TOPRING

Compressed air solutions

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TABLE OF CONTENT

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TOPRING offers more than 7000 products related to the use of compressed air.
▶ Some products in the Series are safety products.

GROUP AND SERIES INDEX

GROUP 1 • COMPRESSED AIR DISTRIBUTION SYSTEMS

GROUP 2 • AIR TREATMENT AT THE COMPRESSOR

GROUP 3 • AIR TREATMENT (FRL)

GROUP 4 • PRESSURE GAUGES

GROUP 5 • SAFETY VALVES and CHECK VALVES

GROUP 6 • QUICK COUPLERS

GROUP 7 • BRASS FITTINGS AND HOSE CLAMPS

GROUP 8 • SELF-STORING AIR HOSES and AIR HOSES

GROUP 9 • HOSE REELS

GROUP 10 • ACCESSORIES, OILS AND TOOLS

GROUP 11 • BLOW GUNS, AIR GUNS and VACUUMS

GROUP 12 • CHUCKS, TIRE GAUGES and INFLATOR GAUGES

GROUP 13 • PUSH-TO-CONNECT FITTINGS and TUBING

GROUP 14 • VALVES, BALL VALVES and FLOW CONTROL VALVES

GROUP 15 • AIR CYLINDERS

GROUP 16 • PNEUMATIC MUFFLERS

SERIES INDEX

INTRODUCTION TO COMPRESSED AIR

Used virtually everywhere, compressed air is an important source of energy as well as a significant cost item for most enterprises.

Using compressed air in a planned and intelligent fashion will ensure its efficiency and limit costs associated with compressed air production and distribution.

COST OF COMPRESSED AIR

The versatility, flexibility and safety of compressed air as an energy transmitting medium ensure its use as an essential service. Typically, over a ten year period, total compressed air system costs are 56% energy, 11% capital and 33% maintenance (ref: Hydro-Québec); an energy efficient compressed air system is therefore highly cost effective, even if it costs slightly more to install initially.

AIR LEAKS AND OVERPRESSURE

Compressed air is a major source of industrial power, and yet a vast majority of engineers and maintenance managers really do not know how much they use, what it costs or how much is wasted. It is estimated that as much as 30% of compressed air is wasted, through leaks and unnecessary overpressure. This will add significantly to total system costs as this compressed air will be produced without contributing to production increases.

All too often the response to a complaint about inadequate tool or application performance is to just add more compressor horsepower in an attempt

to solve pressure loss problems. In many compressed air systems, adding more compressor capacity can simply mean more wasted energy, as leaks and inadequate network piping prevent the added capacity from improving the situation.

COMPRESSED AIR REPRESENTS APPROXIMATELY 10% OF INDUSTRIAL ELECTRICITY USAGE

THE KEY TO UNDERSTANDING
COMPRESSED AIR SYSTEM PERFORMANCE LIES
IN UNDERSTANDING THESE THREE CONCEPTS:
PRESSURE, FLOW AND PRESSURE LOSS.

POORLY THOUGHT-OUT NETWORK CONFIGURATION

Furthermore, it is important to realize that low pressure or flow at the point of use does not necessarily indicate a lack of compressor power. Poorly thought-out network configuration, inadequate piping sizes, inappropriate or worn compressed air accessories, excessive leakage and varying demand in different areas are all more likely causes for the majority of pressure problems in compressed air systems.

The key to understanding compressed air system performance therefore lies in understanding **PRESSURE, FLOW and PRESSURE LOSS**. Understanding these three concepts will help compressed air professionals design, operate and maintain efficient compressed air systems.

PRESSURE

Compressed air **PRESSURE is a way of measuring the potential energy stored in the compressed air system**. Like voltage in electricity, pressure simply states what is available for work. Just as a wall plug still has voltage even if nothing is connected, so does a pressurized compressed air system have pressure even if nothing is being used.

PRESSURE
=
STORED
FORCE

MEASURING PRESSURE

Pressure is measured by calculating the force placed on the walls of the container in which the air is stored; this is usually stated in pounds per square inch, or PSI. Other measurements include BAR, for barometric pressure, ATM, for atmospheres, and kPa, or kiloPascals. The table below illustrates some of these measurements and how to convert from one to another.

DIFFERENCE BETWEEN PSI (POUNDS PER SQUARE INCH) AND PSIG (POUNDS PER SQUARE INCH GAUGE)

Both are units of measure for indicating pressure on a surface. Technically, a PSI always starts from zero (compared to a true vacuum as in space). On earth, at sea level, standard atmospheric pressure is 14.7 PSI (according to established norms). This is the pressure created by the combination of gases in the atmosphere. PSIG is the technical term that is used when we refer to a pressure gauge that has been calibrated to read zero at the sea level. If we wanted calibrated a gauge to zero on the moon, and then traveled to sea level on earth, the gauge would read **14.7 PSI**. So when you read 30 PSIG on a pressure gauge, the pressure is actually 30 PSIG + 14.7 PSI (atmospheric pressure). Therefore, each time you read a pressure gauge, the technically correct unit of measure is **PSIG**. However, many still use the term PSI to give pressure.

HOW PRESSURE IS BUILT

PRESSURE is built by simply adding more air to a closed space; this is the role of the compressor.

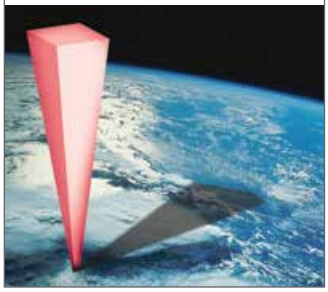
PRESSURE CONVERSION

Example: 1 bar = 14.5 PSI

FROM ↓ / → TO	mm Hg	in Hg	ft H_2O	atm	Bar	lb/in² PSI	kg-f/cm²	kPa
mm Hg	1	0.0394	0.0446	0.00132	0.00133	0.0193	0.00136	0.133
in Hg	25.4	1	1.13	0.0334	0.0339	0.491	0.0345	3.39
ft H_2O	22.4	0.883	1	0.0295	0.0299	0.434	0.0305	2.99
atm	760	29.9	33.9	1	1.01	14.7	1.03	101
Bar	750	29.5	33.5	0.987	1	14.5	1.02	100
lb/po² (PSI)	51.7	2.04	2.31	0.068	0.0689	1	0.0703	6.89
Kg-f/cm²	736	29.0	32.8	0.968	0.981	14.2	1	98.1
kPa	7.50	0.295	0.335	0.00987	0.01	0.145	0.0102	1

For example, if a tool or application is rated at 6 Bar and we want to convert to PSI, we find the intersection of Bar on the left and PSI on the top line, which is 14.5 PSI, then multiply to get the result: 87 PSI.

A column of air 100 km high by 1 inch square will weigh 14.7 pounds



PRESSURIZATION

As more air is forced into the air tank, there are more air molecules occupying the same space; these molecules bounce against one another more vigorously as they try to find a way back to atmospheric pressure. As they do this, the force on the container walls increases; this force is what we measure to indicate pressure. It is this compression effect that stores energy that can then be released, into a tool or application, to perform work. The more air that is forced into a closed tank, the higher the pressure, and the more potential energy is stored.

DEPRESSURIZATION

The opposite effect is also true. As air is taken out of the tank - for example, when applications consume air - pressure drops, since there will now be fewer air molecules in the same space. These molecules then bouce against one another with less vigour, and place less pressure on the container walls.

IDEAL WORKING PRESSURE: BALANCE

The key is to find a balance between what is produced and put into the tank and what is consumed or taken out, in order to achieve a stable working pressure for the air applications and tools connected to the system. As the applications and tools consume air, more molecules are added back into the tank by the compressor, and the system maintains a stable working pressure.

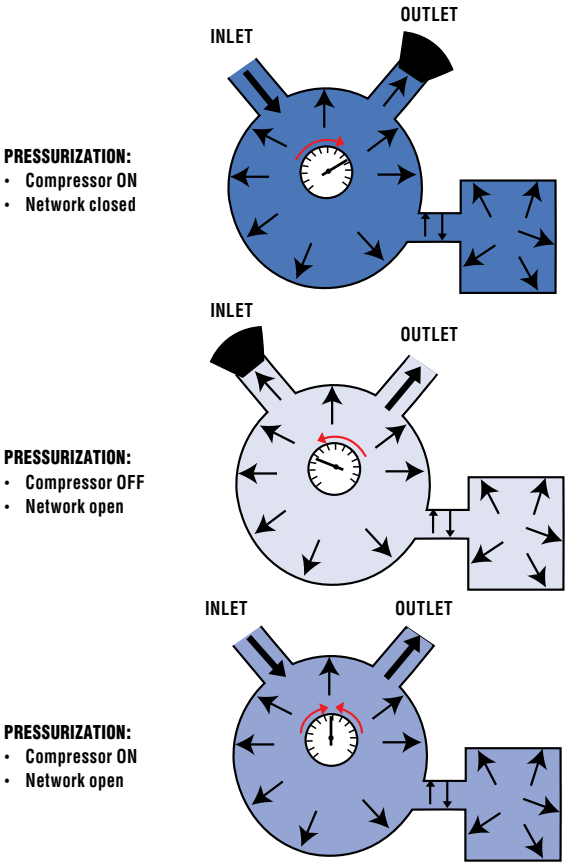
STATIC PRESSURE AND DYNAMIC PRESSURE

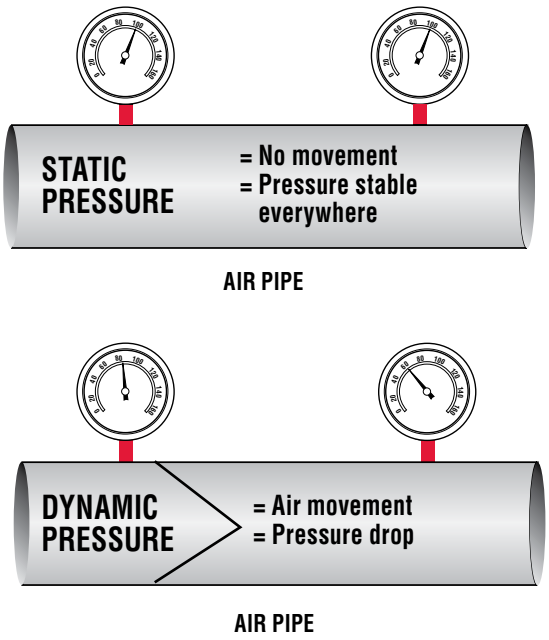
In order for air to move within a system, there must be a **PRESSURE DIFFERENTIAL between two points in the system**.

As air exits a tool, pressure drops at that end of the hose because air is being removed from the system. The higher pressure air next to it in the hose then rushes to replace the exiting air, and so on, all the way back to the beginning of the hose. This happens because there is a **PRESSURE DIFFERENTIAL** between the air at the end of the hose (at the tool connection) and the air at the beginning of the hose (at the supply end), allowing movement along its length.

This is the difference between **STATIC PRESSURE** and **DYNAMIC PRESSURE**. Static pressure is what happens when the system is pressurized and there is no movement of air. Dynamic pressure is the pressure to which the system drops when there is air movement. Under normal circumstances, this dynamic pressure will not drop to zero, since the compressor and tank provide air to replace what is being consumed; the pressure will drop to a lower pressure than the static pressure, to a level dependent on the system's ability to replace the air consumed.

Therefore, **PRESSURE** is a stored force ready to be used. However, for it to perform work, it must **MOVE**; this is where FLOW becomes important.





FLOW

Compressed air **FLOW is a way of measuring the volume of air running through a compressed air system**, application, component or tool, over a given time. Like current (amps) in electricity, flow indicates the volume of air required to maintain sufficient force to perform work.

FLOW MEASUREMENT

Flow is measured by taking the volume of air and dividing by a period of time. The most common unit of measurement is the **cubic foot per minute, or SCFM**.

PRESSURE AND FLOW ARE DIFFERENT

Pressure and flow are often confused, interchanged and misunderstood; while they are related, they are not the same thing.

As an example, knowing what voltage is present in an electrical system is important, but it will not provide the information needed to gauge usage vs. available power. The current (amperage) available will be much more important; the same can be said of compressed air systems.

While it is important to note supply pressure, as much in terms of the compressor as in terms of what is required by the tools or applications, it is the **volume of air available over time that will** determine if the system can keep up with the tools. What is important to understand is that system flow capacity allows the system to replace air consumed at the tool in order to maintain adequate pressure for the tool to function properly.

FLOW = AIR VOLUME

Rotating tools, such as screw drivers, impact guns or grinders, require **flow** to function well, since it is the **volume of air running** through a turbine or over a wheel that will drive the tool. It is recommended to use pneumatic accessories offering high SCFM.

Pulse tools, such as nailers, staplers, etc., require a **specific pressure** to drive the fastener into the material; they will therefore be less affected by flow restrictions (as long as there is sufficient flow to replace the air used in the cycles).

OVERPRESSURE

An increase in pressure of 14.5 PSI in a compressed air system will add 7% to energy costs without providing any additional benefits. Hence, the greater the potential for reducing the pressure, the larger the potential savings are. In addition, leakage losses decrease if the system pressure is lower.

In general, tools and machines require an operating pressure between 87 and 90 PSI (6 and 6.2 bars). Pressure higher than 90 PSI (6.2 bars) reduces the performance of the tool, shortens its lifespan and reduces the reliability of the air supply, while operating and energy costs increase.

THREE SITUATIONS MAY ARISE :

1) All workstations require **a lower pressure than the main line**. If this is the case, the main line pressure can be gradually lowered to meet the actual requirements of the users.

2) Only **a few workstations require a higher pressure**. If the pressure across the entire system needs to be increased by more than 7.25 PSI (0.5 Bar) to meet the needs of a few or a single user, than other solutions need to be explored such as a pressure booster for those specific locations.

AN INCREASE IN PRESSURE OF 14,5 PSI IN A COMPRESSED AIR SYSTEM WILL ADD 7% TO ENERGY COSTS WITHOUT PROVIDING ANY ADDITIONAL BENEFITS.

3) Only a few workstations require a lower pressure. If a workstation requires a lower pressure than the main line then a pressure regulator should be installed. Generally, it is considered a cost savings to install a regulator when a workstation's pressure requirements are 7.5 PSI (0.5 Bar) lower than the main line.

THE PRESSURE TRAP

Despite this, users often increase the pressure at a rotating tool in order to improve performance. The impression is that

the tool will function better if it has more pressure, but, in actual fact, it is lacking flow.

Since the tool is consuming more air than the system can supply, the amount of air at the tool connection point drops, causing excessive pressure drop. Boosting the pressure may buy some time and provide a momentary kick, but the reality is that if the flow capacity of the system is insufficient to replace the air being used, boosting pressure will not solve the problem and can actually cause more problems, such as additional strain on the compressor, damage to the tool, etc. The key, then, lies in minimizing excessive pressure loss at the tool.

PRESSURE LOSS

PRESSURE LOSS refers to the difference in pressure between what is present in the storage tank and what is available at various points along the compressed air network. Some pressure loss is inevitable, simply because there must be a pressure differential for the air to move within the system and the compressed air applications will consume air, leading to some pressure loss. Problems begin to occur when the system experiences **EXCESSIVE PRESSURE LOSS**.

EXCESSICE PRESSURE LOSS

EXCESSIVE PRESSURE LOSS occurs when the air system is incapable of replacing the air being consumed by the tools or applications with sufficient speed. This then can cause the pressure to drop below the specified operating pressure of the tool or application, which can lead to:

- poor tool performance
- lost time, production
- quality problems and even damage to the tool

WHAT IS AN EXCESSIVE PRESSURE LOSS ?

10% pressure loss at the tool, e.g. between compressor tank pressure and tool inlet pressure, is considered to be acceptable for the majority of air tools, as is a total loss of no more than 3% throughout the distribution network itself. Losses in excess of these amounts are considered “excessive”. Often, in an attempt to solve this problem, the supply pressure is increased; while this provides a higher pressure when the tool is first activated, the same inefficiencies in the system still exist, and the pressure simply drops once again to below ideal operating pressure after the initial kick, which can often damage the tool.

Ideally, the compressed air system, including the compressor, storage tank, distribution network, quick couplers, hoses, etc., will have been designed to provide sufficient flow to replace the air being used while avoiding excessive pressure loss at the tool.

PRESSURE LOSS

=

DIFFERENCE IN PRESSURE

BETWEEN WHAT IS PRESENT IN THE STORAGE TANK AND WHAT IS AVAILABLE AT VARIOUS POINTS ALONG THE COMPRESSED AIR NETWORK

Maintaining ideal pressure is the primary goal of air system design

EXCESSIVE

PRESSURE LOSS

WHAT IS EXCESSIVE ?

- AT THE TOOL: 10%
- OVER THE NETWORK: 3%

THE COSTS OF EXCESSIVE PRESSURE LOSS

Compensating for excessive pressure loss will lead to additional costs:

- **Power costs, as the compressor works harder to maintain** a higher working pressure. In general, it costs 1% more in electricity for every 2 PSI additional pressure maintained in the system
- **Leak costs, as the additional pressure in the system will push** more SCFM out of the same openings
- **Maintenance costs, at the compressor, as it will wear more** quickly
- **Tool costs, either replacement or repairs, as the tool sees an initial** pressure higher than recommended and will wear or break faster
- **Personnel costs, as workers waste time compensating for underperforming** tools due to the excessive pressure loss
- **Product costs, due to inferior quality and production problems** due to tools not performing to specifications (example: wrong RPM of a grinder leading to product finish problems) It is therefore very worthwhile to invest in improving compressed air system performance in order to avoid excessive pressure loss, since these costs can add up very quickly.

MEASURING PRESSURE LOSS

Pressure loss should ideally be measured directly at the tool, where it is connected to the air hose. This will ensure that all potential sources of pressure loss are taken into account.

Testing pressure drop at the tool with a differential pressure indicator

Standard procedure is then to measure again, at each component connection, back to the air distribution network and, if possible, all the way back to the storage tank. This will allow isolation of problem components.

There are two very important mistakes that are often made when measuring air pressure at the tool, both of which lead to imprecise measurements and poor tool performance.

1) The first mistake is **regulating the pressure far from the air tool.** A significant pressure drop can occur between the regulator and the tool, through the quick couplers and hose. To ensure accurate pressure at the tool, the pressure should always be checked at the tool inlet while adjusting the pressure regulator. The pressure regulator should also be located as close as possible to the tool.

2) The second mistake **is adjusting pressure with the tool in the static, or off, position**. The tool must be operating in order for the pressure loss to be present (the system will catch up when at rest); the pressure must be measured and the regulator adjusted with the air tool running. The loss measured at the tool, with the tool running, will therefore take into account all of the sources of pressure loss. Since the tool's performance is the ultimate goal, this pressure loss will be the key to ensuring performance.

SOURCES OF PRESSURE LOSS

There are four principle causes of low air pressure at the tool:

1) Inadequate air distribution system

2) Inadequate or poorly maintained air accessories

3) Excessive leakage

4) Insufficient compressor and storage capacity

Each of these can contribute to total system pressure loss, and to the additional costs that it causes. The following pages provide details on each cause and how to minimize its impact.

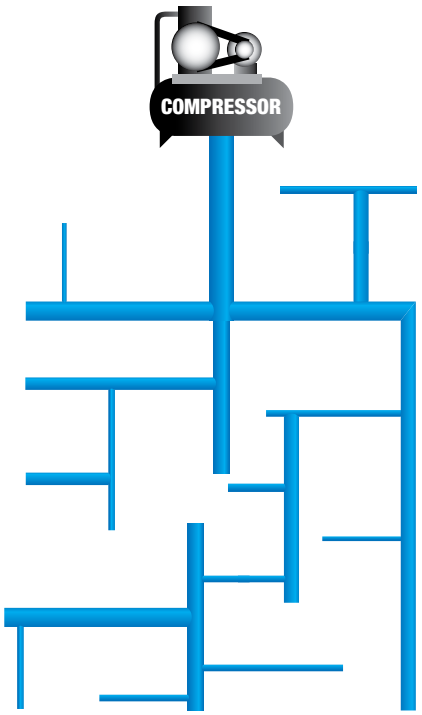
1 INADEQUATE AIR DISTRIBUTION SYSTEM

Piping diameter

A large proportion of pressure loss is due to inadequate piping diameter. The longer the distance to be run, the larger diameter pipe must be used, and the same goes for air volume. The proper piping diameter must be calculated based on the total air volume to be conveyed and the total distance to be covered; see the section on designing an efficient compressed air distribution network on page 19.

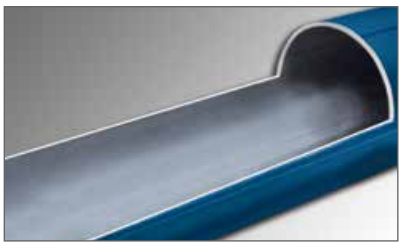
Piping Material

Friction within the air distribution system also contributes to pressure loss, determined by piping material and condition, network design and restrictions.
Rough or deteriorated piping can severely increase pressure loss; several options now exist that provide superior flow characteristics to traditional materials as well as virtually eliminating deterioration due to corrosion.



Networks such as these will lead to excessive pressure loss

Traditional piping corrodes and allows contaminant build-up



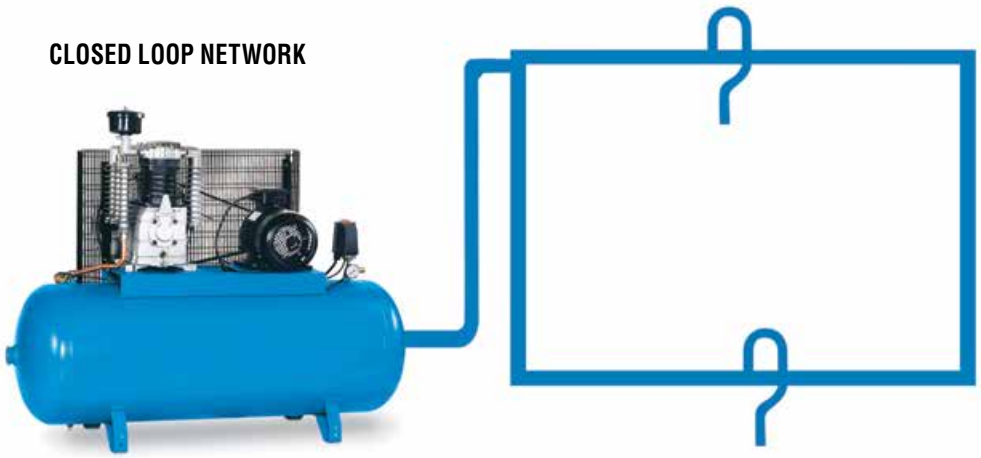
TOPRING piping resists corrosion and stays clean over time

Network Design

Network design will also contribute to pressure loss; using modern, looped systems such as those proposed in the section on designing an efficient compressed air distribution network on page 27, will provide more flow with less pressure loss.

In addition, any fittings, bends, “T”s and other restrictions will add to pressure loss. The impact of these can be taken into account by adding “equivalent length” of piping to the total distance to be covered by the network.

CLOSED LOOP NETWORK



2 INADEQUATE OR POORLY MAINTAINED AIR ACCESSORIES

Air hoses

The largest pressure loss in a system serving air tools is often caused by hoses that are too long and hoses that are too small in diameter. The longer the hose, the more friction is created, regardless of size; this can be addressed by increasing hose diameter. For this reason, small diameter hoses inevitably limit flow. Choosing the proper diameter hose for the distance and flow required will limit pressure loss at the tool. In addition, different hose materials offer different flow characteristics and resistance to deterioration.

SUPPLY PRESSURE (DP = 10 PSIG)

SCFM \ FEET	15'	25'	35'	50'	75'	100'	150'	200'
2	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
5	1/4"	1/4"	1/4"	1/4"	1/4"	3/8"	3/8"	3/8"
10	1/4"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
15	3/8"	3/8"	3/8"	3/8"	3/8"	1/2"	1/2"	1/2"
20	3/8"	3/8"	3/8"	3/8"	1/2"	1/2"	1/2"	1/2"
25	3/8"	3/8"	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"
30	3/8"	1/2"	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"
35	3/8"	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"
40	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"
45	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"	3/4"
50	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"	3/4"
55	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
60	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
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80	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	1"	1"
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120	3/4"	3/4"	3/4"	3/4"	1"	1"	1"	1"
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130	3/4"	3/4"	3/4"	1"	1"	1"	1"	1"
135	3/4"	3/4"	3/4"	1"	1"	1"	1"	< 1"
140	3/4"	3/4"	3/4"	1"	1"	1"	1"	< 1"
145	3/4"	3/4"	3/4"	1"	1"	1"	1"	< 1"
150	3/4"	3/4"	1"	1"	1"	1"	1"	< 1"

Quick couplers

Another source of pressure loss is the restriction caused by quick couplers. Different coupler designs and plug profiles offer varying flow capacities; the most commonly used designs actually provide insufficient flow for the majority of air tools, and yet they continue to be used. Changing to high flow, low pressure drop couplers will increase tool performance and limit pressure drop.

S31 QUIKSILVER
80 SCFM

S31 TOPQUIK
60 SCFM

S20 • 1/4 INDUSTRIAL
S23 • ARO 210
S24 • 1/4 TRUFLATE
S26 • LINCOLN
5.5 mm
24-37 SCFM

S21 • 3/8 INDUSTRIAL
S25 • 3/8 TRUFLATE
7 mm
60-70 SCFM

S31 • ULTRAFLO
7.8 mm
50-80 SCFM

Filters

One of the most routinely overlooked sources of pressure drop is the compressed air filter.

While usually providing sufficient flow when first installed, maintenance is often neglected and the filter elements allowed to saturate, causing additional pressure drop.

A simple maintenance program aimed at changing filter elements at regular intervals (maximum once per year) can go a long way to maximizing pressure available at the tool.

ELEMENT AND DRAIN SHOULD BE REPLACED PERIODICALLY FOR:

- Optimal performance
- Continuous air quality
- Low operation costs
- Continued protection of downstream equipment
- Peace of mind

3 EXCESSIVE LEAKAGE

Compressed air is considered a quality agent for power transmission, it should be treated accordingly. Unfortunately, a significant portion of compressed air that is produced is lost to leaks before it can be used.

A reasonable target is to limit the overall system leakage to 10%. Decreasing leakage below 10% in most cases is not feasible without a significant investment and is often unprofitable.

Measures to eliminate leakage

Leakage reduction can be done directly or indirectly. With direct measures, the number of leaks are reduced. With indirect measures, the amount and size of the leaks remains unchanged while the actual “time of leakage” is reduced.

Direct measures

Most of the time, leaks are located at the connections. It is often sufficient to tighten hose clamps, connections, or hose assemblies to eliminate leakage.

Indirect measures

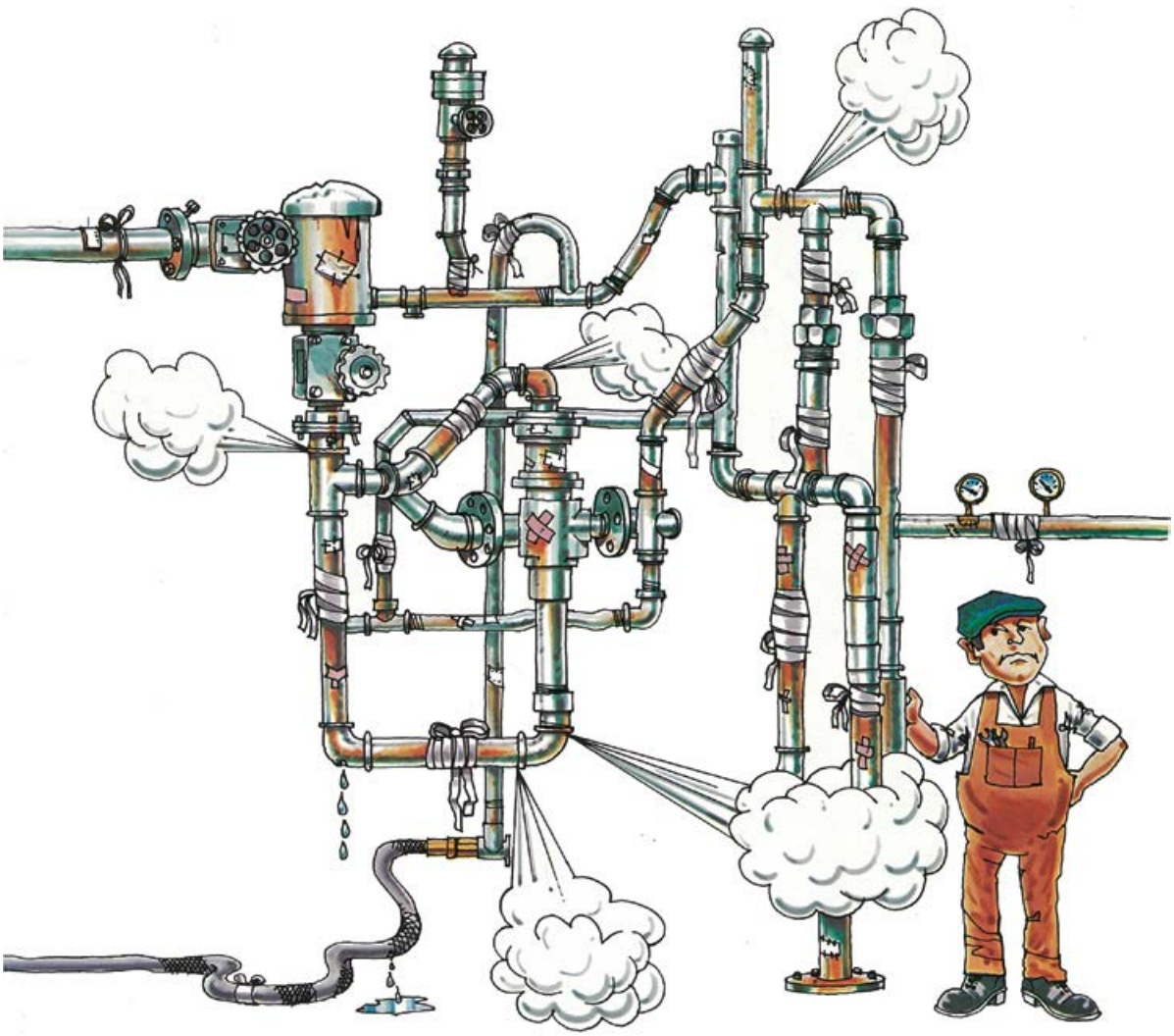
In many cases, leaks are more difficult to eliminate. This is especially true when machines must be stopped in order to make repairs. Often repairs are postponed. Hence, air loss cannot be reduced to near zero levels.

In this case, it is advisable to see whether indirect measure could contribute to a reduction in leakage.

One of the most effective measures is the reduction of the “time of leakage”. This can be done by stopping the network in the evening and on weekends when continuous operation is not required. This measure is performed by installing an electric ball valve with a timer downstream of the compressor (see Air Saver p.424).

If the network can not be stopped entirety, there is always the possibility of shutting some areas of the network. Leaks in isolated areas then have a shorter “uptime” therefore a lower leakage rate. Another possibility is to lower the pressure of the network.

The lower the pressure in the network, the smaller any leaks will be.



3 EXCESSIVE LEAKAGE (CONT'D)

Summary

Compressed air leaks are the most frequent cause and a significant waste of compressed air.

If the network has an air loss of 10% or more, it is urgent to take action. Important consequences of system leakage are :

- Operating costs increase ; the working hours of the compressor increase ; the frequency of maintenance is accelerated ;

- At the time of replacement, compressor needs are overevaluated causing unnecessary investments for a larger compressor and more prep work.

Compressed air system audits indicate that the average plant loses 20% or more of compressor capacity to leakage. Leakage rates exceeding 50% of consumption are common. As a rule of thumb, every 2 PSI increase in pressure will require 1% more energy at the compressor; every PSI lost to leakage is therefore very costly.

Considering the cost of energy, this loss can be a considerable drain on resources. Since air leakage is not considered dangerous, it is often tolerated. Leakage also usually occurs in a multitude of small openings, none of which is sufficient to draw attention; while each leak may be minor, the cumulative effect is great. With compressed air costs averaging $0.25/1000pi^3, an average plant can potentially save huge amounts simply by undertaking a leak identification and repair program.

The sources of leakage are numerous, but the most frequent problems are:

- Condensate drain valves left open
- Shut off valves left open
- Leaking pipes and pipe joints
- Leaking hoses and quick couplers
- Leaking pressure regulators
- Air cooling lines left open permanently
- Pneumatic equipment left in operation when not needed

It is possible to eliminate substantial leakage just by improving these few items.

Leakage is not only a direct source of wasted energy, but is also an indirect

contributor to operating costs. As leaks increase, system pressure drops, air tools function less efficiently and production is affected.

Experience shows that leakage is more likely to appear as we approach the last work station.

ESTIMATED ANNUAL COST ($/YEAR) OF AIR LEAKAGE

	PRESSURE			
Opening totalling (inch)	90 PSIG	100 PSIG	120 PSIG	150 PSIG
1/64	$46	$51	$60	$73
1/32	$185	$203	$239	$292
1/16	$742	$814	$955	$1 170
1/8	$2 970	$3 260	$3 820	$4 670
3/16	$6 680	$7 320	$8 600	$10 500
1/4	$11 900	$13 000	$15 300	$18 700
3/8	$26 700	$29 200	$34 300	$42 000
1/2	$47 500	$52 000	$61 200	$74 800

This table is for illustrative purposes only. The calculations based on 8760 hours of operation, with a 100% effective compressor. N.B. A 3/8" hole is equivalent to 144 holes of 1/32".

4 INSUFFICIENT COMPRESSOR AND STORAGE CAPACITY

As stated before, pressure loss in a compressed air system is the result of an imbalance between the volume of air required (consumption) and the volume of air available (capacity). Thus, when total tool consumption exceeds the capacity of the compressor to produce compressed air at the required pressure, total system pressure drops. The addition of storage capacity can help this situation, since the tank will provide additional cubic feet of air to lengthen the time before system pressure drops below minimum working pressure.

Inbalance can quickly be identified by adding up the total consumption (in SCFM) of all tools that could run simultaneously and comparing this number to the total capacity of the compressor (as a general rule, compressors ingest approximately 4 SCFM per horsepower when producing air at 100 PSIG).

Two methods are used to rate total air usage: average and continuous. **Continuous SCFM** is the amount of air the tool consumes under normal no load operation. **Average SCFM** is determined by multiplying the continuous SCFM by a use factor. The use factor is determined by industry as the amount of time that the tool is run. Tools such as impact wrenches have a shorter run time and thus lower use factors and lower average SCFM requirements. Tools that run for a long period of time, such as sanders, have a higher use factor and higher average SCFM requirements. **Average SCFM** is only used in matching tool consumptions to compressor capacities. **Continuous SCFM** is used to size air lines and fittings within the system.

Therefore, if the compressor produces less than the total average SCFM consumption of the tools, pressure drop will inevitably occur in the system, and, if pressure drops too low, additional tank and/or compressor capacity should be considered

IN CONCLUSION

The key to operating a successful compressed air system therefore lies in producing, storing and conveying adequate cubic feet of compressed air to match or exceed the consumption of all compressed air applications.

Insufficient production, storage or flow capacity will prevent the system from replacing what is consumed by the applications, leading to excessive pressure drop and poor tool performance.

This will lead to additional compressed air production costs, tool maintenance and replacement costs, but most importantly, will have an impact on worker efficiency and product quality as workers try to compensate for poor tool performance. In the end, this can be the most significant cost item, but is hardly ever calculated.

Much of the problem of excessive pressure loss can be avoided by designing the compressed air distribution system from the outset with properly sized, good quality piping. Several options now exist that provide superior flow characteristics to traditional materials as well as virtually eliminating deterioration due to corrosion. Sizing the piping so as to minimise pressure drop and maximise flow will provide dividends almost immediately.

In addition, compressed air accessory selection is crucial to avoiding excessive pressure loss. The selection of quick couplers, valves, fittings, filtration units, hoses or other components, tool consumption should guide the process.

Installation of a component with insufficient flow capacity (SCFM) for the application will inevitably lead to excessive pressure loss that will limit tool performance.

For example:

- Most quick couplers used today offer insufficient air flow for the majority of rotating air tools; care should therefore be taken to choose a design and plug type that offers sufficient flow
- Different hose materials offer different flow characteristics and resistance to deterioration.
- Sizing hoses based on tool consumption and length will ensure that pressure drop is kept to a minimum
- Clogged filter elements lead to pressure drop; preventive maintenance programs designed to change them before saturation can save many PSI of pressure drop

A leak detection and repair program can also be an inexpensive method for reducing costly pressure drop. By replacing faulty couplers and leaking hoses, tightening fittings where required, maintaining filtration units and using adequate thread sealant, much of the problem can be fixed with little investment.

Finally, choosing the compressor based on present and future consumption needs is always a winning proposition. By calculating total air flow usage and future expansion requirements, it is possible to find the ideal compromise between compressor capacity and system needs.

The ***TOPRING products and systems in this catalogue, combined with the expertise of TOPRING sales and technical staff and its distributors can help*** achieve the ideal balance between system performance and costs.

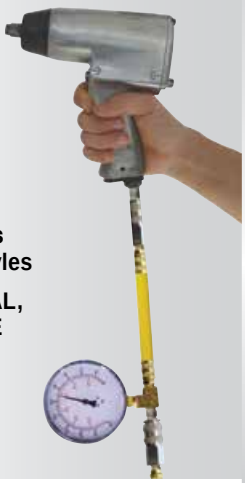
Series 01
DIAGNOSTIC TOOLS

These pressure tester kits are designed to verify pressure drops between the air network and the tool.
Excessive pressure drops are one of the major problems associated with compressed air systems.

PROFESSIONAL PRESSURE INDICATOR TESTER KIT

FEATURES AND BENEFITS

- All-in-one pressure tester ideal for checking pressure drop between network connection and tool
- Can be inserted at any quick coupler junction
- Large pressure gauge for easy pressure reading
- 5 in 1 UNIVERSAL coupler simplifies connection to most popular plug styles
- Included with the kit: 1/4 INDUSTRIAL, ARO 210, ULTRAFLO, 1/4 TRUFLATE and LINCOLN type plugs



Product No	Description
01.060	Professionnal Pressure Indicator Tester Kit

Video demonstration on TOPRING.com

TECH TIP

- The pressure at the tool should be the one recommended by the manufacturer for maximum efficiency.
- A differential pressure of more than 10% to the tool is considered excessive.
- Consult pages 8-10 in the TOPRING catalog for more information on how to reduce pressure losses.

COMPACT PRESSURE TESTER

37 SCFM

FEATURES AND BENEFITS

- All-in-one compact pressure tester ideal for checking pressure drop between network connection and tool
- Can be inserted at any quick coupler junction
- 5 in 1 UNIVERSAL coupler simplifies connection to most popular plug styles
- Included with the tester: 1/4 INDUSTRIAL, ARO 210, ULTRAFLO, 1/4 TRUFLATE and LINCOLN type plugs

Video demonstration on TOPRING.com

Product No	Description
01.050	Compact Pressure Tester

Series 05•06•07

COMPRESSED AIR DISTRIBUTION SYSTEMS

DESIGNING AN EFFICIENT COMPRESSED AIR DISTRIBUTION NETWORK

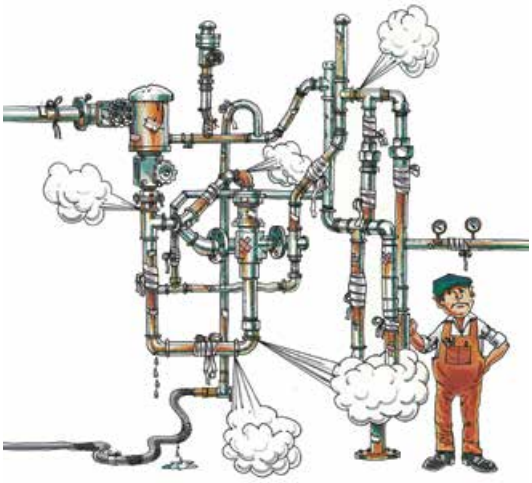
The main source of inefficiencies and problems affecting compressed air distribution systems is often the distribution plan of the system itself.

The majority of problems therefore usually occur somewhere between the compressor and the application points.

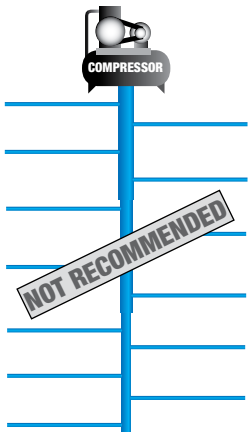
Most compressed air networks are usually of either of two types:

- Dead-end network
- Octopus network

...neither of which provides the best results...



DEAD-END NETWORK



CONVENTIONAL NETWORK

In a dead-end network, air flow must be sacrificed (quantity of air per minute) in order to preserve a uniform pressure at the point of use. The progressive reduction of the central pipe while it moves away from the compressor maintains pressure.

However, air tools and equipment must be placed along the length of the circuit in decreasing order of consumption (SCFM).

The equipment using the most air flow must be located near the compressor, and that using less, further away.

This type of network is not recommended.

OCTOPUS NETWORK

OCTOPUS NETWORK

A network where each additional line and extension does not necessarily match the initial configuration is often called an “octopus” network. Dead-end networks often evolve into octopus networks over time.

The octopus network includes the following anomalies:

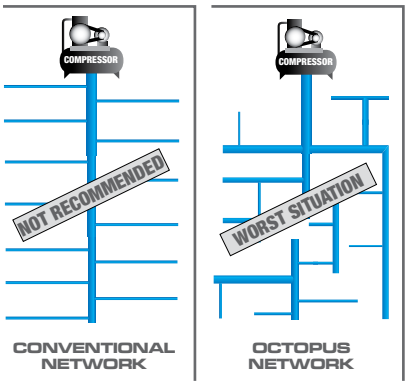
- Different airline materials
- Curves, reductions and enlargements without apparent reason
- Inconsistent diameters of air lines
- Installation done with no knowledge of pneumatic standards

Predicting what flow and pressure are available at any point is virtually impossible. Air flow fluctuations from varying usage of pneumatic equipment and air tools makes it even more difficult to get the right pressure and flow at any given point.

This results in varying pressure and air flow conditions through out the system, creating many problems.

This type of network, while quite common, is the worst possible situation.

THE PROBLEM



More than 98% of factories using compressed air started out with a dead-end network.

Over the years, their systems have come to resemble a giant “octopus” whose growth reminds us of a monster escaping our control.

At the very least, the dead-end network they have has sacrificed air flow in order to maintain point of use pressure.

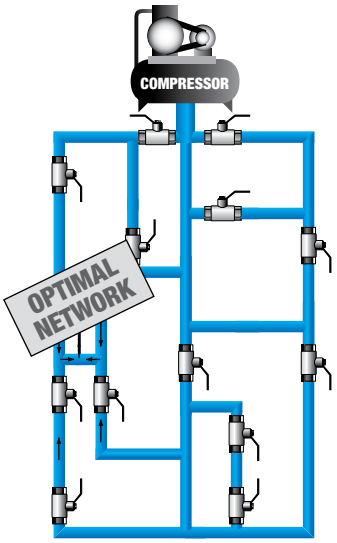
THE SOLUTION

The secret to planning an efficient, problem-free distribution network is actually quite simple. The goal is to achieve a balance between flow and pressure to maintain the ideal situation at all points of use, while providing for future expansion and remaining flexible in the face of varying compressed air needs.

How is this balance achieved ?

Often, the best solution remains the **CLOSED LOOP NETWORK** design.

CLOSED LOOP NETWORK



The equipment located at point **A** demonstrates that the air supply flows through several lines at a time, providing balanced pressure and air flow.

A closed loop network allows the air supply to flow through several lines at a time to any given point on the network. The balance between pressure, air flow and stability of supply is ensured by using a single diameter for piping. This type of system will also easily accommodate modifications and can easily supply tools and equipment with varying supply requirements anywhere on the network.

Ball valves permit the isolation of a particular portion of the air line network to allow for easy:

- **Repairs**
- **Connections**
- **Enlargements**
- **Periodic maintenance**

The size of each loop does not need to be uniform. The important thing is to have at least two different supply routes available simultaneously for each feeder pipe descending toward a tool or piece of equipment.

This type of network is often the ideal situation for compressed air distribution systems, providing the balance between flow and pressure required to provide the most efficient distribution of compressed air.

THE SOLUTION

A well-built closed loop network is therefore most often the ideal situation for the distribution of compressed air.

In addition to being easy to plan and to modify when needed, this type of distribution system becomes an immense compressed air reservoir that:

- **Offers more constant air flow at all times**
- **Guarantees more uniform pressure through out**
- **Contributes to the life of the compressor by limiting running time**
- **Reduces the electrical consumption of the compressor**

PROPER SYSTEM DESIGN

A properly designed system can offer cleaner air of the appropriate volume and pressure, translating to better tool performance and worker productivity

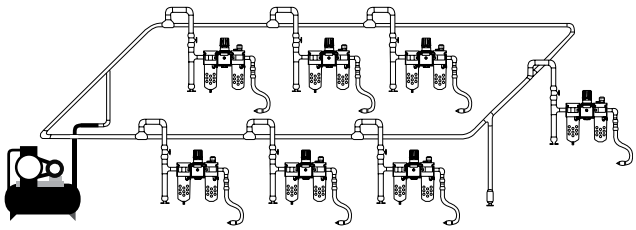
SYSTEM DESIGN

System design should start with a layout of the shop or plant. Designate where and what tools will be used. Determine the placement of the main line. Try to keep the line as short as possible while providing access to where tools are used. Try to keep in mind any future needs or alterations. It is much easier to make changes if they are planned for.

Drop supply lines at the point of use or at regular intervals, to minimize hose length. Size the lines appropriately for the equipment to be used.

Each supply line should be installed with at least a filter and regulator. FRLs should be installed at the point of use, allowing the air to be prepared properly for the application. Designate appropriate supply lines as clean air lines for use with paint guns, blow guns or tire inflator gauges.

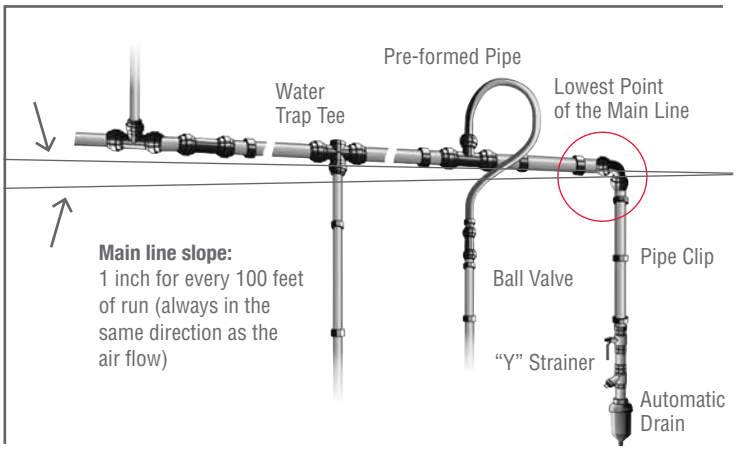
On lines operating air tools, install lubricators to extend tool life.



PROPER SLOPES AND DROPS

As for the slope of network pipes, either for lines running along exterior walls or within a building, there should be a minimum inclination of 1 inch for every 100 feet of length (1 to 2 %). This will lead any condensation toward water evacuation points.

It must be noted that the feeder pipe may perform both functions: air flow and the elimination of condensed liquids. Secondary pipes attached below the main pipes should include a ball valve and will help eliminate condensation at their feet by the presence of evacuation valves.



PROPER DISTRIBUTION SYSTEM INSTALLATION

- Properly installed pipe minimizes the amount of moisture at the point of use. Piping should slope in the direction of the air flow to an accessible moisture drain point
- Outlets should be taken from the top of the main air lines to keep moisture out
- Assemble and test for leaks one section at a time to avoid major disassembly later
- Pipe unions should be installed at regular intervals.
- This makes future repairs and modifications easier
- Sealant should always be used on threads to eliminate air leaks
- Tapered threads should not be overtightened as this could cause the fitting to crack
- Air lines should be secured to a solid surface using pipe clamps
- All piping and fittings should be checked regularly to avoid leaks in the system. An air leak will reduce the amount of air at the tool, causing pressure drop. It will also cause the compressor to work longer and harder, increasing energy and maintenance costs (refer to the next page)

SIZING A COMPRESSED AIR LINE

Correct sizing of the air line is essential to maximize the cost effectiveness of the compressed air distribution system. Network line size is determined by the flow capacity required for the tools and equipment to be supplied, as well as by system design and length.

THINGS TO CONSIDER:

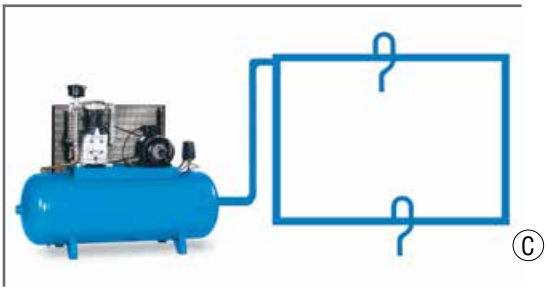
- Pressure drops are totally unrecoverable and waste energy; a drop in pressure from 87 to 73 PSI will decrease machine and tool capacity by up to 27%
- Energy cost will rise by 10% if pressure is increased by 20 PSI to compensate for pressure drop
- Pipe fittings are responsible for much of the pressure drop in compressed air systems
- Pipe size should therefore be large enough to keep pressure drops between the reservoir and the point of use to a minimum
- Main line size should never be smaller than the compressor outlet size
- Branch line size should be determined based on length and total consumption of the tools on the branch
- Main lines that are too small will cause high air velocity, thus making water separation more difficult
- A larger main line is in fact advantageous, acting as a reservoir for the air, reducing the load on the compressor and providing capacity for future demand and growth

NETWORK TYPES

Flow capacity is a function of total network length; longer lines require larger diameters to maintain the same flow and minimize pressure drop.

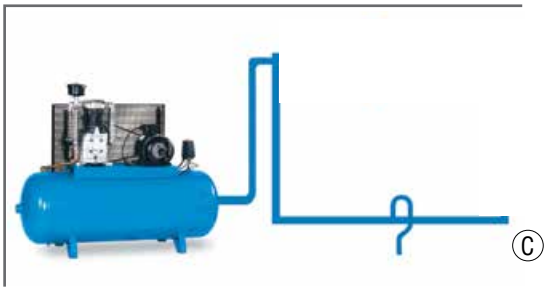
The type of network used will also have an impact on line size. There are two basic types of network designs: **closed loop** and **linear/dead-end**. Both are commonly used for compressed air networks.

CLOSED LOOP NETWORK



- Two paths to point Ⓒ
- Half of the compressor flows in each path
- Allows for smaller diameter size of network

LINEAR/DEAD-END NETWORK



Diameter size of network - to point Ⓒ - determined by total length

BEFORE EVALUATING TOTAL NETWORK LENGTH

In order to calculate an effective length of the total network, fittings used must also be taken into account. Every direction change, cross manifold, T connection or reduction in line size within the network will cause pressure loss equivalent to adding additional line length.

The table below indicates effective lengths added to the network by each of these restrictions and/or connections.

EQUIVALENT LENGTHS FOR VARIOUS FITTINGS (IN LENGTH OF EQUIVALENT TUBE)

FITTINGS	DIAMETER OF FITTINGS								
	15 mm	20 mm	22 mm	25 mm	28 mm	32 mm	40 mm	50 mm	63 mm
Union	0.43" (0.13m)	0.49" (0.15m)	0.56" (0.17m)	0.66" (0.20m)	0.72" (0.22m)	0.82" (0.25m)	0.98" (0.30m)	1.31" (0.40m)	1.64" (0.50m)
90° Elbow	1.15" (0.35m)	1.31" (0.40m)	1.41" (0.43m)	1.64" (0.50m)	1.80" (0.55m)	1.97" (0.60m)	2.62" (0.80m)	3.12" (0.95m)	4.10" (1.25m)
"T" Straight Line	0.56" (0.17m)	0.66" (0.20m)	0.79" (0.24m)	0.98" (0.30m)	1.12" (0.34m)	1.31" (0.40m)	1.64" (0.50m)	2.30" (0.70m)	3.12" (0.95m)
"T" Deviation	1.80" (0.55m)	1.97" (0.60m)	2.20" (0.67m)	2.62" (0.80m)	3.08" (0.94m)	3.61" (1.10m)	4.59" (1.40m)	5.58" (1.70m)	7.55" (2.30m)
Reducer	0.59" (0.18m)	0.66" (0.20m)	0.72" (0.22m)	0.82" (0.25m)	0.98" (0.30m)	1.15" (0.35m)	1.48" (0.45m)	1.97" (0.60m)	2.46" (0.75m)

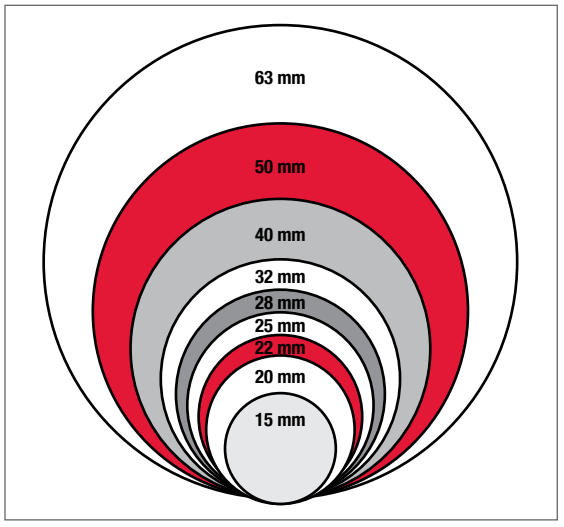
THE TOPRING SOLUTIONS

TOPRING compressed air piping systems in either Nylon or Aluminium are put together using non-traditional means such as push-in fittings or compression fittings. These assembly methods speed up the installation process by as much as a factor of 4, saving on installation costs that often include more labour than materials.

The choice of Nylon or Aluminium air piping system provides great improvements over traditional conventional materials, such as Iron, Galvanized Steel and Copper, by

eliminating corrosion problems that plague traditional systems. This ensures much longer useful life, definite improvements in flow and reductions in operating costs.

TOPRING air systems are also very light, reducing the time and effort required to complete installations and reducing strain on workers.



TOPRING COMPRESSED AIR SYSTEMS

- Series 05 **AIR LINE** – Nylon piping
- Series 06 SICOAIR – Aluminium piping
- Series 07 QuickLINE – Aluminium piping

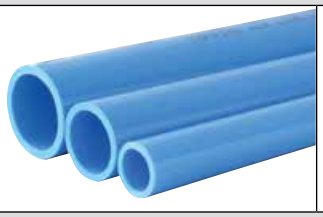
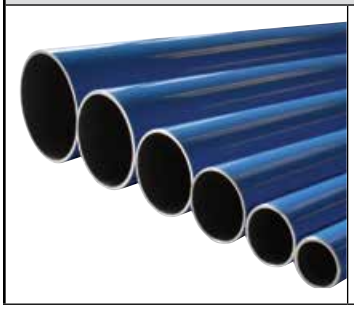
PIPING DIAMETERS AVAILABLE

PIPING	15 mm	20 mm	22 mm	25 mm	28 mm	32 mm	40 mm	50 mm	63 mm
Series 05 **AIR LINE** Nylon	●		●		●				
Series 07 QuickLINE Aluminium	●		●		●		●	●	●
Series 06 SICOAIR Aluminium		●		●		●	●	●	●

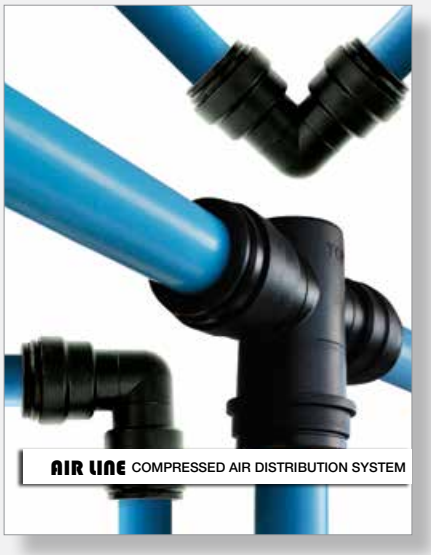
COMPRESSED AIR DISTRIBUTION SYSTEMS

TOPRING offers 3 compressed air distribution systemsto meet the needs of users:

- Series 05 **AIR LINE**
- Series 07 **QuickLINE**
- Series 06 **SICOAIR**

SERIES	FITTINGS	MAXIMUM PRESSURE (PSI)	DIAMETER (MM)
Series 05 AIR LINE Nylon Piping			
	**Series 05**  Composite (Acetal) push-In	175 (PSI) 12.5 (BAR)	15, 22, 28
Series 07 QuickLINE Aluminium Piping			
	**Series 07**  Brass push-In	220 (PSI) 15.3 (BAR)	15, 22, 28
	Series 07  Brass compression	220 (PSI) 15.3 (BAR)	40, 50, 63
Series 07 SICOAIR Aluminium Piping			
	 **Series 06** Fiberglass reinforced polyamid plastic screw-type	181 (PSI) 12 (BAR)	20, 25, 32, 40, 50, 63

For more information on TOPRING's *compressed systems, the following brochures can be downloaded at* TOPRING.com



Series 05

Series 06

Series 07

- ***Highlights features and benefits of each series***
- ***Useful information for planning an optimal network***
- ***A selection of accessories essential to a compressed air network***

Visit TOPRING.com
Section « Technical Support » / Air Distribution Systems

Series 05

AIR LINE COMPRESSED AIR DISTRIBUTION SYSTEM

AIR LINE
AIR DISTRIBUTION SYSTEM

FEATURES AND BENEFITS

- **Installation ease: AIR LINE** installations can be carried out easily by the end-user, eliminating the need to employ expensive sub-contractor labour
- **Installation speed:** Push-to-connect fittings and rigid Nylon pipe allows installation of **AIR LINE** systems to be done much more quickly than conventional systems requiring welding, soldering and threading of heavy components
- **No waiting period:** An **AIR LINE** system can be put under pressure immediately following installation – no need to wait for glue to dry, for welds to cool or for leakage testing
- **Total flexibility:** The flexibility of the **AIR LINE** system ensures modifications and expansions can be carried out quickly and easily in seconds with very little cost or lost production. Integrates perfectly with existing conventional piping
- **Energy savings:** By eliminating leaks, **AIR LINE** can save up 20 to 40% of power consumption costs. Both the pipe and fittings are designed to reduce friction and pressure drop, further reducing power consumption
- **TOPRING AIR LINE** fittings and pipe are made of high quality Nylon, avoiding corrosion and contamination and ensuring high quality compressed air
- **Performance:** Achieves high flow rates and low pressure drops due to low frictional losses through smooth bore of pipe
- **Lightweight:** Only a small fraction of the weight of conventional Steel or black Iron
- **Completely reusable: AIR LINE** components are easy to remove and relocate to a new location, making moving an easier task

Régie du bâtiment Québec

The AIR LINE system is approved for installation as a compressed air system, by RBQ and meets the requirements of UL Norm 94 V2.

APPLICATIONS

The perfect system for air lines in workshops, garages and industry, also suitable for vacuum.

SPECIFICATIONS

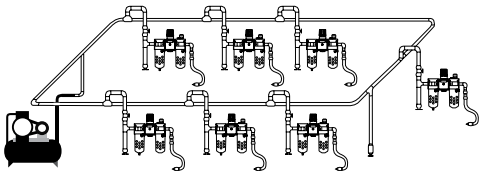
Temperature Range: 0 °C to 70 °C
Working Pressure: 145 PSI (23 °C)
100 PSI (70 °C)

PROPER LINE SIZING FOR AN AIRLINE NETWORK

HOW TO DETERMINE PROPER LINE SIZING:

1. Identify type of network: closed loop or dead-end
2. Calculate total length of line (feet)
3. Determine total flow required
4. Use the chart below in order to identify the proper sizing

LINE SIZING FOR A CLOSED LOOP NETWORK

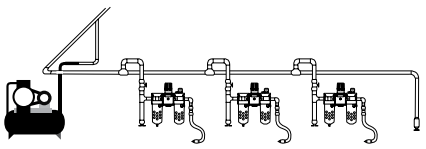


TOTAL LENGTH OF NETWORK (FEET)

TOTAL FLOW REQUIRED

SCFM \ FEET	100'	150'	200'	250'	300'	400'	500'	600'	700'	800'	900'	1000'	1250'	1500'	2000'
5	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
10	15	15	15	15	15	15	15	15	15	15	15	15	22	22	22
15	15	15	15	15	15	15	15	22	22	22	22	22	22	22	22
20	15	15	15	15	15	22	22	22	22	22	22	22	22	22	22
30	15	22	22	22	22	22	22	22	22	22	22	22	28	28	28
40	22	22	22	22	22	22	22	22	28	28	28	28	28	28	28
60	22	22	22	22	28	28	28	28	28	28	28	28	28	28	
80	22	22	28	28	28	28	28	28	28	28	28				
100	22	28	28	28	28	28	28	28							
125	28	28	28	28	28										
150	28	28	28	28			CONSULT SERIES 6 OR 7								
200	28	28													

LINE SIZING FOR A DEAD-END NETWORK



TOTAL LENGTH OF NETWORK (FEET)

TOTAL FLOW REQUIRED

SCFM \ FEET	25'	50'	75'	100'	150'	200'	250'	300'	400'	500'	600'	700'	800'	900'	1000'
5	15	15	15	15	15	15	15	15	15	15	15	22	22	22	22
10	15	15	15	15	15	22	22	22	22	22	22	22	22	22	22
15	15	15	22	22	22	22	22	22	22	22	28	28	28	28	28
20	15	22	22	22	22	22	22	22	28	28	28	28	28	28	28
30	22	22	22	22	28	28	28	28	28	28	28	28	28		
40	22	22	22	28	28	28	28	28	28						
60	22	28	28	28	28	28									
80	28	28	28	28											
100	28	28	28												
125	28														
150	28						CONSULT SERIES 6 OR 7								
200															

- Calculations based on total maximum pressure drop (△P) of no more than 3 PSIG for entire network, at 100 PSIG and 60 °F
- Total flow required takes account of all flows for all compressed air powered tools and equipment
- A typical compressor will produce approximately 4 SCFM per HP

AIR LINE
SEMI RIGID POLYAMIDE PIPE

FEATURES AND BENEFITS

- **AIR LINE** pipes are available in 3 different bore sizes: 15 mm (1/2"), 22 mm (3/4") and 28 mm (1")
- Low friction for high flow
- Prevents the formation of rust
- Lightweight for ease of manipulation
- Calibrated pipe size for leak-proof connections

- CALIBRATED
- LIGHTWEIGHT
- ANTI-CORROSION

MATERIALS

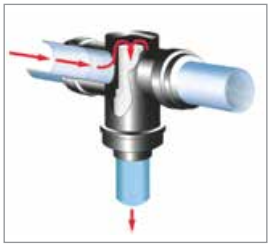
Polyamide 12 (PA12) - Self extinguishing

Product No	Lenght ft	Lenght m	Size mm	Approx. I.D. in	Weight lb
05.042	13	4	15 x 12	1/2	0.59
05.062	13	4	22 x 18	3/4	1.17
05.072	13	4	28 x 24	1	1.53

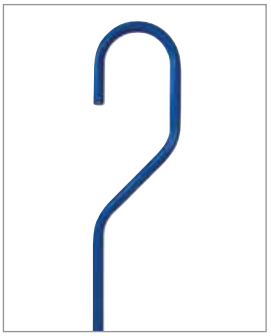
WATER TRAP TEE

Ideal for tapping air off a main line without allowing water to get into the drop

Product No	Size mm (A)	Size mm (B)
05.079	22	15
05.080	22	22
05.083	28	15
05.084	28	22
05.085	28	28



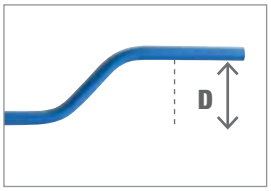
- Stops condensed water within the main air line from entering the vertical drop legs.
- It is important that the main air line be installed with the correct slope, and that water drain points be regularly vented



PREFORMED DROP BEND PIPE

Product No	Size mm
07.130	15
07.135	22

- Special Aluminium alloy
- Ideal for tapping air off a main line without allowing water to get into the drop



DEVIATION PIPE

Product No	D mm	Size mm
07.131	80	15
07.136	100	22

- Special Aluminium alloy
- Ideal for getting around obstacles and correcting minor alignment problems

PUSH-TO-CONNECT

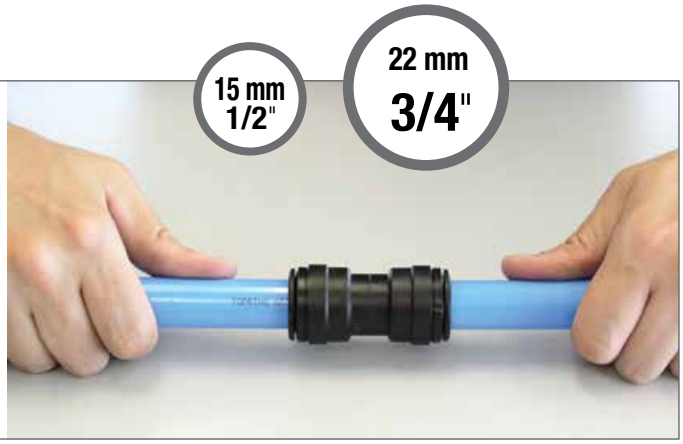
Innovative push-to-connect technology
makes assembly fast and easy

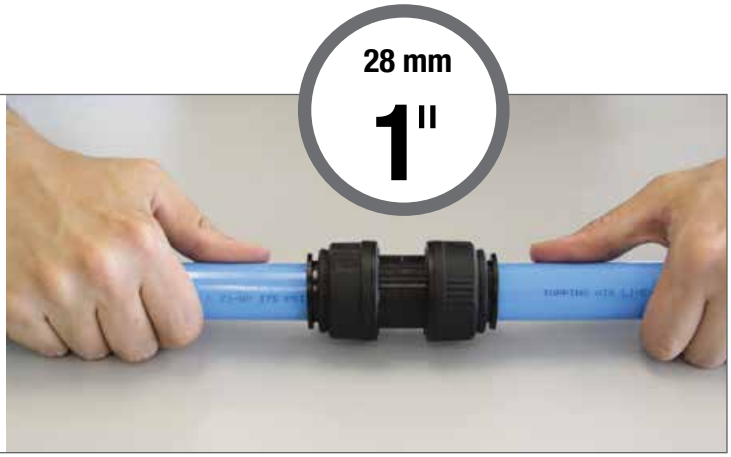
MATERIALS

Body: Black acetal copolymer
Seal: Nitrile rubber
Clamp: Black acetal copolymer with stainless steel teeth

FEATURES AND BENEFITS

- **Suitable for nylon and aluminium pipe**
- **Made of tough, resistant acetal copolymer plastic**
- **Push-to-connect design allows quick assembly**
- **Stainless steel gripping teeth for reliability and high pressure handling**
- **No soldering, no threading, no sealing required**
- **Full flow design**
- **Fully reusable**





PUSH-TO-CONNECT

MALE CONNECTOR (NPT)

Product No	Size mm	Thread (M) NPT
05.116	15	1/2
05.121	22	3/4
05.125	28	1

MALE CONNECTOR (BSPP)

Product No	Size mm	Thread (M) BSPP
05.115	15	1/2
05.120	22	3/4

UNION REDUCER TEE

Product No	Size mm Ⓐ	Size mm Ⓑ
05.170	22	15

« T » UNION

Product No	Size mm
05.160	15
05.165	22
05.168	28

WATER TRAP TEE

Product No	Size mm Ⓐ	Size mm Ⓑ
05.079	22	15
05.080	22	22
05.083	28	15
05.084	28	22
05.085	28	28

END CAP

Product No	Size mm
05.230	15
05.235	22

STRAIGHT UNION

Product No	Size mm
05.130	15
05.135	22
05.140	28

ELBOW UNION

Product No	Size mm
05.145	15
05.150	22
05.155	28

FEMALE REDUCER

Product No	Size mm Ⓐ	Size mm Ⓑ
05.210	15	22
05.212	15	28
05.215	22	28

MALE REDUCER

Product No	Size mm Ⓐ	Thread (M) BSPP Ⓑ
05.185	15	3/8
05.190	15	1/2
05.195	22	1/2
05.200	22	3/4
05.205 *	28	1 NPT

* Brass

PLUG

Product No	Size mm
05.220	15
05.225	22
05.227	28

STEM ELBOW

Product No	Size mm
05.365	15
05.370	22

COMPOSITE MANIFOLD

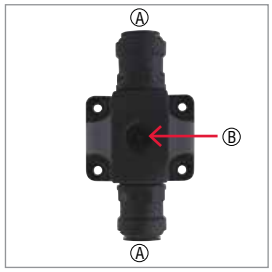
MATERIALS

Polyamide

SPECIFICATIONS

Maximum Working Pressure: 145 PSI
Temperature Range: 0 °C to 70 °C

Product No	Size mm (A)	Outlet (F) NPT (B)
05.450	15	3/8



Product No	Size mm (A)	Outlet (F) NPT (B)
05.455	15	3/8

Product No	Size mm (A)	Outlet (F) NPT (B)
05.470	15	1/2
05.475	22	1/2

Product No	Size mm (A)	Outlet (F) NPT (B)
05.480	22	1/2

Product No	Size mm (A)	Outlet (F) NPT (B)
05.487	15	1/2
05.489	22	1/2

SPACER

Product No	For Manifolds
47.120	47.108 - 47.112 - 07.470 - 07.480

ALUMINIUM MANIFOLD

MATERIALS

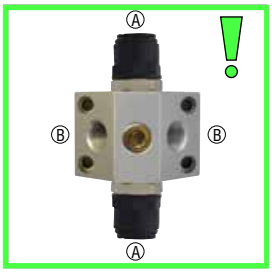
Aluminium

SPECIFICATIONS

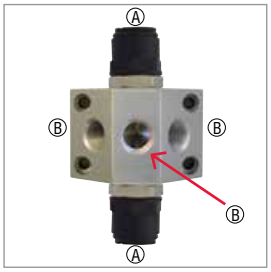
Maximum Working Pressure: 145 PSI
Temperature Range: 0 °C to 70 °C

Product No	Size mm (A)	Outlet (F) NPT (B)
05.492	15	3/8 (2x)
05.496	22	3/8 (2x)

Product No	Size mm (A)	Outlet (F) NPT (B)
05.494	15	3/8 (3x)
05.498	22	3/8 (3x)



Product No	Size mm (A)	Outlet (F) NPT (B)
05.493	15	3/8 (2x)
05.497	22	3/8 (2x)



Product No	Size mm (A)	Outlet (F) NPT (B)
05.495	15	3/8 (3x)
05.499	22	3/8 (3x)

FACTS TO KNOW

For a complete selection of composite or aluminium manifolds, see Series 47

CLIPS

PIPE CLIP FOR WALL MOUNTING

Product No	Size mm ○
05.325	15
05.330	22
05.335	28

Adding horizontal or vertical brackets can be done simply without having to cut the pipe

PIPE CLIP SPACER

Product No	Thickness
05.337	1/2" (12.7 mm)

CLIP WITH SPACER

PIPES CUTTER

RATCHET TYPE PIPE CUTTER

Product No	Description
36.200	Ratchet type Pipe cutter
36.205	Replacement blades (2)

- Allows effortless cutting of nylon pipe up to 41 mm (1-5/8") O.D.
- Straight, even, accurate cutting

PIPE CUTTER

Product No	Description
36.100	Pipe cutter
36.105	Replacement blades (2)

Allows effortless cutting of nylon pipe up to 41 mm (1-5/8") O.D. Straight, even, accurate cutting

BATTERY-OPERATED PIPE CUTTER

Product No	Description
36.020	Pipe cutter

Allows effortless cutting of nylon pipe and hose up to 42 mm

OTHER PRODUCTS

MANUAL DRAIN

Product No	Size mm ○	Fittings
05.500	15	Acetal
05.505	22	Brass

With ball valve, tube and fittings

MECHANICAL AUTOMATIC DRAIN

Product No	Size mm ○	Fittings
05.501	15	Acetal
05.506	22	Acetal

With ball valve, fittings and Y filter

HIGH FLOW SAFETY EXHAUST / LOCKOUT VALVE

Product No	Size mm ○	Fittings
07.430	15	Brass
07.435	22	Brass
07.440	28	Brass

BRASS BALL VALVE

Product No	Size mm ○	Fittings
05.400	15	Acetal
05.405	22	Brass
05.410	28	Brass

SAFETY EXHAUST/ LOCKOUT BRASS BALL VALVE

Product No	Size mm ○	Fittings
07.401	15	Brass
07.406	22	Brass
07.411	28	Brass

Series 06

DISTRIBUTION SYSTEMS

- SicoAIR COMPRESSED AIR
- SicoAZOTE NITROGEN

TOPRING SicoAIR
COMPRESSED AIR DISTRIBUTION SYSTEM

FEATURES AND BENEFITS

Clean air and optimal efficiency

- Aluminium pipe ensures a total absence of corrosion
- Aluminium pipes prevent problems caused by rust common in metal pipe systems
- The “fullbore” design and the low friction coefficient of aluminium pipe provide optimal and constant flow throughout and minimize pressure drop
- Due to consistent clean quality air from the compressor to the equipment, aluminium pipe ensures higher longevity of the equipment and avoids frequent changes of filtration elements

Easy to install

See the video on **TOPRING**.*com* " SICOAIR vs. steel pipe installation "

- Installation time: simple push-in-and-tighten fittings allow installation to be done faster than conventional systems requiring welding, soldering and threading of heavy components
- Installation is 50% to 75% quicker than with conventional metal pipe systems
- **TOPRING** SicoAIR pipes and fittings are assembled in just a few steps by a single installer, without the need for pipe threading equipment
- Lightweight: only a fraction of the weight of conventional steel or black iron
- Fast and easy drop installation: twin take-off drop fitting makes drop installation simple and fast. No need to plan drops before the main line installation, as the system does not need to be depressurized for drop installation

Save money

- Significant energy savings: calibrated aluminium pipe used with fittings eliminates leaks, saving up to 10% of power costs. Both pipe and fittings are designed to reduce friction and pressure drops, further reducing power consumption
- Substantial savings due to lower labour costs
- Reduced system downtime and lost or delayed production
- Reduced maintenance cost

Easy to modify or extend

- **TOPRING** SicoAIR System can be easily dismantled and reinstalled at a new facility
- Completely reusable: components are easy to remove and relocate, making moving an easier task

CERTIFICATIONS

TÜV Certification

- A product certified TÜV is a pledge of safety and quality.
- The group TÜV thus certifies independent test results - in particular, the properties of the products and the standards whereby they were examined.

ASME B31.3

- Meets the requirement of ASME B31.3

  This code prescribes requirements for material and components, design, fabrication, assembly, erection, examination, inspection, and testing of piping.

Canadian Registration Number

- CRN number valid for all Canadian provinces.

QUALICOAT Certification

- QUALICOAT certification is a guarantee of the quality of the lacquer finish applied to aluminium pipe.

ISO 9001: 2008

- Manufactured under ISO quality management system.

TECHNICAL SPECIFICATIONS

Fluids

- Compressed air (dry, wet, lubricated)
- Nitrogen (**TOPRING SicoAzote**)

Maximum Working Pressure

- Pipes: 15 BAR (217 PSI)
- Fittings: 12.5 BAR (181 PSI)

Normal Working Pressure

- 12.5 BAR (181 PSI)

Vaccum Level

- 80% (29.6 "Hg)

Maximum Temperature

- -20 °C to 70 °C

Resistance to

- Corrosion
- Aggressive environments
- Thermal variations
- U.V.
- Mineral and synthetic oils for compressor

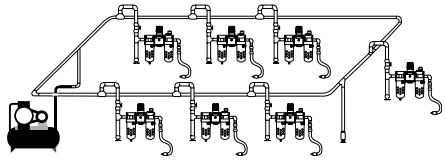
Environment

- Materials used to produce the pipe and fittings are 100% recyclable
- All pipe and fittings are guaranteed silicone-free

PRE-INSTALLATION

GUIDE TO DETERMINE THE PROPER LINE SIZING FOR AN AIRLINE NETWORK

1. Identify the type of network: closed loop or dead-end
2. Calculate the total length of the line (feet)
3. Determine the total flow required (SCFM)

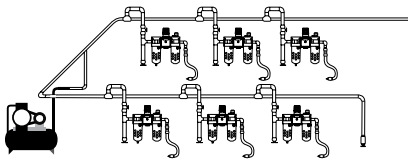


Line sizing for a closed loop network

TOTAL LENGTH OF NETWORK (FEET)

TOTAL FLOW REQUIRED

SCFM \ FEET	100'	150'	200'	250'	300'	400'	500'	600'	700'	800'	900'	1000'	1250'	1500'	2000'
5	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
15	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	25
30	20	20	20	20	20	20	20	20	20	20	25	25	25	25	25
40	20	20	20	20	20	20	25	25	25	25	25	25	25	25	32
60	20	20	20	25	25	25	25	25	25	25	32	32	32	32	32
80	20	25	25	25	25	25	32	32	32	32	32	32	32	32	32
100	25	25	25	25	25	32	32	32	32	32	32	32	32	40	40
125	25	25	32	32	32	32	32	32	32	32	40	40	40	40	40
150	25	32	32	32	32	32	32	40	40	40	40	40	40	40	40
200	32	32	32	32	32	40	40	40	40	40	40	40	50	50	50
300	32	40	40	40	40	40	40	50	50	50	50	50	50	50	63
400	40	40	40	40	40	50	50	50	50	50	50	63	63	63	63
500	40	40	50	50	50	50	50	50	63	63	63	63	63	63	63
750	50	50	50	50	63	63	63	63	63	63	63	63			
1000	50	50	63	63	63	63	63								
1500	63	63	63	63											



Line sizing for a linear / dead-end network

TOTAL LENGTH OF NETWORK (FEET)

TOTAL FLOW REQUIRED

SCFM \ FEET	25'	50'	75'	100'	150'	200'	250'	300'	400'	500'	600'	700'	800'	900'	1000'
5	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	25
15	20	20	20	20	20	20	20	20	20	25	25	25	25	25	25
20	20	20	20	20	20	20	25	25	25	25	25	25	25	25	32
30	20	20	20	20	25	25	25	25	25	32	32	32	32	32	32
40	20	20	25	25	25	25	32	32	32	32	32	32	32	32	32
60	20	25	25	25	32	32	32	32	32	40	40	40	40	40	40
80	25	25	32	32	32	32	32	40	40	40	40	40	40	40	50
100	25	32	32	32	32	40	40	40	40	40	40	50	50	50	50
125	32	32	32	32	40	40	40	40	50	50	50	50	50	50	50
150	32	32	40	40	40	40	40	50	50	50	50	50	50	63	63
200	32	40	40	40	40	50	50	50	50	63	63	63	63	63	63
300	40	40	50	50	50	50	63	63	63	63	63	63	63		
400	40	50	50	50	63	63	63	63	63						
500	50	50	50	63	63	63	63								
750	50	63	63	63											
1000	63	63													
1500	63														

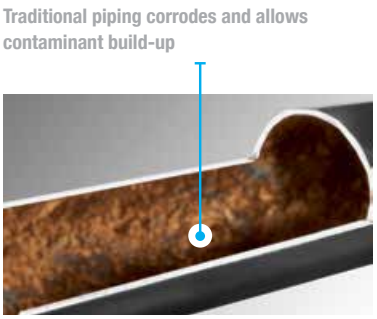
- Calculations based on total maximum pressure drop (△P) of no more than 3 PSIG for entire network, at 100 PSIG at 15.5 °C
- Total flow required takes account of all flows for all compressed air powered tools and equipment
- Note that a typical compressor will produce approximately 4 SCFM per HP

WARNING

Installation of **TOPRING** SicoAir compressed air distribution system must be made according to the assembly instructions as indicated in the installation guide available on request

RIGID ALUMINIUM PIPES

- Available in 6 sizes: 20, 25, 32, 40, 50 & 63 mm
- Tubular extruded aluminium pipe
- Calibrated aluminium pipes for perfect and leak-free assembly with fittings
- Lightweight
- Smooth, clean and corrosion resistant
- Easy and fast installation
- Can be installed on an existant air line system with NPT adaptors
- QUALICOAT certified powder-coated blue paint for compressed air identification
- Suitable for compressed air, vacuum and nitrogen

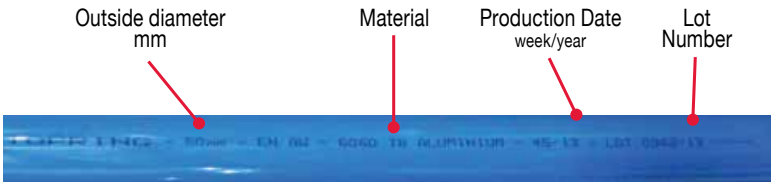


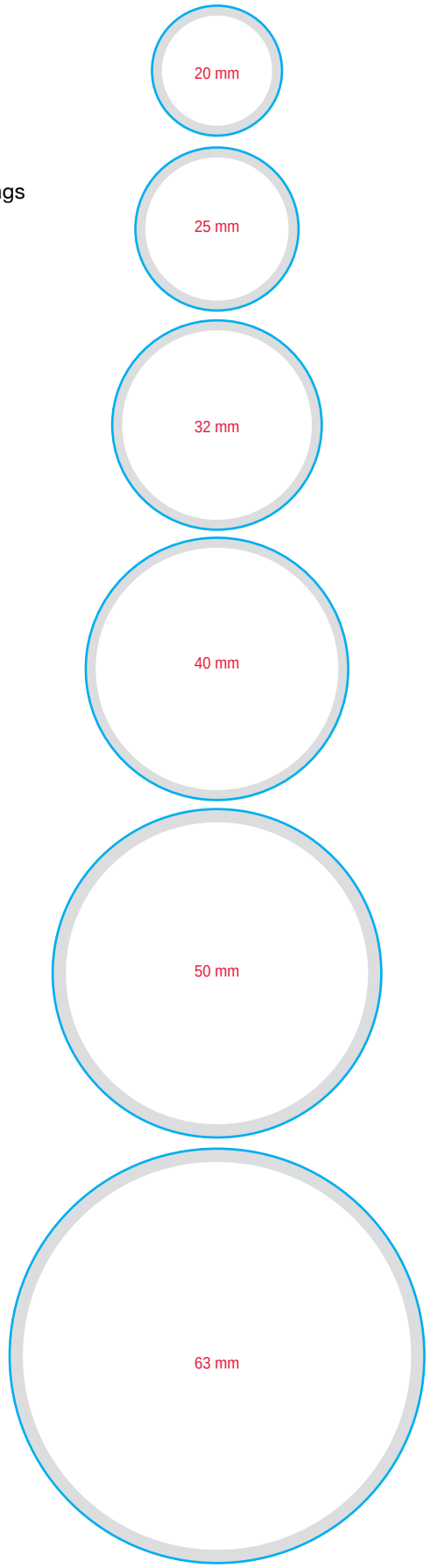
Specifications

- Materials:

  Aluminium extrusion alloy EN AW-6060 T6 with inside and outside titanium-based, chrome-free and Rohs-complying treating and electrocoated outside surface

- Color: Blue RAL 5015
- Manufacturing process: Seamless extrusion process
- Marking:





GOOD TO KNOW

The use of **TOPRING SicoAzote** green pipes and fittings is recommended to easily identify the network using nitrogen from the compressed air network

See page 56

FITTINGS

- Short installation time - quick and easy assembly of piping systems with an easy to connect fitting to the aluminium pipe
- Compression fittings made from polyamide
- High resistance to corrosion, mechanical shocks and thermal variations
- Smooth internal finish
- Quick branch drop leg fitting can be installed anywhere in the pipe network

TOPRING SicoAIR fitting design

① STRONG INTERNAL GRIP DESIGN
Stainless steel clinch ring increasing grip, strength and safety

② DISTINCTIVE NUT DESIGN
The grooves on the nut allow you to use the spanner wrench for safe tightness without damaging the nut

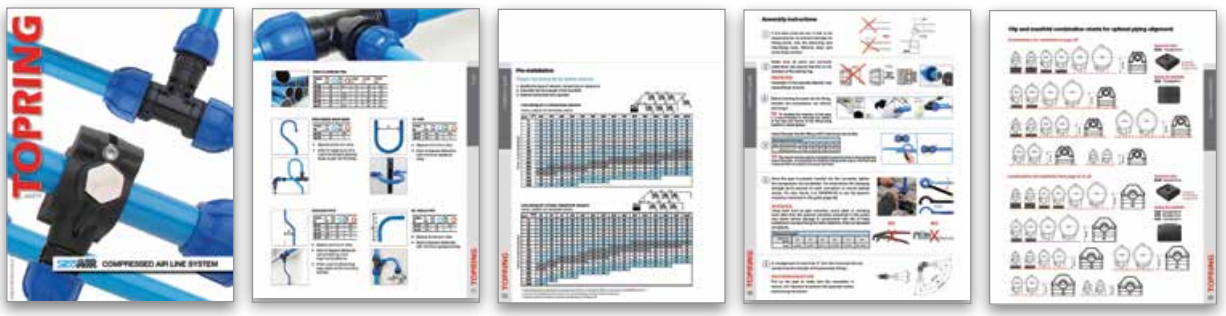
③ EXCLUSIVE BODY DESIGN
Inner body design and large diameter minimize the flow resistance and pressure drop

④ PRECISE ALIGNMENT GUIDE
Nut design allows pipe insertion with perfect alignment

⑤ PARTS IDENTIFICATION

- **TOPRING** SicoAIR reference
- Diameter engraved for easy identification of size
- Nominal pressure

Download the SicoAIR catalogue on TOPRING.com
Section « Technical Support » / Compressed Air Distribution Systems

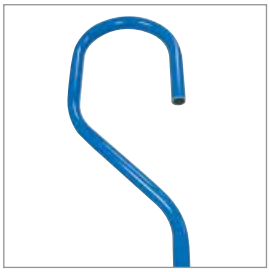


- **Catalogue**
- **Typical Installation**
- **Installation Guide**
- **Basic Principles**
- **Parts and Accessories**

PIPES

RIGID ALUMINIUM PIPE

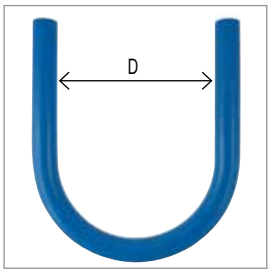
Product No	Size mm	Size inch	Length m	Length ft	Weight kg
06.100	20	3/4	4	13	0.9
06.105	25	1	4	13	1.2
06.110	32	1-1/4	4	13	1.5
06.117	40	1-1/2	6	20	3.1
06.122	50	2	6	20	5.1
06.127	63	2-1/2	6	20	6.5



PREFORMED DROP BEND

Product No	Size mm	Size inch
06.130	20	3/4
06.135	25	1

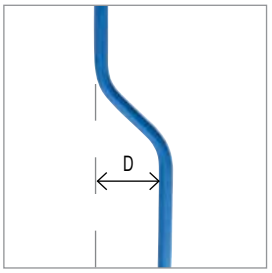
- Special aluminium alloy
- Ideal for tapping air off a main line without allowing water to get into the drop



"U" PIPE

Product No	D mm	Size mm	Size inch
06.132	125	20	3/4
06.137	125	25	1

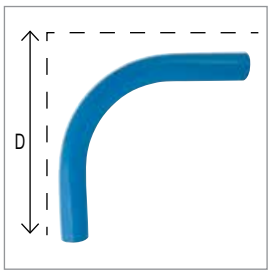
- Special aluminium alloy
- Ideal to bypass obstacles with minimum pressure drop



DEVIATION PIPE

Product No	D mm	Size mm	Size inch
06.131	80	20	3/4
06.134	195	20	3/4
06.136	100	25	1
06.139	240	25	1

- Special aluminium alloy
- Ideal to bypass obstacles and correcting minor alignment problems
- Often used to offset drop legs closer to the mounting surface



90° ANGLE PIPE

Product No	D mm	Size mm	Size inch
06.133	162	20	3/4
06.138	162	25	1

- Special aluminium alloy
- Ideal to bypass obstacles with minimum pressure drop

FLEXIBLE HOSES

FLEXIBLE RUBBER ANTI-VIBRATION HOSE

Length 24 in	Length 48 in	Fittings (M) NPT	Hose I.D. in	Hose O.D. in	Max. Pressure PSI	Min. Bend Radius in
Product No	Product No					
09.200	09.220	1/2	1/2	0.81	500	7
09.202	09.222	3/4	3/4	1.09	500	9-1/2
09.204	09.224	1	1	1.40	500	12
09.206	09.226	1-1/4	1-1/4	1.73	500	16-1/2
09.208	09.228	1-1/2	1-1/2	1.97	500	19-11/16
09.210	09.230	2	2	2.50	500	25

Typical installation

Features and benefits

- Designed for bypassing obstacles and/ or overcoming misalignment of air lines
- Ideal for connecting a compressor outlet to an air line system
- Expansion loops
- Adaptable to all building configurations
- Corrosion-proof rubber hose good for most environments
- Resists mineral and synthetic oils, heat and weathering
- Extends compressor and air line system life by reducing stress from vibration and misalignment

Materials

- Cover: Oil resistant synthetic rubber
- Inner tube: Oil and heat resistant rubber
- Reinforcement: One braid of high tensile steel wire

Specifications

- Temperature range: -40 °C to 100 °C

HIGH TEMPERATURE FLEXIBLE STAINLESS STEEL ANTI-VIBRATION HOSE

Length 12 in	Length 24 in	Fittings (M) NPT	Maximum Misalignment in	Maximum Working Pressure PSI at 21 °C
Product No	Product No			
09.100	09.120	1/2	1-3/4	600
09.102	09.122	3/4	2-3/4	600
09.104	09.124	1	3-1/2	600
09.106	09.126	1-1/4	4-1/2	590
09.108	09.128	1-1/2	5	590
09.110	09.130	2	7-5/8	435

Typical installation

Features and benefits

- Corrugated flexible stainless steel hose is designed to minimize vibration and heat coming from the compressor
- Protects downstream air line system from vibration shock
- Meets ISO 10380 specifications

Materials

- Hose and Braid: Stainless steel
- Fitting: Stainless steel

Specifications

- Temperature range: -40 °C to 250 °C

FEMALE UNION (3 PIECES)

150 PSI

Product No	Thread (F) NPT
41.368	1/2
41.369	3/4
41.370	1
41.371	1-1/4
41.373	2

To minimize possible torque damage to a hose, a union or floating flange, should be used at one end of the hose assembly.

UNION CONNECTIONS • ELBOW UNIONS

STRAIGHT UNION

Product No	Size mm
06.302	20
06.307	25
06.312	32
06.315	40
06.317	50
06.320	63

90° ELBOW UNION

Product No	Size mm
06.262	20
06.267	25
06.272	32
06.275	40
06.277	50
06.280	63

REDUCING UNION

Product No	Size mm ①	Size mm ②
06.308	25	20
06.313	32	25
06.316	40	32
06.318	50	40
06.321	63	50

45° ELBOW UNION

Product No	Size mm
06.282	20
06.283	25
06.284	32
06.285	40
06.286	50
06.287	63

TWIN TAKE-OFF DROP COUPLINGS

Product No	Size mm	Outlet (F) BSPP
06.050	25	1/2
06.055	32	1/2
06.060	40	1/2
06.065	50	1
06.070	63	1

Product No	Size mm ①	Size mm ②
06.052	25	20
06.053	25	25
06.057	32	20
06.058	32	25
06.062	40	20
06.063	40	25
06.067	50	20
06.068	50	25
06.069	50	32
06.072	63	20
06.073	63	25
06.074	63	32

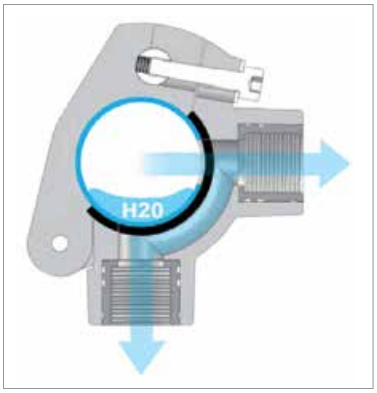
Typical installation

Features and benefits

- Prevents water in main line from getting into drops
- Makes drop installation fast and easy
- The system does not need to be depressurized for drop installation
- No need to plan drops before main line installation
- Can be installed anywhere along any compatible air line
- Side connection point prevents water from getting into drops
- Saddle-type hinged drop coupling mounts simply over existing main lines
- Two connection points for flexibility
- Aluminium threaded inserts for leak proof connections
- Unique design allows installation under pressure with pressurized system drilling tool:
  - Prevents chips and debris from getting into the main line during the installation
  - Built-in drill guide

Applications

- Can be installed on pressurized air networks by using the proper tools (see page 55). Drop installations on new or existing compressed air networks without cutting pipe



See videos on **TOPRING**.com

Video demonstration with **PRESSURIZED** compressed air system

Video demonstration with **NON-PRESSURIZED** compressed air system

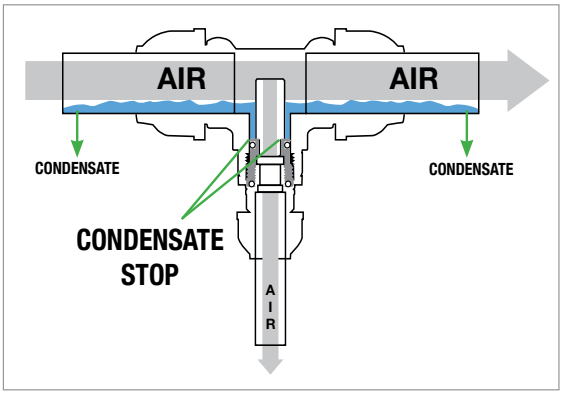
WATER TRAPS "T"

Product No	Size mm ①	Size mm ②
06.970	40	20
06.971	40	25
06.972	50	20
06.973	50	25
06.974	50	32
06.975	50	40
06.976	63	20
06.977	63	25
06.978	63	32
06.979	63	40
06.980	63	50

Features and benefits

- Makes drop installation fast and easy
- Prevents water in main line from getting into drops
- Makes drop installations on new or existing compressed compatible air networks

Typical installation



THREADED DROP CONNECTIONS

Product No	Size mm	Outlet (F) BSPP
06.080	25	1/2
06.084	32	1/2
06.086	32	3/4
06.090	40	1/2
06.092	40	3/4

Features and benefits

- Makes drop installation fast and easy
- No need to plan drops before main line installation
- Saves time during installation
- Drop coupling mounts simply over existing **TOPRING** SicoAIR main lines
- Can be installed anywhere along a compatible air line
- Aluminium threaded inserts for leak proof connections

Typical installation

Applications

- For rigid drops with horizontal take off or for all types of air supply with rigid pipe on an installation which incorporates an efficient air dryer
- Makes drop installations on new or existing compressed air networks without cutting pipe

TEES • REDUCERS

EQUAL TEE

Product No	Size mm
06.332	20
06.337	25
06.342	32
06.345	40
06.347	50
06.350	63

REDUCING TEE

Product No	Size mm ①	Size mm ②
06.385	25	20
06.386	32	20
06.387	32	25
06.388	40	20
06.389	40	25
06.390	40	32
06.391	50	20
06.392	50	25
06.393	50	32
06.394	50	40
06.395	63	20
06.396	63	25
06.397	63	32
06.398	63	40
06.399	63	50

THREADED TEE / REDUCING TEE

Product No	Size mm	Thread (F) BSPP
06.338	25	1/2
06.343	32	3/4
06.346	40	1
06.348	50	1-1/2
06.351	63	2

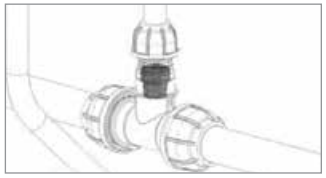
THREADED REDUCER

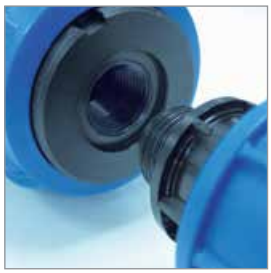
Product No	Ext. Thread (M) BSPP	Int. Thread (F) BSPP
06.916	3/4	1/2
06.918	1	1/2
06.920	1-1/2	1/2
06.922	1-1/2	1
06.924	2	1/2
06.926	2	1
06.928	2	1-1/2

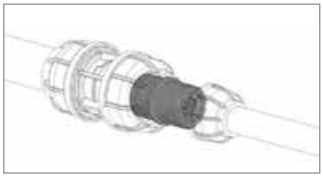
PLUG-IN REDUCER

Product No	Size mm	Int. Thread (F) BSPP
06.950	32	1/2
06.952	40	1/2
06.954	40	1
06.956	50	1/2
06.958	50	1
06.960	63	1/2
06.962	63	1
06.964	63	1-1/2

Specifically designed for use with the female branch " T " (BSPP) connector







THREADED CONNECTIONS

MALE THREADED CONNECTOR BSPT

Product No	Size mm	Thread (M) BSPT
06.202	20	1/2
06.203	20	3/4
06.206	25	1/2
06.208	25	3/4
06.209	25	1
06.212	32	1
06.213	32	1-1/4
06.214	40	1
06.215	40	1-1/4
06.216	40	1-1/2
06.217	50	1-1/2
06.218	50	2
06.220	63	2
06.221	63	2-1/2

FEMALE THREADED CONNECTOR BSPP

Product No	Tube mm	Thread (F) BSPP
06.232	20	1/2
06.237	25	3/4
06.242	32	1
06.245	40	1-1/4
06.247	50	1-1/2
06.250	63	2

MALE THREADED CONNECTOR NPT

Product No	Size mm	Thread (M) NPT
06.222	20	1/2
06.289	20	3/4
06.223	25	1/2
06.224	25	3/4
06.291	25	1
06.225	32	1
06.293	32	1-1/4
06.295	40	1
06.226	40	1-1/4
06.296	40	1-1/2
06.227	50	1-1/2
06.298	50	2
06.228	63	2

FEMALE THREADED CONNECTOR NPT

Product No	Size mm	Thread (F) NPT
06.252	20	1/2
06.254	25	3/4
06.255	32	1
06.256	40	1-1/4
06.257	50	1-1/2
06.258	63	2

END CAP

Product No	Size mm
06.362	20
06.367	25
06.372	32
06.375	40
06.377	50
06.380	63

Includes:

REPLACEMENT PARTS

Product No	Size mm
06.560	20
06.561	25
06.562	32
06.563	40
06.564	50
06.565	63

VALVES

STANDARD BALL VALVE

Product No	Size mm
06.402	20
06.407	25
06.412	32
06.415	40
06.417	50
06.420	63

LOCKABLE SAFETY EXHAUST BALL VALVE

Product No	Size mm
06.403	20
06.408	25
06.413	32

FULL FLOW SAFETY EXHAUST BALL VALVE

Product No	Size mm
06.422	20
06.427	25
06.432	32

DRAINS

MANUAL DRAIN UNIT

Product No	Size mm
06.602	20
06.607	25

Includes: brass ball valve, hose bard, 20 or 25 mm tube fitting, 3/8 x 12 in (30.5 cm) **THERMOFLEX** hose with hose barb and clamp

HIFLO MECHANICAL FLOAT-OPERATED AUTOMATIC DRAIN UNIT

Product No	Size mm
06.603	20
06.608	25

Includes: 114 ml liquid capacity **HIFLO** drain, ball valve, Y strainer, 20 or 25 mm tube fitting

MAXDRAIN MECHANICAL FLOAT-OPERATED AUTOMATIC DRAIN UNIT

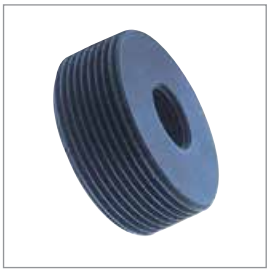
Product No	Size mm
06.604	20
06.609	25

Includes: 400 ml liquid capacity **MAXDRAIN** drain, 20 or 25 mm tube fitting

5 MICRON F/R UNIT WITH LOCK-OUT VALVE AND MUFFLER

Product No	Size mm
06.620	20
06.621	25

ADAPTERS



THREADED REDUCER (ALUMINIUM)

Product No	Ext.Thread (M) BSPT	Int. Thread (F) BSPP
06.900	3/4	1/2
06.901	1	1/2
06.902	1	3/4
06.903	1-1/4	1/2
06.904	1-1/4	3/4
06.906	1-1/2	1/2
06.907	1-1/2	3/4
06.908	1-1/2	1
06.910	2	1/2
06.911	2	3/4
06.912	2	1
06.914	2	1-1/2

BSPT-NPT ADAPTER (ALUMINIUM)

Product No	① Thread (M) BSPT	② Thread (F) NPT
41.930	1/2	1/2
41.931	3/4	3/4
41.932	1	1
41.933	1-1/4	1-1/4
41.934	1-1/2	1-1/2
41.935	2	2

NPT-BSPP ADAPTER (ALUMINIUM)

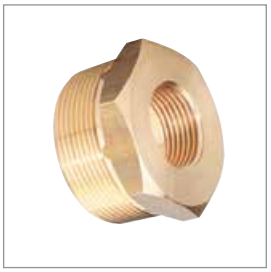
Product No	① Thread (M) NPT	② Thread (F) BSPP
41.920	1/2	1/2
41.921	3/4	3/4
41.922	1	1
41.923	1-1/4	1-1/4
41.924	1-1/2	1-1/2
41.925	2	2

MALE HEXAGONAL NIPPLE BSPT (BRASS)

Product No	① Thread (M) BSPT	② Thread (M) BSPT
41.022	1/4	1/4
41.023	3/8	3/8
41.024	1/2	1/2

MALE HEXAGONAL NIPPLE REDUCER NPT (BRASS)

Product No	① Thread (M) NPT	② Thread (M) NPT
41.120	3/8	1/4
41.124	1/2	1/4
41.126	1/2	3/8
41.133	3/4	1/2



REDUCER BSPP (BRASS)

Product No	Thread (M) BSPT or BSPP	Thread (F) BSPP
41.044	1 **BSPT**	1/2
41.033	1 **BSPT**	3/4
41.045	1-1/4 **BSPP**	1/2
41.047	1-1/4 **BSPP**	3/4
41.054	1-1/4 **BSPP**	1
41.034 *	1-1/2 **BSPP**	1/2
41.035 *	1-1/2 **BSPP**	3/4
41.036	1-1/2 **BSPT**	1
41.037	1-1/2 **BSPT**	1-1/4
41.048	2 **BSPP**	1/2
41.049	2 **BSPP**	3/4
41.051	2 **BSPP**	1
41.052	2 **BSPP**	1-1/4

*Steel

MALE HEXAGONAL REDUCER BSPT (BRASS)

Product No	① Thread (M) BSPT	② Thread (M) BSPT
41.028	1/4	3/8
41.029	3/8	1/2
41.030	1/2	3/4
41.031	3/4	1

MALE HEXAGONAL NIPPLE NPT (BRASS)

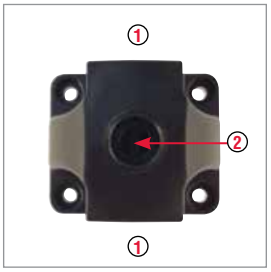
Product No	Thread (M) NPT
41.105	1/4
41.115	3/8
41.125	1/2
41.130	3/4
41.135 *	1
41.127 *	1-1/4
41.128 *	1-1/2
41.129 *	2

*Steel

PIPE PLUG (HEX HEAD) (BRASS)

Product No	Thread (M)
41.065	1/8 **BSPT**
41.066	1/4 **BSPT**
41.067	3/8 **BSPT**
41.068	1/2 **BSPP**
41.069	3/4 **BSPP**
41.070	1 **BSPP**
41.071	1-1/4 **BSPP**
41.072	1-1/2 **BSPT**
41.073	2 **BSPP**

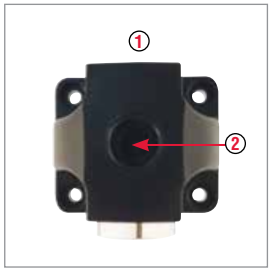
COMPOSITE MANIFOLDS / 1 OUTLET



Product No	Inlet (F) BSPP ①	Outlet (F) NPT ②
47.100	1/2	3/8

Product No	Size mm ①	Quick Coupler
06.452	20	QUIKSILVER 1/4 INDUSTRIAL

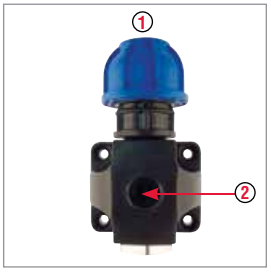
Coupler Specifications
- Accepts **1/4 INDUSTRIAL** type plugs
- Automatic push-to-connect operation
- Easy to connect, even under pressure



Product No	Inlet (F) BSPP ①	Outlet (F) NPT ②
47.102	1/2	3/8

Product No	Size mm ①	Quick Coupler
06.451	20	TOPQUIK 1/4 INDUSTRIAL

Coupler Specifications
- Accepts **1/4 INDUSTRIAL** type plugs
- Automatic push-to-connect operation
- Safety coupler
- Downstream pressure is automatically vented and disconnection is performed easily at zero pressure



Product No	Size mm ①	Outlet (F) NPT ②
06.450	20	3/8

Product No	Size mm ①	Quick Coupler
06.454	20	QUIKSILVER ULTRAFLO

Coupler Specifications
- Accepts **ULTRAFLO** (Series 31) type plugs
- Automatic push-to-connect operation
- Easy to connect, even under pressure

Product No	Size mm ①	Outlet (F) NPT ②
06.455	20	3/8

SPACERS FOR MANIFOLD

Product No	Thickness
47.122	9 mm

Product No	Size mm ①	Quick Coupler
06.453	20	TOPQUIK ULTRAFLO

Coupler Specifications
- Accepts **ULTRAFLO** (Series 31) type plugs
- Automatic push-to-connect operation
- Safety coupler
- Downstream pressure is automatically vented and disconnection is performed easily at zero pressure

COMPOSITE MANIFOLDS / 2 OUTLETS

Product No	Inlet (F) BSPP ①	Outlet (F) NPT ②
47.108	1/2	1/2 (2x)
47.110	3/4	1/2 (2x)

Product No	Size mm	Quick Couplers
06.461	20	QUIKSILVER 1/4 INDUSTRIAL (2x)
06.462	25	

Coupler Specifications

- Accepts **1/4 INDUSTRIAL** type plugs
- Automatic push-to-connect operation
- Easy to connect, even under pressure

Product No	Inlet (F) BSPP ①	Outlet (F) NPT ②
47.109	1/2	1/2 (2x)
47.111	3/4	1/2 (2x)

F/R UNIT WITH COUPLERS

Product No	Size mm	Quick Couplers
06.623	20	QUIKSILVER 1/4 INDUSTRIAL (2x)
06.624	25	

Includes 5 micron F/R, safety lock-out valve, muffler, manifold with 2 couplers

Product No	Size mm ①	Outlet (F) NPT ②
06.470	20	1/2 (2x)
06.475	25	1/2 (2x)

Product No	Size mm	Quick Couplers
06.465	20	QUIKSILVER ULTRAFLO (2x)
06.466	25	

Coupler Specifications

- Accepts **ULTRAFLO** type plugs
- Automatic push-to-connect operation
- Easy to connect, even under pressure

SPACERS FOR MANIFOLD

Product No	Thickness
47.118	10 mm
47.119	13 mm
47.120	20 mm

F/R UNIT WITH COUPLERS

Product No	Size mm	Quick Couplers
06.629	20	QUIKSILVER ULTRAFLO (2x)
06.630	25	

Includes 5 micron F/R, safety lock-out valve, muffler, manifold with 2 couplers

Product No	Size mm	Quick Couplers
06.463	20	TOPQUIK ULTRAFLO (2x)
06.464	25	

Coupler Specifications

- Accepts **ULTRAFLO** type plugs
- Automatic push-to-connect operation
- Safety coupler
- Downstream pressure is automatically vented and disconnection is performed easily at zero pressure

F/R UNIT WITH COUPLERS

Product No	Size mm	Quick Couplers
06.626	20	TOPQUIK ULTRAFLO (2x)
06.627	25	

Includes 5 micron F/R, safety lock-out valve, muffler, manifold with 2 couplers

COMPOSITE MANIFOLDS / 3 OUTLETS

Product No	Inlet (F) BSPP ①	Outlet (F) NPT ②
47.114	1/2	1/2 (3x)
47.112	3/4	1/2 (3x)

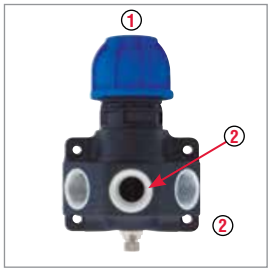
Product No	Size mm	Quick Couplers
06.490	20	QUIKSILVER 1/4 INDUSTRIAL (3x)
06.491	25	

Coupler Specifications
- Accepts **1/4 INDUSTRIAL** type plugs
- Automatic push-to-connect operation
- Easy to connect, even under pressure

Product No	Inlet (F) BSPP ①	Outlet (F) NPT ②
47.115	1/2	1/2 (3x)
47.113	3/4	1/2 (3x)

Product No	Size mm	Quick Couplers
06.494	20	QUIKSILVER ULTRAFLO (3x)
06.495	25	

Coupler Specifications
- Accepts **ULTRAFLO** type plugs
- Automatic push-to-connect operation
- Easy to connect, even under pressure



Product No	Size mm ①	Outlet (F) NPT ②
06.480	25	1/2 (3x)

Product No	Size mm	Quick Couplers
06.492	20	TOPQUIK ULTRAFLO (3x)
06.493	25	

Coupler Specifications
- Accepts **ULTRAFLO** type plugs
- Automatic push-to-connect operation
- Downstream pressure is automatically vented and disconnection is performed easily at zero pressure

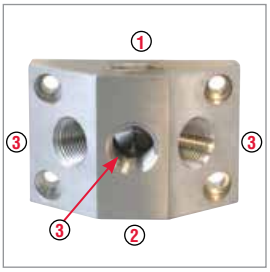
Product No	Inlet (F) BSPP ①	Outlet (F) NPT ②
47.150	1/2	1/2 (4x)
47.155	3/4	1/2 (4x)

Product No	Size mm ①	Outlet (F) NPT ②
06.487	20	1/2 (4x)
06.489	25	1/2 (4x)

SPACERS FOR MANIFOLD

Product No	Thickness
47.118	10 mm
47.119	13 mm
47.120	20 mm

ALUMINIUM MANIFOLDS / 3 OUTLETS



Product No	Inlet (F) BSPP ①	Outlet (F) BSPP ②	Outlet (F) NPT ③
47.307	3/4	3/4	3/8 (3x)
47.310	3/4	3/4	1/2 (3x)
47.320	1	1	1/2 (3x)

Features and benefits

- Provide a convenient junction point for distribution networks requiring multiple connections
- Universal manifolds with 3 outlets

Product No	Size mm ①	Outlet (F) NPT ②
06.435	20	1/4 (3x)
06.436	25	3/8 (3x)
06.437	32	1/2 (3x)

Product No	Size mm	Quick Coupler
06.441	20	QUIKSILVER 1/4 INDUSTRIAL (3x)
06.442	25	
06.443	32	

Coupler Specifications

- Accepts **1/4 INDUSTRIAL** type plugs
- Automatic push-to-connect operation
- Easy to connect, even under pressure

Product No	Size mm	Quick Coupler
06.447	25	QUIKSILVER ULTRAFLO (3x)
06.448	32	

Coupler Specifications

- Accepts **ULTRAFLO** type plugs
- Automatic push-to-connect operation
- Easy to connect, even under pressure

Product No	Size mm	Quick Coupler
06.438	20	TOPQUIK 1/4 INDUSTRIAL (3x)
06.439	25	

Coupler Specifications

- Accepts **1/4 INDUSTRIAL** type plugs
- Automatic push-to-connect operation
- Safety coupler
- Downstream pressure is automatically vented and disconnection is performed easily at zero pressure

Product No	Size mm	Quick Coupler
06.444	25	TOPQUIK ULTRAFLO (3x)
06.445	32	

Coupler Specifications

- Accepts **ULTRAFLO** type plugs
- Automatic push-to-connect operation
- Safety coupler
- Downstream pressure is automatically vented and disconnection is performed easily at zero pressure

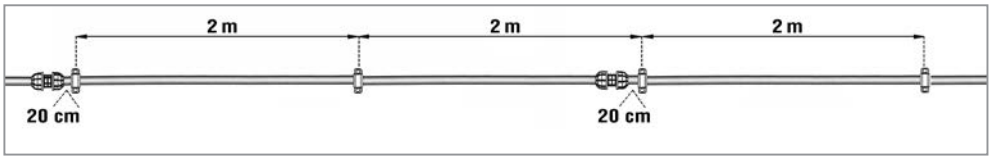
MOUNTING CLIPS FOR RIGID PIPE

Product No	Size mm
06.541	20
06.542	25
06.543	32
06.544	40
06.545	50
06.546	63

It is recommended to use
No 14 screws (Hole size 5.2 mm)

Recommended spacing

- A mounting clip should be installed at every 2 meters maximum (for all diameters 20 to 63 mm)
- A clip must be installed at least 20 cm from of a fitting (downstream or upstream)

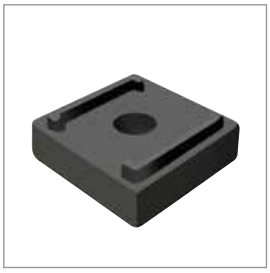


EPDM INSERT FOR FIXING PIPE CLIP

Product No
06.548

Transforms a mounting clip into a fixed point bracket.

Creating a fixed mounting bracket
In order to compensate for thermal expansion, create a fixed point by adding the EPDM insert inside the mounting pipe clip

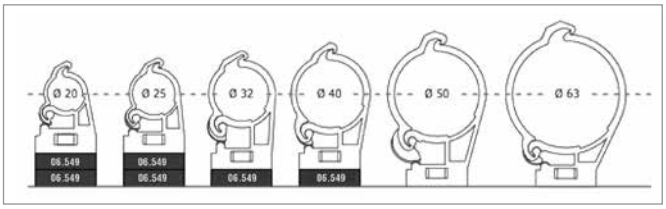


CLIP SPACER

Product No	Thickness
06.549	10 mm

The clip spacer compensates for the height difference which is created when connecting pipes of a different diameter allowing perfect alignment

Combination of different diameters



MOUNTING ACCESSORIES

STRUT ADAPTER FOR PIPE CLIPS

Product No	Description
06.540	For all mounting clip

CANTILEVER ARM 1-5/8" X 1-5/8"

Product No	Length in
06.550	6
06.551	12

STRUT CHANNEL 1-5/8" X 1-5/8"

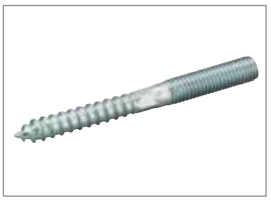
Product No	Length in
06.555	10

THREADED ROD / 10 FT

Product No	Size
06.526	3/8 UNC

COUPLING NUT

Product No	Size
06.528	3/8 UNC



SCREW

Product No	Size
06.529	3/8 UNC

SUSPENSION PIPE CLIPS

Product No	Size mm	Nut
06.503	20	3/8 UNC
06.508	25	3/8 UNC
06.513	32	3/8 UNC
06.518	40	3/8 UNC
06.519	50	3/8 UNC

SWIVEL LOOP HANGERS

Product No	Size mm	For Threaded Rod
06.510	25	3/8 UNC
06.514	32	3/8 UNC
06.516	40	3/8 UNC
06.521	50	3/8 UNC
06.522	63	3/8 UNC

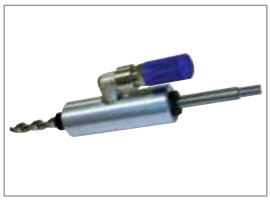
I-BEAM CLAMP

Product No	Beam Thickness	For Threaded Rod
06.535	1/4 - 3/4	3/8 UNC

I-BEAM MOUNTING CLIPS

Product No	Beam Thickness
06.530	1/8 - 1/4
06.531	3/8 - 1/2
06.532	1/2 - 3/4

INSTALLATION TOOLS



FOR PRESSURIZED SYSTEM

Product No	Outlet (F) BSPP	Size mm
06.596	1/2	25-32-40
06.598	1	50-63

With its unique design, the twin take-off drop coupling allows fast and easy drop installation without depressurizing the system or even planning line installation in advance.

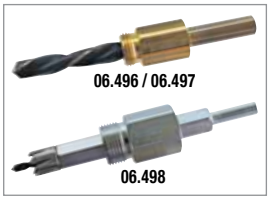
Drilling tool for pressurized system

- Allows installation of twin take-off drop couplings without having to depressurize the **TOPRING** SicoAIR system
- Can also be used on a non-pressurized **TOPRING** SicoAIR system
- Drill chips are collected in the tool reservoir preventing them from entering the main line
- Integrated drill guide for precision drilling

See videos on **TOPRING**.com

Video demonstration with **PRESSURIZED** compressed air system

Video demonstration with **NON-PRESSURIZED** compressed air system



FOR NON-PRESSURIZED SYSTEM

Product No	Outlet (F) BSPP	Size mm
06.496	1/2	25-32-40
06.497	3/4	25-32-40
06.498	1	50-63

Drilling tool for non-pressurized system

- Allows installation of threaded drop connections and twin take-off couplings
- Integrated drill guide for precision drilling

PRACTICAL TOOLS

Tools for the installation and extension of **TOPRING** SicoAIR air pipe systems

CHAMFER TOOL

Product No	Size mm
07.570	3 to 35 mm

DEBURRING TOOL

Product No
07.571

SPANNER WRENCH / SET OF 2

Product No	Size mm
06.590	20
06.591	25
06.592	32
06.593	40
06.594	50
06.595	63

PIPE CUTTER / 3 TO 30 MM

Product No	Description
07.566	Pipe cutter
07.567	Spare blade

PIPE CUTTER / 6 TO 64 MM

Product No	Description
07.568	Pipe cutter
07.569	Spare blade

TOPRING SicoAZOTE
NITROGEN DISTRIBUTION SYSTEM

Exclusively for the use with nitrogen

- Ideal for supplying nitrogen, widely used in tire repair workshops and on assembly lines
- The green color of the pipe and fitting rings make the lines easily distinguishable from other networks used in the distribution of fluids, thus avoiding the need of painting the pipes at the time of installation.

APPLICATIONS

AUTOMOTIVE INDUSTRY
The inflation of tires with nitrogen rather than air maintains the tire pressure for a longer period of time. This reduces the risks associated with underinflated tires and reduces fuel consumption.

FOOD INDUSTRY
Nitrogen is used at different stages of production, handling and packaging of beverages and foods. In winemaking, the use of nitrogen prevents oxidation of the wine and reduce the use of additives.

GENERAL INDUSTRY
Nitrogen is widely used in metal heat treatment: annealing, hardening, tempering, welding, brazing or soldering.

CERTIFICATIONS

TÜV Certification

- A product certified TÜV is a pledge of safety and quality.
- The group TÜV thus certifies independent test results - in particular, the properties of the products and the standards whereby they were examined.

ASME B31.3

- Meets the requirement of ASME B31.3
  This code prescribes requirements for material and components, design, fabrication, assembly, erection, examination, inspection, and testing of piping.

Canadian Registration Number

- CRN number valid for all Canadian provinces.

QUALICOAT Certification

- QUALICOAT certification is a guarantee of the quality of the lacquer finish applied to aluminium pipe.

ISO 9001: 2008

- Manufactured under ISO quality management system.

TECHNICAL SPECIFICATIONS

Fluid: Nitrogen

Maximum Working Pressure:
Pipes: 15 BAR (217 PSI)
Fittings: 12.5 BAR (181 PSI)

Normal Working Pressure:
12.5 BAR (181 PSI)

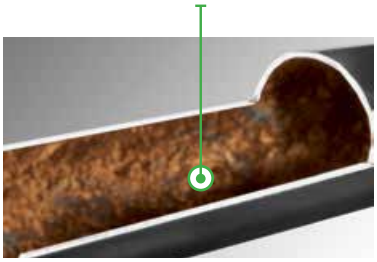
Maximum Temperature:
-20 °C to 70 °C

Resistance to:
Corrosion, aggressive environments, mechanical shocks and thermal variations

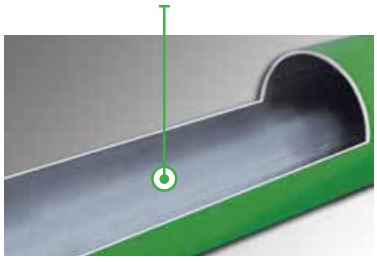
RIGID ALUMINIUM PIPE

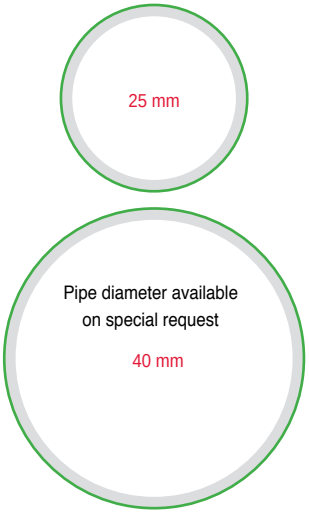
- Available in 25 mm diameter (40 mm on request)
- Tubular extruded aluminium pipe
- Calibrated aluminium pipes for perfect and leak-free assembly with fittings
- Lightweight
- Smooth, clean and corrosion resistant
- Easy and fast installation
- QUALICOAT certified powder-coated green paint for nitrogen identification

Traditional piping corrodes and allows contaminant build-up



TOPRING piping resists corrosion and stays clean over time

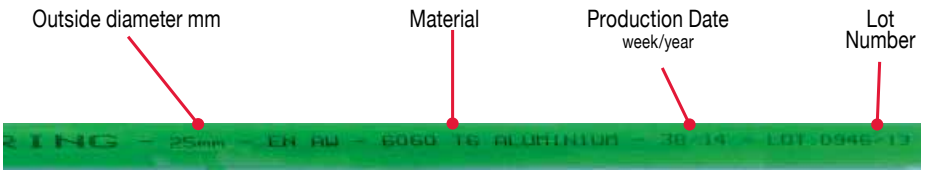




Specifications

- Materials:

  Aluminium extrusion alloy EN AW-6060 T6 with inside and outside titanium-based, chrome-free and Rohs-complying treating and electrocoated outside surface
- Color: Green RAL 6018
- Manufacturing process: Seamless extrusion process
- Marking:



FITTINGS

- Short installation time - quick and easy assembly of piping systems with an easy to connect fitting to the aluminium pipe
- Compression fittings made from polyamide
- High resistance to corrosion, mechanical shocks and thermal variations
- Smooth internal finish
- Quick branch drop leg fitting can be installed anywhere in the pipe network

TOPRING SicoAzote fitting design

1. STRONG INTERNAL GRIP DESIGN
   Stainless steel clinch ring increasing grip, strength and safety
2. DISTINCTIVE NUT DESIGN
   The grooves on the nut allow you to use the spanner wrench for safe tightness without damaging the nut
3. EXCLUSIVE BODY DESIGN
   Inner body design and large diameter minimize the flow resistance and pressure drop
4. PRECISE ALIGNMENT GUIDE
   Nut design allows pipe insertion with perfect alignment
5. PARTS IDENTIFICATION
   - **TOPRING SicoAzote** reference
   - Diameter engraved for easy identification of size
   - Nominal pressure

See videos installation for drop coupling on ***TOPRING****.com*

Video demonstration with **PRESSURIZED** compressed air system

Video demonstration with **NON-PRESSURIZED** compressed air system

PIPE

RIGID ALUMINIUM PIPE

Product No	Size mm	Size inch	Length m	Length ft	Weight kg
06.108	25	1	4	13	1.2

UNIONS

STRAIGHT UNION

Product No	Size mm
06.307.01	25

90° ELBOW UNION

Product No	Size mm
06.267.01	25

TWIN TAKE-OFF DROP COUPLING

Product No	Size mm	Outlet (F) BSPP
06.050	25	1/2

Features and benefits

- Makes drop installation fast and easy
- Can be installed on pressurized air networks by using the proper tools (see p. 55). Drop installations on new or existing nitrogen or compressed air networks without cutting pipe
- Unique design allows installation under pressure with pressurized system drilling tool:
  - Prevents chips and debris from getting into the main line during the installation
  - Built-in drill guide

THREADED DROP CONNECTION

Product No	Size mm	Outlet (F) BSPP
06.080	25	1/2

Features and benefits

- Makes drop installation fast and easy
- No need to plan drops before main line installation
- Saves time during installation
- Drop coupling mounts simply over existing **TOPRING SicoAzote** main lines
- Can be installed anywhere along a compatible nitrogen line
- Solid threaded inserts for leak proof connections

TEE • REDUCER

EQUAL TEE

Product No	Size mm
06.337.01	25

THREADED TEE / REDUCING TEE

Product No	Size mm	Outlet (F) BSPP
06.338.01	25	1/2

THREADED CONNECTIONS

MALE THREADED CONNECTOR BSPT

Product No	Size mm	Thread (M) BSPT
06.206.01	25	1/2
06.208.01	25	3/4
06.209.01	25	1

FEMALE THREADED CONNECTOR BSPP

Product No	Size mm	Thread (F) BSPP
06.237.01	25	3/4

MALE THREADED CONNECTOR NPT

Product No	Size mm	Thread (M) NPT
06.223.01	25	1/2
06.224.01	25	3/4
06.291.01	25	1

FEMALE THREADED CONNECTOR NPT

Product No	Size mm	Thread (F) NPT
06.254.01	25	3/4

END CAP

Product No	Size mm
06.367.01	25

REPLACEMENT PARTS

Product No	Size mm
06.561.01	25

VALVES

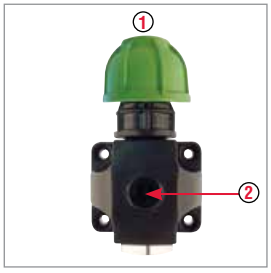
STANDARD BALL VALVE

Product No	Size mm
06.407.01	25

LOCKABLE SAFETY EXHAUST BALL VALVE

Product No	Size mm
06.408.01	25

COMPOSITE MANIFOLD / 1 OUTLET



Product No	Size mm ①	Outlet (F) NPT ②
06.460.01	25	3/8

SPACERS FOR MANIFOLD

Product No	Thickness
47.122	9 mm

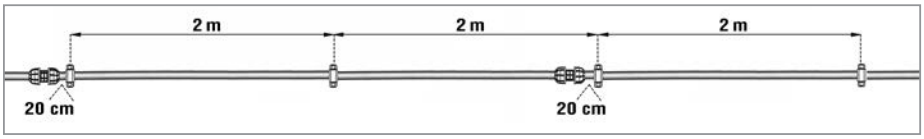
MOUNTING CLIP FOR RIGID PIPE

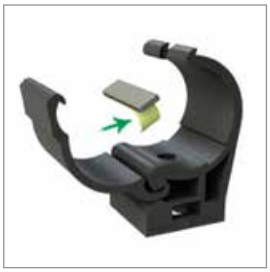
Product No	Size mm
06.542	25

It is recommended to use
No 14 screw (hole size 5.2 mm)

Recommended spacing

- A mounting clip should be installed at every 2 meters maximum (for all diameters 20 to 63 mm)
- A clip must be installed at least 20 cm from of a fitting (downstream or upstream)

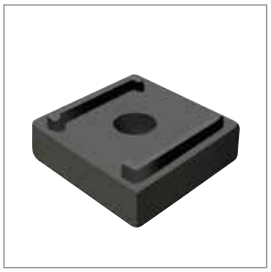




EPDM INSERT FOR FIXING PIPE CLIP

Product No
06.548

Transforms a mounting pipe clip into a fixed point bracket



CLIP SPACER

Product No	Thickness
06.549	10 mm

The clip spacer compensates for the height difference which is created when connecting pipes of a different diameter allowing perfect alignment

FIXING ACCESSORIES

See page 54 for compatible products with 25 mm tube diameter

INSTALLATION TOOLS

See page 55 for compatible products with 25 mm tube diameter

Series 07

QuickLINE COMPRESSED AIR DISTRIBUTION SYSTEM

Features and benefits of TOPRING QuickLINE System

Clean air and optimal efficiency

- Aluminium pipes ensure a total absence of corrosion
- Aluminium pipes prevent problems caused by rust common in metal pipe systems
- The « fullbore » design and the low friction coefficient of aluminium pipe provide optimal and constant flow throughout and minimize pressure drop
- Due to consistent clean quality air from compressor to equipment, aluminium pipe ensures higher longevity of equipment and avoids frequent changes of filtration elements

Easy to install

- Installation speed: simple push-in and push-in-and-tighten fittings (compression) allow installation to be done more quickly than conventional systems requiring threading, welding and soldering of heavy components
- Installation is 50% to 75% quicker than with conventional metal pipe systems
- QuickLINE pipes and fittings are assembled in just a few steps by a single installer, without the need for pipe threading equipment
- Lightweight: only a fraction of the weight of conventional steel or black iron

Save money

- Significant energy savings: calibrated aluminium pipe used with fittings eliminates leaks, saving up to 10% of power costs. Both pipe and fittings are designed to reduce friction and pressure drop, further reducing power consumption
- Substantial savings due to lower labour costs
- Reduced system downtime and lost or delayed production
- Reduced maintenance cost

Easy to modify or extend

- System can be easily dismantled and reinstalled at a new facility

Certification

ASME B31.3

- QuickLINE meets the requirement of ASME B31.3

This code prescribes requirements for material and components, design, fabrication, assembly, erection, examination, inspection, and testing of piping.

Canadian Registration Number

- CRN number valid for all Canadian provinces.

CRN CANADIAN REGISTRATION NUMBER

QUALICOAT Certification

- QUALICOAT certification is a guarantee of the quality of the lacquer finish applied to QuickLINE aluminium pipe.

ISO 9001: 2008

- QuickLINE is manufactured under ISO quality management system.

Technical specifications

Fluids

- Compressed air (dry, wet, lubricated)
- Nitrogen

Maximum Working Pressure

- Pipes: 15 BAR (217 PSI)
- Fittings: 15 BAR (217 PSI)

Normal Working Pressure

- 15 BAR (217 PSI)

Maximum Temperature

- -20 °C to 70 °C

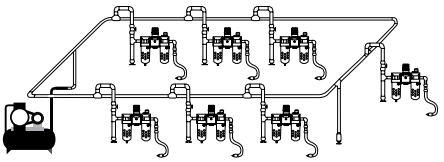
Resistance to

- Corrosion
- Aggressive environments
- Mechanical shocks
- Thermal variations
- U.V.
- Mineral compressor oils
- Synthetic compressor oils

Pre-installation

Proper line sizing for an airline network

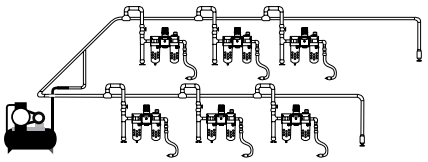
1. Identify type of network: closed loop or dead-end
2. Calculate total length of line (feet)
3. Determine total flow required



Line sizing for a closed loop network

TOTAL LENGTH OF NETWORK (FEET)

TOTAL FLOW REQUIRED (SCFM) \ FEET	100'	150'	200'	250'	300'	400'	500'	600'	700'	800'	900'	1000'	1250'	1500'	2000'
5	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
10	15	15	15	15	15	15	15	15	15	15	15	15	22	22	22
15	15	15	15	15	15	15	15	22	22	22	22	22	22	22	22
20	15	15	15	15	15	22	22	22	22	22	22	22	22	22	22
30	15	22	22	22	22	22	22	22	22	22	22	22	22	22	28
40	22	22	22	22	22	22	22	22	22	22	28	28	28	28	28
60	22	22	22	22	22	28	28	28	28	28	28	28	28	28	40
80	22	22	22	28	28	28	28	28	28	28	28	40	40	40	40
100	22	28	28	28	28	28	28	28	40	40	40	40	40	40	40
125	28	28	28	28	28	40	40	40	40	40	40	40	40	40	40
150	28	28	28	28	40	40	40	40	40	40	40	40	40	40	40
200	28	28	40	40	40	40	40	40	40	40	40	40	50	50	50
300	40	40	40	40	40	40	40	50	50	50	50	50	50	50	63
400	40	40	40	40	40	50	50	50	50	50	50	63	63	63	63
500	40	40	50	50	50	50	50	50	63	63	63	63	63	63	63
750	50	50	50	50	63	63	63	63	63	63	63	63			
1000	50	50	63	63	63	63	63								
1500	63	63	63	63											



Line sizing for a linear / dead-ended network

TOTAL LENGTH OF NETWORK (FEET)

TOTAL FLOW REQUIRED (SCFM) \ FEET	25'	50'	75'	100'	150'	200'	250'	300'	400'	500'	600'	700'	800'	900'	1000'
5	15	15	15	15	15	15	15	15	15	15	15	22	22	22	22
10	15	15	15	15	15	22	22	22	22	22	22	22	22	22	22
15	15	15	22	22	22	22	22	22	22	22	22	22	28	28	28
20	15	22	22	22	22	22	22	22	22	28	28	28	28	28	28
30	22	22	22	22	22	28	28	28	28	28	28	28	28	40	40
40	22	22	22	22	28	28	28	28	28	40	40	40	40	40	40
60	22	28	28	28	28	28	40	40	40	40	40	40	40	40	40
80	22	28	28	28	40	40	40	40	40	40	40	40	40	40	50
100	28	28	28	40	40	40	40	40	40	40	40	50	50	50	50
125	28	40	40	40	40	40	40	40	50	50	50	50	50	50	50
150	28	40	40	40	40	40	40	50	50	50	50	50	50	63	63
200	40	40	40	40	40	50	50	50	50	63	63	63	63	63	63
300	40	40	50	50	50	50	63	63	63	63	63	63	63		
400	40	50	50	50	63	63	63	63	63						
500	50	50	50	63	63	63	63								
750	50	63	63	63											
1000	63	63													
1500	63														

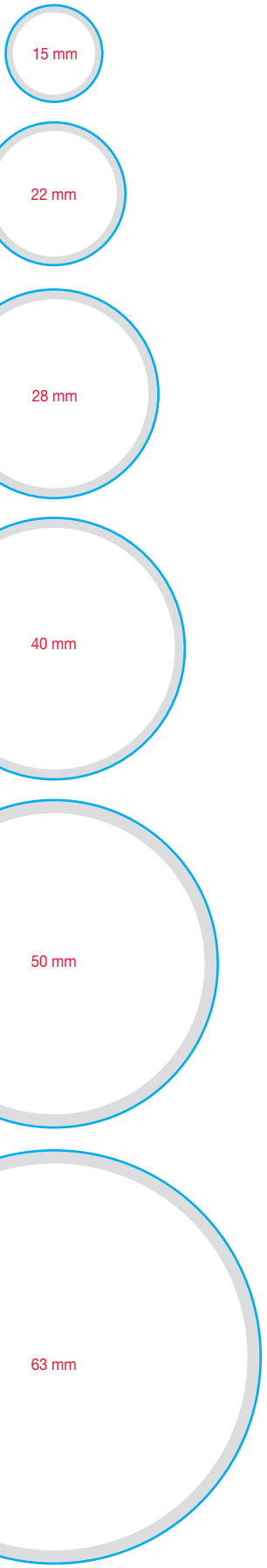
- Calculations based on total maximum pressure drop (△P) of no more than 3 PSIG for entire network, at 100 PSIG @ 15.6 °C
- Total flow required takes account of all flows for all compressed air powered tools and equipment
- Note that a typical compressor will produce approximately 4 SCFM per HP

WARNING

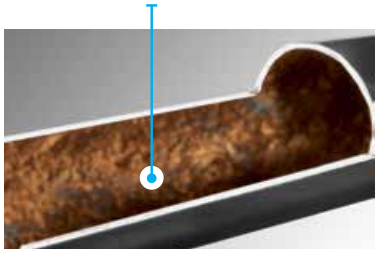
Installation of QuickLine compressed air distribution system must be made according to the assembly instructions as indicated in the installation guide (available on request or on the website)

Rigid aluminium pipes

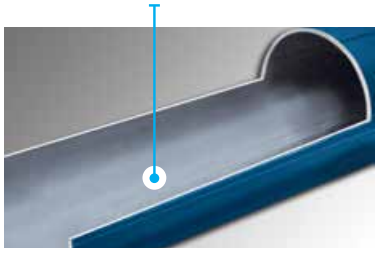
- Available in 6 sizes: 15, 22, 28, 40, 50 & 63 mm
- Tubular extruded aluminium pipe
- Calibrated aluminium pipes for perfect and leak-free assembly with fittings
- Lightweight
- Smooth, clean, non-corrosive, rust-proof internal finish
- Easy to install and adapt to existing metal pipe systems
- QUALICOAT certified powder-coated blue paint for compressed air identification
- Suitable fluids: Compressed air, vacuum, nitrogen



Traditional piping corrodes and allows contaminant build-up



TOPRING piping resists corrosion and stays clean over time

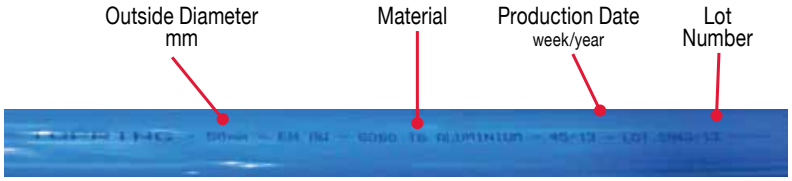


Specifications

- Material:

  Aluminium extrusion alloy EN AW-6060 T6 with inside and outside titanium-based, chrome-free and RoHS-complying treating and electrocoated outside surface

- Color: Blue RAL 5015
- Manufacturing process: Seamless Extrusion Process
- Marking:



PUSH-TO-CONNECT
FOR PIPE ○ 15 • 22 • 28 mm

- Suitable for aluminium and nylon pipe
- For diameters of 15, 22, and 28 mm
- Quick assembly
- Limited fitting expansion under pressure, resulting in dimensionally stable installations
- No threading, no soldering, no sealing materials required
- Full flow design
- Fully reusable

Specifications

- Body: Brass
- Release Sleeve: Glass fibre reinforced polyamide composite
- Release colar: Polyamide
- Retaining ring: Stainless Steel
- Distancer: Acetalic resin
- O-Ring: EPDM Rubber

Quick and easy to assemble

SCREW-TYPE COMPRESSION FITTINGS
FOR PIPE ○ 40 • 50 • 63 mm

- For use with aluminium pipe
- For diameters of 40, 50 and 63 mm
- Quick assembly with screw-type compression fittings
- Unaffected by vibration
- No threading, no soldering, no sealing materials required
- Full flow design, with optimal flow characteristics
- Reusable - only internal ring must be replaced

Specifications

- Body: Brass
- Tightening Collar: Brass
- O-Ring: Buna-N/Nitrile
- Spacer Ring: Stainless steel
- Clamp Ring: Nickel plated brass

Quick and easy to assemble

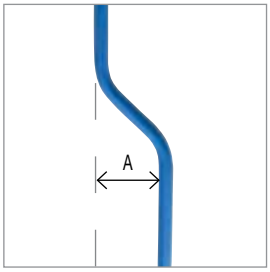
RIGID ALUMINIUM PIPES

Product No	Size mm	Size in	Length m	Length ft	Weight kg
07.102	15	1/2	4	13	0.54
07.107	22	3/4	4	13	0.92
07.112	28	1	4	13	1.36
07.119	40	1-1/2	6	20	2.93
07.121	50	2	6	20	4.97
07.124	63	2-1/2	6	20	6.13

PREFORMED DROP BENDS

Product No	Size mm	Size in
07.130	15	1/2
07.135	22	3/4

- Special aluminium alloy
- Ideal for tapping air off a main line without allowing water to get into the drop



DEVIATION PIPES

Product No	D mm	Size mm	Size in
07.131	80	15	1/2
07.136	100	22	3/4

- Special aluminium alloy
- Ideal for getting around obstacles and correcting minor alignment problems
- Often used to offset drop legs closer to the mounting surface

PRACTICAL TOOLS

Tools for the installation and extension of **TOPRING** air distribution systems

CHAMFER TOOL

Product No	Size mm
07.570	3 to 35 mm

PIPE CUTTER 3 TO 30 MM

Product No	Description
07.566	Pipe cutter
07.567	Spare blade

DEBURRING TOOL

Product No	Description
07.571	Tool
07.572	Spare blade

PIPE CUTTER 6 TO 64 MM

Product No	Description
07.568	Pipe cutter
07.569	Spare blade

DISMANTLING CLIP

Product No	Size mm
07.560	15
07.561	22
07.562	28

FLEXIBLE RUBBER ANTI-VIBRATION HOSE

Length 24 in	Length 48 in	Fittings (M) NPT	Hose I.D. in	Hose O.D. in	Max. Pressure PSI	Min. Bend Radius in
Product No	Product No					
09.200	09.220	1/2	1/2	0.81	500	7
09.202	09.222	3/4	3/4	1.09	500	9-1/2
09.204	09.224	1	1	1.40	500	12
09.206	09.226	1-1/4	1-1/4	1.73	500	16-1/2
09.208	09.228	1-1/2	1-1/2	1.97	500	19-11/16
09.210	09.230	2	2	2.50	500	25

Typical installation

Features and benefits

- Designed for bypassing obstacles and/ or overcoming misalignment of air lines
- Ideal for connecting a compressor outlet to an air line system
- Expansion loops
- Adaptable to all building configurations
- Corrosion-proof rubber hose good for most environments
- Resists mineral and synthetic oils, heat and weathering
- Extends compressor and air line system life by reducing stress from vibration and misalignment

Materials

- Cover: Oil resistant synthetic rubber
- Inner tube: Oil and heat resistant rubber
- Reinforcement: One braid of high tensile steel wire

Specifications

- Temperature range: -40 °C to 100 °C

HIGH TEMPERATURE FLEXIBLE STAINLESS STEEL ANTI-VIBRATION HOSE

Length 12 in	Length 24 in	Fittings (M) NPT	Maximum Misalignment in	Maximum Working Pressure PSI at 21 °C
Product No	Product No			
09.100	09.120	1/2	1-3/4	600
09.102	09.122	3/4	2-3/4	600
09.104	09.124	1	3-1/2	600
09.106	09.126	1-1/4	4-1/2	590
09.108	09.128	1-1/2	5	590
09.110	09.130	2	7-5/8	435

Typical installation

Features and benefits

- Corrugated flexible stainless steel hose is designed to minimize vibration and heat coming from the compressor
- Protects downstream air line system from vibration shock
- Meets ISO 10380 specifications

Materials

- Hose and Braid: Stainless steel
- Fitting: Stainless steel

Specifications

- Temperature range: -40 °C to 250 °C

FEMALE UNION (3 PIECES)

150 PSI

Product No	Thread (F) NPT
41.368	1/2
41.369	3/4
41.370	1
41.371	1-1/4
41.373	2

To minimize possible torque damage to a hose, a union or floating flange. Should be used at one end of the hose assembly.

UNION CONNECTIONS • ELBOW UNIONS

UNION

Product No	Size mm
07.300	15
07.305	22
07.310	28

90° ELBOW UNION

Product No	Size mm
07.260	15
07.265	22
07.270	28

UNION

Product No	Size mm
07.315	40
07.317	50
07.320	63

90° ELBOW UNION

Product No	Size mm
07.275	40
07.277	50
07.280	63

MALE TUBING REDUCER

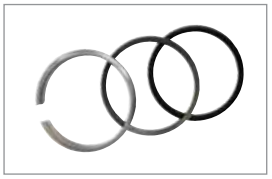
Product No	Size mm	Size mm
07.150	22	15

POLYAMIDE PLUG

Product No	Size mm
07.362	15
07.367	22
07.372	28

ALUMINIUM PLUG

Product No	Size mm
07.379	50
07.382	63



SPACER RING, CLAMP RING, O-RING

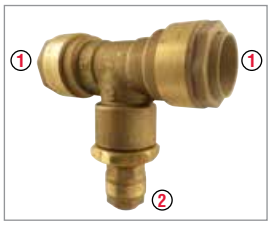
Product No	Size mm
07.580	40
07.584	50
07.585	63

« T » UNION

Product No	Size mm
07.330	15
07.335	22
07.340	28

« T » UNION

Product No	Size mm
07.345	40
07.342	50
07.350	63



« T » REDUCERS UNION

Product No	Size mm ①	Size mm ②
07.334	22	15
07.338	28	15
07.339	28	22
07.343	40	15
07.344	40	22
07.341	40	28
07.355	50	15
07.356	50	22
07.357	50	28
07.348	63	15
07.349	63	22

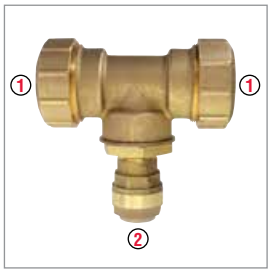
FEMALE BRANCH « T » CONNECTOR

Product No	Size mm	Thread (F) BSPP
07.325	15	1/2
07.327	22	3/4
07.329	28	1

FEMALE BRANCH « T » CONNECTOR

Product No	Size mm	Thread (F) BSPP
07.346	40	1-1/4
07.347	50	1-1/2
07.351	63	2

WATER TRAPS « T »

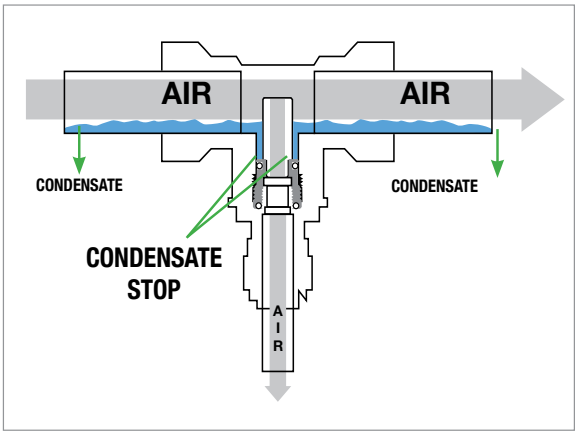


Typical installation

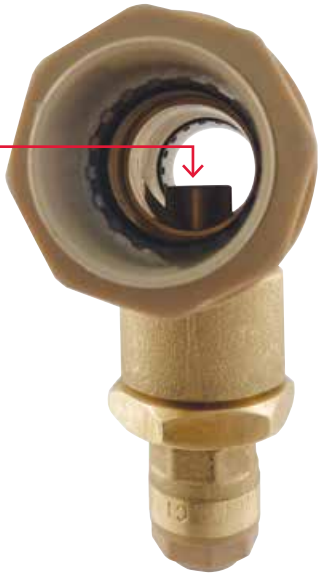
Product No	Size mm ①	Size mm ②
07.950	28	15
07.955	28	22
07.951	40	15
07.952	40	22
07.956	40	28
07.957	50	15
07.958	50	22
07.959	50	28
07.953	63	15
07.954	63	22
07.960	63	28

Features and benefits

- Makes drop installation fast and easy
- Prevents water in main line from getting into drops
- Allows installation of drops on new or existing compressed air networks



Stops water from getting into the drop



THREADED CONNECTORS

BSPT STRAIGHT MALE CONNECTOR

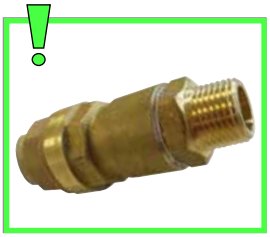
Product No	Size mm	Thread (M) BSPT
07.200	15	1/2
07.204	22	1/2
07.205	22	3/4
07.210	28	1

Product No	Size mm	Thread (M) BSPT
07.215	40	1-1/4
07.217	50	1-1/2
07.220	63	2

BSPP STRAIGHT FEMALE CONNECTOR

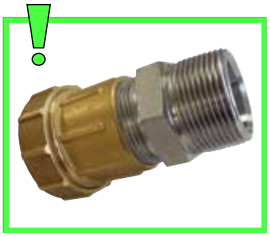
Product No	Size mm	Thread (F) BSPP
07.230	15	1/2
07.234	22	1/2
07.235	22	3/4
07.240	28	1

Product No	Size mm	Thread (F) BSPP
07.245	40	1-1/4
07.247	50	1-1/2
07.250	63	2



NPT STRAIGHT MALE CONNECTOR

Product No	Size mm	Thread (M) NPT
07.222	15	1/2
07.223	22	1/2
07.224	22	3/4
07.225	28	1



Product No	Size mm	Thread (M) NPT
07.226	40	1-1/4
07.227	50	1-1/2
07.229	63	1-1/2
07.228	63	2

BLANKING CAP

Product No	Size mm
07.360	15
07.365	22
07.370	28

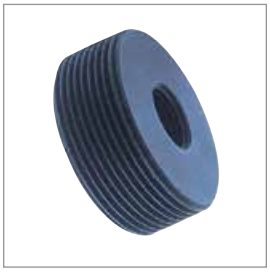
Product No	Size mm
07.375	40
07.376	50
07.380	63

NPT STRAIGHT FEMALE CONNECTOR

Product No	Size mm	Thread (F) NPT
07.252	15	1/2
07.254	22	3/4
07.255	28	1

Product No	Size mm	Thread (F) NPT
07.256	40	1-1/4
07.257	50	1-1/2
07.258	63	2

ADAPTERS



THREADED REDUCER (ALUMINIUM)

Product No	Thread (M) BSPT	Thread (F) BSPP
06.900	3/4	1/2
06.901	1	1/2
06.902	1	3/4
06.903	1-1/4	1/2
06.906	1-1/2	1/2
06.908	1-1/2	1
06.910	2	1/2
06.912	2	1
06.914	2	1-1/2
06.904	1-1/4	3/4
06.907	1-1/2	3/4
06.911	2	3/4

BSPT-NPT ADAPTER (ALUMINIUM)

Product No	Thread (M) BSPT ①	Thread (F) NPT ②
41.930	1/2	1/2
41.931	3/4	3/4
41.932	1	1
41.933	1-1/4	1-1/4
41.934	1-1/2	1-1/2
41.935	2	2

NPT-BSPP ADAPTER (ALUMINIUM)

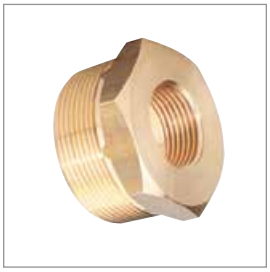
Product No	Thread (M) NPT ①	Thread (F) BSPP ②
41.920	1/2	1/2
41.921	3/4	3/4
41.922	1	1
41.923	1-1/4	1-1/4
41.924	1-1/2	1-1/2
41.925	2	2

MALE HEXAGONAL NIPPLE BSPT (NICKEL-PLATED BRASS)

Product No	Thread (M) BSPT ①	Thread (M) BSPT ②
41.022	1/4	1/4
41.023	3/8	3/8
41.024	1/2	1/2

MALE HEXAGONAL NIPPLE REDUCER NPT (BRASS)

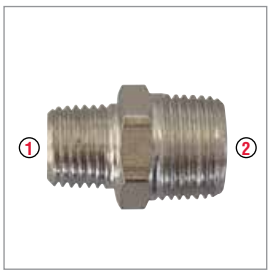
Product No	Thread (M) NPT ①	Thread (M) NPT ②
41.120	3/8	1/4
41.124	1/2	1/4
41.126	1/2	3/8
41.133	3/4	1/2



REDUCER (BSPP) (BRASS)

Product No	Thread (M) BSPT or BSPP	Thread (F) BSPP
41.044	1 **BSPT**	1/2
41.033	1 **BSPT**	3/4
41.045	1-1/4 **BSPP**	1/2
41.047	1-1/4 **BSPP**	3/4
41.054	1-1/4 **BSPP**	1
41.034 *	1-1/2 **BSPP**	1/2
41.035 *	1-1/2 **BSPP**	3/4
41.036	1-1/2 **BSPT**	1
41.037	1-1/2 **BSPT**	1-1/4
41.048	2 **BSPP**	1/2
41.049	2 **BSPP**	3/4
41.051	2 **BSPP**	1
41.052	2 **BSPP**	1-1/4

*Steel



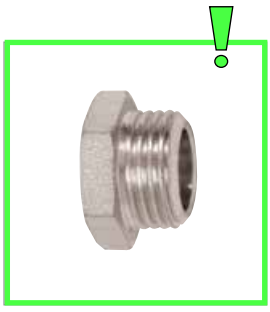
MALE HEXAGONAL REDUCER BSPT (NICKEL-PLATED BRASS)

Product No	Thread (M) BSPT ①	Thread (M) BSPT ②
41.028	1/4	3/8
41.029	3/8	1/2
41.030	1/2	3/4
41.031	3/4	1

MALE HEXAGONAL NIPPLE NPT (BRASS)

Product No	Thread (M) NPT
41.105	1/4
41.115	3/8
41.125	1/2
41.130	3/4
41.135	1
41.127 *	1-1/4
41.129 *	2

*Steel



PIPE PLUG (HEX HEAD) (NICKEL-PLATED BRASS)

Product No	Thread (M)
41.065	1/8 **BSPT**
41.066	1/4 **BSPT**
41.067	3/8 **BSPT**
41.068	1/2 **BSPP**
41.069	3/4 **BSPP**
41.070	1 **BSPP**
41.071	1-1/4 **BSPP**
41.072	1-1/2 **BSPT**
41.073	2 **BSPP**

FEMALE BACKPLATE ELBOW

Product No	Size mm	Thread (F) BSPP
07.291	15	1/2

STANDARD BALL VALVE

Product No	Size mm
07.400	15
07.405	22
07.410	28

STANDARD BALL VALVE

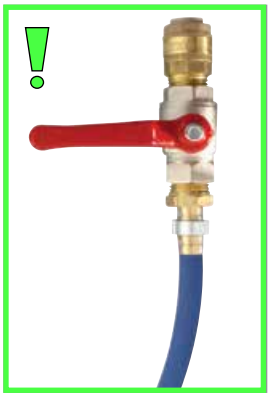
Product No	Size mm
07.415	40
07.417	50
07.420	63

HIGH FLOW SAFETY EXHAUST/ LOCKOUT VALVE

Product No	Size mm
07.430	15
07.435	22
07.440	28

SAFETY EXHAUST/LOCKOUT BALL VALVE

Product No	Size mm
07.401	15
07.406	22
07.411	28



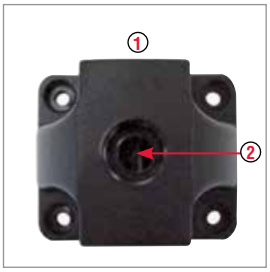
MANUAL DRAIN

Product No	Size mm
07.600	15
07.605	22

MECHANICAL FLOAT-OPERATED AUTOMATIC DRAIN

Product No	Size mm
07.601	15
07.606	22

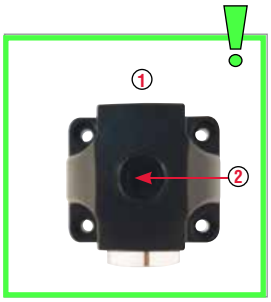
COMPOSITE MANIFOLDS / 1 OUTLET



Product No	Inlet (F) BSPP ①	Outlet (F) NPT ②
47.100	1/2	3/8

Product No	Size mm ○	Quick Coupler
07.457	15	QUIKSILVER 1/4 INDUSTRIAL

Coupler Specifications
- Accepts **1/4 INDUSTRIAL** type plugs
- Automatic push-to-connect operation
- Easy to connect, even under pressure

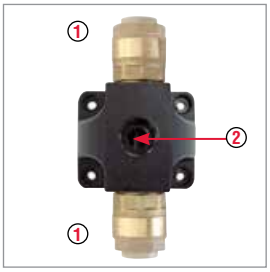


Product No	Inlet (F) BSPP ①	Outlet (F) NPT ②
47.102	1/2	3/8

Product No	Size mm ○	Quick Coupler
07.456	15	TOPQUIK 1/4 INDUSTRIAL

Coupler Specifications
- Accepts **1/4 INDUSTRIAL** type plugs
- Automatic push-to-connect operation
- Downstream pressure is automatically vented and disconnection is performed easily at zero pressure
- Disconnection sound level of only 80 dB

Product No	Size mm ○ ①	Outlet (F) NPT ②
07.450	15	3/8



Product No	Size mm ○ ①	Outlet (F) NPT ②
07.455	15	3/8

Product No	Size mm ○	Quick Coupler
07.459	15	QUIKSILVER ULTRAFLO

Coupler Specifications
- Accepts **ULTRAFLO** type plugs
- Automatic push-to-connect operation
- Easy to connect, even under pressure

SPACERS FOR MANIFOLD

Product No	Thickness
47.122	9 mm

Product No	Size mm ○	Quick Coupler
07.458	15	TOPQUIK ULTRAFLO

Coupler Specifications
- Accepts **ULTRAFLO** type plugs
- Automatic push-to-connect operation
- Downstream pressure is automatically vented and disconnection is performed easily at zero pressure
- Disconnection sound level of only 80 dB

COMPOSITE MANIFOLDS / 2 OUTLETS

Product No	Inlet (F) BSPP ①	Outlet (F) NPT ②
47.108	1/2	1/2 (2x)
47.110	3/4	1/2 (2x)

Product No	Inlet (F) BSPP ①	Outlet (F) NPT ②
47.109	1/2	1/2 (2x)
47.111	3/4	1/2 (2x)

Product No	Size mm ①	Outlet (F) NPT ②
07.470	15	1/2 (2x)
07.475	22	1/2 (2x)

SPACERS FOR MANIFOLD

Product No	Thickness
47.118	10 mm
47.119	13 mm
47.120	20 mm

Product No	Size mm	Quick Couplers
07.463	15	QUIKSILVER 1/4 INDUSTRIAL (2x)
07.464	22	

Coupler Specifications

- Accepts **1/4 INDUSTRIAL** type plugs
- Automatic push-to-connect operation
- Easy to connect, even under pressure

Product No	Size mm	Quick Couplers
07.467	15	QUIKSILVER ULTRAFLO (2x)
07.468	22	

Coupler Specifications

- Accepts **ULTRAFLO** type plugs
- Automatic push-to-connect operation
- Easy to connect, even under pressure

Product No	Size mm	Quick Couplers
07.465	15	TOPQUIK ULTRAFLO (2x)
07.466	22	

Coupler Specifications

- Accepts **ULTRAFLO** type plugs
- Automatic push-to-connect operation
- Downstream pressure is automatically vented and disconnection is performed easily at zero pressure

COMPOSITE MANIFOLDS / 3 OUTLETS

Prod. No	Inlet (F) BSPP ①	Outlet (F) NPT ②
47.114	1/2	1/2 (3x)
47.112	3/4	1/2 (3x)

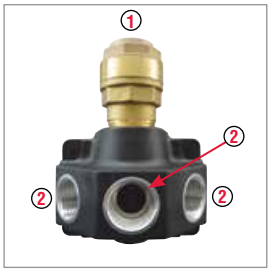
Product No	Size mm ○	Quick Couplers
07.481	15	QUIKSILVER 1/4 INDUSTRIAL (3x)
07.482	22	

Coupler Specifications
- Accepts **1/4 INDUSTRIAL** type plugs
- Automatic push-to-connect operation
- Easy to connect, even under pressure

Product No	Inlet (F) BSPP ①	Outlet (F) NPT ②
47.115	1/2	1/2 (3x)
47.113	3/4	1/2 (3x)

Product No	Size mm ○	Quick Couplers
07.485	15	QUIKSILVER ULTRAFLO (3x)
07.486	22	

Coupler Specifications
- Accepts **ULTRAFLO** type plugs
- Automatic push-to-connect operation
- Easy to connect, even under pressure



Product No	Size mm ○ ①	Outlet (F) NPT ②
07.480	22	1/2 (3x)

Product No	Size mm ○	Quick Couplers
07.483	15	TOPQUIK ULTRAFLO (3x)
07.484	22	

Coupler Specifications
- Accepts **ULTRAFLO** type plugs
- Automatic push-to-connect operation
- Downstream pressure is automatically vented and disconnection is performed easily at zero pressure

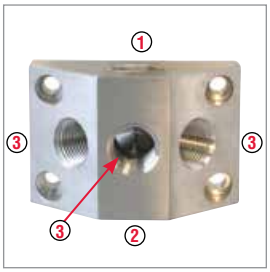
Product No	Inlet (F) BSPP ①	Outlet (F) NPT ②
47.150	1/2	1/2 (4x)
47.155	3/4	1/2 (4x)

Product No	Size mm ○ ①	Outlet (F) NPT ②
07.487	15	1/2 (4x)
07.489	22	1/2 (4x)

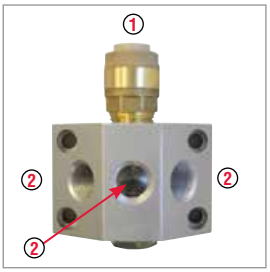
SPACERS FOR MANIFOLD

Product No	Thickness
47.118	10 mm
47.119	13 mm
47.120	20 mm

ALUMINIUM MANIFOLDS / 3 OUTLETS

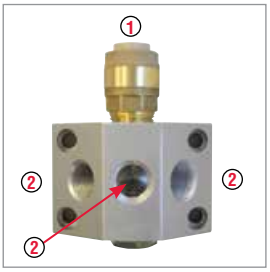


Product No	Top Inlet (F) BSPP ①	Bottom Outlet (F) BSPP ②	Ports Outlet (F) NPT ③
47.307	3/4	3/4	3/8 (3x)
47.310	3/4	3/4	1/2 (3x)
47.320	1	1	1/2 (3x)



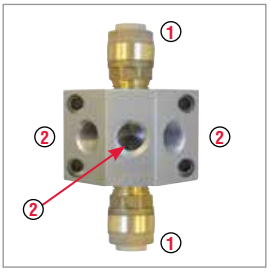
Product No	Size mm ①	Ports Outlet (F) NPT ②
07.441	15	1/4 (3x)
07.442	22	3/8 (3x)
07.443	28	1/2 (3x)

Product No	Size mm ①	Ports Outlet (F) NPT ②
07.492	15	3/8 (2x)
07.496	22	3/8 (2x)
07.445	28	1/2 (2x)



Product No	Size mm ①	Ports Outlet (F) NPT ②
07.494	15	3/8 (3x)
07.498	22	3/8 (3x)
07.447	28	1/2 (3x)

Product No	Size mm ①	Ports Outlet (F) NPT ②
07.493	15	3/8 (2x)
07.497	22	3/8 (2x)
07.446	28	1/2 (2x)



Product No	Size mm ①	Ports Outlet (F) NPT ②
07.495	15	3/8 (3x)
07.499	22	3/8 (3x)
07.448	28	1/2 (3x)

Product No	Size mm ○	Quick Couplers
07.424	15	QUIKSILVER 1/4 INDUSTRIAL (3x)
07.425	22	
07.426	28	

Coupler Specifications

- Accepts **1/4 INDUSTRIAL** type plugs
- Automatic push-to-connect operation
- Easy to connect, even under pressure

Product No	Size mm ○	Quick Couplers
07.432	22	QUIKSILVER ULTRAFLO (3x)
07.433	28	

Coupler Specifications

- Accepts **ULTRAFLO** type plugs
- Automatic push-to-connect operation
- Easy to connect, even under pressure

Product No	Size mm ○	Quick Couplers
07.421	15	TOPQUIK 1/4 INDUSTRIAL (3x)
07.422	22	

Coupler Specifications

- Accepts **1/4 INDUSTRIAL** type plugs
- Automatic push-to-connect operation
- Downstream pressure is automatically vented and disconnection is performed easily at zero pressure
- Disconnection sound level of only 80 dB

Product No	Size mm ○	Quick Couplers
07.428	22	TOPQUIK ULTRAFLO (3x)
07.429	28	

Coupler Specifications

- Accepts **ULTRAFLO** type plugs
- Automatic push-to-connect operation
- Downstream pressure is automatically vented and disconnection is performed easily at zero pressure

FIXING CLIP FOR RIGID PIPE

MOUNTING CLIP
15-22-28 MM

Product No	Size mm
07.500	15
07.505	22
07.510	28

Hole size 5.2 mm / No 14 screw

CLIP SPACER
15-22-28 MM

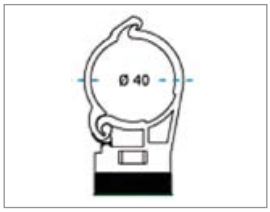
Product No	Thickness
07.512	10 mm

The clip spacer compensates for the height difference which is created when connecting pipes of a different diameter allowing perfect alignment

MOUNTING CLIP
15-22-28 MM

Product No	Size mm
07.544	40
07.545	50
07.546	63

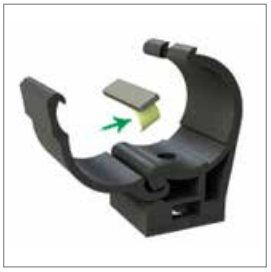
Hole size 5.2 mm / No 14 screw



CLIP SPACER
40-50-63 MM

Product No	Thickness
07.549	10 mm

The clip spacer compensates for the height difference which is created when connecting pipes of a different diameter allowing perfect alignment



EPDM INSERT FOR FIXING PIPE CLIP
40-50-63 MM

Product No
07.548

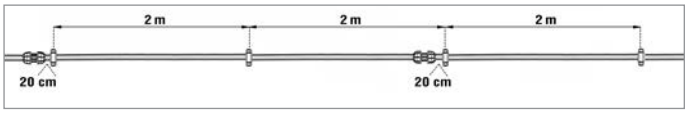
Create a fix support for thermal expansion compensation

Recommended spacing

- Fixing clip should be placed at every 2 meters maximum (for all diameters 20 to 63 mm)
- Clip must be installed at least 20 cm from of a fitting (downstream or upstream)

Creating a fixed support

To create a fixed support in order to compensate for thermal expansion, add the EPDM insert inside the pipe clip



STRUT ADAPTER FOR PIPE CLIPS

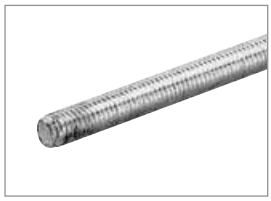
Product No	Description
07.540	For all wall mounting pipe clips

CANTILEVER ARM
1-5/8" x 1-5/8"

Product No	Length in
07.550	6
07.551	12

STRUT CHANNEL
1-5/8" x 1-5/8"

Product No	Length ft
07.555	10

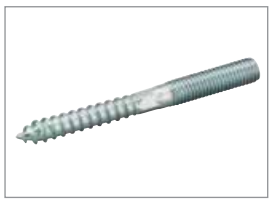


THREADED ROD
10 ft

Product No	Size
07.526	3/8 UNC

COUPLING NUT

Product No	Size
07.528	3/8 UNC



SCREW

Product No	Size
07.529	3/8 UNC

SUSPENSION PIPE CLIPS

Product No	Size mm	Nut
07.508	28	3/8 UNC
07.518	40	3/8 UNC
07.520	50	3/8 UNC

SWIVEL LOOP HANGERS

Product No	Size mm	For threaded rod
07.507	28	3/8 UNC
07.517	40	3/8 UNC
07.521	50	3/8 UNC
07.522	63	3/8 UNC

I-BEAM CLAMP

Product No	Beam thickness	For threaded rod
07.535	1/4 - 3/4	3/8 UNC

I-BEAM MOUNTING CLIPS

Product No	Beam thickness
07.530	1/8 - 1/4
07.531	3/8 - 1/2
07.532	1/2 - 3/4

Series 09
FLEXIBLE ANTI-VIBRATION HOSES

FLEXIBLE ANTI-VIBRATION HOSE

A flexible hose must be installed at the start of the system (between the compressor and the air line system) in order to eliminate any sources of vibration and heat and to facilitate maintenance and operations.

A flexible anti-vibration hose will extend air line system life by reducing stress from vibration and heat coming from the compressor and misalignment. It is not recommended to install fittings directly to the compressor.

INSTALLATION GUIDELINES FOR FLEXIBLE HOSES

1 DO NOT TORQUE

- **Twisting**. To minimize possible torque damage to a hose, a union or floating flange should be used at one end of the hose assembly.
- Always install the hose so that flexing takes place only in the plane of bending.
- Pressure applied to a twisted hose can result in hose failure or loosening of connections.

Female Union (3 pieces)

2 AVOID SHARP BENDS

To avoid hose collapse and flow restriction, keep hose bend radius as large as possible.

Never bend the hose immediately out of connector. Ensure a minimum length equal to 5 times the external diameter of the tube between the end of the connector and the start of the bend.

Avoid twisting of the hose and never exceed the bend radius indicated.

The minimum centerline bend radius for intermittent flexing should never be less than the values specified.

3 EXPANSION LOOP

To design an expansion loop, **TOPRING** flexible hose must always be installed with enough slack to provide for length changes which will occur during thermal expansion.

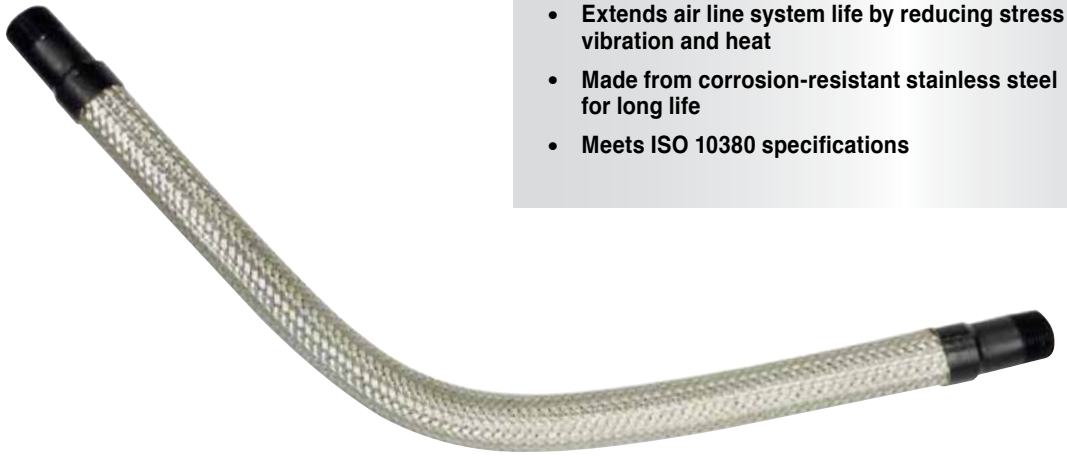
4 BYPASSING OBSTACLES

Bends and bypasses cause pressure drop.
To avoid pressure loss, use the flexible hose to offset the network and to bypass obstacles.

HIGH TEMPERATURE FLEXIBLE STAINLESS STEEL ANTI-VIBRATION HOSES

FEATURES AND BENEFITS

- Corrugated flexible stainless steel hose is designed to minimize vibration and heat coming from the compressor
- Extends air line system life by reducing stress from vibration and heat
- Made from corrosion-resistant stainless steel for long life
- Meets ISO 10380 specifications



MATERIALS

Hose and Braid: Stainless steel

Fitting: Stainless steel

SPECIFICATIONS

Temperature range: -40 °C to 250 °C

Length 12 in	Length 24 in	Fittings (M) NPT	Maximum Misalignment in	Maximum Working Pressure PSI at 21 °C
Product No	Product No			
09.100	09.120	1/2	1-3/4	600
09.102	09.122	3/4	2-3/4	600
09.104	09.124	1	3-1/2	600
09.106	09.126	1-1/4	4-1/2	590
09.108	09.128	1-1/2	5	590
09.110	09.130	2	7-5/8	435

FEMALE UNION (3 PIECES)

150 PSI

Product No	Thread (F) NPT
41.368	1/2
41.369	3/4
41.370	1
41.371	1-1/4
41.373	2

To minimize possible torque damage to a hose, a union or floating flange should be used at one end of the hose assembly.

TYPICAL INSTALLATION

FLEXIBLE RUBBER ANTI-VIBRATION HOSES

FEATURES AND BENEFITS

- Ideal for connecting a compressor outlet to an air line system
- Extends air line system life by reducing stress from vibration and heat
- Designed for bypassing obstacles and/or overcoming misalignment of air lines
- Resists mineral and synthetic oils and heat

MATERIALS

Cover: Oil resistant synthetic rubber

Inner tube: Oil and heat resistant rubber

Reinforcement: One braid of high tensile steel wire

SPECIFICATIONS

Temperature Range: -40 °C to 100 °C

Length 24 in	Length 48 in	Fittings (M) NPT	Hose I.D. in	Hose O.D. in	Max. Pressure PSI	Min. Bend Radius in
Product No	Product No					
09.200	09.220	1/2	1/2	0.81	500	7
09.202	09.222	3/4	3/4	1.09	500	9-1/2
09.204	09.224	1	1	1.40	500	12
09.206	09.226	1-1/4	1-1/4	1.73	500	16-1/2
09.208	09.228	1-1/2	1-1/2	1.97	500	19-11/16
09.210	09.230	2	2	2.50	500	25

FEMALE UNION (3 PIECES)

150 PSI

Product No	Thread (F) NPT
41.368	1/2
41.369	3/4
41.370	1
41.371	1-1/4
41.373	2

To minimize possible torque damage to a hose, a union or floating flange should be used at one end of the hose assembly.

TYPICAL INSTALLATION

Series 11 • 14 • 17 • 19
SELF-STORING AIR HOSES

WHY USE A SELF-STORING AIR HOSE ?

Self-storing hoses have many advantages:

- **Space savings**
- **Time savings**
- **Ergonomics**
- **Light weight and flexibility**

Self-storing hoses save space; the hose simply retracts and can be easily hung from a hook.

Time is also saved, since there is no need to uncoil and coil the hose. The user simply pulls the hose to the desired length.

Ergonomics are improved, as the hose is not in the way when not in use and is easily positioned for work.

Finally, self-storing polyurethane air hoses are lighter than rubber hoses and offer more flexibility.

SELECTING A SELF-STORING AIR HOSE: 5 CRITERIA

Environment will affect hose choice. Working temperature will affect pressure handling, and other environmental aspects, such as the presence of sparks, oil or humidity can also influence hose choice.

The type of work will influence **ergonomics** for instance; working around machinery, vehicles requires different features than other types of work.

Flexibility is another criteria, a function of personal choice and work-related factors.

For example, a polyurethane hose offers greater flexibility than one in nylon.

Service life is always a factor to consider. Ether-based polyurethane better resists weathering and moisture, while ester-based polyurethane will work better in contact with chemicals.

Hose length is also a very important factor to consider. Every unnecessary foot of hose will increase pressure drop and cost.

SELF-STORING HOSE SELECTION GUIDE

COLOR	Series 11 Nylon	Series 14 MAXAIR	Series 17 FLEXCOIL		Series 19 SPARKCOIL
	RED	BLUE	RED	YELLOW	BLACK
			BLUE	CLEAR BLUE	
MATERIAL	NYLON 12	POLYURETHANE (ESTER-BASED)	POLYURETHANE (ETHER-BASED)		THERMOPLASTIC & POLYURETHANE (ESTER-BASED)
MAXIMUM WORKING PRESSURE	Up to 200 PSI	143 PSI at 24 °C	140 PSI at 24 °C		150 PSI at 24 °C
WORKING TEMPERATURE	-40 °C to 82 °C	-20°C to 70 °C	-40 °C to 70 °C		-40 °C to 70 °C
INT. DIAMETER (in)	1/4 - 3/8 - 1/2	1/4 - 3/8	3/16 - 1/4 - 5/16 - 3/8		1/4 - 3/8
LENGTHS (ft)	12.5, 25, 50	25, 50	10, 15, 20, 25, 30, 50		25, 50
MAIN CHARACTERISTICS	SUPERIOR MEMORY ABRASION RESISTANCE	QUALITY/PRICE CHOICE RIGID FITTING AT TOOL END	FLEXIBILITY VARIOUS DIMENSIONS		RESISTS SPARKS AND HOT CHIPS OIL RESISTANT
ERGONOMICS	★	★★	★★★		★★★
FLEXIBILITY	★	★★	★★★		★★★
SERVICE LIFE	★★★★	★★★	★★★★		★★★★
WEIGHT KG. (1/4 x 25)	0.27	0.45	0.44		1.08

SELF-STORING NYLON AIR HOSES

RED

Up to 200 PSI

FEATURES AND BENEFITS

- Self-storing Nylon hose offers little resistance to pull and automatically recoils
- Superior memory over a wide temperature range for long service life
- Excellent resistance to abrasion, impact, flex fatigue and ultraviolet aging
- Excellent resistance to many industrial chemicals, oils and solvents
- High resistance to moisture absorption
- Space efficient and lightweight
- Swivel fittings allow maximum directional flexibility
- Reusable heavy-duty brass fittings at both ends
- No flow restriction
- Spring guard on each hose end for maximum hose support at the fitting

APPLICATIONS

General shop air hose use

MATERIALS

Nylon 12

SPECIFICATIONS

Working Temperature: -40 °C to 82 °C

Maximum Working Length: 80% of total length for vertical applications and 50% for horizontal applications

AIR HOSE ASSEMBLIES WITH FITTINGS

Product No	Hose I.D. in	Total Length ft	Working Length ft	Coil O.D. in	Swivel Fittings (M) NPT	Maximum Working Pressure
11.421*	1/4	12.5	10	3.5	1/4	200 PSI
11.441*	1/4	25	20	3.5	1/4	200 PSI
11.481*	1/4	50	40	3.5	1/4	200 PSI
11.621*	3/8	12.5	10	5.5	3/8	200 PSI
11.626*	3/8	12.5	10	5.5	1/4	200 PSI
11.641*	3/8	25	20	5.5	3/8	200 PSI
11.646*	3/8	25	20	5.5	1/4	200 PSI
11.681*	3/8	50	40	5.5	3/8	200 PSI
11.686*	3/8	50	40	5.5	1/4	200 PSI
11.822**	1/2	12.5	10	6.5	1/2	150 PSI
11.842**	1/2	25	20	6.5	1/2	150 PSI
11.882**	1/2	50	40	6.5	1/2	150 PSI

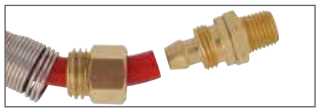
*Red **Yellow

WARNING

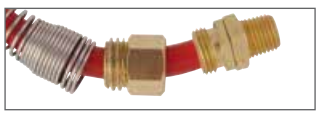
Maximum working pressure decreases as air temperature increases

REPLACEMENT SWIVEL FITTINGS

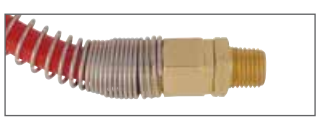
Product No	Hose I.D. in	Fittings (M) NPT
11.042	1/4	1/4
11.062	3/8	3/8
11.065	3/8	1/4
11.082	1/2	1/2



1. After cutting the hose end straight, insert the spring guard and the sleeve nut.



2. Press the barbed end of the fitting into the end of the hose until it seats against the thread base.



3. Slide the sleeve nut over the barbed connection and thread it onto the fitting. The installation is completed by tightening the nut with the appropriate sized open-end wrench until it securely meets the fitting body.

MAXAIR
POLYURETHANE AIR HOSE
BLUE

Up to 143 PSI

ERGONOMIC SOLUTION

FEATURES AND BENEFITS

- The Ester-based Polyurethane hose resin handles oil better than ether-based but it degrades quickly when introduced to moisture
- Self-storing polyurethane hose offers little resistance to pull and automatically recoils
- Excellent memory
- Excellent flexibility
- Excellent kink resistance
- Lightweight - 25% lighter than rubber
- Superior elasticity and flexibility to nylon hose
- Straight 20 in and 4 in tails for tangle-free tool operation
- Highly abrasion resistant and non-marking
- Reusable heavy duty nickel plated brass fittings at both ends
- Dependable, leak-tight seal and resistant to loosening caused by vibration
- Nickel plated brass construction
- Swivel fitting at supply connection allows maximum directional flexibility
- Rigid fitting at tool end to ensure a safer connection and better vibration resistance

● GOOD RESISTANCE IN PRESENCE OF OIL

APPLICATIONS

Assembly lines, air tools and work stations, automotive repair and body shops

MATERIALS

Polyurethane (Ester based)

SPECIFICATIONS

Maximum Working Pressure:

1/4: 132 PSI at 24 °C
3/8: 143 PSI at 24 °C

Working Temperature Range: -20 °C to 70 °C

Durometer: Shore A 98

Maximum Working Length: 80% of total length

AIR HOSE ASSEMBLIES WITH FITTINGS

Product No	Hose I.D. in	Total Length ft	Working Length ft	Coil O.D. in	Fittings (M) NPT
14.620	1/4	25	20	3.25	1/4
14.650	1/4	50	40	3.25	1/4
14.724	3/8	25	20	3.62	1/4
14.754	3/8	50	40	3.62	1/4

FLEXCOIL

POLYURETHANE AIR HOSE

RED - BLUE - YELLOW

140 PSI

ERGONOMIC SOLUTION

FEATURES AND BENEFITS

- The Ether-based Polyurethane hose is an excellent choice when moisture is present
- Offers little resistance to pull and automatically recoils
- Superior memory over a wide temperature range
- Outstanding flexibility
- Excellent kink resistance
- Lightweight - 25 % lighter than rubber
- Superior elasticity and flexibility to nylon hose
- Smaller coil diameter - more compact and space-saving design
- Straight 20 in and 4 in tails for tangle-free tool operation
- Highly abrasion resistant and non-marking
- Leak-tight seal and resistant to loosening caused by vibrations
- Reusable and repairable heavy duty brass swivel compression fittings at both ends
- Two full flow swivel fittings allow maximum directional flexibility

● GOOD RESISTANCE IN PRESENCE OF WATER

APPLICATIONS

Assembly lines, air tools and work stations, automotive repair and body shops

MATERIALS

Polyurethane (Ether based)

SPECIFICATIONS

Maximum Working Pressure: 140 PSI at 24 °C
Working Temperature Range: -40 °C to 70 °C
Durometer: Shore A 98
Maximum Working Length: 80% of total length

WARNING

Maximum working pressure decreases as air temperature increases

FLEXCOIL
POLYURETHANE AIR HOSES

STANDARD AIR HOSE ASSEMBLIES

Product No YELLOW	Hose I.D. in	Total Length ft	Working Length ft	Swivel Fittings (M) NPT
17.405.08	3/16	10	8	1/4

Product No RED	BLUE	Hose I.D. in	Total Length ft	Working Length ft	Swivel Fittings (M) NPT
17.610	17.610.07	1/4	15	12	1/4
17.615	17.615.07	1/4	20	16	1/4
17.620	17.620.07	1/4	25	20	1/4
17.625	17.625.07	1/4	30	24	1/4
17.650	17.650.07	1/4	50	40	1/4

Product No RED	Hose I.D. in	Total Length ft	Working Length ft	Swivel Fittings (M) NPT
17.660	5/16	15	12	1/4
17.670	5/16	25	20	1/4
17.675	5/16	30	24	1/4
17.690	5/16	50	40	1/4

Product No RED	Hose I.D. in	Total Length ft	Working Length ft	Swivel Fittings (M) NPT
17.710	3/8	15	12	3/8
17.714	3/8	15	12	1/4
17.715	3/8	20	16	3/8
17.719	3/8	20	16	1/4
17.720	3/8	25	20	3/8
17.724	3/8	25	20	1/4
17.725	3/8	30	24	3/8
17.729	3/8	30	24	1/4
17.750	3/8	50	40	3/8
17.754	3/8	50	40	1/4

5/16 I. D. — 50% * more flow than — 1/4 I. D.

3/8 I. D. — 150% * more flow than — 1/4 I. D.

* Based on tests at 100 PSIG with 10 PSIG pressure drop and with a 25 ft hose

REPLACEMENT SWIVEL FITTINGS

1. After cutting the hose end straight insert the sleeve nut.

2. Press the barbed end of the fitting into the end of the hose until it seats against the thread base.

3. Slide the sleeve nut over the barbed connection and thread it onto the fitting. The installation is completed by tightening the nut with the appropriate sized openend wrench until it securely meets the fitting body.

FEATURES AND BENEFITS

- Dependable, resistant to loosening caused by vibrations
- Reusable - simple two-piece design does not require special tube inserts or compression sleeves

Product No	Hose I.D. in	Fittings (M) NPT
17.044	1/4	1/4
17.054	5/16	1/4
17.064	3/8	1/4
17.066	3/8	3/8

SPARKCOIL
SPARK RESISTANT AIR HOSES
BLACK

150 PSI

FEATURES AND BENEFITS

- Polyurethane inner tube with a specially formulated flame retardant technopolymer cover to protect the tubing from glowing welding sparks, hot chips or sharp particles
- Offers little resistance to pull and automatically recoils
- Excellent kink resistance and recoil memory
- Resists oils, greases, most acids, bases, aqueous solutions, ozone, heat aging and ultraviolet light
- 4 in and 20 in tails for tangle-free tool operation
- Cover meets UL94-VO requirements and offers strong insulating properties
- Non-marking outer cover
- Excellent abrasion resistance
- Swivel fitting at supply connection allows maximum directional flexibility
- Rigid fitting at tool end to ensure a safer connection and better vibration resistance

APPLICATIONS

Excellent hose for welding shops, robotic welding, chemical plant, lubrication systems, painting systems, laboratories

MATERIALS

Inner Tube: Polyurethane

Flame Retardant: Thermoplastic cover

SPECIFICATIONS

Maximum Working Pressure: 150 PSI at 24 °C

Working Temperature Range: -40 °C to 70 °C

Maximum Working Length: 80% of total length

WARNING

Maximum working pressure decreases as air temperature increases

STANDARD AIR HOSE ASSEMBLIES

Product No	Hose I.D. in	Hose O.D. in	Total Length ft	Working Length ft	Coil O.D. in	Fittings (M) NPT
19.620	1/4	3/8	25	20	1.37	1/4
19.650	1/4	3/8	50	40	1.37	1/4
19.724	3/8	1/2	25	20	2	1/4
19.754	3/8	1/2	50	40	2	1/4

AIRPRO

Display box of 25 blow guns

Ideal for counters or shelves !

Quality + choice
AIRPRO
Robust Industrial quality blow guns

Product No	Description of model
60.320.25	Non-restricted • 6mm tube x 10 cm (4") - Blue
60.330.25	Non-restricted • Rubber tip • 6mm tube x 10 cm (4") - Blue
60.350.25	Safety • High flow tip • 6mm tube x 10 cm (4") - Blue
60.357.25	Safety • StarTip nozzle • 6mm tube x 10 cm (4") - Blue
60.377.25	Safety • StarTip nozzle • 8mm tube x 10 cm (4") - Red
60.381.25	Safety • Flat nozzle • Red
60.385.25	MAXIMUM SAFETY • Rubber tip • 8mm tube x 10 cm (4") - Red
60.386.25	Safety • High flow tip • 8mm tube x 10 cm (4") - Red
60.387.25	Safety • Silent • 8mm tube x 13 cm (5") - Red
60.388.25	Safety • Silent • Flow control screw • 8mm tube x 13 cm (5") - Red
60.389.25	MAXIMUM SAFETY • 8mm tube x 10 cm (4") - Red
60.390.25	Non-restricted • 8mm tube x 10 cm (4") - Red
60.392.25	Non-restricted • Flow control screw • 8mm tube x 10 cm (4") - Red
60.393.25	Non-restricted • Stainless Steel tube • 8mm tube x 10 cm (4") - Red

Series 20 • 21 • 22 • 23 24 • 25 • 26 • 30 • 31

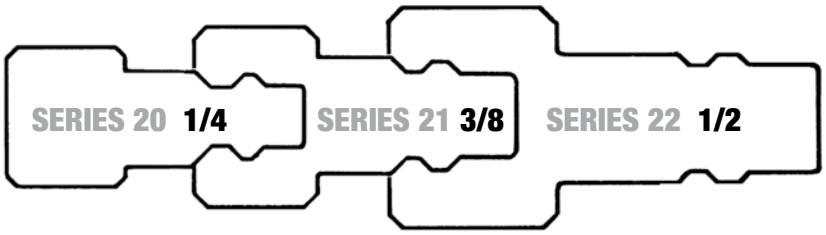
PNEUMATIC QUICK COUPLERS

TOPRING PNEUMATIC PLUG PROFILES

INDUSTRY INTERCHANGEABILITY — SIZES / SERIES

INDUSTRIAL (MIL-C-4109)
ISO 6150-B-12/15/17
PARKER 20/30
HANSEN 3000/4000/5000

I/M 1/4 | I/M 3/8 | I/M 1/2

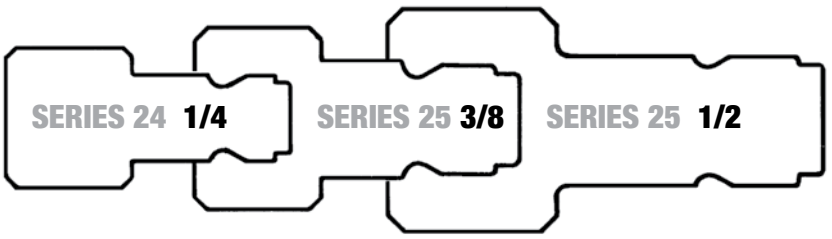


ARO 210
PARKER 50

A 1/4

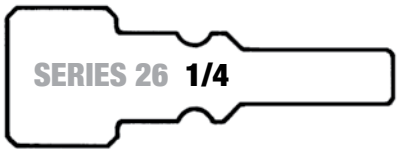
TRUFLATE
PARKER 10
AUTOMOTIVE
AMFLO
CP

T 1/4 | T 3/8 | T 1/2



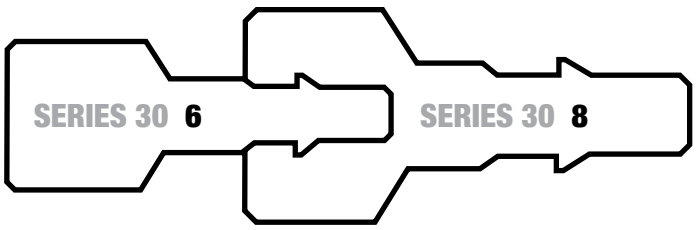
LINCOLN

L 1/4"



STÄUBLI
ISO-6150-C-10/14

S 6 | S 8

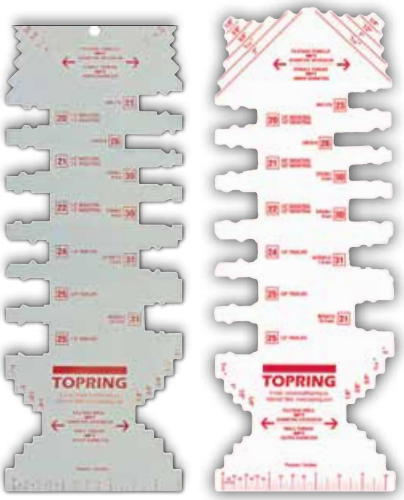


ULTRAFLO
EUROPEAN 7.8 MM
CEJN 320

E 7.8

TOOLS TO EASILY IDENTIFY PLUG PROFILES AND THREADS

Product No	Material
96.030	Plastic
96.031	Stainless Steel



QUICK COUPLERS SELECTION GUIDE

MODEL	SAFE DISCONNECTION	CONNECTION	UNIVERSAL CONNECTION Accepts 3 or 5 plug types	MATERIAL	INDUSTRIAL (MIL-C-4109) I/M 1/4 S 20	INDUSTRIAL I/M 3/8 S 21	INDUSTRIAL I/M 1/2 S 22	ULTRAFLO E 7.8 S 31	ARO 210 A 1/4 S 23	TRUFLATE T 1/4 S 24	TRUFLATE T 3/8 S 25	TRUFLATE T 1/2 S 25	LINCOLN L 1/4 S 26	STÄUBLI S 6 S 30	STÄUBLI S 8 S 30
TOPQUIK SC	✓	Manual		Steel	38 SCFM 360 PSI	75 SCFM 360 PSI	175 SCFM 360 PSI	70 SCFM 360 PSI							
TOPQUIK	✓	Automatic		Composite	36 SCFM 225 PSI	72 SCFM 225 PSI	169 SCFM 225 PSI	60 SCFM 225 PSI							
QUIKSILVER		Automatic		Steel	44 SCFM 500 PSI	72 SCFM 435 PSI	145 SCFM 500 PSI	80 SCFM 500 PSI	44 SCFM 500 PSI						
AUTOMAX		Automatic		Brass	37 SCFM 250 PSI	62 SCFM 250 PSI	99 SCFM 250 PSI	50 SCFM 200 PSI	34 SCFM 250 PSI				32 SCFM 250 PSI		
AUTOMAX SLIM		Automatic		Brass	45 SCFM 150 PSI			60 SCFM 150 PSI	40 SCFM 150 PSI						
MAXQUIK		Manual		Zinc Plated Steel	24 SCFM 250 PSI	67 SCFM 250 PSI	99 SCFM 250 PSI		28 SCFM 250 PSI	24 SCFM 250 PSI	67 SCFM 250 PSI	92 SCFM 250 PSI			
MAXQUIK PLUS		Manual		Brass Stainless	37 SCFM 250 PSI										
UNISAFE	✓	Automatic	✓ S 20•31 23•24•26	Steel	34 SCFM 200 PSI			34 SCFM 200 PSI	34 SCFM 200 PSI	34 SCFM 200 PSI			34 SCFM 200 PSI		
UNIQUIK		Automatic	✓ S 20•23•24	Brass NP Brass	35 SCFM 150 PSI				35 SCFM 150 PSI	35 SCFM 150 PSI					
UNIQUIK SLIM		Automatic	✓ S 20•23•24	Brass	44 SCFM 150 PSI				44 SCFM 150 PSI	44 SCFM 150 PSI					
UNIMAX		Automatic	✓ S 20•31 23•24•26	Steel	37 SCFM 200 PSI			37 SCFM 200 PSI	37 SCFM 200 PSI	37 SCFM 200 PSI			37 SCFM 200 PSI		
ISOSAFE	✓	Automatic		Aluminium										45 SCFM 175 PSI	100 SCFM 145 PSI

HOW TO CHOOSE THE IDEAL QUICK COUPLER?

10 POINTS TO CONSIDER IN ORDER TO CHOOSE THE QUICK COUPLER FOR THE APPLICATION

POINT 1

ACCIDENT PREVENTION

AVOIDING DANGEROUS HOSE WHIPS

ZERO PRESSURE DISCONNECT COUPLERS

These couplers are **safe and easy to connect and disconnect.** Two-step disconnect procedure shuts off air supply and releases downstream air pressure before the plug can be removed from the coupler.

Hose whip is thereby prevented.

TOPQUIK

ISOSAFE

ZERO PRESSURE CONNECT/DISCONNECT COUPLERS

This coupler style allows connection and disconnection at zero pressure. Connector is securely locked before valve is opened, making connection easy and safe.

Downstream line is then exhausted before connector can be removed, eliminating hose whip.


UNISAFE


TOPQUIK SC

ACCIDENTAL DISCONNECTIONS

DRAG GUARDS

There is an integrated front flange designed to protect the retractable sleeve and minimize accidental disconnection when the coupler is dragged across the floor or over obstructions.


QUIKSILVER


MAXQUIK

POINT 2

FLOW (SCFM) AND PRESSURE (PSI) REQUIREMENTS

Determine the volume of air required in SCFM, at the desired working pressure, and then choose the appropriate coupler and plug combination. Inside diameter of the hose used may also be matched to the coupler size. Do not design in restrictions, such as a 1/2 ID hose with a low capacity 1/4 coupler. This restricts both air pressure and volume, thus reducing equipement performance.

The capacities of the coupler and plug used must be the same.

WARNING

Over-pressurization could result in a sudden failure of the coupling causing severe bodily injury or death. Be sure to select the proper coupling for your application and use only within the specified service pressure range.

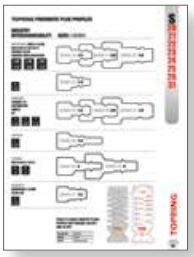
Consult the pneumatic tools flow reference guide page 460.

POINT 3

PLUG PROFILE

The plug profile used will determine the coupler type. There are several profiles used throughout industry today.

Key identification features are the length of the nose and type of locking groove. **TOPRING** offers the most commonly used profiles, covering over 97% of coupler applications.



Consult the pneumatic plug profiles page 95.

POINT 4

CONNECTION METHOD

AUTOMATIC COUPLERS

The plug is simply pushed into the coupler to connect; the coupler sleeve automatically retracts. The sleeve must be manually retracted to disconnect the plug. Automatic couplers are faster and easier to operate.

TOPQUIK

QUIKSILVER

AUTOMAX

AUTOMAX SLIM

UNISAFE

ISOSAFE

UNIQUIK

UNIQUIK SLIM

UNIMAX

MANUAL COUPLERS

These couplers require manual retraction of the sleeve in order to connect or disconnect the plug. This style offers the greatest economy and is relatively safe. It requires two hands to connect.

TOPQUIK SC

MAXQUIK

MAXQUIK PLUS

POINT 5

WORK ENVIRONMENT

Quick couplers should be chosen based on: application, pressure, corrosion resistance, etc.

High performance quick couplers should be used in harsher environments

QUIKSILVER

POINT 6

ENVIRONMENTAL CONDITIONS

Environmental conditions including, moisture, water, chemicals, ozone, ultraviolet radiation and air pollutants can cause degradation and premature failure.

Stainless Steel quick couplers should be considered.

MAXQUIK STAINLESS STEEL

FLUID AND TEMPERATURE

POINT 7

Body and seal materials of the coupler must be compatible with the fluid media and ambient temperature, both steady and transient. The limits of the coupler should not be exceeded. Excessive temperature, even for a short time, can dramatically shorten seal life.

DELICATE SURFACES

POINT 8

In some situations, the possibility of scratches is unacceptable (car body, furniture manufacturing).

Quick couplers with protection, should be used to protect delicate surfaces against scratches

TOPQUIK TOPQUIK SC Polyamide cover

ERGONOMICS

POINT 9

TOPQUIK quick couplers are very light compared to metal quick couplers offering better ergonomics.

TOPQUIK

Free angle plugs also offer better ergonomics.

See Series 62 for the complete selection.

HOSE WHIP

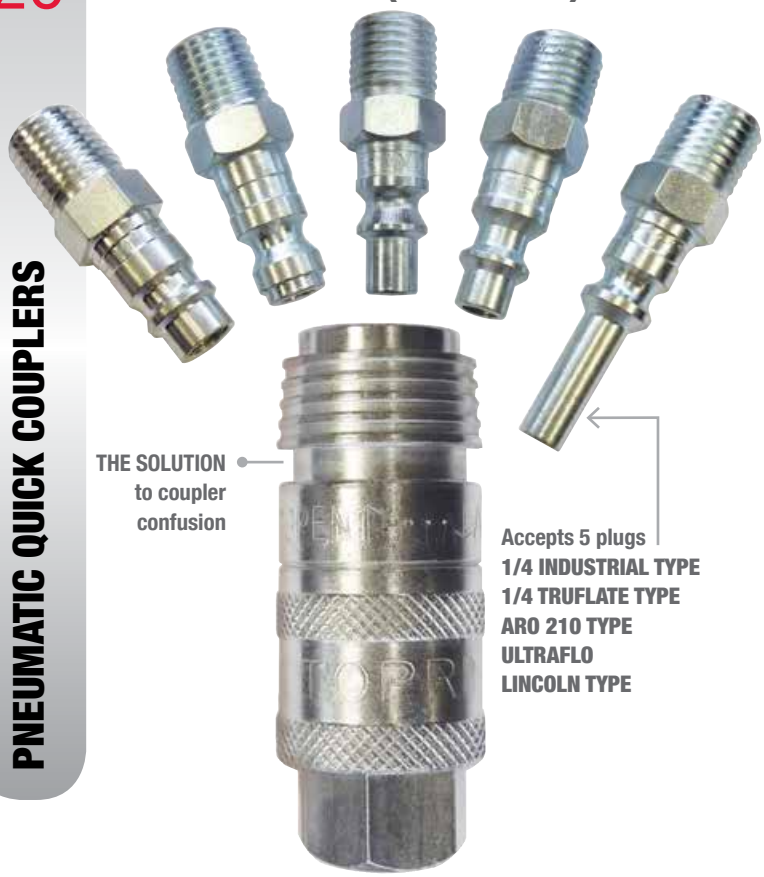
POINT 10

Using a hose whip (minimum 30cm) between the air tool and coupler will extend the life of the coupler by acting as a shock absorber and protecting it against vibration

WARNING

Hose whips are highly recommended for all impact tools, or when strong vibrations are present

U 1/4 UNISAFE
UNIVERSAL INTERCHANGE SAFETY (AUTOMATIC)



FEATURES AND BENEFITS

- Accepts ULTRAFLO, 1/4 INDUSTRIAL, ARO 210, 1/4 TRUFLATE, and LINCOLN type plugs
- Safety coupler minimizes the possibility of hazardous hose whip by exhausting air pressure prior to disconnection
- Valve sleeve is operated independently of locking sleeve. When the valve sleeve is moved to shut off airflow downstream pressure is automatically vented
- Disconnection and connection are performed easily at zero pressure
- Automatic push-to-connect operation
- Proven six-ball locking mechanism evenly distributes load to resist wear and to provide positive connections. It also provides accurate alignment and allows a swivelling action to reduce hose torque
- Knurling and grooves on the sleeves provide a good gripping surface for ease of operation
- Also acts as a slide-valve for shutting down air to applications

200 PSI | 34 SCFM | SAFETY SOLUTION

SAFETY COMES FROM A 2-STEP DISCONNECTION

Coupler and plug connected	Slide the large sleeve to release downstream pressure	Slide the small sleeve to release plug	Disconnection

APPLICATIONS

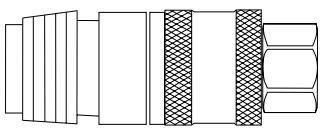
Any air tool or automated equipment connection where safety is of utmost concern (hose whip, accidental disconnection)

MATERIALS

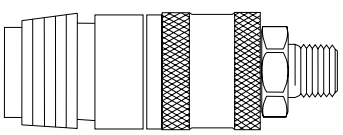
Body: Zinc plated steel
Sleeve: Corrosion resistant nickel plated steel
Valve: Brass
Valve Spring: Steel
Locking Mechanism: Nickel plated steel balls
Seals: Buna-N/Nitrile

SPECIFICATIONS

Maximum Working Pressure: 200 PSI
Temperature Range: -20 °C to 93 °C
Airflow: 34 SCFM at 100 PSIG inlet with 10 PSIG pressure drop

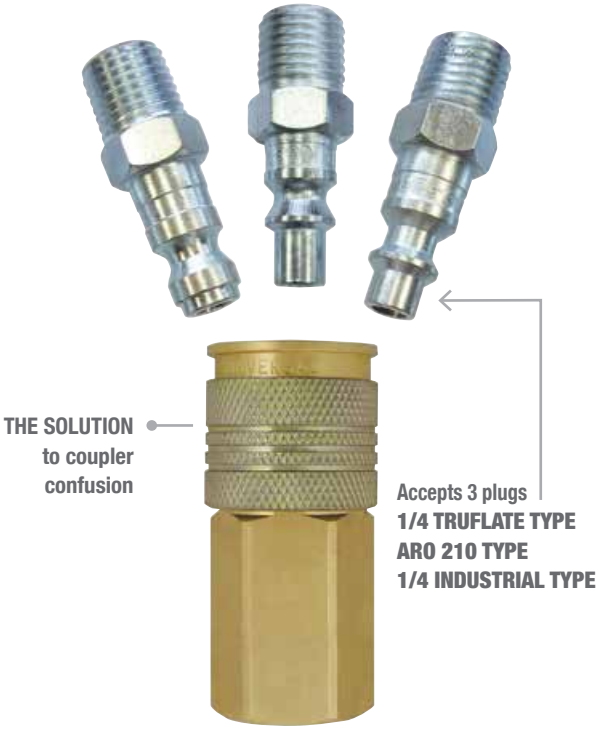


Product No	Female Thread
20.448	1/4 (F) NPT



Product No	Male Thread
20.648	1/4 (M) NPT

U 1/4 UNIQUIK
UNIVERSAL INTERCHANGE (AUTOMATIC)



FEATURES AND BENEFITS

- Accepts 1/4 INDUSTRIAL, 1/4 TRUFLATE, and ARO 210 type plugs
- Automatic push-to-connect operation
- Corrosion-resistant brass or Nickel plated Brass construction
- Sleeve guard protects against accidental disconnection when the coupler is dragged on the floor or over obstructions
- Deep knurled socket sleeve for positive gripping
- Ball locking mechanism insuring on effective and secure connection

150 PSI

35 SCFM

Nickel plated brass
20.442 • 1/4 (F) NPT
20.642 • 1/4 (M) NPT

APPLICATIONS

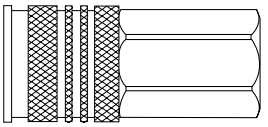
General air service and pneumatic tools

MATERIALS

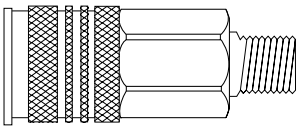
Body: Brass or nickel plated brass
Sleeve: Zinc plated steel / Nickel plated steel
Valve: Brass
Valve Spring: Stainless steel
Locking Mechanism: Stainless steel balls
Seals: Buna-N/Nitrile

SPECIFICATIONS

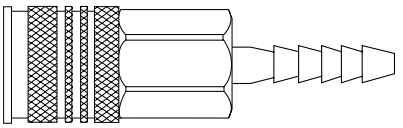
Maximum Working Pressure: 150 PSI
Temperature Range: -40 °C to 71 °C
Airflow: 35 SCFM at 100 PSIG inlet with 10 PSIG pressure drop



Brass **Product No**	Nickel plated brass **Product No**	Female Thread
20.440	**20.442**	1/4 (F) NPT
20.460	--	3/8 (F) NPT



Brass **Product No**	Nickel plated brass **Product No**	Male Thread
20.640	**20.642**	1/4 (M) NPT
20.660	--	3/8 (M) NPT



Brass **Product No**	Hose Barb
20.740	1/4 I.D.
20.760	3/8 I.D.

U 1/4

UNIMAX
UNIVERSAL INTERCHANGE
(AUTOMATIC)

FEATURES AND BENEFITS

- Accepts ULTRAFLO, 1/4 INDUSTRIAL, ARO 210, 1/4 TRUFLATE, and LINCOLN type plugs
- Proven six-ball locking mechanism evenly distributes load to resist wear for longer service life
- Automatic push-to-connect operation
- Corrosion-resistant nickel plated steel construction
- Sleeve guard protects against accidental disconnection when the coupler is dragged on the floor or over obstructions
- Deep knurled socket sleeve for positive gripping

200 PSI

37 SCFM

Quick couplers available with swivel connection
SEE SERIES 62

62.710
UNIVERSAL
UNIMAX swivel
coupler with
flow regulator

62.714
UNIVERSAL
UNIMAX
swivel
coupler

APPLICATIONS

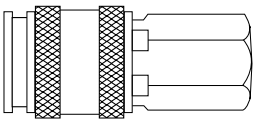
General air service and pneumatic tools

MATERIALS

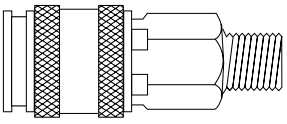
Body: Nickel plated steel
Sleeve: Nickel plated steel
Valve: Steel
Valve Spring: Steel
Locking Mechanism: Stainless steel balls
Seals: Buna-N/Nitrile

SPECIFICATIONS

Maximum Working Pressure: 200 PSI
Temperature Range: -40 °C to 100 °C
Airflow: 37 SCFM at 100 PSIG inlet with 10 PSIG pressure drop

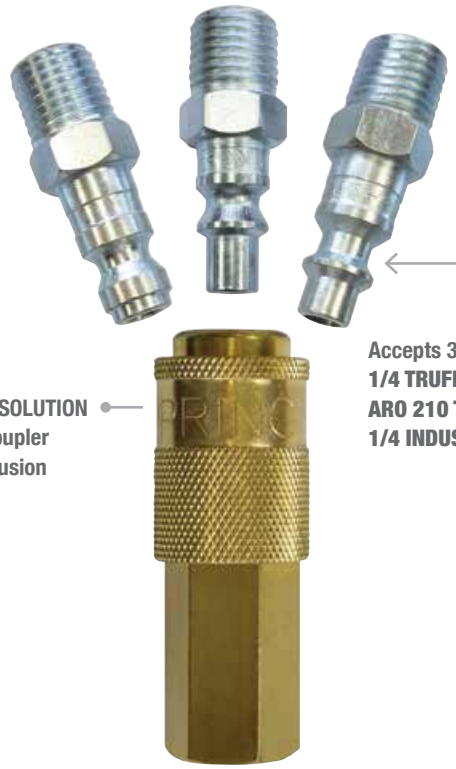


Product No	Female Thread
20.441	1/4 (F) NPT



Product No	Male Thread
20.641	1/4 (M) NPT

U 1/4 UNIQUIK SLIM
UNIVERSAL INTERCHANGE
(AUTOMATIC)



FEATURES AND BENEFITS

- Accepts 1/4 INDUSTRIAL, 1/4 TRUFLATE and ARO 210 type plugs
- Automatic push-to-connect operation
- High airflow
- 33% lighter than a regular coupler
- Compact design prevents accidental disconnection
- One hand disconnection
- Corrosion-resistant brass
- Deep knurled socket sleeve for positive gripping
- Proven and positive connection using six-ball locking mechanism

150 PSI **44 SCFM**

ONE HAND DISCONNECTION

- Hold coupler with 3 fingers
- Remove sleeve with thumb and index

Comparative size between regular **UNIQUIK** and **UNIQUIK SLIM**

APPLICATIONS

Pneumatic tools

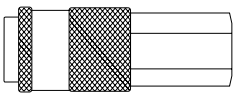
Ideal for the pharmaceutical industry, furniture and textiles

MATERIALS

Body: Brass
Sleeve: Brass
Valve: Brass
Valve Spring: Steel
Locking Mechanism: Steel balls
Seals: Buna-N/Nitrile

SPECIFICATIONS

Maximum Working Pressure: 150 PSI
Temperature Range: -40 °C to 100 °C
Airflow: 44 SCFM to 100 PSIG inlet with 10 PSIG pressure drop

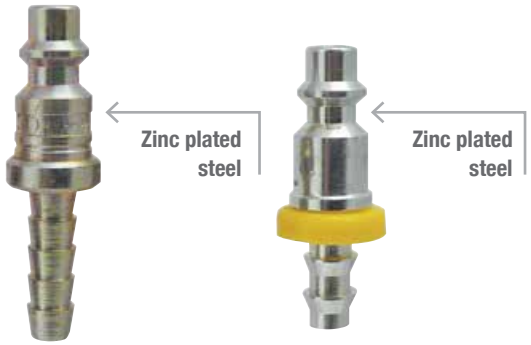


Product No	Female Thread
20.433	1/4 (F) NPT

WARNING

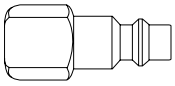
It is not recommended to use SLIM couplers with pneumatic impact tools unless a hose whip is installed between the tool and the coupler.
For more information, see series 62

I/M 1/4 INDUSTRIAL INTERCHANGE PLUGS

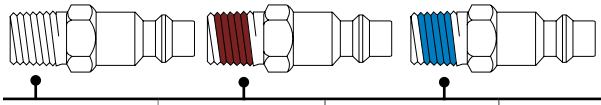


FEATURES AND BENEFITS

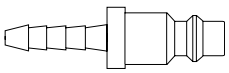
- Compatible with 1/4 INDUSTRIAL couplers
- Compatible with ISO standards 6150 B-12 and MIL-C-4109
- Zinc plated or stainless steel 304 for strength
- Corrosion resistant for long service life
- Manufactured to high quality standards to ensure compatibility
- Threads sealant coating for air tight connections (20.246 and 20.248)



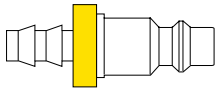
Zinc Plated Steel **Product No**	Stainless Steel **Product No**	Female Thread
20.122	--	1/8 (F) NPT
20.142	**20.146**	1/4 (F) NPT
20.162	--	3/8 (F) NPT



Zinc Plated Steel **Product No**	Zinc Plated Steel with sealant coating **Product No**	Stainless Steel with sealant coating **Product No**	Male Thread
20.222	--	--	1/8 (M) NPT
20.242	**20.248**	**20.246**	1/4 (M) NPT
20.262	--	--	3/8 (M) NPT



Zinc Plated Steel **Product No**	Hose Barb
20.342	1/4 I.D.
20.352	5/16 I.D.
20.362	3/8 I.D.



Zinc Plated Steel **Product No**	Hose Barb (Lock-On)
20.345	1/4 I.D.
20.365	3/8 I.D.

TOPQUIK SAFETY BLOW GUNS WITH INDUSTRIAL PLUG

OSHA SAFETY SOLUTION

SPECIFICATIONS

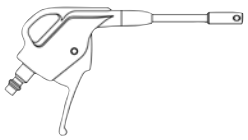
Maximum Working Pressure: 174 PSI

Noise Level:

60.090 : 85 dB at 87 PSI

60.092 : 87 dB at 87 PSI

Airflow: 7.7 SCFM



Product No	Description
60.090	Blow gun with 1/4 INDUSTRIAL plug and safety metal nozzle

Product No	Description
60.092	Blow gun with 1/4 INDUSTRIAL plug and safety polyamide nozzle

FREE ANGLE PLUGS 30°/ 45° / 75°

Free angle plugs are designed to provide 360° rotation and up to 30°, 45° or 75° of angle for an ergonomic solution.

See Series 62

I/M 1/4 TOPQUIK SC INDUSTRIAL INTERCHANGE SAFETY (MANUAL)

Compatible plugs
PAGE 104

FEATURES AND BENEFITS

- **Accepts 1/4 INDUSTRIAL type plugs (MIL-C-4109)**
- **Prevents dangerous hose whip through a 2-step disconnection making it safe**
- **Meets ISO 4414 safety standards**
- **Full flow:** tools work at maximal performance without having to increase the supply pressure
- **Zero load pressure**
  - connects with no effort because no pressure resistance
  - safe disconnection because downstream pressure is automatically vented
- **Low disconnection noise reduces workplace noise pollution**
- **Reliability and durability**

360 PSI | 38 SCFM | SAFETY SOLUTION

APPLICATIONS

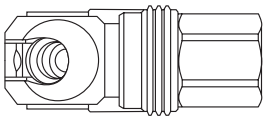
Assembly line and pneumatic hand tools
Any air tool connection where hose whip and disconnection must be avoided

MATERIALS

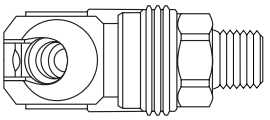
Black part: Steel, nickel plated / Aluminium
Sleeve: Zinc diecast, nickel plated, orange rubber coating
Housing: Steel, tenifer treated
Cylinder: Surface hardened steel, nickel plated
Valve Spring: Stainless steel
Seal: Nitrile (NBR)

SPECIFICATIONS

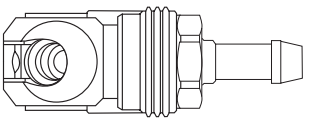
Maximum Working Pressure: 360 PSI
Operating Pressure: Connection/disconnection to maximum 200 PSI
Temperature Range: -20 °C to 100 °C
Airflow: 38 SCFM at 100 PSIG inlet with 10 PSIG pressure drop



Product No	Female Thread
20.847	1/4 NPT
20.867	3/8 NPT
20.887	1/2 NPT



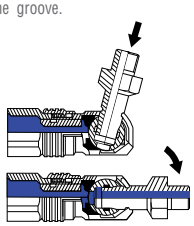
Product No	Male Thread
20.947	1/4 NPT
20.967	3/8 NPT
20.987	1/2 NPT



Product No	Hose Barb
20.547	1/4 I.D.
20.557	5/16 I.D.
20.567	3/8 I.D.

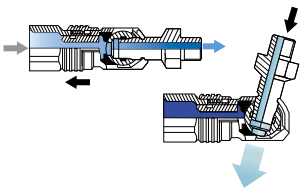
SAFETY COMES FROM A 2-STEP DISCONNECTION

CONNECTION
Push compatible plug into coupling and swing approximately 90 ° until the orange ring engages in the groove.



Pressure is in motion.

DISCONNECTION
Pull back orange ring and swing plug to stop. Remove plug from coupling.



In order to prevent the hose from ejecting dangerously, the plug must be held in the hand until the hose is completely ventilated.

Unbreakable polyamide

Product No	Cover for
20.007	TOPQUIK SC 1/4

The polyamide cover is slipped over the housing of the TOPQUIK SC to protect the work piece, e.g. for work on car body parts, furniture, etc.

Vinyl

Product No	Protective Sleeve for
20.017	TOPQUIK SC 1/4

Slides over airline coupling installation. Provides complete protective coverage of coupler and plug.

I/M 1/4 TOPQUIK INDUSTRIAL INTERCHANGE SAFETY (AUTOMATIC)

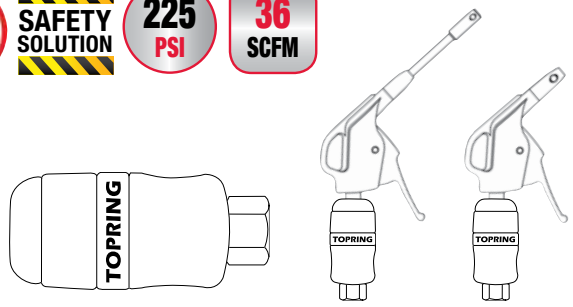
TOPQUIK couplers with safety blow guns

OSHA STANDARDS MEETS OR EXCEEDS OSHA

FEATURES AND BENEFITS

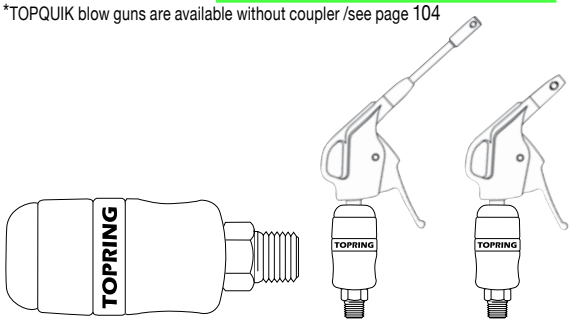
- Accepts 1/4 INDUSTRIAL type plugs (MIL-C-4109)
- Prevents dangerous hose whip through a two-step disconnection
- Shock and crush resistant coupler provides exceptionally long service life
- Non-marring coupler body prevents scratching of delicate surfaces
- Super light weight composite body contributes to ergonomics and safety
- Automatic push-to-connect operation
- Downstream pressure is automatically vented and disconnection is performed easily at zero pressure
- Meets ISO 4414 safety standards
- Disconnection noise level of only 80 dB
- Leak-proof reliability

SAFETY SOLUTION | 225 PSI | 36 SCFM



TOPQUIK Coupler		Coupler and Blow Gun* Kit	
Product No	Female Thread	with metal nozzle	with polyamide nozzle
20.449	1/4 (F) NPT	**60.090.01**	**60.092.01**
20.469	3/8 (F) NPT	**60.090.02**	**60.092.02**

*TOPQUIK blow guns are available without coupler /see page 104



TOPQUIK Coupler		Coupler and Blow Gun* Kit	
Product No	Male Thread	with metal nozzle	with polyamide nozzle
20.649	1/4 (M) NPT	**60.090.04**	**60.092.04**
20.669	3/8 (M) NPT	**60.090.05**	**60.092.05**

*TOPQUIK blow guns are available without coupler /see page 104

APPLICATIONS

Any air tool connection where hose whip and accidental disconnection must be avoided

MATERIALS

COUPLER

Body: High-impact fiberglass composite

Backnut: Nickel plated brass

Seals: Buna-N/Nitrile

BLOW GUN

Body: Polyamide

SPECIFICATIONS

COUPLER

Maximum Working Pressure: 225 PSI

Temperature Range: -15 °C to 70 °C

Airflow: 36 SCFM at 100 PSIG inlet with 10 PSIG pressure drop

BLOW GUN

Maximum Working Pressure: 174 PSI

Airflow: 7.7 SCFM

Noise Level: 60.090 : 85 dB at 87 PSI
60.092 : 87 dB at 87 PSI

SAFETY COMES FROM A 2-STEP DISCONNECTION

I/M 1/4 QUIKSILVER INDUSTRIAL INTERCHANGE (AUTOMATIC)

FEATURES AND BENEFITS

- Accepts 1/4 INDUSTRIAL type plugs (MIL-C-4109)
- High performance, corrosion-resistant coupler for long service life
- Delivers high air volume with low pressure drop for better tool performance
- Drag guard protects against accidental disconnection
- Automatic push-to-connect operation
- Easy to connect, even under pressure
- Deep knurled socket sleeve for positive gripping
- Proven and positive connection using ball locking mechanism

- **HIGH FLOW**
- **HIGH PRESSURE**
- **EASY TO CONNECT**

500 PSI

44 SCFM

APPLICATIONS

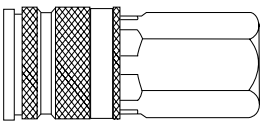
For general use for any compressed air systems and pneumatic tools

MATERIALS

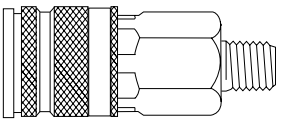
Body: Zinc plated steel
Drag Guard: Zinc plated steel
Valve: Acetal
Sleeve: Zinc plated steel
Valve Spring: Stainless steel
Locking Mechanism: Hardened steel balls
Seals: Buna-N/Nitrile

SPECIFICATIONS

Maximum Working Pressure: 500 PSI
Temperature Range: -20 °C to 60 °C
Airflow: 44 SCFM at 100 PSIG inlet with 10 PSIG pressure drop



Product No	Female Thread
20.446	1/4 (F) NPT
20.466	3/8 (F) NPT
20.486	1/2 (F) NPT



Product No	Male Thread
20.646	1/4 (M) NPT
20.666	3/8 (M) NPT
20.686	1/2 (M) NPT

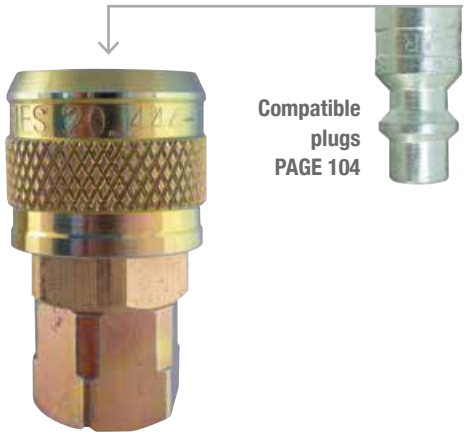
I/M 1/4 AUTOMAX INDUSTRIAL INTERCHANGE (AUTOMATIC)

FEATURES AND BENEFITS

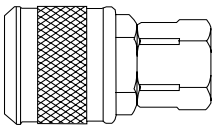
- Accepts 1/4 INDUSTRIAL type plugs (MIL-C-4109)
- Automatic push-to-connect operation
- Proven and positive connection using pin lock mechanism

250 PSI

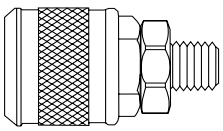
37 SCFM



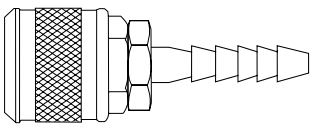
Compatible plugs PAGE 104



Product No	Female Thread
20.444	1/4 (F) NPT
20.464	3/8 (F) NPT



Product No	Male Thread
20.644	1/4 (M) NPT
20.664	3/8 (M) NPT



Product No	Hose Barb
20.744	1/4 I.D.
20.764	3/8 I.D.

APPLICATIONS

General air service and pneumatic tools

MATERIALS

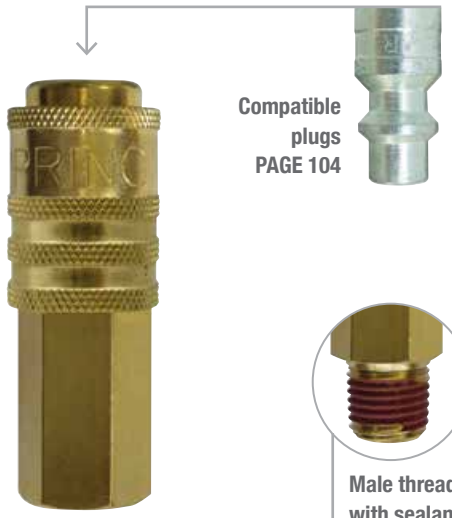
Body: Brass
Backnut: Zinc plated steel
Sleeve: Zinc plated steel
Springs: Stainless steel
Valve: Brass
Locking Mechanism: Hardened steel and zinc plated pins
Seals: Buna-N/Nitrile

SPECIFICATIONS

Maximum Working Pressure: 250 PSI
Temperature Range: -40 °C to 107 °C
Airflow: 37 SCFM at 100 PSIG inlet with 10 PSIG pressure drop

I/M
1/4

AUTOMAX SLIM
INDUSTRIAL INTERCHANGE
(AUTOMATIC)



FEATURES AND BENEFITS

- Accepts 1/4 INDUSTRIAL type plugs (MIL-C-4109)
- Automatic push-to-connect operation
- High airflow
- 33% lighter than a regular coupler
- Compact design prevents accidental disconnection
- One hand disconnection
- Corrosion-resistant Brass
- Deep knurled socket sleeve for positive gripping
- Proven and positive connection using six-ball locking mechanism

150 PSI

45 SCFM

ONE HAND DISCONNECTION

• Hold coupler with 3 fingers • Remove sleeve with thumb and index

Comparative size between regular **AUTOMAX** and **AUTOMAX SLIM**

APPLICATIONS

Pneumatic tools

Ideal for the pharmaceutical industry, furniture and textiles

MATERIALS

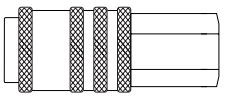
Body: Brass
Sleeve: Brass
Valve: Brass
Valve Spring: Steel
Locking Mechanism: Steel balls
Seals: Buna-N/Nitrile
Sealant: Sealant coating for air tight connection (20.643)

SPECIFICATIONS

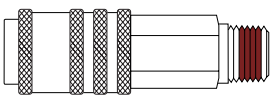
Maximum Working Pressure: 150 PSI
Temperature Range: -40 °C to 100 °C
Airflow: 45 SCFM to 100 PSIG inlet with 10 PSIG pressure drop

WARNING

It is not recommended to use SLIM couplers with pneumatic impact tools unless a hose whip is installed between the tool and the coupler.
For more information, see series 62



Product No	Female Thread
20.443	1/4 (F) NPT



Product No	Male Thread
20.643	1/4 (M) NPT

I/M 1/4 MAXQUIK PLUS INDUSTRIAL INTERCHANGE (MANUAL)

Brass

Stainless Steel 304

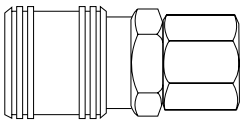
Compatible plugs PAGE 104

FEATURES AND BENEFITS

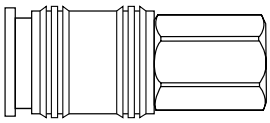
- Accepts 1/4 INDUSTRIAL type plugs (MIL-C-4109)
- Rugged and reliable
- Ball locking mechanism
- Sleeve must be manually retracted to connect or disconnect the plug

250 PSI

37 SCFM



Brass **Product No**	Female Thread
20.844	1/4 (F) NPT



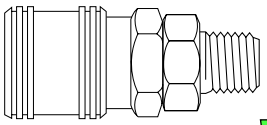
Stainless Steel **Product No**	Female Thread
20.846	1/4 (F) NPT

APPLICATIONS

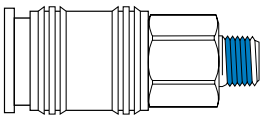
General air service, pneumatic tools, food and pharmaceutical industries (stainless steel)

MATERIALS

Body: Brass / stainless steel 304
Sleeve: Nickel plated steel / stainless steel
Valve: Zinc plated steel / stainless steel
Locking Mechanism: Stainless steel balls
Valve Spring: Stainless steel
Seals: Buna-N/Nitrile



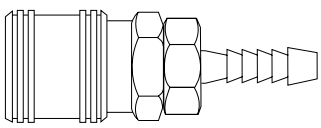
Brass **Product No**	Male Thread
20.944	1/4 (M) NPT



Stainless Steel with sealant coating **Product No**	Male Thread
20.946	1/4 (M) NPT

SPECIFICATIONS

Maximum Working Pressure: 250 PSI
Temperature Range: -40 °C to 107 °C
Airflow: 37 SCFM at 100 PSIG inlet with 10 PSIG pressure drop



Brass **Product No**	Hose Barb
20.544	1/4 I.D.
20.564	3/8 I.D.

I/M 1/4 MAXQUIK
INDUSTRIAL INTERCHANGE
(MANUAL)

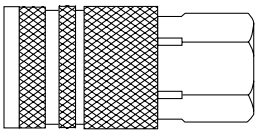
FEATURES AND BENEFITS

- Accepts 1/4 INDUSTRIAL type plugs (MIL-C-4109)
- Sleeve must be manually retracted to connect or disconnect the plug
- Compact and economic design
- Four-ball locking mechanism allows for a tight and long-lasting connection
- Sleeve guard prevents accidental disconnection
- Deep knurled socket sleeve for positive gripping

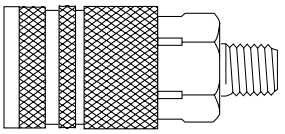
Compatible plugs PAGE 104

250 PSI

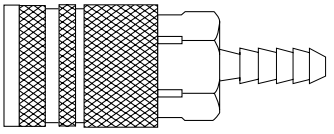
24 SCFM



Product No	Female Thread
20.842	1/4 (F) NPT
20.862	3/8 (F) NPT



Product No	Male Thread
20.942	1/4 (M) NPT
20.962	3/8 (M) NPT



Product No	Hose Barb
20.542	1/4 I.D.
20.562	3/8 I.D.

APPLICATIONS

Pneumatic tools such as staplers, nailers, screwdrivers, and others

MATERIALS

Body: Zinc plated steel
Backnut: Zinc plated steel
Sleeve: Zinc plated steel
Valve: Zinc plated steel
Valve Spring: Nickel plated steel
Locking Mechanism: Nickel plated steel balls
Seals: Buna-N/Nitrile

SPECIFICATIONS

Maximum Working Pressure: 250 PSI
Temperature Range: -40 °C to 107 °C
Airflow: 24 SCFM at 100 PSIG inlet with 10 PSIG pressure drop

I/M 1/4 MAXQUIK INDUSTRIAL INTERCHANGE COUPLER KITS

TOOL CONNECTION KIT

Ideal for connecting a tool to a air hose

Product No	Description
20.711C	1 x 20.842 Manual Coupler 1/4 (F) NPT
	1 x 20.242 Plug 1/4 (M) NPT

DOUBLE HOSE SPLITTER WITH COUPLERS AND PLUG

Allows connection of 2 tools to a single air supply hose

Product No	Description
20.702C	2 x 20.942 Manual Coupler 1/4 (M) NPT
	1 x 62.850 Double Manifold
	1 x 20.242 Plug 1/4 (M) NPT

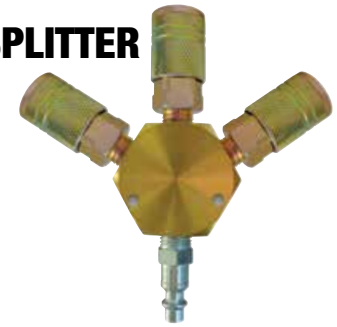
HOSE CONNECTION KIT

Ideal for connections to the tool or the air supply

Product No	Description
20.704C	1 x 20.842 Manual Coupler 1/4 (F) NPT
	1 x 20.142 Plug 1/4 (F) NPT
	1 x 20.242 Plug 1/4 (M) NPT
	1 x 41.105 Plug 1/4 (M) NPT

TRIPLE HOSE SPLITTER WITH COUPLERS AND PLUG

Allows connection of 3 tools to a single air supply hose



Product No	Description
20.703C	3 x 20.942 Manual Coupler 1/4 (M) NPT
	1 x 62.810 Triple Manifold
	1 x 20.242 Plug 1/4 (M) NPT

TRIPLE TOOL HOSE CONNECTION KIT

Allows to easily interchange 3 tools to air hose

Product No	Description
20.712C	1 x 20.842 Manual Coupler 1/4 (F) NPT
	1 x 20.142 Plug 1/4 (F) NPT
	3 x 20.242 Plug 1/4 (M) NPT

I/M 1/4 AUTOMAX SLIM INDUSTRIAL INTERCHANGE COUPLER KITS

TOOL CONNECTION KIT

Ideal for connecting tool hose to an air hose

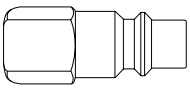
Product No	Description
20.713C	1 x 20.443 AUTOMAX SLIM Coupler 1/4 (F) NPT
	1 x 20.248 Plug 1/4 (M) NPT

I/M 3/8 INDUSTRIAL INTERCHANGE PLUGS

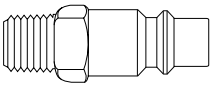
FEATURES AND BENEFITS

- Compatible with 3/8 INDUSTRIAL couplers
- Hardened steel construction for strength and corrosion resistant zinc plating for long service life
- Compatible with ISO standards 6150 B-15 and MIL-C-4109

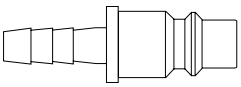
Zinc plated steel



Product No	Female Thread
21.142	1/4 (F) NPT
21.162	3/8 (F) NPT
21.182	1/2 (F) NPT



Product No	Male Thread
21.242	1/4 (M) NPT
21.262	3/8 (M) NPT
21.282	1/2 (M) NPT

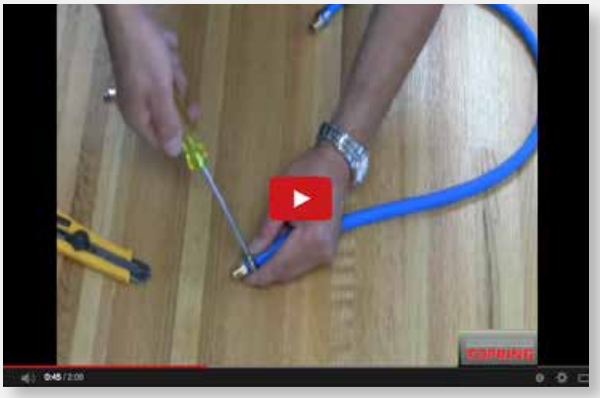


Product No	Hose Barb
21.342	1/4 I.D.
21.362	3/8 I.D.
21.382	1/2 I.D.

For air tight connection, it is recommended to use PTFE tape on male threads

See the video section at TOPRING.com to learn ...

How to repair an air hose



How to do an ergonomic connection at the air tool

I/M 3/8 TOPQUIK SC INDUSTRIAL INTERCHANGE SAFETY (MANUAL)

FEATURES AND BENEFITS

- **Accepts 3/8 INDUSTRIAL type plugs (MIL-C-4109)**
- **Prevents dangerous hose whip through a 2-step disconnection making it safe**
- **Meets ISO 4414 safety standards**
- **Full flow:** tools work at maximal performance without having to increase the supply pressure
- **Zero load pressure**
  - connects with no effort because no pressure resistance
  - safe disconnection because downstream pressure is automatically vented
- **Low disconnection noise reduces workplace noise pollution**
- **Reliability and durability**

APPLICATIONS

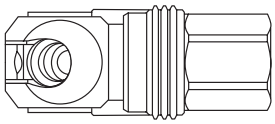
Assembly line and pneumatic hand tools
Any air tool connection where hose whip and disconnection must be avoided

MATERIALS

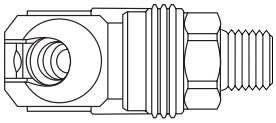
Black Part: Steel, nickel plated / Aluminium
Sleeve: Zinc diecast, nickel plated, orange rubber coating
Housing: Steel, tenifer treated
Cylinder: Surface hardened steel, nickel plated
Valve Spring: Stainless steel
Seal: Nitrile (NBR)

SPECIFICATIONS

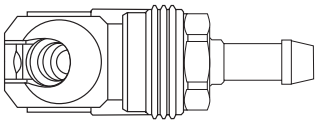
Maximum Working Pressure: 360 PSI
Operating Pressure: Connection/disconnection to maximum 200 PSI
Temperature Range: -20 °C to 100 °C
Airflow: 75 SCFM at 100 PSIG inlet with 10 PSIG pressure drop



Product No	Female Thread
21.847	1/4 NPT
21.867	3/8 NPT
21.887	1/2 NPT



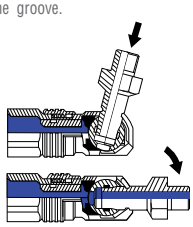
Product No	Male Thread
21.947	1/4 NPT
21.967	3/8 NPT
21.987	1/2 NPT



Product No	Hose Barb
21.557	5/16 I.D.
21.567	3/8 I.D.
21.587	1/2 I.D.

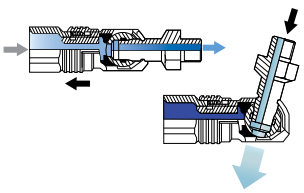
SAFETY COMES FROM A 2-STEP DISCONNECTION

CONNECTION
Push compatible plug into coupling and swing approximately 90 ° until the orange ring engages in the groove.



Pressure is in motion.

DISCONNECTION
Pull back orange ring and swing plug to stop. Remove plug from coupling.



In order to prevent the hose from ejecting dangerously, the plug must be held in the hand until the hose is completely ventilated.

Unbreakable polyamide

Product No	Cover for
21.007	TOPQUIK SC 3/8

The polyamide cover is slipped over the housing of the TOPQUIK SC to protect the work piece, e.g. for work on car body parts, furniture, etc.

Vinyl

Product No	Protective Sleeve for
21.017	TOPQUIK SC 3/8

Slides over airline coupling installation. Provides complete protective coverage of coupler and plug.

I/M 3/8 TOPQUIK INDUSTRIAL INTERCHANGE SAFETY (AUTOMATIC)

FEATURES AND BENEFITS

- Accepts 3/8 INDUSTRIAL type plugs (MIL-C-4109)
- Prevents dangerous hose whip through a two-step disconnection
- Shock and crush resistant coupler provides exceptionally long service life
- Non-marring coupler body prevents scratching of delicate surfaces
- Super light weight contributes to ergonomics and safety
- Disconnection sound level of only 80 dB
- When the sleeve is moved to shut off airflow, downstream pressure is automatically vented and disconnection is performed easily at zero pressure
- Meets ISO 4414 safety standards
- Automatic push-to-connect operation
- Leak-proof reliability

225 PSI | 72 SCFM | SAFETY SOLUTION

APPLICATIONS

Any air tool or automated equipment connection where safety is of utmost concern (hose whip, accidental disconnection)

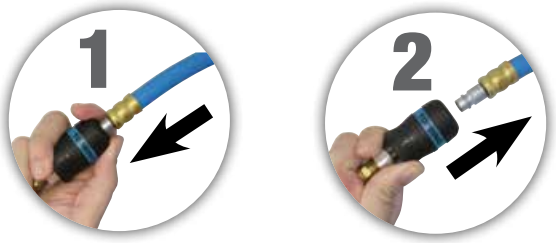
MATERIALS

Body: High-impact fiberglass composite
Backnut: Nickel plated brass
Seals: Buna-N/Nitrile

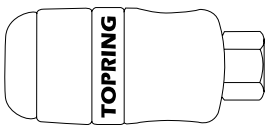
SPECIFICATIONS

Maximum Working Pressure: 225 PSI
Temperature Range: -15 °C to 70 °C
Airflow: 72 SCFM at 100 PSIG inlet with 10 PSIG pressure drop

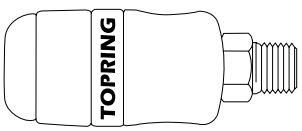
SAFETY COMES FROM A 2-STEP DISCONNECTION



- Slide the sleeve back to release downstream pressure
- The plug is released, but held within the coupler
- Slide the sleeve forward
- The plug is released completely



Product No	Female Thread
21.449	1/4 (F) NPT
21.469	3/8 (F) NPT
21.489	1/2 (F) NPT



Product No	Male Thread
21.649	1/4 (M) NPT
21.669	3/8 (M) NPT
21.689	1/2 (M) NPT

I/M 3/8 QUIKSILVER INDUSTRIAL INTERCHANGE (AUTOMATIC)

FEATURES AND BENEFITS

- Accepts 3/8 INDUSTRIAL type plugs (MIL-C-4109)
- High performance, corrosion-resistant coupler for long service life
- Delivers high air volume with low pressure drop for better tool performance
- Drag guard protects against accidental disconnection
- Automatic push-to-connect operation
- Easy to connect, even under pressure
- Deep knurled socket sleeve for positive gripping
- Proven and positive connection using ball locking mechanism

435 PSI

72 SCFM

APPLICATIONS

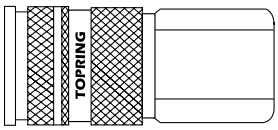
For general use for any compressed air systems and pneumatic tools

MATERIALS

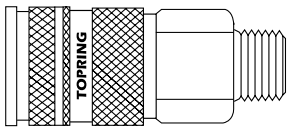
Body: Nickel plated brass
Drag Guard: Nickel plated brass
Valve Mechanism: Brass
Sleeve: Nickel plated steel
Valve Spring: Stainless steel
Locking Balls: Stainless steel
Seals: NBR

SPECIFICATIONS

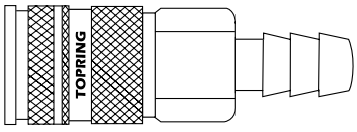
Maximum Working Pressure: 435 PSI
Temperature Range: -20 °C to 100 °C
Airflow: 72 SCFM at 100 PSIG inlet with 10 PSIG pressure drop



Product No	Female Thread
21.446	1/4 (F) NPT
21.466	3/8 (F) NPT
21.486	1/2 (F) NPT



Product No	Male Thread
21.666	3/8 (M) NPT
21.686	1/2 (M) NPT



Product No	Hose Barb
21.786	1/2 I.D.

I/M 3/8 AUTOMAX INDUSTRIAL INTERCHANGE (AUTOMATIC)

FEATURES AND BENEFITS

- Accepts 3/8 INDUSTRIAL type plugs (MIL-C-4109)
- Automatic push-to-connect operation
- Easy to connect, even under pressure
- Proven and positive connection using pin locking mechanism
- Designed for rigid mounting that allows a simple push-to-connect operation
- High-flow capability

250 PSI

62 SCFM

APPLICATIONS

General air service and pneumatic tools

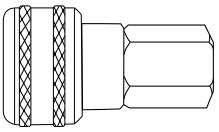
MATERIALS

Body: Brass
Backnut: Brass
Sleeve: Brass
Valve: Zinc plated steel
Valve Spring: Stainless steel
Locking Mechanism: Stainless steel pins
Seals: Buna-N/Nitrile

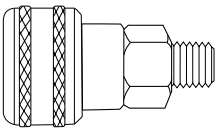
SPECIFICATIONS

Maximum Working Pressure: 250 PSI
Temperature Range: -40 °C to 107 °C
Airflow: 62 SCFM at 100 PSIG inlet with 10 PSIG pressure drop

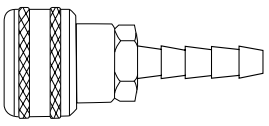
These couplers are designed for rigid wall mounting. They allow a simple push-to-connect operation if couplers are directly fixed to the wall or pluged into a fixed manifold.



Product No	Female Thread
21.442	1/4 (F) NPT
21.462	3/8 (F) NPT
21.482	1/2 (F) NPT

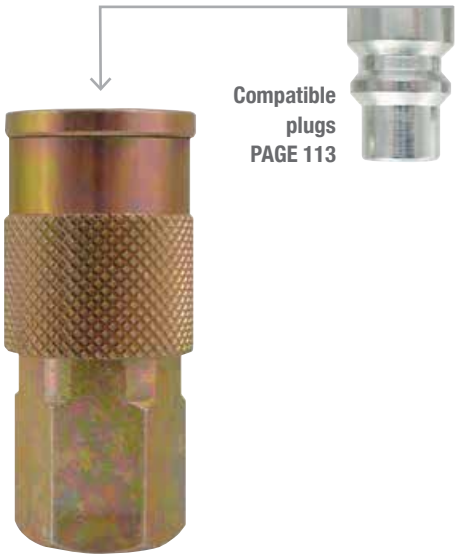


Product No	Male Thread
21.642	1/4 (M) NPT
21.662	3/8 (M) NPT
21.682	1/2 (M) NPT



Product No	Hose Barb
21.762	3/8 I.D.
21.782	1/2 I.D.

I/M 3/8 MAXQUIK INDUSTRIAL INTERCHANGE (MANUAL)



FEATURES AND BENEFITS

- Accepts 3/8 INDUSTRIAL type plugs (MIL-C-4109)
- Heavy-duty, high-quality design
- Sleeve must be manually retracted to connect or disconnect the plug
- Proven and positive connection using a ball locking mechanism
- High-flow capability
- Drag guard protects against accidental disconnection

250 PSI

56 SCFM

APPLICATIONS

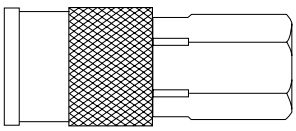
General air service and pneumatic tools

MATERIALS

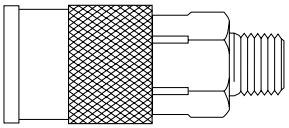
Body: Zinc plated steel
Backnut: Zinc plated steel
Sleeve: Zinc plated steel
Valve: Zinc plated steel
Valve Spring: Stainless steel
Locking Mechanism: Stainless steel balls
Seals: Buna-N/Nitrile

SPECIFICATIONS

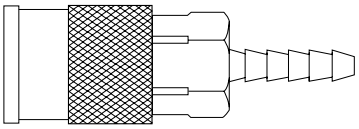
Maximum Working Pressure: 250 PSI
Temperature Range: -40 °C to 107 °C
Airflow: 56 SCFM at 100 PSIG inlet with 10 PSIG pressure drop



Product No	Female Thread
21.842	1/4 (F) NPT
21.862	3/8 (F) NPT
21.882	1/2 (F) NPT



Product No	Male Thread
21.942	1/4 (M) NPT
21.962	3/8 (M) NPT
21.982	1/2 (M) NPT



Product No	Hose Barb
21.562	3/8 I.D.
21.582	1/2 I.D.

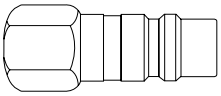
I/M 1/2 INDUSTRIAL INTERCHANGE PLUGS

FEATURES AND BENEFITS

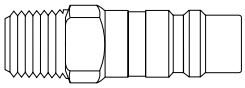
- Compatible with 1/2 INDUSTRIAL type couplers
- Compatible with MIL-C-4109 and ISO standards 6150 B-17
- Hardened Steel construction for strength and corrosion resistant zinc plating for long service life
- Made precisely to standards to ensure compatibility

Zinc plated steel

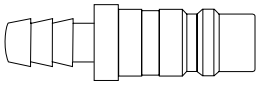
For air tight connection, it is recommended to use PTFE tape on male threads



Product No	Female Thread
22.162	3/8 (F) NPT
22.182	1/2 (F) NPT
22.192	3/4 (F) NPT



Product No	Male Thread
22.242	1/4 (M) NPT
22.262	3/8 (M) NPT
22.282	1/2 (M) NPT
22.292	3/4 (M) NPT



Product No	Hose Barb
22.362	3/8 I.D.
22.382	1/2 I.D.

Hose Whip: better control and better protection!

All sharp bends on hose lines should be avoided. These tend to shorten hose life, increase pressure drop, retard swivel action, increase pump load and raise the temperature of the fluid.

A hose whip should be installed to avoid strain on hose and coupler assembly.

Available with EASYflex® *PREMIUM* or TOPLEX hoses / See Series 62 for more details

I/M 1/2 TOPQUIK SC INDUSTRIAL INTERCHANGE SAFETY (MANUAL)

Compatible plugs
PAGE 119

FEATURES AND BENEFITS

- **Accepts 1/2 INDUSTRIAL type plugs (MIL-C-4109)**
- **Prevents dangerous hose whip through a 2-step disconnection making it safe**
- **Meets ISO 4414 safety standards**
- **Full flow:** tools work at maximal performance without having to increase the supply pressure
- **Zero load pressure**
  - connects with no effort because no pressure resistance
  - safe disconnection because downstream pressure is automatically vented
- **Low disconnection noise reduces workplace noise pollution**
- **Reliability and durability**

APPLICATIONS

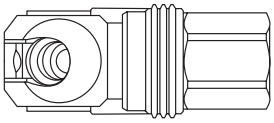
Assembly line and pneumatic hand tools
Any air tool connection where hose whip and disconnection must be avoided

MATERIALS

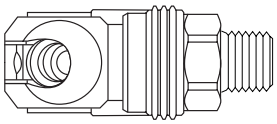
Black Part: Steel, nickel plated / Aluminium
Sleeve: Zinc diecast, nickel plated, orange rubber coating
Housing: Steel, tenifer treated
Cylinder: Surface hardened steel, nickel plated
Valve Spring: Stainless steel
Seal: Nitrile (NBR)

SPECIFICATIONS

Maximum Working Pressure: 360 PSI
Operating Pressure: Connection/disconnection to maximum 200 PSI
Temperature Range: -20 °C to 100 °C
Airflow: 175 SCFM at 100 PSIG inlet with 10 PSIG pressure drop



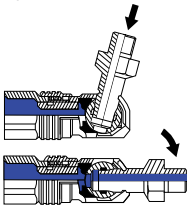
Product No	Female Thread
22.887	1/2 NPT
22.897	3/4 NPT



Product No	Male Thread
22.987	1/2 NPT
22.997	3/4 NPT

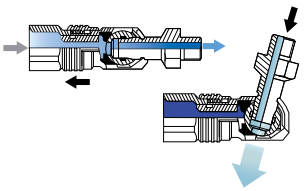
SAFETY COMES FROM A 2-STEP DISCONNECTION

CONNECTION
Push compatible plug into coupling and swing approximately 90 ° until the orange ring engages in the groove.

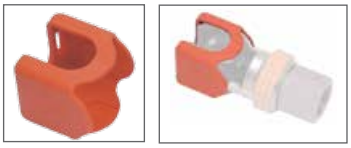


Pressure is in motion.

DISCONNECTION
Pull back orange ring and swing plug to stop. Remove plug from coupling.



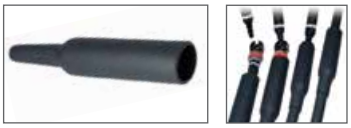
In order to prevent the hose from ejecting dangerously, the plug must be held in the hand until the hose is completely ventilated.



Unbreakable polyamide

Product No	Cover for
22.007	TOPQUIK SC 1/2

The polyamide cover is slipped over the housing of the TOPQUIK SC to protect the work piece, e.g. for work on car body parts, furniture, etc.



Vinyl

Product No	Protective Sleeve for
22.017	TOPQUIK SC 1/2

Slides over airline coupling installation. Provides complete protective coverage of coupler and plug.

07_06_2016

I/M 1/2 TOPQUIK INDUSTRIAL INTERCHANGE SAFETY (AUTOMATIC)

Compatible Plugs PAGE 119

BLUE RING indicates INDUSTRIAL interchange coupler

FEATURES AND BENEFITS

- Accepts 1/2 INDUSTRIAL type plugs (MIL-C-4109)
- Prevents dangerous hose whip through a two-step disconnection
- Shock and crush resistant coupler provides exceptionally long service life
- Non-marring coupler body prevents scratching of delicate surfaces
- Super light weight contributes to ergonomics and safety
- When the sleeve is moved to shut off airflow, downstream pressure is automatically vented and disconnection is performed easily at zero pressure
- Meets ISO 4414 safety standards
- Disconnection sound level of only 80 dB
- Automatic push-to-connect operation
- Leak-proof reliability

APPLICATIONS

Any air tool or automated equipment connection where safety is of utmost concern (hose whip, accidental disconnection)

MATERIALS

Outer Body: High-impact fiberglass composite
Inner Body: Steel
Backnut: Nickel plated brass
Seals: Buna-N/Nitrile

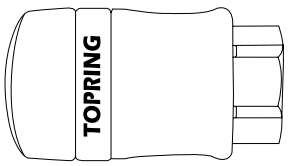
SPECIFICATIONS

Maximum Working Pressure: 225 PSI
Temperature Range: -15 °C to 70 °C
Airflow: 169 SCFM at 100 PSIG inlet with 10 PSIG pressure drop

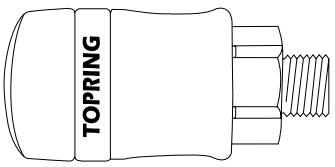
SAFETY COMES FROM A 2-STEP DISCONNECTION

- Slide the sleeve back to release downstream pressure
- The plug is released, but held within the coupler

- Slide the sleeve forward
- The plug is released completely



Product No	Female Thread
22.469	3/8 (F) NPT
22.489	1/2 (F) NPT



Product No	Male Thread
22.669	3/8 (M) NPT
22.689	1/2 (M) NPT

I/M 1/2 QUIKSILVER INDUSTRIAL INTERCHANGE (AUTOMATIC)

FEATURES AND BENEFITS

- Accepts 1/2 INDUSTRIAL type plugs (MIL-C-4109)
- High performance, corrosion-resistant coupler for long service life
- Delivers high air volume with low pressure drop for better tool performance
- Drag guard protects against accidental disconnection
- Automatic push-to-connect operation
- Easy to connect, even under pressure
- Deep knurled socket sleeve for positive gripping
- Proven and positive connection using ball locking mechanism

500 PSI

145 SCFM

APPLICATIONS

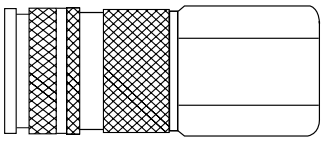
For general use for any compressed air systems and pneumatic tools

MATERIALS

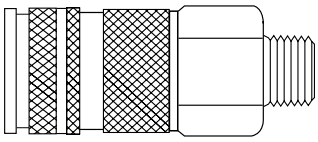
Body: Nickel plated brass
Drag Guard: Nickel plated brass
Valve Mechanism: Brass
Sleeve: Nickel plated steel
Valve Spring: Stainless steel
Locking Balls: Stainless steel
Seals: NBR

SPECIFICATIONS

Maximum Working Pressure: 500 PSI
Temperature Range: -20 °C to 100 °C
Airflow: 145 SCFM at 100 PSIG inlet with 10 PSIG pressure drop



Product No	Female Thread
22.466	3/8 (F) NPT
22.486	1/2 (F) NPT



Product No	Male Thread
22.686	1/2 (M) NPT

I/M 1/2 AUTOMAX INDUSTRIAL INTERCHANGE (AUTOMATIC)

FEATURES AND BENEFITS

- Accepts 1/2 INDUSTRIAL type plugs (MIL-C-4109)
- Automatic push-to-connect operation
- Heavy-duty, high-quality design
- Designed for rigid mounting that allows a simple push-to-connect operation
- High-flow capability

Compatible plugs PAGE 119

250 PSI

99 SCFM

Male thread with sealant coating

APPLICATIONS

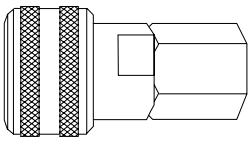
General air service and pneumatic tools

MATERIALS

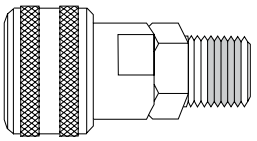
Body: Brass
Backnut: Brass
Sleeve: Brass
Valve: Zinc plated steel
Valve Spring: Stainless steel
Locking Mechanism: Stainless steel pins
Seals: Buna-N/Nitrile

SPECIFICATIONS

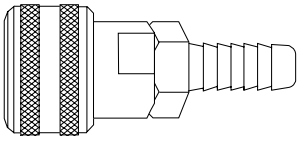
Maximum Working Pressure: 250 PSI
Temperature Range: -40 °C to 107 °C
Airflow: 99 SCFM at 100 PSIG inlet with 10 PSIG pressure drop



Product No	Female Thread
22.482	1/2 (F) NPT



Product No	Male Thread
22.682	1/2 (M) NPT



Product No	Hose Barb
22.782	1/2 I.D.

These couplers are designed for rigid wall mounting. They allow a simple push-to-connect operation if couplers are sturdly fixed to the wall or if pluged into a fixed manifold.

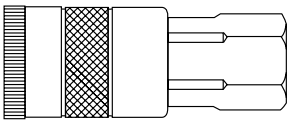
I/M 1/2 MAXQUIK INDUSTRIAL INTERCHANGE (MANUAL)

FEATURES AND BENEFITS

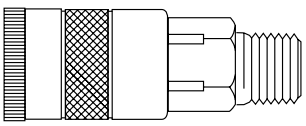
- Accepts 1/2 INDUSTRIAL (MIL-C-4109) type plugs
- High-flow capability
- Drag guard protects against accidental disconnection

250 PSI

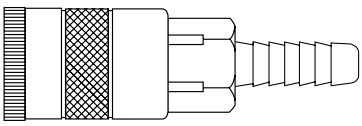
75 SCFM



Product No	Female Thread
22.862	3/8 (F) NPT
22.882	1/2 (F) NPT
22.892	3/4 (F) NPT



Product No	Male Thread
22.982	1/2 (M) NPT
22.992	3/4 (M) NPT



Product No	Hose Barb
22.582	1/2 I.D.

APPLICATIONS

General air service and pneumatic tools

MATERIALS

Body: Zinc plated steel
Backnut: Zinc plated steel
Sleeve: Zinc plated steel
Valve: Hardened and zinc plated steel
Valve Spring: Stainless steel
Locking Mechanism: Stainless steel balls
Seals: Buna-N/Nitrile

SPECIFICATIONS

Maximum Working Pressure: 250 PSI
Temperature Range: -40 °C to 107 °C
Airflow: 75 SCFM at 100 PSIG inlet with 10 PSIG pressure drop

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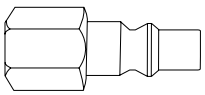
ARO 210 INTERCHANGE PLUGS

FEATURES AND BENEFITS

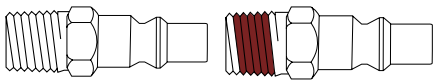
- Compatible with ARO 210 type couplers
- Hardened steel construction for strength and corrosion resistant zinc plating for long service life
- Made precisely to standards to ensure compatibility
- Sealant coating for air tight connections (23.248)

Zinc plated steel

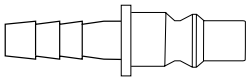
For air tight connection, it is recommended to use PTFE tape on male threads



Product No	Female Thread
23.142	1/4 (F) NPT



Product No	With sealant coating Product No	Male Thread
23.222	--	1/8 (M) NPT
23.242	23.248	1/4 (M) NPT



Product No	Hose Barb
23.342	1/4 I.D.
23.352	5/16 I.D.
23.362	3/8 I.D.

FREE ANGLE FITTING ARO 210 INTERCHANGE PLUG MAXPRO 30°

Free angle fittings are designed to provide 360° of rotation and up to 30° of angle for air tool and air hose supply lines

For more details see Series 62

62.365

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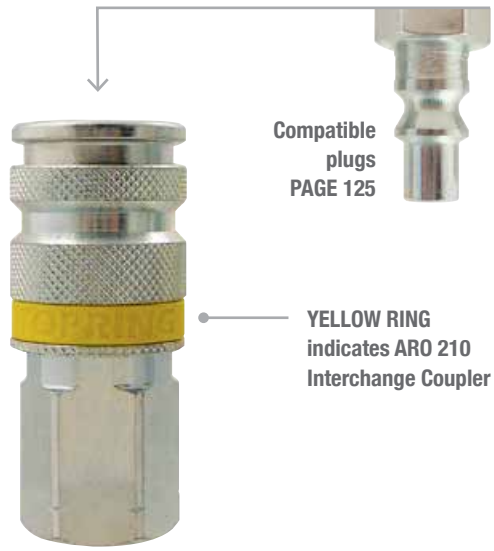
QUIKSILVER
ARO 210 INTERCHANGE
(AUTOMATIC)



FEATURES AND BENEFITS

- Accepts ARO 210 type plugs
- High performance, corrosion-resistant couplers
- Automatic push-to-connect operation
- Easy to connect, even under pressure
- Sleeve guard protects against accidental disconnection
- High-quality design
- Deep knurled socket sleeve for positive gripping
- Secure and efficient connection using a ball locking mechanism

500 PSI

44 SCFM

APPLICATIONS

General air service

Pneumatic tools

MATERIALS

Body: Zinc plated steel

Ball Retainer and Drag Guard: Zinc plated steel

Valve: Brass

Sleeve: Zinc plated steel

Valve Spring: Stainless steel

Locking Mechanism: Hardened steel balls

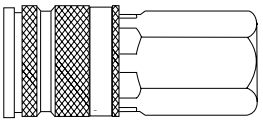
Seals: Buna-N/Nitrile

SPECIFICATIONS

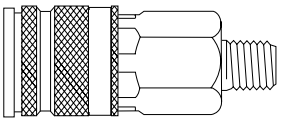
Maximum Working Pressure: 500 PSI

Temperature Range: -20 °C to 60 °C

Airflow: 44 SCFM at 100 PSIG inlet with 10 PSIG pressure drop



Product No	Female Thread
23.446	1/4 (F) NPT



Product No	Male Thread
23.646	1/4 (M) NPT

A 1/4 AUTOMAX ARO 210 INTERCHANGE (AUTOMATIC)

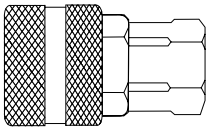
FEATURES AND BENEFITS

- Accepts ARO 210 type plugs
- Automatic push-to-connect operation
- Deep knurled socket sleeve offers an excellent grip

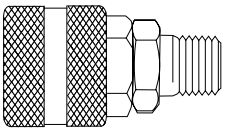
250 PSI

34 SCFM

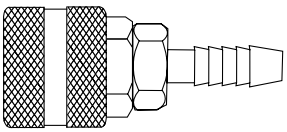
Compatible Plugs PAGE 125



Product No	Female Thread
23.444	1/4 (F) NPT
23.464	3/8 (F) NPT



Product No	Male Thread
23.644	1/4 (M) NPT
23.664	3/8 (M) NPT



Product No	Hose Barb
23.744	1/4 I.D.
23.764	3/8 I.D.

APPLICATIONS

General air service

Pneumatic tools

MATERIALS

Body: Brass

Backnut: Zinc plated steel

Sleeve: Zinc plated steel

Valve: Acetal

Valve Spring: Stainless steel

Locking Mechanism: Hardened steel and zinc plated pins

Seals: Buna-N/Nitrile

SPECIFICATIONS

Maximum Working Pressure: 250 PSI

Temperature Range: -40 °C to 107 °C

Airflow: 34 SCFM at 100 PSIG inlet with 10 PSIG pressure drop

FREE ANGLE FITTING ARO 210 INTERCHANGE PLUG MAXPRO 30°

Free angle fittings are designed to provide 360° rotation and up to 30° of angle for air tool and air hose supply lines

For more details see Series 62

62.365

A 1/4

AUTOMAX SLIM
ARO 210 INTERCHANGE (AUTOMATIC)

Compatible plugs PAGE 125

FEATURES AND BENEFITS

- Accepts ARO 210 type plugs
- Automatic push-to-connect operation
- High airflow
- 33% lighter than a regular coupler
- Compact design prevents accidental disconnection
- One hand disconnection
- Corrosion-resistant brass
- Deep knurled socket sleeve for positive gripping
- Secure and efficient connection using six-ball locking mechanism

150 PSI

40 SCFM

ONE HAND DISCONNECTION

• Hold coupler with 3 fingers • Remove sleeve with thumb and index

Comparative size between regular **AUTOMAX** and **AUTOMAX SLIM**

APPLICATIONS

Pneumatic tools

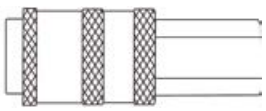
Ideal for the pharmaceutical industry, furniture and textiles

MATERIALS

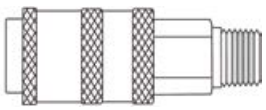
Body: Brass
Sleeve: Brass
Valve: Brass
Valve Spring: Steel
Locking Mechanism: Steel balls
Seals: Buna-N/Nitrile
Sealant: Pre-applied PTFE for air tight connection (23.643)

SPECIFICATIONS

Maximum Working Pressure: 150 PSI
Temperature Range: -40 °C to 100 °C
Airflow: 40 SCFM to 100 PSIG inlet with 10 PSIG pressure drop



Product No	Female Thread
23.443	1/4 (F) NPT



Product No	Male Thread
23.643	1/4 (M) NPT

WARNING

It is not recommended to use SLIM couplers with pneumatic impact tools unless a hose whip is installed between the tool and the coupler.

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MAXQUIK
ARO 210 INTERCHANGE
(MANUAL)

FEATURES AND BENEFITS

- Accepts ARO 210 type plugs
- Compact and economic design
- Four-ball locking mechanism allows for a tight and long-lasting connection
- Sleeve guard prevents accidental disconnection
- Sleeve must be manually retracted to connect or disconnect the plug

250 PSI

28 SCFM

APPLICATIONS

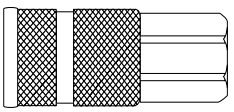
Pneumatic tools such as staplers, nailers, screwdrivers and others

MATERIALS

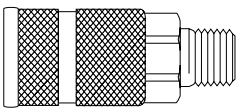
Body: Zinc plated steel
Backnut: Zinc plated steel
Sleeve: Zinc plated steel
Valve: Zinc plated steel
Valve Spring: Nickel plated steel
Locking Mechanism: Nickel plated steel balls
Seals: Buna-N/Nitrile

SPECIFICATIONS

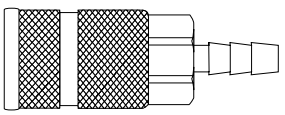
Maximum Working Pressure: 250 PSI
Temperature Range: -40 °C to 107 °C
Airflow: 28 SCFM at 100 PSIG inlet with 10 PSIG pressure drop



Product No	Female Thread
23.842	1/4 (F) NPT



Product No	Male Thread
23.942	1/4 (M) NPT



Product No	Hose Barb
23.742	1/4 I.D.
23.762	3/8 I.D.

A 1/4 AUTOMAX SLIM
ARO 210 INTERCHANGE TOOLS CONNECTION KITS

TOOL CONNECTION SLIM COUPLER KIT

Ideal for connecting tool to hose

Product No	Description
23.713C	1 x 23.443 Coupler 1/4 (F) NPT
	1 x 23.248 Plug 1/4 (M) NPT

TRIPLE HOSE SPLITTER WITH SLIM COUPLERS AND PLUG

Allows connection of three tools to a single air supply hose

Product No	Description
23.714C	3 x 23.643 Coupler 1/4 (M) NPT
	1 x 23.248 Plug 1/4 (M) NPT
	1 x 62.810 Triple Manifold

A 1/4 MAXQUIK
ARO 210 INTERCHANGE TOOLS CONNECTION KITS

23.704C

23.712C

TOOL CONNECTION KIT

Ideal for both tool and supply connections for an air hose and tool

Product No	Description
23.704C	1 x 23.842 Manual Coupler 1/4 (F) NPT
	1 x 23.142 Plug 1/4 (F) NPT
	1 x 23.242 Plug 1/4 (M) NPT
	1 x 41.105 Union 1/4 (M) NPT
23.712C	1 x 23.842 Manual Coupler 1/4 (F) NPT
	3 x 23.242 Plug 1/4 (M) NPT
	1 x 23.142 Plug 1/4 (F) NPT

TOOL CONNECTION KIT

Ideal for connecting a tool to an air hose to an air hose

Product No	Description
23.711C	1 x 23.842 Manual Coupler 1/4 (F) NPT
	1 x 23.242 Plug 1/4 (M) NPT

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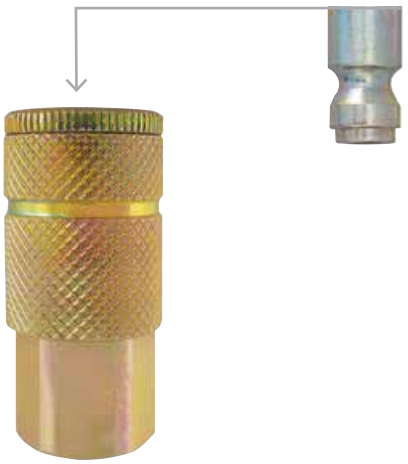
MAXQUIK
TRUFLATE INTERCHANGE
(MANUAL)



FEATURES AND BENEFITS

- Accepts 1/4 TRUFLATE type plugs
- Sleeve must be manually retracted to connect or disconnect the plug
- Compact and economical design
- Four-ball locking mechanism allows for a tight and long-lasting connection
- Sleeve guard prevents accidental disconnection
- Deep knurled socket sleeve for positive gripping

250 PSI

24 SCFM

APPLICATIONS

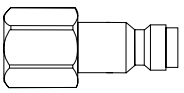
Pneumatic tools such as staplers, nailers, screwdrivers and others

MATERIALS

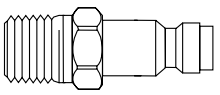
Body: Zinc plated steel
Backnut: Zinc plated steel
Sleeve: Zinc plated steel
Valve: Zinc plated steel
Locking Mechanism: Nickel plated steel balls
Locking Balls: Nickel plated steel
Seals: Buna-N/Nitrile

SPECIFICATIONS

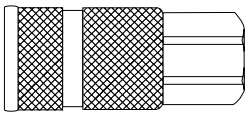
Maximum Working Pressure: 250 PSI
Temperature Range: -40 °C to 107 °C
Airflow: 24 SCFM at 100 PSIG inlet with 10 PSIG pressure drop



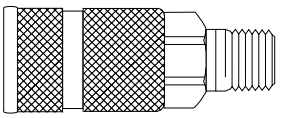
Product No	Female Thread
24.142	1/4 (F) NPT



Product No	Male Thread
24.242	1/4 (M) NPT



Product No	Female Thread
24.844	1/4 (F) NPT



Product No	Male Thread
24.944	1/4 (M) NPT

T 3/8

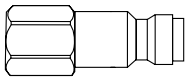
MAXQUIK TRUFLATE INTERCHANGE (MANUAL)

FEATURES AND BENEFITS

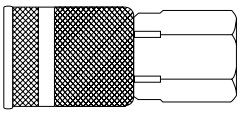
- Accepts 3/8 TRUFLATE type plugs
- Heavy-duty, high-quality design
- Deep knurled socket sleeve for positive gripping
- Proven and positive connection using ball locking mechanism
- Sleeve guard prevents accidental disconnection

250 PSI

67 SCFM



Product No	Female Thread
25.142	1/4 (F) NPT
25.162	3/8 (F) NPT



Product No	Female Thread
25.842	1/4 (F) NPT
25.862	3/8 (F) NPT
25.882	1/2 (F) NPT

APPLICATIONS

General air service

Pneumatic tools

MATERIALS

Body: Zinc plated steel

Backnut: Zinc plated steel

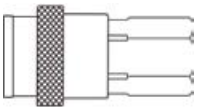
Sleeve: Zinc plated steel

Valve: Zinc plated steel

Valve spring: Stainless steel

Locking Mechanism: Stainless steel balls

Seals: Buna-N/Nitrile



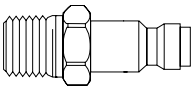
Product No	Easy Grip Coupler
25.844	1/4 (F) NPT
25.864	3/8 (F) NPT

SPECIFICATIONS

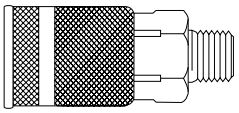
Maximum Working Pressure: 250 PSI

Temperature Range: -40 °C to 107 °C

Airflow: 67 SCFM at 100 PSIG inlet with 10 PSIG pressure drop



Product No	Male Thread
25.242	1/4 (M) NPT
25.262	3/8 (M) NPT



Product No	Male Thread
25.942	1/4 (M) NPT
25.962	3/8 (M) NPT
25.982	1/2 (M) NPT

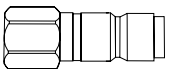
T 1/2 MAXQUIK TRUFLATE INTERCHANGE (MANUAL)

FEATURES AND BENEFITS

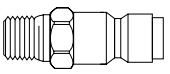
- Accepts 1/2 TRUFLATE type plugs
- Heavy-duty, high-quality design
- Deep knurled socket sleeve for positive gripping
- Proven and positive connection using ball locking mechanism
- Sleeve guard prevents accidental disconnection

250 PSI

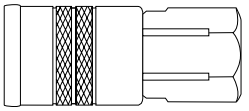
92 SCFM



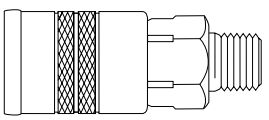
Product No	Female Thread
25.362	3/8 (F) NPT
25.382	1/2 (F) NPT
25.392	3/4 (F) NPT



Product No	Male Thread
25.462	3/8 (M) NPT
25.482	1/2 (M) NPT
25.492	3/4 (M) NPT



Product No	Female Thread
25.662	3/8 (F) NPT
25.682	1/2 (F) NPT
25.692	3/4 (F) NPT



Product No	Male Thread
25.762	3/8 (M) NPT
25.782	1/2 (M) NPT
25.792	3/4 (M) NPT

APPLICATIONS

General air service
Pneumatic tools

MATERIALS

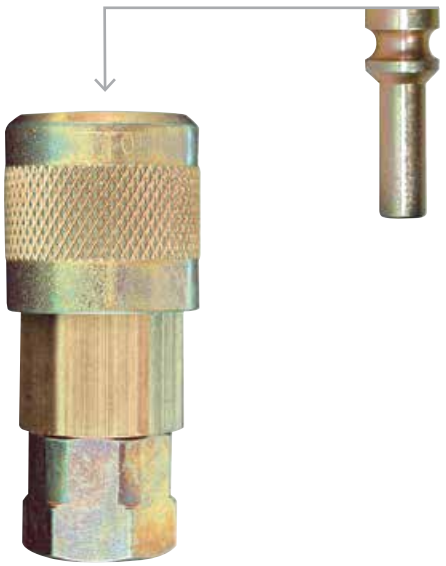
Body: Zinc plated steel
Backnut: Zinc plated steel
Sleeve: Zinc plated steel
Valve: Hardened and zinc plated steel
Valve Spring: Stainless steel
Locking Mechanism: Stainless steel balls
Seals: Buna-N/Nitrile

SPECIFICATIONS

Maximum Working Pressure: 250 PSI
Temperature Range: -40 °C to 107 °C
Airflow: 92 SCFM at 100 PSIG inlet with 10 PSIG pressure drop

L
1/4

AUTOMAX
LINCOLN INTERCHANGE
(AUTOMATIC)



FEATURES AND BENEFITS

- Accepts LINCOLN type plugs
- Automatic push-to-connect operation
- Heavy-duty, high-quality design
- Deep knurled socket sleeve for positive gripping
- Secure and efficient connection using pin lock mechanism

250 PSI

32 SCFM

APPLICATIONS

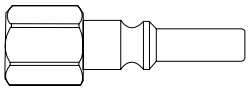
General air service and pneumatic tools

MATERIALS

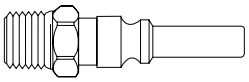
Body: Brass
Sleeve and Backnut: Zinc plated steel
Valve: Acetal
Valve Spring: Stainless steel
Locking Mechanism: Hardened steel and zinc plated pins
Seals: Buna-N/Nitrile

SPECIFICATIONS

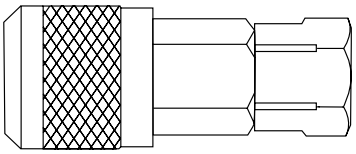
Maximum Working Pressure: 250 PSI
Temperature Range: -40 °C to 107 °C
Airflow: 32 SCFM at 100 PSIG inlet with 10 PSIG pressure drop



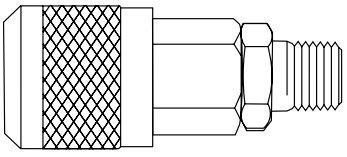
Product No	Female Thread
26.142	1/4 (F) NPT



Product No	Male Thread
26.242	1/4 (M) NPT



Product No	Female Thread
26.442	1/4 (F) NPT



Product No	Male Thread
26.642	1/4 (M) NPT

S6 S8 ISOSAFE SAFETY (AUTOMATIC)

FEATURES AND BENEFITS

- S6 accepts 6mm ISO 6150-C (STÄUBLI) type plugs
- S8 accepts 8mm ISO 6150-C (STÄUBLI) type plugs
- Prevents dangerous hose whip through a 2-step disconnection
- When the button is pressed, downstream pressure is automatically vented and disconnection is performed easily when pressing the button a second time
- Meets ISO 4414 safety standards
- Automatic push-to-connect operation
- Shock and crush resistant coupler for a long service life
- Leak-proof reliability

APPLICATIONS

Any air tool or automated equipment connection where safety is of utmost concern (hose whip, accidental disconnection)

MATERIALS

Body: Aluminium
Backnut: Plated brass
Push Button: Hardened steel
Socket Valve: Plated steel
Seals: Buna-N/Nitrile
Spring: Stainless steel

SPECIFICATIONS

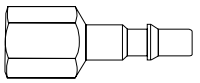
Maximum Working Pressure: S6: 175 PSI / **S8:** 145 PSI
Temperature Range: -20 °C to 90 °C
Airflow: S6: 45 SCFM / **S8:** 100 SCFM at 100 PSIG inlet with 10 PSIG pressure drop

2-STEP SAFE DISCONNECTION

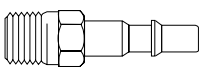
1 Press the button to secure the release of pressure

Plug remains inside the coupler

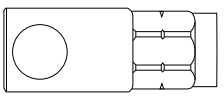
2 Press the button a second time for a safe disconnection



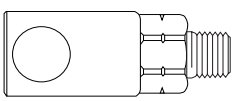
Dimension	Product No	Female Thread
S6	30.043	1/4 (F) NPT
S8	30.053	1/4 (F) NPT
	30.055	3/8 (F) NPT



Dimension	Product No	Male Thread
S6	30.073	1/4 (M) NPT
S8	30.083	1/4 (M) NPT
	30.085	3/8 (M) NPT



Dimension	Product No	Female Thread
S6	30.547	1/4 (F) NPT
S8	30.557	1/4 (F) NPT
	30.558	3/8 (F) NPT

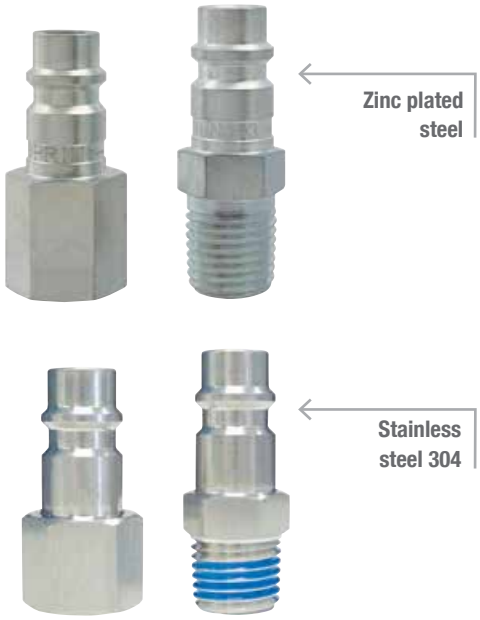


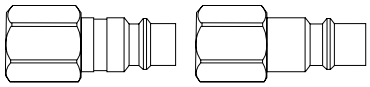
Dimension	Product No	Male Thread
S6	30.877	1/4 (M) NPT
S8	--	1/4 (M) NPT
	30.888	3/8 (M) NPT

E 7.8 ULTRAFLO INTERCHANGE PLUGS

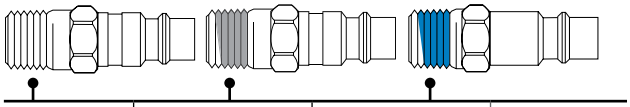
FEATURES AND BENEFITS

- Accepts European type couplers (CEJN 320)
- Hardened steel construction for strength
- Corrosion resistant zinc plating for long service life
- Manufactured to high quality standards to ensure compatibility
- High flow for better tool performance
- Threads sealant coating for air tight connections (31.648 and 31.646)
- Stainless steel 304 (31.546 and 31.646)

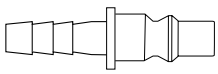




Steel **Product No**	Stainless Steel **Product No**	Female Thread
31.542	**31.546**	1/4 (F) NPT
31.562	--	3/8 (F) NPT



Steel **Product No**	Steel With sealant coating **Product No**	Stainless Steel With sealant coating **Product No**	Male Thread
31.642	**31.648**	**31.646**	1/4 (M) NPT
31.662	--	--	3/8 (M) NPT



Product No	Hose Barb
31.962	3/8 I.D.

TOPQUIK SAFETY BLOW GUNS WITH ULTRAFLO PLUG

OSHA MEETS OR EXCEEDS OSHA STANDARDS — SAFETY SOLUTION

SPECIFICATIONS

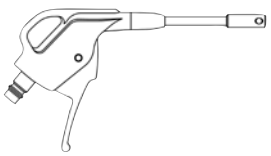
Maximum Working Pressure: 174 PSI

Noise Level:

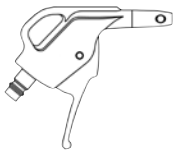
60.080 : 85 dB at 87 PSI

60.082 : 87 dB at 87 PSI

Airflow: 7.7 SCFM



Product No	Description
60.080	Compact blow gun with ULTRAFLO plug and metal nozzle



Product No	Description
60.082	Compact blow gun with ULTRAFLO plug and polyamide nozzle

FREE ANGLE FITTING ULTRAFLO INTERCHANGE PLUG 30°/ 45°

Free angle fittings are designed to provide 360° of rotation and up to 30° or 45° of angle for air tool and air hose supply lines.

See Series 62

E 7.8 TOPQUIK ULTRAFLO SAFETY (AUTOMATIC)

TOPQUIK couplers with safety blow guns

OSHA

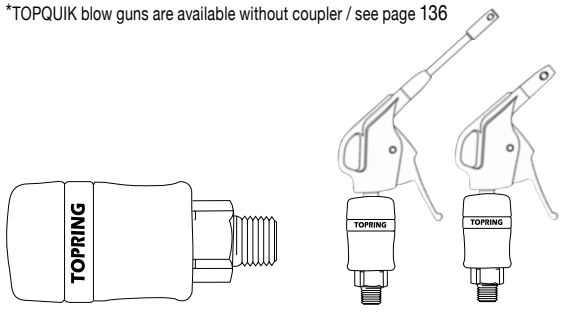
FEATURES AND BENEFITS

- Accepts European type plugs (CEJN 320)
- High flow ULTRAFLO design provides superior tool performance
- Prevents dangerous hose whip through a two-step disconnection
- Shock and crush resistant coupler provides exceptionally long service life
- Non-marring coupler body prevents scratching of delicate surfaces
- Super light weight contributes to ergonomics and safety
- Automatic push-to-connect operation
- Downstream pressure is automatically vented and disconnection is performed easily at zero pressure
- Meets ISO 4414 safety standards
- Disconnection noise level of only 80 dB
- Leak-proof reliability

225 PSI | 60 SCFM | SAFETY SOLUTION

TOPQUIK Coupler		Coupler and Blow Gun* Kit	
Product No	Female Thread	with metal nozzle	with polyamide nozzle
31.749	1/4 (F) NPT	**60.080.01**	**60.082.01**
31.769	3/8 (F) NPT	**60.080.02**	**60.082.02**
31.789	1/2 (F) NPT	--	--

*TOPQUIK blow guns are available without coupler / see page 136



TOPQUIK Coupler		Coupler and Blow Gun* Kit	
Product No	Female Thread	with metal nozzle	with polyamide nozzle
31.749	1/4 (M) NPT	**60.080.04**	**60.082.04**
31.769	3/8 (M) NPT	**60.080.05**	**60.082.05**
31.789	1/2 (M) NPT	--	--

*TOPQUIK blow guns are available without coupler / see page 136

APPLICATIONS

Any air tool connection where hose whip and accidental disconnection must be avoided

MATERIALS

COUPLER

Body: High-impact composite

Backnut: Nickel plated brass

Seals: Buna-N/Nitrile

BLOW GUN

Body: Polyamide

SPECIFICATIONS

COUPLER

Maximum Working Pressure: 225 PSI

Temperature Range: -15 °C to 70 °C

Airflow: 60 SCFM at 100 PSIG inlet with 10 PSIG pressure drop

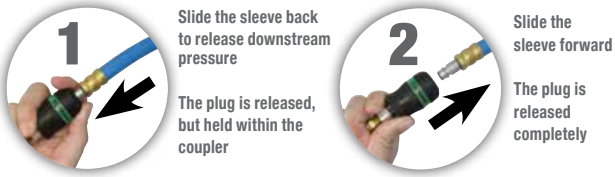
BLOW GUN

Maximum Working Pressure: 174 PSI

Airflow: 7.7 SCFM

Noise Level: 60.080 : 85 dB at 87 PSI
60.082 : 87 dB at 87 PSI

SAFETY COMES FROM A 2-STEP DISCONNECTION



E 7.8

TOPQUIK SC ULTRAFLO SAFETY (MANUAL)

Compatible plugs PAGE 136

FEATURES AND BENEFITS

- **Accepts European type plugs (CEJN 320)**
- **Prevents dangerous hose whip through a 2-step disconnection making it safe**
- **Meets ISO 4414 safety standards**
- **Full flow:** tools work at maximal performance without having to increase the supply pressure
- **Zero load pressure**
  - connects with no effort because no pressure resistance
  - safe disconnection because downstream pressure is automatically vented
- **Low disconnection noise reduces workplace noise pollution**
- **Reliability and durability**

APPLICATIONS

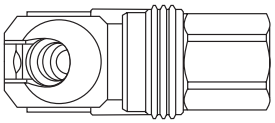
Assembly line and pneumatic hand tools
Any air tool connection where hose whip and disconnection must be avoided

MATERIALS

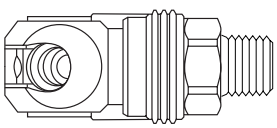
Black part: Steel, nickel plated / Aluminium
Sleeve: Zinc diecast, nickel plated, orange rubber coating
Housing: Steel, tenifer treated
Cylinder: Surface hardened steel, nickel plated
Valve Spring: Stainless steel
Seal: Nitrile (NBR)

SPECIFICATIONS

Maximum Working Pressure: 360 PSI
Operating Pressure: Connection/disconnection to maximum 200 PSI
Temperature Range: -20 °C to 100 °C
Airflow: 70 SCFM at 100 PSIG inlet with 10 PSIG pressure drop



Product No	Female Thread
31.447	1/4 NPT
31.467	3/8 NPT
31.487	1/2 NPT

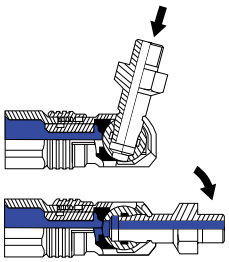


Product No	Male Thread
31.347	1/4 NPT
31.367	3/8 NPT
31.387	1/2 NPT

SAFETY COMES FROM A 2-STEP DISCONNECTION

CONNECTION

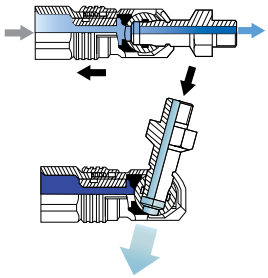
Push compatible plug into coupling and swing approximately 90 ° until the orange ring engages in the groove.



Pressure is in motion.

DISCONNECTION

Pull back orange ring and swing plug to stop. Remove plug from coupling.



In order to prevent the hose from ejecting dangerously, the plug must be held in the hand until the hose is completely ventilated.

Unbreakable polyamide

Product No	Cover for
31.007	TOPQUIK SC ULTRAFLO

The polyamide cover is slipped over the housing of the TOPQUIK SC to protect the work piece, e.g. for work on car body parts, furniture, etc.

Vinyl

Product No	Protective Sleeve for
31.017	TOPQUIK SC ULTRAFLO

Slides over airline coupling installation. Provides complete protective coverage of coupler and plug.

E 7.8 QUIKSILVER ULTRAFLO (AUTOMATIC)

FEATURES AND BENEFITS

- Accepts European type plugs (CEJN 320)
- High-flow ULTRAFLO design provides superior tool performance
- Light and compact with performance similar to 3/8 couplers
- High-flow valve eliminates pressure drop and choking, offering more air than most comparable couplers
- Provides energy savings, increased productivity and superior tool efficiency
- Sleeve guard prevents accidental disconnection
- Automatic push-to-connect operation
- Easy to connect, even under pressure
- Proven and positive connection using ball locking mechanism

500 PSI

80 SCFM

APPLICATIONS

All high-flow tool applications, general pneumatic applications, automotive service shops, tire shops and paint shops (HVLP)

MATERIALS

Body: Zinc plated steel
Drag Guard: Zinc plated steel
Valve: Acetal
Sleeve: Zinc plated steel
Valve Spring: Stainless steel
Locking Mechanism: Hardened steel balls
Seals: Buna-N/Nitrile

SPECIFICATIONS

Maximum Working Pressure: Steel drag guard 500 PSI
Temperature Range: -20 °C to 60 °C
Airflow: 80 SCFM at 100 PSIG inlet with 10 PSIG pressure drop

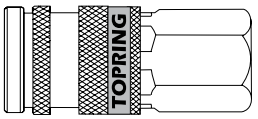
TECH TIP

Couplers offer as much flow as many 3/8 plug-coupler combinations, but in a more compact, economical size. Use of ULTRAFLO plugs and their corresponding couplers will improve tool performance over standard 1/4 size plug-coupler combinations.

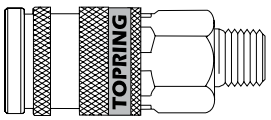
S20 • 1/4 INDUSTRIAL
S23 • ARO 210
S24 • 1/4 TRUFLATE
S26 • LINCOLN
5.5 mm
24-37 SCFM

S21 • 3/8 INDUSTRIAL
S25 • 3/8 TRUFLATE
7 mm
60-70 SCFM

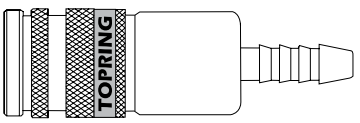
S31 • ULTRAFLO
7.8 mm
50-80 SCFM



Product No	Female Thread
31.744	1/4 (F) NPT
31.764	3/8 (F) NPT
31.784	1/2 (F) NPT



Product No	Male Thread
31.844	1/4 (M) NPT
31.864	3/8 (M) NPT
31.884	1/2 (M) NPT



Product No	Hose Barb
31.944	1/4 I.D.
31.964	3/8 I.D.

E
7.8

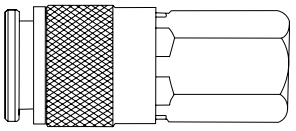
AUTOMAX
ULTRAFLO
(AUTOMATIC)

FEATURES AND BENEFITS

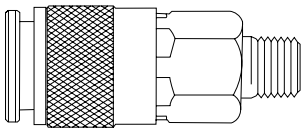
- Accepts European type plugs (CEJN 320)
- High-flow ULTRAFLO design provides superior tool performance
- HVLP system offers more air than most comparable couplers
- Provides energy savings, increased productivity and superior tool efficiency
- Sleeve guard protects against accidental disconnection when the coupler is dragged across the floor or over obstructions
- Automatic push-to-connect operation
- Easy to connect, even under pressure
- Proven and positive connection using ball locking mechanism

200 PSI

50 SCFM



Product No	Female Thread
31.742	1/4 (F) NPT



Product No	Male Thread
31.842	1/4 (M) NPT

APPLICATIONS

All high-flow tool applications, general pneumatic applications, automotive service shops, tire shops, fastening and roofing industries and paint shops (HVLP)

MATERIALS

Body: Nickel plated steel
Sleeve: Nickel plated steel
Valve: Nickel plated steel
Valve Spring: Nickel plated steel
Locking Mechanism: Stainless steel balls
Seals: Buna-N/Nitrile

SPECIFICATIONS

Maximum Working Pressure: 200 PSI
Temperature Range: -40 °C to 100 °C
Airflow: 50 SCFM at 100 PSIG inlet with 10 PSIG pressure drop

TECH TIP

Couplers offer as much flow as many 3/8 plug-coupler combinations, but in a more compact, economical size. Use of ULTRAFLO plugs and their corresponding couplers will improve tool performance over standard 1/4 size plug-coupler combinations.

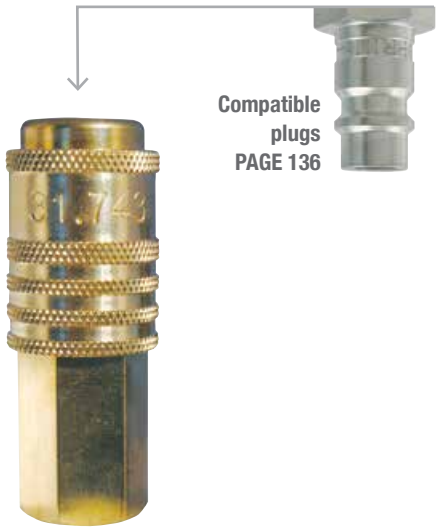
S20 • 1/4 INDUSTRIAL
S23 • ARO 210
S24 • 1/4 TRUFLATE
S26 • LINCOLN
— 5.5 mm, 24-37 SCFM

S21 • 3/8 INDUSTRIAL
S25 • 3/8 TRUFLATE
— 7 mm, 60-70 SCFM

S31 • ULTRAFLO
— 7.8 mm, 50-80 SCFM

E
7.8

AUTOMAX SLIM
ULTRAFLO
(AUTOMATIC)



FEATURES AND BENEFITS

- Accepts European type plugs (CEJN 320)
- HVLP systems offers more air than most comparable couplers
- Provides energy savings, increased productivity and superior toll efficiency
- Automatic push-to-connect operation
- High airflow
- 33% lighter than a regular coupler
- Compact design prevents accidental disconnection
- One hand disconnection
- Corrosion-resistant brass
- Deep knurled socket sleeve for positive gripping
- Proven and positive connection using six-ball locking mechanism

150 PSI

60 SCFM

ONE HAND DISCONNECTION

- Hold coupler with 3 fingers
- Remove sleeve with thumb and index

Comparative size between regular **AUTOMAX** and **AUTOMAX SLIM**

APPLICATIONS

Pneumatic tools

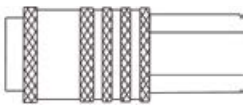
Ideal for the pharmaceutical industry, furniture and textiles

MATERIALS

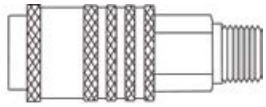
Body: Brass
Sleeve: Brass
Valve: Brass
Valve Spring: Steel
Locking Mechanism: Steel balls
Sealant: Pre-applied PTFE for air tight connection (31.843)

SPECIFICATIONS

Maximum Working Pressure: 150 PSI
Temperature Range: -40 °C to 100 °C
Airflow: 60 SCFM to 100 PSIG inlet with 10 PSIG pressure drop



Product No	Female Thread
31.743	1/4 (F) NPT



Product No	Male Thread
31.843	1/4 (M) NPT

WARNING

It is not recommended to use SLIM couplers with pneumatic impact tools unless a hose whip is installed between the tool and the coupler.

E 7.8 ULTRAFLO COUPLER KITS

QUIKSILVER TOOL CONNECTION KIT

Ideal for both tool and supply connection to an air hose and tool

Product No	Description
31.704C	1 x 31.744 Automatic Coupler 1/4 (F) NPT
	1 x 31.542 ULTRAFLO Plug 1/4 (F) NPT
	1 x 31.642 ULTRAFLO Plug 1/4 (M) NPT

QUIKSILVER TOOL CONNECTION KIT

Product No	Description
31.711C	1 x 31.744 Manual Coupler 1/4 (F) NPT
	1 x 31.642 ULTRAFLO Plug 1/4 (M) NPT

AUTOMAX TOOL CONNECTION KIT

Product No	Description
31.731C	1 x 31.742 Automatic Coupler 1/4 (F) NPT
	1 x 31.642 ULTRAFLO Plug 1/4 (M) NPT

AUTOMAX SLIM TOOL CONNECTION KIT

Ideal for connecting tool to hose

Product No	Description
31.713C	1 x 31.743 Automatique Coupler 1/4 (F) NPT
	1 x 31.648 ULTRAFLO plug 1/4 (M) NPT with PTFE sealant

ULTRAFLO DEMO KIT

Glass beads run through the connection to demonstrate the superior Airflow offered by **ULTRAFLO** quick couplers compared to **1/4 INDUSTRIAL** couplers.

Product No
96.150

TECH TIP

ULTRAFLO quick couplers and plugs improve the performance of pneumatic tools because they deliver a higher volume of air (up to 80 SCFM). They provide the airflow of a 3/8 INDUSTRIAL coupler, yet they are lighter and more compact, like a 1/4 INDUSTRIAL coupler.

S20 • 1/4 INDUSTRIAL
S23 • ARO 210
S24 • 1/4 TRUFLATE
S26 • LINCOLN
— 5.5 mm, 24-37 SCFM

S21 • 3/8 INDUSTRIAL
S25 • 3/8 TRUFLATE
— 7 mm, 60-70 SCFM

S31 • ULTRAFLO

ULTRAFLO design provides superior tool performance!
— 7.8 mm, 50-80 SCFM

EASYflex PREMIUM

300 PSI

TEMP °C -54 +65

RoHS COMPLIANT
Restrictions of Hazardous Substances

TECHNOPOLYMER AIR HOSE

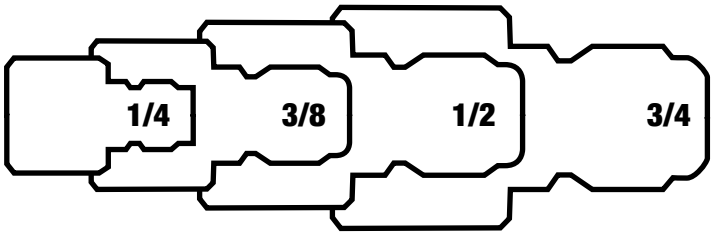
- **Engineered to be tough and ultra-flexible at extremely low temperatures**
- **Available in different hose length and sizes 1/4, 3/8 and 1/2**
- **Good resistance to oils and abrasion**
- **35% lighter than rubber**
- **Resistant to kinking under pressure**
- **Pin pricked cover prevents bursting**

For more information,
see Series 72 page 466

Series 28 TO 29
HYDRAULIC QUICK COUPLERS

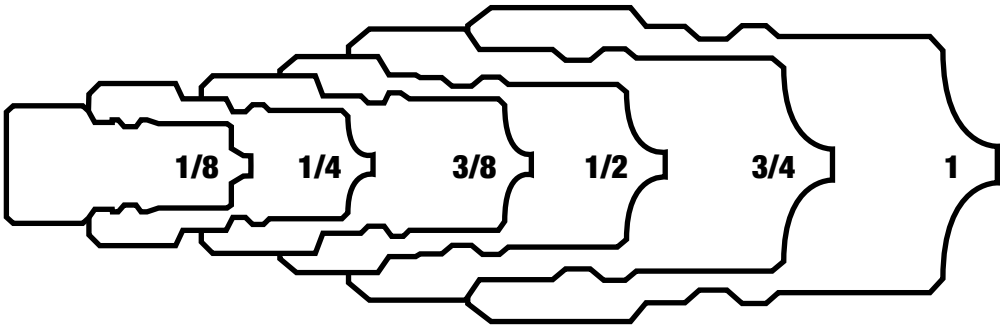
STRAIGHT THROUGH AND HYDRAULIC COUPLERS

SERIES 28
STRAIGHT THROUGH
QUICK COUPLERS



INTERCHANGE:
PARKER ST
HANSEN ST
FOSTER FST
DIXON ST

SERIES 29
HYDRAULIC
QUICK COUPLERS
ISO-B



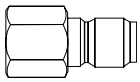
INTERCHANGE:
HANSEN HK
AEROQUIP FD45
PARKER 60
SNAP-TITE 72
FOSTER FHK
DIXON H
FASTER HN

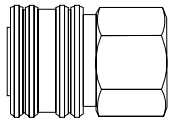
1/4
3/8
1/2
3/4

INDUSTRIAL INTERCHANGE
STRAIGHT THROUGH (MANUAL)

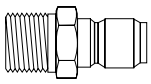
FEATURES AND BENEFITS

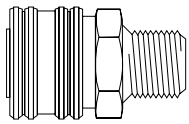
- Straight-through couplers are non-valved and are used in liquid systems needing maximum flow with no restrictions
- Smooth bore permits free flow of liquid





Female Thread	Brass Product No	Stainless Steel Product No	Brass Product No	Stainless Steel Product No
1/4 (F) NPT	28.143	28.144	28.843	28.844
3/8 (F) NPT	28.163	28.164	28.863	28.864
1/2 (F) NPT	28.183	28.184	28.883	28.884
3/4 (F) NPT	28.193	28.194	28.893	28.894





Male Thread	Brass Product No	Stainless Steel Product No	Brass Product No	Stainless Steel Product No
1/4 (M) NPT	28.243	28.244	28.943	28.944
3/8 (M) NPT	28.263	28.264	28.963	28.964
1/2 (M) NPT	28.283	28.284	28.983	--
3/4 (M) NPT	28.293	28.294	28.993	--

APPLICATIONS

Pressure washers, carpet cleaners, plastic mold coolant lines, water manifolds, high-pressure steam washers, other liquid handling applications

MATERIALS

Socket Body: Brass or 303 stainless steel
Sleeve: Brass or 303 stainless steel
Locking Balls: Stainless steel
Seals: Buna-N/Nitrile

SPECIFICATIONS

Temperature Range: -40 °C to 107 °C

MAXIMUM WORKING PRESSURE (PSI)

Dia. in	Brass	Stainless Steel	Cv Factor
1/4	5200	6700	2.5
3/8	2700	5500	6.6
1/2	2200	3000	9.7
3/4	1700	3000	29.6

WARNING
These couplers and plugs should not be disconnected under pressure

1/8
1/4
3/8
1/2
3/4
1

INDUSTRIAL INTERCHANGE ISO « B » (MANUAL)

FEATURES AND BENEFITS

- Accept all industrial ISO « B » (7241) interchange nipples
- High flow-rate
- Low pressure drop
- Long, service-free performance
- Hardened at all points of extra stress and wear
- All interior components are corrosion-resistant
- Standard seals are Buna-N/Nitrile
- Ball-locking mechanism is engineered for even load distribution assuring positive alignment and allowing hose-protecting swivel action

APPLICATIONS

Hydraulic fluids, compressed air, water

All installations where fluid loss during connection or disconnection is undesirable

MATERIALS

Brass: Brass
Stainless steel springs
Stainless steel locking balls

Steel: Zinc plated steel
Stainless steel springs
Chrome-steel locking balls

303 Stainless Steel:
All components manufactured from 303 stainless steel

SPECIFICATIONS

Temperature Range: -20 °C to 80 °C

PERFORMANCE SPECIFICATIONS

Dia. in	Maximum Working Pressure PSI			Max Flow GPM	Cv Factor	SCFM
	Steel	Brass	Stainless			
1/8	5000	1000	--	1.5	0.5	17
1/4	5000	1000	2000	3.5	1.1	35
3/8	4000	1000	1450	6.0	1.9	60
1/2	4000	1000	1450	12.0	3.2	100
3/4	3500	1000	1450	28.0	7.2	275
1	2900	1000	1000	38.0	10.3	375

STEEL

(F) NPT	Plug Product No	Coupler Product No
1/8	29.122	29.922
1/4	29.142	29.942
3/8	29.162	29.962
1/2	29.182	29.982
3/4	29.192	29.992
1	29.195	29.995

BRASS

(F) NPT	Plug Product No	Coupler Product No
1/8	29.123	29.923
1/4	29.143	29.943
3/8	29.163	29.963
1/2	29.183	29.983
3/4	29.193	29.993
1	29.196	29.996

303 STAINLESS STEEL

(F) NPT	Plug Product No	Coupler Product No
1/4	29.144	29.944
3/8	29.164	29.964
1/2	29.184	29.984
3/4	29.194	29.994

Other sizes available upon request

DUST CAPS AND PLUGS

FEATURES AND BENEFITS

- Prevent the introduction of dirt, grit and other contaminants into the system through its components
- Prevent contamination of disconnected fluid systems

I.D. in	Cap for Plug Product No	Cap for Coupler Product No
3/8	29.013	29.023
3/4	--	29.025

MATERIALS

Nylon

Series 32 TO 38
PNEUMATIC TUBINGS

TUBING GUIDELINES

There are 5 thermoplastic tubing compounds used for the majority of pneumatic lines: **POLYURETHANE, NYLON, POLYETHYLENE**, **PVC** and **PTFE**. All five offer distinct advantages. Selecting the one that best fits a particular job should be done only after all of the application requirements are carefully considered. Following are some guidelines that can be used to make the tubing selection process easier and more accurate.

MEDIA

The material that will be passing through the tubing, or even coming into contact with it externally, must also be considered. Certain chemicals can have an adverse effect (swelling, deterioration, etc.) on tubing compounds, so it is important to select a tubing material that is compatible with the media being used. Varying temperatures, mixing chemicals and varying environmental conditions can significantly alter the performance of thermoplastic tubing.

FLEXIBILITY AND KINK RESISTANCE

All thermoplastic tubing is flexible to a certain degree, but they are not all equally as flexible. In applications requiring a small bend radius or where there is a lot of motion, a more flexible tubing may be required. For stationary applications where movement is minimal or a higher working pressure is needed, a more rigid tubing would most likely be desired.

WORKING PRESSURE

Working pressure is an important criterion (and often the first considered) in the tubing selection process. The working pressure of tubing is derived from its burst pressure at what is considered ambient or “normal room temperature”, about 20 °C, and then building in a “safety factor”. Maximum working pressure of a tube is the safe pressure rating that takes all operational criteria into consideration.

FLOW

The amount of pressurised air that must be transported to the pneumatically operated mechanism is another criterion that must be taken into consideration when selecting tubing. As a result, the tubing must be properly sized to do its job effectively. A good rule of thumb is to use tubing that will provide flow that exceeds the requirement of the components (actuators, valves, cylinders, etc.) in the circuit. The type of fitting being used should also be taken into account when flow requirements are being determined. Since **Barbed Fittings** are installed **inside** the tubing, they represent a restriction to the flow. **Push-to-connect fittings**, on the other hand, grip the outside of the tubing, so they offer no flow restrictions. This can often result in the use of smaller diameter tubing, which means space and cost savings.

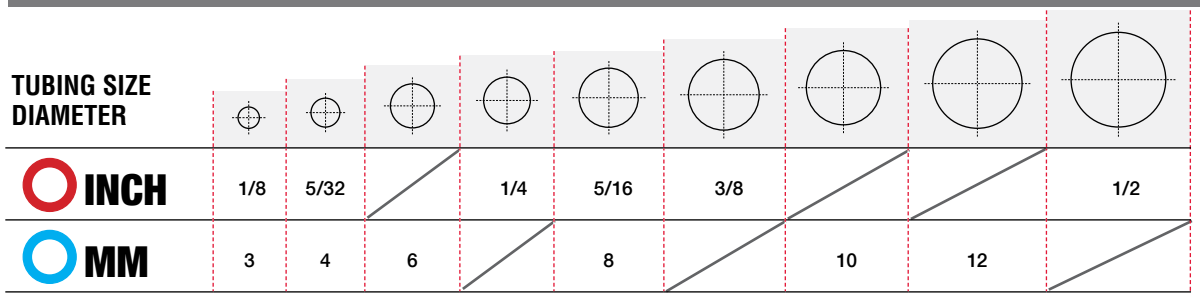
WORKING TEMPERATURE

This is a temperature range for which a particular tubing can effectively be used. When considering temperature, it should be remembered that the higher the temperature, the lower the burst (and working) pressure. Since “working pressures” are calculated at ambient temperature, that figure will be reduced significantly as the temperature approaches the high end of the working temperature range.

FITTING TYPE

There are three basic types of fittings used on thermoplastic tubing. They are categorized as **Push-to-connect fittings, Compression fittings and Barbed fittings**. Each fitting offers different features and benefits. It is very important that the tubing selected be compatible with the selected fitting type.

TUBING SIZE • FULL SCALE CHART



TUBING SELECTION GUIDE

TUBING COMPARISON	SERIES 32 Nylon 12	SERIES 33 Nylon.PU	SERIES 34 Polyethylene (LLDPE)	SERIES 34 Polyethylene (LDPE)	SERIES 34 AL.PE	SERIES 35 Polyurethane (PU)	SERIES 37 PTFE	SERIES 38 Polyvinylchloride (PVC)
MAXIMUM WORKING PRESSURE	★★★★	★★★★	★★	★★	★★★★	★★	★★★	★
WORKING TEMPERATURE	★★★	★★★★	★★	★	★★★	★★★	★★★★★	★
RESISTANCE TO								
Abrasion	★★★	★★★	★★	★★	★★	★★★★	★★★	★
Kinking	★★	★★	★	★	★★★	★★★★	★★	★★★
Moisture	★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★
Ultraviolet Light	★★★	★★★	★	★	★	★★	★★★	★
FITTING COMPATIBILITY	• Push-to-connect • Compression	• Push-to-connect	• Push-to-connect • Compression	• Push-to-connect • Compression	• Push-to-connect	• Push-to-connect • Compression	• Compression	• Hose Barb
CRITERIA								
Compliances	-	-	FDA	-	-	-	FDA	NSF -FDA - RoHS
Flexibility	★★★	★★★★	★★★	★★★★	★★★★	★★★★★	★★★	★★★
Cost	$ $ $	$ $	$	$	$ $ $	$ $	$ $ $	$ $

NYLON 12 TUBINGS
INCH AND METRIC TUBING

FEATURES AND BENEFITS

- Good flexibility
- Super dimensional stability, ensuring perfect connection with push-to-connect fittings
- Excellent pressure rating
- Excellent resistance to crushing, abrasion and cracking
- Superior resistance to solvents, alkalis, oils, greases, petroleum products, fungus and molds
- Good resistance to vibration and movement
- Very low moisture absorption
- Broad temperature range

APPLICATIONS

Pneumatic systems, vacuum, oils, coolants, water, paint supply lines

MATERIALS

Tubing: Nylon 12

Available Colors: Translucent white, black, red and blue

SPECIFICATIONS

Working Temperature Range: - 40 °C to 80 °C

Maximum Working Pressure (at 24 °C): 250 PSI

Vacuum Rating: Up to 28" Hg

INCH SIZE

100 FT POLYBAG

White	Black	Red	Blue	Tubing O.D. in	Tubing I.D. in
32.100	---	---	---	1/8	.080
32.110	32.110.01	32.110.05	32.110.07	5/32 (4mm)	.106
32.120	32.120.01	32.120.05	32.120.07	1/4	.180
32.130	32.130.01	32.130.05	32.130.07	5/16 (8mm)	.233
32.140	32.140.01	32.140.05	32.140.07	3/8	.275
32.150	32.150.01	---	---	1/2	.375

INCH SIZE

330 FT REEL

White	Black	Red	Blue	Tubing O.D. in	Tubing I.D. in
32.300	---	---	---	1/8	.080
32.310	32.310.01	32.310.05	32.310.07	5/32 (4mm)	.106
32.320	32.320.01	32.320.05	32.320.07	1/4	.180
32.330	32.330.01	32.330.05	32.330.07	5/16 (8mm)	.233
32.340	32.340.01	32.340.05	32.340.07	3/8	.275
32.350	32.350.01	---	---	1/2	.375

METRIC SIZE

30 M POLYBAG

White	Black	Red	Blue	Tubing O.D. mm	Tubing I.D. mm
32.110	32.110.01	32.110.05	32.110.07	4 (5/32)	2.7
32.115	32.115.01	32.115.05	32.115.07	6	4.0
32.130	32.130.01	32.130.05	32.130.07	8 (5/16)	6.0
32.145	---	---	---	10	8.0
32.147	---	---	---	12	10.0

METRIC SIZE

100 M REEL

White	Black	Red	Blue	Tubing O.D. mm	Tubing I.D. mm
32.310	32.310.01	32.310.05	32.310.07	4 (5/32)	2.7
32.315	32.315.01	32.315.05	32.315.07	6	4.0
32.330	32.330.01	32.330.05	32.330.07	8 (5/16)	6.0
32.345	---	---	---	10	8.0
32.346	---	---	---	12	10.0

SUPER FLEXIBLE LONGLIFE™ NYLON.PU TUBINGS

INCH AND METRIC TUBING

FEATURES AND BENEFITS

- Economical
- Triple layer hose with two layers of polyamide 12 PHL and one middle layer of Ether-based polyurethane
- Excellent flexibility
- Very strong
- Super dimensional stability, ensuring perfect connection with push-to-connect fittings
- Excellent high pressure rating
- Excellent resistance to crushing, abrasion and cracking
- Very low moisture absorption

APPLICATIONS

Pneumatic systems, vacuum, oils, coolants, water, robotics

MATERIALS

Inside and Outside Layers: Nylon 12
Middle Layer: Ether-based polyurethane
Available Colors: Translucent white, black, red and blue

SPECIFICATIONS

Working Temperature: -40 °C to 70 °C
Vacuum Rating: Up to 28" Hg

INCH SIZE

100 FT POLYBAG

White	Black	Red	Blue	Tubing O.D. in	Tubing I.D. in	Maximum Working Pressure (at 21 °C)
33.110	33.110.01	33.110.05	33.110.07	5/32	.106	362 PSI
33.120	33.120.01	33.120.05	33.120.07	1/4	.180	247 PSI
33.130	33.130.01	33.130.05	33.130.07	5/16	.236	217 PSI
33.140	33.140.01	33.140.05	33.140.07	3/8	.275	232 PSI
33.150	33.150.01	---	---	1/2	.375	218 PSI

330 FT REEL

33.310	33.310.01	33.310.05	33.310.07	5/32	.106	362 PSI
33.320	33.320.01	33.320.05	33.320.07	1/4	.180	247 PSI
33.330	33.330.01	33.330.05	33.330.07	5/16	.236	217 PSI
33.340	33.340.01	33.340.05	33.340.07	3/8	.275	232 PSI
33.350	33.350.01	---	---	1/2	.375	218 PSI

METRIC SIZE

30 M POLYBAG

Clear	Black	Red	Blue	Tubing O.D. mm	Tubing I.D. mm	Maximum Working Pressure (at 21 °C)
33.110	33.110.01	33.110.05	33.110.07	4	2.5	362 PSI
33.115	33.115.01	33.115.05	33.115.07	6	4.0	304 PSI
33.130	33.130.01	33.130.05	33.130.07	8	6.0	217 PSI
33.145	---	---	---	10	8.0	174 PSI
33.147	---	---	---	12	10	145 PSI

100 M REEL

33.310	33.310.01	33.310.05	33.310.07	4	2.5	362 PSI
33.315	33.315.01	33.315.05	33.315.07	6	4.0	304 PSI
33.330	33.330.01	33.330.05	33.330.07	8	6.0	217 PSI
33.345	---	---	---	10	8.0	174 PSI
33.347	---	---	---	12	10	145 PSI

17_05_2016

LINEAR LOW DENSITY FOOD GRADE POLYETHYLENE (LLDPE) TUBINGS

INCH TUBING

FEATURES AND BENEFITS

- Materials comply with FDA specifications
- Manufactured from high quality resins
- LLDPE resin provides excellent environmental stress crack resistance
- Lightweight
- Good dimensional stability
- Very good resistance to most chemicals and solvents
- Excellent bending radius
- Very good puncture resistance
- Impermeable to gasses and moisture

APPLICATIONS

For general low-pressure applications, pneumatic circuitry, air and liquid transfer, light vacuum lines, drain piping, food and beverages

MATERIALS

Tubing Linear: Low density polyethylene (LLDPE)

Color: Translucent white

SPECIFICATIONS

Working Temperature Range: - 45 °C to 60 °C

INCH SIZE

100 FT POLYBAG

Product No	Tubing O.D. in	Tubing I.D. in	Maximum Working Pressure (at 20 °C)
34.120	1/4	.170	140 PSI
34.140	3/8	.250	125 PSI
34.150	1/2	.375	100 PSI

INCH SIZE

500 FT REEL

Product No	Tubing O.D. in	Tubing I.D. in	Maximum Working Pressure (at 20 °C)
34.520	1/4	.170	140 PSI
34.540	3/8	.250	125 PSI
34.550	1/2	.375	100 PSI

LOW DENSITY POLYETHYLENE (LDPE) TUBINGS

INCH TUBING

FEATURES AND BENEFITS

- Economical
- Superior stress crack resistance
- Lightweight
- Manufactured from high quality resins
- Good dimensional stability
- Resistance to most chemicals and solvents

INCH SIZE

100 FT POLYBAG

Product No	Tubing O.D. in	Tubing I.D. in	Maximum Working Pressure (at 20 ºC)
34.170	1/4	.170	170 PSI
34.180	3/8	.250	189 PSI
34.185	1/2	.375	131 PSI

INCH SIZE

500 FT REEL

Product No	Tubing O.D. in	Tubing I.D. in	Maximum Working Pressure (at 20 ºC)
34.570	1/4	.170	170 PSI
34.580	3/8	.250	189 PSI
34.585	1/2	.375	131 PSI

APPLICATIONS

For general low-pressure applications, pneumatic circuitry, air and liquid transfer, light vacuum lines and drain piping

MATERIALS

Tubing: Low density polyethylene (LDPE)

Color: Translucent white

SPECIFICATIONS

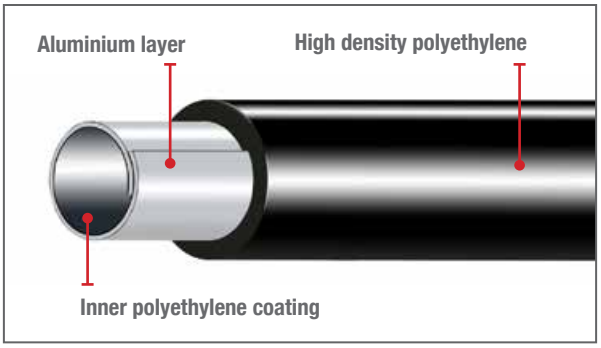
Working Temperature Range: - 10 °C to 60 °C

POLYETHYLENE AND ALUMINIUM TUBINGS (AL.PE™) POSITIONNABLE

METRIC TUBING

FEATURES AND BENEFITS

- Internal core in aluminium protected by polyethylene and external coating in high density black polyethylene
- Lightweight
- Excellent resistance to light and weather
- Good resistance to water, hydrocarbons and oil



APPLICATIONS

AL.PE tubing can be shaped as desired and can maintain their shape

For pneumatic systems, robotics, motion control devices and automation

MATERIALS

Tubing : High density polyethylene

Internal core: Aluminium with polyethylene coating

Color: Black

SPECIFICATIONS

Working Temperature Range: - 30 °C to 70 °C

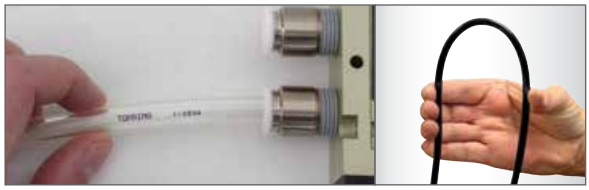
METRIC SIZE

25 M POLYBAG

Product No	Tubing O.D. mm	Maximum Working Pressure (at 20 °C)
34.067	6	362 PSI
34.075	8	362 PSI
34.077	10	290 PSI
34.087	12	362 PSI

POLYURETHANE TUBINGS

INCH AND METRIC TUBING



FEATURES AND BENEFITS

- **Extremely kink-resistant - withstands abuse that would damage other Thermoplastic tubings**
- **Lightweight and tough: ideal for small spaces**
- **Excellent resistance to oils, greases, fuels, moisture and molds**
- **Great resistance to - UV, abrasion and cuts**
- **Extremely flexible (even more than Nylon tubing) offering excellent bending radius**

APPLICATIONS

Pneumatic systems, robotics, instrumentation, motion control devices and automation

MATERIALS

Tubing: Ester-based polyurethane

Available Colors: Clear, black, red, blue and translucent blue

SPECIFICATIONS

Working Temperature Range: -40 °C to 70 °C

Vacuum: Up to 28" Hg

INCH SIZE

100 FT POLYBAG

Clear	Black	Red	Blue	Translucent blue	Tubing O.D. in	Tubing I.D. in	Maximum Working Pressure (at 21 °C)
35.105	---	---	---	35.105.27	1/8	0.066	233 PSI
35.115	35.115.01	35.115.05	35.115.07	35.115.27	5/32	0.093	130 PSI
35.124	35.124.01	35.124.05	35.124.07	35.124.27	1/4	0.156	130 PSI
35.136	35.136.01	---	---	35.136.27	5/16	0.187	150 PSI
35.138	35.138.01	35.138.05	35.138.07	35.138.27	3/8	0.250	120 PSI
35.150	35.150.01	---	---	35.150.27	1/2	0.328	135 PSI

330 FT REEL

35.305	---	---	---	35.305.27	1/8	0.066	233 PSI
35.315	35.315.01	35.315.05	35.315.07	35.315.27	5/32	0.093	130 PSI
35.324	35.324.01	35.324.05	35.324.07	35.324.27	1/4	0.156	130 PSI
35.336	35.336.01	---	---	35.336.27	5/16	0.187	150 PSI
35.338	35.338.01	35.338.05	35.338.07	35.338.27	3/8	0.250	120 PSI
35.350	35.350.01	---	---	35.350.27	1/2	0.328	135 PSI

METRIC SIZE

30 M POLYBAG

Clear	Black	Red	Blue	Translucent blue	Tubing O.D. mm	Tubing I.D. mm	Maximum Working Pressure (at 21 °C)
35.115	35.115.01	35.115.05	35.115.07	35.115.27	4	2.5	130 PSI
35.117	35.117.01	35.117.05	35.117.07	35.117.27	6	4.0	145 PSI
35.136	35.136.01	---	---	35.136.27	8	5.0	150 PSI
35.145	35.145.01	---	---	35.145.27	10	6.5	143 PSI
35.146	---	---	---	35.146.27	12	8.0	120 PSI

100 M REEL

35.315	35.315.01	35.315.05	35.315.07	35.315.27	4	2.5	130 PSI
35.317	35.317.01	35.317.05	35.317.07	35.317.27	6	4.0	145 PSI
35.336	35.336.01	---	---	35.336.27	8	5.0	150 PSI
35.345	35.345.01	---	---	35.345.27	10	6.5	143 PSI
35.346	---	---	---	35.346.27	12	8.0	120 PSI

FLUOROPOLYMER TUBINGS (PTFE)

INCH AND METRIC TUBING

FEATURES AND BENEFITS

- Materials comply with FDA specifications
- Excellent resistance to chemical products
- Extremely inert and stable up to a temperature of 260 °C (500 °F)
- Ideal dielectric properties
- Virtually unaffected by oxygen, ozone and UV rays
- Lowest coefficient of friction of all polymers
- Fireproof to UL94 V0

APPLICATIONS

Fluoropolymer materials are known for their outstanding properties under a variety of applications

They are used where high temperatures in combination with aggressive medias or critical environments require an excellent tubing

MATERIALS

Tubing: Fluoropolymer

Color: Translucent white

SPECIFICATIONS

Working Temperature Range: -60 °C to 260 °C

INCH SIZE

164 FT POLYBAG

Product No	Tubing O.D. in	Tubing I.D. in	Maximum Working Pressure (at 23 °C)
37.210	5/32	.080	290 PSI
37.220	1/4	.125	290 PSI
37.230	5/16	.240	145 PSI
37.240	3/8	.240	188 PSI

METRIC SIZE

50 M POLYBAG

Product No	Tubing O.D. mm	Tubing I.D. mm	Maximum Working Pressure (at 23 °C)
37.210	4	2	290 PSI
37.215	6	4	188 PSI
37.230	8	6	145 PSI

CLEAR VINYL TUBING
INCH TUBING

Certified under NSF-51 standard

FEATURES AND BENEFITS

- Complies with food and beverage industry standards NSF-51 certified material
- Materials comply with FDA specifications
- Materials comply with RoHS specifications
- More flexible than Nylon and Polyethylene
- Lightweight
- Crystal-clear appearance
- Glass-smooth interior to reduce sediment buildup
- Non-reinforced
- Non-toxic blue tint to enhance clarity
- Resistant to many chemicals and solvents
- Self-extinguishing

APPLICATIONS

Low pressure air lines, water, light vacuum lines and drain lines

MATERIALS

Tubing: Quality PVC resin
Color: Clear

SPECIFICATIONS

Working Temperature Range: -5 °C to 65 °C
Durometer: 73 Shore A

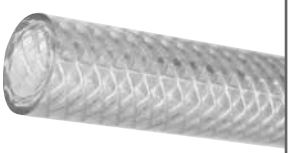
INCH DIAMETER

100 FT CARTON

Product No	Tube I.D. in	Tube O.D. in	Max. Working Pressure (at 21 °C)
38.050	0.125	1/4	65 PSI
38.075	0.187	5/16	55 PSI
38.100	0.250	3/8	55 PSI
38.250	0.250	1/2	60 PSI
38.200	0.312	7/16	50 PSI
38.300	0.375	1/2	45 PSI
38.350	0.375	5/8	55 PSI
38.400	0.500	5/8	30 PSI
38.450	0.500	3/4	45 PSI
38.525	0.625	7/8	40 PSI
38.600	0.750	1	35 PSI
38.700	1.00	1-1/4	25 PSI

Larger sizes available upon request

NYFLEX
For reinforced PVC air hoses, please refer to Series 73



MINIATURE TUBE CUTTER

- Allows quick, clean and square cuts on nylon, polyethylene and polyurethane pipe of 1/8 in through 3/4 in O.D. size
- Safety spring keeps the blade closed after use, preventing blade deterioration
- Body made of Polymer

Product No	Description
36.005	Miniature tubing cutter

TUBE RACKS

- Keeps tubes separate
- 1/4 in O.D. model has countersunk holes for # 4 screws. Channel designed to be cut to length to accommodate from 1 to 10 tubes.
- 3/8 in and 1/2 in O.D. models have screw attachment holes at each end

Product No	Description	
	Tubing O.D	Tubing capacity
36.915	1/4	10
36.920	3/8	7
36.925	1/2	6

PIPE CUTTER

- Provides a straight, even, accurate cut on any pipe or hose up to 38 mm (1-1/2 in O.D.)
- Ergonomically designed handle
- Spring controlled cutting tension
- Handle lock
- Replaceable hardened Steel blade

Product No	Description
36.100	Pipe cutter
36.105	Replacement blades (2)

RATCHET PIPE CUTTER

- Allows effortless a straight, even, accurate cut of plastic piping or hoses up to 41 mm (1-5/8 in O.D.)
- Ratchet type cutting mechanism
- Handle lock ergonomically designed
- Quick replaceable hardened steel blade

Product No	Description
36.200	Ratchet pipe cutter
36.205	Replacement blades (2)

RECHARGEABLE BATTERY-OPERATED PIPE CUTTER

- Can cut plastic piping, nylon, PVC, rubber or hoses pipes with a diameter up to 42 mm (1-21/32 in)
- Comes with rapid retraction device (full retraction in 0.5 seconds)
- Stops cutting automatically once the piping or hoses pipe is cut
- Two safety mechanisms prevent it from turning on unintentionally when in transport or when not being used
- Rechargeable battery

Product No	Description
36.020	Pipe cutter

Series 39 • 40 • 42 43 • 44 • 46

PUSH-TO-CONNECT FITTINGS

TOPFIT®
PUSH-TO-CONNECT FITTINGS
NICKEL PLATED BRASS

FEATURES AND BENEFITS

QUICK CONNECT
Save up to 75 % of assembly time in comparison of compression fittings

INSTANTANEOUS CONNECTION/DISCONNECTION
Designed for fast assembly and disassembly without tools

FULL-FLOW DESIGN
Provide up to 60 % more flow than compression fittings

FULLY REUSABLE
Design to resist multiple connections and disconnections with leak free operation and solid tube gripping

POSITIVE SEAL
Proper insertion of tube into the fitting creates seal

SELF-CONTAINED ASSEMBLY
No loose parts

APPLICATIONS

Compressed air and vacuum and for the use with calibrated polyethylene, nylon, polyurethane and soft metal tubing

MATERIALS

Body and Ring: Nickel plated brass
Seals: POM
Lock Claws: Stainless steel
O-Ring: Nitrile rubber

SPECIFICATIONS

Working Pressure:
Fitting suitable for use up to maximum working pressure of plastic tubing used

Maximum working pressure of 290 PSI for soft copper or metal tubing

Vacuum: 28" Hg

Working Temperature Range: -10 °C to 80 °C

TOPFIT®

NICKEL PLATED BRASS

INCH NPT

MALE CONNECTOR

Product No	Tubing O.D. in	Thread (M) NPT
39.100	1/8	10-32 ◇
39.104	1/8	1/8
39.106	5/32	10-32 ◇
39.108	5/32	1/8
39.110	5/32	1/4
39.112	1/4	1/8
39.114	1/4	1/4
39.118	3/8	1/8
39.120	3/8	1/4
39.122	3/8	3/8
39.124	3/8	1/2
39.126	1/2	1/4
39.128	1/2	3/8
39.130	1/2	1/2

◇ 10-32: (M) UNF

MALE SWIVEL ELBOW

Product No	Tubing O.D. in	Thread (M) NPT
39.235	1/8	10-32 ◇
39.240	1/8	1/8
39.242	5/32	10-32 ◇
39.244	5/32	1/8
39.246	5/32	1/4
39.248	1/4	1/8
39.250	1/4	1/4
39.254	3/8	1/8
39.256	3/8	1/4
39.258	3/8	3/8
39.260	3/8	1/2
39.262	1/2	1/4
39.264	1/2	3/8
39.266	1/2	1/2

◇ 10-32: (M) UNF

MALE SWIVEL BRANCH TEE

Product No	Tubing O.D. in	Thread (M) NPT
39.482	5/32	1/8
39.484	1/4	1/8
39.486	1/4	1/4
39.488	3/8	1/4
39.490	3/8	3/8

BULKHEAD UNION

Product No	Tubing O.D. in
39.582	5/32
39.584	1/4
39.586	3/8
39.588	1/2

UNION

Product No	Tubing O.D. in
39.160	1/8
39.162	5/32
39.164	1/4
39.168	3/8
39.170	1/2

SWIVEL BANJO ELBOW

Product No	Tubing O.D. in	Thread (M) NPT
39.951	5/32	1/8
39.953	1/4	1/8
39.955	1/4	1/4
39.957	3/8	1/4
39.958	3/8	3/8

UNION TEE

Product No	Tubing O.D. in
39.540	1/8
39.542	5/32
39.544	1/4
39.548	3/8
39.550	1/2

STEM REDUCER

Product No	Tubing ① O.D. in	Stem ② O.D. in
39.161	1/8	5/32
39.163	5/32	1/4
39.166	1/4	3/8
39.169	3/8	1/2

MALE SWIVEL RUN TEE

Product No	Tubing O.D. in	Thread (M) NPT
39.339	5/32	1/8
39.440	1/4	1/8
39.442	1/4	1/4
39.446	3/8	1/4
39.448	3/8	3/8

FEMALE CONECTOR

Product No	Tubing O.D. in	Thread (M) NPT
39.334	1/4	1/8
39.336	1/4	1/4
39.338	3/8	1/4
39.340	3/8	3/8

MALE ELBOW

Product No	Tubing O.D. in	Thread (M) NPT
39.192	5/32	1/8
39.194	1/4	1/8
39.196	1/4	1/4
39.202	3/8	1/4
39.204	3/8	3/8

UNION ELBOW

Product No	Tubing O.D. in
39.270	1/8
39.272	5/32
39.274	1/4
39.276	3/8
39.278	1/2

TRIPLE TUBE « Y » UNION

Product No	Tubing O.D. in
39.310	1/8
39.311	5/32
39.312	1/4

SPEED CONTROLLERS

FLOW CONTROL VALVE THREADED ELBOW

METER OUT Product No	Tubing O.D. in	Thread (M) NPT
39.700	1/4	1/8
39.705	1/4	1/4
39.710	3/8	1/4

TOPFIT®

NICKEL PLATED BRASS

MM BSPT

MALE CONNECTOR

Product No	Tubing O.D. mm	Thread (M) BSPT
39.010	4	1/8
39.011	4	1/4
39.013	6	1/8
39.014	6	1/4
39.016	8	1/8
39.017	8	1/4
39.018	8	3/8
39.021	10	1/4
39.022	10	3/8

UNION

Product No	Tubing O.D. mm
39.810	4
39.812	6
39.814	8
39.816	10
39.818	12

MALE SWIVEL ELBOW

Product No	Tubing O.D. mm	Thread (M) BSPT
39.030	4	1/8
39.031	4	1/4
39.033	6	1/8
39.034	6	1/4
39.036	8	1/8
39.037	8	1/4
39.038	8	3/8
39.041	10	1/4
39.042	10	3/8

UNION ELBOW

Product No	Tubing O.D. mm
39.830	4
39.832	6
39.834	8
39.836	10
39.838	12

MALE SWIVEL BRANCH TEE

Product No	Tubing O.D. mm	Thread (M) BSPT
39.050	4	1/8
39.053	6	1/8
39.054	6	1/4
39.056	8	1/4
39.057	8	3/8
39.061	10	1/4
39.062	10	3/8

UNION TEE

Product No	Tubing O.D. mm
39.840	4
39.842	6
39.844	8
39.846	10

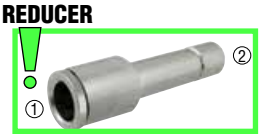
MALE SWIVEL RUN TEE

Product No	Tubing O.D. mm	Thread (M) BSPT
39.070	4	1/8
39.077	8	1/4
39.081	10	1/4
39.084	12	3/8

MALE SWIVEL BRANCH TEE

Product No	Tubing O.D. mm	Thread (M) BSPP
39.850	4	1/8
39.853	6	1/8
39.854	6	1/4
39.856	8	1/4
39.857	8	3/8
39.861	10	1/4
39.862	10	3/8

STEM REDUCER

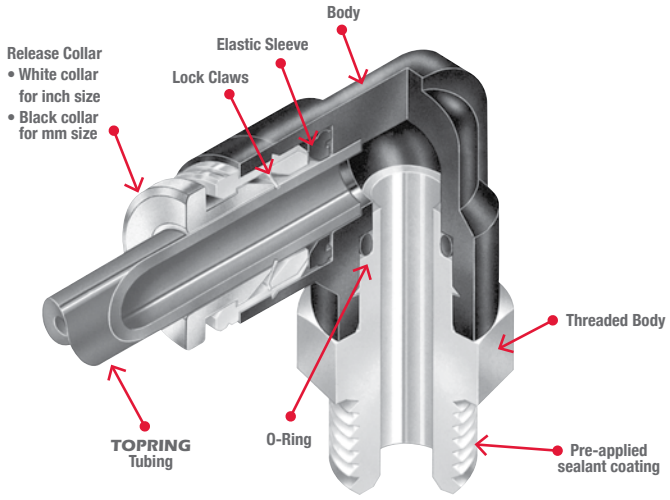


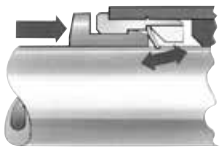
Product No	Tubing① O.D. mm	Stem② O.D. mm
39.090	4	6
39.091	6	8
39.092	8	10
39.094	10	12

BULKHEAD UNION

Product No	Tubing O.D. mm
39.820	4
39.822	6
39.824	8

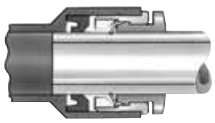
TOPFIT®
PUSH-TO-CONNECT FITTINGS
POLYMER





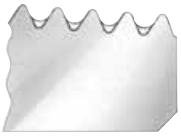
POSITIVE GRIPPING ACTION

Stainless Steel lock claws hold the tubing securely without damaging its surface. Vibration and pressure surges are safely absorbed to prevent accidental disconnections



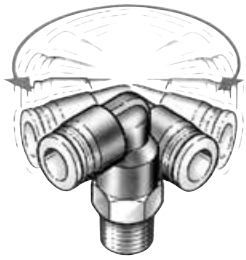
PERFECT SEAL

A nitrile rubber elastic sleeve guarantees a perfect seal between standard O.D. tubing and the body of the fitting



READY-TO-USE THREADS

Male threads have a pre-applied sealant which allows the fitting to be re-used up to five times without the need for additional sealant



ORIENTABLE

The bodies of elbow and tee union fittings with threaded connections can be aligned after installation to allow for variations in tubing direction

FEATURES AND BENEFITS

QUICK CONNECT DESIGN

One-piece fitting saves over 75 % of assembly time compared to standard compression fittings. One-piece fitting means reduced assembly time

COMPACT DESIGN

Allows fittings to be closely mounted

OPTIMUM FLOW

No part of the fitting goes inside the tubing - unrestricted tubing I.D. allows for maximum airflow

QUICK AND EASY CONNECTION

Wide release collar allows fast and trouble-free tubing removal

INSTANTANEOUS CONNECTION/ DISCONNECTION

Designed for fast assembly, disassembly and reassembly without tools

FULLY REUSABLE

Designed for multiple connections and disconnections with leak-free operation and solid tubing gripping

TUBING SIZE IDENTIFICATION

Tubing diameter indicated on release ring

CORROSION RESISTANT THREADED FITTINGS

All threaded fittings are made of nickel plated brass resistant to corrosion

APPLICATIONS

Compressed air, vacuum

MATERIALS

Body: Polymer (PBT)
Release Collar: Polyacetal resin
Threaded Body: Nickel plated brass
Lock Claws: Stainless steel
O-Ring: Buna-N
Needle: Nickel plated brass
Lock Nut: Aluminium
Elastic Sleeve: Nitrile rubber
Adjusting Screw: Nickel plated brass

SPECIFICATIONS

Maximum Working Pressure: 150 PSI
Working Temperature: 0 °C to 60 °C
NPT Thread: Tubing diameter in inch (imperial)
BSPT Thread: Tubing diameter in millimeter (metric)

TOPFIT®

POLYMER

INCH NPT

HEXAGONAL HOLE MALE CONNECTOR

Product No	Tubing O.D. in	Thread (M) NPT
40.047	5/32	1/8
40.048	1/4	1/8
40.049	1/4	1/4
40.053	5/16	1/8
40.054	5/16	1/4
40.057	3/8	1/4
40.059	3/8	3/8

- Allen key type mounting
- Specifically designed for mounting in close proximity to one another

MALE CONNECTOR

Product No	Tubing O.D. in	Thread (M) NPT
40.100	1/8	1/16
40.101	1/8	10-32 ◇
40.105	1/8	1/8
40.115	5/32	10-32 ◇
40.120	5/32	1/8
40.125	5/32	1/4
40.128	1/4	10-32 ◇
40.130	1/4	1/8
40.135	1/4	1/4
40.140	1/4	3/8
40.145	5/16	1/8
40.150	5/16	1/4
40.155	5/16	3/8
40.159	3/8	1/8
40.160	3/8	1/4
40.165	3/8	3/8
40.170	3/8	1/2
40.175	1/2	1/4
40.180	1/2	3/8
40.185	1/2	1/2

◇ 10-32: (M) UNF

UNION

Product No	Tubing O.D. in
40.190	1/8
40.195	5/32
40.200	1/4
40.205	5/16
40.210	3/8
40.215	1/2

UNION REDUCER

Product No	Tubing O.D. in	Tubing O.D. in
40.193	5/32	1/8
40.198	1/4	5/32
40.203	5/16	1/4
40.204	3/8	1/4
40.208	3/8	5/16
40.213	1/2	3/8

MALE SWIVEL ELBOW

Product No	Tubing O.D. in	Thread (M) NPT
40.218	1/8	10-32◇
40.220	1/8	1/16
40.225	1/8	1/8
40.235	5/32	10-32◇
40.240	5/32	1/8
40.245	5/32	1/4
40.248	1/4	10-32◇
40.250	1/4	1/8
40.255	1/4	1/4
40.260	1/4	3/8
40.265	5/16	1/8
40.270	5/16	1/4
40.271	5/16	3/8
40.273	3/8	1/8
40.275	3/8	1/4
40.280	3/8	3/8
40.285	3/8	1/2
40.290	1/2	1/4
40.295	1/2	3/8
40.300	1/2	1/2

◇ 10-32: (M) UNF

BANJO ELBOW

Product No	Tubing O.D. in	Thread (M) NPT
40.949	1/4	1/4
40.950	5/32	10-32◇
40.951	5/32	1/8
40.952	1/4	10-32◇
40.953	1/4	1/8
40.955	5/16	1/4
40.957	3/8	1/4
40.958	3/8	3/8
40.959	1/2	3/8
40.960	1/2	1/2

◇ 10-32: (M) UNF

UNION ELBOW

Product No	Tubing O.D. in
40.304	1/8
40.305	5/32
40.310	1/4
40.315	5/16
40.320	3/8
40.325	1/2

MALE SWIVEL BRANCH TEE

Product No	Tubing O.D. in	Thread (M) NPT
40.335	1/8	1/8
40.343	5/32	10-32◇
40.345	5/32	1/8
40.350	5/32	1/4
40.360	1/4	1/8
40.365	1/4	1/4
40.370	1/4	3/8
40.375	5/16	1/8
40.380	5/16	1/4
40.385	5/16	3/8
40.390	3/8	1/4
40.395	3/8	3/8
40.400	3/8	1/2
40.405	1/2	1/4
40.410	1/2	3/8
40.415	1/2	1/2

◇ 10-32: (M) UNF

UNION TEE

Product No	Tubing O.D. in
40.420	1/8
40.425	5/32
40.430	1/4
40.435	5/16
40.440	3/8
40.445	1/2

UNION TEE REDUCER

Product No	① Tubing O.D. in	② Tubing O.D. in
40.575	1/4	5/32
40.576	5/16	1/4
40.577	3/8	1/4
40.578	3/8	5/16
40.579	1/2	3/8

MALE SWIVEL RUN TEE

Product No	Tubing O.D. in	Thread (M) NPT
40.455	1/8	1/8
40.465	5/32	1/8
40.467	5/32	1/4
40.475	1/4	1/8
40.480	1/4	1/4
40.485	1/4	3/8
40.490	5/16	1/8
40.495	5/16	1/4
40.500	5/16	3/8
40.505	3/8	1/4
40.510	3/8	3/8
40.515	3/8	1/2
40.520	1/2	1/4
40.525	1/2	3/8
40.530	1/2	1/2

TRIPLE TUBE « Y » UNION

Product No	① Tubing O.D. in	② Tubing O.D. in
40.535	1/8	1/8
40.540	5/32	5/32
40.545	1/4	1/4
40.550	5/16	5/16
40.552	3/8	3/8
40.553	3/8	1/2
40.554	1/2	1/2

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INCH NPT

MALE « Y » CONNECTOR

Product No	Tubing O.D. in	Thread (M) NPT
40.710	5/32	1/8
40.715	5/32	1/4
40.720	1/4	1/8
40.725	1/4	1/4
40.730	1/4	3/8
40.735	5/16	1/8
40.740	5/16	1/4
40.745	5/16	3/8
40.750	3/8	1/4
40.755	3/8	3/8
40.760	3/8	1/2
40.765	1/2	1/4
40.770	1/2	3/8
40.775	1/2	1/2

FEMALE BULKHEAD CONNECTOR

Product No	Tubing O.D. in	Thread (F) NPT
40.633	1/4	1/8
40.635	1/4	1/4
40.637	5/16	3/8
40.638	5/16	1/4
40.639	3/8	1/4
40.640	3/8	3/8
40.641	1/2	3/8
40.642	1/2	1/2

BULKHEAD UNION

Product No	Tubing O.D. in
40.650	5/32
40.655	1/4
40.660	5/16
40.665	3/8
40.670	1/2

FEMALE CONNECTOR

Product No	Tubing O.D. in	Thread (F) NPT
40.802	5/32	1/8
40.804	1/4	1/8
40.805	1/4	1/4
40.807	5/16	1/4
40.809	3/8	1/4
40.810	3/8	3/8
40.811	1/2	1/4
40.812	1/2	3/8

STEM REDUCER

Product No	Tubing ① O.D. in	Stem ② O.D. in
40.580	5/32	1/4
40.581	5/32	5/16
40.582	1/4	5/16
40.583	1/4	3/8
40.584	5/16	3/8
40.585	1/4	1/2
40.586	5/16	1/2
40.587	3/8	1/2

PLUG

Product No	O.D. in
40.675	1/8
40.680	5/32
40.685	1/4
40.690	5/16
40.695	3/8
40.700	1/2

STEM ADAPTOR

Product No	Tubing ① O.D. in	Stem ② O.D. mm
42.820	1/4	8
42.822	1/4	10
42.823	5/16	10
42.825	1/4	12
42.826	5/16	12
42.827	3/8	12

ELBOW ROTARY JOINTS

Product No	Tubing O.D. in	Thread (M) NPT	Max RPM
40.600	1/4	1/8	500
40.601	1/4	1/4	500
40.602	5/16	1/8	400
40.603	5/16	1/4	400
40.604	3/8	3/8	300
40.605	3/8	1/2	300
40.606	1/2	3/8	250
40.607	1/2	1/2	250

MANIFOLDS

DUAL TRIPLE UNION

Product No	① Tubing O.D. in	② Tubing O.D. in
40.972	1/4	3/8

TRIPLE UNION

Product No	① Tubing O.D. in	② Tubing O.D. in
40.976	1/4	3/8

CHECK VALVES

Allow free flow from the inlet and block flow in the reverse direction

FREE FLOW

UNION

Product No	Tubing O.D. in
40.985	5/32
40.986	1/4

MALE CONNECTOR

Product No	Tubing O.D. in	Thread (M) NPT
40.980	5/32	1/8
40.981	1/4	1/8
40.982	1/4	1/4

06_06_2016

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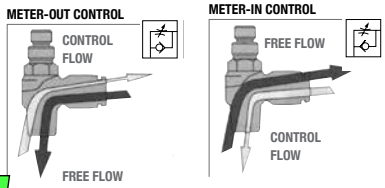
SPEED CONTROLLERS

FLOW CONTROL VALVE THREADED ELBOW

Meter-out Product No	Meter-in Product No	Tubing O.D. in	Thread (M) NPT
40.898	40.899	5/32	10-32 ◇
40.900	40.901	5/32	1/8
40.904	40.905	1/4	1/8
40.906	40.907	1/4	1/4
40.910	40.911	5/16	1/4
40.916	40.917	3/8	1/4
40.912	40.913	5/16	3/8
40.918	40.919	3/8	3/8
40.924	40.925	1/2	1/2

◇ 10-32: (M) UNF



FLOW CONTROL VALVE STRAIGHT UNION

Product No	Tubing O.D. in
40.890	5/32
40.891	1/4
40.892	5/16
40.893	3/8
40.894	1/2

THROTTLE (NEEDLE) VALVE THREADED ELBOW

Product No	Tubing O.D. in	Thread (M) NPT
40.870	1/4	10-32◇
40.871	1/4	1/8
40.872	1/4	1/4
40.874	5/16	1/8
40.875	5/16	1/4
40.876	5/16	3/8
40.878	3/8	1/4
40.879	3/8	3/8
40.880	3/8	1/2
40.882	1/2	3/8
40.883	1/2	1/2

◇ 10-32: (M) UNF

MINIATURE BALL VALVES

STRAIGHT UNION

Product No	① Tubing O.D. in	② Tubing O.D. in
40.930	1/4	1/4
40.931	5/16	5/16
40.933	3/8	3/8
40.934	1/2	1/2

THREADED STRAIGHT

Product No	Tubing O.D. in	Thread (M) NPT
40.940	1/4	1/8
40.941	1/4	1/4
40.942	1/4	3/8
40.943	5/16	1/8
40.944	5/16	1/4
40.945	3/8	1/4
40.946	3/8	3/8
40.947	3/8	1/2

MINIATURE HAND VALVES

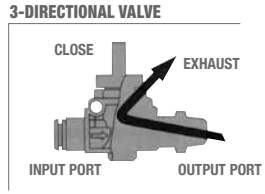
STRAIGHT UNION

2- Directional Product No	3- Directional Product No	Tubing O.D. in
40.060	40.070	1/4
40.062	40.072	5/16
40.063	40.073	3/8
40.065	40.075	1/2

THREADED STRAIGHT

2- Directional Product No	3- Directional Product No	Tubing O.D. in	Thread (M) NPT
40.080	40.090	1/4	1/4
40.082	40.092	5/16	1/4
40.083	40.093	3/8	1/4
40.084	40.094	3/8	3/8
40.087	40.097	1/2	3/8

- The 2-Directional control valve does not discharge the residual pressure
- The 3-directional control valve, when closed, discharges the residual pressure



TOPFIT®

POLYMER

MM BSPT

HEXAGONAL HOLE MALE CONNECTOR

Product No	Tubing O.D. mm	Thread (M) BSPT
42.039	4	M5*
42.041	4	1/8
42.038	6	M5*
42.042	6	1/8
42.043	6	1/4
42.044	8	1/8
42.045	8	1/4
42.046	8	3/8
42.047	10	1/4
42.048	10	3/8
42.049	12	3/8
42.050	12	1/2

*Metric thread

- Allen key type mounting
- Specifically designed for mounting in close proximity to one another

UNION REDUCER

Product No	Tubing O.D. mm	Tubing O.D. mm
42.233	6	4
42.238	8	6
42.243	10	8
42.248	12	10

STEM REDUCER

Product No	Tubing O.D. mm	Stem O.D. mm
42.586	4	6
42.588	6	8
42.470	6	10
42.590	8	10
42.472	6	12
42.592	10	12

SWIVEL BRANCH TEE

Product No	Tubing O.D. mm	Thread (M) BSPT
42.640	4	M5*
42.645	4	1/8
42.646	4	1/4
42.660	6	1/8
42.665	6	3/8
42.662	6	1/4
42.670	8	1/8
42.675	8	1/4
42.676	8	3/8
42.680	10	1/4
42.681	10	3/8
42.683	12	1/4
42.684	12	3/8
42.685	12	1/2

*Metric thread

BULKHEAD UNION

Product No	Tubing O.D. mm
42.560	4
42.570	6
42.575	8
42.580	10
42.585	12

MALE CONNECTOR

Product No	Tubing O.D. mm	Thread (M) BSPT
42.100	4	M5*
42.105	4	1/8
42.110	4	1/4
42.115	6	M5*
42.116	6	M6*
42.130	6	1/8
42.135	6	1/4
42.136	6	3/8
42.140	8	1/8
42.145	8	1/4
42.150	8	3/8
42.153	10	1/8
42.155	10	1/4
42.160	10	3/8
42.161	10	1/2
42.163	12	1/4
42.165	12	3/8
42.170	12	1/2

*Metric thread

MALE SWIVEL ELBOW

Product No	Tubing O.D. mm	Thread (M) BSPT
42.594	4	M3
42.595	4	M5*
42.596	4	M5 Mini*
42.600	4	1/8
42.603	4	1/4
42.613	6	M5*
42.614	6	M6*
42.615	6	1/8
42.620	6	1/4
42.623	6	3/8
42.625	8	1/8
42.630	8	1/4
42.632	8	3/8
42.633	10	1/8
42.635	10	1/4
42.636	10	3/8
42.634	10	1/2
42.637	12	1/4
42.638	12	3/8
42.639	12	1/2

*Metric thread

UNION TEE

Product No	Tubing O.D. mm
42.295	4
42.305	6
42.310	8
42.315	10
42.320	12

TRIPLE TUBE « Y » UNION

Product No	① Tubing O.D. mm	② Tubing O.D. mm
42.540	4	4
42.543	4	6
42.545	6	6
42.548	6	8
42.550	8	8
42.551	8	10
42.552	10	10
42.553	10	12
42.554	12	12

TOPFIT®

POLYMER

MINIATURE BALL VALVES

MM BSPT

UNION ELBOW

Product No	Tubing O.D. mm
42.260	4
42.270	6
42.275	8
42.280	10
42.285	12

UNION

Product No	Tubing O.D. mm
42.230	4
42.235	6
42.240	8
42.245	10
42.250	12

PLUG

Product No	O.D. mm
42.430	4
42.435	6
42.440	8
42.445	10
42.450	12

FEMALE CONNECTOR

Product No	Tubing O.D. mm	Thread (F) BSPT
42.203	4	1/8
42.205	6	1/8
42.210	6	1/4
42.215	8	1/8
42.212	8	1/4
42.213	8	3/8
42.216	10	1/4

STRAIGHT UNION VALVE

2- Directional Product No	3- Directional Product No	Tubing O.D. mm
42.070	42.060	4
42.071	42.061	6
42.073	42.063	8
42.074	42.064	10

STEM ADAPTOR

Product No	Tubing ① O.D. in	Stem ② O.D. mm
42.820	1/4	8
42.822	1/4	10
42.823	5/16	10
42.825	1/4	12
42.826	5/16	12
42.827	3/8	12

SPEED CONTROLLERS

THROTTLE (NEEDLE) VALVE THREADED ELBOW

Product No	Tubing O.D. mm	Thread (M) BSPT
42.870	4	M5*
42.873	6	1/8
42.874	6	1/4
42.876	8	1/8
42.877	8	1/4
42.878	8	3/8
42.880	10	1/4
42.881	10	3/8
42.883	12	3/8
42.884	12	1/2

*Metric thread

FLOW CONTROL VALVE THREADED ELBOW

Meter-in Product No	Meter-out Product No	Tubing O.D. mm	Thread (M) BSPT
42.903	42.902	4	M5*
42.905	42.904	4	1/8
42.909	42.908	6	M5*
42.911	42.910	6	1/8
42.913	42.912	6	1/4
42.917	42.916	8	1/8
42.919	42.918	8	1/4
42.921	42.920	8	3/8
42.923	42.922	8	1/2
42.927	42.926	10	3/8
42.933	42.932	12	1/2

*Metric thread

FLOW CONTROL VALVE STRAIGHT UNION

Product No	Tube O.D. mm
42.890	4
42.891	6
42.892	8
42.893	10
42.894	12

TOPFIT®
PUSH-TO-CONNECT FITTINGS
316 STAINLESS STEEL

INCH **NPT**

MALE CONNECTOR

Product No	Tubing O.D. in	Thread (M) NPT
43.000	5/32	1/8
43.003	1/4	1/8
43.006	1/4	1/4
43.009	5/16	1/8
43.012	5/16	1/4
43.015	5/16	3/8
43.018	3/8	1/4
43.021	3/8	3/8
43.024	1/2	1/4
43.027	1/2	3/8
43.030	1/2	1/2

UNION

Product No	Tubing O.D. in
43.200	5/32
43.203	1/4
43.206	5/16
43.209	3/8
43.212	1/2

MALE SWIVEL ELBOW

Product No	Tubing O.D. in	Thread (M) NPT
43.040	5/32	1/8
43.043	1/4	1/8
43.046	1/4	1/4
43.049	5/16	1/8
43.052	5/16	1/4
43.055	5/16	3/8
43.058	3/8	1/8
43.061	3/8	1/4
43.064	3/8	3/8
43.067	1/2	1/4
43.070	1/2	3/8
43.073	1/2	1/2

UNION ELBOW

Product No	Tubing O.D. in
43.280	5/32
43.283	1/4
43.286	5/16
43.289	3/8
43.292	1/2

MALE SWIVEL BRANCH TEE

Product No	Tubing O.D. in	Thread (M) NPT
43.150	5/32	1/8
43.153	1/4	1/8
43.156	1/4	1/4
43.159	5/16	1/8
43.162	5/16	1/4
43.165	5/16	3/8
43.168	3/8	1/4
43.171	3/8	3/8
43.174	1/2	1/4
43.177	1/2	3/8
43.180	1/2	1/2

UNION TEE

Product No	Tubing O.D. in
43.320	1/4
43.323	3/8
43.326	1/2
43.329	5/16
43.332	5/32

MALE SWIVEL RUN TEE

Product No	Tubing O.D. in	Thread (M) NPT
43.090	5/32	1/8
43.093	1/4	1/8
43.096	1/4	1/4
43.099	5/16	1/8
43.102	5/16	1/4
43.105	5/16	3/8
43.108	3/8	1/8
43.111	3/8	1/4
43.114	3/8	3/8
43.117	1/2	1/4
43.120	1/2	3/8
43.123	1/2	1/2

BULKHEAD UNION

Product No	Tubing O.D. in
43.250	1/4
43.253	5/16
43.256	3/8
43.259	1/2

STEM REDUCER

Product No	Tubing ① O.D. in	Stem ② O.D. in
43.230	1/4	5/32
43.233	3/8	1/4
43.236	3/8	5/16
43.239	1/2	3/8

FEATURES AND BENEFITS

QUICK CONNECT
Save up to 75 % of assembly time in comparison with compression fittings

INSTANTANEOUS CONNECTION/DISCONNECTION
Designed for fast assembly and disassembly without tools

FULL-FLOW DESIGN
Provide up to 60 % more flow than compression fittings

FULLY REUSABLE
Design to resist multiple connections and disconnections with leak free operation and solid tube gripping

POSITIVE SEAL
Proper insertion of tube into the fitting creates seal

SELF-CONTAINED ASSEMBLY
No loose parts or inserts

Pre-applied Sealant: Pipe sealant on all male pipe threads, providing the user additional labor savings

APPLICATIONS

Compressed air, vacuum, food processing, chemical products, medical, manufacturing of semiconductors

MATERIALS

Body and Ring: 316 Stainless Steel
Lock Claws: 316 Stainless Steel
O-Ring: FKM

SPECIFICATIONS

Working Pressure:
Fitting suitable for use up to maximum working pressure of plastic tubing used

Maximum Working Pressure: 217 PSI

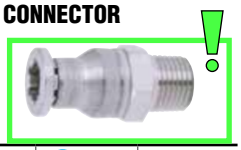
Suitable for vacuum service to 28" Hg

Working Temperature Range: -15 °C to 120 °C

TOPFIT®
316 STAINLESS STEEL

MM BSPT

MALE CONNECTOR



Product No	Tubing O.D. mm	Thread (M) BSPT
43.500	4	M5*
43.503	4	1/8
43.506	6	M5*
43.509	6	1/8
43.512	6	1/4
43.515	8	1/8
43.518	8	1/4
43.521	10	1/4
43.524	10	3/8
43.527	12	3/8
43.530	12	1/2
43.533	16	1/2

*Metric thread

MALE SWIVEL ELBOW

Product No	Tubing O.D. mm	Thread (M) BSPT
43.540	4	M5*
43.543	4	1/8
43.546	6	M5*
43.549	6	1/8
43.552	6	1/4
43.555	8	1/8
43.558	8	1/4
43.561	10	1/4
43.564	10	3/8
43.567	12	3/8
43.570	12	1/2
43.573	16	1/2

*Metric thread

UNION TEE

Product No	Tubing O.D. mm
43.820	4
43.823	6
43.826	8
43.829	10
43.832	12
43.835	16

BULKHEAD UNION

Product No	Tubing O.D. mm
43.745	4
43.747	6
43.748	8
43.749	10
43.751	12
43.753	16

HEXAGONAL HOLE MALE CONNECTOR

Product No	Tubing O.D. mm	Thread (M) BSPT
43.880	4	M5*
43.883	4	1/8
43.886	6	M5*
43.889	6	1/8
43.892	6	1/4
43.895	8	1/8
43.898	8	1/4
43.901	10	1/4
43.904	10	3/8
43.907	12	3/8
43.910	12	1/2
43.913	16	1/2

*Metric thread

UNION ELBOW

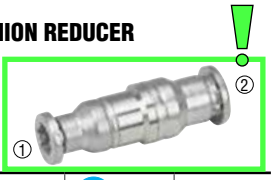
Product No	Tubing O.D. mm
43.780	4
43.783	6
43.786	8
43.789	10
43.792	12
43.795	16

MALE SWIVEL RUN TEE

Product No	Tubing O.D. mm	Thread (M) BSPT
43.590	4	1/8
43.593	6	M5*
43.596	6	1/8
43.599	6	1/4
43.602	8	1/8
43.605	8	1/4
43.608	10	1/4
43.611	10	3/8
43.614	12	3/8
43.617	12	1/2
43.620	16	1/2

*Metric thread

UNION REDUCER

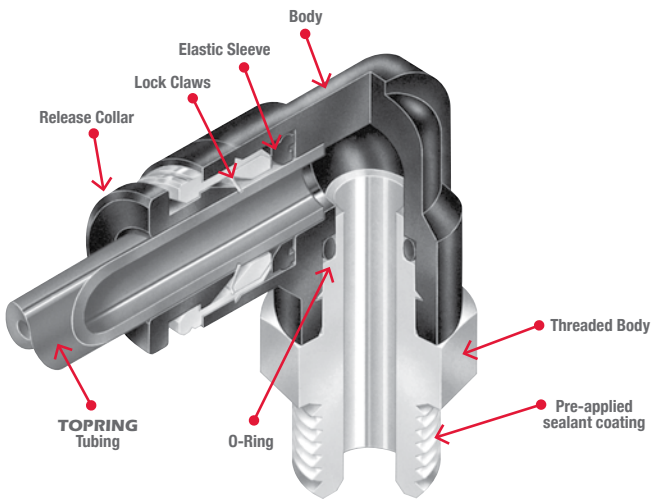


Product No	Tubing ① O.D. mm	Stem ② O.D. mm
43.730	4	6
43.733	6	8
43.736	8	10
43.739	10	12
43.742	12	16

UNION

Product No	Tubing O.D. mm
43.700	4
43.703	6
43.706	8
43.709	10
43.712	12
43.715	16

MAXFIT®
PUSH-TO-CONNECT FITTINGS
POLYMER



FEATURES AND BENEFITS

QUICK CONNECT DESIGN
One-piece fitting saves over 75% of assembly time compared to standard compression fittings. One-piece fitting means reduced assembly time

COMPACT DESIGN
Allows fittings to be closely mounted

OPTIMUM FLOW
No part of the fitting goes inside the tubing - unrestricted tubing I.D. allows for maximum airflow

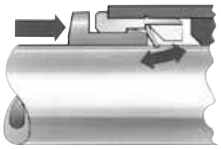
QUICK AND EASY CONNECTION
Wide release collar allows fast and trouble-free tubing removal

INSTANTANEOUS CONNECTION/DISCONNECTION
Designed for fast assembly, disassembly and reassembly without tools

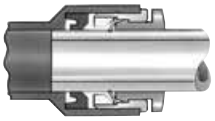
FULLY REUSABLE
Designed for multiple connections and disconnections with leak-free operation and solid tubing gripping

TUBING SIZE IDENTIFICATION
Tubing diameter indicated on release ring

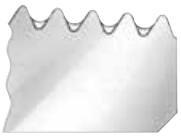
CORROSION RESISTANT THREADED FITTINGS
All threaded fittings are made of nickel plated brass resistant to corrosion



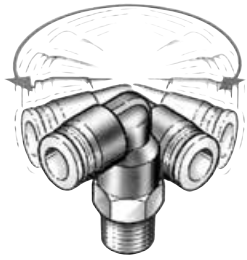
POSITIVE GRIPPING ACTION
Stainless Steel lock claws hold the tubing securely without damaging its surface. Vibration and pressure surges are safely absorbed to prevent accidental disconnections



PERFECT SEAL
A nitrile rubber elastic sleeve guarantees a perfect seal between standard O.D. tubing and the body of the fitting



READY-TO-USE THREADS
Male threads have a pre-applied sealant which allows the fitting to be re-used up to five times without the need for additional sealant



ORIENTABLE
The bodies of elbow and tee union fittings with threaded connections can be aligned after installation to allow for variations in tubing direction

APPLICATIONS

Compressed air

MATERIALS

Body: Polymer (PBT)
Release Collar: Polyacetal resin
Threaded Body: Nickel plated brass
Lock Claws: Stainless steel
O-Ring: Buna-N
Needle: Nickel plated brass
Lock Nut: Aluminium
Elastic Sleeve: Nitrile rubber
Adjusting Screw: Nickel plated brass

SPECIFICATIONS

Maximum Working Pressure: 150 PSI
Working Temperature: 5 °C to 60 °C
NPT Thread: Tubing diameter in inch (imperial)
BSPT Thread: Tubing diameter in millimeter (metric)

MAXFIT®

POLYMER

INCH NPT

HEXAGONAL HOLE MALE CONNECTOR

Product No	Tubing O.D. in	Thread (M) NPT
44.047	5/32	1/8
44.048	1/4	1/8
44.049	1/4	1/4
44.054	5/16	1/4
44.057	3/8	1/4
44.059	3/8	3/8

- Allen key type mounting
- Specifically designed for mounting in close proximity to one another

MALE CONNECTOR

Product No	Tubing O.D. in	Thread (M) NPT
44.101	1/8	10-32 ◇
44.105	1/8	1/8
44.115	5/32	10-32 ◇
44.120	5/32	1/8
44.125	5/32	1/4
44.128	1/4	10-32 ◇
44.130	1/4	1/8
44.135	1/4	1/4
44.140	1/4	3/8
44.145	5/16	1/8
44.150	5/16	1/4
44.155	5/16	3/8
44.159	3/8	1/8
44.160	3/8	1/4
44.165	3/8	3/8
44.170	3/8	1/2
44.175	1/2	1/4
44.180	1/2	3/8
44.185	1/2	1/2

◇ 10-32: (M) UNF

UNION

Product No	Tubing O.D. in
44.190	1/8
44.195	5/32
44.200	1/4
44.205	5/16
44.210	3/8
44.215	1/2

UNION REDUCER

Product No	Tubing O.D. in	Tubing O.D. in
44.198	5/32	1/4
44.203	1/4	5/16
44.208	5/16	3/8
44.204	3/8	1/4
44.213	3/8	1/2

MALE SWIVEL ELBOW

Product No	Tubing O.D. in	Thread (M) NPT
44.218	1/8	10-32 ◇
44.225	1/8	1/8
44.235	5/32	10-32 ◇
44.240	5/32	1/8
44.245	5/32	1/4
44.248	1/4	10-32 ◇
44.250	1/4	1/8
44.255	1/4	1/4
44.260	1/4	3/8
44.265	5/16	1/8
44.270	5/16	1/4
44.271	5/16	3/8
44.273	3/8	1/8
44.275	3/8	1/4
44.280	3/8	3/8
44.285	3/8	1/2
44.290	1/2	1/4
44.295	1/2	3/8
44.300	1/2	1/2

◇ 10-32: (M) UNF

UNION ELBOW

Product No	Tubing O.D. in
44.304	1/8
44.305	5/32
44.310	1/4
44.315	5/16
44.320	3/8
44.325	1/2

MALE SWIVEL BRANCH TEE

Product No	Tubing O.D. in	Thread (M) NPT
44.343	5/32	10-32 ◇
44.345	5/32	1/8
44.360	1/4	1/8
44.365	1/4	1/4
44.375	5/16	1/8
44.380	5/16	1/4
44.390	3/8	1/4
44.395	3/8	3/8
44.405	1/2	1/4
44.410	1/2	3/8
44.415	1/2	1/2

◇ 10-32: (M) UNF

UNION TEE

Product No	Tubing O.D. in
44.420	1/8
44.425	5/32
44.430	1/4
44.435	5/16
44.440	3/8
44.445	1/2

MALE SWIVEL RUN TEE

Product No	Tubing O.D. in	Thread (M) NPT
44.475	1/4	1/8
44.480	1/4	1/4
44.505	3/8	1/4
44.510	3/8	3/8

TRIPLE TUBE UNION « Y »

Product No	Tubing O.D. in
44.535	1/8
44.540	5/32
44.545	1/4
44.550	5/16
44.552	3/8
44.554	1/2

MALE « Y »

Product No	Tubing O.D. in	Thread (M) NPT
44.720	1/4	1/8
44.725	1/4	1/4
44.750	3/8	1/4
44.755	3/8	3/8

FEMALE BULKHEAD CONNECTOR

Product No	Tubing O.D. in	Thread (F) NPT
44.633	1/4	1/8
44.635	1/4	1/4
44.637	5/16	3/8
44.639	3/8	1/4
44.640	3/8	3/8

MAXFIT®

POLYMER

INCH NPT

BULKHEAD UNION

Product No	Tubing O.D. in
44.655	1/4
44.665	3/8

FEMALE CONNECTOR

Product No	Tubing O.D. in	Thread (F) NPT
44.801	1/8	1/8
44.802	5/32	1/8
44.804	1/4	1/8
44.805	1/4	1/4
44.807	5/16	1/4
44.809	3/8	1/4
44.812	1/2	3/8

STEM REDUCER

Product No	Tubing ① O.D. in	Stem ② O.D. in
44.580	5/32	1/4
44.582	1/4	5/16
44.583	1/4	3/8
44.587	3/8	1/2

PLUG

Product No	O.D. in
44.675	1/8
44.680	5/32
44.685	1/4
44.690	5/16
44.695	3/8
44.700	1/2

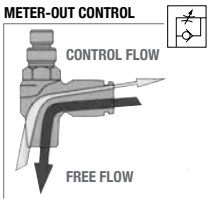
SPEED CONTROLLERS

FLOW CONTROL VALVE THREADED ELBOW

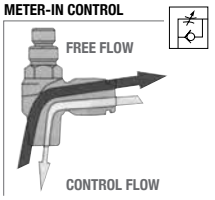
Meter-out Product No	Meter-in Product No	Tubing O.D. in	Thread (M) NPT
44.902	44.903	1/4	10-32 ◇
44.904	44.905	1/4	1/8
44.908	44.909	1/4	1/4
44.910	44.911	3/8	1/4
44.912	44.913	3/8	3/8

◇ 10-32: (M) UNF

METER-OUT CONTROL



METER-IN CONTROL



FLOW CONTROL VALVE THREADED ELBOW

Precise adjustment with screwdriver and protection against unwanted adjustment

Product No	Tubing O.D. in	Thread (M) NPT
44.962	1/4	1/8
44.964	1/4	1/4
44.974	3/8	1/4
44.975	3/8	3/8

FLOW CONTROL VALVE STRAIGHT UNION

Product No	Tubing O.D. in
44.952	1/4
44.956	3/8

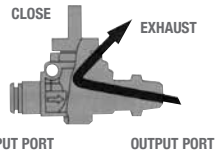
MINIATURE HAND VALVES

STRAIGHT UNION

3 -Directional Product No	Tubing O.D. in
44.070	1/4
44.073	3/8
44.075	1/2

The 3-directional control valve when closed, discharges the residual pressure

3-DIRECTIONAL VALVE



MAXFIT®

POLYMER

MM BSPT

HEXAGONAL HOLE MALE CONNECTOR

Product No	Tubing O.D. mm	Thread (M) BSPT
46.039	4	M5*
46.040	4	1/4
46.041	4	1/8
46.042	6	1/8
46.043	6	1/4
46.044	8	1/8

*Metric thread

- Allen key type mounting
- Specifically designed for mounting in close proximity to one another

MALE CONNECTOR

Product No	Tubing O.D. mm	Thread (M) BSPT
46.100	4	M5*
46.105	4	1/8
46.110	4	1/4
46.115	6	M5*
46.116	6	M6*
46.130	6	1/8
46.135	6	1/4
46.136	6	3/8
46.140	8	1/8
46.145	8	1/4
46.150	8	3/8
46.151	8	1/2
46.155	10	1/4
46.160	10	3/8
46.161	10	1/2
46.165	12	3/8
46.170	12	1/2

*Metric thread

UNION

Product No	Tubing O.D. mm
46.230	4
46.235	6
46.240	8
46.245	10
46.250	12

UNION REDUCER

Product No	Tubing O.D. mm	Tubing O.D. mm
46.233	4	6
46.238	6	8
46.243	8	10

MALE SWIVEL ELBOW

Product No	Tubing O.D. mm	Thread (M) BSPT
46.595	4	M5*
46.600	4	1/8
46.603	4	1/4
46.613	6	M5*
46.615	6	1/8
46.620	6	1/4
46.623	6	3/8
46.625	8	1/8
46.630	8	1/4
46.631	8	1/2
46.632	8	3/8
46.634	10	1/2
46.635	10	1/4
46.636	10	3/8
46.637	12	1/4
46.638	12	3/8

*Metric thread

UNION ELBOW

Product No	Tubing O.D. mm
46.260	4
46.270	6
46.275	8
46.280	10

PLUG

Product No	Tubing O.D. mm
46.430	4
46.435	6
46.440	8
46.445	10

MALE SWIVEL BRANCH TEE

Product No	Tubing O.D. mm	Thread (M) BSPT
46.645	4	1/8
46.646	4	1/4
46.660	6	1/8
46.662	6	1/4
46.670	8	1/8
46.675	8	1/4
46.676	8	3/8
46.679	10	1/8
46.680	10	1/4
46.681	10	3/8

UNION TEE

Product No	Tubing O.D. mm
46.295	4
46.305	6
46.310	8
46.315	10
46.320	12

BULKHEAD UNION

Product No	Tubing O.D. mm
46.560	4
46.570	6
46.575	8
46.580	10

TRIPLE TUBE « Y » UNION

Product No	Tubing O.D. mm
46.540	4
46.545	6
46.550	8
46.552	10

THREADED « Y »

Product No	Tubing O.D. mm	Thread (M) BSPT
46.710	4	1/8
46.715	4	1/4
46.720	6	1/8
46.725	6	1/4
46.740	8	1/4
46.745	8	3/8
46.750	8	1/2

STEM REDUCER

Product No	Tubing ① O.D. mm	Stem ② O.D. mm
46.585	6	4
46.586	8	6
46.587	10	8
46.588	12	10

SPEED CONTROLLERS

FLOW CONTROL VALVE THREADED ELBOW

METER OUT Product No	Tubing O.D. mm	Thread (M) BSPT
46.904	4	1/8
46.906	4	1/4
46.910	6	1/8
46.912	6	1/4
46.914	8	1/8
46.916	8	1/4
46.918	8	3/8
46.920	8	1/2

FLOW CONTROL VALVE STRAIGHT UNION

Product No	Tubing O.D. mm
46.952	4
46.954	6
46.956	8
46.958	10

MAXFIT®

POLYMER

PUSH-TO-CONNECT FITTING CABINETS

Easy product storage and identification!

INCH **NPT**

Product No	Description
95.017	• 840 items / 64 skus • 60 drawers cabinet 23" L x 37" H x 8.75" D

Product No	Description
95.017A	• 1055 items / 64 skus • 60 drawers cabinet 23" L x 37" H x 8.75" D

Series 44

Product quantity per cabinet

No	95.017	95.017A	No	95.017	95.017A
44.048	10	10	44.270	10	10
44.049	10	10	44.273	10	10
44.070	10	10	44.275	20	30
44.105	10	10	44.280	20	30
44.120	10	10	44.285	10	10
44.128	10	10	44.290	10	10
44.130	30	50	44.295	10	10
44.135	30	50	44.300	10	10
44.140	10	10	44.310	10	10
44.145	10	10	44.320	10	10
44.150	20	30	44.325	10	10
44.159	10	10	44.360	10	10
44.160	30	50	44.365	10	10
44.165	20	30	44.390	10	10
44.170	10	10	44.430	30	50
44.175	10	10	44.435	10	10
44.180	10	10	44.440	20	30
44.185	20	30	44.445	10	10
44.190	10	10	44.545	10	10
44.195	10	10	44.552	10	10
44.200	30	50	44.583	10	10
44.203	10	10	44.633	10	10
44.205	10	10	44.655	10	10
44.210	20	30	44.685	10	10
44.215	10	10	44.695	10	10
44.225	10	10	44.804	10	10
44.240	10	10	44.805	10	10
44.248	10	10	44.809	10	10
44.250	30	50	44.904	10	10
44.255	30	50	44.908	10	10
44.260	10	10	44.952	5	10
44.265	10	10	44.956	5	5
44.270	10	10			

MM **BSPT**

Product No	Description
95.012	• 320 items / 32 skus • 20 drawers cabinet 23" L x 14" H x 8.75" D

Series 46

Product quantity in cabinet

No	95.012	No	95.012
46.039	10	46.270	10
46.041	10	46.295	10
46.042	10	46.305	10
46.105	10	46.310	10
46.115	10	46.430	10
46.130	10	46.435	10
46.135	10	46.440	10
46.140	10	46.595	10
46.145	10	46.600	10
46.155	10	46.613	10
46.230	10	46.615	10
46.233	10	46.620	10
46.235	10	46.625	10
46.240	10	46.630	10
46.245	10	46.632	10
46.260	10	46.635	10
46.270	10		

The Push-to-Connect fittings, tubings and mufflers brochure is available at TOPRING.com

- **TOPRING's** *complete selection of push-to-connect fittings, tubings and mufflers for pneumatic applications*
- *Contains a thread and tubing size full scale chart*
- *Push-to-connect fittings and mufflers cabinet selections for easy storage and product identification*

Visit TOPRING.com
Section « Technical Support » / Push-to-connect fittings and tubing

Series 41
BRASS FITTINGS

BRASS FITTINGS

FEATURES AND BENEFITS

- One-piece construction
- Manufactured with threads that conform to the American Standard Taper Size Thread
- Good resistance to vibration and pipe movement
- Corrosion resistant

APPLICATIONS

Compressed air, vacuum, water

MATERIALS

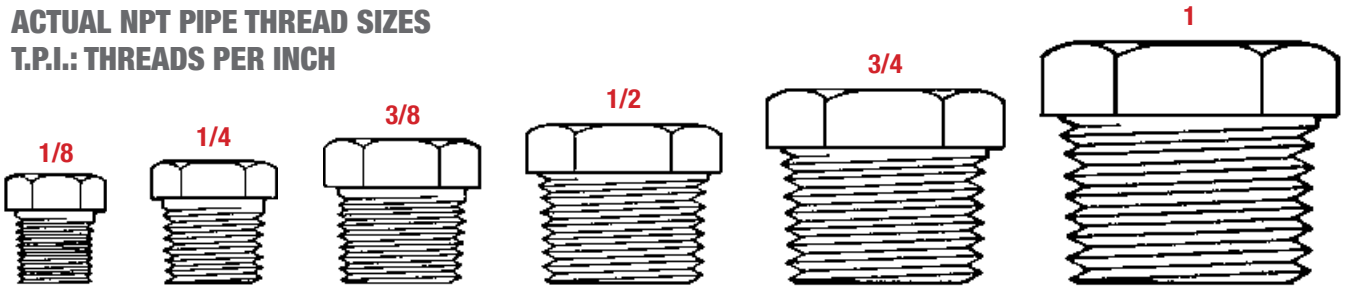
Brass (metric sizes: nickel plated brass)

SPECIFICATIONS

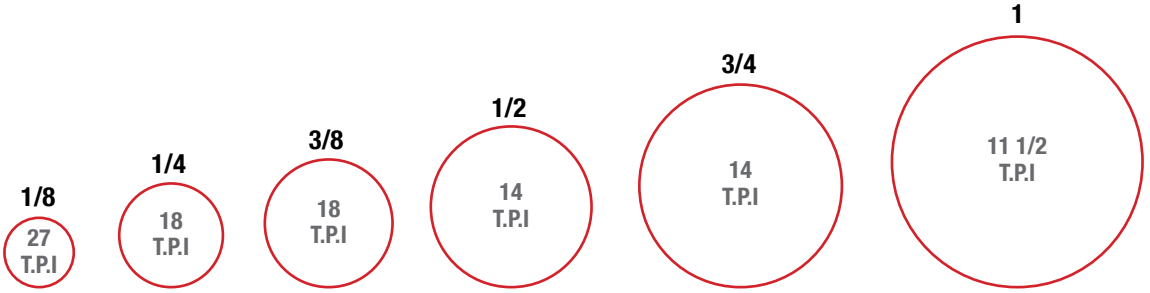
Maximum Working Pressure:
Threaded fittings: 1000 PSI
Hose barb fittings: 150 PSI
Bleed valves: 125 PSI

Working Temperature Range:
Threaded fittings: -54 °C to 121 °C
Hose barb fittings: -40 °C to 71 °C
Bleed valves: -29 °C to 71 °C

ACTUAL NPT PIPE THREAD SIZES
T.P.I.: THREADS PER INCH



ACTUAL OUTSIDE DIAMETERS OF PIPE THREADS



BRASS FITTINGS

NPT

MALE BALL END JOINT ADAPTER NPS/NPT

Product No	① Thread (M) NPS	② Thread (M) NPT
41.854	1/4	1/8
41.855	1/4	1/4
41.857	3/8	1/4

FEMALE REDUCING COUPLING

Product No	① Thread (F) NPT	② Thread (F) NPT
41.193	1/4	1/8
41.198	3/8	1/8
41.202	3/8	1/4
41.203	1/2	1/4
41.204	1/2	3/8

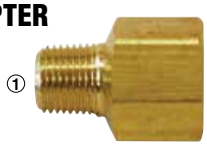
MALE HEXAGONAL NIPPLE REDUCER

Product No	① Thread (M) NPT	② Thread (M) NPT
41.110	1/4	1/8
41.120	3/8	1/4
41.123	3/8	1/8
41.124	1/2	1/4
41.126	1/2	3/8
41.133	3/4	1/2

REDUCING BUSHING

Product No	① Thread (F) NPT	② Thread (M) NPT
41.170	1/8	1/4
41.172	1/8	3/8
41.175	1/4	3/8
41.178	1/8	1/2
41.180	1/4	1/2
41.183	1/4	3/4
41.184 (steel)	3/4	2
41.185	3/8	1/2
41.186	1/2	3/4
41.187	3/4	1
41.188	1	2
41.189 (steel)	1 1/2	2

HEXAGONAL ADAPTER

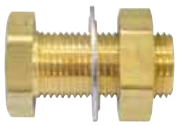


Product No	① Thread (M) NPT	② Thread (F) NPT
41.137	1/8	1/8
41.140	1/8	1/4
41.143	1/8	3/8
41.145	1/4	1/4
41.150	1/4	3/8
41.153	1/4	1/2
41.155	3/8	3/8
41.160	3/8	1/2
41.165	1/2	1/2
41.168	1/2	3/4

MALE HEXAGONAL NIPPLE

Product No	Thread (M) NPT
41.100	1/8
41.105	1/4
41.115	3/8
41.125	1/2
41.130	3/4
41.135	1
41.127 (steel)	1-1/4
41.128 (steel)	1-1/2
41.129 (steel)	2

ANCHOR COUPLING



Product No	Thread (F) NPT	Straight Thread (M)
41.465	1/8	5/8 -18
41.466	1/4	3/4 -16
41.467	3/8	1 -14
41.468	1/2	1-1/8 -14

FEMALE HEXAGONAL NIPPLE

Product No	Thread (F) NPT
41.190	1/8
41.195	1/4
41.200	3/8
41.205	1/2
41.208	3/4

CLOSE NIPPLE

Product No	Thread (M) NPT
41.500	1/8
41.501	1/4
41.502	3/8
41.503	1/2
41.504	3/4
41.496	1
41.497	1-1/4
41.498	1-1/2
41.499	2

BRASS FITTINGS

NPT

FEMALE TEE

Product No	Thread (F) NPT
41.265	1/8
41.270	1/4
41.275	3/8
41.280	1/2
41.279	3/4

FEMALE CROSS

Product No	Thread (F) NPT
41.285	1/8
41.290	1/4
41.295	3/8
41.300	1/2

FEMALE UNION (3 PIECES)

Product No	Thread (F) NPT
41.368	1/2
41.369	3/4
41.370	1
41.371	1-1/4
41.373	2

150 PSI

90° STREET ELBOW MALE/ FEMALE

Product No	① Thread (F) NPT	② Thread (M) NPT
41.230	1/8	1/8
41.233	1/4	1/8
41.235	1/4	1/4
41.240	3/8	3/8
41.242	1/2	1/2
41.243	3/4	3/4

90° MALE ELBOW

Product No	① Thread (M) NPT	② Thread (M) NPT
41.305	1/8	1/8
41.310	1/4	1/8
41.315	1/4	1/4
41.320	3/8	1/4
41.325	3/8	3/8
41.335	1/2	1/2

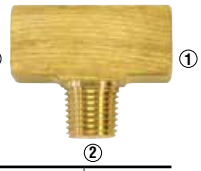
90° FEMALE UNION ELBOW

Product No	Thread (F) NPT
41.245	1/8
41.250	1/4
41.255	3/8
41.260	1/2
41.262	3/4
41.263	1
41.264	1-1/4
41.267	2

45° STREET ELBOW MALE/ FEMALE

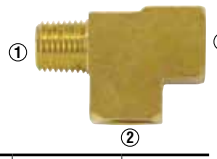
Product No	① Thread (M) NPT	② Thread (F) NPT
41.505	1/8	1/8
41.506	1/4	1/4
41.507	3/8	3/8
41.508	1/2	1/2

MALE BRANCH TEE



Product No	① Thread (F) NPT	② Thread (M) NPT
41.281	1/8	1/8
41.282	1/4	1/4
41.340	3/8	3/8

STREET TEE



Product No	① Thread (M) NPT	② Thread (F) NPT
41.283	1/8	1/8
41.284	1/4	1/4
41.342	3/8	3/8
41.343	1/2	1/2

DRAIN COCK

Product No	Thread (M) NPT
41.792	1/8
41.794	1/4
41.796	3/8

BLEED VALVE

When the button is actuated, the stem slides forward and air flow is vented through a non-threaded exhaust port. This valve releases pressurized air at a rate of 100 cubic inches in 4 seconds.

Product No	Thread (M) NPT
41.786	1/8
41.788	1/4

BRASS-ALUMINIUM FITTINGS

NPT

PIPE PLUG (COUNTERSUNK HEX HEAD)

Product No	Thread (M) NPT	Thread Hex Head
41.210	1/8	3/16
41.215	1/4	1/4
41.220	3/8	5/16
41.225	1/2	3/8

PIPE PLUG (HEX HEAD)

Product No	Thread (M) NPT	Hex Head
41.226	1/8	7/16
41.227	1/4	9/16
41.228	3/8	11/16
41.229	1/2	7/8

MALE TEE

Product No	Thread (M) NPT
41.350	1/8
41.355	1/4
41.360	3/8
41.365	1/2

PIPE PLUG (SLOTTED HEAD)

Product No	Thread (M) NPT
41.450	1/8
41.455	1/4
41.460	3/8

PIPE PLUG (SQUARE HEAD)

Product No	Thread (M) NPT
41.670	1/8
41.675	1/4
41.680	3/8
41.685	1/2
41.690	3/4
41.695	1

LONG NIPPLE

Product No	Thread (M) NPT	Length in
41.400	1/8	1.5
41.401	1/8	2
41.402	1/8	2.5
41.403	1/8	3
41.404	1/8	3.5
41.405	1/8	4
41.406	1/4	1.5
41.407	1/4	2
41.408	1/4	2.5
41.409	1/4	3
41.410	1/4	3.5
41.411	1/4	4
41.412	3/8	1.5
41.413	3/8	2
41.414	3/8	2.5
41.415	3/8	3
41.416	3/8	3.5
41.418	1/2	1.5
41.419	1/2	2
41.420	1/2	2.5
41.421	1/2	3
41.422	1/2	3.5

CAP

Product No	Thread (F) NPT
41.461	1/8
41.462	1/4
41.463	3/8
41.464	1/2

« Y » CONNECTOR

Product No	① Thread	② Thread
62.850	1/4 (F) NPT	1/4 (F) NPT
62.860	1/4 (M) NPT	1/4 (F) NPT

TOPRING

ADAPTATORS NPT - METRIC

NPT

BSPT - BSPP

NPT-BSPP ADAPTER/ ALUMINIUM

Product No	① Thread (M) NPT	② Thread (F) BSPP
41.920	1/2	1/2
41.921	3/4	3/4
41.922	1	1
41.923	1-1/4	1-1/4
41.924	1-1/2	1-1/2
41.925	2	2

BSPT-NPT ADAPTER/ ALUMINIUM

Product No	① Thread (M) BSPT	② Thread (F) NPT
41.930	1/2	1/2
41.931	3/4	3/4
41.932	1	1
41.933	1-1/4	1-1/4
41.934	1-1/2	1-1/2
41.935	2	2

BRASS-ALUMINIUM METRIC PIPE FITTINGS

BSPT - BSPP

MALE HEXAGONAL NIPPLE BSPT

Product No	① Thread (M) BSPT	② Thread (M) BSPT
41.021	1/8	1/8
41.022	1/4	1/4
41.023	3/8	3/8
41.024	1/2	1/2

MALE HEXAGONAL REDUCER BSPT

Product No	① Thread (M) BSPT	② Thread (M) BSPT
41.025	1/8	1/4
41.028	1/4	3/8
41.029	3/8	1/2
41.030	1/2	3/4
41.031	3/4	1

REDUCER MALE/FEMALE BSPP/BSPT

Product No	① Thread (F) BSPP	② Thread (M) BSPT
41.038	1/8	1/4
41.040	1/4	3/8
41.041	3/8	1/2
41.042	1/4	1/2
41.043	1/2	3/4

FEMALE HEXAGONAL NIPPLE BSPP

Product No	Thread (F) BSPP
41.056	1/8
41.057	1/4
41.058	3/8
41.059	1/2

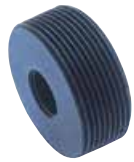
HEXAGONAL REDUCER BSPP/BSPT

Product No	① Thread (F) BSPP	② Thread (M) BSPT
41.046	1/4	1/8
41.050	3/8	1/4
41.053	1/2	3/8

90° FEMALE ELBOW BSPP

Product No	Thread (F) BSPP
41.074	1/8
41.075	1/4
41.076	3/8
41.077	1/2

THREADED ALUMINIUM REDUCER BSPT/BSPP



Product No	Thread (M) BSPT	Thread (F) BSPP
06.900	3/4	1/2
06.901	1	1/2
06.903	1-1/4	1/2
06.906	1-1/2	1/2
06.908	1-1/2	1
06.910	2	1/2
06.912	2	1
06.914	2	1-1/2
06.904	1-1/4	3/4
06.907	1-1/2	3/4
06.911	2	3/4

BRASS REDUCER

Product No	Thread (M)	Thread (F) BSPP
41.044	1 **BSPT**	1/2
41.033	1 **BSPT**	3/4
41.047	1-1/4 **BSPP**	3/4
41.054	1-1/4 **BSPP**	1
41.034*	1-1/2 **BSPP**	1/2
41.035*	1-1/2 **BSPP**	3/4
41.036	1-1/2 **BSPT**	1
41.037	1-1/2 **BSPT**	1-1/4
41.048	2 **BSPP**	1/2
41.049	2 **BSPP**	3/4
41.051	2 **BSPP**	1
41.052	2 **BSPP**	1-1/4

* Steel

PIPE PLUG (HEX HEAD)

Product No	Thread (M)
41.065	1/8 **BSPT**
41.066	1/4 **BSPT**
41.067	3/8 **BSPT**
41.068	1/2 **BSPP**
41.069	3/4 **BSPP**
41.070	1 **BSPP**
41.071	1-1/4 **BSPP**
41.072	1-1/2 **BSPT**
41.073	2 **BSPP**

BRASS HOSE BARB FITTINGS

INCH NPT

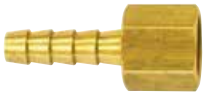
HOSE BARB TO MALE PIPE

Product No	Hose I.D. in	Thread (M) NPT
41.546	1/8	1/8
41.547	3/16	1/8
41.548	1/4	1/8
41.550	1/4	1/4
41.554	1/4	3/8
41.560	5/16	1/4
41.561	5/16	3/8
41.562	5/16	1/2
41.565	3/8	1/8
41.570	3/8	1/4
41.580	3/8	3/8
41.584	3/8	1/2
41.586	1/2	1/4
41.590	1/2	3/8
41.600	1/2	1/2
41.603	1/2	3/4
41.556	5/8	3/8
41.557	5/8	1/2
41.558	5/8	3/4
41.604	3/4	1/2
41.605	3/4	3/4
41.606	1	3/4
41.607	1	1

SWIVEL HOSE BARB TO MALE PIPE

Product No	Hose I.D. in	Thread (M) NPT
41.552	1/4	1/4
41.572	3/8	1/4
41.582	3/8	3/8
41.602	1/2	1/2

HOSE BARB TO FEMALE PIPE



Product No	Hose I.D. in	Thread (F) NPT
41.609	1/4	1/8
41.610	1/4	1/4
41.620	5/16	1/4
41.630	3/8	1/4
41.640	3/8	3/8
41.650	1/2	3/8
41.660	1/2	1/2

HOSE BARB TO FEMALE STRAIGHT (WITH GASKET)

Product No	Hose I.D. in	Thread (F) NPT
41.720	1/4	1/4
41.730	5/16	1/4
41.740	3/8	1/4
41.750	3/8	3/8
41.760	1/2	1/2

HOSE BARB TO FEMALE BALL END (2 PIECES)

Product No	Hose I.D. in	Thread (F) NPS
41.843	1/4	1/8
41.844	1/4	1/4
41.845	1/4	3/8
41.846	5/16	1/4
41.847	3/8	1/4
41.848	3/8	3/8

HOSE REPAIR KITS

Product No	Description
41.511C For 1/4 I.D. Hose	(1) 41.510 Hose barb splicer (2) 48.314 2-Ear clamps
41.531C For 3/8 I.D. Hose	(1) 41.530 Hose barb splicer (2) 48.320 2-Ear clamps
41.514C For 1/4 I.D. Hose	(1) 41.550 1/4" I.D. x 1/4 (M) Hose barb to male pipe (1) 48.314 2- Ear clamps
41.534C For 3/8 I.D. Hose	(1) 41.570 3/8" I.D. x 1/4 (M) Hose barb to male pipe (1) 48.320 2-Ear clamps

HOSE BARB SPLICER

Product No	Hose I.D. in
41.510	1/4
41.520	5/16
41.530	3/8
41.540	1/2
41.542	5/8
41.543	3/4

MAXPRO FREE ANGLE HOSE BARB FITTING

Product No	Hose I.D. in	Thread (F) NPT
62.421	1/4	1/4

BRASS HOSE BARB FITTINGS FOR « LOCK-ON » HOSE

INCH NPT

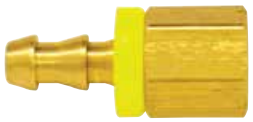
FEATURES AND BENEFITS

- Solid brass construction
- Available for most popular hose sizes
- No crimping required
- « Lock-on » hose barb fittings simplify maintenance
- For hose repairs, simply cut hose square and insert « Lock-on » fitting
- Eliminate need for crimping or skiving

HOSE BARB TO MALE PIPE

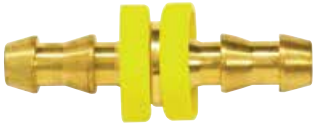
Product No	Hose I.D. in	Thread (M) NPT
41.860	1/4	1/8
41.861	1/4	1/4
41.877	1/4	3/8
41.862	3/8	1/4
41.863	3/8	3/8
41.864	3/8	1/2
41.866	1/2	3/8
41.867	1/2	1/2
41.868	5/8	1/2
41.869	3/4	3/4

HOSE BARB TO FEMALE PIPE



Product No	Hose I.D. in	Thread (F) NPT
41.871	1/4	1/4
41.872	3/8	1/4
41.873	3/8	3/8
41.874	1/2	3/8
41.875	1/2	1/2

HOSE BARB SPLICER



Product No	Hose I.D. in
41.880	1/4
41.881	3/8
41.882	1/2
41.883	5/8
41.884	3/4

SPECIFICATIONS

Maximum Working Pressure: 300 PSI

THE PROBLEM

THE SOLUTION

THE PROBLEM

THE SOLUTION

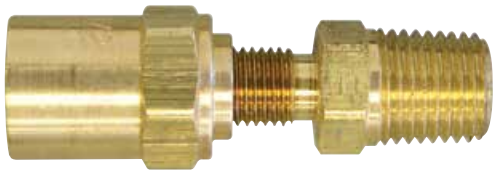
WARNING

« Lock-on » fittings should only be used with « Lock-on » type hose. Use of « Lock-on » type fittings with the wrong hose type can lead to hose and fitting failures.

For more details on « Lock-on » hoses see Series 77, p. 470.

BRASS REUSABLE HOSE FITTINGS FOR RUBBER HOSE

INCH NPT



FEATURES AND BENEFITS

- For easy and foolproof replacement of hose fittings
- Eliminate need for crimping or skiving
- Solid brass construction
- Available for most popular hose sizes

SPECIFICATIONS

Maximum Working Pressure: 250 PSI
Working Temperature Range: - 40 °C to 107 °C

Product No	Hose I.D. in	Hose O.D. in	Thread (M) NPT
41.800	1/4	1/2	1/4
41.802	1/4	9/16	1/4
41.804	1/4	5/8	1/4
41.810	5/16	9/16	1/4
41.812	5/16	5/8	1/4
41.817	3/8	5/8	1/4
41.818	3/8	5/8	3/8
41.819	3/8	11/16	1/4
41.820	3/8	11/16	3/8
41.821	3/8	3/4	1/4
41.830	1/2	7/8	1/2

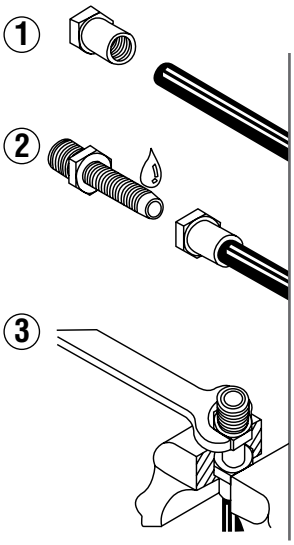
THE PROBLEM

Standard fittings used with hose clamps often lead to hose deterioration.

THE SOLUTION

Reusable hose fittings make for neat, long-lasting connections.

How to install reusable hose fittings without skiving or crimping



1. Simply slip and twist ferrule on end of hose which has been trimmed flush. No skiving necessary.
2. Apply a drop or two of lubricant to fitting before inserting into ferrule.
3. Turn reusable fitting into ferrule. Hose is expanded inside ferrule for perfect fit.

WARNING

Reusable hose fittings are not recommended for use with thermoplastic hoses

BRASS WATER HOSE FITTINGS

NPT

FEATURES AND BENEFITS

- Brass fittings for water hose connectors
- Can be assembled on certain hose reels (see Series 79)

APPLICATIONS

For most industrial plant requirements or shops

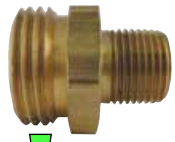
FEMALE SWIVEL CONNECTOR ① ②

Product No	Hose Thread (F) GHT ①	Thread (F) NPT ②
41.201	3/4	1/2

MALE SWIVEL CONNECTOR ① ②

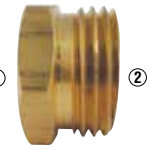
Product No	Hose Thread (F) GHT ①	Thread (M) NPT ②
41.207	3/4	3/8
41.209	3/4	1/2

MALE CONNECTOR ① ②



Product No	Hose Thread (M) GHT ①	Thread (M) NPT ②
41.211	3/4	3/8
41.212	3/4	1/2

FEMALE CONNECTOR ① ②



Product No	Hose Thread (M) GHT ①	Thread (F) NPT ②
41.216	3/4	3/8
41.217	3/4	1/2

REUSABLE HOSE FITTING FOR POLYURETHANE HOSES

(SERIES 14, 17, 74, 78)

FEATURES AND BENEFITS

- Dependable, leak-tight seal and resistant to loosening caused by vibrations
- Full flow

Product No	Hose I.D. in	Hose O.D. in
41.835	1/4	3/8

PTFE TAPE

FEATURES AND BENEFITS

- To be used on all male threaded connections to prevent air leaks
- Comes in a plastic spool dispenser
- Industrial quality

Product No	Dimensions
41.005	0.5 cm x 12.19 m

Series 47
MANIFOLDS

COMPOSITE MANIFOLDS

FEATURES AND BENEFITS

- Provide a convenient junction point for distribution networks requiring multiple connections
- Each manifold accepts one to four couplers or hoses

MATERIALS

Body: Polyamide

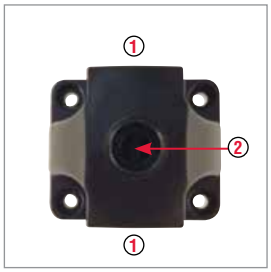
Insert: Aluminium (except 47.100, 47.102)

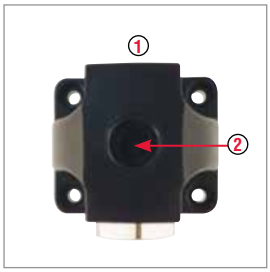
SPECIFICATIONS

Maximum working pressure: 145 PSI

Working temperature range: -20 °C to 60 °C

MANIFOLDS / 1 OUTLET





Product No		Inlet (F) BSPP ①	Outlet (F) NPT ②
Without Plug	With Plug		
47.100	47.102	1/2	3/8

SPACER FOR MANIFOLDS WITH 1 OUTLET

Product No	Thickness
47.122	9 mm

MANIFOLDS / 2 OUTLETS

Product No		Inlet (F) BSPP ①	Outlet (F) NPT ②
Without drain	With Drain		
47.108	47.109	1/2	1/2 (2x)
47.110	47.111	3/4	1/2 (2x)

SPACERS FOR MANIFOLDS WITH 2 OR 3 OUTLETS

Product No	Thickness
47.118	10 mm
47.119	13 mm
47.120	20 mm

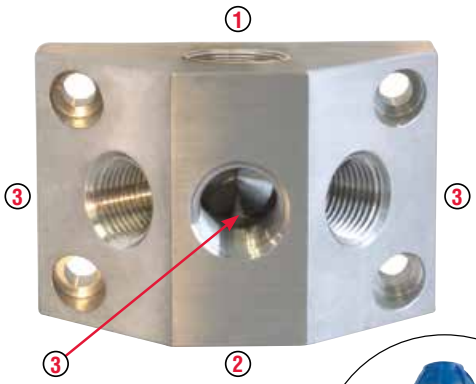
MANIFOLDS / 3 OUTLETS

Product No		Inlet (F) BSPP ①	Outlet (F) NPT ②
Without drain	With Drain		
47.114	47.115	1/2	1/2 (3x)
47.112	47.113	3/4	1/2 (3x)

MANIFOLDS / 4 OUTLETS

Product No	Inlet (F) BSPP ①	Outlet (F) NPT ②
47.150	1/2	1/2 (4x)
47.155	3/4	1/2 (4x)

ALUMINIUM MANIFOLDS 3 OUTLETS



FEATURES AND BENEFITS

- **Provide a convenient junction point for distribution networks requiring multiple connections**
- **Universal manifold with three outlets**

MATERIALS

Aluminium

SPECIFICATIONS

Maximum working pressure: 300 PSI

Working temperature range: -20 °C to 60 °C

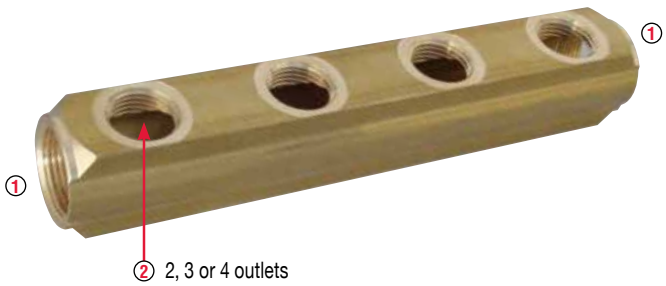
Product No	Inlet (F) NPT ①	Outlet (F) NPT ②	Outlet (F) NPT ③
47.300	1/2	1/2	1/4 (3x)

Product No	Inlet (F) BSPP ①	Outlet (F) BSPP ②	Outlet (F) NPT ③
47.307	3/4	3/4	3/8 (3x)
47.310	3/4	3/4	1/2 (3x)
47.320	1	1	1/2 (3x)

FACTS TO KNOW

Manifolds can be quickly and easily modified by using pipe plugs and reducers (see Series 41)

BRASS BAR MANIFOLDS



FEATURES AND BENEFITS

- **Provide a convenient in-line connection point for air distribution networks requiring multiple inline connections**

APPLICATION

Compressed air distribution networks

MATERIALS

Brass

SPECIFICATIONS

Maximum working pressure: 200 PSI

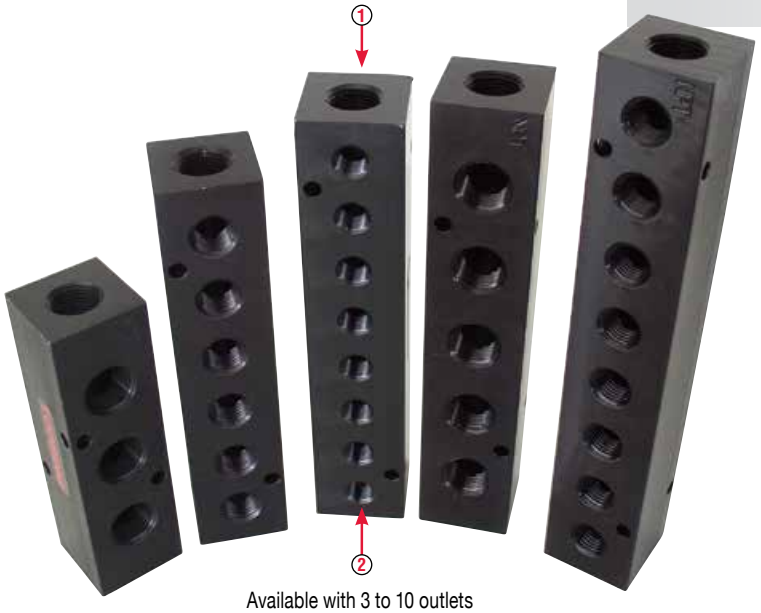
Maximum working temperature: 110 °C

Product No	Inlet/Outlet (F) BSPP ①	Outlet (F) BSPP ②
47.500	3/4	1/2 (2x)
47.505	3/4	1/2 (3x)
47.510	3/4	1/2 (4x)
47.520	1	1/2 (2x)
47.525	1	1/2 (3x)
47.530	1	1/2 (4x)

ALUMINIUM BAR MANIFOLDS

FEATURES AND BENEFITS

- **Provide a convenient junction point for applications in control systems or distribution networks requiring multiple connections**
- **Eliminates the need for « T » fittings**
- **Drilled mounting holes (two per side)**



Available with 3 to 10 outlets

Product No	Inlet/Outlet (F) NPT ①	Outlet F (NPT) ②
47.402	1/4	1/8 (4x)
47.404	1/4	1/8 (6x)
47.416	3/8	1/8 (8x)
47.418	3/8	1/8 (10x)
47.421	3/8	1/4 (3x)
47.422	3/8	1/4 (4x)
47.423	3/8	1/4 (5x)
47.424	3/8	1/4 (6x)
47.425	3/8	1/4 (7x)
47.426	3/8	1/4 (8x)
47.427	3/8	1/4 (9x)
47.428	3/8	1/4 (10x)
47.431	3/8	3/8 (3x)
47.432	3/8	3/8 (4x)
47.433	3/8	3/8 (5x)

APPLICATIONS

Air outlets, machine and distribution lines, control panels

MATERIALS

Aluminium with black anodizing for corrosion resistance

SPECIFICATIONS

Maximum working pressure: 1000 PSI
Working temperature range: -23 °C to 93 °C
Fluids: Air and liquids/gases compatible with aluminium

ALUMINIUM BAR MANIFOLDS

FEATURES AND BENEFITS

- **Ideal for multiple coupler connections**
- **Full flow design**
- **Mounting holes**

Product No	Inlet/Outlet (F) NPT ①	Outlet F (NPT) ②
47.550	1/2	1/4 (2x)
47.551	1/2	1/4 (3x)
47.552	1/2	1/4 (4x)
47.553	1/2	1/4 (5x)

Series 48
HOSE CLAMPS

STAINLESS STEEL HOSE CLAMPS

FEATURES AND BENEFITS

- Used for rubber and PVC hoses
- Ideal for maintenance applications
- Easy to install
- Can be removed and reused
- Stainless steel offers maximum resistance to corrosion

APPLICATIONS

Repairs for a wide variety of applications
Ideal for special situations requiring extra reinforcement

MATERIALS

301 stainless steel

Product No	Size No	Size in	Size mm	Band width mm
48.200	4	1/4 - 5/8	6 - 16 mm	8
48.202	6	5/16 - 7/8	8 - 22 mm	8
48.204	6	7/16 - 25/32	10 - 20 mm	12.7
48.206	8	7/16 - 1	11 - 25 mm	12.7
48.208	10	9/16 - 1-1/16	14 - 27 mm	12.7
48.210	12	1/2 - 1-1/4	13 - 32 mm	12.7
48.212	16	13/16 - 1-1/2	21 - 38 mm	12.7
48.220	20	13/16 - 1-3/4	21 - 44 mm	12.7
48.222	24	1-1/16 - 2	27 - 51 mm	12.7
48.224	28	1-5/16 - 2-1/4	33 - 57 mm	12.7
48.226	32	1-9/16 - 2-1/2	40 - 64 mm	12.7
48.228	36	1-13/16 - 2-3/4	46 - 70 mm	12.7
48.230	40	2-1/16 - 3	52 - 76 mm	12.7

TWO EAR CLAMPS

FEATURES AND BENEFITS

- One-piece design offers positive clamping action without damage to hose or tubing
- Rubber and PVC hoses are easily clamped
- Quick to assemble using crimping pincers

APPLICATIONS

Widely used on air, fluid, gas lines

MATERIALS

Zinc plated steel

Product No	Size mm	Band width mm
48.304	3-5	7+/-0.2
48.306	5-7	7+/-0.2
48.308	7-9	7+/-0.2
48.310	9-11	7+/-0.2
48.314	11-13	7+/-0.2
48.316	13-15	7.5+/-0.5
48.320	15-18	7.5+/-0.5
48.322	17-20	7.5+/-0.5
48.326	20-23	9+/-2
48.328	21-25	9+/-2
48.330	23-27	9+/-2
48.332	25-28	9+/-2
48.334	28-31	9.5+/-0.2
48.338	31-34	9.5+/-0.2
48.340	34-37	9.5+/-0.2
48.342	37-40	10+/-0.2
48.344	40-43	10+/-0.2
48.346	43-46	10+/-0.2

INSTALLATION

One ear should be clamped all the way.

When the second ear is closed, the first ear will open slightly.

This creates a spring-like action which holds against pressure, vibration and hose shrinking caused by temperature changes or aging.

TECH TIP

Select nominal clamp size nearest but larger than O.D. of hose on which clamp is to be used

TUBE AND HOSE CUTTER

FEATURES AND BENEFITS

- Used to cut tube and hose up to 30 mm diameter
- Safety hook keeps cutter closed after use
- Safe

Product No	Description
36.100	Tube cutter
36.105	Replacement blades

CRIMPING PINCER

FEATURES AND BENEFITS

- Used for pinching and removal of ear clamps

Product No	Description
48.600	Crimping pincer

TWO EAR CLAMP KIT

FEATURES AND BENEFITS

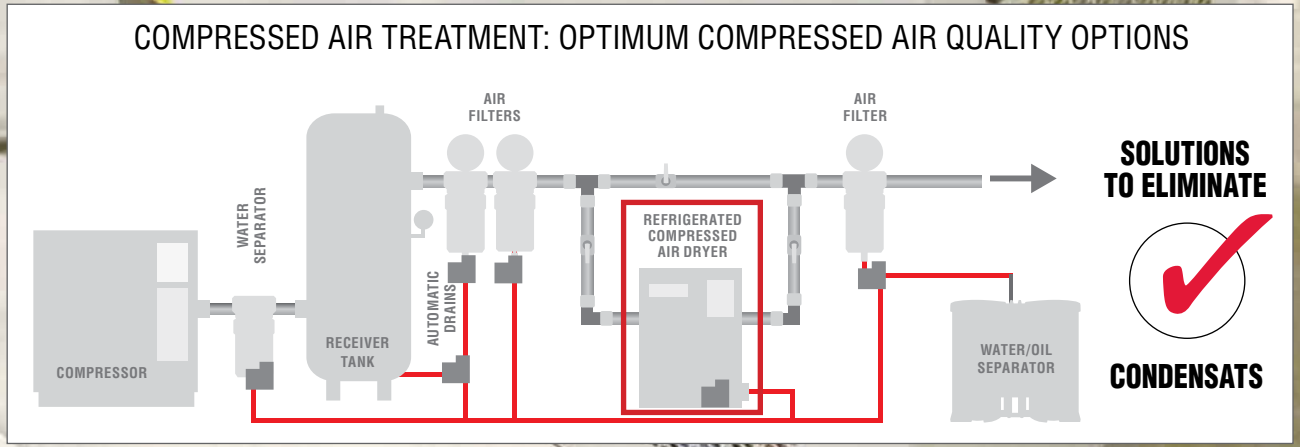
- Ideal for regular service or emergency use
- Most commonly used sizes with crimping pincer in a plastic box

Product No	Description
48.900	Two ear clamp kit with crimping pincer

KIT CONTAINS:

10 x 48.308 (7-9 mm)
10 x 48.310 (9-11 mm)
10 x 48.314 (11-13 mm)
10 x 48.316 (13-15 mm)
10 x 48.320 (15-18 mm)
10 x 48.322 (17-20 mm)
10 x 48.326 (20-23 mm)
10 x 48.330 (23-27 mm)
1 x 48.600 crimping pincer

Series 49
REFRIGERATED COMPRESSED AIR DRYERS



COMPRESSED AIR AND WATER

Compressed air is an effective and reliable source of power used in many industrial operations and processes and to power tools of all sorts.

However, compressed air does have some inherent problems which, if not treated properly, can create all sorts of trouble.

Ambient air ingested by a compressor contains a substantial amount of water vapour. The compression process increases the volume of water for a given volume of air. Compression also increases air temperature, increasing the air's ability to retain water in vapour form.

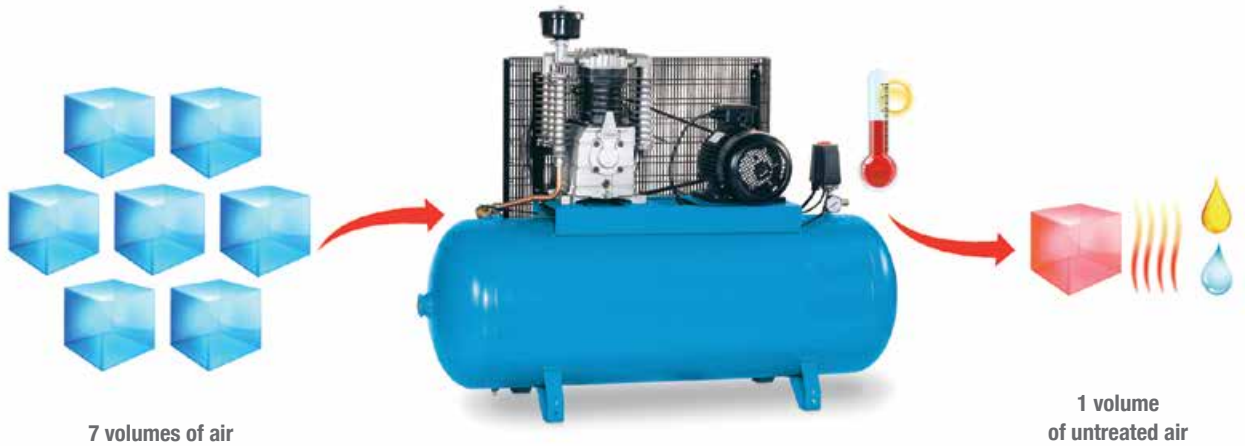
As the now moisture-laden and compressed air travels along piping networks, it cools, and the water vapour condenses into liquid water. This water accumulates in piping and drop legs and eventually gets into tools and equipment, causing considerable problems:

- **Rust and corrosion of piping**
- **Rust and corrosion of tools and equipment**
- **Premature wear and excessive maintenance requirements for FRL**
- **Washed away lubricants**
- **Creation of sludge and varnishes when combined with residual oil and other contaminants**

Therefore, a compressed air system containing excessive water could lead to:

- **Contaminated products and/or paints**
- **Rejections and downtime**
- **Increased repairs and maintenance**
- **Overall increased costs**

Compressed air dryers are designed to eliminate all of these problems before they occur.



7 volumes of air at atmospheric pressure

Atmospheric air, a gas mixture, naturally contains solid particles such as dust, sand, salt, soot or other contaminants.

Compressor + energy

A compressor will transform 7 volumes of air at atmospheric pressure into 1 volume of higher pressure air (about 100 psig, or 7 bar).

Air compressed by a compressor is subjected to high emperatures.

The hot air and vapors emerging from the compressor are then introduced into the compressed air network and this can cause considerable problems.

1 volume of untreated air at higher pressure

Upon cooling, the hot air and vapors (including contaminants and oil from the compressor) condense and form a contaminated presence of water in the air system.

To ensure that air reintroduced into the compressed air network is clean and dry, it is necessary to install a refrigerated air dryer and condensate treatment system at the compressor outlet.

Alaska II

REFRIGERATED AIR DRYERS

FEATURES & BENEFITS

DEMISTER SEPARATOR

- High capacity demister separator is employed for the removal of condensed liquids.
- Lowers the air velocity which maximizes the condensate separation from the air, even when the dryer is not operating at maximum flow.
- Ensures the differential pressure across the dryer is kept to a minimum.

CONDENSATE DRAIN

- Timed automatic drain.
- The positioning of the drain niche allows for easy access to the drain without the requirement of removing panels.

REFRIGERANT CONDENSER

- Oversized high efficiency air cooled condenser.
- Re-positioned to improve reliability and reduce the risk of dirt contamination.

REFRIGERANT COMPRESSOR

- Maintenance free hermetically sealed refrigerant compressor.
- Low refrigerant charge eliminates the requirement for pre-heating on start up and prevents any liquid refrigerant returns.

ASSURED QUALITY

- Every dryer undergoes sophisticated testing, including dewpoint tests with compressed air flow.
- Multiple helium leak testing, again on every dryer, ensures years of trouble-free operation.

Alaska II

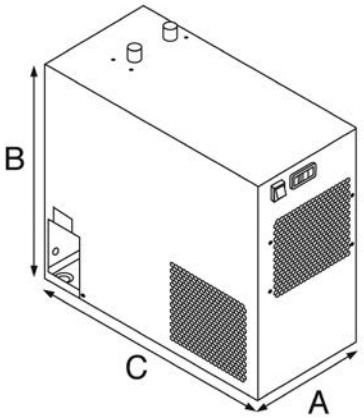
STANDARD REFRIGERATED AIR DRYERS

TOPRING Alaska II refrigerated air dryers actively remove this condensate to achieve near perfectly dry compressed air. The benefits are notable: less system downtime, reduced costs and maintenance and an improved finished product.

FEATURES AND BENEFITS

- **" Plug & Play " design for easy installation and operation (49.305 – 49.345)**
- **Compact, space saving design**
- **Variable flow design achieved by non velocity sensitive slow flow moisture separator**
- **Ultra low pressure differential across the dryer (1.45 PSIG average) saves energy**
- **Oversized condenser to operate in ambients to 50 °C**
- **All models incorporate a built in dewpoint indicator**
- **Environmentally friendly refrigerant**

CRN CANADIAN REGISTRATION NUMBER



APPLICATIONS

General industry, where dry compressed air is important
Auto repair and paint shops
Any type of painting or finishing operations
Sand blasting operations

SPECIFICATIONS

Maximum Ambient Temperature: 50 °C
Maximum Inlet Temperature:
49.305 to 49.355: 65 °C
49.360 and 49.365: 60 °C
Maximum Inlet Pressure:
49.305 to 49.355: 232 PSI
49.360 and 49.365: 203 PSI
Refrigerant:
49.305 to 49.355: R134a
49.360 and 49.365: R407C

Product No	Nominal Flow SCFM	Pipe Size (F) NPT	Power Supply	HE Filter Recommended	Dimensions (cm)			Weight kg
					A	B	C	
49.310	15	1/2	115/1/60	53.051	21.1	43.2	45.0	19.1
49.315	25	1/2	115/1/60	53.051	21.1	50.5	50.0	23.6
49.320	35	1/2	115/1/60	53.051	21.1	50.5	50.0	23.6
49.330	50	3/4	115/1/60	53.071	22.6	56.6	52.1	26.3
49.335	75	3/4	115/1/60	53.071	22.6	56.6	52.1	30.8
49.345	125	1-1/2	230/1/60	53.121	42.4	60.5	55.4	52.2
49.350	150	1-1/2	230/1/60	53.121	42.4	60.5	55.4	58.1
49.355	175	1-1/2	230/1/60	53.121	42.4	60.5	55.4	59.9
49.360	200	1-1/2	230/1/60	53.121	71.1	94.0	55.9	83.0
49.365	250	1-1/2	230/1/60	53.141	71.1	106.0	104.0	130.2

100 PSIG operating pressure, 37.8 °C ambient air temperature, 37.8 °C entering air temperature

REFRIGERATED AIR DRYER CHALLENGES

PROBLEMS

NO 1 TOO MANY UNITS

The solution to contaminated compressed air problems has traditionally been the use of compressed air treatment products such as an after-cooler, moisture separator, coalescing filter and a refrigerated dryer to condense any remaining saturated water. This is often impossible due to space limitations in the compressor room.

NO 2 TOO HOT

Many compressor installations lack an after cooler and/or sufficient pipe run before the dryer to cool the compressed air down. Since compressed air can often reach temperatures in excess of 93 °C, this is a problem for standard dryers.

High ambient temperatures can also wreak havoc on refrigerated dryer performance, leading to dew point problems.

SOLUTION

Alaska II

HI-TEMPERATURE REFRIGERATED AIR DRYERS

The solution to both of these problems is an **all-in-one** compressed air purifying package that can process hot air to provide cool, clean and dry compressed air.

Hi-Temperature refrigerated air dryers Alaska II combine all the required elements to perform this task. One inlet, one outlet air connection and one electrical power hook-up are all that is required to achieve clean, dry compressed air.

Alaska II

HI-TEMPERATURE REFRIGERATED AIR DRYERS

The **TOPRING** Hi-Temperature refrigerated air dryer eliminates the need for a separate aftercooler, moisture separator and particulate filter. With its advanced 5 in 1 drying system, the need for additional piping and separate aftercooler is eliminated in existing applications resulting in lower pressure drop thereby saving you money.

Incorporated within each **TOPRING** Hi-Temperature refrigerated air dryer is an aftercooler, 3.0 micron filter, condensate separator, precooler/reheater and evaporator.

FEATURES AND BENEFITS

- **Handles inlet temperature up to 93 °C**
- **R134a environmentally friendly refrigerant**
- **Small space design**
- **Energy efficient, low running costs**
- **Air to air heat exchanger reduces overall size of refrigeration circuit by up to 60%**
- **Timed solenoid drain equals improved reliability**
- **No condensation on downstream piping**
- **Air to air heat exchanger raises outlet air temperature eliminating condensation that can occur on chilled piping in humid conditions**
- **Components already built into the dryer, offering an all-in-one, easy to install package**
- **Suited for placement after reciprocating type air compressor when clean, dry air is required**

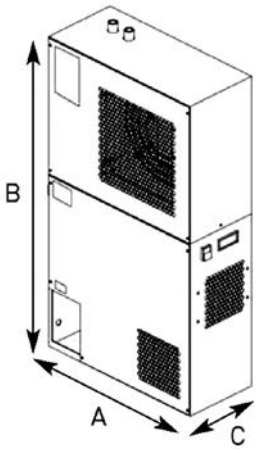
CRN CANADIAN REGISTRATION NUMBER

APPLICATIONS

General industry, where dry compressed air is important
Auto repair and paint shops
Any type of painting or finishing operations
Sand blasting operations

SPECIFICATIONS

Maximum Ambient Temperature: 46 °C
Maximum Inlet Temperature: 93 °C
Maximum Inlet Pressure: 232 PSI
Refrigerant: R134a



Product No	Nominal Flow SCFM	Pipe Size (F) NPT	Power Supply	HE Filter Recommended	Dimensions (cm) A	B	C	Weight kg
49.550	15	3/8	115/1/60	53.021	45	81.3	24.9	24
49.555	25	1/2	115/1/60	53.051	59.9	99.1	28.2	42
49.560	35	1/2	115/1/60	53.051	59.9	99.1	28.2	43
49.565	50	3/4	115/1/60	53.071	70.1	121.2	35.3	60
49.570	75	3/4	115/1/60	53.071	70.1	121.2	35.3	69
49.575	100	3/4	115/1/60	53.071	70.1	121.2	35.3	73

125 PSIG operating pressure, 35 °C ambient air temperature, 82 °C entering air temperature

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ANNUAL MAINTENANCE KITS

Maintenance kits include replacement filter element, evaporator drain, filter drain and associated " O " ring seals.

Product No	Maintenance kit for models
49.606	49.550
49.616	49.555, 49.560, 49.565
49.626	49.570, 49.575

AIR TREATMENT AT THE POINT OF USE

THE IMPORTANCE OF AIR TREATMENT

COMPRESSED AIR MUST BE:

- Clean and dry enough to prevent contaminant and rust damage to equipment
- Flowing at the right pressure for the particular use
- Combined with a lubricant (in many but not all cases) to reduce friction and wear on internal components of tools and equipment

The process of ensuring that air meets these criteria is called **treatment**, which is broken down into three elements; **filtration**, **pressure regulation** and **lubrication**.

Since the raw material used by compressor systems is usually untreated ambient air, compressed air often contains water vapor and contaminating particles concentrated by the compression process that could be harmful to pneumatic equipment.

Filters remove these impurities and a large part of the water.

Regulators ensure that the compressed air stays within a specified pressure range.

Lubricators inject a metered quantity of lubricating oil mist or fog into the compressed air stream.

3 STEPS TO AIR PREPARATION

1. FILTRATION

Compressing air requires the filtration of contaminates generated from the compression cycle. Compressed air can contain billions of contaminating particles. At high concentration and high speed, these particles can be harmful to any compressed air system.

In addition, when ambient air is drawn into a compressor, it can, depending on weather conditions, have relative humidity of up to 100%. As air is compressed and cooled, some water vapor condenses out as free water, but even with a compressor aftercooler, some moisture is swept downstream into the air system. This frequently results in rusted pneumatic tools and components, destroyed lubricants and frozen air lines during low temperature periods.

Other types of foreign matter in air lines include: impurities generated within the air line, such as wear particles, pipe scale and rust; construction and assembly debris; and contaminants ingested into the air system during maintenance or through leaks.

All these contaminants and water must be removed by a filter to ensure that the system works efficiently, economically, safely and trouble-free for a long time.

Compressors also produce oil; most oils suspended in a compressed air stream are in the form of a tiny mist or aerosol droplets which can pass through a standard filter element. If it is necessary to remove these aerosols, a **coalescing filter** can be used (for paint applications for example.

2. PRESSURE REGULATION

A **regulator** is a specialized control valve which reduces the upstream supply pressure level to a specified constant downstream pressure. It does this regardless of variations in that upstream pressure or changes in flow through the valve.

Pneumatic equipment that is operated at a higher than recommended pressure level wastes the energy which generates that pressure, creates a potential safety hazard, and will probably wear out prematurely.

Operating below specified pressure levels can cause the machine to fail to meet design performance specifications.

Precise air pressure control is essential to efficient operation of air-powered equipment.

3. LUBRICATION

Many pneumatic system components and most pneumatic tools require oil lubrication for proper operation and long service life. This lubricant is anormally carried by the air stream.

Too little oil can cause excessive wear and premature failure. Too much oil is wasteful and can become a contaminant, gumming up piping, hoses and equipment.

Intermittent lubrication may be the worst situation, because the oil film can dry out to form sludges and varnishes on internal surfaces.

A properly sized and adjusted mist-type **lubricator** installed within 5 meters of the tool will ensure the proper amount of oil gets to the tool to prolong its useful life without causing deterioration. A properly sized and adjusted micro-mist type lubricator may be installed within 30 meters of the tool.

ALL THREE WORK TOGETHER IN COMBINATION UNITS

Filters, regulators, coalescing filters and lubricators are usually found in combination units mounted close to the application.

These combination units are designed to provide the various treatment functions required by the application in question in convenient, compact packages.

Such combinations usually include a filter and regulator (or filter/regulator piggyback unit), followed by either a lubricator (for tool applications) or a coalescing filter (for paint applications)

Combination units should be chosen based on the flow capacity of the most restrictive unit, based on tool requirements.

INSTALLATION

WHERE TO INSTALL A FILTER?

- Install as far away from compressor as possible.
  This allows air to cool and moisture to condense.
  It is easier to remove condensed moisture than vapors
- As close to tool as possible
- Before regulator and lubricator
- With arrows pointing in direction of air flow (towards tool)

WHERE TO INSTALL A REGULATOR?

- After filter but before lubricator
- In any position (vertical, horizontal)
- With arrows pointing in direction of air flow (towards tool)
- At each branch which requires a specified pressure rating

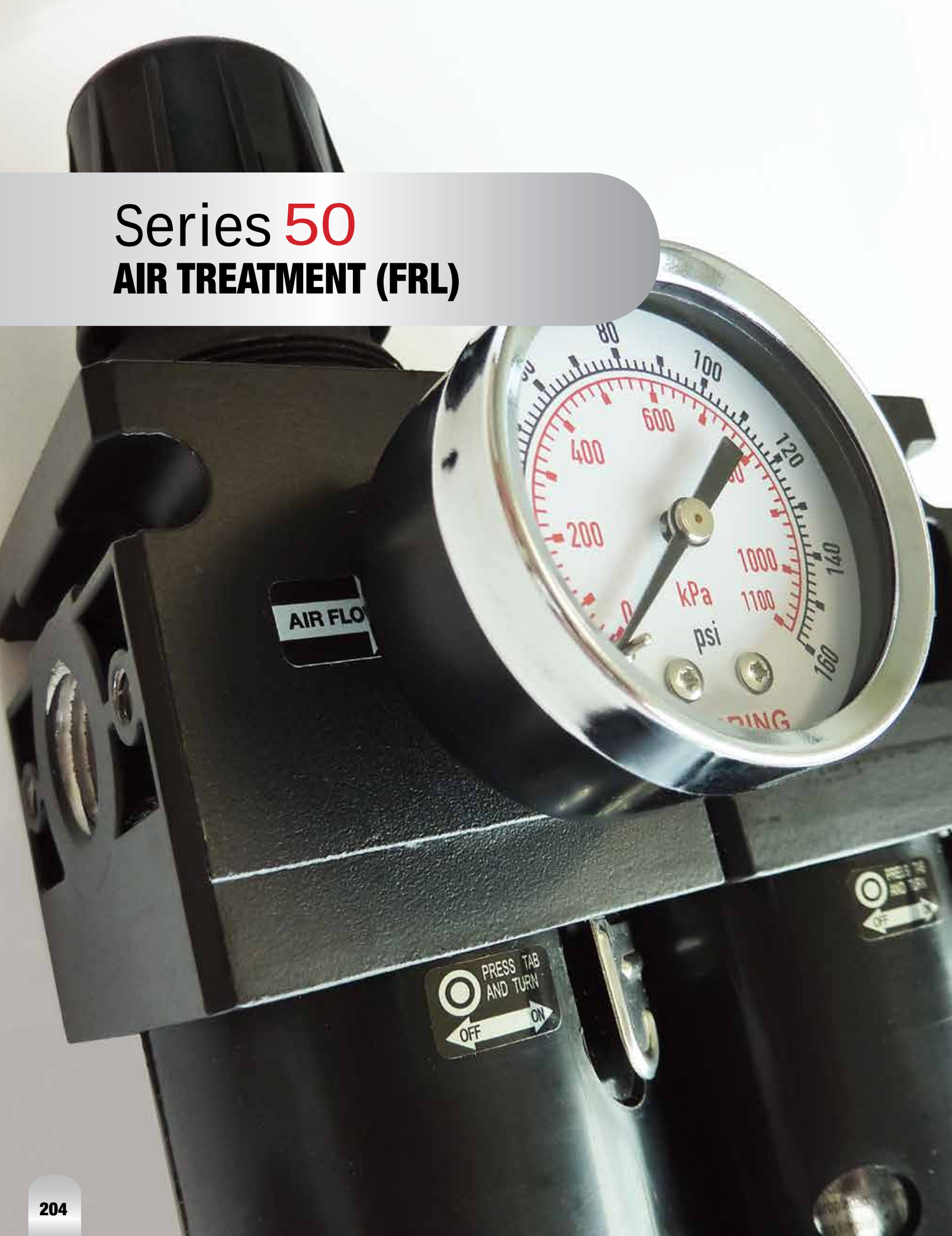
WHERE TO INSTALL A LUBRICATOR?

- As close to tool as possible - no more than 5 meters away or 30 meters micro-mist lubricators
- After filter and regulator
- With easy access for refilling
- With arrows pointing in direction of air flow (towards tool)

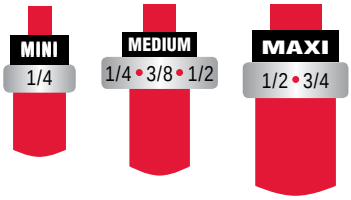
MOUNTING

Regardless of configuration, the connecting piping alone will not support these components. Support brackets or clamps should be added so system vibration will not create leak paths at the port threads.

Series 50
AIR TREATMENT (FRL)



MODULAIR
FILTERS, REGULATORS AND LUBRICATORS



- TOTAL FLEXIBILITY
- EXCELLENT PERFORMANCE
- COMPACT SIZE
- EASY MAINTENANCE

MATERIALS

Body Material
MINI • MEDIUM: Zinc
MAXI: Aluminium

Bowl Type: Polyurethane or zinc with wraparound sight gauge or zinc

Regulator Construction
MINI • MEDIUM: Zinc body - Glass-filled Acetal spring cage / Piston-operated - Relieving type
MAXI: Zinc spring cage with plastic knob - Diaphragm-operated - Relieving type

Drain: Manual drain or automatic float drain

SPECIFICATIONS

Maximum Pressure:
Polyurethane Bowl: 150 PSI
Zinc Bowl (Manual Drain): 250 PSI
Zinc Bowl (Auto Drain): 175 PSI

Temperature Range:
Polyurethane Bowl: 4 °C to 52 °C
Zinc Bowl (Manual Drain): 4 °C to 66 °C
Zinc Bowl (Auto Drain): 4 °C to 52 °C

Pressure Range: 0-25, 0-60, 0-125 and 0-250 PSI

FEATURES AND BENEFITS

- Modular design, especially when used with piping adapters, allows quick field conversion or servicing of individual units without disturbing existing piping
- Modular connection reduces the number of possible leak points associated with nipple mounted units
- Installation flexibility - no special inserts or connectors required
- Enhanced versatility in 3 body sizes, ports from 1/4 to 3/4
- Full range of accessories for maximum FRL flexibility
- Optional safety shut off lockout valve
- Integrated wall mounting slots
- Chemically resistant transparent polyurethane bowls
- Integrated bowl guards to protect against bowl rupture
- Superior product finish (epoxy powder paint)

MODULARITY
SAVES TIME AND MONEY

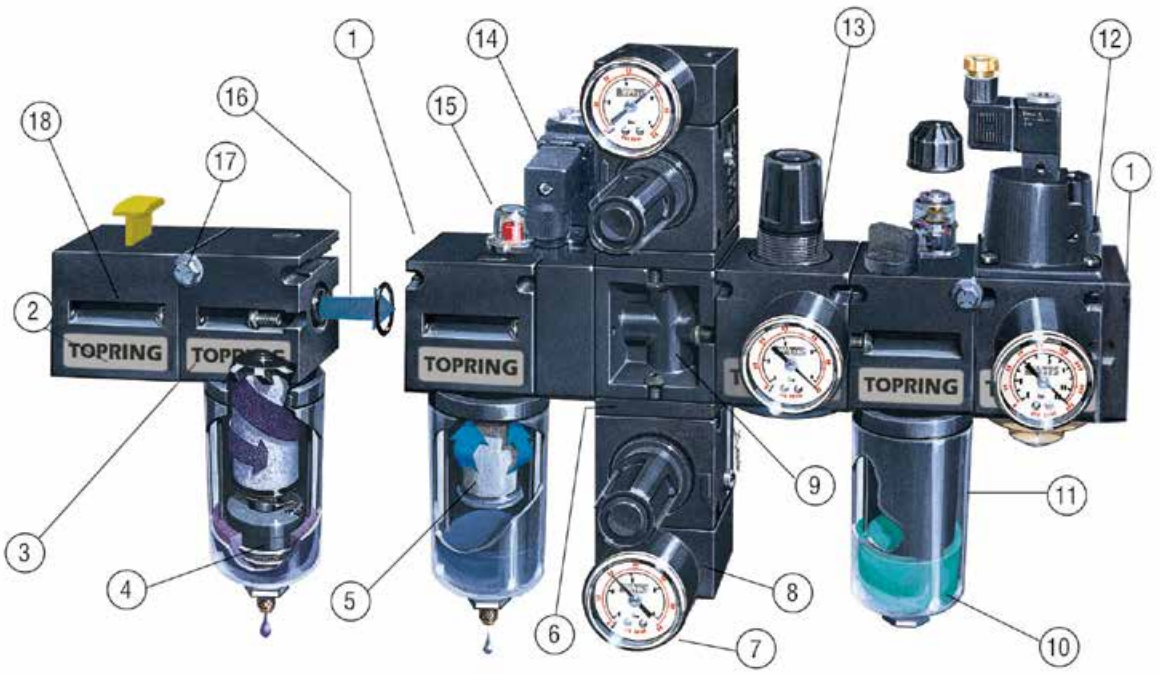
TOPRING MODULAIR FRL units are easy to put together, take apart and install. Units are simply mounted together using the provided screws and O-ring seals, without the need for pipe nipples.

Installation is just as simple, especially using piping adaptors. The unit is installed by simply screwing the piping adaptors onto the two ends of the piping and sliding the FRL unit into place, securing it with the provided screws and O-ring seals. Removal for maintenance purposes is just as simple, requiring only the removal of the retaining screws in order to slide the unit out.

Assembly is simple using Allen key style screws and an O-ring

Units can be quickly and easily assembled and disassembled

MODULAIR
FILTERS, REGULATORS AND LUBRICATORS



1. PIPING ADAPTORS
Mount to all components. Allow basic component removal without disconnecting pipes.

2. SHUT OFF VALVES
Isolate downstream equipment with 3-way lockable shut off valve. Comply with OSHA Standard 29 CFR Part 10. Vented to relieve downstream pressure in off position.

3. PARTICULATE FILTERS
Deflector plate insures maximum water removal while 5 micron element eliminates damaging particulate matter.

4. AUTOMATIC FLOAT DRAIN
Optional automatic float drain removes condensation as required. Manual drain standard.

5. COALESCING FILTERS
High efficiency 0.01 micron element remove damaging oil and water aerosols.

6. DIRECTION PLATES
Rotate connected components 90°.

7. PRESSURE GAUGES
Heavy duty industrial pressure gauges included.

8. BRANCH BLOCK
1/8 NPT ports top and bottom.

9. DIVERTER BLOCKS
Provide component manifolding and branch lines.

10. LUBRICATORS
Provide consistent lubrication under variable flow conditions. Removable adjusting knob renders lubricator tamperproof (standard).

11. WRAPAROUND SIGHT GAUGE BOWL
All filters, lubricators, and integrated F/Rs are available with the wraparound sight gauge bowl. These unique polyurethane bowls provide the 360° visibility of a plastic bowl while maintaining the high strength and safety features of metal bowls. transparent polyurethane bowls with guards and metal bowls are also available.

12. SOFT START/ QUICK EXHAUST VALVE
Combination 3 in 1 valve:
- Solenoid shut off valve
- Autopilot soft start valve
- Quick exhaust valve

13. REGULATORS
Accurate high flow regulators with positive snap lock, Push/Pull adjusting knobs for easy operation.

14. PRESSURE SWITCH
Provides electric signal when a specific pressure is achieved.

15. DIFFERENTIAL PRESSURE POP-UP INDICATOR
Indicates need to change coalescing filter element (**MEDIUM** and **MAXI**).

16. DIRECT CONNECT
All components connect using standard machine screws and O-rings. No special inserts required.

17. INTEGRAL WALL MOUNTING
System eliminates the need for special brackets. Standard on all series 50.

18. TEXTURED FINISH
All components are textured to provide superior powder coat adhesion and a durable surface finish.

TRUE MODULARITY COMES WITH THE USE OF PIPING ADAPTERS

The biggest challenge with standard type FRL units requiring brass pipe fittings is screwing the unit onto opposing ends of air line piping (while tightening one end, the other end is being loosened).

With the piping adapters available for **TOPRING MODULAIR** FRL, the unit is installed by simply screwing the piping adapters onto the two ends of the piping and sliding the FRL unit into place, securing it with the provided screws and O-ring seals.

Removal for maintenance purposes is just as simple, requiring only the removal of the retaining screws in order to slide the unit out.

Piping adapters are therefore the ideal method for allowing simple and easy installation and removal of FRL units.

TECH TIP

PIPING ADAPTORS

(Set of 2)

Designed to install or remove basic units without direct pipe connections to the units.

4 screws and 2 O-rings included.

STANDARD TYPE → VERY DIFFICULT

Standard type FRL use pipe nipples

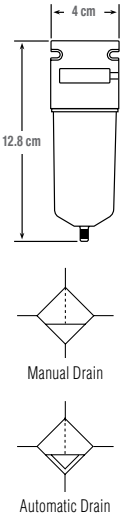
This makes maintenance more difficult

MODULAIR → VERY EASY

MODULAIR FRL with pipe adapters make for a very neat installation

Removal is very easy, since the piping adapters allow the unit to slide out

MODULAIR MINI
FILTER



- **Compact size**
- **High flow capacity**
- **Removes water through centrifugal force**
- **Removes contaminants down to 5 micron in size**
- **Automatic drain available**

SPECIFICATIONS

Port Size: 1/4 (F) NPT

Maximum Air Flow at 100 PSI: 31 SCFM

Maximum Pressure:
Polyurethane Bowl: 150 PSI
Zinc Bowl (Manual Drain): 250 PSI
Zinc Bowl (Auto Drain): 175 PSI

Temperature Range:
Polyurethane Bowl: 4 °C to 52 °C
Zinc Bowl: 4 °C to 66 °C

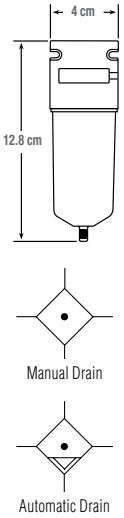
Filtration: 5 micron

Drain: Manual drain or piston-type auto drain

Bowl Capacity: 44.4 ml

POLYURETHANE BOWL		ZINC BOWL		Port Size (F) NPT
Manual Drain Product No	Auto Drain Product No	Manual Drain Product No	Auto Drain Product No	
50.120	50.121	50.122	50.123	1/4

MODULAIR MINI
COALESCING FILTER



- **Compact size**
- **Highly efficient coalescing filter designed to remove all solid particles over 0.01 micron, together with 99.999% of oil and oil aerosols**
- **Automatic drain available**

SPECIFICATIONS

Port Size: 1/4 (F) NPT

Maximum Air Flow at 100 PSI: 20 SCFM

Maximum Pressure:
Polyurethane Bowl: 150 PSI
Zinc Bowl (Manual Drain): 250 PSI
Zinc Bowl (Auto Drain): 175 PSI

Temperature Range:
Polyurethane Bowl: 4 °C to 52 °C
Zinc Bowl: 4 °C to 66 °C

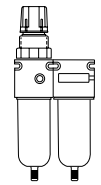
Filtration: 0.01 micron

Drain: Manual drain or piston-type auto drain

Bowl Capacity: 44.4 ml

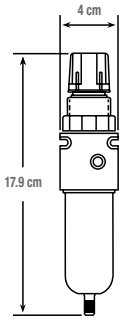
TECH TIP

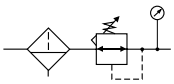
A coalescing filter should always be preceded by a filter or a filter/regulator (see page 203)

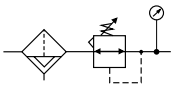


POLYURETHANE BOWL		ZINC BOWL		Port Size (F) NPT
Manual Drain Product No	Auto Drain Product No	Manual Drain Product No	Auto Drain Product No	
50.920	50.921	50.922	50.923	1/4

MODULAIR MINI
INTEGRATED FILTER/REGULATOR
GAUGE INCLUDED




Manual Drain


Automatic Drain

- **Compact size**
- **High flow capacity**
- **Push/Pull adjusting knob**
- **Removes water through centrifugal force**
- **Removes contaminants down to 5 micron in size**
- **Maintains constant downstream pressure**
- **Automatic drain available**

SPECIFICATIONS

Port Size: 1/4 (F) NPT

Maximum Air Flow at 100 PSI: 31 SCFM

Maximum Pressure:
Polyurethane Bowl: 150 PSI
Zinc Bowl (Manual Drain): 250 PSI
Zinc Bowl (Auto Drain): 175 PSI

Temperature Range:
Polyurethane Bowl: 4 °C to 52 °C
Zinc Bowl: 4 °C to 66 °C

Pressure Range: Standard: 0-125 PSI
Options: 0-25 PSI • 0-60 PSI

Filtration: 5 micron

Drain: Manual drain or piston-type auto drain

Bowl Capacity: 44.4 ml

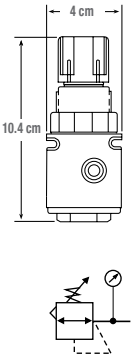
Pressure Gauge Port Size: 1/8 (F) NPT

Panel Mount Thread: 1-3/16 - 18 UNEF - 2B

Panel Mount Opening: 1-1/4 in (3,2 cm)

POLYURETHANE BOWL		ZINC BOWL		
Manual Drain Product No	Auto Drain Product No	Manual Drain Product No	Auto Drain Product No	Port Size (F) NPT
50.220	50.221	50.222	50.223	1/4

MODULAIR MINI
REGULATOR
GAUGE INCLUDED



- **Compact size**
- **High flow capacity**
- **Push/Pull adjusting knob**
- **Maintains constant downstream pressure**

SPECIFICATIONS

Port Size: 1/4 (F) NPT

Maximum Air Flow at 100 PSI: 40 SCFM

Maximum Pressure: 300 PSI

Temperature Range: 4 °C to 52 °C

Pressure Range 0-125 PSI

Pressure Gauge Port Size: 1/8 (F) NPT

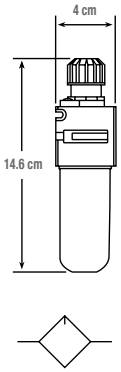
Panel Mount Thread: 1-3/16 - 18 UNEF - 2B

Panel Mount Opening: 1-1/4 in (3,2 cm)

Product No	Pressure Range PSI	Port Size (F) NPT	Replacement Gauge
50.320 *	0-125	1/4	55.120
50.322 **	0-125	1/4	55.120
50.323	0-25	1/4	55.100
50.324	0-60	1/4	55.110

* Standard model ** Non-relieving type

MODULAIR MINI
LUBRICATOR



- **Compact size**
- **High flow capacity**
- **Precision needle valve assures repeatable oil delivery and provides simple adjustment of delivery rate**
- **Recommended oil Series 69 page 449**

SPECIFICATIONS

Port Size: 1/4 (F) NPT

Maximum Air Flow at 100 PSI: 45 SCFM

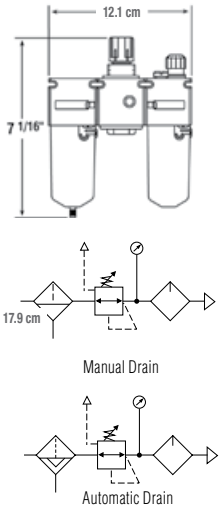
Maximum Pressure:
Polyurethane Bowl: 150 PSI
Zinc Bowl: 250 PSI

Temperature Range:
Polyurethane Bowl: 4 °C to 52 °C
Zinc Bowl: 4 °C to 66 °C

Bowl Capacity: 44.4 ml

POLYURETHANE BOWL Product No	ZINC BOWL Product No	Port Size (F) NPT
50.420	50.422	1/4

MODULAIR MINI
COMBINATION UNIT F+R+L
GAUGE INCLUDED



- **Compact size**
- **High flow capacity**
- **Push/Pull adjusting knob**
- **Precision needle valve assures repeatable oil delivery and provides simple adjustment of delivery rate**
- **Automatic drain available**
- **Recommended oil Series 69 page 449**

SPECIFICATIONS

Port Size: 1/4 (F) NPT

Maximum Air Flow at 100 PSI: 31 SCFM

Maximum Pressure:
Polyurethane Bowl: 150 PSI
Zinc Bowl (Manual Drain): 250 PSI
Zinc Bowl (Auto Drain): 175 PSI

Temperature Range:
Polyurethane Bowl: 4 °C to 52 °C
Zinc Bowl: 4 °C to 66 °C

Pressure Range: Standard: 0-125 PSI
Options: 0-25 PSI • 0-60 PSI

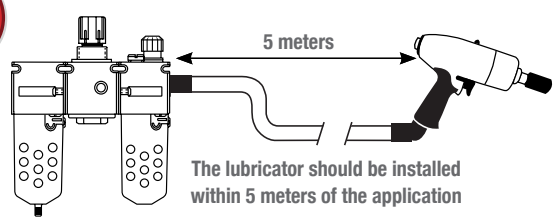
Filtration: 5 micron

Drain: Manual drain or piston-type auto drain

Bowl Capacity: 44.4 ml

Pressure Gauge Port Size: 1/8 (F) NPT

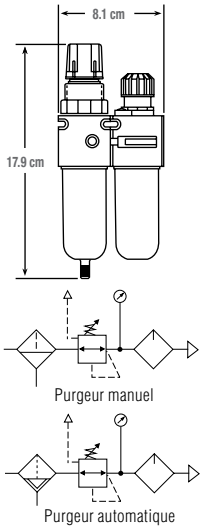
TECH TIP



POLYURETHANE BOWL		ZINC BOWL		Port Size (F) NPT
Manual Drain Product No	Auto Drain Product No	Manual Drain Product No	Auto Drain Product No	
50.520	50.521	50.522	50.523	1/4

Available with piping adaptors: add suffix .01 (see page 212)

MODULAIR MINI
COMBINATION UNIT F/R+L
GAUGE INCLUDED



- **Compact size**
- **High flow capacity**
- **Push/Pull adjusting knob**
- **Automatic drain available**
- **Recommended oil Series 69 page 449**

SPECIFICATIONS

Port Size: 1/4 (F) NPT

Maximum Air Flow at 100 PSI: 31 SCFM

Maximum Pressure:
Polyurethane Bowl: 150 PSI
Zinc Bowl (Manual Drain): 250 PSI
Zinc Bowl (Auto Drain): 175 PSI

Temperature Range:
Polyurethane Bowl: 4 °C to 52 °C
Zinc Bowl: 4 °C to 66 °C

Pressure Range: Standard: 0-125 PSI
Options: 0-25 PSI • 0-60 PSI

Filtration: 5 micron

Drain: Manual drain or piston-type auto drain

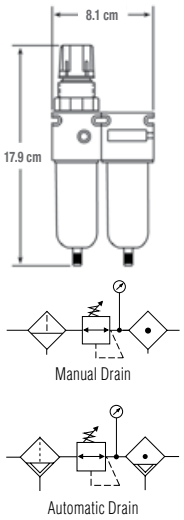
Bowl Capacity: 44.4 ml

Pressure Gauge Port Size: 1/8 (F) NPT

POLYURETHANE BOWL		ZINC BOWL		Port Size (F) NPT
Manual Drain Product No	Auto Drain Product No	Manual Drain Product No	Auto Drain Product No	
50.620	50.621	50.622	50.623	1/4

Available with piping adaptors: add suffix .01 (see page 212)

MODULAIR MINI
COMBINATION UNIT F/R+Fc
GAUGE INCLUDED



- **Compact size**
- **Push/Pull adjusting knob**
- **Highly efficient coalescing filter designed to remove all solid particles over 0.01 micron, together with 99.999% of oil and oil aerosols**
- **Automatic drain available**

SPECIFICATIONS

Port Size: 1/4 (F) NPT

Maximum Air Flow at 100 PSI: 20 SCFM

Maximum Pressure:
Polyurethane Bowl: 150 PSI
Zinc Bowl (Manual Drain): 250 PSI
Zinc Bowl (Auto Drain): 175 PSI

Temperature Range:
Polyurethane Bowl: 4 °C to 52 °C
Zinc Bowl: 4 °C to 66 °C

Pressure Range: Standard: 0-125 PSI
Options: 0-25 PSI • 0-60 PSI

Filtration:
Filter/Regulator: 5 micron
Coalescing Filter: 0.01 micron

Drain: Manual drain or piston-type auto drain

Bowl Capacity: 44.4 ml

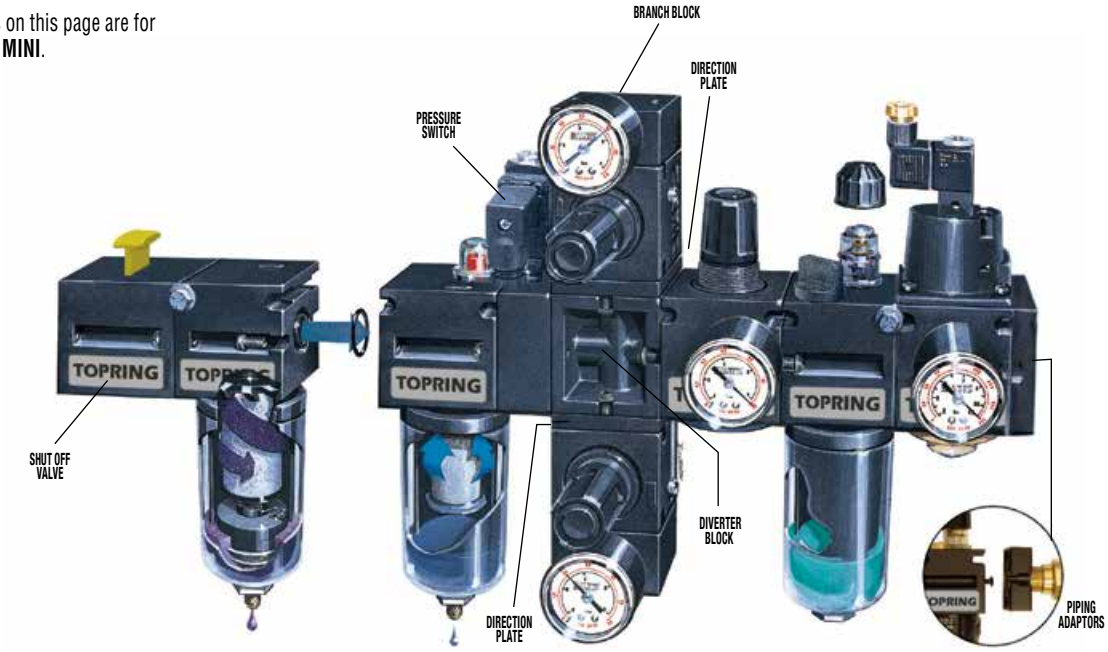
Pressure Gauge Port Size: 1/8 (F) NPT

POLYURETHANE BOWL		ZINC BOWL		Port Size (F) NPT
Manual Drain Product No	Auto Drain Product No	Manual Drain Product No	Auto Drain Product No	
50.660	50.661	50.662	50.663	1/4

Available with piping adaptors: add suffix .01 (see page 212)

MODULAIR MINI
ACCESSORIES

Accessories on this page are for **MODULAIR MINI**.



PRESSURE SWITCH

Designed to give an electric signal when a set pressure is achieved.

Product No	Description
50.007	Pressure switch field adjustable 20-120 PSI, 1/8 (M) NPT, for all **MODULAIR**
50.008	Pressure switch kit includes pressure switch, branch block, gauge, necessary screws and O-rings for **MODULAIR MINI**

3 Amp, 12/24/48 VDC, 125 VAC

SHUT OFF VALVE

Threaded ports allow use in-line or with other Series 50 FRL components

Accepts standard padlock

Conforms to OSHA Standard 29 CFR Part 10

3 port/2 position shut off valve relieves downstream pressure when closed

Can be locked in the closed position only

Maximum pressure: 300 PSI

Includes: 2 screws and 1 O-Ring

Product No	Port Size
50.781	1/4

BRANCH BLOCK

Functions as an end plate with 1/8 NPT branch lines available top and bottom. Also used in conjunction with direction plates and regulators to provide outlets for gauges.

Includes: 4 screws, 1 O-Ring, 2 washers and 1 plug

Product No	Inlet Port	Branch Port
50.990	1/4	1/8

DIRECTION PLATE

Designed to allow 90° rotation of modular type FRL units allowing manifolding of units and resulting in significant space savings. Also used to mount units from different Series to one another.

Includes: 4 screws, 1 O-Ring and 2 washers

Product No
50.796

DIVERTER BLOCK

Designed to mount in a variety of configurations with the capability of having branch line units mounted directly, giving multiple air lines with minimal pressure drop.

Includes: 6 screws, 3 O-Rings and 1 plug

Product No	Port Size In & Out	Port Size Branch
50.790	3/8	1/4

PIPING ADAPTORS (SET OF 2)

Designed to install or remove basic units without direct pipe connections to the units.

Includes: 4 screws and 2 O-Rings

Product No	Port Size
50.950	1/4

Applications: R, F/R, F+R+L and F/R+L

MODULAIR MINI
REPLACEMENT PARTS AND REPAIR KITS

Product No 50.001
Piston Auto. Drain
F, F/R MINI

Product No 50.023
Knob 0-60 and 0-125 PSI
R, F/R MINI

Product No 50.720
Panel Bracket
R, F/R MINI & MEDIUM

Product No 50.806
Polyurethane Bowl
L MINI

Product No 50.002
Piston Auto. Drain
FC MINI

Product No 50.024
Knob 0-25 PSI
R, F/R MINI

Product No 50.735
Mounting Nut
R, F/R MINI & MEDIUM

Product No 50.807
Zinc Bowl + Transp.
L MINI

Product No 50.016
Sight Dome
L MINI, MEDIUM & MAXI

Product No 50.025
Deflector + Retainer
F, F/R MINI

Product No 50.770
O-Ring and Screws
MINI

Product No 50.895
O-Ring
MINI

Product No 50.820
Polyurethane Bowl (Auto Drain)
F, F/R MIN

Product No 50.020
Element 5 mic
F, F/R MINI

Product No 50.021
Element 20 mic
F, F/R MINI

Product No 50.027
Non-Relieving Piston & Valve
R, F/R MINI

Product No 50.800
Polyurethane Bowl (Manual Drain)
F, FC, F/R MINI

Product No 50.822
Zinc Bowl + Transp. (Auto Drain)
F, F/R MINI

Product No 50.022
Relieving Piston & Valve
R, F/R MINI

Product No 50.070
Element 0.01 mic
FC MINI

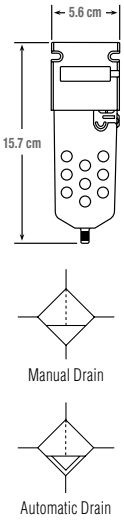
Product No 50.801
Zinc Bowl + Transp. (Manual Drain)
F, FC, F/R MINI

Product No 55.100
Replacement gauge
0-30 PSI

Product No 55.110
Replacement gauge
0-100 PSI

Product No 55.120
Replacement gauge
0-160 PSI

MODULAIR MEDIUM
FILTER



- **Compact size**
- **High performance**
- **Removes water through centrifugal force**
- **Removes contaminants down to 5 micron in size**
- **Automatic drain available**

SPECIFICATIONS

Port Size: 1/4 (F) NPT • 3/8 (F) NPT • 1/2 (F) NPT

Maximum Air Flow at 100 PSI :
1/4: 42 SCFM • 3/8: 64 SCFM • 1/2: 68 SCFM

Maximum Pressure:
Polyurethane Bowl: 150 PSI
Zinc Bowl (Manual Drain): 250 PSI
Zinc Bowl (Auto Drain): 175 PSI

Temperature Range:
Polyurethane Bowl: 4 °C to 52 °C
Zinc Bowl (Manual Drain): 4 °C to 66 °C
Zinc Bowl (Auto Drain): 4 °C to 52 °C

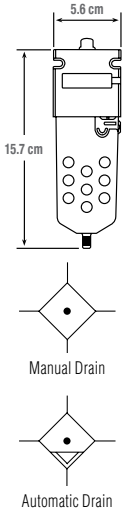
Filtration: 5 micron

Drain: Manual drain or internal auto drain

Bowl Capacity: 112.4 ml

POLYURETHANE BOWL		ZINC BOWL		
Manual Drain Product No	Auto Drain Product No	Manual Drain Product No	Auto Drain Product No	Port Size (F) NPT
50.125	50.126	50.127	50.128	1/4
50.130	50.131	50.132	50.133	3/8
50.135	50.136	50.137	50.138	1/2

MODULAIR MEDIUM
COALESCING FILTER



- **Compact size**
- **Highly efficient filter designed to remove all solid particles over 0.01 micron, together with 99.999% of water and oil aerosols**
- **Automatic drain available**

SPECIFICATIONS

Port Size: 1/4 (F) NPT • 3/8 (F) NPT • 1/2 (F) NPT

Maximum Air Flow at 100 PSI: 43 SCFM

Maximum Pressure:
Polyurethane Bowl: 150 PSI
Zinc Bowl (Manual Drain): 250 PSI
Zinc Bowl (Auto Drain): 175 PSI

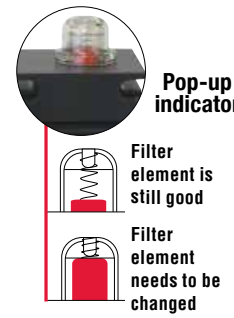
Temperature Range:
Polyurethane Bowl: 4 °C to 52 °C
Zinc Bowl (Manual Drain): 4 °C to 66 °C
Zinc Bowl (Auto Drain): 4 °C to 52 °C

Filtration: 0.01 micron

Drain: Manual drain or internal auto drain

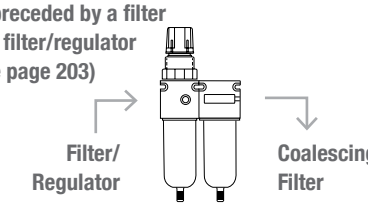
Bowl Capacity: 112.4 ml

Differential Pressure:
Indicator: Triggers at 10 PSI differential



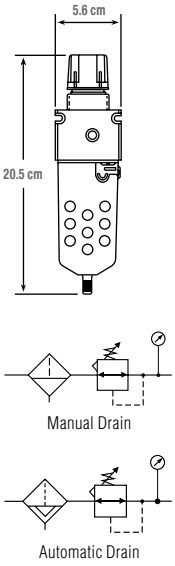
TECH TIP

A coalescing filter should always be preceded by a filter or a filter/regulator (see page 203)



POLYURETHANE BOWL		ZINC BOWL		
Manual Drain Product No	Auto Drain Product No	Manual Drain Product No	Auto Drain Product No	Port Size (F) NPT
50.925	50.926	50.927	50.928	1/4
50.935	50.936	50.937	50.938	3/8
50.930	50.931	50.932	50.933	1/2

MODULAIR MEDIUM
INTEGRATED FILTER/REGULATOR
GAUGE INCLUDED



- **Compact size**
- **High flow capacity**
- **Push/Pull adjusting knob**
- **Automatic drain available**

SPECIFICATIONS

Port Size: 1/4 (F) NPT • 3/8 (F) NPT • 1/2 (F) NPT

Maximum Air Flow at 100 PSI:
1/4: 33 SCFM • 3/8: 73 SCFM • 1/2: 78 SCFM

Maximum Pressure:
Polyurethane Bowl: 150 PSI
Zinc Bowl (Manual Drain): 250 PSI
Zinc Bowl (Auto Drain): 175 PSI

Temperature Range:
Polyurethane Bowl: 4 °C to 52 °C
Zinc Bowl (Manual Drain): 4 °C to 66 °C
Zinc Bowl (Auto Drain): 4 °C to 52 °C

Pressure Range: Standard: 0-125 PSI
Options: 0-25 PSI • 0-60 PSI

Filtration: 5 micron

Drain: Manual drain or internal auto drain

Bowl Capacity: 112.4 ml

Pressure Gauge Port Size: 1/8 (F) NPT

Panel Mount Thread: 1-3/16 - 18 UNEF - 2B

Panel Mount Opening: 1-1/4 in (3,2 cm)

POLYURETHANE BOWL		ZINC BOWL		
Manual Drain Product No	Auto Drain Product No	Manual Drain Product No	Auto Drain Product No	Port Size (F) NPT
50.225	50.226	50.227	50.228	1/4
50.230	50.231	50.232	50.233	3/8
50.235	50.236	50.237	50.238	1/2

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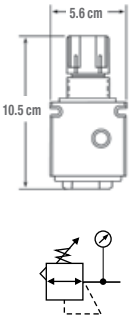
MODULAIR MEDIUM
REGULATOR
GAUGE INCLUDED



- **Compact size**
- **High performance**
- **Push/Pull adjusting knob**
- **Maintains constant downstream pressure**

SPECIFICATIONS

Port Size: 1/4 (F) NPT • 3/8 (F) NPT • 1/2 (F) NPT

Maximum Air Flow at 100 PSI:
1/4: 25 SCFM • 3/8: 45 SCFM • 1/2: 60 SCFM

Maximum Pressure: 300 PSI

Temperature Range: 4 °C to 52 °C

Pressure Gauge Port Size: 1/8 (F) NPT

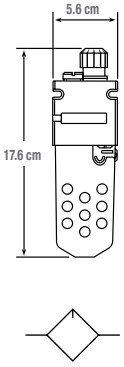
Panel Mount Thread: 1-3/16 - 18 UNEF - 2B

Panel Mount Opening: 1-1/4 in (3,2 cm)

Product No.	Pressure Range PSI	Port Size (F) NPT	Replacement Gauge
50.325*	0-125	1/4	55.120
50.326**	0-125	1/4	55.120
50.327	0-25	1/4	55.100
50.328	0-60	1/4	55.110
50.330*	0-125	3/8	55.120
50.332**	0-125	3/8	55.120
50.333	0-25	3/8	55.100
50.334	0-60	3/8	55.110
50.335*	0-125	1/2	55.120
50.336**	0-125	1/2	55.120
50.337	0-25	1/2	55.100
50.338	0-60	1/2	55.110

* Standard model ** Non-relieving type

MODULAIR MEDIUM
LUBRICATOR



- **Compact size**
- **High flow capacity**
- **Precision needle valve assures repeatable oil delivery and provides simple adjustment of delivery rate**
- **Recommended oil Series 69 page 449**

SPECIFICATIONS

Port Size: 1/4 (F) NPT • 3/8 (F) NPT • 1/2 (F) NPT

Maximum Air Flow at 100 PSI:
1/4: 15 SCFM • 3/8-1/2: 80 SCFM

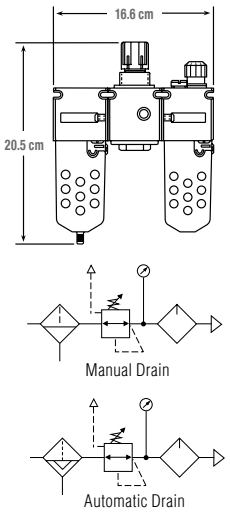
Maximum Pressure:
Polyurethane Bowl: 150 PSI
Zinc Bowl: 250 PSI

Temperature Range:
Polyurethane Bowl: 4 °C to 52 °C
Zinc Bowl: 4 °C to 66 °C

Bowl Capacity: 112.4 ml

POLYURETHANE BOWL Product No	ZINC BOWL Product No	Port Size (F) NPT
50.425	50.427	1/4
50.430	50.432	3/8
50.435	50.437	1/2

MODULAIR MEDIUM
COMBINATION UNIT F+R+L
GAUGE INCLUDED



- **Triple combination unit for easy removal of individual components**
- **Compact size**
- **Highly efficient filter**
- **Push/Pull adjusting knob**
- **Automatic drain available**
- **Recommended oil Series 69 page 449**

SPECIFICATIONS

Port Size: 1/4 (F) NPT • 3/8 (F) NPT • 1/2 (F) NPT

Maximum Air Flow at 100 PSI: 3/8: 45 SCFM • 1/2: 60 SCFM

Maximum Pressure:
Polyurethane Bowl: 150 PSI
Zinc Bowl (Manual Drain): 250 PSI
Zinc Bowl (Auto Drain): 175 PSI

Temperature Range:
Polyurethane Bowl: 4 °C to 52 °C
Zinc Bowl (Manual Drain): 4 °C to 66 °C
Zinc Bowl (Auto Drain): 4 °C to 52 °C

Pressure Range: Standard: 0-125 PSI
Options: 0-25 PSI • 0-60 PSI

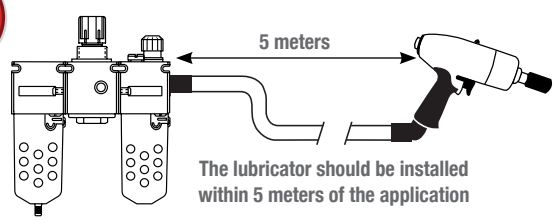
Filtration : 5 micron

Drain: Manual drain or internal auto drain

Bowl Capacity: 112.4 ml

Pressure Gauge Port Size: 1/8 (F) NPT

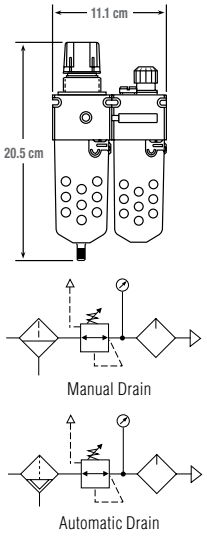
TECH TIP



POLYURETHANE BOWL		ZINC BOWL		Port Size (F) NPT
Manual Drain Product No	Auto Drain Product No	Manual Drain Product No	Auto Drain Product No	
50.525	50.526	50.527	50.528	1/4
50.530	50.531	50.532	50.533	3/8
50.535	50.536	50.537	50.538	1/2

Available with piping adaptors: add suffix .01 (see page 218)

MODULAIR MEDIUM
COMBINATION UNIT F/R + L
GAUGE INCLUDED



- **Compact size**
- **High flow capacity**
- **Push/Pull adjusting knob**
- **Automatic drain available**
- **Recommended oil Series 69 page 449**

SPECIFICATIONS

Port Size: 1/4 (F) NPT • 3/8 (F) NPT • 1/2 (F) NPT

Maximum Air Flow at 100 PSI: 3/8: 73 SCFM • 1/2: 78 SCFM

Maximum Pressure:
Polyurethane Bowl: 150 PSI
Zinc Bowl (Manual Drain): 250 PSI
Zinc Bowl (Auto Drain): 175 PSI

Temperature Range:
Polyurethane Bowl: 4 °C to 52 °C
Zinc Bowl (Manual Drain): 4 °C to 66 °C
Zinc Bowl (Auto Drain): 4 °C to 52 °C

Pressure Range: Standard: 0-125 PSI
Options: 0-25 PSI • 0-60 PSI

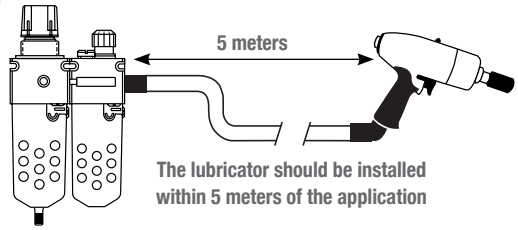
Filtration: 5 micron

Drain: Manual drain or internal auto drain

Bowl Capacity: 112.4 ml

Pressure Gauge Port Size: 1/8 (F) NPT

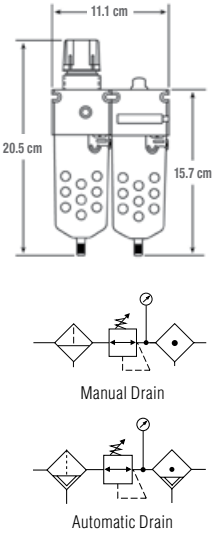
TECH TIP



POLYURETHANE BOWL		ZINC BOWL		Port Size (F) NPT
Manual Drain Product No	Auto Drain Product No	Manual Drain Product No	Auto Drain Product No	
50.625	50.626	50.627	50.628	1/4
50.630	50.631	50.632	50.633	3/8
50.635	50.636	50.637	50.638	1/2

Available with piping adaptors: add suffix .01 (see page 218)

MODULAIR MEDIUM
COMBINATION UNIT F/R+Fc
GAUGE INCLUDED



- **Space-saving integrated filter/regulator design**
- **Highly efficient filter designed to remove all solid particles over 0.01 micron, together with 99.999% of oil and oil aerosols**
- **Automatic drain available**

SPECIFICATIONS

Port Size: 1/4 (F) NPT • 3/8 (F) NPT • 1/2 (F) NPT

Maximum Air Flow at 100 PSI: 1/4: 33 SCFM • 3/8-1/2: 43 SCFM

Maximum Pressure:
Polyurethane Bowl: 150 PSI
Zinc Bowl (Manual Drain): 250 PSI
Zinc Bowl (Auto Drain): 175 PSI

Temperature Range:
Polyurethane Bowl: 4 °C to 52 °C
Zinc Bowl (Manual Drain): 4 °C to 66 °C
Zinc Bowl (Auto Drain): 4 °C to 52 °C

Pressure Range: Standard: 0-125 PSI
Options: 0-25 PSI • 0-60 PSI

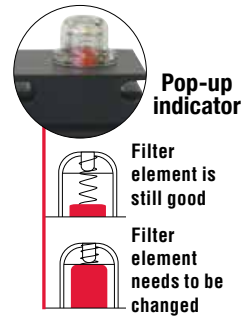
Filtration:
Filter/Regulator: 5 micron
Coalescing filter: 0.01 micron

Drain: Manual drain or internal auto drain

Bowl Capacity: 112.4 ml

Pressure Gauge Port Size:1/8 (F) NPT

Differential Pressure Indicator:
Triggers at 10 PSI differential

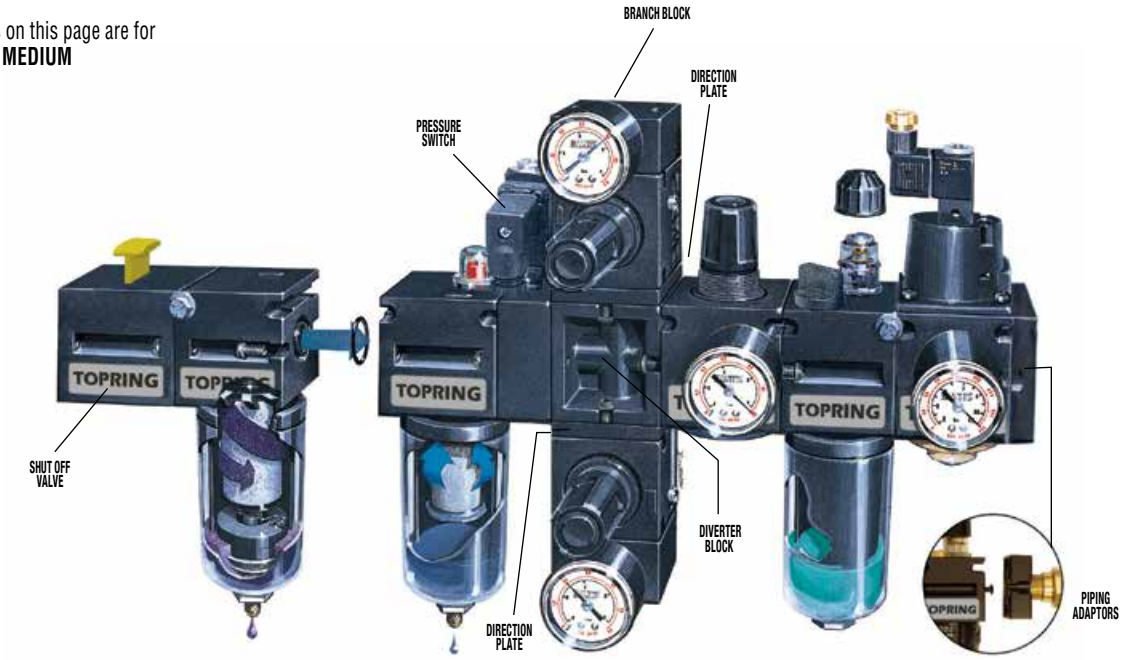


POLYURETHANE BOWL		ZINC BOWL		Port Size (F) NPT
Manual Drain Product No	Auto Drain Product No	Manual Drain Product No	Auto Drain Product No	
50.665	50.666	50.667	50.668	1/4
50.670	50.671	50.672	50.673	3/8
50.685	50.686	50.687	50.688	1/2

Available with piping adaptors: add suffix .01 (see page 218)

MODULAIR MEDIUM
ACCESSORIES

Accessories on this page are for
MODULAIR MEDIUM



PRESSURE SWITCH

Designed to give an electric signal when a set pressure is achieved.

Prod. No	Description
50.007	Pressure switch field adjustable 20-120 PSI, 1/8 (M) NPT, for all **MODULAIR**
50.009	Pressure switch kit includes pressure switch, branch block, gauge, necessary screws and O-rings for **MODULAIR MEDIUM**

3 Amp, 12/24/48 VDC, 125 VAC

DIVERTER BLOCK

Designed to mount in a variety of configurations with the capability of having branch line units mounted directly, giving multiple air lines with minimal pressure drop.

Includes: 6 screws, 3 O-Rings and 1 plug

Product No	Port Size In & Out	Port Size Branch
50.792	3/8	1/4
50.793	3/8	3/8

SHUT OFF VALVE

Threaded ports allow use in-line or with other Series 50 FRL components

Accepts standard padlock

Conforms to OSHA Standard 29 CFR Part 10

3 port/2 position shut off valve relieves downstream pressure when closed

Can be locked in the closed position only

Maximum pressure: 300 PSI

Includes: 2 screws and 1 O-Ring

Product No	Port Size
50.783	1/4
50.784	3/8
50.785	1/2

BRANCH BLOCK

Functions as an end plate with 1/8 NPT branch lines available top and bottom. Also used in conjunction with direction plates and regulators to provide outlets for gauges.

Includes: 4 screw, 1 O-Ring, and 1 plug

Product No	Inlet Port	Branch Port
50.991	1/4	1/8
50.992	3/8	1/8

DIRECTION PLATE

Designed to allow 90° rotation of modular type FRL units allowing manifolding of units and resul-ting in significant space savings. Also used to mount units from different Series to one another.

Includes: 6 screws and 2 O-Rings

Product No
50.797

PIPING ADAPTORS (SET OF 2)

Designed to install or remove basic units without direct pipe connections to the units.

Includes: 4 screws and 2 O-Rings

Product No	Port Size
50.951	1/4
50.952	3/8
50.956	1/2

Applications: R, F/R, F+R+L and F/R+L

MODULAIR MEDIUM
REPLACEMENT PARTS AND REPAIR KITS

Product No 50.003
Auto Drain 175PSI (for poly bowl)
F, FC, F/R MEDIUM & MAXI

Product No 50.017
Cap Knob
R, F/R MEDIUM

Product No 50.075
Element 0.01 mic
FC MEDIUM

Product No 50.803
Zinc Bowl + Transp. (Manual Drain)
F, FC, F/R, L MEDIUM

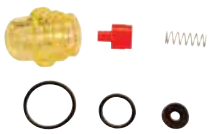
Product No 50.005
Auto Drain 175PSI (for zinc bowl)
F, FC, F/R MEDIUM-MAXI

Product No 50.031
Element 5 mic
F, F/R MEDIUM

Product No 50.030
Element 40 mic
F, F/R MEDIUM

Product No 50.730
Wall Bracket
F, R, L, FC, F/R MEDIUM

Product No 50.808
Polyurethane Bowl
L MEDIUM



Product No 50.011
Pop-up Indicator
FC MEDIUM-MAXI

Product No 50.032
Relieving Diaph. & Valve
R, F/R MEDIUM

Product No 50.735
Mounting Nut
R, F/R MINI
& MEDIUM

Product No 50.720
Panel Bracket
R, F/R MINI
& MEDIUM

Product No 50.830
Polyurethane Bowl (Auto Drain)
F, FC, F/R MEDIUM

Product No 50.013
Non-Relieving Diaph. & Valve
R, F/R MEDIUM

Product No 50.033
Push-Pull Adjusting Knob
R, F/R MEDIUM

Product No 50.772
O-Ring and Screws
MEDIUM

Product No 50.896
O-Ring
MEDIUM

Product No 50.832
Zinc Bowl + Transp. (Auto Drain)
F, FC, F/R MEDIUM

Product No 50.016
Sight Dome
L MINI, MEDIUM & MAXI

Product No 50.035
Deflector + Retainer
F, F/R MEDIUM

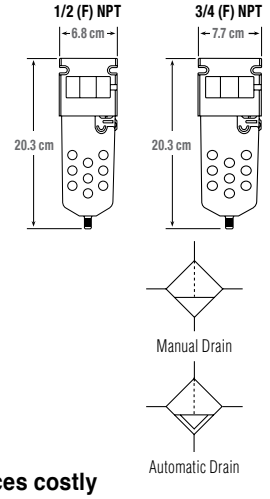
Product No 50.802
Polyurethane Bowl (Manual Drain)
F, FC, F/R MEDIUM

Product No 55.100
Replacement gauge
0-30 PSI

Product No 55.110
Replacement gauge
0-100 PSI

Product No 55.120
Replacement gauge
0-160 PSI

MODULAIR MAXI
FILTER



- **High flow capacity reduces costly pressure drop**
- **Aluminium construction reduces weight for ease of installation**
- **Removes water through centrifugal force**
- **Removes contaminants down to 5 micron in size**
- **Automatic drain available**

SPECIFICATIONS

Port Size: 1/2 (F) NPT • 3/4 (F) NPT

Maximum Air Flow at 100 PSI: 1/2: 115 SCFM • 3/4: 148 SCFM

Maximum Pressure:
Polyurethane Bowl: 150 PSI
Zinc Bowl (Wrap. S/G Man. Drain): 250 PSI
Zinc Bowl (Wrap. S/G Auto. Drain): 175 PSI
Zinc Bowl (Auto Drain): 175 PSI

Temperature Range:
Polyurethane Bowl: 4 °C to 52 °C
Zinc Bowl (Wrap. S/G Man. Drain): 4 °C to 66 °C
Zinc Bowl (Wrap. S/G Auto. Drain): 4 °C to 52 °C
Zinc Bowl (Auto. Drain): 4 °C to 52 °C

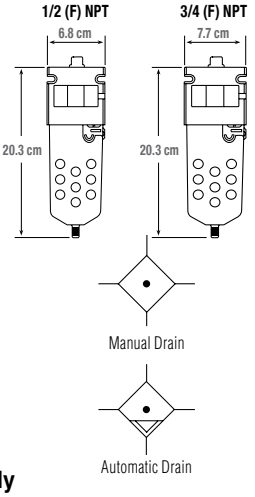
Filtration: 5 micron

Drain: Manual drain or internal auto drain

Bowl Capacity: 251.4 ml

POLYURETHANE BOWL		ZINC BOWL			Port Size (F) NPT
		Wraparound S/G		No Gauge	
Man. Drain Product No	Auto. Drain Product No	Man. Drain Product No	Auto. Drain Product No	Auto. Drain Product No	
50.140	50.141	50.142	50.143	50.144	1/2
50.150	50.151	50.152	50.153	50.154	3/4

MODULAIR MAXI
COALESCING FILTER



- **High flow capacity reduces costly pressure drop**
- **Highly efficient filter designed to remove all solid particles over 0.01 micron, together with 99.999 % of oil and oil aerosols**
- **Automatic drain available**

SPECIFICATIONS

Port Size: 1/2 (F) NPT • 3/4 (F) NPT

Maximum Air Flow at 100 PSI: 85 SCFM

Maximum Pressure:
Polyurethane Bowl: 150 PSI
Zinc Bowl (Wrap. S/G Man. Drain): 250 PSI
Zinc Bowl (Wrap. S/G Auto. Drain): 175 PSI

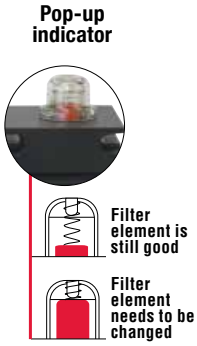
Temperature Range:
Polyurethane Bowl: 4 °C to 52 °C
Zinc Bowl (Wrap. S/G Man. Drain): 4 °C to 66 °C
Zinc Bowl (Wrap. S/G Auto. Drain): 4 °C to 52 °C

Filtration: 0.01 micron

Drain: Manual drain or internal auto drain

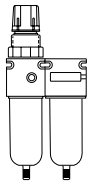
Bowl Capacity: 251.4 ml

Differential Pressure Indicator: Triggers at 10 PSI differential



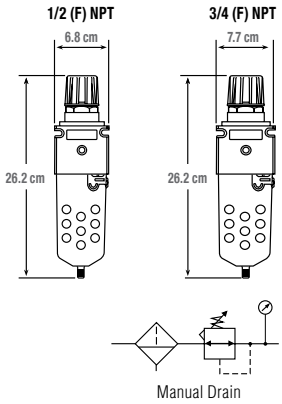
TECH TIP

A coalescing filter should always be preceded by a filter or a filter/regulator (see page 203)

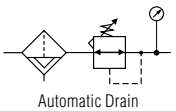


POLYURETHANE BOWL		ZINC BOWL		Port Size (F) NPT
		Wraparound S/G		
Man. Drain Product No	Auto. Drain Product No	Man. Drain Product No	Auto. Drain Product No	
50.945	50.946	50.947	50.948	1/2
50.959	50.960	50.962	50.963	3/4

MODULAIR MAXI
INTEGRATED FILTER/REGULATOR
GAUGE INCLUDED



Manual Drain


Automatic Drain

- **Space-saving integrated filter/regulator design**
- **High flow capacity reduces costly pressure drop**
- **Push/Pull adjusting knob**
- **Maintains constant downstream pressure**
- **Automatic drain available**

SPECIFICATIONS

Port Size: 1/2 (F) NPT • 3/4 (F) NPT

Maximum Air Flow at 100 PSI: 1/2: 132 SCFM • 3/4: 148 SCFM

Maximum Pressure:
Polyurethane Bowl: 150 PSI
Zinc Bowl (Wrap. S/G Man. Drain): 250 PSI
Zinc Bowl (Wrap. S/G Auto. Drain): 175 PSI
Zinc Bowl (Auto Drain): 175 PSI

Temperature Range:
Polyurethane Bowl: 4 °C to 52 °C
Zinc Bowl (Wrap. S/G Man. Drain): 4 °C to 66 °C
Zinc Bowl (Wrap. S/G Auto. Drain): 4 °C to 52 °C
Zinc Bowl: 4 °C to 52 °C

Pressure Range: Standard: 0-125 PSI
Options: 0-25 PSI • 0-60 PSI • 0-250 PSI

Filtration: 5 micron

Drain: Manual drain or internal auto drain

Bowl Capacity: 251.4 ml

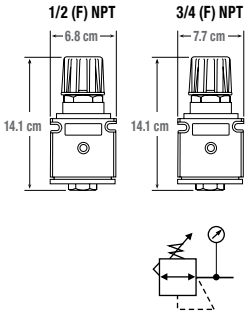
Pressure Gauge Port Size: 1/4 (F) NPT

Panel Mount Thread: 1-3/4 - 18 UNS - 2B

Panel Mount Opening: 1-3/4 in (4.4 cm)

POLYURETHANE BOWL		ZINC BOWL			Port Size (F) NPT
		Wraparound S/G		No Gauge	
Man. Drain Product No	Auto. Drain Product No	Man. Drain Product No	Auto. Drain Product No	Auto. Drain Product No	
50.240	50.241	50.242	50.243	50.244	1/2
50.250	50.251	50.252	50.253	50.254	3/4

MODULAIR MAXI
REGULATOR
GAUGE INCLUDED



- **High flow capacity reduces costly pressure drop**
- **Push/Pull adjusting knob**
- **Maintains constant downstream pressure**

SPECIFICATIONS

Port Size: 1/2 (F) NPT • 3/4 (F) NPT

Maximum Air Flow at 100 PSI: 150 SCFM

Maximum Pressure: 300 PSI

Temperature Range: 4 °C to 52 °C

Pressure Gauge Port Size: 1/4 (F) NPT

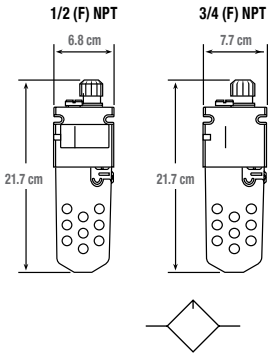
Panel Mount Thread: 1-3/4 - 18 UNS - 2B

Panel Mount Opening: 1-3/4 in (4.4 cm)

Product No	Pressure Range PSI	Port Size (F) NPT	Replacement Gauge
50.340*	0-125	1/2	55.415
50.342**	0-125	1/2	55.415
50.343	0-25	1/2	55.400
50.344	0-60	1/2	55.410
50.345	0-250	1/2	55.425
50.350*	0-125	3/4	55.415
50.352**	0-125	3/4	55.415
50.353	0-25	3/4	55.400
50.354	0-60	3/4	55.410
50.355	0-250	3/4	55.425

* Standard model ** Non-relieving type

MODULAIR MAXI
LUBRICATOR



- **High flow capacity reduces costly pressure drop**
- **Precision needle valve assures repeatable oil delivery and provides simple adjustment of delivery rate**
- **Recommended oil Series 69 page 449**

SPECIFICATIONS

Port Size: 1/2 (F) NPT • 3/4 (F) NPT

Maximum Air Flow at 100 PSI: 1/2: 110 SCFM • 3/4: 125 SCFM

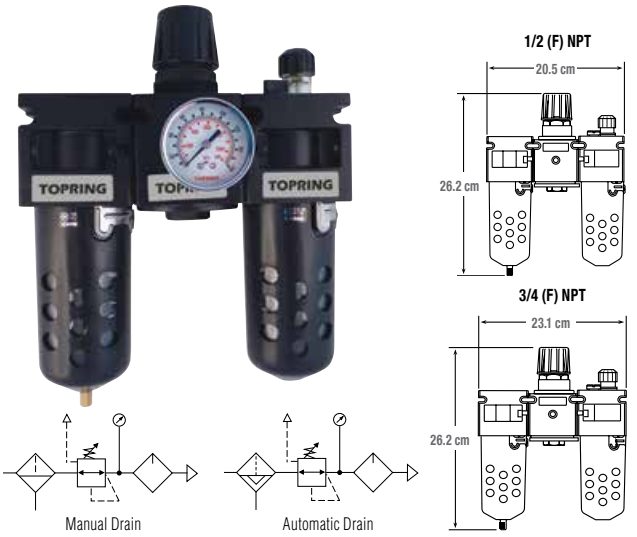
Maximum Pressure:
Polyurethane Bowl: 150 PSI
Zinc Bowl (Wrap. S/G): 250 PSI
Zinc Bowl: 300 PSI

Temperature Range:
Polyurethane Bowl: 4 °C to 52 °C
Zinc Bowl: 4 °C to 66 °C

Bowl Capacity: 251.4 ml

POLYURETHANE BOWL	ZINC BOWL		
Product No	Wraparound S/G Product No	No Gauge Product No	Port Size (F) NPT
50.440	50.442	50.444	1/2
50.450	50.452	50.454	3/4

MODULAIR MAXI
COMBINATION UNIT F+R+L
GAUGE INCLUDED



- **Triple combination unit for easy removal or individual components**
- **High flow capacity reduces costly pressure drop**
- **Push/Pull adjusting knob**
- **Automatic drain available**
- **Recommended oil Series 69 page 449**

SPECIFICATIONS

Port Size: 1/2 (F) NPT • 3/4 (F) NPT

Maximum Air Flow at 100 PSI: 1/2: 110 SCFM • 3/4: 125 SCFM

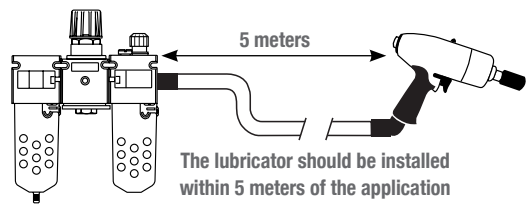
Maximum Pressure:
Polyurethane Bowl: 150 PSI
Zinc Bowl (Wrap. S/G Man. Drain): 250 PSI
Zinc Bowl (Wrap. S/G Auto. Drain): 175 PSI
Zinc Bowl (Auto Drain): 175 PSI

Temperature Range:
Polyurethane Bowl: 4 °C to 52 °C
Zinc Bowl (Wrap. S/G Man. Drain): 4 °C to 66 °C
Zinc Bowl (Wrap. S/G Auto. Drain): 4 °C to 52 °C
Zinc Bowl: 4 °C to 52 °C

Pressure Range: Standard: 0-125 PSI
Options: 0-25 PSI • 0-60 PSI • 0-250 PSI

Filtration: 5 micron
Drain: Manual drain or internal auto drain
Bowl Capacity: 251.4 ml
Pressure Gauge Port Size: 1/4 (F) NPT

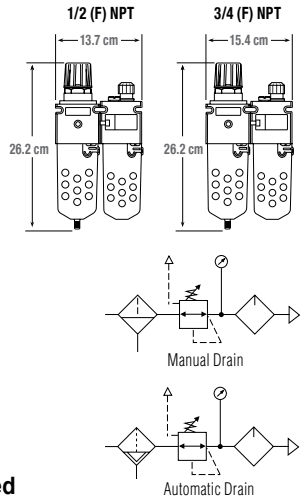
TECH TIP



POLYURETHANE BOWL		ZINC BOWL			
		Wraparound S/G		No Gauge	
Man. Drain Product No	Auto. Drain Product No	Man. Drain Product No	Auto. Drain Product No	Auto. Drain Product No	Port Size (F) NPT
50.540	50.541	50.542	50.543	50.544	1/2
50.550	50.551	50.552	50.553	50.554	3/4

Available with piping adaptors: add suffix .01 (see page 224)

MODULAIR MAXI
COMBINATION UNIT F/R+L
GAUGE INCLUDED



- **Space-saving integrated filter/regulator design**
- **High flow capacity reduces costly pressure drop**
- **Push/Pull adjusting knob**
- **Automatic drain available**
- **Recommended oil series 69 page 449**

SPECIFICATIONS

Port Size: 1/2 (F) NPT • 3/4 (F) NPT

Maximum Air Flow at 100 PSI: 1/2: 110 SCFM • 3/4: 125 SCFM

Maximum Pressure:
Polyurethane Bowl: 150 PSI
Zinc Bowl (Wrap. S/G Man. Drain): 250 PSI
Zinc Bowl (Wrap. S/G Auto. Drain): 175 PSI
Zinc Bowl (Auto Drain): 175 PSI

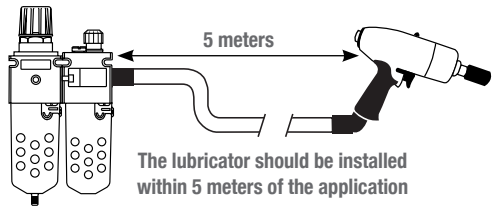
Temperature Range:
Polyurethane Bowl: 4 °C to 52 °C
Zinc Bowl (Wrap. S/G Man. Drain): 4 °C to 66 °C
Zinc Bowl (Wrap. S/G Auto. Drain): 4 °C to 52 °C
Zinc Bowl: 4 °C to 52 °C

Pressure Range: Standard: 0-125 PSI
Options: 0-25 PSI • 0-60 PSI • 0-250 PSI

Filtration: 5 micron
Drain: Manual drain or internal auto drain

Bowl Capacity: 251.4 ml
Pressure Gauge Port Size: 1/4 (F) NPT

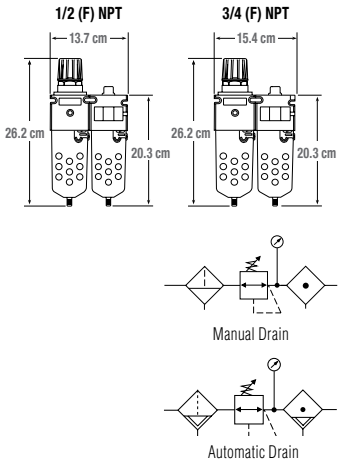
TECH TIP



POLYURETHANE BOWL		ZINC BOWL			Port Size (F) NPT
		Wraparound S/G		No Gauge	
Man. Drain Product No	Auto. Drain Product No	Man. Drain Product No	Auto. Drain Product No	Auto. Drain Product No	
50.640	50.641	50.642	50.643	50.644	1/2
50.650	50.651	50.652	50.653	50.654	3/4

Available with piping adaptors: add suffix .01 (see page 224)

MODULAIR MAXI
COMBINATION UNIT F/R+Fc
GAUGE INCLUDED



- **Space-saving integrated filter/regulator design**
- **Highly efficient filter designed to remove all solid particles over 0.01 micron, together with 99.999% of oil and oil aerosols**
- **Automatic drain available**

SPECIFICATIONS

Port Size: 1/2 (F) NPT • 3/4 (F) NPT

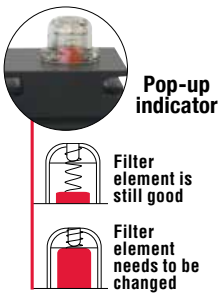
Maximum Air Flow at 100 PSI: 85 SCFM

Maximum Pressure:
Polyurethane Bowl: 150 PSI
Zinc Bowl (Wrap. S/G Man. Drain): 250 PSI
Zinc Bowl (Wrap. S/G Auto. Drain): 175 PSI

Temperature Range:
Polyurethane Bowl: 4 °C to 52 °C
Zinc Bowl (Wrap. S/G Man. Drain): 4 °C to 66 °C
Zinc Bowl (Wrap. S/G Auto. Drain): 4 °C to 52 °C

Pressure Range: Standard: 0-125 PSI
Options: 0-25 PSI • 0-60 PSI • 0-250 PSI

Filtration:
Filter/Regulator: 5 micron
Coalescing Filter: 0.01 micron
Drain: Manual drain or internal auto drain
Bowl Capacity: 251.4 ml
Pressure Gauge Port Size: 1/4 (F) NPT

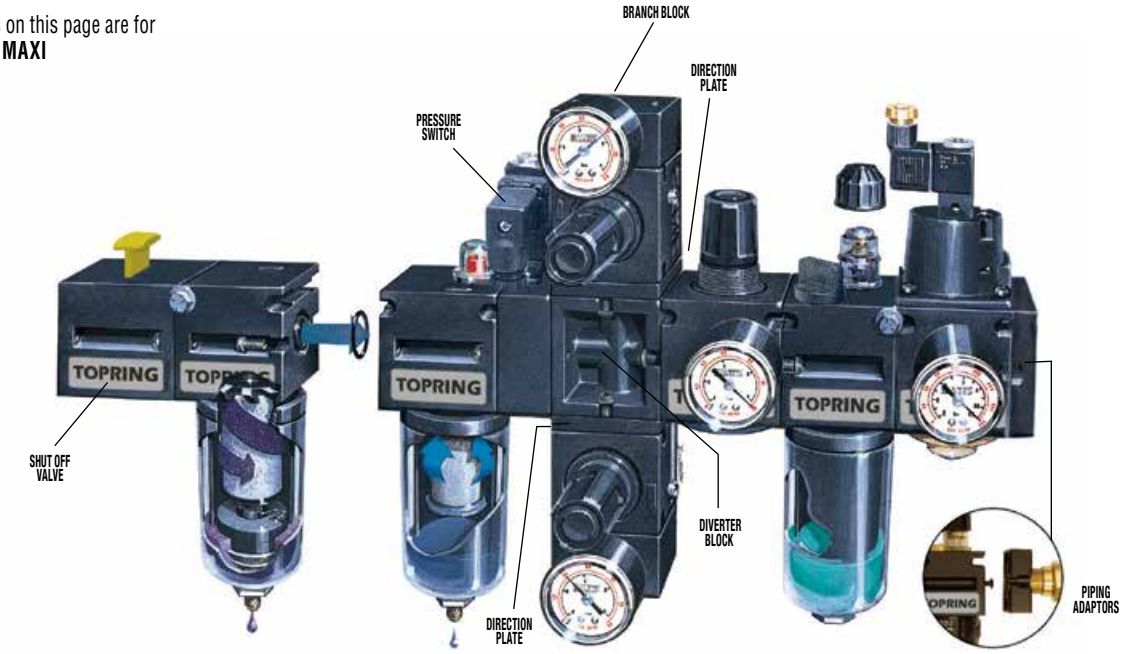


POLYURETHANE BOWL		ZINC BOWL		Port Size (F) NPT
		Wraparound S/G		
Man. Drain Product No	Auto. Drain Product No	Man. Drain Product No	Auto. Drain Product No	
50.675	50.676	50.677	50.678	1/2
50.680	50.681	50.682	50.683	3/4

Available with piping adaptors: add suffix .01 (see page 224)

MODULAIR MAXI
ACCESSORIES

Accessories on this page are for
MODULAIR MAXI



PRESSURE SWITCH

Designed to give an electric signal when a set pressure is achieved.

Prod. No	Description
50.007	Pressure switch field adjustable 20-120 PSI, 1/8 (M) NPT, for all **MODULAIR**

3 Amp, 12/24/48 VDC, 125 VAC

DIVERTER BLOCK

Designed to mount in a variety of configurations with the capability of having branch line units mounted directly, giving multiple air lines with minimal pressure drop.

Includes: 6 screws, 3 O-Rings and 1 plug

Product No	Port Size In & Out	Port Size Branch
50.794	3/4	1/2

BRANCH BLOCK

Designed to fit within any combination providing two 3/8 NPT branch lines.

50.985 50.986

Prod. No	Description
50.985	Between: • Filter and regulator • Regulator and lubricator • Piping adaptor and filter • Lubricator and piping adaptor **Includes: 4 screws and 1 O-Ring**
50.986	Between: • Filter and coalescing filter • Filter and lubricator **Includes: 4 screws and 2 O-Rings**

SHUT OFF VALVE

Threaded ports allow use in-line or with other Series 50 FRL components

Accepts standard padlock

Conforms to OSHA Standard 29 CFR Part 10

3 port/2 position shut off valve relieves downstream pressure when closed

Can be locked in the closed position only

Maximum pressure: 300 PSI

Includes: 2 screws and 1 O-Ring

Product No	Port Size
50.786	1/2
50.787	3/4

PIPING ADAPTORS (SET OF 2)

Designed to install or remove basic units without direct pipe connections to the units.

Includes: 4 screws and 2 O-Rings

Product No	Port Size
50.953	1/2
50.954	3/4

DIRECTION PLATE

Designed to allow 90° rotation of modular type FRL units allowing manifolding of units and resulting in significant space savings. Also used to mount units from different series to one another.

Includes: 6 screws and 3 O-Rings

Product No
50.799

Applications: R, F/R, F+R+L and F/R+L

MODULAIR MAXI
REPLACEMENT PARTS AND REPAIR KITS

Product No 50.003
Auto Drain 175PSI (for poly. bowl)
F, FC, F/R MEDIUM & MAXI

Product No 50.018
Cap Knob
R, F/R MAXI

Product No 50.080
Element 0.01 mic
FC MAXI

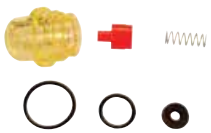
Product No 50.810
Polyurethane Bowl
L MAXI

Product No 50.005
Auto Drain 175PSI (for zinc bowl)
F, FC, F/R MEDIUM & MAXI

Product No 50.034
Push-Pull Adjusting Knob
R, F/R MAXI

Product No 50.742
Panel Bracket
R, F/R MAXI

Product No 50.814
Zinc Bowl (Auto Drain)
F, FC, F/R MAXI



Product No 50.011
Pop-Up Indicator
FC MEDIUM & MAXI

Product No 50.041
Element 5 mic
F, F/R MAXI

Product No 50.040
Element 40 mic
F, F/R MAXI

Product No 50.745
Mounting Nut
R, F/R MAXI

Product No 50.774
O-Ring and Screws
MAXI

Product No 50.898
O-Ring
MAXI

Product No 50.816
Zinc Bowl (Manual Drain)
F, FC, F/R, L MAXI

Product No 50.014
Relieving Diaph. & Valve
R, F/R MAXI

Product No 50.045
Deflector + Retainer
F, F/R MAXI

Product No 50.804
Polyurethane Bowl
(Manual Drain)
F, FC, F/R MAXI

Product No 50.840
Polyurethane Bowl
(Auto Drain)
F, FC, F/R MAXI

Product No 50.842
Zinc Bowl + Transp. (Auto Drain)
F, FC, F/R MAXI

Product No 50.016
Sight Dome
L MINI, MEDIUM & MAXI

Product No 50.047
Non-Relieving Diaph. & Valve
R, F/R MAXI

Product No 50.805
Zinc Bowl + Transp. (Manual Drain)
F, FC, F/R, L MAXI

Product No 55.400
Replacement gauge
0-30 PSI

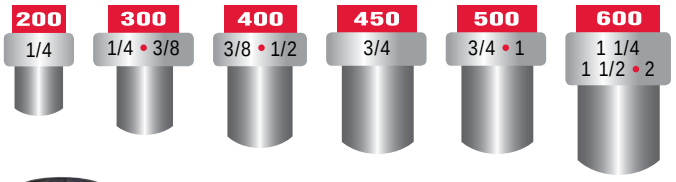
Product No 55.410
Replacement gauge
0-100 PSI

Product No 55.415
Replacement gauge
0-160 PSI

Product No 55.425
Replacement gauge
0-300 PSI

Series 51
AIR TREATMENT (FRL)

AIRFLO
FILTERS, REGULATORS, AND LUBRICATORS



MATERIALS

Body Material: Die cast aluminium

Bowl Type:
200 • 300 • 400: Polycarbonate with steel guard
450 • 500 • 600: Die cast aluminium

Regulation Type: Relieving

Bowl Guard:
200 • 300 • 400: Steel

Filter Element:
200 to 500: Polyethylene, 5 micron
400 (coalescing filter): Borosilicate
600: Sintered bronze 5 micron

Deflector & Spinner: ABS

O-Rings & Seals: EPDM rubber

Regulator Cap:
200 • 300: Reinforced nylon
400 • 450 • 500 • 600: Die cast aluminium

Regulator Adjusting Knob: Reinforced nylon

Diaphragm: EPDM rubber

Poppet Valve: Brass and rubber

Regulator Spring: Stainless steel

Lubricator Sight Gauge: Polycarbonate

Fill Plug: ABS

Retainer: ABS

Lubricator Adjusting Knob: ABS

Check Flap: Polyurethane

SPECIFICATIONS

Maximum Pressure: 150 PSI

Temperature Range: 5 °C to 60 °C

Filtration: 5 micron

Coalescing filtration: 0.01 micron

Drain: Semi-automatic or auto drain

FEATURES AND BENEFITS

- High performance filtration, regulation and lubrication
- Quick and easy mounting and removal with modular system
- Compact size for easy installation
- 6 models (200, 300, 400, 450, 500 et 600) and 8 port sizes (1/4, 3/8, 1/2, 3/4, 1 in, 1-1/4, 1-1/2 and 2 in) to provide solutions for most applications
- Flow rates available from 18 to175 SCFM for adaptation to virtually all applications for port sizes from 1/4 to 1 in
- Flow rates available from 420 to 560 SCFM for port sizes from 1-1/4 to 2 in
- Modular concept using spacers and brackets to make connecting and mounting simple and easy (200, 300, 400, 450 and 500)
- Polycarbonate bowls with metal bowl guards (200, 300 and 400) and metal bowls (450, 500 and 600)
- Bayonet type bowl locking system

AIRFLO 200 • 300

STAINLESS STEEL

SEE PAGES 250-253

MODULARITY
SAVES TIME AND MONEY

TOPRING AIRFLO modular FRL units are easy to put together, take apart and install.

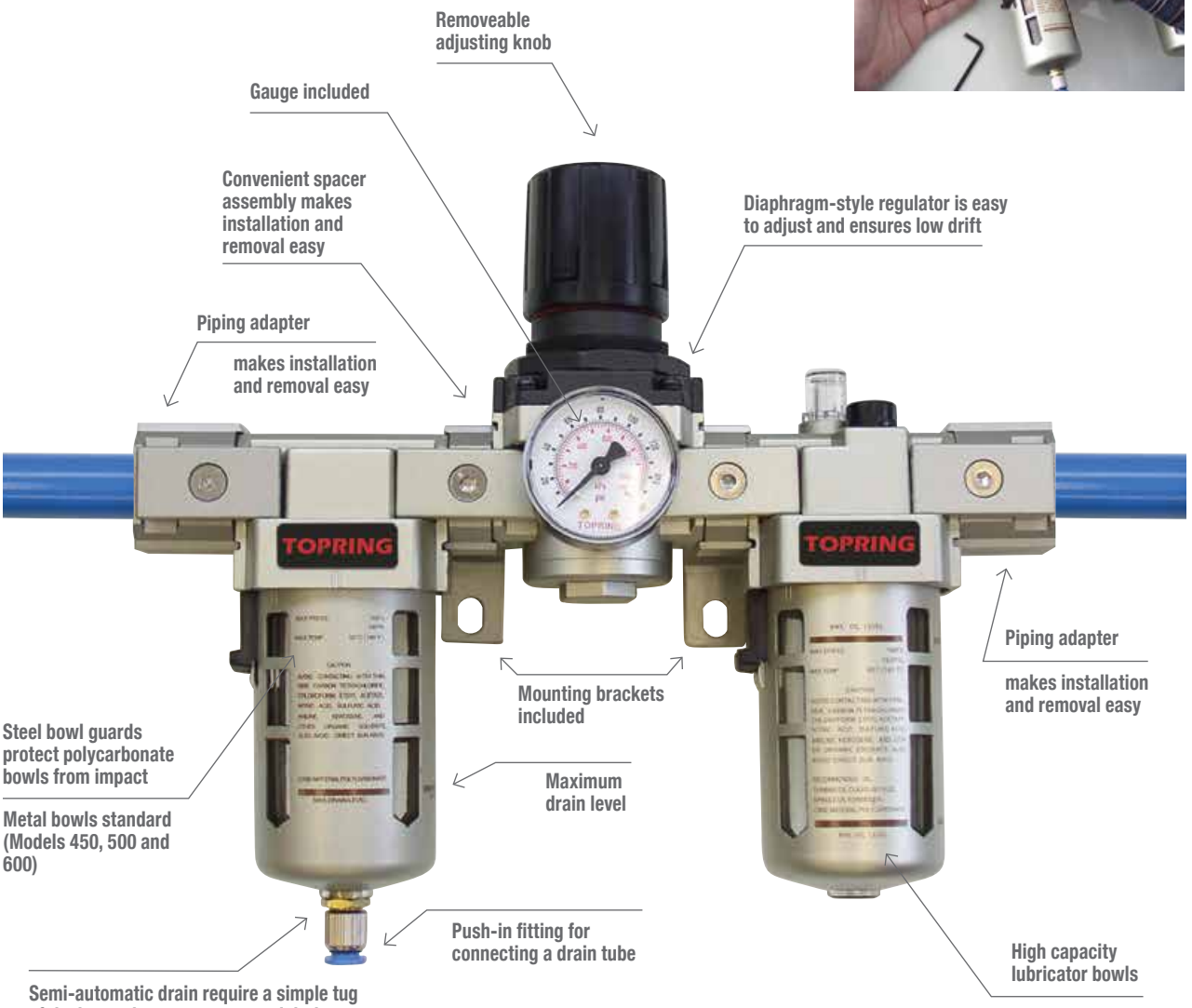
Units are simply mounted together using the provided spacers and O-ring seals, without the need for inconvenient brass pipe nipples.

Installation is easy, especially when using the provided piping adapters. The unit is installed by simply screwing the piping adapters onto the two ends of the airline and securing the FRL unit into place with the provided spacers, screws and O-ring seals.

Removal for maintenance purposes is just as simple, requiring only the removal of the retaining screws and spacers in order to remove the unit.

Assembly is simple using Allen key

Units can be quickly and easily assembled and disassembled



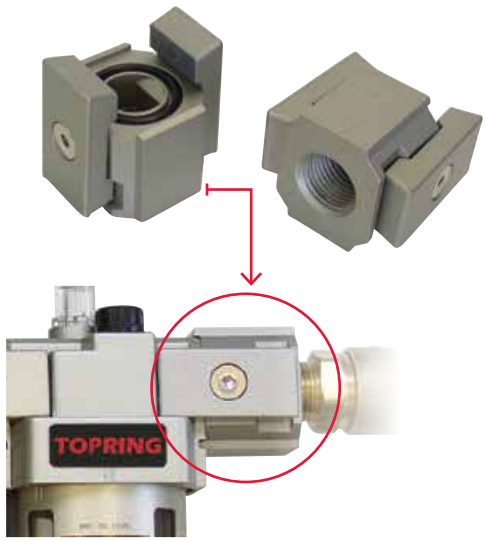
TRUE MODULARITY COMES WITH THE USE OF PIPING ADAPTERS

The biggest challenge with standard type FRL units requiring brass pipe fittings is screwing the unit onto opposing ends of air line piping (while tightening one end, the other end is being loosened).

With the piping adapters provided with **TOPRING AIRFLO** modular FRL, the unit is installed by simply screwing the piping adapters onto the two ends of the airline and securing the FRL unit into place with the provided spacers, screws and O-ring seals.

Removal for maintenance purposes is just as simple, requiring only the removal of the retaining screws and spacers in order to remove the unit.

Piping adapters are therefore the ideal method for allowing simple and easy installation and removal of FRL units.

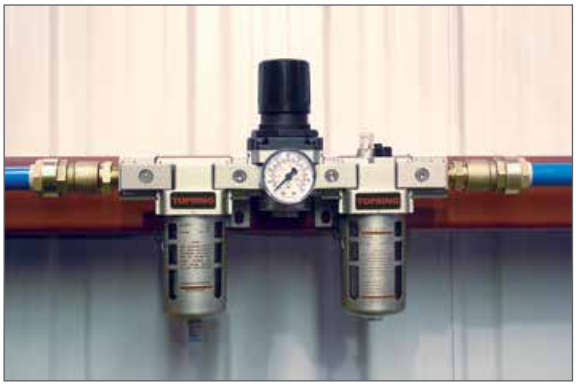


STANDARD TYPE → VERY DIFFICULT

Standard FRLs use pipe nipples

This makes maintenance very difficult

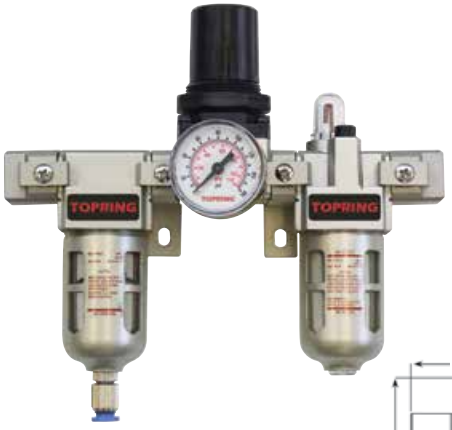
MODULAR TYPE → VERY EASY

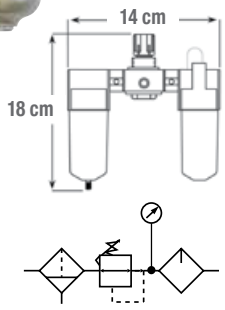


Modular FRLs with pipe adapters make for a very neat installation

Removal is very easy, since the piping adapters allow the unit to slide out

AIRFLO 200
COMBINATION UNIT F+R+L
GAUGE INCLUDED





- **Easy removal of individual units**
- **Accurate pressure control with little drift**
- **Removable locking Push/Pull adjusting knob**
- **Standard semi-automatic drain requires a simple tug of ring to drain**
- **Lubrication proportioned to airflow**
- **Pressure gauge, piping adapters and mounting brackets included**
- **Recommended oil Series 69 page 449**

SPECIFICATIONS

Port Size: 1/4 (F) NPT

Maximum Airflow at 100 PSI: 18 SCFM

Maximum Pressure: 150 PSI

Pressure Range: Standard: 5-125 PSI
Options: 5-30 PSI • 5-60 PSI

Temperature Range: 5 °C to 60 °C

Filtration: 5 micron

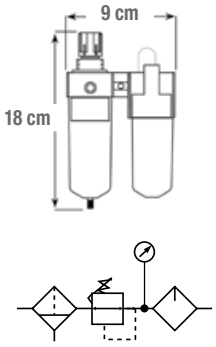
Drain: Semi-automatic

Bowl Capacity: Filter: 15 ml
Lubricator: 25 ml

Pressure Gauge Port Size: 1/8 (F) NPT

POLYCARBONATE BOWL	
Product No	Port Size (F) NPT
51.210	1/4

AIRFLO 200
COMBINATION UNIT F/R + L
GAUGE INCLUDED



- **Compact size**
- **Accurate pressure control with little drift**
- **Removable locking Push/Pull adjusting knob**
- **Standard semi-automatic drain requires a simple tug of ring to drain**
- **Lubrication proportioned to airflow**
- **Pressure gauge, piping adapters and mounting brackets included**
- **Recommended oil Series 69 page 449**

SPECIFICATIONS

Port Size: 1/4 (F) NPT

Maximum Airflow at 100 PSI: 18 SCFM

Maximum Pressure: 150 PSI

Pressure Range: Standard: 5-125 PSI
Options: 5-30 PSI • 5-60 PSI

Temperature Range: 5 °C to 60 °C

Filtration: 5 micron

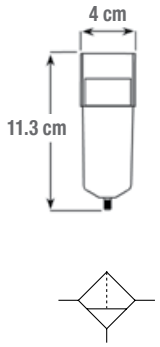
Drain: Semi-automatic

Bowl Capacity: Filter: 15 ml
Lubricator: 25 ml

Pressure Gauge Port Size: 1/8 (F) NPT

POLYCARBONATE BOWL	
Product No	Port Size (F) NPT
51.220	1/4

AIRFLO 200
FILTER



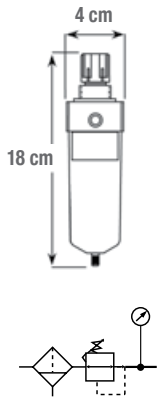
- Compact size
- Removes water through centrifugal force
- Removes contaminants down to 5 micron in size
- Standard semi-automatic drain requires a simple tug of ring to drain
- Mounting bracket included

SPECIFICATIONS

Port Size: 1/4 (F) NPT
Maximum Airflow at 100 PSI: 27 SCFM
Maximum Pressure: 150 PSI
Temperature Range: 5 °C to 60 °C
Filtration: 5 micron
Drain: Semi-automatic
Bowl Capacity: 15 ml

POLYCARBONATE BOWL	
Product No	Port Size (F) NPT
51.260	1/4

AIRFLO 200
FILTER/REGULATOR
GAUGE INCLUDED



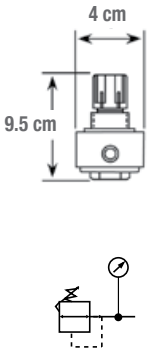
- Compact size
- Removes water through centrifugal force
- Removes contaminants down to 5 micron in size
- Standard semi-automatic drain requires a simple tug of ring to drain
- Accurate pressure control with little drift
- Removable locking Push/Pull adjusting knob
- Pressure gauge and mounting bracket included

SPECIFICATIONS

Port Size: 1/4 (F) NPT
Maximum Airflow at 100 PSI: 19 SCFM
Maximum Pressure: 150 PSI
Pressure Range: Standard: 5-125 PSI
Options: 5-30 PSI • 5-60 PSI
Temperature Range: 5 °C to 60 °C
Filtration: 5 micron
Drain: Semi-automatic
Bowl Capacity: 15 ml
Pressure Gauge Port Size: 1/8 (F) NPT

POLYCARBONATE BOWL	
Product No	Port Size (F) NPT
51.250	1/4

AIRFLO 200
REGULATOR
GAUGE INCLUDED



- Compact size
- Accurate pressure control with little drift
- Removable locking Push/Pull adjusting knob
- Pressure gauge and mounting bracket included

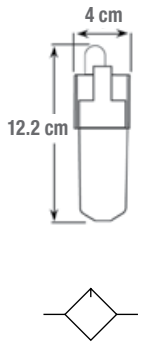
SPECIFICATIONS

Port Size: 1/4 (F) NPT
Maximum Airflow at 100 PSI: 19 SCFM
Maximum Pressure: 150 PSI
Temperature Range: 5 °C to 60 °C
Pressure Gauge Port Size: 1/8 (F) NPT

Product No	Pressure Range PSI	Port Size (F) NPT	Replacement Gauge
51.240*	5 - 125	1/4	**55.120**
51.241	5 - 60	1/4	**55.105**
51.242	5 - 30	1/4	**55.100**

* Popular model

AIRFLO 200
LUBRICATOR



- Compact size
- Lubrication proportioned to airflow
- Mounting bracket included
- Recommended oil Series 69 page 449

SPECIFICATIONS

Port Size: 1/4 (F) NPT
Maximum Airflow at 100 PSI: 28 SCFM
Maximum Pressure: 150 PSI
Temperature Range: 5 °C to 60 °C
Bowl Capacity: 25 ml

POLYCARBONATE BOWL	
Product No	Port Size (F) NPT
51.230	1/4

AIRFLO 200
VENTING SAFETY LOCK-OUT VALVE

- **Shut off valve for closing flow to or from AIRFLO FRL units**
- **3 port/2 position valve relieves downstream pressure when closed**
- **Can be locked in the closed position**
- **Can be mounted directly to AIRFLO components using standard AIRFLO spacers included**
- **Threaded ports also allow use in-line with other components**
- **Accepts standard single pad lock or safety lock for multiple lockout**
- **Conforms to OSHA Standard 29 CFR Part 10**

Product No	Port Size	Vent Port
51.270	1/4	1/8

SPECIFICATIONS

Maximum pressure: 150 PSI

AIRFLO 200
REPLACEMENT PARTS AND ACCESSORIES

Product No 51.005
Spacer w / T-type bracket
for 200

Product No 51.070
Mounting bracket
for 200 F, L

Product No 51.125
5-30 PSI spring
for 200 R, F/R

Product No 51.126
5-60 PSI spring
for 200 R, F/R

Product No 51.127
5-125 PSI spring
for 200 R, F/R

Product No 51.851
Sight dome
for 200 L

Product No 51.030
Spacer w / L-type bracket
for 200

Product No 51.090.05
Element 5 mic
for 200 F, F/R

Product No 51.090
Element 25 mic.
for 200 F, F/R

Product No 51.800
Poly. bowl w / guard & drain
for 200 F, F/R

Product No 51.950
AIRFLO 200 piping adapters
1/4 (F) NPT (2)

Product No 51.050
Mounting bracket
for 200 R, F/R

Product No 51.122
Diaphragm & piston
for 200 R, F/R

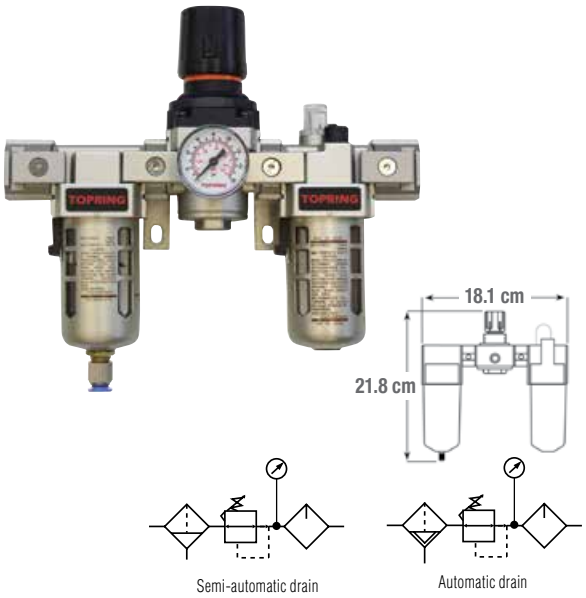
Product No 51.850
Poly. bowl w / guard
for 200 L

Replacement gauge
for 200 R, F/R

Product No 55.120 0-160 PSI
Product No 55.105 0-60 PSI
Product No 55.100 0-30 PSI

Product No 51.115
Mounting nut
for 200 R, F/R

AIRFLO 300
COMBINATION UNIT F+R+L
GAUGE INCLUDED



- **Easy removal of individual units**
- **Accurate pressure control with little drift**
- **Removable locking Push/Pull adjusting knob**
- **Standard semi-automatic drain requires a simple tug of ring to drain**
- **Lubrication proportioned to airflow**
- **Pressure gauge, piping adapters and mounting brackets included**
- **Recommended oil Series 69 page 449**

SPECIFICATIONS

Port Size: 1/4 (F) NPT • 3/8 (F) NPT

Maximum Airflow at 100 PSI: 70 SCFM

Maximum Pressure: 150 PSI

Pressure Range: Standard: 5-125 PSI
Options: 5-30 PSI • 5-60 PSI

Temperature Range: 5 °C to 60 °C

Filtration: 5 micron

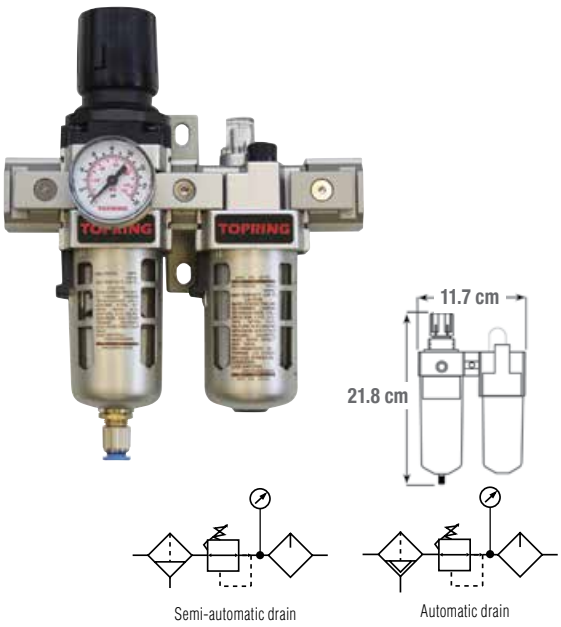
Drain: Semi-automatic or automatic drain

Bowl Capacity: Filter: 20 ml
Lubricator: 50 ml

Pressure Gauge Port Size: 1/8 (F) NPT

POLYCARBONATE BOWL		
Semi-auto. Drain Product No	**Auto. Drain Product No**	Port Size (F) NPT
51.310	**51.311**	1/4
51.315	**51.316**	3/8

AIRFLO 300
COMBINATION UNIT F/R + L
GAUGE INCLUDED



- **Compact size**
- **Accurate pressure control with little drift**
- **Removable locking Push/Pull adjusting knob**
- **Standard semi-automatic drain requires a simple tug of ring to drain**
- **Lubrication proportioned to airflow**
- **Pressure gauge, piping adapters and mounting brackets included**
- **Recommended oil Series 69 page 449**

SPECIFICATIONS

Port Size: 1/4 (F) NPT • 3/8 (F) NPT

Maximum Airflow at 100 PSI: 70 SCFM

Maximum Pressure: 150 PSI

Pressure Range: Standard: 5-125 PSI
Options: 5-30 PSI • 5-60 PSI

Temperature Range: 5 °C to 60 °C

Filtration: 5 micron

Drain: Semi-automatic or automatic drain

Bowl Capacity: Filter: 20 ml
Lubricator: 50 ml

Pressure Gauge Port Size: 1/8 (F) NPT

POLYCARBONATE BOWL		
Semi-auto. Drain Product No	**Auto. Drain Product No**	Port Size (F) NPT
51.320	**51.321**	1/4
51.325	**51.326**	3/8

AIRFLO 300
FILTER

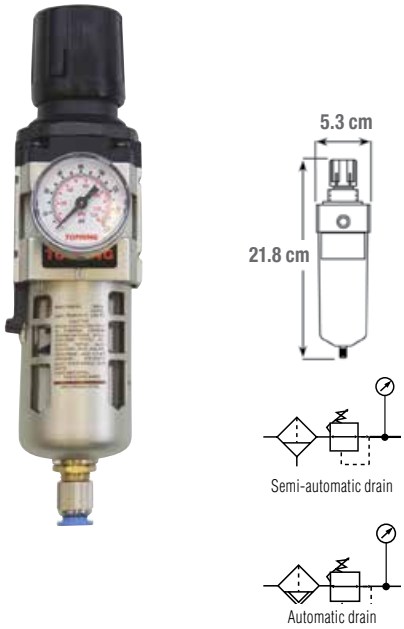
- Compact size
- Removes water through centrifugal force
- Removes contaminants down to 5 micron in size
- Standard semi-automatic drain requires a simple tug of ring to drain
- Mounting bracket included

SPECIFICATIONS

Port Size: 1/4 (F) NPT • 3/8 (F) NPT
Maximum Airflow at 100 PSI: 70 SCFM
Maximum Pressure: 150 PSI
Temperature Range: 5 °C to 60 °C
Filtration: 5 micron
Drain: Semi-automatic or automatic drain
Bowl Capacity: 20 ml

POLYCARBONATE BOWL		
Semi-auto. Drain Product No	Auto. Drain Product No	Port Size (F) NPT
51.360	51.361	1/4
51.365	51.366	3/8

AIRFLO 300
FILTER/REGULATOR
GAUGE INCLUDED



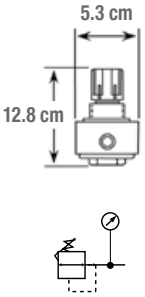
- Compact size
- Removes water through centrifugal force
- Removes contaminants down to 5 micron in size
- Standard semi-automatic drain requires a simple tug of ring to drain
- Accurate pressure control with little drift
- Removable locking Push/Pull adjusting knob
- Pressure gauge and mounting bracket included

SPECIFICATIONS

Port Size: 1/4 (F) NPT • 3/8 (F) NPT
Maximum Airflow at 100 PSI: 70 SCFM
Maximum Pressure: 150 PSI
Pressure Range: Standard: 5-125 PSI
Options: 5-30 PSI • 5-60 PSI
Temperature Range: 5 °C to 60 °C
Filtration: 5 micron
Drain: Semi-automatic or automatic drain
Bowl Capacity: 20 ml
Pressure Gauge Port Size: 1/8 (F) NPT

POLYCARBONATE BOWL		
Semi-auto. Drain Product No	Auto. Drain Product No	Port Size (F) NPT
51.350	51.351	1/4
51.355	51.356	3/8

AIRFLO 300
REGULATOR
GAUGE INCLUDED



- **Compact size**
- **Accurate pressure control with little drift**
- **Removable locking Push/Pull adjusting knob**
- **Pressure gauge and mounting bracket included**

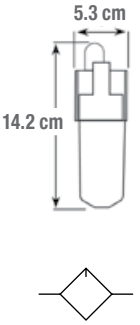
SPECIFICATIONS

Port Size: 1/4 (F) NPT • 3/8 (F) NPT
Maximum Airflow at 100 PSI: 70 SCFM
Maximum Pressure: 150 PSI
Temperature Range: 5 °C to 60 °C
Pressure Gauge Port Size: 1/8 (F) NPT

Product No	Pressure Range PSI	Port Size (F) NPT	Replacement Gauge
51.340*	5 - 125	1/4	**55.120**
51.341	5 - 60	1/4	**55.105**
51.342	5 - 30	1/4	**55.100**
51.345*	5 - 125	3/8	**55.120**
51.346	5 - 60	3/8	**55.105**
51.347	5 - 30	3/8	**55.100**

* Popular model

AIRFLO 300
LUBRICATOR



- **Compact size**
- **Lubrication proportioned to airflow**
- **Mounting bracket included**
- **Recommended oil Series 69 page 449**

SPECIFICATIONS

Port Size: 1/4 (F) NPT • 3/8 (F) NPT
Maximum Airflow at 100 PSI: 70 SCFM
Maximum Pressure: 150 PSI
Temperature Range: 5 °C to 60 °C
Bowl Capacity: 50 ml

POLYCARBONATE BOWL	
Product No	Port Size (F) NPT
51.330	1/4
51.335	3/8

AIRFLO 300
VENTING SAFETY LOCK-OUT VALVE

- Shut off valve for closing flow to or from AIRFLO FRL units
- 3 port/2 position valve relieves downstream pressure when closed
- Can be locked in the closed position
- Can be mounted directly to AIRFLO components using standard AIRFLO spacers included
- Threaded ports also allow use in-line with other components
- Accepts standard single pad lock or safety lock for multiple lockout
- Conforms to OSHA Standard 29 CFR Part 10

Product No	Port Size	Vent Port
51.370	1/4	1/4
51.375	3/8	1/4

SPECIFICATIONS

Maximum pressure: 150 PSI

NEW

400
1/2

SERIES 51 AIRFLO 400
COALESCING FILTER AND COMBINATION UNITS

51.485
COALESCING FILTER

Port size: 1/2 (F) NPT
Filtration: 0.01 micron
Drain: Semi-automatic
Bowl capacity: 45 ml

51.405
COMBINATION UNIT F/R + Fc

Port size: 1/2 (F) NPT
Filtration:
- F/R 5 microns
- Fc 0.01 micron

Drain: Semi-automatic
Bowl capacity: 45 ml

51.407
COMBINATION UNIT F + Fc + R

Port size: 1/2 (F) NPT
Filtration:
- F 5 microns
- Fc 0.01 micron

Drain: Semi-automatic
Bowl capacity: 45 ml

51.407.01
COMBINATION UNIT V + F + Fc + R

Port size: 1/2 (F) NPT
Filtration:
- F 5 microns
- Fc 0.01 micron

Drain: Semi-automatic
Bowl capacity: 45 ml

AIRFLO 300
REPLACEMENT PARTS AND ACCESSORIES

Product No 51.002
Auto. drain
for 300 F, F/R

Product No 51.092.05
Element 5 mic.
for 300 F, F/R

Product No 51.092
Element 25 mic.
for 300 F, F/R

Product No 51.135
5-30 PSI spring
for 300 R, F/R

Product No 51.136
5-60 PSI spring
for 300 R, F/R

Product No 51.137
5-125 PSI spring
for 300 R, F/R

Product No 51.856
Sight dome
for 300-400-450-500 L

Product No 51.010
Spacer w / T-type bracket
for 300

Product No 51.805
Poly. bowl w / guard & drain
for 300 F, F/R

Product No 51.951
AIRFLO 300 piping adapters
1/4 (F) NPT (2)
Product No 51.952
AIRFLO 300 piping adapters
3/8 (F) NPT (2)

Product No 51.035
Spacer w / L-type bracket
for 300

Product No 51.815
Poly. Bowl w / guard & auto. drain
for 300 F, F/R

Replacement gauge
for 300 R, F/R

Product No 55.120 0-160 PSI
Product No 55.105 0-60 PSI
Product No 55.100 0-30 PSI

Product No 51.055
Mounting bracket
for 300 R, F/R

Product No 51.133
Diaphragm & piston
for 300 R

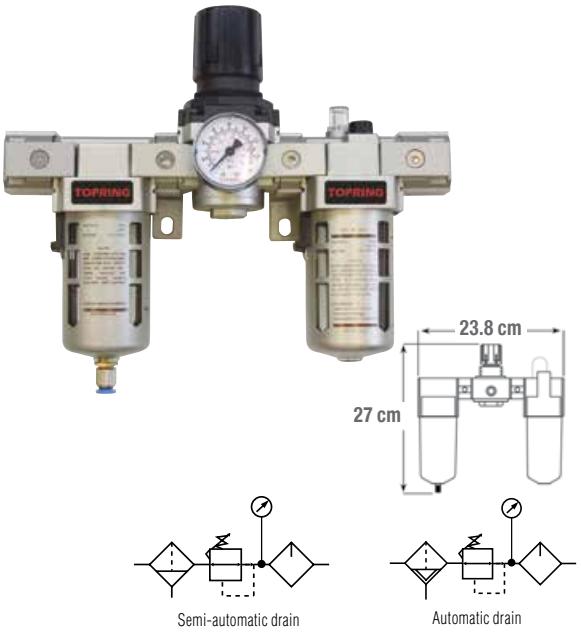
Product No 51.855
Poly. bowl with guard
for 300 L

Product No 51.075
Mounting bracket
for 300 F, L

Product No 51.134
Diaphragm & piston
for 300 F/R

Product No 51.116
Mounting nut
for 300 R, F/R

AIRFLO 400
COMBINATION UNIT F+R+L
GAUGE INCLUDED



- **Easy removal of individual units**
- **Accurate pressure control with little drift**
- **Removable locking Push/Pull adjusting knob**
- **Standard semi-automatic drain requires a simple tug of ring to drain**
- **Lubrication proportioned to airflow**
- **Pressure gauge, piping adapters and mounting brackets included**
- **Recommended oil Series 69 page 449**

SPECIFICATIONS

Port Size: 3/8 (F) NPT • 1/2 (F) NPT

Maximum Airflow at 100 PSI: 141 SCFM

Maximum Pressure: 150 PSI

Pressure Range: Standard: 5-125 PSI
Options: 5-30 PSI • 5-60 PSI

Temperature Range: 5 °C to 60 °C

Filtration: 5 micron

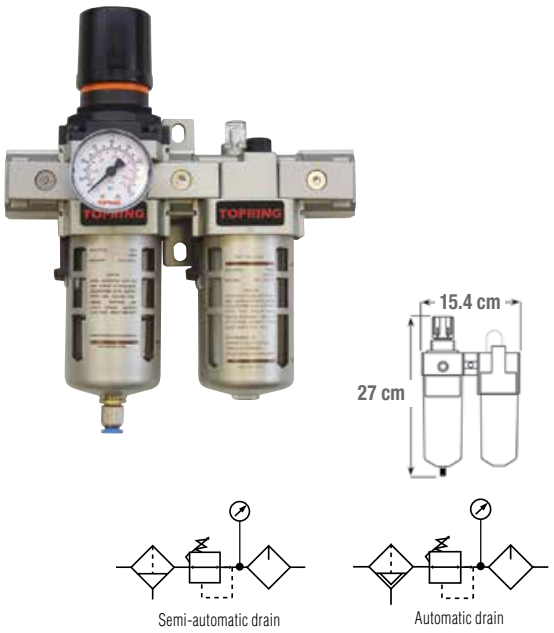
Drain: Semi-automatic or automatic drain

Bowl Capacity: Filter: 45 ml
Lubricator: 130 ml

Pressure Gauge Port Size: 1/4 (F) NPT

POLYCARBONATE BOWL		
Semi-auto. Drain Product No	Auto. Drain Product No	Port Size (F) NPT
51.410	51.411	3/8
51.415	51.416	1/2

AIRFLO 400
COMBINATION UNIT F/R + L
GAUGE INCLUDED



- **Compact size**
- **Accurate pressure control with little drift**
- **Removable locking Push/Pull adjusting knob**
- **Standard semi-automatic drain requires a simple tug of ring to drain**
- **Lubrication proportioned to airflow**
- **Pressure gauge, piping adapters and mounting brackets included**
- **Recommended oil Series 69 page 449**

SPECIFICATIONS

Port Size: 3/8 (F) NPT • 1/2 (F) NPT

Maximum Airflow at 100 PSI: 105 SCFM

Maximum Pressure: 150 PSI

Pressure Range: Standard: 5-125 PSI
Options: 5-30 PSI • 5-60 PSI

Temperature Range: 5 °C to 60 °C

Filtration: 5 micron

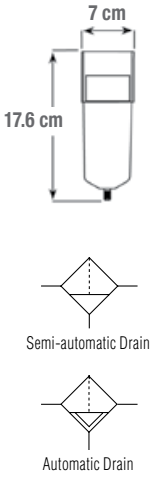
Drain: Semi-automatic or automatic drain

Bowl Capacity: Filter: 45 ml
Lubricator: 130 ml

Pressure Gauge Port Size: 1/4 (F) NPT

POLYCARBONATE BOWL		
Semi-auto. Drain Product No	Auto. Drain Product No	Port Size (F) NPT
51.420	51.421	3/8
51.425	51.426	1/2

AIRFLO 400
FILTER



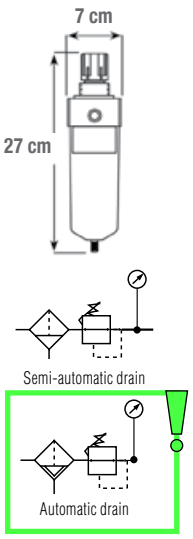
- **Compact size**
- **Removes water through centrifugal force**
- **Standard semi-automatic drain requires a simple tug of ring to drain**
- **Removes contaminants down to 5 micron in size**
- **Mounting bracket included**

SPECIFICATIONS

Port Size: 3/8 (F) NPT • 1/2 (F) NPT
Maximum Airflow at 100 PSI: 141 SCFM
Maximum Pressure: 150 PSI
Temperature Range: 5 °C to 60 °C
Filtration: 5 micron
Drain: Semi-automatic or automatic drain
Bowl Capacity: 45 ml

POLYCARBONATE BOWL		
Semi-auto. Drain Product No	**Auto. Drain Product No**	Port Size (F) NPT
51.460	**51.461**	3/8
51.465	**51.466**	1/2

AIRFLO 400
FILTER/REGULATOR
GAUGE INCLUDED



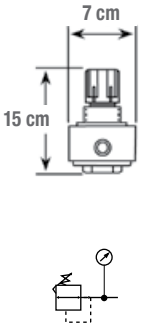
- **Compact size**
- **Removes water through centrifugal force**
- **Removes contaminants down to 5 micron in size**
- **Standard semi-automatic drain requires a simple tug of ring to drain**
- **Accurate pressure control with little drift**
- **Removable locking Push/Pull adjusting knob**
- **Pressure gauge and mounting bracket included**

SPECIFICATIONS

Port Size: 3/8 (F) NPT • 1/2 (F) NPT
Maximum Airflow at 100 PSI: 141 SCFM
Maximum Pressure: 150 PSI
Pressure Range: Standard: 5-125 PSI
Options: 5-30 PSI • 5-60 PSI
Temperature Range: 5 °C to 60 °C
Filtration: 5 micron
Drain: Semi-automatic or automatic drain
Bowl Capacity: 45 ml
Pressure Gauge Port Size: 1/4 (F) NPT

POLYCARBONATE BOWL		
Semi-auto. Drain Product No	**Auto. Drain Product No**	Port Size (F) NPT
51.450	**51.451**	3/8
51.455	**51.456**	1/2

AIRFLO 400
REGULATOR
GAUGE INCLUDED



- Compact size
- Accurate pressure control with little drift
- Removable locking Push/Pull adjusting knob
- Pressure gauge and mounting bracket included

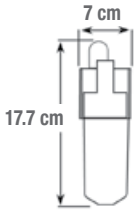
SPECIFICATIONS

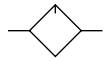
Port Size: 3/8 (F) NPT • 1/2 (F) NPT
Maximum Airflow at 100 PSI: 212 SCFM
Maximum Pressure: 150 PSI
Temperature Range: 5 °C to 60 °C
Pressure Gauge Port Size: 1/4 (F) NPT

Product No	Pressure Range PSI	Port Size (F) NPT	Replacement Gauge
51.440*	5 - 125	3/8	55.415
51.441	5 - 60	3/8	55.405
51.442	5 - 30	3/8	55.400
51.445*	5 - 125	1/2	55.415
51.446	5 - 60	1/2	55.405
51.447	5 - 30	1/2	55.400

* Popular model

AIRFLO 400
LUBRICATOR





- Compact size
- Lubrication proportioned to airflow
- Mounting bracket included
- Recommended oil Series 69 page 449

SPECIFICATIONS

Port Size: 3/8 (F) NPT • 1/2 (F) NPT
Maximum Airflow at 100 PSI: 176 SCFM
Maximum Pressure: 150 PSI
Temperature Range: 5 °C to 60 °C
Bowl Capacity: 130 ml

POLYCARBONATE BOWL	
Product No	Port Size (F) NPT
51.430	3/8
51.435	1/2

AIRFLO 400
VENTING SAFETY LOCK-OUT VALVE

- **Shut off valve for closing flow to or from AIRFLO FRL units**
- **3 port/2 position valve relieves downstream pressure when closed**
- **Can be locked in the closed position**
- **Can be mounted directly to AIRFLO components using standard AIRFLO spacers included**
- **Threaded ports also allow use in-line with other components**
- **Accepts standard single pad lock or safety lock for multiple lockout**
- **Conforms to OSHA Standard 29 CFR Part 10**

Product No	Port Size	Vent Port
51.470	3/8	3/8
51.475	1/2	3/8

SPECIFICATIONS

Maximum pressure: 150 PSI

AIRFLO 400
SOFT START VALVE

FEATURES AND BENEFITS

- **Combines soft start and quick exhaust valve in same body**
- **Can be mounted directly to AIRFLO components using standard AIRFLO spacers**
- **Threaded ports also allow use in-line with other TOPRING components**

SPECIFICATIONS

Port Size: 1/2 (F) NPT

Air Flow: 118 SCFM

Pressure Range: 44 to 145 PSI

Temperature Range: 0 °C to 60 °C

When the valve is installed on a pneumatic system and no electrical signal is received by the pilot operator, the air is blocked. When an electrical signal is received by the pilot, the valve shifts to open. Upon opening, the air flow begins at a slow rate controlled by the needle valve. When the downstream pressure reaches approximately 50 % of the supply pressure, the main valve opens allowing full flow through the valve into the system. If the pilot electrical signal or system pressure is lost, the valve will return to its initial position, venting the downstream pressure.

Product No	Port Size (F) NPT	Voltage	Model
51.495	1/2	110 VAC	**AIRFLO** 400
51.495.03	1/2	24 VDC	**AIRFLO** 400

TECH TIP

Unit is to be installed downtream of lubricator if applicable

AIRFLO 400
REPLACEMENT PARTS AND ACCESSORIES

Product No 51.003
Auto. drain
for 400-450-500-600 F, Fc, F/R

Product No 51.143
Diaphragm & piston
for 400 R

Product No 51.856
Sight dome
for 400-450-500-600 L

Product No 51.015
Spacer w / T-type bracket
for 400

Product No 51.144
Diaphragm & piston
for 400 F/R

Product No 51.860
Poly. bowl w / guard
for 400 L

Product No 51.040
Spacer w / L-type bracket
for 400

Product No 51.145
5-30 PSI Spring
for 400-450 F, F/R

Product No 51.146
5-60 PSI Spring
for 400-450 F, F/R

Product No 51.147
5-125 PSI Spring
for 400-450 F, F/R

Product No 51.953
AIRFLO 400 Piping adapters
3/8 (F) NPT (2)
Product No 51.954
AIRFLO 400 Piping adapters
1/2 (F) NPT (2)

Product No 51.060
Mounting bracket
for 400-500 R, F/R

Product No 51.810
Poly. bowl w / guard & drain
for 400 F, FC, F/R

Replacement gauge
for 400 R, F/R

Product No 55.415	0-160 PSI
Product No 55.405	0-60 PSI
Product No 55.400	0-30 PSI

Product No 51.080
Mounting bracket
for 400 F, Fc, L

Product No 51.820
Poly. bowl w / guard & auto. drain
for 400 F, Fc, F/R

Product No 51.117
Mounting nut
for 400-450-500 R, F/R

Product No 51.093.05
Element 5 mic for
400-450 F/R Auto.

Product No 51.093
Element 25 mic for
400-450 F/R Auto.

Product No 51.094.05
Element 5 mic
for 400-450 F, F/R
semi-auto.

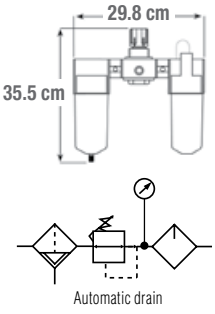
Product No 51.094
Element 25 mic
for 400-450 F, F/R
semi-auto.

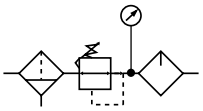
Product No 51.095.05
Element 5 mic
for 400 F Auto.

Product No 51.095
Element 25 mic
for 400 F Auto.

Product No 51.107
Element 0.01 mic
for 400 Fc

AIRFLO 500
COMBINATION UNIT F+R+L
GAUGE INCLUDED




Semi-automatic drain

Automatic drain

- **Easy removal of individual units**
- **Accurate pressure control with little drift**
- **Removable locking Push/Pull adjusting knob**
- **Standard semi-automatic drain requires a simple tug of ring to drain**
- **Lubrication proportioned to airflow**
- **Pressure gauge, piping adapters and mounting brackets included**
- **Recommended oil Series 69 page 449**

SPECIFICATIONS

Port Size: 3/4 (F) NPT • 1 (F) NPT

Maximum Airflow at 100 PSI: 175 SCFM

Maximum Pressure: 150 PSI

Pressure Range: Standard: 5-125 PSI
Options: 5-30 PSI • 5-60 PSI

Temperature Range: 5 °C to 60 °C

Filtration: 5 micron

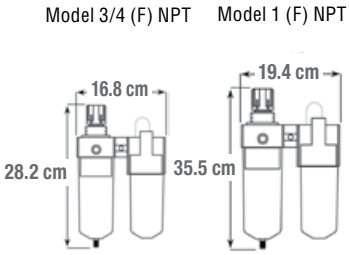
Drain: Semi-automatic or automatic drain

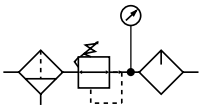
Bowl Capacity: 130 ml

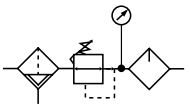
Pressure Gauge Port Size: 1/4 (F) NPT

ALUMINIUM BOWL			
Semi-auto. Drain Product No	Auto. Drain Product No	Port Size (F) NPT	Model
51.510	51.511	3/4	**AIRFLO** 500
51.515	51.516	1	**AIRFLO** 500

AIRFLO 450 • 500
COMBINATION UNIT F/R + L
GAUGE INCLUDED




Semi-automatic drain


Automatic drain

- **Accurate pressure control with little drift**
- **Removable locking Push/Pull adjusting knob**
- **Standard semi-automatic drain requires a simple tug of ring to drain**
- **Lubrication proportioned to airflow**
- **Pressure gauge, piping adapters and mounting brackets included (piping adapters not included for AIRFLO 450)**
- **Recommended oil Series 69 page 449**

SPECIFICATIONS

Port Size: 3/4 (F) NPT • 1 (F) NPT

Maximum Airflow at 100 PSI: 3/4: 105 SCFM • 1: 140 SCFM

Maximum Pressure: 150 PSI

Pressure Range: 7-123 PSI

Temperature Range: 5 °C to 60 °C

Filtration: 5 micron

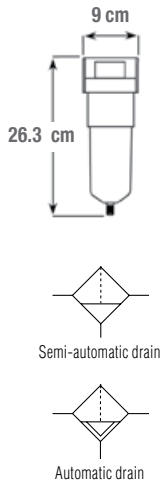
Drain: Semi-automatic or automatic drain

Bowl Capacity: Filter: 130 ml
Lubricator 3/4 : 50 ml
Lubricator 1: 190 ml

Pressure Gauge Port Size: 1/4 (F) NPT

ALUMINIUM BOWL			
Semi-auto. Drain Product No	Auto. Drain Product No	Port Size (F) NPT	Model
51.520	51.521	3/4	**AIRFLO** 450
51.525	51.526	1	**AIRFLO** 500

AIRFLO 500
FILTER



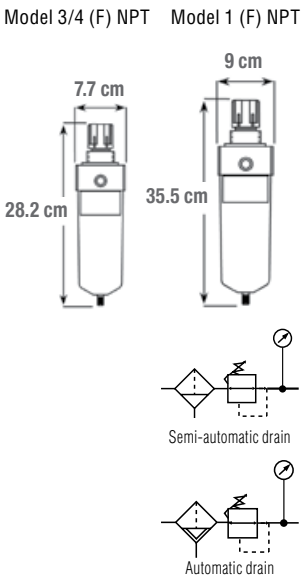
- **Compact size**
- **Removes water through centrifugal force**
- **Removes contaminants down to 5 micron in size**
- **Standard semi-automatic drain requires a simple tug of ring to drain**
- **Mounting bracket included**

SPECIFICATIONS

Port Size: 3/4 (F) NPT • 1 (F) NPT
Maximum Airflow at 100 PSI: 247 SCFM
Maximum Pressure: 150 PSI
Temperature Range: 5 °C to 60 °C
Filtration: 5 micron
Drain: Semi-automatic or automatic drain
Bowl Capacity: 130 ml

ALUMINIUM BOWL			
Semi-auto. Drain Product No	**Auto. Drain Product No**	Port Size (F) NPT	Model
51.560	**51.561**	3/4	**AIRFLO** 500
51.565	**51.566**	1	**AIRFLO** 500

AIRFLO 450 • 500
FILTER/REGULATOR
GAUGE INCLUDED



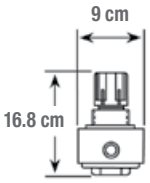
- **Easy removal of individual units**
- **Accurate pressure control with little drift**
- **Removable locking Push/Pull adjusting knob**
- **Standard semi-automatic drain requires a simple tug of ring to drain**
- **Pressure gauge and mounting brackets included**

SPECIFICATIONS

Port Size: 3/4 (F) NPT • 1 (F) NPT
Maximum Airflow at 100 PSI: 3/4: 160 SCFM • 1: 195 SCFM
Maximum Pressure: 150 PSI
Pressure Range: Standard: 5-125 PSI
Options: 5-30 PSI • 5-60 PSI
Temperature Range: 5 °C to 60 °C
Filtration: 5 micron
Drain: Semi-automatic or automatic drain
Bowl Capacity: 3/4: 50 ml • 1: 190 ml
Pressure Gauge Port Size: 1/4 (F) NPT

ALUMINIUM BOWL			
Semi-auto. Drain Product No	**Auto. Drain Product No**	Port Size (F) NPT	Model
51.550	**51.551**	3/4	**AIRFLO** 450
51.555	**51.556**	1	**AIRFLO** 500

AIRFLO 500
REGULATOR
GAUGE INCLUDED



- Compact size
- Accurate pressure control with little drift
- Removable locking Push/Pull adjusting knob
- Pressure gauge and mounting bracket included

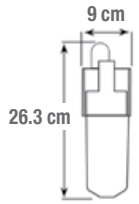
SPECIFICATIONS

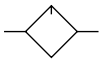
Port Size: 3/4 (F) NPT • 1 (F) NPT
Maximum Airflow at 100 PSI: 282 SCFM
Maximum Pressure: 150 PSI
Temperature Range: 5 °C to 60 °C
Pressure Gauge Port Size: 1/4 (F) NPT

Product No	Pressure Range PSI	Port Size (F) NPT	Replacement Gauge
51.540*	5 - 125	3/4	55.415
51.541	5 - 60	3/4	55.405
51.542	5 - 30	3/4	55.400
51.545*	5 - 125	1	55.415
51.546	5 - 60	1	55.405
51.547	5 - 30	1	55.400

* Popular model

AIRFLO 500
LUBRICATOR





- Compact size
- Lubrication proportioned to airflow
- Mounting bracket included
- Recommended oil Series 69 page 449

SPECIFICATIONS

Port Size: 3/4 (F) NPT • 1 (F) NPT
Maximum Airflow at 100 PSI: 247 SCFM
Maximum Pressure: 150 PSI
Temperature Range: 5 °C to 60 °C
Bowl Capacity: 190 ml

ALUMINIUM BOWL	
Product No	Port Size (F) NPT
51.530	3/4
51.535	1

AIRFLO 450 • 500
REPLACEMENT PARTS AND ACCESSORIES

Product No 51.003
Auto drain
for 400-450-500-600 F, F/R

Product No 51.153
Diaphragm & piston
for 500 R

Product No 51.856
Sight dome
for 400-450-500-600 L

Product No 51.018
Spacer w / T-type bracket
for 450

Product No 51.096.05
Element 5 mic.
for 500 F, F/R

Product No 51.096
Element 25 mic.
for 500 F, F/R

Product No 51.154
Diaphragm + piston
for 500 F/R

Product No 51.865
Metal bowl
for 450-500 L

Product No 51.020
Spacer w / T-type
Bracket for 500

Product No 51.045
Spacer w / L-type
Bracket for 500

Product No 51.155
5-30 PSI spring
for 500 R, F/R

Product No 51.156
5-60 PSI spring
for 500 R, F/R

Product No 51.157
5-125 PSI spring
for 500 R, F/R

Product No 51.955
AIRFLO 500 piping adapters
3/4 (F) NPT (2)
Product No 51.956
AIRFLO 500 piping adapters
1 (F) NPT (2)

Product No 51.060
Mounting bracket
for 400-500 R, F/R

Product No 51.085
Mounting bracket
for 500 F, L

Product No 51.145
5-30 PSI spring
for 400-450 R, F/R

Product No 51.146
5-60 PSI spring
for 400-450 R, F/R

Product No 51.147
5-125 PSI spring
for 400-450 R, F/R

Product No 51.825
Metal bowl w / semi-auto. drain
for 450-500-600 F, F/R

Replacement gauge
for 450, 500 R, F/R

Product No 55.415 0-160 PSI
Product No 55.405 0-60 PSI
Product No 55.400 0-30 PSI

Product No 51.094.05
Element 5 mic
for 400-450 F, F/R
Semi-auto.

Product No 51.094
Element 25 mic
for 400-450 F, F/R
Semi-auto.

Product No 51.149
Diaphragm & piston
for 450 F/R

Product No 51.830
Metal Bowl w / auto. drain
for 450-500-600 F, F/R

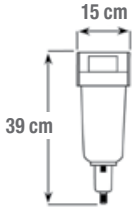
Product No 51.117
Mounting nut
for 450-450-500 R, F/R

Product No 51.093.05
Element 5 mic
for 400-450 F/R
Auto.

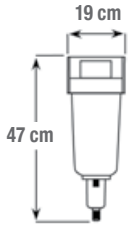
Product No 51.093
Element 25 mic
for 400-450 F/R
Auto.

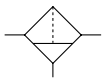
AIRFLO 600
FILTER

Models
1 1/4(F) NPT
1 1/2(F) NPT

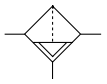


Model 2(F) NPT





Semi-automatic drain



Automatic drain

- **Removes water through centrifugal force**
- **Removes contaminants down to 5 micron in size**
- **Standard semi-automatic drain requires a simple tug of ring to drain**

SPECIFICATIONS

Port Size: 1 1/4 (F) NPT • 1 1/2 (F) NPT • 2 (F) NPT

Maximum Airflow at 100 PSI:
1 1/4 -1 1/2: 405 SCFM • 2: 650 SCFM

Maximum Pressure: 217 PSI

Maximum Operating Pressure: 150 PSI

Temperature Range: 5 °C to 60 °C

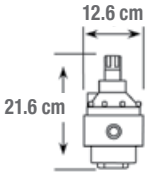
Filtration: 5 micron

Drain: Semi-automatic or automatic drain

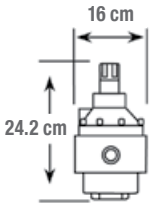
ALUMINIUM BOWL		
Semi-auto. Drain Product No	**Auto. Drain Product No**	Port Size (F) NPT
51.660	**51.661**	1 1/4
51.662	**51.663**	1 1/2
51.665	**51.666**	2

AIRFLO 600
REGULATOR
GAUGE INCLUDED

Model
1 1/2(F) NPT



Model 2(F) NPT



- **Accurate pressure control with little drift**
- **Internal pilot relieving type (pilot is always bleeding)**
- **Pressure gauge included**

SPECIFICATIONS

Port Size: 1 1/2 (F) NPT • 2 (F) NPT

Maximum Airflow at 100 PSI: 1 1/2: 635 SCFM • 2: 775 SCFM

Maximum Pressure: 217 PSI

Maximum Operating Pressure: 150 PSI

Pressure Range: 7-120 PSI

Temperature Range: 5 °C to 60 °C

Pressure Gauge Port Size: 1/4 (F) NPT

Product No	Port Size (F) NPT	**Replacement Gauge**
51.642	1 1/2	**55.415**
51.645	2	**55.415**

AIRFLO 600
REPLACEMENT PARTS AND ACCESSORIES

Product No 51.003
Auto drain
for 400-450-500-600 F, F/R

Product No 51.097.05
Element 5 mic.
for 600 F 1-1/4, 1-1/2

Product No 51.099.05
Element 5 mic.
for 600 F 2

Product No 51.830
Metal bowl w / auto. drain
for 450-500-600 F, F/R

Product No 51.097
Element 25 mic.
for 600 F 1-1/4, 1-1/2

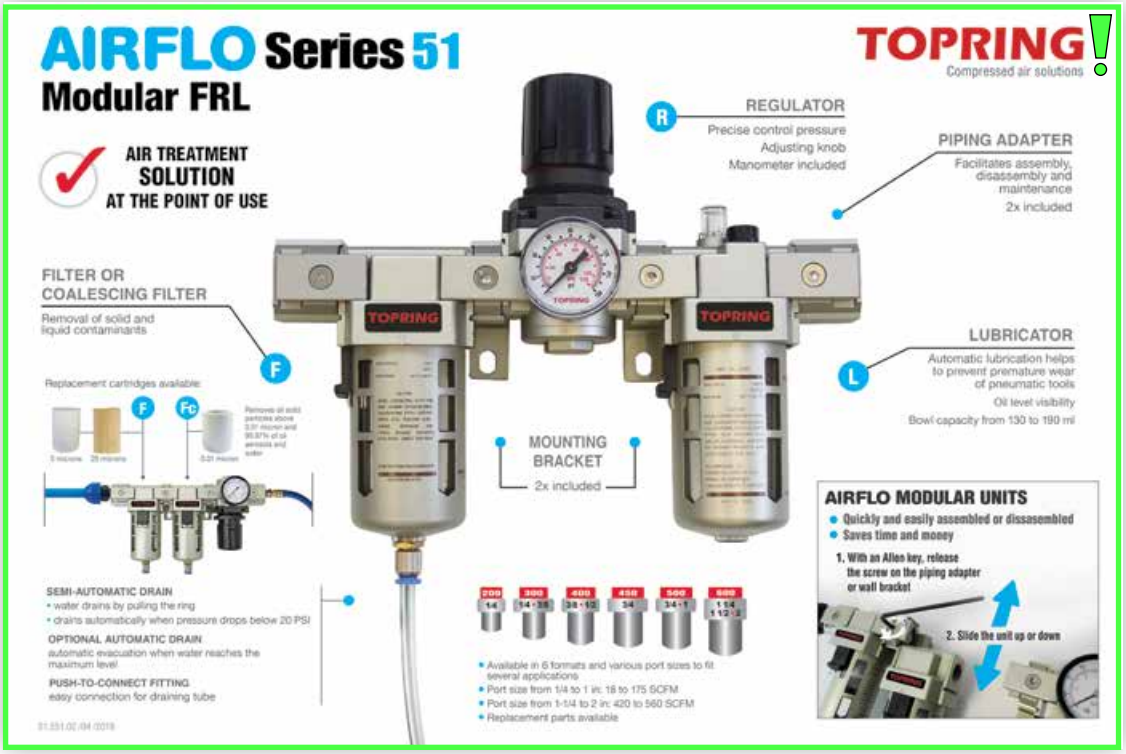
Product No 51.099
Element 25 mic.
for 600 F 2

Product No 51.825
Metal bowl w / semi-auto. drain
for 450-500-600 F, F/R

Product No 55.415
Replacement gauge
for 450-500-600 R, F/R

POSTER • AIRFLO SERIES 51

The **AIRFLO** S51 poster illustrates an F+R+L combination unit with visual reference of necessary steps for compressed air treatment.



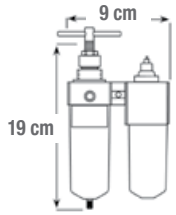
Product No	Description
96.551.01	**AIRFLO** S51 poster / French version
96.551.02	**AIRFLO** S51 poster / English version

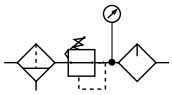
24_05_2016

AIRFLO 200
COMBINATION UNIT F/R+L
GAUGE INCLUDED

STAINLESS STEEL

- Stainless steel SUS 316 body and bowl
- Compact size
- Accurate pressure control
- Removes contaminants down to 5 micron in size
- Standard semi-automatic drain
- Lubricator refillable under pressure
- Pressure gauge and mounting brackets included
- Recommended oil Series 69 page 449





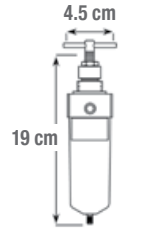
SPECIFICATIONS

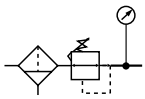
Port Size: 1/4 (F) NPT
Maximum Airflow: 65 SCFM
Operating Pressure Range: 7 to 285 PSI
Temperature Range: -10 °C to 60 °C
Filtration: 5 micron
Drain: Semi-automatic
Bowl Capacity: Filter: 105 ml
Lubricator: 125 ml
Pressure Gauge Port Size: 1/8 (F) BSPT

STAINLESS STEEL		
Product No	Port Size (F) NPT	Replacement Gauge
51.705	1/4	55.795

FILTER/REGULATOR
GAUGE INCLUDED

- Stainless steel SUS 316 body and bowl
- Compact size
- Removes water through centrifugal force
- Removes contaminants down to 5 micron in size
- Standard semi-automatic drain
- Accurate pressure control
- Pressure gauge and mounting bracket included





SPECIFICATIONS

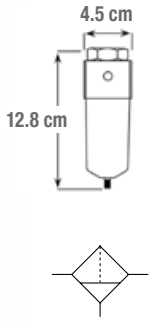
Port Size: 1/4 (F) NPT
Maximum Airflow: 65 SCFM
Operating Pressure Range: 7 to 285 PSI
Temperature Range: -10 °C to 60 °C
Filtration: 5 micron
Drain: Semi-automatic
Bowl Capacity: 105 ml
Pressure Gauge Port Size: 1/8 (F) BSPT

STAINLESS STEEL		
Product No	Port Size (F) NPT	Replacement Gauge
51.710	1/4	55.795

AIRFLO 200 FILTER

STAINLESS STEEL

- Stainless steel SUS 316 body and bowl
- Compact size
- Removes water through centrifugal force
- Removes contaminants down to 5 micron in size
- Standard semi-automatic drain
- Mounting bracket included



SPECIFICATIONS

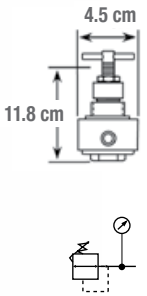
Port Size: 1/4 (F) NPT
Maximum Airflow: 67 SCFM
Operating Pressure Range: 7 to 285 PSI
Temperature Range: -10 °C to 60 °C
Filtration: 5 micron
Drain: Semi-automatic
Bowl Capacity: 105 ml

STAINLESS STEEL	
Product No	Port Size (F) NPT
51.715	1/4

REGULATOR

GAUGE INCLUDED

- Stainless steel SUS 316 body
- Compact size
- Accurate pressure control
- Pressure gauge and mounting bracket included



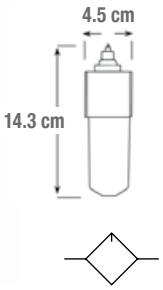
SPECIFICATIONS

Port Size: 1/4 (F) NPT
Maximum Airflow: 65 SCFM
Operating Pressure Range: 7 to 285 PSI
Temperature Range: -10 °C to 60 °C
Pressure Gauge Port Size: 1/8 (F) BSPT

STAINLESS STEEL		
Product No	Port Size (F) NPT	**Replacement Gauge**
51.720	1/4	**55.795**

LUBRICATOR

- Stainless steel SUS 316 body and bowl
- Compact size
- Lubricator refillable under pressure
- Mounting bracket included
- Recommended oil Series 69 page 449



SPECIFICATIONS

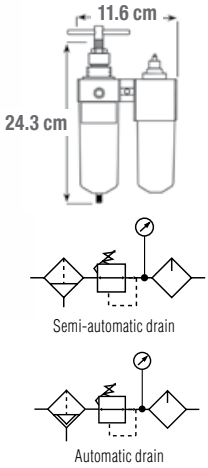
Port Size: 1/4 (F) NPT
Maximum Airflow: 88 SCFM
Operating Pressure Range: 7 to 285 PSI
Temperature Range: -10 °C to 60 °C
Bowl Capacity: 125 ml

STAINLESS STEEL	
Product No	Port Size (F) NPT
51.725	1/4

AIRFLO 300
COMBINATION UNIT F/R+L
GAUGE INCLUDED

- Stainless steel SUS 316 body and bowl
- Compact size
- Accurate pressure control
- Removes contaminants down to 5 micron in size
- Standard semi-automatic drain
- Lubricator refillable under pressure
- Pressure gauge and mounting brackets included
- Recommended oil Series 69 page 449

STAINLESS STEEL



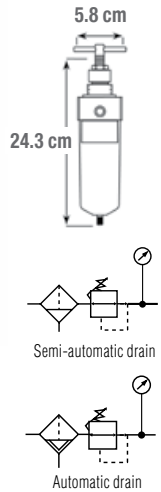
SPECIFICATIONS

Port Size: 3/8 (F) NPT • 1/2 (F) NPT
Maximum Airflow: 3/8: 77 SCFM • 1/2: 88 SCFM
Operating Pressure Range: 7 to 250 PSI
Temperature Range: -10 °C to 70 °C
Filtration: 5 micron
Drain: Semi-automatic
Bowl Capacity: Filter: 110 ml • Lubricator: 130 ml
Pressure Gauge Port Size: 1/8 (F) BSPT

STAINLESS STEEL			
Product No	Port Size (F) NPT	**Replacement Element**	**Replacement Gauge**
51.740	3/8	**51.695**	**55.798**
51.745	1/2	**51.695**	**55.798**

FILTER/REGULATOR
GAUGE INCLUDED

- Stainless steel SUS 316 body and bowl
- Compact size
- Removes water through centrifugal force
- Removes contaminants down to 5 micron in size
- Standard semi-automatic drain
- Accurate pressure control
- Pressure gauge and mounting bracket included



SPECIFICATIONS

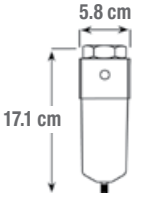
Port Size: 3/8 (F) NPT • 1/2 (F) NPT
Maximum Airflow: 3/8: 88 SCFM • 1/2: 134 SCFM
Operating Pressure Range: 7 to 250 PSI
Temperature Range: -10 °C to 70 °C
Filtration: 5 micron
Drain: Semi-automatic
Bowl Capacity: 110 ml
Pressure Gauge Port Size: 1/8 (F) BSPT

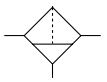
STAINLESS STEEL			
Product No	Port Size (F) NPT	**Replacement Element**	**Replacement Gauge**
51.750	3/8	**51.695**	**55.798**
51.755	1/2	**51.695**	**55.798**

AIRFLO 300 FILTER

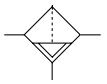
STAINLESS STEEL

- Stainless steel SUS 316 body and bowl
- Compact size
- Removes water through centrifugal force
- Removes contaminants down to 5 micron in size
- Standard semi-automatic drain
- Mounting bracket included





Semi-automatic drain



Automatic drain

SPECIFICATIONS

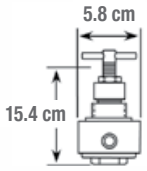
Port Size: 3/8 (F) NPT • 1/2 (F) NPT
Maximum Airflow: 3/8: 89 SCFM • 1/2: 145 SCFM
Operating Pressure Range: 7 to 250 PSI
Temperature Range: -10 °C to 70 °C
Filtration: 5 micron
Drain: Semi-automatic
Bowl Capacity: 110 ml

STAINLESS STEEL		
Product No	Port Size (F) NPT	**Replacement Element**
51.760	3/8	**51.695**
51.765	1/2	**51.695**

REGULATOR

GAUGE INCLUDED

- Stainless steel SUS 316 body
- Compact size
- Accurate pressure control
- Pressure gauge and mounting bracket included



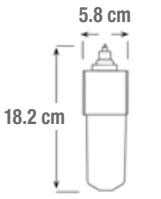
SPECIFICATIONS

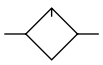
Port Size: 3/8 (F) NPT • 1/2 (F) NPT
Maximum Airflow: 3/8: 79 SCFM • 1/2: 88 SCFM
Operating Pressure Range: 7 to 250 PSI
Temperature Range: -10 °C to 70 °C
Pressure Gauge Port Size: 1/8 (F) BSPT

STAINLESS STEEL		
Product No	Port Size (F) NPT	**Replacement Gauge**
51.770	3/8	**55.798**
51.775	1/2	**55.798**

LUBRICATOR

- Stainless steel SUS 316 body and bowl
- Compact size
- Refillable under pressure
- Mounting bracket included
- Recommended oil Series 69 page 449





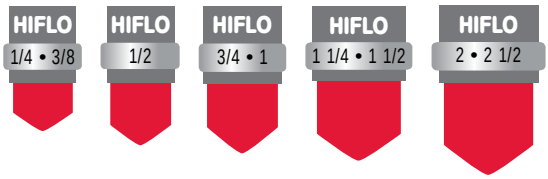
SPECIFICATIONS

Port Size: 3/8 (F) NPT • 1/2 (F) NPT
Maximum Airflow: 3/8: 89 SCFM • 1/2: 144 SCFM
Operating Pressure Range: 7 to 250 PSI
Temperature Range: -10 °C to 70 °C
Bowl Capacity: 130 ml

STAINLESS STEEL	
Product No	Port Size (F) NPT
51.780	3/8
51.785	1/2

Series 52
AIR TREATMENT (FRL)

FILTERS, REGULATORS AND LUBRICATORS
HIFLO



FEATURES AND BENEFITS

- Excellent performance
- Heavy duty for long life and reliability
- Easy maintenance
- High performance FRLs for heavy-duty applications
- High flow with low pressure drop
- Port sizes from 1/4 through 2-1/2
- Also available:
  Large capacity coalescent filters
  Remote pilot regulators
  Precision regulators
  Quick-Set dial regulators
- Tough Polycarbonate bowls with integrated bowl guards to protect against bowl rupture
- Drain: Manual drain or auto drain
- Zinc bowls with sight glass
- Superior product finish (epoxy powder paint)

MATERIALS

Body Material: Zinc (aluminium for 2 and 2-1/2 filter)

Bowl Type: Polycarbonate, zinc, aluminium, steel

SPECIFICATIONS

Maximum Pressure: 150 to 300 PSI

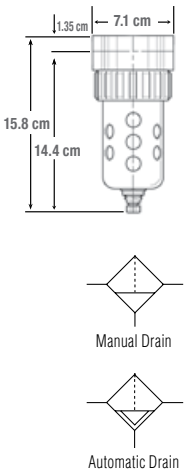
Pressure Range:
1-25 PSI, 2-60 PSI, 2-125 PSI, 5-250 PSI

Temperature Range: 0 °C to 66 °C

THINGS TO KNOW

Filters, coalescing filters and lubricators are now offered in upgraded version (HIFLO$_2$). Some replacement parts are different from the original version (HIFLO). Replacement parts for filters, coalescing filters and lubricators for the original version (HIFLO) are still available. It is therefore important to choose the replacement parts that fit the model version.

HIFLO$_2$ FILTER



- **High flow design**
- **Removes contaminants down to 40 micron in size**
- **Removes water through centrifugal force**
- **Automatic drain available**

SPECIFICATIONS

Port Size: 1/4 (F) NPT • 3/8 (F) NPT

Maximum Airflow at 100 PSI:
1/4: 53 SCFM
3/8: 80 SCFM

Maximum Pressure:
Polycarbonate Bowl: 150 PSI
Zinc Bowl: 250 PSI

Temperature Range:
Polycarbonate Bowl: 0 °C to 52 °C
Zinc Bowl: 0 °C to 80 °C

Filtration: Standard 40 micron / Optional 5 micron

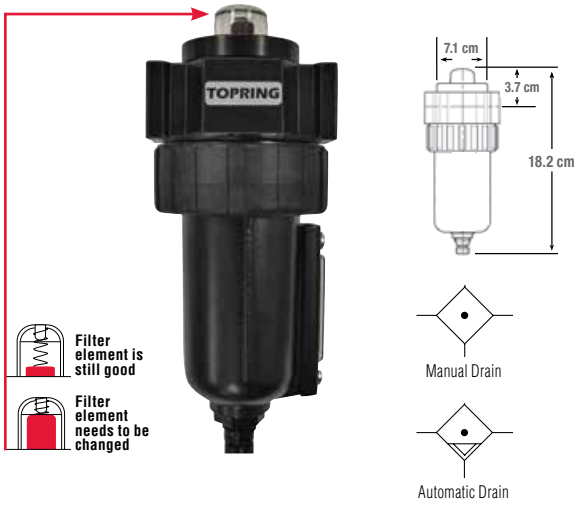
Drain: Manual or internal automatic drain

Bowl Capacity: 130.1 ml

POLYCARBONATE BOWL		ZINC BOWL		
Man. Drain. Product No	Auto. Drain Product No	Man. Drain. Product No	Auto. Drain Product No	Port Size (F) NPT
52.120	52.121	52.122	52.123	1/4
52.135	52.136	52.137	52.138	3/8

Also available with a 5 micron element: add suffix .05

HIFLO$_2$ COALESCING FILTER



- **High flow design**
- **Highly efficient coalescing filter designed to remove all solid particles over 0.3 micron, together with 99.97% of oil and oil aerosols**
- **Differential pressure pop-up indicator will rise with increase in pressure drop, indicating the need to change filter element (10 PSI differential)**
- **Automatic drain available**

SPECIFICATIONS

Port Size: 1/4 (F) NPT • 3/8 (F) NPT

Maximum Airflow at 100 PSI:
1/4: 45 SCFM
3/8: 48 SCFM

Maximum Pressure: 250 PSI

Temperature Range: 0 °C to 80 °C

Filtration: Standard 0.3 micron

Drain: Manual or internal automatic drain

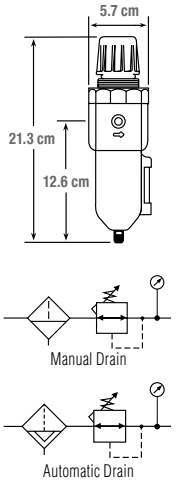
Bowl Capacity: 130.1 ml

TECH TIP

A coalescing filter should always be preceded by a filter or a F/R. The filter will prevent the coalescing element from quickly being saturated by larger particles.
See page 203.

ZINC BOWL		
Manual Drain Product No	Auto. Drain Product No	Port Size (F) NPT
52.922	52.923	1/4
52.932	52.933	3/8

HIFLO
INTEGRATED FILTER/REGULATOR
GAUGE INCLUDED



- **High flow design**
- **Space-saving integrated filter/regulator design**
- **Push/Pull tamper-proof adjusting knob**
- **Removes contaminants down to 40 micron in size**
- **Removes water through centrifugal force**
- **Maintains constant downstream pressure**
- **Automatic drain available**

SPECIFICATIONS

Port Size: 1/4 (F) NPT • 3/8 (F) NPT

Maximum Airflow at 100 PSI: 70 SCFM

Maximum Pressure:
Manual Drain: 250 PSI
Automatic Drain: 175 PSI

Pressure Range: 0-250 PSI

Temperature Range:
Manual Drain: 4 °C to 66 °C
Automatic Drain: 4 °C to 52 °C

Filtration: Standard 40 micron / Optional 5 micron

Drain: Manual or internal automatic drain

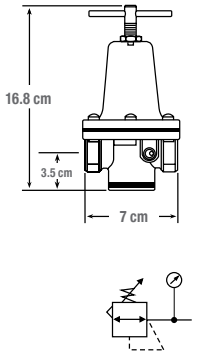
Bowl Capacity: 118.3 ml

Pressure Gauge Port Size: 1/4 (F) NPT

ZINC BOWL		
Manual Drain Product No	**Auto. Drain Product No**	Port Size (F) NPT
52.227	**52.228**	1/4
52.232	**52.233**	3/8

Also available with a 5 micron element: add suffix .05

HIFLO
REGULATOR
GAUGE INCLUDED



- **High flow design**
- **Robust T-handle pressure adjustment**
- **Maintains constant downstream pressure**

A Quick-Set Dial Regulator is a better option when frequent pressure adjustments are required. See page 276.

SPECIFICATIONS

Port Size: 1/4 (F) NPT • 3/8 (F) NPT

Maximum Airflow at 100 PSI:
1/4: 100 SCFM
3/8: 110 SCFM

Maximum Pressure: 300 PSI

Temperature Range: 4 °C to 52 °C

Pressure Gauge Port Size: 1/4 (F) NPT

Product No	Pressure Range PSI	Port Size (F) NPT	Replacement Gauge
52.329 *	5-250	1/4	**55.425**
52.325	2-125	1/4	**55.415**
52.328	2-60	1/4	**55.410**
52.327	1-25	1/4	**55.400**
52.331 *	5-250	3/8	**55.425**
52.330	2-125	3/8	**55.415**
52.338	2-60	3/8	**55.410**
52.337	1-25	3/8	**55.400**

* Popular model

HIFLO
PRECISION REGULATORS

FEATURES AND BENEFITS

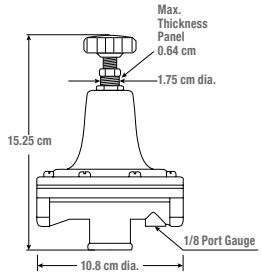
- **High flow performance featuring rugged design for the most demanding applications**
- **High sensitivity under varying conditions.**
- **Diaphragm operated with large surface area and aspirator for quick and precise regulation**
- **Panel mount version for more mounting versatility**
- **Regulator with digital pressure gauge available**

APPLICATIONS

For industrial applications: pneumatic systems, printing equipment, air measurement systems, automation equipment and machine tools

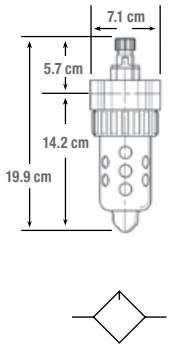
SPECIFICATIONS

Port Size: 1/4 (F) NPT • 3/8 (F) NPT
Pressure Gauge Port Size: 1/8 (F) NPT
Maximum Air Flow at 100 PSI: 40 SCFM
Maximum Pressure: 300 PSI
Temperature Range: 4 ºC to 52 ºC
Precision: ±0.25 PSI



Without pressure gauge	With pressure gauge	Pressure Range PSI	Port Size (F) NPT
Product No	Product No		
52.315	52.315.01	0-20	1/4
52.316	52.316.01	0-8	1/4
52.317	52.317.01	0-20	3/8
52.318	52.318.01	0-8	3/8

HIFLO$_2$ LUBRICATOR



- **High flow design**
- **Lubrication automatically proportioned to airflow, eliminating re-adjustment**
- **Generates oil particles of 5 micron or smaller downstream**
- **Micro-mist type lubricator**
- **Recommended oil Series 69 page 449**

SPECIFICATIONS

Port Size: 1/4 (F) NPT • 3/8 (F) NPT

Maximum Airflow at 100 PSI:
1/4: 40 SCFM
3/8: 60 SCFM

Maximum Pressure:
Polycarbonate Bowl: 150 PSI
Zinc Bowl: 250 PSI

Temperature Range:
Polycarbonate Bowl: 0 °C to 52 °C
Zinc Bowl: 0 °C to 80 °C

Bowl Capacity: 76.9 ml

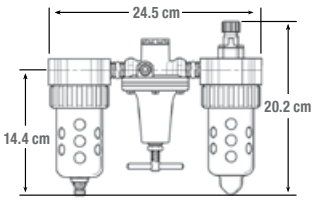
TECH TIP

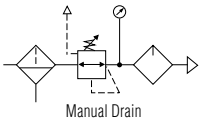
Lubrification up to 30 meters
HIFLO$_2$ lubricators are designed to lubricate a tool through a hose of up to 30 meters (100 feet length) from the outlet of the lubricator.
Standard lubricators lubricate up to 5 meters from the outlet.

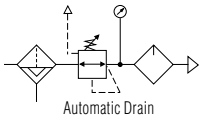
POLYCARBONATE BOWL Product No	ZINC BOWL Product No	Port Size (F) NPT
52.420	52.422	1/4
52.435	52.437	3/8

HIFLO$_2$ COMBINATION UNIT F+R+L

GAUGE INCLUDED







- **High flow design**
- **Robust T-handle pressure adjustment**
- **Lubrication automatically proportioned to airflow, eliminating readjustment**
- **Removes contaminants down to 40 micron in size**
- **Removes water through centrifugal force**
- **Maintains constant downstream pressure**
- **Automatic drain available**
- **Recommended oil Series 69 page 449**

SPECIFICATIONS

Port Size: 1/4 (F) NPT • 3/8 (F) NPT

Maximum Airflow at 100 PSI:
1/4: 40 SCFM
3/8: 60 SCFM

Maximum Pressure:
Polycarbonate Bowl: 150 PSI
Zinc Bowl: 250 PSI

Pressure Range: Standard: 5-250 PSI
Optional: 1-25 PSI • 2-60 PSI • 2-125 PSI

Temperature Range: 4 °C to 52 °C

Filtration: Standard 40 micron / Optional 5 micron

Drain: Manual or internal automatic drain

Bowl Capacity:
Filter: 130.1 ml
Lubricator: 76.9 ml

Pressure Gauge Port Size: 1/4 (F) NPT

POLYCARBONATE BOWL		ZINC BOWL		Port Size (F) NPT
Man. Drain. Product No	Auto. Drain Product No	Man. Drain. Product No	Auto. Drain Product No	
52.520	52.521	52.522	52.523	1/4
52.535	52.536	52.537	52.538	3/8

Also available with a 5 micron element: add suffix .05

HIFLO
REPLACEMENT PARTS AND REPAIR KITS

Product No 52.003
Auto drain 250 PSI
F, FC 1/4-3/8-1/2
HIFLO$_2$

Product No 50.003
Auto drain 175 PSI
F/R HIFLO

Product No 52.042
Element 40 micron
F 1/4-3/8-1/2 HIFLO$_2$

Product No 52.043
Element 5 micron
F 1/4-3/8-1/2 HIFLO$_2$

Product No 52.724
Wall bracket
F, FC, L 1/4-3/8-1/2 HIFLO$_2$

Product No 52.815
Zinc Bowl + sight glass
L 1/4-3/8-1/2 HIFLO$_2$

Product No 50.742
Panel bracket
F/R HIFLO

Product No 50.745
Mounting nut
F/R HIFLO

Product No 52.046
Deflector and retainer
F 1/4-3/8-1/2 HIFLO$_2$

Product No 52.730
Wall bracket
R 1/4-3/8 HIFLO

Product No 55.400
Gauge
0-30 PSI

Product No 55.410
Gauge
0-100 PSI

Product No 55.415
Gauge
0-160 PSI

Product No 55.425
Gauge
0-300 PSI

Product No 52.011
Differential pressure pop-up indicator
FC 1/4-3/8-1/2 HIFLO$_2$

Product No 52.068
Sight dome
L 1/4-3/8-1/2 HIFLO$_2$

Product No 52.810
Polycarbonate Bowl
F, FC 1/4-3/8-1/2
manual HIFLO$_2$

Product No 52.814
Polycarbonate Bowl
L 1/4-3/8-1/2 HIFLO$_2$

Product No 52.032
Relieving diaphragm
and valve
R 1/4-3/8 HIFLO

Product No 52.033
Relieving diaphragm
and valve
F/R HIFLO

Product No 52.076
Element 0.3 micron
FC 1/4-3/8-1/2 HIFLO$_2$

Product No 52.812
Zinc Bowl + sight glass
F, FC, 1/4-3/8-1/2
manual HIFLO$_2$

Product No 52.813
Zinc Bowl + sight glass
F, FC, 1/4-3/8-1/2
auto HIFLO$_2$

Original HIFLO Version

Product No 50.003
Auto drain 175 PSI
F HIFLO

Original HIFLO Version

Product No 50.006
Auto drain 250 PSI
FC HIFLO

Original HIFLO Version

Product No 52.028
Element 40 micron
F 1/4-3/8 HIFLO

Product No 52.029
Element 5 micron
F 1/4-3/8 HIFLO

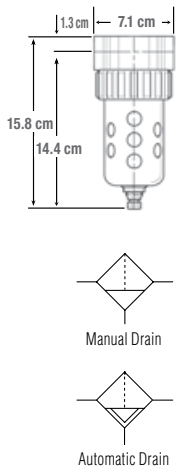
Original HIFLO Version

Product No 52.075
Element 0.3 micron
FC 1/4-3/8-1/2 HIFLO

Original HIFLO Version

Product No 52.806
Polycarbonate Bowl
L 1/4-3/8 HIFLO

HIFLO$_2$ FILTER



- **High flow design**
- **Removes contaminants down to 40 micron in size**
- **Removes water through centrifugal force**
- **Automatic drain available**

SPECIFICATIONS

Port Size: 1/2 (F) NPT

Maximum Airflow at 100 PSI: 85 SCFM

Maximum Pressure:
Polycarbonate Bowl: 150 PSI
Zinc Bowl: 250 PSI

Temperature Range:
Polycarbonate Bowl: 0°C to 52 °C
Zinc Bowl: 0 °C to 80 °C

Filtration: Standard 40 micron / Optional 5 micron

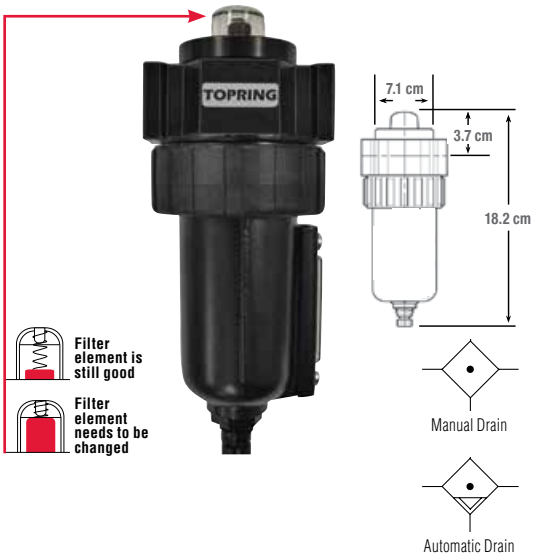
Drain: Manual or internal automatic drain

Bowl Capacity: 130.1 ml

POLYCARBONATE BOWL		ZINC BOWL		Port Size (F) NPT
Man. Drain. Product No	Auto. Drain Product No	Man. Drain. Product No	Auto. Drain Product No	
52.145	52.146	52.147	52.148	1/2

Also available with a 5 micron element: add suffix .05

HIFLO$_2$ COALESCING FILTER



- **High flow design**
- **Highly efficient coalescing filter designed to remove all solid particles over 0.3 micron, together with 99.97% of oil and oil aerosols**
- **Differential pressure pop-up indicator will rise with increase in pressure drop, indicating the need to change filter element (10 PSI differential)**
- **Automatic drain available**

SPECIFICATIONS

Port Size: 1/2 (F) NPT

Maximum Airflow at 100 PSI: 65 SCFM

Maximum Pressure: 250 PSI

Temperature Range: 0 °C to 80 °C

Filtration: Standard: 0.3 micron

Drain: Manual or internal automatic drain

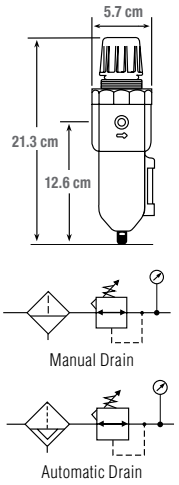
Bowl Capacity: 130.1 ml

TECH TIP

A coalescing filter should always be preceded by a filter or a F/R. The filter will prevent the coalescing element from quickly being saturated by larger particles.

ZINC BOWL		Port Size (F) NPT
Manual Drain Product No	Auto. Drain Product No	
52.942	52.943	1/2

HIFLO
INTEGRATED FILTER/REGULATOR
GAUGE INCLUDED



- **High flow design**
- **Space-saving integrated filter/regulator design**
- **Push/Pull tamper-proof adjusting knob**
- **Removes contaminants down to 40 micron in size**
- **Removes water through centrifugal force**
- **Maintains constant downstream pressure**
- **Automatic drain available**

SPECIFICATIONS

Port Size: 1/2 (F) NPT

Maximum Airflow at 100 PSI: 80 SCFM

Maximum Pressure:
Manual Drain: 250 PSI
Automatic Drain: 175 PSI

Pressure Range: 0-250 PSI

Temperature Range:
Manual Drain: 4 °C to 66 °C
Automatic Drain: 4 °C to 52 °C

Filtration: Standard 40 micron / Optional 5 micron

Drain: Manual or internal automatic drain

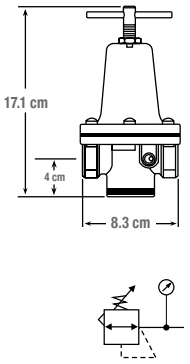
Bowl Capacity: 118.3 ml

Pressure Gauge Port Size: 1/4 (F) NPT

ZINC BOWL		Port Size (F) NPT
Manual Drain Product No	Auto. Drain Product No	
52.242	52.243	1/2

Also available with a 5 micron element: add suffix .05

HIFLO
REGULATOR
GAUGE INCLUDED



- **High flow design**
- **Robust T-handle pressure adjustment**
- **Maintains constant downstream pressure**

A Quick-Set Dial Regulator is a better option when frequent pressure adjustments are required. See page 276

SPECIFICATIONS

Port Size: 1/2 (F) NPT

Maximum Airflow at 100 PSI: 150 SCFM

Maximum Pressure: 300 PSI

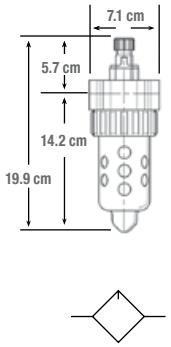
Temperature Range: 4 °C to 52 °C

Pressure Gauge Port Size: 1/4 (F) NPT

Product No	Pressure Range PSI	Port Size (F) NPT	Replacement Gauge
52.345 *	5-250	1/2	55.425
52.340	2-125	1/2	55.415
52.343	1-25	1/2	55.400
52.344	2-60	1/2	55.410

* Popular model

HIFLO$_2$ LUBRICATOR



- **High flow design**
- **Proportional oil delivery over a wide range of airflows**
- **Precision needle valve assures repeatable oil delivery and provides simple adjustment of delivery rate**
- **Generates oil particles of 5 micron or smaller downstream**
- **Micro-mist type lubricator**
- **Recommended oil Series 69 page 449**

SPECIFICATIONS

Port Size: 1/2 (F) NPT

Maximum Airflow at 100 PSI: 90 SCFM

Maximum Pressure:
Polycarbonate Bowl: 150 PSI
Zinc Bowl: 250 PSI

Temperature Range:
Polycarbonate Bowl: 0 °C to 52 °C
Zinc Bowl: 0 °C to 80 °C

Bowl Capacity: 76.9 ml

TECH TIP

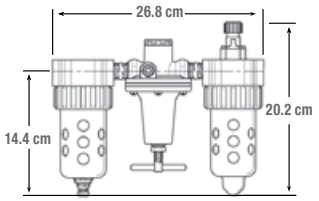
Lubrification up to 30 meters

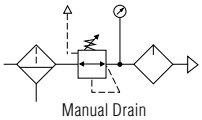
HIFLO$_2$ lubricators are designed to lubricate a tool through a hose of up to 30 meters (100 feet length) from the outlet of the lubricator.
Standard lubricators lubricate up to 5 meters from the outlet.

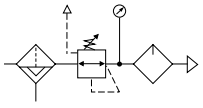
POLYCARBONATE BOWL Product No	ZINC BOWL Product No	Port Size (F) NPT
52.445	52.447	1/2

HIFLO$_2$ COMBINATION UNIT F+R+L

GAUGE INCLUDED




Manual Drain


Automatic Drain

- **High flow design**
- **Robust T-handle pressure adjustment**
- **Proportional oil delivery over a wide range of airflows**
- **Removes contaminants down to 40 micron in size**
- **Removes water through centrifugal force**
- **Maintains constant downstream pressure**
- **Automatic drain available**
- **Recommended oil Series 69 page 449**

SPECIFICATIONS

Port Size: 1/2 (F) NPT

Maximum Airflow at 100 PSI: 85 SCFM

Maximum Pressure:
Polycarbonate Bowl: 150 PSI
Zinc Bowl: 250 PSI

Pressure Range: Standard: 5-250 PSI
Optional: 1-25 PSI • 2-60 PSI • 2-125 PSI

Temperature Range: 4 °C to 52 °C

Filtration: Standard 40 micron / Optional 5 micron

Drain: Manual or internal automatic drain

Bowl Capacity:
Filter: 130.1 ml
Lubricator: 76.9 ml

Pressure Gauge Port Size: 1/4 (F) NPT

POLYCARBONATE BOWL		ZINC BOWL		Port Size (F) NPT
Man. Drain Product No	Auto. Drain Product No	Man. Drain Product No	Auto. Drain Product No	
52.545	52.546	52.547	52.548	1/2

Also available with a 5 micron element: add suffix .05

HIFLO
REPLACEMENT PARTS AND REPAIR KITS

Product No 52.003
Auto drain 250 PSI
F, FC 1/4-3/8-1/2
HIFL0$_2$

Product No 50.003
Auto drain 175 PSI
F/R HIFLO

Product No 52.030
Element 40 micron
F/R HIFLO

Product No 52.031
Element 5 micron
F/R HIFLO

Product No 52.076
Element 0.3 micron
FC 1/4-3/8-1/2 HIFL0$_2$

Product No 52.815
Zinc Bowl + sight glass
L 1/4-3/8-1/2 HIFL0$_2$

Product No 50.742
Panel bracket
F/R HIFLO

Product No 50.745
Mounting nut
F/R HIFLO

Product No 52.042
Element 40 micron
F 1/4-3/8-1/2 HIFL0$_2$

Product No 52.043
Element 5 micron
F 1/4-3/8-1/2 HIFL0$_2$

Product No 52.724
Wall bracket
F, FC, L 1/4-3/8-1/2 HIFL0$_2$

Product No 54.062
Wall bracket
R 1/2 HIFLO

Product No 52.011
Differential pressure pop-up indicator
CF 1/4-3/8-1/2 HIFL0$_2$

Product No 52.046
Deflector and retainer
F 1/4-3/8-1/2 HIFL0$_2$

Product No 52.810
Polycarbonate Bowl
F, FC 1/4-3/8-1/2
manual HIFL0$_2$

Product No 52.814
Polycarbonate Bowl
L 1/4-3/8-1/2 HIFL0$_2$

Product No 55.400
Gauge
0-30 PSI

Product No 55.410
Gauge
0-100 PSI

Product No 55.415
Gauge
0-160 PSI

Product No 55.425
Gauge
0-300 PSI

Product No 52.014
Relieving diaphragm and valve
R 1/2 5-250 HIFLO
Product No 52.015
Relieving diaphragm and valve
R 1/2 1-25, 2-60/125 HIFLO

Product No 52.068
Sight dome
L 1/4-3/8-1/2 HIFL0$_2$

Product No 52.812
Zinc Bowl + sight glass
F, FC, 1/4-3/8-1/2
manual HIFL0$_2$

Product No 52.813
Zinc Bowl + sight glass
F, FC, 1/4-3/8-1/2
auto HIFL0$_2$

Original HIFLO Version

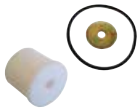
Product No 50.003
Auto drain 175 PSI
F HIFLO

Original HIFLO Version

Product No 50.006
Auto drain 250 PSI
FC HIFLO

Original HIFLO Version

Product No 52.040
Element 40 micron
F 1/2 HIFLO



Product No 52.041
Element 5 micron
F 1/2 HIFLO

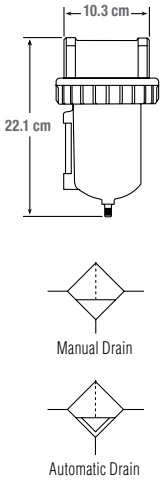
Original HIFLO Version

Product No 52.075
Element 0.3 micron
FC 1/4-3/8-1/2 HIFLO

Original HIFLO Version

Product No 52.804
Polycarbonate Bowl
F 1/2 manual HIFLO

HIFLO
FILTER



- **High flow design**
- **Removes contaminants down to 40 micron in size**
- **Removes water through centrifugal force**
- **Automatic drain available**

SPECIFICATIONS

Port Size: 3/4 (F) NPT • 1 (F) NPT

Maximum Airflow at 100 PSI:
3/4: 220 SCFM
1: 240 SCFM

Maximum Pressure:
Manual Drain: 250 PSI
Automatic Drain: 175 PSI

Temperature Range:
Manual Drain: 4 °C to 66 °C
Automatic Drain: 4 °C to 52 °C

Filtration: Standard 40 micron / Optional 5 micron

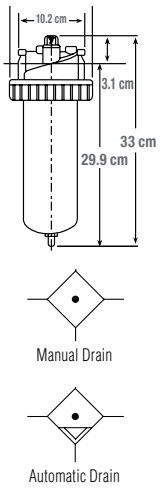
Drain: Manual or automatic

Bowl Capacity: 0.5 L

ZINC BOWL		
Manual Drain Product No	Auto. Drain Product No	Port Size (F) NPT
52.150	52.151	3/4
52.160	52.161	1

Also available with a 5 micron element: add suffix .05

HIFLO
COALESCING FILTER



- **High flow design**
- **Highly efficient coalescing filter designed to remove all solid particles over 0.3 micron, together with 99.97% of oil and oil aerosols**
- **Differential pressure pop-up indicator will rise with increase in pressure drop, indicating the need to change filter element (10 PSI differential)**
- **Automatic drain available**

SPECIFICATIONS

Port Size: 3/4 (F) NPT • 1 (F) NPT

Maximum Airflow at 100 PSI: 95 SCFM • 170 SCFM for 52.968

Maximum Pressure:
Manual Drain: 300 PSI
Automatic Drain: 250 PSI

Temperature Range:
Manual Drain: 4 °C to 66 °C
Automatic Drain: 4 °C to 52 °C

Filtration: Standard 0.3 micron

Drain: Manual or internal automatic drain

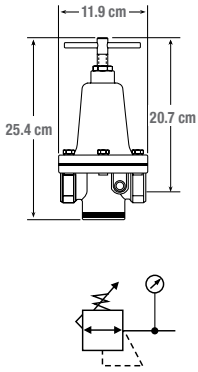
Bowl Capacity: Standard 1 L / Optional 3 L

TECH TIP

A coalescing filter should always be preceded by a filter. The filter will prevent the coalescing element from quickly being saturated by larger particles.

ALUMINIUM BOWL		
Manual Drain Product No	Auto. Drain Product No	Port Size (F) NPT
52.959	52.960	3/4
52.968	-	1
52.969	52.970	1

HIFLO
REGULATOR
GAUGE INCLUDED



- **High flow design**
- **Robust T-handle pressure adjustment**
- **Maintains constant downstream pressure**

SPECIFICATIONS

Port Size: 3/4 (F) NPT • 1 (F) NPT

Maximum Airflow at 100 PSI:
3/4: 300 SCFM
1: 400 SCFM

Maximum Pressure: 300 PSI

Temperature Range: 4 °C to 52 °C

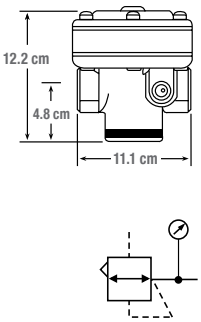
Pressure Range: 0-125 PSI / Optional 0-250 PSI

Pressure Gauge Port Size: 1/4 (F) NPT

Product No	Pressure Range PSI	Port Size (F) NPT	Replacement Gauge
52.350*	2-125	3/4	**55.415**
52.355	5-250	3/4	**55.425**
52.360*	2-125	1	**55.415**
52.361	5-250	1	**55.425**

* Popular model

HIFLO
PILOT-OPERATED REGULATOR
GAUGE INCLUDED



- **Ideal for maximum capacity requirements in applications where units are not readily accessible**
- **Ideal for control by a remote or distant small regulator (i.e: 52.325) (see page 257)**

SPECIFICATIONS

Port Size: 3/4 (F) NPT • 1 (F) NPT

Maximum Airflow at 100 PSI: 300 SCFM

Maximum Pressure: 300 PSI

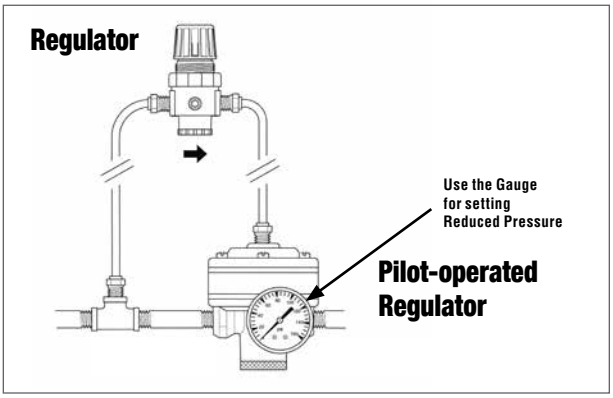
Pressure Range: ± 7 PSI of supply pressure

Temperature Range: 4 °C to 52 °C

Pilot Port Size: 1/4 (F) NPT

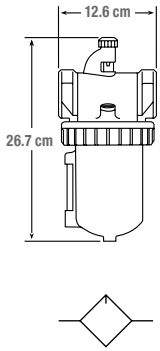
Pressure Gauge Port Size: 1/4 (F) NPT

Must be used with a regulator: 52.325



Product No	Port Size (F) NPT
52.270	3/4
52.275	1

HIFLO
LUBRICATOR



- **High flow design**
- **Fillable under pressure through fill port - no need to depressurize or remove bowl**
- **Proportional oil delivery over a wide range of airflows**
- **Precision needle valve assures repeatable oil delivery and provides simple adjustment of delivery rate**
- **Recommended oil Series 69 page 449**

SPECIFICATIONS

Port Size: 3/4 (F) NPT • 1 (F) NPT

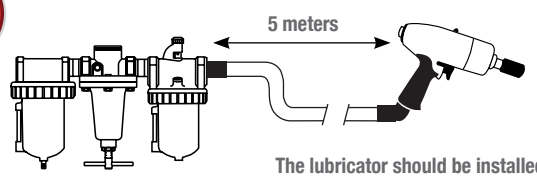
Maximum Airflow at 100 PSI:
3/4: 325 SCFM
1: 350 SCFM

Maximum Pressure: 250 PSI

Temperature Range: 4 °C to 66 °C

Bowl Capacity: 0.5 L

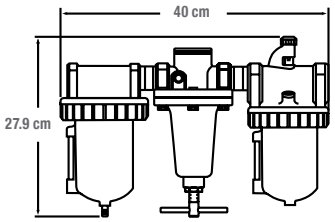
TECH TIP

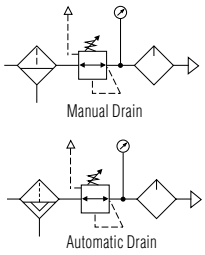


The lubricator should be installed within 5 meters of the application

ZINC BOWL	Port Size (F) NPT
Product No	
52.450	3/4
52.460	1

HIFLO
COMBINATION UNIT F+R+L
GAUGE INCLUDED





- **High flow design**
- **Robust T-handle pressure adjustment**
- **Lubrication automatically proportioned to Airflow, eliminating readjustment**
- **Precision needle valve assures repeatable oil delivery and provides simple adjustment of delivery rate**
- **Removes contaminants down to 40 micron**
- **Removes water through centrifugal force**
- **Maintains constant downstream pressure**
- **Automatic drain available**
- **Recommended oil Series 69 page 449**

SPECIFICATIONS

Port Size: 3/4 (F) NPT • 1 (F) NPT

Maximum Airflow at 100 PSI:
3/4: 220 SCFM
1: 240 SCFM

Maximum Pressure:
Manual Drain: 250 PSI
Automatic Drain: 175 PSI

Pressure Range: 2-125 PSI / Optional 5-250 PSI

Temperature Range: 4 °C to 52 °C

Filtration: Standard 40 micron / Optional 5 micron

Drain: Manual or internal automatic drain

Bowl Capacity: 0.5 L

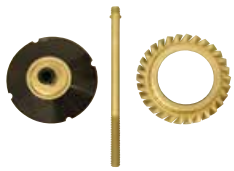
Pressure Gauge Port Size: 1/4 (F) NPT

ZINC BOWL		Port Size (F) NPT
Manual Drain Product No	Auto. Drain Product No	
52.550	52.551	3/4
52.560	52.561	1

Also available with a 5 micron element: add suffix .05

HIFLO
REPLACEMENT PARTS AND REPAIR KITS

Product No 50.003
Auto drain 175 PSI
F, F/R HIFLO



Product No 50.048
Deflector and retainer
F 3/4-1 HIFLO

Product No 50.069
Sight dome
L 1/4 to 1-1/2 HIFLO

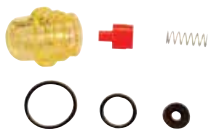
Product No 50.850
Zinc Bowl + sight glass
F 3/4 to 2-1/2 auto. HIFLO

Product No 50.006
Auto drain 250 PSI
FC HIFLO

Product No 50.049
Sight glass assembly
F 3/4 to 2-1/2 HIFLO

Product No 50.085
Element 0.3 micron
FC 3/4-1 HIFLO

Product No 50.899
O'ring for bowl
F, FC, L 3/4 à 2-1/2 HIFLO



Product No 50.011
Differential pressure pop-up indicator
FC 1/4 to 1" HIFLO

Product No 50.054
Relieving diaphragm and valve
R 3/4-1 HIFLO

Product No 50.752
Wall bracket
F, FC, L 1" HIFLO

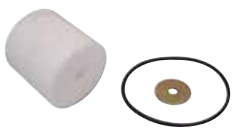
Product No 55.415
Gauge
0-160 PSI

Product No 55.425
Gauge
0-300 PSI

Product No 50.042
Element 40 micron
F 3/4 to 1-1/2 HIFLO

Product No 50.057
Relieving diaphragm and valve
pilot R 3/4-1 HIFLO

Product No 50.762
Wall bracket
R 3/4 to 1-1/2 HIFLO

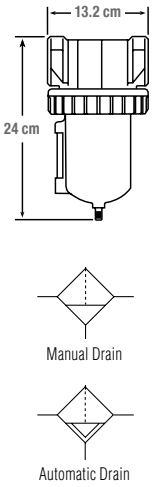


Product No 50.043
Element 5 micron
F 3/4 to 1-1/2 HIFLO

Product No 50.066
Needle valve assembly
L HIFLO

Product No 50.813
Zinc Bowl + sight glass
F, L 3/4 to 2-1/2 manual HIFLO

HIFLO
FILTER



- **High flow design**
- **Removes contaminants down to 40 micron in size**
- **Removes water through centrifugal force**
- **Automatic drain available**

SPECIFICATIONS

Port Size: 1-1/4 (F) NPT • 1-1/2 (F) NPT

Maximum Airflow at 100 PSI:
1-1/4: 390 SCFM
1-1/2: 450 SCFM

Maximum Pressure:
Manual Drain: 250 PSI
Automatic Drain: 175 PSI

Temperature Range:
Manual Drain: 4 °C to 66 °C
Automatic Drain: 4 °C to 52 °C

Filtration: Standard 40 micron / Optional 5 micron

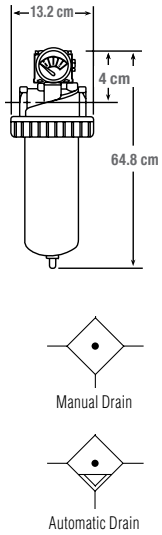
Drain: Manual or internal automatic drain

Bowl Capacity: 0.5 L

ZINC BOWL		
Manual Drain Product No	Auto. Drain Product No	Port Size (F) NPT
52.165	52.166	1-1/4
52.170	52.171	1-1/2

Also available with a 5 micron element: add suffix .05

HIFLO
COALESCING FILTER



- **Differential Pressure Gauge with easy-to-read dial face indicates pressure drop and need for filter element replacement**
- **Low profile allows easy filter installation**
- **High quality construction for durability**
- **Automatic drain available**

SPECIFICATIONS

Port Size: 1-1/4 (F) NPT • 1-1/2 (F) NPT

Maximum Airflow at 100 PSI:
1-1/4: 220 SCFM
1-1/2: 250 SCFM

Maximum Pressure:
Manual Drain: 300 PSI
Automatic Drain: 250 PSI

Temperature Range:
Manual Drain: 4 °C to 66 °C
Automatic Drain: 4 °C to 52 °C

Filtration: Standard 0.3 micron

Drain: Manual or internal automatic drain

Bowl Capacity: 3 L

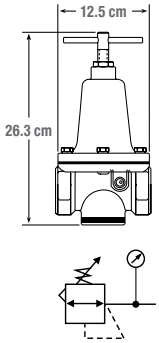
TECH TIP

A coalescing filter should always be preceded by a filter. The filter will prevent the coalescing element from quickly being saturated by larger particles.

Three-color
- **Green** (clean): 0-3 PSI
- **Yellow** (change): 4-8 PSI
- **Red** (dirty): Over 9 PSI

STEEL BOWL		
Manual Drain Product No	Auto. Drain Product No	Port Size (F) NPT
52.971	52.972	1-1/4
52.975	52.976	1-1/2

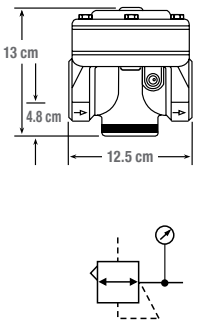
HIFLO
REGULATOR
GAUGE INCLUDED



- **High flow design**
- **Robust T-handle pressure adjustment**
- **Maintains constant downstream pressure**

A Quick-Set Dial Regulator is a better option when frequent pressure adjustments are required. See page 276

HIFLO
PILOT-OPERATED REGULATOR
GAUGE INCLUDED



- **Ideal for maximum capacity requirements in applications where units are not readily accessible**
- **Ideal for control by a remote or distant small regulator (i.e: 52.325) (see page 257)**

SPECIFICATIONS

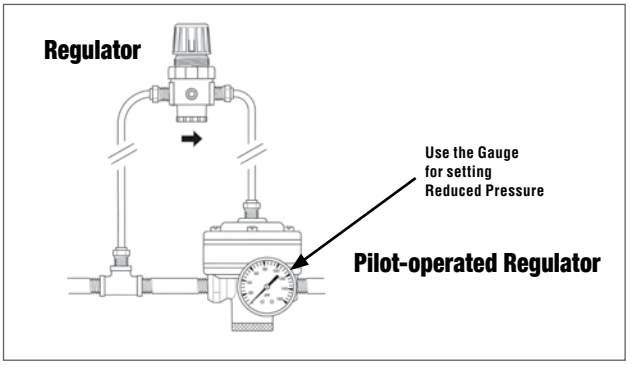
Port Size: 1-1/4 (F) NPT • 1-1/2 (F) NPT
Maximum Airflow at 100 PSI: 500 SCFM
Maximum Pressure: 300 PSI
Temperature Range: 4 °C to 52 °C
Pressure Gauge Port Size: 1/4 (F) NPT

Product No	Pressure Range PSI	Port Size (F) NPT
52.365 *	2-125	1-1/4
52.366	5-250	1-1/4
52.370 *	2-125	1-1/2
52.371	5-250	1-1/2

* Popular model

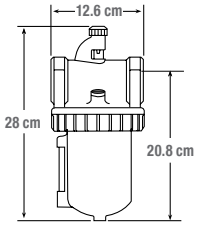
SPECIFICATIONS

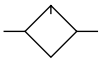
Port Size: 1-1/4 (F) NPT • 1-1/2 (F) NPT
Maximum Airflow at 100 PSI: 500 SCFM
Maximum Pressure: 300 PSI
Pressure Range: ±7 PSI of supply pressure
Temperature Range: 4 °C to 52 °C
Pilot Port Size: 1/4 (F) NPT
Pressure Gauge Port Size: 1/4 (F) NPT
Must be used with a regulator: 52.325



Product No	Port Size (F) NPT
52.280	1-1/4
52.285	1-1/2

HIFLO
LUBRICATOR





- **High flow design**
- **Proportional oil delivery over a wide range of airflows**
- **Precision needle valve assures repeatable oil delivery and provides simple adjustment of delivery rate**
- **Fillable under pressure through fill port - no need to depressurize or remove bowl**
- **Recommended oil Series 69 page 449**

SPECIFICATIONS

Port Size: 1-1/4 (F) NPT • 1-1/2 (F) NPT

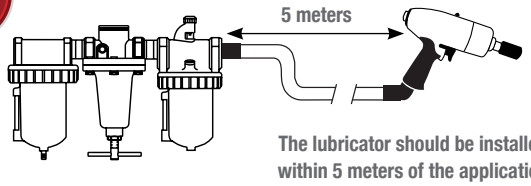
Maximum Airflow at 100 PSI:
1-1/4: 325 SCFM
1-1/2: 400 SCFM

Maximum Pressure: 250 PSI

Temperature Range: 4 °C to 66 °C

Bowl Capacity: 0.5 L

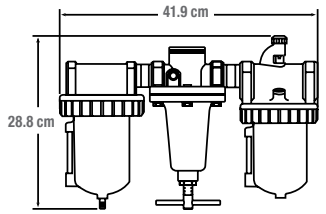
TECH TIP

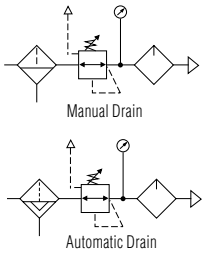


The lubricator should be installed within 5 meters of the application

ZINC BOWL Product No	Port Size (F) NPT
52.465	1-1/4
52.470	1-1/2

HIFLO
COMBINATION UNIT F+R+L
GAUGE INCLUDED





- **High flow design**
- **Robust T-handle pressure adjustment**
- **Lubrication automatically proportioned to airflow, eliminating re-adjustment**
- **Precision needle valve assures repeatable oil delivery and provides simple adjustment of delivery rate**
- **Removes contaminants down to 40 micron**
- **Removes water through centrifugal force**
- **Automatic drain available**
- **Recommended oil Series 69 page 449**

SPECIFICATIONS

Port Size: 1-1/4 (F) NPT • 1-1/2 (F) NPT

Maximum Airflow at 100 PSI:
1-1/4: 325 SCFM
1-1/2: 400 SCFM

Maximum Pressure:
Manual Drain: 250 PSI
Automatic Drain: 175 PSI

Pressure Range: 2-125 PSI / Optional 5-250 PSI

Temperature Range: 4 °C to 52 °C

Filtration: Standard 40 micron / Optional 5 micron

Drain: Manual or internal automatic drain

Bowl Capacity: 0.5 L

Pressure Gauge Port Size: 1/4 (F) NPT

ZINC BOWL		Port Size (F) NPT
Manual Drain Product No	Auto. Drain Product No	
52.565	52.566	1-1/4
52.570	52.571	1-1/2

Also available with a 5 micron element: add suffix .05

HIFLO
REPLACEMENT PARTS AND REPAIR KITS

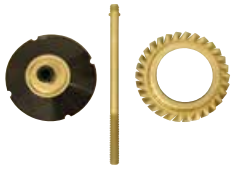
Product No 50.003
Auto drain 175 PSI
F, F/R HIFLO

Product No 50.049
Sight glass assembly
F 3/4 to 2-1/2 HIFLO

Product No 50.069
Sight dome
L 1/4 to 1-1/2 HIFLO

Product No 50.899
O'ring for bowl
F, FC, L 3/4 to 2-1/2 HIFLO

Product No 50.006
Auto drain 250 PSI
FC HIFLO



Product No 50.050
Deflector and retainer
F 1-1/4, 1-1/2 HIFLO

Product No 50.086
Element 0.3 micron
FC 1-1/4, 1-1/2 HIFLO

Product No 55.415
Gauge
0-160 PSI

Product No 55.425
Gauge
0-300 PSI

Product No 50.012
Differential pressure indicator
FC 1-1/4 to 2-1/2 HIFLO

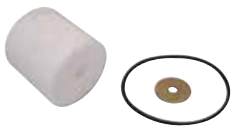
Product No 50.055
Relieving diaphragm and valve
R 1-1/4, 1-1/2 HIFLO

Product No 50.762
Wall bracket
R 3/4 to 1-1/2 HIFLO

Product No 50.042
Element 40 micron
F 3/4 to 1-1/2 HIFLO

Product No 50.058
Relieving diaphragm and valve
Pilot R 1-1/4, 1-1/2 HIFLO

Product No 50.813
Zinc Bowl + sight glass
F, L 3/4 to 2-1/2 manual HIFLO

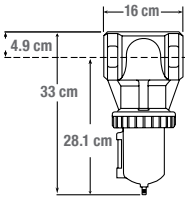


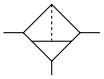
Product No 50.043
Element 5 micron
F 3/4 to 1-1/2 HIFLO

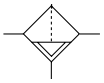
Product No 50.066
Needle valve assembly
L HIFLO

Product No 50.850
Zinc Bowl + sight glass
F 3/4 to 2-1/2 auto. HIFLO

HIFLO
FILTER




Manual Drain


Automatic Drain

- **High flow design**
- **Removes contaminants down to 40 micron in size**
- **Removes water through centrifugal force**
- **Automatic drain available**

SPECIFICATIONS

Port Size: 2 (F) NPT • 2 1/2 (F) NPT

Maximum Airflow at 100 PSI: 1200 SCFM

Maximum Pressure:
Manual Drain: 250 PSI
Automatic Drain: 175 PSI

Temperature Range:
Manual Drain: 4 °C to 66 °C
Automatic Drain: 4 °C to 52 °C

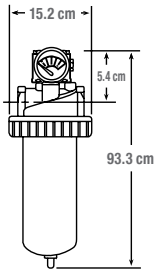
Filtration: Standard 40 micron

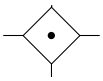
Drain: Manual or internal automatic drain

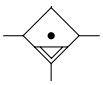
Bowl Capacity: 0.5 L

ZINC BOWL		
Manual Drain Product No	Auto. Drain Product No	Port Size (F) NPT
52.180	52.181	2
52.190	52.191	2-1/2

HIFLO
COALESCING FILTER




Manual Drain


Automatic Drain

- **Differential Pressure Gauge with easy-to-read dial face indicates pressure drop and need for filter element replacement.**
- **Low profile allows easy filter installation**
- **High quality construction for durability**
- **Automatic drain available**

SPECIFICATIONS

Port Size: 2 (F) NPT • 2-1/2 (F) NPT

Maximum Airflow at 100 PSI:
2: 395 SCFM
2-1/2: 550 SCFM

Maximum Pressure:
Manual Drain: 300 PSI
Automatic Drain: 250 PSI

Temperature Range:
Manual Drain: 4 °C to 66 °C
Automatic Drain: 4 °C to 52 °C

Filtration: Standard: 0.3 micron

Drain: Manual or internal automatic drain

Bowl Capacity: 6.1 L

TECH TIP

A coalescing filter should always be preceded by a filter. The filter will prevent the coalescing element from quickly being saturated by larger particles.

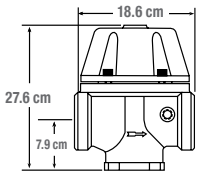
Three-color
- **Green** (clean): 0-3 PSI
- **Yellow** (change): 4-8 PSI
- **Red** (dirty): Over 9 PSI

STEEL BOWL		
Manual Drain Product No	Auto. Drain Product No	Port Size (F) NPT
52.977	52.978	2
52.979	52.980	2-1/2

HIFLO
PILOT-OPERATED REGULATOR
GAUGE INCLUDED

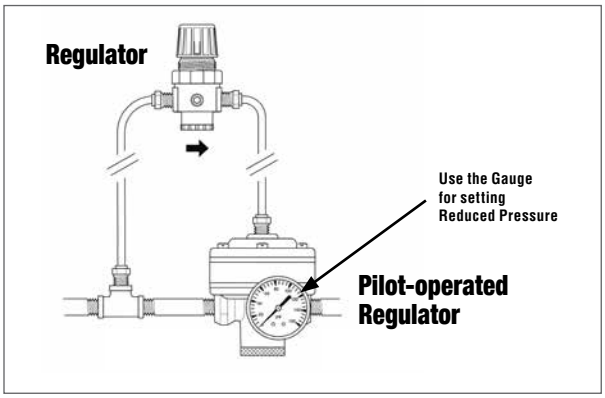
FEATURES AND BENEFITS

- **Ideal for maximum-capacity requirements in applications where units are not readily accessible.**
- **Ideal for control by a remote or distant small regulator (i.e: 52.325) (see page 257)**



SPECIFICATIONS

Port Size: 2 (F) NPT • 2-1/2 (F) NPT
Maximum Airflow at 100 PSI: 1800 SCFM
Maximum Pressure: 300 PSI
Pressure Range: ±7 PSI of supply pressure
Temperature Range: 4 °C to 52 °C
Pressure Gauge Port Size: 1/4 (F) NPT
Pilot Port Size: 1/4 (F) NPT
Must be used with a regulator: 52.325

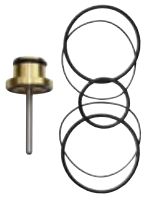


Product No	Port Size (F) NPT
52.380	2
52.390	2-1/2

HIFLO
REPLACEMENT PARTS AND REPAIR KITS

Product No 50.003
Auto drain 175 PSI
F, F/R HIFLO

Product No 50.044
Element 40 micron
F 2, 2-1/2 HIFLO



Product No 50.056
Piston and valve
Pilot R 2, 2-1/2 HIFLO

Product No 50.813
Zinc Bowl + sight glass
F, L 3/4 to 2-1/2 manual HIFLO

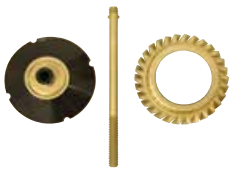
Product No 50.006
Auto drain 250 PSI
FC HIFLO

Product No 50.049
Sight glass assembly
F 3/4 to 2-1/2 HIFLO

Product No 50.087
Element 0.3 micron
FC 2" HIFLO

Product No 50.850
Zinc Bowl + sight glass
F, L 3/4 to 2-1/2 auto. HIFLO

Product No 50.012
Differential pressure indicator
FC 1-1/4 to 2-1/2 HIFLO



Product No 50.051
Deflector and retainer
F 2, 2-1/2 HIFLO

Product No 50.088
Element 0.3 micron
FC 2-1/2 HIFLO

Product No 50.899
O'ring for bowl
F, FC, L 3/4 to 2-1/2 HIFLO

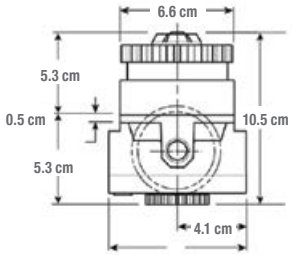
Product No 55.415
Gauge
0-160 PSI

QUICK-SET DIAL REGULATORS

Designed to make frequent pressure adjustments easy and fool-proof. No constant knob turning required; the dial is simply turned to the desired pressure.

Maximum pressure can be physically set to avoid mistakes and tampering.

Ideal for applications where pressure needs to be raised and lowered on a regular basis.



Product No	Port Size (F) NPT
52.326	1/4
52.332	3/8
52.341	1/2
52.351	3/4

FEATURES AND BENEFITS

- **Speeds up adjustments**
- **Saves time and money when pressure needs to be reset often**
- **Maintains a stable pressure throughout a flow range with very little pressure drop**
- **Maximum pressure can be set to avoid overpressure and tampering**
- **160 PSI calibrated dial face for quick reading and setting**
- **Constant bleed relieving design ensures quick response to pressure changes**
- **High flow, low pressure drop design**
- **Panel mountable through a 6.7 cm hole using four mounting holes**
- **Dual 1/4 NPT gauge ports can also be used as additional outlet ports**

APPLICATIONS

Ideal for control panels, production line or laboratory applications where pressure is often reset

MATERIALS

Body: Zinc
Cap: Zinc / Brass
Piston: Acetal
Seals: Nitrile
Springs: Steel
Valve Assembly: Brass / Nitrile / Acetal

SPECIFICATIONS

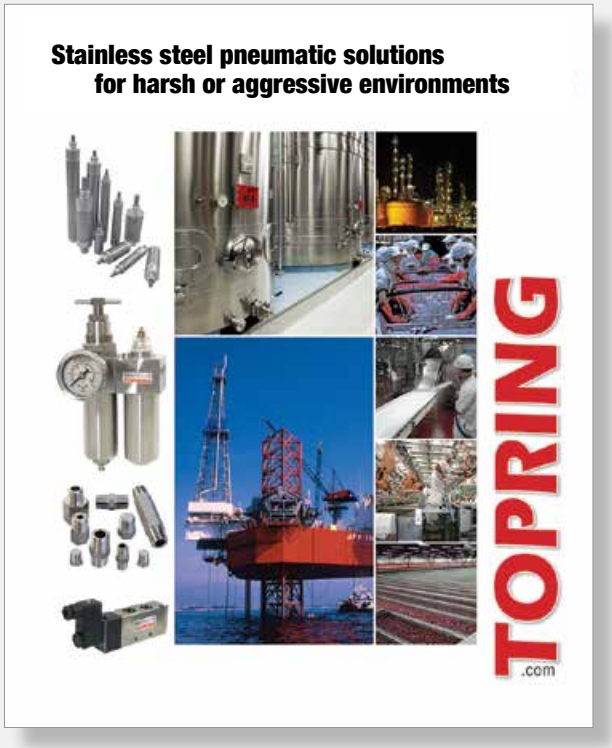
Maximum Airflow at 100 PSI:
1/4: 117 SCFM • 3/8: 180 SCFM • 1/2: 195 SCFM • 3/4: 200 SCFM
Maximum Pressure: 300 PSI
Pressure Range: 5-160 PSI
Temperature Range: 0 °C to 65 °C
Pressure Gauge Port Size: 1/4 (F) NPT
Panel Mount Opening: 6.7 cm

TECH TIP

Standard regulators are set by turning the knob clockwise from a lower pressure, which works fine when raising the pressure; however, when lowering the pressure the knob must be turned counter clockwise until pressure drops below the desired pressure and then turned clockwise again up to the desired pressure. This takes time and leaves room for error.

Using a QUICK-SET DIAL REGULATOR eliminates this long process by allowing to simply set the knob to the pressure.

The « Stainless steel pneumatic solutions for harsh or aggressive environments » brochure is available at TOPRING.com

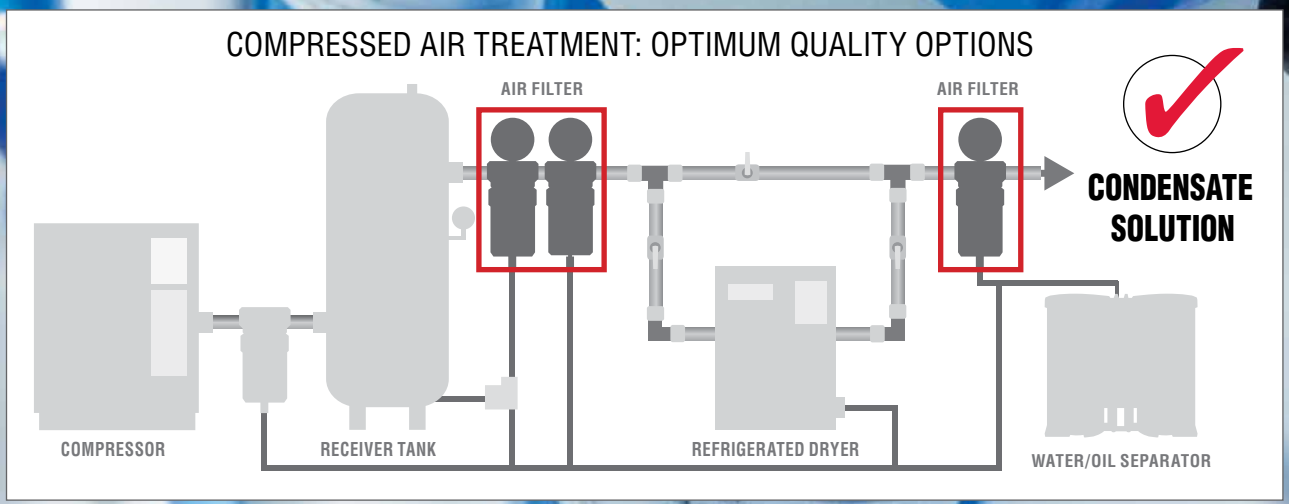


- To learn more about the different types of Stainless Steel and their applications
- To recognize industries and applications where the use of Stainless Steel products is recommended
- To see the full range of compressed air Stainless Steel accessories available at TOPRING

Visit TOPRING.com
Section « Technical Support »/Stainless steel Pneumatic Solutions brochure

Series 53

MAIN LINE COMPRESSED AIR FILTERS



COMPRESSED AIR TREATMENT: A NECESSITY

Compressed air can contain millions of contaminated particles. At high concentration and high speed, these particles can be harmful to any compressed air system. Since the raw material used by compressor systems is usually untreated ambient air, compressed air often contains water vapor and contaminating particles, measured in microns, which could be harmful to pneumatic equipment.

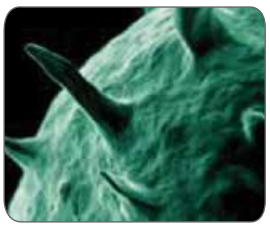
Contaminated compressed air can increase operating and maintenance costs. Many pneumatic equipments and tools are highly sophisticated and require a very high quality compressed air exempt of contaminating particles and water vapor in order to ensure a longer life expectancy and trouble-free maintenance. Compressed air filtration at the source allows for contaminating particles and water vapor removal, a necessary operation in order to ensure elimination of downstream corrosion, reduce component wear and tear and increase life expectancy of pneumatic tools and compressed air network.

THERE ARE 10 MAJOR CONTAMINANTS FOUND IN A COMPRESSED AIR SYSTEM

Atmospheric Dirt
Rust
Pipe scale

Water Vapor
Condensed Water
Water Aerosols

Liquid Oil
Oil Aerosols
Oil Vapor



Micro-organisms

The largest quantity of contamination introduced into the compressed air system originates from the atmospheric air drawn into the compressor and, not as often believed, introduced by the compressor itself. **The most prolific and problematic of the contaminants is water**. Water accounts for 99.9% of the total liquid contaminants found in a compressed air system.

Compressed air filtration is not only used to remove particulates and oil, but most importantly, it removes water aerosols and is a key to operating an efficient compressed air system.

Therefore, regardless of what type of compressor installed, the same level of filtration is required.

COMPRESSED AIR QUALITY AND FILTRATION SPECIFICATION

The quality of compressed air required in a network is based on the application and the desired air quality or the amount of contamination allowed in each cubic feet of compressed air.

The range of purification equipment available from **TOPRING** allows the user to specify the quality of air for every application, from pneumatic tools, through to critical clean dry air point of uses systems.

TOPRING has a range of purification equipment available to exactly match system requirements, ensuring both capital and operational costs are kept to a minimum.

Level 1
Low grade shop air

ISO 8573.1
Class 3.6.5

Level 2
General shop air: air tools (sand blasting, grinding)

ISO 8573.1
Class 2.4.4

Level 3
Instrument air, paint spraying, powder coating, packing machines

ISO 8573.1
Class 1.4.2

Level 4
Food industry pharmaceutical and chemical industries, laboratories

ISO 8573.1
Class 1.4.1

Level 5
Food industry (breweries, dairies), pharmaceutical and chemical industries, laboratories

ISO 8573.1
Class 1.1.1.

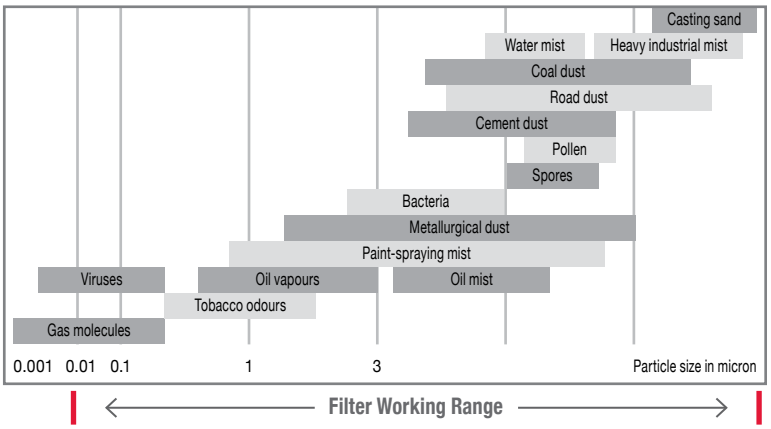
Level 6
Breathing air that meets OSHA requirements

ISO 8573.1
Class 1.2.1

Purification equipment such as compressed air filtration and water separators installed at the source, hence at the beginning of the air network, help maximize compressed air quality based on proper configuration.

Adding filtration at the source helps prevent the accumulation of contaminants, water and oils at the point of use.

NATURE AND EXTEND OF AIR IMPURITIES



The international standard for compressed air quality ISO 8573.1 provides a simple system of classification for the main three contaminants present in compressed air: dirt, water and oil.

Class ISO 8573.1	Solid particulate wper m^3 (µm)	Water Pressure dewpoint		Oil mg/m^3
		°C	°F	
1	0.1	- 70	- 92	0.01
2	1	- 40	- 40	0.1
3	5	- 20	- 4	1
4	15	3	38	5
5	40	7	45	> 5
6	-	10	50	-

AIR QUALITY SPECIFICATIONS

F1

High Efficiency General Purpose Protection
Particle removal down to 1 micron,
including water and oil aerosols.
Maximum remaining oil aerosol content:
0.5 ppm(w) at 70 ºF/0.6mg/m3 at 21 ºC.

F2

High Efficiency Oil Removal Filtration
(Precede with Grade F1 filter)
Particle removal down to 0.01 micron,
including water and oil aerosols.
Maximum remaining oil aerosol content:
0.01 ppm(w) at 70 ºF/0.01mg/m3 at 21 ºC.

F3

General Purpose Dust Filtration
Dry particle removal down
to 1 micron.

F4

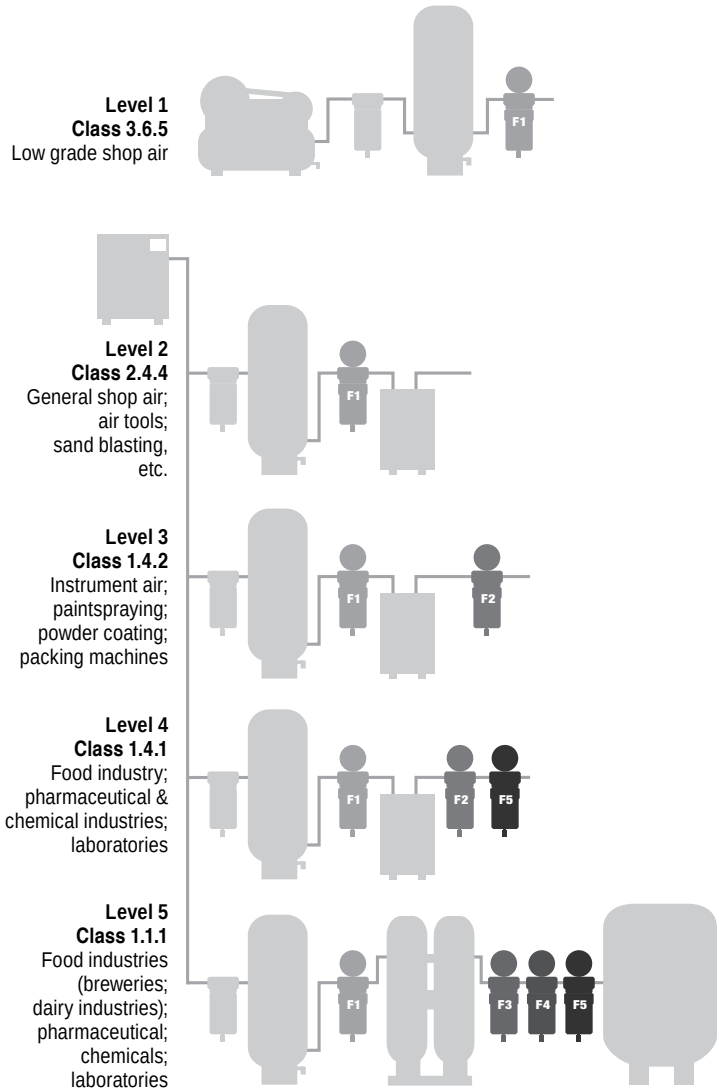
High Efficiency Dust Filtration
Dry particle removal down
to 0.01 micron.

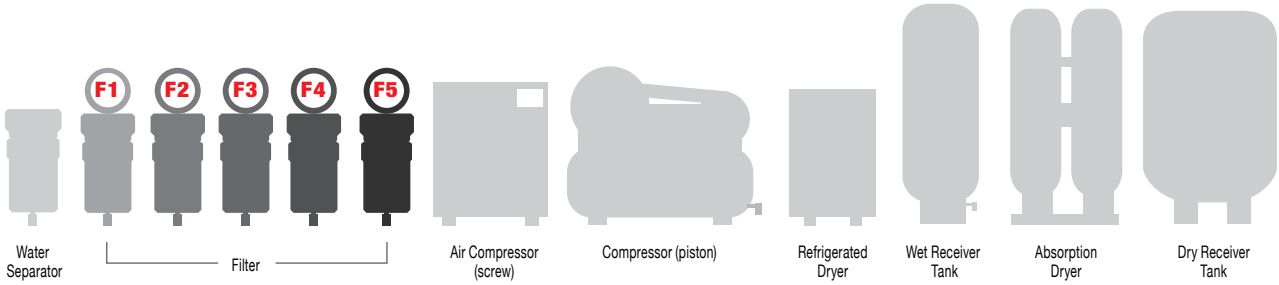
F5

Oil Vapor & Odor Removal
(Precede Grade F5 with Grade F2 or F4 filter)
Maximum remaining oil vapor content:
0.003 ppm(w) at
70 ºF/0.003mg/m3 at 21 ºC.

TYPICAL FILTRATION CONFIGURATION FOR DIFFERENT APPLICATIONS

Specified air quality (purity) in accordance with ISO 8573.1, standard for Compressed Air Quality. Refrigerated Dryer air treatment at 3 ºC.





AIRFLO
COMPRESSED AIR FILTERS

TOPRING offers a comprehensive range of standard filters and elements to meet to the requirements of different applications. Whatever the targeted air quality desired, the **TOPRING AIRFLO** filters will allow for proper particle, oil and vapor filtration.

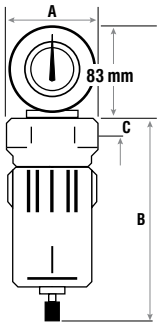
53.611

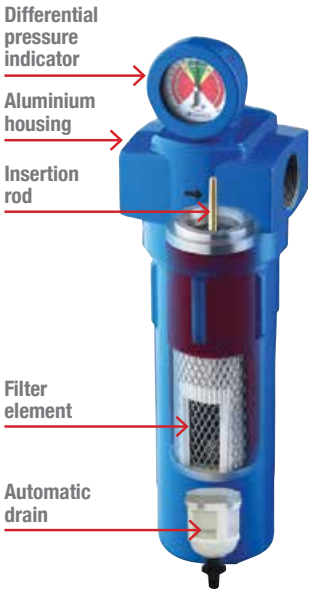
53.641

CE

FEATURES AND BENEFITS

- **Five quality grades of filtration available**
- **Epoxy powder coated (interior and exterior) for added durability and corrosion resistance**
- **Chromatised protective layer between paint and aluminium for better paint adhesion and better protection against corrosion and aggressive substances**
- **Tie-rod insert allows for securing element in housing and easy installation**
- **Differential pressure indicator included for models 1/2 to 3 NPT**
- **Automatic drain included**





MATERIALS

Housing: Aluminium

SPECIFICATIONS

Maximum Working Pressure: 232 PSI

Working Temperature Range: 1 °C to 60 °C

Port Size (F) NPT	SCFM	Filtration					Dimensions (mm)		
		F1	F2	F3	F4	F5	A	B	C
1/4	29	53.611*	53.612*	53.613*	53.612*	53.614*	86	224	64
3/8	41	53.621*	53.622*	53.623*	53.622*	53.624*	86	224	64
1/2	47	53.631	53.632	53.633	53.632	53.634	86	224	84
3/4	70	53.641	53.642	53.643	53.642	53.644	86	305	115
1	116	53.661	53.662	53.663	53.662	53.664	130	312	115
1-1/2	318	53.671	53.672	53.673	53.672	53.674	130	523	115
1-1/2	470	53.681	53.682	53.683	53.682	53.684	130	784	156
2	616	53.701	53.702	53.703	53.702	53.704	163	831	156
2-1/2	923	53.711	53.712	53.713	53.712	53.714	163	1082	156
3	1324	53.721	53.722	53.723	53.722	53.724	251	1054	181

* Differential pressure indicator not included

FILTRATION GRADE	F1	F2	F3	F4	F5
Description	General Protection	Oil Removal	Dust Filtration	Dust Removal	Oil Vapor and Odor Removal
Particle (µm)	1	0.01	3	0.01	--
Oil (mg/m³) at 20 °C	0.1	0.01	--	--	0.003
Filter Media	Polypropylene and borosilicate	Polypropylene and borosilicate	Cellulose	Polypropylene and borosilicate	Polypropylene and activated carbon

AIRFLO
FILTER ELEMENTS

The pleated filter media offers 3 to 5 times more filtration surface area when compared to a non pleated filters.

1. Stainless steel sleeve for strong, reliable support
2. Hydrophobic foam socks, for better drainage and coalescing effect
3. Aluminium end caps, robust and non-corrosive
4. Color coded standard element for easy identification

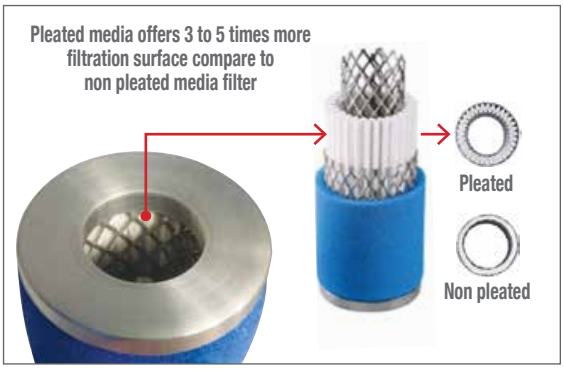
FEATURES AND BENEFITS

- **More filtration surface**
- **High dirt holding capacity**
- **Less pressure drops**
- **High flow capacity**
- **Longer lifespan**

FILTRATION GRADE	F1	F2	F3	F4	F5
Description	General Protection	Oil Removal	Dust Filtration	Dust Removal	Oil Vapor and Odor Removal
Particle (µm)	1	0.01	3	0.01	--
Oil (mg/m³) at 20 °C	0.1	0.01	--	--	0.003

REPLACEMENT ELEMENTS

Port Size (F) NPT	SCFM	Filtration				
		F1	F2	F3	F4	F5
1/4	29	53.811	53.812	53.813	53.812	53.814
3/8	41	53.821	53.822	53.823	53.822	53.824
1/2	47	53.831	53.832	53.833	53.832	53.834
3/4	70	53.841	53.842	53.843	53.842	53.844
1	116	53.861	53.862	53.863	53.862	53.864
1-1/2	318	53.871	53.872	53.873	53.872	53.874
1-1/2	470	53.881	53.882	53.883	53.882	53.884
2	616	53.901	53.902	53.903	53.902	53.904
2-1/2	923	53.911	53.912	53.913	53.912	53.910
3	1324	53.921	53.922	53.923	53.922	53.924



ACCESSORIES FOR AIRFLO FILTERS

DIFFERENTIAL PRESSURE INDICATOR

Used to indicate premature high differential pressure. Indicator can be retrofitted to existing housings without depressurizing the system

Product No
53.920

MAINTENANCE KIT

Product No
53.929

SWIVEL FITTING

Allows quick and simple connection of multiple filter housings

Product No	Orifice NPT
53.914	1/2
53.915	3/4
53.916	1
53.917	1-1/2
53.918	2
53.919	2-1/2

FILTER MOUNTING BRACKETS

Mounting bracket provides additional support to filter

Product No	For Filter Model
53.900	53.611 to 53.644
53.905	53.661 to 53.684

DRAINS

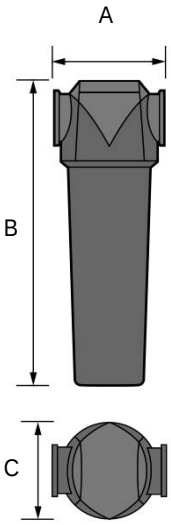
Internal or external drains

Product No	For Filter Model
Internal drain	
53.930	53.611 to 53.684
External drain	
53.935	53.701 to 53.724

HE COMPRESSED AIR FILTERS

Designed from the outset to meet current and forthcoming requirements for compressed air quality.

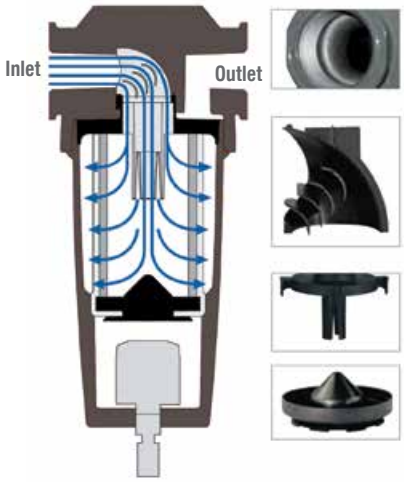
Optimize the flow path through the housing and element, significantly reducing air turbulence and pressure losses.



CRN CANADIAN REGISTRATION NUMBER

FEATURES AND BENEFITS

- **Delivers air quality in accordance with ISO 8573.1 and ISO 12500.1**
- **Multiple port sizes are available to match both pipe size and system flow rate providing greater flexibility**
- **Alocrom and dry powder epoxy coated for full corrosion protection**
- **Suitable for all compressed air applications and all compressor types**
- **Pressure losses start low and stay low to save energy, money and the environment**
- **Differential pressure indicator : used to indicate premature high differential pressure (indicating that the filter element needs to be replaced)**
- **Automatic drain included for filters F1 and F2**
- **Manual drain included for filters F3, F4 and F5**



Advanced housing and element design allows for a more compact and lightweight filtration system

MATERIALS

Housing: Aluminium

SPECIFICATIONS

Maximum Working Pressure:
F 1 / F 2 : 232 PSI
F 3 / F 4 / F 5 : 290 PSI

Working Temperature Range:
F 1 / F 2 : 2 °C to 80 °C
F 3 / F 4 : 2 °C to 100 °C
F 5 : 2 °C to 50 °C

Filtration:
Particles: 1 to 0.01 micron
Oil: 0.6 to 0.003 mg/m^3 at 21 °C

Port Size (F) NPT	SCFM	Filtration					Dimensions (mm)		
		F1	F2	F3	F4	F5	A	B	C
1/4	21	53.011*	53.012*	53.013*	53.014*	53.015*	76	181	64
3/8	21	53.021*	53.022*	53.023*	53.024*	53.025*	76	181	64
1/2	42	53.051	53.052	53.053	53.054	53.055*	97	235	84
3/4	127	53.071	53.072	53.073	53.074	53.075*	129	275	115
1	127	53.091	53.092	53.093	53.094	53.095*	129	275	115
1-1/2	233	53.121	53.122	53.123	53.124	53.125*	129	364	115
1-1/2	339	53.141	53.142	53.143	53.144	53.145*	170	432	156
2	466	53.151	53.152	53.153	53.154	53.155*	170	524	156
2	699	53.161	53.162	53.163	53.164	53.165*	170	524	156
3	911	53.171	53.172	53.173	53.174	53.175*	205	641	181
3	1314	53.181	53.182	53.183	53.184	53.185*	205	832	181

* Differential pressure indicator not available

HE FILTER ELEMENTS

TOPRING HE filter media is constructed into a filter element using a unique deep bed pleating technique in place of the more conventional wrapped construction. This provides 450% more filtration surface area when compared to a traditional wrapped filter element and around 200% more surface area compared to a traditional pleated element. Deep bed pleating also reduces the air flow velocity within the media, which further improves filtration performance.

Additionally, the high efficiency F3 and F4 grade elements have a unique graded density media construction which provides even greater filtration performance without adding to pressure loss or energy consumption.

FEATURES AND BENEFITS

- **Deep bed pleating reduces the air flow velocity within the filtration media, improving both filtration performance of the filter element and reducing pressure losses**
- **Oleophobic nanofiber filter media actively repels oil and water to reduce pressure drops and keep running costs to a minimum**
- **High efficiency drainage layer provides improved chemical compatibility and high temperature capability while ensuring coalesced liquids are removed quickly and efficiently**
- **Filter housing and element integrate to provide capillary action which greatly improves liquid drainage. Interaction between housing and element ensures maximum coalescing performance**
- **Dust removal filters tested in accordance with the test methods of the ISO 8573 Series**
- **Filters performance tested to the stringent requirements of ISO 12500-1**

ELEMENT AND DRAIN SHOULD BE REPLACED EVERY 12 MONTHS FOR:

- Optimal performance
- Continuous air quality
- Low operation costs
- Continued protection of downstream equipment
- Peace of mind

FILTRATION	F1	F2	F3	F4	F5
Description	General Protection	Oil Removal	Dust Removal	Dust Removal	Oil Vapor & Odor Removal
Particle (µm)	1	0.01	1	0.01	--
Oil (mg/m3) at 21°C	0.6	0.01	--	--	0.003

REPLACEMENT ELEMENTS

Port Size (F) NPT	SCFM	Filtration				
		F1	F2	F3	F4	F5
1/4	21	53.311	53.312	53.313	53.314	53.315
3/8	21	53.311	53.312	53.313	53.314	53.315
1/2	42	53.351	53.352	53.353	53.354	53.355
3/4	127	53.371	53.372	53.373	53.374	53.375
1	127	53.371	53.372	53.373	53.374	53.375
1-1/2	233	53.421	53.422	53.423	53.424	53.425
1-1/2	339	53.441	53.442	53.443	53.444	53.445
2	466	53.451	53.452	53.453	53.454	53.455
2	699	53.461	53.462	53.463	53.464	53.465
3	911	53.471	53.472	53.473	53.474	53.475
3	1314	53.481	53.482	53.483	53.484	53.485

WARNING

It is important to remember that the effectiveness of any filter is directly related to the performance of the filter element at minimal pressure differential.

Filter elements must be checked often and re-ordered when necessary to assure a steady stream of contaminant-free compressed air.

Generally, in a compressed air system, when the pressure drop across the filter reaches 8 to 10 PSI, the element should be changed.

It is critical to drain the filter housing daily to release condensate that gathers at the bottom of the filter bowl. Automatic drain valves simplify this process and protect the system from water flooding.

ACCESSORIES FOR HE FILTERS

DIFFERENTIAL PRESSURE INDICATOR

Used to indicate premature high differential pressure. Indicator can be retrofitted to existing housings without depressurizing the system

Product No
53.800

FILTER FIXING KITS

Fixing clamp allows quick and simple connection of multiple filter housings

Product No	Filter Models
53.810	53.011 to 53.025
53.820	53.051 to 53.055
53.830	53.071 to 53.125
53.840	53.141 to 53.165
53.850	53.171 to 53.185

FILTER MOUNTING BRACKETS

Mounting brackets provide additional support to filter

Product No	Filter Models
53.815	53.011 to 53.025
53.825	53.051 to 53.055
53.835	53.071 to 53.125
53.845	53.141 to 53.165
53.855	53.171 to 53.185

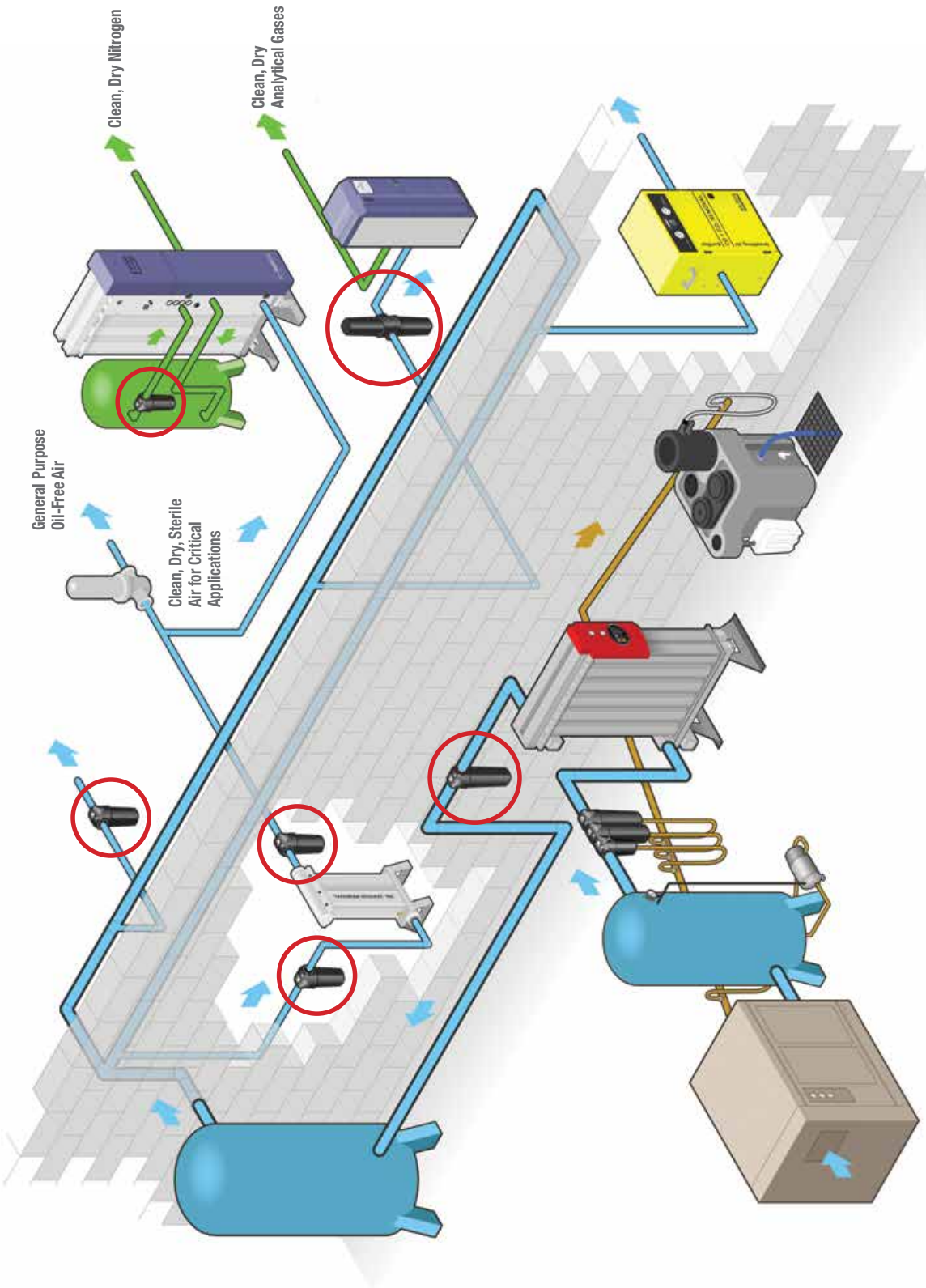
DRAINS

Automatic or manual drains. Easy connection with standard fittings via ½ NPT threaded drain port

Product No	Drain Type
53.600	Automatic
53.700	Manual

FILTERS – TYPICAL INSTALLATION

The range of **TOPRING** compressed air filters is suitable for all compressed air applications and all compressor types



Series 54
DESICCANT AIR DRYER SYSTEMS

NEVADA
DESICCANT AIR DRYER SYSTEMS

A desiccant air dryer system is a simple and reliable method of ensuring pneumatic equipment is not exposed to damaging moisture. When air is compressed, the temperature of air is increased as well as its capacity to hold moisture. As the hot air travels downstream through the lines, it cools, allowing the moisture to condense.

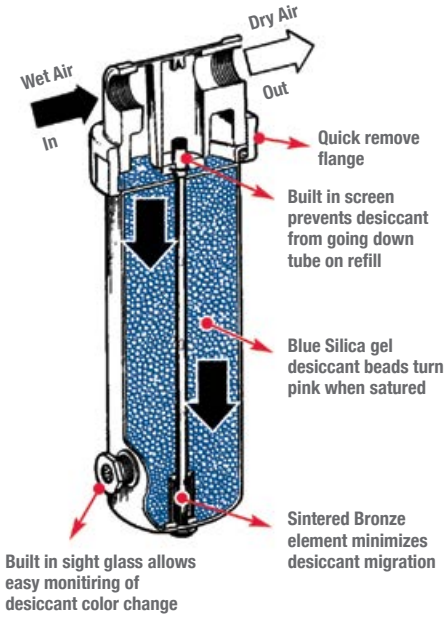
After coolers, dryers, filters and auto drains are effective methods for removing liquid condensate, but for removing residual water vapour and aerosols, a desiccant dryer is recommended.

HOW DO THEY WORK?

As wet compressed air flows through the bed of desiccant it adsorbs the water vapour and aerosols. The Silica gel beads are so effective, the air humidity can be reduced down to a -40 °C pressure dew point. Unless compressed air is exposed to a temperature below the dew point, there will be no further condensation forming in air lines.

The dry air then passes through a sintered Bronze element, up the center tube, and out the outlet port. As long as the desiccant is maintained regularly, the desiccant dryer will produce ultra dry, moisture-free air.

When the blue Silica gel desiccant beads in the sight glass change to pink, the desiccant either needs replacement or regeneration.



FEATURES AND BENEFITS

- **TOPRING NEVADA** 3-Stage Desiccant Air Dryer Systems are engineered to provide high quality, dry air
- Ideal for removing oil, aerosols, water vapors and dirt from compressed air lines
- Designed for ultimate protection in applying state-of-the art refinishing materials
- Deliver extremely dry compressed air without the use of electricity or refrigerants
- Compact size
- Silica gel provides maximum moisture adsorption
- Easy desiccant change out: regenerate or replace

APPLICATIONS

Ideal for:

- Spray painting
- Protecting air lines exposed to freezing temperatures
- Instrumentation
- Moisture sensitive tools
- Laboratory instruments
- Control air systems

3 STAGES FOR CLEAN, DRY COMPRESSED AIR:

A desiccant dryer needs to be protected from oil by a coalescent filter, which needs to be protected by a standard filter. These dryers are therefore usually provided in 3-stage systems.

1st stage: FILTRATION

- The air first enters the particulate filter, which has a 5 micron cleanable, sintered Bronze element
- In this stage, corrosive moisture, pipe scale, dirt and rust are removed from the air line

2nd stage: COALESCENT FILTRATION

- 99.99 percent of oil and aerosols are removed from the air
- Fine filtration also takes place and microscopic particles down to 0.01 micron or 0.3 micron absolute (depending on model) are removed

3rd stage: DEHYDRATION

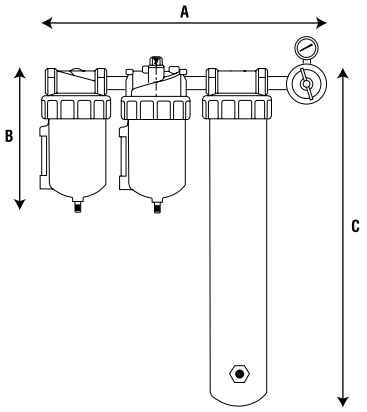
- As the air enters the desiccant dryer, it is dispersed through a filter element which distributes air evenly through the desiccant bed
- The dessicant adsorbs water vapour from the air, producing a -40 °C pressure dew point

NEVADA
DESICCANT AIR DRYER SYSTEMS
(60 SCFM)

4.5 kg Silica Gel included

FEATURES AND BENEFITS

- 5 micron filter with auto drain
- 0.01 micron (0.3 micron for 1 NPT port) coalescing filter with auto drain
- Desiccant dryer a 60 SCFM capacity
- Highly visible color change from blue to pink through sight glass highlights the need for desiccant service
- Pressure regulator with gauge installed after desiccant unit, to compensate for pressure drop
- Available with 3/4 or 1 NPT ports
- Silica gel (4.5 kg) included
- Brass fittings included



SPECIFICATIONS

Maximum Working Pressure:
150 PSI (54.655)
175 PSI (54.657)

Pressure Range: 0-125 PSI

Temperature Range: 4 °C to 52 °C

Airflow Maximum Capacity: 60 SCFM

Optimum Working Temprature: Below 38 °C

DESICCANT AIR DRYER SYSTEMS

Prod. No	Port Size (F) NPT	Dimensions (cm)			Desiccant Capacity	System Weight
		A	B	C		
54.655	3/4	39.4	20.3	76.8	4.5 kg	17.2 kg
54.657	1	53.1	22.1	76.8	4.5 kg	21.8 kg

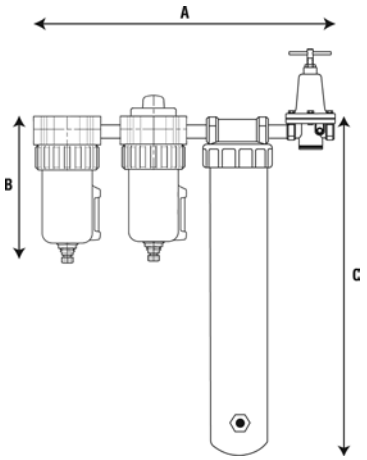
REPLACEMENT PARTS

Prod. No	Description
50.151	Filter 3/4 NPT
50.960	Coalescing Filter 3/4 NPT
54.615	Desiccant Dryer 3/4 NPT 4.5 kg capacity
50.350	3/4 NPT Regulator
50.041	Filter Element 5 microns for 50.151
50.080	Coalescing Filter element 0.01 micron for 50.960
52.161.05	Filter 1 NPT
52.970	Coalescing Filter 1 NPT
54.620	Desiccant Dryer 1 NPT 4.5 kg capacity
52.360	Regulator 1 NPT
50.043	Filter Element 5 microns for 52.161.05
50.085	Coalescing filter Element 0.3 micron for 52.970
50.003	Internal Auto drain for filter 3/4 NPT and 1 NPT Coalescing Filter 3/4 NPT
50.006	Internal Auto drain for Coalescing Filter 1 NPT
54.011	Bronze Element for Dessicant
54.014	Flow Tube Repair Kit for Dessicant
54.695	Silica Gel 2.3 kg
54.696	Silica Gel 9.1 kg (4 x 2.3 kg)
55.415	Pressure Gauge

NEVADA
DESICCANT AIR DRYER SYSTEMS
(15 SCFM AND 30 SCFM)

FEATURES AND BENEFITS

- 5 micron filter with auto drain
- 0.3 micron coalescing filter with auto drain
- Available in desiccant dryer capacities of 15 and 30 SCFM
- Highly visible color change from blue to pink through sight glass highlights the need for desiccant service
- Pressure regulator with gauge installed after desiccant unit, to compensate for pressure drop
- Silica gel (2,3 kg) included
- Brass fittings included



SPECIFICATIONS

Maximum Working Pressure: 250 PSI

Pressure Range: 0-125 PSI

Temperature Range: 4 °C to 52 °C

Airflow Maximum Capacity: 54.659: 15 SCFM
54.661: 30 SCFM

Optimum Working Temprature: Below 38 °C

DESICCANT AIR DRYER SYSTEMS

Prod. No	Port Size (F) NPT	Dimensions (cm)			Desiccant Capacity (kg)	System Weight (kg)
		A	B	C		
54.659	1/2	42.7	15.8	34.3	1.1	12.4
54.661	1/2	42.7	15.8	59.1	2.3	14.7

REPLACEMENT PARTS

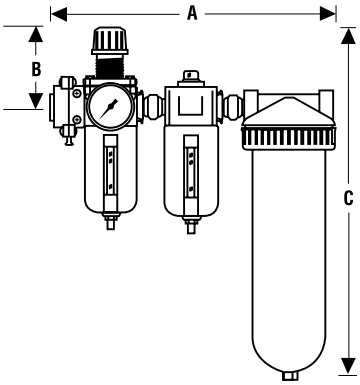
Prod. No	Description
52.148.05	Filter
52.943	Coalescing Filter
54.605	Desiccant Air Dryer 15 SCFM
54.610	Desiccant Air Dryer 30 SCFM
52.340	Regulator
52.043	Element 5 microns for Filter
52.076	Element 0.3 micron for Coalescing Filter
54.010	Bronze Element for Desiccant
52.003	Automatic Drain for Filter and Coalescing Filter
52.011	Differential Pressure Pop-Up Indicator Kit for Coalescing Filter
52.813	Bowl for Filter and Coalescing Filter
54.012	Flow Tube Repair Kit for Desiccant 15 SCFM
54.013	Flow Tube Repair Kit for Desiccant 30 SCFM
54.695	Silica Gel 2.3 kg
54.696	Silica Gel 9.1 kg (4 x 2.3 kg)
55.415	Pressure Gauge

NEVADA
DESICCANT AIR DRYER SYSTEM
(25 SCFM)

1.1 kg Silica Gel
included

FEATURES AND BENEFITS

- 5 micron filter with auto drain
- 0.01 micron coalescing filter with auto drain
- Desiccant dryer (25 SCFM capacity)
- Highly visible color change from blue to pink through sight glass highlights the need for service
- Filter/regulator with gauge
- Safety slide valve
- Silica gel (1.1 kg) included



SPECIFICATIONS

Maximum Working Pressure: 175 PSI
Pressure Range: 0-125 PSI
Temperature Range: 4 °C to 49 °C
Airflow Maximum Capacity: 25 SCFM

DESICCANT AIR DRYER SYSTEM

Prod. No	Port Size (F) NPT	Dimensions (cm)			Desiccant Capacity	System Weight
		A	B	C		
54.665	1/2	36.2	10.2	41.3	1.1 kg	6.1 kg

REPLACEMENT PARTS

Prod. No	Description
54.670	Filter/Regulator
54.671	Coalescing Filter
54.675	Element 5 microns for Filter
54.677	Element 0.01 micron for Coalescing Filter
54.678	Bronze Element and Accessories for Desiccant Dryer
50.003	Internal Auto Drain for Filter and Coalescing Filter
54.015	Sight Glass for Filter and Coalescing Filter
54.045	Pop-Up Indicator for Coalescing Filter
54.679	Wall Bracket for Desiccant Dryer
54.680	Diaphragm Assembly for Filter/Regulator
54.681	Flow Tube Repair Kit for Desiccant Dryer
54.804	Zinc Bowl for Filter and Coalescing Filter
54.806	Zinc Bowl for Desiccant Dryer
54.695	Silica Gel 2.3 kg
54.696	Silica Gel 9.1 kg (4 x 2.3 kg)

NEVADA
DESICCANT AIR DRYERS
(SILICA GEL NOT INCLUDED)

Desiccant beads must be ordered separately

FEATURES AND BENEFITS

- Convenient and cost effective means of ensuring sensitive pneumatic applications are never exposed to damaging moisture
- Drying efficiency down to -40 °C pressure dew point
- Intake flow design takes air through entire supply of desiccant for maximum drying capacity
- Highly visible color change from blue to pink through sight glass highlights the need for service
- Available in capacities from 15 to 60 SCFM
- No external power sources required, needs no electrical connection
- No « purged air » lost as with regenerative dryers
- Easily and quickly serviced
- Built-in particulate after filter prevents downstream dust
- Low pressure drop
- Compact size

MATERIALS

Body and Flange Ring: Zinc

Bowl: Aluminium (model A and B)
Steel (model C)

Filter Element: Sintered Bronze

Flow Tube: CPVC

Seals: Buna-N

Sight Glass: Glass and steel

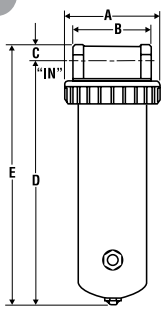
SPECIFICATIONS

Pressure Range: 0 to 300 PSI

Temperature Range: 0 °C to 82 °C

Optimum Working Temperature: Below 38 °C

Model	Dimensions (cm)					Weight kg
	A	B	C	D	E	
A	12.5	10.3	2.1	32.2	34.3	3.6
B	12.5	10.3	2.1	57.0	59.1	5.9
C	12.5	10.3	2.1	74.8	76.8	9.1



INSTALLATION

These desiccant units must be installed with a filter and coalescing filter before and a regulator after the unit; please refer to the table below for recommendations

DESICCANT AIR DRYER SYSTEM

Prod No	Port. Size (F) NPT	Max. Flow SCFM	Bowl Capacity kg	Filter Element Micron	Model	Recommended units for completing system:			Desiccant Beads Required
						Filter	Coalescent	Regulator	
54.605	1/2	15	1.1	90	A	**52.145**	**52.942**	**52.345**	**54.695**
54.607	3/4	15	1.1	90	A	**52.150**	**52.959**	**52.350**	**54.695**
54.610	3/4	30	2.3	90	B	**52.150**	**52.959**	**52.350**	**54.695**
54.615	3/4	60	4.5	40	C	**52.150**	**52.959**	**52.350**	**54.695 x 2**
54.620	1	60	4.5	40	C	**52.160**	**52.969**	**52.360**	**54.695 x 2**

ACCESSORIES & REPLACEMENT PARTS

Product No	Description
50.752	Wall Bracket (for 1" Pipe Size)
54.695	Silica Gel 2.3 kg
54.696	Silica Gel 9.1 kg (4 x 2.3 kg can)
54.009	Gasket for Bowl 54.605 to 54.620
54.010*	Element Bronze for Desiccant 54.605/54.607/54.610
54.011	Element Bronze for Desiccant 54.615 and 54.620
54.012	Flow Tube Repair Kit for Desiccant 54.605 and 54.607
54.013	Flow Tube Repair Kit for Desiccant 54.610
54.014	Flow Tube Repair Kit for Desiccant 54.615 and 54.620

* For 54.610: Requires 2 Elements

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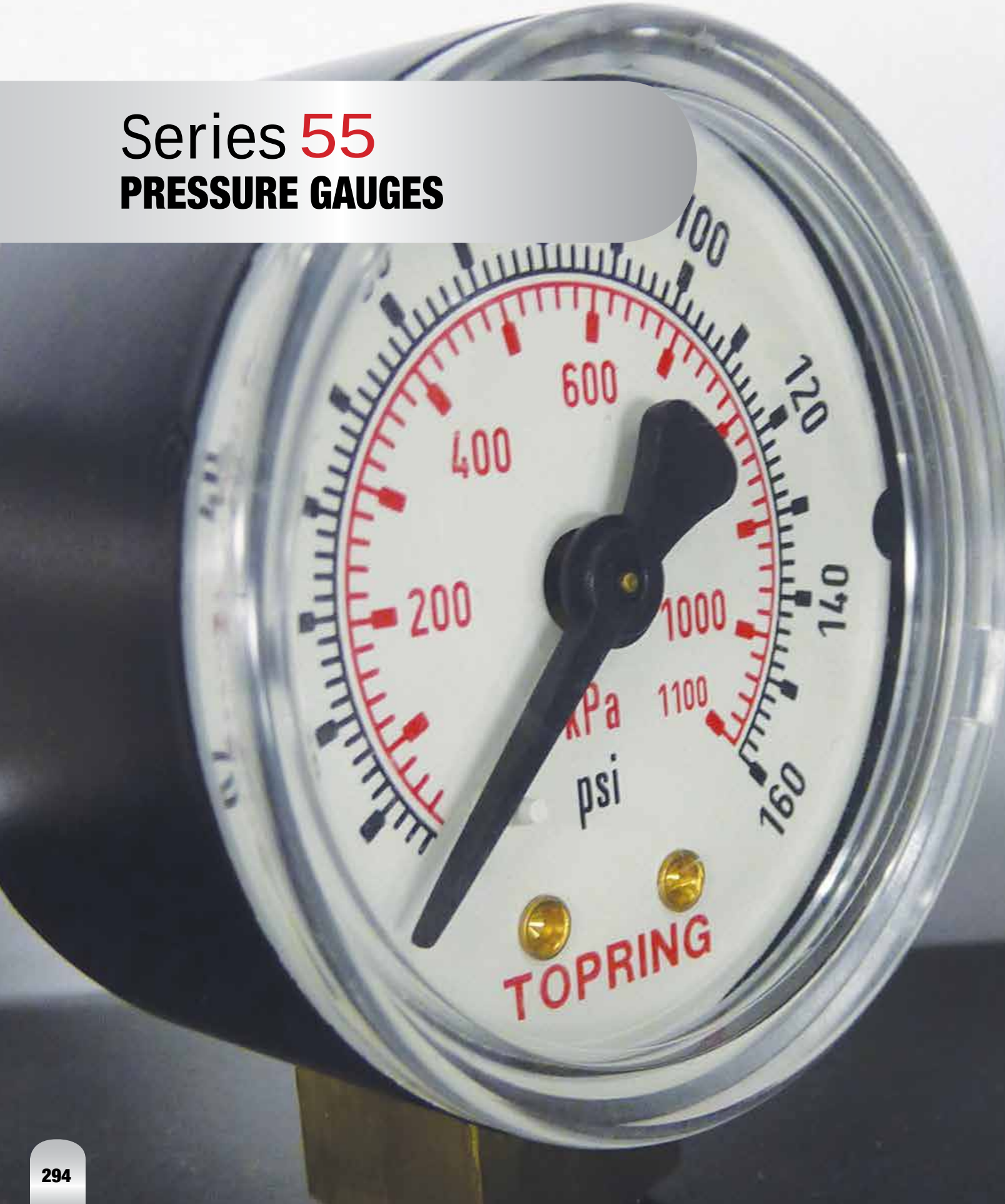
Series 55
PRESSURE GAUGES



DIGITAL PRESSURE GAUGE

TOPRING digital pressure gauge is designed to provide fast, accurate reading from an easy-to-read digital display.

FEATURES AND BENEFITS

- **Four digit backlight digital LCD display with 1.3 cm numerals**
- **Can display in PSI, Bar, Kg/cm² and kPa**
- **Selectable peak, valley or continuous modes**
- **Screen flashes if pressure reaches 155 PSI or higher**
- **Easy access to features via two-key keyboard**
- **6.7 cm screen with rubber casing for optimal protection**
- **Indication of fluid temperature**
- **Programmable automatic shutdown to extend battery life**
- **Water resistant**
- **Reliable**
- **Economic**

APPLICATIONS

For industrial applications
Pneumatic systems
Pneumatic tools
Air compressor
Machine tools

MATERIALS

Case: High impact ABS
Crystal: PET Plastic
Connection: Chrome plated brass
Protection: Rubber

SPECIFICATIONS

Media: Clean, dry air and non-corrosive gases
Pressure limits: 0 to 155 PSI
Accuracy: ± 1% of full scale
Temperature limits: -20 to 70°C
Thread connection: 1/4 (M) NPT
Battery type: 9V Alkaline (included)

Product No	Description	Thread Connection
55.700	Digital pressure gauge	1/4 (M) NPT

STANDARD DRY PRESSURE GAUGES

TOPRING standard dry pressure gauges are high quality gauges designed to provide reliable service on applications not corrosive to Brass

FEATURES AND BENEFITS

- **Stem and connection are machined from a single piece of brass**
- **Precision movement provides accurate readings**

LM
LOWER MOUNT

CBM
CENTER BACK MOUNT

APPLICATIONS

Used in almost every area of manufacturing, especially suitable for:

- Pneumatic and hydraulic systems
- Compressors
- Most industrial and commercial applications

MATERIALS

Case: Black painted steel

Crystal: Acrylic

Dial: White background, black lettering

Bourdon Tube: Phosphorous Bronze

Movement: Brass and nylon with highly polished bearing surfaces

Connection: Brass

SPECIFICATIONS

Standard Dials are dual scale in PSI (black) and kPa (red)

Ambient Temperature: -18 °C to 60 °C

Accuracy: Diameters of 1 1/2 in - 2 in : ± 2.5 % of full scale
Diameters of 2 1/2 in - 4 in : ± 1.6 % of full scale

TECH TIP

When pulsation is present, a pressure snubber (see page 298) should be used in order to maximize the useful life of the gauge.

WARNING

Working pressure should be limited to 60 % of the dial range. Where no sharp fluctuations occur, It should be limited to 90 % of the dial range.

7/8 in DIAMETER	1/8 NPT CBM
Pressure Range PSI	Product No
0-60	55.050*
0-160	55.055*

* ABS case, PSI scale only

1-1/2 in DIAMETER	1/8 NPT LM	1/8 NPT CBM
Pressure Range PSI	Product No	Product No
30" Hg VAC	55.132	55.090
0-15	55.133	55.095
0-30	55.134	55.100
0-60	55.135	55.105
0-60		55.106*
0-100		55.110
0-160	55.145	55.120
0-160		55.121*
0-200	55.150	55.125

* Crystal glass

2 in DIAMETER	1/4 NPT LM	1/8 NPT CBM	1/4 NPT CBM
Pressure Range PSI	Product No	Product No	Product No
30" Hg VAC	55.190		55.385
0-15	55.195		55.390
0-30	55.200	55.350	55.400
0-60	55.205	55.355	55.405
0-100	55.210	55.360	55.410
0-160	55.215	55.365	55.415
0-200	55.220	55.370	55.420
0-300	55.225		55.425

2-1/2 in DIAMETER	1/4 NPT LM	1/4 NPT CBM
Pressure Range PSI	Product No	Product No
30" Hg VAC	55.285	55.428
0-15	55.295	
0-30	55.300	55.430
0-60	55.305	55.435
0-100	55.310	55.440
0-160	55.315	55.445
0-200	55.320	55.450
0-300	55.325	55.455
0-600	55.330	
0-1000	55.332	
0-3000	55.340	
0-5000	55.345	

4 in DIAMETER	1/4 NPT LM
Pressure Range PSI	Product No
30" Hg VAC	55.500
0-15	55.503
0-30	55.505
0-60	55.510
0-100	55.515
0-160	55.520
0-200	55.525
0-300	55.530
0-600	55.540

STAINLESS STEEL PRESSURE GAUGES

BRASS INTERNALS

Used in industrial applications where vibration, pulsation and shock are present and the media is not corrosive to Brass

FEATURES AND BENEFITS

- **Excellent resistance to corrosion**
- **High grade glycerine, retaining crystal-clear clarity and lubricity over the life of the gauge to prolong the life of the gauge**

LM
LOWER MOUNT

CBM
CENTER BACK MOUNT

2-1/2 in DIAMETER	1/4 NPT LM	1/4 NPT CBM
Pressure Range PSI	Product No	Product No
30" Hg VAC	55.608	55.708
0-30	55.613	55.713
0-60	55.618	55.718
0-100	55.623	55.723
0-160	55.628	55.728
0-200	55.633	55.730
0-300	55.638	55.738
0-600	55.643	55.743
0-1000	55.648	55.748
0-1500	55.653	55.753
0-2000	55.658	55.758
0-3000	55.663	55.763
0-5000	55.668	55.768
0-10000	55.688	55.788

APPLICATIONS

Most industrial and commercial applications
Pneumatic equipment
Air compressors
Machine tools
Hydraulic presses

MATERIALS

Case: 304 Stainless steel
Crystal: Acrylic
Dial: White background, black lettering
Bourdon Tube: Phosphorous bronze
Movement: Brass with highly polished bearing surfaces
Connection: Brass

SPECIFICATIONS

Standard Dials are dual scale in PSI (black) and kPa (red)
Fluid: Air, water, oil
Ambient Temperature: -18 °C to 60 °C
Accuracy: ± 1.6% of full range

TECH TIP

When vibration is present, the glycerine fill dampens the Bourdon tube and reduces wear on the movement. For severe applications, a pressure snubber (see page 298) should be used in order to maximize the useful life of the gauge.

WARNING

Working pressure should be limited to 60 % of the dial range. Where no sharp fluctuations occur, It should be limited to 90 % of the dial range.

STAINLESS STEEL PRESSURE GAUGES

STAINLESS STEEL INTERNALS

High quality, glycerine filled-pressure gauges designed for extended service life and reliability

LM

LOWER MOUNT

FEATURES AND BENEFITS

- **Provide excellent resistance to corrosion, acidity and alkalinity**
- **Excellent resistance to strong fluctuations, pulsations, vibration and metal fatigue**
- **High grade glycerine, retaining crystal-clear clarity and lubricity over the life of the gauge to prolong the life of the gauge**

2-1/2 in DIAMETER	1/4 NPT LM
Pressure Range PSI	Product No
30" Hg VAC	**55.800**
0-15	**55.805**
0-30	**55.810**
0-60	**55.815**
0-100	**55.820**
0-160	**55.825**
0-200	**55.830**
0-300	**55.835**
0-600	**55.845**
0-1000	**55.850**
0-1500	**55.855**
0-2000	**55.860**
0-3000	**55.865**
0-5000	**55.870**
0-6000	**55.875**

4 in DIAMETER	1/4 NPT LM
Pressure Range PSI	Product No
30" Hg VAC	**55.900**
0-15	**55.905**
0-30	**55.910**
0-60	**55.915**
0-100	**55.920**
0-160	**55.925**
0-200	**55.930**
0-300	**55.935**
0-600	**55.945**
0-1000	**55.950**
0-1500	**55.955**
0-2000	**55.960**
0-3000	**55.965**
0-5000	**55.970**
0-6000	**55.975**
0-10000	**55.980**
0-15000	**55.985**

APPLICATIONS

For severe applications in process, chemical and petrochemical industries

MATERIALS

Case: 304 Stainless steel

Crystal: Acrylic

Dial: White background, black lettering

Bourdon Tube: 316 Stainless steel

Movement: 316 Stainless steel

Connection: 316 Stainless steel

SPECIFICATIONS

Standard Dials are dual scale in PSI (black) and kPa (red)

Fluid: Air, water, oil

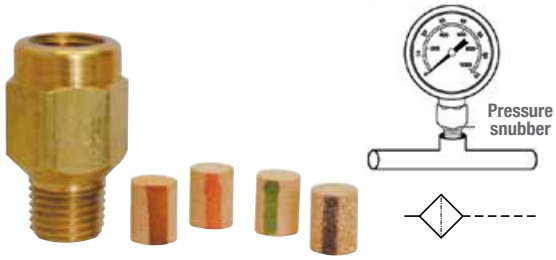
Ambient Temperature: -18 °C to 60 °C

Accuracy: ± 1.6% of full range

WARNING

Working pressure should be limited to 60 % of the dial range. Where no sharp fluctuations occur, it should be limited to 90 % of the dial range.

PRESSURE SNUBBER



FEATURES AND BENEFITS

- **Reduce effects of pressure surge (pulsation) that can damage pressure instruments**
- **Elements of different porosity are included allowing user to adjust snubbing capacity for specific applications**
- **May also be used as in-line filters**

SPECIFICATIONS

Maximum Working Pressure: 10 000 PSI

Product No	Thread NPT	Body	Filter Element
55.005	1/4	Brass	Porous Bronze

Micron Rating	Color	Applications
40 micron	Bronze	High density fluids (+ 500 SSU)
30 micron	Black	Medium density fluids (225 to 500 SSU)
25 micron	Brown	Water and low density fluids (30 to 225 SSU)
20 micron	Green	Very low density fluids (-30 SSU)
10 micron	Red	Air and gas

ULTRAFLO for superior performance!

HIGH PERFORMANCE

ULTRAFLO European quick couplers and plugs improve the performance of pneumatic tools because they deliver a higher volume of air (up to 80 SCFM). They provide the performance (airflow) of a **3/8 INDUSTRIAL** couplers, yet they are lighter and more compact, like the **1/4 INDUSTRIAL** couplers.

S20 • 1/4 INDUSTRIAL
S23 • ARO 210
S24 • 1/4 TRUFLATE
S26 • LINCOLN
— 5.5 mm 24-37 SCFM

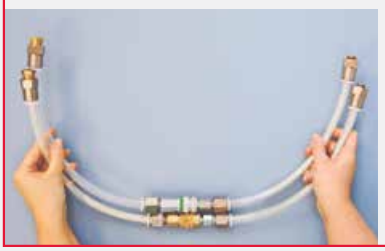
S21 • 3/8 INDUSTRIAL
S25 • 3/8 TRUFLATE
— 7 mm 60-70 SCFM

ULTRAFLO European type couplers provides superior air tool performance

S31 • ULTRAFLO — 7.8 mm 50-80 SCFM

ULTRAFLO DEMO KIT

Glass beads run through the connection to demonstrate the superior airflow offered by **ULTRAFLO** quick couplers compared to **1/4 INDUSTRIAL** couplers.



Product No 96.150

TOPQUIK

ULTRAFLO SAFETY (AUTOMATIC)

60 SCFM | 225 PSI | SAFETY SOLUTION

TOPQUIK SC

ULTRAFLO SAFETY (MANUAL)

70 SCFM | 360 PSI | SAFETY SOLUTION

QUIKSILVER

ULTRAFLO (AUTOMATIC)

80 SCFM | 500 PSI

with drag guard to prevent accidental disconnection

AUTOMAX

ULTRAFLO (AUTOMATIC)

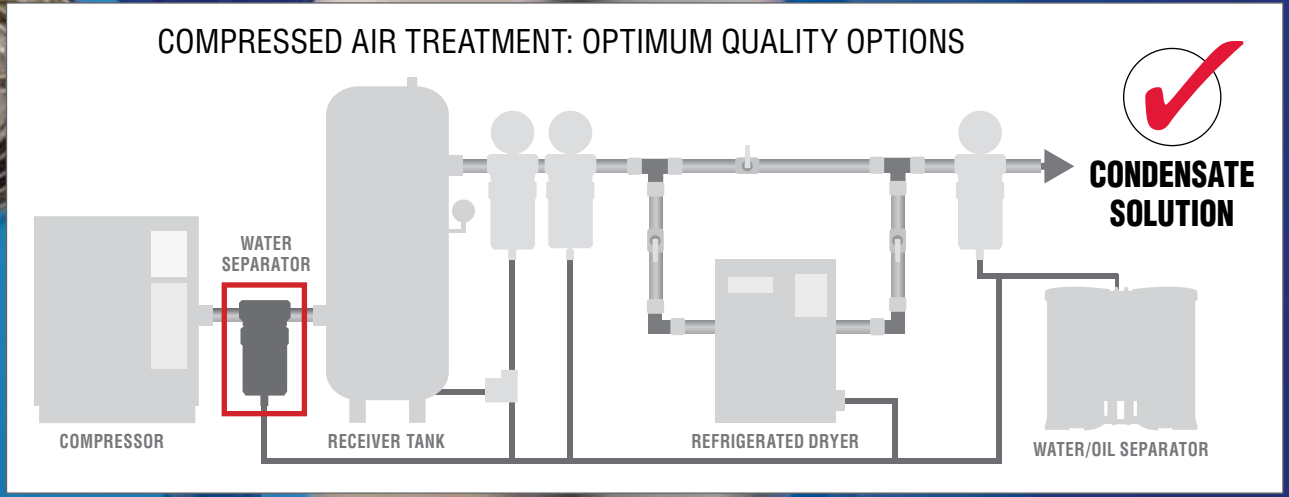
80 SCFM | 200 PSI

with drag guard to prevent accidental disconnection

For the complete selection of ULTRAFLO quick couplers, see series 31

Series 56
WATER SEPARATORS

COMPRESSED AIR TREATMENT: OPTIMUM QUALITY OPTIONS



AIRFLO
WATER SEPARATORS

Compressed air is normally saturated with moisture in the form of water vapor and aerosols, in addition to all of the other contaminants in the air. This water needs to be removed to prevent problems at the point of use.

TOPRING AIRFLO water separators use centrifugal separation to remove up to 99% of the water aerosol in compressed air.

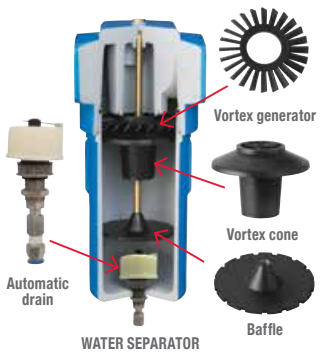
Working in conjunction with other compressed air treatment products like filters, after-coolers and dryers, the **TOPRING AIRFLO** water separator is a very cost effective way of ensuring that bulk water generated by the compressed air is properly separated and discharged from the system.

FEATURES AND BENEFITS

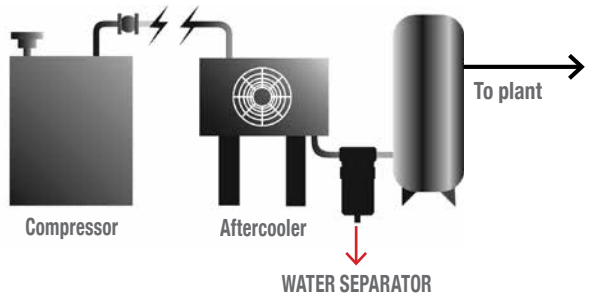
- **Cost effective way of ensuring that bulk water is removed from compressed air**
- **Ideal as a first treatment step between the compressor and receiver tank**
- **Requires no electricity and almost no maintenance**
- **Uses centrifugal force to remove up to 99% of bulk water**
- **Simple and easy to install**
- **Efficient automatic drain**
- **Robust aluminium body**

HOW DOES IT WORK?

Centrifugal force pushes liquid water out of compressed air; the spinning causes condensate to concentrate on the separator walls and, when the condensate gains enoughmass, it falls to the bottomof the separator bowl whereit is flushed out of the system by the automatic drain.



TYPICAL INSTALLATION - MAIN LINE



MATERIALS

Body: Aluminium

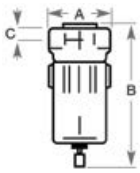
Vortex Generator and Baffles: Polypropylene

SPECIFICATIONS

Maximum Working Pressure: 232 PSI

Working Temperature Range: 1.5 °C to 60 °C

Nominal Pressure Drop: 0.45 PSI



Product No	Port Size (F) NPT	Flow Capacity SCFM	Weight kg	Dimensions (cm)		
				A	B	C
56.001	1/4	32	1.04	8.6	19.3	2.3
56.003	3/8	32	1.13	13.5	19.3	2.3
56.005	3/8	88	1.09	8.6	23.4	2.3
56.007	1/2	32	1.18	14.5	19.3	2.3
56.010	1/2	88	1.09	8.6	23.4	2.3
56.020	3/4	144	1.41	8.6	30.5	2.3
56.023	3/4	232	3.99	16.5	33.0	4.3
56.030	1	232	3.81	13.0	33.0	4.3
56.040	1-1/2	373	4.22	13.0	42.9	4.3
56.050	1-1/2	488	4.81	13.0	52.8	4.3
56.060	1-1/2	600	6.21	13.0	72.9	4.3

ACCESSORIES AND SPARE PARTS

Product No	Description
56.130	Internal automatic for all **AIRFLO** water separators
53.900	Mounting bracket for 56.001 to 56.023
53.905	Mounting bracket for 56.030 to 56.060

HE
WATER SEPARATORS

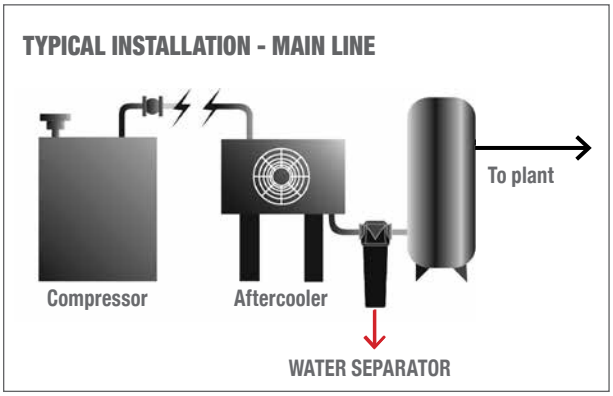
Designed for the efficient removal of bulk liquid contamination from compressed air.

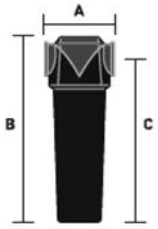
TOPRING HE water separators have been designed with the key focus concentrated in critical areas such as air flow management, separation efficiency at all flow conditions, minimal pressure losses and independently validated performance.

FEATURES AND BENEFITS

- **Excellent liquid removal efficiency at all flow conditions**
- **Low pressure losses for low operating costs**
- **Choice of port sizes for a given flow rate provides increased flexibility during installation**
- **Suitable for all types of compressor and compressor condensate**
- **Ideal for variable flow compressors**
- **Low maintenance**

CRN CANADIAN REGISTRATION NUMBER





APPLICATIONS

- Bulk liquid removal at any point in a compressed air system
- Protection of refrigeration and adsorption dryer pre-filtration
- Liquid removal from compressor inter-coolers/after-coolers
- Liquid separation within refrigerated dryers

MATERIALS

Body: Aluminium

Internals: Glass filled Nylon, Acetyl

SPECIFICATIONS

Maximum Working Pressure: 232 PSI

Working Temperature Range: 1.5 °C to 80 °C

Product No	Port Size (F) NPT	Flow SCFM	Weight kg	Dimensions (cm)		
				A	B	C
56.310	1/4	21	0.59	7.6	18.3	15.2
56.312	3/8	21	0.59	7.6	18.3	15.2
56.314	3/8	85	1.09	9.7	23.6	20.1
56.316	1/2	21	0.59	7.6	18.3	15.2
56.318	1/2	85	1.09	9.7	23.6	20.1
56.320	3/4	85	1.09	9.7	23.6	20.1
56.322	3/4	233	2.18	13.0	27.4	23.4
56.324	1	85	1.09	9.7	23.6	20.1
56.326	1	233	2.18	13.0	27.4	23.4
56.328	1-1/4	233	2.18	13.0	27.4	23.4
56.330	1-1/4	742	5.08	17.0	43.2	38.1
56.332	1-1/2	233	2.18	13.0	27.4	23.4
56.334	1-1/2	742	5.08	17.0	43.2	38.1
56.336	2	742	5.08	17.0	43.2	38.1
56.338	2-1/2	1695	9.98	20.6	50.5	44.5
56.340	3	1695	9.98	20.6	50.5	44.5

How much water is TOO much?

Any amount of water is too much!

Relative humidity is the amount of water vapor in air relative to what it could hold at a given temperature and pressure.

Moisture remains in compressed air through the compression cycle. It doesn't become a problem until it leaves the compressor and reaches the distribution network.

At 75 °F and 75% relative humidity, a 75 HP compressor takes in 174 litres of water vapor in 24 hours.

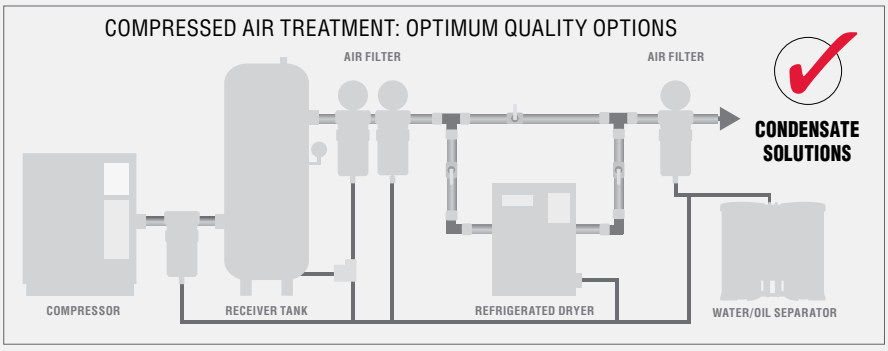
Liquid remaining after the after cooler: **55.6 litres (32.0%)**

Liquid remaining after the refrigerated dryer: **6.8 litres (4.0%)**

Liquid remaining after the desiccant dryer: **0.52 litres (0.3%)**

Water ruins product and jeopardize processes!

Removing moisture is essential to keeping equipment in top shape!



See Series related to « Condensate Solutions »

S49 page 196 • **S53** page 278 • **S54** page 288
S56 page 300 • **S57** page 304 • **S59** page 320

Series 57
WATER/OIL SEPARATORS

WATER AND OIL IN COMPRESSED AIR SYSTEM

WATER ACCUMULATION

When compressing air, a compressor draws in many other substances including water vapor. The compression process causes this water vapor to condense and accumulate in receivers, tanks and compressed air systems.

The most obvious place for this condensate to accumulate is in the compressor tank. In addition to damaging the tank, this condensate will also be entrained in the air flow and be drawn into the compressed air network.

Removing this condensate from the compressed air system is vitally important, as even small quantities can have a significantly detrimental effect on downstream equipment.

COMPRESSOR OILS

In compressors with lubricated compression chambers, the compressed air unavoidably picks up some oil. The most common examples of these types of compressors are oil-flooded rotary screw machines, lubricated reciprocating, and rotary vane compressors. In most cases, manufacturers of these types of compressors report oil carryover in ppm or parts per million by weight.

Fact is a reciprocating compressor does have a higher ppm (parts per million) level of oil carryover then a rotary screw, average ppm of a reciprocating compressor 7-10 ppm and it gets worse as it ages and on the rotary screw 3-5 ppm with oil separation that if maintained regularly will keep it in it's range.

In the compressor air business, most people have a difficult time relating to 2 ppm. In the real world, many lubricated compressors run at considerably higher oil carryover levels. In fact, many installations frequently run over 25 ppm.

At a concentration of 25 ppm, a typical compressor flowing 100 scfm for 35 hours will introduce 240 ml of oil into the pneumatic system. This oil gets into the flow of air and can mix with water vapor, liquid water and other contaminants to form a thick, viscous substance even more damaging to downstream components.

For all these reasons, condensate removal is crucial to any compressed air system.

Condensate removal using automatic drains is simple and efficient, but for the disposal of contaminant, a water/oil separator is essential to comply with municipal regulations.

DISCHARGING
oil contaminated condensate
is not only harmful to environment,
it is illegal !

Quebec Environment Quality Act

20. No one may emit, deposit, issue or discharge or allow the emission, deposit, issuance or discharge into the environment of a contaminant in a greater quantity or concentration than that provided for by regulation of the Government.

The same prohibition applies to the emission, deposit, issuance or discharge of any contaminant the presence of which in the environment is prohibited by regulation of the Government or is likely to affect the life, health, safety, welfare or comfort of human beings, or to cause damage to or otherwise impair the quality of the soil, vegetation, wildlife or property.

E.Q.A., Chapter 2, a. 20

Source: http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=2&file=/Q_2/Q2_A.html

ENVIRONMENTAL REGULATIONS

To meet with environmental regulations for condensate treatment in your location, please refer to your environmental provincial law on the discharge of any contaminant into the natural environment.

WARNING

A 50 HP compressor will pass about 120 ml of oil in 24 hrs at 10 ppm

LITERS OF WATER AFTER 8 HOURS FOR A 25HP COMPRESSOR (100 SCFM)

Ambient Air Temperature °C	% Humidity								
	20 %	30 %	40 %	50 %	60 %	70 %	80 %	90 %	100 %
49	84.5	126.8	169.1	211.4	253.7	296.0	338.0	380.0	422.8
43	64.1	95.5	126.8	159.6	190.1	222.3	253.7	286.4	317.8
38	47.7	70.9	94.1	118.7	141.8	166.4	189.6	212.8	237.3
32	35.6	51.8	69.6	87.3	105.0	121.4	139.1	156.8	174.6
27	25.9	38.2	50.5	62.7	76.4	88.6	101.0	113.2	126.8
21	17.7	27.3	35.5	45.0	54.5	61.4	72.3	81.8	90.0
16	12.3	19.1	25.9	32.4	38.2	45.0	50.5	57.3	64.1
10	9.5	13.6	17.7	21.8	27.3	31.4	35.5	39.6	45.0
4	5.5	9.5	12.3	15.6	17.7	21.8	24.5	27.3	30.0
-1	4.1	5.5	8.2	9.5	12.3	13.6	16.4	17.7	20.5
-7	2.7	4.1	5.5	6.8	7.7	8.6	9.5	10.9	12.3
-12	1.4	2.3	3.2	3.6	4.5	5.5	6.4	6.8	8.2

DISPOSAL OF CONTAMINATED CONDENSATE

A typical compressed air system will produce thousands of litres of oily, contaminated condensate every year. For example, a 100 SCFM compressor/refrigeration dryer package, operating in a 25 °C, 65% relative humidity for 4 000 hours can produce up to 10 000 litres of condensate.

Oil can seriously affect the efficient operation of sewage purification. For this reason, very little oil is permitted in water discharge and rigid legislation exists in most municipalities to protect the environment against this type of contamination. International standards such as ISO 14001 also require the compressed air user to comply with local environmental legislation and show use of protective systems and procedures. Traditional solutions for condensate disposal have been to:

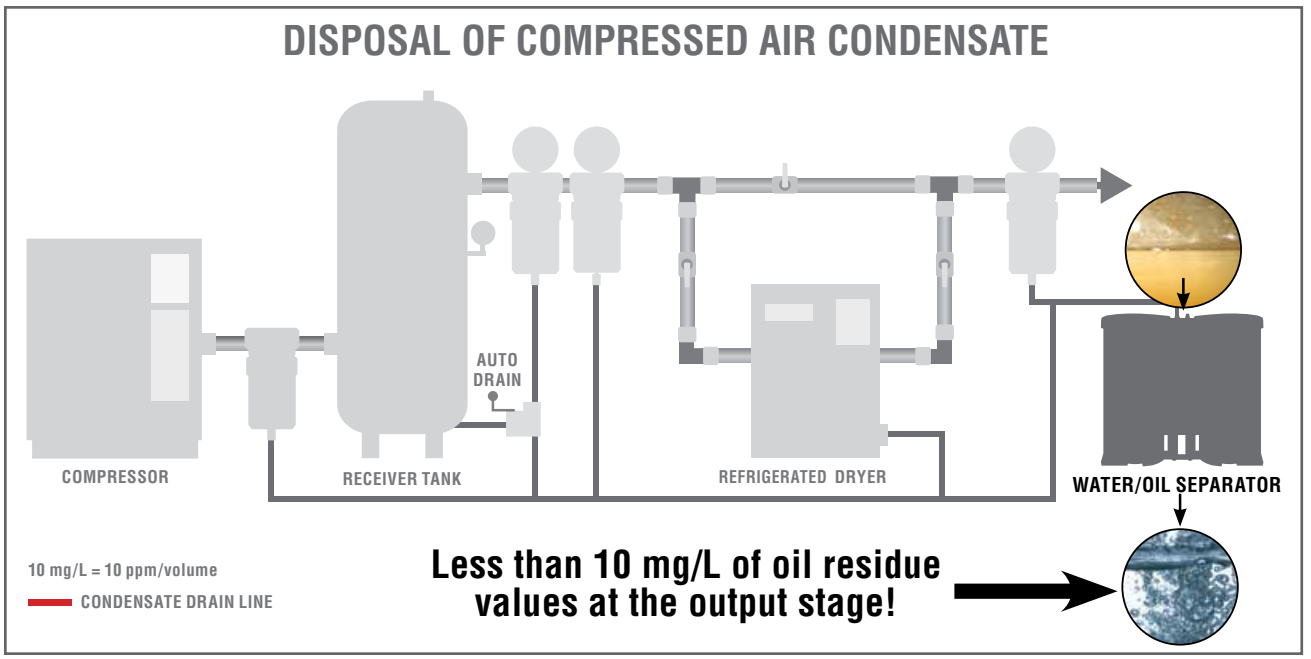
- Collect the condensate and have it trucked away periodically by a waste disposal company. This not only requires storage of the hazardous condensate on site, posing a health and safety risk, it is very costly as disposal charges can be up to several dollars per liter.
- Use a settling tank to separate the oil and water by gravity, then using carbon to filter the remaining water. Advances in compressor lubricants have made this technology obsolete. Modern compressor lubricants have a specific gravity similar to water, and because of this, they form an emulsified water/oil mixture that cannot be separated by gravity.

EFFICIENT ON-SITE DISPOSAL OF CONDENSATE

TOPRING offers a line of water/oil separators that works anywhere, anytime, on virtually any condensate, and with any type of condensate drain. **TOPRING** water/oil separators are a simple, economical and environmental solution. These oil/water separator are installed as part of the compressed air system and reduce the oil concentration in the collected condensate with a larger volume of clean water, up to 99.9% with a relatively small amount of concentrated oil that can be discharged legitimately and economically.

Using a specially treated, adsorbent, polypropylene media, **TOPRING** water/oil separators efficiently and effectively separate all compressor lubricants without the need for condensate storage tanks, settling chambers, or costly disposal. **TOPRING** oil/water separators are the most cost effective and reliable solution to meet environmental regulations for condensate treatment, and ensure your compliance with ISO 14001.

- Specialized polypropylene media
- Cost effective, reliable performance
- No need for a settling chamber
- Works with any condensate drain
- Activated carbon polishing filter
- Works on virtually any condensate



DISPOSABLE WATER/OIL SEPARATOR

70 SCFM

UP TO

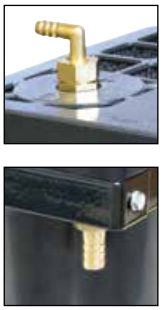
Simple and cost effective way to meet environmental regulations for condensate disposal.

With an advanced polypropylene adsorbent media, it can separate virtually any condensate containing any compressor lubricant discharged from any type of condensate drain, and it does so without the need for a condensate settling tank or storage chamber. The unit is simply mounted to the wall and connected with the inlet and outlet for clean condensate. When the unit is full of oil it must simply be replaced.

FEATURES AND BENEFITS

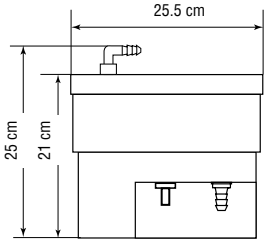
- **Foam depressurization layer separates condensate and compressed air**
- **Polypropylene media adsorbs compressor oil**
- **Carbon polishing media filters out any remaining hydrocarbons**
- **Simple replaceable design:** the unit must be removed and replaced when it is full of oil
- **Lightweight, yet strong and durable rugged ABS housing**
- **No settling chamber:** perfect for portable applications
- **Brass inlet and outlet adapter for secure tubing connections**
- **Wall mounting kit optional for easy installation with no floor space required**

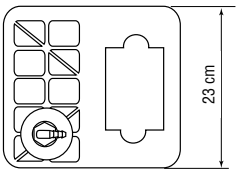
- Quick and easy to service
- Fixing brackets included



- Brass inlet/outlet connection

- Test kit included





APPLICATIONS

Perfect for installations with :

- Low compressed air flows (up to 70 SCFM)
- Low condensate flows
- Portable applications or floor space restrictions
- Any type of compressor oil
- Emulsified mixtures
- Any type of condensate drain
- EPA discharge regulations

MATERIALS

ABS

The oil adsorbing elements combine various types of adsorption technologies to achieve **less than 10 mg/L of oil residue values at the output stage**.

Rule of thumb: 1 HP = 4 SCFM

Mineral and synthetic lubricants applications	Polyglycol applications	Max flow capacity SCFM	Max oil adsorption litres	I.D. Inlet/Outlet	Weight kg
Product No	Product No				
57.300	57.320	70	1.9	1/2	3.6

WATER/OIL SEPARATOR

125 SCFM
UP TO

With an advanced polypropylene adsorbent media and a carbon polisher, it can separate virtually any condensate containing any compressor lubricant discharged from any type of condensate drain, and it does so without the need for a condensate settling chamber or storage tank.

A cost effective and reliable solution to meet environmental regulations for condensate disposal.

FEATURES AND BENEFITS

- **No settling chamber or storage tank required:** eliminates health and safety concerns
- **Can separate any type of lubricant including modern synthetic lubricants or even emulsified mixtures**
- **Can be used with any type of drain including all TOPRING condensate drains**
- **Brass threaded inserts and adapters for secure threaded or tubing connections**
- **Foam mesh depressurization chamber with foam exhaust filter slows incoming condensate and cleanly discharges compressed air**
- **Three stage of treatment combining two polypropylene elements and carbon polisher for optimum performance**
- **Multiple lightweight media bag complying with OSHA lifting requirements**
- **Strong and corrosion proof construction and rugged polyethylene housing**
- **Wall mounting kit optional for easy to instalation with no floor space required**

• Depressurization chamber

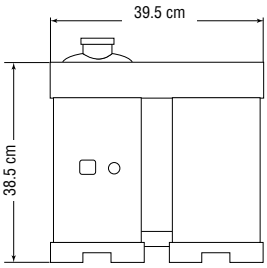
• Test port & kit included

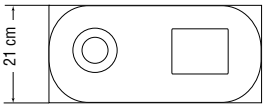
• Complete unit

APPLICATIONS

Perfect for installations with:

- Portable applications for floor space restrictions
- Any type of compressor oil
- Emulsified mixtures
- Any type of condensate drain
- EPA discharge regulations
- Operating cost concerns





MATERIALS

Polyethylene

The oil adsorbing elements combine various types of adsorption technologies to achieve **a less than 10 mg/L of oil residue value at the output stage**.

ELEMENT SERVICE KIT

Product No	Service kit for
57.400	Separator 57.302
57.410	Separator 57.322

When it is time to replace the elements, it is important to have in hand a service kit to replace all 3 elements.

Service kit includes:
2 polypropylene elements and 1 carbon polisher.

Mineral and synthetic lubricants applications	Polyglycol applications	Maximum flow capacity SCFM	Maximum oil adsorption /litre	I.D. Inlet/Outlet	Weight kg
Product No	Product No				
57.302	57.322	125	3	1/2	8.2

HIFLO
WATER/OIL SEPARATORS

TOPRING water/oil separators 175 SCFM through 1250 SCFM use three stages of treatment to separate difficult condensate.

With two specially treated polypropylene elements and a carbon polisher, they provide reliable and cost effective condensate separation performance regardless of the type of lubricant or drains.

1250 SCFM

UP TO

EACH SEPARATOR INCLUDES

- ✔ The primary, secondary and carbon polisher media bags
- ✔ A sample bottle and sample port for water quality testing to ensure compliance with local environmental regulations
- ✔ A step by step instruction manual for installation and operation

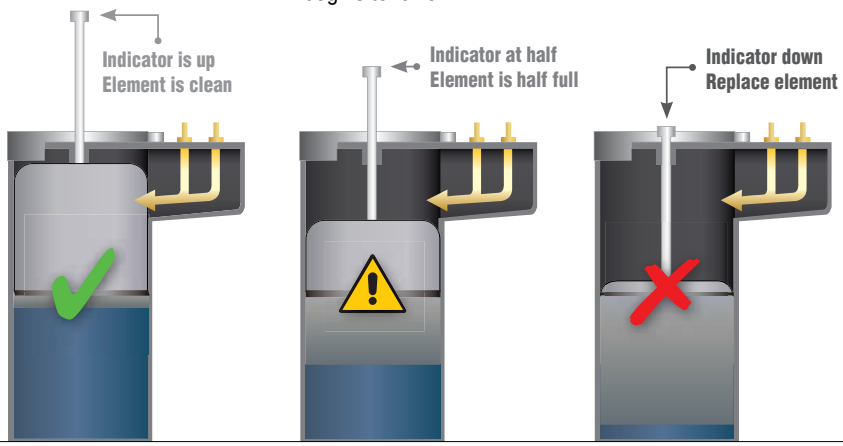
ELEMENT LIFE INDICATOR

One unique feature of the HIFLO water/oil separators is the element life indicator.

This indicator gives instant visual confirmation of the condition of the elements in the separator and when they need to be replaced.

When the primary indicator element is new, it floats on top of the condensate in the first tower. As condensate enters the separator over time, the oil becomes trapped within the fibers of the polypropylene media. This additional weight will cause the element to sink. As it sinks the element life indicator begins to lower.

When the element is fully saturated with oil, the indicator will be all the way down. This indicates that it is time to replace all three.



The oil adsorbing elements combine various types of adsorption technologies to achieve **a less than 10 mg/L of oil residue value at the output stage**.

Rule of thumb: 1 HP = 4 SCFM

HIFLO WATER/OIL SEPARATORS

FEATURES AND BENEFITS

- **No settling chamber or storage tank required:** eliminates health and safety concerns. Performance is not affected by movement
- **Can separate any type of lubricant including modern synthetic lubricants or even emulsified mixtures**
- **Can be used with any type of drain including all TOPRING condensate drains**
- **Brass threaded inserts and adapters for secure threaded or tubing connections**
- **Foam mesh depressurization chamber with foam exhaust filter slows incoming condensate and cleanly discharges compressed air**
- **Visual element life indicator provides confident indication of element conditions**
- **Overflow warning indicator avoids spill in the event of a blockage**
- **Three stage of treatment combining two polypropylene elements and carbon polisher for optimum performance**
- **Multiple lightweight media bag:** comply with OSHA lifting requirements
- **Corrosion proof construction with strong and rugged polyethylene housing**

APPLICATIONS

Perfect for installations with:

- High compressed air flows
- Any type of compressor oil
- Any type of condensate drain
- Floor space restrictions
- High condensate flows
- Emulsified mixtures
- Portable applications
- EPA discharge regulations

MATERIAL

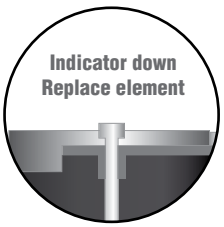
Polyethylene

Mineral and synthetic lubricants applications	Polyglycol applications	Max flow capacity SCFM	Max oil adsorption litres	I.D. Inlet/Outlet	Weight kg	Dimensions W x H x D cm
Product No	Product No					
57.304	57.324	175	4.9	1/2	10.9	58 x 61 x 19
57.306	57.326	350	9.8	1/2	17.7	65 x 75 x 24
57.308	57.328	750	15.1	1/2	32.7	78 x 90 x 30.5
57.310	57.330	1250	24.9	1/2	48.5	97 x 90 x 38

ELEMENT SERVICE KIT

When the indicator is all the way down, it is time to replace all three elements.

It is important to always have a service kit to replace all 3 elements (2x polypropylene and 1x carbon media).



Product No	Service kit for separator
57.402	57.304
57.403	57.306
57.404	57.308
57.406	57.310
57.412	57.324
57.414	57.326
57.416	57.328
57.418	57.330

ACCESSORIES

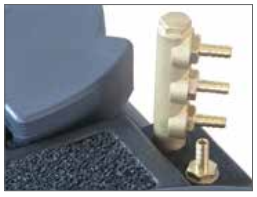
Condensate test kit

Useful tool to demonstrate the oil adsorbing capabilities of the media and prove it's effectiveness on the condensate at a given application prior to installation. The test can be carried out on site, and the kit includes a detailed step-by-step instruction manual to walk through the simple test procedure.

Product No	Description
57.420	Condensate test kit

Brass multiple inlet adaptor

Increases inlet connections from two to four



Product No	Description
57.422	Inlet adaptor

For more information on Water/Oil Separators, see the following brochure at TOPRING.com

TOPRING *offers a complete range of water/oil separators to meet environmental regulations*

Visit **TOPRING.com**
Section « Technical Support » / Air Treatment / Series 57

Series 58
SAFETY VALVES

ASME
AIR SAFETY VALVES
BRASS

SAFETY SOLUTION

OSHA – MEETS OR EXCEEDS OSHA STANDARDS

Manufactured under the regulations of the "National Board of Boiler and Pressure Vessel Inspectors" in accordance with section VIII of the ASME (Americain Society of Mechanical Engineers) code covering valves for unfired pressure vessels

FEATURES AND BENEFITS

- **High quality, corrosion-resistant safety valves**
- **Optimum high flow discharge rates**
- **CRN OG-3724**

APPLICATIONS

Designed to protect air compressor tanks and other unfired pressure vessels by exhausting when the maximum pressure is reached

MATERIALS

Body / Valve + Guide: Brass
Ring / Spring: Stainless steel

SPECIFICATIONS

Working Temperature:
Brass: - 40 °C to 177 °C

1/4 (M) NPT

Product No 1/4 (M) NPT	Pressure PSI	Airflow SCFM
58.800	50	51
58.810	75	71
58.820	115	104
58.830	125	112
58.840	140	124
58.850	155	137
58.860	165	145
58.865	175	153
58.870	190	165
58.880	200	173
58.885	225	194
58.890	300	255
58.895	400	336
58.900	450	377

1/2 (M) NPT

Product No 1/2 (M) NPT	Pressure PSI	Airflow SCFM
58.802	50	108
58.812	75	150
58.822	115	218
58.832	125	235
58.842	140	261
58.852	155	287
58.862	165	304
58.867	175	321
58.872	190	346
58.882	200	363
58.887	225	406
58.892	300	534

3/4 (M) NPT

Product No 3/4 (M) NPT	Pression PSI	Airflow SCFM
58.803	50	233
58.813	75	325
58.823	115	473
58.833	125	509
58.843	140	565
58.853	155	620
58.863	165	657
58.868	175	694
58.873	190	749
58.883	200	786
58.888	225	878
58.893	300	1154

ASME
AIR SAFETY VALVES
STAINLESS STEEL

Manufactured under the regulations of the "National Board of Boiler and Pressure Vessel Inspectors" in accordance with section VIII of the ASME (Americain Society of Mechanical Engineers) code covering valves for unfired pressure vessels

FEATURES AND BENEFITS

- High quality, corrosion-resistant safety valves
- Optimum high flow discharge rates
- CRN OG-3724

APPLICATIONS

Designed to protect air compressor tanks and other unfired pressure vessels by exhausting when the maximum pressure is reached

MATERIALS

Body / Valve + Guide: Stainless steel
Ring / Spring: Stainless steel

SPECIFICATIONS

Working Temperature:
Stainless steel: - 53 °C to 204 °C

1/4 (M) NPT

Product No 1/4 (M) NPT	Pressure PSI	Airflow SCFM
58.550	75	71
58.560	125	112
58.570	150	132
58.580	200	173

1/2 (M) NPT

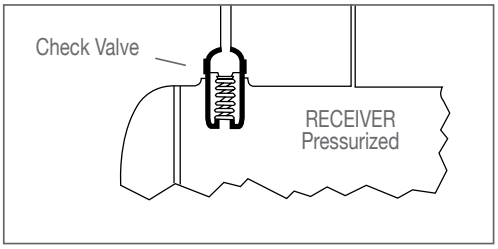
Product No 1/2 (M) NPT	Pressure PSI	Airflow SCFM
58.552	75	150
58.562	125	235
58.572	150	278
58.582	200	363

IN-TANK CHECK VALVES
FOR COMPRESSORS

Compressor check valves are used with compressor tanks to avoid air volume and pressure from returning back into compressor pump while the compressor is not operating.

FEATURES AND BENEFITS

- **Economical and reliable**
- **Two-piece screwed design**
- **Jam-resistant piston**
- **Triple-balanced flow design for minimum restriction**



APPLICATIONS

Used on air compressor tanks

MATERIALS

Body: Brass
Piston: Teflon
Spring: Stainless steel

SPECIFICATIONS

Maximum Working Pressure: 500 PSI
Maximum Temperature: Up to 232 °C
Unloader Port: 1/8 (F) NPT

Product No	Inlet (F) NPT	Outlet (M) NPT	Airflow SCFM
58.610	3/8	1/2	20
58.620	1/2	1/2	20
58.630	3/4	3/4	30
58.640	3/4	1	60
58.650	1	1	60

Product No	Inlet Tube SAE Compression Fitting ①	Outlet (M) NPT ②	Airflow SCFM
58.750	1/2	1/2	20
58.760	3/4	3/4	30

HOSEGUARD®
ANTI HOSE WHIP SAFETY VALVES

When a fitting comes out from a pressurised hose or when a pressurised hose is ruptured, the hose starts blowing compressed air in an uncontrolled way.

This causes the hose to whip and can result in:

- Injury
- Damage to pieces in production
- Dust being blown up from the floor
- Small components being blown around

SAFETY SOLUTION

OSHA

FEATURES AND BENEFITS

- Safe
- Reliable, tamperproof
- Maintenance free
- Easy to install
- Light and compact
- Full, unrestricted flow of air in normal open position
- Complies with OSHA Regulation Standard 29CFR 1926.302 (Partial)
- Complies with ISO Standard 4414 (5.4.5.11.1)

SOLUTION: ANTI HOSE WHIP SAFETY VALVES

HOSEGUARD offers simple but efficient protection to pneumatic systems in the event of a broken compressed air hose or pipe. The air supply is immediately shut off by the HOSEGUARD, should the volume of air exceed a set value. This value is factory preset and is set to allow normal air consumption when using air tools.

Should the air consumption exceed the set value, e.g. the air line is severed, then the internal piston instantly shuts off the main flow. An integral bleed hole allows some air to flow though. This enables the line pressure to automatically reset the HOSEGUARD once the main break is repaired.

APPLICATIONS

Compressed air hose

MATERIALS

Aluminium

SPECIFICATIONS

Maximum Working Pressure:
1/4, 3/8, 1/2 and 3/4: 255 PSI
1: 550 PSI

Working Temperature:
1/4, 3/8 and 1/2: -20 °C to 80 °C
3/4 and 1: -20 °C to 120 °C

Product No	Inlet NPT	Outlet (F) NPT	Airflow SCFM / Closing Point at 90 PSI*	Length cm
58.952	1/4 (M)	1/4	21	5.9
58.955	1/4 (M)	1/4	35	5.9
58.957	3/8 (M)	3/8	42	7.0
58.959	3/8 (M)	3/8	58	7.0
58.962	1/2 (M)	1/2	99	7.9
58.964	1/2 (M)	1/2	112	7.9
58.967	3/4 (F)	3/4	125	7.6
58.972	1 (F)	1	161	10.0

* Table for closing point at other PSI available on page 318 and 319

See the video "HOSEGUARD: Anti hose whip" on TOPRING.com

FACTS TO KNOW

OSHA standard no. 1926.302(b)(7) states that: "All hoses exceeding 1/2 inch inside diameter shall have a safety device at the source of supply or branch line to reduce pressure in case of hose failure." TOPRING anti hose whip safety valves satisfy this standard.

HOSEGUARD®
ANTI HOSE WHIP SAFETY VALVES

INFORMATION REQUIRED TO SELECT THE RIGHT HOSEGUARD®

- Pressure level at the HOSEGUARD
- Inside diameter and length of the air hose from the HOSEGUARD to the air tool
- Flow and pressure level needed to operate the air tool
- Please be aware that using theoretical values to select a HOSEGUARD is not advised.

  By using both the available airflow value and the charts for HOSEGUARD closing points (next pages), the correct HOSEGUARD can be selected

WARNING
INSTALLATION GUIDELINES

- It is essential that the compressed air used is clean and dry
- The inside diameter of the mounted air hose or pipe **INSTALLED AFTER** the HOSEGUARD **MUST BE EQUAL OR SUPERIOR** to the inside diameter of the HOSEGUARD. Air hoses and pipes which are too small could prevent successful closing of the HOSEGUARD
- **Very long lengths of air hose or pipe can result in an extreme pressure drop at its end point. It is essential that the HOSEGUARD has enough air flowing through it to close**
- The rules above also apply to any mounted quick connect couplings, nipples etc. as these could negate the closing function of the HOSEGUARD
- The inside diameter of the air hose or pipe **INSTALLED BEFORE** the HOSEGUARD **MUST BE EQUAL OR LARGER** than the inside diameter of the HOSEGUARD
- If regulators or other components are mounted before the HOSEGUARD, these components must have a higher flow than the HOSEGUARD selected
- The operation of the HOSEGUARD thoroughly should be tested before use

PROPER HOSEGUARD INSTALLATION

The HOSEGUARD must be mounted at the beginning of a flexible air hose

The HOSEGUARD must be mounted at the end of a rigid feeding line

It is essential to ensure air is flowing in the correct direction (as per the arrows marked on the HOSEGUARD), otherwise the safety valve will not be able to close successfully

The inside diameter of the mounted air hose or pipe installed before the HOSEGUARD, must be equal or larger than the inside diameter of the HOSEGUARD

IMPORTANT

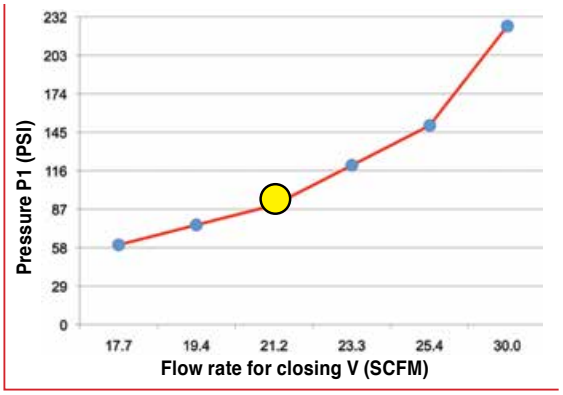
The air system should be operated only after the HOSEGUARD has been rigourously tested and secured

HOSEGUARD®
ANTI HOSE WHIP SAFETY VALVES

Flow measurement according to DIN EN 60534 / Air flow closing point (+ - 5%)

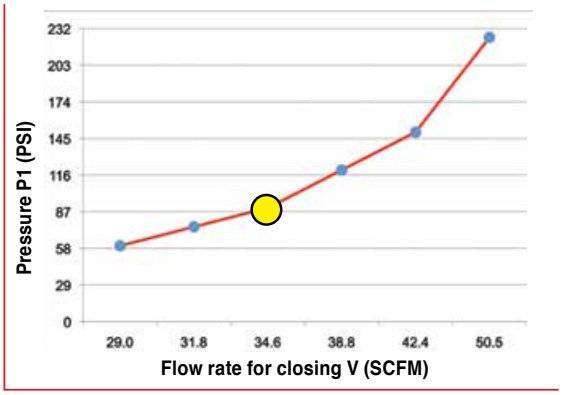
HOSEGUARD® 58.952 • 1/4

P1	Dp	T	V
PSIG	PSIG	C°	SCFM
225	3,6	14	30
150	3,6	14	25
120	3,6	14	23
90	3,5	15	21
75	3,5	15	19
60	3,5	15	18



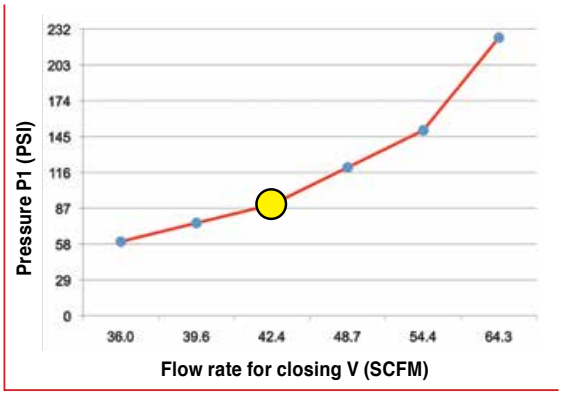
HOSEGUARD® 58.955 • 1/4

P1	Dp	T	V
PSIG	PSIG	C°	SCFM
225	10	18	51
150	10	18	42
120	10	18	39
90	10	18	35
75	8,5	19	32
60	8,5	19	29



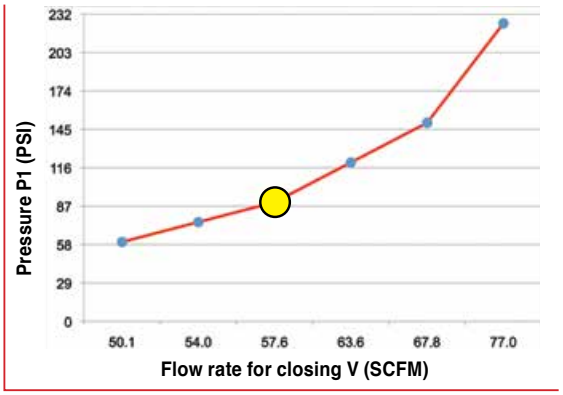
HOSEGUARD® 58.957 • 3/8

P1	Dp	T	V
PSIG	PSIG	C°	SCFM
225	2,9	14	64
150	3	14	54
120	3	14	49
90	3,1	15	42
75	2,9	15	40
60	3	15	36



HOSEGUARD® 58.959 • 3/8

P1	Dp	T	V
PSIG	PSIG	C°	SCFM
225	3,6	15	77
150	3,6	15	68
120	3,6	15	64
90	3,5	15	58
75	3,5	15	54
60	3,5	15	50



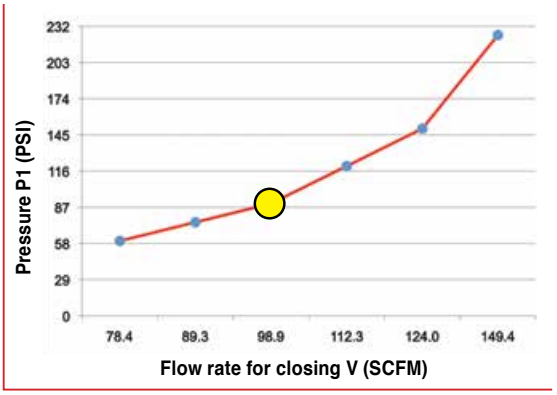
LEGEND
P1: Inlet pressure
DP: Pressure drop
T: °C temperature
V: Closing point (SCFM)

HOSEGUARD®
ANTI HOSE WHIP SAFETY VALVES

Flow measurement according to DIN EN 60534 / Air flow closing point (+ - 5%)

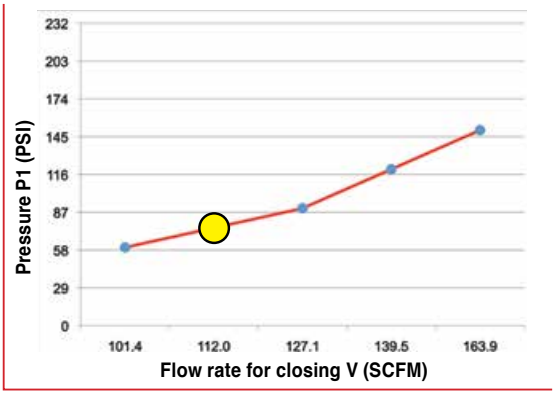
HOSEGUARD® 58.962 • 1/2

P1	Dp	T	V
PSIG	PSIG	C°	SCFM
225	5,9	14	150
150	6	14	124
120	6	14	112
90	6,3	14	99
75	6,3	14	89
60	6	14	78



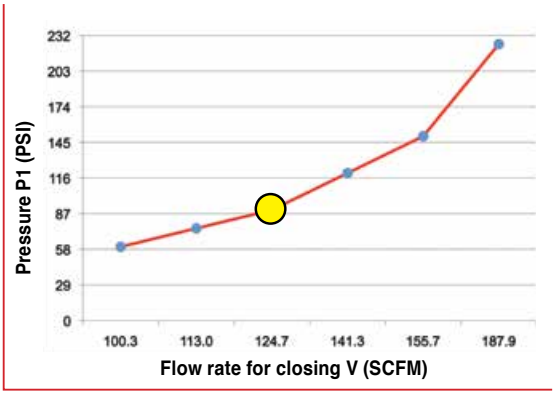
HOSEGUARD® 58.964 • 1/2

P1	Dp	T	V
PSIG	PSIG	C°	SCFM
225	5,9	14	164
150	5,7	14	140
120	5,9	14	127
90	5,9	13	112
75	5,7	14	101
60	5,7	14	92



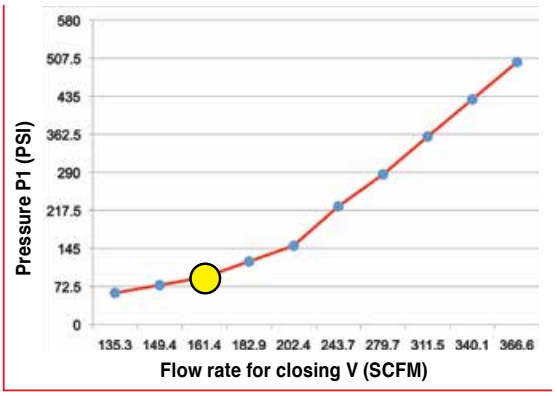
HOSEGUARD® 58.967 • 3/4

P1	Dp	T	V
PSIG	PSIG	C°	SCFM
225	2,9	14	188
150	2,9	14	156
120	2,9	14	141
90	2,9	14	125
75	2,9	14	113
60	3	14	100



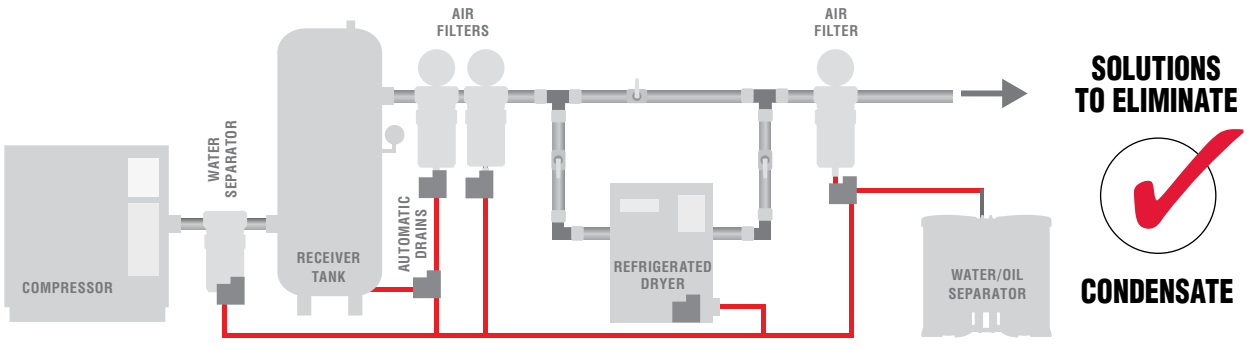
HOSEGUARD® 58.972 • 1

P1	Dp	T	V
PSIG	PSIG	C°	SCFM
500	2,4	13	367
429	2,4	13	340
358	2,4	13	312
286	2,4	13	280
225	2,4	13	244
150	2,4	13	202
120	2,4	13	183
90	2,4	13	161
75	2,4	13	150
60	2,4	13	135



Series 59
AUTOMATIC DRAINS

COMPRESSED AIR TREATMENT: OPTIMUM COMPRESSED AIR QUALITY OPTIONS



WHY USE AUTOMATIC DRAINS ?

TO ELIMINATE WATER ACCUMULATION

When compressing air, a compressor draws in many other substances including water vapor. The compression process causes this water vapor to condense and accumulate in receivers, tanks and compressed air systems.

The most obvious place for this condensate to accumulate is in the compressor tank. In addition to damaging the tank, this condensate will also be entrained in the air flow and be drawn into the compressed air network. Removing this condensate from the compressed air system is vitally important, as even small quantities can have a significantly detrimental effect on downstream equipment.

TO ELIMINATE COMPRESSOR OILS

In addition, compressed air is usually produced from oil-flooded compressors. This oil gets into the flow of air and can mix with water vapor, liquid water and other contaminants to form a thick, viscous substance even more damaging to downstream components.

For all these reasons, condensate removal is crucial to any compressed air system.

SELECTING THE PROPER AUTOMATIC DRAIN

Selecting the right automatic drain is a question of several criteria: environment, pressure, temperature, but the main goal should always be to limit energy cost therefore a **zero air loss drain** is always preferable over programmable or float operated drains.

ZERO AIR LOSS DRAIN	PROGRAMMABLE DRAIN	MECHANICAL DRAIN
		
A sensor located in the condensate collector triggers the draining of the tank when a set value is reached	A valve operated by a timer switch opens at fixed interval	The condensate is collected in a storage tank. A float opens a valve when a certain condensate volume is reached

WHY A ZERO AIR LOSS AUTOMATIC DRAIN IS ALWAYS THE BEST SOLUTION ?

If the control of a condensate drain is exclusively time-based, it employs preset values for valve operation times and intervals. However, since the amount of condensate in a compressed air system changes constantly (summer/winter, maximum/part load), the following problems can occur:

- Valve operating time too short/operating intervals too long: not enough discharge is drained causing compressed air system to back up with condensate
- Valve operating time too long/operating intervals too short: valve remains open although all the condensate has been drained allowing compressed air to escape
- High switching frequency because the condensate collecting vessel is too small: premature failure without the possibility of servicing causing compressed air system to back up with condensate
- Small valve nozzles are susceptible to contamination: valve can no longer close causing compressed air to escape

LITERS OF WATER AFTER 8 HOURS FOR A 25HP COMPRESSOR (100 SCFM)

Ambient Air Temperature °C	% Humidity								
	20 %	30 %	40 %	50 %	60 %	70 %	80 %	90 %	100 %
49	84.5	126.8	169.1	211.4	253.7	296.0	338.0	380.1	422.8
43	64.1	95.5	126.8	159.6	190.1	222.3	253.7	286.4	317.8
38	47.7	70.9	94.1	118.7	141.8	166.4	189.6	212.8	237.3
32	35.6	51.8	69.6	87.3	105.0	121.4	139.1	156.8	174.6
27	25.9	38.2	50.5	62.7	76.4	88.6	101.0	113.2	126.8
21	17.7	27.3	35.5	45.0	54.5	61.4	72.3	81.8	90.0
16	12.3	19.1	25.9	31.4	38.2	45.0	50.5	57.3	64.1
10	9.5	13.6	17.7	21.8	27.3	31.4	35.5	39.6	45.0
4	5.5	9.5	12.3	15.6	17.7	21.8	24.5	27.3	30.0
-1	4.1	5.5	8.2	9.5	12.3	13.6	16.4	17.7	20.5
-7	2.7	4.1	5.5	6.8	7.7	8.6	9.5	10.9	12.3
-12	1.4	2.3	3.2	3.6	4.5	5.5	6.4	6.8	8.2

TOPDRAIN®
« ZERO AIR LOSS »
AUTOMATIC DRAINS

FEATURES AND BENEFITS

- Eliminates the problem of condensate
- All models are suitable for working with any type of condensate even containing a high percentage of oil
- Saves valuable compressed air and reduces compressor demand
- Non-wearing magnetic-core level control for optimized and loss-free discharge of condensate
- Diaphragm valve with large cross-section ensures that contaminants are flushed out and this ensures fault-free operation of the valve. At the same time, the condensate is prevented from forming an emulsion that would need expensive condensate treatment.
- Easy installation and maintenance
- Volt free alarm control - The drain is equiped with a special alarm cycle that starts working in case of trouble. In the alarm state LED indicator blinks and the drain cyclically opens and closes the valve in order to drain the fluid. At the same time the remote control test signal is switched on to request maintenance
- Function test button for functionality check, routine inspection, manual discharge and depressurisation
- Quiet drainage sound - NO « pressure bang »

TOPDRAIN® drains automatically drain condensate from aftercoolers, tanks, filters and air lines in an electronically level-controled manner.

TOPDRAIN® drains prevent compressed air losses and minimize the energy demand. As a result the drain pays itself off within half a year, in contrast to devices with timed drain valves.

In constrast **TOPDRAIN®** drains sense when liquid is present and automatically discharge it. They only open when condensate is present, meaning no energy loss.

MATERIALS

Body Material: Polyamide

Chamber: Aluminium

Valve Internal Parts: Stainless steel

Diaphragm: Fluoroelastomer

SPECIFICATIONS

Maximum Supply Pressure: 230 PSI

Working Temperature Range: 1 °C to 60 °C

Voltage: 115 VAC / 1ph / 50-60 Hz

Power Cord: 1.8 m heavy duty cord with tripolar connector included with 59.248, 59.250, 59.251 and 59.252

Ball Valve Strainer included with 59.230, 59.231, 59.232, 59.233, 59.248, 59.250, 59.251 and 59.252

Built-in dirt screen easy to clean prevents the solenoid from clogging

Volt free alarm control - The drain is equiped with a special alarm cycle that starts working in case of trouble (not available on models 59.250 and 59.230)

Revolving top condensate inlet offering an additional balance line connection (not available on models 59.250 and 59.230)

LED indicators for power ON and valve operation (not available on models 59.250 and 59.230)

59.230
59.250 (with electrical cord)

59.231
59.248 (with electrical cord)

59.232
59.251 (with electrical cord)

59.233
59.252 (with electrical cord)

59.254

59.256

59.258

With electrical cord Product No	Without electrical cord Product No	Connections Inlets NPT	Connections Outlet I.D. in (Hose Barb)	Capacity SCFM Compressor, Aftercooler	Capacity SCFM Refrigeration Air Dryer	Capacity SCFM Filter, Water Separator	H x W x L cm
59.250	59.230	1/2 (M)	12 mm	106	212	1059	12.0 x 6.0 x 13.6
59.248	59.231	1/2 (F)	12 mm	224	448	2238	10.7 x 6.9 x 16.0
59.251	59.232	1/2 (F)	12 mm	265	530	2650	14.0 x 6.9 x 16.3
59.252	59.233	1/2 (F)	12 mm	530	1059	5297	15.5 x 6.9 x 16.3
	59.254	1/2 (F)	12 mm	1060	2120	10600	21.4 x 6.9 x 16.3
	59.256	1/2 x2 (F)	12 mm	5600	11200	56000	23.0 x 12.3 x 18.8
	59.258	1/2 x2 (F)	12 mm	10600	21200	106000	23.0 x 14.7 x 25.1

REPLACEMENT PARTS

Product No	Description
59.260	Maintenance Kit for 59.230 to 59.254
59.262	Maintenance Kit for 59.256 and 59.258
59.264	Valve for 59.250 and 59.230
59.265	Valve for 59.232, 59.248, 59.251, 59.233, 59.252 and 59.254
59.266	Valve for 59.256 and 59.258

With electrical cord

27_05_2016

« ZERO AIR LOSS » AUTOMATIC DRAIN

« Y » strainer and ball valve included

FEATURES AND BENEFITS

- Energy saver
- Removes condensate from compressed air systems without any lost of valuable compressed air
- Meets the demand of virtually any application and covers all compressed air systems up to 3000 SCFM and up to 230 PSI
- Successful draining of condensate due to 4.5 mm large orifice even heavily emulsified condensate
- Integrated mesh strainer protects from blockage
- Built in test fonction, LED status & alarm lights: ensures easy monitoring of drain operation and confirms proper performance
- DIN 43650-B alarm contact provides remote, real time indication of drain function
- A 1.8 meter power cord and a combo « Y » strainer and ball valve are included for a quick and easy installation and maintenance
- Balance Line NOT required (protected from air lock)
- Features a removable electronic module and top cover allowing the disassembly of the drain without disconnecting the air system

RoHS COMPLIANT
Restrictions of Hazardous Substances

MATERIALS

Body: Corrosion resistant aluminium

Valve Internal Parts: Stainless steel

Valve Seals: FKM (fluoroelastomer)

SPECIFICATIONS

Maximum Supply Pressure: 230 PSI

Working Temperature Range: 1 °C to 50 °C

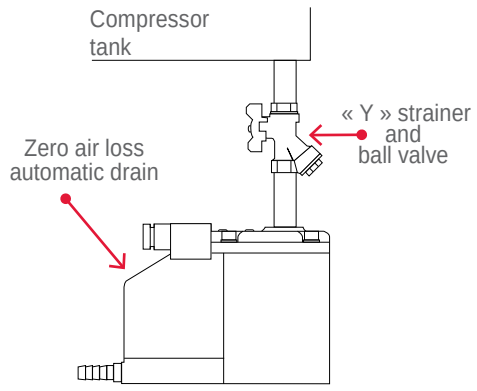
Voltage: 115 VAC / 1 ph / 50/60 Hz

Rating: NEMA 4

Drainage Capacity: 44 liters/hour

Power Cord: 1.8 m heavy-duty grounded

TYPICAL INSTALLATION



Product No	Inlet	Outlet Hose barb	H x L x L cm
59.401	1/2 (2) (F) NPT	3/8 I.D.	11.4 x 14.6 x 8.6

MAGNETICALLY OPERATED ZERO AIR LOSS DRAIN

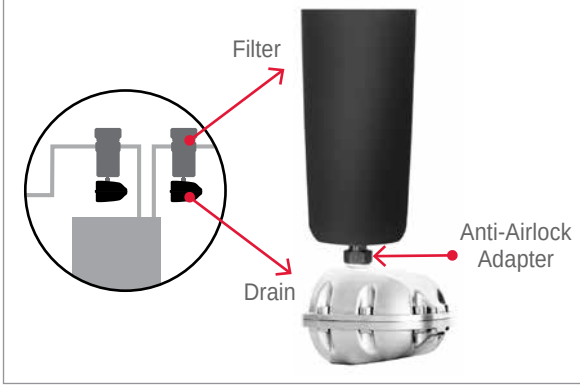
FOR AIR FILTER APPLICATIONS

Designed to remove condensate from compressed air filters. Uses internal magnetic forces as its power source to operate. Ideally suited for applications where electricity is not available, not desired or not reliable. The operation is automatic and there is zero air loss during the condensate discharge cycle.

FEATURES AND BENEFITS

- **Energy saver**
- **No electricity required**
- **Designed to remove condensate from compressed air filters of any size, type or manufacturer**
- **Zero air loss during the condensate discharge**
- **Ideally suited for applications where electricity is not available, not desired or not reliable**
- **Uses internal magnetic forces as its power source to operate**
- **Direct operated valve – not diaphragm type**
- **Large valve orifice**
- **1/2 (M) NPT anti-airlock adapter included allowing the trapped air to escape back into the system**

TYPICAL INSTALLATION



APPLICATIONS

Air Filters

Drop Legs

MATERIALS

Housing Material: Corrosion resistant aluminium

Valve seals: Viton

SPECIFICATIONS

Maximum Supply Pressure: 230 PSI

Working Temperature Range: 2 °C to 49 °C

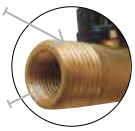
Product No	Inlet	Outlet	H x W x L (cm)
59.500	1/2 (F) NPT	1/8 (F) NPT*	11.1 x 13.7 x 16.0

* With 5/16 I.D. Hose Barb

MAXDRAIN®
PROGRAMMABLE DIGITAL COMPACT AUTOMATIC DRAIN

① Outside thread
1/2 (M) NPT

② Inside thread
1/4 (F) NPT



FEATURES AND BENEFITS

- Drain with timer, ball valve and strainer in one compact package
- Ensures fully automatic and reliable condensate drainage
- True digital timer control allows virtually limitless programming control
- Allows true programming of drain times based on rate of condensate generation
- Valve can open from 1 second to a 99 h 59 min 59 sec.
- Installation is simple and quick
- Saves maintenance time
- LED indicating power ON or OFF
- Test switch for routine inspection and depressurisation
- Strainer with bypass protects valve and allows for convenient, easy access and removal of particles that could block the valve

CYCLE TIME | PURGE TIME
PROGRAMMABLE

CE

APPLICATIONS

Air receivers, refrigerated dryers, separators and drop legs

MATERIALS

Valve Body: Brass and stainless steel
Enclosure: ABS Plastic
Internals: Brass
Seals: Viton

SPECIFICATIONS

Maximum Supply Pressure: 230 PSI
Operating temperature: 0 °C to 60 °C
Maximum Fluid Temperature: 90 °C
Voltage: 115 V / 1 ph / 50-60 Hz
Rating: NEMA 4
Interval time: 1 sec to 99 h 59 min 59 sec
Discharge time: 1 sec to 99 h 59 min 59 sec
Mounting: Horizontal or vertical
Power Cord: 1.8 m heavy-duty grounded

Product No	Inlet	Outlet
59.365	1/2 (M) NPT ① 1/4 (F) NPT ②	1/2 (F) NPT

MAXDRAIN®
COMPACT ELECTRONIC AUTOMATIC DRAINS

FEATURES AND BENEFITS

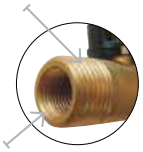
- Fully automatic - no maintenance
- Cost effective solution for regular, reliable condensate removal in pneumatic systems
- Reduce compressed air loss
- Installation is simple and quick
- Adjustable purge time from 0.5 to 10 seconds
- Adjustable cycle drain time of 30 seconds to 45 minutes
- Test switch - for routine inspection and depressurisation
- Solid-state timer for long life and reliability
- LED indicating power ON or OFF
- Large-orifice valve ensuring a self-cleaning process
- « Y » strainer and ball valve (59.345)
- Strainer with bypass protects valve and allows for convenient, easy access and removal of particles that could block the valve (59.345)

CYCLE TIME	PURGE TIME
30 SEC TO 45 MIN	0.5 TO 10 SEC

CE

① Outside thread 1/2 (M) NPT

② Inside thread 1/4 (F) NPT



Product No	Inlet	Outlet
59.345	1/2 (M) NPT ① 1/4 (F) NPT ②	1/2 (F) NPT
59.346	1/4 (F) NPT	1/4 (F) NPT

APPLICATIONS

Air receivers, refrigerated dryers, separators and drop legs

MATERIALS

Valve: Brass and stainless steel
Enclosure: ABS
Strainer: Brass
Seals: Viton

SPECIFICATIONS

Maximum Supply Pressure: 230 PSI
Working Temperature Range: 0 °C to 54 °C
Maximum Fluid Temperature: 90 °C
Voltage: 115 V / 1 ph / 50-60 Hz
Rating: NEMA 4
Interval time: 30 to 45 min
Discharge time: 0.5 to 10 sec
Mounting: Horizontal or vertical
Power Cord: 1.8 m heavy-duty grounded

HIFLO
LARGE CAPACITY MECHANICAL AUTOMATIC DRAIN

250 PSI

240 ml fluid capacity

FEATURES AND BENEFITS

- Automatically expels condensed moisture and compressor carry-over liquids from compressed air systems, wherever liquids tend to accumulate
- Large capacity drain designed with a unique self-cleaning poppet to insure high operating reliability with a minimum of maintenance
- Reliable and accurate draining of high viscosity fluids
- High resistance to rust and dirt
- Can be used with compressors of 500 HP or less
- External auto drain
- Large orifice prevents clogging
- Metal bowl with sight glass
- Discharge port is threaded 1/4 NPT for condensate removal
- Push-button for manual drain
- Threaded bowl for easy removal
- No electricity required

APPLICATIONS

Can be used either on compressor tank or as a drop leg

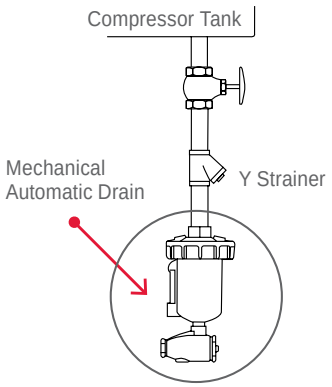
MATERIALS

Body and Bowl: Zinc
Seals: Buna-N/Nitrile
Drain: Brass

SPECIFICATIONS

Minimum and maximum Supply Pressure: 30-250 PSI
Working Temperature Range: 49 °C
Bowl Capacity: 240 ml

TYPICAL INSTALLATION



Product No	Inlet	Outlet	H x L (cm)
59.446	1/2 (F) NPT	1/4 (F) NPT	19.8 x 10.3

FACTS TO KNOW

It is strongly recommended to always install a « Y » strainer (59.705) ahead of an external drain. By trapping large debris and sludge, this will prevent costly malfunctions and extend the life of the automatic drain.

HIFLO
MECHANICAL AUTOMATIC DRAIN

175 PSI

FEATURES AND BENEFITS

- Automatically expels condensed moisture and high and low viscosity liquids from compressed air systems
- Unique self-cleaning poppet ensures reliability and low maintenance
- High resistance to rust and dirt
- No electricity required

114 ml fluid capacity

APPLICATIONS

Can be used on a compressor tank, receiver tank or drop leg

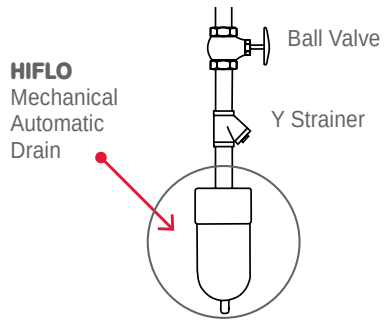
MATERIALS

Body and Bowl: Zinc
Float Mechanism: Plastic
Drain: Plastic

SPECIFICATIONS

Minimum and maximum Supply Pressure: 30-175 PSI
Working Temperature Range: 49 °C
Bowl Capacity: 114 ml

TYPICAL DROP LEG INSTALLATION



Product No	Inlet	H x L (cm)
59.445	1/2 (F) NPT	13.5 x 5.4

FACTS TO KNOW

It is strongly recommended to always install a « Y » strainer (59.705) ahead of an external drain. By trapping large debris and sludge, this will prevent costly malfunctions and extend the life of the automatic drain.

AIRFLO
MECHANICAL AUTOMATIC DRAIN

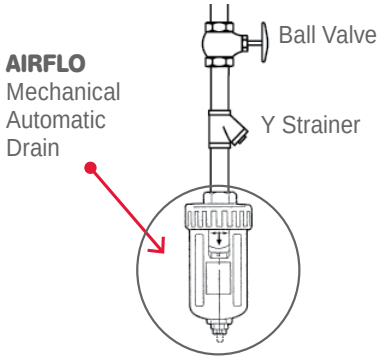
140 PSI

130 ml fluid capacity

FEATURES AND BENEFITS

- **Automatically expels condensed moisture and high and low viscosity liquids from compressed air systems**
- **Integrated filter element prevents rust, scale and large particles from fouling float mechanism**
- **No electricity required**

TYPICAL DROP LEG INSTALLATION



APPLICATIONS

Can be used on a compressor tank, receiver tank or drop leg

MATERIALS

Bowl: Polycarbonate
Body: Zinc
Float Mechanism: Plastic

SPECIFICATIONS

Minimum and maximum Supply Pressure: 22-140 PSI
Working Temperature Range: 5 to 60 °C
Bowl Capacity: 130 ml

Product No	Inlet	Outlet	H x L (cm)
59.470	1/2 (F) NPT	1/8 (M) BSPP	15.1 x 7.5

FACTS TO KNOW

It is strongly recommended to always install a « Y » strainer (59.705) ahead of an external drain. By trapping large debris and sludge, this will prevent costly malfunctions and extend the life of the automatic drain.

Drain tube should be 4 mm or greater in diameter and less than 3 feet long. The drain tube should be on the wall surface and kept straight.

MAXDRAIN® MECHANICAL AUTOMATIC DRAIN

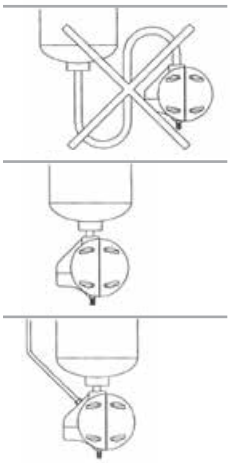
230 PSI

FEATURES AND BENEFITS

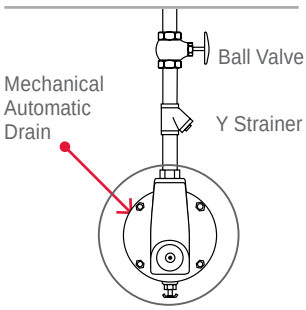
- The condensate is collected in a storage tank. A float opens a valve when a certain level of condensate is reached. The condensate flows through the outlet of the drain automatically.
- It is possible to install a hose to direct the flow of condensate to a specific location.
- No electricity required
- Economical
- Low maintenance

400 ml fluid capacity

TYPICAL RECEIVER TANK INSTALLATION



TYPICAL DROP LEG INSTALLATION



APPLICATIONS

Can be used on a compressor tank, receiver tank or drop leg

MATERIALS

Body: Aluminium
Union and drain cock: Brass
Seal: NBR

SPECIFICATIONS

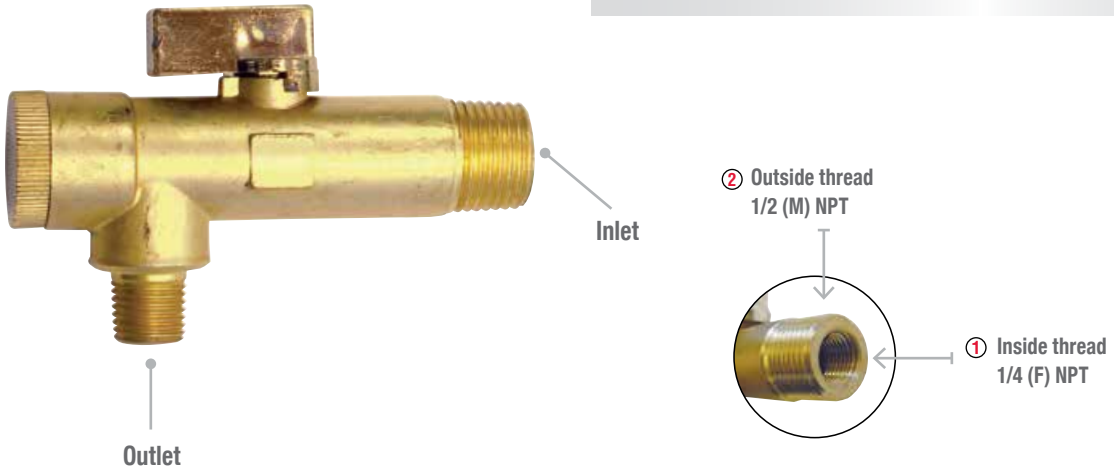
Maximum Supply Pressure: 230 PSI
Working Temperature Range: -10 to 80 °C
Bowl Capacity: 400 ml

Product No	Inlet	Outlet	H x L (cm)
59.465	1/2 (M) NPT	1/2 (F) NPT	14.6 x 13.5

BALL VALVE STRAINERS

FEATURES AND BENEFITS

- Ball valve strainers provide the possibility to isolate condensate drains for maintenance without having to depressurize the whole system



MATERIALS

Cast Brass

Product No	Inlet	Outlet
59.710	1/2 (M) NPT ② 1/4 (F) NPT ①	1/4 (M) NPT
59.714	1/2 (M) NPT ② 1/4 (F) NPT ①	1/2 (M) NPT

« Y » STRAINERS

FEATURES AND BENEFITS

- A « Y » strainer installed ahead of an external drain traps large debris and sludge, prevents malfunctions and extends the life of the automatic drain
- 3/8" removable plug for quick draining

MATERIALS

Cast brass

SPECIFICATIONS

Maximum Supply Pressure: 300 PSI

Product No	Orifice diameter
59.700	1/4 (F) NPT
59.702	3/8 (F) NPT
59.705	1/2 (F) NPT

SHUTDOWN CHECKLIST

Incorporating this shutdown checklist into your maintenance program will allow you to identify defective components in order to maximize your air network!

QUICK COUPLERS

- Air leaks — Yes ☐ No ☐
- Defective ball-locking mechanism — Yes ☐ No ☐
- Loose connection (plug/coupler) — Yes ☐ No ☐
- Plug with cutting edges — Yes ☐ No ☐
- Rust/corrosion — Yes ☐ No ☐
- Hard to connect — Yes ☐ No ☐
- Plant standardisation — Yes ☐ No ☐

FILTERS (F), REGULATORS (R), LUBRICATORS (L)

- Air leaks — Yes ☐ No ☐
- Pressure drops — Yes ☐ No ☐
- Clogged element — Yes ☐ No ☐
- Corrosion — Yes ☐ No ☐
- Damaged bowl — Yes ☐ No ☐
- Sludge in bowl — Yes ☐ No ☐
- Damaged gauge — Yes ☐ No ☐

SELF-STORING AIR HOSES

- Airflow restriction — Yes ☐ No ☐
- Air leaks — Yes ☐ No ☐
- Poor recoil memory — Yes ☐ No ☐
- Cracking or beaking — Yes ☐ No ☐
- Wear and tear — Yes ☐ No ☐
- Dirty — Yes ☐ No ☐
- Swelling — Yes ☐ No ☐

MUFFLERS/FILTERS

- Lack of noise reduction — Yes ☐ No ☐
- Absorbing dirt — Yes ☐ No ☐
- Wear and tear — Yes ☐ No ☐

FLEXIBLE AIR HOSES

- Airflow restriction — Yes ☐ No ☐
- Air leaks — Yes ☐ No ☐
- Cracking or breaking — Yes ☐ No ☐
- Wear and tear — Yes ☐ No ☐
- Dirty — Yes ☐ No ☐
- Swelling — Yes ☐ No ☐

PUSH-TO-CONNECT

- Air leaks — Yes ☐ No ☐
- Wear and tear — Yes ☐ No ☐
- Hard to connect — Yes ☐ No ☐
- Defective lock claws — Yes ☐ No ☐
- Defective swivelling — Yes ☐ No ☐
- Corrosion — Yes ☐ No ☐

HOSE REELS

- Defective auto rewind — Yes ☐ No ☐
- Hose wear and tear — Yes ☐ No ☐
- Mechanism dirtied — Yes ☐ No ☐
- Physical damages — Yes ☐ No ☐

PNEUMATIC TUBING

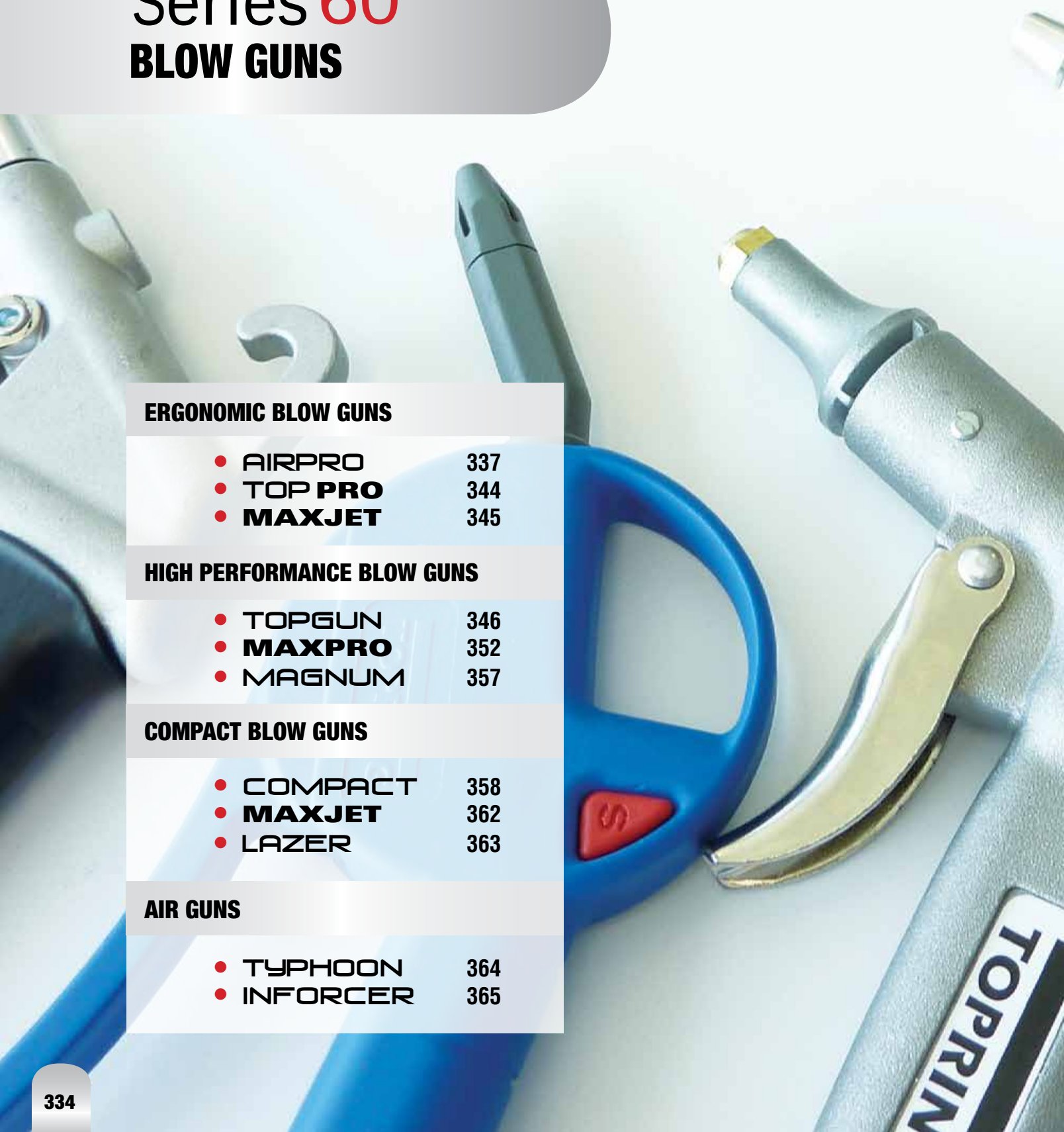
- Airflow restriction — Yes ☐ No ☐
- Cracking or breaking — Yes ☐ No ☐
- Dirty — Yes ☐ No ☐
- Defective connection — Yes ☐ No ☐
- Wear and tear — Yes ☐ No ☐

VALVES AND CYLINDERS

- Air leaks — Yes ☐ No ☐
- Rubbing noises — Yes ☐ No ☐
- Loose brackets — Yes ☐ No ☐
- Install mufflers — Yes ☐ No ☐

***SHUTDOWN CHECKLIST available at* TOPRING.com**

Series 60
BLOW GUNS




TOPRING
Max. 2 bar

WORKING WITH A QUALITY BLOW GUN IS NOT ONLY COMMON SENSE, BUT A SAFE INVESTMENT

Wherever compressed air blow guns are used for cleaning there is a real danger of injury to workers and damage to equipment caused by particles being ejected and blown into the air. This is why the following OSHA regulations pertaining to output pressure, chip guarding and noise are of particular relevance to users of safety air guns and spray equipment.

OUTPUT PRESSURE

Factory air lines operate at pressures of between 80 and 120 PSI. Most pneumatic tools, including air guns, require such high pressures to operate effectively.

However, OSHA and other Safety Agencies require that in the event such air lines are dead-ended (for example, if the tip of an air gun is blocked), the static pressure at the point of blockage should be no more than 30 PSI. All **TOPRING** safety air guns meet this requirement.

Refer to 29CFR Part 1910.242 (b) Hand and portable powered tools and equipment, general and OSHA Instruction STD 1-13.1 (OSHA PROGRAM DIRECTIVE #100-1)

CHIP GUARDING

When blowing off debris with an air gun in close quarters, workers are subject to “chip fly-back”. This term refers to the tendency of loose particles or chips to fly back into the operator's face, eyes or skin. For operations which require close-in work, OSHA and other Safety Agencies require that “effective chip guarding” be incorporated into the workplace. Many **TOPRING** safety air guns designed for close-in work incorporate a protective air cone for effective chip guarding.

Refer to 29CFR Part 1910.242 (b) Hand and portable powered tools and equipment, general and OSHA Instruction STD 1-13.1 (OSHA PROGRAM DIRECTIVE #100-1)

NOISE

Excessive noise generated in the workplace can be harmful. To address this problem, OSHA and other Safety Agencies have developed permissible daily noise exposure specifications. Air guns often contribute to high levels of occupational noise; the use of low noise, safety air guns can be an important component in moving towards noise compliance. Many **TOPRING** safety air guns incorporate noise limiting features.

Refer to 29CFR Part 1910.95 (A) Occupational noise exposure.

OSHA REGULATIONS

29CFR Part 1910.242 (b)

Hand and portable powered tools and equipment, general. Compressed air used for cleaning. Compressed air shall not be used for cleaning purposes except where reduced to less than 30 PSI and then only with effective chip guarding and personal protective equipement.

OSHA Instruction STD 1-13.1

October 30, 1978
Office of Program Operations

February 14, 1972
OSHA PROGRAM DIRECTIVE N° 100-1

To: **National and Field Offices**
Subject: **Reduction of Air Pressure Below 30 PSI for Cleaning Purposes**
Attachment: **Acceptable Methods for Complying with 41 CFR 50-204.8 and 29 CFR 1910.242(b)**

1. **Purpose.** To provide guidance and examples of what alternate systems will meet the requirements of this section, and to clarify its intent.
2. **Background.** A number of inquiries have been received requesting a clarification of the meaning of 1910.242(b) also known as 41 CFR 50-2048 under the Walsh-Healey Act.
3. **Interpretation.** The phrase ”reduce to less than 30 PSI” means that the downstream pressure of the air at the nozzle (nozzle pressure) or opening of a gun, pipe, cleaning lance, etc., used for cleaning purposes will remain at a pressure level below 30 PSI for all static conditions. The requirements for dynamic flow are such that in the case when dead ending occurs a static pressure at the main orifice shall not exceed 30 PSI. This requirement is necessary in order to prevent a back pressure buildup in case the nozzle is obstructed or dead ended. See enclosure (1) for two acceptable methods of meeting this requirement. Also, there is no intent to restrict the diameter of the nozzle orifice or the volume (CFM) flowing from it.

   "Effective chip guarding" means any method or equipment which will prevent a chip or particle (of whatever size) from being blown into the eyes or unbroken skin of the operator or other workers. Effective chip guarding may be separate from the air nozzle as in the case where screens or barriers are used. The use of protective cone air nozzles are acceptable in general for protection of the operator but barriers, baffles or screens may be required to protect other workers if they are exposed to flying chips or particles.
4. **Action.** Inquiries about subject section should be handled in accordance with this instruction.
5. **Effective Date.** This instruction is effective immediately, and will remain in effect until canceled or superseded.

   Director, of Program Operations.

29CFR Part 1910.95 (a)

Occupational noise exposure.
Protection against the effects of noise exposure shall be provided when the sound levels exceed those shown in Table G-16 when measured on the A scale of a standard sound level meter at slow response.

Table G-16 Permissible Noise Exposures

Duration per day, hours	8.0	6.0	4.0	3.0	2.0	1.5	1.0	0.5	0.25
Sound level dBA slow response	90	92	95	97	100	102	105	110	115

AIRPRO
BLOW GUNS

GENERAL FEATURES AND BENEFITS

AIRFLOW ADJUSTMENT
- Control mechanism allows progressive airflow adjustment
- Airflow can be regulated simply by squeezing and releasing the handle

HIGH OUTPUT PERFORMANCE
- High flow for maximum blowing power

SAFETY BLOW GUNS
- Safety models comply with OSHA and other Safety Agencies' requirements.

HIGH QUALITY, HIGH STRENGTH CONSTRUCTION
- Polymer material construction provides maximum durability
- High impact resistance and chemically inert

EASY CLEANING
- Highly resistant surface can be easily cleaned of oil and greases without solvents

EASY STORAGE
- Convenient built-in ring
- Inside of handle may be also used to hang up gun

ERGONOMIC DESIGN
- Nozzle and lever are ergonomically designed to reduce hand fatigue and help minimize carpal tunnel syndrome
- Direction of air jet is aligned with forearm to avoid unnecessary strain
- Long lever for quick, comfortable grip, easy to squeeze even during prolonged use
- Lightweight body fits perfectly into the palm of the hand
- Comfortable slip-free hand grip with soft spring action
- Extended gap between lever and nozzle provides efficient safety guard for user's fingers
- Bent tube allows access to difficult-to-reach places
- Body material insulator prevents cold hands

GENERAL APPLICATIONS

Clearing away chips and shavings, cleaning of parts and machines, blowing, drying and dust removal from parts and work areas

For machine and woodworking shops, construction, lumber mills, paper mills, textile mills, foundries, transportation, bakeries and food processing, rubber and plastic manufacturing plants, general cleanup and maintenance

MATERIALS

Body: Hostaform C®

Nozzle: Plated steel/stainless steel/Aluminium

Valve: Hostaform C®

Springs: Stainless steel

Seals: Buna-N/Nitrile

SPECIFICATIONS

Temperature Range: -40 °C to 65 °C

Connection: 1/4 (F) NPT

WARNING

Under no circumstances should a blow gun be used to clean workers' clothes or body. A vacuum should be used instead.

AIRPRO
MAXIMUM SAFETY BLOW GUNS

Maximum safety, a unique concept!

TOPRING maximum safety blow guns exceed OSHA or other Health and Safety Agencies requirements. If the tip of the nozzle is blocked, a check valve located inside the blow gun mechanism immediately shuts off the airflow. Thus a worker will never risk being exposed to dangerous airflow on his skin. When the tip of nozzle is free of any obstruction, the valve reactivates to release air.

FEATURES AND BENEFITS

- The safest blow gun on the market
- These models combine full-strength air jet and low noise level
- A built-in tamper-proof regulator automatically shuts off the airflow if the tip of the nozzle is blocked
- Rubber tip model eliminates scratching on delicate surfaces
- Airflow is variable depending on the amount of pressure applied to the lever

150 PSI | ERGONOMIC SOLUTION | OSHA | SAFETY SOLUTION | QUIET

SPECIFICATIONS

Noise Level at 87 PSI: 67 dB
Air Consumption: 4.2 SCFM
Maximum Working Pressure: 150 PSI
Maximum Output Thrust: 0.2 lb
Connection: 1/4 (F) NPT

Product No	Description
60.385	With 8 mm x 10 cm (4") tube and rubber tip - Red
60.389	With 8 mm x 10 cm (4") tube - Red
60.296	Chip guard for 60.389

For applications, materials and specifications, see page 337

27_05_2016

AIRPRO
SAFETY BLOW GUNS WITH StarTip NOZZLE

SAFETY SOLUTION

ERGONOMIC SOLUTION

QUIET

FEATURES AND BENEFITS

- Powerful safety blow guns
- Quiet – StarTip nozzle reduces noise by up to 20 decibels
- StarTip nozzle prevents total blockage, thereby complying with OSHA safety standards
- Concentrated airflow for maximum effectiveness
- Slim tip allows access to tight spaces
- Corrosion-resistant stainless steel tube

SPECIFICATIONS

Noise Level at 87 PSI: 76.8 dB
Air Consumption: 8.7 SCFM
Maximum Working Pressure: 150 PSI
Maximum Output Thrust: 0.46 lb
Connection: 1/4 (F) NPT

Product No	Description
60.357	With 6 mm tube x 10 cm (4") - Blue
60.377	With 8 mm tube x 10 cm (4") - Red

For applications, materials and specifications, see page 337

AIRPRO
SAFETY HIGH FLOW VENTURI NOZZLE BLOW GUNS

OSHA MEETS OR EXCEEDS OSHA STANDARDS
150 PSI
SAFETY SOLUTION
ERGONOMIC SOLUTION

FEATURES AND BENEFITS

- Powerful safety air guns
- Aluminium Venturi nozzle increases the available thrust
- If tip is blocked, static pressure will remain at less than 30 PSI to meet OSHA safety standards

SPECIFICATIONS

Noise Level at 87 PSI: 83.7 dB
Air Consumption: 8.3 SCFM
Maximum Working Pressure: 150 PSI
Maximum Output Thrust: 0.52 lb
Connection: 1/4 (F) NPT

VENTURI NOZZLE SERVES 2 PURPOSES

Airflow speeds up as it passes through the nozzle, drawing in ambient air through two side ports. Increased velocity and volume of air exiting the nozzle boosts available thrust.

Should the nozzle tip be blocked, the main airflow exits through the side ports. Static pressure at the nozzle tip is held to less than 30 PSI, satisfying OSHA and other Safety Agencies Standards.

Product No	Description
60.386	With 8 mm tube x 10 cm (4") - Red
60.350	With 6 mm tube x 10 cm (4") - Blue

Product No	Description
60.382	With 8 mm tube x 30 cm (12") - Red
60.383	With 8 mm tube x 50 cm (20") - Red
60.384	With 8 mm tube x 100 cm (40") - Red

For applications, materials and specifications, see page 337

AIRPRO FLAT NOZZLE SAFETY BLOW GUN

OSHA STANDARDS MEETS OR EXCEEDS OSHA | 115 PSI | SAFETY SOLUTION | ERGONOMIC SOLUTION | QUIET

FEATURES AND BENEFITS

- Specially designed flat nozzle for applications requiring a concentrated flat stream of powerful air
- The best air gun for cleaning bench tops, work stations, machinery and equipment in noise-sensitive areas
- In the event of a tip blockage, air escapes through radial holes keeping the pressure safely below 30 PSI to meet OSHA safety standards

SPECIFICATIONS

Noise Level at 87 PSI : 78 dB
Air Consumption: 15.9 SCFM
Maximum Working Pressure: 115 PSI
Maximum Output Thrust: 0.84 lb
Connection: 1/4 (F) NPT

Product No	Description
60.381	Flat nozzle - Red

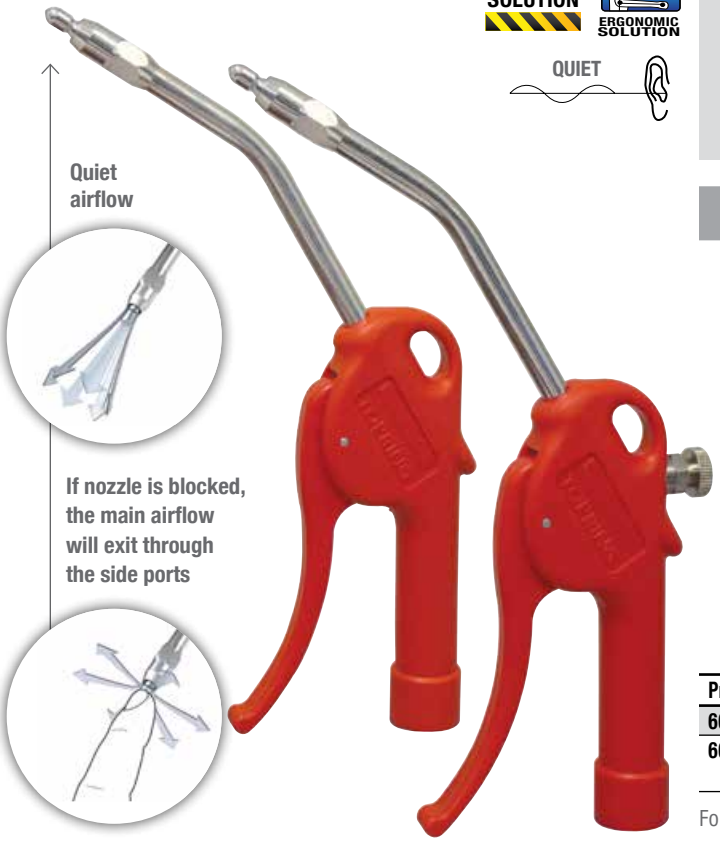
For applications, materials and specifications, see page 337

SILENT SAFETY BLOW GUNS

OSHA STANDARDS MEETS OR EXCEEDS OSHA | 150 PSI | SAFETY SOLUTION | ERGONOMIC SOLUTION | QUIET

FEATURES AND BENEFITS

- Specially designed tip reduces noise by 6 to 20 dB over conventional air guns
- Energy efficient
- Tip prevents blockage, satisfying OSHA safety standards
- Airflow control throttle screw model provides lower independent airflow for delicate jobs (60.388)



SPECIFICATIONS

Noise Level at 87 PSI: 71.6 dB
Air Consumption: 6.7 SCFM
Maximum Working Pressure: 150 PSI
Maximum Output Thrust: 0.27 lb
Connection: 1/4 (F) NPT

Product No	Description
60.387	With 8 mm tube x 13 cm (5") - Red
60.388	With 8 mm tube x 13 cm (5") with airflow control - Red

For applications, materials and specifications, see page 337

AIRPRO NON-RESTRICTED BLOW GUNS

WARNING

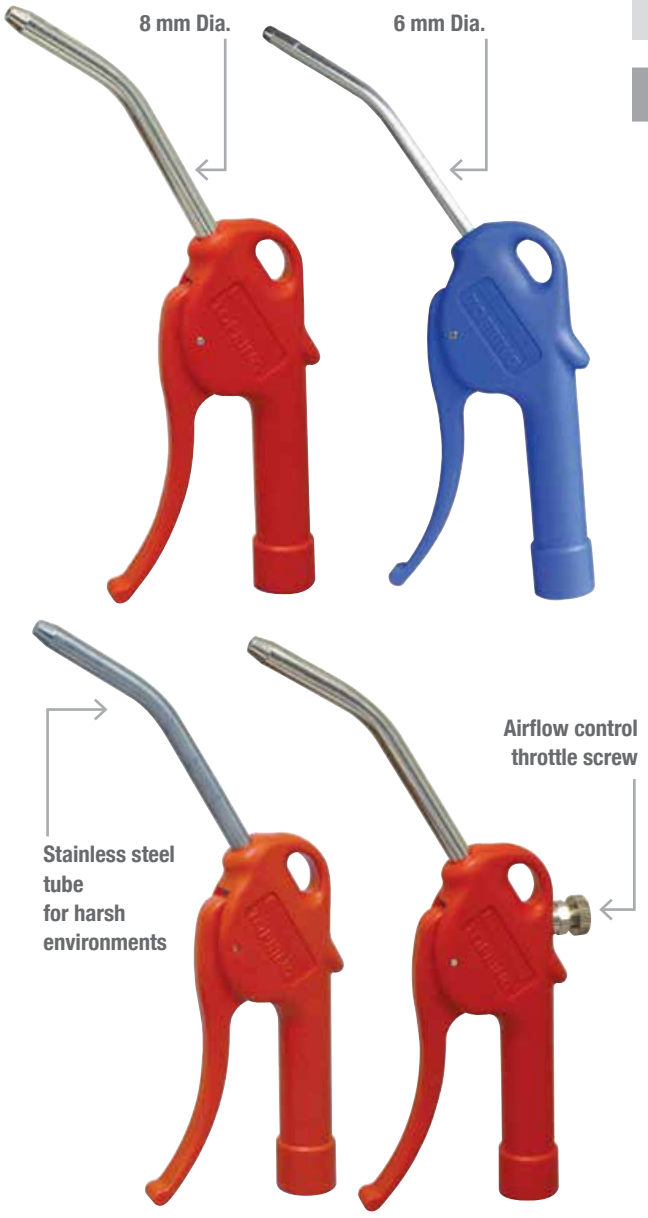
AIRPRO non-restricted blow guns do not have a safety by-pass and must be used on air lines which have a pressure regulator (such as a 62.202) set at a maximum of 30 PSI to conform to OSHA and other Safety Agencies' requirements.

HIGH PERFORMANCE NON-RESTRICTED BLOW GUNS

150 PSI

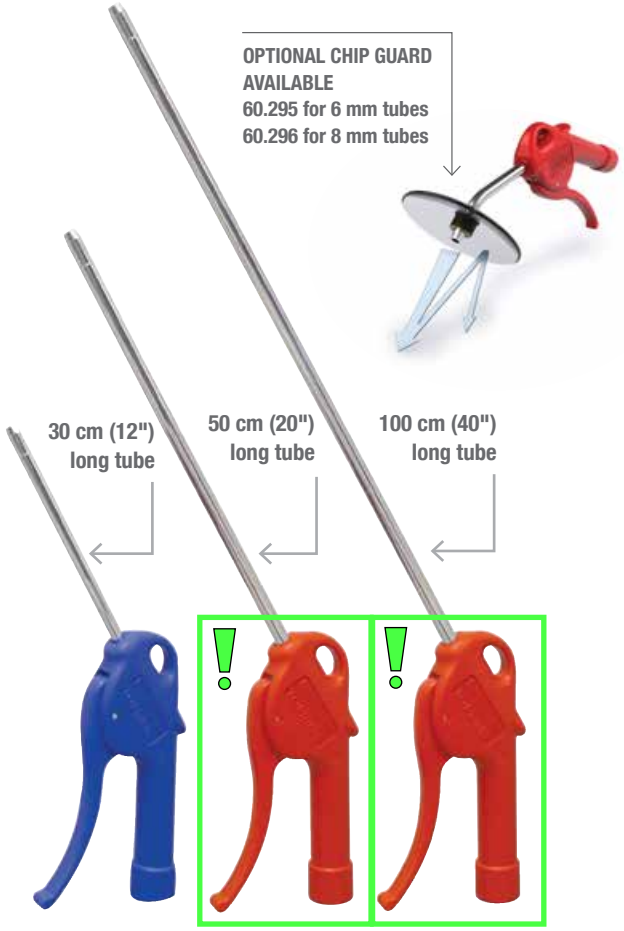
FEATURES AND BENEFITS

- Provides a narrow, high velocity jet of air
- Ergonomic design reduces fatigue and carpal tunnel syndrome
- Airflow control throttle screw model provides lower independent airflow for delicate jobs (60.392)
- Corrosion-resistant stainless steel tube for harsh or aggressive environments (60.399)



SPECIFICATIONS

Noise Level at 87 PSI : 84 dB
Air Consumption: 10.2 SCFM
Maximum Working Pressure: 150 PSI
Maximum Output Thrust: 0.64 lb
Connection: 1/4 (F) NPT



For applications, materials and specifications, see page 337

Product No	Description
60.320	With 6 mm tube x 10 cm (4") - Blue
60.390	With 8 mm tube x 10 cm (4") - Red
60.392	With 8 mm tube x 10 cm (4") with airflow control - Red
60.399	With 8 mm stainless steel tube x 10 cm (4") - Red

Product No	Description
60.325	With 6 mm tube x 30 cm (12") - Blue
60.393	With 8 mm tube x 30 cm (12") - Red
60.395	With 8 mm tube x 50 cm (20") - Red
60.396	With 8 mm tube x 100 cm (40") - Red

AIRPRO NON-RESTRICTED BLOW GUNS WITH RUBBER TIP

150 PSI

FEATURES AND BENEFITS

- Powerful airflow
- Provides a narrow, high velocity jet of air
- Rubber tip eliminates scratching of delicate surfaces

For applications, materials and specifications, see page 337

SPECIFICATIONS

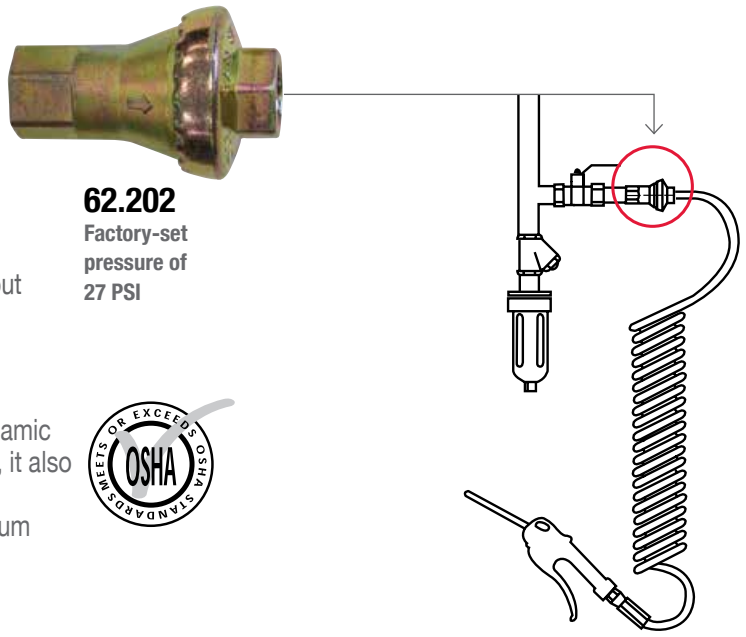
Noise Level at 87 PSI: 84 dB
Air Consumption: 10.2 SCFM
Maximum Working Pressure: 150 PSI
Maximum Output Thrust: 0.64 lb
Connection: 1/4 (F) NPT

WARNING

AIRPRO non-restricted blow guns do not have a safety by-pass and must be used on air lines which have a pressure regulator (such as a 62.202) set at a maximum of 30 PSI to conform to OSHA and other Safety Agencies' requirements. However, AIRPRO non-restricted blow guns do incorporate the same design and construction features as the AIRPRO safety blow guns.

Product No	Description
60.330	With 6 mm tube x 4" - Blue
60.397	With 8 mm tube x 4" - Red

SAVEAIR® IN-LINE PRE-SET ENERGY SAVING MINIATURE REGULATOR



62.202
Factory-set pressure of 27 PSI

The SAVEAIR® supplies a constant, exact outlet pressure regardless of the input pressure. The pressure is factory-set and cannot be changed.

Not only does this regulator prevents "dynamic pressure waste" which is extremely costly, it also optimizes blow guns performance while respecting safety standards with a maximum exit pressure of less than 30 PSI.

FOR MORE DETAILS, SEE SERIES 62

TOP PRO
SAFETY BLOW GUN

OSHA STANDARDS MEETS OR EXCEEDS OSHA

145 PSI

SAFETY SOLUTION

ERGONOMIC SOLUTION

FEATURES AND BENEFITS

- **Airflow can be precisely regulated simply by squeezing and releasing the handle**
- **Convenient built-in ring for easy storage**
- **Ergonomically designed non-slip grip to ensure complete safety and handling**
- **Superior durability thanks to the materials used in the manufacturing**
- **Laboratory tested mechanism to resist to more than 100 000 operation cycles**

MATERIALS

Body: Reinforced antishock polyamide
Nozzle: Reinforced antiscratch polyamide
Valve: Reinforced polyamide
Springs: Galvanized steel
Seals: NBR
Connection inset: Brass

SPECIFICATIONS

Maximum Working Pressure: 145 PSI
Temperature range: -15 °C to 70 °C
Connection: 1/4 (F) NPT

Product No	Description	Consumption SCFM*	Decibels*
60.302	With 10 cm (4") tube	6.4	86
60.303	With 30 cm (12") long tube	11.7	103
60.304	With 50 cm (20") long tube	10.4	101
60.315	With Quiet tip	7.4	73
60.316	With Venturi tip	18.4	108

* At 87 PSI

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MAXJET
NON-RESTRICTED BLOW GUNS

150 PSI

ERGONOMIC SOLUTION

FEATURES AND BENEFITS

- Powerful airflow that provides a narrow, high velocity jet of air
- Trigger action provides progressive airflow adjustment
- Ergonomic design reduces fatigue and carpal tunnel syndrome
- Plastic tip eleminates scratching of delicate surfaces

SPECIFICATIONS

Maximum Operating Pressure: 150 PSI

Connection: 1/4 (F) NPT

WARNING

MAXJET plastic blow guns do not have a safety by-pass and must be used on air lines which have a pressure regulator (such as a 62.202) set at a maximum of 30 PSI to conform to OSHA and other safety agencies' standards.

See page 375 for more details

Product No	Description
60.322	With standard tip • 10 cm (4") Tube
60.324	With 51 cm (20") long tube
60.332	With anti-scratch tip • 10 cm (4") Tube

MAXJET
BLOW GUN AND INTERCHANGEABLE TIPS KIT

150 PSI

FEATURES AND BENEFITS

- Maximum blow gun versatility with 9 tip options
- Maximum utility with 2 different blow gun bodies
- Each tip fits both blow gun bodies with a convenient, quick coupler style connection
- Ergonomic blow gun body provides a narrow, high velocity jet of air
- Compact blow gun body provides long-lasting, rugged performance

SPECIFICATIONS

Maximum operating pressure: 150 PSI

Connection: 1/4 (F) NPT

INCLUDED IN THE KIT:

- Plastic-body ergonomic blow gun with quick coupler style connection for tips
- Compact metal blow gun with quick coupler style connection for tips
- **1/4 INDUSTRIAL** plug, 1/4 (M) NPT
- Plastic safety tip
- Safety booster tip
- Rubber tip
- Inflator needle tip
- Aerosol spray nozzle tip
- Siphon tip
- 8 cm needle extension tip
- 10 cm extension tip
- 15 cm safety extension tip

Product No	Description
60.550	12 piece blow gun kit

TOPGUN
SAFETY BLOW GUNS

GENERAL FEATURES AND BENEFITS

AIRFLOW ADJUSTMENT
- Control mechanism allows progressive airflow adjustment
- Airflow can be regulated simply by squeezing and releasing the handle

HIGH OUTPUT PERFORMANCE
- High flow for maximum blowing power

SAFETY BLOW GUNS
- These guns are manufactured to meet OSHA and other Safety Agencies' requirements, ensuring maximum output pressure of 30 PSI even with complete obstruction to a pressure of 120 PSI

ROBUST AND POWERFUL
- Composite material construction provides maximum durability
- Very resistant aluminium body

FACILITATE STORAGE
- Convenient built-in hook to facilitate storage

LONG TUBE MODELS
- Choices of various lengths of tube for hard-to-reach locations

ERGONOMIC
- Ergonomic design with lever for quick, comfortable grip, easy to squeeze even during prolonged use

APPLICATIONS

Machine and woodworking shops

Industries and shops: construction, transportation, food, paper and textile, foundries, rubber and plastic manufacturing

General clean-up and maintenance

MATERIALS

Body: Cast aluminium

Nozzle: Aluminium or brass

Extention: Aircraft grade aluminium

Valve: Brass

Springs: Stainless steel

Seals: Buna-N/Nitrile

SPECIFICATIONS

Maximum Operating Pressure: 120 PSI

Temperature Range: -40 °C to 65 °C

Connection: 1/4 (F) NPT

WARNING

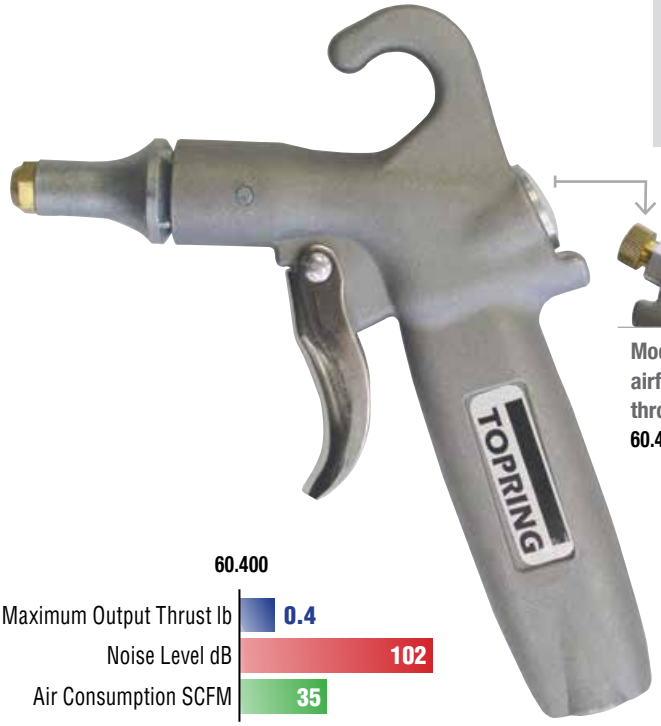
Under no circumstances should a blow gun be used to clean workers' clothes or body. A vacuum should be used instead.

TOPGUN
PROTECTIVE AIR SCREEN SAFETY BLOW GUNS

OSHA STANDARDS MEETS OR EXCEEDS OSHA
120 PSI
SAFETY SOLUTION
ERGONOMIC SOLUTION

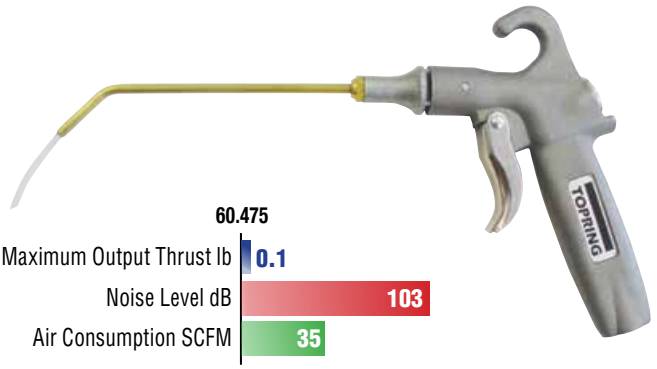
FEATURES AND BENEFITS

- Deliver high thrust with pinpoint accuracy
- Protective air cone protects workers against dangerous "chip fly-back"
- Limit static pressure to 30 PSI when tip is blocked
- Airflow control throttle screw model provides lower independent airflow for delicate jobs (60.405)
- 15 cm brass tube with 1/8" O.D. flexible tube for blind holes (60.475)

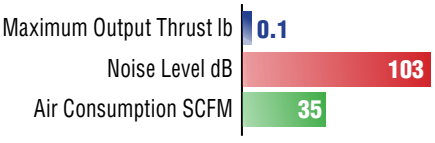


Model with airflow control throttle screw
60.405

60.400



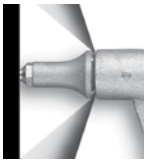
60.475



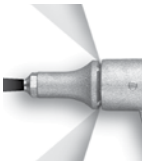
PROTECTIVE AIR SCREEN

During normal operation, the main flow of air exits through the nozzle tip and full plant air pressure is available to move and dislodge debris. In addition, a small portion of the main flow is diverted through slots around the periphery of the nozzle to form a protective air screen. This protective air screen helps prevent chips and other debris from blowing back towards the operator.

Should the tip become blocked, the entire air flow is diverted through the slots.



Therefore the pressure at the nozzle tip is held to less than 30 PSI, satisfying OSHA safety standards.



Specially designed to clean out blind holes in metal, plastic and wood work pieces.

APPLICATIONS

Cleaning of machine tools, woodworking tools, textile and other production equipment

SPECIFICATIONS

Maximum Output Thrust: 60.400 and 60.405: 0.4 lb
60.475: 0.1 lb

Noise Level: 60.400 and 60.405: 102 dB • 60.475: 103 dB

Air Consumption: 35 SCFM

Maximum Operating Pressure: 120 PSI

Product No	Description
60.400	Short tip
60.405	Short tip with airflow control throttle screw
60.475	Tip for blind holes (15 cm tube)

For applications, materials and specifications, see page 346

TOPGUN
BOOSTER SAFETY BLOW GUNS
WITH VENTURI NOZZLE

120 PSI

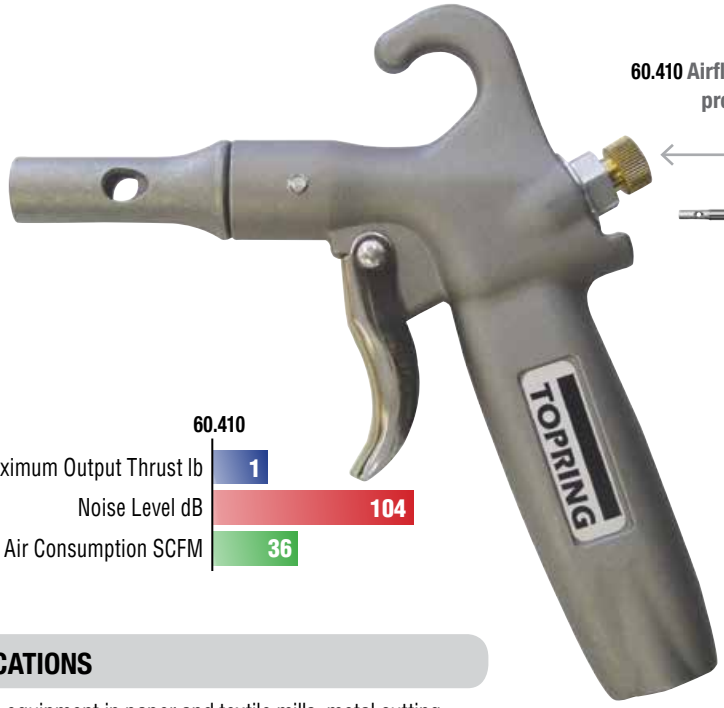
ERGONOMIC SOLUTION

OSHA MEETS OR EXCEEDS OSHA STANDARDS

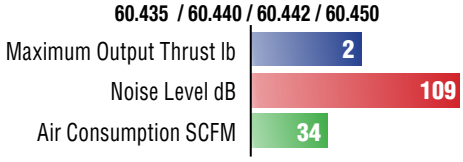
SAFETY SOLUTION

FEATURES AND BENEFITS

- Designed for moving large volumes of debris using air at standard shop pressures
- Venturi tip increases thrust and limits static pressure to less than 30 PSI when tip is blocked



60.410 Airflow control throttle screw provides lower independent airflow for delicate jobs



APPLICATIONS

Cleaning equipment in paper and textile mills, metal cutting and wood-working equipment

Blow guns with long tubes for hard-to-reach spaces: for blowing floor debris into piles, cleaning masonry forms, tanks, ovens, large molds, as well as machinery and storage areas

SPECIFICATIONS

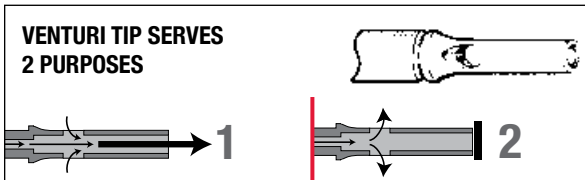
Maximum Output Thrust: 60.410: 1 lb / Long tubes: 2 lb

Noise Level: 60.410: 104 dB / Long tubes: 109 dB

Air Consumption: 60.410: 36 SCFM / Long tubes: 34 SCFM

Maximum Operating Pressure: 120 PSI

VENTURI TIP SERVES 2 PURPOSES



Main airflow speeds up as it passes through the nozzle, drawing in ambient air through the two side ports. The increased velocity and increased volume of air exiting the nozzle amplify the thrust.

Should the nozzle tip become blocked, all of the main airflow exits through the side ports. Static pressure at the nozzle tip is held to less than 30 PSI satisfying OSHA safety Standards.

Long tube for hard to reach spaces

Product No	Description
60.410	Short tip with airflow throttle screw
60.450	With 15 cm (6") tube
60.420	With 30 cm (12") tube
60.422	With 45 cm (18") tube
60.425	With 60 cm (24") tube
60.430	With 90 cm (36") tube
60.435	With 120 cm (48") tube
60.440	With 152 cm (60") tube
60.442	With 182 cm (72") tube

For applications, materials and specifications, see page 346

TOPGUN
WHISPER JET SAFETY BLOW GUNS WITH COANDA NOZZLE

120 PSI

ERGONOMIC SOLUTION

OSHA MEETS OR EXCEEDS OSHA STANDARDS

SAFETY SOLUTION

QUIET

FEATURES AND BENEFITS

- **Provides extra high thrust with reduced air consumption**
- **Unique Coanda nozzle design reduces noise by up to 6 to 20 dB over conventional blow guns**
- **Solid conical tip design prevents blockage of nozzle**
- **Ergonomic pistol grip and trigger eliminate hand fatigue**

60.415

Maximum Output Thrust lb	1.1
Noise Level dB	93
Air Consumption SCFM	21

60.416 / 60.418 / 60.419

Maximum Output Thrust lb	1.5
Noise Level dB	99
Air Consumption SCFM	29

APPLICATIONS

Cleaning equipment in paper and textile mills, metal cutting and wood-working equipment

Blow guns with long tubes for hard-to-reach spaces: for blowing floor debris into piles, cleaning masonry forms, tanks, ovens, large molds, as well as machinery and storage areas

SPECIFICATIONS

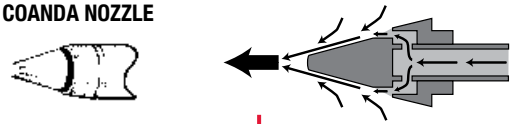
Maximum Output Thrust: 60.415: 1.1 lb / Long tubes: 1.5 lb

Noise Level: 60.415: 93 dB / Long tubes: 99 dB

Air Consumption: 60.415: 21 SCFM / Long tubes: 29 SCFM

Maximum Operating Pressure: 120 PSI

COANDA NOZZLE



High speed jets of air issuing from the narrow slots around the periphery of the nozzle adhere to the conical nozzle tip surface. This primary airflow draws in a large amount of surrounding air.

The net result is increased thrust at lower noise levels and savings of expensive compressed air. The solid conical tip physically prevents blockage thereby satisfying OSHA safety standards.

For applications, materials and specifications, see page 346

Long tube for places for difficult to reach

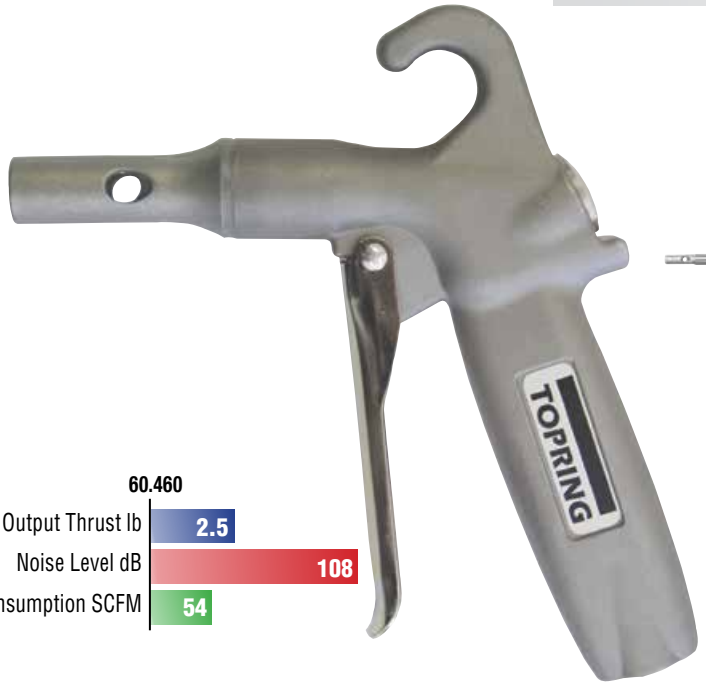
Product No	Description
60.415	Short tip
60.416	With 30 cm (12") tube
60.418	With 60 cm (24") tube
60.419	With 90 cm (36") tube

TOPGUN
EXTRA THRUST SAFETY BLOW GUNS WITH VENTURI NOZZLE

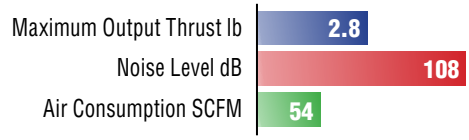
120 PSI
ERGONOMIC SOLUTION
OSHA
SAFETY SOLUTION

FEATURES AND BENEFITS

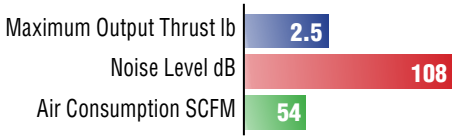
- Designed to quickly move large volumes of debris
- Extra thrust venturi tip increases thrust and limits static pressure to less than 30 PSI when tip is blocked
- Rugged, cast aluminium body with pistol-grip handle and full-length trigger



60.462 / 60.465 / 60.467 / 60.470
60.471 / 60.472 / 60.473 / 60.474



60.460



APPLICATIONS

Short nozzle: cleaning equipment in paper and textile mills, metal cutting and wood-working equipment

Blow guns with long tubes for hard-to-reach spaces: for foundries, lumber mills, and for conveyors and heavy equipment

SPECIFICATIONS

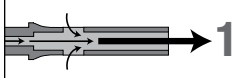
Maximum Output Thrust: 60.460: 2.5 lb / Long tubes: 2.8 lb

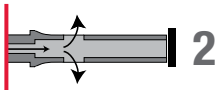
Noise Level: 108 dB

Air Consumption: 54 SCFM

Maximum Operating Pressure: 120 PSI

VENTURI TIP SERVES 2 PURPOSES





Main airflow speeds up as it passes through the nozzle, drawing in ambient air through the two side ports. The increased velocity and increased volume of air exiting the nozzle amplify the thrust.

Should the nozzle tip become blocked, all of the main airflow exits through the side ports. Static pressure at the nozzle tip is held to less than 30 PSI satisfying OSHA safety Standards.

TECH TIP

A high flow coupler and plug are required to insure optimum performance.
SEE SERIES 31

Product No	Description
60.460	Short nozzle
60.462	With 15 cm (6") tube
60.465	With 30 cm (12") tube
60.467	With 45 cm (18") tube
60.470	With 60 cm (24") tube
60.471	With 90 cm (36") tube
60.472	With 120 cm (48") tube
60.473	With 152 cm (60") tube
60.474	With 182 cm (72") tube

For applications, materials and specifications, see page 346

REPLACEMENT PARTS FOR BLOW GUNS TOPGUN

TOPGUN safety blow guns are repairable.
Both valve repair kits and replacement nozzles are available for most models.

Replacement nozzle 60.490

Valve repair kit 60.498

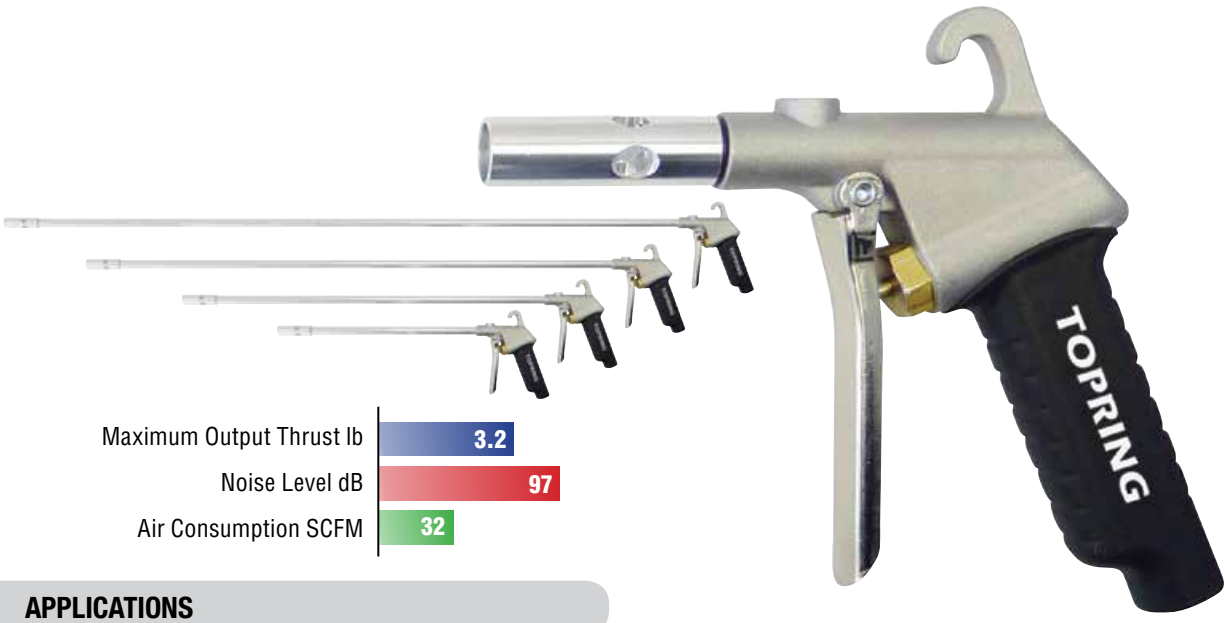
Product No	Description	Replacement Nozze	Valve Repair Kits
60.400	Protective air screen gun	-	60.498
60.405	Protective air screen gun / with airflow control	-	60.499
60.475	Blind hole air gun	-	60.498
60.410	Venturi tip booster air gun	-	60.499
60.450	Venturi tip booster air gun, 15 cm tube (6")	60.490	60.498
60.420	Venturi tip booster air gun, 30 cm tube (12")	60.490	60.498
60.422	Venturi tip booster air gun, 45 cm tube (18")	60.490	60.498
60.425	Venturi tip booster air gun, 60 cm tube (24")	60.490	60.498
60.430	Venturi tip booster air gun, 90 cm tube (36")	60.490	60.498
60.435	Venturi tip booster air gun, 120 cm tube (48")	60.490	60.498
60.440	Venturi tip booster air gun, 152 cm tube (60")	60.490	60.498
60.442	Venturi tip booster air gun, 182 cm tube (72")	60.490	60.498
60.415	Whisper jet air gun	-	60.498
60.416	Whisper jet air gun, 30 cm tube (12")	-	60.498
60.418	Whisper jet air gun, 60 cm tube (24")	-	60.498
60.419	Whisper jet air gun, 90 cm tube (36")	-	60.498
60.460	Extra thrust venturi tip air gun	60.491	60.498
60.462	Extra thrust venturi tip air gun, 15 cm tube (6")	60.491	60.498
60.465	Extra thrust venturi tip air gun, 30 cm tube (12")	60.491	60.498
60.470	Extra thrust venturi tip air gun, 60 cm tube (24")	60.491	60.498
60.471	Extra thrust venturi tip air gun, 90 cm tube (36")	60.491	60.498
60.472	Extra thrust venturi tip air gun, 120 cm tube (48")	60.491	60.498
60.473	Extra thrust venturi tip air gun, 152 cm tube (60")	60.491	60.498
60.474	Extra thrust venturi tip air gun, 182 cm tube (72")	60.491	60.498

MAXPRO
SAFETY HIGH FLOW BLOW GUNS
WITH VENTURI NOZZLE

OSHA EXCEEDS OR MEETS STANDARDS
120 PSI
SAFETY SOLUTION
ERGONOMIC SOLUTION

FEATURES AND BENEFITS

- Airflow regulated simply by squeezing and releasing the handle
- Robust and powerful safety blow guns
- Designed to quickly move large volumes of debris
- Provides maximum thrust from available air
- Lightweight cast aluminium pistol-style body
- Cushioned handle provides better control and comfort
- Integrated hook for convenient storage



APPLICATIONS

Machine and woodworking shops, construction, lumber mills, paper and textile mills, foundries, transportation, bakeries and food processing, rubber and plastic manufacturing plants, general cleanup and maintenance

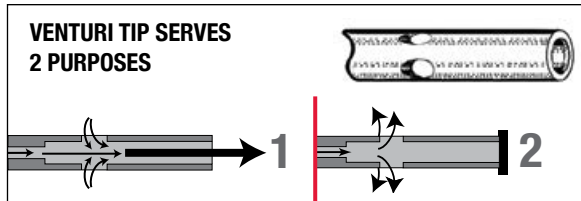
MATERIALS

Body and Nozzle: Aluminium
Valve: Brass and nickel plated steel
Springs: Stainless steel
Seals: EPDM and NBR
Cushioned Handle: Polymer

SPECIFICATIONS

Maximum Output Thrust: 3.2 lb
Noise Level: 97 dB
Air Consumption: 32 SCFM
Maximum Working Pressure: 120 PSI
Connection: 1/4 (F) NPT

VENTURI TIP SERVES 2 PURPOSES



Main airflow speeds up as it passes through the nozzle, drawing in ambient air through the four side ports. The increased velocity and increased volume of air exiting the nozzle amplify the thrust.

Should the nozzle tip become blocked, all of the main airflow exits through the side ports. Static pressure at the nozzle tip is held to less than 30 PSI, thereby satisfying OSHA Safety Standards.

Product No	Description
60.561	With short tip
60.563	With 30 cm tube (12")
60.564	With 60 cm tube (24")
60.565	With 90 cm tube (36")
60.566	With 120 cm tube (48")

MAXPRO
SAFETY HIGH FLOW BLOW GUNS WITH AIRFLOW CONTROL NOZZLE

OSHA STANDARDS MEETS OR EXCEEDS OSHA

120 PSI

SAFETY SOLUTION

ERGONOMIC SOLUTION

FEATURES AND BENEFITS

- Adjustable nozzle for accurate airflow control
- Airflow regulated simply by squeezing and releasing the handle
- Lightweight cast aluminium pistol-style body
- Cushioned handle provides better control and comfort
- Integrated hook for convenient storage

Adjustable nozzle for accurate airflow

Should tip become blocked, the main airflow will keep the static pressure under 30 PSI

APPLICATIONS

Machine and woodworking shops, construction, lumber mills, paper and textile mills, foundries, transportation, bakeries and food processing, rubber and plastic manufacturing plants, general cleanup and maintenance

MATERIALS

Body and Nozzle: Aluminium
Valve: Brass and nickel plated steel
Springs: Stainless steel
Seals: EPDM and NBR
Cushioned Handle: Polymer

SPECIFICATIONS

Maximum Output Thrust: 3.2 lb
Noise Level: 92 dB
Air Consumption: 32 SCFM
Maximum Working Pressure: 120 PSI
Connection: 1/4 (F) NPT

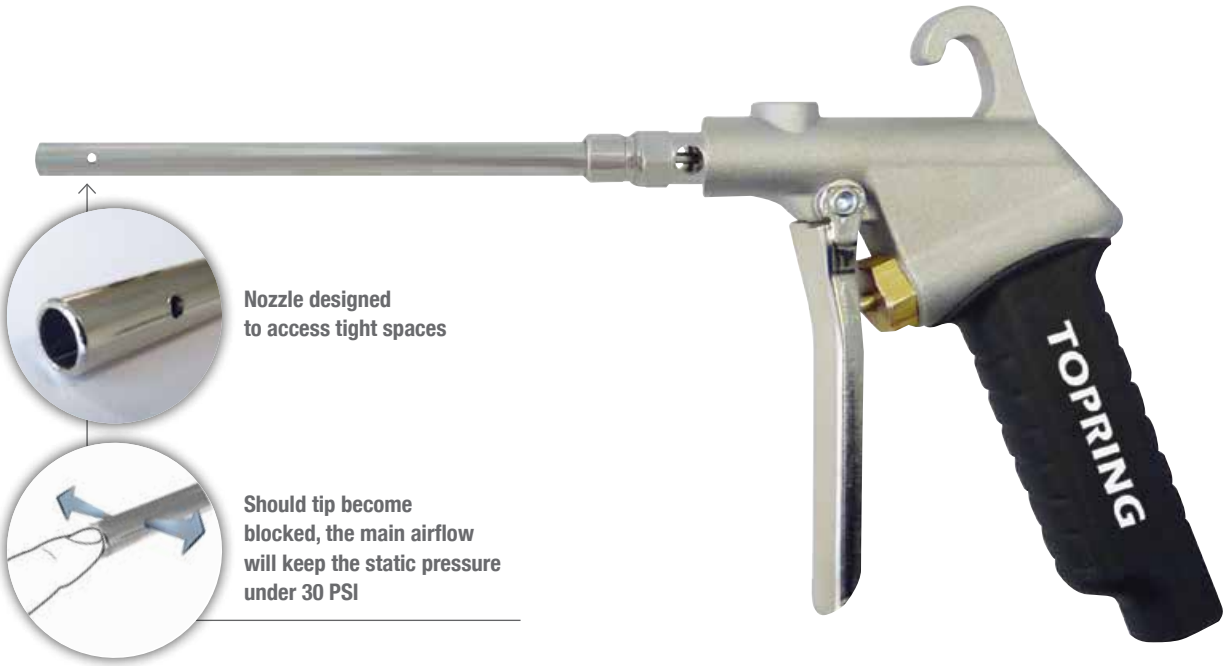
Product No	Description
60.575	Safety high flow with standard nozzle
60.576	Safety high flow with 5.4 mm x 10 cm (4") nozzle

MAXPRO
SAFETY HIGH FLOW BLOW GUNS WITH NOZZLE FOR TIGHT SPACES

OSHA MEETS OR EXCEEDS OSHA STANDARDS · 120 PSI · SAFETY SOLUTION · ERGONOMIC SOLUTION

FEATURES AND BENEFITS

- Airflow regulated simply by squeezing and releasing the handle
- Narrow nozzle to access tight spaces
- Lightweight cast aluminium pistol-style body
- Cushioned handle provides better control and comfort
- Integrated hook for convenient storage



APPLICATIONS

Machine and woodworking shops, construction, lumber mills, paper and textile mills, foundries, transportation, bakeries and food processing, rubber and plastic manufacturing plants, general cleanup and maintenance

MATERIALS

Body and Nozzle: Aluminium
Valve: Brass and nickel plated steel
Springs: Stainless steel
Seals: EPDM and NBR
Cushioned Handle: Polymer

SPECIFICATIONS

Maximum Output Thrust: 3.2 lb
Noise Level: 97 dB
Air Consumption: 32 SCFM
Maximum Working Pressure: 120 PSI
Connection: 1/4 (F) NPT

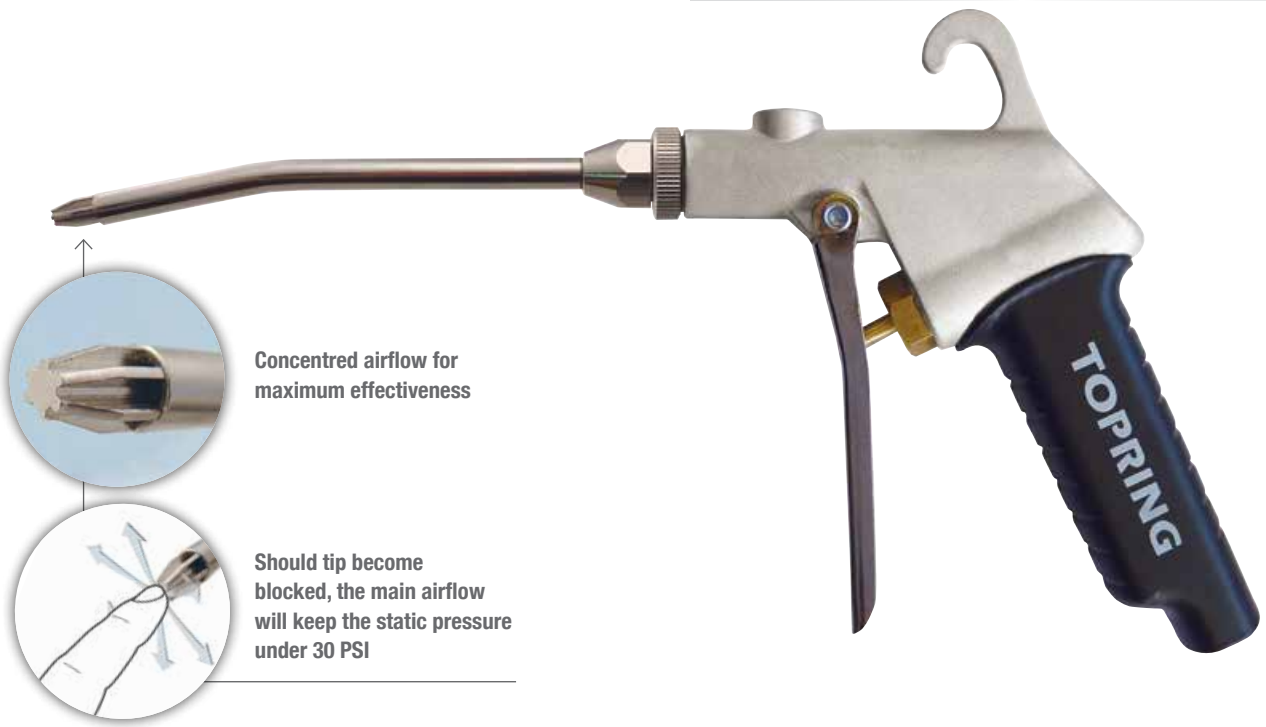
Product No	Description
60.577	Safety high flow with narrow nozzle 7.9 mm x 15 cm (6")
60.578	Safety high flow with narrow nozzle 7.9 mm x 25 cm (10")

MAXPRO
SAFETY HIGH FLOW EXTRA THRUST BLOW GUN WITH StarTip NOZZLE

OSHA STANDARDS MEETS OR EXCEEDS OSHA STANDARDS
120 PSI
SAFETY SOLUTION
ERGONOMIC SOLUTION

FEATURES AND BENEFITS

- Airflow regulated simply by squeezing and releasing the handle
- Lightweight cast aluminium pistol-style body
- Cushioned handle provides better control and comfort
- Integrated hook for convenient storage
- Slim tip allows access to tight spaces



Concentred airflow for maximum effectiveness

Should tip become blocked, the main airflow will keep the static pressure under 30 PSI

APPLICATIONS

Machine and woodworking shops, construction, lumber mills, paper and textile mills, foundries, transportation, bakeries and food processing, rubber and plastic manufacturing plants, general cleanup and maintenance

MATERIALS

Body and Nozzle: Aluminium
Valve: Brass and nickel plated steel
Springs: Stainless steel
Seals: EPDM and NBR
Cushioned Handle: Polymer

SPECIFICATIONS

Maximum Output Thrust: 3.2 lb
Noise Level: 88 dB
Air Consumption: 32 SCFM
Maximum Working Pressure: 120 PSI
Connection: 1/4 (F) NPT

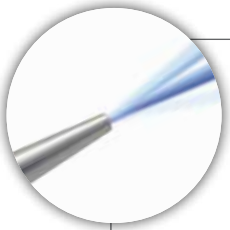
Product No	Description
60.589	Safety high flow with Startip nozzle

MAXPRO
SAFETY HIGH FLOW BLOW GUN WITH AIR SCREEN NOZZLE

OSHA MEETS OR EXCEEDS OSHA STANDARDS
120 PSI
SAFETY SOLUTION
ERGONOMIC SOLUTION

FEATURES AND BENEFITS

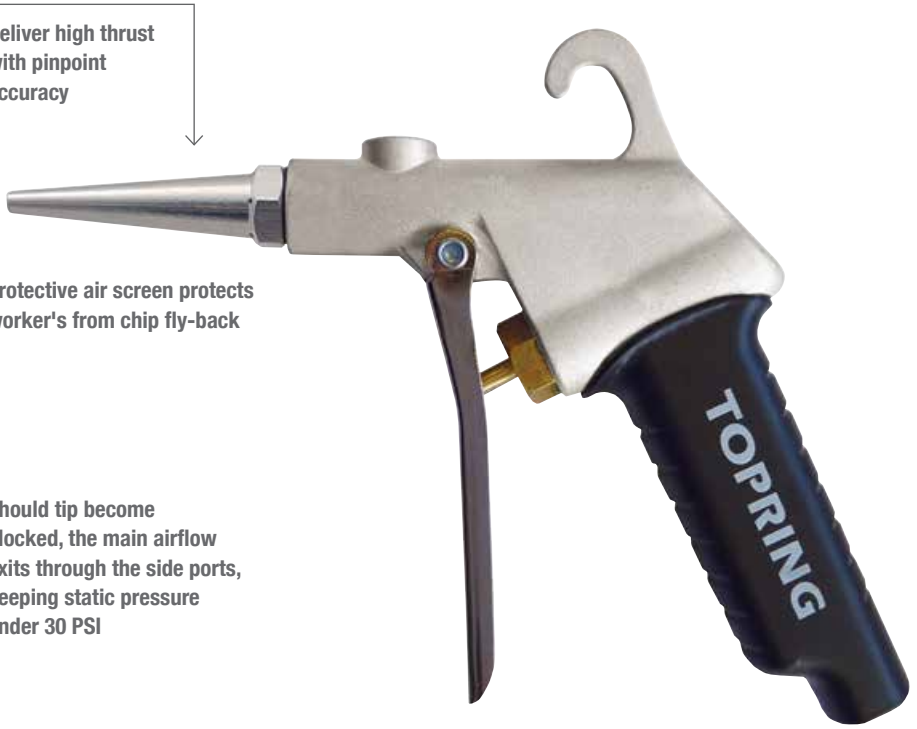
- Airflow regulated simply by squeezing and releasing the handle
- Lightweight cast aluminium pistol-style body
- Cushioned handle provides better control and comfort
- Integrated hook for convenient storage



Deliver high thrust with pinpoint accuracy

Protective air screen protects worker's from chip fly-back

Should tip become blocked, the main airflow exits through the side ports, keeping static pressure under 30 PSI



APPLICATIONS

Machine and woodworking shops, construction, lumber mills, paper and textile mills, foundries, transportation, bakeries and food processing, rubber and plastic manufacturing plants, general cleanup and maintenance

MATERIALS

Body and Nozzle : Aluminium
Valve: Brass and nickel plated steel
Springs: Stainless steel
Seals: EPDM and NBR
Cushioned Handle: Polymer

SPECIFICATIONS

Maximum Output Thrust: 3.2 lb
Noise Level: 88 dB
Air Consumption: 32 SCFM
Maximum Working Pressure: 120 PSI
Connection: 1/4 (F) NPT

Product No	Description
60.571	Safety tip with air screen nozzle

MAGNUM
EXTRA THRUST LONG SAFETY BLOW GUNS WITH VENTURI NOZZLE

OSHA STANDARDS MEETS OR EXCEEDS OSHA STANDARDS
120 PSI
SAFETY SOLUTION
ERGONOMIC SOLUTION

FEATURES AND BENEFITS

- Wide trigger for smoother actuation of airflow regulated simply by squeezing and releasing the handle
- Extra thrust Venturi nozzle boosts the volume of air
- Cast aluminium body with premium cushion grip
- The ergonomic design and the very light aluminium body help to reduce fatigue
- Large adjustable hook for convenient storage

APPLICATIONS

Cleaning equipment in paper and textile mills, metal cutting and wood-working equipment, blowing floor debris into piles, cleaning masonry forms, tanks, ovens, large moulds, cleaning machinery, cleaning storage areas, all applications where maximum blow gun thrust is required

MATERIALS

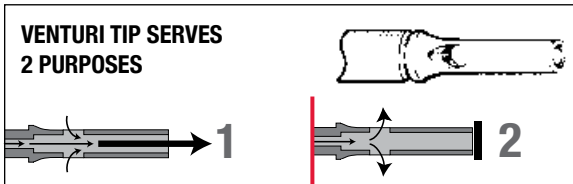
Body and Nozzle: Aluminium

SPECIFICATIONS

Maximum Output Thrust: 3.3 lb
Noise Level: 101 dB
Air Consumption: 66 SCFM
Maximum Working Pressure: 120 PSI
Working Temperature : -40 °C to 65 °C
Connection: 3/8 (F) NPT

Product No	Description
60.620	With 30 cm tube (12")
60.625	With 60 cm tube (24")
60.630	With 90 cm tube (36")
60.632	With 120 cm tube (48")
60.634	With 152 cm tube (60")
60.635	With 182 cm tube (72")

VENTURI TIP SERVES 2 PURPOSES



Main airflow speeds up as it passes through the nozzle, drawing in ambient air through the two side ports. The increased velocity and increased volume of air exiting the nozzle amplify the thrust.

Should the nozzle tip become blocked, all of the main airflow exits through the side ports. Static pressure at the nozzle tip is held to less than 30 PSI, thereby satisfying OSHA Safety Standards.

COMPACT SAFETY BLOW GUNS

GENERAL FEATURES AND BENEFITS

- Designed for extended heavy-duty service
- Flow stabilizer valve for precise air control
- Contoured design comfortably fits operator's hand
- Cushioned thumb lever
- Large hanging hook
- Rugged and lightweight one piece body
- Safety yellow color

MATERIALS

Body and Handle: Zinc
Nozzle and Valve: Brass

SPECIFICATIONS

Maximum Operating Pressure: 150 PSI
Temperature Range: 0 °C to 79 °C

Permatip BLOW GUN

150 PSI

SAFETY SOLUTION

FEATURES AND BENEFITS

- Tamper-proof vent holes increase total airflow
- Case-hardened steel restrictor inside the gun provides a concentrated air stream

APPLICATIONS

Industrial and automotive shops

General purpose safety gun for blowing away dust, metal chips, wood chips, etc

Product No	Noise level *	Air consumption
60.100	89 dB	2.5 SCFM

* At 75 PSI air line pressure

COMPACT AIR SCREEN SAFETY BLOW GUN

150 PSI

SAFETY SOLUTION

FEATURES AND BENEFITS

- Brass air-screen tip produces 30° conical air stream around direct center air stream. Deflects chips and particles away from operator's eyes and face

APPLICATIONS

Machine, tool and die and woodworking shops where drilled or tapped blind holes must be blown out, causing chip and particle blow-back

Product No	Noise level *	Air consumption
60.102	89 dB	3.5 SCFM

* At 75 PSI air line pressure

SAFETY BLOW GUN
VENTURI BOOSTER TIP

150 PSI

SAFETY SOLUTION

FEATURES AND BENEFITS

- **Brass venturi booster tip**
- **Provides extra thrust with reduced air consumption**

APPLICATIONS

Industrial and automotive shops

Product No	Noise level *	Air consumption
60.103	89 dB	2.5 SCFM

* At 75 PSI air line pressure

LONG TUBE
SAFETY BLOW GUN

150 PSI

SAFETY SOLUTION

APPLICATIONS

Allows chip removal in remote or hard to reach applications

Product No	Description
60.114	With 8 cm tube (3")
60.116	With 15 cm tube (6")
60.118	With 30 cm tube (12")

COMPACT
NON-RESTRICTED BLOW GUNS

WARNING

TOPRING non-restricted blow guns do not have a safety by-pass and must be used on air lines which have a pressure regulator (such as 62.202) set at a maximum of 30 PSI to conform to OSHA and other Safety Agencies' standards.

RUBBER TIP BLOW GUN

150 PSI

Rubber anti-scratch tapered tip for leak-proof connection

APPLICATIONS

Automotive and industrial applications

Ideal for blowing out passages such as automatic transmissions lines, carburator lines, molds and dies

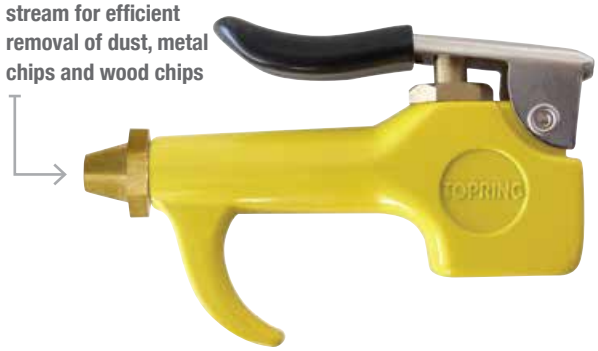
Also excellent for blowing out cavities or surfaces that could be damaged or scratched by metal tips

Product No	Description
60.110	With rubber tip

TAPERED TIP BLOW GUN

150 PSI

Concentrates air stream for efficient removal of dust, metal chips and wood chips



APPLICATIONS

Ideal for industrial applications

Product No	Description
60.112	With tapered tip

SIPHON TIP BLOW GUN

150 PSI

APPLICATIONS

Excellent economical tool for spraying oils, cleaners, solvents, and sealants

FEATURES AND BENEFITS

- **Compact spray gun**
- **Includes a 2.4 m suction tube and 15 cm (6") tip extension**

Product No	Description
60.130	With siphon tip

BASIC BLOW GUN
WITHOUT NOZZLE

150 PSI

FEATURES AND BENEFITS

- **Threaded end ideal for use with various blow gun nozzles**

APPLICATIONS

Automotive and industrial applications

Product No	Description
60.120	Blow gun without nozzle

Allows use of any nozzle on this page

NOZZLES FOR BASIC BLOW GUN BODY

Product No	Description
60.200	Tapered nozzle

Product No	Description
60.215	Spray nozzle

Product No	Description
60.245	Safety nozzle

Product No	Description
60.205	Air screen safety nozzle

Product No	Description
60.220	8 cm safety tube (3")
60.230	15 cm safety tube (6")
60.235	30 cm safety tube (12")

Product No	Description
60.250	Needle nozzle

Product No	Description
60.210	Rubber nozzle

Product No	Description
60.240	Safety booster nozzle

Product No	Description
60.255	Long needle nozzle

SaveAir® IN-LINE PRE-SET ENERGY SAVING MINIATURE REGULATOR

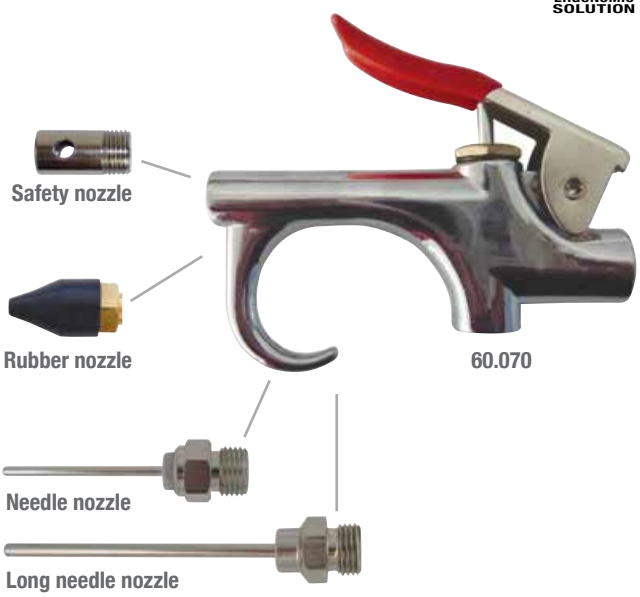
62.202
Factory-set pressure of 27 PSI

See page 375 for more details

MAXJET
BLOW GUN WITH 4 NOZZLES

150 PSI

ERGONOMIC SOLUTION



FEATURES AND BENEFITS

- Designed for light-duty applications
- Contoured design fits comfortably in operator's hand
- Cushioned thumb lever
- Large hanging hook
- Lightweight zinc body
- Brass valve with only one moving part for long-lasting maintenance-free operation
- Connection: 1/4 (F) NPT
- Safe when used with safety nozzle

APPLICATIONS

Drying, cleaning of parts, cleaning surfaces before painting

Product No	Description
60.070	With 4 interchangeable nozzles

MAXJET COMPACT BLOW GUN & ACCESSORIES

Product No	Description
01.400K	Blow gun and accessories

BLOW GUN
WITH SAFETY TIP

150 PSI

SAFETY SOLUTION

FEATURES AND BENEFITS

- Safety tip prevents blockage
- Connection: 1/4 (F) NPT

APPLICATIONS

Drying, cleaning of parts, cleaning surfaces before painting

Product No	Description
60.050	Blow gun with safety tip

PENCIL STYLE BLOW GUNS

150 PSI

60.005

60.010

FEATURES AND BENEFITS

- Provide a narrow, high velocity jet of air
- Compact and light, fit into a shirt pocket like a pen
- Twist to adjust flow

Product No	Description
60.005	1/4 INDUSTRIAL plug
60.010	ARO 210 plug

LAZER
HIGH PERFORMANCE COMPACT SAFETY BLOW GUNS WITH VENTURI NOZZLE

120 PSI

OSHA

ERGONOMIC SOLUTION

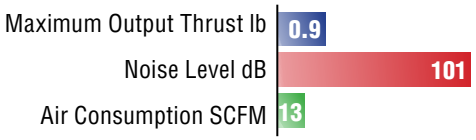
SAFETY SOLUTION

FEATURES AND BENEFITS

- Designed to move large volumes of debris using standard shop pressures
- Ergonomically designed to reduce hand fatigue and help minimize Carpal Tunnel Syndrome
- Unique patented design, safe and trouble-free
- Lightweight, rugged, cast aluminium body with rubber over-moulded trigger
- Venturi tip increases thrust and limits static pressure to less than 30 PSI when blocked

60.150

60.160 / 60.162 / 60.163 / 60.164 / 60.166



APPLICATIONS

Clearing away chips and shavings, cleaning of parts and machines, blowing, drying and dust removal from parts and work areas and general clean-up and maintenance

Long tubes for blowing floor debris into piles, cleaning masonry forms, tanks, ovens, large molds, as well as machinery and storage areas

MATERIALS

Body: Aluminium

Nozzle: Brass

SPECIFICATIONS

Maximum Output Thrust: 60.150 : 0.6 lb / long tubes 0.9 lb
Noise Level: 60.150 : 100 dB / long tubes 101 dB
Air Consumption: 60.150 : 8 SCFM / long tubes 13 SCFM
Maximum Operating Pressure: 120 PSI
Temperature Range: -40 °C to 65 °C
Connection: 1/4 (F) NPT

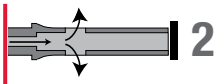
Product No	Description
60.150	Short nozzle
60.160	With 15 cm tube (6")
60.162	With 30 cm tube (12")
60.163	With 45 cm tube (18")
60.164	With 60 cm tube (24")
60.166	With 90 cm tube (36")

27_05_2016

VENTURI TIP SERVES 2 PURPOSES

1

Main airflow speeds up as it passes through the nozzle, drawing in ambient air through the four side ports.
The increased velocity and increased volume of air exiting the nozzle amplify the thrust.



2

Should the nozzle tip become blocked, all of the main airflow exits through the side ports.
Static pressure at the nozzle tip is held to less than 30 PSI, thereby satisfying OSHA Safety Standards.

TYPHOON
EXTREME PERFORMANCE AIR GUNS WITH VENTURI NOZZLE

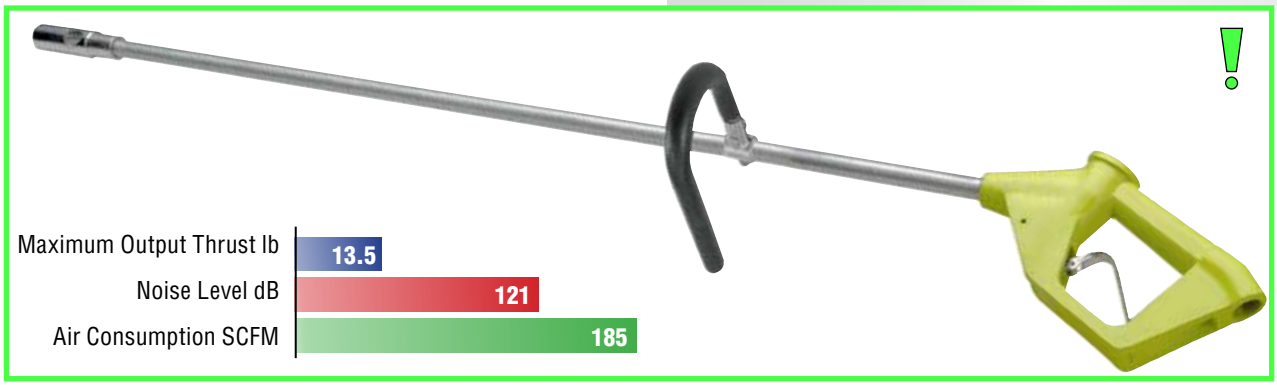
OSHA BENEFITS OR EXCEEDS OSHA STANDARDS — 120 PSI — SAFETY SOLUTION — ERGONOMIC SOLUTION

TYPHOON blow guns are designed to provide 100% of compressor power. In order to do this, airflow must be sufficient from the compressor to the gun.

A minimum 3/4 ID hose and 3/4 safety quick coupler are recommended to ensure maximum performance and safety.

FEATURES AND BENEFITS

- Designed specifically for heavy duty industrial and construction applications
- Quickly move large volumes of debris by delivering 100% of the power provided by the air compressor
- Extremely powerful
- Static pressure limited to less than 30 PSI when tip is blocked
- Rugged all metal construction
- Adjustable auxiliary handle for two-handed operation
- Ergonomic handle also protects trigger from wear and abuse
- Extended trigger allows full hand operation



APPLICATIONS

Paper, textile and steel mills, construction sites, all applications where maximum thrust is required

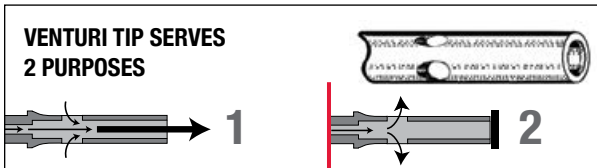
MATERIALS

Body and Nozzle: Aluminium

SPECIFICATIONS

Maximum Output Thrust: 13.5lb
Noise Level: 121 dB
Air Consumption: 185 SCFM
Maximum Operating Pressure: 120 PSI
Temperature Range: -40 °C to 65 °C
Connection: 3/4 (F) NPT

VENTURI TIP SERVES 2 PURPOSES



Main airflow speeds up as it passes through the nozzle, drawing in ambient air through the four side ports. The increased velocity and increased volume of air exiting the nozzle amplify the thrust.

Should the nozzle tip become blocked, all of the main airflow exits through the side ports. Static pressure at the nozzle tip is held to less than 30 PSI, thereby satisfying OSHA Safety Standards.

WARNING

It is recommended to use a safety coupler to prevent accidental disconnections

SAFETY COUPLER
No 22.498
3/4 INDUSTRIAL • 3/4 (F) NPT

COMPATIBLE PLUG
No 22.298
3/4 INDUSTRIAL • 3/4 (F) NPT

Product No	Description
60.702	With 60 cm tube (24")
60.703	With 90 cm tube (36")
60.700	With 122 cm tube (48")
60.705	With 183 cm tube (72")

INFORCER
ERGONOMIC EXTREME PERFORMANCE AIR GUNS WITH VENTURI TIP

OSHA STANDARDS MEETS OR EXCEEDS OSHA

150 PSI

SAFETY SOLUTION

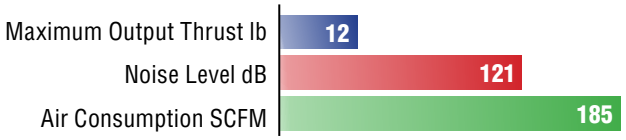
ERGONOMIC SOLUTION

INFORCER ergonomic blow guns are specifically designed for intensive uses in industrial applications and construction.

A minimum 3/4 ID hose and 3/4 safety quick coupler are recommended to ensure maximum performance and safety.

FEATURES AND BENEFITS

- **In-line handle improves ergonomics for long term use**
- **Available with chisel-point tip to break up and loosen stubborn debris**
- **Quickly moves large volumes of debris by delivering 100 % of the power provided by the air compressor**
- **In-line handle with hand stop, made from thermally insulating material**
- **Dead-man type trigger reduces fatigue and improves safety by immediately stopping flow when released**
- **Venturi tip nozzle increases thrust while limiting static pressure under 30 PSI when tip is blocked**
- **Aircraft grade aluminium tube for strength and light weight**
- **Adjustable handle for two-handed operation**



APPLICATIONS

Paper, textile and steel mills, construction sites, all applications where maximum thrust is required

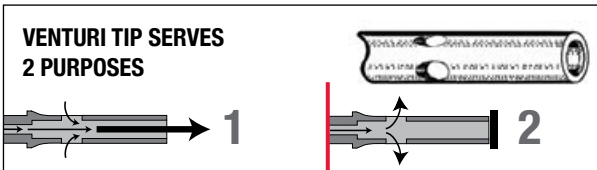
MATERIALS

Body and Nozzle: Aluminium

SPECIFICATIONS

Maximum Output Thrust: 12 lb
Noise Level: 121 dB
Maximum Air Consumption: 185 SCFM
Maximum Operating Pressure: 150 PSI
Temperature Range: -40 °C to 65 °C
Connection: 3/4 (F) NPT

VENTURI TIP SERVES 2 PURPOSES



Main airflow speeds up as it passes through the nozzle, drawing in ambient air through the four side ports. The increased velocity and increased volume of air exiting the nozzle amplify the thrust.

Should the nozzle tip become blocked, all of the main airflow exits through the side ports. Static pressure at the nozzle tip is held to less than 30 PSI, thereby satisfying OSHA Safety Standards.

WARNING

It is recommended to use a safety coupler to prevent accidental disconnections

SAFETY COUPLER
No 22.498
3/4 INDUSTRIAL • 3/4 (F) NPT

COMPATIBLE PLUG
No 22.298
3/4 INDUSTRIAL • 3/4 (F) NPT

Product No	Description
60.750	With 122 cm tube (48")
60.760	With 183 cm tube (72")

Series 61
COMPRESSED AIR GUNS

AIRPRO COMPRESSED AIR BRAKE BLEEDERS

AIRPRO brake bleeders are used for bleeding and refilling the brake system of all types of vehicles.

SPECIFICATIONS

Working Pressure: 90 to 175 PSI
Airflow: 6 SCFM at 115 PSI
Air inlet: 1/4 (F) NPT

FEATURES AND BENEFITS

- Brake bleeder operated by one person allowing labor savings
- Compact size fits easily in the wheel area
- Automatic shutoff prevents overfill
- Clear drain hose provides visible inspection of old fluid during bleeding
- Requires no special adaptors

See the video on **TOPRING.com**

TOPRING Brake Bleeders

Product No	Description
61.105	1.2 L Vacuum Bleeder
61.102	Replacement Nozzle
61.115	1.2 L Vacuum Bleeder with replenishment system

AIRPRO
UNDERSEAL GUN

FEATURES AND BENEFITS

- Specially designed for rustproofing auto bodies
- Works with most types of anti-rust fluids and undersealers of high or low viscosity available on the market
- Complete with adjustable nozzle which can be set depending on viscosity of liquid in use
- Nozzle can be replaced by an extension probe (61.135) for use when applying anti-rust liquids of low viscosity to the inside of doors and panels

Flexible extension probe

SPECIFICATIONS

Working Pressure Range: 87 to 145 PSI

Airflow Consumption:
13.5 SCFM with standard nozzle
6.5 SCFM with extension probe or tube

Air inlet: 1/4 (F) NPT

Product No	Description
61.120	Underseal gun with 1.2 L plastic container
61.121	Underseal gun with 1.2 L plastic container and 90 cm flexible probe

REPLACEMENT PARTS

Product No	Description
61.135	90 cm Flexible extension probe
61.109	Replacement rubber tip

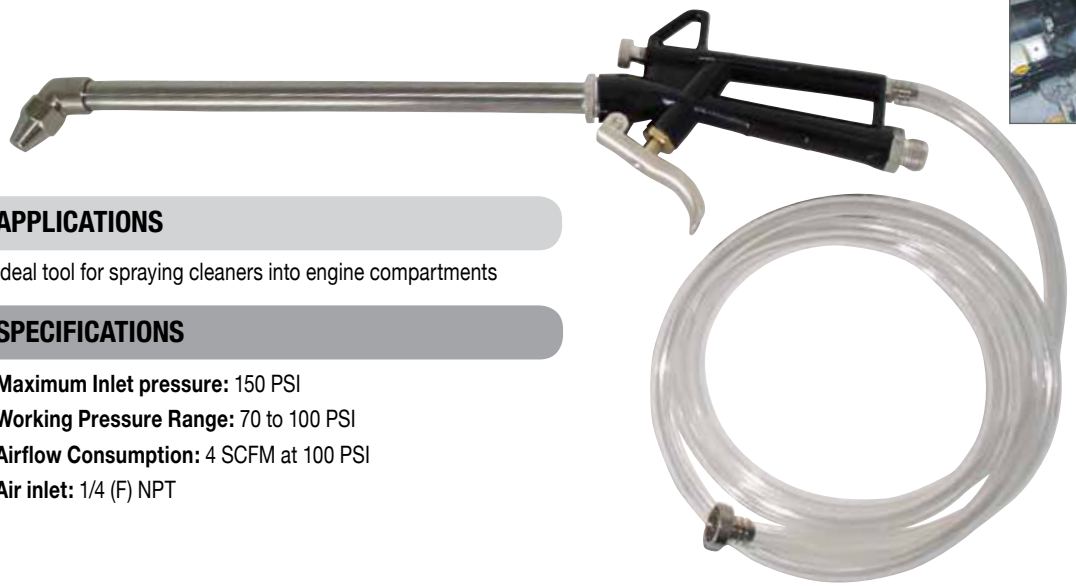
TECH TIP

The extension probe should never be used for high viscosity fluids

MAXPRO
ENGINE CLEANER GUN

FEATURES AND BENEFITS

- High vacuum siphon for delivering liquid
- Includes 152 cm siphon hose with weighted strainer
- Screw adjustment for liquid flow
- Pistol style spray gun grip



APPLICATIONS

Ideal tool for spraying cleaners into engine compartments

SPECIFICATIONS

Maximum Inlet pressure: 150 PSI
Working Pressure Range: 70 to 100 PSI
Airflow Consumption: 4 SCFM at 100 PSI
Air inlet: 1/4 (F) NPT

Product No	Description
61.165	Engine Cleaner Gun

TOPGUN
PNEUMATIC OIL GUN

FEATURES AND BENEFITS

- Heavy-duty air operated gun
- Rugged, all metal construction
- Pistol grip reduces hand fatigue
- Rugged, 1 L steel screw-on container
- Trigger and adjustable nozzle tip control spray volume and pattern
- Delivers up to 49 L per hour at line pressure of 100 PSI

APPLICATIONS

To lubricate trucks, automobiles, construction equipment and machinery

SPECIFICATIONS

Working Pressure Range: 80 to 150 PSI
Airflow Consumption: 8 SCFM at 115 PSI
Reservoir Capacity: 1 L
Air inlet: 1/4 (F) NPT

Product No	Description
61.485	Oil Gun

WATER JET PRESSURE WASHER GUNS

These Water Jet Guns turn any standard air compressor into a handy pressure washer by simply adding a water feed to the compressed air stream. They are ideal for all types of cleaning and washing jobs, and they eliminate the need for a separate pressure washer and air compressor, saving money.

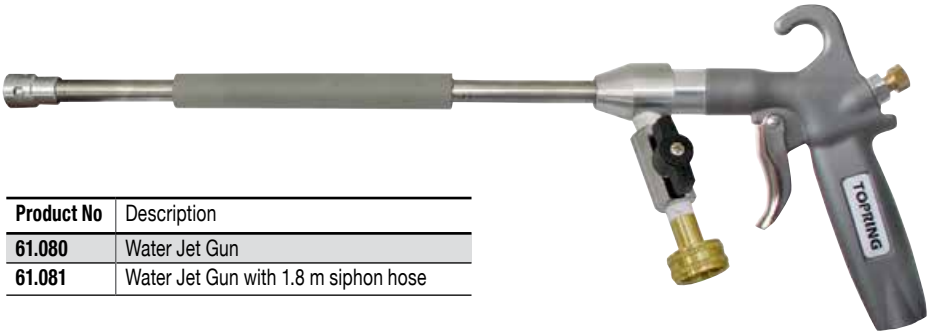
- Powerful air/water flow for various washing and blasting applications
- As easy to use as any pressure washer, just point and shoot
- Works with any standard shop air supply and garden hose water supply
- Also works without water as a blow gun for drying and blowing applications
- Inexpensive to own and operate

TOPJET WATER JET GUN

150 PSI

FEATURES AND BENEFITS

- **Applies a high-pressure jet of water, detergent or degreaser to the toughest cleaning jobs**
- **Equipped with an adjustable trigger to control air volume and an adjustable spigot to direct the a mixture of liquid and air, liquid only or air only**
- **Up to 145 L per hour at 100 PSI pressure**
- **Rugged Aluminium construction**
- **Air inlet: 1/4 (F) NPT**
- **Garden hose fittings: 3/4 (F) GHT**



61.081

Product No	Description
61.080	Water Jet Gun
61.081	Water Jet Gun with 1.8 m siphon hose

TOPGUN SIPHON SPRAY GUN

150 PSI

FEATURES AND BENEFITS

- **Efficient for oils, solvents, insecticides and coatings**
- **High vacuum siphon which can deliver up to 60 L per hour at line pressure of 100 PSI**
- **Includes a 1.8 m siphon hose and sinker and a 30 cm extension for hard-to-reach locations**
- **Trigger and adjustable nozzle tip controls the volume and spray pattern**
- **Pistol grip reduces hand fatigue**
- **Designed for heavy-duty use**
- **Air inlet: 1/4 (F) NPT**

APPLICATIONS

May be used with fluids that are compatible with aluminium, zinc, brass, PVC and buna-N/ nitrile

Product No	Description
61.480	Spray Gun with 1.8 m siphon hose

MAXPRO
GRAVITY FED SAND BLASTER
WITH SPOT BLAST AND SAND RECOVERY SYSTEM

FEATURES AND BENEFITS

- High pressure blasting force for powerful cleaning
- Gravity fed
- Material control valve meters sand flow precisely
- Ergonomically designed for comfortable operation
- Well balanced for minimum operator fatigue
- No tank or material supply hose required
- Convenient sand loading
- Spot Blast system included
- Ceramic nozzle
- Consistent sand flow
- Air inlet: 1/4 (F) NPT

SPECIFICATIONS

Working Pressure: 70 to 80 PSI
Maximum Pressure: 200 PSI
Air Consumption: 10-12 SCFM
Minimum Air Compressor: 3 HP
Working Temperature: -30 °C to 60 °C
Container Capacity: 0.8 L
Gun Material: Aluminium
Tank Material: High impact plastic
Max. Particle Size (Sand): 14 Grit

MAXPRO
SPOT BLAST AND SAND RECOVERY SYSTEM INCLUDED

Most sand blasting applications require that a very specific area be cleaned, be it on a flat surface or a corner.

When this occurs, it can be very useful to limit the sand impact area by adding a blast cone to the ceramic nozzle. This also allows the sand to be recovered for future use, as it can be gathered in a bag after it rebounds from the surface, inside the blast cone.

Product No	Description
61.040	Sand Blaster with Spot Blast System
61.045	Replacement Ceramic Nozzle

ACCESSORIES INCLUDED WITH THE PISTOL AND SAND RECOVERY SYSTEM:

(A) Primary Blast Cone
(B) Inside Angle Cone
(C) Small Spot Cone
(D) Outside Angle Cone
(E) Recovery Bag
(F) Recovery Unit

Series 62
AIR LINE ACCESSORIES

AIRPRO
IN-LINE FILTERS

Compressed air may contain impurities which will cause improper operation of equipment, and in some cases equipment failure.

In-line filters will reduce downtime and prevent costly repairs of tools in addition to extending their life

FEATURES AND BENEFITS

- **This filter has a large, porous Bronze element to remove water and oil particles from contaminated air supplies and to ensure a clean supply of air**
- **Lightweight and compact**
- **Connects directly to the tool**
- **Standard 40 micron element for minimum pressure drop**

APPLICATIONS

Designed specifically for the protection of small air tools
Air line filters are used directly before the air tool

MATERIALS

Body: Anodized aluminium
Filter element: 40 micron bronze

SPECIFICATIONS

Maximum Working Pressure: 300 PSI
Temperature Range: 2 °C to 93 °C

Product No	Thread NPT	Length mm
62.119	1/8	71
62.120	1/4	59
62.123	3/8	57
62.124	1/2	97

MAXPRO
IN-LINE FILTER

FEATURES AND BENEFITS

- **Lightweight and compact**
- **Large element to remove water and oil particles from contaminated air supplies**
- **Connects directly to the tool**
- **Clear reservoir shows accumulated water taken out of air line**
- **Filter element can be removed and cleaned**
- **Button relief valve for draining trapped liquid from reservoir**

MATERIALS

Body: Painted aluminium
Male fitting: Steel plated
Filter element: 40 micron Bronze
Reservoir: Polycarbonate

SPECIFICATIONS

Maximum Working Pressure: 125 PSI

Product No	Thread NPT	Length mm
62.106	1/4	89

IN-LINE DESICCANT DRYER / FILTER

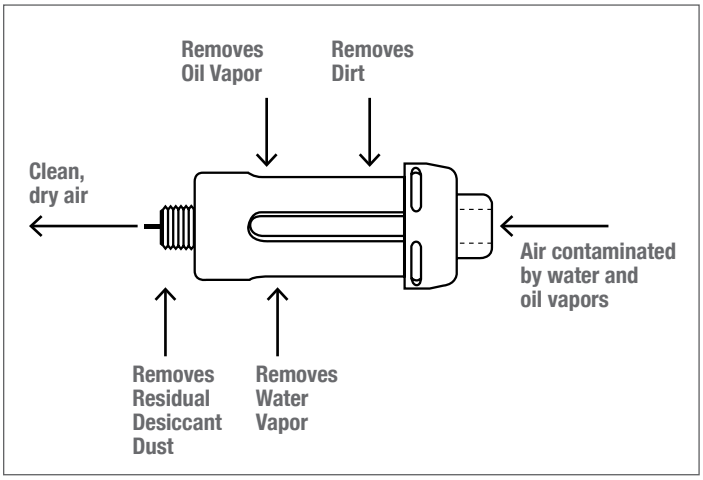
This disposable in-line point-of-use desiccant dryer removes all traces of water vapor, oil vapor and dirt.

A 40 micron porous Bronze element removes fine dirt particles, an oil adsorbing media removes oil vapor, and desiccant beads absorb water vapor.

FEATURES AND BENEFITS

- **Compact size**
- **Lightweight**
- **See-through housing shows desiccant color change (from the original blue to a pink color when it needs to be replaced)**
- **Housing made of a highly chemical-resistant material**
- **Installed right at the point of use**
- **Disposable**

IDEAL FOR PAINT GUNS



APPLICATIONS

Often used directly upstream of paint gun as final protection

MATERIALS

Housing: Polycarbonate

Guard: Nylon

SPECIFICATIONS

Pressure Dew Point: -40 °C

Maximum Working Pressure: 125 PSI

Maximum Flow Capacity: 15 SCFM

Working Temperature Range: 0 °C to 50 °C

Filter element: 40 micron bronze

Product No	Thread NPT	Length mm
62.150	1/4	95

SaveAir®
IN-LINE PRE-SET ENERGY SAVING MINIATURE REGULATOR

SAFETY SOLUTION

The in-line pre-set energy saving miniature regulator **SaveAir®** can be installed in every compressed air system. It supplies a constant, exact outlet pressure regardless of the input pressure.

The pressure is factory-set and cannot be changed. The **SaveAir®** prevents “dynamic pressure waste”. This arises when the pressure and throughput at the withdrawal point are unnecessarily higher than those specified by the manufacturer to achieve the desired function. " Dynamic pressure waste " is extremely costly, a waste of energy.

FEATURES AND BENEFITS

- **Increase user safety by avoiding pressure surges**
- **Limit over-consumption of compressed air, thereby reducing energy costs**
- **Highly reliable**
- **Safe**
- **Tamper-proof**
- **Maintenance free**
- **Lightweight and compact**
- **Heavy duty construction**

APPLICATIONS

Ideal for most air tools

Blow guns in order to respect safety standards (maximum pressure of 30 PSI)

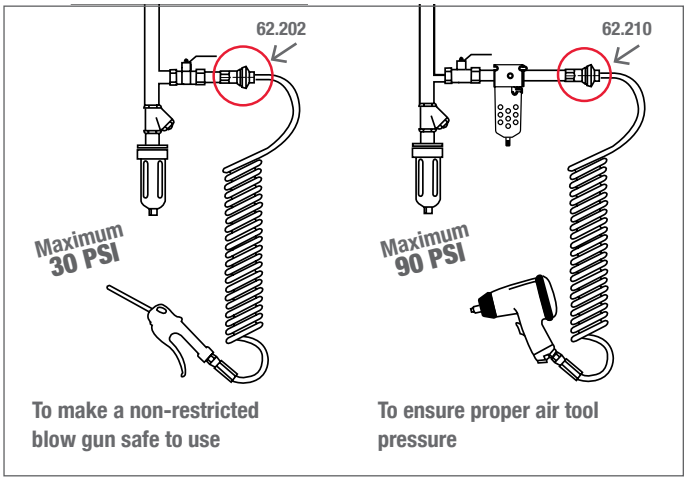
Paint shops

Compressed air network

SPECIFICATIONS

Maximum Inlet Pressure: 250 PSI

Working Temperature Range: 0 °C to 80 °C



To make a non-restricted blow gun safe to use

To ensure proper air tool pressure

Product No	Pre-Set Pressure PSI *	Connection (F) NPT	Flow SCFM
62.200	15	1/4	25
62.202	27	1/4	25
62.204	45	1/4	25
62.206	60	1/4	25
62.208	75	1/4	25
62.210	90	1/4	25
62.212	100	1/4	25
62.214	120	1/4	25

* +/- 10%

FACTS TO KNOW

The ideal pressure for pneumatic tools is usually 90 PSI. Every 15 PSI of over-pressure wastes from 6 to 10% more energy. Pre-set regulators are an economical way to maintain ideal pressure

TOOLREG® MINIATURE PRE-SET REGULATORS WITH AUTOMATIC SECONDARY PRESSURE RELIEF

SAFETY SOLUTION

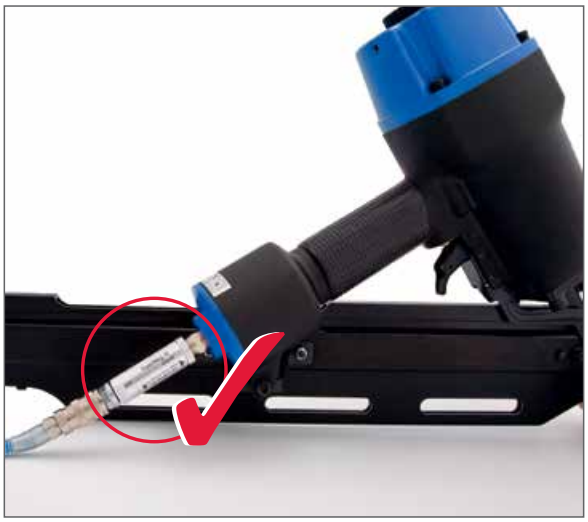
FEATURES AND BENEFITS

- Vents residual pressure to avoid accidental tool activation after disconnection
- Saves energy
- Tamper proof
- Lightweight and compact

The **TOOLREG®** can be mounted directly on the pneumatic tool in order to ensure correct pressure, so that possible pressure drops in hoses, tubes etc. do not influence the pressure at the tool.

Furthermore, the residual pressure in the tool is relieved when it is removed from the compressed air supply line, preventing unintentional activation of the tool with disastrous consequences.

TOOLREG® regulators are an economical method to achieve the ideal pressure at the tool.



APPLICATIONS

Pneumatic tools, particularly nailers

MATERIALS

Body: Aluminium
Spring: Stainless steel
Valve: Brass
Seals: Nitrile

SPECIFICATIONS

Maximum Inlet Pressure: 355 PSI
Working Temperature Range: 0 °C to 80 °C
Maximum Air Flow: 25 SCFM to 90 PSI

Product No	Pre-Set Pressure PSI	Inlet (F) NPT	Outlet (F) NPT
62.226	58	1/4	1/4
62.230	87	1/4	1/4
62.234	116	1/4	1/4

COMPACT PRESSURE REGULATOR PISTON TYPE

FEATURES AND BENEFITS

- Solid control piston with lip seal for extended Life
- Non-rising adjusting knob
- Easily serviced
- Lightweight and compact

MATERIALS

Adjusting Nut: Brass
Adjusting Stem & Spring: Steel
Body: Zinc
Bonnet, Seat, Piston & Valve Poppet: Plastic
Seals: Buna-N/Nitrile
Gauge: Plastic face

SPECIFICATIONS

Maximum Inlet Pressure: 300 PSI
Temperature Range: 0 °C to 52 °C
Reduced Pressure Range: 2 to 125 PSI
Gauge Port Thread: 1/8 NPT
Panel Mount Opening: 31 mm

Product No	Port Size (F) NPT	Flow SCFM
62.175	1/4	15

COMPACT PRESSURE REGULATORS DIAPHRAGM TYPE

FEATURES AND BENEFITS

- Unbalanced poppet design
- High sensitivity
- Diaphragm-operated for fast response
- Non-rising adjusting knob

MATERIALS

Adjusting Screw and spring: Steel
Body: Aluminium
Bottom Spring: Stainless steel
Spring Cage: Acetal plastic
Inner valve: Brass
Gauge: Plastic face

SPECIFICATIONS

Maximum Inlet Pressure: 300 PSI
Temperature Range: 4 °C to 52 °C
Reduced Pressure Range: 2 to 125 PSI
Gauge Port Thread: 1/8 NPT
Panel Mount Opening: 31.8 mm

Product No	Port Size (F) NPT	Flow SCFM
62.180	1/8	10
62.185	1/4	10

HVLP AIR REGULATORS

Specially designed for tools and any spray gun (HVLP) for accurate pressure regulation

APPLICATIONS

Paint guns and other air tools

MATERIALS CERTIFIED N.S.F. & F.D.A.

Adjusting screw: Steel
Body: Non-corrosif (acetal)
Diaphragm: Buna-N/Nitrile
Spring: Stainless steel
Gauge: Glass face

SPECIFICATIONS

Maximum Inlet Pressure: 150 PSI
Temperature Range: 4 °C to 52 °C
Panel Mount Opening: 31.8 mm

FEATURES AND BENEFITS

- **Lightweight air pressure regulator and gauge combination**
- **Precise air pressure control**
- **Push-to-lock knob avoids accidental pressure adjustements**
- **Unbalanced poppet design**
- **Lightweight and compact**

IDEAL FOR PAINT GUNS

Product No	Port Size (F) NPT	Pressure Range	Flow SCFM
62.125	1/4	2 to 125 PSI	14
62.126	1/4	2 to 60 PSI	14
55.121	Replacement gauge for 62.125		
55.106	Replacement gauge for 62.126		

COMPACT AIR PRESSURE REGULATOR

Compact air line regulators control pneumatic power at the tool to save air and tool wear without getting in the operator's way, to ensure exact tool performance

MATERIALS

Body: Anodized aluminium, plated steel and brass
Gauge: Plastic face

SPECIFICATIONS

Inlet Pressure Range: 60 to 160 PSI

FEATURES AND BENEFITS

- **Compact and lightweight**
- **Fewer parts - only 1/2 the parts of conventional air pressure regulators**
- **Vibration-proof adjustment stable after setting**
- **Easily adjustable with a screwdriver or a coin**
- **No piston / No diaphragm**

Product No	Port Size (F) NPT	Pressure Range	Flow SCFM
62.130	1/4	20 to 110 PSI	15

MAXPRO
AIR FLOW REGULATORS

Air flow regulators restrict air flow to the tool.
This results in a pressure drop while the tool is running.

Air flow regulators must therefore be used in conjunction with a pressure regulator installed upstream. Air flow regulators should only be used for fine tuning air flow at the tool.

IN-LINE AIR FLOW REGULATOR

FEATURES AND BENEFITS

- **Eliminates the need to estimate and compensate for pressure drop caused by length of hose**
- **Allows the painter to control air flow at the paint gun**
- **Brass body**
- **Plastic face**

APPLICATIONS

Specially designed to control air flow to air tools and HVLP spray guns

Product No	Thread NPT	Pressure Range
62.105	1/4	0-160 PSI

IN-LINE AIR FLOW REGULATOR

FEATURES AND BENEFITS

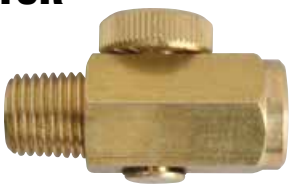
- **Made from solvent-resistant Nylon**
- **Plastic face**
- **Polymer body**

APPLICATIONS

Specially designed to control air flow to air tools and HVLP spray guns

Product No	Thread NPT	Pressure Range
62.104	1/4	0-160 PSI

IN-LINE AIR FLOW REGULATOR



FEATURES AND BENEFITS

- **Permits air flow control in either direction**
- **Connects directly to air tool and hose**
- **Knurled knob sets desired flow rate**

Product No	Thread NPT
62.101	1/4

See the video « Ergonomic connection » at TOPRING.com

AIRPRO
IN-LINE LUBRICATORS

Pneumatic tools and appliances cannot maintain their full efficiency if the mechanism is impaired by corrosion, condensation or lack of lubrication. In-line lubricators allow air tools to operate at full efficiency by preventing sticking, thereby extending service life. Effective tool lubrication saves money by reducing equipment down time.

FEATURES AND BENEFITS

- **Keep air-operated hand tools working better and longer**
- **Provide instant oil flow so critical to time cycled air tools such as staplers and nailers**
- **Attach directly to the air tool inlet**
- **An effective alternative to larger, more costly units that may not deliver lubricant to the tool due to excessive hose length**
- **Automatic lubrication of air upon passage of rated air flow**
- **Will not leak lubricant into the air line upon pressure drop or when disconnected from the air line**
- **Operate in any position**
- **Slotted oil adjustment screw under filler cap**
- **Compact and lightweight**
- **Corrosion resistant**
- **360° swivel outlet port**

APPLICATIONS

Ideal for most air tools

Ideal for intermittent use type tools such as staplers

MATERIALS

Body: Hard anodized aluminium
Insert: Nylon
Nut: Cadmium plated steel
Seals: Buna-N/Nitrile

SPECIFICATIONS

Maximum Pressure: 150 PSI
Temperature Range: 0 °C to 52 °C
Port Threads:
Inlet Port (F) NPT: Non swivel
Outlet Port (M) NPT: Swivel

Product No	Thread NPT	Maximum Flow Rate SCFM	Oil Capacity cc
62.110	1/4	15	5
62.112	1/4	20	9
62.115	3/8	30	9
62.117	3/8	30	22

Please see page 460 for typical air tool consumptions

MAXPRO
IN-LINE LUBRICATOR

FEATURES AND BENEFITS

- **Automatically lubricates a tool by feeding a measured amount of oil mist each time the tool is cycled**
- **When stationary lubricators are not available, these mini in-line oilers will provide an excellent oil source while adding only 2" length to any tool**
- **Clear Plastic reservoir makes oil supply visible**

SPECIFICATIONS

Maximum Working Pressure: 120 PSI

Product No	Inlet (F) NPT	Outlet (F) NPT
62.108	1/4	1/4

See the video « Ergonomic connection » at TOPRING.com

AIRPRO
FREE ANGLE FITTINGS 45°

ERGONOMIC SOLUTION

FEATURES AND BENEFITS

- 360° circular rotation and 45° angled rotation
- Two rotation points prevent kinking of the supply line
- Help alleviate Carpal Tunnel Syndrome and back stress resulting in fewer lost-time injuries
- Steel dust cover protects rotating joint
- Lightweight, streamlined design
- Full flow design (7.0 mm)
- Male threads have a self-sealing coating

APPLICATIONS

Air tools in assembly line

MATERIALS

Nickel plated steel

Thread sealant on male fittings

SPECIFICATIONS

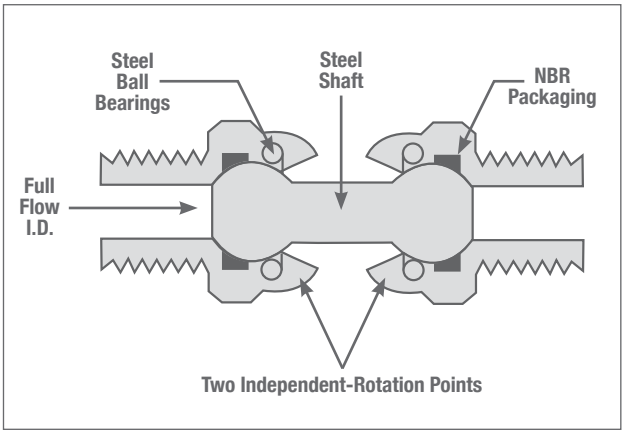
Maximum Working Pressure: 145 PSI

Temperature Range: -7 °C to 60 °C

Product No	Description
62.312C	1/4 (M) NPT x 1/4 (F) NPT
62.315C	3/8 (M) NPT x 3/8 (F) NPT

Product No	Description
62.321C	1/4 (M) NPT x **1/4 INDUSTRIAL**
62.324C	3/8 (M) NPT x **3/8 INDUSTRIAL**

Product No	Description
62.326C	1/4 (M) NPT x **ULTRAFLO**



AIRPRO
FREE ANGLE FITTINGS 75°

ERGONOMIC SOLUTION

APPLICATIONS

Industrials, pneumatic tools

MATERIALS

Nickel plated steel
Polyurethane dust cover
Thread sealant on male fittings

SPECIFICATIONS

Maximum Working Pressure: 145 PSI
Temperature Range: -20 °C to 60 °C

FEATURES AND BENEFITS

- **Designed to provide 360° circular rotation and up to 75° of angle for air tool and air hose supply lines**
- **Saves time and energy by preventing kinking of the air supply line**
- **Improve tool maneuverability and reduce the fatique of the operator**
- **Help alleviate Carpal Tunnel Syndrome and back stress resulting in fewer lost-time injuries**
- **Full flow design**
- **Lightweight, streamlined design**
- **Polyurethane dust cover protecting delicate surfaces**
- **Male threads have a self-sealing coating**

Product No	Description
62.382	1/4 (F) NPT x 1/4 (M) NPT
62.383	3/8 (F) NPT x 3/8 (M) NPT

No de produit	Description
62.385	**1/4 INDUSTRIAL** x 1/4 (M) NPT
62.387	**3/8 INDUSTRIAL** x 1/4 (M) NPT

MAXPRO FREE ANGLE FITTINGS

ERGONOMIC SOLUTION

APPLICATIONS

Ideal for hand-held air tools, nailers and staplers, blow guns, ratchets and sanders

SPECIFICATIONS

Maximum Working Pressure: 140 PSI

Temperature Range: -20 °C to 60 °C

FEATURES AND BENEFITS

- Eliminate hose kinking
- Reduce hand, wrist, elbow and shoulder stress from heavy or non-flexible air hose
- Help alleviate Carpal Tunnel Syndrome and back stress resulting in fewer lost-time injuries

WARNING

Free angle fittings should not be used on impact tools or in areas of high mechanical abuse

MAXPRO 45°

MATERIALS

Nickel plated steel

Polyurethane dust cover

Product No	Description
62.412	1/4 (F) NPT x 1/4 (M) NPT

Product No	Description
62.415	3/8 (F) NPT x 3/8 (M) NPT

Product No	Description
62.400	1/4 (M) NPT x 1/4 (M) NPT

Product No	Description
62.421	1/4 D.I. x 1/4 (M) NPT

Product No	Description
62.430	1/4 INDUSTRIEL x 1/4 (M) NPT

FEATURES AND BENEFITS

- Designed to provide 360° of rotation and up to 45° of angle for air tool and air hose supply lines
- Dual ball-pivot design is simple and tough for long life
- Polyurethane dust cover protects rotating joint and prolongs the service life of the fitting

MAXPRO 30°

MATERIALS

Nickel plated steel

Product No	Description
62.350	1/4 (M) NPT x 1/4 (M) NPT

Product No	Description
62.355	1/4 (F) NPT x 1/4 (M) NPT

Product No	Description
62.360	1/4 INDUSTRIEL x 1/4 (M) NPT

Product No	Description
62.365	ARO 210 x 1/4 (M) NPT

Product No	Description
62.370	ULTRAFLO x 1/4 (M) NPT

FEATURES AND BENEFITS

- Free angle fittings are designed to provide 360° of rotation and up to 30° of angle for air tool supply lines

See the video « Ergonomic connection » at **TOPRING**.com

AIRPRO
AIR TOOL SWIVEL CONNECTORS

ERGONOMIC SOLUTION

FEATURES AND BENEFITS

- **Universal joint that connects portable air tools to an air line**
- **Improves tool manoeuvrability, minimizes operator fatigue and extends hose life**
- **Swivels 360° at two pivot points, allowing the air hose to drop directly to the floor, while providing superb tool handling**

COMPOSITE MODELS

62.704

62.720
with flow control

ALUMINIUM MODELS

62.703

62.706

62.708

APPLICATIONS

For use with most air tools such as:

Grinders - Staple guns - Buffers -Spray guns - Glue guns
Sanders - Drills

MATERIALS

62.704 & 62.720: Lightweight, non-marking composite

62.703 - 62.706 - 62.708: Aluminium

SPECIFICATIONS

Maximum Working Pressure: 150 PSI

WARNING

Air Tool Swivel Connectors should not be used on impact tools or in areas of high mechanical abuse

See the video « Ergonomic connection » at TOPRING.com

Product No	Thread NPT	Materials	Maximum Air Flow SCFM
62.704	1/4	Composite	33
62.720	1/4	Composite	30
62.703	1/4	Aluminium	30
62.706	3/8	Aluminium	45
62.708	1/2	Aluminium	65

UNIMAX
AIR TOOL SWIVEL CONNECTORS

ERGONOMIC SOLUTION

FEATURES AND BENEFITS

- THE solution to coupler confusion
- Accept type plugs: ULTRAFLO, 1/4 INDUSTRIAL, ARO 210, 1/4 TRUFLATE and LINCOLN
- Universal connector that connects portable air tools to an air line
- Improve tool manoeuvrability, minimize operator fatigue and extends hose life
- Swivel 360° at two pivot points, allowing the air hose to drop directly to the floor, while providing superb tool handling

62.705
Swivel connector

62.712
Swivel connector with flow regulator

AIR TOOL SWIVEL CONNECTORS WITH QUICK COUPLERS

Accepts 5 type of plugs

62.710
Swivel connector with flow regulator and **UNIMAX** UNIVERSAL coupler

62.714
Swivel connector with **UNIMAX** UNIVERSAL coupler

APPLICATIONS

For use with most air tools such as:

- Grinders
- Staple guns
- Buffers
- Spray guns
- Glue guns
- Sanders
- Drills

MATERIALS

Brass and anodized aluminium

SPECIFICATIONS

Maximum Working Pressure: 200 PSI

Temperature Range: -35 °C to 120 °C

Product No	Thread NPT	Description
62.705	1/4	Swivel Connector
62.712	1/4	Swivel Connector with Flow Regulator
62.710	1/4	Swivel Connector with Flow Regulator and Universal **UNIMAX** Coupler
62.714	1/4	Swivel Connector with Universal **UNIMAX** Coupler

WARNING

Air tool swivel connectors should not be used on impact tools or in areas of high mechanical abuse

AIR MANIFOLD
(2 IN 1)

62.850

62.860

FEATURES AND BENEFITS

- Allows the supply up to 2 air tools from a single air supply
- Compact design

Kits available with plug and couplers 20.702C (1/4 INDUSTRIAL)

MATERIALS

Body: Nickel brass

Product No	Inlet NPT	Outlets NPT
62.850	1/4 (F)	1/4 (F)
62.860	1/4 (M)	1/4 (F)

AIR MANIFOLD
(3 IN 1)

62.800
62.805

62.810

FEATURES AND BENEFITS

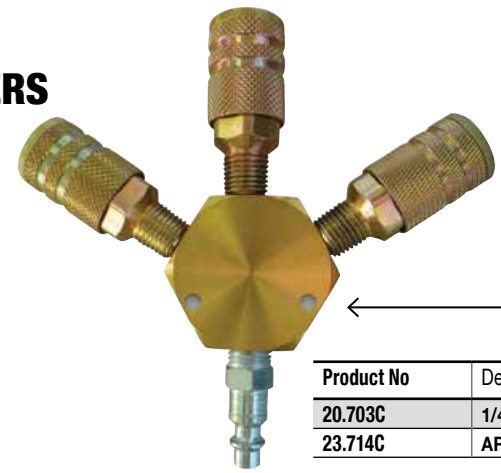
- Eliminates the need to connect and disconnect pneumatic tools whenever one wants to change tooling
- Allows the supply of up to 3 air tools from a single air supply
- Compact and lightweight

MATERIALS

Body: Aluminium (62.800 - 62.805)
Brass (62.810)

Product No	Inlet (F) NPT	Outlets (F) NPT
62.800	1/4	1/4
62.805	3/8	1/4
62.810	1/4	1/4

MAXQUIK
AIR MANIFOLDS WITH QUICK COUPLERS AND PLUG
(3 IN 1)



Holes for securing the manifold to a stable surface using nails

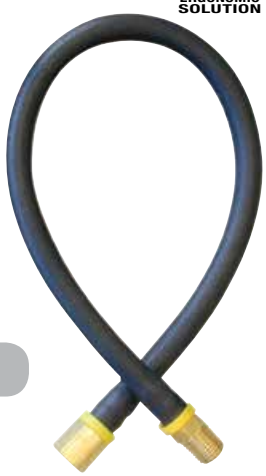
Product No	Description
20.703C	1/4 INDUSTRIAL Kit
23.714C	ARO 210 Kit

HOSE WHIPS
TOPFLEX®

ERGONOMIC SOLUTION

Using a hose whip between the air tool and coupler will extend the life of the coupler by acting as a shock absorber and protecting it against tool vibration.

A hose whip allows the operator an easier and wider range of motion, reducing worker fatigue while increasing productivity.



FEATURES AND BENEFITS

- **Increase the lifespan of the connector and the main pipe**
- **Improve tool manoeuvrability**
- **Excellent flexibility**
- **Lightweight**
- **Excellent oil resistance**

MATERIALS

Tube: Black Nitrile
Reinforcement: One fiber braid
Fittings: Brass

SPECIFICATIONS

Maximum Working Pressure: 300 PSI
Working Temperature Range: -40 °C to 100 °C

TECH TIP

All sharp bends on hose lines should be avoided. These tend to shorten hose life, increase pressure drop, retard swivel action, increase pump load and raise the temperature of the fluid. A hose whip should be installed to avoid strain on hose and coupler assembly.

TOPFLEX Product. No	Hose I.D. in	Overall Length in	Overall Length cm	Inlet (M) NPT	Outlet (F) NPT
62.522	1/4	18	46	1/4	1/4
62.524	1/4	36	91	1/4	1/4
62.542	3/8	18	46	1/4	1/4
62.544	3/8	60	152	1/4	1/4
62.546	1/2	18	46	3/8	3/8
62.548	1/2	60	152	3/8	3/8
62.552	1/2	18	46	1/2	1/2
62.554	1/2	60	152	1/2	1/2

HOSE WHIPS
EASYflex® *PREMIUM*

ERGONOMIC SOLUTION

FEATURES AND BENEFITS

- **Increase the lifespan of the connector and the main pipe**
- **Improve tool manoeuvrability**
- **Excellent flexibility**
- **Lightweight**
- **Excellent oil resistance**

MATERIALS

Tube: Yellow Technopolymer
Reinforcement: Spiral polyester cords
Fittings: Brass

SPECIFICATIONS

Maximum Working Pressure: 300 PSI
Working Temperature Range: -54 °C to 65 °C

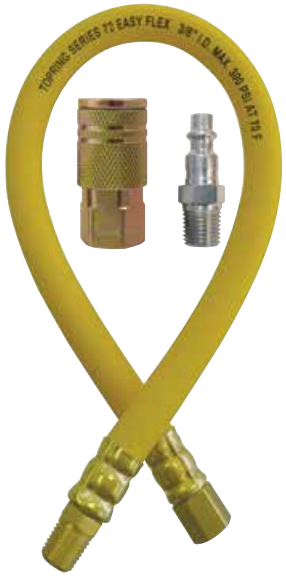
Product. No	Hose I.D. in	Overall Length in	Overall Length cm	Inlet (M) NPT	Outlet (F) NPT
62.523	1/4	18	46	1/4	1/4
62.525	1/4	36	91	1/4	1/4
62.541	3/8	12	30	1/4	1/4
62.543	3/8	18	46	1/4	1/4
62.545	3/8	60	152	1/4	1/4
62.547	1/2	18	46	3/8	3/8
62.549	1/2	60	152	3/8	3/8
62.553	1/2	18	46	1/2	1/2
62.555	1/2	60	152	1/2	1/2

HOSE WHIP KITS WITH COUPLER AND PLUG

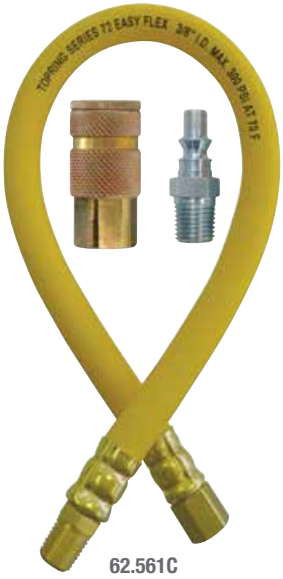
ERGONOMIC SOLUTION

FEATURES AND BENEFITS

- Provides an ergonomic connection and extends coupler life
- Hose made of technopolymer EASYflex® *PREMIUM*



62.560C



62.561C

62.562C

62.563C

Product . No	Hose I.D. in	Overall Length in	Overall Length cm	Plug (M) NPT	Coupler (F) NPT
62.560C	3/8	18	46	**1/4 INDUSTRIAL** (20.242)	**1/4 INDUSTRIAL** (20.842)
62.561C	3/8	18	46	**ARO 210** (23.242)	**ARO 210** (23.842)
62.562C	3/8	18	46	**ULTRAFLO** (31.642)	**ULTRAFLO** (31.742)
62.563C	3/8	18	46	**1/4 INDUSTRIAL** (20.242)	**MAXPRO 30°** (62.355)

FOR AN OPTIMAL CONNECTION AT THE TOOL!

COMPRESSOR

FEMALE PLUG

+

P.T.F.E. TAPE

AIR HOSE

LUBRICATOR *

or

+

OIL

OPTIONAL

and / or

AIRFLOW REGULATOR WITH GAUGE

FEMALE COUPLER

SWIVEL CONNECTOR

or

provides best ergonomics / must be assembled with a coupler

MALE PLUG

or

SWIVEL ANGLE PLUG

provides best ergonomics

TOOL

Go online to watch the video

" Ergonomic air tool connection "

or

" Air hose repair "

Visit the " VIDEOS " section at **TOPRING.com**

TECH TIP

It is important to check the specifics of the air tool to ensure adapted connection. Plug and coupler must be compatible (same type).

* Not suitable for paint guns

Series 63
AIR CHUCKS, TIRE GAUGES AND INFLATOR GAUGES

THE IMPORTANCE OF PROPER TIRE INFLATION

Tire pressure has a direct influence on tire life. When inflated to manufacturers' recommendations, tires will provide optimal performance; on the other hand, incorrect inflation will cause abnormal and/or premature wear. While over-inflation causes certain damage, this wear is even more pronounced for under-inflation, not to speak of increased gas consumption.

The recommended pressure for the front wheels, the rear wheels and the spare tire of the vehicle should be respected. It is indicated on the label located on the edge of the driver's door, the door frame, the glove compartment or fuel door.

INFLATION AND WEAR...

UNDERINFLATION

We should avoid driving a vehicle when the tires are significantly under-inflated for his own safety and to prevent damage to the tires.

The act of driving a vehicle with just one tire under-inflated by (56 kPa) (8PSI) will increase fuel consumption by 4%.

OVERINFLATION

With overinflation, only the center of the tread is in contact with the pavement. A smaller surface area in contact with the road means less adherence, which translates to a harsh ride, handling problems (such as problems related to direction or braking) and greater wear on tires and suspension components.

TECH TIP

It is recommended that tire pressure be checked once per month and/or before any long trip, both for safety reasons and to reduce tire wear and gas consumption.

TIRE CONTACT WITH ROAD SURFACE

The use of dial inflator gauges facilitates the task of maintaining the correct pressure. They are much more accurate than air pumps at gas stations.

TOPRING offers 4 different tools for checking tire pressure: pencil-type gauges, dial gauges, digital gauges and inflator gauges.

They are all compatible with nitrogen used to inflate tires.

CLOSED AIR CHUCKS

- Mounts directly to an **air hose**
- This chuck has a built-in **shut-off valve** to stop airflow when chuck is not in use
- **The air will escape only during inflation** (in contact with the tire valve)

CLOSED BALL FOOT AIR CHUCKS

Product No	Description
63.110	1/4 (F) NPT

Product No	Description
63.130C	1/4 (F) NPT

Product No	Description
63.133	1/4 Hose barb

Product No	Description
63.135	1/4 (M) NPT

Product No	Description
63.137C	**1/4 INDUSTRIAL**
63.138	**ARO 210**
63.139	**ULTRAFLO**

CLOSED EXTENDED DUAL FOOT AIR CHUCKS

Angled head can inflate either side.
Extended chuck is for hard-to-reach tire valves (trucks, buses and tractors) (63.150)

Product No	Description	Length
63.140C	1/4 (F) NPT	15 cm
63.150	1/4 (F) NPT extended	34 cm

63.150

63.140C

CLOSED TILT LOCK DUAL FOOT AIR CHUCKS

Extended chuck for hard-to-reach tire valves (63.170C)

Direct insertion chuck with serrarated heads allowing the chuck to cling tightly to the valve with a slight lateral pressure for safe inflation

Product No	Description	Length
63.160C	1/4 (F) NPT	15 cm
63.170C	1/4 (F) NPT extended	34 cm

63.170C

63.160C

CLOSED LOCK-ON AIR CHUCK

Securely locks onto valves when pushed forward. Allows serviceman to stand clear for tire inflation.

Releases when pulled back

Product No	Description
63.100	1/4 (F) NPT
63.245	Dual foot lock-on air chuck

63.245

63.100

NOTE: Product numbers ending with a C are offered on a card only

OPEN AIR CHUCKS (FLOW-THRU)

- Since they do not have a built-in shut-off valve, **air will flow freely** if installed directly on an air hose
- They must be installed on an **inflator gauge** which controls airflow

OPEN CLIP-ON CHUCKS

For hard-to-reach tire valves (trucks, buses and tractors)

STRAIGHT WITH CLIP-ON

Superior Quality

Product No	Description
63.203	1/4 (F) NPT

STRAIGHT WITH CLIP-ON

Product No	Description
63.205C	1/4 Hose Barb

WITH CLIP-ON

Product No	Description
63.210	1/4 (F) NPT

HEXAGONAL

Product No	Description
63.230	1/4 (F) NPT

OPEN DUAL FOOT AIR CHUCKS

Extended chucks for hard-to-reach tire valves (trucks, buses and tractors)

63.250

63.240

Product No	Description	Length
63.240	1/4 (F) NPT	15 cm
63.250	1/4 (F) NPT extended	34 cm

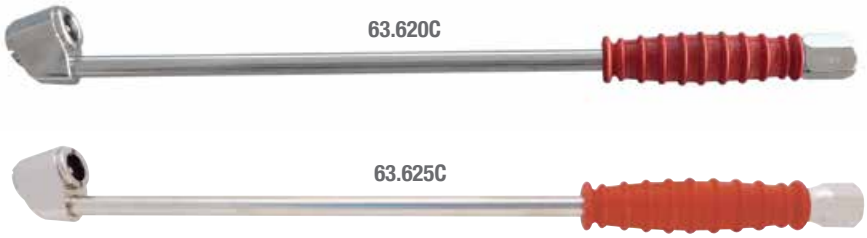
NOTE: Product numbers ending with a C are offered on a card only

LARGE BORE AIR CHUCKS

Ideal for heavy-duty vehicles and agriculture equipment.

DUAL FOOT AIR CHUCKS

Product No	Description	Length	Type
63.620C	1/4 (F) NPT	34 cm	Closed
63.625C	1/4 (F) NPT	34 cm	Opened

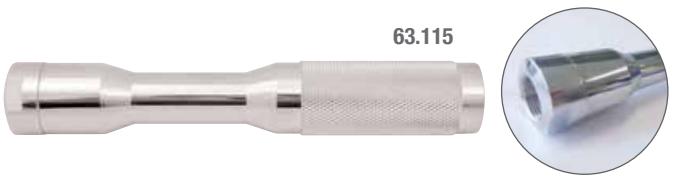


LOCKABLE AIR CHUCK

Product No	Description	Type
63.105	1/4 (F) NPT	Closed

TILT LOCK AIR CHUCKS

Product No	Description	Type
63.115	1/4 (F) NPT extended	Closed
63.175	1/4 (F) NPT	Closed



TIRE GAUGES FOR LARGE BORE VALVES

SWIVEL FOOT LARGE BORE TIRE GAUGE

For large bore valves
Swivel chuck adjusts to straight push-on or right angle, works on valves with shields

Nylon indicator bar with single calibration

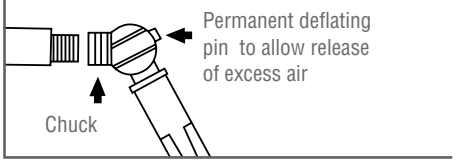
PSI: 10 to 150 PSI / 5 PSI increments

10-150 PSI

Product No	Length
63.610	23 cm

STANDARD TIRE GAUGES
PENCIL TYPE

All gauges have a permanent deflating pin to release excess air



FEATURES AND BENEFITS

- **All pencil type tire gauges have a precision-engineered brass chuck to ensure gauge fits squarely on the valve. This prevents air leakage and guarantees accurate pressure readings**
- **Easy to read and use**
- **All models have a tough, Chrome plated finish**
- **All models use a 4-sided indicator bar for easy pressure readings**
- **Nitrogen compatible**

TRACTOR AIR/LIQUID TIRE GAUGE

Specially designed for air or liquid filled tires
Nylon indicator bar with double calibration

Stainless Steel spring

PSI: 5 to 50 PSI / 2 PSI increments
kPa: 50 to 350 kPa

5-50 PSI

Product No
63.440C

STANDARD TIRE GAUGE

Ideal for automobiles and light trucks
Nylon indicator bar with double calibration

PSI: 5 to 50 PSI / 2 PSI increments
kPa: 50 to 350 kPa

5-50 PSI

Product No
63.400C

EXTRA-LOW PRESSURE TIRE GAUGE

Specially designed for applications requiring accurate low pressure readings
ATV vehicles, air lifts, garden tractors, air shocks, etc.
Nylon indicator bar with double calibration

PSI: 1 to 20 PSI / 0.5 PSI increments
kPa: 10 to 140 kPa

1-20 PSI

Product No
63.460C

STRAIGHT CHUCK TIRE GAUGE

Ideal for automobiles and light trucks
Nylon indicator bar with double calibration

PSI: 5 to 50 PSI / 2 PSI increments
Kg: 5 to 35 Kg

5-50 PSI

Product No
63.330C

HIGH-PRESSURE TIRE GAUGE

For high pressure bicycle and motorcycle tires
Nylon indicator bar with double calibration

PSI: 10 to 120 PSI / 2 PSI increments
kPa: 90 to 820 kPa

10-120 PSI

Product No
63.410C

NOTE: Product numbers ending with a C are offered on a card only

DUAL FOOT TIRE GAUGES
FOR TRUCKS AND BUSES

FEATURES AND BENEFITS

- All dual foot truck tire gauges have precision-engineered Brass chuck guides to ensure gauge fits squarely on the valve
- This prevents air leakage and guarantees accurate pressure readings
- Resistant chrome plated finish
- Nitrogen compatible

DUAL FOOT TIRE GAUGE

Ideal for high pressure applications, especially suited for heavy duty environments

Nylon indicator bar with double calibration

PSI: 10 to 150 PSI / 2 PSI increments
kPa: 100 to 1 000 kPa

Product No	Length
63.540C	30 cm

HIGH-PRESSURE DUAL FOOT TIRE GAUGE

Nylon indicator bar with double calibration

PSI: 10 to 120 PSI / 2 PSI increments
kPa: 90 to 820 kPa

Product No	Length
63.500C	15 cm

DUAL STRAIGHT CHUCK TIRE GAUGE

Straight-on chuck head with a 30° reverse angle chuck for inside and outside tandem wheels

Nylon indicator bar with double calibration

PSI: 10 to 150 PSI / 2 PSI increments
kPa: 100 to 1 000 kPa

Product No	Length
63.570C	28 cm

DUAL FOOT TIRE GAUGE (ALUMINIUM BAR)

Aluminium indicator bar with double calibration

PSI: 10 to 160 PSI / 2 PSI increments
Kg: 1 to 11 Kg

Product No	Length
63.545C	27 cm

NOTE: The product number ending with a C are offered on a card only

PROFESSIONAL DIAL TIRE GAUGE

10-170 PSI

Product No	Air Chuck
63.585C	Clip-on

FEATURES AND BENEFITS

- 90 mm swivel gauge with rubber protector
- Accurate reading 10 to 170 PSI / 2 PSI increments
- Bleeder button to release excess air to exact desired pressure
- Pressure readings maintained until the release button is depressed
- Swivel clip-on air chuck
- 50 cm flexible rubber hose
- Excellent for all types of vehicules (bikes, motorcycles, cars, racing vehicles, light trucks, heavy duty trucks and RV's)
- Nitrogen compatible

COMPACT DIAL TIRE GAUGES

SWIVEL ANGLE AIR CHUCK

0-160 PSI

Product No	Air Chuck
63.582	Swivel angle

STRAIGHT AIR CHUCK

0-60 PSI

Product No	Air Chuck
63.590	Straight

FEATURES AND BENEFITS

- Durable steel case with polished Brass bezel and 50 mm dial
- Excellent for all types of passenger vehicles
- Full geared, solid brass precision movement with bronze bourdon tube. Unlike piston-plunger-type gauges, bourdon tube is not affected by changes in temperature, humidity or altitude
- Pressure readings are held until the release button is depressed
- Bleeder button to release excess air to exact desired pressure
- Include protective rubber gauge guard
- Nitrogen compatible

NOTE: Product numbers ending with a C are offered on a card only

MAXPRO®
DIGITAL TIRE GAUGE

2-100 PSI

Product No
63.630

FEATURES AND BENEFITS

- Reads from 2 to 100 PSI
- Displays in increments of 0.5 PSI
- Calibration in PSI, bar, kPa, and kg/cm²
- Auto shut off
- Digital accuracy of ± 1%
- Backlit LCD display for easy reading
- Streamlined ergonomic shape
- Lightweight and compact size
- Nitrogen compatible

PROFESSIONAL DIGITAL TIRE GAUGES

2-150 PSI

63.640 63.642

Product No	Air Chuck
63.640	Angle
63.642	Dual foot

FEATURES AND BENEFITS

- Reads from 2 to 150 PSI
- Displays in increments of 0.5 PSI
- Calibration in PSI, bar, kPa, and kg/cm²
- Auto shut off
- Digital accuracy of ± 0.5 PSI
- Backlit LCD display for easy reading
- Streamlined ergonomic shape
- Nitrogen compatible

HEAVY DUTY PROFESSIONAL INFLATOR GAUGE
INTENSIVE USE

0-90 PSI

UNIQUE CONCEPTION
USED BY AUTOMOTIVE INDUSTRY PROFESSIONALS

FEATURES AND BENEFITS

- Professional tire gauge developped for exact pressure inflation on north-american and imported vehicles equipped with TPMS pressure sensors
- Large 90 mm dial gauge for extremely accurate pressure reading from 0 to 90 PSI (0-6 bar) / 1 PSI increment
- Gauge protected from high pressure (max 350 PSI)
- 45° angle swivel gauge with rubber protector for increased durability
- Rugged hanging steel ring
- Heavy duty pistol grip (zinc/brass alloy)
- 3 functions: inflation, deflation and tire pressure measurement
- Replaceable flexible 1 meter rubber hose (360° rotation) (2 m hose optional)
- Replaceable clip-on air chuck 1/4 (M) NPT (63.203)
- Nitrogen compatible

Allows precise tire inflation avoiding false warning messages

APPLICATIONS

Cars, light trucks, motorcycles, bicycles, racing vehicles

SPECIFICATIONS

Maximum Inlet Pressure: 350 PSI
Working Temperature: 0 °C to 40 °C
Air Inlet: 1/4 (M) NPT

Product No	Description
63.691	Gauge with 1 m hose and clip-on air chuck
63.698	Replacement gauge
63.699	Replacement hose 1 m (air chuck not included)
63.695	Replacement hose 2 m (air chuck not included)

TOPRING COMPATIBLE AIR CHUCKS:
63.100 / Automatic lock-on
63.203 / Straight Clip-on
63.210 / Ball foot lock-on
63.240 / Dual foot
63.245 / Dual foot lock-on
63.250 / Extended tilt lock dual foot
63.625C / Large bore extended dual foot

HEAVY DUTY PROFESSIONAL INFLATOR GAUGE FOR HEAVY VEHICLES
INTENSIVE USE

SAFETY SOLUTION

0-170 PSI

IDEAL FOR HEAVY VEHICLES

FEATURES AND BENEFITS

- Design for heavy vehicles with high-pressure tires
- Large 90 mm gauge with accurate pressure reading from 0 to 170 PSI (0-12 bar) / 2 PSI increments
- Gauge protected from high pressure (max 350 PSI)
- 45° angle swivel gauge with rubber protector
- High resistance to impacts
- Rugged hanging steel ring
- Heavy duty pistol grip (zinc/brass alloy)
- 3 functions: inflation, deflation and tire pressure measurement
- Replaceable 2 m flexible hose allows the use of the gauge from a safe distance from the tire during inflation in a cage (recommended by safety agencies)
- Replaceable clip-on air chuck 1/4 (M) NPT (63.203)
- Nitrogen compatible

APPLICATIONS

Heavy vehicles

SPECIFICATIONS

Maximum Inlet Pressure: 350 PSI

Working Temperature: 0 °C to 40 °C

Air Inlet: 1/4 (M) NPT

SAFETY SOLUTION

Replaceable 2 m flexible hose allows the use of the gauge from a safe distance from the tire during inflation in a cage (required by Safety Agencies).

Product No	Description
63.692	Gauge with 2 m hose and clip-on air chuck
63.696	Replacement gauge
63.699	Replacement hose 1 m (air chuck not included)
63.695	Replacement hose 2 m (air chuck not included)

TOPRING COMPATIBLE AIR CHUCKS:

63.100 / Automatic lock-on
63.203 / Straight Clip-on
63.210 / Ball foot clip-on
63.240 / Dual foot
63.245 / Dual foot lock-on
63.250 / Extended tilt lock dual foot
63.625C / Large bore extended dual foot

PROFESSIONAL DIGITAL TIRE INFLATOR GAUGE
INTENSIVE USE

2.9-218 PSI

FEATURES AND BENEFITS

- Ideal for exact pressure inflation on north-american and imported vehicles equipped with TPMS pressure sensors
- Large 90 mm gauge with LCD display for pressure reading from 0 to 218 PSI (0-12 bar) / 0.1 increment
- 4 pressure reading measures PSI, BAR, KFG, and KPA
- 3 functions: inflation, deflation and tire pressure measurement
- Gauge encased in a rubber protector for high impact resistance
- Clip-on air chuck (interchangeable) (63.203)
- Flexible 1 m hose (the optional 2 m hose allows the use of the gauge from a safe distance from the tire during inflation in a cage)
- Automatic shut off after 90 seconds to increase battery life time
- Spare battery included
- Nitrogen compatible

Allows precise tire inflation avoiding false warning messages

APPLICATIONS

Cars, light and heavy trucks, motorcycles, bicycles, racing vehicles

SPECIFICATIONS

Working Pressure: 2.9 to 218 PSI
Working Temperature: 0 °C to 40 °C
Air Inlet: 1/4 (F) NPT
Battery: Lithium 3V (140 hours lifespan)

Product No	Description
63.661	Gauge with 1 m hose and clip-on air chuck
63.697	2 m replacement hose (air chuck included)
63.690	1 m replacement hose (air chuck included)

PISTOL GRIP DIAL INFLATOR GAUGES

0-90 PSI

63.711
Gauge with
clip-on air chuck

63.710 Gauge with dual foot air chuck

FEATURES AND BENEFITS

- Inflator gauges developped for exact pressure inflation on north-american and imported vehicles equipped with TPMS pressure sensors
- 60 mm gauge for accurate pressure reading from 0 to 90 PSI (0-6 bar) / 1 PSI increment
- Air pressure set without touching tire or valve core
- Gauge encased in a rubber protector
- 3 functions: inflation, deflation and tire pressure measurement
- Rugged metal body
- Flexible 38 cm rubber hose
- Gauge available with dual foot air chuck (63.710) or with clip-on air chuck (63.711)

The professional tire gauges allow precise tire inflation avoiding false warning messages

APPLICATIONS

Cars, light trucks, motorcycles, bicycles

SPECIFICATIONS

Maximum Inlet Pressure: 174 PSI
Working Temperature: 0 °C to 40 °C
Air Inlet: 1/4 (M) NPT

Product No	Description
63.710	Gauge with dual foot air chuck
63.711	Gauge with clip-on air chuck
63.718	Replacement gauge

AIRPRO
INFLATOR GAUGE

0-174 PSI

INCLUDES
2 INTERCHANGEABLE
AIR CHUCKS

Clip-on air chuck

Dual foot air chuck

FEATURES AND BENEFITS

- Easy to read 60 mm gauge calibrated 0 to 174 PSI (0-12 bar) / 2 PSI increments
- 1.8 m flexible rubber hose allows user to work standing up (preventing back injuries)
- Allows user to keep a safe distance from the tire while inflating or deflating
- Integrated valve allows slow release of tire pressure to desired level
- Rugged construction for everyday use
- Includes 2 interchangeables air chucks: a clip-on air chuck to securely hold the air chuck on the valve while inflating and a dual foot air chuck for valves that are difficult to access (trucks, tractors, bus)
- 3 functions: inflation, deflation and tire pressure measurement
- Gauge encased in a rubber protector for impact resistance
- Light and ergonomic handle
- Easy to hang
- Nitrogen compatible

APPLICATIONS

Cars, light trucks, heavy vehicles, tractors, buses, motorcycles, racing vehicles, RVs

SPECIFICATIONS

Maximum Working Pressure: 174 PSI
Working Temperature: -20 °C to 60 °C
Air Inlet: 1/4 (F) NPT

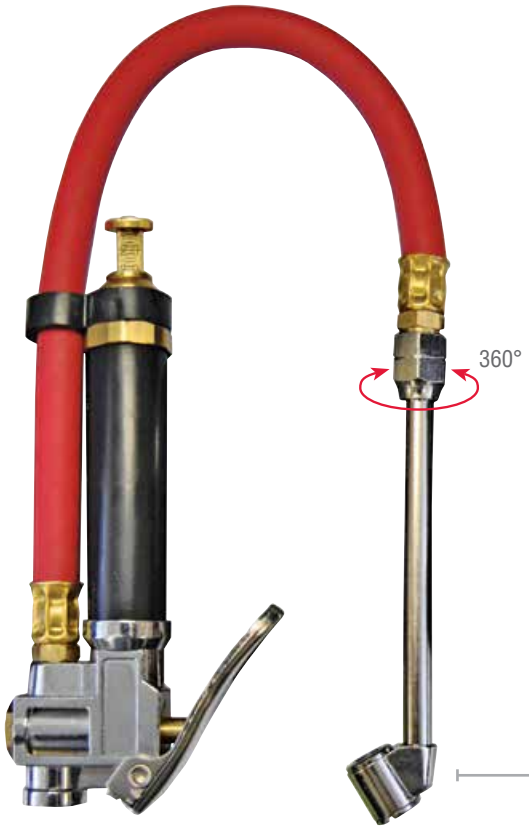
Product No	Description
63.651	Gauge with clip-on air chuck & dual foot air chuck
63.671	Replacement gauge (60 mm)
63.682	1.8 m replacement hose

INFLATOR GAUGES

Brass
indicator bar

FEATURES AND BENEFITS

- 3 functions: inflation, deflation and tire pressure measurement
- Brass indicator bar with calibration 10 to 120 PSI with 2 PSI increments
- 38 cm flexible rubber hose
- Gauge available with swivel dual foot air chuck (63.601C), with ball foot air chuck (63.602) or with clip-on air chuck (63.603C)
- Nitrogen compatible



63.601C
Gauge with swivel dual foot air chuck

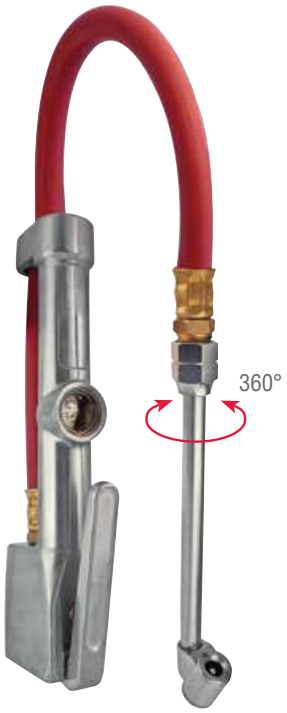
63.602
Gauge with ball foot air chuck

63.603C
Gauge with clip-on air chuck

Product No	Description
63.601C	Gauge with swivel dual foot air chuck
63.602	Gauge with ball foot air chuck
63.603C	Gauge with clip-on air chuck

NOTE: Product numbers ending with a C are offered on a card only

INFLATOR GAUGE



Glass lens

FEATURES AND BENEFITS

- Easy-to-read accuracy magnifying glass window
- Thin-line indicator ring allows full view of scale calibrated 10 to 160 PSI in 2 PSI increments (0-11 bar)
- 3 functions: inflation, deflation and tire pressure measurement
- 38 cm flexible rubber hose with swivel dual foot
- air chuck
- Nitrogen compatible

Product No	Description
63.658C	Gauge with swivel dual foot air chuck

INFLATOR GAUGES

63.659C

FEATURES AND BENEFITS

- All-purpose gauge for passenger vehicles and heavy-duty trucks
- 3 functions: inflation, deflation and tire pressure measurement
- Large, easy-to-read 50 mm dial gauge calibrated 10 to 220 PSI
- Gauge encased in a rubber protector
- 30 cm flexible hose with clip-on air chuck
- Nitrogen compatible

Product No	Description
63.659C	Gauge with clip-on air chuck
63.666	Replacement gauge

NOTE: Product numbers ending with a C are offered on a card only

TIRE TREAD DEPTH INDICATOR

FEATURES AND BENEFITS

- A handy tool that quickly and accurately measures tire tread left on the tire
- Calibrated in 1/32 in units and mm
- Convenient pocket clip

Product No
63.700C

TIRE VALVE REPAIR TOOL

FEATURES AND BENEFITS

- Repairs inside and outside valve threads, inserts and removes cores from valves
- Corrosion-resistant finish
- Case hardened

Product No
63.900C

VALVE CORE EXTRACTOR

FEATURES AND BENEFITS

- For inserting and removing tire valve cores
- Safety-grip handle with case-hardened and plated core

Product No	Length
63.930C	11 cm

NOTE: Product numbers ending with a C are offered on a card

TOPQUIK
anti hose whip safety couplers!

SAFETY SOLUTION

- Prevents dangerous hose whip through two-step disconnection
- Heavy duty shock and crush resistant coupler provides exceptionally long service life
- Anti scratch
- Super light weight contributes to ergonomics and safety
- Low disconnection noise reduces workplace noise pollution
- Meet ISO 4414 safety standards
- Disconnection sound level of only 80 dB

TOPQUIK INDUSTRIAL

20.449 1/4 INDUSTRIAL

21.469 3/8 INDUSTRIAL

22.469 1/2 INDUSTRIAL

TOPQUIK ULTRAFLO

31.749 ULTRAFLO

ULTRAFLO European type couplers increase airflow for better air tool performance

SAFETY COMES FROM 2 STEP DISCONNECTION

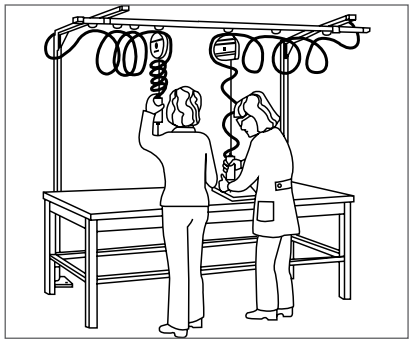
- Slide the sleeve back to release downstream pressure
- The plug is released, but held within the coupler
- Slide the sleeve forward
- The plug is released completely

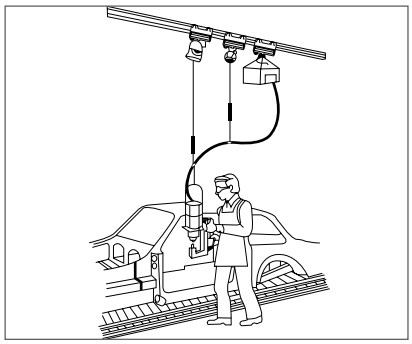
See Series 20, 21, 22 and 31 for more details

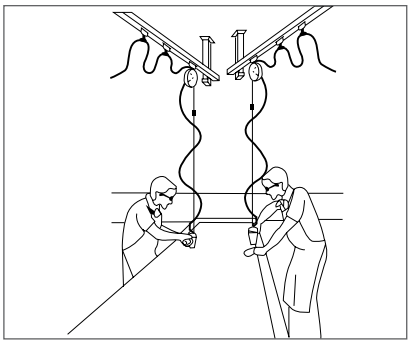
Series 64
TOOL BALANCERS

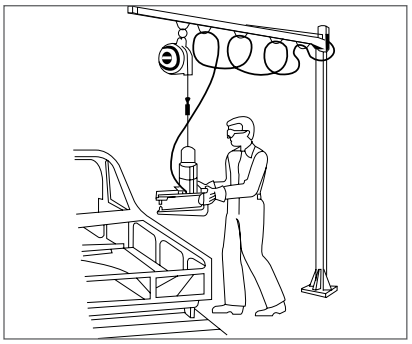
TOOL BALANCERS ARE VERY PRACTICAL

Tool balancers are designed to suspend potentially heavy tools from a jib or a track. The tool is kept within easy reach without being in the way. This allows the user to operate the tool with much less effort and strain, and avoids many types of accidents.









THE BENEFITS OF TOOL BALANCERS

Tool balancers can reduce damage to tools. Expensive power tools suspended from balancers are safeguarded from being accidentally dropped onto the floor or knocked against the work surface or products in production.

In addition, hoses can be kept away from the workspace where they might be cut or damaged.

Tool balancers help reduce chronic fatigue and injuries and improve worker productivity by making tools as light as a feather. Operator effort can be directed to controlling the tool rather than supporting it.

Accidental start-ups are avoided when tools are out of the way, and tripping is virtually eliminated when hose lengths are kept short because the tool is suspended where it is needed.

With tool balancers, workstations can be organised more efficiently by ensuring that tools are always in the right place. By easing operator strain and storing the tool out of the way when not in use, balancers help improve productivity.

WHY USE A TOOL BALANCER?

While very efficient power tools are also very expensive, protecting them from damage and prolonging their useful life, by avoiding falls and reducing pick-up and lay-down wear, is a winning strategy.

Reducing the strain of repetitive use of hand held power tools can decrease worker fatigue and injury, particularly from cumulative trauma disorders (CTD) linked to repetitive lifting and operation of tools. CTD typically affects the wrists, arms, elbows, neck and lower back.

Keeping tools stored out of the way but close at hand when not in use reduces the risk of accidental start-ups and falls.

Keeping hoses off the ground reduces tripping. Maintaining tools at the ideal position for workers to use them improves efficiency and productivity.

Tool balancers are the ideal equipment to achieve all of these objectives.

TECH TIP

SELECTING A BALANCER

When selecting a balancer, first consideration should be given to the weight of the total load to be suspended (tool plus hose plus other attachments).

If the total weight is in between the maximum capacity of one model and the minimum capacity of another, it is better to select the larger capacity model.

In order to suspend a tool further from the balancer than the cable length allows, simply use an extra length of cable between the balancer and the tool.

HEAVY DUTY TOOL BALANCERS

ERGONOMIC SOLUTION

TOPRING heavy duty balancers are designed to improve efficiency and reduce fatigue in more demanding applications.

They offer a number of benefits to the user, including improving the stability of tools and thereby increasing accuracy, freeing up workspace, and preventing tools from being damaged.

APPLICATIONS

Especially suited for assembly lines in automotive, appliances, electronics, automotive and packaging sectors

MATERIALS

Housing: Cast aluminium or ABS (64.500)

Cable: Steel

FEATURES AND BENEFITS

- Zero gravity - true balance
- Easy external tensioning
- 360° upper swivel
- Secondary support hanger
- Bottom hook for tool hanging
- Tapered drum allows « true balance » throughout cable travel
- Manual drum lock on large models
- Permanent lubrication

COMPACT MODEL

Product No	Cable mm	Capacity Load/Kg Min-Max	Cable Length m	Net Weight kg
64.500	2	0.5 - 1.5	1.3	0.7

MEDIUM MODELS

Product No	Cable mm	Capacity Load/Kg Min-Max	Cable Length m	Net Weight kg
64.505	3.2	1.5 - 3.0	1.3	1.7
64.510	3.2	3.0 - 5.0	1.3	1.7

LARGE MODELS

Product No	Cable mm	Capacity Load/Kg Min-Max	Cable Length m	Net Weight kg
64.515	4.7	5.0 - 9	1.3	3.5
64.520	4.7	9.0 - 15	1.3	3.6
64.525	4.8	15.0 - 22	1.3	7.7
64.530	4.8	22.0 - 30	1.3	8.3

HEAVY DUTY TOOL BALANCERS

ERGONOMIC SOLUTION

FEATURES AND BENEFITS

- **Tool balancers and retractors designed for long life and trouble-free service.**
- **Reinforced hanging bracket with forged clevis for ceiling mounting and extra holes for safety chain attachment**
- **Spring is permanently lubricated and provides constant tension, adjustable for suspending tool in normal working zone (15.2 cm - 45.7 cm)**
- **Galvanized steel with nylon coating cable (417 kg test)**
- **Includes safety tool clip and adjustable cable-stop**
- **Locking models (or retractors) include a positive ratchet-lock mechanism to allow locking of the cable at a specific height. A slight pull on the cable releases the lock. The lock feature may be disengaged externally when constant tension is required.**

MATERIALS

Housing: Rugged steel with baked polyester finish

Cable: Galvanized steel nylon coated

BALANCERS (CONSTANT PULL REELS)

May be adjusted to suspend through 15.2 cm - 45.7 cm range.

Product No	Capacity Load/Kg Min-Max	Cable Length m	Net Weight kg
64.295	1.4 - 3.1	2.4	2.7
64.300	2.3 - 4.5	2.4	2.7
64.305	3.6 - 5.4	2.4	3.1
64.310	4.5 - 6.8	2.4	3.6
64.315	7.2 - 10.4	2.4	3.6

RETRACTORS (RATCHET LOCK)

Retract tool upward when manually released.

Product No	Capacity Load/Kg Min-Max	Cable Length m	Net Weight kg
64.345	1.4 - 3.1	2.4	2.7
64.350	2.3 - 4.5	2.4	2.7
64.355	3.6 - 5.4	2.4	3.1
64.360	4.5 - 6.8	2.4	3.6
64.365	7.2 - 10.4	2.4	3.6

MEDIUM DUTY TOOL BALANCERS

ERGONOMIC SOLUTION

FEATURES AND BENEFITS

- Economical choice for suspending tools weighting up to 2.2 kg.
- Molded housing, smooth exterior with rounded edges, designed for maximum ergonomic appeal
- Easy to adjust
- Lightweight and compact
- Push-button release simplifies decreasing spring tension
- Rugged steel upper swivel hook with secondary safety cable provision
- Oversized cable opening with direct in-line pull to reduce cable wear
- 270 lb test galvanized steel, nylon coated aircraft cable
- Adjustable cable-stop and lower safety hook
- Matte black finish to minimise reflected light

APPLICATIONS

Pneumatic and electric tools, screw drivers, drills, riveting machines

MATERIALS

Housing: ABS

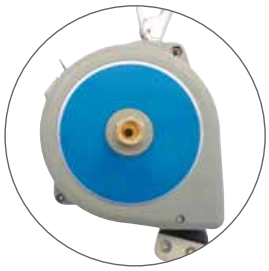
Cable: Galvanized steel, nylon coated

Prod. No	Cable mm	Capacity Load/Kg Min-Max	Cable Length m*	Net Weight kg
64.120	1.19	0.2 - 0.6	1.8	0.5
64.125	1.19	0.6 - 1.3	1.8	0.6
64.130	1.19	1.3 - 2.2	1.8	0.7

* Includes cable stop and safety hook

LIGHT DUTY HOSE BALANCER WITH HOSE

ERGONOMIC SOLUTION



FEATURES AND BENEFITS

- **Compact size**
- **Integrated air hose and support cable keep work areas tidy**
- **Lightweight plastic body**
- **Dial-type torque adjustment**
- **Adjustable ball-stop for positioning**
- **Flexible polyurethane hose - 3/16 in x 48 in - 1/4 (M) NPT**

APPLICATIONS

Designed for use with small pneumatic tools and light duty applications

MATERIALS

Housing: ABS
Hose: Polyurethane

SPECIFICATIONS

Maximum Working Pressure: 140 PSI

Product No	Capacity Load/Lb Min-Max	Capacity Load/Kg Min-Max	Hose Length m	Net Weight kg
64.050	1.3 - 3.3	0.5 - 1.5	1.2 (4 ft)	0.8

LIGHT DUTY TOOL BALANCERS

FEATURES AND BENEFITS

- **Economical choice for suspending tools**
- **Compact and lightweight**
- **Nylon-covered steel aircraft cable**
- **Adjustable tension**

APPLICATIONS

Designed for use with small pneumatic tools, for light duty applications

MATERIALS

Housing: Steel
Cable: Nylon-covered steel aircraft cable

Product No	Capacity Load/Kg Min-Max	Cable Length m	Net Weight kg
64.200	0.5 - 1.5	1.6	0.5
64.205	1.5 - 2.9	1.5	0.7
64.250	2.9 - 4.9	1.5	0.7

Series 65
BALL VALVES

BRASS BALL VALVES

TECH TIP

90% of air leakage is generated at the production area. In order to minimize the negative impact of these leaks, it is strongly recommended to install ball valves or even better « Air-Saver » to isolate the air distribution network from the compressor.

FEATURES AND BENEFITS

- Industrial two-piece forged-brass ball valves
- Precision machined for maximum strength, durability and maintenance- free operation
- Full flow design
- Chrome plated brass ball and nickel plated brass body for long life and extra corrosion resistance

FEMALE / FEMALE

Product No	Maximum Working Pressure	Thread (F) NPT	Weight kg
65.725	725 PSI	1/4	0.18
65.738	725 PSI	3/8	0.15
65.750	725 PSI	1/2	0.19
65.775	580 PSI	3/4	0.32
65.800	580 PSI	1	0.46
65.825	435 PSI	1-1/4	0.70
65.850	435 PSI	1-1/2	1.03
65.900	362 PSI	2	1.66

APPLICATIONS

Designed to handle compressed air and water

MATERIALS

Body: Nickel plated brass
Ball: Hard chrome plated brass
Stem Seal: Brass
Ball Seal: PTFE
Handle: Zinc plated and varnished steel
Joints: NBR and Viton®

SPECIFICATIONS

Working Temperature Range: -20 °C to 150 °C

FEMALE / FEMALE LOCKOUT

SAFETY SOLUTION

LOCKOUT

Product No	Maximum Working Pressure	Thread (F) NPT	Weight kg
65.930	725 PSI	1/4	0.22
65.932	725 PSI	3/8	0.19
65.934	725 PSI	1/2	0.23
65.936	580 PSI	3/4	0.37
65.938	580 PSI	1	0.51

APPLICATIONS

Designed to handle compressed air and water systems which must be locked

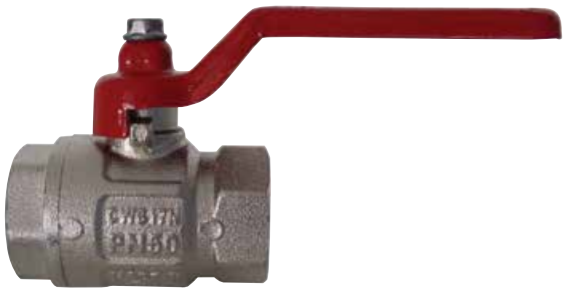
MATERIALS

Body: Nickel plated brass
Ball: Hard chrome plated brass
Stem Seal: Brass
Ball Seal: PTFE
Handle: Zinc plated and varnished steel
Joints: NBR and Viton®

SPECIFICATIONS

Working Temperature Range: -20 °C to 150 °C

FEMALE / FEMALE
(BSPP)



MATERIALS

Body: Nickel plated brass
Ball: Hard chrome plated brass
Stem Seal: Brass
Ball Seal: PTFE
Handle: Zinc plated and varnished steel
Joints: NBR and Viton®

SPECIFICATIONS

Working Temperature Range: -20 °C to 150 °C

Product No	Maximum Working Pressure	Thread (F) BSPP	Weight kg
65.738M	725 PSI	3/8	0.15
65.750M	725 PSI	1/2	0.19
65.775M	580 PSI	3/4	0.32
65.800M	580 PSI	1	0.46
65.825M	435 PSI	1-1/4	0.70
65.850M	435 PSI	1-1/2	1.03
65.900M	362 PSI	2	1.66

MALE / FEMALE

MATERIALS

Body: Brass
Ball: Hard chrome plated brass
Stem and Ball Seal: PTFE
Handle: Steel with vinyl

SPECIFICATIONS

Maximum Working Pressure: 600 PSI
Maximum Working Temperature: 120 °C

Product No	Thread (F) NPT	Thread (M) NPT	Weight kg
65.700	1/4	1/4	0.26
65.705	3/8	3/8	0.26
65.710	1/2	1/2	0.34
65.715	3/4	3/4	0.39
65.720	1	1	0.63

STAINLESS STEEL BALL VALVES
LOCK-OUT

SAFETY SOLUTION

LOCKOUT

FEATURES AND BENEFITS

- Two-piece body construction
- Full flow design
- Locking handle

APPLICATIONS

Ideal for corrosive environments, compressed air, water, oil and gas

MATERIALS

Body: 316 Stainless steel
Ball: 316 Stainless steel
Ball Seal and Stem Seal: PTFE
Handle and Nut: 304 Stainless steel with vinyl

SPECIFICATIONS

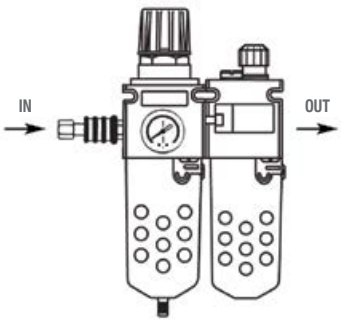
Maximum Pressure Rating: 1000 PSI
Maximum Working Temperature: -51 °C to 232 °C

Product No	Thread (F) NPT	Weight kg
65.225	1/4	0.23
65.238	3/8	0.27
65.250	1/2	0.36
65.275	3/4	0.64
65.300	1	1.00

SLIDE VALVES

FEATURES AND BENEFITS

- 2-position, 3-way, manually-operated slide valves provide simple on/off air-flow control
- Downstream air exhausts when slide valve is closed



APPLICATIONS

Ideal low-cost method for operating single-action air cylinders, air clamps, air gauges, and similar air-actuated devices

MATERIALS

Aluminium

SPECIFICATIONS

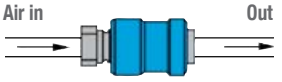
Maximum Working Pressure: 140 PSI
Maximum Working Temperature: 5 °C to 60 °C

Product No	Thread (F) NPT	Thread (M) NPT	Flow SCFM*
65.600	1/8	1/8	41
65.605	1/4	1/4	74
65.615	3/8	3/8	99
65.625	1/2	1/2	102
65.635	3/4	3/4	226
65.645	1	1	312

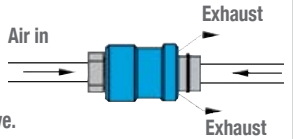
* Inlet 100 PSI, 10 PSI pressure drop

OPERATING INSTRUCTIONS

By moving the sleeve in one direction, the air is free to pass through the slide valve to the circuit



By sliding the sleeve in the opposite direction, the air supply is shut off and the downstream air is allowed to exhaust, thus rendering the tool or machine inoperative.



BRASS MINI BALL VALVES

Product No	Thread (F) NPT
65.118	1/8
65.125	1/4
65.138	3/8
65.150	1/2

Product No	Thread (M-F) NPT
65.119	1/8
65.126	1/4
65.139	3/8
65.151	1/2

FEATURES AND BENEFITS

- **PTFE ball seals for a positive seal in both directions, making installation easier**
- **Compact corrosion-resistant Nylon handle**
- **Compact format**
- **No maintenance required**

APPLICATIONS

Designed to handle compressed air and water, as well as certain gas and liquid applications, where the valve material is appropriate

MATERIALS

Body: Nickel plated brass
Ball: Chrome plated brass
Handle: Reinforced nylon
O-Ring: PTFE

SPECIFICATIONS

Maximum Pressure Rating: 450 PSI
Maximum Working Temperature: -20 °C to 93 °C

TOPFIT® POLYMER MINIATURE BALL VALVES WITH PUSH-TO-CONNECT FITTINGS

FEATURES AND BENEFITS

- **Designed to be mounted in-line**
- **Provide the space savings necessary for small lines in fluid applications**

Product No	Tubing O.D. in ①	Tubing O.D. in ②
40.930	1/4	1/4
40.931	5/16	5/16
40.933	3/8	3/8
40.934	1/2	1/2

Product No	Tubing O.D. in	Thread (M) NPT
40.940	1/4	1/8
40.941	1/4	1/4
40.942	1/4	3/8
40.943	5/16	1/8
40.944	5/16	1/4
40.945	3/8	1/4
40.946	3/8	3/8
40.947	3/8	1/2

TOPFIT®
POLYMER
MINIATURE BALL VALVES
WITH PUSH-TO-CONNECT FITTINGS

2- Directional Product No	3- Directional Product No	Tubing O.D. in	Thread (M) NPT
65.415	--	3/8	3/8

2- Directional Product No	3- Directional Product No	Tubing O.D. in
65.460	65.470	1/4
65.462	65.472	5/16
65.463	65.473	3/8
65.465	65.475	1/2

2- Directional Product No	3- Directional Product No	Tubing O.D. mm
65.485	65.480	4
65.495	65.490	6
65.497	--	8

FEATURES AND BENEFITS

- Compact size
- Provide the space savings necessary for lines in fluid applications
- Integrated push-in fittings
- Available in standard or relieving types
- Standard valves do not have air exhaust
- Relieving valves, when closed, discharge residual pressure

APPLICATIONS

Compressed air, vacuum

MATERIALS

Body: PBT / Nickel plated brass

O-Ring: Buna-N/nitrile

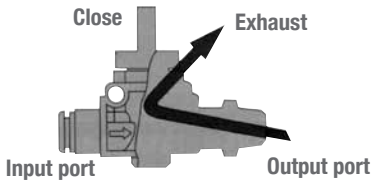
SPECIFICATIONS

Maximum Working Pressure: 150 PSI

Vacuum Pressure: 29.5" Hg

Maximum Working Temperature: 0 °C to 60 °C

RELIEVING BALL VALVE (3 WAY)



SAFETY EXHAUST/LOCKOUT BALL VALVES WITH EXHAUST

SAFETY SOLUTION

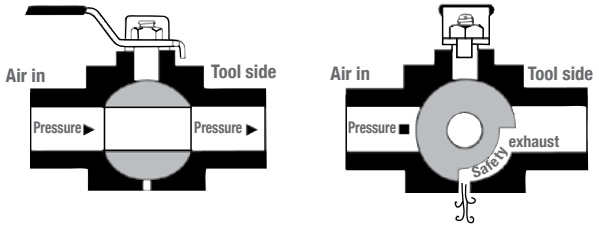
LOCKOUT

FEATURES AND BENEFITS

- These ball valves are designed so the exhaust port automatically bleeds down compressed air trapped between the valve and the machine when the valve is closed, relieving potentially hazardous stored energy
- Sturdy handle with an 8.4 mm hole for locking the valve with a padlock
- Exhaust is tapped with a (10-32 UNF) thread for mounting mufflers

HOW IT WORKS

When the valve is in the OFF position, the exhaust vents residual air on the downstream side of the valve. This ensures that air-powered equipment is safe to service.



APPLICATIONS

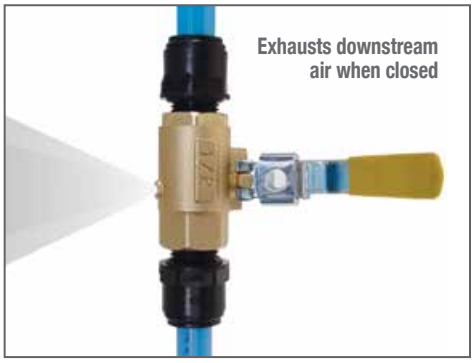
Fast, safe de-energizing of pneumatic equipment
Designed for air service only

MATERIALS

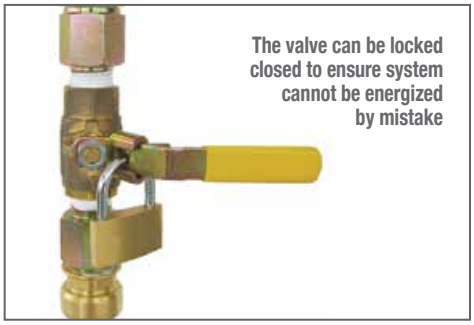
Body: Brass
Ball: Hard chrome plated brass
Stem Seal and Ball Seat: Reinforced PTFE
Handle: Zinc plated steel with vinyl

SPECIFICATIONS

Maximum Working Pressure: 250 PSI
Maximum Working Temperature: 0 °C to 71 °C



Exhausts downstream air when closed



The valve can be locked closed to ensure system cannot be energized by mistake

Product No	Thread (F) NPT	Weight kg
65.500	1/4	0.18
65.505	3/8	0.16
65.510	1/2	0.24
65.515	3/4	0.38
65.520	1	0.63

AIRFLO®
VENTING
SAFETY & LOCK-OUT VALVES

SAFETY SOLUTION

LOCKOUT

FEATURES AND BENEFITS

- 3 port/2 position valve relieves downstream pressure when closed
- Can be locked in the closed position
- Can be mounted directly to AIRFLO FRL using standard AIRFLO spacers included
- Threaded ports also allow use in-line with other components
- Accept standard single pad lock or safety lock for multiple lockout
- Conform to OSHA Standard 29 CFR Part 10
- Maximum pressure: 150 PSI

Product No	Thread (F) NPT	Vent Port	Suggested Muffler
51.270	1/4	1/8	86.600
51.370	1/4	1/4	86.605
51.375	3/8	1/4	86.605
51.470	3/8	3/8	86.610
51.475	1/2	3/8	86.610

MODULAIR®
VENTING
SAFETY & LOCK-OUT VALVES

SAFETY SOLUTION

LOCKOUT

FEATURES AND BENEFITS

- 3 port/2 position valve relieves downstream pressure when closed
- Can be locked in the closed position
- Can be mounted directly to MODULAIR FRL using standard MODULAIR spacers included
- Threaded ports also allow use in-line with other components
- Accept standard single pad lock
- Conform to OSHA Standard 29 CFR Part 10
- Maximum pressure: 300 PSI

Product No	Thread (F) NPT
50.781	1/4
50.783	1/4
50.784	3/8
50.785	1/2
50.786	1/2
50.787	3/4

HIGH FLOW SAFETY EXHAUST/LOCKOUT VALVES

The high flow safety lockout valve is a 2-position, 3-way valve that exhausts downstream air when shifted to the closed position.

Colored bright yellow with a red knob, it is easily distinguished from other air preparation components.

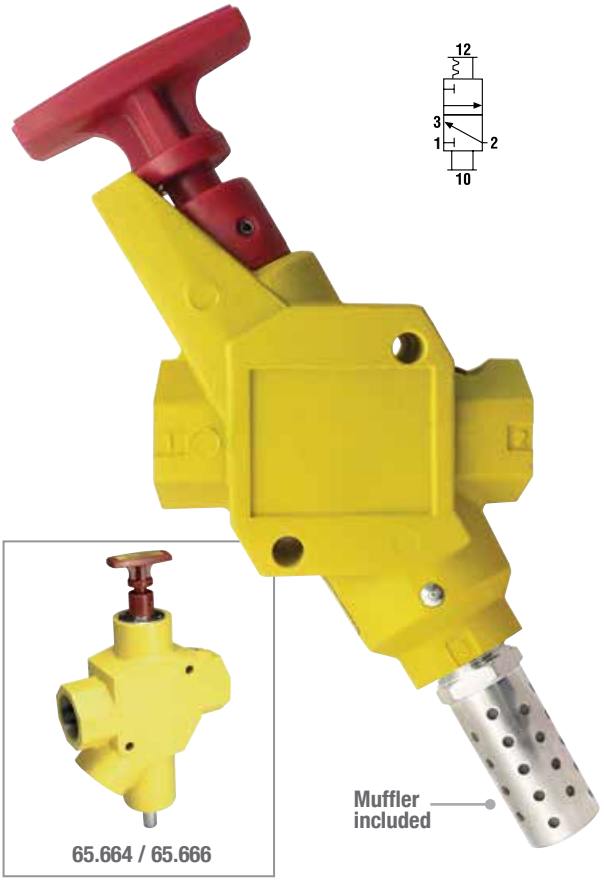
A standard padlock can be inserted in the hole of the plunger to lock the unit in a non-flowing position, keeping it safe for downstream maintenance.

SAFETY SOLUTION

LOCKOUT

FEATURES AND BENEFITS

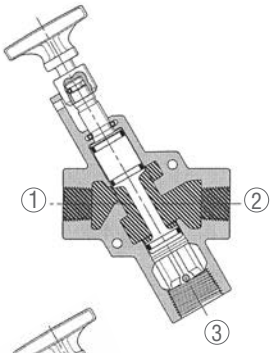
- Used in systems for compliance with OSHA Standard 29 CFR Part 1910
- High flow exhaust
- Rugged cast Aluminium Alloy body
- Durable metal handle
- Inline or surface mountable
- Safety yellow and red for high visibility
- Muffler included



65.664 / 65.666

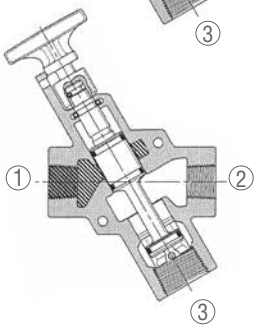
NORMAL OPERATION - VALVE OPEN

With the handle pulled outward.
Inlet Port ① is open to outlet Port ②.
Exhaust Port ③ is blocked.



LOCKOUT OPERATION - VALVE CLOSED

With the handle pushed inward.
Inlet Port ① is blocked.
Outlet Port ② is open to Exhaust Port ③.



MATERIALS

Body and Handle: Cast aluminium alloy
Spool: Aluminium
Seals: Buna-N/Nitrile
Spring: Stainless steel

SPECIFICATIONS

Maximum Working Pressure: 250 PSI
Maximum Working Temperature: 0 °C to 71 °C

Product No	Thread (F) NPT	Port Size Exhaust (F) NPT	Inlet/ Outlet Flow SCFM	SCFM Exhaust
65.650	1/2	3/4	161	91
65.655	3/4	3/4	187	93
65.660	1	1 1/4	375	216
65.662	1 1/4	1 1/4	436	221
65.664	1 1/2	2	761	1156
65.666	2	2	918	1186

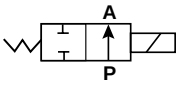
TECH TIP

In accordance with OSHA Standards, lockout valves are used during maintenance and service procedures of air operated equipement. Lockout valves are installed in pneumatic drop legs or individual pneumatic control lines.

Prior to servicing, the red handle is pressed inward, blocking pressure and relieving all downstream air pressure. A padlock is installed through the locking hasp, preventing accidental actuation during the maintenance procedure.

Following maintenance, the padlock is removed and the red handle is pulled outward, returning air pressure to the system.

SOLENOID BALL VALVES
2 WAY - 2 POSITION



Normally closed

FEATURES AND BENEFITS

- High reliability, low maintenance
- DIN connection
- Compact design with high flow rates
- Low noise
- O-ring seal protects coil and valve assembly from moisture and corrosion for longer life
- Standard with DIN connection coil

CE

APPLICATIONS

General purpose applications and process systems

MATERIALS

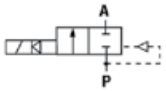
Valve Body: Brass
Seal: Buna-N/Nitrile
Coil Material: Aluminium/plastic

SPECIFICATIONS

Working Pressure: 7-145 PSI
Maximum Working Temperature: -5 °C to 80 °C
Fluid: Compressed air, water, neutral liquids, hot water
Maximum Pressure: 217 PSI

Voltage 110V/60HZ Product No	Voltage 24 VDC Product No	Thread (F) NPT	Port Size mm	Flow Cv
65.541	65.541.03	1/8	1.5	0.10
65.551	65.551.03	1/4	2.3	0.18
65.542	65.542.03	3/8	13	1.00
65.543	65.543.03	1/2	13	4.00
65.544	65.544.03	3/4	25	8.60
65.545	65.545.03	1	25	11.00

SOLENOID BALL VALVES
2 WAY - 2 POSITION



Normally closed

FEATURES AND BENEFITS

- High reliability, low maintenance
- Compact design with high flow rates
- Low noise
- Double O-ring seal protects coil and valve assembly from moisture and corrosion for longer life
- DIN connection
- Zero differential pressure design
- Waterhammer-free

APPLICATIONS

General purpose applications and process systems

MATERIALS

Valve Body: Brass
Seal: Buna-N/Nitrile
Coil Material: Polyamide

SPECIFICATIONS

Working Pressure: 1.5-145 PSI
Fluid Temperature Range: -10 °C to 80 °C
Fluid: Compressed air, water, neutral liquids, hot water
Protection Class with Cable Plug: NEMA 4

Voltage 120VAC/60HZ Product No	Voltage 240 VAC/60HZ Product No	Voltage 12 VDC Product No	Voltage 24 VDC Product No	Thread (F) NPT	Port Size in	Flow Cv
65.550	65.550.02	65.550.05	65.550.03	1/4	3/8	2.4
65.555	65.555.02	65.555.05	65.555.03	3/8	3/8	2.4
65.560	65.560.02	65.560.05	65.560.03	1/2	1/2	4.2
65.563	65.563.02	65.563.05	65.563.03	3/4	3/4	10.5
65.565	65.565.02	65.565.05	--	1	1	12.9

AIR-SAVER®
PROGRAMMABLE BALL VALVE


65.591


65.592

FEATURES AND BENEFITS

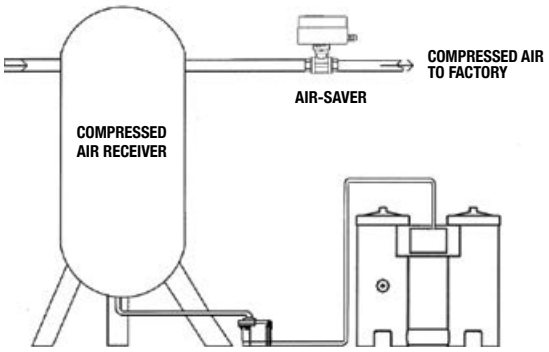
- Valve opens slowly to avoid water hammer in network
- Manual valve opening and closing possible, in case of a power failure
- Microprocessor controlled (multi cycle 7 day program)
- Each individual day can be programmed according to specific working day shift requirements
- Integral lithium battery protects program
- Reset Function
- Maintenance free
- Easy to obtain air in case of overtime work
- Large LCD display showing program cycle and current time
- Compact design - easy to install-easy to program
- No unnecessary start up of compressors during periods when compressed air is not required
- Allows the possibility to shut off sections of an air system where compressed air isn't continuously needed

- **ENERGY SAVER**
- **FULLY AUTOMATIC**
- **SOLUTION AGAINST AIR LEAKAGE**

SPECIFICATIONS

Maximum Working Pressure: 230 PSI
Maximum Working Temperature: 0 °C to 60 °C
Voltage: 115V / 50/60Hz
Power Consumption: 7W during cycle rotation

The Air-Saver is installed on the air outlet of the air tank. It will automatically open just prior to the start of the work shift, and closes just after the working shift is over.



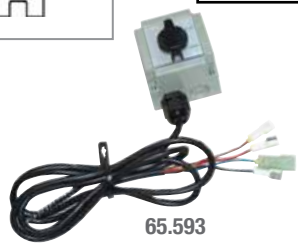
TECH TIP

90% of air leaks are generated at the production area. In order to minimize the negative impact of these leaks the Air-Saver valve will:

- Automatically OPEN just prior to the work shift
- Automatically CLOSE just after the work shift is over

The content of compressed air within the air tank will be saved rather than lost through pipe work leakages.

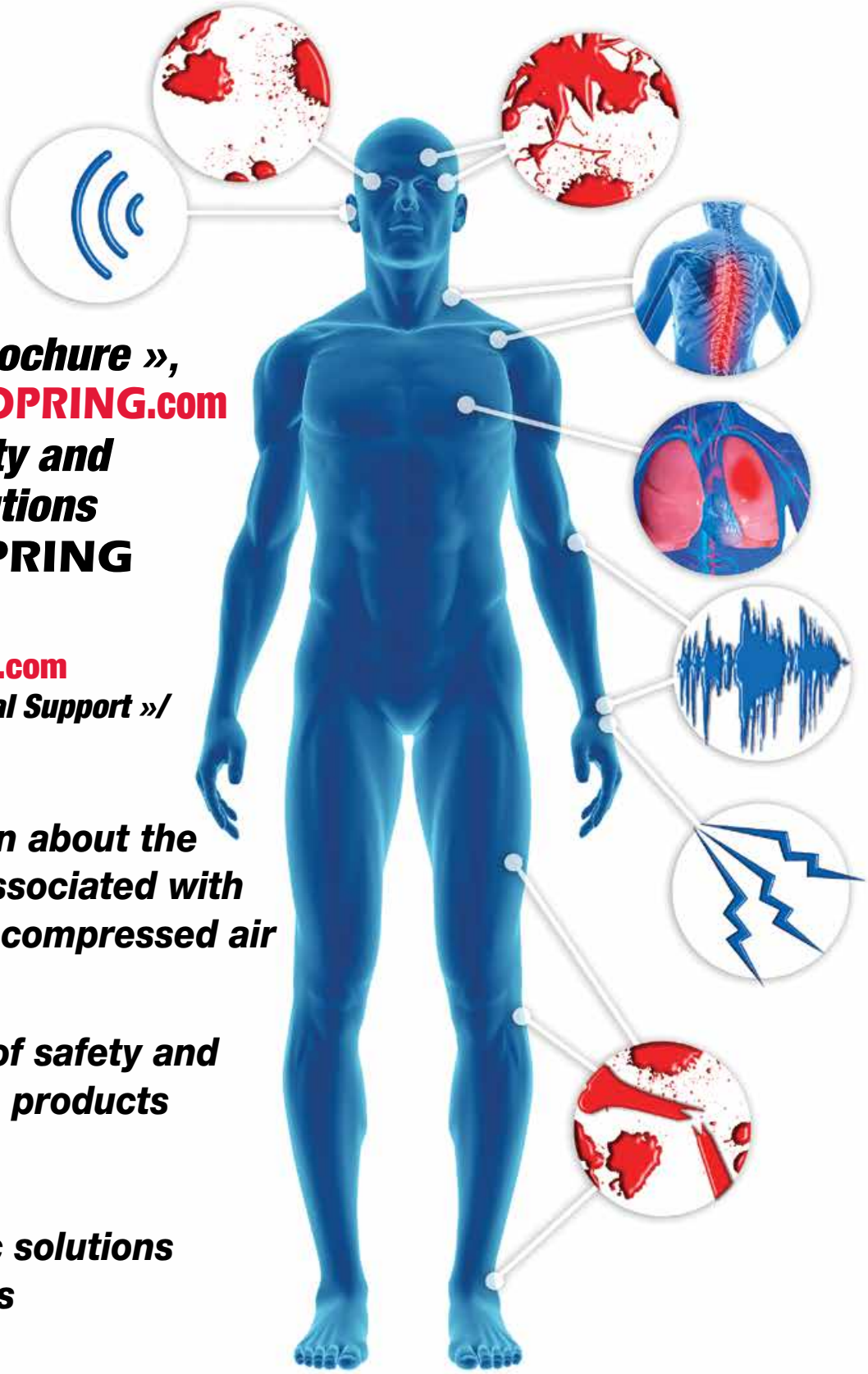
Product No	Thread (F) NPT	Opening / Closing Duration
65.591	1	90° / 30 sec
65.592	2	90° / 105 sec


65.593

Product No	Description
65.593	Remote switch for Air-Saver (16 ft)

DANGER

Compressed air can hurt you!



The « Safety brochure », available at TOPRING.com highlights safety and ergonomic solutions offered by TOPRING

Visit TOPRING.com
Section « Technical Support »/ Safety Brochure

- ***Information about the dangers associated with the use of compressed air***
- ***Selection of safety and prevention products***
- ***Ergonomic solutions for workers***

Series 66
SAFETY CLEANING UNIT

SAFETY CLEANING UNIT

FOR DRY AND WET APPLICATIONS

SAFETY SOLUTION

FEATURES AND BENEFITS

- Vacuum only: does not create any air pressure making it safe for the cleaning of worker's clothing
- Fast and efficient cleaning
- Powered by compressed air (runs on standard compressed air system)
- No electrical motor to burn out eliminating sparks and no power cords to trip over
- Mounts on any vertical surface saving floor space
- Vaccums liquids, metal shavings and chips, powders, sawdust and dirt, debris and small objects
- Easy maintenance
- Wall mounting plate included
- Drain for liquid removal

Wherever compressed air blow guns are used for cleaning there is a real danger of injury to workers and damage to equipment caused by particles being ejected and blown into the air.
The Safety Cleaning Unit from **TOPRING** is the best solution for cleaning worker's clothing and minimizing injuries.

For more informations, visit **TOPRING**.com and see the demonstration video

APPLICATIONS

Vaccums liquids, metal shavings and chips, powders, sawdust and dirt, debris and small objects and cleaning worker's clothing

MATERIALS

Polyethylene

SPECIFICATIONS

Capacity: 20 L

Weight: 5.9 kg

Air requirements:
Air Consumption: 21 CFM
Air Pressure: 100 PSI
Inlet: 3/8 (F) NPT

Vacuum performance:
Flow: 73 CFM
Vacuum: 5.66 in Hg at 100 PSI / 77 in H_2O
Noise level: 88 dBA

Standard filtration: Cartridge filter with 77% efficient at 0.8 micron

HEPA filtration: Cartridge filter with 99.97% efficient at 0.3 micron

Vacuum hose: Diameter: 1-1/2 in / Length: 10 ft (3 m)

Product No	Description
66.200	Safety Cleaning Unit (Standard Cartridge Filter)
66.201	Safety Cleaning Unit (HEPA Cartridge Filter)

Product No	Accessories and Replacement Parts
66.205	Standard Cartridge Filter 0.8 micron
66.208	HEPA Cartridge Filter 0.3 micron
66.206	Mounting Plate
66.207	Gasket
66.209	Exhaust Bag - Includes Hose Clamp
66.210	Vacuum Hose 1-1/2 in I.D. x 10 ft
66.211	Crevice Tool 1-1/2 in O.D.
66.212	Brush 1-1/2 in O.D.

Series 67
COMPRESSED AIR VACUUM UNITS

TOPVAC
VACUUM GUN KIT

APPLICATIONS

Best for vacuuming metal, wood and plastic chips, debris, sawdust, pellets, trimmings, crumbs and powders

Ideal for safe self-cleaning of workers' clothes

SPECIFICATIONS

Working Pressure Range: 80 to 150 PSI

Air Consumption: 29 SCFM at 100 PSI

Vacuum: 6.9 in Hg at 125 PSI / 93 in H_2O

Noise Level: 91 dB at 100 PSI inlet

FEATURES AND BENEFITS

- High power vacuum unit for pick-up of heavier debris
- A safe alternative to blow guns
- Will quickly clean up metal chips, dust, glass, cloth scraps, plastic trim, paper, rubber and other residues
- Total cleaning versatility without electricity or moving parts
- Easy to use
- Comfortable
- Designed for heavy duty use
- Rugged aluminium construction
- 1/4 (F) NPT inlet

SAFETY SOLUTION

ERGONOMIC SOLUTION

KIT INCLUDES:

- TOPVAC vacuum gun
- Reusable collection bag
- 30 cm crevice tool
- Fibre bristle for use with crevice tool
- Upholstery/clothes tool
- Multi-purpose swivel brush
- Flat brush

Blow guns should never be used to clean off workers' clothes

The TOPVAC is an efficient and safe tool for cleaning off workers' clothes

Product No	Description
67.060	Complete kit
67.061	Replacement bag

TOPVAC
SAND-SUCKER VACUUM UNIT

APPLICATIONS

Ideal for cleaning sand and dirt from moulds, bins or barrels in foundries or manufacturing plants

SPECIFICATIONS

Working Pressure Range: 80 to 150 PSI
Air Consumption: 26 SCFM at 100 PSI
Vacuum: 6.9 in Hg at 125 PSI / 93 in H_2O
Noise Level: 91 dB at 100 PSI inlet

Product No	Description
67.080	Complete Unit

FEATURES AND BENEFITS

- Efficiently removes grit from blind holes and cavities
- Designed for heavy duty use
- 1-5/16 in O.D., 18 in long flexible metal extension stays in any desired position
- Reusable collection bag
- Rugged Aluminium construction
- 1/4 (F) NPT inlet

SAFETY SOLUTION
ERGONOMIC SOLUTION

GUNVAC
VACUUM GUN KIT

SPECIFICATIONS

Working Pressure Range: 60 to 125 PSI
Air Consumption: 12 SCFM at 125 PSI
Vacuum: 2.1 in Hg at 125 PSI / 29 in H_2O

KIT INCLUDES:

- GUNVAC vacuum gun
- Heavy-duty dust bag
- Three standard 1-1/4 in accessories:
  - 40 cm flex hose
  - 7.5 cm dust brush
  - 22.5 cm crevice tool

Product No	Description
67.050	Complete Unit
67.051	Replacement Bag

FEATURES AND BENEFITS

- Will quickly clean up metal chips, glass, cloth scraps, plastic trim, paper, rubber and other residues
- Total cleaning versatility without electricity or moving parts
- Simple, safe and efficient
- Lightweight and portable
- Powerful and quiet
- Handy compressed air-operated shop cleaning gun
- Unique Venturi Jet creates a powerful vortex which multiplies input air flow more than 12-fold
- Durable ABS construction
- Rear deflector extends dust bag life

SAFETY SOLUTION
ERGONOMIC SOLUTION

QUIKVAC
AIR VACUUM AND BLOW GUN KIT

SAFETY SOLUTION

ERGONOMIC SOLUTION

FEATURES AND BENEFITS

- The **TOPRING** QUIKVAC provides the operator with both a vacuum and a blow gun in a hand held, easy to use model
- A low cost solution to a wide variety of industrial applications
- Easy to use
- Compact and lightweight
- No maintenance
- No moving parts
- The trigger switch is used for ON/OFF
- 1/4 (F) NPT inlet

APPLICATIONS

Air vacuum for workshops

Blow gun for workbenches

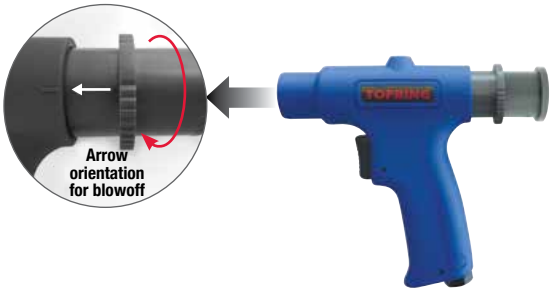
SPECIFICATIONS

Working Pressure Range: 90 PSI

Air Consumption: 2.8 SCFM at 90 PSI

Vacuum: 2.0 in Hg at 90 PSI / 27 in H_2O

QUIKVAC switches from vacuum to blow mode with a simple reverse of the air chamber



INCLUDED IN THE KIT:

- Vacuum / Blow gun / QUIKVAC
- Crevice tool
- Upholstery and clothes tool
- 2 extensions
- Concentrated air stream tool

Product No	Description	Weight (kg)
67.200	Complete system	2.9

DRUMVAC
VACUUM SYSTEM
FOR DRY OR WET MATERIALS

Drum not included

FEATURES AND BENEFITS

- Heavy duty industrial vacuum for dry materials or wet spills pick-up
- Powerful and quiet
- Easy to use
- Portable
- Vacuums chips directly into a 205 L drum
- Creates up to 30 % more vacuum than other shop vacuums
- 50 % quieter than electric vacuums
- Total cleaning versatility without electricity or moving parts
- Can be removed and easily placed onto another drum to keep different materials separate for recycling
- Can be used with any open head steel or plastic drum in good condition

APPLICATIONS

Used to clean up chips from fixtures, floors and work surfaces of CNC's, lathes, grinders, drills and other industrial equipment

Ideally suited for collecting a wide variety of dry materials such as:

- Sawdust
- Glass
- Grinding dust
- Seeds and grains
- Liquid spills
- Metal chips
- Ceramic dust
- Textile scraps
- Food particles

SPECIFICATIONS

Working Pressure Range: 80 to 120 PSI
Air Consumption: 30 SCFM at 80 PSI
Vacuum: 4.0 in Hg at 80 PSI / 54 in H_2O
Noise Level: 80 dB

Product No	Description
67.350	DRUMVAC system for 205 L
67.360	Replacement 5 micron air filter (3) for 67.350

DRUMVAC SYSTEM INCLUDES:

- Air pump
- Drum cover
- Bolt-locking ring
- 5 micron filter bag
- On/off valve with pressure gauge
- 1-1/2 in x 10' (3 m) vacuum hose
- Double bend Aluminium extension wand
- 47.5 cm Wand
- Skimmer
- Squeegee
- Crevice tool
- Round brush
- Drum dolly with Steel casters

WETVAC
VACUUM AND LIQUID TRANSFER SYSTEM FOR WET MATERIALS

Drum not included

FEATURES AND BENEFITS

- Transforms an ordinary 205 L drum into a liquid vacuum cleaner. A simple two-way air valve and 80 - 100 PSI air allows pumping to a sealed drum
- Quick and easy to use
- Safe - eliminates possibility of electric shocks often associated with motor-driven pumps.
- Eliminates double handling of toxic materials and emptying of vacuum container
- Easy to clean - the pump can be completely disassembled
- 50 % quieter than electric vacuums
- Both fills and empties a 205L drum in less than 2 minutes
- Easily picks up high-viscosity liquids
- Easily switches from vacuum mode, filling the container, to empty mode by turning the dial on top of the unit
- Safe in wet areas, no electricity, requires only compressed air
- Maintenance free operation - No moving parts or electricity required
- Instant ON/OFF control from air valve
- Constructed of heavy-duty Stainless Steel
- Automatic float valve to prevent overfilling
- Larger tank capacity than industrial shop vacuums
- Eliminates need for cloth and granular absorbents and their disposal problems

APPLICATIONS

Ideally suited for recovering a wide variety of wet materials such as: coolants, hydraulic oils, non-flammable liquids, sludge and wet chips, waste water

SPECIFICATIONS

Working Pressure Range: 80 to 100 PSI

Air Consumption: 28 SCFM at 80 PSI

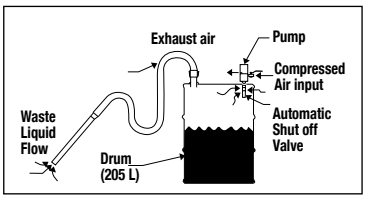
Vacuum: 8.5 in Hg at 80 PSI / 115 in H_2O

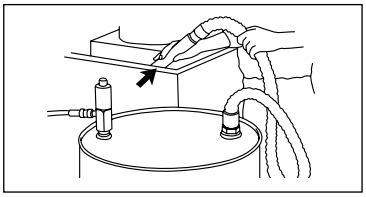
Noise Level: 78 dB

WETVAC SYSTEM INCLUDES:

- Pump unit
- 1-1/2 in x 10' (3 m) hose with tapered PVC couplings
- Tapered PVC drum adaptor
- Extension tubes
- Crevice tool
- Skimmer tool
- Squeegee

Product No	Description
67.400	Complete system





WARNING

Static electricity formed by friction in the vacuum unit can be a fire hazard if used to pick up flammable liquids. Do not use with plastic drum.

REPLACEMENT PARTS

Product No	Description
67.410	Vacuum/pump unit
67.415	10' (3 m) suction hose
67.420	Squeegee
67.425	19 in (47.5 cm) extension tube
67.430	2 in male drum adaptor
67.431	Female adaptor
67.435	Crevice tool
67.440	Round brush
67.445	Skimmer

HOPVAC
DRY MATERIAL TRANSFER SYSTEM

FEATURES AND BENEFITS

- Low cost method of transfering dry materials
- Operates at a small fraction of the cost for motor driven hopper loaders
- No maintenance
- Precise control of material flow into hopper
- Compressed air operation
- Dropped into a container or bag of pellets, this unit will load material into a machine hopper
- No moving parts

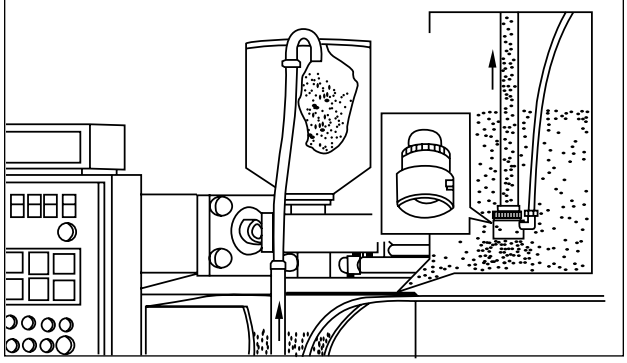
APPLICATIONS

Transfering plastic pellets up to the hopper of injection molding or extruding machines

SPECIFICATIONS

Working Pressure Range: 80 to 120 PSI
Air Consumption: 15 SCFM at 80 PSI
Vacuum: 3.5 in Hg at 80 PSI / 47 in H_2O
Noise Level: 72 dB
Transfer Rate: Up to 22.7 kg/min.

HOPPER LOADING



HOPVAC SYSTEM INCLUDES:

- Variable air flow amplifier
- 1-1/4 in x 3' (75 cm) aluminium feed tube
- 1-1/2 in x 10' (3 m) flexible hose
- Aluminium hopper feed hanger tube
- On/off ball valve

Product No	Description
67.370	Complete system

Clean and dry compressed air!

Compressed air is an essential power sources that is widely used throughout industry.

However, compressed air contains water, dirt, wear particles and degraded lubricating oil, which all mix together to form an unwanted condensate.

This condensate rapidly wears tools and pneumatic machinery, blocks valves and orifices and also corrodes piping.

This results in high maintenance costs and product spoilage which can bring your production process to an extremely expensive standstill.

TOPRING offers an extensive range of condensate management solutions:

- **S49** Refrigerated Air Dryers - **page 196**
- **S53** High Efficiency Filters - **page 278**
- **S54** Desiccant Air Dryers - **page 288**
- **S56** Water Separators - **page 300**
- **S57** Water/Oil Separators - **page 304**
- **S59** Automatic Drains - **page 320**

CONDENSATE

SOLUTION

Protect your equipment with clean and dry compressed air!

Series 68
COMPRESSED AIR PRODUCTIVITY TOOLS

COMPRESSED AIR PRODUCTIVITY TOOLS SELECTION GUIDE

Selecting the right compressed air productivity tool is a question of application: does the application require chip blow-off? Cleaning? Drying? Cooling? Fume removal? Determining the proper application will ensure maximum performance.

Most of the compressed air productivity tools meet or exceed OSHA safety standards and are designed to offer energy saving options.

TYPICAL APPLICATIONS	FLAT NOZZLES	AIR SAVER NOZZLES	AIR FLOW AMPLIFIERS		AIR KNIVES	COLD AIR GUNS
			AJUSTABLE	VARIABLE		
						
PAGE	438	439	440	441	443	445
CHIP BLOW-OFF	●	●	●	●	●	
CLEANING	●	●	●	●	●	
DRYING	●	●	●	●	●	●
COOLING	●	●	●	●	●	●
FUME AND VAPOUR REMOVAL			●	●		
PURGING TANKS				●		
MEETS OR EXCEEDS OSHA STANDARDS	Yes	Yes	Yes	Yes		
ENERGY SAVING	Yes	Yes	Yes		Yes	
HIGH PERFORMANCE	Yes	Yes	Yes	Yes	Yes	Yes

FLAT NOZZLES

SAFETY SOLUTION

FEATURES AND BENEFITS

- Ideal for drying, cleaning and cooling tasks in a wide variety of industries
- Provides a high blowing force at an air consumption lower than any other nozzle on the market
- Specially designed for air control applications requiring a concentrated flat pattern
- Can be used alone or connected to a manifold
- Meets OSHA and other Safety Agencies' noise and dead-end pressure requirements
- ABS model is resistant to most chemicals
- High temperature model 68.060 is resistant to extreme heat and acid, ideal for extremely hot environments such as foundries and bakeries

APPLICATIONS

Provides wide blow-off for stamping, drying and parts ejection

MATERIALS

68.050: ABS black

68.060: ULTEM 1000 grey

SPECIFICATIONS

Working Pressure Range: 60 to 145 PSI

Air Consumption: 15 SCFM

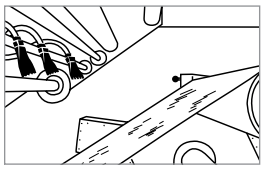
Noise Level: 79 dB

Blowing Force: 8 kg

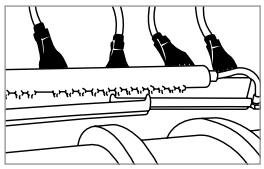
Working Temperature Range:
68.050: -20 °C to 60 °C
68.060: -20 °C to 200 °C

Thread: 1/4 (M) NPT

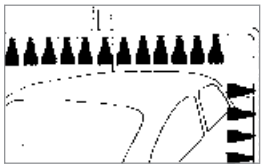
Anti-static treatment of folio and film



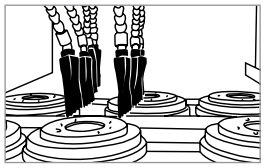
Drying of parts after being washed



Removal of dirt and dust before polishing

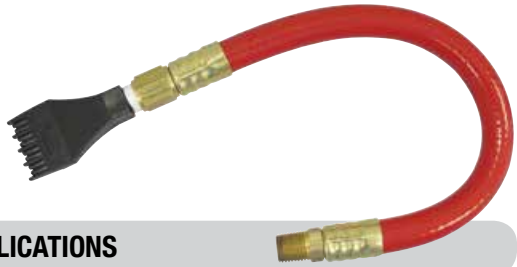


Cleaning of parts



Product No	Description
68.050	Standard nozzle
68.060	High temperature nozzle

FLAT NOZZLE
WITH POSITIONABLE FLEXIBLE HOSE



FEATURES AND BENEFITS

- Flexible extension can be adjusted to virtually any position
- Extension holds its shape even with high pressure compressed air
- Provides compressed air in hard-to-reach places
- Perfect for pinpointing high velocity air

APPLICATIONS

For cooling or drying, for chip blow-off

FLAT NOZZLE WITH HOSE

Product No	Description
68.112	12 in (30 cm), 1/4 NPT
68.117	18 in (45 cm), 1/4 NPT

POSITIONABLE EXTENSION HOSE

Product No	Description
68.120	3/8 I.D. x 12 in (30 cm) x 1/4 NPT
68.122	3/8 I.D. x 18 in (45 cm) x 1/4 NPT
68.118	3/8 I.D. x 24 in (60 cm) x 1/4 NPT
68.119	3/8 I.D. x 36 in (90 cm) x 1/4 NPT

AIR SAVER NOZZLES

SAFETY SOLUTION

The air saver nozzle releases a tiny amount of compressed air at near-sonic velocity through a fine, ring-shaped nozzle. As the high-speed "tube" of air emerges from the nozzle, it creates a strong vacuum along its sides, pulling a much larger volume of surrounding air into the stream.

APPLICATIONS

For parts ejection from molding machines and stamping presses, blowing off chips, trim scrap, parts cleaning before painting, cleaning, drying and cooling

MATERIALS

Aluminium: Ideal for most industrial applications

Stainless Steel: Ideal for food processing applications, corrosive environments and maximum durability

SPECIFICATIONS

Maximum Working Pressure: 250 PSI

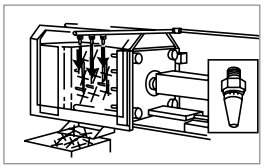
Working Temperature Range:
Aluminium: 0 °C to 160 °C
Stainless Steel: 0 °C to 925 °C

Thread: 1/8 (M) NPT

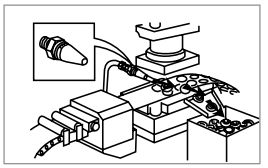
FEATURES AND BENEFITS

- Generates highest thrust with lowest possible air consumption
- Greatly reduces demand on the compressor
- Low initial and operating costs
- Saves up to 80 % air consumption over a 1/4 in open pipe
- Adjustable flow and thrust
- Reduces noise levels 8 decibels or more over open air jets

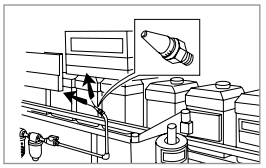
Molding

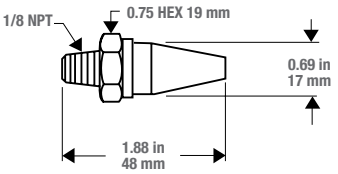


Stamping



Food processing





Product No	Description
68.100	Air saver nozzle (Aluminium)
68.105	Air saver nozzle (Stainless Steel)

AIR SAVER NOZZLE
WITH POSITIONABLE FLEXIBLE HOSE

APPLICATIONS

For cooling or drying, for chip blow-off

AIR SAVER NOZZLE WITH FLEXIBLE HOSE

Product No	Description
68.110	12 in (30 cm), 1/4 NPT
68.115	18 in (45 cm), 1/4 NPT

FEATURES AND BENEFITS

- Flexible extension can be adjusted to virtually any position
- Perfect for pinpointing high velocity air

POSITIONABLE EXTENSION HOSE

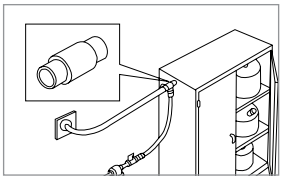
Product No	Description
68.120	3/8 I.D. x 12 in (30 cm) x 1/4 NPT
68.122	3/8 I.D. x 18 in (45 cm) x 1/4 NPT
68.118	3/8 I.D. x 24 in (60 cm) x 1/4 NPT
68.119	3/8 I.D. x 36 in (90 cm) x 1/4 NPT

AIR SAVER ADJUSTABLE HIGH-THRUST JETS

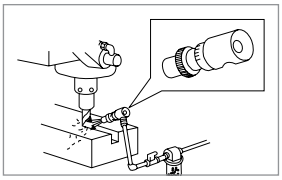
68.130

68.140

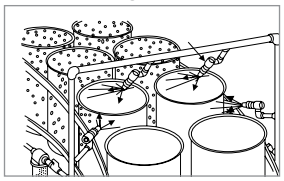
Fume removal



Metalworking



Food processing

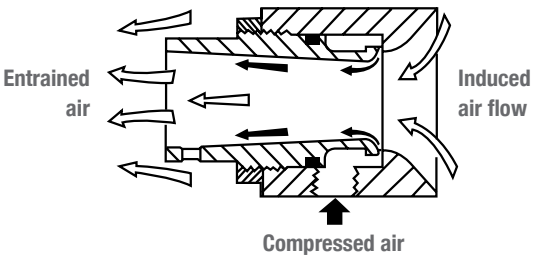


FEATURES AND BENEFITS

- **Air Saver Jets amplify compressed air flow 4 times, delivering high thrust with a fraction of the air used by open air lines**
- **Meet OSHA and other Safety Agencies' noise and dead-end pressure requirements**
- **No electricity or explosion hazards**
- **In-line model ideal for retrofitting open air line blowoff applications where system set-up does not change frequently. Can also air convey fine granular products with a 3/4 in diameter inlet for attachment of tubing**
- **Safe and quiet**
- **Easy-to-control flow/force**
- **Instant ON/OFF**
- **No maintenance, no moving parts**
- **Solid brass construction**
- **Adjustable flow**

VENTURI EFFECT

TOPRING AIR SAVER ADJUSTABLE HIGH-THRUST JETS use the VENTURI effect to produce amplified air flow from a small amount of compressed air.



A small amount of compressed air is forced through an internal ring at supersonic speeds. This circular air movement through the ring creates a vacuum in the centre, which in turn draws in air from the large rear opening. This ambient air drawn into the centre of the ring amplifies the compressed air being fed to the jet, providing a much higher flow and force.

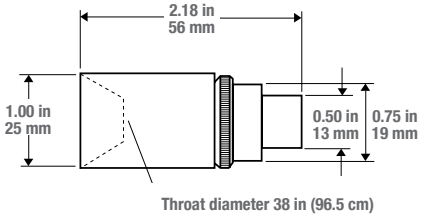
AIR SAVER ADJUSTABLE HIGH-THRUST JETS are the economical choice for parts ejection or chip removal.

APPLICATIONS

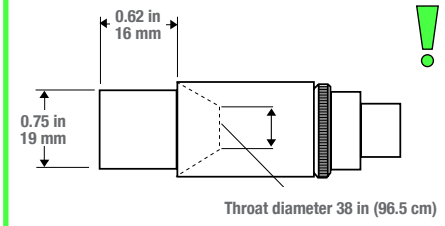
For parts ejection from molding machines and stamping presses
Blowing off chips, trim scrap
Air conveying dusts, powders, and fibers
Parts cleaning
Cooling
Fume removal

SPECIFICATIONS

Throat Diameter: 0.38 in
Amplification Ratio: 4:1
Output at 80 PSIG: 60 SCFM
Air consumption: 15 SCFM
Thread: 1/8 (F) NPT



68.130



68.140

Product No	Description
68.130	Adjustable High-thrust jet
68.140	Adjustable High-thrust-in-line jet

VARIABLE AIR FLOW AMPLIFIERS

SAFETY SOLUTION

Air flow amplifier uses the energy from a small volume of compressed air to produce a high velocity, high volume, low pressure output.

TOPRING air amplifiers amplify compressed air input up to 25 times, allowing increased air flow while drastically reducing compressed air consumption and noise levels.

FEATURES AND BENEFITS

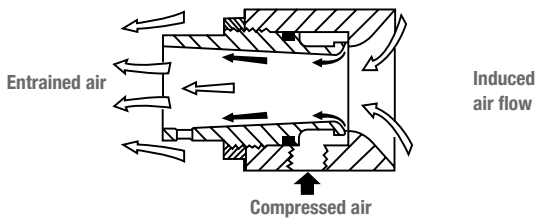
- Low cost way to move air, smoke, fumes and light materials
- Adjustable output without tools
- Quiet - meets OSHA noise requirements
- No moving parts ensuring maintenance-free operation
- No electricity or explosion hazard
- Both the vacuum and discharge ends can be ducted
- Compact and lightweight
- Instant ON/OFF
- Aluminium construction

AIR AMPLIFIER			SPECIFICATIONS				
Product No	Description	Port size (F) NPT	Vacuum	Setting	Amplification Ratio	Output @ 80 PSIG	Noise Level
68.150	1 1/4 in (32 mm) Air amplifier	1/4	1.10" Hg	15 SCFM	12:1	180 SCFM	72 dB
68.160	2 in (51 mm) Air amplifier	3/8	1.32" Hg	25 SCFM	20:1	500 SCFM	76 dB
68.165	2 1/2 in (64 mm) Air amplifier	3/8	1.43" Hg	45 SCFM	20:1	1125 SCFM	76 dB
68.170	4 in (102 mm) Air amplifier	1/2	1.54" Hg	30 SCFM	25:1	1800 SCFM	76 dB

AIR AMPLIFICATION:

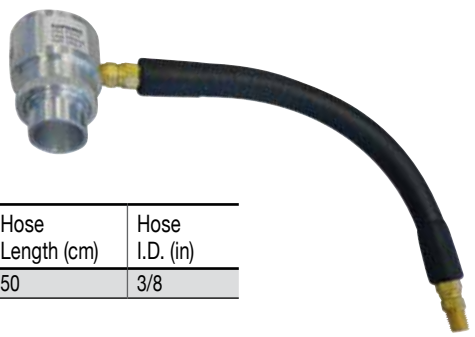
High performance with low noise

- Air amplifier releases a tiny amount of compressed air at high velocity through an adjustable internal ring-shaped nozzle.
- The high-speed "column" of air released through the front creates a strong vacuum behind itself, pulling additional surrounding air through the rear of the amplifier, while pushing the ambient air in front
- In ducted applications, air amplifiers deliver amplification ratios of 12-25:1
- In unducted applications, air amplifiers deliver amplification ratios of 36-75:1



REDUCER FOR IN-LINE APPLICATIONS	
Product No	Description
68.151	Reducer for 68.150
68.161	Reducer for 68.160

AIR AMPLIFIER WITH POSITIONABLE FLEXIBLE HOSE



Product No	Hose Length (cm)	Hose I.D. (in)
68.159	50	3/8

FEATURES AND BENEFITS

- 0.80 in throat diameter air amplifier (68.150)
- Flexible extension that can be adjusted to virtually any position
- Easy to position the air amplifier for various surfaces and applications
- 3/8 in I.D. hose
- 1/4 (M) NPT connection

VARIABLE
AIR FLOW AMPLIFIERS

APPLICATIONS

Air conveying of any material that can be moved in a rush of air: metal chips, sawdust, smoke, paper and cloth trim, grain, plastic pellets, dust, capsules, and powders

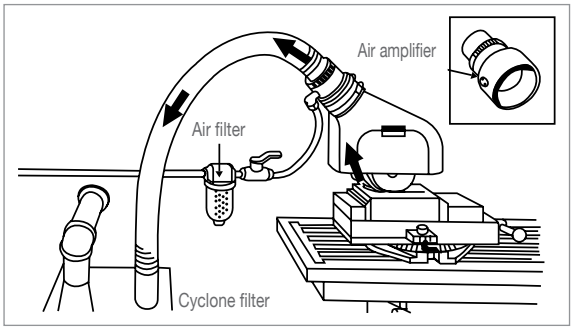
Ventilation and exhaust of smoke/fumes, replacing fans

Purging tanks

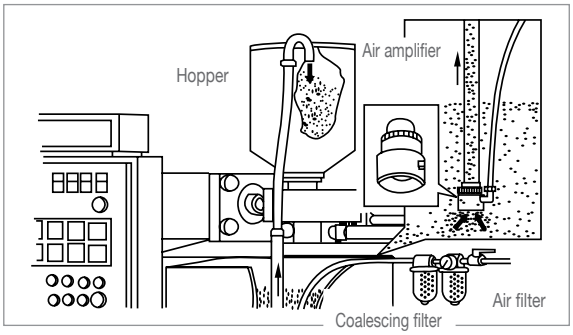
Cleaning/cooling of conveyed parts

Drying waterborne paint used for auto body refinishing

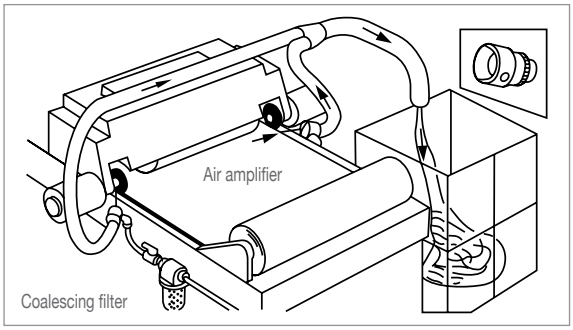
Metalworking - grinding



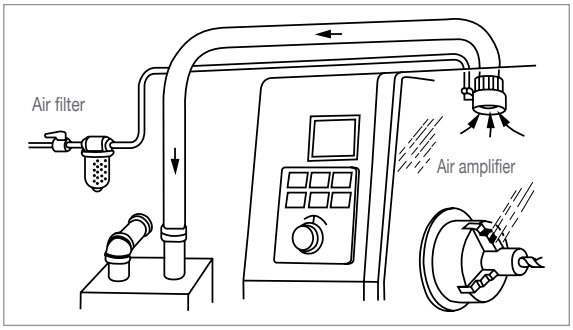
Plastic molding - hopper loading



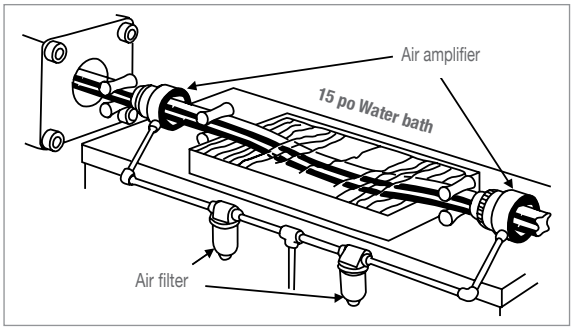
Textiles - scrap removal



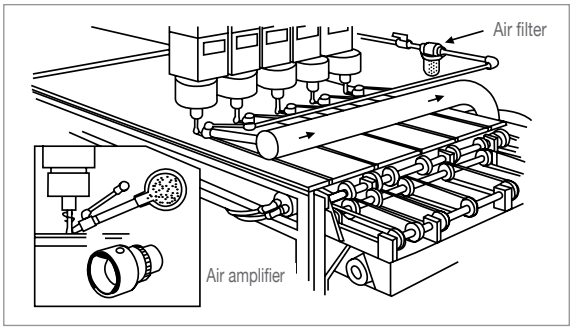
Metalworking - coolant mist removal



Extrusion - rubber molding cooling and drying



Woodworking - sawdust removal



AIR KNIVES

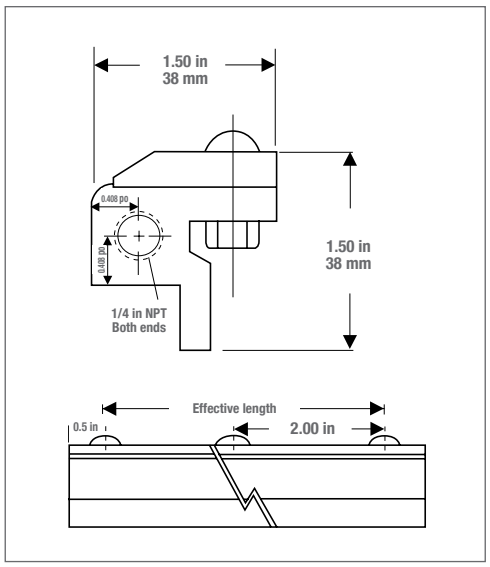
FEATURES AND BENEFITS

- Amplifies compressed air flow up to 25 times
- Provides wide-area coverage with a thin sheet of air
- Uniform curtain of air
- Low operating costs
- Quiet, up to 50 dBA noise reduction over open air tubes
- No maintenance, no moving parts
- No electricity or explosion hazard
- Compact, easy to install
- Instant ON/OFF
- Aluminium construction
- A 5 micron filter and pressure regulator are recommended for most applications

AIR AMPLIFICATION:

More performance with less noise

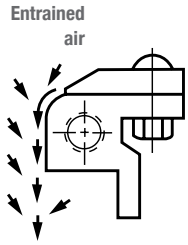
- The air knife releases a tiny amount of compressed air at high speed through a .003 in slot along its entire length
- This high-speed sheet of air entrains a large volume of surrounding air, effectively amplifying compressed air flow 25 times



COANDA EFFECT:

An AIR knife is a quiet, energy efficient device used for blowoff, cooling and drying.

Air knives use the COANDA effect to entrain surrounding air and amplify air flow. A small amount of compressed air put through an air knife pulls in large volumes of surrounding air to produce a high flow, high speed curtain of air.



Product No	Effective Length in	Effective Length cm	Amplification Ratio	Input at 80 PSIG	Output at 80 PSIG
68.200	6	15	25:1	24 SCFM	600 SCFM
68.210	12	30	25:1	48 SCFM	1200 SCFM
68.220	18	45	25:1	72 SCFM	1800 SCFM
68.230	24	60	25:1	96 SCFM	2400 SCFM
68.240	30	75	25:1	120 SCFM	3000 SCFM
68.250	36	90	25:1	144 SCFM	3600 SCFM

AIR KNIVES

APPLICATIONS

Removing water from plastic sheets or metal

Blowing off chips, debris, dirt

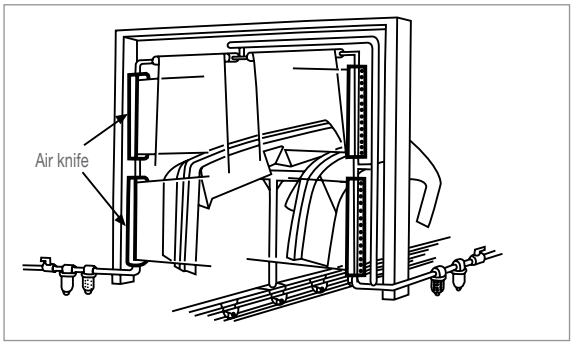
Parts cleaning before painting

Cooling extruded parts

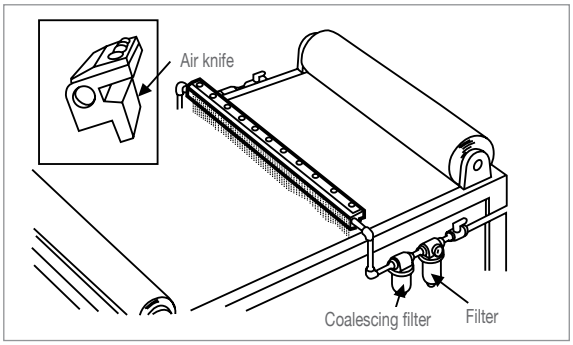
Cleaning/cooling of metal or plastic strips

Cleaning/cooling of parts on a conveyor

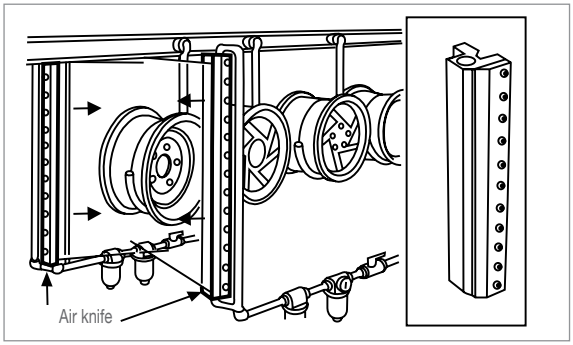
Drying and finishing



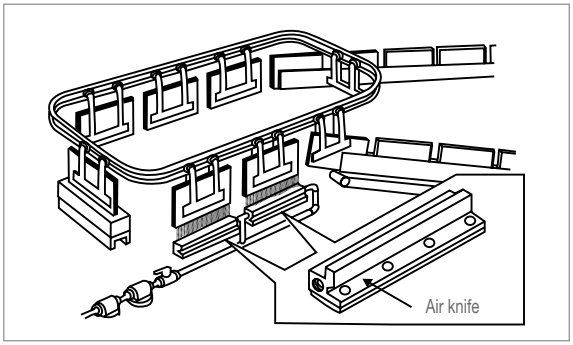
Textile



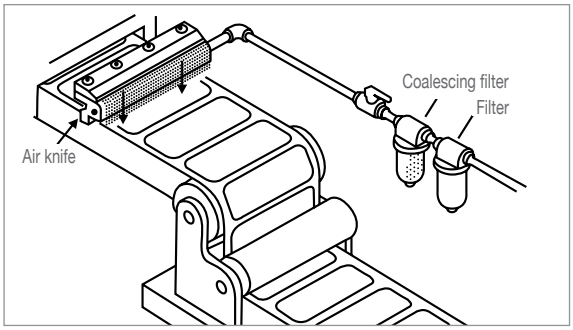
Powder-coating and curing



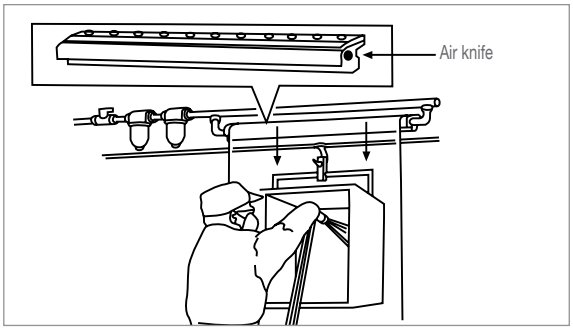
Printing and binding



Label printing



Painting



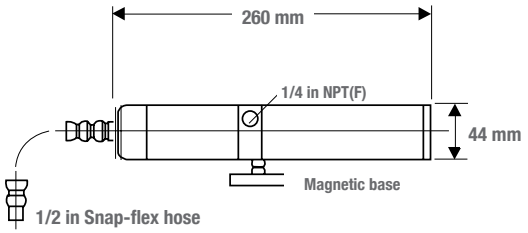
STAINLESS STEEL
COLD AIR GUN

FEATURES AND BENEFITS

- Provides a stream of cold air at 24 °C below supply air temperature
- Stainless steel air gun
- Magnetic base
- 20 cm Snap-flex hose

4 GENERATORS INCLUDED:

Yellow: 10 SCFM - 500 Btu/H
Red: 15 SCFM - 1100 Btu/H
Blue: 25 SCFM - 1800 Btu/H
Orange: 35 SCFM - 2500 Btu/H



Product No	Description
68.270	Standard cold air gun

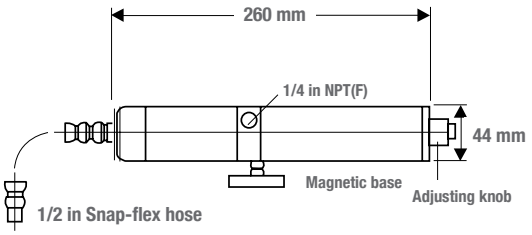
COLD AIR GUN

FEATURES AND BENEFITS

- Provides a stream of cold air at 24 °C below supply air temperature
- Adjustable air flow and temperature
- Magnetic base
- 20 cm in Snap-flex hose

4 GENERATORS INCLUDED:

Yellow: 10 SCFM - 500 Btu/H
Red: 15 SCFM - 1100 Btu/H
Blue: 25 SCFM - 1800 Btu/H
Orange: 35 SCFM - 2500 Btu/H



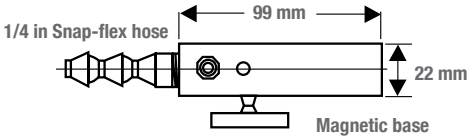
Product No	Description
68.272	Adjustable cold air gun

MINI COLD AIR GUN

FEATURES AND BENEFITS

- Provides a stream of cold air at 24 °C below supply air temperature
- Smaller size cold air gun for tight spaces
- 8 SCFM consumption
- Magnetic base
- 20 cm Snap-flex hose

Airline connecting tube included



Product No	Description
68.274	Mini cold air gun

COLD AIR GUNS

COLD AIR GUNS are an alternative to expensive mist cooling systems.

They provide a stream of cold air at 41 °C below supply air temperature without liquid coolants, freon, part contamination, electricity or moving parts.

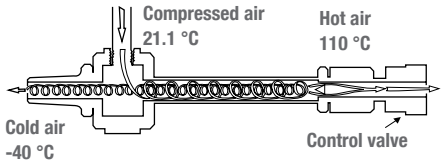
They will remove heat to extend tool life and increase productivity during machining operations when liquid coolants cannot be used.

FEATURES AND BENEFITS

- **Increase feeds, speeds and quality**
- **Eliminate liquid coolant cost, contamination and skin irritation**
- **Finish the job with a clean dry part**
- **Improve tool life, production rates, and finish tolerances**
- **Eliminate microcracking and burning**
- **Stainless steel construction**
- **Maintenance-free, no moving parts**
- **Integrated muffler for quiet efficient operation around workers**
- **Instant ON/OFF**
- **A 5 micron filter is recommended for most applications**

VORTEX EFFECT:

A COLD AIR GUN uses a VORTEX tube to cool compressed air. A small amount of compressed air is converted into two low pressure airstreams which exchange heat, producing cold air at one end of the tube and hot air at the other. A flexible hose is then used to direct the lower temperature air at the surface to be cooled.



APPLICATIONS

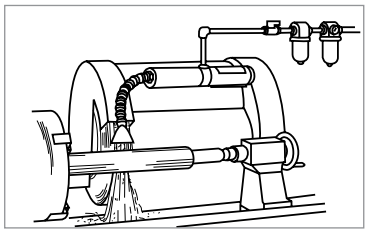
Air-cooled dry machining for metals, composites, plastic, rubber, wood

Perfect for tapping operations

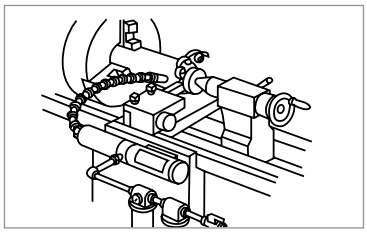
Ideal for grinding, milling and drilling

For cooling plastics, metals, hot melts, adhesives, solders and mold toolings

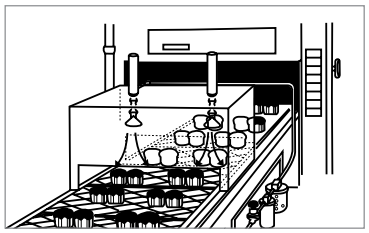
Metalworking - grinding



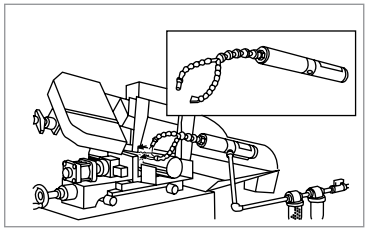
Plastic - machining



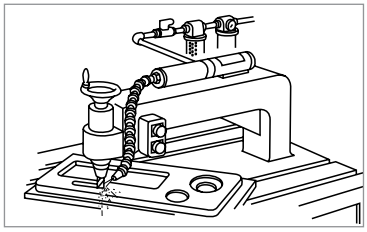
Food processing - product cooling



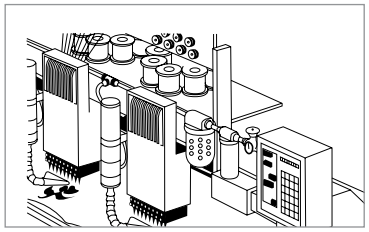
Metalworking - band sawing



Woodworking - routing



Textile - sewing/embroidering



Why the use of TOPRING's Safety Cleaning Unit is your best safety solution for cleaning?

66.200

Is it a good idea to use compressed air to blow dirt off clothing or work surfaces?
Although many people know using compressed air to clean debris or clothes can be hazardous, it is still used because of old habits and the easy availability of compressed air in many workplaces. However, cleaning objects, machinery, bench tops, clothing and other things with compressed air is dangerous. Injuries can be caused by the air jet and by particles made airborne (re-enter the air).

That is why **TOPRING** offers a cleaning unit that doesn't produce any compressed air; it is a vacuum, so no particles re-enter the air, making it a safe solution!

Is cleaning with compressed air allowed by law?
In many Canadian jurisdictions, cleaning with compressed air is not allowed by law. Alberta, Newfoundland, Prince Edward Island, Quebec, and Saskatchewan specifically mention that compressed air shall not be used to clean clothes, or in other situations cleaning a person, machinery, work benches, etc. Reference to cleaning may also be included with specific mention to it being prohibited when there is a risk to the worker being injured (federal regulations, Ontario, British Columbia, North West Territories, Nunavut, and the Yukon). In some cases, other legislation may apply. For example, cleaning with compressed air is prohibited in Manitoba and Ontario when working with asbestos.

Therefore, using TOPRING's Safety Cleaning Unit is a legitimate solution.

What are the hazards of using compressed air?
First, compressed air is extremely forceful. Depending on its pressure, compressed air can dislodge particles. These particles are a danger since they can enter your eyes or abrade skin.
The possible damage would depend on the size, weight, shape, composition, and speed of the particles. There have also been reports of hearing damage caused by the pressure of compressed air and by its sound.

Although the **TOPRING** Safety Cleaning Unit vacuums and does not release any compressed air, **TOPRING** recommends always using ocular protection and ear plugs in any given situation.

Second, compressed air itself is also a serious hazard. On rare occasions, some of the compressed air can enter the blood stream through a break in the skin or through a body opening. An air bubble in the blood stream is known medically as an embolism, a dangerous medical condition in which a blood vessel is blocked, in this case, by an air bubble. An embolism of an artery can cause coma, paralysis or death depending upon its size, duration and location. While air embolisms are usually associated with incorrect diving procedures, they are possible with compressed air due to high pressures. While this seems improbable, the consequences of even a small quantity of air or other gas in the blood can quickly be fatal. In addition, using air to clean forces the dirt and dust particles into the air, making these contaminants airborne and creating a respiratory hazard.

Unfortunately, horseplay has been a cause of some serious workplace accidents caused by individuals not aware of the hazards of compressed air, or proper work procedures.

This situation cannot occur with **TOPRING**'s Safety Cleaning Unit, due to the absence of compressed air and because of his vacuum fonction.

What should I use instead of compressed air for cleaning purposes?
Use wet sweeping techniques, sweeping compounds, or vacuum cleaners equipped with special filters or other devices to prevent dust from being re-circulated into the air just like **TOPRING**'s Safety Cleaning Unit.

Where compressed air is allowed for cleaning, how can I do it safely?
A "quiet" nozzle (i.e. one with low noise emission) should be selected. The nozzle pressure must remain below 10 psi (69 or 70 kPa) and personal protection equipment (PPE) must be worn to protect the worker's body, especially the eyes, against particles and dust under pressure.
Note: Air pressure is legislated by New Brunswick (69 kPa), Yukon (69 kPa/10 psi), and where permitted under federal (69 kPa/10 psi), British Columbia (70 kPa/10 psig), North West Territories, and Nunavut (68.9 kPa/10 P.S.I.) legislation.

Nova Scotia regulation states:
101. (2) Where compressed air is used to clean a surface or person, an employer shall ensure that the device that is used to deliver the air is
(a) commercially manufactured and approved in the manufacturer's specifications for the purpose of cleaning a surface or person with compressed air; or
(b) certified by an engineer as adequate for the purpose of cleaning a surface or person with compressed air.
Occupational Safety General Regulations N.S. Reg. 44/99 Section 101

Ontario does not specify a pressure limit but does state:
66. A compressed air or other compressed gas blowing device shall not be used for blowing dust or other substances,
(a) from clothing worn by a worker except where the device limits increase in pressure when the nozzle is blocked; or
(b) in such a manner as to endanger the safety of any worker.
Industrial Establishments R.R.O. 1990, Reg. 851

In addition, air guns should also be used with some local exhaust ventilation or facilities to control the generation of airborne particulates. When compressed air cleaning is unavoidable, hazards can be reduced by making adjustments to the air gun such as:

- chip guards or curtains that can deflect flying dust or debris,
- extension tubes that provide the worker a safer working distance, or
- air guns equipped with injection exhausts and particle collection bags.

Source : http://www.ccohs.ca/oshanswers/safety_haz/compressed_air.html#tphp

For technical specifications and informations about the Safety Cleaning Unit, see Series 66

Series 69
AIR TOOL AND COMPRESSOR OILS

SELECTION GUIDE

AIR TOOL OIL

DESCRIPTION	PAGE	POUR POINT	GRADE	AVAILABLE SIZES	PRODUCT NUMBER
Extreme Temperature Synthetic Oil	450	-55 °C	ISO 32	500 ml 1 L 4 L 18.9 L	**69.450** **69.401** **69.404** **69.400**
Biodegradable Synthetic Oil	451	-27 °C	ISO 32	500 ml 1 L 4 L	**69.750** **69.701** **69.704**
Mineral Oil	452	-32 °C	ISO 32	500 ml 1 L 4 L 18.9 L	**69.050** **69.101** **69.104** **69.100**
Mineral Food Grade Oil	453	-18 °C	ISO 32	20 L	**69.800**

COMPRESSOR OIL

DESCRIPTION	PAGE	POUR POINT	GRADE	AVAILABLE SIZES	SERVICE LIFE*	PRODUCT NUMBER
Synthetic Oil for Reciprocating Type Compressor (Piston)	454	-45 °C	ISO 150	1 L 4 L 18.9 L	6000 to 8000 hours	**69.601** **69.604** **69.620**
Mineral Oil for Reciprocating Type Compressor (Piston)	455	-18 °C	ISO 150	1 L 4 L 18.9 L	3000 to 4000 hours	**69.201** **69.204** **69.200**
Mineral Oil for Screw Type Compressor	455	-36 °C	ISO 46	18.9 L	3000 to 4000 hours	**69.300**

*** The period of use of the tool may vary depending on the temperature used**

POUR POINT

The pour point refers to the minimum temperature at which a lubricant continues to flow. Below the pour point, the oil tends to thicken and to cease to flow freely.

For a complete selection of lubricators, please consult Series 50, 51, 52 and 62

SYNTHETIC AIR TOOL OIL

FOR EXTREME TEMPERATURE

Correct lubrication is the most important factor in preventive maintenance.

The majority of tool failures can be traced to inadequate lubrication. Tools should be oiled daily through the air inlet, ideally through air line lubricators installed at air tool locations.

FEATURES AND BENEFITS

- **The synthetic air tool oil is especially formulated with polyalphaolefins to obtain the maximum results for all kinds of pneumatic tools**
- **Its very low pour point (-55 °C) helps lubricate and protect pneumatic tools subject to extreme temperatures**
- **Contains first quality additives to prevent rust and dissolve sludges and deposits which reduce the speed and power of pneumatic tools**
- **Daily use prolongs tool life**
- **Non-detergent**
- **Both 500ml and 1L bottles have convenient « Flip-up » spouts**

TECH TIP

A lubricator uses an average of 1 L of oil every 2 to 3 months.

Synthetic air tool oil may affect certain plastics used in lubricators; compatibility should be checked before using any synthetic air tool oil.

TOPRING recommends using lubricators with aluminum or zinc bowls with synthetic oil.

APPLICATIONS

All air tools, air valves, air cylinders and air motors requiring oil lubrication at extreme temperatures

SPECIFICATIONS

Pour Point: -55 °C

Grade: ISO 32

Product No	Size	Quantity Per Case
69.450	500 ml	12
69.401	1 L	12
69.404	4 L	4
69.400	18.9 L	--

Additional specifications & safety data sheets are available upon request

SYNTHETIC BIODEGRADABLE AIR TOOL OIL

FEATURES AND BENEFITS

- **Totally biodegradable for use in sensitive environments**
- **Provides superior lubrication and protection for pneumatic tools**
- **Prevents tool freeze-up in cold temperatures**
- **Extends tool life without harming the environment**
- **Rapidly degraded by micro-organisms present in soil and water**
- **Contains an active lubricating agent that increases lubricant adhesion to form a durable lubricant film inside tools**
- **Contains additives to prevent corrosion, oxidation and wear**
- **Absorbs water vapour present in compressed air to prevent condensation formation, even in cold temperatures**
- **Both 500ml and 1L bottles have convenient « Flip-up » spouts**

HOMOLOGATIONS

TOPRING Oil is classified as follows:
ISO 6743/4 – Hydraulic Oil Type HEES

TOPRING Oil grades meet the requirements (for appropriate viscosity grade) of:

ISO DIS 15380
VDMA 24568
Komatsu G3/G4
Rated WGK 1

APPLICATIONS

Tools used outside, to prevent environmental damage

Tools subjected to extreme temperatures and heavy-duty use

SPECIFICATIONS

Pour Point: -27 °C

Grade: ISO 32

Product No	Size	Quantity Per Case
69.750	500 ml	12
69.701	1 L	12
69.704	4 L	4

TECH TIP

A lubricator uses an average of 1 L of oil every 2 to 3 months.

Synthetic air tool oil may affect certain plastics used in lubricators; compatibility should be checked before using any synthetic air tool oil.

TOPRING recommends using lubricators with aluminum or zinc bowls with synthetic oil.

MINERAL AIR TOOL OIL
PREMIUM

FEATURES AND BENEFITS

- High performance mineral lubricant specially formulated to obtain maximum output from all types of impact wrenches, hammers, grinders, sanders and all other pneumatic tools and equipment
- Formulated with high quality additives to provide superior performance and wear protection to internal moving parts of rotating or piston actuated pneumatic tools
- Prevents rust formation and virtually eliminates the problems of tarnish and carbon build-up
- Non-detergent
- Both the 500 ml and 1 litre bottles have convenient « Flip-up » spouts (69.500)

TECH TIP

A lubricator uses an average of 1 litre of oil every 2 to 3 months.

It is recommended that a small amount of oil should be squeezed into the tool before storage.

APPLICATIONS

All air tools, air valves, air cylinders and air motors requiring oil lubrication

SPECIFICATIONS

Pour Point: -32 °C

Grade: ISO 32

Product No	Size	Quantity Per Case
69.050	500 ml	12
69.101	1 L	12
69.104	4 L	4
69.100	18.9 L	--

MINERAL FOOD GRADE AIR TOOL OIL

Hydraulic fluids are advanced food grade lubricants formulated to deliver long lasting protection.

Using the HT purity process, Petro-Canada produces a 99.9%, crystal clear base oil – among the purest in the world.

APPLICATIONS

This oil offers excellent performance in high pressure systems including applications operating at more than 1000 PSI

They may also be used to lubricate anti-friction bearings and general circulating systems

It can also be used in in-line oilers, in pneumatic systems commonly found in food packaging applications because they deliver clean, non varnishing performance even in extended service, and is essentially odorless

SPECIFICATIONS

Pour Point: -18 °C

Grade: ISO 32 and SAE 10

FEATURES AND BENEFITS

- **Outstanding resistance to oxidative breakdown even at high temperatures and in the presence of water and acidic contamination**
- **Helps keep systems free of sludge and varnish to ensure smooth and reliable operation of hydraulic valves and actuators**
- **Prolongs service life of fluids and limits downtime in harsh environments**
- **Protects equipment operating at high production rates for extended periods in tough conditions**

Canadian Food Inspection Agency

NSF REGISTRED H1

HOMOLOGATIONS

- All grades FZG pass over level 12
- Acceptable for use in food processing facilities
- H1 registered by NSF
- All fluid components comply with FDA 21CFR 178.3570 “Lubricants with incidental food contact”
- Acceptable for use in food processing facilities in Canada.
- Certified by Star K for use in equipment for the preparation of Kosher food
- Maintains security on the allergen level

Product No	Size
69.800	20 L

SYNTHETIC OIL FOR RECIPROCATING TYPE COMPRESSOR (PISTON)

FEATURES AND BENEFITS

- Reduces wear on the compressor by improving lubrication and lowering operating temperatures
- Synthetic formulation prolongs lubricant life and service intervals by up to a factor of two
- Lowers compressor operating temperature by up to 12 °C
- Provides maximum lubrication and protection to crankcase and cylinders of reciprocating type compressor motors
- Includes additives specially selected to provide superior protection against carbon build-up and viscosity break-down
- Excellent anti-corrosion and anti-foam properties
- PAO type base, compatible with most mineral oils
- Both 500ml and 1L bottles have convenient « Flip-up » spouts

SPECIFICATIONS

Pour Point: -45 °C

Grade: ISO 150

Service life: 6000 to 8000 hours depending on the temperature used

Product No	Size	Quantity Per Case
69.601	1 L	12
69.604	4 L	4
69.620	18.9 L	--

TECH TIP

Compatibility should be checked carefully before using any synthetic compressor oil. If synthetic oil has been used in the past, compatibility should be checked or the system completely flushed before changing to another oil type, in order to avoid potential compressor damage.

PREMIUM MINERAL OIL FOR RECIPROCATING COMPRESSOR

FEATURES AND BENEFITS

- High quality, non-detergent oil
- Extends compressor life
- Specially formulated high performance blend provides maximum lubrication and protection to crankcase and cylinders of reciprocating type compressor motors as well as various other types of compressors
- A blend of high-quality, mineral-based oil and additives specially selected to provide superior protection against carbon build-up and viscosity break-down
- Excellent anti-corrosion and anti-foam properties
- Both 500ml and 1L bottles have convenient « Flip-up » spouts

RECIPROCATING COMPRESSOR (PISTON)

SPECIFICATIONS

Pour Point: -18 °C

Grade: ISO 150

Period of use: 3000 to 4000 hours depending on the temperature used

Product No	Size	Quantity Per Case
69.201	1 L	12
69.204	4 L	4
69.200	18.9 L	--

PREMIUM MINERAL OIL FOR SCREW COMPRESSOR

FEATURES AND BENEFITS

- High quality oil
- Extends compressor life
- All-season lubricant
- Contains an anti-foaming additive ensuring a fast air evacuation

SCREW COMPRESSOR

SPECIFICATIONS

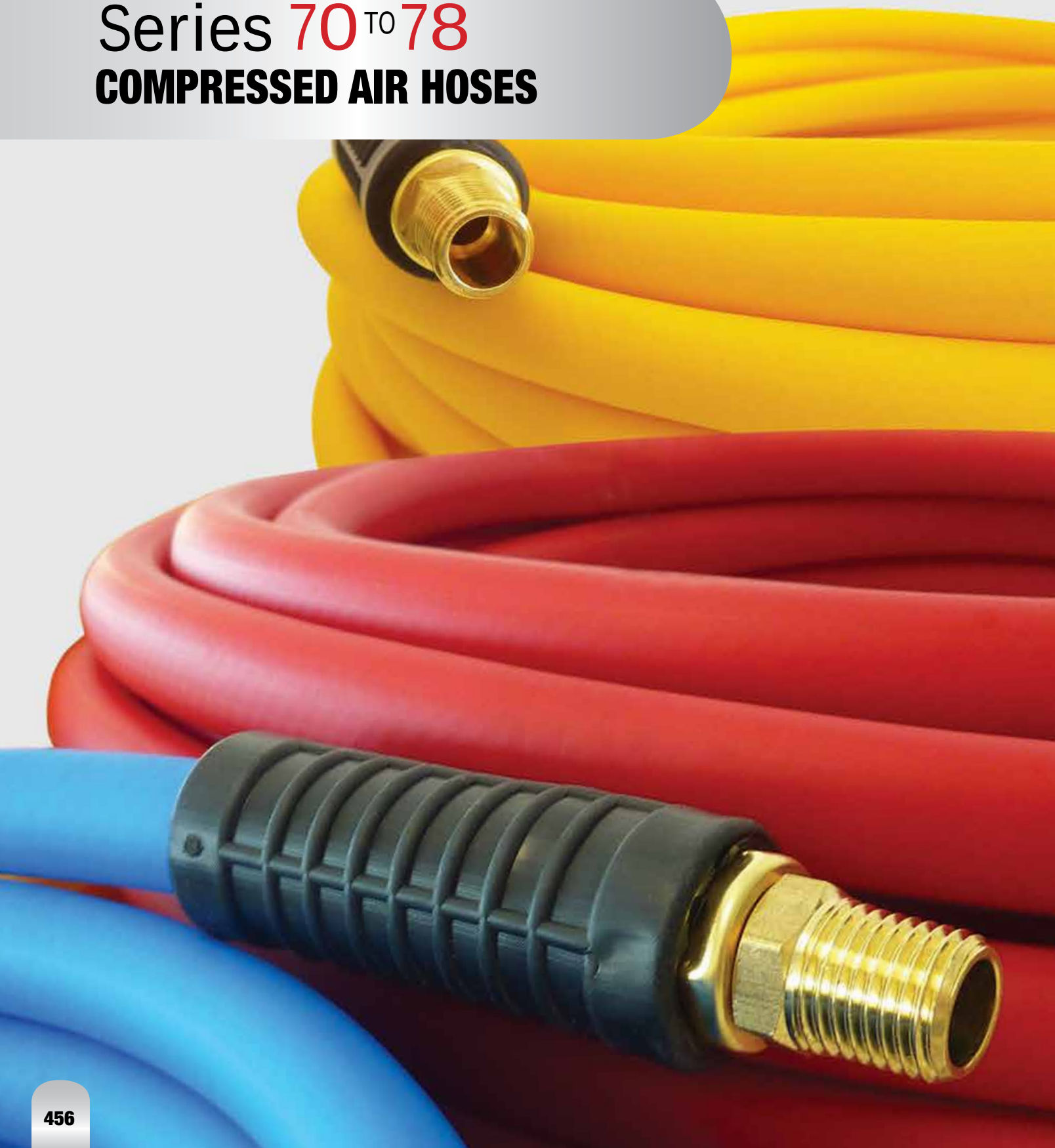
Pour Point: -36 °C

Grade: ISO 46

Period of use: 3000 to 4000 hours depending on the temperature used

Product No	Size
69.300	18.9 L

Series 70 TO 78
COMPRESSED AIR HOSES



SELECTING THE RIGHT AIR HOSE

Selecting the right air hose is a question of several criteria, including the environment in which the hose will be used, the conditions in that environment and the way in which the hose is used. If these things are not taken into account and price is the main criteria, the chosen hose may not perform up to expectations.

WHAT HAPPENS TO HOSES ?

In addition to ergonomic problems caused by weight and lack of flexibility, use of an improper hose for the environment and conditions can lead to rapid deterioration.

Some of the things that happen to hoses are:

- Cracking
- Breaking
- Failure at the fitting
- Swelling
- Ageing
- Absorbing dirt
- Stiffening in cold conditions
- Softening due to heat

It reduces hose life and can lead to failure, which can often be dangerous.

WHAT TYPE OF ENVIRONMENT?

The environment in which the hose will be used is a critical element in choosing the right hose. The ideal hose for an industrial shop floor will not necessarily work well in an automotive garage.

The nailing and stapling industry has special needs, as does the construction industry, and anywhere where paint and/or varnished are applied will require another type of hose altogether. Use of the improper hose for these environments will reduce hose life and increase the probability of hose failure and/or worker injuries.

The conditions in that environment will also affect hose life. Clean and dry floor is usually the ideal, but is rarely the case. Hoses are subjected to water, dirt, greases and oils, chemical products and paints and solvents. Heat and cold also affect hose performance, and outdoor use of a hose will cause certain types to age very quickly. Hose choice will again be affected by the presence of any of these conditions.

HOW WILL THE HOSE BE USED?

How the hose will be used will also affect hose choice. A hose that spends its life on a shop floor, being used in a stationary position, will not have the same attributes as one that is used on a construction site where workers often work at arm's length and over their heads. A hose that must support the weight of a tool does not have the same characteristics.

As one designed to be used with a tool suspended from a balancer. A hose that is stored in an auto rewind reel will not have the same requirements as one that is rolled up by hand.

All of these aspects of hose use will have an impact on ergonomics. Choice of the right hose will limit worker injuries and increase productivity.

HOSE SELECTION GUIDE

TO ENSURE MAXIMUM PERFORMANCE AND SERVICE:

- Select the right hose type for the job, based on the environment, conditions and the way in which the hose is to be used
- Choose hose size based on tool consumption and length (Refer to the “Hose size per length and flow (Tool Type)” Selection Guide page 460)
- Keep the hose as short as possible for the application
- Use a hose reel, where possible, to keep the hose out of harm’s way

	SERIES 71 MAXPRO	SERIES 71 AIRFLEX® Premium	SERIES 75 SUPERFLEX®	SERIES 77 TOPFLEX®
	RUBBER			
Material	NR / Neoprene	EPDM	Nitrile	Synthetic
Color	Red	Red	Red	Black
Flexibility +20 °C	✔✔✔	✔✔✔	✔✔✔	✔✔✔
Cold Temperature Performance -20 °C	❄❄	❄❄❄	❄❄	❄❄
Oil Resistance (Cover)	♦♦	♦♦	♦♦♦♦	♦♦♦♦
Toughness	✚✚✚	✚✚✚✚	✚✚✚✚	✚✚✚✚✚
Maximum Working Pressure	300 PSI	250 PSI	250 PSI	300 PSI
Sizes Available	3/8	1/4 - 3/8 - 1/2	1/4 - 5/16 - 3/8 1/2 - 3/4 - 1	1/4 - 3/8 - 1/2
Main Characteristics	• Economical • Abrasion resistant	Abrasion resistant	• Lightweight • Oil resistance • Non-conductive 1000 VDC	• Lightweight • Good resistance to oil • Spark resistance • « Lock-on » fittings
Fluid	Air, water	Air, water	Air, water, petroleum oils, lubricating oils	Air, water, petroleum-base hydraulic oils, glycol
Applications	• General industrial • Construction • Agriculture	• General industrial • Construction • Agriculture	• General industrial • Automotive repair • Shops	• General industrial • Automotive repair • Shops
Working Temperature	-40 °C to 82 °C	-40 °C to 100 °C	-40 °C to 100 °C	-40 °C to 100 °C

TECH TIP

A 3/8 I.D. Hose offers 150% more flow than a 1/4 I.D. Hose.

SERIES 70 FLEXhybrid®	SERIES 70 ECOFLEX®	SERIES 72 THERMOFLEX®	SERIES 72 EASYflex® PREMIUM	SERIES 73 NYFLEX®	SERIES 74 FLEXAIR®	SERIES 78 TOPMAX®
TECHNOPOLYMER				PVC	POLYURETHANE	
Red	Orange	Blue	Red / Blue / Yellow	Clear	Ester Clear Orange	Ester Yellow
✔✔✔✔	✔✔✔✔	✔✔✔	✔✔✔✔✔	✔✔✔	✔✔✔✔	✔✔✔✔
❄	❄❄❄❄	❄❄❄	❄❄❄❄❄	❄	❄❄❄❄	❄❄❄❄
♦♦♦♦	♦♦	♦♦♦	♦♦	♦♦	♦♦♦	♦♦♦
✚✚	✚✚	✚✚✚	✚✚✚	✚✚✚	✚✚✚✚	✚✚✚✚
300 PSI	300 PSI	Up to 300 PSI	300 PSI	Up to 250 PSI	200 PSI	250 PSI
1/4 - 3/8	1/4 - 3/8	1/4 - 3/8 - 1/2 3/4	1/4 - 3/8 - 1/2	1/4-3/8-1/2-5/8 3/4-1-1-1/4-1-1/2	1/4 - 3/8	1/4
• Economical • Extremely flexible • Lightweight	• Flexible at low temperature • Easy to handle • Economical • RoHS	• Excellent abrasion resistant • Lightweight	• The most flexible at low temperature • Extremely easy to handle • Lightweight • RoHS	• Crystal clear • NSF certified material • Lightweight	• Very flexible & lightweight • Excellent resistance to abrasion • Reusable swivel fittings	• Very flexible & lightweight • Excellent resistance to abrasion • Reusable swivel fittings
Air	Air, water and mild water soluble chemicals	Air, water and mild water soluble chemicals	Air, water	Air	Air	Air
• Ideal for in-plant applications • Excellent for pneumatic tools	• Construction • General industrial	• In-plant and outdoor applications • Excellent for pneumatic tools • Excellent for paint spray systems	• Outdoor usage in extreme cold • Construction • General industrial	Air and water lines	• Indoor and outdoor applications • Construction • General industrial	• Indoor and outdoor applications • Construction
-10 °C to 60 °C	-40 °C to 65 °C	-26 °C to 65 °C	-54 °C to 65 °C	-5 °C to 65 °C	-40 °C to 60 °C	-40 °C to 74 °C

SELECTION GUIDE • MINIMUM AIR HOSE SIZE PER LENGTH AND FLOW






TOOL TYPE	FLOW SCFM	HOSE LENGTH					
		25'	35'	50'	75'	100'	150'
NAILERS & STAPLERS							
18 gauge nailer/stapler	0.02 SCF/cycle	1/4	1/4	1/4	1/4	1/4	1/4
22-18 gauge stapler	0.03 SCF/cycle	1/4	1/4	1/4	1/4	1/4	1/4
Finishing nailer	0.03 SCF/cycle	1/4	1/4	1/4	1/4	1/4	1/4
Roofing nailer	0.05 SCF/cycle	1/4	1/4	1/4	1/4	1/4	1/4
Framing nailer	0.09 SCF/cycle	1/4	1/4	1/4	1/4	1/4	1/4
IMPACT TOOLS							
Miniature 1/4" ratchet	12.5	3/8	3/8	3/8	1/2	1/2	1/2
1/4" impact gun	14.0	3/8	3/8	3/8	1/2	1/2	1/2
3/8" ratchet	19.2	3/8	1/2	1/2	1/2	1/2	3/4
Zip gun	21.9	1/2	1/2	1/2	1/2	3/4	3/4
1/2" impact gun	28.6	1/2	1/2	1/2	3/4	3/4	3/4
3/4" impact gun	34.7	1/2	1/2	3/4	3/4	3/4	3/4
1" impact gun	87.5	3/4	3/4	3/4	1	1	1
POLISHING TOOLS							
Orbital polisher	16.6	3/8	3/8	1/2	1/2	1/2	1/2
Oscillating sander	23.0	1/2	1/2	1/2	1/2	3/4	3/4
SANDERS							
Sander	9.6	5/16	5/16	3/8	3/8	3/8	1/2
4-1/2" angle grinder	18.4	3/8	1/2	1/2	1/2	1/2	3/4
10mm belt sander	18.9	3/8	1/2	1/2	1/2	1/2	3/4
7" angle sander	29.6	1/2	1/2	1/2	3/4	3/4	3/4
DRILLS							
3/8" air drill	17.3	3/8	1/2	1/2	1/2	1/2	1/2
3/8" reversible air drill	23.8	1/2	1/2	1/2	1/2	3/4	3/4
1/2" reversible air drill	26.4	1/2	1/2	1/2	3/4	3/4	3/4
OTHER TOOLS							
Riveter	0.08 SCF/cycle	1/4	1/4	1/4	1/4	1/4	1/4
Grease gun	0.8 SCF/cycle	1/4	1/4	1/4	1/4	1/4	1/4
Caulking gun	0.1	1/4	1/4	1/4	1/4	1/4	1/4
HVLP paint gun	9.5	5/16	5/16	3/8	3/8	3/8	1/2
Screw driver	9.6	5/16	5/16	3/8	3/8	3/8	1/2
Gravity fed sand blaster	12.0	3/8	3/8	3/8	1/2	1/2	1/2

TECH TIP

To choose the proper air hose internal diameter, it is important to know the consumption of the tool used (flow SCFM).

Use of a smaller than recommended hose size will result in a serious reduction of tool performance.

NOTE:
- Continuous consumption at 100 PSIG
- Average consumption (actual consumption may vary)
- Data for straight PVC, rubber or polyurethane air hose new and exempt of contaminants (water, rust, dust)
- Information based on 5 PSIG pressure drop

Hose I.D.	SCFM available at 100 PSI					
	25'	35'	50'	75'	100'	150'
1/4	≤ 7	≤ 6	≤ 5	≤ 4	≤ 3	≤ 3
5/16	≤ 13	≤ 10	≤ 9	≤ 7	≤ 6	≤ 5
3/8	≤ 20	≤ 17	≤ 14	≤ 12	≤ 10	≤ 8
1/2	≤ 43	≤ 36	≤ 30	≤ 25	≤ 22	≤ 17
3/4	≤ 125	≤ 105	≤ 88	≤ 72	≤ 62	≤ 50
1	≤ 265	≤ 224	≤ 188	≤ 153	≤ 133	≤ 108

FLEXhybrid® FLEXIBLE TECHNOPOLYMER AIR HOSE

RED

300 PSI

TEMP °C +60/-10

FEATURES AND BENEFITS

- Engineered hybrid polymer combining best features from PVC and rubber
- Superior flexibility
- Lightweight
- Economical
- Good resistance to oils, heat, ozone and abrasion
- Easy to unroll and rewind

APPLICATIONS

General industrial, automotive, repair shops

MATERIALS

Cover: Synthetic polymer
Reinforcement: High tensile polyester yarns
Tube: Synthetic polymer
Fittings: Brass

SPECIFICATIONS

Maximum Working Pressure: 300 PSI
Working Temperature Range: -10 °C to 60 °C

Flexhybrid air hoses are offered with many types of hose reel: TOPREEL, FLEXREEL, MAXREEL and ROLAIR.
For more details, see Series 79.

WARNING

Prevent dangerous hose whips adding a HOSEGUARD safety valve on the air hose.

For more details see Series 58.

HOSE ASSEMBLIES WITH FITTINGS

Hose length **Product No**		Hose I.D. in	Fittings (M) NPT
25 ft	50 ft		
70.115	**70.119**	1/4	1/4
70.316	**70.318**	3/8	1/4
70.415	**70.419**	1/2	3/8

ECOFLEX® FLEXIBLE TECHNOPOLYMER AIR HOSE

ORANGE

COMPLIANT RoHS Restrictions of Hazardous Substances

300 PSI

TEMP °C +65/-40

FEATURES AND BENEFITS

- High quality technopolymer air hose with great flexibility
- 35% lighter than rubber air hoses
- Non-marking outer cover
- Pin pricked outer cover prevents bursting
- Resistant to oils and abrasion
- Easily re-coiled / No memory
- Product meets RoHS standards
- Rubber guard at both ends to extend the life of the air hose

Ecoflex air hoses are offered on MAXREEL hose reels.
For more details, see Series 79.

APPLICATIONS

Construction, general industrial

MATERIALS

Cover: Technopolymer
Reinforcement: High tensile polyester yarns
Guard: Rubber
Fittings: Brass

SPECIFICATIONS

Maximum Working Pressure: 300 PSI
Working Temperature Range: -40 °C to 65 °C

AIR HOSE WITH FITTINGS

Product No	Approx. length ft	Hose I.D. in	Fittings (M) NPT
70.136	25	1/4	1/4
70.132	35	1/4	1/4
70.138	50	1/4	1/4
70.140	100	1/4	1/4
70.332	35	3/8	1/4
70.336	25	3/8	1/4
70.338	50	3/8	1/4
70.340	100	3/8	1/4

HOSE ASSEMBLIES WITH 1/4 INDUSTRIAL COUPLER & PLUG

Product No	Approx. length ft	Hose I.D. in	Fittings (M) NPT
70.137	25	1/4	1/4
70.139	50	1/4	1/4
70.141	100	1/4	1/4
70.337	25	3/8	1/4
70.339	50	3/8	1/4
70.341	100	3/8	1/4

MAXPRO®
RUBBER AIR HOSE
RED

300 PSI

TEMP °C +82/-40

FEATURES AND BENEFITS

- Complies with RMA's Class C designation for medium oil resistance
- Heavy duty for professional use
- High tensile polyester yarns reinforcement reduce elongation under pressure
- Ozone and abrasion resistant
- PVC guard bend restrictor at both ends to extend the life of the air hose
- Good flexibility
- Economical

APPLICATIONS

General industrial and automotive repair shops

MATERIALS

Cover: Rubber
Reinforcement: High tensile polyester yarns
Tube: High strength rubber
Guard: PVC
Fittings: Brass

SPECIFICATIONS

Maximum Working Pressure: 300 PSI
Working Temperature Range: -40 °C to 82 °C

WARNING

Prevent dangerous hose whips by adding a HOSEGUARD safety valve on the air hose.

For more details see Series 58.

HOSE ASSEMBLIES WITH FITTINGS

Product No	Approx. length ft	Hose I.D. in	Fittings (M) NPT
71.375	25	3/8	1/4
71.379	50	3/8	1/4

AIRFLEX® Premium
RUBBER AIR HOSE
RED

250 PSI

TEMP °C +100/-40

FEATURES AND BENEFITS

- Quality general purpose rubber air hose
- Cover with medium oil resistance (RMA-Class C)
- Tube resistant to oil mist contained in the compressed air
- Excellent abrasion resistance
- Good resistance to cold, heat and ozone
- Vinyl guard bend restrictors on 3/8 in hose assemblies (increase the life of air hose)
- Very flexible
- Long lasting
- Compatible with water

Airflex air hoses are offered with many types of hose reels: Steelpro, TOPREEL HD and TOPREEL. For more details, see Series 79.

APPLICATIONS

Excellent air supply line for pneumatic tools

General industrial, construction, agriculture

MATERIALS

Cover: EPDM

Reinforcement: Spiral polyester cords

Tube: EPDM

Guard: Vinyl

Fittings: Brass

SPECIFICATIONS

Maximum Working Pressure: 250 PSI

Working Temperature Range: -40 °C to 100 °C

HOSE ASSEMBLIES WITH FITTINGS

Hose length **Product No**					Hose I.D. in	Fittings (M) NPT
15 ft	25 ft	35 ft	50 ft	100 ft		
71.111	**71.114**	**71.116**	**71.118**	**71.150**	1/4	1/4
71.311•	**71.314•**	**71.316•**	**71.318•**	**71.350•**	3/8	3/8
71.312•	**71.315•**	**71.317•**	**71.319•**	**71.355•**	3/8	1/4
71.411	**71.414**	**71.416**	**71.418**	**71.450**	1/2	1/2
71.412	**71.415**	**71.417**	**71.419**	**71.453**	1/2	3/8

• With vinyl guard

WARNING

Prevent dangerous hose whips adding a HOSEGUARD safety valve on the air hose.

For more details see Series 58.

REELS

Product No	Approx. length ft	Hose I.D. in	Hose O.D. in	Weight kg/100 ft
71.113	800	1/4	0.508	4.5
71.313	700	3/8	0.656	6.3
71.410	500	1/2	0.844	10.0

THERMOFLEX®
TECHNOPOLYMER AIR HOSE
BLUE

UP TO 300 PSI

TEMP °C +65/-26

FEATURES AND BENEFITS

- High quality flexible PVC compound air hose
- Ideal for applications in contact with paints and solvents
- Lightweight and flexible for easy handling
- Easily re-coiled after use, no memory
- Good flexibility in cold temperatures (alternative to rubber hose)
- Excellent abrasion resistance
- Non-marking pin pricked cover that allows venting of air to prevent ballooning and eventual bursting
- Vinyl guard bend restrictors on 1/4 in hose assemblies
- U.V. and weather resistant
- Chemical resistance
- Complies with RMA's Class B designation for medium/high oil resistance
- High tensile strength polyester yarns reduce elongation under pressure

Thermoflex air hoses are offered on TOPREEL hose reels. For more details, see Series 79.

APPLICATIONS

Ideal for in-plant

Excellent air supply line for pneumatic tools and paint spray systems

MATERIALS

Cover: PVC compound

Reinforcement: High tensile strength Polyester yarns

Tube: PVC compound

Fittings: Brass

SPECIFICATIONS

Maximum Working Pressure: 300 PSI • 3/4: 250 PSI

Working Temperature Range: -26 °C to 65 °C

HOSE ASSEMBLIES WITH FITTINGS

Hose length **Product No**				Hose I.D.in	Fittings (M) NPT
25 ft	35 ft	50 ft	100 ft		
72.114•	**72.116•**	**72.118•**	**72.150•**	1/4	1/4
72.314	**72.316**	**72.318**	**72.350**	3/8	3/8
72.315	**72.317**	**72.319**	**72.355**	3/8	1/4
72.414	**72.416**	**72.418**	**72.450**	1/2	1/2
72.415	**72.417**	**72.419**	**72.455**	1/2	3/8
72.520	--	**72.560**	**72.580**	3/4	3/4

• With vinyl guard

REELS

Product No	Length ft	Hose I.D. in	Hose O.D. in	Weight kg/100 ft
72.100	500	1/4	0.475	3.2
72.310	500	3/8	0.600	4.3
72.410	500	1/2	0.750	6.3
72.610	300	3/4	1.125	13.6

WARNING

Prevent dangerous hose whips adding a HOSEGUARD safety valve on the air hose.

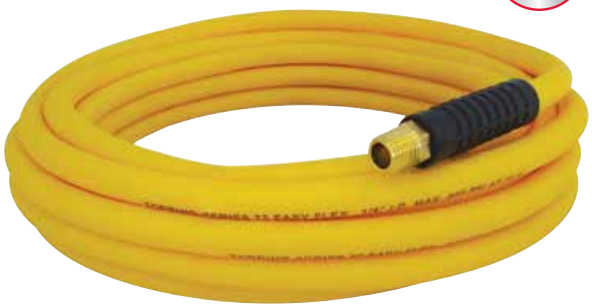
For more details see Series 58.

EASYflex® *PREMIUM*
ULTRA FLEXIBLE TECHNOPOLYMER AIR HOSE
YELLOW•RED•BLUE

RoHS COMPLIANT Restrictions of Hazardous Substances

300 PSI

TEMP °C +65/-54



FEATURES AND BENEFITS

- Engineered to be tough and ultra-flexible at extremely low temperatures
- The physical properties and unique design of this hose make it more efficient than other general PVC and rubber hoses in cold weather
- Easily re-coiled after use, no memory
- 35 % lighter than rubber air hoses for easy handling
- Non-marking pin pricked cover that allows venting of air to prevent ballooning and eventual bursting
- Rubber guard bend restrictors on hose assemblies to extend the life of the hose
- Excellent abrasion resistance
- Complies with RMA-Class B designation for medium/ high oil resistance
- Silicone-free materials
- RoHS compliant

Air hose available with hose reels. For more details see Series 79.

APPLICATIONS

Outdoor air hose for use in cold weather, where flexibility is required

Ideal for in-plant applications that require very easy handling in tight workspaces and freezer applications requiring air service

MATERIALS

Cover: High grade low temperature technopolymer compound

Reinforcement: High tensile strength polyester yarns to reduce elongation under pressure

Tube: High grade technopolymer compound

Guard: Rubber (no guard on 1/2 hose I.D.)

Fittings: Brass

SPECIFICATIONS

Maximum Working Pressure: 300 PSI

Working Temperature Range: -54 °C to 65 °C

HOSE ASSEMBLIES WITH FITTINGS AND RUBBER GUARDS

Hose length **Product No**				Color	Hose I.D. in	Fittings (M) NPT
25 ft	35 ft	50 ft	100 ft			
72.164	**72.166**	**72.168**	**72.170**	Yellow	1/4	1/4
72.364	**72.366**	**72.368**	**72.370**	Yellow	3/8	1/4
72.324	**72.326**	**72.328**	**72.330**	Red	3/8	1/4
72.384	**72.386**	**72.388**	**72.390**	Blue	3/8	1/4
72.464*	**72.466***	**72.468***	**72.470***	Yellow	1/2	1/2
72.465*	**72.467***	**72.469***	**72.471***	Yellow	1/2	3/8

*Without rubber guard

HOSE ASSEMBLIES WITH 1/4 INDUSTRIAL COUPLER AND PLUG

Hose length **Product No**		Color	Hose I.D. in
25 ft	50 ft		
72.165	**72.169**	Yellow	1/4
72.365	**72.369**	Yellow	3/8
72.325	**72.329**	Red	3/8
72.385	**72.389**	Blue	3/8

REELS

Product No	Color	Length ft	Hose I.D. in	Hose O.D. in	Weight kg/100 ft
72.160	Yellow	700	1/4	0.500	3.6
72.360	Yellow	700	3/8	0.625	4.5
72.320	Red	700	3/8	0.625	4.5
72.380	Blue	700	3/8	0.625	4.5
72.460	Yellow	500	1/2	0.781	6.8

NYFLEX®
GENERAL PURPOSE PVC AIR HOSE
CLEAR

UP TO 250 PSI

TEMP °C +65/-4

FEATURES AND BENEFITS

- General purpose PVC air and water hose
- Lightweight and flexible
- Crystal clear
- Non-marking
- Ozone and atmosphere resistant
- Chemical resistance
- Smooth-as-glass interior
- Certified under Standard NSF-51 (food equipment materials)

Food Grade

NSF

Certified under NSF-51 Standard

APPLICATIONS

Air and water lines, glue lines, lubrication lines, packaging machines, food and beverages

MATERIALS

Cover and tube: Clear PVC compound

Reinforcement: Spiral polyester yarn with additional longitudinal yarn to reduce elongation under pressure

SPECIFICATIONS

Maximum Working Pressure:

1/4: 250 PSI • 3/8: 225 PSI • 1/2 and 5/8: 200 PSI

3/4: 150 PSI • 1: 125 PSI • 1-1/4 and 1-1/2: 100 PSI

Working Temperature Range: -4 °C to 65 °C

HOSE ASSEMBLIES WITH FITTINGS

Hose length **Product No**			Hose I.D. in	Fittings (M) NPT
25 ft	50 ft	100 ft		
73.114	**73.118**	**73.150**	1/4	1/4
73.314	**73.318**	**73.350**	3/8	3/8
73.315	**73.319**	**73.355**	3/8	1/4
73.414	**73.418**	**73.450**	1/2	1/2

COILS

Product No	Hose Length ft	Hose I.D. in	Hose O.D. in	Weight kg/100 ft
73.100	300	1/4	0.438	2.7
73.300	300	3/8	0.594	4.0
73.400	300	1/2	0.750	5.9
73.500	300	5/8	0.891	8.1
73.600	200	3/4	1.031	9.9
73.700	200	1	1.300	13.6
73.800	100	1-1/4	1.620	20.4
73.900	100	1-1/2	1.938	29.0

REELS

Product No	Hose Length ft	Hose I.D. in	Hose O.D. in	Weight kg/100 ft
73.110	500	1/4	0.438	2.7
73.310	500	3/8	0.594	4.0
73.410	500	1/2	0.750	5.9

FLEXAIR®
BRAIDED POLYURETHANE AIR HOSE
CLEAR ORANGE

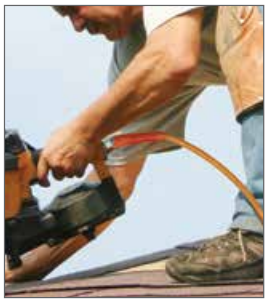
200 PSI

TEMP °C +60/-40

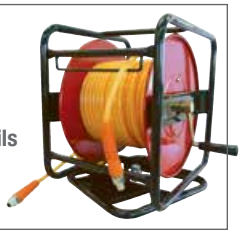
FEATURES AND BENEFITS

- Ideal for outdoor and indoor applications
- Excellent aging properties last up to 10 times longer than conventional rubber hose
- Light weight and flexibility contribute to the prevention of work-related injuries
- 50% lighter than rubber air hoses
- Excellent cold resistance: -40 °C
- Excellent resistance to lubricating oils, grease and solvents
- Excellent resistance to sunlight, weathering and ozone
- Superior resistance to cuts and punctures
- Excellent abrasion resistance
- Non-marking cover
- Highly kink resistant
- Rubber guard at both ends to extend the life of the air hose

- **LIGHTWEIGHT**
- **RESISTANT**
- **FLEXIBLE UNDER COLD TEMPERATURES**



Air hose available with this hose reel. For more details see Series 79.



APPLICATIONS

Excellent for air tools such as nailers and staplers

MATERIALS

Cover and Tube: Ester base polyurethane
Reinforcement: Spiral synthetic yarns
Guard: Rubber

SPECIFICATIONS

Maximum Working Pressure: 200 PSI
Working Temperature Range: -40 °C to 60 °C

TOPRING

REUSABLE SWIVEL FITTING WITH FLEXIBLE RUBBER STRAIN RELIEF GUARD

Product No	Hose I.D. in	Fitting (M) NPT
74.830	1/4	1/4

HOSE ASSEMBLIES WITH FITTINGS

Hose length Product No			Hose I.D. in	Hose O.D. in	Fittings (M) NPT	Fittings type
25 ft	50 ft	100 ft				
74.163	74.167	74.169	1/4	0.375	1/4	Non-Swivel
74.171*	--	--	5/16	0.472	1/4	Non-Swivel
74.364	74.368	74.370	3/8	0.562	1/4	Swivel

*Blue

SUPERFLEX®
RUBBER HOSE
HIGH OIL RESISTANT
RED

250 PSI

TEMP °C +100/-40

FEATURES AND BENEFITS

- Premium quality hose with excellent resistance when in contact with oils and greases
- Resistance to paint and solvent makes this the ideal hose for paint shop applications
- Excellent flexibility
- Tube extremely resistant to oils (RMA-Class A)
- Cover with medium resistance to oils (RMA-Class B)
- Maximum resistance to oil, gasoline, kerosene, fuel oils, lubricating oils and other petroleum based products
- Excellent weather and ozone resistance
- Excellent abrasion resistance
- Performs well at both high and low temperatures

- **MAXIMUM OIL RESISTANT**
- **NON-CONDUCTIVE**

Superflex air hoses are offered with many types of hose reels: Steelpro, TOPREEL HD and Topreel. For more details, see Series 79.

APPLICATIONS

Excellent hose for air tools

MATERIALS

Cover: Nitrile (Type C2)
Reinforcement: High tensile textile cord
Tube: Nitrile (Type C)

SPECIFICATIONS

Maximum Working Pressure: 250 PSI
Working Temperature Range: -40 °C to 100 °C
Electrical Conductivity: Non-conductive at 1000 volts D.C.

HOSE ASSEMBLIES WITH FITTINGS

Hose length **Product No**				Hose I.D. in	Fittings (M) NPT
25 ft	35 ft	50 ft	100 ft		
75.314	--	**75.318**	**75.350**	3/8	3/8
75.315	**75.317**	**75.319**	**75.355**	3/8	1/4
75.414	--	**75.418**	**75.450**	1/2	1/2
75.415	--	**75.419**	**75.453**	1/2	3/8
75.525	**75.535**	**75.560**	**75.600**	3/4	3/4
75.625	--	**75.660**	**75.680**	1	1

REELS

Product No	Hose Length ft	Hose I.D. in	Hose O.D. in	Weight kg/100 ft
75.210	500 to 750	5/16	0.62	4.5
75.310	500 to 700	3/8	0.66	6.3
75.410	500 to 700	1/2	0.85	9.9
75.610	500 to 700	3/4	1.09	16.3
75.710	300 to 525	1	1.38	24.5

WARNING

Prevent dangerous hose whips adding a HOSEGUARD safety valve on the air hose.

For more details see Series 58.

29_05_2016

TOPFLEX®
« LOCK-ON »
RUBBER AIR HOSE
BLACK

300 PSI

TEMP °C +100/-40

FEATURES AND BENEFITS

- « Lock-on » hose simplifies maintenance: for repairs, simply cut hose square and insert « lock-on » fitting
- Flame retardant synthetic rubber cover protects hose in presence of hot chips and sparks
- Maximum resistance to oils for longer life in oily, greasy environments
- Accepts reusable « lock-on » fittings
- Tube extremely resistant to oils and heat (RMA-Class A)
- Cover with medium oil resistance (RMA-Class B)
- Performs well at both high and low temperatures
- Excellent abrasion resistance

- **MAXIMUM OIL & SPARK RESISTANT**
- **VERY FLEXIBLE**

APPLICATIONS

Excellent in-plant hose for air tools
Ideal hose for automotive repair shops
Other applications: Petroleum-base hydraulic oils, glycol, lubricating oils

CONSTRUCTION

Cover: Neoprene (Type C2)
Reinforcement: Braided high tensile textile cord
Tube: Synthetic rubber (Nitrile - Type C)

SPECIFICATIONS

Maximum Working Pressure: 300 PSI
Working Temperature Range: -40 °C to 100 °C
Electrical Conductivity: Non-conductive at 1000 volts D.C.

Topflex air hoses are offered with many types of hose reels: Steepro, TOPREEL HD and Topreel. For more details, see Series 79.

HOSE ASSEMBLIES WITH FITTINGS

Hose length Product No					Hose I.D. in	Fittings (M) NPT
15 ft	25 ft	35 ft	50 ft	100 ft		
77.121	**77.125**	**77.126**	**77.128**	**77.130**	1/4	1/4
77.331	**77.335**	**77.336**	**77.338**	**77.340**	3/8	3/8
77.341	**77.345**	**77.346**	**77.348**	**77.350**	3/8	1/4
77.431	**77.435**	**77.436**	**77.438**	**77.440**	1/2	1/2
77.441	**77.445**	**77.446**	**77.448**	**77.450**	1/2	3/8

REELS

Product No	Length* ft	Hose I.D. in	Hose O.D. in	Weight kg/100 ft
77.110	600	1/4	0.47	3.6
77.310	600	3/8	0.63	4.9
77.410	600	1/2	0.77	6.8

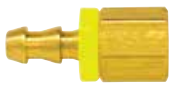
*Maximum of 3 pieces per reel

RECOMMENDED FITTINGS

TO MALE PIPE
BRASS

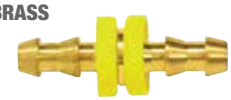
Prod. No	Hose I.D. in	(F) NPT
41.871	1/4	1/4
41.872	3/8	1/4
41.873	3/8	3/8
41.874	1/2	3/8
41.875	1/2	1/2

TO FEMALE PIPE
BRASS



Prod. No	Hose I.D. in	(M) NPT
41.860	1/4	1/8
41.861	1/4	1/4
41.877	1/4	3/8
41.862	3/8	1/4
41.863	3/8	3/8
41.864	3/8	1/2
41.866	1/2	3/8
41.867	1/2	1/2

SPLICER
BRASS



Product No	Hose I.D. in
41.880	1/4
41.881	3/8
41.882	1/2

1/4 INDUSTRIAL PLUG
ZINC PLATED STEEL

Product No	Hose Barb (lock-on)
20.345	1/4 D.I.
20.365	3/8 D.I.

TOPMAX®
POLYURETHANE AIR HOSE
YELLOW

250 PSI

TEMP °C +74/-40

ERGONOMIC SOLUTION

FEATURES AND BENEFITS

- Lighter, more durable and more chemical resistant than any other air hose material
- Ergonomically designed to contribute to the prevention of work-related injuries
- 75% lighter than rubber air hose and 50% lighter than PVC air hose
- Extremely flexible
- Excellent resistance to lubricating oils, grease and solvents
- Excellent resistance to sunlight, weathering and ozone
- Superior resistance to cuts
- High abrasion resistance
- Reusable full flow swivel fittings for maximum directional flexibility (360°)
- Flexible Rubber guard to extend the life of the air hose
- Non-marking cover

- **VERY FLEXIBLE**
- **LIGHTWEIGHT**

APPLICATIONS

Excellent for air tools such as nailers and staplers

Plant assembly line air service

Air service for spray painting equipment

MATERIALS

Cover and tube: Polyurethane - Ester base

Reinforcement: Polyester yarns

Guard: Rubber

SPECIFICATIONS

Maximum Working Pressure: 250 PSI

Working Temperature Range: -40 °C to 74 °C

REUSABLE SWIVEL FITTING WITH FLEXIBLE RUBBER STRAIN RELIEF GUARD

Product No	Hose I.D. in	Fittings (M) NPT
78.825	1/4	1/4

HOSE ASSEMBLIES WITH SWIVEL FITTINGS

Product No Hose length			Hose I.D. in	Fittings (M) NPT
25 ft	50 ft	100 ft		
78.114	**78.118**	**78.150**	1/4	1/4

HOSE ASSEMBLY WITH 1/4 INDUSTRIAL COUPLER & PLUG

Product No	Hose Length ft	Hose I.D. in	Fittings (M) NPT
78.119	50	1/4	1/4

REEL

Product No	Hose Length ft	Hose I.D. in	Hose O.D. in	Weight kg/100 ft
78.110	300	1/4	0.385	1.6

Series 79
HOSE REELS

HOW TO REDUCE HOSE HANDLING COSTS

Time lost by workers untangling air hoses takes away from efficiency and tripping accidents can injure workers and damage equipment.

A FEW SIMPLE QUESTIONS ABOUT HOSE HANDLING:

Do workers regularly trip over hoses lying on the floor ?

Are workers annoyed by poorly positioned fixed hoses ?

Are hoses long enough to answer workers' needs ?

Do worn hoses represent high expenses ?

Is there leakage in the hoses used ?

Can hoses be quickly and easily repaired in the work area ?

Could there be a better way to store hoses than rolled up on the floor or on a bench?

Tripping is a common workshop accident. These accidents can result in direct personal injuries and also indirect damage due to the pull on equipment connected to hoses. It is simpler and safer to use a hose reel and keep floors clear.

Hose tangles waste time and can be dangerous. Hose reels prevent tangles.

THE SOLUTION: HOSE REELS

HOSE REELS REDUCE WEAR ON HOSES

Hoses are kept out of the way when not in use

Only the needed length is pulled out of the reel when working

Hoses stay cleaner

Hoses last longer, as do couplings and tools, reducing maintenance costs

HOSE REELS POSITION HOSES WHERE WORKERS NEED THEM

Can be mounted to walls, ceilings, work benches

Fewer changeovers from hose to hose saves time

Flexible length positions tool where needed

HOSE REELS IMPROVE EFFICIENCY

Less time lost due to tangling

Proper length hose for each job reduces pressure loss from excess length

HOSE REELS INCREASE SAFETY

Less hoses on floor reduces risk of tripping

Reduced risk of tools falling off surfaces

PROBLEM ✗

SOLUTION ✓

HOW TO CHOOSE THE RIGHT REEL

For tools to function properly, hoses and couplings must be of proper dimensions

Retraction force should be taken into account

Mounting location should also be considered. Reels can be positioned on the ceiling, the wall, under or on a bench or on the floor

HOW TO SELECT THE PROPER HOSE REEL?

7 STEPS IN ORDER TO SELECT THE PROPER HOSE REEL FOR YOUR APPLICATION

RETRACTION METHOD

Automatic rewind - Spring driven requiring no power source. Operator guides the hose as it retracts itself around the drum. Automatic rewind easily wraps, stores and protects hoses

Manual rewind - Hand crank. Operator must manually crank the reel and guide the hose evenly as it wraps around the drum

HOSE REEL MATERIALS

- The environment in which the hose reel will be used is a critical element in selecting the proper hose reel.
- Steel open or enclosed models. Enclosed models shield out the elements to protect and extend the life of the reel, the hose and the components inside
- Composite enclosed models for lighter weight and for wash down environments

TYPE OF HOSE

- Select the right hose type for the application, based on the environment, conditions and the way in which the hose is to be used
- Consider the maximum pressure (PSI) of the hose
- Consider operating temperature and pressure requirements

HOSE DIAMETER

- Select a hose with the largest possible diameter
- Hoses with smaller inside diameters (I.D.) require an increase in compressed air pressure and thus increase operating costs

HOSE LENGTH

- Keep the hose as short as possible for the application
- Each unused foot/meter increases pressure drops and costs

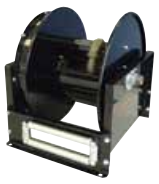
FLUID REQUIREMENT

- Will the hose reel be used with compressed air?
- With water?

HEIGHT OF INSTALLATION

When a hose reel is suspended from the ceiling, the hose needs to have strong resistance (less elasticity). If a hose reel is installed from the ceiling, it should be heavy duty to ensure proper function and to avoid costly maintenance costs.

SELECTION GUIDE FOR HOSE REELS / INDUSTRIAL AND PROFESSIONAL

	SteelPro	SteelPro	SteelPro	SteelPro	SteelPro INOX	Top Reel HD	Top Reel	MAXREEL	FLEXReel
									
Type	Industrial	Industrial	Industrial	Industrial	Industrial	Industrial	Industrial	Professional	Professional
Duty	★★★★	★★★★	★★★★	★★★★	★★★★	★★★	★★	★	★
Winding	Manual	Automatic							
Materials	Steel	Steel	Steel	Steel	Stainless Steel	Steel	Steel	Steel	Steel/Polymer
Hose	Without hose	Superflex, without hose	Airflex, Superflex, Topflex, without hose	Airflex, Superflex, Topflex	Airflex, Superflex	Thermoflex Airflex, Superflex Topflex	Flexhybrid, Airflex, Superflex, Topflex	Flexhybrid, EcoFlex	Flexhybrid
Max. PSI	500	250 / 300	250 / 300	250 / 300	250	250 / 300	250 / 300	300	300
I.D. in	1/2 - 3/4 -1	1/2 - 3/4 -1	1/2 - 3/4	1/4 - 3/8 - 1/2	3/8 - 3/4 - 1/2	3/8 - 1/2	1/4 - 3/8 - 1/2	3/8 - 1/2	3/8
Length ft	Capacity 50 - 75 100 - 150	Capacity 45 - 50 70 -100	50 - 100	25 - 35 - 50	50	33 - 50	25 - 33 - 50 - 65	33 - 25 -50	50
Fluid	Air • Water	Air • Water	Air • Water	Air • Water	Air • Water	Air • Water	Air	Air	Air

Continuing hose reel selection page 486 / Industrial and construction

SteelPro
INDUSTRIAL HEAVY DUTY HOSE REELS
(FOR 3/8" AND 1/2" HOSE)

HOSE REEL WITHOUT HOSE

Product No	Hose Capacity with 3/8 I.D.	Hose Capacity with 1/2 I.D.	Inlet/Outlet (F) NPT
79.705	150 ft	100 ft	1/2

FEATURES AND BENEFITS

- Manual rewind with removable handle
- Beaded edges on spool prevent hose damage or injury to operator
- Heavy 12 ga Steel base
- Only 14.5 in tall
- Heavy duty ABS bearings require no lubrification for years of dependable service
- Super Swivel for longer life
- External swivel o-rings can be changed by simply removing one retaining ring
- Fully adjustable brake - tension is adjustable with hand knob
- Universal pipe outlet allows for left or right hand mounting positions
- Hose not included
- Inlet hose not included. Refer to page 485 to order the right inlet hose

SPECIFICATIONS

Fluid: Compressed air, water
Inlet/ Outlet: 1/2 (F) NPT
Maximum Working Pressure: 500 PSI
Weight: 9.5 kg
Reel Color: Black

SteelPro
INDUSTRIAL HEAVY DUTY HOSE REELS
(FOR 3/8", 1/2", 3/4" AND 1" HOSE)

FEATURES AND BENEFITS

- Manual rewind
- Flow-through shaft for universal installation
- Self-lubricating bearings
- External swivel
- Standardized quad rings can be changed by simply removing one retaining ring
- Fully adjustable nylon brake, tension is adjustable with hand knob
- Light and strong mounting base
- Brass swivel reduces potential for corrosion
- Durable powder-coated finish
- Hose not included
- Inlet hose not included. Refer to page 485 to order the right inlet hose

SPECIFICATIONS

Fluid: Compressed air, water
Maximum Working Pressure: 500 PSI
Reel Color: Black

HOSE REELS WITHOUT HOSE

Product No	Hose Capacity with 3/4 I.D.	Hose Capacity with 1 I.D.	Inlet/Outlet (F) NPT
79.105*	75 ft	50 ft	1
79.106*	100 ft	75 ft	1

*Inlet hose not available

HOSE REELS WITHOUT HOSE

Product No	Hose Capacity with 3/8 I.D.	Hose Capacity with 1/2 I.D.	Inlet (F) NPT	Outlet (M) NPT
79.100	100 ft	75 ft	1/2	1/2
79.101	250 ft	175 ft	1/2	1/2
79.102	350 ft	275 ft	1/2	1/2

SteelPro

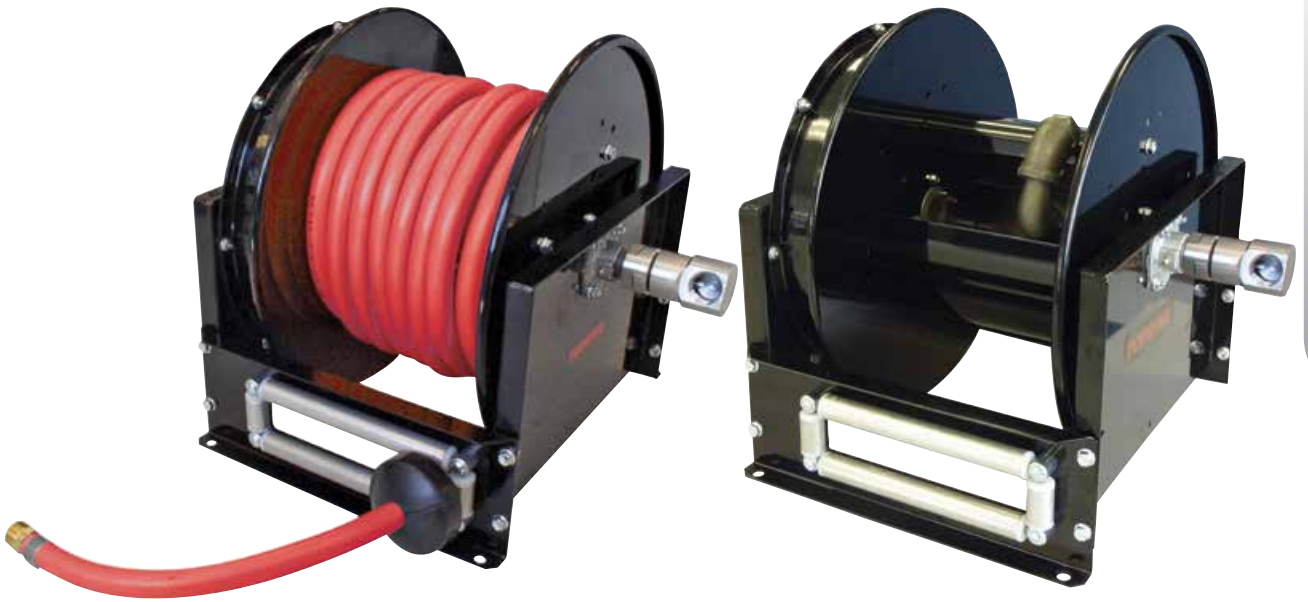
INDUSTRIAL HEAVY DUTY HOSE REELS BOX-STYLE FRAME (FOR 1/2", 3/4" AND 1" HOSE)

FEATURES AND BENEFITS

- Automatic rewind
- Heavy-duty steel construction
- Safety banded spring in sealed springcase
- Full 1 in flow path
- Compact design
- Guide rollers allow frictionless retrieval of hose
- Heavy-duty spool and frame design
- Durable powder-coated finish
- Multi-position ratchet lock
- Inlet hose not included

SPECIFICATIONS

Fluid: Compressed air, water
Maximum Working Pressure: SUPERFLEX: 250 PSI
Reel Color: Black



HOSE REELS WITH RUBBER HOSE

With SUPERFLEX Hose Product No	Hose I.D. inch	Hose Length ft	Inlet (F) NPT	Outlet (M) NPT
79.257	1/2	50	1/2	1/2
79.259	1/2	100	1/2	1/2
79.258	3/4	50	1	3/4

HOSE REELS WITHOUT HOSE

Product No	Hose Capacity with I.D. inch			Inlet/Outlet (F) NPT
	1/2	3/4	1	
79.200	100 ft	---	---	1/2
79.201	---	70 ft	---	1*
79.202	---	---	45 ft	1

*Includes reducer with 3/4 (F) NPT Inlet/Outlet

WARNING

Refer to page 485 to order the right inlet hose

SteelPro

INDUSTRIAL HEAVY DUTY HOSE REELS

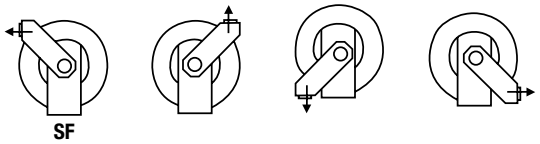
(WITH 1/4", 3/8" AND 1/2" HOSE)

FEATURES AND BENEFITS

- Automatic rewind
- All steel, bolted construction
- Heavy-duty mounting bracket
- Permanently lubricated drive-spring mechanism to ensure many years of dependable service
- One-piece combination latch, spring arbor, main bearing, and spool support for fewer moving parts
- All Brass shaft and swivel reduces potential for corrosion
- Single set-screw to access spring casing
- Fully closed bead on spool to prevent hose cutting
- Hidden latch mechanism to prevent grime buildup
- Adjustable drag brake/spool lock
- Durable powder coat finish
- Inlet hose not included. Refer to page 485 to order the right inlet hose.

UNIVERSAL INSTALLATION

The narrow size and the fact that the guide arm can be easily rotated to any of the positions shown, solves virtually all installation problems. Reels are shipped in the SF position.



See the video on TOPRING.com « Spring tension adjustment »

SPECIFICATIONS

Fluid: Compressed air, water

Maximum Working Pressure: See hose pressure

Inlet: Standard model: 3/8 (F) NPT • Large model: 1/2 (F) NPT

Reel Color: Black

HOSE REELS WITH RUBBER HOSES

Product No			Hose I.D. in	Hose Length ft	Inlet (F) NPT	Outlet (M) NPT	Model
AIRFLEX 250 PSI	SUPERFLEX 250 PSI	TOPFLEX 300 PSI					
79.711	---	79.771	1/4	35	3/8	1/4	Standard
79.712	---	79.772	1/4	50	3/8	1/4	Standard
79.713	79.753	79.773	3/8	25	3/8	1/4	Standard
79.714	79.754	79.774	3/8	35	3/8	1/4	Standard
79.715	79.755	79.775	3/8	50	1/2	1/4	Large
79.716	79.756	79.776	3/8	50	1/2	3/8	Large
79.718	79.758	79.778	1/2	35	1/2	3/8	Large
79.717	79.757	79.777	1/2	50	1/2	3/8	Large

HOSE REELS WITHOUT HOSE

Product No	Hose capacity with I.D. inch			Inlet/Outlet (F) NPT	Model
	1/4	3/8	1/2		
79.700	50 ft	35 ft	---	3/8	Standard
79.702	---	50 ft	50 ft	1/2	Large
79.703	---	---	50 ft	1/2	Large

TECH TIP

To view the instruction manual and technical specifications, visit TOPRING.com for more details (see product page)

WARNING

Refer to the hose section (series 70-78) for more information on hose characteristics (oil resistance)

SteelPro INOX

INDUSTRIAL HEAVY DUTY HOSE REELS

304 STAINLESS STEEL

(WITH 3/8" AND 1/2" HOSE)

FEATURES AND BENEFITS

- Automatic rewind
- 8 position guide arm
- Heavy gauge base with no welds
- Fully committed, non-jamming latch pawl
- Nickel plated swivel reduces corrosion potential
- Constructed of heavy gauge 304 stainless steel
- Single set screw to access latch area and spring case
- Drive spring mechanism lubricated for life
- One piece combination latch, spring arbor, main bearing and spool support for fewer moving parts
- Beaded edges on spool prevent hose damage or injury to operator
- Non-sparking latch mechanism in the event flammable gases or liquids are present
- Narrow compact design permits installation where space is a factor

Available on request: reel with white washdown hose

APPLICATIONS

Ideal for harsh environments such as chemical clean up or when an exceptionally clean area has to be maintained for food or beverage process

SPECIFICATIONS

Fluid: Compressed air, water

Maximum Working Pressure: 250 PSI

Reel Colors: Grey

TECH TIP

To view the instruction manual and technical specifications, visit **TOPRING**.com for more details (see product page)

WARNING

Refer to page 485 to order the right inlet hose

HOSE REELS WITH RUBBER HOSE

With AIRFLEX Hose Product No	With SUPERFLEX Hose Product No	Hose I.D. in	Hose Length ft	Inlet (F) NPT	Outlet (M) NPT
79.837	79.847	3/8	50	1/2	3/8
79.838	79.848	3/8	70	1/2	3/8
79.839	79.849	1/2	50	1/2	3/8

HOSE REELS WITHOUT HOSE

Product No	Hose Capacity with I.D. inch		Inlet/Outlet (F) NPT	Model
	3/8	1/2		
79.833	70 ft	---	1/2	Large
79.834	---	50 ft	1/2	Large

SteelPro

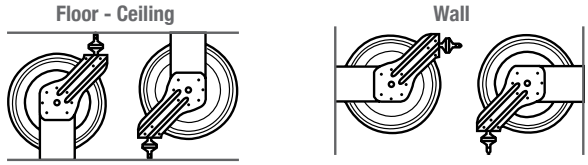
INDUSTRIAL HEAVY DUTY HOSE REELS

(WITH 1/2" AND 3/4" HOSE)

FEATURES AND BENEFITS

- Automatic rewind
- Heavy-duty steel construction
- Ribbed Steel plate to ensure strong support
- Corrosion-resistant epoxy powder coat finish
- Wide profile base with grooved reinforcement supported on each side
- Adjustable double guide arm for handling up to 3 positions
- Wall, ceiling or floor mounting possible
- 4-direction non-snag rollers to reduce hose wear
- Multi-position ratchet lock and easy tension adjustment
- Full flow swivel mechanism, ball bearing mounted, largely reducing the friction
- Fully enclosed, lubricated and centered spring to ensure stability of the reel
- Inlet hose not included

MOUNTING OPTIONS



SPECIFICATIONS

Fluid: Compressed air, water
Maximum Working Pressure: See table below
Inlet: 1/2 NPT
Reel Color: Light Grey

TECH TIP

To view the instruction manual and technical specifications, visit **TOPRING**.com for more details (see product page)

WARNING

Refer to the hose section (Series 70-78) for more information on hose characteristics (oil resistance)

HOSE REELS WITH RUBBER HOSE

Product No		Hose I.D. in	Hose Length ft	Inlet (F) NPT	Outlet (M) NPT	Model
79.721	**AIRFLEX** 250 PSI	1/2	100	1/2	1/2	XX-Large
79.761	**SUPERFLEX** 250 PSI	1/2	100	1/2	1/2	XX-Large
79.762	**SUPERFLEX** 250 PSI	3/4	50	1/2	1/2	XX-Large
79.781	**TOPFLEX** 300 PSI	1/2	100	1/2	1/2	XX-Large

HOSE REEL WITHOUT HOSE

Product No	Hose Capacity with I.D. inch		Inlet/Outlet (F) NPT	Model
	1/2	3/4		
79.704	100 ft	50 ft	1/2	XX-Large

TopReel HD

INDUSTRIAL HEAVY DUTY HOSE REELS (WITH 3/8" AND 1/2" HOSE)

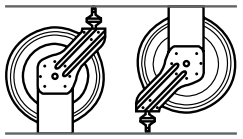
Double Guide Arm

FEATURES AND BENEFITS

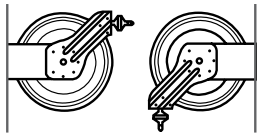
- Automatic rewind
- Heavy-duty Steel construction for durable use
- Heavy ribbed Steel plate to ensure strong support
- Corrosion-resistant epoxy powder coat finish
- Wide profile base with grooved reinforcement supported on each side
- Adjustable double-guide arm for handling up to 3 positions
- Wall, ceiling or floor mounting possible
- 4-direction non-snag rollers to reduce hose wear
- Multi-position ratchet lock and easy tension adjustment
- Full flow swivel mechanism
- Fully enclosed and lubricated spring
- Inlet hose not included. Refer to page 485 to order the right inlet hose

MOUNTING OPTIONS

Floor - Ceiling



Wall - Service truck



See the video on TOPRING.com « Spring tension adjustment »

Using a HOSEGUARD® with an hose reel will protect workers and equipment. **TOPRING** offers 2 models with HOSEGUARD®.

SPECIFICATIONS

Fluid: Compressed air, water

Maximum Working Pressure: See table below

Reel Color: Black

HOSE REELS WITH HOSE

With Technopolymer Hose Product No	With Rubber Hose Product No								
THERMOFLEX 300 PSI	SUPERFLEX 250 PSI	TOPFLEX 300 PSI	AIRFLEX 250 PSI	AIRFLEX with HOSEGUARD® 250 PSI	Hose I.D. in	Hose Length ft	Inlet (F) NPT	Outlet (M) NPT	Model
79.513	79.523	79.533	79.503		3/8	33	1/2	1/4	Large
79.514	79.524	79.534	79.504	79.504.01	3/8	50	1/2	1/4	Large
79.518	79.528	79.538	79.508		1/2	33	1/2	3/8	Large
79.519	79.529	79.539	79.509	79.509.01	1/2	50	1/2	3/8	X-Large

TECH TIP

To view the instruction manual and technical specifications, visit **TOPRING**.com for more details (see product page)

WARNING

Refer to the hose section (Series 70-78) for more information on hose characteristics (oil resistance)

TopReel

INDUSTRIAL MEDIUM DUTY HOSE REELS

(WITH 1/4", 3/8" AND 1/2" HOSE)

FEATURES AND BENEFITS

- Automatic rewind
- Heavy-duty steel construction
- Corrosion-resistant epoxy powder coat finish
- Wide L-shaped base with grooved reinforcement
- Adjustable guide arm for handling up to 9 positions
- Wall, ceiling or floor mounting possible
- 4-direction non-snag rollers to reduce hose wear
- Multi-position ratchet lock and easy tension adjustment
- Full flow swivel mechanism
- Fully enclosed and lubricated spring
- Inlet hose not included. Refer to page 485 to order the right inlet hose

SPECIFICATIONS

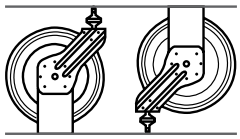
Fluid: Compressed air

Maximum Working Pressure: See table below

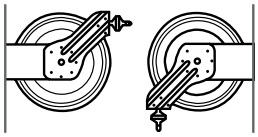
Reel Color: Black

MOUNTING OPTIONS

Floor - Ceiling



Wall - Service truck



See the video on **TOPRING**.com « Spring tension adjustment »

HOSE REELS WITH HOSE

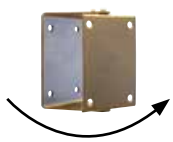
With Technopolymer Hose Product No	With Rubber Hose Product No			Hose I.D. in	Hose Length ft	Inlet (F) NPT	Outlet (M) NPT	Model
FLEXhybrid 300 PSI	SUPERFLEX 250 PSI	TOPFLEX 300 PSI	AIRFLEX 250 PSI					
79.890*	---	79.970	79.990	1/4	25	3/8	1/4	Standard
79.891*	---	79.972	79.991	1/4	33	3/8	1/4	Standard
79.893	79.924	79.974	79.993	3/8	25	3/8	1/4	Standard
79.894	79.926	79.976	79.994	3/8	33	3/8	1/4	Standard
79.895**	79.928	79.978	79.995	3/8	50	1/2	1/4	X-Large
79.896	79.929	79.980	79.996	3/8	65	1/2	1/4	X-Large
79.897	79.933	79.982	79.997	1/2	33	1/2	3/8	X-Large
79.898	79.934	79.984	79.998	1/2	50	1/2	3/8	X-Large
79.899	79.936	79.986	79.999	1/2	65	1/2	3/8	X-Large

* Inlet 1/4" ** Inlet 3/8"

WALL MOUNTED SWING BRACKET

Heavy-duty steel construction with powder coat finish

Bracket will pivot approx. 140° and aligns horizontally to the direction of the hose run



Product No	For model
79.940	Standard
79.941	X-Large

FLOOR MOUNTING 340° SWIVEL PIVOT BASE

Heavy-duty steel construction with powder coat finish

Pivot base aligns to the direction of the hose run

Product No
79.942

MAXREEL
PROFESSIONAL HOSE REELS
(WITH 3/8" AND 1/2" HOSE)

FEATURES AND BENEFITS

- Automatic rewind
- Steel construction
- Corrosion-resistant epoxy powder coat finish
- Wide L-shaped base
- Adjustable guide arm for wall, ceiling or floor mounting
- 4-direction non-snag rollers to reduce hose wear
- Multi-position ratchet lock and easy tension adjustment
- Fully enclosed spring
- Supplied with Rubber or Technopolymer hose, ready for immediate installation
- Inlet hose not included. Refer to page 485 to order the right inlet hose

APPLICATIONS

Economical reels for indoor shops and professional applications

SPECIFICATIONS

Fluid: Compressed air

Maximum Working Pressure: See hose specifications

Reel Color: Black

HOSE REELS WITH TECHNOPOLYMER HOSE

Product No		Hose I.D. in	Hose Length ft	Inlet (F) NPT	Oulet (M) NPT	Model
FLEXhybrid 300 PSI	ECOFLEX 300 PSI					
----	**79.332**	3/8	25	1/4	1/4	Standard
----	**79.333**	3/8	33	1/4	1/4	Standard
79.334	----	3/8	50	3/8	1/4	Large
79.336	----	1/2	50	1/2	3/8	X-Large

See the video on TOPRING.com « Spring tension adjustment »

TECH TIP

To view the instruction manual and technical specifications, visit TOPRING.com for more details (see product page)

WARNING

Refer to the hose section (Series 70-78) for more information on hose characteristics (oil resistance)

FLEXReel
PROFESSIONAL COMPACT HOSE REEL (WITH 3/8" HOSE)

FEATURES AND BENEFITS

- Automatic rewind
- Light and compact design
- Heavy-duty construction made of impact-resistant polymer and rugged steel
- High quality, impact-resistant polymer drum for durable use
- Steel frame with corrosion-resistant powder coating
- Adjustable hose stopper
- Technopolymer FLEXhybrid hose combines all the qualities of PVC and rubber
- Good oil, heat, abrasion and ozone resistance
- Base designed for stable wall, ceiling and floor mounting
- Inlet hose included (91 cm)

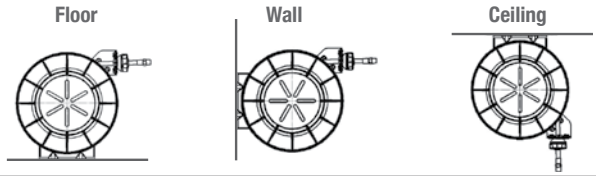
APPLICATIONS

Economical reel ideal for workshops

SPECIFICATIONS

Fluid: Compressed air
Maximum Working Pressure: 300 PSI
Reel Colors: Dark grey & black

MOUNTING OPTIONS



HOSE REEL WITH TECHNOPOLYMER HOSE

Product No FLEXHybrid 300 PSI	Hose I.D. in	Hose Length ft	Inlet/Outlet (M) NPT
79.805	3/8	50	1/4

See the video on **TOPRING**.com « Spring tension adjustment »

TECH TIP

To view the instruction manual and technical specifications, visit **TOPRING**.com for more details (see product page)

INLET RUBBER HOSES FOR HOSE REELS

Product No	Hose I.D. in	Hose Length ft	Thread (M) NPT
79.011	3/8	5	1/4
79.012	3/8	5	3/8
79.013	1/2	5	3/8
79.014	1/2	5	1/2

FEATURES AND BENEFITS

- **Allow simple and easy connection of air hose reels to compressed air networks**
- **Convenient 5 ft length rubber hose assemblies, ideal for most reel connections**

MATERIALS

Cover: Rubber EPDM (Red)

Reinforcement: Spiral Polyester cords

Tube: Black EPDM

SPECIFICATIONS

Maximum Working Pressure: 250 PSI

Working Temperature Range: -40 °C to 100 °C

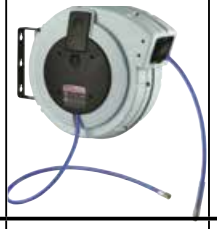
INLET HOSE SELECTION GUIDE

HOSE REELS Product No	INLET HOSE Product No
79.100	79.014
79.101	79.014
79.102	79.014
79.200	79.014
79.201	Special order
79.202	Special order
79.257	79.014
79.258	Special order
79.259	79.014
79.332	79.011
79.333	79.011
79.334	79.012
79.503	79.013
79.504	79.013
79.508	79.014
79.509	79.014
79.513	79.013
79.514	79.013
79.518	79.014
79.519	79.014
79.523	79.013
79.524	79.013
79.528	79.014
79.529	79.014
79.533	79.013
79.534	79.013
79.538	79.014
79.539	79.014
79.700	79.012
79.702	79.014
79.704	79.014
79.705	79.014
79.711	79.012
79.712	79.012
79.713	79.012

HOSE REELS Product No	INLET HOSE Product No
79.714	79.012
79.715	79.014
79.716	79.014
79.717	79.014
79.718	79.014
79.721	79.014
79.751	79.012
79.752	79.012
79.753	79.012
79.754	79.012
79.755	79.014
79.756	79.014
79.757	79.014
79.758	79.014
79.761	79.014
79.762	Special order
79.771	79.012
79.772	79.012
79.773	79.012
79.774	79.012
79.775	79.014
79.776	79.014
79.777	79.014
79.778	79.014
79.781	79.014
79.820	79.011
79.825	79.012
79.890	79.011
79.891	79.011
79.893	79.012
79.894	79.012
79.895	79.012
79.896	79.012
79.897	79.014
79.898	79.014

HOSE REELS Product No	INLET HOSE Product No
79.899	79.014
79.910	79.012
79.912	79.014
79.914	79.014
79.920	79.012
79.922	79.012
79.924	79.012
79.926	79.012
79.928	79.014
79.929	79.014
79.933	79.014
79.934	79.014
79.936	79.014
79.970	79.012
79.972	79.012
79.974	79.012
79.976	79.012
79.978	79.014
79.980	79.014
79.982	79.014
79.984	79.014
79.986	79.014
79.990	79.012
79.991	79.012
79.993	79.012
79.994	79.012
79.995	79.014
79.996	79.014
79.997	79.014
79.998	79.014
79.999	79.014

SELECTION GUIDE FOR HOSE REELS / INDUSTRIAL AND CONSTRUCTION

	TopReel	Retracto	Retracto COMPACT	RolAir	Retracto	EzReel	PolyReel
							
Type	Industrial	Industrial	Industrial	Professional	Professional	Professional	Professional
Duty	★ ★ ★	★ ★ ★ ★	★ ★ ★ ★	★ ★	★ ★ ★	★ ★ ★	★ ★ ★
Winding						Manual	
Materials	Steel	Polymer	Polymer	Polymer	Polymer	Steel	Steel
Hose	Polyurethane	Polyurethane	Polyurethane	Flexhybrid,PVC	PVC	Without hose	Flexair, Easyflex
Max. PSI	220	215	145 / 215	200 / 300	140	300	200 / 300
I.D. in	5/16	5/16 - 3/8 -1/2	1/4 - 5/16 -3/8	1/4 - 3/8	5/8	For hose 1/4 - 3/8 - 1/2	1/4
Length ft	33	50 - 65	20 - 25 -40	27- 30 - 33 - 50	65	Capacity 30 - 50 60 - 100 - 200	100
Fluid	Air	Air	Air • Eau	Air	Water	Air • Water	Air

TopReel

INDUSTRIAL MEDIUM DUTY HOSE REELS (ENCLOSED MODEL) (WITH 5/16" HOSE)

FEATURES AND BENEFITS

- **Automatic rewind**
- **Heavy-duty steel construction**
- **Corrosion-resistant powder coat finish**
- **Positive latching mechanism - automatically locks hose at desired length**
- **Integrated wall/overhead swivel bracket**
- **Non-snag hose rollers reduce hose wear**
- **Heavy-duty lightweight braided polyurethane hose**
- **Full flow solid nickel plated steel swivel fittings**
- **Inlet hose included (19 in)**

APPLICATIONS

Ideal for indoor use where hose and reel mechanism can benefit from protection from dirt, water and other contaminants

MATERIALS

Hose: Reinforced polyurethane

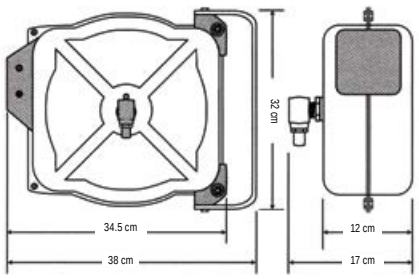
Case Material: Steel

SPECIFICATIONS

Fluid: Compressed air

Maximum Working Pressure: 220 PSI

Reel Color: Blue



HOSE REELS WITH POLYURETHANE HOSE

Product No	Hose I.D. in	Hose Length ft	Inlet/Outlet (M) NPT
79.550	5/16	33	1/4
79.555	5/16	50	1/4

TECH TIP

5/16 in I.D. hoses offer 55% more flow than 1/4 in I.D. hoses

5/16 I. D. — 50%* more flow than — 1/4 I. D.

Retracto

INDUSTRIAL MEDIUM DUTY HOSE REELS (WITH 5/16", 3/8" AND 1/2" HOSE) CE

APPLICATIONS

Ideal for indoor use and for industrial and automotive applications

MATERIALS

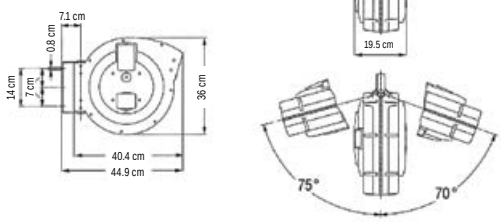
Reel Mechanism: Steel
Case: High impact polymer
Mounting Bracket: Steel
Hose: Reinforced polyurethane

SPECIFICATIONS

Fluid: Compressed air
Maximum Working Pressure: 215 PSI
Reel Color: Grey

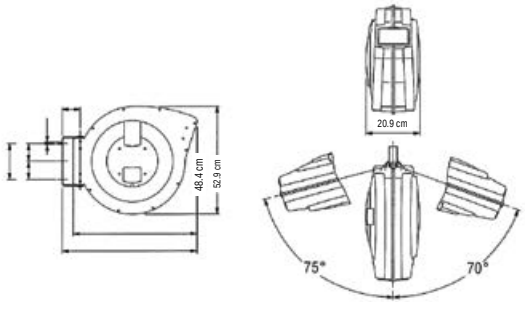
FEATURES AND BENEFITS

- **Automatic rewind**
- **Compact design**
- **High-impact polymer case**
- **Enclosed case to prolong hose and reel life**
- **Heavy-duty spring rewind mechanism for long, problem-free life**
- **Flexible, long-lasting reinforced polyurethane air hose**
- **Steel swiveling wall bracket**
- **Inlet hose included**



HOSE REELS WITH POLYURETHANE HOSE

Product No	Hose I.D. in	Hose Length ft	Inlet (F) NPT	Outlet (M) NPT	Model
79.415	5/16	50	1/4	1/4	Large
79.425	3/8	50	3/8	3/8	Large



HOSE REELS WITH POLYURETHANE HOSE

Product No	Hose I.D. in	Hose Length ft	Inlet (F) NPT	Outlet (M) NPT	Model
79.435	3/8	65	3/8	3/8	X-Large
79.440	1/2	50	1/2	1/2	X-Large

Retracto COMPACT

INDUSTRIAL MEDIUM DUTY HOSE REELS (WITH 5/16", 3/8" AND 1/4" HOSE)

CE

APPLICATIONS

Ideal for indoor use and for industrial and automotive applications

MATERIALS

Reel Mechanism: Steel

Case: High impact polymer

Mounting Bracket: Steel

Hose: Reinforced polyurethane

SPECIFICATIONS

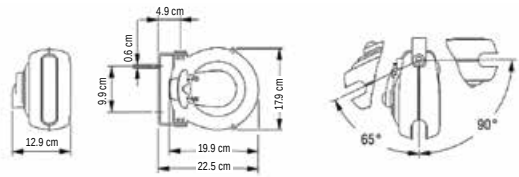
Fluid: 79.405: Air / 79.410, 79.420: Air and water

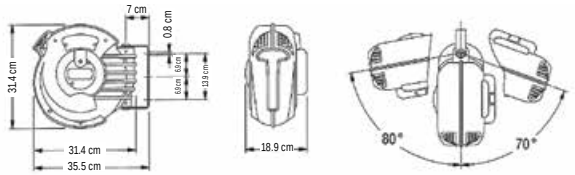
Maximum Working Pressure:
79.405: 145 PSI • 79.410, 79.420: 215 PSI

Reel Color: Grey

FEATURES AND BENEFITS

- **Automatic rewind**
- **Compact design**
- **High-impact polymer case**
- **Enclosed case to prolong hose and reel life**
- **Heavy-duty spring rewind mechanism for long, problem-free life**
- **Flexible, long-lasting reinforced polyurethane air hose**
- **Steel swiveling wall bracket**
- **Inlet hose included**





HOSE REELS WITH POLYURETHANE HOSE

Product No	Hose I.D. in	Hose Length ft	Inlet (F) NPT	Outlet (M) NPT	Model
79.405	1/4	20	1/4	1/4	Compact

HOSE REELS WITH POLYURETHANE HOSE

Product No	Hose I.D. in	Hose Length ft	Inlet (F) NPT	Outlet (M) NPT	Model
79.410	5/16	40	1/4	1/4	Standard
79.420	3/8	25	3/8	3/8	Standard

RolAir

PROFESSIONAL HOSE REELS (WITH 1/4" AND 3/8" HOSE)

APPLICATIONS

Economical reel ideal for workshops

MATERIALS

Hose: PVC / except 79.365 with FLEXhybrid

Case: Polypropylene

SPECIFICATIONS

Fluid: Compressed air

Maximum Working Pressure:
FLEXhybrid : 200 PSI • PVC : 300 PSI

Reel color: Red

FEATURES AND BENEFITS

- Automatic rewind
- Durable construction - made from high-impact resistant polypropylene
- Compact design
- Double adjustment action to lock hose at desired length
- Sealed connection points at swivel and hose inlet to prevent leaks
- Integrated wall/overhead swivel bracket
- Non-snag hose rollers reduce hose wear
- Adjustable hose stopper
- 61 cm inlet hose included (model 79.365)
- 91 cm inlet hose included (models 79.370, 79.375, 79.380)

COMPACT MODEL

STANDARD MODEL

LARGE MODEL

HOSE REELS WITH PVC OR TECHNOPOLYMER HOSE

Product No	Hose I.D. in	Hose Length ft	Inlet/Outlet (M) NPT	Model	Hose
79.365	1/4	27	1/4	Compact	FLEXhybrid
79.370	1/4	33	1/4	Standard	PVC
79.375	3/8	30	1/4	Standard	PVC
79.380	3/8	50	1/4	Large	PVC

PolyReel
PROFESSIONAL PORTABLE HOSE REELS (WITH 1/4" HOSE)

FEATURES AND BENEFITS

- Manual rewind
- Light and easy to carry
- Great hose storage
- Handle folds in to avoid snags
- 360° swivel base with ball bearing to extend service life of reel
- Rugged Steel construction for durability
- Inlet hose included (91 cm)

APPLICATIONS

Ideal for outdoor and indoor construction applications

Ideal for mobile paint applications

SPECIFICATIONS

Fluid: Compressed air

Maximum Working Pressure:

FLEXAIR: 200 PSI

EASYflex *PREMIUM* 300 PSI

With FLEXAIR polyurethane hose:

Flexible and lightweight

Excellent resistance to kinking, abrasion, lubricating oils, grase and solvents

Excellent weather resistance

Reusable full flow swivel fittings with flexible rubber strain relief guard

With EASYflex *PREMIUM* technopolymer hose:

Engineered to be tough and ultra-flexible even at -54 °C

35% lighter than rubber

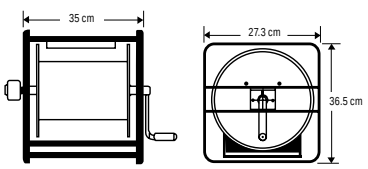
Rubber bend restrictor at both ends

Abrasion and oil resistant

Kink resistant under pressure

HOSE REELS WITH POLYURETHANE OR TECHNOPOLYMER HOSE

With FLEXAIR hose Product No	With EASYflex *PREMIUM* hose Product No	Hose I.D. in	Hose Length ft	Inlet/Outlet (M) NPT
79.040	79.060	1/4	100	1/4



EzReel

PROFESSIONAL AIR OR WATER HOSE REELS (FOR 1/4", 3/8" AND 1/2" HOSE)

FEATURES AND BENEFITS

- Manual rewind
- Heavy-duty steel construction
- Corrosion-resistant powder-coated finish
- Full flow solid Brass 90° swivel
- Beveled flanges makes it easier to rewind the hose without kinking it
- Rated at 300 PSI inlet air pressure, 65 °C
- Maintenance-free bushings allow reel to spin smoothly
- Spring loaded lock pin to prevent hose from unwanted reeling
- Sealed swivel and hose inlet connection
- Built-in base plate makes installation to walls or workbenches quick and easy
- Eliminates hose storage and handling problems
- Extends hose life
- Makes shop, garage and work area safer
- Easy to carry
- Hose not included
- Inlet hose not included. Refer to page 485 to order the right inlet hose.

APPLICATIONS

Construction sites, mobile units and garages

SPECIFICATIONS

Fluid: Compressed air, water

Maximum Working Pressure: 300 PSI

HOSE REELS WITHOUT HOSE

Product No	Hose capacity with I.D. inch			Inlet (F) NPT	Outlet (F) NPT	Model
	1/4	3/8	1/2			
79.820	100 ft	50 ft	30 ft	1/4	3/8	Standard
79.825	200 ft	100 ft	60 ft	3/8	3/8	Large

TECH TIP

To view the instruction manual and technical specifications, visit **TOPRING**.com for more details (see product page)

Retracto

PROFESSIONAL WATER HOSE REEL (WITH 5/8" HOSE)

FEATURES AND BENEFITS

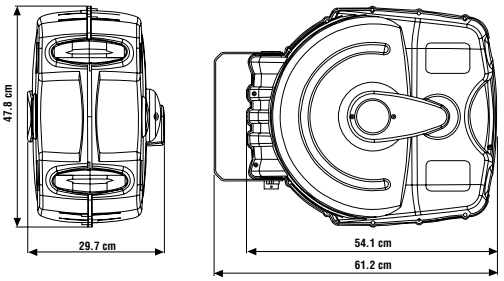
- Automatic rewind
- Lightweight and durable
- High-impact plastic case
- Enclosed case to prolong hose and reel life
- Locking auto-rewind mechanism
- Non-snag hose rollers
- Flexible, long-lasting PVC water hose
- Easily dismountable
- Swivel base mounts to any surface
- Unit dismounts from base easily to become portable with built-in handle
- Quick disconnect water hose couplers included
- Convenient spray nozzle included
- Inlet hose included

SPECIFICATIONS

Fluid: Water

Maximum Working Pressure: 140 PSI

Reel Color: Grey



HOSE REEL WITH PVC HOSE

Product No	Hose I.D. in	Hose Length ft	Inlet/Outlet Garden Hose Thread
79.155	5/8	65	3/4

BRASS FITTINGS FOR GARDEN HOSE

NPT - GHT (GARDEN HOSE THREAD)

Transform an air hose reel into a water hose reel

FEATURES AND BENEFITS

- Brass fittings for water type hose connectors
- Perfect for compressed air hose reels compatible with water

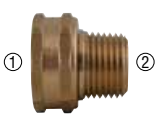
APPLICATIONS

For most industrial plant requirements

MALE CONNECTOR

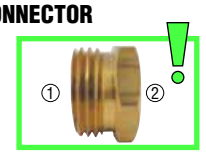
Product No	① GHT (M)	② Thread (M) NPT
41.211	3/4	3/8
41.212	3/4	1/2

MALE SWIVEL CONNECTOR



Product No	① GHT (F)	② Thread (M) NPT
41.207	3/4	3/8
41.209	3/4	1/2

FEMALE CONNECTOR



Product No	① GHT (M)	② Thread (F) NPT
41.216	3/4	3/8
41.217	3/4	1/2

FEMALE SWIVEL CONNECTOR

Product No	① GHT (F)	② Thread (F) NPT
41.201	3/4	1/2

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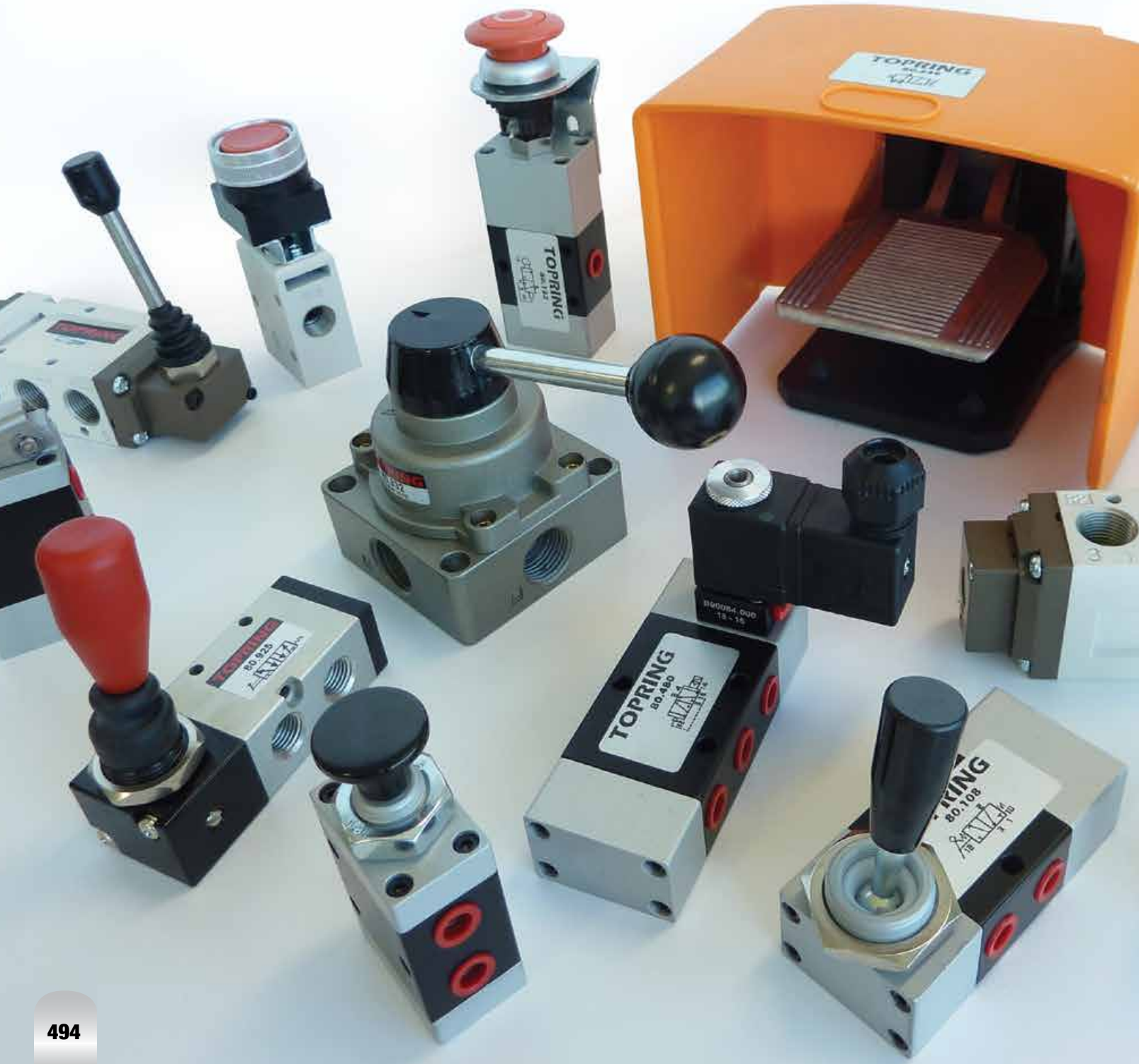
Series 80
AIR CONTROL VALVES



AIR CONTROL VALVES INTRODUCTION

UNDERSTANDING AIR CONTROL VALVES

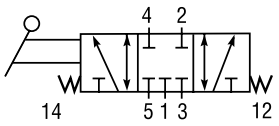
VALVE SYMBOLS

The workings of an air control valve can be determined by the symbol printed right on the valve. All air control valves have this symbol on the valve body, and these symbols are also included in this catalogue.

The number of squares in the symbol will determine the number of positions for the valve. The square containing arrows and either letters or numbers is the « normal », or « initial » position of the valve; this is the position the valve will default to when connected to the air supply.

The other square (or squares) indicates how the valve reacts when another position is reached. The arrows indicate the flow direction of air.

Basic symbols for typical valve types



Port identification

1	Supply pressure inlet
2 - 4	Working Ports
3 - 5	Exhaust
12	Return Type
14	Control

Air control valves have their symbol indicated on the valve body

3/2

3 WAYS, 2 POSITIONS VALVES

Used to activate single acting cylinders

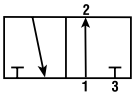
5/2 • 5/3 • 4/3

4 OR 5 WAYS, 2 AND 3 POSITIONS VALVES

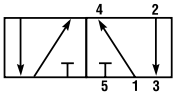
Used to activate double acting cylinders

Examples of symbols

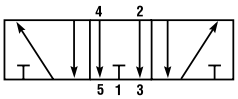
3 way - 2 position



5 way - 2 position



5 way - 3 position



COEFFICIENT OF VELOCITY

The Cv factor, or coefficient of velocity, is a method of indicating the flow capacity of different valves, independent of supply pressure, pressure loss or temperature. The higher the Cv factor, the higher the air flow capacity of the valve.

This Cv factor can be calculated as follows: **Cv = Q x Fc**
Q = Cv / Fc

Fc table for air at 20 °C and pressure loss of 10 PSI (for standard application)

Pressure, inlet (PSIG)	20	30	40	50	60	70	80	90	100	110	120
Fc factor	0.0650	0.0549	0.0483	0.0437	0.0402	0.0374	0.0351	0.0332	0.0316	0.0302	0.0289

Fc table for air at 20 °C and pressure loss of 5 PSI (for conservative application)

Pressure, inlet (PSIG)	20	30	40	50	60	70	80	90	100	110	120
Fc factor	0.0839	0.0725	0.0648	0.0591	0.0547	0.0512	0.0483	0.0458	0.0436	0.0418	0.0401

Fc table for air at 20 °C and pressure loss of 2 PSI (for critical application)

Pressure, inlet (PSIG)	20	30	40	50	60	70	80	90	100	110	120
Fc factor	0.1264	0.1106	0.0995	0.0913	0.0847	0.0795	0.0751	0.0713	0.0681	0.0652	0.0627

Example: 1/4" NPT valve, Cv = 0.8, 100 psig operating pressure will have a flow "Q" of:
Q = 25.3 scfm if δP of 10 psi is acceptable
Q = 18.3 scfm if δP of 5 psi is acceptable
Q = 11.7 scfm if δP of 2 psi is acceptable

Q= flow (scfm), P= inlet valve pressure (psig), **δP**= pressure loss (psi), **Cv**= coefficient of velocity, **Fc**= conversion factor

* In the metric system, Kv coefficient is used, its equivalence is: Cv = 1.16*Kv

VALVES TYPES

BUTTON

Palm Button Operated

Pushing and holding the button shifts the valve.
When the button is released, the valve returns to its normal position.

Direct Plunger Operated

A “maintained” mechanical force applied to the plunger shifts the valve. When the force is removed, the valve returns to its normal position.

Flush Push-Button Operated

Pushing and holding the button shifts the valve. When the button is released, the valve returns to its normal position. Can be panel mounted through a round mounting hole.

Button Operated (Spring)

Pushing and holding the button shifts the spring return valve.
When the button is released, the valve returns to its normal position.

Button Operated (Detented)

Pushing the button shifts the manual return valve. The valve remains in this position until the button is pulled back.

ROLLER OPERATED

These valves actuate when approached from both directions. A “maintained” mechanical force to the roller shifts the valve. When the force is removed, the valve returns to its normal position.

TWIST LEVER OPERATED

Twisting the lever shifts the valve.
The valve remains in this position until the lever is twisted back.

LEVER OPERATED

Lever Operated (Spring Return)

Pushing the lever shifts the spring return valve.
When the lever is released, the valve returns to its normal position.

Lever Operated (Detented)

Pushing the lever shifts the manual return valve.
The valve remains in this position until the lever is pulled back.

Lateral Lever Operated (Detented)

Pushing the lever shifts the valve.
The valve remains in this position until the lever is pulled back.

FOOT OPERATED

Foot Operated (Spring)

Pressing and holding the pedal shifts the spring return valve.
When the pedal is released, the valve returns to its normal position.

Foot Operated (Detented)

Pressing the primary pedal shifts the detented valve.
When the release pedal is pressed, the valve returns to its normal position.

WHISKER

Very low force deflection of the whisker shifts the valve.
When the force is removed, the valve returns to its normal position.

SINGLE AND DOUBLE SOLENOID VALVES

Single Solenoid Valve

A “maintained” electrical signal shifts the single solenoid valve.
When the signal is removed, the valve returns to its normal position.
These valves can be used to provide pilot signals for larger valves.

Double Solenoid Valve

A “momentary” electrical signal applied to one of the solenoids shifts the double solenoid valve. The valve remains in this position until a “momentary” signal is applied to the other solenoid.
A “maintained” electrical signal applied alternately to the solenoids shifts the 3 position double solenoid valve. When the signal is removed, springs return the valve to its center position.

SINGLE AND DOUBLE REMOTE PILOT VALVES

Single Remote Pilot Valves

A “maintained” pressure signal shifts single pilot valve.
When the signal is removed, the valve returns to its normal position.

Double Remote Pilot Valves

A “momentary” pressure applied to one pilot section shifts the double pilot valve. The valve remains in this position until a “momentary” pressure signal is applied to the other pilot section.

3/2

	MAXIMA 40 000 000 cycles			OPTIMA 10 000 000 cycles			MAXPRO 10 000 000 cycles		
	NPT	Cv	Product No	NPT	Cv	Product No	NPT	Cv	Product No
PUSH BUTTON OPERATED				1/8	0.58	80.802			
	1/4	1.26	80.232	1/4	0.89	80.902			
DIRECT PLUNGER OPERATED				1/4	0.89	80.900			
FLUSH PUSH-BUTTON OPRATED				1/4	0.89	80.903			
BUTTON OPERATED (SPRING RETURN)				1/8	1.00	80.805			
	1/4	1.26	80.214	1/4	1.00	80.905			
BUTTON OPERATED (DETENTED)	1/8	0.52	80.116	1/8	1.00	80.806			
	1/4	1.26	80.216	1/4	1.00	80.906			
ROLLER OPERATED	1/8	0.52	80.104	1/8	0.58	80.801			
	1/4	1.26	80.204	1/4	0.89	80.901			
TWIST SELECTOR OPERATED	1/8	0.52	80.122	1/8	0.58	80.804			
	1/4	1.26	80.222	1/4	0.89	80.904			
LEVER OPERATED (SPRING RETURN)							1/8	1.00	80.817
	1/4	1.26	80.208				1/4	1.00	80.917
LEVER OPERATED (DETENTED)	1/8	0.52	80.112				1/8	1.00	80.807
	1/4	1.26	80.212				1/4	1.00	80.907
LATERAL LEVER OPERATED (DETENTED)				1/8	0.50	80.818			
				1/4	1.0	80.918			
FOOT OPERATED (SPRING RETURN)				1/4	0.67	80.908			
FOOT OPERATED (DETENTED)				1/4	0.67	80.909			
CATS WHISKER OPERATED (SPRING RETURN)	1/8	0.52	80.134						
	1/4	1.26	80.234						
SINGLE REMOTE PILOT	1/4	1.26	80.662	1/4	1.06	80.992			
DOUBLE REMOTE PILOT	1/4	1.26	80.663						
ELECTRICAL 1 SOLENOID	1/8	0.52	80.470 (110 VAC) 80.470.02 (220 VAC) 80.470.03 (24 VDC) 80.470.04 (24 VAC) 80.470.05 (12 VDC)	1/8	0.70	(NF) (NO) 80.950 • 80.951 (110 VAC) 80.950.02 • 80.951.02 (220 VAC) 80.950.03 • 80.951.03 (24 VDC) 80.950.04 • 80.951.04 (24 VAC) 80.950.05 • 80.951.05 (12 VDC)			
				1/4	1.06	(NF) (NO) 80.952 • 80.953 (110 VAC) 80.952.02 • 80.953.02 (220 VAC) 80.952.03 • 80.953.03 (24 VDC) 80.952.04 • 80.953.04 (24 VAC) 80.952.05 • 80.953.05 (12 VDC)	1/4	1.00	(NF) (NO) 80.752 • 80.753 (110 VAC) 80.752.03 • 80.753.03 (24 VDC)
				1/2	3.61	80.966 (110 VAC) 80.966.02 (220 VAC) 80.966.03 (24 VDC) (NF) 80.966.04 (24 VAC) 80.966.05 (12 VDC)			

IMPORTANT
Some MAXIMA valves are no longer available.
To find the product equivalent, please consult the "2015 Air Control Valve Guide " on TOPRING.com

LEGEND FOR OPTIMA AND MAXPRO ELECTRICAL SOLENOID VALVES: (NF) : NORMALLY CLOSED / (NO) : NORMALLY OPEN

AIR CONTROL VALVE GUIDE

5/2	MAXIMA 40 000 000 cycles			OPTIMA 10 000 000 cycles			MAXPRO 10 000 000 cycles		
	NPT	Cv	Product No	NPT	Cv	Product No	NPT	Cv	Product No
PALM BUTTON OPERATED				1/4	1.06	80.912			
DIRECT PLUNGER OPERATED				1/4	1.06	80.910			
FLUSH PUSH-BUTTON OPRATED				1/4	1.06	80.913			
BUTTON OPERATED (SPRING RETURN)	1/8	0.52	80.314	1/8	1.00	80.815			
	1/4	1.26	80.414	1/4	1.00	80.915			
BUTTON OPERATED (DETENTED)	1/8	0.52	80.316	1/8	1.00	80.816			
	1/4	1.26	80.416	1/4	1.00	80.916			
ROLLER OPERATED	1/8	0.52	80.304	1/8	0.70	80.811			
	1/4	1.26	80.404	1/4	1.06	80.911			
TWIST LEVER OPERATED	1/8	0.52	80.322	1/8	0.70	80.814			
	1/4	1.26	80.422	1/4	1.06	80.914			
LEVER OPERATED (SPRING RETURN)	1/8	0.52	80.308						
				1/4	1.00	80.935	1/4	1.00	80.925
				3/8	1.94	80.945			
				1/2	5.00	80.845			
LEVER OPERATED (DETENTED)				1/8	0.75	80.836			
	1/4	1.26	80.412	1/4	1.00	80.936	1/4	1.00	80.926
				3/8	1.94	80.946			
				1/2	5.00	80.846			
LATERAL LEVER OPERATED (DETENTED)	1/8	0.52	80.318	1/8	0.50	80.820			
	1/4	1.26	80.418	1/4	1.00	80.920			
FOOT OPERATED (SPRING RETURN)				1/4	0.67	80.942			
FOOT OPERATED (DETENTED)				1/4	0.67	80.943			
FOOT OPERATED (SPRING RETURN)				1/4	1.00	80.940			
				3/8	1.94	80.941			
CATS WHISKER OPERATED (SPRING RETURN)	1/4	1.26	80.434						
SINGLE REMOTE PILOT	1/8	0.52	80.654	1/8	0.75	80.979			
	1/4	1.26	80.664	1/4	1.06	80.982			
				3/8	2.00	80.986			
	1/2	4.06	80.674	1/2	3.61	80.989			
DOUBLE REMOTE PILOT	1/8	0.52	80.655	1/8	0.75	80.980			
				1/4	1.06	80.983			
				3/8	2.00	80.987			
	1/2	4.06	80.675	1/2	3.61	80.990			

5/2

	MAXIMA 40 000 000 cycles			OPTIMA 10 000 000 cycles			MAXPRO 10 000 000 cycles		
	NPT	Cv	Product No	NPT	Cv	Product No	NPT	Cv	Product No
ELECTRICAL SINGLE SOLENOID 	1/8	0.52	**80.480** (110 VAC) **80.480.02** (220 VAC) **80.480.03** (24 VDC) **80.480.04** (24 VAC) **80.480.05** (12 VDC)	1/8	0.70	**80.954** (110 VAC) **80.954.02** (220 VAC) **80.954.03** (24 VDC) **80.954.04** (24 VAC) **80.954.05** (12 VDC)	1/8	0.61	**80.760** (110 VAC) **80.760.03** (24 VDC)
				1/4	1.06	**80.960** (110 VAC) **80.960.02** (220 VAC) **80.960.03** (24 VDC) **80.960.04** (24 VAC) **80.960.05** (12 VDC)	1/4	1.00	**80.761** (110 VAC) **80.761.03** (24 VDC)
				3/8	2.00	**80.970** (110 VAC) **80.970.02** (220 VAC) **80.970.03** (24 VDC) **80.970.04** (24 VAC) **80.970.05** (12 VDC)	3/8	1.94	**80.762** (110 VAC) **80.762.03** (24 VDC)
				1/2	3.61	**80.974** (110 VAC) **80.974.02** (220 VAC) **80.974.03** (24 VDC) **80.974.04** (24 VAC) **80.974.05** (12 VDC)	1/2	3.89	**80.763** (110 VAC) **80.763.03** (24 VDC)
ELECTRICAL DOUBLE SOLENOID 	1/8	0.52	**80.485** (110 VAC) **80.485.02** (220 VAC) **80.485.03** (24 VDC) **80.485.04** (24 VAC) **80.485.05** (12 VDC)	1/8	0.70	**80.955** (110 VAC) **80.955.02** (220 VAC) **80.955.03** (24 VDC) **80.955.04** (24 VAC) **80.955.05** (12 VDC)	1/8	0.61	**80.765** (110 VAC) **80.765.03** (24 VDC)
	1/4	1.26	**80.486** (110 VAC) **80.486.02** (220 VAC) **80.486.03** (24 VDC) **80.486.04** (24 VAC) **80.486.05** (12 VDC)	1/4	1.06	**80.961** (110 VAC) **80.961.02** (220 VAC) **80.961.03** (24 VDC) **80.961.04** (24 VAC) **80.961.05** (12 VDC)	1/4	1.00	**80.766** (110 VAC) **80.766.03** (24 VDC)
				3/8	2.00	**80.971** (110 VAC) **80.971.02** (220 VAC) **80.971.03** (24 VDC) **80.971.04** (24 VAC) **80.971.05** (12 VDC)	3/8	1.94	**80.767** (110 VAC) **80.767.03** (24 VDC)
				1/2	3.61	**80.975** (110 VAC) **80.975.02** (220 VAC) **80.975.03** (24 VDC) **80.975.04** (24 VAC) **80.975.05** (12 VDC)			

5/2 STAINLESS

ELECTRICAL SINGLE SOLENOID 							1/4	1.94	**80.870** (110 VAC) **80.870.02** (220 VAC) **80.870.03** (24 VDC)
							3/8	3.61	**80.875** (110 VAC) **80.875.02** (220 VAC) **80.875.03** (24 VDC)
ELECTRICAL DOUBLE SOLENOID 							1/4	1.94	**80.871** (110 VAC) **80.871.02** (220 VAC) **80.871.03** (24 VDC)
							3/8	3.61	**80.876** (110 VAC) **80.876.02** (220 VAC) **80.876.03** (24 VDC)

AIR CONTROL VALVE GUIDE

5/3	MAXIMA 40 000 000 cycles			OPTIMA 10 000 000 cycles			MAXPRO 10 000 000 cycles		
	NPT	Cv	Product No	NPT	Cv	Product No	NPT	Cv	Product No
LEVER OPERATED (SPRING RETURN) 	1/4 (CF)	1.26	80.450	1/4 (CF)	1.00	80.937	1/4 (CF)	1.94	80.923
				3/8 (CF)	1.94	80.947	3/8 (CF)	1.94	80.919
				1/2 (CF)	5.00	80.847			
	1/4 (CE)	1.26	80.460	1/4 (CE)	1.00	80.938	1/4 (CE)	1.94	80.924
				3/8 (CE)	1.94	80.948			
	1/2 (CE)	4.06	80.461	1/2 (CE)	5.00	80.848			
				3/8 (CP)	1.94	80.949			
LEVER OPERATED (DETENTED) 	1/4 (CF)	1.26	80.455	1/4 (CF)	1.00	80.921	1/4 (CF)	1.94	80.927
				3/8 (CF)	1.94	80.933	3/8 (CF)	1.94	80.929
				1/2 (CF)	5.00	80.833			
				1/4 (CE)	1.00	80.922	1/4 (CE)	1.94	80.928
				3/8 (CE)	1.94	80.934			
	1/2 (CE)	4.06	80.466	1/2 (CE)	5.00	80.834			
				1/4 (CF)	0.42	80.930			
				3/8 (CF)	1.11	80.931			
				1/2 (CF)	3.06	80.932			
DOUBLE REMOTE PILOT 	1/4 (CF)	1.26	80.666	1/4 (CF)	0.64	80.984			
				3/8 (CF)	1.67	80.988			
ELECTRICAL DOUBLE SOLENOID 				1/8 (CF)	0.50	**80.956** (110 VAC) **80.956.02** (220 VAC) **80.956.03** (24 VDC) **80.956.04** (24 VAC) **80.956.05** (12 VDC)			
				1/4 (CF)	0.64	**80.962** (110 VAC) **80.962.02** (220 VAC) **80.962.03** (24 VDC) **80.962.04** (24 VAC) **80.962.05** (12 VDC)			
				3/8 (CF)	1.67	**80.972** (110 VAC) **80.972.02** (220 VAC) **80.972.03** (24 VDC) **80.972.04** (24 VAC) **80.972.05** (12 VDC)			
	1/2 (CF)	4.06	**80.492** (110 VAC) **80.492.02** (220 VAC) **80.492.03** (24 VDC) **80.492.04** (24 VAC) **80.492.05** (12 VDC)	1/2 (CF)	2.78	**80.976** (110 VAC) **80.976.02** (220 VAC) **80.976.03** (24 VDC) **80.976.04** (24 VAC) **80.976.05** (12 VDC)			
ELECTRICAL DOUBLE SOLENOID 				1/8 (CE)	0.50	**80.957** (110 VAC) **80.957.02** (220 VAC) **80.957.03** (24 VDC) **80.957.04** (24 VAC) **80.957.05** (12 VDC)			
				1/4 (CE)	0.64	**80.963** (110 VAC) **80.963.02** (220 VAC) **80.963.03** (24 VDC) **80.963.04** (24 VAC) **80.963.05** (12 VDC)			
				3/8 (CE)	1.67	**80.973** (110 VAC) **80.973.02** (220 VAC) **80.973.03** (24 VDC) **80.973.04** (24 VAC) **80.973.05** (12 VDC)			

LEGEND: CO: OPEN CENTER / CF: CLOSED CENTER / CE: OPEN CENTER AT THE EXHAUST / CP: OPEN CENTER AT THE PRESSURE

MAXIMA VALVES

With its unique design, **MAXIMA** air control valves offer high flow.

Ideal for continuous motion applications.

40 000 000 CYCLES

FEATURES AND BENEFITS

- **Robust design**
- **High flow**
- **Excellent for applications requiring a high velocity**
- **High technology spool design combined with rubber lip seals for reliable intensive work**
- **Stainless steel spool allowing excellent corrosion resistance**
- **Solenoid manual override button provides a means to shift the valve without electrical power**
- **Standard plug connector (DIN type)**
- **Electrical coil convertors can be turned 360° in 90° increments to accommodate most industrial requirements**

MATERIALS

Body and End Caps: Anodized aluminium

Seals: Oil resistant NBR lip seals

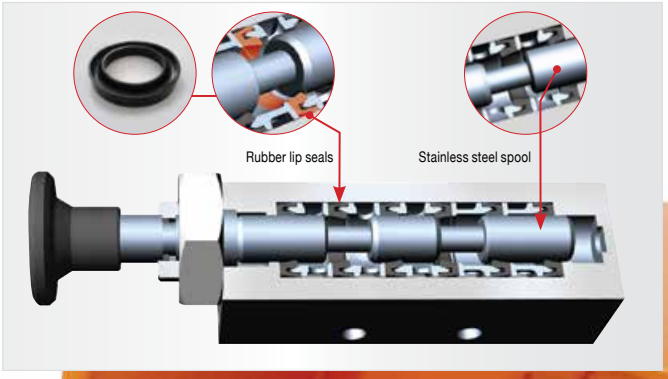
Spool: Stainless steel 304L

Other Internal Parts: Stainless steel, brass, aluminium

SPECIFICATIONS

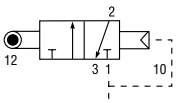
Maximum Cycles/Minute: 1 000

Fluid: Filtered air (lubricated or oil free)



ROLLER OPERATED

3/2



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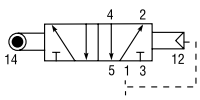
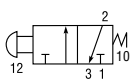


Product No	Port Size (F) NPT	Way / position
80.104	1/8	3/2
80.204	1/4	3/2
80.304	1/8	5/2
80.404	1/4	5/2

BUTTON OPERATED (WITH SPRING RETURN)

3/2



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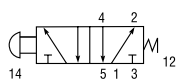
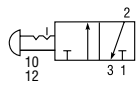


Product No	Port Size (F) NPT	Way / position
80.214	1/4	3/2
80.314	1/8	5/2
80.414	1/4	5/2
80.004	Replacement Button	

BUTTON OPERATED (DETENTED)

3/2



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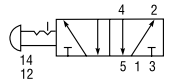
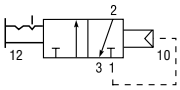


Product No	Port Size (F) NPT	Way / position
80.116	1/8	3/2
80.216	1/4	3/2
80.316	1/8	5/2
80.416	1/4	5/2
80.004	Replacement Button	

TWIST LEVER OPERATED

3/2



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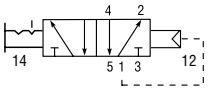
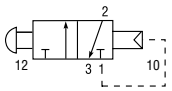


Product No	Port Size (F) NPT	Way / position
80.122	1/8	3/2
80.222	1/4	3/2
80.322	1/8	5/2
80.422	1/4	5/2
80.001	Replacement Twist Lever Operated for 80.222 / 80. 322 / 80.422	

PALM BUTTON OPERATED

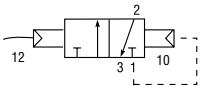
3/2



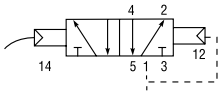
Product No	Port Size (F) NPT	Way / position
80.232	1/4	3/2

CATS WHISKER OPERATED (SPRING RETURN)

3/2



5/2

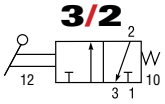


Product No	Port Size (F) NPT	Way / position
80.134	1/8	3/2
80.234	1/4	3/2
80.434	1/4	5/2
80.007	Replacement Whisker	

Pressure Range: 29 to 145 PSI / **Temperature Range:** -20 to 70 °C

LEVER OPERATED
(SPRING RETURN)

3/2



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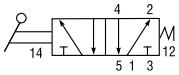
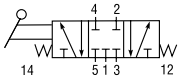
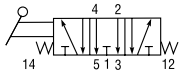


5/3



CLOSED CENTER

5/3

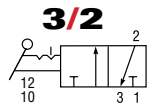


EXHAUST CENTER

Product No	Port Size (F) NPT	Way / position	Return Type
80.208	1/4	**3/2**	Spring
80.308	1/8	**5/2**	Spring
80.450	1/4	**5/3**	Spring / Closed Center
80.460	1/4	**5/3**	Spring / Exhaust Center
80.461	1/2	**5/3**	Spring / Exhaust Center

LEVER OPERATED
(DETENTED)

3/2



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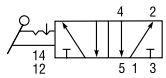
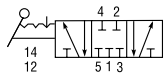
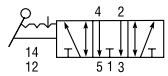


5/3



CLOSED CENTER

5/3



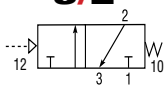
EXHAUST CENTER

Product No	Port Size (F) NPT	Way / position	Return Type
80.412	1/4	**5/2**	Detented
80.455	1/4	**5/3**	Detented / Closed Center
80.466	1/2	**5/3**	Detented / Exhaust Center

Pressure Range: 29 to 145 PSI / **Temperature Range:** -20 to 70 °C

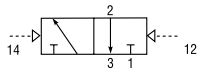
SINGLE AND DOUBLE REMOTE PILOT VALVES

3/2



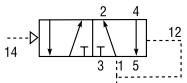
SINGLE PILOT

3/2



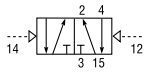
DOUBLE PILOT

5/2



SINGLE PILOT

5/2



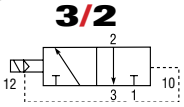
DOUBLE PILOT

Product No	Port Size (F) NPT	Way / position	Return Type
80.662	1/4	**3/2**	Single Pilot
80.663	1/4	**3/2**	Double Pilot
80.655	1/8	**5/2**	Double Pilot
80.664	1/4	**5/2**	Single Pilot

Pilot entry: 1/8 NPT

Pressure Range: 29 to 145 PSI / **Temperature Range:** -20 to 70 °C

SINGLE SOLENOID VALVES

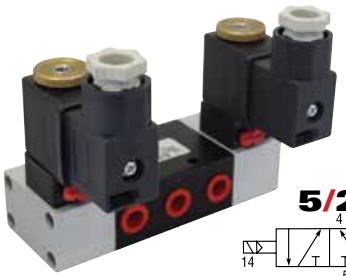


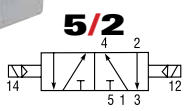
SINGLE SOLENOID

SINGLE SOLENOID - 3 WAY / 2 POSITION

Product No	Port Size (F) NPT	Voltage
80.470	1/8	110 VAC
80.470.02	1/8	220 VAC
80.470.03	1/8	24 VDC
80.470.04	1/8	24 VAC
80.470.05	1/8	12 VDC

DOUBLE SOLENOID VALVES





DOUBLE SOLENOID

DOUBLE SOLENOID - 5 WAY / 2 POSITION

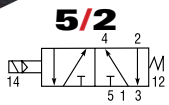
Product No	Port Size (F) NPT	Voltage
80.485	1/8	110 VAC
80.485.02	1/8	220 VAC
80.485.03	1/8	24 VDC
80.485.04	1/8	24 VAC
80.485.05	1/8	12 VDC
80.486	1/4	110 VAC
80.486.02	1/4	220 VAC
80.486.03	1/4	24 VDC
80.486.04	1/4	24 VAC
80.486.05	1/4	12 VDC

REPLACEMENT SOLENOID COILS

The solenoid coils on all **MAXIMA** electrical valves can be replaced or changed for other voltages.

Product No	Voltage
80.494	24 VDC
80.495	24 VAC
80.496	110 VAC
80.497	220 VAC
80.499	12 VDC

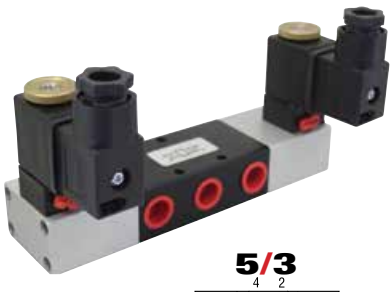
Product No	Description
80.500	Connector

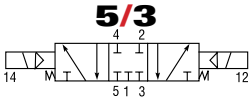


SINGLE SOLENOID

SIINGE SOLENOID - 5 WAY / 2 POSITION

Product No	Port Size (F) NPT	Voltage
80.480	1/8	110 VAC
80.480.02	1/8	220 VAC
80.480.03	1/8	24 VDC
80.480.04	1/8	24 VAC
80.480.05	1/8	12 VDC





DOUBLE SOLENOID / CLOSED CENTER

DOUBLE SOLENOID - CLOSED CENTER 5 WAY / 3 POSITION

Product No	Port Size (F) NPT	Voltage
80.492	1/2	110 VAC
80.492.02	1/2	220 VAC
80.492.03	1/2	24 VDC
80.492.04	1/2	24 VAC
80.492.05	1/2	12 VDC

Pressure Range: 29 to 145 PSI
Temperature Range: -20 to 70 °C

OPTIMA VALVES

OPTIMA air control valves offer high flow performance and reliability in an economical package.

10 000 000 CYCLES

FEATURES AND BENEFITS

- **Compact size**
- **High flow**
- **Quick response**
- **Highly reliable spool technology**
- **3 and 5 way, 2 and 3 position**
- **Designed for in-line or bar manifolding**

MATERIALS

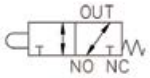
Body, End Caps: Anodized aluminium
Seals: Oil resistant rubber seals
Spool: Aluminium
Other Internal Parts: Stainless steel, brass, aluminium

SPECIFICATIONS

Fluid: Filtered air (lubricated or oil-free)

DIRECT PLUNGER OPERATED

3/2



5/2

Product No	Port Size (F) NPT	Way / position
80.900	1/4	3/2
80.910	1/4	5/2

ROLLER OPERATED

3/2

5/2

Product No	Port Size (F) NPT	Way / position
80.801	1/8	3/2
80.901	1/4	3/2
80.811	1/8	5/2
80.911	1/4	5/2

PUSH-BUTTON OPERATED

3/2

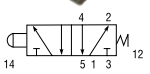
5/2

Product No	Port Size (F) NPT	Way / position
80.802	1/8	3/2
80.902	1/4	3/2
80.912	1/4	5/2

FLUSH PUSH-BUTTON OPERATED

3/2

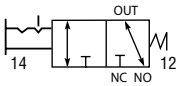
5/2



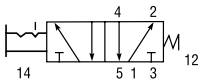
Product No	Port Size (F) NPT	Way / position
80.903	1/4	3/2
80.913	1/4	5/2

TWIST SELECTOR OPERATED

3/2



5/2



Product No	Port Size (F) NPT	Way / position
80.804	1/8	3/2
80.904	1/4	3/2
80.814	1/8	5/2
80.914	1/4	5/2

Operating Pressure Range : 0 to 116 PSI / **Temperature Range:** 5 to 60 °C

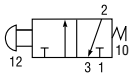
07_06_2016

TECH TIP

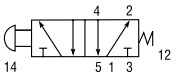
These 5 way - 2 positions valves 80.910, 80.911, 80.912, 80.913 and 80.914 are supplied with mufflers for the two exhaust ports

BUTTON OPERATED (WITH SPRING RETURN)

3/2



5/2

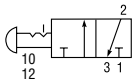


Product No	Port Size (F) NPT	Way / position
80.805	1/8	3/2
80.905	1/4	3/2
80.815	1/8	5/2
80.915	1/4	5/2

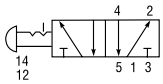
Operating Pressure Range: 0 to 130 PSI
Temperature Range: -10 to 60 °C

BUTTON OPERATED (DETENTED)

3/2



5/2

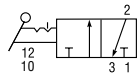


Product No	Port Size (F) NPT	Way / position
80.806	1/8	3/2
80.906	1/4	3/2
80.816	1/8	5/2
80.916	1/4	5/2

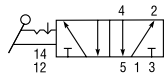
Operating Pressure Range: 0 to 130 PSI
Temperature Range: -10 to 60 °C

LATERAL LEVER OPERATED (DETENTED)

3/2



5/2

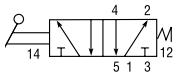


Product No	Port Size (F) NPT	Way / position
80.818	1/8	3/2
80.918	1/4	3/2
80.820	1/8	5/2
80.920	1/4	5/2

Operating Pressure Range:
1/8: 29 to 145 PSI • 1/4: 0 to 116 PSI
Temperature Range: 5 to 60 °C

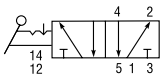
LEVER VALVE

5/2



SPRING RETURN

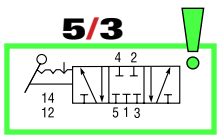
5/2



DETENDED

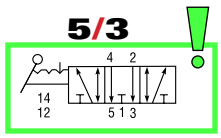
Product No	Port Size (F) NPT	Way / position	Return Type
80.836	1/8	5/2	Detented
80.935	1/4	5/2	Spring return
80.936	1/4	5/2	Detented
80.945	3/8	5/2	Spring return
80.946	3/8	5/2	Detented
80.845	1/2	5/2	Spring return
80.846	1/2	5/2	Detented

5/3



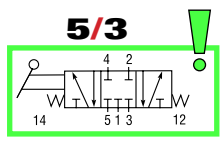
DETENDED CLOSED CENTER

5/3



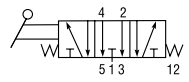
DETENDED CLOSED CENTER AT THE EXHAUST

5/3



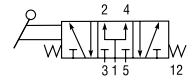
SPRING RETURN CLOSED CENTER

5/3



SPRING RETURN OPEN CENTER AT THE EXHAUST

5/3



SPRING RETURN OPEN CENTER AT THE PRESSURE

Operating Pressure Range: 0 to 116 PSI
Temperature Range: 5 to 60 °C

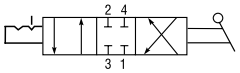
Product No	Port Size (F) NPT	Way / position	Return Type
80.921	1/4	5/3	Detended / Closed center
80.922	1/4	5/3	Detended / Open center at the exhaust
80.937	1/4	5/3	Spring return / Closed center
80.938	1/4	5/3	Spring return / Open center at the exhaust
80.933	3/8	5/2	Detended / Closed center
80.934	3/8	5/2	Detended / Open center at the exhaust
80.947	3/8	5/3	Spring return / Closed center
80.948	3/8	5/3	Spring return / Open center at the exhaust
80.949	3/8	5/3	Spring return / Open center at the pressure
80.833	1/2	5/3	Detended / Closed center
80.834	1/2	5/3	Detended / Open center at the exhaust
80.847	1/2	5/3	Spring return / Closed center
80.848	1/2	5/3	Spring return / Open center at the exhaust

MANUALLY OPERATED VALVES

FEATURES AND BENEFITS

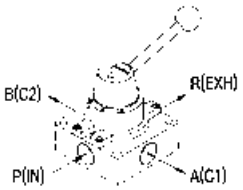
- Compact design
- Leak-proof operation
- Long service life
- Low operator effort
- Operation Angle: 90°
- Fluid: Filtered air (5 micron)

4/3
CLOSED CENTER



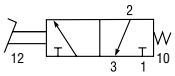
Product No	Port Size (F) NPT	Way / position
80.930	1/4	4/3
80.931	3/8	4/3
80.932	1/2	4/3

Operating Pressure Range : 0 to 145 PSI
Temperature Range: 5 to 60 °C



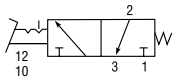
FOOT OPERATED VALVE

3/2



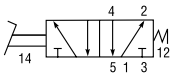
SPRING RETURN

3/2



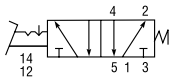
DETENTED

5/2



SPRING RETURN

5/2

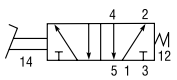


DETENTED

Product No	Port Size (F) NPT	Way / position	Return Type
80.908	1/4	**3/2**	Spring
80.909	1/4	**3/2**	Detented
80.942	1/4	**5/2**	Spring
80.943	1/4	**5/2**	Detented

Operating Pressure Range: 0 to 130 PSI
Temperature Range: -10 to 60 °C

5/2



SPRING RETURN

Product No	Port Size (F) NPT	Way / position	Return Type
80.940	1/4	**5/2**	Spring
80.941	3/8	**5/2**	Spring

Operating Pressure Range: 21.8 to 116 PSI
Temperature Range: 5 to 60 °C

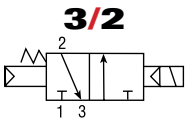
SINGLE SOLENOID ELECTRICAL VALVES

SPECIFICATIONS

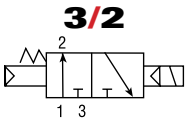
Manual Override: Push-Button
Voltage Fluctuation: ±10%
Response Time M/Sec: 3/2 & 5/2: ≤ 25 MS • 5/3: ≤ 35 MS
Maximum Cycles/Minute: 3/2 and 5/2: 300 • 5/3: 180

FEATURES AND BENEFITS

- **Solenoid manual override button shifts the valve without electrical power**
- **Standard connector (DIN type)**
- **Electrical coil can be turned 360° in 90° increments to accommodate most installation requirements**



NORMALLY CLOSED



NORMALLY OPEN

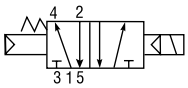
SINGLE SOLENOID - 3 WAY / 2 POSITION

Product No	Port Size (F) NPT	Way / position	Type	Voltage
80.950	1/8	**3/2**	Normally Closed	110 VAC
80.950.02	1/8	**3/2**	Normally Closed	220 VAC
80.950.03	1/8	**3/2**	Normally Closed	24 VDC
80.950.04	1/8	**3/2**	Normally Closed	24 VAC
80.950.05	1/8	**3/2**	Normally Closed	12 VDC
80.951	1/8	**3/2**	Normally Open	110 VAC
80.951.02	1/8	**3/2**	Normally Open	220 VAC
80.951.03	1/8	**3/2**	Normally Open	24 VDC
80.951.04	1/8	**3/2**	Normally Open	24 VAC
80.951.05	1/8	**3/2**	Normally Open	12 VDC
80.952	1/4	**3/2**	Normally Closed	110 VAC
80.952.02	1/4	**3/2**	Normally Closed	220 VAC
80.952.03	1/4	**3/2**	Normally Closed	24 VDC
80.952.04	1/4	**3/2**	Normally Closed	24 VAC
80.952.05	1/4	**3/2**	Normally Closed	12 VDC
80.953	1/4	**3/2**	Normally Open	110 VAC
80.953.02	1/4	**3/2**	Normally Open	220 VAC
80.953.03	1/4	**3/2**	Normally Open	24 VDC
80.953.04	1/4	**3/2**	Normally Open	24 VAC
80.953.05	1/4	**3/2**	Normally Open	12 VDC
80.966	1/2	**3/2**	Normally Closed	110 VAC
80.966.02	1/2	**3/2**	Normally Closed	220 VAC
80.966.03	1/2	**3/2**	Normally Closed	24 VDC
80.966.04	1/2	**3/2**	Normally Closed	24 VAC
80.966.05	1/2	**3/2**	Normally Closed	12 VDC

Operating Pressure Range: 21.8 to 145 PSI
Temperature Range: 5 to 60 °C

SINGLE SOLENOID ELECTRICAL VALVES

5/2



SINGLE SOLENOID

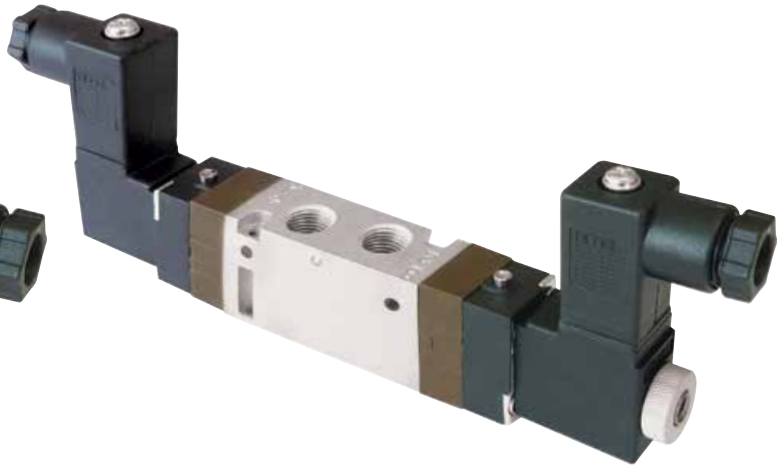
SINGLE SOLENOID - 5 WAY / 2 POSITION

Product No	Port Size (F) NPT	Way / position	Type	Voltage
80.954	1/8	**5/2**	Single solenoid	110 VAC
80.954.02	1/8	**5/2**	Single solenoid	220 VAC
80.954.03	1/8	**5/2**	Single solenoid	24 VDC
80.954.04	1/8	**5/2**	Single solenoid	24 VAC
80.954.05	1/8	**5/2**	Single solenoid	12 VDC
80.960	1/4	**5/2**	Single solenoid	110 VAC
80.960.02	1/4	**5/2**	Single solenoid	220 VAC
80.960.03	1/4	**5/2**	Single solenoid	24 VDC
80.960.04	1/4	**5/2**	Single solenoid	24 VAC
80.960.05	1/4	**5/2**	Single solenoid	12 VDC
80.970	3/8	**5/2**	Single solenoid	110 VAC
80.970.02	3/8	**5/2**	Single solenoid	220 VAC
80.970.03	3/8	**5/2**	Single solenoid	24 VDC
80.970.04	3/8	**5/2**	Single solenoid	24 VAC
80.970.05	3/8	**5/2**	Single solenoid	12 VDC
80.974	1/2	**5/2**	Single solenoid	110 VAC
80.974.02	1/2	**5/2**	Single solenoid	220 VAC
80.974.03	1/2	**5/2**	Single solenoid	24 VDC
80.974.04	1/2	**5/2**	Single solenoid	24 VAC
80.974.05	1/2	**5/2**	Single solenoid	12 VDC

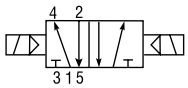
Operating Pressure Range: 21.8 to 145 PSI

Temperature Range: 5 to 60 °C

DOUBLE SOLENOID ELECTRICAL VALVES



5/2



DOUBLE SOLENOID

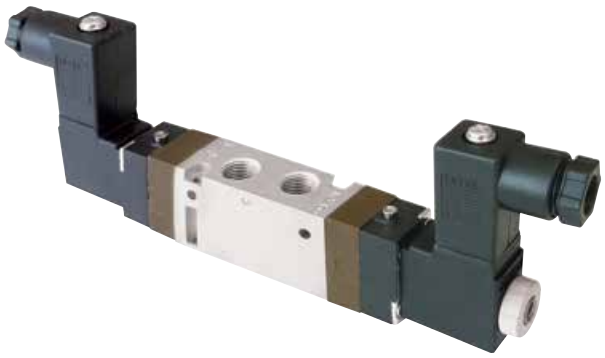
DOUBLE SOLENOID - 5 WAY / 2 POSITION

Product No	Port Size (F) NPT	Way / position	Type	Voltage
80.955	1/8	**5/2**	Double solenoid	110 VAC
80.955.02	1/8	**5/2**	Double solenoid	220 VAC
80.955.03	1/8	**5/2**	Double solenoid	24 VDC
80.955.04	1/8	**5/2**	Double solenoid	24 VAC
80.955.05	1/8	**5/2**	Double solenoid	12 VDC
80.961	1/4	**5/2**	Double solenoid	110 VAC
80.961.02	1/4	**5/2**	Double solenoid	220 VAC
80.961.03	1/4	**5/2**	Double solenoid	24 VDC
80.961.04	1/4	**5/2**	Double solenoid	24 VAC
80.961.05	1/4	**5/2**	Double solenoid	12 VDC
80.971	3/8	**5/2**	Double solenoid	110 VAC
80.971.02	3/8	**5/2**	Double solenoid	220 VAC
80.971.03	3/8	**5/2**	Double solenoid	24 VDC
80.971.04	3/8	**5/2**	Double solenoid	24 VAC
80.971.05	3/8	**5/2**	Double solenoid	12 VDC
80.975	1/2	**5/2**	Double solenoid	110 VAC
80.975.02	1/2	**5/2**	Double solenoid	220 VAC
80.975.03	1/2	**5/2**	Double solenoid	24 VDC
80.975.04	1/2	**5/2**	Double solenoid	24 VAC
80.975.05	1/2	**5/2**	Double solenoid	12 VDC

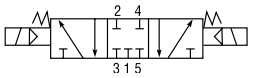
Operating Pressure Range: 21.8 to 145 PSI

Temperature Range: 5 to 60 °C

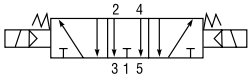
DOUBLE SOLENOID ELECTRICAL VALVES



5/3



DOUBLE SOLENOID / CLOSED CENTER



DOUBLE SOLENOID / EXHAUST CENTER

DOUBLE SOLENOID - 5 WAY / 3 POSITION

Product No	Port Size (F) NPT	Way / position	Type	Voltage
80.956	1/8	**5/3**	Double solenoid / Closed Center	110 VAC
80.956.02	1/8	**5/3**	Double solenoid / Closed Center	220 VAC
80.956.03	1/8	**5/3**	Double solenoid / Closed Center	24 VDC
80.956.04	1/8	**5/3**	Double solenoid / Closed Center	24 VAC
80.956.05	1/8	**5/3**	Double solenoid / Closed Center	12 VDC
80.957	1/8	**5/3**	Double solenoid / Exhaust Center	110 VAC
80.957.02	1/8	**5/3**	Double solenoid / Exhaust Center	220 VAC
80.957.03	1/8	**5/3**	Double solenoid / Exhaust Center	24 VDC
80.957.04	1/8	**5/3**	Double solenoid / Exhaust Center	24 VAC
80.957.05	1/8	**5/3**	Double solenoid / Exhaust Center	12 VDC
80.962	1/4	**5/3**	Double solenoid / Closed Center	110 VAC
80.962.02	1/4	**5/3**	Double solenoid / Closed Center	220 VAC
80.962.03	1/4	**5/3**	Double solenoid / Closed Center	24 VDC
80.962.04	1/4	**5/3**	Double solenoid / Closed Center	24 VAC
80.962.05	1/4	**5/3**	Double solenoid / Closed Center	12 VDC
80.963	1/4	**5/3**	Double solenoid / Exhaust Center	110 VAC
80.963.02	1/4	**5/3**	Double solenoid / Exhaust Center	220 VAC
80.963.03	1/4	**5/3**	Double solenoid / Exhaust Center	24 VDC
80.963.04	1/4	**5/3**	Double solenoid / Exhaust Center	24 VAC
80.963.05	1/4	**5/3**	Double solenoid / Exhaust Center	12 VDC
80.972	3/8	**5/3**	Double solenoid / Closed Center	110 VAC
80.972.02	3/8	**5/3**	Double solenoid / Closed Center	220 VAC
80.972.03	3/8	**5/3**	Double solenoid / Closed Center	24 VDC
80.972.04	3/8	**5/3**	Double solenoid / Closed Center	24 VAC
80.972.05	3/8	**5/3**	Double solenoid / Closed Center	12 VDC
80.973	3/8	**5/3**	Double solenoid / Exhaust Center	110 VAC
80.973.02	3/8	**5/3**	Double solenoid / Exhaust Center	220 VAC
80.973.03	3/8	**5/3**	Double solenoid / Exhaust Center	24 VDC
80.973.04	3/8	**5/3**	Double solenoid / Exhaust Center	24 VAC
80.973.05	3/8	**5/3**	Double solenoid / Exhaust Center	12 VDC
80.976	1/2	**5/3**	Double solenoid / Closed Center	110 VAC
80.976.02	1/2	**5/3**	Double solenoid / Closed Center	220 VAC
80.976.03	1/2	**5/3**	Double solenoid / Closed Center	24 VDC
80.976.04	1/2	**5/3**	Double solenoid / Closed Center	24 VAC
80.976.05	1/2	**5/3**	Double solenoid / Closed Center	12 VDC

Operating Pressure Range: 29 to 145 PSI

Temperature Range: 5 to 60 °C

REPLACEMENT SOLENOID COILS

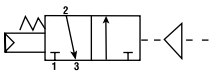
The solenoid coils on all **OPTIMA** electrical valves can be replaced or changed for other voltages

Product No	Port Size	Voltage
80.994	1/8	110 VAC
80.994.02	1/8	220 VAC
80.994.03	1/8	24 VDC
80.994.04	1/8	24 VAC
80.994.05	1/8	12 VDC
80.995	1/4-3/8	110 VAC
80.995.02	1/4-3/8	220 VAC
80.995.03	1/4-3/8	24 VDC
80.995.04	1/4-3/8	24 VAC
80.995.05	1/4-3/8	12 VDC

Product No	Connector
80.997	1/8
80.998	1/4 and 3/8

DOUBLE AND SINGLE REMOTE PILOT VALVES

3/2

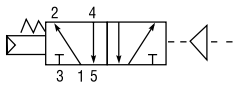


SINGLE REMOTE PILOT

Product No	Port Size (F) NPT	Way / position	Return Type
80.992	1/4	**3/2**	Single Remote Pilot

Operating Pressure Range: 21.8 to 145 PSI
Temperature Range: 5 to 60 °C
Pilot Port: 1/4 NPT

5/2

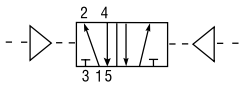


SINGLE REMOTE PILOT

Product No	Port Size (F) NPT	Way / position	Return Type
80.979	1/8	**5/2**	Single Remote Pilot
80.982	1/4	**5/2**	Single Remote Pilot
80.986	3/8	**5/2**	Single Remote Pilot
80.989	1/2	**5/2**	Single Remote Pilot

Operating Pressure Range: 21.8 to 145 PSI
Temperature Range: 5 to 60 °C
Pilot Port: 1/8 NPT

5/2

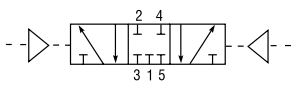


DOUBLE REMOTE PILOT

Product No	Port Size (F) NPT	Way / position	Return Type
80.980	1/8	**5/2**	Double Remote Pilot
80.983	1/4	**5/2**	Double Remote Pilot
80.987	3/8	**5/2**	Double Remote Pilot
80.990	1/2	**5/2**	Double Remote Pilot

Operating Pressure Range: 21.8 to 145 PSI
Temperature Range: 5 to 60 °C
Pilot Port: 1/8 NPT

5/3



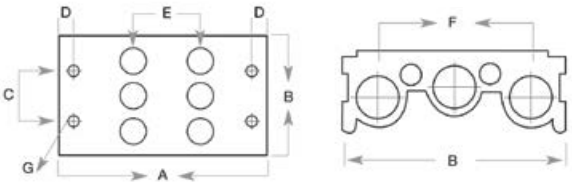
DOUBLE REMOTE PILOT / CLOSED CENTER

Product No	Port Size (F) NPT	Way / position	Return Type
80.984	1/4	**5/3**	Double Remote Pilot / Closed Center
80.988	3/8	**5/3**	Double Remote Pilot / Closed Center

Operating Pressure Range: 29 to 145 PSI
Temperature Range: 5 to 60 °C
Pilot Port: 1/8 NPT

MANIFOLD BASE KITS

FOR OPTIMA 5/2 AND 5/3 SOLENOID AND PNEUMATIC PILOT VALVES



FEATURES AND BENEFITS

- Manifold base kits allow the mounting of multiple 5/2 and 5/3 valves to a common air source and exhaust outlet
- This mounting method can be used for single and double solenoid valves as well as for both single and double pneumatic pilot valves, in any combination on the same manifold base
- All kits come with mounting hardware and gaskets for the total number of mountable valves per manifold

SPECIFICATIONS

Maximum Operating Pressure: 145 PSI

Temperature Range: 5 ˚C to 60 ˚C

Product No	Stations	Input & Exhaust Ports (F) NPT	Port Size (F) NPT	Dimensions (mm)						
				A	B	C	D	E	F	G
80.958.02	2	1/4	1/8	59.0	61.0	20.0	6.0	19.0	39.0	4.5
80.958.03	3	1/4	1/8	78.0	61.0	20.0	6.0	19.0	39.0	4.5
80.958.04	4	1/4	1/8	97.0	61.0	20.0	6.0	19.0	39.0	4.5
80.958.05	5	1/4	1/8	116.0	61.0	20.0	6.0	19.0	39.0	4.5
80.958.06*	6	1/4	1/8	135.0	61.0	20.0	6.0	19.0	39.0	4.5
80.958.08*	8	1/4	1/8	173.0	61.0	20.0	6.0	19.0	39.0	4.5
80.958.10*	10	1/4	1/8	211.0	61.0	20.0	6.0	19.0	39.0	4.5
80.968.02	2	1/4	1/4	83.5	68.0	24.0	6.0	27.0	46.0	5.5
80.968.03	3	1/4	1/4	111.0	68.0	24.0	6.0	27.0	46.0	5.5
80.968.04	4	1/4	1/4	138.5	68.0	24.0	6.0	27.0	46.0	5.5
80.968.05	5	1/4	1/4	166.0	68.0	24.0	6.0	27.0	46.0	5.5
80.968.06*	6	1/4	1/4	193.5	68.0	24.0	6.0	27.0	46.0	5.5
80.968.08*	8	1/4	1/4	248.5	68.0	24.0	6.0	27.0	46.0	5.5
80.968.10*	10	1/4	1/4	303.5	68.0	24.0	6.0	27.0	46.0	5.5
80.978.02	2	3/8	3/8	93.0	87.0	30.0	6.5	33.0	60.0	6.5
80.978.03	3	3/8	3/8	126.0	87.0	30.0	6.5	33.0	60.0	6.5
80.978.04*	4	3/8	3/8	159.0	87.0	30.0	6.5	33.0	60.0	6.5
80.978.05*	5	3/8	3/8	192.0	87.0	30.0	6.5	33.0	60.0	6.5
80.978.06*	6	3/8	3/8	225.0	87.0	30.0	6.5	33.0	60.0	6.5
80.978.08*	8	3/8	3/8	291.0	87.0	30.0	6.5	33.0	60.0	6.5
80.978.10*	10	3/8	3/8	357.0	87.0	30.0	6.5	33.0	60.0	6.5

* Available upon request

BLANKING PLATE

Used to block valve station on the manifold

Product No	
80.958.01	**(1/8)**
80.968.01	**(1/4)**
80.978.01	**(3/8)**

MAXPRO VALVES

MAXPRO air control valves offer excellent performance and reliability in an economical package.

10 000 000 CYCLES

FEATURES AND BENEFITS

- **Compact design**
- **High flow**
- **Highly reliable spool technology**
- **Standard plug connector (DIN type)**

MATERIALS

Body: Anodized aluminium

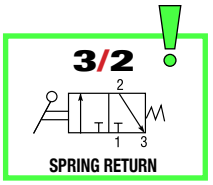
Seals: Oil resistant rubber seals

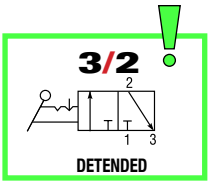
Spool: Aluminium

SPECIFICATIONS

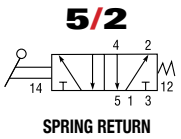
Fluid: Filtered air (lubricated or oil free)

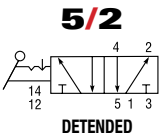
LEVER VALVES



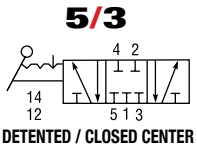


Product No	Port Size (F) NPT	Way / position	Return Type
80.807**	1/8	**3/2**	Detented
80.817*	1/8	**3/2**	Spring Return
80.907**	1/4	**3/2**	Detented
80.917*	1/4	**3/2**	Spring Return





Product No	Port Size (F) NPT	Way / position	Return Type
80.925*	1/4	**5/2**	Spring Return
80.926**	1/4	**5/2**	Detented

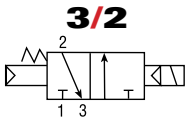


Product No	Port Size (F) NPT	Way / position	Return Type
80.923*	1/4	**5/3**	Spring Return / Closed Center
80.924*	1/4	**5/3**	Spring Return / Open Center at the Exhaust
80.927**	1/4	**5/3**	Detented / Closed Center
80.928**	1/4	**5/3**	Detented / Open Center at the Exhaust
80.919*	3/8	**5/3**	Spring Return / Closed Center
80.929**	3/8	**5/3**	Detended / Closed Center

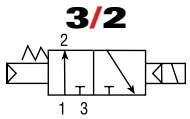
Operating Pressure Range: 0 to 130 PSI
Temperature Range: -10 to 60 °C

*Red colored lever (spring return)
**Black colored lever (detended)

SINGLE AND DOUBLE SOLENOID ELECTRICAL VALVES



NORMALLY CLOSED



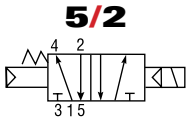
NORMALLY OPEN

SINGLE SOLENOID - 3 WAY / 2 POSITION

Product No	Port Size (F) NPT	Way / position	Type	Voltage
80.752	1/4	**3/2**	Normally closed	110 VAC
80.752.03	1/4	**3/2**	Normally closed	24 VDC
80.753	1/4	**3/2**	Normally open	110 VAC
80.753.03	1/4	**3/2**	Normally open	24 VDC

Operating Pressure Range: 29 to 116 PSI

Temperature Range: -10 to 50 °C



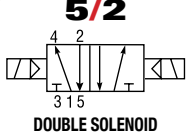
SINGLE SOLENOID

SINGLE SOLENOID - 5 WAY / 2 POSITION

Product No	Port Size (F) NPT	Way / position	Type	Voltage
80.760	1/8	**5/2**	Single solenoid	110 VAC
80.760.03	1/8	**5/2**	Single solenoid	24 VDC
80.761	1/4	**5/2**	Single solenoid	110 VAC
80.761.03	1/4	**5/2**	Single solenoid	24 VDC
80.762	3/8	**5/2**	Single solenoid	110 VAC
80.762.03	3/8	**5/2**	Single solenoid	24 VDC
80.763	1/2	**5/2**	Single solenoid	110 VAC
80.763.03	1/2	**5/2**	Single solenoid	24 VDC

Operating Pressure Range:
1/8, 1/4 and 3/8: 21.8 to 116 PSI • 1/2: 29 to 116 PSI

Temperature Range:
1/8: -10 to 50 °C • 1/4, 3/8 and 1/2: -10 to 60 °C



DOUBLE SOLENOID

DOUBLE SOLENOID - 5 WAY / 2 POSITION

Product No	Port Size (F) NPT	Way / position	Type	Voltage
80.765	1/8	**5/2**	Double solenoid	110 VAC
80.765.03	1/8	**5/2**	Double solenoid	24 VDC
80.766	1/4	**5/2**	Double solenoid	110 VAC
80.766.03	1/4	**5/2**	Double solenoid	24 VDC
80.767	3/8	**5/2**	Double solenoid	110 VAC
80.767.03	3/8	**5/2**	Double solenoid	24 VDC

Operating Pressure Range:
1/8 : 21.8 to 116 PSI • 1/4 and 3/8 : 29 to 116 PSI

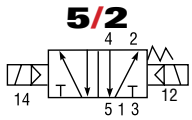
Temperature Range:
1/8 : -10 to 50 °C • 1/4 and 3/8 -10 to 60 °C

SINGLE AND DOUBLE SOLENOID ELECTRICAL VALVES

STAINLESS STEEL SUS 316

SPECIFICATIONS

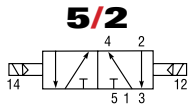
Voltage Fluctuation: ±10%
Electrical Connector: DIN Type
Coil Insulation Class: F



SINGLE SOLENOID

SINGLE SOLENOID - 5 WAY / 2 POSITION

Product No	Port Size (F) NPT	Way / position	Type	Voltage
80.870	1/4	**5/2**	Single solenoid	110 VAC
80.870.02	1/4	**5/2**	Single solenoid	220 VAC
80.870.03	1/4	**5/2**	Single solenoid	24 VDC
80.875	3/8	**5/2**	Single solenoid	110 VAC
80.875.02	3/8	**5/2**	Single solenoid	220 VAC
80.875.03	3/8	**5/2**	Single solenoid	24 VDC



DOUBLE SOLENOID

DOUBLE SOLENOID - 5 WAY / 2 POSITION

Product No	Port Size (F) NPT	Way / position	Type	Voltage
80.871	1/4	**5/2**	Double solenoid	110 VAC
80.871.02	1/4	**5/2**	Double solenoid	220 VAC
80.871.03	1/4	**5/2**	Double solenoid	24 VDC
80.876	3/8	**5/2**	Double solenoid	110 VAC
80.876.02	3/8	**5/2**	Double solenoid	220 VAC
80.876.03	3/8	**5/2**	Double solenoid	24 VDC

Operating Pressure Range: 21.8 to 116 PSI
Temperature Range: -10 to 60 °C

REPLACEMENT SOLENOID COILS

Product No	Voltage
80.088	110 VAC
80.088.02	220 VAC
80.088.03	24 VDC

Temperature Range: -20 to 50 °C

MINIATURE VALVES

TOGGLE AND PUSH-BUTTON OPERATED VALVES

FEATURES AND BENEFITS

These **MINIATURE** valves are used to operate single acting cylinders or to provide pilot signals for larger valves.

- Compact design
- Corrosion resistant
- Swivel connection

MATERIALS

Body: Anodized aluminium

Stem: Acetal

Spring: Stainless steel

Button/Toggle: Nylon

Seals: Buna-N/Nitrile

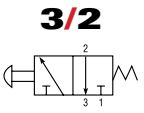
SPECIFICATIONS

Flow Rate: 0.23 Cv

Actuating Force: 2 lb to 3.5 lb

Fluid: Filtered compressed air

PUSH-BUTTON OPERATED

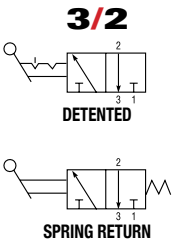


Product No	Inlet Port Size	Outlet Port Size	Way / position	Return Type
80.062	1/8 (M) NPT	10-32	**3/2**	Spring Return
80.066	1/8 (F) NPT	10-32	**3/2**	Spring Return

Operating Pressure Range: 0 to 125 PSI

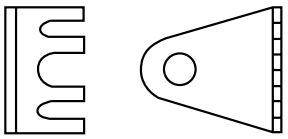
Temperature Range: -29 ˚C to 71 ˚C

TOGGLE OPERATED



Product No	Inlet Port Size	Outlet Port Size	Way / position	Return Type
80.050	1/8 (M) NPT	10-32	**3/2**	Detented
80.052	1/8 (M) NPT	10-32	**3/2**	Spring Return
80.058	1/8 (F) NPT	10-32	**3/2**	Detented
80.060	1/8 (F) NPT	10-32	**3/2**	Spring Return

BRACKET

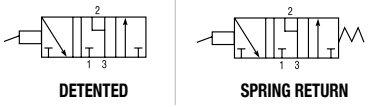


Product No	Description
80.068	Right Angle Mounting Bracket

TOGGLE OPERATED VALVES

MATERIALS

Body: Black anodized aluminium
Threaded insert: Nickel plated brass
Seals: Buna-N/Nitrile
Spring: Stainless steel
Mounting nuts: Nickel plated brass



FEATURES AND BENEFITS

- **Pushing and holding the toggle in either direction shifts the spring return valve in that direction. When the toggle is released, the valve returns to its center position**
- **Pushing the toggle in either direction shifts the detented valve in that direction. The valve remains in this position until the toggle is pulled out of that position**
- **When the toggle is centered, both output ports are open to exhaust**
- **High flow rate**

Product No	Port Size (F) NPT	Way / position	Return Type
80.090	1/8	3/3	Detented
80.092	1/8	3/3	Spring Return

Operating Pressure Range: 0 to 125 PSI
Temperature Range: -29 ˚C to 71 ˚C
Cv: 0.47

PUSH-BUTTON AND TOGGLE VALVES

MATERIALS

Body: Black anodized aluminium
Threaded Insert: Nickel plated brass
Seals: Buna-N/Nitrile
Spring: Stainless steel
Mounting Nuts: Nickel plated brass

5/2
PUSH-BUTTON ACTUATOR

5/2
TOGGLE ACTUATOR

FEATURES AND BENEFITS

- **Features porting that permits the use of mufflers for exhaust control, ideal for speed control of cylinders or motors**
- **Can be converted to a 3 way by plugging one port with a plug fitting**
- **Three .20 diameter holes for securing the valve to a machine**
- **Panel mountable using the 15/32-32 threaded neck with locknut and lock washer (included)**
- **Full ported valve**

TECH TIP

The use of mufflers can greatly reduce exhaust noise levels for pneumatic valves.

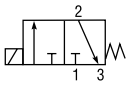
See series 86 for a selection of **TOPRING** mufflers.

Product No	Port Size (F) NPT	Way / position	Atuator	Return Type
80.070	1/8	5/2	Push-Button	Spring Return
80.072	1/8	5/2	Toggle	Spring Return
80.074	1/8	5/2	Toggle	Detented

Operating Pressure Range: 0 to 125 PSI
Temperature Range: -29 ˚C to 71 ˚C
Cv: 0.37

SINGLE SOLENOID VALVES

3/2



FEATURES AND BENEFITS

- **Direct acting with spring return**
- **Compact design**
- **Easy to be installed side by side**

Product No	Port Size (F) NPT	Type	Voltage
80.085	1/4	Simple solénoïde	110 VAC
80.085.02	1/4	Simple solénoïde	220 VAC
80.085.03	1/4	Simple solénoïde	24 VDC

Operating Pressure Range: 0 to 116 PSI

Temperature Range: -10 ˚C to 60 ˚C

Cv: 0.08

REPLACEMENT SOLENOID COIL

Product No	Voltage
80.088	110 VAC
80.088.02	220 VAC
80.088.03	24 VDC

ASSEMBLY KIT

Product No	Description
80.087	Manifold assembly kit: 1 O-ring, 2 bolts, 2 screws, 2 nuts

Series 81•82•83

AIR CYLINDERS
NFPA

AIR CYLINDERS
NFPA

FEATURES AND BENEFITS

- Meet NFPA standards
- NFPA-MS4 standard mounting styles
- Made of corrosion-resistant Aluminium
- Adjustable cushions on both ends
- High strength

OPTIONS

- Magnetic piston
- Proximity switches
- High temperature seals
- Stainless steel piston rod and tie rods
- Stop tubes

ALSO AVAILABLE: SPECIAL CYLINDERS

Double rod ends
Ajustable stroke
Tandem
3-position cylinders
Multistage cylinders
ISO 6431 cylinders

See pages 532-533

Wiper
Keeps dirt out for less maintenance and longer life of the cylinder. (Urethane) (temperature: -45 °C to 110 °C)

Rod Lips Seal
Designed with a real rod u-cup; completely self-compensating for zero leakage at all pressures

Tie Rods
Corrosion resistant (Nitrocarburation), stressproof Steel maintains uniform compression on tube end seals

Piston Wear Ring
Made from nylon for low friction and to ensure maximum life in side load applications. Eliminates metal-to-metal contact

Piston
Machined from solid aluminium bar stock. Offers long bearing support

Solid Aluminium Head & Cap
Machined from solid aluminium bar stock and black anodized for corrosion resistance

Piston Rod
Medium carbon steel, chrome plated and polished. Two wrench flats are provided for rod end attachment

Rod Gland
Bronze gland is removable without cylinder disassembly for easy maintenance. Designed to provide maximum rod bearing life

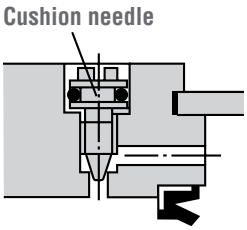
Hard Anodized Aluminium Tube
Provides superior wear resistance and lower friction coefficient for maximum seal life

Piston Seals
Lip-type low friction Urethane piston seals are pressure energized and wear compensating for low friction and long life. (-45 °C to 110 °C)

Check Seal Cushion and Needle valves
Precision cushion spuds combine with a new style of floating cushion seal to provide smooth deceleration at end of stroke. Needle valves make adjustments easy

O-Ring Tube End Seals
Nitrile O-ring design is pressure compensating and reusable

CUSHIONING ADJUSTMENT



Cushioning is adjusted prior to shipment, but the cushion effect may change due to cylinder speed, load and inertial force. When necessary, adjust the cushion needle as follows: turn cushion needle to the left or right, and adjust speed at stroke end so that shock is minimal and operation smoothness is optimal. Turning to the left (right) opens (closes) the cushion needle.

CYLINDER SPEED ADJUSTMENT

Maximum cylinder operating speed is 25"/sec. If this speed is exceeded, the rod gland and seals will wear rapidly and the shock at stroke-end will increase. The result is shortened cylinder life and susceptibility to malfunction.

If cylinder speed is too low, the result will be sticking, slipping and unstable operation.

Cylinder speed varies depending on supply and exhaust tube diameter, air pressure, flow rate and load, and therefore must be adjusted to suit the intended use. Adjustment is normally done using a speed control valve, but this is not always enough, and other factors may have to be considered (air pressure, load, etc.).

SPECIFICATIONS

Working Fluid: Air
Operating Pressure Range: 15 to 250 PSI
Lubrification: Not necessary
Temperature Range: -45 °C to 110 °C

WARNING

TOPRING air cylinders are intended for use in industrial compressed air systems only. They must not be used where pressure or temperature may exceed maximum rated operating conditions. See specifications.
In lubricated applications, some oil mist may escape from the point of use into the surrounding atmosphere.

TIGHTENING TORQUE FOR TIE ROD NUT

Bore Inch	Tie rod Thread	Tightening Torque lb - ft
1 1/2	1/4 - 28	5
2 - 2 1/2	5/16 - 24	11
3 1/4 - 4	3/8 - 24	25
5 - 6	1/2 - 20	60

PUSH/PULL FORCES

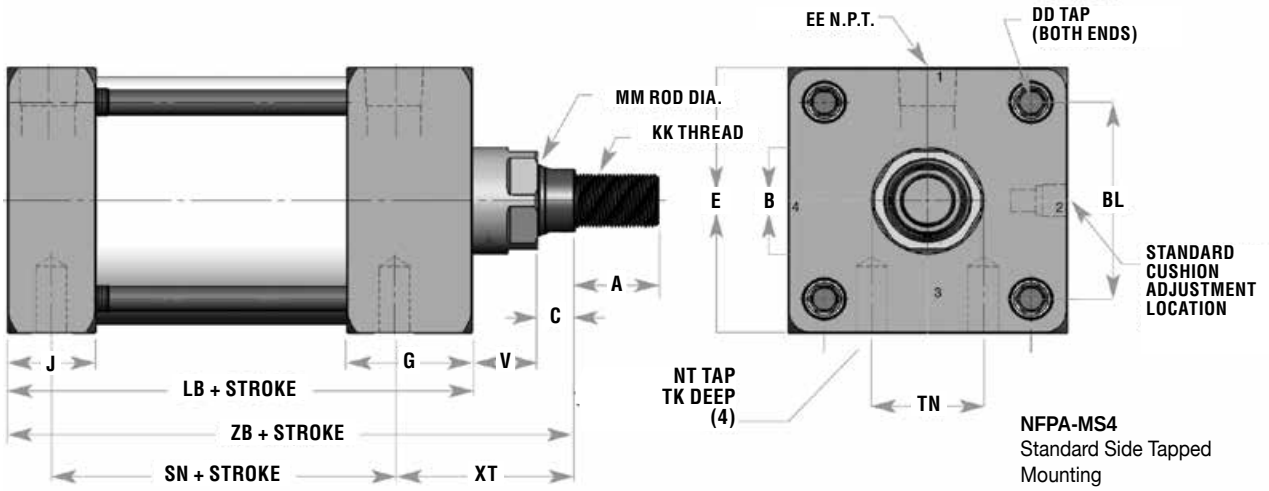
Cylinders provide specific forces based on piston area and on pressure provided.

These forces will not be the same for push and pull, since the rod takes up a portion of the area of the piston when pulling.

WARNING

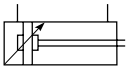
Specification of the proper cylinder remains the responsability of the system designer; these forces should be used as a guideline and should not replace testing of the specific application.

⊘ Bore Size	Rod Size	Push Forces (lb)				Pull Forces (lb)			
		at 50 PSI	at 100 PSI	at 150 PSI	at 250 PSI	at 50 PSI	at 100 PSI	at 150 PSI	at 250 PSI
1 1/2	5/8	88	177	266	442	73	146	220	365
2	5/8	157	314	471	785	141	283	425	709
2 1/2	5/8	245	491	737	1227	230	460	691	1150
3 1/4	1	415	830	1245	2074	375	751	1127	1878
4	1	628	1257	1886	3142	589	1170	1768	2945
5	1	982	1964	2946	4909	942	1885	2827	4712
6	1 3/8	1413	2827	4241	7069	1337	2679	4018	6697



NFPA-MS4
Standard Side Tapped Mounting

Bore Size	MM Rod. Diam.	Dimensions (in)																	
		A	B	BL	C	DD (UNF)	E	EE (F) NPT	G	J	KK (UNF)	LB	V	ZB	SN	XT	NT	TK	TN
1 1/2	5/8	3/4	1 1/8	1.43	3/8	1/4-28	2	3/8	1 1/2	1	7/16-20	3 5/8	5/8	4 5/8	2 1/4	1 15/16	1/4-20	3/8	5/8
2	5/8	3/4	1 1/8	1.84	3/8	5/16-24	2 1/2	3/8	1 1/2	1	7/16-20	3 5/8	5/8	4 5/8	2 1/4	1 15/16	15/16-18	1/2	7/8
2 1/2	5/8	3/4	1 1/8	2.19	3/8	5/16-24	3	3/8	1 1/2	1	7/16-20	3 3/4	5/8	4 3/4	2 3/8	1 15/16	3/8-16	5/8	1 1/4
3 1/4	1	1 1/8	1 1/2	2.78	1/2	3/8-24	3 3/4	1/2	1 3/4	1 1/4	3/4-16	4 1/4	7/8	5 5/8	2 5/8	2 7/16	1/2-13	3/4	1 1/2
4	1	1 1/8	1 1/2	3.32	1/2	3/8-24	4 1/2	1/2	1 3/4	1 1/4	3/4-16	4 1/4	7/8	5 5/8	2 5/8	2 7/16	1/2-13	3/4	2 1/16
5	1	1 1/8	1 1/2	4.12	1/2	1/2-20	5 1/2	1/2	1 3/4	1 1/4	3/4-16	4 1/2	7/8	5 7/8	2 7/8	2 7/16	5/8-11	1	2 11/16
6	1 3/8	1 5/8	2	4.88	5/8	1/2-20	6 1/2	3/4	2	1 1/2	1-14	5	1	6 5/8	3 1/8	2 13/16	3/4-10	1 1/8	3 1/4



Stroke (in)	Bore Size (in)						
	1 1/2 Product No	2 Product No	2 1/2 Product No	3 1/4 Product No	4 Product No	5 Product No	6 Product No
1	81.501	81.601	81.701	81.801	81.901	82.101	82.201
2	81.502	81.602	81.702	81.802	81.902	82.102	82.202
3	81.503	81.603	81.703	81.803	81.903	82.103	82.203
4	81.504	81.604	81.704	81.804	81.904	82.104	82.204
5	81.505	81.605	81.705	81.805	81.905	82.105	82.205
6	81.506	81.606	81.706	81.806	81.906	82.106	82.206
7	81.507	81.607	81.707	81.807	81.907	82.107	82.207
8	81.508	81.608	81.708	81.808	81.908	82.108	82.208
9	81.509	81.609	81.709	81.809	81.909	82.109	82.209
10	81.510	81.610	81.710	81.810	81.910	82.110	82.210
11	81.511	81.611	81.711	81.811	81.911	82.111	82.211
12	81.512	81.612	81.712	81.812	81.912	82.112	82.212
13	81.513	81.613	81.713	81.813	81.913	82.113	82.213
14	81.514	81.614	81.714	81.814	81.914	82.114	82.214
15	81.515	81.615	81.715	81.815	81.915	82.115	82.215
16	81.516	81.616	81.716	81.816	81.916	82.116	82.216
17	81.517	81.617	81.717	81.817	81.917	82.117	82.217
18	81.518	81.618	81.718	81.818	81.918	82.118	82.218
19	81.519	81.619	81.719	81.819	81.919	82.119	82.219
20	81.520	81.620	81.720	81.820	81.920	82.120	82.220
21	81.521	81.621	81.721	81.821	81.921	82.121	82.221
22	81.522	81.622	81.722	81.822	81.922	82.122	82.222
23	81.523	81.623	81.723	81.823	81.923	82.123	82.223
24	81.524	81.624	81.724	81.824	81.924	82.124	82.224
25	81.525	--	--	--	--	--	--

Note: Please add suffix «.01» Order these cylinders with a magnetized piston for use with a magnetic proximity switch (example: 81.522.01)

CYLINDER MOUNTING OPTIONS

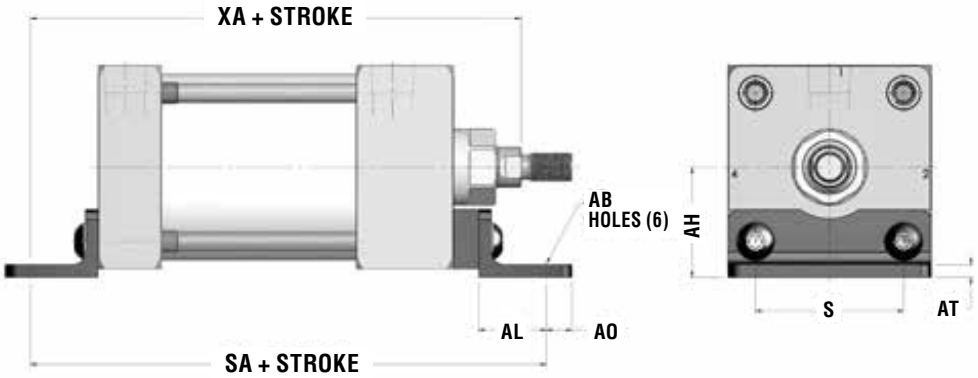
There are various ways to mount a cylinder to an equipment, beyond using the standard side tapped mounting style (MS4).

These mounting options can be identified by their NFPA standard codes:

NFPA-MS1 90° Angle Bracket
NFPA-MF1 Rectangular Head Flange
NFPA-MF2 Rectangular Cap Flange
NFPA-MP1 Cap Clevis
NFPA-MP2 Cap Clevis High
NFPA-MP4 Cap Eye
NFPA-MS2 Side Lug

This page and the following pages show these various options that can be used to mount NFPA cylinders.

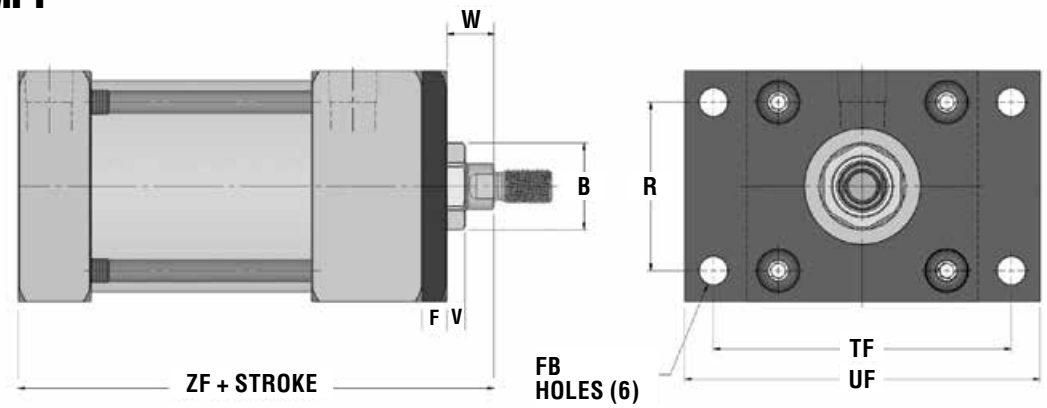
90° ANGLE BRACKET
NFPA-MS1



Screws included

Product No	⌀ Bore Size	Dimensions (in)							
		AB	AH	AL	AO	AT	S	SA	XA
81.560	1 1/2	7/16	1 3/16	1	3/8	1/8	1 1/4	6	5 5/8
81.660	2	7/16	1 7/16	1	3/8	1/8	1 3/4	6	5 5/8
81.760	2 1/2	7/16	1 5/8	1	3/8	1/8	2 1/4	6 1/8	5 3/4
81.860	3 1/4	9/16	1 15/16	1 1/4	1/2	3/16	2 3/4	7 3/8	6 7/8
81.985	4	9/16	2 1/4	1 1/4	1/2	3/16	3 1/2	7 3/8	6 7/8
82.160	5	11/16	2 3/4	1 3/8	5/8	3/16	4 1/4	7 7/8	7 1/4
82.260	6	13/16	3 1/4	1 3/8	5/8	1/4	5 1/4	8 1/2	8

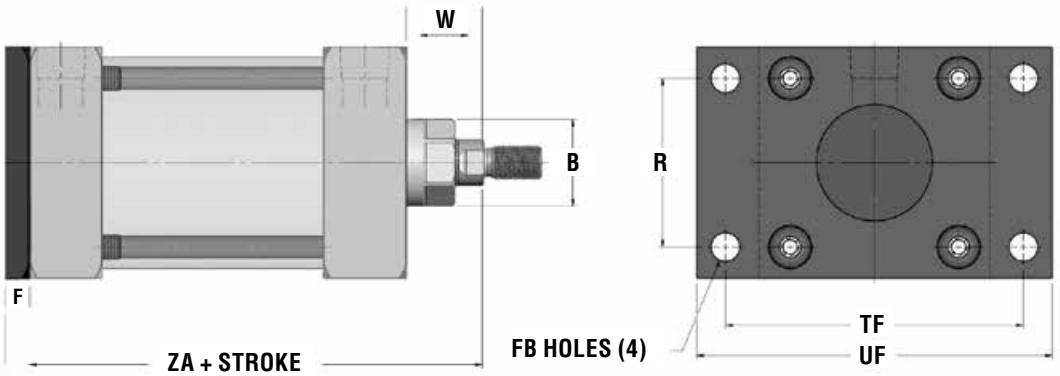
RECTANGULAR HEAD FLANGE
NFPA-MF1



Screws included

Product No	Bore Size	Dimensions (in)								
		B	F	FB	R	TF	UF	V	W	ZF
81.550	1 1/2	1 1/8	3/8	5/16	1.43	2 3/4	3 3/8	1/4	5/8	4 5/8
81.650	2	1 1/8	3/8	3/8	1.84	3 3/8	4 1/8	1/4	5/8	4 5/8
81.750	2 1/2	1 1/8	3/8	3/8	2.19	3 7/8	4 5/8	1/4	5/8	4 3/4
81.850	3 1/4	1 1/2	5/8	7/16	2.76	4 11/16	5 1/2	1/4	3/4	5 5/8
81.980	4	1 1/2	5/8	7/16	3.32	5 7/16	6 1/4	1/4	3/4	5 5/8
82.150	5	1 1/2	5/8	9/16	4.10	6 5/8	7 5/8	1/4	3/4	5 7/8
82.250	6	2	3/4	9/16	4.88	7 5/8	8 5/8	1/4	7/8	6 5/8

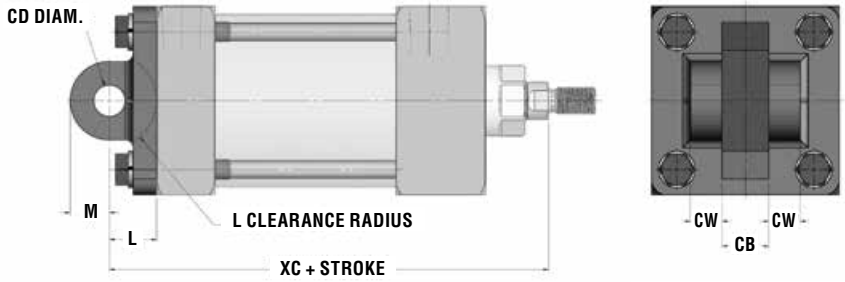
RECTANGULAR CAP FLANGE
NFPA-MF2



Screws included

Product No	Bore Size	Dimensions (in)							
		B	F	FB	R	TF	UF	W	ZA
81.550	1 1/2	1 1/8	3/8	5/16	1.43	2 3/4	3 3/8	1	5
81.650	2	1 1/8	3/8	3/8	1.84	3 3/8	4 1/8	1	5
81.750	2 1/2	1 1/8	3/8	3/8	2.19	3 7/8	4 5/8	1	5 1/8
81.850	3 1/4	1 1/2	5/8	7/16	2.76	4 11/16	5 1/2	1 3/8	6 1/4
81.980	4	1 1/2	5/8	7/16	3.32	5 7/16	6 1/4	1 3/8	6 1/4
82.150	5	1 1/2	5/8	9/16	4.10	6 5/8	7 5/8	1 3/8	6 1/2
82.250	6	2	3/4	9/16	4.88	7 5/8	8 5/8	1 5/8	7 3/8

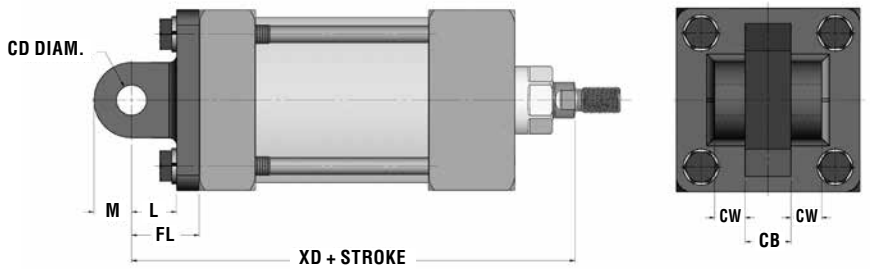
CAP CLEVIS
NFPA-MP1

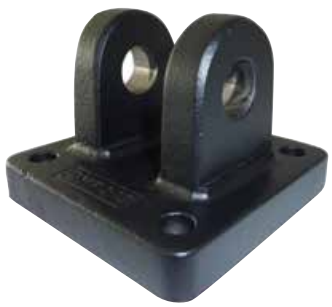


Clevis pin and screws included

Product No	⌀ Bore Size	Dimensions (in)					
		CB	CD	CW	L	M	XC
81.565	1 1/2	3/4	1/2	1/2	3/4	5/8	5 3/8
81.665	2	3/4	1/2	1/2	3/4	5/8	5 3/8
81.765	2 1/2	3/4	1/2	1/2	3/4	5/8	5 1/2
81.865	3 1/4	1 1/4	3/4	5/8	1 1/4	7/8	6 7/8
81.990	4	1 1/4	3/4	5/8	1 1/4	7/8	6 7/8
82.165	5	1 1/4	3/4	5/8	1 1/4	7/8	7 1/8
82.265	6	1 1/2	1	3/4	1 1/2	1 1/4	8 1/8

CAP CLEVIS HIGH
NFPA-MP2

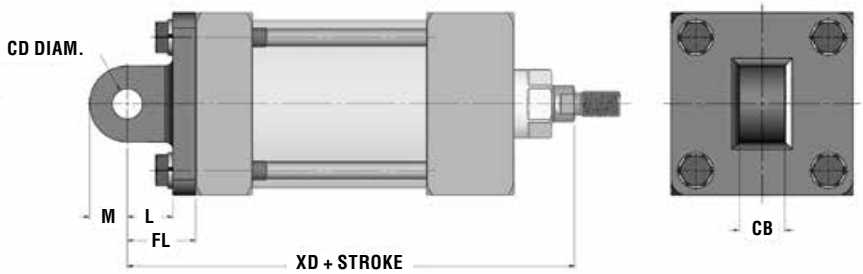




Clevis pin and screws included

Product No	⌀ Bore Size	Dimensions (in)						
		CB	CD	CW	FL	L	M	XD
81.563	1 1/2	3/4	1/2	1/2	1 1/8	3/4	5/8	5 3/4
81.663	2	3/4	1/2	1/2	1 1/8	3/4	5/8	5 3/4
81.763	2 1/2	3/4	1/2	1/2	1 1/8	3/4	5/8	5 7/8
81.863	3 1/4	1 1/4	3/4	5/8	1 7/8	1 1/4	7/8	7 1/2
81.993	4	1 1/4	3/4	5/8	1 7/8	1 1/4	7/8	7 1/2
82.163	5	1 1/4	3/4	5/8	1 7/8	1 1/4	7/8	7 3/4
82.263	6	1 1/4	1	5/8	2 1/4	1 1/2	1 1/4	8 7/8

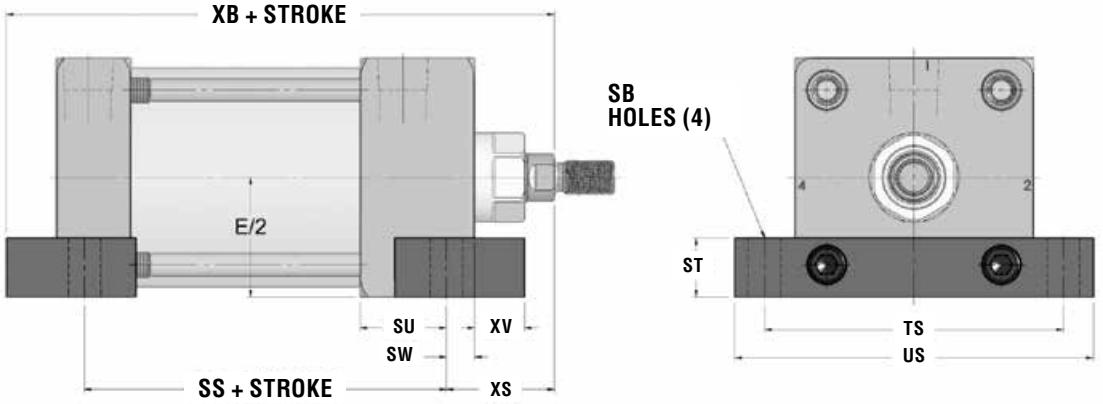
CAP EYE
NFPA-MP4



Screws included

Product No	⌀ Bore Size	Dimensions (in)					
		CB	CD	FL	L	M	XD
81.567	1 1/2	3/4	1/2	1 1/8	3/4	5/8	5 3/4
81.667	2	3/4	1/2	1 1/8	3/4	5/8	5 3/4
81.767	2 1/2	3/4	1/2	1 1/8	3/4	5/8	5 7/8
81.867	3 1/4	1 1/4	3/4	1 7/8	1 1/4	7/8	7 1/2
81.996	4	1 1/4	3/4	1 7/8	1 1/4	7/8	7 1/2
82.167	5	1 1/4	3/4	1 7/8	1 1/4	7/8	7 3/4
82.267	6	1 1/2	1	2 1/4	1 1/2	1 1/8	8 7/8

SIDE LUG
NFPA-MS2



Screws included

Product No	Bore Size	Dimensions (in)									
		SB	SS	ST	SU	SW	TS	US	XB	XS	XV
81.562	1 1/2	13/32	2 7/8	9-16	5/8	3/8	2 3/4	3 1/2	5 1/8	1 3/8	1/2
81.662	2	13/32	2 7/8	5/8	5/8	3/8	3 1/4	4	5 1/4	1 3/8	5/8
81.762	2 1/2	13/32	3	3/4	5/8	3/8	3 3/4	4 1/2	5 3/8	1 3/8	5/8
81.862	3 1/4	17/32	3 1/4	1	3/4	1/2	4 3/4	5 3/4	6 3/8	1 7/8	3/4
81.982	4	17/32	3 1/4	1	3/4	1/2	5 1/2	6 1/2	6 3/8	1 7/8	3/4
82.162	5	25/32	3 1/8	1 1/4	9-16	11/16	6 7/8	8 1/4	6 13/16	2 1/16	15/16
82.262	6	25/32	3 5/8	1 1/2	7/8	11/16	7 7/8	9 1/4	7 9/16	2 5/16	15/16

MAGNETIC PROXIMITY SWITCHES

COMPLIES WITH CSA STANDARDS

FEATURES AND BENEFITS

- Designed to allow detection of cylinder piston position
- Actuates when optional piston magnet passes below switch
- One switch for a majority of voltages and cylinder sizes
- Switch bracket included
- 9 ft cable included

SPECIFICATIONS

Voltage Range: 5-240 V AC/DC • 50/60 HZ

Current: 1 A max

Switching Speed: 0.6 MS Operated • 0.5 MS Release

Temperature Range: -20 °C to 80 °C

WARNING

In auto switch (Magnetic proximity switch) applications, it is recommended to connect the auto switch to the power source through a load. Direct connection of the switch may cause damage to the internal elements of the switch.

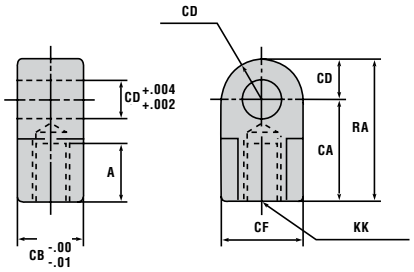
In order for magnetic proximity switches to function, the cylinder must have a magnetized piston. Please see page 525 for instructions on ordering **TOPRING** cylinders with a magnetic piston (see note at bottom of product chart numbers).

Standard cylinders do not include a magnetic piston, it must be ordered as an option

Product No	Voltage Drop	Indicator Light
81.150	3 Volts	LED

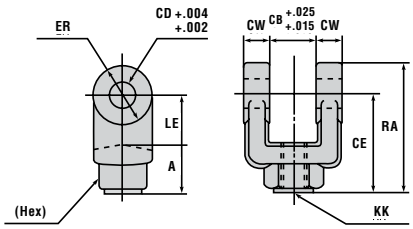
EYE ROD END
TYPE T

Product No	Bore Size	Dimensions (in)						
		A	CA	CB	CD	CF	KK	RA
81.575	1 1/2 - 2 - 2 1/2	3/4	1 1/2	3/4	1/2	1	7/16-20	2
81.675	3 1/4 - 4 - 5	1 1/8	2 1/16	1 1/4	3/4	1 1/2	3/4-16	2 13/16
81.875	6	1 5/8	2 13/16	1 1/2	1	2	1-14	3 13/16



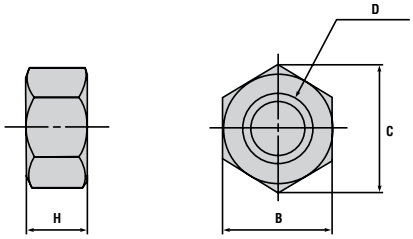
CLEVIS ROD END
TYPE Y
WITH PIVOT PIN

Product No	Bore Size	Dimensions (in)								
		A	CE	CB	CD	CW	ER	KK	LE	RA
81.570	1 1/2 - 2 - 2 1/2	3/4	1 1/2	3/4	1/2	1/2	1/2	7/16-20	3/4	2
81.870	3 1/4 - 4 - 5	1 1/8	2 3/8	1 1/4	3/4	5/8	3/4	3/4-16	1 1/4	3 1/8
82.270	6	1 5/8	3 1/8	1 1/2	1	3/4	1	1-14	1 1/2	4 1/8



LOCK NUT

Product No	Bore Size	Dimensions (in)			
		D	H	B	C
81.576	1 1/2 - 2 - 2 1/2	7/16-20	1/4	11/16	0.79
81.676	3 1/4 - 4 - 5	3/4-16	27/64	1-1/8	1.30
81.876	6	1-14	31/64	1 9/32	1.46

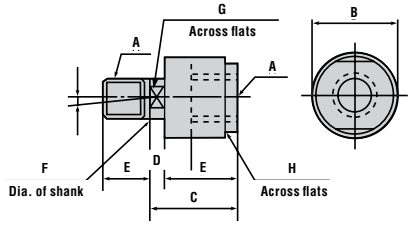


SELF-ALIGNING
ROD-END COUPLERS

FEATURES AND BENEFITS

- **Prevent binding of cylinder**
- **Permit greater tolerance between center line of cylinder and mating part**
- **Reduce cylinder and component wear**
- **Heat treated for corrosion and wear resistance**

Product No	Bore Size	Dimensions (in)							
		A	B	C	D	E	F	G	H
81.010	1 1/2 - 2 - 2 1/2	7/16-20	1.25	2.0	0.50	0.75	0.62	9/16	1.12
81.015	3 1/4 - 4 - 5	3/4-16	1.75	2.31	0.31	1.12	0.97	7/8	1.50
81.020	6	1-14	2.50	2.94	0.50	1.62	1.38	1 1/4	2.25



REPLACEMENT PARTS

CYLINDER SEAL KITS

Includes wiper seal, tube seal, cushion seal and piston seal.

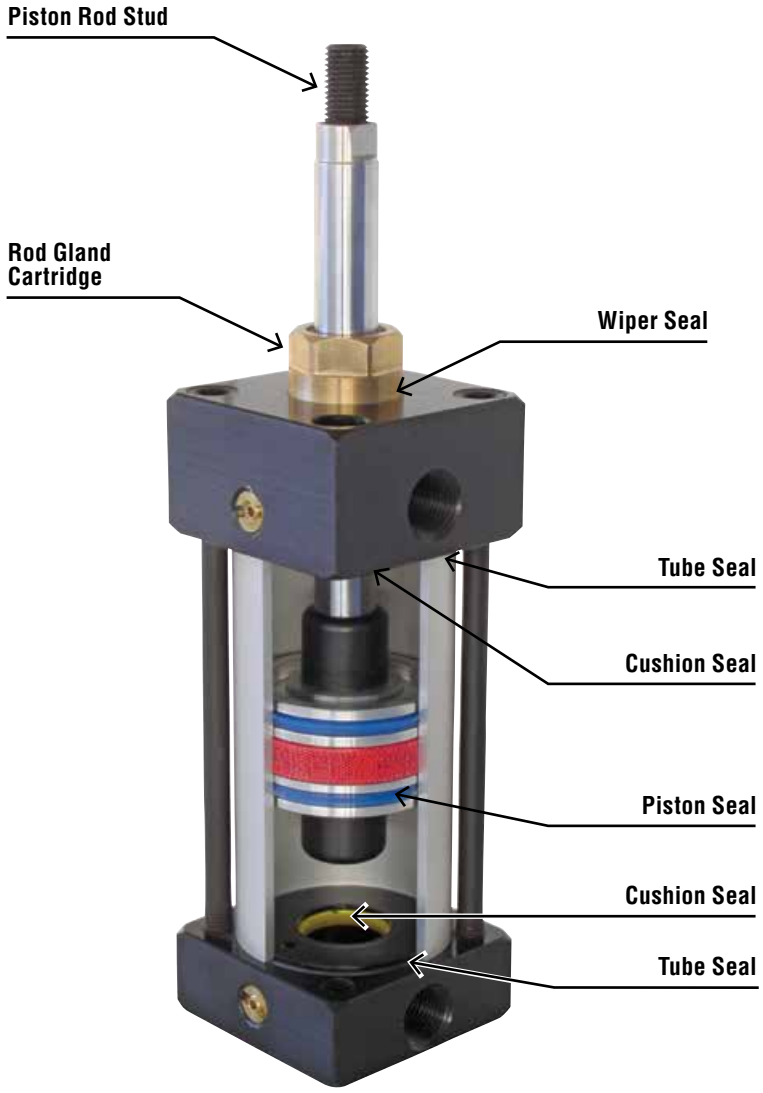
Product No	⌀ Bore Size
81.052	1 1/2
81.057	2
81.062	2 1/2
81.067	3 1/4
81.072	4
81.077	5
81.082	6

ROD GLAND CARTRIDGE

Product No	⌀ Bore Size
81.032	1 1/2 - 2 - 2 1/2
81.037	3 1/4 - 4 - 5
81.042	6

PISTON ROD STUD

Product No	⌀ Bore Size
81.001	5/8
81.002	1



SPECIAL CYLINDERS

STAINLESS STEEL

Stainless steel cylinders for use in food and drug-related industries
Standard stainless steel piston rod and tie rods

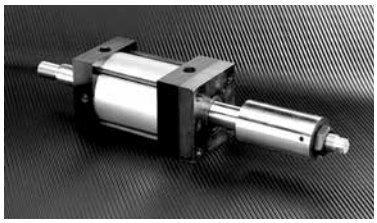
ADJUSTABLE STROKE RETURN TYPE

Return stroke stop position is infinitely adjustable within the adjustment range
Bore sizes available from 1 1/2" to 6"

TANDEM CYLINDER

Single piston rod (two position)
Double the force on the extend stroke
Bore sizes available from 1 1/2" to 6"

ADJUSTABLE STROKE EXTENDED, DOUBLE ROD TYPE



Extended stroke stop position is infinitely adjustable within the adjustment range
Bore sizes available from 1 1/2" to 6"

DUAL STROKE CYLINDER

Three positions from a single cylinder
Double the force on the extend stroke
Bore sizes available from 1 1/2" to 6"

AIR/OIL TANK

Internal baffles reduce foaming and aeration of the oil, resulting in maximum cylinder control
Sight tube available
Bore sizes available in 2 1/2", 3 1/4", 4" and 5"

MULTI-STAGE DOUBLE ROD ONLY

Multiple piston with 2 to 5 times the force of a standard cylinder
Can replace large bore cylinders or hydraulic systems
Reduces system cost
Bore sizes available in 3 1/4", 4", 5", and 6"

VOLUME CHAMBER

Reservoir for extra air when needed in a pneumatic system
Available in all bore sizes

PNEUMATIC CYLINDERS ISO/VDMA

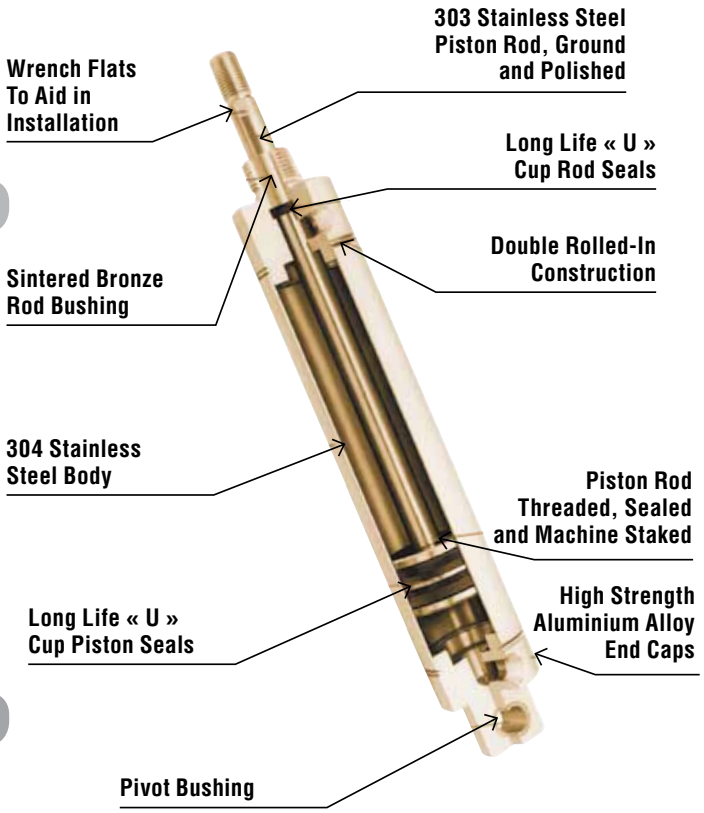
FEATURES AND BENEFITS

- Meet worldwide standards (ISO 6431), VDMA 24562
- Bore sizes: 32, 40, 50, 63, 80, 100, 125, 160, 200 mm
- Standard stroke lengths: 25 mm to 500 mm
- Corrosion-resistant extruded aluminum body
- Rated for 145 PSI at operating temperatures from -30 °C to 80 °C
- Available with all popular mounting styles
- Available with magnetic piston and limit switches
- Available with various seal and rod materials

STAINLESS STEEL AIR CYLINDERS

FEATURES AND BENEFITS

- Stainless steel air cylinders for pneumatic applications
- Single and double acting units available in a variety of strokes and mounting styles
- Cylinders are dimensionally interchangeable with other major brands, allowing for model and mounting retrofits
- Pre-lubricated: All cylinders are lubricated with a special high-endurance oil
- Pre-tested: Each cylinder is tested for leakage



MATERIALS

Cylinder Body: 304 Stainless steel for exceptional wear and corrosion resistance

Piston Rod: 303 Stainless steel - All rods have wrench flats

Piston and Caps: High strength Aluminium Alloy

Rod Guide Bushing: Oil-impregnated Bronze bushing increases the life of the cylinder rod and provides a better seamline surface

Spring: Piano wire spring designed for millions of cycles

Seals: Buna-N seals ensure low breakaway friction and leak-free operation

Piston Rod Assembly: Piston rods are threaded, anaerobically sealed, and machine staked into the piston for triple protection

Optional: Viton seals, magnetic switches and bumpers

SPECIFICATIONS

Maximum Operating Pressure: 250 PSI

Working Temperature Range: -29 °C to 93 °C

Fluid: Air

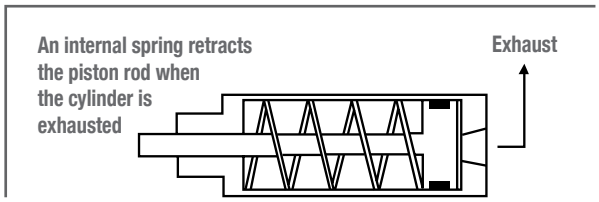
Lubrication: Not necessary

⌀ Bore Size	Push Forces (lb)				Pull Forces (lb)			
	at 50 PSI	at 100 PSI	at 150 PSI	at 200 PSI	at 50 PSI	at 100 PSI	at 150 PSI	at 200 PSI
3/4	22.0	44	66.0	88	19.5	39	58.5	78
1 1/16	44.5	89	133.5	178	40.5	81	121.5	162
1 1/4	61.5	123	184.5	246	53.5	107	160.5	214
1 1/2	88.5	177	265.5	354	81.0	162	243.0	324
2	157.0	314	471.0	628	141.0	283	424.0	566

SINGLE ACTING

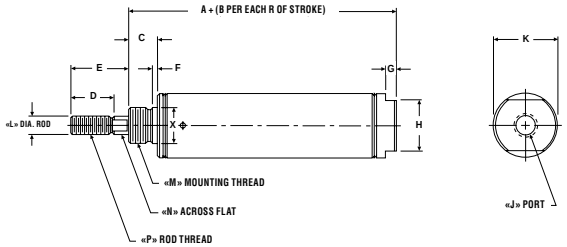
CYLINDER OPERATION

The piston rod is extended by pneumatic pressure and is mechanically returned to the retracted position by a spring within the cylinder.



NOSE MOUNT

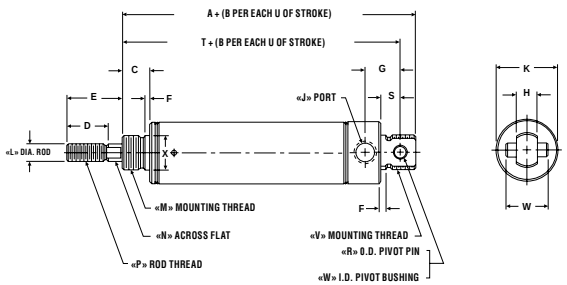
Stroke (in)	Bore Size (in) 3/4 Product No	1 1/16 Product No	1 1/4 Product No	1 1/2 Product No
1	83.401	83.501	83.601	83.701
2	83.403	83.503	83.603	83.703
3	83.405	83.505	83.605	83.705
4	83.407	83.507	83.607	83.707



Bore Size	Dimensions (in) A	B	C	D	E	F	G	H	J (NPT)	K	L	M	N	P
3/4	1.50	1.68	0.43	0.50	0.50	0.05	0.18	0.62	1/8	0.81	0.25	1/2-20	0.21	1/4-28
1 1/16	1.93	1.56	0.50	0.75	0.50	0.06	0.18	0.87	1/8	1.12	0.31	5/8-18	0.25	5/16-24
1 1/4	2.40	1.81	0.62	0.75	1.00	0.09	0.18	0.87	1/8	1.34	0.43	3/4-16	0.37	7/16-20
1 1/2	2.18	1.68	0.62	0.75	1.00	0.09	0.25	0.87	1/8	1.56	0.43	3/4-16	0.37	7/16-20

UNIVERSAL MOUNT

Stroke (in)	Bore Size (in) 3/4 Product No	1 1/16 Product No	1 1/4 Product No	1 1/2 Product No
1	83.421	83.521	83.621	83.721
2	83.423	83.523	83.623	83.723
3	83.425	83.525	83.625	83.725
4	83.427	83.527	83.627	83.727



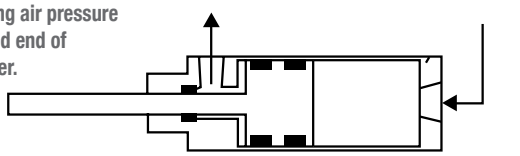
Bore Size	Dimensions (in) A	B	C	D	E	F	G	H	J (NPT)	K	L	M	N	P	R	S	T	V	W
3/4	2.56	1.68	0.43	0.50	0.50	0.05	0.62	0.37	1/8	0.86	0.25	1/2-20	0.21	1/4-28	0.25	0.34	2.28	5/8-18	0.75
1 1/16	2.81	1.56	0.50	0.50	0.50	0.06	0.62	0.37	1/8	1.12	0.31	5/8-18	0.25	5/16-24	0.25	0.34	2.53	5/8-18	0.75
1 1/4	3.53	1.81	0.62	0.75	1.00	0.09	0.71	0.50	1/8	1.34	0.43	3/4-16	0.37	7/16-20	0.25	0.40	3.12	3/4-16	0.87
1 1/2	3.25	1.68	0.62	0.75	1.00	0.09	0.81	0.62	1/8	1.56	0.43	3/4-16	0.37	7/16-20	0.37	0.50	2.87	--	1.00

DOUBLE ACTING CYLINDERS

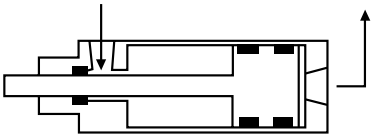
CYLINDER OPERATION

By alternately applying air pressure to the blind end and rod end of a double acting cylinder, a reciprocating push and pull type output is obtained.

The piston rod is extended by directing air pressure to the blind end of the cylinder.

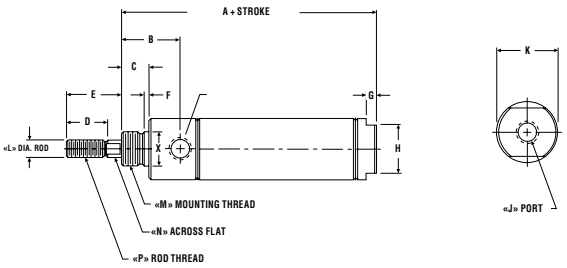


The piston rod retracts when air pressure is directed to the rod end of the cylinder.



NOSE MOUNT

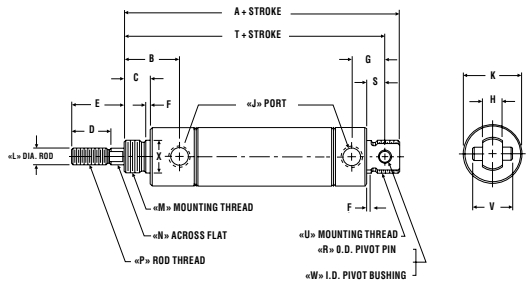
Stroke (in)	Bore Size (in) ⊘ 3/4 Product No	1 1/16 Product No	1 1/4 Product No	1 1/2 Product No	2 Product No
1	83.441	83.541	83.641	83.741	83.961
2	83.443	83.543	83.643	83.743	83.963
3	83.445	83.545	83.645	83.745	83.965
4	83.447	83.547	83.647	83.747	83.967
5	83.449	83.549	83.649	83.749	83.969
6	83.451	83.551	83.651	83.751	83.971
8	83.453	83.553	83.653	83.753	83.973
10	83.455	83.555	83.655	83.755	83.975
12	83.457	83.557	83.657	83.757	83.977



Bore Size ⊘	Dimensions (in) A	B	C	D	E	F	G	H	J (NPT)	K	L	M	N	P
3/4	2.96	0.96	0.43	0.50	0.50	0.05	0.18	0.62	1/8	0.81	0.25	5/8-18	0.21	1/4-28
1 1/16	3.12	1.06	0.50	0.75	0.50	0.06	0.18	0.87	1/8	1.12	0.31	5/8-18	0.25	5/16-24
1 1/4	3.75	1.18	0.62	0.75	1.00	0.09	0.18	0.87	1/8	1.34	0.43	3/4-16	0.37	7/16-20
1 1/2	3.43	1.25	0.62	0.75	1.00	0.09	0.25	0.87	1/8	1.56	0.43	3/4-16	0.37	7/16-20
2	4.31	1.50	0.81	0.87	1.25	0.10	0.25	1.25	1/4	2.09	0.62	1 1/4-12	0.56	1/2-20

UNIVERSAL MOUNT

Stroke (in)	Bore Size (in) ⊘ 3/4 Product No	1 1/16 Product No	1 1/4 Product No	1 1/2 Product No	2 Product No
1	83.461	83.561	83.661	83.761	83.861
2	83.463	83.563	83.663	83.763	83.863
3	83.465	83.565	83.665	83.765	83.865
4	83.467	83.567	83.667	83.767	83.867
5	--	83.569	83.669	83.769	83.869
6	--	83.571	83.671	83.771	83.871
8	--	83.573	83.673	83.773	83.873
10	--	83.575	83.675	83.775	83.875
12	--	83.577	83.677	83.777	83.877



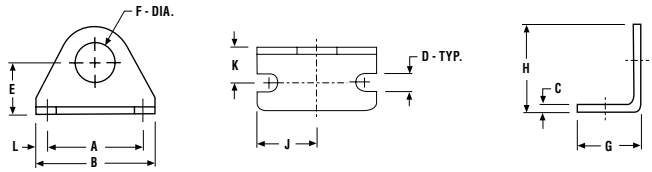
Bore Size ⊘	Dimensions (in) A	B	C	D	E	F	G	H	J (NPT)	K	L	M	N	P	R	S	T	U	V	W
3/4	4.03	0.96	0.50	0.50	0.50	0.06	0.62	0.37	1/8	0.86	0.25	5/8-18	0.21	1/4-28	0.25	0.34	3.75	5/8-18	0.75	--
1 1/16	4.00	1.06	0.50	0.50	0.50	0.06	0.62	0.37	1/8	1.12	0.31	5/8-18	0.25	5/16-24	0.25	0.34	3.71	5/8-18	0.75	--
1 1/4	4.87	1.18	0.62	0.75	1.00	0.09	0.71	0.50	1/8	1.34	0.43	3/4-16	0.37	7/16-20	0.25	0.40	4.46	3/4-16	0.87	--
1 1/2	4.50	1.25	0.62	0.75	1.00	0.09	0.81	0.62	1/8	1.56	0.43	3/4-16	0.37	7/16-20	0.37	0.50	4.12	◇	1.00	--
2	5.68	1.50	0.81	0.87	1.25	0.10	0.93	0.75	1/4	2.09	0.62	1 1/4-12	0.56	1/2-20	--	0.56	5.25	1 1/4-12	0.37	0.37

◊ 1.00" diameter unthreaded

FOOT BRACKETS

*** MOUNTING NUT INCLUDED**

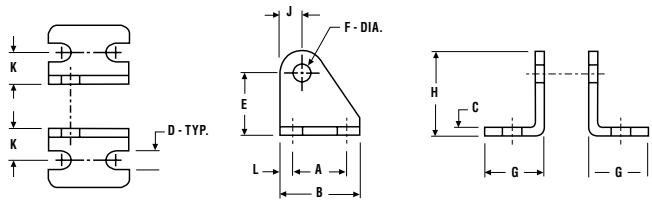
Product No	Bore Size	Simple Acting	Double Acting
83.015	3/4	•	
83.020	3/4		•
83.020	1 1/16	•	•
83.025	1 1/4	•	•
83.025	1 1/2	•	•
83.030	2		•



Product No	Dimensions (in)										
	A	B	C	D	E	F	G	H	J	K	L
83.015	1.25	1.62	0.10	0.18	0.68	0.50	0.75	1.09	0.81	0.43	0.18
83.020	1.50	1.87	0.12	0.28	0.81	0.62	1.00	1.37	0.93	0.56	0.18
83.025	1.87	2.50	0.15	0.28	1.00	0.75	1.50	1.75	1.25	0.75	0.31
83.030	2.25	3.12	0.25	0.34	1.50	1.37	1.62	2.56	1.56	1.00	0.43

PIVOT BRACKETS

Product No	Bore Size
83.035	3/4 (Pin not included)
83.035	1 1/16 (Pin not included)
83.035	1 1/4 (Pin not included)
83.040	1 1/2 (Pin not included)
83.045	2 (Pin included)

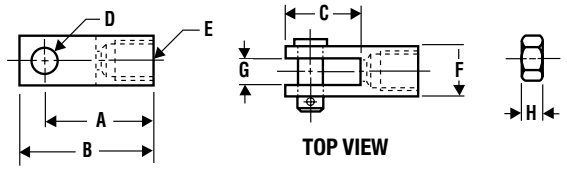


Product No	Dimensions (in)										
	A	B	C	D	E	F	G	H	J	K	L
83.035	0.75	1.12	0.12	0.26	0.87	0.25	0.81	1.18	0.31	0.43	0.18
83.040	1.00	1.50	0.12	0.26	1.37	0.37	1.00	1.75	0.37	0.62	0.25
83.045	1.00	1.50	0.25	0.34	1.37	0.37	1.12	1.75	0.37	0.68	0.25

ROD CLEVIS*

*** MOUNTING NUT INCLUDED**

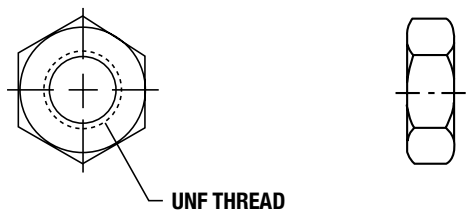
Product No	Bore Size
83.050	3/4
83.055	1 1/16
83.060	1 1/4
83.060	1 1/2
83.065	2



Product No	Dimensions (in)							
	A	B	C	D	E	F	G	H
83.050	0.93	1.18	0.68	0.25	1/4-28	0.50	0.25	0.15
83.055	0.93	1.18	0.68	0.25	5/16-24	0.50	0.25	0.18
83.060	1.31	1.68	0.93	0.37	7/16-20	0.75	0.37	0.25
83.065	1.31	1.68	0.93	0.37	1/2-20	0.75	0.37	0.37

MOUNTING NUTS

Product No	Bore Size	A
83.072	3/4 (single acting)	1/2 -20
83.074	3/4	5/8 -18
83.074	1 1/16	5/8 -18
83.076	1 1/4	3/4 -16
83.076	1 1/2	3/4 -16
83.078	2	1 1/4 -12



Series 85
FLOW CONTROL VALVES

FLOW CONTROL VALVES

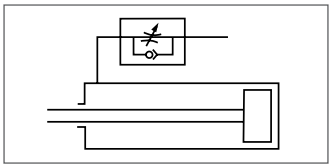
- Flow control valves are used to adjust the amount of air flow that is delivered to valves, cylinders, air motors, etc.
- Direct connection flow controls must be installed directly at the port
- In-line flow controls must be installed on air lines between the valve and as close as possible to the cylinder
- Flow control valves may incorporate a check valve. This type of flow control valve allows free air in one direction and regulates the flow in the other

METER OUT CONTROL

TO CONTROL THE EXHAUST SIDE

Air is supplied to the cylinder as free flow without resistance and the pressure in the cylinder increases rapidly. Since the exhaust from the cylinder is made while being controlled by the throttle valve, the speed control is stable.

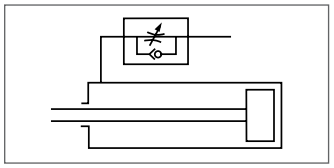
The Meter-Out type is most commonly used.



METER IN CONTROL

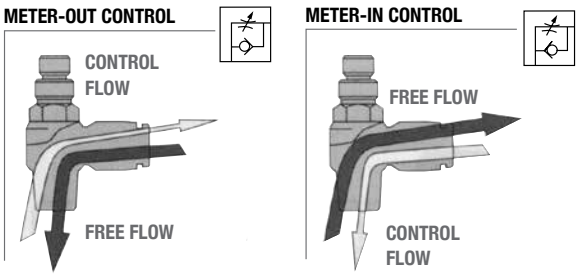
TO CONTROL THE AIR SUPPLY SIDE

The controlled flow occurs on the air supply side and the pressure increase in the cylinder is slow. The free flow occurs on the exhaust side.



TOPFIT®

POLYMER DIRECT CONNECTION FLOW CONTROL VALVES



FEATURES AND BENEFITS

- **Restrict flow of air in one direction, permits maximum flow in opposite direction**
- **One-piece construction allows a compact right-angle connection**
- **Mount directly on the cylinder, ensuring optimum performance and proper installation**
- **Speed may be accurately controlled, even at low speed**
- **Built-in push-to-connect minimizes installation time and cost**
- **Accept nylon and polyurethane tubing**
- **360° swivel body**
- **Retaining ring prevents accidental loss of needle**
- **PTFE thread sealant**

MATERIALS

Body: Nickel plated brass and PBT
Needle: Nickel plated brass
Lock Nut: Aluminium
Seals: Buna-N/Nitrile
Release Ring: Polyacetal
Lock Claws: Stainless steel

SPECIFICATIONS

Fluid: Compressed air
Working Pressure Range: 0-150 PSI
Check Valve Operating Pressure: 7.25 PSI
Working Temperature Range: 0 °C to 60 °C

THREADED ELBOW

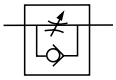
Meter-out Product No	Meter-in Product No	Tube O.D. in	Thread (M) NPT
85.115	**85.215**	1/4	1/8
85.130	**85.230**	1/4	1/4
85.150	**---**	3/8	1/4
85.165	**85.265**	3/8	3/8
85.175	**---**	1/2	1/2

THREADED ELBOW

Meter-out Product No	Meter-in Product No	Tube O.D. mm	Thread (M) BSPT
---	**85.282**	4	1/8
85.184	**---**	6	M5*
85.186	**---**	6	1/8
85.190	**---**	6	1/4
85.194	**---**	8	1/4

*Metric

TOPFIT®
IN-LINE FLOW CONTROL VALVES
(WITH CHECK VALVE)



FEATURES AND BENEFITS

- Restrict flow of air in one direction, permits maximum flow in opposite direction
- One-piece construction
- Can be mounted in-line or by means of two body mounting holes
- Built-in push-to-connect fittings
- Tube to tube connection, allows installation as a Meter Out or a Meter In device
- Speed may be accurately controlled, even at low speeds
- Easily added to existing circuitry, by simply splicing into existing lines
- Retaining ring prevents accidental loss of needle

MATERIALS

Body: Polymer (PBT)
Needle: Nickel plated brass
Lock Nut: Aluminium
Seals: Buna-N/Nitrile
Release Ring: Polyacetal
Lock Claws: Stainless steel

SPECIFICATIONS

Fluid: Compressed air
Working Pressure Range: 0-150 PSI
Check Valve Operating Pressure: 7.25 PSI
Working Temperature Range: 0 °C to 60 °C

Product No	Tube O.D. in
85.300	5/32
85.305	1/4
85.310	5/16
85.315	3/8
85.320	1/2

Product No	Tube O.D. mm
85.355	6
85.360	8

TOPFIT®
DIRECT CONNECTION FLOW CONTROL VALVES
(WITHOUT CHECK VALVE)

FEATURES AND BENEFITS

- Needle valve controls the flow of air
- The orifice size can be changed very gradually
- Compact 90° angle connection
- Built-in push-to-connect fittings
- Mount directly to the cylinder
- Retaining ring prevents accidental loss of needle

MATERIALS

Body: Brass and PBT
Needle: Nickel plated brass
Lock Nut: Aluminium
Seals: Buna-N/Nitrile
Release Ring: Polyacetal
Lock Claws: Stainless steel

SPECIFICATIONS

Fluid: Compressed air and vacuum
Working Pressure Range: 0-150 PSI
Vacuum Pressure: 29.5" Hg
Working Temperature Range: 0 °C to 60 °C

Product No	Thread (M) NPT	Tube O.D. in
85.580	10-32	1/4
85.582	1/8	1/4
85.584	1/4	1/4
85.586	1/8	5/16
85.588	1/4	5/16
85.590	3/8	5/16
85.592	1/4	3/8
85.594	3/8	3/8
85.595	1/2	3/8
85.598	1/2	1/2

Product No	Thread (M) BSPT	Tube O.D. mm
85.550	M5	4
85.556	1/8	6
85.572	1/2	12

MAXFIT®
POLYMER DIRECT CONNECTION FLOW CONTROL VALVES

FEATURES AND BENEFITS

- Needle valve controls the flow of air
- The orifice size can be changed very gradually
- Compact 90° angle connection
- Built-in push-to-connect fittings
- Mount directly to the cylinder
- Retaining ring prevents accidental loss of needle

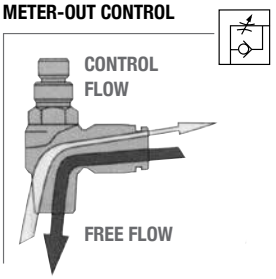
MATERIALS

Body: Nickel plated brass and PBT
Needle: Nickel plated brass
Lock Nut: Aluminium
Seals: Buna-N/Nitrile
Release Ring: Polyacetal
Lock Claws: Stainless steel

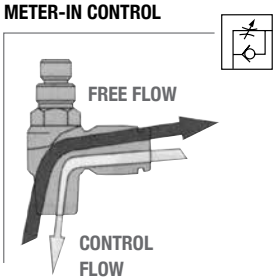
SPECIFICATIONS

Fluid: Compressed air
Working Pressure Range: 0-150 PSI
Check Valve Operating Pressure: 7.25 PSI
Working Temperature Range: 0 °C to 60 °C

METER-OUT CONTROL



METER-IN CONTROL



SPEED CONTROLLERS

THREADED ELBOW

Meter-out Product No	Meter-in Product No	Tubing O.D. in	Thread (M) NPT
44.902	**44.903**	1/4	10-32 ◇
44.904	**44.905**	1/4	1/8
44.908	**44.909**	1/4	1/4
44.910	**44.911**	3/8	1/4
44.912	**44.913**	3/8	3/8

◇ 10-32: (M) UNF

ELBOW

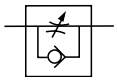
Precise adjustment with screwdriver and protection against unwanted adjustment

Product No	Tubing O.D. in	Thread (M) NPT
44.962	1/4	1/8
44.964	1/4	1/4
44.974	3/8	1/4
44.975	3/8	3/8

STRAIGHT UNION

Product No	Tubing O.D. in
44.952	1/4
44.956	3/8

PRECISION IN-LINE FLOW CONTROL VALVES
(WITH BUILT-IN CHECK VALVE)



FEATURES AND BENEFITS

- For precise control of cylinder speeds, even at low speed
- Restrict flow of air in one direction, permits maximum flow in opposite direction
- Can be mounted in-line
- Retaining ring prevents accidental loss of needle

MATERIALS

Body: Aluminium - Alloy

SPECIFICATIONS

Fluid: Compressed air
Working Pressure Range: 0-140 PSI
Working Temperature Range: -10 °C to 80 °C

Product No	Thread (F) NPT	Air Flow Cv
85.540	1/4	0.33
85.542	3/8	2.05
85.544	1/2	2.60

PRECISION IN-LINE FLOW CONTROL VALVES
(WITH BUILT-IN CHECK VALVE)

85.505

85.535

FEATURES AND BENEFITS

- For precise control of cylinder speeds, even at low speed
- Restrict flow of air in one direction, permits maximum flow in opposite direction
- Can be mounted in-line
- Retaining ring prevents accidental loss of needle
- Number of needle rotations: 8

MATERIALS

Body: Aluminium - Zinc alloy
Needle: Brass
Diaphragm: Buna-N/Nitrile
Lock Nut: Steel
Knob: Zinc alloy

SPECIFICATIONS

Fluid: Compressed air
Working Pressure Range: 7-145 PSI
Working Temperature Range: 5 °C to 60 °C

Product No	Thread (F) NPT	Air Flow SCFM	Applicable Cylinder Bore Size in
85.505	1/8	12	3/4 to 1-1/4
85.510	1/4	12	3/4 to 1-1/4
85.515	1/4	28.6	1-1/4 to 2-1/2
85.520	3/8	28.6	1-1/4 to 2-1/2
85.525	1/4	59	1-1/2 to 4
85.530	3/8	59	1-1/2 to 4
85.535	1/2	59	1-1/2 to 4

IN-LINE FLOW CONTROL AND NEEDLE VALVES

In-line flow control valves meter flow of air or oil in one direction and allow free flow in the reverse direction

- **FLUID: AIR, OIL**

FEATURES AND BENEFITS

- **Accurate flow control**
- **High flow**
- **Positive no-leak stem seal**
- **Safe, positive stop for needle travel**
- **Precision-calibrated dial to determine flow and allow return to required flow settings**
- **One-piece forged housing**

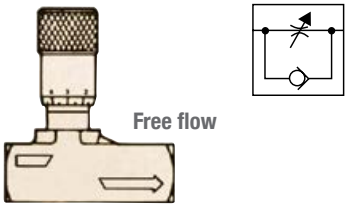
MATERIALS

Body: One-piece, high-tensile forged brass
Needle: Heat-treated, ground and polished stainless steel
Ball and Cage: Stainless steel
Knob: Aluminium
Seal: Buna-N/Nitrile

SPECIFICATIONS

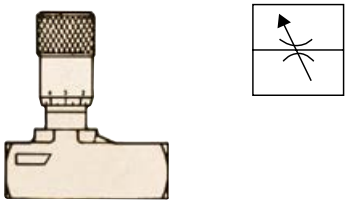
Fluid: Compressed air, hydraulic Oil
Maximum Working Pressure: 3000 PSI
Working Temperature Range: -23 ˚C to 71 ˚C
Check Valve Operating Pressure: 2 PSI

FLOW CONTROL VALVES
(WITH BUILT-IN CHECK VALVE)



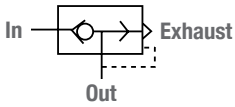
Product No	Thread (F) NPT	Cv Factor Check valve	Cv Factor Needle Full open
85.374	1/8	0.60	0.30
85.376	1/4	1.30	0.60
85.378	3/8	2.85	1.08
85.380	1/2	4.96	1.75
85.381	3/8 (F)	9	3.20
85.383	1 (F)	9.20	3.20

NEEDLE VALVES



Product No	Thread (F) NPT	Cv Factor Needle Full open
85.382	1/8	0.30
85.384	1/4	0.60
85.386	3/8	1.08
85.388	1/2	1.75

QUICK EXHAUST VALVES



APPLICATIONS

The quick exhaust valve added to a pneumatic circuit increases the exhaust capacity of the system. This permits greater cylinder speeds without increasing the size of the control valve.

FEATURES AND BENEFITS

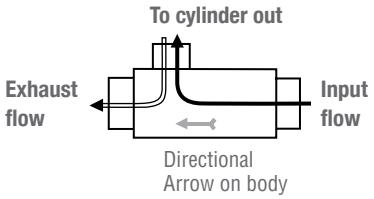
- **Quick exhaust valves provide fast cylinder returns**
- **Designed to give quick exhaust byunrestricted air flow to the atmosphere so that back pressure will disperse in the shortest possible time**
- **High flow capacity**
- **Compact and lightweight**
- **Can be fitted directly to cylinder port with a suitable connector**

MATERIALS

Body: Nickel plated brass
Diaphragm and seal: Polyurethane

SPECIFICATIONS

Fluid: Compressed air
Working Pressure: 5-145 PSI
Ambient and Fluid Temperature: -18 °C to 70 °C



Product No	Thread (F) NPT	Air Flow* SCFM
85.605	1/8	19
85.615	1/4	31
85.630	1/2	79
85.635	3/4	100

* At 88 PSI

MATERIALS

Body: Aluminium alloy
Diaphragm and seal: Polyurethane

SPECIFICATIONS

Fluid: Compressed air
Working Pressure: 1-145 PSI
Ambient and Fluid Temperature: -5 °C to 60 °C

Product No	Thread (F) NPT	Air Flow* SCFM
85.616	1/4	29
85.626	3/8	47
85.636	1/2	77

* At 88 PSI

MATERIALS

Body: Aluminium alloy
Diaphragm and seal: Polyurethane

SPECIFICATIONS

Fluid: Compressed air
Working Pressure: 7-140 PSI
Ambient and Fluid Temperature: -10 °C to 80 °C

Product No	Thread (F) NPT	Air Flow* SCFM
85.640	1/8	31
85.642	1/4	64
85.644	3/8	81
85.646	1/2	106
85.648	3/4	136

* At 88 PSI

IN-LINE CHECK VALVES

Ideal for safety purposes – prevent pressure loss in the event of air supply failure or air supply shut-off.

Check valves allow free flow from the inlet to the work port and block flow in the other direction

IN-LINE CHECK VALVES

IN OUT

MATERIALS

Body: Brass
Spring: Stainless steel
O-ring: Viton

SPECIFICATIONS

Fluid: Compressed air
Maximum Working Pressure: 250 PSI
Ambient and Fluid Temperature: -40 °C to 120 °C
Cracking Pressure: 1 PSI

Product No	Thread (M) NPT
85.650	1/4
85.655	3/8

IN-LINE CHECK VALVES

IN OUT

MATERIAL

Body: Aluminium alloy

SPECIFICATIONS

Fluid: Compressed air
Maximum Pressure Range: 114 PSI
Ambient and Fluid Temperature: -10 °C to 80 °C

Product No	Thread (F) NPT
85.690	1/8
85.692	1/4
85.694	3/8
85.696	1/2

IN-LINE CHECK VALVES

IN OUT

MATERIALS

Body: Brass
Spring: Stainless steel
O-ring: Buna-N/Nitrile

SPECIFICATIONS

Fluid: Compressed air
Maximum Working Pressure: 500 PSI
Ambient and Fluid Temperature: -40 °C to 230 °C
Cracking Pressure: 1 PSI

Product No	Thread (F) NPT
85.390	1/8
85.392	1/4
85.394	3/8
85.396	1/2

ADJUSTABLE RELIEF VALVES

A small, sensitive diaphragm-type relief valve for use where gradual, proportional relief is required

Product No	Pressure Range PSI
85.402	0 - 15
85.404	0 - 25
85.406	0 - 50
85.408	0 - 100

- **Maximum Pressure: 300 PSI**
- **Locking knob and top work the same as on miniature regulators**
- **3 inlet ports: 1/4 NPT (1), 1/8 NPT (2) 1 exhaust port: 1/4 NPT**

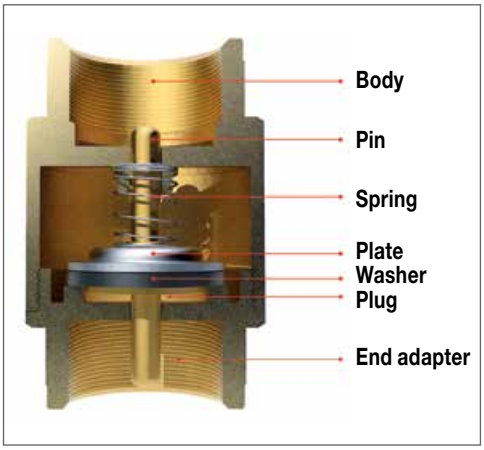
MATERIALS

Body: Brass
Diaphragm/Disc: Buna-N/Nitrile
Cage: Celcon
Adjusting Knob: Polypropylene

SPECIFICATIONS

Working Temperature: 49 °C
Weight: 0.50 lb

EUROPA® CHECK VALVES



MATERIALS

Body: Brass
Pin: Brass
Spring: Stainless steel AISI302
Plate: Stainless steel AISI304
Washer: NBR
Plug: Brass
End adapter: Brass

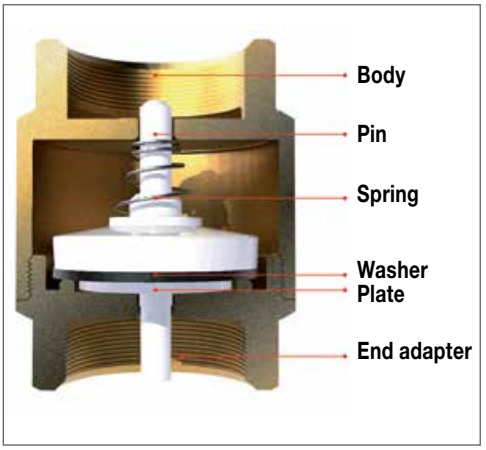
SPECIFICATIONS

Fluid: Compressed air, water
Ambient and Fluid Temperature: -20 °C to 100 °C

Product No	Thread (F) NPT	Maximum Working Pressure PSI*
85.710	1/4	200
85.715	3/8	362.5
85.720	1/2	362.5
85.725	3/4	362.5
85.730	1	362.5
85.735	1-1/4	261
85.740	1-1/2	261
85.745	2	261
85.746	2-1/2	174
85.747	3	174
85.748	4	174

* Air, water

YORK® CHECK VALVES



MATERIALS

Body: Brass
Pin: Polymer
Spring: Stainless steel AISI302
Washer: NBR
Plate: Polymer
End adapter: Brass

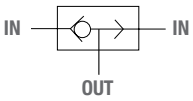
SPECIFICATIONS

Fluid: Compressed air, water
Ambient and Fluid Temperature: -20 °C to 100 °C

Product No	Thread (F) BSPP	Maximum Working Pressure PSI*
85.750	3/8	174
85.752	1/2	174
85.754	3/4	174
85.756	1	174
85.758	1-1/4	145
85.760	1-1/2	145
85.762	2	145
85.764	2-1/2	116
85.766	3	116
85.768	4	116

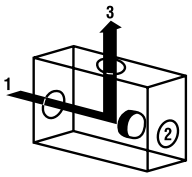
* Air, water

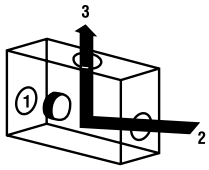
SHUTTLE VALVES
(« OR » LOGIC FUNCTION)



FEATURES AND BENEFITS

- Shuttle valves select and direct the flow of air from 2 individual sources to a common outlet. The valve automatically selects the greater pressure
- This valve is also called a 3 port check valve, which has 1 outlet and 2 inlets. The outlet is always connected to the high pressure side and is used to close the inlet of the low pressure side
- A common application is to control a cylinder from 2 different positions





MATERIALS

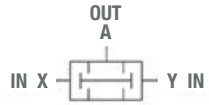
Body: Anodized aluminium

SPECIFICATIONS

Fluid: Compressed air
Working Pressure Range: 12-140 PSI
Ambient Temperature: -10 °C to 80 °C

Product No	Thread (F) NPT
85.805	1/8
85.810	1/4

DOUBLE PRESSURE VALVE
(«AND » LOGIC FUNCTION)



FEATURES AND BENEFITS

- Double pressure valve requires the flow of air from 2 individual sources to a common outlet
- Provides an output signal upon nearly concurrent operation of two push buttons (inputs)

WARNING

Double pressure valves do not, by themselves, insure the safety of any machine. Users and original equipment manufacturers are responsible for making sure that installations meet all relevant safety regulations.

MATERIALS

Body: Anodized aluminium

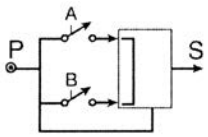
SPECIFICATIONS

Fluid: Compressed air
Working Pressure Range: 12-140 PSI
Ambient Temperature: -10 °C to 80 °C

Product No	Thread (F) NPT
85.815	1/8

TWO-HAND ANTI TIE-DOWN SAFETY UNIT
("AND" TYPE)

SAFETY SOLUTION



FEATURES AND BENEFITS

- Ensures worker safety by requiring both hands to activate a machine
- Supply is shut down quickly for safety when deactivated
- Tamper resistant enclosure avoids operator circumvention
- The two-hand control occupies both hands of an operator by requiring simultaneous operation of two pushbuttons
- Quick acting poppet valve (no spools)
- Output appears sharply at full force (snap-acting)
- Quick exhaust upon deactivation
- Operation not affected by the length of supply or application side tubing
- Handles standard shop air, no special lubrication required

APPLICATIONS

Air presses and drill fixtures
Air clamps and cylinders
Air pilot valves
Other industrial machinery

MATERIALS

Body: Glass filled nylon
Operating Head: Zinc alloy and plastic

SPECIFICATIONS

Operating Pressure: 40 to 120 PSI
Flow at 90 PSI: 7 SCFM
Temperature Range: -15 °C to 60 °C
Fluid: Filtered compressed air
Connection: 5/32 (4mm) push-in

Product No	Description
85.850	Two-Hand Anti Tie-Down Unit

WARNING

Two-hand control modules do not of themselves insure the safety of any machine. Users and original equipment manufacturers are responsible for making sure that installations meet all relevant safety regulations.

SicoAir compressed air system: *for a fast and easy installation*

TOPRING SicoAir *Series 06 compressed air systems are put together using screw-type fittings, as opposed to the usual threading and welding methods required with traditional steel pipes.*

These assembly methods using **TOPRING**'s SicoAir *system, speeds up the installation process by as much as a factor of 4, thus saving on installation costs that can often include more labour than materials.*

Total assembling time for a TOPRING SicoAir System **00:05:14:02**

Total assembling time with a traditionnal system and components **00:19:08:02**

Series 86
PNEUMATIC MUFFLERS

PNEUMATIC MUFFLERS

Our modern world is a dynamic, fast-moving, noisy place.

On the job, workers are exposed to the sounds of industrial equipment, machinery and power tools.

All of these loud sounds can contribute to hearing loss.

Continuous or repeated exposure to sound levels exceeding 90 decibels will eventually cause permanent hearing loss.

The relative loudness and harmfulness of impulse noise is often underestimated. Noise generated by the functionning of pneumatic valves is much more dangerous than most people realise. This noise can lead to permanent hearing damage.

The brain is incapable of distinguishing the strength of these staccato sounds assaulting the ear, and cannot adjust accordingly. As a result, it is heard as a continuous sound. A half-inch valve controlling a pneumatic cylinder can produce a sound equivalent to a continuous 92 dB(A) (at 3 cycles per second). Working near such a sound source for extended periods can cause permanent hearing damage.

Fortunately, this type of sound is easily controlled. **TOPRING** silencers and mufflers effectively muffle the noise of exhaust air from pneumatic valves.

ADVANTAGES OF REDUCING NOISE

Ensures protection of hearing, reduces the number of workers affected by occupational deafness, and lowers the seriousness of hearing loss.

Reduces accidents because, sound-warning alarms, equipment failures and conversations are easier to hear and distinguish.

Offers an environment where noise is less threatening and stressing thus improving workers' productivity.

Workers will benefit from a better quality of life and the company will reduce its working expenses.

TECHNICAL ASPECTS TO CONSIDER WHEN CHOOSING A SILENCER

A silencer installed on air lines must not restrict airflow to a level below the limit specified by the manufacturer.

Inspection and maintenance of silencers must be done regularly in order to ensure their efficiency. Impurities, such as rust coming from air lines, could gradually block the silencer and thus reduce its air-exhaust capacity.

For increased protection, metal silencers should be installed for air lines with high rates of contaminant accumulation.

PERMISSIBLE NOISE EXPOSURE

Duration per day, in hours	Sound Level dB (A)
8	90
6	92
4	95
3	97
2	100
1-1/2	102
1	105
1/2	110
1/4 or less	115

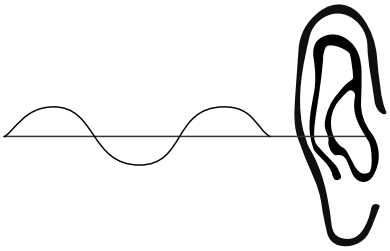
References:
OSHA 29 CFR PART 1910.95(b)(2)
CSST L.R.Q., c. S-2.1, r.19.01 Section XV, 131.

NOISE

Irritating noise is a form of pollution which degrades quality of life and threatens health

Besides jangling nerves, provoking anger and instilling fear, noise also provokes stress and is a serious threat to our hearing

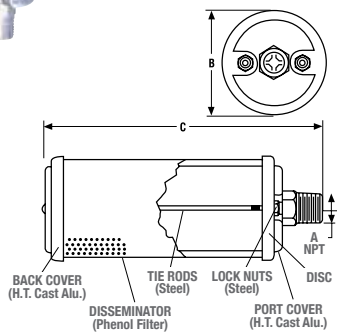
Controlling noise is a new challenge that industry must meet today



AIR EXHAUST MUFFLERS / FILTERS

FEATURES AND BENEFITS

- Provide complete protection to personnel from injurious air blast noise
- Air exhaust mufflers meet all requirements for the effective control of air exhaust noise with negligible impairment of operating efficiencies
- Made with an expansion chamber completely free of obstructions, from which the exhaust air, at reduced velocity, is softly dispersed through the openings of the perforated cylinder wall of the muffler
- Made entirely of corrosion-resistant material for maintenance-free performance
- Standard male pipe-thread connections for quick, easy attachment to the air exhaust port
- Unit should be mounted in a protective position, free from excess vibration
- May be used as filters for compressed air



APPLICATIONS

Air cylinders, Valves, Tools, Hoists, Clutches and other air-operated devices

MATERIALS

Covers: Cast Aluminium

Tie Rods and Lock Nuts: Steel

Disseminator: Cellulose fiber/Steel

SPECIFICATIONS

Maximum Working Pressure: 125 PSI

Working Temperature Range: 40 °C to 163 °C

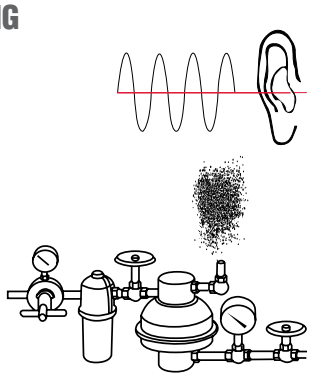
Noise Reduction: Up to 85%

Product No	Thread (M) NPT	Air Flow SCFM at 90 PSI	Dimensions (in)			Weight kg
			A	B	C	
86.700	1/8	44	1/8	1.84	3.12	0.09
86.705	1/4	84	1/4	1.84	4.37	0.11
86.710	3/8	192	3/8	2.59	5.12	0.23
86.715	1/2	256	1/2	3.15	6.00	0.34
86.720	3/4	544	3/4	3.40	7.18	0.45
86.725	1	800	1	3.90	8.75	0.59
86.730	1-1/4	1360	1-1/4	3.90	8.75	0.61
86.735	1-1/2	2080	1-1/2	5.25	13.56	1.45
86.740	2	3200	2	5.25	18.87	1.86

PROBLEM:

AIR STREAM EXHAUSTING FROM AIR SYSTEM OUTLETS

Components such as air operated valves, air operated rotary actuators, etc. produce very high noise levels when air is released to the atmosphere. These noises come from air turbulence caused by high speed air exhausted underhigh pressure.

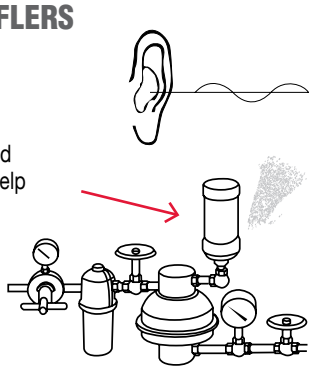


High noise levels

SOLUTION:

AIR EXHAUST MUFFLERS DESIGNED FOR EXHAUST PORTS

Air exhaust mufflers mounted on compressed air outlets help reduce noise.



Reduced noise

RELIEF VALVE AIR EXHAUST MUFFLERS / FILTERS

Includes all the features of the **TOPRING** air exhaust mufflers/filters plus an added relief valve to equalize pressure and optimize performance.

Superior design and construction provides a low-cost, effective method of eliminating annoying, distracting noise emitted from air-operated devices.

The relief valve equalizes pressure by detecting any outflow deviation, responding to the pressure differential and opening up to compensate for outflow demands.

Eliminate excessive noise by dividing the air stream and turning it back on itself. As an air exhaust enters the muffler at high velocity, the muffler redirect it into smaller air streams that rebound off opposing walls of the chamber. With the air streams colliding head-on with each other, the velocity is reduced and the air is dispersed throughout the disseminator surface area.

FEATURES AND BENEFITS

- **Outstanding ability to eliminate excessive noise for a more pleasant working environment while reducing potential physical injuries caused by extreme air blasts**
- **Full-flow design uses interposing sound waves**
- **Obstruction-free expansion chamber and porous disseminator (filter element) to completely dissipate harmful air exhaust blast**
- **Ideal for reducing Exponentially Perceived Noise (EPNdB)**

APPLICATIONS

Ideal for applications where uninterrupted continuous outflow is required

MATERIALS

Cover: Aluminium

Tie Rods and lock Nuts: Zinc plated CRS

Discharge Valve: Stainless Steel 409

Fiber: Cellulose fibers

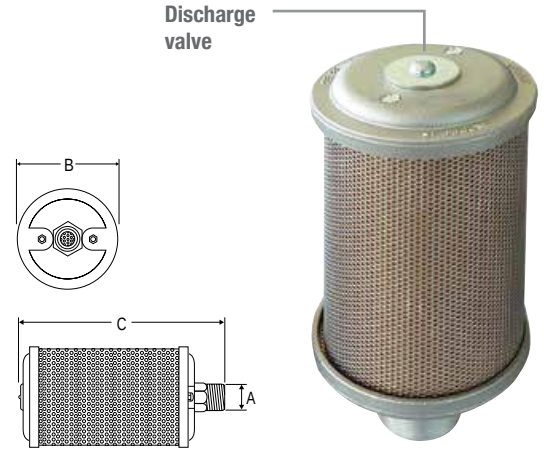
SPECIFICATIONS

Maximum Working Pressure: 150 PSI

Working Temperature Range: Maximum 150 °C less than 30 minutes

Noise Reduction: Up to 85%

Decibel level: 17 at 25 dBa (average of 22 dBa)



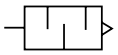
Product No	Thread (M) NPT	Air Flow SCFM at 90 PSI	Dimensions (in)			Weight kg
			A	B	C	
86.760	1/2	256	1/2	3.15	6.00	0.40
86.765	3/4	544	3/4	3.40	7.18	0.52
86.770	1	800	1	3.90	8.75	0.76
86.775	1-1/4	1360	1-1/4	3.90	8.75	0.80
86.780	1-1/2	2080	1-1/2	5.25	13.56	1.65
86.785	2	3200	2	5.25	18.87	2.09

MUFFLERS / FILTERS

These muffler/filters are ideal for silencing compressed air exhausting from such devices as air valves, air motors and impact air tools. In addition, they also prevent valve orifices from being contaminated by outside impurities.

FEATURES AND BENEFITS

- **Efficient noise reduction**
- **Compact and lightweight**
- **Low flow restriction**
- **Long life**



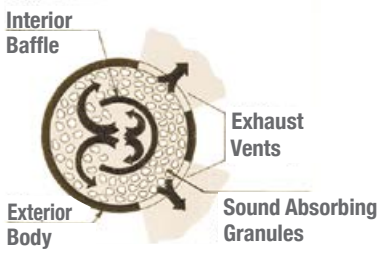
MATERIALS

Body: Molded Acetal Plastic
Element: Acetal Plastic beads

SPECIFICATIONS

Maximum Working Pressure: 116 PSI
Working Temperature: 5 °C to 80 °C
Noise Reduction: ≥ 30dB

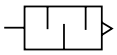
An integrated baffle plate inside the silencer body provides a controlled-flow condition that circulates air through a maximum number of sound-absorbing granules before exhausting to the atmosphere.



TECH TIP

Mufflers require no maintenance when used under normal working conditions. When used with dirty or oily air, a periodic wash with a petroleum-based solvent is recommended. Mufflers may be installed to direct airflow away from the operator.

Product No	Thread (M) NPT
86.145	1/8
86.150	1/4
86.155	3/8
86.160	1/2
86.165	3/4
86.170	1



MATERIALS

Body: Molded Acetal Plastic
Element: Polyethylene (PE)

SPECIFICATIONS

Maximum Working Pressure: 150 PSI
Working Temperature: 5 °C to 80 °C
Noise Reduction: ≥ 30dB

Product No	Thread (M) NPT
86.146	1/8
86.151	1/4
86.156	3/8
86.161	1/2
86.166	3/4
86.171	1

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SINTERED BRONZE OR STAINLESS STEEL MUFFLERS / FILTERS

FEATURES AND BENEFITS

- Diffuses air and disperses noise from the exhaust ports of valves, cylinders and air tools
- Compact - particularly suitable where space is limited
- Easy to install and maintain
- Tough, cellular, sintered metal structure, secured to metal body, provides an ideal combination of strength and performance
- May be used as filters for compressed air
- Prevents metal chips, abrasive grit, dust and other contaminants from entering open exhaust ports and causing premature valve failure

APPLICATIONS

Muffling of air valve noise

Exhaust and intake filtering

Coalescing of oil mist and/or water vapor

Pressure or vacuum equalization

MATERIALS

Base: Brass or Stainless Steel

Element: Sintered Bronze or Sintered Stainless Steel

SPECIFICATIONS

Maximum Working Pressure: 116 PSI

Working Temperature: -10 °C to 250 °C

Bronze Product No	Stainless Steel Product No	Thread (M) NPT	Air Flow SCFM at 90 PSI
86.100	--	10-32 ◇	--
86.105	**86.107**	1/8	34
86.110	**86.112**	1/4	68
86.115	**86.116**	3/8	102
86.120	--	1/2	186
86.125	--	3/4	322
86.130	--	1	353

◇ 10-32: (M) UNF

COMPACT BREATHER VENT FILTERS

FEATURES AND BENEFITS

- Low profile filter and diffusion unit
- Supplied with male pipe threads, they can be inserted, with little protrusion, as a flat, integral part of the equipment
- Compact size
- Filtration element: 40 micron

APPLICATIONS

Used on single acting cylinders or valves to prevent dirt and foreign particles from entering ports open to the atmosphere

MATERIALS

Base: Brass

Element: Sintered Porous Bronze

SPECIFICATIONS

Maximum Working Pressure:
1/8, 1/4: 174 PSI
3/8, 1/2, 3/4, 1: 125 PSI

Working Temperature Range:
1/8, 1/4: -10 °C to 80 °C
3/8, 1/2, 3/4, 1: 4 °C to 149 °C

Product No	Thread (M) NPT	Air Flow SCFM at 90 PSI
86.200	1/8	30
86.205	1/4	50
86.210	3/8	80
86.215	1/2	120
86.220	3/4	200
86.225	1	280

SPEED CONTROL MUFFLERS

Speed Control Mufflers provide an infinite variation of metering air flow with complete safety at an acceptable sound level on exhaust ports of air valves.

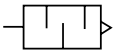
APPLICATIONS

Speed control mufflers are recommended for use with 5-ported, dual-exhaust, air-control valves. Speed control mufflers are screwed into the selected air control valve exhaust ports. The cylinder exhaust is throttled by the port flow control adjustable orifice, and back pressure is developed that acts to reduce the cylinder stroke period.

FEATURES AND BENEFITS

- **Compact size**
- **The adjustable tapered metering valve provides a fine adjustment of air flow, for pressure applications and for vacuum relief on vacuum systems**
- **External adjustment screw accurately varies orifice opening from closed to full flow as required. Securely locked at the desired setting with a locknut, it cannot be accidentally tampered with, removed, or blown outenlevé ou obturé**

Easy to adjust knob. No screw driver needed



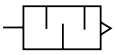
MATERIALS

Body: Brass nickel plated
Element: Polyethylene

SPECIFICATIONS

Maximum Working Pressure: 145 PSI
Working Temperature Range: -10 °C to 250 °C

Product No	Thread (M) NPT	Air Flow SCFM at 90 PSI
86.800	1/8	30
86.805	1/4	51
86.810	3/8	70
86.815	1/2	100
86.820	3/4	130



Tough, cellular, sintered Bronze structure, secured to bronze body, ensures desired combination of filtering and mufflering with adjustable flow

MATERIALS

Base: Bronze
Element: Sintered bronze

SPECIFICATIONS

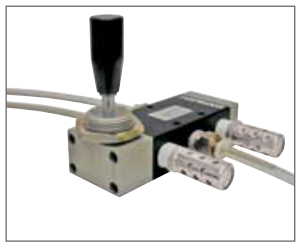
Maximum Working Pressure: 145 PSI
Working Temperature Range: 0 °C to 149 °C
Filtration element: 40 micron

Product No	Thread (M) NPT	Air Flow SCFM at 90 PSI
86.300	1/8	23
86.305	1/4	51
86.310	3/8	73
86.315	1/2	140
86.320	3/4	325
86.325	1	573

HIGH FLOW PNEUMATIC SILENCERS

Quick, inexpensive method for reducing work area noise. At the same time, pneumatic silencers protect the inside of the valve from contamination through the exhaust ports.

86.600



Product No	Thread (M) NPT	Air Flow SCFM at 90 PSI
86.600	1/8	25
86.605	1/4	30
86.610	3/8	61
86.615	1/2	91
86.620	3/4	160
86.625	1	187
86.630	1-1/4	230
86.635	1-1/2	252
86.640	2	308

FEATURES AND BENEFITS

- **Tough, compact and ideally suited for use where space is limited**
- **High flow capacity**
- **Minimal back pressure**
- **Designed with a precise distribution of peripheral openings, the silencers softly disperse exhaust air uniformly over a 360° pattern to provide effective reduction of air exhaust noise**
- **Constructed of a corrosion-resistant metal to withstand shock and continuous heavy-duty use under many conditions**

APPLICATIONS

Ideally suited for use on exhaust ports of valves and air tools

In addition to reducing noise levels, they may also be used to keep out foreign material

MATERIALS

Body: Zinc plated steel

Brass screen

SPECIFICATIONS

Maximum Working Pressure: 125 PSI

Working Temperature Range: 4 °C to 149 °C

HIGH FLOW PNEUMATIC SILENCERS

Quick, inexpensive method for reducing work area noise. At the same time, pneumatic silencers protect the inside of the valve from contamination through the exhaust ports.

86.400

Product No	Thread (M) NPT	Air Flow SCFM at 90 PSI
86.400	1/8	42
86.405	1/4	54
86.410	3/8	121
86.415	1/2	146
86.420	3/4	230
86.425	1	237

FEATURES AND BENEFITS

- **Tough, compact and ideally suited for use where space is limited**
- **High flow capacity**
- **Minimal back pressure**
- **Designed with a precise distribution of peripheral openings, the silencers softly disperse exhaust air uniformly over a 360° pattern to provide effective reduction of air exhaust noise**
- **Constructed of a corrosion-resistant metal to withstand shock and continuous heavy-duty use under many conditions**

APPLICATIONS

Ideally suited for use on exhaust ports of valves and air tools

In addition to reducing noise levels, they may also be used to keep out foreign material

MATERIALS

Body: Aluminium

SPECIFICATIONS

Maximum Working Pressure: 300 PSI

Working Temperature Range: 4 °C to 149 °C

PNEUMATIC MUFFLER CABINET

Quantity of items per product No

No		No	
86.105	20	86.210	10
86.110	20	86.215	5
86.115	10	86.300	10
86.120	5	86.305	10
86.107	10	86.310	10
86.112	10	86.315	5
86.145	10	86.600	5
86.150	10	86.605	5
86.155	10	86.610	5
86.160	10	86.615	5
86.146	10	86.620	5
86.151	10	86.800	5
86.156	10	86.805	5
86.161	5	86.810	5
86.200	20	86.815	5
86.205	20		

Product No: 95.021

- 285 items / 32 Product No
- 20 drawers cabinet 23” L x 14” H x 8.75” W

The Push-to-Connect fittings, tubings and mufflers brochure is available to download at TOPRING.com

- ***TOPRING’s complete selection of push-to-connect fittings, tubings and mufflers for pneumatic applications***
- ***Contains a thread and tubing size full scale chart***
- ***Push-to-connect fittings and mufflers cabinet selections for easy storage and product identification***

Visit TOPRING.com
Section « Technical Support » / Push-to-connect fittings and tubing

Hose whip: better control and better protection!

All sharp bends on hose lines should be avoided. These tend to shorten hose life, increase pressure drop, retard swivel action, increase pump load and raise the temperature of the fluid. A hose whip should be installed to avoid strain on hose and coupler assembly.

- **Protection**
  Extends the life of the hose and coupler by acting as a shock absorder and protecting it against tool vibration
- **Control**
  Allows the operator an easier and wider range of motion while increasing the worker productivity
- **Ergonomic**
  Reduces worker fatigue when using tools with heavy vibrations

Available with EASYflex® *PREMIUM* or TOPLEX hoses

See Series 62 page 387 for the complete selection
Large choice of hose length and diameter

Hose whip kits with quick coupler and plug available with EASYflex® *PREMIUM* hose / See Series 62 for more details

Technical Data

UNITS AND CONVERSION TABLES

CONVERSION FACTORS

From	Multiply by	=	From	Multiply by	=
POWER					
1 "horsepower" = hp	0.746	kiloWatts = kW	1 kiloWatts = kW	1.34	"horsepower" = hp
VOLUME					
1 inch^3 = in^3	16.387	centimetre^3 = cm^3	1 centimetre^3 = cm^3	0.061	inch^3 = in^3
1 feet^3 = ft^3	0.0283	metre^3 = m^3	1 metre^3 = m^3	35.3	feet^3 = ft^3
1 feet^3 = ft^3	28.32	litre = l	1 litre = l	0.0353	feet^3 = ft^3
1 gallon (U.S.)	3.785	litre = l	1 litre = l	0.264	gallon (U.S.)
1 gallon (U.S.)	0.1337	feet^3 = ft^3	1 feet^3 = ft^3	7.48	gallon (U.S.)
1 gallon (imperial)	4.546	litre = l	1 litre = l	0.22	gallon (imperial)
1 gallon (imperial)	0.1605	feet^3 = ft^3	1 feet^3 = ft^3	6.23	gallon (imperial)
1 metre^3 = m^3	1000	litre = l	1 litre = l	0.001	metre^3 = m^3
1 ounce (liquid) U.S. = oz	29.574	millilitre = ml	1 millilitre = ml	0.0338	ounce (liquid) U.S. = oz
1 ounce (liquid) imperial = oz	28.413	millilitre = ml	1 millilitre = ml	0.0352	ounce (liquid) imperial = oz
LENGTH					
1 inch = in	25.4	millimetre = mm	1 millimetre = mm	0.03937	inch = in
1 feet = ft	0.3048	metre = m	1 metre = m	3.281	feet = ft
MASS					
1 ounce = oz	28.35	gram = g	gram = g	0.03527	1 ounce = oz U.S.
1 pound = lb	453.592	gram = g	gram = g	0.002205	1 pound = lb

TEMPERATURE

Fahrenheit to Celsius
(°F - 32) x 5/9 = °C

Celsius to Fahrenheit
(0 °C x 9/5) + 32° = °F

FLOW RATE CONVERSION

FROM ↓ / → TO	litre/sec	litre/min	gallon/min	ft^3/sec	ft^3/min (SCFM)
litre/sec	1	60.0	15.8	0.0353	2.12
litre/min	0.0167	1	0.264	0.000589	0.0353
gallon/min	0.0631	3.789	1	0.00223	0.134
ft.cu/sec	28.3	1700	449	1	60.0
ft.cu/min (SCFM)	0.472	28.3	7.48	0.0167	1

PRESSURE CONVERSION

FROM ↓ / → TO	m Hg	in Hg	ft H_2O	atm	Bar	lb/in PSI	kg-f/cm^2	kPa
mm Hg	1	0.0394	0.0446	0.00132	0.00133	0.0193	0.00136	0.133
in Hg	25.4	1	1.13	0.0334	0.0339	0.491	0.0345	3.39
ft H_2O	22.4	0.883	1	0.0295	0.0299	0.434	0.0305	2.99
atm	760	29.9	33.9	1	1.01	14.7	1.03	101
Bar	750	29.5	33.5	0.987	1	14.5	1.02	100
lb/po^2 (PSI)	51.7	2.04	2.31	0.068	0.0689	1	0.0703	6.89
kg-f/cm^2	736	29.0	32.8	0.968	0.981	14.2	1	98.1
kPa	7.50	0.295	0.335	0.00987	0.01	0.145	0.0102	1

Hg = Mercury Example: 1 bar = 14.5 PSI

DECIMAL AND METRIC EQUIVALENTS OF FRACTIONS

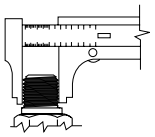
	in	mm
1/64	.0156	0.397
1/32	.0313	0.794
3/64	.0469	1.191
1/16	.0625	1.588
5/64	.0781	1.984
3/32	.0938	2.381
7/64	.1094	2.778
1/8	.1250	3.175
9/64	.1406	3.572
5/32	.1562	3.969
11/64	.1719	4.366
3/16	.1875	4.762
13/64	.2031	5.159
7/32	.2188	5.556
15/64	.2344	5.953
1/4	.2500	6.350
17/64	.2656	6.747
9/32	.2812	7.144
19/64	.2969	7.541
5/16	.3125	7.938
21/64	.3281	8.334
11/32	.3438	8.731
23/64	.3594	9.128
3/8	.3750	9.525
25/64	.3906	9.922
13/32	.4062	10.319
27/64	.4219	10.716
7/16	.4375	11.112
29/64	.4531	11.509
15/32	.4688	11.906
31/64	.4844	12.303
1/2	.5000	12.700

	in	mm
33/64	.5156	13.097
17/32	.5313	13.494
35/64	.5469	13.891
9/16	.5625	14.288
37/64	.5781	14.684
19/32	.5938	15.081
39/64	.6094	15.478
5/8	.6250	15.875
41/64	.6406	16.272
21/32	.6562	16.669
43/64	.6719	17.066
11/16	.6875	17.462
45/64	.7031	17.859
23/32	.7188	18.256
47/64	.7344	18.653
3/4	.7500	19.050
49/64	.7656	19.447
25/32	.7812	19.844
51/64	.7969	20.241
13/16	.8125	20.638
53/64	.8281	21.034
27/32	.8438	21.431
55/64	.8594	21.828
7/8	.8750	22.225
57/64	.8906	22.822
29/32	.9062	23.019
59/64	.9219	23.416
15/16	.9375	23.812
61/64	.9531	24.209
31/32	.9688	24.606
63/64	.9844	25.003
1	1.000	25.400

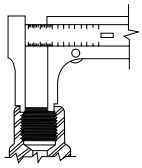
THREAD TYPES

With the caliper measure the thread diameter at the largest point. (O.D. of male threads - I.D. of female threads).

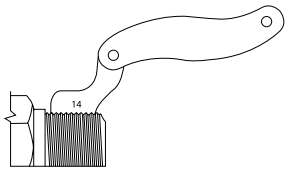
Using the pitch gauge determine the number of threads per inch. Comparison of gauge and coupling threads against a lighted background will insure an accurate reading.



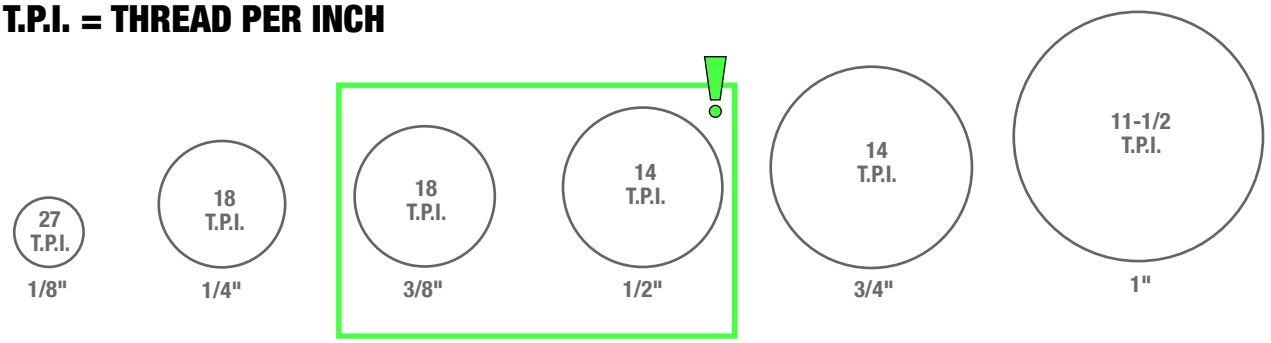
Male



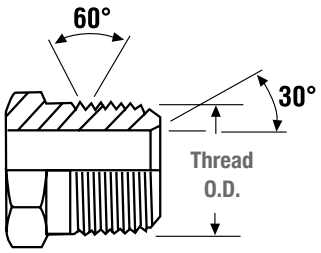
Female



T.P.I. = THREAD PER INCH



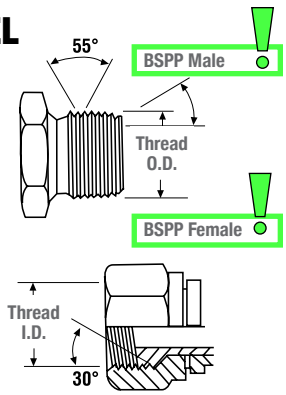
NPTT = NATIONAL PIPE THREAD TAPERED



Nominal Size in	T.P.I. Threads Per inch	Male Thread O.D. in	Female Thread I.D. in
1/8	27	3/8	23/64
1/4	18	35/64	15/32
3/8	18	43/64	19/32
1/2	14	27/32	3/4
3/4	14	1-1/16	61/64
1	11-1/2	1-5/16	1-13/64
1-1/4	11-1/2	1-43/64	1-17/32
1-1/2	11-1/2	1-29/32	1-25/32
2	11-1/2	2-3/8	2-1/4

BSPP = BRITISH STANDARD PIPE PARALLEL

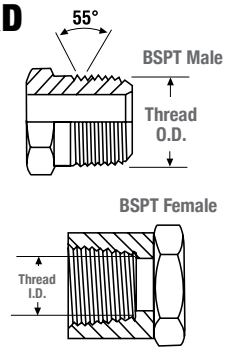
The BSPP (parallel) male will mate with a BSPP (parallel) female or a female port.



Nominal Size in	Thread Size	Male Thread O.D. in	Female Thread I.D. in
1/8	1/8-28	3/8	11/32
1/4	1/4-19	17/32	15/32
3/8	3/8-19	21/32	19/32
1/2	1/2-14	13/16	3/4
5/8	5/8-14	29/32	13/16
3/4	3/4-14	1-1/32	31/32
1	1 -11	1-11/32	1-7/32
1-1/4	1-1/4-11	1-21/32	1-17/32
1-1/2	1-1/2-11	1-7/8	1-25/32
2	2 -11	2-11/32	2-7/32

BSPT = BRITISH STANDARD PIPE / TAPERED

The BSPT (tapered) male will mate with a BSPT (tapered) female, or a BSPP (parallel) female



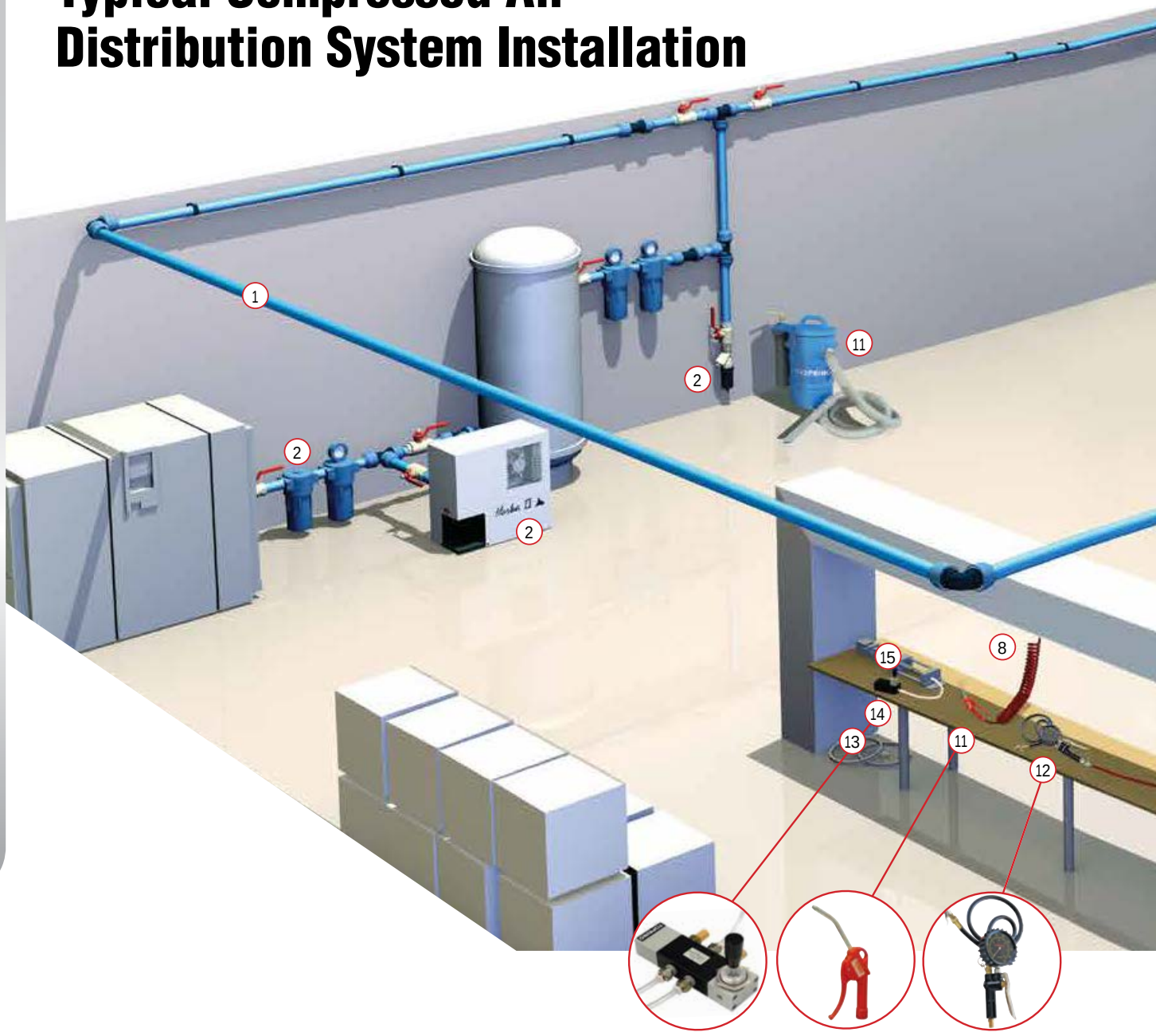
Nominal Size in	Thread Size	FMale Parallel Thread O.D. in	Female Tapered Thread I.D. in
1/8	1/8-28	3/8	11/32
1/4	1/4-19	17/32	15/32
3/8	3/8-19	21/32	19/32
1/2	1/2-14	13/16	3/4
5/8	5/8-14	29/32	13/16
3/4	3/4-14	1-1/32	31/32
1	1 -11	1-11/32	1-7/32
1-1/4	1-1/4-11	1-21/32	1-17/32
1-1/2	1-1/2-11	1-7/8	1-25/32
2	2 -11	2-11/32	2-7/32

ALPHABETICAL INDEX

NUMERICAL INDEX

NUMERICAL INDEX

Typical Compressed Air Distribution System Installation



1 **GROUP 1 • COMPRESSED AIR DISTRIBUTION SYSTEMS**
SERIES 05-06-07 • AIR LINE Compressed Air Distribution systems
SERIES 09 • Flexible Anti-vibration Hoses

2 **GROUP 2 • AIR TREATMENT AT THE COMPRESSOR**
SERIES 49 • Refrigerated Compressed Air Dryers
SERIES 53 • AIRFLO and HE Main Line Air Filters
SERIES 56 • AIRFLO and HE Water Separators
SERIES 57 • Water/Oil Separators
SERIES 59 • Automatic and Mechanical Drains

3 **GROUP 3 • AIR TREATMENT (FRL)**
SERIES 50-51-52 • Filters, regulators, lubricators (FRL)
SERIES 54 • Dessicant Air Dryers

4 **GROUP 4 • PRESSURE GAUGES**
SERIES 55 • Pressure Gauges

5 **GROUP 5 • SAFETY VALVES AND CHECK VALVES**
SERIES 58 • Safety Valves and Check Valves

6 **GROUP 6 • QUICK COUPLERS**
SERIES 20-21-22-23-24-25-26-30-31 • Quick Couplers
SERIES 28 • INDUSTRIAL Interchange Straight Through Quick Couplers
SERIES 29 • «ISO B» INDUSTRIAL Interchange Quick Couplers

7 **GROUP 7 • BRASS FITTINGS AND HOSE CLAMPS**
SERIES 41 • Brass Fittings
SERIES 48 • Hose Clamps

8 **GROUP 8 • SELF-STORING AIR HOSES AND AIR HOSES**
SERIES 11-14-17-19 • Self-storing Nylon Air Hoses
SERIES 70-71-72-73-74-75-77-78 • Air Hoses

9 **GROUP 9 • HOSE REELS**
SERIES 79 • Hose Reels

10 **GROUP 10 • ACCESSORIES, OILS AND TOOLS**
SERIES 01 • Diagnostic Tools
SERIES 47 • Manifolds

SERIES 62 • Air Line Accessories
SERIES 64 • Tool Balancers
SERIES 68 • Compressed Air Productivity Tools
SERIES 69 • Air Tool and Compressor Oils

11 **GROUP 11 • BLOW GUNS AND VACUUMS**
SERIES 60 • Blow Guns
SERIES 61 • Specialized Compressed Air Guns
SERIES 66 • Safety Cleaning Unit
SERIES 67 • Compressed Air Vacuum Units

12 **GROUP 12 • CHUCKS, TIRE GAUGES AND INFLATOR GAUGES**
SERIES 63 • Chucks, Tire Gauges and Inflator Gauges

13 **GROUP 13 • PUSH-TO-CONNECT FITTINGS AND TUBES**
SERIES 32-33-34-35-36-37-38 • Tubing
SERIES 39-40-42-43-44-46 • Push-to-Connect Fittings

14 **GROUP 14 • VALVES AND FLOW CONTROL**
SERIES 65 • Ball Valves
SERIES 80 • Air Control Valves
SERIES 85 • Flow Control, Quick Exhaust and Check Valves

15 **GROUP 15 • CYLINDERS**
SERIES 81-82 • NFPA Type Cylinders
SERIES 83 • Stainless Steel Cylinders

16 **GROUP 16 • AIR MUFFLERS**
SERIES 86 • Air Mufflers

NOTES

NOTES

NOTES

For internal use only

IMPORTANT NOTICE

Published literature at time of initial publication reflects current design, dimension and performance data. However, in keeping with our policy of upgrading products on an on-going basis, modifications may result in changes in design, dimensions and performance data not printed in literature.

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