



COMPRESSED AIR SAFETY UNITS



CAUTION!

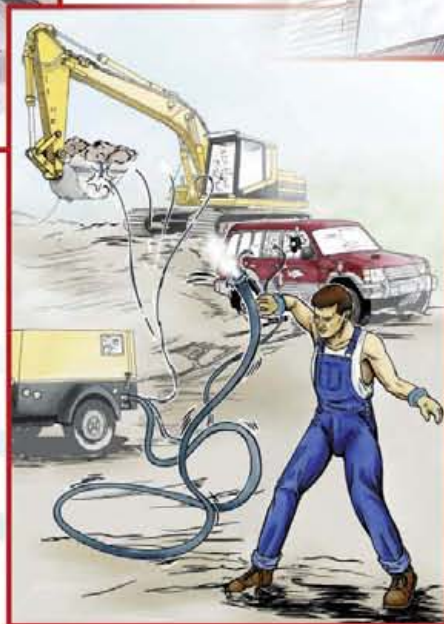
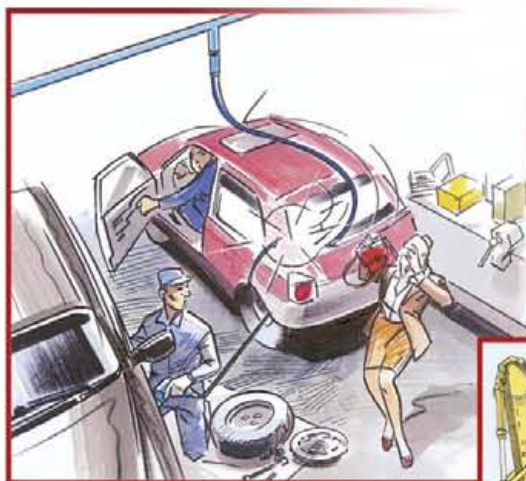
Do you live up to
your responsibility?
And does that also
apply when using
compressed air?





CAUTION!

The Protect-Air™ products described in this leaflet help plant managers to easily and cost efficiently comply with increasingly stringent directives on safe use of pneumatic equipment issued by industrial standards organizations such as the ISO.





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MANAGEMENT RESPONSIBILITY

Meeting the latest safety standards in pneumatic applications

Compressed air is used virtually everywhere, and is presently a major source of energy as well as a significant cost item in most companies. Use of compressed air in a planned and intelligent fashion ensures its efficient use and limits the costs associated with its production and distribution.



However, the hazards associated with improperly used compressed air should never be underestimated!

OSHA AND MSHA (USA) REGULATIONS

Standard – 29 CFR, 1910.242 (excerpt):

b) *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 equipment.*

„You can fully comply with this regulation by installing the Saveair® pre-set regulator and HoseGuard® air fuse“.

Standard – 29 CFR, 1915.302 (excerpt):

(b) (1) *Pneumatic power tools shall be secured to the hose or whip by some positive means to prevent the tool from becoming accidentally disconnected from the whip.*

You can fully comply with this regulation by installing the HoseGuard® air fuse.

(b) (7) *All hoses exceeding 1/2" inside diameter shall have a safety device at the source of supply or branch line to reduce pressure in case of hose failure.*

“You can fully comply with this regulation by installing the HoseGuard® air fuse.”

Standard – 29 CFR, 1915.131 – e) (excerpt) and 29 CFR, 1915.302 (excerpt):

e) *Before use, pneumatic tools shall be secured to the extension hose or whip by some positive means to prevent the tool from becoming accidentally disconnected from the whip.*

“You can fully comply with this regulation by installing the HoseGuard® air fuse”.

(b) (3) *All pneumatically driven nailers, staplers and other similar equipment provided with automatic fastener feed, which operate at more than 100 psi pressure at the tool shall have a safety device on the muzzle to prevent the tool from ejecting fasteners, unless the muzzle is in contact with the work surface.*

“You can fully comply with this regulation by installing a Toolreg® pre-set regulator with secondary pressure relief”

Excerpt of ISO EN 4414:

§ 5.4.5.11: Failure of hose assemblies and plastic piping:

5.4.5.11.1: *When failure of a hose assembly or plastic piping constitutes a whiplash hazard, it shall be restrained or shielded by suitable means and/or an air fuse for compressed air shall be mounted.*

KEY TO SYMBOLS

The Protect-Air™ products described in this leaflet help plant managers to easily and cost efficiently comply with increasingly stringent directives on safe use of pneumatic equipment issued by industrial standards organizations such as the ISO.

The following symbols indicate the safety device or protection product required to conform to regulations. Every product listed in this catalog complies with one or more safety requirements, laws or regulations. The round symbols indicate the primary type of protection offered by the pertinent product.



Safety

General safety symbol. Placed on the first page of the pertinent product range, this draws attention to the safety features.

- Maintenance equipment
- Safety ball valves
- Safety couples
- Safety air guns
- Pressure regulators
- Manometers
- Safety valves
- Sound absorbers
- Lines
- Line burst fuses – Airfuse (HoseGuard®)



Injury Protection

The risk of personal injury is reduced by use of special materials and technical safety features of the products.

- Maintenance equipment
- Safety couples
- Safety air guns
- Pressure regulators
- Manometers
- Safety valves
- Lines
- Line burst fuses – Airfuse (HoseGuard®)



Line Burst Protection

Use of line burst protectors prevents the feared “whipping effect” and helps prevent injuries.

- Line burst fuses – Airfuse (HoseGuard®)



Compressed Air

This symbol always appears on the “Laws and Regulations” pages and underscores the meaningfulness and significance of the laws.

- Maintenance equipment
- Safety ball valves
- Safety couples
- Safety air guns
- Pressure regulators
- Manometers
- Safety valves
- Sound absorbers
- Lines
- Line burst fuses – Airfuse (HoseGuard®)



Eye Protection

The risk of eye injury is reduced by use of special materials and technical safety features of the products.

- Maintenance equipment
- Safety couples
- Manometers
- Safety nozzles
- Line burst fuses – Airfuse (HoseGuard®)



Setting Locker

These products prevent intentional and unintentional changes in settings, since they include a setting lock.

- Maintenance equipment
- Safety ball valves
- Pressure regulators
- Safety valves

Our products are manufactured in conformity with ISO 9001:2000.

HOSEGUARD®



FUNCTION:

Airfuse - Protection of Personnel, Machinery and Equipment.

If a sudden rupture occurs in a compressed air system or hose, the air fuse automatically cuts off the air supply when the air flow exceeds a pre-set value. This value is pre-set by the manufacturer to allow a normal flow of air when using pneumatic tools. HoseGuard® is designed to allow a constant bleed of compressed air through a tiny nozzle to re-pressurize the system and re-open HoseGuard® once the broken hose has been repaired (reset function).

Protect your most important assets: your employees and their equipment!

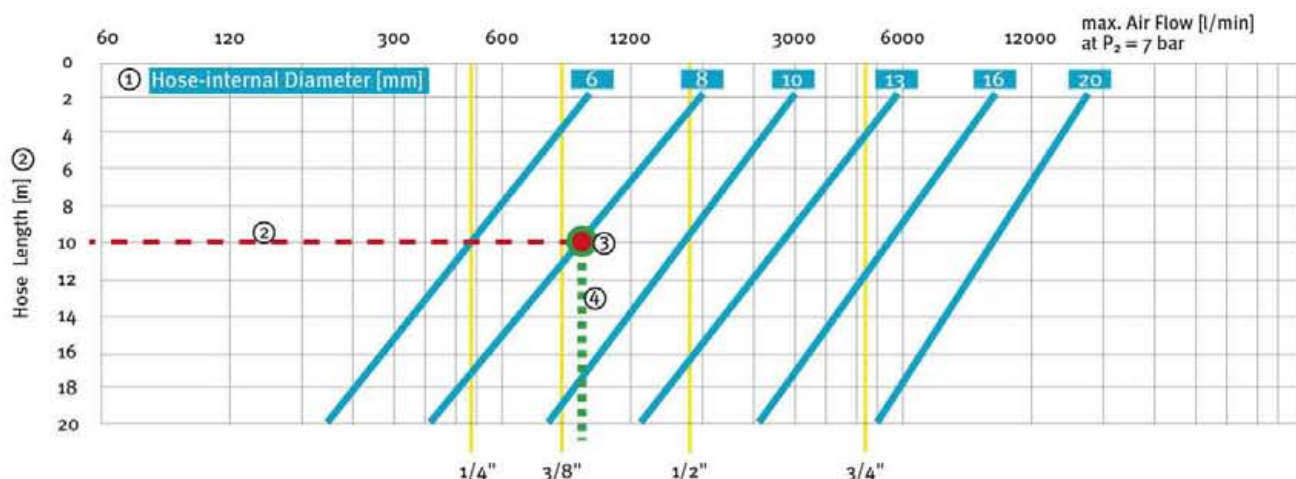
ADVANTAGES:

- ✓ Protects personnel, machinery, and plant
- ✓ Maintenance friendly – repair possible while plant is still working
- ✓ Economic: competitive pricing, no superfluous repairs
- ✓ Complies with EU standard ISO EN 4414 – § 5.3.4.3.2
- ✓ Reliable and tamperproof, no adjustment necessary
- ✓ Light weight – compact size
- ✓ Compatible with all pneumatic systems
- ✓ Can be used as a flow blocker
- ✓ TÜV Approval No. 01-02-0145
- ✓ EU Registered Utility Model No. 0025 73 525
- ✓ USA/US Design Patent D 475, 126

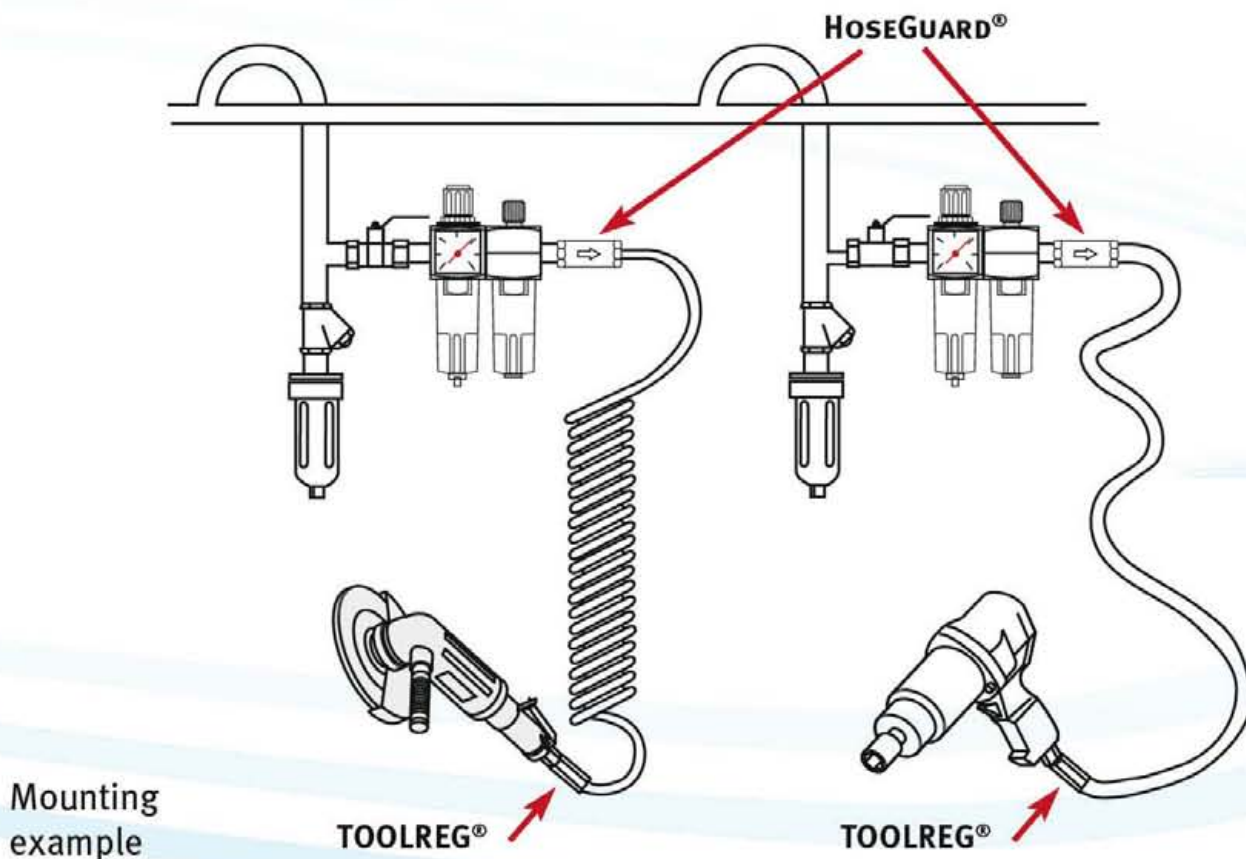
APPLICATION:

- ✓ Compressed air hoses and systems in chemical and pharmaceutical industries
- ✓ Cleanrooms
- ✓ Offshore
- ✓ Similar industrial fields

HOW TO SELECT THE OPTIMAL SIZE OF A AIR FUSE



- Select the internal diameter of the hose or pipe ① (refer to internal diameters of hose in mm on blue background and blue diagonals).
- Select the length of the hose or pipe ② (hose length in meters).
- Locate the intersection of lines a and b ③, and draw a vertical line down to the axis ④ (in the example the red dot in green circle and the green dashed line)
- The closest vertical yellow line left of where vertical ④ (the dashed green line in the example) intersects the axis indicates the correct HoseGuard® size (in inches).
- Important! In case of a hose or pipe burst, the HoseGuard® will actuate at all flow rates to the right of the pertinent yellow vertical indicating the burst protector size.
- All HoseGuard® sizes to the right of where the dashed green line intersects the axis are excessively large and will not shut off the flow.
- Example:** Which air fuse should be used for a 10 meter hose with an internal diameter of 8 mm? Follow the dashed red 10 meter line ② until it intersects ③ with one of the diagonals at the red dot in a green circle. Then read off the proper size from the closest yellow line to the left.
- Result:** In our example, the correct HoseGuard® size is 3/8".



TECHNICAL DATA – HOSEGUARD®

Media:

compressed atmospheric air

Thread:

BSP, NPT, male/female (1/4", 3/8", 1/2")
BSP, NPT, female/female (1/4" up to 2")

Max. Inlet pressure:

18 bar for 1/4", 3/8", 1/2" and 3/4"
35 bar for 1" and 2"

Temperature:

1/4" – 1/2" -20 – +80°C (-4 – +176°F)
3/4" – 2" -20 – +120°C (-4 – +248°F)

Weight:

see table

Material: Standard Design

Housing: Aluminium

Other parts: Nitrile rubber, plastic, stainless steel

Material: Stainless Steel Design

Housing: Stainless steel - DIN 17440 mater. no. 1.4404

Piston ①: Polyoxymethylen, POM, Kepital F20-03
on request stainless steel

Spring ②: Stainless steel - DIN 17224 mater. no. 1.4310

O-Ring ③: Nitrile rubber (NBR) / Viton (FRM)

Pressure loss:

0.05 – 0.1 bar (0.7 – 1.5 psi)

Pressure loss by closing:

0.3 bar (4 psi)

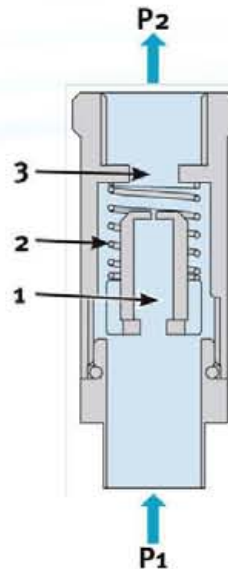
Ordering code: 281



1. Design	A	Aluminium (Standard)
	R	Stainless steel
2. Thread type	0	BSP
	1	NPT
3. Thread connection	2	1/4"
	3	3/8"
	4	1/2" (Standard)
	5	3/4"
	6	1"
	9	2"
4. Thread	11	female/female
	21	male/female

Thread connection	Dimensions [mm]				Inlet pressure	Weight
BSP	A	B	ØC	A/F	max. bar	g
G1/4	48	–	–	22	18	30
G1/4	58	49	–	22	18	36
G3/8	59	–	–	27	18	58
G3/8	71	59	–	27	18	62
G1/2	65	–	–	30	18	78
G1/2	80	65	–	30	18	85
G3/4	76	–	36	30	18	107
G1	100	–	50	41	35	300
G2	130	–	80	70	35	775

HoseGuard® 3" and stainless steel 1/4", 3/8", 3/4", 1" and 2" available on request.

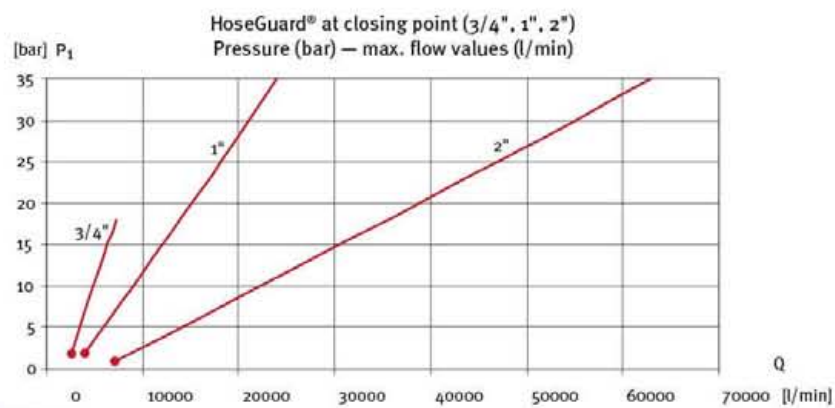
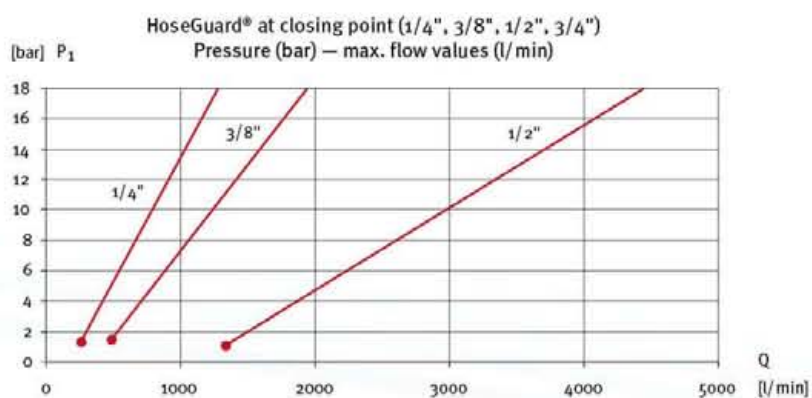
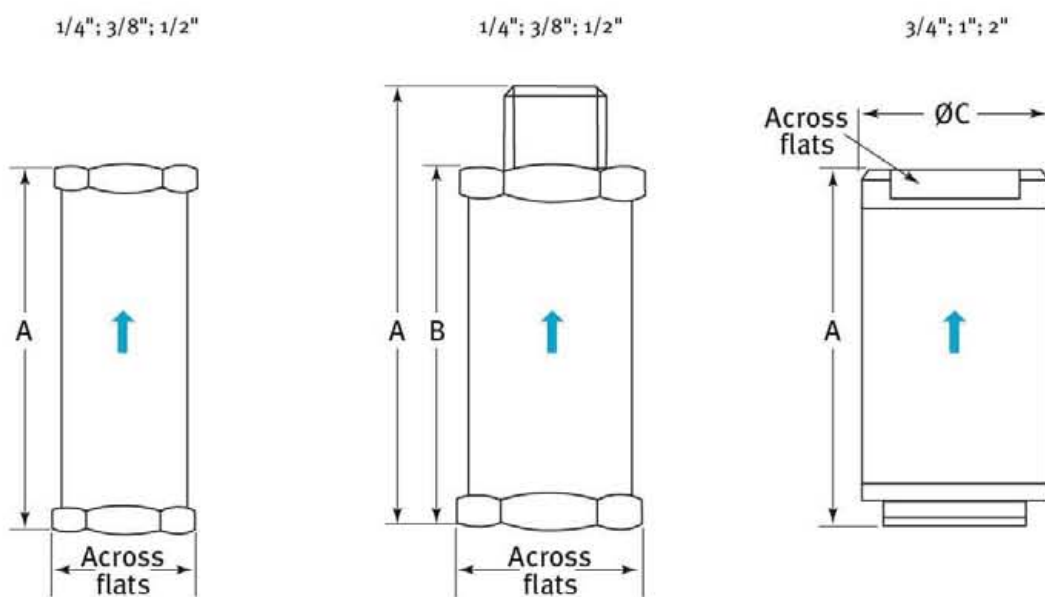


Function:

The drawing left-hand: P1 is the inlet. The air passes the piston (1) and continues through the seat (3).

The air flow, passing the piston, is slowed down by means of some lengthwise grooves on the outer side of the piston.

If the flow is too high, the air cannot pass the piston quickly enough, and the piston will be pressed against the spring (2) underneath and towards the seat. The maximum flow is shown in the graphic (see next page). If the value indicated is exceeded – e.g. if the hose suddenly breaks – the air supply is automatically shut off.



MANIFOLD



NOTE:

Regulations require installation of a HoseGuard® compressed air fuse when a compressed air manifold is employed.

FUNCTION:

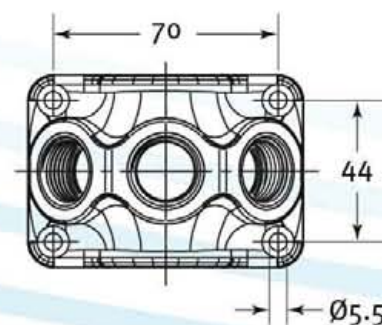
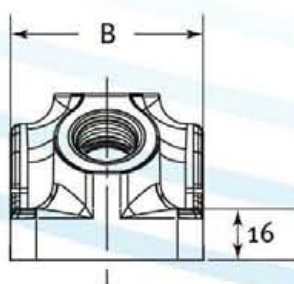
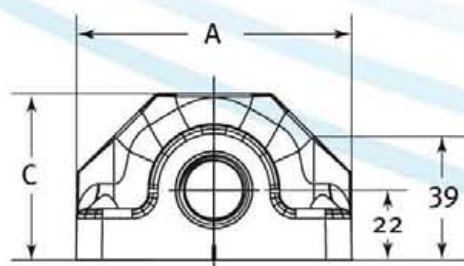
Compressed air manifold

ADVANTAGES:

- ✓ Fiber-reinforced plastic (FRP) compressed air manifold
- ✓ Can be mounted on walls or ceilings
- ✓ High quality

APPLICATION:

- ✓ Compressed air lines, hoses and systems in the chemical industry
- ✓ Pharmaceutical industry
- ✓ Cleanrooms
- ✓ Offshore operations
- ✓ Similar industrial areas



TECHNICAL DATA – MANIFOLD

Media:

compressed atmospheric air

Thread:

Inlet and/or outlet BSP (1/2", 3/4")
Outlet BSP (1/2")
NPT-Threads on request

Max. Inlet pressure:

15 bar

Temperature:

-10 – +50°C (14 – 122°F)

Max. Tightening Torque:

12 Nm

Weight:

see table

Material:

Housing: Fiber-reinforced plastic (FRP)

Connections: Brass

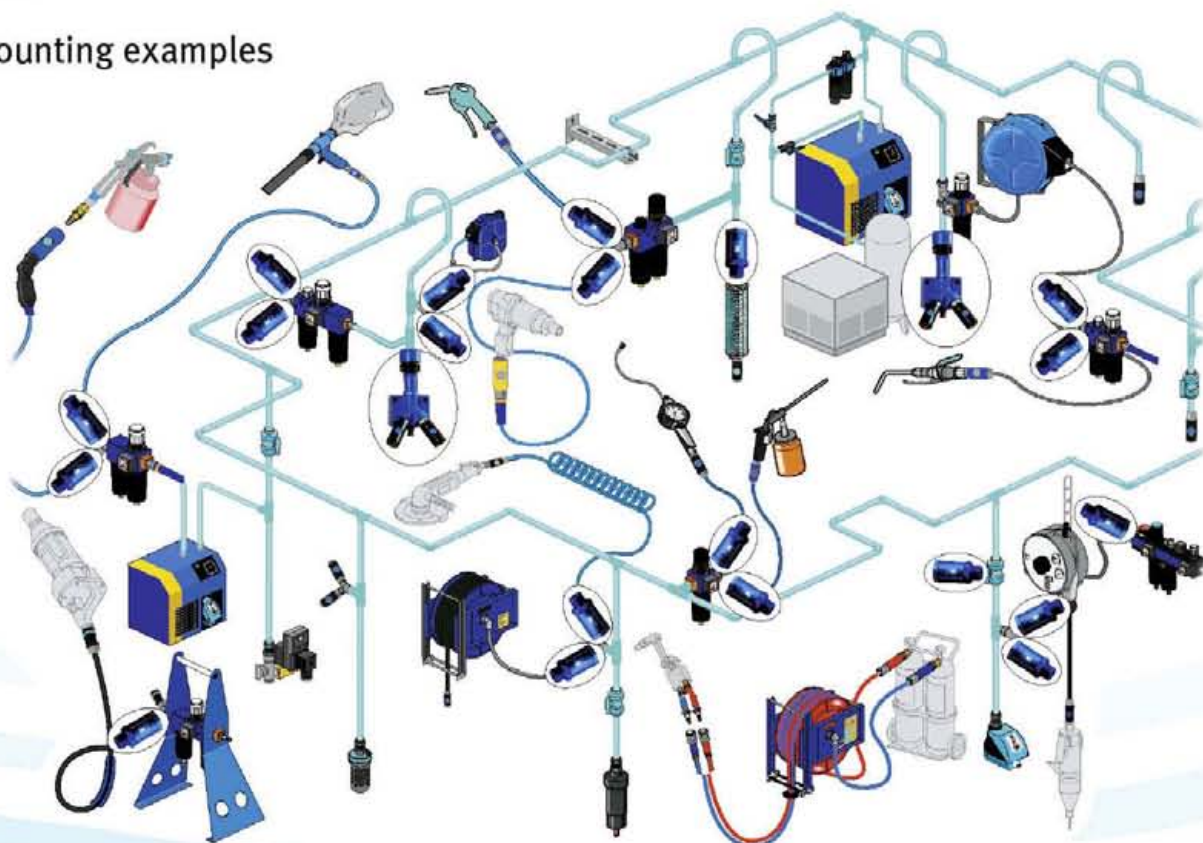
Ordering code: 260^A0⁰4⁴2²

1 2 3 4 5

1. Design	A	air distribution
	B	dead end distribution
2. Thread type	0	BSP (standard)
	1	NPT (on request)
3. Thread connection	4	1/2"
Inlet and/or outlet	5	3/4"
4. Thread connection	4	1/2"
Outlets	5	3/4"
5. No. of outlets	2	2 x 1/2"
	3	3 x 1/2"

Thread connection BSP		Dimensions [mm]			Inlet pressure	Weight
Inlet/Outlet	Outlet	A	B	C	max. bar	g
1/2"	1/2"	86	60	52	15	circ. 195
3/4"	1/2"	86	60	52	15	circ. 230
Inlet/-						
1/2"	1/2"	86	60	52	15	circ. 170
3/4"	1/2"	86	60	52	15	circ. 185

Mounting examples





FUNCTION:

In-Line pre-set energy saving miniature regulator.

The SaveAir® regulator is an independent diaphragm regulator that 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. 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 that may be found throughout industry.

ADVANTAGES:

- ✓ Supplies tools exclusively with the specified pressure
- ✓ No pressure gauge needed
- ✓ Prevents compressed air waste
- ✓ Saves energy – reduces costs
- ✓ Highly reliable
- ✓ Locked to prevent pressure change
- ✓ Small and compact
- ✓ Increases tool service life

APPLICATION:

- ✓ Piping and compressed air systems
- ✓ Compressed air used in automation for actuation
- ✓ Control, feeding or transportation
- ✓ “Pick and Place”-units in automatic assembly systems

USEFUL INFORMATION:

- ✓ The ideal pressure for pneumatic tools is generally 6.3 bars (90 psi).
- ✓ Every bar (15 psi) of excess pressure essentially wastes 6 - 10% of the energy.
- ✓ For safety reasons, pneumatic guns should not be operated at pressures exceeding 2 bars (30 psi).
- ✓ Use of pre-set regulators is an economical way to maintain ideal working pressure in the tool.

TECHNICAL DATA – SAVEAIR®

Media:
compressed atmospheric air

Thread:
BSP, NPT, female/female (1/4")

Max. Inlet pressure:
18 bar

Temperature:
0 – +60°C (32 – 140°F)

Variation in pre-set pressure:
1 – 8 bar +/- 0.3 bar – at 10 l/min

Weight:
see table

Material:
Housing: Zinc
Other parts: Brass, Nitrile rubber, Stainless steel

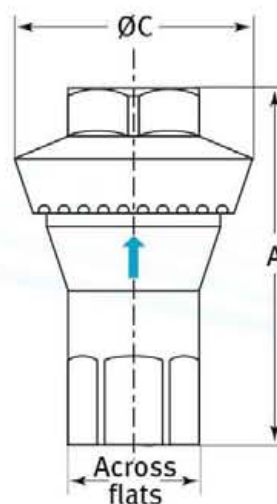
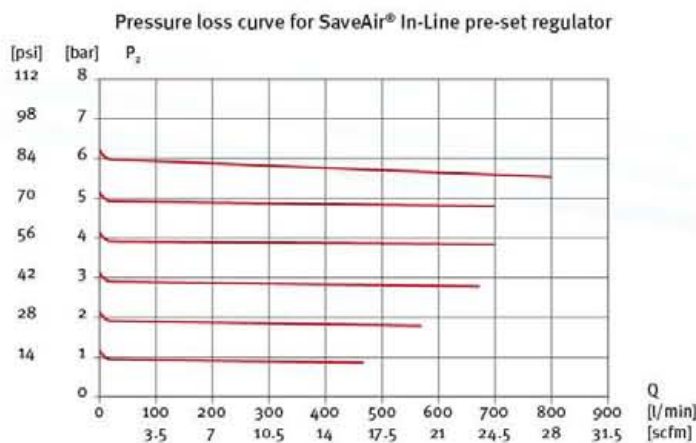
Thread connection	Dimensions [mm]			Inlet pressure	Weight
BSP	A	ØC	A/F	max. bar	g
1/4"	52	34	17	18	82

Ordering code: 231 A 0 2 20 V
without thread connection

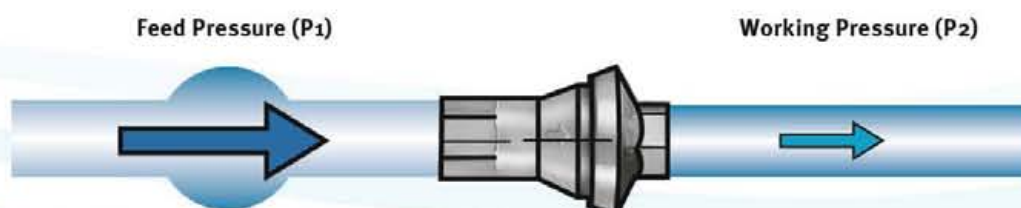


1. Design	A	(Standard)
	B	Oxygen
2. Thread type	0	BSP
	1	NPT
3. Pre-set Pressure	10	1 bar
	20	2 bar
	30	3 bar
	40	4 bar
	50	5 bar
	60	6 bar
	65	6.5 bar
	70	7 bar
	80	8 bar
4. Options	–	Nitrile rubber
	V	Viton

other pressure ranges on request



Schematic




 TOOLREG®


FUNCTION:

Miniature Pre-Set Regulator with Automatic Secondary Pressure Relief.

The TOOLREG® must 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 on the tool itself. Furthermore, the residual pressure in the tool is relieved when it is removed from the compressed air supply line, preventing unintentional actuation of the tool with disastrous consequences.

Pre-set regulators are an economical path to achieve the ideal pressure in the tool.

ADVANTAGES:

- ✓ Automatic Secondary Pressure Relief
- ✓ Protection Guaranteed – No residual pressure in tool
- ✓ High flow performance (0 - 3,000 l/min / 0 - 105 scfm)
- ✓ High pressure performance (P1 – inlet pressure up to 25 bar/355 psi)
- ✓ Corrosion resistant
- ✓ Saves energy
- ✓ Competitively priced
- ✓ Tamper proof
- ✓ Light weight – Small and compact size

APPLICATION:

- ✓ In situations where small amounts of compressed air are required, but the pressure and flow must be stringently regulated
- ✓ Pneumatic tools
- ✓ Particularly nailers
- ✓ Furniture, construction and precision engineering trades
- ✓ "Pick and place" units in automatic assembly systems



TECHNICAL DATA – TOOLREG®

Media:

compressed atmospheric air

Thread:

BSP, NPT, female/female (1/4", 2/3", 1/2")
BSP, NPT, female/male (1/4")

Max. Inlet pressure:

25 bar

Temperature:

0 – +80°C (32 – 176°F)

Pre-set Pressure:

2, 4, 6, 8 bar

Flow:

0 – 3,000 l/min / 0 – 105.9 scfm

Weight:

see table

Material:

Housing: Aluminium

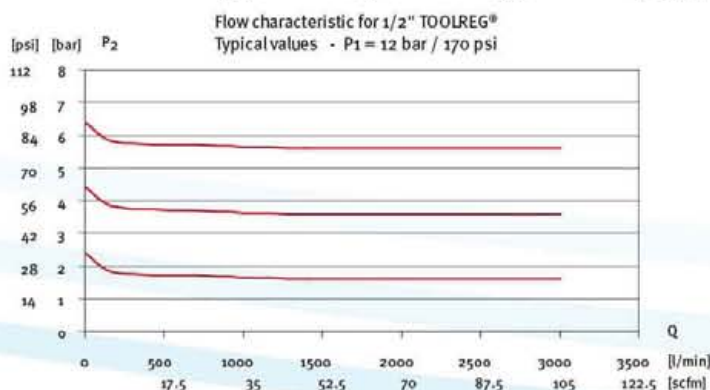
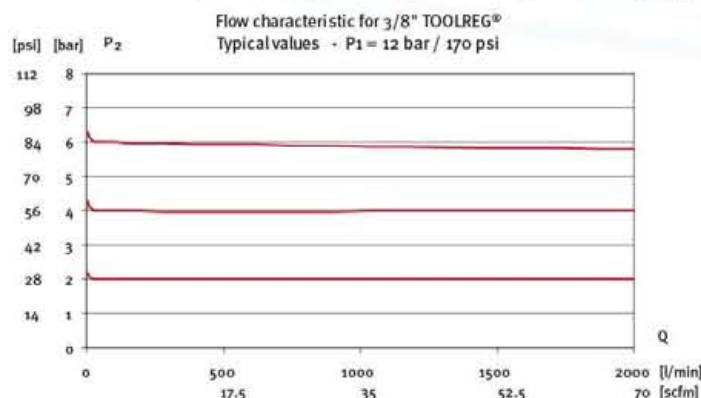
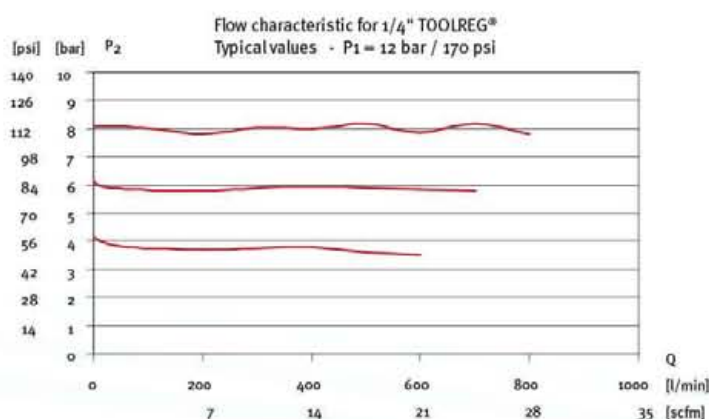
Other Parts: Stainless steel, Nitrile rubber, Brass

Ordering code: 232 A 0 2 60

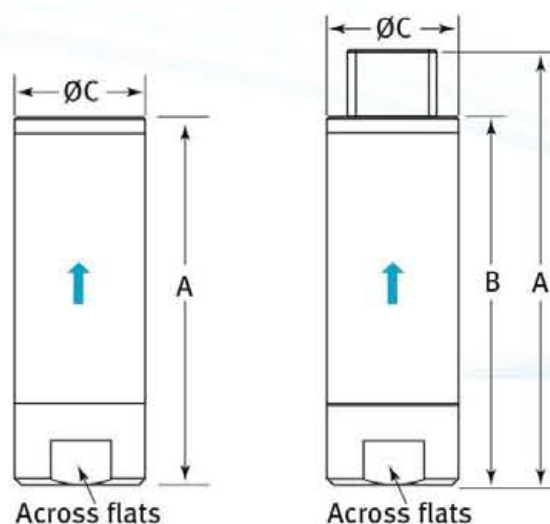
① ② ③ ④

1. Design	A	female/female
	F	female/male
2. Thread type	0	BSP
	1	NPT
3. Thread connections	2	1/4"
	3	3/8"
	4	1/2"
4. Pre-set Pressure	20	2 bar / 29 psi
	40	4 bar / 58 psi
	60	6 bar / 87 psi

other pressure ranges on request



Thread dimensions	Dimensions [mm]				Inlet pressure	Weight
BSP	A	B	ØC	A/F	max. bar	g
1/4" female/female	52	–	19	17	25	25
1/4" female/male	59	50	19	17	25	25
3/8" female/female	58	–	25	22	25	48
1/2" female/female	69	–	30	27	25	80





FUNCTION:

Ready to install! - Inline pre-set pressure regulator for air blow guns and pneumatic tools.

The pre-set miniature CartReg regulator is installed in the compressed air supply line. It is designed to meet OSHA (Occupational Safety & Health Administration, USA) and other safety agency requirements for 30 psi maximum pressure for pneumatic guns.

The CartReg can easily be threaded into any 1/4" air blow gun and pneumatic tool and is an economical means to maintain ideal pressures.

ADVANTAGES:

- ✓ Safety: Protects personnel, machinery and plant by avoiding pressure surges
- ✓ Ensures optimal air tool efficiency by supplying a constant pre-set pressure
- ✓ Limits excessive compressed air consumption ➡ Reducing energy costs
- ✓ Easy assembly: can be integrated into any 1/4" pneumatic tool
- ✓ Tamper-proof
- ✓ High-pressure performance (P_1 = inlet pressure up to 18 bars)
- ✓ High flow performance (up to 500 l/min)
- ✓ Lightweight (14 g) and compact (Hexagon 14 mm, length 24 mm)
- ✓ Competitively priced

APPLICATION:

- ✓ Pneumatic guns
- ✓ Pneumatic tools
- ✓ "Pick-and-place" units and automatic assembly lines



TECHNICAL DATA – CARTREG

Media:
compressed atmospheric air

Thread:
BSP male/male (1/4")
NPT on request

Max. inlet pressure:
12 bar

Temperature:
-20 – +60°C (-4 – +140°F)

Flow:
400 l/min

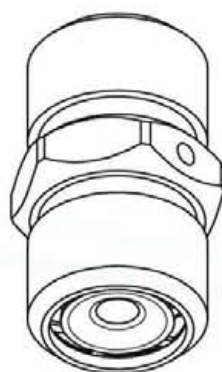
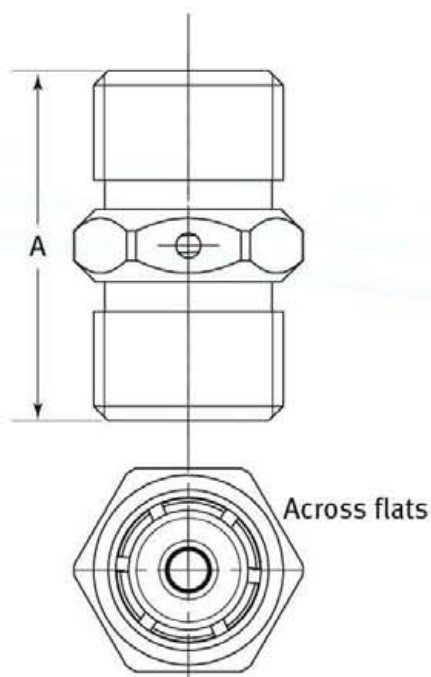
Weight:
see table

Material:
Housing: Brass
Piston: Brass
Spring: Stainless steel
O-Ring: Nitrile rubber (NBR)

Ordering code: 233G02⁶⁰
_①

1. Pre-set pressure	20	2	bar
	40	4	bar
	60	6	bar

Thread connection	Dimensions [mm]		Inlet pressure	Weight g
	A	A/F	max. bar	
BSP				
1/4" male/male	24	14	12	14



IN-LINE FILTER



FUNCTION:

The in-line filter improves compressed air quality. It can be completely integrated into existing compressed air systems when different sections or tools require special grades of compressed air.

ADVANTAGES:

- ✓ Ensures peak pneumatic tool efficiency by supplying a constant pre-set pressure
- ✓ Tamper-proof units
- ✓ Easy assembly
- ✓ Conserves energy
- ✓ Protects equipment such as machines and tools
- ✓ Capable of full system integration
- ✓ Can be installed in tight spaces
- ✓ Lightweight
- ✓ Maintenance-free

APPLICATION:

- ✓ All pneumatic tools and systems

TECHNICAL DATA – IN-LINE FILTER

Media:

compressed atmospheric air

Thread:

BSP female/female (1/8", 1/4", 3/8", 1/2")

BSP male/female (1/8", 1/4", 3/8", 1/2")

Max. Inlet pressure:

18 bar (261 psi)

Temperature:

0 – +80°C (32 – 176°F)

Filter:

36 µm; other on request

Weight:

see table

Material:

Housing: Brass plated

Filter: Brass plated

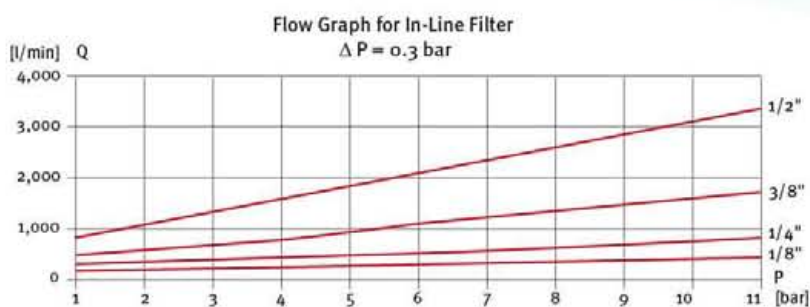
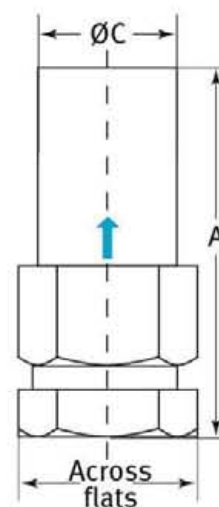
Other parts: Nitrile rubber

Ordering code: 221 ^A0 ²20



1. Thread type	A	female/female
	F	male/female
2. Thread connection	1	1/8"
	2	1/4"
	3	3/8"
	4	1/2"

Thread connection	Dimensions [mm]			Inlet pressure max. bar	Weight g
	A	ØC	A/F		
BSP					
1/8"	36	16.5	17	18	38
1/4"	42	17.5	19	18	45
3/8"	54	23	24	18	89
1/2"	59	29	30	18	136





FUNCTION:

In-Line pre-set pressure regulator for water.

The Water Regulator is an independent diaphragm regulator that can be installed in every water line. It supplies a constant, exact outlet pressure regardless of the input pressure. The pressure is factory-set and cannot be changed. This ensures that nobody can alter the specified pressure.

It is well known that the pressure of a water line normally is too high, fluctuates, and varies according to the height of the building. In that case the in-line water regulator protects all equipment and components placed after it, because thus they will only receive the correct pressure. This is particularly important for all machinery/plants for or with dosing of liquids, for in this case expensive production stops can be avoided.

Furthermore if the water regulator is combined with a sprinkler nozzle, the best basis for cooling/cleaning by means of water spray or fog is created.

ADVANTAGES:

- ✓ Reduced consumption
- ✓ Reliability
- ✓ Service-free: no adjustment needed
- ✓ Very competitive pricing
- ✓ Tamper-proof
- ✓ Light weight – compact construction
- ✓ Easy to mount in any water supply system
- ✓ Extension by sprinkler equipment
- ✓ Incompliance with prevailing Food and Feed Code of Law (TÜV)

APPLICATION:

- ✓ Coffee and soft drink machines
- ✓ Filling machines
- ✓ Laboratory dosing equipment
- ✓ Pharmacies
- ✓ Food industry
- ✓ Irrigation systems ect.

TECHNICAL DATA – WATER REGULATOR

Media:

Water

Thread:

BSP female/female (1/4")

Max. Inlet pressure:

10 bar

Temperature:

0 – +60°C (32 – 140°F)

Inlet pressure sensitivity:

8%

Flow:

4 l/min at a pressure loss of 0.8 bar

Weight:

see table

Material:

Housing: Brass, nickel-plated

Diaphragm: CR

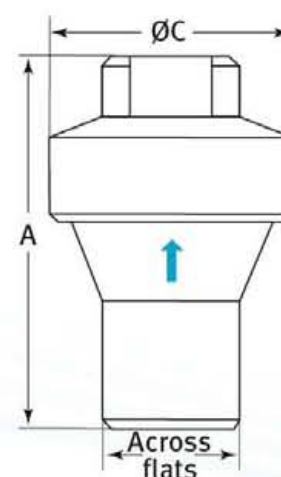
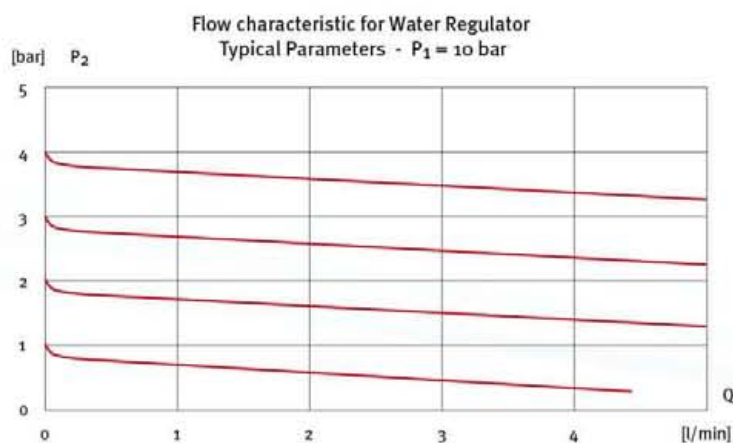
Spring: Stainless steel

Ordering code: 239 A 0 2 2 0



1. Thread type	0	BSP
2. Pre-set pressure	10	1 bar
	20	2 bar
	30	3 bar
	40	4 bar

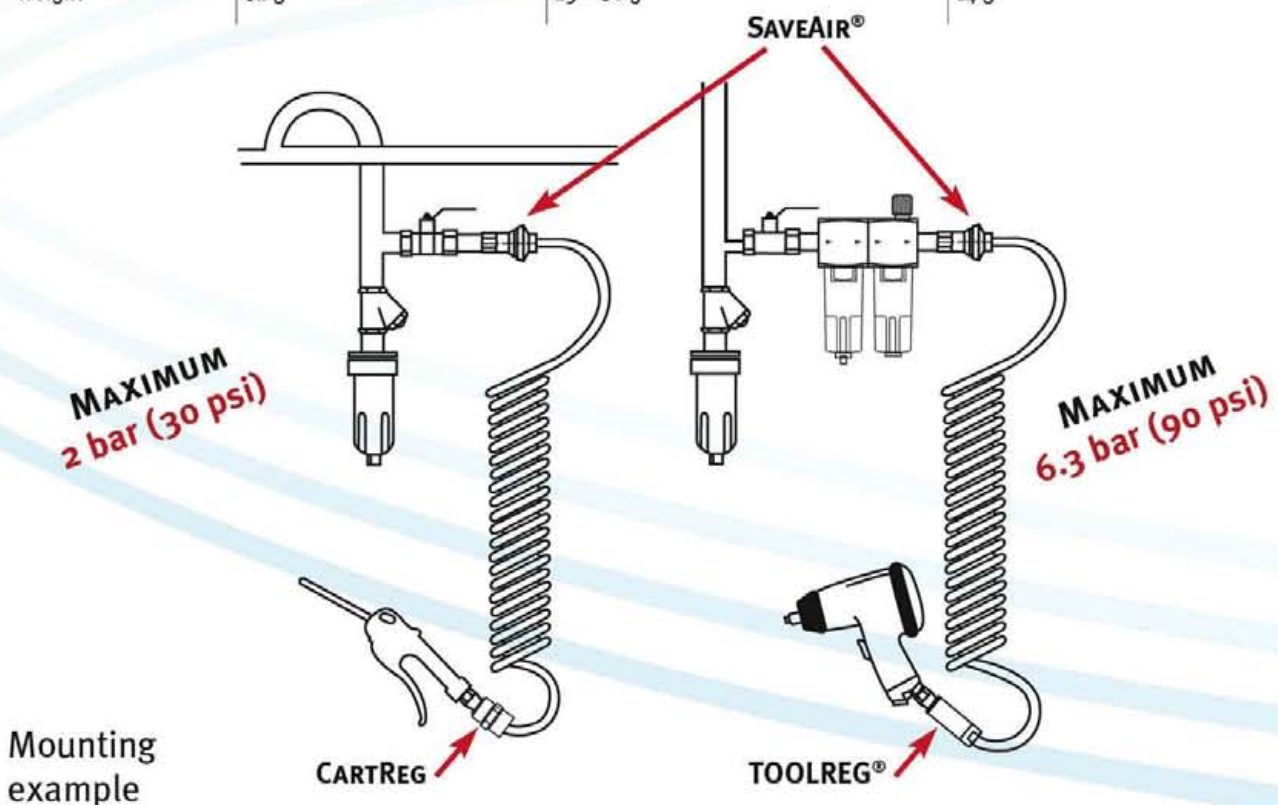
Thread connection	Dimensions [mm]			Inlet pressure	Weight
BSP	A	ØC	A/F	max. bar	g
1/4"	50	34	17	10	140



IN-LINE PHILOSOPHY AND OVERVIEW

With Protect-Air's In-Line series, use of compressed air becomes simpler, more effective and more economical. The In-Line series enables the user to supply any compressed air tool with the ideal air pressure in terms of both purity and quality to provide optimal performance, energy efficiency and economy. The series is directly installed in the piping systems, pressure hoses or tools at the user's installation.

In-Line regulator	SaveAir®	TOOLREG®	CartReg
Type of regulator	Diaphragm regulator	Piston regulator	Piston regulator
Application field	Compressed air systems and hoses	Compressed air tools, esp. nail-guns	Compressed air tools, esp. air blow guns
Mode of operation	Reduces air consumption and thus energy cost	Protection against accidents: no residual pressure remains in the tool	Reduces air consumption and thus energy cost; avoids pressure surges
Tamper-proof	Yes	Yes	Yes
Pressure accuracy	Comparably high pressure accuracy	Not suitable for segments with exact pressure demand	With limited pressure, without warranty of pressure accuracy
Autom. pressure relief	No	Yes	No
Mounting position	Do not install between valve and cylinder. Not suitable for pneumatic guns	Suitable for use with valves and cylinders	Directly attached to tool
Thread connection	BSP, NPT female/female (1/4")	BSP, NPT female/female (1/4", 3/8", 1/2") BSP, NPT female/male (1/4")	BSP male/male (1/4") NPT on request
Inlet pressure [bar]	18 (261 psi)	25 (362 psi)	18 (261 psi)
Pre-set pressure [bar]	1; 2; 3; 4; 5; 6; 6.5; 7; 8	2; 3; 4; 5; 6; 8 (1/4") 2; 4; 6; 8 (3/8" and 1/2")	2; 4; 6
Flow rate at 6 bar	700 l/min (24.7 cfm)	0 – 3,000 l/min (0 – 105.9 cfm)	400 l/min (14.1 cfm)
Pressure variation	± 0.3 bar	± 0.5 bar	± 0.5 bar
Temperature range	32 – 140°F (0 – 60°C)	-4 – +140°F (-20 – +60°C)	-4 – +140°F (-20 – +60°C)
Dimensions [length x diameter]	52 x 34 mm	1/4" 52 x 17 mm 3/8" 58 x 22 mm 1/2" 69 x 27 mm	24 x 15 mm
Weight	82 g	25 – 80 g	14 g





MISSION

Protect-Air's core business is to provide a range of niche products developed for compressed air systems – protection units – to tackle H&S (Health & Safety) issues where compressed air is concerned to increase efficiency and ensure cost saving production. Our number one consideration is to offer customers added value through broad and deep product lines, knowledge and processing.

The mission of Protect-Air™ is to be a leading manufacturing and distribution company that offers all branches of industry a wide range of high-quality engineering protection components plus related technical and logistical services, backed up by a thorough knowledge of its products and applications.

Protect-Air™ presents itself as a company driven by innovation, know-how and added value. This policy is strictly monitored by a well-qualified staff – from concept to delivery – and it is not only our guarantee, but it also ensures Protect-Air's continued growth.

TECHNICAL SERVICES

A large part of the Protect-Air™ range consists of components that require special technical knowledge of the product, material and applications. Protect-Air™ can provide answers to all questions. What's more, there is always a Protect-Air™ partner in the area, or one of the product specialists will give a specific advice.

PROFESSIONAL PARTNER



In cooperation with a network of partners throughout the globe, Protect-Air™ AG offers technical solutions to ensure cost-effective compressed air performance and safety to users.

The Protect-Air™ products are designed to comply with various machine regulations and have been developed to meet the ever-increasing needs at the shop floor. Protect-Air™ products allow the production plants and equipment to be individually fitted to comply with most of the increasingly stringent guidelines on safe use of pneumatic equipment in many industrial applications issued by industrial standards organizations and associations such as ISO, PUWER and OSHA.

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