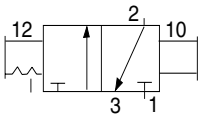
New Product Introduction

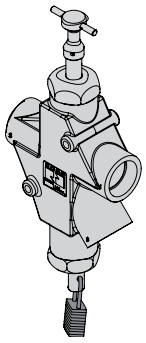
Stainless Steel L-O-X® Valves

Energy Isolation

Port Sizes ¼ thru 2



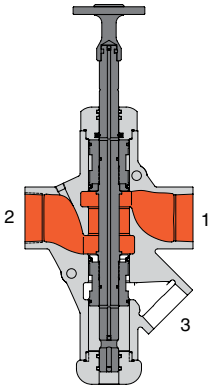
Manual L-O-X® valve shown padlocked in closed position. The valve can only be locked in the closed position. Push/pull operation - Push the handle inward to exhaust downstream air (lockable in this position). Pull the handle outward in to supply air downstream.



Valve Operation

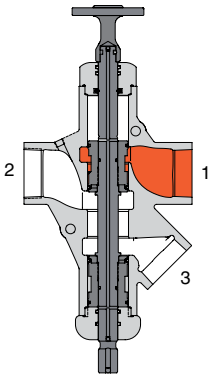
VALVE OPEN

When the handle is pulled out, supply air flows freely from inlet to outlet and flow to exhaust is blocked. A detent keeps the handle in the open position. The handle is not designed to be locked in this position, thereby providing for ready shut-off when necessary.



VALVE CLOSED

With a push of the handle inward, the flow of supply air is blocked and downstream air is exhausted via the exhaust port while servicing or maintaining machinery. Padlock the L-O-X® valve in this position to prevent the handle from being pulled outward inadvertently to avoid potential for human injury while servicing machinery.



Referenced Standards:

All standards are subject to revision. Parties are encouraged to investigate and apply the most recent editions of the standards indicated below.

OSHA 29 CFR 1910.147; CSA Z142-10
CSA Z460-05; ISO 13849-1; ISO 14118:2000
EN 1037; ANSI Z244.1- 2003(R2008)
ANSI/PMMI B155.1- 2011, ANSI B11.TR6-2010

GENERAL:

ROSS L-O-X® valves are energy isolation valves and are generally used as the first valve in a line supplying compressed air to equipment. Air can be shut off by pushing the L-O-X® handle inward; downstream air is simultaneously exhausted through the L-O-X® exhaust port. Many standards & regulations, e.g., OSHA, require that the valve be padlocked in this position to prevent handle from being pulled out inadvertently during maintenance and/or servicing.

FEATURES:

- Easily identified by unique shape
- Corrosion-resistant 316 Stainless Steel construction
- Reliable Fluorocarbon seals withstand contaminant ingression
- Self-draining, washdown suitable design
- Trusted L-O-X® performance
- Lockable only in the OFF position
- Large exhaust port for rapid release of pressure
- Standard pressure sensing port with optional pressure switch or visual indicator
- Simple push/pull of the large handle provides direct manual operation
- Pressure sensing port allows installation of either the visual indicator or pressure switch (see page 2) to verify pressure downstream to the next obstruction is released.

ROSS Consider it DONE!

APPLICATIONS: • Food and Beverage • Pharmaceutical • Pulp and Paper • Chemical Processing • Oil and Gas • Off-shore Industries

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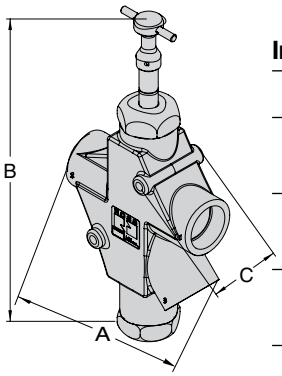
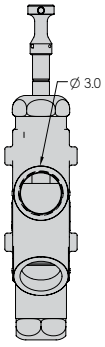
STANDARD SPECIFICATIONS:

Ambient/Media Temperature: 30° to 175°F (-1° to 80°C).
Note: For lower temperature ratings, consult ROSS.
Flow Media: Filtered air.
Inlet Pressure: 0 to 300 psig (0 to 20.7 bar).
Port Threads: NPT, BSPP. For BSPP threads, add a "D" prefix to the model number, e.g., D1523A2004.
Lock Hole Diameter:
Port sizes 1/4 thru 2: 0.34 inch (8.64 mm).

Length of Hole:
Port size 1/4: 0.44 in (11.17mm).
Port size 1/2: 0.47 in (11.93mm)
Port size 1 and 2: 0.55 inch (13.97 mm).
NOTE: Per specifications and regulations, these products are defined as energy isolation devices**, NOT AS EMERGENCY STOP DEVICES.**



Port Size In	Port Size Exh.	Valve Model Number*	Avg. C_v 1 to 2	Avg. C_v 2 to 3	Dimensions inches (mm) A	B	C	Weight lb (kg)
1/4	1/4	1523A2004	2.14	2.08	3.5 (89.9)	8.6 (218.3)	2.1 (53.6)	3.75 (1.70)
3/8	1/2	1523A3004	5.79	6.24	4.3 (108.5)	10.5 (265.8)	1.8 (44.5)	6.0 (2.72)
1/2	1/2	1523A4004	5.79	6.24	4.3 (108.5)	10.5 (265.8)	1.8 (44.5)	6.0 (2.72)
3/4	1	1523A5004	14.30	17	6.0 (151.1)	14.1 (356.9)	2.5 (63.5)	13.0 (5.89)
1	1	1523A6004	14.30	17	6.0 (151.1)	14.1 (356.9)	2.5 (63.5)	13.0 (5.89)
1½	2	1523A8004	39	45	8.2 (208)	18.5 (470)	4.0 (101)	35.0 (15.87)
2	2	1523A9004	39	45	8.2 (208)	18.5 (470)	4.0 (101)	35.0 (15.87)



L-O-X® Stainless Steel Accessories

Stainless Steel Silencer

- Constructed for very corrosive or sensitive situations of corrosion-resistant metals to withstand shock
- Available in different port sizes, offering continuous heavy-duty use under all types of conditions
- Recommended for general purpose air exhaust applications for pressures up to 125 psig (8.6 bar)

Silencers port sizes 1/4 thru 1 have all stainless steel construction.

Silencers port size 2 have standard construction consisting of nickel plated body and stainless internals.

All silencers are supplied with a standard pipe thread fitting for attaching directly to the exhaust ports of air-operated equipment.

Stainless Steel Silencers

Port Size	Construction	Model Number	Threads*	Dimensions inches (mm) Length	Width	Weight lb (kg)
1/4	Stainless Steel	5500A2004	Male	1.75 (44.5)	0.56 (14.2)	0.05 (0.23)
1/2	Stainless Steel	5500A4004	Male	2.75 (69.7)	0.87 (22.1)	0.25 (0.11)
1	Stainless Steel	5500A6004	Male	3.87 (98.3)	1.31 (33.3)	0.45 (0.20)
2	Nickel Plated	5500A9004	Male	5.50 (139.7)	2.37 (60.2)	1.50 (0.68)

Pneumatic Energy Release Verification Options

- 316 Stainless Steel Body, Internals and Springs
- Nitrile Seals • Visual Indicator piston Acetal
- Visual Indicator assembly Acetal with acrylic lens

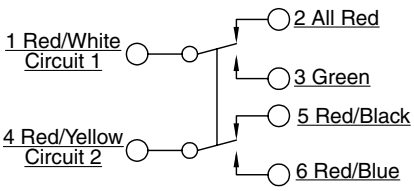
Visual Indicator

Model Number	Inlet Port Size*	Verification Option	Dimensions inches (mm) Length	Width	Weight lb (kg)
1155H30	1/8	Visual Indicator	2.33 (59.3)	1.00 (25.4)	0.22 (0.1)
1162A30	1/8	Pressure Switch	8.20 (208.3)	1.25 (31.75)	0.23 (.01)

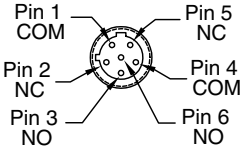
* NPT port threads.

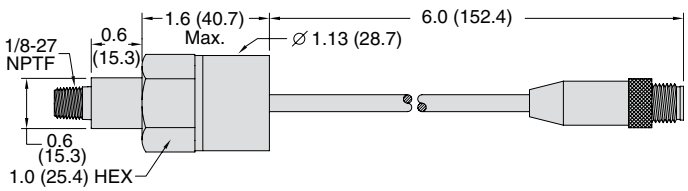
- 316 Stainless Steel Body • Nitrile Seals
- DPDT (Double-Pole Double-Throw Switch
- Factory preset 5 psi (falling)

Pressure Switch



Pin Configuration



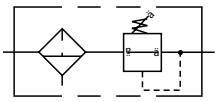


RPB12 Series Stainless Steel Filter/Regulator

RPB12 Filter/Regulator – 1/2 Inch Ports

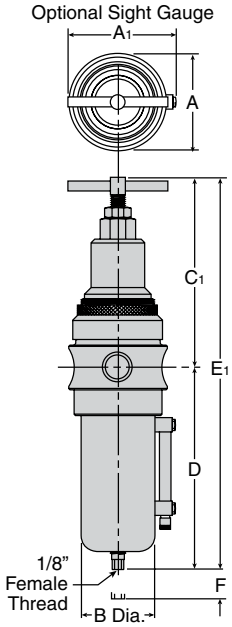
Features

- Stainless steel construction handles most corrosive environments
- Metal bowl with sight gauge
- Large diaphragm to valve area ratio for precise regulation and high flow capacity
- 1/8" female threaded drain
- Meets NACE specifications MR-01-75/ISO-15156
- High Flow: 1/2" – 72 SCFM*



*SCFM = Standard cubic feet per minute at 100 PSIG inlet, 90 PSIG no flow secondary setting and 15 PSIG pressure drop.

Series	Adjustment Type	Port Size	Filter Element Type	NPT		BSPP	
				Manual Twist Drain	Automatic Float Drain	Manual Twist Drain	Automatic Float Drain
				Metal Bowl with Sight Gauge			
RPB12	Tee-Handle	1/2”	5 Micron	**RPB12-04WGCSS**	**RPB12-04WGCRSS**	RPB12G04WGCSS	RPB12G04WGCRSS
RPB12	Tee-Handle	1/2”	40 Micron	**RPB12-04WJCSS**	**RPB12-04WJCRSS**	RPB12G04WJCSS	RPB12G04WJCRSS



F - Distance Required to Remove All Bowls Regardless of Drain Option

RPB12 Filter / Regulator Dimensions inches (mm)								
A	**A1**	**B**	**C**	**C1**	**D**	**E**	**E1**	**F**
2.34 (60)	2.50 (64)	1.75 (44)	3.59 (91)	4.70 (119)	5.00 (127)	8.59 (218)	9.70 (246)	2.12 (54)

NOTE: 1.75 Dia. (44mm) hole required for panel mounting.

⚠ WARNING

Product rupture can cause serious injury.
Do not connect regulator to bottled gas. Do not exceed maximum primary pressure rating.

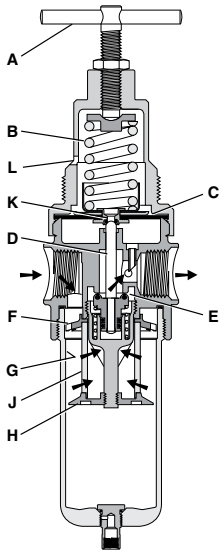
STANDARD SPECIFICATIONS:

Ambient/Media Temperature: 0°F to 150°F (-18°C to 66°C).
Automatic Float Drain: 32°F to 150°F (0°C to 66°C).

Note: *Air must be dry enough to avoid ice formation at temperatures below 32°F (0°C).*

Bowl Capacity: 4.0 Ounces.
Body, Bonnet/Tee Handle: 316 Stainless Steel.
Bottom Plug, Poppet: 316 Stainless Steel.
Seals: Fluorocarbon.
Sight Gauge: Isoplast.
Filter Element: 5-micron rated polyethylene, optional 40-micron rated.
Inlet Pressure:
Manual Drain: 0 to 300 psig (0 to 20.7 bar).
Automatic Float Drain: 15 to 175 psig (1 to 12 bar).
Port Threads: NPT standard, BSPP.

Overview of RPB12 Regulator Operation



Turning the adjusting knob / T-Handle **(A)** clockwise applies a load to control spring **(B)** which forces diaphragm **(C)** and valve poppet assembly **(D)** to move downward allowing filtered air to flow through the seat area **(E)** created between thepoppet assembly and the seat. **"First stage filtration".**

Air pressure supplied to the inlet port is directed through deflector plate **(F)** causing a swirling centrifugal action forcing liquids and coarse particles to the inner bowl wall **(G)** and down below the lower baffle **(H)** to the quiet zone. After liquids and large particles are removed in the first stage of filtration **"second stage filtration"** occurs as air flows through element **(J)** where smaller particles are filtered out and retained. The air flow now passes through seat area **(E)** to the outlet port of the unit. Pressure in the downstream line is sensed below the diaphragm **(C)** and offsets the load of spring **(B)**. When downstream pressure reaches the set-point, poppet valve assembly **(D)** and diaphragm **(C)** move upward closing seat area **(E)**. Should downstream pressure exceed the desired regulated pressure, the excess pressure will cause the diaphragm **(C)** to move upward opening vent hole **(K)** venting the excess pressure to atmosphere through the hole in the bonnet **(L)**. (This occurs in the standard relieving type filter/regulators only.)

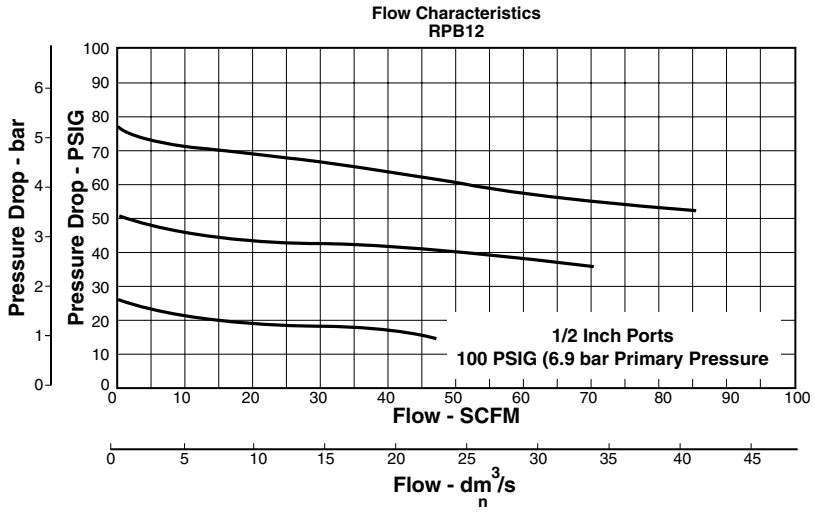
Technical Information

CAUTION:

REGULATOR PRESSURE ADJUSTMENT –

The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.



RPB12 Filter/Regulator Accessories

Gauge (Stainless) –160 PSIG (0 to 1100 kPa), 2" FaceRK4520N14160SS
Panel Mount Bracket (Stainless).....R10Y57-SS
Panel Mount Nut – Stainless R10X51-SS
– Plastic..... R10X51-P

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