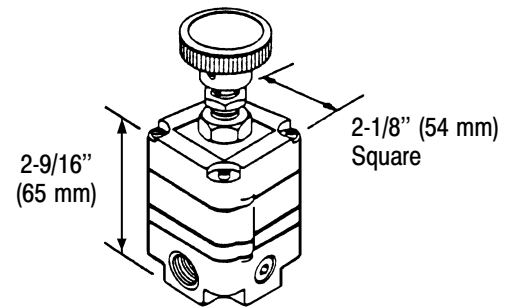
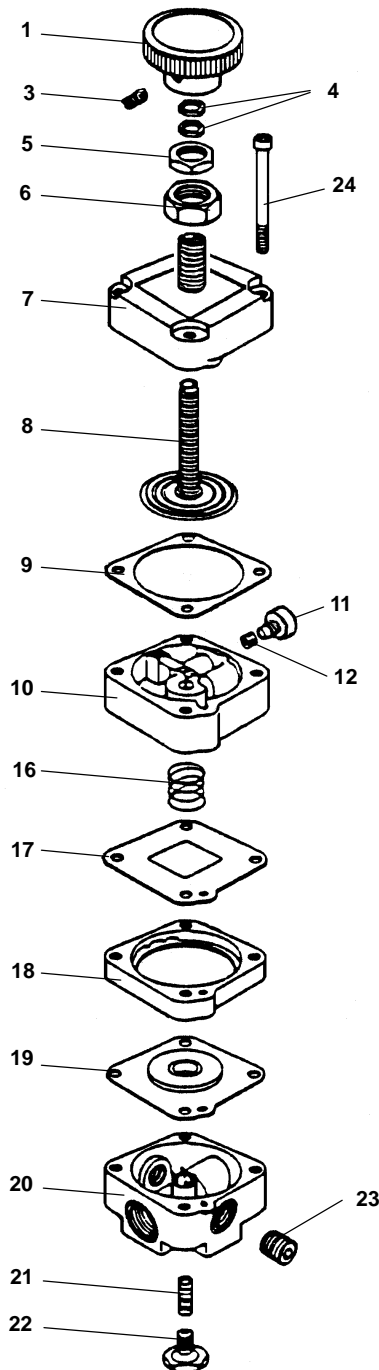


PRECISION PRESSURE REGULATOR

PR40X1-X

RELEASED: 9-17-97
REVISED: 9-1-00
(REV. A)



TECHNICAL SPECIFICATIONS

Model Number Series: PR40X1-X00
Control Range: PR40X1-100 2 - 120 p.s.i. (.14 - 8.28 bar)
PR40X1-200 2 - 60 p.s.i. (.14 - 4.14 bar)
PR40X1-300 2 - 25 p.s.i. (.14 - 1.72 bar)
Port Size (In / Out): PR4021-X00 1/4 - 18 N.P.T.F.
PR4031-X00 3/8 - 18 N.P.T.F.
Gauge Port Size: 1/4 - 18 N.P.T.F.

OPERATION CONDITIONS

Max. Inlet Air Pressure: 150 p.s.i.g. (10.3 bar)
Filtration: 5 micron recommended
Temperature Range: 20° to 150° F (-7° to 66° C)
Application: Industrial compressed air systems

MATERIALS OF CONSTRUCTION

Body: Zinc die-cast, vinyl paint
Seals: Nitrile
Diaphragms: Nitrile
Measuring Capsule: Stainless Steel
Knob: Phenolic plastic

ITEM	DESCRIPTION	(MODEL)	P.S.I. RANGE	QTY	PART NO.
8	Capsule Unit	(PR40X1-300)	2 - 25	(1)	100214-1
		(PR40X1-200)	2 - 60	(1)	100214-2
		(PR40X1-100)	2 - 120	(1)	100214-3
✓ 9	Gasket			(1)	100208
✓ 11	Screen			(1)	100209
✓ 12	Bleed Screw	(PR40X1-300)	2 - 25	(1)	100211-1
		(PR40X1-200)	2 - 60	(1)	100211-1
		(PR40X1-100)	2 - 120	(1)	100211-2
16	Control Spring			(1)	100215
✓ 17	Diaphragm & Protector Assembly			(1)	100212
✓ 19	Control Dia. Unit	(PR40X1-300)	2 - 25	(1)	100213-1
		(PR40X1-200)	2 - 60	(1)	100213-1
		(PR40X1-100)	2 - 120	(1)	100213-2
21	Supply Pintle Spring			(1)	100216
22	Bottom Plug			(1)	100217
✓	Repair Kit Parts	(PR40X1-300)	2 - 25		100207-1
		(PR40X1-200)	2 - 60		100207-1
		(PR40X1-100)	2 - 120		100207-2

OPERATING AND SAFETY PRECAUTIONS

- Use only genuine ARO replacement parts to assure compatible pressure rating and performance.
- Read carefully all warnings and safety precautions and heed the following before operating, to avoid personal injury and / or property damage.
- Be certain anyone operating this equipment has been trained to use it safely.

⚠ WARNING COMPONENT RUPTURE. DO NOT EXCEED MAXIMUM RATED OPERATING PRESSURE OF 150 p.s.i. (10.3 bar). To avoid possible damage or personal injury, DO NOT expose the unit to excessive pressure beyond the intended working range.

⚠ WARNING TEMPERATURE LIMITS. DO NOT EXCEED MAX-

IMUM TEMPERATURE LIMITS OF 150° F (66° C). Excessive temperature can affect non-metallic parts which may weaken them and cause failure.

⚠ WARNING USE WITH INDUSTRIAL COMPRESSED AIR SYSTEMS ONLY. DO NOT USE WITH BOTTLED GAS PRODUCTS OR FLUIDS. MISAPPLICATIONS CAN RESULT IN COMPONENT FAILURE.

⚠ WARNING DISASSEMBLY HAZARD. DO NOT DISASSEMBLE THIS UNIT WHEN IT IS UNDER PRESSURE. SHUT OFF AND RELIEVE AIR SUPPLY BEFORE ATTEMPTING SERVICE OR DISASSEMBLY PROCEDURES. Isolate the unit by closing the line valve or disconnect the supply line or hose.

INSTALLATION

- Clean out all air lines thoroughly to remove dirt and scale. If the air line contains water, sludge or foreign materials, a filter (5 micron is recommended) should be installed on the upstream side to protect the regulator.
- Install regulator as close as possible to the air operated equipment and upstream from the lubricator for best performance.
- Apply a small amount of compound to the male threads only and install the regulator so that the flow is in accordance with the ports indicated "IN" and "OUT".
- Make sure all connections are tight and that the exhaust vents in the side of the regulator are not blocked.
- The regulator can be mounted in any position without affecting the operation. For panel mounting, the panel mounting nut should be tightened to a torque of 60 in. lbs (6.8 Nm).
- A pressure gauge may be attached to the regulator by removing the gauge port plug.
- After a regulator has been installed in the air line, the adjustment knob should be turned counterclockwise until compression is released from the pressure control spring. This prevents over pressurizing the air operated equipment when the air supply is turned on.

OPERATION

- Turn clockwise to increase pressure.
- Turn counterclockwise to decrease pressure.
- Back off the pressure adjusting knob before putting the regulator into initial operation. Turn on the supply slowly and then turn the adjusting knob until the desired output pressure is reached. It is recommended that the upstream supply pressure be at least 20 p.s.i. more than the regulated pressure.
- **Since this regulator utilizes an air bleed servo-control action, a slight sound of escaping air may be heard in the area of the bleed screw. This is normal and is required for the precise control which this regulator offers.**

MAINTENANCE

- Occasional attention should be given to cleaning out any foreign matter. If the gauge readings begin to fluctuate without cause, it may be an indication that the bleed screw may need cleaning.
- Remove it from the regulator body and clean both the bleed screw and the screen. Make certain that no foreign material is plugging the small orifice in the tip of the screw.