Regulator Model PR08
With Variations and Accessories
Service Information

**WARNING: INSTALLATION and MOUNTING**
The user of these devices must conform to all applicable electrical, mechanical, piping and other codes in the installation, operation or repair of these devices.

**INSTALLATION!** Do not attempt to install, operate or repair these devices without proper training in the technique of working on pneumatic or hydraulic systems and devices, unless under trained supervision.

Compressed air and hydraulic systems contain high levels of stored energy. Do not attempt to connect, disconnect or repair these products when a system is under pressure. Always exhaust or drain the pressure from a system before performing any service work. Failure to do so can result in serious personal injury.

**MOUNTING!** Devices should be mounted and positioned in such a manner that they cannot be accidentally operated.

**INSTALLATION**
1. Refer to the above WARNING before installing regulator.
2. Make sure that system piping and regulator are the same pipe size. Avoid using fittings, couplings, etc. that restrict air flow.
3. Install unit as near as possible to regulated air application.
4. Position unit so air flows in direction indicated by arrow on the top or bottom of regulatory body.
5. Regulator may be installed with adjusting knob located in the up or down positions only.
6. Panel mount regulators require 1-1/4" (31.7 mm) diameter hole and are mountable on panel up to 1/8" (3.2 mm) thick. To panel mount regulator or install using L-Type (wall mount) bracket, snap off adjusting knob by rotating the panel nut counterclockwise allowing the mechanical advantage of the screw thread to lift the knob off. Fit bonnet threads into panel or bracket hole. Replace panel nut and tighten. Replace adjusting knob by snapping back onto regulator bonnet.

**OPERATION**
1. **NOTE:** Maximum inlet pressure is 300 psi (20.7 bar).
   Maximum temperature is 175°F (79.4°C)
2. To adjust regulator pull up on adjusting knob.
3. Before turning on supply air pressure, turn the adjusting knob counter-clockwise until there is no load on the regulating main spring.
4. To set the downstream pressure turn on the supply air pressure and then turn the adjusting knob clockwise until the desired secondary pressure is reached. Push the adjusting knob down to lock knob into place.
5. When making a change in pressure setting, always approach the desired pressure from a lower pressure.

When reducing from a higher to a lower setting first reduce to some pressure point less than that desired and then increase to the desired pressure.

**MAINTENANCE**
1. Given normal operating conditions this unit will be trouble-free. For long service life, occasionally disassemble and clean body, diaphragm, valve and valve seat. Service unit at least every six months.
2. TO REPLACE OR SERVICE VALVE ASSEMBLY:
   a. Depressurize unit.
   b. Turn adjusting knob counterclockwise to relieve compression on spring.
   c. Insert flat head screwdriver into bottom plug slot and slowly rotate counterclockwise.
   d. Remove bottom plug and bottom valve spring. Valve assembly can now be removed for cleaning or replacement. When replacing valve assembly lightly lubricate valve o-ring with Teflon based grease.
   e. Reinset valve assembly and bottom spring. Align bottom plug so that tabs match body slots and arrow points in the direction of air flow.
   f. Before returning to service, insure that all seals have been reinstalled or replaced.
   g. Insert flat head screwdriver into bottom plug slot, lightly press downward and slowly rotate clockwise to securely lock bottom plug in place.
3. TO REPLACE OR SERVICE DIAPHRAGM ASSEMBLY:
   a. Depressurize unit.
   b. Turn adjusting knob counterclockwise to relieve compression on spring.
   c. Remove bonnet from body by turning counterclockwise.
   d. Remove main spring.
   e. Remove diaphragm assembly to clean or replace.
   f. Reinstall diaphragm assembly with spring rest in the up position.
   g. Place main spring on spring rest.
   h. Align bonnet assembly into body. Turn bonnet clockwise and tighten to 5 lb/ft (6-8 N-m).
   i. Slowly pressurize unit to assume proper seating of all components.
4. IF UNIT WILL NOT REGULATE TO DESIRED PRESSURE OR IF DOWNSTREAM PRESSURE BECOMES EXCESSIVE, disassemble, clean and check valve O-ring, valve system and valve seat for wear or damage. Replace worn or damaged parts with original manufacturer’s service parts.
   (See reverse side for Repair Kits & Replacement Parts)
# Regulator Model PR08

## Dimensions with Gauge

<table>
<thead>
<tr>
<th>Model</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
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<tr>
<td>PR08</td>
<td>3.94</td>
<td>1.58</td>
<td>2.53</td>
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<td>40.0</td>
<td>64.3</td>
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</tbody>
</table>

*Flush mounted pressure gauge 0-11 bar
  PGRP-96-722

*Flush mounted pressure gauge 0-4 bar
  PGRP-96-723

*Flush mounted pressure gauge 0-30 psig
  PGRP-96-724

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†Gauge kits will not fit units originally purchased without gauges

## Dimensions without Gauge

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†Round Accessory Gauge Kits 0-30 psig (0-2 bar)
  PRPA-95-103

†Round Accessory Gauge Kits 0-60 psig (0-4 bar)
  PGRP-95-228

†Round Accessory Gauge Kits 0-160 psig (0-11 bar)
  PGRP-95-227

**REPAIR KITS AND REPLACEMENT PARTS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Bottom Plug O-Ring</th>
<th>Main spring 0-125 psig (0-9 bar) range</th>
<th>Main spring 0-60 psig (0-4 bar) range</th>
<th>Main spring 0-30 psig (0-2 bar) range</th>
<th>Diaphragm Assembly (Relieving)</th>
<th>Diaphragm Assembly (Non-Relieving)</th>
<th>Valve Assembly</th>
<th>Bottom Valve Spring</th>
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<tbody>
<tr>
<td>PR08</td>
<td>PGRP-96-710</td>
<td>PGRP-96-717</td>
<td>PGRP-96-718</td>
<td>PGRP-95-111</td>
<td>PGRP-96-725</td>
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**ACCESSORIES**

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<tr>
<th>Part Description</th>
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<tr>
<td>T-Type Bracket</td>
<td>R432016177</td>
<td>PGPA-96-737</td>
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<td>C-Type Bracket</td>
<td>R432016179</td>
<td>PGPA-97-010</td>
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<td>L-Type Bracket</td>
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<tr>
<td>Joiner Set</td>
<td>R432016178</td>
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<tr>
<td>Piping Adapter Set, 1/8&quot; NPT</td>
<td>R432030062</td>
<td>PGPA-97-025</td>
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<td>Piping Adapter Set, 1/4&quot; NPT</td>
<td>R432029222</td>
<td>PGPA-97-026</td>
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<td>PGPA-97-029</td>
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<td>PGPA-97-031</td>
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<tr>
<td>Piping Adapter Set, 1/8&quot; NPT</td>
<td>R432016180</td>
<td>PGPA-97-032</td>
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<tr>
<td>Panel Mount Nut (Aluminum)</td>
<td>R432016394</td>
<td>PRPA-96-733</td>
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<td>Panel Mount Nut (Plastic)</td>
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<td>Safety Lockout Valve, 1/8&quot; NPT</td>
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Page 2
Regulator Model PR08
Exploded View

Bottom Plug

O-RING

Valve Spring

O-RING

Valve Assembly

O-RING

Pressure Gauge

*This gauge will not fit unit purchased without gauge.

Screws (2 Required)

Back Cover

Body without gauge

Body with gauge

O-RING

Diaphragm Assembly

Main Spring

Adjusting Screw Assembly

Slip Ring

Slip Ring

Bonnet

Panel Mount Nut

Tamper-Resistant Kit (Optional)

Adjusting Knob

O-RING

Washer

Adjusting Screw Assembly
1. WARNING: FLUID MEDIA

AVENTICS pneumatic devices are designed and tested for use with filtered, clean, dry, chemical free air at pressures and temperatures within the specified limits of the device. For use with media other than air or for human life support systems, AVENTICS must be consulted. Hydraulic cylinders are designed for operation with filtered, clean, petroleum based hydraulic fluid; operation using fl re-resistant or other special types of fluids may require special packing and seals. Consult the factory.

2. WARNING: MATERIAL COMPATIBILITY

Damage to product seals or other parts caused by the use of non-compatible lubricants, oil additives or synthetic lubricants in the air system compressor or line lubrication devices voids the AVENTICS warranty and can result in product failure or other malfunction. See lubrication recommendations below.

AIR LINE LUBRICANTS! In service higher than 18 cycles per minute or with continuous fl ow of air through the device, an air line lubricator is recommended.* (Do not use line lubrication with vacuum products.) However, the lubricator must be maintained since the oil will wash out the grease, and lack of lubrication will greatly shorten the life expectancy. The oils used in the lubricator must be compatible with the elastomers in the device. The elastomers are normally BUNA-N, NEOPRENE, VITON, SILICONE and HYTREL. AVENTICS recommends the use of only petroleum based oils without synthetic additives, and with an aniline point between 180° F and 210° F.

COMPRESSOR LUBRICANTS! All compressors (with the exception of special "oil free" units) pass oil mist or vapor from the internal crankcase lubricating system through to the compressed air. Since even small amounts of non-compatible lubricants can cause severe seal deterioration (which could result in component and system failure) special care should be taken in selecting compatible compressor lubricants.

3. WARNING: INSTALLATION AND MOUNTING

The user of these devices must conform to all applicable electrical, mechanical, piping and other codes in the installation, operation or repair of these devices. INSTALLATION! Do not attempt to install, operate or repair these devices without proper training in the technique of working on pneumatic or hydraulic systems and devices, unless under trained supervision.

Compressed air and hydraulic systems contain high levels of stored energy. Do not attempt to connect, disconnect or repair these products when a system is under pressure. Always exhaust or drain the pressure from a system before performing any service work. Failure to do so can result in serious personal injury.

MOUNTING! Devices should be mounted and positioned in such a manner that they cannot be accidentally operated.

4. WARNING: APPLICATION AND USE OF PRODUCTS

The possibility does exist for any device or accessory to fail to operate properly through misuse, wear or malfunction. The user must consider these possibilities and should provide appropriate safe guards in the application or system design to prevent personal injury or property damage in the event of a malfunction.

5. WARNING: CONVERSION, MAINTENANCE AND REPAIR

When a device is disassembled for conversion to a different configuration, maintenance or repair, the device must be tested for leakage and proper operation after being reassembled and prior to installation.

MAINTENANCE AND REPAIR! Maintenance periods should be scheduled in accordance with frequency of use and working conditions. All AVENTICS products should provide a minimum of 1,000,000 cycles of maintenance free service when used and lubricated as recommended. However, these products should be visually inspected for defects and given an "in system" operating performance and leakage test once a year. Where devices require a major repair as a result of the one million cycles, one year, or routine inspection, the device must be disassembled, cleaned, inspected, parts replaced as required, rebuilt and tested for leakage and proper operation prior to installation. See individual catalogs for specific cycle life estimates.

6. PRODUCT CHANGES

Product changes including specifications, features, designs and availability are subject to change at any time without notice. For critical dimensions or specifications, contact factory.

*Many AVENTICS pneumatic valves and cylinders can operate with or without air line lubrication; see individual sales catalogs for details.

LIMITATIONS OF WARRANTIES & REMEDIES

AVENTICS warrants all Products manufactured by it to be free from defects in material and workmanship under normal operating conditions and proper application in accordance with specifications for operation as described in the Data Sheet which accompanied such Products, for (i) twenty-four (24) months after date of shipment to Distributor, (ii) eighteen (18) months after date of shipment to the customer, or (iii) twelve (12) months after the Product is placed in service, whichever occurs first. Vendor or customer-supplied items on systems, assemblies are warranted per original manufacturer’s warranty policy.

THE FOREGOING WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Buyer’s sole and exclusive remedy under this warranty shall be limited to the repair or exchange of warranted products at AVENTICS’ option FOB AVENTICS’ factory. No attempt to repair or improve the Goods or parts by any of AVENTICS’ representatives shall change or extend this warranty.

If the Buyer (as that term is hereafter defined) or Agent grants to an end user any warranty which is greater in scope, time period or labor allowance than the warranty stated herein, AVENTICS shall not be liable beyond this stated warranty. Except as otherwise provided under the Warranty Processing Procedures section of this warranty, equipment and accessories not manufactured by AVENTICS shall not be the responsibility of AVENTICS. The term “Buyer” as used herein means the person or firm that purchased the product directly from AVENTICS, and includes direct OEM customers and AVENTICS distributors.

No products shall be returned without prior authorization from AVENTICS. Buyer shall prepay all transportation charges for the return of such products to AVENTICS’ factory or authorized factory service center. AVENTICS will not accept any charges for labor and/or parts incidental to the removal and remounting of products repaired or replaced under this warranty. All repair and replacement parts provided under this warranty will assume the identity, for warranty purposes, of the part replaced and the warranty on such replacement parts will expire when the warranty on the original part would have expired. Claims must be submitted within 30 days of failure or be subject to rejection. This warranty is not transferable beyond the first using purchaser. An AVENTICS Quality Service Report (QSR) to initiate the warranty request is available online (www.aventics.com/us/downloads).
