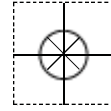
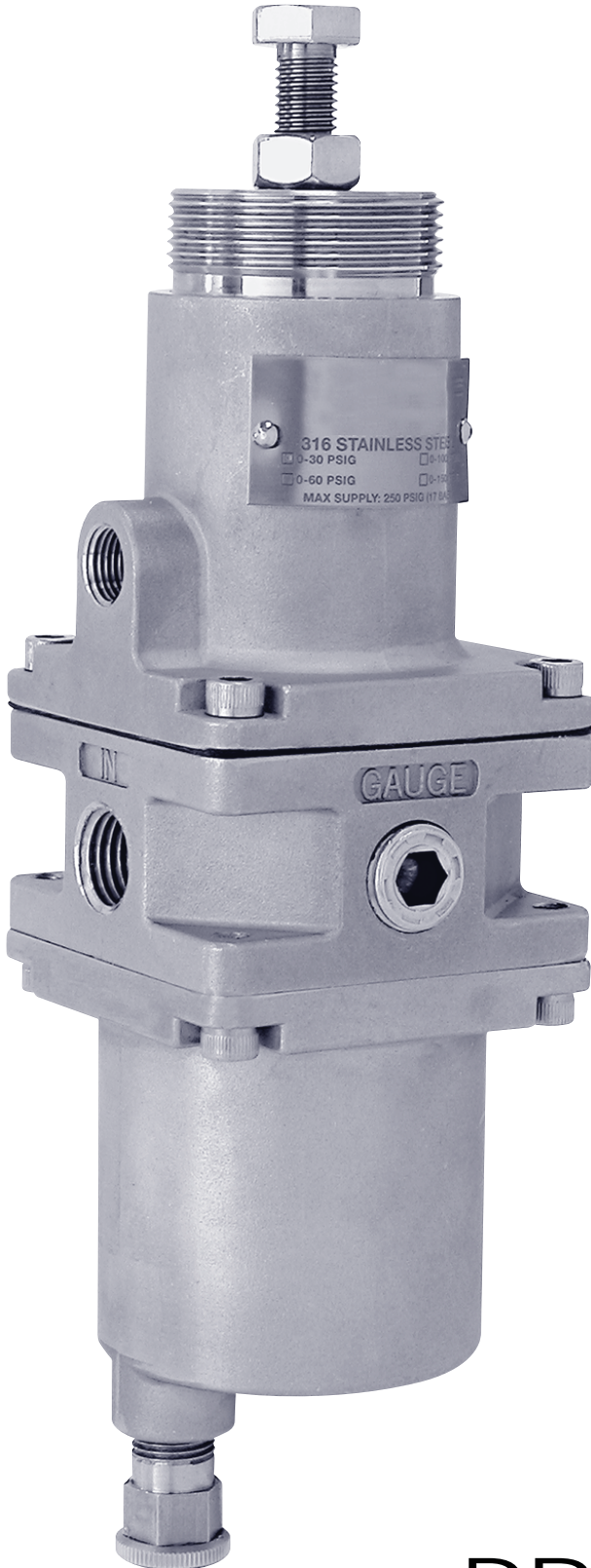


**1 YEAR**  
WARRANTY



# User's Guide



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## PRG 350 Series Stainless Steel Regulators



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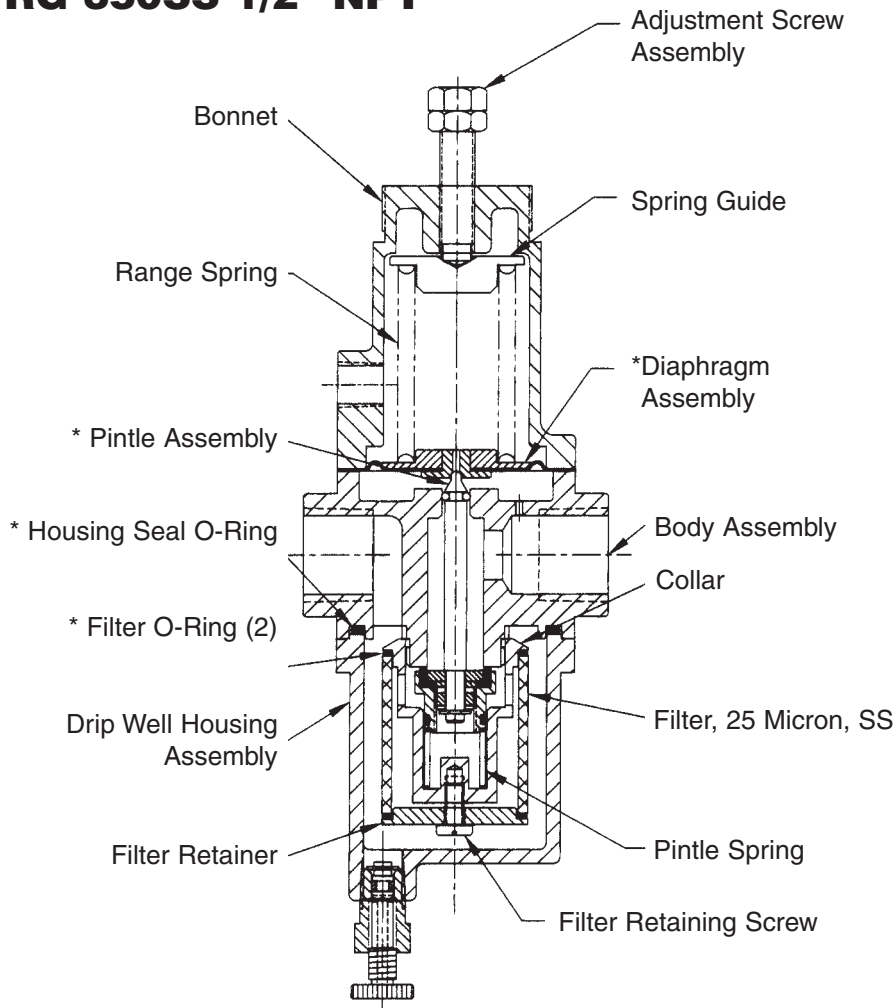
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# PRG 350 Series

## Stainless Steel Regulators Installation, Operation and Maintenance Instructions

### PRG 350SS 1/2" NPT



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\*Included with repair kit

## DANGER, WARNING, CAUTION and NOTE statements

**DANGER** Refers to conditions or hazards which could result in serious personal injury or death.

**WARNING** Refers to conditions or hazards which could result in personal injury.

**CAUTION** Refers to conditions or hazards which could result in equipment or property damage.

**NOTE** Alerts you to facts or special instructions.

### ALL DANGER, WARNING, AND CAUTION NOTICES MUST BE COMPLIED WITH IN FULL

**DANGER** Personal injury, property damage, equipment damage, or leakage due to escaping gas or bursting of pressure containing parts may result if this regulator is over pressurized or installed where service conditions could exceed the limits given in the specifications. To avoid such injury or damage, provide pressure-relieving or limiting devices (as required by the appropriate code, regulation or standard) to prevent service conditions from exceeding those limits.

## 1. SPECIFICATIONS

<b>Output Ranges:</b>	0-30 psig (0-2.0 BAR), 0-60 psig (0-4.0 BAR), 0-100 psig (0-7.0 BAR), 0-150 psig (0-10.0 BAR)
<b>Exhaust Capacity:</b>	1.0 SCFM (1.7 m <sup>3</sup> /hr) at downstream pressure of 10 psig (0.7 BAR) above set point
<b>Maximum Supply Pressure:</b>	290 psig (20.0 BAR)
<b>Air Consumption:</b>	4 SCFH (0.1 m <sup>3</sup> /hr)
<b>Operating Temperatures:</b>	-20° to +185° F (-29° to +85° C)
<b>Filter:</b>	25 micron
<b>Porting:</b>	Inlet/Outlet: 1/4" NPT or 1/2" NPT Gauge (2): 1/4" NPT Exhaust: 1/8" NPT
<b>Materials:</b>	316 stainless steel: body, bonnet, filter Fluorocarbon: diaphragm, seals Inconel: range spring, pintle spring
<b>Weight:</b>	1/4" NPT: 2.2 lbs. (1.0 kg) 1/2" NPT: 2.8 lbs. (1.3 kg)

## 2. INSTALLATION

**2.1** Install the regulator/filter as close as possible to the instrument or tool it is to service.

**2.2** Clean all pipelines to remove dirt and scale prior to installation.

**NOTE** Failures attributable to air supply contamination are not covered by the warranty.

**WARNING** This instrument vents to atmosphere. The use of gas other than air may create a hazardous environment.

**2.3** Install the regulator/filter so that the direction of flow is from the "IN" to "OUT" connection as marked on the body of the regulator/filter.

- 2.4 For best drainage, orient the drain valve so that it is at the lowest point on the drip well housing. Positioning of the drain valve may be improved by rotating the drip well with respect to the body.
- 2.5 The exhaust port should be kept free and unplugged. Position the regulator so that the vent is at the lowest point possible, or provide additional protection to prevent contaminants from entering the regulator. Rotating the bonnet relative to the body may change the vent hole orientation.

**WARNING** *The PRG 350 Series has a low capacity internal relief that provides limited down stream protection against over pressurization.*

- 2.6 Exhaust may be remotely vented by installing tubing to the 1/8" NPT port.
- 2.7 Apply pipe compound or sealing tape to the male pipe threads prior to installing regulator/filter. Use caution to prevent the sealant from getting inside the regulator/filter.

### 3. OPERATION

- 3.1 Prior to turning on supply air, back off adjusting screw until there is no compression of the range spring.
- 3.2 After applying the air supply, output pressure will be increased by rotating the adjustment screw clockwise. Pressure can be decreased by turning counter clockwise.
- 3.3 Tighten locknut to maintain desired pressure setting.

### 4. MAINTENANCE & REPAIR

- 4.1 To remove condensate from the PRG 350 Series, slowly open drain valve by turning clockwise and bleed accumulated liquid.

**DANGER** *To avoid personal injury, property damage, or equipment damage caused by sudden release of pressure or explosion of accumulated gas, do not attempt any maintenance or disassembly without first isolating the regulator from system pressure and relieving all internal pressure from the regulator.*

#### 4.2 To clean filter element

- 4.2.1 Shut off supply pressure and relieve all internal pressure.
- 4.2.2 Drain condensate from drip well.
- 4.2.3 Remove four corner bolts from bottom of unit and remove drip well housing.
- 4.2.4 Remove filter retaining screw.
- 4.2.5 Remove filter retainer, filter o-ring seals and filter.
- 4.2.6 Clean parts and reassemble in reverse order.

#### 4.3 To clean/replace pintle assembly

- 4.3.1 Follow steps 4.2.1 through 4.2.4.
- 4.3.2 Unscrew collar and remove.
- 4.3.3 Remove pintle spring and pintle. 1/4" NPT version may require needle nose pliers or push pintle stem from above by removing bonnet and diaphragm assembly.
- 4.3.4 Clean/replace parts and reassemble in reverse order.

#### 4.4 To clean/replace diaphragm assembly

- 4.4.1 Back out the adjusting screw until the spring is no longer compressed.
- 4.4.2 Remove the four bonnet screws and separate the bonnet from the body of the regulator. Remove the spring guide and spring.
- 4.4.3 Remove the diaphragm assembly, clean or replace it as necessary and reassemble in reverse order. After placing the diaphragm assembly on the body, push down the assembly to make sure that the pintle is seated properly and strokes smoothly.

#### 4.5 Repair kits/replacement parts

- 4.5.1 Repair kits include all parts marked with an asterisk (\*). See diagrams on page 1.
- 4.5.2 When ordering repair kits or replacement filters, order as:

##### REPAIR KITS

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**PRG 350** Includes: Pintle Assembly, Housing Seal O-Ring, Diaphragm Assembly, Filter Seal O-Ring (2)

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Model	Porting	Description	Part Number
PRG 354	1/4" NPT	Relieving	449-871-068
PRG 352	1/2" NPT	Relieving	449-871-070

- 4.5.3 Other replacement parts are available. Please consult Omega Engineering, Inc. for part numbers and availability.

## WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

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## RETURN REQUESTS/INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

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