

# Hydraulic Regulators

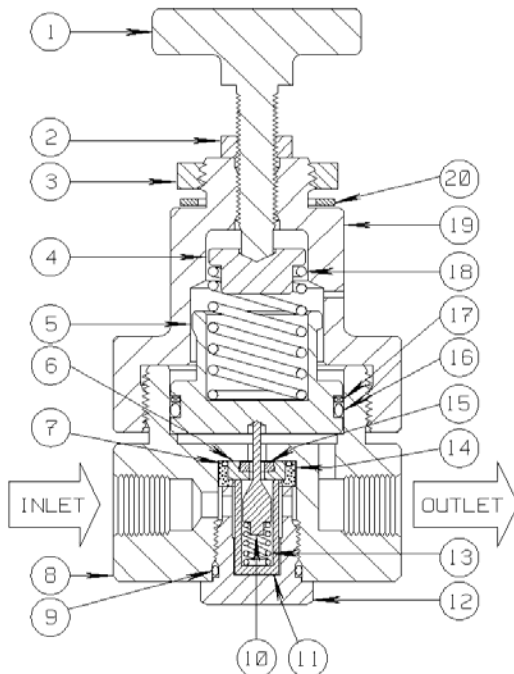
## Non-Relieving Regulators

1/4" FEMALE NPT, 30 - 150 PSI MAX OUTPUT, 10,000 PSI MAX INLET

Model 28RG16, 28RG18 ARCTIC SERVICE

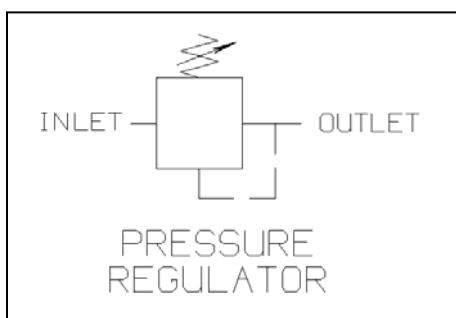


Conforms to the SEP category of the European Pressure Equipment Directive  
Issue No. 97/23/EC



The **28RG16** is a two position, pressure reducing (spring/sensing piston modulating combination), flow control valve. Pressure Regulators are typically used to reduce source or instrument supply pressure from up to 10,000 PSI to a specific lower operating pressure, generally from 30-150 PSI. The reduced operating pressure provided from the Regulator outlet connection will be maintained within a predetermined operating pressure range or limit, required by the receiving control circuit or a control device.

Turning the Adjustment Knob clockwise will increase the Spring exerted tension to increase the Regulator output pressure. Rotating the Adjustment Knob counterclockwise will decrease the Regulator output pressure. Once the exact operating output pressure is achieved, the Lock Nut (2) should be tightened against the Spring Housing to maintain the appropriate output pressure setting.



### PARTS LIST:

- |                    |                        |
|--------------------|------------------------|
| 1. Adjustment Knob | 11. SS Porous Filter * |
| 2. Hex Lock Nut    | 12. Retainer           |
| 3. Panel Nut       | 13. Spring *           |
| 4. Spring Guide    | 14. Seat Guide *       |
| 5. Sensing Piston  | 15. Seat Back Up *     |
| 6. Kel-F Seat *    | 16. O Ring *           |
| 7. O Ring *        | 17. Back Up Ring *     |
| 8. Valve Body      | 18. Spring *           |
| 9. O Ring *        | 19. Spring Housing     |
| 10. Valve Pin *    | 20. Panel Seal Ring    |

\* Indicates parts included in a Repair Kit

**Sigma Model Number 28RG16**  
**1/4" FEMALE NPT, 30 - 150 PSI MAX OUTPUT, 10,000 PSI MAX INLET**

---

**Product Specifications**

---

**Control Function:** Pressure Reducing Flow Control (High Pressure In - Low Pressure Out)

**Flow Control Application:** Normally Open

**Body Pressure Rating:** 10,000 PSI maximum (690 bar) inlet pressure

**Adjustment Range Capability (Regulated Pressure):** 30 - 150 PSI maximum outlet pressure

**Manual Pressure Adjusting Operator:** Knob (360° Rotating Screw)

**Media Service:** Hydraulic, Pneumatic, Natural Gas, Nitrogen

**Connection Size (Body):** 1/4-18 Female N.P.T. Inlet and Outlet

**Orifice:** 7/64 Diameter     **Cv Factor:** .11

**Component Material (Metal):** 316 Stainless Steel and 17-4PH SS

**Seal Material:** Viton   **Arctic:** Buna

**Panel Mount:** Yes

**Panel Hole Cutout Size Required:** 1 Diameter

**Weight:** 4 Lbs.

**Operating Temperature:** -20° F to +250° F (-29° C to +121° C)

**Arctic Service Model:** -55° F to +250° F

**Overall Dimensions:** 5-1/4 Height x 2-1/2 Diameter (13.34 cm Height x 6.35 cm Diameter)

**Pressure Equipment Directive (PED):** This product conforms to the SEP Category of the European P.E.D.

**Installation and Maintenance Instructions:**

Remove the Hex Lock Nut (#2), Adjustment Knob (#1), and Panel Nut (#3). Insert the Pressure Regulator in a pre-drilled 1" diameter hole. Replace the Panel Nut, Adjustment Knob, and Hex Lock Nut. Sigma recommends the use of appropriate thread sealant for each port connection.

**Shelf Position Port Status**

**Inlet Supply**     High Pressure Fluid Inlet Open to Outlet

**Outlet**             Reduced Pressure Output (to receiving control circuit)