

# MOTOR VALVES

## R2800 SERIES

### **The R2800 Series: Pressure Pilot**

#### **Application:**

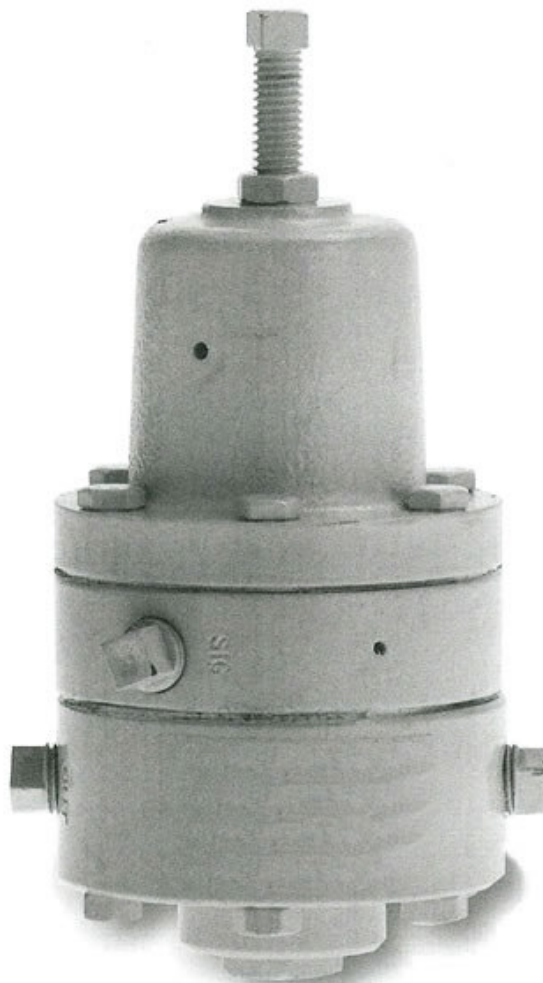
The output from this pressure pilot can be used to throttle control valves to maintain a constant field adjustable pressure setting. The 2800 Series are used with both back pressure valves and pressure reducing valves. The pilot will control pressure on separators, vessels, flow lines or any location where the pressure must be maintained at a constant level.

#### **Operation:**

The signal pressure is applied to two opposing diaphragms. The upper diaphragm is larger than the lower diaphragm. As a result, signal pressure tries to move the diaphragm assembly up. Adjustable spring tension opposes this movement.

The diaphragm assembly moves upward when the pressure is sufficient to overcome this spring tension. This closes the supply and opens the output port to exhaust. The opposite occurs when signal pressure decreases. The diaphragm assembly moves downward closing the exhaust, then opening the supply valve. This combination creates a throttling action that maintains a desired output for the pressure setting required. Output from 0 to full supply pressure is proportional-to-signal pressure.

The 2800 Series is a non-bleed, reverse acting type pilot.



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### Specifications: R2800 Series Pressure Pilot

#### Pressure:

Signal: 350 psi maximum, liquid or gas

Supply: 5 to 50 psi, air or gas

Output: 0 to full supply

Temperature: -20°F to +180°F

#### Material:

Body: Center housing: aluminum (available in stainless steel)

Lower housing: aluminum

Spring housing: cast iron

Plug: Stainless steel

Seat: Stainless steel

Diaphragm: Nylon reinforced nitrile (available in fluorocarbon)

Connections: All 1/4" NPT

### Ordering Chart:

#### R2800 Series: Pressure pilot

##### Type:

01 - Standard

05 - Options (specify your requirements)

##### Option Number:

( ) - Factory will assign an option number based on specified requirements.

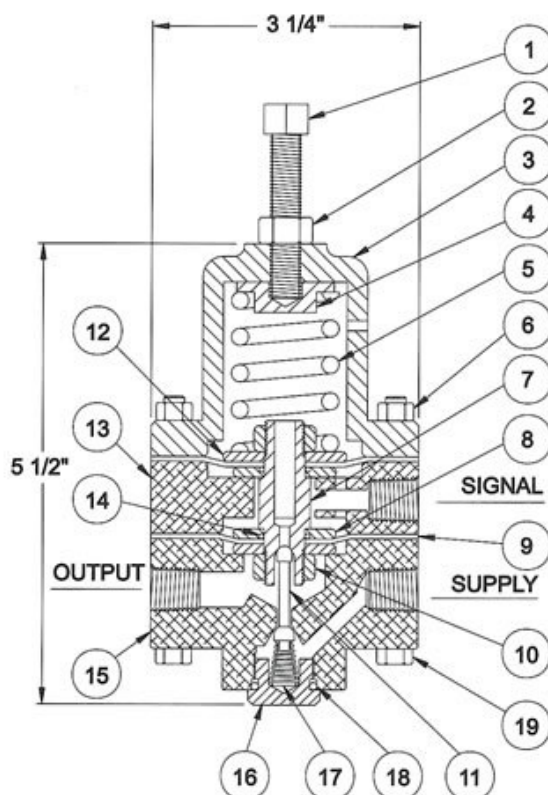
R2800-

Example: R2800-05

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### R2800 SERIES PRESSURE ACTUATED PILOT



ALL PORTS 1/4" NPT

| Model | R2800  | Pressure Actuated Pilot |                          |     |
|-------|--------|-------------------------|--------------------------|-----|
| Item  | Part # | Description             | Material                 | Qty |
| 1     | 10209  | Adjustment Screw        | Plated                   | 1   |
| 2     | 10177  | Jam Nut                 | Plated                   | 1   |
| 3     | 20352  | Spring Housing          | Cast Iron                | 1   |
| 4     | 20673  | Spring Retainer         | Carbon Steel             | 1   |
| 5     | 10067  | Spring                  | 316 ss                   | 1   |
| 6     | 10200  | Cap Screw               | Plated                   | 5   |
| 7     | 20669  | Upper Seat              | 303 ss                   | 1   |
| 8     | 20672  | Small Diaphragm Plate   | 303 ss                   | 3   |
| 9     | 10102  | Diaphragm               | Nylon Reinforced Nitrile | 2   |
| 10    | 10183  | Jam Nut                 | 18-8 ss                  | 2   |
| 11    | 20649  | Plug                    | 303 ss                   | 1   |
| 12    | 20671  | Large Diaphragm Plate   | Carbon Steel             | 1   |
| 13    | 20351  | Spacer Ring             | Aluminum                 | 1   |
| 14    | 10114  | O-Ring                  | Nitrile                  | 2   |
| 15    | 20350  | Body                    | Aluminum                 | 1   |
| 16    | 20670  | Plug                    | Brass                    | 1   |
| 17    | 10068  | Spring                  | 316 ss                   | 1   |
| 18    | 10124  | O-Ring                  | Nitrile                  | 1   |
| 19    | 10168  | Hex Nut                 | Plated                   | 7   |
| 20    | 10329  | Cap Screw (not shown)   | Plated                   | 1   |