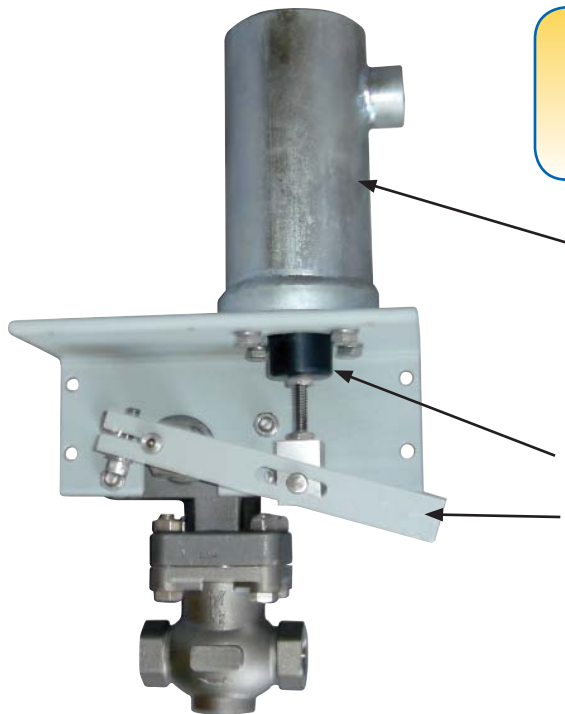


# ROTARY SHAFT STYLE SOLENOID VALVE CONSTRUCTION FEATURES



## BASIC OPERATION:

When the Solenoid is energized, the Plunger pulls the External Lever upwards. The lever rotates the Rotary Shaft, which penetrates the valve's pressure boundary, to open or close the Piston Assembly.

The **Solenoid** is completely isolated from the process fluid allowing the valve to easily handle extremely corrosive and/or high temperature fluids.

- **Continuous Duty, Encapsulated Coil with Class H Insulation**
- **NEMA 4X - Watertight and Corrosion Resistant Enclosure**
- **Certified Explosion-proof Enclosure for Hazardous Atmospheres**

The **Plunger** is Teflon® coated to provide superior corrosion resistance.

The **External Lever** provides visual position indication and manual override.

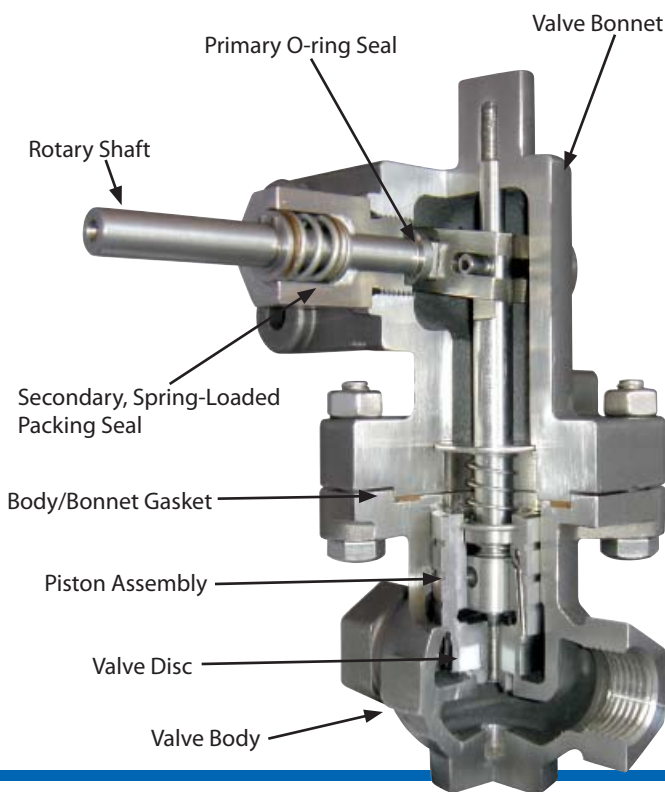
**ROTARY SHAFT ASSEMBLY:** The Rotary Shaft Assembly has a primary o-ring seal and a secondary, spring-loaded packing seal, providing zero leakage to the environment.

The rotary shaft rotates approximately 20° to 30° to open and close the Piston Assembly inside the valve, virtually eliminating seal wear.

**PISTON ASSEMBLY:** The Piston Assembly is directly connected to the Rotary Shaft Assembly allowing all valves to operate from 0 PSI up to the valve's rated pressure.

The **Direct Operated Piston Assembly** uses a solid piston with large clearance areas to easily accommodate dirty or viscous liquids.

The **Direct Operated, Pilot Assisted Piston Assembly** (shown here) uses an internal pilot orifice that assists the piston by relieving the pressure above it, thus accommodating higher pressures and/or larger pipe sizes.



## CONSTRUCTION MATERIALS AVAILABLE FOR ALL WETTED COMPONENTS

### Valve Body / Bonnet

- Commercial Bronze
- Naval Bronze
- 304 Stainless Steel
- 316 Stainless Steel
- Hastelloy® C
- Monel®
- Alloy 20

### Piston & Rotary Shaft Assemblies

- 300 Series SS
- 316 Stainless Steel
- Hastelloy® C
- Monel®
- Alloy 20

### Valve Disc/Seals

- Teflon®
- GF Teflon®
- Buna-N
- Viton®
- EPDM
- Silicone

**SOLENOID:** Explosion-proof approved for Hazardous Atmospheres. Contact the factory for listing details.

**END CONNECTION:** NPT, 150# ANSI Flange, 300# ANSI Flange, Socket Weld, Union, many other choices available.

**VOLTAGES:** See Page 5.

**OPTIONS:** Position Indicating Switches, Manual Override with Lock Pin, Electrical Terminal Box and others. See Page 7.

