

PRESSURE REDUCING VALVE

with Multi Level Setting, Electrically Controlled

Model 720-59 EN/ES

Hydraulically operated, pressure reducing control valve that reduces higher upstream pressure to lower constant downstream pressure, regardless of fluctuating demand or varying upstream pressure. The valve is equipped with a full opening eclectic override device. It reduces pressure loss across the valve to a minimum, in the event of a pressure drop below a minimum value.

BERMAD 700 SIGMA EN/ES series valves are hydraulic, oblique pattern, globe valves with a raised seat assembly and double chamber unitized actuator, that can be disassembled from the body as a separate integral unit. The valves hydrodynamic body is designed for unobstructed flow path and provides excellent and highly effective modulation capacity for high differential pressure applications. The valves are available in the standard configuration or with an Independent Check Feature code "2S". The 700 SIGMA EN/ES Valves operate under difficult operation conditions with minimal cavitation and noise. They meet size and dimensions requirements of various standards.



[Click here for control accessories](#)



HOME VIEW

Features and Benefits

- Designed to - stand up to the toughest conditions
 - Excellent anti-cavitation properties
 - Wide flow range
 - High stability and accuracy
 - Drip tight sealing
- Double chamber design
 - Moderated valve reaction
 - Protected diaphragm
 - Optional operation in very low pressure
 - Moderated closing curve
- Flexible design - Easy addition of features
- Obstacle free flow pass
- V-Port Throttling Plug (Optional) - Very stable at low flow
- Compatible with various standards
- High quality materials
- In-line serviceable - Easy maintenance

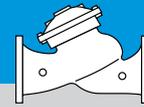
Major Additional Features

- Fix Proportion PRV – 720-PD
 - Pressure management valve – 7PM
 - 2-way control – 720
 - 3-way control - 720-X
 - Anti cavitation cage – 720-C2
 - Safety valve – 720-TC
 - Independent check feature – 720-2S
 - Check valve – 720-20
 - Solenoid control – 720-55
 - Electrically selected multi-level setting – 720-45
 - High sensitivity pilot – 720-12
 - Downstream over pressure guard – 720-48
- See relevant BERMAD publications.

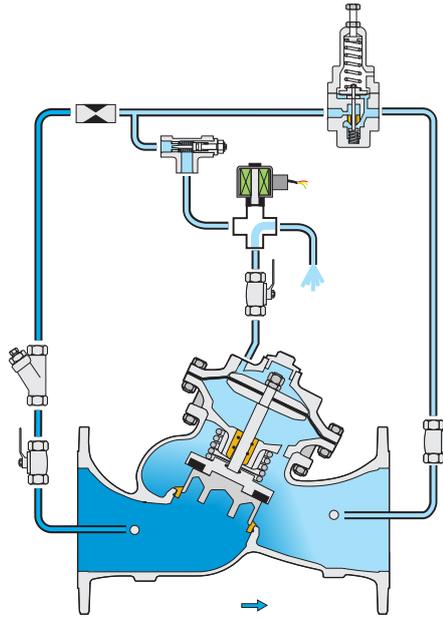
Typical Installation



All images in this catalog are for illustration only



- CLOSED
- OPEN
- Regulating



This drawing refers to 1½ – 8"; 40-200 mm sized valves only. For other sizes please refer to the Model's IOM.

Main Valve

- Valve Pattern:** "Y" (Globe)
- Size Range:**
- EN Series:** 1½-16"; 40-400 mm
- ES Series:** 2½-24"; 65-600 mm
- Pressure Rating:** 25 bar; 400 psi
- End Connections:** Flanged (all standard)
- Plug Types:** Flat disc, V-port, Cavitation cage
- Temperature Rating:** 60°C; 140°F for Cold water applications
- Optional higher temperature:** Available on request

Standard Materials:

- Body & actuator:** Ductile Iron
- Bolts, nuts & studs:** Stainless Steel
- Internals:** Stainless Steel, Tin Bronze & Coated Steel
- Diaphragm:** Fabric-reinforced synthetic rubber
- Seals:** Synthetic rubber
- Coating:** Dark blue Fusion bonded epoxy

Control System

- Standard Materials:**
- Accessories:** Stainless Steel, Bronze & Brass
- Tubing:** Stainless Steel or Copper
- Fittings:** Stainless Steel or Brass

Pilot Standard Materials:

- Body:** Stainless Steel, Bronze or Brass
- Elastomers:** Synthetic Rubber
- Spring:** Stainless Steel
- Internals:** Stainless Steel

Pilot Options:

Various pilots and calibration springs are available. Select according to valve size and operating conditions. For more details check pressure reducing pilots product pages.

Solenoid Standard Materials:

- Body:** Brass or Stainless Steel
- Elastomers:** NBR or FPM
- Enclosure:** Molded Epoxy

Solenoid Electrical Data:

- Voltages:**
 - (AC):** 24, 110-120, 220-240, (50-60Hz)
 - (DC):** 12, 24, 110, 220
 - Power Consumption:**
 - (AC):** 30VA, inrush; 15VA (8W), holding or 70VA, inrush; 40VA (17.1W), holding (DC): 8-11.6W
- Values might vary according to specific solenoid model. For more details check solenoid product page.

Notes

- Inlet pressure, outlet pressure and flow rate are required for optimal sizing and cavitation analysis.
- Recommended continuous flow velocity: 0.1-6.0 m/sec; 0.3-20 ft/sec.
- Minimum operating pressure: 0.7 bar; 10 psi. For lower pressure requirements consult factory.

