

LEVEL CONTROL AND PRESSURE SUSTAINING VALVE

with Bi-Level Electric Float

Model 753-65 EN/ES

Hydraulically operated, level control and pressure sustaining control valve that controls reservoir filling and reservoir level. During filling the valve sustains minimum upstream pressure regardless of fluctuating flow or reservoir level. Reservoir filling is in response to a Bi-level electric float switch signal opening at a pre-set low level and shutting off at a pre-set high level.

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](#)



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

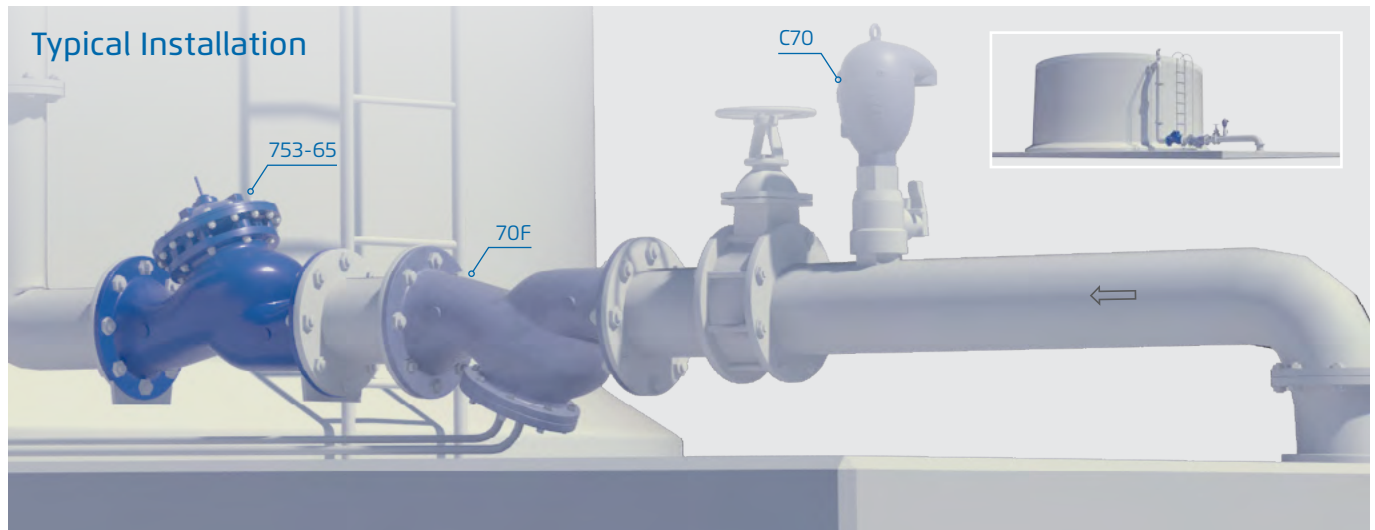
- Compatible with various standards
- High quality materials
- In-line serviceable - Easy maintenance

Major Additional Features

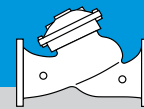
- Level control – 750-66
- Flow control – 757-66-U
- Hydraulic float backup – 753-65-66
- Closing surge prevention – 753-65-49
- Relief override – 753-65-3Q
- Level sustaining – 75A-66
- Independent Check Feature – 753-65-2S

See relevant BERMAD publication

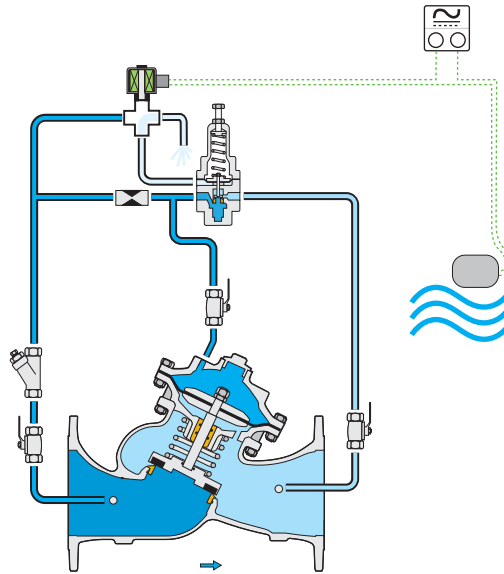
Typical Installation



All images in this catalog are for illustration only



CLOSED
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 Patterns: "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

Float Pilot Standard Materials:

Body: Brass or Stainless Steel 316
Elastomers: Synthetic Rubber
Internal Parts: Stainless Steel 316 & Brass
Lever System: Brass or Stainless Steel 316
Float: Plastic
Float Rod: Stainless Steel
Base Plate: Fusion Bonded Epoxy Coated Steel or Stainless Steel 316

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.

Notes

- Inlet Pressure, Outlet Pressure and Flow-rate are required for optimal sizing.
- Recommended maximum flow velocity: 6.0 m/sec; 20 ft/sec.
- Minimum operating pressure: 0.7bar/10psi. For lower pressure requirements consult factory.

