

LEVEL & FLOW CONTROL VALVE

with Bi-Level Vertical Float

Model 757-66-U EN/ES

Hydraulically operated control valve that controls reservoir filling and reservoir level. During filling, the valve limits the flow to a pre-set maximum, regardless of fluctuating upstream pressure or reservoir level and protects the valve from cavitation damage. Reservoir filling is in response to a hydraulically controlled non-modulating bi-level vertical float that opens at a pre-set reservoir low level and shuts off drip-tight 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

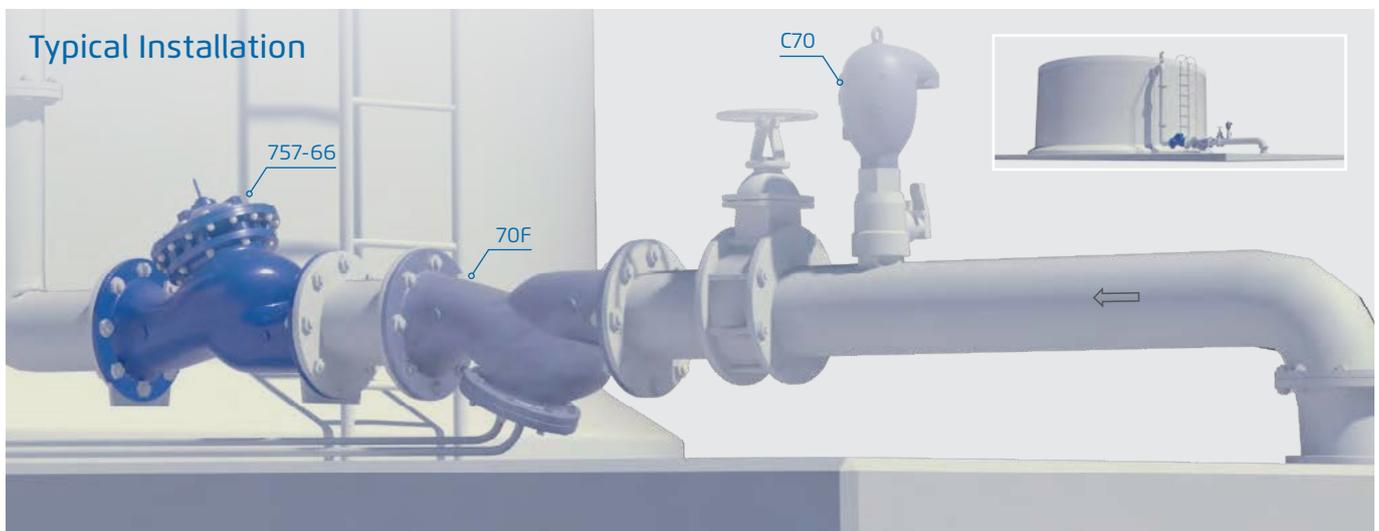
- Designed to - stand up to the toughest conditions
 - Excellent anti-cavitation properties
 - Wide flow range
 - High stability and accuracy
 - Drip tight sealing
- Double chamber design
 - Moderated valve reaction
 - Protected diaphragm
 - Optional operation in very low pressure
 - Moderated closing 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

- Closing surge prevention – 757-66-49-U
- Hydraulic float backup – 757-66-65-U
- Altitude pilot backup – 757-66-80-U

See relevant BERMAD publications.

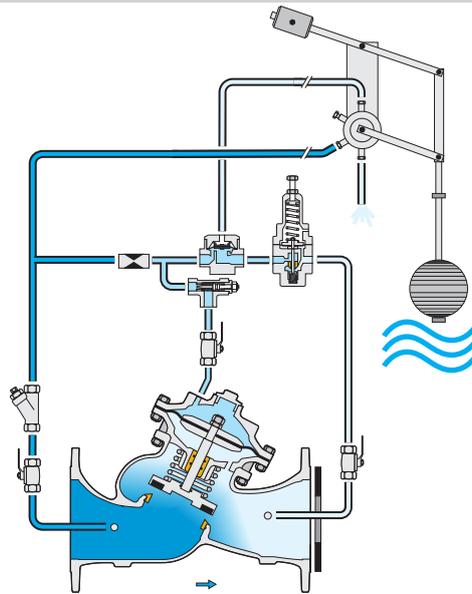


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Regulating



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

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

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.

Orifice Assembly

Body: Fusion Bonded Epoxy Steel or Stainless Steel

Orifice Plate: Stainless Steel

Notes

- Orifice diameter is calculated for each valve.
 - Flow Setting Range: (-)15% & (+)25% from predetermined flow.
 - Orifice assembly adds 20-25mm ; ¾"-1" to valve length.
 - Recommended continuous flow velocity: 0.3-6.0 m/sec ; 1-20 ft/sec.
 - Minimum operating pressure: 0.7 bar ; 10 psi. For lower pressure requirements consult factory.
 - Inlet pressure, outlet pressure and flow rate are required for optimal sizing and cavitation analysis.
- * See BERMAD float installation recommendation.

