

BOOSTER PUMP CONTROL & PRESSURE SUSTAINING ACTIVE CHECK VALVE

with Opening & Closing Speed Control and Limit Switch

Model 743-2S-03-S-M5-M5M-M5L

Hydraulically operated, active check, pump control & pressure sustaining valve with two independent functions: It opens fully or shuts off in response to electric signals, isolating the pump from the system during pump startup and shutdown, thereby preventing pipeline surges. While open, it sustains minimum pump discharge pressure regardless of fluctuating flow, and prevents the pump from exceeding its designed flow or power consumption.

The BERMAD 700 Series large control valves are hydraulically operated and diaphragm actuated. Their unique hydro-dynamic globe design with an open plug ensures high flow capabilities.



Features & Benefits

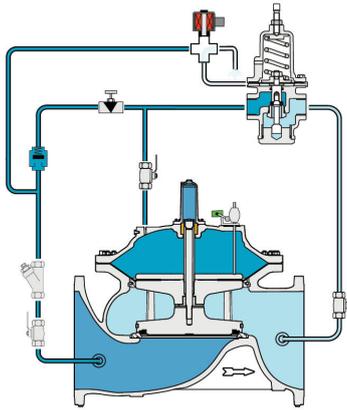
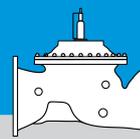
- Hydrodynamic wide globe valve body provides:
 - Higher flow coefficient (Kv; Cv) than standard globe valves
 - Higher resistance to cavitation damage
- In-line serviceable
- Valves are suitable for working with all types of command: Hydraulic, Electric and Pneumatic.
- Self-operated valves that can work without an external source of power
- Wide range of options and accessories:
 - Visual position indicator
 - Limit switches
 - Analog opening output
 - Large selection of control accessories
 - Large inspection and service ports (700-M5L)

Typical Applications

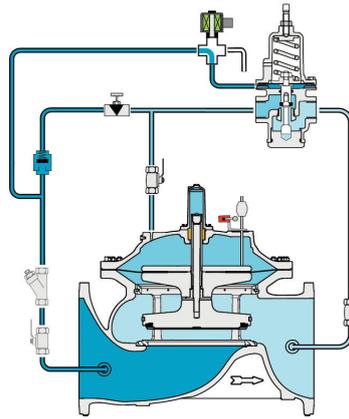
- Pumping stations - Controls pump start-up and shut-down
- Pumping stations - Ensure operating point on pump curve

Typical Installation

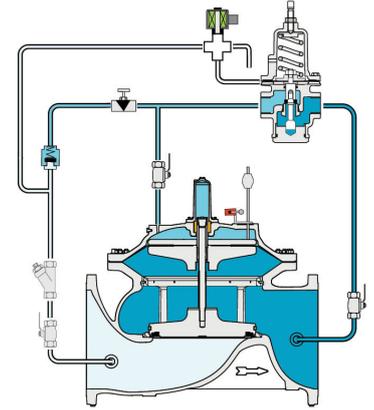




Closed



Regulating



Reverse Flow

Main Valve

Size Range: 20"-36"; DN500-900

Pattern: Globe

Pressure Rating: 25 bar

End Connection: Flanged

Temperature Rating: 80°C

For 60-80°C consult factory

Standard Materials:

Body & Cover: Ductile Iron

Cover Bolts: Stainless Steel

Internals: Epoxy coated Ductile Iron, Stainless Steel & Tin Bronze

Diaphragm: Fabric-reinforced synthetic rubber

Seals: Synthetic rubber

Coating: Dark blue Fusion bonded epoxy

For other materials contact BERMAD

Control System

Standard Materials:

Accessories: Stainless Steel, Bronze & Brass

Tubing: Stainless Steel or Copper

Fittings: Stainless Steel or Brass

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 may vary according to specific solenoid model.

For more details check solenoid product page.

Limit Switch:

Switch Type: SPDT

Electrical Rating: 10A, type gl or gG

Operating Temperature: Up to 85°C (185°F)

Enclosure Rating: IP66

Notes

- Recommended maximum flow velocity: 6.0 m/sec; 20 ft/sec.
- Minimum operating pressure: 0.7 bar; 10 psi. For lower pressure requirements consult factory.

For detailed Engineering & Specification data, IOM and CAD Drawings, visit the Model Page on the [BERMAD](https://www.bermad.com) website.