

BOOSTER PUMP CONTROL VALVE

Pressure Sustaining and Reducing

Model 743-M5/M5L/M6

Hydraulically operated, pump control, pressure sustaining & reducing 3-Way control valve. It opens/closes in response to electric signals, isolating the pump from the system during startup and shutdown, thereby preventing pipeline surges. While open, it sustains minimum pump discharge pressure to ensure optimal pump operation. It also reduces upstream pressure to lower constant downstream pressure.

The BERMAD 700 Series large size control valves are hydraulically operated, diaphragm actuated type. Unique hydro-dynamic globe valve design with a special open plug provides high flow capabilities. The valves are available in the standard configuration or with an Independent Check Feature code "2S".



[Click here for control accessories](#)



HOME VIEW

Features and Benefits

- Hydrodynamic wide globe valve body provides:
 - Higher flow (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:
 - One-way or two-way flow direction
 - V-Port
 - Cavitation cage
 - Visual position indicator
 - Limit switches
 - Analog opening output

- Large selection of control accessories
- Double chamber actuation (700-M6)
- Large inspection and service ports (700-M5L)

Major Additional Features:

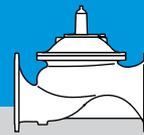
- Independent check feature – 743-2S-M5/M5L/M6
- Differential pressure sustaining – 743-06-M5/M5L/M6
- 3-Way control – 743-X-M5/M5L/M6
- Flow control – 747-U-M5/M5L/M6
- Pressure reducing – 742-M5/M5L/M6
- Pump circulation control – 745-M5/M5L/M6
- Electronic control – 740-18-M5/M5L/M6
- Pressure sustaining and Pressure reducing – 743-2Q-M5/M5L/M6

See relevant BERMAD publication

Typical Installation

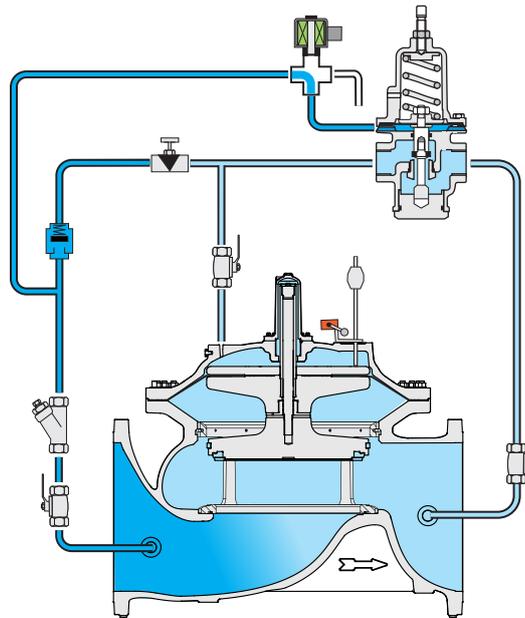


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Model 743-M5/M5L/M6

- CLOSED
- Reverse Flow
- OPEN



Main Valve

Valve Pattern: Globe
Size Range: DN 500-1200; 20"-48"
Pressure Rating: 40 bar; 600 psi
End Connections: Flanged
Temperature Rating: 60°C; 140°F for Cold water applications
Optional higher temperature: Available on request
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

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.

BR 740-E Controller:
Supply Voltage: 110, 230 VAC 50/60Hz
Power Consumption: <8VA
Solenoid Circuit Fuse: 2A (internal)
Pump Control Circuit Fuse: 1A (internal)
Dimensions: 96 x 96 x 166mm (DIN), 0.75kg
Housing Material: NORYL (DN 43700)

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

