

Hydraulic Hydrant Valve

Model: FP 405-02



Typical Applications



Industrial fire fighting hydrant replacing mechanical valves



Petrochemical plant



Oil & gas storage

Operation

The BERMAD Model FP 405-02 is a simply designed, manually operated, on/off valve. It is particularly suited for industrial hydrants.

The valve is held closed when line pressure is applied to the control chamber. Sealing is drip tight keeping the downstream piping dry.

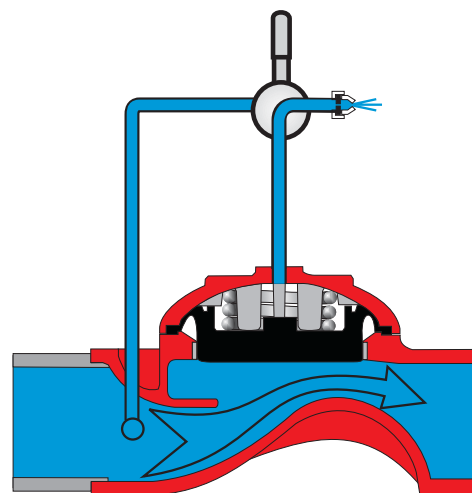
To open, pressure is manually released from the control chamber by a 1/4 turn of the Manual Release Pilot handle.

Features and Benefits

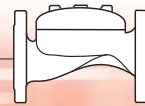
- Easy manual opening requires only 1/4 turn of pilot handle
- One-piece molded diaphragm assembly – No distortion caused by high differential pressure
- Quick cover removal – Minimal down time
- Never "sticks" closed – Reliability
- Simple design

Optional Features

- Seawater service (Add FS as prefix to model)
- Corrosive environment materials
- Foam resistant coating
- Storz quick coupling connector



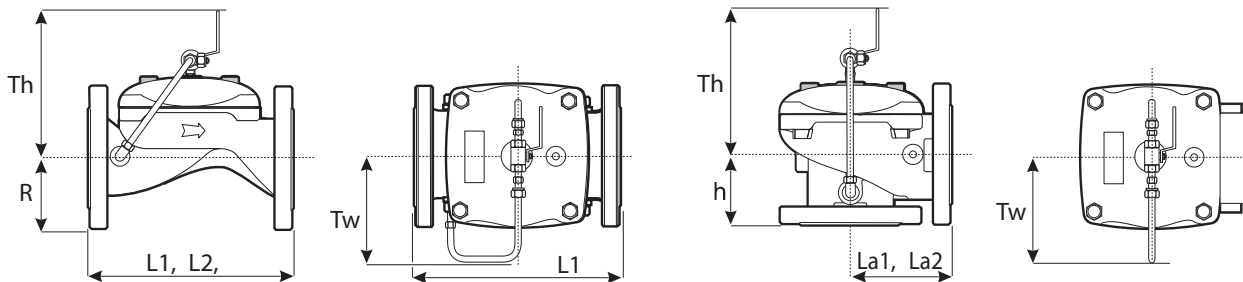
Valve Open



Engineer Specifications

- The valve shall be a line pressure driven, elastomeric type globe valve with a **rolling-diaphragm**.
- Valve actuation shall be accomplished by a fully peripherally supported, one-piece balanced rolling-diaphragm, vulcanized with a rugged radial seal disk. The diaphragm assembly shall be the only moving part.
- The valve shall have an **unobstructed flow path**, with no stem guide or **supporting ribs**.
- The valve cover shall be removable for in-line service, enabling all necessary inspection and servicing.
- The manual release pilot valve shall be supplied as an assembly with the main valve. It shall require only 1/4 turn for full opening or closing. It shall be equipped with a device to regulate the opening speed.
- The valve trim shall be supplied as an assembly, pre-assembled and hydraulically tested at an ISO 9000 & 9001 certified factory.

Technical Data



Valve Size	2"		2 1/2"		3"		4"		6"		
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
Dimensions	(1)L1	205	8 1/2	205	8 1/2	250	9 13/16	320	12 9/16	415	16 5/16
	(2)L2	180	7 1/16	210	8 1/4	255	10 1/16	N/A	N/A	N/A	N/A
	(1)La1	121	3 3/4	N/A	N/A	153	6	160	6 5/16	N/A	N/A
	(2)La2	284	11 3/16	N/A	N/A	300	11 3/16	313	12 5/16	341	13 7/16
	Tw	284	11 3/16	284	11 3/16	300	11 3/16	313	12 5/16	341	13 7/16
	Th	210	8 1/4	210	8 1/4	215	8 7/16	243	9 9/16	315	12 3/8
	h	83	3 1/4	N/A	N/A	101	4	112	4 7/16	N/A	N/A

Notes:

1. L1 & La1 are for flanged ANSI #125 / #150 and ISO PN16.
2. L2 & La2 are for threaded female, NPT or BSP.
3. Data is for maximum envelope dimensions, component positioning may vary.
4. Provide adequate space around valve for maintenance.

Connection Standard

- Flanged: ANSI B16.42 (Ductile Iron), B16.5 (Steel & Stainless Steel), B16.24 (Bronze), B16.1 (Cast Iron), ISO PN16
- Threaded: NPT or BSP for 2 & 3"

Water Temperature

- 0.5 – 50°C (33 – 122°F)

Manufacturers Standard Materials

Main valve body and cover

- Cast Iron ASTM A126 class B⁽¹⁾

Valve wetted parts

- Stainless Steel and Natural Rubber

Control System

- Brass with Copper tubing

Elastomers

- Nylon fabric reinforced polyisoprene

Coating

- Electrostatic Powder Coating Polyester, Red (RAL 3002)

Available Sizes

- Globe: 1 1/2, 2, 2 1/2, 3, 4, 6, 8, 10 & 12"
- Angle: 2, 3 & 4"

Pressure Rating

- Max. working pressure: 235 psi (16 bar)

Optional Materials

Main valve body and accessories

- Carbon Steel ASTM A216-WCB⁽¹⁾
- Stainless Steel 316
- Ni-Al-Bronze ASTM B-148

Control System

- Stainless Steel 316

Elastomers

- NBR
- EPDM

Coating

- High Built Epoxy Fusion-Bonded with UV Protection, Anti-Corrosion

