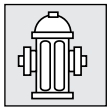
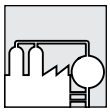
Hydraulic Hydrant Valve

Model: FP 405-02

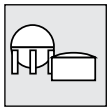
Typical Applications



Industrial fire fighting hydrant replacing mechanical valves



Petrochemical plant



Gas & oil storage tanks

Operation

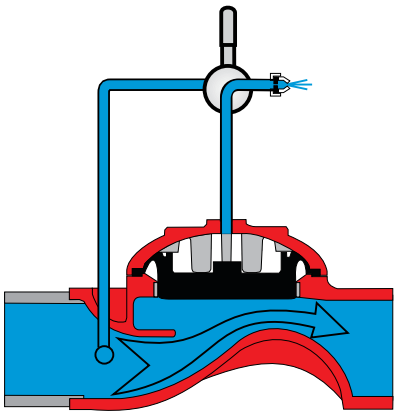
The BERMAD Model FP 405-02 is a simply designed, manually operated, on/off valve. It is particularly suited for industrial hydrants.
The valve is held closed when line pressure is applied to the control chamber. Sealing is drip tight keeping the downstream piping dry.
To open, pressure is manually released from the control chamber by a ¼ turn of the Manual Release Pilot handle.

Features and Benefits

- **Easy manual opening requires only ¼ turn of pilot handle**
- **One-piece molded elastomeric moving part –** No maintenance required
- **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**

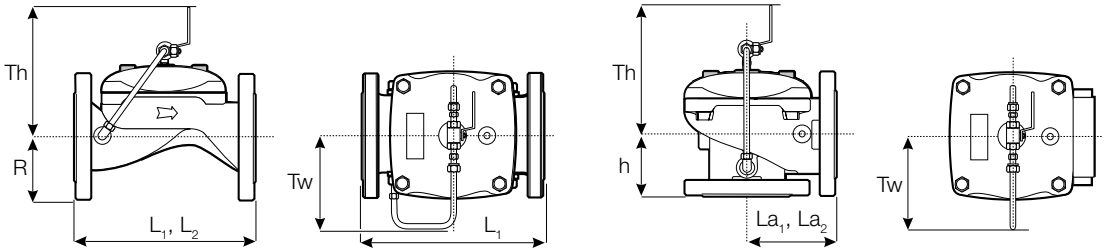


Valve Open

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 assembled with the main valve. It shall require only ¼ 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



Size		2”		2½”		3”		4”		6”	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
Dimensions	L_1 (1)	205	8 1/2	205	8 1/2	257	10 1/8	320	12 9/16	415	16 5/16
	L_2 (2)	180	7 1/16	210	8 1/4	255	10 1/16	N/A	N/A	N/A	N/A
	La_1 (1)	121	3 3/4	N/A	N/A	153	9 13/16	160	6 5/16	N/A	N/A
	La_2 (2)	284	11 3/16	N/A	N/A	300	6	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
	RF	78	3 1/8	89	3 4/8	100	3 7/8	115	4 4/8	140	5 4/8

Notes:
1. L_1 & La_1 are for flanged ANSI #125 / #150 and ISO PN16.
2. L_2 & La_2 are for threaded female, NPT or ISO-7-Rp.
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 ISO-7-Rp for 2 & 3”

Water Temperature
- 0.5 – 50°C (33 – 122°F)

Available Sizes
- Globe: 1½, 2, 2½, 3, 4 & 6”
- Angle: 2, 3 & 4”

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

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)

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 Build Epoxy Fusion-Bonded with UV Protection, Anti-Corrosion

