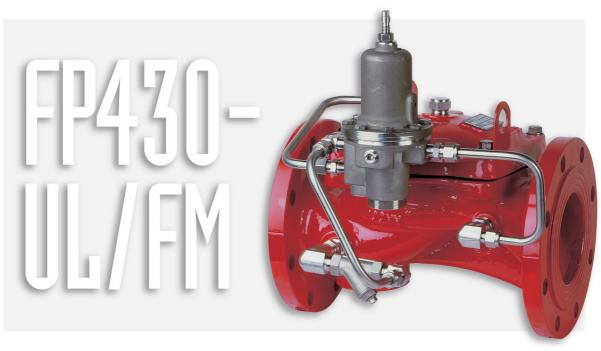


Fire Protection

FP430-UL/FM

# **Pressure-Relief Valve**



# Features and Benefits

- Simple design cost effective
- Quick cover removal easy in-line service
- One piece diaphragm reliability
- Line-pressure driven
- Unrestricted flow path

# **Optional Features**

- · Large control filter
- Seawater service

Consult your local BERMAD representative for full details

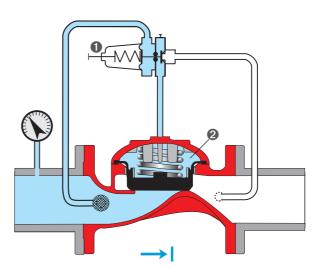
# Tender Specifications

The valve shall be a UL-listed, FM-approved, line-pressure driven, direct-diaphragm actuated, angle (up to 4") or globe pattern valve. Valve actuation shall be accomplished by a one piece diaphragm assembly. The valve cover shall be removable for in-line service. The valve shall have an unobstructed flow path, with no stem-guide or supporting ribs.

The pilot system shall consist of relief pilot valve and control strainer.

# Operation

The BERMAD Model 430-UL/FM remains closed as long as the inlet pressure is lower than the setpoint. When it senses inlet pressure that is higher than the pilot ① setting, it acts upon the control chamber ② causing the main valve to open, relieving excess pressure to either the reservoir or sump.



**Valve Closed** 









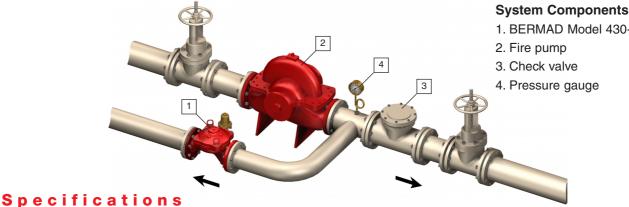
Typical Installations

FP430-UL/FM

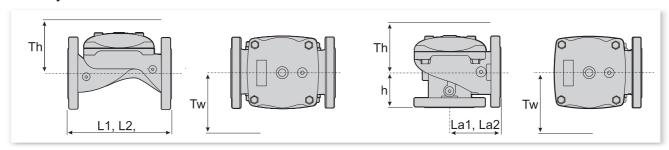
# **Pressure-Relief Valve**



- 1. BERMAD Model 430-UL
- 4. Pressure gauge



# **Pilot System Dimensions**



Valve Size		2"		21/2"		3"		4"		6"	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
Dimensions	(1)L1	205	81/2	205	81/2	250	913/16	320	129/16	415	<b>16</b> <sup>5</sup> / <sub>16</sub>
	(2)L2	180	71/16	210	81/4	255	101/16	N/A	N/A	N/A	N/A
	(1)La1	121	33/4	N/A	N/A	153	6	160	65/16	N/A	N/A
	(2)La2	284	<b>11</b> <sup>3</sup> / <sub>16</sub>	N/A	N/A	300	<b>11</b> <sup>3</sup> / <sub>16</sub>	313	125/16	341	137/16
	Tw	284	<b>11</b> <sup>3</sup> / <sub>16</sub>	284	<b>11</b> <sup>3</sup> / <sub>16</sub>	300	<b>11</b> <sup>3</sup> / <sub>16</sub>	313	125/16	341	137/16
	Th	210	81/4	210	81/4	215	87/16	243	99/16	315	12 <sup>3</sup> /8
	h	83	31/4	N/A	N/A	101	4	112	47/16	N/A	N/A

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

# **Connection Standard**

- Flanged: ANSI B16.42 (Ductile Iron), B16.5 (Steel & Stainless), B16.24 (Bronze), B16.1 (Cast iron), ISO PN16
- Threaded: NPT or BSP for 2, 21/2 & 3"

#### **Water Temperature**

• 0.5 - 50°C (33 - 122°F)

# **Available Sizes**

- Globe: 2, 21/2, 3, 4, 6, 8, 10 & 12"
- Angle: 2, 3 & 4"

#### **Working Pressure**

• Max working pressure: 235 psi (16 bar)

• Size the valve not less than according to NFPA-20.

#### **Materials**

### **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

#### **Optional Materials**

#### Main valve body and accessories

- Carbon steel ASTM A216-WCB<sup>(1)</sup>
- Stainless steel 316
- Marine bronze<sup>(2)</sup>

#### **Control System**

• Stainless steel 316

#### **Approvals**

### Main valve body and accessories

- UL-listed: 2-6"
- FM-approved: 2-6"

#### Notes:

- 1. Epoxy coated, fusion bonded standard. Other coatings available on request.
- 2. For seawater service see BERMAD publication "Seawater and Corrosive Media".

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English

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