

PRESSURE RELIEF VALVE

Pressure Relief Valve

Model FP-730-UF

The BERMAD Model FP 730-UF pilot operated relief valve prevents overpressure, maintaining a constant maximum preset system pressure regardless of fluctuating conditions and pressure peaks upstream of the valve.

It is UL-Listed (up to 350 psi) and FM-Approved in accordance with NFPA-20.

The valve offers reliable performance when installed in: Refineries, petrochemical complexes, tank farms, high-rise buildings, aviation and airports, marine and on-shore installations.



Features & Benefits

- Safety and reliability
 - Straight through Y type body
 - Quiet and Smooth operation
 - Quick response with minimal power requirement
 - In-line serviceable
 - High discharge capacity
 - Designed for high reliability and easy maintenance
- Quick and easy maintenance
 - In-line serviceable
 - Fast and easy cover removal

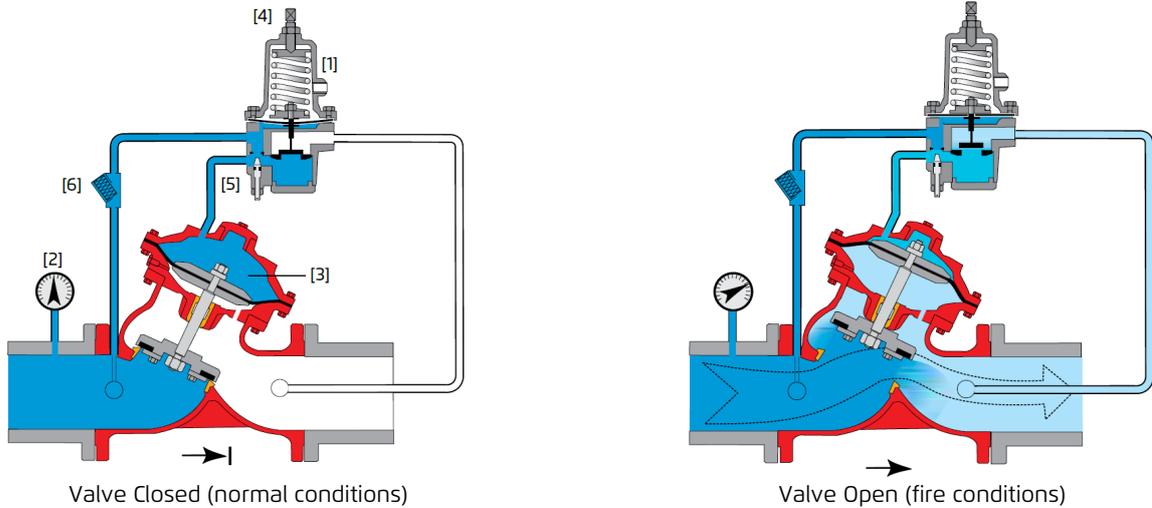
Typical Applications

- Surge prevention on pump start up.
- Foam concentrate recirculation
- Centralized thermal pressure relief

Additional Features

- Large control filter
- Seawater compatibility
- Valve position limit switches

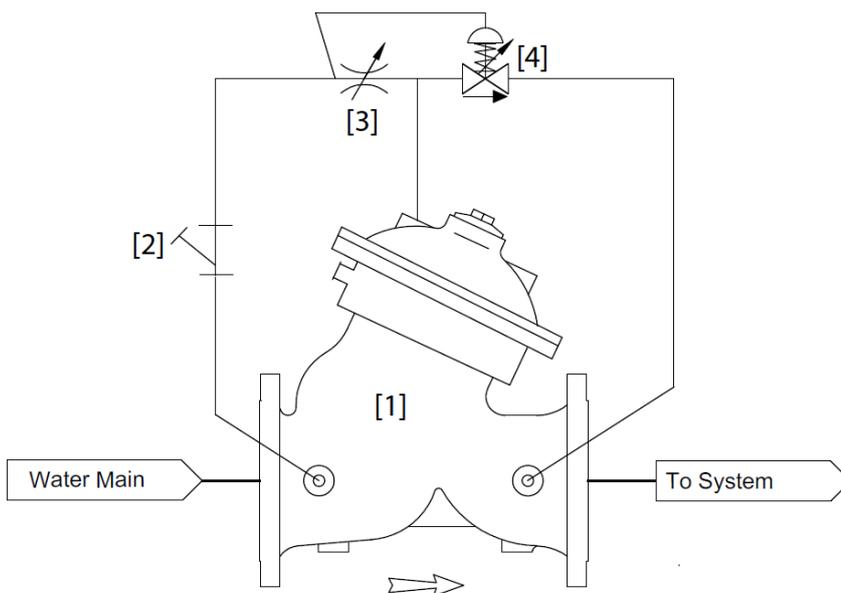
Operation



The BERMAD Model FP 730-UF remains closed as long as the sensed inlet pressure is lower than the adjustable set point. When the Pressure Relief Pilot [1] senses inlet pressure [2] that is higher than the pilot setting, it opens releasing water pressure from the control chamber [3] causing the main valve to modulate open, relieving excess pressure to either a reservoir or sump, preventing system overpressure.

The Pressure Relief Pilot is equipped with an adjusting screw [4] to preset the desired inlet pressure and an integral adjustable needle valve [5] to control the main valve closing speed. The valve's unique design and quick reaction to system demand keeps pressure loss at a minimum. To further enhance reliability the control system is equipped with a control strainer [6].

System P&ID



Components	
1	BERMAD 700 Valve
2	Control loop strainer
3	Needle valve
4	Pressure relief pilot

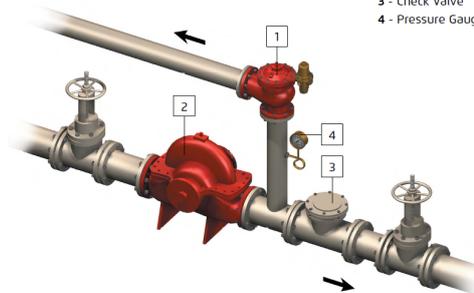
System Installation

- Valve size should be no less than NFPA-20 requirements
- Provide adequate clearance around valve for maintenance, ensuring that the actuator can be easily removed
- Arrange installation with the valve cover facing up for best performance
- Ensure that before the valve is installed, instructions are given to flush the pipeline at full flow

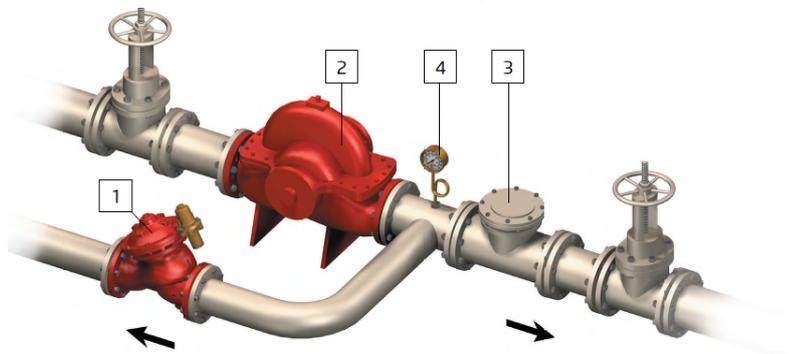
Installation with Angle pressure relief valve

System Components

- 1 - BERMAD Model FP 730-UF
- 2 - Fire Pump
- 3 - Check Valve
- 4 - Pressure Gauge



Installation with "Y" Pattern relief valve



Suggested Specifications

The Pressure Relief Valve shall be UL-Listed, FM-Approved and hydraulic pilot controlled. The main valve shall be an angle or "Y" pattern. All necessary inspection and servicing of the main valve shall be possible inline. Valve actuation shall be accomplished by a double chambered actuator, which shall include a stainless steel stem and a flat seal disk creating a drip tight seal. The valve seat shall be made of stainless steel and have an unobstructed flow path, with no stem guide or supporting ribs. The pilot system shall be field adjustable, with adjustable valve closing speed, integrated to the pilot valve, hydraulically tested and supplied as an assembly consisting of: Relief pilot valve shall be UL-Listed and FM-Approved as part of the assembly with built-in, internal needle valve and "Y" strainer. The control trim shall be supplied as an assembly, pre-assembled and hydraulically tested at an ISO 9000 and 9001 certified factory.

Technical Data

Available Sizes:

Flanged- 1½, 2, 2½, 3, 4, 6, 8, 10, 11, 12, 14, 16, 18, 20"

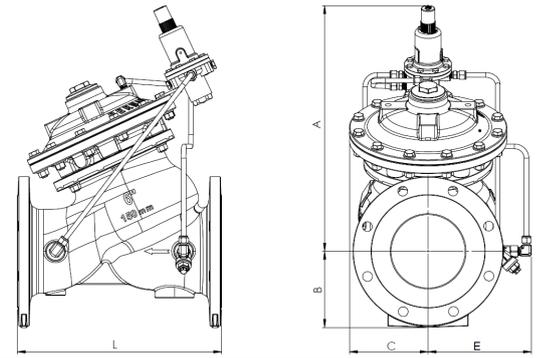
Grooved- 1½, 2, 2½, 3, 4, 6 & 8"

Pressure Rating:

ANSI#150 - 16 bar | 235 psi

ANSI#300 - 1½" to 10" - 24 bar | 350 psi

Setting range: 2 to 24 bar | 30 to 350 psi



Valve Size	L #150 mm in	L Grooved mm in	L #300 mm in	A mm in	B mm in	C mm in	∅D in	E mm in	F mm in	G mm in	Weight #150 kg lb	Weight #300 kg lb
DN100 4"	320 12.6	320 12.6	335 13.2	242 9.5	112 4.4	114 4.5	-	405 15.9	-	-	37 81	-
DN150 6"	415 16.3	415 16.3	433 17	290 11.4	160 6.3	140 5.5	-	505 19.9	-	-	75 165	-
DN200 8"	500 19.7	500 19.7	524 20.6	325 12.8	195 7.7	171 6.7	-	566 22.3	-	-	125 275	-
DN250 10"	605 23.8	-	637 25.1	370 14.6	240 9.4	203 8	-	639 25.2	-	-	217 477	-
DN300 12"	725 28.5	-	762 30	515 20.3	275 10.8	241 9.5	-	449 17.7	-	-	370 814	-
DN350 14"	733 28.9	-	767 30.2	525 20.7	275 10.8	267 10.5	-	449 17.7	-	-	381 838	-
DN40 1½"	205 8.1	205 8.1	210 8.3	191 7.5	78 3.1	75 3	-	312 12.3	-	-	9.1 20	-
DN400 16"	990 39	-	1024 40.3	610 24	370 14.6	298 11.7	-	541 21.3	-	-	846 1861	-
DN50 2"	205 8.1	205 8.1	210 8.3	191 7.5	78 3.1	83 3.3	-	312 12.3	-	-	10.6 23	-
DN65 2½"	209 8.2	209 8.2	212 8.3	191 7.5	89 3.5	93 3.7	-	312 12.3	-	-	13 29	-
DN80 3"	250 9.8	250 9.8	264 10.4	207 8.1	100 3.9	100 3.9	-	364 14.3	-	-	22 48	-

IMPORTANT: Dimensions for the trim envelope or extents refer to a vertical orientation and may vary with specific component positioning - Apart from the "L" dimension, allow a tolerance of at least ±15%

Valve Code Designations

