

S.S.316 PRESSURE SUSTAINING/RELIEF VALVE FOR HIGH VISCOSITY FOAM CONCENTRATE

Model FC-730-N-VBeZ

The BERMAD FC-730-VBeZ is a double chambered hydraulically powered Pressure Sustaining/Relief Valve suitable for use with high viscosity Foam Concentrate in Fire protection systems.

The FC 730-VBeZ is hydraulically actuated by existing fire water pressure, independent from the foam pressure enabling functionality with highly viscous concentrates.

The BERMAD FC -730-VBeZ replaces mechanically actuated valves or pilot-operated solenoid valves, providing safer operation for modern foam systems, assuring maximum reliability of the entire firefighting system.



Features & Benefits

- Features
 - Obstacle-free, uninterrupted flow path
 - In-line serviceable
 - Straight through Y type body

Typical Applications

- Foam applications
- Foam concentrate recirculation
- Foam concentrate injection systems

Additional Features

- Large control filter
- Seawater compatibility
- Valve Position Indicator

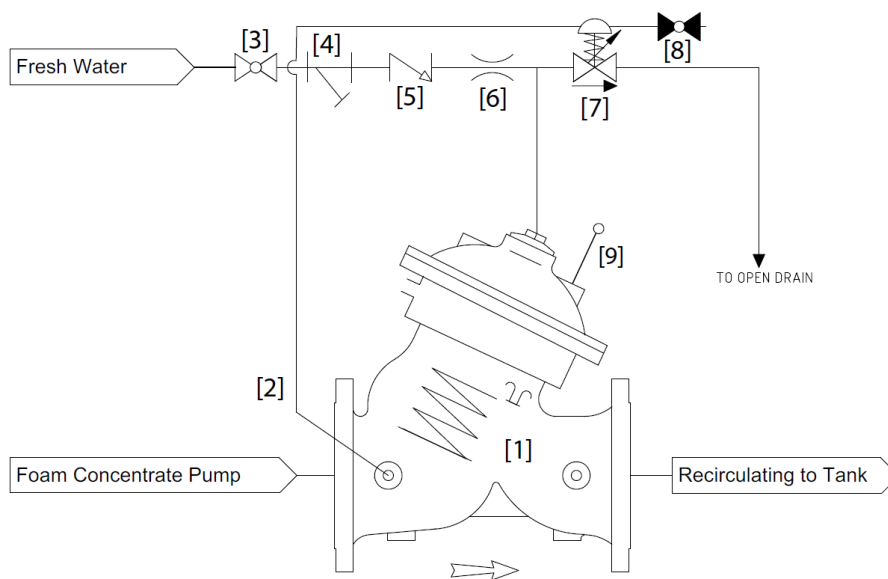
Operation

The BERMAD FC-730-BeVZ is a “Y” pattern, diaphragm actuated, double chambered, water pressure driven hydraulic pressure relief valve, that requires existing firewater for a priming pressure source for valve activation.

In the set position: The main valve remains closed using an existing firewater pressure supply to the main valve control chamber, via the 2-Way priming line ball valve [3] Y strainer [4] check valve [5] and restriction [6]. Holding the main valve drip tight closed.

In the operating position: The 2-Way relief pilot [7] senses a rise above the preset pressure, via the foam concentrate pressure sensing line, causing the pilot to open and relieve the pressure in the main valve control chamber, thus opening the main valve and directing excess concentrate back to the foam concentrate tank.

System P&ID



Components	
1	Bermad 700 Valve
2	Concentrate Pressure Sensing
3	Priming Ball Valve
4	Priming Strainer
5	Check valve
6	Restriction Orifice
7	Pressure Relief Pilot
8	Concentrate Bleed Valve
9	Position Indicator/Limit switch

System Installation

Suggested Specifications

- The valve shall be a hydraulically operated "Y" pattern body with integral unitized double chamber actuator.
- Valve actuation shall be accomplished by one moving assembly, which shall include the diaphragm assembly, a flat seal disk and a stainless steel stem.
- All valve body and internal parts shall be of stainless steel and have an unobstructed flow path, with no stem guide or supporting ribs.
- The valve actuator shall be removable for quick in-line service enabling all necessary inspection and servicing.
- The control trim shall consist of stainless steel 316 tubing, fittings and accessories, including a stainless steel 2-Way Relief Pilot Valve, Y strainer and check valve.
- 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"

Threaded- 1½, 2, 2½ & 3"

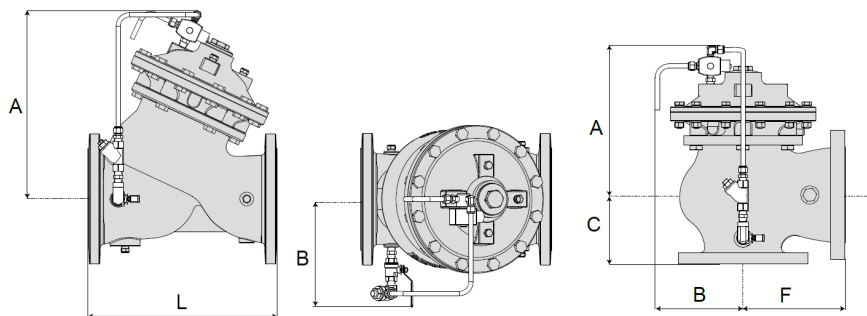
Pressure Rating:

ANSI#150 - 17.2 bar | 250 psi

ANSI#300 - 1½" to 10" - 28 bar | 400 psi

Elastomer:

Nitrile Butadiene Rubber (NBR)



Valve Size	L #150 mm in	L Grooved mm in	L #300 mm in	A mm in	B mm in	C mm in	øD in	E mm in	F mm in	G mm in	Weight #150 kg lb	Weight #300 kg lb
DN40 1½"	205 8.1	-	-	312 12.3	191 7.5	82 3.2	-	-	121 4.8	-	-	-
DN50 2"	205 8.1	-	-	312 12.3	191 7.5	82 3.3	-	-	121 4.8	-	-	-
DN65 2½"	209 8.3	-	-	312 12.3	191 7.5	102 4	-	-	140 5.5	-	-	-
DN80 3"	250 9.8	-	-	364 14.3	207 8.1	102 4	-	-	152 6	-	-	-
DN100 4"	320 12.6	-	-	405 16	242 9.5	127 5	-	-	200 7.9	-	-	-

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

Valve Code Designations

