

DIAPHRAGM TYPE, DIRECT ACTING PRESSURE RELIEF VALVE

Model FP-3HC-0

The BERMAD model FP-3HC-0 is a direct acting, spring loaded, diaphragm type relief valve. The single port is held closed by the force of the adjustable spring located above the pressure sensing diaphragm. When the force of the pressure sensed under the diaphragm exceeds the force of the spring the valve will open to relieve pressure and will close tight when pressure falls below the pre-set value. This UL Listed and FM Approved valve is well suited for use in protecting wet sprinkler systems from overpressure occurring from temperature fluctuations and for fire pump casing relief as required by the NFPA 20 and NFPA 13 standards.

Features

- Fast immediate response to pressure rise
- Easy in-field pressure setting adjustment
- UL/FM Approved
- Available in corrosion resistant materials
- Tamperproof cap

Typical Applications

- Fire pump casing relief
- Thermal release for wet piping systems
- Pressurized sprinkler systems
- Pressure relief for pressure control valves
- Jockey pump overpressure

Technical Data

Pressure Rating: 365 psi

Water Temperature Range: 180 °F

Weight: 7.5 Lbs

Standard Materials:

Body: Stainless Steel

Cover: Brass

Elastomers: NBR

Internal Parts: Stainless Steel & Brass

Spring: Galvanized Steel

Optional Materials:

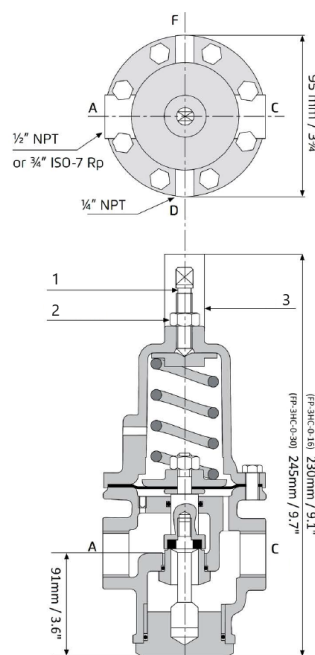
Body: Stainless Steel, Nickel Aluminum Bronze, Super Duplex

Cover: Stainless Steel, Nickel Aluminum Bronze, Super Duplex

Internal Parts: Stainless Steel, Nickel Aluminum Bronze, Hastelloy, Super Duplex

Adjustment Range:

Spring	Setting range
16	15-230 psi
25*	100-365 psi



Part	Description
1	Adjusting screw
2	Locking nut
3	Tamperproof cover

Port	Size	Connections
A	3/4\" ISO-7-Rp	Outlet
C	3/4\" ISO-7-Rp	Inlet
F & D	1/4\" NPT	Pressure Gauge Port

Typical Installations

The BERMAD FP-3HC-0 direct pressure relief valve will accurately relieve pressure above a pre-set value and will seal drip tight when the pressure is below the pre-set value.

Typical installations of the BERMAD FP-3HC-0 include use as a pump casing circulation relief valve to prevent pump overheating at churn, zero flow or shut off conditions, also used for pressure build up prevention from thermal expansion in wet pipe systems and overpressure prevention downstream of pressure control/reducing valves.



Fire pump casing relief valve for overheating prevention



Pressure relief downstream of pressure control / reducing valves

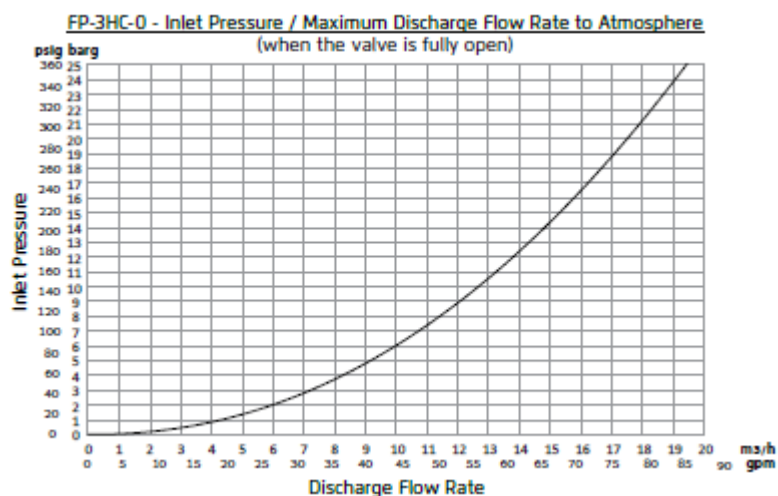
Installation

The valve can be installed in any orientation, vertical or horizontal, ensure an unrestricted relief passage from the valve to the atmosphere.

Be sure not to install the valve at any low point or at the bottom of the piping, where accumulated debris might enter the valve and hamper correct functioning.

The valve will occasionally open to release over pressure, expelling water to the atmosphere. Where relevant, install piping to direct the expelled water to a preferred drainage point.

NOTE: The model FP-3HC-0 is suitable for minimum flow fire pump applications, it is not suitable for discharging the full-rated pump capacity of a fire pump. For full rated fire pump relief valves See BERMAD Models 43T or 730-UF



Engineer Specifications

The relief valve shall be UL listed and FM approved.

The valve shall be of a diaphragm assisted direct acting type, constructed with corrosion resistant materials throughout.

The adjustment assembly shall be protected from unintended adjustment by a tamperproof wire sealable cover.

Pressure gauge ports shall be available at either side of the valve.

Each valve shall be assembled and hydraulically tested at a factory certified to ISO 9000 and 9001 standards.