

DIRECT ACTING PRESSURE RELIEF VALVE

Model DPRV-3HC

Spring loaded, direct acting relief valve that relieves excessive system pressure when such pressure rises above a preset value. It responds immediately, accurately, and with high repeatability to a rise in system pressure by opening fully. This model is often used as a pilot control for various BERMAD pilot operated models.

Features

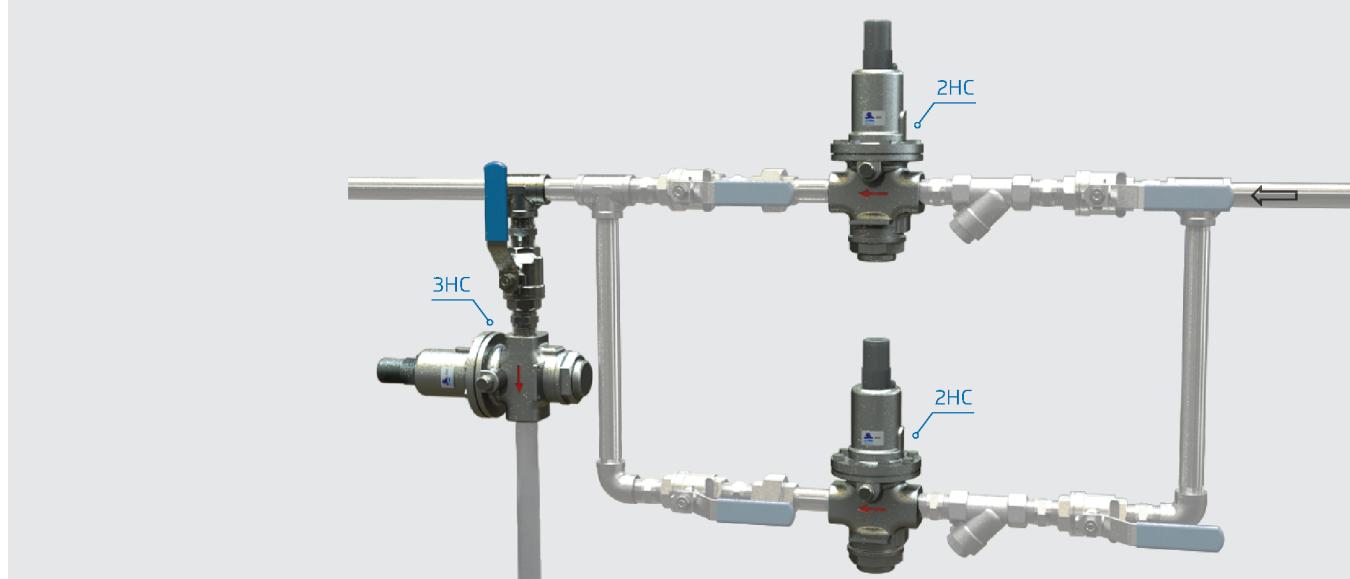
- Certified to functional and drinking water standards: EN-1074, NSF/ANSI 61/372, WRAS, AS 5081 and others
- Drip tight sealing
- Robust design – Engineered for continuous, demanding operation
- High quality construction materials
- Easy pressure adjustment



Typical Applications

- Relieves excess pressure downstream of pressure reducing stations
- Protects systems and pipelines from high pressure

Typical Installation



Pressure reducing system with redundancy featuring two BERMAD DPRV-2HC direct acting pressure reducing valves in parallel and BERMAD DPRV-3HC direct acting pressure relief valve.



Operation

Upstream pressure is applied to the bottom of the diaphragm through an internal sensing port. So long as upstream pressure is less than or equal to the set-point of the valve, the relief valve is held closed by the force exerted by the spring on the top of diaphragm. When the pressure rises above the set-point, the pressure relief valve opens to relieve the upstream pressure. When the pressure has fallen back below the set-point, the valve will close drip tight. Turning the adjusting screw allows for pressure adjustment by varying the force the spring applies to the diaphragm.

Technical Data

Pressure Rating: PN25, 400 psi

End Connections: $\frac{3}{4}$ " ISO-7 Rp, $\frac{1}{2}$ " NPT

Working Temperature: Water up to 80°C ; 180°F

Materials

Body & Cover: Stainless Steel 316

Elastomers: EPDM

Internals: Stainless Steel 316

Spring: Stainless Steel 316

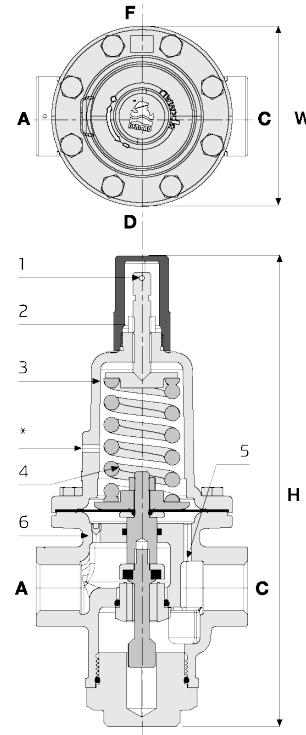
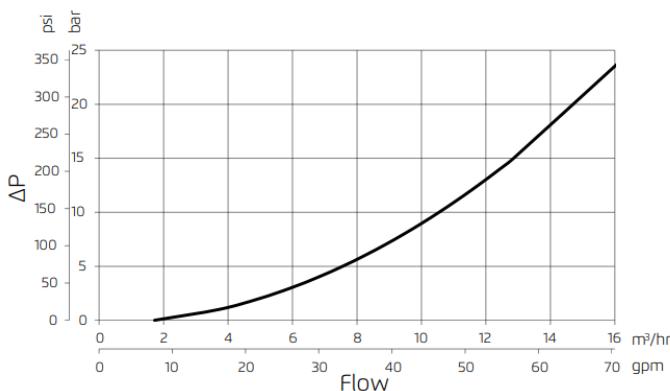
Optional Materials

Metal parts: St. St 303, Nickel Aluminum Bronze, Super Duplex, Hastelloy

Elastomers: NBR, FPM (Viton®)

Performance Data

Inlet Pressure / Maximum Discharge Flow Rate to Atmosphere(when the valve is fully open)



Part	Description
1	Adjusting screw
2	Locking nut
3	Cover
4	Spring
5	Internal sensing
6	Body

Port	Size	Connections
C	$\frac{3}{4}$ " BSP	In
A	$\frac{3}{4}$ " BSP	Out
F/D	$\frac{1}{4}$ " NPT	pressure gauge

Adjustment Range:

Model	Spring	Pressure range		1 Turn of adjusting screw = approx	
		bar	psi	bar	psi
3HC-WD-16-N (Standard)	16	1-16	15-230	2.2	31.3
3HC-WD-30-N	30	7-25	100-365	1.8	25.7