

DIRECT ACTING PRESSURE REDUCING VALVE

Model DPRV-2HC

Spring loaded, direct acting pressure reducing valve that reduces a high upstream pressure to a lower downstream pressure. This model is often used as a pilot control for various BERMAD pilot operated models.

Features

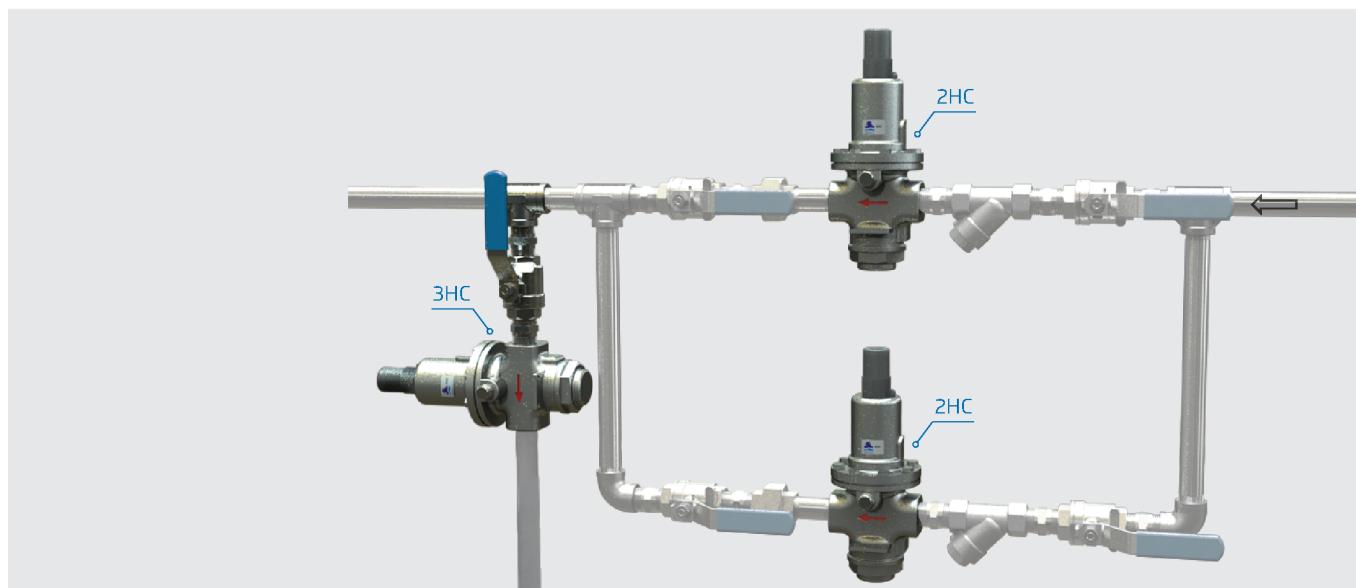
- Certified to functional and drinking water standards: EN-1074, NSF/ANSI 61/372, WRAS, AS 5081 and others
- Provides immediate and precise response to sudden operating condition changes
- Drip tight sealing
- Robust design – Engineered for continuous, demanding operation
- High quality construction materials
- In-line serviceable
- Easy pressure adjustment



Typical Applications

- Pressure reduction for small-scale systems.
- Low flow bypass for pilot-operated PRV.

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

Downstream pressure enters beneath the diaphragm into the pilot sensing chamber through an internal sensing port. When downstream pressure is at or below the set-point, the BERMAD DPRV 2HC remains open. If downstream pressure exceeds the set-point, the valve modulates toward the closed position to reduce pressure. Pressure adjustment is achieved by turning the adjustment screw, which varies the spring force applied to the diaphragm.

Technical Data

Pressure Rating: PN25, 400 psi

End Connections: 3/4" ISO-7 Rp, 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

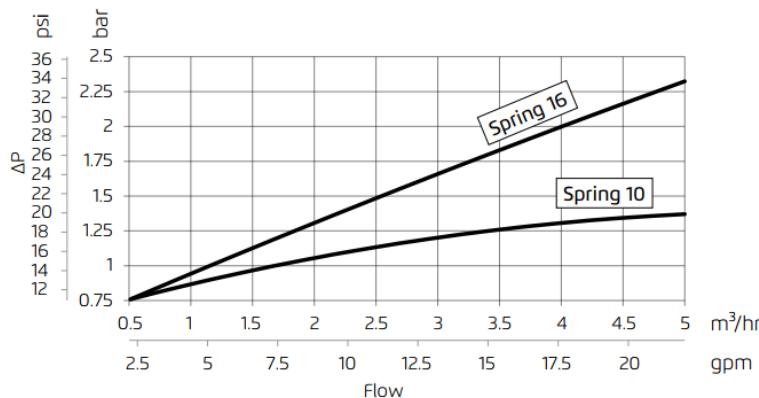
Metal parts: St. St 303, Nickel Aluminum Bronze, Super Duplex, Hastelloy

Elastomers: NBR, FPM (Viton®)

Performance Data

Recommended flow range: 0–2.8 m³/hr; 0-12 gpm

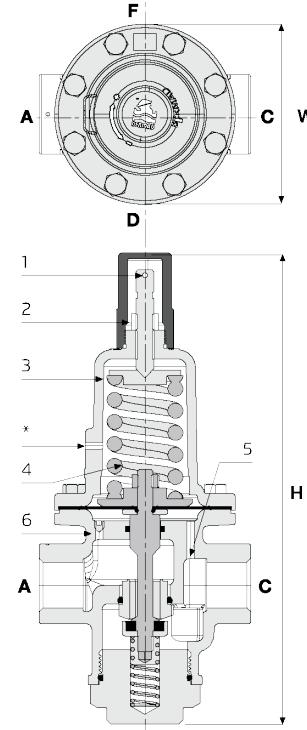
Fall-Off Pressure Chart



Reduction in downstream pressure as flow increases after a DPRV is calibrated at zero flow.

Adjustment Range:

Model	Spring	Pressure range		Approximate increase for each clockwise turn of adjusting screw	
		bar	psi	bar	psi
#2HC-WD-16-0-N (Standard)	16	1-16	15-230	2.2	31.3
#2HC-WD-10-0-N	10	0.8-10	11-150	0.6	9.0
#2HC-WD-25-0-N	25	2-25	30-350	1.8	25.7



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

Port	Size	Connections
A	3/4" BSP	In
C	3/4" BSP	Out
F/D	1/4" NPT	pressure gauge