DIRECT ACTING PRESSURE REDUCING VALVE

Model DPRV-CAP1

Spring loaded, direct acting pressure reducing valve that reduces a high upstream pressure to a lower, constant downstream pressure, regardless of fluctuating demand or varying upstream pressure. The pre-calibrated device is easily adjustable using an adjustment knob with setting indicator.

This model is often used as a low flow bypass on larger piloted pressure reducing valves like the BERMAD 720-2B or 420-2B.

The BERMAD DPRV-CAP1 series are certified according to the EN 1567 standard for use with hot water up to 80°C. In addition, they are certified in accordance with the WRAS specifications.

WRAS
Water Regulations Advisory Scheme

Technical Data

General:

End connections:
Threaded Male Union according to EN 10226-1
Pressure Gauge: ¼" F (ISO 228-1)
Max Inlet Pressure:
25 bar (static, EN 1567)
16 bar (working, EN 1567)
Downstream Pressure Range: 1-6 bar (static)
Working Temperature: Up to 80°C
Medium: Water
EN 1567 Acoustic Group: II (½"-1¼")

Main Valve Materials:

Body: dezincification resistant alloy EN 12165 CW724R
Cover: PA6G30
Internals:
Control Stem: stainless steel EN 10088-3 (AISI 303)
Moving Parts: dezincification resistant alloy EN 12165 CW724
Diaphragm: EPDM
Seals: EPDM
Strainer: stainless steel EN 10088-2 (AISI 304)
Seat:
(½"-1") PPSG40
(1¼"-2") stainless steel EN 10088-3 (AISI 303)
Cartridge: PPSG40

Typical Application

- Reduces pressure for point of use zones in high rise buildings.
- Pressure reduction in floor installations and for limited amount of fixtures.
- Low flow bypass for piloted PRV systems.

Features and Benefits

- Internal self-contained cartridge containing all the adjustment components, easily replicable in-line.
  The cartridge containing the diaphragm, strainer, seat, obturator and compensation piston in a pre-assembled self-contained unit
- Internal moving parts are made of low adherence coefficient material such as plastic to minimize the chance of lime scale formation and malfunctions.
- Compensation chamber balanced regulation allow for stable downstream pressure at variable upstream pressures.
- Y-Shaped pattern for compact dimensions at relatively high capacity and performances with low head losses.

Additional information

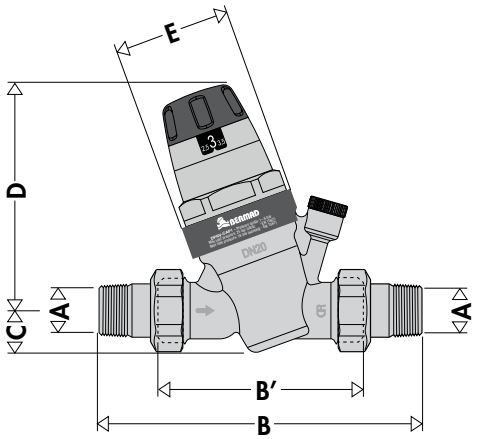
BERMAD Buildings & Construction

DPRVs Series

Potable Water • Pressure Control

Model DPRV-CAP1

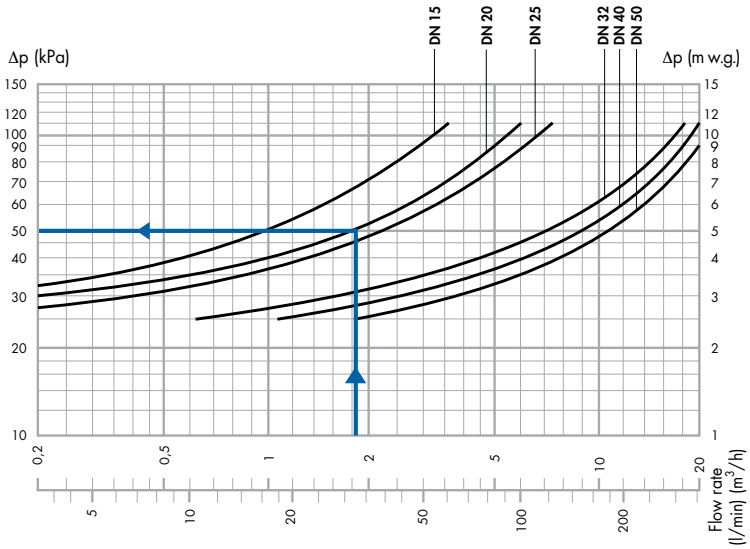
Dimensions and Weights



DN	A	B	B'	C	D	E	Weight (Kg)
15	½"	140	76	20.5	115	Ø60	0.86
20	¾"	160	90	20.5	115	Ø60	1.02
25	1"	180	95	20.5	115	Ø60	1.31
32	1¼"	200	110	40	178	Ø78	2.78
40	1½"	220	120	40	178	Ø78	3.30
50	2"	250	130	40	178	Ø78	4.41

Dimensions in millimeters

Sizing



Device size should be chosen so that work flow velocity will be 1-2 meters per second (pipeline nominal flow); working in this range will prevent noise in the pipes and rapid wear of appliances.

To predict the dynamic head loss at the expected work flow use the diagram. The intersection of expected flow and the pressure droop line of the selected device diameter will provide the deviation between static set pressure and dynamic downstream pressure.

For example, for a flow rate of 33 l/min the flow velocity in a DN20 pipe is 1.75 m/sec - within 1-2 m/sec guideline. At this flow rate of 33 l/min we will get a pressure droop of 0.5 bar on a DN20 device, as indicated by the example on the diagram.

In other words, if we set the downstream pressure to 3.0 bar at static conditions, the pressure at a flow of 33 l/min is expected to be 2.5 bar.

How to Order

Please Specify the requested valve in the following sequence:

BERMAD Segment	Size	Series	Model
BC	**1½"**	**DPRV**	**CAP1**
Buildings & Constructions	Inch mm: ½" 15; ¾" 20; 1" 25; 1¼" 32; 1½" 40; 2" 50	Direct acting Pressure Reducing Valve	Potable Water[1]: European Standards **CAP1**; North America - NSF 61/372 **CAP2**[2]

Ordering code would be

BC-1½"-DPRV-CAP1

1. BERMAD complies with a wide range of international potable water standards.Please consult with BERMAD about compliance.
2. See Relevent product page for North America model.