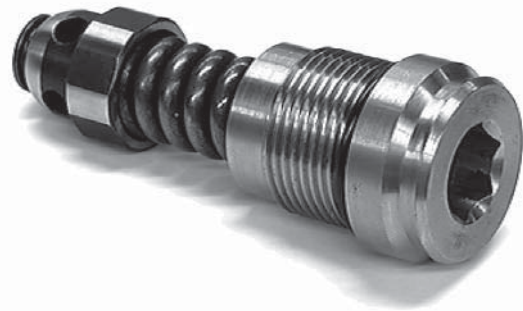
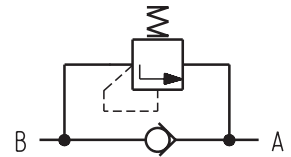


- Compact design
- High pressure capabilities
- Cartridge model – built into the mounting cavity with the seat in manifold
- Factory set pressure setting
- Simple mounting – the valve and the screw plug build up an integral unit

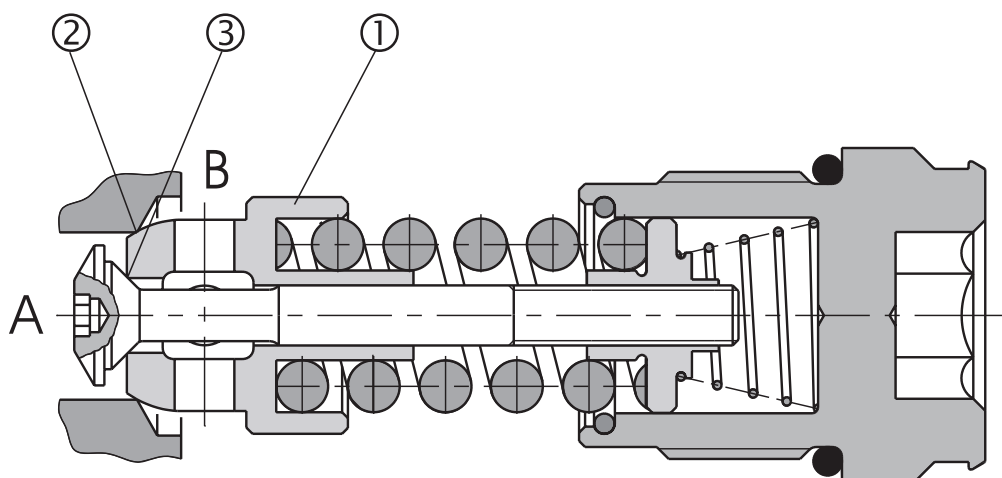


Functional Description

The high-pressure relief-check valve DBV2-420 is delivered as a cartridge unit without bushing, i.e. for direct mounting into the cavity with the seat machined directly in the manifold. In the direction A-B the fluid passes freely through the check valve (1). The direction B-A is closed by main seat (2) and as the pressure

increases above the factory set value the fluid is drained through the seat of the main cone (3). The adjusted pressure is defined as the pressure, which is necessary to open the relief valve at the flow rate 20 L/min (5.28 GPM).

The valve is delivered without any surface treatment.



Ordering Code

DBV2 - 420

Combined Relief-Check Valves

Pressure
adjusted pressure 420 bar (6092 PSI)

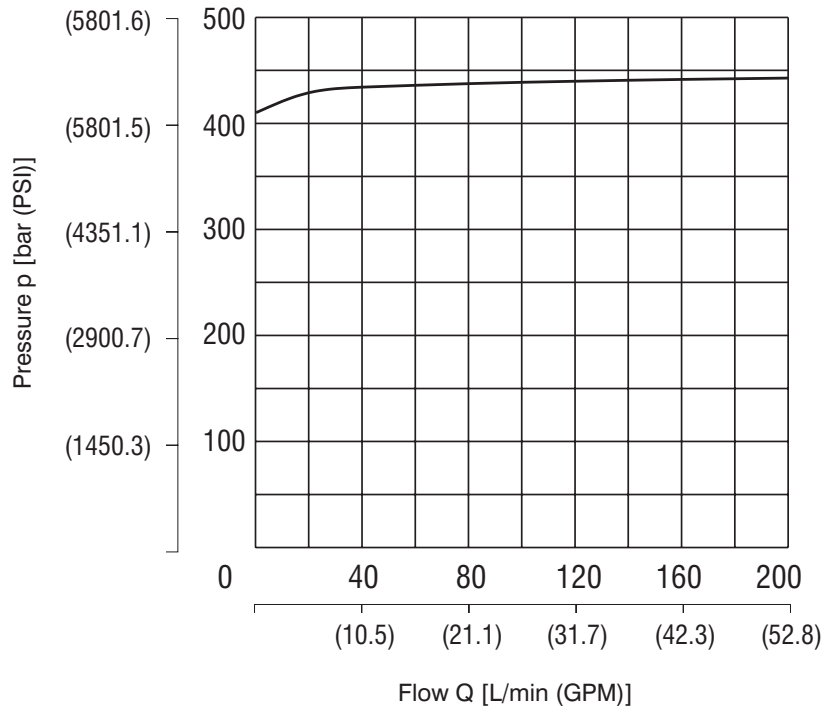
Technical Data

Nominal size	mm	10
Maximum flow rate	L/min (GPM)	200 (52.84)
Nominal pressure	bar (PSI)	420+15 (6091+218)
Pressure losses	bar (PSI)	see the characteristics
Hydraulic fluid		Hydraulic oils of power classes (HL, HLP) to DIN 51 524
Fluid temperature range	°C (°F)	-30 ... +100 (-22 ... +212)
Viscosity range	mm ² /s (SUS)	20 ... 400 (97.3 ... 1840)
Maximum degree of fluid contamination		Class 21/18/15 to ISO 4406 (1999)
Weight	kg (lbs)	0,138 (0.300)
Mounting position		optional

p-Q Characteristics

Measured at $v = 32 \text{ mm}^2/\text{s}$ (156 SUS)

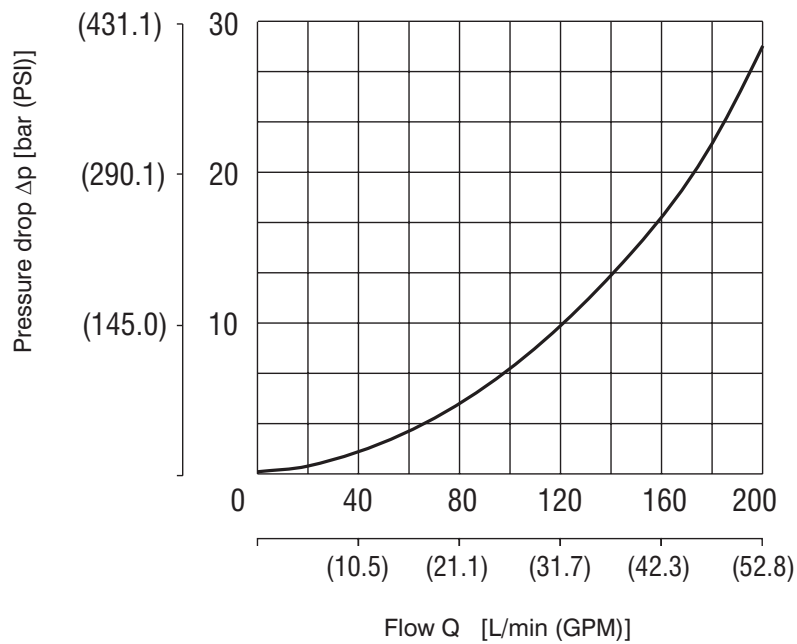
Pressure Relief Valve, flow direction B → A
 Static characteristic



Δp-Q Characteristics

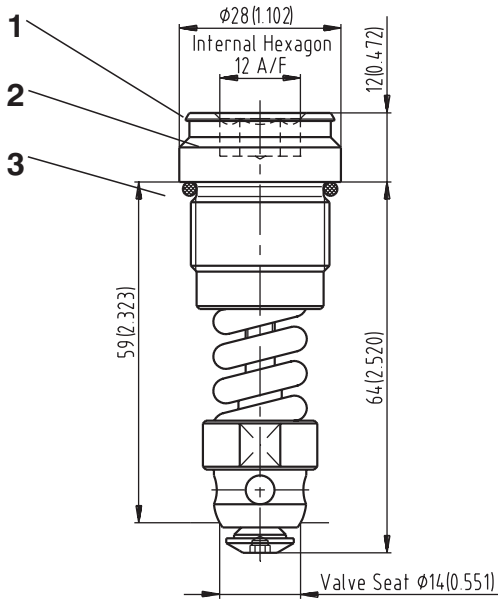
Measured at $v = 32 \text{ mm}^2/\text{s}$ (156 SUS)

Check Valve, flow direction A → B
 Pressure drop of the check valve alone, measure at test manifold.



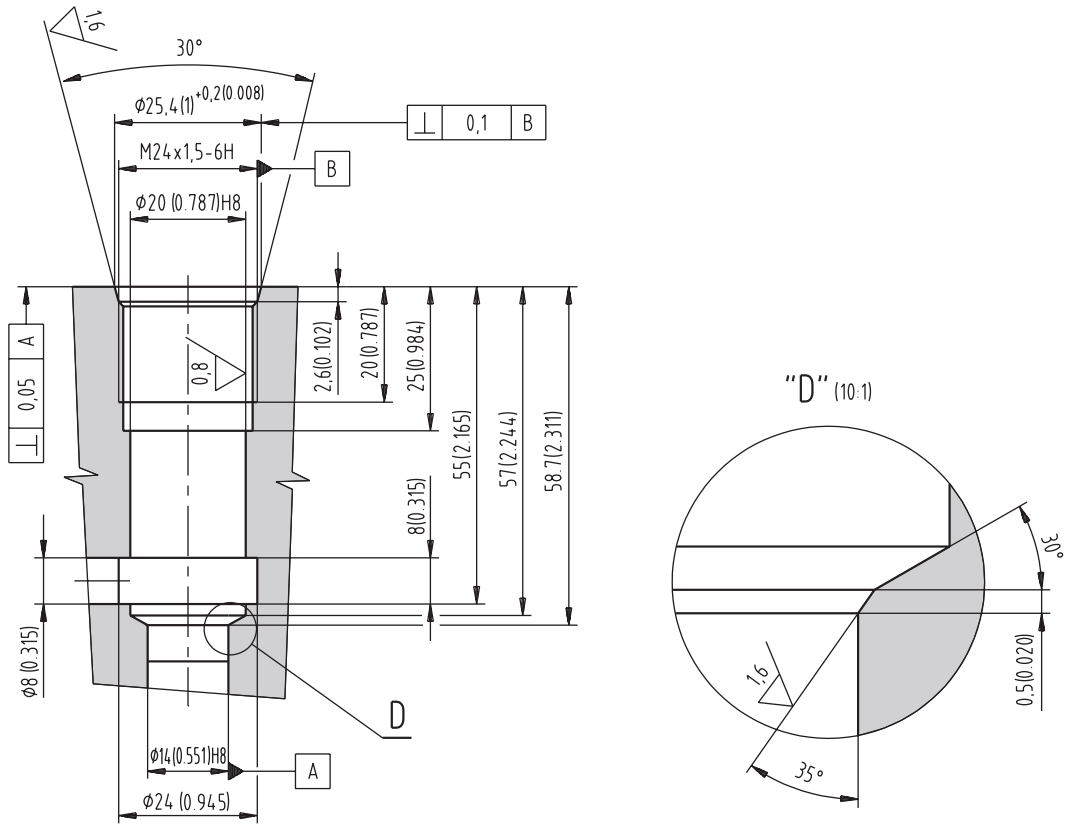
Valve Dimensions

Dimensions in millimeters and inches



- 1 Nominal pressure
- 2 Inside hexagon for valve mounting into the cavity
Tightening torque 50 + 10 Nm (36.97 + 7.37 ft-lbs)
- 3 Seals: O-Ring 20.35 x 1.78
(supplied with valve)

Cavity



Caution!

- The packing foil is recyclable.
- The technical information regarding the product presented in this catalogue is for descriptive purposes only. It should not be construed in any case as a guaranteed representation of the product properties in the sense of the law.

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