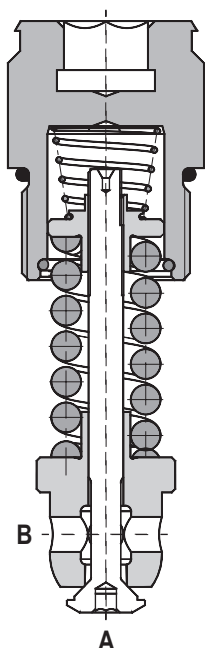


Pressure Relief Valve with Reverse Flow Check, Poppet Type, Not Adjustable

DBV3

M24 x 1,5 • Q_{max} 200 l/min (53 GPM) • p_{max} 480 bar (7000 PSI)



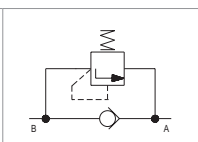
Technical Features

- › Excellent stability throughout flow range with rapid response to dynamic pressure changes
- › Low hysteresis, accurate pressure control and low pressure drop through CFD optimized flow paths
- › Adjustable pressure range 160-480 bar
- › Factory pre-set, non adjustable version only
- › Hardened precision parts
- › Sharp-edged steel seats for dirt-tolerant performance
- › Leak-free closing, suitable for fast cycling with long life
- › One-way bypass valve with suction function
- › In the standard version, the valve is zinc-coated for 240 h protection acc. to ISO 9227.
Enhanced surface protection for mobile sector available for the steel parts (ISO 9227, 520 h salt spray)

Functional Description

A direct acting, poppet type hydraulic relief valve in the form of a screw-in cartridge with reverse flow check intended for use as a pressure limiting and anti-cavitation device for common hydraulic circuit protection. The spring acts on the poppet and presses it on the valve seat. If the hydraulic pressure is below the pre-set value, the valve is closed. If the hydraulic force exceeds the pre-set value, the valve opens and flow passes to the tank port until the system pressure drops below the spring pre-set value and the valve closes again.

Symbol



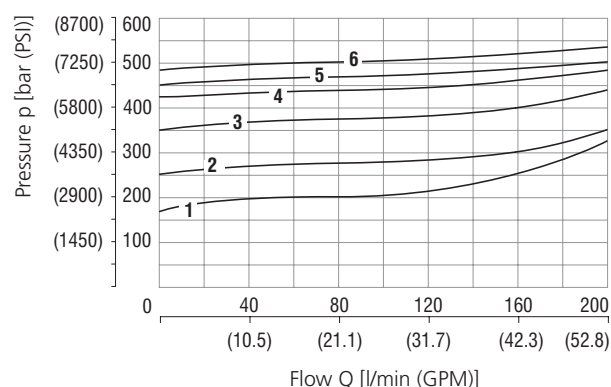
Technical Data

Valve size / Cartridge cavity	M24 x 1,5 / QH2	
Max. flow	l/min (GPM)	200 (52.8)
Max. operating pressure	bar (PSI)	480 (6960)
Fluid temperature range (NBR)	°C (°F)	-30... + 100 (-22 ... +212)
Fluid temperature range (FPM)	°C (°F)	-20 ... +120 (-4 ... +248)
Weight	kg (lbs)	0.16 (0.36)
	Datasheet	Type
General information	GI_0060	Products and operating conditions
Cavity details	SMT_0019	SMT-QH2 *
Spare parts	SP_8010	

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

Relief pressure related to flow rate

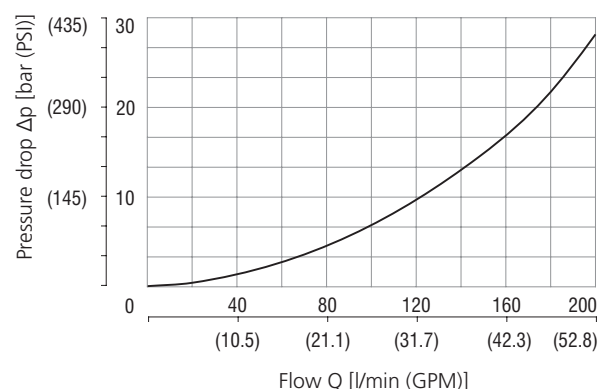
Pressure relief function, flow direction 2 - 1



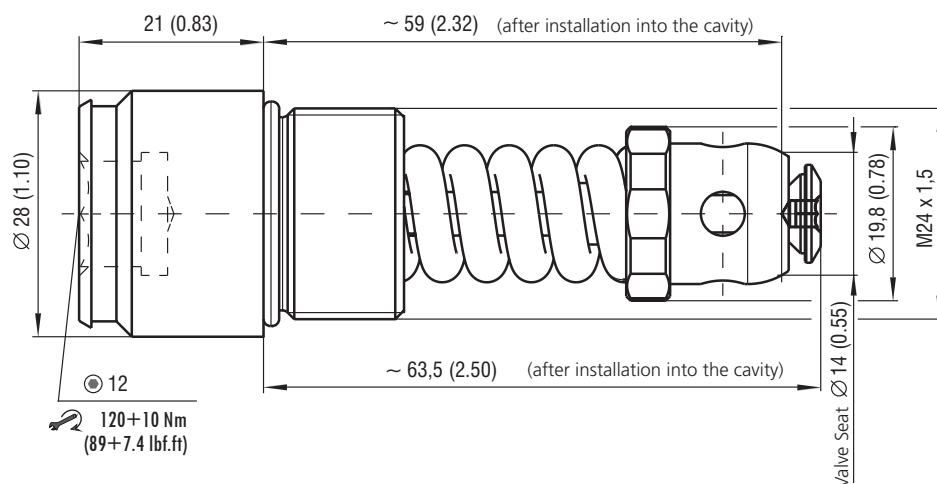
Pressure range					
1	2	3	4	5	6
160	250	350	420	450	480

Pressure drop related to flow rate

Check valve function, flow direction 1 - 2



Dimensions in millimeters (inches)



Ordering Code

DBV 3 - <input type="text"/> / 4 - <input type="text"/> - <input type="text"/>			
Pressure relief valve with reverse flow check, poppet type, direct acting, non-adjustable	Design stage	Adjusted cracking pressure	<p>160</p> <p>250</p> <p>350</p> <p>420</p> <p>450</p> <p>480</p>
No designation	No designation	Seals	<p>NBR</p> <p>FPM (Viton)</p>
M1	S1	Model	<p>M24 x 1,5</p> <p>SAE 12</p>

*All standard valves settings are at flow 4 l/min (1.06 GPM)