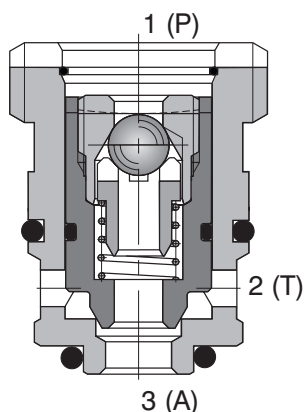


Load Shuttle Valve, Kick Down, Ball-type

VJL2-304

M22x1.5 • Q_{max} 15 l/min (4 GPM) • p_{max} 210 bar (3000 PSI)

Model M, G

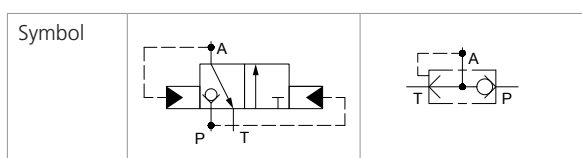


Technical Features

- › Rapid response to changes in load direction
- › Hardened precision parts
- › Sharp-edged steel seats for dirt-tolerant performance
- › Leak-free closing, suitable for fast cycling with long life
- › Compact design for limited installation space availability
- › In the standard version, the valve is without surface coating

Functional Description

A poppet-type hydraulic directional shuttle valve in the form of a screw-in cartridge for use in single acting cylinder applications. Pressure at port 1(P) opens the ball check valve, allowing fluid to pass to port 3(A). The poppet tightly closes the connection between ports 3(A) and 2(T). If there is no pressure at port 1(P), any pressure at port 3(A) - like from a cylinder's return spring - causes the poppet to shift such that fluid can pass from 3(A) to 2(T) but not from 3(A) and 1(P).



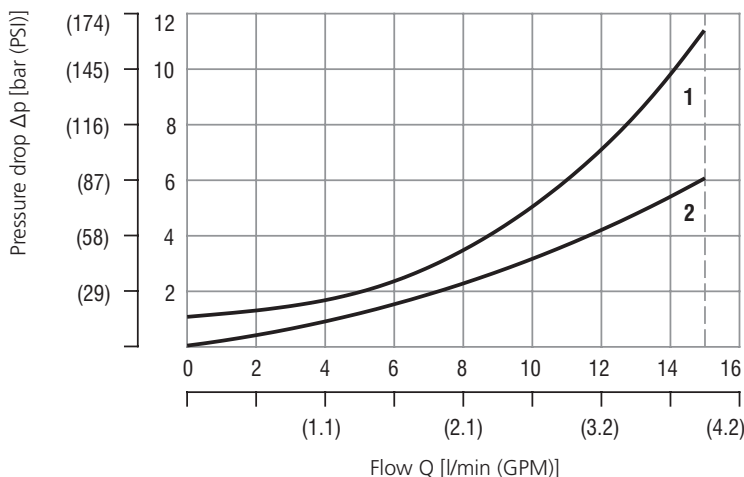
Technical Data

| Valve size / Cartridge cavity | | M22x1,5 / QG3 |
|-------------------------------|-------------|-----------------------------|
| Max. flow | l/min (GPM) | 15 (4) |
| Max. operating pressure | bar (PSI) | 210 (3000) |
| Cracking pressure | bar (PSI) | 2 ± 0.5 (29) |
| Fluid temperature range (NBR) | °C (°F) | -30 ... +100 (-22 ... +212) |
| Fluid temperature range (FPM) | °C (°F) | -20 ... +120 (-4 ... +248) |
| Mass | kg (lbs) | 0.04 (0.088) |

| | Datasheet | Type |
|---------------------|-----------|-----------------------------------|
| General information | GI_0060 | Products and operating conditions |
| Cavity details | SMT_0019 | SMT-QG3* |
| Spare parts | SP_8010 | |

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

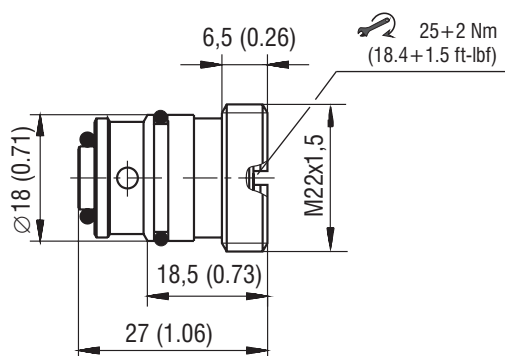
Pressure drop related to flow rate



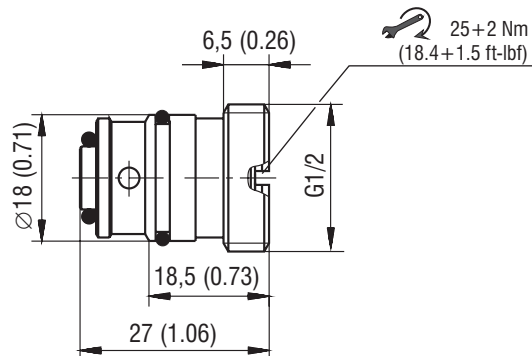
| | Flow direction |
|---|----------------|
| 1 | P (1) → A (3) |
| 2 | A (3) → T(2) |

Dimensions in millimeters (inches)

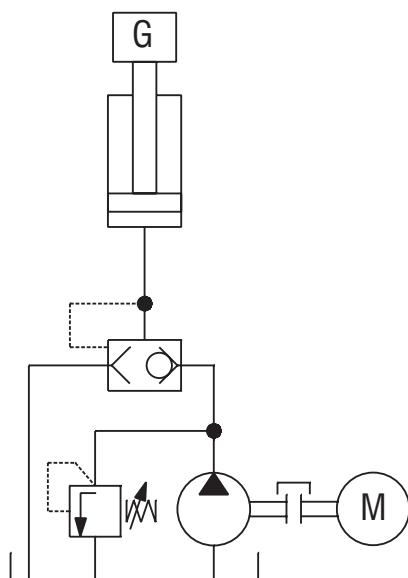
Model M



Model G



Application example



Ordering Code

