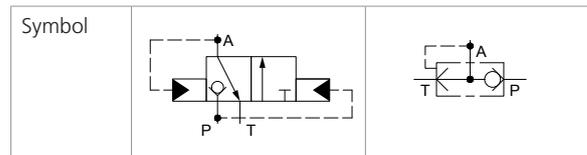


Technical Features

- › Rapid response to changes in load direction
- › Hardened precision parts
- › Sharp-edged steel seats for dirt-tolerant performance
- › Leak-free closing, suitable for durable fast-cycling
- › High flow capacity
- › In the standard version, the valve is zinc-coated for 240 h protection acc. to ISO 9227

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), pressure at port 3(A) –via the cylinder return spring - causes the poppet to shift so that fluid can pass from 3(A) to 2(T) but not from 3(A) and 1(P).



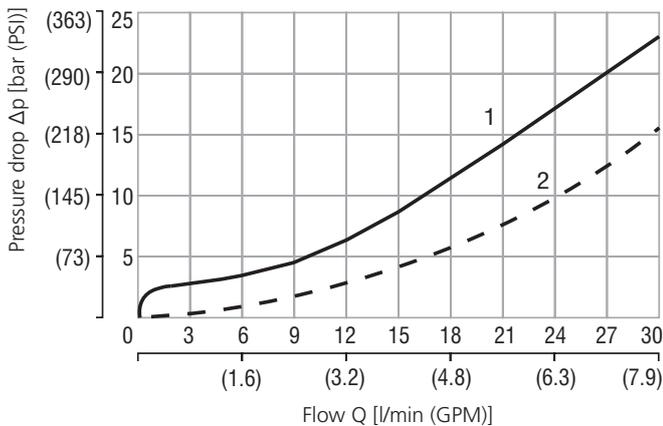
Technical Data

Valve size / Cartridge cavity		3/4-16 UNF-2A / A3 (C-8-3)
Max. flow	l/min (GPM)	20 (5.3)
Max. operating pressure	bar (PSI)	250 (3630)
Cracking pressure	bar (PSI)	2 ± 0.5 (29 ± 7 PSI)
Fluid temperature range (NBR)	°C (°F)	-30 ... +100 (-22 ... +212)
Fluid temperature range (FPM)	°C (°F)	-20 ... +120 (-4 ... +248)
Weight	kg (lbs)	0.08 (0.18)

	Datasheet	Type
General information	GI_0060	Products and operating conditions
Cartridge cavity / Form tools	SMT_0019	SMT-A3
Spare parts	SP_8010	

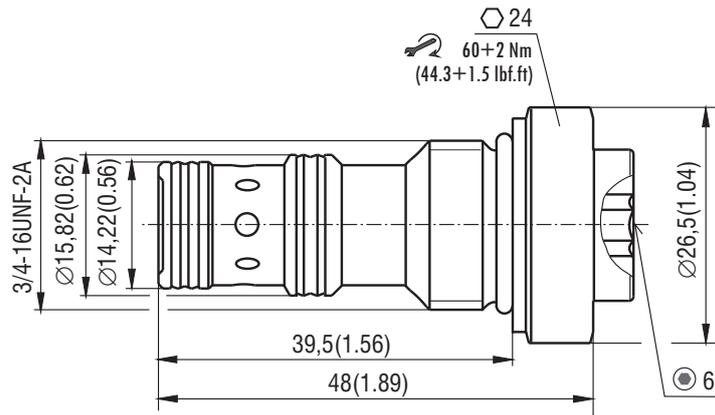
Characteristics measured at $v = 32 \text{ mm}^2/\text{s}$ (156 SUS)

Pressure drop related to flow rate

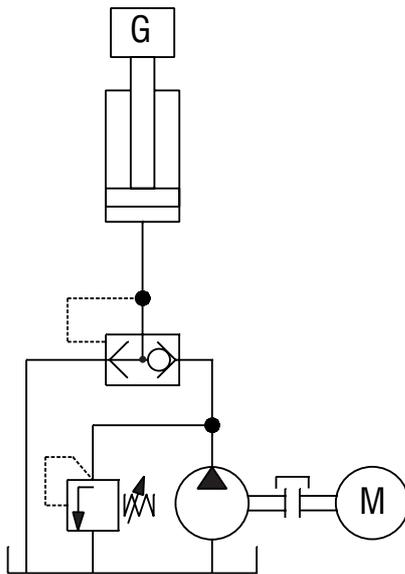


	Flow direction
1	P (1) → A (3)
2	A (3) → T (2)

Dimensions in millimeters (inches)



Application example



Ordering Code

	SH1F-A3 / L	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Load shuttle valve, kick down					
Valve cavity 3/4-16 UNF (C-8-3)					
Version Lightline					
Cracking pressure 2 ± 0.5 bar (29 ± 7 PSI)					
					020
					No designation
					V
					Seals NBR FPM (Viton)
					Surface treatment A zinc-coated (ZnCr-3), ISO 9227 (240 h) B zinc-coated (ZnNi), ISO 9227 (520 h)