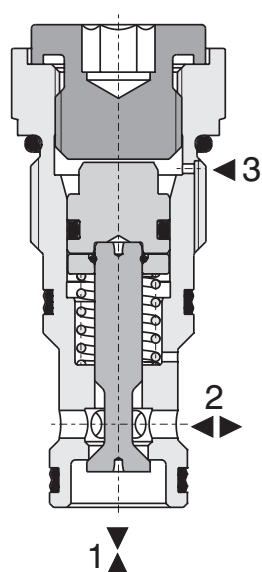


Check Valve, Poppet-type, Pilot to Open

SC5H-BP3/H

7/8-14UNF • Q_{max} 60 l/min (16 GPM) • p_{max} 420 bar (6100 PSI)



Technical Features

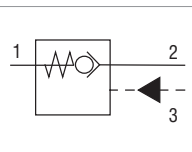
- › Hardened and precision working parts
- › Sharp-edged ground steel seats for dirt-tolerant performance
- › Leak-free closing and suitable for fast cycling with long life
- › High flow capacity
- › Optional sealed piston and bias spring ranges for back-pressure control
- › In the standard version, the valve is zinc-coated for 240 h protection acc. to ISO 9227

Functional Description

The valve allows flow to pass from port 2 to 1 while normally closing flow from 1 to 2 with load. When pressure is applied at port 3. The flow passes from port 1 to 2.

The cartridge valve has a 3:1 pilot ratio. This requires minimum one-third of the load pressure applied at port 3 to open the valve. The check valve is also spring closed to secure holding position in static conditions without the load.

Symbol



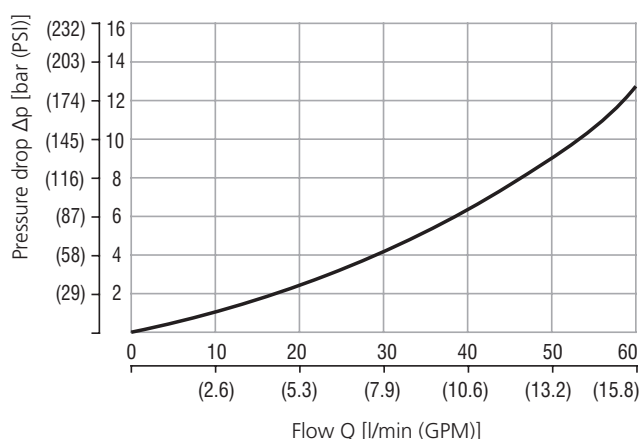
Technical Data

Valve size / Cartridge cavity		7/8-14UNF-2A - LONG / BP3
Max. flow	l/min (GPM)	60 (15.8)
Max. operating pressure	bar (PSI)	420 (6090)
Pilot ratio		3:1
Fluid temperature range (NBR)	°C (°F)	-30 ... +100 (-22 ... +212)
Fluid temperature range (FPM)	°C (°F)	-20 ... +120 (-4 ... +248)
Mass	kg (lbs)	0.13 (0.29)

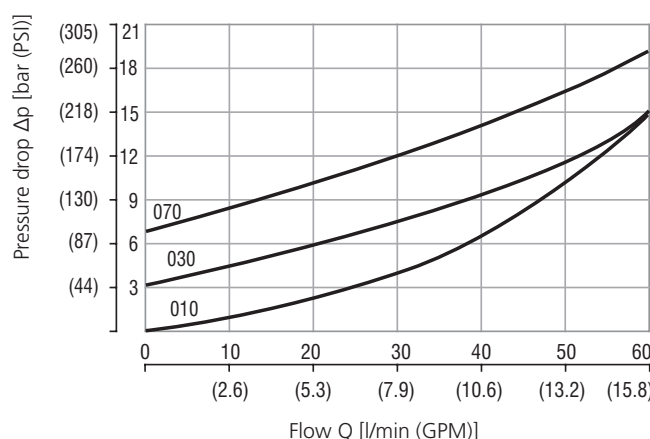
		Datasheet	Type
General information		GI_0060	Products and operating conditions
Valve bodies	In-line mounted	SB_0018	SB-BP3*
	Sandwich mounted	SB-04(06)_0028	SB-BP3*
Cavity details		SMT_0019	SMT-BP3*
Spare parts		SP_8010	

Characteristics measured at $v = 40 \text{ mm}^2/\text{s}$ (195 SUS)

Pressure drop related to flow rate

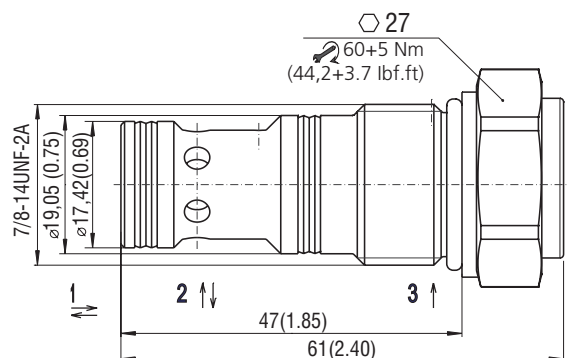


pilot open (1→2)



free flow (2→1)

Dimensions in millimeters (inches)



Ordering Code

SC5H-BP3/H				-		-	
Check valve, pilot to open, poppet-type	7/8-14UNF	3:1	3	No designation	V	Surface treatment B 520 h salt spray test (ISO 9227)	Seals NBR FPM (Viton)
Pilot ratio standard							
Optional pilot piston seal		No designation		010		Free flow cracking pressure	
without pilot piston seal				030		1 bar (14.5 PSI)	
with pilot piston seal		S		070		3 bar (43.5 PSI)	
						7 bar (101.5 PSI)	