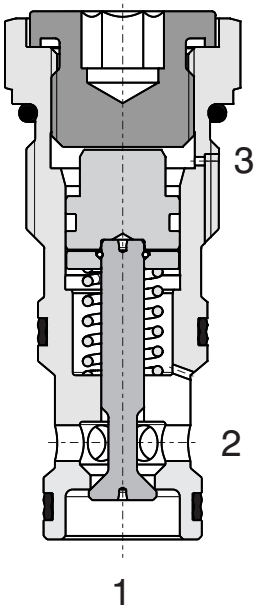
## Check Valve, Poppet-type, Pilot to Open

# SC5H-CP3

1-1/16-12 UN • $Q_{max}$ 120 l/min (32 GPM) • $p_{max}$ 350 bar (5100 PSI)



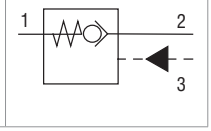

## Technical Features

› 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 520 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 pilot ratio (ratio of piston area to seat area) defines the minimum ratio of opening pressure (3) to load pressure (1). The check valve is also spring closed to secure holding position in static conditions without the load.

Symbol



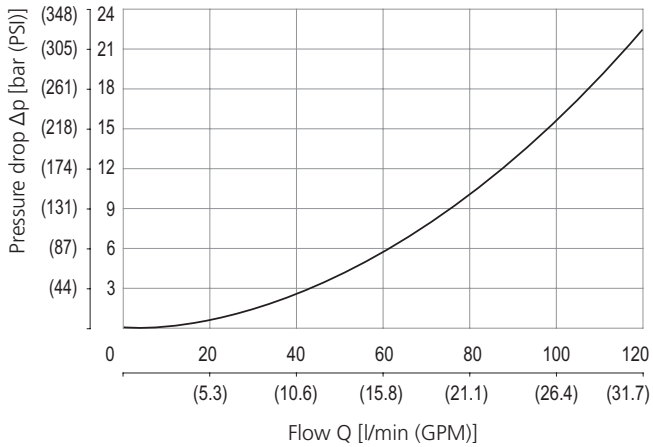

## Technical Data

| Valve size / Cartridge cavity | | 1-1/16-12 UN-2A / CP3 | |
|---|---|---|---|
| Max. flow | l/min (GPM) | 120 (31.7) | |
| Max. operating pressure | bar (PSI) | 350 (5080) | |
| Pilot ratio | | 3:1 | 5:1 |
| Fluid temperature range (NBR) | °C (°F) | -30 ... +100 (-22 ... +212) | |
| Fluid temperature range (FPM) | °C (°F) | -20 ... +120 (-4 ... +248) | |
| Weight | kg (lbs) | 0.22 (0.49) | |

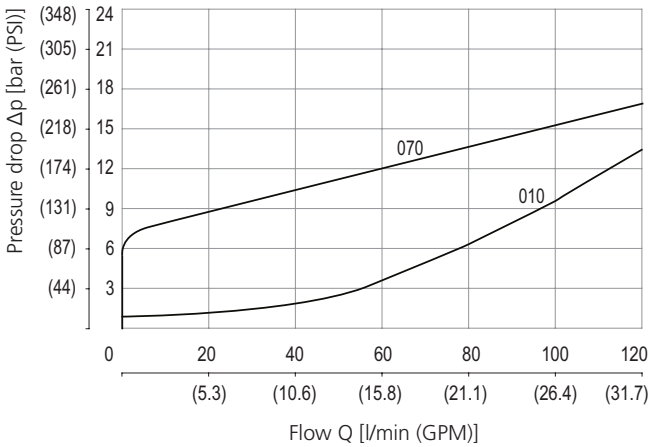
| | | Datasheet | Type |
|---|---|---|---|
| General information | | GI_0060 | Products and operating conditions |
| Valve bodies | In-line mounted | SB_0018 | SB-CP3* |
| | Sandwich mounted | SB-04(06)_0028 | SB-CP3* |
| Cavity details | | SMT_0019 | SMT-CP3* |
| Spare parts | | SP_8010 | |

## Characteristics measured at ν = 40 mm²/s (195 SUS)

**Pressure drop related to flow rate for pilot ratio 3:1**



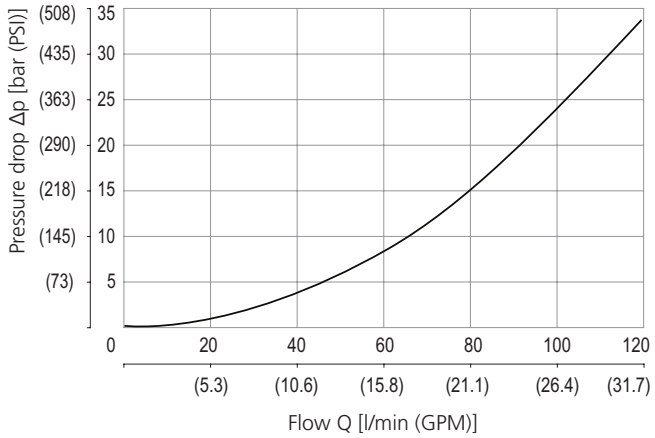

pilot open (1→2)



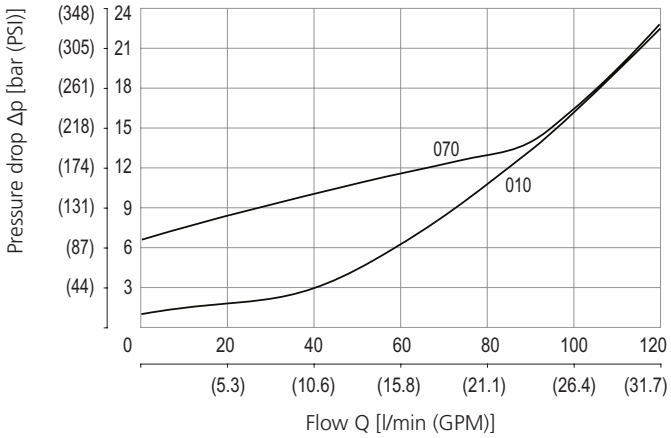

free flow (2→1)

## Characteristics measured at ν = 40 mm²/s (195 SUS)

**Pressure drop related to flow rate for pilot ratio 5:1**

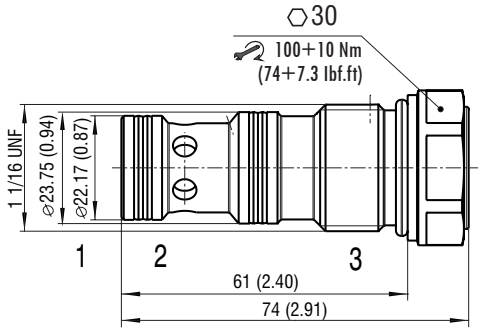



pilot open (1→2)




free flow (2→1)

## Dimensions in millimeters (inches)




## Ordering Code

**SC5H - CP3 / H □ □ - □ □ - B**

**Check valve, poppet-type, pilot to open**

**Valve cavity**
1-1/16-12 UN

**Model**
High performance

**Pilot ratio**

| | |
|---|---|
| 3:1 | **3** |
| 5:1 | **5** |

**Optional pilot piston seal**

| | |
|---|---|
| without pilot piston seal | **No designation** |
| with pilot piston seal | **S** |

**Free flow cracking pressure**

| | |
|---|---|
| **010** | 1 bar (14.5 PSI) |
| **070** | 7 bar (101.5 PSI) |

**Seals**

| | |
|---|---|
| **No designation** | NBR |
| **V** | FPM (Viton) |

**Surface treatment**
zinc-coated (ZnNi), ISO 9227 (520 h)