



Overview



Description

The PS10-S38X is a screw-in, cartridge style, pilot operated, sequence valve with reverse free flow check valve, intended for use in demanding hydraulic circuits which require fast response, low hysteresis, low leakage, low pressure rise and reverse free flow features.

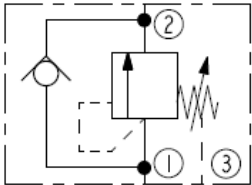
Operation

The PS10-S38X blocks flow from port 1 to port 2 until sufficient pressure is present at port 1, opening the flow path from port 1 to port 2. Reverse flow from port 2 to port 1 occurs when pressure at port 2 is higher than pressure at port 1. Port 3 is the spring chamber vent, and pressure at port 3 is cumulative to the setting.

Features

- Low hysteresis
- Low leakage
- Low pressure rise
- Free reverse flow check
- Three spring ranges from 13 to 350 bar (233 to 5076 psi)
- Hardened spool and cage for long life

Symbol



Ratings

Pressure Ratings

| | |
|------------------------|--|
| Pressure rating | 350 bar (5076 psi) |
| Proof pressure | 420 bar (6092 psi) |
| Proof pressure | 420 bar (6092 psi) |
| Burst pressure | 965 bar (14000 psi) |
| Crack pressure defined | Pressure evident at 0.95 lpm (0.25 gpm) flow |

Flow Ratings

| | | |
|--------------------------|-----------------------------------|---|
| Flow rating | 60 lpm (15.9 gpm) | - Note: Port 1 to port 2 |
| Maximum internal leakage | 0.65 ml/min (10 drops per minute) | - Note: Port 1 to 2 at 85% of nominal setting |

Temperature Ratings

| | | |
|-----------------------------|-------------------------------|---------------------------------|
| Operating fluid temperature | -30 to 100 °C (-22 to 212 °F) | - Note: With Buna N seals |
| | -26 to 204 °C (-15 to 400 °F) | - Note: With fluorocarbon seals |
| Storage temperature | -40 to 70 °C (-40 to 160 °F) | |
| Ambient temperature | -40 to 70 °C (-40 to 160 °F) | |



Operating Parameters

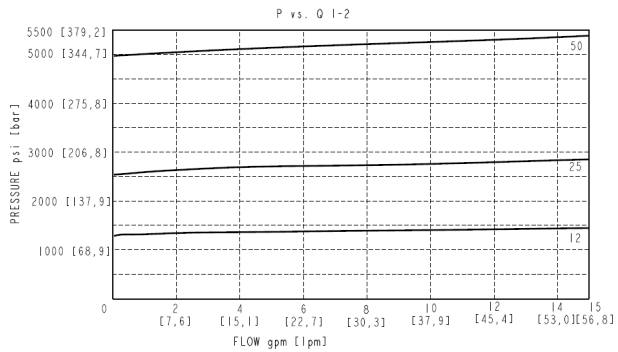
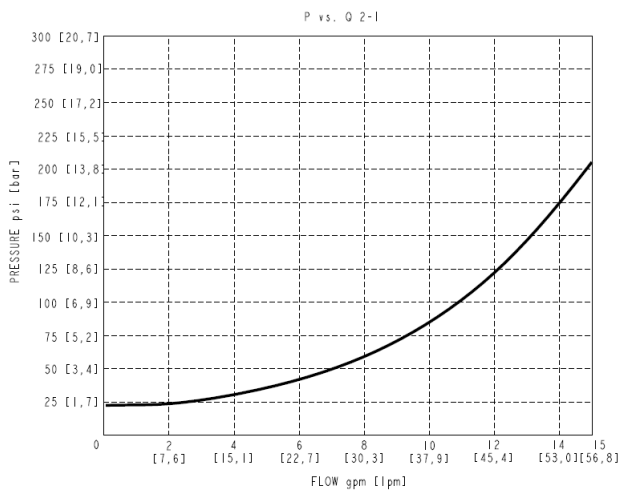
Fluids

| | |
|---------------------------------------|---|
| Fluids | Mineral based or synthetic with lubricating properties |
| Fluid viscosity range | 10 to 500 cSt |
| Maximum operating contamination level | 19/17/14 per ISO 4406 10 ¹ / ₂ m (NAS 8) |

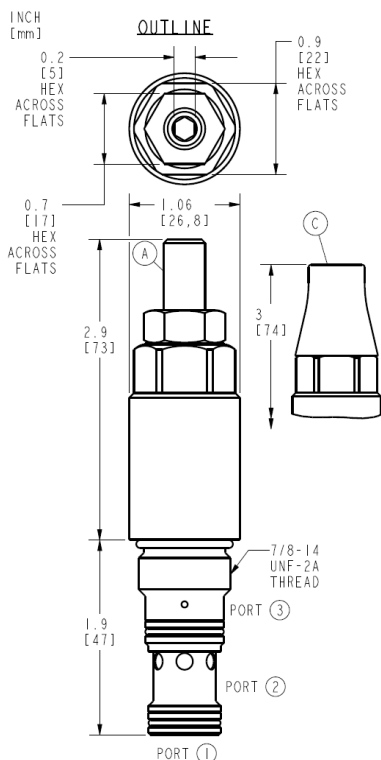
Properties

| | | |
|-----------------------------------|---|------------------------|
| Unit weight | 0.3 kg (0.66 lb) | |
| Internal wetted surface area | 110 cm ² (17.1 in ²) | |
| Pressure change per adjuster turn | 16 bar (232 psi) | - Note: Spring code 12 |
| | 57 bar (827 psi) | - Note: Spring code 25 |
| | 122 bar (1769 psi) | - Note: Spring code 50 |

Performance



Dimensions





Installation Specifications

| | |
|-------------------------------|-----------------------------------|
| Cavity | VC10-S3 |
| Cartridge installation torque | 41 to 47 N-m (30.2 to 34.7 ft-lb) |
| Orientation restriction | None |

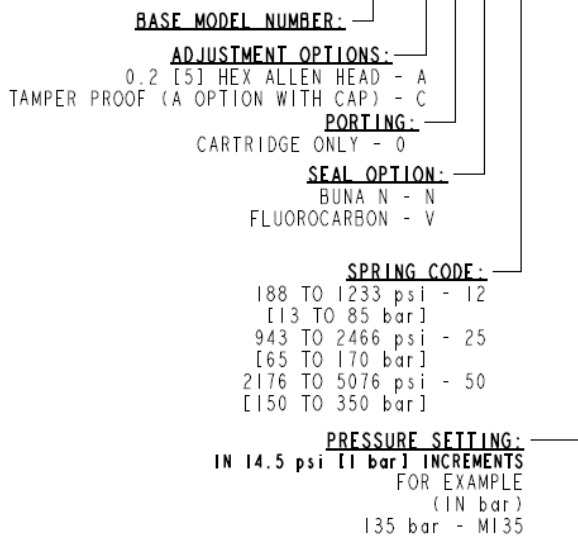
Accessories

| | | |
|----------|-------------|-------------------------------|
| Seal kit | SK10-S3X-BB | - Note: X=seal options |
|----------|-------------|-------------------------------|

Order Code

ORDERING INFORMATION:

PS10-S38X-0-X-XX/XXXX



Model Options

PS10-S38F-H-J-R/S

F Adjustment Option

| CODE | DESCRIPTION |
|------|------------------------------------|
| A | 5 mm Hex Allen Head |
| C | 5 mm Hex Allen Head with Cover Cap |

H Line Body

| CODE | DESCRIPTION |
|------|----------------------------|
| 0 | No Body |
| 6T | Aluminum SAE 6 |
| 8T | Aluminum SAE 8 |
| 6TD | Ductile Iron SAE 6 |
| 8TD | Ductile Iron SAE 8 |
| 3B | Aluminum BSPP 3/8" (3) |
| 3BD | Ductile Iron BSPP 3/8" (3) |

J Seal

| CODE | DESCRIPTION |
|------|--------------|
| N | Buna-N |
| V | Fluorocarbon |

R Spring



| CODE | DESCRIPTION |
|------|--|
| 12 | 13 to 85 bar (188 to 1233 psi) Spring Range |
| 25 | 65 to 170 bar (943 to 2466 psi) Spring Range |
| 50 | 150 to 350 bar (2176 to 5076 psi) Spring Range |

S Setting

| CODE | DESCRIPTION |
|------|--------------------------------------|
| MXXX | Pressure Setting in 1 bar increments |