



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.

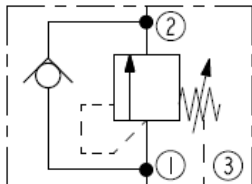
Operation

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)
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

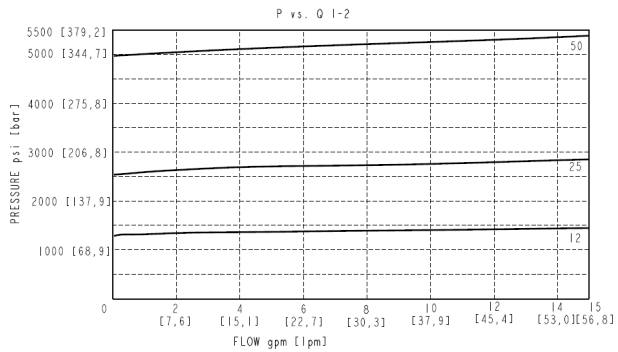
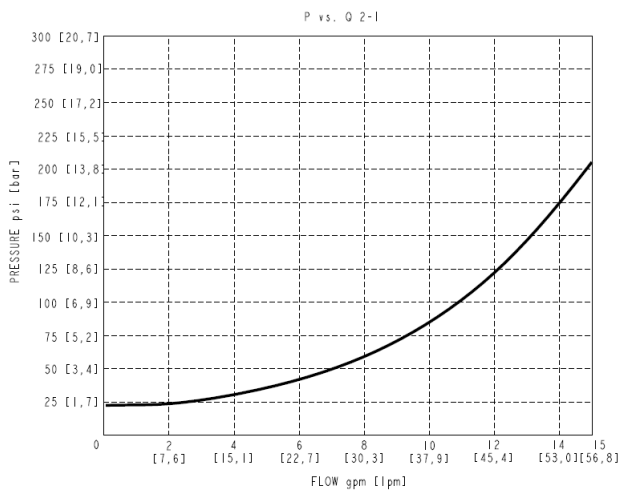
Fluids

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)

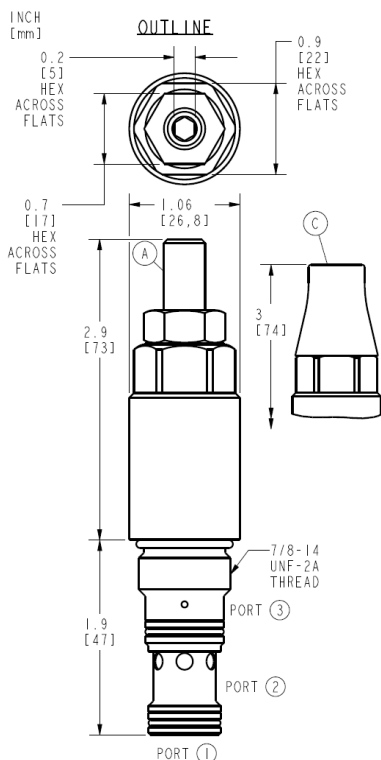
Properties

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) 57 bar (827 psi) 122 bar (1769 psi)	<ul style="list-style-type: none"> - Note: Spring code 12 - Note: Spring code 25 - 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

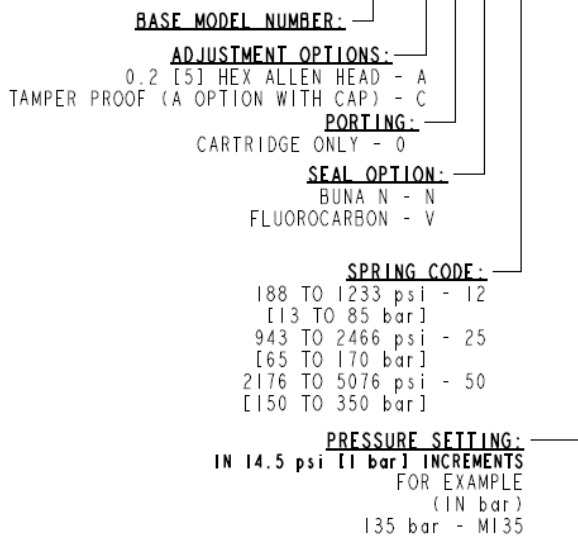
Accessories

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