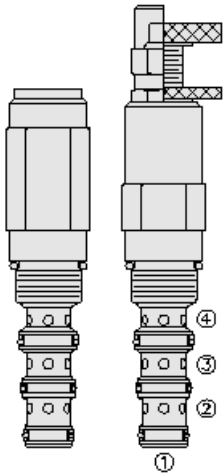




## Overview



### Description

The PS50-40X is a spool type, direct acting, adjustable, external pilot hydraulic sequence valve with externally vented spring chamber

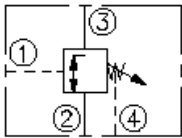
### Operation

The PS50-40X blocks flow between ports 2 and 3 bidirectionally. The spring chamber is constantly vented at port 4. On attainment of the valve pressure setting at port 1, the spool shifts to open ports 2 and port 3 bidirectionally. Pressure at port 4 is additive to the spring setting at a 1:1 ratio

### Features

- Adjustments cannot be backed out of the valve.
- Adjustments prohibit springs from going solid.
- Optional spring ranges to 241 bar (3500 psi).
- Hardened precision spool and cage for long life.
- Industry-common size.

### Symbol



## Ratings

### Pressure Ratings

Pressure rating	413.7 bar (6000 psi) 344.7 bar (5000 psi) 68.9 bar (1000 psi)	- <b>Note:</b> Port 1 - <b>Note:</b> Ports 2, 3 - <b>Note:</b> Port 4
Proof pressure	482.6 bar (7000 psi)	
Burst pressure	965.3 bar (14000 psi)	

### Flow Ratings

Flow rating	37.8 lpm (10 gpm)	
Maximum internal leakage	164 ml/min (10 in <sup>3</sup> /min)	- <b>Note:</b> Max to 85% of pressure setting

### Temperature Ratings

Operating fluid temperature	-54 to 107 °C (-65 to 225 °F)	- <b>Note:</b> With polyurethane seals - <b>Note:</b> With urethane seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 90 °C (-40 to 194 °F)	

## Operating Parameters

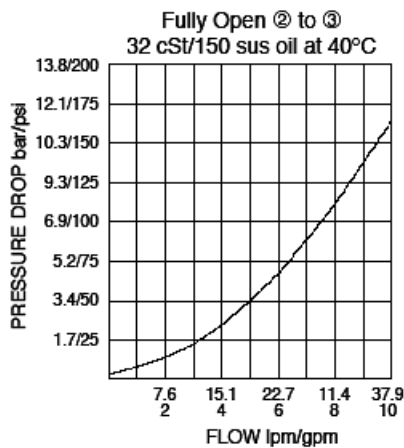
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	20/18/14 per ISO 4406

## Properties

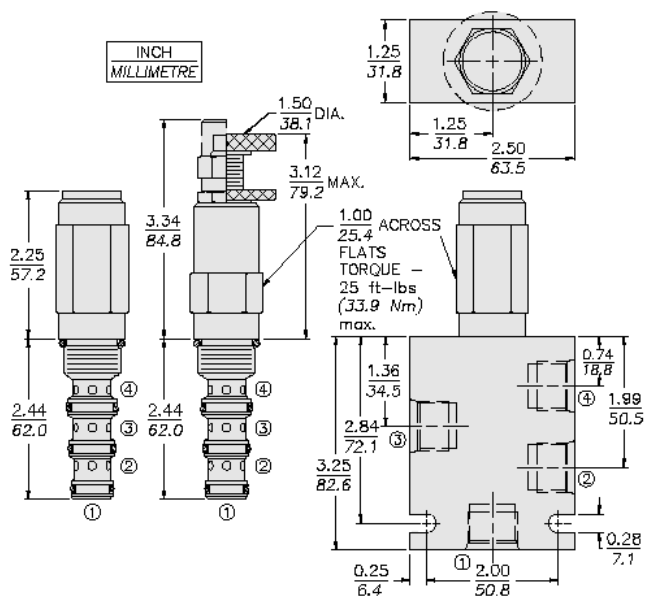
Unit weight	0.29 kg (0.64 lb) 0.31 kg (0.69 lb) 0.34 kg (0.74 lb) 0.28 kg (0.62 lb) 0.28 kg (0.61 lb)	- <b>Note:</b> PS50-40A - <b>Note:</b> PS50-40B - <b>Note:</b> PS50-40C - <b>Note:</b> PS50-40F - <b>Note:</b> PS50-40H
Internal wetted surface area	150 cm <sup>2</sup> (23.3 in <sup>2</sup> ) 163 cm <sup>2</sup> (25.3 in <sup>2</sup> )	- <b>Note:</b> A b c - <b>Note:</b> F h



## Performance



## Dimensions



## Materials

### Materials

**Cartridge:** Weight: 0.34 kg (0.70 lb); Steel with hardened work surfaces. Zinc-plated exposed surfaces; Buna N O-rings and polyester elastomer back-ups standard. Anodized aluminum knobs and caps.

**Standard Ported Body:** Weight: 0.34 kg (0.70 lb); Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi); Ductile iron bodies required for operation over 207 bar (3000 psi); dimensions may differ.

**Adjustment Option Details:** See [adjustment options](#)

## Installation Specifications

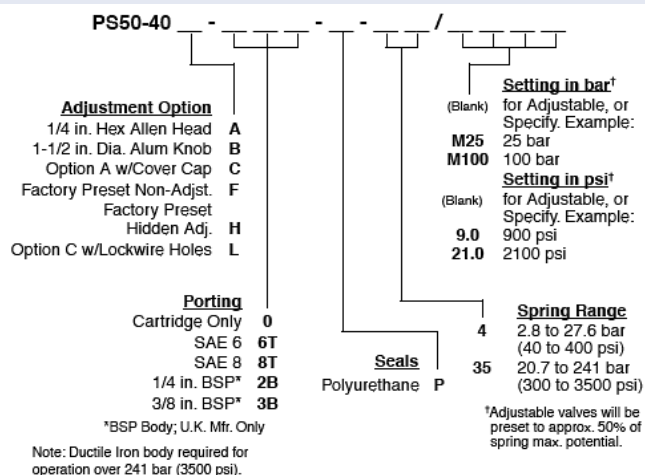
Cavity	VC10-4
Plug torque	33.9 to 36.6 N-m (25 to 27 ft-lb)
Cartridge installation torque	44.7 to 50.2 N-m (33 to 37 ft-lb)
Orientation restriction	None

## Accessories

Seal kit	SK10-4P-BMM	- <b>Note:</b> Polyurethane
	SK10-4U-OOO	- <b>Note:</b> Urethane
Housings		



## Order Code



POSITION	CODE	DESCRIPTION
		PS50-40F-H-J-R/S
F		Adjustment Option
F	A	1/4" Hex Allen Head
F	B	1-1/2" Diameter Aluminum Knob with Aluminum Lock Knob
F	C	1/4" Hex Allen Head with Cover Cap
F	F	Factory Preset Non-Adjustable
F	H	Factory Preset Hidden Adjustment
F	L	1/4" Hex Allen Head with Cover Cap and Lockwire Holes
H		Line Body
H	0	No Body
H	6T	Aluminum SAE 6
H	8T	Aluminum SAE 8
H	6TD	Ductile Iron SAE 6
J		Seal
J	N	Buna-N
J	V	Fluorocarbon
J	P	Polyurethane
R		Spring
R	03	6.9 to 20.7 bar (40 to 300 psi) Spring Range
R	04	2.8 to 27.6 bar (100 to 400 psi) Spring Range
R	35	20.7 to 241.3 bar (300 to 3500 psi) Spring Range
S		Setting
S	MXXX	Spring Setting in XXX bar
S	XX	Spring Setting in XX psi (x 100)