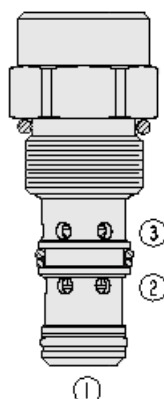
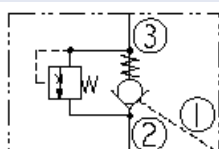




Overview



Symbol



Description

PC10-38 is a screw-in, cartridge-style, pilot operated hydraulic check valve for use as a blocking or load-holding device. The pilot ratio is 3:1. The cartridge incorporates a low flow thermal relief valve intended to prevent cylinder damage resulting from temperature-induced pressure intensification.

NOTE: The thermal relief feature is not intended for use in dynamic pressure limiting applications.

Operation

The PC10-38 allows flow from port 2 to port 3, while blocking oil flow in the opposite direction. If the pressure at port 3 exceeds the thermal relief setting, a small amount of oil will be allowed to pass from port 3 to port 2 preventing cylinder damage from pressure intensification.

Features

- Integrated low flow thermal relief valve.
- Hardened seat for long life and low leakage.
- Optional sealed piston.
- Industry common cavity.

Ratings

Pressure Ratings

Pressure rating	241 bar (3500 psi)
Proof pressure	390 bar (5700 psi)

Flow Ratings

Flow rating	45 lpm (12 gpm)
Maximum internal leakage	0.25 ml/min (5 drops/min) - Note: At 241 bar (3500 psi)

Temperature Ratings

Operating fluid temperature	-40 to 100 °C (-40 to 212 °F)	- Note: With buna N seals
	-26 to 204 °C (-15 to 400 °F)	- Note: With fluorocarbon seals
	-54 to 107 °C (-65 to 225 °F)	- Note: With polyurethane seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 70 °C (-40 to 160 °F)	

Other Ratings

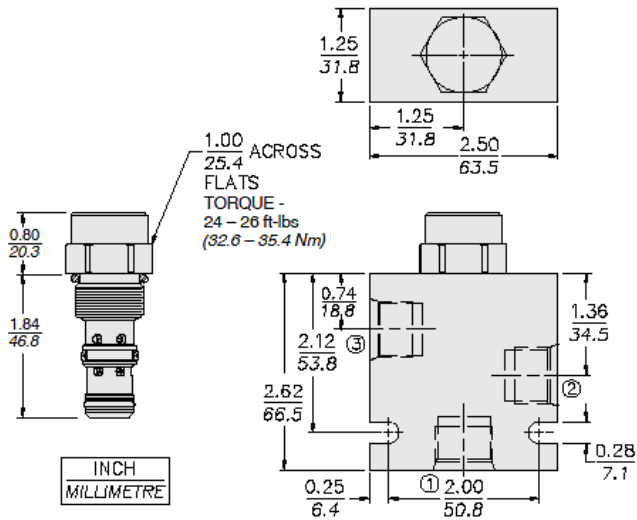
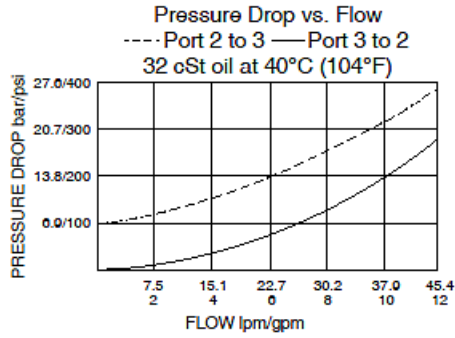
Corrosion protection	960 hr salt spray per ASTM b117 (gpc10-38)
----------------------	--

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	0.14 kg (0.3 lb)
Internal wetted surface area	146 cm ² (22.7 in ²)



Cavity	VC10-3
Cartridge installation torque	32.6 to 35.4 N-m (24 to 26 ft-lb)
Orientation restriction	None

Seal kit SK10-3X-TM - **Note:** (x = seal option)

PC10-38 -

Porting

Cartridge Only 0

SAE 6 6T

SAE 8 8T

1/4 in. BSP* 2B

3/8 in. BSP* 3B

*BSP Body;
U.K. Mfr. Only

Bias Spring

100 6.9 bar/100 psi

Seals

N Buna N (Std.)

NS* Buna N with Sealed Piston

V Fluorocarbon

VS* Fluorocarbon with Sealed Piston

P Polyurethane

PS* Polyurethane with Sealed Piston

Thermal Relief Setting

05 34.5 to 48.3 bar
(500 to 700 psi)

11 69.0 to 93.1 bar
(1000 to 1350 psi)

20 137.9 to 172.4 bar
(2000 to 2500 psi)

25 172.4 to 217.2 bar
(2500 to 3150 psi)

30 206.9 to 262.1 bar
(3000 to 3800 psi)

40 275.9 to 344.8 bar
(4000 to 5000 psi)

45 310.3 to 386.2 bar
(4500 to 5600 psi)

Note: NS, VS and PS seal options require 6.9 bar (100 psi) spring minimum.

Model Options

PC10-38-H-J-R/S

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
NS	Buna-N with a Sealed Spool
V	Fluorocarbon
VS	Fluorocarbon with a Sealed Spool
P	Polyurethane
PS	Polyurethane with a Sealed Spool
U	PPDI Urethane
US	PPDI Urethane with a Sealed Spool

R Spring

CODE	DESCRIPTION
100	100 psi Bias Spring

S Thermal Relief Setting

CODE	DESCRIPTION
5	500 psi Thermal Relief
10	1000 psi Thermal Relief
20	2000 psi Thermal Relief
25	2500 psi Thermal Relief
30	3000 psi Thermal Relief
40	4000 psi Thermal Relief
45	4500 psi Thermal Relief