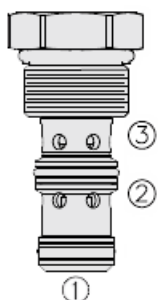




Overview



Description

The PC10-34 is a screw-in, cartridge style, pilot operated, hydraulic check valve.

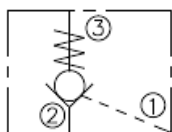
Operation

The cartridge valve allows free flow from ports 2 to 3, while normally blocking flow from ports 3 to 2. Flow will be allowed from ports 3 to 2 when pressure is applied at port 1.

Features

- Higher pilot ratio reduces valve "chatter" in low flow applications.
- Choice of several bias spring values.
- Hardened seat for long life and low leakage.
- Optional sealed piston.
- Industry common cavity.

Symbol



Ratings

Pressure Ratings

Pressure rating	241 bar (3500 psi)
Proof pressure	749 bar (11000 psi)
Burst pressure	1157 bar (17000 psi)
Pilot ratio	7:1

Flow Ratings

Flow rating	- Note: See performance graphs on sheet 2	
Maximum internal leakage	0.10 ml/min (2 drops/min)	- Note: At 207 bar (3000 psi) between ports 3 and 2
	0 ml/min (0 in ³ /min)	- Note: Between ports 2 and 1 with sealed piston
	115 ml/min (7 in ³ /min)	- Note: At 207 bar (3000 psi) between ports 2 and 1
	0 ml/min (0 in ³ /min)	- Note: Between ports 2 and 1 with sealed piston

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 and urethane seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 90 °C (-40 to 194 °F)	

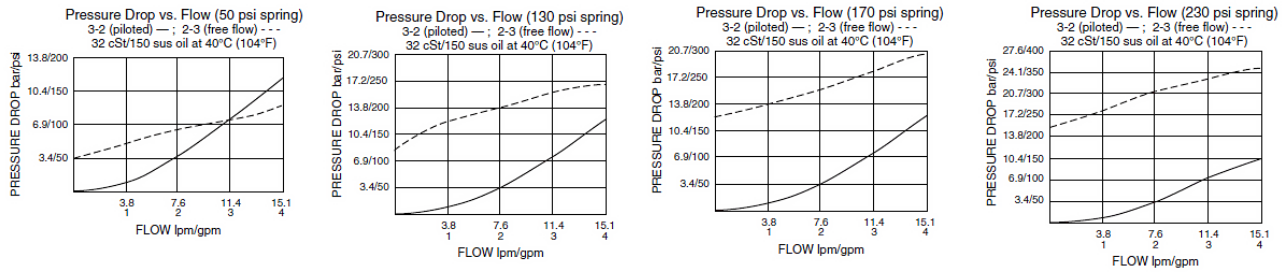
Operating Parameters

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

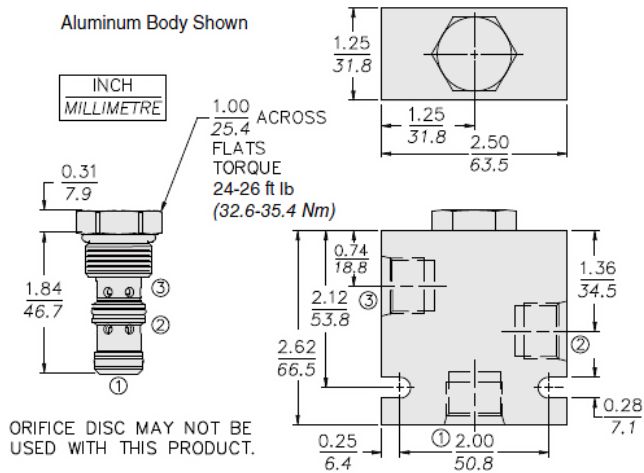
Properties

Unit weight	0.10 kg (0.21 lb)
Internal wetted surface area	99 cm ² (15.3 in ²)

Performance



Dimensions



Installation Specifications

Cavity	VC10-3
Cartridge installation torque	32.6 to 35.4 N-m (24 to 26 ft-lb)
Maximum allowable torque	67.8 N-m (50 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK10-3N-TM	- Note: Buna N
	SK10-3V-TM	- Note: Fluorocarbon
	SK10-3U-00	- Note: Urethane



Order Code

PC10-34 -

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

(Blank) 3.4 bar/50 psi **130** 9 bar/130 psi

170 11.7 bar/170 psi

230 15.9 bar/230 psi

Seals

N Buna N (Std.)

NS Buna N with Sealed Piston
9 bar (130 psi) spring minimum

V Fluorocarbon

VS Fluorocarbon with Sealed Piston
9 bar (130 psi) spring minimum

U Urethane

US Urethane with Sealed Piston
9 bar (130 psi) spring minimum

Model Options

PC10-34-H-J-R

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
BLANK	50 3.4 bar (50 psi) Bias Spring
130	9.0 bar (130 psi) Bias Spring
170	11.7 bar (170 psi) Bias Spring
230	15.9 bar (230 psi) Bias Spring