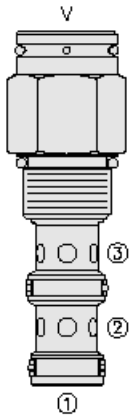




Overview



Description

The PD12-30 is a screw-in, cartridge style, pilot-operated, spool type, normally open, hydraulic directional valve.

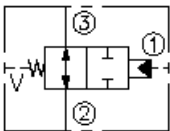
Operation

In neutral position the valve allows flow from port 3 to 2 bi-directionally. The spring chamber is vented to atmosphere "v" which is internally o-ring sealed from the cartridge flow paths. On remote pilot signal at port 1, the valve's spool shifts to block flow from port 3 to 2 while port 2 is blocked. Because of the vented spring chamber, the cartridge may be fully pressurized at any port without affecting required pilot pressure.

Features

- Hardened spool and cage for long life.
- Cost-effective cavity.

Symbol



Ratings

Pressure Ratings

Pressure rating 241 bar (3500 psi)

Temperature Ratings

Operating fluid temperature -40 to 120 °C (-40 to 248 °F)

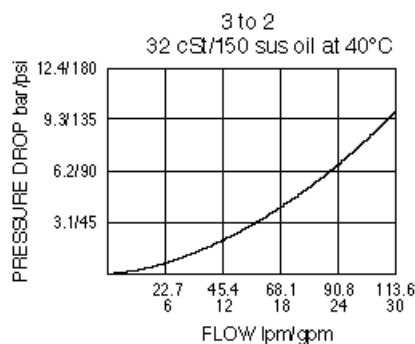
Flow Ratings

Maximum internal leakage 245 ml/min (15 in³/min) - **Note:** From port 1 to 2 and from port 2 to 3 (when piloted), at 207 bar (3000 psi)
0 lpm (0 gpm) - **Note:** From port 1 and 2 with sealed spool

Properties

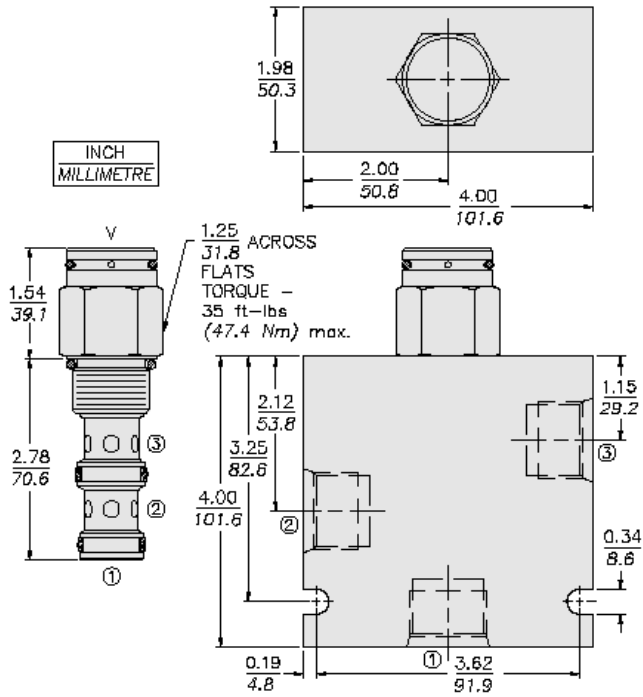
Materials steel with work surfaces hardened. External surfaces are zinc plated
Unit weight 0.23 kg (0.50 lb)

Performance





Dimensions



Installation Specifications

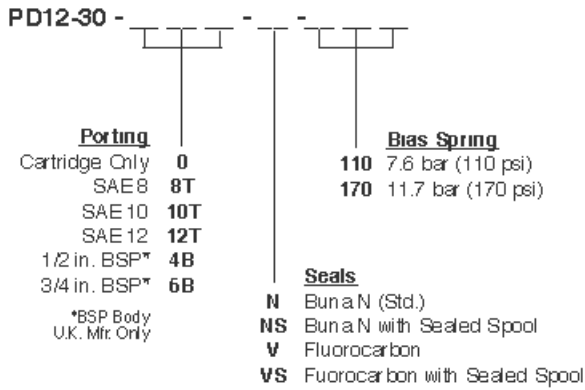
Cavity	VC12-3
Cartridge installation torque	44.7 to 50.2 N-m (33 to 37 ft-lb)

Accessories

Seal kit	SK12-3N-MM	- Note: Buna N
	SK12-3V-MM	- Note: Viton
	SK12-3P-MM	- Note: Polyurethane



Order Code



Model Options

PD12-30-H-J-R

H Line Body

CODE	DESCRIPTION
0	No Body
8T	Aluminum SAE 8
10T	Aluminum SAE 10
12T	Aluminum SAE 12
12TD	Ductile Iron SAE 12

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
110	110 psi Bias Spring
170	170 psi Bias Spring