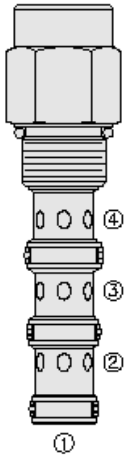




Overview



Description

The PD12-44 is a screw-in, cartridge style, pilot-operated, spool type, hydraulic directional valve

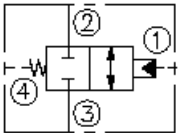
Operation

In neutral position the valve blocks flow from port 2 to 3. On remote pilot signal at port 1, the valve's spool shifts to allow flow from port 2 to 3 bidirectionally. The spring chamber is vented to port 4 which is internally o-ring sealed from the cartridge flow paths. Pressure on port 4 will directly (1:1) affect the pilot pressure required and must be added to the bias spring value

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)

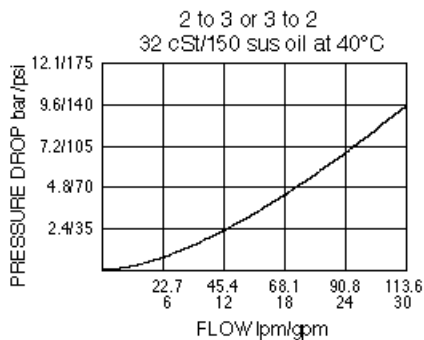
Flow Ratings

Maximum internal leakage 245 ml/min (15 in³/min) - **Note:** At 207 bar (3000 psi)
0 lpm (0 gpm) - **Note:** From port 1 and 2 with sealed spool

Properties

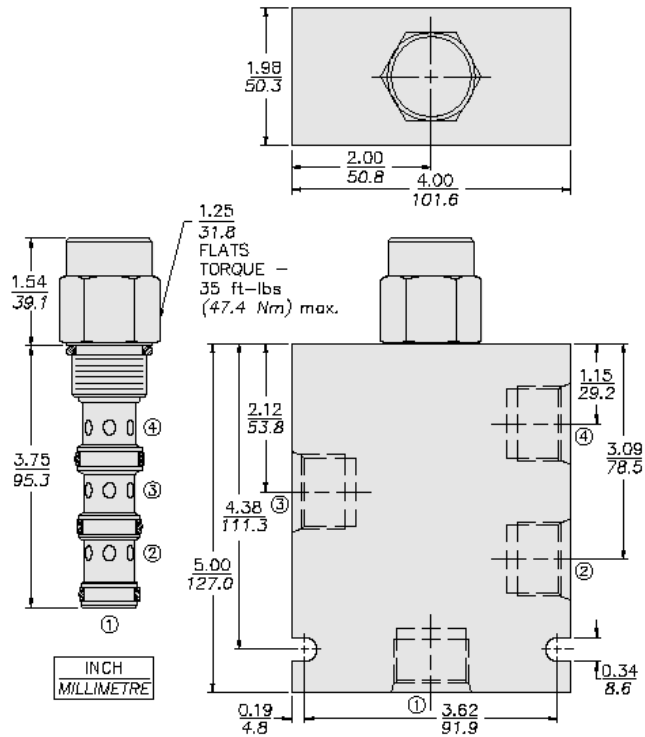
Materials steel with work surfaces hardened. External surfaces are zinc plated
Unit weight 0.28 kg (0.61 lb)

Performance





Dimensions



Materials

Materials

Cartridge: Weight: 0.28 kg (0.61 lb); Steel with hardened work surfaces. Zinc-plated exposed surfaces; Buna N O-rings and polyester elastomer back-ups standard.

Standard Ported Body: Weight: 1.5 kg (3.3 lb); Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ.

Installation Specifications

Cavity	VC12-4
Cartridge installation torque	44.7 to 50.2 N-m (33 to 37 ft-lb)

Accessories

Seal kit	SK12-4N-MMM	- Note: Buna N
	SK12-4V-MMM	- Note: Viton
	SK12-4P-MMM	- Note: Polyurethane
Housings		



Order Code

POSITION	CODE	DESCRIPTION
		PD12-44-H-J-R
H		Line Body
H	0	No Body
H	10T	Aluminum SAE 10
H	12T	Aluminum SAE 12
H	12TD	Ductile Iron SAE 12
J		Seal
J	N	Buna-N
J	NS	Buna-N with a Sealed Spool
J	V	Fluorocarbon
J	VS	Fluorocarbon with a Sealed Spool
J	P	Polyurethane
J	PS	Polyurethane with a Sealed Spool
J	U	PPDI Urethane
J	US	PPDI Urethane with a Sealed Spool
R		Spring
R	110	110 psi Bias Spring
R	170	170 psi Bias Spring

