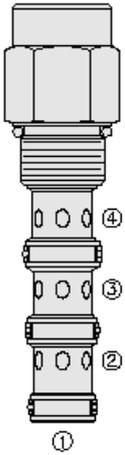




Overview



Description

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

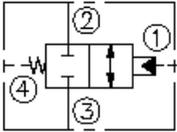
Operation

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)

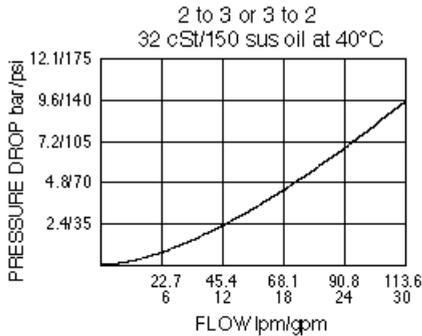
Flow Ratings

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

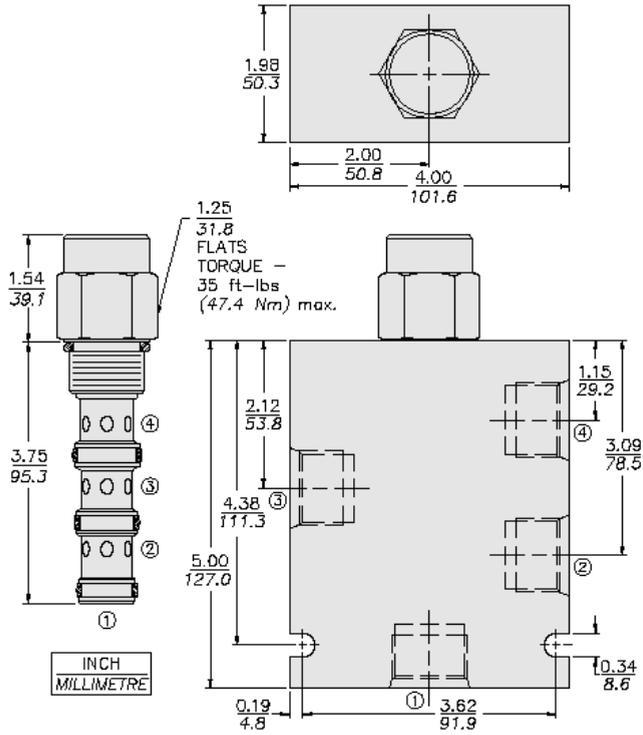
Materials steel with work surfaces hardened. External surfaces are zinc plated
 Unit weight 0.28 kg (0.61 lb)

Performance





Dimensions



Installation Specifications

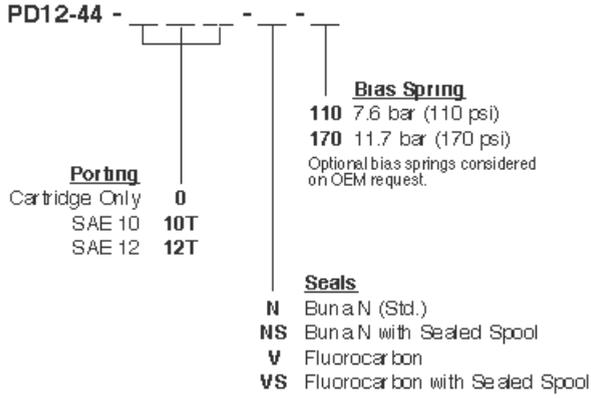
Cavity	VC12-4
Cartridge installation torque	44.7 to 50.2 N-m (33 to 37 ft-lb)

Accessories

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



Order Code



Model Options

PD12-44-H-J-R

H Line Body

CODE	DESCRIPTION
0	No Body
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