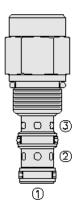


Overview



<u>Description</u>

The PD10-35 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 2 to 3. The spring chamber is vented to port 3. On remote pilot signal at port 1, the valve's spool shifts to block flow from port 2 to 3. Pressure on port 3 will directly (1:1) affect the pilot pressure required and must be added to the bias spring value

<u>Features</u>

- External vent-to-atmosphere.
- Range of bias springs available.
- Sealed spool option for bias spring options 110, 130 and 170.
- Hardened spool and cage for long life.
- Industry common cavity.

Symbol



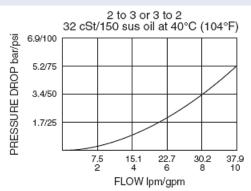
Ratings

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	82 ml/min (5 in ³ /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 to 2 with sealed spool

Properties

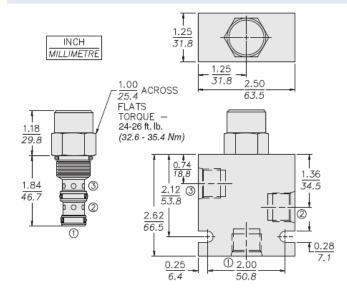
Materialssteel with work surfaces hardened. External surfaces are zinc platedUnit weight0.15 kg (0.34 lb)

Performance





Dimensions



Materials

<u>Materials</u>

Cartridge: Weight: 0.15 kg (0.34 lb); Steel with hardened work surfaces. Zinc-plated exposed surfaces; Buna N O-rings and polyester elastomer back-ups standard.

Standard Ported Body: Weight: 0.36 kg (0.80 lb); Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ.

Installation Specifications

Cavity	VC10-3
Cartridge installation torque	32.6 to 35.4 N-m (24 to 26 ft-lb)
Accessories	

Seal kit	SK10-3N-MM	- Note: Buna N
	SK10-3V-MM	- Note: Viton
	SK10-3P-MM	- Note: Polyurethane

Housings



Order Code

POSITION	CODE	DESCRIPTION	
		PD10-35-H-J-R	
Н		Line Body	
н	0	No Body	
н	6T	Aluminum SAE 6	
Н	8T	Aluminum SAE 8	
н	6TD	Ductile Iron SAE 6	
н	8TD	Ductile Iron SAE 8	
н	3B	Aluminum BSPP 3/8" (3)	
н	3BD	Ductile Iron BSPP 3/8" (3)	
J		Seal	
J	Ν	Buna-N	
J	NS	Buna-N with a Sealed Spool	
J	V	Fluorocarbon	
J	VS	Fluorocarbon with a Sealed Spool	
J	Р	Polyurethane	
J	PS	Polyurethane with a Sealed Spool	
J	U	PPDI Urethane	
J	US	PPDI Urethane with a Sealed Spool	
R		Spring	
R	40	40 psi Bias Spring	
R	60	60 psi Bias Spring	
R	110	110 psi Bias Spring	
R	130	130 psi Bias Spring	
R	170	170 psi Bias Spring	
PD10-35			

	<u> </u>	1	
Porting Cartridge Only SAE 6 SAE 8 1/4 in. BSP* 3/8 in. BSP* *BSP Body U.K. Mft. Only	0 6T 8T 2B 3B		Bias Spring [†] 40 2.8 bar (40 psi) 60 4.1 bar (60 psi) 110 7.6 bar (110 psi) 130 9.0 bar (130 psi) 170 11.7 bar (170 psi) *Note: 110 psi blas spring is the minimum required for use with sealed spool.
		•	Seals
			Buna N (Std.)
	N	S*	Buna N with Sealed Spool
		v	Fluorocarbon
	v	S*	Fluorocarbon with Sealed Spool
		_	

P Polyurethane VS* Polyurethane with Sealed Spool Note: 10 psl blas spring is the minimum required for use with sealed spool.