

Piloted 2-Way Spool, Normally Closed, Externally Vented

Type:PD12-2244

Operating pressure: 350 bar (5000 psi)

Proof pressure: 630 bar (9000 psi)

Flow: 120 L/min



Description

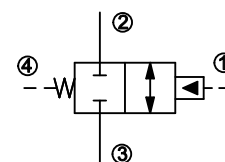
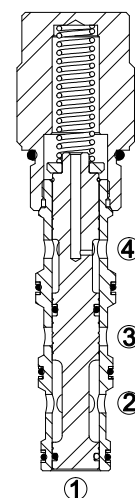
A screw-in, cartridge-style, pilot-operated, spool-type, externally vented, normally closed hydraulic directional valve for 2-way circuits requiring remote pilot actuation.

Operation

In neutral (unpiloted), the PD12-2244 blocks flow from ② to ③ bi-directionally. The spring chamber is directed to port ④, which is internally O-ring sealed from the cartridge flow paths. On remote pilot signal at ①, the valve shifts to open ② to ③ bi-directionally. Since ④ is common to the spring chamber, pressure on ④ will directly (1:1) affect the pilot pressure required, and must always be added to the bias spring value.

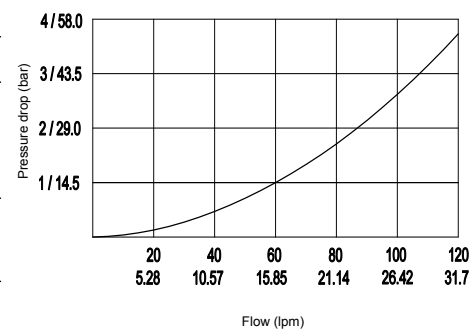
Technical Data

Operating pressure	350 bar (5000 psi)
Proof pressure	630 bar (9000 psi)
Max. flow	See Performance Chart
Oil volume required to full shift	1.31 ml (0.08 cu. in.)
Internal leakage	40 ml/min (2.44 cu. in./min) max.at 350 bar (5000 psi)
Installation torque	40-47 Nm (30-35 ft.lbs)
Pilot pressure required to full spool shift	For 5.5 bar (80 psi)spring: 5.5bar(80 psi)+ ④ pressure For 11.5 bar (167 psi)spring:11.5bar(167 psi)+ ④ pressure
Temperature range	-40°C ~ 120°C with standard buna seals -26°C ~ 204°C with fluorocarbon seals
Fluids	Mineral based or synthetics with lubricating properties at viscosities of 7.4~420cSt (50-2000ssu)
Installation	No restriction
Cavity	VC12-4
Cavity tool	T12-4RC (Rough), T12-4FM (Finishing)



(Symbol)

32cSt/150ssu fluid at 40°C

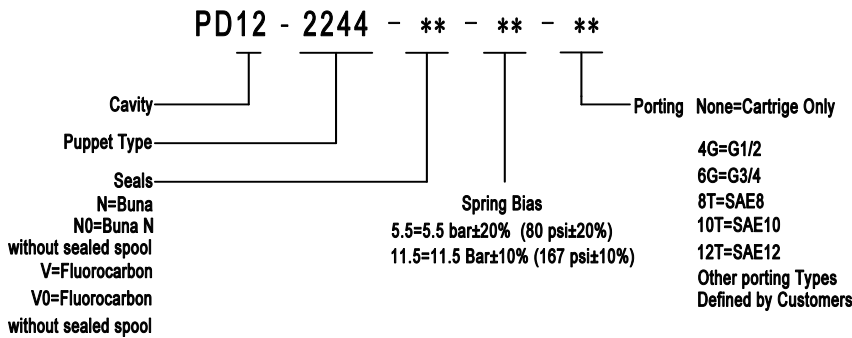


(Performance Chart)

Features

- Hardened spool and cage for long life.
- Compact and convenience.
- Industrial general cavity.
- Range of bias springs available.

Ordering Code



Materials

Cartridge: Weight: 0.44 kg (0.97 lbs) ; Steel with hardened working surfaces and zinc-plated exposing surfaces ; Buna N O-rings and back-up (standard) .

Standard ported body: Weight : 1.45 kg (3.2 lbs) ; Anodized high-strength 6061 T6 aluminum alloy, rated to 250 bar (3600 psi).

Others: Ductile iron bodies and steel bodies available. Dimensions may differ. Contact after sale.

Dimensions

