

Piloted 2-Way Spool, Normally Open, Internally Vented

Type:PD10-2231

Operating pressure: 350 bar (5000 psi)

Proof pressure: 650 bar (9000 psi)

Flow: 50 L/min



Description

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

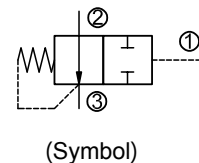
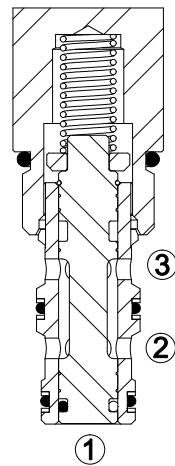
Operation

In neutral (unpiloted), the PD10-2231 allows flow from ② to ③ unidirectionally. The spring bias chamber is internally vented to ③. On remote pilot signal at ①, the valve shifts to block ② to ③ bi-directionally.

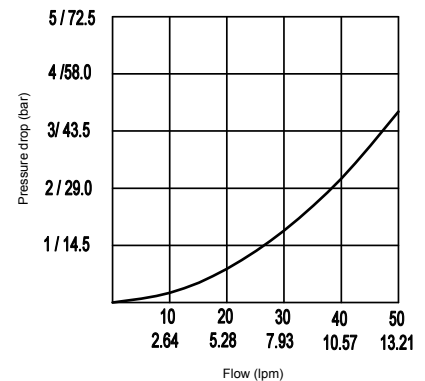
Note: Back pressure at ③ will increase the pilot pressure required at ① to shift, at a ratio of 1:1. Consult factory for applications where bi-directional flow is required.

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	0.4 ml (0.025 cu. in.)
Internal leakage	57 ml/min (3.5 cu. in./min) max. at 350 bar (5000 psi)
Installation torque	30-35 Nm (22-25 ft.lbs)
Pilot pressure required to full spool shift	For 3 bar(43.5psi)spring: 3 bar(43.5psi)+ ③ pressure For 5.5 bar(80psi)spring: 5.5 bar(80psi)+ ③ pressure For 11.5 bar(167psi)spring: 11.5 bar(167psi)+ ③ 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	VC10-3
Cavity tool	T10-3RC (Rough), T10-3FM (Finishing)



32cSt/150ssu fluid at 40°C

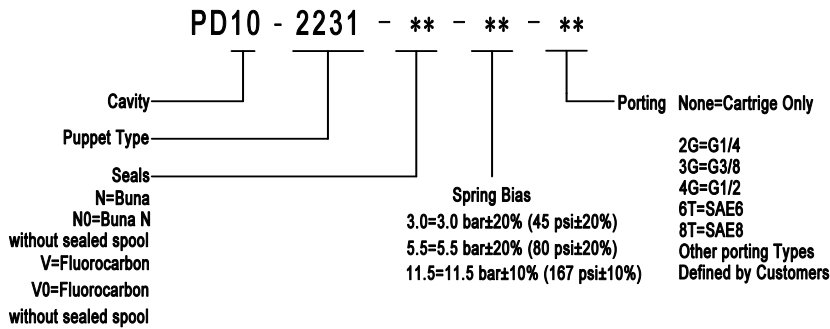


(Performance Chart)

Features

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

Ordering Code



Materials

Cartridge: Weight: 0.16 kg (0.35 lbs) ; Steel with hardened working surfaces and zinc-plated exposing surfaces ; Buna N O-rings and back-up (standard) .

Standard ported body: Weight : 0.36 kg (0.80 lbs) ; Anodized high-strength 6061 T6 aluminum alloy, rated to 240 bar (3500 psi).

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

Dimensions

