



4.17

# 35PD10-32 TYPE

## Hydraulic Directional Valve

Rated pressure (bar / psi)	240 / 3500
Peak flow (L/min / gpm)	37.9 / 10 (See performance chart)

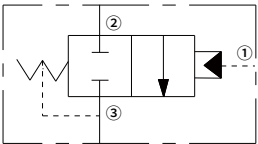
### Features

- Hardened parts for long life
- Compact size
- Industry common cavity

### Contents

Description	02
Operation	02
Ordering code	02
Materials	02
Technical data	03
Performance	03
Dimensions	04

### Symbol

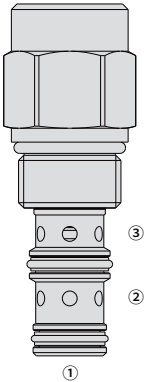


Description

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

Operation

In neutral (unpiloted), 35PD10-32 bi-directional block flow from ③ to ② .The spring chamber is connected to port ③ , on remote hydraulic-control signal at ① , the valve shifts to open from ② to ③ uni-directional.



Ordering Code

50PD10-42

-

-

-

Porting:

Cartridge only

0

Seals:

Polyurethane (Std.)

Polyurethane (with sealed piston)

Buna N

Buna N (with sealed piston)

Fluorocarbon

Fluorocarbon (with sealed piston)

P

PS

N

NS

V

VS

Bias Spring:

4.1 bar (60 psi)

7.6 bar (110 psi)

11.7 bar (170 psi)

60

110

170

\*Note:

7.6 bar (110 psi ) bias spring is the minimum required for use with sealed spool.

Materials

Cartridge:

Weight: 0.2 kg; Steel with hardened work surfaces. Zinc-plated exposed surfaces; Polyurethane (Std. ) seal.

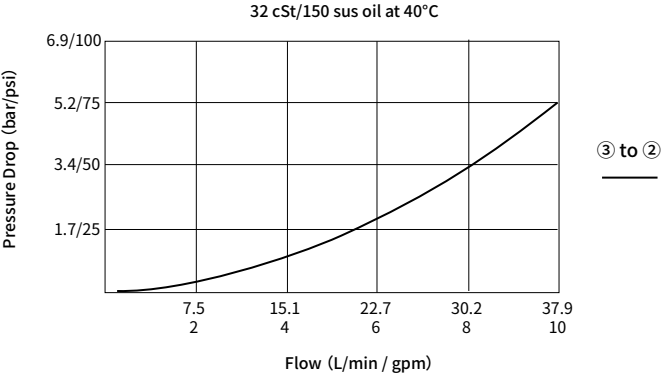
Standard Ported Body:

Anodized high-strength aluminum alloy, rated to 240 bar; Ductile iron and steel bodies available; Dimensions may differ, consult factory.

Technical Data

Rated pressure	240 bar (3500 psi)
Peak flow	See performance chart
Internal leakage	≤ 82 mL/min @ 207bar
Hydraulic control pressure requirements (Spool fully reversed)	Spring 4.1 bar: 4.7 bar
	Spring 7.6 bar: 8.6 bar
	Flow required for complete reversal of spool: 0.65 mL
Cavity	VC10-3 (See technical reference)
Fluid	Mineral-based or synthetics with lubricating properties
Viscosity range	7.4 to 420 mm <sup>2</sup> /s
Temperature range	-40 to 100 °C (Buna N seals)
	-26 to 204 °C (Fluorocarbon seals)
	-54 to 107 °C (Polyurethane seals)
Degree of fluid contamination	The minimum pollution level is ISO4406 level 20/18/14, and level 17/15/13 is recommended to prolong the service life

Performance (Cartridge Only)



Dimensions

