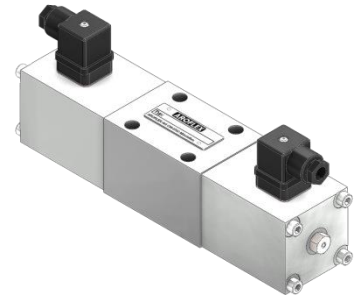


- **direct operated**
- Q_{\max} = 50 l/min
- p_{\max} in P, A and B = 315 bar
- p_{\max} in T = 160 bar



Description

The proportional valves are used to control direction and flow in hydraulic systems. The applications of these valves ensure any motion sequences at low cost.

The PVD valve is a directly controlled spool valve, actuated by proportional solenoids, in five chamber design. The flow rate is proportional to the solenoid current and partly load-compensated.

Application

Examples are acceleration and deceleration movements which are difficult to realize with common hydraulic components. Furthermore with these valves, electric remote controls with manual potentiometer could easily be done.

When large control range is requested we recommend the AROFLEX-proportional directional control valve PVS.

Technical Data

General Specifications	
Description:	spool valve, direct operated
Mounting position:	any
Nominal size:	NG10, DIN 24340 A 10, ISO 4401-05

Solenoid coil	24VDC	12VDC
Ambient temperature:	- 20° ... + 50°C	
Rated voltage:	24 VDC	12 VDC
Current range:	0.05 - 1.15 A	0.1 - 2.3 A
Rated power:	28 W	28 W
Operating time:	100 %	
Protection class:	IP65 acc. to EN 60 529	
Connection:	Plug connection ISO 4400/DIN 43650 (2P+E)	
Amplifier modul:	please ask for datasheets	

Hydraulic Specifications	
Volume flow at Δp 15 bar:	5 - 50 l/min
Max. pressure:	P, A and B 315 bar, T 160 bar
Fluid:	Mineral oil, other fluids on request
Fluid temperature:	- 20 ... + 70°C
Viscosity range:	12 - 320 mm ² /s (cSt)
Filtration:	25 μ m minimum, recommended: 10 μ m or better
Hysteresis:	appr. 3% at optimal dither signal

Overview

Symbols	Description	Design
	PVD-10-2-50-N	4/3 way function spool type N
	PVD-10-2-50-D	4/3 way function spool type D
	PVD-10-2-50-T	4/3 way function spool type T
	PVD-10-1-50-NBZ PVD-10-1-50-DBZ PVD-10-1-50-TBZ	4/2 way function proportional solenoid b-side spool type N, D and T
	PVD-10-1-50-NAZ PVD-10-1-50-DAZ PVD-10-1-50-TAZ	4/2 way function proportional solenoid a-side spool type N, D and T

➔ other functions on request.

Type code

PVD-10	-...	-50	-...	-...
				omit = 24 VDC standard 12 VDC = 12 VDC
				spool type and function according overview
				nominal volume flow 50 = 50 l/min
				1 = 4/2 way function 2 = 4/3 way function
				proportional directional valve NG 10

Ordering code (example):

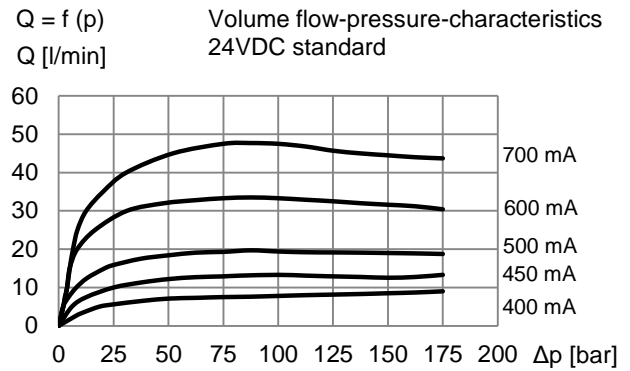
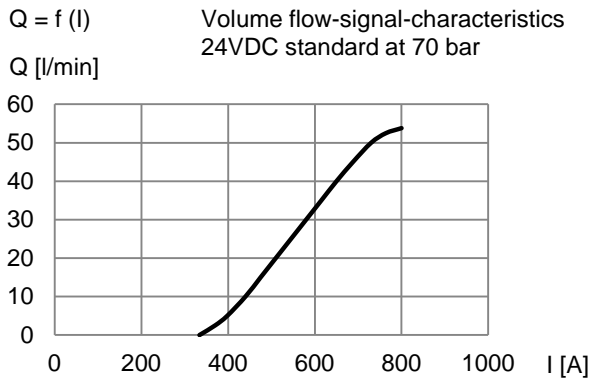
- Proportional directional valve NG10
- Spool type N
- Solenoid coils on both sides (4/3 way function)

Type Code

PVD-10-2-50-N

Characteristics

Measurement conditions:
Hydraulic oil ISO VG 46; Viscosity 46 mm²/s
Temperature 40...50 °C

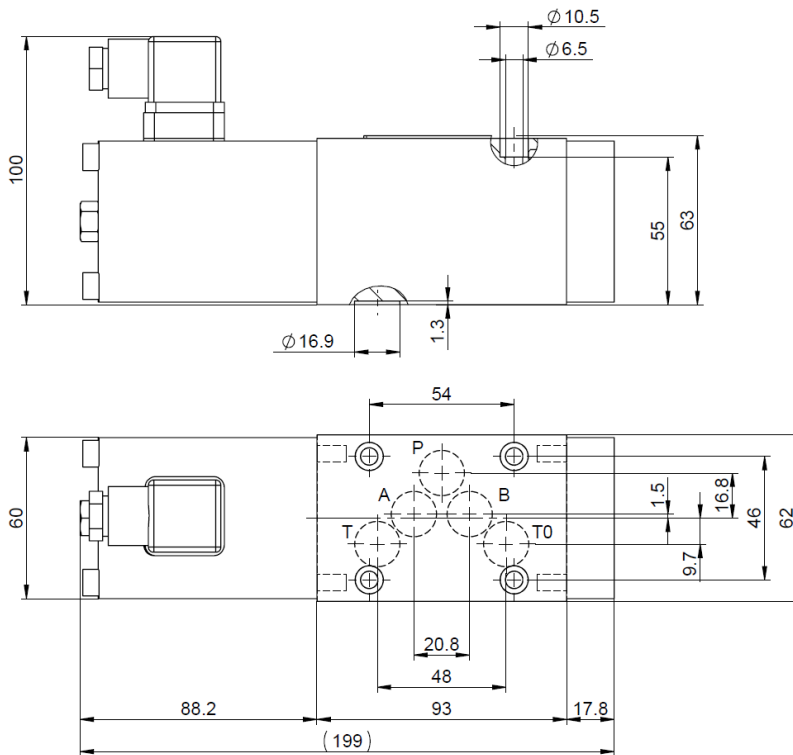


Dimensions

PVD-10-1-...AZ

pictured: proportional solenoid a-side

Weight: 4.5 kg



PVD-10-2-...

Weight: 6 kg

