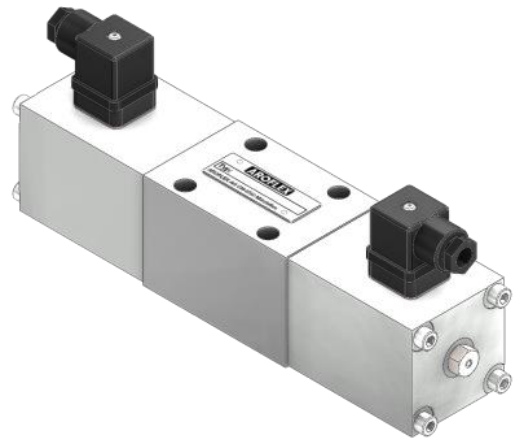


- **direct operated**
- $Q_{max} = 50 \text{ l/min}$
- $p_{max} \text{ in P, A and B} = 315 \text{ bar}$
- $p_{max} \text{ in T} = 160 \text{ bar}$



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.

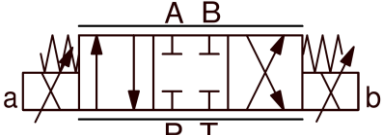
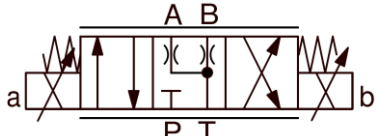
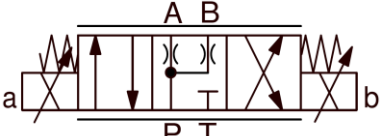
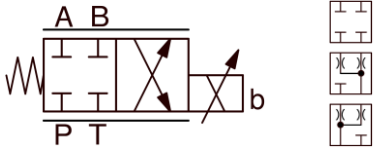
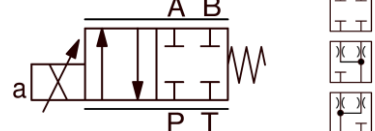
The PVD valve is a directly controlled spool valve, actuated by proportional solenoids, in five chamber design. The flow rate is proportional to the solenoid current and partly load-compensated.

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 and optimal load compensation is requested we recommend the AROFLEX-proportional directional control valve series PVS.

Overview

Sinnbild	Bezeichnung	Ausführung
	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

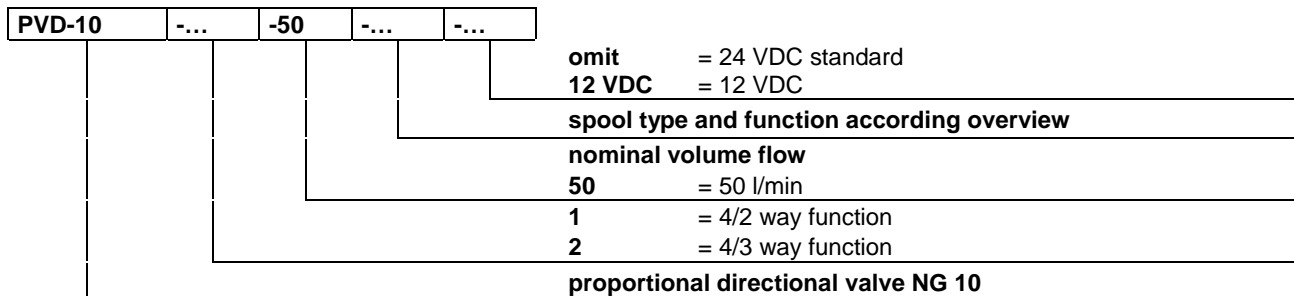
Technical Data

General Specifications	
Nominal size:	NG10, DIN 24340 A 10, ISO 4401-05
Mounting position:	any position (solenoid down, only after consulting the manufacturer)

Solenoid coil	M60-24VDC	M60-12VDC
Type:	PI60V-G24-M40-HB8.5	
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
Nominal resistance:	16.5 Ohm	
Operating time:	100 %	
Protection class:	IP65 according to VDE 0580	
Connection:	Plug connection according to ISO 4400/DIN 43650 (2P+E)	

Hydraulic Specifications	
Description:	Spool valve, direct operated
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
Filtration:	25 μ m minimum, recommended: 10 μ m or better
Viscosity range:	12 - 320 mm ² /s (cSt)
Repeatability:	≤ 1 % at optimal dither signal
Hysteresis:	≤ 3 % at optimal dither signal

Type code



Ordering code (example):

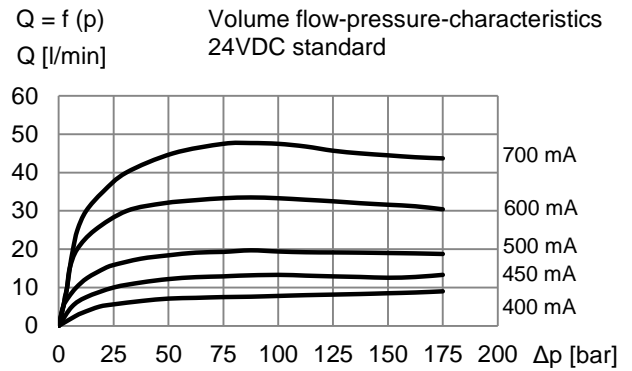
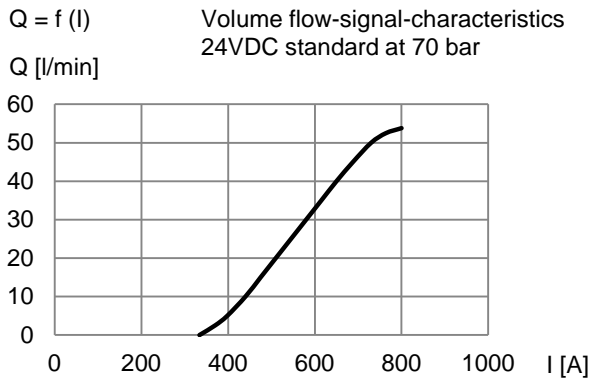
- Proportional directional valve NG10
- Spool type N
- Solenoid coils on both sides (4/3 way function)

Type Code

PVD-10-2-50-N

Characteristics

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

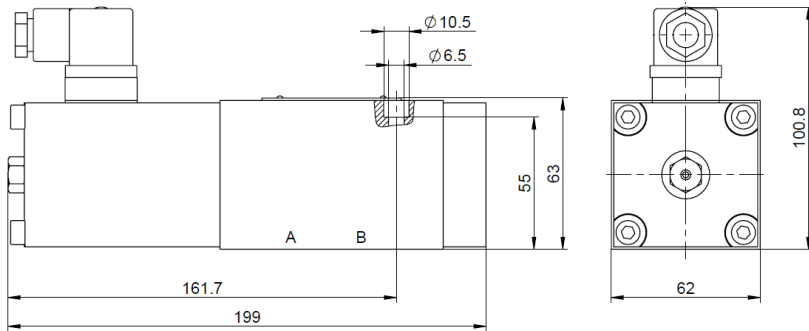


Dimensions

PVD-10-1-...AZ

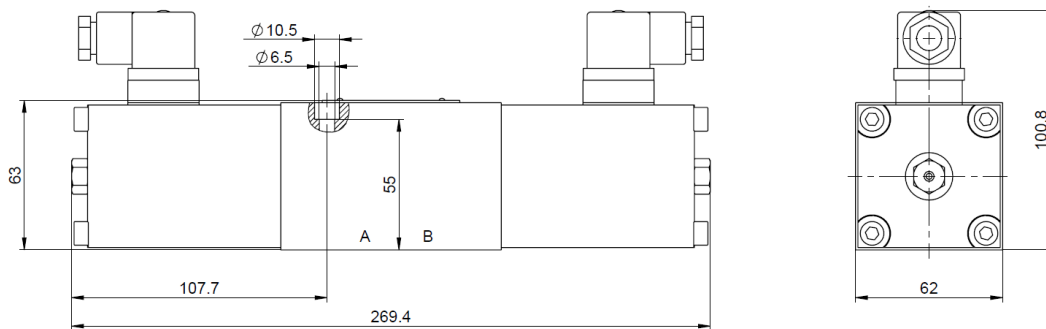
pictured: proportional solenoid a-side

Weight: 4.5 kg



PVD-10-2-...

Weight: 6 kg



NG10, Cetop 5

