

Proportional Valves

PPD22A

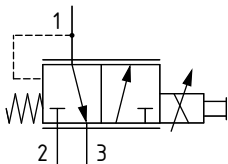
Proportional Pressure Reducing, Relieving, Direct Acting, Normally Open to Drain

210 bar [3000 psi] • 20 l/min [5.3 US gpm]

DESCRIPTION AND OPERATION

This is a direct acting, proportional pressure reducing / relieving valve. In the de-energized condition, the inlet port 2 is blocked, while the reduced pressure in port 1 will be at the minimum setting and open to the tank port 3. By energizing the coil, the pressure in port 1 will increase proportionally to the current applied. Flow through port 2 to 1 is restricted to limit the pressure in port 1. In the case of over pressurization in port 1, the spool will open port 1 to port 3, which acts as a relief valve to limit the pressure in port 1.

SCHEMATIC

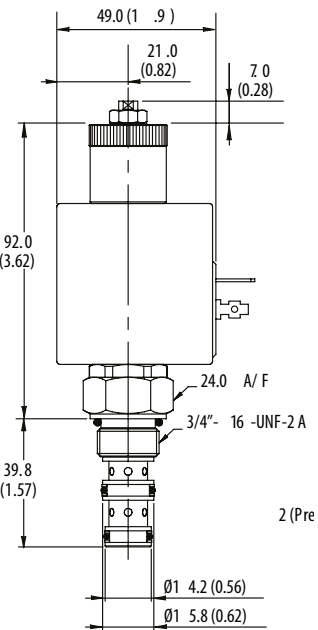


DIMENSIONS

mm [in]

Coil nut torque
3.4 Nm [2.5 ft lbs]

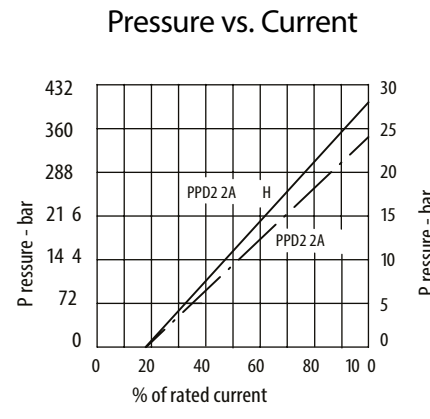
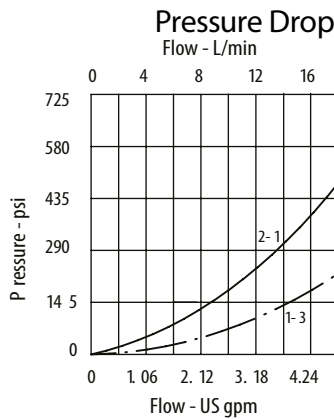
Installation torque
A - 30 Nm [22 lbs ft]



PERFORMANCE DATA

Rated pressure	210 bar [3000 psi]
Rated flow	20 l/min [5.3 US gpm]
Max reduced pressure	19W coil: 24 bar [350 psi] 29W coil: 28 bar [405 psi]
Leakage	50 ml/min @ 210 bar [3000 psi]
Recommended PWM frequency	200 Hz
Maximum Hysteresis	16% max without PWM
Threshold current	19% of max current
Coil Options	C16
Weight	0.25 kg [0.55 lb]
Cavity	A3531

PERFORMANCE CURVES



MODEL CODE

PPD22A - V - 6 - H - 12 - 3W

Seal Option

Code	Seal kit
N - Buna-N	SK1119
V - Viton	SK1119V

Manual Override Option

6 - Screw Type

Connector Type

- Omit - No coil
- H - DIN 43650
- F - Flying Lead
- DM - Deutsch moulded

Housing

Code	Ports	Aluminium
Omit	No housing	
2W	1/4" BSP	A7724
3W	3/8" BSP	A6684
6T	3/8" SAE	B6516

* Aluminium bodies are to be used for pressures less than 210 bar [3000 psi].
* Additional housings available

Coil Voltage

- Omit - No coil
- 12 - 12 VDC
- 24 - 24 VDC