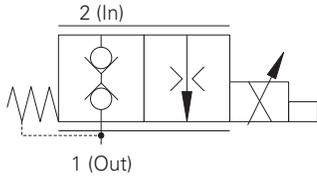


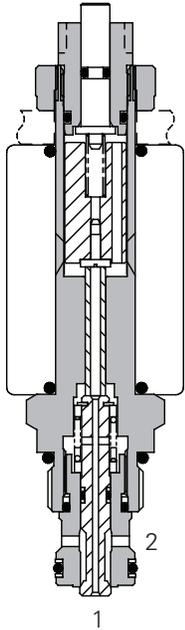
PFR21H - Proportional Valve

Proportional bi-directional poppet, flow control valve
Up to 18L/min (5 USgpm) • 210 bar (3000 psi)

B



Sectional View



Operation

In the de-energised position the valve is blocked in both directions. As the current to the coil is increased the valve opens proportionally. There is also an element of compensation as the pressure difference across the valve increases. See performance graphs.

Features

- High flow capacity with reduced space requirements.
- Standard valve bodies and common cavities.
- One-piece encapsulated coil with minimal amperage draw.
- Oil immersed armature solenoid.
- Various coil terminals and voltages.
- Coil interchangeability with valves of same series.
- Manual override, seal variations and other options available.
- Sealed coil arrangement to protect stem from corrosion.
- Reversible coil without affecting performance.

Performance Data

Ratings and Specifications

Performance data is typical with fluid at 32 cSt (150 SSU)

Max inlet pressure	210 bar (3000 psi)
Max regulated flow at rated current @ 50 bar	20 L/min (5.3 USgpm) @100%, 15 L/min (3.9 USgpm) @85%, 11 L/min (2.9 USgpm) @75%
Frequency	200 to 400 Hz - 200 recommended
Dead band	38-60% of rated current
Response time	80ms
Internal leakage	Up to 0.67 ml/min (10dpi) 210 bar differential at 32 centistokes
Temperature range (oil)	-30° to 120°C (-22° to 248°F)
Cavity	A6701 (see Section M)
Electrical data	See coil data sheet
Torque cartridge into cavity	30 Nm (22 lbs ft)
Mounting position	Unrestricted
Fluids	Most general purpose hydraulics fluids
Seal material	Standard nitrile with PTFE back up rings
Filtration	BS5540/4 Class 16/13 (25 micron or better)
Nominal viscosity range	15 to 250 cSt
Standard housing materials	Aluminium
Coil model code	C16-*/*/29
Voltage available	12, 24 VDC
Coil weight	.3 kg (.6 lbs)
Weight	.2 kg (.44 lbs)
Seal kit	SK1138 (Nitrile) SK1138V (Viton)

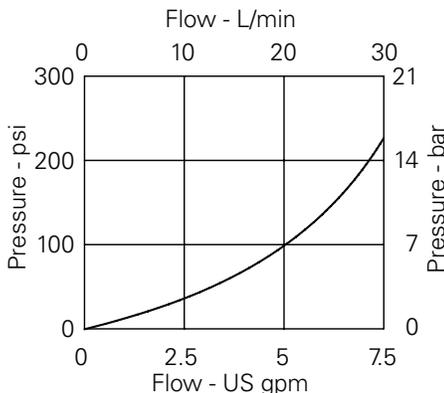
Viton is a registered trademark of E.I. DuPont

Description

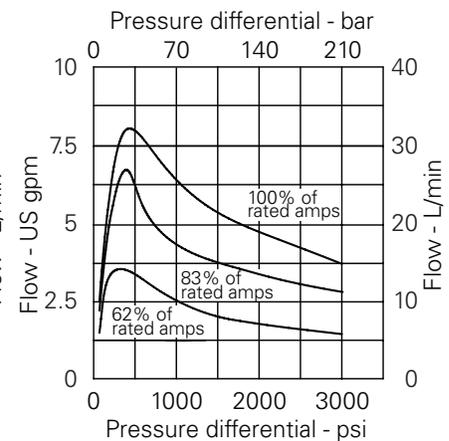
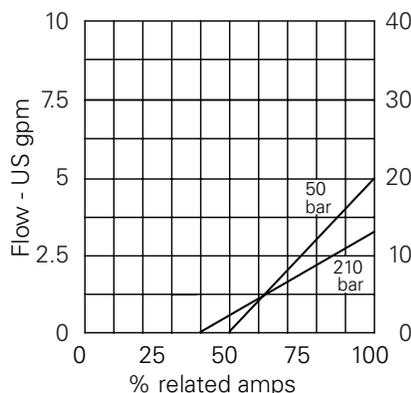
This is a proportionally operated 2 way poppet valve. Ideal for use in lowering circuits to give good control to the operator. The valve will compensate as the pressure difference increases to prevent speed increase due to increasing load.

Pressure Drop

Viscosity = 32 cSt (150 SSU)
PFR21H @ 100%



Performance Curves

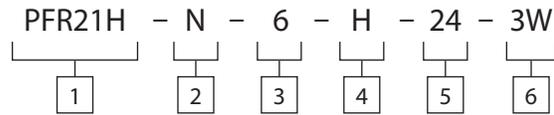


Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

PFR21H - Proportional Valve

Proportional bi-directional poppet, flow control valve
Up to 18L/min (5 USgmp) • 210 bar (3000 psi)

Model Code



1 Function
PFR21H - Normally closed

2 Seal Material
N - Nitrile
V - Viton

3 Manual Override
6 - Screw

4 Coil Termination
H - DIN43650
F - Flying Lead
DM - Deutsch moulded
Other terminations available on request.

5 Voltage
12 - 12 VDC
24 - 24 VDC

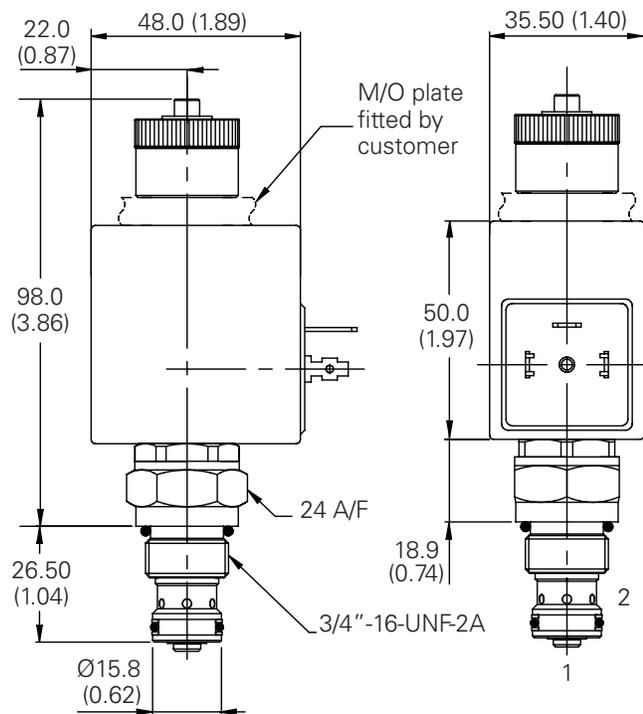
6 Port Size

Code	Port Size	Housing Number
Blank	Cartridge only	
2W	1/4" BSP	A12592
3W	3/8" BSP	A7450
6T	3/8" SAE	A19355

Dimensions

mm (inch)

Cartridge Only



Installation Drawing

