

# Proportional Valves

## PAR1-10

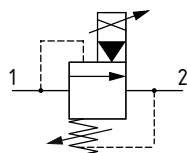
Proportional Relief Valve, Spool Type, Pilot Operated, Normally Open

240 bar [3500 psi] • 57 l/min [15 US gpm]

### DESCRIPTION AND OPERATION

This is a pilot operated, spool type, normally open, proportional relief valve. In the de-energized condition, the pressure setting will be at a minimum. As current is applied to the coil, the pressure setting of the valve will increase proportionally. This valve is ideal for system pressure control where flows may vary.

### SCHEMATIC

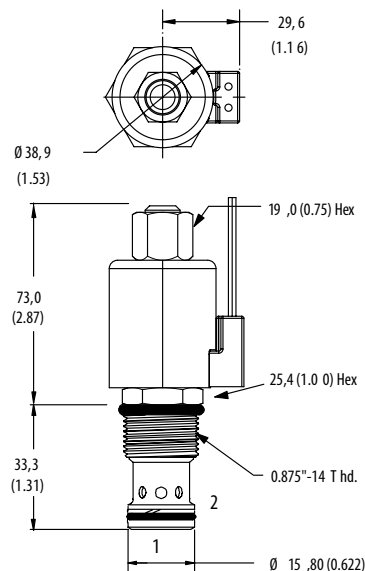


### DIMENSIONS

mm [in]

**Coil Nut Torque**  
5-8 Nm [4-6 ft lbs]

**Installation torque**  
A - 47-54 Nm [35-40 ft lbs]

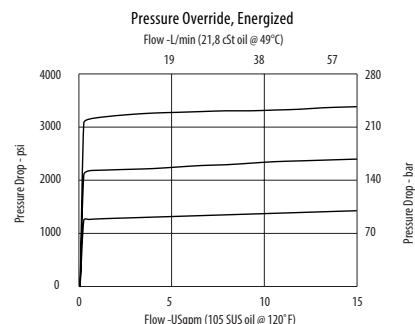
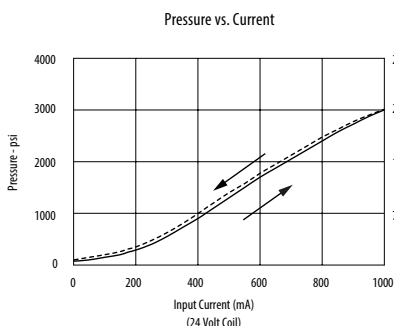


### PERFORMANCE DATA

Rated pressure*	<b>240 bar [3500 psi]</b>
Rated flow	<b>57 l/min [15 US gpm]</b>
Leakage	120 ml/min [7.3 in <sup>3</sup> /min] @ 80% of Pressure Setting
Pressure Range	7-210 bar [100-3000 psi]
Maximum Hysteresis	10%
Recommended PWM frequency	100 Hz
Threshold current	0 A
Maximum control current	1.0 A [12 VDC coil] 0.5 A [24 VDC coil]
Coil Options	J series
Weight	0.44 kg [0.98 lb]
Cavity	SDC10-2

\*Rated pressure based on NFPA fatigue test standards (at 1 million cycles)

### PERFORMANCE CURVES



### MODEL CODE

**PAR1 - 10 - V - 100 - 0 - 12D - G - J**

#### Seal Option

Code	Seal kit
Omit - Buna - N	565803
V - Viton	566086

#### Max Pressure Setting

Code x 100 - Pressure setting in psi [100 psi increments within specified Pressure Range]  
Pressure Range: 7-210 bar [100-3000 psi]  
Example:

Code	Bar	Psi
100	100	[1450 psi]

#### Housing

Code	Ports	Aluminium
0	No housing	
6T	#6 SAE	566151
2G	1/4" BSP	876702
3G	3/8" BSP	876703
6H	#6 SAE	876700
8H	#8 SAE	876701

\* Aluminum bodies are to be used for pressures less than 210 bar [3000 psi].

\* Additional housings available

#### Coil series

Omit - No coil  
J - J Series, 23 W

#### Connector Type

Omit - No coil  
G - DIN 43650  
W - Lead wires  
N - Deutsch  
Y - AMP JR.

#### Coil Voltage

00 - No coil, nut included (p/n 565559)  
12D - 12 VDC  
24D - 24 VDC