

# Proportional Valves

## EPRV2-8

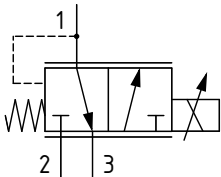
Proportional Pressure Reducing, Relieving, Direct Acting, Normally Open to Drain

35 bar [500 psi] • 7.6 l/min [2 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



### PERFORMANCE DATA

<b>Rated pressure*</b>	<b>35 bar [500 psi]</b>
<b>Rated flow</b>	<b>7.6 l/min [2 US gpm]</b>
<b>Reduced pressure range</b>	0-22 bar [0-320 psi]
<b>Maximum Hysteresis</b>	5%
<b>Recommended PWM frequency</b>	150 Hz
<b>Maximum control current</b>	0.85 A [12 VDC coil] 0.425 A [24 VDC coil]
<b>Coil Options</b>	S series
<b>Weight</b>	0.29 kg [0.64 lb]
<b>Cavity</b>	SDC08-3

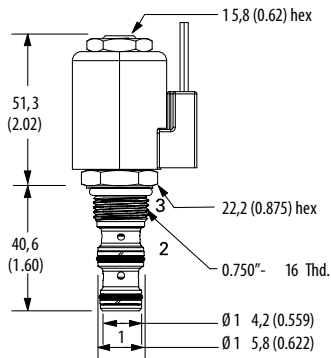
\*Rated pressure based on NFPA fatigue test standards (at 1 million cycles)

### DIMENSIONS

mm [in]

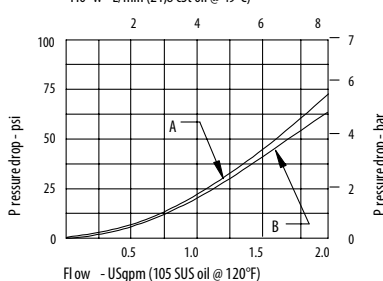
**Coil nut torque**  
5-8 Nm [4-6 ft lbs]

**Installation torque**  
A - 34-41 Nm [25-30 ft lbs]



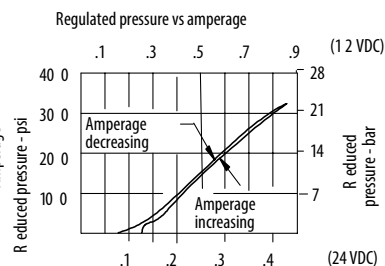
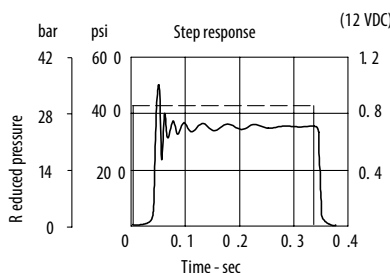
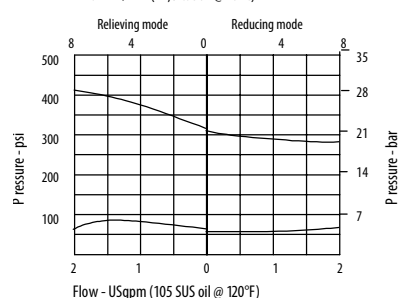
### PERFORMANCE CURVES

Flo w - L/min (21,8 cSt oil @ 49°C)



A - Port 1 to port 3 B - Port 2 to port 1

Flow - L/min (21,8 cSt oil @ 49°C)



### MODEL CODE

**EPRV2 - 8 - V - A - 4T - 12D - G - S**

#### Seal Option

Code	Seal kit	Housing Material
Omit	Buna - N 02-179451	Omit - No housing
V	Viton 02-179452	A - Aluminium

#### Housing

Code	Ports	Aluminium
0	No housing	
4T	#4 SAE	02-160741
6T	#6 SAE	02-160742
2G	1/4" BSP	02-160739
3G	3/8" BSP	02-160740

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

#### Coil series

Omit - No coil  
S - S series coil

#### Connector Type

Omit - No coil  
G - ISO 4400 DIN 43650  
W - Flying lead  
N - Deutsch (DC only)  
Y - Amp JR (DC only)  
D - Metripack 150 male (DC only)  
J - Metripack 280 male (DC only)

#### Coil Voltage

00 - No coil, nut included (p/n 565558)  
12D - 12 VDC  
24D - 24 VDC