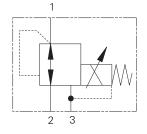
В

# **EPRV2-8 - Proportional Valve**

Proportional reducing/relief, spool 7.6 L/min (2 USgpm) • 35 bar (500 psi)



### Operation

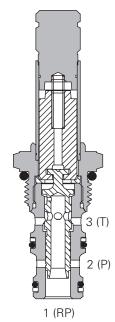
In the de-energized position, pressure inlet port 2 is closed and reduced pressure port 1 is open to return port 3. As electrical current is increased, port 2 opens to port 1 and port 3 closes, proportionally increasing pressure at port 1.

If the pressure at port 1 exceeds the setting of the valve, the spool will shift further and relieve to port 3.

#### **Features**

Hardened and ground components for accurate consistent control and a long life. IP69K Tough coil compatibility continuously rated.

### **Sectional View**



# Description

This is a low pressure proportional direct acting pressure reducing valve with a reverse relief screw in cartridge valve. It is ideal for the control of compensators on a pump or brake and clutch systems on a transmission circuit.

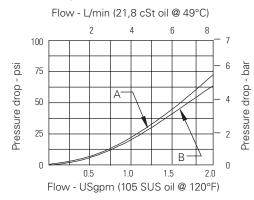
#### Performance Data

Ratings and	Specifications
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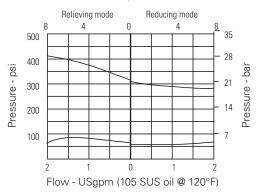
natings and specifications		
Performance data is typical with	fluid at 21,8 cST (105 SUS) and 49°C (120°F)	
Maximum inlet pressure		35 bar (500 psi)
Cartridge fatigue pressure (infini	te life)	35 bar (500 psi)
Reduced pressure range		0-22 bar (0-320 psi)
Maximum operating flow		7,6 L/min (2 USgpm)
Temperature range		-40° to 120°C (-40° to 248°F)
Cavity		C-8-3
Fluids	All general purpose hydraulic fluids such as:	MIL-H-5606, SAE 10, SAE 20 etc.
Filtration		Cleanliness code 18/16/13
Recommended PWM frequency		150 Hz
Hysterisis @ 150 Hz PWM		5%
Housing material (standard)		Aluminum
Weight including coil		0,29 kg (.64 lbs)
Seal kit	02-1794	51 (Buna-N), 02-179452 (Viton <sup>*</sup> )

Viton is a registered trademark of E.I. DuPont

## **Pressure Drop Curves**

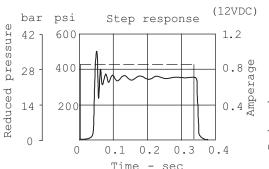


Flow - L/min (21,8 cSt oil @ 49°C)



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

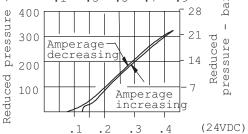
### **Performance Curves**



Regulated pressure vs amperage

1 .1 .3 .5 .7 .9 (12VDC)

400 28 .0







# **EPRV2-8 - Proportional Valve**

Proportional reducing/relief, spool 7.6 L/min (2 USgpm) • 35 bar (500 psi)

#### Model Code

EPRV2 - 8 (V) - (A) - \*\* - \*\*\* - \* \* - 00

1 Function

EPRV2 - Proportional reducing/ relieving valve

2 Size

8 - 8 size

3 Seal Material Blank - Buna-N V - Viton\*

4 Valve Housing Material Omit for cartridge only A - Aluminum 5 Port Size

Code	Port Size	Housing Number	
		Aluminum Single	
0	Cartridge only		
4T	SAE 4	02-160741	
6T	SAE 6	02-160742	
2G	1/4" BSPP	02-160739	
3G	3/8" BSPP	02-160740	

See section J for housing details.

6 Voltage Rating

00 - No coil 12D - 12VDC

24D - 24VDC

12B - 12VDC/w diode\* 24B - 24VDC/w diode\* \*Optional arc suppression diode. Note: This valve uses the standard S series coils, see section C for coil

part numbers and specifications.

7 Connector Types

Blank - No coil

G - DIN 43650

Q - Spade TerminalsW - Flying Lead

N - Flying Le

Y - Amp JR

For coil part numbers and dimensions see section C.

8 Coil

S - S series coils

9 Special Features

00 - None

Only required if valve has special features, omitted if "00."

#### Dimensions

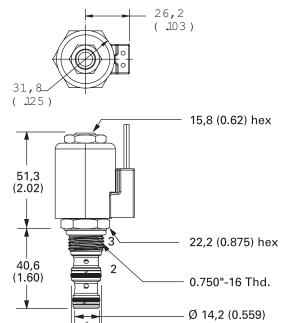
mm (inch)

Torque cartridge in aluminum or steel housing 34-41 Nm (25-30 ft lbs)

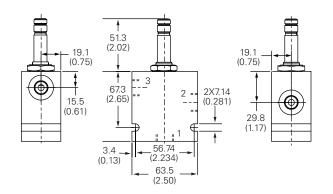
Ø 15,8 (0.622)

#### Cartridge Only

Valve is shown with "N" coil.



#### Installation Drawing





WARNING Maintain 5-8 Nm (4-6 ft lbs) maximum

torque on valve tube nut. Over tightening may cause valve failure.



