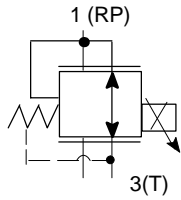


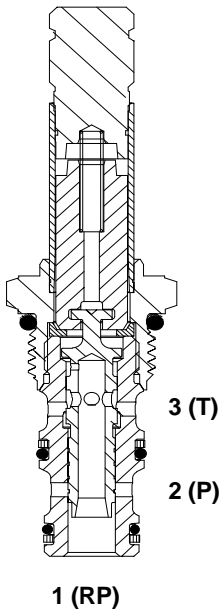
EPRV2-8

Proportional pressure reducing-relieving valve

Functional Symbol



Sectional View



Description

The EPRV2-8 is a proportional, pressure reducing-relieving, sliding spool, electrically controlled, screw-in cartridge type valve.

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.

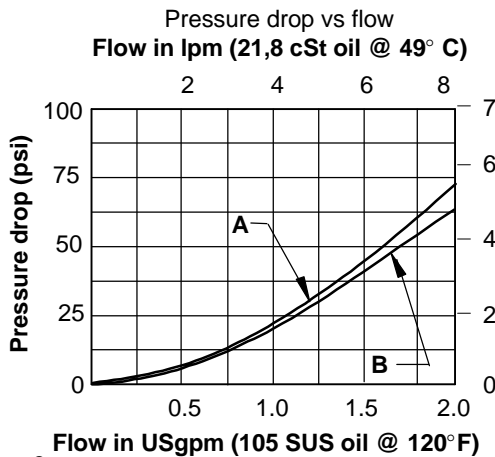
Ratings and specifications

Performance data is typical with fluid at 21,8 cSt (105 SUS) and 49° C (120° F)

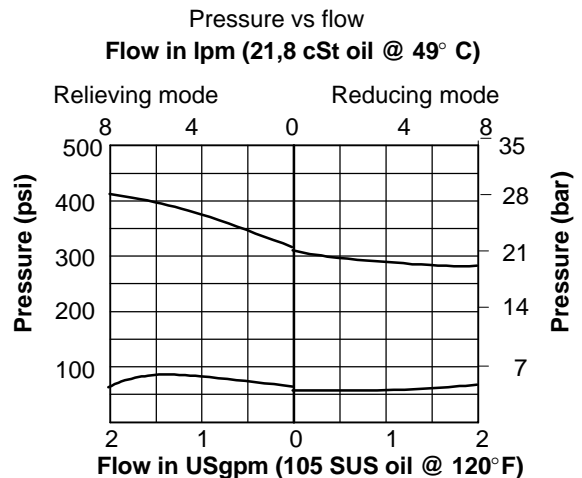
Maximum inlet pressure	35 bar (500 psi)
Cartridge fatigue pressure (infinite life)	35 bar (500 psi)
Reduced pressure range	0-22 bar (0-320 psi)
Maximum operating flow	7,6 L/min (2 USgpm)
Cavity	C-8-3 (See page 27)
Standard housing materials	Aluminum
Temperature range	-40 to 120° C (-40° to 248° F)
Fluids	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
Hysteresis @ 150 Hz PWM	5%
Weight including coil	0,29 kg. (0.64 lbs.)
Seal kits	02-179451 Buna-N 02-179452 Viton®

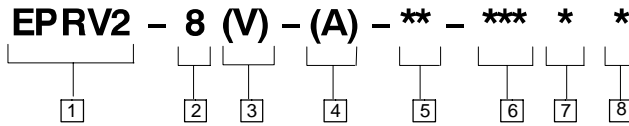
Viton® is a registered trademark of E.I. DuPont Co.

Performance Characteristics



A—Port 1 to port 3
B—Port 2 to port 1





1 Function

EPRV2 - Proportional reducing/relieving valve

2 Size

8 - 8 Size

3 Seals

Blank - Buna-N
V - Viton

4 Valve housing material

Omit for cartridge only

A - Aluminum

5 Port size

0 - Cartridge only

Code	Port size	Housing number
4T	SAE 4	02-160741
6T	SAE 6	02-160742
2G	1/4" BSPP	02-160739
3G	3/8" BSPP	02-160740

See page 29 for housings

7 Connector types

Blank - No coil

Voltage	G - ISO 4400 DIN 43650	P - 1/2" NPT conduit port w/ leadwire	Q - Spade terminals	W - Leadwire	N - Deutsch	Y - Amp JR
12D	02-160690	02-160684	02-160681	02-160678	02-160958	02-178001
24D	02-160691	02-160685	02-160682	02-160679	02-160959	02-178002
12B	02-178810	-	02-178804	02-178802	02-160953	02-160957
24B	02-178811	-	02-178805	02-178803	02-178812	02-178815

6 Voltage rating

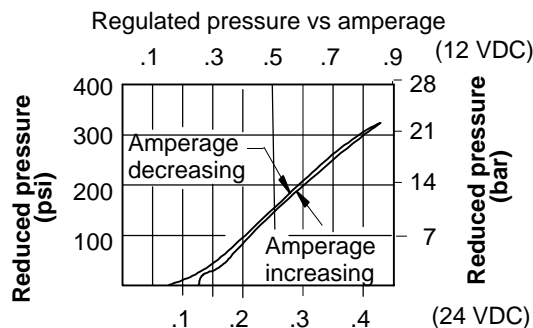
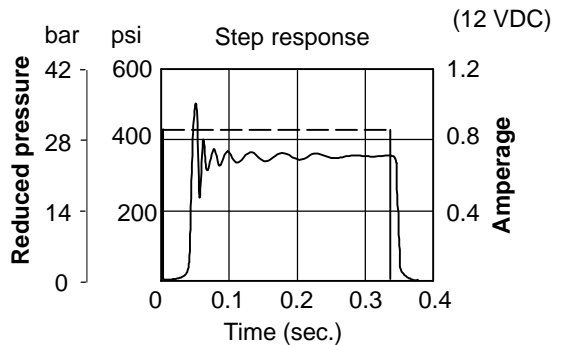
00 - No coil
12D - 12VDC
24D - 24VDC
12B - 12VDC/w diode*
24B - 24VDC/w diode*
*optional arc suppressing diode

8 Coil

Valve is shown with "N" coil. See page 32 for coil information and dimensions.

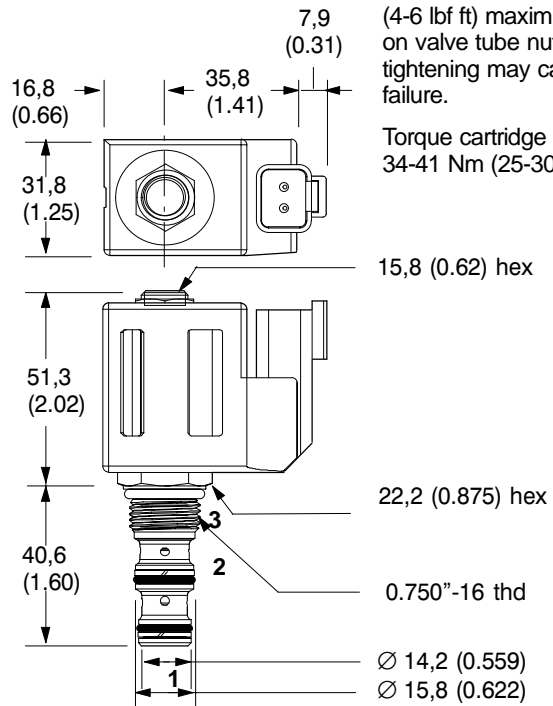
S - 8 series, 16w

Performance characteristics



Dimensions

mm (inch)



WARNING

Maintain 5-8 Nm (4-6 lbf ft) maximum torque on valve tube nut. Over-tightening may cause valve failure.

Torque cartridge in housing 34-41 Nm (25-30 lbf ft)