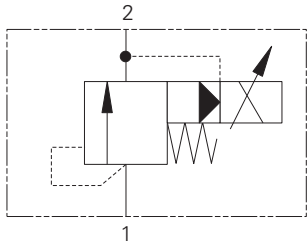


ERV1-16 - Proportional Valve

Proportional relief, spool

Up to 132 L/min (35 USgpm) • 210 bar (3000 psi)

B



Operation

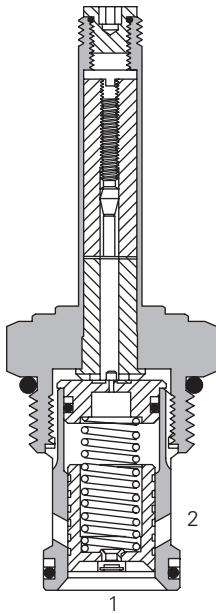
This valve remains closed between port 1 and 2 until the predetermined pressure setting has been reached

at port 1, overcoming the electrical force and opening the spool to allow flow from port 1 to port 2.

Features

Hardened and ground components for accurate consistent control and a long life. Pilot style to give accurate pressure control over varying flows. IP69K Tough coil compatibility continuously rated.

Sectional View



Description

This is a proportional internally pilot operated screw in cartridge relief valve. Good control over large flows for the physical size of the cartridge. Ideal for the control of pressure under varying flow conditions.

Performance Data

Ratings and Specifications

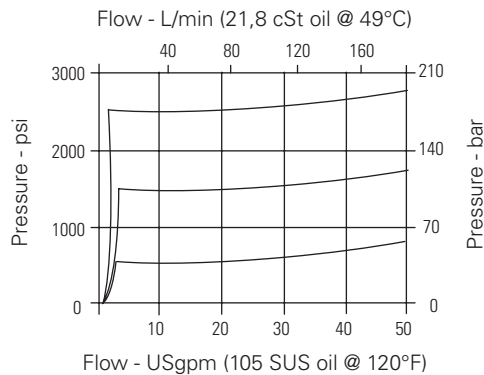
Performance data is typical with fluid at 21,8 cSt (105 SUS) and 49°C (120°F)

Typical application pressure (all ports)	3,5-210 bar (50-3000 psi)
Cartridge fatigue pressure (infinite life)	210 bar (3000 psi)
Rated flow	7,6-132,0 L/min (2-35 USgpm)
Temperature range	-40° to 120°C (-40° to 248°F)
Cavity	C-16-2
Fluids	All general purpose hydraulic fluids such as: MIL-H-5606, SAE 10, SAE 20 etc.
Filtration	Cleanliness code 18/16/13
Housing material (standard)	Aluminum
Weight including coil	0,44 kg (.98 lbs)
Seal kit	565810 (Buna-N), 889609 (Viton)

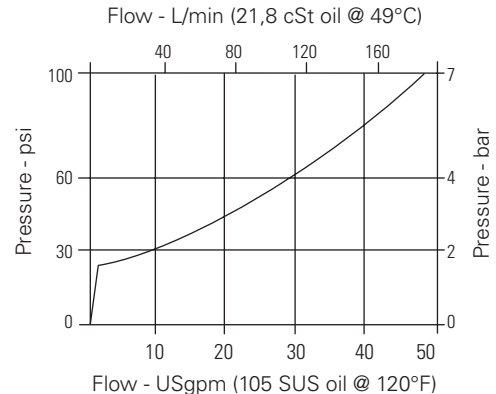
Viton is a registered trademark of E.I. DuPont

Pressure Drop Curves

Pressure override, energized



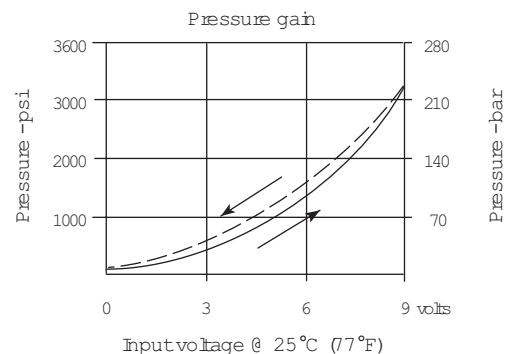
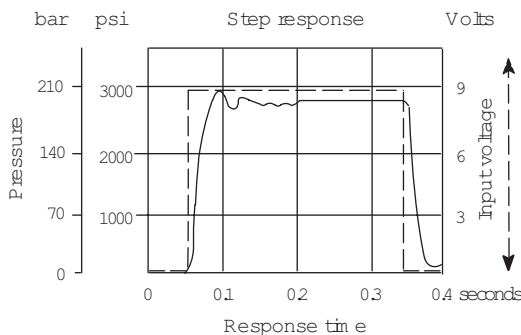
Pressure override, de-energized



Performance Curves

Cartridges only

Zero outlet pressure



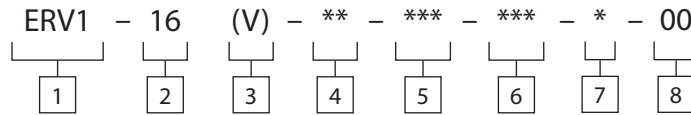
Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

ERV1-16 - Proportional Valve

Proportional relief, spool

Up to 132 L/min (35 USgpm) • 210 bar (3000 psi)

Model Code



1 Function
ERV1 - Proportional relief valve

2 Size
16 - 16 size

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

4 Maximum Pressure
Customer to specify settings in increments of 7 bar (100 psi) and coded in hundreds of psi within the 35-210 bar range (500-3000 psi) range.
Example: 5-35,0 (500 psi)

5 Port Size

Code	Port Size	Housing Number
Aluminum Single		
0	Cartridge only	
12T	SAE 12	566149*
4G	1/2" BSPP	876716*
6G	3/4" BSPP	876718
10H	SAE 10	876717
12H	SAE 12	566113

*Light duty housing.
See section J for housing details.

6 Voltage Rating

00 - No coil	*Optional arc suppression diode. Note: This valve uses the standard J series coils, see section C for coil part numbers and specifications.
12D - 12VDC	
24D - 24VDC	
12B - 12VDC/w diode*	
24B - 24VDC/w diode*	

7 Connector Types
Blank - No coil
G - DIN 43650
Q - Spade Terminals
W - Flying Lead
N - Deutsch
Y - Amp JR
For coil part numbers and dimensions see section C.

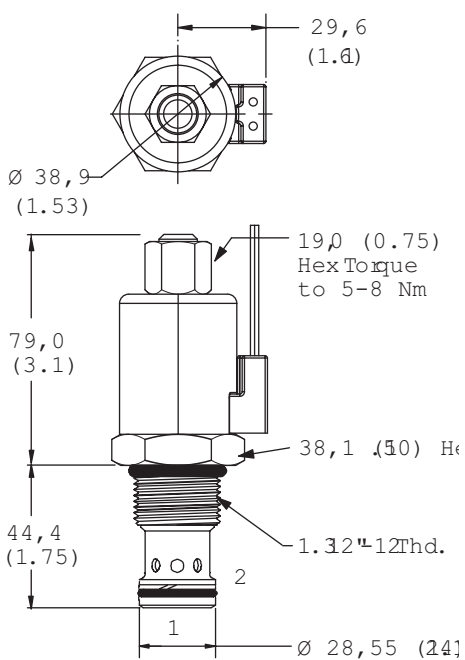
8 Special Features
00 - None
Only required if valve has special features, omitted if "00."

Dimensions

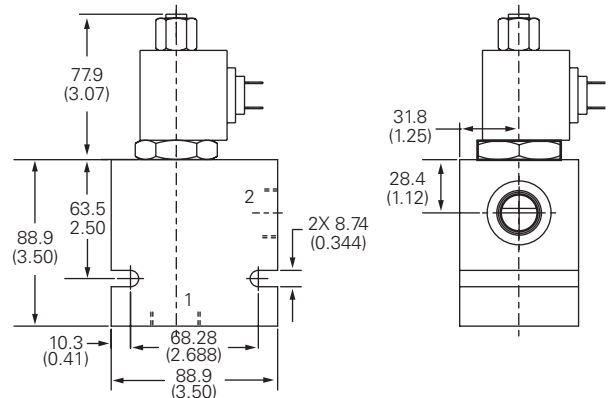
mm (inch)

Torque cartridge in aluminum housing
108-122 Nm (80-90 ft lbs)

Cartridge Only



Installation Drawing



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