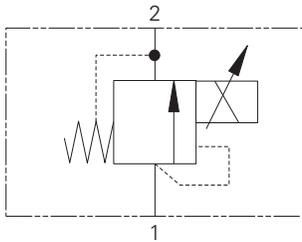


# IRV1-10 - Proportional Valve

Proportional inverse relief, poppet  
1 L/min (.25 USgpm) • 210 bar (3000 psi)

B



## Operation

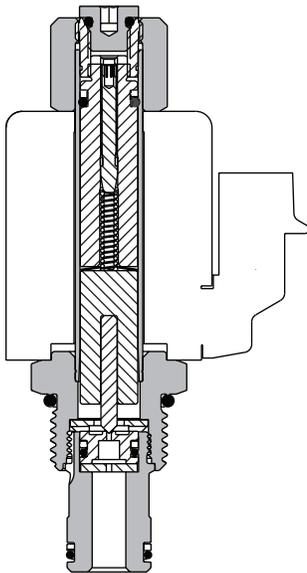
The IRV1-10 proportional relief is spring biased closed to the highest setting. Increasing current to the coil will proportionally decrease the pressure setting.

When the pressure at port 1 (inlet) is enough to overcome the spring force, the poppet lifts and allows flow from port 1 to port 2 (outlet).

## Features

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

## Sectional View



## 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	210 bar (3000 psi)
Cartridge endurance rating	1 million cycles
Cartridge fatigue pressure rating (NFPA/T2.6.1 R2-2000)	210 bar (3000 psi)
Maximum pressure setting range	35-210 bar (3000 psi)
Rated flow	1 L/min, (0.25 USgpm)
Nominal supply voltage	12/24 V
Temperature range	-30° to 90°C (-22° to 194°F)
Maximum oil temperature	120°C (248°F)
Maximum internal oil temperature	200°C (392°F)
Cavity	C-10-2
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
Hysteresis	100 psi with dither
Weight cartridge only	0,13 kg (.3 lbs)
Seal kit	565803 (Buna-N), 566086 (Viton <sup>®</sup> )

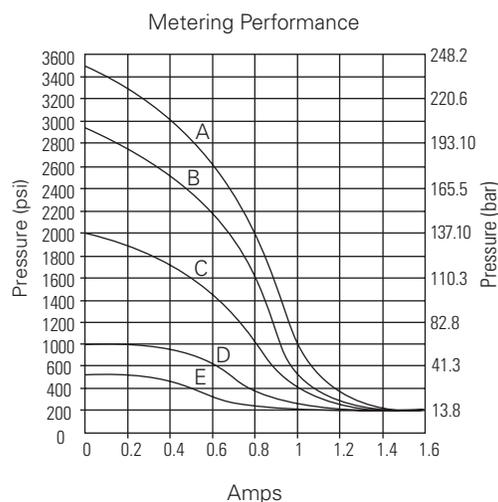
Viton is a registered trademark of E.I. DuPont

Endurance tested to 1 million cycles at full rated flow and pressure.

## Description

This is a proportionally controlled inverse pilot poppet relief valve. Ideal for use with logic elements to control fan or brush pressure where full speed or force is required under electrical failure.

## Pressure Drop



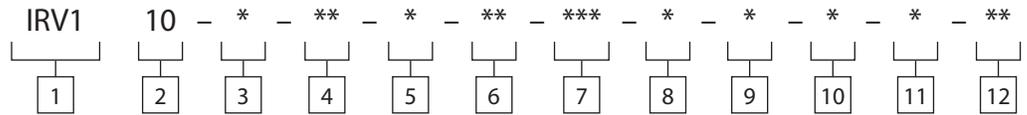
Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

# IRV1-10 - Proportional Valve

Proportional inverse relief, poppet

1 L/min (.25 USgpm) • 210 bar (3000 psi)

## Model Code



**1** Function  
IRV1 - Inverse proportional relief

**2** Size  
10 - 10 size

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

**4** Factory Set Pressure  
User requested in 100 psi increments. Max pressure setting range 500 - 3000 psi  
Example  
15 - 1500 psi  
30 - 3000 psi

**5** Housing Material  
Blank - Cartridge only  
A - Aluminum

**6** Port Size

Code	Port Size	Housing Number
		Aluminum Single Aluminum Single
		Light Duty Fatigue Rated
0	Cartridge only	
6T	SAE 6	566150
8T	SAE 8	566151
2G	1/4" BSPP	5986433-001
3G	3/8" BSPP	876703
6H	SAE 6	876700
8H	SAE 8	876701

See section J for housing details.

**7** Coil Voltage  
00 - No coil  
010 - 10VDC  
012 - 12VDC  
024 - 24VDC

**8** Type of Power  
Blank - No coil  
D - DC w/o diode  
B - DC with diode

**9** Connector Type  
Blank - No coil  
G - ISO 4400 DIN 43650  
Q - Spade Terminals  
W - Flying Lead  
N - Deutsch (DC only)  
Y - Amp JR (DC only)  
P - Conduit  
Forcoilpartnumbersanddimensions see section C.

**10** Coil Series  
Blank - No coil  
J - J Series, 20 W  
Forcoilpartnumbersanddimensions see section C.

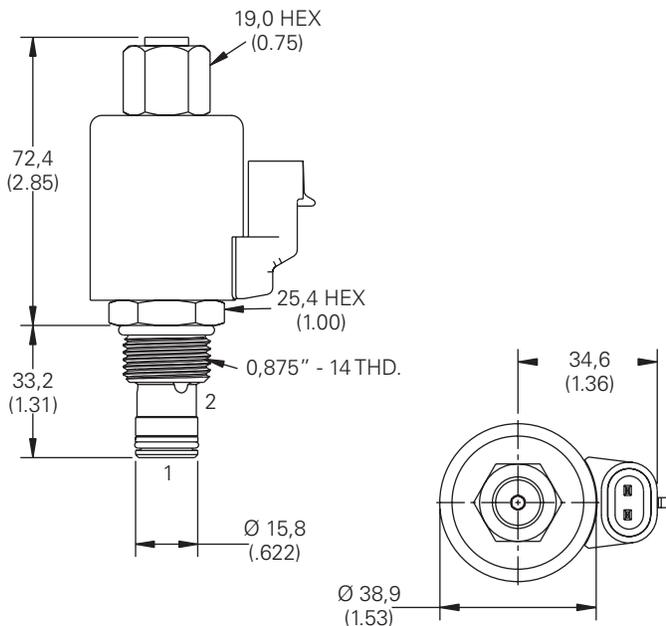
**11** Coil Special Features  
Blank - No coil  
00 - No special feature

**12** Valve Special Features  
Blank - No coil

## Dimensions

mm (inch)

### Cartridge Only



### Installation Drawing

