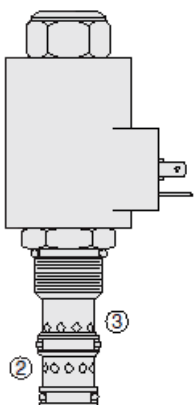




## Overview



### Description

PV72-30 is a solenoid operated, pressure compensated, spool type, normally closed, proportional priority flow control valve.

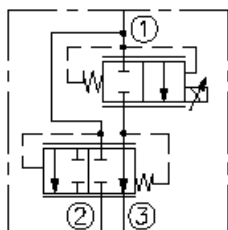
### Operation

The valve provides priority regulated flow at port 3 with pressure compensated regulated and bypass flow. The regulated flow is proportional to electric current applied to the solenoid.

### Features

- Choice of two regulated flow ranges
- Excellent linearity and hysteresis characteristics.
- Optional coil voltages and terminations.
- Efficient wet-armature construction.
- Cartridges are voltage-interchangeable.
- Unitized, molded coil design.
- Coil waterproofing standard.
- Manual Override option.

### Symbol



## Ratings

### Pressure Ratings

Pressure rating	240 bar (3500 psi)
Proof pressure	345 bar (5000 psi)
Burst pressure	896 bar (13000 psi)

### Flow Ratings

Flow rating	0 to 57 lpm (0 to 15.0 gpm)	- <b>Note:</b> For "a" flow range;
	0 to 38 lpm (0 to 10.0 gpm)	- <b>Note:</b> For "b" flow range
Maximum internal leakage	0.38 lpm (0.1 gpm)	- <b>Note:</b> Max at 0 current
Hysteresis flow	lpm (gpm)	

### Temperature Ratings

Operating fluid temperature	-40 to 100 °C (-40 to 212 °F)	- <b>Note:</b> With buna N seals
	-26 to 204 °C (-15 to 400 °F)	- <b>Note:</b> With fluorocarbon seals
	-54 to 107 °C (-65 to 225 °F)	- <b>Note:</b> With polyurethane seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 70 °C (-40 to 160 °F)	

### Other Ratings

Corrosion protection	960 hr salt spray per ASTM b117
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## Operating Parameters

Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per ISO 4406



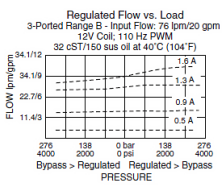
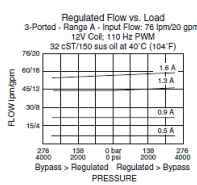
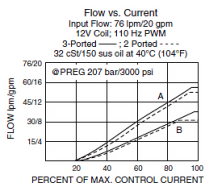
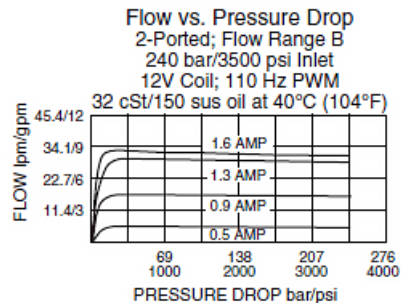
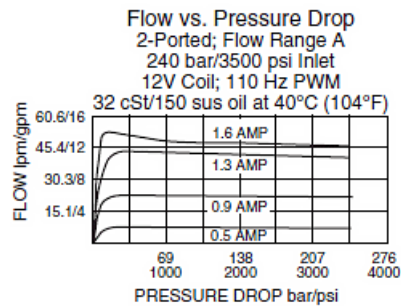
## Properties

Unit weight	0.42 kg (0.93 lb)	- <b>Note:</b> PV72-30X
	0.47 kg (1.03 lb)	- <b>Note:</b> PV72-30XM
	0.56 kg (1.23 lb)	- <b>Note:</b> PV72-30XG
Internal wetted surface area	339 cm <sup>2</sup> (52.5 in <sup>2</sup> )	- <b>Note:</b> PV72-30X
	342 cm <sup>2</sup> (53.0 in <sup>2</sup> )	- <b>Note:</b> PV72-30XM PV72-30XG

## Electrical Parameters

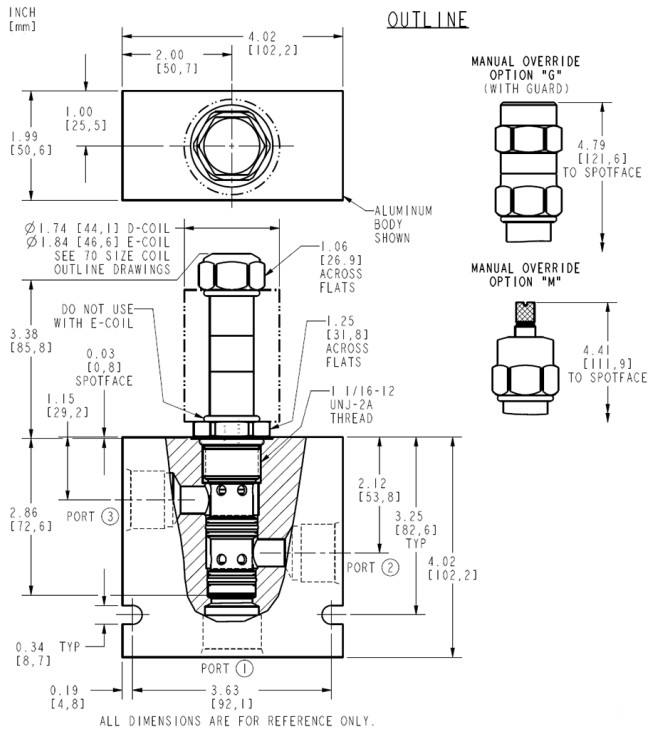
Note	With size 70 e-series and d-series coils	
Maximum control current	1600 mA	- <b>Note:</b> 12 V coil
	800 mA	- <b>Note:</b> 24 V coil
Threshold current	350 mA	- <b>Note:</b> 12 V coil
	175 mA	- <b>Note:</b> 24 V coil
Valve inductance	240 mH	- <b>Note:</b> E-coil 12 V
	200 mH	- <b>Note:</b> D-coil 12 V
	700 mH	- <b>Note:</b> E-coil 12 V
	600 mH	- <b>Note:</b> D-coil 24 V
Dither PWM frequency	100 to 250 Hz	

## Performance





## Dimensions



## Installation Specifications

Cavity	VC12-3
Cartridge installation torque	45 to 50 N-m (33 to 37 ft-lb)
Maximum allowable torque	68 N-m (50 ft-lb)
Coil nut torque	14 to 16 N-m (10 to 12 ft-lb)
Cover cap torque	7 to 9 N-m (5 to 7 ft-lb)
Orientation restriction	None

## Accessories

Seal kit	SK12-3X-MM	- <b>Note:</b> X = seal option
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## Order Code

PV72-30			
<b>Flow Range</b> 0-57 lpm (0-15 gpm) A 0-38 lpm (0-10 gpm) B	<b>Porting</b> 0 Cartridge Only 8T SAE 8 10T SAE 10 12T SAE 12 12TD SAE 12 4B 1/2 in. BSP* 6B 3/4 in. BSP*	<b>Terminations D-Coil</b> DS Dual Spades DL Leadwires (2) <b>Terminations E-Coil</b> ER IP69K Rated EY Deutsch DT04-2P Metri-Pack® 150	<b>Voltage</b> 0 Less Coil 12 12 VDC 24 24 VDC
<b>Option(s)</b> None (Blank) Manual Override M* Manual Override with Guard G**	<b>Seals</b> Buna N (Std.) N Fluorocarbon V Polyurethane P		

\* BSP Body; U.K. Mfr. Only

\* Requires Coil Nut Kit P/N 4202180

\*\* Requires Coil Nut Kit P/N 4001214

### Model Options

**PV72-30DE-H-J-L**

### D Max Regulated Flow

CODE	DESCRIPTION
A	56.8 lpm (15.0 gpm) Max Regulated Flow
B	37.9 lpm (10.0 gpm) Max Regulated Flow



## E Manual Override

CODE	DESCRIPTION
BLANK	NONE
G	Variable Position Override, Red Knurled Knob with Cover Cap
M	Variable Position Override, Red Knurled Knob

## H Line Body

CODE	DESCRIPTION
0	No Body
8T	Aluminum SAE 8
10T	Aluminum SAE 10
12T	Aluminum SAE 12
12TD	Ductile Iron SAE 12
6B	Aluminum BSPP 3/4" (6)

## J Seal

CODE	DESCRIPTION
N	Buna-N
V	Fluorocarbon
P	Polyurethane
U	PPDI Urethane

## L Coil

CODE	DESCRIPTION
0	No Coil
12DG	12 VDC, D-Coil, DIN 43650
12DL	12 VDC, D-Coil, Dual Lead Wires
12DL/W	12 VDC, D-Coil, Dual Lead Wires with Weatherpak
12DS	12 VDC, D-Coil, Dual Spade
12ER	12 VDC, E-Coil, Deutsch
12EY	12 VDC, E-Coil, Metri-Pack 150
24DG	24 VDC, D-Coil, DIN 43650
24DL	24 VDC, D-Coil, Dual Lead Wires
24DS	24 VDC, D-Coil, Dual Spade
24ER	24 VDC, E-Coil, Deutsch