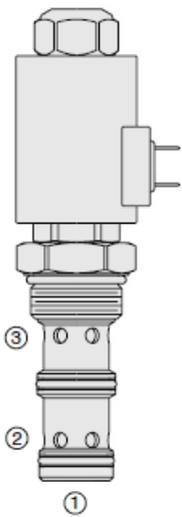




**Overview**



**Description**

Pv76-30 is a solenoid operated, pressure compensated, spool type, normally closed proportional flow control valve.

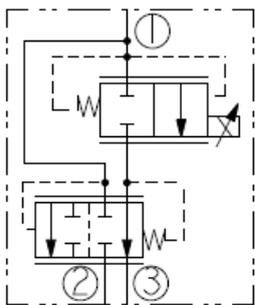
**Operation**

The valve CAN be used as priority type flow regulator with pressure compensated regulated and bypass flow. It can also be used as a restrictive type, 2-way, pressure compensated flow regulator when bypass line (port 2) is blocked. The regulated flow is proportional to electric current applied to the solenoid.

**Features**

- Excellent linearity and hysteresis characteristics.
- Hardened spool and cage for long life.
- Optional coil voltages and terminations.
- Efficient wet-armature construction.
- Manual Override option.

**Symbol**





## Ratings

### Pressure Ratings

Pressure rating	241 bar (3500 psi)	- <b>Note:</b> Inlet
	207 bar (3000 psi)	- <b>Note:</b> Ports 2, 3
Proof pressure	345 bar (5000 psi)	
Burst pressure	896 bar (13000 psi)	

### Flow Ratings

Flow rating	<b>!</b> Flow rating for PV76-30A, PV76-30AM, and PV76-30AG	
	85.2 lpm (22.5)	- <b>Note:</b> Range A, 2-ported, regulated
	94.6 lpm (25 gpm)	- <b>Note:</b> Range A, 3-ported, regulated
	121.1 lpm (32 gpm)	- <b>Note:</b> Range A, 3-ported, input (bypass open), nominal
	151.4 lpm (40 gpm)	- <b>Note:</b> Range A, 3-ported, input (bypass open), maximum
	60.6 lpm (16 gpm)	- <b>Note:</b> Range B, 2-ported, regulated
	64.4 lpm (17 gpm)	- <b>Note:</b> Range B, 3-ported, regulated
	83.3 lpm (22 gpm)	- <b>Note:</b> Range B, 3-ported, input (bypass open), nominal
	113.6 lpm (30 gpm)	- <b>Note:</b> Range B, 3-ported, input (bypass open), maximum
Maximum internal leakage	0.38 lpm (0.10 gpm)	- <b>Note:</b> At zero current

### 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	18/16/14 per ISO 4406	

## Properties

Unit weight	0.6 kg (1.3 lb)	- <b>Note:</b> PV76-30A, PV76-30B
	0.64 kg (1.4 lb)	- <b>Note:</b> PV76-30AM, PV76-30BM
	0.73 kg (1.6 lb)	- <b>Note:</b> PV76-30AG, PV76-30BG
Internal wetted surface area	468 cm <sup>2</sup> (72.6 in <sup>2</sup> )	- <b>Note:</b> PV76-30A, PV76-30B
	473 cm <sup>2</sup> (73.3 in <sup>2</sup> )	- <b>Note:</b> PV76-30AM, PV76-30AG, PV76-30BM, PV76-30BG

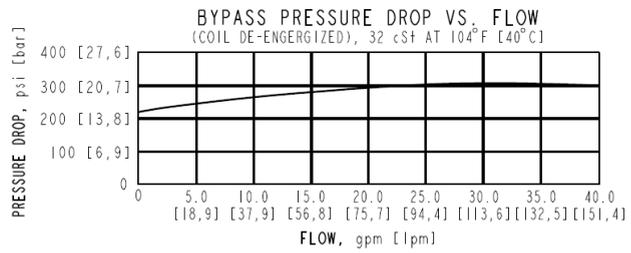
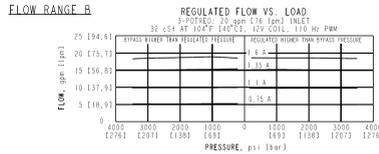
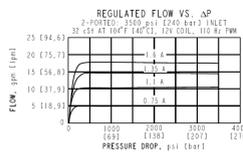
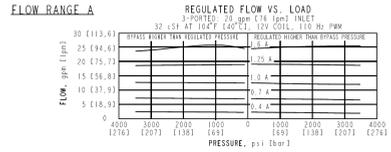
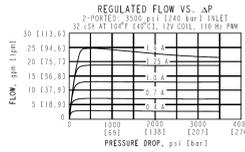
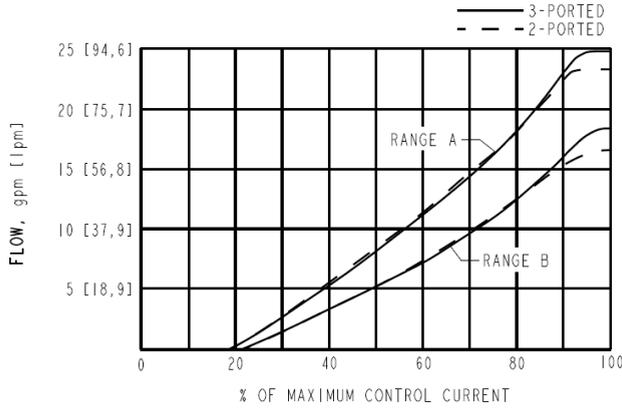
## Electrical Parameters

Maximum control current	1600±100 mA	- <b>Note:</b> 12 V coil
	800±50 mA	- <b>Note:</b> 24 V coil
Threshold current	<b>!</b> PV76-30A/AM/AG	
	300±100 mA	- <b>Note:</b> 12 V coil
	150±50 mA	- <b>Note:</b> 24 V coil

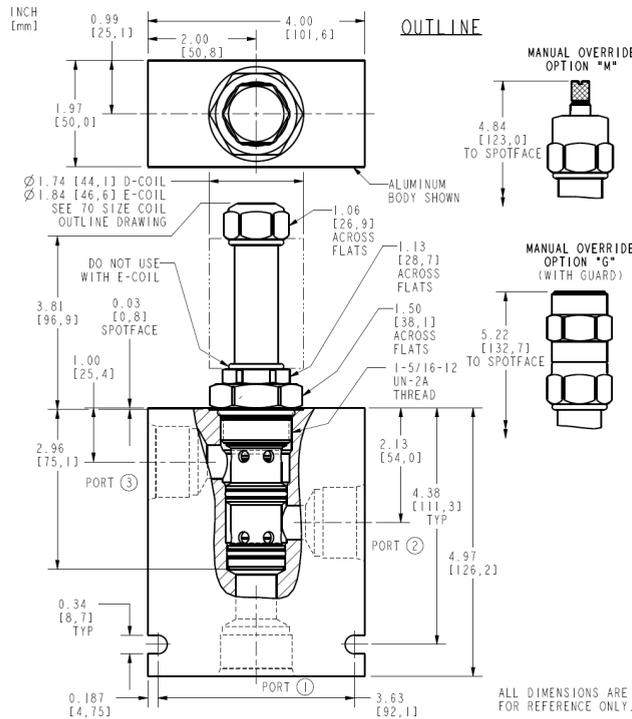


Performance

REGULATED FLOW VS. CURRENT  
3000 psi [207 bar] LOAD AT PORT 3  
12V COIL, 110 Hz PWM, 32 cSt AT 104°F [40°C]



Dimensions



Installation Specifications

Cavity	VC16-3
Cartridge installation torque	67.8 N-m (50 ft-lb)
Coil nut torque	13.6 to 16.3 N-m (10 to 12 ft-lb)
Guard cap torque	7 to 9 N-m (5 to 7 ft-lb)
Orientation restriction	None

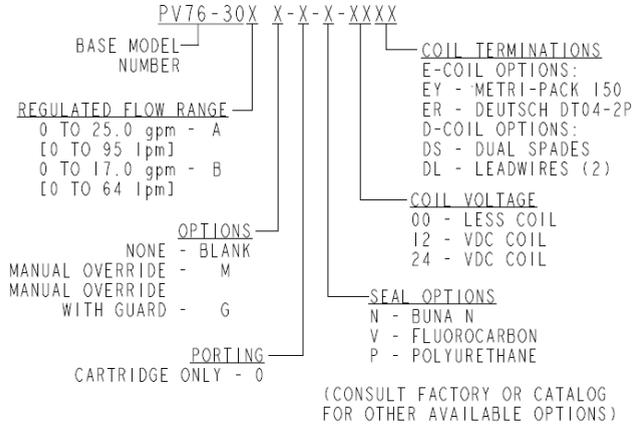


Accessories

Seal kit	SK16-3N-MM	- <b>Note:</b> Buna N
	SK16-3V-MM	- <b>Note:</b> Fluorocarbon
	SK16-3P-MM	- <b>Note:</b> Polyurethane

Order Code

ORDERING INFORMATION:



Model Options

PV76-30ADE-H-J-L

D Max Regulated Flow

CODE	DESCRIPTION
A	0 to 95 lpm (0 to 25.0 gpm) Max Regulated Flow
B	0 to 64 lpm (0 to 17 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
12T	Aluminum SAE 12
16T	Aluminum SAE 16
16TD	Ductile Iron SAE 16

J Seal

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

L Coil

CODE	DESCRIPTION
0	No Coil



CODE	DESCRIPTION
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