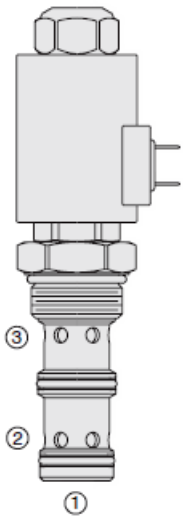




Overview



Description

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

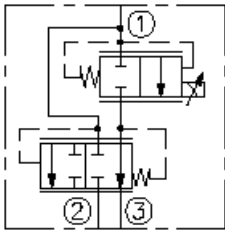
Operation

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)	- Note: Inlet
	207 bar (3000 psi)	- Note: Ports 2, 3
Proof pressure	345 bar (5000 psi)	
Burst pressure	896 bar (13000 psi)	

Flow Ratings

Flow rating	85.2 lpm (22.5)	- Note: 2-ported, regulated
	94.6 lpm (25)	- Note: 3-ported, regulated
	121.1 lpm (32)	- Note: 3-ported, input, nominal
	151.4 lpm (40)	- Note: 3-ported, input, maximum
Maximum internal leakage	0.38 lpm (0.10 gpm)	- Note: At zero current

Temperature Ratings

Operating fluid temperature	-40 to 100 °C (-40 to 212 °F)	- Note: With buna N seals
	-26 to 204 °C (-15 to 400 °F)	- Note: With fluorocarbon seals
	-54 to 107 °C (-65 to 225 °F)	- Note: 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



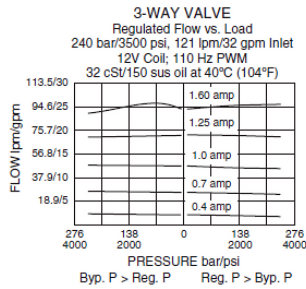
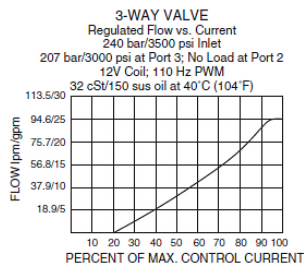
Properties

Unit weight	0.6 kg (1.3 lb)	- Note: PV76-30A
	0.64 kg (1.4 lb)	- Note: PV76-30AM
	0.73 kg (1.6 lb)	- Note: PV76-30AG
Internal wetted surface area	468 cm ² (72.6 in ²)	- Note: PV76-30A
	473 cm ² (73.3 in ²)	- Note: PV76-30AM PV76-30AG

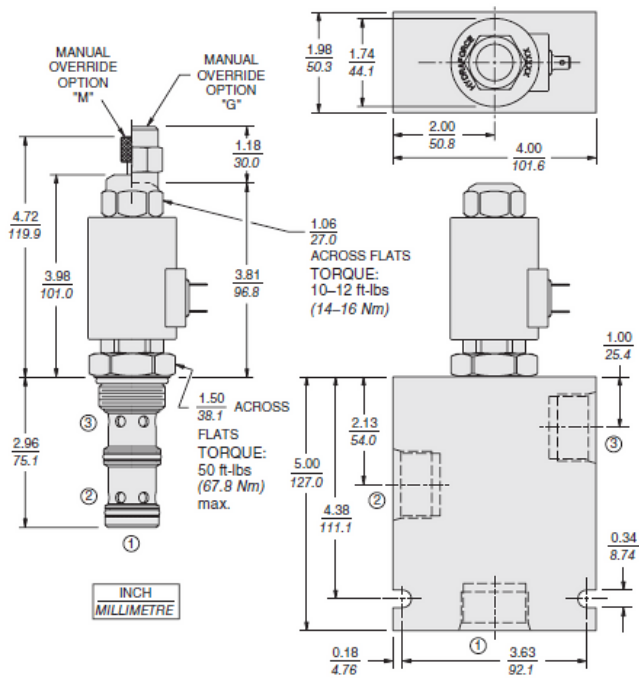
Electrical Parameters

Maximum control current	1600 mA	- Note: 12 V coil
	800 mA	- Note: 24 V coil
Threshold current	300 mA	- Note: 12 V coil
	150 mA	- Note: 24 V coil

Performance



Dimensions



Materials

Materials

Cartridge: Weight: 0.54 kg (1.19 lb); Steel with hardened work surfaces. Zinc-plated exposed surfaces; Buna N O-rings and polyester elastomer back-ups standard.

Standard Ported Body: Weight: 1.6 kg (3.35 lb); Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi); Ductile iron bodies available; dimensions may differ.

70-Size D-Coil: Weight each: 0.32 kg (0.7 lb); Unitized thermoplastic encapsulated, Class H high temperature magnet wire.

70-Size E-Coil: Weight each: 0.41 kg (0.9 lb); Fully encapsulated with rugged external metal shell. IP69K rated.



Installation Specifications

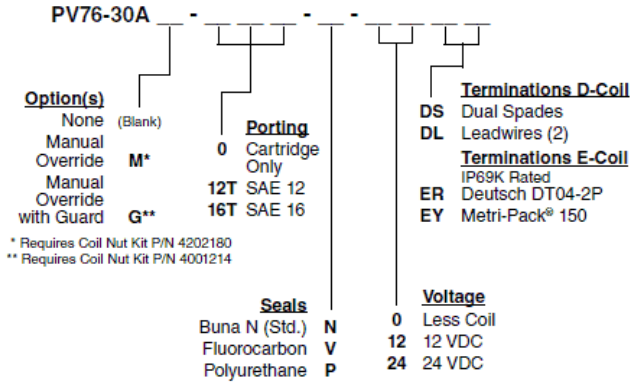
Cavity	VC16-3
Cartridge installation torque	67.8 N-m (50 ft-lb)
Coil nut torque	13.6 to 16.3 N-m (10 to 12 ft-lb)
Cover cap torque	7 to 9 N-m (5 to 7 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK16-3X-MM	- Note: X = seal option
Housings		
Coils		



Order Code



POSITION	CODE	DESCRIPTION
		PV76-30ADE-H-J-L
D		Max Regulated Flow
D	A	94.6 lpm (25.0 gpm) Max Regulated Flow
E		Manual Override
E	BLANK	NONE
E	G	Variable Position Override, Red Knurled Knob with Cover Cap
E	M	Variable Position Override, Red Knurled Knob
H		Line Body
H	0	No Body
H	12T	Aluminum SAE 12
H	16T	Aluminum SAE 16
H	16TD	Ductile Iron SAE 16
J		Seal
J	N	Buna-N
J	V	Fluorocarbon
J	P	Polyurethane
J	U	PPDI Urethane
L		Coil
L	0	No Coil
L	12DG	12 VDC, D-Coil, DIN 43650
L	12DL	12 VDC, D-Coil, Dual Lead Wires
L	12DL/W	12 VDC, D-Coil, Dual Lead Wires with Weatherpak
L	12DS	12 VDC, D-Coil, Dual Spade
L	12ER	12 VDC, E-Coil, Deutsch
L	12EY	12 VDC, E-Coil, Metri-Pack 150
L	24DG	24 VDC, D-Coil, DIN 43650
L	24DL	24 VDC, D-Coil, Dual Lead Wires
L	24DS	24 VDC, D-Coil, Dual Spade
L	24ER	24 VDC, E-Coil, Deutsch