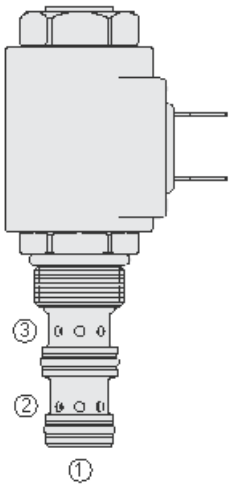




Overview



Description

The PV08-30 is a solenoid operated, pressure compensated, spool type, normally closed, priority type proportional flow control regulator. It also CAN be used as a restrictive type, 2-way, pressure compensated proportional flow regulator (with port 2 blocked).

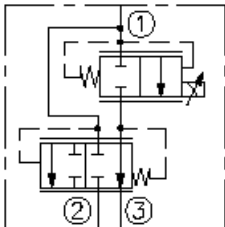
Operation

With inlet flow at port 1 the valve will regulate priority flow out of port 3 regardless of system working pressure with flow rate proportional to current applied to the solenoid. The excessive flow will bypass out of port 2. The bypass flow CAN be used for auxiliary function control. Note: avoid dead heading of priority line by external valving to prevent blocking of bypass line. In restrictive mode applications bypass port 2 has to be blocked, flow rate out of port 3 remains proportional to current applied to the solenoid regardless of load (pressure) applied to port 3.

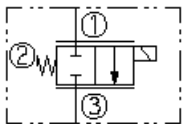
Features

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

Symbol



2-Ported:



Ratings

Pressure Ratings

Pressure rating	241 bar (3500 psi) 207 bar (3000 psi)	- Note: Inlet - Note: Regulated and bypass
Proof pressure	345 bar (5000 psi)	
Burst pressure	896 bar (13000 psi)	

Flow Ratings

Flow rating	11.4 lpm (3.0 gpm)	- Note: Flow range a, regulated, 2-ported
	11.4 lpm (3.0 gpm)	- Note: Flow range a, regulated, 3-ported
	5.7 lpm (1.5 gpm)	- Note: Flow range b, regulated, 2-ported
	5.7 lpm (1.5 gpm)	- Note: Flow range b, regulated, 3-ported
	15.2 lpm (4.0 gpm)	- Note: Flow range a, input nominal, 3-ported
	7.6 lpm (2.0 gpm)	- Note: Flow range b, input nominal, 3-ported
Maximum internal leakage	22.8 lpm (6.0 gpm)	- Note: Flow range a, input maximum, 3-ported
	22.8 lpm (6.0 gpm)	- Note: Flow range b, input maximum, 3-ported
Hysteresis	197 ml/min (12 in ³ /min) bar (3000 psi)	- Note: At port 3 with at port 1 (port 2 closed) at 0 current 207
	±0.9 lpm (±0.25 gpm)	- Note: Maximum

Temperature Ratings

Operating fluid temperature	-40 to 100 °C (-40 to 212 °F) -26 to 204 °C (-15 to 400 °F)	- Note: With buna N seals - Note: With fluorocarbon seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 70 °C (-40 to 160 °F)	



Operating Parameters

Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	20/18/14 per ISO 4406 (reference all sheets)

Electrical Parameters

Note	(With EHPR08 E-series and D-series coil)	
Maximum control current	1400 ±150 mA	- Note: 12 V coil
	700 ±75 mA	- Note: 24 V coil
Threshold current	400 ±100 mA	- Note: 12 V coil
	200 ±50 mA	- Note: 24 V coil
Dither PWM frequency	100 to 200 Hz	

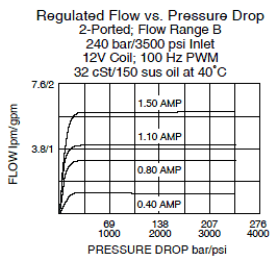
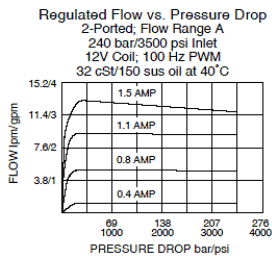
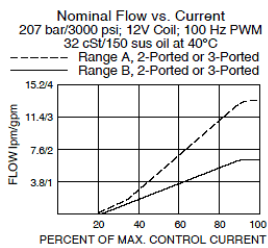
Properties

Cartridge weight	0.15 kg (0.33 lb)	- Note: PV08-30A/30B
	0.20 kg (0.45 lb)	- Note: PV08-30AM/30BM
	0.27 kg (0.59 lb)	- Note: PV08-30AG/30BG
Internal wetted surface area	155 cm ² (24.1 in ²)	- Note: PV08-30AM/30AG/30BM/30BG
	152 cm ² (23.6 in ²)	- Note: PV08-30A/30B

Environmental

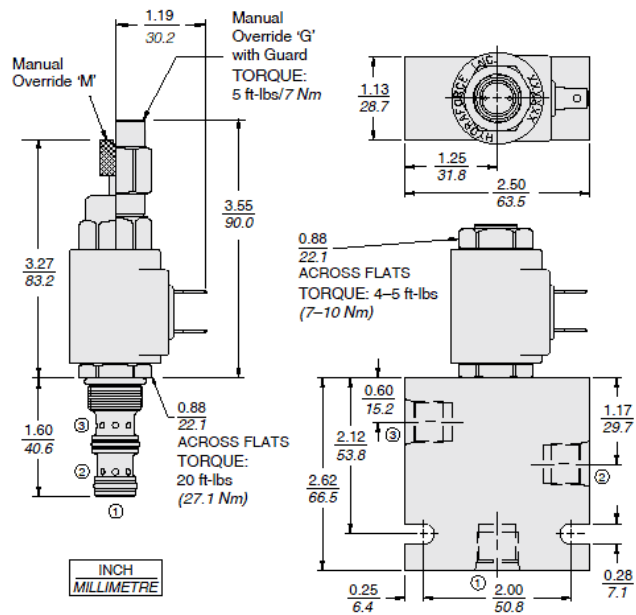
Corrosion protection	960 hr salt spray per ASTM B117	- Note: GPV08-30XX
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Performance





Dimensions



Installation Specifications

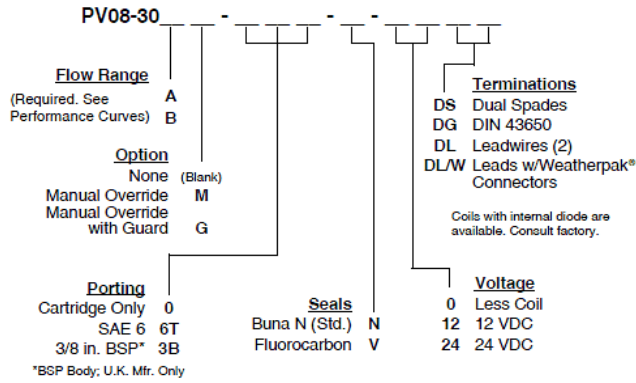
Cavity	VC08-3	
Cartridge installation torque	25.8 to 28.5 N-m (19 to 21 ft-lb)	
Maximum allowable torque	47.5 N-m (35 ft-lb)	
Coil nut torque	6.8 to 9.5 N-m (5 to 7 ft-lb)	- Note: Coil nut and guard nut
Orientation restriction	None	

Accessories

Seal kit	SK08-3X-MM	- Note: X = seal option
Housings		
Coils		



Order Code



POSITION	CODE	DESCRIPTION
		PV08-30DE-H-J-L
D		Max Regulated Flow
D	A	11.4 lpm (3.0 gpm) Max Regulated Flow
D	B	5.7 lpm (1.5 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	4T	Aluminum SAE 4
H	6T	Aluminum SAE 6
H	6TD	Ductile Iron SAE 6
H	8TD	Ductile Iron SAE 8
H	3B	Aluminum BSPP 3/8" (3)
H	3BD	Ductile Iron BSPP 3/8" (3)
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	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