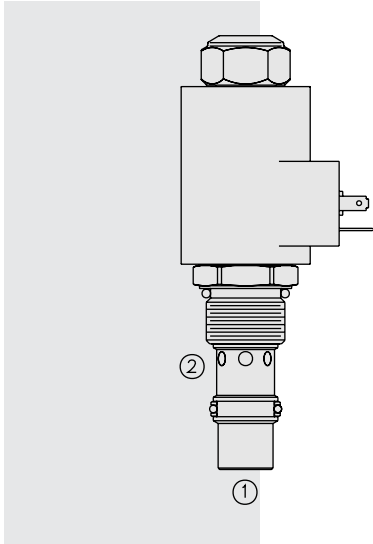


ELECTRO-PROPORTIONAL VALVES—FLOW CONTROLS

PV72-21 Proportional Flow Control Cartridge,



DESCRIPTION

A solenoid operated, electrically-variable, two-port, pressure-compensated, spool-type, normally open when de-energized, proportional flow control valve.

OPERATION

The **PV72-21** will regulate flow out of port ② regardless of system working pressure. With an increasing current applied to the solenoid, the PV72-21 will decrease output flow.

Operation of Manual Override:

- To Engage: Turn clockwise approximately 1 turn to reach start point. Continue another approximately 5 turns to full shift.
- To Disengage: Turn counterclockwise approximately 6 turns until positive stop is found.

FEATURES

- Excellent linearity and hysteresis characteristics.
- Hardened spool and cage for long life.
- Efficient wet armature construction.
- Optional coil voltages and terminations.
- Cartridges voltage interchangeable.
- Unitized, molded coil design.
- Coil waterproofing standard.
- Manual override option.

RATINGS

Operating Pressure: Port ①: 240 bar (3500 psi); Port ②: 207 bar (3000 psi)

Regulated Flow Rate: 56 lpm (15 gpm)

Internal Leakage: .38 lpm (0.1 gpm) fully closed at 207 bar (3000 psi)

Electrical: 2 standard voltage ratings

Coil Voltage	Threshold Current	Max. Control Current
12 VDC	150 ± 100 mA	1350 ± 150 mA
24 VDC	75 ± 50 mA	675 ± 75 mA

Filtration: See page 9.010.1

Fluids: Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 sus); See Temperature and Oil Viscosity, page 9.060.1

Installation: No restrictions; See page 9.020.1.

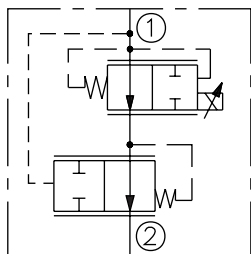
Cavity: VC12-2, Cavity Variation "B"; See page 9.112.1

Cavity Tool: CT12-2X-XX; See page 8.600.1

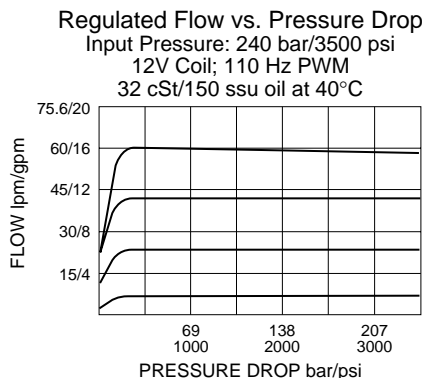
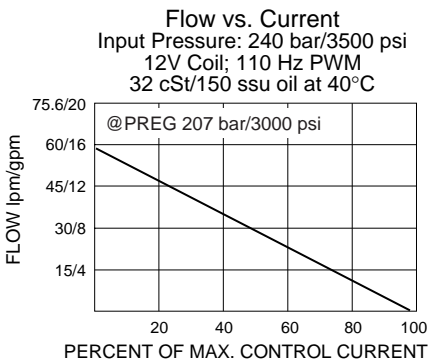
Seal Kit: SK12-2X-M; See page 8.650.1 for seal kit options and appropriate seals based on application temperature range.

SYMBOLS

USASI/ISO:



PERFORMANCE

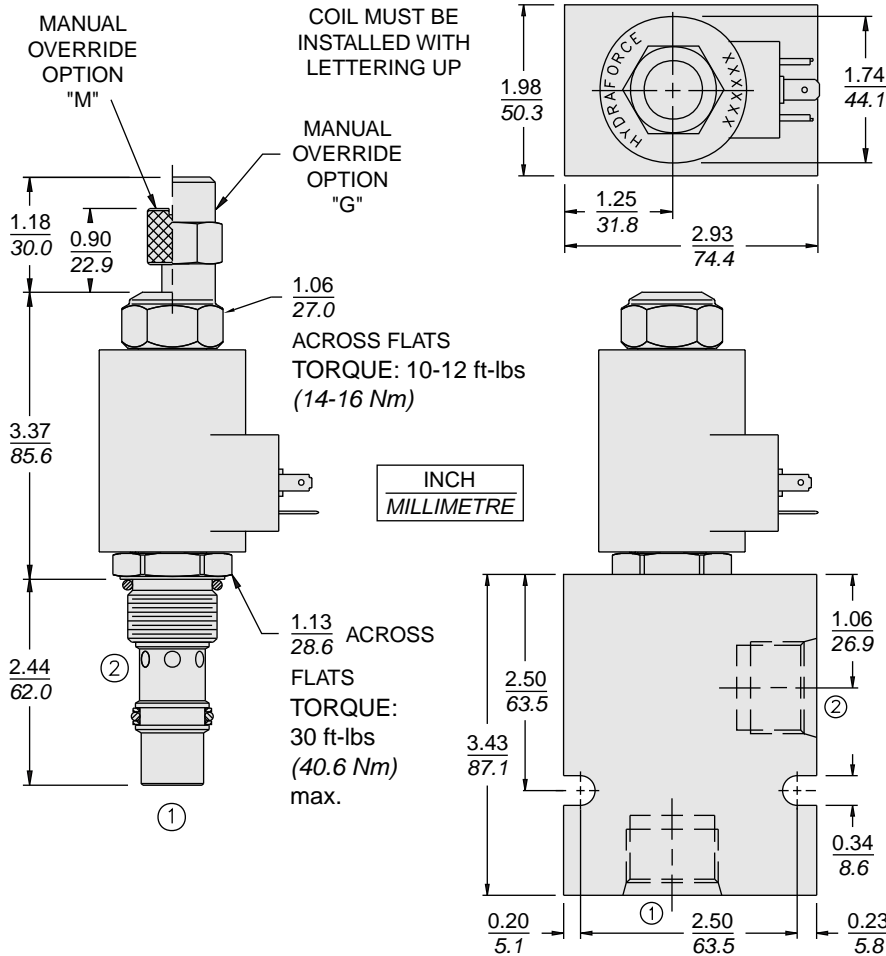


Recommended Electronic Controllers:
See page 2.001.1 or our Electronics catalog.

Normally Open

PV72-21

DIMENSIONS



MATERIALS

Cartridge: Weight: 0.32 kg. (0.7 lbs.)
Steel with hardened work surfaces.
Zinc-plated exposed surfaces. Buna
N O-rings and polyester elastomer
back-ups standard.

Standard Ported Body: Weight:
0.59 kg. (1.3 lbs.); Anodized high-
strength 6061 T6 aluminum alloy,
rated to 207 bar (3000 psi). Ductile
iron bodies available; dimensions
may differ. See page 8.012.1.

70-Size "D" Coil: Weight: 0.32 kg.
(0.7 lbs.) Unitized thermoplastic
encapsulated, Class H high
temperature magnet-wire.
See page 3.200.7.

70-Size "E" Coil: Weight: 0.41 kg.
(0.9 lbs.) Fully encapsulated with
rugged external metal shell.
IP69K rated. See page 3.400.13.

TO ORDER

PV72-21		-	-	-	-	-
Option(s)						
None (Blank)						
Manual Override	M					
Manual Override with Guard	G					
Porting						
Cartridge Only	0					
SAE 10	10T					
SAE 12	12T					
Seals						
Buna N (Std.)	N					
Fluorocarbon	V					
Terminations D-Coil						
DS	Dual Spades					
DG	DIN 43650					
DL	Leadwires (2)					
DL/W	Leads w/Weatherpak® Connectors					
Terminations E-Coil						
ER	IP69K Rated Deutsch DT04-2P					
EY	Metri-Pack® 150					
Coils with internal diode are available. Consult factory.						
Voltage						
0	Less Coil					
12	12 VDC					
24	24 VDC					