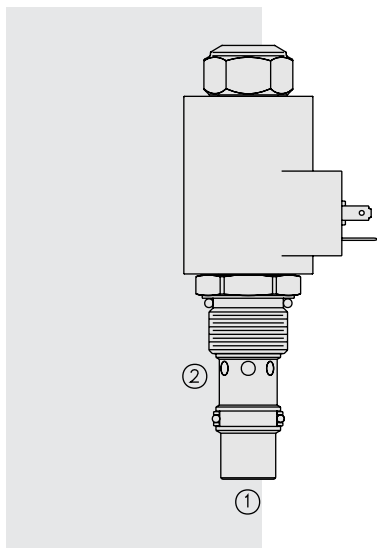


ELECTRO-PROPORTIONAL VALVES—FLOW CONTROLS

PV72-20 Proportional Flow Control Cartridge,



DESCRIPTION

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

OPERATION

The **PV72-20** will regulate flow out of port ② regardless of system working pressure. With an increasing current applied to the solenoid, the PV72-20 will increase 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: 0 to 64 lpm (0 to 17 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	1500 ± 100 mA
24 VDC	75 ± 50 mA	750 ± 50 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.

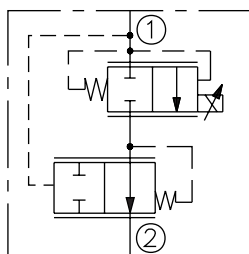
Cavity: VC12-2 Cavity Variation "B"; See page 9.112.1

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

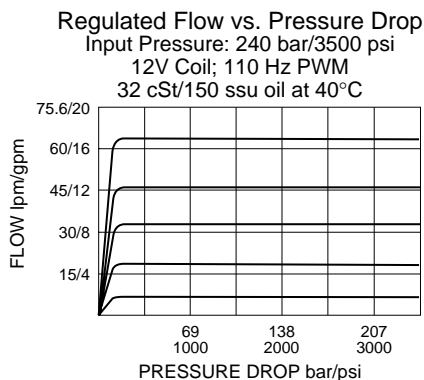
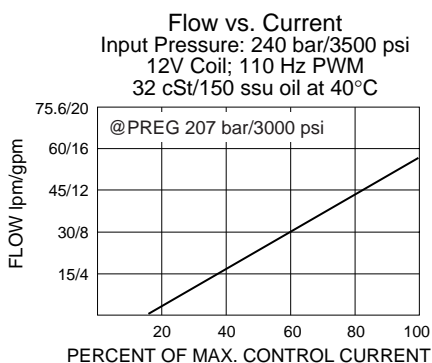
Seal Kit: SK12-2X-M; See page 8.650.1 for seal kit options and appropriate seals based on application temperature range.

SYMBOLS

USASI/ISO:



PERFORMANCE

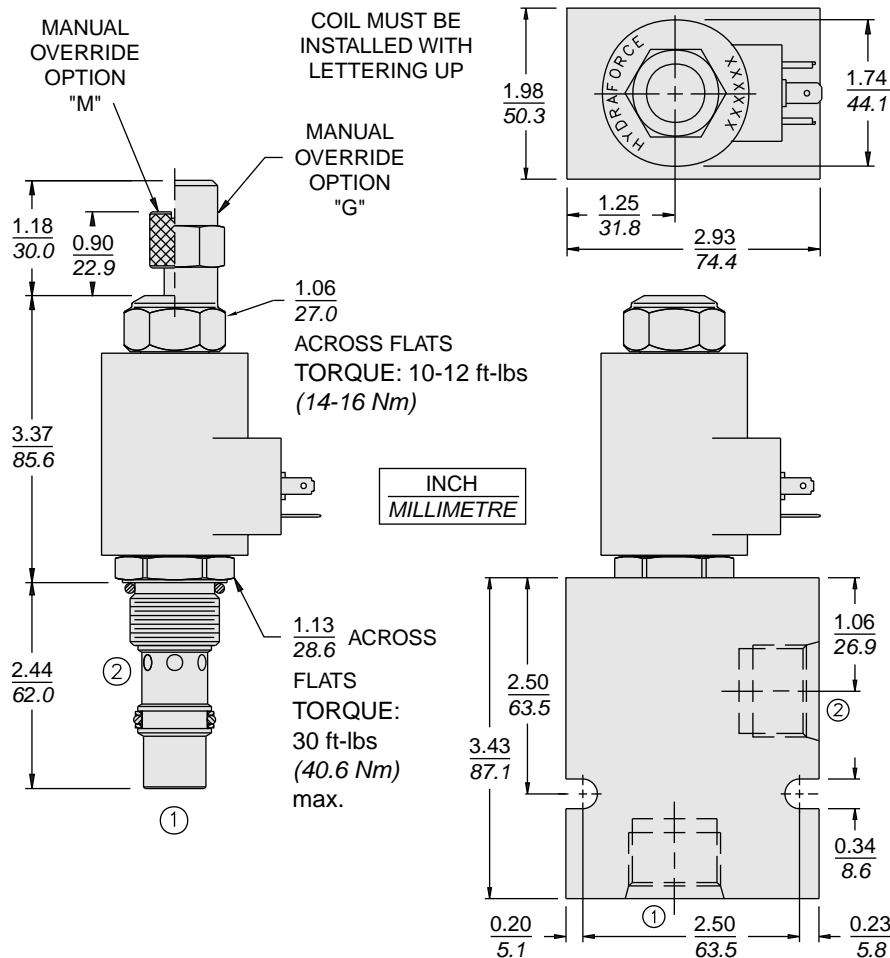


Recommended Electronic Controllers:
See page 2.001.1 or our Electronics catalog.

Normally Closed

PV72-20

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

PV72-20

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**

Voltage

0 Less Coil
12 12 VDC
24 24 VDC

Terminations D-Coil

DS Dual Spades
DG DIN 43650
DL Leadwires (2)
DL/W Leads w/Weatherpak® Connectors

Terminations E-Coil

IP69K Rated
ER Deutsch DT04-2P
EY Metri-Pack® 150

Coils with internal diode are available. Consult factory.