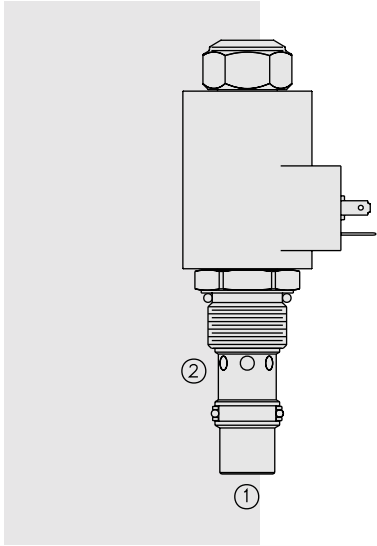


ELECTRO-PROPORTIONAL VALVES—FLOW CONTROLS

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 56 lpm (0 to 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	250 ± 100 mA	1500 ± 100 mA
24 VDC	125 ± 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 ssu)

Installation: No restrictions; See page 9.020.1.

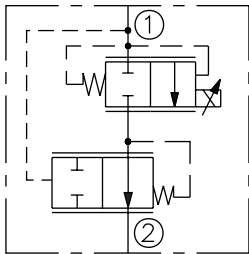
Cavity: VC12-2 Cavity Variation "B"; See page 9.112.1

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

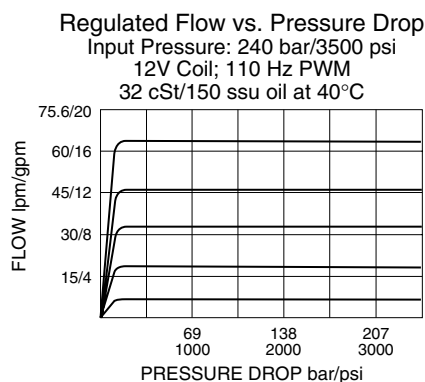
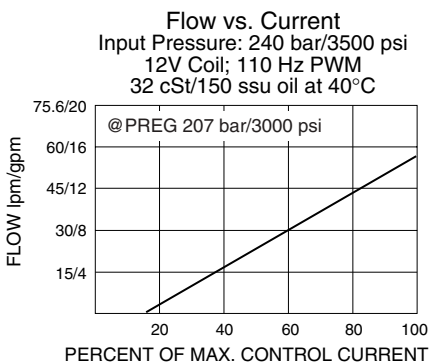
Seal Kit: SK12-2X-M; See page 8.650.1

SYMBOLS

USASI/ISO:



PERFORMANCE



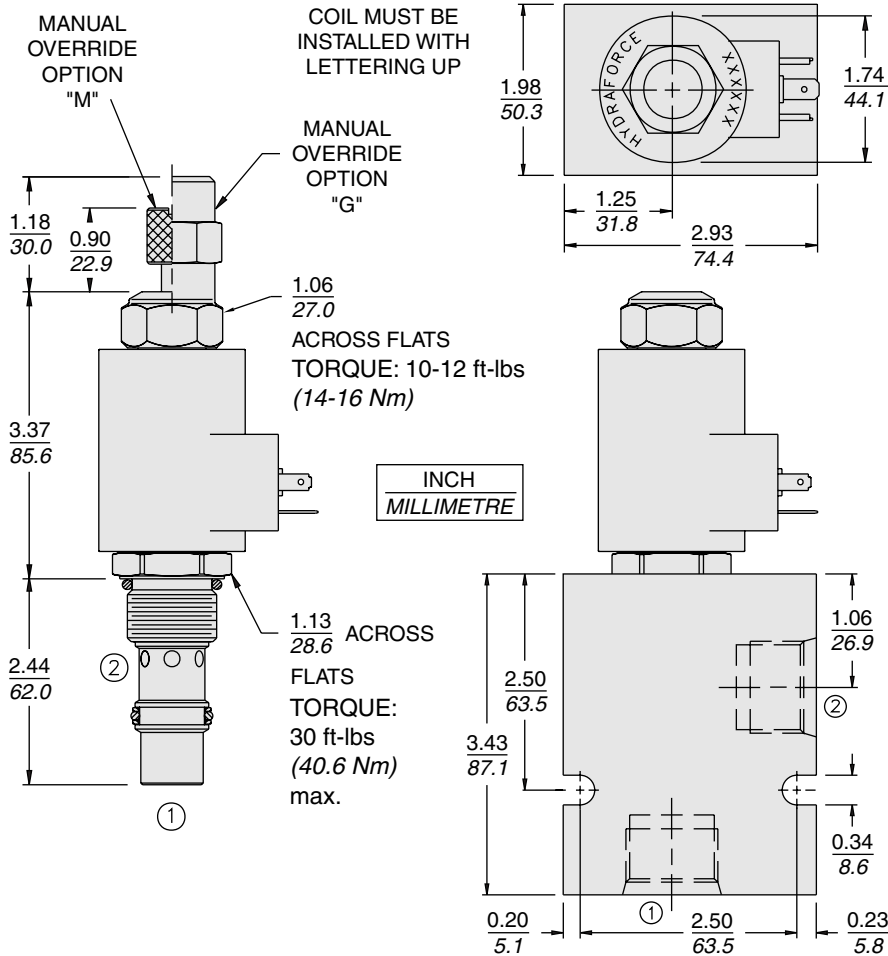
Recommended Controllers (See Section 3)

Input Sig. w/12V Coil	DIN Coil Mount	PCB Board	Metal Box	DIN Rail Mount
0-5 VDC	7114950	4000046	4000049	4000136
0-10 VDC	4000070	4000141	4000124	4000137
4-20 mA	4000123	4000143	4000130	4000139
PWM	—	4000144	4000133	4000140
w/24V Coil				
0-5 VDC	4000161	4000194	4000174	4000136
0-10 VDC	4000165	4000141	4000182	4000137
4-20 mA	4000169	4000143	4000186	4000139
PWM	—	4000144	4000133	4000140

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: .59 kg. (1.3 lbs.); Anodized high-strength 6061 T6 aluminum alloy, rated to 240 bar (3500 psi); See page 8.012.1. Steel and Ductile Iron bodies available; dimensions may differ; consult factory.

Coil: Weight: 0.32 kg. (0.7 lbs.); Unitized thermoplastic encapsulated, Class H high temperature magnet-wire; See page 3.200.1.

TO ORDER

