

DESCRIPTION

A solenoid-operated, electrically-variable, three-port, pressure-compensated, spooltype, normally closed when de-energized, proportional flow control valve. It can be used as a 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 the bypass line (port 2) is blocked.

OPERATION

The INPV72-30 will regulate flow out of port 3 regardless of system working pressure. With increasing current applied to the solenoid, the INPV72-30 will increase output flow. Note: When used as a bypass flow control in applications where the priority flow port will be blocked by external valving, bypass pressure drop will increase unless a small amount of leakage is provided for the priority port. Consult factory. 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 to positive stop.

FEATURES

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

RATINGS

Operating Pressure: Port 1: 240 bar (3500 psi); Ports 2 and 3: 207 bar (3000 psi)

Regulated Flow Rate in 3-Port Mode: Range A: 57 lpm (15 gpm)
Range B: 38 lpm (10 gpm)

Maximum Input Flow in 3-Port Mode: Range A and B: 114 lpm (30 gpm)

Maximum Flow Rate in 2-Port Mode: Range A: 53 lpm (14 gpm)
Range B: 31 lpm (8 gpm)

Note: For increased flow capacity in a 2-port flow control, see model INPV72-20

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	350 ± 100 mA	1600 ± 200 mA
24 VDC	175 ± 50 mA	800 ± 100 mA

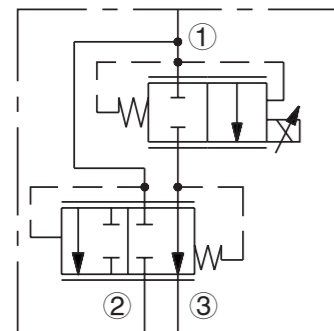
Fluids: Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 sus);

Installation: No restrictions;

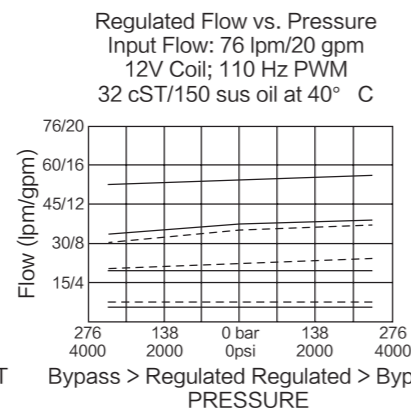
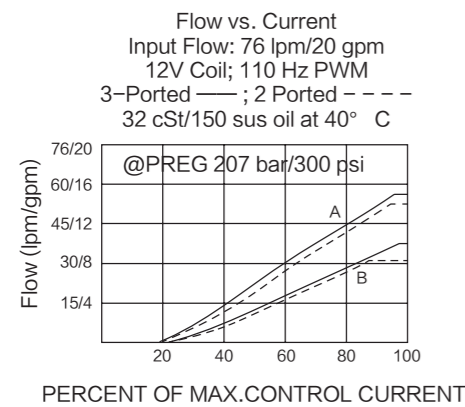
Cavity: T12-3A; See bottom of this catalog.

ISO SYMBOL

USASI/ISO:



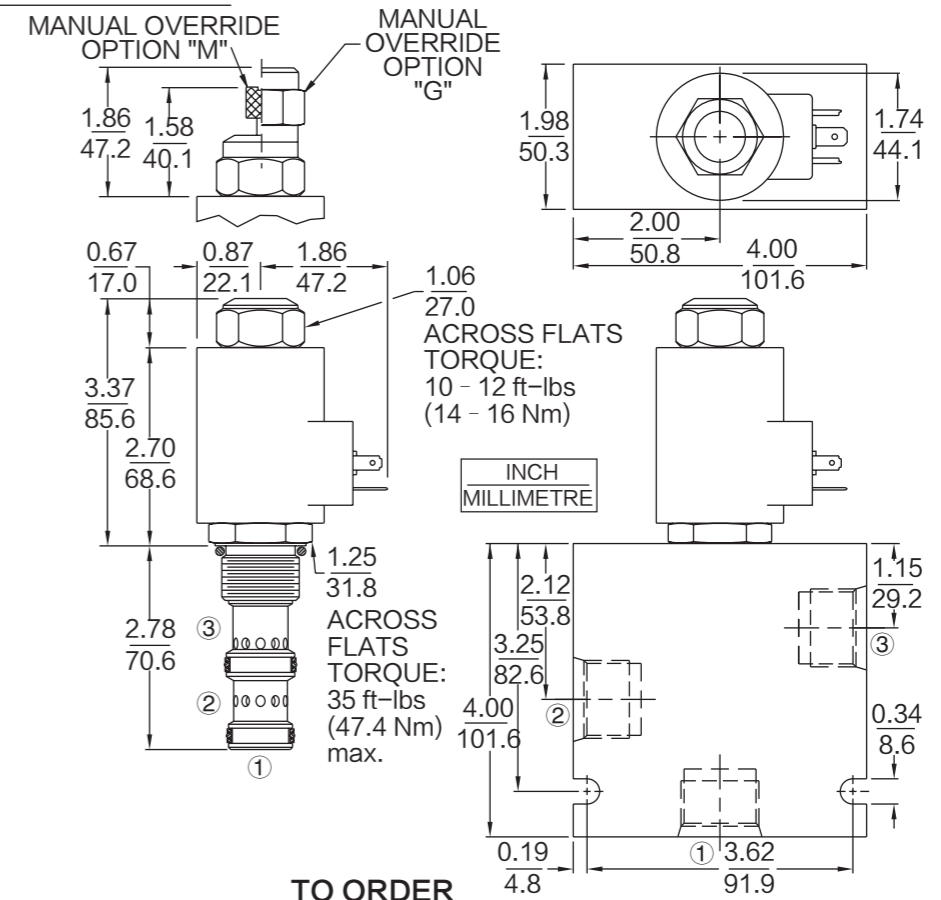
PERFORMANCE (Cartridge Only)



Recommended Electronic Controllers:

输入信号	DIN 线圈 安装	PCB 板	金属盒式	DIN 导轨安装
0-5 VDC	7114950	4000046	4000049	4000136
0-10 VDC	4000070	4000141	4000124	4000137
4-20mA PWM	4000123	4000143	4000130	4000139
		4000144	4000133	4000140
带 12V 线圈				
0-5 VDC	4000161	4000194	4000174	4000136
0-10 VDC	4000165	4000141	4000182	4000137
4-20 mA PWM	4000169	4000143	4000186	4000139
		4000144	4000133	4000140

DIMENSIONS



MATERIALS

Cartridge: Weight: 0.36 kg. (0.80 lbs.) Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings and polyester elastomer back-ups standard.

Standard Ported Body: Weight: 1.09 kg. (2.4 lbs.) 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: 0.32 kg. (0.7 lbs.) Unitized thermoplastic encapsulated, Class H high temperature magnet-wire.

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

INPV72-30

