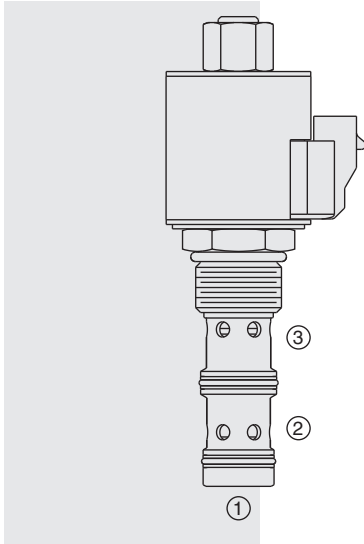
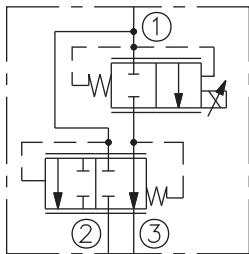
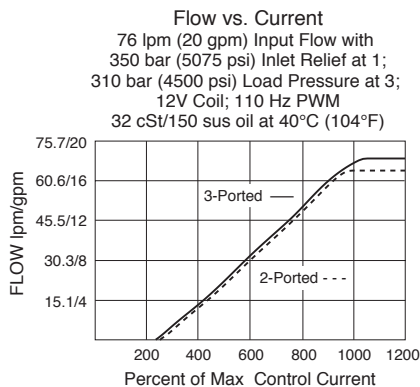


HPV12-30 HyPerformance™ Proportional Flow,**ISO SYMBOL****PERFORMANCE**

Performance info. continued
on following page.

DESCRIPTION

A high pressure, solenoid-operated, electrically-variable, three-port, pressure-compensated, spool-type, 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 HPV12-30 will regulate flow out of port 3 regardless of system working pressure. With an increasing current applied to the solenoid, the HPV12-30 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.

FEATURES

- Excellent linearity and hysteresis.
- Hardened spool and cage for long life.
- Optional coil voltages and terminations.
- Efficient wet armature construction.
- Cartridges voltage-interchangeable.
- Unitized, molded coil design.
- Coil waterproofing standard.
- All HyPerformance™ products are tested to the rigorous standards of the NFPA specification T2.6.1.
- All HyPerformance™ valves are tested at a verification level of 90% and an assurance of 99%.

RATINGS

Operating Pressure: 350 bar (5075 psi); 10% life cycle 420 bar (6090 psi)

Note: All HyPerformance™ products are tested for 900K cycles at 350 bar and 100K cycles at 420 bar.

Proof Pressure: 690 bar (10,000 psi)

Burst Pressure: 1380 bar (20,000 psi)

Regulated Flow Rate: 76 lpm (20 gpm) nominal input; 114 lpm (30 gpm) maximum input; priority type 66 lpm (17.5 gpm) maximum; restrictive type 60 lpm (16 gpm) maximum.

Max. Internal Leakage: 380 ml/min. (0.10 gpm) at port 3 at 0 current with 350 bar (5075 psi) at port 1 (port 2 blocked)

Temperature: -54°C - 107°C (-65°F - 225°F) with PPDI Urethane seals

Hysteresis: ±1.9 lpm (0.50 gpm) maximum

Dither/PWM Frequency Range: 100 to 250 Hz

Electrical Parameters (with size 10 E-series coil):

Coil Voltage	Threshold Current	Max. Control Current
12 VDC	250 ± 100 mA	1100 ± 100 mA
24 VDC	125 ± 50 mA	550 ± 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: HVC12-3; See page 9.112.1

Cavity Tool: HCT10-3X-XX; See page 8.600.1

Seal Kit: HSK12-3X-0; See page 8.650.1 for seal kit options and appropriate seals based on application temperature range.

Coil Nut: Part No. 7004420

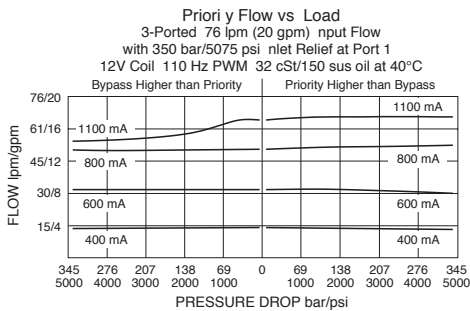
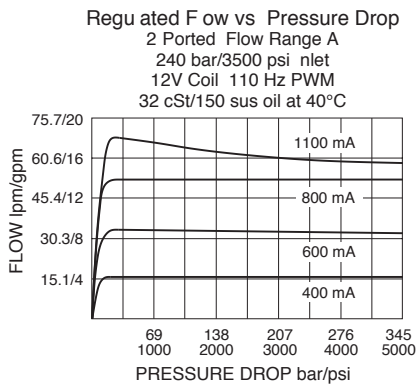
Recommended Electronic Controllers:

See page 2.001.1 or our Electronics catalog.

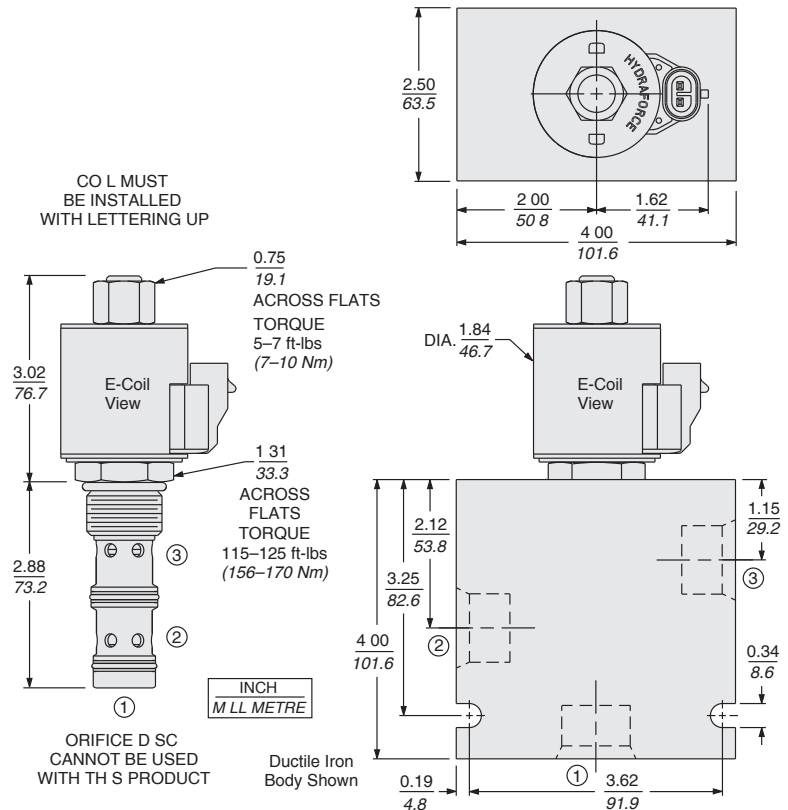
Normally Closed, Priority Flow

HPV12-30

PERFORMANCE (Continued)



DIMENSIONS



MATERIALS

Cartridge: Weight (without coil and nut): 0.32 kg. (0.70 lbs.) Steel with hardened work surfaces. PPDI urethane seals without back-up rings standard.

Standard Ported Body: Weight: 4.0 kg (8.93 lbs.) HyPerformance™ Ductile iron (Code 'D') standard. Rated to 345 bar (5000 psi). See page 8.012.1.

E-Coil: Weight: 0.41 kg. (0.9 lbs.) Fully encapsulated with rugged external metal shell. IP69K rated. See page 3.400.1.

TO ORDER

HPV12-30 -

Porting

Cartridge Only **0**
SAE 08 **08TD**
SAE 10 **10TD**
SAE 12 **12TD**
1/2" BSP* **4BD**
3/4" BSP* **6BD**

*BSP body; UK Mfg only

Seals

PPDI Urethane **U**

Coil Terminations

IP69K Rated
Deutsch DT04-2P **ER**
Metri-Pack® 150 **EY**
Dual Leads **EL**

Coils with internal diode are available. Consult factory. See coil option info. on page 3.400.1

Voltage

0 Less Coil
12 12 VDC
24 24 VDC

Note: PPDI Urethane seals are recommended for pressures over 241 bar (3500 psi).

Note: Consult factory for additional seal options.