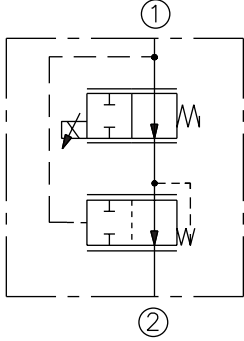


ELECTRO-PROPORTIONAL VALVES—FLOW CONTROLS

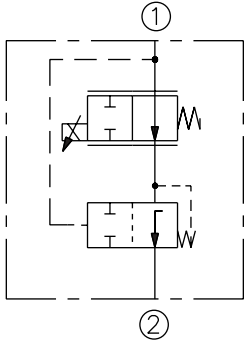
PFR70-35x-E Proportional Flow Regulator, N.O.,

SYMBOLS

USASI:



ISO:



DESCRIPTION

A pressure-compensated electrically-variable two-port flow regulator that is normally open when de-energized. This combination valve uses a PV70-35x proportional cartridge and an EC10-30 compensator.

OPERATION

This proportional valve/compensator package will regulate flow out of port ② regardless of system working pressure. With an increasing current applied to the solenoid, the PFR70-35x-E will decrease output flow.

FEATURES

- Excellent linearity and hysteresis characteristics.
- Optional control orifice sizes.
- 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.
- Screw-in manual override option.

RATINGS

Operating Pressure: 207 bar (3000 psi)

Leakage: 0.75 lpm (0.2 gpm) max. at 100% current applied

Electrical: 2 standard voltage ratings

Coil Voltage	Threshold Current	Max. Control Current
12 VDC	300 ± 200 mA	1500 ± 100 mA
24 VDC	150 ± 100 mA	750 ± 50 mA

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.

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)

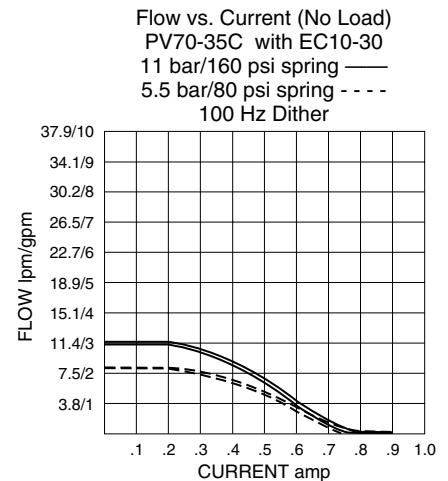
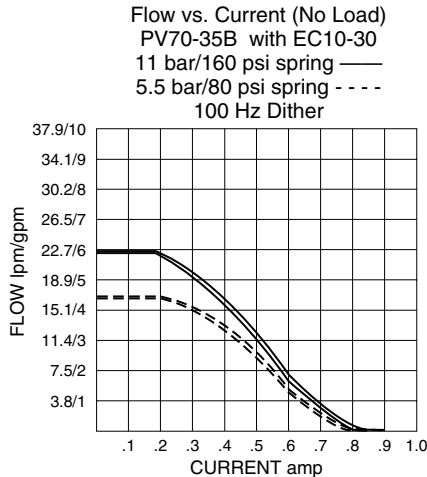
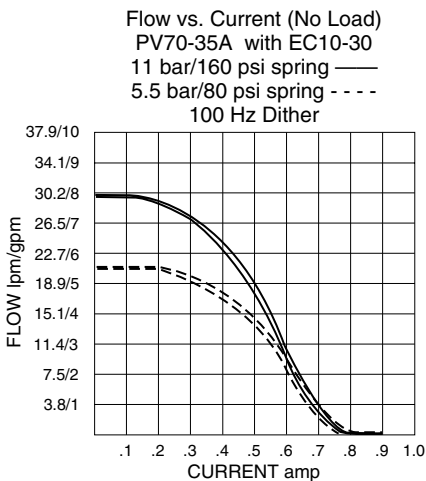
Installation: No restrictions; See page 9.020.1

Attention Manifold Designers:

To obtain these high flow capabilities using proportional flow controls and compensators, optimized cavity drillings are required. Please consult factory.

PERFORMANCE CURVES Regulated Flow Delivered Out Port ②:

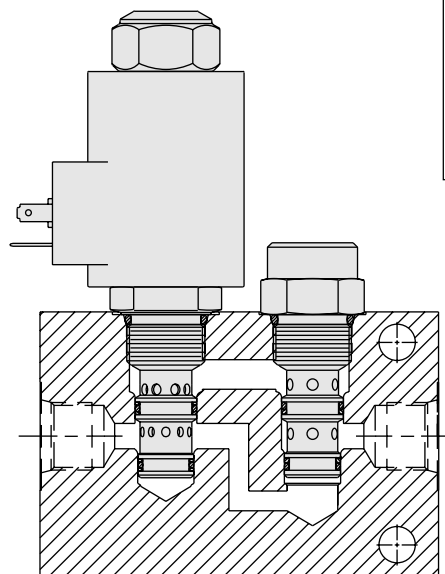
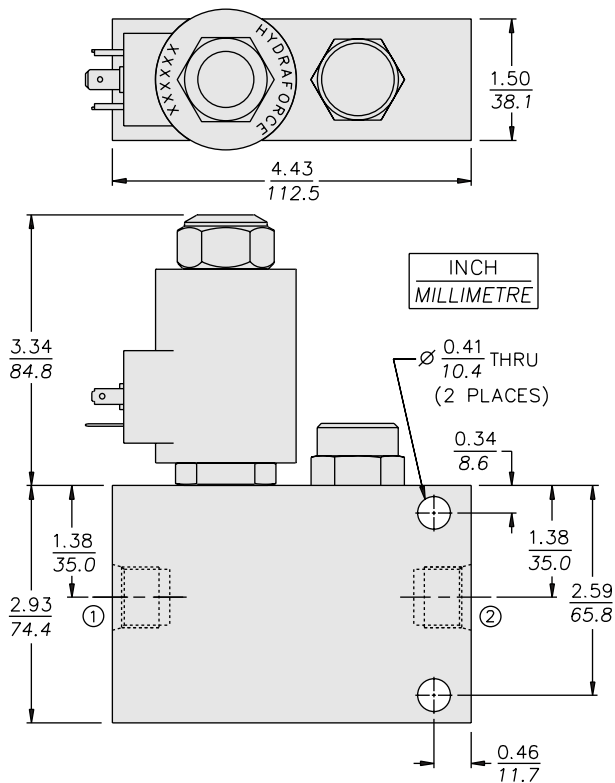
24 Volt coil used; 100 Hz dither; PWM controller. For 12 volt coils, double the current (amp) values shown.



2-Port, Pressure Compensated

PFR70-35x-E

DIMENSIONS



NOTE: The N.O. PV70-33 may not be substituted in this manifold due to port logic factors.

MATERIALS

Cartridge: Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings and back-ups standard.

Standard Ported Body: Anodized high-strength 6061 T6 aluminum alloy, rated to 240 bar (3500 psi). Steel and ductile iron bodies available; dimensions may differ; consult factory.

Coil: Unitized thermoplastic encapsulated, Class H high temperature magnetwire; See page 3.200.1.

Package Weight: 2.27 kg. (5 lbs.).

Seal Kit: SK10-3x-MM (PV); SK10-3x-TB (EC)

TO ORDER

