

**Air piloted proportional pressure control valve**  
**Fully user adjustable for a wide range of applications**  
**High speed**  
**Lower power consumption**  
**High flow capacity**  
**Optional manifold mount utilizes the ISO Size 2**  
**subbase**



### Technical data

#### Medium:

Compressed air, filtered to 5 micron, non-lubricated

#### Operation:

Proportional, direct acting air piloted spool

#### Output Pressure:

See website

#### Supply Pressure:

200 psig (14 bar) max

#### Supply Sensitivity:

Better than 0.75% span output change per bar supply pressure change

#### Flow Capacity:

Up to 50 scfm (1400 Nl/min)

#### Response Time:

< 80 mS (from 10-90% of output pressure into a 0.1 litre load)

#### Air Consumption:

< .177 scfm (5 l/min)

#### Port Size:

¼ PTF (G¼)

#### Total Error:

Max. error < ±1% of span (independent error includes the combined effect of non-linearity, hysteresis, deadzone and repeatability)

#### Operating Temperature:

23° to 120°F (-5° to 50°C)

#### Temperature Effect:

Typically better than 0.03% of span/°C for span and zero over operating range

#### Degree of protection:

NEMA 4 (IP65) in normal operation

#### Vibration Immunity:

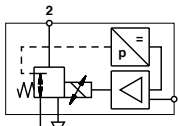
< 3% output shift for 3g 10-2000Hz

#### Mounting Position:

Any screw mounting or manifold mount

#### Material of Construction:

Aluminium body, zinc diecast lid and end cover  
 Weight: 1.76 lbs. (800g) approx

Symbol	Part Number*	Pressure Range and Input Signal Options		Port size
		Control Signal	Output Pressure in psig (bar)	
	VP5010PK111H00	0-10V	0-145 ( 0-10)	1/4" PTF
	VP5010PK411H00	4-20mA	0-145 ( 0-10)	1/4" PTF
	VP5006PK111H00	0-10V	0-90 ( 0-6)	1/4" PTF
	VP5006PK411H00	4-20mA	0-90 ( 0-6)	1/4" PTF
	VP5002PK111H00	0-10V	0-30 ( 0-2)	1/4" PTF
	VP5002PK411H00	4-20mA	0-30 ( 0-2)	1/4" PTF

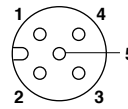
\* To specify regulator calibration in BAR use "B" in the 7th position For ¼" ISO G ports use "J" in the 8th position.

To order the VP50 with interface for manifold mounting, indicate an "X" in the 8th position of the part number. Also requires a manifold mounting kit, see Accessories.  
 All units shipped with M12 five pin electrical connector

### Electrical Information

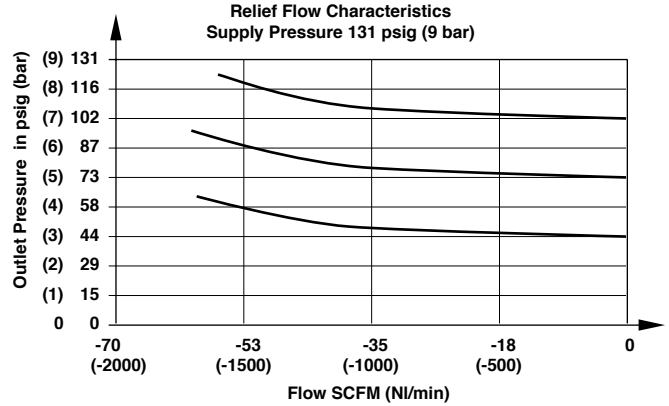
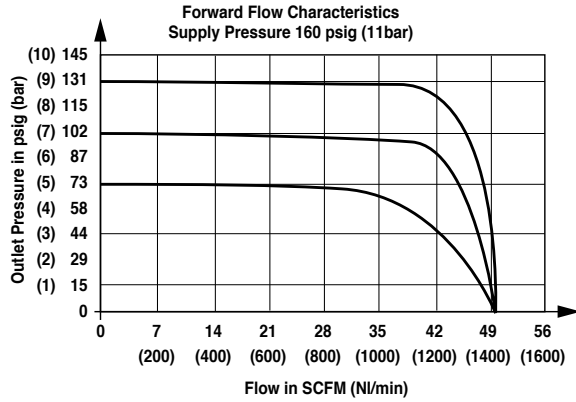
Electromagnetic Compatibility	CE marked: conforms to E.C. requirements EN 50081-2 (1994) and EN 50082-2 (1995)
Electrical Input Signal	4-20mA or 0-10V factory set
Electrical Power Input	24V dc ±25% (power consumption < 1W)
Output Pressure Feedback Signal	0-10V full range
Connections	DIN 43650 or Brad Harrison connection for feedback output

Instrument pin configuration



- 1 +24V d.c. supply
- 2 0-10 full range
- 3 Control signal (+ve)
- 4 Common (DC supply, signal and feedback return)
- 5 Chassis (earth)

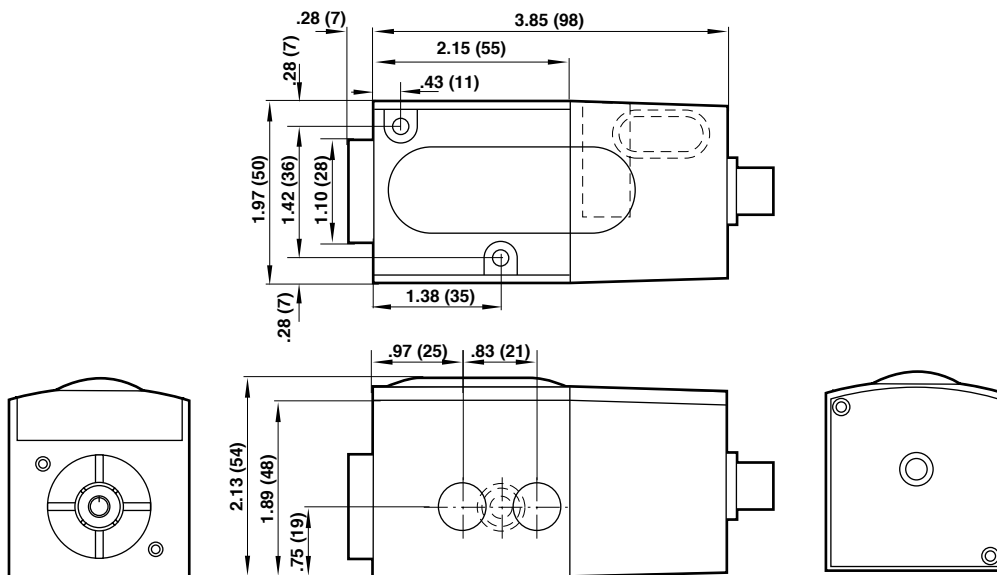
Characteristic Curves



Accessories

Designation	Specification	Type
Connectors with cable	M12 x 1.5 pin; 16 ft (5m) 5 x 0.34 mm <sup>2</sup>	0250081000000000
	M12 x 1.5 pin; 30 ft (10 m) 5 x 0.34 mm <sup>2</sup>	0250472000000000
Manifold Mounting Kit	Interface plate, gasket, mounting screws	ZZ5M00

NOTE: Refer to website to select an ISO 2 size base and accessories.



Dimensions in inches (mm)