



VALVES

Reliable, rugged proportional *I*P and E/P converters Suitable for a wide range of applications Excellent accuracy High flow versions NEMA4 environmental protection in normal operation



Technical data

Medium:

Oil free, dry air, filtered to 5 micron **Output pressure:** See table below **Flow capacity:** Up to 10 scfm (300 l/min)

Air consumption <60 psig (<4 bar): 0.03 scfm (0.85 //min) typical >60 psig (>4 bar): 0.06 scfm (1.75 //min) typical

Operating pressure:

At least 10 psig (0.7 bar) above maximum required output pressure **Connections:** NPT ¼" or ¼" ISO G available **Operating temperature:** -4° to 160°F (-20°C to 70°C)

Response time

<30 psig (<2 bar): less than 0.5 seconds for 10-90% step change >30 psig (>2 bar): 2 seconds for 10-90% step change

Total error:

±0.5% of span (typical, independent error includes the combined effect of non-linearity, hysteresis, deadzone and repeatability)

Temperature effect:

Typically 0.1% of span^oF for span and zero over operating range **Supply sensitivity:**

>0.025% span output change per % supply pressure change

Failure mode:

Signal falls to bleed pressure when electrical supply fails

Mounting:

Integral surface mounting bracket provided for preferred vertical mounting. 50 mm pipe mounting kit available

Material of construction:

Zinc die-casting passivated and epoxy paint, nitrile diaphragms, stainless steel/nylon flapper nozzle and supply valve Mass: 3.3 lbs (1500g) approx.

ISO Symbol

Pressure range and input signal options

	Part Number	Control signal	Output pressure	Calibration	Thread form*
	VP1001PK100A00	0-10 V	3-15 psi (0.2-1 bar)	PSIG	1/4" NPT
	VP1001PK400A00	4-20 mA	3-15 psi (0.2-1 bar)	PSIG	1/4" NPT
	VP1002PK100A00	0-10 V	3-30 psi (0.2-2 bar)	PSIG	1/4" NPT
	VP1002PK400A00	4-20 mA	3-30 psi (0.2-2 bar)	PSIG	1/4" NPT
	VP1004PK100A00	0-10 V	3-60 psi (0.2-4 bar)	PSIG	1/4" NPT
	VP1004PK400A00	4-20 mA	3-60 psi (0.2-4 bar)	PSIG	1/4" NPT
	VP1006PK101A00	0-10 V	3-90 psi (0.2-6 bar)	PSIG	1/4" NPT
	VP1006PK401A00	4-20 mA	3-90 psi (0.2-6 bar)	PSIG	1/4" NPT
	VP1008PK101A00	0-10 V	3-120 psi (0.2-8 bar)	PSIG	1/4" NPT
	VP1008PK401A00	4-20 mA	3-120 psi (0.2-8 bar)	PSIG	1/4" NPT

Electrical Information

Electromagnetic compatibility	This is a passive electromagnetic instrument and is unaffected by interfering high frequency signals
Electrical signal	Two wire version 4-20 mA or 0-10 V for 60< PSIG Three wire version requires 12-24 V d.c. supply
Connections 30 mm square connector	DIN 43650 provided, mountable in four directions (alternative connections available)

* Replace PK w/BJ for calibration in Bar and 1/4 ISO G thread form.



VAL-266

20% of

output

range

Typical Performance Characteristics FORWARD FLOW CHARACTERISTICS Supply Pressure 100 psig (7 bar) psig bar 120 8 100 OUTLET PRESSURE 6 **Connector Wiring** 80 60 4 Input Signal Two vire version <=60 PSIG wire: + to #1 С \overline{O} 40 3 – to #2 2 20 1 2 + \bigcirc Three wire version wire: **o** \perp 0 + to #1 3.5 17.5 10.5 14 21 scfm C – to #2 0 100 200 300 400 500 600 l/min Input signal to #3 FLOW **RELIEF FLOW CHARACTERISTICS** Supply Pressure 100 psig (7 bar) lisd 120 bar 8 Span/Zero Adjustments 100 OUTLET PRESSURE 6 Max 80 60 4 Outlet Pressure 40 2 20 Min. 0⊥ 0 25 21 17.5 14 10.5 7 3.5 0 scfm -700 -600 -500 -300 -100 0 N I/m in -400 -200 Min. Max. FLOW Input Signal 2.9 (73) 2.13 (54) .87 (22) 1.57 (40) 2.13 (54) Plug Orients 4-Ways Range or Spar .75 (19) CRS Mounting Holes .26 (6.5) 4.72 (120) С Ð 1.63 (42) 2 (51) Supply Ir Output Front View **Rear View** Removable Orifice Mtg Bracket Holes Ø.15 (3.7)

NC = Normally closed, NO = Normally open, APB = All ports blocked, COE = Center open exhaust, COP = Center open pressure **** Insert coil connector code from Connectors table. For manual override options, substitute 'x' as follows: 1 = without manual override, 2 = locking, 3 = non-locking,

Dimensions in inches (mm)

