



... the level & gas people

ISO-9001 : 2008 CERTIFIED COMPANY

DESCRIPTION:-

The VAutomat IP500 series transducers are ideally used to convert current to Voltage input signal to linearity Proportional to pneumatic output pressure this versatile Instrument is rugged and reliable force balance transducer for use in both process control And industrial application, for standard process control application which typically Utilize 3 to 5 psig output and industrial & high pressure application which typically utilize pressure Output up to 120psig. VAutomat IP500 series transducer combines low cost, high accuracy And minimum air consumption with field proven Technology. Versatile design feature and Rugged, compact housing.



PRINCIPLE OPERATION:-

The VAutomat IP500 Series transducer is a force balance device in which, when electrical current pass through the coil Of Transducer, a magnetic field is created which act on the magnet assembly, causing the anvil & diaphragm to move away From or forward the nozzle (flapper nozzle) depending on the direction of current flow. Motion at the nozzle assembly is Proportional to the amount of current passing through the coil.

The flapper/anvil move away from or forward towards the nozzle create back pressure which act as pilot pressure to an Integral booster relay. When input electrical current increase (or decrease for revers acting) causes proportional output Increase.

Zero & Span are calibrated by turning easily accessible adjusting screws on the front face of the unit. The zero adjusting Screw causes the nozzle to move relative to the flapper/anvil. The span adjusting screw is a potentiometer that limits the Current through the coil. A thermistor circuit in series with the coil provides temperature compensation.

SPLIT RANGING:-

If split ranging is required the 4-20mA input and 3-15 psig output version can be calibrated to provide 3-9 psig or 9-15psig Output.

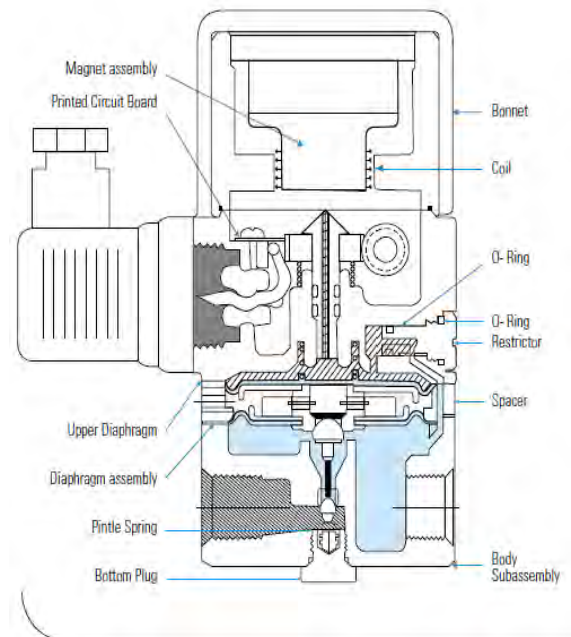
MOUNTING:-

The IP500 series transducer can be pipe, panel or bracket mounted in any position. Position other than vertical will require Recalibration of the zero & span adjustment. Transducer should be mounted in a vibration free area.

FIELD REVERSIBLE:-

All IP500 series transducer are calibrated at the factory for direct acting operation but may use in reversed acting mode by Reversing the polarity of the signal leads and recalibrating. When calibrate reverse acting application it provide a minimum Of their full rated output pressure (i.e. 3psig) upon input signal failure.

| ► Specifications | Low Output Range (up to 30 psig) | High Output Range (up to 120 psig) |
|--------------------------------------|---|--|
| Supply Pressure Range (Min./Max.) | Minimum - 21 kPa (3 psig) above maximum output Maximum -700 kPa (100 psig) | Minimum = 35 kPa (5 psig) above maximum output Maximum -1050 kPa (150 psig) |
| Supply Pressure Sensitivity | 0.15% of span per 10kpa (0.1% of span per psig at mid range) | .005% of span per 7.0 kPa (1.0 psig) |
| Terminal Based Linearity | 1.0% of span | 1.5% of span typical 2.0% max. |
| Repeatability | 0.5% of span | 1.0% of span |
| Hysteresis | 1.0% of span | 1.0% of span |
| Response Time | Depends on pressure range - typ. less than 0.25 sec. for 3-15 psig units | Depends on pressure range - typ. |
| Flow Rate | 7.6 m ³ /hr (4.5 SCFM) at 175 kPa (25 psig) supply 20.0 m ³ /hr (12.0 SCFM) at 700 kPa (100 psig) supply | 40.8 m ³ /hr (24.0 SCFM) at 1050 kPa (150 psig) supply |
| Relief Capacity | 3.4 m ³ /hr (2 SCFM) at 35 kPa (5 psig) above 140 kPa (20 psig) set point | 11.9 m ³ /hr (7 SCFM) at 35 kPa (10 psig) above 140 kPa (20 psig) set point |
| Maximum Air Consumption | 0.3 m ³ /hr (0.15 SCFM) at midrange typical | 0.15 m ³ /hr (0.08 SCFM) at midrange typ. |
| Media | Oil free, clean dry air filtered to 40 microns. | |
| Temp. Range (Operating) | -30C to 60C (-20F to 140F) | |
| Port Sizes | 1/4" NPT (Pneumatic) DIN 43650 connector (Electric) | 1/4" NPT (Pneumatic) DIN - 43650 connector (Electric) |
| Weight | 2.2 lbs. (1.0 kg) approx. | |



OPTION:

Enclosure rating allow for installation in splashdown or outdoor environments. Unit also meets the requirements of IEC standard IP65. Intrinsically safe approve by CMRI, Dhanbad IIa, IIb and IIc Gas Group C, D, E, F and G.

2" pipe mounting/DIN Rail mounting available on request.

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(See Website for address)

Specifications Subject to change without prior notice