WatsonSmith

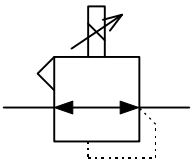
COMPACT ELECTRONIC CONVERTER CURRENT TO PRESSURE (I/P) TYPE 421 FAILSAFE MANIFOLD OR RAIL MOUNT

FEATURES

- **Advanced electronic control**
- **High density rail or manifold mount**
- **Failsafe operation (output pressure falls to minimum on power failure)**
- **Vibration immune**

GENERAL DESCRIPTION

The 421 proportional I/P converter uses advanced electronic control to achieve outstanding performance. It is highly reliable with long life, is free from the effects of vibration and its high density mounting capability makes it ideal for control room applications.
The manifold system, usually surface mounted, allows several converters to be connected to a single air supply and is available in different lengths



Functional Symbol

TECHNICAL DATA

PNEUMATIC

•Output Signal	0.2-1bar (3-15psig); minimum outlet pressure less than 15mbar (0.2psig)
•Air Supply	Oil free, dry air, filtered to 5 microns; 1.5-3.5bar (20-50psig) or at least 0.7bar above maximum output pressure
•Flow Capacity	Up to 150Nl/min (5scfm)
•Air Consumption	0.2 l/min typical low pressure (0.007scfm)
•Response Time	5 seconds (10 to 90% or 90 to 10% of output pressure into a 5 litre load)
•Total Error	±0.5% of span (typical, independent error includes the combined effect of non-linearity, hysteresis, deadzone and repeatability
•Temperature Effect	Typically less than 1% span for span and zero between 0°C and 50°C
•Supply Sensitivity	Maximum of ±2% of outlet pressure at extremes of supply range
•Connections	1/8" NPT female

PHYSICAL

•Operating Temperature	-10°C to +60°C
•I.P. Rating	IP40
•Vibration	The unit possesses a high degree of immunity
•Electromagnetic Compatibility	Compliant and CE marked in accordance with the EC E.M.C. directive. Tested to standards: BS EN50082-2: 1995, BS EN50081-2: 1994
•Material of Construction	Anodised natural aluminium
•Mass	600g
•Mounting Position	The instrument can be mounted in any orientation. A rail clip is provided with each instrument forTS32 EN50035)/TS35 (EN50022) rail.

ELECTRICAL

•Electrical Signal	4-20mA (two wire); load presents 10 volts (±0.5V) constant voltage drop to the current source
•Failure Mode	Signal falls to below 15mbar (0.2psig) when input signal fails
•Connections	Two part quick release terminal block with capacity up to 2.5mm² cable

MANIFOLD

•Materials	Aluminium extrusion, clear anodised nitrile 'O' ring seals
•Port Sizes	Supply and output 1/4" NPT
•Proof Pressure	10bar (150psig); pressure should be regulated to converter requirements. WARNING: maximum pressure should not be exceeded for safety reasons

Note: it is recommended that an appropriate filter-regulator be fitted to supply all converters

Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.

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