

WatsonSmith

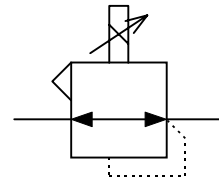
TYPE 423 FAIL SAFE ELECTRONIC I/P CONVERTER

FEATURES

- Advanced electronic control
- Fail-safe operation (output pressure falls to minimum on power failure)
- Vibration immune
- Weatherproof

GENERAL DESCRIPTION

The 423 proportional I/P converter uses advanced electronic control to achieve outstanding performance. It has a rugged construction, vibration immunity and weatherproofing making it ideal for field applications.



Functional Symbol

TECHNICAL DATA

PNEUMATIC

- Output Signal 0.2-1bar (3-15psig); minimum outlet pressure less than 140mbar (2psig)
- Air Supply Oil free, dry air, filtered to 3 microns; 1.5-3.5bar(20-50psig) or at least 0.7bar above maximum output pressure
- Flow Capacity Up to 300NI/min (10scfm)
- Air Consumption 0.6l/min typical (0.02scfm)
- Response Time 5 seconds (from 10 to 90% of output pressure into a 0.5 litre load)
- Total Error Max. error $\pm 0.5\%$ of span (typical, independent error includes combined effect of non-linearity, hysteresis, deadzone and repeatability)
- Temperature Effect Typically better than 1% span between -10°C and 60°C
- Connections $1/4$ " NPT female standard (plus two integral $1/4$ " NPT gauge ports); others available on request

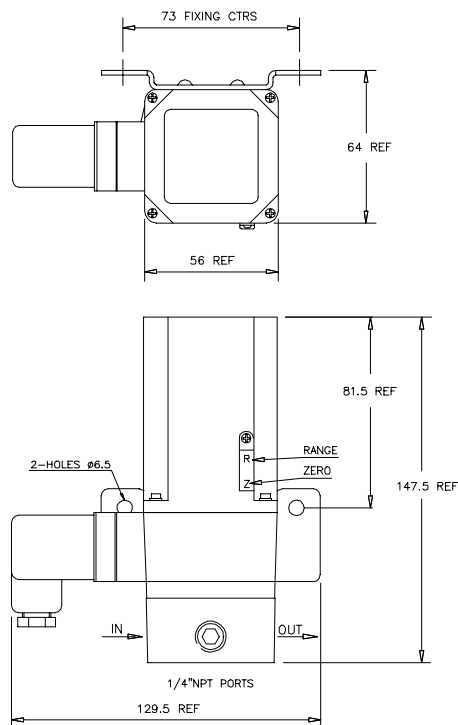
PHYSICAL

- Operating Temperature -20°C to $+70^{\circ}\text{C}$
- I.P. Rating IP65
- 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 Zinc diecasting passivated and epoxy painted, Verton glass/nylon cover; Nitrile diaphragms
- Mass 800g
- Mounting Position Operation in any attitude is possible without recalibration; integral surface mounting bracket provided for vertical mounting

ELECTRICAL

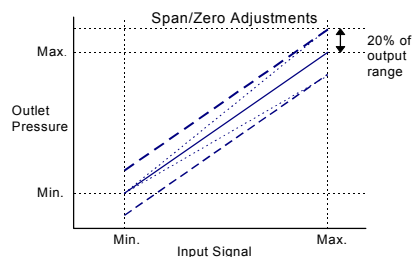
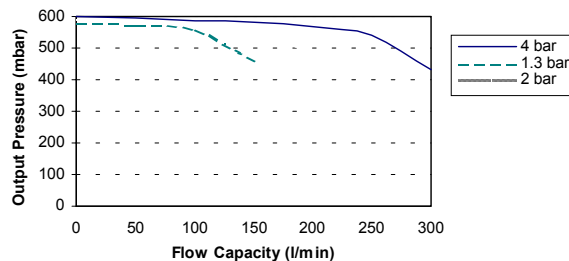
- Electrical Signal 4-20mA (two wire)
- Failure Mode Signal falls below 15mbar(0.2psig) when input signal fails
- Connections 30mm square connector DIN43650 provided, mountable in four directions. Others available on request

INSTALLATION DIAGRAM



CHARACTERISTIC GRAPHS

Model 423 Flow Capacity at 12mA, 1.3, 2 and 4 bar Supply Pressure



ORDERING INFORMATION

Standard Models: 4-20mA input, forward action, DIN connector

Output Pressure	Certification	Part number
3-15psig	None	53AD0100
0.2-1bar	None	53AD2100

Options to special order:

- Other pressure ranges
- Conduit entry
- Flying leads
- 50mm pipe mounting bracket
- 1/8" NPT pneumatic connections
- Captured bleed

CERTIFICATION

All instruments are tested on the Watson Smith Automatic Testing System and an individual test certificate is provided at no extra charge. Each unit is tested for linearity, hysteresis, total error, settling error, air consumption, response time, calibration, insulation, start-up current, supply sensitivity and voltage load.