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 ±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°C		
 I.P. Rating 	IP65	
•Vibration •Electromagnetic Compatibility	The unit possesses a high degree of immunity 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



Characteristics 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	AD0100
0.2-1bar	None	AD2100

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.

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Our policy is one of continuous research and development. We therefore reserve the right to amend without notice the specifications given in this document. Customers are responsible for ensuring that the product is used only for the purpose for which it is intended. In case of doubt Norgren will be pleased to advise.