Watson<mark>Smith</mark>

ELECTRO MECHANICAL CONVERTERS CURRENT TO PRESSURE (I/P) AND VOLTAGE TO PRESSURE (E/P) TYPE 100X

FEATURES

- •Reliable, rugged, open loop control
- •ATEX certified units available
- Proportional I/P and E/P converters
- Minimum Vibration Effects
- IP65 environmental protection
- Mounting Bracket and Connector Included

GENERAL DESCRIPTION

The 100X series is an open-loop, highly accurate proportional control valve. A rugged and reliable unit which has been proven in application installations globally. The uncomplicated design of the 100X101X enhances the reliability and reduces maintenance requirements, offering a cost effective accurate solution.

TECHNICAL DATA

PNEUMATIC

 Output Signal 	See product selector
•Air Supply	Oil free, dry air, filtered to 5 microns; at least 0.5bar above maximum required output pressure range; maximum 80psig
 Flow Capacity 	Up to 300NI/min (10scfm)
 Air Consumption 	1.4 l/min (0.06scfm) typical
•Response Time	<2bar/30psig: less than 0.5 seconds (dependent on input for 10-90% step change in outlet pressures) into a 10cc load
•Hysteresis •Independent Linearity •Temperature Effect	Maximum 0.35% of span for 100X Maximum 0.5% of span for 100X Average 0.1% span/°C for span and zero over operating range
 Supply Sensitivity 	Better than 0.075% span output change per % supply pressure change
•Connections	1/4" NPT standard (1/4" BSP available on request)



Functional Symbol

PHYSICAL

 Operating Temperature 	-40°C to +85°C
•I.P. Rating	IP65 in normal operation
•Electromagnetic Compatibility	This is a passive electromagnetic instrument and is unaffected by interfering high frequency signals
 Material of Construction 	Zinc diecasting passivated and epoxy paint, nitrile diaphragms, Be ₂ Cu flapper nozzle & supply valve
•Mass	825g
•Mounting Position	Integral surface mounting bracket provided for preferred vertical mounting. Alternative mounting available with re-calibration. 50mm pipe mounting kit available
•Vibration Effect	<5% of span : $4mm_{p-p}$ 5-15Hz & 2g sine 15-150Hz, vertical, horizontal & inverted, in accordance with ISA-S75.13-1996
 Electrical Signal 	See product selector
•Failure Mode	Signal falls to bleed pressure when electrical supply fails
•Connections	30mm square connector DIN 43650 provided, mountable in four directions



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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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.