

# WatsonSmith

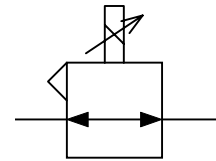
## ELECTRO MECHANICAL CONVERTERS CURRENT TO PRESSURE (I/P) AND VOLTAGE TO PRESSURE (E/P) TYPE 100X

### 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.



Functional Symbol

### 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 Maximum 0.35% of span for 100X
- Independent Linearity Maximum 0.5% of span for 100X
- Temperature Effect 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)

#### 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<sub>2</sub>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<sub>p-p</sub> 5-15Hz & 2g sine 15-150Hz, vertical, horizontal & inverted, in accordance with ISA-S75.13-1996

#### ELECTRICAL

- 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.

Please contact us for a quotation:



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