# 7000 Series I/P Transducer

The Masoneilan-Dresser Model 7000 electronic Current-to-Pressure (I/P) Transducer is designed for servicing the most demanding industrial and process applications where 4-20 mA current signals are converted to precise pneumatic signals for control valve operation. The digital pressure control principle uses the proven Reedex™ micro-miniature valve technology avoiding the traditional, and sensitive, nozzle-flapper element. The advantages of this fully electronic transducer include:



freedom from effects of vibration, no position effect, low air consumption, excellent long term stability, and accurate (0.15% typ.) operation over a wide temperature range. The Model 7000 combines sophisticated control techniques, environmentally hardened housing and advanced electronics to produce a field mountable I/P transducer with superior performance with the lowest cost of ownership.

#### APPROVALS for HAZARDOUS Areas and Environmental

#### FM & CSA

Intrinsic Safety:

Class I, Div I, Groups A, B, C, D, T4

Explosion proof:

Class I, Div I, Groups B, C, D, T6

### CENELEC

Intrinsic Safety:

EEx ia IIC, T4

Flame proof:

EEx d IIB + H2, T6

### **Electro-Magnetic Compatibility**

RFI protection giving full protection up to Radio Frequency Fields of 10 V/m over the band of 30-1000 MHz.

### Product Information



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Specifications:

Input: 4-20 mA (100 mA max.)

3-15 psi; 0.2-1 bar (adjustable to 1-17 psi) Output:

6-30 psi; 0.4-2 bar (adjustable to: 0-20 psi, 3-27 psi &

0-35 psi)

Minimum output is less than 0.2 psi (15 mbar)

Supply Pressure Range:

18 - 60 psi (1.3 - 4 bar) Preferred Supply Pressure: 25 - 35 psi (1.7 -2.5 bar)

**Output Capacity:** Air Consumption:

10 scfm (300 NI/min) .01 scfm (350 cc/min)

Accuracy: Conformity:

0.2% of span

Hysteresis plus Deadband:

0.16% of span 0.04% of span

Vibration:

Less than 1% of output pressure change for 5 mm displacements, 10-30 Hz, 10g acceleration,

30-500 Hz

Operating Temperature:

-40 to +85°C (-40 to + 185°F)

Terminal Voltage: Air Connections:

5.5 - 6.5 Volts (equivalent resistive load of 325 ohms) 1/4" NPT female (plus two 1/4" NPT gauge ports)

Electrical Connections:

1/2" NPT or M20 female (alternate Plug/Socket: DIN

43650, 30 mm, rating IP65)

Temperature Effect:

0.035% of span/Degree F

Mounting Effect:

Negligible

Supply Pressure Effect:

Less than 1% of span for 10% supply pressure

change

Split Range Operation:

4-12 mA, 12-20 mA

Mounting:

Integral bracket for direct mount to valves or pipe

mount option.

Weight:

0.93 kg. (2 lb).

Fail-safe output:

Loss of electrical signal causes output to quickly drop

to 0.2 psig (15 mbar).

Enclosure: IP66, NEMA 4X

For more information call your local Masoneilan

Representative or:

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Masoneilan Europe

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