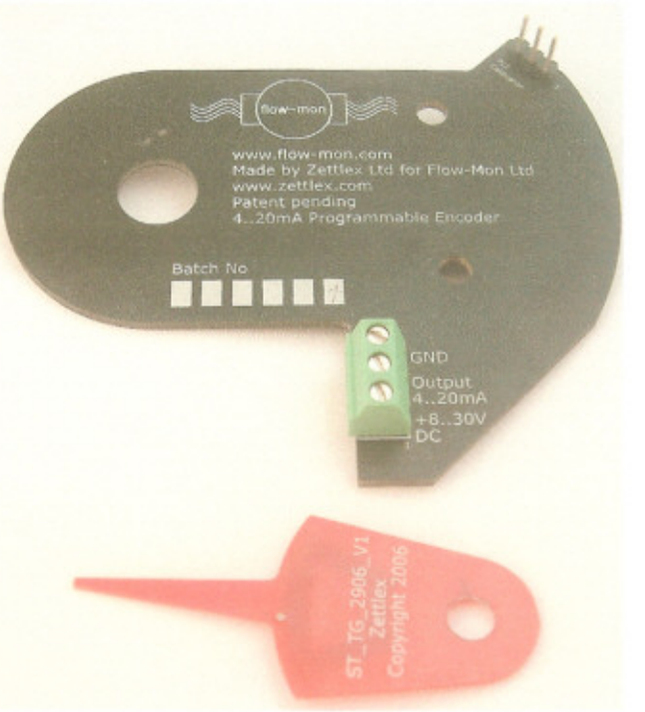
i-Mon 4-20mA Transducer

Programmable 4-20mA current loop transducer designed to be built into Flow-Mon's flow indicators

- Based on the sophisticated Zettlex ST technology for inductive displacement sensing
- Non-Contact (no wear problems, no loading and no added hysteresis on the system to effect measurement at low flow)
- Absolute measurement (no problems if power is disconnected and reconnected)
- Robust construction (long life without problems)
- Smart (one time factory calibration stored in electronic memory)
- Accurate (more than 1000 measurement points over full-scale deflection)
- High resolution measurement (sensor can indicate changes in flow before the eye can)
- Programmable output filter for stable output (damping of the pointer vibration)
- Consists of two parts : electronics board and target (pointer replacement)
- 3 wire or 2 wire version



Technical specifications

Mechanical specification	
Measurement range	100°
Angle resolution	0.03°
Linearity	±1%
Gap range (electronics to target)	4.3mm..5.8mm[a,b]
Max concentricity	±1.5mm
Repeatability	<0.2%
Electrical specification	
Operating voltage	8..28V DC
Supply current	50mA max[d],4..20mA[e]
Reverse polarity protection	yes
Overvoltage protection	up to 30V
Output signal	4..20mA[c]
Load impedance	$R<(U_{supply} - 3)/0.02$ [d] $R<(U_{supply} - 8)/0.02$ [e]
Resolution of the output signal	>10 bit
Programmable output filter	0..5s (0.5s steps)
Temperature stability	<80ppm
Standard connections	3[d]/2[e] way terminal block, wires<1.0mm^2
Operating temperature	-40°C..+85°C
Storage temperature	-40°C..+85°C

[a] Specified performance is only within this range of the gap
[b] Gap is measured between top of the pointer and top of the electronics board
[c] Guaranteed only within the full scale ±5% on both ends
[d] 3 wire version only
[e] 2 wire version only

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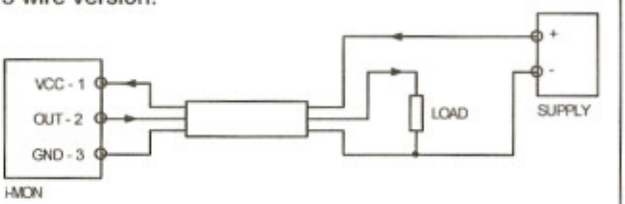
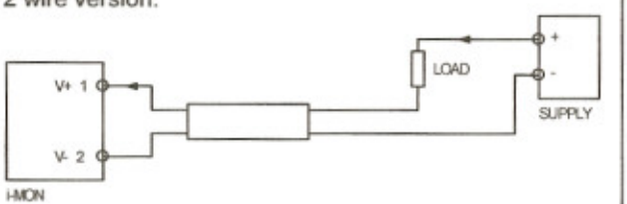
Installation instructions

3 wire version:



2 wire version:



Wires must be kept away from the underneath of the electronics board area otherwise they could affect the accuracy of the output.

(3 pins on board are for calibration only)

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