

IMPULSE COUNTER TRANSDUCER

Application:

The transducer is suitable to convert the counting impulse signal to an analog DC voltage/current or a digital RS485 output. The input is controlled by a switch or voltage signal.

Important features:

- Full digital operation (Icom System).
- Preset delivery or connecting to external device can be set (monlcom option).
- Non volatile memory for counter content.
- Plug in terminal blocks with screw.
- DIN rail case.
- EMC compliance.

Technical specifications:

Input:

- Impulse counter speed: max. 10 pulse / s
- Impulse width: min. 1 ms
- Impulse counter rotation (non volatile): 0...9999 or 0...59999
- Impulse input switch: $R_{max} = 1.2 \text{ kohm}$ for close, $R_{min} = 15 \text{ kohm}$ for open
- Impulse input voltage level: $L_{max} = +1.2 \text{ V}$, $H_{min} = +3.8 \text{ V}$, $I = 3 \text{ uA}$
- Impulse input voltage range: 0 ... +50V DC
- Input insulation voltage: Cat. III. 1 kV (Test: 4300 V_{eff} 1 min)

Output:

- Analog output range: 0..20 mA, $\pm 20 \text{ mA}$, 4..20 mA, 0..10 V, $\pm 10 \text{ V DC}$
- Output load: for current: max. 500 ohm, for voltage: min. 2 kohm
- Output limits: max. 20 V, or 30 mA
- Output response time: max. 300 ms
- Digital output: RS485, Modbus-RTU, 9.6 / 19.2 kBaud
- Accuracy (EN 60688): Class 0.5 or Class 0.2 (20 %..120 % input range)
For $\pm 20 \text{ mA}$ and $\pm 10 \text{ V}$ output only $\pm 0.5 \%$ accuracy can be ordered.

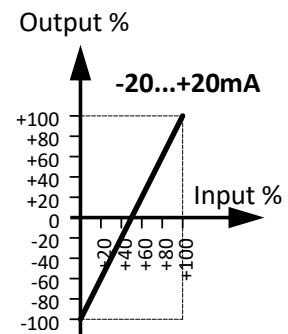
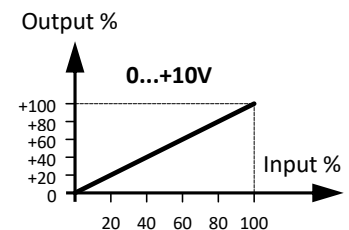
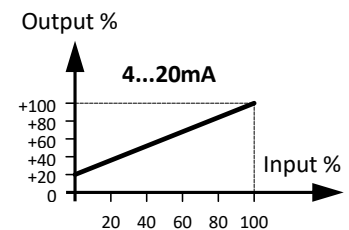
Other:

- Standards applied: IEC/EN 61010-1, IEC/EN 61326, IEC/EN 60688
- Consumption: max. 2 W
- Wire cross-section of terminals: max. 2.5 mm²
- Working temperature: -10...+25...+60 °C
- Storage temperature: -40...+80 °C
- Humidity: max. 85 %
- Vibration (acceleration): max. 2 g
- Dimension (HxWxD): 101 mm x 22.5 mm x 80 mm
- Case protection: IP 20
- Case material: PC-GF
- Weight (with converter): approx. 0.25 kg



Illustration only.

Typical transfer characteristics:

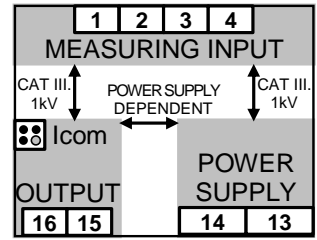


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Auxiliary Supply variations:

	(Voltage / Insulation)
5 V, 12 V, 24 V, 48 V DC ±50 %, converter	/ 1 kV
55...264 V, 47...440 Hz, and 72...370 V DC, converter	/ 3 kV

Isolation scheme:



Ordering examples:

MD22-IMP _ Input: 0...+5 V, 0...9999 pulse _ Output: 4...20 mA DC, ±0.2 % _ Aux: 55..264 V AC converter
MD22-IMP _ Input: Switch, 0...59999 pulse _ Output: RS485 Modbus _ Aux: 24 V DC converter

On request for extra charge special ranges (Input, Output, Auxiliary Supply) are possible.

Outline dimensions and connection diagrams:

