MNHµCON Digital Converter for Eddy Current Sensors





Processor controlled eddy current converter for MNH proximity sensors

- Very robust circuitry proven in the field, encapsulated in an aluminum die-cast housing
- Suitable for high temperature proximity sensors type MESSOTRON MNH, as well as for other eddy current sensors
- 16-point linearity correction curve, resulting in a significantly increased working range with improved linearity
- Temperature compensation by software, preloaded with values for MNH sensors
- Adjustment to different target materials and shapes via software

Technical Data

Applicable sensors	eddy current sensors series MNH and other manufacturers
Linearity error	< 1% (at 150% of the nominal measuring range of the MNH sensors)
Operating frequency	1MHz
Dynamic range	010 kHz (-3dB)
Storage temperature	-2585°C
Operating temperature range	-30°C +70°C
Power supply	+9 +36 VDC, protected against reverse polarity
Power consumption	< 200mA (typical 50mA 24V)
Output 1	020mA / 420mA (load < 500 Ohm)
Output 2	010VDC / 210VDC (load >10 kOhm)
Housing	aluminum die cast housing, coated
Dimensions	L 80mm x W 75mm x H 57mm
Weight	0.5kg
Protection	IP66

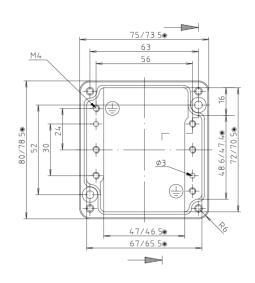
Operation / adjustability

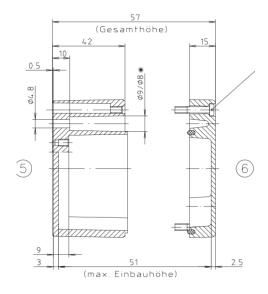
zero point, sensitivity and threshold values (teach-in), reset
Lemo "ERA.0E" series, triaxial connector
spring-loaded terminals, 5-pin, encapsulated
status display (internal, threshold exceeded)
linearization and temperature compensation
Adjustment range 0 100% f.s. measuring range
Adjustment range 0 100% f.s. measuring range

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Dimensional drawing





Wiring connection

Eddy current sensor	Lemo "ERA.0E" series, triaxial panel jack
Power supply	Spring-loaded terminals, 5-pin, encapsulated
Signal output	10 pin header

Pin Assignment

pin	signal
1	24V power supply (high)
2	24V power supply (low)
3	Output voltage 010V
4	Current output 420mA
5	0V