

Measuring amplifier for operation of inductive displacement sensors

- Small, rugged field enclosure (IP66) with external mounting bolts
- Increased frequency response / bandwidth for detection / processing of fast movements
- Enhanced phase compensation +/- 60 degrees
- Dual output: 0...10V and 4...20mA, galvanically isolated from supply
- 4 measuring ranges selected by jumper, fine trimming by means of potentiometers

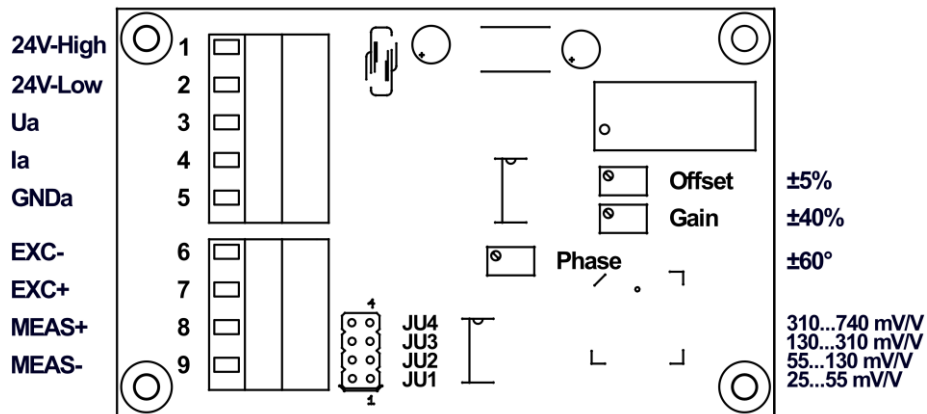
Technical Specifications

Linearity error	< 0,1 % FSO
Carrier frequency	5 kHz ±5 % optional 1...20 kHz
Dynamic bandwidth	500 Hz (3 dB, at 5 kHz)
Excitation voltage (primary EXC+, EXC-)	approx. 2 V _{rms} , sinusoidal max. 12 mA _{rms}
Input resistance (secondary MEAS+, MEAS-)	approx. 100 kΩ
Output signal	4...20 mA , impedance < 500 Ω, 0...10 VDC, load resistance > 10 kΩ
Noise level and residual carrier voltage	< 5 mV _{rms}
Temperature coefficient of zero point	< 0,10 % / 10 K @ 100 mV/V < 0,15 % / 10 K @ 20 mV/V
Temperature coefficient of gain	< 0,05 % / 10 K @ 100 mV/V < 0,15 % / 10 K @ 20 mV/V
Operating temperature	-30...+70°C
Storage temperature	-30...+85°C
Protection rating	IP66
Electromagnetic compatibility	DIN EN 61326-1
Supply voltage	10...36 VDC
Current consumption (@ 24 VDC)	max. 60 mA
Electrical connection	2 cable glands IP68 (power supply/output signal and sensor), spring-loaded terminals inside
Dimensional data	approx. 115 x 64 x 34,5 mm
Weight	approx. 0,3 kg

Suitable sensors

Inductive differential transformers (LVDTs)	with 4-wire technology
Differential inductors (LVITs) and Long-stroke sensors (eddy current design)	inductive half bridges with 3-wire technology
Rated output	25...740 mV/V
Input impedance	100...1000 Ω

Electrical connection / calibration



Installation dimensions / mounting

