

IMPRESS

SENSORS & SYSTEMS

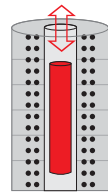
Unit 6B, Mercury House, Calleva Park
Aldermaston, Berkshire, RG7 8PN
Tel: +44 (0)118 981 7980
Fax: +44 (0)118 981 7990
e-mail: info@impress-sensors.co.uk
Website: www.impress-sensors.co.uk

Pressure - Temperature - Level - Flow - Analytical - Control - Indication - Data logging

More Precision.

induSENSOR

Linear inductive displacement sensors

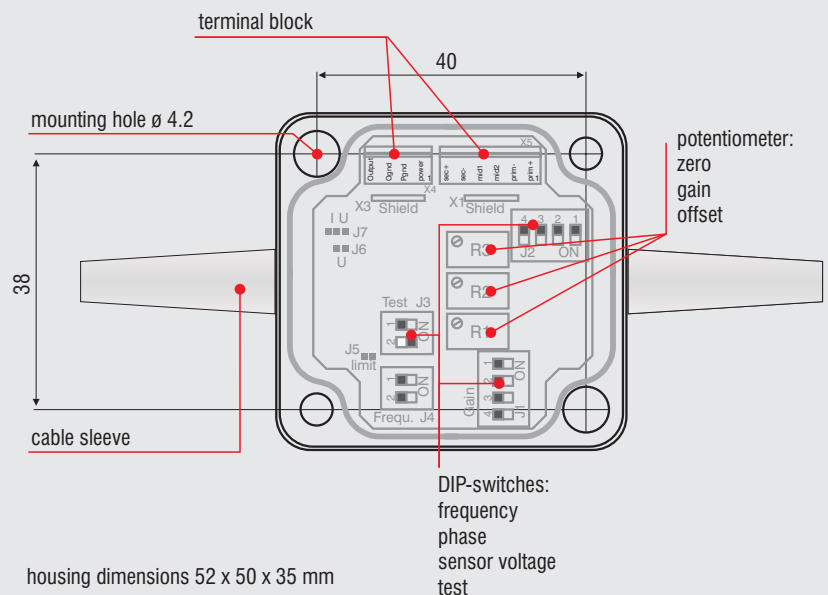
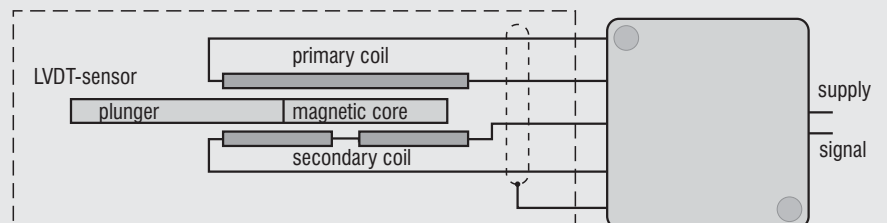


MSC710 sensor controller for LVDT series



Excellent linearity and resolution
Zero and gain adjustable coarse/fine
Excitation frequency 1 ... 10 kHz (selectable)
Compact and robust EMI-proofed housing

The MSC 710 is a single-channel miniature sensor controller for the operation of inductive displacement sensors based on the LVDT principle (Linear Variable Differential Transformer). Its compact, but rugged design, makes it suitable for both industrial and laboratory applications. Easily accessible and simple to operate, by using DIP-switches. The electronic unit can be matched to a wide range of sensors.



| Model | | MSC 710-U | MSC 710-I |
|-------------------------------------|-----------|-----------------------------------------------------|----------------------------------|
| Power supply | | 18 ... 30 VDC (18 ... 45 mA) | |
| Protection | | Reverse polarity protection, overvoltage protection | |
| Sensor principle | | for LVDT sensors | |
| Sensor excitation | | 150 ... 400 mV | |
| | | 1/2/5 kHz (selectable by DIP-switches) | |
| Input impedance | sensor | 10 kOhm | |
| Range | gain | -20 ... +350 % (trimpot) | |
| | zero | ±50 % (trimpot) | |
| Output signal | | 2 ... 10 VDC ($R_a > 1 \text{ kOhm}$) | 4 ... 20 mA (load <500 Ohm) |
| Noise | | < 1.5 mV _{eff} * | < 3 μA_{eff} * |
| | | < 15 mV _{ss} | < 30 μA_{ss} |
| Linearity | | <0.02 % FSO | |
| Frequency response | | 300 Hz (-3dB) | |
| Temperature range | storage | -40 °C ... +85 °C | |
| | operating | 0 °C ... +70 °C | |
| Temperature stability | | ±100 ppm / °C | |
| Protection class | | IP 65 | |
| Weight | | 80 g | |
| Housing material | | ABS-plastic | |
| Electromagnetic compatibility (EMC) | | EN 50081-2 (spurious emission) | |
| | | EN 50082-2 (immunity to interference) | |
| Vibration | | EN 60068-2-64 (noise) | |
| Shock | | EN 60068-2-29 (continuous shock) | |

FSO = Full Scale Output

* RMS AC-Measuring, Frequency 3 Hz ... 300 Hz

More Precision.

Sensors and systems

for displacement, position and dimension

Sensors and measurement devices

for non-contact temperature measurement

Measurement systems

for online/offline quality control