

Magnetic measuring system

Length and angle modes

FEATURES AND APPLICATIONS

MPI-15 measuring system, made of a LCD multifunction display with built-in magnetic position sensor, combined with the magnetic band M-BAND-10 (see page -) (to be ordered separately), is a complete system for the measurement of linear and angular displacement (with a minimum radius of 65 mm).

Characterised by an extremely easy assembly, it allows precise alignment and positioning, reducing time and machining procedures to the minimum.

- Multifunction LCD with 5 function keys.
- Absolute/ incremental mode.
- Programmable offset function.
- External battery power supply 1.5 VDC.
- Buffered memory during battery substitution.
- Accidental polarity inversion protection.
- Magnetic sensor envelope material: anodized aluminium.

For further information read the operating instructions on page .

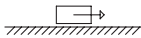
SPECIAL EXECUTIONS ON REQUEST

The special plate display may be supplied with customised graphic symbols, marks or writings.

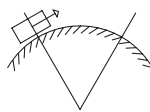
Magnetic sensor with cable length different from the standard executions shown in the table, up to 20 m maximum.



Linear measure



Angular measure



MPI-15 Technical data

Battery life	1.5 years (C-type battery)
Resolution ⁽¹⁾	0.1 mm - 0.01 in - 0.01°
Precision ⁽²⁾	0.1 mm
Repeat accuracy ⁽³⁾	0.001 mm
Operating speed	max. 5 m/s
Self-diagnostic	battery check, sensor check, magnetic tape check
Programmable measuring unit	millimetres, inches, degrees (angles)
Working temperature	0 ÷ 50 °C
Storing temperature	-20 ÷ +70 °C
Relative humidity	Max. 95% at 25°C without condensation
Protection class	IP40 whole device IP54 front side according to IEC 529 IP67 magnetic sensor
Interference protection	IEC 61000-4-2

(1) Resolution: the smallest change in length that the system is capable of displaying.

(2) Precision: the maximum deviation of the value measured by the system from the actual one.

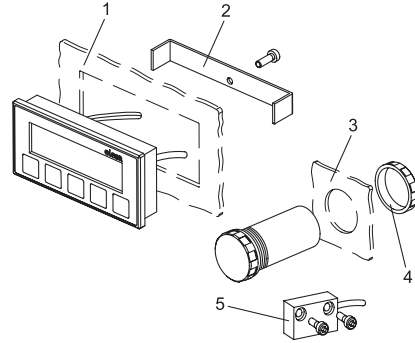
(3) Repeat accuracy: the degree of closeness between a series of measures of the same sample, when the single measurements are carried out leaving the asurement conditions unchanged.

MPI-15 ASSEMBLY INSTRUCTIONS

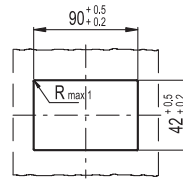
1. Make a drilling of $42 +0.2/+0.5$ mm x $90 +0.2/+0.5$ mm in the metal sheet for the installation of the display.
2. Fix the display to the panel by using the specific mounting bracket (the screw is included in the supply).
3. Make a drilling of diameter $34 +0.2/+0.5$ mm in the metal sheet for the installation of the battery case.
4. Fix the battery case to the panel by using the specific nut.
5. Fix the magnetic sensor by using M3 screws (not included in the supply). Distance between sensor and magnetic band to ensure a correct reading of the displacement: max 2.5 mm.

ACCESSORIES ON REQUEST

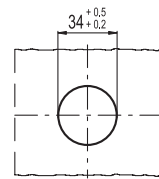
Magnetic band M-BAND-10.



Drilling template for display



Drilling template for battery case

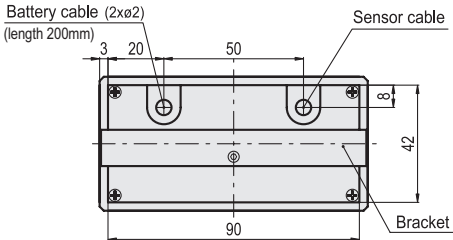
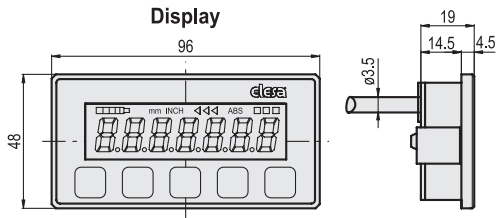


(remove all drilling burrs before fitting the display / battery case)

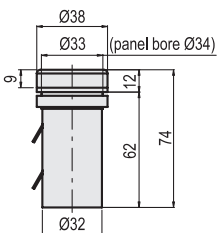


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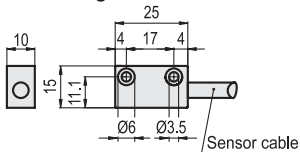
Rotary controls



Battery case



Magnetic sensor



MPI-15

Code	Description	⚖️
CE.99901-#	MPI-15-#	180

Complete by specifying the sensor cable length in decimetres (10=1 meter). Minimum length 0.2 m, maximum length 2.0 m.

Example: CE.99901-06 MPI-15-06 display with sensor cable length 0.6 m.