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 686) (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.
- Material of the magnetic sensor envelope: anodised aluminium. For further information read the operating instructions.

ACCESSORIES ON REQUEST

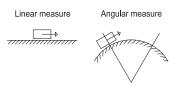
Magnetic band M-BAND-10 (see page 686).

SPECIAL EXECUTIONS ON REQUEST

The display of special plate 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.





Т	echnical 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. 2.5 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
	IP40 whole device
Protection class	IP54 front side according to EN 60529
	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 with the conditions unchanged.



11/2019

Code

CE.99901-02

CE.99901-03

CE.99901-04

CE.99901-05

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CE.99901-20

MPI-15-15

MPI-15-16

MPI-15-17

MPI-15-18

MPI-15-19

MPI-15-20

2 2

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.

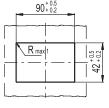


Display 96

dese

Drilling template for display

Drilling template for battery case





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

	Description	Cable length [mm]	7,7
٠	MPI-15-02	200	228
	MPI-15-03	300	229
	MPI-15-04	400	230
	MPI-15-05	500	232
	MPI-15-06	600	233
	MPI-15-07	700	235
	MPI-15-08	800	236
	MPI-15-09	900	238
	MPI-15-10	1000	239
	MPI-15-11	1100	241
	MPI-15-12	1200	242
	MPI-15-13	1300	244
	MPI-15-14	1400	245

82

Ø32



Sensor cable

Ø6

































1500

1600

1700

1800

1900

2000

247

248

250

251

252

254