

NORDIC TRANSDUCER

## TM + MP200

Magnetic Transducer for length measuring up to 50meter



### The linear magnetic measuring system

**TM+MP200** is composed by the magnetic transducer TM and the magnetic band MP200:

The transducer works contactless, relieving the polarized fields of the magnetic band and converting the measure into digital signals.

The system can be profitably employed in severe industrial environments, in presence of water, oil, grease. The mounting method is easy and cheap and the measure is accurate and repeatable.

The scanning head TM is contained in a compact and strong metal case, and it is available with reading resolution 0.1 mm (TM10) or 0.01 mm (TM100).

An electronic zero pulse is generated each 4 mm (type TM10C/TM100C), 0 matching with one or more external magnets (TM10E/TM100E).

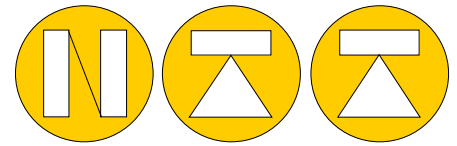
Complying with **CE** standards

### Magnetic Band MP200

The magnetic band MP200 consists of a plasto-ferrite strip, which is polarized at regular distance, and supported by a stainless steel carrier; it is equipped with the adhesive tape for an easy mounting. As an optional, the magnetic band can be supplied with a magnetically transparent stainless steel cover for physical protection.



*For direct indication of length the CM78 digital panel meter is perfect  
Can also be supplied with zero input, 2 relays, RS232 or RS485 +++*



## Reading Transducer Specification

**NORDIC TRANSDUCER**

TYPE	TM10C/TM10E	TM100C/TM100E
Reading resolution	0.1 mm	0.01 mm
Accuracy	± 0.1 mm/m	± 0.05 mm/m
Electronic zero pulse	each 4 mm (type C) or matching with external magnet (type E)	
Frequency	32.5 KHz	250 KHz
Sensor distance	0.3 ÷ 1.2 mm	
Phase difference	90° ± 5° electrical degree	
Max. speed	13 m/s	10 m/s
Vibration resistance	(10 Hz ÷ 2 KHz) at 100 m/s <sup>2</sup>	
Shock resistance	100 m/s <sup>2</sup> (11 m/s)	
Protection degree	IP67	
Operating temperature	0 ÷ 70° C	
Stocking temperature	-20° ÷ 80 C°	
Humidity	100% non condensed	
Supply	5 Vdc ±10% 25 mA 10÷30 Vdc 15 mA	5 Vdc ±10% 65 mA 10÷30 Vdc 40 mA
Output signals	Push-pull or line-driver	
Standard cable	Length 2 m	
Electrical protections	for the supply: against polarity inversions for the outputs: against short circuits	

## Magnetic Band Specifications **MP200**

Pole pitch	2 + 2 mm
Accuracy	0.1 mm
Width	10 mm
Thickness	1.3 mm
Max. length	50 m
Thermal expansion	10.5x10 <sup>-6</sup> °C <sup>-1</sup> ref.t.=20°C±0.1°C
Operating temperature	0 ÷ 70°C
Stocking temperature	-20° ÷ 80°C

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