

## MW090000

### LINEAR AND ANGULAR MEASUREMENT • MAGNETIC

For length measurement, rotational speed or angle measurement, magnetic measuring systems are used. These systems operate in a way that the sensor moves without contact over a flexible magnetic tape, or it is situated above the rotating magnetized measuring wheel. The magnetic tape is applied to a 0.3mm thick steel strip and is located on the circumference of the various measuring wheels. The magnetization is carried out with defined pole pitches. By scanning of the magnetic poles an analog signal is generated, which is converted into digital square wave signals that can be processed by a downstream electronics and, if necessary, be displayed. The sensor detects the pitch of the strip and converts the information into a high-resolution path or rotation information. To read out the magnetic lines no direct contact is required. Magnetic sensors are insensitive to dirt, oils and moisture and relatively stable at shock and vibration. For users, this opens up a wide field of applications, e.g. for plants and systems in the timber industry, at linear axes, in outdoor areas or with machine tools.



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#### MECHANICAL DATA

Ambient temperature (MAX)	60 °C
Cable length	0.3 m
Degree of protection (IP)	IP20
Housing material	Zinc die-cast
Length	26.7 mm
Max. traverse speed	3.5 m/s
Sensor height	15 mm
Sensor length	26.7 mm
Sensor width	7.8 mm
Storage temperature	70 °C
Storage temperature	-20 °C

#### ELECTRICAL DATA

Battery-powered systems	Yes
Multi-part systems	Yes
Relative repeat accuracy	+/-1 increment
Resolution	100 µm
Sensing range	0.1 mm ... 2 mm
Type of electrical connection	Other
Voltage type	DC
With display	Yes

#### OTHER DATA

Relative air humidity	95 %
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**DIMENSIONAL DRAWING****INSTALLATION**

Mounting / Installation may only be carried out by a qualified electrician!

**DISPOSAL****SAFETY WARNINGS**

Before initial operation, please make sure to follow all safety instructions that may be provided in the product information!