



Incremental rotary encoder

MNI20N-0H02DY41N-00100:02

- Cost-effective, bearing-free rotary encoder for rotational speed measurement
- Simple installation
- Operating display verifies function
- High degree of protection (IP67)
- Magnetic ring with 50 poles

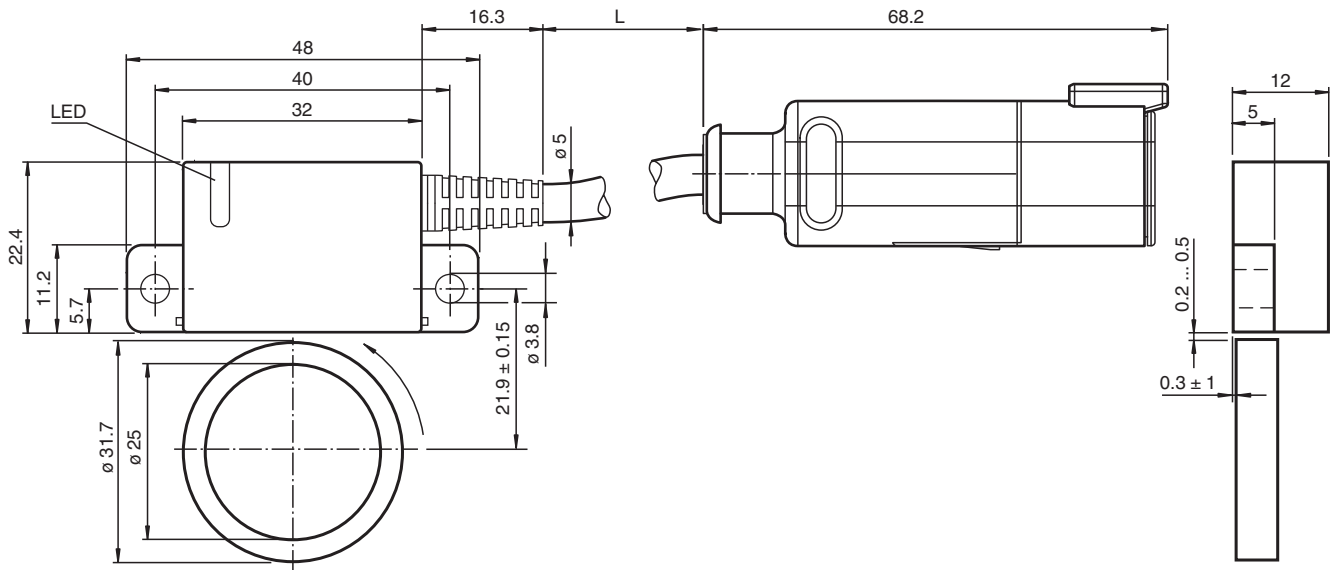
Magnetic, Non Contact



Function

The magnetic incremental encoder MNI20 is an exceptionally robust measurement system in the smallest space. Its highly compact encapsulated housing gives the sensor its high resistance to harsh environmental conditions. The installation-friendly design reduces the installation time considerably.

Dimensions



Technical Data

General specifications

Detection type	magnetic sampling
Pulse count	100
UL File Number	E223176 "For use in NFPA 79 Applications only", if UL marking is marked on the product.

Functional safety related parameters

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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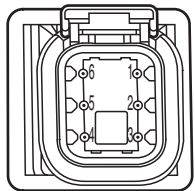
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Technical Data

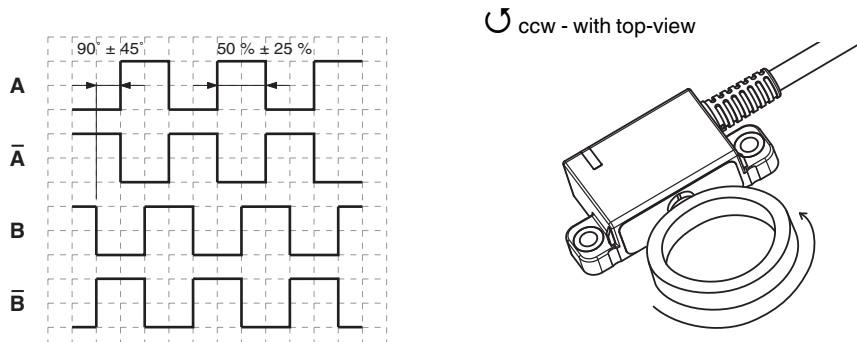
MTTF _d		1093 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
Indicators/operating means		
LED green		Operating display
Electrical specifications		
Operating voltage	U _B	10 ... 30 V DC
No-load supply current	I ₀	max. 55 mA
Output		
Output type		push-pull, incremental
Voltage drop	U _d	< 2.5 V
Load current		max. per channel 30 mA , short-circuit protected (max. per channel 20 mA, conditionally short-circuit proof)
Output frequency		max. 800 kHz
Connection		
Cable		Ø4,7 mm, 4 x 2 x 0,128 mm ² cable with Deutsch connector DTM04-6P L = 1,15 m
Standard conformity		
Degree of protection		DIN EN 60529, IP67
Climatic testing		DIN EN 60068-2-30
Emitted interference		EN 61000-6-4:2007/A1:2011
Noise immunity		EN 61000-6-2:2005
Shock resistance		DIN EN 60068-2-27, 200 g, 6 ms
Vibration resistance		DIN EN 60068-2-6, 40 g, 10 ... 2000 Hz
Approvals and certificates		
UL approval		cULus Listed, General Purpose, Class 2 Power Source, Type 1 enclosure , if UL marking is marked on the product. adapters providing field wiring on request
Maximum permissible ambient temperature		max. 80 °C (max. 176 °F)
Ambient conditions		
Operating temperature		-25 ... 85 °C (-13 ... 185 °F)
Storage temperature		-25 ... 85 °C (-13 ... 185 °F)
Mechanical specifications		
Material		
Housing		PA
Cable		PUR
Magnetic ring		PA , Plastic-coated ferrite 50 poles
Mass		approx. 190 g
Rotational speed		max. 20000 min ⁻¹

Connection

Signal	Deutsch connector DTM04-P6, 6-pin
+U _b	6
GND	5
A	1
\bar{A}	3
B	2
\bar{B}	4
Pinout	

Operation

Signal outputs



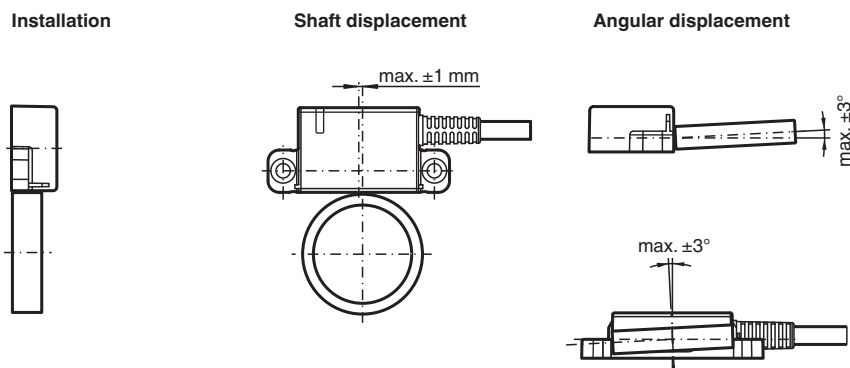
Indication

LED-Indicators

LED status	Description
Green On	Sensor ready for operation. Supply voltage applied and magnetic wheel is detected.
LED Off	Possible reason: <ul style="list-style-type: none"> • Supply voltage drop or no supply voltage • Magnetic wheel not detectable (e. g. too large gap)

Mounting

Mounting information



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