

Incremental rotary encoder

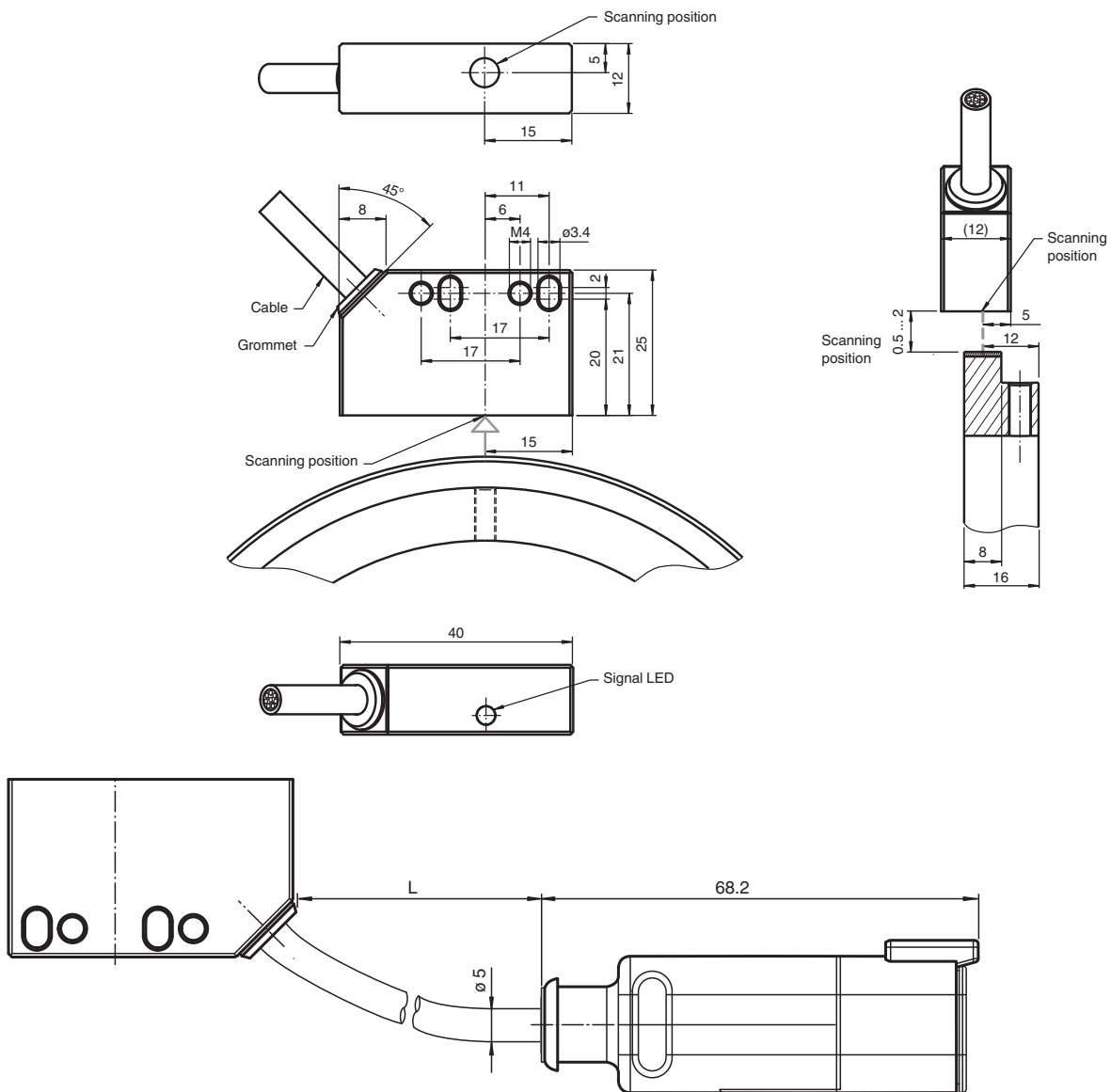
MNIR50-PL0016-0-7UD1-LDY-00:01

- Cost-effective, bearing-free rotary encoder for rotational speed measurement
- Simple installation
- High degree of protection (IP67)
- Robust and flexible magnetic rings

Magnetic incremental rotary encoder for contactless sampling of a magnetic wheel



Dimensions



Release date: 2022-12-19 Date of issue: 2022-12-19 Filename: 70150828_eng.pdf

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

Pepperl+Fuchs Group
www.pepperl-fuchs.com

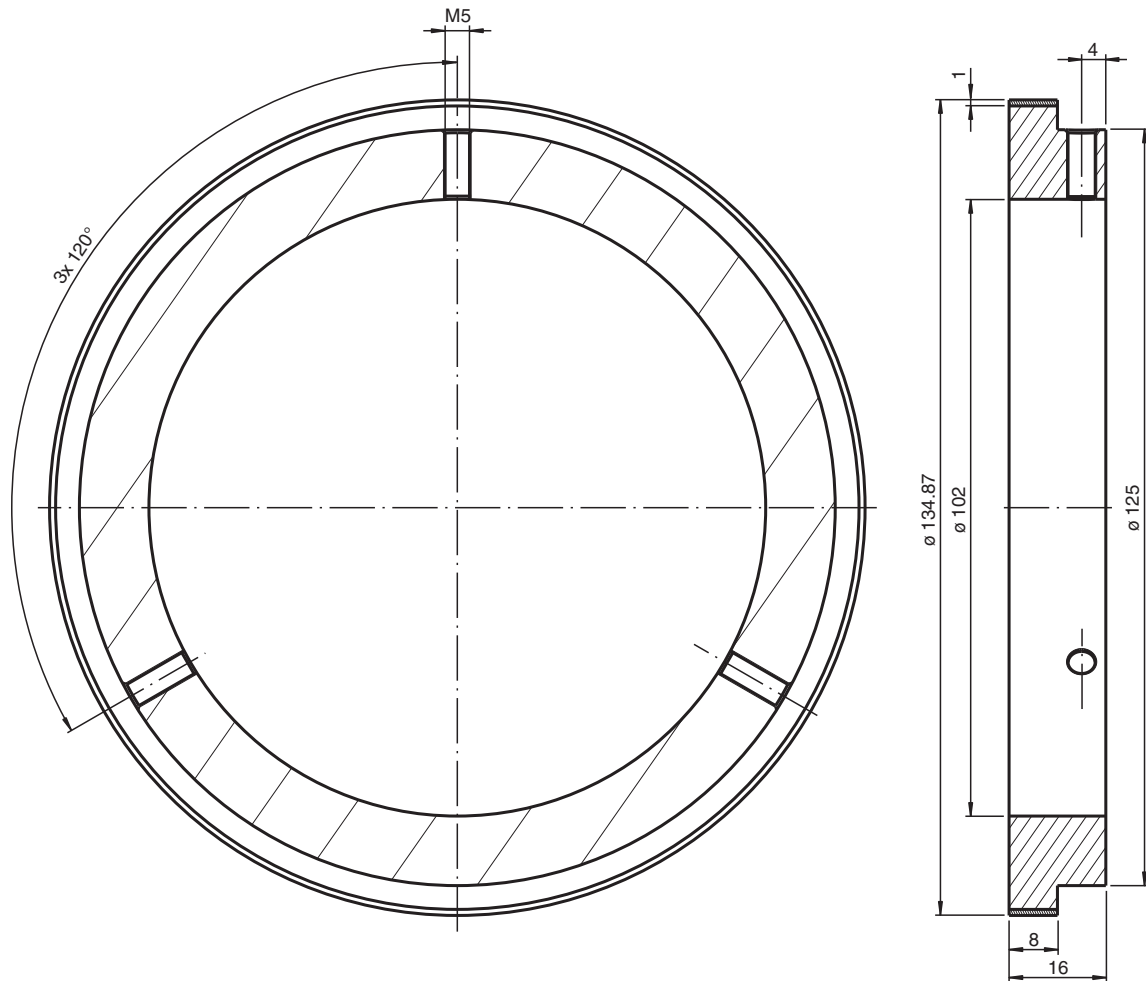
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Dimensions



Technical Data

General specifications			
Detection type	magnetic sampling		
Pulse count	1376		
UL File Number	E223176 "For use in NFPA 79 Applications only", if UL marking is marked on the product.		
Functional safety related parameters			
MTTF _d	942 a		
Mission Time (T _M)	20 a		
Diagnostic Coverage (DC)	0 %		
Indicators/operating means			
LED green	Operating display		
Electrical specifications			
Operating voltage	U _B	4.75 ... 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			
Connector	L = 0.3 m fixed cable with Deutsch connector DTM04-6P		

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Technical Data

Cable	Ø4,7 mm, 4 x 2 x 0,128 mm ²
Standard conformity	
Degree of protection	DIN EN 60529, IP67, IP68
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	-40 ... 100 °C (-40 ... 212 °F)
Storage temperature	-40 ... 100 °C (-40 ... 212 °F)
Mechanical specifications	
Material	
Housing	PA
Cable	PUR
Magnetic wheel	steel 1.4021 (AISI 420) ferrite filled cured rubber
Mass	approx. 760 g
Rotational speed	max. 3000 min ⁻¹

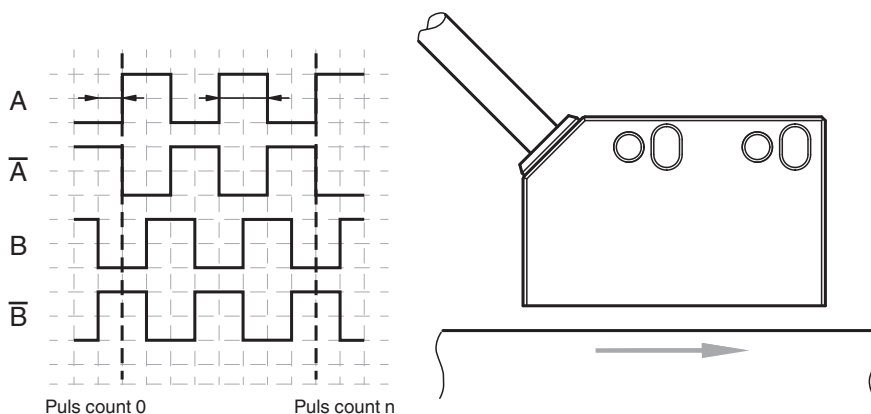
Indication

LED-Indicators

LED status	Description
Green On	Sensor is ready for operation: Supply volage applied and magnetic tapel is detected.
LED Off	Possible reason: - Supply voltage drop or no supply voltage - Magnetic tape is not detectable e. g. too large gap

Operation

Signal outputs

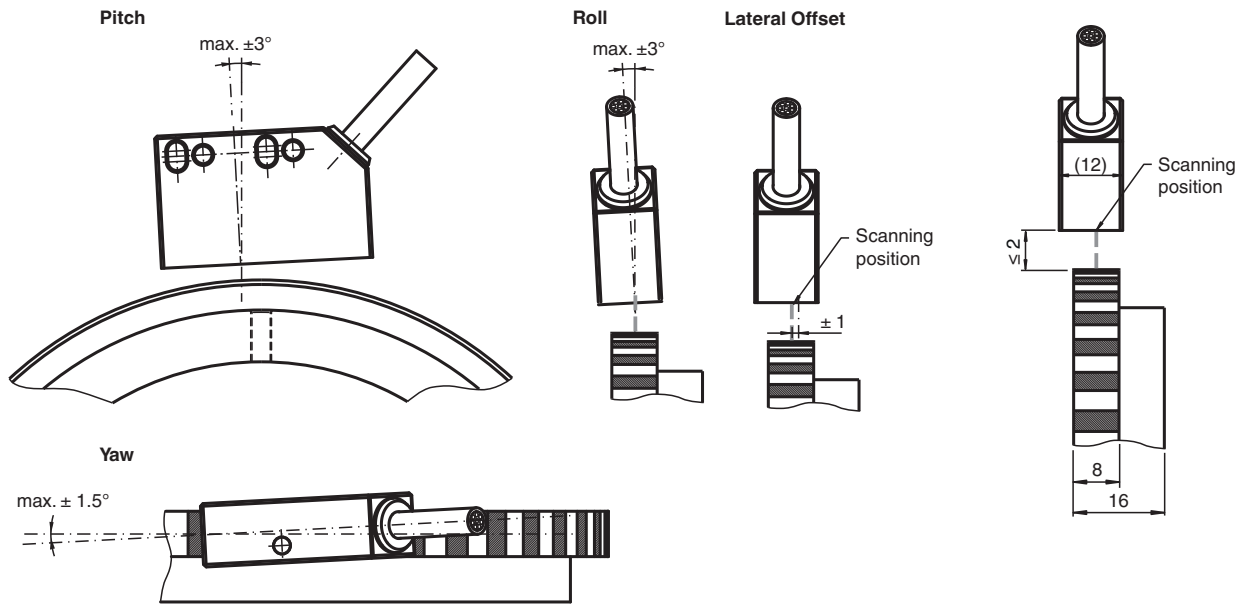


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Installation Conditions

Permissible angular deviation in consideration of the nominal dimensions

Basic nominal dimensions for alignment



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Connection

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