

Incremental rotary encoder

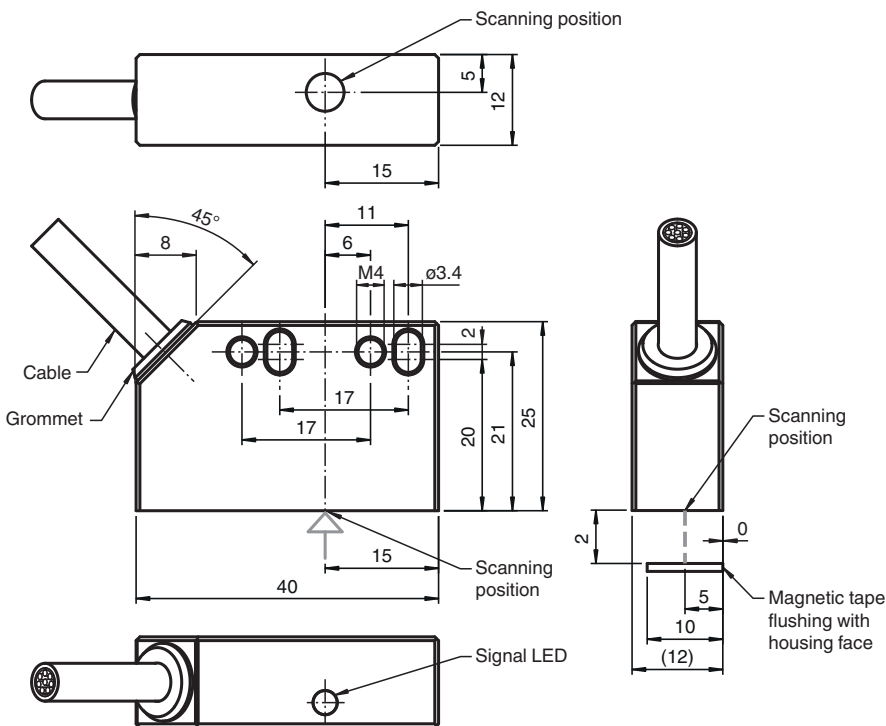
MNI35Z-0150KY6XN-C0010:01

- Simple installation
- Operating display verifies function

Magnetic incremental rotary encoder for contactless sampling of a magnetic tape



Dimensions



Technical Data

General specifications

Detection type	magnetic sampling
Device type	Incremental rotary encoder
Resolution	40 μm / per pulse
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	1000 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %

Indicators/operating means

LED green	Operating display
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Electrical specifications

Operating voltage	U _B	4.75 ... 30 V DC
No-load supply current	I ₀	max. 55 mA

Interface

Release date: 2022-12-12 Date of issue: 2022-12-12 Filename: 70124141_eng.pdf

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

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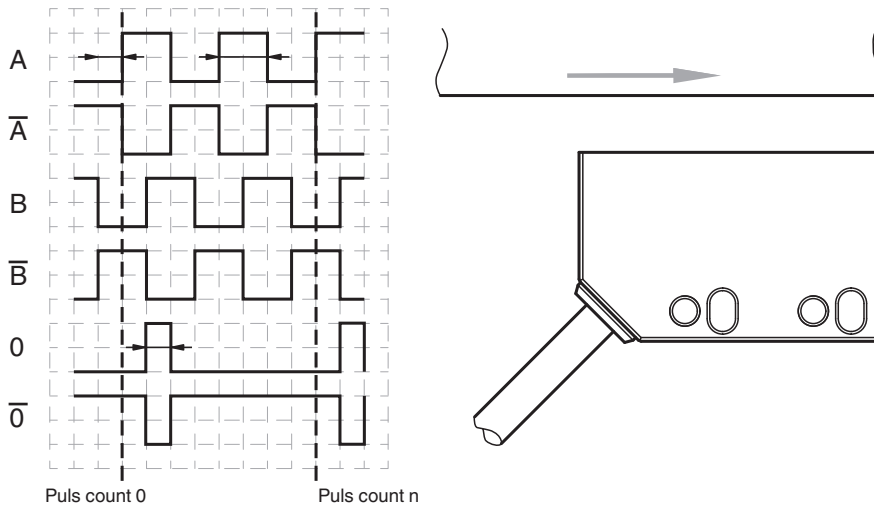
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Technical Data

Interface type	RS-422 , 3 channels	
Load current	max. per channel 30 mA , short-circuit protected (max. per channel 20 mA, conditionally short-circuit proof)	
Output frequency	max. 1 MHz	
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, 100 g, 6 ms	
Vibration resistance	DIN EN 60068-2-6, 20 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		
Connection type	cable	
Material		
Housing	Zinc, CuNi plated	
Magnetic tape	steel 1.4021 (AISI 420) ferrite filled cured rubber	
Cable		
Bending radius	20	
Material	TPE-E	
Color	black	
Number of cores	8	
Core cross section	0.128 mm ² 26 AWG	
Length	L	6 m
Mass	approx. 190 g	
Max. Motion velocity	20 m/s	

Operation

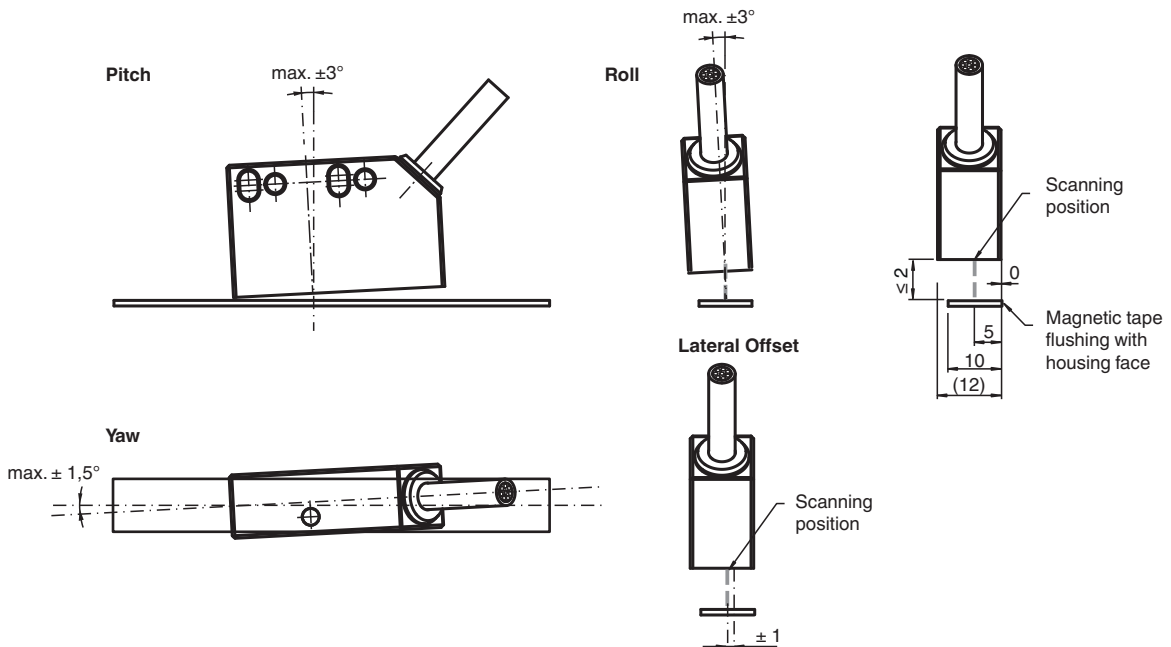
Signal outputs



Installation Conditions

Permissible angular deviation in consideration of the nominal dimensions

Basic nominal dimensions for alignment



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Connection

Signal	Cable core marking
GND	FW-GND
+U _b	FW-Ub+
A	FW-A+
B	FW-B+
\bar{A}	FW-A-
\bar{B}	FW-B-
Z	FW-Z+
\bar{Z}	FW-Z-
Screen	FW-E

Indication

LED-Indicators

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