

# Cable pull rotary encoder

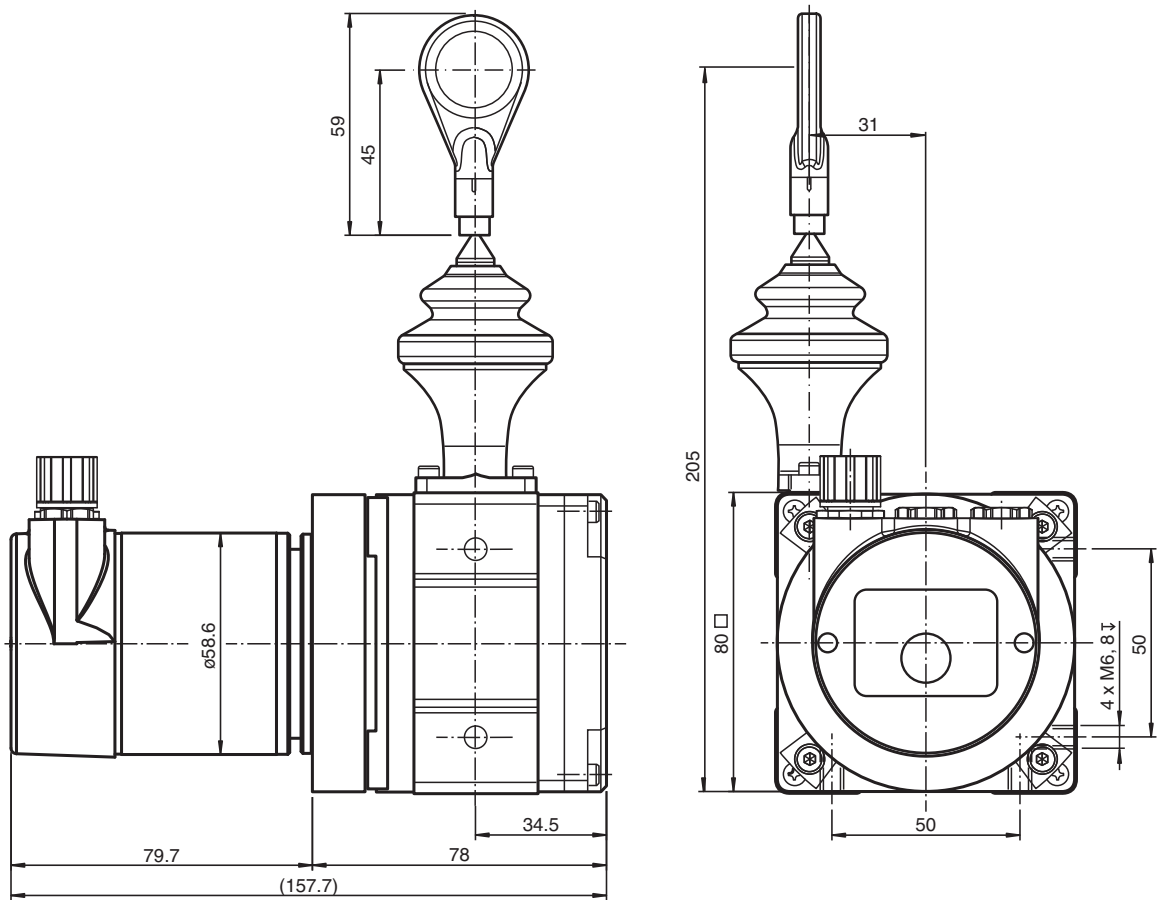
## ECA21IL-02A1A-B16AN:OE1212

- Robust aluminum drum housing
- Bellows with steel tip
- Rust and acid-resistant measuring cable
- Resolution: 12 singleturn, 12 bit multiturn

Cable pull rotary encoder with CANopen interface



### Dimensions



### Technical Data

#### General specifications

Detection type	photoelectric sampling
Device type	Industrial Line with CANopen interface
Measuring range	2000 mm
Construction type	80 mm
Resolution	Cable pull: Design 80 mm: 0.049 mm Encoder: 24 bit (12 bit/revolution)

Release date: 2022-04-08 Date of issue: 2022-12-12 Filename: 70115513\_eng.pdf

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

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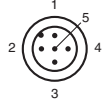
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## Technical Data

Electrical specifications		
Operating voltage	$U_B$	10 ... 30 V DC
No-load supply current	$I_0$	≥ 350 mA
Interface		
Interface type		CANopen
Resolution		
Single turn		12 Bit
Multiturn		12 Bit
Overall resolution		24 Bit
Transfer rate		max. 1 MBit/s
Standard conformity		communication profile: DS 301 Device profiles: DS 406 and DS 417 , programmable according to class 2
Connection		
Connector		M12 connector, 5 pin , A-coded
Standard conformity		
Degree of protection		acc. DIN EN 60529
Connection side		Encoder: IP65 Cable pull: IP64
Climatic testing		DIN EN 60068-2-3, no moisture condensation
Emitted interference		EN 61000-6-4:2007
Noise immunity		EN 61000-6-2:2005
Ambient conditions		
Ambient temperature		-30 ... 70 °C (-22 ... 158 °F)
Storage temperature		-30 ... 70 °C (-22 ... 158 °F)
Relative humidity		98 % , no moisture condensation
Mechanical specifications		
Rope diameter		0.54 mm
Drum perimeter		200 mm
Retraction speed		4 m/s
Spring retraction force		8 ... 14 N
Material		
Housing		aluminum, coated
Cable pull		anodized aluminum
Flange		anodized aluminum
Rope		Stainless steel 1.4401/316
Mass		1900 g
Life span		up to 10 <sup>6</sup> Cycles

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**Connection**

Signal	5-pin, M12 x 1 connector
CAN GND	1
+V <sub>s</sub>	2
GND	3
CAN-High	4
CAN-Low	5
Shielding	Housing
Pinout	

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