

# Cable pull rotary encoder

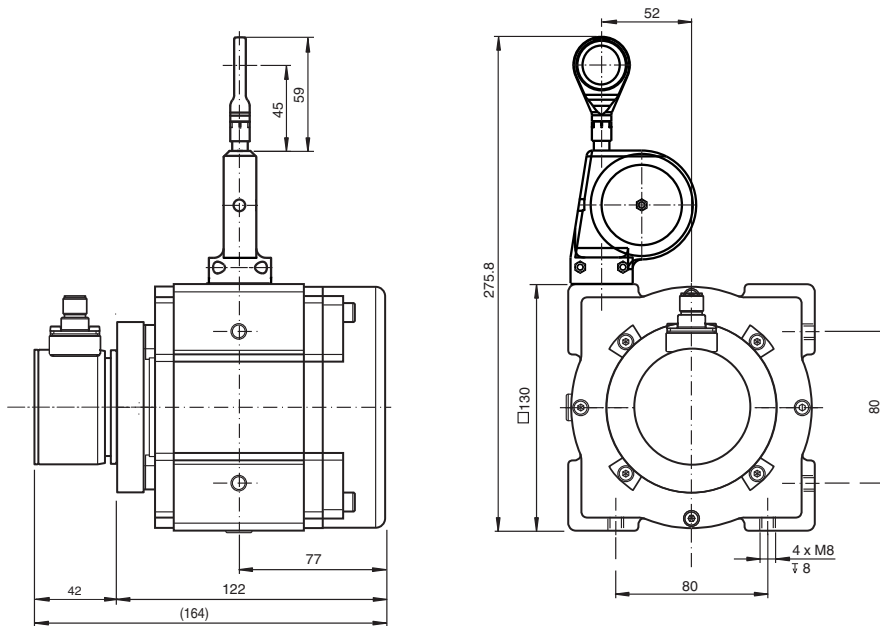
## ECI30PL-05A4A-UD1BE:02

- Robust aluminum drum housing
- Guide pulley for guide
- Rust and acid-resistant measuring cable
- 1024 pulses, incremental

Cable pull rotary encoder with incremental output signals (1024 pulses)



### Dimensions



### Technical Data

#### General specifications

Detection type	photoelectric sampling
Device type	Performance Line
Measuring range	5000 mm
Construction type	130 mm
Resolution	Cable pull: Design 130 mm: 0.32 mm Encoder: 1024 pulses per revolution

#### Electrical specifications

Operating voltage	$U_B$	4.75 ... 30 V DC
No-load supply current	$I_0$	max. 50 mA

#### Output

Output type	push-pull or RS422 (universal output driver, output level depending on input voltage)
Output frequency	max. 400 kHz

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## Technical Data

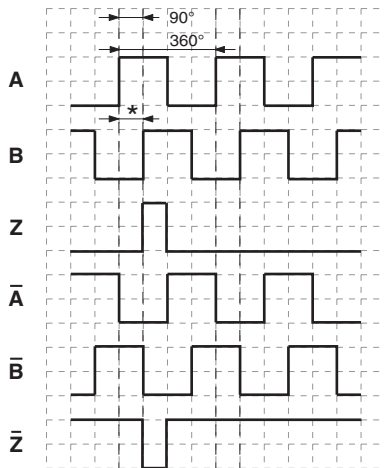
Rise time	300 ns
Phase position A to B	
Pulse counts < 3600	90 ° ± 9 ° electrical
Pulse counts ≥ 3600	90 ° ± 15 ° electrical
Duty cycle	1/2 ± 10 %
<b>Connection</b>	
Connector	M12 connector, 8-pin
<b>Standard conformity</b>	
Degree of protection	acc. DIN EN 60529
Connection side	Encoder: IP65 Cable pull: 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
<b>Ambient conditions</b>	
Ambient temperature	-30 ... 70 °C (-22 ... 158 °F)
Storage temperature	-30 ... 70 °C (-22 ... 158 °F)
Relative humidity	98 % , no moisture condensation
<b>Mechanical specifications</b>	
Rope diameter	1.35 mm
Drum perimeter	334.1 mm
Retraction speed	4 m/s
Spring retraction force	15 ... 21 N
<b>Material</b>	
Housing	aluminum, coated
Cable pull	anodized aluminum
Flange	anodized aluminum
Rope	Stainless steel 1.4401/316
Mass	2888 g
Life span	up to 10 <sup>6</sup> Cycles

**Connection**

Signal	Connector M12 x 1, 8-pin
GND	1
U <sub>b</sub>	2
A	3
B	5
$\bar{A}$	4
$\bar{B}$	6
Z	7
$\bar{Z}$	8
NC	-
NC	-
NC	-
NC	-
Shielding	Housing

**Operation**

**Signal outputs**



↺ cw - with view onto the shaft  
 phase relationships electrical  
 \* 1 Measuring step is 90° electrical

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