

Incremental rotary encoder

ENI58IL-H15YY5-0200UD1-RBY:01

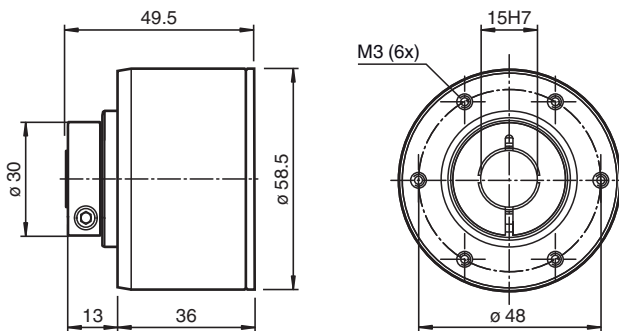
- Housing Ø 58 mm
- Hollow shaft
- Universal output driver
- BlueBeam technology for ultimate precision
- 200 ppr



Function

The ENI58IL impresses with its modular design, which is available over all mechanical and electrical interfaces. The ENI58IL is the best solution for all common applications, coupled with its high robustness, high reliability and versatility. With the high-precision BlueBeam technology and innovative housing design, the ENI58IL is the new market standard for incremental encoders.

Dimensions



Technical Data

General specifications			
Detection type			photoelectric sampling
Linearity error			± 0.025 °
Pulse count			200
UL File Number			E223176 "For use in NFPA 79 Applications only"
Functional safety related parameters			
MTTF _d			140 a
Mission Time (T _M)			20 a
L ₁₀			15 E+9 at 3000 rpm
Diagnostic Coverage (DC)			0 %
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)
Load current			max. per channel 40 mA , short-circuit protected, reverse polarity protected
Output frequency			max. 400 kHz

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

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Technical Data

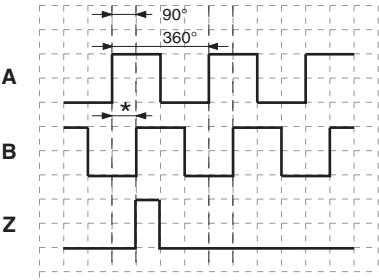
Rise time	300 ns
Phase position A to B	
Pulse counts < 3600	90 ° ± 9 ° electrical
Pulse counts ≥ 3600	90 ° ± 15 ° electrical
Duty cycle	1/2 ± 10 %
Connection	
Fixed cable with plug	M12 connector, 5 pin cable L = 300 mm , Ø6,5 mm, 5 x 2 x 0,14 mm ²
Standard conformity	
Degree of protection	DIN EN 60529, IP65
Climatic testing	DIN EN 60068-2-78 , no moisture condensation
Emitted interference	EN 61000-6-4:2007/A1:2011
Noise immunity	EN 61000-6-2:2005
Shock resistance	DIN EN 60068-2-27, 300 g, 6 ms
Vibration resistance	DIN EN 60068-2-6, 30 g, 10 ... 2000 Hz
Approvals and certificates	
UL approval	cULus Listed, General Purpose, Class 2 Power Source, Type 1 enclosure , adapters providing field wiring on request
Maximum permissible ambient temperature	max. 80 °C (max. 176 °F)
Ambient conditions	
Operating temperature	-40 ... 85 °C (-40 ... 185 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications	
Material	
Housing	3.2315 aluminum (AlMgSi1, saltwater-proof)
Flange	3.2315 aluminum (AlMgSi1, saltwater-proof)
Shaft	Hollow shaft Stainless steel
Mass	< 300 g
Rotational speed	max. 6000 min ⁻¹
Moment of inertia	≤ 70 gcm ²
Starting torque	≤ 1.5 Ncm
Shaft load	
Angle offset	max. 1 °
Axial offset	max. 1 mm

Connection

Signal	Connector M12 x 1, 5 pin
U _b	1
B	2
GND	3
A	4
Z	5

Operation

Signal outputs



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