



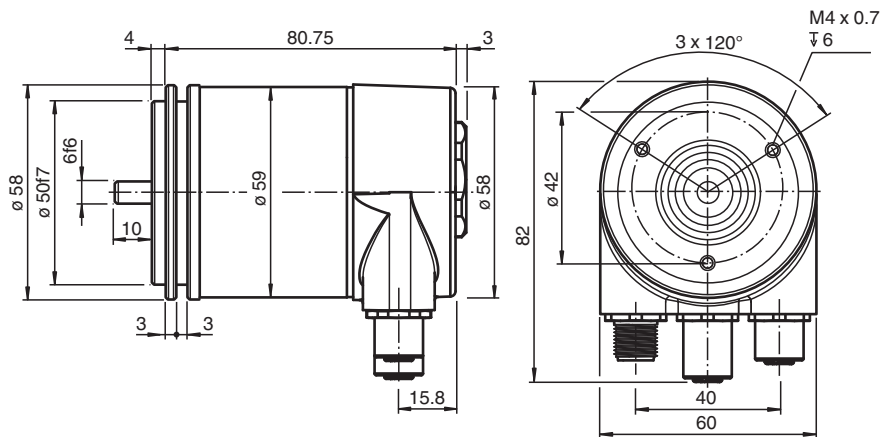
# Multiturn absolute encoder

## EVM58N-032IZR0BY-1213:01

- Industrial standard housing Ø58 mm
- EtherNet/IP
- 25-bit multiturn
- Clamping flange
- Compatible with Rockwell/ Allen Bradley/ Schneider control
- Mechanical compatibility with all major encoders with fieldbus interface
- Rotary axis functionality
- Status LEDs



### Dimensions



### Technical Data

General specifications	
Detection type	photoelectric sampling
Device type	Multiturn absolute encoder
Electrical specifications	
Operating voltage	$U_B$ 10 ... 30 V DC
Power consumption	$P_0$ max. 4 W
Linearity	$\pm 0.5$ LSB (12 Bit)
Output code	binary code
Code course (counting direction)	programmable, cw ascending (clockwise rotation, code course ascending) cw descending (clockwise rotation, code course descending)
Interface	
Interface type	EtherNet/IP
Resolution	
Single turn	13 Bit
Multiturn	12 Bit
Overall resolution	25 Bit
Physical	Ethernet

Release date: 2022-12-08 Date of issue: 2022-12-12 Filename: 70120250\_eng.pdf

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

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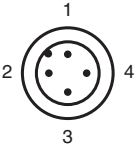
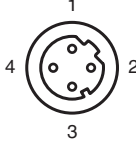
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## Technical Data

Transfer rate	100 MBit/s
<b>Connection</b>	
Connector	Ethernet: 2 sockets M12 x 1, 4-pin, D-coded Supply: 1 plug M12 x 1, 4-pin, A-coded
<b>Standard conformity</b>	
Degree of protection	DIN EN 60529, shaft side: IP64 housing side: IP67
Climatic testing	DIN EN 60068-2-3, no moisture condensation
Emitted interference	EN 61000-6-4:2007
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, 10 g, 10 ... 2000 Hz
<b>Approvals and certificates</b>	
UL approval	cULus Listed, General Purpose, Class 2 Power Source
<b>Ambient conditions</b>	
Operating temperature	-40 ... 85 °C (-40 ... 185 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)
<b>Mechanical specifications</b>	
Material	housing: powder coated aluminum flange: aluminum shaft: stainless steel
Mass	approx. 370 g
Rotational speed	max. 12000 min <sup>-1</sup>
Moment of inertia	30 gcm <sup>2</sup>
Starting torque	≤ 3 Ncm (version without shaft seal)
<b>Shaft load</b>	
Axial	40 N
Radial	110 N

## Connection

Pin	Male connector M12 x 1, 4-pin, A-coded	Female connector M12 x 1, 4-pin, D-coded
1	Supply voltage +U <sub>B</sub>	Tx +
2	-	Rx +
3	0 V	Tx -
4	-	Rx -
		

## Indication

### Diagnostic LEDs

LED	Color	Description for LED = ON
Active1	Yellow	Incoming and outgoing data traffic for port 1
Link1*	Green	Connection to other Ethernet devices on port 1
Active2	Yellow	Incoming and outgoing data traffic for port 2
Link2*	Green	Connection to other Ethernet devices on port 2
Stat1	Green	Status 1, details see table below
Stat2	Red	Status 2, details see table below

\* flashes with 2 Hz if engineering identification call is activated and link connection is available

Stat1 (green)	Stat2 (red) bus failure	Meaning	Cause
off	off	No power	
on	on	No connection to another device Criteria: no data exchange	<ul style="list-style-type: none"> <li>bus disconnected</li> <li>Master not available / switched off</li> </ul>
on	flashes <sup>1)</sup>	Parameterization fault, no data exchange Criteria: data exchange correct. However, the slave did not switch to the data exchange mode.	<ul style="list-style-type: none"> <li>Slave not configured yet or wrong configuration</li> <li>Wrong station address assigned (but not outside the permitted range)</li> <li>Actual configuration of the slave differs from the nominal configuration</li> </ul>
on	off	Data exchange. Slave and operation ok.	

1) flashing frequency 0.5 Hz for at least 3 seconds