

Multiturn absolute encoder EVM58N-011IZR0BY-1213

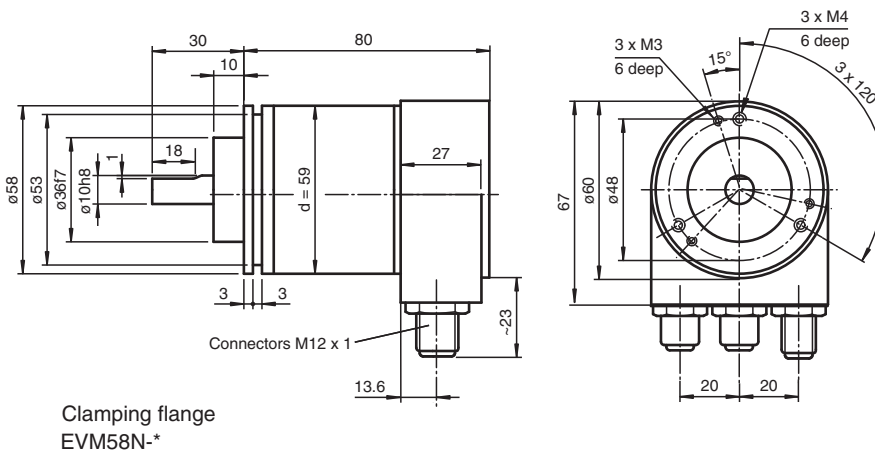
- Industrial standard housing Ø58 mm
- EtherNet/IP
- 25-bit multiturn
- Clamping flange
- Network loop through by means of integrated 2 port switch
- IP address resettable
- No DIP switches for address setting
- Multi-protocol capable (ENIP-PNIO)
- Compatible with Rockwell/ Allen Bradley/ Schneider control
- Mechanical compatibility with all major encoders with fieldbus interface
- Rotary axis functionality
- Status LEDs
- Ethernet IP declaration of conformity
- CIP encoder profile



Function

In addition to the CANopen-, DeviceNet-, PROFIBUS- and AS-Interface encoders, we have broadened our product line of bus-capable absolute encoders with the EVM58 for Ethernet. Absolute multiturn rotary encoders deliver an absolute step value for each angle setting. This device has a maximum basic resolution of 8192 steps per revolution (13 bits) and codes up to 4096 revolutions (12 bits). Thus the overall resolution amounts to 30 bits.

Dimensions



Technical Data

General specifications	
Detection type	photoelectric sampling
Device type	Multiturn absolute encoder
Functional safety related parameters	
MTTF _d	120 a
Mission Time (T _M)	20 a
L _{10h}	1.9 E+11 at 6000 rpm and 20/40 N axial/radial shaft load

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

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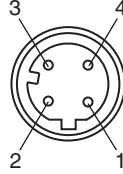
Technical Data

Diagnostic Coverage (DC)		0 %
Electrical specifications		
Operating voltage	U _B	10 ... 30 V DC
Power consumption	P ₀	max. 4 W
Linearity		± 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
Device profile		firmware 8.5 / P+F version 1.0
Resolution		
Single turn		13 Bit
Multiturn		12 Bit
Overall resolution		25 Bit
Physical		Ethernet
Transfer rate		100 MBit/s
Connection		
Connector		Ethernet: 2 sockets M12 x 1, 4-pin, D-coded Supply: 1 plug M12 x 1, 4-pin, A-coded
Standard conformity		
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
Approvals and certificates		
UL approval		cULus Listed, General Purpose, Class 2 Power Source
Ambient conditions		
Operating temperature		-40 ... 85 °C (-40 ... 185 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Material		housing: powder coated aluminum flange: aluminum shaft: stainless steel
Mass		approx. 700 g
Rotational speed		max. 12000 min ⁻¹
Moment of inertia		30 gcm ²
Starting torque		≤ 3 Ncm (version without shaft seal)
Shaft load		
Axial		40 N
Radial		110 N

Accessories

	MBT-36ALS	Spring-loaded mounting bracket with a diameter of 36 mm
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Connection

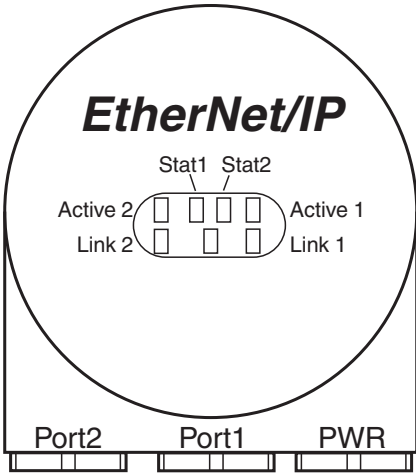
Pin	Voltage supply Male connector M12 x 1, 4-pin, A-coded	Ethernet Female connector M12 x 1, 4-pin, D-coded
1	+VS (15 ... 30 VDC)	Tx +
2	n. c.	Rx +
3	GND (0 V)	Tx -
4	n. c.	Rx -
		

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

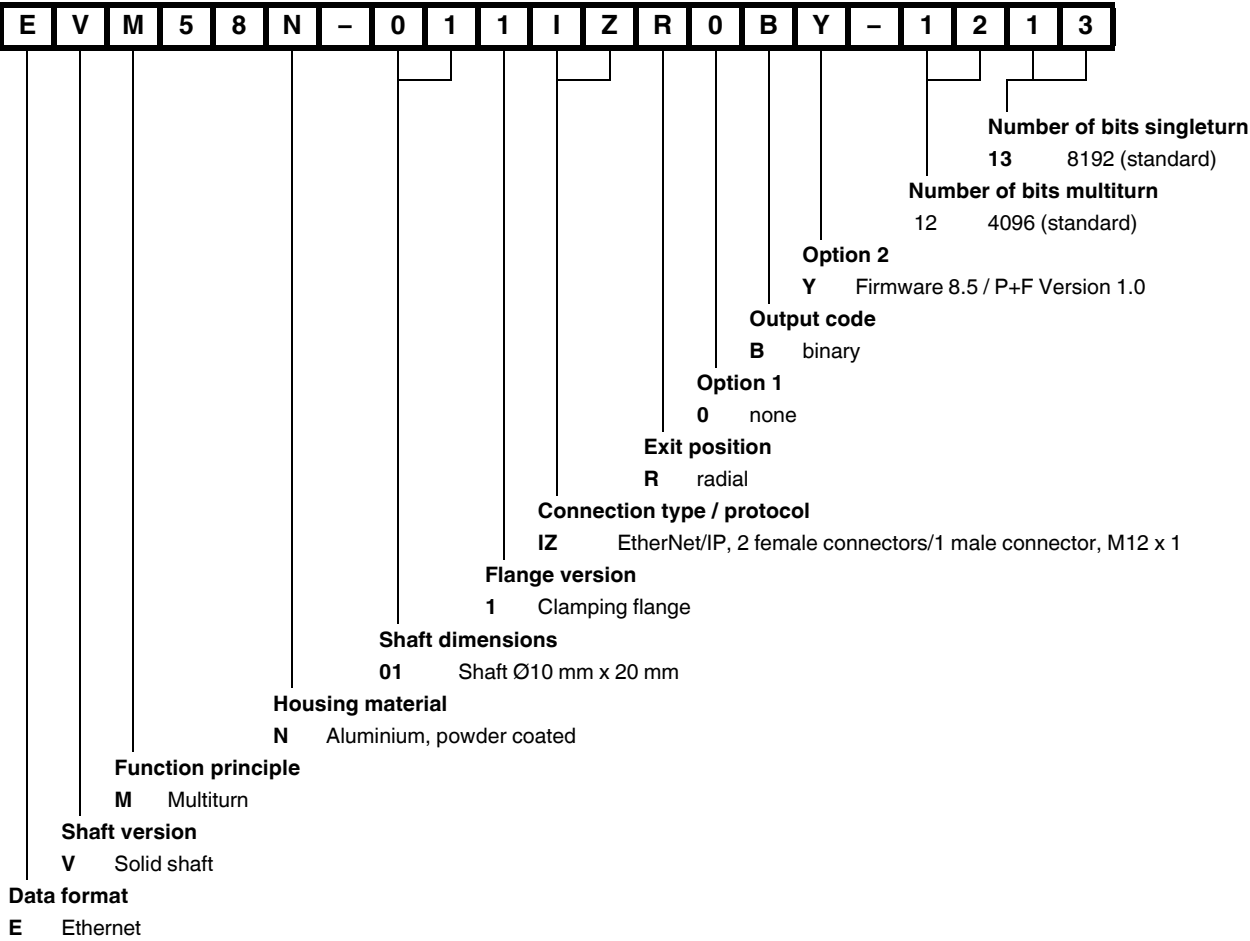


Stat1 (green)	Stat2 (red) bus failure	Meaning	Cause
off	off	No power	
on	on	No connection to another device Criteria: no data exchange	• bus disconnected • Master not available / switched off
on	flashes ¹⁾	Parameterization fault, no data exchange Criteria: data exchange correct. However, the slave did not switch to the data exchange mode.	• Slave not configured yet or wrong configuration • Wrong station address assigned (but not outside the permitted range) • Actual configuration of the slave differs from the nominal configuration
on	off	Data exchange. Slave and operation ok.	

1) flashing frequency 0.5 Hz for at least 3 seconds

Type Code

Order code



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