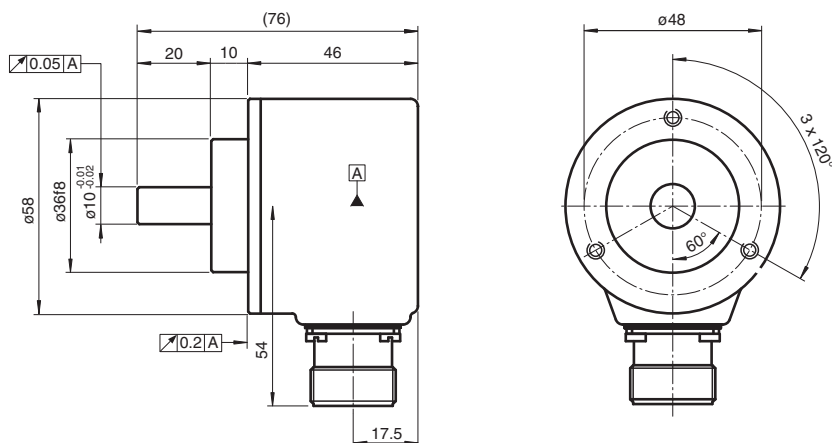


Incremental rotary encoder RVI58N-011AAR31N-00015

- Industrial standard housing Ø58 mm
- Clamping flange
- 10 V ... 30 V with short-circuit proof push-pull output



Dimensions



Technical Data

General specifications			
Pulse count			15
Functional safety related parameters			
MTTF _d			140 a
Mission Time (T _M)			20 a
L _{10h}			70 E+9 at 6000 rpm
Diagnostic Coverage (DC)			0 %
Electrical specifications			
Operating voltage	U _B		10 ... 30 V DC
No-load supply current	I ₀		max. 150 mA
Output			
Output type			push-pull, incremental
Voltage drop	U _d		< 3 V
Load current			max. per channel 20 mA , short-circuit prtected (not with U _b), reverse polarity protected
Output frequency			max. 200 kHz
Rise time			100 ns
Connection			
Connector			type 9416 (M23), 12-pin

Release date: 2022-04-21 Date of issue: 2022-12-12 Filename: 204273_eng.pdf

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

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

Technical Data

Standard conformity

Degree of protection	DIN EN 60529, IP65
Climatic testing	DIN EN 60068-2-3, 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, 100 g, 3 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	
Plastic disk	-5 ... 60 °C (23 ... 140 °F), movable cable -20 ... 60 °C (-4 ... 140 °F), fixed cable
Storage temperature	
Plastic disk	-40 ... 70 °C (-40 ... 158 °F)

Mechanical specifications

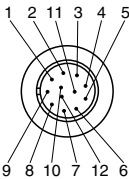
Material	
Housing	powder coated aluminum
Flange	3.1645 aluminum
Shaft	Stainless steel 1.4305 / AISI 303
Mass	approx. 350 g
Rotational speed	max. 12000 min ⁻¹
Moment of inertia	≤ 25 gcm ²
Starting torque	≤ 1.5 Ncm
Shaft load	
Axial	40 N at max. 6000 min ⁻¹ 10 N at max. 12000 min ⁻¹
Radial	60 N at max. 6000 min ⁻¹ 20 N at max. 12000 min ⁻¹

Function

Focussing on the designs that are most often required has allowed us to offer rapid availability at an attractive price. This incremental rotary encoder is available either in clamping flange design with a shaft 10 mm in diameter and 20 mm in length. The electrical connection is made by a 12-pin round plug connector.

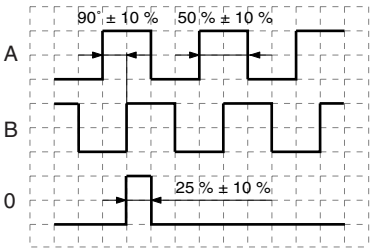
Connection

Electrical connection

Signal	Connector 9416, 12-pin
GND	10
U _b	12
A	5
B	8
NC	6
NC	1
0	3
NC	4
NC	2
NC	7
Screen	Housing
NC	9
NC	11
	

Operation

Signal outputs



↻ cw - in view of the shaft

Additional Information

Accessories

For type	Accessories	Name/defining feature	Order code
----------	-------------	-----------------------	------------

RVI58N-011	Couplings	D1: Ø10 mm, D2: Ø10 mm	9401
		D1: Ø10 mm, D2: Ø10 mm	9404
		D1: Ø10 mm, D2: Ø10 mm	9409
		D1: Ø10 mm, D2: Ø10 mm	KW
	Measurement wheels with circumference of 500 mm	Plastic	9101, 10
		Pimpled rubber	9102, 10
		Knurled aluminium	9103, 10
		Knurled plastic	9112, 10
	Measurement wheels with circumference of 200 mm	Plastic	9108, 10
		Pimpled rubber	9109, 10
		Knurled aluminium	9110, 10
		Knurled plastic	9113, 10
	Mounting aids	Mounting bracket	9203
		Mounting bracket	9213
	Connector	Cable socket	9416

For additional information on the accessories, please see the "Accessories" section.

Order code

R	V	I	5	8	N	-	0	1	1	A	A	R	3	1	N	-	0	0	0	1	5	