



### Model Number

**RSI58N-02YAAR61T-01024**

### Features

- **Industrial standard housing Ø58 mm**
- **Up to 50,000 ppr**
- **Recessed hollow shaft**
- **10 V ... 30 V with short-circuit proof push-pull output**

### Description

High performance are key words for this rotary encoder. Its outstanding feature is the-high resolution angle.

Usually all six output channels of this incremental rotary encoder are assigned to ensure flexible use of the encoder in a wide range of applications.

The rotary encoder must be mounted using a torque support. The torque support is supplied with the unit.

The electrical connection is made via a 12-pin round connector.

## Technical data

### General specifications

Detection type	photoelectric sampling
Pulse count	1024

### Functional safety related parameters

MTTF <sub>d</sub>	140 a
Mission Time (T <sub>M</sub> )	20 a
L <sub>10h</sub>	2 E+9
Diagnostic Coverage (DC)	0 %

### Electrical specifications

Operating voltage U <sub>B</sub>	10 ... 30 V DC
No-load supply current I <sub>0</sub>	max. 60 mA

### Output

Output type	push-pull, incremental
Voltage drop U <sub>d</sub>	< 4.4 V
Load current	max. per channel 40 mA , short-circuit protected, reverse polarity protected
Output frequency	max. 200 kHz
Rise time	400 ns

### Connection

Connector	type 9416 (M23), 12-pin
-----------	-------------------------

### Standard conformity

Degree of protection	DIN EN 60529, IP54
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, 100 g, 3 ms
Vibration resistance	DIN EN 60068-2-6, 10 g, 10 ... 2000 Hz

### Ambient conditions

Operating temperature	-40 ... 60 °C (-40 ... 140 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)

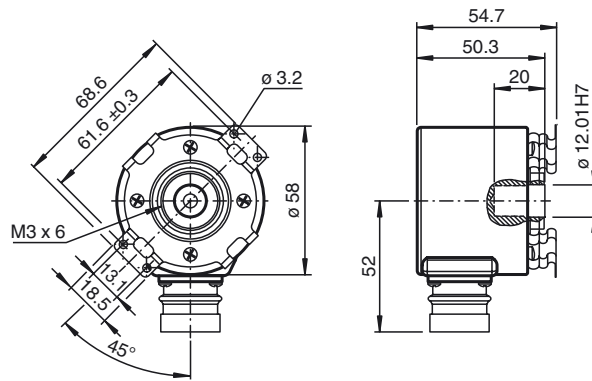
### Mechanical specifications

Material	
Housing	powder coated aluminum
Flange	aluminum
Shaft	Stainless steel 1.4305 / AISI 303
Mass	approx. 280 g
Rotational speed	max. 100 min <sup>-1</sup>
Moment of inertia	≤ 35 gcm <sup>2</sup>
Starting torque	≤ 4.5 Ncm
Shaft load	
Angle offset	1 °
Axial offset	max. 1 mm

### Approvals and certificates

UL approval	cULus Listed, General Purpose, Class 2 Power Source
-------------	---

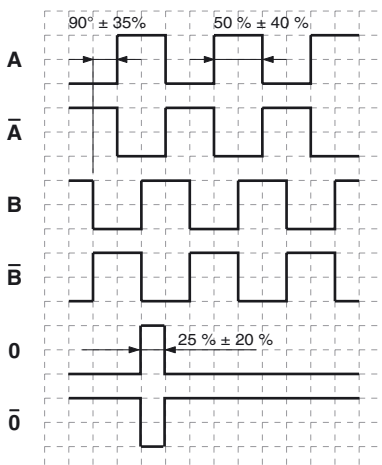
**Dimensions**



**Electrical connection**

Signal	Connector 9416
GND	10
U <sub>b</sub>	12
A	5
B	8
$\bar{A}$	6
$\bar{B}$	1
0	3
$\bar{0}$	4
NC	2, 7, 9, 11
Screen	Housing

**Signal outputs**



↻ cw - with view onto the shaft clamping ring

Release date: 2014-12-11 08:48 Date of issue: 2014-12-11 247295\_eng.xml

