



- Industrial standard housing Ø58 mm
- From 5000 ppr to 10000 ppr
- Servo flange
- 5 V with RS 422 interface

## Product description

Compatibility says it all for this incremental rotary encoder.

All six output channels are fitted for this incremental rotary encoder. It can thus be used universally in many different applications.

Focussing on the designs that are most often required has allowed us to offer rapid availability at an attractive price.

The pulse disk is designed in glass.

This incremental rotary encoder is available in servo flange design with a shaft 6 mm in diameter x 10 mm.

The electrical connection is made by a 12-pin round plug connector. It is also possible to obtain a version with a cable connector.

RVI58N-\*\*\*\*\*6



## Technical data

### General specifications

Pulse count (ppr) max. 10000

### Electrical specifications

Operating voltage 5 V DC  $\pm$  5 %

No-load supply current  $I_0$  max. 150 mA

### Output

Output type RS 422, incremental

Operating current max. per channel 20 mA, conditionally short-circuit proof (not with  $U_b$ )

Output frequency max. 200 kHz

Rise time 100 ns

### Connection

Connector type 9416L, 12-pin

Cable Ø7.8 mm, 6 x 2 x 0.14 mm<sup>2</sup>, 1 m

### Standard conformity

Protection degree DIN EN 60529, IP65

Climatic testing DIN EN 60068-2-3, no moisture condensation

Emitted interference DIN EN 61000-6-4

Interference rejection DIN EN 61000-6-2

Shock resistance DIN EN 60068-2-27, 100 g, 3 ms

Vibration resistance DIN EN 60068-2-6, 10 g, 55 ... 2000 Hz

### Ambient conditions

Operating temperature

Glass disk -5 ... 70 °C (268 ... 343 K), movable cable  
-20 ... 80 °C (253 ... 353 K), fixed cable

Storage temperature

Glass disk -30 ... 80 °C (243 ... 353 K)

### Mechanical specifications

Material

Housing aluminium, powder coated

Flange aluminium

Shaft Stainless steel

Mass approx. 350 g

Rotational speed max. 12000 min<sup>-1</sup>

Moment of inertia  $\leq$  25 gcm<sup>2</sup>

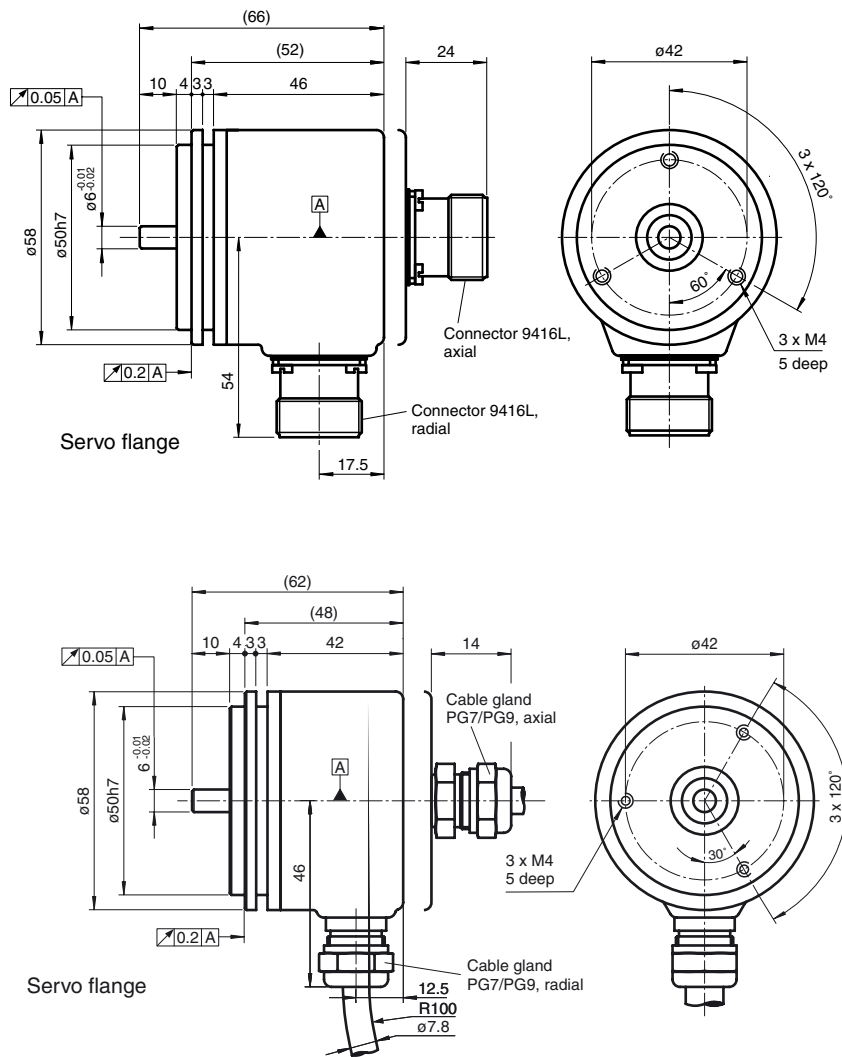
Starting torque  $\leq$  1.5 Ncm

Shaft load

Axial 40 N at max. 6000 min<sup>-1</sup>  
10 N at max. 12000 min<sup>-1</sup>

Radial

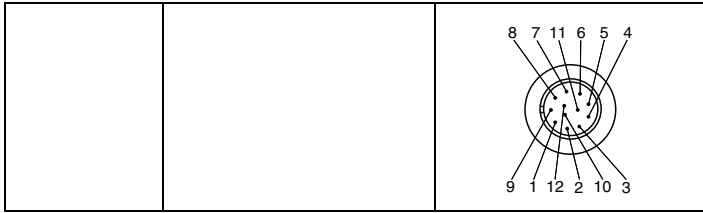
60 N at max. 6000 min<sup>-1</sup>  
20 N at max. 12000 min<sup>-1</sup>



**Electrical connection**

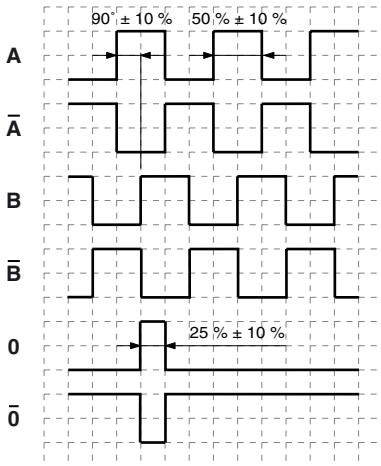
Signal	Cable Ø7.8 mm, 12-core	Connector 9416L, 12-pin
GND	White/Green	10
U <sub>b</sub>	Brown/Green	12
A	Brown	5
B	Grey	8
$\bar{A}$	Green	6
$\bar{B}$	Pink	1
0	Red	3
$\bar{0}$	Black	4
U <sub>b</sub> Sens <sup>*)</sup>	Blue	2
NC	Violet	7
Screen	-	Housing
NC	-	9
GND Sens <sup>*)</sup>	White	11

Date of edition 2007-06-04



\*) only for devices with 5 V supply and RS 422 interface

**Signal outputs**



↻ cw - with view onto the shaft

**Accessories**

For type	Accessories	Name/defining feature	Order code
RVI58N-032	Couplings	D1: Ø6 mm, D2: Ø6 mm	9401
		D1: Ø6 mm, D2: Ø6 mm	9402
		D1: Ø6 mm, D2: Ø6 mm	9404
		D1: Ø6 mm, D2: Ø6 mm	9409
		D1: Ø6 mm, D2: Ø6 mm	KW
	Mounting aids	Mounting bracket and set	9300 and 9311-3
		Eccentric clamping elements	9310-3
All	Connector	Cable socket	9416L

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

**Order code**

