



- **Sturdy and compact design**
- **Up to 2500 ppr**
- **4.75 V ... 30 V with short-circuit proof push-pull output**

Product description

The RVI50 is characterised by its small housing diameter of 50 mm with equal technical data compared to other encoder series.

The centering shoulder makes it possible to fit the unit very precisely. In addition to the three M3 holes, the encoder has a servo infeed on the circumference. This allows you to make a slight adjustment to the reference point of the incremental rotary encoder by turning the housing.

The clamping element that grips into the servo infeed ensures that the incremental rotary encoder stays firmly in place without slipping out of adjustment.

The pulse disk is designed in plastic up to 600 pulses. Beyond that, glass is used.

RVI50N-09B**A*T



Technical data

General specifications

Pulse count (ppr) max. 2500

Electrical specifications

Operating voltage 4.75 ... 30 V DC

No-load supply current I_0 max. 80 mA

Output

Output type push-pull, incremental

Voltage drop U_d < 4 V

Operating current max. per channel 40 mA, short-circuit proof

Output frequency max. 160 kHz

Rise time 250 ns

De-energized delay t_{off} 250 ns

Connection

Connector type 9416, 12-pin

Cable \varnothing 6 mm, 5 x 0.38 mm², 0.5 m

Standard conformity

Protection degree DIN EN 60529, IP50

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

Emitted interference DIN EN 61000-6-4

Interference rejection DIN EN 50082-2

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

Glass disk -20 ... 70 °C (253 ... 343 K)

Plastic disk -20 ... 60 °C (253 ... 333 K)

Storage temperature

Glass disk -40 ... 70 °C (233 ... 343 K)

Plastic disk -40 ... 60 °C (233 ... 333 K)

Mechanical specifications

Material

Housing aluminium, powder coated

Flange aluminium 3.1645

Shaft stainless steel 1.4305

Mass approx. 220 g

Rotational speed max. 10000 min⁻¹

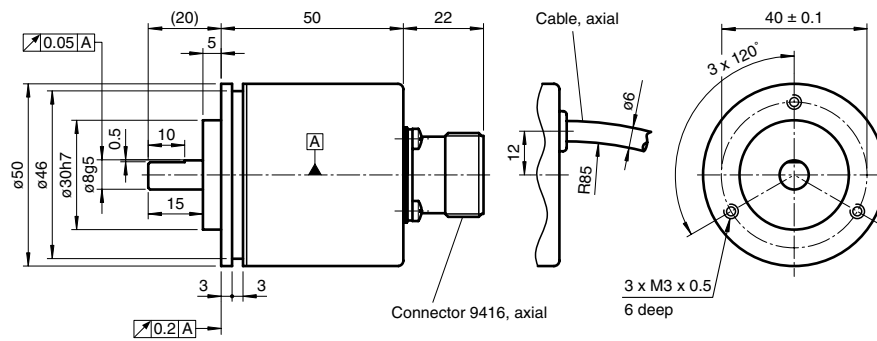
Moment of inertia \leq 5 gcm²

Starting torque \leq 1.5 Ncm

Shaft load

Axial	30 N
Radial	50 N

Dimensions

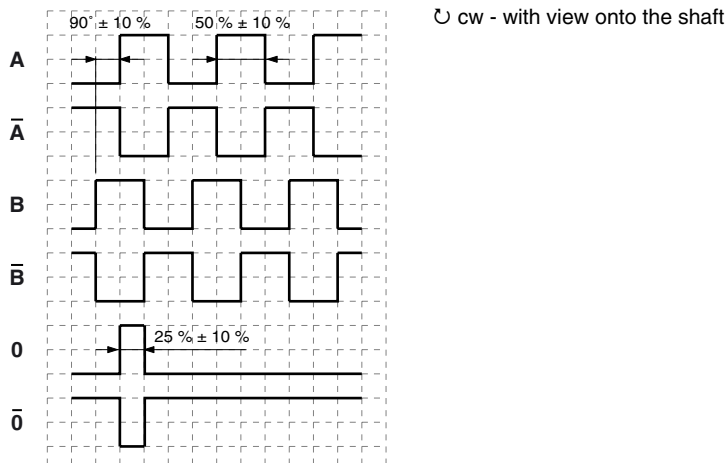


Clamping flange

Electrical connection

Signal	Cable Ø6 mm, 5-core	Connector 9416, 12-pin
GND	Black	8
+U _b	Red	7
A	Green	1
B	White	3
\bar{A}	-	2
\bar{B}	-	4
0	Yellow	5
$\bar{0}$	-	6
Screen	-	Housing

Signal outputs



Date of edition 2005-11-21

Accessories

Accessories	Name/defining feature	Order code
Couplings	D1: Ø8 mm, D2: Ø8 mm	9401
	D1: Ø8 mm, D2: Ø8 mm	9402
	D1: Ø8 mm, D2: Ø8 mm	KW
Measurement wheels with circumference of 500 mm	Plastic	9101, 8
	Pimpled rubber	9102, 8
	Knurled aluminium	9103, 8
	Knurled plastic	9112, 8
Measurement wheels with circumference of 200 mm	Plastic	9108, 8
	Pimpled rubber	9109, 8
	Knurled aluminium	9110, 8
	Knurled plastic	9113, 8
Mounting aids	Mounting bracket	9250
	Eccentric clamping elements	9312-3
Connector	Cable socket	9416

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

Order code

