

RCI58B HS



Incremental Optical Encoder with Hollow Shaft

RADIO-ENERGIE optical incremental encoders are designed for accurately measuring speed and position of rotating shafts in industrial environment: machine tools, motor drives ...

They use a differential optical and ratio metric principle to minimize temperature and photodiode aging effects.

Their universal complementary push-pull output interface and their large supply voltage range make them very easy to connect to most of electronic control units with high noise immunity.

Main features

Shaft type

Housing diameter

Fixation

• Body - Cover

Shaft

Pulses per turn

Output signals

Connections

Operating temperature range

Hollow Shaft \emptyset 15 mm. Others diameters available (\emptyset 6, 8, 10,12, 14 mm) with reduction ring

Spring plate with 2 fixation arms. Additional spring plate can be fitted in the rear (see drawing)

Aluminium – Zamac

Stainless steel

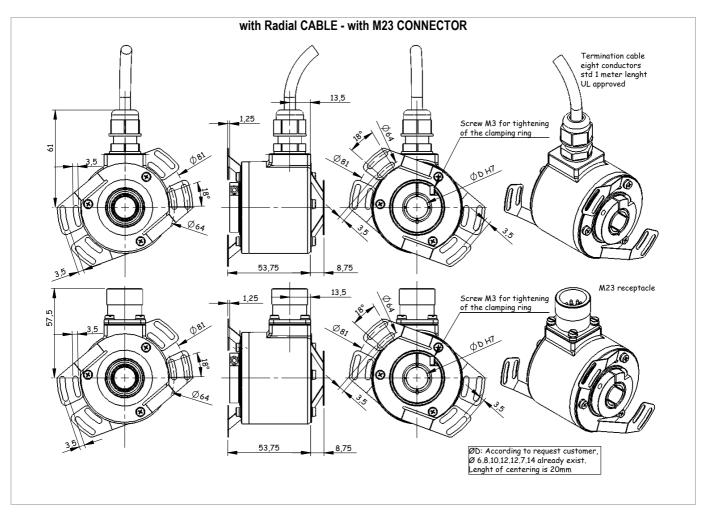
1024, 2048 and others resolutions upon request

A & B with gated Z

Radial cable or M23

-25°C / +85°C

Outline drawings







RCI58B HS

 ϵ

Electrical characteristics

Supply voltage 4,5 to 30 Vdc with reverse polarity protection
 No load supply current 100 mA under 4.5 V – 25 mA under 24 V

Output signals
 Universal complementary push-pull (short circuit protected, 7272)

RS422 compatible with 5 V supply voltage

Max output frequency 300 kHzMax load current 20 mA max

EMC According to EN 61000-6-2 and EN 61000-6-4

Connections

| | Cable UL - 8 wires | M23 - CW | MS310 | Output waveforms |
|-------------|-----------------------|----------|-------|-----------------------|
| A | white | 5 | Α | |
| Α/ | Yellow | 6 | Н | |
| В | blue | 8 | В | В |
| В / | orange | 1 | I | |
| Z | green | 3 | С | |
| Z/ | Brown | 4 | J | B Seen from the shaft |
| Vcc (+) | red | 12 | D | 7. |
| Gnd (-) | black | 10 | F | |
| Ground case | drain | 9 | G | Z |

Mechanical characteristics

Max continuous speed
 Starting torque
 Shaft Inertia
 Weight
 6 000 rpm
 3 N.cm
 62 gr.cm²
 300 gr

Protection
 IP 65 at housing (IEC 60529) and IP64 at shaft inlet

Max shock
 Max vibrations
 100 g, 6 ms (IEC 68-2-27)
 10 g, 10-2000 Hz (IEC 68-2-6)

Ordering Code

Piameters Of (6 mm), 08 (8 mm), 10 (10 mm), 12 (12 mm), 14 (14 mm – standard) with reduction ring 15 (15 mm) Spring plates Standard resolutions Connections Of (6 mm), 08 (8 mm), 10 (10 mm), 12 (12 mm), 14 (14 mm – standard) with reduction ring 15 (15 mm) 2 (2 fixation arms, standard) - Additional spring plate can be fitted in the rear (see drawing) 1024, 2048 and others resolutions upon request CA01: one meter cable, radial output - other lengths on request up to 10 meters (CA10) 23C1: M23 connector, 12 pins clockwise (CW) MILP: MS310 connector, 10 pins Others connections on request

⁻ We reserve the right to modify technical characteristics in the interest of technological advance -