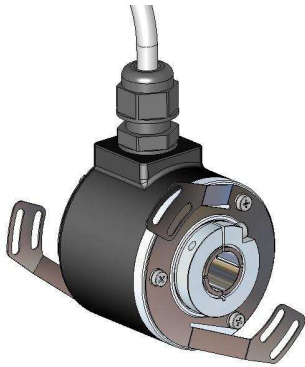


# RCI58B HS



## 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 ...

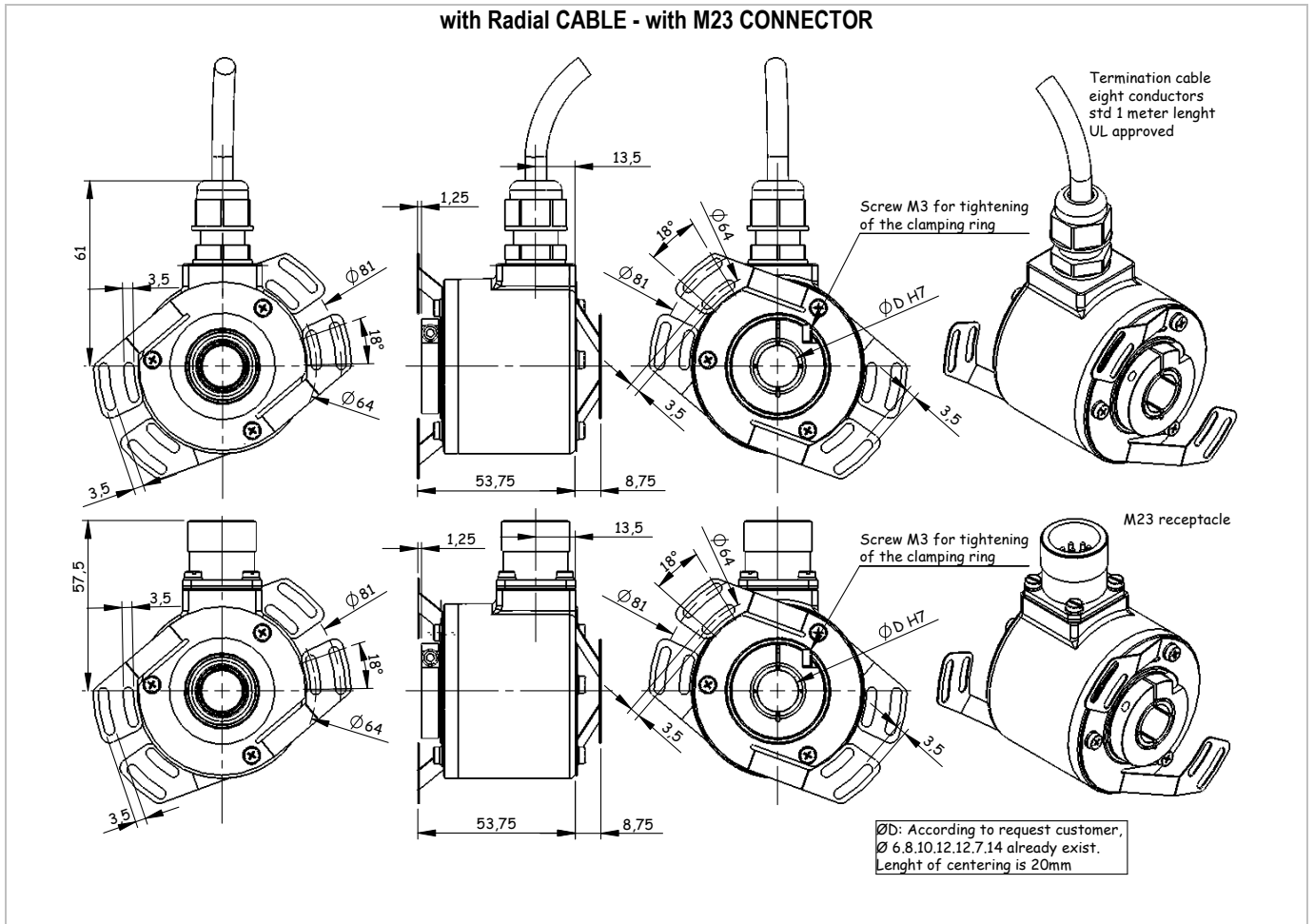
They use a differential optical and ratio metric principle to minimize temperature and photodiode aging effects.

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                  | Hollow Shaft Ø 15 mm. Others diameters available (Ø 6, 8, 10,12, 14 mm) with reduction ring        |
| • Housing diameter            | 59 mm  |
| • Fixation                    | Spring plate with 2 fixation arms. Additional spring plate can be fitted in the rear (see drawing) |
| • Body - Cover                | Aluminium – Zamac  |
| • Shaft                       | Stainless steel  |
| • Pulses per turn             | 1024, 2048 and others resolutions upon request   |
| • Output signals              | A & B with gated Z   |
| • Connections                 | Radial cable or M23  |
| • Operating temperature range | - 25°C / + 85°C  |

### Outline drawings

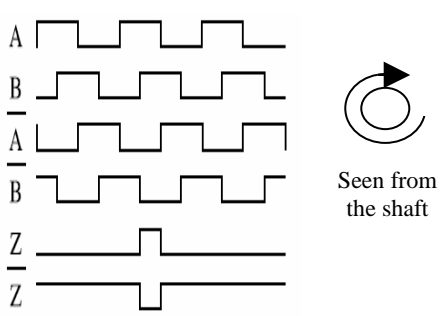


# RCI58B HS

## 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 kHz
- Max load current 20 mA max
- EMC According to EN 61000-6-2 and EN 61000-6-4

## Connections

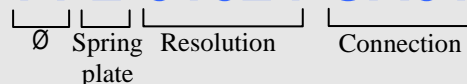
	Cable UL - 8 wires	M23 - CW	MS310	Output waveforms
A	white	5	A	 <p>Seen from the shaft</p>
A /	Yellow	6	H	
B	blue	8	B	
B /	orange	1	I	
Z	green	3	C	
Z /	Brown	4	J	
Vcc (+)	red	12	D	
Gnd (-)	black	10	F	
Ground case	drain	9	G	

## Mechanical characteristics

- Max continuous speed 6 000 rpm
- Starting torque < 3 N.cm
- Shaft Inertia 62 gr.cm<sup>2</sup>
- Weight 300 gr
- Protection IP 65 at housing (IEC 60529) and IP64 at shaft inlet
- Max shock 100 g, 6 ms (IEC 68-2-27)
- Max vibrations 10 g, 10-2000 Hz (IEC 68-2-6)

## Ordering Code

# RCI58B-HS14-2-01024-CA01


 Ø Spring plate    Resolution    Connection

- **Diameters** 06 (6 mm), 08 (8 mm), 10 (10 mm), 12 (12 mm), 14 (14 mm – **standard**) with reduction ring 15 (15 mm)
- **Spring plates** 2 (2 fixation arms, standard) - Additional spring plate can be fitted in the rear (see drawing)
- **Standard resolutions** 1024, 2048 and others resolutions upon request
- **Connections**
  - 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 -