

RCI58B BS

Blind Shaft - Incremental Optical Encoder



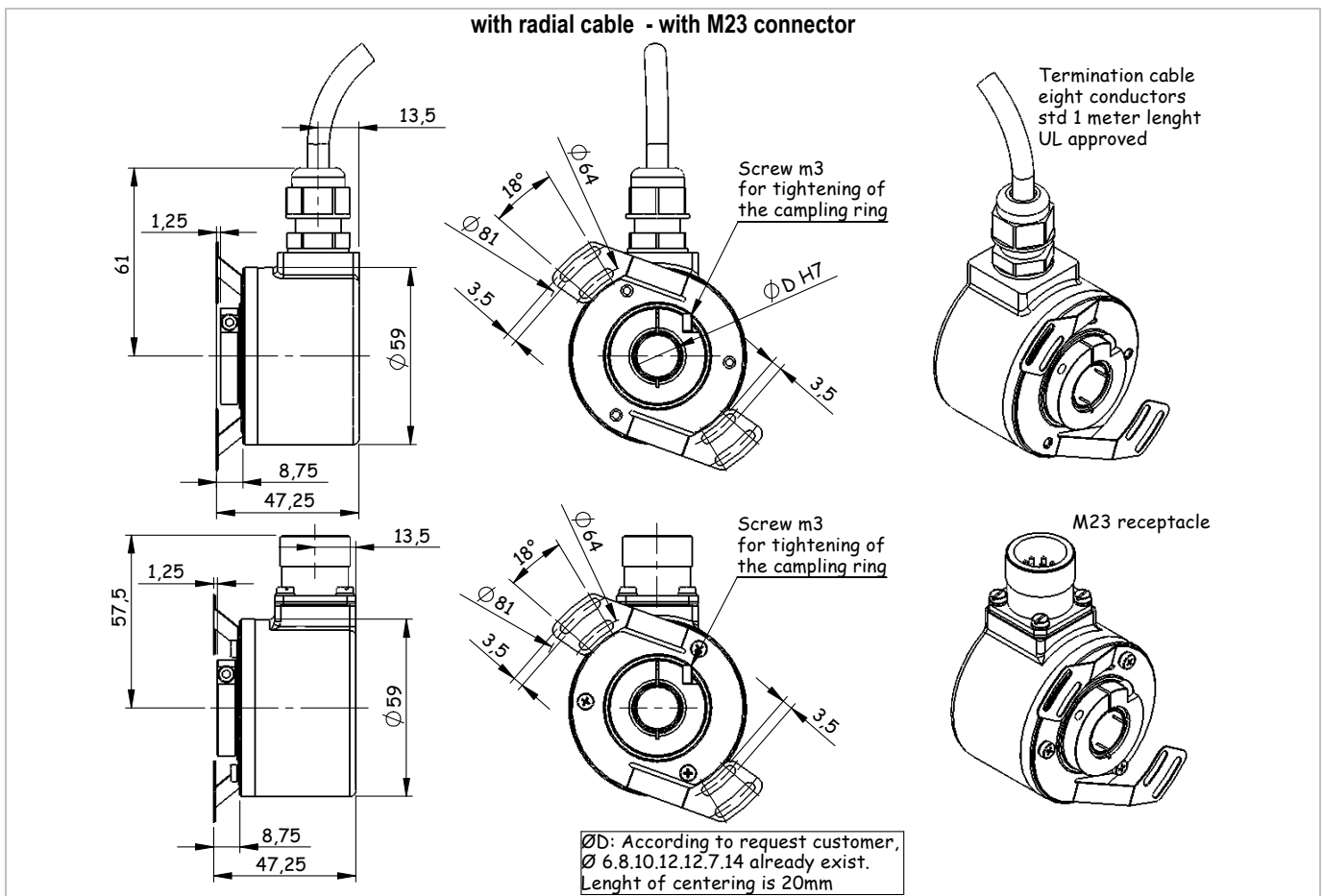
PRECILEC optical incremental encoders are designed for accurately measuring speed and position of rotating shafts in industrial environment: machine tools, motor drives ... They use a differential optical measurement and a ratio-metric processing of the signal for minimizing the temperature and photodiode 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: Standard Blind Shaft $\varnothing 15$ mm : others diameters available ($\varnothing 6, 8, 10, 12, 14$ mm) with reduction ring
- Housing diameter: 59 mm
- Fixation: Spring plate with 2 fixation arms
- 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: $-25^{\circ}\text{C} / +85^{\circ}\text{C}$

Outline drawings



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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 per channel
- 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	
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 10 000 rpm
- Starting torque < 0.5 N.cm
- Shaft Inertia 62 gr.cm²
- Weight 300 gr
- Protection IP 65 (IEC 60529) and IP64 at shaft inlet
- Max shock 100 gr, 6 ms (IEC 68-2-27)
- Max vibrations 10 gr, 10-2000 Hz (IEC 68-2-6)

Ordering Code

RCI58B-BS14-2-01024-CA01

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Spring plate
Resolution
Connection

- **Diameters** 06 (6 mm), 08 (8 mm), 10 (10 mm), 12 (12 mm) and 14 (14 mm – **standard**) with reduction ring 15 (15 mm)
- **Spring plates** 2 (2 fixation arms, standard)
- **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 -