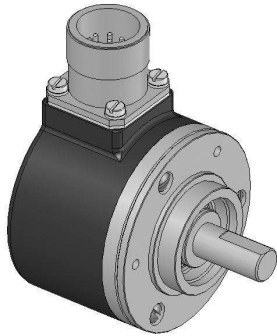


# RCI58B FS

## Incremental Optical Encoder with Shaft



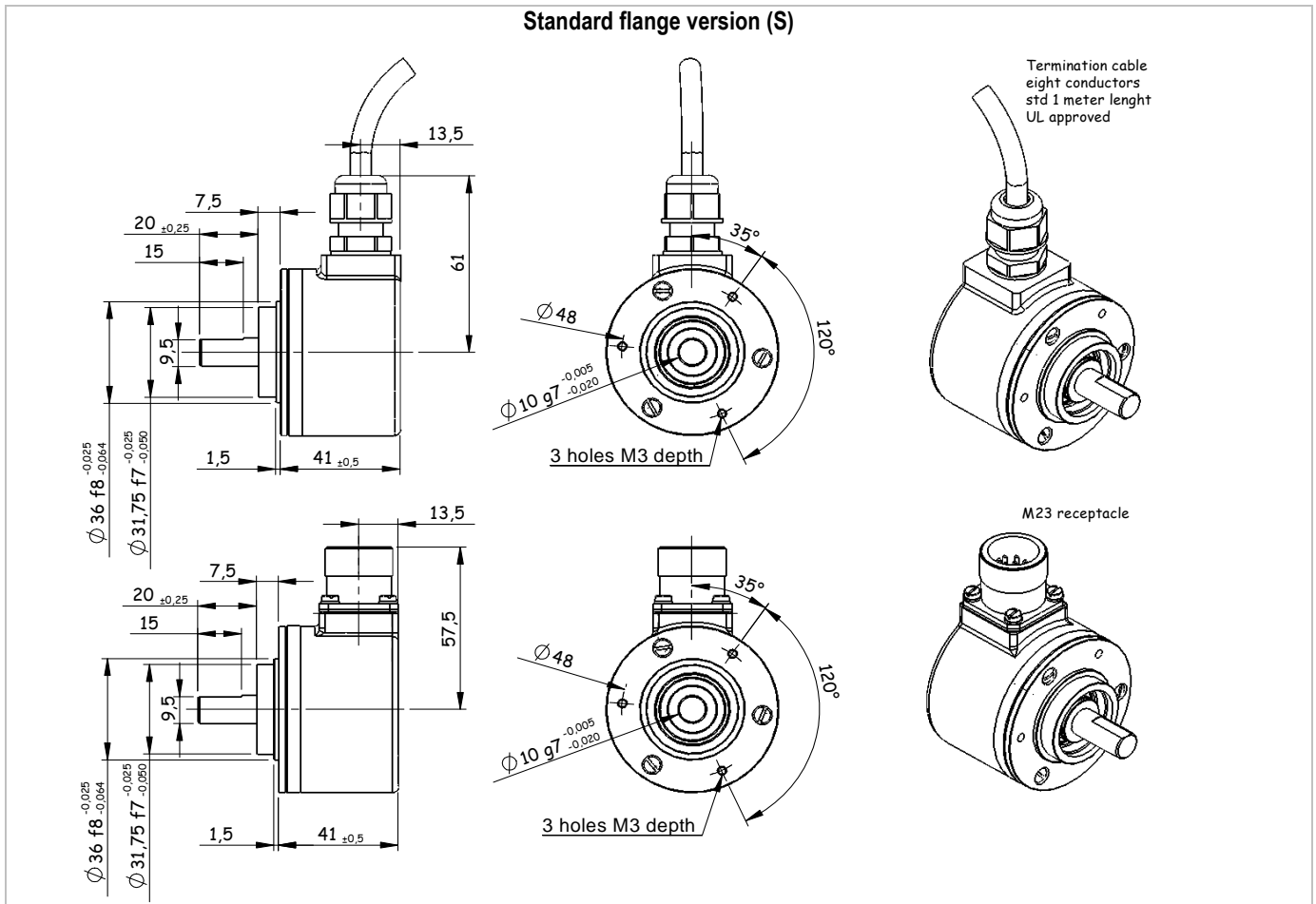
RADIO-ENERGIE optical incremental encoders are designed for accurately measuring speed and position of rotating shafts in industrial environment: machine tools, packing machines, motor drives ... They use a differential optical and ratio metric principle to minimize temperature and photodiode aging effects.

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                                      Full shaft Ø6, 10 mm and 1/4, 3/8 "
- Housing diameter                              58 mm
- Fixation    Standard flange, US square flange, or synchro-flange
- Body - Cover                                    Aluminium – Zamac
- Shaft    Stainless steel
- Pulses per turn                                1024 and 2048
- Output signals                                 A & B with gated Z
- Termination                                     1 meter radial cable
- Operating T° range                            - 25°C / + 85°C

### Outline drawings

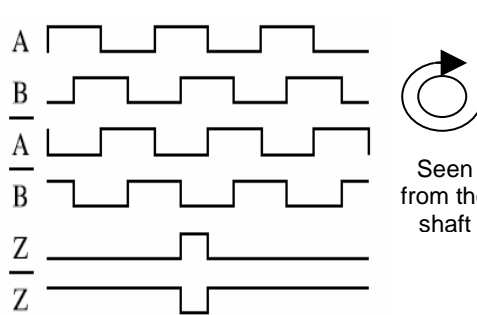


# RCI58B FS

## 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
- Max. shaft load Axial : 40 N ; Radial : 80 N
- Shaft Inertia 70 gr.cm<sup>2</sup>
- Weight 300 gr
- Protection IP 65 at housing (IEC 60529) and IP64 at shaft end
- Max shock 100 g, 6 ms (IEC 68-2-27)
- Max vibrations 10 g, 10-2000 Hz (IEC 68-2-6)
- Theoretical bearings life (x 10<sup>9</sup> revolutions)
 

<u>25 % max load</u>	<u>50 % max load</u>	<u>100 % max load</u>
1 300	230	40

## Ordering code

**RCI58B-FS10-S-01024-CA01**

Ø
Flange
Resolution
Connection

- **Diameters** 06 (6 mm), 10 (10 mm), U1 (1/4"), U2 (3/8")
- **Flanges** S (standard), U (US square flange), Y (synchro)
- **Standard resolutions** 1024, 2048 and others resolutions upon request
- **Connections**
  - CA01: one meter cable, other lengths on request
  - 23C1: M23 connector, 12 pins clockwise (CW)
  - MILP: MS310 connector, 10 pins
  - Other connections on request

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