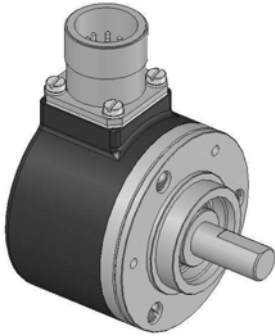


RCI58B FS

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

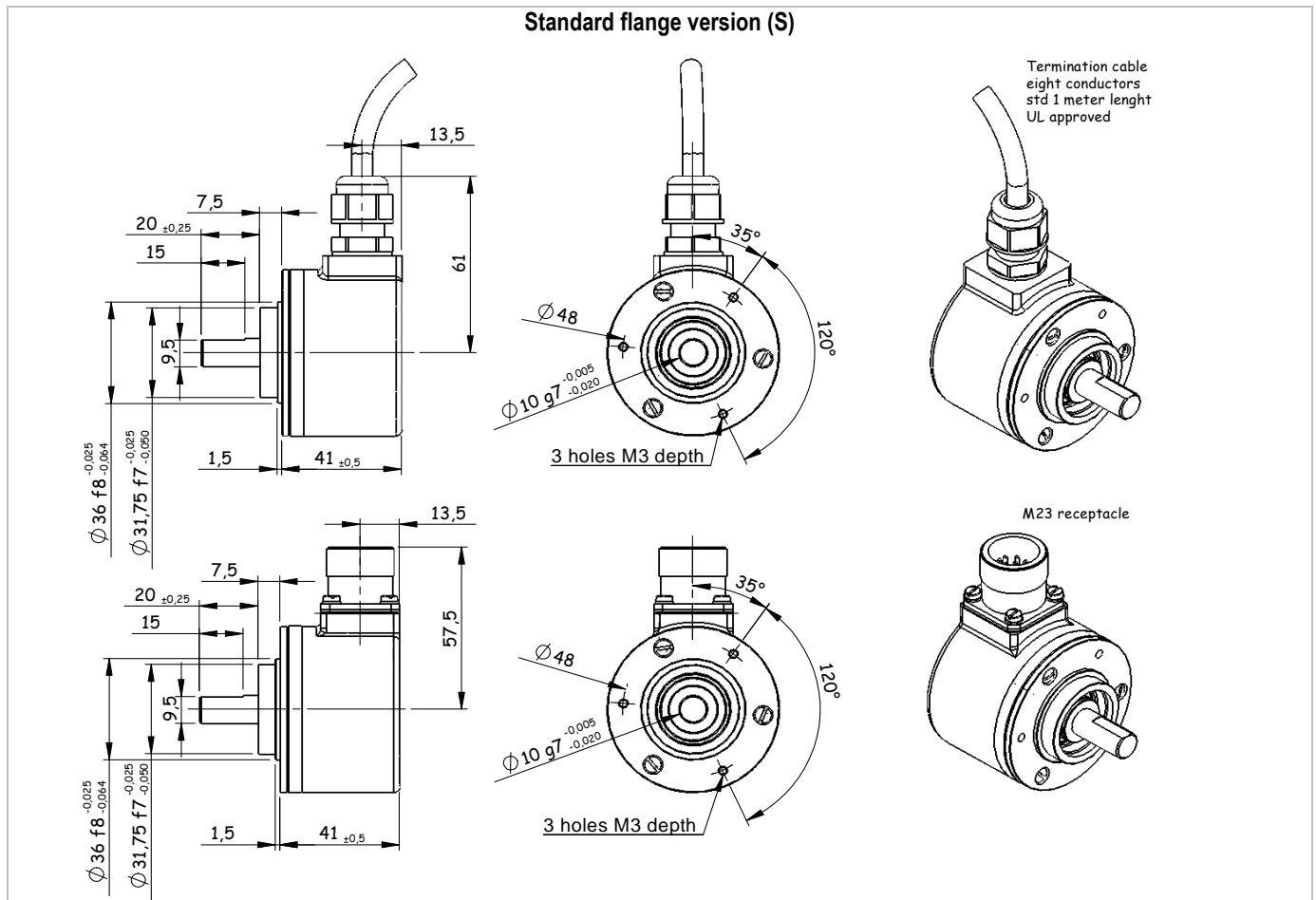
- Shaft type Full shaft Ø6, 10 mm and 1/4, 3/8 "
- Housing diameter 58 mm
- Fixation Standard flange, US square flange, or synchro-flange
- Body - Cover Aluminium - Zamac
- Shaft Stainless steel
- Pulses per turn 1024 and 2048
- Output signals A & B with gated Z
- Termination 1 meter radial cable
- Operating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



Distribución de componentes
eléctricos y electrónicos

Tel.: (+34) 902 450 160
Fax: (+34) 902 433 088
ermec@ermec.com
www.ermec.com

Outline drawings



RCI58B FS

Shaft - Incremental Optical Encoder

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	<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: 10 000 rpm
- Starting torque: < 0.5 N.cm
- Max. shaft load: Axial : 40 N ; Radial : 80 N
- Shaft Inertia: 70 gr.cm²
- 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 10⁹ 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



Tel.: (+34) 902 450 160
Fax: (+34) 902 433 088
ermec@ermec.com
www.ermec.com