

# RCI58S/T BS06 3

## Blind Hollow Shaft - Incremental Optical Encoder



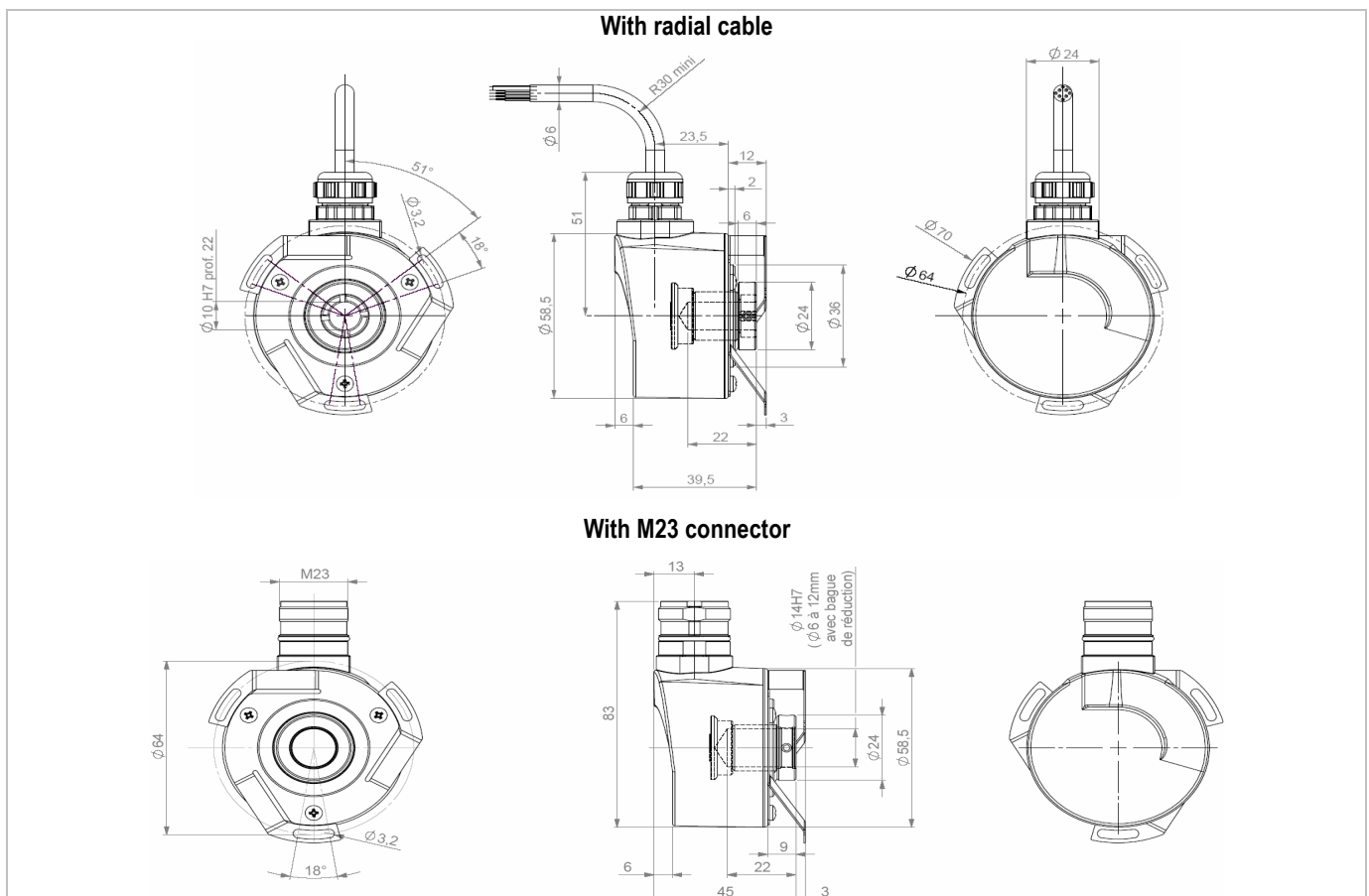
PRECILEC optical incremental encoders are designed for accurately measuring speed and position of rotating shafts in industrial environment: machine tools, motor drives ...  
 They use a differential optical measurement and a ratio-metric processing of the signal for minimizing the temperature and photodiode 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                                      Blind hollow shaft Ø6 mm with reduction ring in aluminium
- Housing diameter                              58 mm
- Fixation    Spring plate with 3 fixation arms
- Body - Cover                                    Aluminium – Zamac
- Shaft    Stainless steel
- Pulses per turn                                Up to 10.000 ppr
- Output signals                                 A & B with gated Z
- Connections                                    Radial cable or M23
- Operating temperature range              - 30°C / + 100°C (standard resolutions) / - 20°C / + 80°C (specific resolutions)

### Outline drawings



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### Electrical characteristics

	Standard resolutions		Specific resolutions	
	5 to 30 Vdc	5 Vdc	11 to 30 Vdc	5 Vdc
Supply voltage	5 to 30 Vdc	5 Vdc	11 to 30 Vdc	5 Vdc
Output signals	Push-pull (T)	RS422 (S)	Push-pull (T)	RS422 (S)
Max output frequency	300 kHz		100 kHz	
Max load current per channel	40mA max			
EMC	According to EN 61000-6-2 and EN 50081-1			

### Connections

	Cable - 8 wires	M23 - CW	M23 - CCW	Output waveforms
A	green	3	8	<p>Seen from the shaft</p>
A /	pink	6	1	
B	yellow	4	5	
B /	blue	7	6	
Z	grey	5	3	
Z /	red	8	4	
Vcc (+)	brown	2	2 + 12	
Gnd (-)	white	1	10 + 11	
Ground case	General shielding	Connector body	Connector body	

### Mechanical characteristics

- Max continuous speed 6 000 min<sup>-1</sup>
- Max permissible speed 9 000 min<sup>-1</sup>
- Starting torque ≤ 6.10<sup>-3</sup> N.m
- Shaft Inertia ≤ 2,2.10<sup>-6</sup> kg.m<sup>2</sup>
- Weight 300 gr
- Protection IP 65 (EN 60529)
- Max shock ≤ 500 m.s<sup>-2</sup> (during 6 ms) (EN60068-2-27)
- Max vibrations ≤ 100 m.s<sup>-2</sup> (55 ... 2 000 Hz) (EN60068-2-6)