

RCI444R FS

RE.0444 Flange – 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 ...

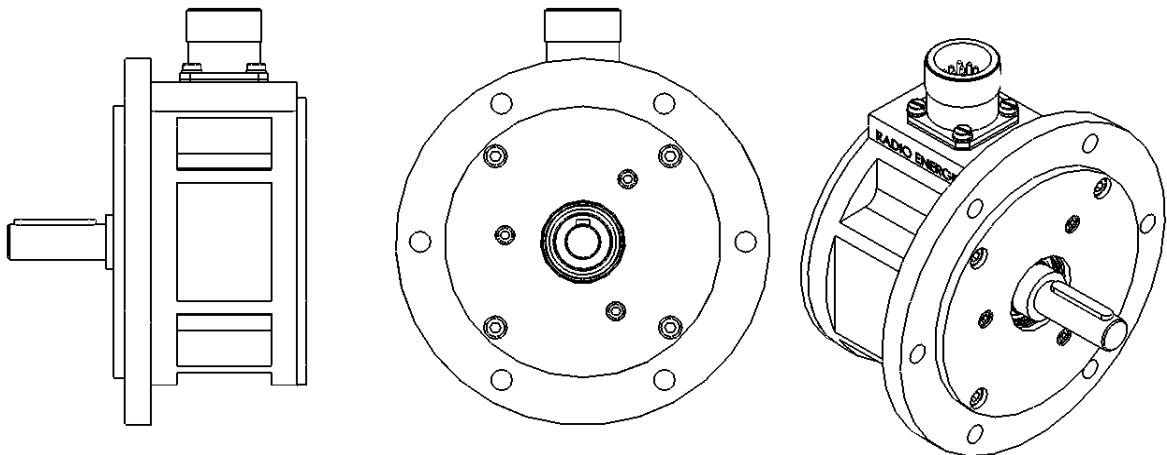
They use a differential optical measurement and a ratio-metric processing of the signal for minimizing the temperature and photodiode aging effects.

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

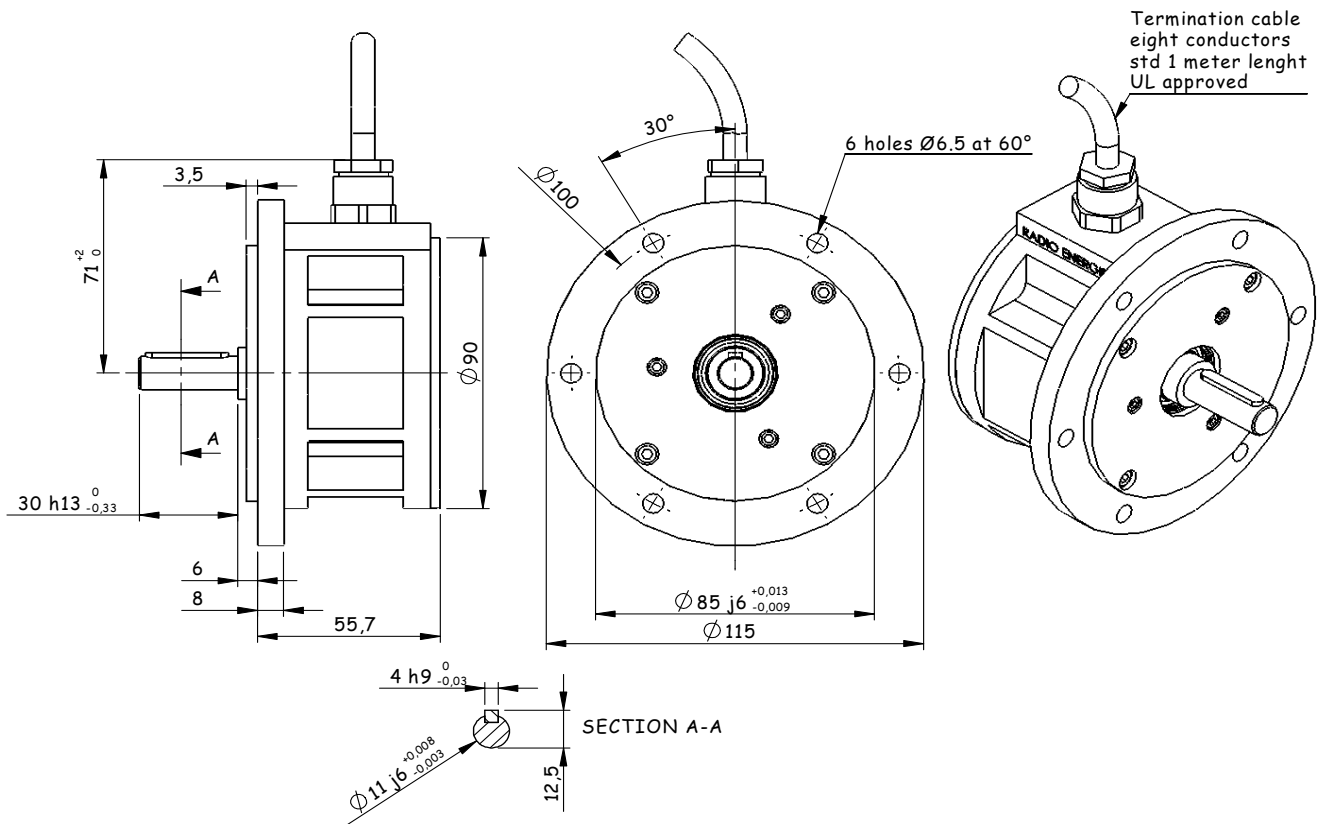
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|----------------------|--|
| • Shaft type | Full shaft Ø 7 and 11 mm |
| • Housing diameter | 115 mm |
| • Fixation | Standard RE0 444 flange |
| • Body | Aluminium |
| • Shaft | Stainless steel |
| • Pulses per turn | 1024 or 2048 as standard. All others upon request |
| • Output signals | A & B with gated Z |
| • Termination | M23 connector 12 pins - Cable - Junction Box – MS310 connector 10 pins |
| • Operating T° range | - 25°C / + 85°C |



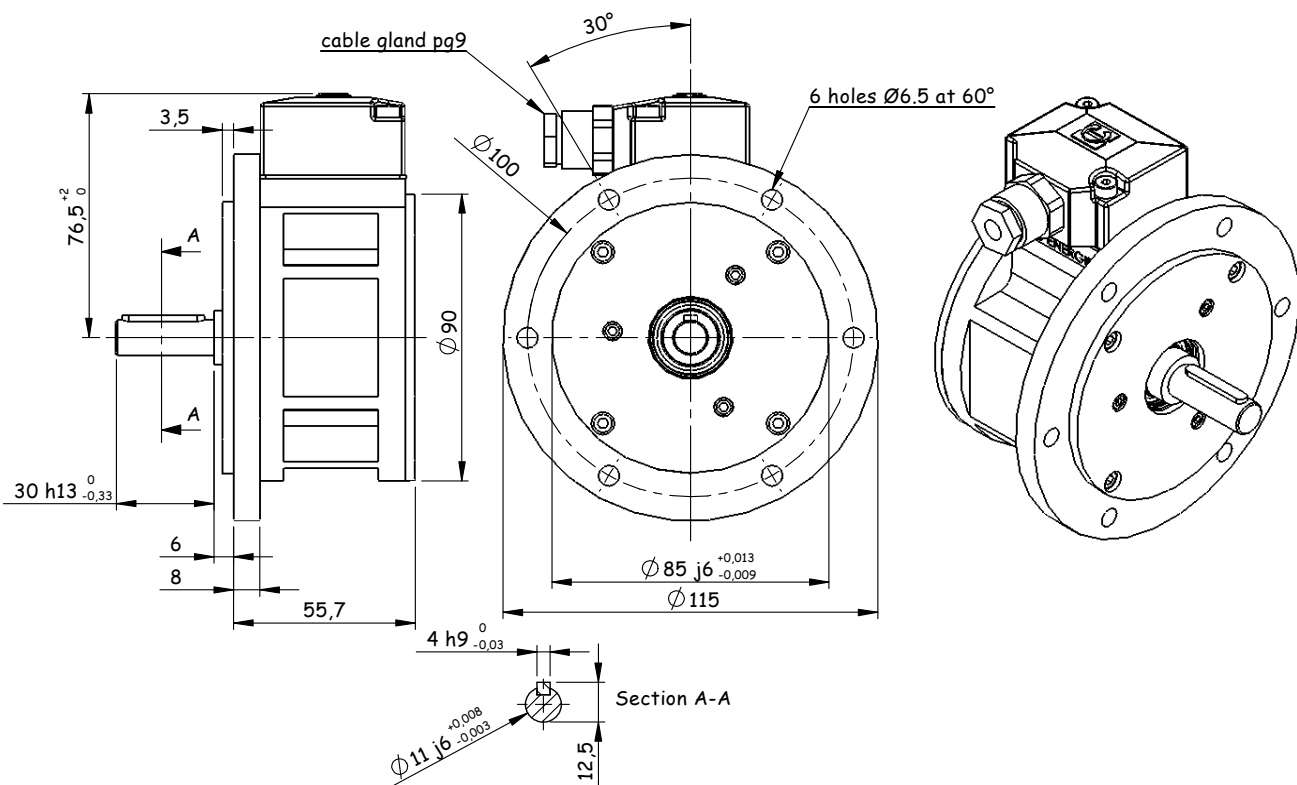
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CABLE (CA01 / CB01)



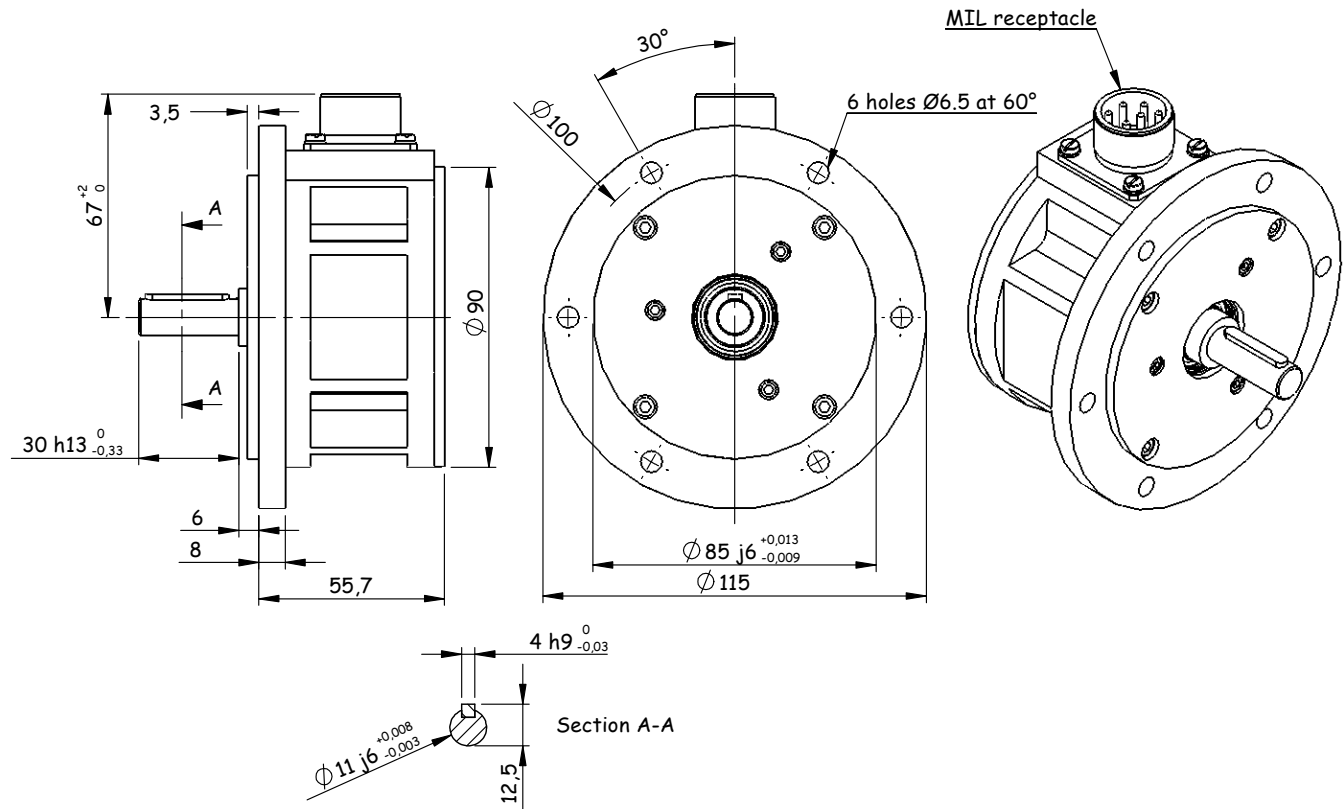
JUNCTION BOX (JBX1 / JBX0)



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MS310 CONNECTOR (MILP / MIL0 / MIL1)



Electrical characteristics

- Supply voltage: 4,5 to 30 Vdc
- 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	Junction box	Output waveforms
A	white	5	A	3	<p>Seen from the shaft</p>
A/	yellow	6	H	6	
B	blue	8	B	4	
B/	orange	1	I	7	
Z	green	3	C	5	
Z/	brown	4	J	8	
Vcc (+)	red	12	D	2	
Gnd (-)	black	10	F	1	
Ground case	Drain	9	G		

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Mechanical characteristics

- Max continuous speed 10 000 min⁻¹
- Starting torque ≤ 0.5 N.cm
- Shaft Inertia 70 gr.cm²
- Weight 700 gr
- Protection IP 65 (IEC 60529) and IP64 at shaft end
- Max shock 30 g, 11 ms (IEC 68-2-27)
- Max vibrations 10 g, 10-2000 Hz (IEC 68-2-6)