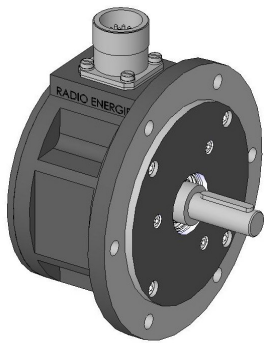


RCI444R FS



Incremental Optical Encoder with RE0 444 Tacho Flange

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.

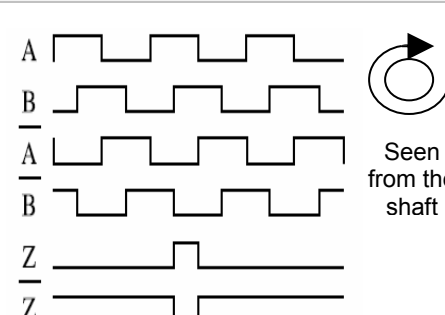
Main features

- Shaft type Full shaft 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

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

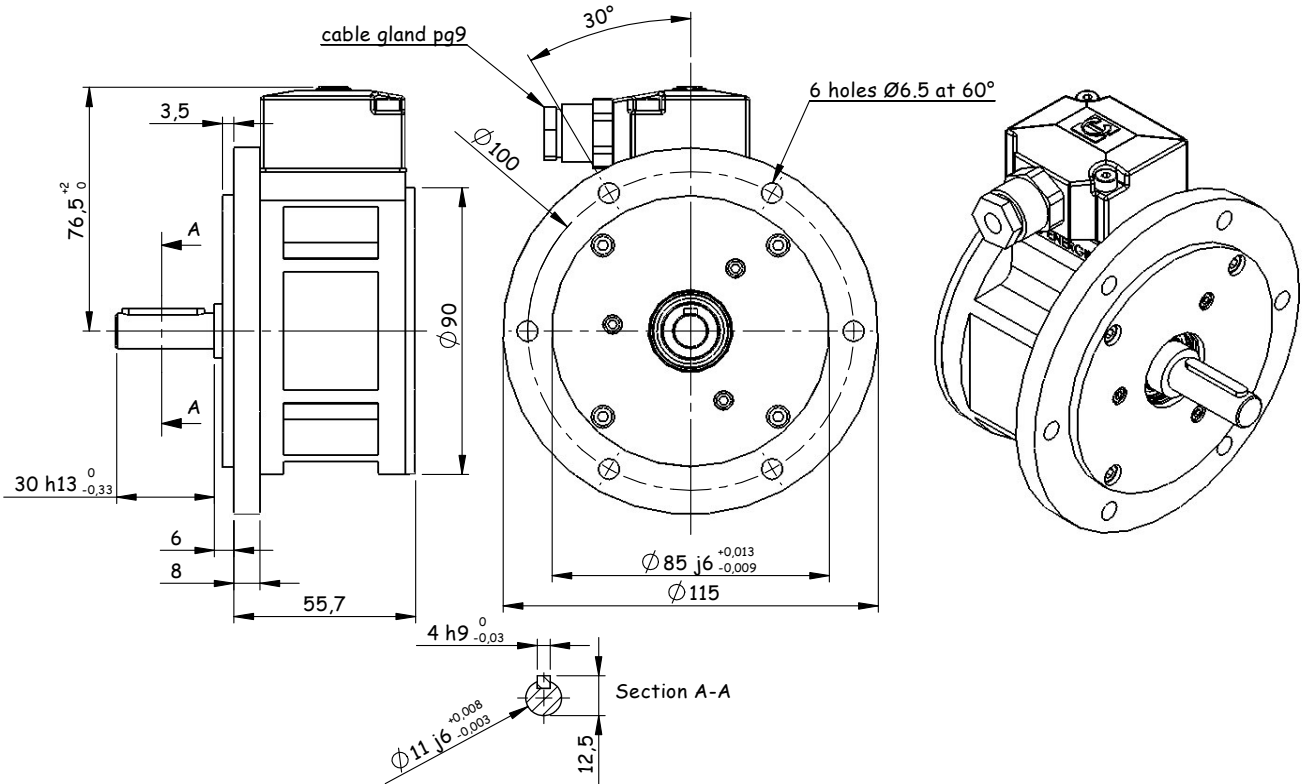
	Cable UL - 8 wires	M23 – CW	MS310	Junction box	Output waveforms
A	white	5	A	3	 <p>Seen from the shaft</p>
A /	yellow	6	H	6	
B	blue	8	B	4	
B /	orange	1	I	7	
Z	green	3	C	5	
Z /	brown	4	J	8	
Vcc (+)	red	12	D	2	
Gnd (-)	black	10	F	1	
Ground case	Drain	9	G		

Mechanical characteristics

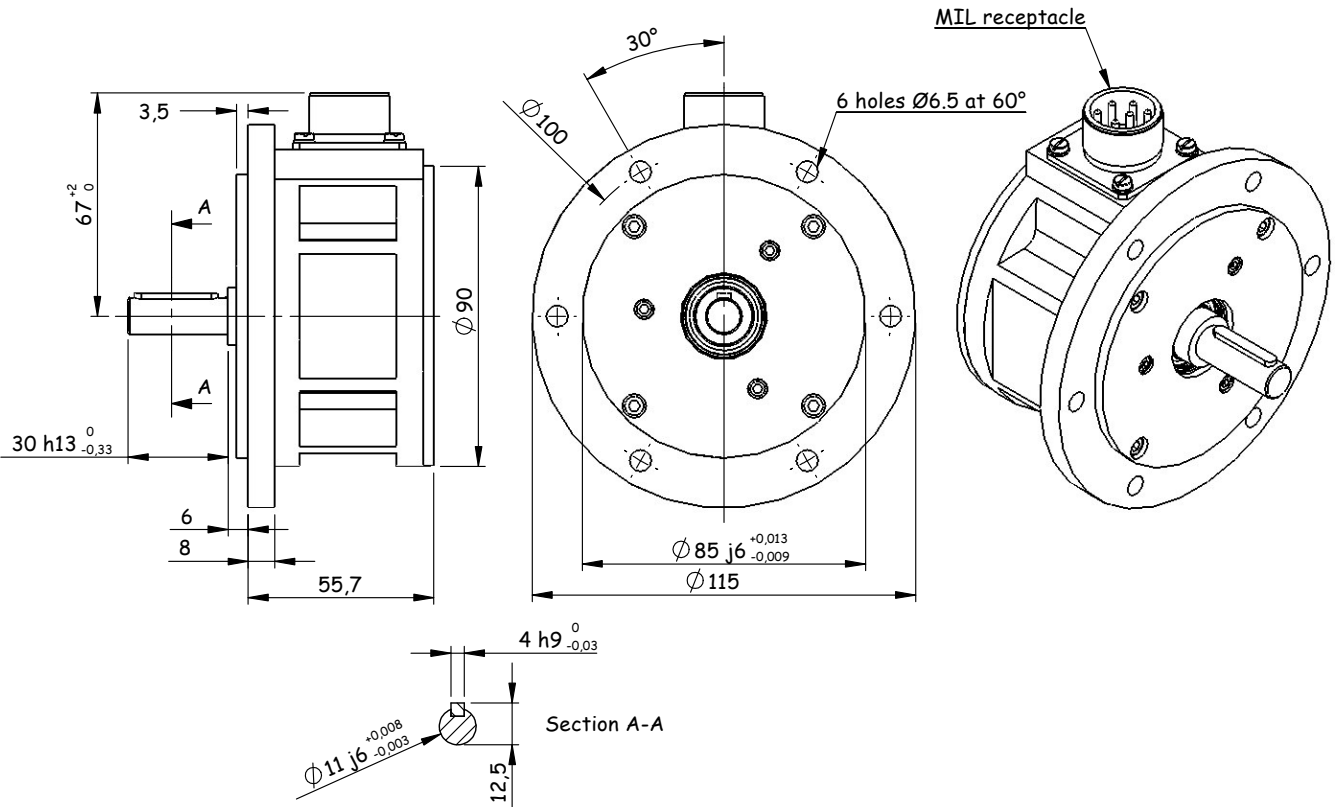
- Max continuous speed 10 000 min⁻¹
- Starting torque ≤ 0.5 N.cm
- Shaft Inertia 70 gr.cm²
- Weight 700 gr
- Protection IP 65 (IEC 60529) and IP64 at shaft end
- Max shock 30 g, 11 ms (IEC 68-2-27)
- Max vibrations 10 g, 10-2000 Hz (IEC 68-2-6)

RCI444R FS

JUNCTION BOX (JBX1)



MS310 CONNECTOR (MILP)



RCI444R FS

Ordering code

RCI444R-FS11-4-1024-23C1

Ø
 Resolution
 Connection

• RCI 444R	RADIO-ENERGIE Incremental encoder dedicated to Robust environments
• Shaft Diameters	11 (11 mm) mostly used, 07 (7 mm) standard too
• Electronics	4 (Push-Pull), 3 (RS422)
• Standard resolutions	1024, 2048 standard Others resolutions upon request
• Connections	<p>Connector M23</p> <p>23C1 : M23 connector, 12 pins clockwise (CW), channel A before B - standard 23C0 : M23 connector, 12 pins clockwise (CW), channel B before A</p> <p>Junction Box</p> <p>JBX1: Junction Box, channel A before B - standard JBX0: Junction Box, channel B before A</p> <p>Câble</p> <p>CA01: cable one meter - standard CA02: cable two meters CA10: cable ten meters (maximum length)</p> <p>Connector MS310</p> <p>MILP: MS310 connector, 10 pins</p> <p>Other connections on request</p>

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