



## IXARC Absolute Rotary Encoder

### OCE-EC00B-1216-E14S-CRW



#### Interface

Interface	Ethercat
Profile	CoE (CANopen over EtherCAT, DS-301+DS-406)
Features	Boot-Loader, Round Axis
Transmission Rate	10 / 100 Mbit
Interface Cycle Time	≥ 62.5 μs
Programming Functions	Resolution, preset, counting direction

#### Outputs

Output Driver	Ethernet
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#### Electrical Data

Supply Voltage	10 - 30 VDC
Power Consumption	≤ 2.5 W
Start-Up Time	< 1 s
Reverse Polarity Protection	Yes
Short Circuit Protection	Yes
EMC: Emitted Interference	DIN EN 61000-6-4
EMC: Noise Immunity	DIN EN 61000-6-2
Electrical Lifetime	>10 <sup>5</sup> h

#### Sensor



Technology	Optical
Resolution Singleturn	16 bit
Resolution Multiturn	12 bit
Multiturn Technology	Mechanical Gearing (no Battery)
Accuracy (INL)	$\pm 0.0220^\circ$ (14 - 16 bit), $\pm 0.0439^\circ$ ( $\leq 13$ bit)
Code	Binary

### Environmental Specifications

Protection Class (Shaft)	IP66/IP67
Protection Class (Housing)	IP66/IP67
Operating Temperature	-30 °C fixed (-22 °F), -5 °C flexible (+23 °F) - +70 °C (+158 °F)
Storage Temperature	-40 °C (-40 °F) - +85 °C (+185 °F)
Humidity	98% RH, no condensation

### Mechanical Data

Connection Cap Material	Aluminum
Housing Material	Aluminum
Housing Coating	Eloxide
Flange Type	Blind Hollow, $\varnothing$ 78mm ATEX
Flange Material	Aluminum
Shaft Type	Blind Hollow, Depth = 30 mm
Shaft Diameter	$\varnothing$ 14 mm (0.55")
Rotor Inertia	$\leq 35$ gcm <sup>2</sup> [ $\leq 0.2$ oz-in <sup>2</sup> ]
Friction Torque	$\leq 5$ Ncm @ 20 °C, (7.1 oz-in @ 68 °F)
Max. Permissible Mechanical Speed	$\leq 3000$ 1/min
Shock Resistance	$\leq 100$ g (half sine 11 ms, EN 60068-2-27)
Vibration Resistance	$\leq 10$ g (10 Hz - 2000 Hz, EN 60068-2-6)
Length	134 mm (5.28")
Weight	1090 g (2.40 lb)
Maximum Axial / Radial Misalignment	Static $\pm 0.3$ mm / $\pm 0.5$ mm; Dynamic $\pm 0.1$ mm / $\pm 0.2$ mm

### Electrical Connection

Connection Orientation	Radial
Connection Type	Cable / Connector
Cable Length	1 m [39"]



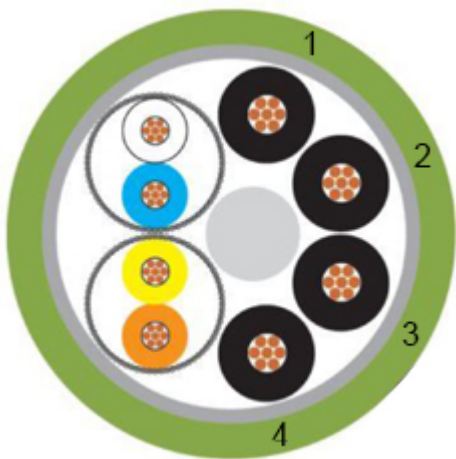
Material / Type	PVC
Minimum Bend Radius	50 mm (2") fixed, 100 mm (4") flexing

### Certification

Approval	CE + ATEX Zone 1 & 21 (Oil+Gas)
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### Product Life Cycle

Product Life Cycle	Established
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### Connection Plan

SIGNAL	CABLE COLOR
Power Supply	Black 1
GND	Black 2
Not Connected	Black 3
Not Connected	Black 4
Rx+	White
Rx-	Blue
Tx+	Yellow
Tx-	Orange

Connector-View on Encoder

### Dimensional Drawing

**Got questions? Need an individual solution? We are here to help!**



## Contact Us

If the drawings are not available please refer to the "Download" section. The picture and drawing are for general presentation purposes only. All dimension in [inch] mm. © FRABA B.V., All rights reserved. We do not assume responsibility for technical inaccuracies or omissions. Specifications are subject to change without notice.