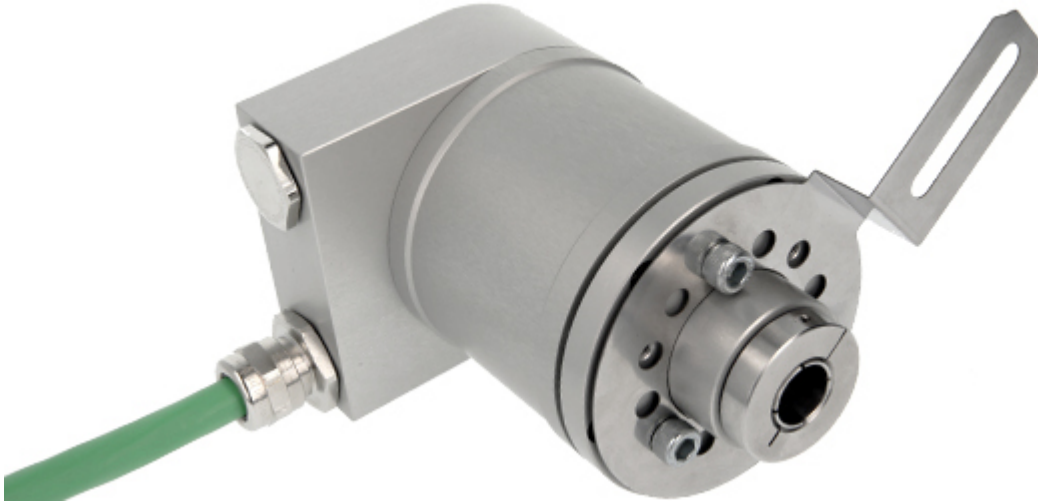




IXARC Absolute Rotary Encoder

OCM-EIB1B-1416-E14W-ARW



Interface

Interface	Profinet
Profile	Profidrive Profile 4.x, Encoder Profile 4.x
Diagnostics	Memory
Features	Boot-Loader, Round Axis, Flashing LEDs
Transmission Rate	10 / 100 Mbit
Interface Cycle Time	≥ 1 ms
Programming Functions	Resolution, time base and filter for velocity, preset, counting direction, IP-Address

Outputs

Output Driver	Ethernet
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Electrical Data

Supply Voltage	10 - 30 VDC
Current Consumption	≤ 230 mA @ 10 V DC, ≤ 100 mA @ 24 V DC
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

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MTTF	65 years @ 40 °C
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Sensor

Technology	Optical
Resolution Singleturn	16 bit
Resolution Multiturn	14 bit
Multiturn Technology	Mechanical Gearing (no Battery)
Accuracy (INL)	$\pm 0.0220^\circ$ (14 - 16 bit), $\pm 0.0439^\circ$ (≤ 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	Stainless Steel V4A (1.4404; 316 L)
Housing Material	Stainless Steel V4A (1.4404, 316 L)
Housing Coating	No Coating
Flange Type	Blind Hollow, \varnothing 78mm ATEX
Flange Material	Stainless steel V4A (1.4404, 316 L)
Shaft Type	Blind Hollow, Depth = 30 mm
Shaft Diameter	\varnothing 14 mm (0.55")
Rotor Inertia	$\leq 35 \text{ gcm}^2$ [$\leq 0.2 \text{ oz-in}^2$]
Friction Torque	$\leq 3 \text{ Ncm}$ @ 20 °C (4.2 oz-in @ 68 °F)
Max. Permissible Mechanical Speed	$\leq 3000 \text{ 1/min}$
Shock Resistance	$\leq 100 \text{ g}$ (half sine 11 ms, EN 60068-2-27)
Vibration Resistance	$\leq 10 \text{ g}$ (10 Hz - 2000 Hz, EN 60068-2-6)
Length	134 mm (5.28")
Weight	3110 g (6.86 lb)
Maximum Axial / Radial Misalignment	Static $\pm 0.3 \text{ mm}$ / $\pm 0.5 \text{ mm}$; Dynamic $\pm 0.1 \text{ mm}$ / $\pm 0.2 \text{ mm}$

Electrical Connection

Data Sheet
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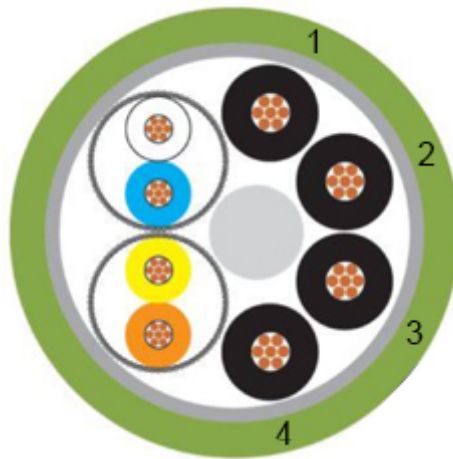
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Connection Orientation	Radial
Connection Type	Cable / Connector
Minimum Bend Radius	50 mm (2") fixed, 100 mm (4") flexing

Product Life Cycle

Product Life Cycle	Established
Approval	CE + ATEX Zone 1 & 21 (Mining)



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

[2D Drawing](#)

Contact

Data Sheet
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Contact Us

The picture and drawing are for general presentation purposes only. Please refer to the "Download" section for detailed technical drawings. 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.