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IXARC Absolute Rotary Encoder

UCD-M200B-1516-HFSS-PRM



Interface

Interface	Modbus RTU
Programming Functions	Resolution, preset, direction, node ID, baud rate

Outputs

Output Driver	Line Driver RS485
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Electrical Data

Supply Voltage	10 - 30 VDC
Reverse Polarity Protection	Yes
Short Circuit Protection	Yes
EMC: Emitted Interference	DIN EN 61000-6-4
EMC: Noise Immunity	DIN EN 61000-6-2
MTTF	350 years @ 40 °C

Sensor

Technology	Magnetic
Resolution Singleturn	16 bit
Resolution Multiturn	15 bit
Multiturn Technology	Self powered magnetic pulse counter (no battery, no gear)
Accuracy (INL)	$\pm 0.0878^\circ$ (≤ 12 bit)
Sense Signal (Default)	Clockwise shaft movement (front view on shaft)

Data Sheet

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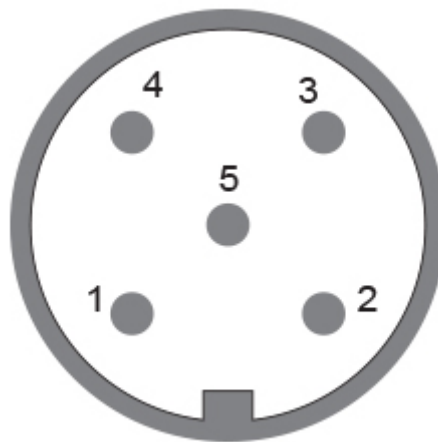
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Code	Binary
Environmental Specifications	
Protection Class (Shaft)	IP66/IP67
Protection Class (Housing)	IP66/IP67
Operating Temperature	-40 °C (-40 °F) - +85 °C (+185 °F)
Humidity	98% RH, no condensation
Mechanical Data	
Housing Material	Steel
Housing Coating	Wet coating (RAL 9006 White Aluminium) + Cathodic corrosion protection (>720 h salt spray resistance)
Flange Type	Blind Hollow, \varnothing 58 mm (H)
Flange Material	Aluminum
Shaft Type	Blind Hollow, Depth = 28 mm
Shaft Diameter	\varnothing 15 mm (0.59")
Shaft Material	Stainless Steel V2A (1.4305, 303)
Rotor Inertia	$\leq 30 \text{ gcm}^2$ [$\leq 0.17 \text{ oz-in}^2$]
Friction Torque	$\leq 5 \text{ Ncm}$ @ 20 °C, (7.1 oz-in @ 68 °F)
Max. Permissible Mechanical Speed	$\leq 3000 \text{ 1/min}$
Shock Resistance	$\leq 100 \text{ g}$ (half sine 6 ms, EN 60068-2-27)
Permanent Shock Resistance	$\leq 10 \text{ g}$ (half sine 16 ms, EN 60068-2-29)
Vibration Resistance	$\leq 10 \text{ g}$ (10 Hz - 1000 Hz, EN 60068-2-6)
Length	71,2 mm (2.80")
Weight	360 g (0.79 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	
Connection Orientation	Radial
Connector	M12, Male, 5 pin, a coded
Product Life Cycle	
Product Life Cycle	New
Approval	CE + cULus



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Connection Plan

SIGNAL	PIN NUMBER
Power Supply	2
GND	3
RS485 A +	4
RS485 B -	5
Signal GND	1

Connector-View on Encoder

Dimensional Drawing

[2D Drawing](#)

Accessories

Connectors & Cables

10m PUR Cable, 5pin, A-Coded, f

POS M12 5pin-A Female+5m PUR Cable

POS M12 5pin-A Female+2m PUR Cable

POS M12 5pin-A Female+10m PUR Cable

M12, 5pin A-Coded, Female

More

Clamping Rings

Clamping Ring B15

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



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.