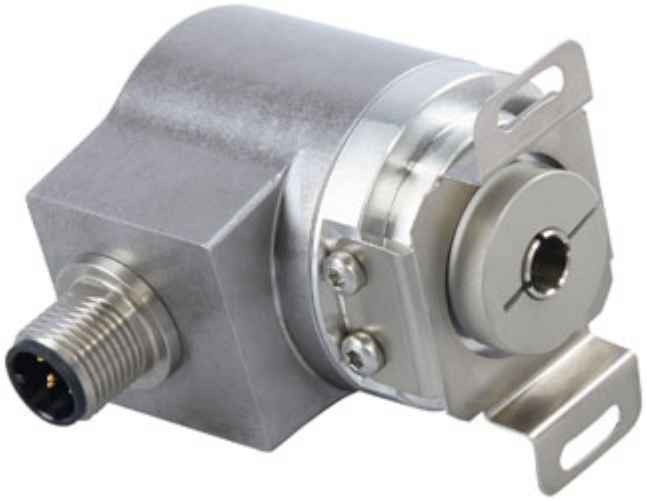
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IXARC Absolute Rotary Encoder

UCD-S101B-0012-V6S0-PRQ



Interface	
Interface	SSI with Preset
Programming Functions	Absolute: Resolution, Revolution, Code, Preset
Manual Functions	Preset + complement via cable or connector
Interface Cycle Time	≥ 25 µs
Number of Preset Cycles	5,100,000
SSI Format	SSSSSSSSSSSS00
Video Manual	Watch a simple installation video

Outputs	
Output Driver	RS422

Electrical Data	
Supply Voltage	4.5 – 30 VDC
Current Consumption	Typical 50 mA
Power Consumption	≤ 1.0 W
Start-Up Time	< 250 ms
Clock Input	RS 422, via Optocoupler
Clock Frequency	100 kHz – 2 MHz
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	500 years @ 40 °C

Sensor

Technology	Magnetic
Resolution Singleturn	12 bit
Resolution Multiturn	0 bit
Accuracy (INL)	±0.0878° (≤ 12 bit)
Sense Signal (Default)	Clockwise shaft movement (front view on shaft)
Code	Binary

Environmental Specifications

Protection Class (Shaft)	IP65
Protection Class (Housing)	IP65
Operating Temperature	-40 °C (-40 °F) - +85 °C (+185 °F)
Humidity	98% RH, no condensation

Mechanical Data

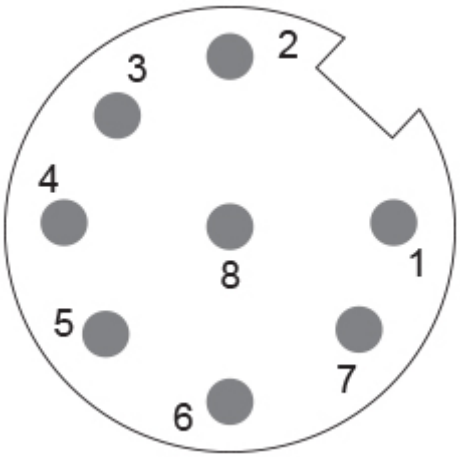
Housing Material	Steel
Housing Coating	Cathodic corrosion protection (>720 hrs salt spray resistance)
Flange Type	Blind Hollow, ø 36 mm / ø 42 mm
Flange Material	Aluminum
Shaft Type	Blind Hollow, Depth = 18 mm
Shaft Diameter	ø 6 mm (0.24")
Shaft Material	Stainless Steel V2A (1.4305, 303)
Friction Torque	≤ 3 Ncm @ 20 °C (4.2 oz-in @ 68 °F)
Max. Permissible Mechanical Speed	≤ 12000 1/min
Shock Resistance	≤ 100 g (half sine 6 ms, EN 60068-2-27)
Permanent Shock Resistance	≤ 10 g (half sine 16 ms, EN 60068-2-29)
Vibration Resistance	≤ 10 g (10 Hz – 1000 Hz, EN 60068-2-6)
Length	50,2 mm (1.98")
Weight	140 g (0.31 lb)

Electrical Connection

Connection Orientation	Radial
Connector	M12, Male, 8 pin, a coded

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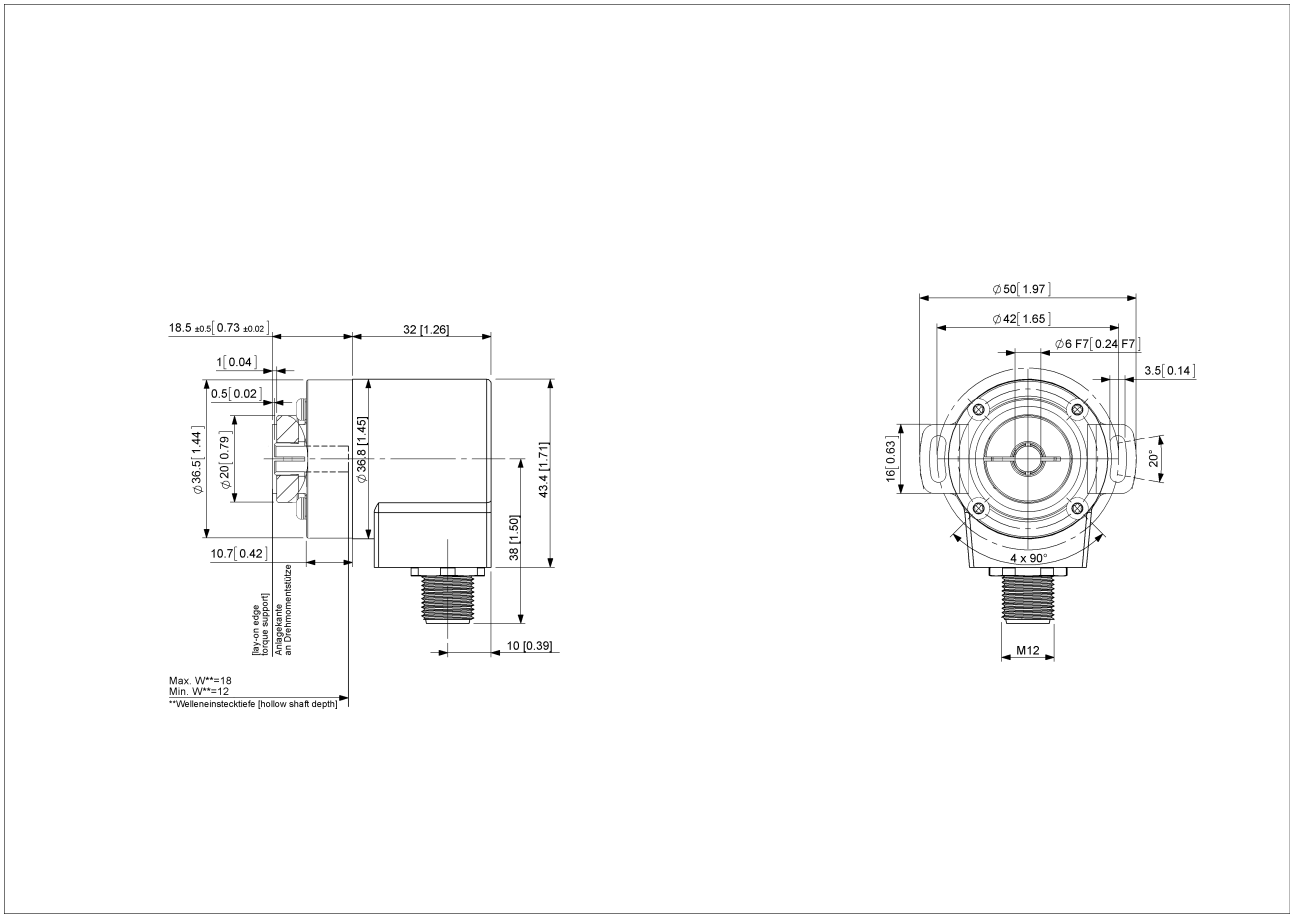
Certification	
Approval	CE + cULus listed, Industrial Control Equipment
Product Life Cycle	Established



Connection Plan	
SIGNAL	PIN NUMBER
Power Supply	2
GND	1
Data+	5
Data-	6
Clock+	3
Clock-	4
Preset	7
DIR	8
Shielding	Connector Housing

Connector-View on Encoder
Rotation Clockwise (seen on shaft)

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2D Drawing

Accessories

Connectors & Cables
5m PUR Cable, 8pin, A-Coded, f
10m PUR Cable, 8pin, A-Coded, f
2m PUR Cable, 8pin, A-Coded, f
10m PUR Cable, 8pin, A-Coded, f
M12, 8pin A-Coded, Female
More

Clamping Ring V06

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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.