



# POSITAL

## FRABA

### IXARC Absolute Rotary Encoder

### UCD-CA01B-1412-VTS0-PRM



#### Interface

Interface	CANopen
Profile	DS-406
Programming Functions	Resolution, preset, 2 limit switches, 8 CAMS, baud rate, CAN-Identifier, bootloader, transmission modes: polled, cyclic, sync
Features	Round Axis
Transmission Rate	min. 20 kBaud, max. 1 MBaud
Interface Cycle Time	≥ 1 ms
Video Manual	<a href="#">▶ Watch a simple installation video</a>

#### Outputs

Output Driver	Transceiver (ISO 11898), Galvanically Isolated by Opto-Couplers
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#### Electrical Data

Supply Voltage	9 - 30 VDC
Power Consumption	≤ 1.2 W
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	240 years @ 40 °C

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### Sensor

Technology	Magnetic
Resolution Singleturn	12 bit
Resolution Multiturn	14 bit
Multiturn Technology	Self powered magnetic pulse counter (no battery, no gear)
Accuracy (INL)	$\pm 0.0878^\circ (\leq 12 \text{ bit})$
Code	Binary

### Environmental Specifications

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

### Mechanical Data

Connection Cap Material	None
Housing Material	Steel
Housing Coating	Cathodic corrosion protection (>720 hrs salt spray resistance)
Flange Type	Blind Hollow, $\varnothing 36 \text{ mm} / \varnothing 42 \text{ mm}$
Flange Material	Aluminum
Shaft Type	Blind Hollow, Depth = 18 mm
Shaft Diameter	$\varnothing 12.7 \text{ mm} (1/2")$
Shaft Material	Stainless Steel V2A (1.4305, 303)
Friction Torque	$\leq 3 \text{ Ncm} @ 20 \text{ }^\circ\text{C} (4.2 \text{ oz-in} @ 68 \text{ }^\circ\text{F})$
Max. Permissible Mechanical Speed	$\leq 12000 \text{ 1/min}$
Shock Resistance	$\leq 100 \text{ g} ( \text{half sine } 6 \text{ ms, EN 60068-2-27})$
Permanent Shock Resistance	$\leq 10 \text{ g} ( \text{half sine } 16 \text{ ms, EN 60068-2-29})$
Vibration Resistance	$\leq 10 \text{ g} (10 \text{ Hz} - 1000 \text{ Hz, EN 60068-2-6})$
Length	50,2 mm (1.98")
Weight	180 g (0.40 lb)

### Electrical Connection

Connection Orientation	Radial
Connection Type	Cable / Connector

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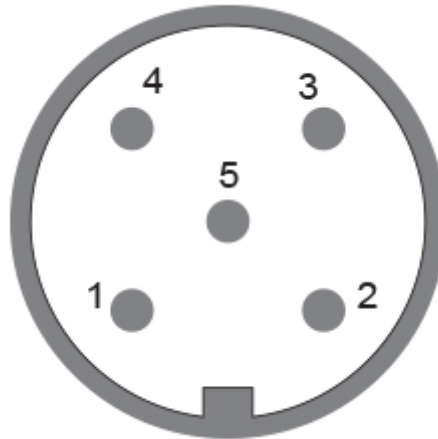
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Connector M12, Male, 5 pin, a coded

### Certification

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



### Connection Plan

SIGNAL	PIN NUMBER
Power Supply	2
GND	3
CAN High	4
CAN Low	5
CAN GND	1

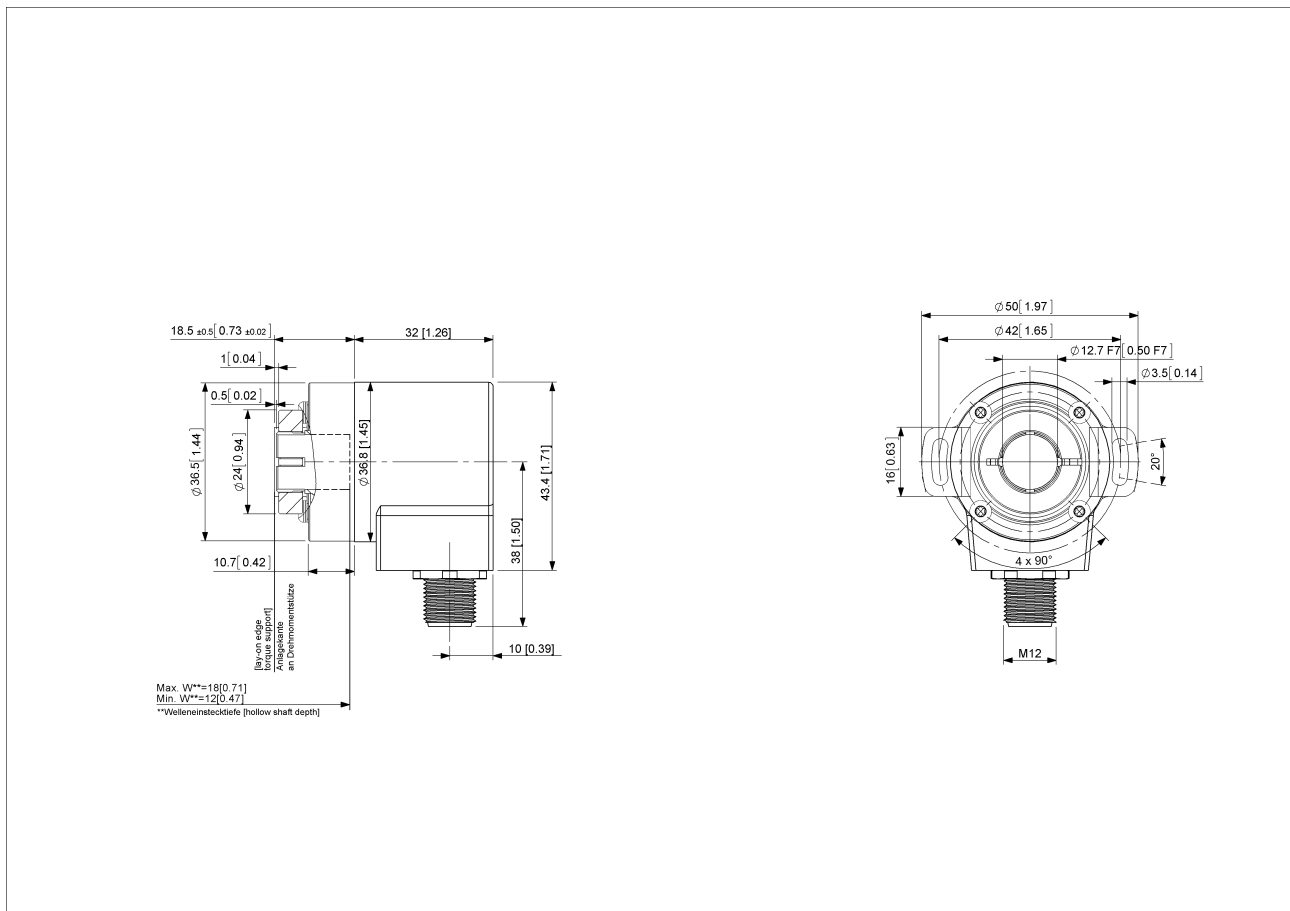
Connector-View on Encoder



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### [2D Drawing](#)

### Accessories

#### Connectors & Cables

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

2m PUR Cable, 5pin, A-Coded, f

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

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

M12, 5pin A-Coded, Female

More

Clamping Ring V12

### Contact

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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.