POSITAL
FRABA

IXARC Absolute Rotary Encoder

UCD-CA01B-0012-H6S0-PAM



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	Watch a simple installation video

Outputs	
Output Driver	Transceiver (ISO 11898), Galvanically Isolated by Opto-Couplers

Electrical Data	
Supply Voltage	9 – 30 VDC
Current Consumption	≤ 65 mA @ 10 V DC, ≤ 60 mA @ 24 V DC
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

Sensor

Technology	Magnetic
Resolution Singleturn	12 bit
Accuracy (INL)	±0.0878° (≤ 12 bit)
Code	Binary

Environmental Specifications

Protection Class (Shaft)	IP65
Protection Class (Housing)	IP66/IP67
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, ø 58 mm (H)
Flange Material	Aluminum
Shaft Type	Blind Hollow, Depth = 28 mm
Shaft Diameter	ø 6 mm (0.24")
Shaft Material	Stainless Steel V2A (1.4305, 303)
Rotor Inertia	≤ 30 gcm² [≤ 0.17 oz-in²]
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	60,2 mm (2.37")
Weight	360 g (0.79 lb)

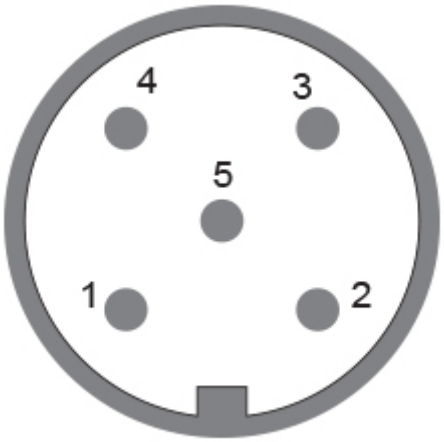
Electrical Connection

Connection Orientation	Axial
Connection Type	Cable / Connector

Connector	M12, Male, 5 pin, a coded

Certification

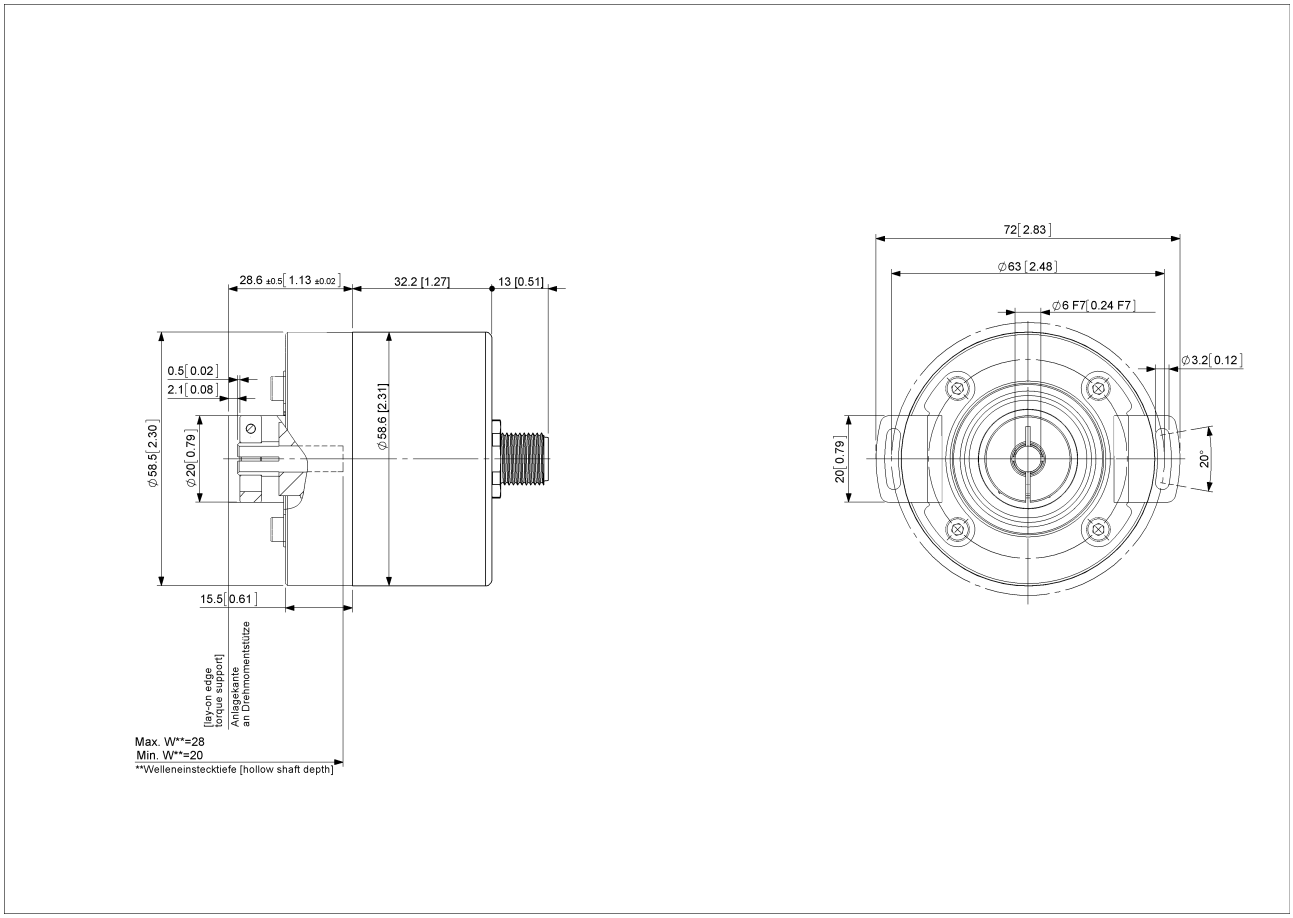
Approval	CE + cULus listed, Industrial Control Equipment + E1
Product Life Cycle	Established



Connection Plan

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

Connector-View on Encoder



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 V06

Contact

POSITAL
FRABA



POSITAL
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.