

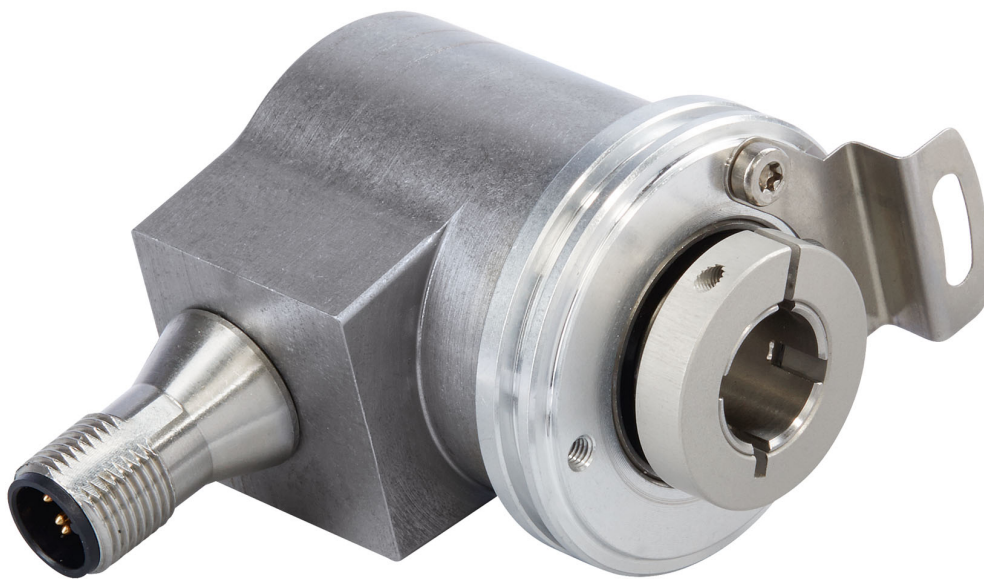


# POSITAL

## FRABA

### IXARC Absolute Rotary Encoder

UCD-C901B-0012-V8S0-PRV



#### Interface

Interface	SAE J1939
Profile	J1939 specific
Manual Functions	Programmable
Features	Round Axis
Transmission Rate	min. 20 kBaud, max. 1 MBaud
Interface Cycle Time	$\geq 1$ ms
Programming Functions	Resolution, preset, direction, node ID, baud rate

#### Outputs

Data Sheet

Printed at 29-04-2020 15:04



# POSITAL

## FRABA

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

### Electrical Data

Supply Voltage	9 - 30 VDC
Power Consumption	≤ 1.2 W
Start-Up Time	<500 ms
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)	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, ø 36 mm / ø 42 mm
Flange Material	Aluminum
Shaft Type	Blind Hollow, Depth = 18 mm
Shaft Diameter	ø 8 mm (0.31")
Shaft Material	Stainless Steel V2A (1.4305, 303)
Friction Torque	≤ 3 Ncm @ 20 °C (4.2 oz-in @ 68 °F)

Data Sheet  
Printed at 29-04-2020 15:04



# POSITAL

## FRABA

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	190 g (0.42 lb)
Maximum Axial / Radial Misalignment	Static ± 0.3 mm /± 0.5 mm; Dynamic ± 0.1 mm /± 0.2 mm

### Electrical Connection

Connection Orientation	Radial
Connection Type	Cable / Connector
Connector	M12, Male, 5 pin, a coded, with LED

### Certification

Approval	CE + cULus
Product Life Cycle	New

### Connection Plan

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

Connector-View on Encoder

### Dimensional Drawing

[2D Drawing](#)

### Accessories

Connectors & Cables

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

Data Sheet

Printed at 29-04-2020 15:04



# POSITAL

---

## FRABA

More

Clamping Rings

Clamping Ring V12

### Contact



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.

Data Sheet

Printed at 29-04-2020 15:04