



# POSITAL

## FRABA

### IXARC Absolute Rotary Encoder

### OCD-D2C1B-1413-B12V-H3P



#### Interface

Interface	DeviceNet
Profile	CIP (Common Industrial Protocol)
Manual Functions	Address selector switch 0-99 and terminal resistor (with connection cap)
Transmission Rate	150 kBaud, 250 kBaud, 500 kBaud
Interface Cycle Time	$\geq 10$ ms
Programming Functions	Resolution, preset, complement, transmission mode: polled mode, cyclic mode, sync mode

#### Outputs

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

#### Electrical Data

Supply Voltage	10 - 30 VDC
Current Consumption	$\leq 230$ mA @ 10 V DC, $\leq 100$ mA @ 24 V DC
Power Consumption	$\leq 2.5$ W
Start-Up Time	$< 1$ s
Reverse Polarity Protection	Yes
Short Circuit Protection	Yes
EMC: Emitted Interference	DIN EN 61000-6-4
EMC: Noise Immunity	DIN EN 61000-6-2

Data Sheet

Printed at 5-10-2020 20:10



# POSITAL

## FRABA

MTTF	13.5 years @ 40 °C
------	--------------------

### Sensor

Technology	Optical
Resolution Singleturn	13 bit
Resolution Multiturn	14 bit
Multiturn Technology	Mechanical Gearing (no Battery)
Accuracy (INL)	$\pm 0.0220^\circ$ (14 - 16 bit), $\pm 0.0439^\circ$ ( $\leq 13$ bit)
Code	Binary

### Environmental Specifications

Protection Class (Shaft)	IP66/IP67
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	Stainless Steel V2A (1.4305; 303)
Housing Material	Stainless Steel V2A (1.4305, 303)
Housing Coating	No Coating
Flange Type	Blind Hollow, $\varnothing$ 58 mm (B)
Flange Material	Stainless steel V2A (1.4305; 303)
Shaft Type	Blind Hollow, Depth = 30 mm
Shaft Diameter	$\varnothing$ 12 mm (0.47")
Shaft Material	Stainless Steel V2A (1.4305, 303)
Rotor Inertia	$\leq 30$ gcm <sup>2</sup> [ $\leq 0.17$ oz-in <sup>2</sup> ]
Friction Torque	$\leq 5$ Ncm @ 20 °C, (7.1 oz-in @ 68 °F)
Max. Permissible Mechanical Speed	$\leq 3000$ 1/min
Shock Resistance	$\leq 100$ g (half sine 6 ms, EN 60068-2-27)
Permanent Shock Resistance	$\leq 10$ g (half sine 16 ms, EN 60068-2-29)
Vibration Resistance	$\leq 10$ g (10 Hz - 1000 Hz, EN 60068-2-6)
Length	100 mm (3.94")
Weight	1060 g (2.34 lb)
Maximum Axial / Radial Misalignment	Static $\pm 0.3$ mm / $\pm 0.5$ mm; Dynamic $\pm 0.1$ mm / $\pm 0.2$ mm

Data Sheet

Printed at 5-10-2020 20:10



# POSITAL

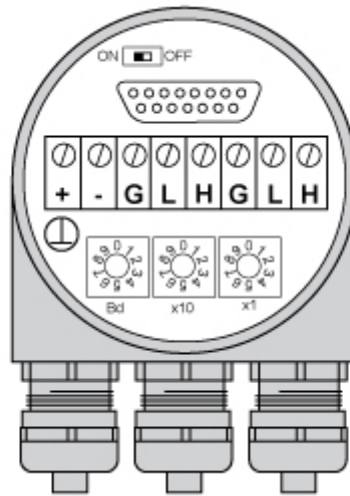
## FRABA

### Electrical Connection

Connection Orientation	Radial
Connection Type	3 x Cable Gland

### Product Life Cycle

Product Life Cycle	Established
Approval	CE



### Connection Plan

SIGNAL	PIN NUMBER
Power Supply	+
GND	-
CAN High	H
CAN Low	L
CAN GND	G
CAN High	H
CAN Low	L
CAN GND	G
GND	⊥

Connector-View on Encoder

### Dimensional Drawing

[2D Drawing](#)



# POSITAL

---

## FRABA

### Accessories

Clamping Rings  
Clamping Ring B15-VA

### Contact

Sold & Serviced By:



*Canadian and International Sales*

**ELECTROMATE**

**877-737-8698**

[sales@electromate.com](mailto:sales@electromate.com)

[www.electromate.com](http://www.electromate.com)

*U.S. Sales*

**SERVO2GO.com**

**877-378-0240**

[sales@servo2go.com](mailto:sales@servo2go.com)

[www.servo2go.com](http://www.servo2go.com)

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 5-10-2020 20:10