



IXARC Absolute Rotary Encoder

OCD-S6B1G-0016-CA30-PAP



Interface

Interface	SSI with Preset + Incremental Push Pull
Manual Functions	Preset via push button and cable or connector
Transmission Rate	≤2 Mbaud

Outputs

Output Driver	SSI (RS422) / Incr. (Push Pull)
---------------	---------------------------------

Electrical Data

Supply Voltage	10 - 30 VDC
Power Consumption	≤ 2.5 W
Start-Up Time	< 1 s
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	16.2 years @ 40 °C

Sensor

Technology	Optical
Resolution Singleturn	16 bit

POSITAL

FRABA



Accuracy (INL)	$\pm 0.0220^\circ$ (14 - 16 bit), $\pm 0.0439^\circ$ (≤ 13 bit)
Code	Gray

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	Clamp, $\varnothing$ 58 mm (C)
Flange Material	Aluminum
Shaft Type	Solid, Single Flat, Length = 20 mm
Shaft Diameter	$\varnothing$ 10 mm (0.39")
Shaft Material	Stainless Steel V2A (1.4305, 303)
Max. Shaft Load	Axial 40 N, Radial 110 N
Minimum Mechanical Lifetime (10^8 revolutions with Fa/Fr)	430 (20 N / 40 N), 150 (40 N / 60 N), 100 (40 N / 80 N), 55 (40 N / 110 N)
Rotor Inertia	$\leq 30 \text{ gcm}^2$ [$\leq 0.17 \text{ oz-in}^2$]
Friction Torque	$\leq 3 \text{ Ncm}$ @ 20 °C (4.2 oz-in @ 68 °F)
Max. Permissible Mechanical Speed	$\leq 12000 \text{ 1/min}$
Shock Resistance	$\leq 100 \text{ g}$ (half sine 6 ms, EN 60068-2-27)
Permanent Shock Resistance	$\leq 10 \text{ g}$ (half sine 16 ms, EN 60068-2-29)
Vibration Resistance	$\leq 10 \text{ g}$ (10 Hz - 1000 Hz, EN 60068-2-6)
Length	41,7 mm (1.64")
Weight	285 g (0.63 lb)

Electrical Connection

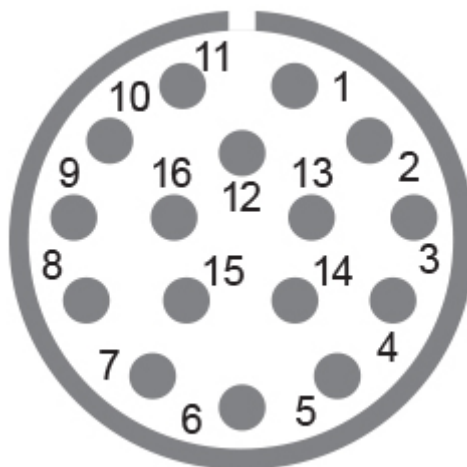
Connection Orientation	Axial
Connector	M23, Male, 16 pin

Certification

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

POSITAL

FRABA



Connection Plan

SIGNAL	PIN NUMBER
Power Supply	11
GND	12
Data+	3
Data-	4
Clock+	2
Clock-	1
DIR	8
Preset	9
A	5
/A	6
B	7
/B	10
Z	13
/Z	14
Shielding	Housing

Connector-View on Encoder

Pulse Diagram



Connectors & Cables
5m PVC Cable, 16pin, f

- 4 / 6 -



1m PVC Cable, 16pin, f
2m PVC Cable, 16pin, f
10m PVC Cable, 16pin, f
M23, 16pin, Female
More

Clamp Disc w/ Eccentric Hole-4pcs
Clamp Disc w/ Centred Hole-4pcs

Coupling Disc Type-10-12
Coupling Bellow Type-10-10
Coupling Bellow Type-06-10
Coupling Bellow Type-08-10
Coupling Bellow Type-10-12
Coupling Bellow Type-10-(1/4")
Coupling Bellow Type-10-(3/8")
Coupling Jaw Type-06-10
Coupling Jaw Type-08-10
Coupling Jaw Type-10-12
Coupling Jaw Type-10-(1/4")
Coupling Jaw Type-10-(3/8")
Coupling Jaw Type-10-10
Coupling Disc Type-06-10
Coupling Disc Type-10-10
More

Mounting Bracket for Clamping Flange w/ fixtures
L Mounting Bracket w/ screws
Mounting Bracket Spring Loaded f. Clamping Flange

Contact



POSITAL
Contact Us

POSITAL

FRABA



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.