



IXARC Absolute Rotary Encoder

OCD-S6B1G-0016-S060-2AW



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
------------	---------

Data Sheet

Printed at 27-09-2017 19:09

POSITAL

FRABA



Resolution Singleturn	16 bit
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	-30 °C fixed (-22 °F), -5 °C flexible (+23 °F) - +70 °C (+158 °F)
Humidity	98% RH, no condensation

Mechanical Data

Housing Material	Steel
Housing Coating	Cathodic corrosion protection (>720 hrs salt spray resistance)
Flange Type	Synchro, $\varnothing$ 58 mm (S)
Flange Material	Aluminum
Shaft Type	Solid, Length = 10 mm
Shaft Diameter	$\varnothing$ 6 mm (0.24")
Shaft Material	Stainless Steel V2A (1.4305, 303)
Max. Shaft Load	Axial 40 N, Radial 110 N
Minimum Mechanical Lifetime (10^8 revolutions with F_a/F_r)	550 (20 N / 40 N), 195 (40 N / 60 N), 135 (40 N / 80 N), 85 (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	45,7 mm (1.80")
Weight	270 g (0.60 lb)

Electrical Connection

Connection Orientation	Axial
Cable Length	2 m [79"]
Wire Cross Section	0.14 mm ² / AWG 26
Material / Type	PVC
Cable Diameter	8 mm (0.31 in)

Data Sheet

Printed at 27-09-2017 19:09

POSITAL

FRABA



Minimum Bend Radius

35 mm (1.38) fixed, 70 mm (2.76)

Certification

Approval

CE + cULus listed, Industrial Control Equipment

Product Life Cycle

Established

Connection Plan

SIGNAL

CABLE COLOR

Power Supply

Brown

GND

White

Data+

Gray

Data-

Pink

Clock+

Green

Clock-

Yellow

DIR

Red

Preset

Blue

A

Black

/A

Violet

B

Gray-Pink

/B

Red-Blue

Z

White-Green

/Z

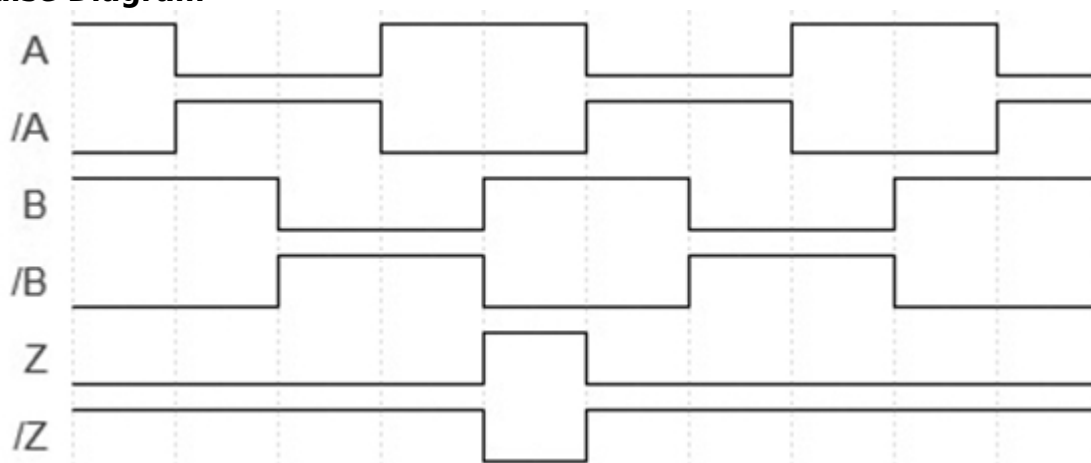
Brown-Green

Shielding

Shield

Connector-View on Encoder

Pulse Diagram

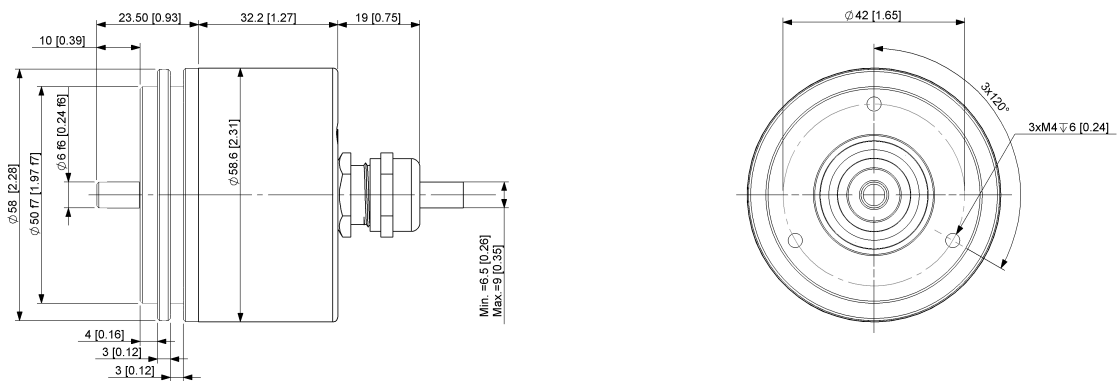


Data Sheet

Printed at 27-09-2017 19:09



Rotation Clockwise (seen on shaft)



2D Drawing

Accessories

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

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

Data Sheet

Printed at 27-09-2017 19:09



Coupling Disc Type-06-06
Coupling Disc Type-06-10
[More](#)

[Mounting Bracket for Synchro Flange w/ fixtures](#)

Contact



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.