



IXARC Absolute Rotary Encoder

OCD-P1A1B-0016-B10S-PAT



Interface

| | |
|----------------------|--|
| Interface | Bit Parallel preset |
| Manual Functions | Preset + complement via cable or connector |
| Interface Cycle Time | 150 μ s |

Outputs

| | |
|---------------|-----------|
| Output Driver | Push-Pull |
|---------------|-----------|

Electrical Data

| | |
|-----------------------------|--|
| Supply Voltage | 10 - 30 VDC |
| Current Consumption | \leq 400 mA @ 10 V DC, \leq 180 mA @ 24 V DC |
| Power Consumption | \leq 1.5 W |
| Start-Up Time | < 250 ms |
| Settling Time | 80 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 | 22.3 years @ 40 °C |

Sensor

| | |
|------------|---------|
| Technology | Optical |
|------------|---------|

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|------------------------|---|
| Resolution Singleturn | 16 bit |
| Accuracy (INL) | $\pm 0.0220^\circ$ (14 - 16 bit), $\pm 0.0439^\circ$ (≤ 13 bit) |
| Sense Signal (Default) | Clockwise shaft movement (front view on shaft) |
| Code | Binary |

Environmental Specifications

| | |
|----------------------------|------------------------------------|
| Protection Class (Shaft) | IP66/IP67 |
| 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 | Blind Hollow, \varnothing 58 mm (B) |
| Flange Material | Aluminum |
| Shaft Type | Blind Hollow, Depth = 30 mm |
| Shaft Diameter | \varnothing 10 mm (0.39") |
| Shaft Material | Stainless Steel V2A (1.4305, 303) |
| Rotor Inertia | $\leq 30 \text{ gcm}^2$ [$\leq 0.17 \text{ oz-in}^2$] |
| Friction Torque | $\leq 5 \text{ Ncm}$ @ 20 °C, (7.1 oz-in @ 68 °F) |
| Max. Permissible Mechanical Speed | $\leq 3000 \text{ 1/min}$ |
| 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 | 60,2 mm (2.37") |
| Weight | 325 g (0.72 lb) |

Electrical Connection

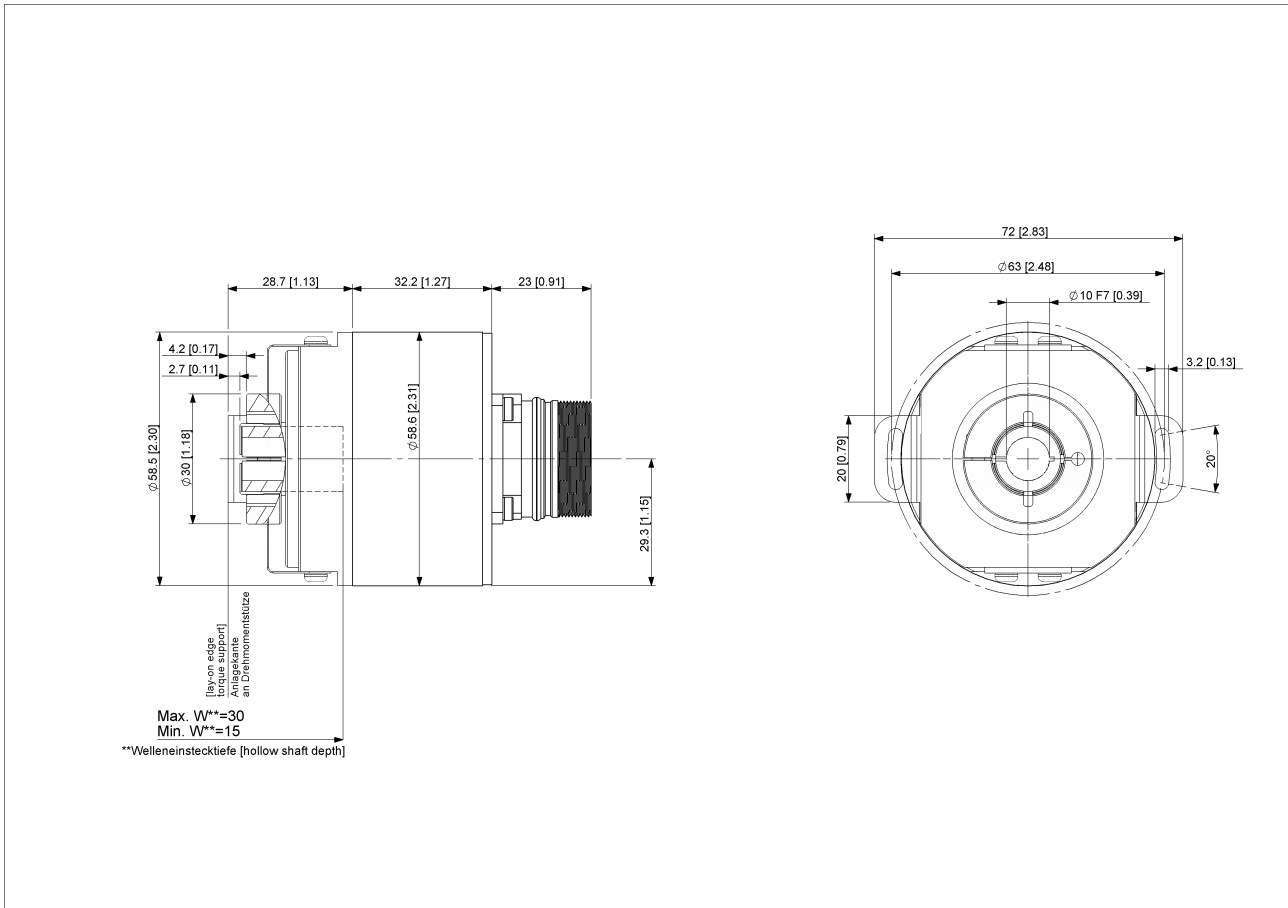
| | |
|------------------------|-------------------|
| Connection Orientation | Axial |
| Connector | M27, Male, 26 pin |

Certification

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



Connection Plan



[2D Drawing](#)

Accessories

Connectors & Cables

10m PVC Cable, 26pin, f

5m PVC Cable, 26pin, f

20m PVC Cable, 26pin, f

15m PVC Cable, 26pin, f

2m PVC Cable, 26pin, f

M27, 26pin, Female

More

Clamping Ring B15

Contact

Data Sheet

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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.