

POG 83 - DNV GL

Solid shaft $\varnothing 11$ mm with EURO flange B10

512...4096 pulses per revolution

Overview

- Encoder in stainless steel
- Offshore and salt water firm
- Approval DNV GL
- Protection IP 66
- Specialy designed for deck machinery and cranes in offshore and marine environment
- M23 flange connector in stainless steel



Technical data

Technical data - electrical ratings

| | |
|-------------------------|---|
| Voltage supply | 7...24 VDC |
| Consumption w/o load | ≤ 70 mA |
| Pulses per revolution | 512 ... 4096 |
| Phase shift | $90^\circ \pm 10^\circ$ |
| Duty cycle | 40...60 % |
| Reference signal | Zero pulse, width 90° |
| Sensing method | Optical |
| Output frequency | ≤ 160 kHz |
| Output signals | A+, A-, B+, B-, R+, R- |
| Output stages | HTL/push-pull |
| Interference immunity | EN 61000-6-2 |
| Emitted interference | EN 61000-6-3 |
| Approval | CE UL approval / E217823 DNV GL |
| Location classes DNV GL | Temperature: D Humidity: B Vibration: B EMC: B Enclosure: C |

Technical data - mechanical design

| | |
|-------------------------|---|
| Size (flange) | $\varnothing 115$ mm |
| Shaft type | $\varnothing 11$ mm solid shaft |
| Admitted shaft load | ≤ 250 N axial ≤ 350 N radial |
| Flange | EURO flange B10 |
| Protection EN 60529 | IP 66 |
| Operating speed | ≤ 6000 rpm (mechanical) |
| Operating torque typ. | 6.5 Ncm |
| Rotor moment of inertia | 450 gcm ² |
| Material | Housing: stainless steel Shaft: stainless steel |
| Operating temperature | -40...+85 °C |
| Resistance | IEC 60068-2-6 Vibration 20 g, 10-2000 Hz IEC 60068-2-27 Shock 300 g, 1 ms |
| Corrosion protection | IEC 60068-2-52 Salt mist for ambient conditions CX (C5-M) according to ISO 12944-2 |
| Connection | Flange connector M23 |
| Weight approx. | 3.5 kg |

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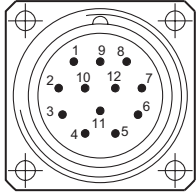
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Terminal assignment

View A (see dimension)

Assignment flange connector



Flange connector M23,
male, 12-pin,
counter-clockwise (CCW)

| Pin | Assignment |
|-----|----------------|
| 1 | B- |
| 2 | dnu |
| 3 | R+ |
| 4 | R- |
| 5 | A+ |
| 6 | A- |
| 7 | dnu |
| 8 | B+ |
| 9 | dnu |
| 10 | 0V (\perp) |
| 11 | dnu |
| 12 | +UB |

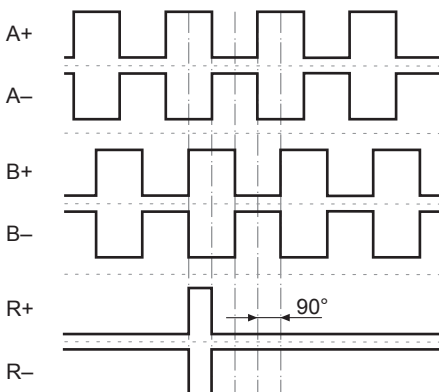
Terminal significance

| | |
|----------------|--|
| +UB | Voltage supply |
| 0V (\perp) | Ground |
| A+ | Output signal channel 1 |
| A- | Output signal channel 1 inverted |
| B+ | Output signal channel 2 (offset by 90° to channel 1) |
| B- | Output signal channel 2 inverted |
| R+ | Zero pulse (reference signal) |
| R- | Zero pulse inverted |
| dnu | Do not use |

Output signals

HTL

At positive rotating direction (see dimension)

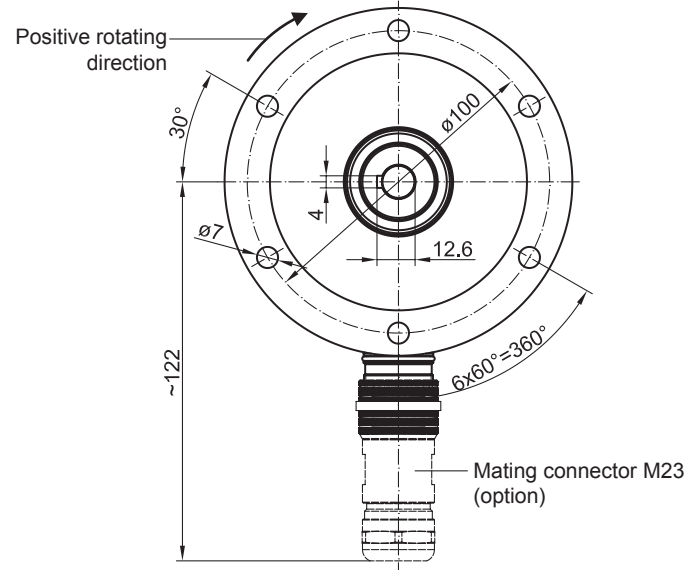
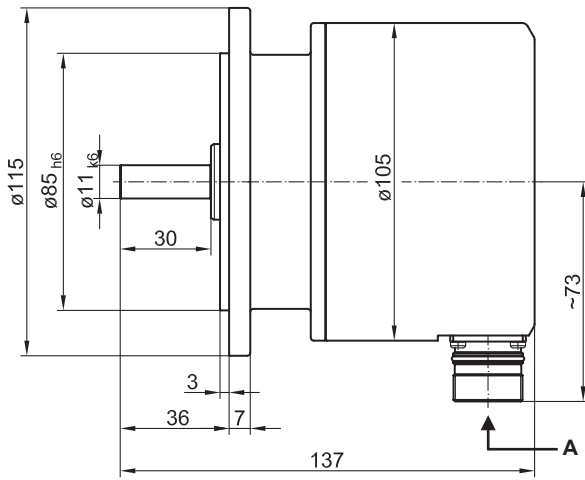


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Dimensions



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Ordering reference

| | | | | | | | | | | | | | |
|---------------------------------------|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------------|----------|-------------|
| | POG83 | - | S | N | 6 | . | 1 | F | D | . | #### | / | 0116 |
| Product | Incremental encoder | POG83 | | | | | | | | | | | |
| Shaft type | Solid shaft | | S | | | | | | | | | | |
| Flange (Solid shaft) | EURO flange B10, without shaft isolation | | | N | | | | | | | | | |
| Protection class | IP 66 | | | | 6 | | | | | | | | |
| Solid shaft | Ø11 mm, featherkey 4 mm | | | | | | 1 | | | | | | |
| Connection | Flange connector M23, 12 pin, radial, male contacts, CCW | | | | | | | F | | | | | |
| Supply voltage / output stages | 7...24 VDC, HTL push-pull (Vin=Vout), 6 channels | | | | | | | | D | | | | |
| Pulses per revolution | 512 | | | | | | | | | | | 0512 | |
| | 1024 | | | | | | | | | | | 1024 | |
| | 2048 | | | | | | | | | | | 2048 | |
| | 4096 | | | | | | | | | | | 4096 | |
| Option approval | DNV GL | | | | | | | | | | | | 0116 |

(1) Other pulse numbers on request.

Accessories

Mounting accessories

- Spring disk coupling K 35 (shaft ø6...12 mm)
- Spring disk coupling K 50 (shaft ø11...16 mm)
- Spring disk coupling K 60 (shaft ø11...22 mm)

Connectors and cables

- 11068549 Mating connector M23, solder version, 12-pin, CW
- Sensor cable for encoders HEK 8

Diagnostic accessories

- 11075858 Analyzer for encoders HENQ 1100
- 11075880 Analyzer for encoders HENQ 1100 B