

Combination

Twin encoder with two electrically separated systems

Solid shaft with EURO flange B10

300...5000 pulses per revolution

POG 11 G



POG 11 G

Technical data - electrical ratings

Voltage supply	9...30 VDC 5 VDC \pm 5 %
Consumption w/o load	\leq 100 mA
Pulses per revolution	300...5000
Phase shift	90° \pm 20°
Scan ratio	40...60 %
Reference signal	Zero pulse, width 90°
Output frequency	\leq 120 kHz \leq 300 kHz (on request)
Output signals	K1, K2, K0 + inverted Error output (only EMS)
Output stages	HTL-P (power linedriver) TTL/RS422
Sensing method	Optical
Interference immunity	EN 61000-6-2
Emitted interference	EN 61000-6-3
Approvals	CE, UL approval / E256710

Features

- Twin encoder featuring two separate systems
- Offshore and salt water firm, high protection IP 67
- TTL output driver for cable length up to 500 m
- Very high resistance to shock and vibrations
- EURO-flange B10 / solid shaft \varnothing 11 mm
- Big terminal boxes, turn by 180°

Optional

- Function control with EMS
(Enhanced Monitoring System)
- Redundant sensing with two terminal boxes

Technical data - mechanical design

Size (flange)	\varnothing 115 mm
Shaft type	\varnothing 11 mm solid shaft
Admitted shaft load	\leq 300 N axial \leq 450 N radial
Flange	EURO flange B10
Protection DIN EN 60529	IP 67
Operating speed	\leq 12000 rpm (mechanical)
Operating torque typ.	2 Ncm
Rotor moment of inertia	200 gcm ²
Materials	Housing: aluminium die-cast Shaft: stainless steel
Operating temperature	-40...+100 °C -25...+100 °C (>3072 pulses per revolution)
Resistance	IEC 60068-2-6 Vibration 25 g, 10-2000 Hz IEC 60068-2-27 Shock 300 g, 6 ms
Explosion protection	II 3 G Ex nA IIC T4 Gc (gas) II 3 D Ex tc IIIC T135°C Dc (dust)
Connection	2x terminal box 3x terminal box (with option M)
Weight approx.	2.5 kg, 2.7 kg (with option M)

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Part number

Incremental encoder

POG11 G DN / DN

Voltage supply / signals

- I 9...30 VDC / output circuit HTL with inverted signals
- TTL 5 VDC / output circuit TTL with inverted signals
- R 9...30 VDC / output circuit TTL with inverted signals

Pulse number - see table

Output signals

DN K1, K2, K0

Voltage supply / signals

- I 9...30 VDC / output circuit HTL with inverted signals
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Pulse number - see table

Output signals

DN K1, K2, K0

Redundant sensing

Without redundant sensing

M With redundant sensing

EMS - Enhanced Monitoring System

Without EMS

.2 With EMS

Pulse number

300	1000	2048	4096
500	1024	2500	5000
512	1200	3072	

Other pulse numbers on request.

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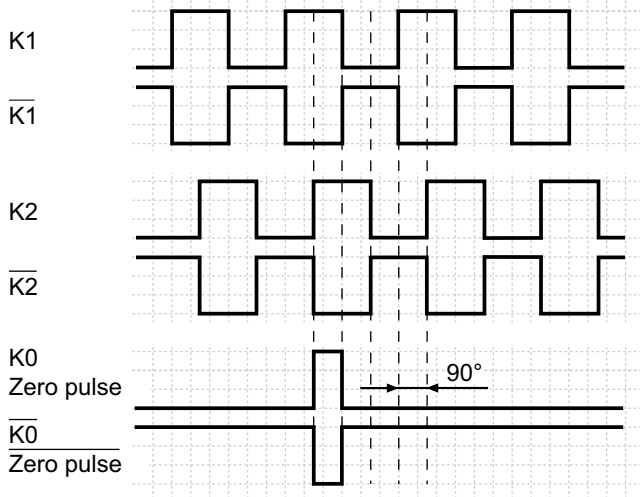
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Output signals

At positive rotating direction



Option EMS: LED status / Error output

Flash light red*	Error of signal sequence, zero pulse or pulses (Error output = HIGH-LOW alternation)
Red	Overload output driver (Error output = LOW)
Flash light green	Encoder o.k., rotating (Error output = HIGH)
Green	Encoder o.k., stopped (Error output = HIGH)
No light	No output voltage connection or wrong connection (Error output = LOW)

* Only at rotating encoder

Accessories

Connectors and cables

HEK 8 Sensor cable for encoders

Mounting accessories

K 35 Spring washer coupling for solid shaft $\varnothing 6...12$ mm

K 50 Spring washer coupling for solid shaft $\varnothing 11...16$ mm

K 60 Spring washer coupling for solid shaft $\varnothing 11...22$ mm

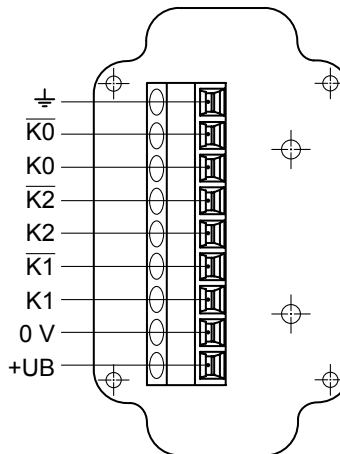
Diagnostic accessories

HENQ 1100 Analyzer for encoders

Terminal assignment

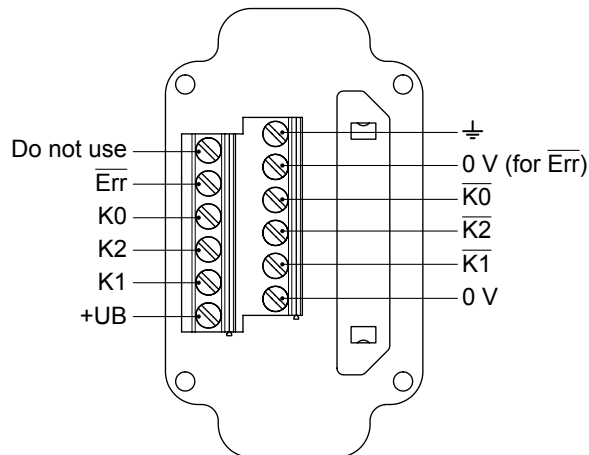
View A

Connecting terminal in terminal box



Option EMS: View A

Connecting terminal in terminal box



Option EMS: LED status / Error output

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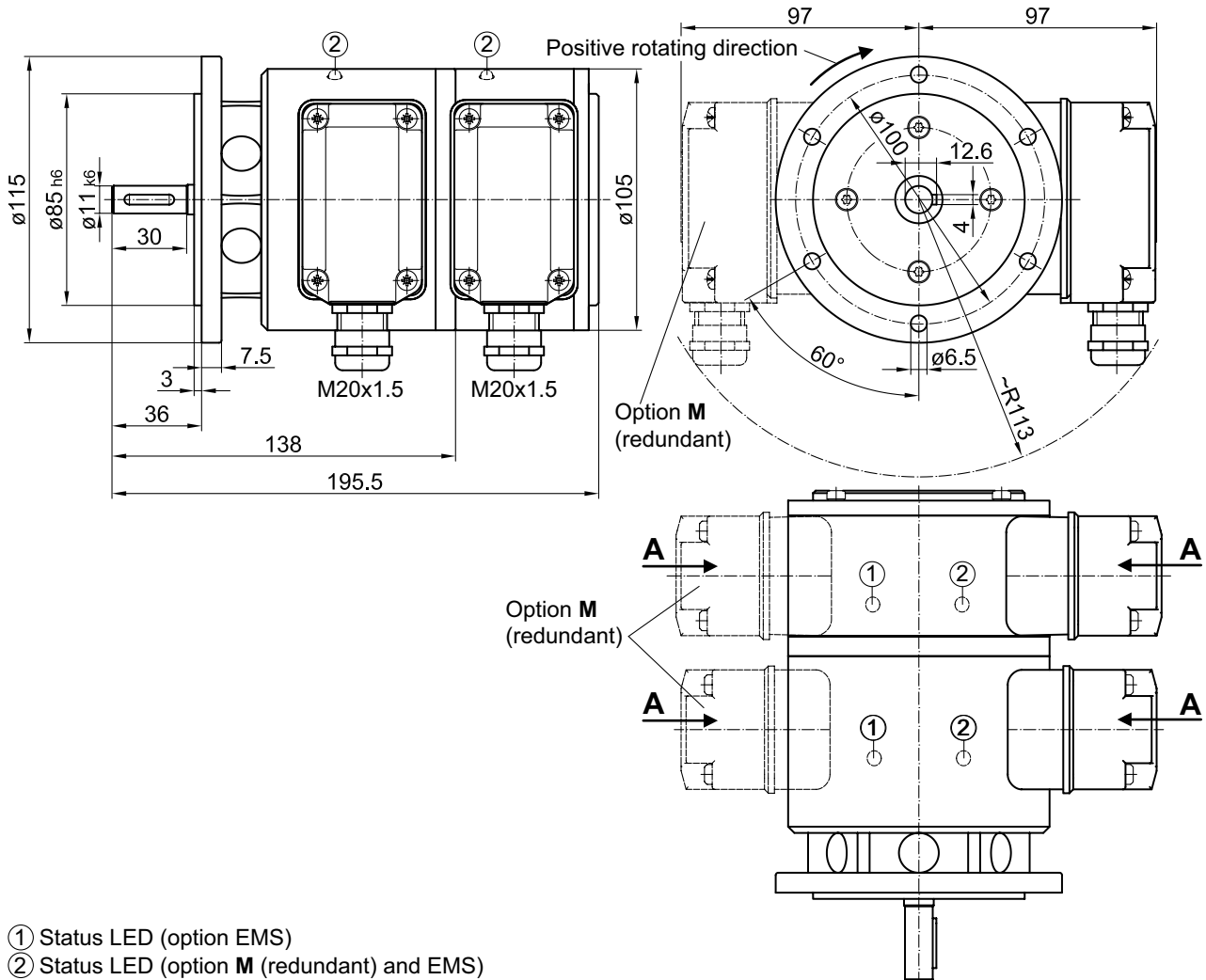
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Dimensions



- ① Status LED (option EMS)
- ② Status LED (option M (redundant) and EMS)