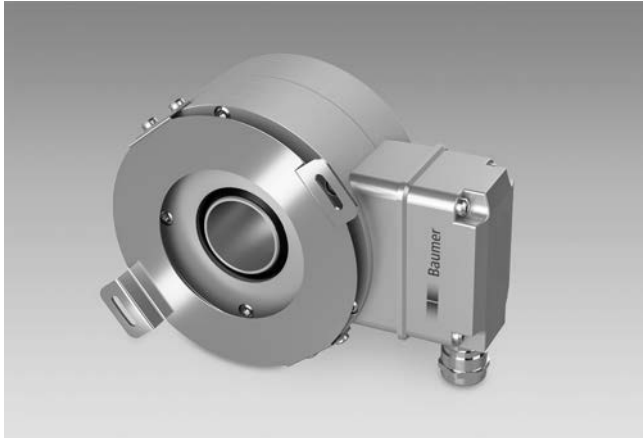


Incremental encoders

Through hollow shaft $\varnothing 16...36$ mm

1024...3072 pulses per revolution

HOG 131



HOG 131

Features

- Through hollow shaft $\varnothing 16...36$ mm
- Optical sensing method
- Shaft especially sealed for offshore applications
- Housing with special surface protection
- Hybrid bearing for extended service life
- Integrated lightning protection gap between encoder shaft and housing
- Output stage HTL or TTL
- Output stage TTL with regulator UB 9...30 VDC
- Large terminal box, turn by 180°

Technical data - electrical ratings

Voltage supply	9...30 VDC 5 VDC ± 5 % 9...26 VDC
Consumption w/o load	≤ 100 mA
Pulses per revolution	1024...3072
Phase shift	$90^\circ \pm 20^\circ$
Duty cycle	40...60 %
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output frequency	≤ 120 kHz
Output signals	K1, K2, K0 + inverted
Output stages	HTL TTL/RS422
Interference immunity	EN 61000-6-2
Emitted interference	EN 61000-6-3
Approvals	CE, UL approval / E256710

Technical data - mechanical design

Size (flange)	$\varnothing 130$ mm
Shaft type	$\varnothing 16...36$ mm (through hollow shaft)
Admitted shaft load	≤ 300 N axial ≤ 500 N radial
Protection DIN EN 60529	IP 56
Operating speed	≤ 6000 rpm (mechanical)
Operating torque typ.	15 Ncm
Rotor moment of inertia	4.9 kgcm ² ($\varnothing 32$)
Materials	Housing: aluminium alloy Shaft: stainless steel
Operating temperature	$-40...+100$ °C
Resistance	IEC 60068-2-6 Vibration 10 g, 10-2000 Hz IEC 60068-2-27 Shock 200 g, 6 ms
Corrosion protection	IEC 60068-2-52 Salt mist for ambient conditions C5-M (CX) according to ISO 12944-2
Explosion protection	II 3 G Ex nA IIC T4 Gc (gas) II 3 D Ex tc IIIB T135°C Dc (dust)
Connection	Terminal box
Weight approx.	4 kg

Incremental encoders

Through hollow shaft ø16...36 mm
1024...3072 pulses per revolution

HOG 131

Part number

Incremental encoder

HOG131 **DN**

Shaft diameter

16H7 Through hollow shaft ø16 mm
25H7 Through hollow shaft ø25 mm
32H7 Through hollow shaft ø32 mm
36H7 Through hollow shaft ø36 mm

Voltage supply / signals

I 9...30 VDC / output stage HTL with inverted signals
TTL 5 VDC / output stage TTL with inverted signals
R 9...26 VDC / output stage TTL with inverted signals

Pulse number - see table

Output signals

DN K1, K2, K0

Pulse number

1024 | 2048 | 3072

Other pulse numbers on request.

Accessories

Connectors and cables

HEK 8 Sensor cable for encoders

Diagnostic accessories

11075858 Analyzer for encoders HENQ 1100

Incremental encoders

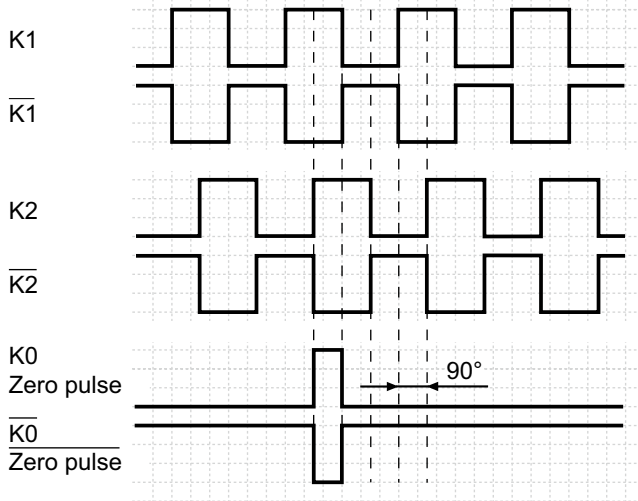
Through hollow shaft $\varnothing 16...36$ mm

1024...3072 pulses per revolution

HOG 131

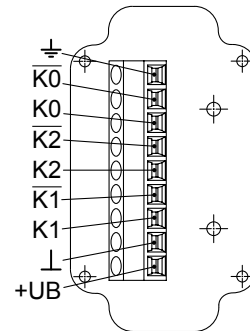
Output signals

At positive rotating direction



Terminal assignment

View A - Connecting terminal terminal box



Terminal significance

+UB	Voltage supply (for the device)
$\perp$; $\downarrow$; GND; 0 V	Ground (for the signals)
$\perp$; $\nearrow$	Earth ground (housing)
K1; A; A+	Output signal channel 1
$\overline{K1}$; $\overline{A}$; A-	Output signal channel 1 inverted
K2; B; B+	Output signal channel 2 (offset by 90° to channel 1)
$\overline{K2}$; $\overline{B}$; B-	Output signal channel 2 (offset by 90° to channel 1) inverted
K0; C; R; R+	Zero pulse (reference signal)
$\overline{K0}$; $\overline{C}$; $\overline{R}$; R-	Zero pulse (reference signal) inverted
dnu	Do not use

HOG 131

Drawing 38° rotated

Positive rotating direction

ød1	ød2
16	31.5
25	41.5
32	48.5
36	52

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