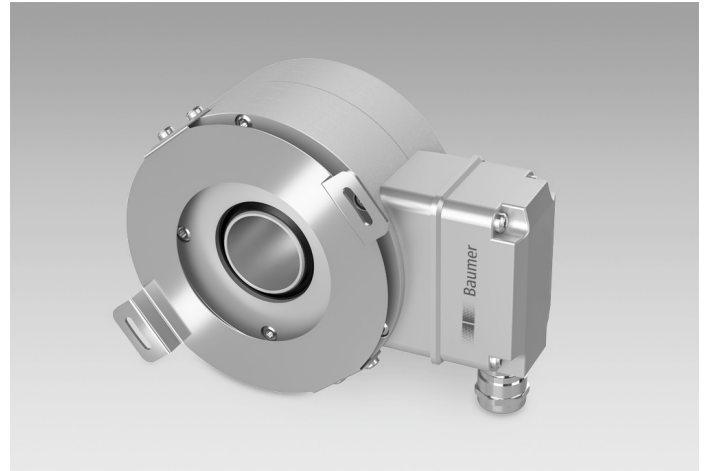


# HOG 131

Through hollow shaft  $\varnothing 16...36$  mm  
1024...3072 pulses per revolution

## Overview

- 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°



**HUBNER**  
BERLIN  
A Baumer Brand

## Technical data

### Technical data - electrical ratings

Voltage supply	9...30 VDC 5 VDC $\pm 5\%$ 9...26 VDC
Consumption w/o load	$\leq 100$ mA
Pulses per revolution	1024 ... 3072
Phase shift	$90^\circ \pm 20^\circ$
Duty cycle	40...60 %
Reference signal	Zero pulse, width $90^\circ$
Sensing method	Optical
Output frequency	$\leq 120$ kHz
Output signals	K1, K2, K0 + inverted
Output stages	HTL TTL/RS422
Interference immunity	EN 61000-6-2
Emitted interference	EN 61000-6-3
Approval	CE UL approval / E217823

### Technical data - mechanical design

Size (flange)	$\varnothing 130$ mm
Shaft type	$\varnothing 16...36$ mm (through hollow shaft)

### Technical data - mechanical design

Admitted shaft load	$\leq 300$ N axial $\leq 500$ N radial
Protection EN 60529	IP 56
Operating speed	$\leq 6000$ rpm (mechanical)
Operating torque typ.	15 Ncm
Rotor moment of inertia	4.9 kgcm <sup>2</sup> ( $\varnothing 32$ )
Material	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 CX (C5-M) according to ISO 12944-2
Explosion protection	II 3 G Ex ec IIC T4 Gc (gas) II 3 D Ex tc IIIB T135°C Dc (dust) (only with option ATEX)
Connection	Terminal box
Weight approx.	4 kg

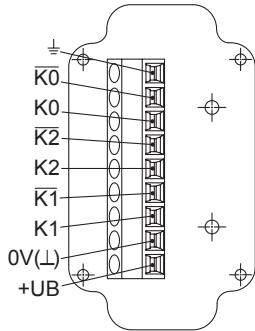
# HOG 131

Through hollow shaft  $\varnothing 16 \dots 36$  mm  
1024...3072 pulses per revolution

## Terminal assignment

**View A** (see dimension)

Connecting terminal terminal box, radial



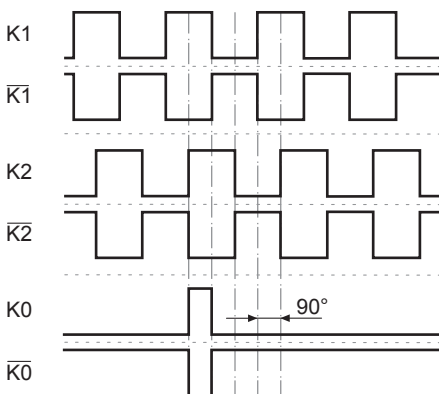
## Terminal significance

+UB	Voltage supply
0V (L)	Ground
⊥	Earth ground (housing)
K1	Output signal channel 1
$\overline{K1}$	Output signal channel 1 inverted
K2	Output signal channel 2 (offset by 90° to channel 1)
$\overline{K2}$	Output signal channel 2 inverted
K0	Zero pulse (reference signal)
$\overline{K0}$	Zero pulse inverted

## Output signals

**HTL/TTL**

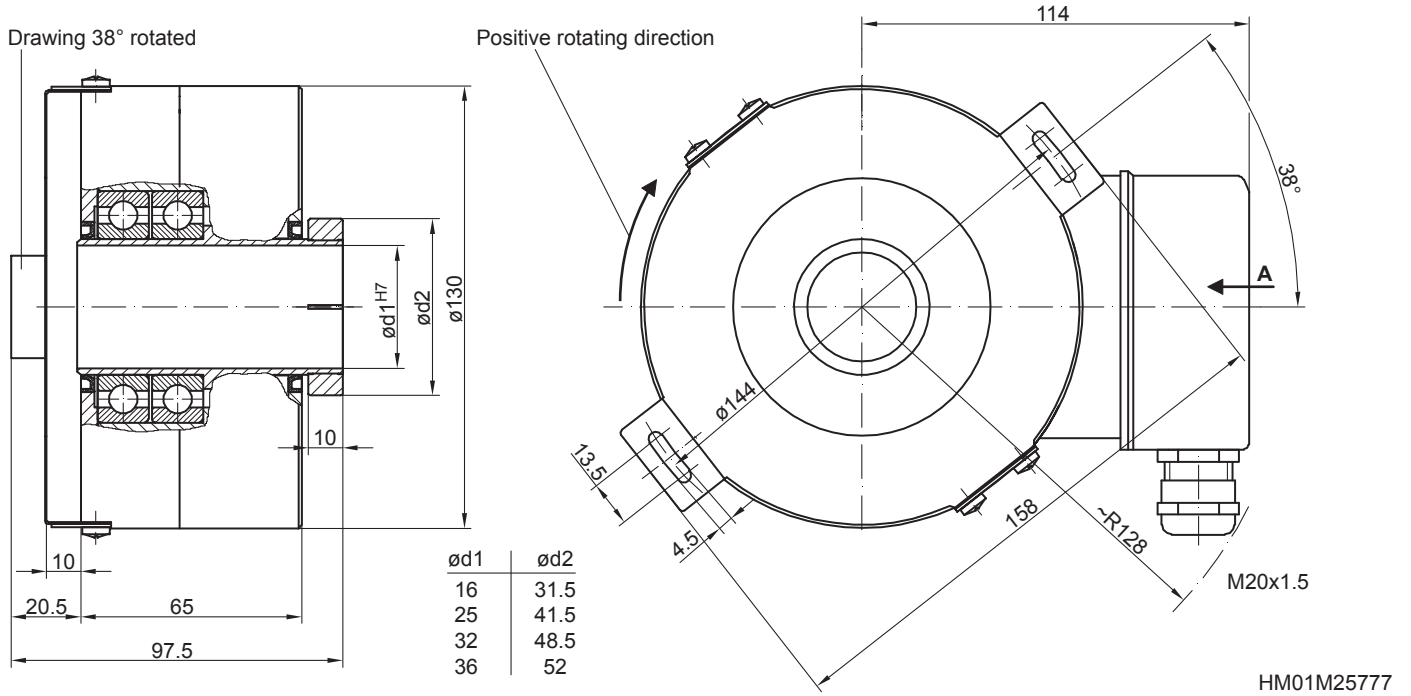
At positive rotating direction (see dimension)



# HOG 131

Through hollow shaft  $\varnothing 16 \dots 36$  mm  
1024...3072 pulses per revolution

## Dimensions



# HOG 131

 Through hollow shaft  $\varnothing 16 \dots 36$  mm  
 1024...3072 pulses per revolution

## Ordering reference

		HOG131	DN	####	###	#####
<b>Product</b>						
Incremental encoder		HOG131				
<b>Output signals</b>						
K1, K2, K0		DN				
<b>Pulse number<sup>(1)</sup></b>						
1024		1024				
2048		2048				
3072		3072				
<b>Voltage supply / output stage</b>						
9...30 VDC / output stage HTL with inverted signals		I				
5 VDC / output stage TTL with inverted signals		TTL				
9...30 VDC / output stage TTL with inverted signals		R				
<b>Shaft diameter</b>						
Blind hollow shaft $\varnothing 16$ mm		16H7				
Through hollow shaft $\varnothing 25$ mm		25H7				
Blind hollow shaft $\varnothing 32$ mm		32H7				
Blind hollow shaft $\varnothing 36$ mm		36H7				

(1) Other pulse numbers on request.

## Accessories

### Diagnostic accessories

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