

Incremental encoders

Hollow shaft $\varnothing 16$ to $\varnothing 36$ mm

Resolution 2048...3072 pulses

HOG 131



HOG 131

Features

- Encoder with hollow shaft $\varnothing 16$ -36 mm
- Optical sensing
- Shaft especially sealed for offshore applications
- Housing with special surface protection
- Hybrid bearing with ceramic balls
- Integrated lightning protection gap between encoder shaft and flange
- Logic level HTL with power line driver
- Big terminal box, pivotable through 180°

Technical data - electrical ratings

Voltage supply	5 VDC ± 5 % 9...26 VDC 9...30 VDC
Consumption w/o load	≤ 100 mA
Resolution (steps/turn)	2048...3072
Phase shift	$90^\circ \pm 20^\circ$
Scan ratio	40...60 %
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output frequency	≤ 120 kHz
Output signals	K1, K2, K0 + inverted
Output circuit	TTL (RS422) HTL (power line driver)
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4
Approval	UL approval / E256710

Technical data - mechanical design

Housing	$\varnothing 130$ mm
Shaft	$\varnothing 16$...36 mm hollow shaft
Protection DIN EN 60529	IP 56
Operating speed	≤ 6000 rpm (mechanical)
Operating torque typ.	15 Ncm
Rotor moment of inertia	4.9 kgcm^2 ($\varnothing 32$)
Admitted shaft load	≤ 300 N axial ≤ 500 N radial
Materials	Housing: aluminium alloy Shaft: stainless steel
Operating temperature	$-40 \dots +100$ °C
Resistance	DIN EN 60068-2-6 Vibration 10 g, 10-2000 Hz DIN EN 60068-2-27 Shock 200 g, 6 ms
Explosion protection	II3G Ex nA T4 X (gas) II3D Ex tD IP56 A22 T135°C X (dust)
Weight approx.	4 kg
Connection	Terminal box

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Hollow shaft ø16 to ø36 mm

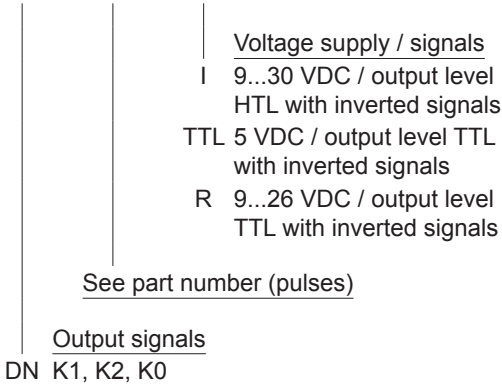
Resolution 2048...3072 pulses

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Part number

HOG 131

DN



Part number (pulses)

2048

3072

Other pulse numbers upon request.

Accessories

Connectors and cables

HEK 8

Sensor cable for encoders

Diagnostic accessories

HENQ 1100

Analyzer for encoders

Incremental encoders

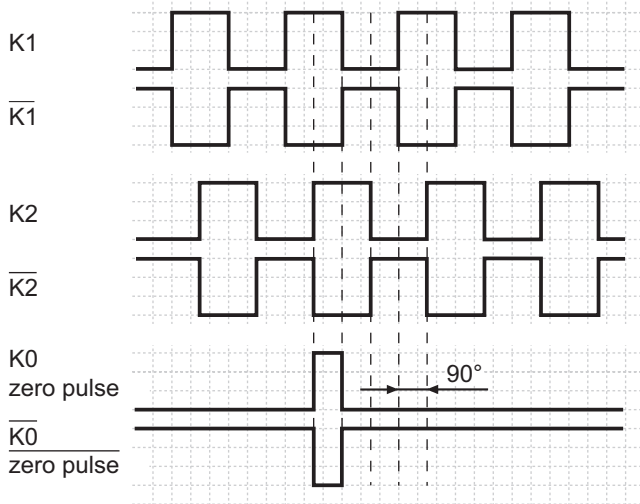
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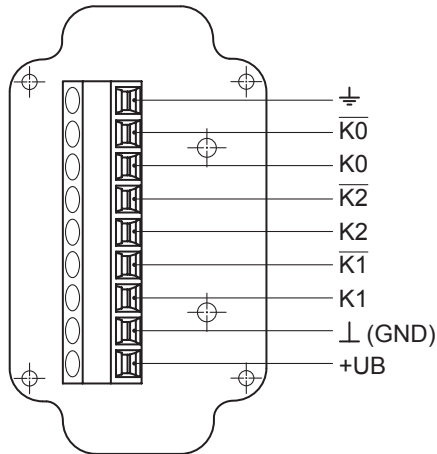
Output signals

at positive direction of rotation



Terminal assignment

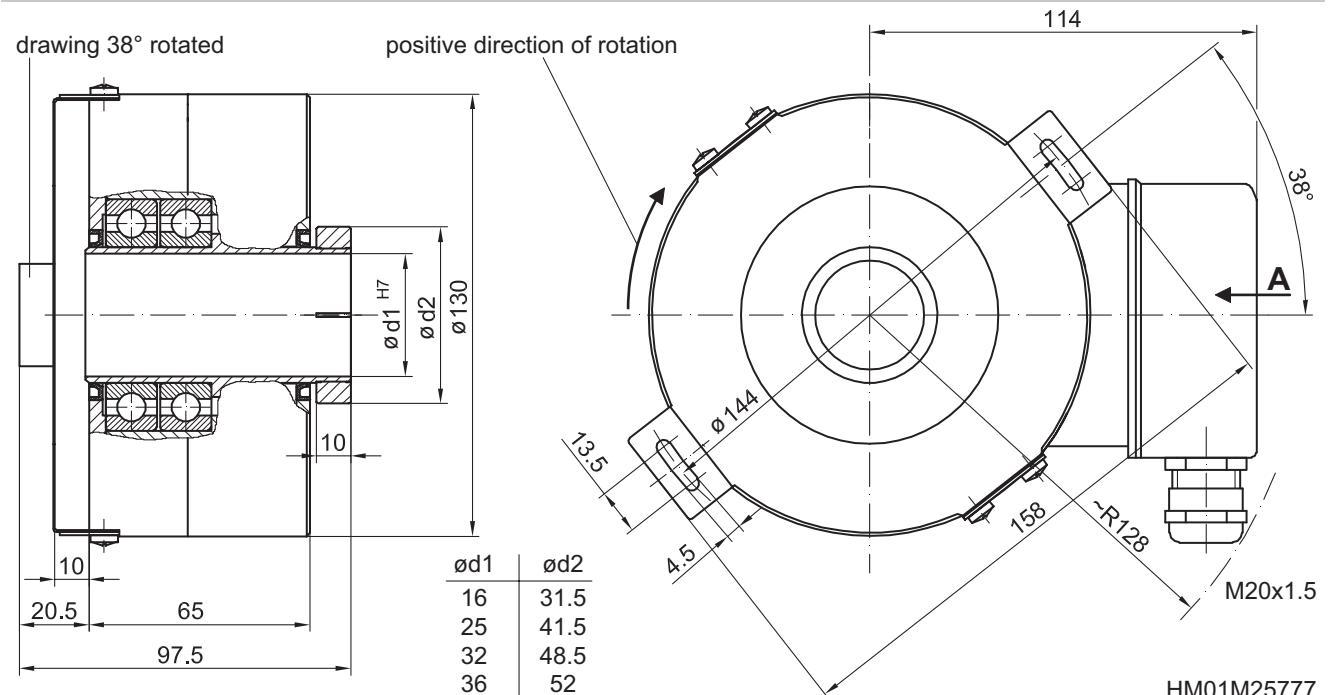
View A - Connecting terminal in terminal box



Dimensions

drawing 38° rotated

positive direction of rotation



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