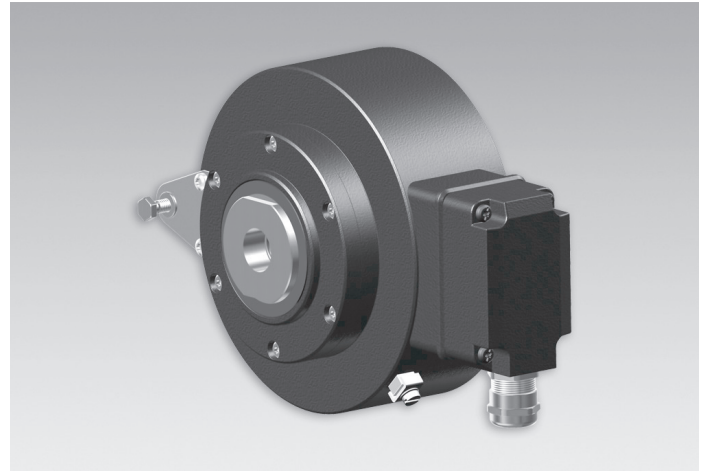


HOG 16

Through hollow shaft $\varnothing 20 \dots 38$ mm
250...2500 pulses per revolution

Overview

- Through hollow shaft $\varnothing 20 \dots 38$ mm
- Robust light-metal housing
- Output stage HTL, TTL or TTL with regulator UB 9...26 VDC
- Special protection against corrosion
- With earthing brushes
- Large terminal box, turn by 180°



Technical data

Technical data - electrical ratings

Voltage supply	9...30 VDC 5 VDC ± 5 % 9...26 VDC
Consumption w/o load	≤ 100 mA
Pulses per revolution	250 ... 2500
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
Approval	CE UL approval / E217823

Technical data - mechanical design

Size (flange)	$\varnothing 158$ mm
Shaft type	$\varnothing 20 \dots 38$ mm (through hollow shaft)

Optional

- Redundant sensing with two terminal boxes
- Hybrid bearing

Technical data - mechanical design

Admitted shaft load	≤ 450 N axial ≤ 600 N radial
Protection DIN EN 60529	IP 66
Operating speed	≤ 6000 rpm (mechanical)
Operating torque typ.	15 Ncm
Rotor moment of inertia	$4,9$ kgcm ² ($\varnothing 25$)
Material	Housing: aluminium alloy Shaft: stainless steel
Operating temperature	$-40 \dots +100^\circ\text{C}$
Resistance	IEC 60068-2-6 Vibration 20 g, 10...2000 Hz IEC 60068-2-27 Shock 300 g, 6 ms
Corrosion protection	IEC 60068-2-52 Salt mist for ambient conditions C4 according to ISO 12944-2
Connection	Terminal box 2x terminal box (with option M)
Weight approx.	$4,9$ kg $5,1$ kg (with option M)

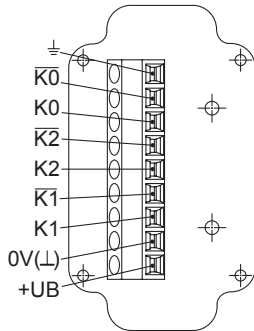
HOG 16

Through hollow shaft $\varnothing 20 \dots 38$ mm
250...2500 pulses per revolution

Terminal assignment

View A (see dimension)

Connecting terminal terminal box, radial



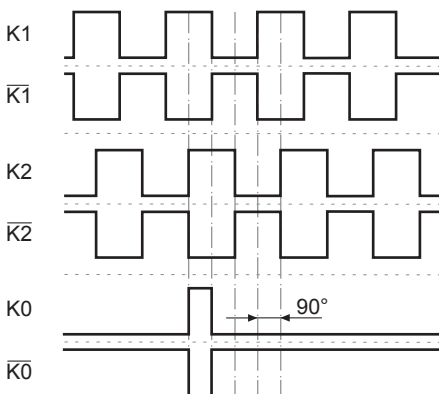
Terminal significance

+UB	Voltage supply
0V (⊥)	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)

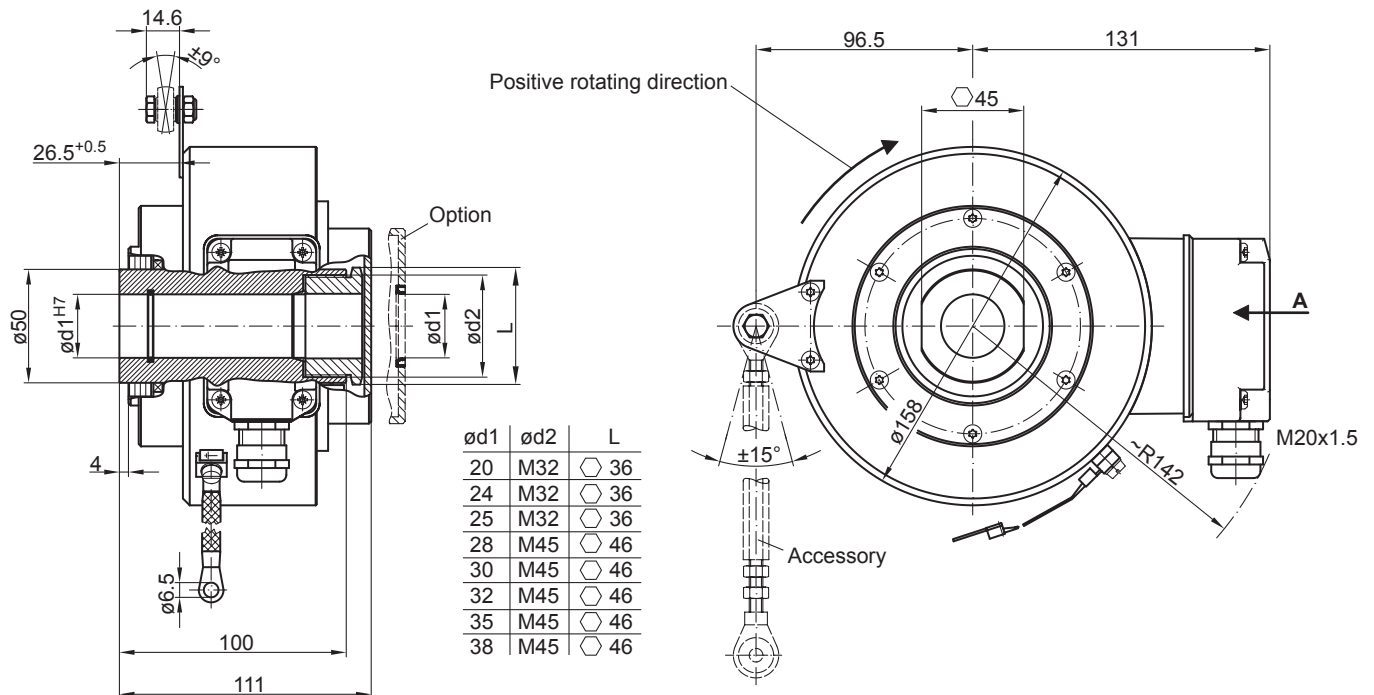


HOG 16

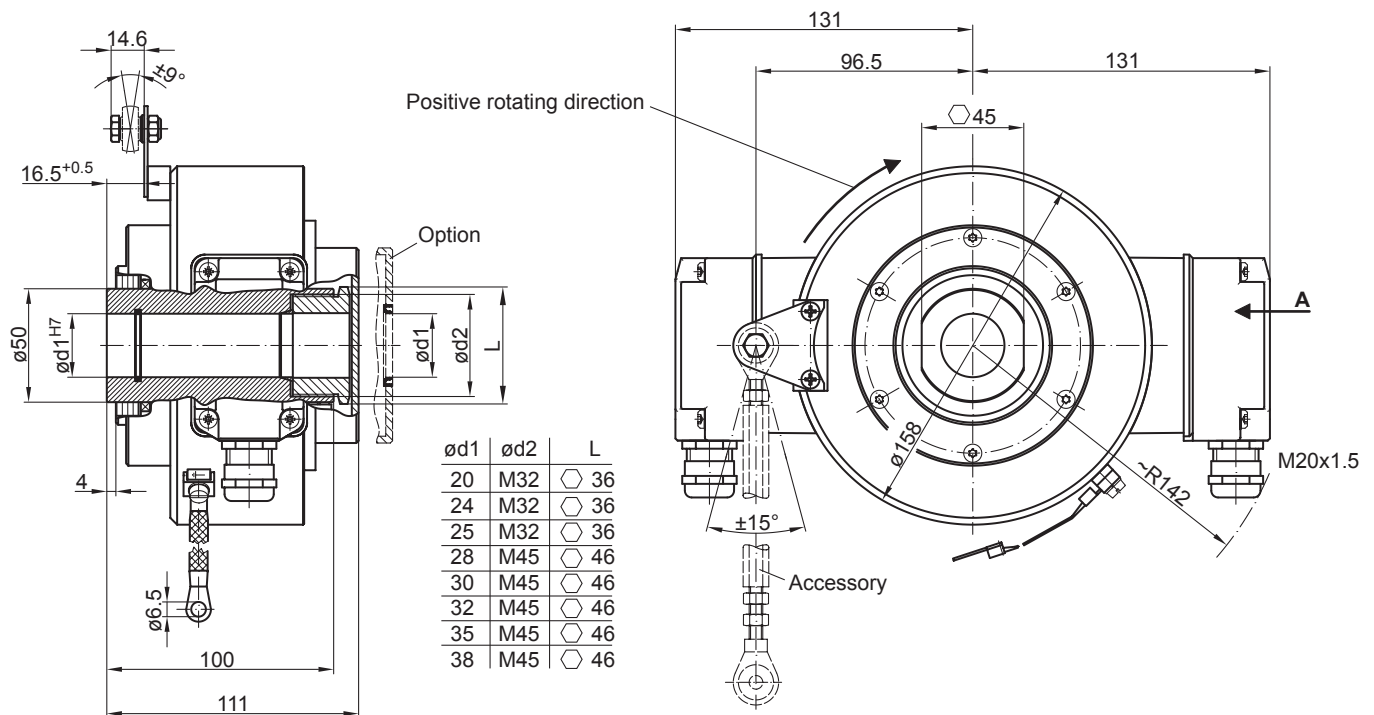
Through hollow shaft $\varnothing 20 \dots 38$ mm

250...2500 pulses per revolution

Dimensions



Version with single sensing



Version with redundant sensing

HOG 16

Through hollow shaft ø20...38 mm
 250...2500 pulses per revolution

Ordering reference

	HOG16	#	#	DN	####	###	#####
Product							
Incremental encoder	HOG16						
Shaft type							
Standard ball bearings							
With hybrid bearings			C				
Redundant sensing							
Without redundant sensing							
With redundant sensing				M			
Output signals							
K1, K2, K0				DN			
Pulse number⁽¹⁾							
250						250	
500						500	
512						512	
600						600	
1000						1000	
1024						1024	
1080						1080	
1200						1200	
2048						2048	
2500						2500	
Voltage supply / output stage							
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	
Shaft diameter							
Blind hollow shaft ø20 mm							20H7
Through hollow shaft ø24 mm							24H7
Through hollow shaft ø25 mm							25H7
Blind hollow shaft ø28 mm							28H7
Through hollow shaft ø30 mm							30H7
Blind hollow shaft ø32 mm							32H7
Through hollow shaft ø35 mm							35H7
Blind hollow shaft ø38 mm							38H7

(1) Other pulse numbers on request.

Accessories

Mounting accessories

11043628	Torque arm M6, length 67...70 mm
11004078	Torque arm M6, length 120...130 mm (≥71 mm)
11002915	Torque arm M6, length 425...460 mm (≥131 mm)
11054917	Torque arm M6 insulated, length 67...70 mm
11072795	Torque arm M6 insulated, length 120...130 mm (≥71 mm)
11082677	Torque arm M6 insulated, length 425...460 mm (≥131 mm)
11077197	Mounting kit for torque arm size M6 and earthing strap

Accessories

Connectors and cables

Sensor cable for encoders HEK 8

Diagnostic accessories

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