

HOG 11 - DNV

Blind hollow shaft $\varnothing 16$ mm

300...2500 pulses per revolution

Overview

- Approval DNV
- Suitable for offshore, salt water firm
- High protection IP 67
- TTL output driver for cable length up to 550 m
- Hybrid bearing for extended service life
- Earthing brush for capacitive shaft currents
- Large terminal box, turn by 180° or axial terminal cover



Technical data

Technical data - electrical ratings

Voltage supply	9...30 VDC 5 VDC ± 5 %
Consumption w/o load	≤ 100 mA
Pulses per revolution	300 ... 2500
Phase shift	$90^\circ \pm 20^\circ$
Duty cycle	30...70 %
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output frequency	≤ 120 kHz
Output signals	K1, K2, K0 + inverted
Output stages	HTL-P (power linedriver) TTL/RS422
Transmission length	≤ 350 m at 100 kHz (HTL-P) ≤ 550 m at 100 kHz (TTL)
Interference immunity	EN 61000-6-2
Emitted interference	EN 61000-6-3
Approval	CE UL approval / E217823 DNV approval
Location classes DNV	Temperature: D Humidity: B Vibration: B EMC: B Enclosure: C

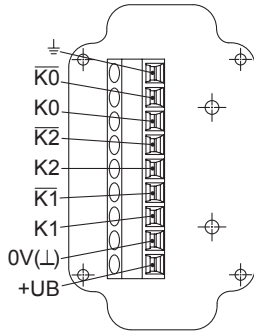
Technical data - mechanical design

Size (flange)	$\varnothing 105$ mm
Shaft type	$\varnothing 16$ mm (blind hollow shaft)
Admitted shaft load	≤ 250 N axial ≤ 400 N radial
Protection EN 60529	IP 67
Operating speed	≤ 6000 rpm (mechanical)
Operating torque typ.	6 Ncm
Rotor moment of inertia	340 gcm ²
Material	Housing: aluminium die-cast Shaft: stainless steel
Operating temperature	$-40...+100^\circ\text{C}$
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 CX (C5-M) according to ISO 12944-2
Connection	Terminal box
Weight approx.	1.6 kg

Terminal assignment

View A (see dimension)

Connecting terminal terminal box, radial



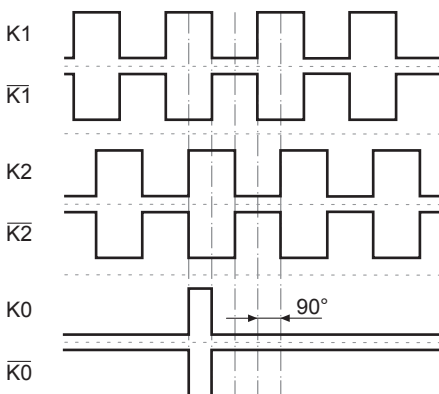
Terminal significance

+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)

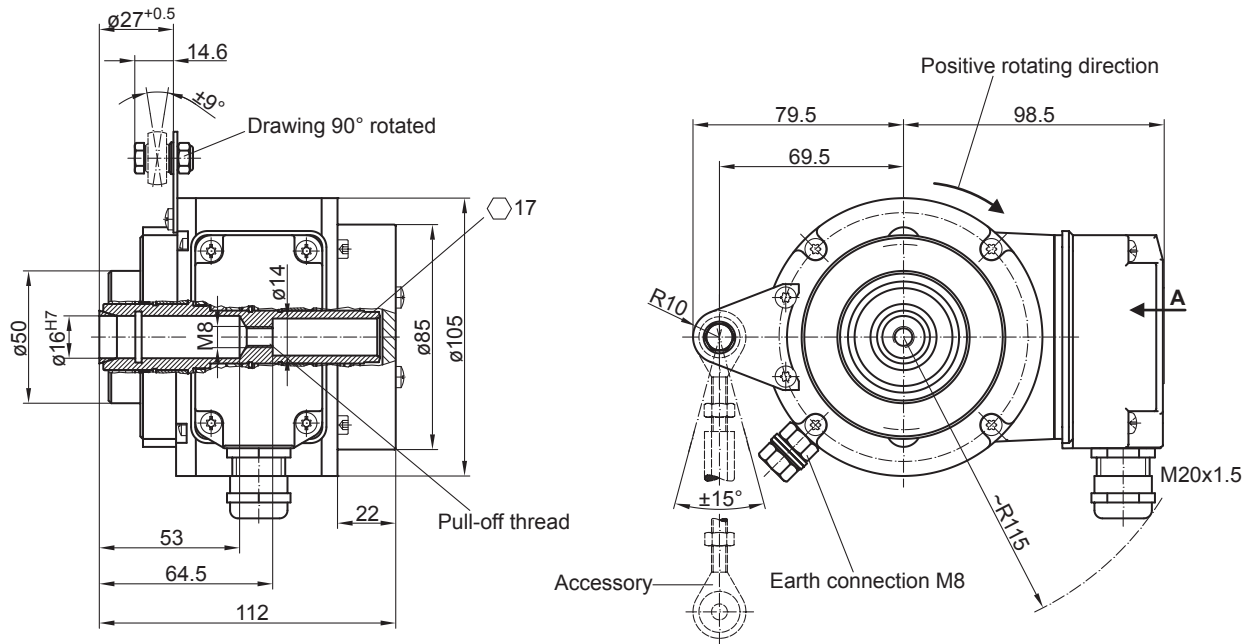


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Dimensions



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Ordering reference

	HOG11	DN	####	###	16H7	SR	KLK	ERD	(DNV)
Product	Incremental encoder	HOG11							
Output signals	K1, K2, K0	DN							
Pulse number⁽¹⁾									
	300		300						
	500		500						
	512		512						
	1000		1000						
	1024		1024						
	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 $\varnothing 16$ mm				16H7				
Sealing system	Damp protection					SR			
Connection	Terminal box, radial						KLK		
Earthing	With earthing brushes							ERD	
Approval	DNV approval								(DNV)

(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
11077087	Mounting and dismounting set