

HOG 71

Blind hollow shaft $\varnothing 12$ mm and $\varnothing 14$ mm
64...2048 pulses per revolution



Overview

- Blind hollow shaft $\varnothing 12...14$ mm
- Optical sensing method
- Compact, robust die-cast housing
- Inside connecting terminals
- Output stage HTL or TTL
- Output stage TTL with regulator UB 9...26 VDC
- High resistance to shock and vibrations
- High protection IP 66



HUBNER
BERLIN
A Baumer Brand

Technical data

Technical data - electrical ratings

Voltage supply	9...26 VDC 5 VDC ± 5 %
Consumption w/o load	≤ 100 mA
Pulses per revolution	64 ... 2048
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	A, B, C + 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)	$\varnothing 60$ mm
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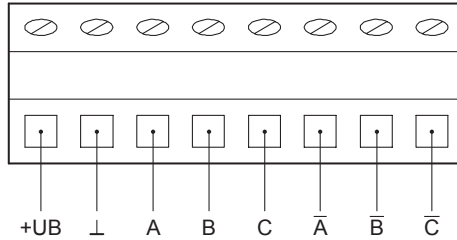
Technical data - mechanical design

Shaft type	$\varnothing 12...14$ mm (blind hollow shaft)
Admitted shaft load	≤ 30 N axial ≤ 40 N radial
Protection EN 60529	IP 66
Operating speed	≤ 10000 rpm (mechanical)
Operating torque typ.	1 Ncm
Rotor moment of inertia	55 gcm ²
Material	Housing: aluminium die-cast Shaft: stainless steel
Operating temperature	$-20...+85^\circ\text{C}$
Resistance	IEC 60068-2-6 Vibration 10 g, 10-2000 Hz IEC 60068-2-27 Shock 100 g, 6 ms
Explosion protection	II 3 G Ex ec IIC T4 Gc X (gas) II 3 D Ex tc IIIC T85°C Dc X (dust) (only with option ATEX)
Connection	Connecting terminal
Weight approx.	280 g

Terminal assignment

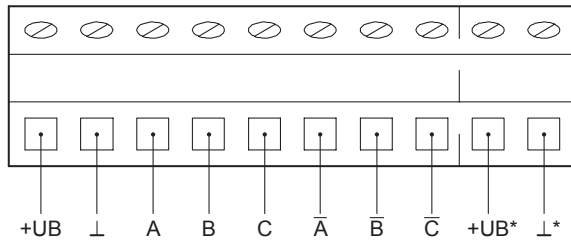
View A (see dimension)

Connecting terminal HTL



View A (see dimension)

Connecting terminal TTL



* Sensor

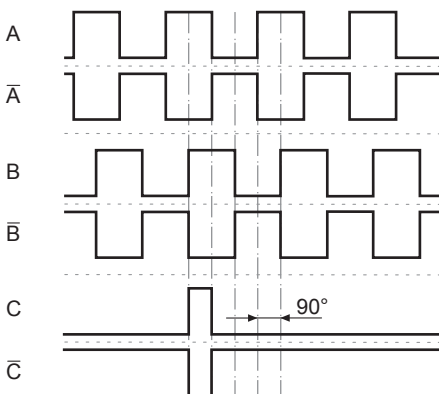
Terminal significance

+UB	Voltage supply
⊥	Ground
A	Output signal channel 1
A̅	Output signal channel 1 inverted
B	Output signal channel 2 (offset by 90° to channel 1)
B̅	Output signal channel 2 inverted
C	Zero pulse (reference signal)
C̅	Zero pulse inverted

Output signals

HTL/TTL

At positive rotating direction (see dimension)

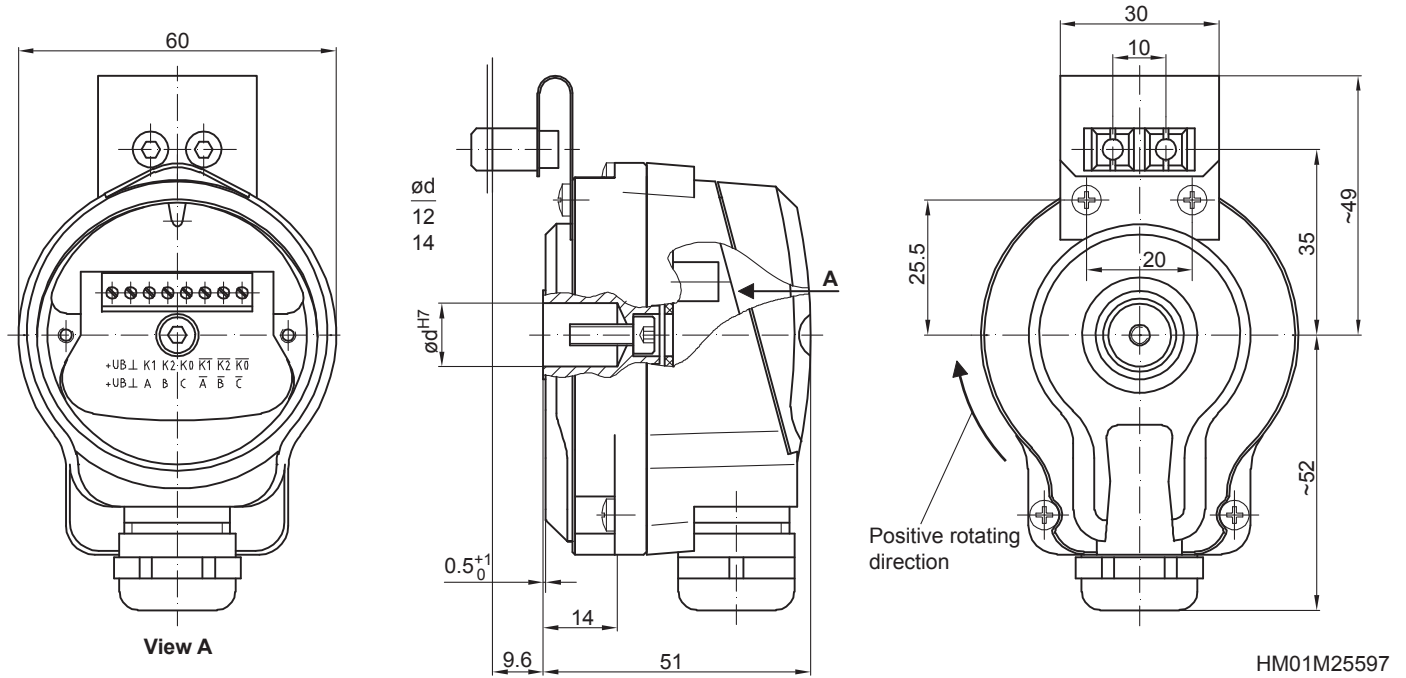


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Dimensions



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Ordering reference

		HOG71	DN	####	###	#####
Product						
Incremental encoder		HOG71				
Output signals						
A, B, C			DN			
Pulse number ⁽¹⁾						
64				64		
100				100		
180				180		
192				192		
200				200		
256				256		
360				360		
400				400		
500				500		
512				512		
720				720		
1000				1000		
1024				1024		
2048				2048		
Voltage supply / output stage						
9...26 VDC / output stage HTL (C) with inverted signals						CI
5 VDC / output stage TTL with inverted signals						TTL
9...26 VDC / output stage TTL with inverted signals						R
Shaft diameter						
Blind hollow shaft ø12 mm						12H7
Through hollow shaft ø14 mm						14H7

(1) Other pulse numbers on request.