

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



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

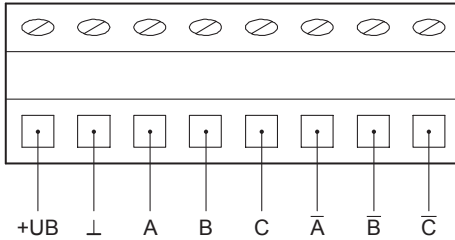
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Terminal assignment

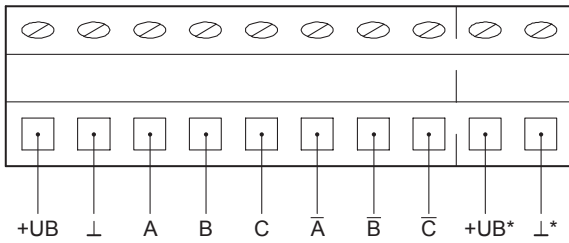
View A (see dimension)

Connecting terminal HTL



View A (see dimension)

Connecting terminal TTL



* Sensor

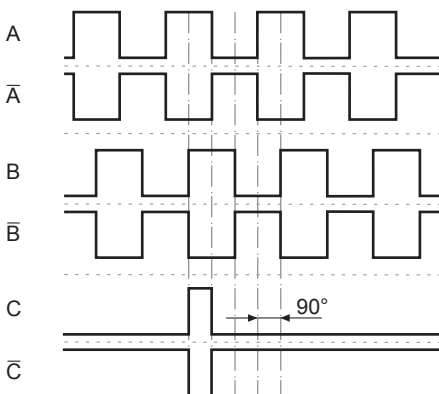
Terminal significance

+UB	Voltage supply
\perp	Ground
A	Output signal channel 1
\bar{A}	Output signal channel 1 inverted
B	Output signal channel 2 (offset by 90° to channel 1)
\bar{B}	Output signal channel 2 inverted
C	Zero pulse (reference signal)
\bar{C}	Zero pulse inverted

Output signals

HTL/TTL

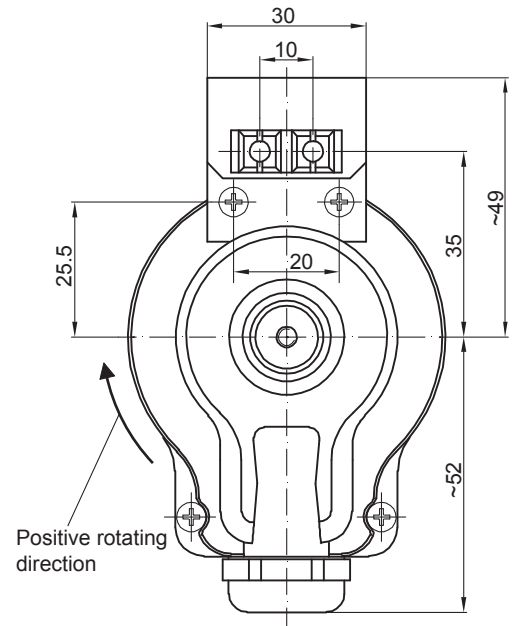
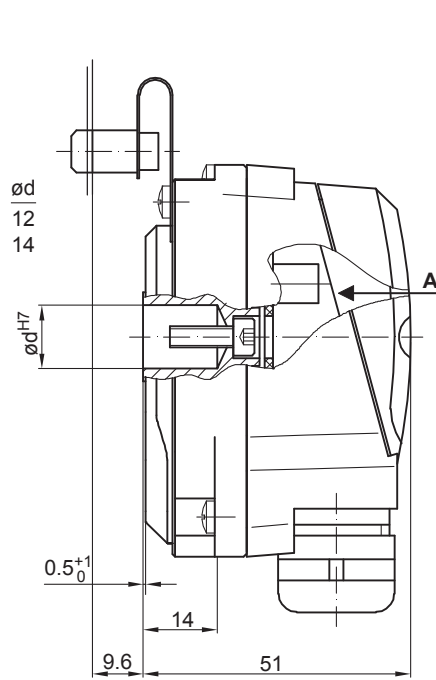
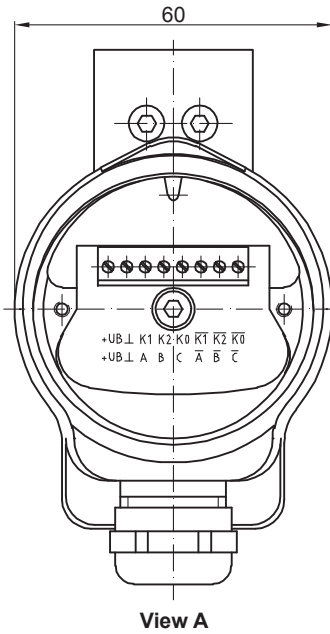
At positive rotating direction (see dimension)



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Dimensions



HM01M25597

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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 \varnothing 12 mm		12H7				
Through hollow shaft \varnothing 14 mm		14H7				

(1) Other pulse numbers on request.