

HOG 70

Blind hollow shaft $\varnothing 12$ mm and $\varnothing 14$ mm
10...10000 pulses per revolution

Overview

- Compact, robust die-cast housing
- Max. 10000 pulses per revolution
- Inside connecting terminals
- Output stage HTL or TTL
- Output stage TTL with regulator UB 9...26 VDC
- High output frequency
- 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	10 ... 10000
Phase shift	$90^\circ \pm 20^\circ$
Duty cycle	40...60 %
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output frequency	≤ 250 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

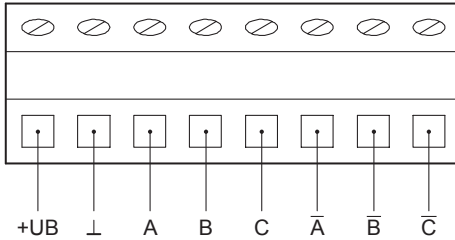
Shaft type	$\varnothing 12...14$ mm (blind hollow shaft)
Admitted shaft load	≤ 30 N axial ≤ 40 N radial
Protection EN 60529	IP 66
Operating speed	≤ 12000 rpm (mechanical)
Operating torque typ.	1 Ncm
Rotor moment of inertia	55 gcm ²
Material	Housing: aluminium die-cast Shaft: stainless steel
Operating temperature	-20...+85 °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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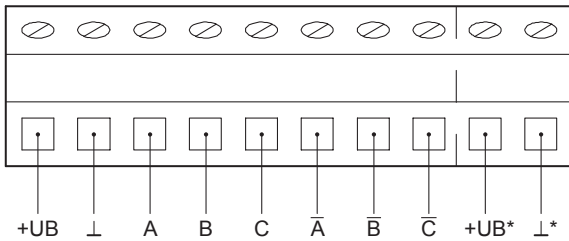
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Terminal assignment

View A (see dimension)
Connecting terminal HTL



View A (see dimension)
Connecting terminal TTL



* Sensor

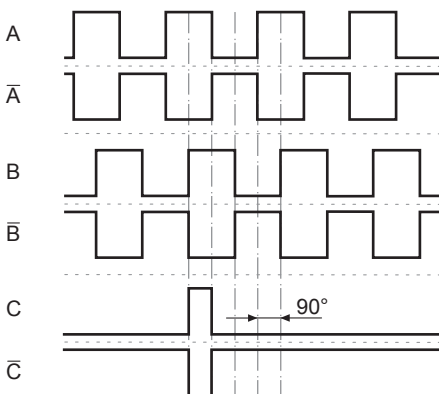
Terminal significance

+UB	Voltage supply
⊥	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

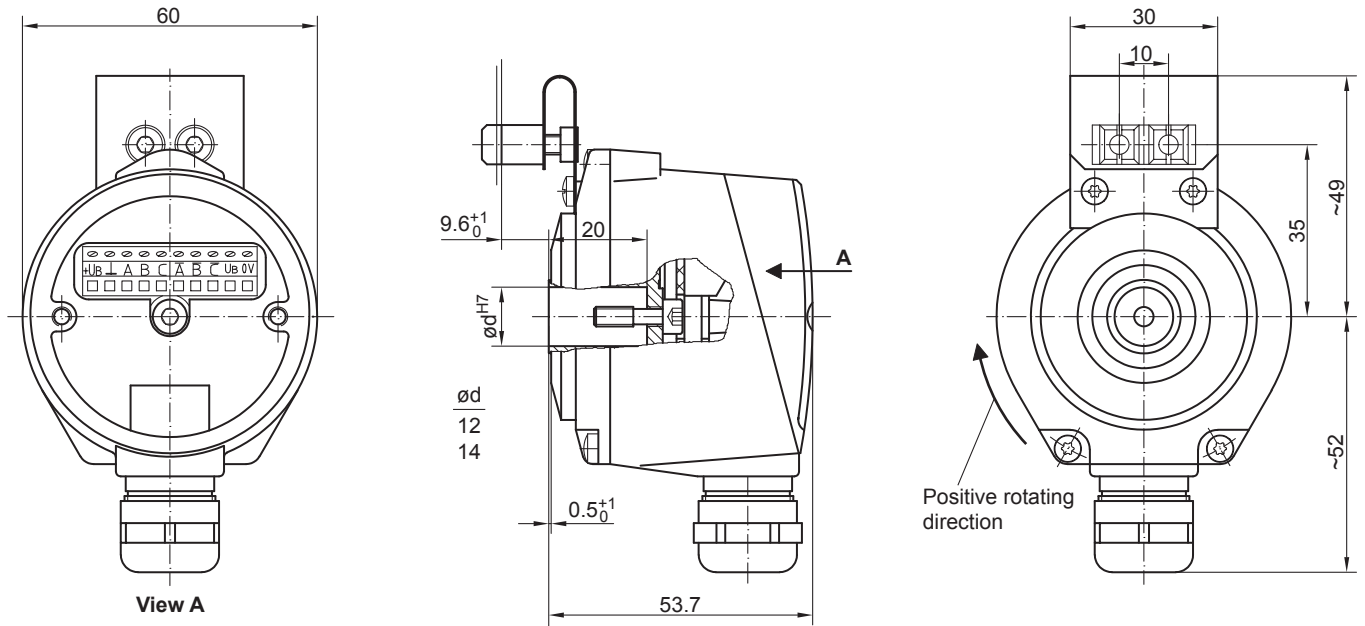
At positive rotating direction (see dimension)



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Dimensions



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Ordering reference

	HOG70	DN	####	###	#####
Product					
Incremental encoder	HOG70				
Output signals					
A, B, C		DN			
Pulse number⁽¹⁾					
10			10		
20			20		
60			60		
100			100		
200			200		
256			256		
300			300		
360			360		
400			400		
500			500		
512			512		
600			600		
625			625		
720			720		
900			900		
1000			1000		
1024			1024		
1250			1250		
1500			1500		
1800			1800		
2000			2000		
2048			2048		
2500			2500		
3000			3000		
3600			3600		
4096			4096		
5000			5000		
6000			6000		
8192			8192		
10000			10000		
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.