

HOG 14

Through hollow shaft up to $\varnothing 75$ mm
1024...5000 pulses per revolution

Overview

- Through hollow shaft up to $\varnothing 75$ mm
- Optical sensing method
- Robust light-metal housing
- Output stage HTL or TTL
- Output stage TTL with regulator UB 9...26 VDC



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	1024 ... 5000
Phase shift	$90^\circ \pm 8^\circ$
Duty cycle	44...56 %
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output frequency	≤ 250 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
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Technical data - mechanical design

Shaft type	$\varnothing 40...75$ mm (through hollow shaft)
Admitted shaft load	≤ 50 N axial ≤ 100 N radial
Protection EN 60529	IP 55
Operating speed	≤ 6300 rpm (mechanical)
Operating torque typ.	15 Ncm
Rotor moment of inertia	16.5 kgcm ² ($\varnothing 70$)
Material	Housing: aluminium Shaft: stainless steel
Operating temperature	$-30...+85^\circ\text{C}$
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 (gas) II 3 D Ex tc IIIB T135°C Dc (dust) (only with option ATEX)
Connection	Terminal box
Weight approx.	2.5 kg

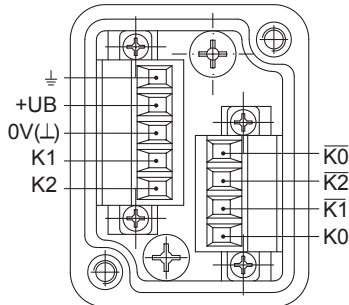
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Terminal assignment

View A (see dimension)

Connecting terminal terminal box



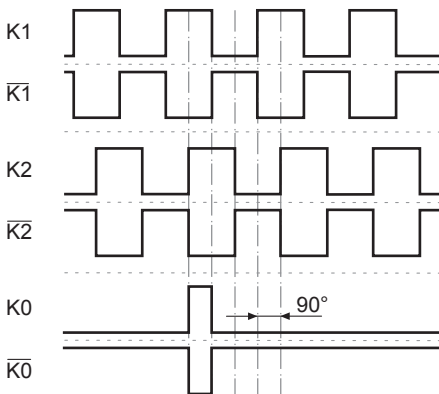
Terminal significance

+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

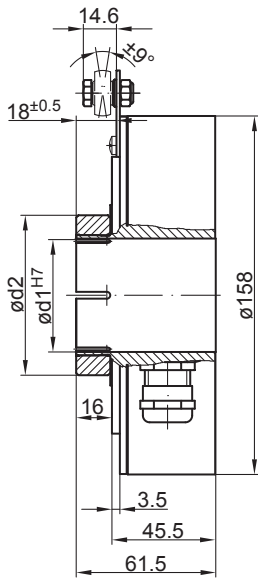
At positive rotating direction (see dimension)



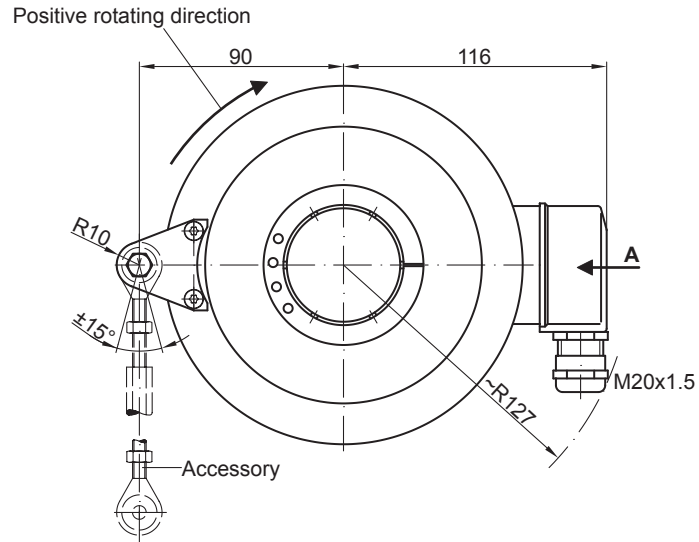
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Dimensions



$\varnothing d1$	$\varnothing d2$
40	60.5
45	65
48	68.5
50	70.5
60	81
70	94
75	98



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Ordering reference

		HOG14	DN	####	###	#####
Product						
Incremental encoder		HOG14				
Output signals						
K1, K2, K0		DN				
Pulse number						
1024		1024				
5000		5000				
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						
Through hollow shaft $\varnothing 40$ mm		40H7				
Through hollow shaft $\varnothing 45$ mm		45H7				
Through hollow shaft $\varnothing 48$ mm		48H7				
Through hollow shaft $\varnothing 50$ mm		50H7				
Through hollow shaft $\varnothing 60$ mm		60H7				
Through hollow shaft $\varnothing 70$ mm		70H7				
Through hollow shaft $\varnothing 75$ mm		75H7				