

## HOG 8

Through hollow shaft  $\varnothing 10 \dots 16$  mm  
8...5000 pulses per revolution

### Overview

- Through hollow shaft  $\varnothing 10 \dots 16$  mm
- Optical sensing method
- Compact, robust die-cast 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 $\pm 5$ %
Consumption w/o load	$\leq 100$ mA
Pulses per revolution	8 ... 5000
Phase shift	$90^\circ \pm 20^\circ$
Duty cycle	40...60 %
Reference signal	Zero pulse, width $90^\circ$
Sensing method	Optical
Output frequency	$\leq 120$ kHz $\leq 300$ kHz (on request)
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)	$\varnothing 86.5$ mm
Shaft type	$\varnothing 10 \dots 16$ mm (through hollow shaft)
Admitted shaft load	$\leq 100$ N axial $\leq 200$ N radial
Protection DIN EN 60529	IP 54
Operating speed	$\leq 12000$ rpm (mechanical)
Operating torque typ.	1 Ncm
Rotor moment of inertia	18 gcm <sup>2</sup>
Material	Housing: aluminium die-cast Shaft: stainless steel
Operating temperature	-30...+85 °C -25...+85 °C (>3072 pulses)
Resistance	IEC 60068-2-6 Vibration 10 g, 20...2000 Hz IEC 60068-2-27 Shock 100 g, 6 ms
Connection	Connecting terminal
Weight approx.	650 g

### Optional

- Cone shaft  $\varnothing 17$  mm (1:10)
- Option 2: Support plate for torque arm
- Option 1: Torque sheet

## HOG 8

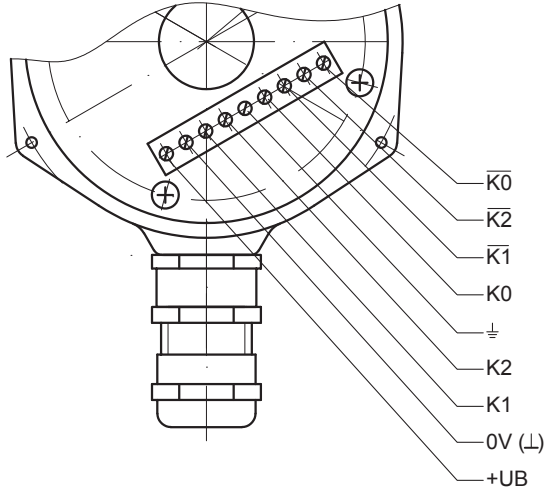
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### Terminal assignment

**View A** (see dimension)

Connecting terminal



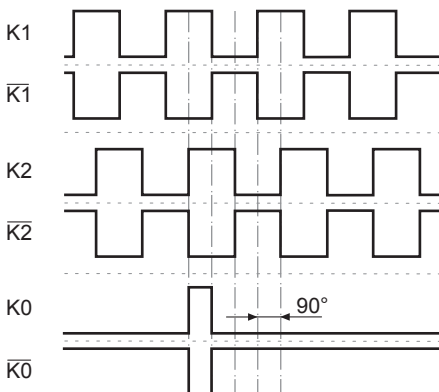
### Terminal significance

+UB	Voltage supply
0V (L)	Ground
$\perp$	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

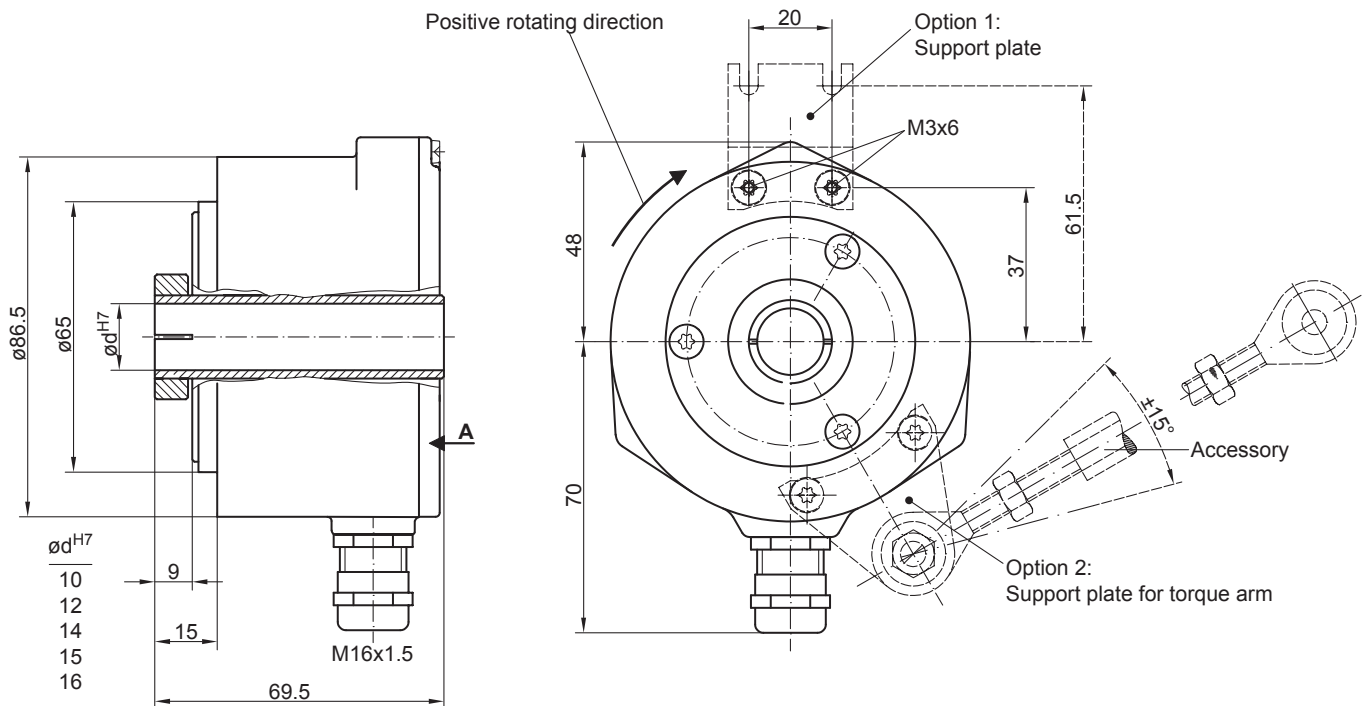
### Output signals

**HTL/TTL**

At positive rotating direction (see dimension)



## Dimensions



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### Ordering reference

	HOG8	DN	####	###	#####
<b>Product</b>					
Incremental encoder	HOG8				
<b>Output signals</b>					
K1, K2, K0		DN			
<b>Pulse number<sup>(1)</sup></b>					
8			8		
20			20		
25			25		
30			30		
36			36		
40			40		
50			50		
60			60		
62			62		
64			64		
100			100		
120			120		
176			176		
180			180		
192			192		
200			200		
250			250		
300			300		
360			360		
400			400		
500			500		
512			512		
600			600		
720			720		
900			900		
1000			1000		
1024			1024		
1042			1042		
1200			1200		
1250			1250		
2048			2048		
2500			2500		
3072			3072		
4096			4096		
5000			5000		
<b>Voltage supply / output stage</b>					
9...26 VDC / output stage HTL (C)				C	
9...26 VDC / output stage HTL (C) with inverted signals				CI	
5 VDC / output stage TTL with inverted signals				TTL	
9...30 VDC / output stage TTL with inverted signals				R	

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### Ordering reference

	HOG8	DN	####	###	#####
<b>Shaft diameter</b>					
Blind hollow shaft $\varnothing 10$ mm					10H7
Blind hollow shaft $\varnothing 12$ mm					12H7
Through hollow shaft $\varnothing 14$ mm					14H7
Blind hollow shaft $\varnothing 15$ mm					15H7
Blind hollow shaft $\varnothing 16$ mm					16H7

(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 ( $\geq 71$ mm)
11002915	Torque arm M6, length 425...460 mm ( $\geq 131$ mm)
11054917	Torque arm M6 insulated, length 67...70 mm
11072795	Torque arm M6 insulated, length 120...130 mm ( $\geq 71$ mm)
11082677	Torque arm M6 insulated, length 425...460 mm ( $\geq 131$ mm)
11071904	Mounting kit for torque arm size M6

#### Connectors and cables

Sensor cable for encoders HEK 8

#### Diagnostic accessories

11075858	Analyzer for encoders HENQ 1100
11075880	Analyzer for encoders HENQ 1100 B