Baumer
Passion for Sensors

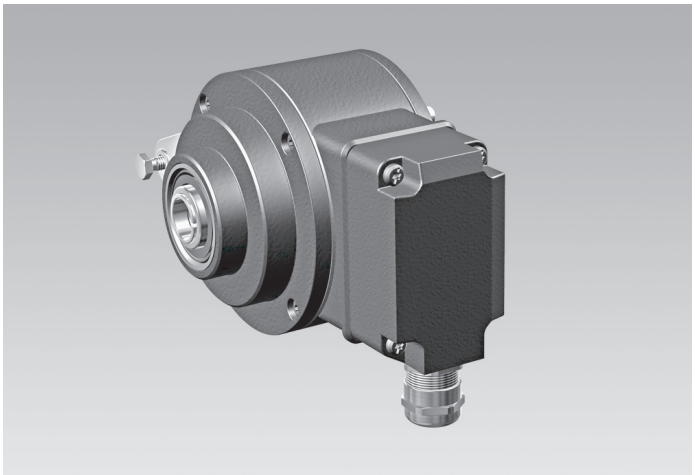
Incremental encoders

HOG 100

Blind hollow shaft ø16 mm or cone shaft ø17 mm (1:10)
1024…10000 pulses per revolution

Overview

- High resolution
- Blind hollow shaft ø16 mm or cone shaft ø17 mm (1:10)
- Optical sensing method
- Output stage HTL or TTL
- Output stage with regulator 9...26 VDC
- Hybrid bearing for extended service life
- Large terminal box, turn by 180° or axial terminal cover



HTL TTL® HUBNER BERLIN A Baumer Brand

Technical data

Technical data - electrical ratings	
Voltage supply	9...30 VDC 5 VDC ±5 % 9...26 VDC
Consumption w/o load	≤100 mA
Pulses per revolution	1024 … 10000
Phase shift	90 ° ±8°
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)	ø105 mm
Shaft type	ø16 mm (blind hollow shaft) ø17 mm (cone shaft 1:10)

Technical data - mechanical design	
Admitted shaft load	≤450 N axial ≤600 N radial
Protection DIN EN 60529	IP 66
Operating speed	≤10000 rpm (mechanical)
Operating torque typ.	6 Ncm
Rotor moment of inertia	320 gcm²
Material	Housing: aluminium die-cast Shaft: stainless steel
Operating temperature	-30...+85 °C
Resistance	IEC 60068-2-6 Vibration 20 g, 10...2000 Hz IEC 60068-2-27 Shock 300 g, 6 ms
Corrosion protection	IEC 60068-2-52 Salt mist for ambient conditions C4 according to ISO 12944-2
Explosion protection	II 3 G Ex nA IIC T4 Gc (gas) II 3 D Ex tc IIIC T135°C Dc (dust)
Connection	Terminal box Terminal cover
Weight approx.	1,5 kg

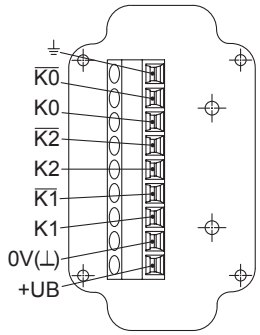
2020-02-18 The product features and technical data specified do not express or imply any warranty. Technical modifications subject to change.

HOG 100

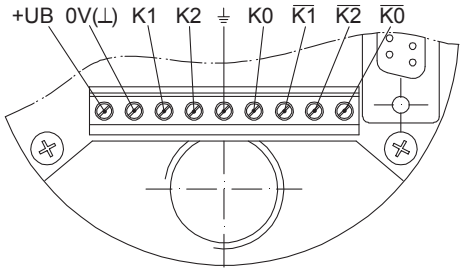
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Terminal assignment

View A *(see dimension)*
Connecting terminal terminal box, radial



View B *(see dimension)*
Connecting terminal terminal cover, axial

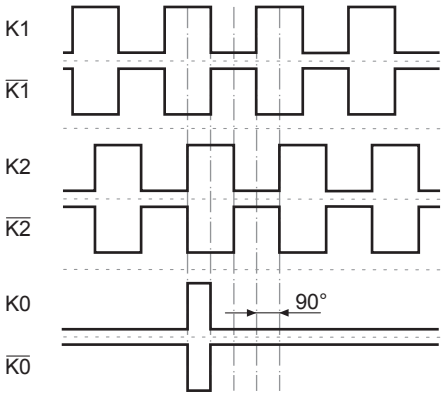


Terminal significance

+UB	Voltage supply
0V (⊥)	Ground
⏚	Earth ground (housing)
K1	Output signal channel 1
K1	Output signal channel 1 inverted
K2	Output signal channel 2 (offset by 90° to channel 1)
K2	Output signal channel 2 inverted
K0	Zero pulse (reference signal)
K0	Zero pulse inverted

Output signals

HTL/TTL
At positive rotating direction *(see dimension)*

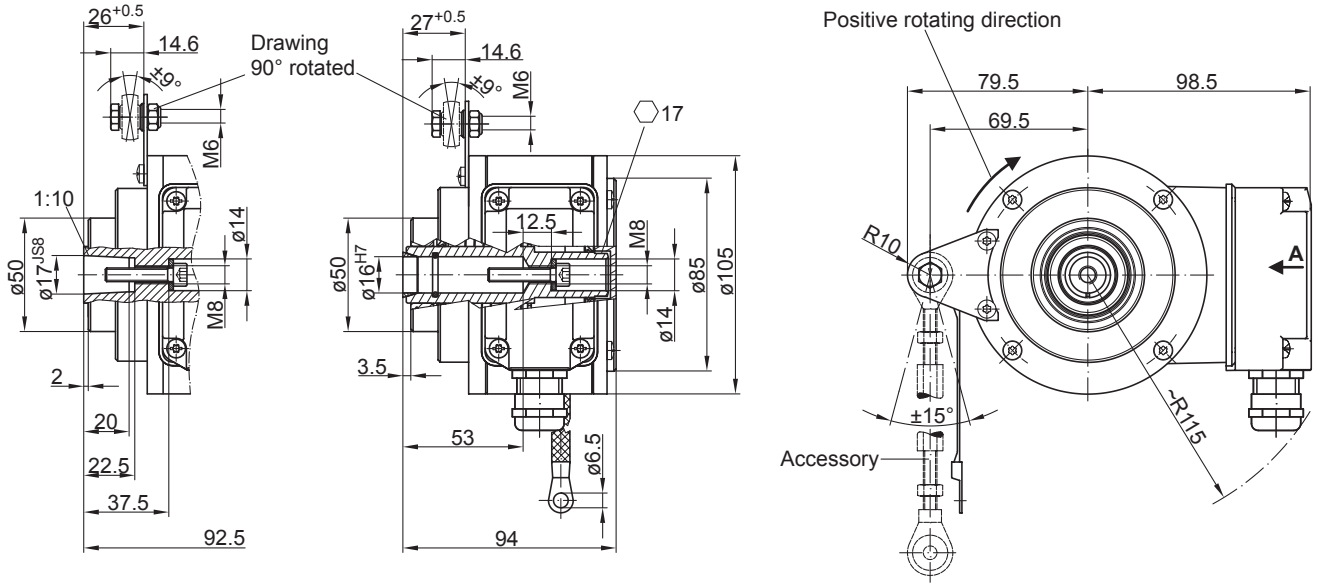


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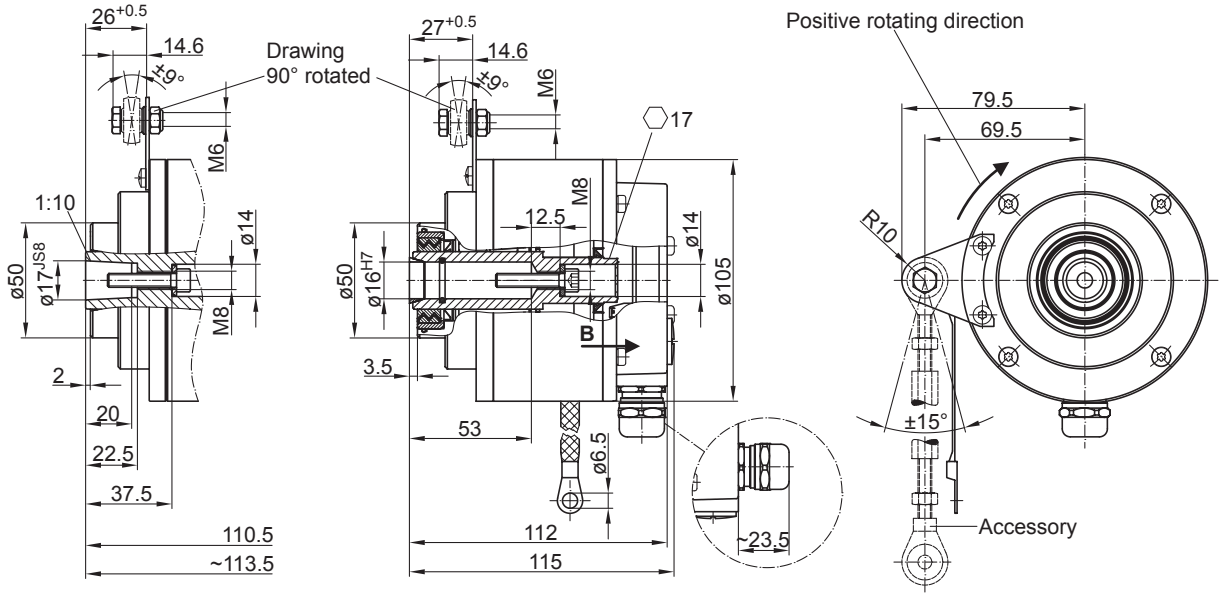
HOG 100

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Dimensions



Version with radial terminal box



Version with axial terminal cover

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HOG 100

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Ordering reference

	HOG100	DN	####	###	##	######	######
Product							
Incremental encoder	HOG100						
Output signals							
K1, K2, K0		DN					
Pulse number(1)							
1024			1024				
2000			2000				
2048			2048				
2160			2160				
2500			2500				
3072			3072				
4096			4096				
5000			5000				
10000			10000				
Voltage supply / output stage							
9...30 VDC / output stage HTL with inverted signals				I			
5 VDC / output stage TTL with inverted signals				TTL			
9...30 VDC / output stage TTL with inverted signals				R			
Sealing system							
Dust protection					LR		
Damp protection					SR		
Shaft diameter							
Blind hollow shaft ø16 mm						16H7	
Cone shaft ø17 mm (1:10)						17K	
Connection							
Terminal box, radial							KLK
Terminal cover, axial (not for option M redundant)							KLK-AX

(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 (≥71 mm)
11002915	Torque arm M6, length 425...460 mm (≥131 mm)
11054917	Torque arm M6 insulated, length 67...70 mm
11072795	Torque arm M6 insulated, length 120...130 mm (≥71 mm)
11082677	Torque arm M6 insulated, length 425...460 mm (≥131 mm)
11077197	Mounting kit for torque arm size M6 and earthing strap
11077087	Mounting and dismounting set

Connectors and cables	
	Sensor cable for encoders HEK 8

Diagnostic accessories	
11075858	Analyzer for encoders HENQ 1100
11075880	Analyzer for encoders HENQ 1100 with a power pack

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