Baumer
Passion for Sensors

Incremental encoder

OG 71

Solid shaft ø6 mm with synchro flange
100...1024 pulses per revolution

Overview

- Robust aluminium housing
- Encoder with solid shaft ø6 mm
- Optical sensing method
- Synchro flange
- Very high resistance to shock
- Output stage HTL or TTL
- Output stage TTL with regulator UB 9...26 VDC

HTL TTL®

HÜBNER 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	100 … 1024
Phase shift	90 ° ±20°
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)	ø58 mm
Shaft type	ø6 mm solid shaft

Technical data - mechanical design

Admitted shaft load	≤30 N axial ≤40 N radial
Flange	Synchro flange
Protection EN 60529	IP 66
Operating speed	≤10000 rpm (mechanical)
Operating torque typ.	1 Ncm
Rotor moment of inertia	25 gcm²
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 300 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.	300 g

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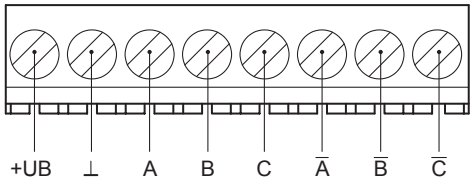
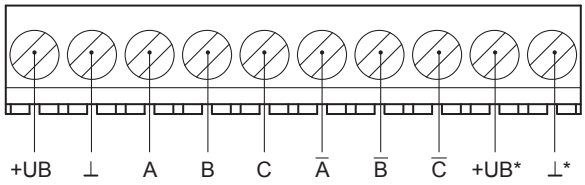
Terminal assignment

View A *(see dimension)*
Connecting terminal HTL



View A *(see dimension)*
Connecting terminal TTL



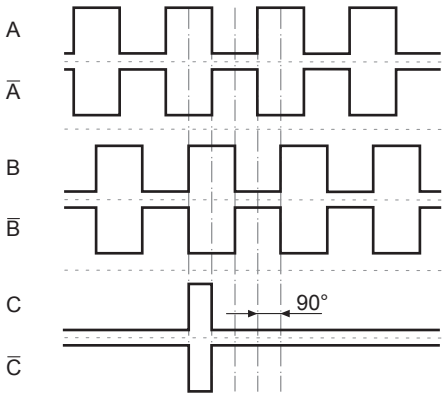
* Sensor

Terminal significance

+UB	Voltage supply
⊥	Ground
A	Output signal channel 1
Ā	Output signal channel 1 inverted
B	Output signal channel 2 (offset by 90° to channel 1)
B̄	Output signal channel 2 inverted
C	Zero pulse (reference signal)
C̄	Zero pulse inverted

Output signals

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



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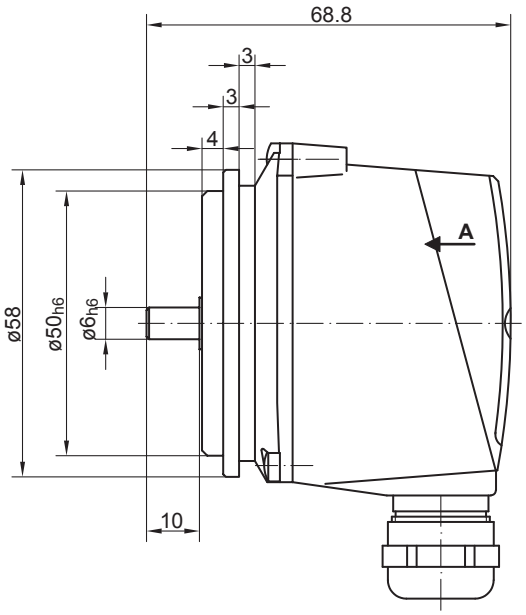
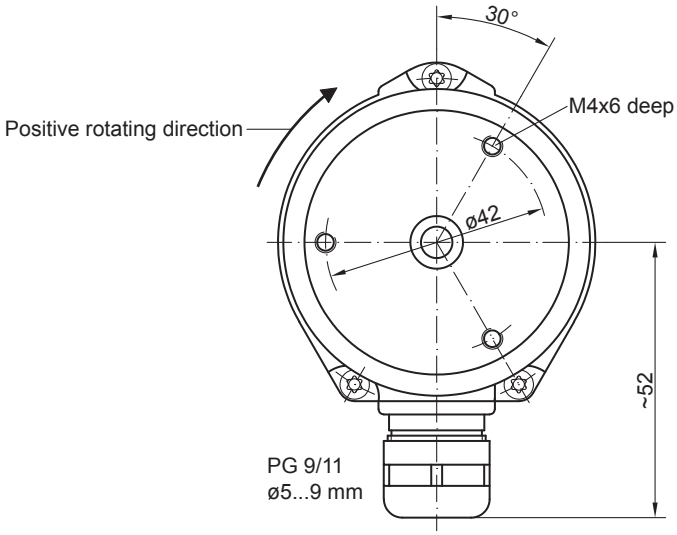
Dimensions





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Ordering reference

	OG71	DN	####	###
Product				
Incremental encoder	OG71			
Output signals				
K1, K2, K0		DN		
Pulse number(1)				
100			100	
200			200	
256			256	
360			360	
400			400	
500			500	
512			512	
720			720	
1000			1000	
1024			1024	
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...30 VDC / output stage TTL with inverted signals				R

(1) Other pulse numbers on request

Accessories

Mounting accessories	
	Spring disk coupling K35 (shaft ø6...12 mm)
	Eccentric disks (clamping claws)

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