

OG 71

Solid shaft $\varnothing 6$ mm with synchro flange
100...1024 pulses per revolution

Overview

- Robust aluminium housing
- Encoder with solid shaft $\varnothing 6$ 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



HUBNER
BERLIN
A Baumer Brand

Technical data

Technical data - electrical ratings

Voltage supply	9...26 VDC 5 VDC $\pm 5\%$
Consumption w/o load	≤ 100 mA
Pulses per revolution	100 ... 1024
Phase shift	$90^\circ \pm 20^\circ$
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

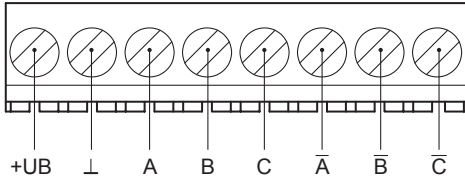
Size (flange)	$\varnothing 58$ mm
Shaft type	$\varnothing 6$ mm solid shaft

Technical data - mechanical design

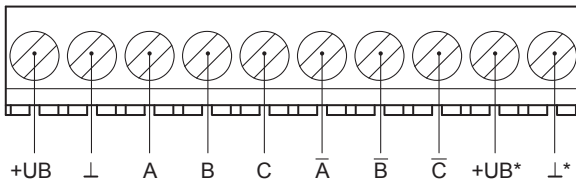
Admitted shaft load	≤ 30 N axial ≤ 40 N radial
Flange	Synchro flange
Protection EN 60529	IP 66
Operating speed	≤ 10000 rpm (mechanical)
Operating torque typ.	1 Ncm
Rotor moment of inertia	25 gcm ²
Material	Housing: aluminium die-cast Shaft: stainless steel
Operating temperature	$-20...+85^\circ\text{C}$
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

Terminal assignment

View A (see dimension)
Connecting terminal HTL



View A (see dimension)
Connecting terminal TTL



* Sensor

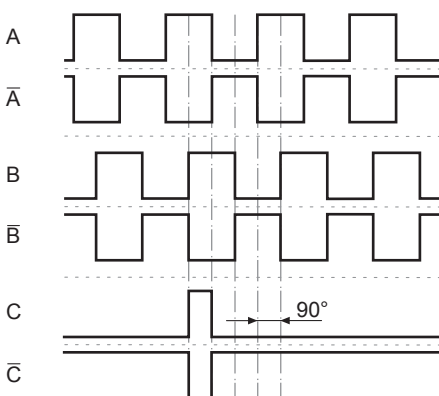
Terminal significance

+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

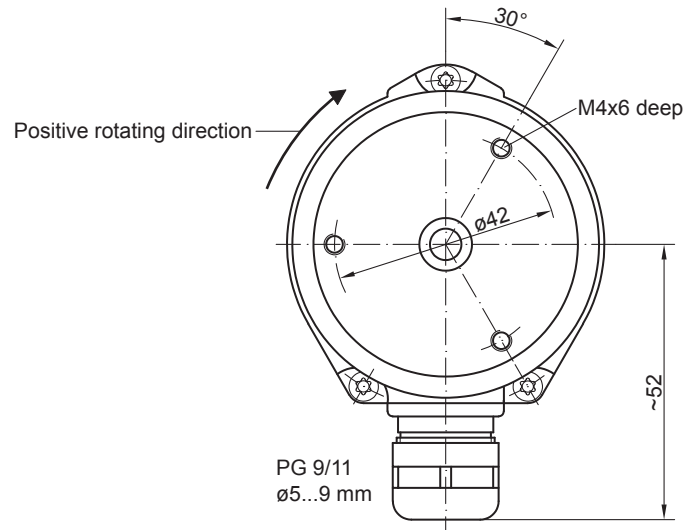
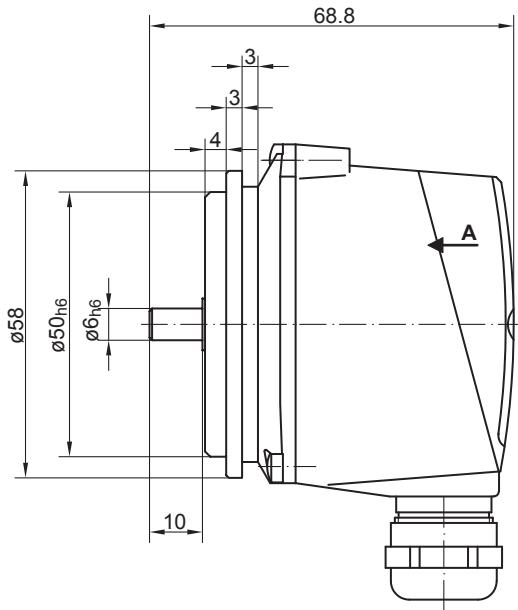
At positive rotating direction (see dimension)



OG 71

Solid shaft $\varnothing 6$ mm with synchro flange
100...1024 pulses per revolution

Dimensions



OG 71

Solid shaft $\varnothing 6$ mm with synchro flange
 100...1024 pulses per revolution

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 K 35 (shaft $\varnothing 6...12$ mm)
- Eccentric disks (clamping claws)