

OG 60

Solid shaft $\varnothing 6$ mm with synchro flange

10...10000 pulses

Overview

- Robust aluminium housing
- Encoder with solid shaft $\varnothing 6$ mm
- Optical sensing method
- Synchro flange
- 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	10 ... 10000
Phase shift	$90^\circ \pm 8^\circ$
Duty cycle	46...54 %
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)	$\varnothing 58$ mm
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Technical data - mechanical design

Shaft type	$\varnothing 6$ mm solid shaft
Admitted shaft load	≤ 50 N axial ≤ 60 N radial
Flange	Synchro flange
Protection EN 60529	IP 65
Operating speed	≤ 12000 rpm (mechanical)
Operating torque typ.	1 Ncm
Rotor moment of inertia	22 gcm ²
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 300 g, 6 ms
Connection	Flange connector M23, 12-pin Mating connector
Weight approx.	400 g

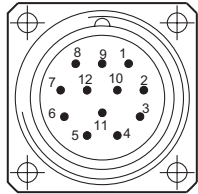
Optional

- Angle flange-connector

Terminal assignment

View A (see dimension)

Assignment flange connector



Flange connector M23,
male, 12-pin,
clockwise (CW)

Pin	Assignment
1	$\overline{K2}$
2	dnu
3	K0
4	$\overline{K0}$
5	K1
6	$\overline{K1}$
7	dnu
8	K2
9	dnu
10	0V (\perp)
11	dnu
12	+UB

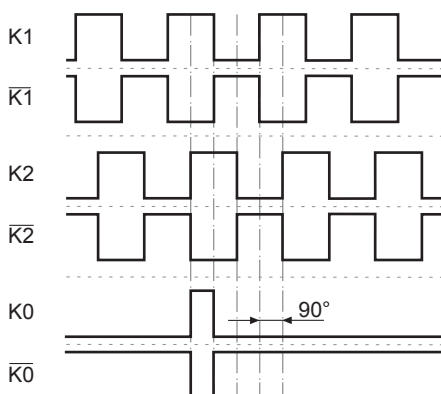
Terminal significance

+UB	Voltage supply
0V (\perp)	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
dnu	Do not use

Output signals

HTL/TTL

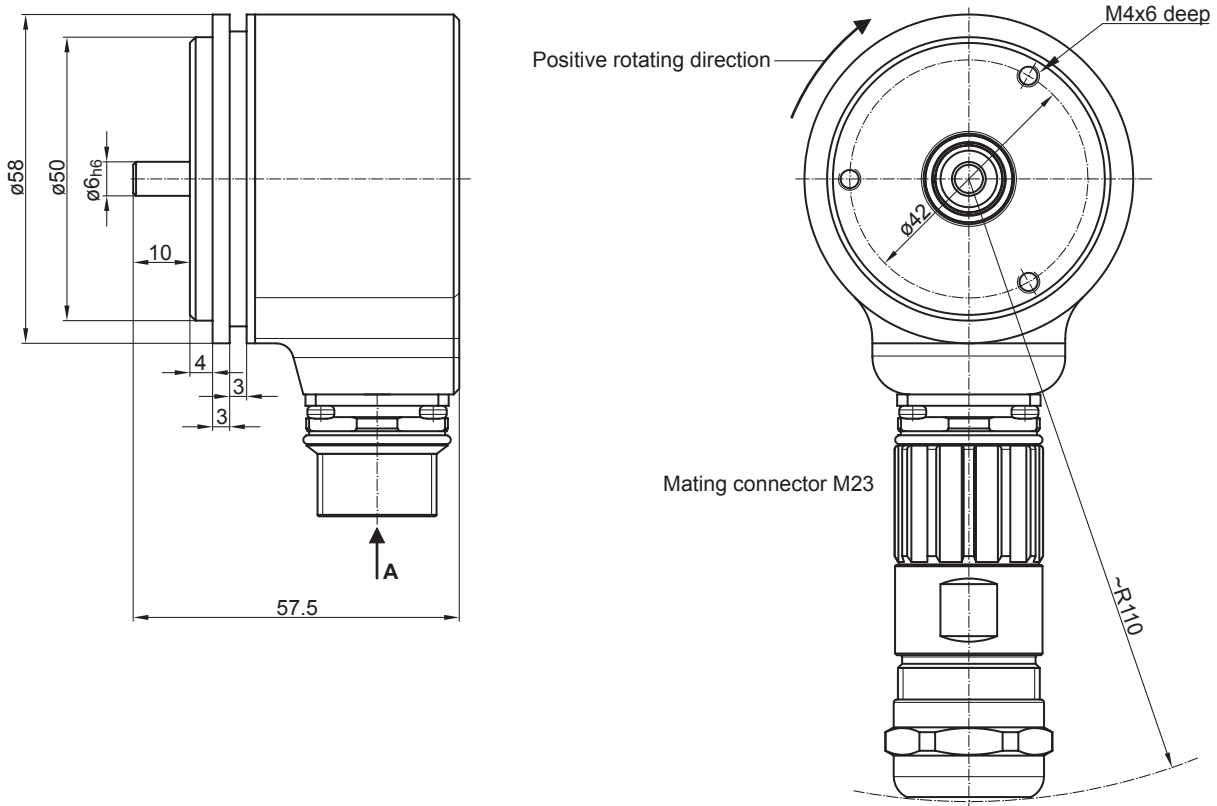
At positive rotating direction (see dimension)



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Dimensions



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Ordering reference

	OG60	DN	####	###
Product				
Incremental encoder	OG60			
Output signals				
K1, K2, K0		DN		
Pulse number⁽¹⁾				
10			10	
20			20	
60			60	
100			100	
200			200	
256			256	
300			300	
360			360	
400			400	
500			500	
512			512	
600			600	
625			625	
720			720	
900			900	
1000			1000	
1250			1250	
1500			1500	
1800			1800	
2000			2000	
2048			2048	
2500			2500	
3000			3000	
3600			3600	
4096			4096	
5000			5000	
6000			6000	
8192			8192	
10000			10000	

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 ø6...12 mm)
- Eccentric disks (clamping claws)

Connectors and cables

- Sensor cable for encoders HEK 8

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Accessories

Diagnostic accessories

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