Baumer
Passion for Sensors

Incremental encoders

OG 6

Solid shaft ø6 mm with synchro flange
100...512 pulses per revolution

Overview

- Robust aluminium housing
- Encoder with solid shaft ø6 mm
- Optical sensing method
- Synchro flange
- Output stage HTL or TTL
- Output stage TTL with regulator UB 9...24 VDC

HTL TTL®

HUBNER BERLIN
A Baumer Brand

Technical data

Technical data - electrical ratings	
Voltage supply	9...26 VDC 5 VDC ±5 % 9...24 VDC
Consumption w/o load	≤100 mA
Pulses per revolution	100 … 512
Phase shift	90 ° ±20°
Duty cycle	40…60 %
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output frequency	≤120 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)	ø58 mm
Shaft type	ø6 mm solid shaft
Admitted shaft load	≤50 N axial ≤60 N radial
Flange	Synchro flange
Protection EN 60529	IP 54
Operating speed	≤12000 rpm (mechanical)
Operating torque typ.	1 Ncm
Rotor moment of inertia	18 gcm²
Material	Housing: aluminium Shaft: stainless steel
Operating temperature	-20...+70 °C
Resistance	IEC 60068-2-6 Vibration 10 g, 10-2000 Hz IEC 60068-2-27 Shock 100 g, 6 ms
Connection	Connecting terminal
Weight approx.	300 g

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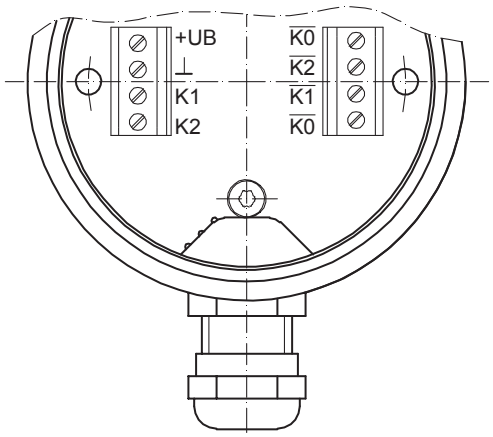
Terminal assignment

View A *(see dimension)*
Connecting terminal

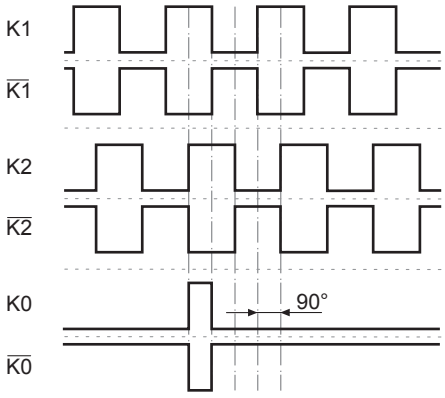


Terminal significance

+UB	Voltage supply
0V (⊥)	Ground
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)*



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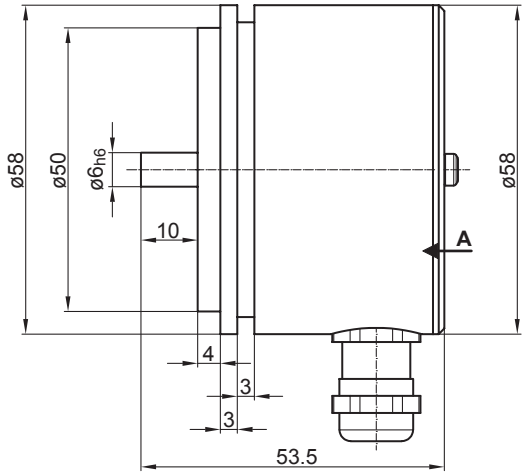
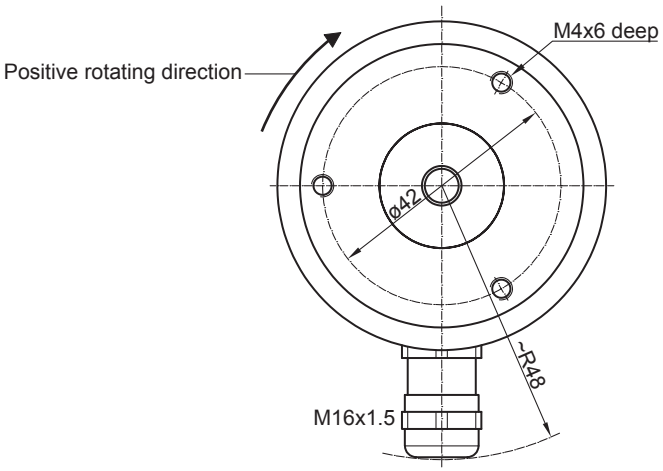
Dimensions





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Ordering reference

	OG6	DN	####	###
Product				
Incremental encoder	OG6			
Output signals				
K1, K2, K0		DN		
Pulse number(1)				
100			100	
200			200	
360			360	
500			500	
512			512	
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)