

OG 8

Solid shaft $\varnothing 11$ mm with EURO flange B10

1...5000 pulses per revolution

Overview

- Robust aluminium housing
- Solid shaft $\varnothing 11$ mm
- Optical sensing method
- EURO flange B10
- Output stage HTL or TTL
- Output stage TTL with regulator UB 9...26 VDC



Technical data

Technical data - electrical ratings

Voltage supply	9...26 VDC 5 VDC ± 5 %
Consumption w/o load	≤ 100 mA
Pulses per revolution	1 ... 5000
Phase shift	$90^\circ \pm 20^\circ$
Duty cycle	40...60 %
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output frequency	≤ 120 kHz ≤ 300 kHz (on request)
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

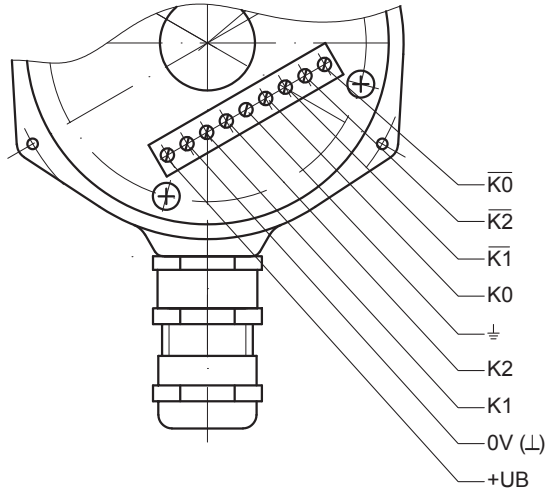
Technical data - mechanical design

Size (flange)	$\varnothing 115$ mm
Shaft type	$\varnothing 11$ mm solid shaft
Admitted shaft load	≤ 50 N axial ≤ 60 N radial
Flange	EURO flange B10
Protection EN 60529	IP 54
Operating speed	≤ 12000 rpm (mechanical)
Operating torque typ.	1 Ncm
Rotor moment of inertia	18 gcm ²
Material	Housing: aluminium die-cast Shaft: stainless steel
Operating temperature	-30...+85 °C -25...+85 °C (>3072 pulses)
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.	700 g

Terminal assignment

View A (see dimension)

Connecting terminal



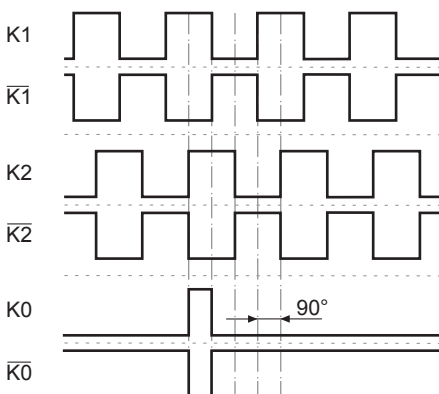
Terminal significance

+UB	Voltage supply
0V (L)	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

Output signals

HTL/TTL

At positive rotating direction (see dimension)

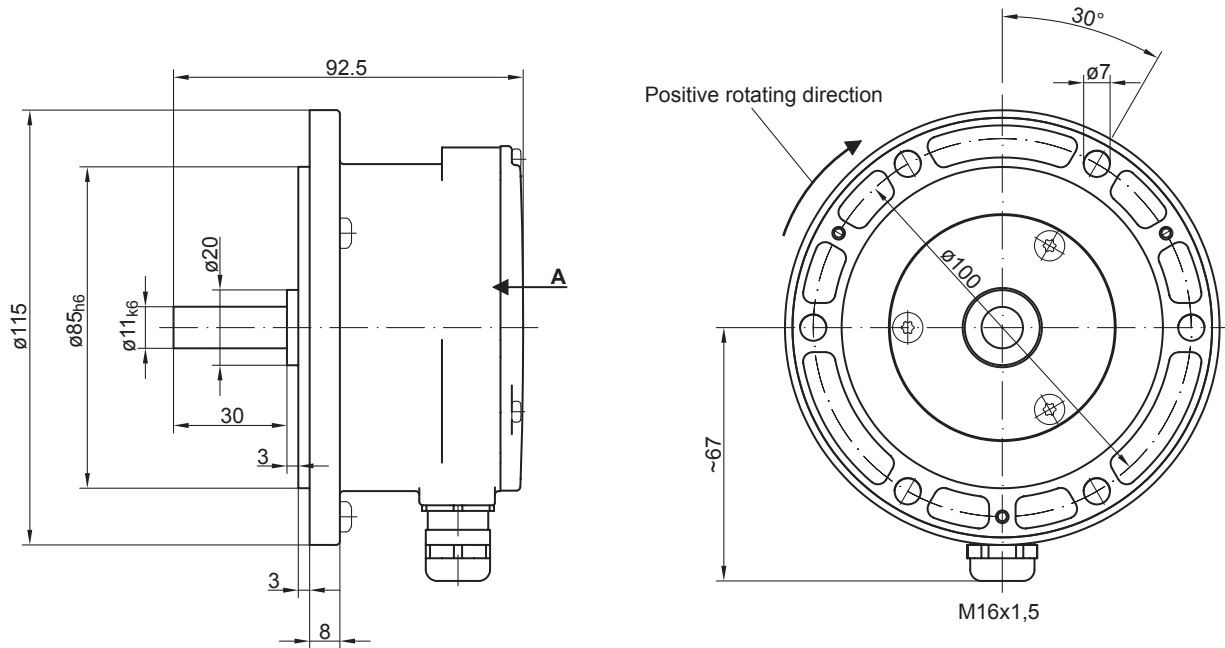


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Dimensions



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Ordering reference

	OG8	##	####	###
Product				
Incremental encoder	OG8			
Output signals				
K1, K2		D		
K1, K2, K0		DN		
Pulse number⁽¹⁾				
1 ⁽²⁾			1	
2 ⁽²⁾			2	
3 ⁽²⁾			3	
4 ⁽²⁾			4	
5 ⁽²⁾			5	
6 ⁽²⁾			6	
8			8	
10 ⁽²⁾			10	
11 ⁽²⁾			11	
12 ⁽²⁾			12	
15 ⁽²⁾			15	
20			20	
25			25	
30			30	
36			36	
40			40	
50			50	
60			60	
62			62	
64			64	
100			100	
120			120	
176			176	
180			180	
192			192	
200			200	
250			250	
300			300	
360			360	
400			400	
500			500	
512			512	
600			600	
720			720	
900			900	
1000			1000	
1024			1024	
1042			1042	
1200			1200	
1250			1250	
2048			2048	
2500			2500	
3072			3072	
4096			4096	
5000			5000	

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Ordering reference

	OG8	##	####	###
Voltage supply / output stage				
9...26 VDC / output stage HTL (C)				C
9...26 VDC / output stage HTL (C) with inverted signals				CI
9...30 VDC / output stage TTL with inverted signals				R
5 VDC / output stage TTL with inverted signals				TTL

- (1) Other pulse numbers on request.
(2) Only without zero pulse, version D

Accessories

Mounting accessories

Spring disk coupling K 35 (shaft ø6...12 mm)
Spring disk coupling K 50 (shaft ø11...16 mm)
Spring disk coupling K 60 (shaft ø11...22 mm)