

Incremental encoders

Solid shaft $\varnothing 6$ mm with synchro flange

10...10000 pulses

OG 60



OG 60

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
Approvals	CE, UL approval / E256710

Features

- 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

Optional

- Angel flange connector

Technical data - mechanical design

Size (flange)	$\varnothing 58$ mm
Shaft type	$\varnothing 6$ mm solid shaft
Admitted shaft load	≤ 50 N axial ≤ 60 N radial
Flange	Synchro flange
Protection DIN EN 60529	IP 65
Operating speed	≤ 12000 rpm (mechanical)
Operating torque typ.	1 Ncm
Rotor moment of inertia	22 gcm ²
Materials	Housing: aluminium Shaft: stainless steel
Operating temperature	$-30...+85$ °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

Subject to modification in technic and design. Errors and omissions excepted.

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Part number

OG60 **DN**

Voltage supply / signals

CI 9...26 VDC / output stage HTL (C) with inverted signals
 TTL 5 VDC / output stage TTL with inverted signals
 R 9...26 VDC / output stage TTL with inverted signals

Pulse number - see table

Output signals

DN K1, K2, K0

Pulse number

10	300	625	1800	4096
20	360	720	2000	5000
60	400	900	2048	6000
100	500	1000	2500	8192
200	512	1250	3000	10000
256	600	1500	3600	

Other pulse numbers on request.

Accessories

Eccentric disks
(clamping claws)

Connectors and cables

HEK 8 Sensor cable for encoders

Mounting accessories

K 35 Spring washer coupling
for solid shaft $\varnothing 6...12$ mm

Diagnostic accessories

11075858 Analyzer for encoders HENQ 1100

Incremental encoders

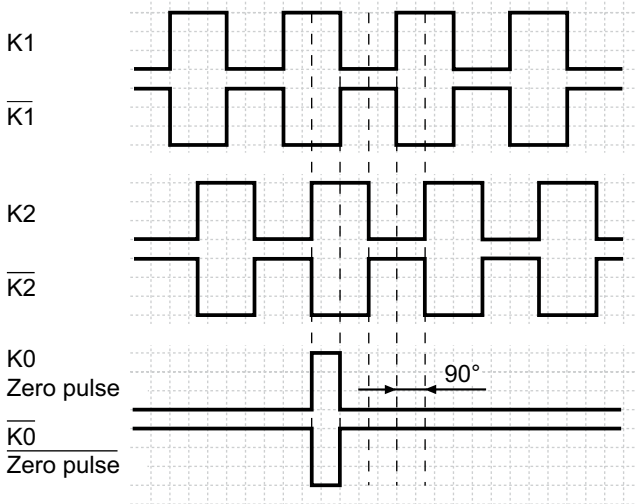
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Output signals

At positive rotating direction



Terminal significance

+UB	Voltage supply (for the device)
\perp ; \downarrow ; GND; 0 V	Ground (for the signals)
\perp ; \nearrow	Earth ground (housing)
K1; A; A+	Output signal channel 1
$\overline{K1}$; \overline{A} ; A-	Output signal channel 1 inverted
K2; B; B+	Output signal channel 2 (offset by 90° to channel 1)
$\overline{K2}$; \overline{B} ; B-	Output signal channel 2 (offset by 90° to channel 1) inverted
K0; C; R; R+	Zero pulse (reference signal)
$\overline{K0}$; \overline{C} ; \overline{R} ; R-	Zero pulse (reference signal) inverted
dnu	Do not use

Terminal assignment

View A- Flange connector M23, 12 pin, male contacts, 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	\perp
11	dnu
12	+UB

