

Incremental encoders

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

1...5000 pulses per revolution

OG 8



OG 8

Features

- 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 - 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
Approvals	CE, UL approval / E256710

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 DIN EN 60529	IP 54
Operating speed	≤ 12000 rpm (mechanical)
Operating torque typ.	1 Ncm
Rotor moment of inertia	18 gcm ²
Materials	Housing: aluminium die-cast Shaft: stainless steel
Operating temperature	$-30...+85$ °C $-25...+85$ °C (>3072 pulses per revolution)
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

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

Incremental encoders

Solid shaft ø11 mm with EURO flange B10

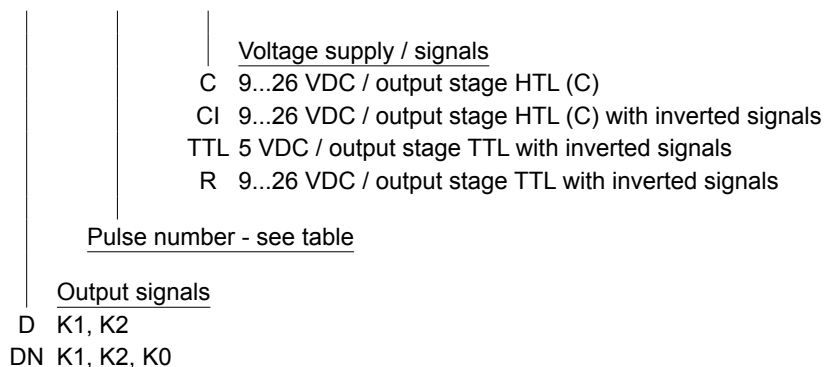
1...5000 pulses per revolution

OG 8

Part number

Incremental encoder

OG8



Pulse number

1	12	62	300	1024
2	15	64	360	1042
3	20	100	400	1200
4	25	120	500	1250
5	30	176	512	2048
6	36	180	600	2500
8	40	192	720	3072
10	50	200	900	4096
11	60	250	1000	5000

* Pulse number 1,2,3,4,5,6,10,11,12,15 only without zero pulse, version D
Other pulse numbers on request.

Accessories

Connectors and cables

HEK 8 Sensor cable for encoders

Mounting accessories

K 35 Spring washer coupling for solid shaft ø6...12 mm

K 50 Spring washer coupling for solid shaft ø11...16 mm

K 60 Spring washer coupling for solid shaft ø11...22 mm

Diagnostic accessories

11075858 Analyzer for encoders HENQ 1100

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

Incremental encoders

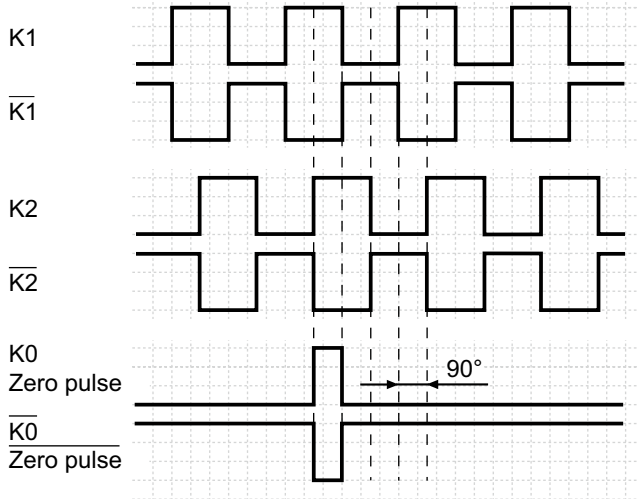
Solid shaft $\varnothing 11$ mm with EURO flange B10

1...5000 pulses per revolution

OG 8

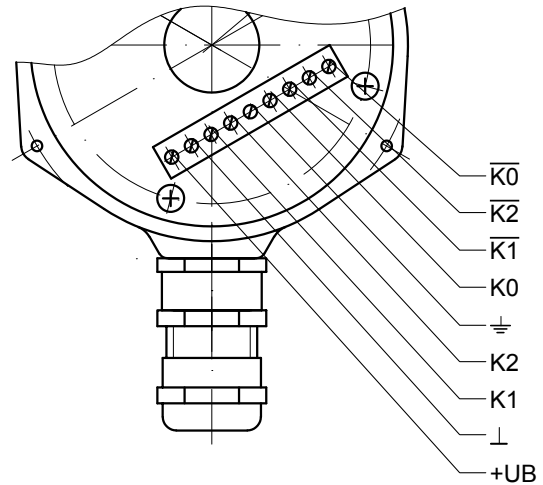
Output signals

At positive rotating direction



Terminal assignment

View A - Connecting terminal



Terminal significance

+UB	Voltage supply (for the device)
⊥; ↓; GND; 0 V	Ground (for the signals)
⊥; ↘	Earth ground (housing)
K1; A; A+	Output signal channel 1
K1-bar; A-bar; A-	Output signal channel 1 inverted
K2; B; B+	Output signal channel 2 (offset by 90° to channel 1)
K2-bar; B-bar; B-	Output signal channel 2 (offset by 90° to channel 1) inverted
K0; C; R; R+	Zero pulse (reference signal)
K0-bar; C-bar; R-bar; R-	Zero pulse (reference signal) inverted
dnu	Do not use

Incremental encoders

Solid shaft $\varnothing 11$ mm with EURO flange B10
1...5000 pulses per revolution

OG 8

Dimensions

