

Incremental encoders

Shaft $\varnothing 6$ mm with synchro flange

Resolution 10...10000 pulses

OG 71



OG 71

Features

- Robust aluminium housing
- Encoder with shaft $\varnothing 6$ mm
- Optical sensing
- Synchro flange
- Especially high resistance to shock
- Logic level TTL with regulator UB 9...26 VDC
- Logic level HTL with power linedriver

Technical data - electrical ratings

Voltage supply	5 VDC ± 5 % 9...26 VDC
Consumption w/o load	≤ 100 mA
Resolution (steps/turn)	100...1024
Phase shift	$90^\circ \pm 20^\circ$
Scan ratio	40...60 %
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output frequency	≤ 120 kHz
Output signals	K1, K2, K0 + inverted
Output circuit	TTL (RS422) HTL (power linedriver)
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4
Approval	UL approval / E256710

Technical data - mechanical design

Dimensions (flange)	$\varnothing 58$ mm
Shaft	$\varnothing 6$ mm
Shaft loading	≤ 30 N axial ≤ 40 N radial
Flange	Synchro flange
Protection DIN EN 60529	IP 66
Operating speed	≤ 10000 rpm (mechanical)
Operating torque typ.	1 Ncm
Rotor moment of inertia	25 gcm ²
Materials	Housing: aluminium die-cast Shaft: stainless steel
Operating temperature	$-20...+85$ °C
Resistance	IEC 60068-2-6 Vibration 10 g, 10-2000 Hz IEC 60068-2-27 Shock 300 g, 6 ms
Explosion protection	II3G Ex nA IIC T4 Gc X (gas) II3D Ex tc IIIC T85°C Dc X (dust)
Connection	Connecting terminal
Weight approx.	350 g

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Part number

OG 71 **DN**

Voltage supply / signals

CI 9...26 VDC / output circuit HTL (C) with inverted signals

TTL 5 VDC / output circuit TTL with inverted signals

R 9...26 VDC / output circuit TTL with inverted signals

See part number (pulses)

Output signals

DN K1, K2, K0

Accessories

Eccentric disks
(clamping claws)

Connectors and cables

HEK 8 Sensor cable for encoders

Mounting accessories

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

Diagnostic accessories

HENQ 1100 Analyzer for encoders

Part number (pulses)

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 upon request.

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