

Incremental encoders

Function control with EMS (Enhanced Monitoring System)

Shaft with EURO flange B10

Resolution 100...2500 pulses

POG 10.2



POG 10.2

Features

- Function control with EMS (Enhanced Monitoring System)
- Operating status LED and error output
- Suitable to drive for lines max. 500 m (TTL)
- Opto ASIC
- Logic level TTL with regulator UB 9...30 VDC
- Logic level HTL with power linedriver
- Encoder with shaft $\varnothing 11$ mm
- EURO flange B10

Technical data - electrical ratings

Voltage supply	5 VDC ± 5 % 9...30 VDC
Consumption w/o load	≤ 100 mA
Resolution (steps/turn)	100...2500
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	HTL (power linedriver) TTL (RS422)
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4
Approvals	UL approval / E256710, ROHS compliant, CE conform

Technical data - mechanical design

Dimensions (flange)	$\varnothing 115$ mm
Shaft	$\varnothing 11$ mm
Shaft loading	≤ 300 N axial ≤ 450 N radial
Flange	EURO flange B10
Protection DIN EN 60529	IP 66
Operating speed	≤ 12000 rpm (mechanical)
Operating torque typ.	2 Ncm
Rotor moment of inertia	200 gcm ²
Materials	Housing: aluminium die-cast Shaft: stainless steel
Operating temperature	$-40...+100$ °C
Resistance	IEC 60068-2-6 Vibration 20 g, 10-2000 Hz IEC 60068-2-27 Shock 200 g, 6 ms
Explosion protection	II3G Ex nA IIC T4 Gc (gas) II3D Ex tc IIIC T135°C Dc (dust)
Connection	Terminal box
Weight approx.	1.9 kg

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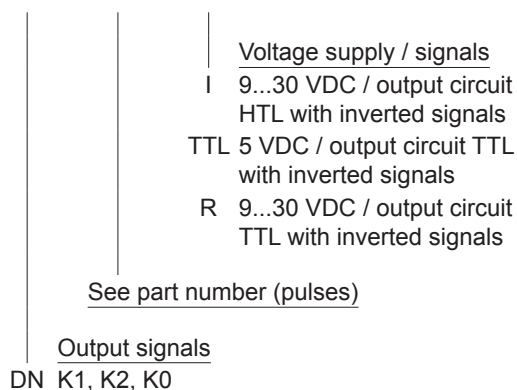
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Part number

POG 10.2 **DN**



Accessories

Connectors and cables

HEK 8	Sensor cable for encoders
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Mounting accessories

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

Diagnostic accessories

HENQ 1100	Analyzer for encoders
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Part number (pulses)

100	192	300	512	1000
120	200	360	600	1024
128	250	400	720	2048
180	256	500	900	2500

Other pulse numbers upon request.

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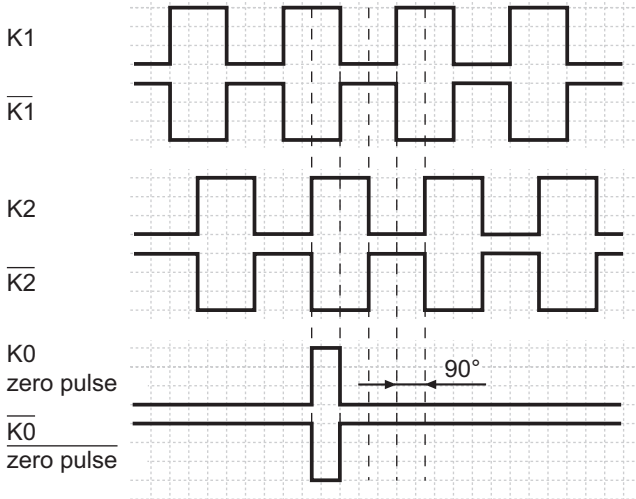
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Output signals

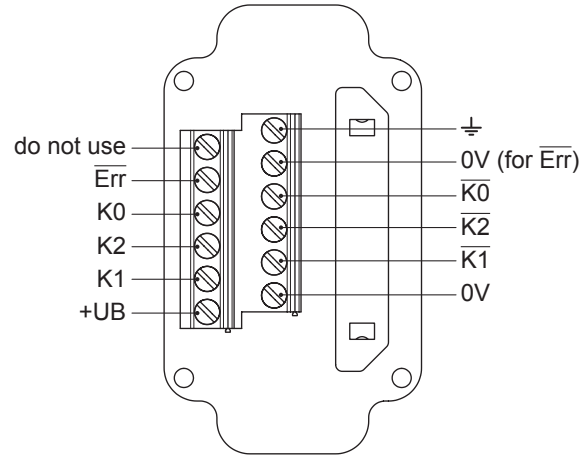
at positive rotating direction



Terminal assignment

View A

Connecting terminal in terminal box



LED status / error output

flashing red light*	Error of signal sequence, marker pulse or cycles (Error output = high-low alternation)
red	Overload output transistors (Error output = low)
flashing green light	Encoder o.k., rotating (Error output = high)
green	Encoder o.k., stopped (Error output = high)
no light	no output voltage connection or wrong connection (Error output = low)

* only on rotating encoder

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Dimensions

