

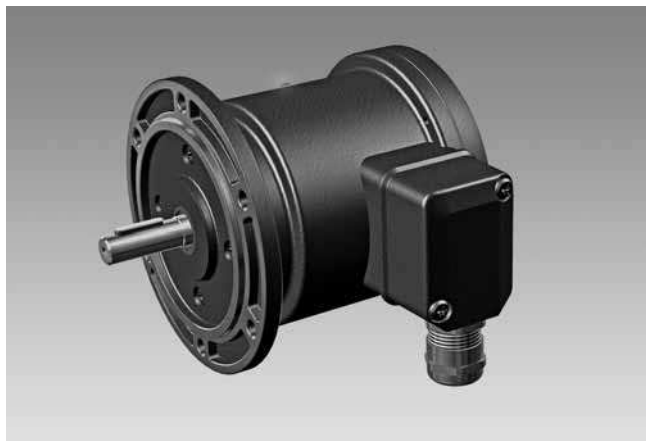
Incremental encoders

Function control with EMS (Enhanced Monitoring System)

Shaft with EURO flange B10

Resolution 100...2500 pulses

POG 9.2



POG 9.2

Features

- Function control with EMS (Enhanced Monitoring System)
- Operating status LED and error output
- Suitable to drive for lines max. 350 m (HTL)
- 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)	$\varnothing 90$ mm
Shaft	$\varnothing 11$ mm
Shaft loading	≤ 250 N axial ≤ 350 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	-30...+100 °C
Resistance	IEC 60068-2-6 Vibration 10 g, 10-2000 Hz IEC 60068-2-27 Shock 300 g, 1 ms
Explosion protection	II3G Ex nA IIC T4 Gc (gas) II3D Ex tc IIIB T135°C Dc (dust)
Connection	Terminal box
Weight approx.	1.3 kg

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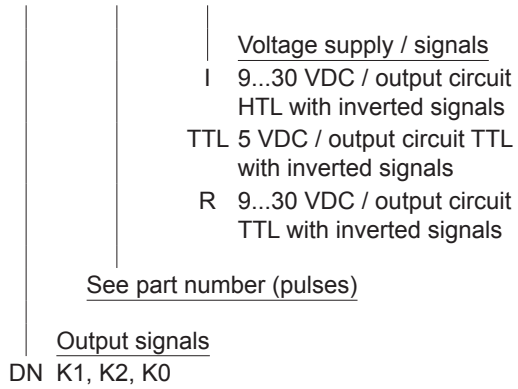
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Part number

POG 9.2 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
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K 50	Spring disk coupling for shaft ø11...16 mm
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K 60	Spring disk coupling for shaft ø11...22 mm
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Diagnostic accessories

HENQ 1100	Analyzer for encoders
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Part number (pulses)

100	200	400	900	1250
120	250	500	1000	2048
176	256	512	1024	2500
180	300	600	1042	
192	360	720	1200	

Other pulse numbers upon request.

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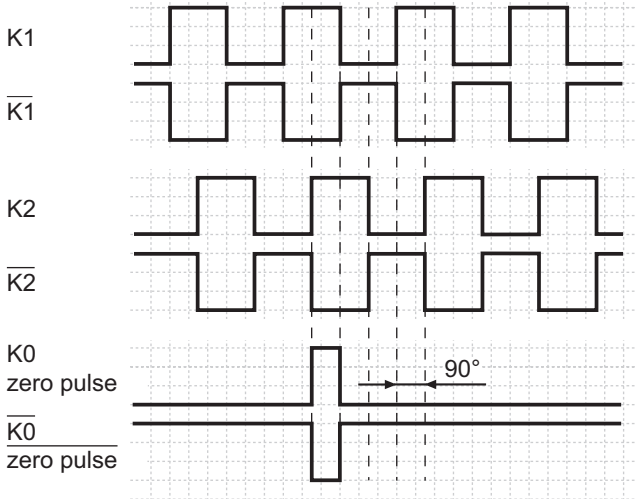
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Output signals

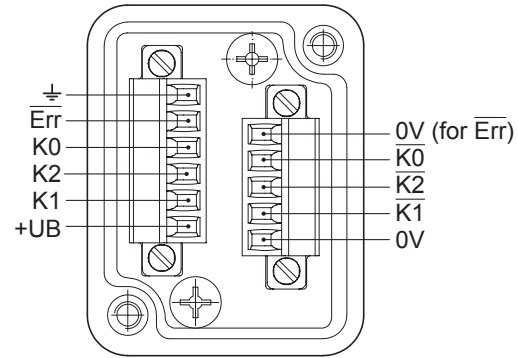
at positive rotating direction



Terminal assignment

View A

Connecting terminal in terminal box



LED status / error output

flash light red*	Error of signal sequence, marker pulse or cycles (Error output = high-low alternation)
red	Overload output transistors (Error output = low)
flash light green	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 at rotating encoder

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Dimensions

