

Combination

Twin encoder with two electrically separated systems

Solid shaft with EURO flange B10

300...5000 pulses per revolution

POG 9 G



POG 9 G

Features

- Twin encoder featuring two separate systems
- TTL output driver for cable length up to 500 m
- Very high resistance to shock
- EURO-flange B10 / solid shaft $\varnothing 11$ mm

Optional

- Function control with EMS
(Enhanced Monitoring System)

Technical data - electrical ratings

Voltage supply	9...30 VDC 5 VDC ± 5 %
Consumption w/o load	≤ 100 mA
Pulses per revolution	300...5000
Phase shift	$90^\circ \pm 20^\circ$
Scan ratio	40...60 %
Reference signal	Zero pulse, width 90°
Output frequency	≤ 120 kHz ≤ 300 kHz (on request)
Output signals	K1, K2, K0 + inverted Error output (only EMS)
Output stages	HTL-P (power linedriver) TTL/RS422
Sensing method	Optical
Interference immunity	EN 61000-6-2
Emitted interference	EN 61000-6-3
Approvals	CE, UL approval / E256710

Technical data - mechanical design

Size (flange)	$\varnothing 90$ mm
Shaft type	$\varnothing 11$ mm solid shaft
Admitted shaft load	≤ 250 N axial ≤ 350 N radial
Flange	EURO flange B10
Protection DIN EN 60529	IP 56
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 -25...+100 °C (>3072 pulses per revolution)
Resistance	IEC 60068-2-6 Vibration 10 g, 10-2000 Hz IEC 60068-2-27 Shock 300 g, 1 ms
Explosion protection	II 3 G Ex nA IIC T4 Gc (gas) II 3 D Ex tc IIIB T135°C Dc (dust)
Connection	2x terminal box
Weight approx.	2 kg

Combination

Twin encoder with two electrically separated systems

Solid shaft with EURO flange B10

300...5000 pulses per revolution

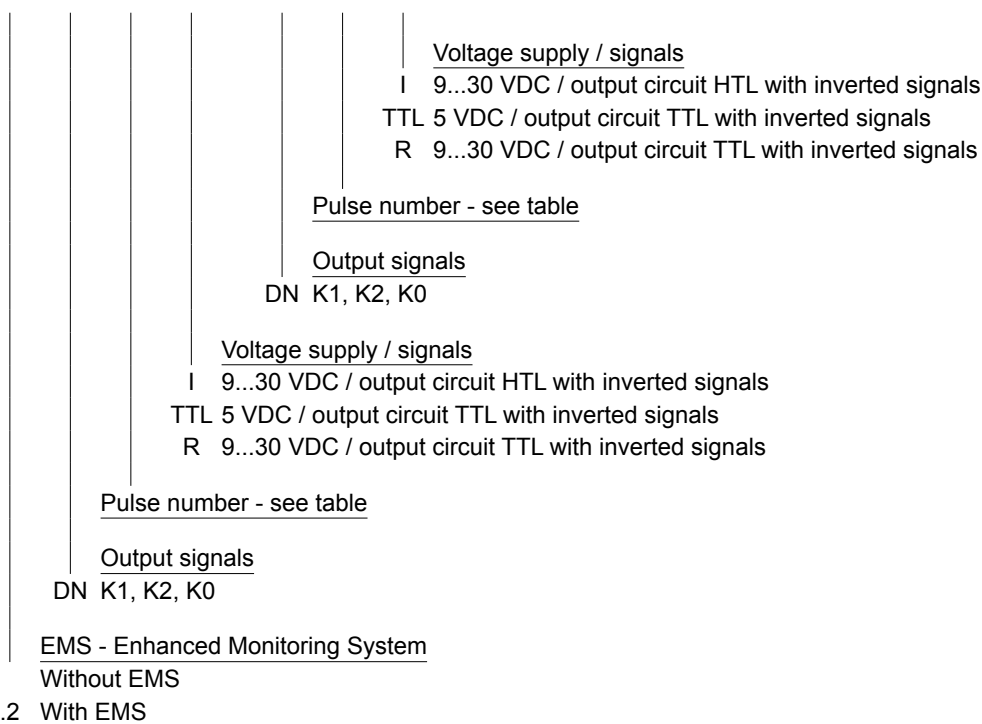
POG 9 G

Part number

Incremental twin encoder

POG9G

	DN			/	DN		
--	----	--	--	---	----	--	--



Pulse number

300	1000	2048	4096
500	1024	2500	5000
512	1200	3072	

Other pulse numbers on request.

Combination

Twin encoder with two electrically separated systems

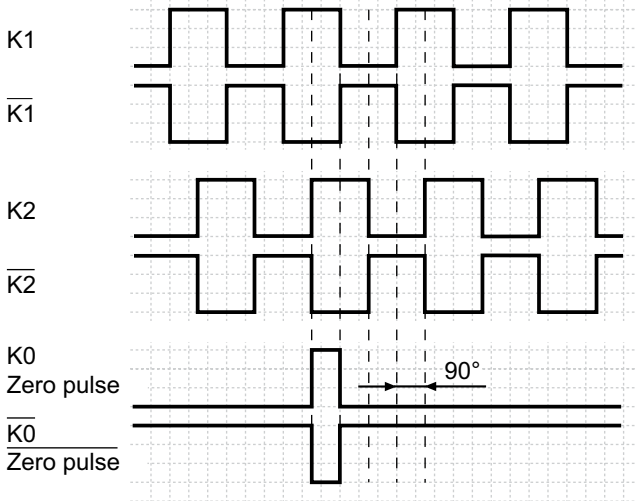
Solid shaft with EURO flange B10

300...5000 pulses per revolution

POG 9 G

Output signals

At positive rotating direction



Accessories

Connectors and cables

HEK 8 Sensor cable for encoders

Mounting accessories

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

K 50 Spring washer coupling for solid shaft $\varnothing 11...16$ mm

K 60 Spring washer coupling for solid shaft $\varnothing 11...22$ mm

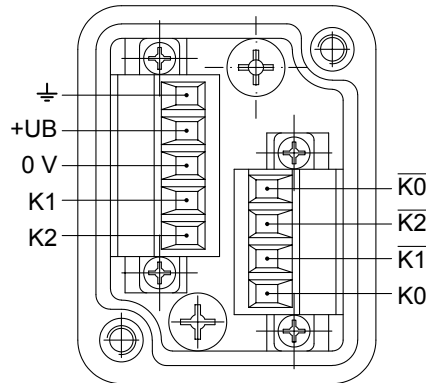
Diagnostic accessories

HENQ 1100 Analyzer for encoders

Terminal assignment

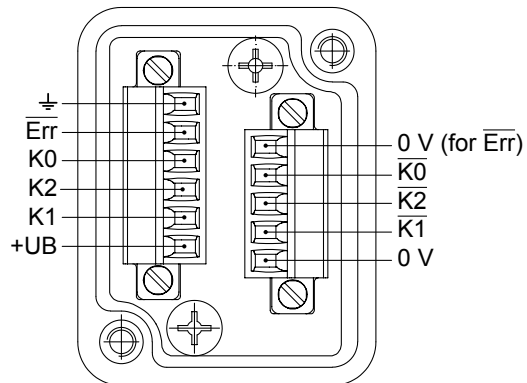
View A

Connecting terminal in terminal box



Option EMS: View A

Connecting terminal in terminal box



Option EMS: LED status / Error output

Flash light red*	Error of signal sequence, zero pulse or pulses (Error output = HIGH-LOW alternation)
Red	Overload output driver (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

Combination

Twin encoder with two electrically separated systems

Solid shaft with EURO flange B10

300...5000 pulses per revolution

POG 9 G

Dimensions

