

# Incremental encoders

## Solid shaft with EURO flange B10

### 1024...10000 pulses per revolution

#### POG 90



POG 90

#### Technical data - electrical ratings

Voltage supply	9...30 VDC 5 VDC $\pm$ 5 % 9...26 VDC
Consumption w/o load	$\leq$ 100 mA
Pulses per revolution	1024...10000
Phase shift	90° $\pm$ 8°
Scan ratio	44...56 %
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output frequency	$\leq$ 250 kHz
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

#### Features

- Encoder with solid shaft  $\varnothing$ 11 mm
- EURO flange B10
- Big terminal box, turn by 180°
- Optical sensing method
- Up to 10000 pulses per revolution
- Output stage HTL or TTL
- Output stage TTL with regulator UB 9...26 VDC

#### Optional

- Second shaft end
- Housing foot (B3)

#### Technical data - mechanical design

Size (flange)	$\varnothing$ 115 mm
Shaft type	$\varnothing$ 11 mm solid shaft
Admitted shaft load	$\leq$ 250 N axial $\leq$ 350 N radial
Flange	EURO flange B10
Protection DIN EN 60529	IP 66
Operating speed	$\leq$ 10000 rpm (mechanical)
Operating torque typ.	2 Ncm
Rotor moment of inertia	320 gcm <sup>2</sup>
Materials	Housing: aluminium die-cast alloy and stainless steel Shaft: stainless steel
Operating temperature	-20...+85 °C
Resistance	IEC 60068-2-6 Vibration 10 g, 10-2000 Hz IEC 60068-2-27 Shock 100 g, 11 ms
Explosion protection	II 3 G Ex nA IIC T4 Gc (gas) II 3 D Ex tc IIIC T135°C Dc (dust)
Connection	Terminal box
Weight approx.	1.8 kg

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#### Part number

#### Incremental encoder

POG 90 **DN**

			Voltage supply / signals
			I 9...30 VDC / output circuit HTL with inverted signals
			TTL 5 VDC / output circuit TTL with inverted signals
			R 9...26 VDC / output circuit TTL with inverted signals
			<u>Pulse number - see table</u>
			<u>Output signals</u>
			DN K1, K2, K0

#### 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

HENQ 1100 Analyzer for encoders

#### Pulse number

1024	2048	3072	4096	10000
2000	2500	3600	5000	

Other pulse numbers on request.

# Incremental encoders

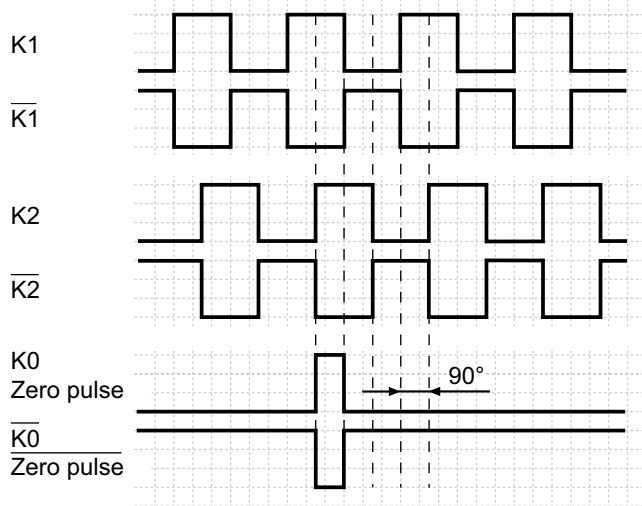
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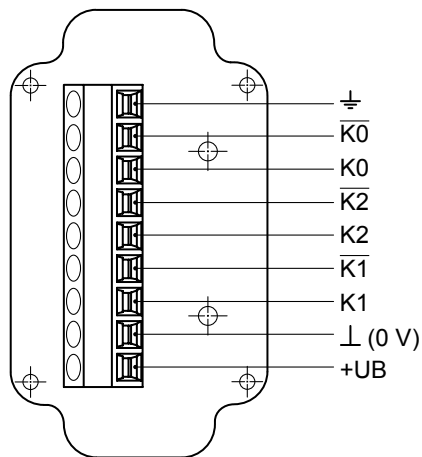
### Output signals

At positive rotating direction



### Terminal assignment

View A - Connecting terminal in terminal box



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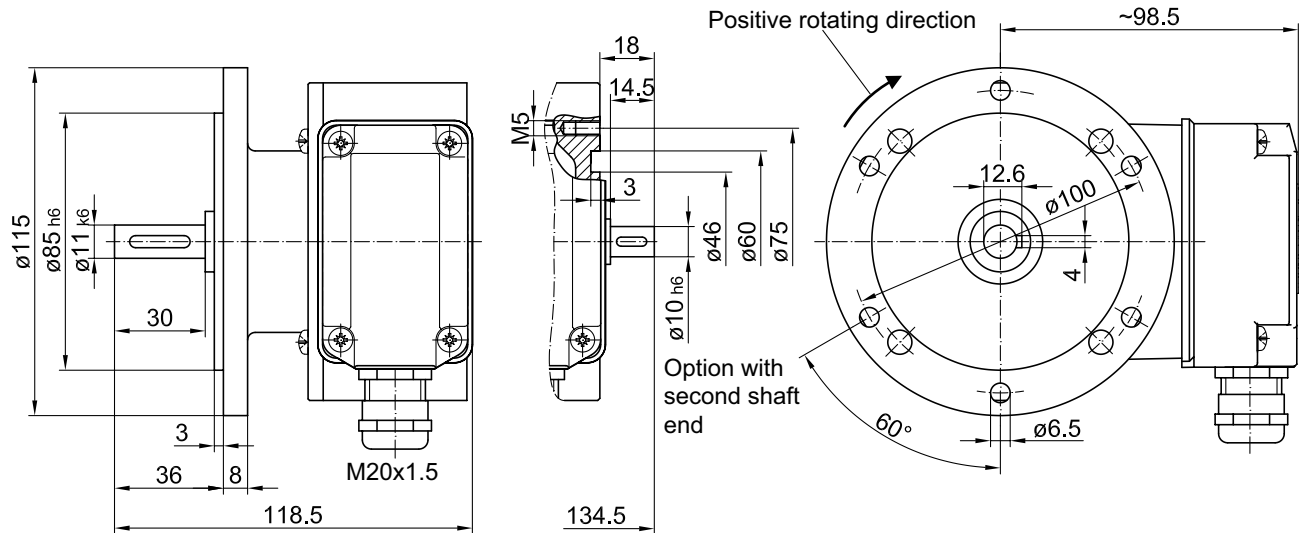
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#### Dimensions

##### POG 90 - Version with Euro flange (B10)



##### POG 90 - Version with Euro flange (B10) and housing foot (B3)

