

# Sine encoders

Ex approval ATEX II 2G Ex de IIC T5/T6 Gb and IECEx Ex de IIC T5/T6 Gb

Resolution 1024...2048 pulses

## EEx OG 9 S



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### Features

- Sine Encoder / ATEX / IECEx
- Optical sensing
- Ex-approved by ATEX II 2G Ex de IIC T5/T6 Gb
- Ex de IIC T5/T6 Gb
- Shaft  $\varnothing$ 11 mm
- Robust light-metal housing
- Top-quality sine signals
- Low harmonic content (patented LowHarmonics technology)
- Big terminal box, turn by 90°

### Technical data - electrical ratings

Voltage supply	5 VDC $\pm$ 5 % 9...30 VDC
Consumption w/o load	$\leq$ 90 mA
Resolution (steps/turn)	1024...2048
Phase shift	90°
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output signals	K1, K2, K0 + inverted
Output circuit	Sine/cosine 1 Vpp
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4
Offset sine/cosine amplitude	$\leq$ 20 mV
Harmonics share approx.	-50 dB
Spectrum	250 kHz (-3 dB)

### Technical data - mechanical design

Dimensions (flange)	$\varnothing$ 120 mm
Shaft	$\varnothing$ 11 mm
Shaft loading	$\leq$ 200 N axial $\leq$ 350 N radial
Flange	EURO flange B10
Protection DIN EN 60529	IP 56
Operating speed	$\leq$ 6000 rpm (T5, mechanical) $\leq$ 4500 rpm (T6, mechanical)
Operating torque typ.	4 Ncm
Rotor moment of inertia	290 gcm <sup>2</sup>
Materials	Housing: aluminium die-cast Shaft: stainless steel
Operating temperature	-20...+55 °C
Resistance	DIN EN 60068-2-6 Vibration 10 g, 50-2000 Hz DIN EN 60068-2-27 Shock 100 g, 6 ms
Explosion protection	II 2G Ex de IIC T5/T6 Gb Ex de IIC T5/T6 Gb
Connection	Terminal box
Weight approx.	3.5 kg

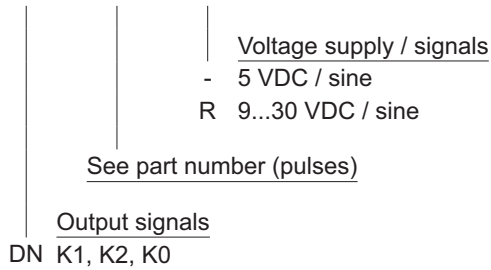
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## Part number

EEx OG 9 S **DN**



## Accessories

### Connectors and cables

HEK 8 Sensor cable for encoders

### Mounting accessories

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

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

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

### Diagnostic accessories

HENQ 1100 Analyzer for encoders

## Part number (pulses)

1024 | 2048

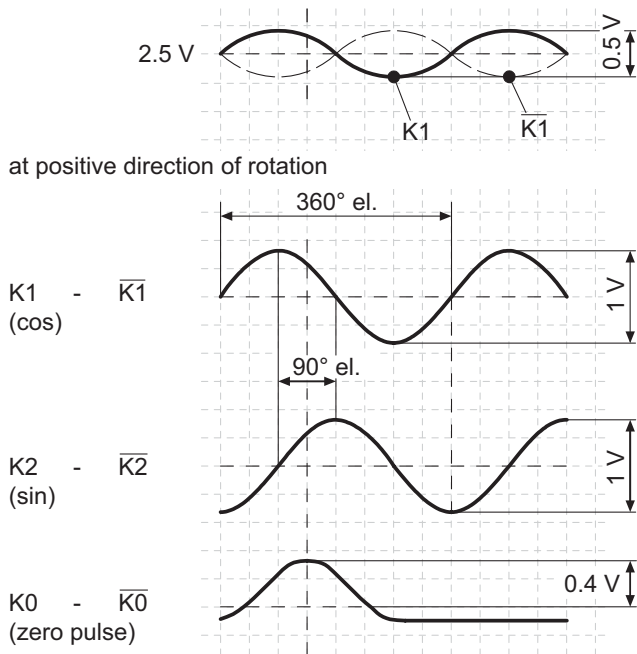
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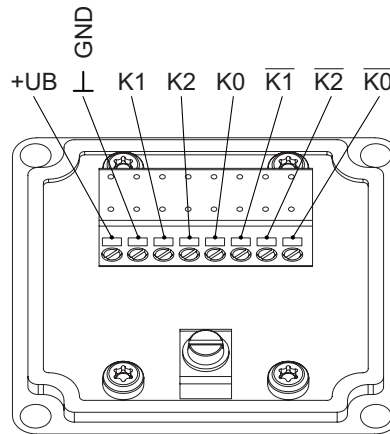
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### Output signals

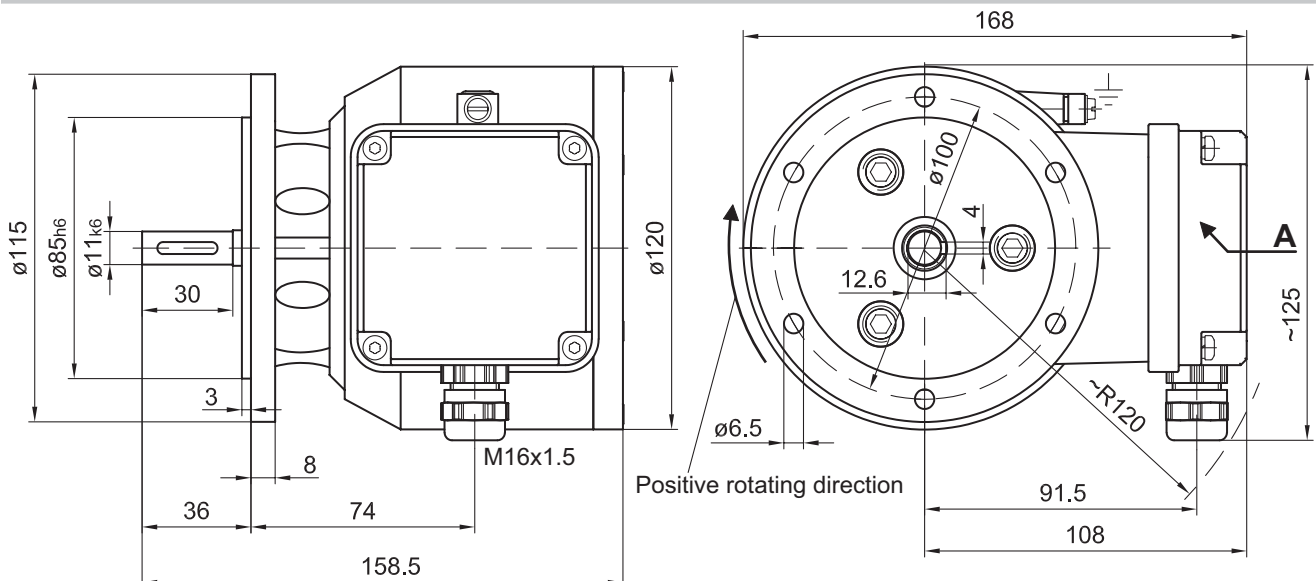


### Terminal assignment

View A - Connecting terminal



### Dimensions



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