Zertifiziertes QM-System DIN EN ISO 9001 Reg.Nr. 95046

Miniature Incremental Rotary Encoder

Hollow shaft model

measuring • monitoring • analysing

- Max. speed: 12 000 rpm
- Shaft: Ø 4/6 mm
- Output: push-pull
- Cable connection: 2 m
- Pulse count: 50-1024 pulses
- Max. pulse frequency: 160 kHz
- Supply: 5-24 V_{DC}
- Max. temperature: +85 °C
- Protection type: IP 64

KOBOLD offices exist in the following countries:

ARGENTINA, AUSTRIA, BELGIUM, BRAZIL, CANADA, CHINA, COLOMBIA, FRANCE, GREAT BRITAIN, NETHERLANDS, POLAND, SWITZERLAND, USA, VENEZUELA

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Model:
ZDI-AH

01/0804/Ko/10

Description

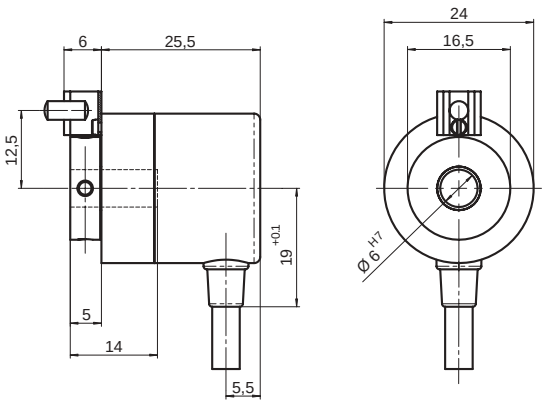
KOBOLD rotary encoders are used to measure length, position, rotational speed and angle. They convert mechanical motion to electrical signals. Incremental rotary encoders output a frequency signal which can represent speed, length or position.

A rotatable disc, on which a grating is attached, is mounted between an LED and a receiver. The light emitted from the LED is modulated by the grating and hits the receiver, which outputs a sinusoidal signal that is proportional to the light received. The sinusoidal signal is processed by specially designed electronics. Standard control systems - including all KOBOLD counters - require digital, square-wave signals at the input. Thus the signal is conditioned in the rotary encoder and is output through different output circuits depending on the field of application.

Areas of application:

- Mounting technology
- Feeders and handling machines for electrical components
- Test equipment
- Medical engineering, for example stirring machines
- Inserting plant / letter opening machines
- Inspection platforms
- Labelling machines
- Pipe inspection machines (camera control)

Dimensions:



Technical Details:

Max. speed:	12 000 rpm
Moment of inertia of rotor:	approximately 0.1 x 10^{-6} kgm^2
Initial torque:	< 0.001 Nm
Insertion shaft:	Ø 4 mm or Ø 6 mm stainless steel
Flange:	Ø 24 mm
Impact resistance:	1000 m/s^2, 6 ms
Vibration resistance:	100 m/s^2, 55 - 2000 Hz
Operating temperature range:	- 20 to + 85 °C
Working temperature range:	- 20 to +90 °C
Output circuit:	push-pull with or without inversion short-circuit-proof
Electrical connection:	2 m cable, axial or radial
Pulse count:	50 - 1024 pulses
Max. pulse frequency:	160 kHz
Supply:	5 - 24 V_{DC}
Current consumption:	max. 50 mA
Permissible load / channel:	max. 50 mA
Signal level high:	min. U_B - 2.5 V
Signal level low:	max. 0.5 V
Rise time / fall time:	max. 1 µs
Pulses per revolution:	50, 100, 200, 360, 500, 1000, 1024
Protection type:	IP 64
Weight:	approximately 0.06 kg

Order details (Example: **ZDI-AH 11 G 6 0050**)

Model	Description	Flange / shaft	Output circuit	Electrical connection	Pulse count (always use 4 digits)
ZDI-AH...	Incremental miniature rotary encoder - hollow shaft model	**11** = Ø 4 mm **12** = Ø 6 mm	**G** = push-pull without inversion **H** = push-pull with inversion	**5** = 2 m cable, radial (standard) **6** = 2 m cable, axial (special)	**0050, 0100, 0200, 0360, 0500, 1000, 1024**

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