

Data Sheet for Angle Sensors

Hall-Effect Single-Turn Rotary Encoder with Incremental Output

Series ENI22 K



- Optional read out of the absolute position
- Up to 1024 pulses per revolution
- Unlimited Life expectancy
- Potted electronics

The Halleffect Kit-Encoder Series ENI22 K has an endless mechanical life expectancy because there ins'nt any bearing nor wear. A separate position-magnet is enclosed. There are push on magnet holders as an acessorie available. Due to the easy connection of the flat ribbon cable, e.g. using IDC, the cost of soldering can be reduced as well.

Electrical Data

Output signal	TTL	Open Collector
Number of pulses	1...128; 256; 512; 1024 pulses per revolution	
Limit frequency	500 kHz	
Supply voltage	5 VDC \pm 10 %	8-30 VDC
Power consumption (no load)	\leq 20 mA	
Insulation voltage 1.)	1000 VAC @ 50 Hz, 1 min	
Insulation resistance 1.)	2 MOhm @ 500 VDC, 1 min	

Mechanical Date, Environmental Conditions, Miscellaneous

Lifetime	unlimited
Operating temperature range	-40..+85 °C (fixed cable, extended temperature range on request)
Storage temperature range	-40..+105 °C
Protection grade (IEC 60529)	IP65
Vibration (IEC 68-2-6, Test Fc)	\pm 1,5 mm / 20 g / 10 bis 2000 Hz / 16 frequency cycles (3x4 h)
Shock (IEC 68-2-27, Test Ea)	50 g / 11 ms / halfsine (3x6 shocks)
Mass	approx. 11 g
Material housing	plastic

Emission / Immunity

EN 55011 Emission AC/DC power	Class B
EN 55011 Emission housing	Class B
EN 61000-4-2 Immunity housing ESD	Class B
EN 61000-4-3 Immunity RF sine wave	Class A
EN 61000-4-4 Immunity DC power, I/O cable: Burst	Class B
EN 61000-4-5 Immunity DC power, I/O cable: Surge	Class B
EN 61000-4-6 Immunity DC power, I/O cable: Conducted sine wave	Class A

1.) According IEC 60393

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Order code

Description

Series ENI22 Kit	ENI22 K		
Number of pulses [pulses per revolution]			
1024		1024	
512 (*)		512 (*)	
256 (*)		256 (*)	
2...128 free of choice (*)		2...128 (*)	
Supply voltage / Output signal			
5 V / TTL			05 BZ TTL
5 V / Open Collector			05 BZ OC
24 V / Open Collector			24 BZ OC
Other cable length [m] (*)			CVxx (*)

short-term stock types can be found on: <http://www.megatron.de/en/stocklists/angle-sensors/lagerliste.html>

bold print = standard option

(*) = on request available for projects

For higher quantities or on-going demand, additional options are available as described below

For example:

- Read out of the absolute position
- Changed signal edges
- Special housing
- Special magnet holder
- Mu-Metal shielding against disturbing magnetic fields

For technical advice, projects, samples, questions about pricing, delivery times and availability please contact us

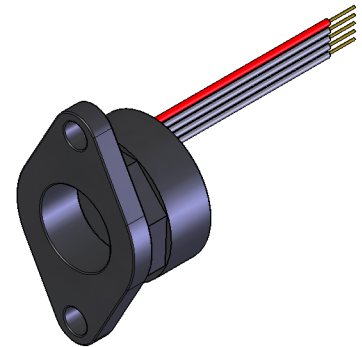
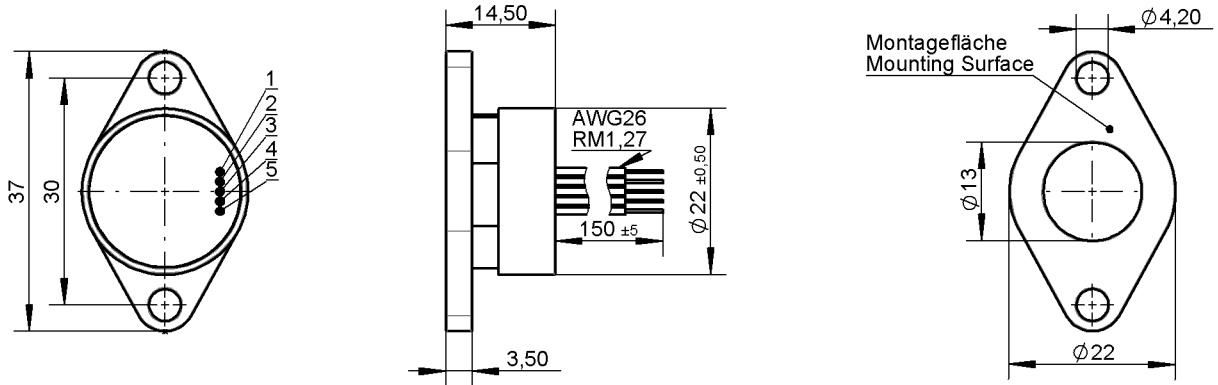
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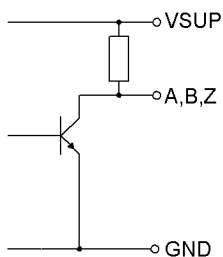
Drawing



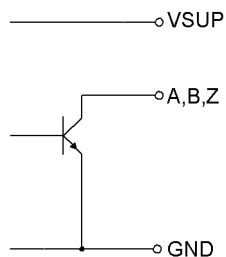
Cable assignment	
VSUP (red)	1
Z	2
B	3
A	4
GND	5

Internal connection

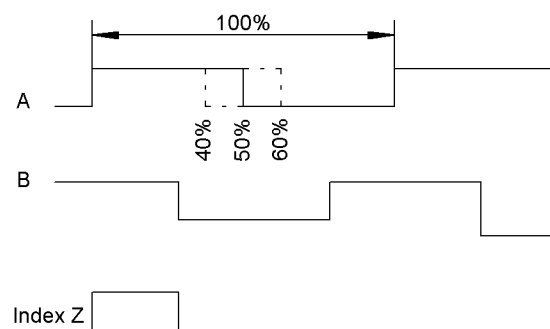
TTL:



Open Collector:



Signal edges



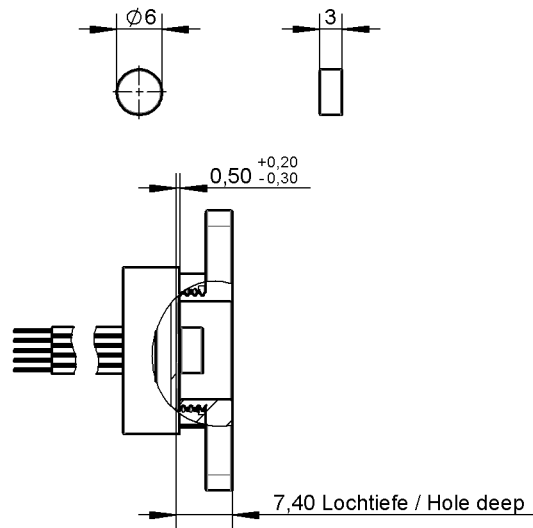
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Installation tolerances of the position-magnet



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