

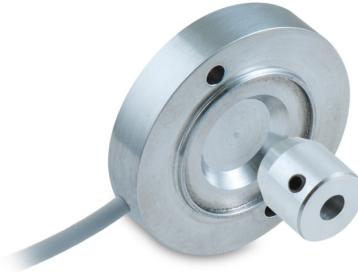
## EAM500R-K - CANopen®

Magnet rotor bore ø6 mm or M7 screw

Magnetic singleturn encoder kit 14 bit, CANopen®

### 产品一览

- Encoder kit singleturn / CANopen®
- Contactless measuring method, flat design
- Maintenance-free for the entire service life
- Protection against corrosion CX (C5-M)
- Operating temperature -40...+85 °C
- Resolution 14 bit
- Redundant version available
- Protection up to IP 69K
- Detection of magnetic loss
- Magnetic rotor included in delivery



### 技术数据

#### 技术数据 – 电气参数

电源电压	10...30 VDC
反极性保护	是
短路保护	是 (14 VDC或接地)
典型电流消耗	14 mA (24 VDC · 无负载)
Update time	25 ms (max. 2400 rpm)
初始化时间	≤ 500 ms (上电后)
接口	CANopen®
功能	单圈
符合的协议	CANopen® CiA DS 301 (通讯协议) DSP 305 (LSS协议) DS 406 (设备协议)
测量范围	0...360°
每圈步数	≤16384 / 14位
输出方式	CAN总线 · 低电压 (3.3 V) · 符合标准 ISO 11898
线性度	±0.3% FS
绝对精度	±1,2° (+25 °C)
感应原理	磁式
编码顺序	顺时针: 正对法兰顺时针旋转时输出值 上升
抗干扰性	EN 61000-6-2
辐射干扰	EN 61000-6-3

#### 技术数据 – 机械参数

尺寸 (法兰)	ø50 mm
轴类型	ø6 mm (磁转子安装孔) M7 螺钉
防护等级 (EN 60529)	IP 67 IP69K
运行速度	≤3000 rpm
工作距离	1 ... 3 mm (轴向) · ±0.8 mm (径向)
材质	外壳: 阳极氧化铝 磁转子: 阳极氧化铝
防腐蚀保护	IEC 60068-2-52 盐雾试验 室温条件下防腐等级达到ISO 12944-2 CX (C5-M)
工作温度	-40...+85 °C
使用寿命	无限制
耐抗性	EN 60068-2-6 抗振动20 g · 10-2000 Hz EN 60068-2-27 抗冲击50 g · 6 ms
温度变化	EN 60068-2-14 · -40...+85 °C · 5次高 低温循环
近似重量	53 g
连接	0.3米直接出线 0.3米直接出线 · 带M12接头

### 可选配件

- DEUTSCH or AMP connector on cable end on request

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## 端子定义

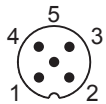
### Cable

Core color	Signal	Description
White	0 V	Voltage supply
Brown	+Vs	Voltage supply
Green	CAN_H	Bus (dominant HIGH)
Yellow	CAN_L	Bus (dominant LOW)
Grey	CAN_GND	CAN ground

Cable data: 5 x 0,25 mm<sup>2</sup>

### Cable with flange connector M12, male, 5-pin, A-coded

Pin	Signal	Description
1	CAN_GND	CAN ground
2	+Vs	Voltage supply
3	0 V	Voltage supply
4	CAN_H	Bus (dominant HIGH)
5	CAN_L	Bus (dominant LOW)



Terminals 0 V and GAN\_GND are internally connected and identical in their functions.

## CANopen® 功能特征

工作模式	Event-Time 同步触发 (同步) Timer-driven (Async)
节点监控	心跳报文 (default: disabled)
可设置参数	工作模式 Rotating direction Zero position 比例
默认	Baud rate 250 kbit/s Node ID 10 (0Ah) Timer-driven (Async) 100 ms

## 数据传输

### PDO Mapping

#### ID10 / PDO 1

LSB	...	...	MSB
Byte 0	1	2	3

**Channel 1** (position angle) = 0 → 3600<sub>dec</sub>  
Angle increasing in size and value

### PDO Mapping (redundant sensing)

#### ID10 / PDO 1

LSB	...	...	MSB
Byte 0	1	2	3

**Channel 1** (position angle) = 0 → 3600<sub>dec</sub>  
Angle increasing in size and value

#### ID10 / PDO 2

LSB	...	...	MSB
Byte 0	1	2	3

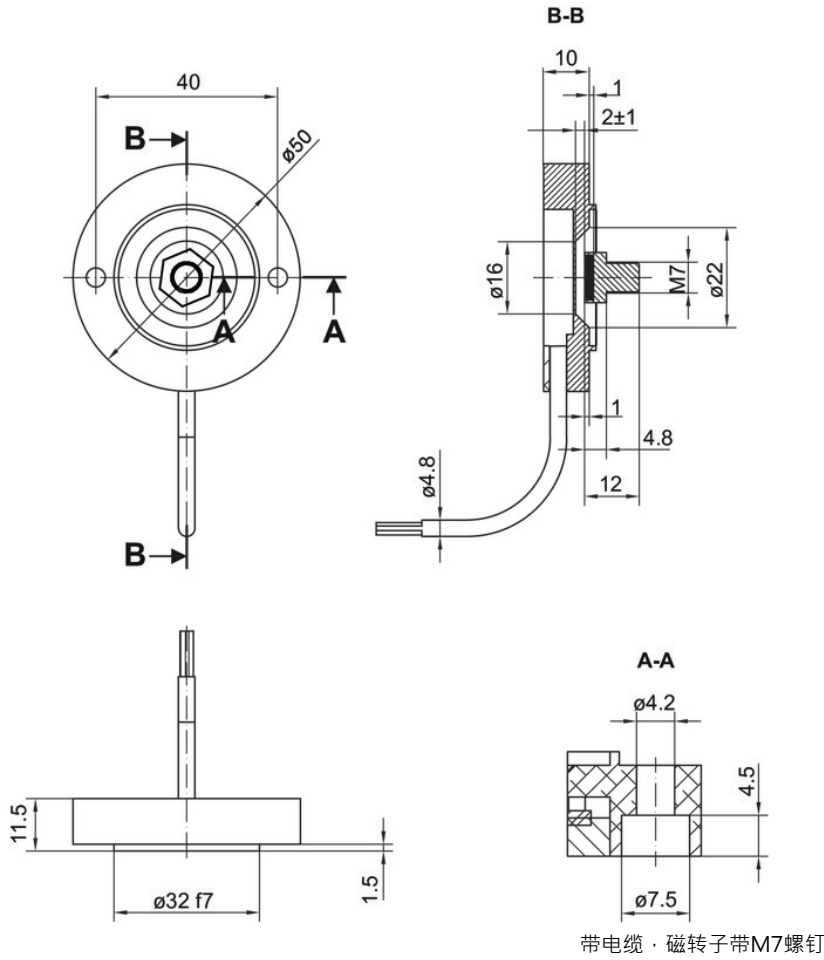
**Channel 2** (position angle) = (3600<sub>dec</sub> → 0)  
Angle increasing in size and decreasing in value

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尺寸

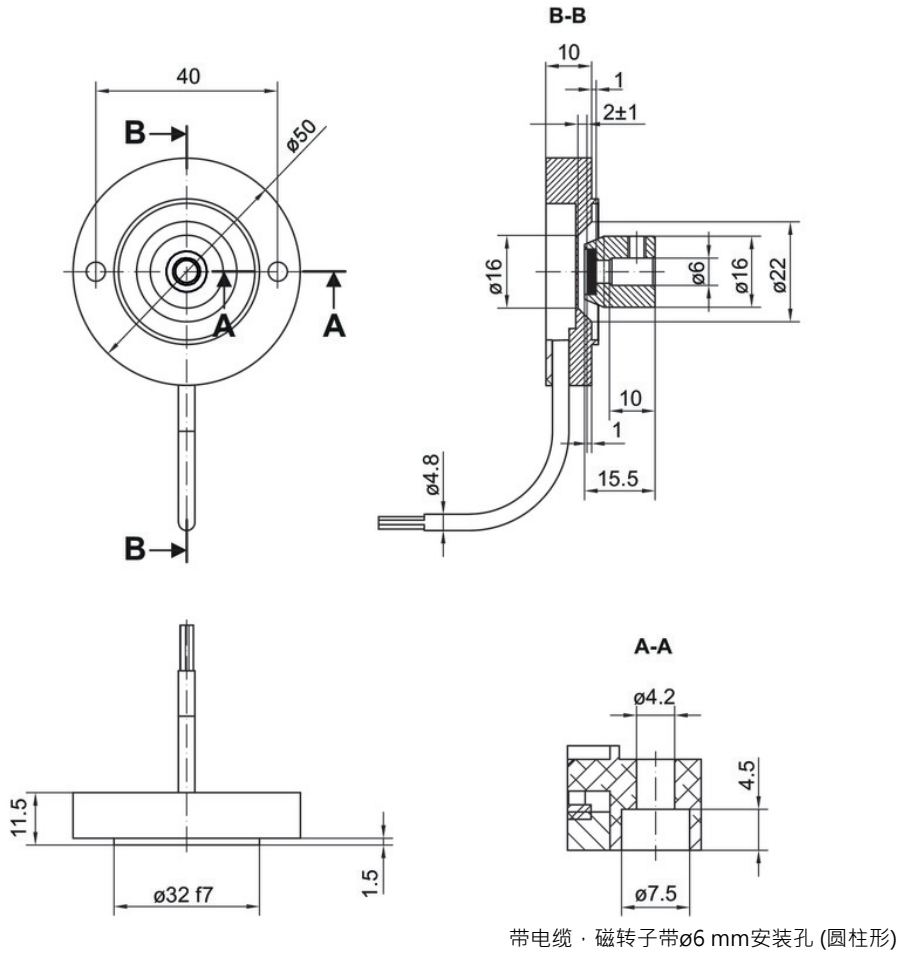


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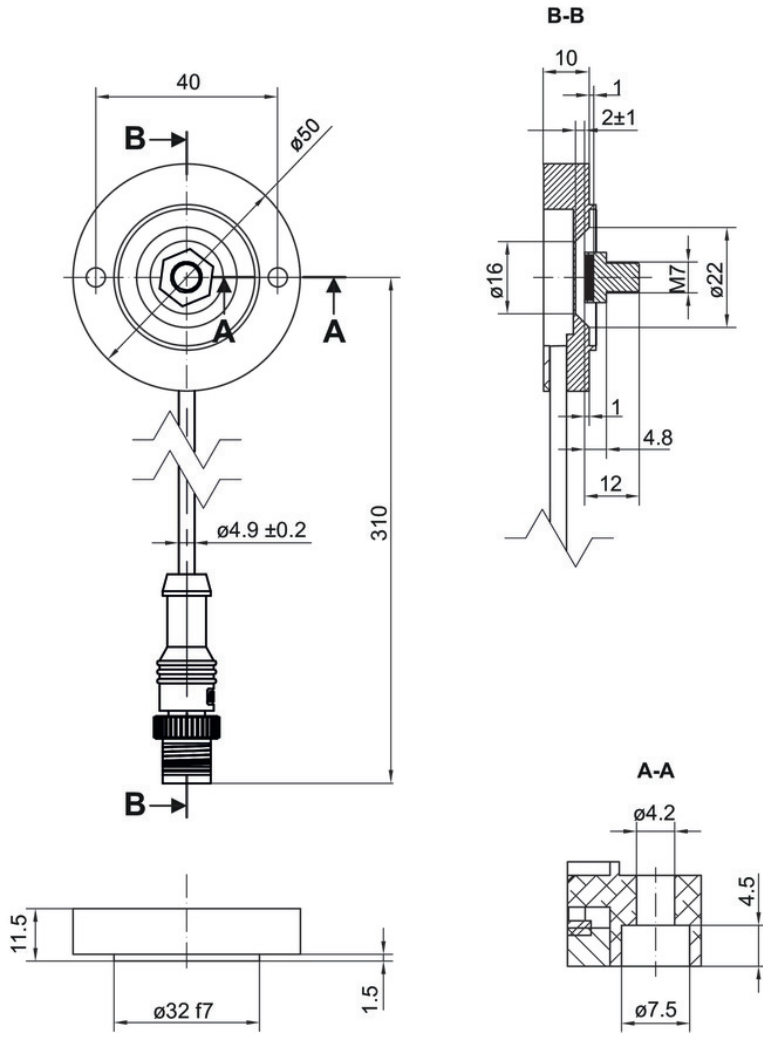
带电缆·磁转子带 $\varnothing 6$  mm安装孔(圆柱形)

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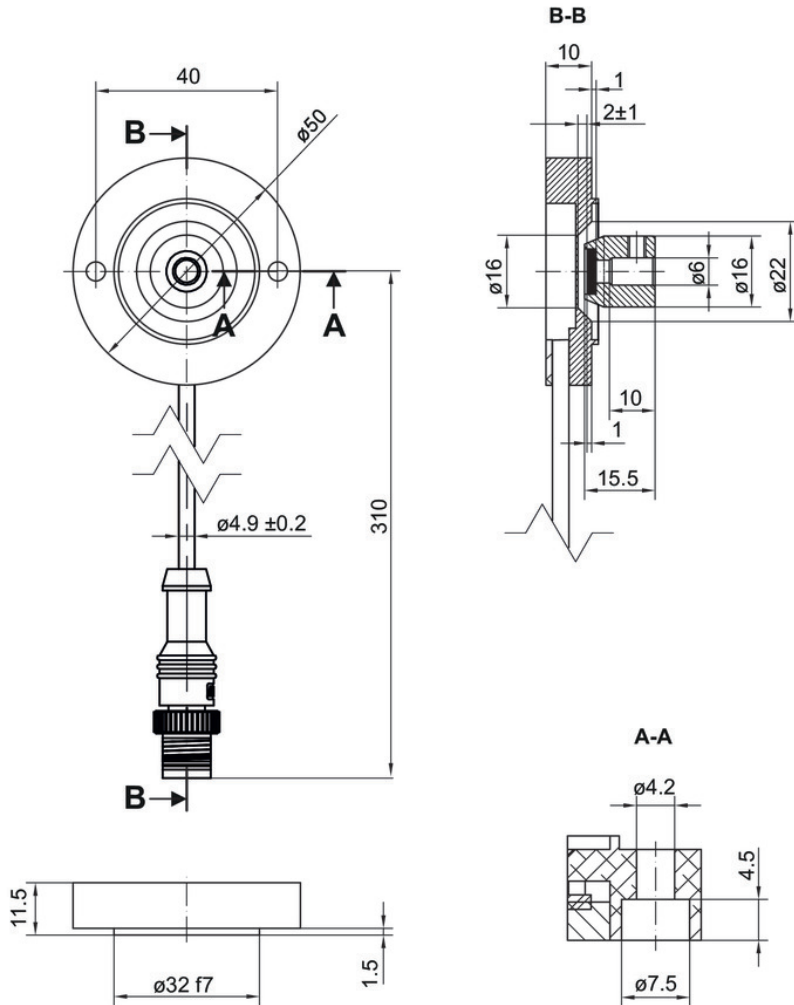
带电缆和M12接头·磁转子带M7螺钉

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带电缆和M12接头·磁转子带 $\varnothing 6$  mm安装孔(圆柱形)

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**订货资料**

	EAM500R	-	K	M	##	.	K	##	##	.	14	00	0	####	#	.	A
<b>Product</b>	EAM500R																
<b>Shaft type</b>																	
Kit				K													
<b>Flange (kit)</b>																	
Flat mounting flange, ø40 mm				M													
<b>Magnet holder / bore diameter</b>																	
ø6 mm					6												
M7 screw					7												
<b>Protection class</b>																	
IP69K							K										
<b>Connection<sup>(1)</sup></b>																	
Cable radial, 0.3 m								M									
Cable 0.3 m with connector M12, 5-pin, A-coded								S									
<b>Voltage supply / interface</b>																	
10...30 VDC / CANopen (DS406) redundant (sensing)									C5								
10...30 VDC, CANopen (DS 406)									C6								
<b>Resolution Singleturn</b>																	
14 Bit										14							
<b>Resolution Multiturn</b>																	
No option												00					
<b>Resolution supplement</b>																	
No option													0				
<b>Measuring range</b>																	
0...30°																A030	
0...60°																A060	
0...180°																A180	
0...270°																A270	
0...360°																A360	
<b>Output characteristics</b>																	
One-channel, rising CW																	1
One-channel, rising CCW																	2
Redundant, CH1 rising CW, CH2 rising CCW																	3
Redundant, CH1 rising CCW, CH2 rising CW																	4
Redundant, CH1 rising CW, CH2 rising CW																	5
Redundant, CH1 rising CCW, CH2 rising CCW																	6
<b>Operating temperature</b>																	
-40...+85 °C																	A

(1) 其他电缆长度可定制并根据需求预装德驰 ( Deutsch ) 或AMP连接器。