

# 双轴， 倾角传感器

Biaxial  
Tilt sensor

## SDA8200系列

应用于航空、高速列车、工程机械和船舶等领域

- 测量角度最大达 $\pm 120^\circ$ ，分辨率达到 $0.001^\circ$
- 4~20mA, 0~5VDC, 0.5~0.45VDC, RS485等多种模拟及数字信号输出方式供选择
- 宽电压供电12-32VDC，50VDC过压保护
- 内部灌胶全密封，防护等级IP67
- 抗冲击力50g以上，耐振动，高稳定性
- 符合RoHs、CE认证
- 电源反接保护，通过EMC和浪涌测试

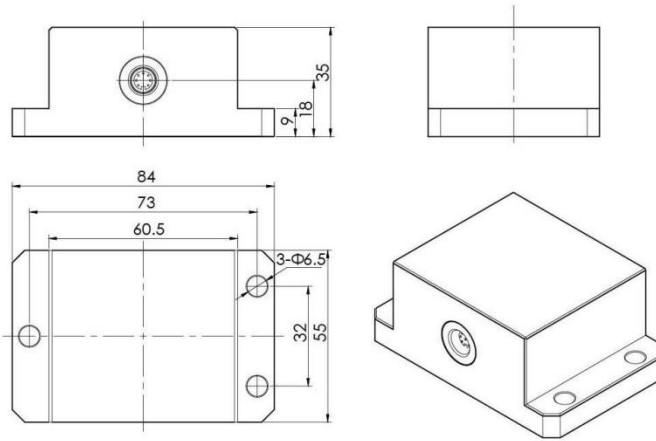


### 技术参数 Technical Parameter

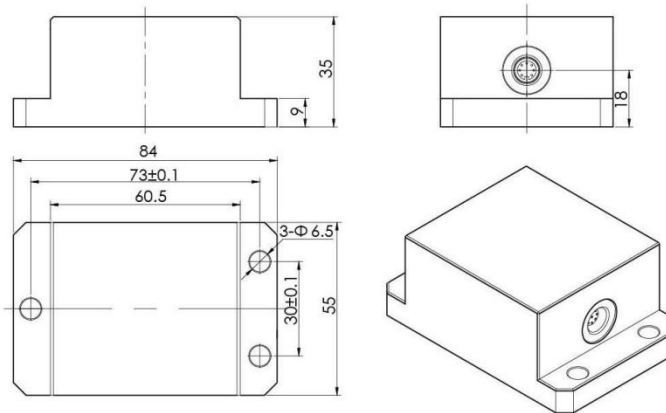
参数	Specifications	技术指标 Technical Data
角度范围	Angular range	0 ~ $\pm 10^\circ$ , $\pm 20^\circ$ , $\pm 30^\circ$ , $\pm 40^\circ$ , $\pm 50^\circ$ , $\pm 60^\circ$ ..... $\pm 120^\circ$
出线方式	Output mode	3wires/5wires
工作电压	Operating voltage	24VDC(8~30VDC)
分辨率	Resolution	0.001°
输出信号	Output signal	4~20mA, 0~5VDC, 0.5~4.5VDC, RS485, CANOpen, Modbus, Profibus
综合精度	Comprehensive precision	0.1%F.S, 0.25%F.S, 0.5%F.S
工作温度范围	Operating temperature range	-40~100°C
储存温度范围	Storage temperature range	-40~120°C
温度漂移	Temperature drifting	$\pm 0.005^\circ/\text{C}$
长期稳定性	Long-Term Stability	$\leq 0.1\% \text{F.S/year}$
消耗电流	Current consumption	$\leq 40 \text{mA}$
绝缘阻抗	Insulation resistance	$\geq 100 \text{M}\Omega(500 \text{VDC})$
耐冲击	Strike proof	50g(11ms)
耐振性	Shock proof	9.8g
材质	Material	铝合金 Aluminum alloy
防护等级	Protection class to DIN 40050	IP 67 (Binder712 7-pole male) IP 68 (flying lead connector is used)

# 82-系列 倾角传感器

## 外形尺寸图 Dimensions

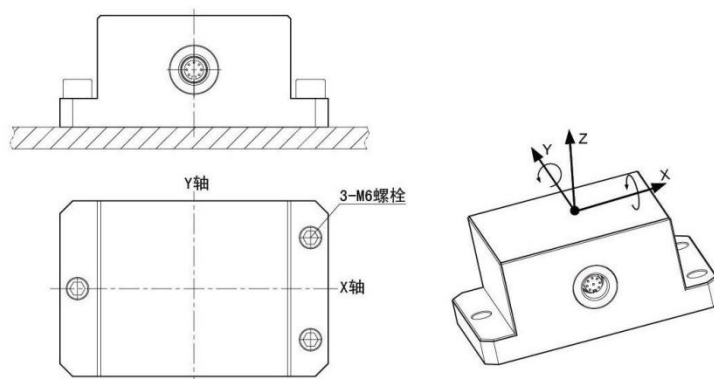


Side outlet



The front line

## 安装列举 Installation cited



## 选型表 Model code:

SDP 8 2 X X - X-XXX-XXX-XX(000)

### 出线方向 Outlet direction

- 0 = Side outlet
- 1 = The front line

### 电气连接 Electrical connection

- 0 = flying lead (Teflon cable, silicone-free)
- 9 = Binder712(7-pole male)  
(connector not supplied)

### 输出信号 Signal

- C = 4~20 mA, 3 conductor
- D = 0.5~4.5V, 3conductor
- H = 0~5V, 3conductor
- K = CANOpen
- M = Modbus
- P = Profibus
- Q = RS485

### X轴测量范围 X Axis Range

- 005 =  $\pm 5^\circ$
- 010 =  $\pm 10^\circ$
- 025 =  $\pm 25^\circ$

### Y轴测量范围

- 005 =  $\pm 5^\circ$
- 010 =  $\pm 10^\circ$
- 025 =  $\pm 25^\circ$

### 综合精度 Comprehensive precision

- 01 = 0.1%F.S
- 02 = 0.25%F.S
- 05 = 0.5%F.S

### 其他 Other options

- 000 = 标准 (无电缆线)
- 020 = 2m 电缆线 (对应电器连接选项母端电缆线)
- 050 = 5m 电缆线 (对应电器连接选项母端电缆线)

## 接线定义 Pin connections:

### Cable assignment

Core	SDA8200-C/D/J/Q/K/M/P
brown	+24VDC
gray	XSignal+
pink	X&Y Signal-
white	0V
blue	Y Signal+
green	RS485- /Signal-
yellow	RS485+/Signal+
red	n.c

Pin	SDA82XB-C/D/J/Q/K/M/P
1	+24VDC
2	X Signal+
3	X&Y Signal-
4	0V
5	Y Signal+
6	RS485- /Signal-
7	RS485+/Signal+

### Flying lead



### Binder712

