

单轴， 倾角传感器

Uniaxial
Inclination sensor

SDA8100系列

应用于航空、高速列车、工程机械和船舶等领域

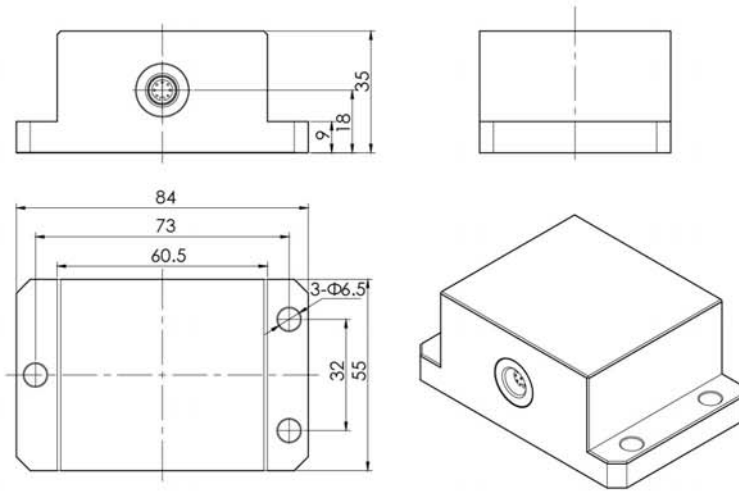
- 测量角度最大达 $\pm 120^\circ$ ，分辨率达到 0.001°
- 4~20mA, 0~5VDC, 0.5~4.5VDC等多种信号输出方式供选择
- 宽电压供电15-36VDC, 50VDC过压保护
- 防护等级可达到IP68
- 抗冲击力50g以上，耐振动，高稳定性
- 符合RoHs、CE认证
- 通过EMC、浪涌测试，电源反接保护



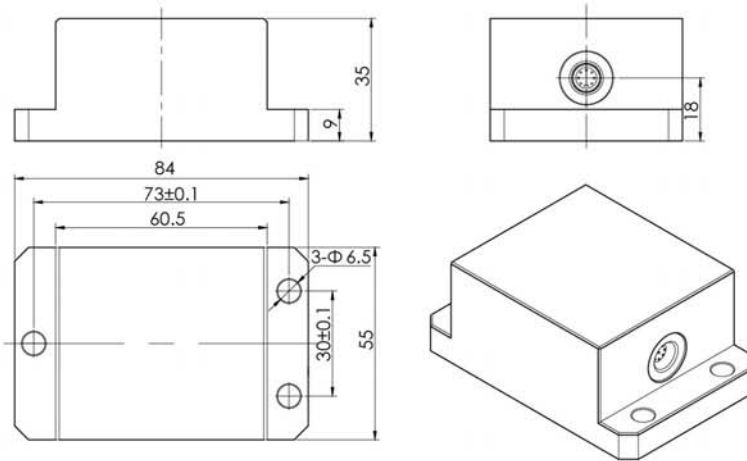
技术参数 Technical Parameter

参数	Specifications	技术指标 Technical Data
角度范围	Angular range	0 ~ $\pm 10^\circ$, $\pm 20^\circ$, $\pm 30^\circ$, $\pm 40^\circ$, $\pm 50^\circ$, $\pm 60^\circ$ $\pm 120^\circ$
工作电压	Operating voltage	24VDC (15~36VDC)
分辨率	Resolution	0.001°
输出信号	Output signal	4~20mA, 0~5VDC, 0.5~4.5VDC, Modbus RTU, CANopen ($\pm 60^\circ$)
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	-40~85℃
储存温度范围	Storage temperature range	-40~120℃
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	$\leq 80\text{mA}$
绝缘阻抗	Insulation resistance	$\geq 100\text{M}\Omega(100\text{VDC})$
耐冲击	Strike proof	50g
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 (M12x1 5-pole male, Binder712 7-pole male) IP 68 (flying lead)

外形尺寸图 **Dimensions**

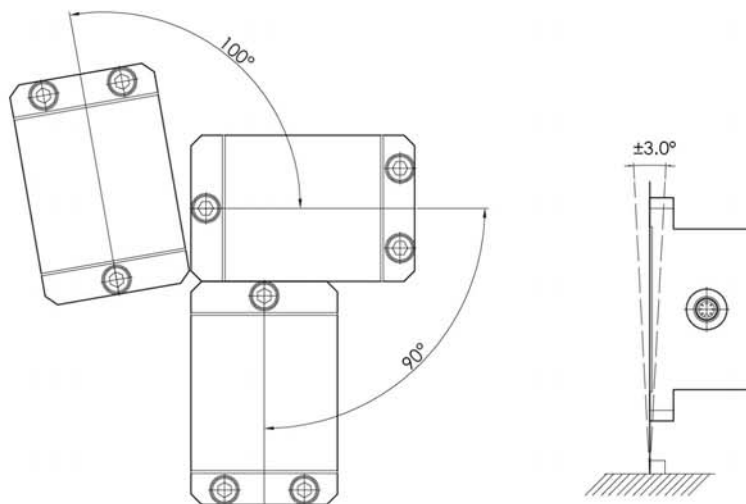


Side outlet



The front line

安装列举 **Installation cited**



81-系列 倾角传感器

选型表 Model code:

SDA 8 1 X X - X - 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)
- 8 = M12x1 5-pole, male (connector not supplied)
- 9 = Binder712 7-pole male

输出信号 Signal

- C = 4~20 mA, 3 conductor
- D = 0.5~4.5V, 3 conductor
- H = 0~5V, 3 conductor
- K = CANopen ($\pm 60^\circ$)
- M = Modbus RTU

测量范围 Range

- 010 = $\pm 10^\circ$
- 025 = $\pm 25^\circ$
- 045 = $\pm 45^\circ$

有效量程: 0... $\pm 10^\circ$ ~ $\pm 120^\circ$ 范围内可选

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

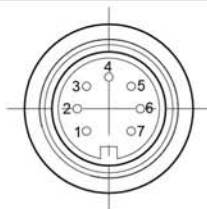
- 000 = 标准 (无电缆线)
- 020 = 2m 电缆线 (对应电器连接选项母端电缆线)
- 050 = 5m 电缆线 (对应电器连接选项母端电缆线)

接线定义 Pin connections:

Cable gland Note:* Modbus-RTU for configuration

Core	SDA8100-C	SDA8100-D/H	SDA8100-K
brown	+24VDC	+24VDC	+24VDC
grey	Signal	Signal	CANL
white	0V	0V	0V
green	RS485-*	RS485-*	CANH
yellow	RS485+*	RS485+*	Shielding wire

Binder712



Pin	SDA8106-C	SDA8106-D/H	SDA8106-K
1	+24VDC	+24VDC	+24VDC
2	Signal	Signal	CANL
3	0V	0V	0V
4	n.c.	n.c.	n.c.
5	n.c.	n.c.	n.c.
6	RS485-*	RS485-*	CANH
7	RS485+*	RS485+*	Shielding wire

