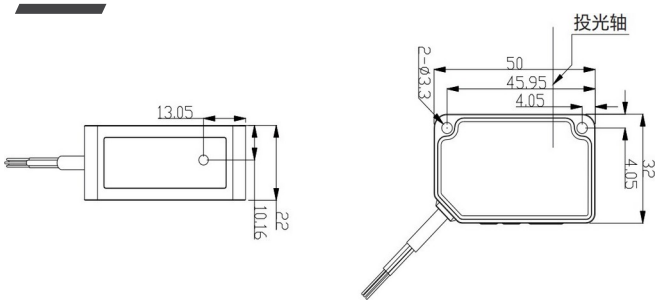
Shenzhen xiaorui technology co., ltd

Laser displacement sensor

kind		Measurement center 30mm	Measurement center 100mm	Measurement center 200mm
model	NPN output	LD-A030N	LD-A100N	LD-A200N
	Output PNP	LD-A030P	LD-A100P	LD-A200P
Measuring center distance		30mm	100mm	200mm
measuring range		±5mm	±35mm	±80mm
repeatability		10μm	70μm	200μm
linearity		±0.1% F.S.	±0.1% F.S.	±0.2% F.S.
Temperature characteristic		± 0.03% F .S./℃		
light source		Red semiconductor laser, CL ASS 2		
		Maximum output power: 1mW, emission wavelength: 655nm.		
Beam diameter		φ Φ0.05mm	φ Φ0.15mm	φ Φ0.3mm
Power supply voltage		12V～24V DC±10%		
Consumption current		Under 60mA (when the power supply voltage is 24V DC) and under 100mA (when the power supply voltage is 12V DC)		
Control output		< ＜NPN output type >	< ＜PNP output type >	
		NPN open collector transistor	PNP open collector transistor	
		• Maximum inflow current: 50mA	• Maximum source current: 50mA	
		• Applied voltage: below 30V DC	• Applied voltage: below 30V DC	
		(control output -0V)	(control output-+V)	
		• Residual voltage: less than 1.5V	• Residual voltage: less than 1.5V	
		(Under the inflow current of 50mA)	(Under the current of 50mA)	
analog output	voltage	Output range: 0V ～5V (+＋5.2V in case of alarm), output impedance: 100ω		
	electric current	Output range: 4mA ～20mA (when alarming: 0mA), load: less than 300ω.		
Response time		1.5ms/5ms/50ms switchable		
external input		< ＜NPN output type >	< ＜PNP output type >	
		• Input conditions	• Input conditions	
		Invalid:+8V ~+V DC or open	Invalid: 0v ~+0.6vdc or open	
		Effective: 0v ~+1.2vdc	Effective:+4V ~+V DC	
		• Input impedance: about 10kΩ	• Input impedance: about 10kΩ	
protect grade		IP66		
Operating ambient		-10 C ~+45 C (be careful not to condense or freeze), and when storing:-20 C ~+60		

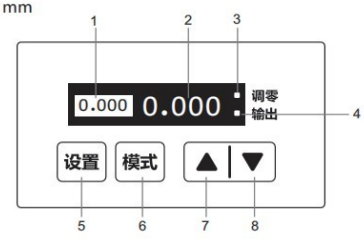
- Super cost performance
- Built-in measurement processor
- Have the same feedback loop as high-end products.

Product dimension drawing



显示/控制部分

数值单位：mm



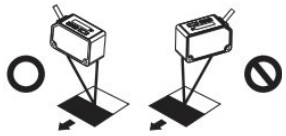
1. 基准值
2. 测量值
3. 调零指示灯
4. 输出指示灯
5. "设置"键
6. "模式"键
7. "向上"键
8. "向下"键

安装方向

• 相对于移动体的方向

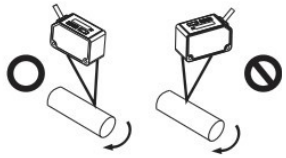
＜材质、有色差的情况下＞

• 测量时，移动的测量对象物的材质、颜色极端不同的情况下，按照右图所示方向进行安装，从而可将测量误差控制在最小限度。



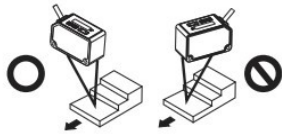
＜对旋转的对象物进行测量＞

• 对旋转的对象物进行测量时，按照右图所示方向进行安装，从而可抑制对象物的上下振动和位置偏移等的影响。



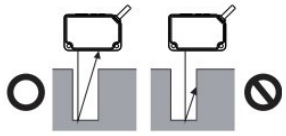
＜有段差的情况下＞

• 移动的测量对象物存在段差的情况下，按照右图所示方法进行安装， 从而可抑制段差边缘的影响。



• 在狭隘场所和凹陷部分进行测量

• 在狭隘场所和孔中进行测量的情况下，安装时，请注意避免遮挡投光部至受光部的光路。



• 将传感器部安装到墙面的情况下

• 请按照右图所示方法进行安装，以免墙面产生的多重反射光会入光到受光部。另外，墙面的反射率较高的情况下，如改为无光泽的黑色，则可获得良好的效果。