

### Feature 特征

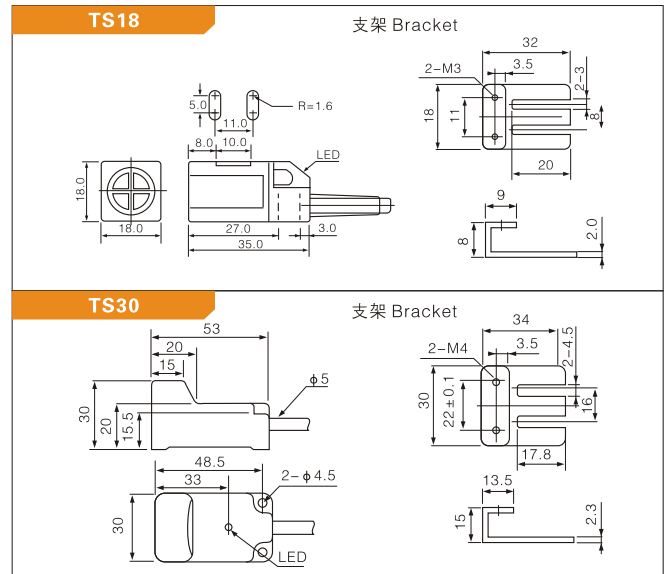
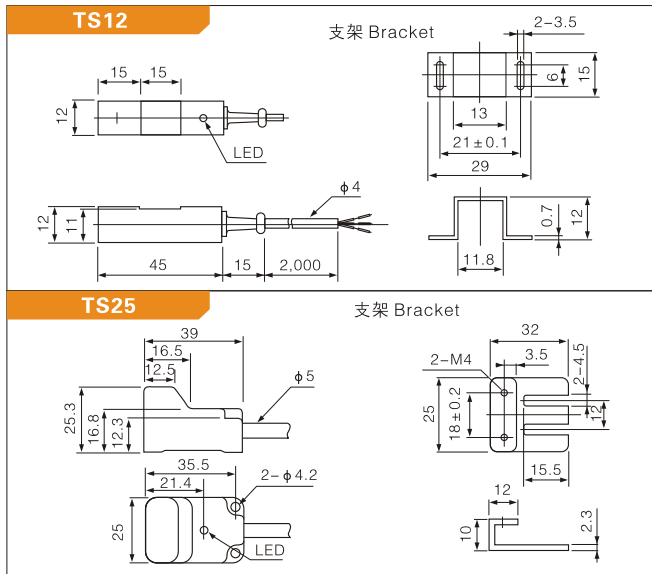
- Shape kind is abundant, owning wide application range  
形状种类丰富应用广泛
- Long endurance and high reliability  
长寿命和高可靠
- Reverse polarity protection, Short circuit protection(DC type)  
电源反接保护, 过电流保护(DC型)
- IP67防水结构



### Specification 规格

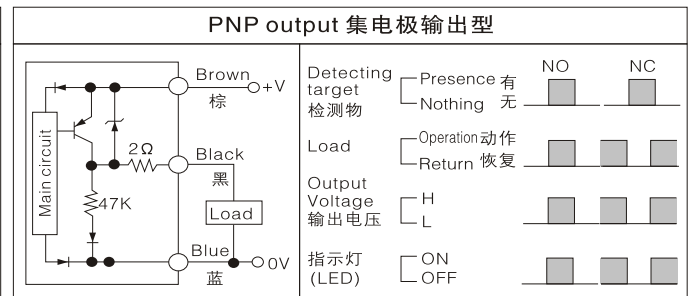
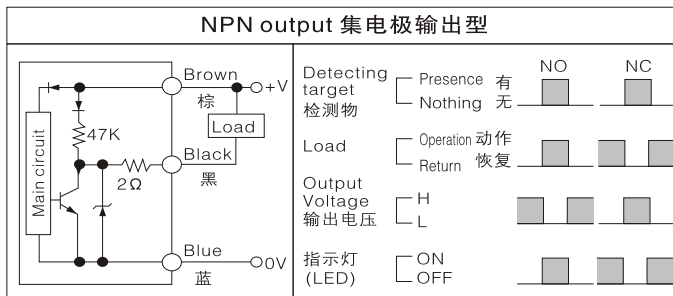
Model 型号	DC NPN	TS12-4DN TS12-4DN2	TS12-4DNU TS12-4DN2U	TS18-5DN TS18-5DN2	TS25-7DN TS25-7DN2	TS30-10DN TS30-10DN2
	DC PNP	TS12-4DP TS12-4DP2	TS12-4DPU TS12-4DP2U	TS18-5DP TS18-5DP2	TS25-7DP TS25-7DP2	TS30-10DP TS30-10DP2
	DC二线 2-wire	TS12-4DO TS12-4DC	TS12-4DOU TS12-4DCU	TS18-5DO TS18-5DC	TS25-7DO TS25-7DC	TS30-10DO TS30-10DC
	AC二线 2-wire				TS25-7AO TS25-7AC	TS30-10AO TS30-10AC
Appearance 外型						
Detecting distance 探测距离	4mm ± 10%		4mm ± 10%	5mm ± 10%	7mm ± 10%	10mm ± 10%
Setting distance 设定距离	0 to 2.8mm		0 to 2.8mm	0 to 3.5mm	0 to 4.9mm	0 to 7mm
Standard detecting target 标准探测体	Iron 12x12x1mm(铁)			Iron 18x18x1mm(铁)	Iron 25x25x1mm(铁)	Iron 30x30x1mm(铁)
Hysteresis 回差	Max. 10% of detecting distance(检测距离的10%以下)					
Power supply 电源电压	DC NPN(PNP) type: 12-24VDC(10-30VDC) DC 2-wire type: 12-30VDC AC 2-wire type: 90-250VAC					
Current consumption 静态电流	DC NPN(PNP) type: Max.10mA DC 2-wire type: Max.0.9mA AC 2-wire type: Max.2.2mA					
Response frequency 频率	DC	400HZ		300HZ	250HZ	200HZ
	AC	—————			20HZ	
Residual voltage 残留电压	DC NPN(PNP) type: Max.1.5V DC 2-wire type: Max.6v AC 2-wire type: Max.10V					
Control output 控制输出	DC NPN(PNP) type: Max.200mA DC 2-wire type: Max.100mA AC 2-wire type: Max.200mA					
Circuit protection 电路保护	Reverse Polarity Protection 反极性保护, Surge absorber浪涌保护, Short Circuit Protection 短路保护; M12、M18、M30、DC NPN ( PNP ) type					
Insulation resistance 绝缘	Min.50MΩ ( 500VDC )					
Dielectric strength 耐电压	1500VAC 50/60HZ for 1 minute					
Operating temperature 使用环境温度	-25 to +70°C (non-freezing condition 不结冰)					
Protection 保护结构	IP67 (IEC Specification)					

## Dimensions 尺寸(unit:mm)

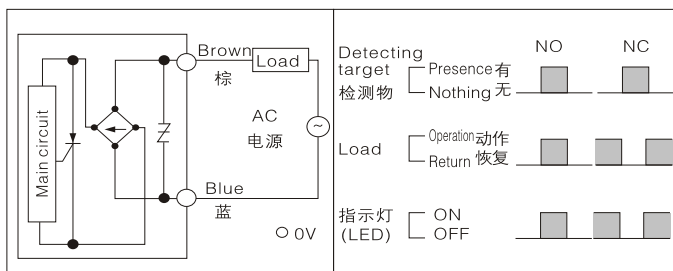


## Control output diagram 控制输出图

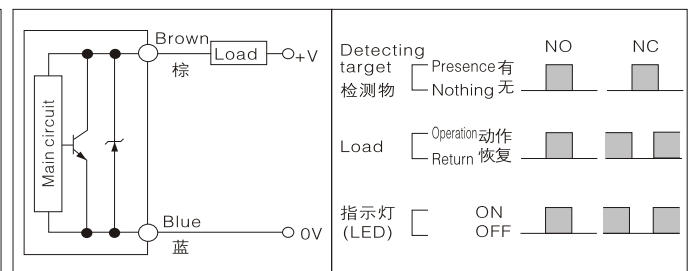
### DC 3-wire(三线型)



### AC 2-wire(二线型)

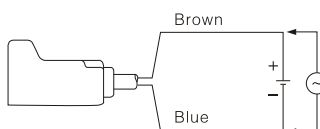


### DC 2-wire(二线型)

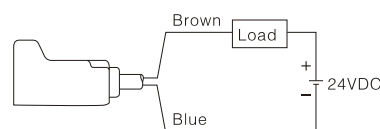


## Proper usage 适当的用法

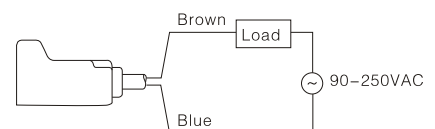
### Load connections 负载连接



< DC 2-wire type & AC 2-wire type >  
< DC 2-线型 & AC 2-线型 >



< DC 2-wire type >  
< DC 2-线型 >



< AC 2-wire type >  
< AC 2-线型 >

When using DC2-wire or AC2-wire type proximity switch, the load must be connected otherwise internal components may be damaged, and the load can be connected to other wire.

当使用DC2-线或AC2-线型接近传感器时, 请将负载连接到其中任意一根连接线来避免故障。