

Feature

- Ultra long life
- High protection performance, up to IP68 and IP69K
- Can be used in a variety of harsh environments
- Beautiful appearance, can be customized according to the needs of appearance

压电开关特点

- 寿命超长
- 防护性能高,可达IP68及IP69K
- 可应用在多种恶劣环境中
- 外观美观,可根据需要定制外观

Environmental specification

- Sealing : IP68
- Vibration resistance : 10-500 Hz / 10 g
- Operating temperature : -40°C to +75°C

Electrical and general specification

- Max. current/voltage rating : 1A 24VAC/DC or 200mA 24VAC/DC depending on version
- Switch resistance ON : 10 Ω max.
- Switch resistance OFF : 5MΩ min.
- Operating force : 2 to 6N
- Life expectancy : 50 million cycles
- LED consumption : Illuminated dot : 10mA - Illuminated ring : 20mA

Material

- Case : aluminium anodized, stainless steel
- Multi-wire leads section 0,22 mm² length 300 mm, twisted by pair
- PC terminals : bronze, tin plated

一般技术条件

- 防水性能 : IP68
- 抗冲击性 : 10-500 Hz / 10 g
- 操作温度 : -40°C to +75°C

性能特征

- 最大电压电流等级 : 1A 24VAC/DC 或 200mA 24VAC/DC
不同规格不同等级, 具体参看详细说明
- 开关电阻 ON : 10 Ω max.
- 开关电阻 OFF : 5MΩ min.
- 操作力 : 2 - 6N
- 操作寿命 : 5000万次
- LED消耗 : 单点带灯 10mA / 环形带灯 20mA

材质

- 外壳 : 铝电镀颜色, 不锈钢
- 引线 : 线径 0,22 mm² 长度 300 mm, 每两条扭结
- PC 端子 : 铜镀锡



Operating status description 操作状态说明

Finger pressure applied to switch
手指压在开关上的状态

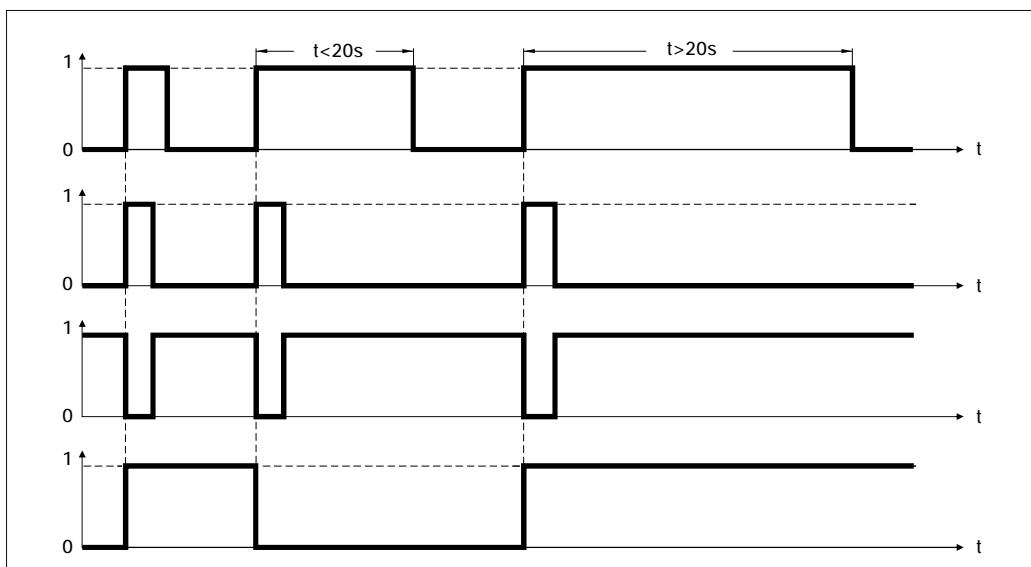
1 = pressure/压着
0 = no pressure/未压

Output 输出状态

- Momentary NO (pulse)
瞬动 NO (脉冲)
No external power supply required
无需外部电源提供

- Momentary NC (pulse)
瞬动 NC (脉冲)
No external power supply required
无需外部电源提供

- Latching (ON-OFF)
自锁 (ON-OFF)
Requires external power supply
需外部电源提供



Wiring diagram 接线图

	Non-illuminated/不带灯	1 LED*	2 LEDs	3 LEDs
Momentary NO (pulse) 瞬动 NO (脉冲)				
Momentary NO (pulse) 瞬动 NC (脉冲)				
Latching (ON-OFF) 自锁 (ON-OFF)				

NOTE: X means the color of the wire depends on the color of the LED.

备注: X表示引线的颜色取决于LED的颜色。

Overview型号描述

PS	16	★	□	■	◆	◇	△	▲
Series 系列号	Mounting dimension 安装尺寸	Operator 5P Flat operator, height 4.5 1P Flat operator, height 1.0 (non illuminated) 5Z With finger location, height 4.5 (non-illuminated) 操作头部: 5P 平型头部, 高4.5 1P 平型头部, 高1.0 (不带灯) 5Z 带手指位头部, 高4.5 (不带灯)	Electrical function 10 NO (pulse) 01 NC (pulse) 10Z latching ON-OFF (requires external power supply) 电气功能: 10 NO(脉冲) 01 NC(脉冲) 10Z 自锁ON-OFF (需要提供外接电源)	Terminal Y Lead(length 30cm) Other Lead length and connection mode can be customized. 接线方式 Y 引线(长度30cm) 需指定引线长度可定制	Colour / Material NT Natural anodized BU Blue anodized BK Black anodized GD Gold anodized GN Green anodized RD Red anodized SS Stainless steel 外壳颜色及材料: NT 镀原色 BU 镀蓝色 BK 镀黑色 GD 镀金色 GN 镀绿色 RD 镀红色 SS 不锈钢	Switch rating 1 200mA 24VAC/DC 电气性能 1 200mA 24VAC/DC	LED colour Blank Non-illum. R Red G Green Y Yellow O Orange B Blue W White 带灯颜色: 无字表示不带灯 R 红 G 绿 Y 黄 O 橙 B 蓝 W 白	Lamp voltage Blank Non-illum. 05 Standard ring - 5VDC 12 Standard ring - 12VDC 24 Standard ring - 24VDC 带灯电压 无字表示不带灯 05 环形 - 5VDC 12 环形 - 12VDC 24 环形 - 24VDC

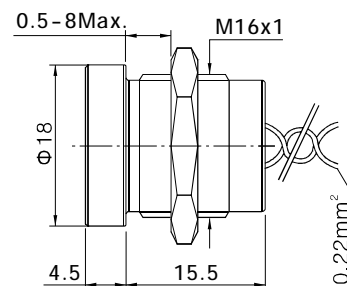
PS	19	★	□	■	◆	◇	△	▲
Series 系列号	Mounting dimension 安装尺寸	Operator 3P flat operator, height 3.0 3Z with finger location, height 3.0 操作头部: 3P 平型头部, 高 3.0 3Z 带手指位头部, 高3.0	Electrical function 10 NO (pulse) 01 NC (pulse) 10Z latching ON-OFF (requires external power supply) 电气功能: 10 NO(脉冲) 01 NC(脉冲) 10Z 自锁ON-OFF (需要提供外接电源)	Terminal Y Lead(length 30cm) Other Lead length and connection mode can be customized. 接线方式 Y 引线(长度30cm) 需指定引线长度可定制	Colour / Material NT Natural anodized BU Blue anodized BK Black anodized GD Gold anodized GN Green anodized RD Red anodized SS Stainless steel 外壳颜色及材料: NT 镀原色 BU 镀蓝色 BK 镀黑色 GD 镀金色 GN 镀绿色 RD 镀红色 SS 不锈钢	Switch rating 1 200mA 24VAC/DC 电气性能 1 200mA 24VAC/DC	LED colour Blank Non-illum. R Red G Green Y Yellow O Orange B Blue W White 带灯颜色: 无字表示不带灯 R 红 G 绿 Y 黄 O 橙 B 蓝 W 白	Lamp voltage Blank Non-illum. 05T thin ring - 5VDC 12T thin ring - 12VDC 24T thin ring - 24VDC 05L large ring - 5VDC 12L large ring - 12VDC 24L large ring - 24VDC 带灯电压 无字表示不带灯 05T 细环形 - 5VDC 12T 细环形 - 12VDC 24T 细环形 - 24VDC 05L 宽环形 - 5VDC 12L 宽环形 - 12VDC 24L 宽环形 - 24VDC

PS	22	★	□	■	◆	◇	△	▲
Series 系列号	Mounting dimension 安装尺寸	Operator 3P Flat operator, height 3.0 (Not available with large illuminated ring.) 3Z With finger location, height 3.0, (Not available with illuminated ring). 5P Flat operator, height 4.5 (Available with large illuminated ring only.) 操作头部: 3P 平型头部, 高 3.0 (宽环形带灯无此规格) 3Z 带手指位头部, 高3.0 (环形带灯无此规格) 5P 平型头部, 高 4.5 (仅宽环形带灯有此规格)	Electrical function 10 NO (pulse) 01 NC (pulse) 10Z latching ON-OFF (requires external power supply) 电气功能: 10 NO(脉冲) 01 NC(脉冲) 10Z 自锁ON-OFF (需要提供外接电源)	Terminal Y Lead(length 30cm) Other Lead length and connection mode can be customized. 接线方式 Y 引线(长度30cm) 需指定引线长度可定制	Colour / Material NT Natural anodized BU Blue anodized BK Black anodized GD Gold anodized GN Green anodized RD Red anodized SS Stainless steel 外壳颜色及材料: NT 镀原色 BU 镀蓝色 BK 镀黑色 GD 镀金色 GN 镀绿色 RD 镀红色 SS 不锈钢	Rating 1 200mA 24VAC/DC 电气性能 1 200mA 24VAC/DC	LED colour Blank Non-illum. R Red G Green Y Yellow O Orange B Blue W White 带灯颜色: 无字表示不带灯 R 红 G 绿 Y 黄 O 橙 B 蓝 W 白	Lamp voltage Blank Non-illum. 05T thin ring - 5VDC 12T thin ring - 12VDC 24T thin ring - 24VDC 05L large ring - 5VDC 12L large ring - 12VDC 24L large ring - 24VDC 05D dot - 5VDC 12D dot - 12VDC 24D dot - 24VDC 带灯电压 无字表示不带灯 05T 细环形 - 5VDC 12T 细环形 - 12VDC 24T 细环形 - 24VDC 05L 宽环形 - 5VDC 12L 宽环形 - 12VDC 24L 宽环形 - 24VDC 05D 单点带灯 - 5VDC 12D 单点带灯 - 12VDC 24D 单点带灯 - 24VDC

Non-illuminated, operator height 4.50mm, flat
平型头部, 高4.50mm, 不带灯



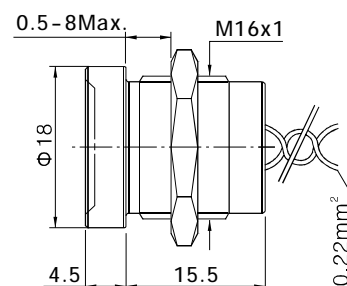
PS165P□Y◆1
Panel size 安装孔尺寸: $\Phi 16\text{mm}$
IP degree 防护等级: IP69K, IK10



Non-illuminated, operator height 4.50mm, with finger location
带手指位头部, 高4.50mm, 不带灯



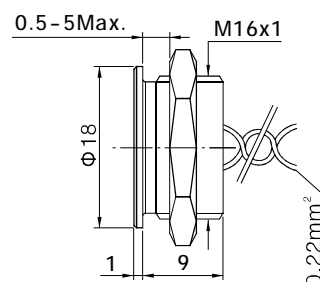
PS165Z□Y◆1
Panel size 安装孔尺寸: $\Phi 16\text{mm}$
IP degree 防护等级: IP69K, IK10



Non-illuminated, operator height 1mm, flat
平型头部, 高1.00mm, 不带灯



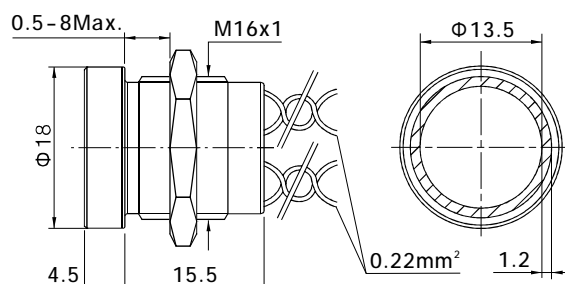
PS161P□Y◆1
Panel size 安装孔尺寸: $\Phi 16\text{mm}$
IP degree 防护等级: IP69K, IK10



With standard illuminated ring, operator height 4.50mm, flat
平型头部, 高4.50mm, 环形带灯



PS165P□Y◆1△▲
Panel size 安装孔尺寸: $\Phi 16\text{mm}$
IP degree 防护等级: IP68, IK10

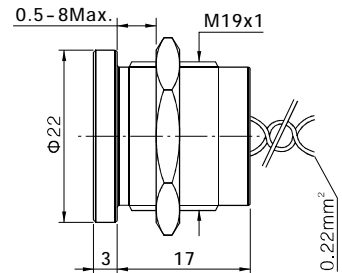


□	◆	△	▲
Electrical function 电气功能:	Colour / Material 外壳颜色及材料:	LED colour 带灯颜色:	Lamp voltage 带灯电压
10 NO (pulse) 10 NO(脉冲)	NT Natural anodized NT 镀原色	Blank Non-illum. 无字表示不带灯	Blank Non-illum. 无字表示不带灯
01 NC (pulse) 01 NC(脉冲)	BU Blue anodized BU 镀蓝色	R Red R 红	05 Standard ring - 5VDC 05 环形 - 5VDC
10Z latching ON-OFF (requires external power supply) 10Z 自锁ON-OFF (需要提供外接电源)	BK Black anodized BK 镀黑色	G Green G 绿	12 Standard ring - 12VDC 12 环形 - 12VDC
	GD Gold anodized GD 镀金色	Y Yellow Y 黄	24 Standard ring - 24VDC 24 环形 - 24VDC
	GN Green anodized GN 镀绿色	O Orange O 橙	
	RD Red anodized RD 镀红色	B Blue B 蓝	
	SS Stainless steel SS 不锈钢	W White W 白	

Non-illuminated - operator height 3mm, flat
平型头部, 高3.00mm, 不带灯



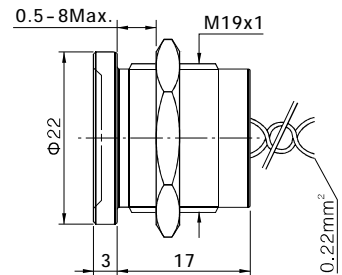
PS193P□Y◆1
Panel size 安装孔尺寸: $\Phi 19\text{mm}$
IP degree 防护等级: IP69K,IK10



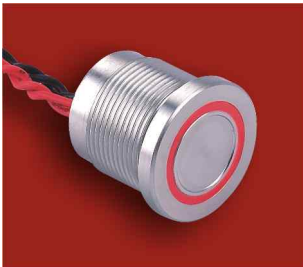
Non-illuminated - operator height 3mm, with finger location
带手指位头部, 高3.00mm, 不带灯



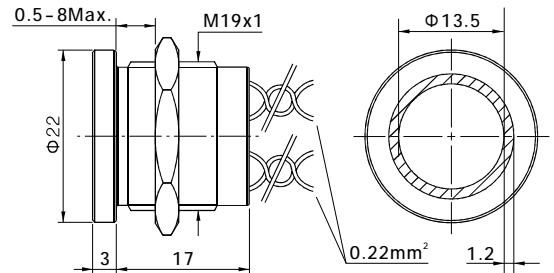
PS193Z□Y◆1
Panel size 安装孔尺寸: $\Phi 19\text{mm}$
IP degree 防护等级: IP69K,IK10



With thin illuminated ring, operator height 3mm, flat
平型头部, 高3.00mm, 细环形带灯



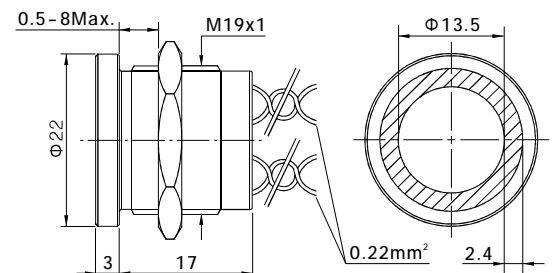
PS193P□Y◆1△▲
Panel size 安装孔尺寸: $\Phi 19\text{mm}$
IP degree 防护等级: IP68,IK10



With large illuminated ring, operator height 3mm, with flat
平型头部, 高3.00mm, 宽环形带灯



PS193P□Y◆1△▲
Panel size 安装孔尺寸: $\Phi 19\text{mm}$
IP degree 防护等级: IP68,IK10

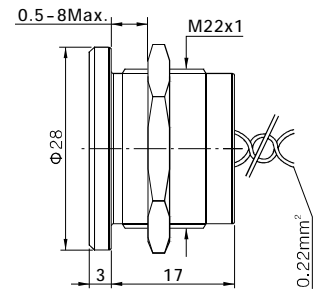


□	◆	△	▲				
Electrical function 10 NO (pulse) 01 NC (pulse) 10Z latching ON-OFF (requires external power supply)	电气功能: 10 NO(脉冲) 01 NC(脉冲) 10Z 自锁ON-OFF (需要提供外接电源)	Colour / Material NT Natural anodized BU Blue anodized BK Black anodized GD Gold anodized GN Green anodized RD Red anodized SS Stainless steel	外壳颜色及材料: NT 镀原色 BU 镀蓝色 BK 镀黑色 GD 镀金色 GN 镀绿色 RD 镀红色 SS 不锈钢	LED colour Blank Non-illum. R Red G Green Y Yellow O Orange B Blue W White	带灯颜色: 无字表示不带灯 R 红 G 绿 Y 黄 O 橙 B 蓝 W 白	Lamp voltage Blank Non-illum. 05T thin ring - 5VDC 12T thin ring - 12VDC 24T thin ring - 24VDC 05L large ring - 5VDC 12L large ring - 12VDC 24L large ring - 24VDC	带灯电压 无字表示不带灯 05T 细环形 - 5VDC 12T 细环形 - 12VDC 24T 细环形 - 24VDC 05L 宽环形 - 5VDC 12L 宽环形 - 12VDC 24L 宽环形 - 24VDC

Non-illuminated, operator height 3 mm, flat
平型头部, 高3.00mm, 不带灯



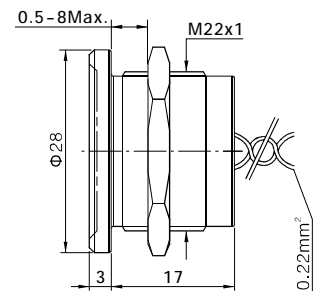
PS223P□Y◆1
Panel size 安装孔尺寸: $\Phi 22\text{mm}$
IP degree 防护等级: IP69K, IK10



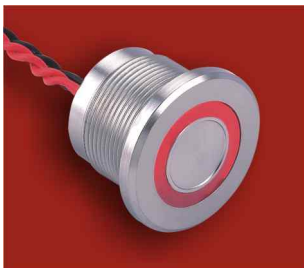
Non-illuminated, operator height 3 mm, with finger location
带手指位头部, 高3.00mm, 不带灯



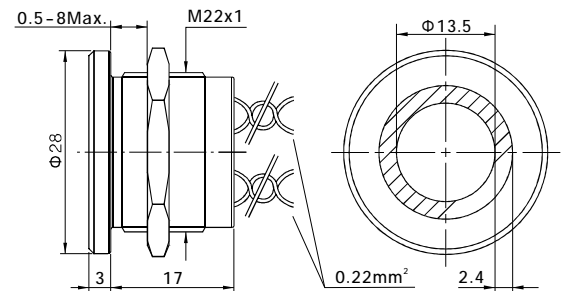
PS223Z□Y◆1
Panel size 安装孔尺寸: $\Phi 22\text{mm}$
IP degree 防护等级: IP69K, IK10



With thin illuminated ring - operator height 3mm, flat
平型头部, 高3.00mm, 细环形带灯



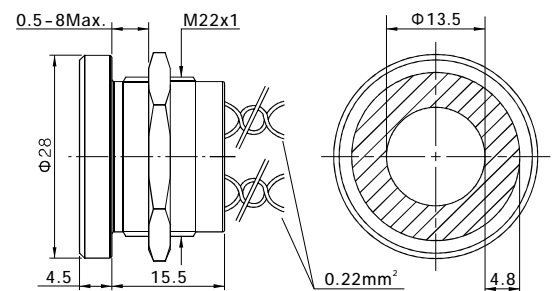
PS223P□Y◆1△▲
Panel size 安装孔尺寸: $\Phi 22\text{mm}$
IP degree 防护等级: IP68, IK10



With large illuminated ring, operator height 4,50mm, flat
平型头部, 高4.50mm, 宽环形带灯



PS225P□Y◆1△▲
Panel size 安装孔尺寸: $\Phi 22\text{mm}$
IP degree 防护等级: IP68, IK10

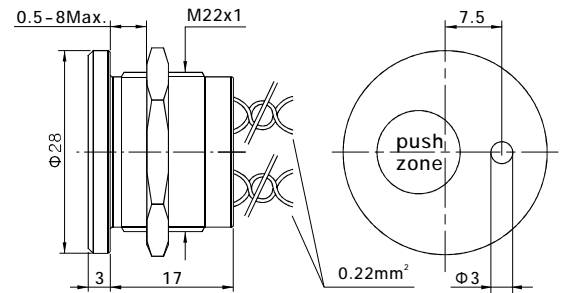


□	◆	△	▲
Electrical function 电气功能:	Colour / Material 外壳颜色及材料:	LED colour 带灯颜色:	Lamp voltage 带灯电压
10 NO (pulse) 10 NO(脉冲)	NT Natural anodized NT 镀原色	Blank Non-illum. 无字表示不带灯	Blank Non-illum. 无字表示不带灯
01 NC (pulse) 01 NC(脉冲)	BU Blue anodized BU 镀蓝色	R Red R 红	05T thin ring - 5VDC 05T 细环形 - 5VDC
10Z latching ON-OFF (requires external power supply) 10Z 自锁ON-OFF (需要提供外接电源)	BK Black anodized BK 镀黑色	G Green G 绿	12T thin ring - 12VDC 12T 细环形 - 12VDC
	GD Gold anodized GD 镀金色	Y Yellow Y 黄	24T thin ring - 24VDC 24T 细环形 - 24VDC
	GN Green anodized GN 镀绿色	O Orange O 橙	05L large ring - 5VDC 05L 宽环形 - 5VDC
	RD Red anodized RD 镀红色	B Blue B 蓝	12L large ring - 12VDC 12L 宽环形 - 12VDC
	SS Stainless steel SS 不锈钢	W White W 白	24L large ring - 24VDC 24L 宽环形 - 24VDC

With illuminated dot, operator height 3 mm, flat
平型头部, 高3.00mm, 单点带灯



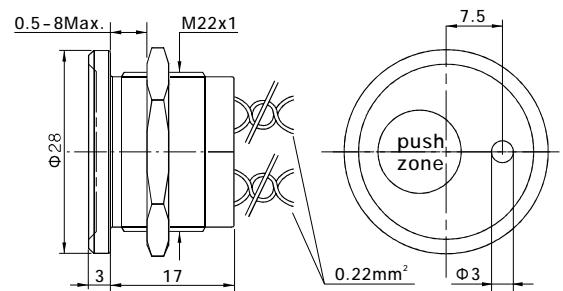
PS223P□Y◆1△▲D
Panel size 安装孔尺寸: $\Phi 22\text{mm}$
IP degree 防护等级: IP68, IK10



With illuminated dot, operator height 3 mm, with finger location
带手指位头部, 高3.00mm, 单点带灯



PS223Z□Y◆1△▲D
Panel size 安装孔尺寸: $\Phi 22\text{mm}$
IP degree 防护等级: IP68, IK10



□	◆	△	▲
Electrical function 10 NO (pulse) 01 NC (pulse) 10Z latching ON-OFF (requires external power supply)	电气功能: 10 NO(脉冲) 01 NC(脉冲) 10Z 自锁ON-OFF (需要提供外接电源)	Colour / Material NT Natural anodized BU Blue anodized BK Black anodized GD Gold anodized GN Green anodized RD Red anodized	外壳颜色及材料: NT 镀原色 BU 镀蓝色 BK 镀黑色 GD 镀金色 GN 镀绿色 RD 镀红色
		LED colour Blank Non-illum. R Red G Green Y Yellow O Orange B Blue W White	带灯颜色: 无字表示不带灯 R 红 G 绿 Y 黄 O 橙 B 蓝 W 白
			Lamp voltage Blank Non-illum. 05D dot - 5VDC 12D dot - 12VDC 24D dot - 24VDC
			带灯电压 无字表示不带灯 05D 单点带灯 - 5VDC 12D 单点带灯 - 12VDC 24D 单点带灯 - 24VDC



Shower/淋浴器
(IP68 sealing)



Home automation/家庭自动化
(design, customization/按需设计外观并定制)



Bath/浴缸
(IP68 sealing, customization/按需设计外观并定制)



Car wash/洗车设备
(IP68 sealing, long life/超长寿命)



Marine/海上设备
(IP68 sealing, design/按需设计外观)



Medical/医疗设备
(easy to clean surface, no retention area/易清洁, 无残留)



Food processing/食品加工设备
(IP69K sealing)



Mining/采掘设备