



大电流按钮开关系列 $\Phi 19 \sim \Phi 25\text{mm}$



我们只制造精品 We Only Make Quality Products

METAL PUSH BUTTON SWITCH



Φ 19mm 大电流开关 Metal Push Button Switch

产品外观

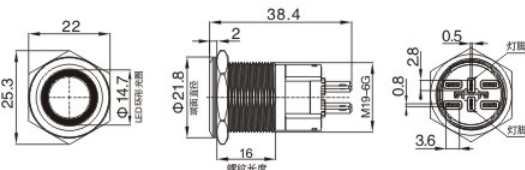
技术参数

外形尺寸



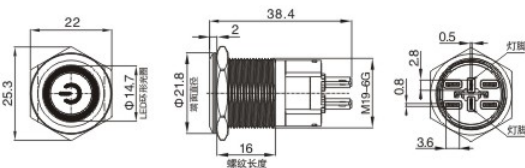
MD19S/F11-Δ▲E(Z)

安装尺寸Diameter: Φ19mm
开关组合Contact Configuration: 1NO1NC
1NO / 2NO
头部形状The Front Shape: 平面 Flat
操作类型Operation Type: 自复型Momentary
自锁型Maintained(Z)



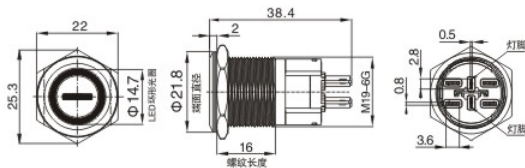
MD19S/F11-Δ▲EDY(Z)

安装尺寸Diameter: Φ19mm
开关组合Contact Configuration: 1NO1NC
1NO / 2NO
头部形状The Front Shape: 平面 Flat
操作类型Operation Type: 自复型Momentary
自锁型Maintained(Z)



MD19S/F11-Δ▲EX(Z)

安装尺寸Diameter: Φ19mm
开关组合Contact Configuration: 1NO1NC
1NO / 2NO
头部形状The Front Shape: 平面 Flat
操作类型Operation Type: 自复型Momentary
自锁型Maintained(Z)



产品规格	Specification	MD19S/F11-Δ▲E(Z)	MD19S/F11-Δ▲EDY(Z)	MD19S/F11-Δ▲EX(Z)
尾部配置	Terminal Type	接线插片Pin Terminal(3.6×0.8mm)	接线插片Pin Terminal(3.6×0.8mm)	接线插片Pin Terminal(3.6×0.8mm)
开关结构	Switching	No.2	No.2	No.2
开关规格	Max.Switch Rating	10A/250VAC	10A/250VAC	10A/250VAC
接触电阻	Contact Resistance	≤25mΩ	≤25mΩ	≤25mΩ
绝缘电阻	Insulation Resistance	≥100mΩ	≥100mΩ	≥100mΩ
绝缘强度	Dielectric Intensity	2000VAC	2000VAC	2000VAC
环境温度	Operating Temp	-20℃~+70℃	-20℃~+70℃	-20℃~+70℃
机械寿命	Mechanical Life	10万次以上100,000 cycles	10万次以上100,000 cycles	10万次以上100,000 cycles
电气寿命	Electrical Life	1万次以上10,000 cycles	1万次以上10,000 cycles	1万次以上10,000 cycles
面板厚度	Panel Thickness	1-15mm	1-15mm	1-15mm
螺母扭矩	Torque	1-2Nm	1-2Nm	1-2Nm
操作压力	Operation Pressure	6N	6N	6N
操作行程	Operation Travel	约4.5mm About 4.5mm	约4.5mm About 4.5mm	约4.5mm About 4.5mm
防护等级	IP Degree	IP65(可定制 IP67), IK10	IP65(可定制 IP67), IK10	IP65(可定制 IP67), IK10
材料	触点	银镀金Silver plated gold	银镀金Silver plated gold	银镀金Silver plated gold
	按键	不锈钢Stainless steel	不锈钢Stainless steel	不锈钢Stainless steel
	外壳	不锈钢Stainless steel	不锈钢Stainless steel	不锈钢Stainless steel
	底座	聚碳酸酯PC	聚碳酸酯PC	聚碳酸酯PC
灯珠参数	产品定制	可定制Made to order	可定制Made to order	可定制Made to order
	带灯类型	环形带灯Ring Illuminated(LED)	环形电源标Ring&Power symbol Illuminated(LED)	环形一字标Ring luminated(LED)
	额定电压	6/12/24/110/220V	6/12/24/110/220V	6/12/24/110/220V
	灯珠颜色	R G Y O B W	R G Y O B W	R G Y O B W
灯珠寿命	Life	40000小时hours	40000小时hours	40000小时hours

Φ 22mm 大电流开关 Metal Push Button Switch

产品外观

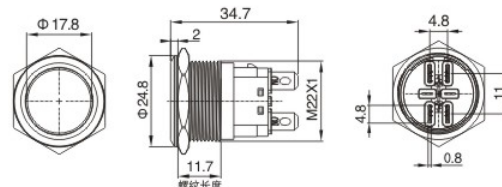
技术参数

外形尺寸



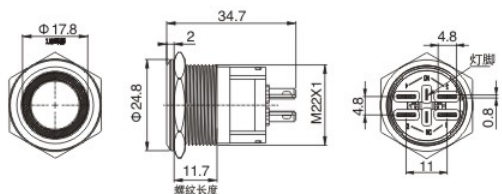
MD22S/F11(Z)

安装尺寸Diameter: Φ22mm
开关组合Contact Configuration: 1NO1NC
1NO / 2NO
头部形状The Front Shape: 平面 Flat
操作类型Operation Type: 自复型Momentary
自锁型Maintained(Z)



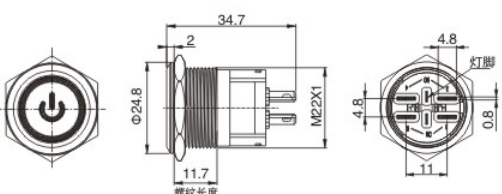
MD22S/F11-Δ▲E(Z)

安装尺寸Diameter: Φ22mm
开关组合Contact Configuration: 1NO1NC
1NO / 2NO
头部形状The Front Shape: 平面 Flat
操作类型Operation Type: 自复型Momentary
自锁型Maintained(Z)



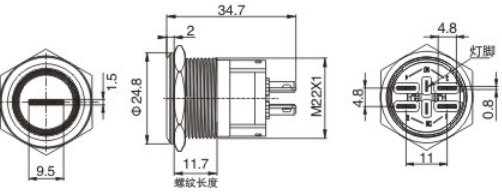
MD22S/F11-Δ▲EDY(Z)

安装尺寸Diameter: Φ22mm
开关组合Contact Configuration: 1NO1NC
1NO / 2NO
头部形状The Front Shape: 平面 Flat
操作类型Operation Type: 自复型Momentary
自锁型Maintained(Z)



MD22S/F11-Δ▲EX(Z)

安装尺寸Diameter: Φ22mm
开关组合Contact Configuration: 1NO1NC
1NO / 2NO
头部形状The Front Shape: 平面 Flat
操作类型Operation Type: 自复型Momentary
自锁型Maintained(Z)



产品规格	Specification	MD22S/F11(Z)	MD22S/F11-Δ▲E(Z)	MD22S/F11-Δ▲EDY(Z)	MD22S/F11-Δ▲EX(Z)
尾部配置	Terminal Type	接线插片Pin Terminal(4.8×0.8mm)	接线插片Pin Terminal(4.8×0.8mm)	接线插片Pin Terminal(4.8×0.8mm)	接线插片Pin Terminal(4.8×0.8mm)
开关结构	Switching	No.2	No.2	No.2	No.2
开关规格	Max.Switch Rating	15A/250VAC	15A/250VAC	15A/250VAC	15A/250VAC
接触电阻	Contact Resistance	≤25mΩ	≤25mΩ	≤25mΩ	≤25mΩ
绝缘电阻	Insulation Resistance	≥100mΩ	≥100mΩ	≥100mΩ	≥100mΩ
绝缘强度	Dielectric Intensity	4000VAC	4000VAC	4000VAC	4000VAC
环境温度	Operating Temp	-20℃~+70℃	-20℃~+70℃	-20℃~+70℃	-20℃~+70℃
机械寿命	Mechanical Life	10万次以上100,000 cycles	10万次以上100,000 cycles	10万次以上100,000 cycles	10万次以上100,000 cycles
电气寿命	Electrical Life	1万次以上10,000 cycles	1万次以上10,000 cycles	1万次以上10,000 cycles	1万次以上10,000 cycles
面板厚度	Panel Thickness	1-15mm	1-15mm	1-15mm	1-15mm
螺母扭矩	Torque	1-2Nm	1-2Nm	1-2Nm	1-2Nm
操作压力	Operation Pressure	6N	6N	6N	6N
操作行程	Operation Travel	约3.5mm About 3.5mm	约3.5mm About 3.5mm	约3.5mm About 3.5mm	约3.5mm About 3.5mm
防护等级	IP Degree	IP65(可定制 IP67), IK10	IP65(可定制 IP67), IK10	IP65(可定制 IP67), IK10	IP65(可定制 IP67), IK10
材料	触点	银镀金Silver Plated Gold	银镀金Silver Plated Gold	银镀金Silver Plated Gold	银镀金Silver Plated Gold
	按键	不锈钢Stainless steel	不锈钢Stainless steel	不锈钢Stainless steel	不锈钢Stainless steel
	外壳	不锈钢Stainless steel	不锈钢Stainless steel	不锈钢Stainless steel	不锈钢Stainless steel
	底座	聚碳酸酯PC	聚碳酸酯PC	聚碳酸酯PC	聚碳酸酯PC
灯珠参数	产品定制	可定制Made to order	可定制Made to order	可定制Made to order	可定制Made to order
	带灯类型	Lamp type	环形带灯Ring Illuminated(LED)	环形电源标 Ring&Power symbol Illuminated(LED)	环形一字标Ring luminated(LED)
	额定电压	Rated Voltage(Ue)	6/12/24/110/220V	6/12/24/110/220V	6/12/24/110/220V
	灯珠颜色	Color	R G Y O B W	R G Y O B W	R G Y O B W
	灯珠寿命	Life	40000小时hours	40000小时hours	40000小时hours



压电开关 $\Phi 16 \sim \Phi 22\text{mm}$



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METAL PIEZO SWITCH



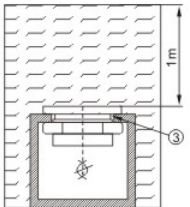
◎环境规范 Environmental Specifications

- 1.防水: IP68/IEC 529, IP69K/DIN 40050-9(按钮安装在面板上或者没有安装在面板上)
- 2.抗振: 10~500HZ/10g/IEC 60068-2-6
- 3.环境温度: -40℃~+70℃
- 4.EMC兼容性的整个范围是根据EN61058-1
- 5.型号1A(002)EMS兼容性根据EN61000-4和EN611000-6-2
- 1.Sealing: IP68 per IEC 529, IP69K per DIN 40050-9 (switches mounted on panel or not)
- 2.Vibration resistance: 10~500HZ/10g per IEC 60068-2-6
- 3.Operating temperature: -40℃ to +70℃
- 4.EMC compatibility according to EN 61058-1 for the whole range
- 5.EMC compatibility according to EN61000-4&EN61000-6-2 for model 1A(code 002)

◎电气通用规范 Electrical And General Specification

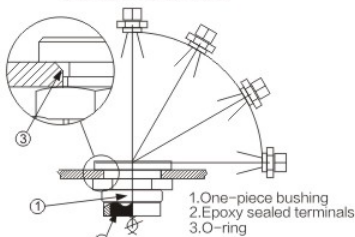
- 1.最大电流/额定电压:
功能A: 200mA 24VAC/DC-1A 24VAC/DC
功能B: 100mA 24VAC/DC
- 2.常开电阻: 最大10欧姆
- 3.常闭电阻: 最小5毫欧
- 1.Max. current/voltage rating:
-Function A: standard 200mA 24VAC/DC-option 1A 24VAC/DC
-Function B: standard 100mA 24VAC/DC
- 2.Switch resistance ON: 10Ω Max.
- 3.Switch resistance OFF: 5mΩ Min.
- 4.Operating force: 2 to 6N
- 5.Life expectancy: 50 million cycles
- 6.LED consumption: Illuminated dot: 10mA-Illuminated ring: 20mA

防水等级IP68 SEALINE IP68



持续浸在水中
Continuous immersion in water
IP68 测试条件(一直浸在水中1米, 24小时)
IP68 test conditions
Continuous immersion in water (1m, 24hours)

防水等级IP69K SEALING IP69K



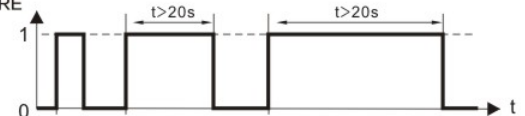
高温, 高压冲洗
High pressure, high temperature wash down
IP69K 测试条件
1.压力: 80~120帕
2.间距: 15厘米
3.温度: 80℃ ±5℃
4.流动: 14~16 l/mn
5.持续时间: 每个位置30秒
IP69K test condition
1.Pressure: 80~120bars
2.Distance: 15cm
3.Temperature: 80℃ ±5℃
4.Flow: 14~16l/mn
5.Duration: 30seconds per position

◎材料 Materials

- 1.外壳: 铝,氧化或者是316L 不锈钢
- 2.多股线, 0.22平方, 双股
- 3.电缆, 300mm长, 部分取决于按钮型号
- 4.PC 端子: 铜, 镀锡
- 1.case: aluminium, anodized or stainless steel 316L
- 2.Multi-wire leads section 0.22 mm² length 300 mm, twisted by pair
- 3.cable, length 300 mm, section depending on switch model
- 4.PC terminals: bronze, tin plated

手压开关 FINGER PRESSURE applied to switch

1=压力
0=没有压力
1=pressure
0=no pressure



输出 OUTPUT

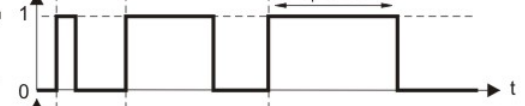
自复常闭(脉冲)
无需额外电压供给
-Momentary NO(pulse)
No external power supply required



自复常闭(脉冲)
无需额外电压供给
-Momentary NC(pulse)
No external power supply required



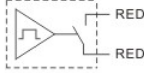
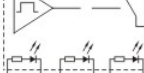
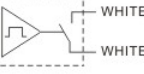
自复常开, 延迟脉冲
无需额外电压供给
-Momentary NO
prolongated pulse
No external power supply required



自锁(开-闭)
需要额外电压供给
-Latching (NO-OFF)
Requires external power supply



◎接线图 Wiring Diagrams

	无灯 Non-illuminated	1 LED*	2 LEDs*	3 LEDs
自复常开 Momentary NO				
自复常闭 Momentary NC				
自复常开 延时脉冲 Momentary NO prolongated pulse				
自锁(开-闭) Latching (ON-OFF)				

◎外壳颜色 Shell color



MX16~22mm金属压电开关系列 Metal Piezo Switches

产品外观

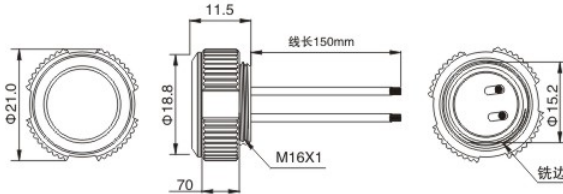
技术参数

外形尺寸



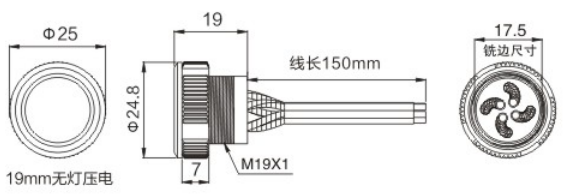
MX16A-10

安装尺寸Diameter: $\Phi 16\text{mm}$
 开关组合Contact Configuration: 1NO1NC
 1NO / 2NO
 头部形状The Front Shape: 平面 Flat
 操作方式operating mode: 压力 Press
 操作类型Operation Type: 自复型Momentary



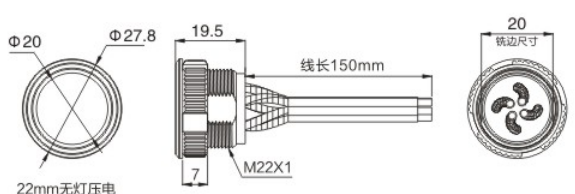
MX19A-10

安装尺寸Diameter: $\Phi 19\text{mm}$
 开关组合Contact Configuration: 1NO1NC
 1NO / 2NO
 头部形状The Front Shape: 平面 Flat
 操作方式operating mode: 压力 Press
 操作类型Operation Type: 自复型Momentary



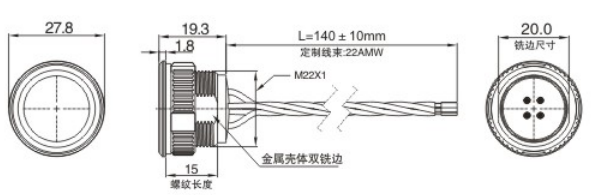
MX22A-10

安装尺寸Diameter: $\Phi 22\text{mm}$
 开关组合Contact Configuration: 1NO1NC
 1NO / 2NO
 头部形状The Front Shape: 平面 Flat
 操作方式operating mode: 压力 Press
 操作类型Operation Type: 自复型Momentary



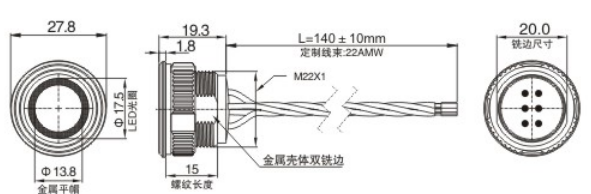
MX22S-10(Z)

安装尺寸Diameter: $\Phi 22\text{mm}$
 开关组合Contact Configuration: 1NO1NC
 1NO / 2NO
 头部形状The Front Shape: 平面 Flat
 操作方式operating mode: 压力 Press
 操作类型Operation Type: 自复型Momentary



MX22S-10(Z)-Δ▲E

安装尺寸Diameter: $\Phi 22\text{mm}$
 开关组合Contact Configuration: 1NO1NC
 1NO / 2NO
 头部形状The Front Shape: 平面 Flat
 操作方式operating mode: 压力 Press
 操作类型Operation Type: 自复型Momentary



产品规格	Specification	MX16A-10	MX19A-10	MX22A-10	MX22S-10(Z)	MX22S-10(Z)-Δ▲E
尾部配置	Terminal Type	电线 Cable(22-26AWG×100mm)	电线 Cable(22-26AWG×100mm)	电线 Cable(22-26AWG×100mm)	电线 Cable(22-26AWG×100mm)	电线Cable(24AWG×100mm)
绝缘强度	Dielectric Intensity	1100VAC	1100VAC	1100VAC	1100VAC	1100VAC
环境温度	Operating Temp	-20℃~+70℃	-20℃~+70℃	-20℃~+70℃	-20℃~+70℃	-20℃~+70℃
开关规格	Max.Switch Rating	100mA/24VAC	100mA/24VAC	100mA/24VAC	100mA/24VAC	100mA/24VAC
面板厚度	Panel Thickness	1-10mm	1-10mm	1-10mm	1-10mm	1-10mm
螺母扭矩	Torque	1-2Nm	1-2Nm	1-2Nm	1-2Nm	1-2Nm
防护等级	IP Degree	IP68, IK10	IP68, IK10	IP68, IK10	IP68, IK10	IP68, IK10
材料	按键 Button	铝氧化/不锈钢 Aluminum/Stainless steel				
	外壳 Body					
产品定制	Made to order	可定制Made to order	可定制Made to order	可定制Made to order	可定制Made to order	可定制Made to order
带灯类型	Lamp type					环形带灯Ring Illuminated(LED)
额定电压	Rated Voltage(Ue)					6/12/24V
灯珠颜色	Color					RGBYGBWRGBY
灯珠寿命	Life					40000小时hours



金属微程开关系列 $\Phi 12 \sim \Phi 22\text{mm}$



我们只制造精品 We Only Make Quality Products

METAL MICRO SWITCH



◎MW12~16金属微程开关系列 Metal Micro Switch

产品外观

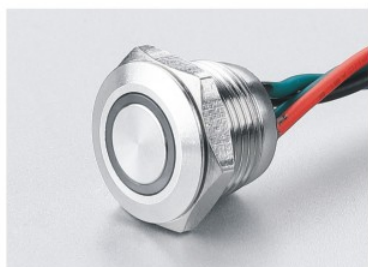
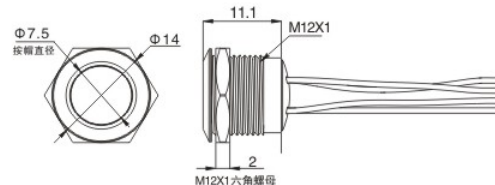
技术参数

外形尺寸



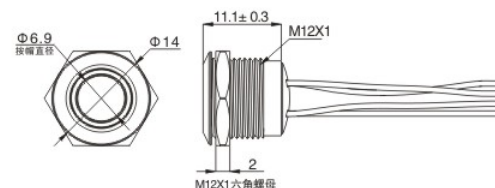
MW012S/10

安装尺寸Diameter: $\Phi 12\text{mm}$
开关组合Contact Configuration: 1NO
头部形状The Front Shape: 平面 Flat
操作类型Operation Type: 自复型Momentary



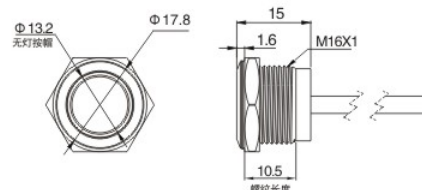
MW012S/10-△▲E

安装尺寸Diameter: $\Phi 12\text{mm}$
开关组合Contact Configuration: 1NO
头部形状The Front Shape: 平面 Flat
操作类型Operation Type: 自复型Momentary



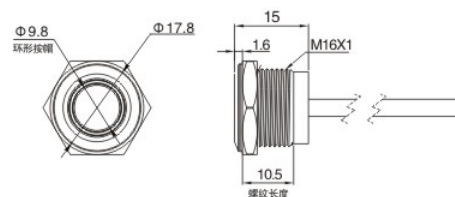
MW016S/10

安装尺寸Diameter: $\Phi 16\text{mm}$
开关组合Contact Configuration: 1NO
头部形状The Front Shape: 平面 Flat
操作类型Operation Type: 自复型Momentary



MW016S/10-△▲E

安装尺寸Diameter: $\Phi 16\text{mm}$
开关组合Contact Configuration: 1NO
头部形状The Front Shape: 平面 Flat
操作类型Operation Type: 自复型Momentary



产品规格	Specification	MW012S/10	MW012S/10-△▲E	MW016S/10	MW016S/10-△▲E
尾部配置	Terminal Type	电线Cable(22~26AWG×100mm)	电线Cable(22~26AWG×100mm)	电线Cable(22~26AWG×100mm)	电线Cable(22~26AWG×100mm)
绝缘强度	Dielectric Intensity	1100VAC	1100VAC	1100VAC	1100VAC
环境温度	Operating Temp	-20℃~+70℃	-20℃~+70℃	-20℃~+70℃	-20℃~+70℃
开关规格	Max.Switch Rating	50mA/24VAC	50mA/24VAC	50mA/24VAC	50mA/24VAC
面板厚度	Panel Thickness	1~10mm	1~10mm	1~10mm	1~10mm
螺母扭矩	Torque	1~2Nm	1~2Nm	1~2Nm	1~2Nm
防护等级	IP Degree	IP68, IK10	IP68, IK10	IP68, IK10	IP68, IK10
材料	Material	铝氧化/不锈钢 Aluminum/Stainless steel			
按键	Button				
外壳	Body				
产品定制	Made to order	可定制Made to order	可定制Made to order	可定制Made to order	可定制Made to order
带灯类型	Lamp type		环形带灯Ring luminated(LED)		环形带灯Ring luminated(LED)
额定电压	Rated Voltage(Ue)		3/6/12/24V		3/6/12/24V
灯珠颜色	Color		RGBW RGBY		RGBW RGBY
灯珠寿命	Life		40000小时hours		40000小时hours

◎MW19~22金属微程开关系列 Metal Piezo Switches

产品外观

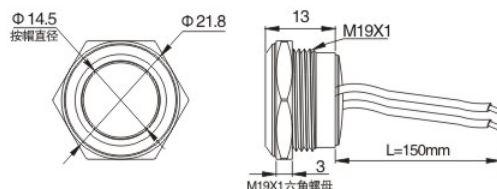
技术参数

外形尺寸



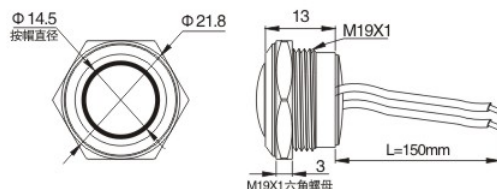
MW019S/10

安装尺寸Diameter: $\Phi 19\text{mm}$
开关组合Contact Configuration: 1NO
头部形状The Front Shape: 平面 Flat
操作类型Operation Type: 自复型Momentary



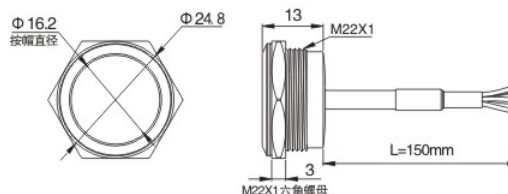
MW019S/10-Δ▲E

安装尺寸Diameter: $\Phi 19\text{mm}$
开关组合Contact Configuration: 1NO
头部形状The Front Shape: 平面 Flat
操作类型Operation Type: 自复型Momentary



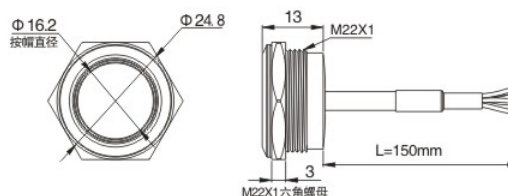
MW022S/10

安装尺寸Diameter: $\Phi 22\text{mm}$
开关组合Contact Configuration: 1NO
头部形状The Front Shape: 平面 Flat
操作类型Operation Type: 自复型Momentary



MW022S/10-Δ▲E

安装尺寸Diameter: $\Phi 22\text{mm}$
开关组合Contact Configuration: 1NO
头部形状The Front Shape: 平面 Flat
操作类型Operation Type: 自复型Momentary



产品规格	Specification	MW019S/10	MW019S/10-Δ▲E	MW022S/10	MW022S/10-Δ▲E
尾部配置	Terminal Type	电线Cable(22~26AWG×100mm)	电线Cable(22~26AWG×100mm)	电线Cable(22~26AWG×100mm)	电线Cable(22~26AWG×100mm)
绝缘强度	Dielectric Intensity	1100VAC	1100VAC	1100VAC	1100VAC
环境温度	Operating Temp	-20℃~+70℃	-20℃~+70℃	-20℃~+70℃	-20℃~+70℃
开关规格	Max.Switch Rating	50mA/24VAC	50mA/24VAC	50mA/24VAC	50mA/24VAC
面板厚度	Panel Thickness	1~10mm	1~10mm	1~10mm	1~10mm
螺母扭矩	Torque	1~2Nm	1~2Nm	1~2Nm	1~2Nm
防护等级	IP Degree	IP68, IK10	IP68, IK10	IP68, IK10	IP68, IK10
材料	按键	铝氧化/不锈钢 Aluminum/Stainless steel			
	外壳				
灯珠参数	产品定制	可定制Made to order	可定制Made to order	可定制Made to order	可定制Made to order
	带灯类型		环形带灯Ring luminated(LED)		环形带灯Ring luminated(LED)
	额定电压		3/6/12/24V		3/6/12/24V
	灯珠颜色		RGBYOBWRGRGY		RGBYOBWRGRGY
	灯珠寿命		40000小时hours		40000小时hours