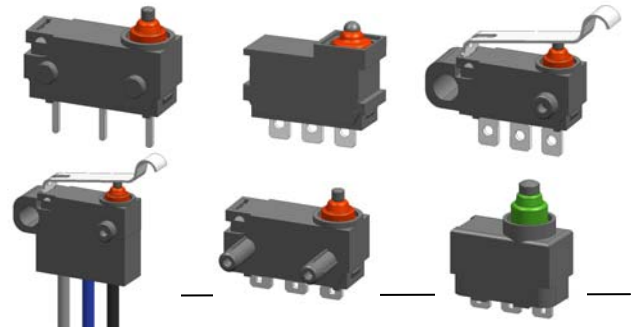


G3系列/G3 Series

超小型防水防尘微动开关

Subminiature Water and Dust Tight Micro Switch



■ 特点/Features

- ◆ 防水防尘（IP67）设计 - Designed for water and dust tight(IP67)
- ◆ 体形小巧，紧凑 - Small Compact Size
- ◆ 拥有全球安规认证 - Customer Designs
- ◆ 长寿命，高可靠性 - Long Life and High reliability
- ◆ 配备各种形式的操作柄 - Wide range of wiring Terminals
- ◆ 接线端子种类齐全 - Variety of levers
- ◆ 广泛应用于汽车控制、家电控制、工业控制等领域 - Widely used in automotive electronics, appliance and industrial control
- ◆ 多种安装外形尺寸满足不同的安装要求

■ 应用/Application

- ◆ 汽车/Car
- ◆ 空调/Air-Conditioner
- ◆ 通信/Communication
- ◆ 电动牙刷/Electric tooth brush
- ◆ 玩具/Toys

■ 特性参数/Parameters:

额定值/Rating		0.1A /125VAC; 3A/ 12VDC ; 1A /24VDC; 0.5A/ 42VDC u 1E5.
操作频率/Operating Frequency	电气/Electrical	10mA-120次/分; 3A-10-30次/分 cycles/minute
	机械/Mechanical	120次/分 cycles/minute
初始接触电阻/Contact Resistance(Initiative)		100mW Max
绝缘电阻/Insulation Resistance(at 500VDC)		100MW Min
抗震动/Vibration durability		10-55Hz,位移/move 0.75mm(p-p)
抗电强度/Dielectric Strength		500VAC (50-60Hz)
保存温度/Storage Temperature		-25℃~+85℃
保存湿度/Storage Humidity		85% RH Max
寿命/Service Life	电气/Electrical	6,000~500,000次/cycles(取决于类型/Depend on part number)
	机械/Mechanical	Min.500,000次/cycles

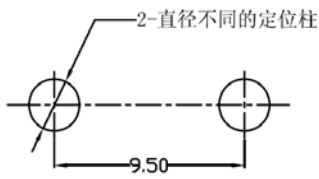
G3 系列微动开关订货型号指引
G3 Series Micro Switch Ordering Instruction

G3	03	130	S	00	A	2	A	E	A	01	Z
Switch Type 开关类别	Electrical Rating 额定负载	Operating Force at pin Plunger, Max 操作力(最大值) 数据在不带操作柄测得	Terminal Style 端子类型	Lever Type 操作柄类型	Circuit Code 接触形式	Shape and Posts 外形与定位柱	Posts Dimension 定位柱尺寸	AWG Type(for Wire type only) 线号 (仅适用于带线型)	AWG Number(For Wire type only) 线规 (仅适用于带线型)	Wires length 线长	Special Designator 特别设计 代码
G3 Series Micro-Switch G3系列 微动开关	03 0.1A/125VAC;3A/12D VC;1A/24DVC;0.5A/4 2DVC u 1E5	130 130gf Max. Other 其他	E Molded lead wires downwards. 带电线型号 底面出线	00 No lever 不带操作柄 Pin Plunger 柱式按拳	A SPDT 单极双投	1 A type no post A型无定位柱	Standard posts:2.60mmx5.0mm 标准型定位柱 2.60mmx5.0mm	No molded lead wires 不带电线	No molded lead wires 不带电线	300mm length standard lead wires 300mm 标准线长	S Special code 特殊说明
			G Molded lead wires on left side(plunger side) 带电线型号 左侧(按拳侧)出线	01 Leaf lever 水平手柄	B SPST- NC 单极单投-常闭	2 A type left side posts A型左定位柱	A φ2.2mmX0.9mm posts. φ2.2mmX0.9mm定位柱	E 20#	A UL1007	01 280mm length 280mm长
			F Molded lead wires on right side(plunger side) 带电线型号 右侧(远离按拳侧)出线	02 Straight Leaf lever 直手柄	C SPST- NO 单极单投-常开	3 A type right side posts A型右定位柱	B φ2.5mmX1.5mm posts. φ2.5mmX1.5mm定位柱	F 22#	C UL1430	Other 其他	
			S Solder Connect 焊接端子	05 Simulated Roller 模拟滚轮手柄		4 B type no post B型无定位柱	Other 其他	G 24#	D UL1061		
			M Short Solder terminals 短焊接端子	Other 其他		5 B type left posts B型左定位柱		H 26#	E UL1330		
			K Long solder terminals 长焊接端子			6 B type right side posts B型右定位柱		I 28#	F AVSS		
			N None-hole short Solder terminals 无孔短焊接端子			7 M3 type posts M3型定位柱		J 30#	H UL1332		
			P Straight PCB connect 直PCB端子			13 C type no post C型无定位柱		K 32#			
			R Right side PCB connect 右侧PCB端子			14 C type left posts C型左定位柱		L 34#			
			L Left side PCB connect 左侧PCB端子			15 C type left posts C型右定位柱					
			T Special Connect 特殊端子			16 D type no post D型无定位柱					
						17 D type left side posts D型左定位柱					
						18 D type right side posts D型右定位柱					
			Other								

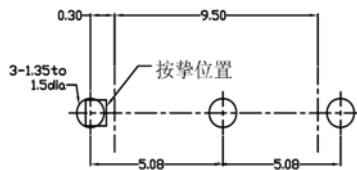
G3 Series Micro Switch Ordering Instruction



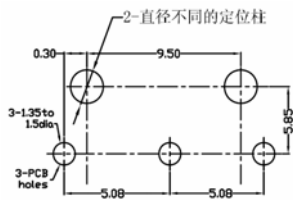
■ 安装孔尺寸/Mounting Hole Dimensions



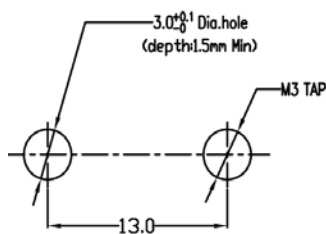
定位柱间距
Space between Posts



直PCB端子安装孔
Straight PCB terminals mounting hole

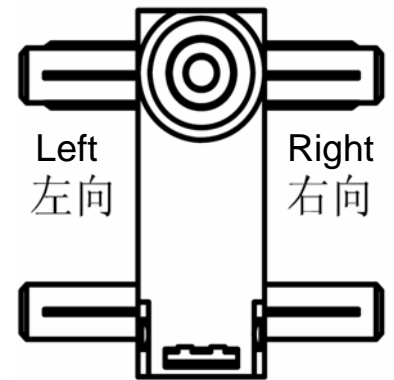


左右PCB端子安装孔
Left/Right PCB terminals mounting



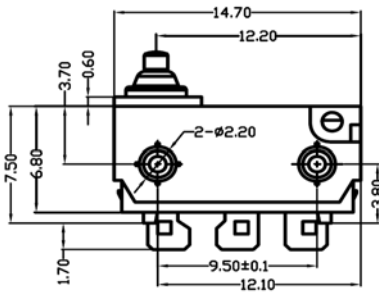
M3 型安装孔
M3 type mounting hole

定位柱方向识别 Posts direction define

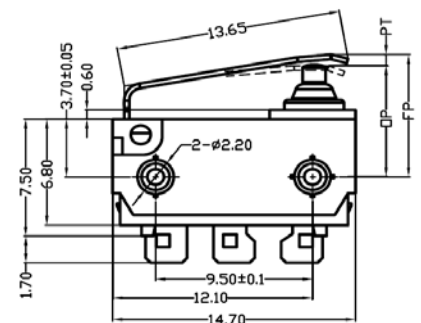


■ 操作柄类型/Lever Type

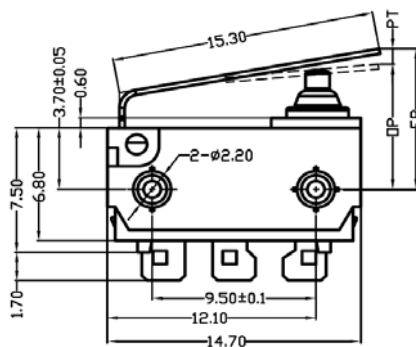
00#: 柱式按挚/Pin Plunger



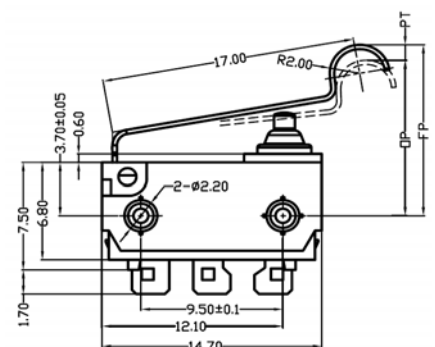
01#: 水平手柄/Leaf lever



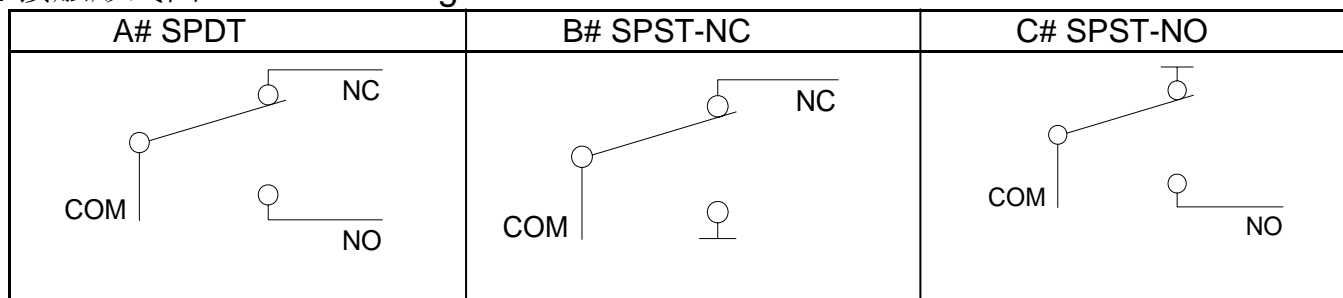
02#: 直手柄/Straight leaf lever



05#: 模拟滚轮手柄/Simulated Roller leaf lever



接触形式图/Contact Configuration

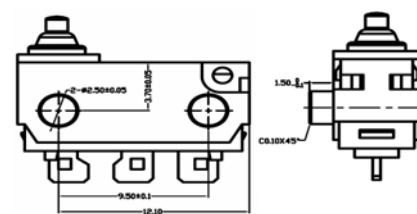
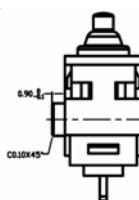
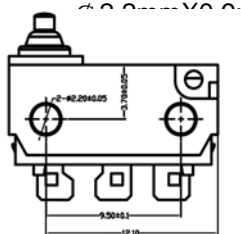
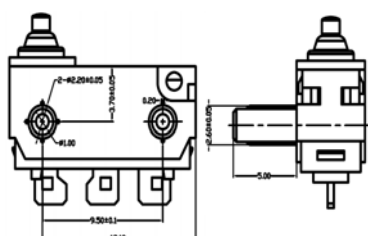


定位柱尺寸/Posts Dimension

无: 标准型定位柱 ϕ 2.60mmx5.0mm
Standard posts: ϕ 2.60mmx5.0mm

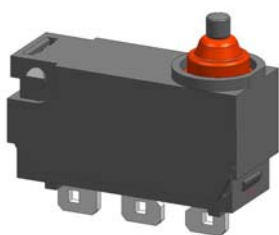
A#: ϕ 2.2mmx0.9mm定位柱

B#: ϕ 2.5mmX1.5mm定位柱
 ϕ 2.5mmX1.5mm posts

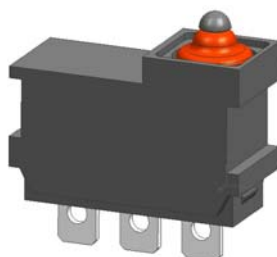


外形与定位柱/Shape and

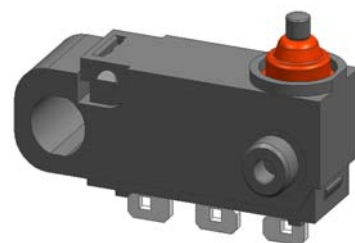
A 型基本外形
A type basic shape



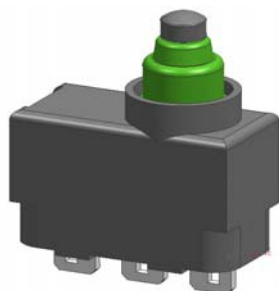
B 型基本外形
B type basic shape



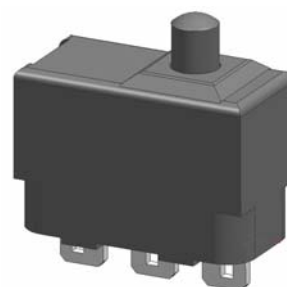
M3 型基本外形
M3 type basic shape



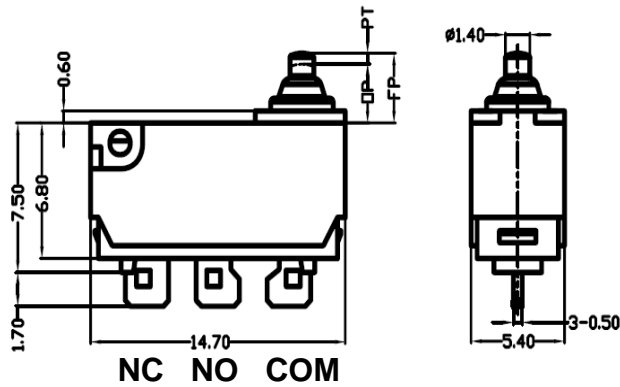
C 型基本外形
C type basic shape



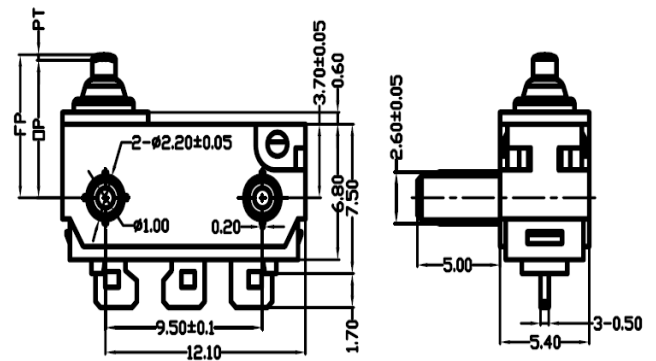
D 型基本外形
D type basic shape



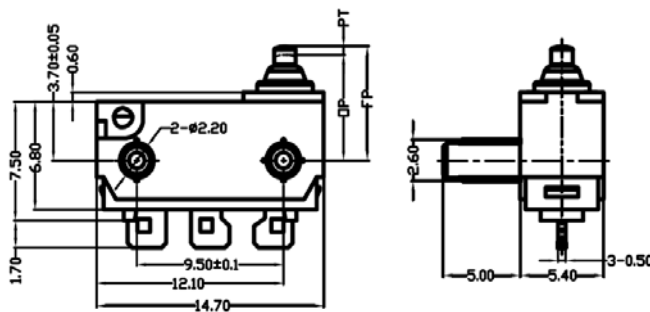
1# : A型无定位柱/ A type no post



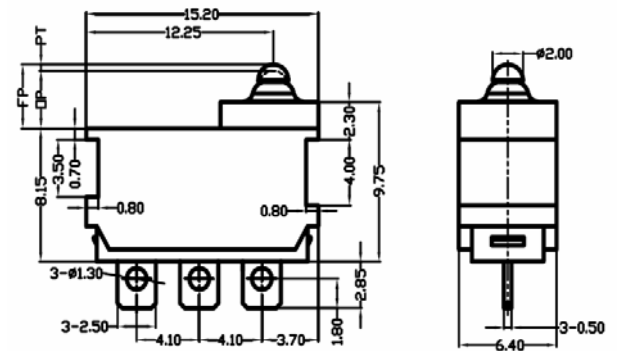
2# : A型左定位柱/A type left side posts



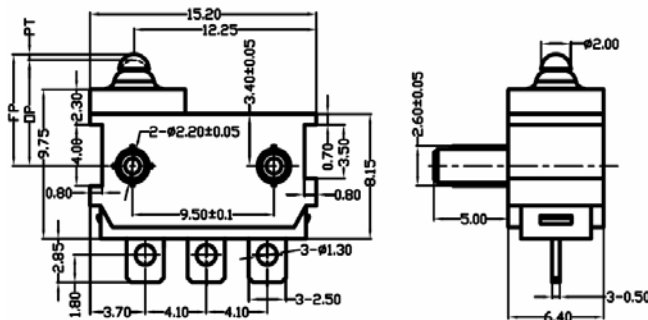
3# : A型右定位柱/A type right side posts



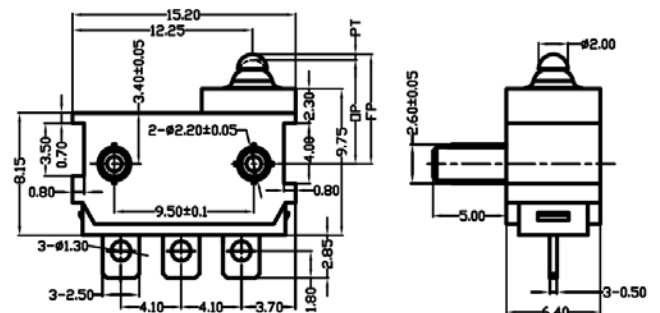
4# : B型无定位柱/ B type no post



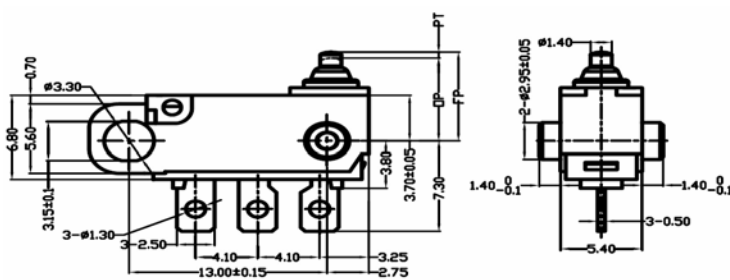
5# : B type left posts B型左定位柱



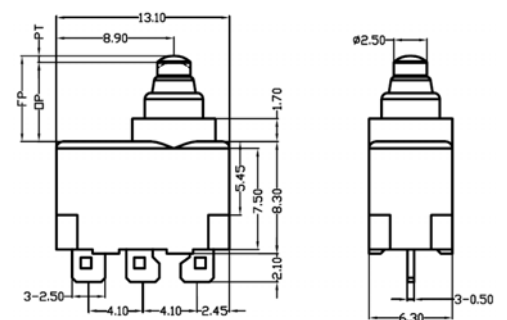
6# : B型右定位柱/B type right side posts



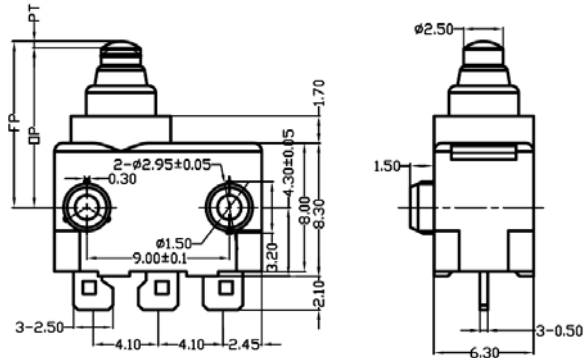
7# : M3 type posts/M3型定位柱



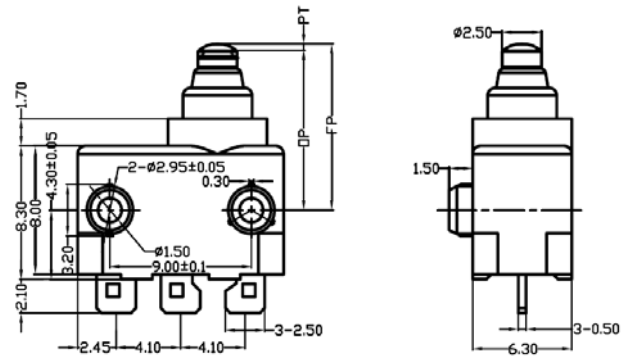
13# : C型无定位柱/C type no Posts



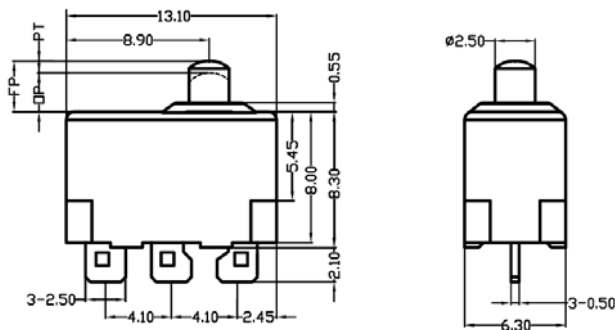
14# : C型左定位柱/ C type left posts



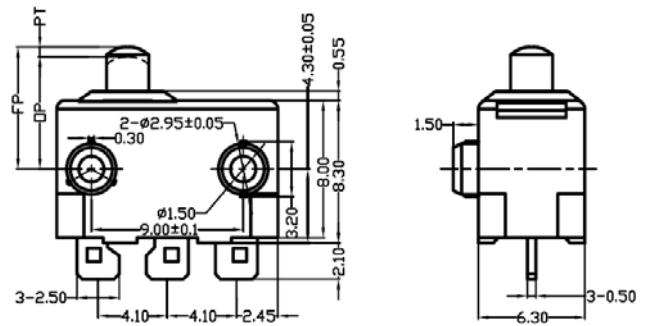
15# : C type right posts C型右定位柱



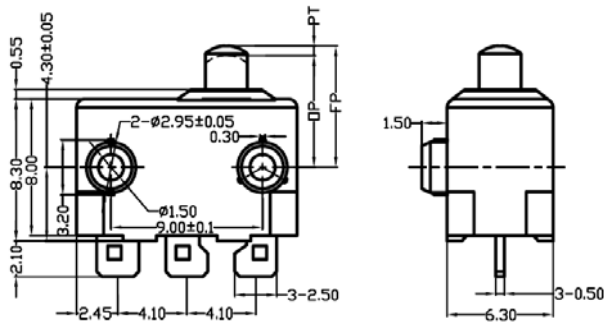
16# : D型无定位柱/ D type no post



17# : D type left side posts D型左定位柱



18# : D型右定位柱/D type right side posts

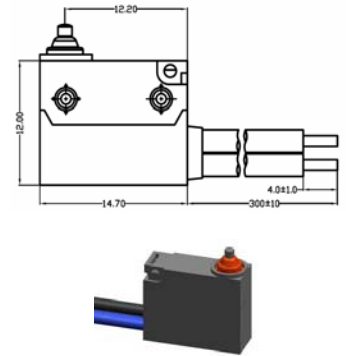
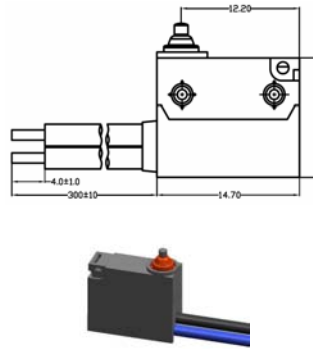
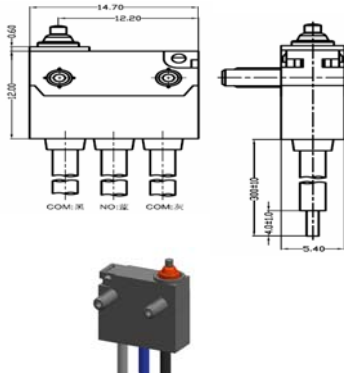


端子类型/Terminal Style

E#: 带电线型号, 底面出线
Molded lead wires downwards

G#: 带电线型号, 左侧(按掣侧)出线
Molded lead wires on left side (plunger side)

F#: 带电线型号, 右侧(远离按掣侧)出线
Molded lead wires on right side (opposite plunger side)

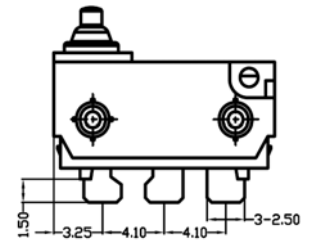
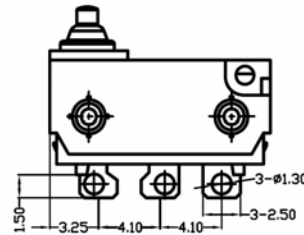
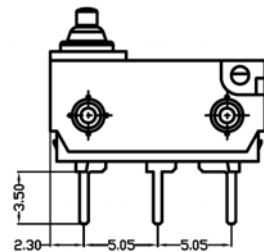
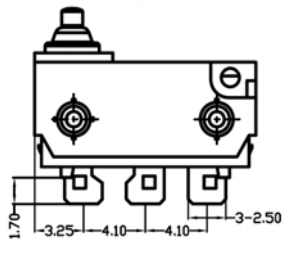


S#: 焊接端子
Solder terminals

P#: 直PCB端子
Straight PCB terminals

M#: 短焊接端子
Short Solder terminals

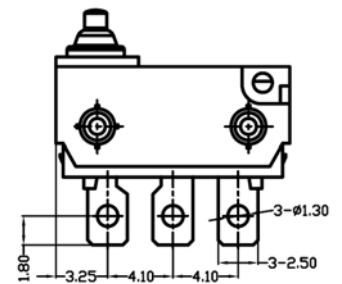
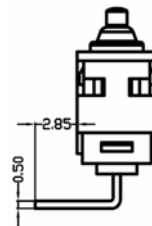
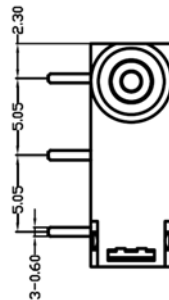
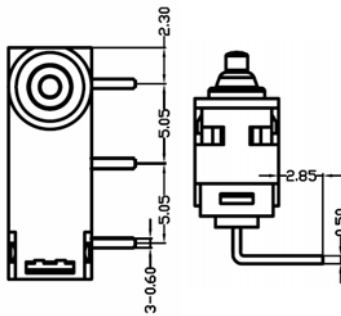
N#: 无孔短焊接端子
No-hole short solder terminals



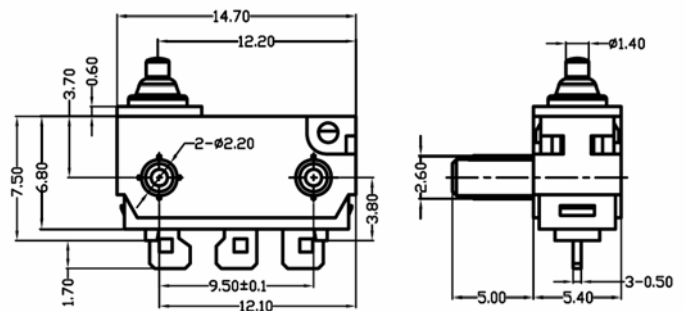
R#: 向右PCB端子
Right side PCB terminals

L#: 向左PCB端子
Left side PCB terminals

K#: 长焊接端子
Long solder terminals

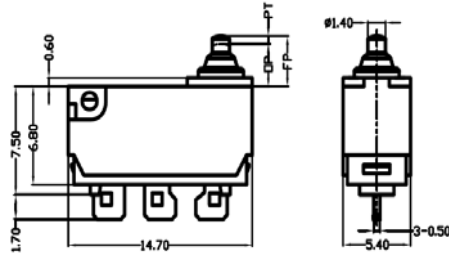


所有端子厚度为0.5mm
All terminals thickness are 0.5mm



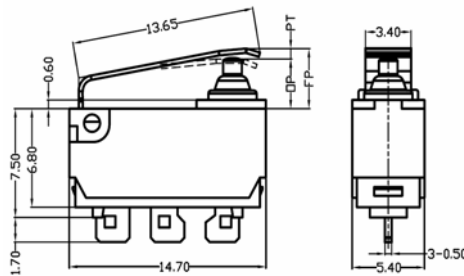
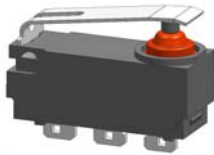
■ 外形尺寸和操作特性/Dimensions and Operating Characteristics

◆ G3□□-□□□S00A1



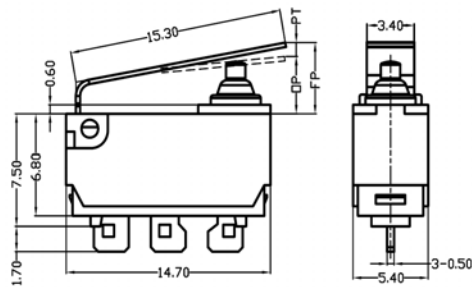
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-130	130	13	0.8	0.2	3.65	3.05±0.2

◆ G3□□-□□□S01A1



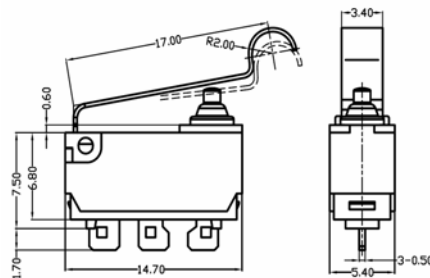
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-130	200	30	3	0.5	5.7	3.4±0.5

◆ G3□□-□□□S02A1



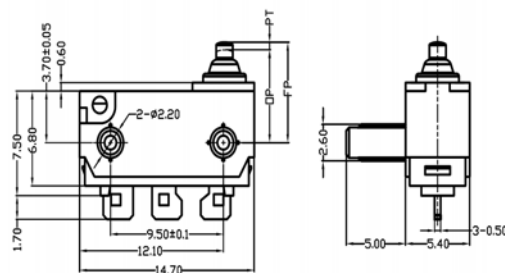
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-130	195	25	3.5	1.35	6.8	3.7±0.6

◆ G3□□-□□□S05A1



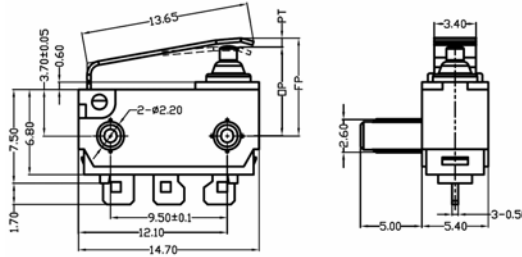
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-130	180	20	3.8	1.5	9.8	7.0±0.7

◆ G3□□-□□□S00A3



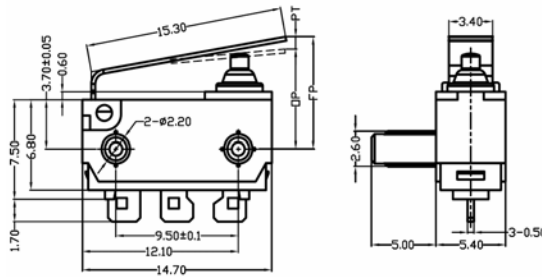
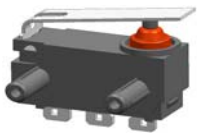
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-130	130	13	0.8	0.2	7.35	6.75±0.2

◆ G3□□-□□□S01A3



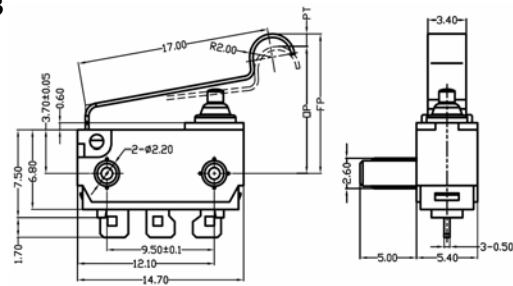
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)	
-130	200	30	3	0.8	0.5	9.4	7.1±0.5

◆ G3□□-□□□S02A3



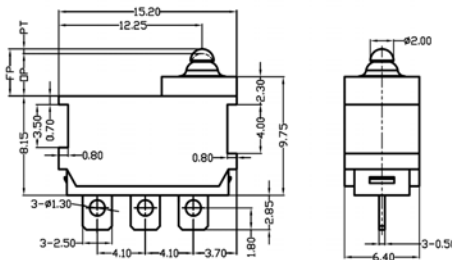
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)	
-130	195	25	3.5	1.35	0.6	10.5	7.4±0.6

◆ G3□□-□□□S05A3



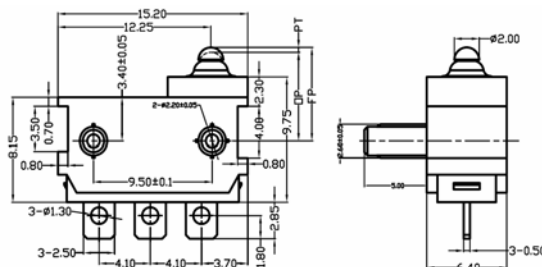
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)	
-130	180	20	3.8	1.5	0.7	13.5	10.7±0.7

◆ G3□□-□□□K00A4



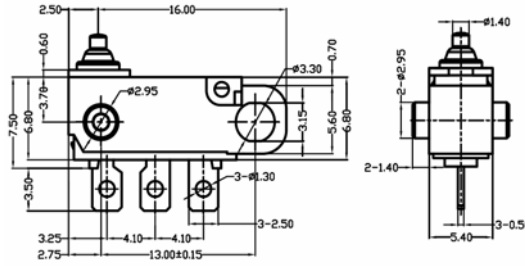
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)	
-130	130	13	0.8	0.8	0.2	4.1	3.45±0.2

◆ G3□□-□□□K00A6



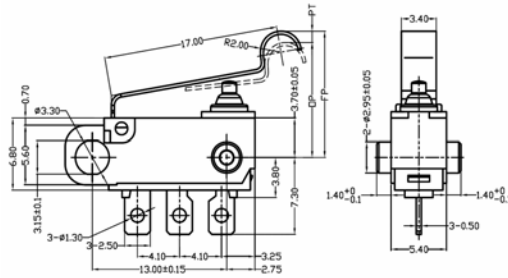
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)	
-130	130	13	0.8	0.8	0.2	7.5	6.85±0.2

◆ G3□□-□□□K00A7



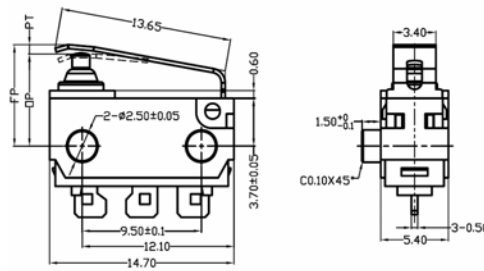
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)	
-130	130	13	0.8	0.8	0.2	7.35	6.75±0.2

◆ G3□□-□□□K05A7



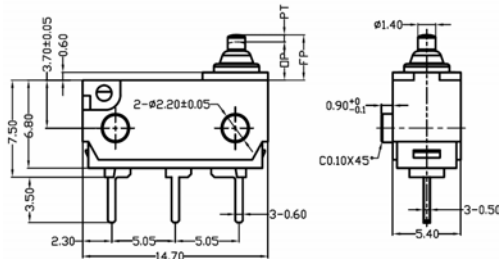
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)	
-130	180	20	3.8	1.5	0.7	13.5	10.7±0.7

◆ G3□□-□□□K01A2



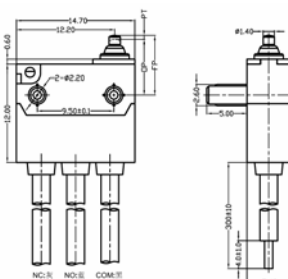
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)	
-130	200	30	3	0.8	0.5	9.4	7.1±0.5

◆ G3□□-□□□P00A3



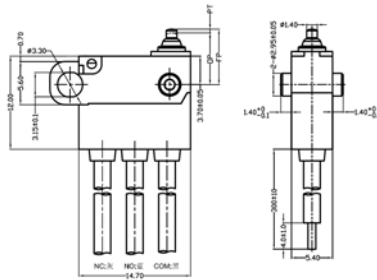
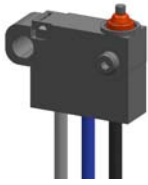
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)	
-130	130	13	0.8	0.8	0.2	7.35	6.75±0.2

◆ G3□□-□□□E00A3



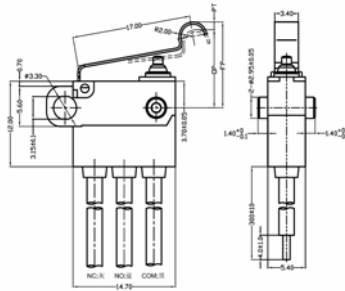
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)	
-130	130	13	0.8	0.8	0.2	7.35	6.75±0.2

◆ G3□□-□□□E00A7



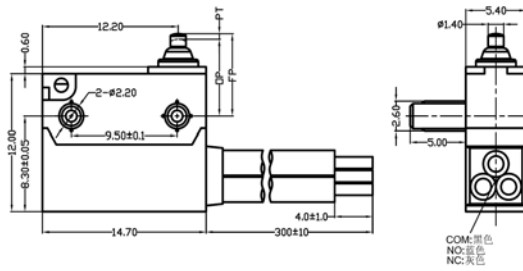
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-130	130	13	0.8	0.8	0.2	7.35
						6.75±0.2

◆ G3□□-□□□E05A7



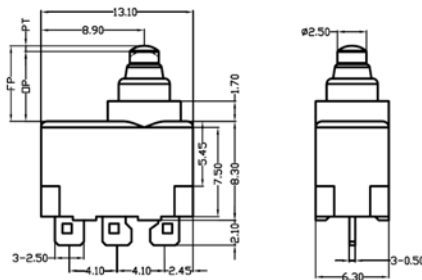
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-130	180	20	3.8	3.8	0.7	13.5
						10.7±0.7

◆ G3□□-□□□G00A3



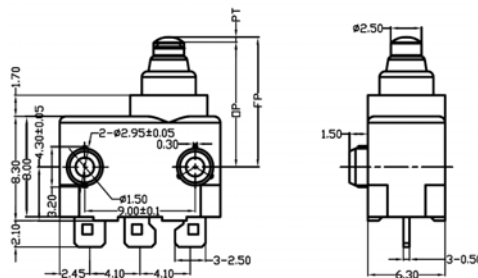
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-130	130	13	0.8	0.8	0.2	7.35
						6.75±0.2

◆ G3□□-□□□S00A13



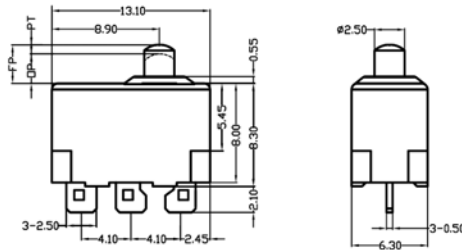
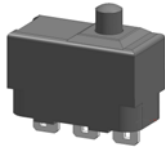
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-130	180	20	1.5	0.7	0.25	14.85
						5.4±0.3

◆ G3□□-□□□S00A15



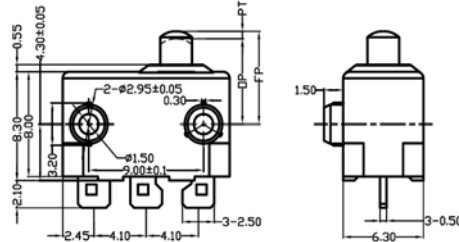
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-130	180	20	1.5	0.7	0.25	18.85
						9.4±0.3

◆ G3□□-□□□S00A16



OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)	
-130	130	8	1.5	0.7	0.25	11.6	2.2±0.3

◆ G3□□-□□□S00A18



OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-130	130	8	1.5	0.7	15.6	6.2±0.3

代号 Code	参数名称 Name	含义 Meanings
PT	动作行程(预行程) Pre travel	驱动件从自由位置到动作位置间的位移 The displacements of actuator from free position to operating position.
OP	动作位置 Operating position	驱动件在瞬动机构发生正向动作瞬间所处的位置 The position where the actuator moved obverse on snap-action parts.
OT	超行程 Over travel	驱动件从动作位置到全行程位置间的位移 The displacements of actuator form operating position to total travel position.
MD(or DT)	差动行程 Movement differential travel	驱动件从动作位置到释放位置或释放位置到动作位置间的位移 The displacements of actuator from operating position to release position
RT	释放行程 Release travel	驱动件从释放位置到自由位置间的位移 The displacements of actuator from release position to free position.
OF	动作力 Operating force	驱动件从自由位置到动作位置所必须的最大操作力 The max. force of displacements of actuator from free position to operating position.
RF	释放力 Release force	驱动件自正向动作位置返回到释放位置, 操作减小到的数值 The force when the actuator moved back to release position from obverse operating position.
TF	全行程力 Total travel force	驱动件在全行程位置所承受的最小操作力 The smallest force of displacements of actuator on total travel position.
TTP	全行程位置 Total travel position	驱动件被止动时所处的位置 The position where the actuator be stopped.
RP	释放位置 Release position	驱动件在瞬动机构发生反向动作瞬间所处的位置 The position where the actuator moved reversely on snap-action parts.
FP	自由位置 Free position	驱动件在不承受操作力以及力不足以引起位移时所处的位置 The position where the actuator lead the displacements when its out of force is not enough.

