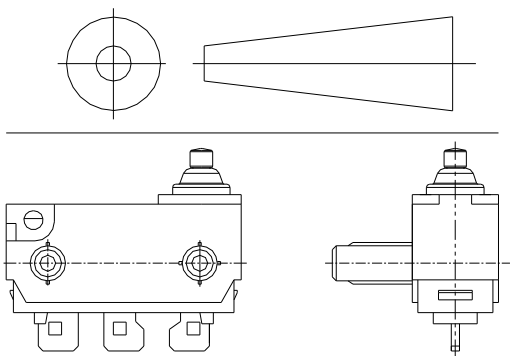
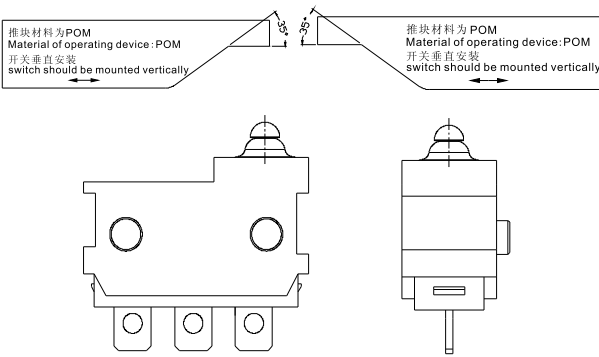


代號 Code	參數名稱 Name	含義 Meanings
PT	動作行程(預行程) Pre-travel	驅動件從自由位置到動作位置間的位移 Distance or angle which actuator travels from Free Position to Operating Position.
OT	超行程 Over-travel	驅動件從動作位置到全行程位置間的位移 Distance or angle which actuator travels from Operating Position to Total Travel Position.
DT (or MD)	差動行程 Movement-Differential	驅動件從動作位置到釋放位置或釋放位置到動作位置間的位移 Distance or angle which actuator travels from Operating Position to Release Position.
RT	釋放行程 Release travel	驅動件從釋放位置到自由位置間的位移 The displacements of actuator from release position to free position.
OF	動作力 Operating force	驅動件從自由位置到動作位置所必須的最大操作力 Amount of force applied to switch actuator to cause snap action contact from Free Position to Operating Position.
TF	全行程力 Total travel force	驅動件在全行程位置所承受的最小操作力 Amount of force applied to actuator in order to move from Operating Position to Total Travel Position.
RF	釋放力 Release force	驅動件自正向動作位置返回到釋放位置,操作減小到數值 Amount of force applied to switch actuator in order to move from Total Travel Position to Release Position.
TTP	全行程位置 Total travel position	驅動件被止動時所處的位置 Position at where actuator reaches Over-Travel limit.
OP	動作位置 Operating position	驅動件在瞬動機構發生正向動作瞬間所處的位置 Position of actuator at where contacts snap from Free Position to Operating Position.
RP	釋放位置 Release position	驅動件在瞬動機構發生反向動作瞬間所處的位置 Position of actuator at where contacts snaps back from Operating Position to Free Position.
FP	自由位置 Free position	驅動件在不承受操作力以及力不足以引起位移時所處的位置 Position of actuator when no external force is applied.

■第三視圖投影/ Third View Projection

■側推動作/ Lateral Actuation

本說明書所有的視圖均採用以下圖示的第三視圖投影 Note: All the views in the catalogue use this third view projection	G3系列B型產品如推動按鈕的裝置為凸輪外形或滑動斜面,則開關能夠承受最大的驅動角度為35° For G3-B type, if the operating plunger device is cam or sliding bevel, the max. bearable operating angle is 35°
	

G3系列 / G3 Series

超小型防水防尘微动开关 Subminiature Sealed Micro Switch



■ 特点/Features

- ◆ 防水防尘 (IP67) 设计
- ◆ 体形小巧, 紧凑
- ◆ 拥有全球安规认证
- ◆ 长寿命, 高可靠性
- ◆ 配备各种形式的操作柄
- ◆ 接线端子种类齐全
- ◆ 广泛应用于汽车控制、家电控制、工业控制等领域
- ◆ 多种安装外形尺寸满足不同的安装要求

- Designed For Water and Dust Tight(IP67)
- Small Compact Size
- Global Safety Approvals
- Long Life and High Reliability
- Wide Range of Wiring Terminals
- Variety of Levers
- Widely used in Automotive Electronics,Appliance and Industrial Control
- Customized Designs

■ 应用/Application

- ◆ 汽车/Car
- ◆ 空调/Air-Conditioner
- ◆ 通信/Communication
- ◆ 电动牙刷/Electric Tooth Brush
- ◆ 玩具/Toys
- ◆ 家用电器/Home Appliance
- ◆ 电机控制器/Motor Control

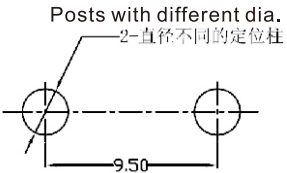
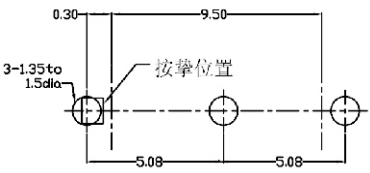
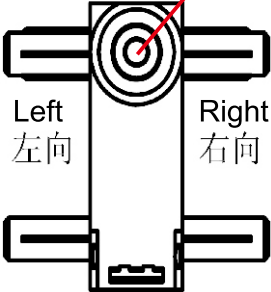
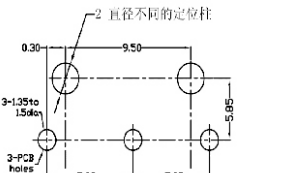
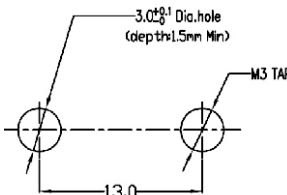
■ 特性参数/Parameters:

额定值/Rating		0.1A,125/250VAC;3A/12VDC;0.1A/48VDC; μ 1E5.
操作频率 Operating Frequency	电气/Electrical	0.1A-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)		100m Ω Max(不带线型/without wire type)
绝缘电阻/Insulation Resistance(at500VDC)		100M Ω Min
抗震动/Vibration durability		10~55Hz,位移/move0.75mm(p-p)
抗电强度/Dielectric Strength		500VAC(50~60Hz)
保存温度/Storage Temperature		-40℃ ~ +85℃
保存湿度/Storage Humidity		85%RHMax
寿命/Service Life	电气/Electrical	Min.100,000次/cycles(取决于具体型号/Depend on part No.)
	机械/Mechanical	Min.500,000次/cycles

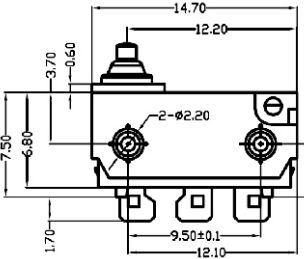
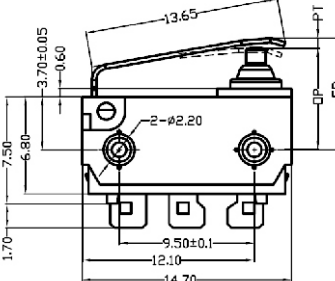
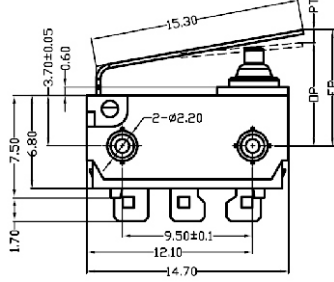
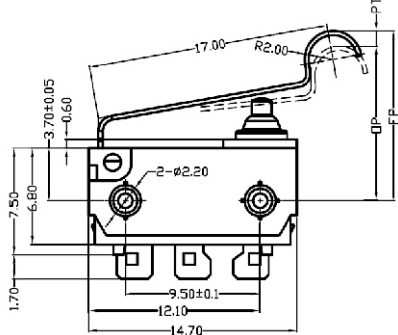
G3 系列微动开关订货型号指引
G3 Series Micro Switch Ordering Instruction

G3	03	130	S	00	A	2	A	E	A	280	Z
Switch Type 开关类别	Electrical Rating 额定负载	Max Operating Force at Pin Plunger 操作力(在引脚) 数据在不带操作手柄取得	Terminal Type 端子类型	Lever Type 操作柄类型	Circuit Code 接插形式	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)	Wire Length 线长	Special Designator 特殊设计代码
G3 Series Micro-Switch G3 系列微动开关	03 UL 0.1A 125/250VAC 3A 12VDC 48VDC 3A 12VDC	130 130gf Max.	Wires leads to bottom 带电线型号 底面出线	00 No Lever 不带操作柄 Pin Plunger 柱式接插	A SPDT 单极双投	1 A type no post A型无定位柱	Standard posts: 2.60mmx5.0mm 标准定位柱 2.60mmx5.0mm	No lead wires 不带电线	No lead wires 不带电线	300mm length standard lead wires 300mm 标准线长	
		Other 其他	Wires leads to left side(plunger side) 带电线型号 左侧(按手柄)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	Φ2.2mmX0.9mm posts. A 定位柱	E 20#	A UL1007	280mm length 280mm 长	
			Wires leads to right side(far from plunger side) 带电线型号 右侧(远离按手柄)出线	02 Straight 直手柄	C SPST-NO 单极单投 -常开	3 A type right side posts A型右定位柱	Φ2.5mmX1.5mm posts. B 定位柱	F 22#	C UL1430	Other 其他	
	01 镀金		Solder Terminals 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		
			Short Solder Terminals 短焊接端子	Other 其他		5 B type left side posts B型左定位柱		H 26#	E UL1330		
	02 10mA 12VDC u.5E5		Long solder Terminals 长焊接端子			6 B type right side posts B型右定位柱		I 28#	F AVSS		
			No-hole short Solder Terminals 无孔短焊接端子			7 M3 type posts M3型定位柱		J 30#	H UL1332		
			Straight PCB Terminals 直PCB端子 (0.6mm宽Wide)			8 A type two side posts A型双侧定位柱					
			Right Angled PCB Terminals 右侧PCB端子			9 B type two side posts B型双侧定位柱					
			Left Angled PCB Terminals 左侧PCB端子			12 C1 type two side posts C1型双侧定位柱					
Special Terminals 特殊端子						13 C1 type no post C1型无定位柱					
						14 C1 type left side posts C1型左定位柱					
						15 C1 type right side posts C1型右定位柱					
						16 D1 type no post D1型无定位柱					
						17 D1 type left side posts D1型左定位柱					
						18 D1 type right side posts D1型右定位柱					
						19 D1 type two side posts D1型双侧定位柱					

G3系列
G3 Series
安裝孔位、操作柄類型、接觸形式、外形介紹、端子類
Mounting Hole, Lever Type, Circuit, Shape, Terminal Type
■ 安裝孔尺寸/Mounting Hole Dimensions

 Posts with different dia. 2-直徑不同的定位柱 定位柱間距 Dimension between Posts	 按摺位置 Plunger Position 直PCB端子安裝孔 Straight PCB terminals mounting hole	 定位柱方向識別 Posts Identification 按摺位置 Plunger Position Left 左向 Right 右向
 2-直徑不同的定位柱 3-1.35 to 1.5 dia 3-PCB holes 左右PCB端子安裝孔 Left/Right Angled PCB terminals mounting hole	 3.00±0.1 Dia.hole (depth 1.5mm Min) M3 TAP M3 型安裝孔 M3 type mounting hole	

■ 操作柄類型/Lever Type

00#: 柱式按摺/Pin Plunger 	01#: 水平手柄/Leaf Lever 
02#: 直手柄/Straight Leaf Lever 	05#: 模擬滾輪手柄/Simulated Roller Leaf Lever 

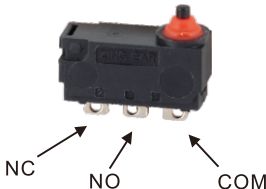
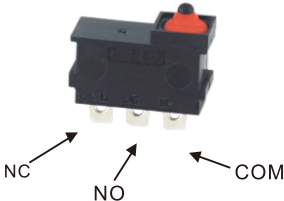
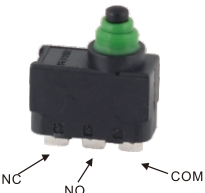
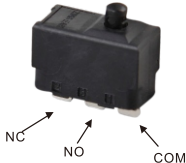
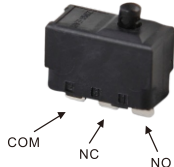
■ 接觸形式圖/ Circuit Configuration

A# SPDT	B# SPST-NC	C# SPST-NO

■ 定位柱尺寸/Posts Dimension

無: 標準型定位柱 ϕ 2.60mmx5.0mm Standard posts: ϕ 2.60mmx5.0mm	A#: ϕ 2.2mmx0.9mm定位柱 ϕ 2.2mmx0.9mm posts.	B#: ϕ 2.5mmx1.5mm定位柱 ϕ 2.5mmx1.5mm posts

■ 外形与定位柱/Shape and Posts

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	
 C1型 C1 type	 C2型 C2 type	 D1型 D1 type	 D2型 D2 type

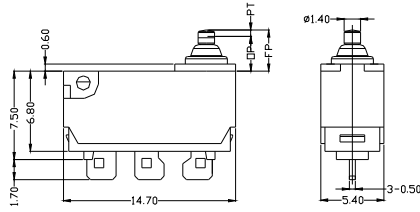
■ 外形與定位柱/Shape and Posts

1#: A型無定位柱/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型無定位柱/B type no post	5#: B型左定位柱/B type left side posts	6#: B型右定位柱/B type right side posts
7#: M3型定位柱/M3 type posts	8#: A型雙側定位柱/A type two side posts	9#: B型雙側定位柱/B type two side posts
12#/20#: C1/C2型雙側定位柱 C1/C2 type two side posts	13#/21#: C1/C2型無定位柱 C1/C2 type no posts	14#/22#: C1/C2型左定位柱 C1/C2 type left side posts
15#/23#: C1/C2型右定位柱 C1/C2 type right side posts	16#/24#: D1/D2型無定位柱 D1/D2 type no post	17#/25#: D1/D2型左定位柱 D1/D2 type left side posts
18#/26#: D1/D2型右定位柱 D1/D2 type right side posts	19#/27#: D1/D2型雙側定位柱 D1/D2 type two side posts	

E#:帶電線型號,底面出線 Wires leads to bottom	G#:帶電線型號,左側(按墊側)出線 Wires leads to left side (plunger side)	F#:帶電線型號,右側(遠離按墊側)出線 Wires leads to right side(opposite to 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#: 無孔短焊接端子 No-hole Short Solder Terminals
R#: 右向PCB端子 Right Angled PCB Terminals	L#: 左向PCB端子 Left Angled PCB Terminals	K#:長焊接端子 Long Solder Terminals	
所有端子厚度為0.5mm All terminals' thickness are 0.5mm			

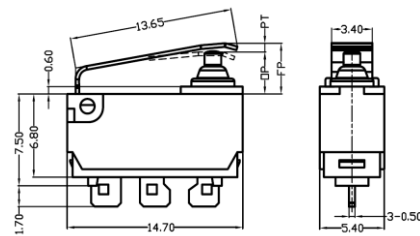
■ 外形尺寸和操作特性 Dimensions and Operating Characteristics

◆ G3□□-□□□S00A1



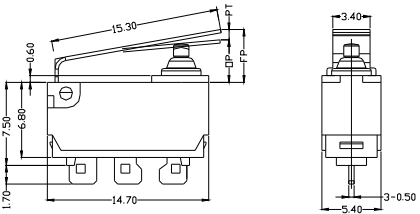
OF Max. (gf)		RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-130	130	13	0.8	0.8	0.2	3.65	3.05±0.2

◆ G3□□-□□□S01A1



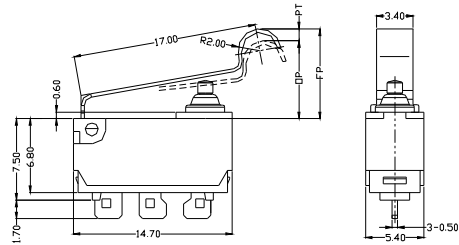
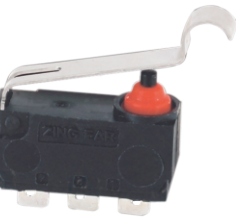
OF Max. (gf)		RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-130	220	30	3	0.8	0.5	5.7	3.4±0.5

◆ G3□□-□□□S02A1



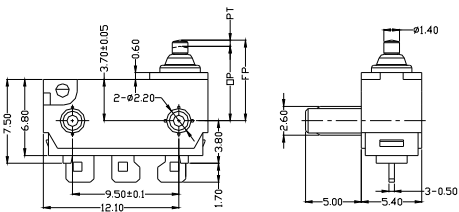
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)	
-130	195	25	3.5	1.35	0.6	6.8	3.7±0.6

◆ G3□□-□□□S05A1



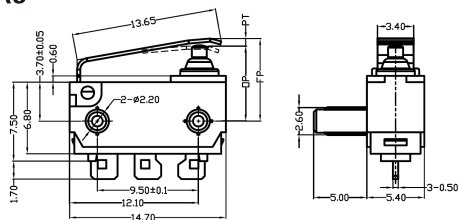
OF Max. (gf)		RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-130	180	20	3.8	1.5	0.7	9.8	7.0±0.7

◆ G3□□-□□□S00A3



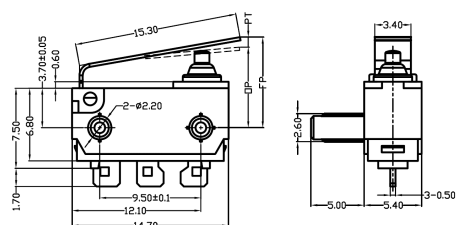
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)	
-130	130	13	0.8	0.8	0.2	7.35	6.75±0.2

◆ G3□□-□□□S01A3



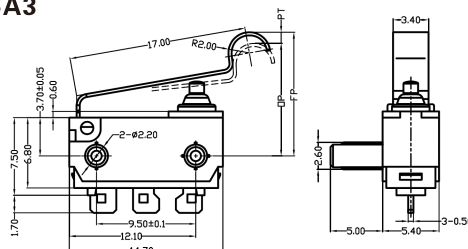
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-130	220	30	3	0.8	0.5	9.4
7.1±0.5						

◆ G3□□-□□□S02A3



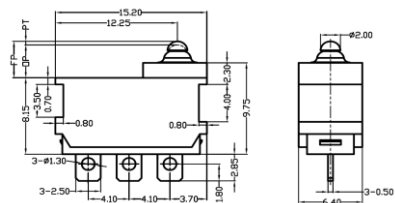
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-130	195	25	3.5	1.35	0.6	10.5
7.4±0.6						

◆ G3□□-□□□S05A3



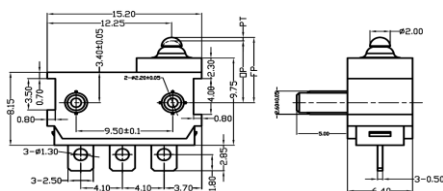
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-130	180	20	3.8	1.5	0.7	13.5
10.7±0.7						

◆ 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						

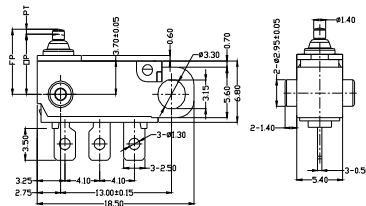
◆ G3□□-□□□K00A6



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						

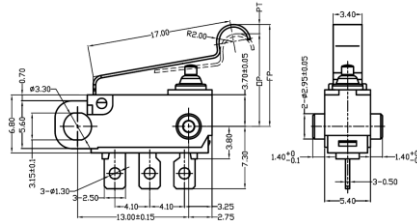
■ 外形尺寸和操作特性 Dimensions and Operating Characteristics

◆ G3□□-□□□K00A7



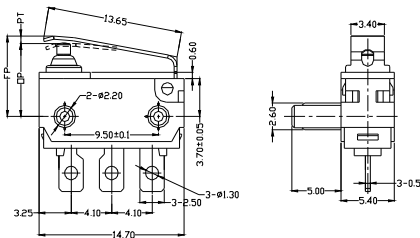
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)	
-130	130	13	0.8	0.8	0.2	7.35	6.75±0.2

◆ G3□□-□□□K05A7



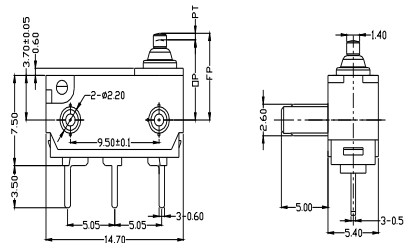
OF Max. (gf)		RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-130	180	20	3.8	1.5	0.7	13.5	10.7±0.7

◆ G3□□-□□□K01A2



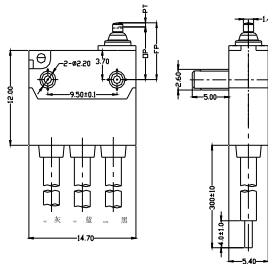
OF Max. (gf)		RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-130	200	30	2	0.8	0.5	9.4	7.1±0.5

◆ G3□□-□□□P00A3



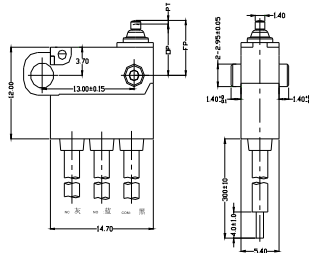
OF Max. (gf)		RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-130	130	13	0.8	0.8	0.2	7.35	6.75±0.2

◆ G3□□-□□□E00A3



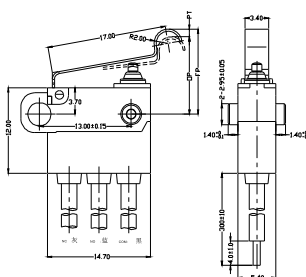
OF Max. (gf)		RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-130	130	13	0.8	0.8	0.2	7.35	6.75±0.2

◆ G3□□-□□□E00A7



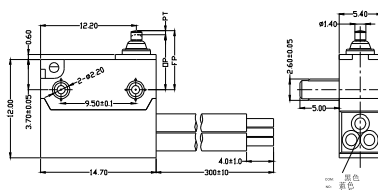
OF Max. (gf)		RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-130	130	13	0.8	0.8	0.2	7.35	6.75±0.2

◆ G3□□-□□□E05A7



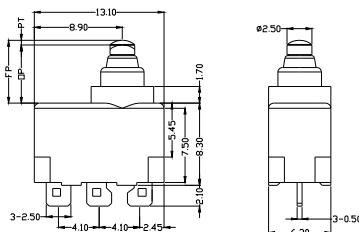
OF Max. (gf)		RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-130	180	20	3.8	1.5	0.7	13.5	10.7±0.7

◆ G3□□-□□□G00A3



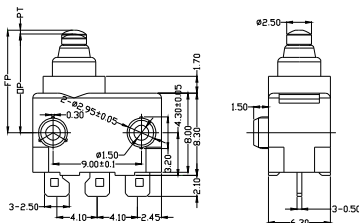
OF Max. (gf)		RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-130	130	13	0.8	0.8	0.2	7.35	6.75±0.2

◆ G3□□-□□□S00A13



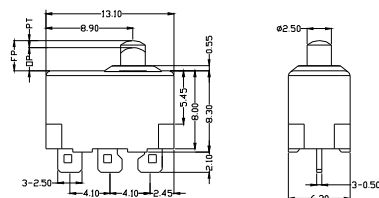
OF Max. (gf)		RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-130	180	20	1.5	0.7	0.25	6.35	5.4±0.3

◆ G3□□-□□□S00A15



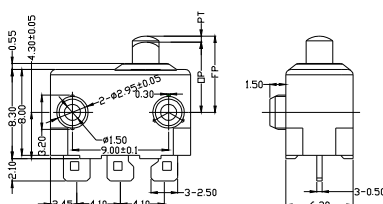
OF Max. (gf)		RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-130	180	20	1.5	0.7	0.25	10.35	9.4±0.3

◆ 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	3.3	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	0.25	7.3	6.2±0.3