

G5

基本微动开关 Basic Micro Switch

■ 特点 Features

- ◆ 结构紧凑,具有微小触点间隙,快速动作,高灵敏度和微小动作行程的特点
- ◆ 长寿命,高可靠性
- ◆ 拥有全球安规认证
- ◆ 接线端子种类齐全
- ◆ 动作力范围宽 7gf~600gf
- ◆ 多种温度等级 25T85 25T125 25T150
- ◆ PTL 等级有 175V, 250V, 600V 可供选择
- ◆ 配备各种形式操作柄
- ◆ 广泛应用于各种家用电器,电子设备,自动化设备,通讯设备,汽车电子,仪器仪表,电动工具等领域

■ 应用 Application

- ◆ 家用电器
- ◆ 电子设备
- ◆ 自动化设备
- ◆ 通讯设备
- ◆ 汽车电子
- ◆ 仪器仪表
- ◆ 电动工具等领域



- ◆ Tight configuration, small contact gap, snap action, high sensitivity and small operating travel
- ◆ Long life, high reliability
- ◆ Global safety approvals
- ◆ Variety of terminals
- ◆ Wide operating force (7gf~600gf)
- ◆ Variety of temperature grade (25T85 25T125 25T150)
- ◆ With optional PTL grade (175V, 250V, 600V)
- ◆ Variety of levers
- ◆ Widely used in appliance, electronic equipment, automatic machine, communication equipment, car electric, apparatus and instrument, power tool etc

- ◆ Appliance
- ◆ Electric Equipment
- ◆ Automatic Equipment
- ◆ Communication Equipment
- ◆ Car Electric
- ◆ Apparatus and Instrument
- ◆ Power Tool

■ 特性参数 Parameters

工作速度	Operating speed	0.1mm -1m/s (与驱动方式有关/Related with actuator forms)
工作频率	Operating frequency	机械 60 次/分钟; 电气 15 次/分钟. Mechanical 60 cycles/min; Electrical 15 cycles/min.
绝缘电阻	Insulation resistance	≥100M Ω (500VDC)
接触电阻	Contact resistance	≤100m Ω (初始值/Initial value)
耐电压 Test Voltage	耐电压-同极不相接端子间/ Between each terminals of the same polarity	AC1000V, 50/60HZ, 1min.
	耐电压-带电流金属零件与外壳之间, 接线端与易触及的不带电流金属件之间 /Between current-carrying metal part and ground, and between each terminal and non- current carrying metal parts	AC1500V, 50/60HZ, 1min.
抗振动	Vibration resistance	10-55HZ, 1.5mm 两倍振幅 Double amplitude
抗冲击	Shock resistance	破坏 Destruction: 动作力 /OF> 1.0N:1000m/s ² (约/approx. 100G)max. 动作力 /OF ≤ 1.0N:400m/s ² (约/approx. 40G)max. 故障 Destruction: 动作力 /OF> 1.0N:200m/s ² (约/approx. 20G)max. 动作力 /OF ≤ 1.0N:100m/s ² (约/approx. 10G)max.
寿命	Life expectancy	机械 /Mechanical ≥10,000,000 次/cycles 或/or 1,000,000 次/cycles 电气 /Electrical ≥50,000 次/cycles 或/or 100,000 次/cycles
质量	Weight	约 6.2g (无操作柄) Approx. 6.2g (No lever).

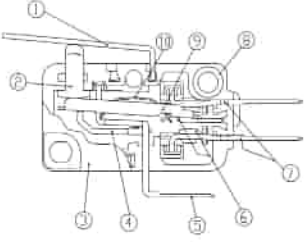
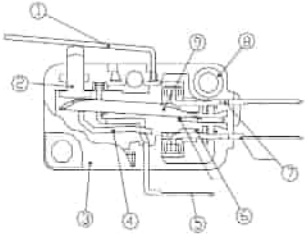
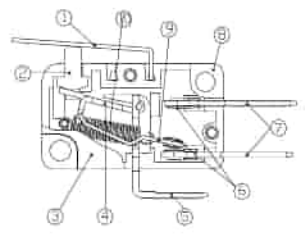
G5系列微动开关订货指引
G5 Series Micro Switch Ordering Instruction

G5	T	16	C	Z	300	A	01	K	XX
开关类别 Switch Type	温度等级 Temperature grade	额定电压 Electrical Rating	端子类型 Terminal Style	接触形式 Contact Code	操作力与最大行程 Operating Force and Stroke	操作杆位置 Lever Position	操作杆类型 Lever Type	安装孔尺寸 Mounting Hole	特别设计代码 Special Designator
G5 系列微动开关 G5 Series - Micro Switch	S 仅针对 5A 电流 / for "05" rating (only)	INFC/CQC: 0.1A 0WTC 0.1A 125/250VAC 0.2A 125/250VAC 0.1A 18VDC 0.1A 125/250VAC 5A 1/2HP 125/250VAC 仅适用于 "S" 温度等级 / "S" Temperature grade only / 仅适用于 / only for S, C1, C2, E, F1, E2, D, D1, D2, S, S1, S2	C1 C2 C3 快速端子 Quick connect.	Z SPDT 单极双投	15gf note: 仅适用于 / only apply to G550S, series.	不带操作柄 柱式按垫 No lever Pin Plunger	不带操作柄 柱式按垫 No lever Pin Plunger	Metric 01.5mm	此为特别指定代码当端子为"型"或操作柄为"型"时, 请参照"型"列说明此端子或操作柄是特别设计的, 具体请参考产品规格来确定详细的差异。 Blast-5250 terminal. Blast-7250 terminal. Side PCB 250 terminal. A Contact-gold plated.
		INFC/CQC: 8 (10) A 250VAC 0.1A 1/2HP 125/250VAC 以上仅适用于 "T" 温度等级和触点间距 3mm 的开关 / 仅适用于 C2, D2. 端子类型和 "300gf/250gf" 操作力 Above only for "T" temperature grade and switch of contact gap 3mm and only for C2 and D2 terminals. "300"/"250" OF only	D1 D2 快速端子 Quick Connect	Z SPST-NO 单极单投 -常开	25gf note: 仅适用于 / only apply to G550S, series.	远离柱式 按垫位置 Far From Pin Plunger	短直柄 Short straight lever	15A 02.5mm	
		INFC/CQC: 1A 30VDC 10A 1/2HP 125/250VAC 以上仅 "H" 温度等级适用 / Above only for "H" temperature grade 0.1A 1/2HP 125/250VAC 0.5A 125VDC 0.25A 250VDC 1A 125VAC 1 1A 125VAC 1 以上仅 "T" 温度等级适用 / Above only for "T" temperature grade 仅适用于 S, C1, C2, E, F1, E2, W, D1, D2, F1 Terminal only. 10 (4) A 250V AC 25 (7) W 4 1/4 以上仅适用于 G50 "IP64" 防水等级 Only for G50 "IP64" waterproof grade	E E1 E2 快速端子 Quick Connect	Z SPST-NC 单极单投 -常闭	50gf 0.38N Note: 仅适用于 / only apply to G550S, 25T10, series.	靠近柱式 按垫位置 Near Pin Plunger	标准直柄 Std. Straight Lever	内安装孔合金底座 -仅适用于 G50 系列 Alloy base with inner mounting hole. Only for G50 Door Switch	
B 前置应用和 触点间距 "0.700" (Pin and contact gap) 3mm	INFC/CQC: 10 (4) A 250VAC 0.1A 1/2HP 125/250VAC	L L1 L2 左侧面 PCB 端子 Left side PCB connect	100gf 0.98N Note: 16A and 22A (10mm) (F) 100gf, 16A/22A 最小操作力为 100gf	推杆 Push Rod "G50 Door switch" only	长直柄 Long Straight Lever	外安装孔合金底座 -仅适用于 G50 系列 Alloy base with outer mounting hole. Only for G50 Door Switch			
F 仅适用于 10" (Pin and contact gap) 10"	INFC/CQC: 22 (0) A 250VAC 22A 1HP 185/250VAC	R R1 R2 右侧面 PCB 端子 Right side PCB connect	250gf 1.96N Note: G550S, G5T10, G5F1 Series / 最大操作力为 250gf / with max max OF is 250gf, 20A, 最小操作力为 100gf	螺孔推杆 Screw Push Rod "G50 Door switch" only	模拟滚轮手 柄 Simulated Roller Lever	双开合金底座 -仅适用于 G50 系列 Alloy base with two switches Only for G50 Door Switch			
	INFC/CQC: 20 (10) A 250VAC, 8, 0.25 250VAC, 200	S S1 S2 焊接端子 Solder Connect	300gf 2.94N Note: 不适用于 / Not apply to G550S, G5T10 Series	带滚轮手柄 Roller Lever					
		T T1 T2 螺孔端子 Screw Connect	400gf 3.92N Note: 不适用于 / Not apply to G550S, G5T10 Series	带长滚轮手柄 Long Roller Lever					
		P P1 P2 自 PCB 端子 Self PCB connect	500gf 4.90N Temperature grade only.					
		H H1 H2 簧片端子 Special connect	1800gf 17.64N 800 G50 Door switch only.	特殊手柄 Special Lever					

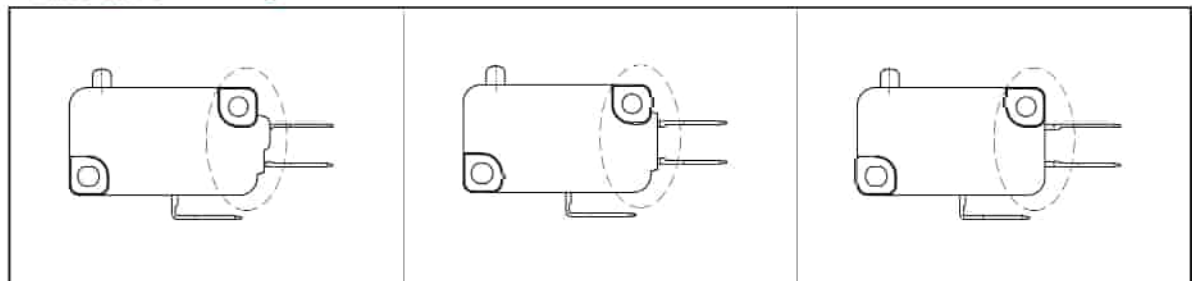
备注: 仅字母时用于基本型外壳
字母+数字时用于半端型外壳
Note: Letters only for basic type housing
Letter+number for semi-end type housing

说明 Description:
电流与操作力关系, 各电流等级对应最小操作力等级
Relationship between current and OF, the lowest OF for each rating
0.1A ~ 0.5A: 15gf Min. Grade.
10A: 25gf Min. Grade.
16A: 100gf Min. Grade.
22A: 100gf Min. Grade. (不推荐 / don't recommend)

■ 内部构造图/Inner Construction

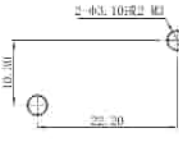
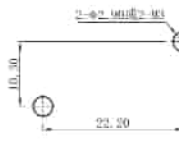
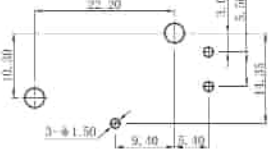
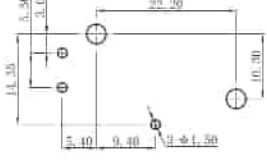
		
普通型 General Type	G5S05/G5T10	触点间距>3mm Contact Gap>3mm
1. 操作柄/Lever 2. 按琴/Plunger 3. 胶盖/Cover	4. 支杆/Internal Lever 5. 公共端子/Common Terminal 6. 触点/Contacts	7. NC/NO端子/NO/NC Terminals 8. 胶座/Case 9. 动片/Movable Plate 10. 弹片/弹簧 (右图) Spring

■ 外形特征/Housing Outline Characteristics

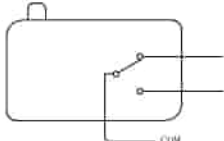
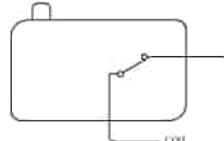
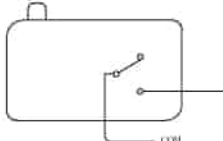


■ 安装孔尺寸/Mounting Hole Dimensions

(单位/Unit:mm)

基本形 Basic Type	K形 K Type	左侧面PCB端子 Left Angled PCB Terminal	右侧面PCB端子 Right Angled PCB Terminal
			

■ 接触形式图/Circuit Configuration

公共端子类型/Common Terminal Type	"Z"转换式SPDT	"C"常闭式SPST-NC	"P"常开式SPST-NO
公共端在底部 Common Terminal at bottom			

■ 接线端子尺寸/Connect Terminal Dimensions

◆ 基本型胶壳/Terminals for Type Housing

(单位/Unit:mm)

<p>C基本型带250#快速连接端子 Basic Type Housing with 250#Quick Connect Terminals, T=0.8(C)</p>		
<p>D基本型带187#快速连接端子 Basic Type Housing with 187#Quick Connect Terminals, T=0.8(D)</p>		
<p>E基本型带187#快速连接端子 Basic Type Housing with 187#Quick Connect Terminals, T=0.5(E)</p>		

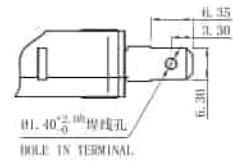
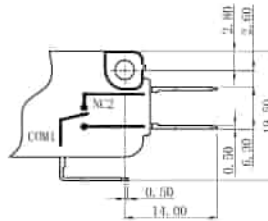
◆ 平端型胶壳/Terminals for Flat Type Housing

(单位/Unit:mm)

<p>C1平端型带250#快速连接端子 Flat Type Housing with 250#Quick Connect Terminals, T=0.8(C1)</p>		
<p>D1平端型187#快速连接端子 Flat Type Housing with 187#Quick Connect Terminals, T=0.8(D1)</p>		

(单位/Unit:mm)

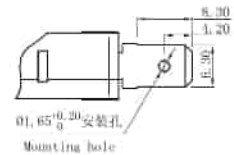
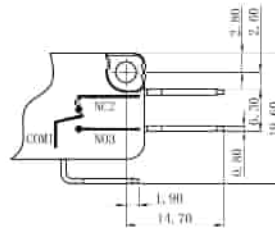
E1平端型带187#快速连接端子
Flat Type Housing with
187#Quick Connect Terminals, T=0.5 (E1)



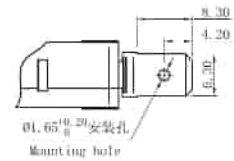
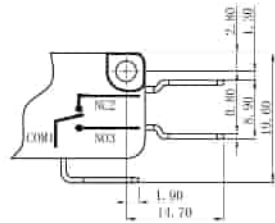
◆完全平端型胶壳/Terminals for Fully Flat Type Housing

(单位/Unit:mm)

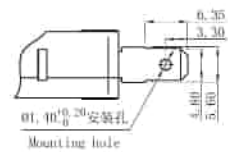
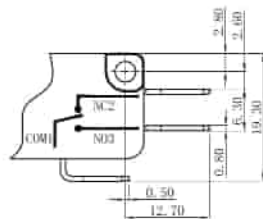
B2完全平端型/B2 Fully Flat Type
250#快速连接端子
250#Quick Connect Terminals, T=0.8



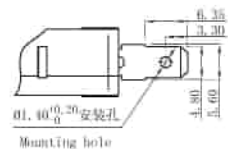
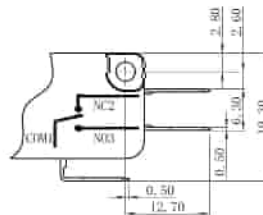
C2完全平端型带250#快速连接端子
Fully Flat Housing with
250#Quick Connect Terminals, T=0.8 (C2)



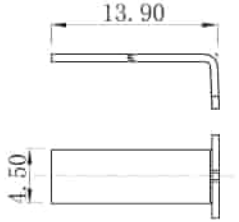
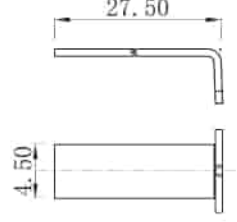
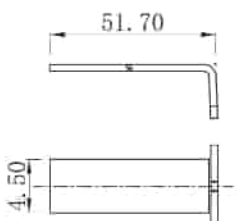
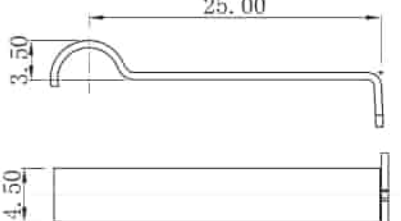
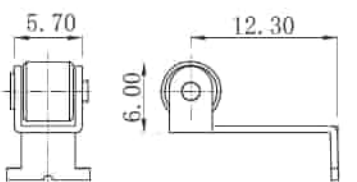
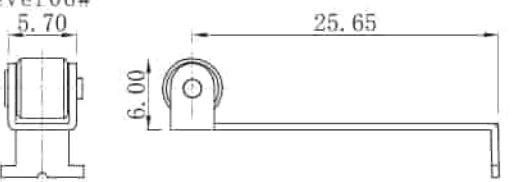
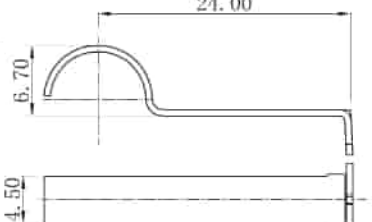

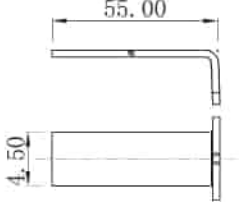
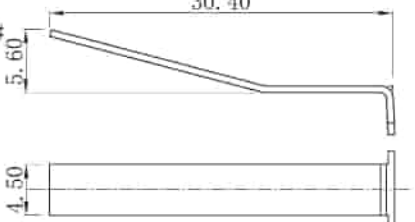
D2完全平端型带187#快速连接端子
Fully Flat Housing with
187#Quick Connect Terminals, T=0.8 (D2)



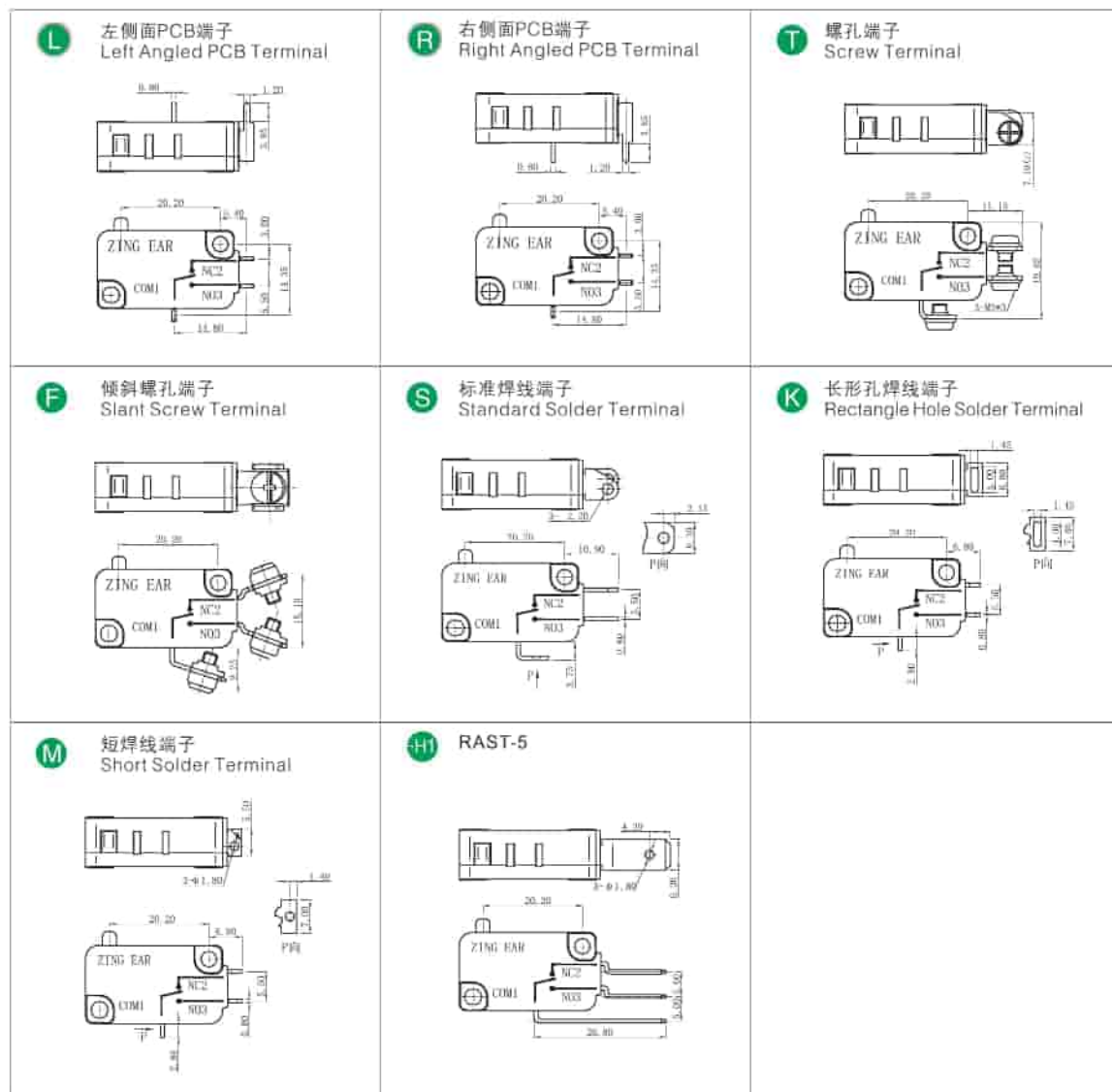
E2完全平端型带187#快速连接端子
Fully Flat Housing with
187#Quick Connect Terminals, T=0.5 (E2)



◆其他手柄类型/Other Levers

<p>#01手柄 Lever01#</p> 	<p>#02手柄 Lever02#</p> 
<p>#03手柄 Lever03#</p> 	<p>#04手柄 Lever04#</p> 
<p>#05手柄 Lever05#</p> 	<p>#06手柄 Lever06#</p> 
<p>#110手柄 Lever110#</p> 	<p>#137手柄 Lever137#</p> 
<p>#164手柄 Lever164#</p> 	<p>#165手柄 Lever165#</p> 

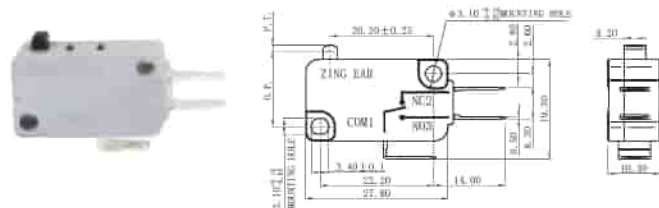
◆其他端子类型/Other Terminal Type



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

(单位/Unit:mm)

◆柱式按单 Plunger

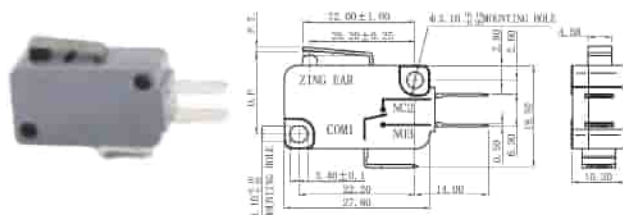


型号 Part No.	操作参数/Parameters							
	OP Max	RF Min	PT Max	OT Min	MD Max	OP Min		
	(N)	(μF)	(N)	(μF)	(mm)	(mm)		
65□□□-E12015	0.15	15	0.03	3	1.6	0.8	0.4	14.7±0.5
65□□□-E12025	0.25	25	0.05	5	1.6	0.8	0.4	14.7±0.5
65□□□-E12050	0.49	50	0.10	10	1.6	0.8	0.4	14.7±0.5
65□□□-E12100	0.98	100	0.25	25	1.6	0.8	0.4	14.7±0.5
65□□□-E12200	1.96	200	0.49	50	1.6	0.8	0.4	14.7±0.5
65□□□-E12300	2.94	300	0.74	75	1.6	0.8	0.4	14.7±0.5
65□□□-E12400	3.92	400	0.98	100	1.6	0.8	0.4	14.7±0.5

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

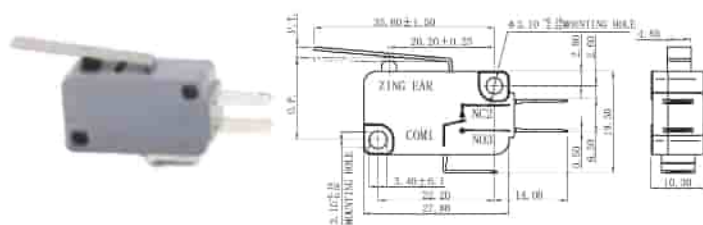
(单位/Unit:mm)

◆短直柄 Short Straight Lever



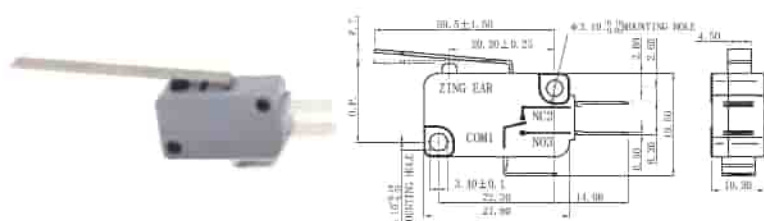
型号 Part No.	操作参数/Parameters							
	OF Max	RF Min	PT Max	OT Min	MD Max	OP		
	(N)	(gf)	(N)	(gf)	(mm)	(mm)		
GS□□□-E1Z015A01	0.15	15	0.03	3	1.6	0.8	0.4	15.3±0.5
GS□□□-E1Z025A01	0.25	25	0.05	5	1.6	0.8	0.4	15.3±0.5
GS□□□-E1Z050A01	0.49	50	0.10	10	1.6	0.8	0.4	15.3±0.5
GS□□□-E1Z100A01	0.98	100	0.25	25	1.6	0.8	0.4	15.3±0.5
GS□□□-E1Z200A01	1.96	200	0.49	50	1.6	0.8	0.4	15.3±0.5
GS□□□-E1Z300A01	2.94	300	0.74	75	1.6	0.8	0.4	15.3±0.5
GS□□□-E1Z400A01	3.92	400	0.98	100	1.6	0.8	0.4	15.3±0.5

◆标准直柄 Standard Straight Lever



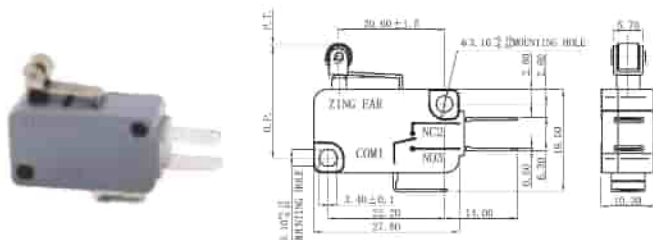
型号 Part No.	操作参数/Parameters							
	OF Max	RF Min	PT Max	OT Min	MD Max	OP		
	(N)	(gf)	(N)	(gf)	(mm)	(mm)		
GS□□□-E1Z015A02	0.10	10	0.02	2	3.2	1.3	1.2	15.3±0.5
GS□□□-E1Z025A02	0.15	15	0.02	2	3.2	1.3	1.2	15.3±0.5
GS□□□-E1Z050A02	0.29	30	0.05	5	3.2	1.3	1.2	15.3±0.5
GS□□□-E1Z100A02	0.59	60	0.10	10	3.2	1.3	1.2	15.3±0.5
GS□□□-E1Z200A02	1.18	120	0.20	20	3.2	1.3	1.2	15.3±0.5
GS□□□-E1Z300A02	1.77	180	0.29	30	3.2	1.3	1.2	15.3±0.5
GS□□□-E1Z400A02	2.35	240	0.39	40	3.2	1.3	1.2	15.3±0.5

◆长直柄 Long Straight Lever



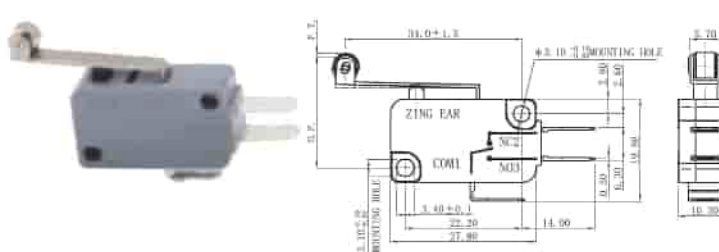
型号 Part No.	操作参数/Parameters							
	OF Max	RF Min	PT Max	OT Min	MD Max	OP		
	(N)	(gf)	(N)	(gf)	(mm)	(mm)		
GS□□□-E1Z015A03	0.07	7	0.02	2	6.4	2.6	2.4	15.3±0.3
GS□□□-E1Z025A03	0.10	10	0.02	2	6.4	2.6	2.4	15.3±0.3
GS□□□-E1Z050A03	0.15	15	0.02	2	6.4	2.6	2.4	15.3±0.3
GS□□□-E1Z100A03	0.29	30	0.05	5	6.4	2.6	2.4	15.3±0.3
GS□□□-E1Z200A03	0.59	60	0.10	10	6.4	2.6	2.4	15.3±0.3
GS□□□-E1Z300A03	0.88	90	0.15	15	6.4	2.6	2.4	15.3±0.3
GS□□□-E1Z400A03	1.18	120	0.20	20	6.4	2.6	2.4	15.3±0.3

◆短滚轮手柄 Short Roller Lever



型号 Part No.	操作参数/Parameters							
	OF Max	RF Min	PT Max	OT Min	MD Max	OP		
	(N)	(gf)	(N)	(gf)	(mm)	(mm)		
GS□□□-E1Z015A05	0.15	15	0.03	3	1.6	0.8	0.4	20.6±0.8
GS□□□-E1Z025A05	0.30	30	0.05	5	1.6	0.8	0.4	20.6±0.8
GS□□□-E1Z050A05	0.59	60	0.10	10	1.6	0.8	0.4	20.6±0.8
GS□□□-E1Z100A05	1.18	120	0.20	20	1.6	0.8	0.4	20.6±0.8
GS□□□-E1Z200A05	2.35	240	0.39	40	1.6	0.8	0.4	20.6±0.8
GS□□□-E1Z300A05	3.43	350	0.59	60	1.6	0.8	0.4	20.6±0.8
GS□□□-E1Z400A05	4.60	470	0.78	80	1.6	0.8	0.4	20.6±0.8

◆长滚轮手柄 Long Roller Lever

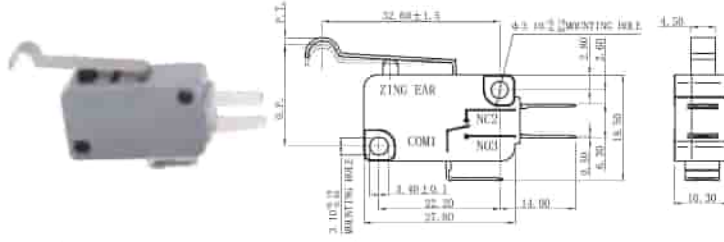


型号 Part No.	操作参数/Parameters							
	OF Max	RF Min	PT Max	OT Min	MD Max	OP		
	(N)	(gf)	(N)	(gf)	(mm)	(mm)		
GS□□□-E1Z015A06	0.10	10	0.02	2	3.2	1.3	1.2	20.6±1.0
GS□□□-E1Z025A06	0.15	15	0.02	2	3.2	1.3	1.2	20.6±1.0
GS□□□-E1Z050A06	0.29	30	0.05	5	3.2	1.3	1.2	20.6±1.0
GS□□□-E1Z100A06	0.59	60	0.10	10	3.2	1.3	1.2	20.6±1.0
GS□□□-E1Z200A06	1.18	120	0.20	20	3.2	1.3	1.2	20.6±1.0
GS□□□-E1Z300A06	1.77	180	0.29	30	3.2	1.3	1.2	20.6±1.0
GS□□□-E1Z400A06	2.35	240	0.39	40	3.2	1.3	1.2	20.6±1.0

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

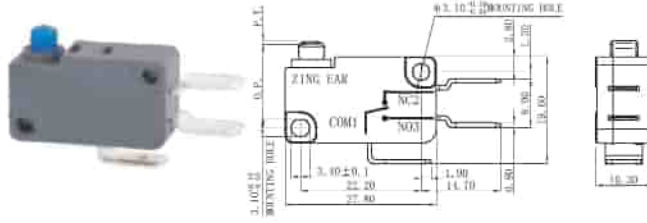
(单位/Unit:mm)

◆模拟滚轮手柄 Simulated Roller Lever



型号 Part NO	操作参数/Parameters							
	OF Max	RF Min	PT Max	OT Min	MD Max	OP Min	OP Max	
	(N)	(gf)	(N)	(gf)	(mm)	(mm)	(mm)	
G5□□□-E1Z015A04	0.10	10	0.02	2	3.2	1.3	1.2	18.3±1.5
G5□□□-E1Z025A04	0.15	15	0.02	2	3.2	1.3	1.2	18.3±1.5
G5□□□-E1Z035A04	0.29	30	0.02	2	3.2	1.3	1.2	18.3±1.5
G5□□□-E1Z100A04	0.59	60	0.10	10	3.2	1.3	1.2	18.0±1.5
G5□□□-E1Z200A04	1.18	120	0.20	20	3.2	1.3	1.2	18.3±1.5
G5□□□-E1Z300A04	1.77	180	0.30	30	3.2	1.3	1.2	18.3±1.5
G5□□□-E1Z400A04	2.35	240	0.39	40	3.2	1.3	1.2	18.3±1.5

◆IP64防水开关 IP64 Waterproof Switch



型号 Part NO	操作参数/Parameters							
	OF Max	RF Min	PT Max	OT Min	MD Max	OP Min	OP Max	
	(N)	(gf)	(N)	(gf)	(mm)	(mm)	(mm)	
G5F□□-C1Z300	4.92	500	1.96	200	1.6	0.8	0.4	15.0±0.5

G5系列/Series-G5D门开关/Zinc Alloy Door Switch

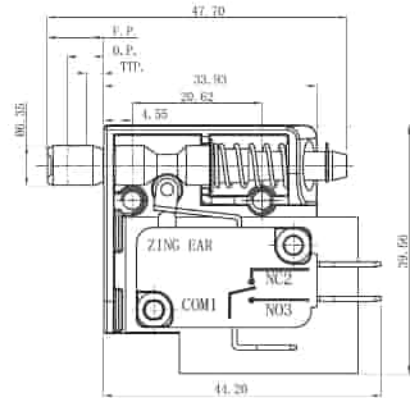
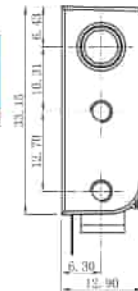
◆外形尺寸和操作特性/Dimensions and Operating Characteristics

(单位/Unit:mm)

◆G5D□□-□□1800F05-U

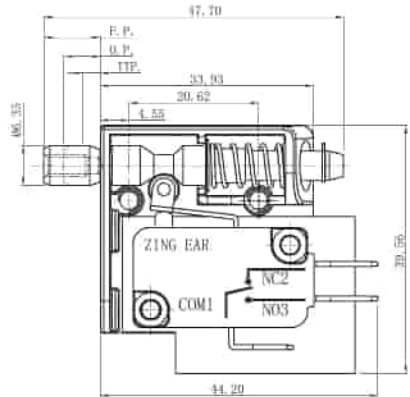


操作参数/Parameters					
OF Max	FP Max	TTP Min	OP Min	OP Max	
(N)	(gf)	(mm)	(mm)	(mm)	
17.60	1800	9.5	3.18	5.16	



◆G5D□□-□□1800J05-U

操作参数/Parameters					
OF Max	FP Max	TTP Min	OP Min	OP Max	
(N)	(gf)	(mm)	(mm)	(mm)	
17.60	1800	9.5	3.18	5.16	



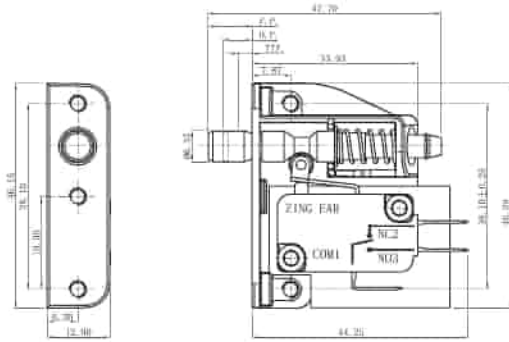
◆外形尺寸和操作特性/Dimensions and Operating Characteristics

(单位/Unit:mm)

◆G5D□□-□□1800F05-V

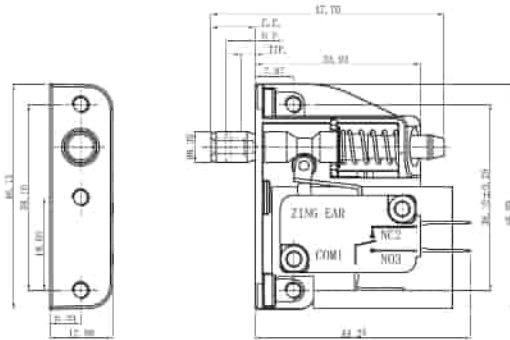


操作参数/Parameters				
OF Max (N)	FP (gf)	TTP Max (mm)	OP Min (mm)	OP Min (mm)
17.90	1800	9.5	3.18	5.16



◆G5D□□-□□1800J05-V

操作参数/Parameters				
OF Max (N)	FP (gf)	TTP Max (mm)	OP Min (mm)	OP Min (mm)
17.60	1800	9.5	3.18	5.16



◆G5D□□-□□900J05-V



操作参数/Parameters				
OF Max (N)	FP (gf)	TTP Max (mm)	OP Min (mm)	OP Min (mm)
17.60	900	9.5	3.18	5.16

