

Unionwell

HUIZHOU UNIONWELL SENSING & CONTROL ELECTRONICS CO., LTD.

Introduction

Unionwell is an SRDI (Specialized, Refinement, Differential, Innovation) "High-New Technology" enterprise dedicated to the research, production, and sales of various sensing and control core components. Our products include various high-precision waterproof & dustproof micro switches and modules. Our products are widely used in automotive electronics, new energy equipment, smart home appliances, computer gaming, power tools, industry 4.0, 5G Internet of Things, etc. They are all essential core sensing and control components in relative industries. 60% of our professional R&D team members have worked in the switches & connectors industry for 20 to 30 years. The automation equipment R&D team has independent research and development capabilities in software and hardware. Over 90% of our products are manufactured and tested using automated equipment, ensuring consistent quality and economies of scale. After years of unremitting efforts of all employees, we have established a research and development, production and sales system to integrate new product development, precision mold manufacturing, precision injection molding, precision stamping, R&D and manufacturing of automation equipment, and finished product manufacturing.

Our Mission:

Provide customers with competitive products and services, concerned about the challenges and pressure customers face, and constantly innovate for customers' benefit.

Our Vision:

To become a global first-class manufacturer of precision components and modules.

Our Core Value:

Goal, Responsibility, Coordination, Innovation, Effort, Development, Openness, Integrity.



▲ HUIZHOU UNIONWELL SENSING & CONTROL ELECTRONICS CO., LTD.



Part of Certificates



ISO 9001



IATF 16949



UL



cUL



CE



ENEC



CQC



PATENT

CONTENTS

Warm Reminder:

All products information in this catalog is for reference only, we may change the specification in the catalog before any notification in advance. Please contact with Unionwell sales representative to get the newly individual product specification before you purchase it.

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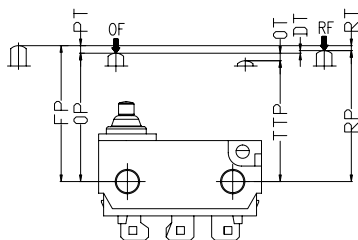
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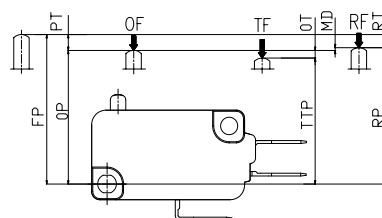
179	GT07-Mechanical Keyboard Switch-4mm Travel
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■ Operating Characteristic Diagram

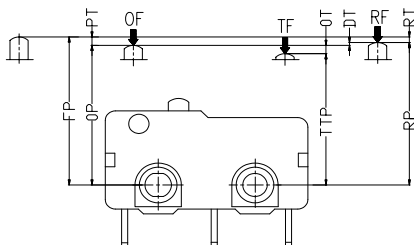
G3 Series



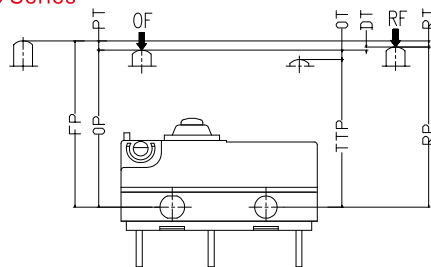
G5 Series/G5W Series



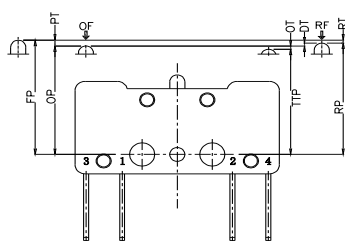
G6 Series/G10 Series



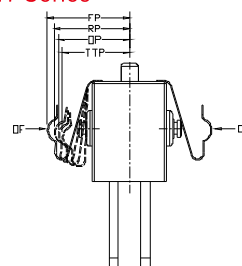
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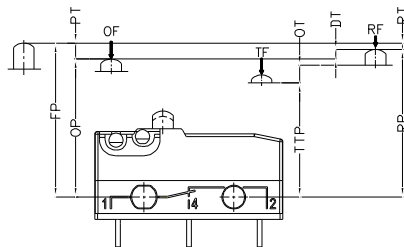
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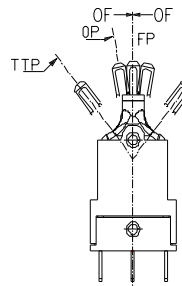
G1 Series/G17 Series



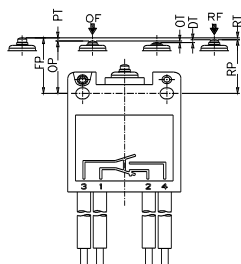
G91 Series



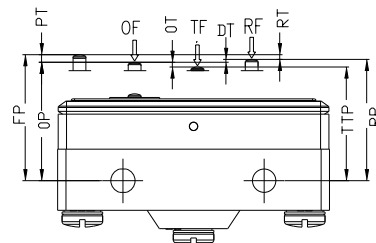
G16 Series



G11 Series



G12 Series



Code	Name	Meanings
PT	Pre-travel	The displacement of the actuator from the free position to the operating position.
OT	Over-travel	The displacement of the actuator from the operating position to the Total Travel position.
DT (or MD)	Movement- Differential	The displacement of the actuator from the operating position to the release position or from the release position to the operating position.
RT	Release travel	The displacement of the actuator from the release position to the free position.
OF	Operating force	The maximum operating force required for the actuator to move from the free position to the operating position.
TF	Total travel force	The minimum operating force experienced by the actuator at the Total Travel location.
RF	Release force	The actuator returns to the release position from the forward operating position, which the value reduce to.
TTP	Total travel position	The position at which the actuator was stopped.
OP	Operating position	The position of the actuator at the moment when the mechanism is positively operating.
RP	Release position	The position of the actuator at the moment when the mechanism is reversely operating.
FP	Free position	The position of the actuator when it is not subjected to operating forces and when the force is not sufficient to cause displacement.

Third View Projection

Lateral Actuation

Note: All the view in the catalogue use this thrid view projection	For G3-B type, if the operating plunger device is cam or sliding bevel, the max. bearable operating angle is 35° POM Material of operating device: POM Switch should be mounted vertically POM Material of operating device: POM Switch should be mounted vertically
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G303 Series

Sealed Subminiature Micro Switch



■ Features

- ◆ Designed for water and dust tight (IP67)
- ◆ Small compact size
- ◆ Global safety approvals
- ◆ Long life and high reliability
- ◆ Variety of levers
- ◆ Wide range of wiring terminals
- ◆ Widely used in automotive electronics, appliance and industrial control designs

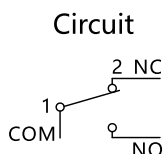
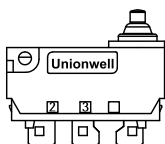
■ Application

- ◆ Car
- ◆ Air-Conditioner
- ◆ Communication
- ◆ Electric Toothbrush
- ◆ Toys
- ◆ Bicycle

■ Parameters

Rating		0.1A, 125/250VAC; 3A/12VDC; 0.1A/48VDC; μ 1E5
Operating Frequency	Electrical	0.1A, 120 cycles/min 3A, 10~30 cycles/min
	Mechanical	120 cycles/min
Contact Resistance (Initiative)		100m Ω Max. (without wire type)
Insulation Resistance (at 500VDC)		100M Ω Min.
Vibration Durability		10~55Hz, move 0.75mm (p-p)
Dielectric Strength		500VAC (50~60Hz)
Operating Temperature		-40°C ~ +85°C
Operating Humidity		85%RH Max.
Service Life	Electrical	Min. 100,000 cycles (Depend on part NO.)
	Mechanical	Min. 500,000 cycles

■ Circuit



G3 Series Micro Switch Ordering Instruction

G3	03	R	130	S	00	A	
Switch Type	Electrial Rating	Resistor Configuration	Operating Force at Pin Plunger,Max	Terminal Style	Lever Type	Circuit	
03	0.1A 125/250VAC 48VDC:3A 12VDC μ40T85 1E5	Without inner resistor	130 130gf Max. Use 130# spring	E	00	31	A
		R With inner resistor(with wires)		No lever Pin plunger	Simulated roller (for A, A1, M3 types)	SPDT	
				G	01	35	B
				F	02	36	C
				S	03	37	
				K	04	38	
				N	05	41	
				P	08	45	
				R	09	79	
				L	10	93	
				I	13	...	
				J	15		
				A			
				B	21		
				Q	22		
				D	23		
				W	25		
				U	28		
				V			

1	A	E	A	280	T001	U
Shape and Posts	Posts Dimension	AWG Type (for wire type only)	AWG Number (for wire type only)	Wires Length	Custom Code	LOGO
1 A type no post	Standard post 1. A, A1, A2, B types 2.60mm X 5.0mm 2. M3 type 2.95mm X 1.4mm 3. C1, D1 types 2.95mm X 1.5mm 4. C1 M3 type 3.0mm X 1.5mm	Without wire	Without wire	Standard length (300mm)	General model	U Unionwell
2 A type left side posts		M 18# Only for molded lead wires downward types			T0 01 Customization the customized code is T + serial number, suchas: T001	
3 A type right side posts		E 20# For A, A1, M3 molded Lead wires downward types and C type with 2 wires types	A UL1007	280 280mm length	T3 55 SPST-NC Color of wires, COM (black) NC (gray) resistance value RC: 220Ω R4: 3300Ω FP: 220Ω OP: 3520Ω	... Other
4 B type no post			C UL1430			
5 B type left posts		A Φ 2.2mm X 0.9mm posts. (for A, A1, types)	D UL1061	... Other	T3 50 SPST-NC Color of wires, COM (black) NC (gray) resistance value RC: 680Ω R4: 2700Ω FP: 680Ω OP: 3380Ω	
6 B type right side posts	B Φ 2.5mm X 1.5mm posts. (for A, A1, A2, B types)	F 22#				
7 M3 type posts	C Φ 2.6mm X 2.5mm posts. (for A, A1, A2 types)	G 24#	F AVSS	T3 54 SPST-NC Color of wires, COM (black) NC (gray) resistance value RC: 1500Ω R4: 1800Ω FP: 1500Ω OP: 3300Ω		
8 A type two sides posts	F Φ 2.60mm X 3.8mm posts. (for A, A1 types)	H 26#	L FLRYA			
9 B type two sides posts	H Φ 2.6mm X 2.0mm posts. (for A, A1 types)	I 28#	... Other	T3 14 SPST-NO Color of wires, COM (black) NC (gray) resistance value RC: 1620Ω R4: 5110Ω FP: 6730Ω OP: 1620Ω		
12 C1 type two sides posts	K Φ 2.95mm X 5.0mm posts. (only for C1 type)	... Other				
13 C1 type no post	J Φ 2.6mm X 1.4mm posts. (only for A2 type)			T3 19 SPST-NO Color of wires, COM (black) NC (gray) resistance value RC: 220Ω R4: 3300Ω FP: 3520Ω OP: 220Ω		
14 C1 type left posts	... Other			T5 64 SPST-NO Color of wires, COM (black) NC (gray) resistance value RC: 150Ω R4: 330Ω FP: 480Ω OP: 150Ω		
15 C1 type right posts						
16 D1 type no post						
17 D1 type left side posts						
18 D1 type right side posts						
19 D1 type two sides posts						
28 A type no post						
29 A type left side posts						
30 A type right side posts						
31 A type two sides posts						
47 C1M3 type posts						
48 A2 type posts						
49 A2 type posts						
50 A2 type posts						
51 A2 type posts						
52 A2 type posts						
53 A2 type posts						
54 A2 type posts						
55 A2 type posts						
... Other						

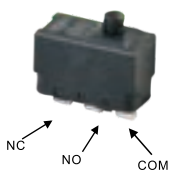
■ Basic Mounting Dimensions and Operating Characteristics

A shape	A1 shape
A2 shape	B shape
C1 shape	C1M3 shape
D1 shape	M3 shape

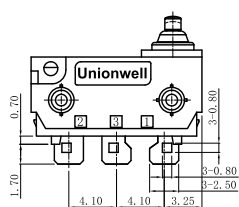
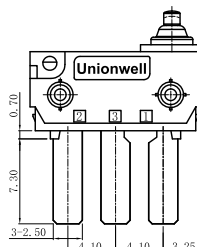
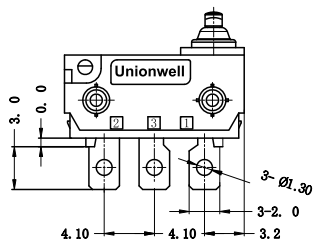
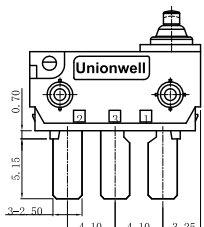
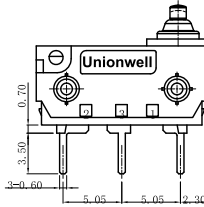
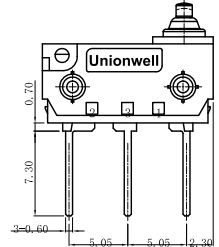
■ Shape and Posts

A type basic shape	A1 type basic shape	A2 type basic shape	B type basic shape	M3 type basic shape

■ Shape and Posts

C1 type basic shape	D1 type basic shape
 NC NO COM C1 type	 NC NO COM D1 type
C1M3 Shape	
	

■ Switch Terminal Type (can be customized)

S Type	Q Type	K Type
		
D Type	P Type	J Type
		

P1 Type	I Type	R Type
L Type	A Type	B Type
W Type	U Type	V Type

■ Wires Leads Type

Wires leads to bottom	Wires leads to plunger side	Wires leads to opposite to plunger side

■ Switch Lever Type (can be customized)

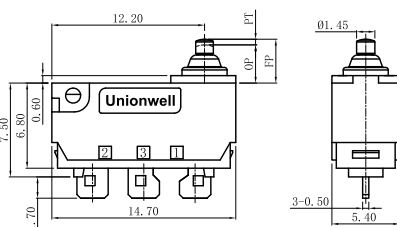
Without Lever	01# Lever	02# Lever
03# Lever	04# Lever	05# Lever
09# Lever	37# Lever	15# Lever
22# Lever	23# Lever	25# Lever
28# Lever	35# Lever	36# Lever

■ Posts Type (can be customized)

M3: Ø2.60X5.00mm posts	A shape of type A: Ø2.20X0.90mm posts	A shape of type B: Ø2.50X1.50mm posts
A shape of type C: Ø2.60X2.50mm posts	A shape of type F: Ø2.60X3.80mm posts	A shape of type H: Ø2.60X2.00mm posts

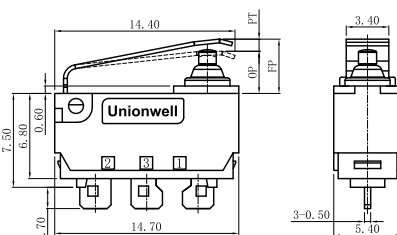
■ Dimensions and Operating Characteristics

◆ G3□□-□□□S00A1U



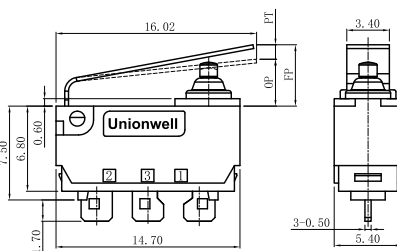
OF Max (gf)		RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	130	13	0.8	0.8	0.2	3.65	3.05±0.2

◆ G3□□-□□□S01A1U



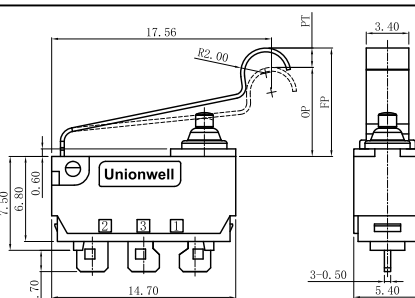
OF Max (gf)		RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	250	30	3	0.8	0.5	5.7	3.4 ± 0.5

◆ G3□□-□□□S02A1U



OF Max (gf)		RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	250	25	3.5	1.35	0.6	6.8	3.7±0.6

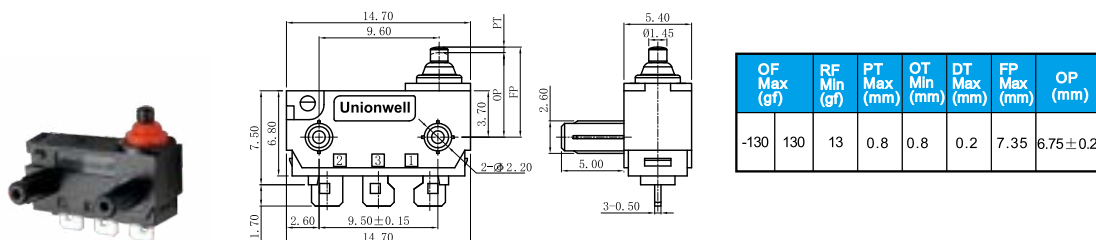
◆ G3□□-□□□S05A1U



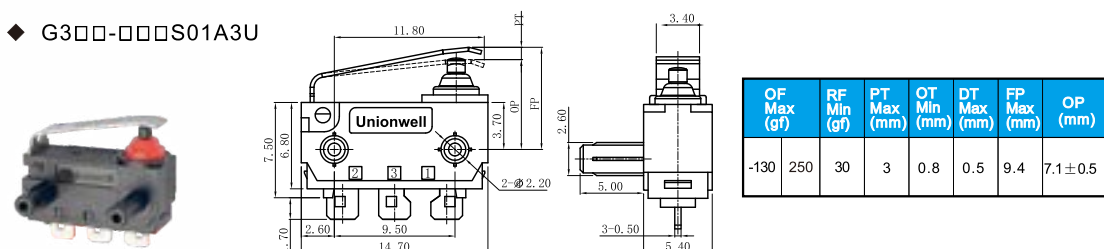
OF Max (gf)		RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	180	20	3.8	1.5	0.7	9.8	7.0±0.7

■ Dimensions and Operating Characteristics

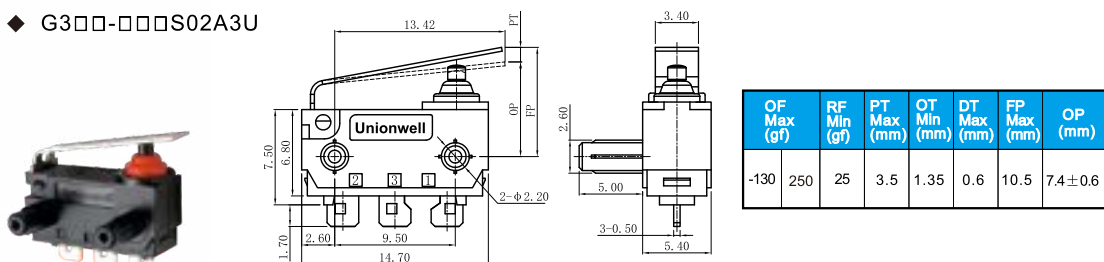
◆ G3□□-□□□S00A3U



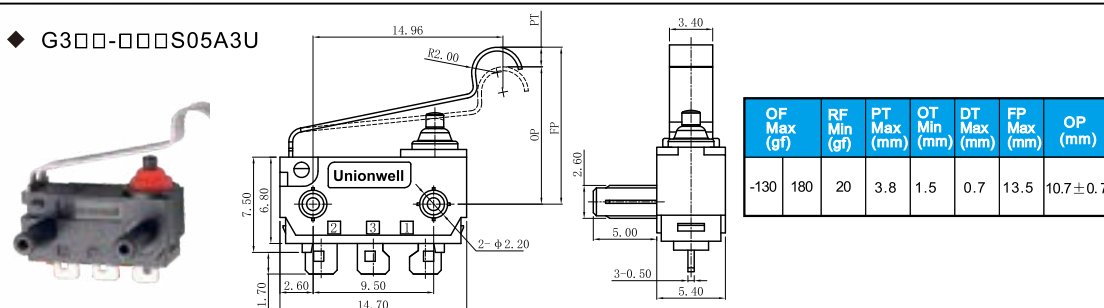
◆ G3□□-□□□S01A3U



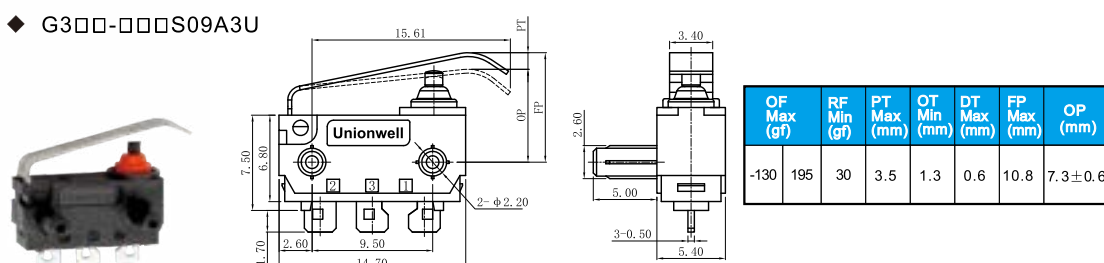
◆ G3□□-□□□S02A3U



◆ G3□□-□□□S05A3U

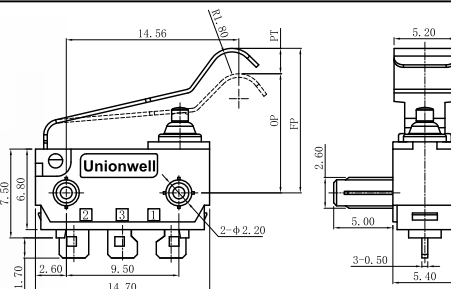


◆ G3□□-□□□S09A3U



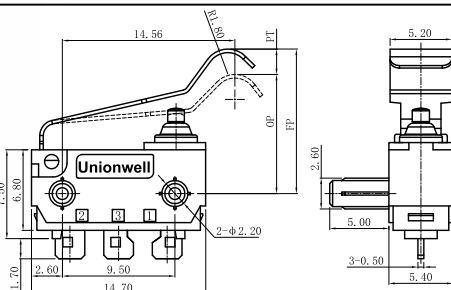
■ Dimensions and Operating Characteristics

◆ G3□□-□□□S15A3U



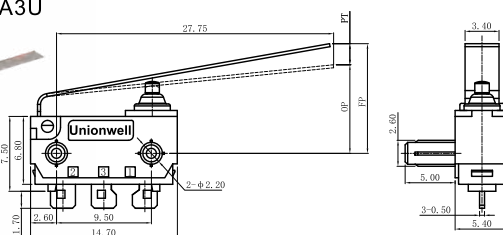
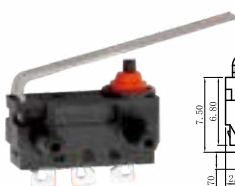
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-130	200	20	3.8	1.5	0.7	13.8	10.0 ± 0.1

◆ G3□□-□□□S22A3U



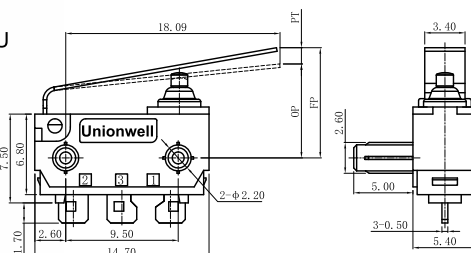
OF Max (gf)		RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	200	20	3.8	1.5	0.7	13.8	10.0±0.7

◆ G3□□-□□□S25A3U



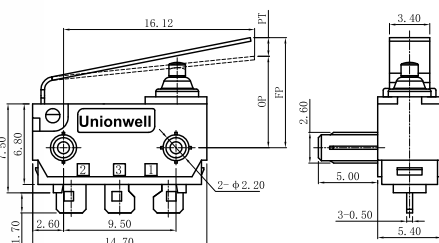
OF Max (gf)		RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	150	25	5.5	1.35	1.5	13	7.50 ± 1.2

◆ G3□□-□□□S28A3U



OF Max (gf)		RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	200	25	4.5	1.5	1	11.65	7.15±1.0

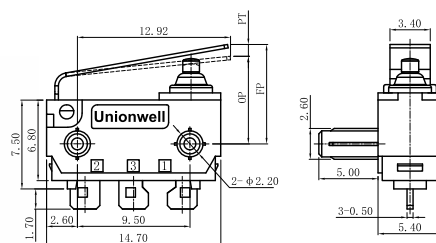
◆ G3□□-□□□S35A3U



OF Max (gf)		RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	200	25	4.4	1.5	1	11.45	7.05±1.0

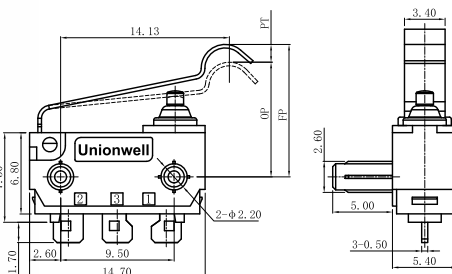
◆ Dimensions and Operating Characteristics

◆ G3□□-□□□S36A3U



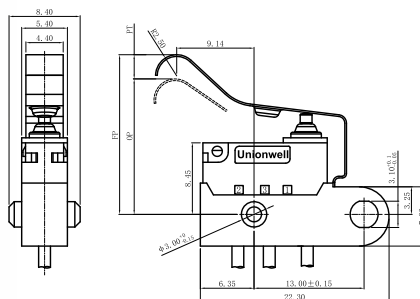
OF Max (gf)		RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	250	25	3.4	1.3	0.6	10.6	7.2±0.6

◆ G3□□-□□□P41A3U



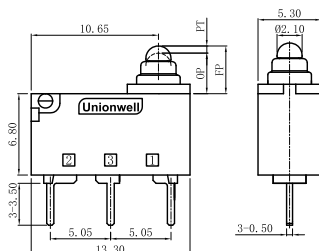
OF Max (gf)		RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	200	50	3.5	1.2	0.6	13	9.5±0.7

◆ G3□□-□□□E37C1U



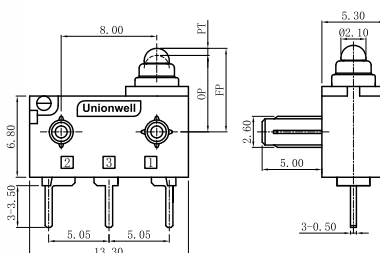
OF Max (gf)		RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	100	25	6	1.5	2	21	15±2.0

◆ G3□□-□□□P00A52U



OF Max (gf)		RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	130	30	1.3	0.6	0.25	4.2	3.4 ± 0.3

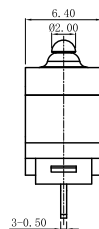
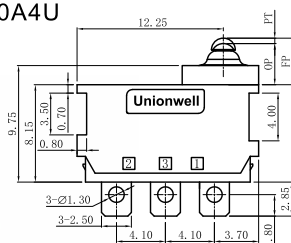
◆ G3□□-□□□P00A53U



OF Max (gf)		RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	130	30	1.3	0.6	0.25	7.2	6.4±0.3

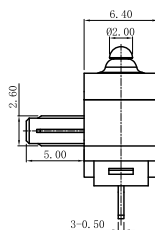
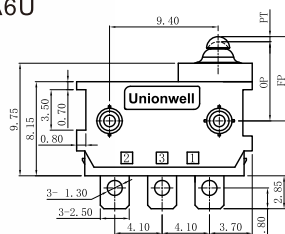
■ Dimensions and Operating Characteristics

◆ G3□□-□□□K00A4U



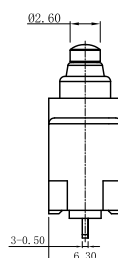
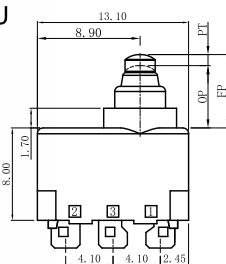
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	130	13	0.8	0.8	0.2	4.1
3.45±0.2						

◆ G3□□-□□□K00A6U



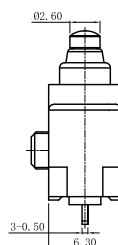
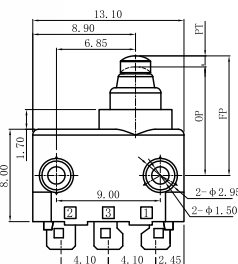
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	130	13	0.8	0.8	0.2	7.5
6.85±0.2						

◆ G3□□-□□□S00A13U



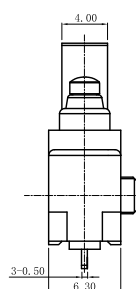
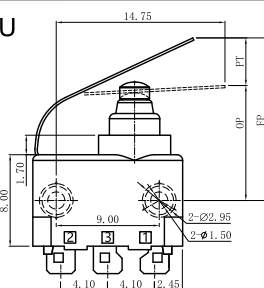
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	180	20	1.5	0.5	0.25	6.55
5.4±0.3						

◆ G3□□-□□□S00A15U



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	0.5	0.25	10.55
9.4±0.3						

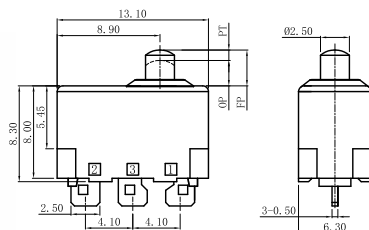
◆ G3□□-□□□S03A15U



OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	250	50	5.5	0.5	1.1	15
10.7±1.5						

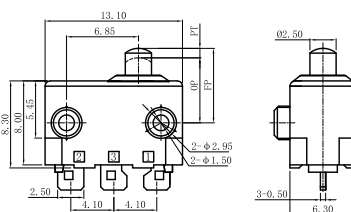
■ Dimensions and Operating Characteristics

◆ G3□□-□□□S00A16U



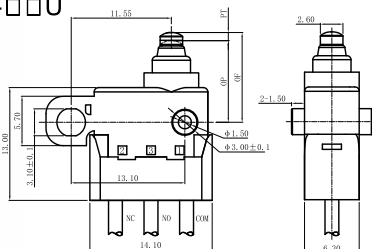
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	130	8	1.5	0.5	0.25	3.3
2.2±0.3						

◆ G3□□-□□□S00A18U



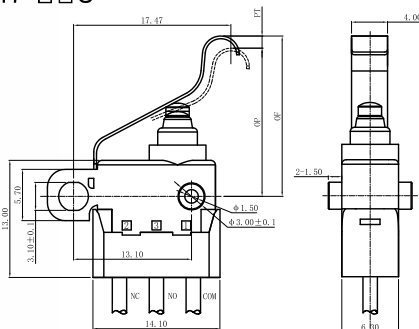
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	130	8	1.5	0.5	0.25	7.3
6.2±0.3						

◆ G3□□-□□□E00A47-□□U



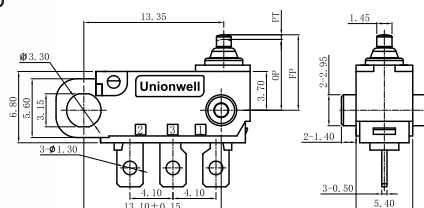
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	200	20	1.5	0.5	0.25	10.55
9.4±0.3						

◆ G3□□-□□□E23A47-□□U



OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)	TTP
-130	300	50	3.5	0.5	1.1	20	16.45±1.5
14.90							

◆ G3□□-□□□K00A7U



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						



G303A/B Series

Sealed Subminiature Micro Switch

■ Features

- ◆ Designed for water and dust tight (IP67)
- ◆ Small compact size
- ◆ Global safety approvals, customized designs
- ◆ Long life and high reliability
- ◆ Wide range of wiring terminals
- ◆ Variety of levers
- ◆ Variety of shapes
- ◆ Widely used in automotive electronics, appliance and industrial control

■ Application

- ◆ Car
- ◆ Air-Conditioner
- ◆ Communication
- ◆ Electric Toothbrush
- ◆ Toys
- ◆ Bicycle

■ Parameters

Rating		0.1A/125VAC; 3A/12VDC; 0.1A/250VAC; 0.1A/48VDC μ 1E5.
Operating Frequency	Electrical	0.1A-120 cycles/min; 3A-10~30 cycles/min
	Mechanical	120 cycles/min
Contact Resistance(Initiative)		100m Ω Max
Insulation Resistance(at 500VDC)		100M Ω Min
Vibration Durability		10~55Hz, move0.75mm (p-p)
Dielectric Strength		500VAC (50~60Hz)
Operating Temperature		-40°C~+85°C
Operating Humidity		85%RH Max
Service Life	Electrical	Min.100,000 cycles
	Mechanical	Min.500,000 cycles

■ Switch IP Rated

G303A IP67



G303B IP40



G303A/B Series Micro Switch Ordering Instruction

G3	03	A	180	K	00	A
Switch Type	Electrical Rating	Degree of Protection	Operating Force at Pin Plunger, Max	Terminal Style	Lever Type	Circuitry
G3 Series micro switch	03 0.1A 125/250VAC 48VDC 3A 12VDC μ 1E5	A IP67	180 180gf Max Only for IP67	E Molded lead wires downwards	00 No lever pin plunger	A SPDT
		B IP40	130 130gf Max Only for IP40	G Molded lead wires on left side (plunger side)	03 03# Straight lever Only for IP67	B SPST-NC
				F Molded lead wires on right side (away from the plunger side)		
				K Long solder terminals	38 38# Lever Only for IP67	C SPST-NO
				I Big solder terminals (Terminal aperture 1.8mm)		
				P Straight PCB terminals (0.9mm width)	... Other	
				R Right side PCB terminals		
				L Left side PCB terminals		
				J Longstraight PCB terminals		
				C 2# Long solder terminals		
				D 2# Straight PCB terminals (0.6mm width)		
				S Solder terminals		
				... Other		

20		A		E		A		280		T001		U	
Shape and Posts		Posts Dimension		AWG Type (for Wire Type Only)		AWG Number (for Wire Type Only)		Wires Length		Custom Code		LOGO	
20	Waterproof two sides posts	A	No post		No molded lead wires		No molded lead wires		300mm Length standard lead wires		General	U	Unionwel
21	C2 Type no post	B	Φ2.95mmx5.0mm posts	E	Only available on molded lead down types	A	UL1007	280	280mm Length	T001	Customized according to requirements, the code format is T+serial number XXX, for example: T001		
22	C2 Type left posts	C	Φ2.95mmx1.5mm posts	F	22#	F	AVSS	... Other			... Other		
23	C2 Type right posts	D	Φ2.95mmx2.5mm posts	G	24#	L	FLRY-A						
24	Dustproof no post			... Other		... Other							
25	D2 Type left side posts			... Other									
26	D2 Type right side posts												
27	D2 Type two side posts												
...	Other												

Terminal Type

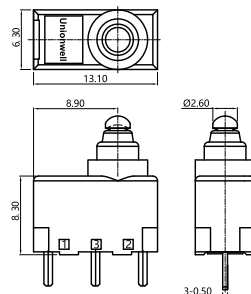
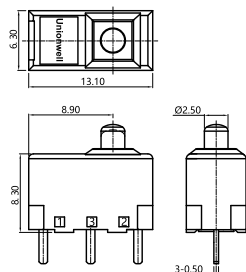
E type: molded lead wires downward	I type: big Solder terminals	G type: molded lead wires on left side (plunger side)
P type: 0.9mm width PCB terminals	K type: long solder terminals	F type: molded lead wires on right side (away from the plunger side)
J type: long straight PCB terminals	C type: 2# long solder terminals	D type: 0.6mm width straight PCB terminals

Lever Type

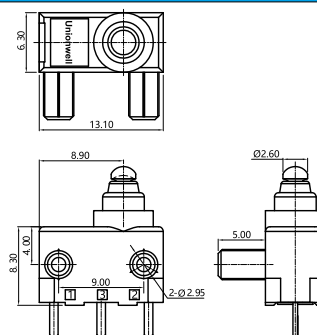
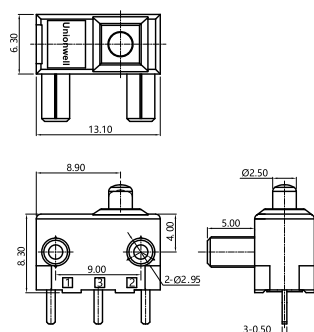
03# lever	38# lever
------------------	------------------

Posts Dimension

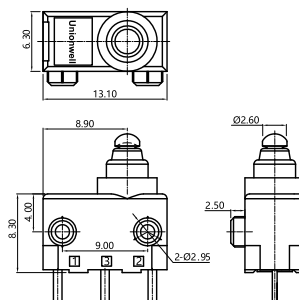
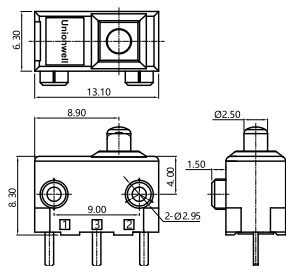
A#: No post



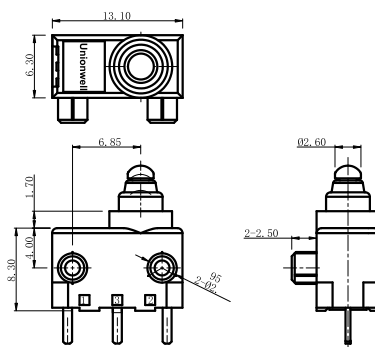
B#: Φ 2.95x5.0mm posts



C#: Φ 2.95x1.5mm posts



D#: Φ 2.95x2.5mm posts



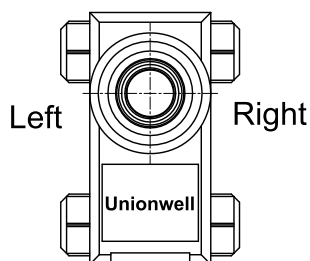
Contact Configuration

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

Mounting Hole and Operating Characteristics

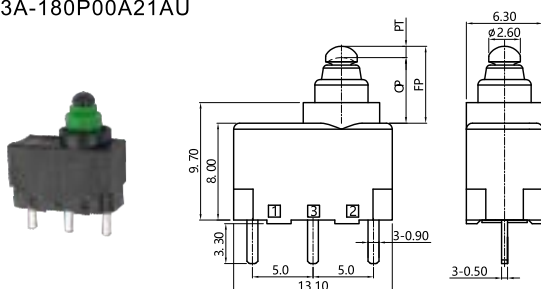
G303A/G303A Series	G303B/G303B Series
Mounting Hole Dimensions	Mounting Hole Dimensions

Posts Direction Define



Dimensions and Operating Characteristics

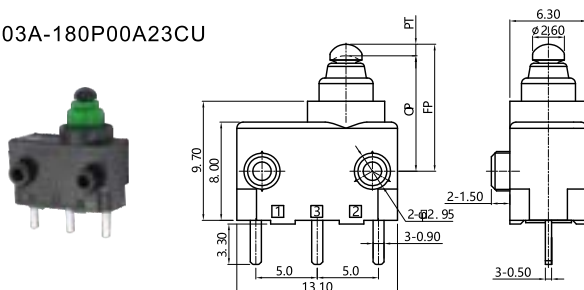
◆ G303A-180P00A21AU



OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-180	180	20	1.5	0.7	0.4	6.35

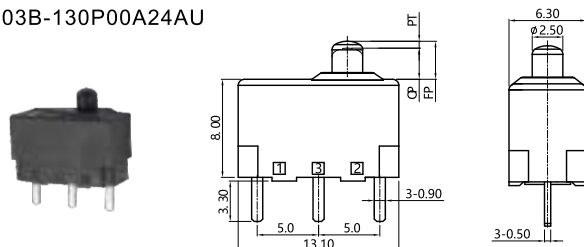
■ Dimensions and Operating Characteristics

◆ G303A-180P00A23CU



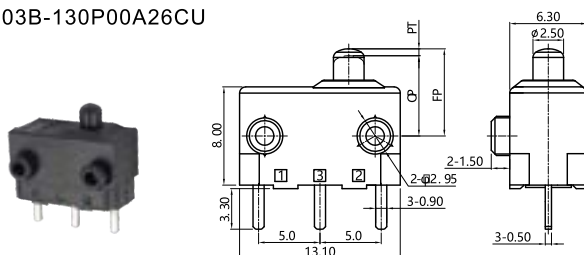
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-180	180	20	1.5	0.7	0.4	10.35
9.4 ± 0.3						

◆ G303B-130P00A24AU



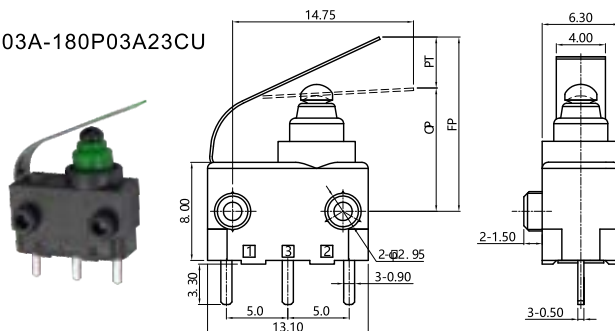
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-130	130	8	1.5	0.7	0.4	3.3
2.2 ± 0.3						

◆ G303B-130P00A26CU



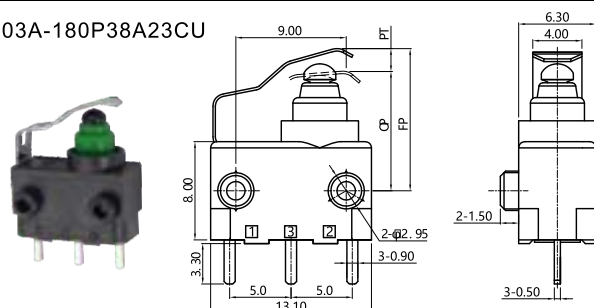
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-130	130	8	1.5	0.7	0.4	7.3
6.2 ± 0.3						

◆ G303A-180P03A23CU



OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-180	250	50	5.5	0.7	1.1	15
10.7 ± 1.5						

◆ G303A-180P38A23CU



OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-180	250	50	2	0.7	1.1	12
10 ± 1.2						

G304 (F-Type)

Sealed Clip Type Subminiature Micro Switch



■ Features

- ◆ Designed for water and dust tight (IP67)
- ◆ Small compact size
- ◆ Long life and high reliability
- ◆ Variety of levers
- ◆ Wide range of wiring terminals
- ◆ Widely used in automotive electronics, appliances and industrial control etc.
- ◆ Customized designs
- ◆ Slide structure
- ◆ Non short circuit conversion

■ Application

- ◆ Car
- ◆ Air-conditioner
- ◆ Communication
- ◆ Electric toothbrush
- ◆ Toys

■ Parameters

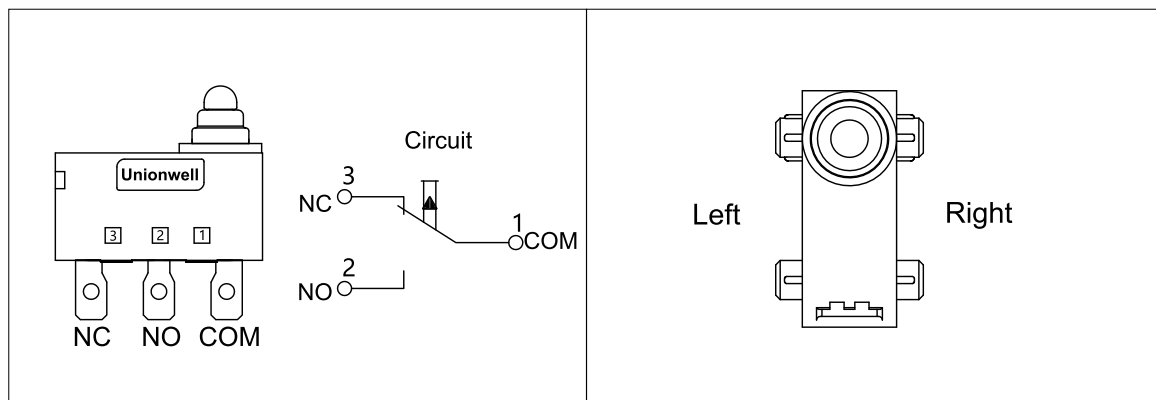
Operation Speed		1~500mm/s
Operating Frequency		120 cycles/min.
Insulation Resistance		$\geq 100M\Omega$
Contact Resistance (Initial Value)	With terminals type	$\leq 100m\Omega$
	With wires type	$\leq 500m\Omega$ (Standard wire length 300mm)
Voltage Resistance	Between terminals	AC500V, 50/60Hz, 1min.
	Between terminals and uncharged metal parts	AC1000V, 50/60Hz, 1min.
Vibration	No transformation action	10-55Hz (Double amplitude 1.5mm)
Service Life	Electrical	300,000 cycles (15 cycles/min.) DC12V 0.1A DC3V 50 μ A
	Mechanical	300,000 cycles (30 cycles/min.)
Protection Level		IEC IP67 (Except terminals)
Operating Temperature		-40~+85°C 60%RH Max. (No icing, no condensation)
Operating Humidity		95%RH Max. (+5~+35°C)

G304 F - Type Series Micro Switch Ordering Instruction

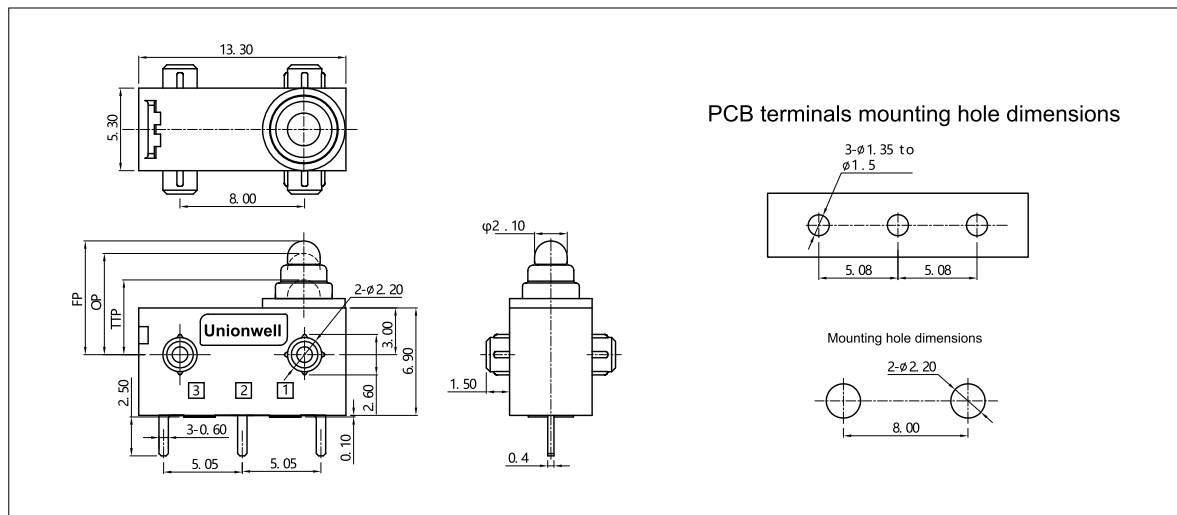
G3	04F	150	P	00	E	39	G	T001	U
Switch Type	Electrical Rating	Operating Force at Pin Plunger	Terminal Type		Circuitry	Shape and Posts	Post Dimension	Custom Code	LOGO
G3 Series- Micro Switch	0.1A 12VDC 50µA 3VDC	80gf 80 Max.	Straight PCB Terminals	No Lever Pin Plunger	Slide Non-Short Circuit Type, 1, 3 Convert to 1, 2 SPDT	F Type W/O Posts	Standard Posts: 2.60mmx1.5mm	General	Unionwell
	...	150gf 150 Max.	Long Solder Terminals	V Type Straight Leaf Lever	Slide Non-Short Circuit Type 3 Terminals, But SPST-NO	F Type Left Posts	Φ2.6x1.5mm Posts.	Customized according to requirements, the code format is T+serial number XXX, for example: T001	Other
	...	Other	Right Side PCB Terminals	Straight Leaf Lever	Slide Type SPST-NC 1, 3	F Type Right Posts	Φ2.6x2.0mm Posts.	T0 01	
	...	...	Other	...	Slide Type SPST-NO 1, 2	F Type Two Sides Posts	Φ2.2x0.8mm Posts.	...	Other
	...	...	...	...	...	F Type Lengthen Two Sides Posts	7.3x1.2x1.2mm Posts.	...	...
	...	...	...	...	Other	...	Other	...	...

■ Circuit

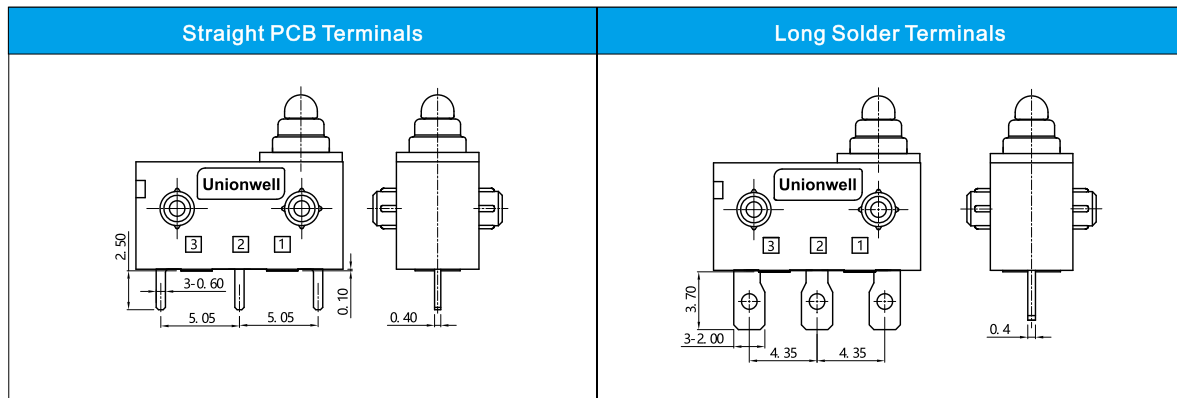
■ Posts Direction Define



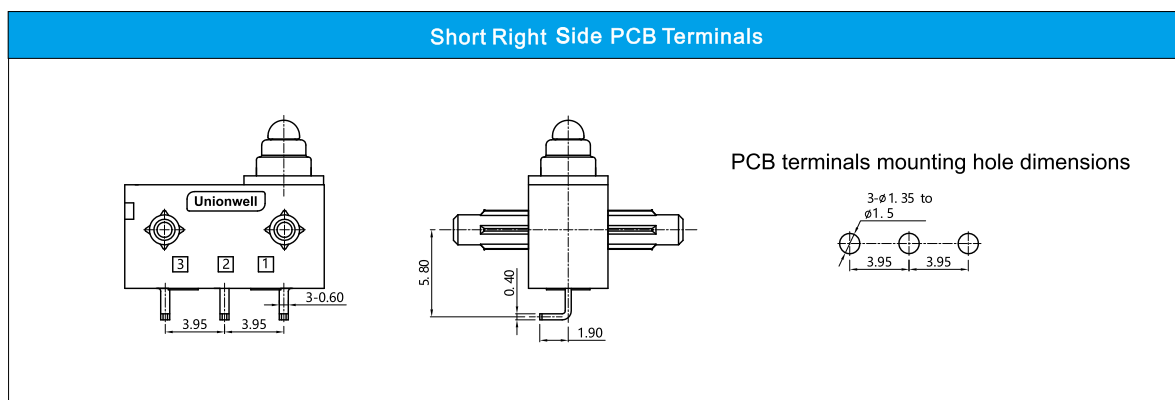
■ Basic Mounting Dimensions and Operating Characteristics



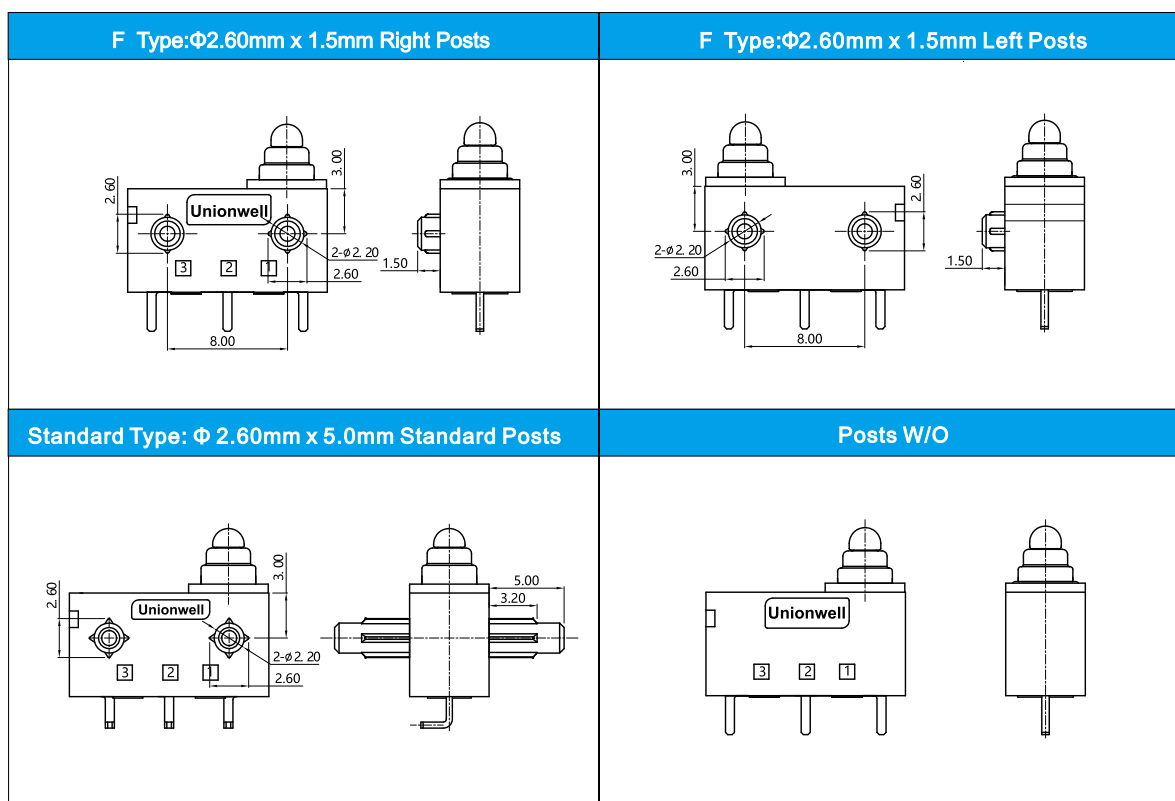
■ Switch Terminals Type (Can be customized)



■ Switch Terminals Type(Can be customized)

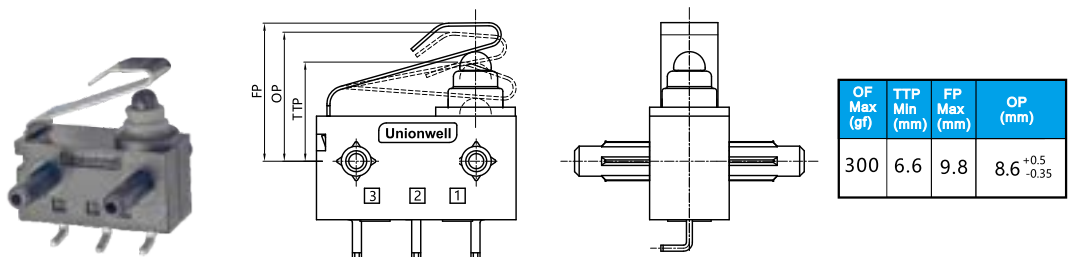


■ Posts Type

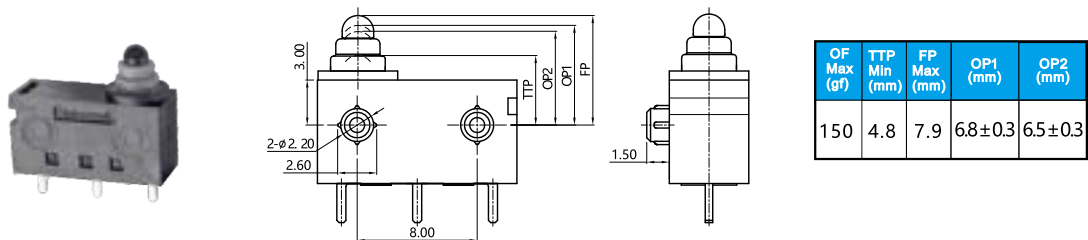


■ Dimensions and Operating Characteristics

◆ G304F-150W26D46U



◆ G304F-150P00D36GU



G304 (G-Type)

Sealed Clip Type Subminiature Micro Switch



■ Features

- ◆ Designed for water and dust tight (IP67)
- ◆ Small compact size
- ◆ Long life and high reliability
- ◆ Variety of levers
- ◆ Wide range of wiring terminals
- ◆ Widely used in automotive electronics, appliances and industrial control etc.
- ◆ Customized designs
- ◆ Slide structure
- ◆ Non short circuit conversion

■ Application

- ◆ Car
- ◆ Air-conditioner
- ◆ Communication
- ◆ Electric toothbrush
- ◆ Toys

■ Parameters

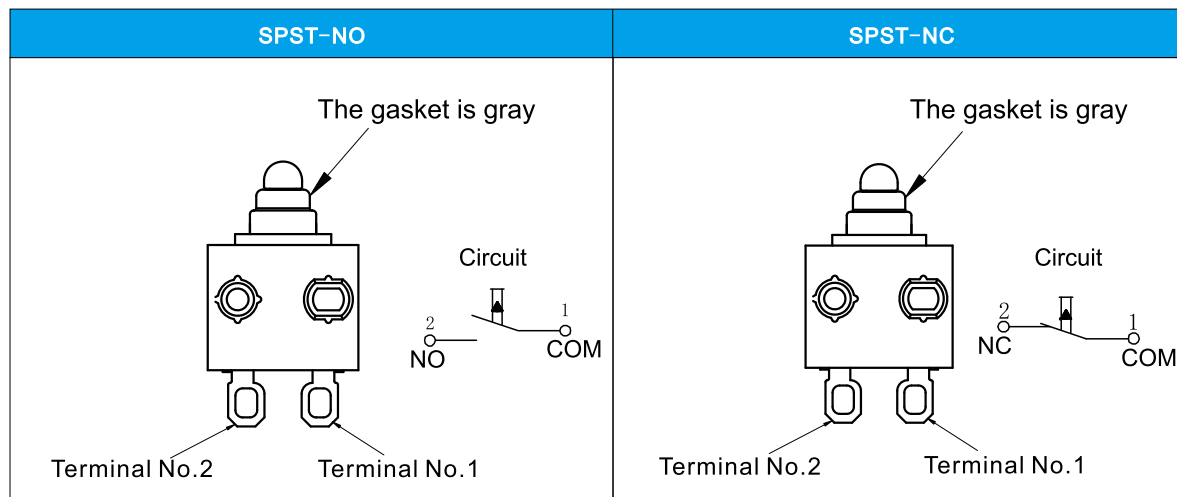
Operation Speed		1~500mm/s
Operating Frequency		120 cycles/min.
Insulation Resistance		≥100MΩ
Contact Resistance (Initial Value)	With terminals type	≤100mΩ
	With wires type	≤500mΩ (Standard wire length 300mm)
Voltage Resistance	Between terminals	AC500V, 50/60Hz, 1min.
	Between terminals and uncharged metal parts	AC1000V, 50/60Hz, 1min.
Vibration	No transformation action	10-55Hz (Double amplitude 1.5mm)
Service Life	Electrical	300,000 cycles (15 cycles/min.) DC12V 0.1A DC3V 50μA
	Mechanical	300,000 cycles (30 cycles/min.)
Protection Level		IEC IP67 (Except terminals)
Operating Temperature		-40~+85°C 60%RH Max. (No icing, no condensation)
Operating Humidity		95%RH Max. (+5~+35°C)

G304G-Type Series Micro Switch Ordering Instruction

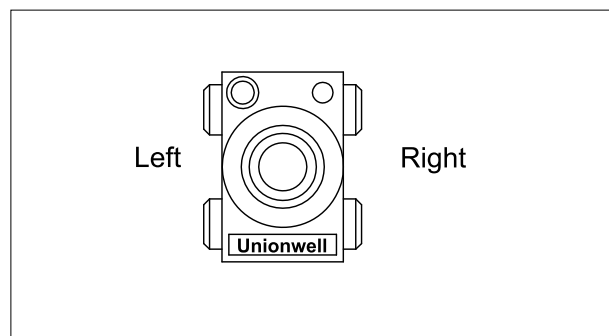
G3	04G	150	U		00	E	39						
Switch Type	Electrical Rating	Operating Force at Pin Plunger	Terminal Type		Lever Type	Circuitry	Shape and Posts						
G3 Series - Micro Switch	04G	0.1A 12VDC 50μA 3VDC	80	80gf Max.	U	Left-right PCB Terminals	G Type Left Side PCB Terminals	00	No Lever Pin Plunger	E	Slide Type SPST-NO 1, 2	39	G Type W/O Post
	...	Other	150	150gf Max.	V	Solder Terminals 6# 7#	G Type Left Solder Terminals	...	Other	F	Slide Type SPST-NC 1, 2	40	G Type Left Posts
			...	Other	M	Short Solder Terminals 6# 7#	G Type Short Solder Terminals			...	Other	41	G Type Right Posts
					P	Straight PCB Terminals	G Type Straight PCB Terminals					42	G Type Two Sides Posts
					S	2.0 Short Solder Terminals with Hole 6# 2.0	G Type Short Solder Terminals with Holes					44	G Type Revers Left Posts
					...	Other						48	G Type Ractangle one Side Posts
												...	Other

	G	A	280	B	T001	U
Posts Dimension	AWG Type (For wire type only)	AWG Number (For wire type only)	Wires Length	Type of Wires Outline	Custom Code	LOGO
Standard Posts: 2.60mmx5.0mm	W/O Molded Lead Wires	W/O Molded Lead Wires	300mm Length Standard Lead Wires 300mm	B Molded Lead Wires on Left Side	General	U Unionwell
G Φ2.6x1.5mm Posts.	... Other	A UL1007	280 280mm Length	C Molded Lead Wires on Right Side	Customized according to requirements, the code format is T+serial number XXX, for example: T001	... Other
H Φ2.6x2.0mm Posts.		C UL1430	... Other	E Molded Lead Wires on Bottom		
I Φ2.2x0.8mm Posts.		D UL1061		... Other		
K 7.3x1.2x1.2mm Posts.		E UL1330				
... Other		F AVSS			... Other	
		H UL1332				
		G UL3132				
		... Other				

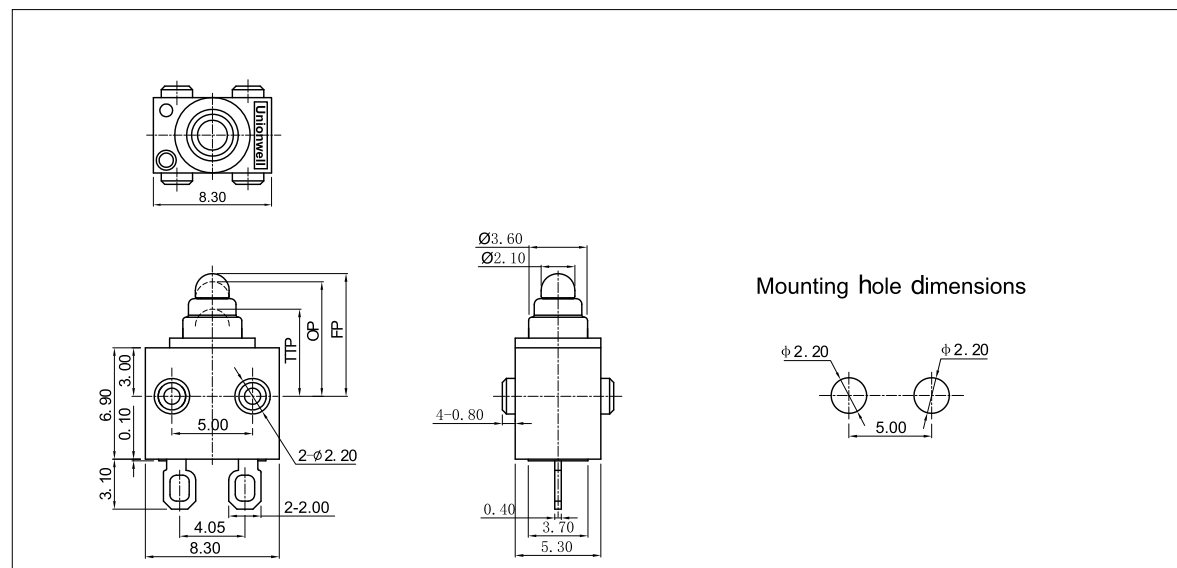
■ Circuit



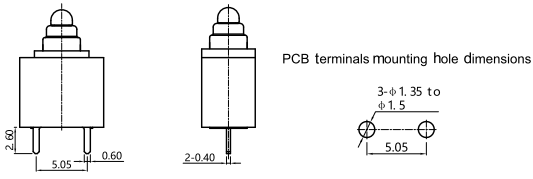
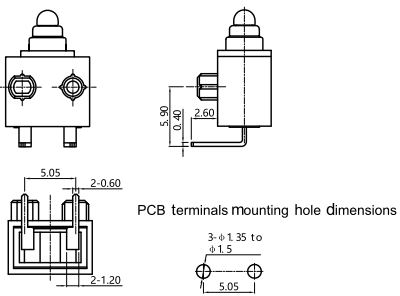
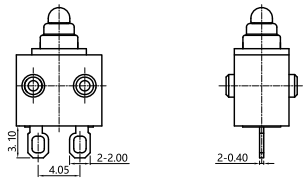
■ Post direction define



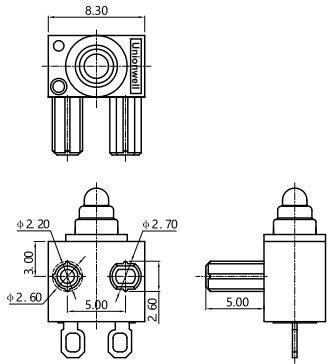
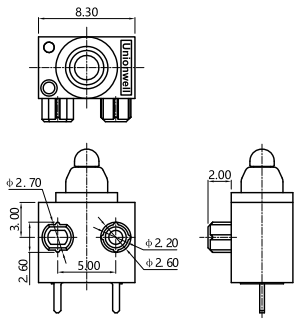
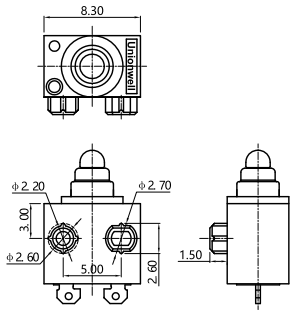
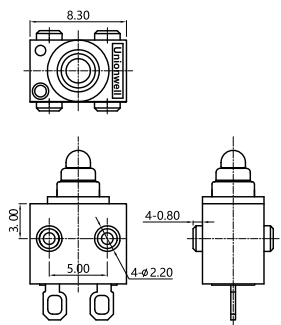
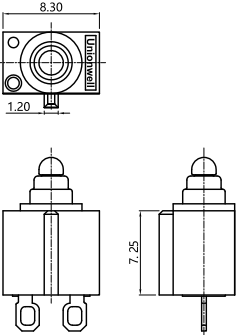
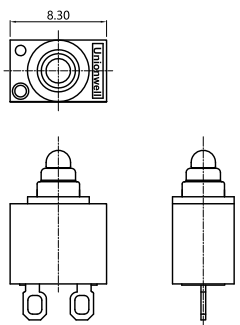
■ Basic Mounting Dimensions and Operating Characteristics



■ Switch Terminal Type(can be customized)

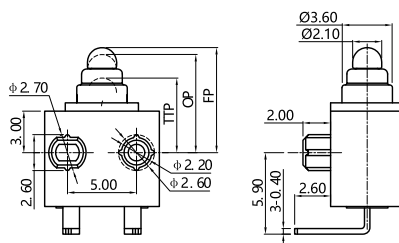
5# Straight PCB terminals	6# Straight left side PCB terminals
 PCB terminals mounting hole dimensions 3-ϕ1.35 to ϕ1.5 5.05	 PCB terminals mounting hole dimensions 3-ϕ1.35 to ϕ1.5 5.05
6# Solder terminals	
	

■ Posts Type

Standard Type: ϕ 2.60mm x 5.0mm left posts	H Type: ϕ 2.60mm x 2.0mm left posts	G Type: ϕ 2.60mm x 1.5mm reverse left posts
		
I Type: ϕ 2.20mm x 0.8mm two sides posts	G Type rectangle one side posts	W/O posts
		

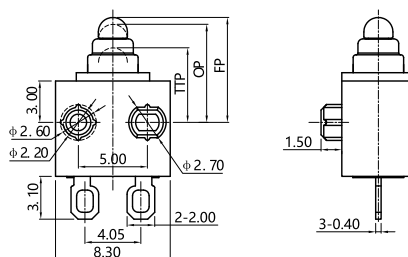
.34.

◆ G304G-150U00E40HU



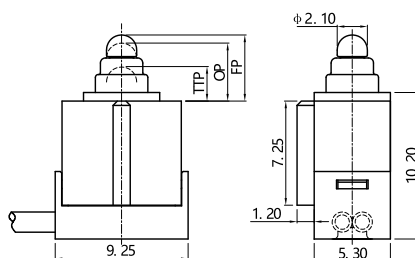
OF Max. (gf)	TTP Max. (mm)	FP Max. (mm)	OP (mm)
150	5.3	7.9	7.1±0.4

◆ G304G-150V00F44GU



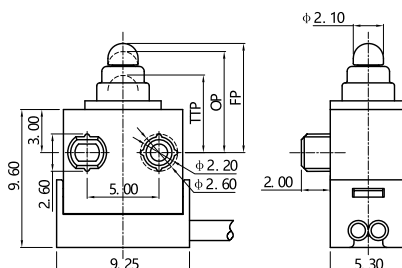
OF Max. (gf)	TTP Max. (mm)	FP Max. (mm)	OP (mm)
150	5.3	7.9	7.1±0.4

◆ G304G-150M00E48-□□□□□BU



OF Max. (gf)	TTP Max. (mm)	FP Max. (mm)	OP (mm)
150	5.3	4.9	4.1±0.

◆ G304G-150M00E40H-□□□□□CU



OF Max. (gf)	TTP Max. (mm)	FP Max. (mm)	OP (mm)
150	5.3	7.9	7.1±0.

G304A Series

High Reliability Sealed Clip Type Subminiature Micro Switch



■ Features

- ◆ Small electrical rating and high contact reliability switch
- ◆ Sliding contact mute structure
- ◆ Widely applied in different environments, IP67 rated
- ◆ Widely used in home appliances, electronic equipment, automatic machines, communication equipment, auto electronics, apparatus and instruments, power tools etc

■ Application

- ◆ Home appliances
- ◆ Electronic equipment
- ◆ Automatic equipment
- ◆ Communication equipment
- ◆ Auto electronics
- ◆ Apparatus and instruments

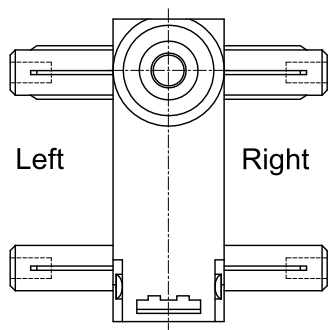
■ Parameters

Operation Speed		1~500mm/s
Operation Frequency		120 cycles/min.
Insulation Resistance		≥100MΩ
Contact Resistance (Initial Value)	With terminals type	≤100mΩ
	With wire type	≤500mΩ (Standard wire length 300mm)
Voltage Resistance	Between terminals	AC500V, 50/60Hz, 1min.
	Between terminals and uncharged metal parts	AC1,000V, 50/60Hz, 1min.
Vibration Resistance	No transformation action	10-55Hz (Double amplitude 1.5mm)
Operating Life	Electrical	300,000 cycles (15 cycles/min.) DC12V 0.1A 50μA 5VDC
	Mechanical	300,000 cycles (30 cycles/min.)
Protection Level		IEC IP67 (Except terminals)
Operating Temperature		-40~+85°C
Operating Humidity		85%RH Max.

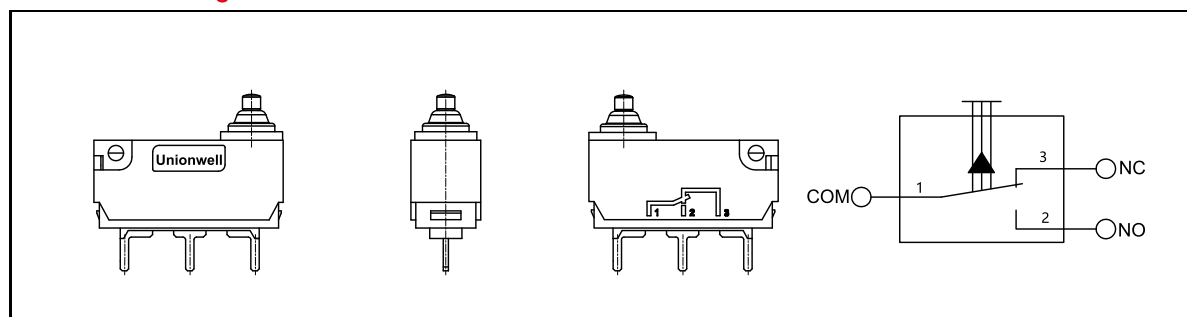
G304A Series Micro Switch Ordering Instruction

G3	04A	150	E	27	D	49	A	E	A	B	280	T001	U
Switch Type	Electrical Rating	Operating Force at Pin Plunger	Terminal Type	Lever Type	Circuit Code	Shape and Posts	Posts Dimension	AWG Type (For wire type only)	AWG Number (For wire type only)	Type of wires Outline	Wires Length	Custom Code	LOGO
G304A Series Micro-Switch	0.1A 12VDC 50µA 3VDC	150gf 150 Max.	T Shape PCB Terminals	Pin Plunger NO Lever	Slide Non-short Circuit Type, 1, 3 Convert to 1, 2 SPDT	49 No Posts	Standard Posts: 2.60mmx1.5mm	No Molded Lead Wires	No Molded Lead Wires	Wires Lead to Bottom	300mm Length Standard Lead Wires	General	U Unionwell
	Other	Other	Standard PCB Terminals	27# Straight Leaf Lever	Slide Type, SPST-NO 1, 2	50 Left Posts	Φ2.6x1.5mm Posts.	F 22#	A UL1007	Molded Lead Wires on Left Side	280mm Length	Customized according to requirements, the code format is T+ serial number XXX, for example: T001	Other
			Solder Terminals	Other	Slide Type, SPST-NC 1, 3	51 Right Posts	Φ2.6x2.5mm Posts.	G 24#	FAVSS	Molded Lead Wires on Right Side	Other	Other	
			Left Side PCB Terminals		Other	52 Two-sided Posts	No Post	Other	Other	Other			
			Right Side PCB Terminals			Other				Other			
			Other										

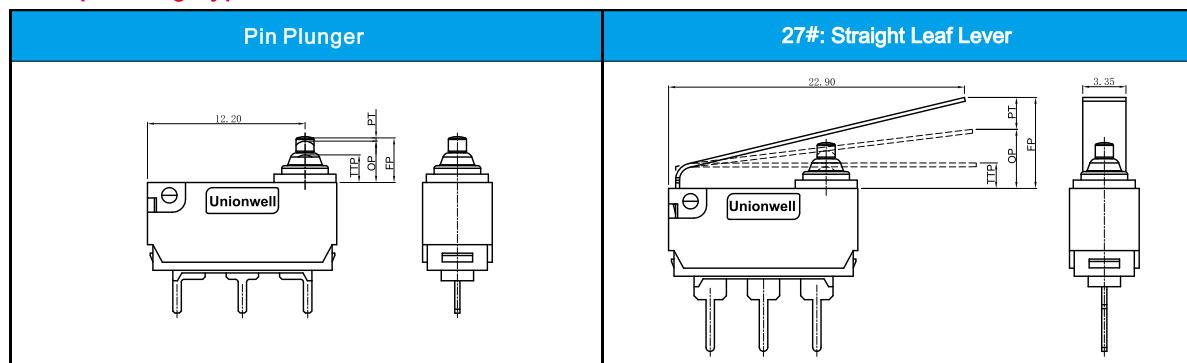
■ Posts Direction



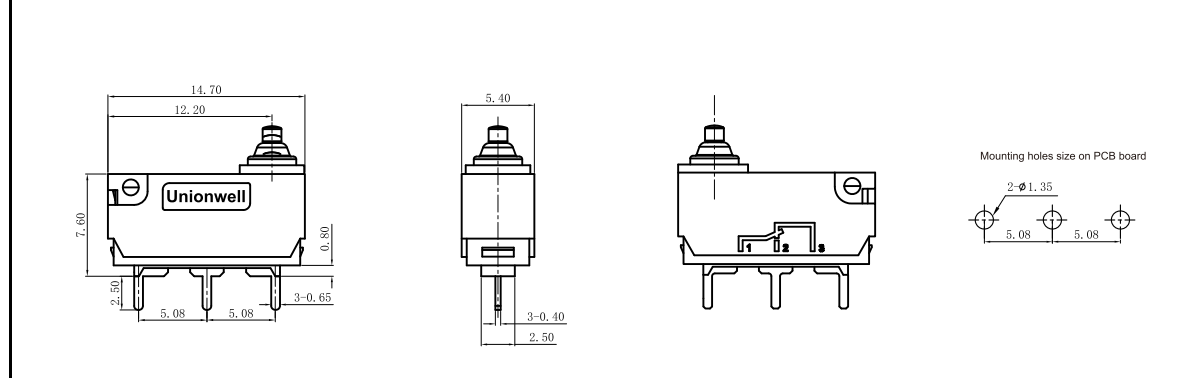
■ Circuit Configuration



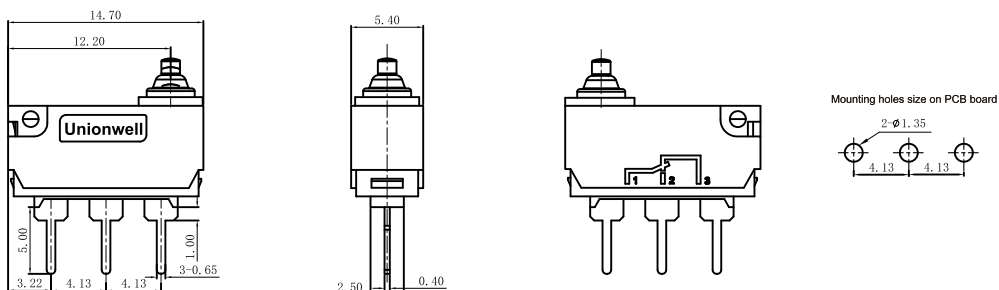
■ Operating Type



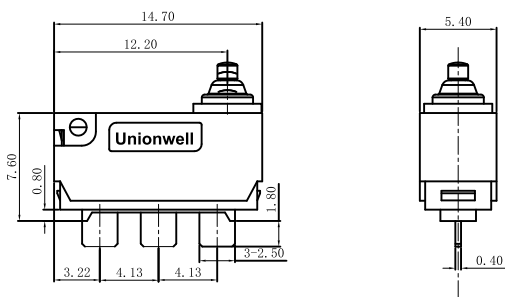
■ Standard PCB Terminals



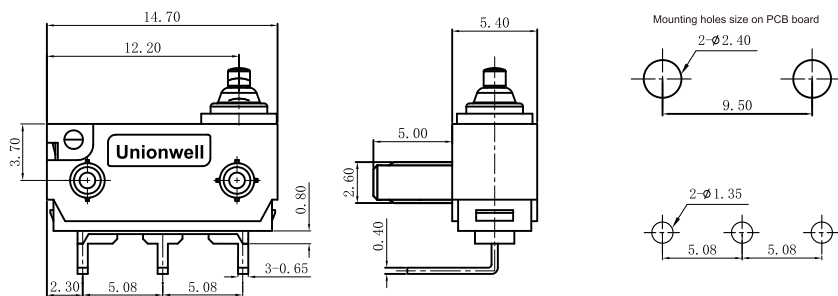
◆ T Shape PCB Terminals



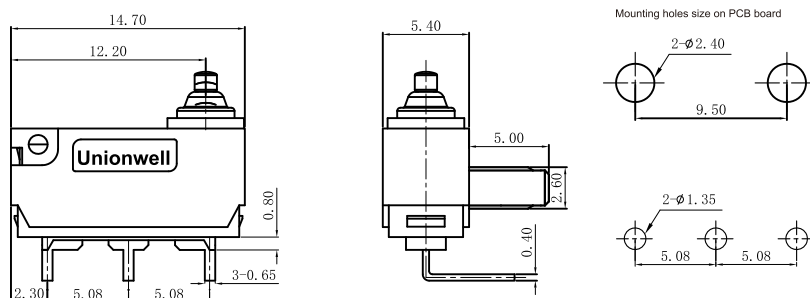
◆ Solder Terminals



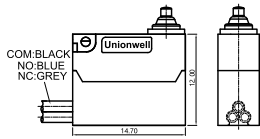
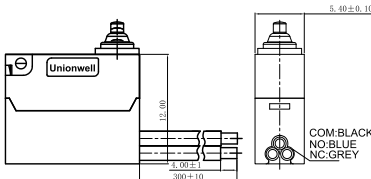
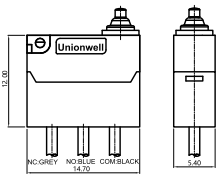
◆ Right PCB Terminals



◆ Left PCB Terminals

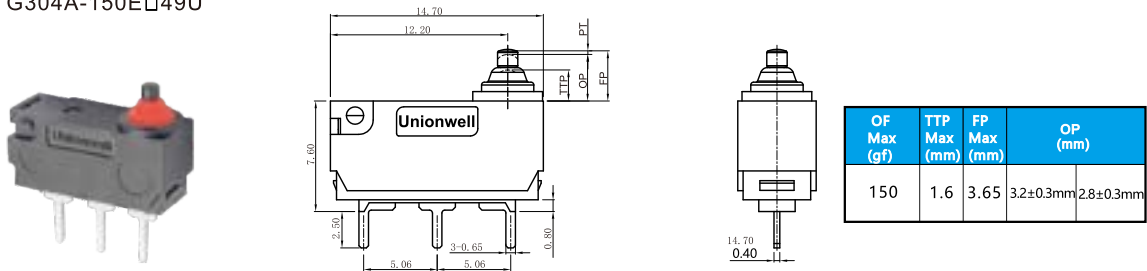


Wire Leads

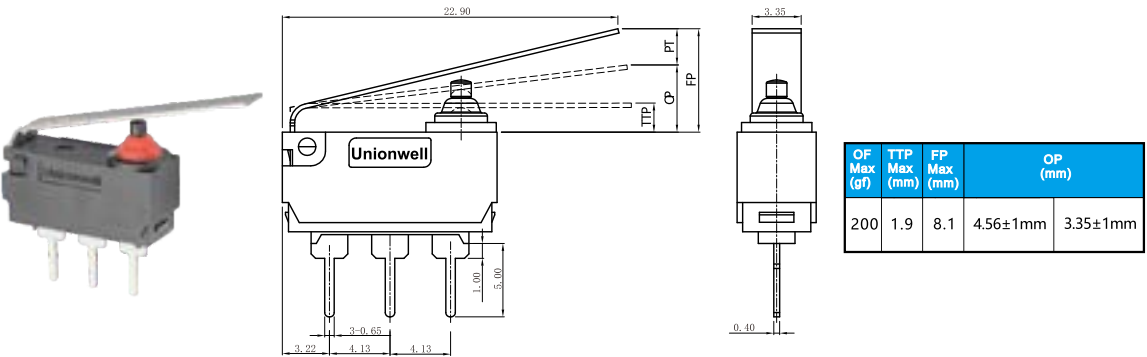
Left Wire	Right Wire	Bottom Wire
		

Dimensions and Operating Characteristics

◆ G304A-150E□49U



◆ G304A-150E27□49U



■ G304A Lever List as Shown Below(Same as G303 Lever)

01 # Lever	02 # Lever	04 # Lever
05 # Lever	09 # Lever	10 # Lever
15 # Lever	22 # Lever	25 # Lever
28 # Lever	35 # Lever	36 # Lever
41 # Lever		

G304B Series

Sealed Clip Type Subminiature Micro Switch



■ Features

- ◆ High reliability and good resistance to environment, sealed micro switch with long travel
- ◆ With long travel, can work easily even without lever
- ◆ High reliability sliding contact structure
- ◆ With high temperature resistance(+85 °C) and drip-proof structure, can be widely applied in different environment, IP67 rated (except for terminals)
- ◆ Widely applied for home appliances, electronic equipment, automatic equipment, communication equipment, auto electronics, apparatus and instruments, electrical tools etc.

■ Application

- ◆ Home Appliances
- ◆ Electronic Equipment
- ◆ Automatic Equipment
- ◆ Communication Equipment
- ◆ Auto Electronics
- ◆ Apparatus and Instruments
- ◆ Power Tools

■ Parameters:

Operation Speed		1 ~ 500mm/s (Related to the driving method)
Operation Frequency		120 cycles/min.
Insulation Resistance		≥100MΩ
Contact Resistance (Initial Value)	With terminals type	≤100mΩ
	With wire type	≤200mΩ (Standard wire length 300mm)
Voltage Resistance	Between terminals	AC600V, 50/60Hz, 1min.
	Between each terminal and the non-electrical metal parts	AC1,500V, 50/60Hz, 1min.
Operating Life	Electrical	300,000 cycles (15 cycles/min.) 0.1A 12VDC 50μA 5VDC
	Mechanical	300,000 cycles (30 cycles/min.)
Operating Temperature		-40~+85°C
Operating Humidity		85%RH Max.

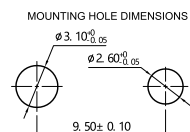
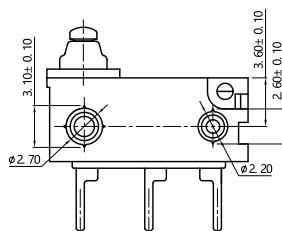
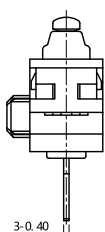
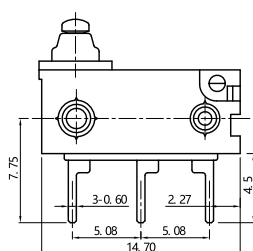
G304B Series Micro Switch Ordering Instruction

G304B	150	P	00	C	2	T001	U
Switch Type	Max Operating Force at Pin Plunger	Terminal Type	Lever Type	Circuit Code	Assembly Type	Custom Code	LOGO
G304B Series Micro Switch Ordering Instruction	150 150gf Max.	P Straight PCB Terminals	00 No Lever Pin Plunger	A SPDT	1 No Posts	General	U Unionwell
	... Other	... Other	01 Leaf Lever	B SPST-NC	2 $\Phi 3.1 \times 5.0\text{mm}$ Posts at Left Side	T0 Customized according to requirements, the code format is T+serial number XXX, for example: T001	... Other
			02 Straight Leaf Lever	C SPST-NO	3 Posts at Right Side	...	Other
			05 Simulated Roller				
			... Other				

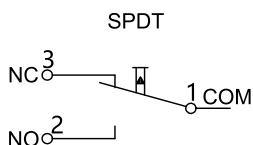
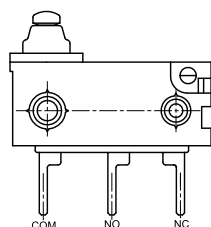
■ Terminals Type

■ Basic Mounting Dimensions and Operating Characteristics

◆ Straight PCB terminal

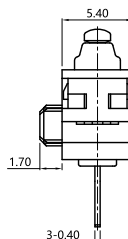
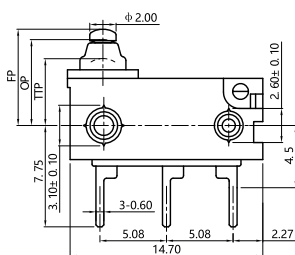


■ Circuit



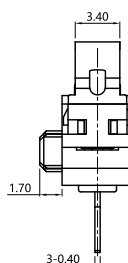
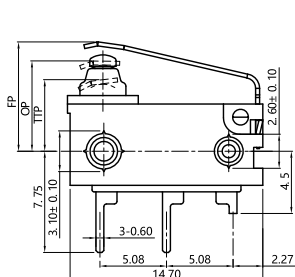
■ Dimensions and Operating Characteristics

◆ G304B-150P00A2U



OF Max. (gf)	FP Max. (mm)	OP1 (mm)	OP2 (mm)	TTP Min (mm)
150	7.45	6.9±0.2	6.55±0.2	4.85

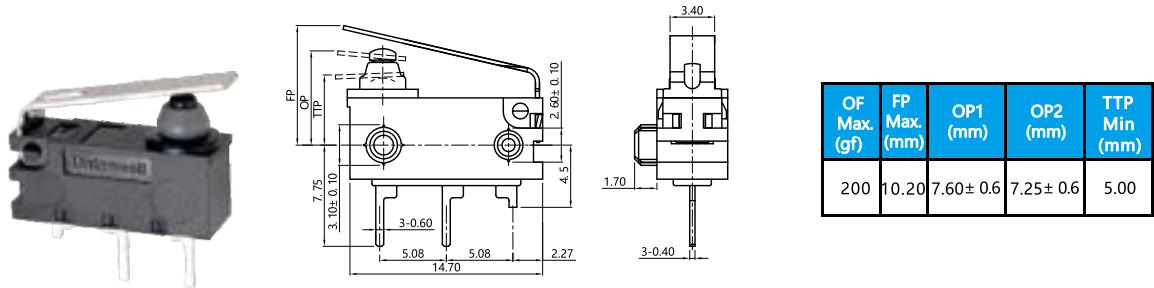
◆ G304B-150P01C2U



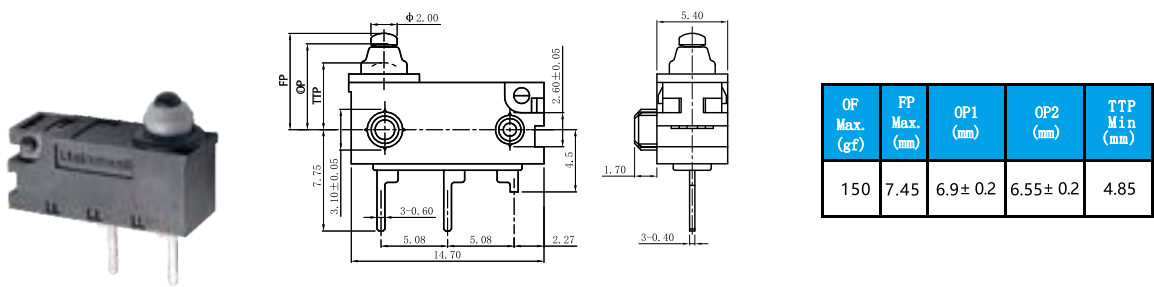
OF Max. (gf)	FP Max. (mm)	OP1 (mm)	OP2 (mm)	TTP Min (mm)
220	9.00	7.3±0.5	6.9±0.5	5.20

■ Dimensions and Operating Characteristics

◆ G304B-150P02C2U



◆ G304B-150P00C2U



G304D Series

2 Pin Long Travel Sealed Subminiature Micro Switch (Slide Structure)



■ Features

- ◆ Small compact size, 2 Pin switch, with lever
- ◆ Can install lock cover and operate at the various operating bodies(cams, etc.)
- ◆ The operating force does not depend on the operating travel structure
- ◆ High-reliability switch for tiny loads
- ◆ High-sealed switch, resistance to the environment(IP67)
- ◆ Mute structure with sliding contacts

■ Application

- ◆ Car
- ◆ Air-conditioner
- ◆ Communication
- ◆ Electric toothbrushes
- ◆ Toys

■ Parameters

Operating Speed		30~500mm/s
Operating Frequency		120 cycles/min.
Insulation Resistance		≥100MΩ (DC 500V)
Contact Resistance (Initial Value)	With terminals type	≤500mΩ
	With wire type	≤800mΩ (Standard wire length 300mm)
Voltage Resistance	Between terminals	AC500V, 50/60Hz, 1min.
	Between terminals and uncharged metal parts	AC1,500V, 50/60Hz, 1min.
Service Life	Electrical	300,000 cycles (30 cycles/min.) DC12V 0.1A 50μA 5VDC
	Mechanical	300,000 cycles (60 cycles/min.)
Protection Type		IEC IP67 (Except terminals)
Operating Temperature		-40~+85°C
Operating Humidity		95%RH (+5~+35°C)

G304D Series Micro Switch Ordering Instruction

G304D	150	A	B	39	A
Switch Type	Operating Force at Pin Plunger	Terminal Type	Circuitry	Posts Type	Posts Dimension
	150 150gf Max.	A Solder Terminal	B SPST-NC	39 No Post	N No Post
		B PCB Terminal	C SPST-NO	40 Left Post	A $\Phi 2.6 \times 2.0$ Posts
		C Left Side PCB Terminal		41 Right Post	... Other
		D Right Side PCB Terminal		42 Two Sides Posts	
		... Other		... Other	

Remarks:

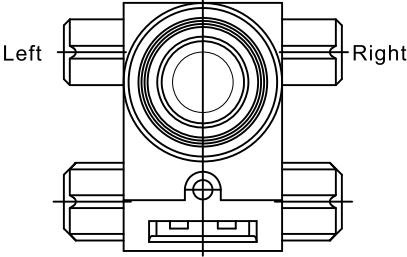
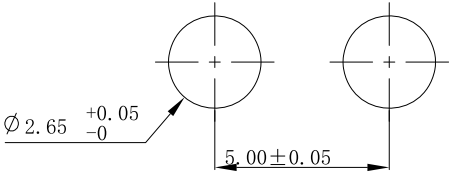
Product ordering rules except for the four digits of the special code can be omitted, other codes can not be omitted, see the above guidelines for details about whether there is a feature ordering description:
For example: the maximum operating force of the switch is 150gf, NO switch with solder terminal, left post, no lever and no lead wire, Unionwell logo, it is G304D-150AC40A00N000U;

Description of wire length features:

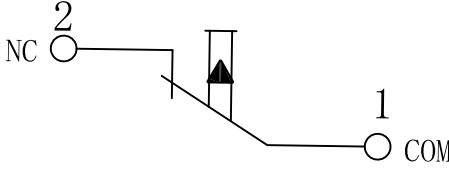
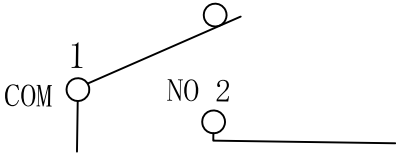
- 1.No letters and simply represent the wire length, such as 300 means the effective wire length is 300mm
- 2.With letters (only applicable to C type waterproof cover): the first number represents the wire length, and the last letter represents the built-in resistance combination, such as 300A, 300 means the wire length is 300mm, and the A resistance combination is used;
Special code TXXX represents all product features except for all other non-standard designations.

01		E		300		T001		U					
Lever Type		Wire Leads Type		Wires Length		Custom Code		LOGO					
00	No Lever Pin Plunger	06	06# Lever	N	No Wires	J	B Cover Wires Lead to Left	00	No Wires		General	U	Unionwell
01	01# Lever	...	Other	E	A Cover Wires Lead to Bottom	K	B Cover Wires Lead to Right	300	300mm Wires Length AVSS 0.3MM² (Black Wire COM Terminal, White Wire NC/NO Terminal)	T001	Customized according to requirements, the code format is T+ serial number XXX, for example: T001	...	Other
02	02# Lever			F	A Cover Wires Lead to Left	L	C Cover Wires Lead to Bottom	300A	300mm Wires Length AVSS 0.3MM² (Black Wire COM Terminal, White Wire NC/NO Terminal) A: Build-in Resistance R1==1.5KΩ R2=1.8KΩ		...	Other	
03	03# Lever			G	A Cover Wires Lead to Right	M	C Cover Wires Lead to Left	300B	300mm Wires Length AVSS 0.3MM² (Black Wire COM Terminal, White Wire NC/NO Terminal) A: Build-in Resistance R1==2.0KΩ R2=1.5KΩ				
04	04# Lever			H	B Cover Wires Lead to Bottom	P	C Cover Wires Lead to Right	300C	300mm Wires Length AVSS 0.3MM² (Black Wire COM Terminal, White Wire NC/NO Terminal) A: Build-in Resistance R1==2.0KΩ R2=0Ω				
05	05# Lever							...	Other				

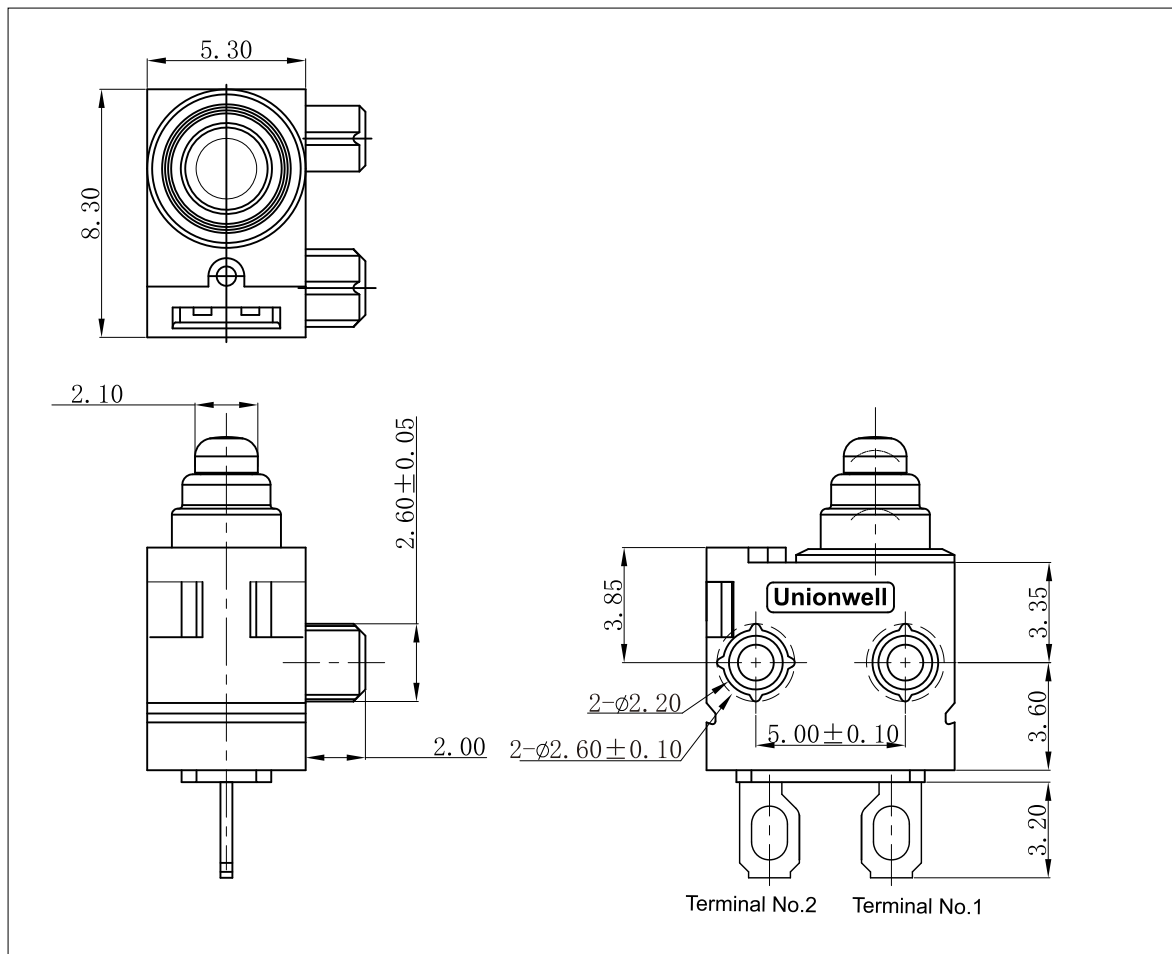
■ Posts Direction Identification and Mounting Hole Dimensions

Posts Direction	Mounting Hole Dimensions
Pin Plunger Position 	

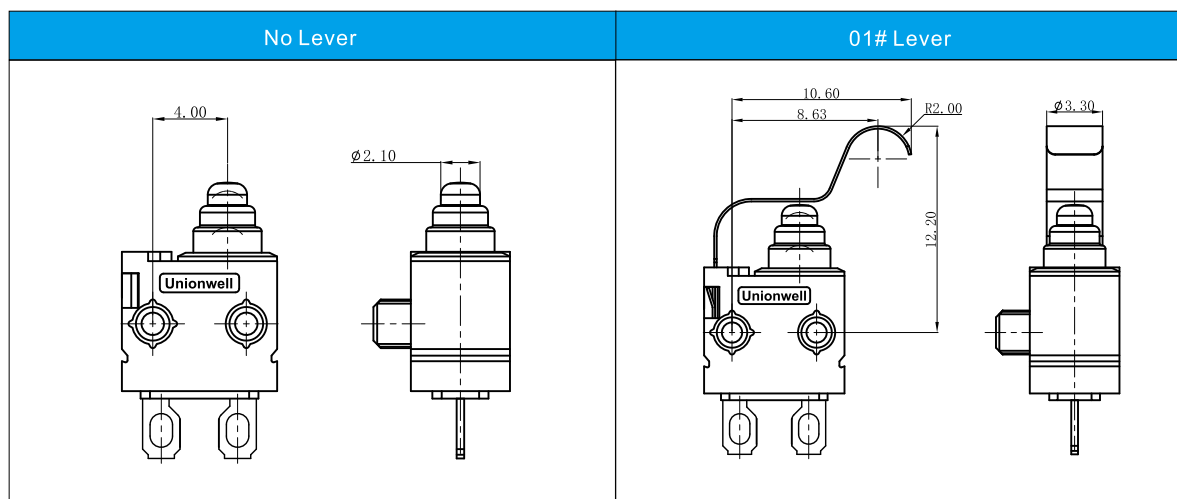
■ Circuitry

B:SPST-NC	C:SPST-NO
	

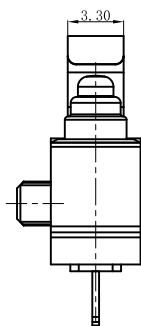
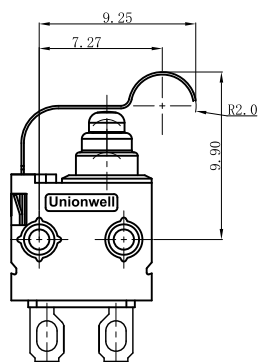
■ Dimensions (mm)



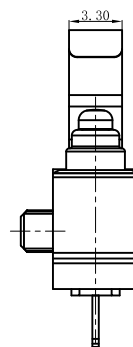
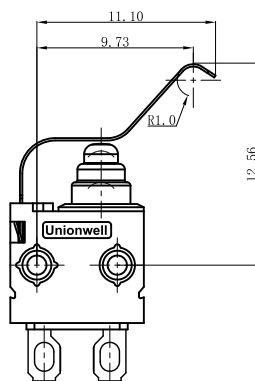
■ Lever Type



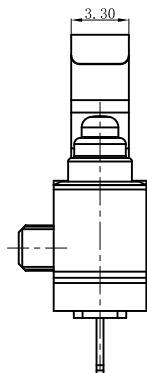
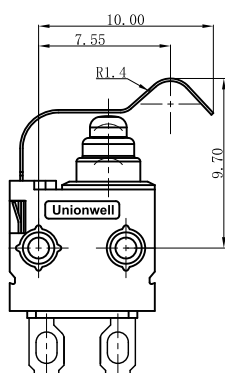
02 # Lever



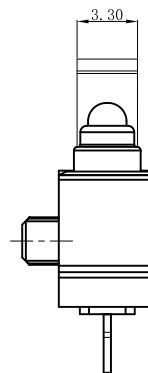
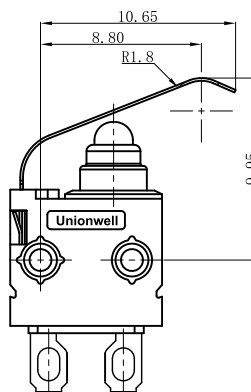
03 # Lever



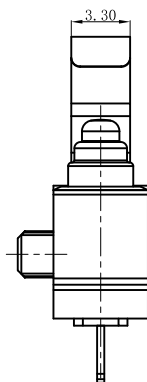
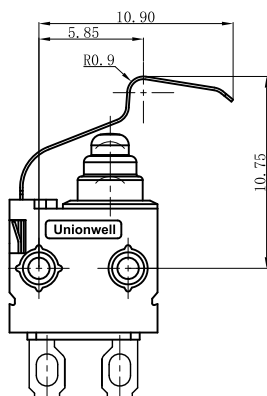
04 # Lever



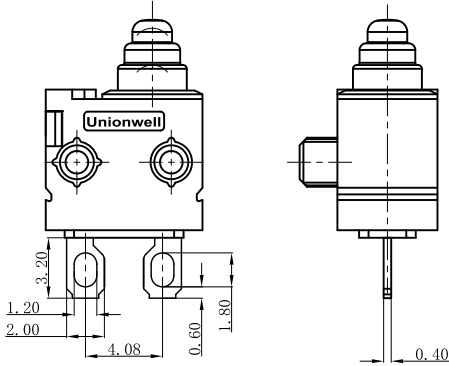
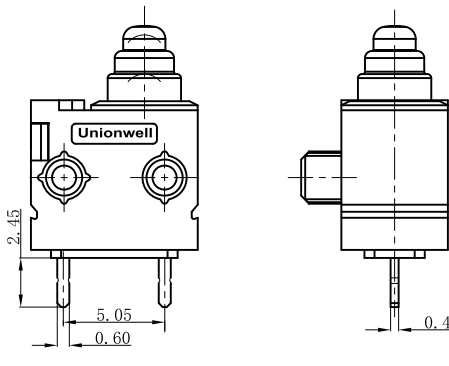
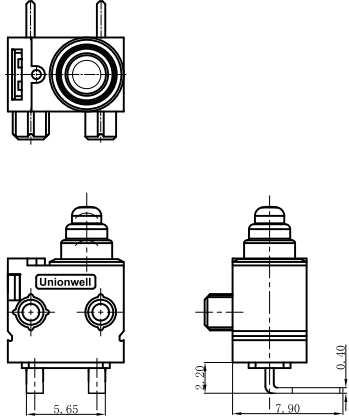
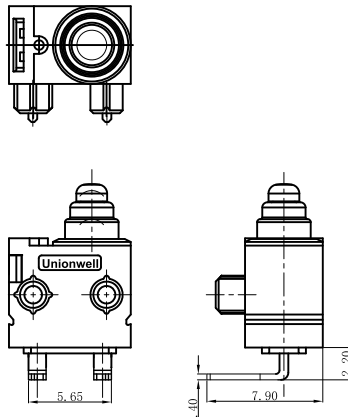
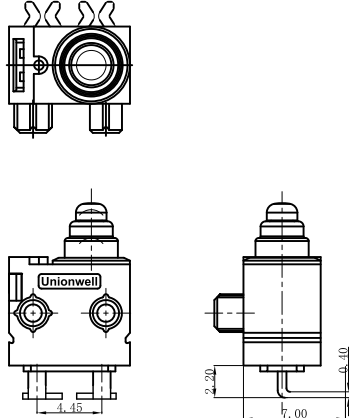
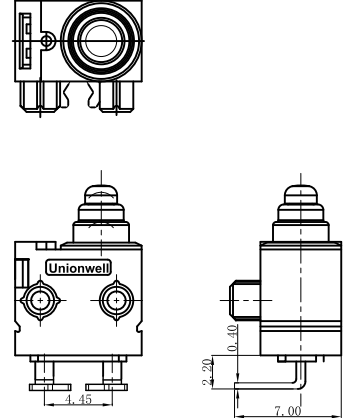
05 # Lever



06 # Lever

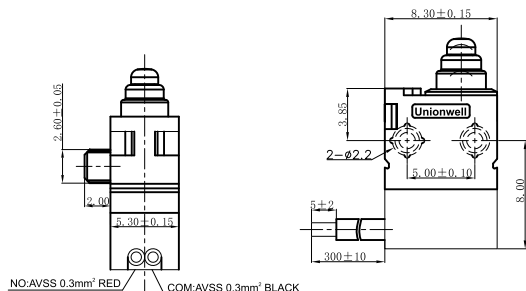


■ Terminal Type

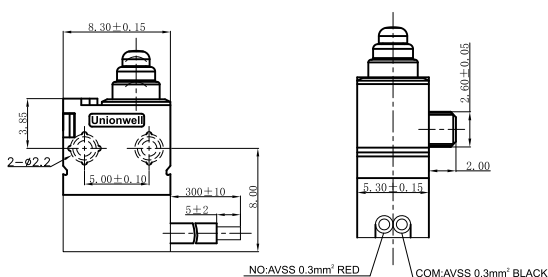
Solder Terminal	PCB Terminal
	
Left Side PCB Terminal	Right Side PCB Terminal
	
Left Side Fork-shaped Terminal	Right Side Fork-shaped Terminal
	

■ Wires Lead Type

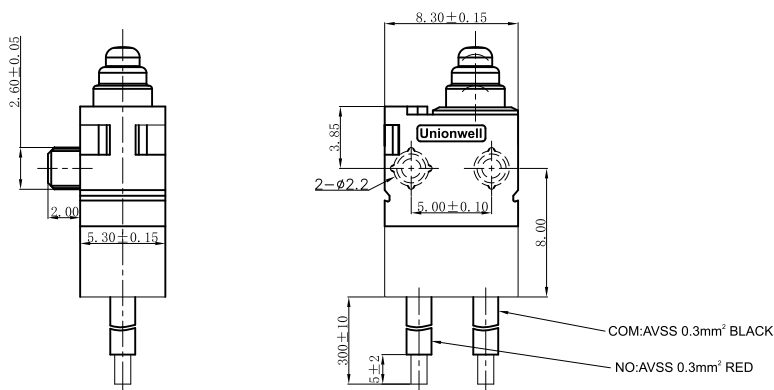
A-Type Waterproof Cover Wires Lead to Left



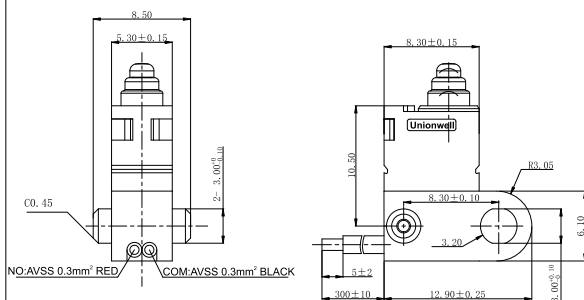
A-Type Waterproof Cover Wires Lead to Right



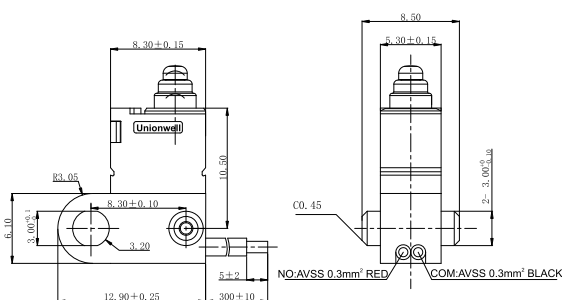
A-Type Waterproof Cover Wires Lead to Bottom



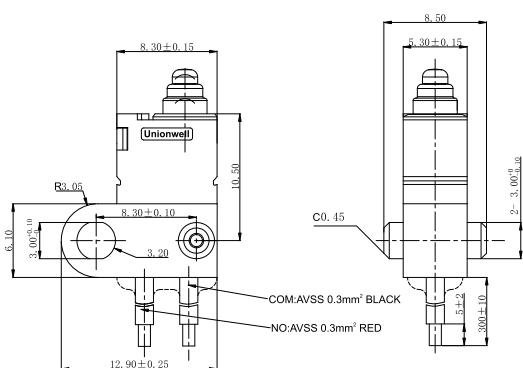
B-Type Waterproof Cover Wires Lead to Left



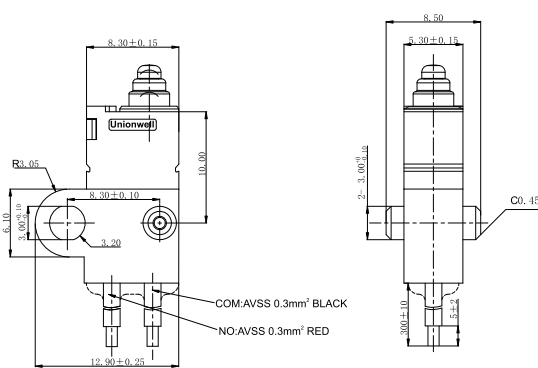
A-Type Waterproof Cover Wires Lead to Right



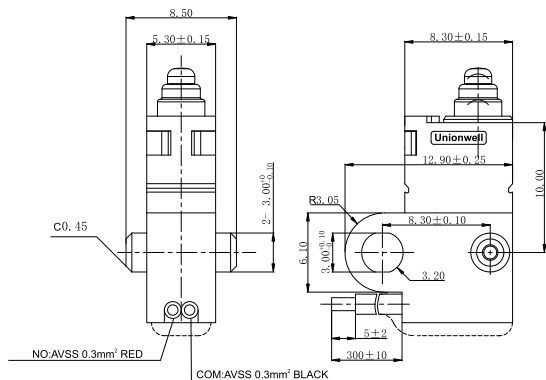
B-Type Waterproof Cover Wires Lead to Bottom



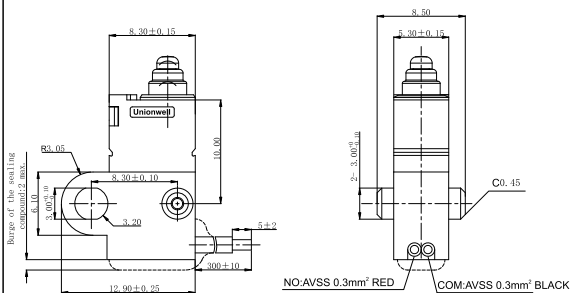
C-Type Waterproof Cover (Build-in Resistance) Wires Lead to Bottom



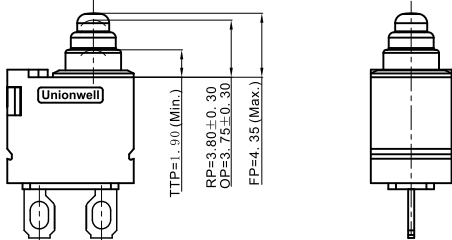
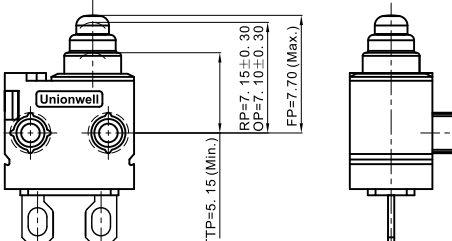
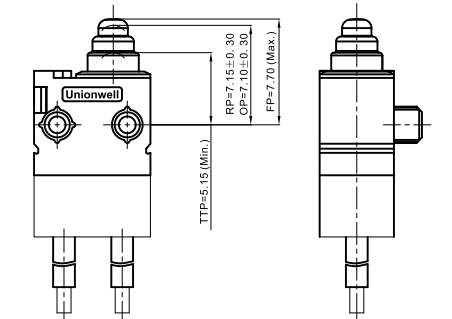
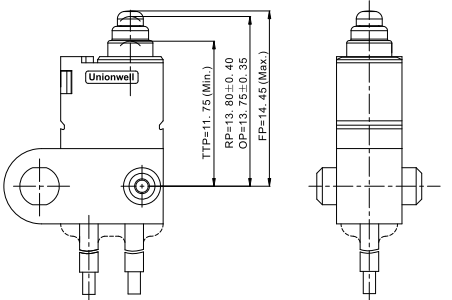
C-Type Waterproof Cover (Build-in Resistance) Wires Lead to Left

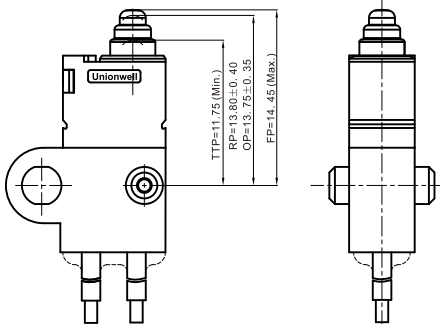


C-Type Waterproof Cover (Build-in Resistance) Wires Lead to Right

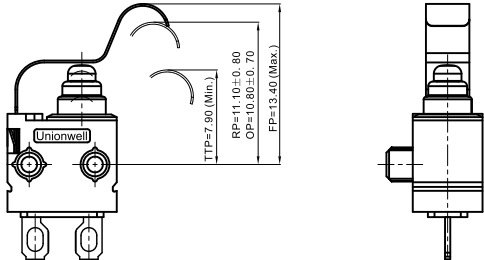
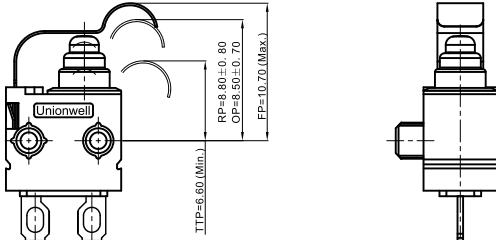


■ Operating Parameters

Features NO.	Features Type	Operating Parameters Diagram	Operating Parameters												
N	No Post		<table><tr><td>P/N</td><td>G304D-150A□39N00N000U</td></tr><tr><td>OF</td><td>150gf Max.</td></tr><tr><td>FP</td><td>4.35mm Max.</td></tr><tr><td>NC/NO(OP)</td><td>3.75±0.30mm</td></tr><tr><td>NO/NO(RP)</td><td>3.80±0.30mm</td></tr><tr><td>TTP</td><td>1.90mm Min.</td></tr></table>	P/N	G304D-150A□39N00N000U	OF	150gf Max.	FP	4.35mm Max.	NC/NO(OP)	3.75±0.30mm	NO/NO(RP)	3.80±0.30mm	TTP	1.90mm Min.
P/N	G304D-150A□39N00N000U														
OF	150gf Max.														
FP	4.35mm Max.														
NC/NO(OP)	3.75±0.30mm														
NO/NO(RP)	3.80±0.30mm														
TTP	1.90mm Min.														
A	Φ2.6*2.0 Posts		<table><tr><td>P/N</td><td>G304D-150A□41A00N000U</td></tr><tr><td>OF</td><td>150gf Max.</td></tr><tr><td>FP</td><td>7.70mm Max.</td></tr><tr><td>NC/NO(OP)</td><td>7.10±0.30mm</td></tr><tr><td>NO/NO(RP)</td><td>7.15±0.30mm</td></tr><tr><td>TTP</td><td>5.15mm Min.</td></tr></table>	P/N	G304D-150A□41A00N000U	OF	150gf Max.	FP	7.70mm Max.	NC/NO(OP)	7.10±0.30mm	NO/NO(RP)	7.15±0.30mm	TTP	5.15mm Min.
P/N	G304D-150A□41A00N000U														
OF	150gf Max.														
FP	7.70mm Max.														
NC/NO(OP)	7.10±0.30mm														
NO/NO(RP)	7.15±0.30mm														
TTP	5.15mm Min.														
F	A Cover Wires Leads to Bottom		<table><tr><td>P/N</td><td>G304D-150A□41A00■□□□U</td></tr><tr><td>OF</td><td>150gf Max.</td></tr><tr><td>FP</td><td>7.70mm Max.</td></tr><tr><td>NC/NO(OP)</td><td>7.10±0.30mm</td></tr><tr><td>NO/NO(RP)</td><td>7.15±0.30mm</td></tr><tr><td>TTP</td><td>5.15mm Min.</td></tr></table>	P/N	G304D-150A□41A00■□□□U	OF	150gf Max.	FP	7.70mm Max.	NC/NO(OP)	7.10±0.30mm	NO/NO(RP)	7.15±0.30mm	TTP	5.15mm Min.
P/N	G304D-150A□41A00■□□□U														
OF	150gf Max.														
FP	7.70mm Max.														
NC/NO(OP)	7.10±0.30mm														
NO/NO(RP)	7.15±0.30mm														
TTP	5.15mm Min.														
H	B Cover Wires Leads to Bottom		<table><tr><td>P/N</td><td>G304D-150A□39N00■□□□U</td></tr><tr><td>OF</td><td>150gf Max.</td></tr><tr><td>FP</td><td>14.45mm Max.</td></tr><tr><td>NC/NO(OP)</td><td>13.75±0.35mm</td></tr><tr><td>NO/NO(RP)</td><td>13.80±0.40mm</td></tr><tr><td>TTP</td><td>11.75mm Min.</td></tr></table> Note: The position parameter of the switch with lever is the position parameter of switch with mounting post and lever +6.65mm.	P/N	G304D-150A□39N00■□□□U	OF	150gf Max.	FP	14.45mm Max.	NC/NO(OP)	13.75±0.35mm	NO/NO(RP)	13.80±0.40mm	TTP	11.75mm Min.
P/N	G304D-150A□39N00■□□□U														
OF	150gf Max.														
FP	14.45mm Max.														
NC/NO(OP)	13.75±0.35mm														
NO/NO(RP)	13.80±0.40mm														
TTP	11.75mm Min.														

Features NO.	Features Type	Operating Parameters Diagram	Operating Parameters	
L	C Cover Wires Leads to Bottom		P/N	G304D-150A□39N00■□□□U
			OF	150gf Max.
			FP	14.45mm Max.
			NC/NO(OP)	13.75±0.35mm
			NO/NO(RP)	13.80±0.40mm
			TTP	11.75mm Min.
			Note: The position parameter of the switch with lever is the position parameter of switch with mounting post and lever +6.65mm.	

■ Operating Parameters

Lever NO.	Lever Type	Lever Assembly Diagram	Operating Parameters												
01	1# Lever		<table><tr><td>P/N</td><td>G304D-150A□41A01N000U</td></tr><tr><td>OF</td><td>150gf Max.</td></tr><tr><td>FP</td><td>13.40mm Max.</td></tr><tr><td>NC/NO(OP)</td><td>10.80±0.70mm</td></tr><tr><td>NO/NO(RP)</td><td>11.10±0.80mm</td></tr><tr><td>TTP</td><td>7.90mm Min.</td></tr></table>	P/N	G304D-150A□41A01N000U	OF	150gf Max.	FP	13.40mm Max.	NC/NO(OP)	10.80±0.70mm	NO/NO(RP)	11.10±0.80mm	TTP	7.90mm Min.
P/N	G304D-150A□41A01N000U														
OF	150gf Max.														
FP	13.40mm Max.														
NC/NO(OP)	10.80±0.70mm														
NO/NO(RP)	11.10±0.80mm														
TTP	7.90mm Min.														
02	2# Lever		<table><tr><td>P/N</td><td>G304D-150A□41A02N000U</td></tr><tr><td>OF</td><td>150gf Max.</td></tr><tr><td>FP</td><td>10.70mm Max.</td></tr><tr><td>NC/NO(OP)</td><td>8.50±0.70mm</td></tr><tr><td>NO/NO(RP)</td><td>8.85±0.80mm</td></tr><tr><td>TTP</td><td>6.60mm Min.</td></tr></table>	P/N	G304D-150A□41A02N000U	OF	150gf Max.	FP	10.70mm Max.	NC/NO(OP)	8.50±0.70mm	NO/NO(RP)	8.85±0.80mm	TTP	6.60mm Min.
P/N	G304D-150A□41A02N000U														
OF	150gf Max.														
FP	10.70mm Max.														
NC/NO(OP)	8.50±0.70mm														
NO/NO(RP)	8.85±0.80mm														
TTP	6.60mm Min.														

Lever NO.	Lever Type	Lever Assembly Diagram	Operating Parameters												
03	3# Lever		<table><tr><td>P/N</td><td>G304D-150A□41A03N000U</td></tr><tr><td>OF</td><td>150gf Max.</td></tr><tr><td>FP</td><td>12.50mm Max.</td></tr><tr><td>NC/NO(OP)</td><td>10.35±0.70mm</td></tr><tr><td>NO/NO(RP)</td><td>10.50±0.80mm</td></tr><tr><td>TTP</td><td>6.80mm Min.</td></tr></table>	P/N	G304D-150A□41A03N000U	OF	150gf Max.	FP	12.50mm Max.	NC/NO(OP)	10.35±0.70mm	NO/NO(RP)	10.50±0.80mm	TTP	6.80mm Min.
P/N	G304D-150A□41A03N000U														
OF	150gf Max.														
FP	12.50mm Max.														
NC/NO(OP)	10.35±0.70mm														
NO/NO(RP)	10.50±0.80mm														
TTP	6.80mm Min.														
04	4# Lever		<table><tr><td>P/N</td><td>G304D-150A□41A04N000U</td></tr><tr><td>OF</td><td>150gf Max.</td></tr><tr><td>FP</td><td>10.20mm Max.</td></tr><tr><td>NC/NO(OP)</td><td>8.50±0.70mm</td></tr><tr><td>NO/NO(RP)</td><td>8.80±0.80mm</td></tr><tr><td>TTP</td><td>5.70mm Min.</td></tr></table>	P/N	G304D-150A□41A04N000U	OF	150gf Max.	FP	10.20mm Max.	NC/NO(OP)	8.50±0.70mm	NO/NO(RP)	8.80±0.80mm	TTP	5.70mm Min.
P/N	G304D-150A□41A04N000U														
OF	150gf Max.														
FP	10.20mm Max.														
NC/NO(OP)	8.50±0.70mm														
NO/NO(RP)	8.80±0.80mm														
TTP	5.70mm Min.														
05	5# Lever		<table><tr><td>P/N</td><td>G304D-150A□41A05N000U</td></tr><tr><td>OF</td><td>150gf Max.</td></tr><tr><td>FP</td><td>10.70mm Max.</td></tr><tr><td>NC/NO(OP)</td><td>7.85±0.70mm</td></tr><tr><td>NO/NO(RP)</td><td>8.25±0.80mm</td></tr><tr><td>TTP</td><td>5.80mm Min.</td></tr></table>	P/N	G304D-150A□41A05N000U	OF	150gf Max.	FP	10.70mm Max.	NC/NO(OP)	7.85±0.70mm	NO/NO(RP)	8.25±0.80mm	TTP	5.80mm Min.
P/N	G304D-150A□41A05N000U														
OF	150gf Max.														
FP	10.70mm Max.														
NC/NO(OP)	7.85±0.70mm														
NO/NO(RP)	8.25±0.80mm														
TTP	5.80mm Min.														
06	6# Lever		<table><tr><td>P/N</td><td>G304D-150A□41A06N000U</td></tr><tr><td>OF</td><td>150gf Max.</td></tr><tr><td>FP</td><td>11.70mm Max.</td></tr><tr><td>NC/NO(OP)</td><td>9.80±0.70mm</td></tr><tr><td>NO/NO(RP)</td><td>10.05±0.80mm</td></tr><tr><td>TTP</td><td>8.50mm Min.</td></tr></table>	P/N	G304D-150A□41A06N000U	OF	150gf Max.	FP	11.70mm Max.	NC/NO(OP)	9.80±0.70mm	NO/NO(RP)	10.05±0.80mm	TTP	8.50mm Min.
P/N	G304D-150A□41A06N000U														
OF	150gf Max.														
FP	11.70mm Max.														
NC/NO(OP)	9.80±0.70mm														
NO/NO(RP)	10.05±0.80mm														
TTP	8.50mm Min.														

G304E Series

Sealed Clip Type Subminiature Micro Switch



■ Features

- ◆ Designed for water and dust tight (IP67)
- ◆ Small compact size
- ◆ Long life and high reliability
- ◆ Wide range of wiring terminals
- ◆ Widely used in automotive electronics, appliances and industrial control etc.
- ◆ Customized designs
- ◆ Slide structure
- ◆ Non short circuit conversion

■ Application

- ◆ Car
- ◆ Air-conditioner
- ◆ Communication
- ◆ Electric toothbrush
- ◆ Toys

■ Parameters:

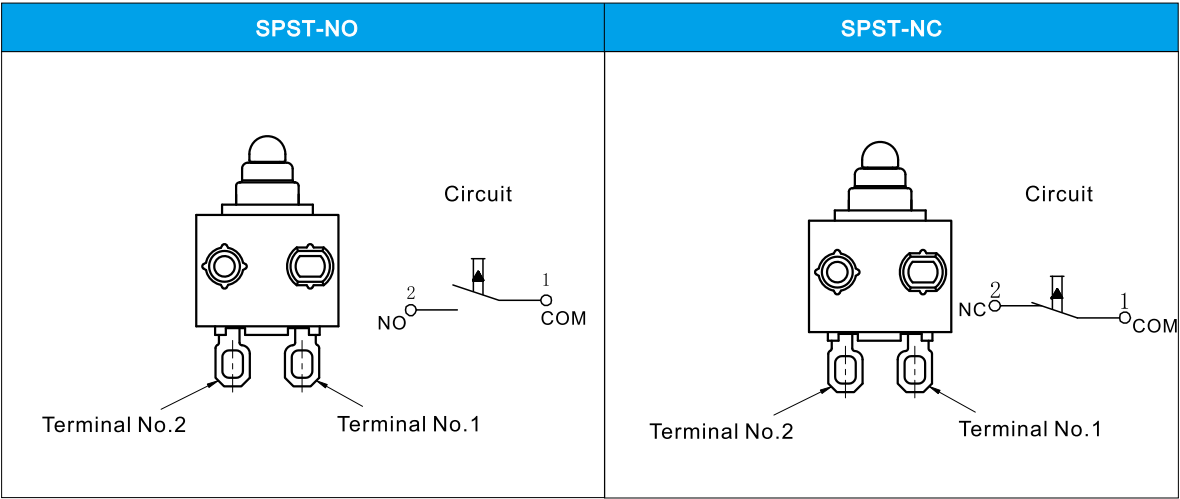
Operation Speed		1~500mm/s
Operation Frequency		120 cycles/min.
Insulation Resistance		$\geq 100\text{M}\Omega$
Contact Resistance (Initial Value)	With terminals type	$\leq 100\text{m}\Omega$
	With wire type	$\leq 500\text{m}\Omega$ (Standard wire length 300mm)
Voltage Resistance	Between terminals	AC500V, 50/60Hz, 1min.
	Between each terminal and the non-electrical metal parts	AC1,000V, 50/60Hz, 1min.
Operating Life	Electrical	300,000 cycles (15 cycles/min.) DC12V 01A 5VDC 50 μ A
	Mechanical	300,000 cycles (30 cycles/min.)
Operating Temperature		-40~+85°C 60%RH(No icing, no condensation)
Operating Humidity		95%RH (+5~+35°C)
Vibration	Malfunction	10-55Hz (Double amplitude 1.5mm)

G304E Series Micro Switch Ordering Instruction

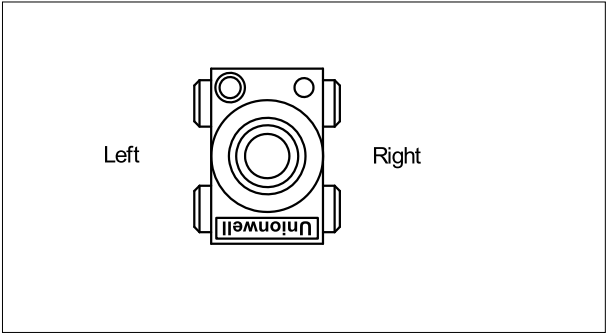
G3	04E	150	U	00	E	39
Switch Type	Electrical Rating	Max Operating Force at Pin Plunger	Terminal Type	Lever Type	Circuit Code	Shape and Posts
G3 Series Micro Switch	04E 0.1A 12VDC 50µA 3VDC	80 80gf Max.	U 6# Straight PCB Terminals	00 No Lever Pin Plunger	E Slide Type, SPST-NO 1, 2	39 G type No Post
	... Other	150 150gf Max.	V Solder Terminals 6# 7#	... Other	F Slide Type, SPST-NC 1, 2	40 G Type Left Posts
		... Other	M Short Solder Terminals 6# 7#		... Other	41 G Type Right Posts
			P Straight PCB Terminals			... Other
			... Other			

G304E

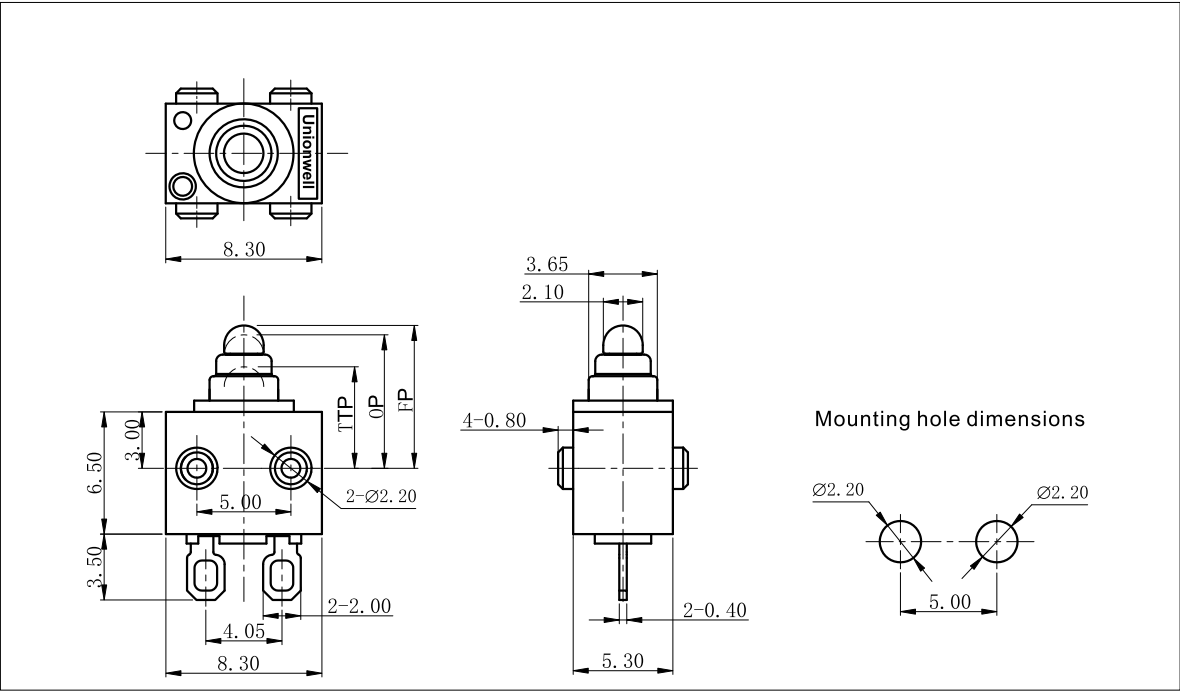
■ Circuit



■ Post Direction



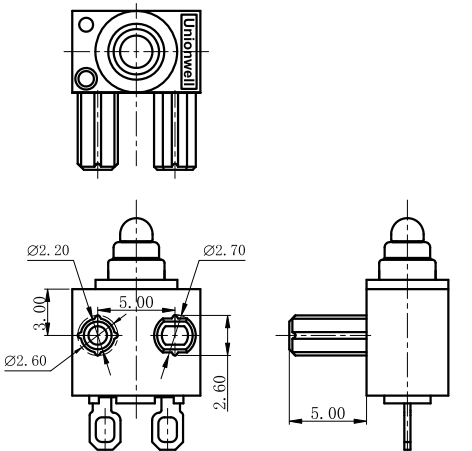
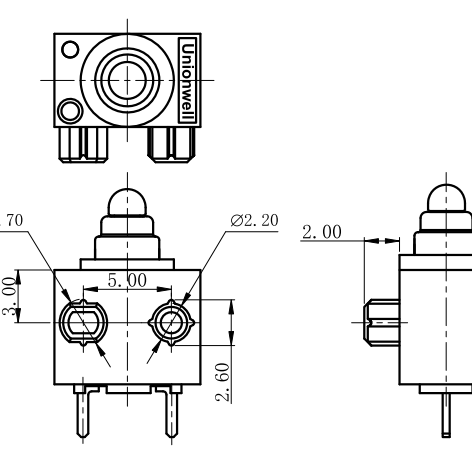
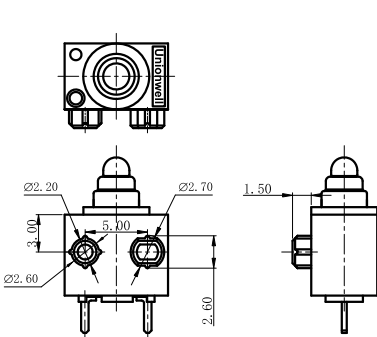
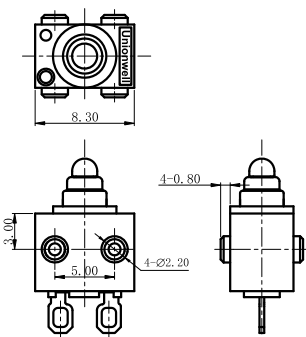
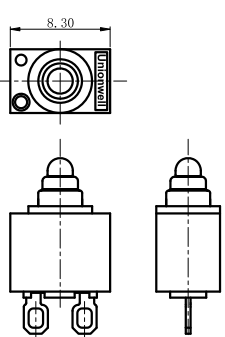
■ Basic Mounting Dimensions and Operating Characteristics



■ Terminal Type (can be customized)

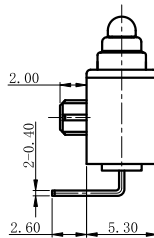
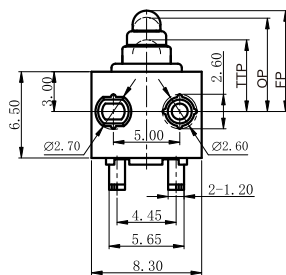
Left side PCB terminal	Welding base	Straight PCB terminal
PCB terminals mounting hole dimensions 3-Ø1.35 to 1.5 Dia	3.10 4.05 8.30 2-2.00 2-0.40	0.50 5.05 2-0.60 2-2.50 2-0.40

■ Post Type and Size

Standard Type: Φ 2.60mm x 5.0mm left posts		H Type: Φ 2.60mm x 2.0mm left posts			
					
G Type: Φ 2.60mm x 1.5mm reverse left posts		I Type: Φ 2.20mm x 0.8mm two sides posts		No posts	
					

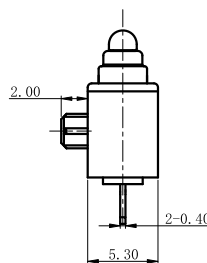
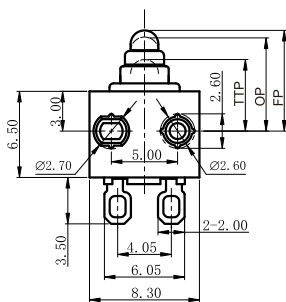
■ Dimensions and Operating Characteristics

◆ G304E-150U00E40HU



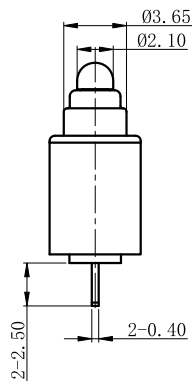
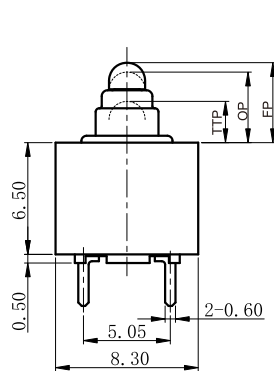
OF Max. (gf)	TTP Max. (mm)	FP Max. (mm)	OP (mm)
150	5.30	7.90	7.10±0.50

◆ G304E-150V00F40HU



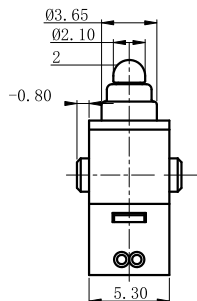
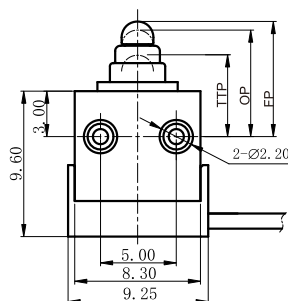
OF Max. (gf)	TTP Max. (mm)	FP Max. (mm)	OP (mm)
150	5.30	7.90	7.10±0.50

◆ G304E-150P00E39U



OF Max. (gf)	TTP Max. (mm)	FP Max. (mm)	OP (mm)
150	2.30	4.90	4.10±0.30

◆ G304E-150M00E42I-□□□□□ CU



OF Max. (gf)	TTP Max. (mm)	FP Max. (mm)	OP (mm)
150	5.30	7.90	7.10±0.50



G305 Series

Waterproof Subminiature Micro Switch



■ Features

- ◆ Designed for water and dust tight (IP67)
- ◆ Small compact size
- ◆ Long life and high reliability
- ◆ Widely used in automotive electronics, home appliances and industrial control

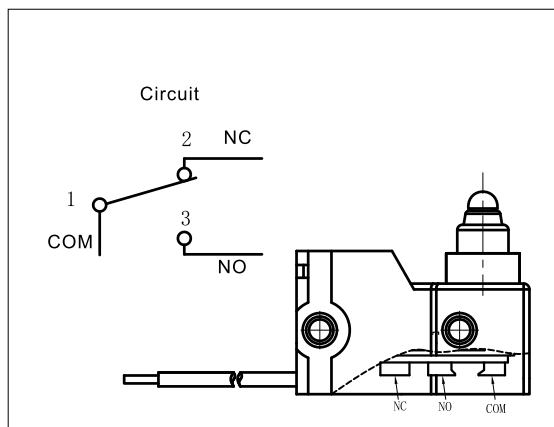
■ Application

- ◆ Car
- ◆ Air - Conditioner
- ◆ Communication
- ◆ Electric Toothbrush
- ◆ Toys
- ◆ Bicycle

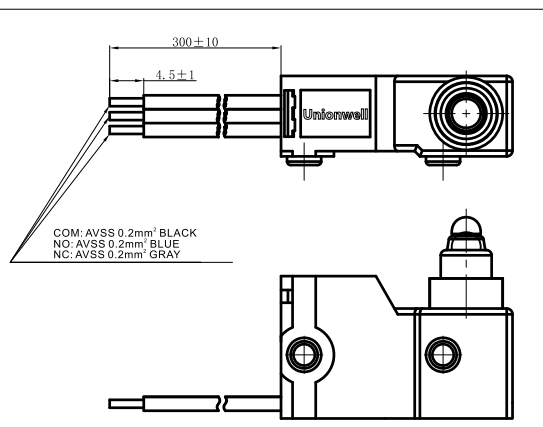
■ Parameters:

Rating		2A 24VDC 4A 12VDC 40T85 U10E4
Operating Frequency	Electrical	0.1A-120 cycles/min; 4A-10~30 cycles/min
	Mechanical	120 cycles/min
Contact Resistance (Initial)		100mΩ Max
Insulation Resistance (at 500VDC)		100MΩ Min
Vibration Durability		10~55Hz, move 0.75mm (p-p)
Dielectric Strength		500VAC (50~60Hz)
Operating Temperature		-40°C~+85°C
Operating Humidity		85% RH Max
Service Life	Electrical	Min.10,000 cycles
	Mechanical	Min.500,000 cycles

■ Circuit



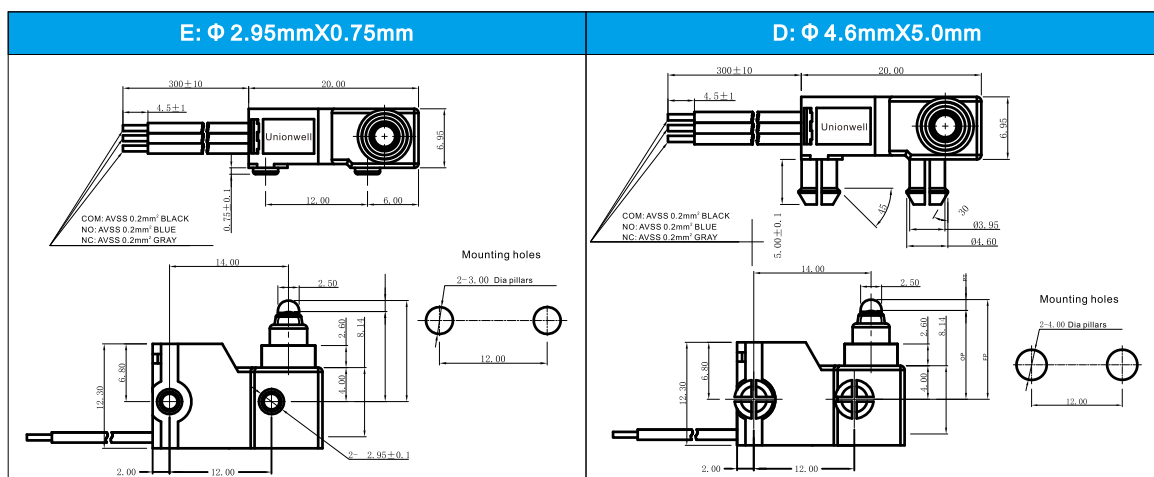
■ Switch Wire Type



G305 Series Micro Switch Ordering Instruction

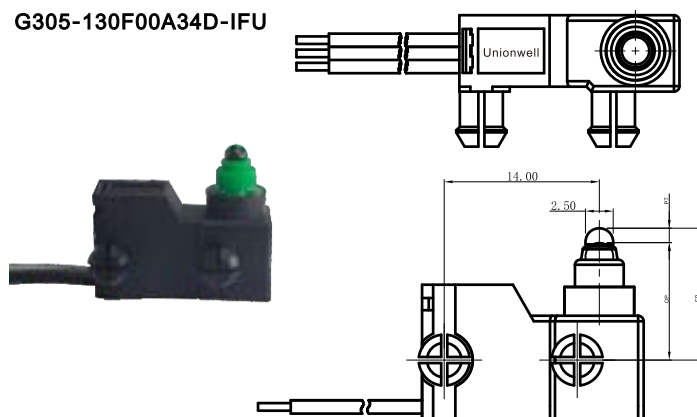
G3	05	130	F	00	A	33	D	I	F	280	T001	U
Switch Type	Electrical Rating	Operating Force at Pin Plunger, Max	Terminal Type	Lever Type	Circuitry	Shape and Posts	Posts Dimension	AWG Type (For wire type only)	AWG Number (For wire type only)	Wires Length	Custom Code	LOGO
05	2A 24VDC 4A 12VDC 40T85 μ 10E4	130# Spring	F Molded lead wires on right side, far from pin plunger side	00 No lever pin plunger	A SPDT	33 Left side posts	D Cross type Φ 4.6mm x 5.0mm posts.	I 0.2mm ²	F AVSS	300mm length standard lead wires	General	U Unionwell
				13 13# lever	B SPST-NC	34 Right side posts	E Φ 2.95mm x 0.75mm posts.			280mm length	Customized according to requirements, the code format is T+ serial number XXX, for example: T001	Other
				... Other	C SPST-NO		... Other			... Other	... Other	

■ Dimensions and Operating Characteristics of Basic Shape



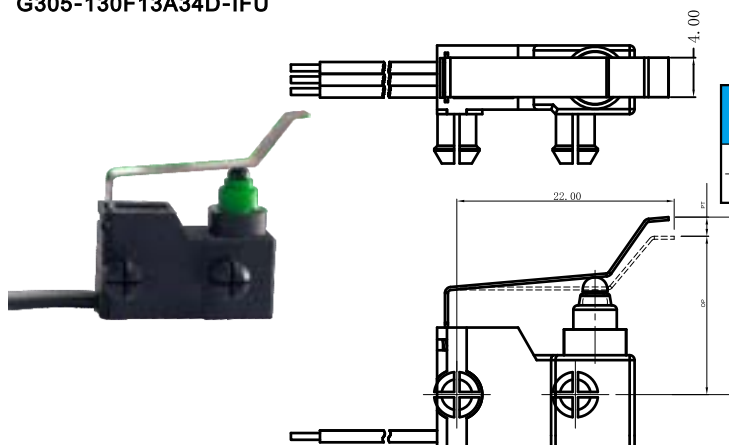
■ Switch Lever and Operating Characteristics

◆ G305-130F00A34D-IFU



OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	200	25	1.5	0.7	0.6	12.1
						10.60±0.4

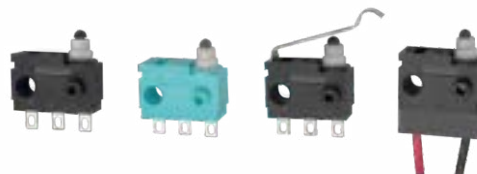
◆ G305-130F13A34D-IFU



OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	200	25	3.3	1.2	1.1	21
						16.0±0.8

G306 Series

Sealed Clip Type Subminiature Micro Switch



■ Features

- ◆ High reliability and good resistance to environment, sealed micro switch with long travel
- ◆ With long travel, can work easily even without lever
- ◆ High reliability sliding contact structure
- ◆ With high temperature resistance (+85°C) and waterproof structure, can be widely applied in different environments, IP67 rated (except for terminals)
- ◆ Widely applied for home appliances, electronic equipment, automatic equipments, communication equipment, auto electronics, apparatus and instruments, power tools, etc.

■ Application

- ◆ Home Appliances
- ◆ Electronic Equipment
- ◆ Automatic Equipment
- ◆ Communication Equipment
- ◆ Auto Electronics
- ◆ Apparatus and Instruments

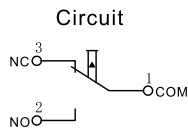
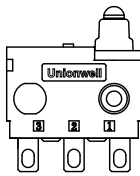
■ Parameters

Operating Speed		1~500mm/s
Operating Frequency		120 cycles/min.
Insulation Resistance		≥100MΩ (at 500VDC)
Contact Resistance (Initiative)	With Terminals Type	≤100mΩ
	With Wire Type	≤500mΩ (Standard Wire Length 300mm)
Voltage Resistance	Between Terminals	AC500V, 50/60Hz, 1min.
	Between Terminals Uncharged Metal Parts	AC1,000V, 50/60Hz, 1min.
Vibration Resistance	No Transformation Action	10-55Hz (Double Amplitude 1.5mm)
Service Life	Electrical	300,000 cycles (20 cycles/min.) DC300V 0.1A DC14V 10mA
	Mechanical	300,000 cycles (30 cycles/min.)
Protection Level		IEC IP67 (Exclude Terminals)
Operating Temperature		< -40~ +85°C 60%RH
Operating Humidity		< 90%RH (+5~35°C)

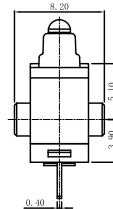
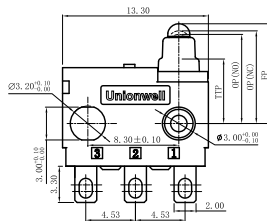
G306 Series Micro Switch Ordering Instruction

G306	150	S	00	A	A	300	T001	U
Switch Type	Max Operating Force at Pin Plunger	Terminal Type	Lever	Circuitry	Shape and Posts	Wires Length	Custom Code	LOGO
150	150gf Max	E With wire (wire leads to bottom)	00 No lever pin plunger	A SPDT Slide Non-short circuit type, 1, 3 convert to 1, 2	A M3 Type	300 300mm length standard lead wires AVSS 0.3mm ² , (black COM red NC blue NO)Except custom models	General	U Unionwell
...	Other	G With wire (left wire)	08 08# Lever	C SPST-NO	B No post	280 280mm length AVSS 0.3mm ² (Black COM Red NC Blue NO)	Customized according to requirements, the code format is T+serial number XXX, for example: T001	... Other
		F With wire (right wire)	09 09# Lever	B SPST-NC	... Other	No molded lead wires	Other	
		S Solder Terminals	41 41# Lever			other length AVSS 0.3 mm ² (Black COM Red NC Blue NO)		
		P Straight PCB Terminals	... Special lever					
		... Special Terminals						

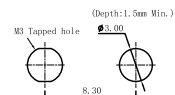
■ Circuit



■ Dimensions and Operating Characteristics of Basic Shape

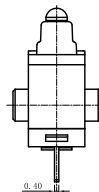
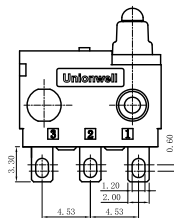


Mounting Hole Dimensions

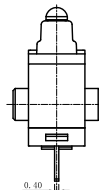
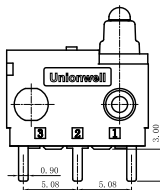


■ Terminals Type (can be customized)

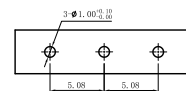
◆ (S) Solder Terminals



◆ (P) PCB Terminals

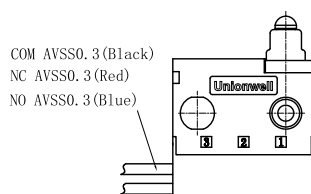


PCB Terminals Mounting Hole Dimensions

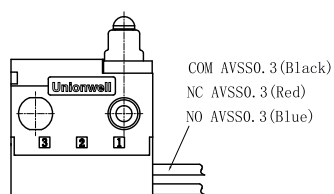


◆ **Wire Lead Direction**

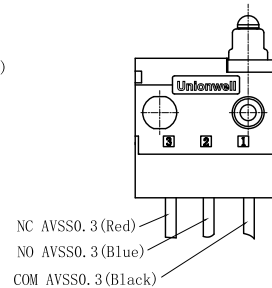
(G) Left Wire



(F) Right Wire

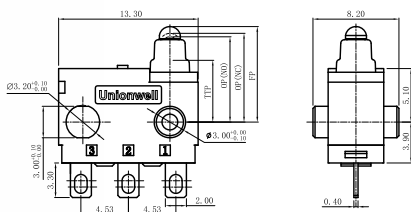


(E) Bottom Wire



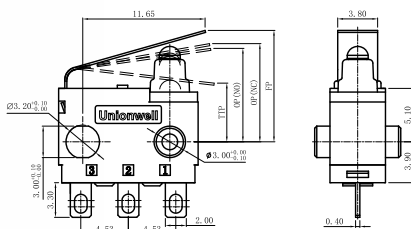
Switch Lever and Operating Characteristics

◆ G306-150S00□□U



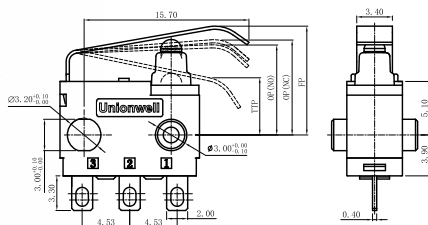
(OF)	150gf Max.
(FP)	9.2mm Max.
(OP-NC)	8.7 ± 0.3mm
(OP-NO)	8.4 ± 0.3mm
(OT-NC)	2.5mm Min.
(OT-NO)	2.2mm Min.
(TTP)	6.1mm Max.

◆ G306-150S08□□U



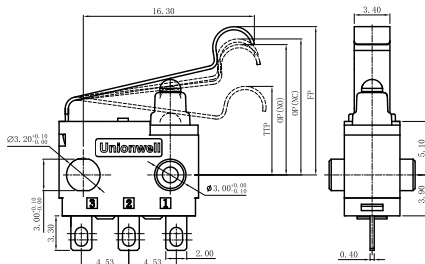
(OF)	150gf Max.
(FP)	11.5mm Max.
(OP-NC)	9.3 ± 0.6mm
(OP-NO)	8.8 ± 0.6mm
(OT-NC)	3.0mm Min.
(TTP)	6.2mm Max.

◆ G306-150S09□□U



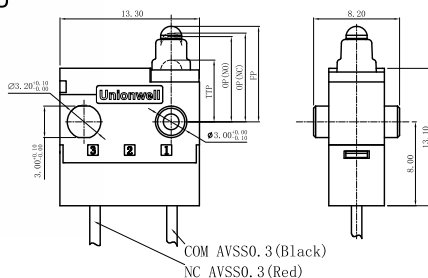
(OF)	170gf Max.
(FP)	11.3mm Max.
(OP-NC)	9.6 ± 0.6mm
(OP-NO)	9.1 ± 0.6mm
(OT-NC)	2.8mm Min.
(TTP)	6.2mm Max.

◆ G306-150S41□□U



(OF)	150gf Max.
(FP)	14.4mm Max.
(OP-NC)	13.0 ± 0.8mm
(OP-NO)	12.5 ± 0.8mm
(OT-NC)	3.5mm Min.
(TTP)	8.7mm Max.

◆ G306-150E00BA□□U



(OF)	150gf Max.
(FP)	9.2mm Max.
(OP)	8.4 ± 0.3mm
(OT)	2.2mm Min.
(TTP)	6.1mm Max.

G307A Series

Sealed Dual Loop Subminiature Micro Switch



■ Features

- ◆ Momentary structure, dual loop synchronization time $\leq 15\text{ms}$;
- ◆ Small size, compact structure, high reliability, long life;
- ◆ Two shape options and two terminal mounting options - DIP or SMT.

■ Application

- ◆ Home Appliances
- ◆ Electronic Equipment
- ◆ Automatic Equipment
- ◆ Communication Equipment
- ◆ Auto Electronics
- ◆ Apparatus and Instruments

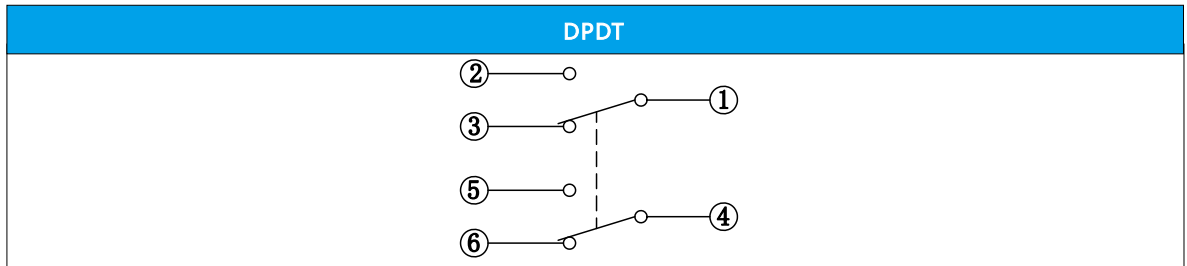
■ Parameters

Operating		1~500mm/s
Operating Frequency		120 cycles/min
Insulation Resistance		$\geq 100\text{M}\Omega$ (at 500VDC)
Contact Resistance (Initial Value)	With terminals type	$\leq 75\text{m}\Omega$
Voltage Resistance	Between terminals	AC500V, 50/60Hz, 1min.
	Between terminals and uncharged metal parts	AC500V, 50/60Hz, 1min.
Vibration Resistance	No transformation action	10-55Hz Double amplitude 1.5mm
Service Life	Electrical	300,000 cycles (20 cycles/min) 50mA 18VDC 50 μ A 5VDC
	Mechanical	300,000 cycles (30 cycles/min)
Protection Level		IEC IP67 (Exclude terminals)
Operating Temperature		-40~+85°C 60%RH (No ice, no frost)
Operating Humidity		95%RH (+5~+35°C)

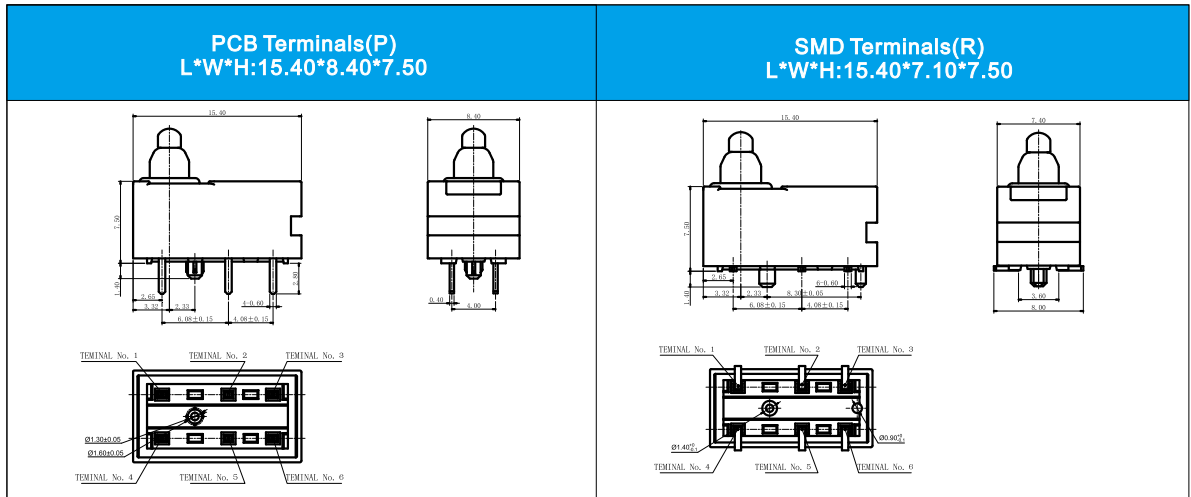
G307A Series Micro Switch Ordering Instruction

G307	150	P	00	A	A	U
Switch Type	Max Operating Forceat Pin Plunger	Terminal Type	Lever Type	Dimensions	Circuitry	LOGO
Switch Type	150 150gf Max	P Straight PCB Terminals	00 NO Lever pin plunger	A L*W*H 15.4*8.4*7.5	A DPDT	U Unionwell
	... Other	S SMT Terminals	01 01# Lever	B L*W*H 15.4*7.4*7.5	B DPST-NC	... Other
		... Special Terminals	... Other		C DPST-NO	

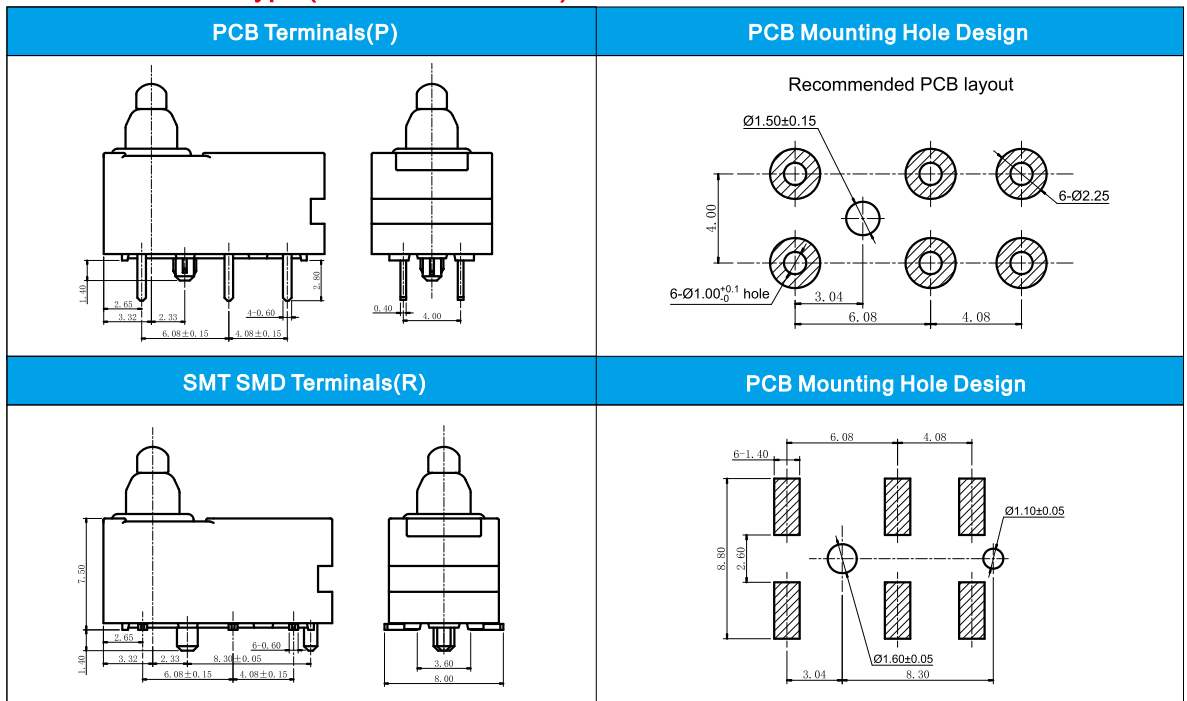
■ Circuit



■ Shape and Dimensions

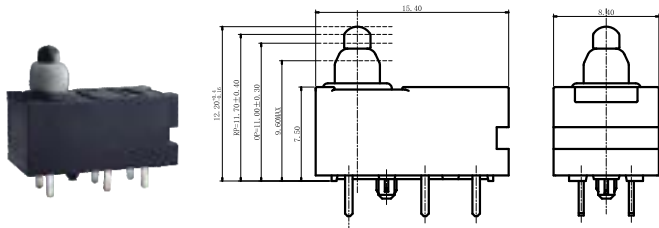


■ Switch Terminal Type (can be customized)



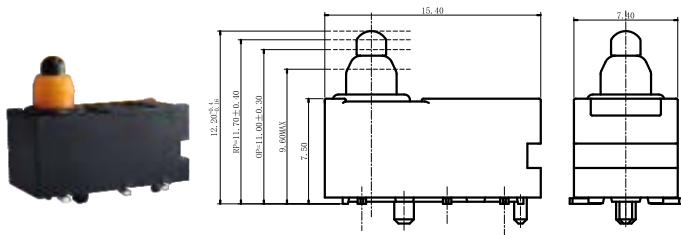
■ Dimensions and Operating Characteristics

◆ G307A-150P00AAU



OF Max. (gf)	RF Min. (gf)	RP (mm)	TTP Max. (mm)	FP (mm)	OP (mm)
150	30	11.70±0.4	9.60	12.2+0.4/-0.16	11.0±0.3

◆ G307A-150R00BAU



OF Max. (gf)	RF Min. (gf)	RP (mm)	TTP Max. (mm)	FP (mm)	OP (mm)
150	30	11.70±0.4	9.60	12.2+0.4/-0.16	11.0±0.3

G307B Series

Sealed Triple Loop Subminiature Micro Switch



■ Features

- ◆ Momentary structure, triple loop synchronization time $\leq 50\text{ms}$;
- ◆ Small size, compact structure, high reliability, long life;
- ◆ Special terminal mounting method - SMT

■ Application

- ◆ Home Appliances
- ◆ Electronic Equipment
- ◆ Automatic Equipment
- ◆ Communication Equipment
- ◆ Auto Electronics
- ◆ Apparatus and Instruments

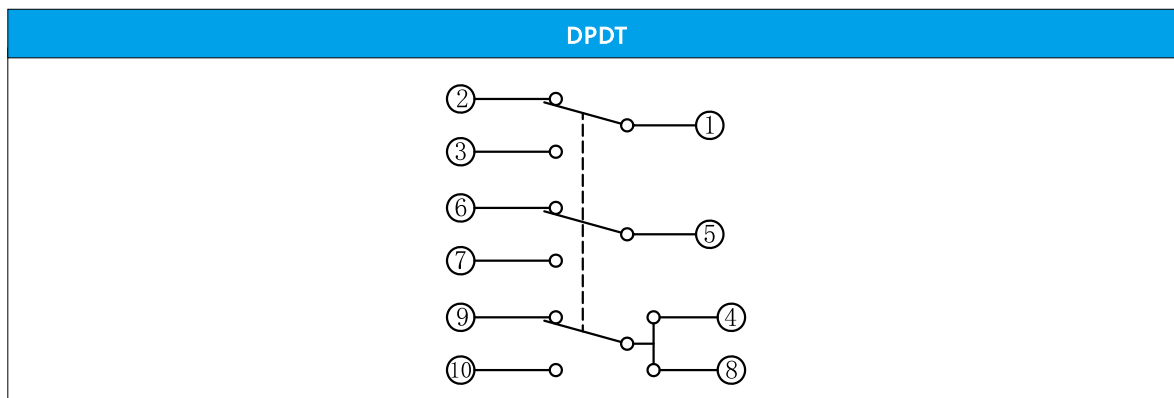
■ Parameters

Operating		1~500mm/s
Operating Frequency		120 cycles/min
Insulation Resistance		$\geq 100\text{M}\Omega$ (at 500VDC)
Contact Resistance (Initial Value)	With terminals type	$\leq 75\text{m}\Omega$
Voltage Resistance	Between terminals	AC500V, 50/60Hz, 1min.
	Between terminals and uncharged metal parts	AC500V, 50/60Hz, 1min.
Vibration Resistance	No transformation action	10-55Hz Double amplitude 1.5mm
Service Life	Electrical	150,000 cycles (20 cycles/min) 50mA 18VDC 50 μ A 5VDC
	Mechanical	150,000 cycles (30 cycles/min)
Protection Level		IEC IP67 (Exclude terminals)
Operating Temperature		-40~+85°C 60%RH (No ice, no frost)
Operating Humidity		95%RH (+5~+35°C)

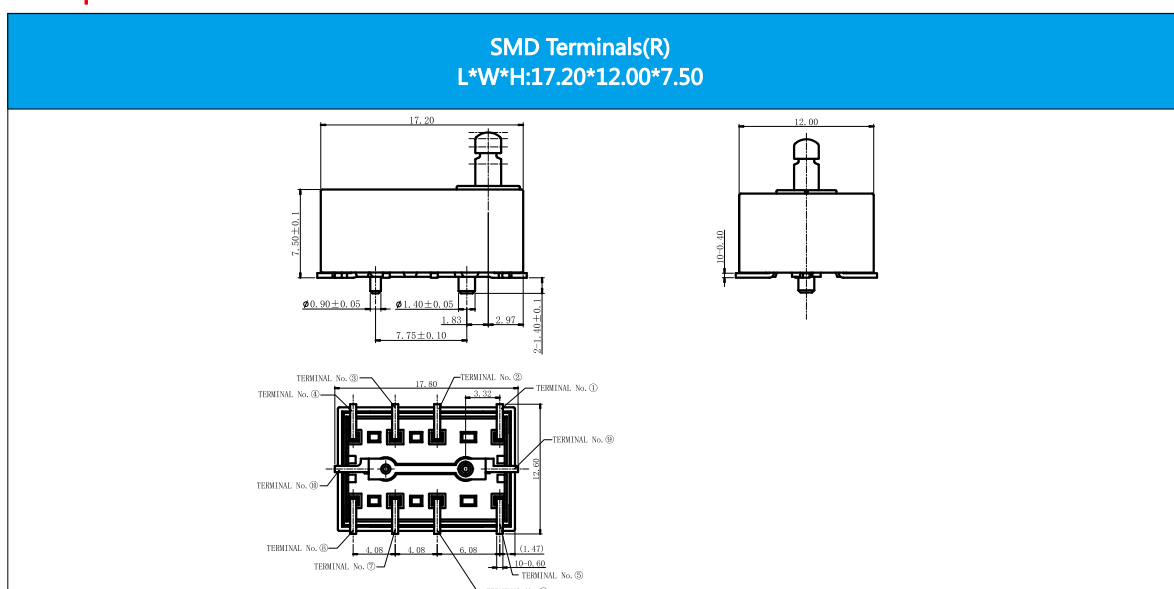
G307B Series Micro Switch Ordering Instruction

G307B	150	P	00	A	U
Switch Type	Max Operating Force at Pin Plunger	Terminal Type	Lever Type	Circuitry	LOGO
Switch Type	150 150gf Max	P Straight PCB Terminals	00 NO Lever pin plunger	A DPDT	U Unionwell
	... Other	S SMT Terminals	... Other	B DPST-NC	... Other
		... Special Terminals		C DPST-NO	

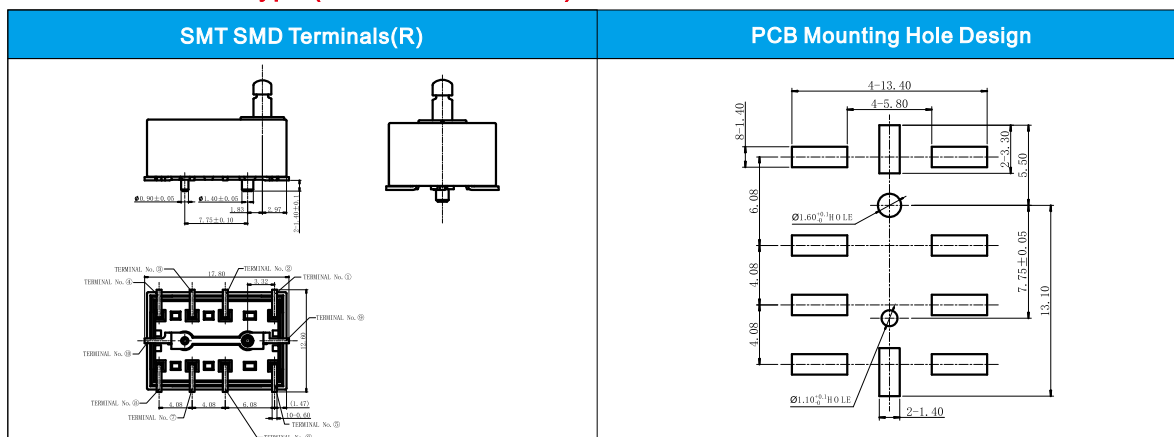
■ Circuit



■ Shape and Dimensions

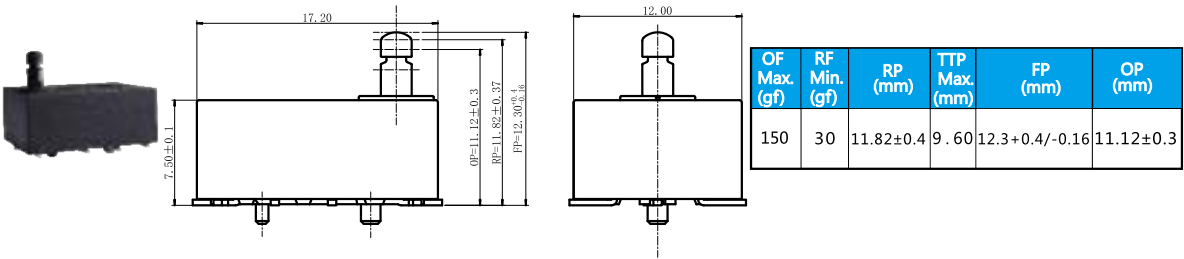


■ Switch Terminal Type (can be customized)



■ Dimensions and Operating Characteristics

◆ G307B-150R00AU



G309 Series

Sealed Clip Type Subminiature Micro Switch



■ Features

- ◆ IP67 Waterproof and dustproof design
- ◆ Small compact size
- ◆ Long life and high reliability
- ◆ Variety of levers
- ◆ Wide range of wiring terminals
- ◆ Widely used in automotive electronics, appliance and industrial control, etc.
- ◆ Multiple shape and size options for different fixation requirements.
- ◆ Contact structure

■ Application

- ◆ Car
- ◆ Air-conditioner
- ◆ Communication
- ◆ Electric Toothbrush
- ◆ Toys

■ Parameters

Operating		1~500mm/s
Operating Frequency		120 cycles/min
Insulation Resistance		≥ 100MΩ (at 500VDC)
Contact Resistance (Initial Value)	With Terminals Type	≤ 100mΩ
	With Wire Type	≤ 500mΩ (Standard wire length 300mm)
Voltage Resistance	Between Terminals	AC500V, 50/60Hz, 1min.
	Between Terminals and Uncharged Metal Parts	AC1,000V, 50/60Hz, 1min.
Vibration Resistance	No Transformation Action	10-55Hz Double amplitude 1.5mm
Service Life	Electrical	300,000 cycles (20 cycles/min) DC12V 0.1A DC3V 50μA
	Mechanical	300,000 cycles (30 cycles/min)
Protection Level		IEC IP67 (Exclude terminals)
Operating Temperature		-40~+85°C 60%RH (No ice, no frost)
Operating Humidity		95%RH (+5~+35°C)

G309 Series Micro Switch Ordering Instruction

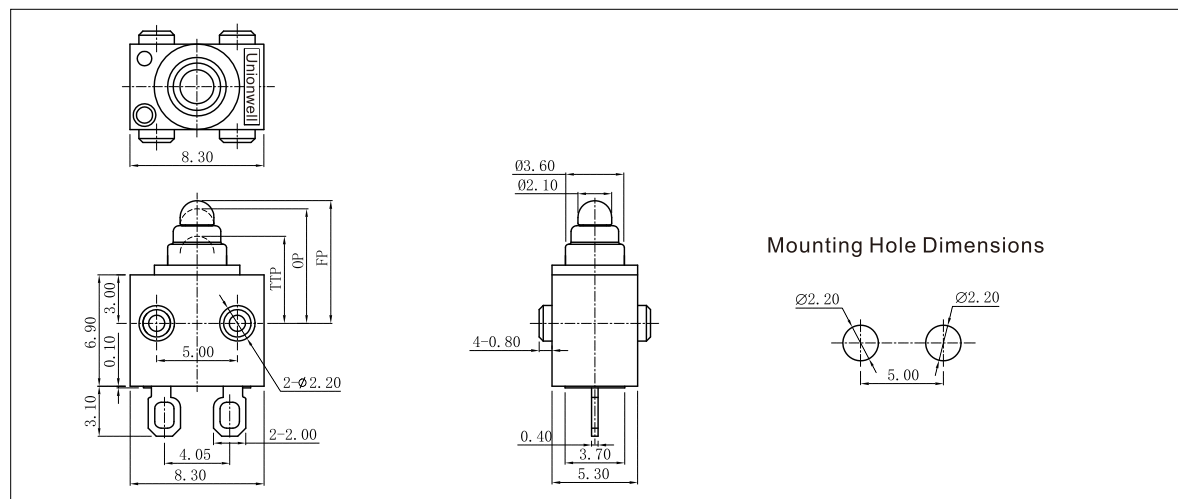
G309	150		00	E	39		G	A	280	B	T001	U
Switch Type	Operating Force at pin Plunger,Max	Terminal Style	Lever Type	Circuitry	Shape and Posts	Posts Dimension	AWG Type (For Type Wire Only)	AWG Number (For Type Wire Only)	Wires Length	Wire Type	Custom code	LOGO
G309 Series-Micro Switch	80 80gf Max.	Short Solder Terminals G Type M 6# 7#	No Lever Pin Plunger 00	Slide Type SPST-NO E	G Type 39 NO Posts	F Type Standard Posts: 260mmx5.0mm	No Molded Lead Wires	No Molded Lead Wires	300mm Length Standard Lead Wires 300	Molded Lead Wires on Left Side B	General	Unionwell
	150 150gf Max.	Solder Terminals With to Pins G Type V 6# 7#	Other ...	Slide Type SPST-NC F	G Type 40 Left Posts	G Φ2.6X1.5mm post.	F 22#	A UL1007	280mm Length 280	Molded Lead Wires on Right Side C	Customized according to requirements the code formats T+ serial number XXX for example:T001	Other
	Other	Straight PCB Terminals G Type P		Other ...	G Type 41 Right Posts	H Φ2.6X2.0mm post.	G 24#	F AVSS	Other ...	Molded Lead Wires on Bottom E		
		2.0 Short Solder Terminals With Hole G Type S			G Type TWO Sides Posts 42	I Φ2.2X0.8mm post.	Other ...	G UL3132		Other ...		
	Other				G Type Revers Left Posts 44	K 7.3X1.2x1.2mm post.	Other ...	Other ...			Other ...	
					Other ...	Other ...						

■ Circuit

■ Post Direction Define

SPST-NO	SPST-NC	
The gasket is gray (Circuit) Terminal NO.2 Terminal NO.1	The gasket is green (Circuit) Terminal NO.2 Terminal NO.1	Left Right

■ Basic Mounting Dimensions and Operating Characteristics



■ Switch Terminal Type(Can be customized)

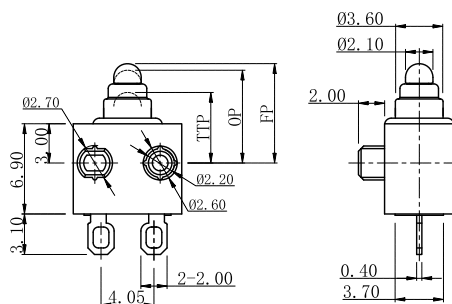
5#Straight PCB Terminals	Short Solder Terminals with Holes
PCB Terminals Mounting Hole Dimensions 3-Ø1.35 to 1.5 Dia 5.05	2-1.96 4.05 0.60 0.40
6#Solder Terminals	
2-0.40 3.10 2-2.00 4.05	

■ Posts Type and Dimension

I Type: Φ 2.20mmx0.8mm Double Sided Posts	H Type: Φ 2.60mmx2.0mm Left Posts	No Posts

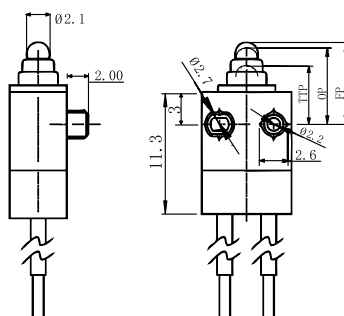
■ Dimensions and Operating Characteristics

◆ G309-150V00E40H



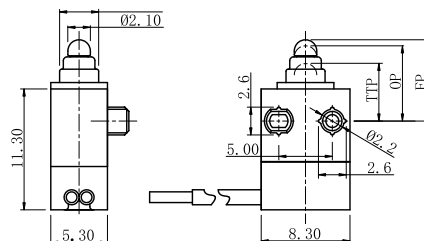
OF Max. (gf)	TTP Max. (mm)	FP Max. (mm)	OP (mm)
150	5.3	7.9	7.1±0.3

◆ G309-150M00E40H-□□□□□E



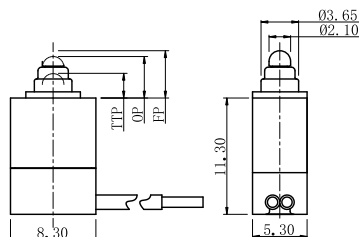
OF Max. (gf)	TTP Max. (mm)	FP Max. (mm)	OP (mm)
150	5.3	7.9	7.1±0.3

◆ G309-150M00E40H-□□□□□B



OF Max. (gf)	TTP Max. (mm)	FP Max. (mm)	OP (mm)
150	5.3	7.9	7.1±0.3

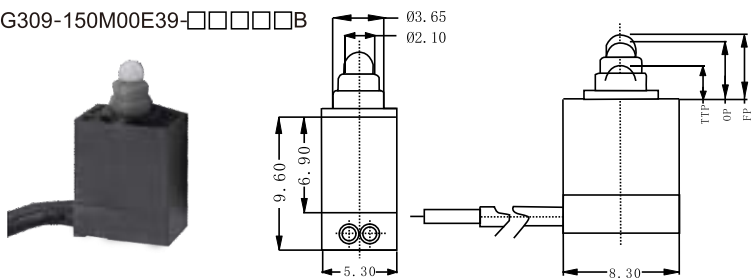
◆ G309-150M00E39-□□□□□C



OF Max. (gf)	TTP Max. (mm)	FP Max. (mm)	OP (mm)
150	2.3	4.9	4.1±0.3

■ Dimensions and Operating Characteristics

◆ G309-150M00E39-□□□□□B



OF Max. (gf)	TTP Max. (mm)	FP Max. (mm)	OP (mm)
150	2.3	4.9	4.1±0.3

G5 Series

Basic Micro Switch



■ Features

- ◆ 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 PTI grade (175V, 250V, 600V)
- ◆ Variety of levers
- ◆ Widely used in home appliance, electronic equipment, automatic machine, communication equipment, car electric, apparatus and instrument, power tool, etc.

■ Application

- ◆ Home appliance
- ◆ Electric equipment
- ◆ Automatic equipment
- ◆ Communication equipment
- ◆ Car electric
- ◆ Apparatus and instrument
- ◆ Power tool

■ Parameters

Operating Speed		0.1mm 1m/s (Related with actuator forms)
Operating Frequency		Mechanical 60 cycles/min; Electrical 15 cycles/min.
Insulation Resistance		$\geq 100M\Omega$ (500VDC)
Contact Resistance (Initial Value)		$\leq 100m\Omega$
Voltage Resistance	Between each terminals of the same polarity	AC1000V, 50/60Hz, 1min.
	Between current-carrying metal part and ground and between each terminal and non-current carrying metal parts	AC1500V, 50/60Hz, 1min.
Vibration Resistance		10-55Hz Double amplitude 1.5mm
Shock Resistance		Destruction: OF>1.0 N:1000m/s ² (approx.100g) max. OF $\leq$ 1.0 N:400m/s ² (approx.40g) max. Destruction: OF>1.0 N:200m/s ² (approx.20g) max. OF $\leq$ 1.0 N:100m/s ² (approx.10g) max.
Service Life		Mechanical $\geq 10,000,000$ cycles or 1,000,000 cycles Electrical $\geq 50,000$ cycles or 100,000 cycles
Unit Net Weight		Approx. 6.2g (without lever)

G5 Series Micro Switch Ordering Instruction

G5	T	16	C	Z	200	A	01	K	T001	U
Switch Type	Temperature Grade	Electrical Rating	Terminal Style	Circuitry	Max Operating Force at Pin Plunger	Lever Position	Lever Type	Mounting Holes	Custom Code	LOGO
G5 Series - Micro Switch	S 25T85 (for "05" rating Only)	05 ENEC/CQC: 0.1A 48VDC 0.1A 125/250VAC 5(2.5)A 125/250VAC UL/CUL: 0.1A 48VDC 0.1A 125/250VAC 5A/10HP 125/250VAC ("S" Temperature grade only) Only for C,C1,C2,E,E1,E2,D,D1,D2,S,S1,S2	C C1 C2 6.30x0.80mm 0.250"x0.032" Quick Connect	Z SPDT	0 15 15gf note: Only apply to G5S05	No lever Pin Plunger	No lever Pin Plunger	Metric Ø3.1mm	General	U Unionwell
	T 25T125	08 ENEC/CQC:8(10)A 250VAC UL/CUL:10,1A1/2HP 250VAC (Above only for "T" temperature grade and switch of contact gap>3mm) and only for C2 and D2 terminals; "300"~"500"OF only	D D1 D2 4.80x0.80mm 0.187"x0.032" Quick Connect	P SPST-NO	0 25 25gf note: Only apply to G5S05	A Far From Pin Plunger	01 Short Straight Lever	K USA Ø2.9mm	T001 Customized according to requirements, the code format is T+serial number XXX, for example: T001	Other
GSD Door Switch	H 25T150	10 UL/CUL:1A 30VDC 10A1/2HP 125/250VAC (Above only for "H" temperature grade) UL/CUL:11A1/3HP 125/250VAC 0.5A 125VDC 0.25A 250VDC 4A 125VAC ENEC/CQC:10(3)A125/250VAC 25T125 µSE4 (Above only for "T" temperature grade) C,C1,C2,E,E1,E2, D,D1,D2,F,F1 Terminal only. 10(4)A 250VAC25T85 µSE4 IP64 Only for G5F"IP64"waterproof grade	E E1 E2 4.80x0.50mm 0.187"x0.020" Quick Connect	C SPST-NC	0 50 50gf 0.49N Note: Only apply to G5S05, G5T10	B Near Pin Plunger	02 Std. Straight Lever	U Alloy base with inner mounting hole Only for G5D Door Switch	Other	
	B 25T125 Only for "08" rating and contact gap>3mm	16 ENEC/CQC: 16(4)A 250VAC µ SE4 UL/CUL: 16A1/2HP 125/250VAC	L L1 L2 Left side PCB Connect		1 00 100gf 0.98 N Note:16A and 22A Mini OF is 100gf;16A/22A 100gf	F Push Rod "GSD Door switch" only.	03 Long Straight Lever	V Alloy base with outer mounting hole Only for G5D Door Switch		
	F 25T85IEC IP64 Only for rating "10"	22 ENEC/CQC: 22(8)A 250VAC µ SE4 UL/CUL: 22A 1HP 125/250VAC	R R1 R2 Right side PCB Connect		2 00 200gf 1.96N Note:G5S05, G5T10, Series with Max OF is 200gf; 26A, Min OF is 200gf	J Screw Push Rod "GSD Door switch" only	04 Simulated Roller Lever	W Alloy base with two switches Only for G5D Door Switch		
		26 ENEC/CQC: 26(10)A 250VAC 0.02A 250VAC, 25E3	S S1 S2 Solder Connect		3 00 300gf 2.94N Note: Not apply to G5S05,G5T10 Series		05 Roller Lever			
			T T1 T2 Screw Connect		4 00 400gf 3.92N Note: Not apply to G5S05,G5T10 Series		06 Long Roller Lever			
			P P1 P2 Straight PCB Terminals		5 00 500gf 4.90N "B" Temperature grade only		...			
			H H1 H2 Rast -5 Terminals		18 00 1800gf 17.64N "GSD Door switch" only		99 Special Lever			
			B B2 6.30x0.80mm 0.250"x0.032" Straight Quick Connect							
			...	Special Connect						

Note: Letter is used for the basic type housing
Letter + number is used for the flat type housing

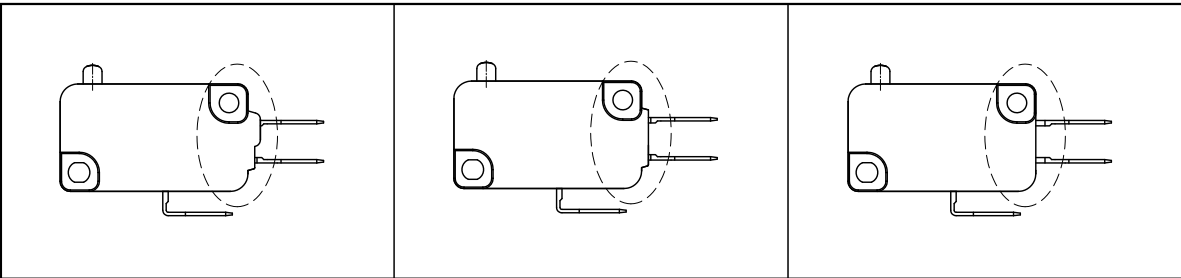
Description:
Relationship between current and OF, the lowest OF for each rating
0.1A~0.5A: 15gf Min. Grade.
10A: 25gf Min. Grade.
16A: 100gf Min. Grade.
22A: 100gf Min. Grade. (Not recommended)

G5 Series | Mounting Hole, Lever Type, Circuit, Shape, Terminal Type

Inner Construction

General Type	G5S05/G5T10	Contact Gap>3mm
1. Lever 2. Plunger 3. Cover 4. Internal Lever 5. Common Terminal 6. Contacts 7. NO/NC Terminals 8. Case 9. Movable Plate 10. Spring		

Housing Outline Characteristics



Mounting Hole Dimensions

(Unit:mm)

Basic Type	K Type	Left Angled PCB Terminal	Right Angled PCB Terminal

Circuitry Configuration

Common Terminal Type	"Z" SPDT	"C" SPST-NC	"P" SPST-NO
Common Terminal at Bottom			

■ Connect Terminal Dimensions

◆ Terminals for Basic Type Housing

(Unit:mm)

Basic Type Housing with 250# Quick Connect Terminals, T=0.8(C)	
Basic Type Housing with 187# Quick Connect Terminals, T=0.8(D)	
Basic Type Housing with 187# Quick Connect Terminals, T=0.5(E)	

◆ Terminals for Flat Type Housing

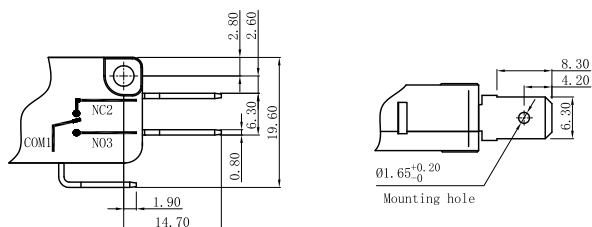
(Unit:mm)

Flat Type Housing with 250# Quick Connect Terminals, T=0.8 (C1)	
Flat Type Housing with 187# Quick Connect Terminals, T=0.8 (D1)	
Flat Type Housing with 187# Quick Connect Terminals, T=0.5 (E1)	

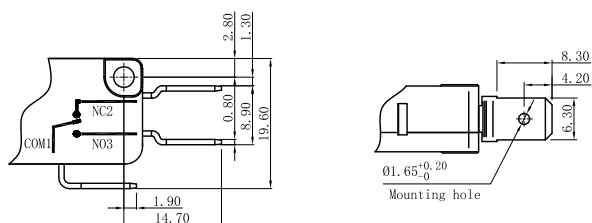
◆ Terminals for Fully Flat Type Housing

(Unit:mm)

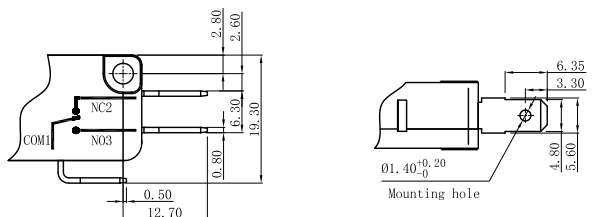
B2 Fully Flat Type
250# Quick Connect Terminals, T=0.8



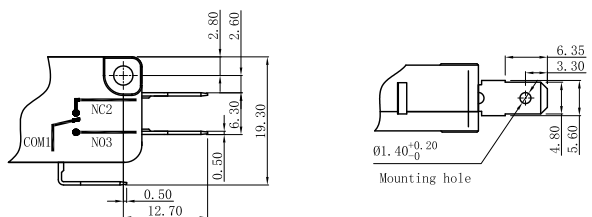
Fully Flat Housing with
250# Quick Connect Terminals, T=0.8 (C2)



Fully Flat Housing with
187# Quick Connect Terminals, T=0.8 (D2)



Fully Flat Housing with
187# Quick Connect Terminals, T=0.5 (E2)



◆ Other Levers

Lever 01#	Lever 02#
Lever 03#	Lever 04#
Lever 05#	Lever 06#
Lever 110#	Lever 137#
Lever 164#	Lever 165#

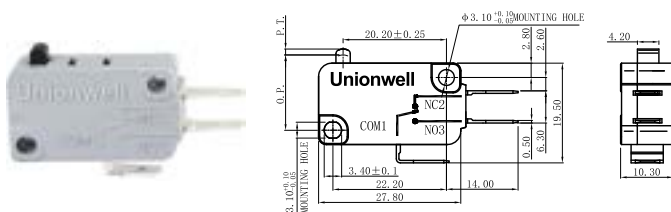
◆ Other Terminals

L Left Angled PCB Terminal	R Right Angled PCB Terminal	T Screw Terminal
F Slant Screw Terminal	S Standard Solder Terminal	K Rectangle Hole Solder Terminal
M Short Solder Terminal	-H1 RAST-5	

■ Dimensions and Operating Characteristics

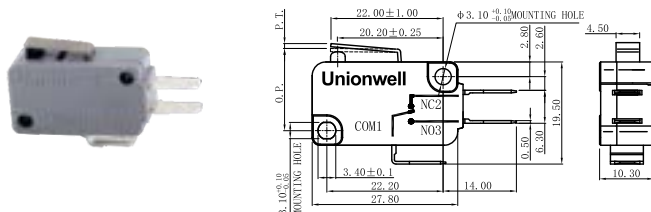
(Unit:mm)

◆ Plunger



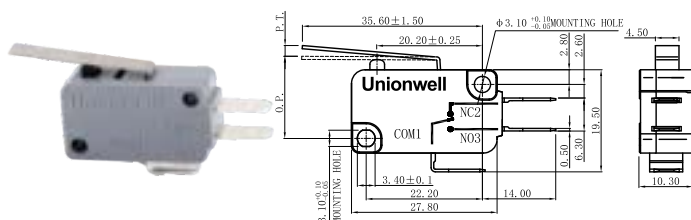
Part No.	Parameters						
	FP Max. (mm)	OP (mm)	OF Max. (g)	RF Min. (g)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)
G5□□□-E1Z015U	16.80	14.7±0.5	15	3	1.6	0.8	0.4
G5□□□-E1Z025U	16.80	14.7±0.5	25	5	1.6	0.8	0.4
G5□□□-E1Z050U	16.80	14.7±0.5	50	10	1.6	0.8	0.4
G5□□□-E1Z0100U	16.80	14.7±0.5	100	25	1.6	0.8	0.4
G5□□□-E1Z0200U	16.80	14.7±0.5	200	50	1.6	0.8	0.4
G5□□□-E1Z0300U	16.80	14.7±0.5	300	75	1.6	0.8	0.4
G5□□□-E1Z0400U	16.80	14.7±0.5	400	100	1.6	0.8	0.4

◆ Short Straight Lever



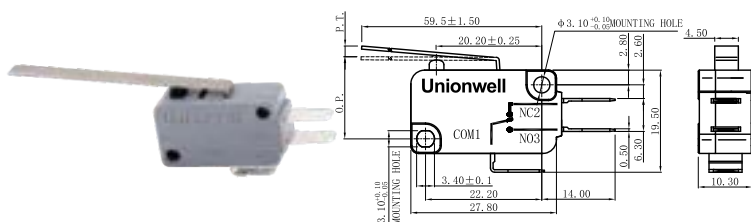
Part No.	Parameters						
	FP Max (mm)	OP (mm)	OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)
G5□□□-E1Z015A01U	17.00	15.3±0.5	15	3	1.6	0.8	0.4
G5□□□-E1Z025A01U	17.00	15.3±0.5	25	5	1.6	0.8	0.4
G5□□□-E1Z050A01U	17.00	15.3±0.5	50	10	1.6	0.8	0.4
G5□□□-E1Z0100A01U	17.00	15.3±0.5	100	25	1.6	0.8	0.4
G5□□□-E1Z0200A01U	17.00	15.3±0.5	200	50	1.6	0.8	0.4
G5□□□-E1Z0300A01U	17.00	15.3±0.5	300	75	1.6	0.8	0.4
G5□□□-E1Z0400A01U	17.00	15.3±0.5	400	100	1.6	0.8	0.4

◆ Standard Straight Lever



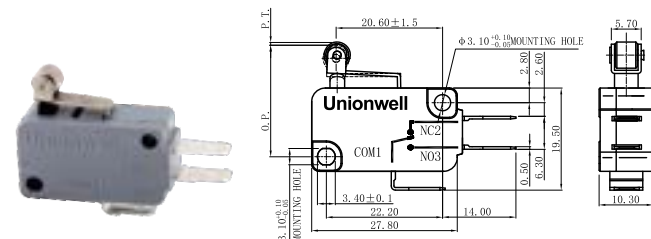
Part No.	Parameters						
	FP Max (mm)	OP (mm)	OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)
G5□□□-E1Z015A02U	18.60	15.3±1.5	10	2	3.2	1.3	1.0
G5□□□-E1Z025A02U	18.60	15.3±1.5	15	2	3.2	1.3	1.0
G5□□□-E1Z050A02U	18.60	15.3±1.5	30	5	3.2	1.3	1.0
G5□□□-E1Z0100A02U	18.60	15.3±1.5	60	10	3.2	1.3	1.0
G5□□□-E1Z0200A02U	18.60	15.3±1.5	120	20	3.2	1.3	1.0
G5□□□-E1Z0300A02U	18.60	15.3±1.5	180	30	3.2	1.3	1.0
G5□□□-E1Z0400A02U	18.60	15.3±1.5	240	40	3.2	1.3	1.0

◆ Long Straight Lever



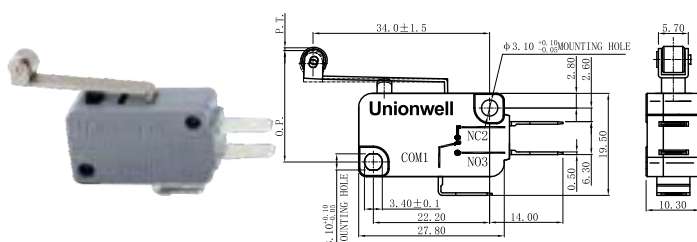
Part No.	Parameters						
	FP Max (mm)	OP (mm)	OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)
G5□□□-E1Z015A03U	22.40	15.3±3.0	7	2	6.4	2.6	2.0
G5□□□-E1Z025A03U	22.40	15.3±3.0	10	2	6.4	2.6	2.0
G5□□□-E1Z050A03U	22.40	15.3±3.0	15	2	6.4	2.6	2.0
G5□□□-E1Z0100A03U	22.40	15.3±3.0	30	5	6.4	2.6	2.0
G5□□□-E1Z0200A03U	22.40	15.3±3.0	60	10	6.4	2.6	2.0
G5□□□-E1Z0300A03U	22.40	15.3±3.0	90	15	6.4	2.6	2.0
G5□□□-E1Z0400A03U	22.40	15.3±3.0	120	20	6.4	2.6	2.0

◆ Short Roller Lever



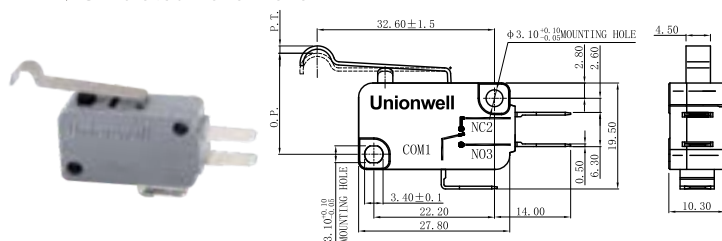
Part No.	Parameters						
	FP Max (mm)	OP (mm)	OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)
G5□□□-E1Z015A05U	22.70	20.6±0.8	15	3	3.2	0.8	0.4
G5□□□-E1Z025A05U	22.70	20.6±0.8	30	5	3.2	0.8	0.4
G5□□□-E1Z050A05U	22.70	20.6±0.8	60	10	3.2	0.8	0.4
G5□□□-E1Z0100A05U	22.70	20.6±0.8	120	20	3.2	0.8	0.4
G5□□□-E1Z0200A05U	22.70	20.6±0.8	240	40	3.2	0.8	0.4
G5□□□-E1Z0300A05U	22.70	20.6±0.8	350	60	3.2	0.8	0.4
G5□□□-E1Z0400A05U	22.70	20.6±0.8	470	80	3.2	0.8	0.4

◆ Long Roller Lever



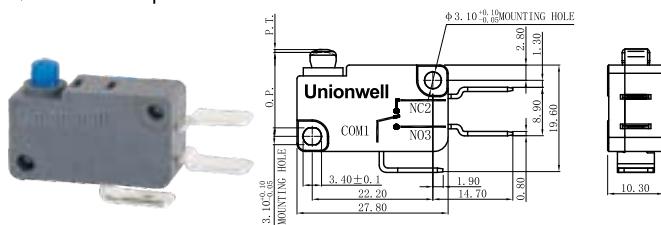
Part No.	Parameters						
	FP Max (mm)	OP (mm)	OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)
G5□□□-E1Z015A06U	23.90	20.6±1.6	10	2	3.2	1.3	1.2
G5□□□-E1Z025A06U	23.90	20.6±1.6	15	2	3.2	1.3	1.2
G5□□□-E1Z050A06U	23.90	20.6±1.6	30	5	3.2	1.3	1.2
G5□□□-E1Z0100A06U	23.90	20.6±1.6	60	10	3.2	1.3	1.2
G5□□□-E1Z0200A06U	23.90	20.6±1.6	120	20	3.2	1.3	1.2
G5□□□-E1Z0300A06U	23.90	20.6±1.6	180	30	3.2	1.3	1.2
G5□□□-E1Z0400A06U	23.90	20.6±1.6	240	40	3.2	1.3	1.2

◆ Simulated Roller Lever



Part No.	Parameters						
	FP Max (mm)	OP (mm)	OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)
G5□□□-E1Z015A04 U	23.90	20.6±1.6	10	2	3.2	1.3	1.2
G5□□□-E1Z025A04 U	23.90	20.6±1.6	15	2	3.2	1.3	1.2
G5□□□-E1Z050A04 U	23.90	20.6±1.6	30	5	3.2	1.3	1.2
G5□□□-E1Z0100A04U	23.90	20.6±1.6	60	10	3.2	1.3	1.2
G5□□□-E1Z0200A04U	23.90	20.6±1.6	120	20	3.2	1.3	1.2
G5□□□-E1Z0300A04U	23.90	20.6±1.6	180	30	3.2	1.3	1.2
G5□□□-E1Z0400A04U	23.90	20.6±1.6	240	40	3.2	1.3	1.2

◆ IP64 Waterproof Switch



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

G5 Series-G5D Zinc Alloy Door Switch

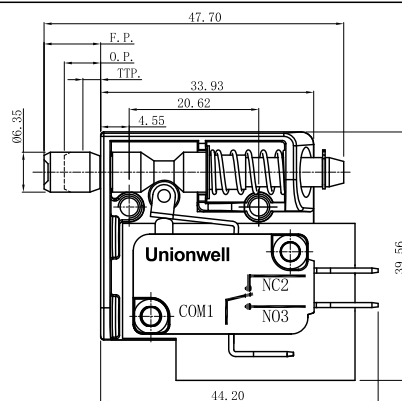
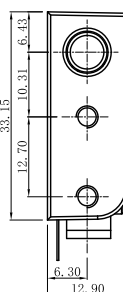
■ Dimensions and Operating Characteristics

(Unit:mm)

◆ G5D□□-□□1800F05-UU



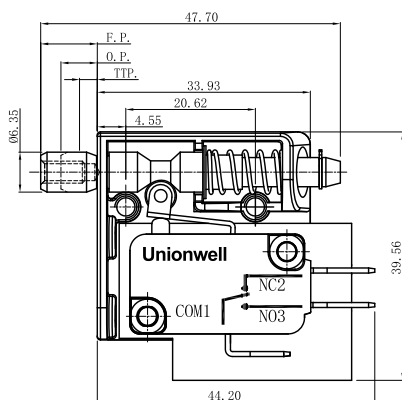
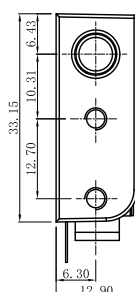
Parameters			
OF Max (N)	FP Max (gf)	TTP Min (mm)	OP Min (mm)
17.60	1800	9.5	3.18
			5.16



◆ G5D□□-□□1800J05-UU



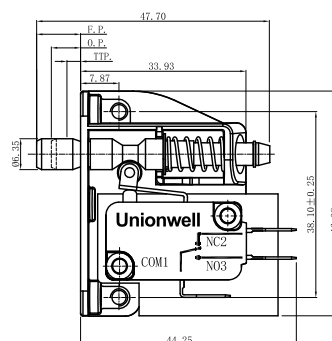
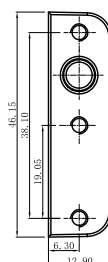
Parameters			
OF Max (N)	FP Max (gf)	TTP Min (mm)	OP Min (mm)
17.60	1800	9.5	3.18
			5.16



◆G5D□□-□□1800F05-VU



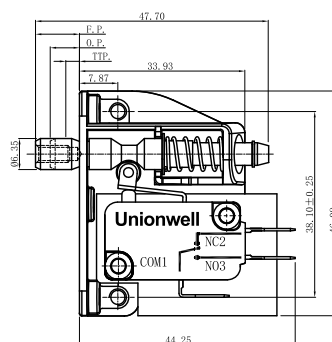
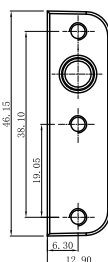
Parameters				
OF Max (N)	FP Max (gf)	TTP Min (mm)	OP Min (mm)	
17.60	1800	9.5	3.18	5.16



◆G5D□□-□□1800J05-V



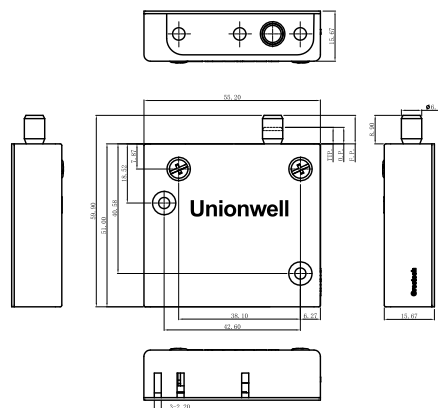
Parameters				
OF Max (N)	FP Max (gf)	TTP Min (mm)	OP Min (mm)	
17.60	1800	9.5	3.18	5.16



◆G5D□□-□□900J05-VU



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



G5E Series

Basic Micro Switch



■ Features

- ◆ Small compact size
- ◆ Long life and high reliability
- ◆ Variety of terminals
- ◆ PTI rated 400V
- ◆ Widely applied for home appliances, electronic equipments, automatic equipments, communication equipments, auto electronics, apparatus and instruments, power tools, etc. Especially used for the electric heating tap industry.

■ Application

- ◆ Home Appliances: Electric heating tap
- ◆ Electronic equipment
- ◆ Automatic equipment
- ◆ Communication equipment
- ◆ Auto electronics
- ◆ Apparatus and instruments
- ◆ Power tools

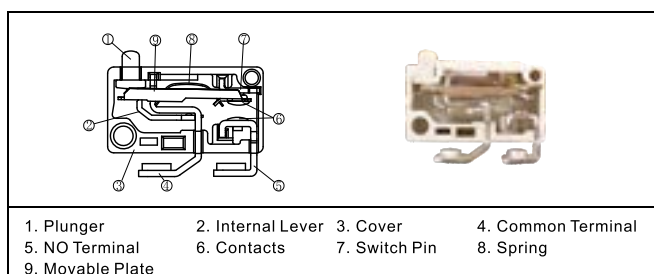
■ Parameters

Operating Speed		0.1mm -1m/s (Related with actuator forms)
Operating Frequency		Mechanical 60 cycles/min; Electrical 15 cycles/min
Insulation Resistance		≥ 100MΩ (500VDC)
Contact Resistance		≤ 100mΩ (Initial Value)
Voltage Resistance	Between each terminal of the same polarity	AC1000V, 50/60Hz, 1min.
	Between current-carrying metal part and cover, and between each terminal and non-current carrying metal parts	AC1500V, 50/60Hz, 1min.
Vibration Resistance		10-55Hz, Double amplitude 1.5mm
Operating Temperature		-40~85°C
Operating Humidity		85%RH Max
Service Life	Electrical	50000 cycles
	Mechanical	1000,000 cycles

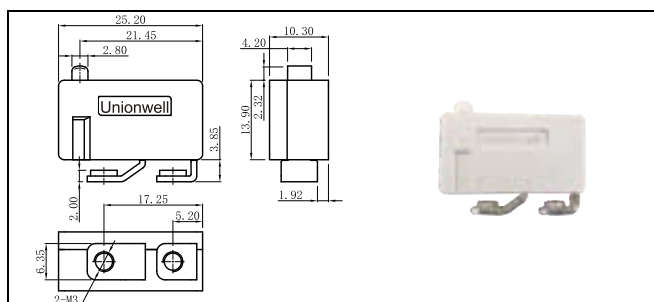
G5E Series Micro Switch Ordering Instruction

G5E	16	100	A	P	T001	U
Switch Type	Electrical Rating	Max Operating Force at Pin Plunger	Terminal Type	Circuit Code	Custom Code	LOGO
Switch Type	16 16A 250VAC 40T85 μ 5E4	100 100gf Max	A M3 Screw Terminals	P SPST-NO	General	U Unionwell
	... Other	150 150gf Max	... Special Terminals		T001 Customized according to requirements. the code format is T+serial number XXX, for example: T001	... Other
		... Other				... Other

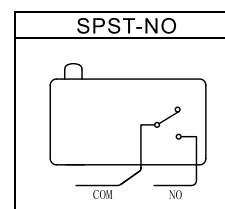
Inner Construction



Shape Characteristics

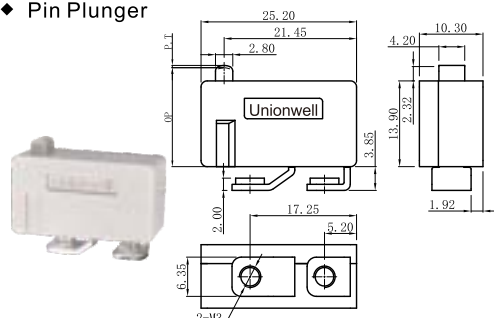


Circuit Configuration



Dimensions and Operating Characteristics

Pin Plunger



Operating Parameters

Type	OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
G5E□□-100APU	100	20	1.6	0.8	0.8	17	15.5 ± 0.5
G5E□□-150APU	150	30	1.6	0.8	0.8	17	15.5 ± 0.5
G5E□□-200APU	200	50	1.6	0.8	0.8	17	15.5 ± 0.5
G5E□□-300APU	300	75	1.6	0.8	0.8	17	15.5 ± 0.5
G5E□□-400APU	400	100	1.6	0.8	0.8	17	15.5 ± 0.5

G5L Series



Basic Micro Switch

■ Features

- ◆ Compact structure, with 2.5mm contact gap, snap action and high sensitivity
- ◆ Long life, high reliability
- ◆ Global safety approvals
- ◆ Variety of terminals
- ◆ Variety of levers
- ◆ Widely used in appliance, electronic equipment, automatic machine, communication equipment, car electric, apparatus and instrument, power tool etc.

■ Application

- ◆ Appliance
- ◆ Electric equipment
- ◆ Automatic equipment
- ◆ Communication equipment
- ◆ Car electric
- ◆ Apparatus and instrument
- ◆ Power tool

■ Parameters:

Operating Speed		0.1mm-1m/s (Related with actuator forms)
Operating Frequency		Mechanical 60 cycles/min; Electrical 7.5 cycles/min.
Insulation Resistance		$\geq 100M\Omega$ (500VDC)
Contact Resistance		$\leq 100m\Omega$ (Initial value)
Test Voltage	Between each terminals of the same polarity	AC1000V, 50/60Hz, 1min.
	Between current-carrying metal part and ground and between each terminal and non-current-carrying metal parts	AC1500V, 50/60Hz, 1min.
Life Expectancy	Mechanical	$\geq 1,000,000$ cycles
	Electrical	$\geq 50,000$ cycles

■ Mounting Hole Dimensions

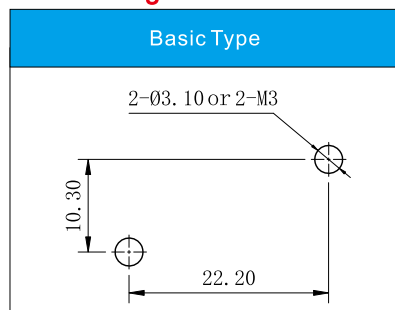
(Unit:mm)

Terminal Type	SPDT	SPST-NC	SPST- NO
Common Terminal at Bottom			

G5L Series Micro Switch Ordering Instruction

G5L	30	C	A	200	A	01	T001	U
Switch Type	Electrical Rating	Terminal Type	Circuit Code	Max Operating Force at Pin Plunger	Lever Position	Lever Type	Custom Code	LOGO
G5 Series Micro-Switch	30 25.1A 84VDC 5E4 μ 25T85	C 250# Quick Connect 6.30×0.80mm	A SPDT	700 700gf Max	No Lever Pin Plunger	00 No Lever Pin Plunger	General	U Unionwell
	25 25.1A 60VDC 5E4 μ 25T85	D 187# Quick Connect 4.80×0.80mm	B SPST-NC	... Other	A Far From Pin Plunger	01 01#Straight 22.00mm	TO 01 Customized according to requirements, the code format is T+serial number XXX, for example: T001	... Other
		F 250# Quick Connect 6.30×1.00mm	C SPST-NO		B Near Pin Plunger	02 02#35.60mm Short Straight Lever		
						05 05# Roller Lever 25.97mm	... Other	
						120 120# Simulated Roller Lever 32.21mm		
						... Other		

■ Mounting Hole Dimensions

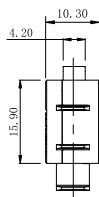
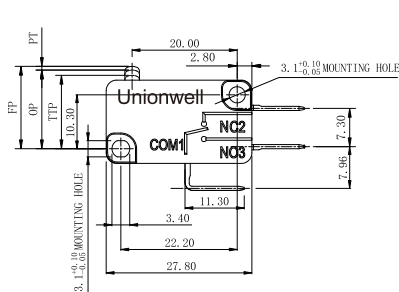


■ Terminal Type

C# 250# Quick Connect Terminal 6.30x0.80mm	D# 187# Quick Connect Terminal 4.80x0.80mm	F# 250# Quick Connect Terminal 6.30X1.00mm

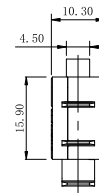
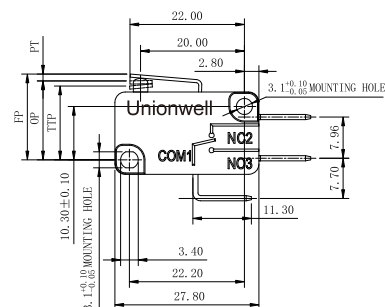
■ Dimensions and Operating Characteristics

◆ G5L□□-□□□A00U



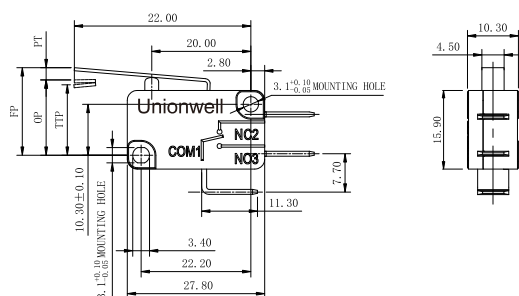
OF Max. (gf)		RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	MD Max. (mm)	FP Max. (mm)	OP (mm)
-800	800	300	1.6	0.8	1	15.3	15.5 ± 0.5

◆ G5L□□-□□□A01U



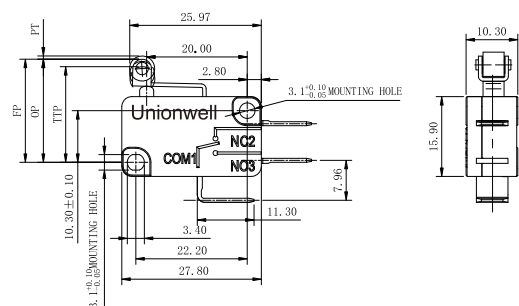
OF Max. (gf)		RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	MD Max. (mm)	FP Max. (mm)	OP (mm)
-800	800	300	1.6	0.8	1	16	15.3 ± 0.5

◆ G5L□□-□□□A02U



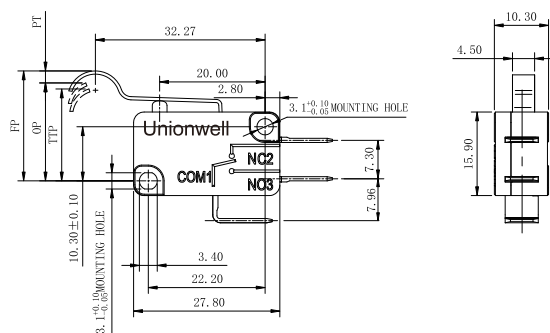
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	MD Max. (mm)	FP Max. (mm)	OP (mm)
-800	600	90	3.2	1.3	2	17.8
						15.3±1.50

◆ G5L□□-□□□A05U



OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	MD Max. (mm)	FP Max. (mm)	OP (mm)
-800	800	150	3.2	1.3	2	25
						20.6±0.80

◆ G5L□□-□□□A120U



OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	MD Max. (mm)	FP Max. (mm)	OP (mm)
-800	600	90	3.2	1.3	2	15.3
						19.1±1.50

G5W11 Series

Waterproof and Dustproof Basic Micro Switch



■ Features

- ◆ Water proof and dust proof
- ◆ Tight structure, small contact gap, snap action, high sensitivity
- ◆ Long life, high precision and reliability
- ◆ Widely used in auto, agricultural equipment, home appliance, office equipment, etc.
- ◆ Max approved current at ENEC/UL is 10A

■ Application

- ◆ Home appliances
- ◆ Electronic devices
- ◆ Automatic equipments
- ◆ Auto electronics
- ◆ Agricultural equipments
- ◆ Office equipments

■ Parameters

Rating	W1	ENEC 0.1A 48VDC, 0.1A 125/250VAC, 40T85 μ 5E4 UL: 0.1A 48VDC, 0.1A 125/250VAC, T85
	W2	ENEC 5A 48VDC, 0.1A 125/250VAC, 40T85 μ 2E4 UL: 5A 125/250VAC, 5A 30VDC, T85
	W3	ENEC 10(2)A 125/250VAC, 0.5A 125VDC, 025A 250VDC 40T85 μ 2E4 UL: 10.1A 1/10HP 125/250VAC, 0.5A 125VDC, 0.25A 250VDC, T85
Operating Frequency	Electrical	10~30 cycles/min
	Mechanical	60 cycles/min
Contact Resistance (Initial Value)	With Terminal Type	50 m Ω Max
	With Wire Type	100 m Ω Max (Depends on the length of the wire)
Insulation Resistance		at 500VDC, 100M Ω Min.
Dielectric Strength	Between Terminals	AC 1000V 50-60Hz 1min
	Between Terminals and Housing	AC 1500V 50-60Hz 1min
Operating Temperature		-40°C~+85°C
Operating Humidity		85%RH Max
Protection Grade	With Terminal Type	IEC IP67 (Exclude terminal)
	With Wire Type	IEC IP67
Electric-shock Safeguard Grade		Class II
Service Life	Electrical	2E4~10E4 cycles (Depends on P/N)
	Mechanical	Over 500,000 cycles or 1,000,000 cycles (60 cycles/min)
Unit Net Weight		Approx.7g (With terminals type and without lever)

G5W11 Series Sealed Micro Switch Ordering Instruction

G5	W	11	E	Z
Switch Type	Temperature Grade	Electrical Rating	Terminal Style	Circuitry
	W 40T85 IEC IP67	11 ENEC/CQC: Rating 1: 0.1A 48VDC, 0.1A 125/250VAC, 40T85 μ 5E4 Rating 2: 5A 125/250VAC, 5A, 30VDC, 40T85 μ 5E4 Rating 3: 10(2)A 125/250VAC, 0.5A 125VDC, 0.25A 250VDC, 480T85 μ 2E4 UL/cUL: Rating 1: 0.1A 48VDC, 0.1A 125/250VAC, T85 Rating 2: 5A 125/250VAC, T85 Rating 3: 10.1A 1/10HP 125/250VAC, 0.5A 125VDC, 0.25A 250VDC, T85	E 4.70x0.5mm 0.187"x0.020" Quick Connect	Z SPDT
			W Terminals for External Conductors (for G5W11 series only)	P SPST-NO
				C SPST-NC

Description :

G5W11(rating 2): 50gf Min.Grade
G5W11(rating 3): 100gf Min.Grade

200	A	01	W1	T001	U
Operating Force at pin Plunger,Max	Lever Position	Lever Type	AWG Number & Wires Length	Custom Code	LOGO
015 15gf	No Lever Pin Plunger	No Lever Pin Plunger	W1 W1: Rating 1 (Note: standard wire: UL1015, 24#, 300MM) W2 W2: Rating 2 (Note: standard wire: UL1015, 20#, 300MM) W3 W3: Rating 3 (Note: standard wire: UL1015, 18#, 300MM)	General T001 Customized according to requirements, the code format is T+ serial number XXX, for example: T001 Other	U Unionwell Other
025 25gf	A Far From Pin Plunger	01 Short Straight Lever		Other	
050 50gf	B Near Pin Plunger	02 Std. Straight Lever	Special		
100 100gf		03 Long Straight Lever			
200 200gf		04 Simulated Roller Lever			
		05 Roller Lever			
		06 Long Roller Lever			
					
		99 Special Lever			

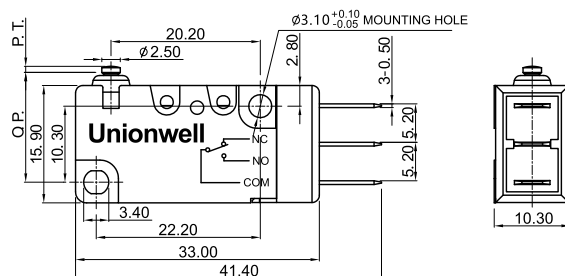
■ Dimensions and Operating Characteristics

(Unit:mm)

◆ G5W11-E□□-W□U



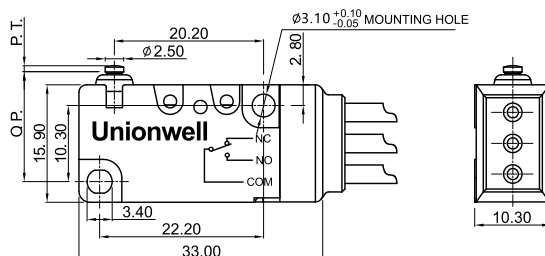
	OF Max		RF Min		PT Max (mm)	OT Min (mm)	MD Max (mm)	OP (mm)
	(N)	(g)	(N)	(g)				
G5W11-EZ015-W□□	0.30	30	0.05	5	1.6	0.8	0.4	14.7±0.5
G5W11-EZ025-W□□	0.40	40	0.10	10	1.6	0.8	0.4	14.7±0.5
G5W11-EZ050-W□□	0.64	65	0.15	15	1.6	0.8	0.4	14.7±0.5
G5W11-EZ100-W□□	1.08	110	0.35	35	1.6	0.8	0.4	14.7±0.5
G5W11-EZ200-W□□	2.06	210	0.60	60	1.6	0.8	0.4	14.7±0.5



◆ G5W11-W□□-W□U



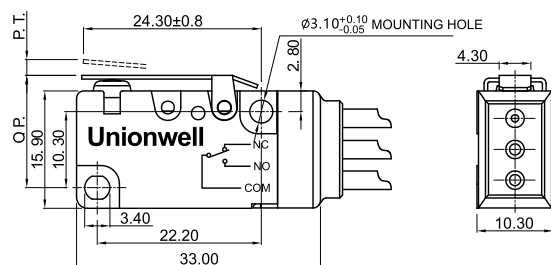
	OF Max		RF Min		PT Max (mm)	OT Min (mm)	MD Max (mm)	OP (mm)
	(N)	(g)	(N)	(g)				
G5W11-WZ015-W□□	0.30	30	0.05	5	1.6	0.8	0.4	14.7±0.5
G5W11-WZ025-W□□	0.40	40	0.10	10	1.6	0.8	0.4	14.7±0.5
G5W11-WZ050-W□□	0.64	65	0.15	15	1.6	0.8	0.4	14.7±0.5
G5W11-WZ100-W□□	1.08	110	0.35	35	1.6	0.8	0.4	14.7±0.5
G5W11-WZ200-W□□	2.06	210	0.60	60	1.6	0.8	0.4	14.7±0.5



◆ G5W11-W□□A01-W□U



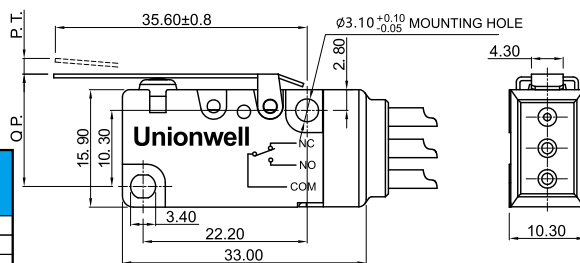
	OF Max		RF Min		PT Max (mm)	OT Min (mm)	MD Max (mm)	OP (mm)
	(N)	(g)	(N)	(g)				
GSW11-WZ015A01-W□□	0.30	30	0.05	5	1.6	0.8	0.4	15.3±0.5
GSW11-WZ025A01-W□□	0.40	40	0.10	10	1.6	0.8	0.4	15.3±0.5
GSW11-WZ050A01-W□□	0.64	65	0.15	15	1.6	0.8	0.4	15.3±0.5
GSW11-WZ100A01-W□□	1.08	110	0.35	35	1.6	0.8	0.4	15.3±0.5
GSW11-WZ200A01-W□□	2.06	210	0.59	60	1.6	0.8	0.4	15.3±0.5



◆ G5W11-W□□A02-W□U



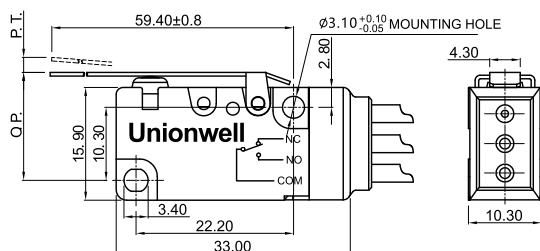
	OF Max		RF Min		PT Max (mm)	OT Min (mm)	MD Max (mm)	OP (mm)
	(N)	(gf)	(N)	(gf)				
GSW11-WZ015A02-W□□□	0.20	20	0.05	5	3.2	1.3	1.2	15.3±0.5
GSW11-WZ025A02-W□□□	0.25	25	0.08	8	3.2	1.3	1.2	15.3±0.5
GSW11-WZ050A02-W□□□	0.40	40	0.15	15	3.2	1.3	1.2	15.3±0.5
GSW11-WZ100A02-W□□□	1.60	65	0.25	25	3.2	1.3	1.2	15.3±0.5
GSW11-WZ200A02-W□□□	1.27	130	0.35	35	3.2	1.3	1.2	15.3±0.5



◆ G5W11-W□ □A03-W□U



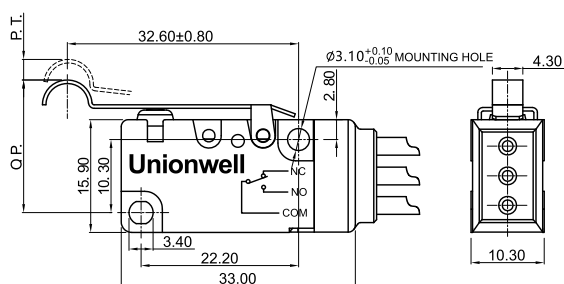
Part NO	OF Max		RF Min		PT Max (mm)	OT Min (mm)	MD MAX (mm)	OP (mm)
	(N)	(gf)	(N)	(gf)				
G5W11-WZ015A03-W□U	0.10	10	0.03	3	6.4	2.6	2.4	15.3±3
G5W11-WZ025A03-W□U	0.15	15	0.05	5	6.4	2.6	2.4	15.3±3
G5W11-WZ050A03-W□U	0.20	20	0.08	8	6.4	2.6	2.4	15.3±3
G5W11-WZ100A03-W□U	0.35	35	0.10	10	6.4	2.6	2.4	15.3±3
G5W11-WZ200A03-W□U	0.64	65	0.15	15	6.4	2.6	2.4	15.3±3



◆ G5W11-W□ □A04-W□U



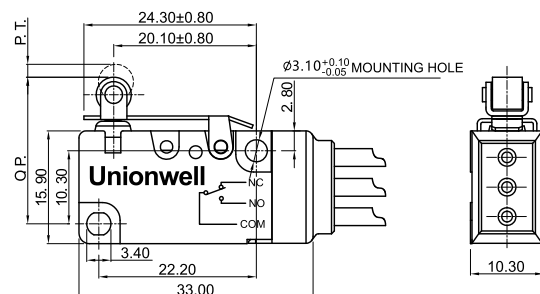
Part NO	OF Max		RF Min		PT Max (mm)	OT Min (mm)	MD MAX (mm)	OP (mm)
	(N)	(gf)	(N)	(gf)				
G5W11-WZ015A04-W□U	0.20	20	0.05	5	3.2	1.3	1.2	18.5±1.5
G5W11-WZ025A04-W□U	0.25	25	0.08	8	3.2	1.3	1.2	18.5±1.5
G5W11-WZ050A04-W□U	0.40	40	0.15	15	3.2	1.3	1.2	18.5±1.5
G5W11-WZ100A04-W□U	0.64	65	0.25	25	3.2	1.3	1.2	18.5±1.5
G5W11-WZ200A04-W□U	1.27	130	0.35	35	3.2	1.3	1.2	18.5±1.5



◆ G5W11-W□ □A05-W□U



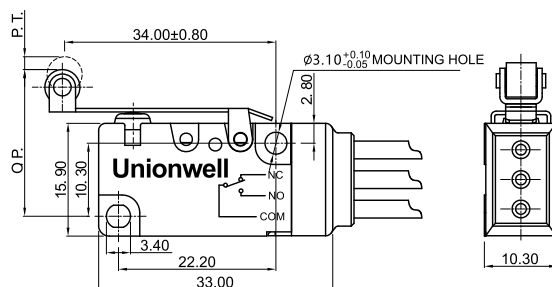
Part NO	OF Max		RF Min		PT Max (mm)	OT Min (mm)	MD MAX (mm)	OP (mm)
	(N)	(gf)	(N)	(gf)				
G5W11-WZ015A05-W□U	0.30	30	0.05	5	3.2	0.8	0.4	20.6±0.8
G5W11-WZ025A05-W□U	0.40	40	0.10	10	3.2	0.8	0.4	20.6±0.8
G5W11-WZ050A05-W□U	0.64	65	0.15	15	3.2	0.8	0.4	20.6±0.8
G5W11-WZ100A05-W□U	1.18	120	0.35	35	3.2	0.8	0.4	20.6±0.8
G5W11-WZ200A05-W□U	2.35	240	0.59	60	3.2	0.8	0.4	20.6±0.8



◆ G5W11-W□ □A06-W□U



Part NO	OF Max		RF Min		PT Max (mm)	OT Min (mm)	MD MAX (mm)	OP (mm)
	(N)	(gf)	(N)	(gf)				
G5W11-WZ015A06-W□U	0.20	20	0.05	5	3.2	1.3	1.2	20.6±1.6
G5W11-WZ025A06-W□U	0.25	25	0.08	8	3.2	1.3	1.2	20.6±1.6
G5W11-WZ050A06-W□U	0.40	40	0.15	15	3.2	1.3	1.2	20.6±1.6
G5W11-WZ100A06-W□U	0.64	65	0.25	25	3.2	1.3	1.2	20.6±1.6
G5W11-WZ200A06-W□U	1.27	130	0.35	35	3.2	1.3	1.2	20.6±1.6



G6 Series

Miniature Micro Switch



■ Features

- ◆ Small compact size
- ◆ Global safety approvals
- ◆ Long life and high reliability
- ◆ Terminal load to 10(2)A, 1/4HP
- ◆ Variety of actuator and terminals
- ◆ Customized designs
- ◆ Widely used in auto control, appliance control, industrial control etc.

■ Application

- ◆ Phone
- ◆ Air-Conditioner
- ◆ Computer
- ◆ Humidifier
- ◆ Alarm
- ◆ Timer
- ◆ Mixer & Meat Grinder
- ◆ Welding Machine
- ◆ Neon Phone
- ◆ Fax Machine
- ◆ Game Controller
- ◆ Pump
- ◆ Gas Detector
- ◆ Pencil Sharpener
- ◆ Money Sorter
- ◆ Food Processor
- ◆ Electric Knife
- ◆ Toy Car
- ◆ Juice Extractor
- ◆ Lighting Equipment
- ◆ Electric Frying Pan
- ◆ Linear Actuator & Tubular Motor

■ Parameters

Rating	P1	ENEC/CQC: 0.1A 125/250VAC 0.1A 48VDC 5E4 25T125 UL: 0.1A 125/250VAC 0.1A 48VDC Gold Plated Contact Optional
	05	ENEC/CQC: 5(3)A 125/250VAC 5A 125/250VAC 5A 30VDC 25T120 μ 5E4 UL: 5A 125/250VAC 1/8HP 125/250VAC 5A 30VDC
	051/052	ENEC/CQC: 5A 125/250VAC 25T120 μ 5E4 UL: 5A 125/250VAC 1/8HP 125/250VAC
	10/101	ENEC/CQC: 10(2)A 125/250VAC 25T120 μ 5E4 UL: 10.1A 125/250VAC 1/4HP 125/250VAC 10A 30VDC Note: Only with "OF" over "250gf"
	12	ENEC/CQC: 12(6)A 125/250VAC 40T125 μ 1E4 UL: 12A 125/250VAC Note: Only with 350gf OF
Operating Frequency	Electrical	10~30 cycles/min
	Mechanical	120 cycles/min
Contact Resistance (Initiative)		100mΩ Max.
Insulation Resistance (at 500VDC)		100MΩ Min.
Dielectric Strength	Between Terminals	1,000VAC 50~60Hz for 1 Min.
	Between Terminals and Housing	1,500VAC 50~60Hz for 1 Min.
Operating Temperature		-25°C~+125°C
Operating Humidity		85%RH Max.
Service Life	Electrical	10,000~50,000 cycles (Depend on P/N)
	Mechanical	1,000,000 cycles

G6 Series Micro Switch Ordering Instruction

G6	05	150	S	00	A	A	T001	U
Switch Type	Electrical Rating	Max. Operating Force at Pin Plunger	Terminal Style	Lever Type	Circuitry	Special Designator	Custom Code	LOGO
G6 series micro switch	P1 ENEC/CQC: 0.1A 125/250VAC 0.1A 48VDC 5E4 25T125 UL: 0.1A 125/250VAC 0.1A 48VDC Gold plated contact optional	50 50gf 0.49N (Only for 0.1A rating)	S Solder Terminals	00 No lever Pin Plunger	A SPDT	General	General Customized according to requirements, the code format is T+ serial number XXX, for example: T001	U Unionwell ... Other
	05 ENEC/CQC: 5(3)A 125/250VAC 5A 125/250VAC 5A 30VDC 5E4 25T125 UL: 5A 125/250VAC 1/8HP 125/250VAC 5A 30VDC	100 100gf 0.98N (Only for 0.1A and 5A rating)	P Straight PCB Terminals	01 Short Straight Lever 0.66"	B SPST-NC	A Gold Plated Contacts (Optional, only for G6P1)	... Other	
	10 ENEC/CQC: 10(2)A 125/250VAC 1E4 25T125 UL: 10.1A 125/250VAC 1/4HP 125/250VAC 10A 30VDC Note: Switch "10" rating is only available with OF over "250gf"	150 150gf 1.49N (Only available for G6P1, G605, G610)	R Right Side PCB Terminals	02 18.70mm Std. Straight Lever 0.74"	C SPST-NO	D High DC Rating Special use		
	12 ENEC/CQC: 12(6)A 125/250VAC, 1E4 40T125 UL: 12A 125/250VAC OF only with 250gf	250 250gf 2.45N (Only available for G6P1, G605, G610)	L Left Side PCB Terminals	03 24.80mm Long Straight Lever 0.98"		... Other		
	051 ENEC/CQC: 5A 125/250VAC 5E4 25T125 UL/cUL: 5A 125/250VAC 1/8HP 125/250VAC Spring plate type	350 350gf 3.43N Mainly for G612	D 110# 2.80 x0.6mm Quick Connect Terminals 0.11"x0.023"	04 35.10mm Longer Straight Lever 1.39"				
	101 ENEC/CQC: 10(2)A 125/250VAC 1E4 25T125 UL: 10.1A 125/250VAC 1/4HP 125/250VAC 10A 30VDC Note: Switch with "10" rating are only available with "150" OF spring plate type	F Special OF	E 110# 2.80 x0.5mm Quick Connect Terminals 0.11"x0.023"	05 18.00mm Std. Simulated Roller Lever 0.71"				
	052 ENEC/CQC: 5A 125/250VAC 5E4 25T85 UL: 5A 125/250VAC 1/8HP 125/250VAC Bakelite housing spring plate type		... Special Terminals	06 16.60mm Copper Roller Lever				
				07 17.90mm Small Simulated Roller Lever 0.71"				
				08 16.50mm Plastic Roller Lever				
				... Other				

■ Mounting Hole Dimensions

Solder and 110#Terminal	Straight PCB Terminal	Right Angled PCB Terminal	Left Angled PCB Terminal
2-ϕ2.4 mounting holes or M2.3 screw holes 9.50	5.30 3-ϕ1.35toϕ1.5dia 3.30 9.50 8.80 7.30 plunger position	2.00 plunger position 3.30 9.50 3-PCB孔 8.80 7.30 3-ϕ1.35toϕ1.5dia 4.70	plunger position 2.00 9.50 3.30 4.70 3-PCB孔 7.30 8.80 3-ϕ1.35toϕ1.5dia

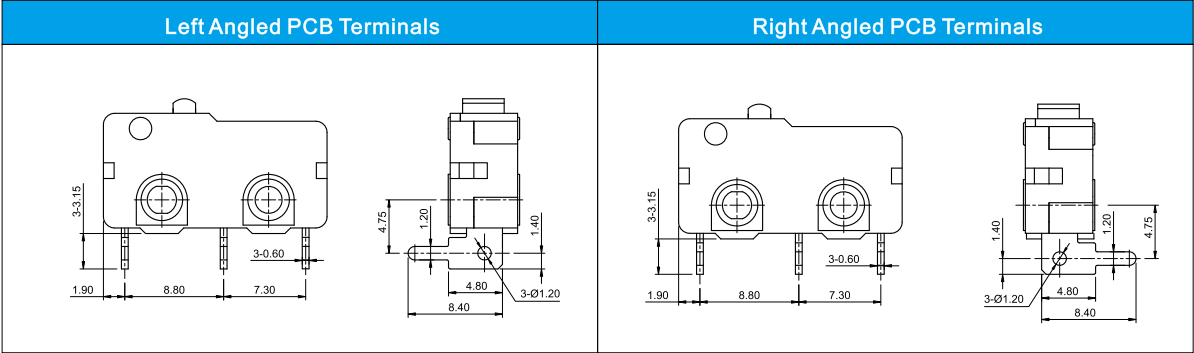
■ Circuit Configuration

A# SPDT	B# SPST-NC	C# SPST-NO
1 2 NC COM 3 NO	1 2 NC COM	1 2 COM NO 3

■ Terminal Dimensions

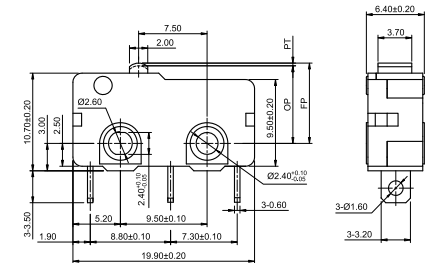
(Unit:mm)

Solder Terminals	Straight PCB Terminals
1.90 8.80 7.30 3-3.50 3-0.60 3-01.60 3-3.20	1.90 8.80 7.30 3-4.00 3-0.60 3-1.20 3-3.20
Non-Standard Quick Connect Terminals (Thickness: 0.6mm)	Quick Connect Terminals (Thickness: 0.5mm)
1.90 8.80 7.30 3-10.60 3-0.60 3-2.80 3-1.60 3-7.10	1.90 8.80 7.30 3-10.60 3-0.50 3-2.80 3-1.60 3-7.10



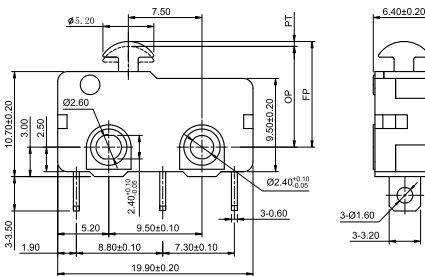
■ Dimensions and Operating Characteristics

◆ G6□□-□□□S00AU



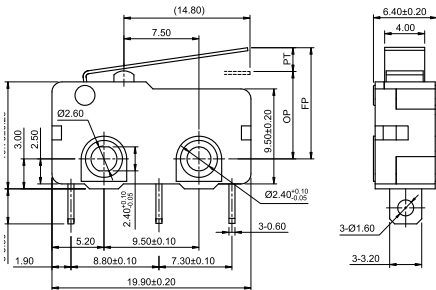
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)	
-100	100	10	1.0	0.4	0.2	9.1	8.5±0.3
-150	150	35	1.0	0.4	0.2	9.1	8.5±0.3
-250	250	50	1.0	0.4	0.2	9.1	8.5±0.3
-350	350	80	1.0	0.4	0.2	9.1	8.5±0.3

◆ G6□□-□□□S00A-B3U



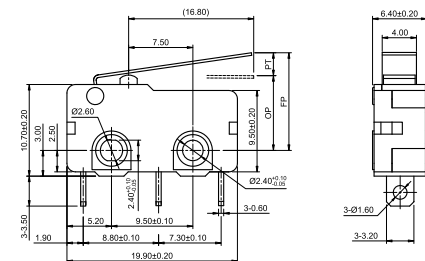
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-100	100	10	1.0	0.40	0.20	10.90
-150	150	35	1.0	0.40	0.20	10.90
-250	250	50	1.0	0.40	0.20	10.90

◆ G6□□-□□□S01AU



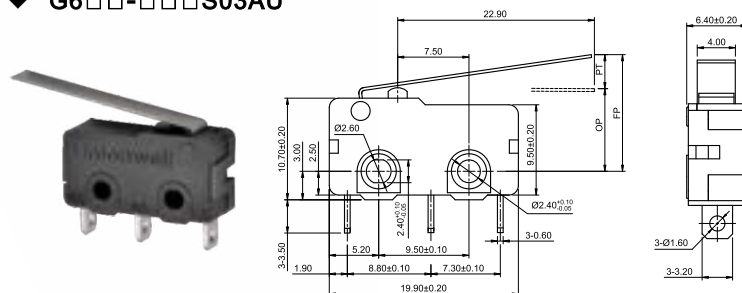
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)	
-100	40	6	3.6	0.6	1.0	11.7	8.9±1.0
-150	50	8	3.6	0.6	1.0	11.7	8.9±1.0
-250	80	15	3.6	0.6	1.0	11.7	8.9±1.0
-350	110	30	3.6	0.6	1.0	11.7	8.9±1.0

◆ G6□□-□□□S02AU



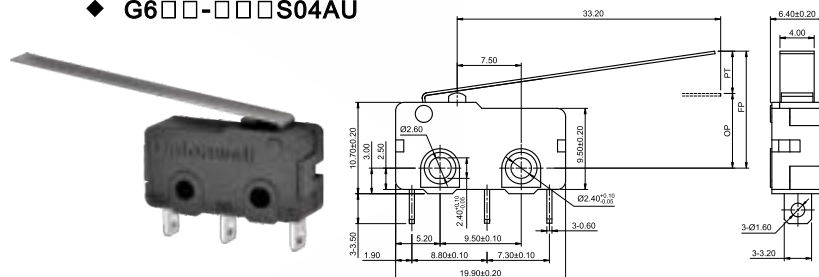
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)	
-100	35	5	4.0	0.6	1.0	12.0	8.9±1.2
-150	45	6	4.0	0.6	1.0	12.0	8.9±1.2
-250	75	10	4.0	0.6	1.0	12.0	8.9±1.2
-350	100	20	4.0	0.6	1.0	12.0	8.9±1.2

◆ G6□□-□□□S03AU



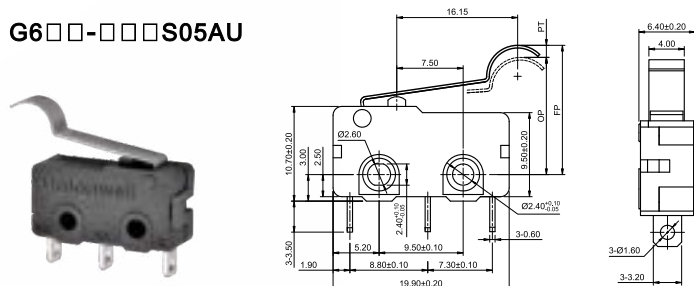
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-100	25	2	6.1	0.8	1.8	13.5
-150	35	6	6.1	0.8	1.8	13.5
-250	55	10	6.1	0.8	1.8	13.5
-350	75	15	6.1	0.8	1.8	13.5

◆ G6□□-□□□S04AU



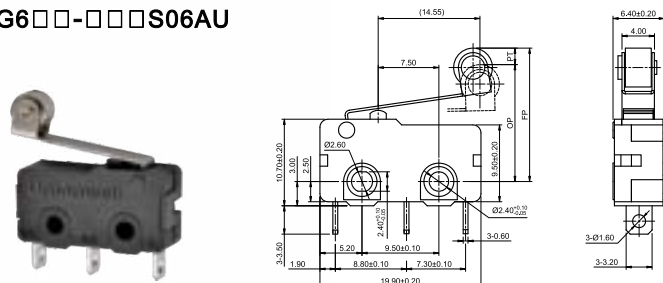
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-100	15	2	7.5	1.5	2.0	15.5
-150	30	4	7.5	1.5	2.0	15.5
-250	45	7	7.5	1.5	2.0	15.5
-350	55	12	7.5	1.5	2.0	15.5

◆ G6□□-□□□S05AU



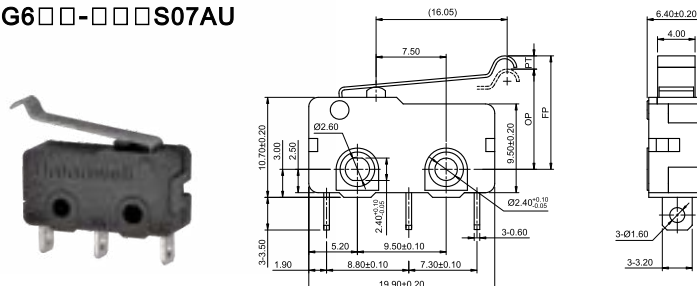
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-100	35	5	5.0	0.6	1.0	18.5
-150	45	6	5.0	0.6	1.0	18.5
-250	75	10	5.0	0.6	1.0	18.5
-350	100	20	5.0	0.6	1.0	18.5

◆ G6□□-□□□S06AU



OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-100	40	6	3.8	0.8	1.0	17.6
-150	50	8	3.8	0.8	1.0	17.6
-250	80	15	3.8	0.8	1.0	17.6
-350	110	30	3.8	0.8	1.0	17.6

◆ G6□□-□□□S07AU



OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-100	40	6	4.5	0.8	1.0	14.4
-150	50	8	4.5	0.8	1.0	14.4
-250	80	15	4.5	0.8	1.0	14.4
-350	110	20	4.5	0.8	1.0	14.4

G606 Series

Double Break Miniature Micro Switch



■ Features

- ◆ Small size and compact structure
- ◆ Long life, high reliability
- ◆ Variety lever types
- ◆ DPDT double-break type
- ◆ Widely used in industrial control, etc.

■ Application

- ◆ Float
- ◆ Sewage pump

■ Parameters

Rating	06	0.5A 125/250VDC
		0.5A/6A 125/250VAC, 1/4HP 250VAC
Operating Frequency	Electrical	10~30 cycles/min
	Mechanical	120 cycles/min
Contact Resistance(Initial Value)		30~100mΩ Max. (Depends on P/N)
Insulation Resistance		100MΩ Min. (at 500VDC)
Dielectric Strength		AC 750V RMS (50-60Hz)
Operating Temperature		-40°C~+125°C
Operating Humidity		85%RH Max.
Service Life	Electrical	50,000~100,000 cycles (Depends on P/N)
	Mechanical	50,000 cycles
Unit Weight		1.96g (Solder terminals, without lever)

■ Circuit Configuration

DPDT	DPDT-NO

■ Mounting Hole Dimensions

(Unit:mm)

Mounting Hole Dimensions	Mounting Hole Dimension of PCB at Bottom	Mounting Hole Dimension of Lateral PCB Terminal

G606 Series Micro Switch Ordering Instruction

G6	06	200	K	00	D	K	T001	U
Switch Type	Electrical Rating	Operating Force at Pin Plunger, Max	Terminal Type	Lever Type	Circuitry	Special Designator	Custom Code	LOGO
G6 series micro switch	UL/cUL: 0.5A 125/250VDC 0.5A/6A 125/250VAC 1/4HP 250VAC 40T125 μ5E4	50gf 0.49N (Only for 0.1A rating) (no automatic reset function, should be acted by lever)	Long solder terminal	No lever Pin plunger	DPDT-1NO/NC	General	General	Unionwell
	06	050	K	00	D		T0 01	...
		200	P	11	E	No automatic reset	Customized according to requirements, the code format is T+serial number XXX, for example: T001	Other
		F	F	12			...	
							Other	
			R	13				
			L	16				
				...				

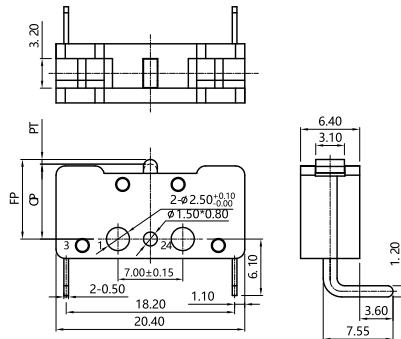
Terminal Type

◆ Thickness of Terminals: 0.5mm

P Type/ Straight PCB Terminals	K Type/ Long Solder Terminals
L Type/ Left Angled PCB Terminals	R Type/ Right Angled PCB Terminals
F Type/ Lateral Solder Terminals	

Dimensions and Operating Characteristics

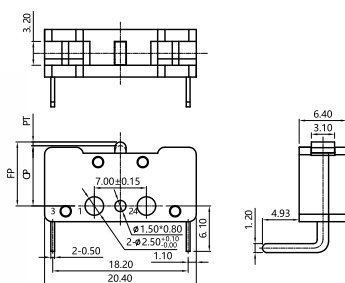
◆ G606-200R00EU



OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	MD Max (mm)	FP Max (mm)	OP (mm)
200	40	1.5	0.25	0.45	9.5	7.7±0.3

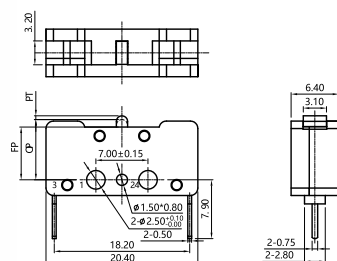
■ Dimensions and Operating Characteristics

◆ G606-200L00EU



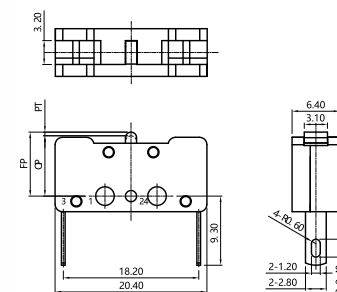
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	MD Max (mm)	FP Max (mm)	OP (mm)
200	40	1.5	0.25	0.45	9.5	7.7±0.3

◆ G606-200P00EU



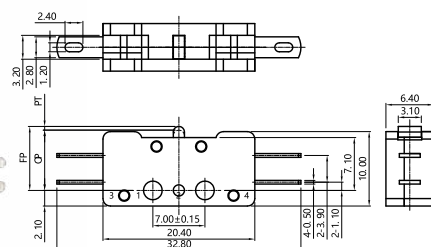
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	MD Max (mm)	FP Max (mm)	OP (mm)
200	40	1.5	0.25	0.45	9.5	7.7±0.3

◆ G606-200K00EU



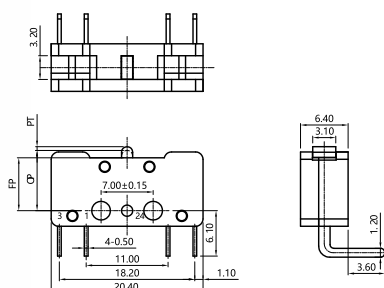
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	MD Max (mm)	FP Max (mm)	OP (mm)
200	40	1.5	0.25	0.45	9.5	7.7±0.3

◆ G606-200F00DU



OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	MD Max (mm)	FP Max (mm)	OP (mm)
200	40	1.5	0.25	0.45	9.5	7.7±0.3

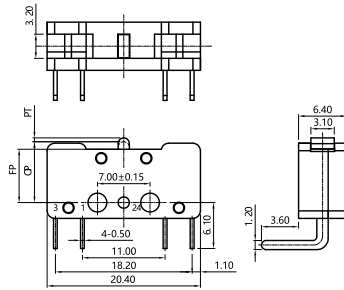
◆ G606-200R00DU



OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	MD Max (mm)	FP Max (mm)	OP (mm)
200	40	1.5	0.25	0.45	9.5	7.7±0.3

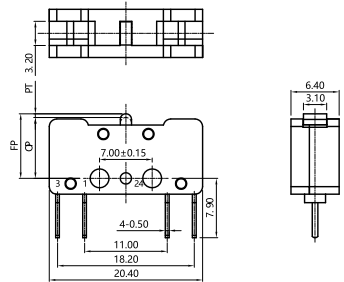
■ Dimensions and Operating Characteristics

◆ G606-200L00DU



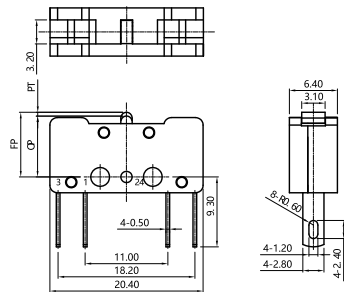
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	MD Max (mm)	FP Max (mm)	OP (mm)
200	40	1.5	0.25	0.45	9.5	7.7±0.3

◆ G606-200P00DU



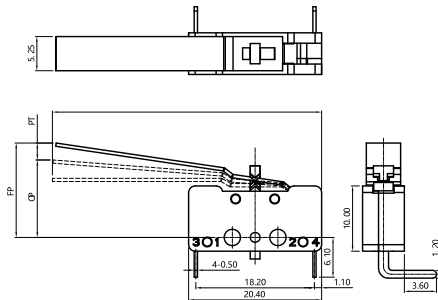
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	MD Max (mm)	FP Max (mm)	OP (mm)
200	40	1.5	0.25	0.45	9.5	7.7±0.3

◆ G606-200K00DU



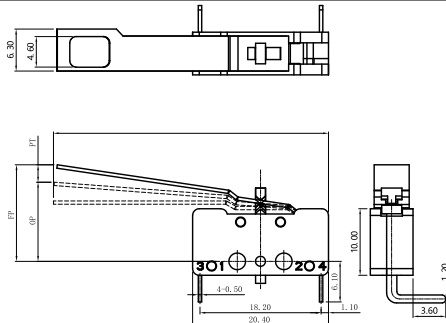
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	MD Max (mm)	FP Max (mm)	OP (mm)
200	40	1.5	0.25	0.45	9.5	7.7±0.3

◆ G606-200R11EKG



Positive operating force	12gf MAX
Negative operating force	12gf MAX
Positive travel	8.0mm MAX
Negative travel	8.6mm MAX
Positive free position	19.0mm MAX
Negative free position	9.5mm MAX
Positive operating position	12.05±1.5mm
Negative operating position	15.5±1.0mm

◆ G606-200R12EKG



Positive operating force	12gf MAX
Negative operating force	12gf MAX
Positive travel	8.0mm MAX
Negative travel	8.6mm MAX
Positive free position	19.0mm MAX
Negative free position	9.5mm MAX
Positive operating position	12.05±1.5mm
Negative operating position	15.5±1.0mm

G9 Series

Sealed Mini Micro Switch



■ Features

- ◆ Dust and water proof design (IP67)
- ◆ Small compact size
- ◆ Long life, high reliability
- ◆ Variety of terminals and levers
- ◆ Widely used in auto control, appliance and other industry control

■ Application

- | | |
|---|---|
| <ul style="list-style-type: none"> ◆ Car ◆ Phone ◆ Air-Conditioner ◆ Computer ◆ Humidifier ◆ Alarm ◆ Timer ◆ Mixer & Meat Grinder ◆ Welding Machine ◆ Neon Phone ◆ Fax Machine | <ul style="list-style-type: none"> ◆ Game Controller ◆ Pump ◆ Gas Detector ◆ Pencil Sharpener ◆ Money Sorter ◆ Food Processor ◆ Electric Knife ◆ Toy Car ◆ Juice Extractor ◆ Light Equipment ◆ Electric Frying Pan |
|---|---|

■ Parameters

Rating	P1	0.1A 125/250VAC 48VDC 5E4 Gold Plated Contact Optional
	05	UL: 5A 125/250VAC ENEC: 6A 125/250VAC 1E4; 3A 125/250VAC 30VDC 25T120 μ 5E4
Operating Frequency	Electrical	10~30 cycles/min
	Mechanical	120 cycles/min
Contact Resistance (Initial Value)		100m Ω Max (It depends on the wire length for the type with wire)
Insulation Resistance (at 500VDC)		100M Ω Min
Dielectric Strength		AC 1,000V RMS (50~60Hz)
Operating Temperature		-25°C~+120°C
Operating Humidity		85%RH Max.
Service Life	Electrical	10,000~100,000 cycles (Depend on P/N)
	Mechanical	500,000 cycles

G9 Series Micro Switch Ordering Instruction

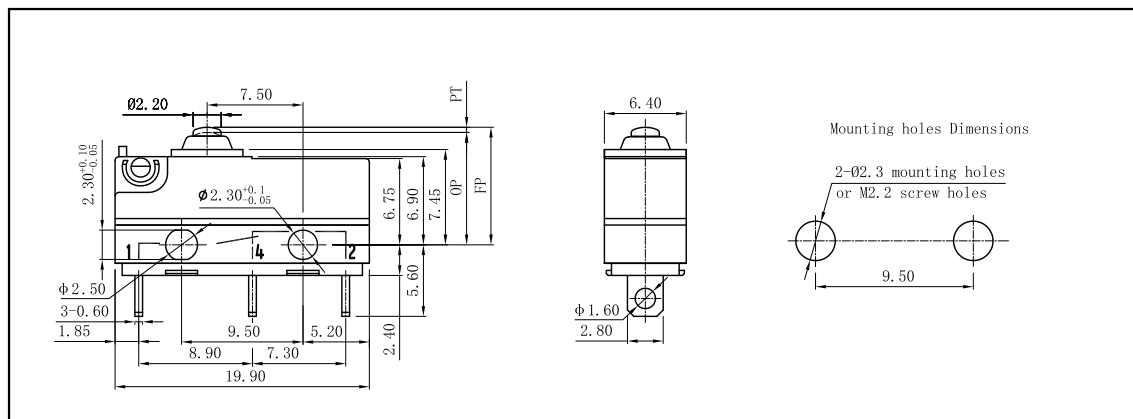
G9	05	200	S	00	D	1
Switch Type	Electrical Rating	Max Operating Force at Pin Plunger	Terminal Style	Lever Type	Switch Protection Grade	Circuitry
G9 Series Micro-Switch	P1 ENEC/CQC: 0.1A 125/250VAC 48VDC 5E4μ 25T120 UL/cUL: 0.1A 125/250VAC 48VDC Gold Plated Contact optional.	150 150gf Max. Only for G9P1	S Solder Terminals	00 Spherical Pin Plunger	D Dust proof -Ip00 No wire.	1 SPDT
		200 200gf Max.	F Straight PCB Terminals (0.6mm wide)	01 Short Straight Lever 17.7(0.70")	W Water tight-IP67 With lead wires	2 SPsT -NC
	05 ENEC/CQC: 6A 125/250VAC 1E4μ 3A 125/250VAC 30VDC 5E4 UL/cUL: 5A 125/250VAC	300 300gf Max.	D 110#Quick Connect Terminals (2.8X0.5mm)	02 Std. Straight Lever 19.7(0.78")		3 SPDT -NO
			E Wires leads to bottom (500mm)	03 Long Straight Lever 25.8(1.02")		
			F Wires leads to side(500mm) (opposite to plunger)	05 Small Simulated Roller Lever 18.9mm (0.75")		
			G Wires leads to side(500mm) (plunger side)	06 Roller Lever 15.7mm (0.62")		
			... Special Terminals	07 Small Simulated Roller Lever 19.0mm		
				12 Long Straight Lever 56.2mm (2.23")		
				... Other		

A				T001	U
Special Designator	AWG Type (For with wire type only)	AWG Number (For with wire type only)	wire Length	Custom Code	LOGO
General (Temperature grade 25T120)	20#	UL1007	Standard length:500mm	General	U Unionwell
A Gold Plated Contacts (Optional Only for G9P1)	F 22#	B UL1569		T001 Customized according to requirements, the code format is T+serial number XXX, for example: T001	... Other
D Special use for high DC rating	G 24#	C UL1430			
B Lever Can Be On Two Sides (oppositeto plunger)	H 26#	D UL1061			
C Lever Can Be OnTwo Sides (plungerside)	M 28#	E UL1330			
E Lever Can Be On Two Sides (No Lever)		H UL1332			
N With ATEXmarking		K UL1015			
... Other					

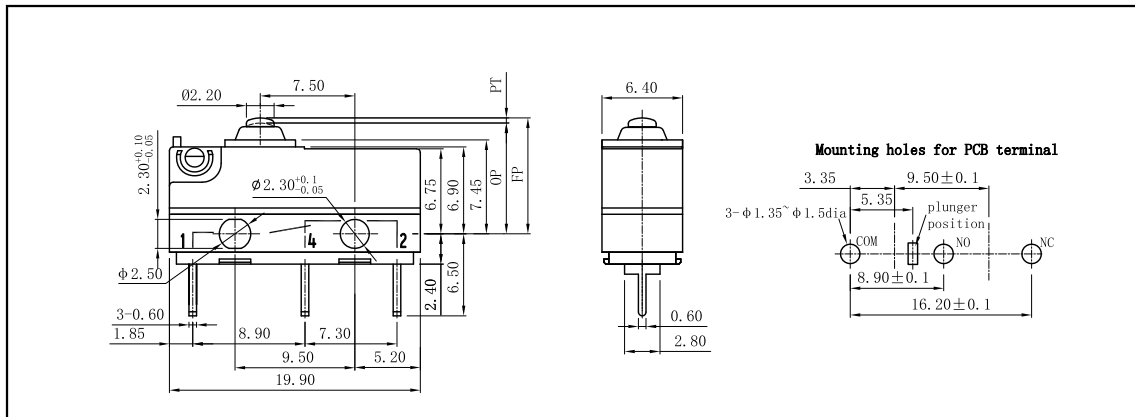
Terminal Type

S#: Solder Terminals	E#: Wires Lead to Bottom(500mm length)
P#: Straight PCB Terminals	F#Wires Lead to Side(Opposite to pin plunger side),
D#: 110# Quick Connect Terminals: 2.8x0.5mm	G#: Wire Leads to Side (Pin plunger side), length: 500mm

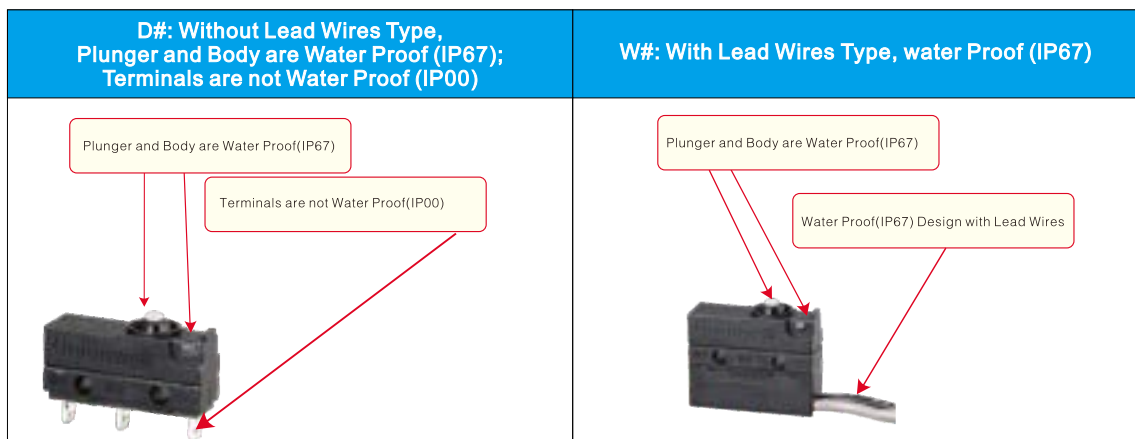
Mounting Hole Dimensions and Operating Characteristics



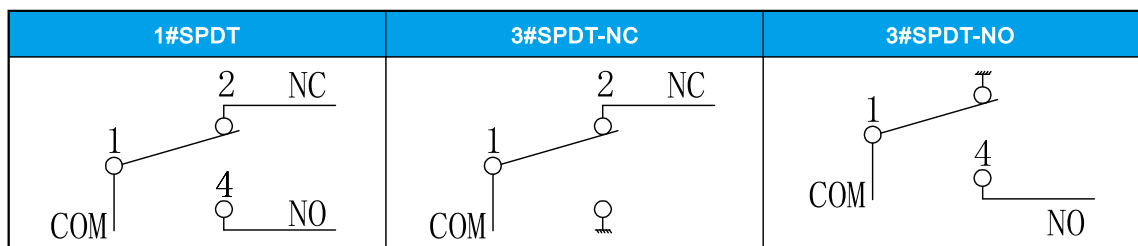
■ Mounting Hole Dimensions and Operating Characteristics

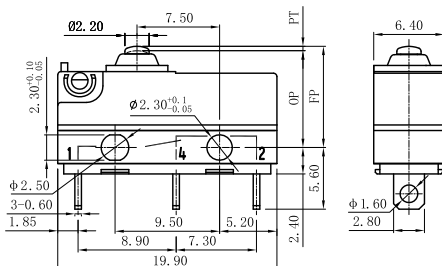


■ IP Grade

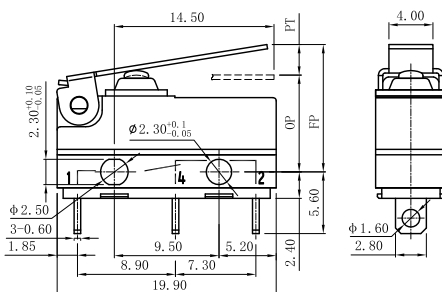


■ Circuit Configuration

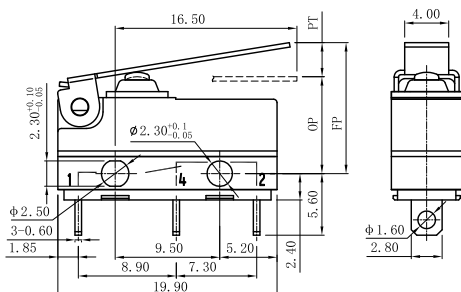




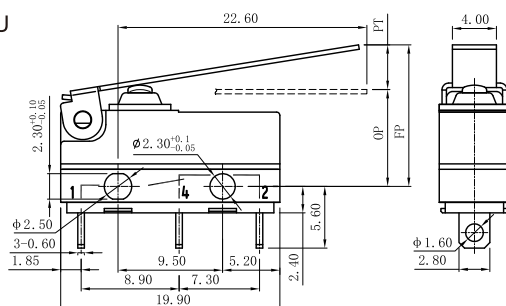
OF Max (gf)		RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
150	150	30	1.2	0.6	0.2	9.4	8.4±0.3
-200	200	50	1.2	0.6	0.2	9.4	8.4±0.3



OF Max (gf)		RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-150	50	8	4.3	0.6	0.7	12.0	8.8±1.2
-200	90	15	4.3	0.6	0.7	12.0	8.8±1.2

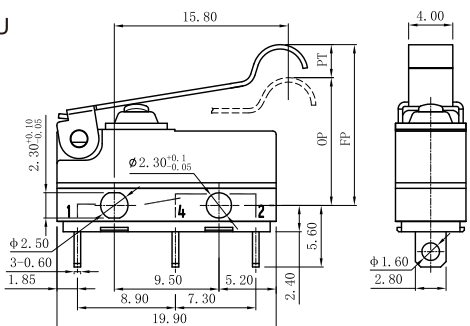


OF Max (gf)		RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-150	50	6	4.8	0.7	0.8	12.5	8.8±1.3
-200	75	13	4.8	0.7	0.8	12.5	8.8±1.3



OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)	
-150	40	5	6.3	1.0	1.0	13.5	8.8±1.8
-200	55	8	6.3	1.0	1.0	13.5	8.8±1.8

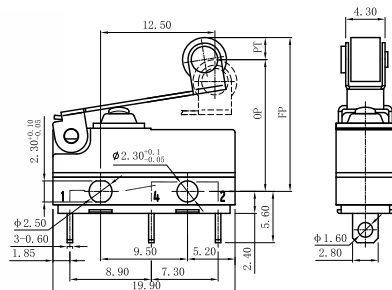
A black plastic relay with a metal arm and contact points. The relay has a rectangular body with two rows of pins on the bottom. A metal arm is attached to the top, with a contact point at the end. The word "RELAY" is embossed on the side of the plastic body.



OF Max (gf)		RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
150	50	6	4.6	0.7	0.8	15.5	11.8±1.5
-200	75	12	4.6	0.7	0.8	15.5	11.8±1.5

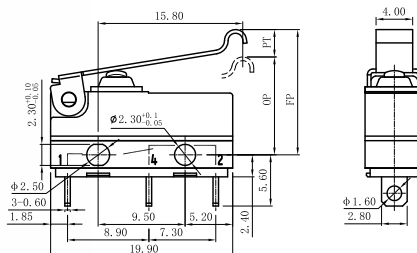
■ Dimensions and Operating Characteristics

◆ G9□□-□□□S06D1U



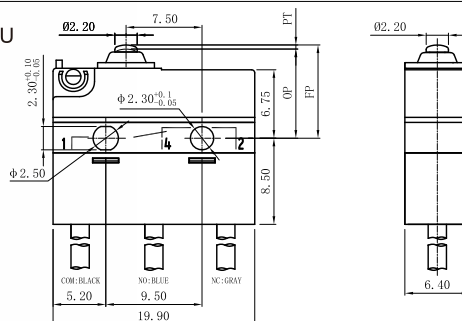
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
150	65	10	4.3	0.6	0.7	17.5
-200	85	15	4.3	0.6	0.7	17.5

◆ G9□□-□□□S07D1U



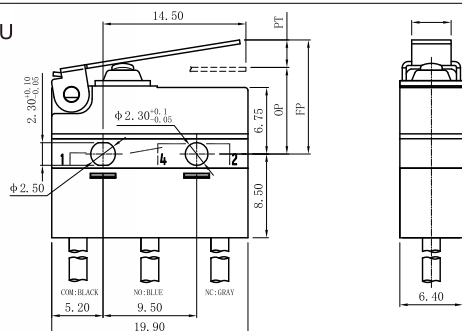
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
150	50	9	4.6	0.7	0.8	14.0
-200	75	12	4.6	0.7	0.8	14.0

◆ G9□□-□□□E00W1U



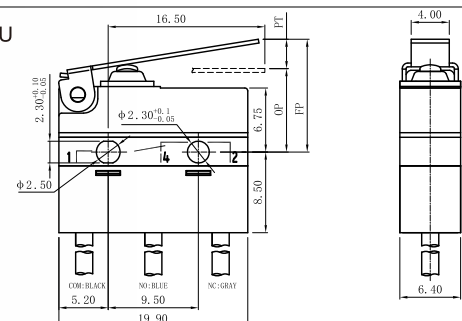
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-150	150	30	1.2	0.6	0.2	9.4
-300	300	70	1.2	0.6	0.2	9.4

◆ G9□□-□□□E01W1U



OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-150	50	8	4.3	0.6	0.7	12.0
-300	105	20	4.3	0.6	0.7	12.0

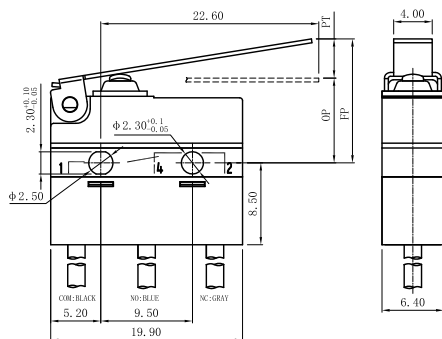
◆ G9□□-□□□E02W1U



OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-150	50	6	4.8	0.7	0.8	12.5
-300	95	18	4.8	0.7	0.8	12.5

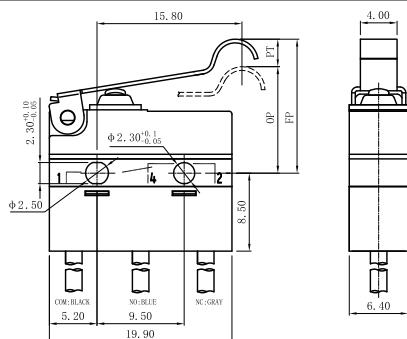
■ Dimensions and Operating Characteristics

◆ G9□□-□□□E03W1U



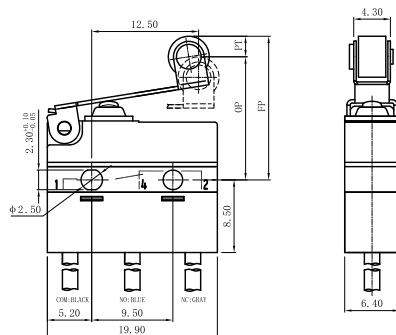
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-150	40	5	6.3	1.0	13.5	88±1.8
-300	75	13	6.3	1.0	13.5	88±1.8

◆ G9□□-□□□E05W1U



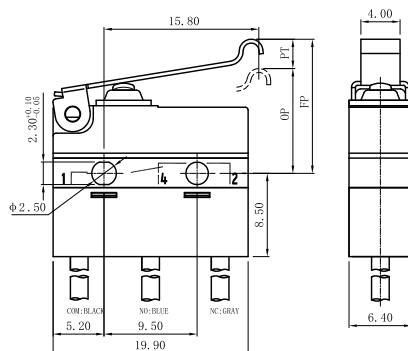
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-150	40	6	4.6	0.7	15.5	11.8±1.5
-300	95	18	4.6	0.7	15.5	11.8±1.5

◆ G9□□-□□□E06W1U



OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-150	65	10	4.3	0.6	17.5	14.5±1.1
-300	110	25	4.3	0.6	17.5	14.5±1.1

◆ G9□□-□□□E07W1U



OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-150	50	6	4.6	0.7	14.0	10.7±1.5
-300	95	18	4.6	0.7	14.0	10.7±1.5

G91 Series

Dustproof Miniature Micro Switch



■ Features

- ◆ Small compact size
- ◆ Long life, high reliability
- ◆ Variety of terminals and levers
- ◆ Widely used in home appliances and other industry control

■ Application

- ◆ Auto
- ◆ Push Rod
- ◆ Tubular Motor
- ◆ Air-Conditioner
- ◆ Alarm
- ◆ Mixer & Meat Grinder
- ◆ Fax Machine
- ◆ Money Sorter
- ◆ Toy Car

■ Parameters:

Rating	P1	ENEC/UL: 0.1A 125/250V 48VDC Gold Plated Contact Optional
	05	ENEC: 5A 125/250VAC; 5A 1/8HP, 125/250VAC
	10	ENEC: 10(1.5A) 125/250VAC; UL: 10A 1/4HP 125/250VAC
Operating Frequency	Electrical	10~30 cycles/min
	Mechanical	120 cycles/min
Contact Resistance(Initiative)		100mΩ Max
Insulation Resistance(at 500VDC)		100MΩ Min
Dielectric Strength		AC 1,000V RMS (50~60Hz)
Operating Temperature		-40°C~+125°C or -40°C~ +85°C
Operating Humidity		85%RH Max.
Service Life	Electrical	10,000~100,000 cycles (Depend on P/N)
	Mechanical	Min 1,000,000 cycles

G91 Series Micro Switch Ordering Instruction

G91	05	150	S	00		D
Switch Type	Electrical Rating	Operating Force at Pin Plunger, Max	Terminal Style	Lever Type		Shape and Post
G91 Series Micro -	P1 ENEC/CQC: 0.1A 125/250VAC 48VDC 25T25 μ 5E4 UL/cUL: 0.1A 125/250VAC 48VDC	100 100gf Max.	S Solder Connect	00 No lever Pin Plunger (Spherical surface)	08 Small Simulated Roller Lever 19.00mm	D Mounting Hole 2.30mm
	05 ENEC/CQC: 5A 125/250VAC 40T25 μ 5E4 UL/cUL: 5A 125/250VAC	150 150gf Max.	P Straight PCB Connect (0.6mm wide)	0A Cambered Surface	11 Straight Lever 35.3mm	E Φ1.8mmX2.8mm Two Sides Posts Φ1.8mmX2.8mm
	10 ENEC/CQC: 10(1.5)A 125/250VAC μ 40T125 UL/cUL: 10.1A 1/4HP 125/250VAC	250 250gf Max.	D 0.11"x0.023" Quick Connect	01 Short Straight Lever 17.7mm	12 Simulate Arc Lever 14.70mm	F Φ1.8mmX2.8mm Right Side Posts Φ1.8mmX2.8mm
		300 300gf Max.	R Right Side PCB Connect	02 Std. Straight Lever 19.9mm	15 With Bending 17.7mm Straight Lever 4.4mm	G Φ1.8mmX2.8mm Left Side Posts Φ1.8mmX2.8mm
			L Left Side PCB Connect	03 Long Straight Lever 25.8mm	20 Straight Lever 11.9mm	
			K Wide Straight PCB Connect (0.6mm wide)	04 Long Straight Lever 55.30mm	05 Small Simulated Roller Lever15.9mm	
			... Other	06 Roller Lever15.8mm	07 Small Simulated Roller Lever18.15m	

1		T001	U
Circuitry	Special Designator	Custom Code	LOGO
1 SPDT	General (Temperature grade 40T125)	General	U Unionwell
2 SPST-NC	T Temperature Grade 40T85	T001 Customized according to requirements, the code format is T+serial number XXX, for example: T001	... Other
3 SPST-NO		... Other	

■ Terminal type for G91

(Unit:mm)

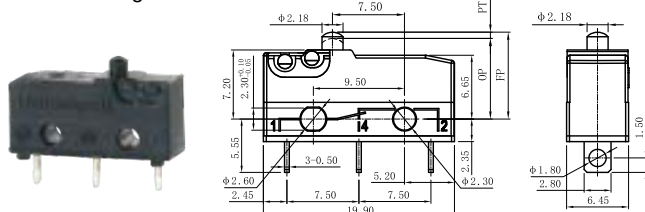
S Type Solder Terminals	P Type Straight PCB Terminals (0.6mm wide)
D Type 110# Quick Connect Terminals (2.8x0.5mm)	R Type Right Angled PCB Terminals
L Type Left Angled PCB Terminals	K Type Straight PCB Terminals (1.3mm Wide)

■ Mounting Hole and Operating Characteristics

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■ Dimensions and Operating Characteristics

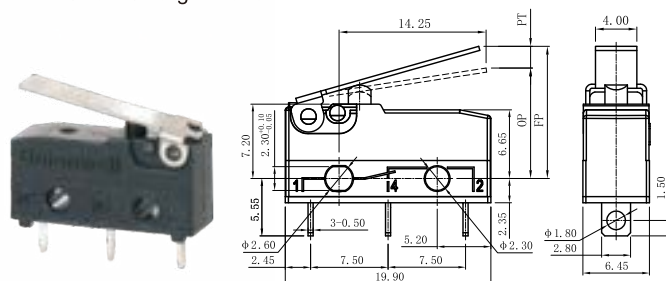
◆ Pin Plunger



Part NO.	Parameters							
	OF Max.		RF Min.		PT Max.	OT Min.	MD Max.	OP
	(N)	(gf)	(N)	(gf)	(mm)	(mm)	(mm)	(mm)
G91□□-100□00D1U	1.00	100	0.10	10	1.1	0.6	0.2	8.4±0.3
G91□□-150□00D1U	1.50	150	0.35	35	1.1	0.6	0.2	8.4±0.3
G91□□-250□00D1U	2.50	250	0.40	40	1.1	0.6	0.2	8.4±0.3
G91□□-300□00D1U	3.00	300	0.60	60	1.1	0.6	0.2	8.4±0.3

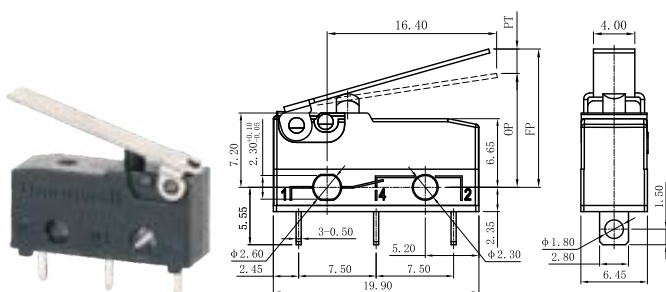
■ Dimensions and Operating Characteristics

◆ Short Straight Lever



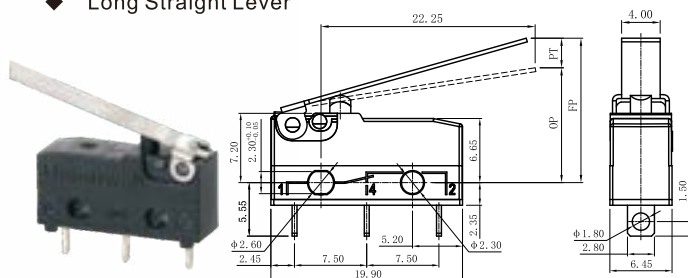
Part NO.	Parameters							
	OF Max.	RF Min.	PT Max.	OT Min.	MD Max.	OP		
	(N)	(gf)	(N)	(gf)	(mm)	(mm)		
G91□□-100□01D1U	0.45	45	0.03	3	4.3	1.2	0.8	10.70±1.3
G91□□-150□01D1U	0.60	60	0.08	8	4.3	1.2	0.8	10.70±1.3
G91□□-250□01D1U	0.85	85	0.10	10	4.3	1.2	0.8	10.70±1.3
G91□□-300□01D1U	1.20	120	0.15	15	4.3	1.2	0.8	10.70±1.3

◆ Std. Straight Lever



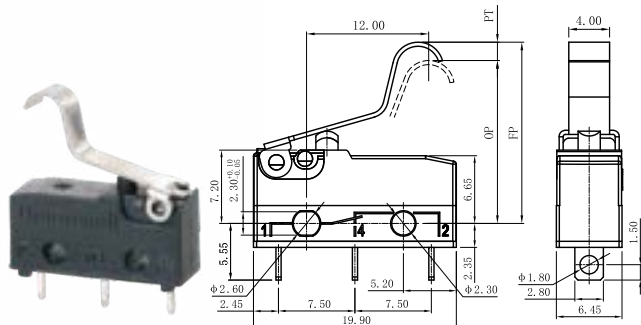
Part NO.	Parameters							
	OF Max.		RF Min.		PT Max.	OT Min.	MD Max.	OP
	(N)	(gf)	(N)	(gf)	(mm)	(mm)	(mm)	(mm)
G91□□-100□02D1U	0.40	40	0.02	2	4.8	1.2	1.2	11.1±1.5
G91□□-150□02D1U	0.50	50	0.06	6	4.8	1.2	1.2	11.1±1.5
G91□□-250□02D1U	0.75	75	0.08	8	4.8	1.2	1.2	11.1±1.5
G91□□-300□02D1U	1.10	110	0.12	12	4.8	1.2	1.2	11.1±1.5

◆ Long Straight Lever



Part NO.	Parameters						
	OF Max.	RF Min.	PT Max.	OT Min.	MD Max.	OP	
	(N) (gf)	(N) (gf)	(mm)	(mm)	(mm)	(mm)	
G91□□-100□03D1U	0.35	35	0.01	1	6.3	1.5	12.0±1.8
G91□□-150□03D1U	0.40	40	0.04	4	6.3	1.5	12.0±1.8
G91□□-250□03D1U	0.65	65	0.06	6	6.3	1.5	12.0±1.8
G91□□-300□03D1U	0.90	90	0.10	10	6.3	1.5	12.0±1.8

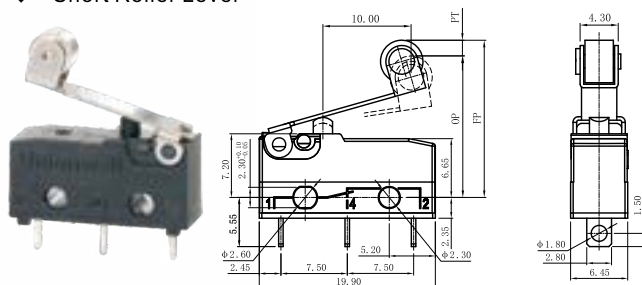
◆ Short Std. Simulated Roller Lever



Part NO.	Parameters							
	OF Max.		RF Min.		PT Max.	OT Min.	MD Max.	OP
	(N)	(gf)	(N)	(gf)	(mm)	(mm)	(mm)	(mm)
G91□□-100□05D1U	0.50	50	0.03	3	4.3	1.0	0.7	16.0±1.3
G91□□-150□05D1U	0.65	65	0.08	8	4.3	1.0	0.7	16.0±1.3
G91□□-250□05D1U	0.95	95	0.12	12	4.3	1.0	0.7	16.0±1.3
G91□□-300□05D1U	1.30	130	0.16	16	4.3	1.0	0.7	16.0±1.3

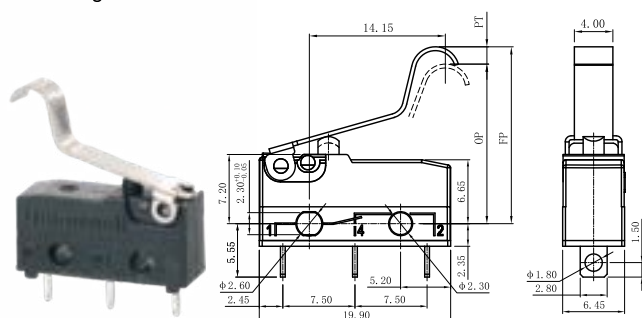
■ Dimensions and Operating Characteristics

◆ Short Roller Lever



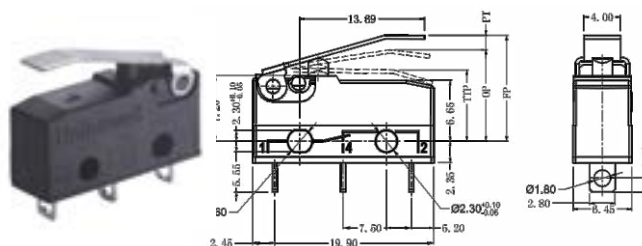
Part NO.	Parameters							
	OF		RF		PT Max. (mm)	OT Min. (mm)	MD Max. (mm)	OP (mm)
	Max. (N)	(gf)	Min. (N)	(gf)				
G91□□-100□06D1U	0.50	50	0.03	3	4.3	1.0	0.7	15.8±1.3
G91□□-150□06D1U	0.65	65	0.08	8	4.3	1.0	0.7	15.8±1.3
G91□□-250□06D1U	0.95	95	0.12	12	4.3	1.0	0.7	15.8±1.3
G91□□-300□06D1U	1.30	130	0.16	16	4.3	1.0	0.7	15.8±1.3

◆ Long Std. Simulated Roller Lever



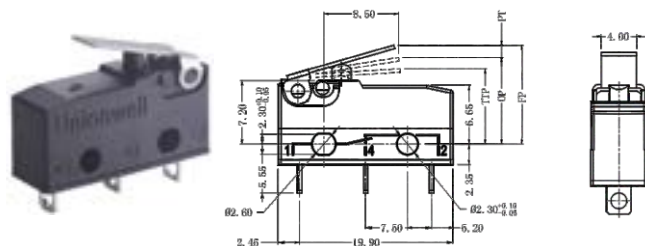
Part NO.	Parameters							
	OF		RF		PT	OT	MD	OP
	Max. (N)	(gf)	Min. (N)	(gf)	Max. (mm)	Min. (mm)	Max. (mm)	(mm)
G91□□-100□07D1U	0.45	45	0.03	3	4.8	1.3	1.0	16.4±1.5
G91□□-150□07D1U	0.60	60	0.08	8	4.8	1.3	1.0	16.4±1.5
G91□□-250□07D1U	0.85	85	0.11	11	4.8	1.3	1.0	16.4±1.5
G91□□-300□07D1U	1.20	120	0.15	15	4.8	1.3	1.0	16.4±1.5

◆ Bent Lever



Part NO.	Parameters							
	OF		RF		PT	OT	MD	OP
	Max.	(N)	Min.	(N)	Max.	Min.	Max.	(mm)
	(gf)		(gf)		(mm)	(mm)	(mm)	
G91□□-100□15D1U	0.6	60	0.03	30	3.4	1.3	0.8	9.5±0.80
G91□□-150□15D1U	0.9	90	0.05	50	3.4	1.3	0.8	9.5±0.80
G91□□-250□15D1U	1.5	150	0.08	80	3.4	1.3	0.8	9.5±0.80
G91□□-300□15D1U	1.8	180	0.09	90	3.4	1.3	0.8	9.5±0.80

◆ Short Straight Lever



Part NO.	Parameters							
	OF	RF	PT	OT	MD	OP		
	Max. (N) (gf)	Min. (N) (gf)	Max. (mm)	Min. (mm)	Max. (mm)	(mm)		
G91□□-100□20D1U	0.6	60	0.05	20	2.9	0.8	0.5	9.8±0.90
G91□□-150□20D1U	0.9	90	0.035	35	2.9	0.8	0.5	9.8±0.90
G91□□-250□20D1U	1.5	150	0.06	60	2.9	0.8	0.5	9.8±0.90
G91□□-300□20D1U	1.8	180	0.07	70	2.9	0.8	0.5	9.8±0.90

G9A/G9B

Waterproof and Dustproof Miniature Micro Switch



■ Features

- ◆ G9A dust and water proof (IP67) / G9B dust proof (IP40)
- ◆ Small compact size
- ◆ Long life and high reliability
- ◆ Variety of terminals
- ◆ Variety of levers optional
- ◆ Long over-travel of 2.20mm minimum
- ◆ Widely used in auto control, home appliances and other industry control

■ Application

- ◆ Auto electronics
- ◆ Home appliances
- ◆ Apparatus and instruments

■ Parameters:

Rating	P1	0.1A 125/250VAC, 0.1A 30VDC
	05	5(2)A 125/250VAC, 5A 30VDC
Operating Frequency	Electrical	10~30 cycles/min
	Mechanical	120 cycles/min
Contact Resistance (Initiative)	With terminals type	≤100mΩ
	With wire type	≤200mΩ (500mm wires length)
Insulation Resistance (at 500VDC)		≥100MΩ
Volatge Resistance	Between terminals	AC 500V, 50/60Hz, 1min
	Between terminals and uncharged metal parts	AC 1,000V, 50/60Hz, 1min
Service Life	Electrical	50,000 cycles
	Mechanical	200,000 cycles (IP67) 200,000 cycles (IP40)
Operating Temperature		-40~+85°C
Operating Humidity		95% RH Max.

G9A/G9B Series Micro Switch Ordering Instruction

G9A	05	200	S	01	A	F	300	T001	U
Switch Type	Electrical Rating	Max Operating Force at Pin Plunger	Terminal Type	Lever Type	Circuitry	Waterproof Code	Wires Length (AWG Number UL1007 AWG Type 20#)	Custom Code	LOGO
G9A IP67 G9B IP40 Series - Micro Switch	ENEC/CQC: 0.1A 125/250VAC 30VDC P1 40T85 μ 5E4 UL/cUL: 0.1A 125/250VAC 30VDC	200 200gf Max	S Solder terminals	00 No Lever Pin Plunger	A SPDT	Low pressure injection molding (only apply to wired switches)	500mm length standard lead wires	General	Unionwell
	ENEC/CQC: 5(2)A 125/250VAC 30VDC 05 40T85 μ 5E4 UL/cUL: 5A 125/250VAC 30VDC	... Other	P Straight PCB terminals	01 01 Lever	B SPST-NC	Sealed housing with glue injection (only apply to wired switches)	300mm length	Customized according to requirements the code format is T+serial number XXX for example:T001	Other
	Other		E Molded lead wires downwards	... Other	C SPST-NO	Other	Other	Other	
			F Molded lead Wires lead to right Side (Opposite to pin plunger side)						
			G Molded lead wires lead to left side (Pin plunger side)						
			... Special Terminals						

Terminal Type

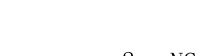
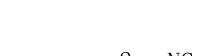
◆ Terminal Thickness: 0.5mm

P# PCB Terminals	S# Solder Terminals
F# Wires Lead to Right	G# Wires Lead to Left
E# Wires Lead to Bottom	

■ Mounting Hole and Operating Characteristics

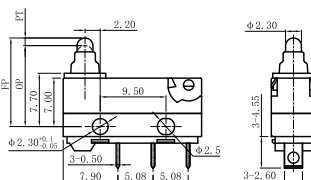
Mounting Hole Dimension	Mounting Hole Dimension of PCB Terminals
 2-φ2.3mounting holes or M2.2 screw holes 9.50 ± 0.15	 3-φ1.35~1.5dia 2.60 9.50 ± 0.15 2.55 5.08 5.08

■ Circuitry

	SPDT	SPST-NC	SPST-NO
			

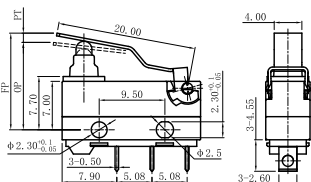
■ Dimensions and Operating Characteristics

◆ G9A□□-□□□S00AU



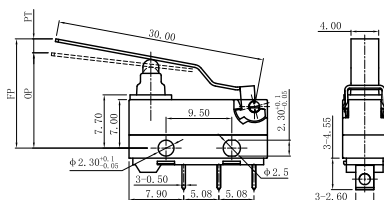
OF Max. (gf)		RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-200	200	20	1.7	2.2	0.9	13.0	11.7 ± 0.4

◆ G9A□□-□□□S01AU



OF Max. (gf)		RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-200	200	20	2.9	2.2	1.0	14.5	12.6 ± 0.8

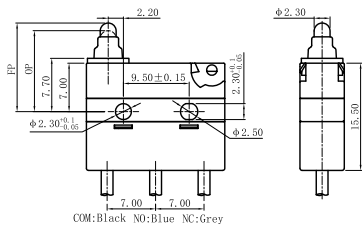
◆ G9A□□-□□□S02AU



OF Max. (gf)		RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-200	150	20	4.0	2.9	1.3	16.5	13.5 ± 1.0

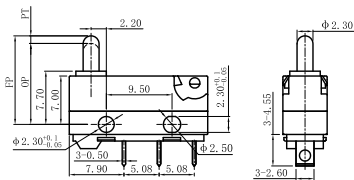
Dimensions and Operating Characteristics

G9A□□-□□□E00AU



OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-200	200	20	1.7	2.2	0.9	13
11.7 ± 0.4						

G9B□□-□□□S00AU



OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-200	200	20	1.7	2.2	0.9	13.0
11.7 ± 0.4						

G10 Series

Subminiature Micro Switch



■ Features

- ◆ Small compact size
- ◆ Long life and high reliability
- ◆ Variety of terminals
- ◆ Variety of levers optional
- ◆ Widely used in home appliances and industrial control

■ Application

- ◆ Walkie Talkie
- ◆ Mouse
- ◆ Electric Knife
- ◆ Electric Stapler
- ◆ Telephone
- ◆ Calculator
- ◆ Mixer & Chopper
- ◆ Electric Pan
- ◆ Battery Charger
- ◆ Video Cassette Rewinder
- ◆ Cordless Phone
- ◆ Alarm
- ◆ Tester Machine
- ◆ Home Appliances

■ Parameters:

Rating	P1	ENEC/CQC: 0.1A 48VDC/125VAC
		UL/cUL: 0.1A 48VDC/125VAC
	03	ENEC/CQC: 1A/3A 125VAC
		UL/cUL: 1A/3A 125VAC
Operating Frequency	Electrical	10~30 cycles/min
	Mechanical	120 cycles/min
Contact Resistance (Initial Value)		100mΩ Max. (Depends on P/N)
Insulation Resistance (at 500 VDC)		100MΩ Min.
Dielectric Strength	Between terminals	600VAC 50~60Hz for 1 Min.
	Between terminals and housing	600VAC 50~60Hz for 1 Min.
Operating Temperature		-40°C~+85°C
Operating Humidity		85%RH Max.
Service Life	Electrical	10,000/50,000 cycles (Depends on P/N)
	Mechanical	1,000,000 cycles
Unit Net Weight		About 0.5g (Straight PCB type without lever)

G10 Series Micro Switch Ordering Instruction

G10	P1	150	S	00	A	XX	T001	U
Switch Type	Electrical Rating	Max Operating Force at Pin Plunger	Terminal Type	Lever Type	Circuitry	Special Designator	Custom Code	LOGO
G10 Series Micro Switch	P1 ENEC/CQC: 0.1A 48VDC 125VAC 40T85 μ 5E4 UL/cUL: 0.1A 48VDC/125VAC	090 90gf Max	S Solder Terminals	00 No Lever Pin Plunger	A SPDT	General	General	U Unionwell
	03 ENEC/CQC: 1A/3A 125VAC 40T85 μ 5E4 UL/cUL: 1A/3A 125VAC	150 150gf Max	P Straight PCB Terminals	01 10.55mm Short Straight Lever 0.41"			T0 01 Customized according to requirements, the code format is T+serial number XXX, for example: T001	...
			Q Snap in PCB Terminals	02 13.55mm Std. Straight Lever 0.53"		A Gold Plated	...	Other
			M Short Solder Terminals	03 18.0mm Long Straight Lever 0.71"		00 Non-Halogen Material		
			R Right Angled PCB Terminals	05 11.8mm Simulated Roller Lever 0.46"				
			L Left Angled PCB Terminals	07 14.9mm Small Simulated Roller Lever 0.58"				
			K Long Solder Terminals	09 30.0mm Long Straight Lever				
			... Special Terminals	10 12.80mm Roller Lever				
				... Special Lever				

Terminal Type

◆ Terminal thickness: 0.6mm

S Type Straight Solder Terminals	P Type Straight PCB Terminals	Q Type PCB snap-in (clip) Terminals
M Type Short Solder Terminals	R Type Right Angled PCB Terminals	L Type Left Angled PCB Terminals
K Type Long Solder Terminals	Circuit Configuration	

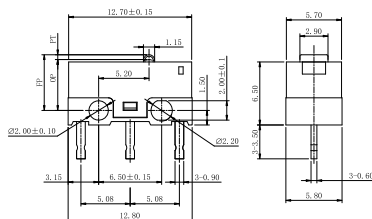
Mounting Hole Dimensions

(Unit:mm)

Mounting Hole Dimensions	Mounting Hole Dimensions of PCB Terminals
Mounting Hole Dimensions of Right Angled PCB Terminals	Mounting Hole Dimensions of Left Angled PCB Terminals

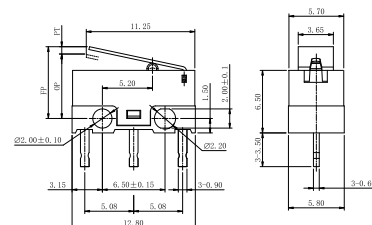
Overall Dimensions and Operating Characteristics

◆ G10□□-□P00AU



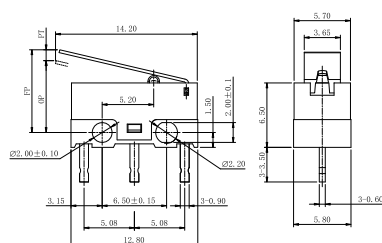
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-090	90	15	0.65	0.2	0.2	6.0
-150	150	20				5.5±0.3

◆ G10□□-□P01AU



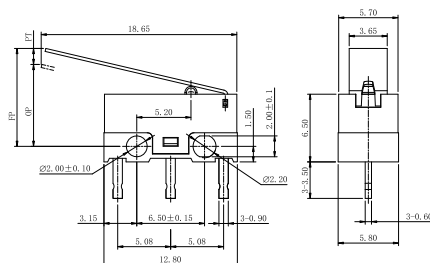
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-090	40	6	2.5	0.3	0.6	8.0
-150	60	10				6.25±0.8

◆ G10□□-□P02AU



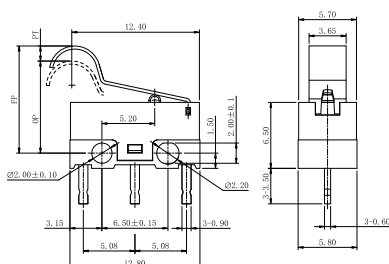
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-090	30	4	3.4	0.3	0.8	8.8
-150	50	8				6.35±0.9

◆ G10□□-□P03AU



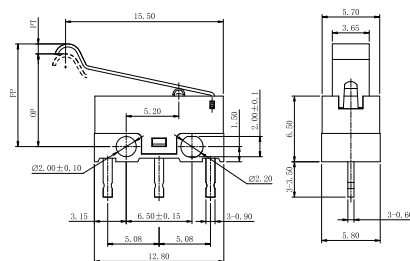
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-090	40	3	4.0	0.5	1.0	10.0
-150	50	5				7.5±1.5

◆ G10□□-□P05AU



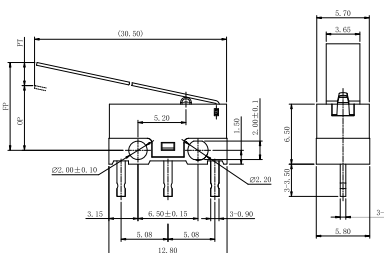
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-090	40	5	3.0	0.3	0.7	12.0
-150	50	8				9.5±0.8

◆ G10□□-□P07AU



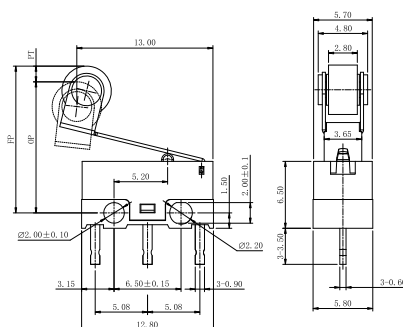
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-090	30	5	3.5	0.3	1.1	11.5
-150	50	8				

◆ G10□□-□P09AU



OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-090	15	2	6.9	0.4	2.5	14.0
-150	23	3				

◆ G10□□-□P10AU



OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-090	35	3	5.5	0.3	0.8	16.5
-150	50	6				

G10A Series

Subminiature Micro Switch (Spring-Loaded Structure)



■ Features

- ◆ Small compact size
- ◆ Long life and high reliability
- ◆ Variety of terminals
- ◆ Variety of levers optional
- ◆ Widely used in home appliances and industry control

■ Application

- ◆ Mouse
- ◆ Electric Knife
- ◆ Electric Stapler
- ◆ Telephone
- ◆ Calculator
- ◆ Mixer & Chopper
- ◆ Battery Charger
- ◆ Cordless Phone
- ◆ Alarm
- ◆ Cleaner
- ◆ Home Appliances

■ Operating Parameters

Rating	P1	0.1A 125/250VAC 30VDC
	03	3A 125/250VAC 30VDC
Operating Frequency	Electrical	10~30 cycles/min
	Mechanical	120 cycles/min
Contact Resistance (Initial Value)		100mΩ Max.
Insulation Resistance (at 500 VDC)		100MΩ Min.
Dielectric Strength	Between terminals	600VAC 50~60Hz for 1 Min.
	Between terminals and housing	1,000VAC 50~60Hz for 1 Min.
Operating Temperature		-40°C ~ +85°C
Operating Humidity		85% RH Max.
Service Life	Electrical	10,000 cycles
	Mechanical	1,000,000 cycles

G10A Series Micro Switch Ordering Instruction

G10A	03	150	S	01	A	T001	U
Switch Type	Electrical Rating	Max Operating Force at Pin Plunger	Terminal Type	Lever Type	Circuitry	Custom Code	LOGO
Switch Type	ENEC/CQC: 0.1A 125/250VAC P1 40T85 μ 1E4 UL/cUL: 0.1A 30VDC 40T85 μ 1E4	90 90gf Max.	S Standard Solder Terminals	00 No Lever Pin Plunger	A SPDT	General	U Unionwell
	ENEC/CQC: 3A 125/250VAC 03 40T85 μ 1E4 UL/cUL: 3A 30VDC 40T85 μ 1E4	150 150gf Max.	P Standard Straight PCB Terminals	01 10.55mm Short straight lever	B SPST-NC	Customized according to requirements, the code format is T+serial number XXX, for example: T001	...
			Q Snap-in PCB Terminals	02 13.55mm Standard straight lever	C SPST-NO	Other	
			M Short Solder Terminals				
			R Right Angled PCB Terminals	03 18.00mm Long straight lever			
			L Left Angled PCB Terminals				
			K Long Solder Terminals	05 11.80mm Simulated roller lever			
			... Special Terminals	07 14.90mm Small simulated roller lever			
				09 30.00mm Long straight lever			
				10 12.80mm Roller lever			

Terminal Type

◆ Terminal thickness: 0.4mm

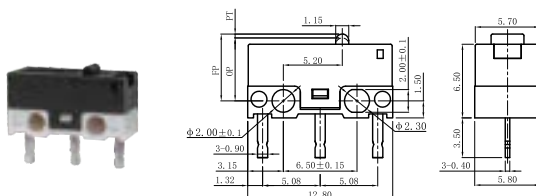
S Type Straight Solder Terminals	P Type Straight PCB Terminals	Q Type PCB snap-in(clip) Terminals
M Type Short Solder Terminals	R Type Right Angled PCB Terminals	L Type Left Angled PCB Terminals
K Type Long Solder Terminals	■ Circuit Configuration	

Mounting Hole Dimension

Mounting Hole Dimension	Mounting Hole Dimension of PCB Terminals
Mounting Hole Dimension of Right Angled PCB Terminals	Mounting Hole Dimension of Left Angled PCB Terminals

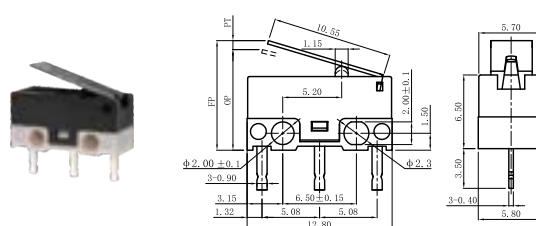
Overall Dimensions and Operating Characteristics

◆ G10A□□-□P00AU



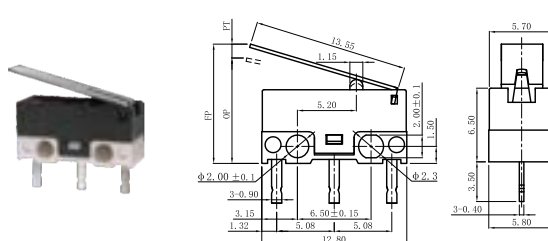
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)	
-150	150	20	0.65	0.2	0.2	6.0	5.5±0.3

◆ G10A□□-□P01AU



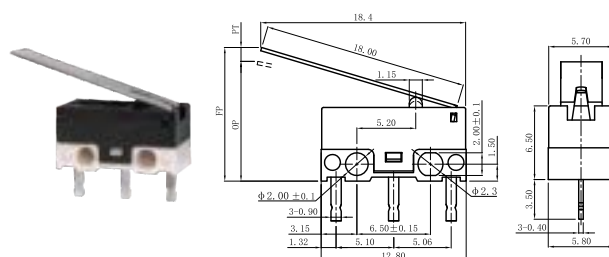
OF Max. (gf)		RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-150	60	10	2.5	0.3	0.6	9.0	6.65 ± 0.9

◆ G10A□□-□P02AU



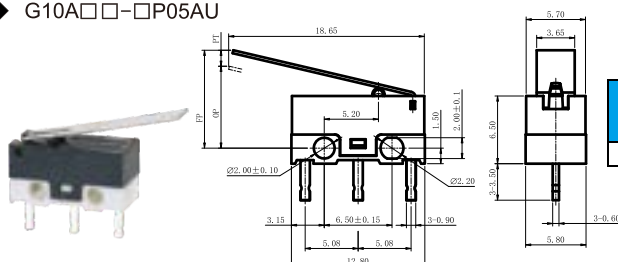
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-150 50	8	3.4	0.3	0.8	9.5	7.0 ± 1.2

◆ G10A□□-□P03AU



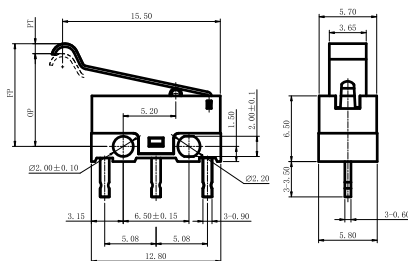
OF Max. (gf)		RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-150	50	5.0	4.0	0.5	1.0	10.0	7.5 ± 1.5

◆ G10A□□-□P05AU



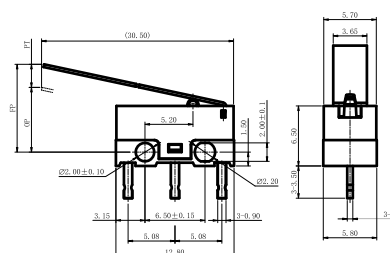
OF Max. (gf)		RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-150	50	5.0	4.0	0.5	1.0	10.0	7.5 ± 1.5

◆ G10A□□-□P07AU



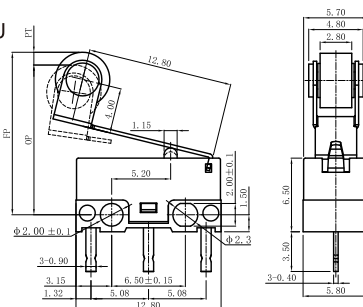
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-150	50	8	3.5	0.3	1.1	11.5
						8.2±1.0

◆ G10A□□-□P09AU



OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-150	23	3	6.9	0.4	2.5	14.0
						8.2±2.1

◆ G10A□□-□P10AU



OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-150	50	6	5.5	0.3	0.8	16.5
						13.0±1.5

G10B Series

G10B-Seal Type Subminiature Micro Switch



■ Features

- ◆ IP67 waterproof and dustproof design
- ◆ Small compact size
- ◆ Long life and high reliability
- ◆ Variety of levers optional
- ◆ Widely used in automotive electronics, home appliances and industrial control etc.

■ Application

- ◆ Car
- ◆ Air-conditioner
- ◆ Communication
- ◆ Home Appliance
- ◆ Charging Pile
- ◆ Charging Gun

■ Parameters:

Rating	P1	0.1A 125/250VAC 30VDC
	03	3A 125/250VAC 30VDC
Operating Frequency	Electrical	10~30 cycles/min
	Mechanical	120 cycles/min
Contact Resistance (Initial Value)		100mΩ Max.
Insulation Resistance (at 500 VDC)		100MΩ Min.
Dielectric Strength	Between terminals	600VAC 50~60Hz for 1 Min.
	Between terminals and housing	1,000VAC 50~60Hz for 1 Min.
Operating Temperature		-40°C ~ +85°C
Operating Humidity		85% RH Max.
Service Life	Electrical	10,000 cycles
	Mechanical	1,000,000 cycles

G10B Series Micro Switch Ordering Instruction

G10B	03	150	S	01	A	300	T001	U
Switch Type	Electrical Rating	Max Operating Force at Pin Plunger	Terminal Type	Lever Type	Circuitry	Wires length (AWG Number UL1007 AWG Type 24#)	Custom Code	LOGO
G10B Series Micro-Switch	ENEC/CQC: 0.1A 125/250VAC 30VDC UL/cUL: 40T85 μ 1E4 P1	150 150gf Max.	S Solder terminals P Straight PCB terminals	00 No Lever Pin Plunger	A SPDT	Length standard wires 300mm	General	U Unionwell
	ENEC/CQC: 3A 125/250VAC 30VDC UL/cUL: 0.1A 125/250VAC 30VDC	... Other	E Wires come out from the bottom G Molded lead Wires leads to left side (pin plunger side) F Molded lead Wires leads to right side (opposite to pin plunger side)	02# Straight 03# Straight ... Other	B SPST-NC C SPST-NO	... Other	Customized according to requirements, the code format is T+serial number XXX, for example: T001	... Other
			M M3 type waterproof housing bottom outlet wires MF M3 type waterproof housing Wires on right side (opposite to the plunger) H M2 flange waterproof housing with 4 holes bottom outlet wires HG M2 flange waterproof housing with 4 holes wires on left side (plunger side) HF M2 flange waterproof housing with 4 holes wires on right side (plunger side) R Right side PCB terminals L Left side PCB terminals					

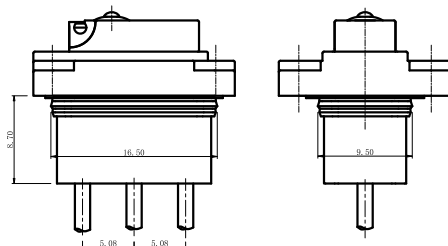
Terminal Type

◆ Terminal thickness: 0.4mm

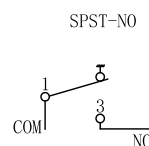
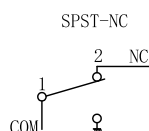
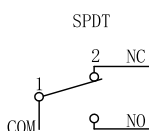
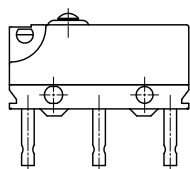
S Type Straight Solder Terminals	P Type Straight PCB Terminals
L Type PCB Left Terminals	R Type PCB Right Terminals
Wires Leads to Right Side (Opposite to Pin plunger) Length: 300mm	Wires Leads to Left Side (Pin Plunger Side) Length: 300mm
Wires Leads to Bottom (300mm Length)	M3 Type Housing, Wires Lead to Bottom

Terminal Type

H Type M2 Flange Housing, Wires Lead to Bottom

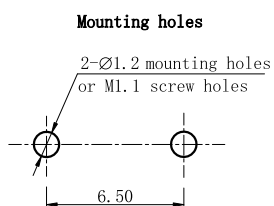


Circuit

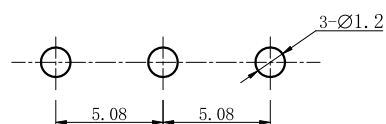


Mounting Hole Dimensions

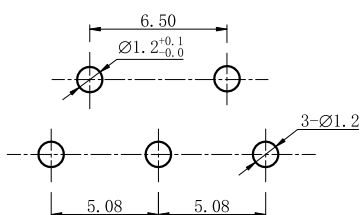
Mounting Hole Dimensions



Mounting Hole Dimensions of PCB Terminals

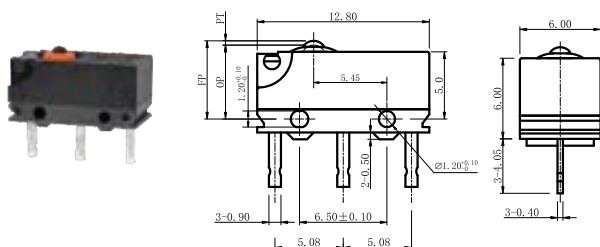


Left and Right PCB Terminal Mounting Hole Dimensions



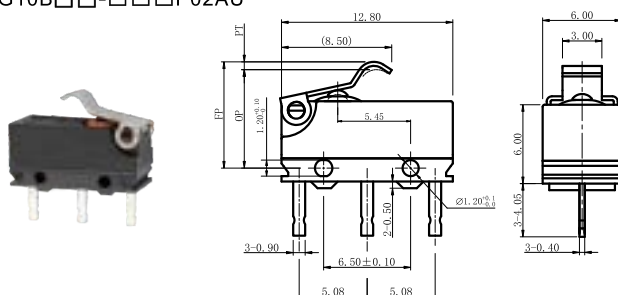
■ Dimensions and Operating Characteristics

◆ G10B□□-□□□P00AU



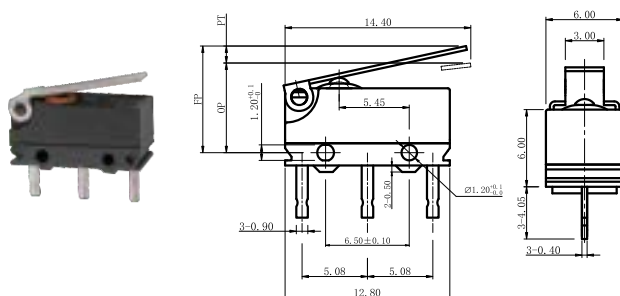
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-150	150	20	0.65	0.20	0.20	6.10
5.50 ± 0.30						

◆ G10B□□-□□□P02AU



OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-150	90	15	1.50	0.30	0.70	8.70
7.30 ± 0.60						

◆ G10B□□-□□□P03AU



OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-150	50	8.00	3.40	0.30	0.80	9.50
6.80 ± 1.00						

G10B-A001 Series

G10B-A001-M4 Mounting Hole Waterproof Subminiature Micro Switch



■ Features

- ◆ Designed for water and dust tight (IP67)
- ◆ Snap action contact structure
- ◆ Single-point mounting with M4 screw
- ◆ Widely used in automotive electronics, appliance and industrial control

■ Application

- ◆ Car
- ◆ Charging Station
- ◆ Charging Gun
- ◆ Air-Conditioner
- ◆ Communication

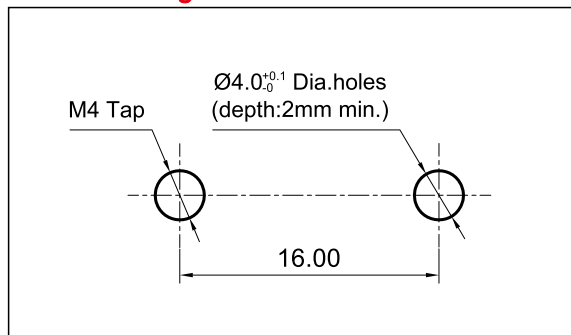
■ Parameters

Rating		1A/30VDC
Operating Frequency	Electrical	10~30 cycles/min
	Mechanical	120 cycles/min
Contact Resistance (Initial Value)		100mΩ Max.
Insulation Resistance (at 500 VDC)		100MΩ Min.
Dielectric Strength		500VAC 50~60Hz for 1 Min
Operating Temperature		-40°C ~ +85°C
Operating Humidity		85% RH Max
Service Life	Electrical	10,000 cycles
	Mechanical	300,000 cycles

G10B-A001 Series Micro Switch Ordering Instruction

G10B	A	U	0	1	150	T001
Switch Type	Lever Type	LOGO	Wires Type	Circuitry	Wire Length	Custom Code
G10B-A001 Series MicroSwitch	A 08# Lever	U Unionwell	0 UL1007-18AWG	1 SPDT	150 150mm	General
	C 11# Lever	... Other	1 UL1007-22AWG	2 SPST-NC	... Other	Customized according to requirements, the code forma is T+serial number XXX, for example: T001
			2 AVSS 0.5mm ²	3 SPST-NO		
			3 UL1007-20AWG			Other
			... Other			...

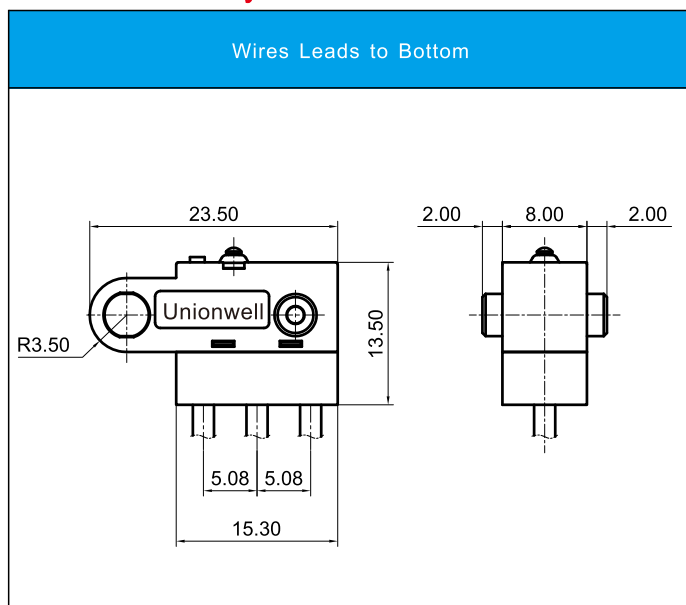
■ Mounting Hole Dimensions



■ Circuit Configuration

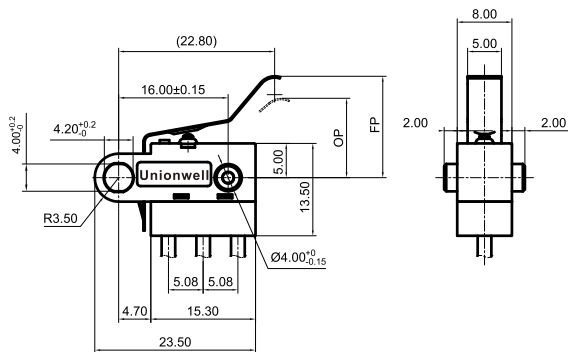
SPDT	SPST-NC	SPST-NO

■ Lead Wire Style



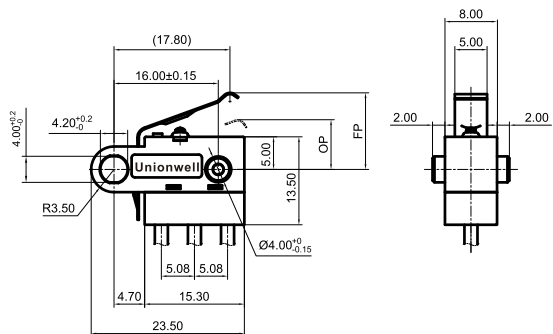
Overall Dimensions and Operating Characteristics

G10B-A□□1U



OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
250	30	6.00	1.00	1.20	16.50	11.50±2.00

G10B-C□□1U



OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
300	60	6.00	0.30	1.00	12.50	6.80±1.00

G11 Series

Waterproof and Dustproof DPDT Limit Micro Switch



■ Features

- ◆ Small Size and compact structure
- ◆ Long life and high reliability
- ◆ Dust and water proof design(IP67)
- ◆ DPDT double-break switching mechanism
- ◆ Variety of mounting method and operation type
- ◆ Widely used in industry control, and more.

■ Application

- ◆ Electrical Actuators
- ◆ Valve Control
- ◆ Power Station Control
- ◆ Industrial Auto Control
- ◆ Nuclear Power Facilities
- ◆ Automobile Production Line

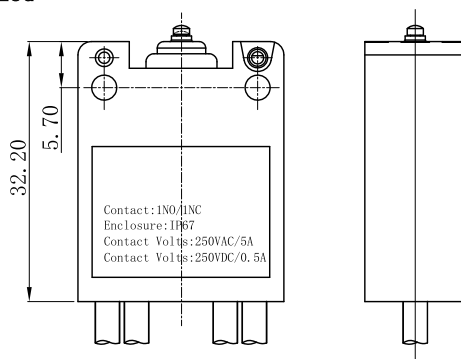
■ Parameters:

Rating	05	0.5A 250VDC
		0.5A/5A 250VAC
Operating Frequency	Electrical	10~30 cycles/min
	Mechanical	10~30 cycles/min
Contact Resistance (Initial Value)		30~100mΩ Max (Depends on P/N, wire resistance excluded)
Insulation Resistance (at 500 VDC)		100MΩ Min
Dielectric Strength		AC750V RMS (50-60Hz)
Operating Temperature		-25°C~+85°C
Operating Humidity		85% RH Max
Service Life	Electrical	50,000 cycles (Depends on P/N)
	Mechanical	2,000,000 cycles
Unit Net Weight		Approx. 110g (8 Wires)

■ With Wire Type

- ◆ Wire length could be customized

Wire leads to bottom

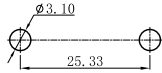
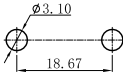
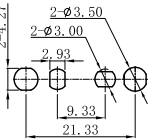


G11 Series Micro Switch Ordering Instruction

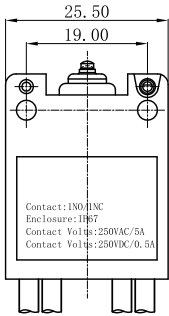
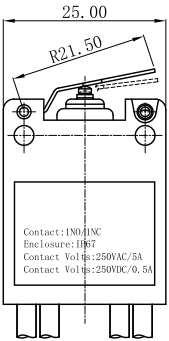
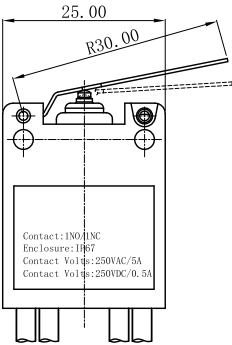
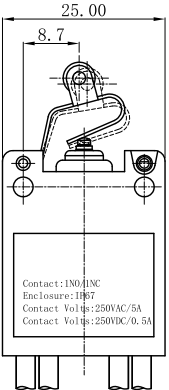
G11	05	350	00	D	01	E1	T001	U
Switch Type	Electrical Rating	Max Operating Force at Pin Plunger	Lever Type	Circuitry	Mounting Hole Dimensions	Wire Type	Custom Code	LOGO
G11 Series Micro Switch	05 0.5A 250VDC 0.5A/5A 250VAC 25T85 μ 5E4 (Only for switches with 4 or 8 wires)	350 Max (Only for switches with 4 wires 1NO/1NC)	00 No lever pin plunger	D DPDT	01 5.7mm* Φ 3.1mm* 19mm	E1 Wire length 780mm UL1015 AWG18 NO black NC brown	General	U Unionwell
			01 Straight lever 10mm wide* 24mm long	E DPDT-NO	02 6.7mm* Φ 3.1mm* 14mm (Only for switches with 4 wires 1NO/1NC)	F1 Wires leads to the bottom Wire length 610mm 60227 IEC 06 (RV) (NONC)	Customized according to requirements, the code format is T+serial number XXX, for example: T001	...
		450 Max (Only for switches with 8 wires 2NO/2NC)	02 Straight lever 7mm wide* 34mm long	F DPDT-NC	03 5.7mm* Φ 3.5mm* 16mm Φ 3.0mm* 7mm (Only for switches with 4 wires 1NO/1NC)	G1 Wires leads to the bottom Wire length 4000mm UL1015 18AWG (wire color: red/blue black/brown, add PVC tube)	Other	Other
		...	03 Roller lever		...	...	...	
			...		Other	Others (wire material could be customized)		

■ Mounting Hole Dimensions

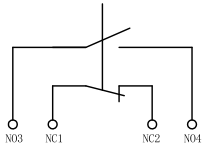
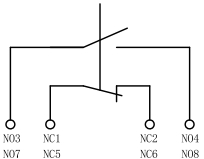
(Unit:mm)

01#Mounting Hole 5.7mm* Φ3.1mm*19mm	02#Mounting Hole 6.7mm* Φ3.1mm*14mm	03#Mounting Hole 5.7mm* Φ3.5mm*16mm__Φ3.0mm*7mm
		

■ Lever Type

00#: Without lever	01#: Straight lever (10mm width*24mm length)
	
02#: Straight lever (7mm width*32mm length)	03#: Roller lever
	

■ Circuit Configuration

DPDT 1NO+1NC	DPDT 2NO+2NC
	

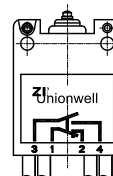
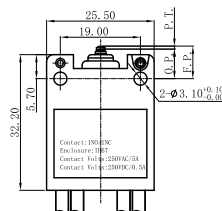


■ Dimensions and Operating Characteristics

◆ G1105-35000D01□U



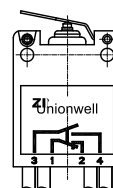
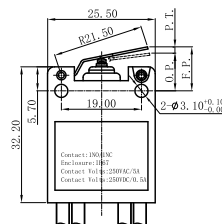
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	MD Max. (mm)	FP Max. (mm)	OP (mm)
350	40	1.30	0.25	0.45	8.6	7.0±0.3



◆ G1105-35001D01□U



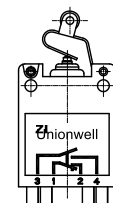
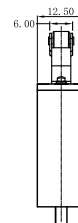
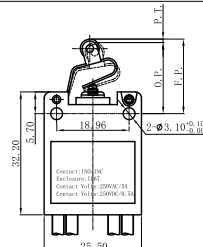
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	MD Max. (mm)	FP Max. (mm)	OP (mm)
200	10	3.00	0.3	1.30	12.8	8.9±0.9



◆ G1105-35003D01□U



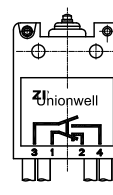
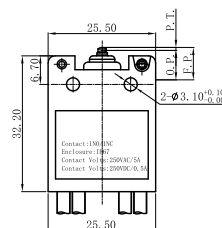
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	MD Max. (mm)	FP Max. (mm)	OP (mm)
450	40	3.00	0.3	1.30	23.0	19.0±1.0



◆ G1105-35000D02□U



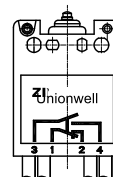
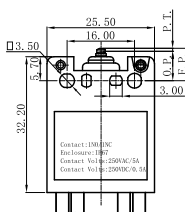
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	MD Max. (mm)	FP Max. (mm)	OP (mm)
350	40	1.30	0.25	0.45	9.60	8.0±0.3



◆ G1105-35000D03□U



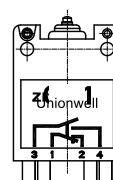
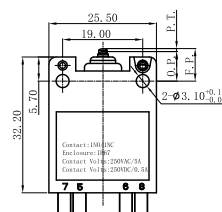
OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	MD Max. (mm)	FP Max. (mm)	OP (mm)
350	40	1.30	0.25	0.45	8.60	7.0±0.3



◆ G1105-45000D01□U



OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	MD Max. (mm)	FP Max. (mm)	OP (mm)
450	50	1.30	0.25	0.45	8.60	7.0±0.3



G12 Series

Large Basic Limit Switch



■ Features

- ◆ Housing is made of high temperature resistant phenolic plastic
- ◆ Sensitive differential travel
- ◆ Precise operation repeatability
- ◆ Long mechanical life
- ◆ ENEC/UL/cUL/CQC approved

■ Application

- ◆ Machine tools
- ◆ Elevators
- ◆ Auto production line
- ◆ Civilian, industrial machinery field
- ◆ Any automation application in the automation field

■ Parameters

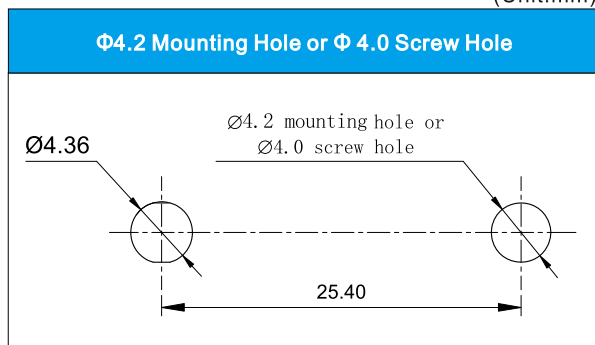
Rating	16A	ENEC/CQC 16A 125/250VAC 10A 30VDC
		UL/cUL 16A 125/250/480VAC 1/8HP 125VAC 1/4HP 250VAC 0.5A 125VDC 0.25A 250VDC
	22A	ENEC/CQC 22A 125/250VAC
		UL/cUL 22A 125/250/480VAC 1/4HP 125VAC 1/2HP 250VAC
	26A	ENEC/CQC 26A 125/250VAC
		UL/cUL 26A 125/250/480VAC 1/2HP 125VAC 1HP 250VAC
Operating Frequency	Electrical	10~30 cycles/min.
	Mechanical	240 cycles/min.
Contact Resistance (Initial Value)		50mΩ Max.
Insulation Resistance		100MΩ Min.
Dielectric Strength	Between Terminals	1500VAC 50/60Hz 1min.
	Between Terminals and Housing	2500VAC 50/60Hz 1min.
Operating Temperature		-40°C ~ +80°C
Operating Humidity		85%RH Max.
Service Life	Electrical	50,000 cycles
	Mechanical	200,000 cycles

G12 Series Micro Switch Ordering Instruction

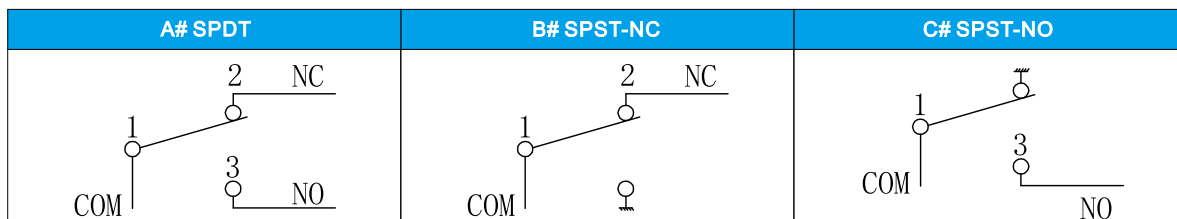
G12	16	1	R1	A	A	T001	U
Switch Type	Electrical Rating	Protection Type	Lever Type	Circuitry	Terminal Type	Custom Code	LOGO
G12 Series Micro Switch	16 ENEC/CQC: 16A 125/250VAC 10A 30VDC 40T80 μ 5E4 UL/cUL 16A 125/250/480VAC 1/8HP 125VAC 1/4HP 250VAC 0.5A 125VDC 0.25A 250VDC	1 General Type	R1 Pin Plunger	A SPDT	A Screw Terminals	General	U Unionwell
			RD1 Spring Pin Plunger	B SPST-NC		Customized according to requirements, the code format is T+serial numberXXX, for example: T001	...
			RQ1 Panel Mounting Plunger	C SPST-NO			Other
			RQ2 Panel Mounting Roller Plunger				
22	22 ENEC/CQC: 22A 125/250VAC 40T80 μ 5E4 UL/cUL 22A 125/250/480VAC 1/4HP 125VAC 1/2HP 250VAC		RQ3 Panel Mounting Cross Roller Plunger				
			RW1 Swing				
26	26 ENEC/CQC: 26A 125/250VAC 40T80 μ 5E4 UL/cUL 26A 125/250/480VAC 1/2HP 125VAC 1HP 250VAC		RW2 Short Swing Lever				
			RW3 Roller Swing Lever				
			RW4 Roller Short Swing Lever				

■ Mounting Hole Dimensions

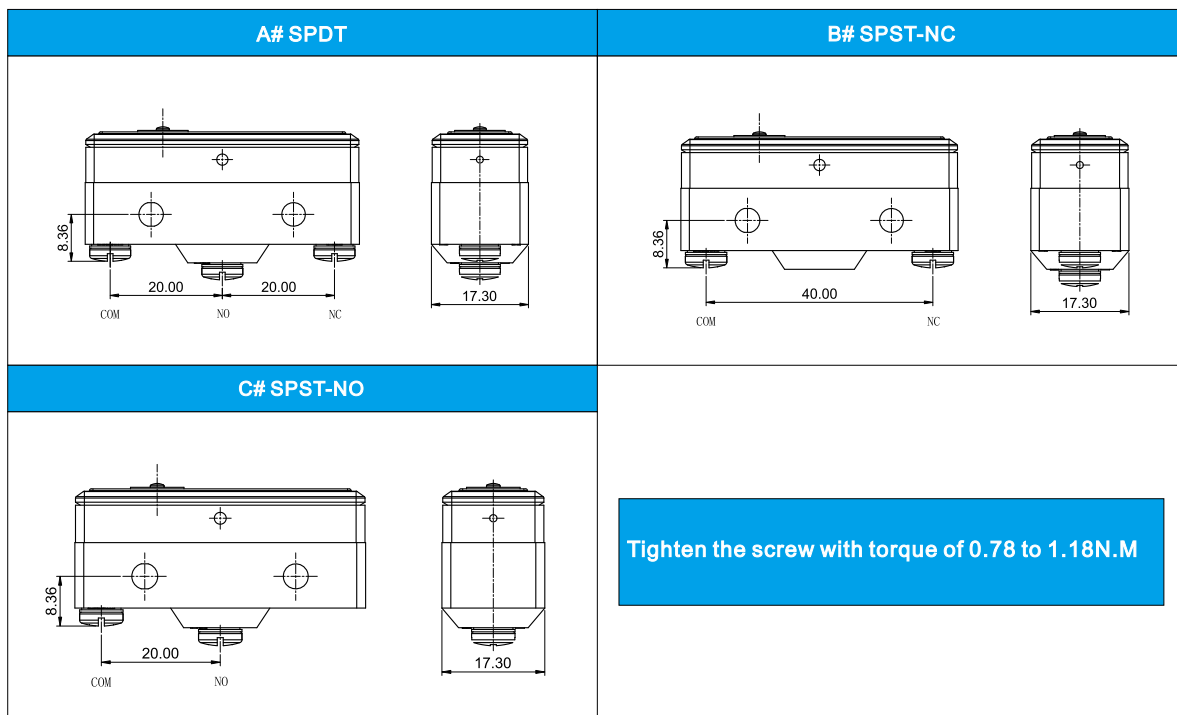
(Unit:mm)

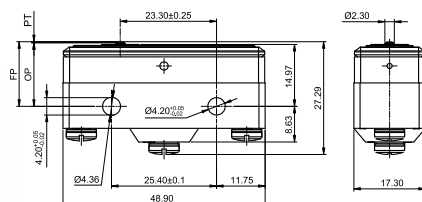


■ Circuit Configuration

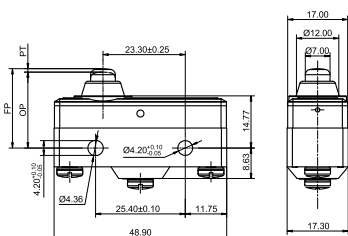


■ Terminal Type and Dimensions

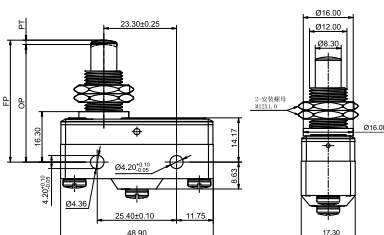




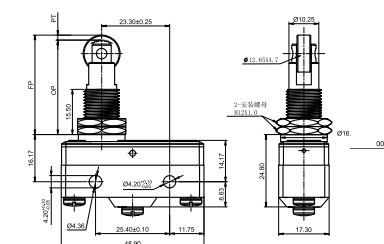
	OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
G1216	450	115	0.8	0.10	0.20	17.00	15.9±0.60
G1222	700	115	0.8	0.10	0.20	17.00	15.9±0.60
G1226	700	115	0.8	0.10	0.20	17.00	15.9±0.60



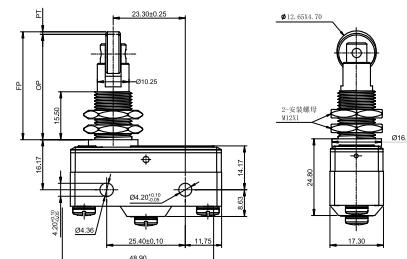
	OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
G1216	450	115	0.80	1.50	0.20	22.50	21.5 ± 0.80
G1222	700	115	0.80	1.50	0.20	22.50	21.5 ± 0.80
G1226	700	115	0.80	1.50	0.20	22.50	21.5 ± 0.80



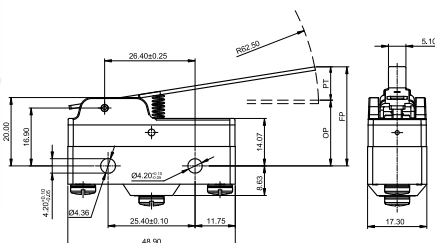
	OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
G1216	450	115	0.80	5.50	0.20	23.00	21.8 ± 1.00
G1222	700	115	0.80	5.50	0.20	23.00	21.8 ± 1.00
G1226	700	115	0.80	5.50	0.20	23.00	21.8 ± 1.00



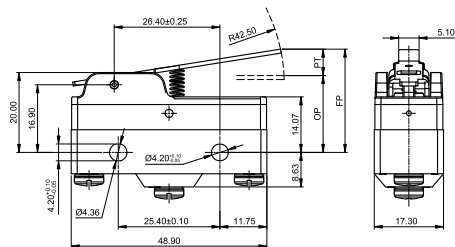
	OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
G1216	450	115	0.80	3.50	0.20	35.00	33.40±1.50
G1222	700	115	0.80	3.50	0.20	35.00	33.40±1.50
G1226	700	115	0.80	3.50	0.20	35.00	33.40±1.50



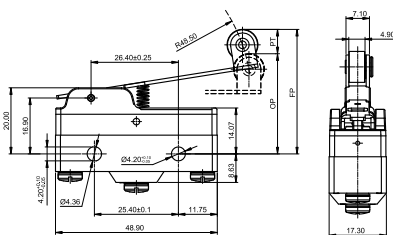
	OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
G1216	450	115	0.80	3.50	0.20	35.00	33.40±1.50
G1222	700	115	0.80	3.50	0.20	35.00	33.40±1.50
G1226	700	115	0.80	3.50	0.20	35.00	33.40±1.50



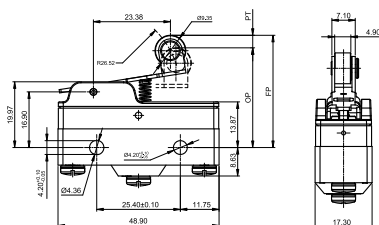
	OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
G1216	85	14	12.00	5.60	2.00	29.50	19.00±3.00
G1222	135	14	12.00	5.60	2.00	29.50	19.00±3.00
G1226	135	14	12.00	5.60	2.00	29.50	19.00±3.00



OF Max. (gf)		RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
G1216	130	20	7.50	3.50	1.00	25.50	19.00±2.50
G1222	205	20	7.50	3.50	1.00	25.50	19.00±2.50
G1226	205	20	7.50	3.50	1.00	25.50	19.00±2.50



OF Max. (gf)		RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
G1216	120	20	8.50	4.00	1.20	37.50	30.20±3.00
G1222	190	20	8.50	4.00	1.20	37.50	30.20±3.00
G1226	190	20	8.50	4.00	1.20	37.50	30.20±3.00



OF Max. (gf)	RF Min. (gf)	PT Max. (mm)	OT Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)	
G1216	195	40	4.00	2.40	1.00	33.50	30.20±1.50
G1222	305	40	4.00	2.40	1.00	33.50	30.20±1.50
G1226	305	40	4.00	2.40	1.00	33.50	30.20±1.50

G13 Series

Dustproof Micro Switch



■ Features

- ◆ Small and compact
- ◆ Long life, high reliability
- ◆ Dustproof design
- ◆ Touch contact structure

■ Application

- ◆ Breakers

■ Parameters

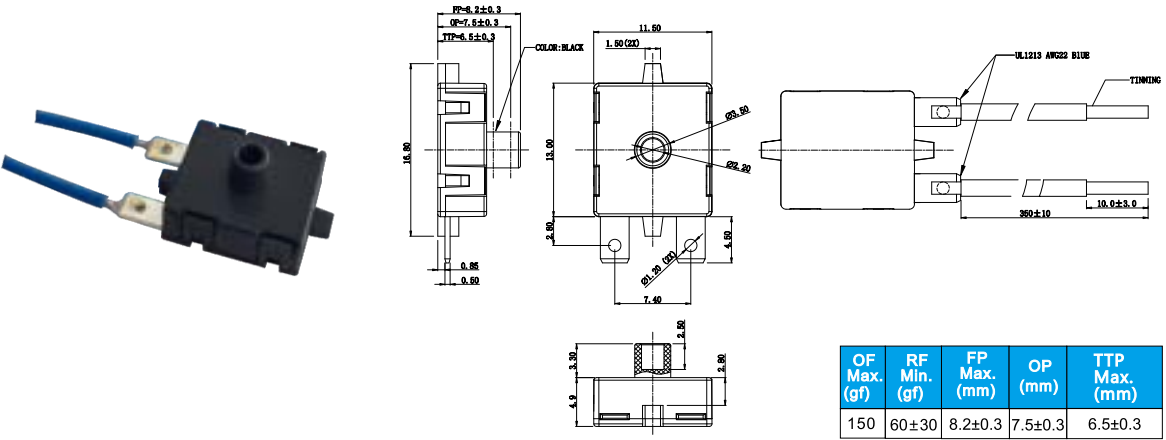
Rating		5A 250VAC 1E4
Operating Frequency	Electrical	10~30 cycles/min
	Mechanical	120 cycles/min
Contact Resistance(Initial Value)		100mΩ Max.
Insulation Resistance		100MΩ Min.
Dielectric Strength		1,000 VAC (50~60Hz)
Operating Temperature		-40°C~+150°C
Operating Humidity		85%RH Max.
Service Life	Electrical	10,000 cycles
	Mechanical	100,000 cycles

■ Contact Configuration

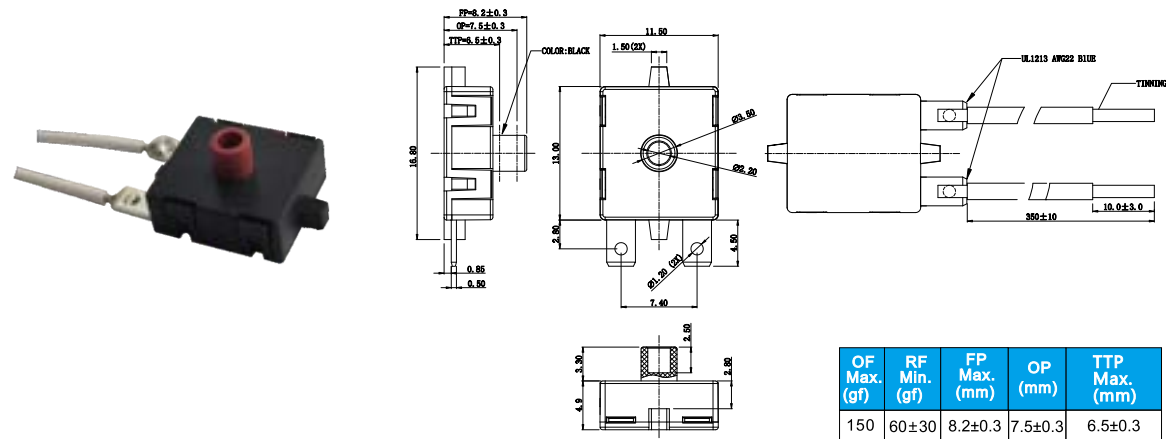
A001/A003	A002/A004

■ Dimensions and Operating Characteristics

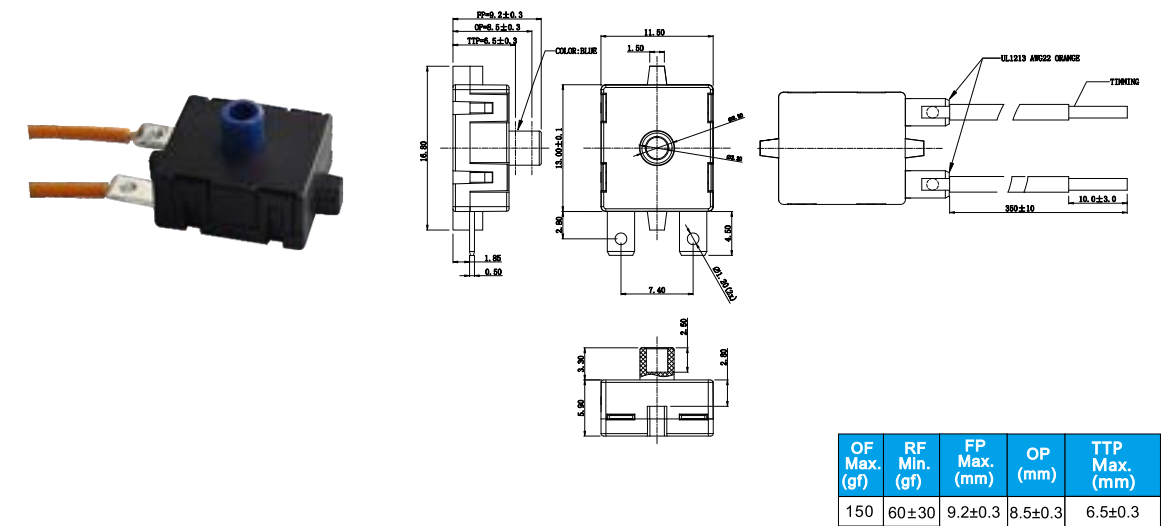
◆ G13-A001



◆ G13-A002

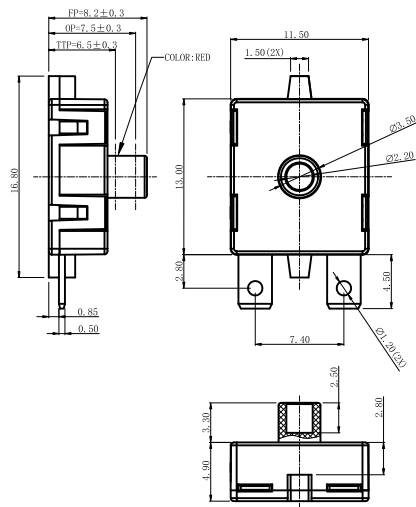


◆ G13-A003



■ Dimensions and Operating Characteristics

◆ G13-A004



OF Max. (gf)	RF Min. (gf)	FP Max. (mm)	OP (mm)	TTP Max. (mm)
150	60±30	8.2±0.3	7.5±0.3	6.5±0.3

GPS100 Series

Air Pressure Switch

Application:

GPS100 Series pressure switches are especially designed for high volume OEM market. Typical applications include boilers, hot water heaters, HVAC and other industrial equipments.

These switches could be customized set points and can be used to positive pressure sensing, negative pressure sensing and differential pressure sensing.

A sensitive high reliability snap action switch is used as the main switching element. The snap action switch can provide a high switching capability up to 16A 125/250VAC.



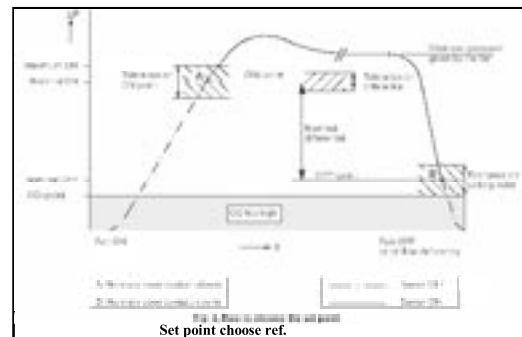
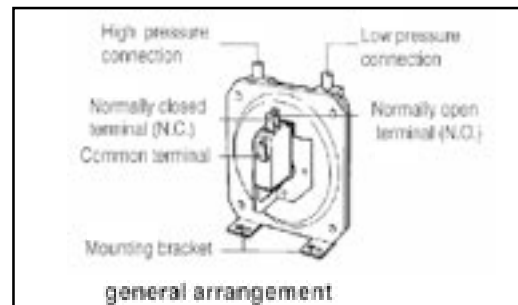
Specifications:

Set Point:

Set-Point Range: 10-1500Pa
Operating Pressure Range: 25-1500Pa
Switch off Pressure Range: 10Pa Min
Fixed set-point calibrated in Factory.

Maximum Pressure Allowed: 4000pa.

Switch Rating
0.1A 125/250VAC, 3A 125/250VAC
5A 125/250VAC, 16A 125/250VAC
(Resistive Load)
Switching Element
Snap Action Switch
SPDT, SPST-NO, SPST-NC
Measured Media: Air
Operating Temperature: -40~+90°C



Installation & Sample Line Connection

Mounting:

Always mount with the diaphragm in vertical plane in order to maintain the specified operating point fixed in the factory.

Avoid mounting with sample-line connections directed upward.

Positive Pressure Sensing Only:

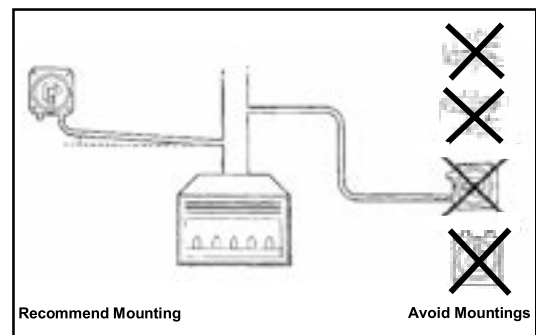
Connect the sample-line to H while L remains open to the atmosphere.

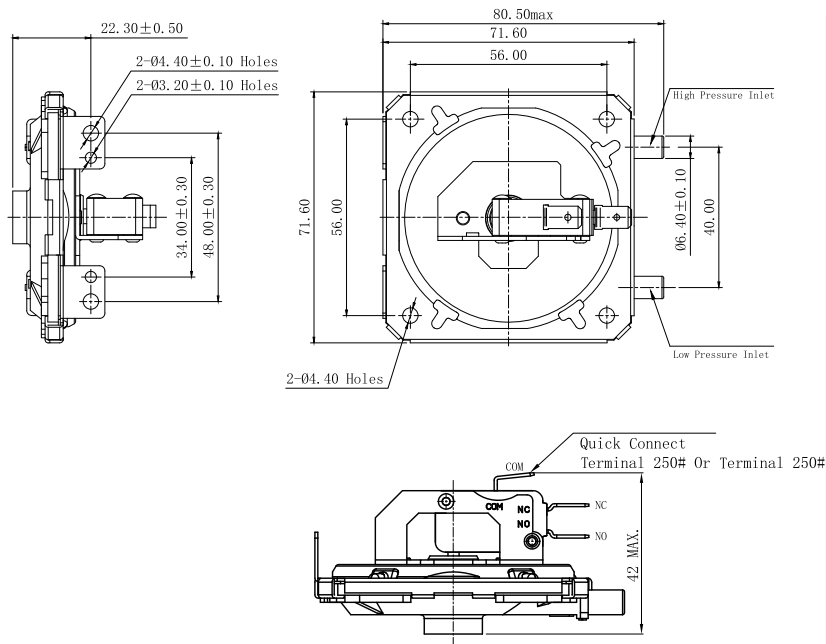
Negative Pressure Sensing Only:

Connect the sample-line to L while H remains open to the atmosphere.

Differential Pressure Sensing:

Connect the higher pressure sample line to H and the lower pressure samples-line to L.

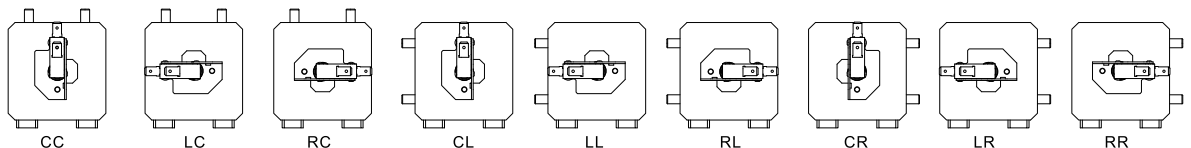
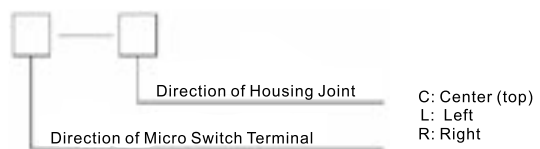




Pressure Conversion Table

1Pa=	0.01	mbar
(pascal N/m²)	1×10 ^(-^7)	bar
	102×10 ^(-^7)	kg/cm²
	0.102	mm H2O
	0.0075	mm Hg
	145×10 ^(-^6)	psi
1mbar=	100	pa
(millibar)	0.001	bar
	102×10 ^(-^5)	kg/cm²
	10.2	mm H2O
	0.750	mm Hg
	0.0145	psi
1bar=	100 000	pa
	1000	mbar
	1.02	kg/cm²
	10 200	mm H2O
	750	mm Hg
	145,038	psi
1Kg/cm²=	98100	pa
kilogram per cm²	981	mbar
	0.981	bar
	10 000	mm H2O
	736	psi
	142 233	pa
1mm H2O=	9.81	pa
(mm water gauge)	0.098	mbar
	98,1×10 ^(-^6)	bar
	0.0001	kg/cm²
	0.0736	mm H2O
	0.001422	psi
1mm Hg=	133,3	pa
(mm mercury)	1.33	mbar
	0.00133	bar
	0.001359	kg/cm²
	13.59	mm H2O
	0.01934	psi
1psi=	6895,06	pa
(pounds per sq inch)	68,95	mbar
	0.06895	bar
	0.07031	kg/cm²
	703,01	mm H2O
	51,717	mm Hg

Assembled Shape:



GPS100 Series Air Pressure Switch Ordering Instruction

GPS100	39	90	CC	1	C	Z	G	L	T001	U
Switch Type	Off Pressure Set Point	On Pressure Set Point	Assembled Shape	Electrical Rating	Terminal Type	Circuitry	Color of Micro Switch	Pressure Type	Custom Code	LOGO
GPS100 Series Air Pressure Switch	According to Customer's Requirements	According to Customer's Requirements	Refer to "Assembled Shape"	1 < 0.1A	C 6.30x0.80mm 0.250"x0.032" 250# Quick Connect Terminals	C SPST-NC	G Grey	H Positive Pressure	General	U Unionwell
				2 ≥ 0.1A and ≤ 5A	E 4.70x0.5mm 0.187"x0.020" 187# Quick Connect Terminals	P SPST-NO	B Black	L Negative Pressure	Customized according to requirements, the code format is T+serial number XXX, for example: T001	...
				3 > 5A and ≤ 16A		Z SPDT				
				4 > 16A					Other	

GT01 Series Detector Switch

Micro Switch Type, Could Be Used on PCB Board or Soldered with Wires



Features

- ◆ Small size, light weight and high precision
- ◆ Long life, small operating force

Applications

- ◆ Widely used in automobile, motorcycles, remote control device, industrial machines, telecommunication equipment, navigation and car audio system, etc.

Terminal Type			Unit:mm
PCB Terminals	Lead Terminals	Lead Terminals (Screw Mounting)	
PCB Board Mounting Hole Dimensions (Viewed From Direction A)	Timing Lag Diagram	Circuit Diagram (Viewed From Direction A)	
	Travel Position (X) ● Push Direction Only		

Parameters

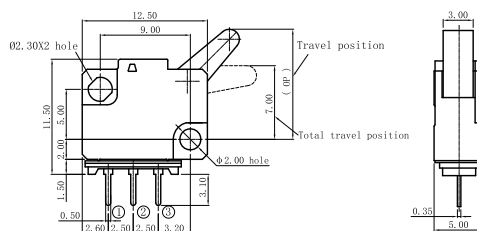
Electrical Characteristics	Rating	0.1A 12VDC/50μA 3VDC
	Contact Resistance (Initial Value)	100mΩ Max.
	Insulation Resistance	50MΩ Min.
	Voltage Proof	AC 50V (50-60Hz) 1 Min.
	Electrical Life	10,000 cycles/min
Mechanical/Reliability Characteristics	Operating Force	See Detailed Spec
	Mechanical Life	100,000 cycles (Min)
	Operating Temperature	-25℃~+80℃
	Operating Humidity	≤85% RH
	Solderability	245℃±5℃ 3s±0.5s
	Soldering Heat Resistance	260℃±5℃ 3s±1s

GT01 Series Detector Switch Ordering Instruction

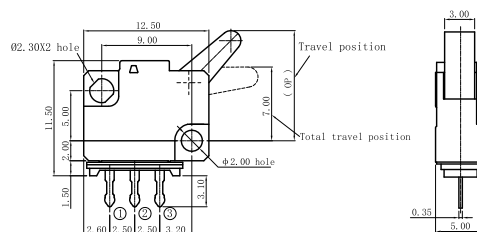
GT01	P	1	00	T001	U
Switch Type	Code of Terminal Type	Code of Operating Force	Lever Type	Custom Code	LOGO
GT01 Series Detector Switch	P PCB Terminals	1 OF=70±30gf	00 Without Lever	General	U Unionwell
	L Lead Terminals	2 OF=150±40gf	01 01# Lever	Customized according to requirements, the code format is T+serial number XXX, for example: T001	... Other
	S Lead Terminals (Screw Mounting)	... Other	02 02# Lever		
	... Other		... Other	T001	
				... Other	

■ Dimensions

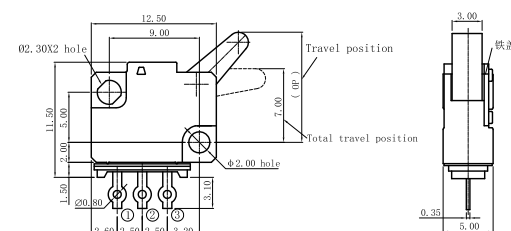
◆ GT01P100U



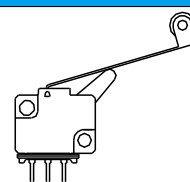
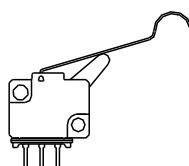
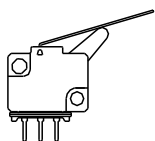
◆ GT01L100U



◆ GT01S100U



Lever can be customized according to customer's demand



GT02 Series

Mechanical Keyboard Switch-4mm Travel



■ Features

- ◆ Desktop profile, 0.60 inch (15.2mm) from PCB (without keycap)
- ◆ Switch option: linear, tactile, clicky
- ◆ PCB or frame mount
- ◆ Long life to 80 million operation cycles
- ◆ LED, diode or jumper option
- ◆ 12V AC/DC maximum
- ◆ Current rating: 10mA
- ◆ Insulation resistance: <100MΩ under 100VDC

■ Applications

- ◆ Computer keyboards
- ◆ Cash registers
- ◆ Industrial equipment
- ◆ Man-machine interfaces

■ Specification and Parameters

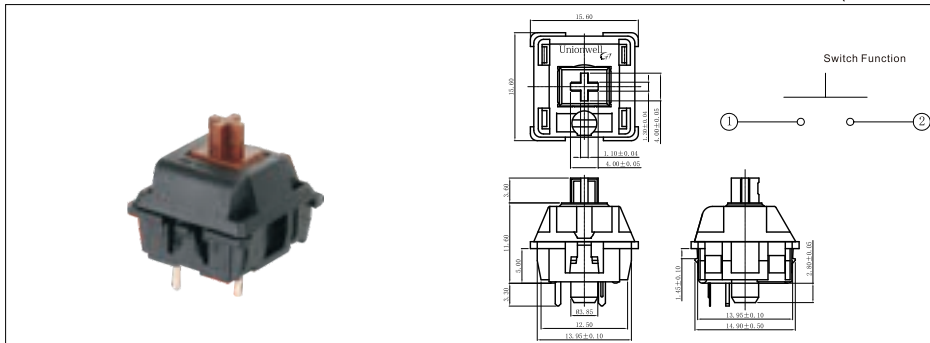
Electrical Characteristics	Rating	12VDC/AC max. 10mA AC/DC max.
	Contact Resistance	200mΩ Max (25mΩ Typical) (Initial Value)
	Insulation Resistance	100MΩ Min
	Voltage Resistance	AC 500V (50-60Hz) 1 Min
	Electrical Life	Over 80,000,000 cycles (Load)
	Bounce Time	5 msec (Operation Speed at 400mm/sec)
Parameters	Operating Force	See Detail Spec
	Pre-travel	2.0±0.6mm
	Total Travel	4.0±0.4mm
	Mechanical Life	Over 100 Million cycles (Under No Load)
	Operating Temperature	-40°C~+80°C
	Operating Humidity	≤85% RH

GT02 Series Keyswitch Ordering Instruction

GT02	A	1	A	N	W	1	T001	U
Switch Type	Contact Material	Code of Operating Force	Operating Characteristics and Key Style	LED Diode	PCB Mounting Pins	Case Cover Color	Custom Code	LOGO
GT02 Series Keyswitch	A Au Alloy	1 OF=60±20gf (60# or 601#Spring)	A Momentary, Single Pole, Standard Keyswitch, Linear, Black Key	N Single Color	W With Pins	1 Black Case and Clear Cover	General	U Unionwell
	B Ag Alloy	2 OF=80±25gf (80# Spring)	B Momentary, Single Pole, Standard Keyswitch, Soft Tactile, Brown Key	F Full Color RGB	N No Pins (With Metal Frame)	2 White Case and Clear Cover	Customized according to requirements, the code format is T+serial number XXX, for example: T001	...
		3 OF=120±25gf (120# Spring)	D Click Tactile Feel, Blue Key	T SMT LED				
		...		... Other			...	Other
			E Momentary, Single Pole, Standard Keyswitch, Linear, Red Key					

■ Dimensions

(Unit:mm)



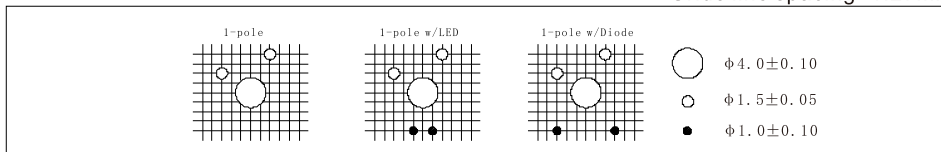
■ Mounting Options



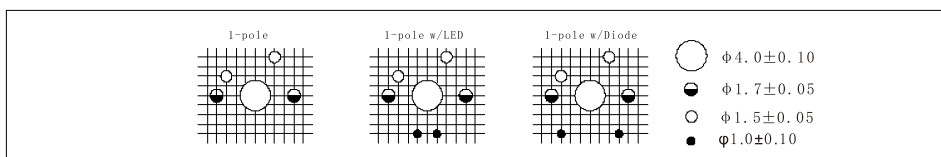
■ Circuitry Board Layouts

◆ Keyswitch without fixation pins

Gride line spacing=1.27mm



◆ Keyswitch with fixation pins



GT04 Series

Mechanical Keyboard Switch-2.5mm Travel



■ Features

- ◆ Ultra-thin profile, 0.31 inch (7.8mm) measuring from PCB (no keycap)
- ◆ Choice of feel: Linear, Soft tactile
- ◆ PCB pin
- ◆ Long life to 20 million operation cycles
- ◆ 12VAC/DC maximum
- ◆ Current rating: 10mA
- ◆ Insulation resistance: < 100MΩ under 100VDC

■ Applications

- ◆ Computer keyboards
- ◆ Cash registers
- ◆ Industrial equipment
- ◆ Man-machine interfaces

■ Specification and Parameters

Electrical Characteristics	Rating	12VDC/AC max. 10mA AC/DC max.
	Contact Resistance	200mΩ Max (25mΩ Typical) (Initial Value)
	Insulation Resistance	100MΩ Min
	Voltage Resistance	AC 100V (50-60Hz) 1 Min
	Electrical Life	Over 20,000,000 cycles (Load)
	Bounce Time	5 msec (Operation Speed at 400mm/sec)
Parameters	Operating Force	See Detail Spec
	Pre-travel	1.5±0.4mm
	Total Travel	2.5±0.4mm
	Mechanical Life	Over 20,000,000 cycles (No Load)
	Operating Temperature Range	-40°C~+80°C
	Ambient Humidity	≤85% RH

GT04 Series Keyswitch Ordering Instruction

GT04	A	1	B	N	W	T001	U
Switch Type	Contact Material	Code Of Operating Force	Operating Characteristics and Key Style	LED Diode	Mounting Options	Custom Code	LOGO
GT04 Series Keyswitch	A Au Alloy	1 OF=50±20gf	A Momentary, Single Pole, Standard Keyswitch, Black Key	N No LED No Diode	W With Pins	General	Unionwell
	B Ag Alloy	... Special	B Momentary, Single Pole, Tactile Feel Keyswitch Red Key	D No LED With Diode	... Special	T001 Customized according to requirements, the code format is T+serial number XXX, for example: T001	...
	... Special	... Special	... Special	F RGB full color LED	...	...	Other



GT06 Series

Mechanical Keyboard Switch-4mm Travel



■ Features

- ◆ Desktop profile, 0.60 inch (15.2mm) from PCB (no keycap)
- ◆ Switch option: linear, tactile, clicky
- ◆ Frame mount
- ◆ Long life to 80 million operation cycles
- ◆ Equipped with light pipe, to diffuse light and make it not dazzling
- ◆ 12VAC/DC maximum
- ◆ Current rating: 10mA
- ◆ Insulation resistance: < 100MΩ under 100VDC

■ Applications

- ◆ Computer keyboards
- ◆ Cash counters
- ◆ Industrial equipment
- ◆ Man-machine interfaces

■ Specification and Parameters

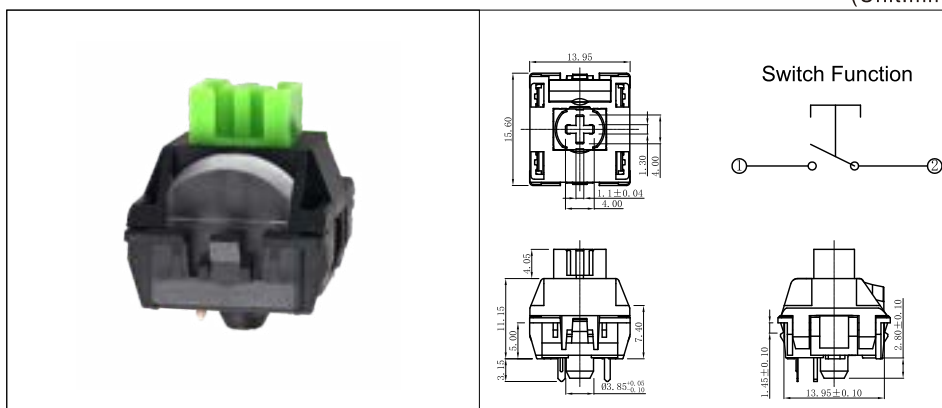
Electrical Characteristics	Rating	12VDC/AC max. 10mA AC/DC max.
	Contact Resistance	200mΩ Max. (25mΩ Typical) (Initial Value)
	Insulation Resistance	100MΩ Min
	Voltage Resistance	AC 500V (50-60Hz) 1 Min
	Electrical Life	Over 80,000,000 cycles(load)
	Bounce Time	5 msec (Operation speed at 400mm/Sec)
Parameters	Operating Force	See Detail Spec
	Pre-travel	2.0±0.4mm
	Total Travel	4.0 ⁺⁰ _{-0.3} mm
	Mechanical Life	Over 100 Million cycles (Under No Load)
	Operating Temperature	-40°C~+80°C
	Operating Humidity	≤85% RH

GT06 Series Keyboard Switch Ordering Instruction

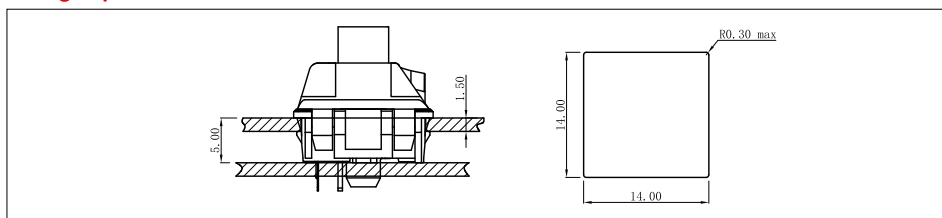
GT06	A	1	A	N	W	T001	U
Switch Type	Contact Material	Code of Operating Force	Operating Characteristics and Key Style	LED Diode	PCB Mounting Pins	Custom Code	LOGO
GT06 Series Key Switch	A Au Alloy	1 OF=60±20gf (60#or601#Spring)	A Momentary, Single Pole, Standard switch, Linear, Black Key	N Single Color	W With Pins	General	U Unionwell
	B Ag Alloy	2 OF=80±25gf (80#Spring)	B Momentary, Single Pole, Standard switch, Soft Tactile, Brown Key	F Full Color RGB	N No Pins (With Metal Frame)		... Other
	R Others Up to Customer	3 OF=120±25gf (120#Spring)	D Momentary, Single Clicky Feel, Blue Key	T SMT LED		Customized according to requirements, the code format is T+serial number XXX, for example: T001	
	...		E Momentary, Single Pole, Standard switch, Linear, Black Key	... Others		...	Other

■ Dimensions

(Unit:mm)



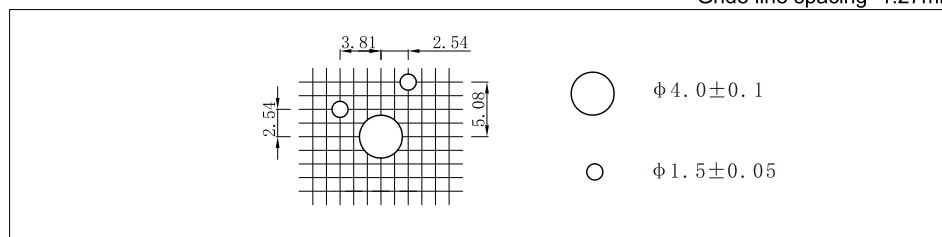
■ Mounting Options



■ Circuit Board Layouts

◆ Keyboard Switch without Fixation Pins

Gride line spacing=1.27mm



GT07 Series

Mechanical Keyboard Switch-4mm Travel



■ Features

- ◆ Compact structure, high reliability, long life
- ◆ Dustproof design
- ◆ SPDT structure patent design
- ◆ Long life, high reliability
- ◆ Touch contact structure

■ Applications

- ◆ Election machines
- ◆ Process equipment
- ◆ Machine interface equipment

■ Specification and Parameters

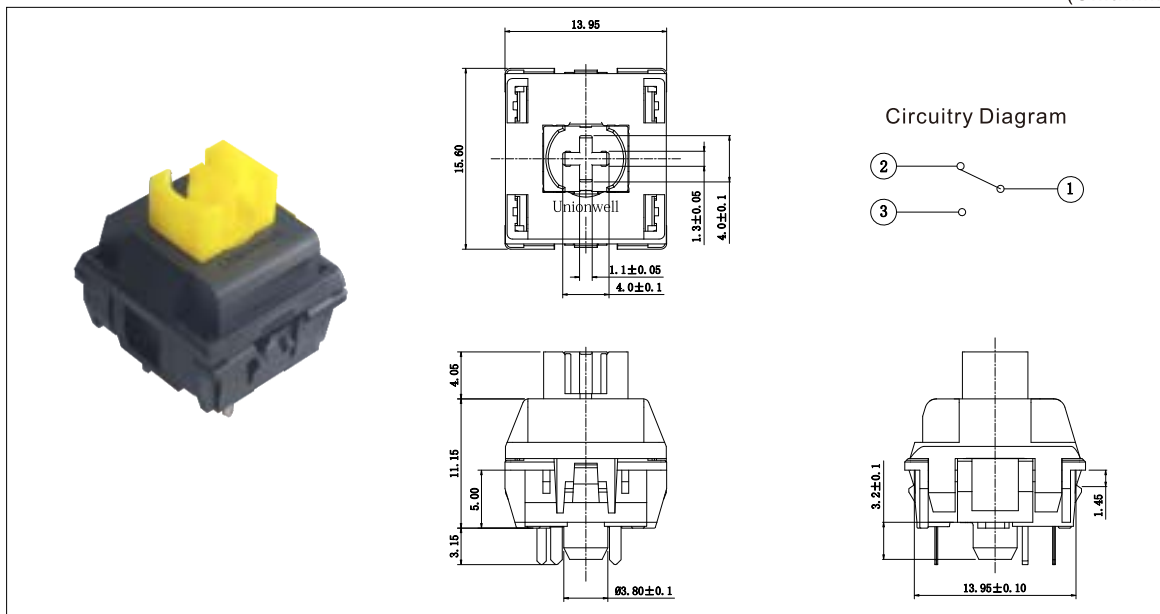
Electrical Characteristics	Rating	12VDC/AC Max. 10mA VDC/AC Max.
	Contact Resistance	200mΩ Max. (25mΩ Typical) (Initial Value)
	Insulation Resistance	100MΩ Min
	Voltage Resistance	AC 500V (50-60Hz) 1 Min
	Electrical Life	Over 10,000,000 cycles (Load)
Parameters	Bounce Time	Operation Speed at 400mm/sec 5 msec
	Operating Force	See Detail Spec
	Pre-travel	PT1=1.0±0.4mm, PT2=1.6±0.4mm
	Total Travel	4.0+0/-0.3mm
	Mechanical Life	Over 10,000,000 cycles (No Load)
	Operating Temperature	-40°C~+80°C
	Operating Humidity	≤85% RH

■ GT07 Series Keyboard switch Ordering Instruction

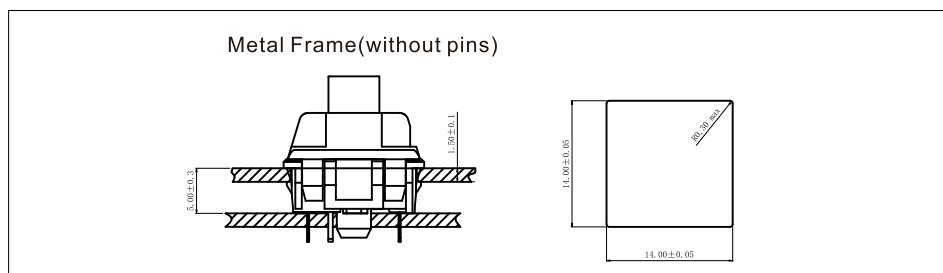
GT07	T001	U
Switch Type	Custom Code	LOGO
GT07 Series Keyboard Switch	General	U Unionwell
	T001 Customized according to requirements, the code format is T+serial number XXX, for example: T001	... Other
	... Other	

■ Dimensions

(Unit:mm)



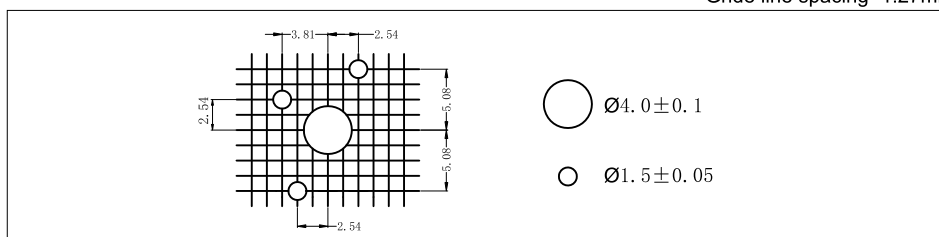
■ Mounting Options



■ Circuitry Board Layouts

- ◆ Keyboard switch without fixation pins

Gride line spacing=1.27mm



GT08 Series

Ultrathin Laptop Keyboard Switch-1.6mm Travel



■ Features

- ◆ With tactile sound or smooth mute for selection
- ◆ Feel smooth and natural
- ◆ Service life can reach more than 10 million times
- ◆ Can be equipped with RGB-LED lights to add colorful backlight
- ◆ Patent products, the world's first

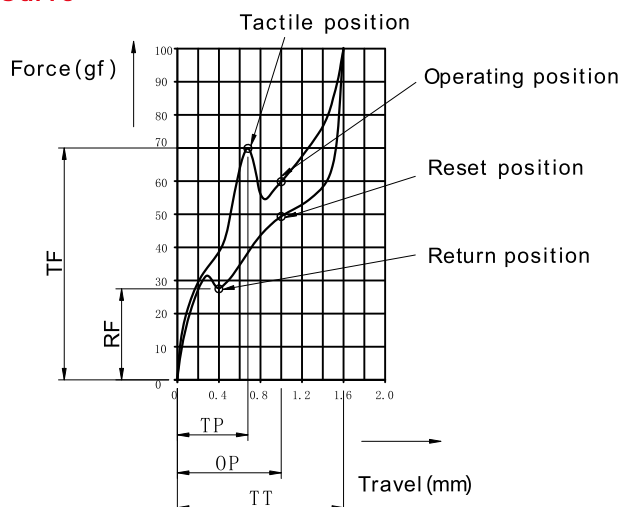
■ Applications

- ◆ Notebook computer keyboards

■ Specification and Parameters

Electrical Characteristics	Rating	12V DC/AC Max. 10mA AC/DC Max
	Initial Contact Resistance	200mΩ Max
	Insulation Resistance	100MΩ Min
	Voltage Resistance	AC 100V (50-60Hz) 1 Min
	Electrical Life	Over 20,000,000 cycles (Load)
	Bounce Time	Operation speed at <400mm/sec
Parameters	Tactile Force (TF)	70±15gf
	Tactile Position (TP)	0.65±0.2mm
	Operating Position (OP)	(TP±0.05) ≤ OP ≤ 1.2mm
	Total Travel (TT)	1.6±0.3mm
	Return Force (RF)	RF=20gf Min
	Mechanical Life	Over 10,000,000 cycles (NO Load)
	Operating Temperature	-40°C ~ +80°C
	Operating Humidity	≤85% RH
	Hand Soldering Condition	3Sec Max. 360°C ±10°C

■ Travel-Force Curve

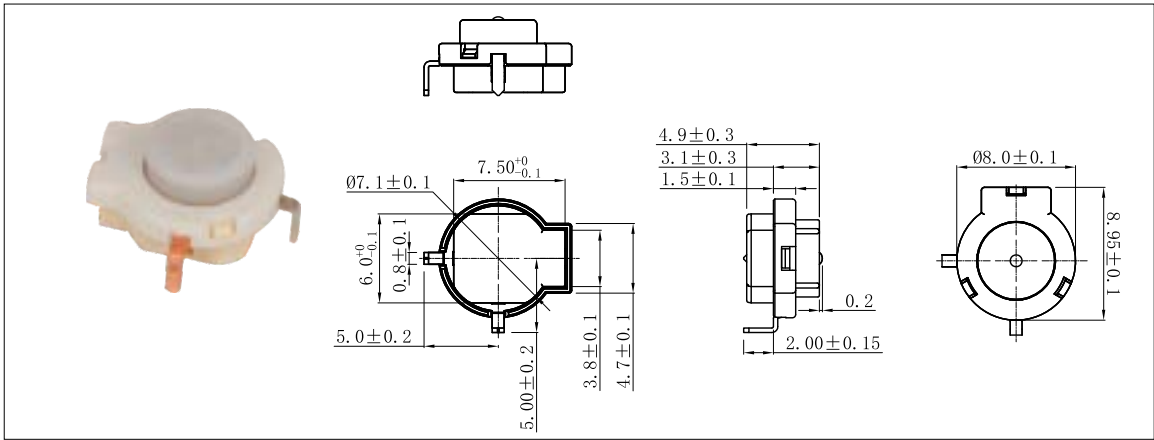


GT08 Series Keyswitch Ordering Instruction

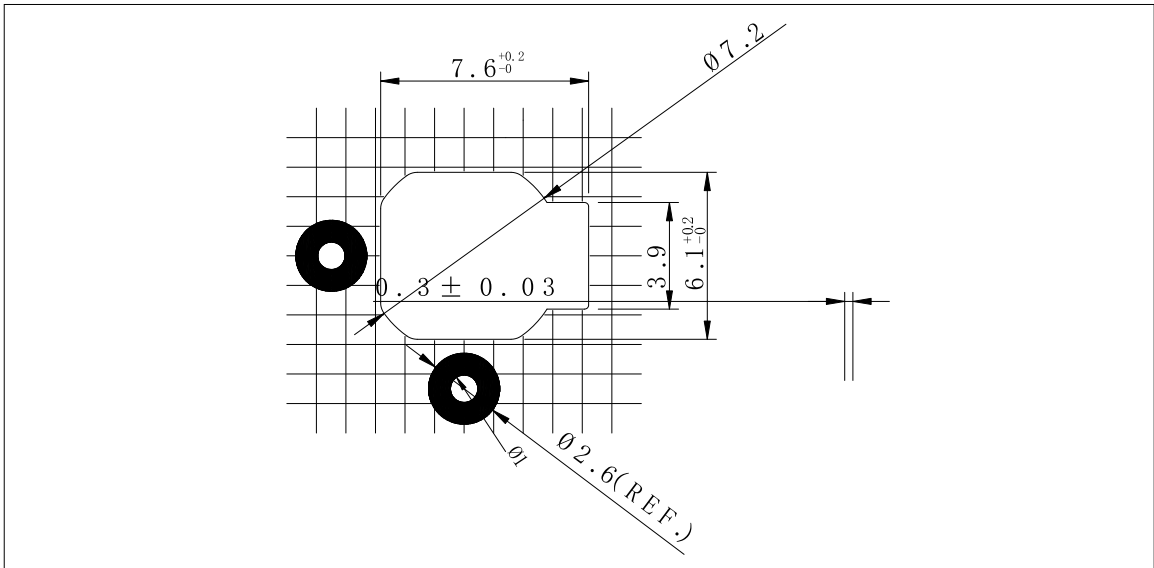
GT08	A	1	C	N	P	A1	T001	U
Unionwell Switch Type	Keyswitch Height	Code of Operating Force	Operating Characteristics and Key Style	LED Diode	Mounting Options	Special Requirements Travel	Custom Code	LOGO
	A 4.9mm	1 OF=70±15gf	A Single pole, standard type, black key	N No LED, No Diode	P With pins	The switch on stroke is less than 0.95mm	General	Unionwell
	B Other	2 Other to be defined	C Single pole, tactile feel, sound, white translucent key		S Suitable	Other to be defined	T0 01 Customized according to requirements, the code format is T+ serial number XXX for example:T001	Other
							...	Other

■ Dimensions

(Unit:mm)



■ Circuit Board Layouts



GT11 Series

Ultrathin Laptop Keyboard Switch-2.5mm Travel



■ Features

- ◆ With tactile sound or smooth mute for selection
- ◆ Feel smooth and natural
- ◆ Service life can reach more than 10 million times
- ◆ Can be equipped with RGB-LED lights to add colorful backlight
- ◆ Patent products, the world's first

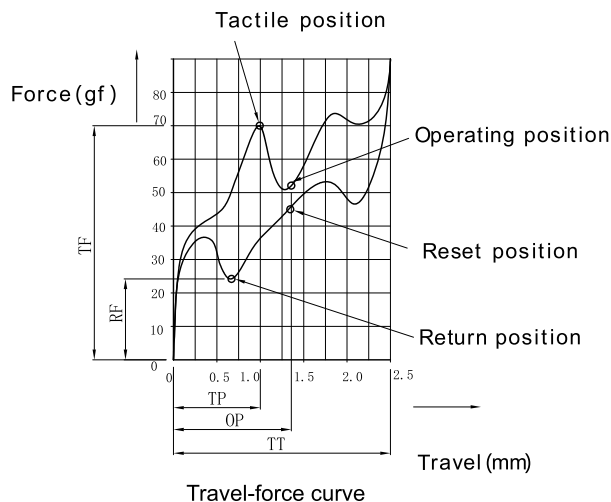
■ Applications

- ◆ Notebook computer keyboards

■ Specification and Parameters

Electical Characteristics	Rating	12V DC/AC Max. 10mAAC/DC Max
	Initial Contact Resistance	200mΩ Max
	Insulating Resistance	100MΩ Min
	Voltage Resistance	AC 100V (50-60Hz) 1 Min
	Electrical Life	Over 10,000,000 cycles (Load)
	Bounce Time	Operation speed at<400mm/sec
Parameters	Tactile Force (TF)	70±15gf
	Tactile Position (TP)	1.0±0.3
	Operating Position (OP)	(TP±0.1) ≤OP≤1.2mm
	Total Travel (TT)	2.5±0.2mm (GT11A) 2.5+0/-0.3mm (GT11B)
	Return Force (RF)	RF=20gf Min
	Mechanical Life	Over 20,000,000 cycles (NO Load)
	Operating Temperature	-40°C~+80°C
	Operating Humidity	≤85% RH
	Hand Soldering Condition	3Sec Max. 360°C±10°C

■ Travel-Force Curve



GT11 Series Keyswitch Ordering Instruction

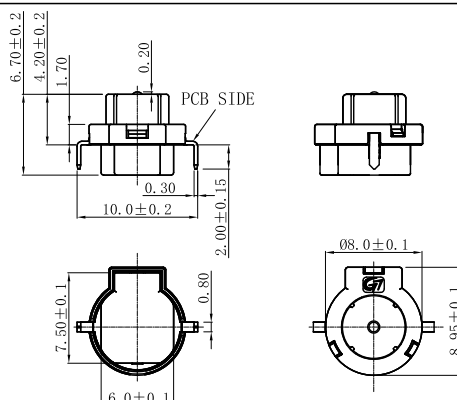
GT11	A	1	C	N	P	T001	U
Unionwell Switch Type	Keyswitch Height	Code of Operating Force	Operating Characteristics and Key Style	LED Diode	Mounting Options	Custom Code	LOGO
	A 6.7mm	1 OF=70±15gf	A Single pole, standard type, black key	N No LED, No Diode	P With pins	General	U Unionwell
	B 6.4mm	2 Other to be defined	C Single pole, tactile feel, white, sound translucent key		S Suitable	Customized according to requirements. the code format is T+ serial number XXX for example:T001	... Other
	C Other					... Other	

■ Dimensions

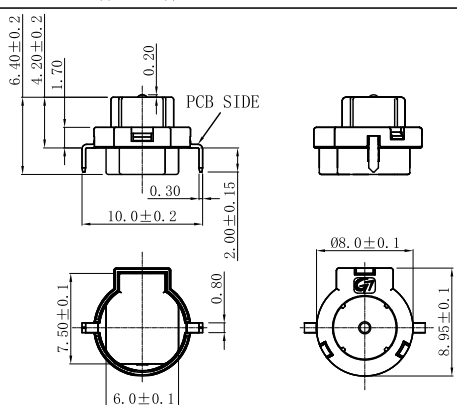
(Unit:mm)



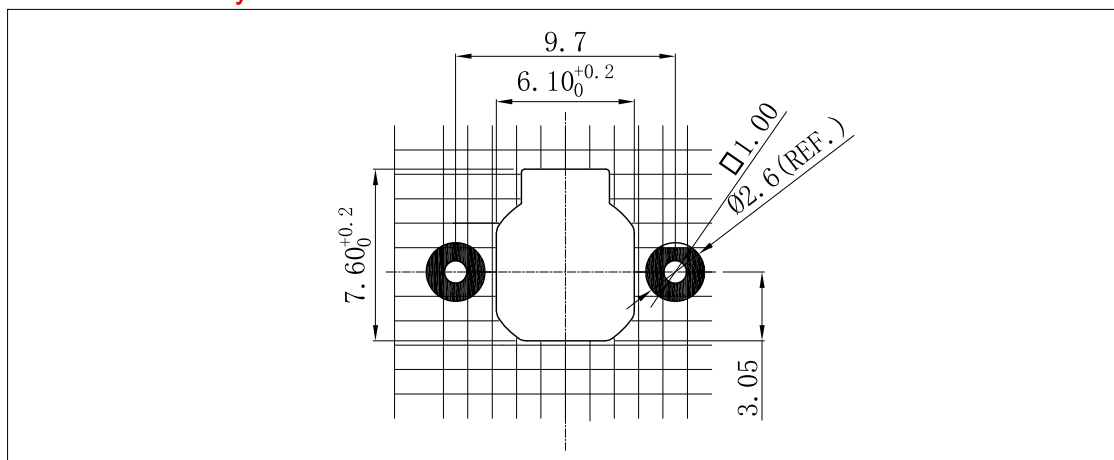
H=6.7mm(DIP)



H=6.4mm(DIP)



■ Circuit Board Layouts



G1 Series & G17 Series

Linked Sealead Tact Switch



■ Features

- ◆ Water and dust proof design (IP67)
- ◆ Long Life and high reliability
- ◆ 0.8*0.8 PCB terminals
- ◆ Safe operation design double circuits only closed when both levers actuated
- ◆ Variety of levers and control methods
- ◆ Mini size, could be used for tight space

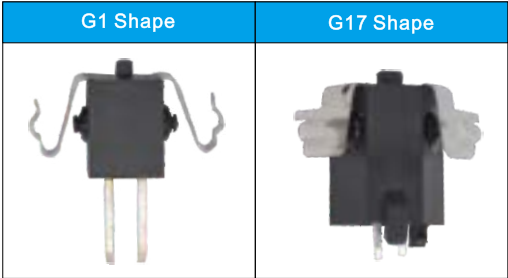
■ Application

- ◆ Auto
- ◆ Industrial control

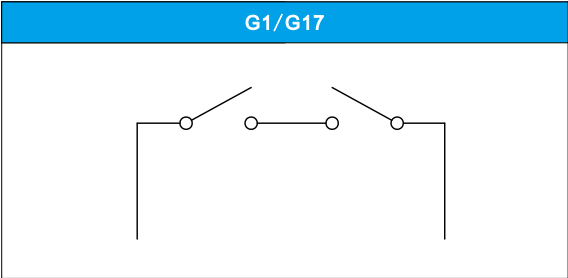
■ Parameters

Rating		12VDC 20 μA~20mA
Operating Frequency	Electrical	20 cycles/min
	Mechanical	G1 Series: 120 cycles/min
		G17 Series: 80 cycles/min
Contact Resistance (Initial Value)		> 200mΩ
Insulation Resistance (at 500VDC)		> 10MΩ
Vibration Duraility		10~500Hz, Amplitude 1.5mm
Voltage Resistance	Between terminals	500VAC (50~60Hz)
	Between terminals and housing	1,500VAC (50~60Hz)
Service Life	Electrical	100,000 cycles
	Mechanical	100,000 cycles
Operating Temperature		-40°C~ +85°C
Operating Humidity		85% RH Max.
Unit Weight		G1: 0.85g
		G17: 1.1g

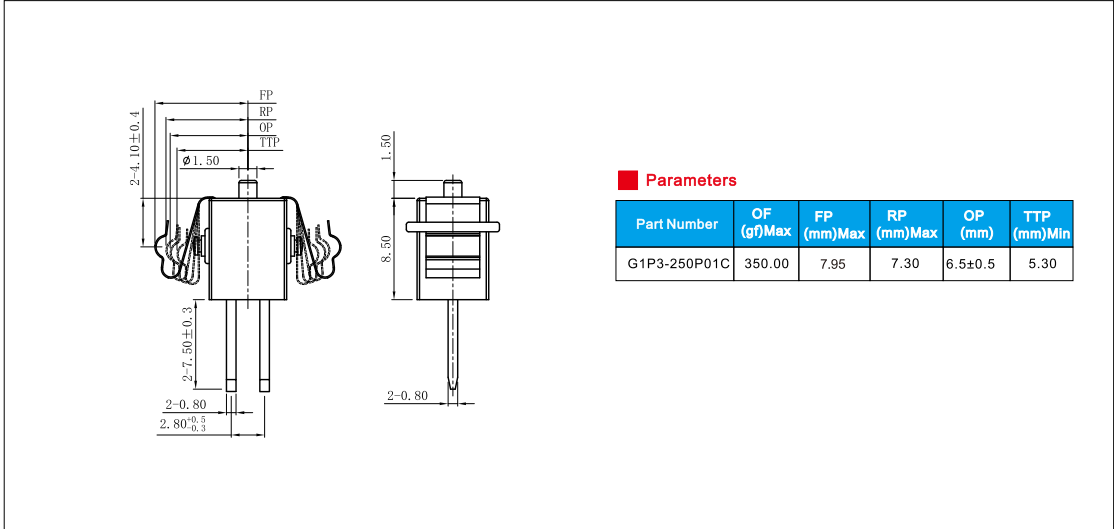
■ Shape



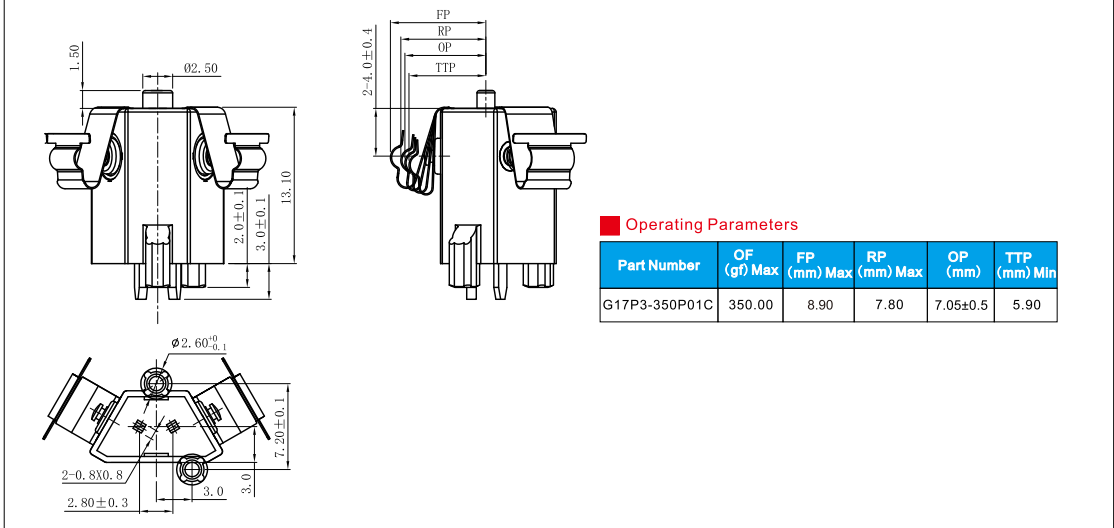
■ Circuit Configuration



■ G1 Overall Dimensions



■ G17 Overall Dimensions



G2 Series

Rotary Switch



■ Features

- ◆ Designed for water and dust tight (IP64)
- ◆ Small compact size
- ◆ Long life and high reliability
- ◆ Widely used in automotive electronics, home appliances and industrial control

■ Application

- ◆ Car
- ◆ Home appliances

■ Parameters

Rating		0.1A 12VDC
Operating Frequency	Electrical	10~30 cycles/min
	Mechanical	120 cycles/min
Contact Resistance (Initial Value)		100mΩ Max.
Insulation Resistance (at 500VDC)		100MΩ Min.
Vibration Durability		10~55Hz, move 0.75mm (p-p)
Dielectric Strength		500VAC (50~60Hz)
Operating Temperature		-30°C~+85°C
Operating Humidity		85% RH Max.
Service Life	Electrical	100,000 cycles
	Mechanical	100,000 cycles

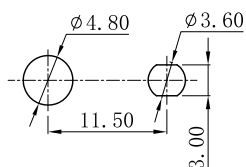
G2 Series Rotary Switch Ordering Instruction

G2	01	E	00	A	1	G	F	400	T001	U
Switch Type	Electrical Rating	Terminal Type	Lever Type	Circuitry	Posts	AWG Type (for wire type only)	AWG Number (for wiretype only)	Wire Length	Custom Code	LOGO
G2 Series Rotary Switch	01 0.1A 12VDC	E Wire leads to bottom 0.1A	01 01# Lever	A Circuit1-COM Circuit2-COM	1 Standard post	No lead wires	No lead wires	300mm length standard leadwires	General	U Unionwell
	... Other	F No-hole solder terminals	... Other	B Circuit1-COM	... Other	E 20#	A UL1007	Wire length 400mm	Customized according to requirements. the code format is T+serial number XXX for example: T001	... Other
		... Other		C Circuit2-COM		F 22#	C UL1430	Other		
						G 24#	D UL1061			
						H 26#	F AVSS			
						I 28#	H UL1332			
						... Other	... Other			



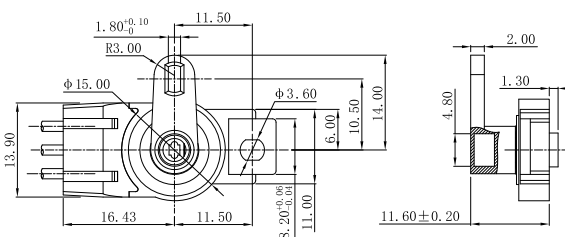
■ Mounting Hole Dimensions

Posts with different dimensions



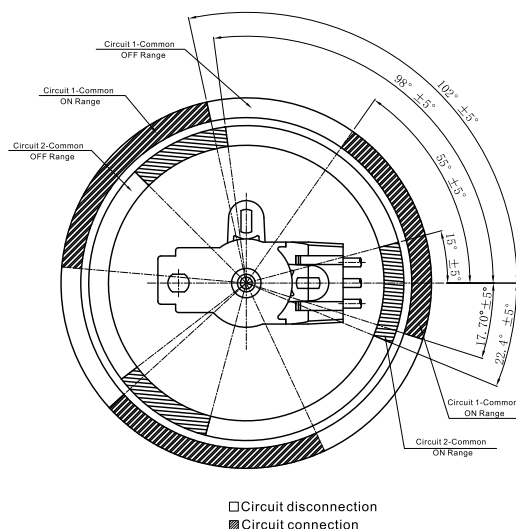
■ Lever Type

01#: Leaf Lever



■ Circuit Configuration

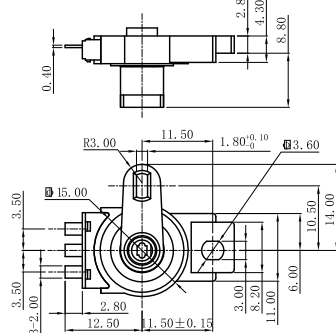
Transfer Contact Diagram



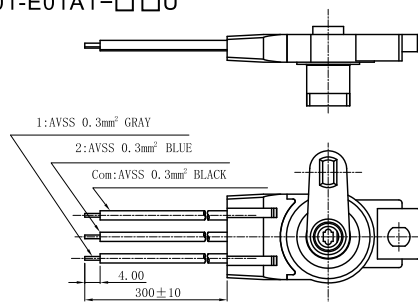
Circuit 1 ON: $-17.70^{\circ} \pm 5^{\circ} \sim 55^{\circ} \pm 5^{\circ}$ The black wire is connected to the gray wire
 Circuit 1 OFF: $55^{\circ} \pm 5^{\circ} \sim 102.3^{\circ} \pm 5^{\circ}$ The black wire is disconnected from the gray wire
 Circuit 2 ON: $-22.40^{\circ} \pm 5^{\circ} \sim 15^{\circ} \pm 5^{\circ}$ The black wire is connected to the blue wire
 Circuit 2 OFF: $-15^{\circ} \pm 5^{\circ} \sim 98^{\circ} \pm 5^{\circ}$ The black wire is disconnected from the blue wire

■ Shape

G201-S01A1U



G201-E01A1-□□U



G15D (Metal Lever) Series

Ultraminiature Micro Switch



■ Features

- ◆ Compact size and structure, available in places requiring high space utilization
- ◆ High precision shrapnel structure
- ◆ Instantaneous contact construction

■ Application

- ◆ Car
- ◆ Air-Conditioner
- ◆ Communication

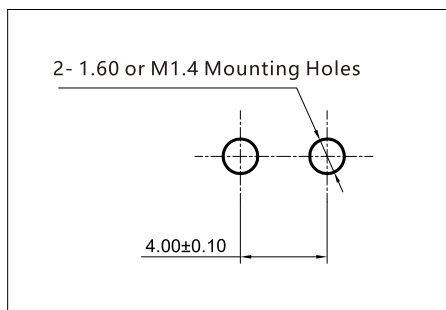
■ Parameters

Rating		1A/15VDC
Operating Frequency	Electrical	20 cycles/min
	Mechanical	60 cycles/min
Contact Resistance (Initial Value)		100mΩ Max.
Insulation Resistance (at 500VDC)		100MΩ Min.
Dielectric Strength		500VAC 50~60Hz for 1 Min
Operating Temperature		-40°C ~ +85°C
Operating Humidity		85% RH Max.
Service Life	Electrical	10,000 cycles
	Mechanical	300,000 cycles

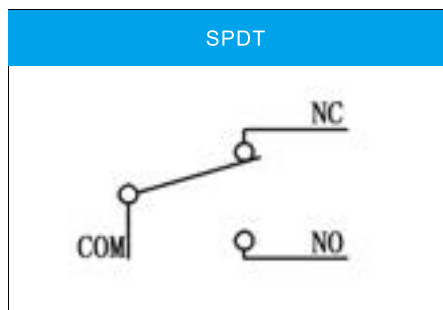
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 info@elitaliaweb.it

G15D

■ Mounting Hole Dimensions



■ Circuitry Configuration

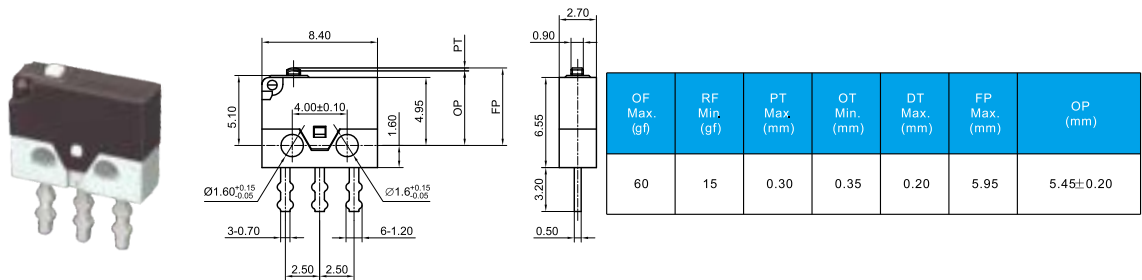


■ Terminal Style

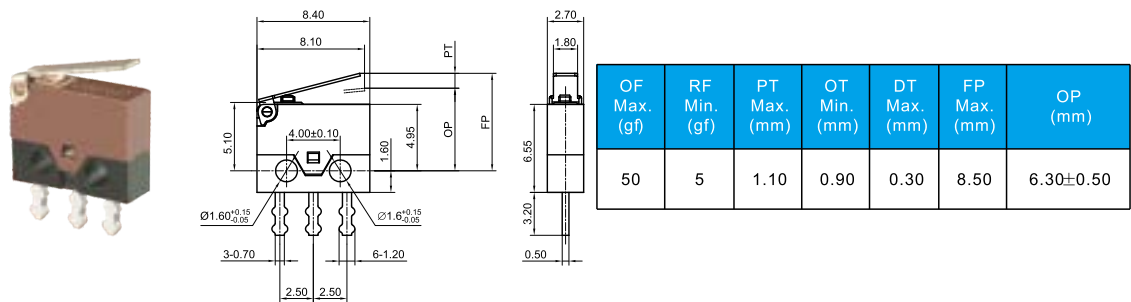
P: Standard PCB Terminals	D: Long PCB Terminals
3-0.70 2.50 2.50 6-1.20 0.50 3.20	3-0.70 2.50 2.50 6-1.20 0.50 5.10 0.50
L: Left Side PCB Terminals	R: Right Side PCB Terminals
0.70 1.20 0.50 1.60 1.50	1.20 0.70 2.50 2.50 1.50 0.50 1.60

■ Dimensions and Operating Characteristics

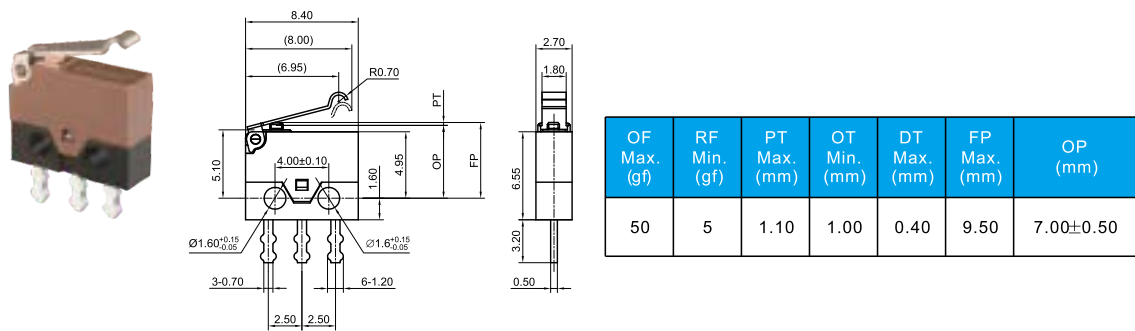
◆ G15D01-60P00WAuU



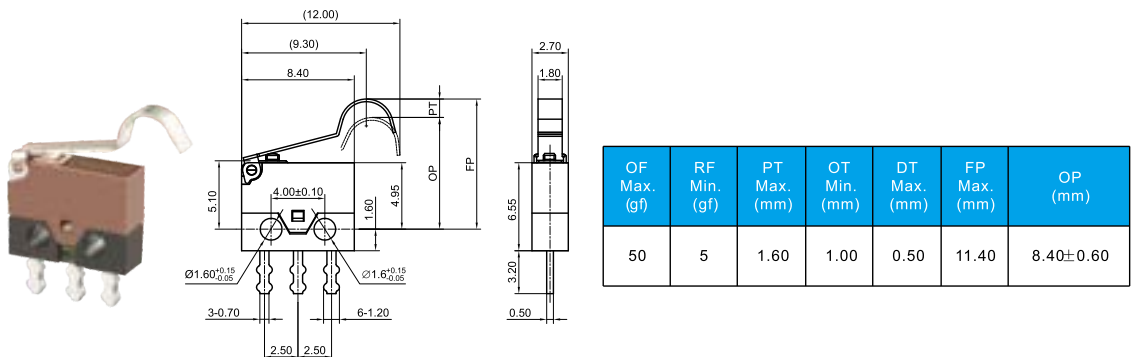
◆ G15D01-15P03WAuU



◆ G15D01-15P04WAuU



◆ G15D01-15P06WAuU



G15E (Plastic Lever) Series

Ultraminiature Micro Switch



■ Features

- ◆ Small compact size, it can be used in places requiring high space utilization
- ◆ High precision shrapnel structure
- ◆ Momentary contact structure

■ Application

- ◆ Car
- ◆ Air-Conditioner
- ◆ Communication

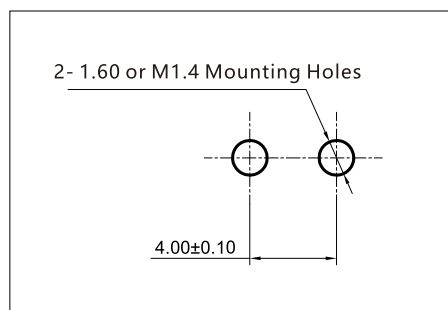
■ Parameters

Rating		1A/15VDC
Operating Frequency	Electrical	20 cycles/min
	Mechanical	60 cycles/min
Contact Resistance (Initial Value)		100mΩ Max.
Insulation Resistance (at 500VDC)		100MΩ Min.
Dielectric Strength		500VAC 50~60Hz for 1 Min
Operating Temperature		-40°C~+85°C
Operating Humidity		85% RH Max.
Service Life	Electrical	10,000 cycles
	Mechanical	300,000 cycles

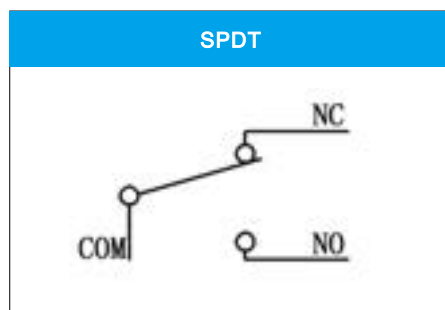
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 info@elitaliaweb.it

■ Mounting Hole Dimensions



■ Circuit Configuration

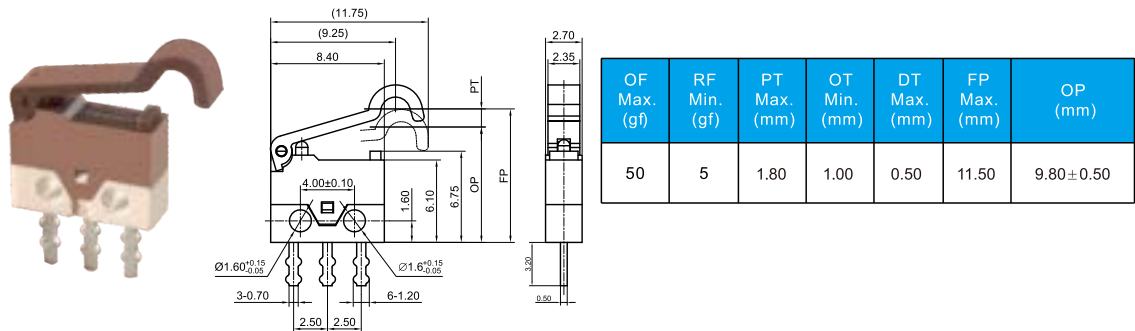


■ Terminal Style

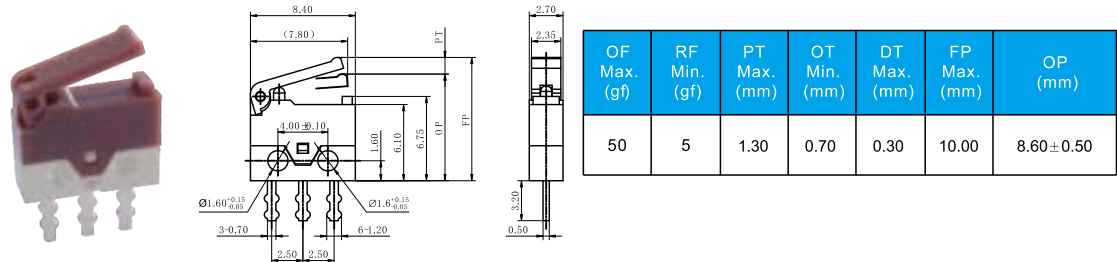
P: Standard PCB Terminals	D: Long PCB Terminals
L: Left Side PCB Terminals	R: Right Side PCB Terminals

■ Dimensions and Operating Characteristics

◆ G15E01-15P02WAuU



◆ G15E01-150P01WAuU



G16 Series

Waterproof Swing Rotary Switch



■ Features

- ◆ Water and dust proof design (IP67)
- ◆ Long life, high reliability
- ◆ Bidirectional conduction design
- ◆ Mini size, could be used in tight space

■ Application

- ◆ Car
- ◆ Industrial Control

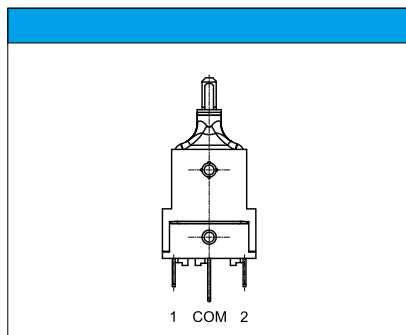
■ Parameters

Rating		0.1A 12VDC
Operating Frequency	Electrical	20 cycles/min.
	Mechanical	30 cycles/min.
Contact Resistance (Initial Value)		200mΩ Max.
Insulation Resistance		100MΩ Min.
Vibration Durability		10~55Hz, Amplitude 1.5mm
Shock Resistance		Acceleration 98m/s ² , Time 11ms
Voltage Resistance	Between terminals	500VAC 50~60Hz for 1 Min.
	Between terminals and housing	1,000VAC 50~60Hz for 1 Min.
Service Life	Electrical	100,000 cycles
	Mechanical	100,000 cycles
Operating Force		200gf Max.
Operating Temperature		-40°C~ +85°C
Operating Humidity		85% RH Max.

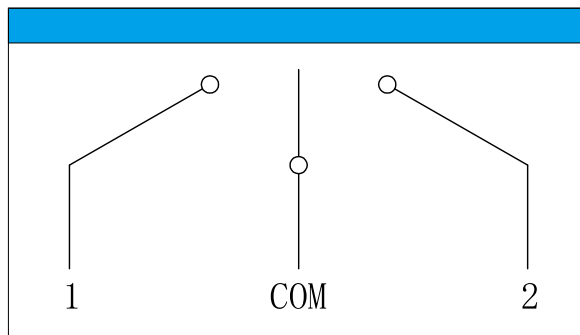
G16 Series Swing Rotary Switch Ordering Instruction

G16	01	200	A	00	A	00	T001	U
Switch Type	Electrical Rating	Max Operating Force at Swing Arm	Terminal Type	Lever Type	Circuitry	Posts Type	Custom Code	LOGO
G16 Series Swing Rotary Switch	01 0.1A 12VDC	200 200gf Max	A Vertical Type No-hole solder Terminals (3.0mm wide)	00 SwingArm	A SPDT-NO	00 Posts: $\phi 2.0 \times 2.0 \text{mm}$	General	U Unionwell
						01 Posts: $\phi 2.4 \times 2.7 \text{mm}$	Customized according to requirements. the code format is T+ serial number XXX for example: T001	Other
							...	...
							Other	

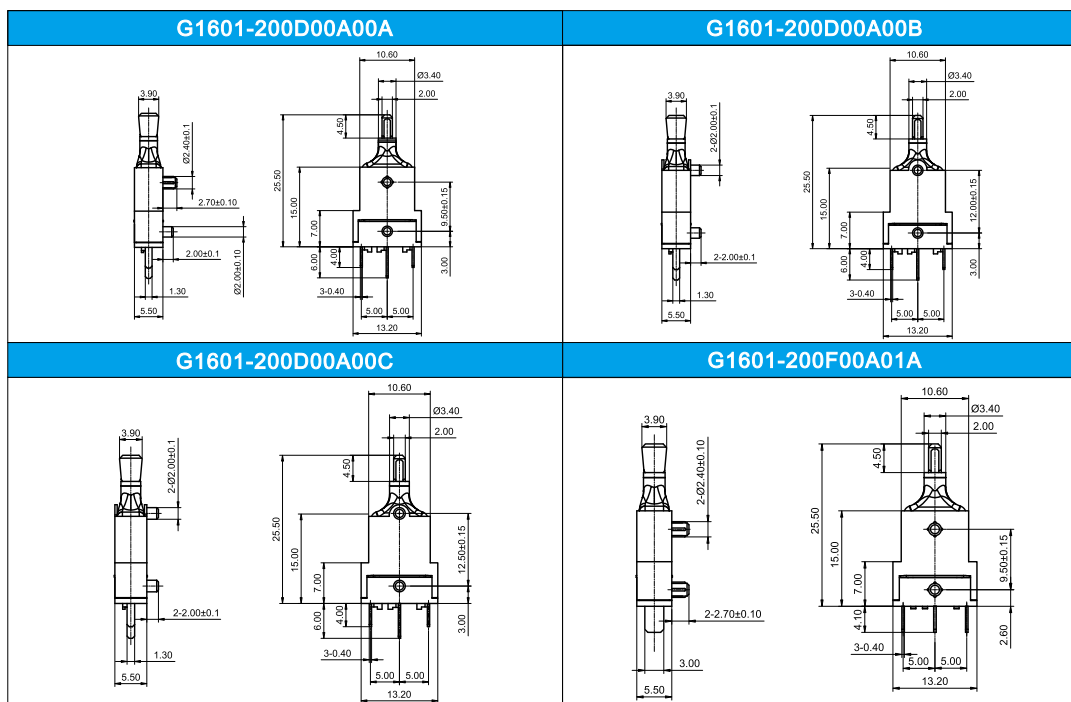
■ Shape



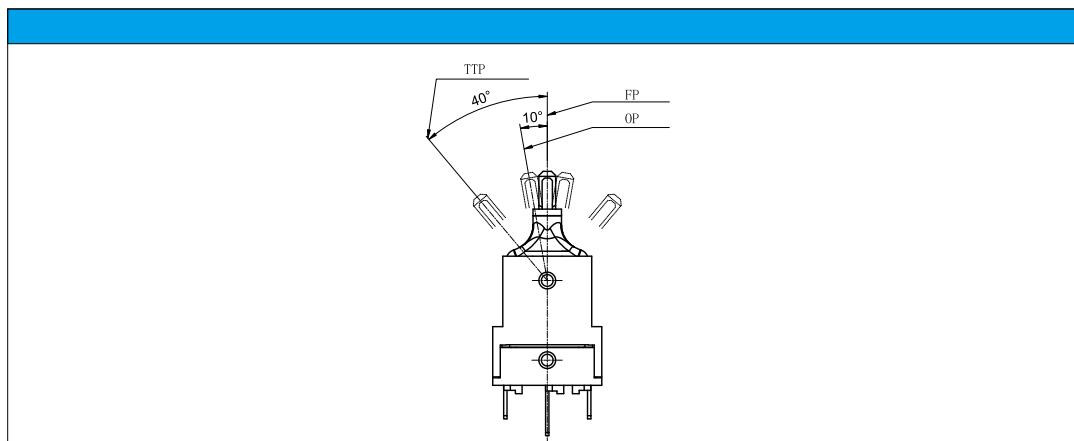
■ Circuit Configuration



■ Dimension

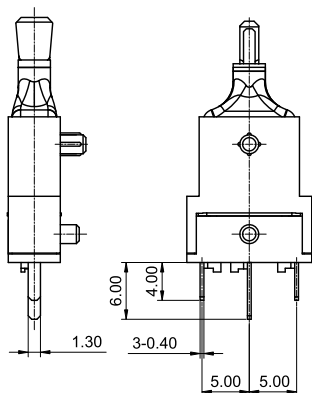


■ Parameters

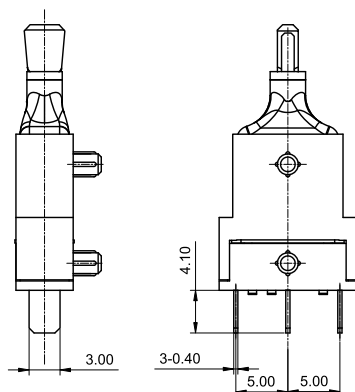


■ Terminal Type

D13# Vertical Type Straight PCB Terminals



F Vertical Type No-hole solder Terminals



G19 Series

Waterproof Seat Adjustment Switch



■ Features

- ◆ Sealed design, IP67 protection level, applied in different extreme environments
- ◆ Multiple operating sticks and heights, could be customized different vehicle models
- ◆ Tight structure, two-way or four-way switching accomplished
- ◆ High-performance spring, high-sensitive switching and long service life

■ Application

- ◆ Car

■ Parameters

Rating		15A 14VDC/8A 12VDC
Operating Frequency	Electrical	20~30 cycles/min
	Mechanical	50~100 cycles/min
Contact Resistance (Initial Value)		20mΩ Max.
Insulation Resistance (at 500VDC)		100MΩ Min.
Service Life	Electrical	30,000 cycles
	Mechanical	50,000 cycles
Dielectric Strength		500VAC (50~60Hz)
Operating Temperature		-40°C~+85°C
Operating Humidity		96% RH Max.

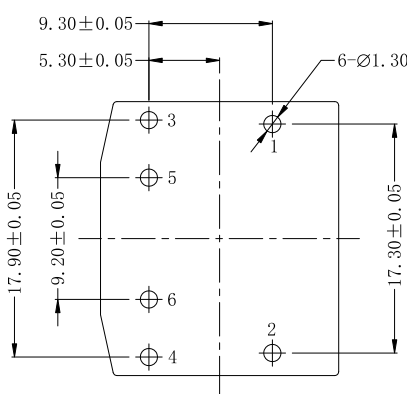
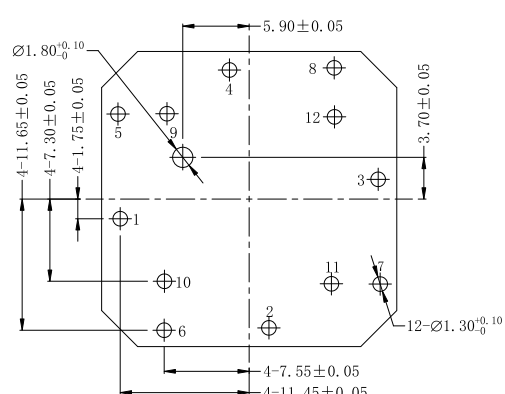
G19 Series Seat Adjustment Switches Ordering Instruction

G19	15	4	A	R	A	1	A	A	T001
Switch Type	Electrical Rating	Operating Direction	Stick Position	Stick Shape	Operating Position Height	Pre-press Button	Circuit	Protection Level	Custom Code
G19 Series Seat Adjustment Switches	15 15A 14VDC	2 Two-way	M Middle	R Round	A 22mm (Only for 4-Way Switch)	0 No Button	A SPDT	A IP67	General
		4 Four-way	L Left side	S Square	B 21.6mm (Only for 2-Way Switch)	1 With Pre-press Button	B SPST-NC	B IP5X	T001 Customized according to requirements, the code format is T+serial number XXX, for example: T001
	C 25.6mm (Only for 2-Way Switch)								
	8 8A 12VDC	... Other						C SPST-NO	... Other

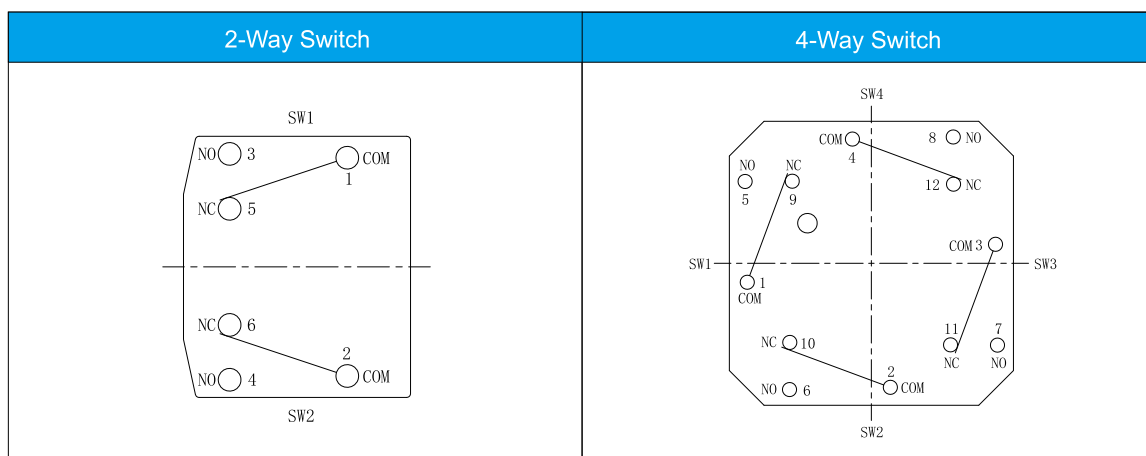
■ Protection Level

IP67		
		
IP5X		
		

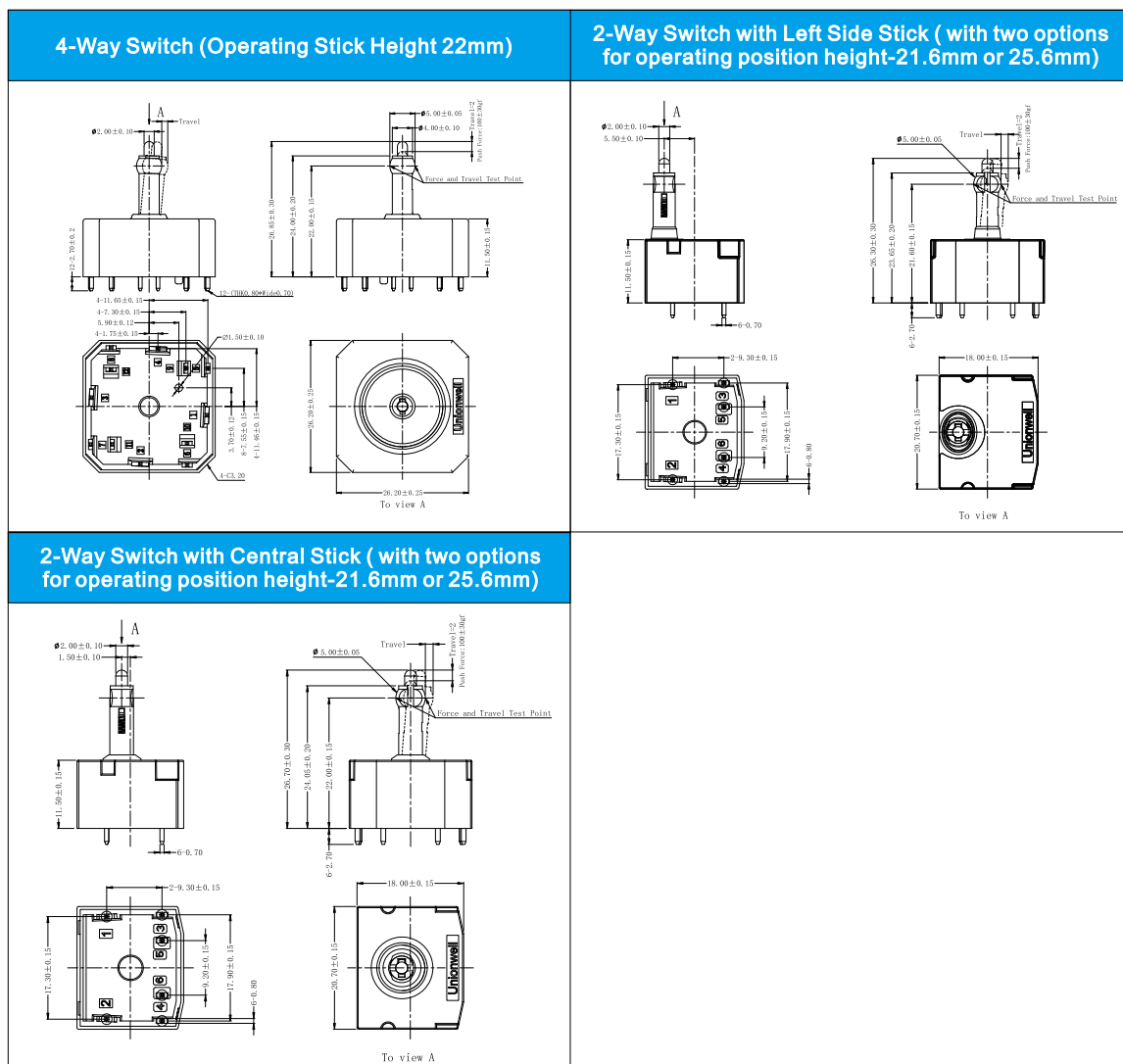
■ Basic Mounting Dimensions

2-Way Switch	4-Way Switch
 Diagram showing mounting dimensions for a 2-Way Switch. The component is a square with rounded corners. Dimensions include: top width 9.30 ± 0.05, top offset 5.30 ± 0.05, total width 17.90 ± 0.05, bottom offset 9.20 ± 0.05, total height 17.30 ± 0.05, and 6 mounting holes with diameter $\varnothing 1.30$. Terminals are numbered 1 through 6.	 Diagram showing mounting dimensions for a 4-Way Switch. The component is a square with rounded corners. Dimensions include: top width 5.90 ± 0.05, top offset $\varnothing 1.80^{+0.10}_{-0}$, total width 17.90 ± 0.05, bottom offset $4-7.30 \pm 0.05$, total height 17.30 ± 0.05, and 12 mounting holes with diameter $\varnothing 1.30^{+0.10}_{-0}$. Terminals are numbered 1 through 12.

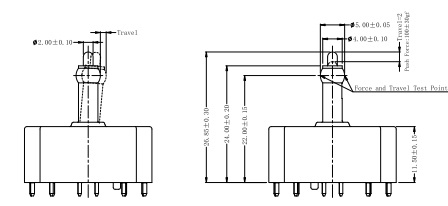
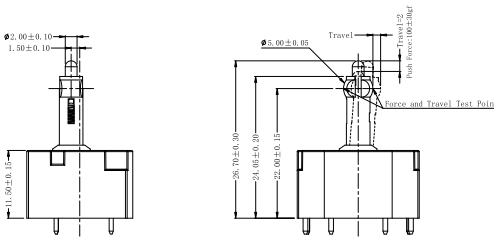
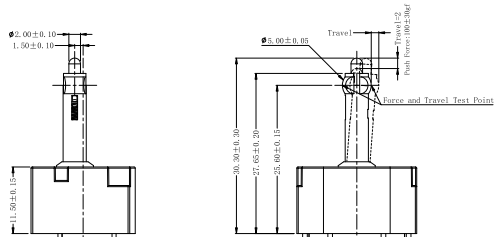
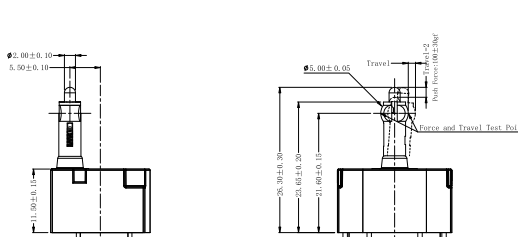
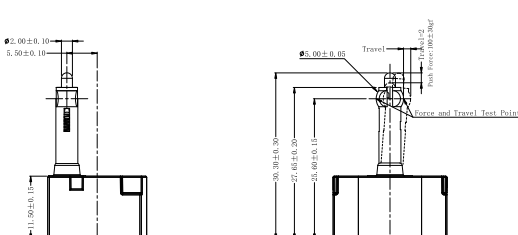
■ Contact Configuration



■ Basic Shape and Dimensions



■ Dimensions and Operating Characteristics

Stick Code	Stick Height	Stick Assembly Diagram	Operating Parameters								
A	22		<table><tr><td>Part No.</td><td>G19-154MRA1AA</td></tr><tr><td>Operating Force (OF)</td><td>700 ± 150</td></tr><tr><td>Operating Position (OP)</td><td>1.60 ± 0.40</td></tr><tr><td>Total Travel Position (TTP)</td><td>2.5mm</td></tr></table>	Part No.	G19-154MRA1AA	Operating Force (OF)	700 ± 150	Operating Position (OP)	1.60 ± 0.40	Total Travel Position (TTP)	2.5mm
			Part No.	G19-154MRA1AA							
			Operating Force (OF)	700 ± 150							
			Operating Position (OP)	1.60 ± 0.40							
Total Travel Position (TTP)	2.5mm										
B	22		<table><tr><td>Part No.</td><td>G19-152MRA1AA</td></tr><tr><td>Operating Force (OF)</td><td>600 ± 150</td></tr><tr><td>Operating Position (OP)</td><td>1.60 ± 0.40</td></tr><tr><td>Total Travel Position (TTP)</td><td>2.50mm</td></tr></table>	Part No.	G19-152MRA1AA	Operating Force (OF)	600 ± 150	Operating Position (OP)	1.60 ± 0.40	Total Travel Position (TTP)	2.50mm
			Part No.	G19-152MRA1AA							
			Operating Force (OF)	600 ± 150							
			Operating Position (OP)	1.60 ± 0.40							
Total Travel Position (TTP)	2.50mm										
C	25.6		<table><tr><td>Part No.</td><td>G19-152MRC1AA</td></tr><tr><td>Operating Force (OF)</td><td>500 ± 150</td></tr><tr><td>Operating Position (OP)</td><td>2.10 ± 0.40</td></tr><tr><td>Total Travel Position (TTP)</td><td>3.50mm</td></tr></table>	Part No.	G19-152MRC1AA	Operating Force (OF)	500 ± 150	Operating Position (OP)	2.10 ± 0.40	Total Travel Position (TTP)	3.50mm
			Part No.	G19-152MRC1AA							
			Operating Force (OF)	500 ± 150							
			Operating Position (OP)	2.10 ± 0.40							
Total Travel Position (TTP)	3.50mm										
B	21.6		<table><tr><td>Part No.</td><td>G19-152LRB1AA</td></tr><tr><td>Operating Force (OF)</td><td>600 ± 150</td></tr><tr><td>Operating Position (OP)</td><td>1.60 ± 0.40</td></tr><tr><td>Total Travel Position (TTP)</td><td>2.5mm</td></tr></table>	Part No.	G19-152LRB1AA	Operating Force (OF)	600 ± 150	Operating Position (OP)	1.60 ± 0.40	Total Travel Position (TTP)	2.5mm
			Part No.	G19-152LRB1AA							
			Operating Force (OF)	600 ± 150							
			Operating Position (OP)	1.60 ± 0.40							
Total Travel Position (TTP)	2.5mm										
C	25.6		<table><tr><td>Part No.</td><td>G19-152LRC1AA</td></tr><tr><td>Operating Force (OF)</td><td>500 ± 150</td></tr><tr><td>Operating Position (OP)</td><td>2.10 ± 0.40</td></tr><tr><td>Total Travel Position (TTP)</td><td>3.50mm</td></tr></table>	Part No.	G19-152LRC1AA	Operating Force (OF)	500 ± 150	Operating Position (OP)	2.10 ± 0.40	Total Travel Position (TTP)	3.50mm
			Part No.	G19-152LRC1AA							
			Operating Force (OF)	500 ± 150							
			Operating Position (OP)	2.10 ± 0.40							
Total Travel Position (TTP)	3.50mm										

G20 series

Automotive Seat Belt Reminder Switch



■ Features

- ◆ Small in size, compact in structure, with high reliability and long service life.
- ◆ Mainly used in micro-current load industries such as car seat and electronic equipment;
- ◆ The series has a variety of built-in resistor structure options.

■ Application

- ◆ Car seat
- ◆ Electronic equipment

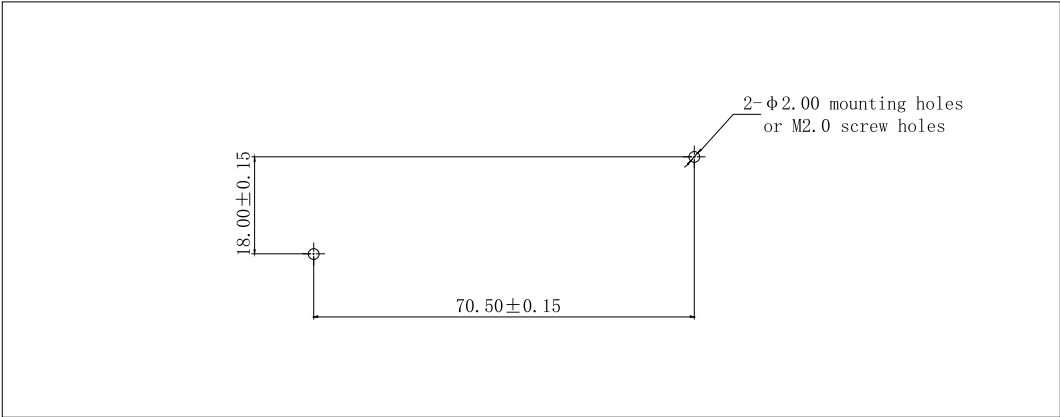
■ Characteristic Parameters

Rating		5 ~ 1000mA 4 ~ 48VDC (according to different resistance selection)
Operating Frequency	Mechanical	120 cycles/min.
	Electrical	10~30 cycles/min 1~500mm/s
Contact Resistance (Initial Value)		100mΩ Max. (single switch, excluding resistors)
Insulation Resistance		100MΩ Min. (single switch, excluding resistors)
Dielectric Strength		Between terminals: AC 500V (single switch, excluding resistors) Between terminals and housing: AC 1000V
Operating Temperature		-40°C ~ +85°C
Service Life	Electrical	300,000 cycles
	Mechanical	1,000,000 cycles

G20 Series Automotive Seat Belt Reminder Switch Ordering Instruction

G20	A	T001
Switch Series	Circuitry	Custom Code
	A SPDT	General
	A SPST-NC	Customized according to requirements, the code format is T+ serial number XXX, for example: T001
	C SPST-NO	
		... Other

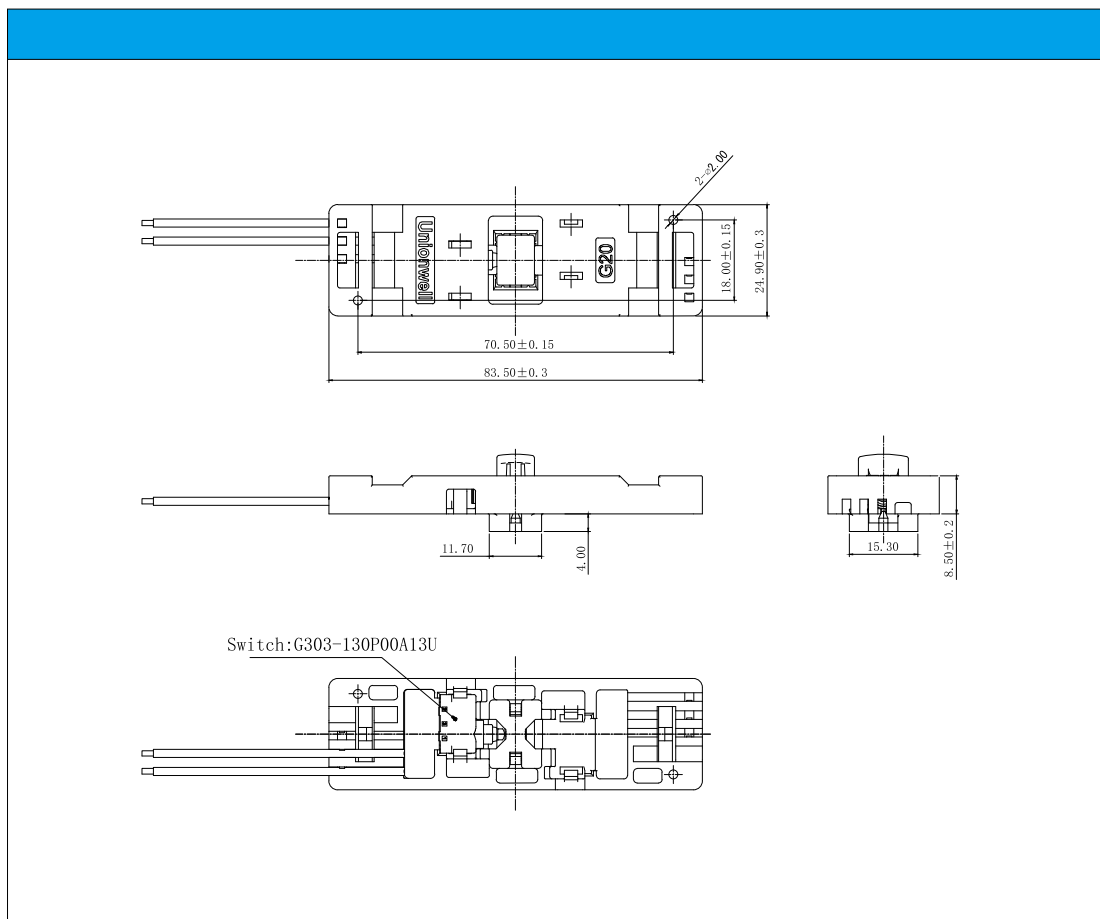
■ Mounting Hole Processing Dimensions (Unit: mm)



■ Circuit Configuration

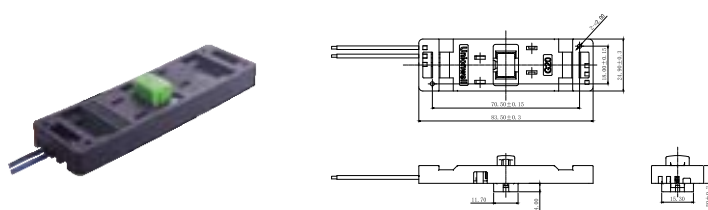
A: SPDT	B: SPST-NC	C: SPST-NO
Diagram showing the circuit configuration for A: SPDT. The switch has three terminals: 1 (COM), 2 (NC), and 3 (NO).	Diagram showing the circuit configuration for B: SPST-NC. The switch has two terminals: 1 (COM) and 2 (NC).	Diagram showing the circuit configuration for C: SPST-NO. The switch has two terminals: 1 (COM) and 3 (NO).

■ Dimensions (mm)



■ Operating Features

◆ G20-A001



OF Max. (gf)	RF Min. (gf)	TTP Min. (mm)	DT Max. (mm)	FP Max. (mm)	OP (mm)
-600	600	200	8.5	1.0	15
					10±1.0

G21 Series

DPDT Micro Switch



■ Features

- ◆ Long life, high reliability
- ◆ DPDT double-break type
- ◆ Widely used in industrial control, etc.

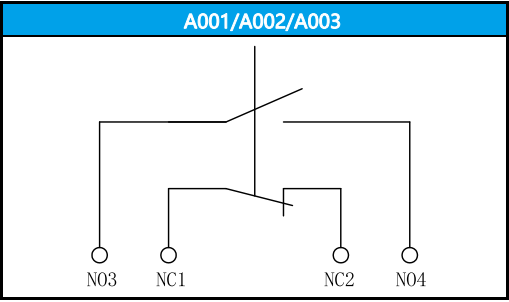
■ Application

- ◆ Telecommunication tools, field work vehicles, etc.

■ Parameters

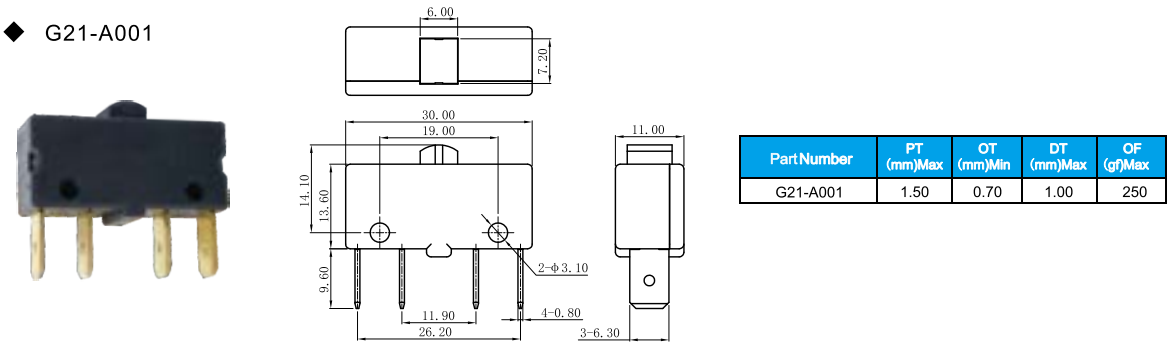
Rating		6A 12VDC; 2A 24VDC 0.6A 55VDC
Operating Frequency	Electrical	60 cycles/min
	Mechanical	180 cycles/min
Contact Resistance (Initial Value)		100mΩ Max.
Insulation Resistance		100MΩ Min.
Service Life	Electrical	1,000,000 cycles
	Mechanical	3,000,000 cycles
Storage Temperature		-30°C~+85°C
Operating Temperature		-30°C~+65°C
Operating Humidity		95% RH Max.

Circuit Configuration

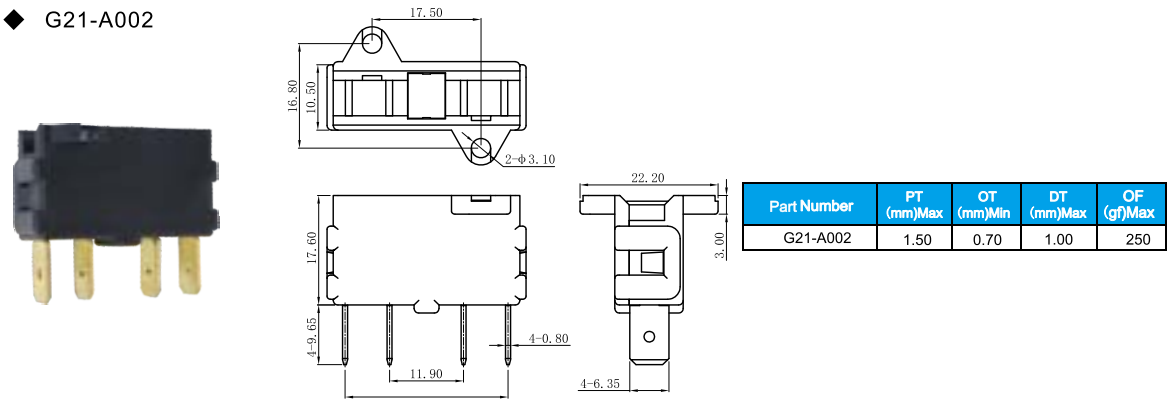


Dimensions and Operating Characteristics

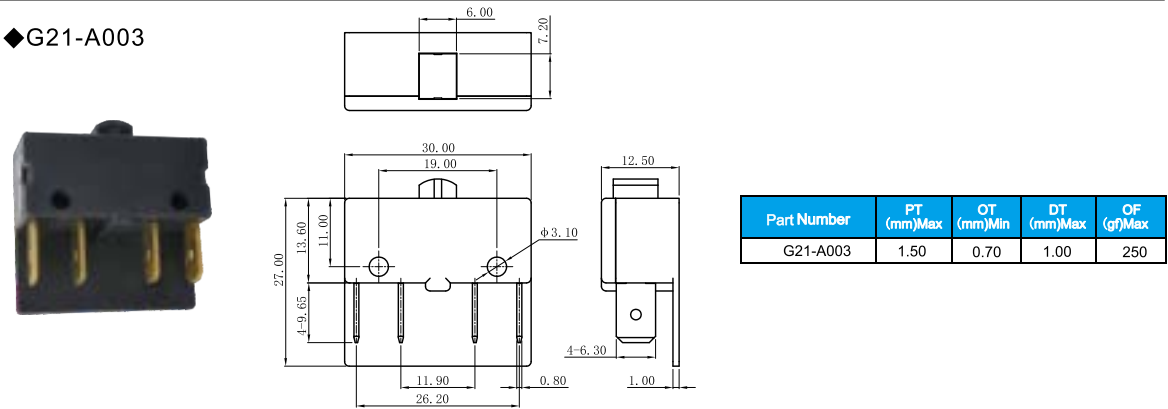
G21-A001



G21-A002



G21-A003



G22 Series

Automotive Micro Switch



■ Features

- ◆ Tight configuration, sliding contact, long travel
- ◆ Long life, high reliability
- ◆ Widely used in home appliances, electronic equipments, automatic machines, communication equipments, auto door switch

■ Application

- ◆ Home appliances
- ◆ Electronic devices
- ◆ Automatic equipment
- ◆ Office equipment
- ◆ Auto electronics

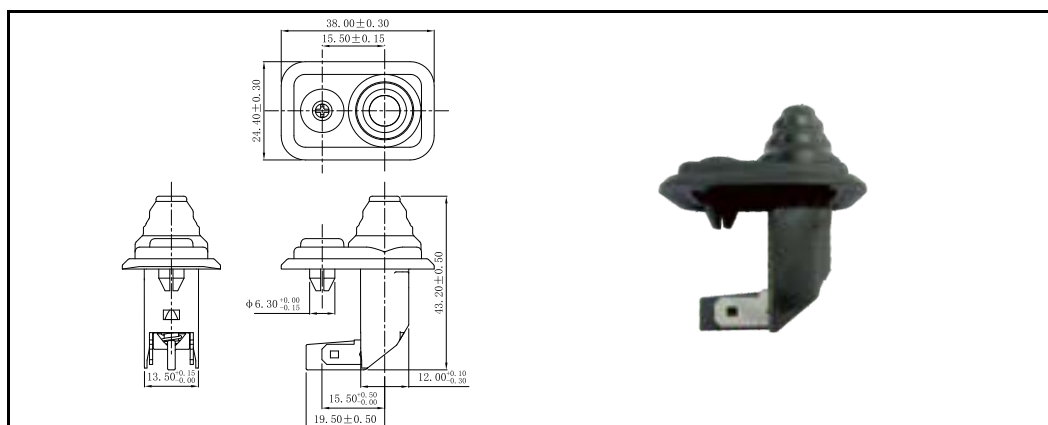
■ Parameters

Operating Frequency		Mechanical: 30 cycles/min; Electrical: 10 cycles/min.
Insulation Resistance (at 500VDC)		$\geq 10\text{M}\Omega$
Contact Resistance (Initial Value)		$\leq 100\text{m}\Omega$
Voltage Resistance	Between each terminals of the same polarity	AC1,000V, 50/60Hz, 1min.
	Between current-carrying metal part and ground and between each terminals and non-current-carrying metal parts	AC1,500V, 50/60Hz, 1min.
Vibration Durability		10-55Hz, Double amplitude 1.5mm
Operating Temperature		-40~85°C
Operating Humidity		85% RH Max.
Service Life	Electrical	50,000 cycles
	Mechanical	100,000 cycles

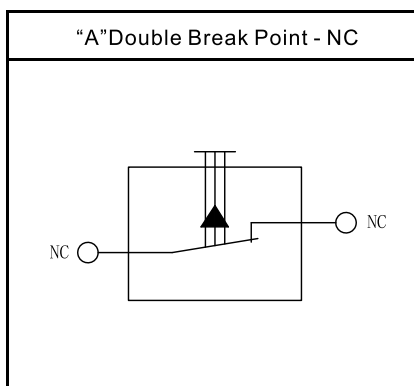
G22 Series Auto Door Switch Ordering Instruction

G22	04	10	A	A	T001	U
Switch Type	Electrical Rating	Max Operating Force at Pin Plunger	Terminal Type	Circuitry	Custom Code	LOGO
Switch Type	04 Rating: 4A 14VDC Temperature grade: 40T85	10 10N Max	A 250#quick connect Terminals	A DPDT-NC	General	Unionwell
	...	15 15N Max	...		Customized according to requirements, the code format is T+ serial number XXX for example: T001	Other
		20 20N Max			...	
		...	Other		Other	

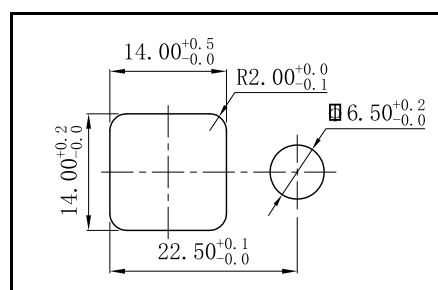
Shape Characteristics



Circuitry

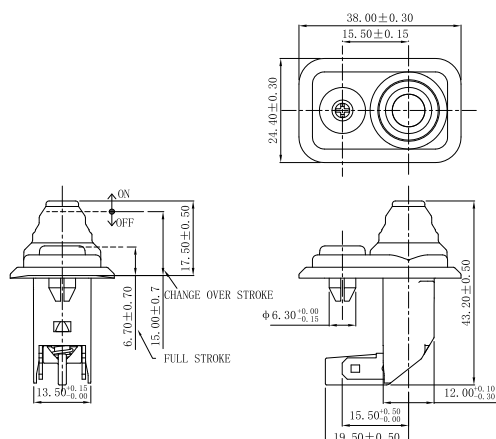


Mounting Hole Location



Dimensions and Operating Characteristics

Pin Plunger



Parameters

Type	FP (mm)	OP (mm)	OF Max.(N)	PT (mm)	TTP (mm)
G2204-10AA	17.5±0.5	15±0.7	10	2.5±1.2	8.7±0.7
G2204-15AA	17.5±0.5	15±0.7	15	2.5±1.2	8.7±0.7
G2204-20AA	17.5±0.5	15±0.7	20	2.5±1.2	8.7±0.7

G23A Series

Motor Electronic Lock for Charging



■ Features

- ◆ High-density sealed motor electronic lock, meeting IP67 requirements
- ◆ Reliable locking, manual and automatic unlocking are available
- ◆ Accurate locking or unlocking positioning and clear gear
- ◆ The motor electronic lock is sensitive to forward and reverse conversion, with long service life, stable and reliable

■ Application

- ◆ Charging gun

■ Parameters

Rating		12VDC
Insulation Resistance		100MΩ Min.
Dielectric Strength		500VAC (50~60Hz)
Degree of Protection		IEC IP67 (Drive roller and housing excluded)
Work Temperature		-40°C~+85°C
Work Humidity		45% RH~85% RH
Service Life	Electrical	60,000 cycles
	Mechanical	60,000 cycles (Min.)
Operating Frequency	Electrical	20 cycles/min
	Mechanical	20 cycles/min
Operating Features (At 12VDC)	(OF)	700g.cm (Min.)
	(HF)	250g.cm (Min.)
	(PT)	45°±5°
	Shaft Strength	200N (No mechanical damage under vertical axial force)
	(OF)	250g.cm (Min.)

G23A Series Motor Electronic Lock Ordering Model Guide

G23A	250	A	B	01	A	300	A	A	T001
G23A Electronic Lock Series	Torque	Wire Spec	Feedback Switch Function	Manual Unlocking Type	Wire Type	Wire Length	Conductor Holder Type	Resistance combination	Custom Code
G23A Series	250g.cm (Min.)	A 26# AWG	A (NC)	A None	A AVSS	00 None	N None	N None	General
		B 24# AWG	B (NO)	"-" type base unlock	B UL1007	300 300mm Wire Length Motor Positive Red Wire Negative Black Wire COM Terminal White Wire NC Orange Wire	A A type base with wires	A Switch Built-in Resistor Resistance Combination R1=1KΩ; R2=1KΩ	T001 Customized according to the code requirements, the code format is T+serial number XXX, for example: T001
		C 22# AWG	... Other	"+" type base unlock	C UL1061	500 500mm Wire Length Motor Positive Red Wire Negative Black Wire COM Terminal White Wire NC Orange Wire	B B type base with wires	B Switch Built-in Resistor Resistance Combination R1=220Ω; R2=3.3KΩ	
	... Other	D 20# AWG			D UL1332			C Switch Built-in Resistor Resistance Combination R1=1.5KΩ; R2=1.8KΩ	
		... Other			E UL1430			D Switch Built-in Resistor Resistance Combination R1=2.0KΩ; R2=2.7KΩ	... Other
					F UL1571			E Switch Built-in Resistor Resistance Combination R1=2.0KΩ; R2=1.5KΩ	
					G FLRY-A			F Switch Built-in Resistor Resistance Combination R1=100Ω; R2=3.3KΩ	
					H UL3266			G Switch Built-in Resistor Resistance Combination R1=1.0KΩ; R2=3.3KΩ	
								H Switch Built-in Resistor Resistance Combination R1=150KΩ; R2=330KΩ	
								J Switch Built-in Resistor Resistance Combination R1=680Ω; R2=2.7KΩ	

■ Basic Overall Dimensions and Installation Dimensions

G23	G23A+A type base with wires
G23A+B type base with wires	

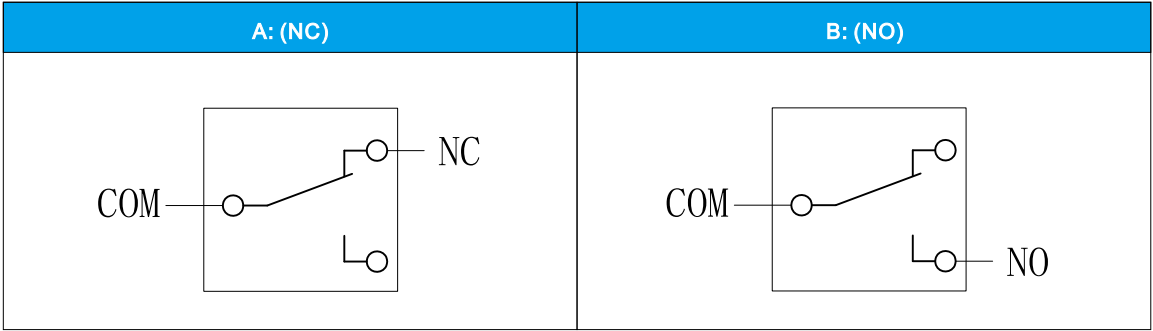
■ Base With Wires Type

A type base with wires	B type base with wires

■ Manual Unlocking Port Type

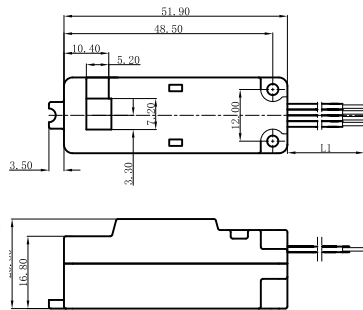
"—" type base with wires	"+" type base with wires

Feedback Switch Function



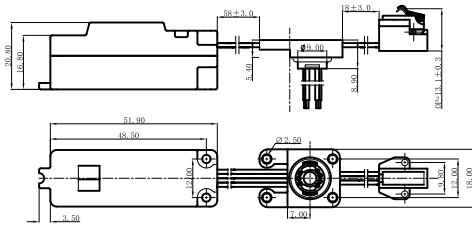
Dimensions and Operating Characteristics

◆ G23A-250BB02AXXXNNU



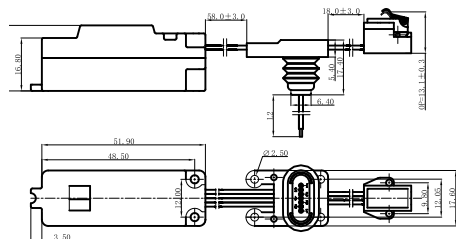
OF	HF	PT	Shaft Strength	OF
700g.cm (Min)	250g.cm (Min)	45°±5°	200N Vertical Axial Force Without Mechanical Damage	250g.cm (Min)

◆ G23A-250AB02A300AAU



OF	HF	PT	Shaft Strength	OF
700g.cm (Min)	250g.cm (Min)	45°±5°	200N Vertical Axial Force Without Mechanical Damage	250g.cm (Min)

◆ G23A-250AB02A300ABU



OF	HF	PT	Shaft Strength	OF
700g.cm (Min)	250g.cm (Min)	45°±5°	200N Vertical Axial Force Without Mechanical Damage	250g.cm (Min)

G23B Series

Motor Electronic Lock for Charging



■ Features

- ◆ High-density sealed motor electronic lock, meeting IP54 requirements
- ◆ Reliable locking, manual and automatic unlocking are available
- ◆ Accurate locking or unlocking positioning and clear gear
- ◆ The motor electronic lock is sensitive to forward and reverse conversion, with long service life, stable and reliable

■ Application

- ◆ Charging Gun

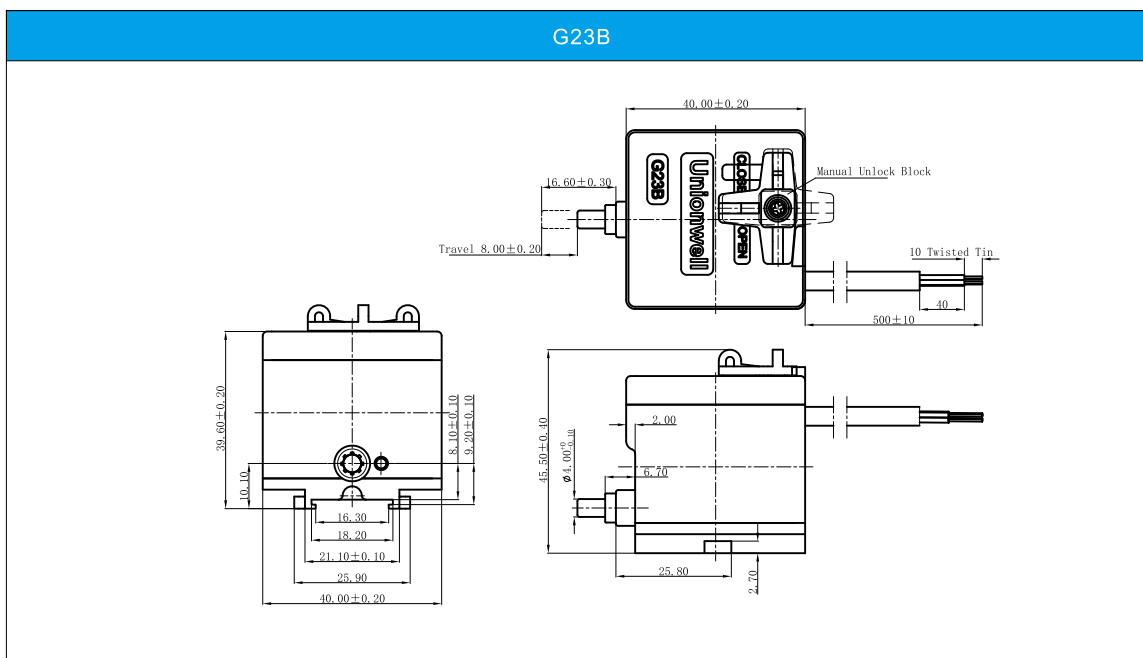
■ Parameters

Rated Voltage		12VDC (pulse)
Voltage Range		12±10% VDC.
Motor No Load Current		≤50mA
Motor Lock Current		≤500mA
Response Time		≤100mS
Maximum Power on Time		3S (No long time conduction)
Locking Time		≤300mS
Unlocking Time		≤300mS
Triggering Time at 12VDC		0.25S<t<1S
Functional Angle		≤90°
Insulation Resistance		100 MΩ Min
Dielectric Strength		500VAC (50~60Hz)
Degree of Protection		IEC IP54 Except driving wheel and push rod active cavity
Operating Temperature		-40°C~+85°C
Operating Humidity		45%RH~85%RH
Service Life	Electrical	30,000 cycles
	Mechanical	30,000 cycles (Min.)
Operating Frequency	Electrical	18 cycles/min
	Mechanical	18 cycles/min
Operating Features (At 12VDC)	HF	300g (Min.)
	Fracture Force	200N
	PT	8.0mm±0.20mm
	OF	300g.cm (Min.)

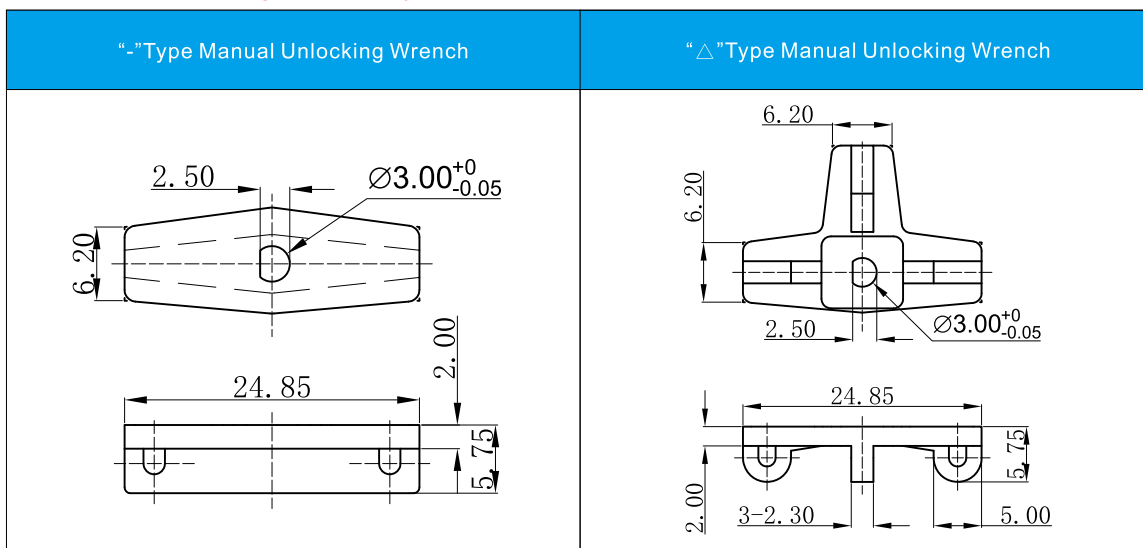
G23B Series Motor Electronic Lock Ordering Model Guide

G23B	500	A	B	1	A	300	T001	U
Electronic Lock Series	Torque	Terminal Spec.	Feedback Switch Function	Manual Unlocking Knob Type	Wire Type	Wire Length	Custom Code	LOGO
G23B Series Motor Electronic Lock	500g.cm (Min.)	A 26# AWG	A NC	00 None	A UL2464	000 None	General	Unionwell
	...	B 24# AWG	B NO	01 Triangle knob	B UL2463	300 300mm Wire Length Motor Positive Red Wire Negative Black Feedback switch COM terminal with blue wire and NC terminal with green wire (NO terminal with orange wire)	Customized according to requirements, the code format is T+ serial number XXX, for example: T001	...
		C 22# AWG	C (DT)	02 " " Type manual unlocking wrench	C UL2096	500 500mm Wire Length Motor Positive Red Wire Negative Black Feedback switch COM terminal with blue wire and NC terminal with green wire (NO terminal with orange wire)	Other	
		D 20# AWG	... Other	... Other	D UL2099	... Other	...	
		... Other			... Other			

Basic Overall Dimensions and Installation Dimensions



Manual Unlocking Wrench Type



A: NC	B: NO

Figure 1 shows the dimensions of the actuator. The top view shows a square base with a central circular feature and a cable extending from one corner. The side view shows the profile of the actuator with a central circular feature. The front view shows the actuator with a central circular feature and a cable extending from one corner. Dimensions are provided in millimeters (mm) and inches (in).

HF	PT	Rotary Shaft Strength	OF
30N.cm (Min)	8.0±0.2 (mm)	200N Vertical Axial Force Without Mechanical Damage	50N.cm (Min)

G25 Series

Subminiature Push Button Switch



■ Production Features

- ◆ High contact reliability push-button switches for micro loads
- ◆ High stability in high temperature environment
- ◆ Have two function modes of self-locking and non-locking
- ◆ Feel smooth and good operating experience
- ◆ There are two welding process options of DIP and SMT

■ Application

- ◆ Home Appliance
- ◆ Electronic Equipments
- ◆ Automatic Equipments
- ◆ Communication Equipments
- ◆ Auto Electronics
- ◆ Apparatus and Instruments

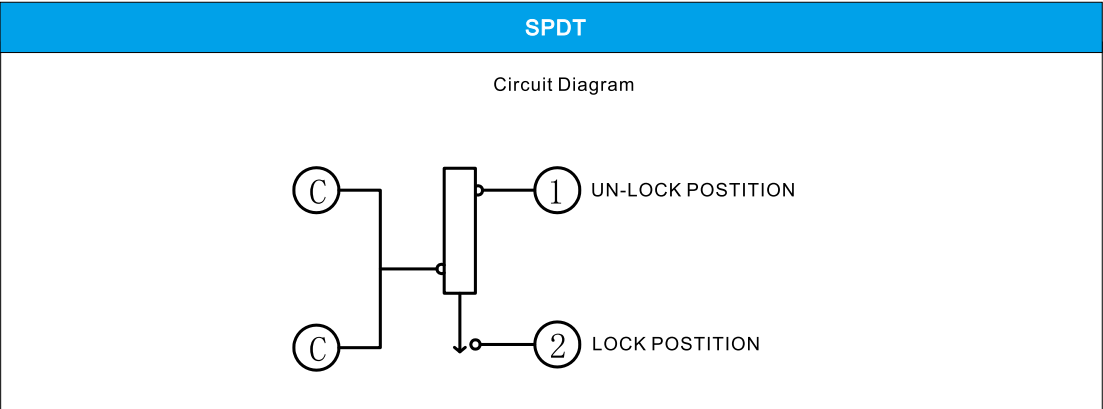
■ Parameters

Operating Frequency		15~20 cycles/min
Insulation Resistance		$\geq 3\text{M}\Omega$ (at 100VDC)
Contact Resistance (Initiative)	with terminals type	$\leq 100\text{m}\Omega$
Dielectric Strength	Between terminals	AC100V, 50/60Hz, 1min.
	Between terminals and uncharged metal parts	AC100V, 50/60Hz, 1min.
Service Life	Electrical	300,000 cycles (15~20 cycles/min) 50mA 18VDC 50 μ A 5VDC
	Mechanical	300,000 cycles (30 cycles/min)
Operating Temperature		-40~+80°C 60% RH (No ice, no frost)
Operating Humidity		95% RH (+5~+35°C)

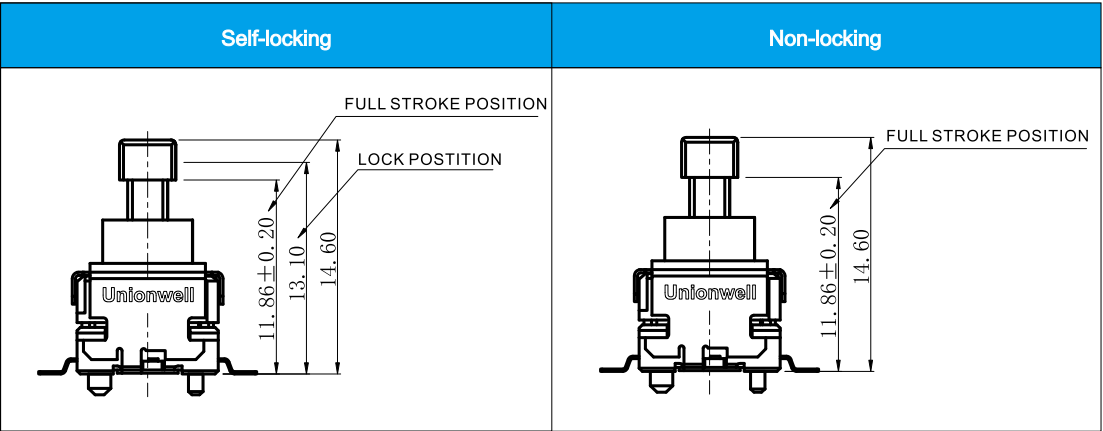
G25 Series Micro Switch Ordering Instruction

G25	1	1	1	1	U
Switch Type	Overtravel	Operating Force	Terminal Shape	Function	LOGO
Switch Type	1 1.5mm	1 300gf	1 SMD terminal	1 Self-locking	U Unionwell
	2 Non-locking	2 500gf	2 DIP	2 Non-locking	... Other
		3 360gf			

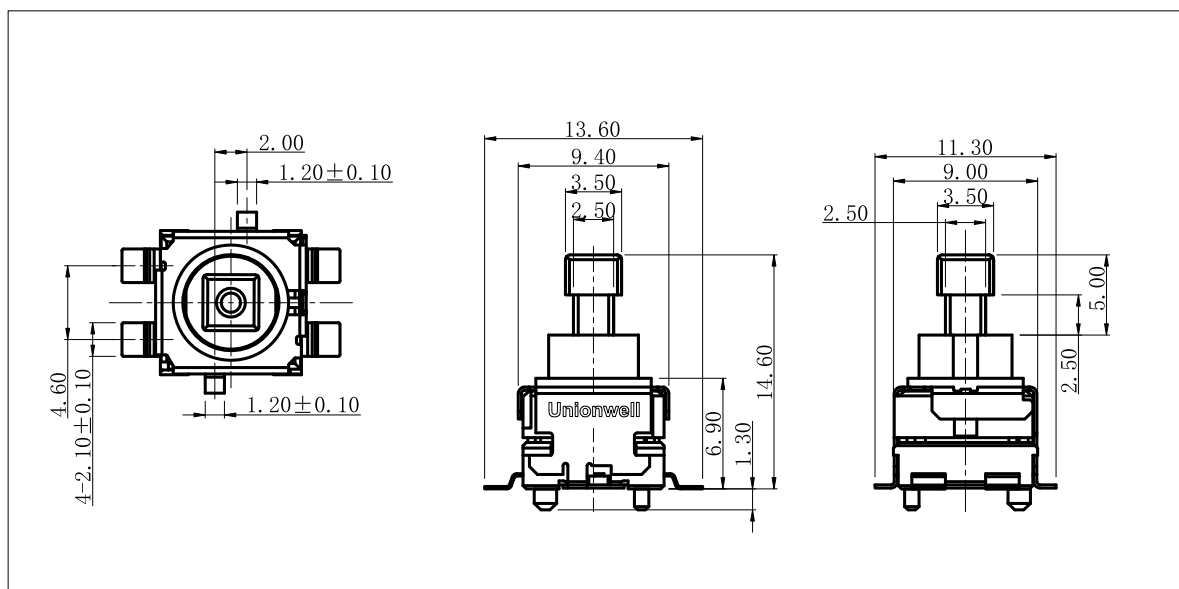
■ Circuit



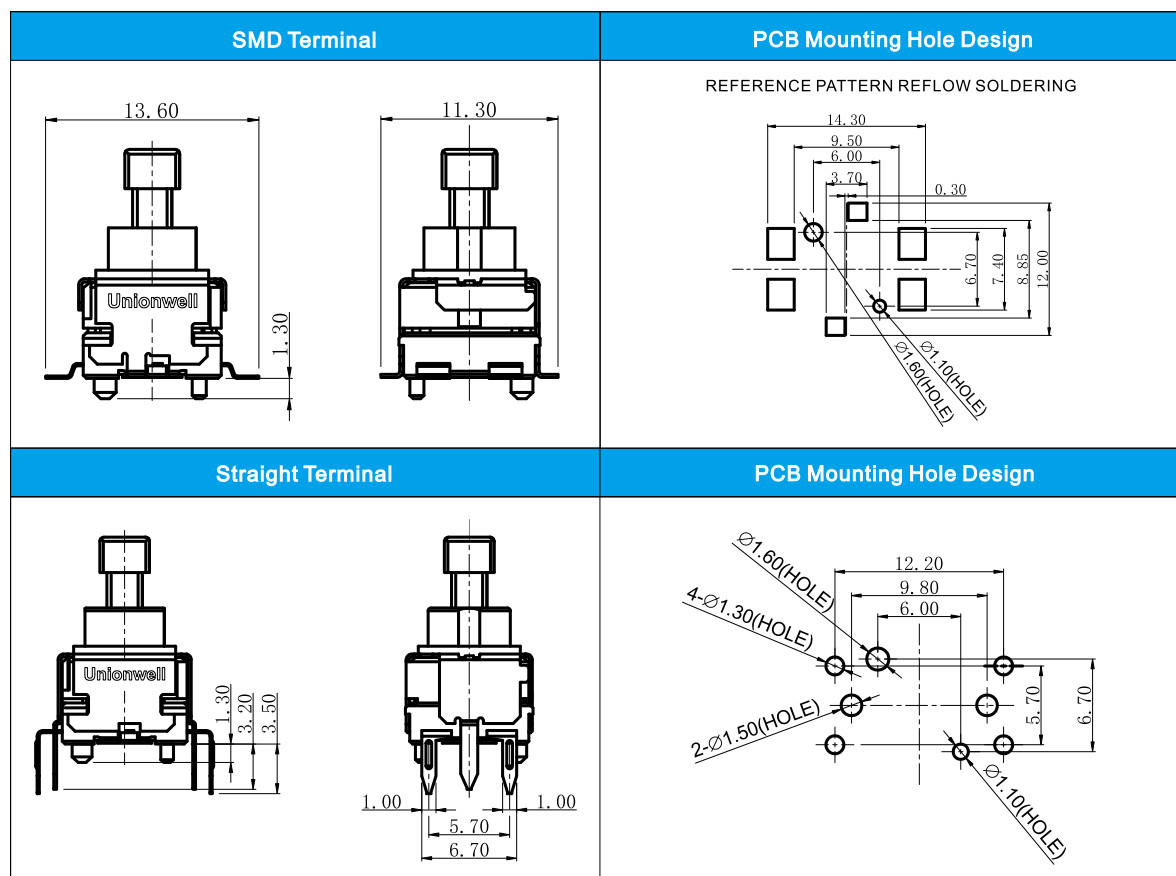
■ Function type



■ Shape and Dimensions

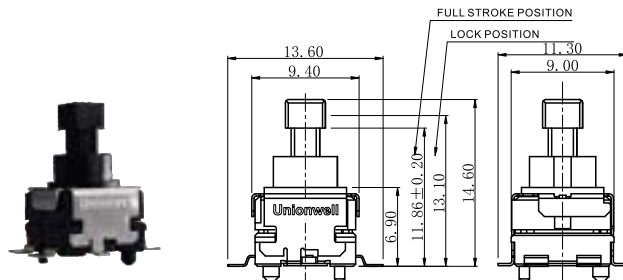


■ Switch Terminal Type (can be customized)



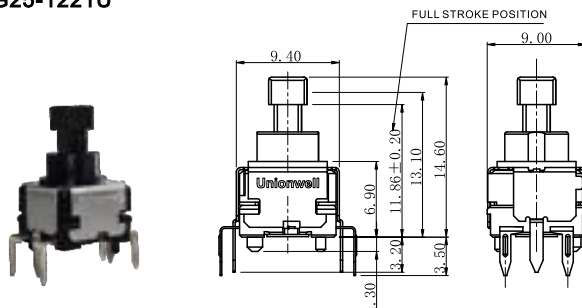
■ Dimensions and Operating Characteristics

◆ G25-1111U



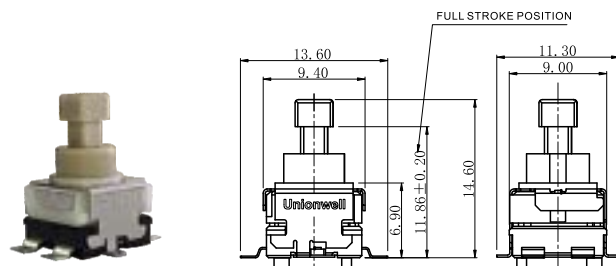
OF Max. (gf)	TTP Max. (mm)	FP Max. (mm)	LOCK POSITION (mm)
300±70	11.86	14.60	13.10±0.3

◆ G25-1221U



OF Max. (gf)	TTP Max. (mm)	FP Max. (mm)	LOCK POSITION (mm)
360±70	11.86	14.60	13.10±0.3

◆ G25-2312U



OF Max. (gf)	TTP Max. (mm)	FP Max. (mm)	LOCK POSITION (mm)
300±70	11.86	14.60	13.10±0.3

SWP Series

Explosion Proof Door Switch



■ Features

- ◆ Single pole construction
- ◆ Small compact size
- ◆ Long travel
- ◆ UL/ENEC Approval

■ Application

- ◆ Main applications include lighting and ventilator control of home appliances like fridge, freezer, cooler; and also power control in devices such as microwave oven, disinfection cabinet, and air conditioner etc.

■ Parameters:

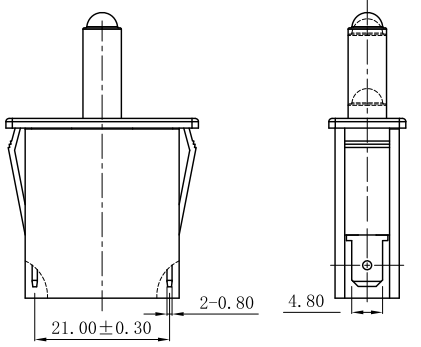
Rating		0.25A 250VAC 0.5A 24VDC
Operating Frequency	Electrical	10~30 cycles
	Mechanical	120 cycles
Contact Resistance (Initial Value)		100mΩ Max
Insulation Resistance (at 500VDC)		100MΩ Min
Operating Temperature		-25°C~ +60°C
Storage Temperature		-10°C~ +45°C
Operating Humidity		10%~85%
Service Life	Electrical	100,000 cycles
	Mechanical	200,000 cycles

SWP Series Door Switch Ordering Instruction

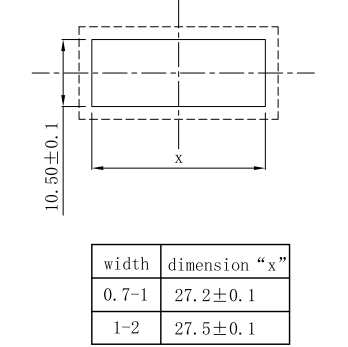
SWP-SEL-01	T001	U
Custom Code		LOGO
General	U	Unionwell
T001	Customized according to requirements, the code format is T+serial number XXX, for example: T001	
...	Other	...
...	Other	Other

Terminal Type

D#: Quick Connect Terminals

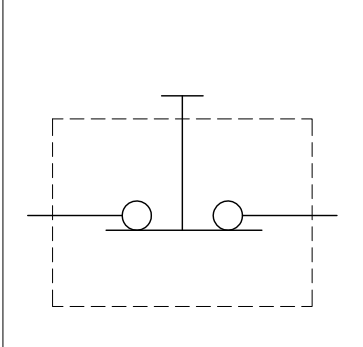


Recommended Mounting Port Dimensions on Panel

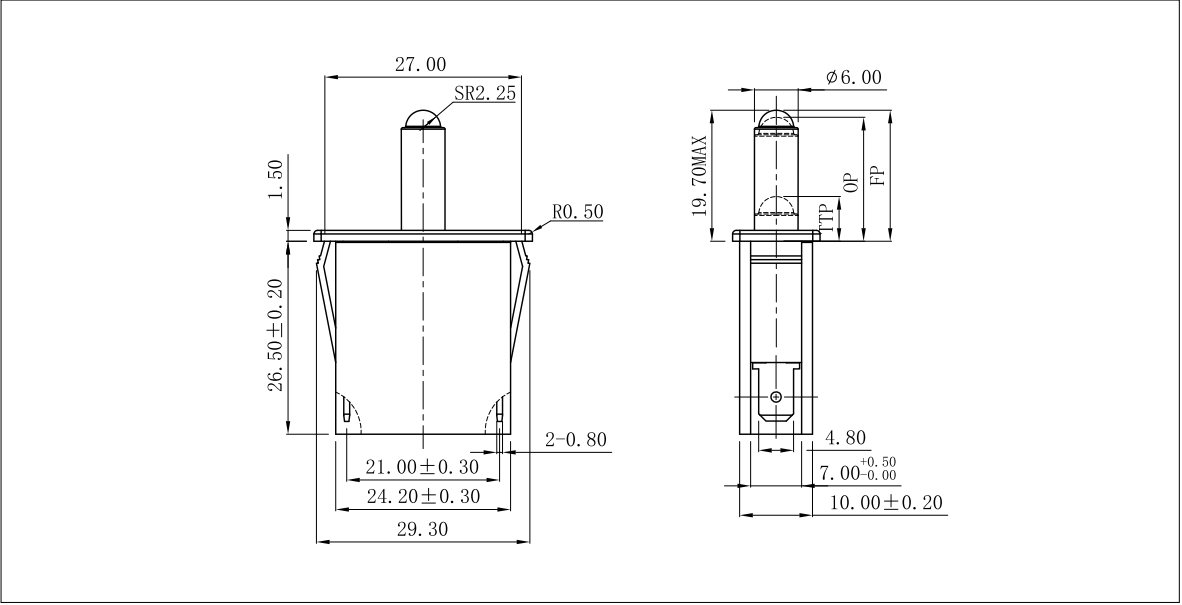


width	dimension "x"
0.7-1	27.2 ± 0.1
1-2	27.5 ± 0.1

Circuit Configuration



Dimensions



SWD Series

ATEX Explosion Proof Refrigerator Door Switch



■ Features

- ◆ Fully sealed, certified by ATEX explosion-proof
- ◆ Two load options: mass current load for light control or tiny current load for signal control.
- ◆ Universal quick-install fixation
- ◆ Various shapes of operation buttons
- ◆ Widely used in heat pumps, air conditioners, dehumidifiers, refrigerators and other refrigeration appliances and equipment;

■ Application

- ◆ Home appliances
- ◆ Electronic equipment

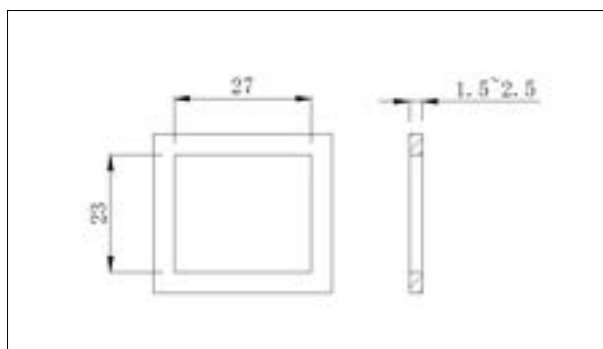
■ Parameters

Operating Speed		7.5~500mm/s
Operating Frequency	Mechanical	60 cycles/min
	Electrical	20 cycles/min
Insulation Resistance		≥100MΩ (at 500VDC)
Contact Resistance (Initial Value)	Terminals Type	≤100mΩ
Voltage Resistance	Between Terminals	AC1,000V, 50/60Hz, 1min.
	Between Terminals and Uncharged Metal Parts	AC1,500V, 50/60Hz, 1min.
Vibration durability	NO Transformation Action	10-55Hz (Double amplitude 1.5mm)
Service Life	Electrical	2.5A 125/250VAC 25T85 μ 5E4 6A 125/250VAC 25T85 μ 1E4 0.1A 125/250VAC 0.1A 30VDC 25T85 μ 5E4
	Mechanical	300,000 cycles (60Min)
Protection Level		IEC IP67/IEC IP40
ATEX Proof and Certificate Number		TPS 20 ATEX 107202 0001U II 3 G EX nC IIC Gc
PTI (Leakage Characteristics)		450V
Operating Temperature		-25~+85°C
Operating Humidity		85%RH Max

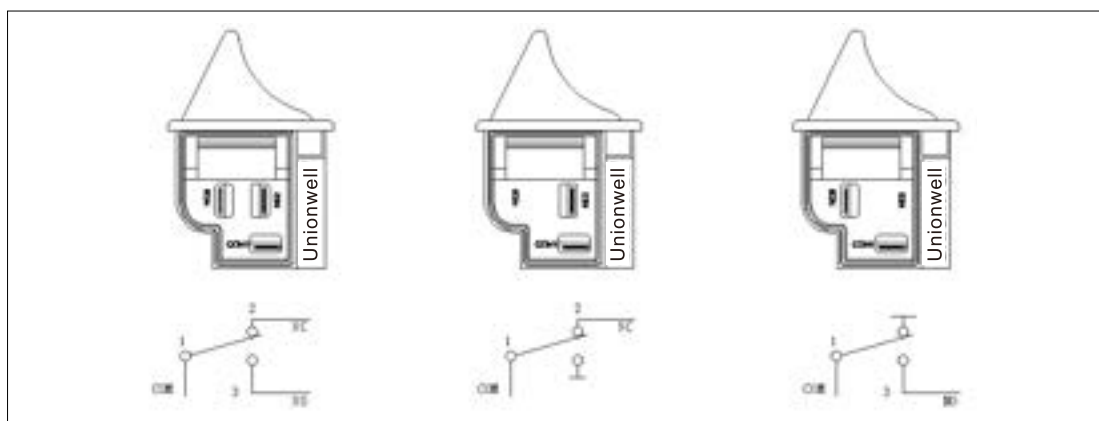
SWD Door Switch Ordering Instruction

SWD	06	A	A	B	A	01	T001	U
Switch Type	Electrical Rating	Dust and Water Proof	Circuit Code	Terminal Type	Operating Force	Button type	Custom Code	LOGO
	01 0.1A 125/250VAC 25T85 μ 5E4 0.1A 30VDC 25T85 μ 5E4	A IP67	A 1P2T	B 187# Quick Connect	A 400gf Max	01	General	U Unionwell
	06 2.5A 125/250VAC 25T85 μ 5E4 6A 125/250VAC 25T85 μ 5E4	B IP40	B 1P1T-NC C 1P1T-NO	... Other	... Other	02 03 ... Other	Customized according to requirements, the code format is T+serial number XXX, for example:T001	... Other

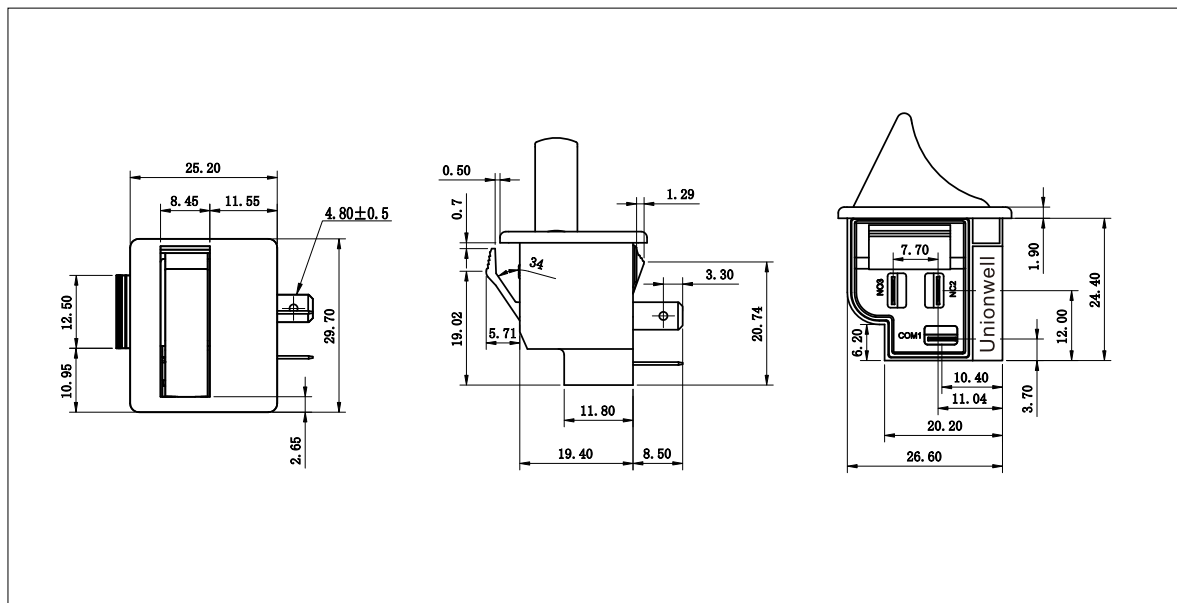
■ Mounting Hole Dimensions(Unit:mm)



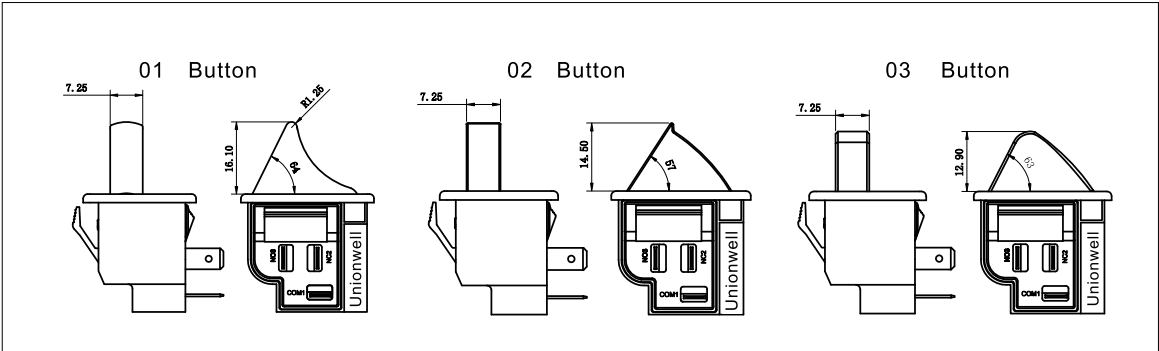
■ Circuit Configuration



■ Dimension

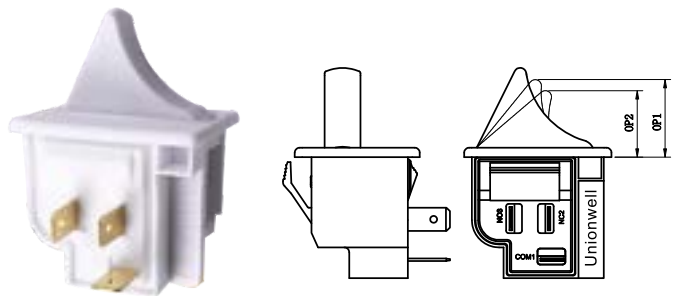


■ Button Type



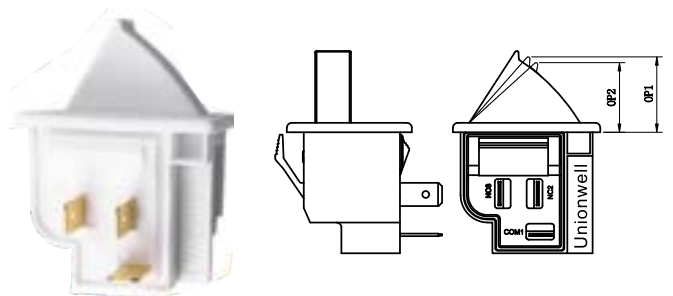
■ Operating Characteristics

◆ SWD- ☐ ☐ ☐ BA01U



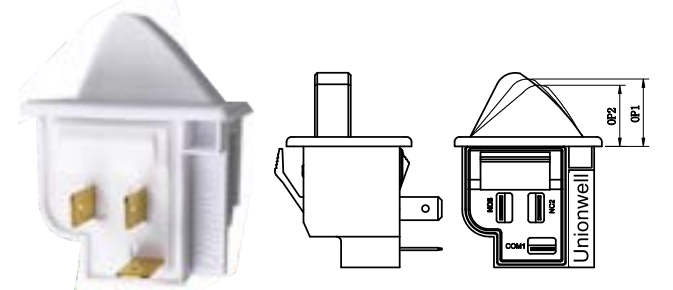
Parameters			
OF Max. (gf)	OP1 NC-OFF (mm)	OP2 NO-ON (mm)	TTP Min. (mm)
400	16±2	14.3±2.5	4

◆ SWD- ☐ ☐ ☐ BA02U



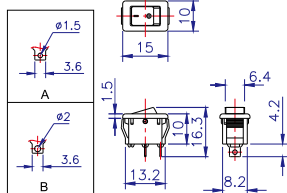
Parameters			
OF Max. (gf)	OP1 NC-OFF (mm)	OP2 NO-ON (mm)	TTP Min. (mm)
400	14.2±2	11.2±2.5	2

◆ SWD- ☐ ☐ ☐ BA03U



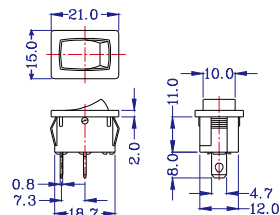
Parameters			
OF Max. (gf)	OP1 NC-OFF (mm)	OP2 NO-ON (mm)	TTP Min (mm)
400	12.9±2	10.5±2.5	3.5

ZE-200S



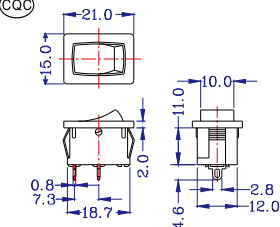
Rating: 3A 250VAC 6A 125VAC 6(1)A 250V
Material: Plastic Key-press Plastic Base
Function: ON-OFF

ZE-200



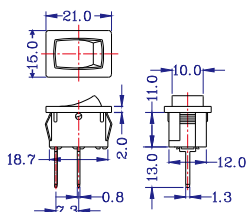
Rating: 6A 250VAC / 10A 125VAC / 5A 125VLT / 3A 14VT / 6(1)A 250VAC
Material: Plastic Key-press Plastic Base
Function: ON-OFF (Long Terminal)

ZE-200-1



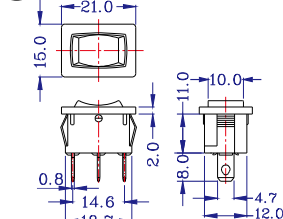
Rating: 6A 250VAC / 10A 125VAC / 5A 125VLT / 3A 14VT / 6(1)A 250VAC
Material: Plastic Key-press Plastic Base
Function: ON-OFF (Short Terminal)

ZE-200-2



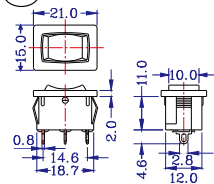
Rating: 6A 250VAC / 10A 125VAC / 5A 125VLT / 3A 14VT / 6(1)A 250VAC
Material: Plastic Key-press Plastic Base
Function: ON-OFF (Slender Terminal)

ZE-200-3



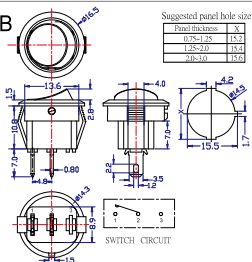
Rating: 6A 250VAC / 10A 125VAC / 5A 125VLT / 6(1)A 250VAC
Material: Plastic Key-press Plastic Base
Function: ON-OFF-ON (Long Terminal)

ZE-200-3-1



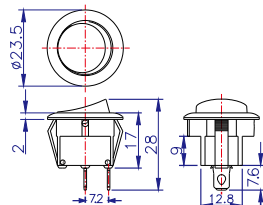
Rating: 6A 250VAC / 10A 125VAC / 5A 125VLT / 6(1)A 250VAC
Material: Plastic Key-press Plastic Base
Function: ON-OFF-ON Short Terminal

ZE-201S



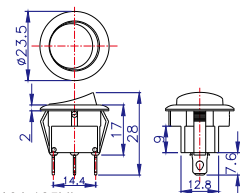
Rating: 3A 250VAC / 6A 125VAC
6(1)A 250VAC T125/55
Material: Plastic Base
Function: ON-OFF (1P1T)

ZE-201



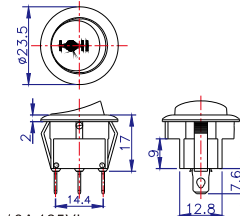
Rating: 5A 250VAC / 10A 125VAC / 3A 125VLT
Material: Plastic Key-press Plastic Base
Function: ON-OFF (ON)-OFF/ON-(OFF)

ZE-201-1



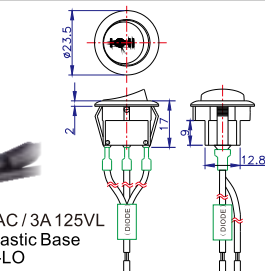
Rating: 5A 250VAC / 10A 125VAC / 3A 125VLT
Material: Plastic Key-press Plastic Base
Function: ON-OFF (with Neon Light) (with LED Light)

ZE-201-3



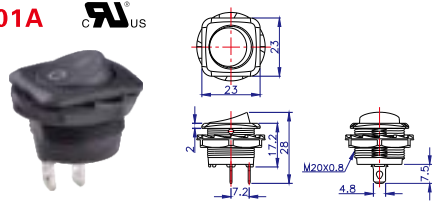
Rating: 5A 250VAC / 10A 125VAC / 3A 125VLT
Material: Plastic Key-press Plastic Base
Function: ON-OFF-ON/ON-OFF-(ON)/(ON)-OFF-(ON)/ON-ON/(ON)-ON

ZE-201-3D



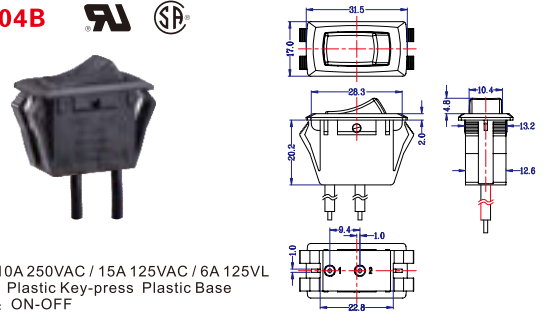
Rating: 5A 250VAC / 10A 125VAC / 3A 125VLT
Material: Plastic Key-press Plastic Base
Function: LO-OFF-HI / HI-OFF-LO

ZE-201A



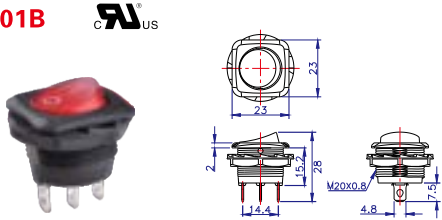
Rating: 5A 250VAC / 10A 125VAC / 3A 125VL
Material: Plastic Key-press / Plastic Base
Function: ON-OFF

ZE-204B



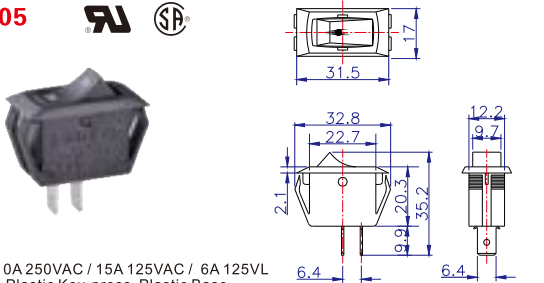
Rating: 10A 250VAC / 15A 125VAC / 6A 125VL
Material: Plastic Key-press Plastic Base
Function: ON-OFF

ZE-201B



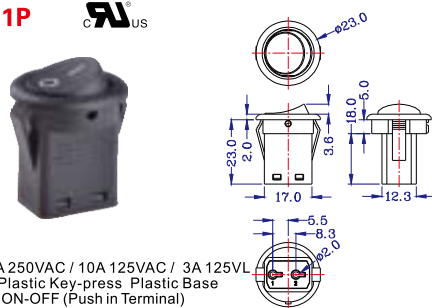
Rating: 5A 250VAC / 10A 125VAC / 3A 125VL
Material: Plastic Key-press / Plastic Base
Function: ON-OFF (with Neon Light)

ZE-205



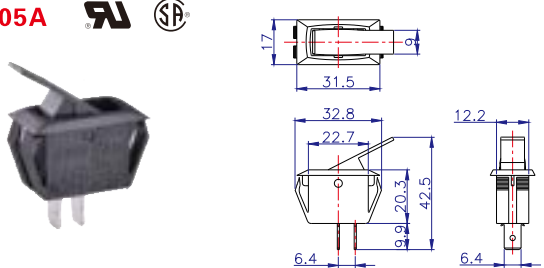
Rating: 10A 250VAC / 15A 125VAC / 6A 125VL
Material: Plastic Key-press Plastic Base
Function: ON-OFF

ZE-201P



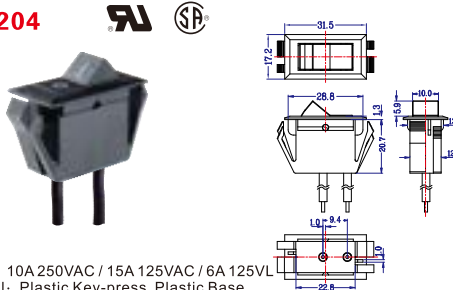
Rating: 6A 250VAC / 10A 125VAC / 3A 125VL
Material: Plastic Key-press Plastic Base
Function: ON-OFF (Push In Terminal)

ZE-205A



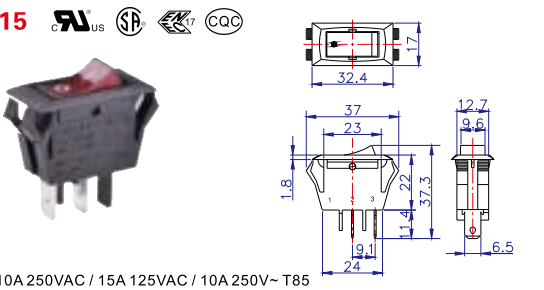
Rating: 10A 250VAC / 15A 125VAC / 6A 125VL
Material: Plastic Key-press / Plastic Base
Function: ZE-205A Normally ON / ZE-205B Normally OFF

ZE-204



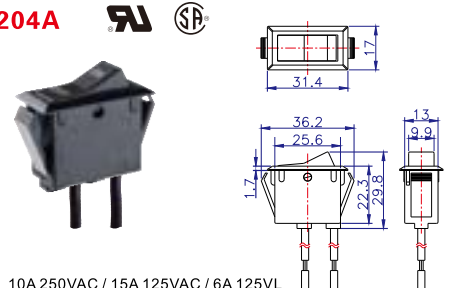
Rating: 10A 250VAC / 15A 125VAC / 6A 125VL
Material: Plastic Key-press Plastic Base
Function: ON-OFF

ZE-215



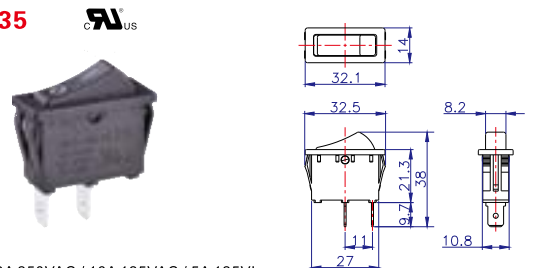
Rating: 10A 250VAC / 15A 125VAC / 10A 250V~T85
Material: Plastic Key-press / Plastic Base
Function: ON-OFF (Available with lighted or unlighted)

ZE-204A



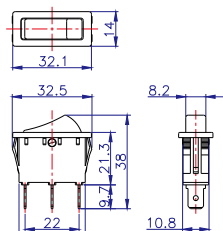
Rating: 10A 250VAC / 15A 125VAC / 6A 125VL
Material: Plastic Key-press Plastic Base
Function: ON-OFF

ZE-235



Rating: 8A 250VAC / 16A 125VAC / 5A 125VL
Material: Plastic Base
Function: ON-OFF

ZE-235A



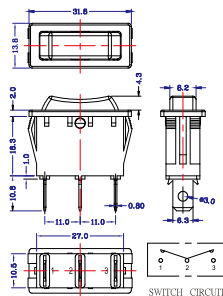
Rating: 8A 250VAC / 16A 125VAC / 5A 125VL
Material: Plastic Base
Function: ON-ON(1P2T)

ZE-235B



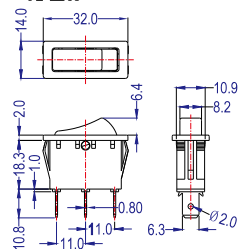
Suggested panel hole size

Panel thickness	X
0.75-1.25	30.1
1.25-2.0	30.3
2.0-3.0	30.7



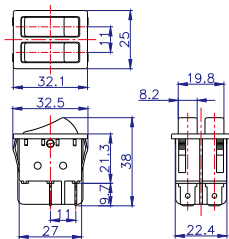
Rating: 8A 250VAC / 16A 125VAC / 5A 125VL
Material: Plastic Base
Function: ON-OFF-ON(1P2T)

ZE-235L (With Neon Light)



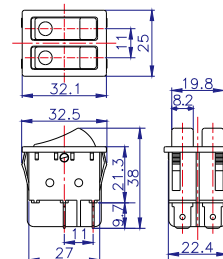
Rating: 10.1 250VAC / 16A 125VAC
Material: Plastic Base
Function: ON-OFF (With Neon Light)

ZE-235-2



Rating: 8A 250VAC / 16A 125VAC
5A 125VL / 16(8) 250VAC
Material: Plastic Base
Function: ON-OFF(2P1T)

ZE-235-2L



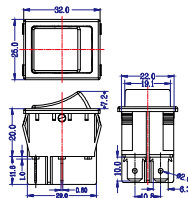
Rating: 8A 250VAC / 16A 125VAC
5A 125VL / 16(8) 250VAC
Material: Plastic Base
Function: ON-OFF (2P1T)
With Neon Light

ZE-235-2 II

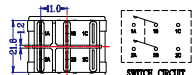


Suggested Panel Hole Size

Panel thickness	X
0.75-1.25	30.1
1.25-2.0	30.3
2.0-3.0	30.6



Rating: 8A 250VAC / 16A 125VAC / 5A 125VL
16(8)A 250VAC
Material: Plastic Base
Function: ON-OFF / (ON)-OFF / ON-(OFF)
(2P1T)(1P1T)

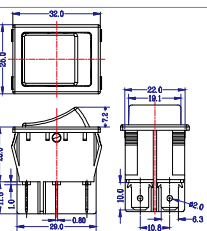


ZE-235-2A II

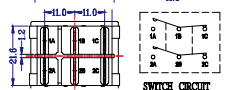


Suggested Panel Hole Size

Panel thickness	X
0.75-1.25	30.1
1.25-2.0	30.3
2.0-3.0	30.6



Rating: 8A 250VAC / 16A 125VAC / 5A 125VL
16(8)A 250VAC
Material: Plastic Base
Function: ON-ON / (ON)-ON (2P1T)(1P1T)

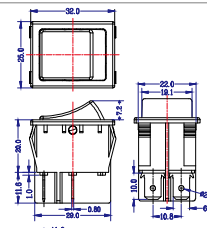


ZE-235-2L II



Suggested Panel Hole Size

Panel thickness	X
0.75-1.25	30.1
1.25-2.0	30.3
2.0-3.0	30.6



Rating: 8A 250VAC / 16A 125VAC
5A 125VL / 16(8)A 250VAC
Material: Plastic Base
Function: ON-OFF (2P1T)(1P1T)(W/lamp)



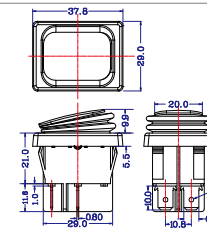
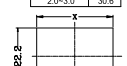
ZE-235-2 II

Waterproof

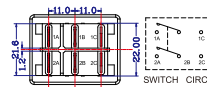


Suggested panel hole size

Panel thickness	X
0.75-1.25	30.1
1.25-2.0	30.3
2.0-3.0	30.6



Rating: 8A 250VAC / 16A 125VAC
5A 125VL / 16(8)A 250VAC
Material: Plastic Base
Function: ON-OFF (2P1T)(1P1T)



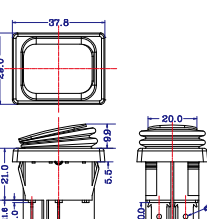
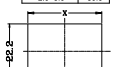
ZE-235-2L II

Waterproof

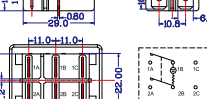


Suggested panel hole size

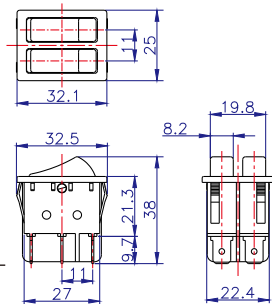
Panel thickness	X
0.75-1.25	30.1
1.25-2.0	30.3
2.0-3.0	30.6



Rating: 8A 250VAC / 16A 125VAC
5A 125VL / 16(8)A 250VAC
Material: Plastic Base
Function: ON-OFF (2P1T) (W/lamp)

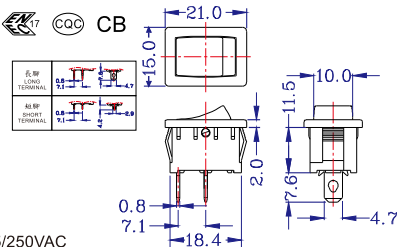


ZE-235-2A



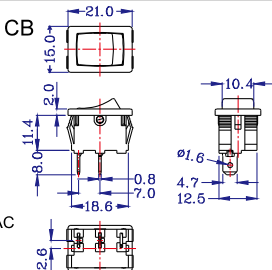
Rating: 8A 250VAC
16A 125VAC / 5A 125VDC
Material: Plastic Base
Function: ON-ON(2P2T)

KAB-2D



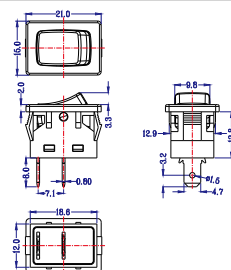
Rating: 1/2HP 125/250VAC
10(6)A 250VAC 1E4
6(4)A 250VAC 5E4
Material: Plastic Key-Press / Plastic Base
Function: (ON)-OFF / ON-(OFF)

KAB-A



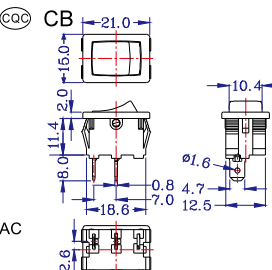
Rating: 10A 250VAC 16A 125VAC
1/2HP 125/250VAC
10(6)A 250VAC 1E4
6(4)A 250VAC 5E4
Material: Plastic Key-Press / Plastic Base
Function: ON-OFF

KAB-2A (Dust Proof)



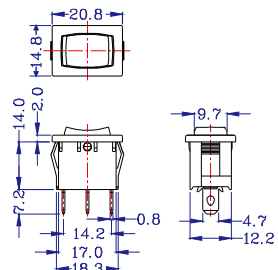
Rating: 1/2HP 125/250VAC
10(6)A 250VAC 1E4
6(4)A 250VAC 5E4
Material: Plastic Key-Press / Plastic Base
Function: ON-OFF

KAB-D



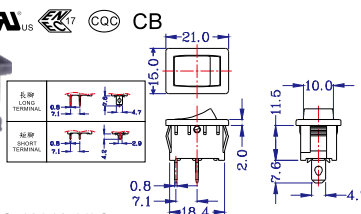
Rating: 10A 250VAC 16A 125VAC
1/2HP 125/250VAC
10(6)A 250VAC 1E4
6(4)A 250VAC 5E4
Material: Plastic Key-Press / Plastic Base
Function: (ON)-OFF / ON-(OFF)

RK-01



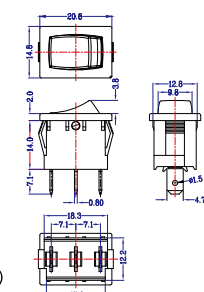
Rating: 8A 250VAC / 16A 125VAC
Material: Plastic Base
Function: ON-OFF-ON / ON-OFF-(ON)
(ON)-OFF-(ON)

KAB-2A



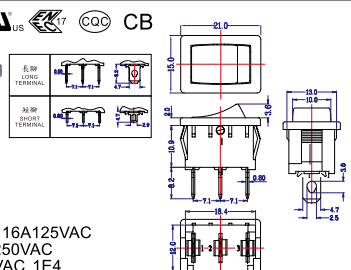
Rating: 10A 250VAC 16A 125VAC
1/2HP 125/250VAC
10(6)A 250VAC 1E4
6(4)A 250VAC 5E4
Material: Plastic Key-Press / Plastic Base
Function: ON-OFF

RK-01L



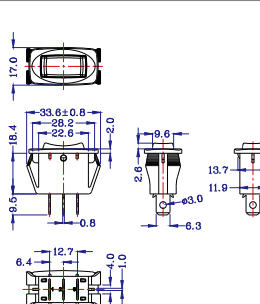
Rating: 8A 250VAC / 16A 125VAC
Material: Plastic Base
Function: ON-OFF (W/ Neon lamp)

KAB-2B



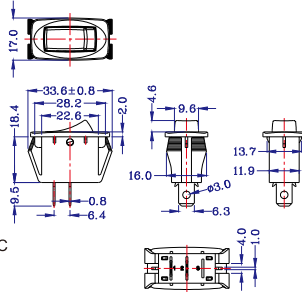
Rating: 10A 250VAC 16A 125VAC
1/2HP 125/250VAC
10(6)A 250VAC 1E4
6(4)A 250VAC 5E4
Material: Plastic Key-Press / Plastic Base
Function: ON-ON / (ON)-ON / ON-(ON)

RK-02A



Rating: 3A 250VAC / 6A 125VAC
Material: Plastic Base
Function: ON-OFF-ON(1P2T)

RK-02B

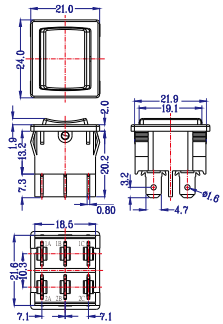


Rating: 3A 250VAC / 6A 125VAC
Material: Plastic Base
Function: ON-OFF

RK-06A



CB

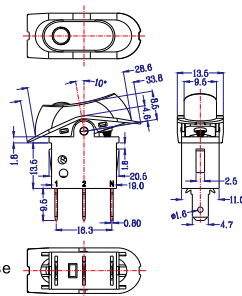


Rating: 8A 250VAC / 16A 125VAC
10(8)A 250VAC T105/55
Material: Plastic Base
Function: ON-OFF-ON(2P2T)(1P2T)

RK-03



CB

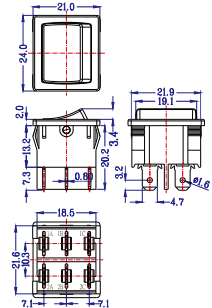


Rating: 10A 250VAC 16A 125VAC
1/2HP 250VAC 1/4HP 125VAC
16(4)A 250VAC T105/55
Material: Plastic Key-Press / Plastic Base
Function: ON-OFF(W/light)

RK-06B



CB

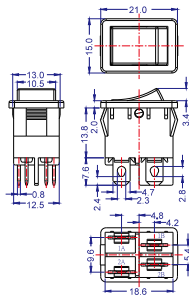


Rating: 8A 250VAC / 16A 125VAC
10(8)A 250VAC T105/55
Material: Plastic Base
Function: ON-ON(2P2T)(1P2T)

RK-04



CB

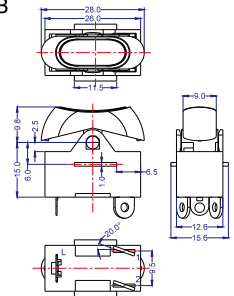


Rating: 12A 125VAC / 250VAC
12(4)A 250VAC T105/55
Material: Plastic Base
Function: ON-OFF(2P1T)(1P1T)

RK-07



CB

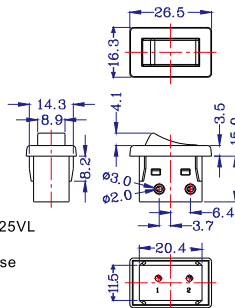


Rating: 10A 250VAC / 16A 125VAC
16(3)A 250VAC T105/55
Material: Plastic Base
Function: OFF.L-1.L1+2

RK-05



CB

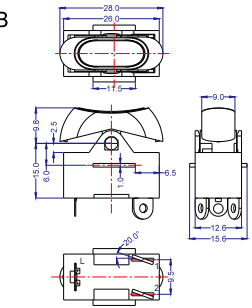


Rating: 6A 250VAC / 10A 125VAC / 3A 125VAC
6(3)A 250VAC T125/55
Material: Plastic Key-Press / Plastic Base
Function: ON-OFF (Push In Terminal)

RK-07A



CB

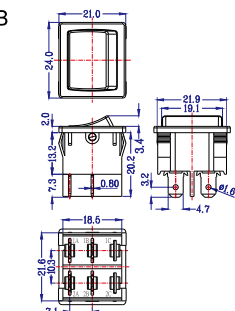


Rating: 10A 250VAC / 16A 125VAC
16(3)A 250VAC T105/55
Material: Plastic Base
Function: L-1.OFF.L-2

RK-06



CB

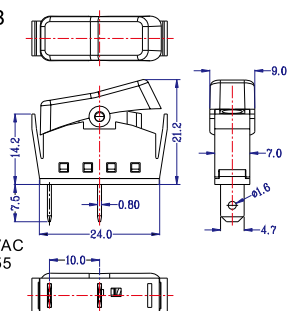


Rating: 8A 250VAC / 16A 125VAC
10(8)A 250VAC T105/55
Material: Plastic Base
Function: ON-OFF(2P1T)(1P1T)

RK-09



CB

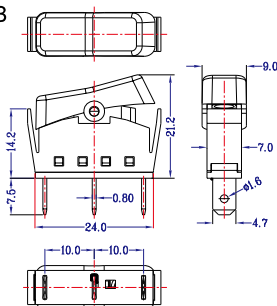


Rating: 10A 250VAC / 16A 125VAC
10(3)A 250VAC T125/55
Material: Plastic Base
Function: ON-OFF

RK-09L CB



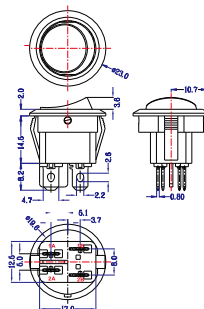
Rating: 10A 250VAC / 16A 125VAC
10(3)A 250VAC T125/55
Material: Plastic Base
Function: ON-OFF
(W/ Neon lamp)



ZE-401 CQC CB



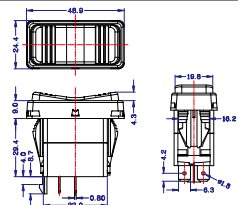
Rating: 12A 125VAC / 250VAC T125
12(4)A 250VAC T125/55
Material: Plastic Base
Function: ON-OFF(2P1T)(1P1T)



RK-10A



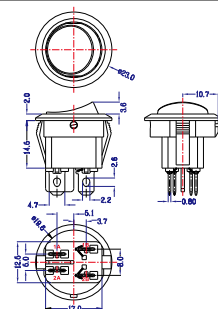
Rating: 20A 12V (Pending)
Material: Plastic Key-Press/ Plastic Base
Function: 1A 1B 1C
(ON) ON OFF
2A 2B 2C
ON OFF OFF



ZE-401L CQC CB



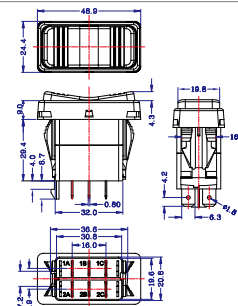
Rating: 12A 125VAC / 250VAC
12(4)A 250VAC T125/55
Material: Plastic Base
Function: ON-OFF(2P1T)(1P1T)
(W/ Neon Lamp)



RK-10C



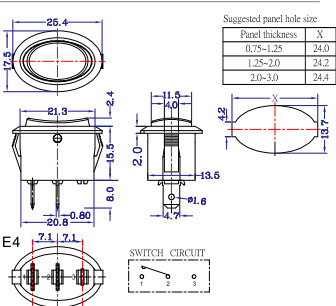
Rating: 20A 12V (Pending)
Material: Plastic Key-Press/ Plastic Base
Function: ON-OFF-(ON)



RK-12 CQC CB



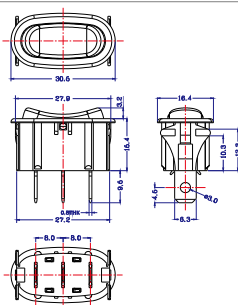
Rating: 10A 250VAC / 16A 125VAC
16(6)A 250VAC T125/55 1E4
Material: Plastic Base
Function: ON-OFF(1P1T)



RK-11A



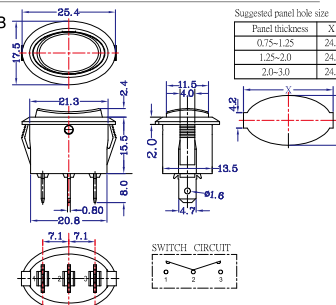
Rating: 10A 250VAC / 16A 125VAC
Material: Plastic Base
Function: ON-OFF-ON(1P2T)



RK-12A CQC CB



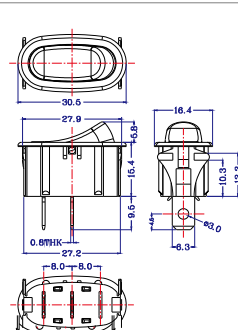
Rating: 10A 250VAC / 16A 125VAC
16(6)A 250VAC T125/55
Material: Plastic Base
Function: ON-OFF-ON(1P2T)



RK-11B



Rating: 10A 250VAC / 16A 125VAC
Material: Plastic Base
Function: ON-OFF



RK-12B CQC CB



Rating: 10A 250VAC / 16A 125VAC
16(6)A 250VAC T125/55
Material: Plastic Base
Function: ON-ON(1P2T)

