

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		≥100MΩ (500VDC)
Contact Resistance (Initial Value)		≤100mΩ
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≤1.0 N:400m/s ² (approx.40g) max. Destruction: OF>1.0 N:200m/s ² (approx.20g) max. OF≤1.0 N:100m/s ² (approx.10g) max.
Service Life		Mechanical ≥10,000,000 cycles or 1,000,000 cycles Electrical ≥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 (for "05" rating Only)	ENEC/CQC: 0.1A 48VDC 125/250VAC 5(2.5)A 125/250VAC UL/cUL: 0.1A 48VDC 125/250VAC 5A1/10HP 125/250VAC ("S" Temperature grade only) Only for C,C1,C2,E,E1,E2,D,D1,D2,S,S1,S2	C C1 C2 Connect	Z SPDT	15gf note: Only apply to G5S05	No lever Pin Plunger	No lever Pin Plunger	Metric Ø3.1mm	General	U Unionwell ... Other
	T 25T125	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 Quick Connect	F SPST-NO	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	
G5D Door Switch	H 25T150	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 u5E4 (Above only for "T" temperature grade) C,C1,C2,E,E1,E2, D,D1,D2,F,F1 Terminal only. 10(4)A 250VAC25T85u5E4 IP64 Only for G5F"IP64" waterproof grade	E E1 E2 Quick Connect	C SPST- NC	50gf 0.49N Note: Only apply to G5S05, G5T10	F 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	ENEC/CQC: 16(4)A 250VAC u 5E4 UL/cUL: 16A1/2HP 125/250VAC	L L1 L2 Connect		100gf 0.98N Note:16A and 22A Mini OF is 100gf;16A/22A 100gf	F Push Rod "G5D 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"	ENEC/CQC: 22(8)A 250VAC u 5E4 UL/cUL: 22A1HP 125/250VAC	R R1 R2 Connect		200gf 1.96N Note: G5S05, G5T10, Series with Max OF is 200gf; 26A, Min OF is 200gf	J Screw Push Rod "G5D Door switch" only	04 Simulated Roller Lever	W Alloy base with two switches Only for G5D Door Switch			
	26 26(10)A 250VAC 0.02A 250VAC, 25E3	S S1 S2 Solder Connect		300gf 2.94N Note: Not apply to G5S05,G5T10 Series		05 Roller Lever				
		T T1 T2 Screw Connect		400gf 3.92N Note: Not apply to G5S05,G5T10 Series		06 Long Roller Lever				
		P P1 P2 Straight PCB Terminals		500gf 4.90N "B" Termerature grade only					
		H H1 H2 Rast -5 Terminals		1800gf 17.64N "G5D Door switch" only		99 Special Lever				
		B 6.30x0.80mm 0.250"x0.032" Straight Quick Connect								
		... Special Connect								

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)

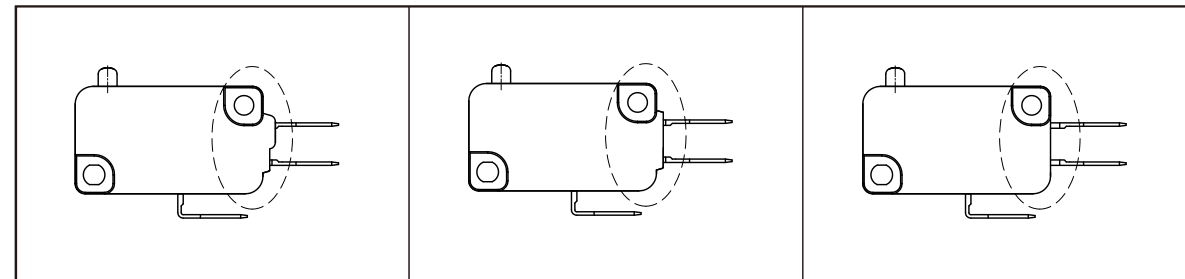
Note: Letter is used for the basic type housing
Letter + number is used for the flat type housing

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

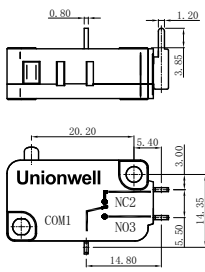
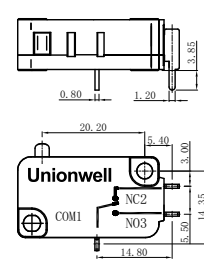
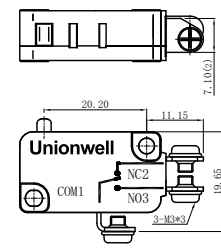
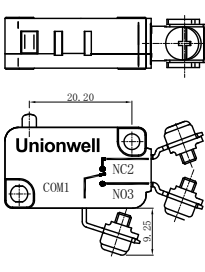
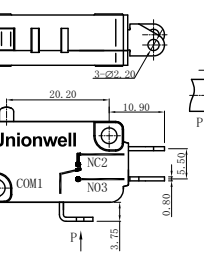
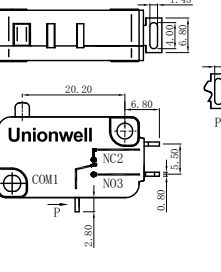
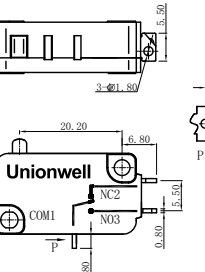
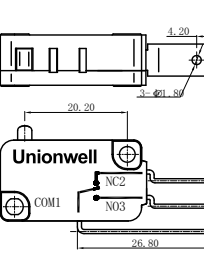
(Unit:mm)

<p>B2 Fully Flat Type 250# Quick Connect Terminals, T=0.8</p>	
<p>Fully Flat Housing with 250# Quick Connect Terminals, T=0.8 (C2)</p>	
<p>Fully Flat Housing with 187# Quick Connect Terminals, T=0.8 (D2)</p>	
<p>Fully Flat Housing with 187# Quick Connect Terminals, T=0.5 (E2)</p>	

◆ Other Levers

<p>Lever 01#</p>	<p>Lever 02#</p>
<p>Lever 03#</p>	<p>Lever 04#</p>
<p>Lever 05#</p>	<p>Lever 06#</p>
<p>Lever 110#</p>	<p>Lever 137#</p>
<p>Lever 164#</p>	<p>Lever 165#</p>

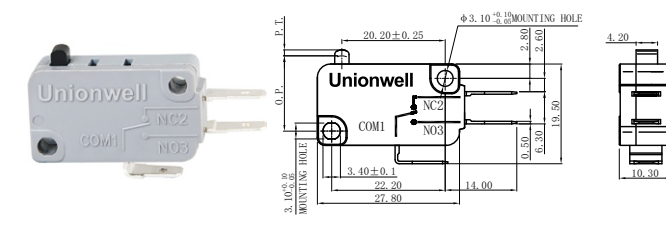
◆ Other Terminals

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

◆ Dimensions and Operating Characteristics

(Unit:mm)

◆ Plunger

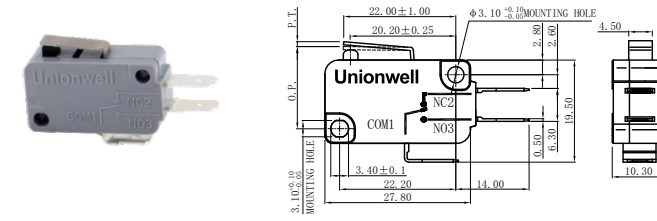


Part No.	Parameters						
	FP Max (mm)	OP (mm)	OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)
G5□□□-E1Z015U	16.80	14.7±0.5	15	3	1.6	0.8	0.4
G5□□□-E1Z025U	16.80	14.7±0.5	25	5	1.6	0.8	0.4
G5□□□-E1Z050U	16.80	14.7±0.5	50	10	1.6	0.8	0.4
G5□□□-E1Z0100U	16.80	14.7±0.5	100	25	1.6	0.8	0.4
G5□□□-E1Z0200U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

◆ Dimensions and Operating Characteristics

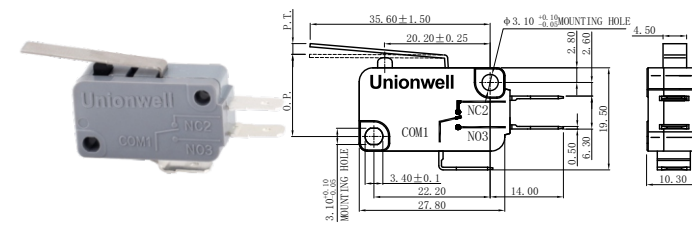
(Unit:mm)

◆ Short Straight Lever



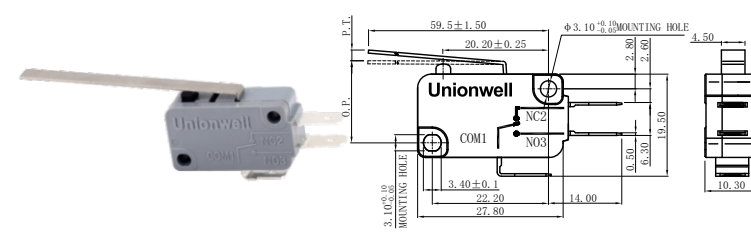
Part No.	Parameters						
	FP Max (mm)	OP (mm)	OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)
G5□□□-E1Z015A01U	17.00	15.3±0.5	15	3	1.6	0.8	0.4
G5□□□-E1Z025A01U	17.00	15.3±0.5	25	5	1.6	0.8	0.4
G5□□□-E1Z050A01U	17.00	15.3±0.5	50	10	1.6	0.8	0.4
G5□□□-E1Z0100A01U	17.00	15.3±0.5	100	25	1.6	0.8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



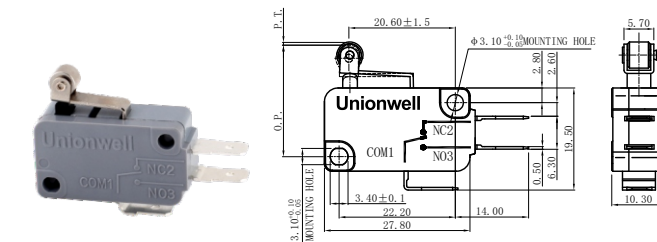
Part No.	Parameters						
	FP Max (mm)	OP (mm)	OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)
G5□□□-E1Z015A02U	18.60	15.3±1.5	10	2	3.2	1.3	1.0
G5□□□-E1Z025A02U	18.60	15.3±1.5	15	2	3.2	1.3	1.0
G5□□□-E1Z050A02U	18.60	15.3±1.5	30	5	3.2	1.3	1.0
G5□□□-E1Z0100A02U	18.60	15.3±1.5	60	10	3.2	1.3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



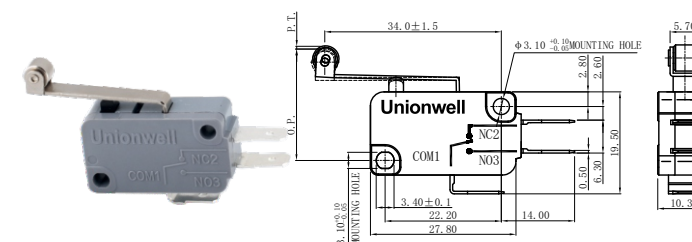
Part No.	Parameters						
	FP Max (mm)	OP (mm)	OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)
G5□□□-E1Z015A03U	22.40	15.3±3.0	7	2	6.4	2.6	2.0
G5□□□-E1Z025A03U	22.40	15.3±3.0	10	2	6.4	2.6	2.0
G5□□□-E1Z050A03U	22.40	15.3±3.0	15	2	6.4	2.6	2.0
G5□□□-E1Z0100A03U	22.40	15.3±3.0	30	5	6.4	2.6	2.0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

