

UNIONWELL G6 technical reference

Mini Micro Switch G6

Open engineering reference | Presentation date 29 October 2026. A controlled drawing revision and model-specific product approval must be confirmed for production release.

Published reference values describe the stated series or example configuration. Confirm the complete part number, load, actuator drawing and current approval scope before design release.

An inconsistent insulation-resistance unit in a source entry is excluded. Use the current controlled datasheet for that value.

Original company G6 catalogue drawings and ordering references follow the text summary in the PDF. The S00AU travel example does not describe lever variants.

Parameter	Published value and configuration scope
Model Number	G6 Series
Operation Force	50gf/100gf/150gf/250gf/350gf Alternate units: 0.4903 N / 0.1102 lbf/0.9807 N / 0.2205 lbf/1.471 N / 0.3307 lbf/2.452 N / 0.5512 lbf/3.432 N / 0.7716 lbf
Terminal Type	Solder/PCB/Quick Connect
Lever Type	No Lever/Hinge/Simulated Roller/Roller
Circuit Code	SPDT/SPST-NO/SPST-NC
Rating / P1/P11/P12	ENEC: 0.1A,125/250V 48VDC 5EA UL: 0.1A,125/250V 48VDC Gold Plated Contact Optional
Rating / 05/051/052	ENEC: 5A,125/250VAC UL: 5A, 1/8HP 125/250VAC
Rating / 10/101	ENEC: 10(2)A,125/250VAC μ 25T125 UL: 10.1A, 1/4HP 125/250VAC Note: Only with "OF"over "250gf" Alternate units: ENEC: 10(2)A,125/250VAC μ 25T125 UL: 10.1A, 1/4HP 125/250VAC Note: Only with "OF"over "2.452 N / 0.5512 lbf"

UNIONWELL G6 technical reference continued

The same configuration scope and verification notes apply to the values below.

Parameter	Published value and configuration scope
Rating / 12	ENEC: 12(6) A, 125/250VAC μ 40T125 UL: 12A, 125/250VAC Note: Only with 350gf OF Alternate units: ENEC: 12(6) A, 125/250VAC μ 40T125 UL: 12A, 125/250VAC Note: Only with 3.432 N / 0.7716 lbf OF
Operating Frequency / Electrical	10-30 cycles/minute
Operating Frequency / Mechanical	120 cycles/minute
Contact Resistance(Initiative)	100m Ω Max (without wire type)
Dielectric strength	1,000 VAC, 50–60 Hz for 1 minute (between terminals)
Operating Temperature	-25°C~+125°C Alternate units: -13 °F~257 °F
Storage Humidity	85% RH Max
Life Expectancy / Electrical	10,000-50,000 cycles (depending on specific model selection)
Life Expectancy / Mechanical	1,000,000 cycles
Insulation resistance — company G6 PDF reference	100 M Ω minimum at 500 VDC
Pre-travel — S00AU pin-plunger drawing example	1.0 mm maximum Alternate units: 0.03937 in maximum
Overtravel — S00AU pin-plunger drawing example	0.4 mm minimum Alternate units: 0.01575 in minimum
Movement differential — S00AU pin-plunger drawing example	0.2 mm maximum Alternate units: 0.007874 in maximum
Free position — S00AU pin-plunger drawing example	9.1 mm maximum Alternate units: 0.3583 in maximum
Operating position — S00AU pin-plunger drawing example	8.5 $\pm$ 0.3 mm Alternate units: 0.3346 $\pm$ 0.01181 in

Source references on this website

<https://unionwell-microswitch.com/library-item/fac1b309e26b7fc6/>

For quotation: identify the complete part number, actuator/terminal, electrical load, requested quantity, annual forecast and target timing. Availability, quantity breaks and lead time are reviewed for that configuration.

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

- | | |
|---|--|
| <ul style="list-style-type: none"> ◆ Phone ◆ Air-Conditioner ◆ Computer ◆ Humidifier ◆ Alarm ◆ Timer ◆ Mixer & Meat Grinder ◆ Welding Machine ◆ Neon Phone ◆ Fax Machine ◆ Game Controller | <ul style="list-style-type: none"> ◆ 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/COC: 0.1A 125/250VAC 0.1A 48VDC 5E4 25T125 UL: 0.1A 125/250VAC 0.1A 48VDC Gold Plated Contact Optional
	05	ENEC/COC: 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/COC: 5A 125/250VAC 25T120 μ 5E4 UL: 5A 125/250VAC 1/8HP 125/250VAC
	10/101	ENEC/COC: 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/COC: 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	U Unionwell
	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)	TO 01 Customized according to requirements, the code format is T+ serial number XXX, for example: T001	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	...	Other
	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

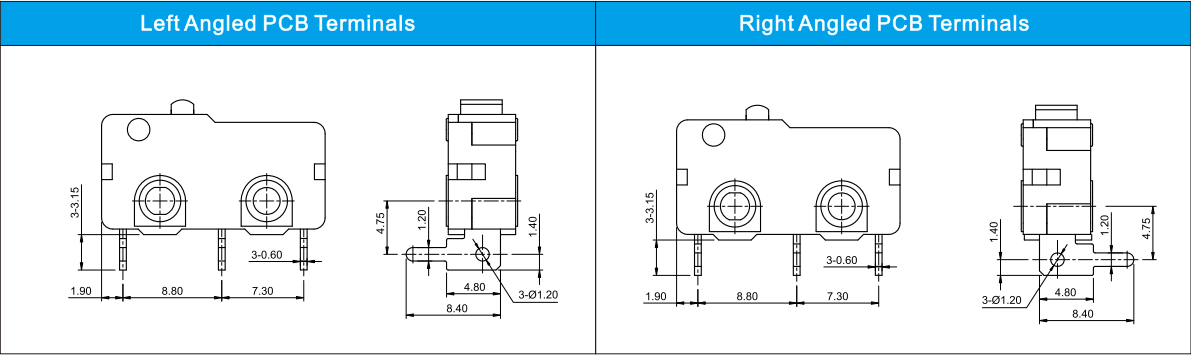
■ Circuit Configuration

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

■ Terminal Dimensions

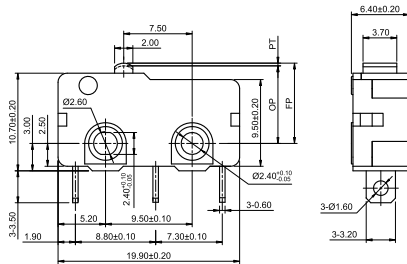
Unit:mm

Solder Terminals	Straight PCB Terminals
Non-Standard Quick Connect Terminals (Thickness: 0.6mm)	Quick Connect Terminals (Thickness: 0.5mm)



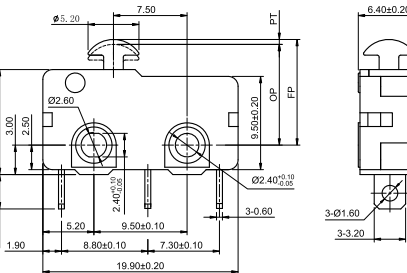
■ Dimensions and Operating Characteristics

◆G6□□-□□□S00AU



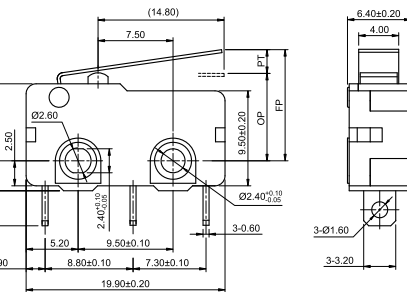
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-100	100	10	1.0	0.4	0.2	9.1
-150	150	35	1.0	0.4	0.2	9.1
-250	250	50	1.0	0.4	0.2	9.1
-350	350	80	1.0	0.4	0.2	9.1

◆G6□□-□□□S00A-B3U



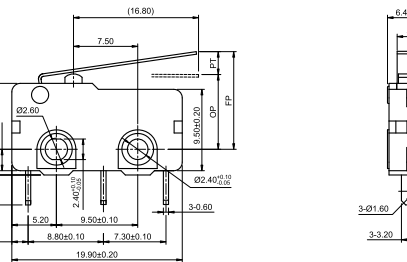
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-100	100	10	1.0	0.40	0.20	10.90
-150	150	35	1.0	0.40	0.20	10.90
-250	250	50	1.0	0.40	0.20	10.90

◆G6□□-□□□S01AU



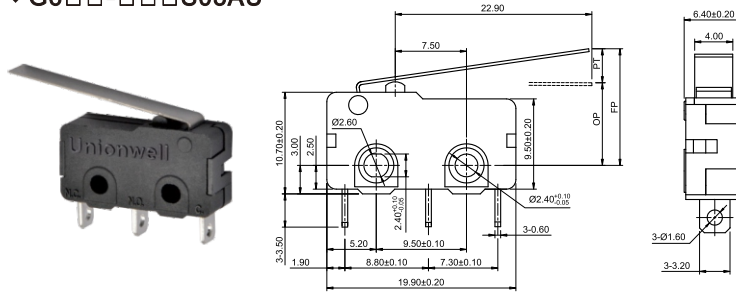
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-100	40	6	3.6	0.6	1.0	11.7
-150	50	8	3.6	0.6	1.0	11.7
-250	80	15	3.6	0.6	1.0	11.7
-350	110	30	3.6	0.6	1.0	11.7

◆G6□□-□□□S02AU



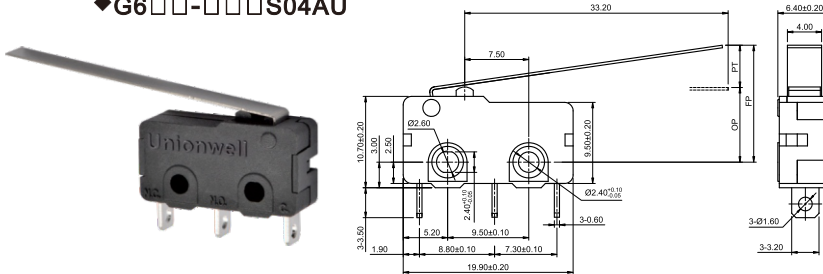
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-100	35	5	4.0	0.6	1.0	12.0
-150	45	6	4.0	0.6	1.0	12.0
-250	75	10	4.0	0.6	1.0	12.0
-350	100	20	4.0	0.6	1.0	12.0

◆G6□□-□□□S03AU



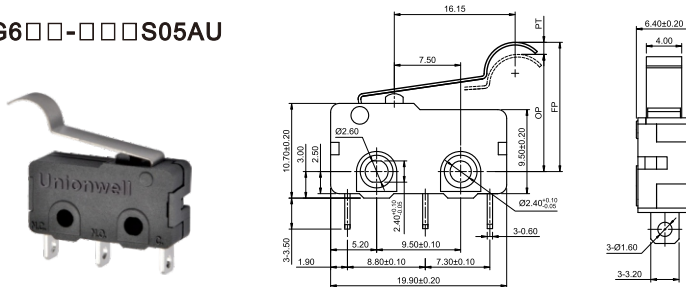
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-100	25	2	6.1	0.8	1.8	13.5
-150	35	6	6.1	0.8	1.8	13.5
-250	55	10	6.1	0.8	1.8	13.5
-350	75	15	6.1	0.8	1.8	13.5

◆G6□□-□□□S04AU



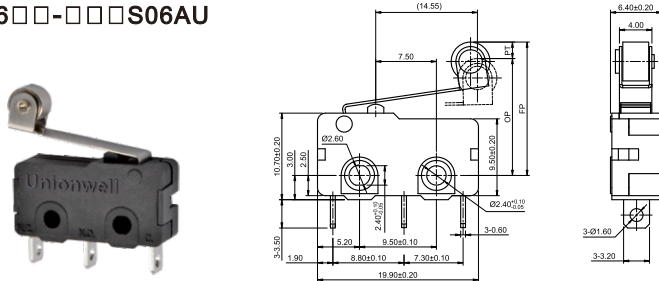
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-100	15	2	7.5	1.5	2.0	15.5
-150	30	4	7.5	1.5	2.0	15.5
-250	45	7	7.5	1.5	2.0	15.5
-350	55	12	7.5	1.5	2.0	15.5

◆G6□□-□□□S05AU



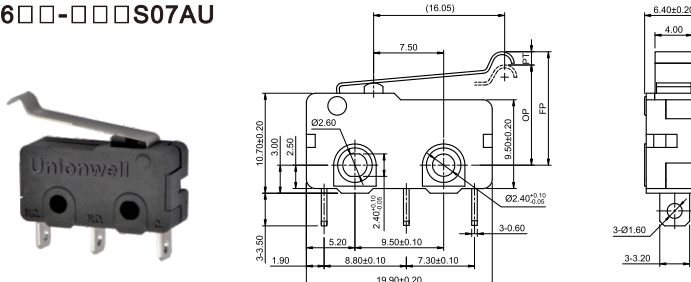
OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-100	35	5	5.0	0.6	1.0	18.5
-150	45	6	5.0	0.6	1.0	18.5
-250	75	10	5.0	0.6	1.0	18.5
-350	100	20	5.0	0.6	1.0	18.5

◆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