G303 Series

Mini Sealed 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 Tooth Brush

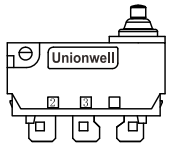
◆Toys

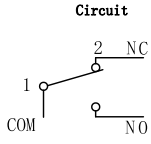
◆Shared Bicycle

■Parameters

Rating		0.1A,125/250VAC;3A/12VDC;0.1A/48VDC; μ 1E5
Operatng Frequency	Electrical	0.1A-120cycles/minute；3A-10~30 cycles/minute
	Mechanical	120 Cycles/minute
Contact Resistance (Initiative)		100mΩ Max (without wire type)
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.100,000 cycles(Depend on part NO.)
	Mechanical	Min.500,000 cycles

■Circuit





G3 Series Micro Switch Ordering Instruction

G3	03	130	S	00	A	1	A	E	A	280	TXXX
Switch Type	Electrical Rating	Operating Force at pin Plunger,Max	Terminal Style	Lever Type	Circuit Code	Shape and Posts	Posts Dimension	AWG Type(for Wire type only)	AWG Number(For Wire type only)	Wires length	Custom code

03 — Electrical Rating
- ENEC:0.1A 125/250VAC 48VDC;3A 12VDC u 1E5 UL: 0.1A 125/250VAC 48VDC;3A 12VDC

130 — Operating Force at pin Plunger,Max
- 130 — 130gf Max, employ 130# Spring

S — Terminal Style
- E — Molded lead wires downwards.
- G — Molded lead wires on left side(plunger side)
- F — Molded lead wires on right side(plunger side)
- S — Solder terminals
- K — Long solder terminals
- N — None-hole short Solder terminals
- P — Straight PCBterminals (0.6mm width,length3.5mm,) The base has a boss
- R — Right side PCBterminals
- L — Left side PCBterminals
- I — Big Solder terminals
- J — Left Right straight PCB terminals
- A — Left Side Fork type terminals
- B — Right Side Fork type terminals
- C — 2.5 type terminals Terminal wide 2,5mm ,length 7,5mm)
- D — 2.5 type 2#terminals(Terminal Wide 2,5mm,length 5,15mm)

00 — Lever Type
- 00 — No lever Pin Plunger
- 01 — Leaf lever Use for A type、A1 type 、M3 type
- 02 — Straight Leaf lever
- 03 — 03#staight lever(Only for C type case)
- 04 — 04# lever (Use for A type、A1 type 、M3type)
- 05 — Simulated Roller (Use for A type、A1 type 、M3type)
- 06 — Straight Leaf lever (Use for A2 type)
- 08 — Mini Simulated Roller lever (Use for A type、A1 type 、M3type)
- 10 — 10# lever (Use for A type、A1 type with PHA waterproof case
- 13 — 13#lever(Only for T type case)
- 15 — Upside downsimulated roller lever (Use for A type、A1 type 、M3type)
- 21 — 21#staight lever(Only for C type case)
- 22 — 22# lever (Use for A type、A1 type 、M3 type)
- 23 — 23#lever (Only for C1M3type case)
- 25 — 25#lever (Use for A type、A1 type 、M3 type)
- 28 — 28# lever (Use for A type、A1 type 、M3 type)
- 31 — Simulated Roller (Use for A type、A1 type 、M3 type
- 35 — 35# lever (Use for A type、A1 type 、M3type)
- 36 — 36# lever (Use for A type、A1 type 、M3type)
- 37 — 37# lever (Use for A type、A1 type with PHA waterproof case)
- 38 — 38#lever (Use for C1、C2 type)
- 41 — 41# lever (Use for A type、A1 type 、M3 type
- *** — Other

A — Circuit Code
- A — SPDT
- B — SPST-NC
- C — SPST-NO

1 — Shape and Posts
- 1 — A type no post
- 2 — A type left side posts
- 3 — A type right side posts
- 4 — B type no post
- 5 — B type left posts
- 6 — B type right side posts
- 7 — M3 type posts
- 8 — A type two sides posts
- 9 — B type two sides posts
- 12 — C1 type two sides posts
- 13 — C1 type no post
- 14 — C1 type left posts
- 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 — A1 type no post
- 29 — A1 type left side posts
- 30 — A1 type right side posts
- 31 — A1type two sides posts
- 47 — C1M3 type posts
- 48 — A2type posts For use with wire switch
- 49 — A2type left posts For use with wire switch
- 50 — A2type right posts For use with wire switch
- 51 — A2type Double location column For use with wire switch
- 52 — A2 type no posts For use with wire switch
- 53 — A2type left posts For use with wire switch
- 54 — A2 type right posts For use with wire switch
- 55 — A2 type Double location column For use with wire switch
- *** — Other

A — Posts Dimension
- A — ¢ 2.2mmX0.9mm posts. Use for A type、A1 type)
- B — ¢ 2.5mmX1.5mm posts. Use for A type、A1 type、A2 type B type)
- C — ¢ 2.6mmX2.5mm posts. Use for A type、A1 type、A2 typee)
- F — ¢ 2.60mmx3.8mm posts, (Use for A type、A1 type)
- H — ¢2.6X2.0mm posts. Use for A type、A1 type)
- K — ¢2. 95X5.0mm posts. Use for C1 type)
- J — ¢2.6X1.4mm posts. (Columns without reinforcement) (Use for A2 type)
- *** — Other

Standard posts:
1.A type A1 type A2 type B type posts 2.60mmx5.0mm
2.M3 type posts 2.95mmX1,4mm
3.C1type D1type posts 2.95mmX1,5mm
4.C1M3type posts 3.0mmX1.5mm

E — AWG Type(for Wire type only)
- No molded lead wires
- M — 18# Only applicable to bottom outlet switch
- E — 20# Only applicable to A type, A1 type, M3 type bottom outlet switch. C type out of the two wire switch

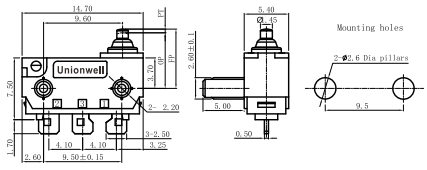
A — AWG Number(For Wire type only)
- No molded lead wires
- A — UL1007
- C — UL1430
- D — UL1061
- F — AVSS
- L — FLRY-A
- *** — Other

280 — Wires length
- 300mm length standard lead wires
- 280 — 280mm length
- *** — Other

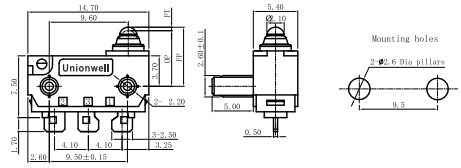
TXXX — Custom code
- General Type
- TXXX — Customized according to customer requirements, unified in the technician login, the custom code is T+serial number, such as: T001
- *** — Other

■Basic Mounting Dimensions and Operating Characteristics

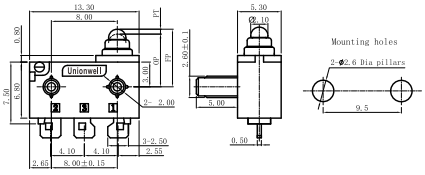
A shape



A1 shape



A2 shape



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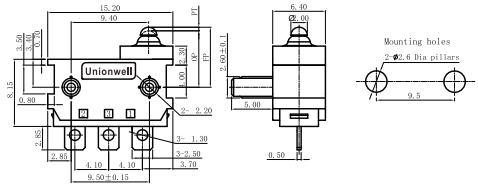
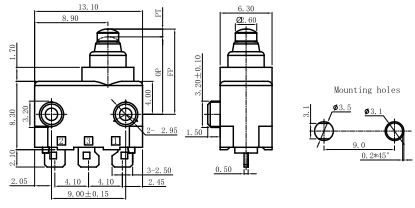
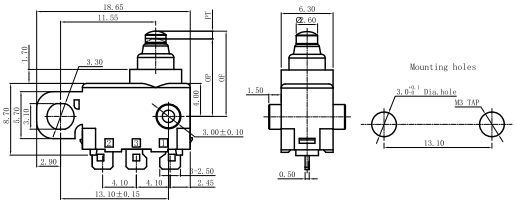


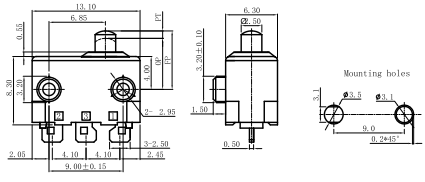
C1 shape



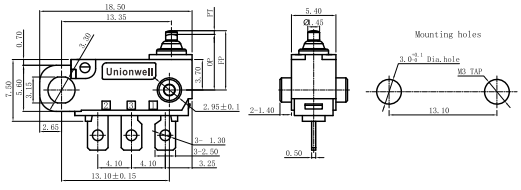
C1M3 shape



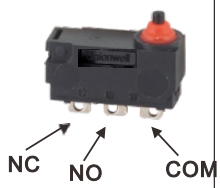
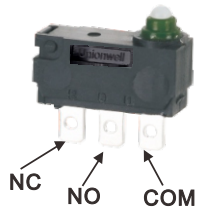
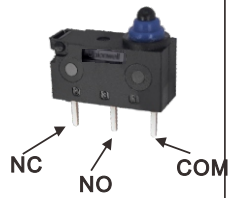
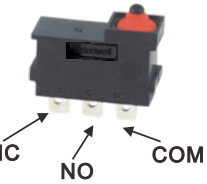
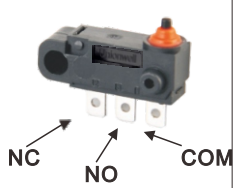
D1 shape



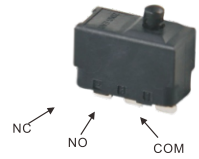
M3 shape



■Shape and Posts

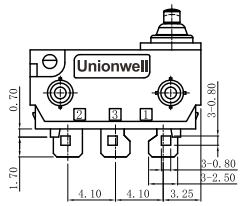
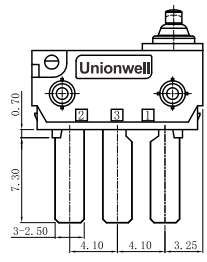
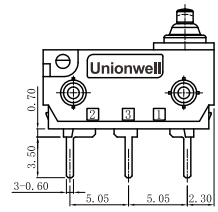
A type basic shape	A1 type basic shape	A2 type basic shape	B type basic shape	M3 type basic shape
				

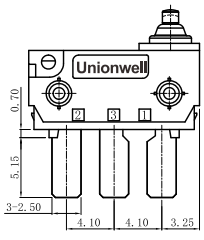
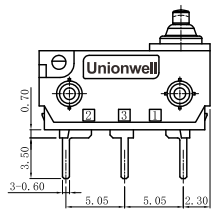
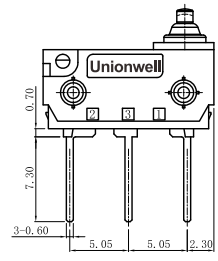
■Shape and Posts

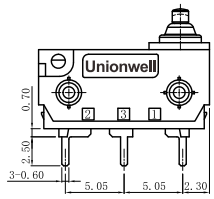
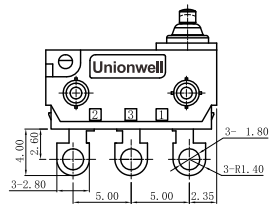
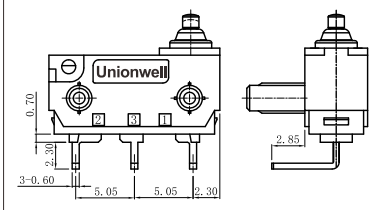
C1 type basic shape	D1 type basic shape
	

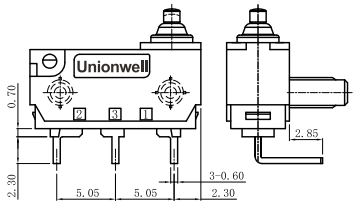
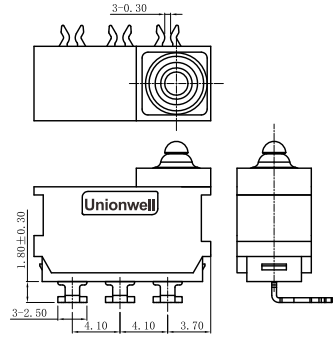
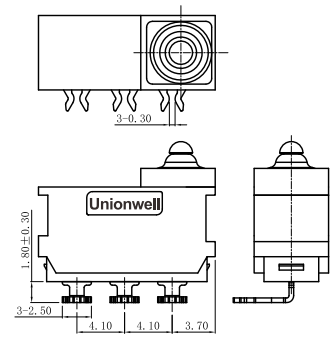
C1M3 Shape


■Switch Terminal Type(Can be customized)

S Type	Q Type	K Type
		

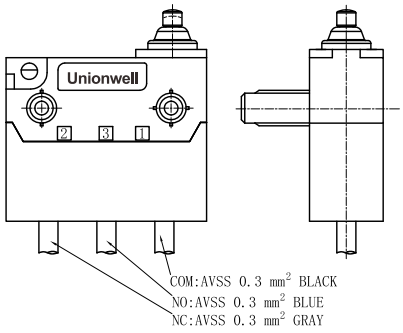
D Type	P Type	J Type
		

P1 Type	I Type	R Type
		

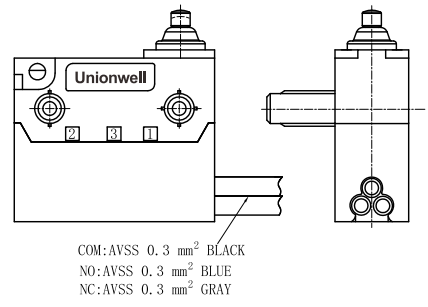
L Type	A Type	B Type
		

■Wires Leads Type

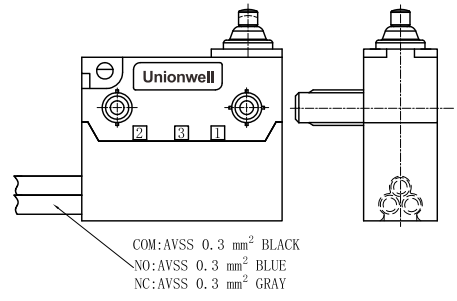
Wires leads to bottom



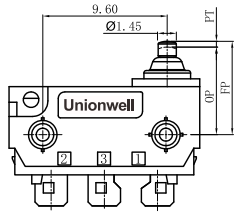
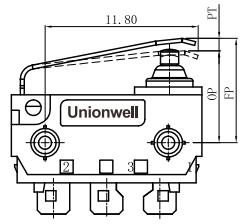
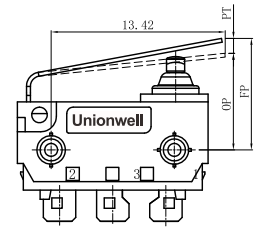
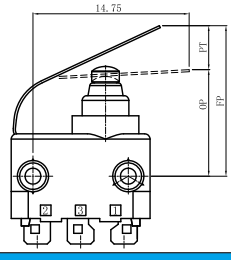
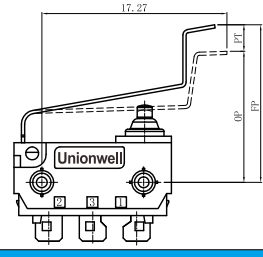
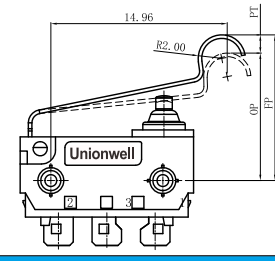
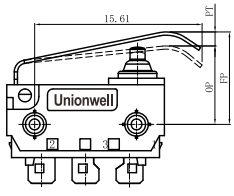
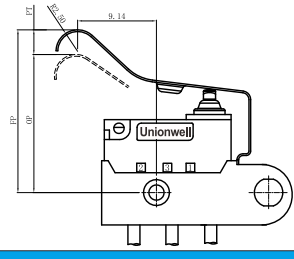
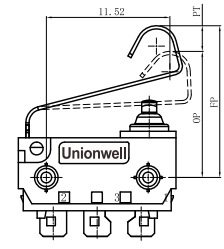
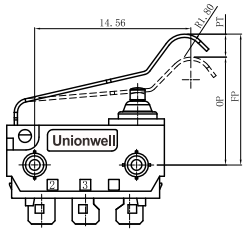
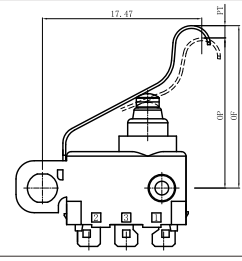
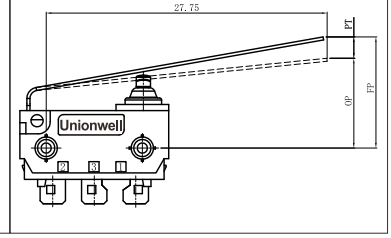
Wires leads to plunger side

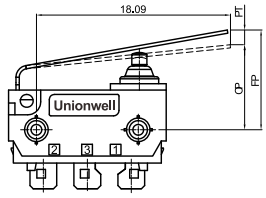
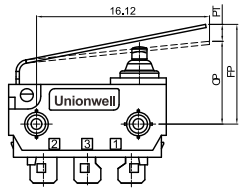
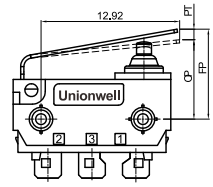


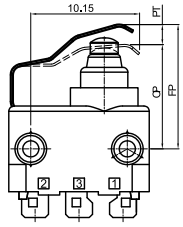
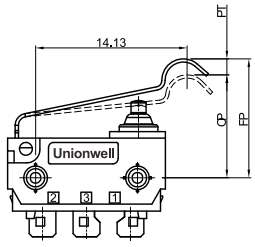
Wires leads to opposite to plunger side



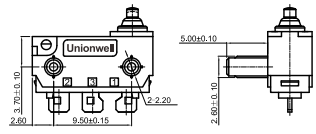
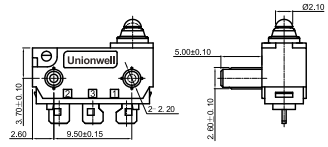
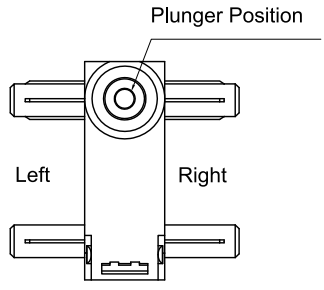
■Switch Lever Type(Can be customized)

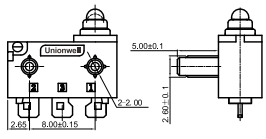
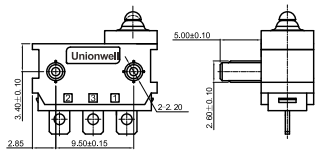
Without lever	01# Lever	02# Lever
		
03# Lever	**04# Lever**	**05# Lever**
		
09# Lever	**37# Lever**	**15# Lever**
		
22#Lever	**23#Lever**	**25#Lever**
		

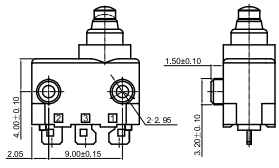
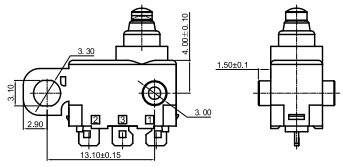
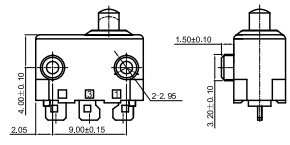
28#Lever	35#Lever	36#Lever
		

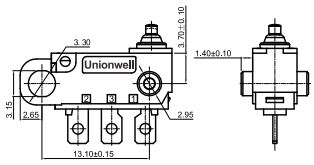
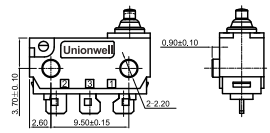
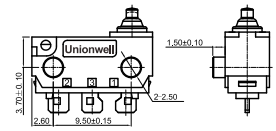
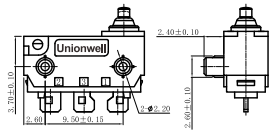
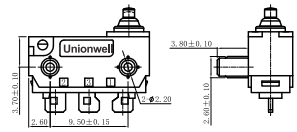
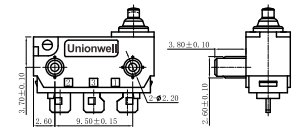
38#Lever	41#Lever
	

■Posts Type(Can be customized)

A shape standard type: Ø2.60X5.00mm posts	A1 shape standard type: Ø2.60X5.00mm posts	■Posts Identification
		

A2 shape standard type: Ø2.60X5.00mm posts	B shape standard type: Ø2.60X5.00mm posts
	

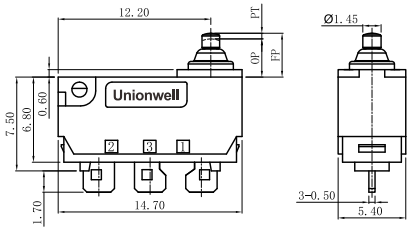
C1:ø2.95X1.50mm posts	C1M3:ø3.00X1.50mm posts	D1:ø2.95X1.50mm posts
		

M3 shape: Ø 2.95X1.50mm posts	A shape A type: Ø 2.20X0.90mm posts	A shape B type: Ø2.50X1.50mm posts
		
A shape C type: Ø2.60X2.50 mm posts	**A shape F type: Ø2.60X3.80mm posts**	**A shape H type: Ø 2.60X2.00mm posts**
		

■Dimensions and Operating Characteristics

◆ G3□□-□□□S00A1

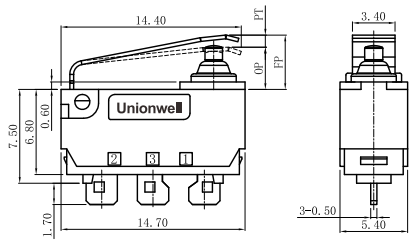




OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	130	13	0.8	0.8	0.2	3.65	3.05±0.2

□ G3□□-□□□S01A1

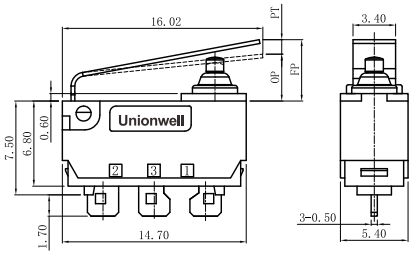




OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	220	30	3	0.8	0.5	5.7	3.4±0.5

◆ G3□□-□□□S02A1

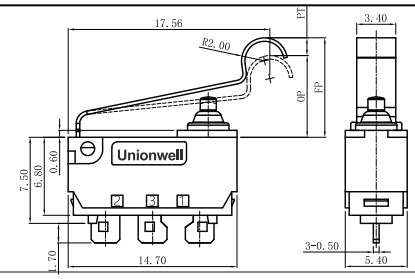




OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	195	25	3.5	1.35	0.6	6.8	3.7±0.6

◆ G3□□-□□□S05A1



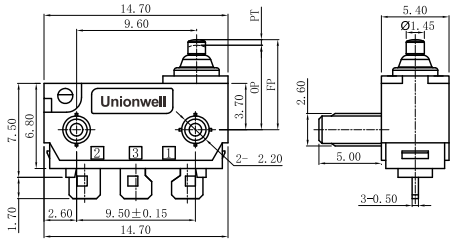


OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	180	20	3.8	1.5	0.7	9.8	7.0±0.7

■Dimensions and Operating Characteristics

◆ G3□□-□□□S00A3

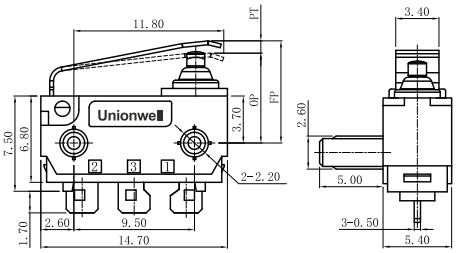




OF Max (gf)		RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	130	13	0.8	0.8	0.2	7.35	6.75±0.2

◆ G3□□-□□□S01A3

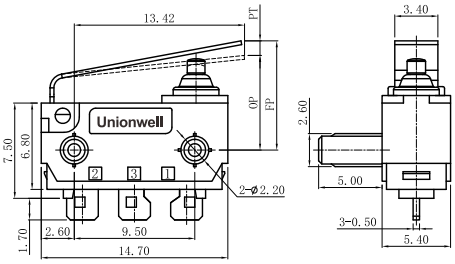




OF Max (gf)		RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	220	30	3	0.8	0.5	9.4	7.1±0.5

◆ G3□□-□□□S02A3

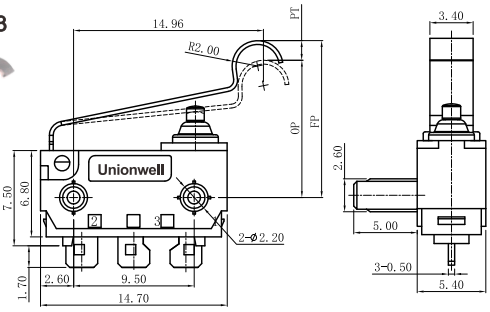




OF Max (gf)		RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	195	25	3.5	1.35	0.6	10.5	7.4±0.6

◆G3□□-□□□S05A3

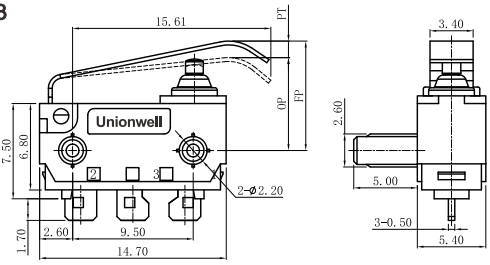




OF Max (gf)		RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	180	20	3.8	1.5	0.7	13.5	10.7±0.7

◆G3□□-□□□S09A3



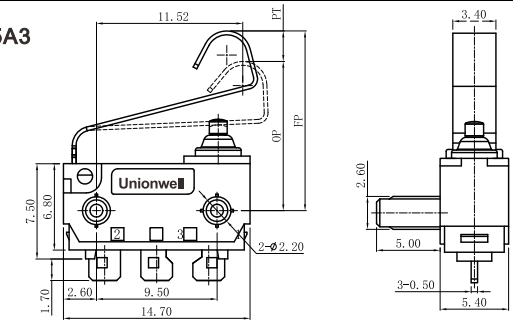


OF Max (gf)		RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	195	30	3.5	1.3	0.6	10.8	7.3±0.6

■Dimensions and Operating Characteristics

◆G3□□-□□□P15A3

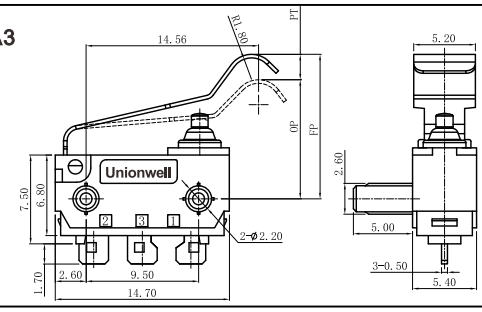




OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	280	30	4	1.5	0.7	15.9	11.9±0.7

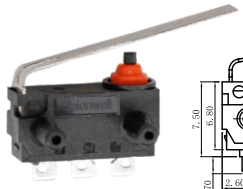
◆G3□□-□□□P22A3

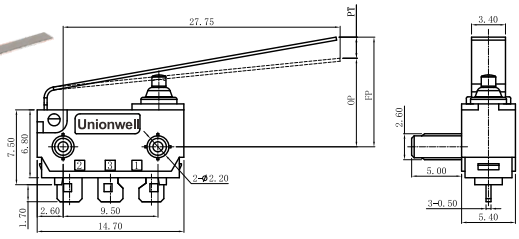




OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	200	20	3. 8	1.5	0.7	13. 8	10.0±0.7

◆G3□□-□□□S25A3

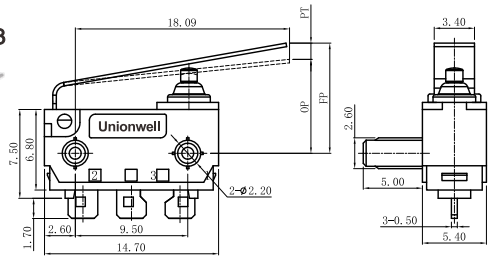




OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	150	25	5. 5	1.35	1. 5	13	7.50±1.2

◆G3□□-□□□S28A3

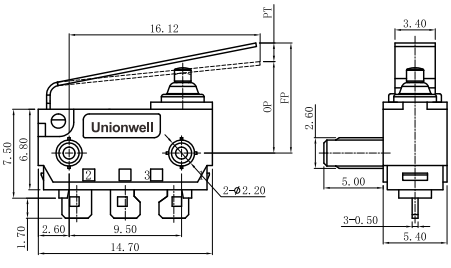




OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	200	25	4. 5	1.5	1	11. 65	7.15±1.0

◆G3□□-□□□S35A3



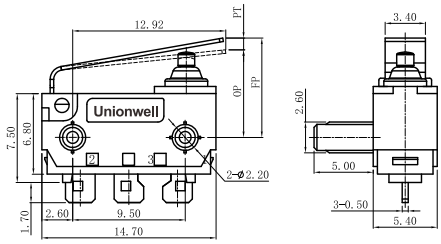


OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	200	25	4. 4	1.5	1	11. 45	7.05±1.0

■Dimensions and Operating Characteristics

◆G3□□-□□□S36A3

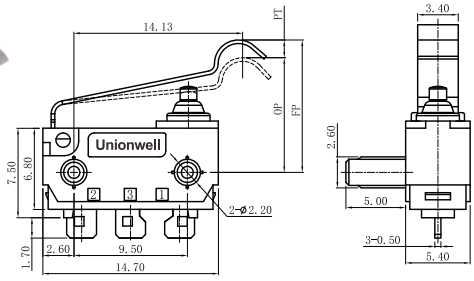




OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	200	25	3.4	1.3	0.6	10.6	7.2±0.6

◆G3□□-□□□P41A3

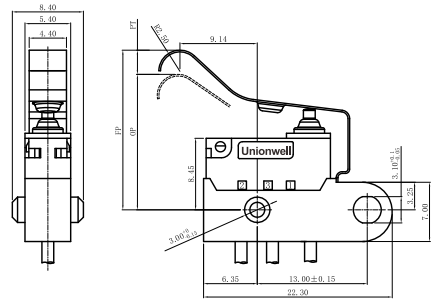




OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	200	50	3.5	1.2	0.6	13	9.5±0.7

◆G3□□-□□□E37C1

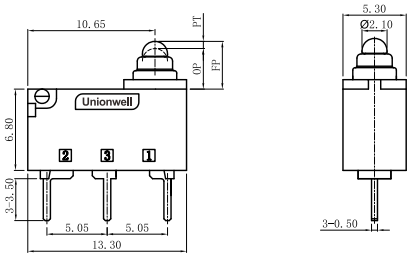




OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	100	25	6	1.5	2	21	15±2.0

◆G3□□-□□□S00A52

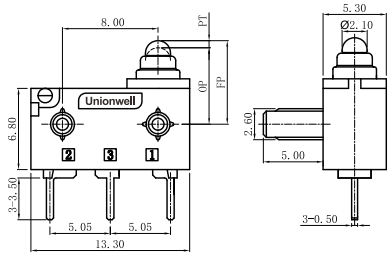




OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)	TTP
-130	130	30	1.3	0.6	0.25	4.2	3.4±0.3	2.3

◆G3□□-□□□P00A53



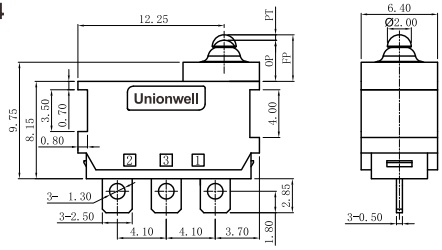


OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)	TTP
-130	130	30	1.3	0.6	0.25	7.2	6.4±0.3	5.3

■Dimensions and Operating Characteristics

◆G3□□-□□□K00A4

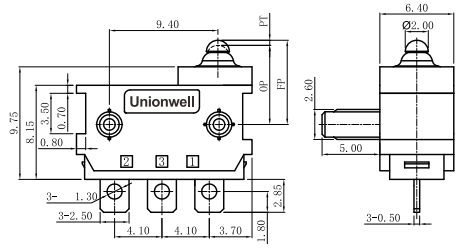




OF Max (gf)		RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	130	13	0.8	0. 8	0.2	4.1	3.45±0.2

◆G3□□-□□□K00A6

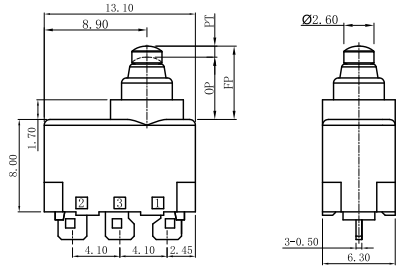




OF Max (gf)		RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	130	13	0.8	0. 8	0.2	7. 5	6.85±0.2

◆G3□□-□□□S00A13

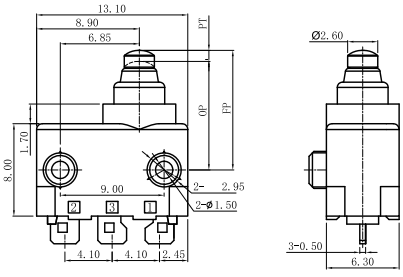




OF Max (gf)		RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	180	20	1. 5	0.5	0.25	6.35	5.4±0.3

◆G3□□-□□□S00A15

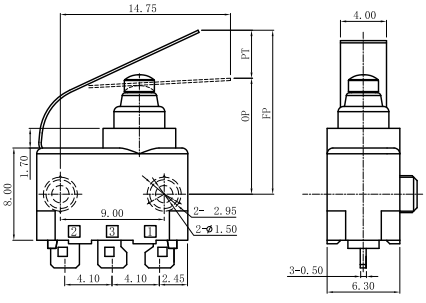




OF Max (gf)		RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	180	20	1. 5	0.5	0.25	10.35	9.4±0.3

◆G3□□-□□□S03A15



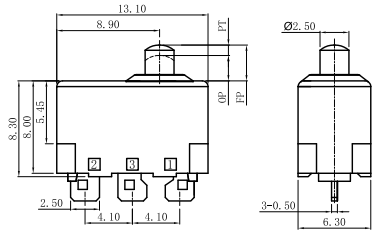


OF Max (gf)		RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	250	50	5. 5	0.5	1. 1	15	10.7±1.5

■Dimensions and Operating Characteristics

◆G3□□-□□□S00A16

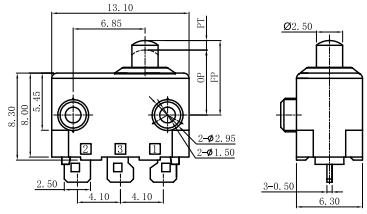




OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	130	8	1.5	0.5	0.25	3.3	2.2±0.3

◆G3□□-□□□S00A18

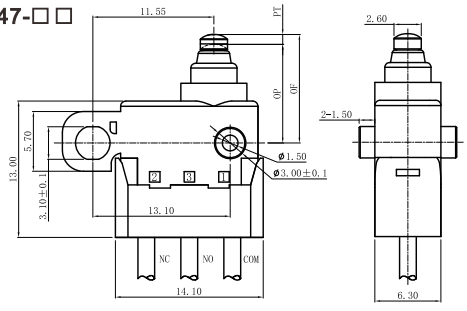




OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)
-130	130	8	1.5	0.5	0.25	7.3	6.2±0.3

◆G3□□-□□□E00A47-□□

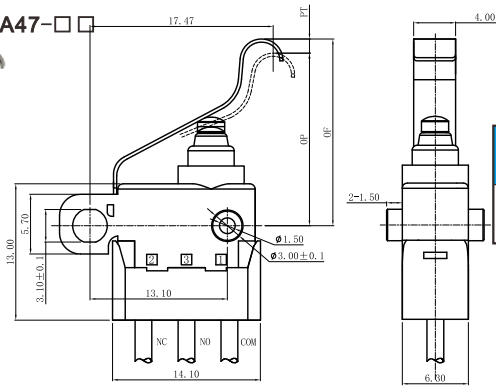




OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)	TTP
-130	200	20	1.5	0.5	0.25	10.45	9.4±0.3	8.4

◆G3□□-□□□E23A47-□□

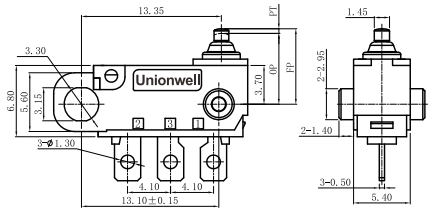




OF Max (gf)	RF Min (gf)	PT Max (mm)	OT Min (mm)	DT Max (mm)	FP Max (mm)	OP (mm)	TTP
-130	300	50	3.5	0.5	1.1	20	16.45±1.5	14.9

◆G3□□-□□□K00A7





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