

Internal snap-fit



External snap-fit lever

- ▶ **High quality micro switches for a wide range of applications**
- ▶ **Internal or external snap-fit lever**
- ▶ **Designed for footswitch, hand control, joystick etc**
- ▶ **Excellent performance, high reliability and long service life**
- ▶ **UL/cUL and ENEC certification**

Specifications	
Contact resistance (initial)	Max. 300 mΩ Measured by ohm meter - open voltage < 1VDC, driver current -100 mA
Insulation Resistance (at 500 VDC / minute)	Min. 100 MΩ
Dielectric Strength	Min. 500VAC (50-60HZ)/minute between Live parts. Min. 1500VAC (50-60HZ)/minute between Live parts and dead metal parts
Operating Temperature Range	-40°C to 125°C (with no icing)
Vibration	10~55Hz, displacement 0.75 mm (p-p)
Electrical Service Life	Min. 10,000 operations
Electrical Operating Frequency	10~30 operations per minute
Mechanical Service Life	All series for H force: No define the life cycles All series for F force: Min. 1,000,000 operations Others: Min. 5,000,000 operations
Mechanical Operating Frequency	120 operations per minute
Operating application of the switch	Set the switch pushing distance from 60% to 90% of the specified OT value



Certification information

Model Name	UL - cUL	ENEC
SM1-G1 SM1-NC1 SM1-GC1	0.1RA 125/250VAC μ T125 1E4 0.1RA 30VDC μ T125 1E4	0.1A 125/250VAC μ T125 1E4 0.1A 30VDC μ T125 1E4
SM1-N3 SM1-G3 SM1-NC3 SM1-GC3	3RA 125/250VAC μ T125 1E4 3RA 30VDC μ T125 1E4	3A 125/250VAC μ T125 1E4 3A 30VDC μ T125 1E4
SM1-N6 SM1-G6	6RA 125/250VAC μ T125 1E4 6GPA 125/250VAC μ T85 1E4 5RA 30VDC μ T125 1E4	6A 125/250VAC μ T125 1E4 5A 30VDC μ T125 1E4 6(3)A 125/250VAC μ T85 1E4 (S,F, H force only)

Selection of rating & force

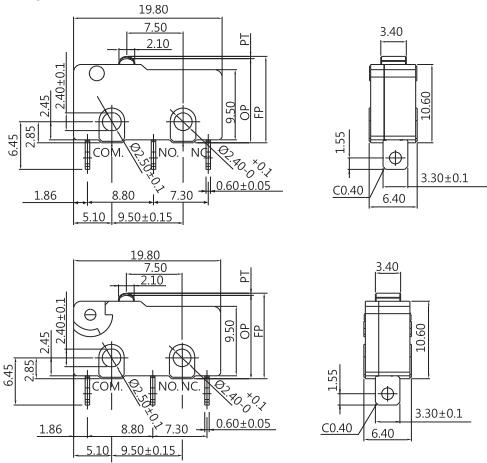
Model	Rating	D	L	S	F	H
SM1-G1 SM1-NC1 or SM1-GC1	0.1A	*	*	*	*	*
SM1-N3 or SM1-G3	3A	*	*	*	*	*
SM1-NC3 or SM1-GC3	3A		*	*	*	*
SM1-N6 or SM1-G6	6A	*	*	*	*	*
SM1-N6S, N6F, N6H	6(3)A			*	*	*

NOTE: The symbol " * " represents the result is accepted



Dimensions

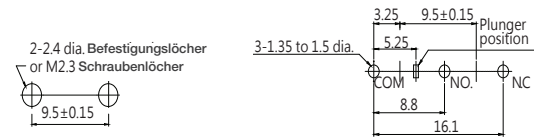
Es gilt eine Toleranz von +/- 0,4mm für alle Dimensionen, sofern nicht anders angegeben



Kontakt Konfiguration

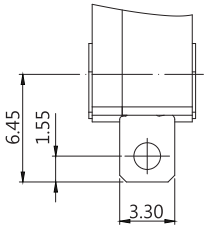


Befestigungslöcher

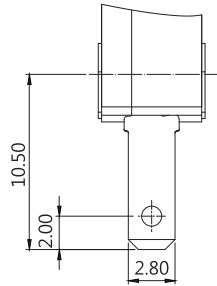


Terminal types

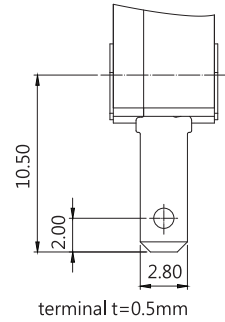
A Typ



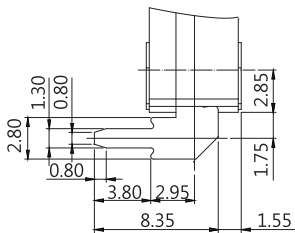
B Typ



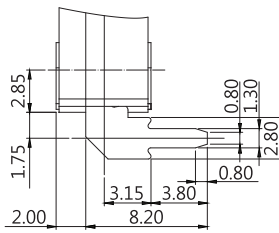
G Typ



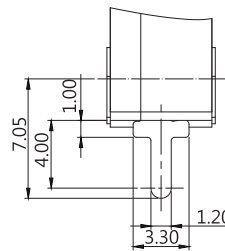
C Typ



D Typ



P Typ





Ordering information

(Please use the characters in the chart below to create your product code)

Sample code SM1 - N6 S - 00 ODER 500 A 0 - Z

Rating Current	
G1	0.1A 125/250VAC
NC1	0.1A 30VDC
GC1	
N3	3A 125/250VAC
G3	3A 30VDC
NC3	3A 30VDC
GC3	
N6	6A 125/250VAC
G6	5A 30VDC

Operating Force	
S	standard
L	light
D	slighter
F	heavy
H	heavier

Actuator Type (internal snap-fit lever)	
00	
01	
02	
03	
04	
05	
06	
07	
08	
09	





Ordering information


(Please use the characters in the chart below to create your product code)


Sample code SM1 - N6 S - 00 ODER 500 A 0 - Z


Actuator Type (external snap-fit lever)

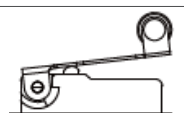
- 00 


- 01 


- 02 


- 03 


- 04 

- 05 


- 06 


- 07 

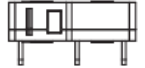
- 08 


- 09 

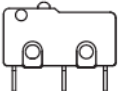
Terminal type

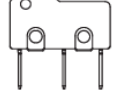
- A 

- B 

- C 

- D 

- P 

- G 



Ordering information

(Please use the characters in the chart below to create your product code)

Sample code SM1 - N6 S - 00 ODER 500 A 0 - Z

Contact Arrangement

0	S.P.D.T.
1	S.P.S.T.NO
2	S.P.S.T.NC

If you require a customized solution for your program contact our sales team.

Rating Current	Operating Force
G1	ALL
N3/G3	ALL
N6/G6	ALL
NC1/GC1	ALL
NC3/GC3	L, S, F, H



Operating characteristics (internal snap fit lever)

SWITCH TYPE	PART SUFFIX	OF Max. (gf)	OP (mm)	PT Max. (mm)	OT Min. (mm)	MD Max. (mm)	FP Max. (mm)	RF Min. (gf)	
SM1- □□□ -00 □□ -Z		H	355	11.4±0.3	1.1	0.4	0.2	12.2	100
		F	280						50
		S	150						25
		L	95						10
SM1- □□□ -01 □□ -Z		H	118	11.4±1.1	4.63	0.53	1.45	14.6	20
		F	90	11.8±0.8	3.6	0.6	0.8		9
		S	50						6
		L	28						1
SM1- □□□ -02 □□ -Z		H	107	11.4±1.3	5.29	0.48	1.67	14.94	17
		F	82	11.8±0.9	4.03	0.67	0.9		8
		S	45						5
		L	25						1
SM1- □□□ -03 □□ -Z		H	87	11.0±1.8	7.47	0.18	2.40	15.96	11
		F	70	11.8±1.5	5.35	0.89	1.19		5
		S	34						2
		L	20						1
SM1- □□□ -04 □□ -Z		H	111	13.3±1.2	5.02	0.51	1.58	16.66	19
		F	85	13.7±0.9	3.86	0.64	0.86		8
		S	47						5
		L	26						1
SM1- □□□ -05 □□ -Z		H	117	17.1±1.1	4.60	0.55	1.44	20.5	21
		F	90	17.5±0.8	3.8	0.6	0.8		9
		S	50						6
		L	28						1
SM1- □□□ -06 □□ -Z		H	97	18.0±1.5	6.12	0.4	1.95	23.2	15
		F	75	19.0±1.5	5.7	1.0	1.0		7
		S	42						2
		L	23						1
SM1- □□□ -07 □□ -Z		H	55	9.9±2.7	11.20	0.5	4.1	18.4	8
		F	53	11.8±2.0	8.6	1.5	1.8		3
		S	25						1
		L	16						1
SM1- □□□ -08 □□ -Z		F	58	-2.3±3.0	6.0	X	1.9	5.4	3
		S	25						1
		L	17						1
SM1- □□□ -09 □□ -Z		F	38	11.8±3.0	13.3	1.0	2.9	22.1	2
		S	15						2
		L	12						1



Operating characteristics (external snap fit lever)

SWITCH TYPE	PART SUFFIX	OF Max. (gf)	OP (mm)	PT Max. (mm)	OT Min. (mm)	MD Max. (mm)	FP Max. (mm)	RF Min. (gf)	
SM1- □□□ -500 □□ -Z		H	355	11.4±0.3	1.1	0.4	0.2	12.2	100
		F	280						50
		S	150						25
		L	95						10
SM1- □□□ -501 □□ -Z		H	145	11.8±1.10	4.6	0.9	0.8	15.3	15
		F	105						12
		S	50						6
		L	40						1
SM1- □□□ -502 □□ -Z		H	135	11.8±1.20	5.1	0.7	0.8	15.70	10
		F	100						8
		S	50						5
		L	40						--
SM1- □□□ -503 □□ -Z		H	110	11.8±1.60	6.90	0.9	1.10	17.10	10
		F	80						7
		S	45						4
		L	35						--
SM1- □□□ -504 □□ -Z		H	140	13.7±1.1	4.80	1.50	0.8	17.40	15
		F	100						11
		S	50						6
		L	40						1
SM1- □□□ -505 □□ -Z		H	145	17.9±1.0	4.05	0.55	0.9	21.00	15
		F	110						12
		S	55						6
		L	40						1
SM1- □□□ -506 □□ -Z		H	195	11.8±0.8	3.2	0.6	0.6	14.2	25
		F	145						19
		S	70						10
		L	50						2
SM1- □□□ -507 □□ -Z		H	85	11.8±2.6	10.8	1.2	1.9	20.0	5
		F	60						3
		S	35						1
		L	30						---
SM1- □□□ -508 □□ -Z		H	140	14.9±1.1	4.10	1.0	0.8	17.95	40
		F	100						11
		S	50						3
		L	40						1
SM1- □□□ -509 □□ -Z		H	65	11.8±3.5	14.8	2.8	2.6	23.1	1
		F	50						1
		S	30						1
		L	25						---