

Specification

| | |
|-----------------------|---|
| Electrical rating | 2A/12VDC, 40T85, 100000 cycles 2A/24VDC, 40T85, 50000 cycles 10mA/12VDC, 40T85, 250000 cycles 0.1mA/250VAC, 40T85, 50000 cycles 0.5mA/250VAC, 40T85, 10000 cycles |
| Mechanical Life | 1,000,000 cycles |
| Contact Resistance: | 50mΩ Max. (initial) |
| Insulation Resistance | 100 MΩ Min. |
| Dielectric Strength | 500VAC for 60 ± 5 sec. |
| Housing | UL94 V-0 |



IP Protection

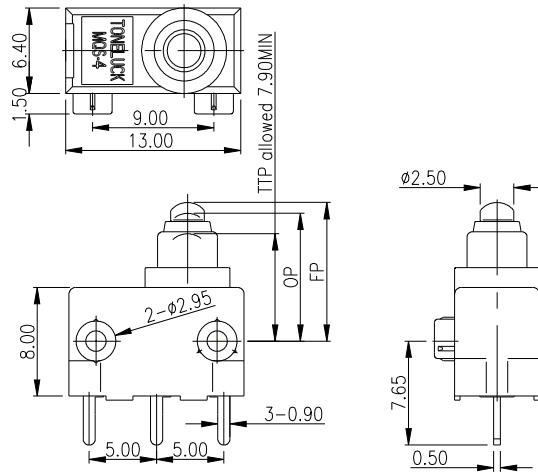
| Series | Actuation Side | Terminal Side | OF | OP |
|--------|----------------|---------------|-------------|------------|
| MQS-41 | IP 40 | IP 00 | 50 - 150 gf | 6.15±0.3mm |
| MQS-42 | IP 67 | IP 00 | 50 - 200 gf | 9.40±0.3mm |
| MQS-43 | IP 67 | IP 67 | 50 - 200 gf | 9.40±0.3mm |

Ordering Instruction

| | | | | | | |
|--------|---|---|---|----|----|----|
| MQS-41 | 1 | A | A | 00 | Ag | 01 |
|--------|---|---|---|----|----|----|

| | | | |
|-------------------|---|---|----------------------------------|
| Series | MQS-41 | MQS-42 | MQS-43: second molding with wire |
| Electrical rating | 1= 2A/12VDC,SPDT 2= 10mA/12VDC,SPDT 3= 0.1A/250VAC,SPDT 4= 2A/12VDC,SPST-NO 5= 10mA/12VDC,SPST-NO | 6= 0.1A/250VAC,SPST-NO 7= 2A/12VDC,SPST-NC 8= 10mA/12VDC,SPST-NC 9= 0.1A/250VAC,SPST-NC | |
| Location Pin | A = Side A, 1.5mm B = Side B, 1.5mm C = Both Sides, 1.5mm D = Side A, 2.5mm E = Side B, 2.5mm | F = Both Sides, 2.5mm G = Side A,5mm H = Side B, 5mm J = Both Sides, 5mm N = No Position Pin M=Side A, 2.5mm+Side B(single), 0.8mm | |
| Terminal Type | A=Angled PCB pins, side A B=Angled PCB pins, side B C=Straight PCB pins D=Straight crimped PCB pins E=Solder terminal F=Terminal B | H=Angled Solder terminal,Side B J=Interlock terminal,side A K= Interlock terminal,side B M=Short Interlock terminal,side B W=Wires Specification: eg.W1,W2,W3,etc P=Soder-free Clamping terminal | |
| Lever Type | 00,01,02,03 ... (00 = No lever) (P1= metal hat) | | |
| Contact Plating | Ag=Sliver Alloy | | |
| Version | 01:Standard Version 02:Special Version Custom-made:03,04,etc. | | |

Basic Dimensions

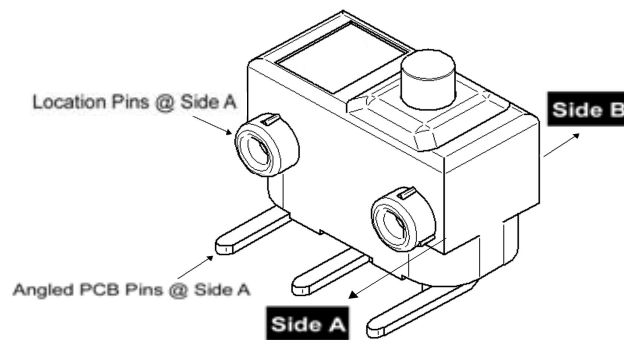


Common Characteristics

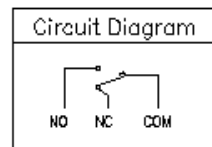
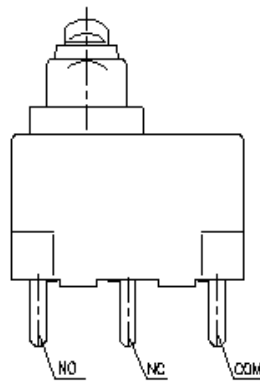
MQS-41/MQS-42: SPDT
 MQS-43: SPDT, SPST-NC, SPST-NO

Movement Differential: 0.4 mm Max.
 Pre-travel Distance: 1.2mm Max.
 Over-travel Distance: 1.2mm Min.

Standard Contact Plating: Silver Alloy

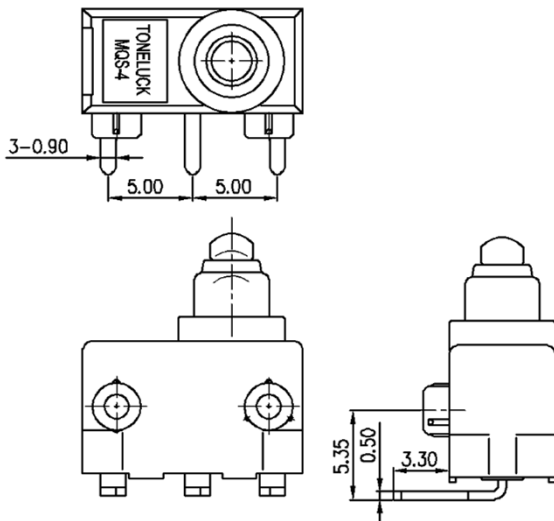


Circuit

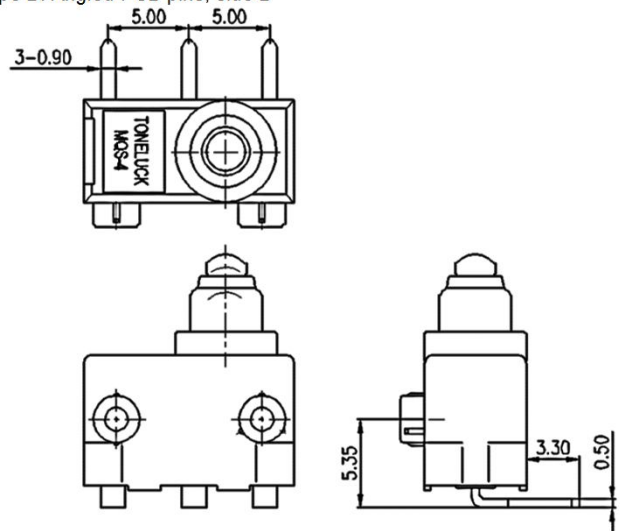


Terminal Type

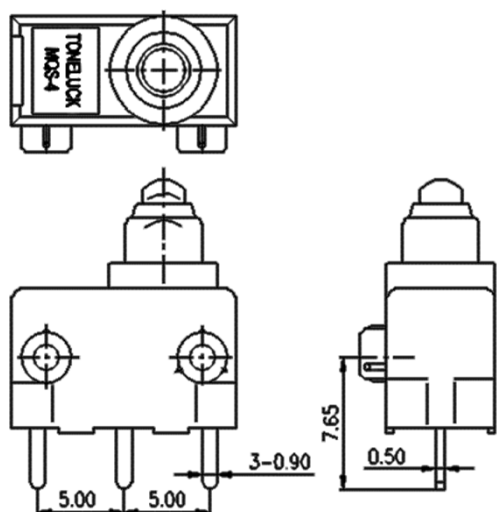
Type A: Angled PCB pins, side A



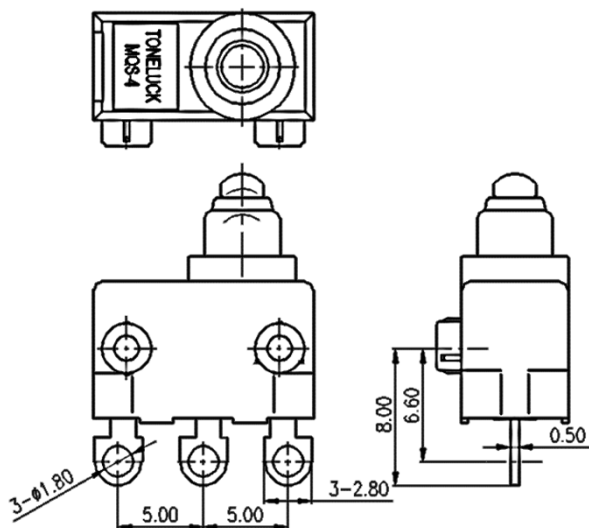
Type B: Angled PCB pins, side B



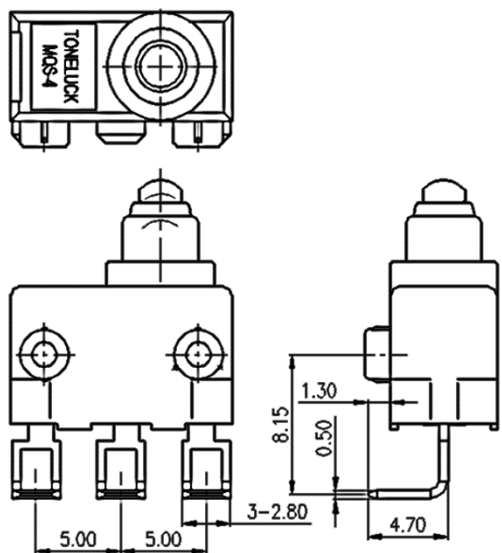
Type C: Straight PCB pins



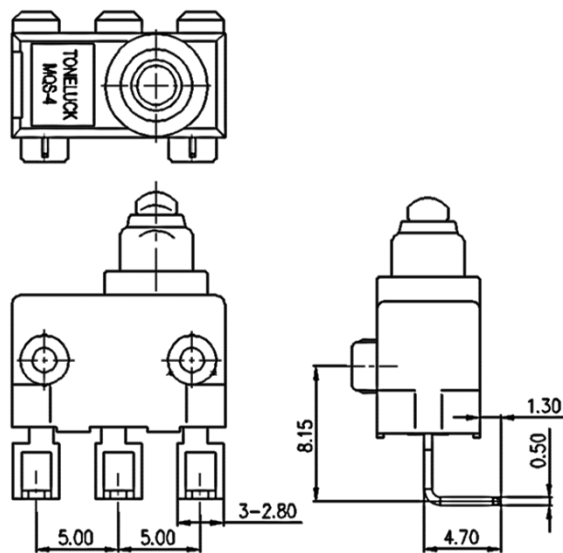
Type E: Solder terminal



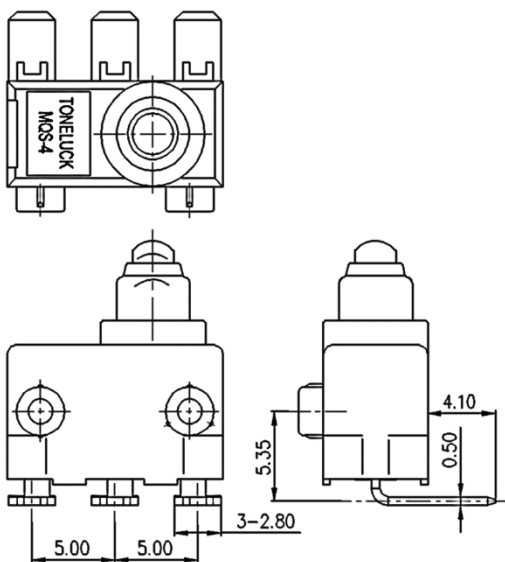
Type J: Interlock terminal, side A



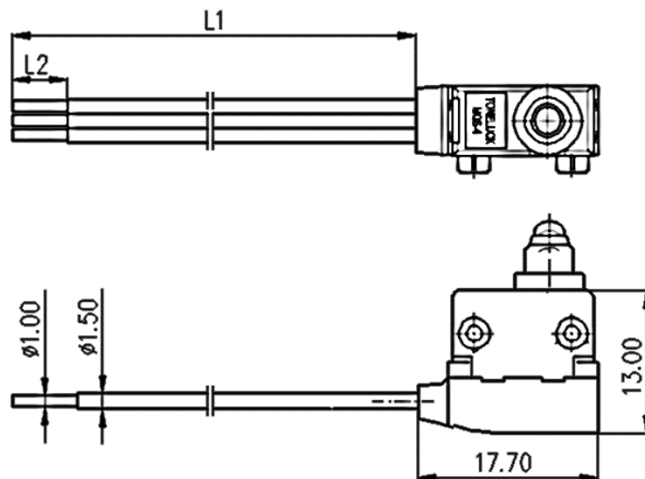
Type K: Interlock terminal, side B



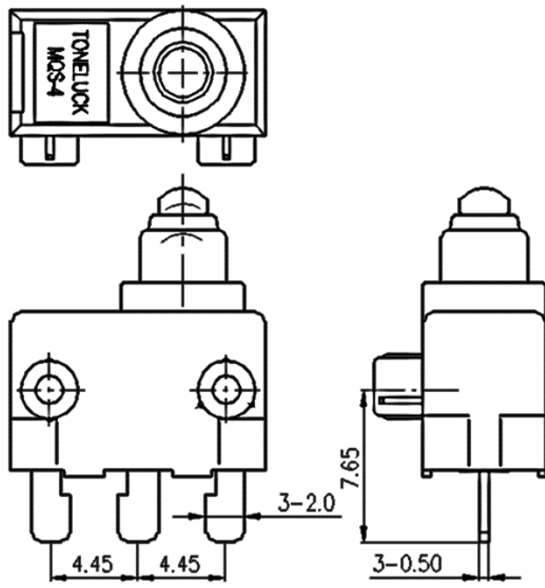
Type M: Short Interlock terminal, side B



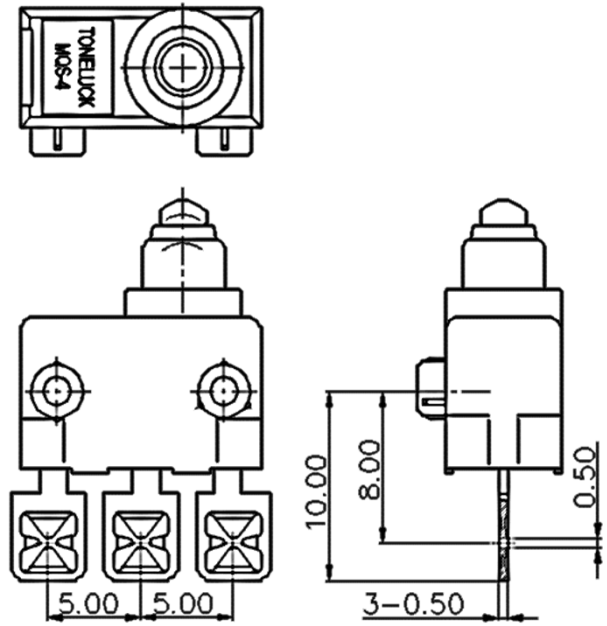
Type W: Wires Specification



Type F: Terminal B

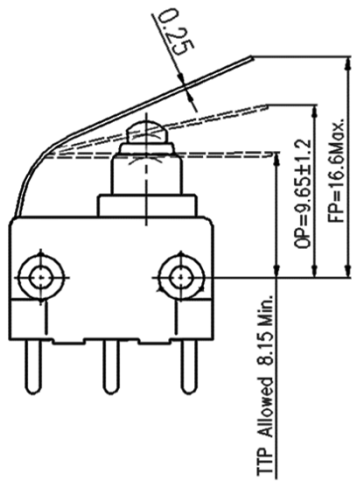


Type P: Solder-free Clamping terminal

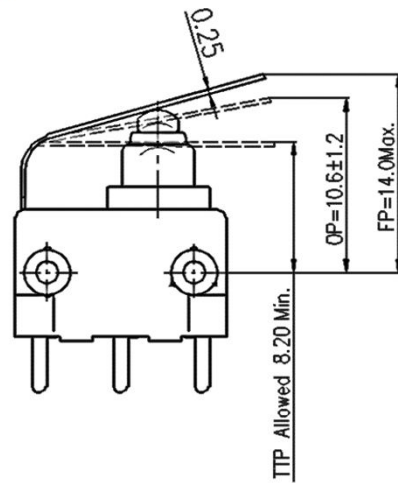


Lever type

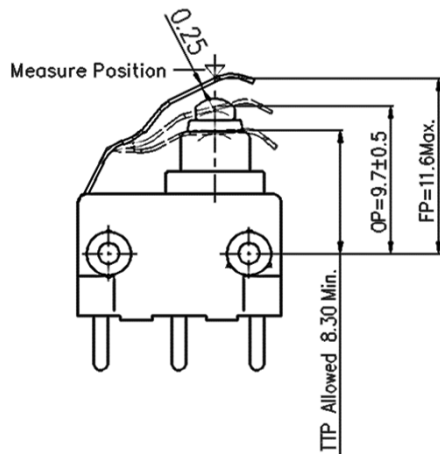
Lever Type = 01



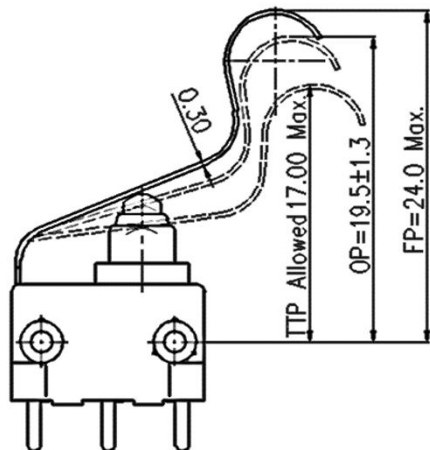
Lever Type = 02



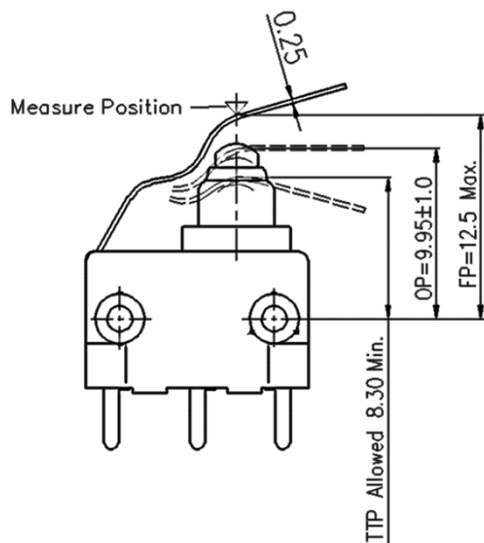
Lever Type = 03



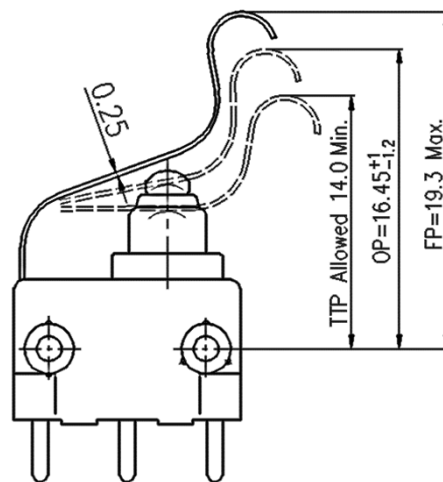
Lever Type = 04



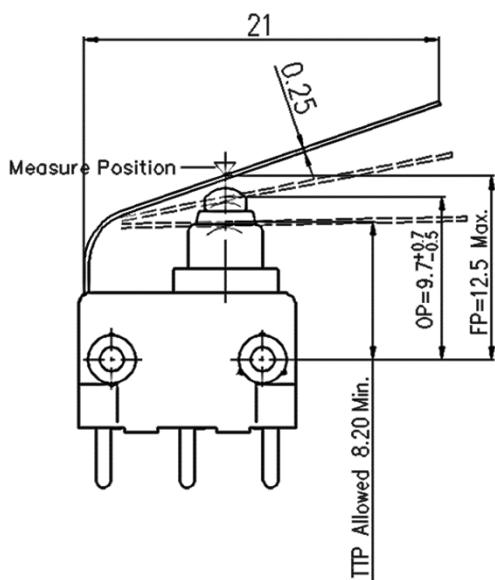
Lever Type = 05



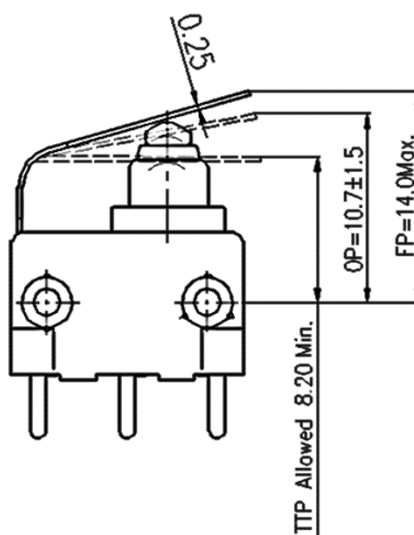
Lever Type = 06



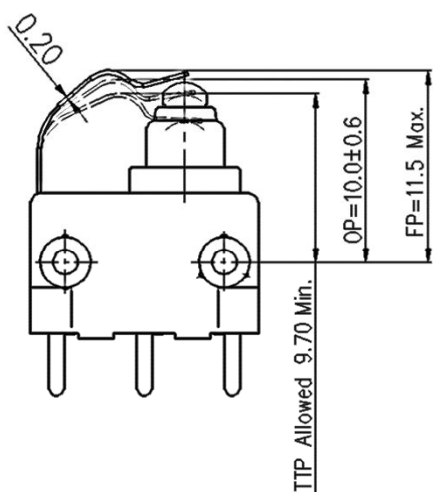
Lever Type = 07



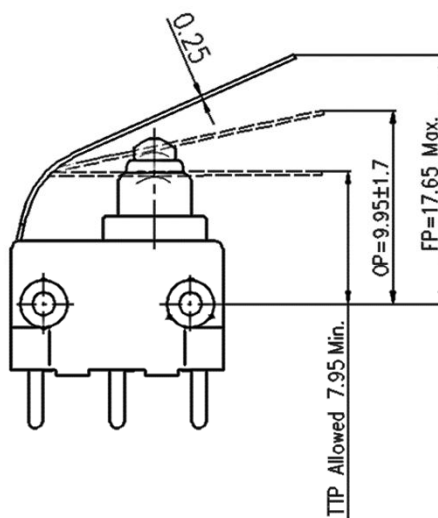
Lever Type = 08



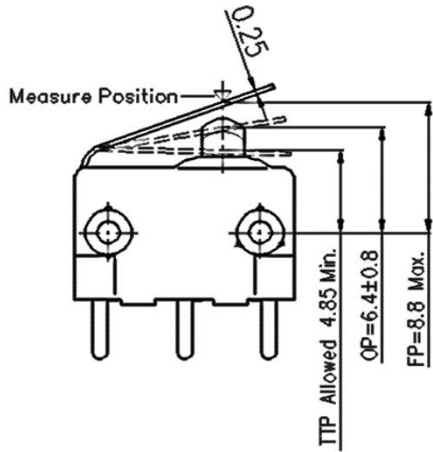
Lever Type = 09



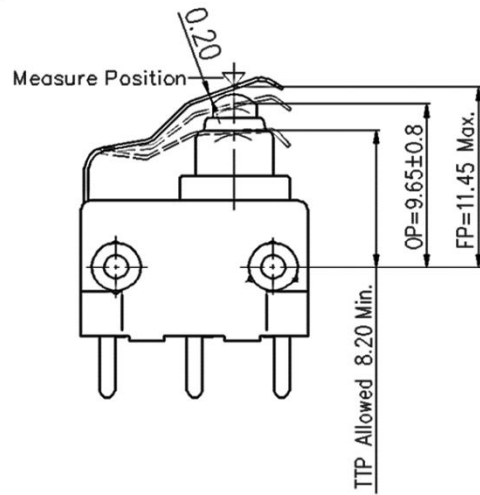
Lever Type = 10



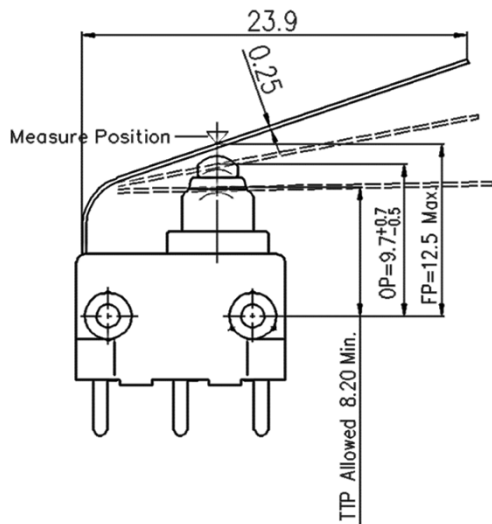
Lever Type = 11



Lever Type = 12

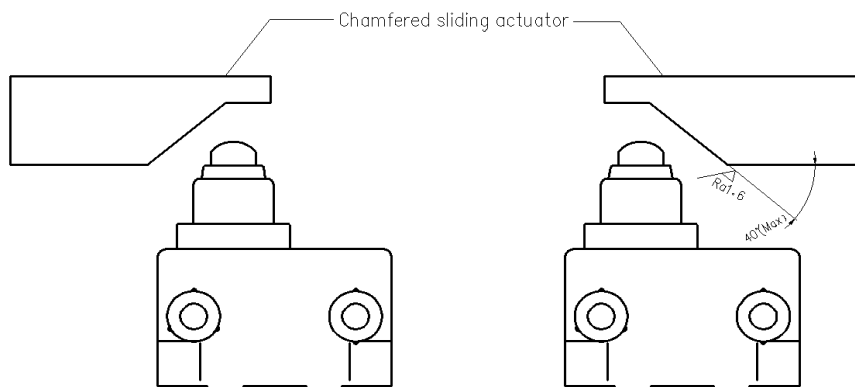


Lever Type = 13



Actuation Angle

Besides actuating the micro-switch vertically, the switch could be operated by cam-shaped or chamfered sliding actuators with an approximate value of Max. 40°. Please refer to the technical specification for the specified conditions.



The approximate value of 40° was tested under the following conditions:

- Chamfered sliding material : POM.
- Polished chamfered sliding surface, greased with lubricant oil .
- Operation frequency :30 cycles per minute.
- 0.3mm away from total travel position.
- Suggest angle ≤30° if no grease on sliding surface.