

EN: This Datasheet is presented by the manufacturer.

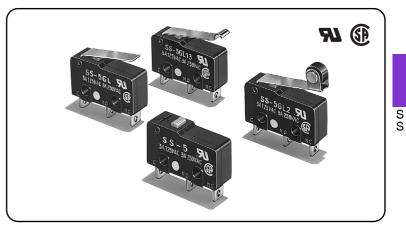
Please visit our website for pricing and availability at <u>www.hestore.hu</u>.

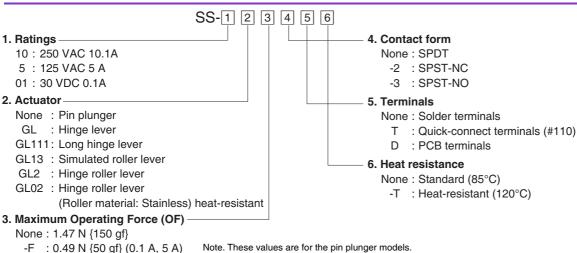
Subminiature Basic Switch Offers High Reliability and Security

- The OMRON's best-selling micro switches of a wide variety from 0.1A to 10.1A.
- A variety of models are available, with operating force ranging from low to high.
- Two split springs ensure a high stability and durability of 30,000,000 operations.

RoHS Compliant

Model Number Legend





-E : 0.25 N {25 gf} (0.1 A)

List of Models

Standard Models

| Actuator | Terminals | Contact Form | Ratings Maximum Operating Force (OF) | 10.1 A | 5 A | 0.1 A |
|-------------|-------------------------|--------------|---|----------------------|--------------------|----------------------|
| Actualor | Terminais | SPDT | Maximum Operating Force (OF) | SS-10 | SS-5 | SS-01 |
| | Solder terminals | SPST-NC | - | SS-10-2 | SS-5-2 | SS-01-2 |
| | Soluer terminals | SPST-NO | - | SS-10-2 SS-10-3 | SS-5-2 SS-5-3 | SS-01-2 SS-01-3 |
| | | SPDT | - | SS-10-3 | SS-5-5 SS-5T | SS-01-3 |
| | Quick-connect | SPST-NC | 1.47 N {150 gf} | SS-10-2T | SS-5-2T | SS-01-2T |
| | terminals (#110) | SPST-NO | 1.47 N {150 gi} | SS-10-21 SS-10-3T | SS-5-21 | SS-01-21 |
| | | SPDT | - | SS-10-31 SS-10D | SS-5-31 SS-5D | SS-01-31 |
| | PCB terminals | SPST-NC | - | SS-10D SS-10-2D | SS-5-2D | SS-01-2D |
| | FOB terminais | SPST-NO | + – | SS-10-2D SS-10-3D | SS-5-2D SS-5-3D | SS-01-2D SS-01-3D |
| | | SPDT | | 55-10-3D | SS-5-3D SS-5-F | SS-01-3D SS-01-F |
| Pin plunger | O a lala in ta masimala | - | | - | | |
| | Solder terminals | SPST-NC | | - | SS-5-F-2 | SS-01-F-2 |
| | | SPST-NO | | - | SS-5-F-3 | SS-01-F-3 |
| | Quick-connect | SPDT | | - | SS-5-FT | SS-01-FT |
| | terminals (#110) | SPST-NC | 0.49 N {50 gf} | - | SS-5-F-2T | SS-01-F-2T |
| | | SPST-NO | | - | SS-5-F-3T | SS-01-F-3T |
| | | SPDT | | - | SS-5-FD | SS-01-FD |
| | PCB terminals | SPST-NC | | - | SS-5-F-2D | SS-01-F-2D |
| | | SPST-NO | | - | SS-5-F-3D | SS-01-F-3D |
| | | SPDT | | - | - | SS-01-E |
| | Solder terminals | SPST-NC | | - | - | SS-01-E-2 |
| | | SPST-NO | | - | - | SS-01-E-3 |
| | Quick-connect | SPDT | | - | - | SS-01-ET |
| | terminals (#110) | SPST-NC | 0.25 N {25 gf} | - | - | SS-01-E-2T |
| | terminais (#110) | SPST-NO | | - | - | SS-01-E-3T |
| | | SPDT | | - | - | SS-01-ED |
| | PCB terminals | SPST-NC | | - | - | SS-01-E-2D |
| | | SPST-NO | | - | - | SS-01-E-3D |

Separator (Sold Separately), Terminal Connector (Sold Separately) => Refer to "Basic Switch Common Accessories"

| | | | Ratings | 10.1 A | 5 A | 0.1 A |
|------------------------|--|----------------------|------------------------------|----------------------------|-----------------------------|----------------------------------|
| Actuator | Terminals | Contact Form SPDT | Maximum Operating Force (OF) | SS-10GL | SS-5GL | SS-01GL |
| | Solder terminals | SPST-NC | SS-10GL-2 | SS-5GL-2 | SS-01GL-2 | |
| | Conder terminais | SPST-NO | | SS-10GL-3 | SS-5GL-3 | SS-01GL-3 |
| | | SPDT | - | SS-10GLT | SS-5GLT | SS-01GLT |
| | Quick-connect | SPST-NC | 0.49 N {50 gf} | SS-10GL-2T | SS-5GL-2T | SS-01GL-2T |
| | terminals (#110) | SPST-NO | | SS-10GL-3T | SS-5GL-3T | SS-01GL-3T |
| | | SPDT | | SS-10GLD | SS-5GLD | SS-01GLD |
| | PCB terminals | SPST-NC | | SS-10GL-2D | SS-5GL-2D | SS-01GL-2D |
| | | SPST-NO | | SS-10GL-3D | SS-5GL-3D | SS-01GL-3D |
| | | SPDT | | - | SS-5GL-F | SS-01GL-F |
| | Solder terminals | SPST-NC | | - | SS-5GL-F-2 | SS-01GL-F-2 |
| Hinge lever | | SPST-NO SPDT | | - | SS-5GL-F-3 SS-5GL-FT | SS-01GL-F-3 SS-01GL-FT |
| - | Quick-connect | SPST-NC | 0.16 N {16 gf} | - | SS-5GL-F1 | SS-01GL-F-2T |
| | terminals (#110) | SPST-NO | 0.1014 (10 g) | | SS-5GL-F-3T | SS-01GL-F-3T |
| | | SPDT | - | - | SS-5GL-FD | SS-01GL-FD |
| | PCB terminals | SPST-NC | | - | SS-5GL-F-2D | SS-01GL-F-2D |
| | | SPST-NO | | - | SS-5GL-F-3D | SS-01GL-F-3D |
| | | SPDT | | - | - | SS-01GL-E |
| | Solder terminals | SPST-NC | | - | - | SS-01GL-E-2 |
| | | SPST-NO | | - | - | SS-01GL-E-3 |
| | Quick-connect | SPDT | | - | - | SS-01GL-ET |
| | terminals (#110) | SPST-NC | 0.08 N {8 gf} | - | - | SS-01GL-E-2T |
| | | SPST-NO | | - | - | SS-01GL-E-3T |
| | PCB terminals | SPDT SPST-NC | | - | - | SS-01GL-ED SS-01GL-E-2D |
| | PCB terminals | SPST-NC SPST-NO | | - | - | SS-01GL-E-3D |
| | | SPST-NO SPDT | | - SS-10GL111 | - SS-5GL111 | SS-01GL-E-3D |
| | Solder terminals | SPST-NC | | SS-10GL111-2 | SS-5GL111-2 | SS-01GL111-2 |
| | | SPST-NO | | SS-10GL111-3 | SS-5GL111-3 | SS-01GL111-3 |
| | Quick-connect | SPDT | | SS-10GL111T | SS-5GL111T | SS-01GL111T |
| | terminals (#110) | SPST-NC | 0.39 N {40 gf} | SS-10GL111-2T | SS-5GL111-2T | SS-01GL111-2T |
| | PCB terminals | SPST-NO | | SS-10GL111-3T | SS-5GL111-3T | SS-01GL111-3T |
| | | SPDT | | SS-10GL111D | SS-5GL111D | SS-01GL111D |
| | | SPST-NC | | SS-10GL111-2D | SS-5GL111-2D | SS-01GL111-2D |
| | | SPST-NO SPDT | | SS-10GL111-3D | SS-5GL111-3D SS-5GL111-F | SS-01GL111-3D SS-01GL111-F |
| | Solder terminals | SPST-NC | | - | SS-5GL111-F-2 | SS-01GL111-F-2 |
| | | SPST-NO | | - | SS-5GL111-F-3 | SS-01GL111-F-3 |
| Long hinge lever | Quick-connect terminals (#110) PCB terminals | SPDT | | - | SS-5GL111-FT | SS-01GL111-FT |
| / | | | 0.12 N {12 gf} | - | SS-5GL111-F-2T | SS-01GL111-F-2T |
| <u> </u> | | | | - | SS-5GL111-F-3T | SS-01GL111-F-3T |
| | | SPDT | c | - | SS-5GL111-FD | SS-01GL111FD |
| | | SPST-NC | | - | SS-5GL111-F-2D | SS-01GL111-F-2D |
| | | SPST-NO | | - | SS-5GL111-F-3D | SS-01GL111-F-3D |
| | Solder terminals | SPDT SPST-NC | | - | - | SS-01GL111-E SS-01GL111-E-2 |
| | | SPST-NO | _ | | - | SS-01GL111-E-3 |
| | | SPDT | | - | - | SS-01GL111-ET |
| | Quick-connect | SPST-NC | 0.06 N {6 gf} | - | - | SS-01GL111-E-2T |
| | terminals (#110) | SPST-NO | | - | - | SS-01GL111-E-3T |
| | PCB terminals | SPDT | | - | - | SS-01GL111-ED |
| | | SPST-NC | | - | - | SS-01GL111-E-2D |
| | | SPST-NO | | - | - | SS-01GL111-E-3D |
| | Solder terminals | SPDT SPST-NC | | SS-10GL13 SS-10GL13-2 | SS-5GL13 SS-5GL13-2 | SS-01GL13 |
| | Soluer terminals | SPST-NC SPST-NO | | SS-10GL13-2 SS-10GL13-3 | SS-5GL13-2 SS-5GL13-3 | SS-01GL13-2 SS-01GL13-3 |
| | | SPDT | | SS-10GL13-3 | SS-5GL13-5 | SS-01GL13-5 |
| | Quick-connect | SPST-NC | 0.49 N {50 gf} | SS-10GL13-2T | SS-5GL13-2T | SS-01GL13-2T |
| | terminals (#110) | SPST-NO | | SS-10GL13-3T | SS-5GL13-3T | SS-01GL13-3T |
| | | SPDT | | SS-10GL13D | SS-5GL13D | SS-01GL13D |
| | PCB terminals | SPST-NC | | SS-10GL13-2D | SS-5GL13-2D | SS-01GL13-2D |
| | | SPST-NO | | SS-10GL13-3D | SS-5GL13-3D | SS-01GL13-3D |
| | | SPDT | | - | SS-5GL13-F | SS-01GL13-F |
| | Solder terminals | SPST-NC | | - | SS-5GL13-F-2 | SS-01GL13-F-2 |
| Simulated roller lever | | SPST-NO SPDT | | - | SS-5GL13-F-3 SS-5GL13-FT | SS-01GL13-F-3 SS-01GL13-FT |
| 0 | Quick-connect | SPDT SPST-NC | 0.16 N {16 gf} | • | SS-5GL13-F1 | SS-01GL13-F1 |
| | terminals (#110) | SPST-NO | | | SS-5GL13-F-21 | SS-01GL13-F-3T |
| | | SPDT | | - | SS-5GL13-FD | SS-01GL13-FD |
| | PCB terminals | SPST-NC | | - | SS-5GL13-F-2D | SS-01GL13-F-2D |
| | | SPST-NO | | - | SS-5GL13-F-3D | SS-01GL13-F-3D |
| | | SPDT | | - | - | SS-01GL13-E |
| | Solder terminals | SPST-NC | | - | - | SS-01GL13-E-2 |
| | | SPST-NO | | - | - | SS-01GL13-E-3 |
| | Quick-connect | SPDT | 0.09 N (0.~f) | - | - | SS-01GL13-ET |
| | terminals (#110) | SPST-NC SPST-NO | 0.08 N {8 gf} | - | - | SS-01GL13-E-2T SS-01GL13-E-3T |
| | | | | - | - | 30-010L10-E-31 |
| | | | | - | - | SS-01GI 13-ED |
| | PCB terminals | SPDT SPST-NC | | - | - | SS-01GL13-ED SS-01GL13-E-2D |

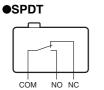
Separator (Sold Separately), Terminal Connector (Sold Separately) => Refer to "Basic Switch Common Accessories"

| Actuator | Terminals | Contact Form | Ratings Maximum Operating Force (OF) | 10.1 A | 5 A | 0.1 A |
|---------------------|-----------------------------------|--------------|---|-------------|--------------|---------------|
| Actuator | renninaio | SPDT | Maximum operating rolee (Or) | SS-10GL2 | SS-5GL2 | SS-01GL2 |
| | Solder terminals | SPST-NC | - | SS-10GL2-2 | SS-5GL2-2 | SS-01GL2-2 |
| | | SPST-NO | | SS-10GL2-3 | SS-5GL2-3 | SS-01GL2-3 |
| | | SPDT | | SS-10GL2T | SS-5GL2T | SS-01GL2T |
| | Quick-connect | SPST-NC | 0.49 N {50 gf} | SS-10GL2-2T | SS-5GL2-2T | SS-01GL2-2T |
| | terminals (#110) | SPST-NO | | SS-10GL2-3T | SS-5GL2-3T | SS-01GL2-3T |
| | | SPDT | | SS-10GL2D | SS-5GL2D | SS-01GL2D |
| | PCB terminals | SPST-NC | | SS-10GL2-2D | SS-5GL2-2D | SS-01GL2-2D |
| | | SPST-NO | | SS-10GL2-3D | SS-5GL2-3D | SS-01GL2-3D |
| | | SPDT | | - | SS-5GL2-F | SS-01GL2-F |
| | Solder terminals | SPST-NC | 0.16 N {16 gf} | - | SS-5GL2-F-2 | SS-01GL2-F-2 |
| Hinge roller lever | | SPST-NO | | - | SS-5GL2-F-3 | SS-01GL2-F-3 |
| Thinge toller level | | SPDT | | - | SS-5GL2-FT | SS-01GL2-FT |
| ଜ | Quick-connect terminals (#110) | SPST-NC | | - | SS-5GL2-F-2T | SS-01GL2-F-2T |
| | | SPST-NO | | - | SS-5GL2-F-3T | SS-01GL2-F-3T |
| | | SPDT | | - | SS-5GL2-FD | SS-01GL2-FD |
| | PCB terminals | SPST-NC | | - | SS-5GL2-F-2D | SS-01GL2-F-2D |
| | | SPST-NO | | - | SS-5GL2-F-3D | SS-01GL2-F-3D |
| | | SPDT | | - | - | SS-01GL2-E |
| | Solder terminals | SPST-NC | | - | - | SS-01GL2-E-2 |
| | | SPST-NO | | - | - | SS-01GL2-E-3 |
| | Out also and a state | SPDT | | - | - | SS-01GL2-ET |
| | Quick-connect | SPST-NC | 0.08 N {8 gf} | - | - | SS-01GL2-E-2T |
| | terminals (#110) | SPST-NO | , | - | - | SS-01GL2-E-3T |
| | | SPDT | | - | - | SS-01GL2-ED |
| | PCB terminals | SPST-NC | | - | - | SS-01GL2-E-2D |
| | | SPST-NO | 1 | - | - | SS-01GL2-E-3D |

•Heat Resistant Models

| | | | Ratings | 10.1 A | 5 A | 0.1 A |
|---|--|--------------|------------------------------|---------------|--------------|---------------|
| Actuator | Terminals | Contact Form | Maximum Operating Force (OF) | 10.1 A | 54 | 0.1 A |
| | Solder terminals | | | SS-10-T | SS-5-T | SS-01-T |
| Pin plunger | Quick-connect terminals (#110) | | 1.47 N {150 gf} | SS-10T-T | SS-5T-T | SS-01T-T |
| | PCB terminals | | | SS-10D-T | SS-5D-T | SS-01D-T |
| | Solder terminals | | | SS-10GL-T | SS-5GL-T | SS-01GL-T |
| Hinge lever | Quick-connect terminals (#110) | SPDT | 0.49 N {50 gf} | SS-10GLT-T | SS-5GLT-T | SS-01GLT-T |
| | PCB terminals | | | SS-10GLD-T | SS-5GLD-T | SS-01GLD-T |
| | Solder terminals | | 0.39 N {40 gf} | SS-10GL111-T | SS-5GL111-T | SS-01GL111-T |
| Long hinge lever | Quick-connect terminals (#110) | | | SS-10GL111T-T | SS-5GL111T-T | SS-01GL111T-T |
| | PCB terminals | | | SS-10GL111D-T | SS-5GL111D-T | SS-01GL111D-T |
| - | Solder terminals | | | SS-10GL13-T | SS-5GL13-T | SS-01GL13-T |
| Simulated roller | Quick-connect terminals (#110) | | 0.49 N {50 gf} | SS-10GL13T-T | SS-5GL13T-T | SS-01GL13T-T |
| | PCB terminals | | | SS-10GL13D-T | SS-5GL13D-T | SS-01GL13D-T |
| | Solder terminals | | | SS-10GL02-T | SS-5GL02-T | SS-01GL02-T |
| Hinge roller lever (Roller material: | Quick-connect terminals (#110) | | 0.49 N {50 gf} | SS-10GL02T-T | SS-5GL02T-T | SS-01GL02T-T |
| stainless steel) | PCB terminals | 1 | | SS-10GL02D-T | SS-5GL02D-T | SS-01GL02D-T |

Contact Form





•SPST-NC



Contact Specifications

| Item | Model | SS-10 models | SS-5 models | SS-01 models |
|---|----------------------|--------------|---------------------|--------------|
| | Specification | Rivet | | Crossbar |
| Contact | Material | Silver alloy | Silver | Gold alloy |
| | Gap (standard value) | 0.5 | 0.25 mm | |
| Inrush | NC | 20 A | max. | 1 A max. |
| current | NO | 15 A max. | 15 A max. 10 A max. | 1 A max. |
| Minimum applicable load (reference value)* | | 5 VDC 160 mA | | 5 VDC 1 mA |

Please refer to "**OUsing Micro Loads**" in "**Precautions**" for more information on the minimum applicable load. *

S S

Separator (Sold Separately), Terminal Connector (Sold Separately) => Refer to "Basic Switch Common Accessories"

Ratings

| | Item | Resistive load |
|--------------|--------------------|----------------|
| Model | Rated voltage | nesistive loau |
| SS-10 models | 250 VAC | 10.1 A |
| SS-5 models | 125 VAC 250 VAC | 5 A 3 A |
| SS-01 models | 125 VAC | 0.1 A |
| 33-01 models | 30 VDC | 0.1 A |

Note. The above rating values apply under the

following test conditions. (1) Ambient temperature: 20±2°C

(2) Ambient humidity: 65±5%

(3) Operating frequency: 30 operations/min

Approved Safety Standards

Models shown in the "List of Models" are UL and CSA approved models. Note. Note that heat resistant models are not

standard approved models

UL (UL1054)/CSA (CSA C22.2 No.55)

| Rated voltage Model | SS-10 | SS-5 | SS-01 |
|---------------------|--------|------|-------|
| 125 VAC | - | 5 A | 0.1 A |
| 250 VAC | 10.1 A | 3 A | - |
| 30 VDC | - | - | 0.1 A |

Consult your OMRON sales representative for specific models with VDE standard approvals. VDE (EN61058-1)

| Rated voltage | Model | SS-10 | SS-5 | | |
|---|-------|-------|------|--|--|
| 250 VAC | 10 A | 5 A | | | |
| Testing conditions, FE4 (F0 000 energtions) | | | | | |

Testing conditions: 5E4 (50,000 operations) T85 (0°C to 85°C)

Characteristics

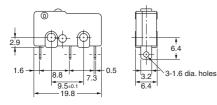
| Item | | Model | SS-10 models | SS-5 models | SS-01 models | |
|--|--|------------------|---|--------------------|----------------------------------|--|
| Permissible of | perating speed | | 0.1 mm to 1 m/s (for pin plunger models) | | | |
| Permissible | Mechanical | | 400 operations/min | | | |
| operating frequency | Electrical | | 60 operations/min | | | |
| Insulation resistance | | | 100 MΩ min. (at 500 | VDC with insulat | ion tester) | |
| | <i>//</i> 1 | OF 1.47 N models | 30 mΩ max | | 50 mΩ max. | |
| Contact resist value) | ance (initial | OF 0.49 N models | - | 50 m Ω max. | 100 mΩ max. | |
| value) | | OF 0.25 N models | - | | 150 mΩ max. | |
| Dislostria | Between terminals of the same polarity | | 1,000 VAC 50/60 Hz | for 1 min | 600 VAC 50/60 Hz for 1 min | |
| Dielectric strength *1 Between current-carrying parts and ground Between each terminals current-carrying metal pa | | , . | 1,500 VAC | 50/60 Hz for 1 mi | n | |
| | | | 1,500 VAC 50/60 Hz for 1 min | | | |
| Vibration resistance *2 | Malfunction | | 10 to 55 Hz, 1.5 mm double amplitude | | | |
| | | OF 1.47 N models | 1,000 m/s ² {approx. 100G} max. | | | |
| | Durability | OF 0.49 N models | 500 m/s ² {approx. 50G} max. | | | |
| Shock | | OF 0.25 N models | 500 m/s ² {approx. 50G} max. | | | |
| resistance | | OF 1.47 N models | 300 m/s ² {approx. 30G} max. | | | |
| | Malfunction *2 | OF 0.49 N models | 200 m/s ² {approx. 20G} max. | | | |
| | | OF 0.25 N models | 200 m/s ² {approx. 20G} max. | | | |
| Durability *3 | Mechanical | | 10,000,000 operations min. (60 operations/min) | | perations min. tions/min) | |
| | Electrical | | 50,000 operations min. (30 operations/min) | | erations min. tions/min) | |
| Degree of pro | tection | | IEC IP40 | | | |
| Degree of protection against electric shock | | | | Class I | | |
| Proof tracking index (PTI) | | | 175 | | | |
| Ambient operating temperature | | | -25°C to +85°C (at ambient humidity of 60% max.) (with no icing or condensation) | | | |
| Ambient opera | ating humidity | | 85% max. (for +5°C to +35°C) | | | |
| Weight | | | Approx. 1.6g (pin plunger models) | | | |

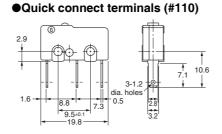
Note. The data given above are initial values.

- The values for dielectric strength shown are for models with a Separator (refer to "Micro Switch *1. Common Accessories").
- The values are at Free Position and Total Travel Position values for pin plunger, and Total Travel *2 Position value for lever. Close or open circuit of the contact is 1ms max. For testing conditions, consult your OMRON sales representative. *3.

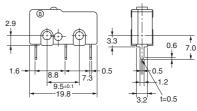
Terminals/Appearances (Unit: mm)

Solder terminals

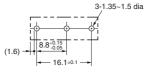




PCB terminals



<PCB Mounting Dimensions (Reference)>



Mounting Holes (Unit: mm)

2-2.4 dia. mounting holes or M2.3 screw holes 9 5+0

S S

Dimensions (Unit: mm) and Operating Characteristics

The illustrations and drawings are for solder terminals models.

Refer to "Terminals/Appearances" of the previous page for details on models with quick connect terminals (#110) or PCB terminals.

Pin plunger **SS-10** SS-5 (-F) SS-01 (-E, -F)

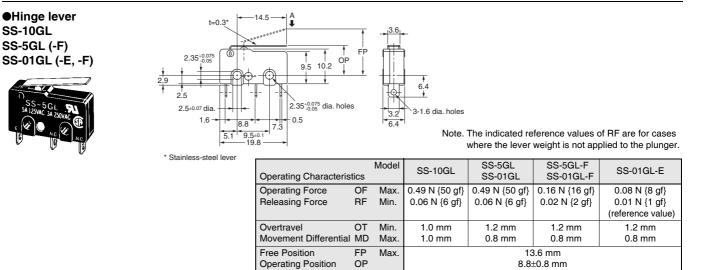


| Operating CharacteristicsOperating ForceOFReleasing ForceRFMitPretravelPT | PT 2- | | 5 | 3.2 |
|---|-------|-------------------------------|------|---------|
| Operating Force OF Ma Releasing Force RF Mi Pretravel PT Ma | | | | Model |
| Releasing ForceRFMiPretravelPTMa | | Operating Characterist | tics | |
| Pretravel PT Ma | | Operating Force | OF | Max. |
| | | Releasing Force | RF | Min. |
| Overtravel OT Mi | | Pretravel | PT | Max. |
| Sterilaver Of Mi | | Overtravel | ОТ | Min. |

Μ 0

| - | - |
|-------------|-------------------|
| ₽ | |
| 11 | |
| !_ | |
| ┼┤ | .4 |
| 얷 | |
| - | |
| 3.2' 5.4 | 3-1.0 ula. 110185 |
| D.4 ' | |

| perating Characteris | tics | Model | SS-10 | SS-5 SS-01 | SS-5-F SS-01-F | SS-01-E | |
|--|----------------|----------------------|-----------------------------------|-----------------------------------|---------------------------------|---------------------------------|--|
| Derating Force Releasing Force | OF RF | Max. Min. | 1.47 N {150 gf} 0.25 N {25 gf} | 1.47 N {150 gf} 0.25 N {25 gf} | 0.49 N {50 gf} 0.04 N {4 gf} | 0.25 N {25 gf} 0.02 N {2 gf} | |
| Pretravel Overtravel Novement Differential | PT OT MD | Max. Min. Max. | 0.6 mm 0.4 mm 0.12 mm | 0.5 mm 0.5 mm 0.1 mm | 0.5 mm 0.5 mm 0.1 mm | 0.5 mm 0.5 mm 0.1 mm | |
| perating Position | OP | | 8.4±0.5 mm | | | | |



Long hinge lever SS-10GL111 SS-5GL111 (-F) SS-01GL111 (-E, -F)



| | A 9.5 10.2 FP 9.5 10.2 CP 2.35 ^{+0.075} dia. holes -0.5 | 3.6 6.4 6.4 3.2 6.4 3.1.6 dia. holes |
|-------------|--|---|
| 5.1 9.5±0.1 | | Note. |

te. The indicated reference values of RF are for cases where the lever weight is not applied to the plunger.

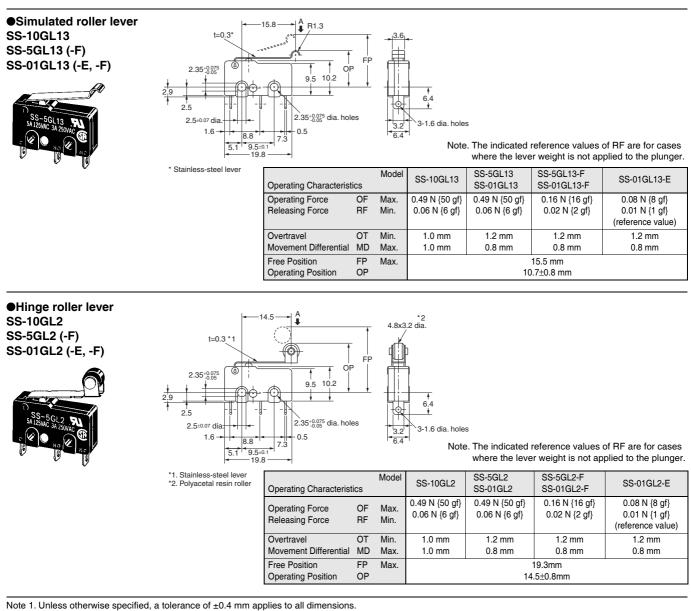
| Operating Characterist | tics | Model | SS-10GL111 | SS-5GL111 SS-01GL111 | SS-5GL111-F SS-01GL111-F | SS-01GL111-E |
|------------------------------------|----------|--------------|---------------------------------|---------------------------------|--|--|
| Operating Force Releasing Force | OF RF | Max. Min. | 0.39 N {40 gf} 0.03 N {3 gf} | 0.39 N {40 gf} 0.03 N {3 gf} | 0.12 N {12 gf} 0.02 N {2 gf} (reference value) | 0.06 N {6 gf} 0.003 N {0.3 gf} (reference value) |
| Overtravel | OT | Min. | 1.2 mm | 1.2 mm | 1.2 mm | 1.2 mm |
| Movement Differential | MD | Max. | 1.2 mm | 1.2 mm | 1.2 mm | 1.2 mm |
| Free Position | FP | Max. | 16.8 mm | | | |
| Operating Position | OP | | 8.8±1.5 mm 8.8±2 mm | | | |

Note 1. Unless otherwise specified, a tolerance of ± 0.4 mm applies to all dimensions.

Note 2. The operating characteristics are for operation in the A direction (\clubsuit).

2

* Stainless-steel leve



Note 2. The operating characteristics are for operation in the A direction (\clubsuit).

Precautions

★Please refer to "Common Precautions" for correct use.

Cautions

Soldering

- Complete the soldering at the iron tip temperature below 350°C within 5 seconds, and do not apply any external force for 1 minute after soldering. Soldering at an excessively high temperature or soldering for more than 5 seconds may deteriorate the characteristics of the Switch.
- Be sure to apply only the minimum required amount of flux. Switch may have contact failures if flux intrudes into the interior of the Switch.
- If the PCB terminal models are soldered in the solder bath, flux will permeate inside the Switch and cause contact failure. Therefore, manually solder the PCB terminal.

Correct Use

Mounting

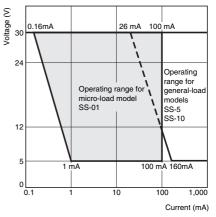
- Use M2.3 mounting screw with plane washers or spring washers to securely mount the Switch. Tighten the screws to a torque of 0.23 to 0.26 N·m {2.3 to 2.7 kgf·cm}.
- Mount the Switch onto a flat surface. Mounting on an uneven surface may cause deformation of the Switch, resulting in faulty operation or breakage in the housing.

Using Micro Loads

Using a model for ordinary loads to open or close the contact of a micro load circuit may result in faulty contact. Use models that operate in the following range. However, even when using micro load models within the following operating range, if inrush current occurs when the contact is opened or closed, it may increase the contact wear and so decrease durability. Therefore, insert a contact protection circuit where necessary. The N-level reference value applies for the minimum applicable load. This value indicates the malfunction reference level for the reliability level of 60% (λ_{60}).

(JIS C5003)

The equation, $\lambda_{60}=0.5\times10^{-6}$ /operation indicates that the estimated malfunction rate is less than $\frac{1}{2,000,000}$ operations with a reliability level of 60%.



Application examples provided in this document are for reference only. In actual applications, confirm equipment functions and safety before using the product.
Consult your OMRON representative before using the product under conditions which are not described in the manual or applying the product to nuclear control systems, railroad systems, aviation systems, vehicles, combustion systems, medical equipment, amusement machines, safety equipment, and other systems or equipment that may have a serious influence on lives and property if used improperly. Make sure that the ratings and performance characteristics of the product provide a margin of safety for the system or equipment, and be sure to provide the system or equipment with double safety mechanisms.

Note: Do not use this document to operate the Unit.

OMRON Corporation ELECTRONIC AND MECHANICAL COMPONENTS COMPANY

Contact: www.omron.com/ecb

Cat. No.B032-E1-13 0812(0207)(O)