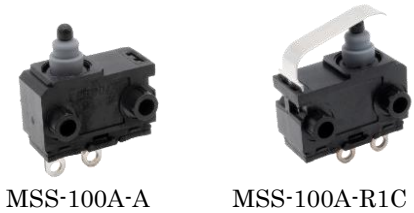


# Long stroke type micro switch MSS-100/101 Series

## Features

- ◇ Long stroke type micro switch that can be pushed diagonally.
- ◇ Stroke 2.6mm or more without actuator.
- ◇ Superior reliability at micro-current by employing a sliding contact.
- ◇ Supports boss press-fit type and screw-fastening type mounting forms.
- ◇ Customized actuators are available.
- ◇ Customizable for dust-proof and drip-proof types.



MSS-100A-A

MSS-100A-R1C

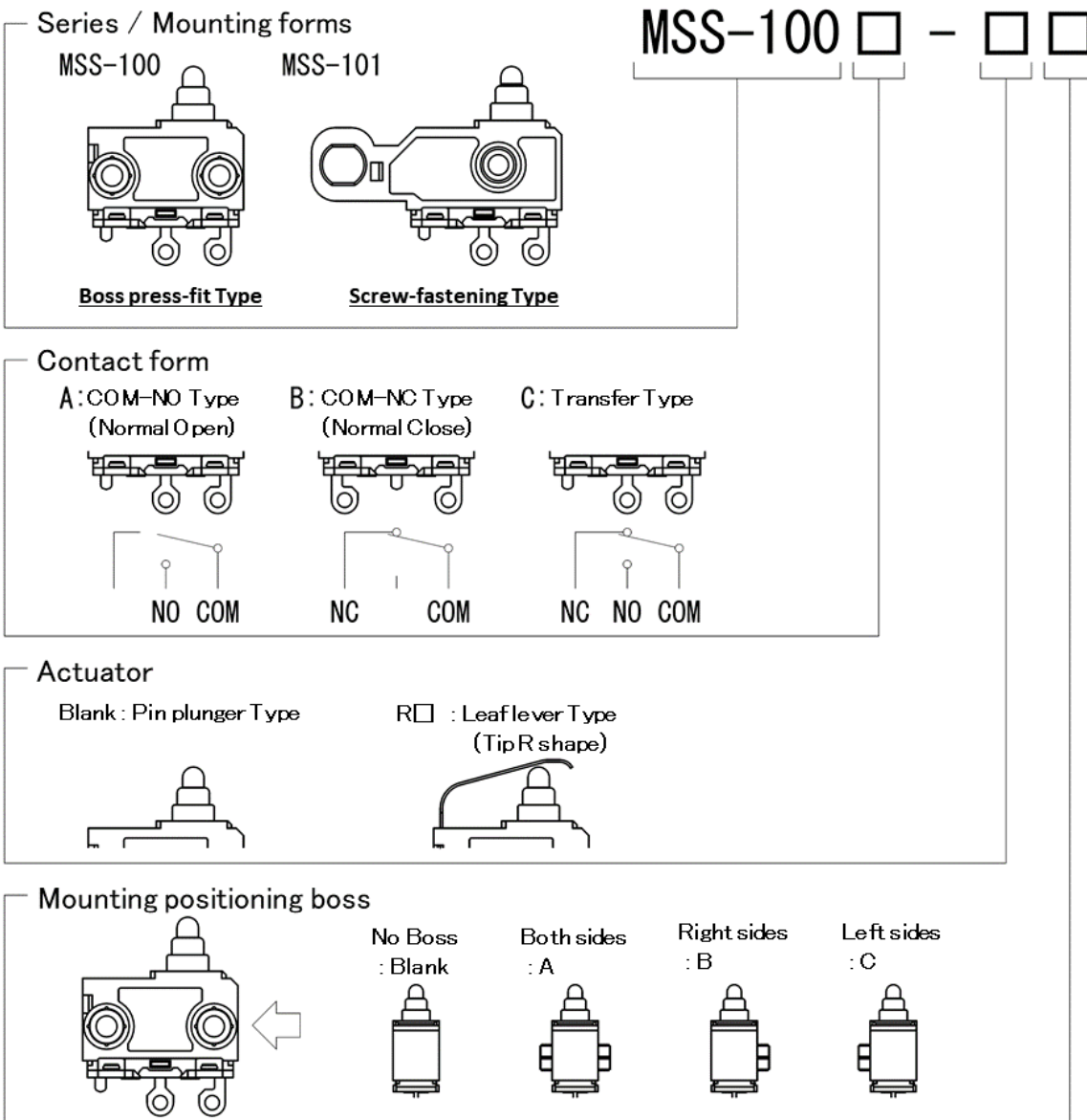
## Applications

- ◇ Home appliances (Air-conditioner, Washing machine, Cleaner etc.)
- ◇ For car (Shifter unit etc.)



MSS-101A-R2A

## Products Number system



## □ Typical Specifications

Item	Specifications
Operating force (Pin plunger type)	1 +/- 0.5N
Ratings (Resistive load)	Max. DC 12V 100mA Min. DC 5V 0.05mA (Resistive load)
Mechanical life	300,000 cycles
Electrical life	300,000 cycles
Contact resistance (Initial)	MAX 100 milliohm
Insulation Resistance	DC 500V MIN 100 megohm
Withstanding voltage	Between non-continuous terminals : 500V AC 1min Between each terminal and other exposed metal parts : 500V AC 1min Between each terminal and ground : 500V AC 1min
Operating temperature range	-40 to +85 degree Celsius
Storage temperature range	-40 to +85 degree Celsius

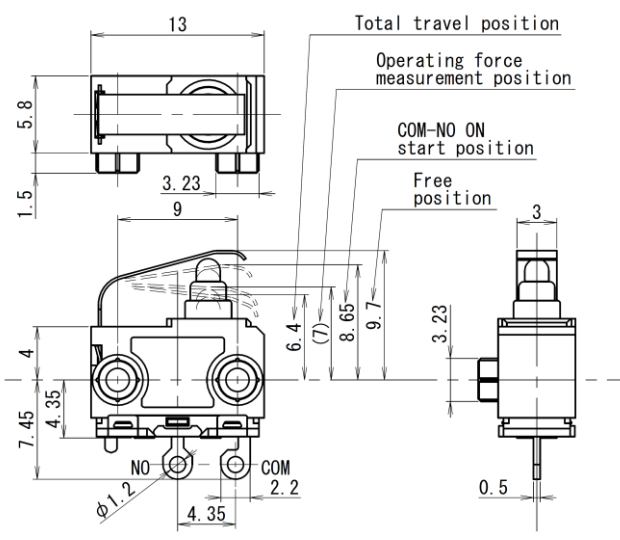
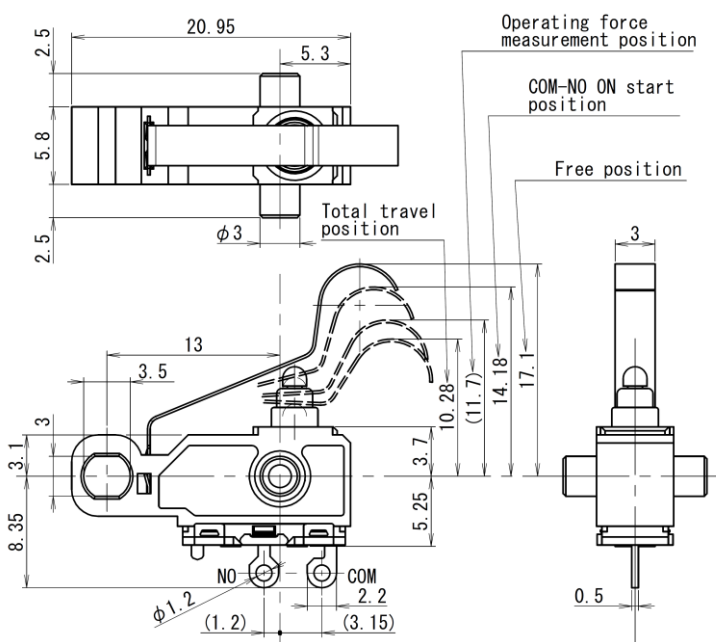
## □ Dimensions

Unit : mm

No	Style	Operating characteristics	
1	MSS-100A-A Pin plunger Type (Actuator No. : blank) Press-fit boss on both sides , COM-NO Type	Free position	9.1 mm
		COM-NO ON start position	8.3 mm
		Total travel position	6.2 mm
		Operating force	1 +/- 0.5 N

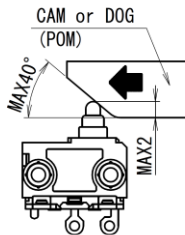
Dimensions

Unit : mm

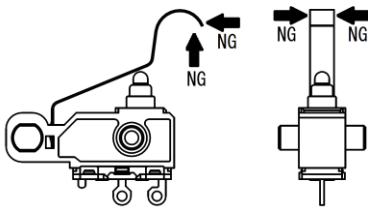
No	Style	Operating characteristics	
2	<p>MSS-100A-R1C                      Leaf lever type with tip R shape (Actuator No. : R1)                      Press-fit boss on left side , COM-NO Type</p>  <p>Technical drawing of MSS-100A-R1C actuator. It includes a side view, a top view, and a detail view of the lever tip. Dimensions include: 13 (total length), 5.8 (height), 1.5 (height), 3.23 (width), 9 (width), 4 (height), 7.45 (height), 4.35 (width), 7.45 (height), 4.35 (width), 6.4 (height), 8.65 (height), 9.7 (height), 3.23 (width), 0.5 (width), 3 (width), 4.35 (width), 2.2 (width), 1.2 (width), and 2.2 (width). Labels indicate 'Total travel position', 'Operating force measurement position', 'COM-NO ON start position', and 'Free position'. Terminal labels 'NO' and 'COM' are shown with dimensions 2.2 and 2.2 respectively.</p>	Free position	9.7 mm
	COM-NO ON start position	8.65 mm	
	Total travel position	6.4 mm	
	Operating force	Max5 N	
3	<p>MSS-101A-R2A                      Leaf lever type with tip R shape (Actuator No. : R2)                      Screw-fastening Type ( boss on both sides ) , COM-NO Type</p>  <p>Technical drawing of MSS-101A-R2A actuator. It includes a side view, a top view, and a detail view of the lever tip. Dimensions include: 20.95 (total length), 5.3 (width), 2.5 (height), 5.8 (height), 2.5 (height), 20.95 (total length), 5.3 (width), 3 (width), 13 (width), 3.5 (width), 3.1 (height), 8.35 (height), 3 (height), 10.28 (height), 11.7 (height), 14.18 (height), 17.1 (height), 3.7 (height), 5.25 (height), 3 (width), 1.2 (width), 2.2 (width), 3.15 (width), and 0.5 (width). Labels indicate 'Operating force measurement position', 'COM-NO ON start position', and 'Free position'. Terminal labels 'NO' and 'COM' are shown with dimensions 1.2 and 2.2 respectively.</p>	Free position	17.1 mm
	COM-NO ON start position	14.18 mm	
	Total travel position	10.28 mm	
	Operating force	Max4 N	

### Notes

1. The appearance and specifications of the product may be modified without prior notice to improve its performance.
2. This catalog shows only outline specifications. When using the product, please obtain formal specifications.
3. Please see appendix [Cautions in Using Switches].
4. Fix the switch of screw-fastening Type by M3 screw with torque less than 29 N-cm.  
Fixing with spring washers and adhesive are recommended to avoid the loose of the screw.
5. Please note that it is not possible to use the return force of the switch as the driving force of the mechanical part of the set.
6. Please be careful not to pull, scratch or pinch the rubber cap. It will cause damage.
7. When using a cam when operating the switch, the durability of the switch is affected by the operating conditions. (operating speed, operating frequency, amount of depression of the operation, material and shape of the cam, etc.)  
Please check the actual operating conditions.



8. Please be careful not to apply a load to the actuator from other than the operating direction. It will cause damage to the actuator and switch.



9. Please confirm the performance on actual operation by simulation with actual environment environments for high reliability.
10. No dust, high humidity and organic gas should be found in the storage location.
11. Please remember that this switch cannot be used under water. Also, please be warned that switching and sudden temperature changes with the presence of water droplets can cause seepage into the switch.