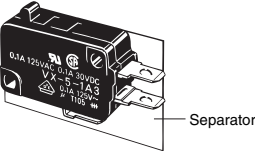
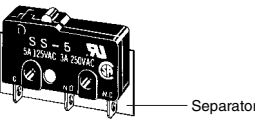


# Basic Switch Common Accessories

## Separator (Sold Separately)

To ensure a secure insulation distance, or if there are other metal parts or copper wire installed too close to the Switch, use the Switch with insulation guard or use a separator purchased separately to keep the insulation distance.

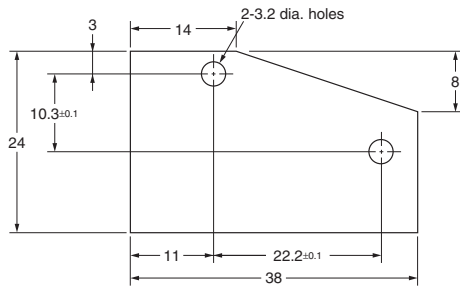
### List of models

| Appearance                                                                        | Applicable Switches                       | Thickness (mm) | Model                |
|-----------------------------------------------------------------------------------|-------------------------------------------|----------------|----------------------|
|  | V<br>D3V-01<br>VX<br>D2MV<br>D2RV<br>D2VW | 0.18           | SEPARATOR FOR V0.18  |
|                                                                                   |                                           | 0.25           | SEPARATOR FOR V0.25  |
|  | SS<br>SS-P<br>D2S<br>D2SW<br>D2SW-P       | 0.18           | SEPARATOR FOR SS0.18 |
|                                                                                   |                                           | 0.4            | SEPARATOR FOR SS0.4  |

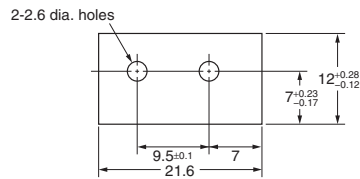
Note. The Separator is made of EAVTC (epoxy alkyl/varnish tetron cloth) and has heat-resistant temperature of +130°C.

### Dimensions (Unit: mm)

#### SEPARATOR FOR V0.18 SEPARATOR FOR V0.25



#### SEPARATOR FOR SS0.18 SEPARATOR FOR SS0.4



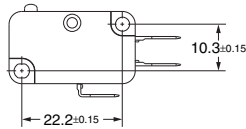
# Basic Switch Common Accessories

## Actuator (Sold Separately)

Actuators are supplementary components used when operating the Switch using cams or dogs or when transmitting mechanical movements that are not in alignment with the switch plunger. The VAL models are suitable for cases where a Switch is operated by a rotary cam or sliding devices with relatively low operation frequency. The VAM models are designed to operate in reverse movements and have high shock and vibration resistance. Since the Overtravel (OT) of these models is rather large, they can be used for automatic control or door switches of machining tools.

The VAV models can be used where a small Operating Force (OF) is required.

**These Actuators do not include Switches.**



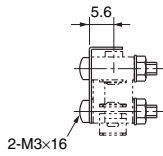
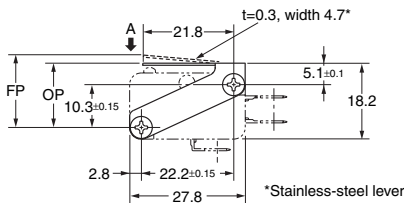
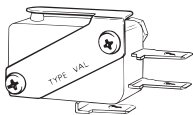
Note. Switches with the mounting holes shown in the diagram can be used except for special models.

## ■Dimensions (Unit: mm) / Operating Characteristics

\* Model numbers are for the Actuators only.

The value given for operating characteristics are reference values. For operating characteristics of models not listed above, consult your OMRON sales representative.

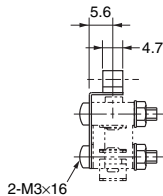
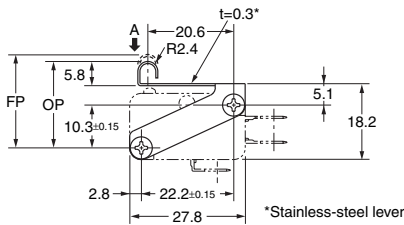
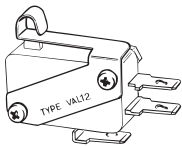
### ●Leaf Spring Model VAL



| Operating characteristics |         | In the case of V-15-1A5 |
|---------------------------|---------|-------------------------|
| Operating Force           | OF Max. | 2.26 N {230 gf}         |
| Releasing Force           | RF Min. | 0.49 N {50 gf}          |
| Overtravel                | OT Min. | 0.8 mm                  |
| Movement Differential     | MD Max. | 0.4 mm                  |
| Free Position             | FP Max. | 17 mm                   |
| Operating Position        | OP      | 14.9±0.5 mm             |

Note. Pin plunger (Designed for models of OF 1.96 N {200 gf} or greater).

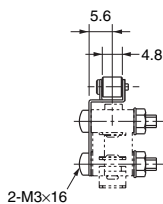
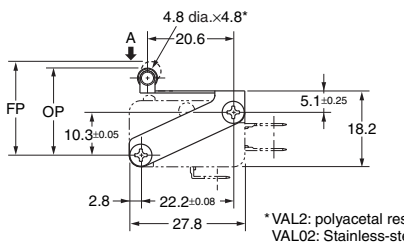
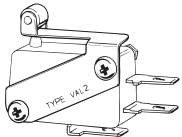
### ●Simulated Leaf Spring VAL12



| Operating characteristics |         | In the case of V-15-1A5 |
|---------------------------|---------|-------------------------|
| Operating Force           | OF Max. | 2.26 N {230 gf}         |
| Releasing Force           | RF Min. | 0.49 N {50 gf}          |
| Overtravel                | OT Min. | 0.8 mm                  |
| Movement Differential     | MD Max. | 0.4 mm                  |
| Free Position             | FP Max. | 22.9 mm                 |
| Operating Position        | OP      | 20.5±0.8 mm             |

Note. Pin plunger (Designed for models of OF 1.96 N {200 gf} or greater).

### ●Roller Leaf Spring VAL2 VAL02

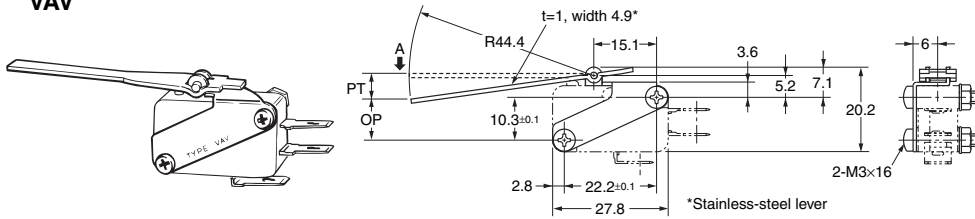


| Operating characteristics |         | In the case of V-15-1A5 |
|---------------------------|---------|-------------------------|
| Operating Force           | OF Max. | 2.26 N {230 gf}         |
| Releasing Force           | RF Min. | 0.49 N {50 gf}          |
| Overtravel                | OT Min. | 0.8 mm                  |
| Movement Differential     | MD Max. | 0.4 mm                  |
| Free Position             | FP Max. | 22.6 mm                 |
| Operating Position        | OP      | 20.5±0.5 mm             |

Note. Pin plunger (Designed for models of OF 1.96 N {200 gf} or greater).

Note1. Unless otherwise specified, a tolerance of ±0.4mm applies to all dimensions.  
Note2. The operating characteristics are for operation in the A direction (↓).

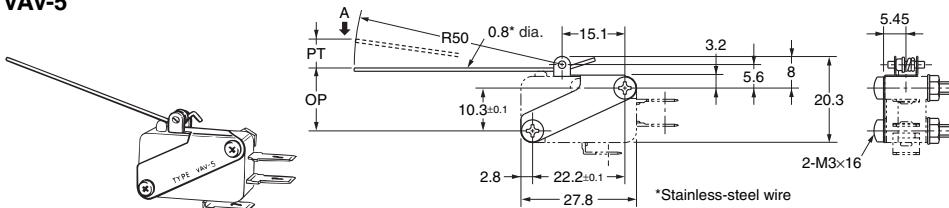
## ●Long Hinge Lever VAV



| Operating characteristics |         | In the case of V-15-1A5 |
|---------------------------|---------|-------------------------|
| Operating Force           | OF Max. | 0.34 N {35 gf}          |
| Releasing Force           | RF Min. | 0.04 N {4 gf}           |
| Pretravel                 | PT Max. | 7.6 mm                  |
| Overtravel                | OT Min. | 3.6 mm                  |
| Movement Differential     | MD Max. | 4.7 mm                  |
| Operating Position        | OP      | Approx. 10.6 mm         |

Note. Pin plunger designed for models of OF 0.98 N {100 gf} or greater.  
Use in direction where the lever does not apply its own weight load to the plunger.

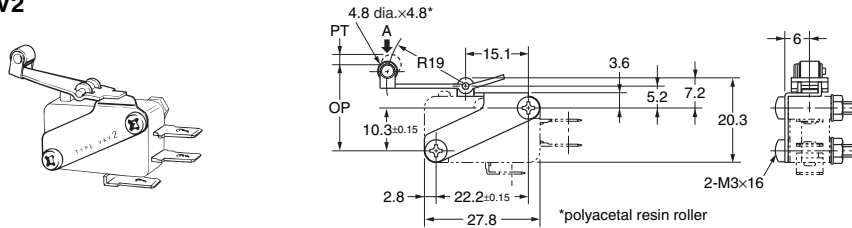
## ●Hinge Wire Lever VAV-5



| Operating characteristics |         | In the case of VX-5-1A2 |
|---------------------------|---------|-------------------------|
| Operating Force           | OF Max. | 0.03 N {3 gf}           |
| Pretravel                 | PT Max. | 16 mm                   |
| Overtravel                | OT Min. | 2 mm                    |
| Movement Differential     | MD Max. | 5 mm                    |
| Operating Position        | OP      | Approx. 16.7 mm         |

Note. This is designed for model of OF 0.25 N {25 gf}.  
Use in direction where the lever does not apply its own weight load to the plunger.

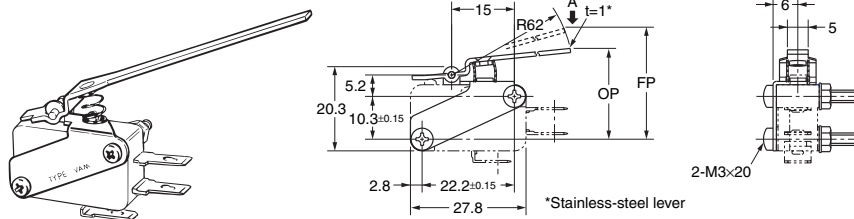
## ●Hinge Roller Lever VAV2



| Operating characteristics |         | In the case of V-15-1A5 |
|---------------------------|---------|-------------------------|
| Operating Force           | OF Max. | 0.74 N {75 gf}          |
| Releasing Force           | RF Min. | 0.09 N {9 gf}           |
| Pretravel                 | PT Max. | 4.8 mm                  |
| Overtravel                | OT Min. | 1.5 mm                  |
| Movement Differential     | MD Max. | 1.2 mm                  |
| Operating Position        | OP      | 18.6±1.6 mm             |

Note. Pin plunger designed for models of OF 0.98 N {100 gf} or greater.  
Use in direction where the lever does not apply its own weight load to the plunger.

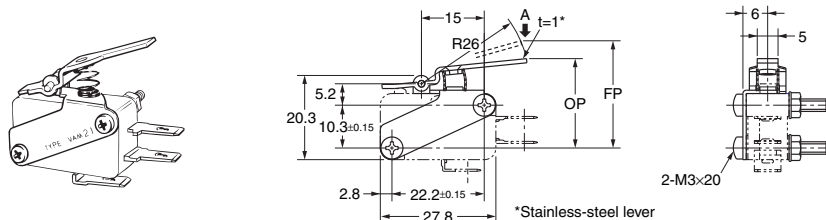
## ●Reverse Long Hinge Lever VAM



| Operating characteristics |         | In the case of V-15-1A5 |
|---------------------------|---------|-------------------------|
| Operating Force           | OF Max. | 1.96 N {200 gf}         |
| Releasing Force           | RF Min. | 0.29 N {30 gf}          |
| Overtravel                | OT Min. | 7mm (reference value)   |
| Movement Differential     | MD Max. | 5mm                     |
| Free Position             | FP Max. | 45 mm                   |
| Operating Position        | OP      | 20±9 mm                 |

Note. Not available for D2VW.

## ●Reverse Hinge Lever VAM21



| Operating characteristics |         | In the case of V-15-1A5 |
|---------------------------|---------|-------------------------|
| Operating Force           | OF Max. | 3.53 N {360 gf}         |
| Releasing Force           | RF Min. | 0.69 N {70 gf}          |
| Overtravel                | OT Min. | 5 mm (reference value)  |
| Movement Differential     | MD Max. | 4 mm                    |
| Free Position             | FP Max. | 30 mm                   |
| Operating Position        | OP      | 20±4 mm                 |

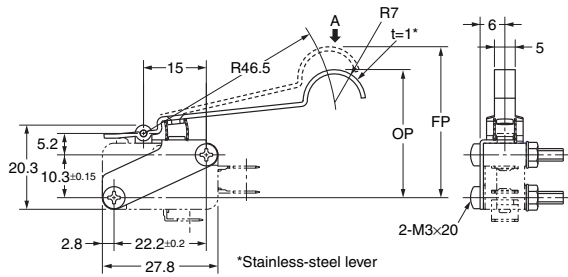
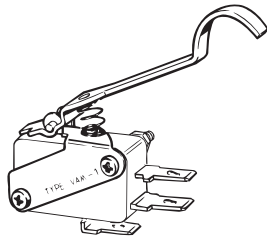
Note. Not available for D2VW.

Note1. Unless otherwise specified, a tolerance of ±0.4mm applies to all dimensions.

Note2. The operating characteristics are for operation in the A direction (↓).

# Basic Switch Common Accessories

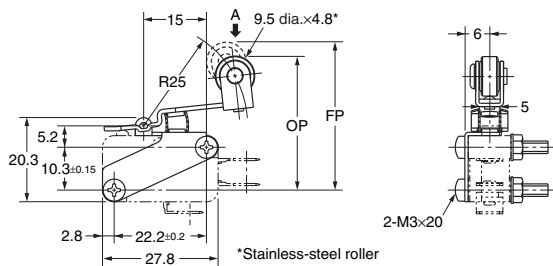
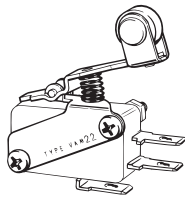
## ●Reverse Hinge Modified Lever VAM-1



| Operating characteristics |         | In the case of V-15-1A5 |
|---------------------------|---------|-------------------------|
| Operating Force           | OF Max. | 2.94 N {300 gf}         |
| Releasing Force           | RF Min. | 0.39 N {40 gf}          |
| Overtravel                | OT Min. | 5 mm (reference value)  |
| Movement Differential     | MD Max. | 6 mm                    |
| Free Position             | FP Max. | 47 mm                   |
| Operating Position        | OP      | 30±5 mm                 |

Note. Not available for D2VW.

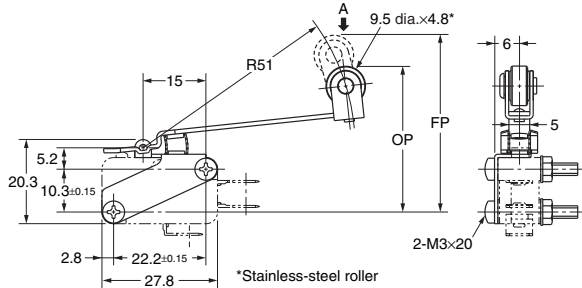
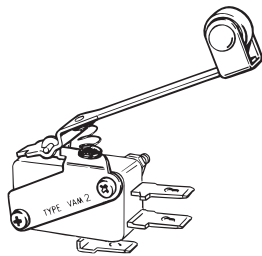
## ●Reverse Roller Modified Lever VAM22



| Operating characteristics |         | In the case of V-15-1A5 |
|---------------------------|---------|-------------------------|
| Operating Force           | OF Max. | 3.53 N {360 gf}         |
| Releasing Force           | RF Min. | 0.69 N {70 gf}          |
| Overtravel                | OT Min. | 3 mm (reference value)  |
| Movement Differential     | MD Max. | 4 mm                    |
| Free Position             | FP Max. | 38 mm                   |
| Operating Position        | OP      | 31±3 mm                 |

Note. Not available for D2VW.

## ●Reverse Long Hinge Roller Lever VAM2



| Operating characteristics |         | In the case of V-15-1A5 |
|---------------------------|---------|-------------------------|
| Operating Force           | OF Max. | 2.45 N {250 gf}         |
| Releasing Force           | RF Min. | 0.39 N {40 gf}          |
| Overtravel                | OT Min. | 7 mm (reference value)  |
| Movement Differential     | MD Max. | 6 mm                    |
| Free Position             | FP Max. | 48 mm                   |
| Operating Position        | OP      | 31±6 mm                 |

Note. Not available for D2VW.

Note1. Unless otherwise specified, a tolerance of ±0.4mm applies to all dimensions.  
Note2. The operating characteristics are for operation in the A direction (↓).

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