## omron

## Middle-stroke Tactile Switch (SMT) B3SL

## Surface-mounting Sealed Tactile Switch.

## Middle Stroke and Crisp Clicking Action.

■ Sealed construction conforming to IP67 (IEC 60529) provides high contact reliability in dusty environments. (* Excluding the terminal section.)

- Crisp click feeling and middle stroke with rubber plunger.
Embossed taping package for automatic mounting.


## RoHS Compliant



## Ordering Information

- List of Models

| Type | Plunger |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Note: Orders must be made in multiples of the minimum order. Switches are not sold individually.

## Ratings/Characteristics

| Switching capacity | 1 to 50 mA at 5 to 12 VDC (resistive load) |
| :--- | :--- |
| Ambient operating temperature | $-25^{\circ} \mathrm{C}$ to $+90^{\circ} \mathrm{C}$ at $60 \% \mathrm{RH}$ max. (with no icing or conden- <br> sation) |
| Ambient operating humidity | $35 \%$ to $85 \%$ (at 5 to $35^{\circ} \mathrm{C}$ ) |
| Contact configuration | SPST-NO |
| Contact resistance | $100 \mathrm{~m} \Omega$ max. (initial value) (for 1 mA at 5 VDC ) |
| Insulation resistance | $100 \mathrm{M} \Omega$ min. (at 250 VDC ) |
| Dielectric strength | $250 \mathrm{VAC}, 50 / 60 \mathrm{~Hz}$ for 1 min |
| Bounce time | 5 ms max. |
| Vibration resistance | Destruction: 10 to $55 \mathrm{~Hz}, 1.5-\mathrm{mm}$ double amplitude |
| Shock resistance | Destruction: $1,000 \mathrm{~m} / \mathrm{s}^{2}$ \{approx. 100 G \} max. |
| Durability | 100,000 operations min. |
| Operating force | $30 \mathrm{~N} \mathrm{max}$. |

## Operating Characteristics

| Item Operation type | B3SL-1002P | B3SL-1022P | B3SL-1005P | B3SL-1025P |
| :---: | :---: | :---: | :---: | :---: |
| Operating force (OF) | $1.96 \pm 0.49 \mathrm{~N}\{200 \pm 50 \mathrm{gf}\}$ |  | $3.5 \pm 0.8 \mathrm{~N}\{357 \pm 82 \mathrm{gf}\}$ |  |
| Releasing force (RF) | 0.35 N min. $\{35 \mathrm{gf}\}$ |  | 0.5 N min. $\{51 \mathrm{gf}\}$ |  |
| Pretravel (PT) | $0.3 \pm 0.2 \mathrm{~mm}$ | $0.5 \pm 0.2 \mathrm{~mm}$ | $0.6 \pm 0.2 \mathrm{~mm}$ | $0.8 \pm 0.2 \mathrm{~mm}$ |

## Model Structure



## Dimensions

Note: All units are in millimeters unless otherwise indicated.
B3SL-1002P
B3SL-1005P


Terminal Arrangement/ internal Connections (Top View)


B3SL-1022P
B3SL-1025P


Terminal Arrangement/ Internal Connections (Top View)


Note: Unless otherwise specified, a tolerance of $\pm 0.2 \mathrm{~mm}$ applies to all dimensions.

## Precautions

Be sure to read the precautions common to all Tactile Switches on pages for correct use.

