## OmROn

## Middle-stroke Tactile Switch (SMT)

## Surface-mounting Switches with a

## Sealed Structure (Rubber Plunger),

Crisp Feel, and Middle Stroke.

## Available on Embossed Tape

- 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.
- A small package containing 100 embossed taping reels is available,in addition to the standard package.


## - List of Models

## $6 \times 6 \mathrm{~mm}$ Models

| Type | Contact material | Plunger | Height | Operating force (OF) | Plunger color | Embossed tape |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Model | Minimum packing unit |
| B3SL Series | Silver plated | (Flat type) | 3.4 mm | 1.96 N \{200 gf $\}$ | Yellowgreen | B3SL-1002P | 2,000 pcs |
|  |  |  |  |  |  | B3SL-1002P-R100 | 100 pcs |
|  |  |  | 5.1 mm |  | Gray | B3SL-1022P | 1,400 pcs |
|  |  |  | 3.4 mm | $3.5 \mathrm{~N}\{357 \mathrm{gf}\}$ | Blue | B3SL-1005P | 2,000 pcs |
|  |  | (Flat type) |  |  |  | B3SL-1005P-R100 | 100 pcs |
|  |  |  | 5.1 mm |  | Blue | B3SL-1025P | 1,400 pcs |

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

## ■ Ratings/Characteristics

| Rating (resistive load) | 1 to 50 mA at 3 to 12 VDC |
| :--- | :--- |
| Minimum applicable load (reference value) | $10 \mu \mathrm{~A}$ at 1 VDC (resistive load) |
| Ambient operating temperature | $-25^{\circ} \mathrm{C}$ to $+90^{\circ} \mathrm{C}$ at $60 \% \mathrm{RH}$ max. (with no icing or condensation) |
| Ambient operating humidity | $35 \%$ to $85 \%$ (at +5 to $+35^{\circ} \mathrm{C}$ ) |
| Contact form | SPST-NO |
| Contact resistance (initial value) | $100 \mathrm{~m} \Omega$ max. |
| Insulation resistance | $100 \mathrm{M} \Omega$ min. (at 250 VDC with insulation tester) |
| Dielectric strength | $250 \mathrm{VAC}, 50 / 60 \mathrm{~Hz}$ for 1 min |
| Bounce time | 5 ms max. |
| Vibration resistance | Destruction: $10 \mathrm{to} 55 \mathrm{~Hz}, 1.5-\mathrm{mm}$ double amplitude |
| Shock resistance | Destruction: $1,000 \mathrm{~m} / \mathrm{s}^{2}$ \{approx. 100 G$\}$ max. |
| Durability | 100,000 operations min. |
| Degree of protection | IEC IP67 |
| Washing | Not possible |

## - Operating Characteristics

| Item $\quad$ Operation type | B3SL-1002P <br> B3SL-1002P-R100 | B3SL-1022P | B3SL-1005P <br> B3SL-1005P-R100 | 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) | $0.35 \mathrm{~N} \mathrm{min}.\{35 \mathrm{gf}\}$ | $0.5 \mathrm{~N} \mathrm{min}.\{51 \mathrm{gf}\}$ |  |  |
| 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 (Unit: mm)

## B3SL-1002P B3SL-1002P-R100

B3SL-1005P B3SL-1005P-R100


PCB Pad
Terminal Arrangement/ (Top View) Internal Connections (Top View)


B3SL-1022P
B3SL-1025P


Terminal Arrangement/ PCB Pad (Top View) Internal Connections (Top View)


[^0]■ Precautions
Be sure to read the precautions common to all Tactile Switches on pages for correct use.

[^1]OMRON Corporation
Device \& Module Solutions Company

## Regional Contact

## Americas

Europe
https://components.omron.com/us
https://components.omron.com/eu
Asia-Pacific
China
https://components.omron.com/ap
https://components.omron.com.cn
Korea
Japan
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https://components.omron.com/jp


[^0]:    Note: Unless otherwise specified, a tolerance of $\pm 0.4 \mathrm{~mm}$ applies to all dimensions. No terminal numbers are indicated on the Switches.

[^1]:    Please check each region's Terms \& Conditions by region website.

