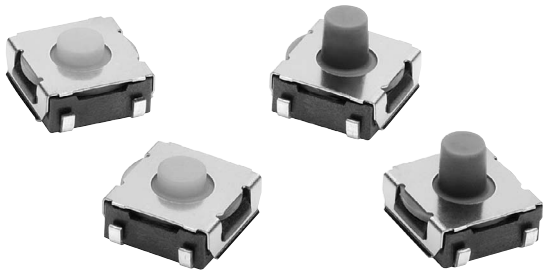
OMRON

Middle-stroke Tactile Switch (SMT) | B3SL

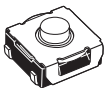
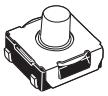
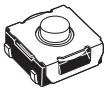
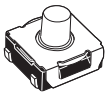
Surface-mounting Sealed Tactile Switch. Middle Stroke and Crisp Clicking Action.

- 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



■ List of Models

Type	Plunger	Height	Operating force (OF)	Plunger color	Embossed tape	
					Model	Quantity per reel
6 × 6 mm B3SL Series	 (Flat type)	3.4 mm	1.96 N {200 gf}	Yellow-green	B3SL-1002P	2,000
	 (Flat type)	5.1 mm		Gray	B3SL-1022P	1,400
	 (Flat type)	3.4 mm	3.5 N {357 gf}	Blue	B3SL-1005P	2,000
	 (Flat type)	5.1 mm		Blue	B3SL-1025P	1,400

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

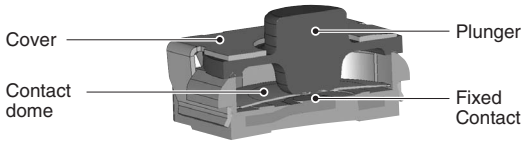
■ Ratings/Characteristics

Ratings	1 to 50 mA at 5 to 12 VDC (resistive load)
Ambient operating temperature	-25℃ to +90℃ at 60%RH max. (with no icing or condensation)
Ambient operating humidity	35% to 85% (at +5 to +35°C)
Contact form	SPST-NO
Contact resistance	100 mΩ max. (initial value) (for 1 mA at 5 VDC)
Insulation resistance	100 MΩ min. (at 250 VDC)
Dielectric strength	250 VAC, 50/60 Hz for 1 min
Bounce time	5 ms max.
Vibration resistance	Destruction: 10 to 55 Hz, 1.5-mm double amplitude
Shock resistance	Destruction: 1,000 m/s^2 {approx. 100 G} max.
Durability	100,000 operations min.
Operating force	30 N max.

■ Operating Characteristics

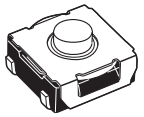
Item \ Operation type	B3SL-1002P	B3SL-1022P	B3SL-1005P	B3SL-1025P
Operating force (OF)	1.96 ± 0.49 N {200 ± 50 gf}		3.5 ± 0.8 N {357 ± 82 gf}	
Releasing force (RF)	0.35 N min. {35 gf}		0.5 N min. {51 gf}	
Pretravel (PT)	0.3 ± 0.2 mm	0.5 ± 0.2 mm	0.6 ± 0.2 mm	0.8 ± 0.2 mm

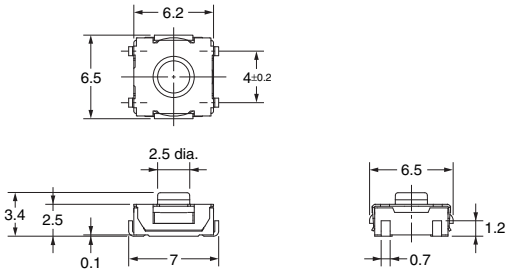
■ Model Structure



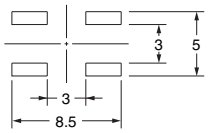
■ Dimensions (Unit: mm)

B3SL-1002P
B3SL-1005P

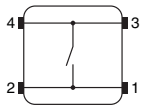




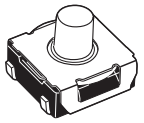
PCB Pad
(Top View)

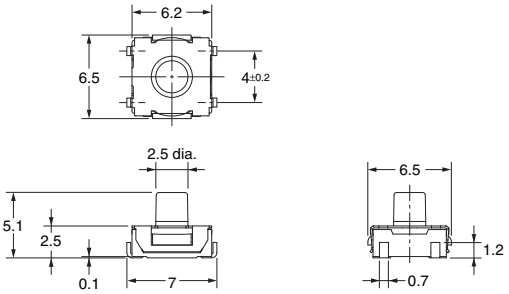


Terminal Arrangement/ Internal Connections
(Top View)

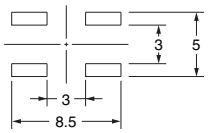


B3SL-1022P
B3SL-1025P

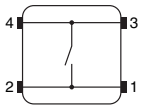




PCB Pad
(Top View)



Terminal Arrangement/ Internal Connections
(Top View)



Note: Unless otherwise specified, a tolerance of ±0.4 mm applies to all dimensions. No terminal numbers are indicated on the Switches.

■ Precautions

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

- 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**

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