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.

RoHS Compliant

List of Models

$6 \times 6 \text{ mm Models}$



Туре	Contact material	Plunger	Height	Operating force (OF)	Plunger color	Embossed tape	
						Model	Minimum packing unit
B3SL Series	Silver plated	(Elat type)	3.4 mm	1.96 N {200 gf}	Yellow-green	B3SL-1002P	2,000
		(Flat type) (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
			5.1 mm		Blue	B3SL-1025P	1,400
		(Flat type)					

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 µA at 1 VDC (resistive load)		
Ambient operating temperature	-25 °C to +90 °C 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 (initial value)	100 mΩ max.		
Insulation resistance	100 M Ω min. (at 250 VDC with insulation tester)		
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.		
Degree of protection	IEC IP67		
Washing	Not possible		

Operating Characteristics

Operation type	B3SL-1002P	B3SL-1022P	B3SL-1005P	B3SL-1025P	
Item					
Operating force (OF)	1.96 ± 0.49 N {200 ± 50 gf}		$3.5 \pm 0.8 \text{ N} \{357 \pm 82 \text{ gf}\}$		
Releasing force (RF)	0.35 N min. {35 gf}		0.5 N min. {51 gf}		
Pretravel (PT)	$0.3\pm0.2~\text{mm}$	$0.5\pm0.2~\text{mm}$	$0.6\pm0.2\ \text{mm}$	$0.8\pm0.2\ mm$	

Model Structure



■ Dimensions (Unit: mm)

B3SL-1002P B3SL-1005P



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

Cat. No. A173-E1-04 1014(0207)(O)