

# B3SE

Ultra-thin Sealed Surface-mounting Tactile Switch

## PCB surface-mounting 6-mm square type that achieves high durability with an ultra-thin, sealed structure.


- A height of 2 mm contributes to the development of thinner and smaller devices.
- Sealed construction conforming to IP67 (IEC 60529) provides high contact reliability in dusty environments. (\* Excluding the terminal section.)
- Crisp click feeling and high durability of 1million operations.
- Surface-mounting pin type is suitable for high-density mounting.



RoHS Compliant

## List of Model

### 6 × 6 mm Models

Type	Contact material	Plunger	Height	Operating force (OF)	Plunger color	Embossed tape	
						Model	Minimum packing unit
B3SE	Silver plated		2.0 mm	1.96 N {200 gf}	Blue	B3SE-1002P	2,000

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

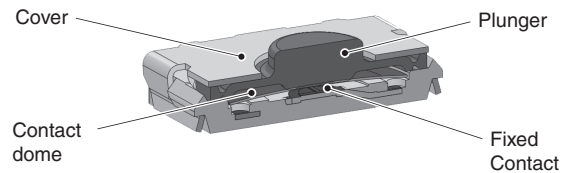
## Ratings/Characteristics

Rating (resistive load)	1 to 50 mA at 3 to 12 VDC
Minimum applicable load (reference value)	10 $\mu$ A at 1 VDC (resistive load)
Ambient operating temperature	-25°C to +70°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 m $\Omega$ max.
Insulation resistance	100 M $\Omega$ 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: 980 m/s <sup>2</sup> {approx. 100 G} max.
Durability	1,000,000 operations min.
Degree of protection	IEC IP67
Washing	Not possible

## Operating Characteristics

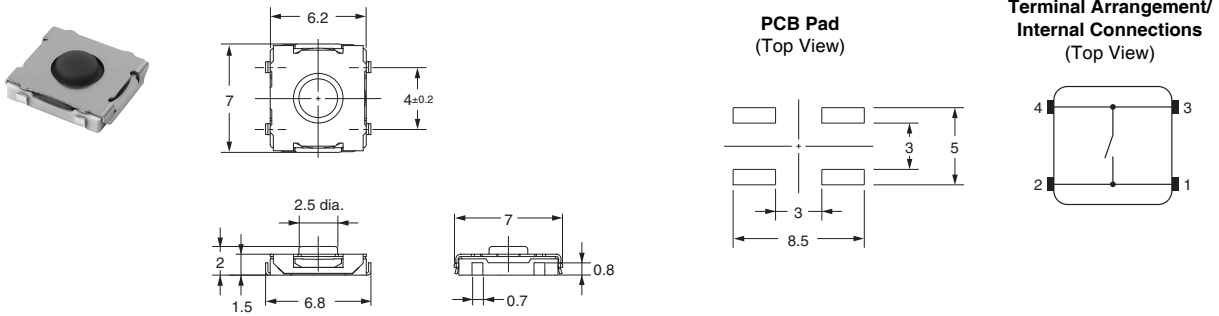
Item	Operation type	B3SE-1002P
Operating force (OF)		1.96 $\pm$ 0.49 N {200 $\pm$ 50 gf}
Releasing force (RF)		0.35 N min. {35 gf}
Pretravel (PT)		0.3 $\pm$ 0.2 mm

## Model Structure



### Dimensions (Unit: mm)

#### B3SE-1002P



**Note:** Unless otherwise specified, a tolerance of  $\pm 0.4$  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.**