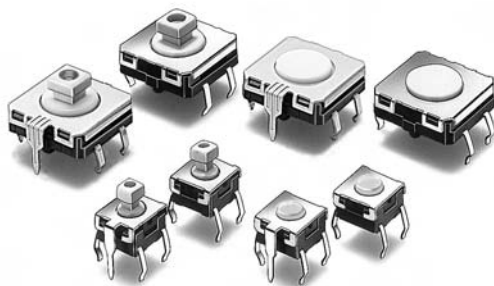






## Tactile Switch (Sealed Type) - B3W

### Allows Cleaning After Soldering with Alcohol Solvents

- ROHS compliant.
- Internal sealed construction allows immersion cleaning with alcohol solvents after soldering.
- Thin, compact construction in both 12 x 12 mm and 6 x 6 mm sizes.
- Snap-action contact construction for a positive click action.
- Available with ground terminals for protection against static electricity.
- Sealed construction also provides high reliability in dusty environments.



### Ordering Information

Type	Plunger	Height	Operating force (of)	Bags (100 Switches)	
				Without ground terminal	With ground terminal
6 x 6 mm (B3W-1000)		4.3 mm	1.57 N {160 gf}	B3W-1000	B3W-1100
			2.25 N {230 gf}	B3W-1002	B3W-1102
		7.3 mm	1.57 N {160 gf}	B3W-1050	B3W-1150
			2.25 N {230 gf}	B3W-1052	B3W-1152
12 x 12 mm (B3W-4000)		4.3 mm	1.96 N {200 gf}	B3W-4000	B3W-4100
			3.43 N {350 gf}	B3W-4005	B3W-4105
		7.3 mm	1.96 N {200 gf}	B3W-4050	B3W-4150
			3.43 N {350 gf}	B3W-4055	B3W-4155

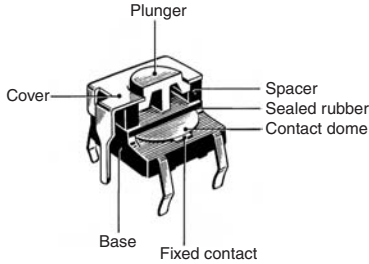
**Note:** Orders must be made in multiples of 100 (the quantity per bag).

### ■ Accessories (Order Separately)

Special Key Tops are available for projected Switch models.

# Tactile Switch (Sealed Type) – B3W

## Nomenclature



## Specifications

### ■ Ratings/Characteristics

<b>Switching capacity</b>	1 to 50 mA, 5 to 24 VDC (resistive load)
<b>Ambient temperature</b>	-25°C to 70°C, at 60% maximum (with no icing)
<b>Ambient humidity</b>	35% to 85% (for +5°C to 35°C)
<b>Contact configuration</b>	SPST-NO
<b>Contact resistance</b>	100 mΩ max. (initial value) (rated: 1 mA, 5 VDC)
<b>Insulation resistance</b>	100 MΩ min. (at 250 VDC)
<b>Dielectric strength</b>	500 VAC, 50/60 Hz for 1 min
<b>Bounce time</b>	5 ms max.
<b>Vibration resistance</b>	Malfunction: 10 to 55 Hz, 1.5 mm double amplitude
<b>Shock resistance</b>	Destruction: 1,000 m/s <sup>2</sup> {approx. 100 G} max. Malfunction: 100 m/s <sup>2</sup> {approx. 10 G} max.
<b>Life expectancy</b>	B3W-1000: 1.57 N (standard force):1,000,000 operations min. 2.26 N (high-force):300,000 operations min. B3W-4000: 1.96 N (standard force):3,000,000 operations min. 3.43 N (high-force):1,000,000 operations min.
<b>Weight</b>	6 x 6 mm: approx. 0.3 g, 12 x 12: approx. 1 g

### ■ Operating Characteristics

Item	B3W-1000		B3W-4000	
	1.57 N	2.26 N	1.96 N	3.43 N
<b>Operating force (OF)</b>	1.57 N {160 gf} max.	2.26 N {230 gf} max.	1.96 N {200 gf} max.	3.43 N {350 gf} max.
<b>Releasing force (RF)</b>	0.2 N {20 gf} min.	0.49 N {50 gf} min.	0.29 N {30 gf} min.	0.49 N {50 gf} min.
<b>Pretravel (PT)</b>	0.25 <sup>+0.2</sup> / <sub>-0.1</sub> mm		0.3 <sup>+0.2</sup> / <sub>-0.1</sub> mm	

# Tactile Switch (Sealed Type) – B3W

**Note 1.** All units are in millimetres unless otherwise indicated. Unless otherwise specified, a tolerance of  $\pm 0.4$  mm applies to all dimensions.

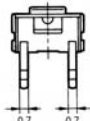
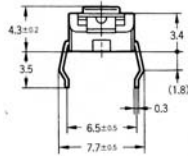
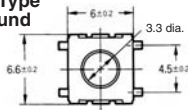
**2.** No terminal numbers are indicated on the Switches. The numbers used for terminals in the following graphics are indicated in the "Bottom View" diagram below. In this diagram, the Switch is rotated so that the terminals are on the right and left-hand sides, and the OMRON logo appears the right way up.



## ■ 6 x 6 mm Models

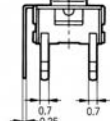
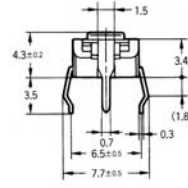
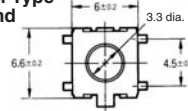
**Flat Plunger Type  
(without Ground  
Terminal)**

**B3W-1000  
B3W-1002**

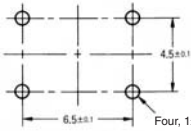


**Flat Plunger Type  
(with Ground  
Terminal)**

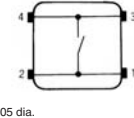
**B3W-1100  
B3W-1102**



**PCB Mounting (Top View)  
(Single-sided PCB, t=1.6)**

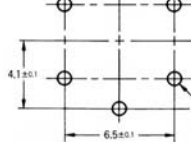


**Terminal Arrangement  
/Internal Connections  
(Top View)**

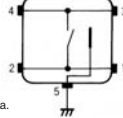


Four, 1±0.05 dia.

**PCB Mounting (Top View)  
(Single-sided PCB, t=1.6)**



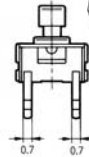
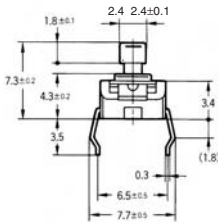
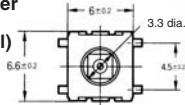
**Terminal Arrangement  
/Internal Connections  
(Top View)**



Five, 1±0.05 dia.

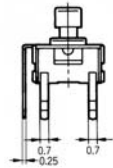
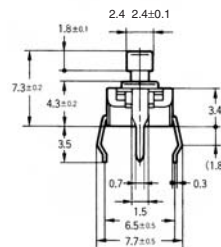
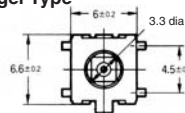
**Projected Plunger  
Type (without  
Ground Terminal)**

**B3W-1050  
B3W-1052**

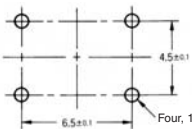


**Projected Plunger Type  
(with Ground  
Terminal)**

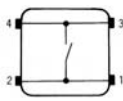
**B3W-1150  
B3W-1152**



**PCB Mounting (Top View)  
(Single-sided PCB, t=1.6)**

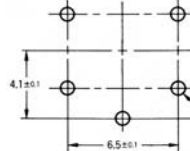


**Terminal Arrangement  
/Internal Connections  
(Top View)**

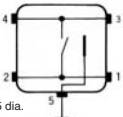


Four, 1±0.05 dia.

**PCB Mounting (Top View)  
(Single-sided PCB, t=1.6)**



**Terminal Arrangement  
/Internal Connections  
(Top View)**



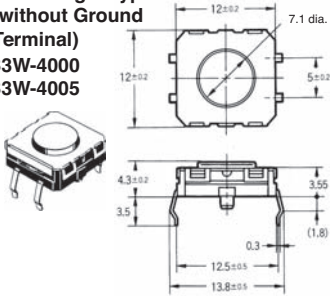
Five, 1±0.05 dia.

# Tactile Switch (Sealed Type) – B3W

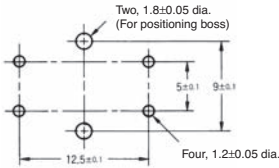
## ■ 12 x 12 mm Models

### Flat Plunger Type (without Ground Terminal)

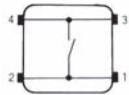
**B3W-4000  
B3W-4005**



#### PCB Mounting (Top View) (Single-sided PCB, t=1.6)

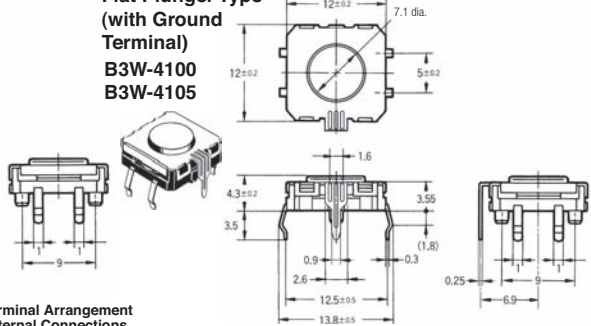


#### Terminal Arrangement (Internal Connections (Top View)

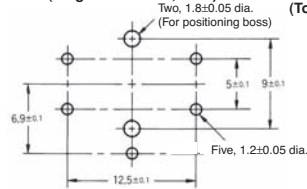


### Flat Plunger Type (with Ground Terminal)

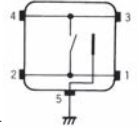
**B3W-4100  
B3W-4105**



#### PCB Mounting (Top View) (Single-sided PCB, t=1.6)

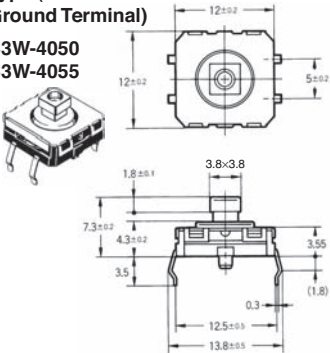


#### Terminal Arrangement (Internal Connections (Top View)

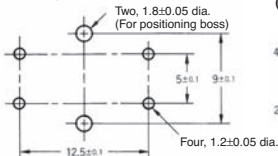


### Projected Plunger Type (without Ground Terminal)

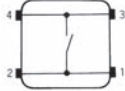
**B3W-4050  
B3W-4055**



#### PCB Mounting (Top View) (Single-sided PCB, t=1.6)

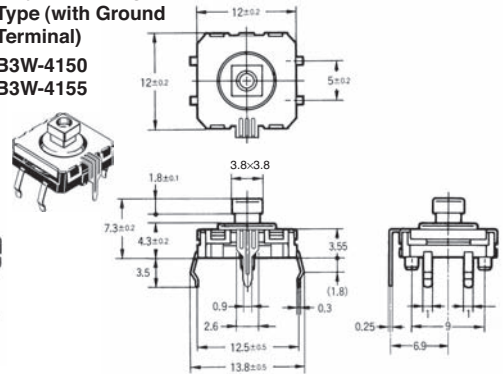


#### Terminal Arrangement (Internal Connections (Top View)

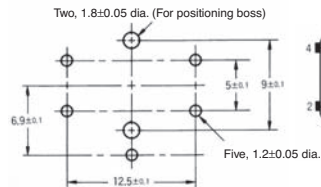


### Projected Plunger Type (with Ground Terminal)

**B3W-4150  
B3W-4155**



#### PCB Mounting (Top View) (Single-sided PCB, t=1.6)



#### Terminal Arrangement (Internal Connections (Top View)



## Key Tops

B32 series Special Key Tops are available for projected plunger models.