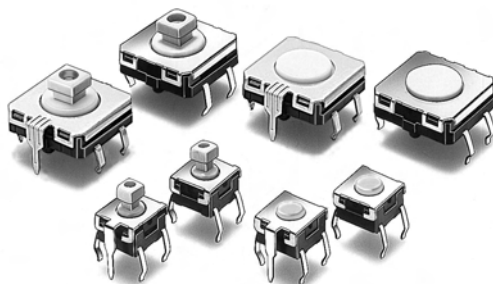






Tactile Switch (Sealed Type) - B3W

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) |  Flat | 4.3 mm | 1.57 N {160 gf} | B3W-1000 | B3W-1100 |
| | | | 2.25 N {230 gf} | B3W-1002 | B3W-1102 |
| |  Projected | 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) |  Flat | 4.3 mm | 1.96 N {200 gf} | B3W-4000 | B3W-4100 |
| | | | 3.43 N {350 gf} | B3W-4005 | B3W-4105 |
| |  Projected | 7.3 mm | 1.96 N {200 gf} | B3W-4050 | B3W-4150 |
| | | | 3.43 N {350 gf} | B3W-4055 | B3W-4155 |

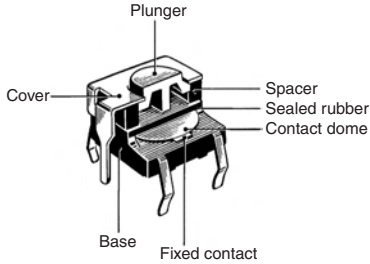
Note: Orders must be made in multiples of 100 (the quantity per bag).

■ Accessories (Order Separately)

Special Key Tops are available for projected Switch models.

Tactile Switch (Sealed Type) – B3W

Nomenclature



Specifications

■ Ratings/Characteristics

| | |
|-----------------------|--|
| Switching capacity | 1 to 50 mA, 5 to 24 VDC (resistive load) |
| Ambient temperature | -25°C to 70°C, at 60% maximum (with no icing) |
| Ambient humidity | 35% to 85% (for +5°C to 35°C) |
| Contact configuration | SPST-NO |
| Contact resistance | 100 mΩ max. (initial value) (rated: 1 mA, 5 VDC) |
| Insulation resistance | 100 MΩ min. (at 250 VDC) |
| Dielectric strength | 500 VAC, 50/60 Hz for 1 min |
| Bounce time | 5 ms max. |
| Vibration resistance | Malfunction: 10 to 55 Hz, 1.5 mm double amplitude |
| Shock resistance | Destruction: 1,000 m/s ² {approx. 100 G} max. Malfunction: 100 m/s ² {approx. 10 G} max. |
| Life expectancy | 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. |
| Weight | 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 |
| Operating force (OF) | 1.57 N {160 gf} max. | 2.26 N {230 gf} max. | 1.96 N {200 gf} max. | 3.43 N {350 gf} max. |
| Releasing force (RF) | 0.2 N {20 gf} min. | 0.49 N {50 gf} min. | 0.29 N {30 gf} min. | 0.49 N {50 gf} min. |
| Pretravel (PT) | 0.25 ^{+0.2} / _{-0.1} mm | | 0.3 ^{+0.2} / _{-0.1} mm | |

Tactile Switch (Sealed Type) – B3W

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

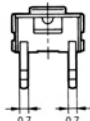
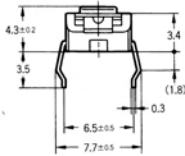
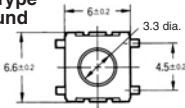
2. No terminal numbers are indicated on the Switches. The numbers used for terminals in the following graphics are indicated in the "Bottom View" diagram below. In this diagram, the Switch is rotated so that the terminals are on the right and left-hand sides, and the OMRON logo appears the right way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



■ 6 x 6 mm Models

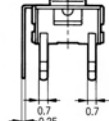
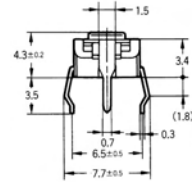
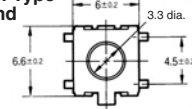
**Flat Plunger Type
(without Ground
Terminal)**

**B3W-1000
B3W-1002**

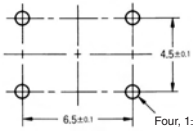


**Flat Plunger Type
(with Ground
Terminal)**

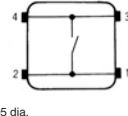
**B3W-1100
B3W-1102**



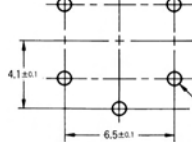
**PCB Mounting (Top View)
(Single-sided PCB, t=1.6)**



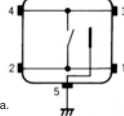
**Terminal Arrangement
/Internal Connections
(Top View)**



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

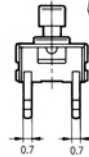
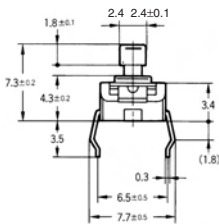
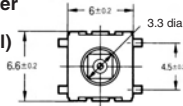


**Terminal Arrangement
/Internal Connections
(Top View)**



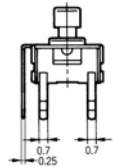
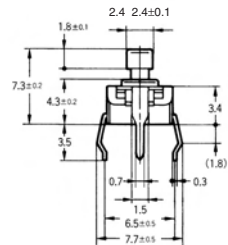
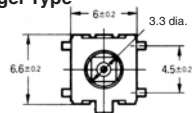
**Projected Plunger
Type (without
Ground Terminal)**

**B3W-1050
B3W-1052**

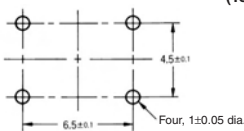


**Projected Plunger Type
(with Ground
Terminal)**

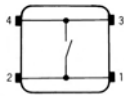
**B3W-1150
B3W-1152**



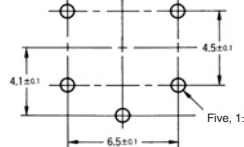
**PCB Mounting (Top View)
(Single-sided PCB, t=1.6)**



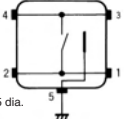
**Terminal Arrangement
/Internal Connections
(Top View)**



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



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

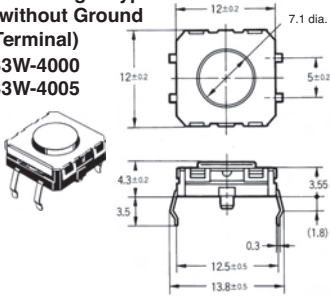


Tactile Switch (Sealed Type) – B3W

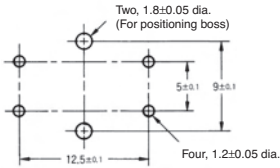
■ 12 x 12 mm Models

Flat Plunger Type (without Ground Terminal)

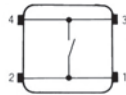
**B3W-4000
B3W-4005**



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

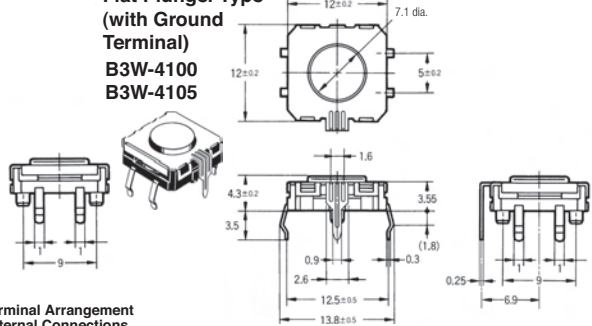


Terminal Arrangement (Internal Connections (Top View)

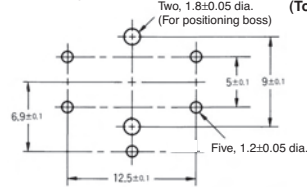


Flat Plunger Type (with Ground Terminal)

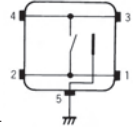
**B3W-4100
B3W-4105**



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

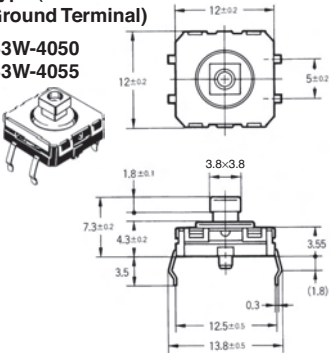


Terminal Arrangement (Internal Connections (Top View)

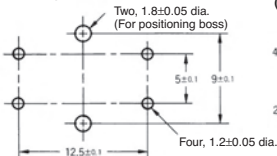


Projected Plunger Type (without Ground Terminal)

**B3W-4050
B3W-4055**



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

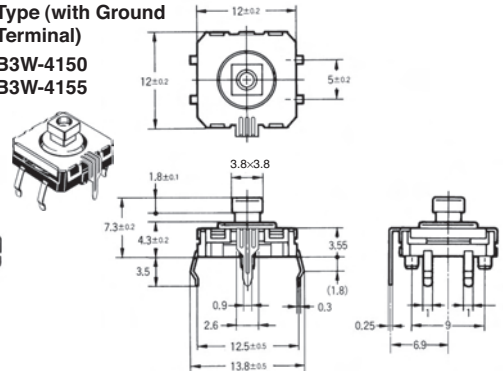


Terminal Arrangement (Internal Connections (Top View)

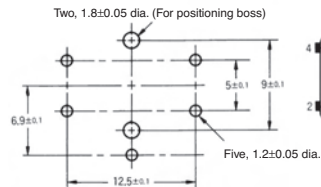


Projected Plunger Type (with Ground Terminal)

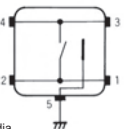
**B3W-4150
B3W-4155**



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.