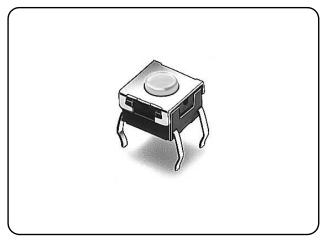
# B3W-AQ

**Sealed Tactile Switch** 

# Through-hole-mounting Switches That Are Mounting-compatible with B3F Series. Sealed Structure for High Reliability

Sealed construction conforming to IP67 (IEC-60529) provides high reliability in locations exposed to dust or water.
 (\* Excluding the terminal section.)

**RoHS Compliant** 



# **List of Models**

Due to the idiosyncrasies of the automotive parts industry, a business decision is required on individual items to determine when to start supply. Contact your OMRON representative for information on individual models.

### $6 \times 6$ mm Models

| Туре            | Contact       | Plunger   | Height | Operating force (OF) | Plunger<br>color | Bags                    |                      |
|-----------------|---------------|-----------|--------|----------------------|------------------|-------------------------|----------------------|
|                 | material      |           |        |                      |                  | Without ground terminal | Minimum packing unit |
| B3W-1000 Series | Silver plated | Flat type | 4.3 mm | 2.26 N {230 gf} max. | Yellow           | B3W-1002-AQ             | 100 pcs              |

Note: Bulk Packaged, 100 switches per bag. Order in multiples of the package quantity.

# Ratings/Characteristics

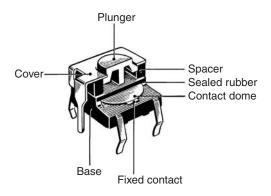
| Rating (resistive load)                   | 1 to 50 mA, 3 to 24 VDC   |
|---|---|
| Minimum applicable load (reference value) | 10 μA at 1 VDC (resistive load)   |
| Ambient operating temperature             | -25°C to +70°C at 60%RH max. (with no icing or condensation)  |
| Ambient operating humidity                | 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                       | 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 <sup>2</sup> {approx. 100 G} max.  Malfunction: 100 m/s <sup>2</sup> {approx. 10 G} max. |
| Durability                                | 2.26 N (high-force):300,000 operations min.   |
| Weight                                    | approx. 0.3 g   |
| Degree of protection                      | IEC IP67  |
| Washing                                   | Possible  |

# **Operating Characteristics**

#### $6 \times 6$ mm Models

| Туре                 | B3W-1000 series                           |  |
|----------------------|---|--|
| Operating force (OF) | 2.26 N                                    |  |
| Item Model           | B3W-1□□2-AQ                               |  |
| Operating force (OF) | 2.26 N {230 gf} max.                      |  |
| Releasing force (RF) | 0.49 N {50 gf} min.                       |  |
| Pretravel (PT)       | 0.25 <sup>+0.2</sup> / <sub>-0.1</sub> mm |  |

# **Model Structure**



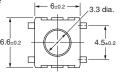
# **Dimensions** (Unit: mm)

**Note:** 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.

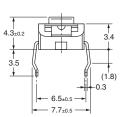


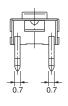
## ■ 6×6 mm Models

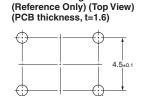
Flat Plunger Type (without Ground Terminal) B3W-1002-AQ



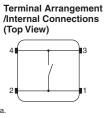








**PCB Processing Dimensions** 



 $\textbf{Note:} \quad \text{Unless otherwise specified, a tolerance of } \pm 0.4 \text{ mm applies to all dimensions. No terminal numbers are indicated on the Switches.}$ 

# **Precautions**

Please refer to "Safety Precautions for All Tactile Switches" on page 22 for correct use.