

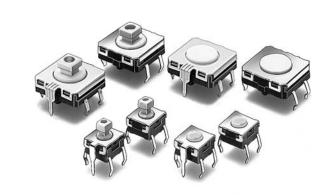
Sealed Tactile Switch

B3W

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.)
- Available in two sizes: 6 × 6 mm and 12 × 12 mm sizes.
- Ground terminal available to protect against static electricity.
- B32-series Key Tops mount to models with projected plungers.

RoHS Compliant



■ List of Models

6 × 6 mm Models

Туре	Contact material	Plunger	Height	Operating force (OF)	Plunger color	Bags			
						Without ground terminal	Minimum packing unit	With ground terminal	Minimum packing unit
	Silver plated	Flat type	4.3 mm	1.57 N {160 gf} max.	White	B3W-1000		B3W-1100	100 pcs
	Pro			2.26 N {230 gf} max.	Yellow	B3W-1002		B3W-1102	
			5.0 mm	1.57 N {160 gf} max.	White	B3W-1020			
				2.26 N {230 gf} max.	Yellow	B3W-1022			
			2 2	1.57 N {160 gf} max.	White	B3W-1050		B3W-1150	
				2.26 N {230 gf} max.	Yellow	B3W-1052		B3W-1152	

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

$12 \times 12 \text{ mm Models}$

Туре	Contact material	Plunger	Height	Operating force (OF)	Plunger color	Bags			
						Without ground terminal	Minimum packing unit	With ground terminal	Minimum packing unit
B3W-4000 Series	Silver plated	Flat type	4.3 mm	1.96 N {200 gf} max.	White	B3W-4000	100	B3W-4100	100 200
				3.43 N {350 gf} max.	Yellow	B3W-4005		B3W-4105	
		Projected type 7.3 mm	1.96 N {200 gf} max.	White	B3W-4050	- 100 pcs	B3W-4150	- 100 pcs -	
			3.43 N {350 gf} max.	Yellow	B3W-4055		B3W-4155		

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 Ω max.
Insulation resistance	100 M Ω 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 ² {approx. 100 G} max.
	Malfunction: 100 m/s ² {approx. 10 G} max.
Durability	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	6×6 mm: approx. 0.3 g, 12 \times 12 mm: approx. 1 g
Degree of protection	IEC IP67
Washing	Possible

■ Operating Characteristics

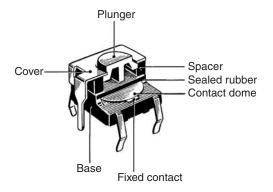
6×6 mm Models

Туре	B3W-1000 series			
Operating force (OF)	1.57 N	2.26 N		
Item Model	B3W-1□□0	B3W-1□□2		
Operating force (OF)	1.57 N {160 gf} max.	2.26 N {230 gf} max.		
Releasing force (RF)	0.2 N {20 gf} min.	0.49 N {50 gf} min.		
Pretravel (PT)	0.25 ^{+0.2} / _{-0.1} mm			

$12 \times 12 \text{ mm Models}$

Туре	B3W-4000 series			
Operating force (OF)	1.96 N	3.43 N		
Item Model	B3W-4□□0	B3W-4□□5		
Operating force (OF)	1.96 N {200 gf} max.	3.43 N {350 gf} max.		
Releasing force (RF)	0.29 N {30 gf} min.	0.49 N {50 gf} min.		
Pretravel (PT)	0.3 ^{+0.2} / _{-0.1} mm			

■ Model Structure

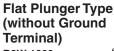


■ Dimensions (Unit: mm)

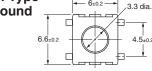
Note: The numbers used for terminals in the following graphics are indicated in the "Bottom View" diagram below. In this diagram, the Switch is rotated so that the terminals are on the right and left-hand sides, and the OMRON logo appears the right way up.



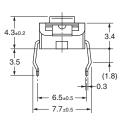
■ 6×6 mm Models

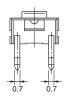


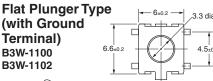
B3W-1000 B3W-1002



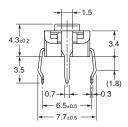


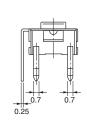






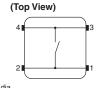






PCB Processing Dimensions (Reference Only) (Top View) (PCB thickness, t=1.6)

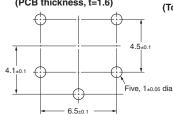
4.5±0.1 4.5±0.1 Four, 1±0.05 dia.



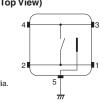
Terminal Arrangement

/Internal Connections

PCB Processing Dimensions (Reference Only) (Top View) (PCB thickness, t=1.6)

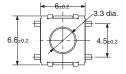


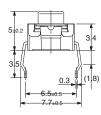
Terminal Arrangement /Internal Connections (Top View)

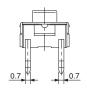


Flat Plunger Type (without Ground Terminal)

B3W-1020 B3W-1022







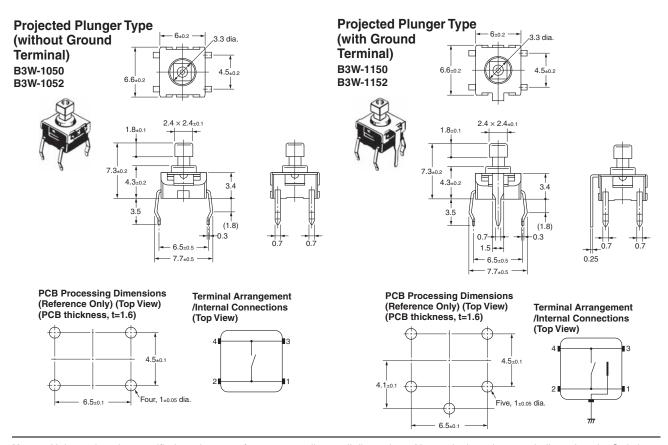
PCB Processing Dimensions (Reference Only) (Top View) (PCB thickness, t=1.6)

4.5±0.1

Terminal Arrangement /Internal Connections (Top View)

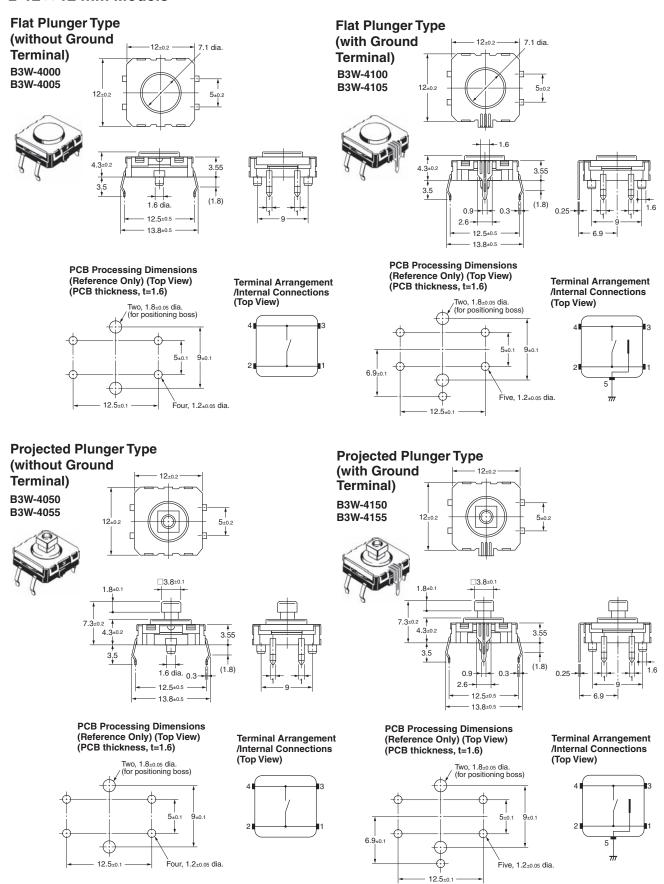


Note: Unless otherwise specified, a tolerance of ±0.4 mm applies to all dimensions. No terminal numbers are indicated on the Switches.



Note: Unless otherwise specified, a tolerance of ±0.4 mm applies to all dimensions. No terminal numbers are indicated on the Switches.

■ 12 × 12 mm Models



Note: Unless otherwise specified, a tolerance of ± 0.4 mm applies to all dimensions.

■ Key Tops

B32-series Key Tops are available for projected plungers. Refer to the datasheet for the B32 for details.

■ Precautions

Be sure to read the safety precautions common to all Tactile Switches for correct use.

Contact: www.omron.com/ecb

Note: Do not use this document to operate the Unit.

OMRON Corporation

Electronic and Mechanical Components Company

Cat. No. A075-E1-07 1014(0207)(O)

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

Consult your OMHON 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.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Tactile Switches category:

Click to view products by Omron manufacturer:

Other Similar products are found below:

5GTH92001 5GTH9202242 1-1977120-4 ADTSA62RV ADTSA63KV ADTSA644NV ADTSMW66NV ADTSMW67RV B3F-3123 B3F-6055A B3F-B32-01-KIT 1977177-8 1977266-1 ADTS644KV ADTSA61RV ADTSA62KV ADTSA63NV ADTSA63RV ADTSM21NSVTR ADTSM32NVTR ADTSM63SVTR ADTSM644KVTR ADTSMW64RV ADTSMW69NV FSMRA4JHA04 GS4.70F300QP 3ESH9R 506E00201 MJTP1164TR 3FTL600RAS 3FTL640RAS Y96K132V0FPLFS 101-TS5022T1601-EV 5GSH92001 KSJ0A231 80SH LFG EVQ-P1D05K MJTP1162TR ADTSM63KV 2-1977120-7 TSJW-5.2-260-TR KMT011MNGJLHS B3WN6002S ADTSA648RV 70-201.0 ADTSM62KSVTR ATA600VTR ADTSG66RV ADTSG1NV ADTSM62KVTR ADTSM25KSVB