

# **Sealed Tactile Switch (SMT)**

**B3S** 

## Surface-mounting Switches with a Sealed Structure for High Reliability. Available on Embossed Tape

- Sealed construction conforming to IP67 (IEC-60529) provides high contact reliability in locations exposed to dust or water. (\* Excluding the terminal section.)
- · Surface-mounting terminals for high-density mounting.
- Ground terminal available to protect against static electricity.
- Available in embossed taping packages for automatic mounting.

RoHS Compliant



#### **■ List of Models**

#### 6 × 6 mm Models

					Without ground terminal				With ground terminal			
					Bags		Embossed taping		Bags		Embossed taping	
Operation type	Contact material	Height	Operating force (OF)	Plunger color	Model	Minimum packing unit	Model	Minimum packing unit	Model	Minimum packing unit	Model	Minimum packing unit
B3S-1000 Series	Silver plated	4.3 mm	1.57 N {160 gf} max.	Ivory	B3S-1000	100 pcs	B3S-1000P	1,000 pcs	B3S-1100	100 pcs	B3S-1100P	1,000 pcs
			2.26 N {230 gf} max.	Yellow	B3S-1002		B3S-1002P		B3S-1102		B3S-1102P	

Note: Switches in bags must be ordered in units of 100 Switches, and Switches on embossed taping must be ordered in units of 1,000 Switches.

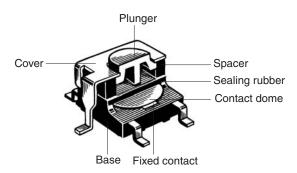
## ■ Ratings/Characteristics

Rating (resistive load)	1 to 50 mA, 3 to 24 VDC			
nating (resistive load)	1 to 50 flia, 5 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. 100G} max. Malfunction: 100 m/s <sup>2</sup> {approx. 10G} max.			
Durability	Standard force models (1.57 N {160 gf}): 500,000 operations min.  High-force models (2.26 N {230 gf}): 300,000 operations min.			
Weight	Approx. 0.3 g			
Degree of protection	IEC IP67			
Washing	Possible			

### ■ Operating Characteristics

	Туре	B3S Series			
	Operating force (OF)	1.57 N	2.26 N		
Item	Model	B3S-1□00	B3S-1□02		
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 <sup>+0.2</sup> / <sub>-0.1</sub> mm			

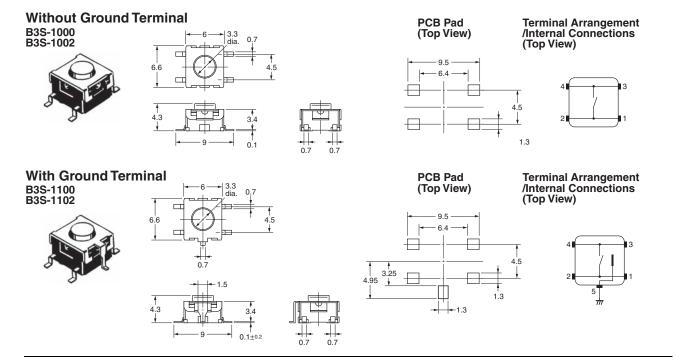
### **■ Model Structure**



### ■ **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.





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

#### **■** 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.

B<sub>3</sub>S

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.

# **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:

KMR633NG LFG 5GTH92001 5GTH9202242 6426-201-11343 MJ1226 MJTP1109B MJTP1138EAUTR MJTP1230BL MJTPSHW
GS6.90F300QP 1-1977223-0 1-1977120-4 ADTSA62NV ADTSA62RV ADTSA63KV ADTSA644NV ADTSM24NVTR ADTSMW66NV
ADTSMW67RV ATM533VTR 1571300-3 B3F-3123 B3F-6055A B3F-B32-01-KIT 1977177-8 1977266-1 2-1977223-4 2-1977223-7
ADTS644KV ADTSA61RV ADTSA62KV ADTSA63NV ADTSA63RV ADTSA65NV ADTSM21NSVTR ADTSM25RVTR
ADTSM31RVTR ADTSM32NVTR ADTSM61YVTR ADTSM63SVTR ADTSM644KVTR ADTSMW64RV ADTSMW69NV
FSMRA4JHA04 GS4.70F300QP D38999/20JJ37SA TL1105B TL1105J ATH447K2Q ATM534VTR