



**B3F series...** Our most comprehensive series of tactile switches includes 6 x 6 and 12 x 12 models with vertical and high-type forces, as well as radial taped types. They are available in surface mount and through hole and the latest addition to the B3F series is a gold plated version providing long term use in severe environments such as corrosive gas.

**Dome Arrays...** The B3DA dome arrays feature a dustproof construction and attach directly to the PCB so no soldering is required. The B3D, a single key type, is also available.

**Positive click action...** Omron's comprehensive range of tactile switches are suitable for keyboards with a membrane overlay or stand alone use with a keypad. These high quality switches provide a positive click action and are available with various forces of operation to suit most applications

**Industry's smallest SMD Tactile Switch...** Omron has introduced the industry's smallest tactile switches, in top and side actuating form. Both versions offer a sealed construction to ensure high reliability in dust-laden environments. The B3U switches have a footprint of just 3.0 x 2.5mm and are only 1.2mm high, enabling high-density mounting on printed circuit boards.



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Ref. Y908-E2-04A



# TACTILE SWITCHES

## Selector Guide

**BIG IDEAS**  
For a Small World

# TACTILE SWITCH SELECTOR GUIDE



Model Number	B3F							B3W			B3FS	B3SN	B3S	B3WN	B3J			B3U	B3DA	B3D															
Size	6 x 6mm	6 x 6mm	6 x 6mm	12 x 12mm	12 x 12mm	12 x 12mm	6 x 6mm	6 x 6mm	12 x 12mm	10 x 10mm	6 x 6mm	6 x 6mm	6 x 6mm	6 x 6mm	12 x 18mm	12 x 18mm	6 x 6mm	6 x 6mm	6 x 6mm	3.0 x 2.5mm	-	4mm diameter	5mm diameter												
Series	B3F-1000	B3F-1000-G	B3F-3000	B3F-3000G	B3F-4000/B3F-8000	B3F-5000	B3F-6000	B3W-1000	B3W-4000	B3W-9000	B3FS-1000	B3SN-3000	B3S-1000	B3WN-6000	B3J-1000	B3J-2000/3000/4000	B3J-5000/6000/7000	B3U	B3DA	B3D-4	B3D-5														
Features	Horizontal – Flat and projected	Horizontal – Flat – high reliability types	Vertical – Flat and projected	Vertical – flat – high reliability types	Horizontal – Flat and projected – Flat and projected/B3F-8000 with protective cover	Horizontal – Flat and projected – Long life expectancy and high reliability types	Horizontal – Flat and projected – radial taped type	Sealed construction that allows immersion cleaning after soldering. Dust-proof for applications in adverse conditions			Compact illumination with 2 LEDs	Surface mounting – ideal for high density mounting	Surface mounting with sealed construction	Surface mounting for high-density packaging	Double-sealed construction ensures water-tight and dust-tight performance			Hinged tactile switch			Ultra small switch with high reliability contact	Dome arrays with dust-tight construction	Single-key type added to series of B3DA ultra-low profile dome array												
Contact	Silver-plated	Gold-plated	Silver-plated	Gold-plated	Silver-plated	Silver-plated	Gold-plated	Silver-plated	Silver-plated			Silver-plated	Silver-plated	Silver-plated	Silver-plated	Silver-plated			Silver-plated	Silver-plated	Stainless steel														
Operating Force	0.98N (100gf) 1.47N (150gf) 2.55N (260gf) 4.9N (500gf)	1.76N (180gf)	0.98N (100gf) 1.47N (150gf) 2.55N (260gf)	1.76N (180gf)	1.27N (130gf) 2.55N (260gf)	1.27N (130gf)	1.27N (130gf)	0.98N (100gf) 1.47N (150gf)	1.57N (160gf) 2.26N (230gf)	1.96N (200gf) 3.43N (350gf)	1.57N (160gf), 2.26N (230gf)	0.98N (100gf) 1.47N (150gf)	1.57N (160gf)	1.57N (160gf) 2.25N (230gf)	1.96N (200gf) 2.55N (260gf)	1.27N (130gf)			1.5N (top) 1.59N (side)	1.57N (160gf)	1.67N														
Type	<ul style="list-style-type: none"> <li>Flat Type (3.1mm height) – without ground</li> <li>Flat Type (3.1mm height) – with ground</li> <li>Flat type (4.3mm height – vertical model 3.15mm) – without ground</li> <li>Flat type (4.3mm height – vertical model 3.15mm) – with ground</li> <li>Flat type (5.0mm height – vertical model 3.85mm) – without ground</li> <li>Flat type (5.0mm height – vertical model 3.85mm) – with ground</li> <li>Flat type and others – without ground</li> <li>Flat type and others – with ground</li> <li>Projected type (7.3mm height – vertical model 6.15mm) – without ground</li> <li>Projected type (7.3mm height – vertical model 6.15mm) – with ground</li> <li>1 LED without ground</li> <li>2 LEDs without ground</li> </ul>																																		
Life Expectancy (operations)	1,000,000 (0.98N) 300,000 (1.47N) 100,000 (2.55N) 50,000 (4.9N)	300,000	1,000,000 (0.98N) 300,000 (1.47N) 100,000 (2.55N) 50,000 (4.9N)	300,000	3,000,000 (1.27N) 1,000,000 (2.55N)	10,000,000	1,000,000 (0.98N) 300,000 (1.47N)	1,000,000 (1.57N) 300,000 (2.26N)	3,000,000 (1.96N) 1,000,000 (3.43N)	1,000,000 (1.57N) 200,000 (2.26N)	1,000,000 (0.98N) 300,000 (1.47N)	100,000	500,000 (1.57N) 300,000 (2.25N)	100,000	3,000,000	200,000 (top actuated) 100,000 (side actuated)	500,000 cycles (4mm diameter) 1,000,000 operations (5mm diameter)	500,000	1,000,000																
Ambient Operating Temperature	-25°C to 75°C							-25°C to 70°C			-25°C to 70°C		-25°C to 70°C		-25°C to 70°C		-25° to 85°C			-25°C to 70°C		-40° to 80°C		-40° to 80°C											
Enclosure rating	IP00							IP00			IP00		IP64		IP64		IP67			IP00		IP00		IP00											
Cleaning	Not possible							Possible			Not possible		Not possible		Possible		Possible			Not possible		Not possible		Not possible											
Packaging	Box (standard)		1500		1500		1500		1500		(200 for B3F-8000) 500		1,000 (radial)		1500		500		300		1500		1500		1500		1000 (radial taped)			300		-		500 (20 sheets x 25 B3D)	
Key top for projected type	<ul style="list-style-type: none"> <li>4 x 4mm</li> <li>9 x 9mm</li> <li>12 x 12mm</li> <li>Diameter 6mm</li> <li>Diameter 9.5mm</li> <li>D-Shape</li> </ul>																																		