

ø16 LB Series Control Units

Flush Silhouette Switches LB Series

Standard bezel models with a panel depth of 27.9 mm. Removable contact blocks ideal for single board mounting. Flush bezel projects only 2mm from front of panel.

- Pushbuttons, selector switches, and key selector switches with up to 3PDT contacts.
- Key selectors with keys that are difficult to duplicate. Seven different key numbers to choose from.
- Black or metallic flush bezels available.
- Bright and clear illumination surface. LED illumination.
- Gold-clad, cross-bar contact, or high-capacity silver contacts.
- Protection degree: IP65 (IEC60529)
- CCC pending.

Safety Standards	Mark	File No. or Organization
UL508		UL Recognition No.E55996
CSA 22.2 No.14		CSA File No. LR 21451
EN60947-5-1		TÜV Rheinland
		EU Low Voltage Directive



Contact Ratings

Gold Contact (switch base: blue)

Rated Insulation Voltage	250V
Rated Thermal Current	3A
Rated Operating Voltage	30V DC 125V AC
Rated Operating Current (resistive load)	0.1A 0.1A
Contact Material	Gold-clad silver

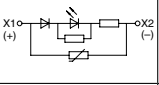
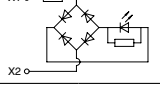
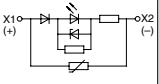
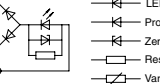
- Minimum applicable load (reference value): 5V AC/DC, 1 mA
- Applicable range is subject to the operating conditions and load.

Silver Contact (switch base: gray)

Rated Insulation Voltage				250V		
Rated Operating Voltage				30V	125V	250V
Rated Operating Current	Electrical Life 50,000 operations	AC 50/60Hz	Resistive load	—	5A	5A
			Inductive load	—	3A	1.5A
		DC	Resistive load	5A	1.1A	—
			Inductive load	2.5A	0.55A	—
	Electrical Life 100,000 operations	AC 50/60Hz	Resistive load	—	5A	3A
			Inductive load	—	3A	1.5A
		DC	Resistive load	3A	0.6A	—
			Inductive load	1A	0.22A	—
Rated Thermal Current				5A		
Contact Material				Silver		

- AC inductive load: PF=0.6 to 0.7 DC inductive load: L/R=7 ms max.

LED Ratings

Rated Voltage	5V DC	12V AC/DC	24V AC/DC
Voltage Range	5V DC±5%	12V AC/DC±10%	24V AC/DC±10%
LED Part No.	LB9Z-LED5②	LB9Z-LED1②	LB9Z-LED2②
Current Draw	A, R, W: 22 mA G, PW, S: 16 mA		
Voltage Range	Die stamped on base		
LED Life (reference value)	Approx. 30,000 hours (until the brightness reduces to 50% the initial value when lit at complete direct current the rated voltage under 25°C environment.)		
Internal Circuit	A, PW, R, W		A, PW, R, W
			
	G, S		G, S
			

- ② (color code): A (amber), G (green), PW (pure white), R (red), S (blue), W (white)
- For orange, specify "A" (for amber).
- Use the pure white (PW) module for yellow illumination.
- LED lamp contains a current-limiting resistor.

Specifications

Operating Temperature	-25 to +60°C (no freezing) Illuminated units: -25 to +55°C	
Storage Temperature	-30 to +80°C (no freezing)	
Operating Humidity	45 to 85% RH (no condensation)	
Contact Resistance	50 mΩ maximum (initial value)	
Insulation Resistance	100 MΩ minimum (500V DC megger)	
Dielectric Strength	Switch Unit	Between live part and ground: 2,000V AC, 1 minute Between terminals of different poles: 2,000V AC, 1 minute Between terminals of the same poles: 1,000V AC, 1 minute
	Illumination Unit	Between live part and ground: 2,000V AC, 1 minute
Vibration Resistance	Operating extremes/Damage limits: 5 to 55 Hz, amplitude 0.5 mm	
Shock Resistance	Operating extremes: 100 m/s ² Damage limits: 1,000 m/s ²	
Mechanical Life (minimum operations)	Momentary:	2,000,000
	Maintained:	250,000
	Selector switches	250,000
	Key selector switches	250,000
Electrical Life (minimum operations)	Momentary:	50,000 / 100,000 (*1)
	Maintained:	50,000 / 100,000 (*2)
	Selector switches:	50,000 / 100,000 (*2)
	Key selector switches:	50,000 / 100,000 (*2)
Degree of Protection	IP65 (IEC 60529)	
Terminal Style	Solder/tab terminal #110 PC board terminal	
Weight (approx.)	11g (LB3L-M1T24) 10g (LB3P-1T04) 10g (LB3B-M1T2) 12g (LB3S-2T2) 25g (LB3K-2ST2A) 17g (LB8L-M1T24) 16g (LB8P-1T04) 16g (LB8B-M1T2) 18g (LB8S-2T2) 31g (LB8K-2ST2A) 18g (LB8GL-M1T24) 17g (LB8GB-M1T2)	

- * 1: Switching frequency 1800 operations/h.
- * 2: Switching frequency 1200 operations/h.

Round / Square Illuminated Pushbuttons

Package Quantity:1

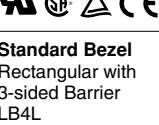
Package Quantity:									
Shape	Operation	Contact Material	Operating Voltage	Contact	Part No. (Ordering No.)				② Color Code
					Standard Bezel		Flush Bezel		
					Solder/Tab Terminal	PC Board Terminal	Solder/Tab Terminal	PC Board Terminal	
Standard Bezel Round LB1L  Flush Bezel Round (flush lens) LB6□L-M1 LB6□L-A1  Metal Bezel  Black Bezel  	Momentary	Gold	5V DC	SPDT	LB1L-M1T11②	LB1L-M1T11V②	LB6□L-M1T11②	LB6□L-M1T11V②	A G P W R S W Y
				DPDT	LB1L-M1T21②	LB1L-M1T21V②	LB6□L-M1T21②	LB6□L-M1T21V②	
			12V AC/DC	SPDT	LB1L-M1T13②	LB1L-M1T13V②	LB6□L-M1T13②	LB6□L-M1T13V②	
				DPDT	LB1L-M1T23②	LB1L-M1T23V②	LB6□L-M1T23②	LB6□L-M1T23V②	
			24V AC/DC	SPDT	LB1L-M1T14②	LB1L-M1T14V②	LB6□L-M1T14②	LB6□L-M1T14V②	
				DPDT	LB1L-M1T24②	LB1L-M1T24V②	LB6□L-M1T24②	LB6□L-M1T24V②	
		Silver	5V DC	SPDT	LB1L-M1T51②	—	LB6□L-M1T51②	—	
				DPDT	LB1L-M1T61②	—	LB6□L-M1T61②	—	
			12V AC/DC	SPDT	LB1L-M1T53②	—	LB6□L-M1T53②	—	
				DPDT	LB1L-M1T63②	—	LB6□L-M1T63②	—	
			24V AC/DC	SPDT	LB1L-M1T54②	—	LB6□L-M1T54②	—	
				DPDT	LB1L-M1T64②	—	LB6□L-M1T64②	—	
	Maintained	Gold	5V DC	SPDT	LB1L-A1T11②	LB1L-A1T11V②	LB6□L-A1T11②	LB6□L-A1T11V②	
				DPDT	LB1L-A1T21②	LB1L-A1T21V②	LB6□L-A1T21②	LB6□L-A1T21V②	
			12V AC/DC	SPDT	LB1L-A1T13②	LB1L-A1T13V②	LB6□L-A1T13②	LB6□L-A1T13V②	
				DPDT	LB1L-A1T23②	LB1L-A1T23V②	LB6□L-A1T23②	LB6□L-A1T23V②	
			24V AC/DC	SPDT	LB1L-A1T14②	LB1L-A1T14V②	LB6□L-A1T14②	LB6□L-A1T14V②	
				DPDT	LB1L-A1T24②	LB1L-A1T24V②	LB6□L-A1T24②	LB6□L-A1T24V②	
		Silver	5V DC	SPDT	LB1L-A1T51②	—	LB6□L-A1T51②	—	
				DPDT	LB1L-A1T61②	—	LB6□L-A1T61②	—	
			12V AC/DC	SPDT	LB1L-A1T53②	—	LB6□L-A1T53②	—	
				DPDT	LB1L-A1T63②	—	LB6□L-A1T63②	—	
			24V AC/DC	SPDT	LB1L-A1T54②	—	LB6□L-A1T54②	—	
				DPDT	LB1L-A1T64②	—	LB6□L-A1T64②	—	
Standard Bezel Square LB2L  Flush Bezel Square (flush lens) LB7□L-M1 LB7□L-A1  Metal Bezel  Black Bezel  	Momentary	Gold	5V DC	SPDT	LB2L-M1T11②	LB2L-M1T11V②	LB7□L-M1T11②	LB7□L-M1T11V②	A G P W R S W Y
				DPDT	LB2L-M1T21②	LB2L-M1T21V②	LB7□L-M1T21②	LB7□L-M1T21V②	
			12V AC/DC	SPDT	LB2L-M1T13②	LB2L-M1T13V②	LB7□L-M1T13②	LB7□L-M1T13V②	
				DPDT	LB2L-M1T23②	LB2L-M1T23V②	LB7□L-M1T23②	LB7□L-M1T23V②	
			24V AC/DC	SPDT	LB2L-M1T14②	LB2L-M1T14V②	LB7□L-M1T14②	LB7□L-M1T14V②	
				DPDT	LB2L-M1T24②	LB2L-M1T24V②	LB7□L-M1T24②	LB7□L-M1T24V②	
		Silver	5V DC	SPDT	LB2L-M1T51②	—	LB7□L-M1T51②	—	
				DPDT	LB2L-M1T61②	—	LB7□L-M1T61②	—	
			12V AC/DC	SPDT	LB2L-M1T53②	—	LB7□L-M1T53②	—	
				DPDT	LB2L-M1T63②	—	LB7□L-M1T63②	—	
			24V AC/DC	SPDT	LB2L-M1T54②	—	LB7□L-M1T54②	—	
				DPDT	LB2L-M1T64②	—	LB7□L-M1T64②	—	
	Maintained	Gold	5V DC	SPDT	LB2L-A1T11②	LB2L-A1T11V②	LB7□L-A1T11②	LB7□L-A1T11V②	
				DPDT	LB2L-A1T21②	LB2L-A1T21V②	LB7□L-A1T21②	LB7□L-A1T21V②	
			12V AC/DC	SPDT	LB2L-A1T13②	LB2L-A1T13V②	LB7□L-A1T13②	LB7□L-A1T13V②	
				DPDT	LB2L-A1T23②	LB2L-A1T23V②	LB7□L-A1T23②	LB7□L-A1T23V②	
			24V AC/DC	SPDT	LB2L-A1T14②	LB2L-A1T14V②	LB7□L-A1T14②	LB7□L-A1T14V②	
				DPDT	LB2L-A1T24②	LB2L-A1T24V②	LB7□L-A1T24②	LB7□L-A1T24V②	
		Silver	5V DC	SPDT	LB2L-A1T51②	—	LB7□L-A1T51②	—	
				DPDT	LB2L-A1T61②	—	LB7□L-A1T61②	—	
			12V AC/DC	SPDT	LB2L-A1T53②	—	LB7□L-A1T53②	—	
				DPDT	LB2L-A1T63②	—	LB7□L-A1T63②	—	
			24V AC/DC	SPDT	LB2L-A1T54②	—	LB7□L-A1T54②	—	
				DPDT	LB2L-A1T64②	—	LB7□L-A1T64②	—	

- Specify the bezel type in place of □ in the Part No.: M (metal), Blank (black)
- Specify the color code in place of ② in the Part No.: A (amber), G (green), PW (pure white), R (red), S (blue), W (white), Y (yellow)
- Illuminated pushbuttons contain an LED unit.
- See page 26 for dimensions.
- See page 39 for maintenance LED unit.
- Illuminated pushbuttons can be used with legend markings. Engraving can be done on a marking plate which is placed in the lens, or a clear film can be printed and placed in the lens. See page 42 for details on the marking plate and film.
- When using white lens unit (clear lens + white marking plate) with color codes A, G, R, or S, specify "W" before ② in the Part No.
Example: **LB1L-M1T14W②**

LB Series Illuminated Pushbuttons

Rectangular / Rectangular with 3-sided Barrier Illuminated Pushbuttons

Package Quantity: 1

Shape	Operation	Contact Material	Operating Voltage	Contact	Part No. (Ordering No.)				② Color Code		
					Standard Bezel		Flush Bezel				
					Solder/Tab Terminal	PC Board Terminal	Solder/Tab Terminal	PC Board Terminal			
Standard Bezel Rectangular LB3L  Flush Bezel Rectangular (flush lens) LB8□L-M1 LB8□L-A1  Metal Bezel  Black Bezel  	Momentary	Gold	5V DC	SPDT	LB3L-M1T11②	LB3L-M1T11V②	LB8□L-M1T11②	LB8□L-M1T11V②	A G P W R S W Y		
				DPDT	LB3L-M1T21②	LB3L-M1T21V②	LB8□L-M1T21②	LB8□L-M1T21V②			
			12V AC/DC	SPDT	LB3L-M1T13②	LB3L-M1T13V②	LB8□L-M1T13②	LB8□L-M1T13V②			
				DPDT	LB3L-M1T23②	LB3L-M1T23V②	LB8□L-M1T23②	LB8□L-M1T23V②			
		24V AC/DC	SPDT	LB3L-M1T14②	LB3L-M1T14V②	LB8□L-M1T14②	LB8□L-M1T14V②				
			DPDT	LB3L-M1T24②	LB3L-M1T24V②	LB8□L-M1T24②	LB8□L-M1T24V②				
			Silver	5V DC	SPDT	LB3L-M1T51②	—	LB8□L-M1T51②		—	
					DPDT	LB3L-M1T61②	—	LB8□L-M1T61②		—	
	12V AC/DC	SPDT		LB3L-M1T53②	—	LB8□L-M1T53②	—				
		DPDT		LB3L-M1T63②	—	LB8□L-M1T63②	—				
	Maintained	Gold	5V DC	SPDT	LB3L-A1T11②	LB3L-A1T11V②	LB8□L-A1T11②	LB8□L-A1T11V②			
				DPDT	LB3L-A1T21②	LB3L-A1T21V②	LB8□L-A1T21②	LB8□L-A1T21V②			
			12V AC/DC	SPDT	LB3L-A1T13②	LB3L-A1T13V②	LB8□L-A1T13②	LB8□L-A1T13V②			
				DPDT	LB3L-A1T23②	LB3L-A1T23V②	LB8□L-A1T23②	LB8□L-A1T23V②			
		24V AC/DC	SPDT	LB3L-A1T14②	LB3L-A1T14V②	LB8□L-A1T14②	LB8□L-A1T14V②				
			DPDT	LB3L-A1T24②	LB3L-A1T24V②	LB8□L-A1T24②	LB8□L-A1T24V②				
Silver			5V DC	SPDT	LB3L-A1T51②	—	LB8□L-A1T51②	—			
				DPDT	LB3L-A1T61②	—	LB8□L-A1T61②	—			
	12V AC/DC	SPDT	LB3L-A1T53②	—	LB8□L-A1T53②	—					
		DPDT	LB3L-A1T63②	—	LB8□L-A1T63②	—					
Standard Bezel Rectangular with 3-sided Barrier LB4L  	Momentary	Gold	5V DC	SPDT	LB4L-M1T11②	LB4L-M1T11V②			A G P W R S W Y		
				DPDT	LB4L-M1T21②	LB4L-M1T21V②					
			12V AC/DC	SPDT	LB4L-M1T13②	LB4L-M1T13V②					
				DPDT	LB4L-M1T23②	LB4L-M1T23V②					
		24V AC/DC	SPDT	LB4L-M1T14②	LB4L-M1T14V②						
			DPDT	LB4L-M1T24②	LB4L-M1T24V②						
			Silver	5V DC	SPDT	LB4L-M1T51②				—	
					DPDT	LB4L-M1T61②				—	
	12V AC/DC	SPDT		LB4L-M1T53②	—						
		DPDT		LB4L-M1T63②	—						
	Maintained	Gold	5V DC	SPDT	LB4L-M1T54②	—				LB8□L-A1T54②	—
				DPDT	LB3L-A1T64②	—				LB8□L-A1T64②	—
			12V AC/DC	SPDT	LB4L-A1T11②	LB4L-A1T11V②					
				DPDT	LB4L-A1T21②	LB4L-A1T21V②					
		24V AC/DC	SPDT	LB4L-A1T13②	LB4L-A1T13V②						
			DPDT	LB4L-A1T23②	LB4L-A1T23V②						
Silver			5V DC	SPDT	LB4L-A1T14②	LB4L-A1T14V②					
				DPDT	LB4L-A1T24②	LB4L-A1T24V②					
	12V AC/DC	SPDT	LB4L-A1T51②	—							
		DPDT	LB4L-A1T61②	—							
24V AC/DC	SPDT	LB4L-A1T53②	—								
	DPDT	LB4L-A1T63②	—								
	5V DC	SPDT	LB4L-A1T54②	—							
		DPDT	LB4L-A1T64②	—							

- Specify the bezel color in place of □ in the Part No.: M (metal), Blank (black)
- Specify the color code in place of ② in the Part No.: A (amber), G (green), PW (pure white), R (red), S (blue), W (white), Y (yellow)
- Illuminated pushbuttons contain an LED unit.
- See page 26 for dimensions.
- See page 39 for maintenance LED unit.
- Illuminated pushbuttons can be used with legend markings. Engraving can be done on a marking plate which is placed in the lens, or a clear film can be printed and placed in the lens. See page 42 for details on the marking plate and film.
- When using white lens unit (clear lens + white marking plate) with color codes A, G, R, or S, specify "W" before ② in the Part No.
Example: **LB3L-M1T14W②**

Round / Square Illuminated Pushbuttons with Guard

Package Quantity:1

Shape	Operation	Contact Material	Operating Voltage	Contact	Part No. (Ordering No.)				② Color Code
					Standard Bezel		Flush Bezel		
					Solder/Tab Terminal	PC Board Terminal	Solder/Tab Terminal	PC Board Terminal	
Flush Bezel with Round Guard (flush lens) LB6GL-M1 LB6GL-A1  	Momentary	Gold	5V DC	SPDT	Use with an optional switchguard (AL-K6SP)	LB6GL-M1T11②	LB6GL-M1T11V②	A G P W R S W Y	
				DPDT		LB6GL-M1T21②	LB6GL-M1T21V②		
			12V AC/DC	SPDT		LB6GL-M1T13②	LB6GL-M1T13V②		
				DPDT		LB6GL-M1T23②	LB6GL-M1T23V②		
			24V AC/DC	SPDT		LB6GL-M1T14②	LB6GL-M1T14V②		
				DPDT		LB6GL-M1T24②	LB6GL-M1T24V②		
		Silver	5V DC	SPDT		LB6GL-M1T51②	—		
				DPDT		LB6GL-M1T61②	—		
			12V AC/DC	SPDT		LB6GL-M1T53②	—		
				DPDT		LB6GL-M1T63②	—		
			24V AC/DC	SPDT		LB6GL-M1T54②	—		
				DPDT		LB6GL-M1T64②	—		
	Maintained	Gold	5V DC	SPDT		LB6GL-A1T11②	LB6GL-A1T11V②		
				DPDT		LB6GL-A1T21②	LB6GL-A1T21V②		
			12V AC/DC	SPDT		LB6GL-A1T13②	LB6GL-A1T13V②		
				DPDT		LB6GL-A1T23②	LB6GL-A1T23V②		
			24V AC/DC	SPDT		LB6GL-A1T14②	LB6GL-A1T14V②		
				DPDT		LB6GL-A1T24②	LB6GL-A1T24V②		
		Silver	5V DC	SPDT		LB6GL-A1T51②	—		
				DPDT		LB6GL-A1T61②	—		
			12V AC/DC	SPDT		LB6GL-A1T53②	—		
				DPDT		LB6GL-A1T63②	—		
			24V AC/DC	SPDT		LB6GL-A1T54②	—		
				DPDT		LB6GL-A1T64②	—		
Flush Bezel with Square Guard (flush lens) LB7GL-M1 LB7GL-A1  	Momentary	Gold	5V DC	SPDT	LB7GL-M1T11②	LB7GL-M1T11V②	A G P W R S W Y		
				DPDT	LB7GL-M1T21②	LB7GL-M1T21V②			
			12V AC/DC	SPDT	LB7GL-M1T13②	LB7GL-M1T13V②			
				DPDT	LB7GL-M1T23②	LB7GL-M1T23V②			
			24V AC/DC	SPDT	LB7GL-M1T14②	LB7GL-M1T14V②			
				DPDT	LB7GL-M1T24②	LB7GL-M1T24V②			
		Silver	5V DC	SPDT	LB7GL-M1T51②	—			
				DPDT	LB7GL-M1T61②	—			
			12V AC/DC	SPDT	LB7GL-M1T53②	—			
				DPDT	LB7GL-M1T63②	—			
			24V AC/DC	SPDT	LB7GL-M1T54②	—			
				DPDT	LB7GL-M1T64②	—			
	Maintained	Gold	5V DC	SPDT	LB7GL-A1T11②	LB7GL-A1T11V②			
				DPDT	LB7GL-A1T21②	LB7GL-A1T21V②			
			12V AC/DC	SPDT	LB7GL-A1T13②	LB7GL-A1T13V②			
				DPDT	LB7GL-A1T23②	LB7GL-A1T23V②			
			24V AC/DC	SPDT	LB7GL-A1T14②	LB7GL-A1T14V②			
				DPDT	LB7GL-A1T24②	LB7GL-A1T24V②			
		Silver	5V DC	SPDT	LB7GL-A1T51②	—			
				DPDT	LB7GL-A1T61②	—			
			12V AC/DC	SPDT	LB7GL-A1T53②	—			
				DPDT	LB7GL-A1T63②	—			
			24V AC/DC	SPDT	LB7GL-A1T54②	—			
				DPDT	LB7GL-A1T64②	—			

- Specify the color code in place of ② in the Part No.: A (amber), G (green), PW (pure white), R (red), S (blue), W (white), Y (yellow)
- Illuminated pushbuttons contain an LED unit.
- See page 26 for dimensions.
- See page 39 for maintenance LED unit.
- Illuminated pushbuttons can be used with legend markings. Engraving can be done on a marking plate which is placed in the lens, or a clear film can be printed and placed in the lens. For details on the marking plate and film, see page 42.
- When using white lens unit (clear lens + white marking plate) with color codes A, G, R, or S, specify "W" before ② in the Part No.
Example: **LB6GL-M1T11W②**

LB Series Illuminated Pushbuttons

Rectangular Illuminated Pushbuttons with Guard

Package Quantity: 1

Shape	Operation	Contact Material	Operating Voltage	Contact	Part No. (Ordering No.)				② Color Code
					Standard Bezel		Flush Bezel		
					Solder/Tab Terminal	PC Board Terminal	Solder/Tab Terminal	PC Board Terminal	
Flush Bezel with Rectangular Guard (flush lens) LB8GL-M1 LB8GL-A1  	Momentary	Gold	5V DC	SPDT	Use with an optional switchguard (AL-KH6SP)	LB8GL-M1T11②	LB8GL-M1T11V②	A G PW R S W Y	
				DPDT		LB8GL-M1T21②	LB8GL-M1T21V②		
			12V AC/DC	SPDT		LB8GL-M1T13②	LB8GL-M1T13V②		
				DPDT		LB8GL-M1T23②	LB8GL-M1T23V②		
			24V AC/DC	SPDT		LB8GL-M1T14②	LB8GL-M1T14V②		
				DPDT		LB8GL-M1T24②	LB8GL-M1T24V②		
		Silver	5V DC	SPDT		LB8GL-M1T51②	—		
				DPDT		LB8GL-M1T61②	—		
			12V AC/DC	SPDT		LB8GL-M1T53②	—		
				DPDT		LB8GL-M1T63②	—		
			24V AC/DC	SPDT		LB8GL-M1T54②	—		
				DPDT		LB8GL-M1T64②	—		
	Maintained	Gold	5V DC	SPDT		LB8GL-A1T11②	LB8GL-A1T11V②		
				DPDT		LB8GL-A1T21②	LB8GL-A1T21V②		
			12V AC/DC	SPDT		LB8GL-A1T13②	LB8GL-A1T13V②		
				DPDT		LB8GL-A1T23②	LB8GL-A1T23V②		
			24V AC/DC	SPDT		LB8GL-A1T14②	LB8GL-A1T14V②		
				DPDT		LB8GL-A1T24②	LB8GL-A1T24V②		
		Silver	5V DC	SPDT		LB8GL-A1T51②	—		
				DPDT		LB8GL-A1T61②	—		
			12V AC/DC	SPDT		LB8GL-A1T53②	—		
				DPDT		LB8GL-A1T63②	—		
			24V AC/DC	SPDT		LB8GL-A1T54②	—		
				DPDT		LB8GL-A1T64②	—		

- Specify the color code in place of ② in the Part No.: A (amber), G (green), PW (pure white), R (red), S (blue), W (white), Y (yellow)
- Illuminated pushbuttons contain an LED unit.
- See page 26 for dimensions.
- See page 39 for maintenance LED unit.
- Illuminated pushbuttons can be used with legend markings. Engraving can be done on a marking plate which is placed in the lens, or a clear film can be printed and placed in the lens. For details on the marking plate and film, see page 42.
- When using white lens unit (clear lens + white marking plate) with color codes A, G, R, or S, specify "W" before ② in the Part No.
Example: **LB6GL-M1T11W②**

Round / Square Pilot Lights

Package Quantity: 1

Shape	Operating Voltage	Part No. (Ordering No.)				② Color Code
		Standard Bezel		Flush Bezel		
		Solder/Tab Terminal	PC Board Terminal	Solder/Tab Terminal	PC Board Terminal	
Standard Bezel Round LB1P 	5V DC	LB1P-1T01②	LB1P-1T01V②	LB6□P-1T01②	LB6□P-1T01V②	A G PW R S W Y
	12V AC/DC	LB1P-1T03②	LB1P-1T03V②	LB6□P-1T03②	LB6□P-1T03V②	
	24V AC/DC	LB1P-1T04②	LB1P-1T04V②	LB6□P-1T04②	LB6□P-1T04V②	
Flush Bezel Round (Flush Lens) LB6□P  Metal Bezel  Black Bezel 						
Standard Bezel Square LB2P 	5V DC	LB2P-1T01②	LB2P-1T01V②	LB7□P-1T01②	LB7□P-1T01V②	A G PW R S W Y
	12V AC/DC	LB2P-1T03②	LB2P-1T03V②	LB7□P-1T03②	LB7□P-1T03V②	
	24V AC/DC	LB2P-1T04②	LB2P-1T04V②	LB7□P-1T04②	LB7□P-1T04V②	
Flush Bezel Square (Flush Lens) LB7□P  Metal Bezel  Black Bezel 						

- Specify the bezel color in place of □ in the Part No.: M (metal), Blank (black)
- Specify the color code in place of ② in the Part No.: A (amber), G (green), PW (pure white), R (red), S (blue), W (white), Y (yellow)
- Illuminated pushbuttons contain an LED unit.
- See page 27 for dimensions.
- See page 39 for maintenance LED unit.
- When using white lens unit (clear lens + white marking plate) with color codes A, G, R, or S, specify "W" before ② in the Part No.
Example: **LB1P-1T04W②**

LB Series Pilot Lights

Rectangular / Rectangular with 3-sided Barrier Pilot Lights

Package Quantity: 1

Shape	Operating Voltage	Part No. (Ordering No.)				② Color Code
		Standard Bezel		Flush Bezel		
		Solder/Tab Terminal	PC Board Terminal	Solder/Tab Terminal	PC Board Terminal	
Standard Bezel Rectangular LB3P  Flush Bezel Rectangular (flush lens) LB8□P  Metal Bezel  Black Bezel  	5V DC	LB3P-1T01②	LB3P-1T01V②	LB8□P-1T01②	LB8□P-1T01V②	A G PW R S W Y
	12V AC/DC	LB3P-1T03②	LB3P-1T03V②	LB8□P-1T03②	LB8□P-1T03V②	
	24V AC/DC	LB3P-1T04②	LB3P-1T04V②	LB8□P-1T04②	LB8□P-1T04V②	
Standard Bezel Rectangular with 3-sided LB4P  	5V DC	LB4P-1T01②	LB4P-1T01V②			A G PW R S W Y
	12V AC/DC	LB4P-1T03②	LB4P-1T03V②			
	24V AC/DC	LB4P-1T04②	LB4P-1T04V②			

- Specify the bezel color in place of □ in the Part No.: M (metal), Blank (black)
- Specify the color code in place of ② in the Part No.: A (amber), G (green), PW (pure white), R (red), S (blue), W (white), Y (yellow)
- Pilot lights contain an LED unit.
- See page 27 for dimensions.
- See page 39 for maintenance LED unit.
- When using white lens unit (clear lens + white marking plate) with color codes A, G, R, or S, specify "W" before ② in the Part No.
Example: **LB1P-1T04W②**

Round / Square Pushbuttons

Package Quantity: 1

Shape	Button Style	Operation	Contact Material	Contact	Part No. (Ordering No.)				② Color Code
					Standard Bezel		Flush Bezel		
					Solder/Tab Terminal	PC Board Terminal	Solder/Tab Terminal	PC Board Terminal	
Standard Bezel Round LB1B  Flush Bezel Round (flush lens) LB6□B-M1 LB6□B-A1  Metal Bezel  Black Bezel  	Button	Momentary	Gold	SPDT	LB1B-M1T1②	LB1B-M1T1V②	LB6□B-M1T1②	LB6□B-M1T1V②	B G R S Y W
				DPDT	LB1B-M1T2②	LB1B-M1T2V②	LB6□B-M1T2②	LB6□B-M1T2V②	
				3PDT	LB1B-M1T3②	LB1B-M1T3V②	LB6□B-M1T3②	LB6□B-M1T3V②	
			Silver	SPDT	LB1B-M1T5②	—	LB6□B-M1T5②	—	
				DPDT	LB1B-M1T6②	—	LB6□B-M1T6②	—	
				3PDT	LB1B-M1T7②	—	LB6□B-M1T7②	—	
		Maintained	Gold	SPDT	LB1B-A1T1②	LB1B-A1T1V②	LB6□B-A1T1②	LB6□B-A1T1V②	
				DPDT	LB1B-A1T2②	LB1B-A1T2V②	LB6□B-A1T2②	LB6□B-A1T2V②	
				3PDT	LB1B-A1T3②	LB1B-A1T3V②	LB6□B-A1T3②	LB6□B-A1T3V②	
			Silver	SPDT	LB1B-A1T5②	—	LB6□B-A1T5②	—	
				DPDT	LB1B-A1T6②	—	LB6□B-A1T6②	—	
				3PDT	LB1B-A1T7②	—	LB6□B-A1T7②	—	
	Illuminated Lens	Momentary	Gold	SPDT	LB1B-M1T1L②	LB1B-M1T1VL②	LB6□B-M1T1L②	LB6□B-M1T1VL②	A G R S Y W
				DPDT	LB1B-M1T2L②	LB1B-M1T2VL②	LB6□B-M1T2L②	LB6□B-M1T2VL②	
				3PDT	LB1B-M1T3L②	LB1B-M1T3VL②	LB6□B-M1T3L②	LB6□B-M1T3VL②	
			Silver	SPDT	LB1B-M1T5L②	—	LB6□B-M1T5L②	—	
				DPDT	LB1B-M1T6L②	—	LB6□B-M1T6L②	—	
				3PDT	LB1B-M1T7L②	—	LB6□B-M1T7L②	—	
		Maintained	Gold	SPDT	LB1B-A1T1L②	LB1B-A1T1VL②	LB6□B-A1T1L②	LB6□B-A1T1VL②	
				DPDT	LB1B-A1T2L②	LB1B-A1T2VL②	LB6□B-A1T2L②	LB6□B-A1T2VL②	
				3PDT	LB1B-A1T3L②	LB1B-A1T3VL②	LB6□B-A1T3L②	LB6□B-A1T3VL②	
			Silver	SPDT	LB1B-A1T5L②	—	LB6□B-A1T5L②	—	
				DPDT	LB1B-A1T6L②	—	LB6□B-A1T6L②	—	
				3PDT	LB1B-A1T7L②	—	LB6□B-A1T7L②	—	
Standard Bezel Square LB2B  Flush Bezel Square (flush lens) LB7□B-M1 LB7□B-A1  Metal Bezel  Black Bezel  	Button	Momentary	Gold	SPDT	LB2B-M1T1②	LB2B-M1T1V②	LB7□B-M1T1②	LB7□B-M1T1V②	B G R S Y W
				DPDT	LB2B-M1T2②	LB2B-M1T2V②	LB7□B-M1T2②	LB7□B-M1T2V②	
				3PDT	LB2B-M1T3②	LB2B-M1T3V②	LB7□B-M1T3②	LB7□B-M1T3V②	
			Silver	SPDT	LB2B-M1T5②	—	LB7□B-M1T5②	—	
				DPDT	LB2B-M1T6②	—	LB7□B-M1T6②	—	
				3PDT	LB2B-M1T7②	—	LB7□B-M1T7②	—	
		Maintained	Gold	SPDT	LB2B-A1T1②	LB2B-A1T1V②	LB7□B-A1T1②	LB7□B-A1T1V②	
				DPDT	LB2B-A1T2②	LB2B-A1T2V②	LB7□B-A1T2②	LB7□B-A1T2V②	
				3PDT	LB2B-A1T3②	LB2B-A1T3V②	LB7□B-A1T3②	LB7□B-A1T3V②	
			Silver	SPDT	LB2B-A1T5②	—	LB7□B-A1T5②	—	
				DPDT	LB2B-A1T6②	—	LB7□B-A1T6②	—	
				3PDT	LB2B-A1T7②	—	LB7□B-A1T7②	—	
	Illuminated Lens	Momentary	Gold	SPDT	LB2B-M1T1L②	LB2B-M1T1VL②	LB7□B-M1T1L②	LB7□B-M1T1VL②	A G R S Y W
				DPDT	LB2B-M1T2L②	LB2B-M1T2VL②	LB7□B-M1T2L②	LB7□B-M1T2VL②	
				3PDT	LB2B-M1T3L②	LB2B-M1T3VL②	LB7□B-M1T3L②	LB7□B-M1T3VL②	
			Silver	SPDT	LB2B-M1T5L②	—	LB7□B-M1T5L②	—	
				DPDT	LB2B-M1T6L②	—	LB7□B-M1T6L②	—	
				3PDT	LB2B-M1T7L②	—	LB7□B-M1T7L②	—	
		Maintained	Gold	SPDT	LB2B-A1T1L②	LB2B-A1T1VL②	LB7□B-A1T1L②	LB7□B-A1T1VL②	
				DPDT	LB2B-A1T2L②	LB2B-A1T2VL②	LB7□B-A1T2L②	LB7□B-A1T2VL②	
				3PDT	LB2B-A1T3L②	LB2B-A1T3VL②	LB7□B-A1T3L②	LB7□B-A1T3VL②	
			Silver	SPDT	LB2B-A1T5L②	—	LB7□B-A1T5L②	—	
				DPDT	LB2B-A1T6L②	—	LB7□B-A1T6L②	—	
				3PDT	LB2B-A1T7L②	—	LB7□B-A1T7L②	—	

- Specify the bezel color in place of □ in the Part No.: M (metal), Blank (black)
- For buttons, specify the color code in place of ② in the Part No.: B (black), G (green), R (red), S (blue), W (white), Y (yellow)
- For illuminated lens, specify the color code in place of ② in the Part No.: A (amber), G (green), R (red), S (blue), W (white), Y (yellow)
- See page 28 and 29 for dimensions.
- Illuminated pushbuttons can be used with legend markings. Engraving can be done on a marking plate which is placed in the lens, or a clear film can be printed and placed in the lens. For details on the marking plate and film, see page 42.
- Black is available for illuminated lens. Black illuminated lens consists of a transparent lens and a black marking plate. Specify "B" in place of ② in the Part No. Example: **LB1B-M1T1LB**

LB Series Pushbuttons

Rectangular / Rectangular with 3-sided Barrier Pushbuttons

Package Quantity: 1

Shape	Button Style	Operation	Contact Material	Contact	Part No. (Ordering No.)				② Color Code
					Standard Bezel		Flush Bezel		
					Solder/Tab Terminal	PC Board Terminal	Solder/Tab Terminal	PC Board Terminal	
Standard Bezel Rectangular LB3B  Flush Bezel Rectangular (flush lens) LB8□B-M1 LB8□B-A1  Metal Bezel  Black Bezel 	Button	Momentary	Gold	SPDT	LB3B-M1T1②	LB3B-M1T1V②	LB8□B-M1T1②	LB8□B-M1T1V②	B G R S W Y
				DPDT	LB3B-M1T2②	LB3B-M1T2V②	LB8□B-M1T2②	LB8□B-M1T2V②	
				SPDT	LB3B-M1T3②	LB3B-M1T3V②	LB8□B-M1T3②	LB8□B-M1T3V②	
			Silver	DPDT	LB3B-M1T5②	—	LB8□B-M1T5②	—	
				SPDT	LB3B-M1T6②	—	LB8□B-M1T6②	—	
		Maintained	Gold	DPDT	LB3B-M1T7②	—	LB8□B-M1T7②	—	
				SPDT	LB3B-A1T1②	LB3B-A1T1V②	LB8□B-A1T1②	LB8□B-A1T1V②	
				DPDT	LB3B-A1T2②	LB3B-A1T2V②	LB8□B-A1T2②	LB8□B-A1T2V②	
			Silver	SPDT	LB3B-A1T3②	LB3B-A1T3V②	LB8□B-A1T3②	LB8□B-A1T3V②	
				DPDT	LB3B-A1T5②	—	LB8□B-A1T5②	—	
	Illuminated Lens	Momentary	Gold	SPDT	LB3B-A1T6②	—	LB8□B-A1T6②	—	
				DPDT	LB3B-A1T7②	—	LB8□B-A1T7②	—	
				Silver	SPDT	LB3B-M1T1L②	LB3B-M1T1VL②	LB8□B-M1T1L②	LB8□B-M1T1VL②
					DPDT	LB3B-M1T2L②	LB3B-M1T2VL②	LB8□B-M1T2L②	LB8□B-M1T2VL②
				Silver	SPDT	LB3B-M1T3L②	LB3B-M1T3VL②	LB8□B-M1T3L②	LB8□B-M1T3VL②
			DPDT		LB3B-M1T5L②	—	LB8□B-M1T5L②	—	
			Maintained	Gold	SPDT	LB3B-M1T6L②	—	LB8□B-M1T6L②	—
					DPDT	LB3B-M1T7L②	—	LB8□B-M1T7L②	—
					Silver	SPDT	LB3B-A1T1L②	LB3B-A1T1VL②	LB8□B-A1T1L②
				DPDT		LB3B-A1T2L②	LB3B-A1T2VL②	LB8□B-A1T2L②	LB8□B-A1T2VL②
Standard Bezel Rectangular with 3-sided Barrier LB4B  	Button	Momentary		Gold	SPDT	LB4B-M1T1②	LB4B-M1T1V②		
			DPDT		LB4B-M1T2②	LB4B-M1T2V②			
			SPDT		LB4B-M1T3②	LB4B-M1T3V②			
			Silver	DPDT	LB4B-M1T5②	—			
				SPDT	LB4B-M1T6②	—			
		Maintained	Gold	DPDT	LB4B-M1T7②	—			
				SPDT	LB4B-A1T1②	LB4B-A1T1V②			
				DPDT	LB4B-A1T2②	LB4B-A1T2V②			
			Silver	SPDT	LB4B-A1T3②	LB4B-A1T3V②			
				DPDT	LB4B-A1T5②	—			
	Illuminated Lens	Momentary	Gold	SPDT	LB4B-A1T6②	—			
				DPDT	LB4B-A1T7②	—			
				Silver	SPDT	LB4B-M1T1L②	LB4B-M1T1VL②		
					DPDT	LB4B-M1T2L②	LB4B-M1T2VL②		
				Silver	SPDT	LB4B-M1T3L②	LB4B-M1T3VL②		
			DPDT		LB4B-M1T5L②	—			
			Maintained	Gold	SPDT	LB4B-M1T6L②	—		
					DPDT	LB4B-M1T7L②	—		
					Silver	SPDT	LB4B-A1T1L②		
				DPDT		LB4B-A1T2L②	LB4B-A1T2VL②		
Silver	SPDT	LB4B-A1T3L②		LB4B-A1T3VL②					
	DPDT	LB4B-A1T5L②	—						
Silver	SPDT	LB4B-A1T6L②	—						
	DPDT	LB4B-A1T7L②	—						

- Specify the bezel color in place of □ in the Part No.: M (metal), Blank (black)
- For buttons, specify the color code in place of ② in the Part No.: B (black), G (green), R (red), S (blue), W (white), Y (yellow)
- For illuminated lens, specify the color code in place of ② in the Part No.: A (amber), G (green), R (red), S (blue), W (white), Y (yellow)
- See page 28 and 29 for dimensions.
- Illuminated pushbuttons can be used with legend markings. Engraving can be done on a marking plate which is placed in the lens, or a clear film can be printed and placed in the lens. For details on the marking plate and film, see page 42.
- Black is available for illuminated lens. Black illuminated lens consist of a transparent lens and a black marking plate. Specify "B" in place of ② in the Part No. Example: **LB3B-M1T1LB**

Round / Square Pushbuttons with Guard

Package Quantity: 1

Shape	Button Style	Operation	Contact Material	Contact	Part No. (Ordering No.)				② Color Code
					Standard Bezel		Flush Bezel		
					Solder/Tab Terminal	PC Board Terminal	Solder/Tab Terminal	PC Board Terminal	
Flush Bezel with Round Guard (flush button) LB6GB-M1 LB6GB-A1  	Button	Momentary	Gold	SPDT	Use with an optional switchguard (AL-K6SP)		LB6GB-M1T1②	LB6GB-M1T1V②	B G R Y S W
				DPDT			LB6GB-M1T2②	LB6GB-M1T2V②	
				3PDT			LB6GB-M1T3②	LB6GB-M1T3V②	
			Silver	SPDT			LB6GB-M1T5②	—	
				DPDT			LB6GB-M1T6②	—	
				3PDT			LB6GB-M1T7②	—	
		Maintained	Gold	SPDT			LB6GB-A1T1②	LB6GB-A1T1V②	
				DPDT			LB6GB-A1T2②	LB6GB-A1T2V②	
				3PDT			LB6GB-A1T3②	LB6GB-A1T3V②	
			Silver	SPDT			LB6GB-A1T5②	—	
				DPDT			LB6GB-A1T6②	—	
				3PDT			LB6GB-A1T7②	—	
	Illuminated Lens	Momentary	Gold	SPDT			LB6GB-M1T1L②	LB6GB-M1T1VL②	R G Y A W S
				DPDT			LB6GB-M1T2L②	LB6GB-M1T2VL②	
				3PDT			LB6GB-M1T3L②	LB6GB-M1T3VL②	
			Silver	SPDT			LB6GB-M1T5L②	—	
				DPDT			LB6GB-M1T6L②	—	
				3PDT			LB6GB-M1T7L②	—	
		Maintained	Gold	SPDT			LB6GB-A1T1L②	LB6GB-A1T1VL②	
				DPDT			LB6GB-A1T2L②	LB6GB-A1T2VL②	
				3PDT			LB6GB-A1T3L②	LB6GB-A1T3VL②	
			Silver	SPDT			LB6GB-A1T5L②	—	
				DPDT			LB6GB-A1T6L②	—	
				3PDT			LB6GB-A1T7L②	—	
Flush Bezel with Square Guard (flush button) LB7GB-M1 LB7GB-A1  	Button	Momentary	Gold	SPDT			LB7GB-M1T1②	LB7GB-M1T1V②	B G R S W Y
				DPDT			LB7GB-M1T2②	LB7GB-M1T2V②	
				3PDT			LB7GB-M1T3②	LB7GB-M1T3V②	
			Silver	SPDT			LB7GB-M1T5②	—	
				DPDT			LB7GB-M1T6②	—	
				3PDT			LB7GB-M1T7②	—	
		Maintained	Gold	SPDT			LB7GB-A1T1②	LB7GB-A1T1V②	
				DPDT			LB7GB-A1T2②	LB7GB-A1T2V②	
				3PDT			LB7GB-A1T3②	LB7GB-A1T3V②	
			Silver	SPDT			LB7GB-A1T5②	—	
				DPDT			LB7GB-A1T6②	—	
				3PDT			LB7GB-A1T7②	—	
	Illuminated Lens	Momentary	Gold	SPDT			LB7GB-M1T1L②	LB7GB-M1T1VL②	A G R S W Y
				DPDT			LB7GB-M1T2L②	LB7GB-M1T2VL②	
				3PDT			LB7GB-M1T3L②	LB7GB-M1T3VL②	
			Silver	SPDT			LB7GB-M1T5L②	—	
				DPDT			LB7GB-M1T6L②	—	
				3PDT			LB7GB-M1T7L②	—	
		Maintained	Gold	SPDT			LB7GB-A1T1L②	LB7GB-A1T1VL②	
				DPDT			LB7GB-A1T2L②	LB7GB-A1T2VL②	
				3PDT			LB7GB-A1T3L②	LB7GB-A1T3VL②	
			Silver	SPDT			LB7GB-A1T5L②	—	
				DPDT			LB7GB-A1T6L②	—	
				3PDT			LB7GB-A1T7L②	—	

- For buttons, specify the color code in place of ② in the Part No.: B (black), G (green), R (red), S (blue), W (white), Y (yellow)
- For illuminated lens, specify the color code in place of ② in the Part No.: A (amber), G (green), R (red), S (blue), W (white), Y (yellow)
- See page 30 for dimensions.
- Illuminated pushbuttons can be used with legend markings. Engraving can be done on a marking plate which is placed in the lens, or a clear film can be printed and placed in the lens. For details on the marking plate and film, see page 42.
- Black is available for illuminated lens. Black illuminated lens consist of a transparent lens and a black marking plate. Specify "B" in place of ② in the Part No. Example: **LB6GB-M1T1LB**

LB Series Pushbuttons

Rectangular Pushbuttons with Guard

Package Quantity: 1

Shape	Button Style	Operation	Contact Material	Contact	Part No. (Ordering No.)				② Color Code
					Standard Bezel		Flush Bezel		
					Solder/Tab Terminal	PC Board Terminal	Solder/Tab Terminal	PC Board Terminal	
Flush Bezel with Rectangular Guard (flush button) LB8GB-M1 LB8GB-A1  	Button	Momentary	Gold	SPDT	Use with an optional switchguard (AL-KH6SP)	LB8GB-M1T1②	LB8GB-M1T1V②	B G R Y S W	
				DPDT		LB8GB-M1T2②	LB8GB-M1T2V②		
				3PDT		LB8GB-M1T3②	LB8GB-M1T3V②		
			Silver	SPDT		LB8GB-M1T5②	—		
				DPDT		LB8GB-M1T6②	—		
				3PDT		LB8GB-M1T7②	—		
		Maintained	Gold	SPDT		LB8GB-A1T1②	LB8GB-A1T1V②		
				DPDT		LB8GB-A1T2②	LB8GB-A1T2V②		
				3PDT		LB8GB-A1T3②	LB8GB-A1T3V②		
			Silver	SPDT		LB8GB-A1T5②	—		
				DPDT		LB8GB-A1T6②	—		
				3PDT		LB8GB-A1T7②	—		
	Illuminated Lens	Momentary	Gold	SPDT		LB8GB-M1T1L②	LB8GB-M1T1VL②	A G R S W Y	
				DPDT		LB8GB-M1T2L②	LB8GB-M1T2VL②		
				3PDT		LB8GB-M1T3L②	LB8GB-M1T3VL②		
			Silver	SPDT		LB8GB-M1T5L②	—		
				DPDT		LB8GB-M1T6L②	—		
				3PDT		LB8GB-M1T7L②	—		
		Maintained	Gold	SPDT		LB8GB-A1T1L②	LB8GB-A1T1VL②		
				DPDT		LB8GB-A1T2L②	LB8GB-A1T2VL②		
				3PDT		LB8GB-A1T3L②	LB8GB-A1T3VL②		
			Silver	SPDT		LB8GB-A1T5L②	—		
				DPDT		LB8GB-A1T6L②	—		
				3PDT		LB8GB-A1T7L②	—		

- For buttons, specify the color code in place of ② in the Part No.: B (black), G (green), R (red), S (blue), W (white), Y (yellow)
- For illuminated lens, specify the color code in place of ② in the Part No.: A (amber), G (green), R (red), S (blue), W (white), Y (yellow)
- See page 30 for dimensions.
- Illuminated pushbuttons can be used with legend markings. Engraving can be done on a marking plate which is placed in the lens, or a clear film can be printed and placed in the lens. For details on the marking plate and film, see page 42.
- Black is available for illuminated lens. Black illuminated lens consist of a transparent lens and a black marking plate. Specify "B" in place of ② in the Part No. Example: **LB6GB-M1T1LB**

Round / Square Selector Switches

Package Quantity: 1

Shape	Operator Position		Contact		Part No. (Ordering No.)			
					Standard Bezel		Flush Bezel	
					Solder/Tab Terminal	PC Board Terminal	Solder/Tab Terminal	PC Board Terminal
Standard Bezel Round LB1S  Flush Bezel Round LB6□S  Metal Bezel  Black Bezel  	90° 2-position	Maintained 	Gold	SPDT	LB1S-2T1	LB1S-2T1V	LB6□S-2T1	LB6□S-2T1V
				DPDT	LB1S-2T2	LB1S-2T2V	LB6□S-2T2	LB6□S-2T2V
				3PDT	LB1S-2T3	LB1S-2T3V	LB6□S-2T3	LB6□S-2T3V
			Silver	SPDT	LB1S-2T5	—	LB6□S-2T5	—
				DPDT	LB1S-2T6	—	LB6□S-2T6	—
				3PDT	LB1S-2T7	—	LB6□S-2T7	—
		Spring return from right 	Gold	SPDT	LB1S-21T1	LB1S-21T1V	LB6□S-21T1	LB6□S-21T1V
				DPDT	LB1S-21T2	LB1S-21T2V	LB6□S-21T2	LB6□S-21T2V
				3PDT	LB1S-21T3	LB1S-21T3V	LB6□S-21T3	LB6□S-21T3V
			Silver	SPDT	LB1S-21T5	—	LB6□S-21T5	—
				DPDT	LB1S-21T6	—	LB6□S-21T6	—
				3PDT	LB1S-21T7	—	LB6□S-21T7	—
	45° 3-position	Maintained 	Gold	DPDT	LB1S-3T2	LB1S-3T2V	LB6□S-3T2	LB6□S-3T2V
				3PDT	LB1S-3T3	LB1S-3T3V	LB6□S-3T3	LB6□S-3T3V
			Silver	DPDT	LB1S-3T6	—	LB6□S-3T6	—
				3PDT	LB1S-3T7	—	LB6□S-3T7	—
		Spring return from right 	Gold	DPDT	LB1S-31T2	LB1S-31T2V	LB6□S-31T2	LB6□S-31T2V
				3PDT	LB1S-31T3	LB1S-31T3V	LB6□S-31T3	LB6□S-31T3V
			Silver	DPDT	LB1S-31T6	—	LB6□S-31T6	—
				3PDT	LB1S-31T7	—	LB6□S-31T7	—
		Spring return from left 	Gold	DPDT	LB1S-32T2	LB1S-32T2V	LB6□S-32T2	LB6□S-32T2V
				3PDT	LB1S-32T3	LB1S-32T3V	LB6□S-32T3	LB6□S-32T3V
			Silver	DPDT	LB1S-32T6	—	LB6□S-32T6	—
				3PDT	LB1S-32T7	—	LB6□S-32T7	—
		Spring return two-way 	Gold	DPDT	LB1S-33T2	LB1S-33T2V	LB6□S-33T2	LB6□S-33T2V
				3PDT	LB1S-33T3	LB1S-33T3V	LB6□S-33T3	LB6□S-33T3V
			Silver	DPDT	LB1S-33T6	—	LB6□S-33T6	—
				3PDT	LB1S-33T7	—	LB6□S-33T7	—
Standard Bezel Square LB2S  Flush Bezel Square LB7□S  Metal Bezel  Black Bezel  	90° 2-position	Maintained 	Gold	SPDT	LB2S-2T1	LB2S-2T1V	LB7□S-2T1	LB7□S-2T1V
				DPDT	LB2S-2T2	LB2S-2T2V	LB7□S-2T2	LB7□S-2T2V
				3PDT	LB2S-2T3	LB2S-2T3V	LB7□S-2T3	LB7□S-2T3V
			Silver	SPDT	LB2S-2T5	—	LB7□S-2T5	—
				DPDT	LB2S-2T6	—	LB7□S-2T6	—
				3PDT	LB2S-2T7	—	LB7□S-2T7	—
		Spring return from right 	Gold	SPDT	LB2S-21T1	LB2S-21T1V	LB7□S-21T1	LB7□S-21T1V
				DPDT	LB2S-21T2	LB2S-21T2V	LB7□S-21T2	LB7□S-21T2V
				3PDT	LB2S-21T3	LB2S-21T3V	LB7□S-21T3	LB7□S-21T3V
			Silver	SPDT	LB2S-21T5	—	LB7□S-21T5	—
				DPDT	LB2S-21T6	—	LB7□S-21T6	—
				3PDT	LB2S-21T7	—	LB7□S-21T7	—
	45° 3-position	Maintained 	Gold	DPDT	LB2S-3T2	LB2S-3T2V	LB7□S-3T2	LB7□S-3T2V
				3PDT	LB2S-3T3	LB2S-3T3V	LB7□S-3T3	LB7□S-3T3V
			Silver	DPDT	LB2S-3T6	—	LB7□S-3T6	—
				3PDT	LB2S-3T7	—	LB7□S-3T7	—
		Spring return from right 	Gold	DPDT	LB2S-31T2	LB2S-31T2V	LB7□S-31T2	LB7□S-31T2V
				3PDT	LB2S-31T3	LB2S-31T3V	LB7□S-31T3	LB7□S-31T3V
			Silver	DPDT	LB2S-31T6	—	LB7□S-31T6	—
				3PDT	LB2S-31T7	—	LB7□S-31T7	—
		Spring return from left 	Gold	DPDT	LB2S-32T2	LB2S-32T2V	LB7□S-32T2	LB7□S-32T2V
				3PDT	LB2S-32T3	LB2S-32T3V	LB7□S-32T3	LB7□S-32T3V
			Silver	DPDT	LB2S-32T6	—	LB7□S-32T6	—
				3PDT	LB2S-32T7	—	LB7□S-32T7	—
		Spring return two-way 	Gold	DPDT	LB2S-33T2	LB2S-33T2V	LB7□S-33T2	LB7□S-33T2V
				3PDT	LB2S-33T3	LB2S-33T3V	LB7□S-33T3	LB7□S-33T3V
			Silver	DPDT	LB2S-33T6	—	LB7□S-33T6	—
				3PDT	LB2S-33T7	—	LB7□S-33T7	—

- Specify the bezel color in place of □ in the Part No.: M (metal), Blank (black)
- For dimensions, see page 31 and 32.

Illuminated Pushbuttons

Pilot Lights

Pushbuttons

Selector Switches

Key Selector Switches

LB Series Selector Switches

Rectangular Selector Switches

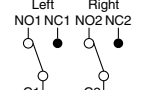
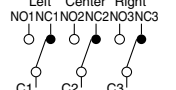
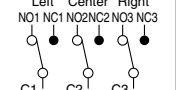
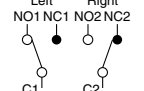
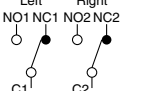
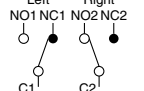
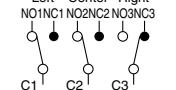
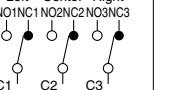
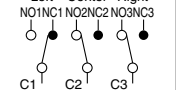
Package Quantity: 1

Shape	Operator Position		Contact		Part No. (Ordering No.)			
					Standard Bezel		Flush Bezel	
					Solder/Tab Terminal	PC Board Terminal	Solder/Tab Terminal	PC Board Terminal
Standard Bezel Rectangular LB3S 	90° 2-position	Maintained 	Gold	SPDT	LB3S-2T1	LB3S-2T1V	LB8□S-2T1	LB8□S-2T1V
				DPDT	LB3S-2T2	LB3S-2T2V	LB8□S-2T2	LB8□S-2T2V
				3PDT	LB3S-2T3	LB3S-2T3V	LB8□S-2T3	LB8□S-2T3V
		Silver	SPDT	LB3S-2T5	—	LB8□S-2T5	—	
			DPDT	LB3S-2T6	—	LB8□S-2T6	—	
			3PDT	LB3S-2T7	—	LB8□S-2T7	—	
	Spring return from right 	Gold	SPDT	LB3S-21T1	LB3S-21T1V	LB8□S-21T1	LB8□S-21T1V	
			DPDT	LB3S-21T2	LB3S-21T2V	LB8□S-21T2	LB8□S-21T2V	
			3PDT	LB3S-21T3	LB3S-21T3V	LB8□S-21T3	LB8□S-21T3V	
		Silver	SPDT	LB3S-21T5	—	LB8□S-21T5	—	
			DPDT	LB3S-21T6	—	LB8□S-21T6	—	
			3PDT	LB3S-21T7	—	LB8□S-21T7	—	
45° 3-position	Maintained 	Gold	DPDT	LB3S-3T2	LB3S-3T2V	LB8□S-3T2	LB8□S-3T2V	
			3PDT	LB3S-3T3	LB3S-3T3V	LB8□S-3T3	LB8□S-3T3V	
			Silver	DPDT	LB3S-3T6	—	LB8□S-3T6	—
		3PDT		LB3S-3T7	—	LB8□S-3T7	—	
		Spring return from right 		Gold	DPDT	LB3S-31T2	LB3S-31T2V	LB8□S-31T2
			3PDT		LB3S-31T3	LB3S-31T3V	LB8□S-31T3	LB8□S-31T3V
	Silver		DPDT		LB3S-31T6	—	LB8□S-31T6	—
			3PDT	LB3S-31T7	—	LB8□S-31T7	—	
			Spring return from left 	Gold	DPDT	LB3S-32T2	LB3S-32T2V	LB8□S-32T2
	3PDT				LB3S-32T3	LB3S-32T3V	LB8□S-32T3	LB8□S-32T3V
	Silver	DPDT			LB3S-32T6	—	LB8□S-32T6	—
		3PDT		LB3S-32T7	—	LB8□S-32T7	—	
		Spring return two-way 		Gold	DPDT	LB3S-33T2	LB3S-33T2V	LB8□S-33T2
	3PDT				LB3S-33T3	LB3S-33T3V	LB8□S-33T3	LB8□S-33T3V
	Silver		DPDT		LB3S-33T6	—	LB8□S-33T6	—
			3PDT	LB3S-33T7	—	LB8□S-33T7	—	



- Specify the bezel color in place of □ in the Part No.: M (metal), Blank (black)
- For dimensions, see page 31 and 32.

Contact Operation

Operator Position & Contact Operation (Top View)					
Position		Contact	↙ Left	↑ Center	↘ Right
90° 2-position	 Maintained	SPDT			
		DPDT			
					
45° 3-position	 Maintained	DPDT			
		3PDT			

Round Key Selector Switches

Package Quantity: 1

Shape	Operator Position		Key retained at ●	Contact	Part No. (Ordering No.)				
					Standard Bezel		Flush Bezel		
					Solder/Tab Terminal	PC Board Terminal	Solder/Tab Terminal	PC Board Terminal	
Standard Bezel Round LB1K	90° 2-position	Maintained	A		Gold	SPDT LB1K-2ST1A	LB1K-2ST1VA	LB6□K-2ST1A	LB6□K-2ST1VA
DPDT LB1K-2ST2A					LB1K-2ST2VA	LB6□K-2ST2A	LB6□K-2ST2VA		
3PDT LB1K-2ST3A					LB1K-2ST3VA	LB6□K-2ST3A	LB6□K-2ST3VA		
Silver				SPDT LB1K-2ST5A	—	LB6□K-2ST5A	—		
DPDT LB1K-2ST6A				—	LB6□K-2ST6A	—			
3PDT LB1K-2ST7A				—	LB6□K-2ST7A	—			
B				Gold	SPDT LB1K-2ST1B	LB1K-2ST1VB	LB6□K-2ST1B	LB6□K-2ST1VB	
				DPDT LB1K-2ST2B	LB1K-2ST2VB	LB6□K-2ST2B	LB6□K-2ST2VB		
				3PDT LB1K-2ST3B	LB1K-2ST3VB	LB6□K-2ST3B	LB6□K-2ST3VB		
			Silver	SPDT LB1K-2ST5B	—	LB6□K-2ST5B	—		
			DPDT LB1K-2ST6B	—	LB6□K-2ST6B	—			
			3PDT LB1K-2ST7B	—	LB6□K-2ST7B	—			
C		Gold	SPDT LB1K-2ST1C	LB1K-2ST1VC	LB6□K-2ST1C	LB6□K-2ST1VC			
		DPDT LB1K-2ST2C	LB1K-2ST2VC	LB6□K-2ST2C	LB6□K-2ST2VC				
		3PDT LB1K-2ST3C	LB1K-2ST3VC	LB6□K-2ST3C	LB6□K-2ST3VC				
	Silver	SPDT LB1K-2ST5C	—	LB6□K-2ST5C	—				
	DPDT LB1K-2ST6C	—	LB6□K-2ST6C	—					
	3PDT LB1K-2ST7C	—	LB6□K-2ST7C	—					
Spring return from right	B		Gold	SPDT LB1K-21ST1B	LB1K-21ST1VB	LB6□K-21ST1B	LB6□K-21ST1VB		
			DPDT LB1K-21ST2B	LB1K-21ST2VB	LB6□K-21ST2B	LB6□K-21ST2VB			
			3PDT LB1K-21ST3B	LB1K-21ST3VB	LB6□K-21ST3B	LB6□K-21ST3VB			
			Silver	SPDT LB1K-21ST5B	—	LB6□K-21ST5B	—		
			DPDT LB1K-21ST6B	—	LB6□K-21ST6B	—			
			3PDT LB1K-21ST7B	—	LB6□K-21ST7B	—			
45° 3-position	Maintained	A		Gold	DPDT LB1K-3ST2A	LB1K-3ST2VA	LB6□K-3ST2A	LB6□K-3ST2VA	
				3PDT LB1K-3ST3A	LB1K-3ST3VA	LB6□K-3ST3A	LB6□K-3ST3VA		
				Silver	DPDT LB1K-3ST6A	—	LB6□K-3ST6A	—	
			3PDT LB1K-3ST7A	—	LB6□K-3ST7A	—			
			B		Gold	DPDT LB1K-3ST2B	LB1K-3ST2VB	LB6□K-3ST2B	LB6□K-3ST2VB
					3PDT LB1K-3ST3B	LB1K-3ST3VB	LB6□K-3ST3B	LB6□K-3ST3VB	
		Silver			DPDT LB1K-3ST6B	—	LB6□K-3ST6B	—	
		3PDT LB1K-3ST7B	—	LB6□K-3ST7B	—				
		C		Gold	DPDT LB1K-3ST2C	LB1K-3ST2VC	LB6□K-3ST2C	LB6□K-3ST2VC	
				3PDT LB1K-3ST3C	LB1K-3ST3VC	LB6□K-3ST3C	LB6□K-3ST3VC		
				Silver	DPDT LB1K-3ST6C	—	LB6□K-3ST6C	—	
		3PDT LB1K-3ST7C	—	LB6□K-3ST7C	—				
		D		Gold	DPDT LB1K-3ST2D	LB1K-3ST2VD	LB6□K-3ST2D	LB6□K-3ST2VD	
				3PDT LB1K-3ST3D	LB1K-3ST3VD	LB6□K-3ST3D	LB6□K-3ST3VD		
				Silver	DPDT LB1K-3ST6D	—	LB6□K-3ST6D	—	
		3PDT LB1K-3ST7D	—	LB6□K-3ST7D	—				
		E		Gold	DPDT LB1K-3ST2E	LB1K-3ST2VE	LB6□K-3ST2E	LB6□K-3ST2VE	
				3PDT LB1K-3ST3E	LB1K-3ST3VE	LB6□K-3ST3E	LB6□K-3ST3VE		
				Silver	DPDT LB1K-3ST6E	—	LB6□K-3ST6E	—	
		3PDT LB1K-3ST7E	—	LB6□K-3ST7E	—				
		G		Gold	DPDT LB1K-3ST2G	LB1K-3ST2VG	LB6□K-3ST2G	LB6□K-3ST2VG	
				3PDT LB1K-3ST3G	LB1K-3ST3VG	LB6□K-3ST3G	LB6□K-3ST3VG		
				Silver	DPDT LB1K-3ST6G	—	LB6□K-3ST6G	—	
		3PDT LB1K-3ST7G	—	LB6□K-3ST7G	—				
		H		Gold	DPDT LB1K-3ST2H	LB1K-3ST2VH	LB6□K-3ST2H	LB6□K-3ST2VH	
				3PDT LB1K-3ST3H	LB1K-3ST3VH	LB6□K-3ST3H	LB6□K-3ST3VH		
				Silver	DPDT LB1K-3ST6H	—	LB6□K-3ST6H	—	
		3PDT LB1K-3ST7H	—	LB6□K-3ST7H	—				


Flush Bezel
Round
LB6□K


Metal Bezel


Black Bezel



- Specify the bezel color in place of □ in the Part No.: M (metal), Blank (black)
- Key is retained at ● and removable at ○ positions.
- Two keys are supplied.
- For dimensions, see page 33 and 34.
- Pin tumbler keys also available. (The key AS6-SK-132 is also used with A6/L6 series key selector switches.) Remove the letter "S" before the "T" from the part no.
Example: **LB1K-2T1A**
- Besides the standard key (key number 0H), six other keys are available.
To order other keys, specify the key number as shown below:
Example: **LB1K-2ST1A-1H**

(blank): Standard key (0H)
1H to 2H: Reversible key
3H to 6H: Non-reversible key

Note:
Key number is indicated on the key cylinder.
Standard keys do not have a key number indication.

LB Series Key Selector Switches

Round Key Selector Switches

Package Quantity: 1

Shape	Operator Position	Key retained at ●	Contact	Part No. (Ordering No.)						
				Standard Bezel		Flush Bezel				
				Solder/Tab Terminal	PC Board Terminal	Solder/Tab Terminal	PC Board Terminal			
Standard Bezel Round LB1K  Flush Bezel Round LB6□K  Metal Bezel  Black Bezel  	45° 3-position	Spring return from right	B		Gold	DPDT	LB1K-31ST2B	LB1K-31ST2VB	LB6□K-31ST2B	LB6□K-31ST2VB
					Silver	3PDT	LB1K-31ST3B	LB1K-31ST3VB	LB6□K-31ST3B	LB6□K-31ST3VB
			D		Gold	DPDT	LB1K-31ST2D	LB1K-31ST2VD	LB6□K-31ST2D	LB6□K-31ST2VD
					Silver	3PDT	LB1K-31ST3D	LB1K-31ST3VD	LB6□K-31ST3D	LB6□K-31ST3VD
			G		Gold	DPDT	LB1K-31ST2G	LB1K-31ST2VG	LB6□K-31ST2G	LB6□K-31ST2VG
					Silver	3PDT	LB1K-31ST3G	LB1K-31ST3VG	LB6□K-31ST3G	LB6□K-31ST3VG
		Spring return from left	C		Gold	DPDT	LB1K-32ST2C	LB1K-32ST2VC	LB6□K-32ST2C	LB6□K-32ST2VC
					Silver	3PDT	LB1K-32ST3C	LB1K-32ST3VC	LB6□K-32ST3C	LB6□K-32ST3VC
			D		Gold	DPDT	LB1K-32ST6C	—	LB6□K-32ST6C	—
					Silver	3PDT	LB1K-32ST7C	—	LB6□K-32ST7C	—
			H		Gold	DPDT	LB1K-32ST2H	LB1K-32ST2VH	LB6□K-32ST2H	LB6□K-32ST2VH
					Silver	3PDT	LB1K-32ST3H	LB1K-32ST3VH	LB6□K-32ST3H	LB6□K-32ST3VH
	Spring return two-way	D		Gold	DPDT	LB1K-33ST2D	LB1K-33ST2VD	LB6□K-33ST2D	LB6□K-33ST2VD	
				Silver	3PDT	LB1K-33ST3D	LB1K-33ST3VD	LB6□K-33ST3D	LB6□K-33ST3VD	
		D		Gold	DPDT	LB1K-33ST6D	—	LB6□K-33ST6D	—	
				Silver	3PDT	LB1K-33ST7D	—	LB6□K-33ST7D	—	

- Specify the bezel color in place of □ in the Part No.: M (metal), Blank (black)
- Key is retained at ● and removable at ○ positions.
- Two keys are supplied.
- For dimensions, see page 33 and 34.
- Pin tumbler keys also available. (The key AS6-SK-132 is also used for A6/L6 series key selector switches.)
- Remove the letter "S" before the "T" from the part no. Example: **LB1K-31T2B**
- Besides the standard key (key number 0H), six other keys are available.

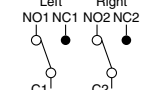
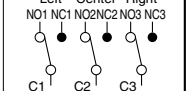
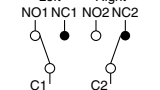
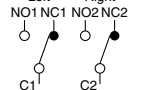
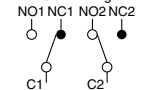
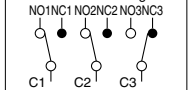
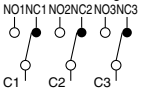
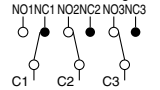
To order other keys, specify the key number as shown below:

Example: **LB1K-2ST2B-1H**

(blank): Standard key (0H)
1H to 2H: Reversible key
3H to 6H: Non-reversible key

Note:
Key number is indicated on the key cylinder.
Standard keys do not have a key number indication.

Contact Operation

Operator Position & Contact Operation (Top View)					
Position		Contact	Left	Center	Right
90° 2-position	 Maintained	SPDT			
		DPDT			
		3PDT			
45° 3-position	 Maintained	DPDT			
		3PDT			

Square Key Selector Switches

Package Quantity: 1

Shape	Operator Position		Key retained at ●		Contact		Part No. (Ordering No.)					
							Standard Bezel		Flush Bezel			
							Solder/Tab Terminal	PC Board Terminal	Solder/Tab Terminal	PC Board Terminal		
Standard Bezel Square LB2K  Flush Bezel Square LB7□K  Metal Bezel  Black Bezel 	90° 2-position	Maintained	A		Gold	SPDT	LB2K-2ST1A	LB2K-2ST1VA	LB7□K-2ST1A	LB7□K-2ST1VA		
						DPDT	LB2K-2ST2A	LB2K-2ST2VA	LB7□K-2ST2A	LB7□K-2ST2VA		
						3PDT	LB2K-2ST3A	LB2K-2ST3VA	LB7□K-2ST3A	LB7□K-2ST3VA		
					Silver	SPDT	LB2K-2ST5A	—	LB7□K-2ST5A	—		
						DPDT	LB2K-2ST6A	—	LB7□K-2ST6A	—		
						3PDT	LB2K-2ST7A	—	LB7□K-2ST7A	—		
			B		Gold	SPDT	LB2K-2ST1B	LB2K-2ST1VB	LB7□K-2ST1B	LB7□K-2ST1VB		
						DPDT	LB2K-2ST2B	LB2K-2ST2VB	LB7□K-2ST2B	LB7□K-2ST2VB		
						3PDT	LB2K-2ST3B	LB2K-2ST3VB	LB7□K-2ST3B	LB7□K-2ST3VB		
					Silver	SPDT	LB2K-2ST5B	—	LB7□K-2ST5B	—		
						DPDT	LB2K-2ST6B	—	LB7□K-2ST6B	—		
						3PDT	LB2K-2ST7B	—	LB7□K-2ST7B	—		
		C		Gold	SPDT	LB2K-2ST1C	LB2K-2ST1VC	LB7□K-2ST1C	LB7□K-2ST1VC			
					DPDT	LB2K-2ST2C	LB2K-2ST2VC	LB7□K-2ST2C	LB7□K-2ST2VC			
					3PDT	LB2K-2ST3C	LB2K-2ST3VC	LB7□K-2ST3C	LB7□K-2ST3VC			
				Silver	SPDT	LB2K-2ST5C	—	LB7□K-2ST5C	—			
					DPDT	LB2K-2ST6C	—	LB7□K-2ST6C	—			
					3PDT	LB2K-2ST7C	—	LB7□K-2ST7C	—			
Spring return from right	B		Gold	SPDT	LB2K-21ST1B	LB2K-21ST1VB	LB7□K-21ST1B	LB7□K-21ST1VB				
				DPDT	LB2K-21ST2B	LB2K-21ST2VB	LB7□K-21ST2B	LB7□K-21ST2VB				
				3PDT	LB2K-21ST3B	LB2K-21ST3VB	LB7□K-21ST3B	LB7□K-21ST3VB				
			Silver	SPDT	LB2K-21ST5B	—	LB7□K-21ST5B	—				
				DPDT	LB2K-21ST6B	—	LB7□K-21ST6B	—				
				3PDT	LB2K-21ST7B	—	LB7□K-21ST7B	—				
45° 3-position	Maintained	A		Gold	DPDT	LB2K-3ST2A	LB2K-3ST2VA	LB7□K-3ST2A	LB7□K-3ST2VA			
					3PDT	LB2K-3ST3A	LB2K-3ST3VA	LB7□K-3ST3A	LB7□K-3ST3VA			
					DPDT	LB2K-3ST6A	—	LB7□K-3ST6A	—			
				Silver	3PDT	LB2K-3ST7A	—	LB7□K-3ST7A	—			
					B		Gold	DPDT	LB2K-3ST2B	LB2K-3ST2VB	LB7□K-3ST2B	LB7□K-3ST2VB
								3PDT	LB2K-3ST3B	LB2K-3ST3VB	LB7□K-3ST3B	LB7□K-3ST3VB
		DPDT	LB2K-3ST6B	—				LB7□K-3ST6B	—			
		Silver	3PDT	LB2K-3ST7B			—	LB7□K-3ST7B	—			
			C				Gold	DPDT	LB2K-3ST2C	LB2K-3ST2VC	LB7□K-3ST2C	LB7□K-3ST2VC
								3PDT	LB2K-3ST3C	LB2K-3ST3VC	LB7□K-3ST3C	LB7□K-3ST3VC
		DPDT			LB2K-3ST6C	—		LB7□K-3ST6C	—			
		Silver			3PDT	LB2K-3ST7C	—	LB7□K-3ST7C	—			
					D		Gold	DPDT	LB2K-3ST2D	LB2K-3ST2VD	LB7□K-3ST2D	LB7□K-3ST2VD
								3PDT	LB2K-3ST3D	LB2K-3ST3VD	LB7□K-3ST3D	LB7□K-3ST3VD
		DPDT	LB2K-3ST6D	—				LB7□K-3ST6D	—			
		Silver	3PDT	LB2K-3ST7D			—	LB7□K-3ST7D	—			
			E				Gold	DPDT	LB2K-3ST2E	LB2K-3ST2VE	LB7□K-3ST2E	LB7□K-3ST2VE
								3PDT	LB2K-3ST3E	LB2K-3ST3VE	LB7□K-3ST3E	LB7□K-3ST3VE
		DPDT			LB2K-3ST6E	—		LB7□K-3ST6E	—			
		Silver			3PDT	LB2K-3ST7E	—	LB7□K-3ST7E	—			
					G		Gold	DPDT	LB2K-3ST2G	LB2K-3ST2VG	LB7□K-3ST2G	LB7□K-3ST2VG
								3PDT	LB2K-3ST3G	LB2K-3ST3VG	LB7□K-3ST3G	LB7□K-3ST3VG
		DPDT	LB2K-3ST6G	—				LB7□K-3ST6G	—			
		Silver	3PDT	LB2K-3ST7G			—	LB7□K-3ST7G	—			
H			Gold	DPDT			LB2K-3ST2H	LB2K-3ST2VH	LB7□K-3ST2H	LB7□K-3ST2VH		
				3PDT			LB2K-3ST3H	LB2K-3ST3VH	LB7□K-3ST3H	LB7□K-3ST3VH		
		DPDT		LB2K-3ST6H	—	LB7□K-3ST6H	—					
		Silver	3PDT	LB2K-3ST7H	—	LB7□K-3ST7H	—					



- Specify the bezel color in place of □ in the Part No.: M (metal), Blank (black)
- Key is retained at ● and removable at ○ positions.
- Two keys are supplied.
- For dimensions, see page 33 and 34.
- Pin tumbler keys also available. (The key AS6-SK-132 is also used for A6/L6 series key selector switches.)
- Remove the letter "S" before the "T" from the part no. Example: **LB2K-2T1A**
- Besides the standard key (key number 0H) six other keys are available.
- To order other keys, specify the key number as shown below:

Example: **LB2K-2ST1A-1H**

(blank): Standard key (0H)
1H to 2H: Reversible key
3H to 6H: Non-reversible key

Note:
Key number is indicated on the key cylinder.
Standard keys do not have a key number indication.

LB Series Key Selector Switches

Square Key Selector Switches

Package Quantity: 1

Shape	Operator Position	Key retained at ●	Contact	Part No. (Ordering No.)						
				Standard Bezel		Flush Bezel				
				Solder/Tab Terminal	PC Board Terminal	Solder/Tab Terminal	PC Board Terminal			
Standard Bezel Square LB2K	45° 3-position	Spring return from right	B		Gold	DPDT	LB2K-31ST2B	LB2K-31ST2VB	LB7□K-31ST2B	LB7□K-31ST2VB
Silver					3PDT	LB2K-31ST3B	LB2K-31ST3VB	LB7□K-31ST3B	LB7□K-31ST3VB	
D				Gold	DPDT	LB2K-31ST2D	LB2K-31ST2VD	LB7□K-31ST2D	LB7□K-31ST2VD	
				Silver	3PDT	LB2K-31ST3D	LB2K-31ST3VD	LB7□K-31ST3D	LB7□K-31ST3VD	
G				Gold	DPDT	LB2K-31ST2G	LB2K-31ST2VG	LB7□K-31ST2G	LB7□K-31ST2VG	
				Silver	3PDT	LB2K-31ST3G	LB2K-31ST3VG	LB7□K-31ST3G	LB7□K-31ST3VG	
Spring return from left			C		Gold	DPDT	LB2K-32ST2C	LB2K-32ST2VC	LB7□K-32ST2C	LB7□K-32ST2VC
					Silver	3PDT	LB2K-32ST3C	LB2K-32ST3VC	LB7□K-32ST3C	LB7□K-32ST3VC
					Gold	DPDT	LB2K-32ST6C	—	LB7□K-32ST6C	—
					Silver	3PDT	LB2K-32ST7C	—	LB7□K-32ST7C	—
			D		Gold	DPDT	LB2K-32ST2D	LB2K-32ST2VD	LB7□K-32ST2D	LB7□K-32ST2VD
					Silver	3PDT	LB2K-32ST3D	LB2K-32ST3VD	LB7□K-32ST3D	LB7□K-32ST3VD
		Gold			DPDT	LB2K-32ST6D	—	LB7□K-32ST6D	—	
		Silver			3PDT	LB2K-32ST7D	—	LB7□K-32ST7D	—	
		H		Gold	DPDT	LB2K-32ST2H	LB2K-32ST2VH	LB7□K-32ST2H	LB7□K-32ST2VH	
				Silver	3PDT	LB2K-32ST3H	LB2K-32ST3VH	LB7□K-32ST3H	LB7□K-32ST3VH	
				Gold	DPDT	LB2K-32ST6H	—	LB7□K-32ST6H	—	
				Silver	3PDT	LB2K-32ST7H	—	LB7□K-32ST7H	—	
Spring return two-way		D		Gold	DPDT	LB2K-33ST2D	LB2K-33ST2VD	LB7□K-33ST2D	LB7□K-33ST2VD	
				Silver	3PDT	LB2K-33ST3D	LB2K-33ST3VD	LB7□K-33ST3D	LB7□K-33ST3VD	
				Gold	DPDT	LB2K-33ST6D	—	LB7□K-33ST6D	—	
				Silver	3PDT	LB2K-33ST7D	—	LB7□K-33ST7D	—	


Flush Bezel
Square
LB7□K

Metal Bezel

Black Bezel



- Specify the bezel color in place of □ in the Part No.: M (metal), Blank (black)
- Key is retained at ● and removable at ○ positions.
- Two keys are supplied.
- For dimensions, see page 33 and 34.
- Pin tumbler keys also available. (The key AS6-SK-132 is also used for A6/L6 series key selector switches.)
- Remove the letter "S" before the "T" from the part no. Example: **LB2K-31T2B**
- Besides the standard key (key number 0H) six other keys are available.

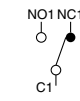
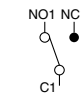
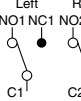
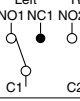
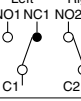
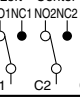
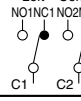
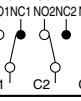
To order other keys, specify the key number as shown below:

Example: **LB2K-2ST1B-1H**

(blank): Standard key (0H)
1H to 2H: Reversible key
3H to 6H: Non-reversible key

Note:
Key number is indicated on the key cylinder.
Standard keys do not have a key number indication.

Contact Operation

Operator Position & Contact Operation (Top View)					
Position		Contact	Left	Center	Right
90° 2-position	 	SPDT			
		DPDT			
		3PDT			
45° 3-position	   	DPDT			
		3PDT			

Round Key Selector Switches

Package Quantity: 1

Shape	Operator Position		Key retained at ●	Contact	Part No. (Ordering No.)						
					Standard Bezel		Flush Bezel				
					Solder/Tab Terminal	PC Board Terminal	Solder/Tab Terminal	PC Board Terminal			
Standard Bezel Rectangular LB3K 	90° 2-position	Maintained	A		Gold	SPDT	LB3K-2ST1A	LB3K-2ST1VA	LB8□K-2ST1A	LB8□K-2ST1VA	
					DPDT	LB3K-2ST2A	LB3K-2ST2VA	LB8□K-2ST2A	LB8□K-2ST2VA		
					3PDT	LB3K-2ST3A	LB3K-2ST3VA	LB8□K-2ST3A	LB8□K-2ST3VA		
				Silver	SPDT	LB3K-2ST5A	—	LB8□K-2ST5A	—		
				DPDT	LB3K-2ST6A	—	LB8□K-2ST6A	—			
				3PDT	LB3K-2ST7A	—	LB8□K-2ST7A	—			
			B		Gold	SPDT	LB3K-2ST1B	LB3K-2ST1VB	LB8□K-2ST1B	LB8□K-2ST1VB	
					DPDT	LB3K-2ST2B	LB3K-2ST2VB	LB8□K-2ST2B	LB8□K-2ST2VB		
					3PDT	LB3K-2ST3B	LB3K-2ST3VB	LB8□K-2ST3B	LB8□K-2ST3VB		
				Silver	SPDT	LB3K-2ST5B	—	LB8□K-2ST5B	—		
				DPDT	LB3K-2ST6B	—	LB8□K-2ST6B	—			
				3PDT	LB3K-2ST7B	—	LB8□K-2ST7B	—			
		C		Gold	SPDT	LB3K-2ST1C	LB3K-2ST1VC	LB8□K-2ST1C	LB8□K-2ST1VC		
				DPDT	LB3K-2ST2C	LB3K-2ST2VC	LB8□K-2ST2C	LB8□K-2ST2VC			
				3PDT	LB3K-2ST3C	LB3K-2ST3VC	LB8□K-2ST3C	LB8□K-2ST3VC			
			Silver	SPDT	LB3K-2ST5C	—	LB8□K-2ST5C	—			
			DPDT	LB3K-2ST6C	—	LB8□K-2ST6C	—				
			3PDT	LB3K-2ST7C	—	LB8□K-2ST7C	—				
Flush Bezel Rectangular LB8□K 	45° 3-position	Spring return from right	B		Gold	SPDT	LB3K-21ST1B	LB3K-21ST1VB	LB8□K-21ST1B	LB8□K-21ST1VB	
					DPDT	LB3K-21ST2B	LB3K-21ST2VB	LB8□K-21ST2B	LB8□K-21ST2VB		
					3PDT	LB3K-21ST3B	LB3K-21ST3VB	LB8□K-21ST3B	LB8□K-21ST3VB		
				Silver	SPDT	LB3K-21ST5B	—	LB8□K-21ST5B	—		
				DPDT	LB3K-21ST6B	—	LB8□K-21ST6B	—			
				3PDT	LB3K-21ST7B	—	LB8□K-21ST7B	—			
			A		Gold	DPDT	LB3K-3ST2A	LB3K-3ST2VA	LB8□K-3ST2A	LB8□K-3ST2VA	
					3PDT	LB3K-3ST3A	LB3K-3ST3VA	LB8□K-3ST3A	LB8□K-3ST3VA		
					Silver	DPDT	LB3K-3ST6A	—	LB8□K-3ST6A	—	
				3PDT	LB3K-3ST7A	—	LB8□K-3ST7A	—			
				B		Gold	DPDT	LB3K-3ST2B	LB3K-3ST2VB	LB8□K-3ST2B	LB8□K-3ST2VB
						3PDT	LB3K-3ST3B	LB3K-3ST3VB	LB8□K-3ST3B	LB8□K-3ST3VB	
		Silver	DPDT			LB3K-3ST6B	—	LB8□K-3ST6B	—		
		3PDT	LB3K-3ST7B		—	LB8□K-3ST7B	—				
		C		Gold	DPDT	LB3K-3ST2C	LB3K-3ST2VC	LB8□K-3ST2C	LB8□K-3ST2VC		
				3PDT	LB3K-3ST3C	LB3K-3ST3VC	LB8□K-3ST3C	LB8□K-3ST3VC			
				Silver	DPDT	LB3K-3ST6C	—	LB8□K-3ST6C	—		
			3PDT	LB3K-3ST7C	—	LB8□K-3ST7C	—				
D			Gold	DPDT	LB3K-3ST2D	LB3K-3ST2VD	LB8□K-3ST2D	LB8□K-3ST2VD			
			3PDT	LB3K-3ST3D	LB3K-3ST3VD	LB8□K-3ST3D	LB8□K-3ST3VD				
		Silver	DPDT	LB3K-3ST6D	—	LB8□K-3ST6D	—				
	3PDT	LB3K-3ST7D	—	LB8□K-3ST7D	—						
	E		Gold	DPDT	LB3K-3ST2E	LB3K-3ST2VE	LB8□K-3ST2E	LB8□K-3ST2VE			
			3PDT	LB3K-3ST3E	LB3K-3ST3VE	LB8□K-3ST3E	LB8□K-3ST3VE				
Silver			DPDT	LB3K-3ST6E	—	LB8□K-3ST6E	—				
3PDT		LB3K-3ST7E	—	LB8□K-3ST7E	—						
G			Gold	DPDT	LB3K-3ST2G	LB3K-3ST2VG	LB8□K-3ST2G	LB8□K-3ST2VG			
			3PDT	LB3K-3ST3G	LB3K-3ST3VG	LB8□K-3ST3G	LB8□K-3ST3VG				
	Silver		DPDT	LB3K-3ST6G	—	LB8□K-3ST6G	—				
	3PDT	LB3K-3ST7G	—	LB8□K-3ST7G	—						
	H		Gold	DPDT	LB3K-3ST2H	LB3K-3ST2VH	LB8□K-3ST2H	LB8□K-3ST2VH			
			3PDT	LB3K-3ST3H	LB3K-3ST3VH	LB8□K-3ST3H	LB8□K-3ST3VH				
Silver			DPDT	LB3K-3ST6H	—	LB8□K-3ST6H	—				
3PDT		LB3K-3ST7H	—	LB8□K-3ST7H	—						



- Specify the bezel color in place of □ in the Part No.: M (metal), Blank (black)
- Key is retained at ● and removable at ○ positions.
- Two keys are supplied.
- For dimensions, see page 33 and 34.
- Pin tumbler keys also available. (The key AS6-SK-132 is also used for A6/L6 series key selector switches.)
- Remove the letter "S" before the "T" from the part no. Example: **LB3K-2T1A**
- Besides the standard key (key number 0H) six other keys are available.
- To order other keys, specify the key number as shown below:

Example: **LB3K-2ST1A-1H**

(blank): Standard key (0H)
1H to 2H: Reversible key
3H to 6H: Non-reversible key

Note:
Key number is indicated on the key cylinder.
Standard keys do not have a key number indication.

LB Series Key Selector Switches

Round Key Selector Switches

Package Quantity: 1

Shape	Operator Position	Key retained at ●	Contact	Part No. (Ordering No.)							
				Standard Bezel		Flush Bezel					
				Solder/Tab Terminal	PC Board Terminal	Solder/Tab Terminal	PC Board Terminal				
Standard Bezel Rectangular LB3K  Flush Bezel Rectangular LB8□K  Metal Bezel  Black Bezel 	45° 3-position	Spring return from right	B		Gold	DPDT	LB3K-31ST2B	LB3K-31ST2VB	LB8□K-31ST2B	LB8□K-31ST2VB	
				Silver	3PDT	LB3K-31ST3B	LB3K-31ST3VB	LB8□K-31ST3B	LB8□K-31ST3VB		
			D		Gold	DPDT	LB3K-31ST2D	LB3K-31ST2VD	LB8□K-31ST2D	LB8□K-31ST2VD	
				Silver	3PDT	LB3K-31ST3D	LB3K-31ST3VD	LB8□K-31ST3D	LB8□K-31ST3VD		
			G		Gold	DPDT	LB3K-31ST2G	LB3K-31ST2VG	LB8□K-31ST2G	LB8□K-31ST2VG	
				Silver	3PDT	LB3K-31ST3G	LB3K-31ST3VG	LB8□K-31ST3G	LB8□K-31ST3VG		
		Spring return from left	C		Gold	DPDT	LB3K-32ST2C	LB3K-32ST2VC	LB8□K-32ST2C	LB8□K-32ST2VC	
					Silver	3PDT	LB3K-32ST3C	LB3K-32ST3VC	LB8□K-32ST3C	LB8□K-32ST3VC	
				D		Gold	DPDT	LB3K-32ST6C	—	LB8□K-32ST6C	—
						Silver	3PDT	LB3K-32ST7C	—	LB8□K-32ST7C	—
				H		Gold	DPDT	LB3K-32ST2D	LB3K-32ST2VD	LB8□K-32ST2D	LB8□K-32ST2VD
						Silver	3PDT	LB3K-32ST3D	LB3K-32ST3VD	LB8□K-32ST3D	LB8□K-32ST3VD
	Spring return two-way		D		Gold	DPDT	LB3K-33ST2D	LB3K-33ST2VD	LB8□K-33ST2D	LB8□K-33ST2VD	
					Silver	3PDT	LB3K-33ST3D	LB3K-33ST3VD	LB8□K-33ST3D	LB8□K-33ST3VD	
			D		Gold	DPDT	LB3K-33ST6D	—	LB8□K-33ST6D	—	
					Silver	3PDT	LB3K-33ST7D	—	LB8□K-33ST7D	—	

- Specify the bezel color in place of □ in the Part No.: M (metal), Blank (black)
- Key is retained at ● and removable at ○ positions.
- Two keys are supplied.
- For dimensions, see page 33 and 34.
- Pin tumbler keys also available. (The key AS6-SK-132 is also used for A6/L6 series key selector switches.)
- Remove the letter "S" before the "T" from the part no. Example: **LB3K-31T2B**
- Besides the standard key (key number 0H) six other keys are available.

To order other keys, specify the key number as shown below:

Example: **LB2K-31ST1B-1H**

(blank): Standard key (0H)
1H to 2H: Reversible key
3H to 6H: Non-reversible key

Note:
Key number is indicated on the key cylinder.
Standard keys do not have a key number indication.

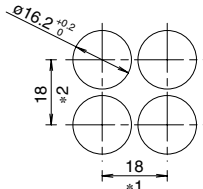
Contact Operation

Operator Position & Contact Operation (Top View)					
Position		Contact	Left	Center	Right
90° 2-position	 Maintained	SPDT			
		DPDT			
		3PDT			
45° 3-position	 Maintained	DPDT			
		3PDT			

Mounting Hole Layout / PC Board Drilling Layout

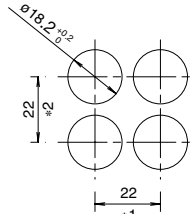
Mounting Hole Layout

Standard Bezel



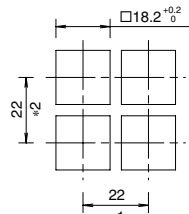
- *1 Rectangular: 24 mm
 3PDT: 23.2 mm
 *2 3PDT: 21 mm

Flush Bezel / Round

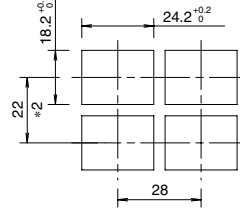


Note: When using the LB series with a rubber boot or terminal cover, make sure to note the dimensions on page 37 and 38.

Flush Bezel / Square



Flush Bezel / Rectangular

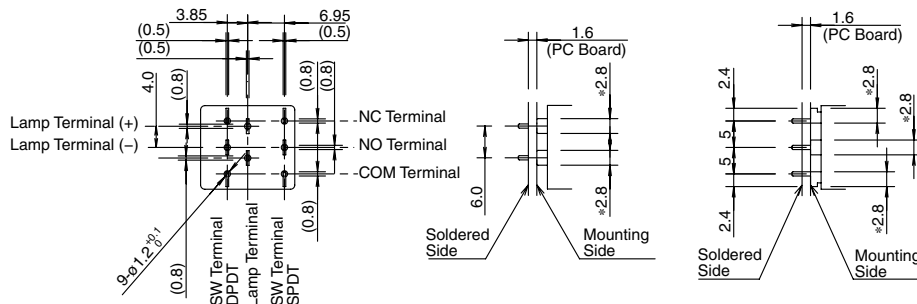


- *1 3PDT: 23.2 mm
 *2 Switches with Guard: 45 mm

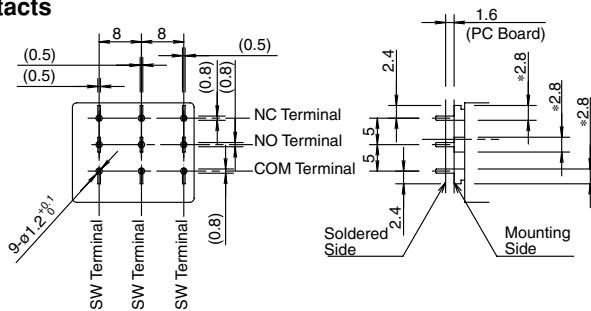
Notes for Designing PC Board and Circuit

- Use 1.6-mm-thick glass epoxy PC board with drilled holes.
- Design a circuit so that the LB series can operate within the rated voltage and current range. Make sure that inrush current and voltage do not exceed the rating.
- Minimum applicable load is 5V AC/DC, 1 mA on gold contacts. Applicable range is subject to the operating condition and load.
- Since the *2.8-mm-wide terminal touches the PC board as shown on the right, short circuit may occur with pattern lines. Design a circuit that prevents short circuits.

SPDT/DPDT Contacts

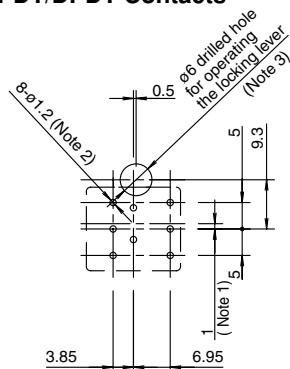


3PDT Contacts

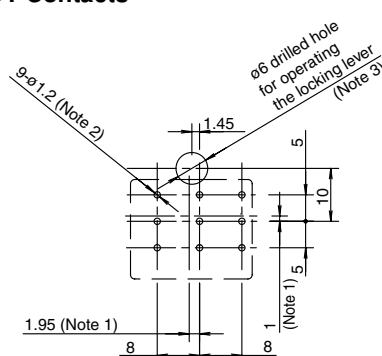


PC Board Drilling Layout (Bottom View)

SPDT/DPDT Contacts



3PDT Contacts



All dimensions in mm.

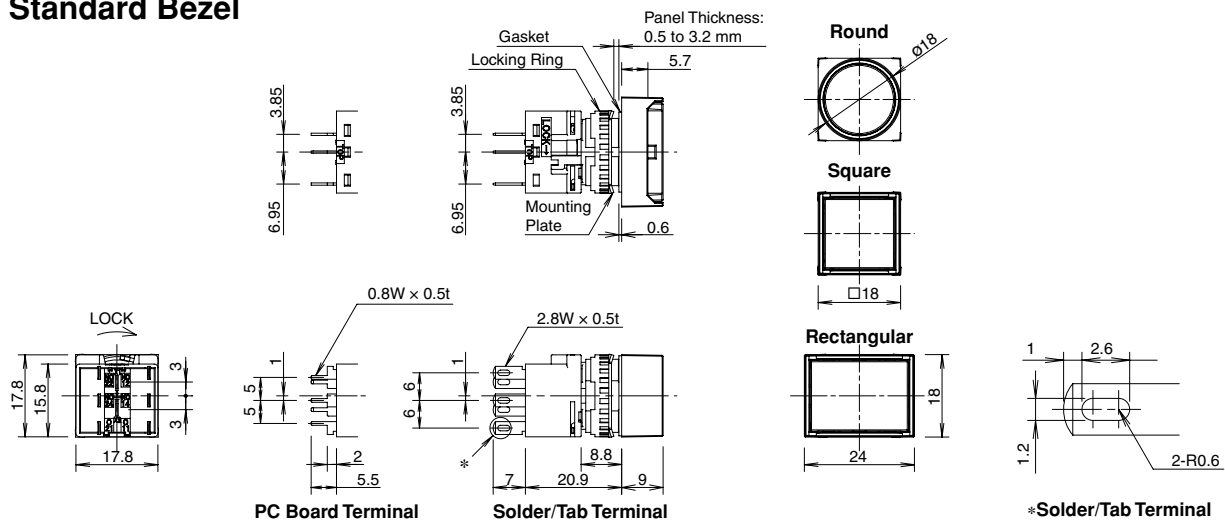
Note 1: When designing, note the alignment of centerlines of the contact blocks and centerlines of the operators.

Note 2: The diameter of the terminal hole is $\phi 1.2$.

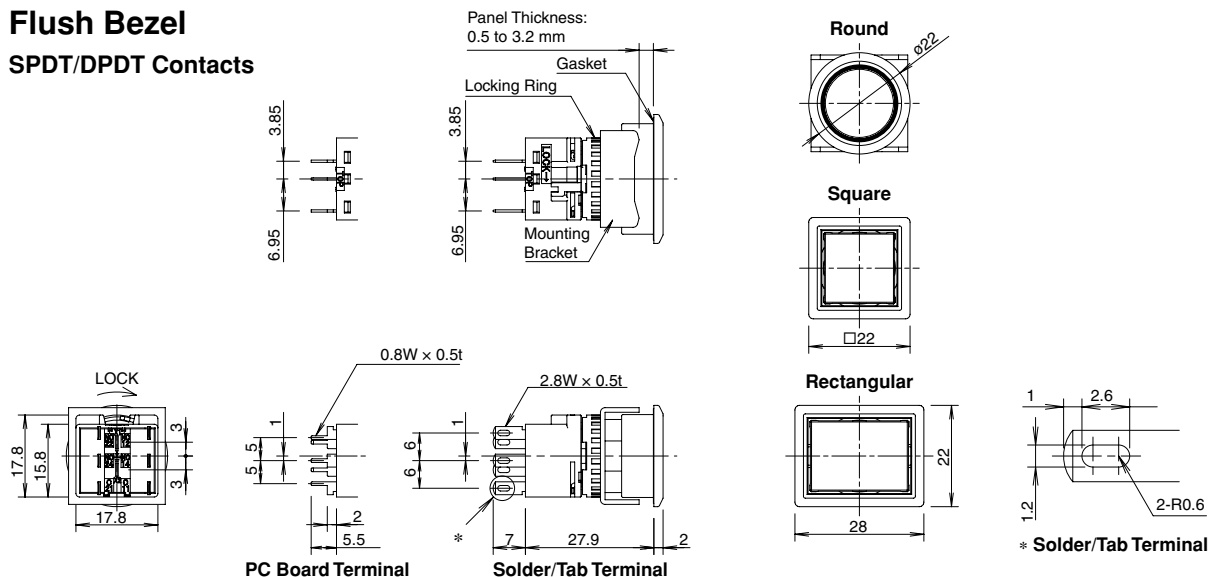
Note 3: Hole diameter may vary to meet installation requirements. Determine the location and the size of the hole so that the locking lever can be operated.

Dimensions for Illuminated Pushbuttons

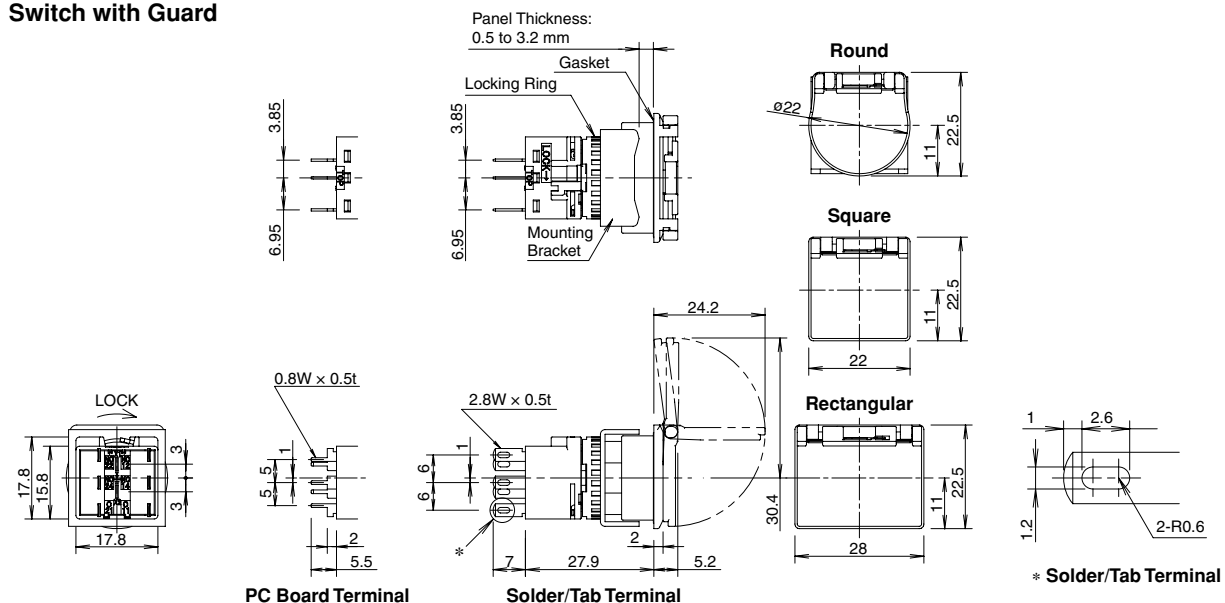
Standard Bezel



Flush Bezel SPDT/DPDT Contacts



Switch with Guard

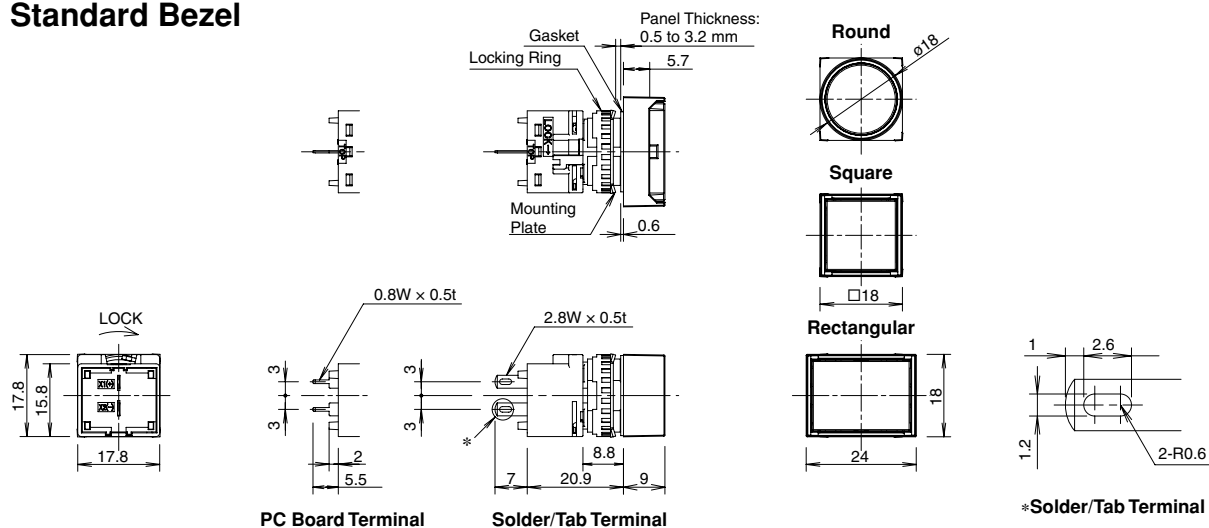


- For details on terminal arrangement, see page 27.
- For details on mounting hole layout, see page 25.
- For details on single board mounting, see page 44.

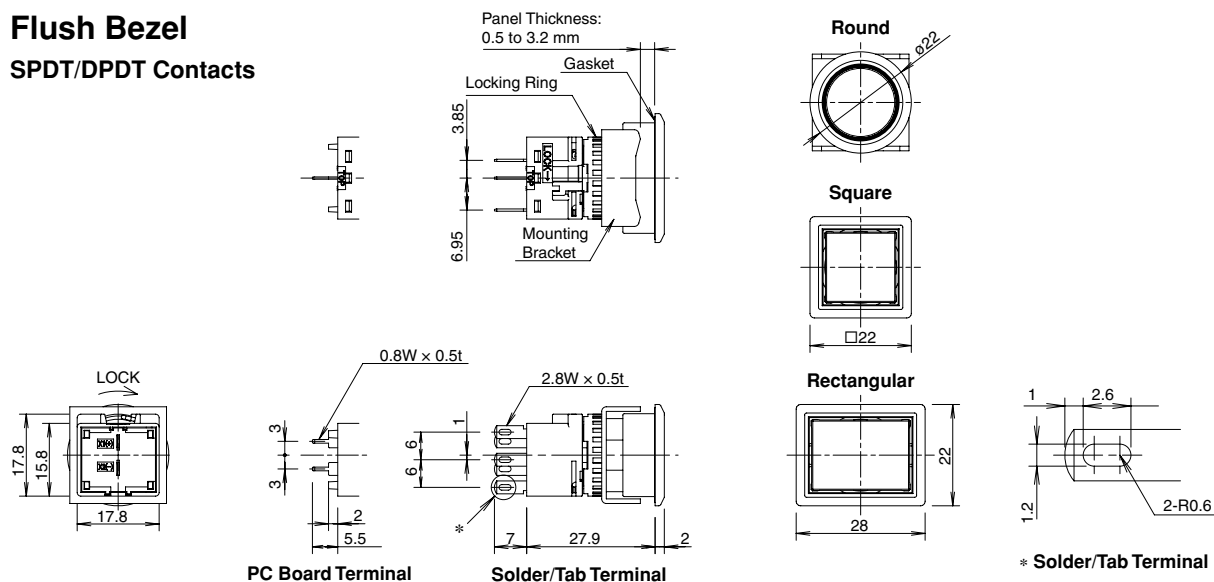
All dimensions in mm.

Dimensions for Pilot Lights

Standard Bezel



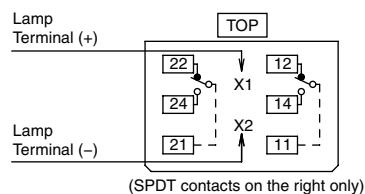
Flush Bezel SPDT/DPDT Contacts



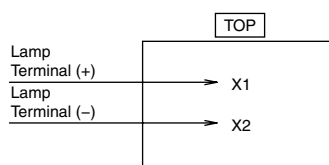
All dimensions in mm.

Terminal Arrangement (Bottom View)

Illuminated Pushbuttons



Pilot Lights

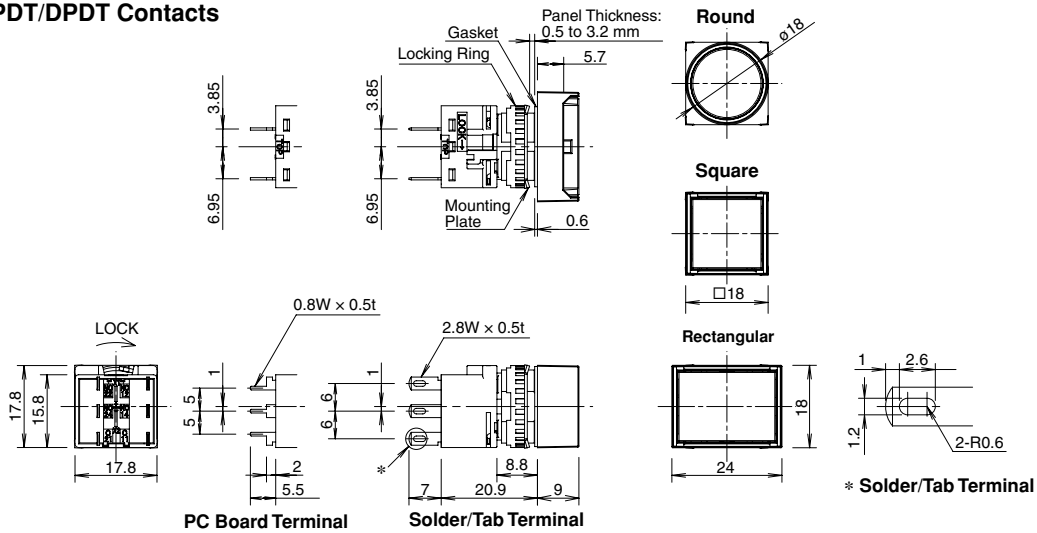


- For details on mounting hole layout, see page 25.
- For details on single board mounting, see page 44.

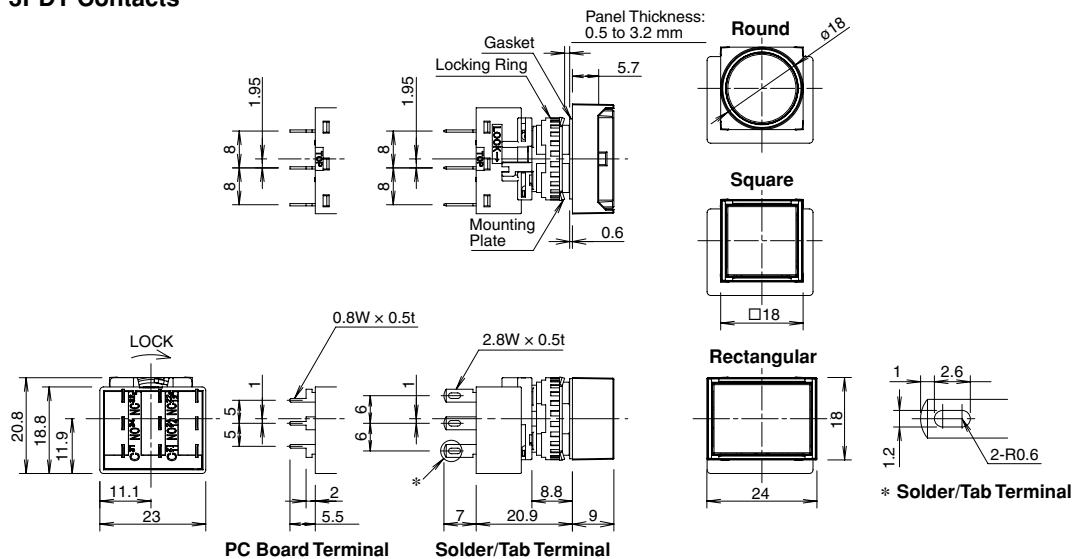
Dimensions for Pushbuttons

Standard Bezel

SPDT/DPDT Contacts



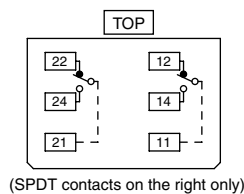
3PDT Contacts



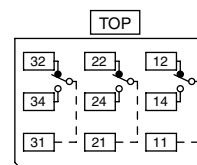
All dimensions in mm.

Terminal Arrangement (Bottom View)

SPDT/DPDT Contacts



3PDT Contacts

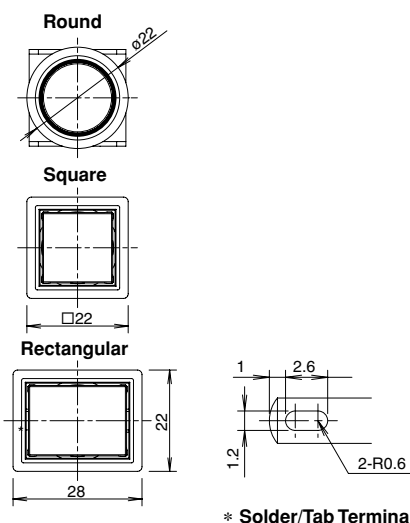
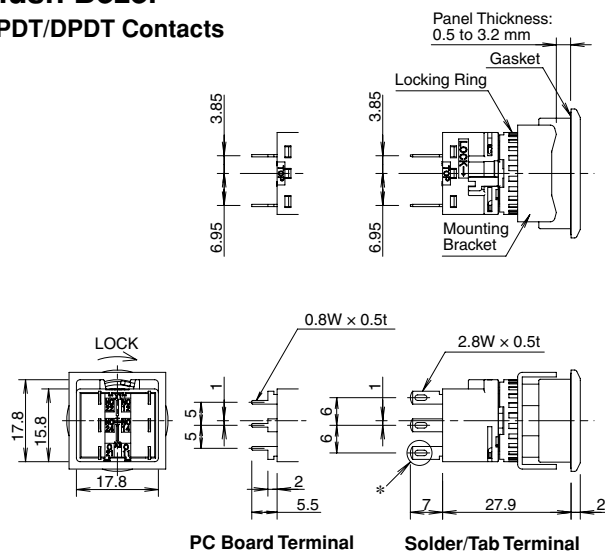


- For details on mounting hole layout, see page 25.
- For details on single board mounting, see page 44.

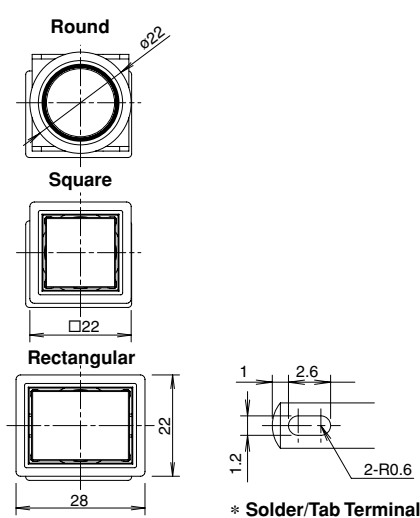
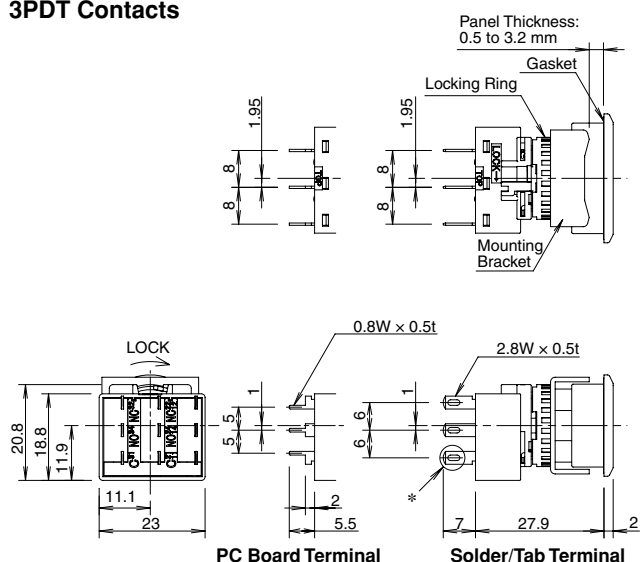
Dimensions for Pushbuttons

Flush Bezel

SPDT/DPDT Contacts



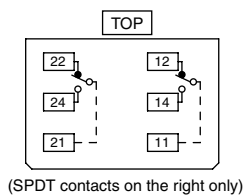
3PDT Contacts



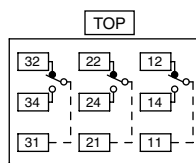
All dimensions in mm.

Terminal Arrangement (Bottom View)

SPDT/DPDT Contacts



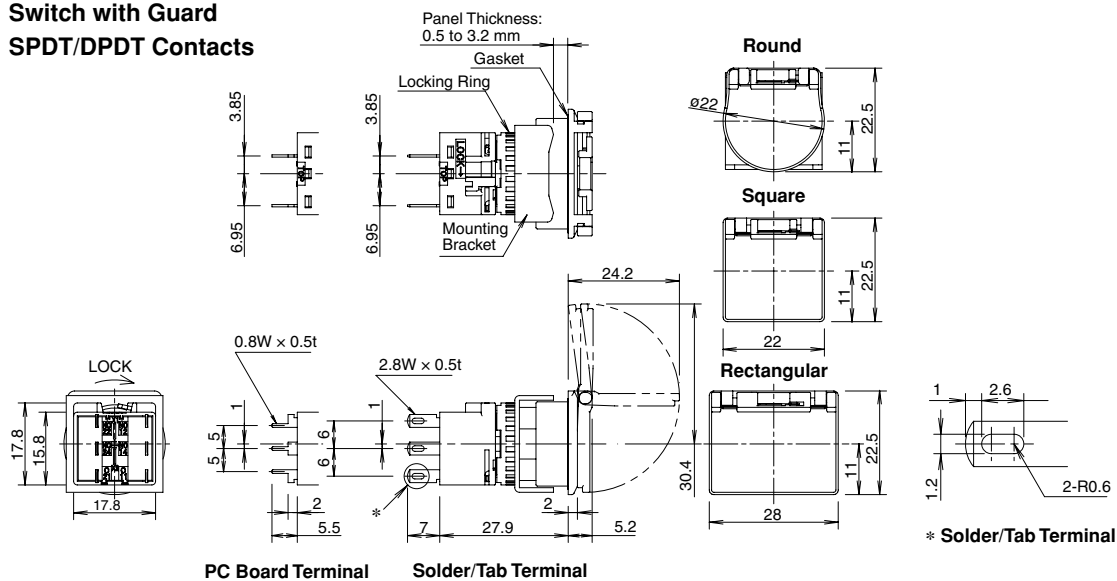
3PDT Contacts



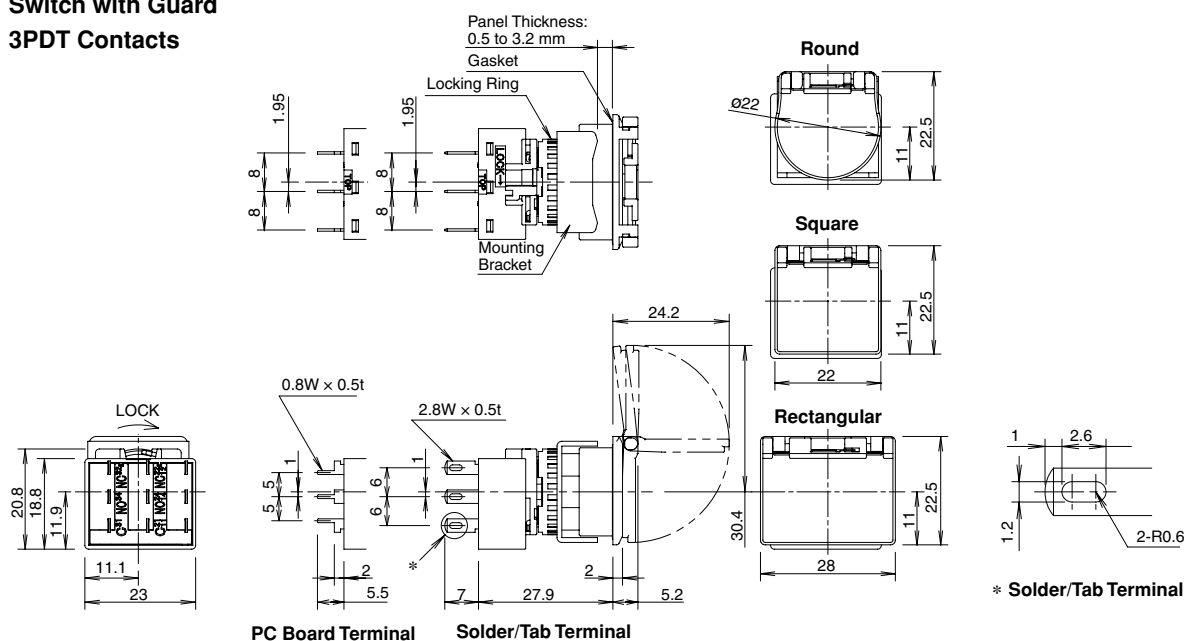
- For details on mounting hole layout, see page 25.
- For details on single board mounting, see page 44.

Dimensions for Pushbuttons

Switch with Guard SPDT/DPDT Contacts



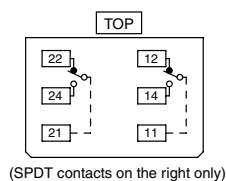
Switch with Guard 3PDT Contacts



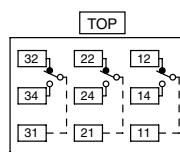
All dimensions in mm.

Terminal Arrangement (Bottom View)

SPDT/DPDT Contacts



3PDT Contacts

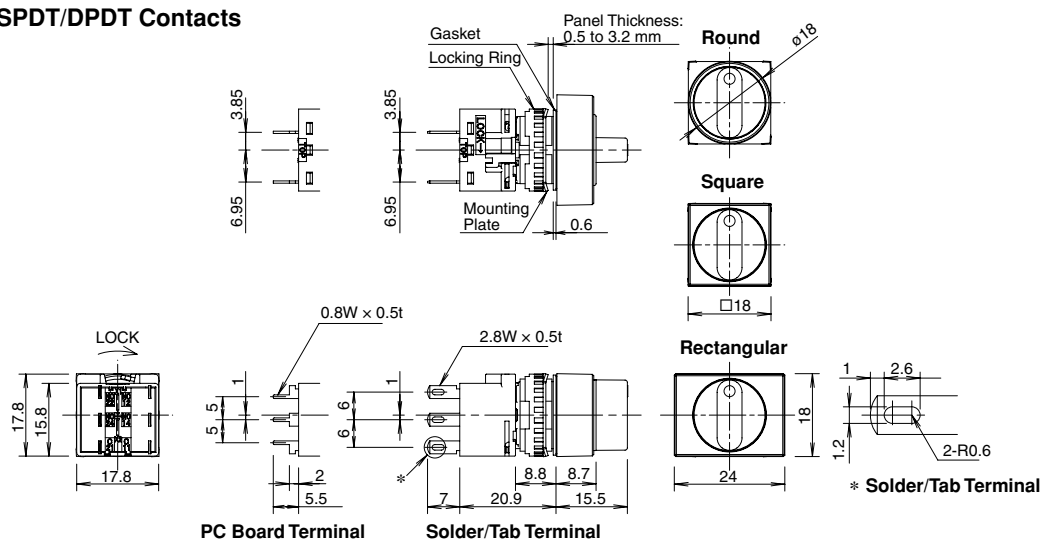


- For details on mounting hole layout, see page 25.
- For details on single board mounting, see page 44.

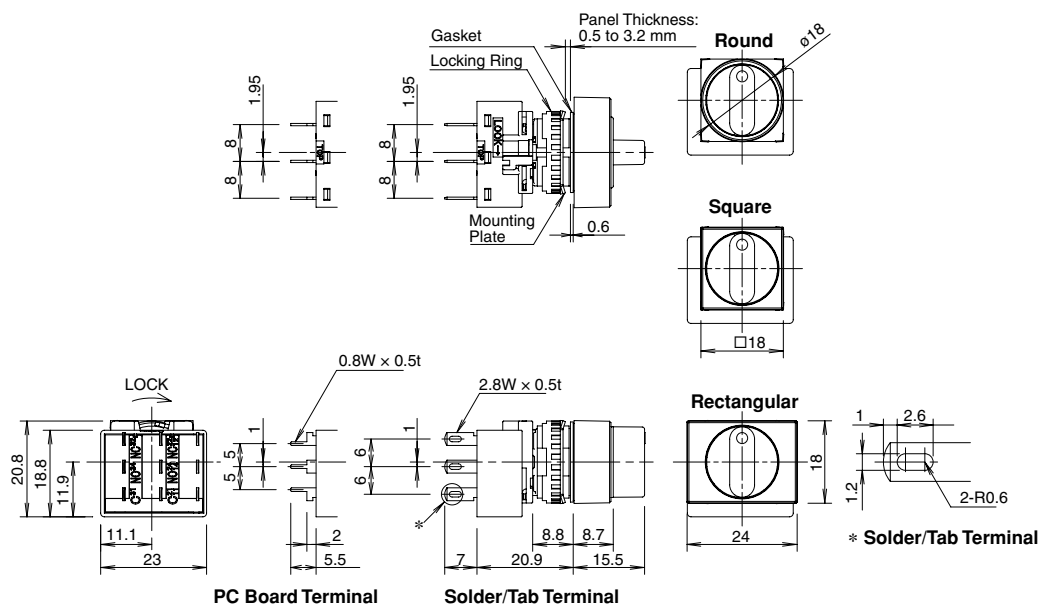
Dimensions for Selector Switches

Standard Bezel

SPDT/DPDT Contacts



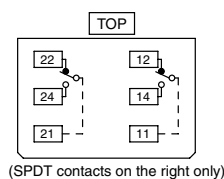
3PDT Contacts



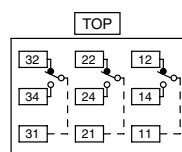
All dimensions in mm.

Terminal Arrangement (Bottom View)

SPDT/DPDT Contacts



3PDT Contacts

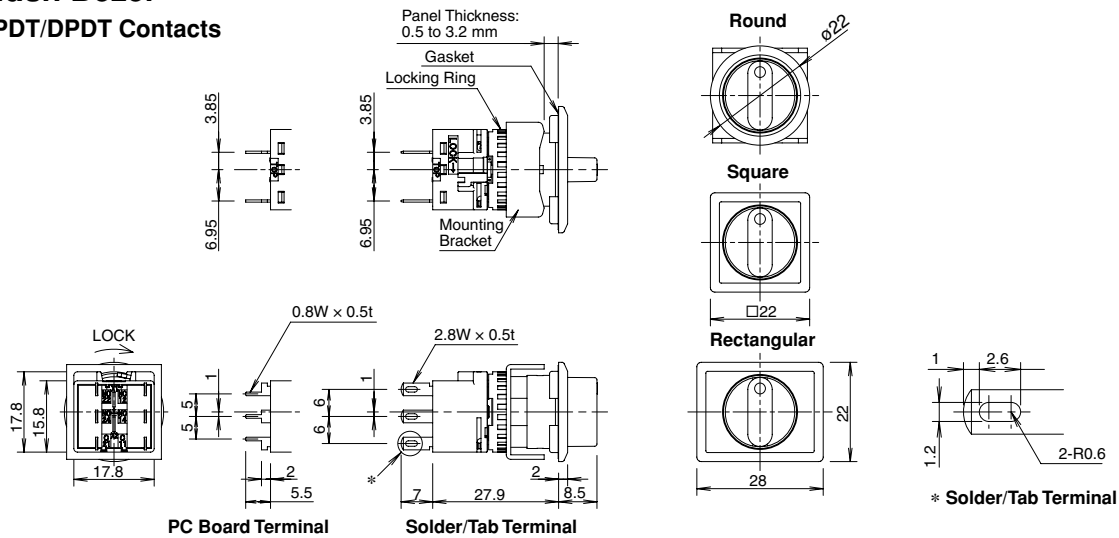


- For details on mounting hole layout, see page 25.
- For details on single board mounting, see page 44.

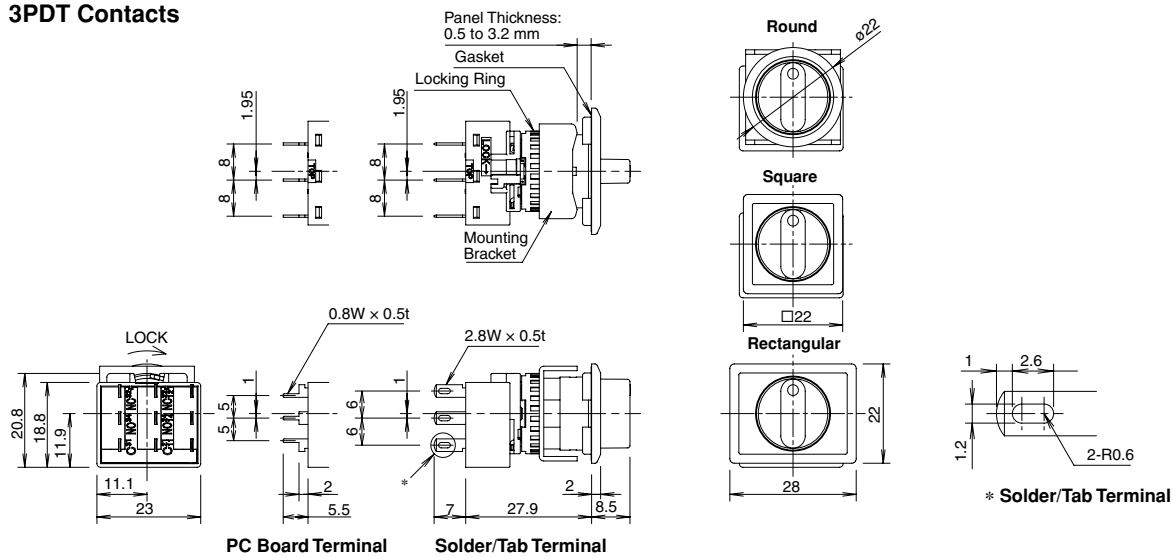
Dimensions for Selector Switches

Flush Bezel

SPDT/DPDT Contacts



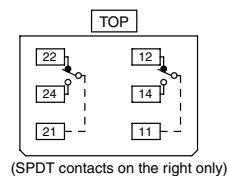
3PDT Contacts



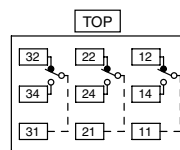
All dimensions in mm.

Terminal Arrangement (Bottom View)

SPDT/DPDT Contacts



3PDT Contacts

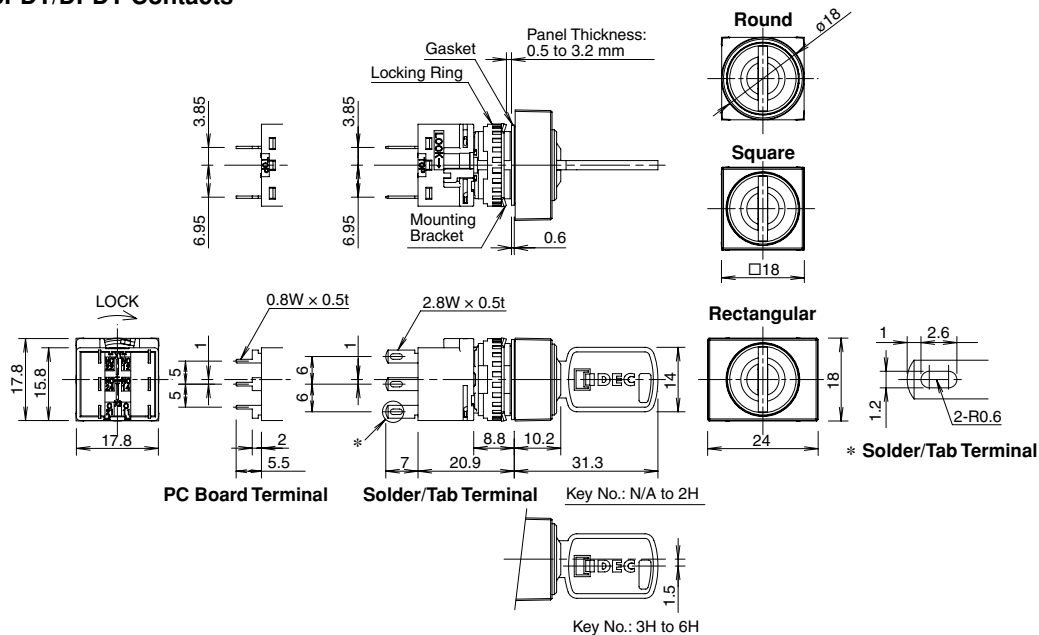


- For details on mounting hole layout, see page 25.
- For details on single board mounting, see page 44.

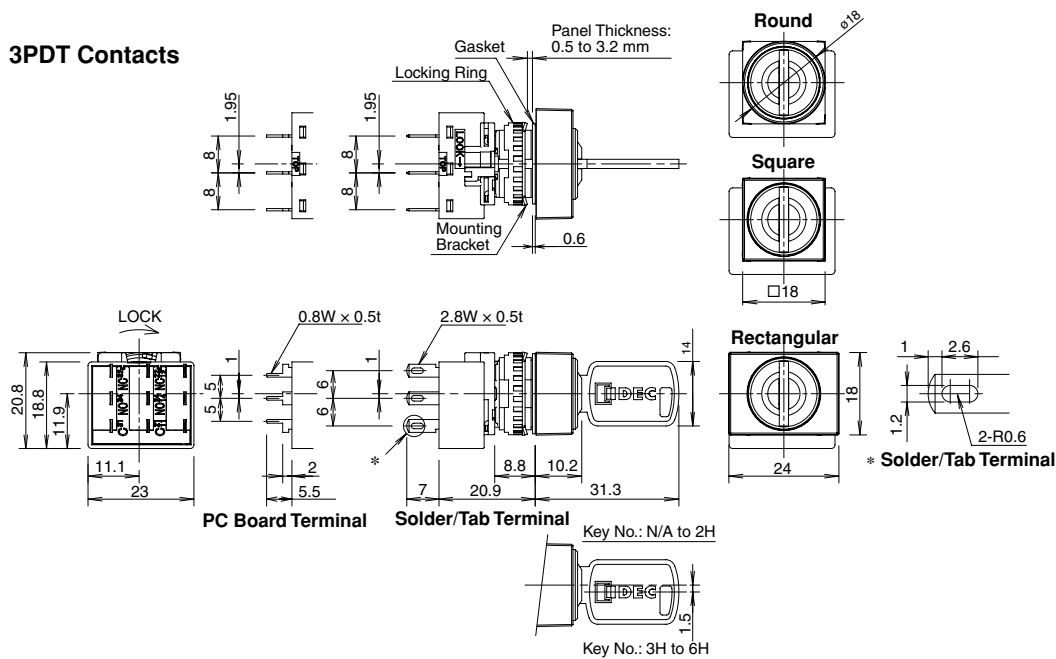
Dimensions for Key Selector Switches

Standard Bezel

SPDT/DPDT Contacts



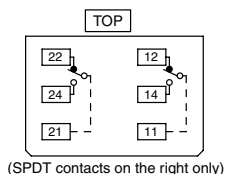
3PDT Contacts



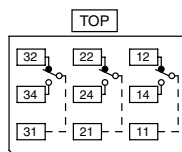
All dimensions in mm.

Terminal Arrangement (Bottom View)

SPDT/DPDT Contacts



3PDT Contacts

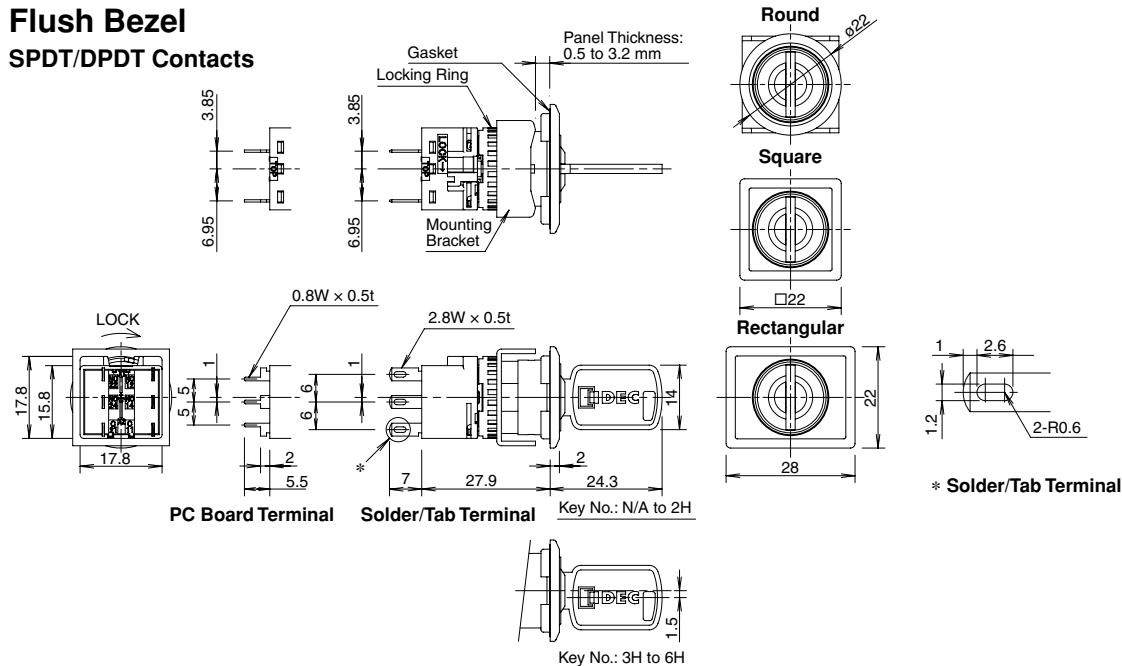


- For details on mounting hole layout, see page 25.
- For details on single board mounting, see page 44.

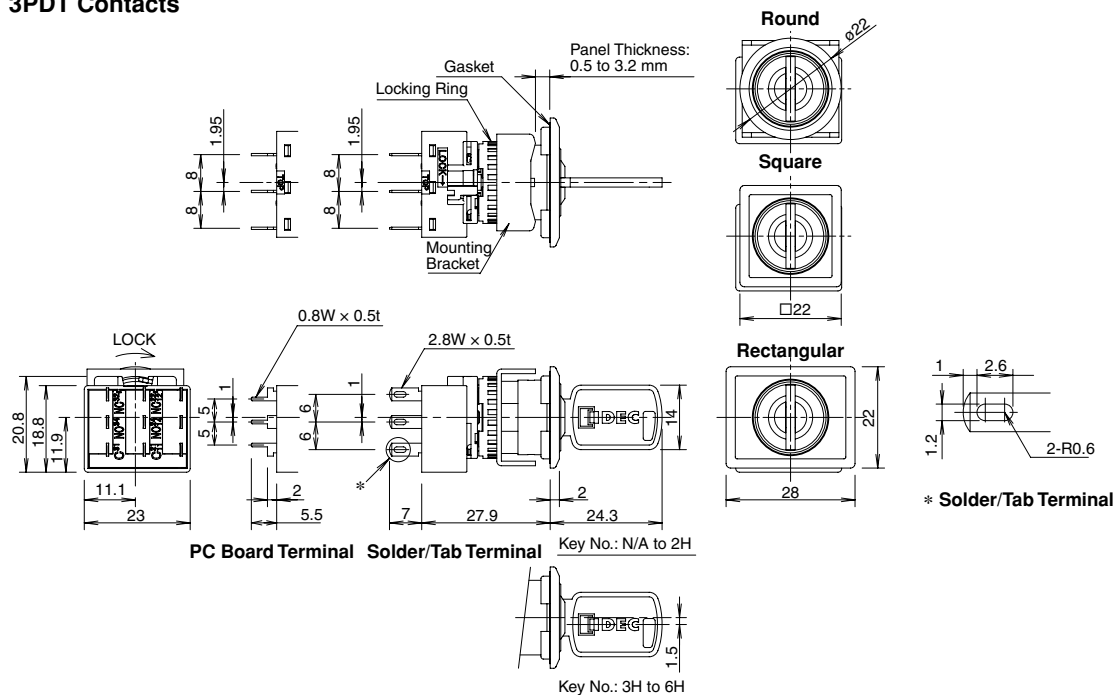
Dimensions for Key Selector Switches

Flush Bezel

SPDT/DPDT Contacts



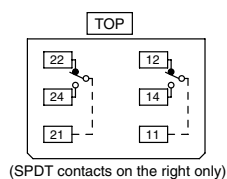
3PDT Contacts



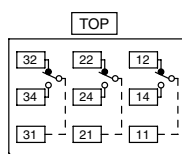
All dimensions in mm.

Terminal Arrangement (Bottom View)

SPDT/DPDT Contacts

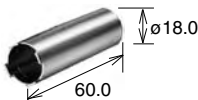
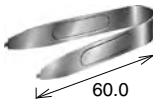
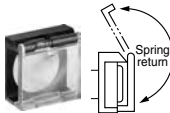


3PDT Contacts



- For details on terminal arrangement, see page 33.
- For details on mounting hole layout, see page 25.
- For details on single board mounting, see page 44.

Accessories

Shape		Material	Part No.	Ordering No.	Package Quantity	Remarks	
Locking Ring Wrench 		Metal (Nickel-plated brass)	MT-001	MT-001	1	Used to tighten the locking ring when installing the units on to the panel.	
Lens Removal Tool 		Stainless Steel	MT-101	MT-101	1	Used to remove the lens or button. (for standard bezels)	
For Standard Bezels	Switch Guard (180° Spring return) 	For round / square units	Guard (Polyacetal)	AL-K6SP	AL-K6SP	1	- Degree of protection: IP65 - Used to protect pushbuttons and illuminated pushbuttons from inadvertent operation. - See page 38 for dimensions. - With the gasket mounted on the switch, attach the switch guard and mount on the panel.
	For rectangular units	Base (Polyarylate)	AL-KH6SP	AL-KH6SP	1		
	Switchguard for Single Board Mounting 	For rectangular units	Guard (Polyacetal) Base (Polyarylate)	LA9Z-K3	LA9Z-K3	1	- Degree of protection: IP65 - With the gasket mounted on the switch, attach the switch guard and mount on the panel. - See page 38 for dimensions.
	Ruber Boot 1 	1. For round units	Rubber (Transparent silicon rubber)	LB9Z-D1	LB9Z-D1	1	- Degree of protection: IP65 - See page 37 for dimensions. - See page 43 for mounting.
	2 	2. For square units		LB9Z-D2	LB9Z-D2	1	
	3 	3. For rectangular units		LB9Z-D3	LB9Z-D3	1	
	Mounting Hole Plug 	Metal	[Plug] Metal (Zinc diecast) [Locking nut] Polyacetal [Gasket] Nitrile rubber	AL-BM6	AL-BM6	1	- Degree of protection: IP65 - Tightening torque: 0.1 to 0.29 N·m - See page 37 for dimensions.
	Mounting Hole Plug 	Rubber	Nitrile rubber (black)	AL-B6	AL-B6PN05	5	- Degree of protection: IP65 - See page 37 for dimensions.

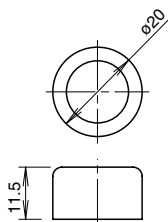
Accessories

Shape			Material		Part No.	Ordering No.	Package Quantity	Remarks
For Flush Bezels	Rubber Boot		Rubber (Transparent silicon rubber)		LB9Z-D6	LB9Z-D6	1	Degree of protection: IP65 See page 37 for dimensions. See page 43 for mounting.
	1	1. For round units						
	2	2. For square units			LB9Z-D7	LB9Z-D7	1	
	3	3. For rectangular units			LB9Z-D8	LB9Z-D8	1	
	Mounting Hole Plug		[Plug] Polyamide (Black) [Gasket] Nitrile rubber [Mounting Plate] Stainless Steel	Black	LB9Z-BS6	LB9Z-BS6	1	Degree of protection: IP65 Panel thickness: 0.5 to 3.2 mm See page 37 for dimensions.
	1	1. For round units		White	LB9Z-BS6-W	LB9Z-BS6-W	1	
	2	2. For square units		Black	LB9Z-BS7	LB9Z-BS7	1	
				White	LB9Z-BS7-W	LB9Z-BS7-W	1	
	3	3. For rectangular units		Black	LB9Z-BS8	LB9Z-BS8	1	
				White	LB9Z-BS8-W	LB9Z-BS8-W	1	
Terminal Cover					LB9Z-VL2	LB9Z-VL2PN10	10	See page 38 for dimensions. See page 41 for mounting.
1	2	1. For SPDT/DPDT contacts			LB9Z-VL3	LB9Z-VL3PN10	10	
		2. For 3PDT contacts						

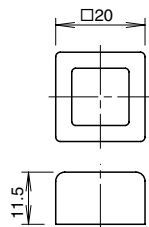
Dimensions for Accessories

Rubber Boot

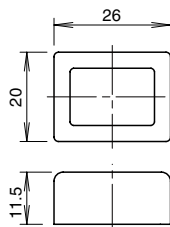
Standard Bezel
For round units
(LB9Z-D1)



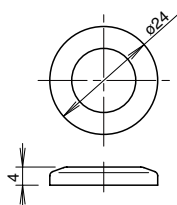
For square units
(LB9Z-D2)



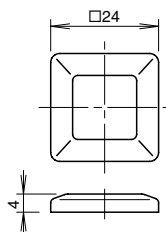
For rectangular units
(LB9Z-D3)



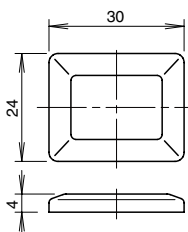
Flush Bezel
For round units
(LB9Z-D6)



For square units
(LB9Z-D7)



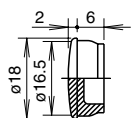
For rectangular units
(LB9Z-D8)



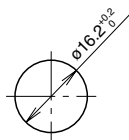
Mounting Hole Plug

Standard Bezel

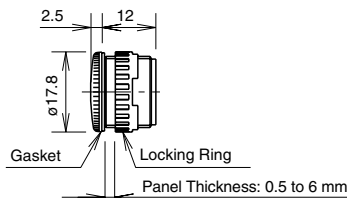
AL-B6



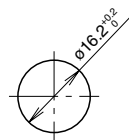
Mounting Hole
Layout



AL-BM6

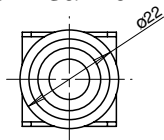


Mounting Hole
Layout

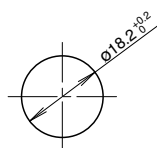


Flush Bezel

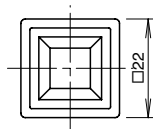
For round units
(LB9Z-BS6/LB9Z-BS6-W)



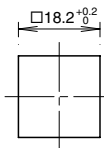
Mounting Hole Layout



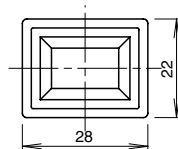
For square units
(LB9Z-BS7/LB9Z-BS7-W)



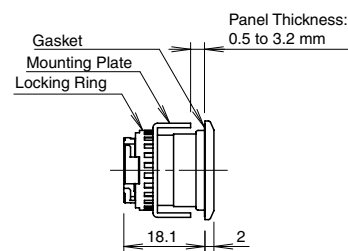
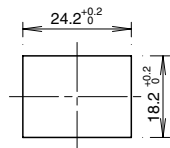
Mounting Hole Layout



For rectangular units
(LB9Z-BS8/LB9Z-BS8-W)



Mounting Hole Layout

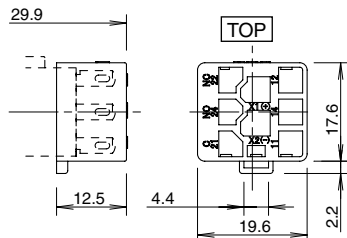


All dimensions in mm.

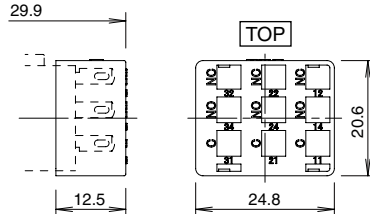
Dimensions for Accessories

Terminal Cover

For SPDT/DPDT contacts
(LB9Z-VL2)

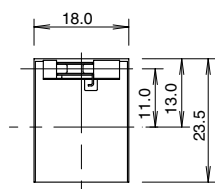


For 3PDT contacts
(LB9Z-VL3)



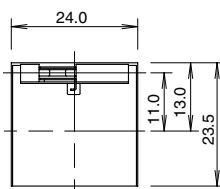
Switch Guard

For round / square units
(AL-K6SP)

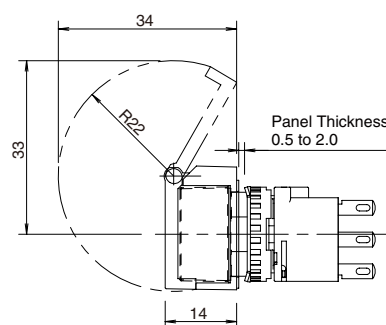


[For round / square units]

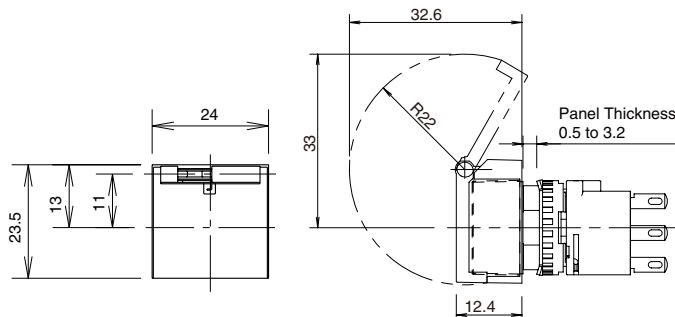
For rectangular units
(AL-KH6SP)



[For rectangular units]



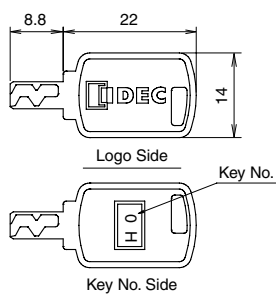
For Single Board Mounting (LA9Z-K3)



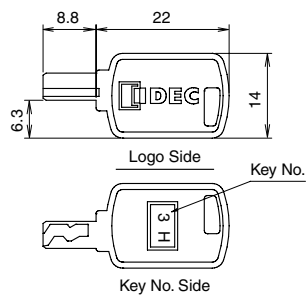
Note: The panel depth is the same for switches with or without switch guards. Both types can be installed on the same PC board.

Key

Reversible key

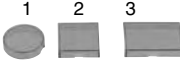
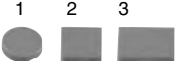


Non-reversible key



All dimensions in mm.

Maintenance Parts

Shape		Material	Part No.	Ordering No.	Package Quantity	Remarks
Lens 	1. For round units	Polyarylate ø15.4 H4	AL6M-L②	AL6M-L②PN05	5	Specify the color code in place of ② in the part no. A: Amber, C: Clear, G: Green, R: Red, S: Blue, Y: Yellow Note: Use a clear lens for white (W) or pure white (PW) illumination.
	2. For square units	Polyarylate □15.4 H4	AL6Q-L②	AL6Q-L②PN05		
	3. For rectangular units	Polyarylate W21.4 H4 D15.4	AL6H-L②	AL6H-L②PN05		
Button 	1. For round units	Polyarylate ø15.4 H4	AB6M-B①	AB6M-B①PN05	5	Specify the color code in place of ① in the part no. B: Black, G: Green, R: Red, S: Blue W: White, Y: Yellow
	2. For square units	Polyarylate □15.4 H4	AB6Q-B①	AB6Q-B①PN05		
	3. For rectangular units	Polyarylate W21.4 H4 D15.4	AB6H-B①	AB6H-B①PN05		
Marking Plate 	1. For round units	Acrylic ø13.7 H0.8	AL6M-①	AL6M-①PN05	5	Specify the color code in place of ① in the part no. B: Black, W: White See page 42 for dimensions and engraving area.
	2. For square units	Acrylic □13.7 H0.8	AL6Q-①	AL6Q-①PN05		
	3. For rectangular units	Acrylic W19.7 H0.8 (0.4) D13.7	AL6H-①	AL6H-①PN05		
		Polyamide ø17.9 H3.9	LB9Z-LN	LB9Z-LNPN10	10	
	For standard bezel	Metal (Stainless steel) □17.9 t0.6	LB9Z-LP1	LB9Z-LP1PN10	10	
	For flush bezel	Metal (Stainless steel) W21 H8.2 D20.6 t0.8	LB9Z-LP6	LB9Z-LP6PN10	10	
	For key selector switches	Material: Diecast zinc alloy (nickel-plated) Key size W:14 H:2 D:30.8	LA9Z-SK-□	LA9Z-SK-□PN02	2	Specify a key number in place of □ in the Part No. 0H: Standard key (reversible) 1H to 2H: Reversible key 3H to 6H: Non-reversible key See page 38 for dimensions.

LB Series Maintenance LED Unit

Package Quantity: 1

Shape	Rated Operating Voltage	Part No. (Ordering No.)	* Color Code
LED Unit 	DC5V	LB9Z-LED5*	A G PW R S W
	AC/DC12V	LB9Z-LED1*	
	AC/DC24V	LB9Z-LED2*	

- * (Color code) R: Red, G: Green, A: Amber, W: White, S: Blue, PW: Pure White
- All LB series contain an LED unit.
- Use a pure white (PW) LED unit for yellow (Y) illumination.

ø16 LB Series Miniature Control Units Flush Silhouette Switch LB Series

Contents

⚠ Safety Precautions	40	
Instructions	40	
Wiring	40	Terminal Cover
Operating Environment	40	Handling
Removing and Installing the Contact Block	41	Panel Mounting
Replacing the Lens and Marking Plate	41	Installing the Lens Unit and Contact Block
Marking Plates and Films	42	Replacing the LED Unit
Notes on Using Receptacles	42	Installing the Rubber Boot
Maintained Pushbuttons	43	Switches with Guard
Selector Switches	43	Key Selector Switches
Single Board Mounting	44	
Installing and Removing Contact Blocks	44	Mounting Holes and Assembly Procedure

⚠ Safety Precautions

- Turn off the power to the LB series control units before installation, removal, wiring, maintenance, and inspection. Failure to turn power off may cause electrical shocks or fire hazard.
- To avoid burning your hand, use the lamp holder tool when replacing the lamps.
- For wiring, use wires of a proper size to meet voltage and current requirements. Solder correctly according to the instructions in "Wiring" and "Notes on Terminal Cover." Improper soldering may cause overheating and create a fire hazard. Also, when using tab terminals, use receptacles of appropriate size.

Instructions

Wiring

- 1) Solder the terminals at 350°C within 3 seconds using a 60W soldering iron. Sn-Ag-Cu type is recommended when using leadfree solder. When soldering, do not touch the LB series with the soldering iron. Also ensure that no tensile force is applied to the terminal. Do not bend the terminal or apply excessive force to the terminal.
- 2) Use non-corrosive liquid flux.

Terminal Cover

Solder/tab terminal

Insert the terminal cover into the contact block with the TOP markings on the contact block and the terminal cover in the same direction.

Note: When wiring, insert the lead wires into the terminal cover holes before soldering.
After wiring, the terminal covers cannot be installed.

Standard Bezel



Flush Bezel



Operating Environment

- Do not use the LB series where corrosive gases exist or under an environment exceeding the operating temperature and humidity ranges. Otherwise, damages due to contact failure or change of surface color may occur.
- Major parts of the switch are plastic. Scratches or damages may occur when scraped with a sharp object or applied with excessive load or shock. Note that this may cause operation and appearance failure of the operator and bezel.
- Adherence of detergent, cutting oil, or special chemicals to the switch may result in operation failures and appearance failures such as change of surface color.

Handling

Contacts (micro switch)

When using NC (normally closed) and NO (normally open) contacts of the same microswitch, avoid connections of different voltages, or connections of different types of power supplies. Failure to observe this instruction may cause a short-circuit.

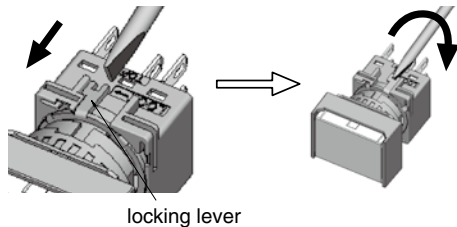
Protection against oil (IP65)

The LB series has been tested according to JIS C 0920: Appendix 1 by using water insoluble cutting oil Class N3, No. 8 (JIS K 2241) to prove that the switches will not be damaged by oil drops or splashes. This may not apply to special types of oils. Contact IDEC for details.

Instructions

Removing and Installing the Contact Block

- 1) Turn the locking lever on the contact block in the direction opposite to the arrow on the housing. Then the contact block can be removed.
- 2) Insert the contact block with the TOP markings on the contact block and the operator placed in the same direction. Then lock the units, turning the locking lever in the direction of the arrow.

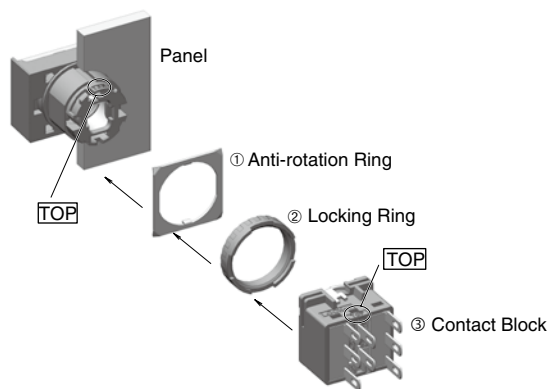


locking lever

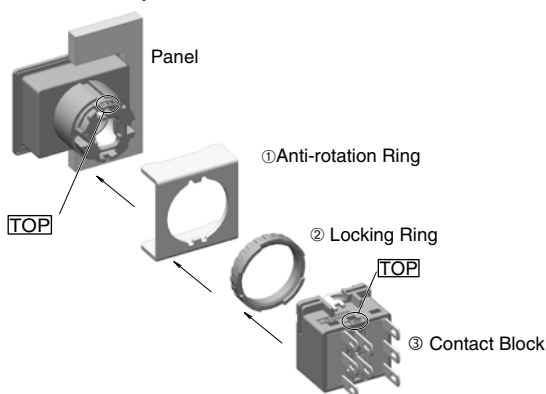
Panel Mounting

Remove the contact block from the operator. Insert the operator into the panel cut-out from the front, then install the contact block to the operator.

(For Standard Bezel)



(For Flush Bezel)



Notes on Mounting

Use the optional ring wrench (MT-001) to mount the operator onto the panel. Tightening torque should not exceed 0.7 N·m. Do not use pliers. Excessive tightening will damage the locking ring.

Replacing the Lens and Marking Plate

Removing

[Standard Bezel]

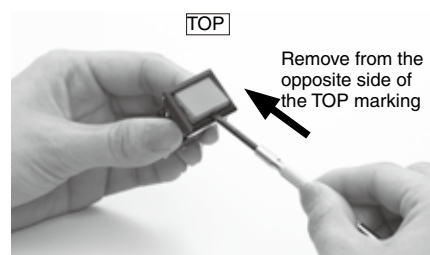
- 1) From the opposite side of the TOP marking, remove the operator (lens, marking plate, and lens holder) using the optional lens removal tool (MT-101) by gripping the recesses of the color lens. Removing from the TOP side may damage the metal bezel.



[Removing the Operator (standard bezel)]

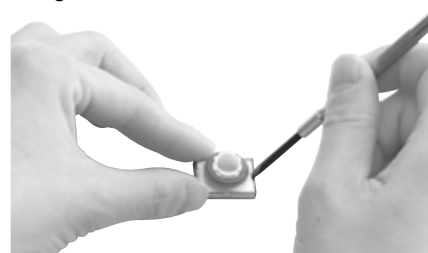
[Flush Bezel]

- 1) Push the tip of the flat screwdriver to the groove of the color lens and pull out the operator (lens, marking plate, lens holder).



[Removing the Operator (flush bezel)]

- 2) Remove the marking plate by pushing the lens from the rear to disengage the latches between the lens and holder, using the screwdriver as shown below.

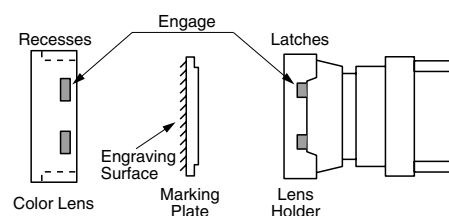


[Removing the Lens]

Note) The translucent in the lens holder cannot be removed because this filter is sealed to make the unit waterproof and airtight.

Installing

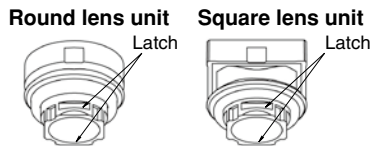
Insert the marking plate into the color lens, and press the lens onto the lens holder to engage the latches. Pay attention to the orientation of the marking plate.



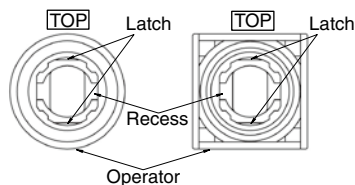
Instructions

Installing the Lens Unit and Contact Block

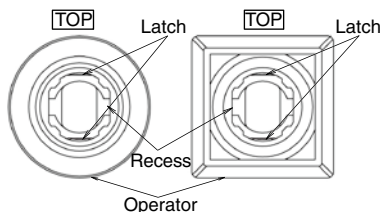
To insert the lens unit into the operator, press in the lens unit by making sure that the latch on the operator is aligned with the latch on the lens unit.



Standard Bezel



Flush Bezel



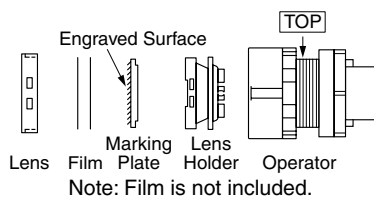
Marking Plates and Films

For illuminated pushbuttons and pushbuttons with illuminated lens, legends and symbols can be engraved on the marking plates, or printed film can be inserted under the lens for labelling purposes.

Marking Plate and Marking Film Size

Lens	Round	Square	Rectangular
Built-in Marking Plate	- Engraving must be made on the engraving area within 0.5 mm deep. - The marking plate is made of white acrylic resin.		
Applicable Marking Film	- Film thickness: 0.1 mm per film - Marking film is not included. - Recommended marking film: Polyester film		

Insertion Order of Marking Plate and Film

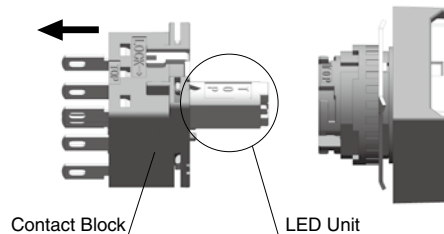


The marking plate must be engraved on the specified side as shown above.

Pay attention to the orientation of the marking plate.

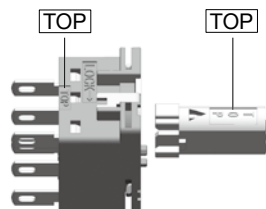
Replacing the LED Unit

The LED unit can be replaced without tools by pulling out the lens unit from the contact block.



Orientation of the LED unit

Insert the LED unit into the contact block with the TOP markings on the contact block and LED unit in the same orientation.



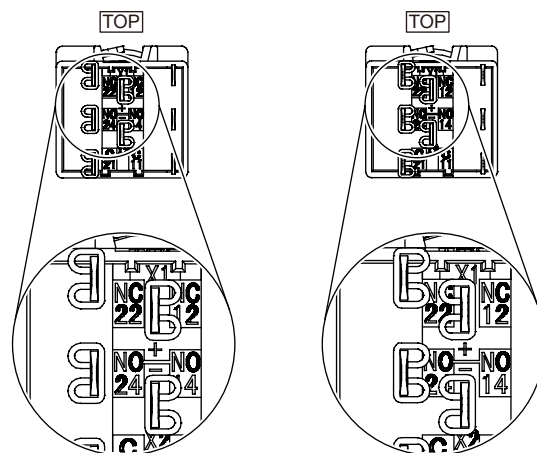
Notes on replacing the LED Unit

When replacing the LED unit, make sure that static electricity is not applied.

Make sure that the LB series has cooled down before replacing the LED unit. To avoid burn injuries, be careful not to touch the unit while it is still hot.

Notes on Using Receptacles

- 1) Use #110 tab receptacles, 0.5 mm-thick.
- 2) When connecting the terminals on the left and center, make sure that surfaces of the receptacles face each other. Otherwise, short-circuit may occur.



Correct

Incorrect

- 3) Apply only horizontal force against the panel to the tab. The switch may be damaged if a force other than a horizontal force is applied.

Instructions

Installing the Rubber Boot

When using in places where the switches are subjected to water splash or an excessive amount of dust, make sure to use the optional rubber boot.

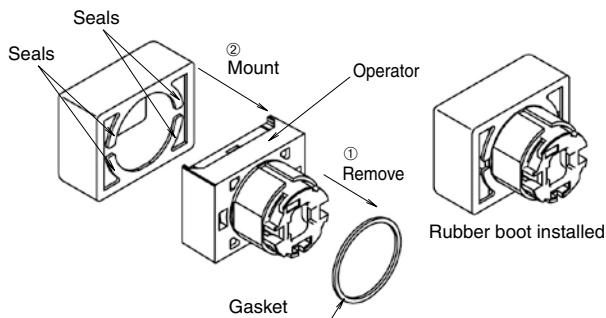
As shown in the drawing below, ① remove the gasket from the operator, and ② attach the rubber boot from the front (button side).

Standard Bezel

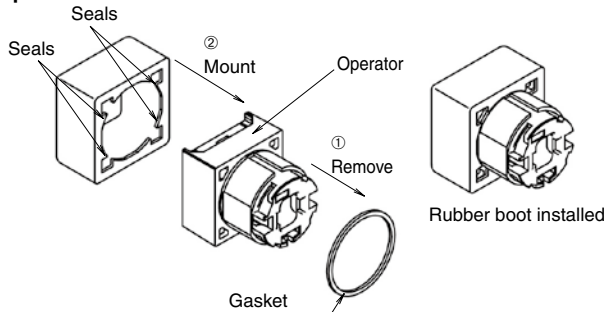
For rectangular and square units, pull out the seals of the rubber boot and place them around the operator sleeve as shown below. Make sure that the seals are not twisted or tucked inside and that the gasket is removed, otherwise waterproof and dustproof characteristics are not ensured.

How to Install the Rubber Boot

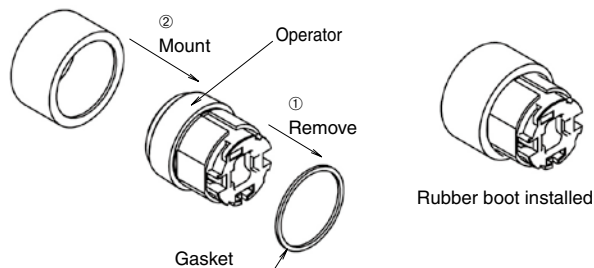
Rectangular



Square



Round

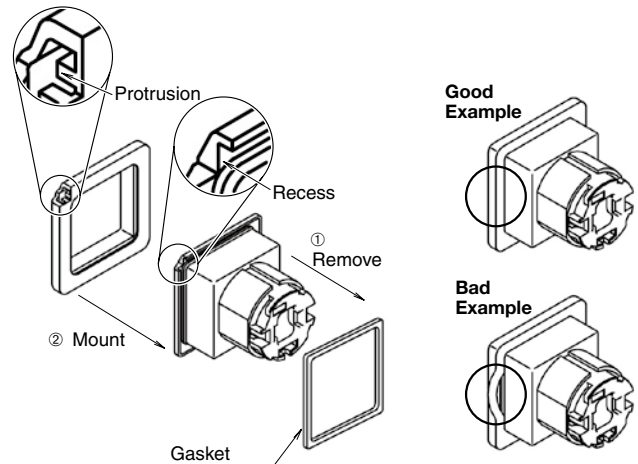


Flush Bezel

Mount the rubber boot so that the protrusion at the bottom surface of the operator fits with the recess on the operator, placing the rubber boot all around the operator sleeve.

Make sure that the protrusion on the rubber boot and the recess on the operator is properly fitted, otherwise, the waterproof and dustproof characteristics are not ensured.

How to Install the Rubber Boot



Note: Install the rubber boot before mounting the unit to the panel.

Maintained Pushbuttons

Do not replace the buttons when the pushbutton is in the maintained position. Replacing the button in the maintained position may damage the internal mechanism. Also, do not remove the contact block with the button in the maintained position. The contact may not operate properly when the contact block is remounted. Make sure to push down fully when using the pushbuttons.

Pushbuttons, Illuminated Pushbuttons, and Lenses with Switch Guard

Do not apply force to the switch guard when the switch guard is not attached to a panel. When opening the switch guard, do not open more than 180°. The hinge may break.

Selector Switches

When turning the operator or key, make sure that they are turned to the each position properly.

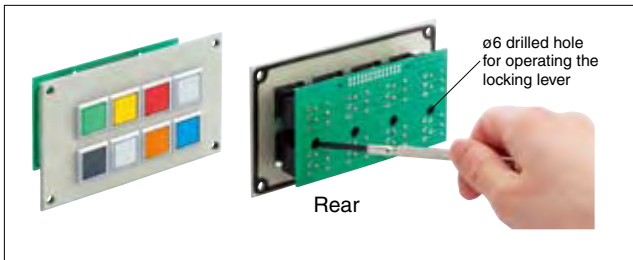
Selector Switches with Key

Observe the following instructions to prevent malfunction or damage.

- Insert the key to the bottom of the key hole.
- Do not remove the key from any key retained position.
- Besides the standard key (key number 0H), six other key numbers are available. Use a key of the matching number with the key cylinder. The standard key does not have a key number indication.
- Keys are available in two types.
Key numbers 0H (standard), 1H, and 2H are reversible keys which can be inserted in two ways.
Key numbers 3H, 4H, 5H, and 6H are non-reversible keys. Make sure of correct insertion direction.

Single Board Mounting

The IDEC's LB Series is available for single board mounting.



Installing and Removing Contact Blocks

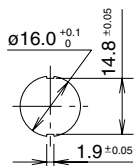
Turn the locking lever to install and remove contact blocks on the PC using a screwdriver from a hole in the PC board. Determine the location of the switches so that the locking lever can be operated.

Mounting Holes and Assembly Procedure

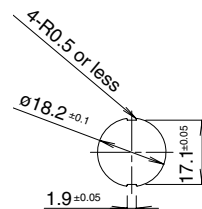
Drill mounting holes in the panel as shown below. When the units are mounted collectively, provide adequate clearance.

Panel Cut-out

Standard Bezel

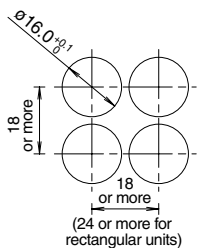


Flush Bezel

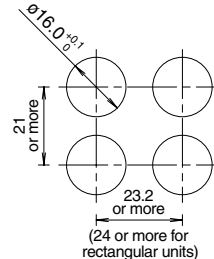


Standard Bezel

SPDT/DPDT Contacts



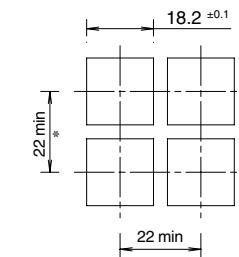
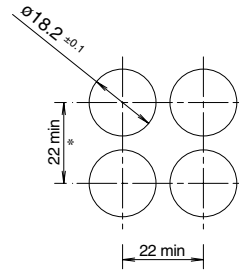
3PDT Contacts



Flush Bezel

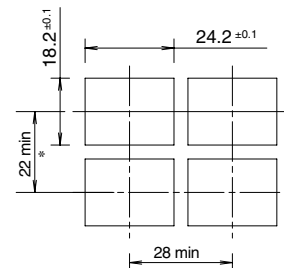
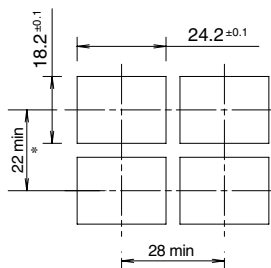
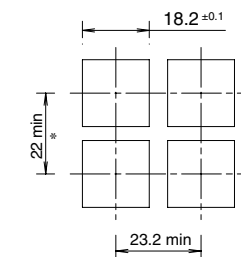
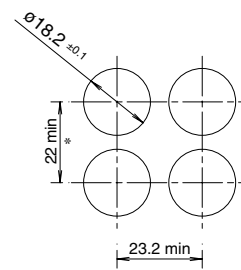
SPDT/DPDT Contacts

* 45 mm minimum for switches with guard



3PDT Contacts

* 45 mm minimum for switches with guard



All dimensions in mm.

Assembly Procedure

1. Install the operator to the panel.
2. Mount the contact block to the operator from the rear.
3. Turn the locking lever to lock the contact block.
4. Insert the PC board to terminals and solder.

Note 1: Make sure that each terminal is inserted into the PC board correctly.

Note 2: Do not apply tensile force to the connector cable for an extended period of time.

Note 3: Do not expose the contact block to water.

Note 4: Ensure to lock contact blocks when the contact blocks are installed on the operators.

Specifications and other descriptions in this catalog are subject to change without notice.



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