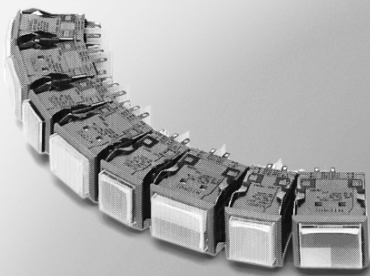


# Compact LED-Lit Push-Button Switches and Indicators

# LPK Series

Ideal for mounting on equipment with little depth margin



- **Two button sizes are available: 19 x 19mm (square) and 19 x 26mm (rectangular)**
- **Least panel depth in its class in the industry (switch body depth of 32.6mm)**
- **Safe design prevents direct contact with charged metal parts when the switch is handled**
- **The switch button is dimpled to fit your finger. When mounted on a panel, the push-button switch and indicator can be distinguished by the lens shape (The indicator has a flat lens)**



CLICK

## ORDER GUIDE

- **Set Model Nos. (The following set model Nos. are available for the LPK Series.)**

These switches are shipped with each of the standard specification lighting section/operator, and switch body units packaged as an individual set.

Regular orders should be made by this set model No. (package unit: 1 piece)

- **Push-button switches**

Shape	Contact material	Operation	Housing color	LED rated voltage	Button color	Catalog listing			
Square, single-section dimple lens button	Silver contact for normal loads	Momentary operation	Gray	24Vdc	Red	<b>LPK11-DG1T24AR</b>			
					Yellow	<b>LPK11-DG1T24AY</b>			
					Green	<b>LPK11-DG1T24AG</b>			
					White	<b>LPK11-DG1T24AW</b>			
					Orange	<b>LPK11-DG1T24AD</b>			
					Red when lit	<b>LPK11-DG1T24AP</b>			
			Green when lit	<b>LPK11-DG1T24AN</b>					
			Black	24Vdc	Momentary operation	Black	24Vdc	Red	<b>LPK11-DB1T24AR</b>
								Yellow	<b>LPK11-DB1T24AY</b>
								Green	<b>LPK11-DB1T24AG</b>
								White	<b>LPK11-DB1T24AW</b>
								Orange	<b>LPK11-DB1T24AD</b>
	Red when lit	<b>LPK11-DB1T24AP</b>							
	Green when lit	<b>LPK11-DB1T24AN</b>							
	Gold alloy cross point contact for low current loads	Momentary operation	Alternate operation	Gray	24Vdc	Red	<b>LPK11-DG2T24AR</b>		
						Green	<b>LPK11-DG2T24AG</b>		
						White	<b>LPK11-DG2T24AW</b>		
				Black	24Vdc	Alternate operation	Black	24Vdc	Red
Green									<b>LPK11-DB2T24AG</b>
White									<b>LPK11-DB2T24AW</b>
Gold alloy cross point contact for low current loads	Momentary operation	Momentary operation	Gray	24Vdc	Red	<b>LPK11-DG3T24AR</b>			
					Yellow	<b>LPK11-DG3T24AY</b>			
					Green	<b>LPK11-DG3T24AG</b>			
					White	<b>LPK11-DG3T24AW</b>			
					Orange	<b>LPK11-DG3T24AD</b>			
					Red when lit	<b>LPK11-DG3T24AP</b>			
Green when lit	<b>LPK11-DG3T24AN</b>								

**Note:** Color combinations, push-button switches with flat lens and LED lamp voltage 5Vdc or 12Vdc LEDs other than in the above table can also be produced.

**Note:** Switch body and operator can also be purchased separately besides set Model Nos.

Shape	Contact material	Operation	Housing color	LED rated voltage	Button color	Catalog listing	
Square, single-section dimple lens button	Gold alloy cross point contact for low current loads	Momentary operation	Black	24Vdc	Red	LPK11-DB3T24AR	
					Yellow	LPK11-DB3T24AY	
					Green	LPK11-DB3T24AG	
					White	LPK11-DB3T24AW	
					Orange	LPK11-DB3T24AD	
					Red when lit Green when lit	LPK11-DB3T24AP LPK11-DB3T24AN	
		Alternate operation	Gray	24Vdc	Red	LPK11-DG4T24AR	
					Green	LPK11-DG4T24AG	
					White	LPK11-DG4T24AW	
			Black	24Vdc	Red	LPK11-DB4T24AR	
					Green	LPK11-DB4T24AG	
					White	LPK11-DB4T24AW	
Rectangular, single-section dimple lens button	Silver contact for normal loads	Momentary operation	Gray	24Vdc	Red	LPK11-EG1T24AR	
					Yellow	LPK11-EG1T24AY	
					Green	LPK11-EG1T24AG	
					White	LPK11-EG1T24AW	
					Orange	LPK11-EG1T24AD	
					Red when lit Green when lit	LPK11-EG1T24AP LPK11-EG1T24AN	
			Black		24Vdc	Red	LPK11-EB1T24AR
						Yellow	LPK11-EB1T24AY
						Green	LPK11-EB1T24AG
						White	LPK11-EB1T24AW
						Orange	LPK11-EB1T24AD
						Red when lit Green when lit	LPK11-EB1T24AP LPK11-EB1T24AN
		Alternate operation	Gray	24Vdc	Red	LPK11-EG2T24AR	
					Green	LPK11-EG2T24AG	
					White	LPK11-EG2T24AW	
			Black	24Vdc	Red	LPK11-EB2T24AR	
					Green	LPK11-EB2T24AG	
					White	LPK11-EB2T24AW	
		Gold alloy cross point contact for low current loads	Momentary operation	Gray	24Vdc	Red	LPK11-EG3T24AR
						Yellow	LPK11-EG3T24AY
						Green	LPK11-EG3T24AG
						White	LPK11-EG3T24AW
						Orange	LPK11-EG3T24AD
						Red when lit Green when lit	LPK11-EG3T24AP LPK11-EG3T24AN
	Black			24Vdc		Red	LPK11-EB3T24AR
						Yellow	LPK11-EB3T24AY
						Green	LPK11-EB3T24AG
						White	LPK11-EB3T24AW
						Orange	LPK11-EB3T24AD
						Red when lit Green when lit	LPK11-EB3T24AP LPK11-EB3T24AN
	Alternate operation	Gray	24Vdc	Red	LPK11-EG4T24AR		
				Green	LPK11-EG4T24AG		
				White	LPK11-EG4T24AW		
		Black	24Vdc	Red	LPK11-EB4T24AR		
				Green	LPK11-EB4T24AG		
				White	LPK11-EB4T24AW		

**Note:** Color combinations, push-button switches with flat lens and LED lamp voltage 5Vdc or 12Vdc LEDs other than in the above table can also be produced.

**Note:** Switch body and operator can also be purchased separately besides set Model Nos.

Shape	Contact material	Operation	Housing color	LED rated voltage	Button colors (1) – (2)	Catalog listing
Square, 2-section dimple lens button  - Button position <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 5px 0;">(1)</div> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 5px 0;">(2)</div>	Silver contact for normal loads	Momentary operation	Gray	24Vdc	Red – Red	<b>LPK12-DG1T24ARR</b>
					Red – White	<b>LPK12-DG1T24ARW</b>
					White – Red	<b>LPK12-DG1T24AWR</b>
					Green – Green	<b>LPK12-DG1T24AGG</b>
					Green – White	<b>LPK12-DG1T24AGW</b>
					White – Green	<b>LPK12-DG1T24AWG</b>
			Red – Green	<b>LPK12-DG1T24ARG</b>		
			Green – Red	<b>LPK12-DG1T24AGR</b>		
			White – White	<b>LPK12-DG1T24AWW</b>		
			Black	24Vdc	Red – Red	<b>LPK12-DB1T24ARR</b>
					Red – White	<b>LPK12-DB1T24ARW</b>
					White – Red	<b>LPK12-DB1T24AWR</b>
		Green – Green			<b>LPK12-DB1T24AGG</b>	
		Green – White			<b>LPK12-DB1T24AGW</b>	
		White – Green			<b>LPK12-DB1T24AWG</b>	
		Alternate operation	Gray	24Vdc	Red – Green	<b>LPK12-DB1T24ARG</b>
					Green – Red	<b>LPK12-DB1T24AGR</b>
					White – White	<b>LPK12-DB1T24AWW</b>
					White – Red	<b>LPK12-DG2T24AWR</b>
					White – Green	<b>LPK12-DG2T24AWG</b>
					Red – Green	<b>LPK12-DG2T24ARG</b>
			Black	24Vdc	White – White	<b>LPK12-DG2T24AWW</b>
					White – Red	<b>LPK12-DB2T24AWR</b>
					White – Green	<b>LPK12-DB2T24AWG</b>
	Red – Green				<b>LPK12-DB2T24ARG</b>	
	White – White				<b>LPK12-DB2T24AWW</b>	
	White – Red				<b>LPK12-DB2T24AWR</b>	
	Gold alloy cross point contact for low current loads	Momentary operation	Gray	24Vdc	Red – Red	<b>LPK12-DG3T24ARR</b>
					Red – White	<b>LPK12-DG3T24ARW</b>
					White – Red	<b>LPK12-DG3T24AWR</b>
					Green – Green	<b>LPK12-DG3T24AGG</b>
					Green – White	<b>LPK12-DG3T24AGW</b>
					White – Green	<b>LPK12-DG3T24AWG</b>
			Red – Green	<b>LPK12-DG3T24ARG</b>		
			Green – Red	<b>LPK12-DG3T24AGR</b>		
			White – White	<b>LPK12-DG3T24AWW</b>		
			Black	24Vdc	Red – Red	<b>LPK12-DB3T24ARR</b>
					Red – White	<b>LPK12-DB3T24ARW</b>
					White – Red	<b>LPK12-DB3T24AWR</b>
		Green – Green			<b>LPK12-DB3T24AGG</b>	
		Green – White			<b>LPK12-DB3T24AGW</b>	
		White – Green			<b>LPK12-DB3T24AWG</b>	
		Alternate operation	Gray	24Vdc	Red – Green	<b>LPK12-DB3T24ARG</b>
					Green – Red	<b>LPK12-DB3T24AGR</b>
					White – White	<b>LPK12-DB3T24AWW</b>
					White – Red	<b>LPK12-DG4T24AWR</b>
					White – Green	<b>LPK12-DG4T24AWG</b>
					Red – Green	<b>LPK12-DG4T24ARG</b>
Black			24Vdc	White – White	<b>LPK12-DG4T24AWW</b>	
				White – Red	<b>LPK12-DB4T24AWR</b>	
				White – Green	<b>LPK12-DB4T24AWG</b>	
	Red – Green			<b>LPK12-DB4T24ARG</b>		
	White – White			<b>LPK12-DB4T24AWW</b>		
	White – Red			<b>LPK12-DB4T24AWR</b>		

**Note:** Color combinations, push-button switches with flat lens and LED lamp voltage 5Vdc or 12Vdc LEDs other than in the above table can also be produced.

**Note:** Switch body and operator can also be purchased separately besides set Model Nos.

Shape	Contact material	Operation	Housing color	LED rated voltage	Button colors (1) - (2)	Catalog listing
Rectangular, 2-section dimple lens button  - Button position <div style="border: 1px solid black; width: 100px; height: 20px; margin: 5px 0; text-align: center;">(1)</div> <div style="border: 1px solid black; width: 100px; height: 20px; margin: 5px 0; text-align: center;">(2)</div>	Silver contact for normal loads	Momentary operation	Gray	24Vdc	Red - Red	<b>LPK12-EG1T24ARR</b>
					Red - White	<b>LPK12-EG1T24ARW</b>
					White - Red	<b>LPK12-EG1T24AWR</b>
					Green - Green	<b>LPK12-EG1T24AGG</b>
					Green - White	<b>LPK12-EG1T24AGW</b>
					White - Green	<b>LPK12-EG1T24AWG</b>
					Red - Green	<b>LPK12-EG1T24ARG</b>
					Green - Red	<b>LPK12-EG1T24AGR</b>
					White - White	<b>LPK12-EG1T24AWW</b>
			Black	24Vdc	Red - Red	<b>LPK12-EB1T24ARR</b>
					Red - White	<b>LPK12-EB1T24ARW</b>
					White - Red	<b>LPK12-EB1T24AWR</b>
					Green - Green	<b>LPK12-EB1T24AGG</b>
					Green - White	<b>LPK12-EB1T24AGW</b>
					White - Green	<b>LPK12-EB1T24AWG</b>
					Red - Green	<b>LPK12-EB1T24ARG</b>
					Green - Red	<b>LPK12-EB1T24AGR</b>
					White - White	<b>LPK12-EB1T24AWW</b>
	Alternate operation	Gray	24Vdc	White - Red	<b>LPK12-EG2T24AWR</b>	
				White - Green	<b>LPK12-EG2T24AWG</b>	
				Red - Green	<b>LPK12-EG2T24ARG</b>	
		Black		24Vdc	White - White	<b>LPK12-EG2T24AWW</b>
					White - Red	<b>LPK12-EB2T24AWR</b>
					White - Green	<b>LPK12-EB2T24AWG</b>
					Red - Green	<b>LPK12-EB2T24ARG</b>
					White - White	<b>LPK12-EB2T24AWW</b>
					White - Red	<b>LPK12-EG3T24ARR</b>
	Gold alloy cross point contact for low current loads	Momentary operation	Gray	24Vdc	Red - Red	<b>LPK12-EG3T24ARR</b>
					Red - White	<b>LPK12-EG3T24ARW</b>
					White - Red	<b>LPK12-EG3T24AWR</b>
					Green - Green	<b>LPK12-EG3T24AGG</b>
					Green - White	<b>LPK12-EG3T24AGW</b>
					White - Green	<b>LPK12-EG3T24AWG</b>
					Red - Green	<b>LPK12-EG3T24ARG</b>
					Green - Red	<b>LPK12-EG3T24AGR</b>
					White - White	<b>LPK12-EG3T24AWW</b>
Black			24Vdc	Red - Red	<b>LPK12-EB3T24ARR</b>	
				Red - White	<b>LPK12-EB3T24ARW</b>	
				White - Red	<b>LPK12-EB3T24AWR</b>	
				Green - Green	<b>LPK12-EB3T24AGG</b>	
				Green - White	<b>LPK12-EB3T24AGW</b>	
				White - Green	<b>LPK12-EB3T24AWG</b>	
				Red - Green	<b>LPK12-EB3T24ARG</b>	
				Green - Red	<b>LPK12-EB3T24AGR</b>	
				White - White	<b>LPK12-EB3T24AWW</b>	
Alternate operation	Gray	24Vdc	White - Red	<b>LPK12-EG4T24AWR</b>		
			White - Green	<b>LPK12-EG4T24AWG</b>		
			Red - Green	<b>LPK12-EG4T24ARG</b>		
	Black		24Vdc	White - White	<b>LPK12-EG4T24AWW</b>	
				White - Red	<b>LPK12-EB4T24AWR</b>	
				White - Green	<b>LPK12-EB4T24AWG</b>	
				Red - Green	<b>LPK12-EB4T24ARG</b>	
				White - White	<b>LPK12-EB4T24AWW</b>	
				White - Red	<b>LPK12-EG1T24ARR</b>	

**Note:** Color combinations, push-button switches with flat lens and LED lamp voltage 5Vdc or 12Vdc LEDs other than in the above table can also be produced.

**Note:** Switch body and operator can also be purchased separately besides set Model Nos.

• Indicator

Shape	Operation	Housing color	LED rated voltage	Button colors	Catalog listing
Square, single-section flat lens	Indicator	Gray	24Vdc	Red	<b>LPK11-SG0T24AR</b>
				Yellow	<b>LPK11-SG0T24AY</b>
				Green	<b>LPK11-SG0T24AG</b>
				White	<b>LPK11-SG0T24AW</b>
				Orange	<b>LPK11-SG0T24AD</b>
				Red when lit	<b>LPK11-SG0T24AP</b>
		Green when lit	<b>LPK11-SG0T24AN</b>		
		Black	24Vdc	Red	<b>LPK11-SB0T24AR</b>
				Yellow	<b>LPK11-SB0T24AY</b>
				Green	<b>LPK11-SB0T24AG</b>
				White	<b>LPK11-SB0T24AW</b>
				Orange	<b>LPK11-SB0T24AD</b>
				Red when lit	<b>LPK11-SB0T24AP</b>
				Green when lit	<b>LPK11-SB0T24AN</b>
Rectangular, single-section flat lens	Indicator			Gray	24Vdc
		Yellow	<b>LPK11-RG0T24AY</b>		
		Green	<b>LPK11-RG0T24AG</b>		
		White	<b>LPK11-RG0T24AW</b>		
		Orange	<b>LPK11-RG0T24AD</b>		
		Red when lit	<b>LPK11-RG0T24AP</b>		
		Green when lit	<b>LPK11-RG0T24AN</b>		
		Black	24Vdc	Red	<b>LPK11-RB0T24AR</b>
				Yellow	<b>LPK11-RB0T24AY</b>
				Green	<b>LPK11-RB0T24AG</b>
				White	<b>LPK11-RB0T24AW</b>
				Orange	<b>LPK11-RB0T24AD</b>
				Red when lit	<b>LPK11-RB0T24AP</b>
				Green when lit	<b>LPK11-RB0T24AN</b>

**Note:** Color combinations, push-button switches with flat lens and LED lamp voltage 5Vdc or 12Vdc LEDs other than in the above table can also be produced.

**Note:** Switch body and operator can also be purchased separately besides set Model Nos.

• Switch, Indicator body catalog listing

Basic model No.	Body shape	Bezel color	Switch function and contact material	Terminal shape	Description	
<b>LPK21-</b>	<b>S</b> <b>R</b>				Short body type push-button switch, indicator body	
					Square	
					Rectangular	
	<b>B</b> <b>G</b>					Black
						Gray
	<b>1</b> <b>2</b> <b>3</b> <b>4</b> <b>0</b>					Momentary operation, silver contact
						Alternate operation, silver contact
						Momentary operation, gold cross contact
						Alternate operation, gold cross contact
						Indicator
	<b>T</b>					Solder and #110 tab terminal combined

\* For details on combinations of products in the above table, contact your agent.

● Operator (button/LED lamp) unit push-button catalog listing

Basic model No.	Shape of lit surface	Button shape	Switch function	Lamp voltage	LED circuit	Button color (1)	Button color (2)	Button color (3)	Description	
<b>LPK</b>									Short body type push-button switch	
	<b>31-</b>								Single-section LED-lit operator	
	<b>32-</b>								2-section LED-lit operator	
	<b>33-</b>								3-section LED-lit operator	
			<b>D1</b>						Dimple, Square, Push-button switch	
			<b>E1</b>						Dimple, Rectangular, Push-button switch	
			<b>S0</b>						Flat, Square, Indicator	
			<b>R0</b>						Flat, Rectangular, Indicator	
					<b>24</b>				For 24Vdc	
					<b>12</b>				For 12Vdc	
				<b>5</b>				For 5Vdc		
					<b>A</b>			Anode (+) common		
									Color when lit	
									Color when out	
					<b>R</b>	<b>R</b>	<b>R</b>		Red	Red
					<b>Y</b>	<b>Y</b>	<b>Y</b>		Yellow	Yellow
					<b>G</b>	<b>G</b>	<b>G</b>		Green	Green
					<b>D</b>	<b>D</b>	<b>D</b>		Orange	Orange
					<b>W</b>	<b>W</b>	<b>W</b>		Amber	Milky white
					<b>N</b>	<b>N</b>	<b>N</b>		Pale yellowish green	Milky white
					<b>P</b>	<b>P</b>	<b>P</b>		Pink	Milky white

- Button position

(1)	
(3)	(2)

\* For details on combinations of products in the above table, contact your agent.

● Accessories (sold separately)

Name	Specifications	Catalog listing	Packaging unit	
Barrier	Short barrier, center, gray	<b>LPK4B-SCL</b>	10	
	Short barrier, center, black	<b>LPK4B-SCK</b>		
	Short barrier, end, gray	<b>LPK4B-SEL</b>		
	Short barrier, end, black	<b>LPK4B-SEK</b>		
	Long barrier, center, gray	<b>LPK4B-LCL</b>		
	Long barrier, center, black	<b>LPK4B-LCK</b>		
	Long barrier, end, gray	<b>LPK4B-LEL</b>		
	Long barrier, end, black	<b>LPK4B-LEK</b>		
Switch guard	For square type	<b>LPK4G-SS1</b>	5	
	For rectangular type	<b>LPK4G-RS1</b>		
	Long mounting type for rectangular type	<b>LPK4G-RL1</b>		
Panel seal (dust-proof cover)	For square type: IP50	<b>LPK4P-S50</b>	5	
	For rectangular type: IP50	<b>LPK4P-R50</b>		
Connector	For square type	Soldered terminal	<b>LPK4C-ST</b>	-
		PCB terminal	<b>LPK4C-SP</b>	
		Wire-wrap terminal	<b>LPK4C-SW</b>	
	For rectangular type	Soldered terminal	<b>LPK4C-RT</b>	
		PCB terminal	<b>LPK4C-RP</b>	
		Wire-wrap terminal	<b>LPK4C-RW</b>	

● Maintenance parts (sold separately)

• Button (packaging unit: 10)











Type	Description	Catalog listing
For square type	Flat button, gloss finish, achromatic transparent	<b>LPK5B-SF1C</b>
For rectangular type	Flat button, gloss finish, achromatic transparent	<b>LPK5B-RF1C</b>


• Button tool (packaging unit: 1)

Type	Catalog listing	Description
Button tool	<b>PS5T-AX1</b>	Used for removing buttons



• Color plate (packaging unit: 10)

Shape and size	Description	Catalog listing
 Square type 1/4 size	Square single-section LED-lit	<b>LPK5C-S1</b> 
 Square type 1/2 size	Square 2-section LED-lit	<b>LPK5C-S2</b> 
 Rectangular type 1/4 size	Rectangular single-section LED-lit	<b>LPK5C-R1</b> 
 Rectangular type 1/2 size	Rectangular 2-section LED-lit, Rectangular 3-section LED-lit	<b>LPK5C-R2</b> 
 Rectangular type 3/4 size	Rectangular 3-section LED-lit	<b>LPK5C-R4</b> 

 ... Color (**R**: Red, **G**: Green, **W**: Milky white, **D**: Orange, **Y**: Yellow)

• Legend plate (packaging unit: 10)

Shape	Catalog listing
Square	<b>LPK5L-S</b>
Rectangular	<b>LPK5L-R</b>

## SPECIFICATIONS

External standard	Conformed standards		JIS C 4521, IEC 60947-5-1
	Approved standards		EN 60947-5-1, UL/C-UL
Structure	Contact type		Single-Pole Double Throw (SPDT) × 2
	Contact shape		Normal load: silver rivet, Low current load: gold alloy cross point
	Terminal shape		Solder and #110 tab terminal combined
	Protective structure		IP00 (release type)
	Electric shock protection class		Class II
	Operating environment pollution level		3 (IEC 60947-5-1)
Electrical performance	Electrical rating		Normal load (silver contact): 250Vac-3A, 30Vdc-3A Low current load (gold alloy cross point contact): 125Vac-0.1A, 30Vdc-0.1A
	LED lamp rating		See Table 1.
	Dielectric strength		Across same pole terminals 750Vac, 50/60Hz for 1 minute
			Between different pole terminals 3,500Vac, 50/60Hz for 1 minute
			Between lamp terminals 1,250Vac, 50/60Hz for 1 minute
	Insulating resistance		Between conducting metal part and non-conducting metal part 3,500Vac, 50/60Hz for 1 minute
			Min. 100MΩ (by 500Vdc megger)
	Initial contact resistance		Normal load (silver contact): Max. 50mΩ (6 to 8Vdc-1A measured by voltage drop method) Low current load (gold alloy cross point contact): Max. 100mΩ (6 to 8Vdc-0.1A measured by voltage drop method)
	Minimum contact voltage/current		Normal load (silver contact): 24Vdc-10mA, 12Vdc-20mA Low current load (gold alloy cross point contact): 5Vdc-5mA
	PTI (tracking characteristics)		175
	Indicator rated voltage		5Vdc, 12Vdc, 24Vdc ± 5%
	Indicator rated energizing voltage		See Table 1
	Terminal temperature rise		Max. 30°C (Terminal temperature measured by thermoelectric thermometer after energizing by rated current)
Button temperature rise		30°C or less on button top surface Note	
Mechanical performance	Allowable operating frequency	Mechanical	30 operations/minute
		Electrical	20 operations/minute
	Operator strength		Withstand load of 100N applied in operating direction for 1 minute
	Terminal strength	#110 tab/solder	Withstand insertion and extraction load of 64N for 1 minute
	Vibration resistance	Malfunction	1.5mm amplitude, 10 to 55Hz vibration frequency, for 2 continuous hours (contact release of 1ms or less at free position and operating limit positions)
	Impact resistance	Malfunction	150m/s <sup>2</sup> (contact release of 1ms or less at free position and operating limit positions)
Life	Mechanical		Momentary (min. 1 million operations)
			Alternate (min. 200,000 operations)
	Electrical		Normal load (silver contact): min. 100,000 operations (250Vac-3A resistive load, operating frequency 20 operations/minute) Low current load (gold alloy cross point contact): min. 200,000 operations (30Vdc-0.1A resistive load, operating frequency 20 operations/minute)
Environmental conditions	Operating temperature range		-20 to +40°C, Freezing or condensation not allowed.
	Operating humidity range		Max. 85%RH
	Storage temperature range		-30 to +65°C, Freezing or condensation not allowed.
	Soldering heat resistance		Within 5 seconds by 350°C soldering iron

Note: With 24Vdc types, all three LED-lit sections do not light.

Table 1 LED lamp rating

Lit surface	Rated voltage	Current consumption Note	Recommended operating voltage
Square single-section LED-lit	5Vdc	54mA	±5% of rated voltage
	12Vdc	31mA	
	24Vdc	16mA	
Square 2-section LED-lit	5Vdc	33mA × 2	
	12Vdc	16mA × 2	
	24Vdc	15mA × 2	
Rectangular single-section LED-lit	5Vdc	72mA	
	12Vdc	31mA	
	24Vdc	16mA	
Rectangular 2-section LED-lit	5Vdc	36mA × 2	
	12Vdc	16mA × 2	
	24Vdc	16mA × 2	
Rectangular 3-section LED-lit	5Vdc	36/18mA × 2	
	12Vdc	16mA × 3	
	24Vdc	16mA × 3	

Note: The current value per circuit is indicated as the current value.

### ELECTRIC DUTY

Voltage	Normal load (silver contact)		Low current load (gold cross contact)		
	Resistance	Induction	Resistance	Induction	
AC	125Vac	5	3	0.1	—
	250Vac	3	2	—	—
DC	30Vdc	3	2	0.1	—
	125Vdc	0.4	0.05	—	—
Minimum allowable load	24Vdc-10mA 12Vdc-20mA		5Vdc-5mA		

Note: A power-factor load of 0.4 (ac) and time constant 7ms (dc) is indicated as the "induction load."

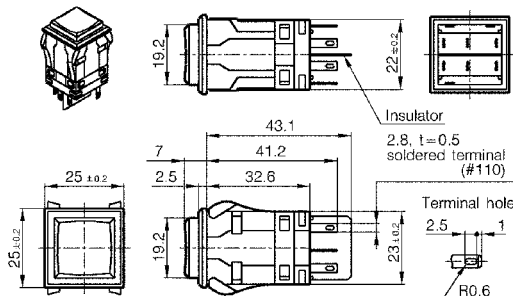
### CHARACTERISTICS, ETC.

Item	Momentary operation	Alternate operation
Operation force	Max. 7N	Max. 8N
Button stroke	3.5 ± 0.4mm	
Mounting panel plate thickness	1 to 5mm	
Materials	Button	Polycarbonate resin (achromatic transparent)
	Color plate	Acrylic resin (red, yellow, green, orange, milky white)
	Plunger	Polyester resin (white)
	Switch, indicator housing	Polyester resin (gray, black)
	Barrier	Polycarbonate resin (gray, black)

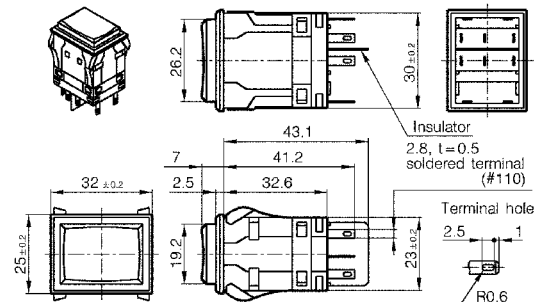
### EXTERNAL DIMENSIONS

- Push-button switch
- Square set type

(unit: mm)



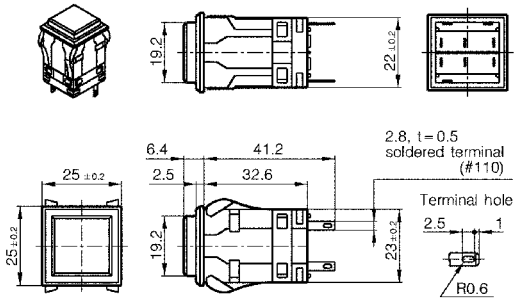
- Rectangular set type



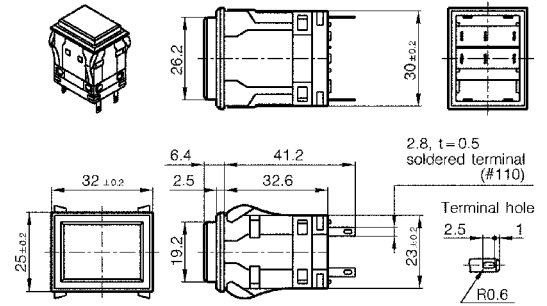
(unit: mm)

● Indicators

Square set model

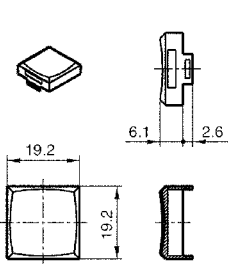


Rectangular set model

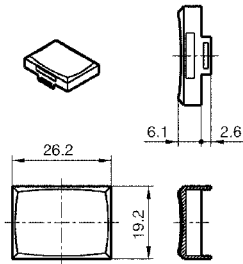


● Button

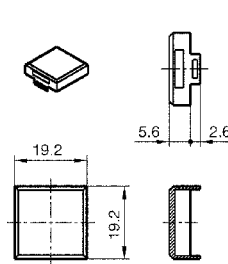
Square dimple  
(LPK5B-SD2C)



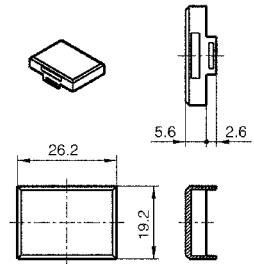
Rectangular dimple  
(LPK5B-RD2C)



Square flat  
(LPK5B-SF1C)

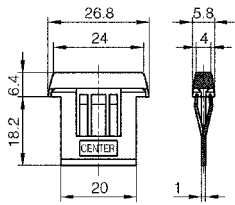


Rectangular flat  
(LPK5B-RF1C)

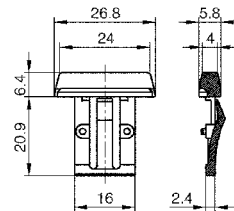


● Barrier

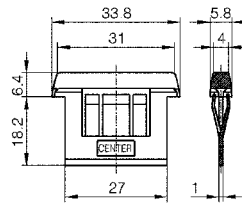
Short center barrier  
(LPK4B-SCL)



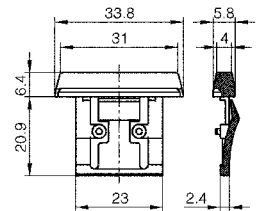
Short end barrier  
(LPK4B-SEL)



Long center barrier  
(LPK4B-LCL)



Long end barrier  
(LPK4B-LEL)

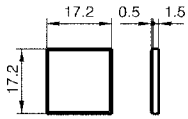


(unit: mm)

● Color plate

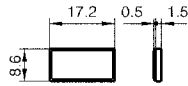
Square  $\frac{1}{1}$  size

(LPK5C-S1 □ Note)



Square  $\frac{1}{2}$  size

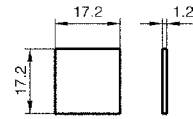
(LPK5C-S2 □ Note)



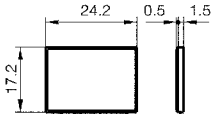
● Legend plate

Square

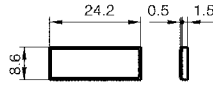
(LPK5L-S)



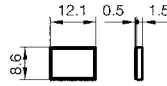
Rectangular  $\frac{1}{1}$  size  
(LPK5C-R1 □ Note)



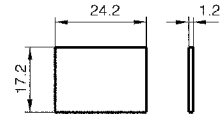
Rectangular  $\frac{1}{2}$  size  
(LPK5C-R2 □ Note)



Rectangular  $\frac{1}{4}$  size  
(LPK5C-R4 □ Note)



Rectangular  
(LPK5L-R)

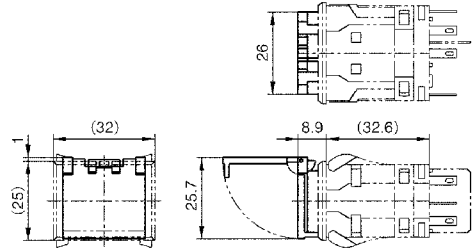
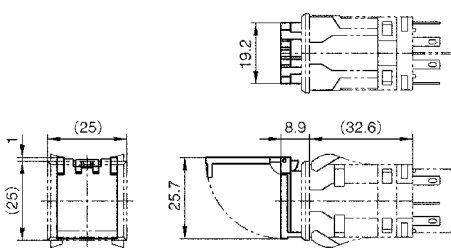


Note: Color cord (R: Red, G: Green, W: White, D: Orange, Y: Yellow)

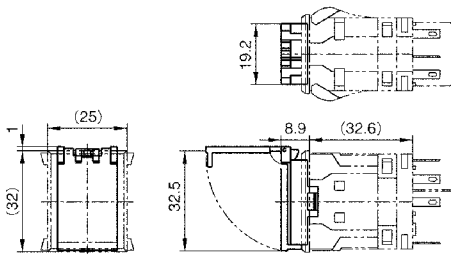
● Switch guard

Square (LPK4G-SS1)

Rectangular (LPK4G-RS1)

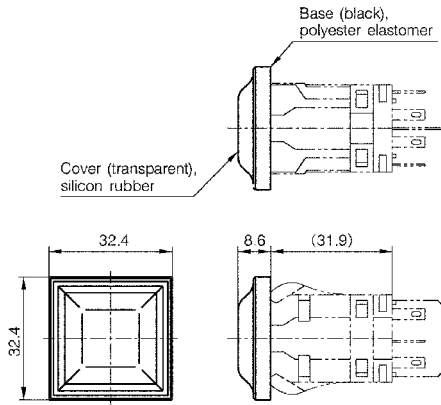


Long mounting type for rectangular (LPK4G-RL1)

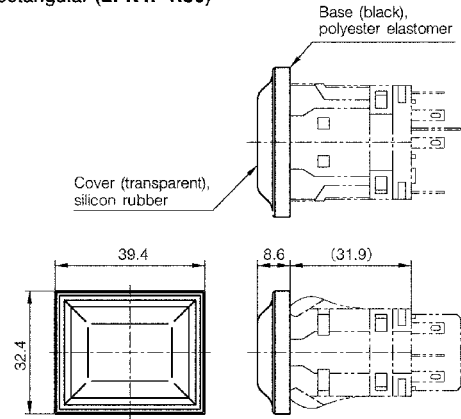


(unit: mm)

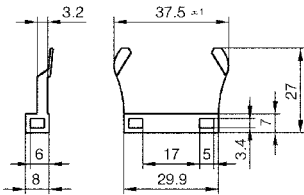
● Panel seal  
Square (LPK4P-S50)



Rectangular (LPK4P-R50)

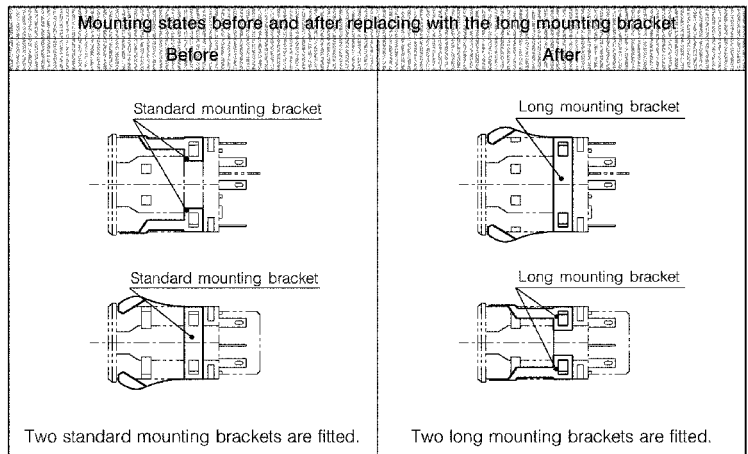


● Long mounting bracket (LPK4T-L11)

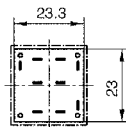
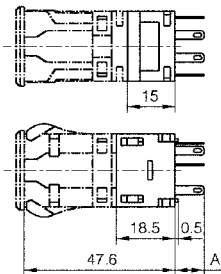


Note 1: This long mounting bracket is used when vertically mounting a rectangular LPK body.

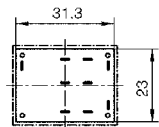
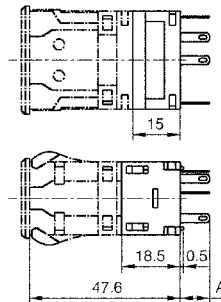
Note 2: Remove the mounting bracket fitted on the LPK body, and replace with the long mounting bracket for use referring to the figures on the right.



● Connector  
• External dimensions  
Square (LPK4C-S□)



Rectangular (LPK4C-R□)



• Terminal shape details

(unit: mm)

Soldered terminal	Wire-wrap terminal	PCB terminal
<p>Terminal length (dimension A) : 9.4</p>	<p>Terminal length (dimension A): 16.9</p> <p>Terminal circumscribing circle pitch dimensions</p> <p>Rectangular: 26, 12.5, 7, 7.96, 8.8, 16.1</p> <p>Square: 19, 12.5, 7, 9-1.6mm dia. hole</p>	<p>Terminal length (dimension A): 4.1</p> <p>PCB drilling dimensions</p> <p>Rectangular: 27.28, 12.5, 7, 7.32, 8.8, 16.1</p> <p>Square: 20.28, 12.5, 7, 9-1.5mm dia. hole</p>

**PANEL CUTOUT (panel thickness 1 to 5mm)**

Square

Rectangular

(unit: mm)

Classification	Mount design	Panel cutout
Standard mounting	Horizontal single mounting 	Panel cutout: 23.5±0.3, 22.5±0.3
	Horizontal gang mounting 	Panel cutout: 23.5±0.3, 25N-2.5±0.3
Barrier attachment mounting	Horizontal single mounting 	Panel cutout: 23.5±0.3, 28.3±0.3
	Horizontal gang mounting 	Panel cutout: 23.5±0.3, 26N+2.3±0.3
Dust-proof cover mounting	Horizontal single mounting 	Panel cutout: 22.5±0.3, 23.5±0.3
	Horizontal gang mounting 	Panel cutout: 22.5±0.3, 23.5±0.3

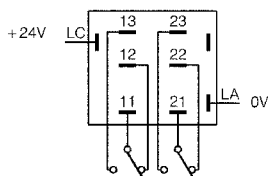
Classification	Mount design	Panel cutout
Standard mounting	Horizontal single mounting 	Panel cutout: 23.5±0.3, 30.5±0.3
	Horizontal gang mounting 	Panel cutout: 23.5±0.3, 32N-1.5±0.3
	Vertical single mounting 	Panel cutout: 30.5±0.3, 23.5±0.3
	Vertical gang mounting 	Panel cutout: 30.5±0.3, 25N-1.5±0.3
Barrier attachment mounting	Horizontal single mounting 	Panel cutout: 23.5±0.3, 35.3±0.3
	Horizontal gang mounting 	Panel cutout: 23.5±0.3, 33N+2.3±0.3
	Vertical single mounting 	Panel cutout: 30.5±0.3, 28.3±0.3
	Vertical gang mounting 	Panel cutout: 30.5±0.3, 26N+2.3±0.3
Dust-proof cover mounting	Horizontal single mounting 	Panel cutout: 30.5±0.3, 23.5±0.3
	Horizontal gang mounting 	Panel cutout: 30.5±0.3, 23.5±0.3

Note 1: When inserting the switch body from the front of the panel, mount with the model No./rating inscribed side facing up.

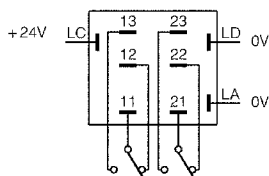
Note 2: When mounting vertically, replace with the long mounting bracket (model No. LPK4T-11) for use. When ordering, specify "number of push-button switches used × 2".

## TERMINAL LAYOUT (view from bottom with model No./rating inscribed side facing up)

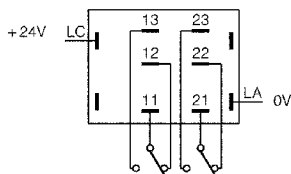
### • Square single-section LED-lit



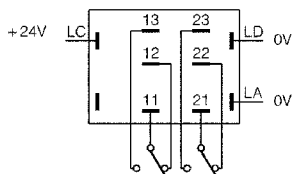
### • Square 2-section LED-lit



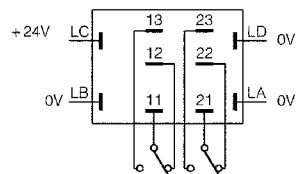
### • Rectangular single-section LED-lit



### • Rectangular 2-section LED-lit



### • Rectangular 3-section LED-lit



## PRECAUTIONS

### Safety Precautions

- Be sure to turn the power supply of the equipment OFF before wiring the switch. Failure to do so might result in electrical shock depending on the power supply voltage.
- When removing the button and refitting it, the switch contacts are reversed.  
If there is the risk of an abnormality by reversion of the contacts, turn the power OFF first.
- Use lamps within their specified ranges such as a switching load and operating life. If lamps are used outside of their ranges, abnormal heat or smoke may occur.

### Handling precautions

- Indicator**
  - Use indicators within the LED lamp lighting voltage of 25.2V.
- Mounting**
  - Secure sufficient insulation space between terminals and switch metal parts and the mounting panel in a mounted state.
- Soldering**
  - Solder within 5 seconds using a 350°C (60W or less) soldering iron.
- Environmental considerations**
  - This product is not hermetically sealed. So its characteristics may be impaired depending on external atmosphere and other conditions. Avoid use and storage at dusty locations or at locations subject to corrosive gases or silicon that may adversely influence the contacts.
  - This product is not a water-proof structure. Prevent it from being splashed by water and other liquids.
- Other**
  - Do not operate switch buttons using a hammer, screwdriver or other tool. Operate buttons only with your fingers.
  - To improve reliability during actual use, we request that you check the quality of the switch in an actual operating state.