■ Indicator

Cylindrical ⌀16 Series
• Same type as the KL□□ Pushbutton Switches.
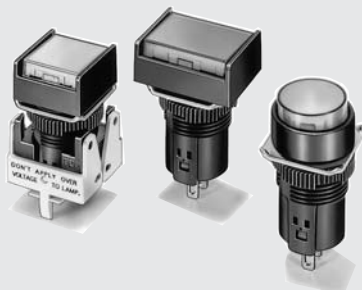
■ Product Models

	Shape		Model
Soldering Terminal	Round		KL1P Series
	Square		KL2P Series
	Rectangular		KL3P Series

	Shape
Voltage Reduction Lighting	
Quick Connector	

■ Ratings

Operating Ambient Temperature	-10 ~ +55°C (No freezing)
Operating Ambient Humidity	35 ~ 85%RH
Storage Ambient Temperature	-25 ~ +65°C

• Incandescent lamps

Rated Voltage	Rated Current	Operating Voltage
6V AC/DC	60mA	5V AC/DC
14V AC/DC	40mA	12V AC/DC
28V AC/DC	24mA	24V AC/DC

• LED Lamps

Rated Voltage	Rated Current	Operating Voltage	Incorporated Resister
5V DC	30mA(15mA)	5V±5% DC	33Ω(68Ω)
12V AC/DC	15mA	12V±5% AC/DC	270Ω(560Ω)
24V AC/DC	10mA	24V±5% AC/DC	1600Ω(2000Ω)

■ Approved Overseas Standard

UL, cUL

■ Set Model ... (Lighting section + Case section

assembly) and (Lamp section + Socket section)
combined can be delivered in a set.

■ Model Designation

KL - ※1 P - ※2 ※3 ※4

Operation section shape

Light source

Color of operation section

Socket section

※1 Operation section shape

Code	Shape
1	Round
2	Square
3	Rectangular

※2 Light source

Code	Lamp	Operating Voltage	Rated Voltage
5	Incandescent lamp	5V AC/DC	6V AC/DC
12		12V AC/DC	14V AC/DC
24		24V AC/DC	28V AC/DC
5E		5V AC/DC	5V AC/DC
12E	LED	12V AC/DC	12V AC/DC
24E		24V AC/DC	24V AC/DC

※3 Color of operation section

Code	Function
R	Red
G	Green (Incandescent lamp only)
GY	Green (LED only)
Y	Yellow
PY	Pure yellow
W	White
A	Blue

※4 Socket section

Code	Terminal
None	Soldering terminal

B-input: Socket section

S	Quick connector

Enquire to our representative about the prices and delivery of the quick connector.

B-input: Voltage reduction unit (24V LED incorporated)

Code	Lamp	Operating Voltage	Rated Voltage
T1	LED	100/110V AC/DC	110V AC/DC
T2		200/220V AC/DC	220V AC/DC

-Soldering terminal is available for 100V type only.
-No voltage reduction unit is available for PCB terminal.
-Enquire to our representative about the prices and delivery.

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■ Set Model ... (Lighting section + Case section assembly) and (Lamp section + Socket section) combined can be delivered in a set.

● Round (KL1P)

• Soldering terminal

Shape	Lamp	Protection Degree	IP65 Oil Resistant	Color of Lighting Section Code (color)*
	LED lamp	5V DC	KL1P-5E ☐	R (Red), Y (Yellow) G (Green), A (Blue) W (White)
		12V AC/DC	KL1P-12E ☐	
		24V AC/DC	KL1P-24E ☐	
	Incandescent lamp	5V AC/DC	KL1P-5 ☐	R (Red), Y (Yellow) G (Green), A (Blue) W (White)
		12V AC/DC	KL1P-12 ☐	
		24V AC/DC	KL1P-24 ☐	

*The color code should be designated in ☐ .

● Square (KL2P)

• Soldering terminal

Shape	Lamp	Protection Degree	IP65 Oil Resistant	Color of Lighting Section Code (color)*
	LED lamp	5V DC	KL2P-5E ☐	R (Red), Y (Yellow) G (Green), A (Blue) W (White)
		12V AC/DC	KL2P-12E ☐	
		24V AC/DC	KL2P-24E ☐	
	Incandescent lamp	5V AC/DC	KL2P-5 ☐	R (Red), Y (Yellow) G (Green), A (Blue) W (White)
		12V AC/DC	KL2P-12 ☐	
		24V AC/DC	KL2P-24 ☐	

*The color code should be designated in ☐ .
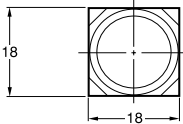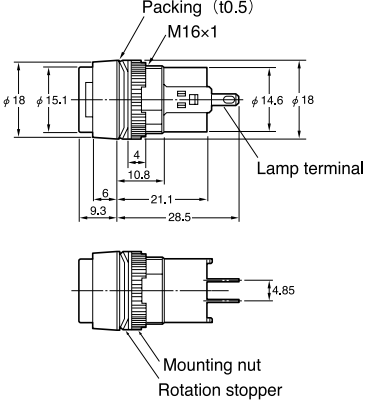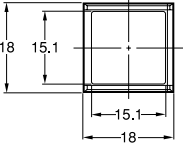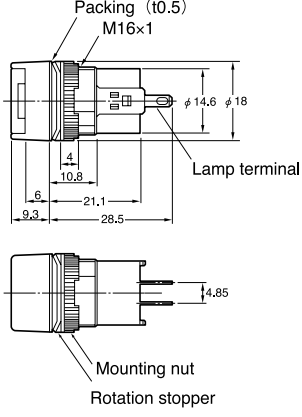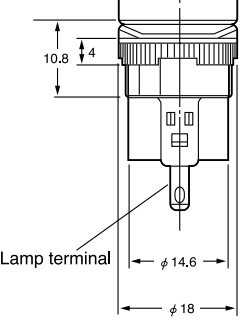
● Rectangular (KL3P)

• Soldering terminal

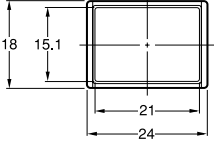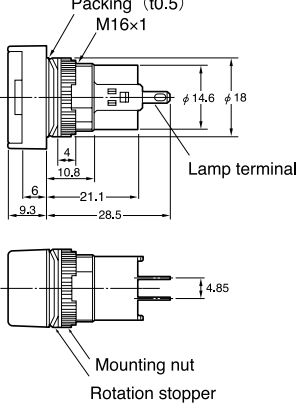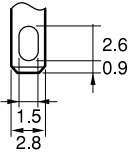| Shape	Lamp	Protection Degree	IP65 Oil Resistant	Color of Lighting Section Code (color)*
	LED lamp	5V DC	KL3P-5E ☐	R (Red), Y (Yellow) G (Green), A (Blue) W (White)
		12V AC/DC	KL3P-12E ☐	
		24V AC/DC	KL3P-24E ☐	
	Incandescent lamp	5V AC/DC	KL3P-5 ☐	R (Red), Y (Yellow) G (Green), A (Blue) W (White)
		12V AC/DC	KL3P-12 ☐	
		24V AC/DC	KL3P-24 ☐	

*The color code should be designated in ☐ .

■ **Dimensions** (For panel dimensions, refer to the page 4-12.)
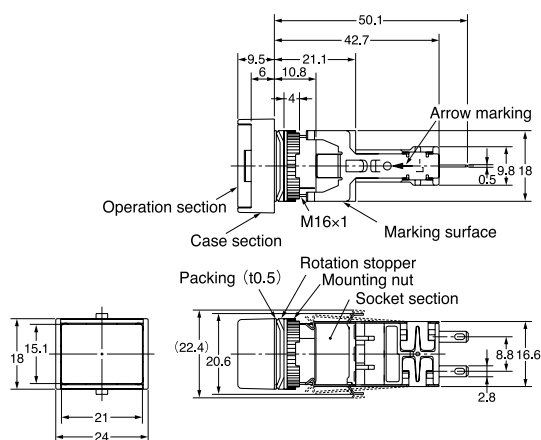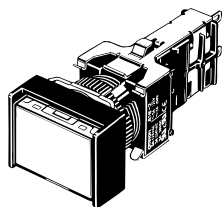
▼ Round / KL1P
Soldering terminal

Packing（t0.5）
M16×1

φ18 φ15.1   φ14.6 φ18

4
10.8

6
9.3

21.1
28.5

Lamp terminal

18

18

4.85

Mounting nut
Rotation stopper

▼ Square / KL2P
Soldering terminal

Packing（t0.5）
M16×1

φ14.6 φ18

4
10.8

6
9.3

21.1
28.5

Lamp terminal

18 15.1

15.1
18

4.85

Mounting nut
Rotation stopper

▼ Rectangular / KL3P
Soldering terminal

Packing（t0.5）
M16×1

φ14.6 φ18

4
10.8

6
9.3

21.1
28.5

Lamp terminal

18 15.1

21
24

4.85

Mounting nut
Rotation stopper

Terminal hole dimensions

2.6
0.9

1.5
2.8

10.8 4

Lamp terminal

φ14.6

φ18

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■ Dimensions

▼ Rectangular
Voltage Reduction Lighting
Soldering terminal

Arrow marking
Operation section
Case section
M16×1
Marking surface
Packing (t0.5)
Rotation stopper
Mounting nut
Socket section

50.1
42.7
9.5
6
10.8
4
9.8 18
0.5
15.1
18
(22.4)
20.6
8.8 16.6
2.8
21
24
21.1

Panel cut dimensions

φ16 $^{+0.2}_{0}$
24 or longer
23 or longer
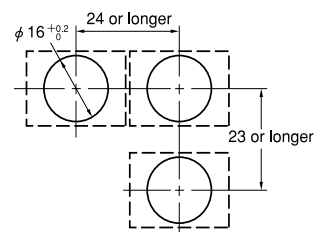
Panel thickness: 0.5 ~ 3.2mm

▼ Rectangular / KL3K
Quick connector

Socket section release
lever
Rotation stopper
Mounting nut
Packing (t0.5)
M16×1
TOP

2
9.5
6
10.8
4
48.9
24
23.9
18 15.1
(31.7) 27.4
23.5
21
24

Panel cut dimensions

φ16 $^{+0.2}_{0}$
25 or longer
33 or longer
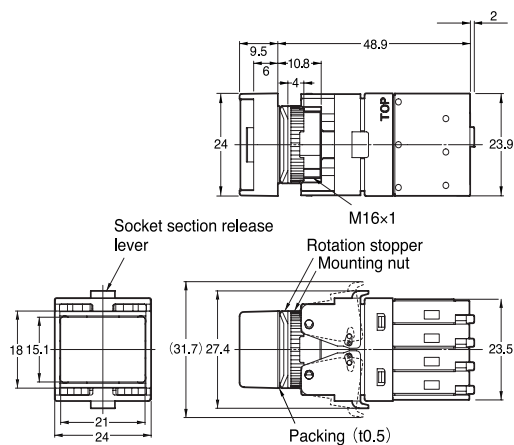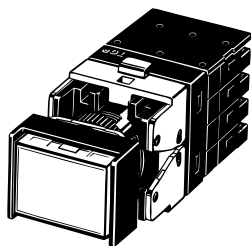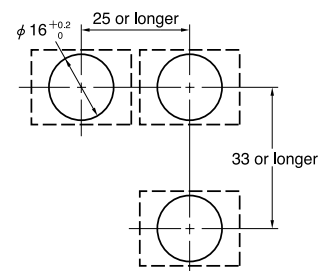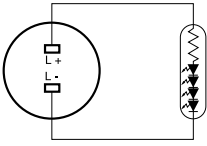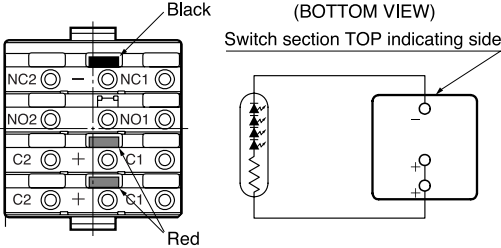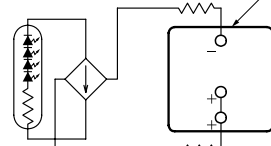
Panel thickness: 0.5 ~ 3.2mm

■ Terminal Arrangement

Soldering Terminal	Quick Connector	Voltage Reduction
(BOTTOM VIEW) "L+" is not indicated on the main body.	Black NC2 — NC1 NO2 NO1 C2 + C1 C2 + C1 Red	(BOTTOM VIEW) Switch section TOP indicating side 	(BOTTOM VIEW) Switch section TOP indicating side Voltage reduction circuit is incorporated in the voltage reduction light type.

■ Wiring Procedures for Quick Connector

● Wiring

(1) Remove the insulation at the wire end for 10mm. (Allowable range: 10mm ±1mm)
(2) For stranded wire, twist the wire edge straight.
(3) While pushing the release button completely at the wire insertion, insert the wire to the depth. (Using a fine screwdriver is recommended.)
(4) Release the button to lock the wire.
(5) Confirm that the wire will not be pulled out easily.

● Removing wire

(1) Pull the wire while pushing the release button.

Note: When re-inserting the wire once locked, cut the end and remove the insulation to use.

■ Instructions for Proper Use

● Assembling

• Give an attention to the proper direction when installing the case section on the switch section. Align the "• " mark of the case with the TOP indication of the switch section before assembling.

TOP indication

Case section   "●" marking

Socket section
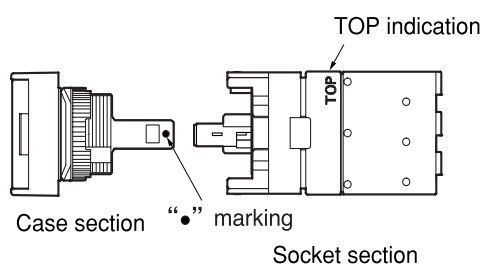
● Wiring

• When using stranded wire, be sure to twist the wire end.
• Insert the wire to the depth until it stops. Also, ensure that the wire is secured firmly by pulling the wire with appropriate force.
• Consider so that the terminals and connected wires will not get physically stressed.
• Ensure the proper wiring with the diagrams and terminal numbers.

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