Sunmulon

LED

CL

CL LED Indicator

Bright and Various Illumination makes easy planning of multiple design.
Easy Matrix Mounting available.
Dome Cover type (easy to look) provided.

Various illumination (Mono Color,Split-Face, 3-color, Negative) available.

■ FEATURES
・Size : 40mm square type.
・40×80mm rectangular type.
・Depth behind panel : Only 20mm
・Illumination : Mono-Color, Split-Face, 3-Color (Red, Green, Yellow), Negative
・Dome Cover type (easy to look) available.
・Terminal : Connector Type
  Mounting : Snap-in Type
  (Matrix mounting is possible to use "joint".)
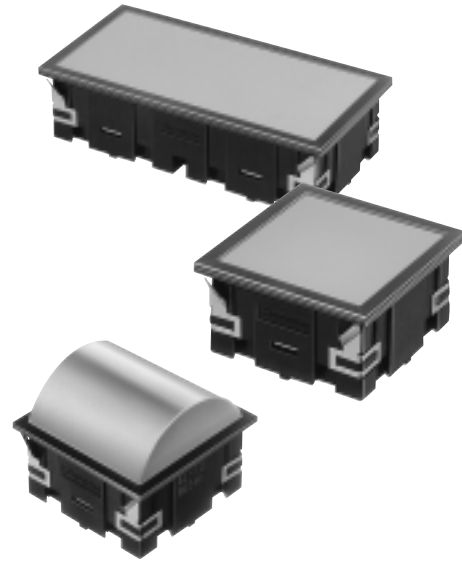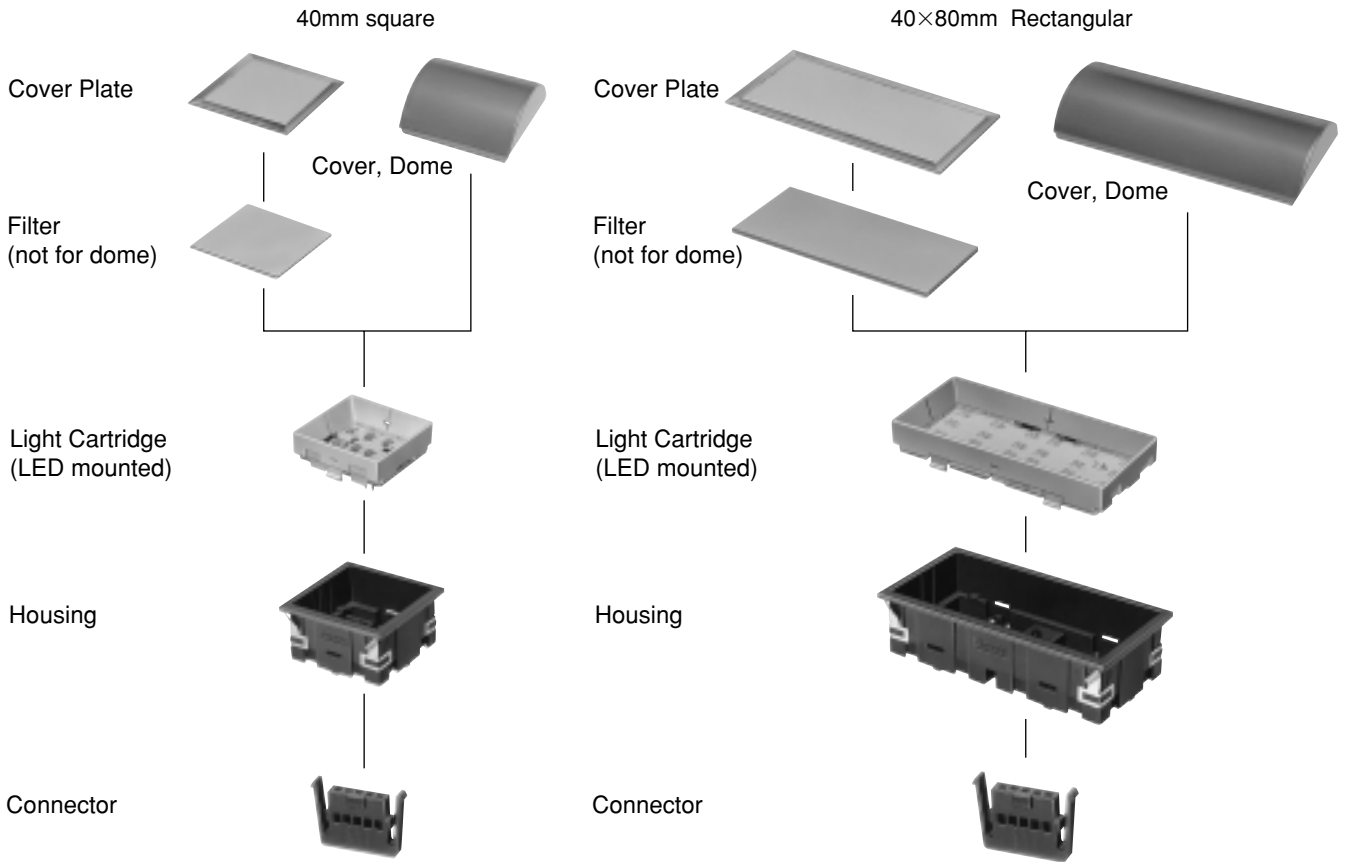
SPECIFICATIONS

Insulation Resistance	More than 100MΩ at 500V DC
Dielectric Strength	1500V AC RMS between terminals and ground (50/60Hz for 60sec. at normal ambient temperature and humidity)
Reverse Dielectric Strength	150V
Ambient Temperature	−10℃～+40℃
Ambient Humidity	45～80% RH

LED DATA

	DC Supply Voltage (V)	Current Rating (mA)								
		Mono-Color		Split-Face		Split-Face, Dual		3-Color		
		Red	Green/Yellow	Red	Green/Yellow	Red	Green	Red	Green	Yellow
40×40	DC12 (±5%)	52	80	26	40	26×2	40×2	52	80	80
	DC24 (±5%)	26	40	13	20	13×2	20×2	26	40	40
40×80	DC12 (±5%)	104	160	52	80	52×2	80×2	104	160	160
	DC24 (±5%)	52	80	26	40	26×2	40×2	52	80	80

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STRUCTURE

40mm square

Cover Plate

Cover, Dome

Filter
(not for dome)

Light Cartridge
(LED mounted)

Housing

Connector

40×80mm Rectangular

Cover Plate

Cover, Dome

Filter
(not for dome)

Light Cartridge
(LED mounted)

Housing

Connector

DIMENSIONS

40mm square

Flat type

□40

□36

2.5

30

20

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Top View

JAPAN

Dome type

□40

□34.8

□36

R18.7

11.9

1.5

30

20

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Top View

JAPAN

Tolerance : ±0.4mm

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DIMENSIONS

40×80mm Rectangular

Flat type

80
76
2.5
20
30
40
36

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Top View

Dome type

80
74.8
76
40
34.8
R18.7
36
20 1.5 11.9
30

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Top View

Panel Thickness 1mm~4mm

Matrix Mounting (Without Matrix Frame)

Row

Column

$(40n+80m)-3.4\,^{+0.4}_{0}$

$(40n+80m)-3.4\,^{+0.4}_{0}$

Panel Cut Dimension

A
A
Square

B
A
Rectangular

※n : Number of A size (Row/Column)
m: Number of B size (Row/Column)

40n+80m
$(40n+80m)-4$

2.5
30
20
40n+80m
$(40n+80m)-4$

Tolerance : ±0.4mm

INTERNAL CONNECTION ARRANGEMENTS

		Full-Face	3-Color	Split, Vert.	Split, Vert.,Dual
40mm square	**12V**				
	24V				

		Full-Face	3-Color
40×80mm Rectangular	**12V**		
	24V		

Tolerance : ±0.4mm

INTERNAL CONNECTION ARRANGEMENTS

		Split, Vert.	Split, Horiz.
40×80mm Rectangular	**12V**	No.4 / No.2 / No.1	No.5 / No.2 / No.1
	24V	No.4 / No.2 / No.1	No.2 / No.1 / No.5

		Split, Vert.,Dual	Split, Horiz.,Dual
	12V	No.5 (Green) / No.3 (Green) / No.1 / No.2 (Red) / No.4 (Red)	No.3 (Green) / No.2 (Red) / No.1 / No.4 (Red) / No.5 (Green)
	24V	No.5 (Green) / No.3 (Green) / No.1 / No.2 (Red) / No.4 (Red)	No.3 (Green) / No.2 (Red) / No.1 / No.4 (Red) / No.5 (Green)

TERMINAL

● **TERMINAL LAYOUT**

● **CONNECTOR**

Projection
1 2 3 4 5
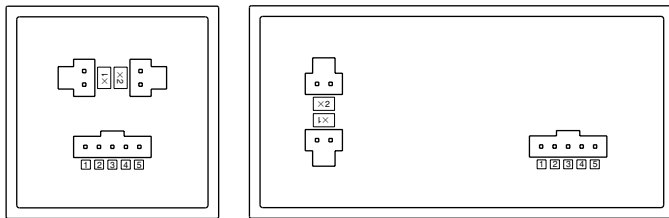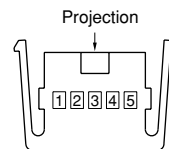
● **Suitable wire**

Wire size	Diameter
AWG#24-28	1.0-1.5mm

Pin No.	40mm square				40×80mm Rectangular					
	Full-Face	Split-Face	3-Color	Split, Dual	Full-Face	Split, Vert.	Split, Horiz.	3-Color	Split, Vert.,Dual	Split, Horiz.,Dual
1	Anode (+)	Anode (+)	Anode (+)	Anode (+)	Anode (+)	Anode (+)	Anode (+)	Anode (+)	Anode (+)	Anode (+)
2		Cathode (−)	Cathode (−) Green	Cathode (−) Green		Cathode (−)	Cathode (−)	Cathode (−) Red	Cathode (−) Red	Cathode (−) Red
3	Cathode (−)		Cathode (−) Red	Cathode (−) Red				Cathode (−) Green	Cathode (−) Green	Cathode (−) Green
4		Cathode (−)	Cathode (−) Yellow	Cathode (−) Green		Cathode (−)		Cathode (−) Yellow	Cathode (−) Red	Cathode (−) Red
5	Cathode (−)			Cathode (−) Red	Cathode (−)		Cathode (−)		Cathode (−) Green	Cathode (−) Green

Note: Simultaneous lighting is impossible while pin no. 2, 3, 4 for 3-Color Type, also impossible while pin no. 2, 3 and 4, 5 for Split-Face Dual Color Type.

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Panel Layout/Panel Cut Dimensions

Panel thickness : 1~4mm

		Panel Layout	Panel Cut Dimensions
30mm square	Serial Mounting	40 / 40n$^{\pm 1}$	$36.2^{+0.4}_{-0}$ / $36.2+40(n-1)^{+0.4}_{-0}$
40×80mm Rectangular	Vert., Serial Mounting	80 / 40n$^{\pm 1}$	$76.2^{+0.4}_{-0}$ / $36.2+40(n-1)^{+0.4}_{-0}$
	Horiz. Serial Mounting	40 / 80n$^{\pm 1}$	$36.2^{+0.4}_{-0}$ / $76.2+80(n-1)^{+0.4}_{-0}$

n : number of indicators

ACCESSORIES

Connector (appended)

Part No.	BL-0077

Housing

Contact Pin
Honda Tsushin Kogyo made
(HKP-F403)

Connector (1Housing & 5 Contact Pins) to be appended.

Wire Hearness

Wire : UL1061, AWG26

A
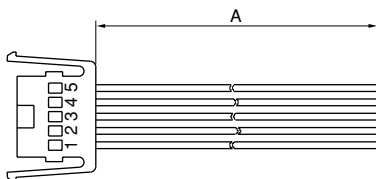
Pin no.	1	2	3	4	5
Color	Red	Green	Yellow	Blue	Grey

A Length	Part No.
50cm	CL-0230
100cm	CL-0231

Contact Pin press Tool

Honda Tsushin Kogyo made (KP-309)

Joint (Use for Matrix mounting)

Part No.	CL-0160

Tolerance : ±0.4mm

ORDERING CODE Ⅰ

CL – ☐ **1 2** ☐ ☐ **1 2 K** ☐ ☐

● **SHAPE & ILLUMINATION**

S0	40mm square, Full-Face	
S1	40mm square, Split,Vert.	
S2	40mm square, Split, Horiz.	
S3	40mm square, 3-Color	※1)
S4	40mm square, Split, Vert.,Dual	※1)
S5	40mm square, Split, Horiz., Dual	※1)
W0	40×80mm Rect., Full-Face	
W1	40×80mm Rect., Split,Vert.	
W2	40×80mm Rect., Split, Horiz.	
W3	40×80mm Rect., 3-Color	※1)
W4	40×80mm Rect., Split, Vert.,Dual	※1)
W5	40×80mm Rect., Split, Horiz., Dual	※1)

T0	40mm square, Full-Face, Dome	
T3	40mm square, 3-Color, Dome	※4) ※5)
H0	40×80mm Rect., Full-Face, Dome	※4)
H3	40×80mm Rect., 3-Color, Dome	※4) ※5)

● **LED COLOR** ※3)

7	Red	Full-Face : Put color no. into the frame 1
8	Green	Split-Face : Put color no. into the frame 1, 2
※ 9	Yellow	3-Color : Put color no. 7,8 into the frame 1, 2 ※2)
×	Without LED	Split,Dual : Put color no. 7,8 into the frame 1, 2 ※2)

● **MOUNTING**

1	For Horiz. Mtg.
2	For Vert. Mtg.

● **HOUSING COLOR**

K	Black
H	Grey

● **SUPPLY VOLTAGE**

2	12V
3	24V
×	Without LED

● **FILTER COLOR** ※3)

1	Red	Full-Face : Put color no. into the frame 1
2	Green	Split-Face : Put color no. into the frame 1, 2
※ 3	Yellow	3-Color : Put color no. 4 into the frame 1
4	Milk-White	Split,Dual : Put color no. 4,4 into the frame 1, 2
×	Without Filter	

● **COVER PLATE**

C	Transparent
SK	Semitransparent (for Negative) ※1)

● **DOME COVER**

R	Red		※ Y	Yellow
G	Green		M	Milk-White

※ "Yellow" color for LED/Filter is actually "Orange Yellow".

● NOTES

※1) In case of Negative illumination, please select Milk-White filter.
(Black silk printing to be applied on Milk-White filter)
※2) Simultaneous lighting is impossible for 3-Color Type, and Split-Face Dual Color Type.
※3) In case of Split-Face, LED and Filter color location should be specified as follow:

40mm square, Split, Vert.   40×80mm Rect., Split, Vert.   40×80mm Rect., Split, Horiz.

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1	2		1	2		1
						2
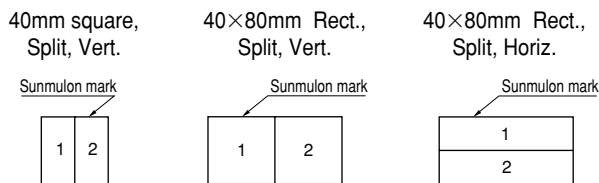
※4) In case of selecting Dome type, filter is not needed, so please select Without Filter(X)
※5) Milk-White color filter or dome cover must be selected for 3-Color type and Split-Face Dual Color Type.
※6) Snap-spring metal plates come out Left/Right direction for Vertical Mounting, and Top/Bottom direction for Horizontal Mounting to avoid interferring mutually in case of serial mounting. Therefore, in case of independent use, it does not matter. (select 2 Horizontal ordinary)