# Reduce Installation Time with Quick Disconnect M12 Signal Towers

What is the M12 connector?　　　IEC 61076-2-101

· A robust circular connector for industrial use, offering watertight and dustproof performance, suitable for signal and power connections.

· In addition to being compatible with a wide variety of applications, the connection also provides stable signal transmission and power.
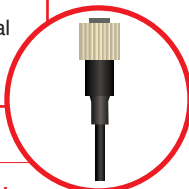
Designed for Quick and Easy Installation

Rugged and reliable M12 connection

Designed for Use in Various Environments

Features flexible installation and mounting options while maintaining clear visual and audible indication
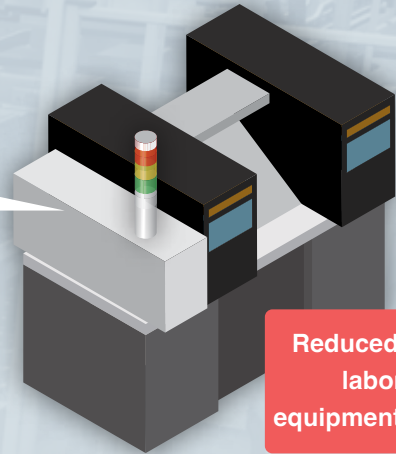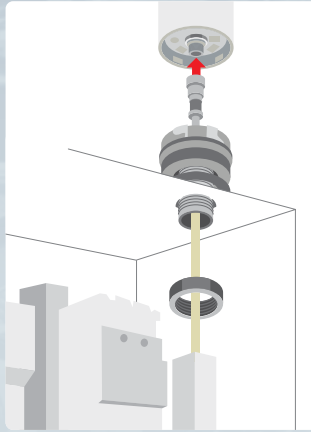
* Pole-mount version schedule for **June 2025 release**

RoHS 10　CE　c UL us　KC　UK CA

Simplified Wiring Significantly Reduces Installation Time

## Reduce Wiring Workload During Equipment Installation.

Save time and effort with a single M12 cable, making attachment and detachment quick and easy.
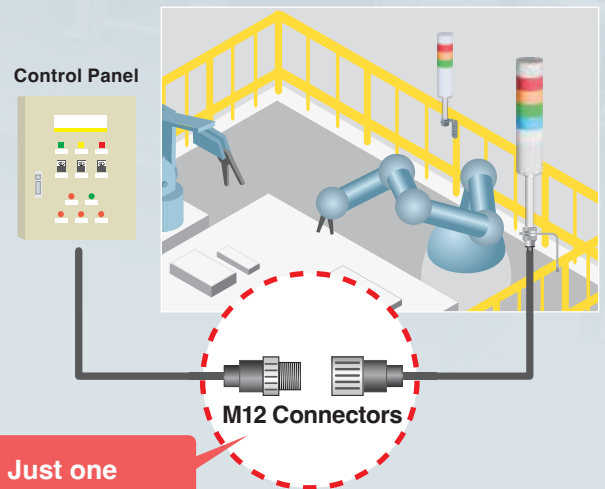
Reduced installation labor during equipment deployment.

No Need for Relay Boxes and Maintenance

Using a watertight M12 connector eliminates the need for relay boxes as well as making maintenance and rewiring more efficient.

Control Panel
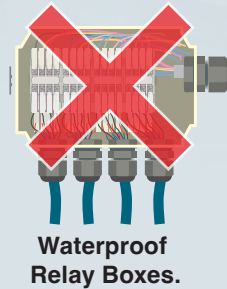
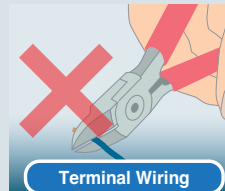Waterproof Relay Boxes.

M12 Connectors

Just one simple connection.

Prevent Incorrect Wiring

Having only one cable to connect for installation and removal, the M12 ensures proper connection and no faulty wiring.

No time consuming preparations!

Terminal Wiring

Simplified wiring!

Terminal Crimp

Screw Tightening

Model

LR6-302W5BW-RYG

① ② ③ ④ ⑤ ⑥ ⑦

① Size	② Tiers	③ Rated Voltage
6 = Φ60mm	= 0 tiers	02 = 24V DC
	1 = 1 tier	
	2 = 2 tiers	
	3 = 3 tiers	
	4 = 4 tiers	
	5 = 5 tiers	

④ Mounting / Wiring
W4 = Direct mounting (Mounting with M30 Nut) / M12 connector 4-pin
W5 = Direct mounting (Mounting with M30 Nut) / M12 connector 5-pin
W8 = Direct mounting (Mounting with M30 Nut) / M12 connector 8-pin
L4 = Pole Mounting with L-bracket - M12 connector 4-pin
L5 = Pole Mounting with L-bracket - M12 connector 5-pin
L8 = Pole Mounting with L-bracket - M12 connector 8-pin
※ Scheduled for Release in June 2025

⑤ Buzzer
B = With Buzzer
N = No Buzzer
*No buzzer option for 4-pin models

⑥ Body Color
W = Off-White
K = Black

⑦ LED Unit Color
R = Red
Y = Amber
G = Green
B = Blue
C = White

Model No. Example

4-pin Model
LR6-302W4NW-RYG
LR6-302L4NW-RYG

5-pin Model
LR6-302W5BW-RYG
LR6-302L5BW-RYG

8-pin Model
LR6-502W8BW-RYGBC
LR6-502L8BW-RYGBC

Product list ➡

Wiring Example / M12 Connector Pin Layout
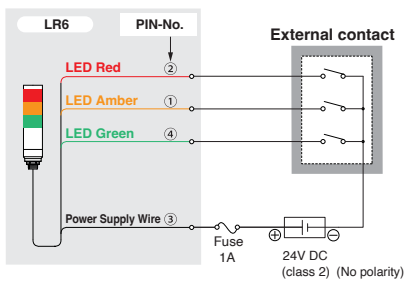
Assembled Model
4-pin

LR6-302W4NW-RYG

LR6-302L4NW-RYG

Assembled Model
5-pin

Buzzer

LR6-302W5BW-RYG

Buzzer

LR6-302L5BW-RYG
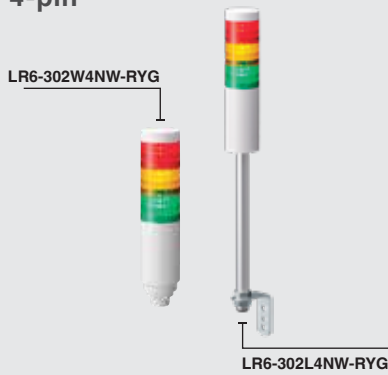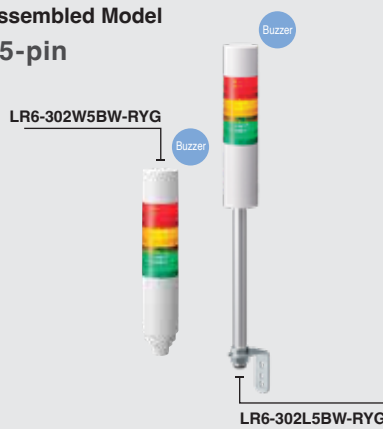
Body Unit / Assembled Model
8-pin

Buzzer

LR6-502W8BW-RYGBC

Buzzer

LR6-02W8NW

LR6-02L8NW

LR6-502L8BW-RYGBC

4-pin

LR6 | PIN-No.
External contact

LED Red ②
LED Amber ①
LED Green ④

Power Supply Wire ③
Fuse 1A
24V DC (class 2) (No polarity)
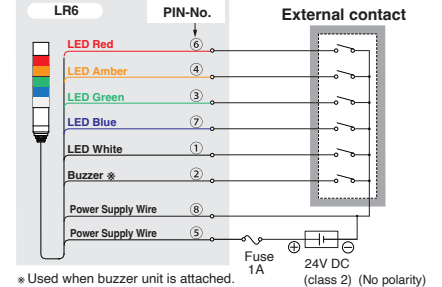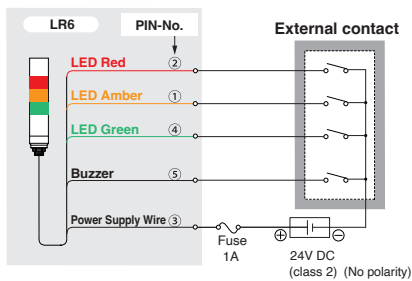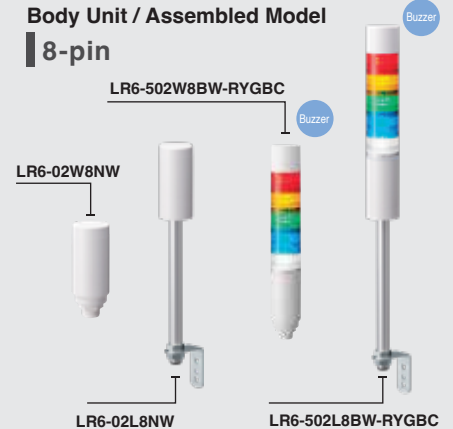
Buzzer Unit	WD Transmitter
Not Supported	Not Supported

4-pin plug (male)

②LED Red   ①LED Amber
③Power Supply Wire   ④LED Green

Connector Type: M12 4-pin A-code

5-pin

LR6 | PIN-No.
External contact

LED Red ②
LED Amber ①
LED Green ④
Buzzer ⑤

Power Supply Wire ③
Fuse 1A
24V DC (class 2) (No polarity)

Buzzer Unit	WD Transmitter
Supported	Not Supported

5-pin plug (male)

②LED Red   ①LED Amber
                  ⑤Buzzer
③Power Supply Wire   ④LED Green

Connector Type: M12 5-pin A-code

8-pin

LR6 | PIN-No.
External contact

LED Red ⑥
LED Amber ④
LED Green ③
LED Blue ⑦
LED White ①
Buzzer ※ ②
Power Supply Wire ⑧
Power Supply Wire ⑤
Fuse 1A
24V DC (class 2) (No polarity)

※ Used when buzzer unit is attached.

Buzzer Unit	WD Transmitter
Supported	Supported

8-pin plug (male)

②Buzzer   ⑧Power Supply Wire
③LED Green   ①LED White
                    ⑦LED Blue
④LED Amber   ⑥LED Red
⑤Power Supply Wire

Connector Type: M12 8-pin A-code

⚠ **Note**
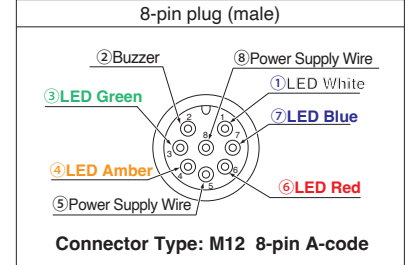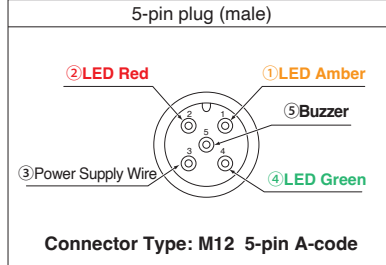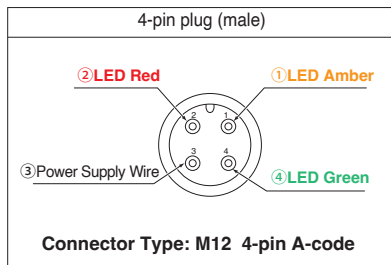
● For 4-pin and 5-pin models, standard blue, white, and multi-color LED units cannot be used. Please use custom blue and white LED units (refer to the last page).
● Poles for these models are not sold separately.
● Cable not included with this product.

Outer Dimensions (Unit: mm)

■ Mounting Dimensional Drawing (M30x1.5 Installation)

28.5

Mounting Hole	Nut
Φ31	M30

15°

Recommended Torque
4.5 Nm

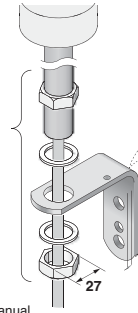Distribution Hole

Nameplate Position
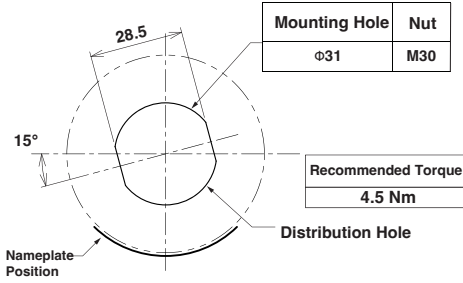
■ Installation Figure

❶ Make mounting holes for the product.

❷ Pass the M12 cable through.
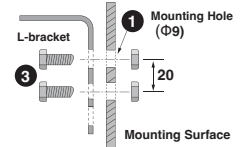❸ Fix the product.

Recommended Torque
30 N m

Note

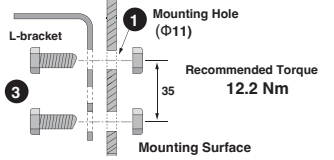When not using a L-bracket attachment, use a 22 to 23mm diameter hole
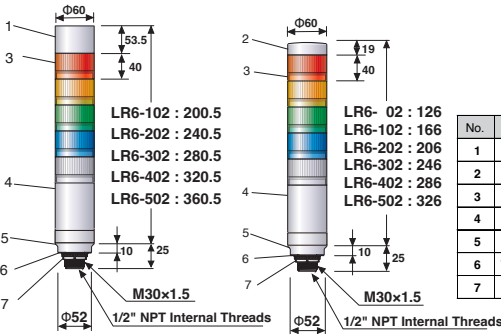
※ For more details please refer to the installation manual
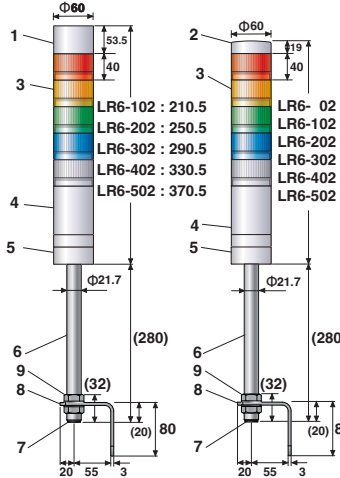
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Measurements for M8 screws and nuts

L-bracket
❶ Mounting Hole (Φ9)
❸
20
Mounting Surface

Measurements for M10 screws and nuts

L-bracket
❶ Mounting Hole (Φ11)
❸
35
Recommended Torque
12.2 Nm
Mounting Surface

■ W4/W5/W8 Direct Mounting (Mounting with M30 Nut) / M12 Connector

Φ60
1
3
53.5
40

LR6-102 : 200.5
LR6-202 : 240.5
LR6-302 : 280.5
LR6-402 : 320.5
LR6-502 : 360.5

4
5
6
7
10 25

M30×1.5
Φ52
1/2" NPT Internal Threads

Φ60
2
3
19
40

LR6- 02 : 126
LR6-102 : 166
LR6-202 : 206
LR6-302 : 246
LR6-402 : 286
LR6-502 : 326

4
5
6
7
10 25

M30×1.5
Φ52
1/2" NPT Internal Threads

No.	Name	Material
1	Buzzer Unit	PC
2	Head Cover	PC
3	LED Unit	PC
4	Body	PC
5	Direct Mount Bracket	PC
6	Waterproof Packing	Silicon Rubber
7	M30 Nut	PC

■ L4/L5/L8 Pole Mounting L-bracket / M12 Connector

Φ60
1
3
53.5
40

LR6-102 : 210.5
LR6-202 : 250.5
LR6-302 : 290.5
LR6-402 : 330.5
LR6-502 : 370.5

4
5
Φ21.7
6
9
8
(280)
(32)
7
(20) 80
20 55 3

Φ60
2
3
19
40

LR6- 02 : 136
LR6-102 : 176
LR6-202 : 216
LR6-302 : 256
LR6-402 : 296
LR6-502 : 336

4
5
Φ21.7
6
9
8
(280)
(32)
7
(20) 80
20 55 3

No.	Name	Material
1	Buzzer Unit	PC
2	Head Cover	PC
3	LED Unit	PC
4	Body	PC
5	Pole Bracket	PC
6	Pole	AL
7	Grommet	Silicone Sponge
8	L-bracket	Steel Plate
9	Hex Nuts M22	SUM

Option

▮ Connector with Cable

8-pin type, one-side connector
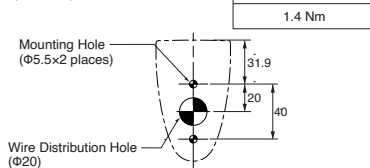
SZ-120-02 : 2m
SZ-120-05 : 5m
SZ-120-10 : 10m

▮ Wall Mount Bracket

Material: PC
SZK-005W

■ Mounting Dimensional Drawing (Unit : mm)

	M5 Recommended Torque
	1.4 Nm

Mounting Hole (Φ5.5×2 places)

31.9
20
40

Wire Distribution Hole (Φ20)

Ordering Blue or White LED units for 4-pin or 5-pin models

Example order for 3 lights: Red, Amber, and Blue or White (instead of Green)
The green control pin will be used to light the Blue or White LED

Purchase a 2-tier assembled model
LR6-202W5BW-RY
✛
Then purchase a special LED unit that uses the green control pin
LR6-E-BG+B0962

Color of LED:
B = Blue
C = White

Wire Used for LED:
G = Green Control Pin
R = Red Control Pin
A = Amber Control Pin

[Standard LED Unit (Red)]
Uses Red control pin

[Standard LED Unit (Amber)]
Uses Amber control pin

*Example:
[Special LED unit (Blue)]
Uses Green control pin

Specifications

Supported Transistors	NPN / PNP
Rated Voltage	24V DC
Rated Power Consumption	Max. 6.6W
Protection Rating	Direct mounting: IP65 / Pole mounting: IP54
Mounting Location / Mounting Direction	Indoor / Upright

⚠ CAUTION

To ensure correct use of these products, read the "Instruction Manual" prior to use. Failure to follow all safeguards can result in fire, electric shock, or other accidents. Specifications are subject to change without notice.