

SPECIFICATIONS

[1. General Specifications]

Product Name		Signal Tower			
Model		LR6-□02W4N□	LR6-□02W5B□	LR6-□02W8□□	LR6-02W8N□
Rated Voltage		24V DC			
Operating Voltage Range		Rated Voltage ±10%			
Rated Current Consumption	Typ.	LED Unit : 40mA Buzzer Unit : 40mA (*1)			
	Max.	LED Unit : 45mA Buzzer Unit : 250mA (*1)			
Rated Power Consumption	Typ.	LED Unit : 1W Buzzer Unit : 1W (*1)			
	Max.	LED Unit : 1.3W Buzzer Unit : 1.3W (*1)			
Operating Ambient Temperature		-20°C to +50 °C			
Operating Ambient Humidity		Less than 90 % (No condensation)			
Storage Ambient Temperature		-30°C to +60 °C			
Storage Ambient Humidity		Less than 90 % (No condensation)			
Mounting Location		Indoor			
Mounting Direction		Upright			
Protection Rating		IP65(IEC 60529)			
Environmental		Upright			
Insulation Resistance		More than 1MΩ at 500V DC between live part and non-current carrying metallic part			
Withstand Voltage		500V AC applied for 1min between live part and non-current carrying metallic part without breaking insulation (LED Unit) + [Buzzer Unit]			
Mass (Tolerance ±10%)		LR6-□02W4N□ LR6-□02W5B□ LR6-□02W8□□	0.17kg + (0.06kg) × Tiers + [0.06kg]		
		LR6-02W8N□	0.17kg		
Compatible Unit (Optional)	LED Unit Model	LR6-E-R,Y,G,RZ,YZ,GZ		LR6-E-R,Y,G,B,C,RZ,YZ,GZ,BZ,MZ	
	Buzzer Unit Model	-			
Conformity Standards		UL 508, CSA-C22.2 No. 14 RoHS Directive (EN IEC 63000) EMC Directive (EN 61000-6-4, EN 61000-6-2) FCC Part 15 SubpartB Class A KC (KN 61000-6-4, KN 61000-6-2)			
Remarks		(*1)Environmental Condition : Buzzer sound No.2 Continuous beep sound Due to the characteristics of the LED elements, a variation in difference of the color brightness of every product may occur UL Recognized Component (File No.E215660) Conforms to the CE Requirements Conforms to the UKCA Requirements			

Drawing No.	Rev.	Page
LR6-502W8-W18	A	2/10

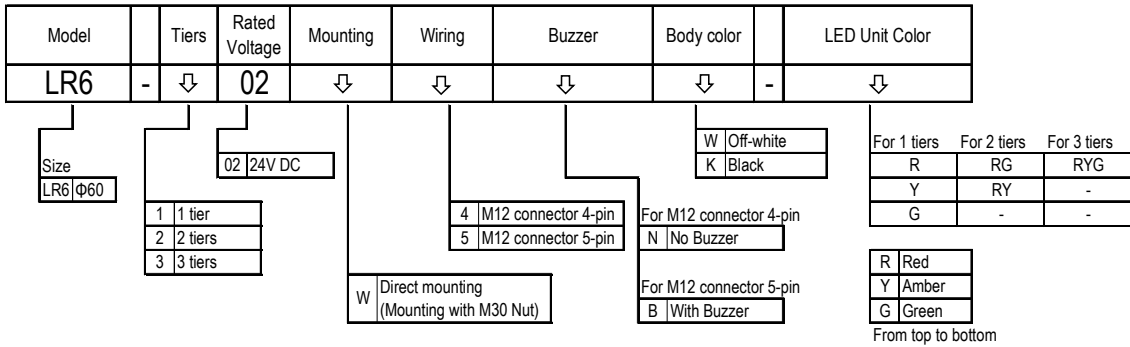
Buzzer Sound / Typical Frequency	No.1	Rapid intermittent beep / 3,378 Hz
	No.2	Continuous beep sound / 3,378 Hz
	No.3	Rapid Hi-Lo / 2,016 Hz & 3,012 Hz
	No.4	Sweet sound / 1,000 Hz - 4,032 Hz
Setting	Depending on DIP Switch Settings Refer to the 6. Buzzer Pattern Set-up	
Sound Pressure Level	Typ.88 dB	Sound Reduction Approx. -10dB Depending on Dip Switch Settings Refer to the 6. Buzzer Pattern Set-up
Environmental Condition	Buzzer sound No.4 was measured from the total circumference of the Buzzer Unit at 1m	

[2.Model]

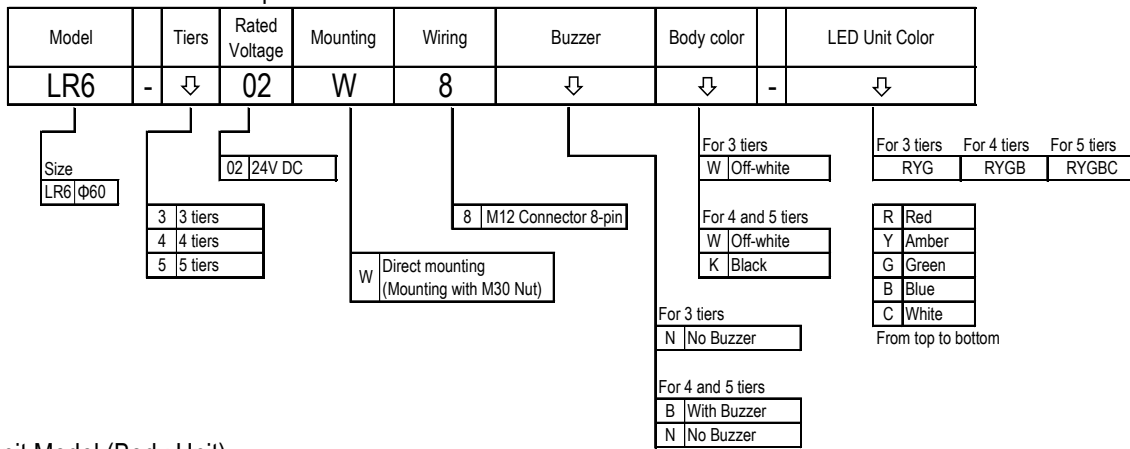
2.1 Model Configuration

Assembly Model

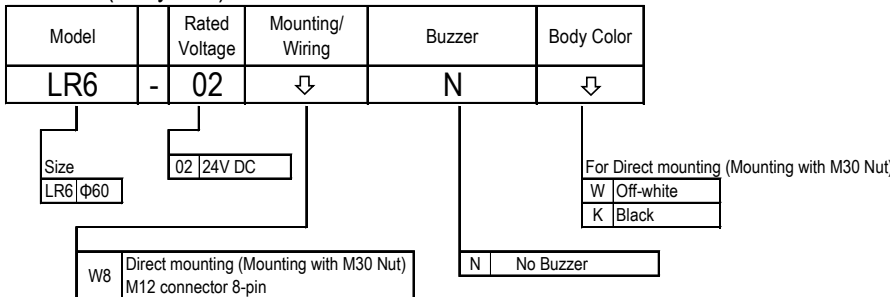
-For M12 Connector 4-pin ,5-pin



-For M12 Connector 8-pin



Unit Model (Body Unit)



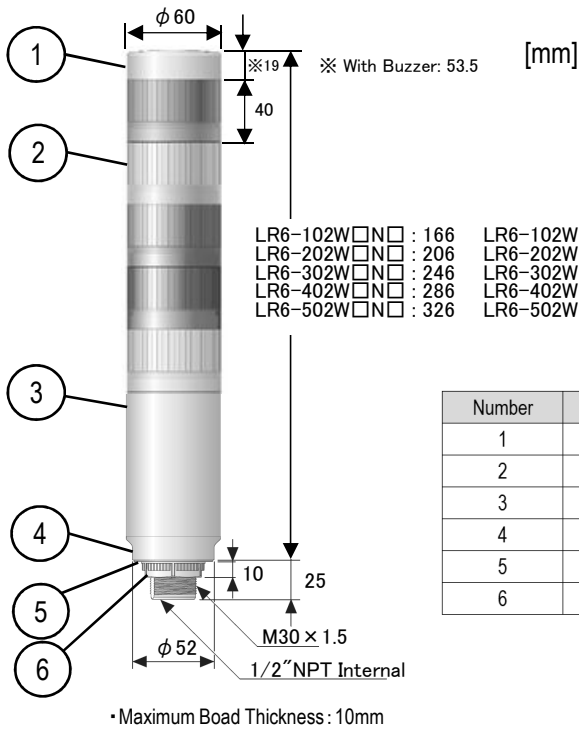
2.2 Model List

- | | | |
|-----------------|-----------------|-------------------|
| LR6-102W4NW-R | LR6-102W5BW-R | LR6-02W8NW |
| LR6-102W4NW-Y | LR6-102W5BW-Y | LR6-302W8NW-RYG |
| LR6-102W4NW-G | LR6-102W5BW-G | LR6-402W8NW-RYGB |
| LR6-202W4NW-RG | LR6-202W5BW-RG | LR6-402W8BW-RYGB |
| LR6-202W4NW-RY | LR6-202W5BW-RY | LR6-502W8NW-RYGBC |
| LR6-302W4NW-RYG | LR6-302W5BW-RYG | LR6-502W8BW-RYGBC |
| LR6-102W4NK-R | LR6-102W5BK-R | LR6-02W8NK |
| LR6-102W4NK-Y | LR6-102W5BK-Y | LR6-402W8NK-RYGB |
| LR6-102W4NK-G | LR6-102W5BK-G | LR6-402W8BK-RYGB |
| LR6-202W4NK-RG | LR6-202W5BK-RG | LR6-502W8NK-RYGBC |
| LR6-202W4NK-RY | LR6-202W5BK-RY | LR6-502W8BK-RYGBC |
| LR6-302W4NK-RYG | LR6-302W5BK-RYG | |

[3.Outer Dimensions]

3.1 Assembly Model

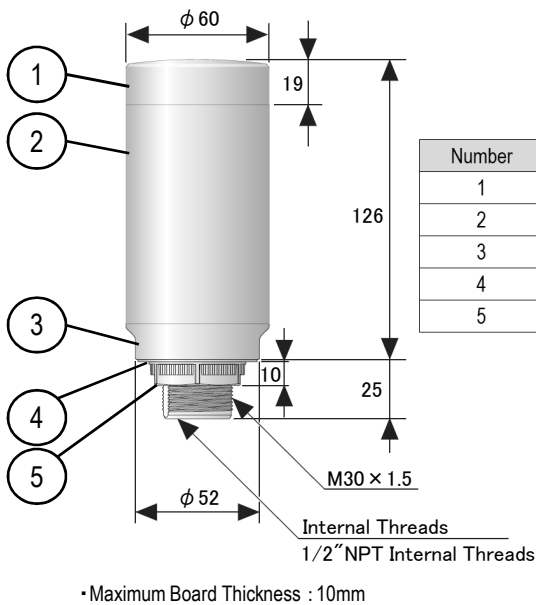
■ Direct Mount type : LR6-□02W4□□, LR6-□02W5□□, LR6-□02W8□□



Number	Name	Material	UL Flammability
1	Head Cover / Buzzer Case	PC	V-2
2	LED Unit	PC	V-2
3	Body	PC	V-2
4	Direct Mount Bracket	PC	V-2
5	Waterproof Packing (t =1)	Silicone Rubber	-
6	M30 Nut	PC	V-2

3.2 Unit Model(Body Unit)

■ LR6-02W8N□ [mm]

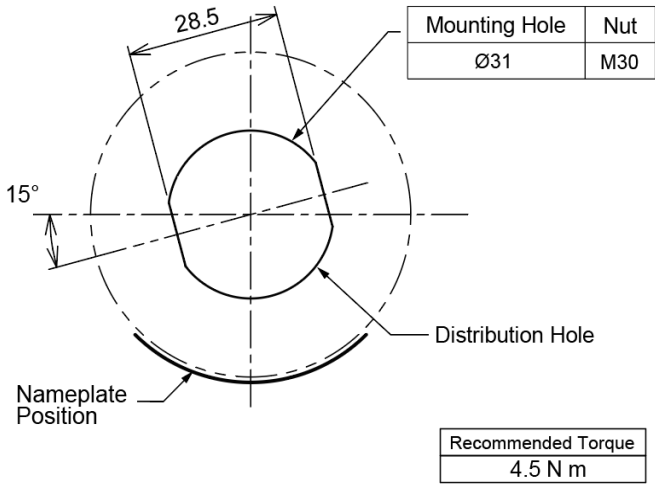


Number	Name	Material	UL Flammability
1	Head Cover	PC	V-2
2	Body	PC	V-2
3	Direct Mount Bracket	PC	V-2
4	Waterproof Packing (t =1)	Silicone Rubber	-
5	M30 Nut	PC	V-2

[4.Mounting Dimensional Drawing]

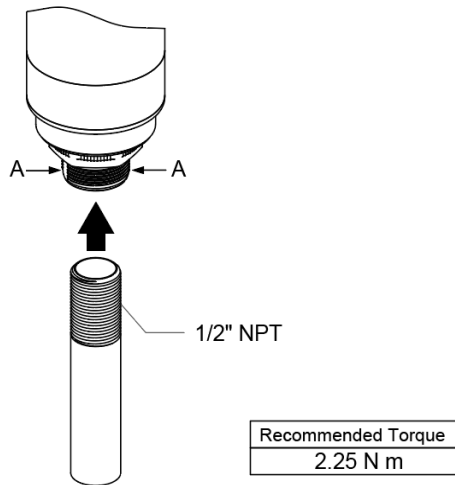
■ Mounting Dimensional Drawing(M30×1.5 Installation)

[mm]



■ Installation Figure(1/2 NPT Installation Figure)

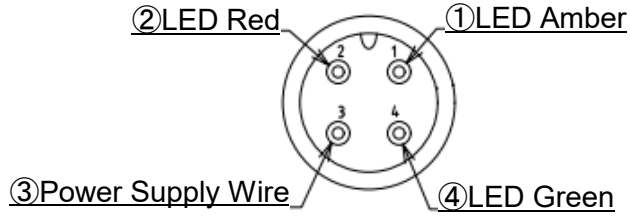
While holding part 'A', install the 1/2" NPT.
Failure to comply may result in damage.



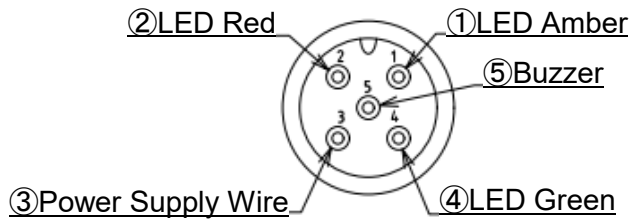
[5.Wiring Diagram]

5.1 M12 Connector Pin Layout

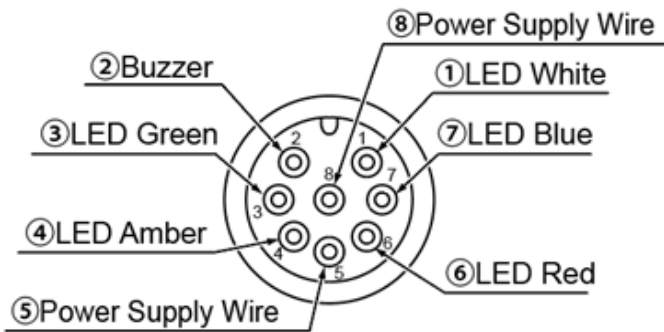
4-pin plug(male)



5-pin plug(male)

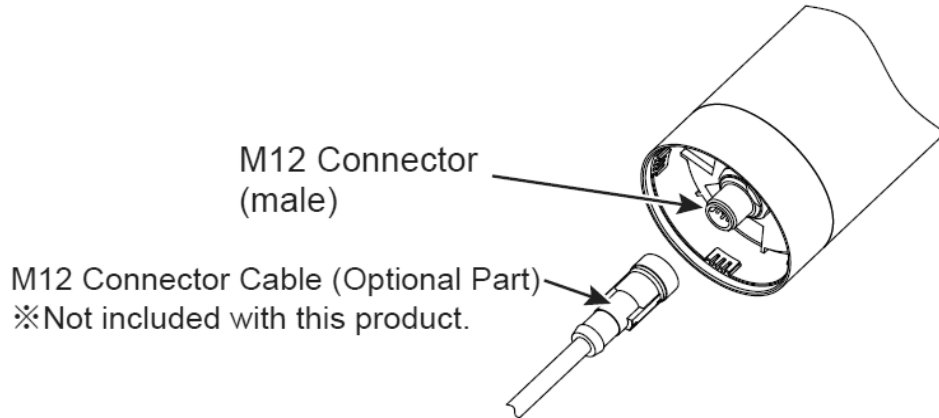


8-pin plug(male)



[5.Wiring Diagram]

5.2 Attach the M12 connector with cable to the unit body.



5.3 Optional Parts

M12 Connector with Cable
 (Manufactured by the OMRON Corp.)

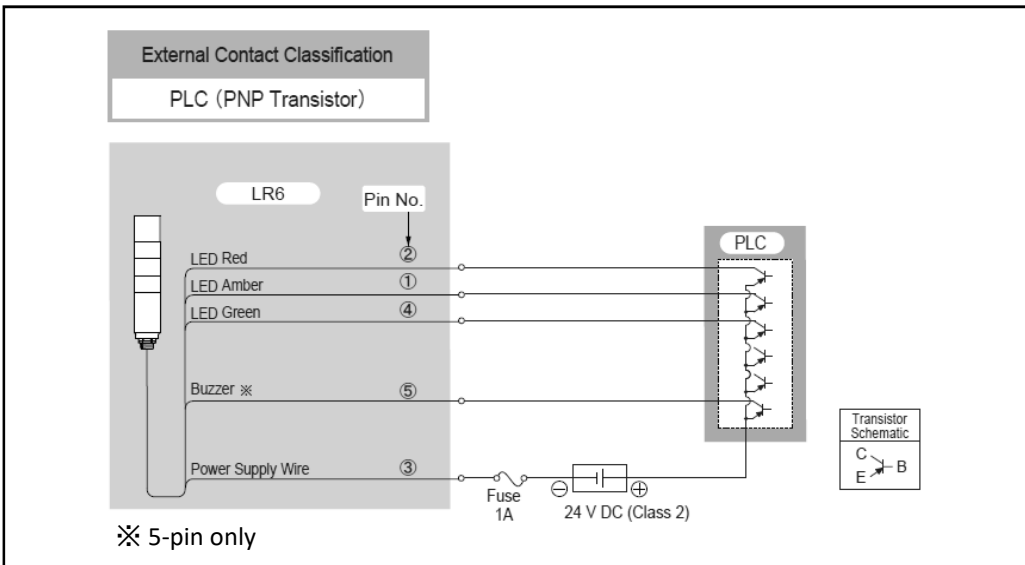
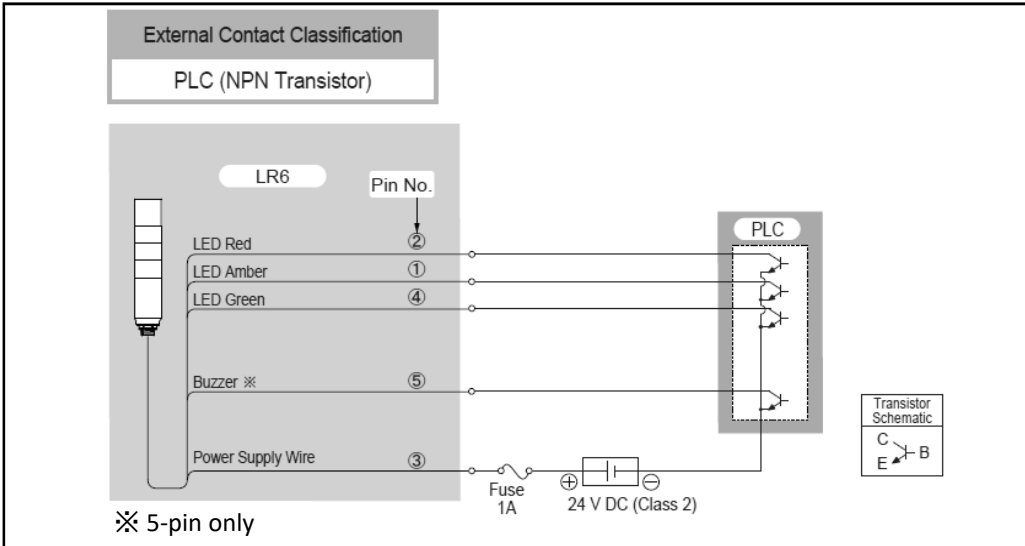
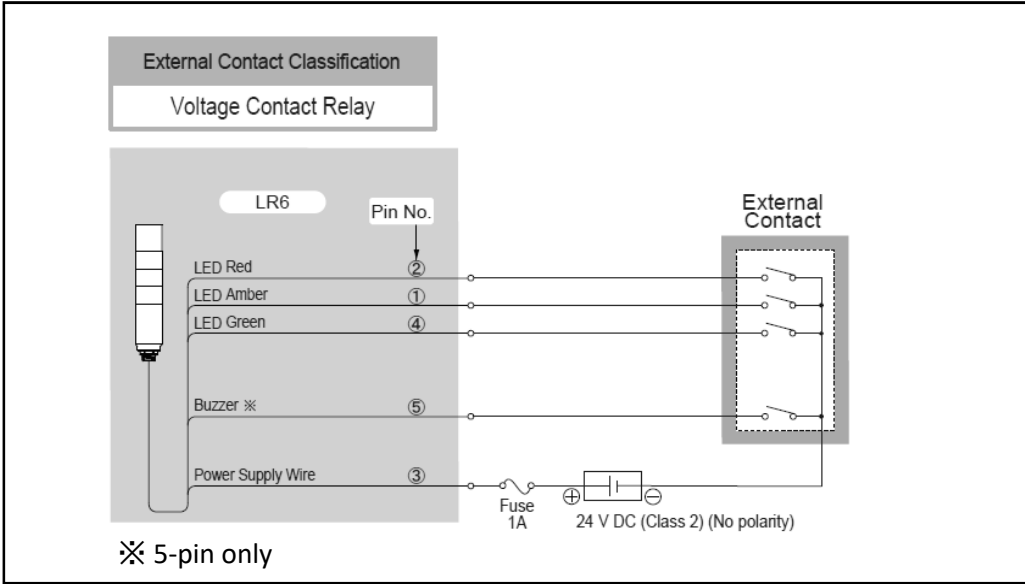


SZ-120-02 / -05 / -10
 (Lengths : 2m , 5m , 10m)

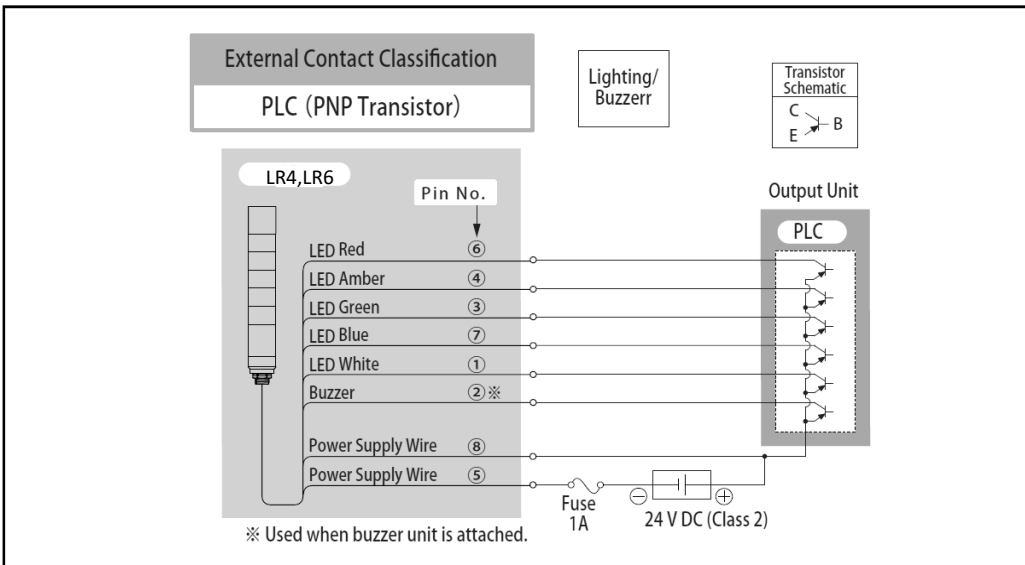
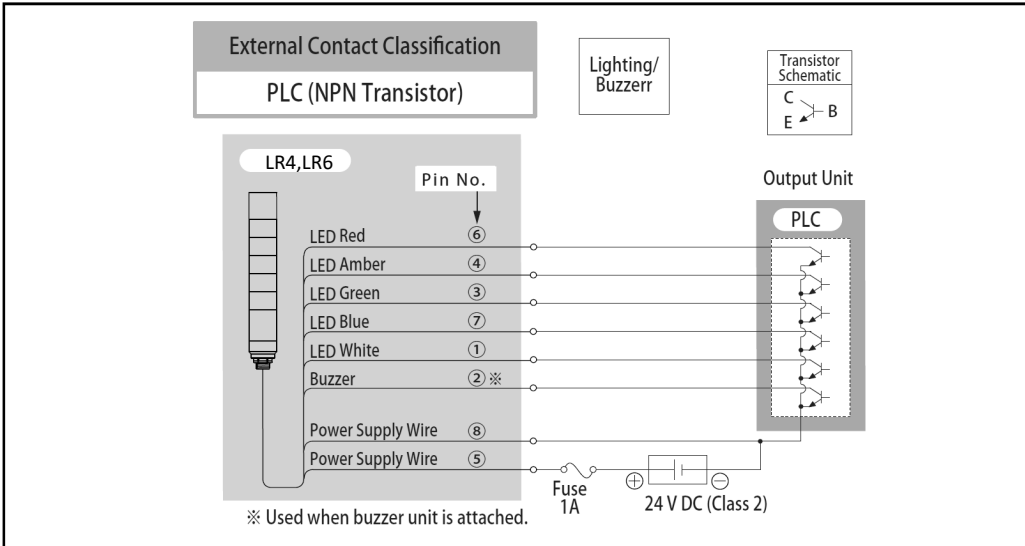
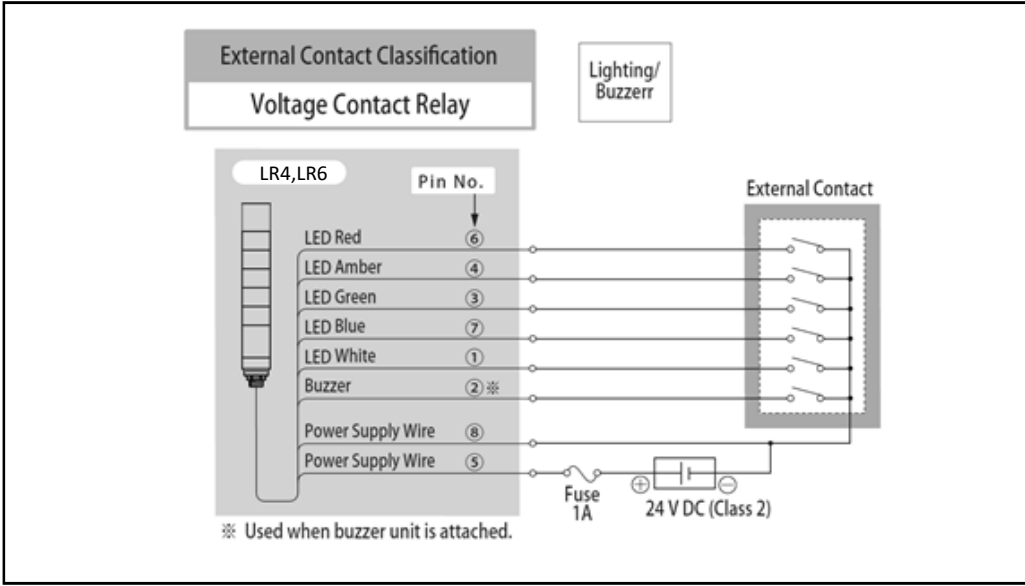
PIN No.	Wire Color
①	White
②	Brown
③	Green
④	Yellow
⑤	Gray
⑥	Pink
⑦	Blue
⑧	Red

※ 8-pin Connector only.
 Available for LR6-W8.

5.4 Wiring Example (4-pin / 5-pin)



5.4 Wiring Example (8-pin)



5.5 External Contact Capacity

I_s : Current Capacity V_s : Withstand Voltage I_L : Leakage Current

Rated Load Voltage		24V DC			
LED Unit (1 Tier)	Signal Wire Current (Max.) / Voltage	45mA / Power Supply Voltage			
	Recommended Contact Capacity	$I_s \geq 100\text{mA}$ $V_s \geq 35\text{V DC}$			
Buzzer	Signal Wire Current (Max.) / Voltage	250mA / Power Supply Voltage			
	Recommended Contact Capacity	$I_s \geq 300\text{mA}$ $V_s \geq 35\text{V DC}$			
Power Supply	Current Consumption (Max.)	250mA (※1)			
	Signal Wire Current (Max.) / Voltage	$I_s \geq 500\text{mA}$ $V_s \geq 35\text{V DC}$			
Inrush Current	Signal Wire	LED	None	Buzzer	None (※2)
	Power Supply Wire	None (※3)			
Leakage Current		$I_L \leq 0.1\text{mA}$			

※1... Measured with five LED tiers and buzzer operating.

※2... Not exceeding Maximum Signal Wire Current Ratings

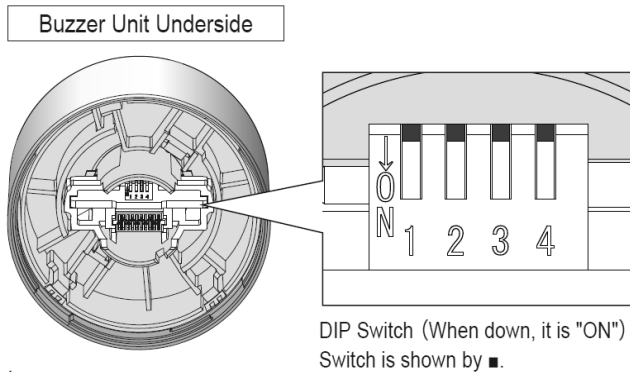
※3... Signal wire current (Max.) not exceeding the sum total.

■ Recommended Fuse

Fuse Rated Current	250 V / 1A (5x20mm Fast-Acting Glass Body Cartridge Fuse)
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6. Buzzer Pattern Set-up

The **B** Buzzer type includes a set up for four different patterns and sound reduction. Set up the preferred pattern, using the DIP Switch after removing the buzzer unit.



■ Setup Table

Buzzer Sound	DIP Switch		Sound Pattern
	1	2	
No.1	OFF	OFF	Rapid Intermittent Beep
No.2	ON	OFF	Continuous Beep Sound
No.3	OFF	ON	Rapid Hi-Lo
No.4	ON	ON	Sweep Sound

DIP Switch		Volume
3		
OFF	OFF	Normal
ON	ON	Sound Reduction

(Note) Do not use DIP Switch 4.
It is set to "OFF" at all times after factory shipments.