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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℃ to +50 ℃			
Operating Ambient Humidity		Less than 90 % (No condensation)			
Storage Ambient Temperature		-30℃ to +60 ℃			
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			
Mass (Tolerance ±10%)		(LED Unit) + [Buzzer Unit]			
		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	-	LR6-BW		
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			

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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

Model	Tiers	Rated Voltage	Mounting	Wiring	Buzzer	Body color	LED Unit Color
LR6	-	02	↓	↓	↓	↓	↓
Size LR6 Φ60	02 24V DC					W Off-white K Black	For 1 tiers For 2 tiers For 3 tiers R RG RYG Y RY - G - -
1 1 tier 2 2 tiers 3 3 tiers				4 M12 connector 4-pin 5 M12 connector 5-pin	For M12 connector 4-pin N No Buzzer For M12 connector 5-pin B With Buzzer	R Red Y Amber G Green	From top to bottom
			W Direct mounting (Mounting with M30 Nut)				

•For M12 Connector 8-pin

Model	Tiers	Rated Voltage	Mounting	Wiring	Buzzer	Body color	LED Unit Color
LR6	-	02	W	8	↓	↓	↓
Size LR6 Φ60	02 24V DC					For 3 tiers W Off-white For 4 and 5 tiers W Off-white K Black	For 3 tiers For 4 tiers For 5 tiers RYG RYGB RYGBG R Red Y Amber G Green B Blue C White
3 3 tiers 4 4 tiers 5 5 tiers				8 M12 Connector 8-pin	For 3 tiers N No Buzzer For 4 and 5 tiers B With Buzzer N No Buzzer		From top to bottom
			W Direct mounting (Mounting with M30 Nut)				

Unit Model (Body Unit)

Model	Rated Voltage	Mounting/ Wiring	Buzzer	Body Color
LR6	-	02	↓	↓
Size LR6 Φ60	02 24V DC			
		W8 Direct mounting (Mounting with M30 Nut) M12 connector 8-pin	N No Buzzer	For Direct mounting (Mounting with M30 Nut) W Off-white K Black

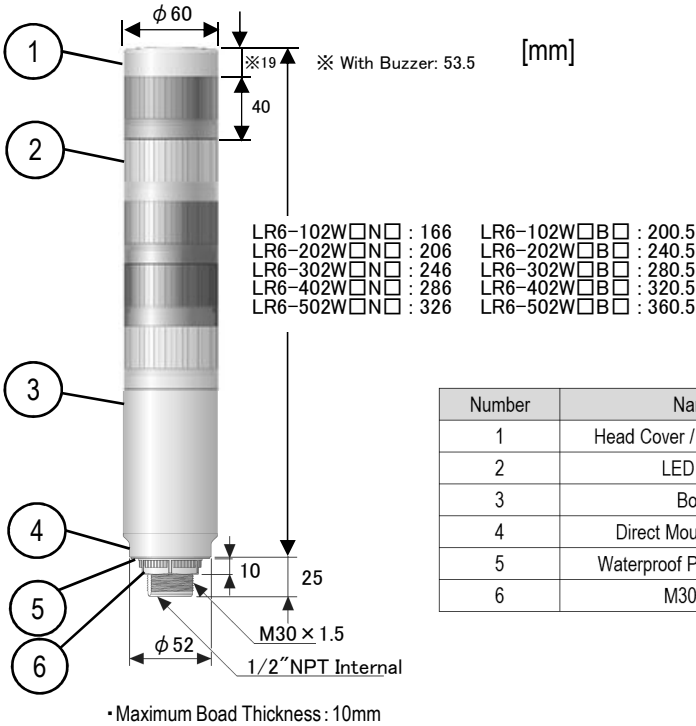
2.2 Model List

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-RYGBG
LR6-302W4NW-RYG	LR6-302W5BW-RYG	LR6-502W8BW-RYGBG
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-RYGBG
LR6-202W4NK-RY	LR6-202W5BK-RY	LR6-502W8BK-RYGBG
LR6-302W4NK-RYG	LR6-302W5BK-RYG	

[3.Outer Dimensions]

3.1 Assembly Model

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

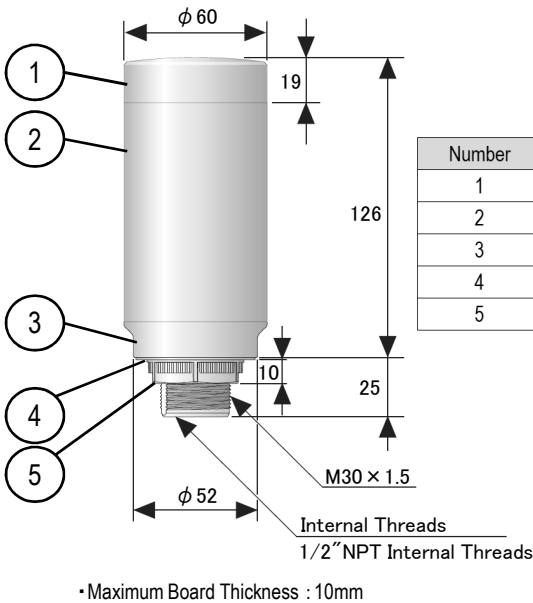


Number	Name	Material	UL Flammability
1	Head Cover / Buzzer Case	PC	V-2
2	LED Unit	PC	V-2
3	Body	PC	V-2
4	Direct Mount Bracket	PC	V-2
5	Waterproof Packing (t =1)	Silicone Rubber	-
6	M30 Nut	PC	V-2

3.2 Unit Model(Body Unit)

■ LR6-02W8N□

[mm]

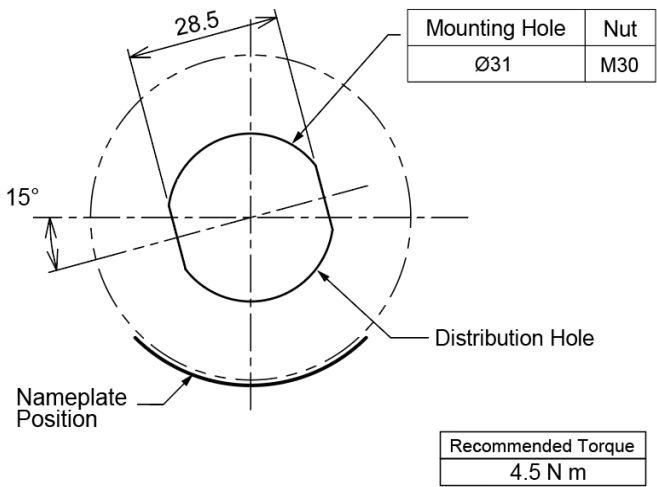


Number	Name	Material	UL Flammability
1	Head Cover	PC	V-2
2	Body	PC	V-2
3	Direct Mount Bracket	PC	V-2
4	Waterproof Packing (t =1)	Silicone Rubber	-
5	M30 Nut	PC	V-2

[4.Mounting Dimensional Drawing]

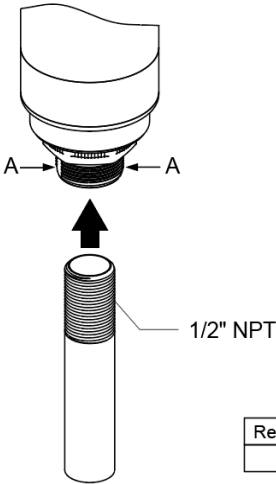
■ Mounting Dimensional Drawing(M30×1.5 Installation)

[mm]



■ Installation Figure(1/2 NPT Installation Figure)

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

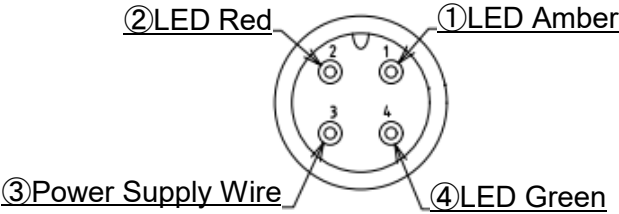


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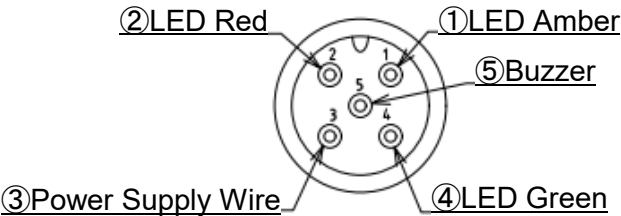
[5.Wiring Diagram]

5.1 M12 Connector Pin Layout

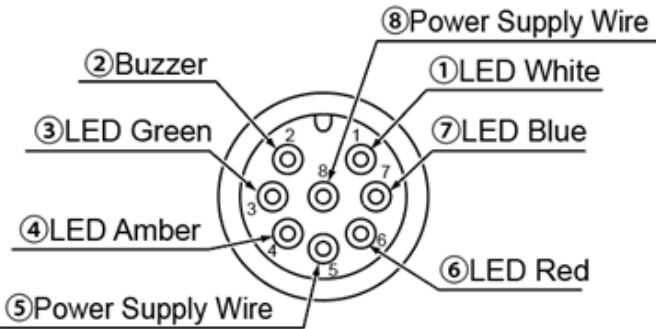
4-pin plug(male)



5-pin plug(male)

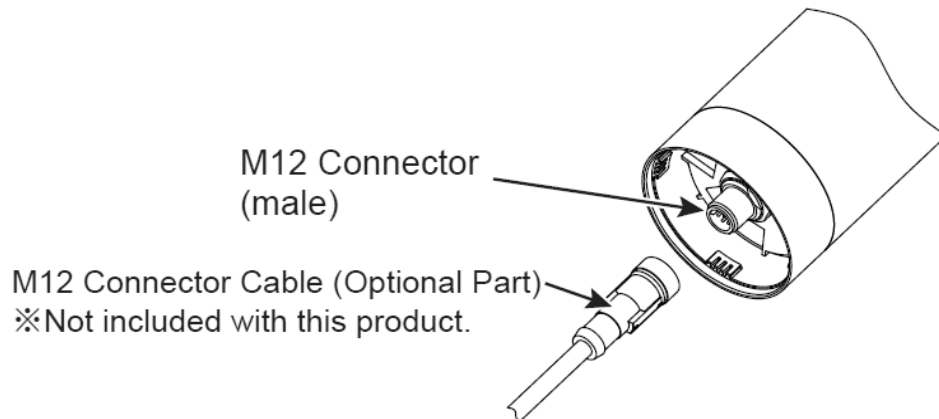


8-pin plug(male)



[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.)

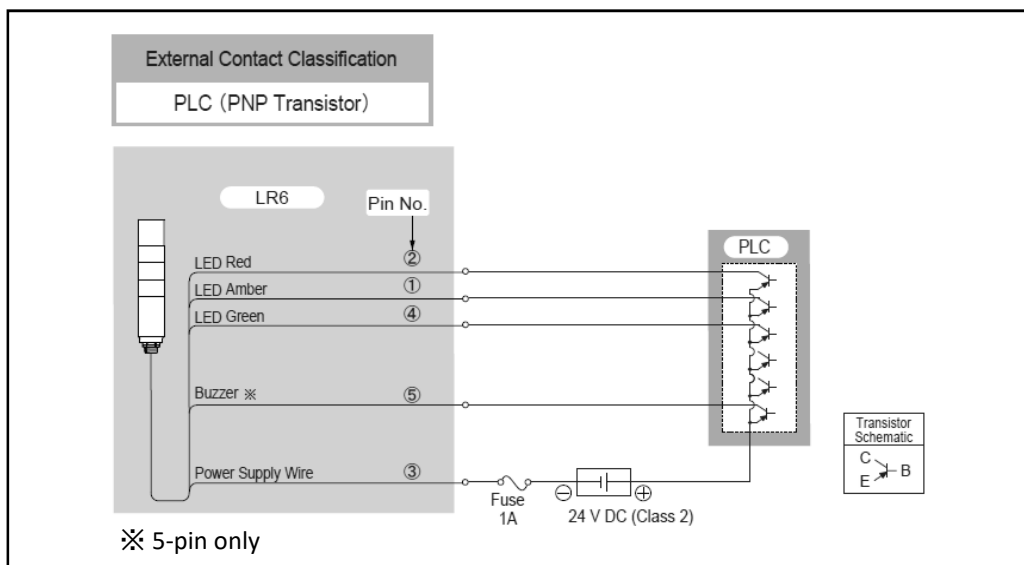
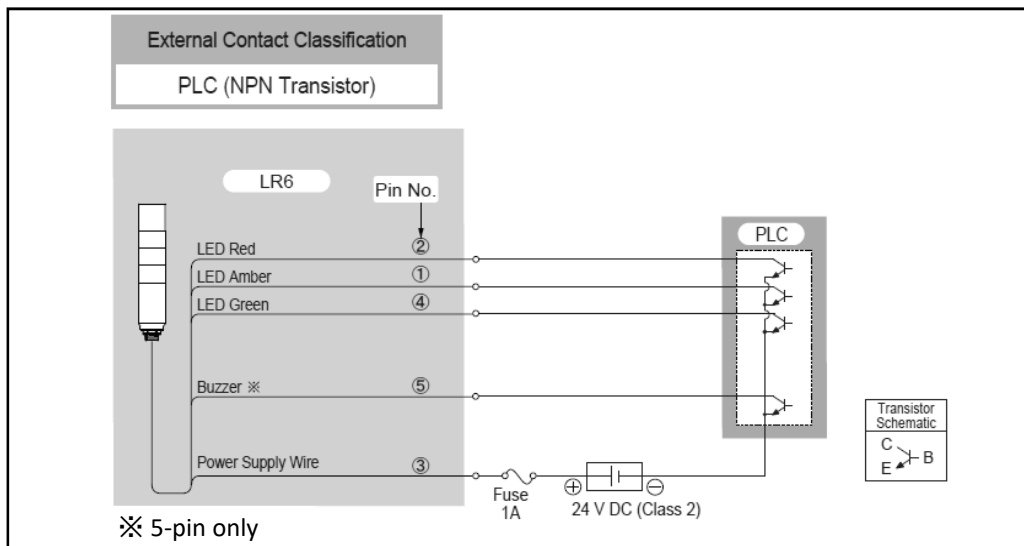
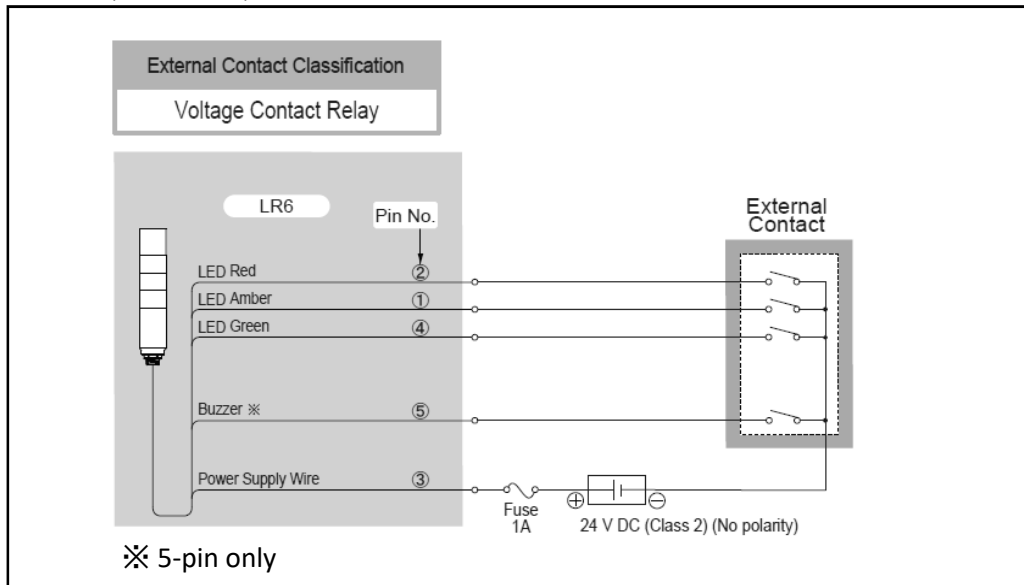


SZ-120-02 / -05 / -10
(Lengths : 2m , 5m , 10m)

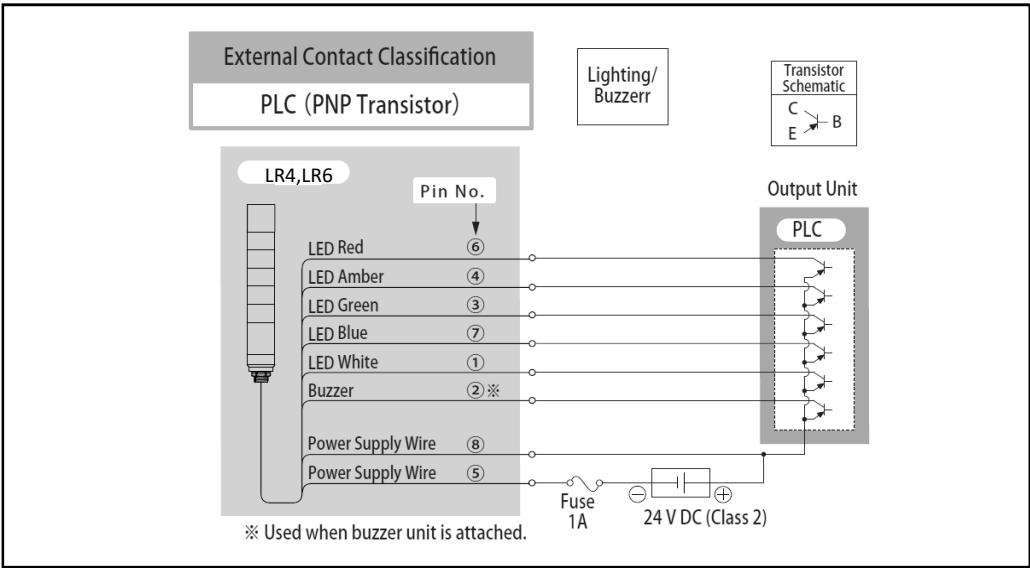
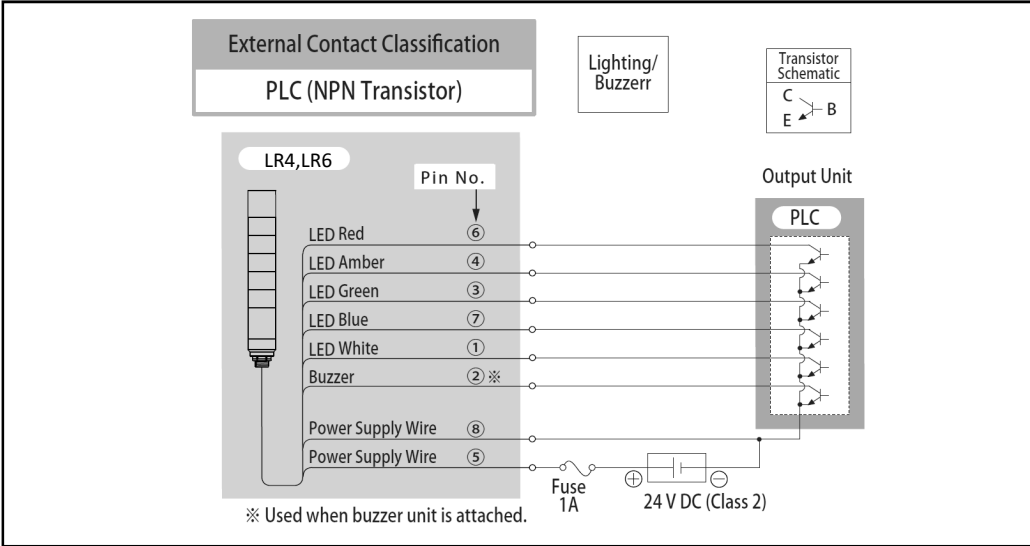
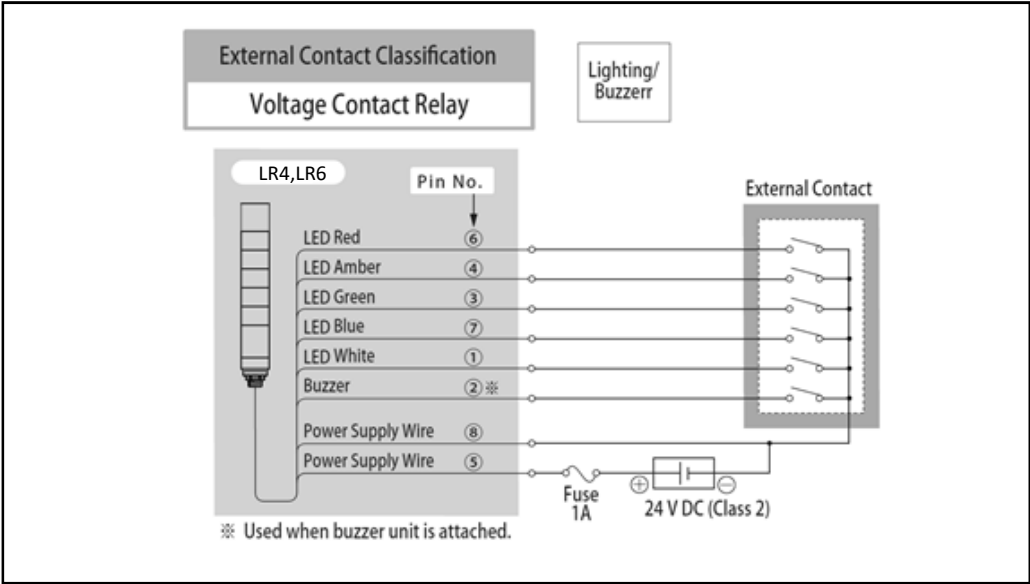
PIN No.	Wire Color
①	White
②	Brown
③	Green
④	Yellow
⑤	Gray
⑥	Pink
⑦	Blue
⑧	Red

※ 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

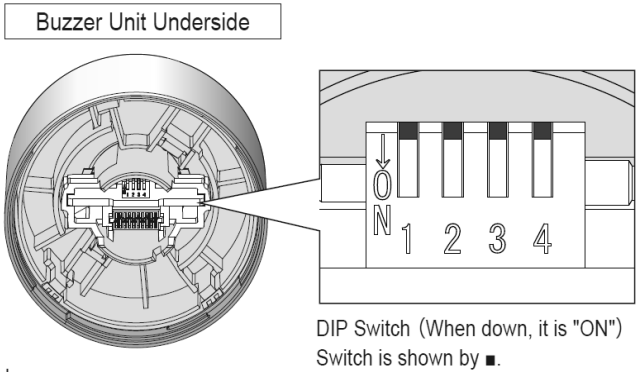
※3・・・Signal wire current (Max.) not exceeding the sum total.

■ 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	Normal
ON	Sound Reduction

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