

SPECIFICATIONS

[1.General Specifications]

Product Name		Signal Tower			
Model		LR6-□02W4N□	LR6-□02W5B□	LR6-□02W8□□	LR6-02W8N□
		LR6-□02L4N□	LR6-□02L5B□	LR6-□02L8□□	LR6-02L8N□
Rated Voltage		24V DC			
Operating Voltage Range		Rated Voltage ±10%			
Rated Current Consumption	Typ.	-	LED Unit : 40mA		
		-	Buzzer Unit : 40mA (*1 *2)		
	Max.	-	LED Unit : 45mA		
		-	Buzzer Unit : 250mA (*1 *2)		
Inrush Current	Power Supply Wire	none (Signal Wire Current Maximum not exceeding the sum total)			
	Signal Wire	LED Unit : none			
		Buzzer Unit : none (Not exceeding Maximum Signal Wire Current Ratings)			
Rated Power Consumption	Typ.	-	LED Unit : 1W		
		-	Buzzer Unit : 1W (*1 *2)		
	Max.	-	LED Unit : 1.3W		
		-	Buzzer Unit : 1.3W (*1 *2)		
Standby Power Consumption		LED Unit : none			
		Buzzer Unit : 0.1W (*2)			
		Body Unit : none			
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	W4/W5/W8	IP65(IEC 60529)			
	L4/L5/L8	IP54(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			
Outer Dimensions		Refer to 3.Outer Dimensions			
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 (*2)LR6-□02W4N□ and LR6-□02L4N□ do not support the Buzzer Unit. 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	B	2/11

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	
Mass (Tolerance ±10%)		(LED Unit) + [Buzzer Unit]	
		LR6-□02W4N□ LR6-□02W5B□ LR6-□02W8□□	0.17kg + (0.06kg) × Tiers + [0.06kg]
		LR6-02W8N□	0.17kg
		LR6-□02L4N□ LR6-□02L5B□ LR6-□02L8□□	0.44kg + (0.06kg) × Tiers + [0.06kg]
		LR6-02L8N□	0.44kg
Compatible Unit (Optional)	LED Unit Model	W4/W5	LR6-E-R,Y,G,RZ,YZ,GZ
		L4/L5	
		W8	LR6-E-R,Y,G,B,C,RZ,YZ,GZ,BZ,MZ
		L8	
	Buzzer Unit Model	W4	-
		L4	
		W5/W8	LR6-BW,BK
		L5/L8	

[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

1 1 tier

2 2 tiers

3 3 tiers

4 M12 connector 4-pin

5 M12 connector 5-pin

W Direct mounting(Mounting with M30 Nut)

L Pole Mount with L-bracket

W Off-white

K Black

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

•For M12 Connector 8-pin

Model		Tiers	Rated Voltage	Mounting	Wiring	Buzzer	Body color		LED Unit Color
LR6	-	↓	02	↓	8	↓	↓	-	↓

Size
LR6 Φ60

02 24V DC

3 3 tiers

4 4 tiers

5 5 tiers

8 M12 Connector 8-pin

W Direct mounting(Mounting with M30 Nut)

L Pole Mount with L-bracket

W Off-white

K Black

B With Buzzer

N No Buzzer

R Red

Y Amber

G Green

B Blue

C White

From top to bottom

Unit Model (Body Unit)

Model		Rated Voltage	Mounting/ Wiring	Buzzer	Body Color
LR6	-	02	↓	N	↓

Size
LR6 Φ60

02 24V DC

W8 Direct mounting (Mounting with M30 Nut)
M12 connector 8-pin

L8 Pole Mount with L-bracket
M12 connector 8-pin

W Off-white

K Black

N No Buzzer

2.2 Compatible Units Table

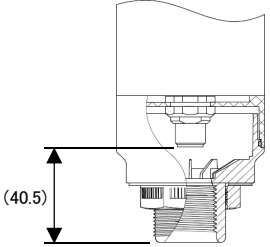
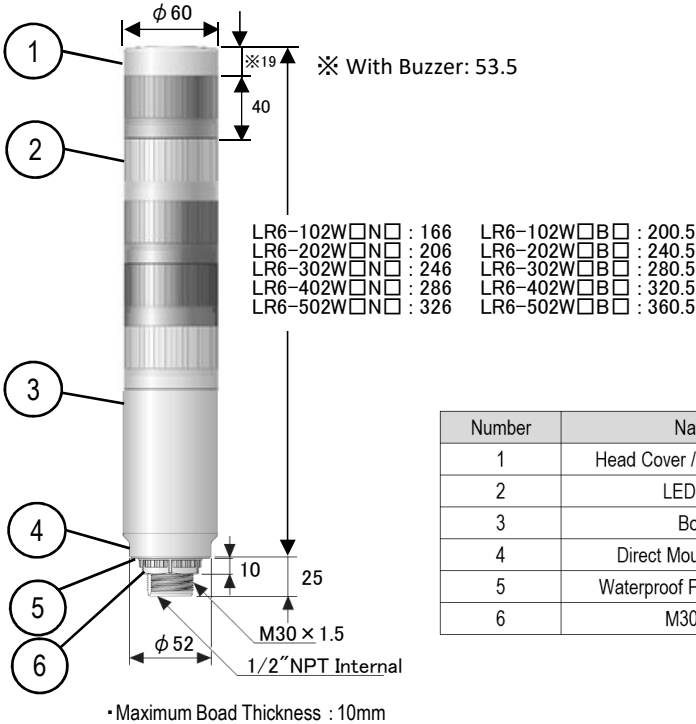
	LED Unit					Buzzer
	R	Y	G	B	C	Bz
M12 connector 4-pin	✓	✓	✓			
M12 connector 5-pin	✓	✓	✓			✓
M12 connector 8-pin	✓	✓	✓	✓	✓	✓

[3.Outer Dimensions]

3.1 Direct Mount type

■ LR6-□02W4N□, LR6-□02W5B□, LR6-□02W8□□

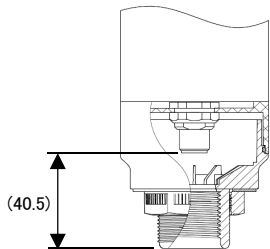
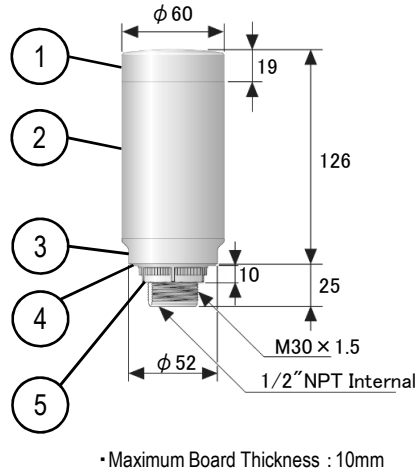
[mm]



<Direct Mount Bracket part section>

■ LR6-02W8N□

[mm]

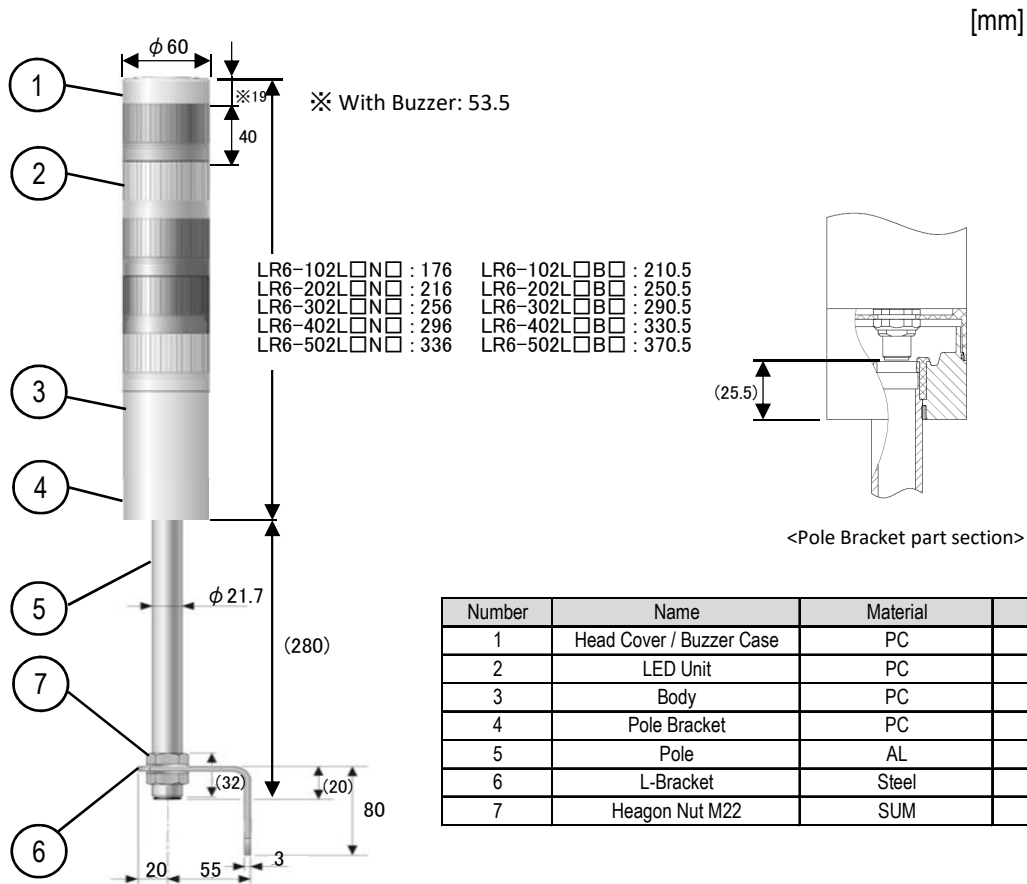


<Direct Mount Bracket part section>

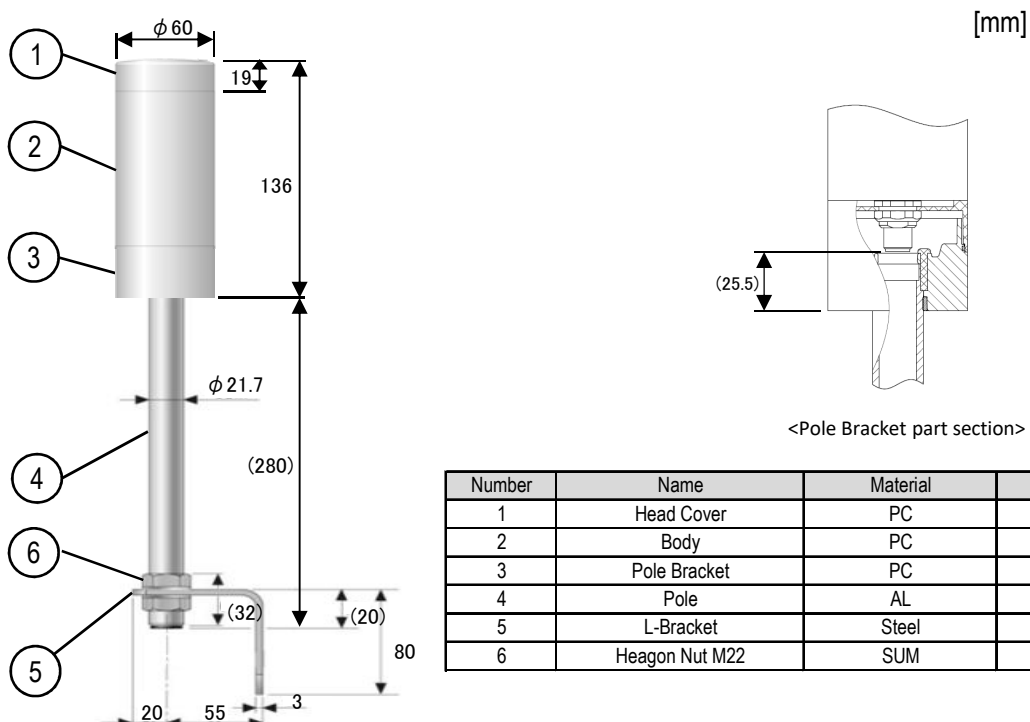
[3.Outer Dimensions]

3.2 Pole Mount type

■ LR6-□02L4N□, LR6-□02L5B□, LR6-□02L8□□

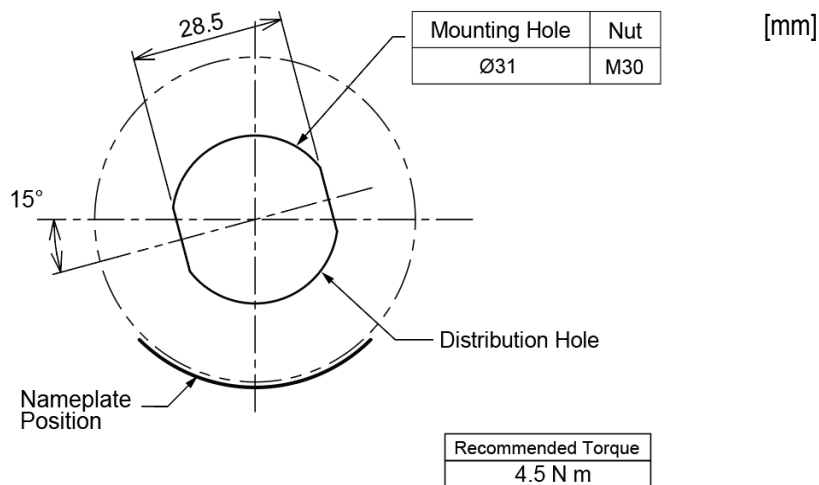


■ LR6-02L8N□



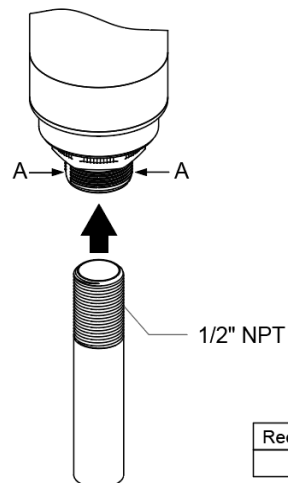
[4.Mounting Dimensional Drawing]

4.1 Direct Mount type Mounting Dimensional Drawing(M30×1.5 Installation)



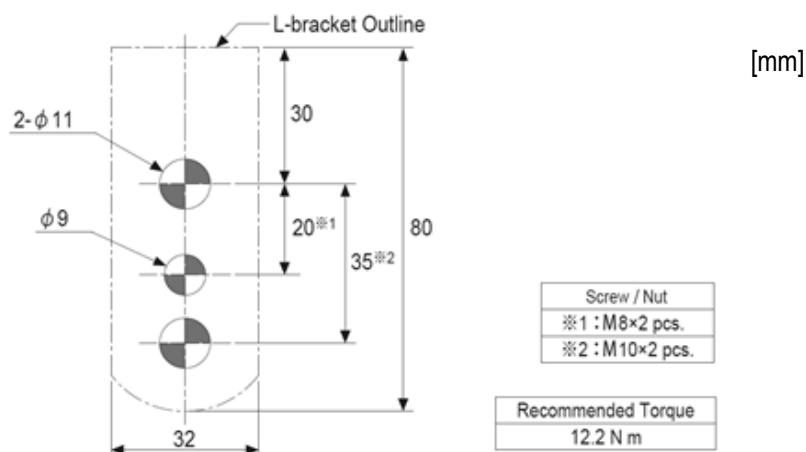
4.2 Direct Mount type Installation Figure(1/2" NPT Installation Figure)

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



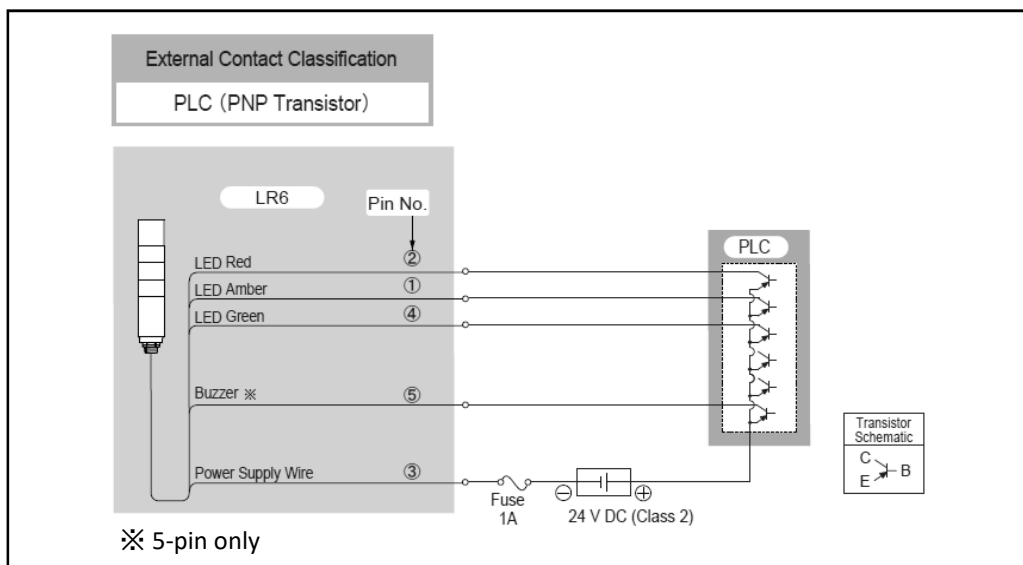
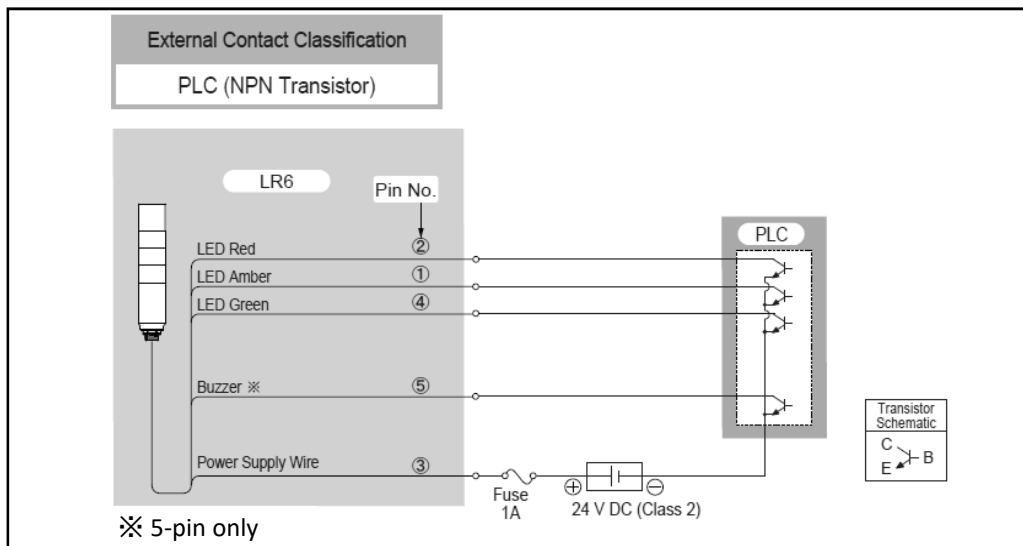
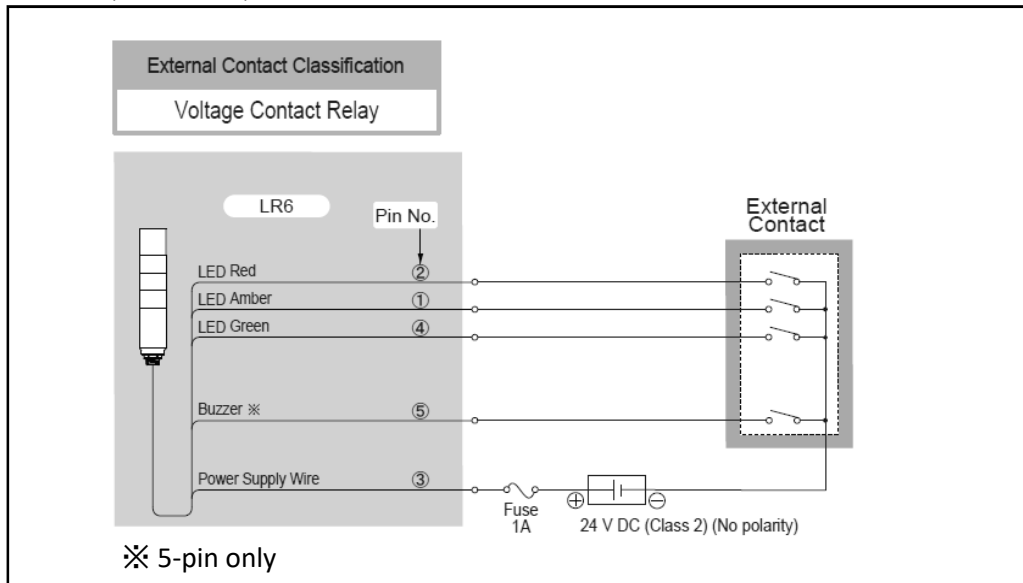
Recommended Torque
2.25 N m

4.3 Pole Mount type Mounting Dimensional Drawing

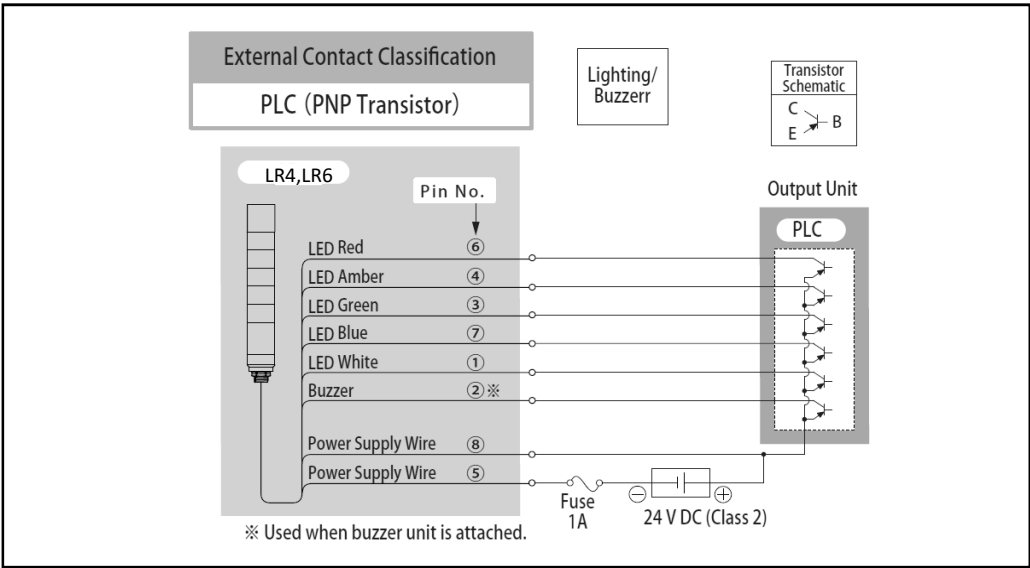
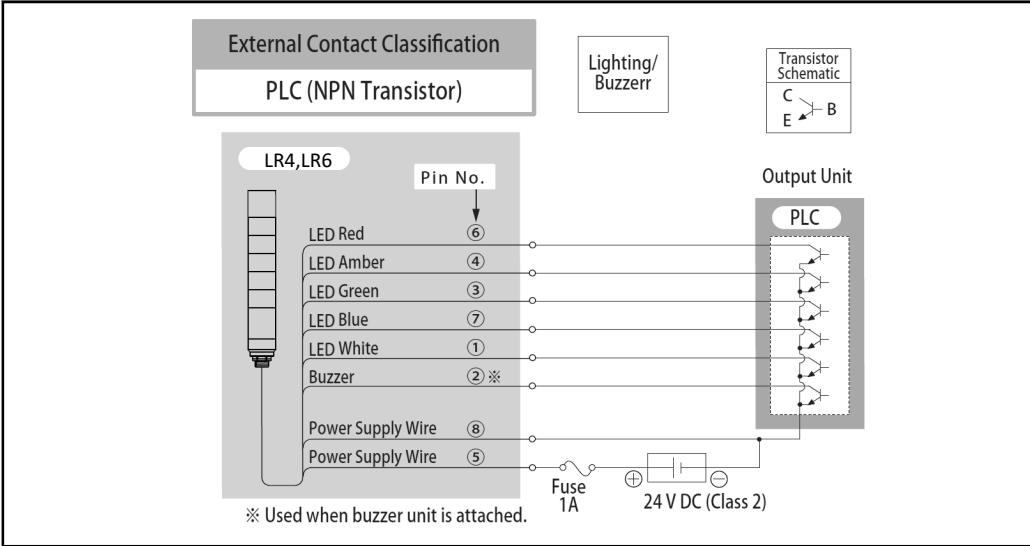
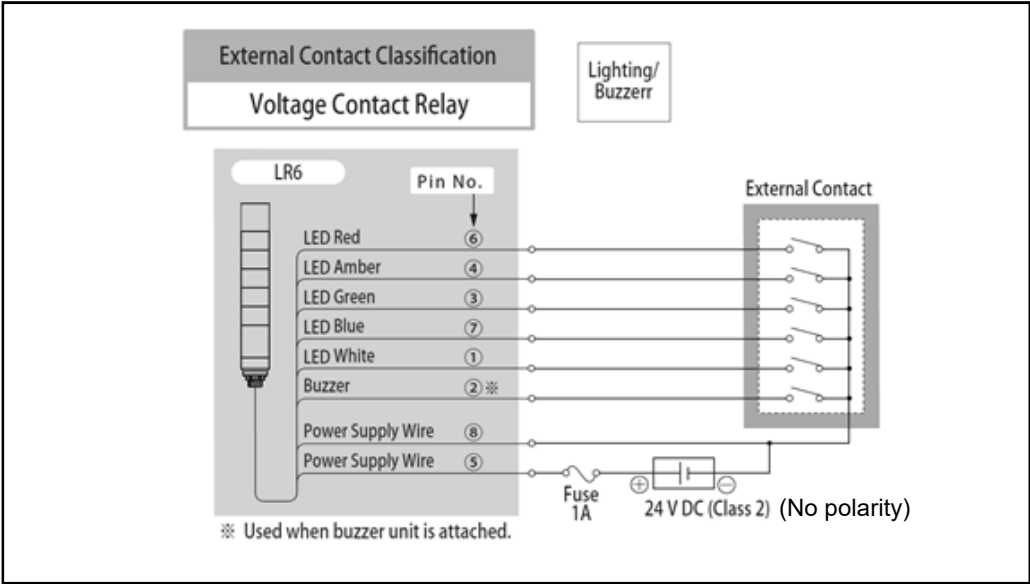


[5.Wiring Diagram]

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



5.2 Wiring Example (8-pin)



5.3 External Contact Capacity

I_S : Current Capacity V_S : Withstand Voltage I_L : Leakage Current

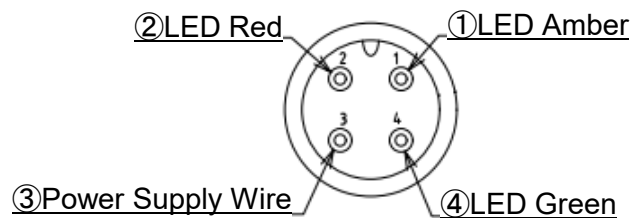
	Recommended Contact Capacity
LED Unit (1 Tier)	$I_S \geq 100\text{mA}$ $V_S \geq 35\text{V DC}$
Buzzer	$I_S \geq 300\text{mA}$ $V_S \geq 35\text{V DC}$
Power Supply	$I_S \geq 500\text{mA}$ $V_S \geq 35\text{V DC}$
Leakage Current	$I_L \leq 0.1\text{mA}$

■ Recommended Fuse

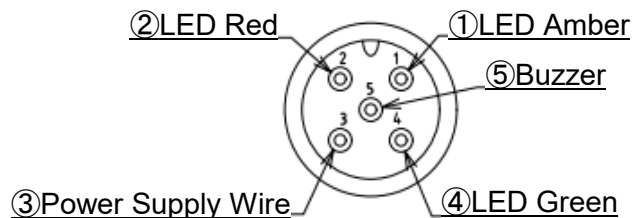
Fuse Rated Current	250 V / 1A (5x20mm Fast-Acting Glass Body Cartridge Fuse)
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5.4 M12 Connector Pin Layout

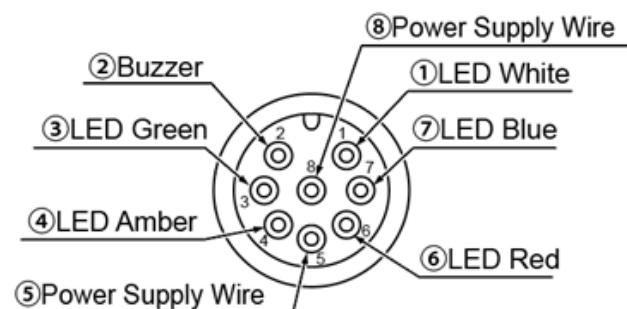
4-pin plug(A-Code, male)



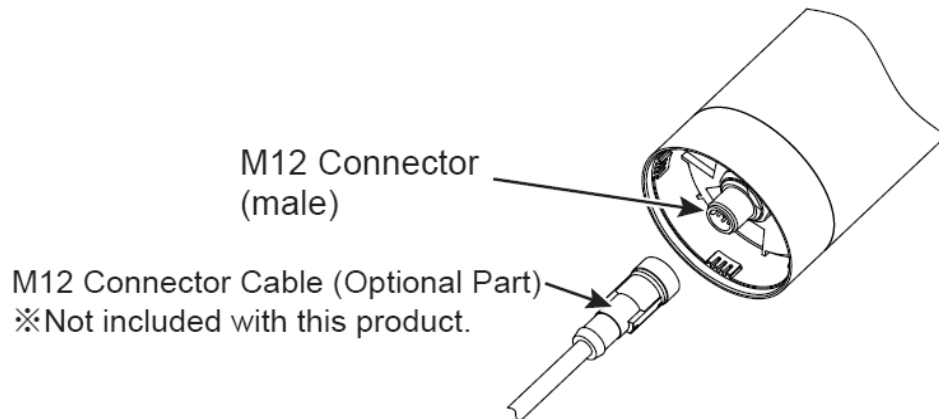
5-pin plug(A-Code, male)



8-pin plug(A-Code, male)



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



5.6 Optional Parts

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



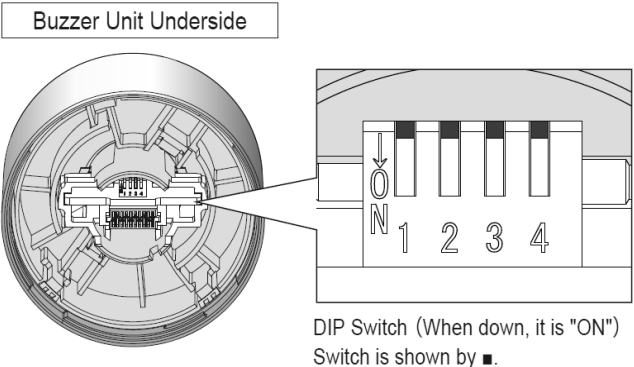
SZ-120-02 / -05 / -10
(Lengths : 2m , 5m , 10m)

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 ,LR6-L8

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.