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LR6-02WC-W18	E	1/8

# SPECIFICATIONS

## [1.General Specifications]

Product Name		Signal Tower			
Model		LR6-302WCNW	LR6-02WCNW	LR6-02WMNW	LR4-02WCNW
Rated Voltage		24V DC			
Operating Voltage Range		Rated Voltage $\pm 10\%$			
Rated Current	Typ.	LED Unit : 40mA			
	Max.	LED Unit : 45mA			
Rated Power	Typ.	LED Unit : 1W			
	Max.	LED Unit : 1.3W			
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) / NEMA TYPE 4X,13			
Environmental Condition		Upright			
Insulation Resistance		More than 1M $\Omega$ 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 $\pm 10\%$ )		LR6-302WCNW	: 0.35kg		
		LR6-02WCNW	: 0.17kg		
		LR6-02WMNW	: 0.21kg		
		LR4-02WCNW	: 0.09kg		
Compatible Unit (Optional)	LED Unit Model	LR6-E-R,Y,G,B,C,RZ,YZ,GZ,BZ,MZ		LR4-E-R,Y,G,B,C,RZ,YZ,GZ,BZ	
	Buzzer Unit Model	LR6-BW		LR4-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		UL Recognized Component (File No.E215660) Due to the characteristics of the LED elements, a variation in difference of the color tone and brightness of every product may occur Conforms to the CE Requirements Conforms to the UKCA Requirements			

[2.Model Number Configuration]

	Model		Tiers	Rated Voltage	Mounting/Wiring	Flashing/Buzzer	Body Color		LED Unit Color
Assembly Model	LR6	-	3	02	WC	N	W	-	RYG
Unit Model(Body Unit)	LR6	-	3	02	WC	N	W		
Unit Model(Body Unit)	LR6	-		02	WM	N	W		
Unit Model(Body Unit)	LR4	-		02	WC	N	W		

LR6 | φ60  
LR4 | φ40

02 | 24VDC

3 | 3Tiers

WC	Direct Mount/M12 Connector (Mounting with M30 Nut)
WM	Direct Mount/M12 Connector (Mounting with 3 Hexagon Bolts)

W | Off-white

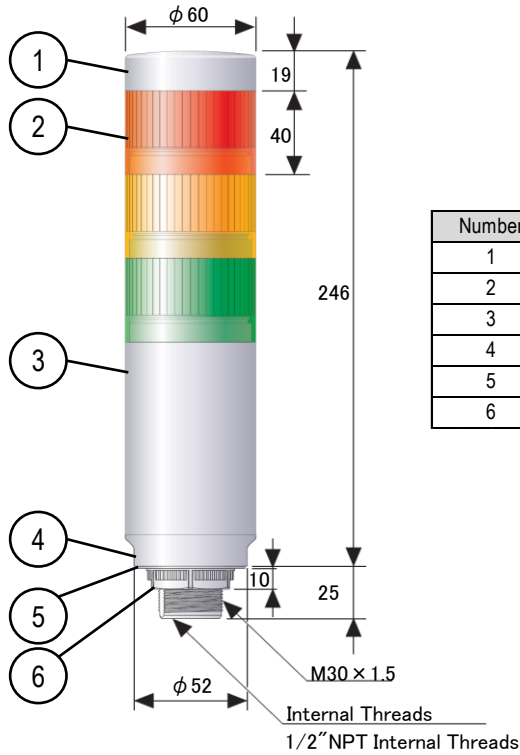
N | No Flashing / Buzzer

LED Color  
R | Red  
Y | Amber  
G | Green  
From top to bottom

[3.Outer Dimensions]

[mm]

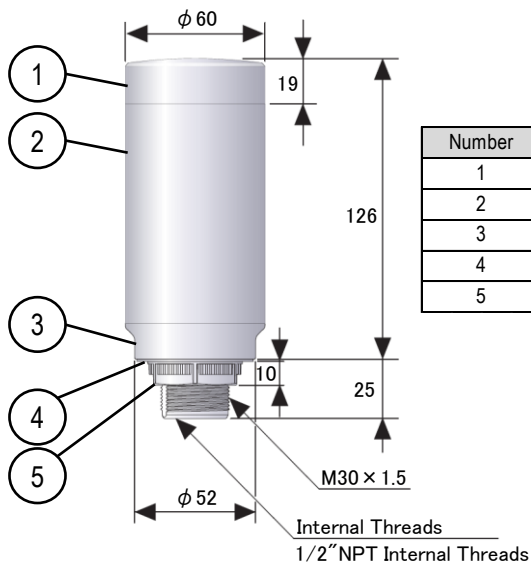
■ LR6-302WCNW-RYG



Number	Name	Material	UL Flammability
1	Head Cover	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

• Maximum Board Thickness : 10mm

■ LR6-02WCNW

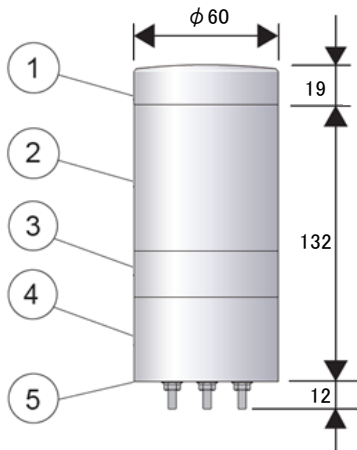


Number	Name	Material	UL Flammability
1	Head Cover	PC	V-2
2	Body	PC	V-2
3	Direct Mount Bracket	PC	V-2
4	Waterproof Packing (t=1)	Silicone Rubber	-
5	M30 Nut	PC	V-2

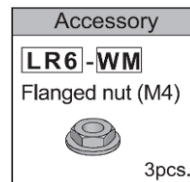
• Maximum Board Thickness : 10mm

■ LR6-02WMNW

[mm]

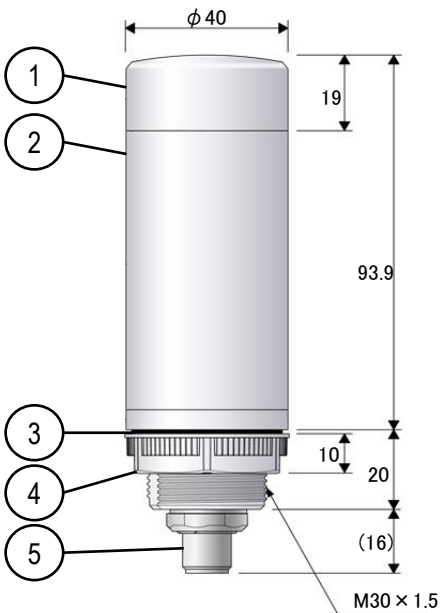


Number	Name	Material	UL Flammability
1	Head Cover	PC	V-2
2	Body	PC	V-2
3	M12 Bracket	PC	V-2
4	Direct Mount Bracket	PC	V-2
5	Waterproof Packing	Silicone Rubber	-



•Maximum Board Thickness : 8mm

■ LR4-02WCNW



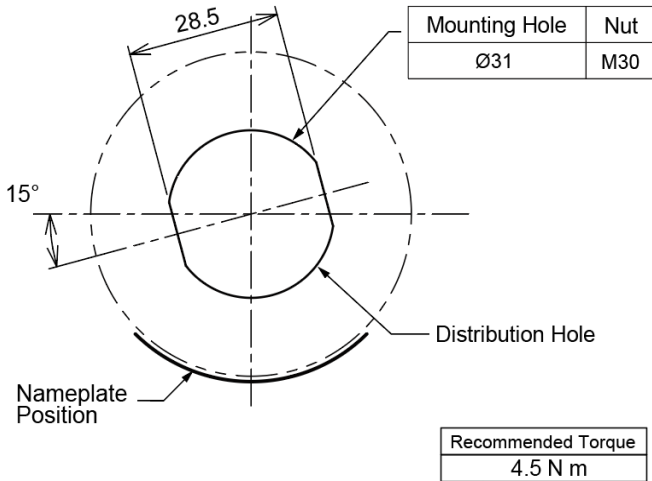
Number	Name	Material	UL Flammability
1	Head Cover	PC	V-2
2	Body	PC	V-2
3	Waterproof Packing (t=1)	Silicone Rubber	-
4	M30 Nut	PC	V-2
5	M12 Connector	Brass	-

•Maximum Board Thickness : 8mm

[4.Mounting Dimensional Drawing]

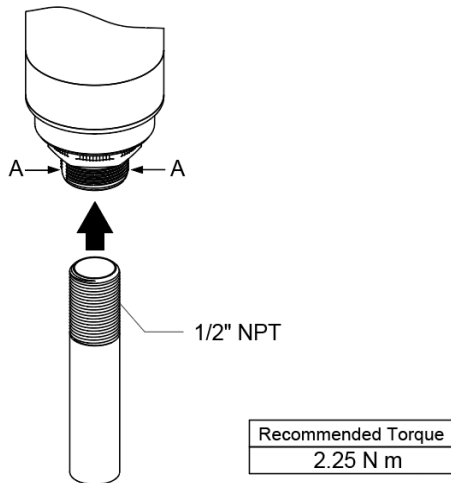
■ **WC** Mounting Dimensional Drawing(M30×1.5 Installation)

[mm]

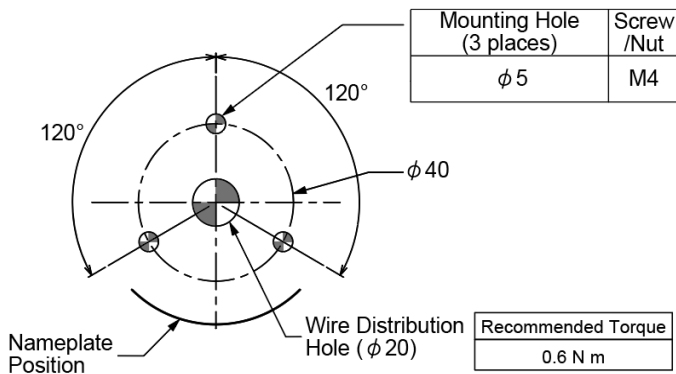


■ **LR6** - **WC** Installation Figure(1/2" NPT Installation Figure)

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

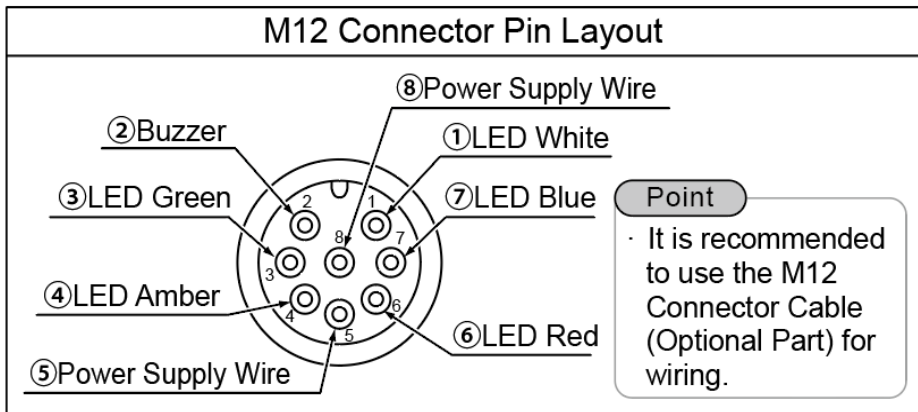


■ **WM** Mounting Dimensional Drawing (Only for LR6)

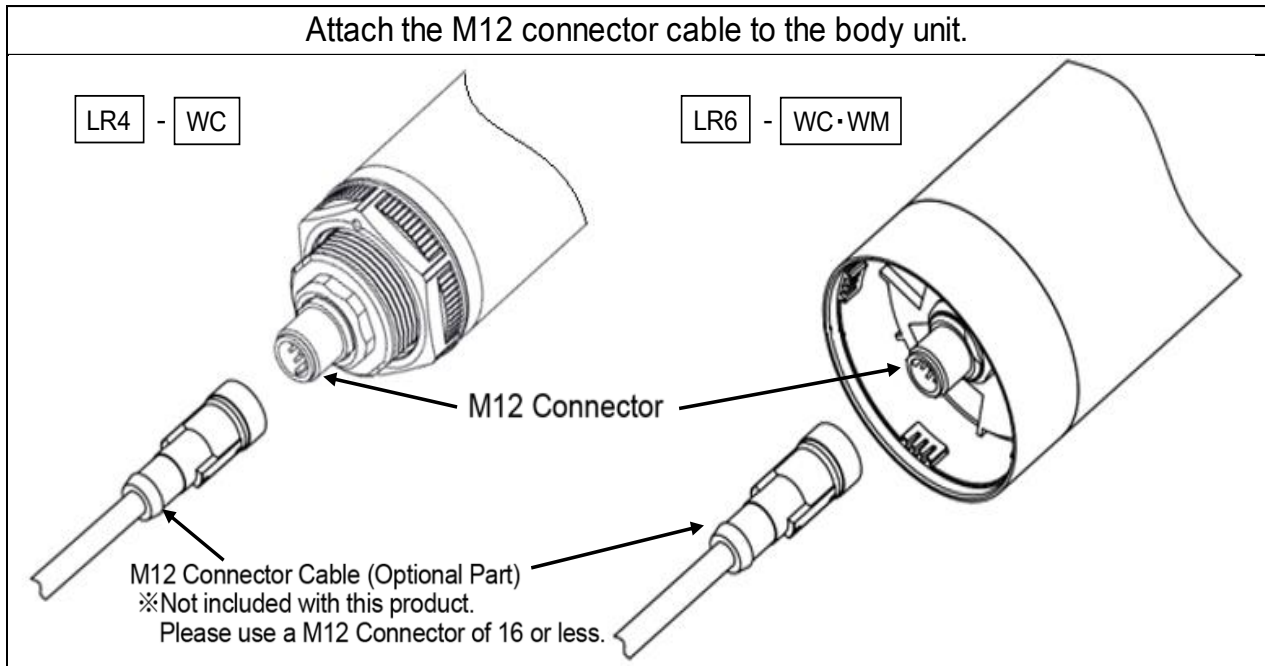


[5.Wiring Diagram]

5.1 M12 Connector Pin Layout  
8-pin male(plug)



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



5.3 Optional Parts

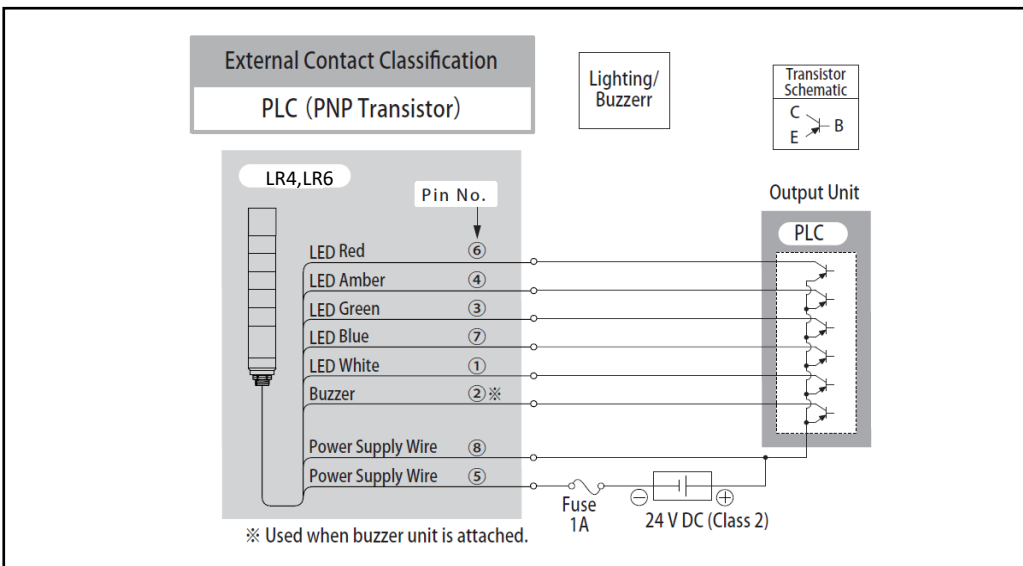
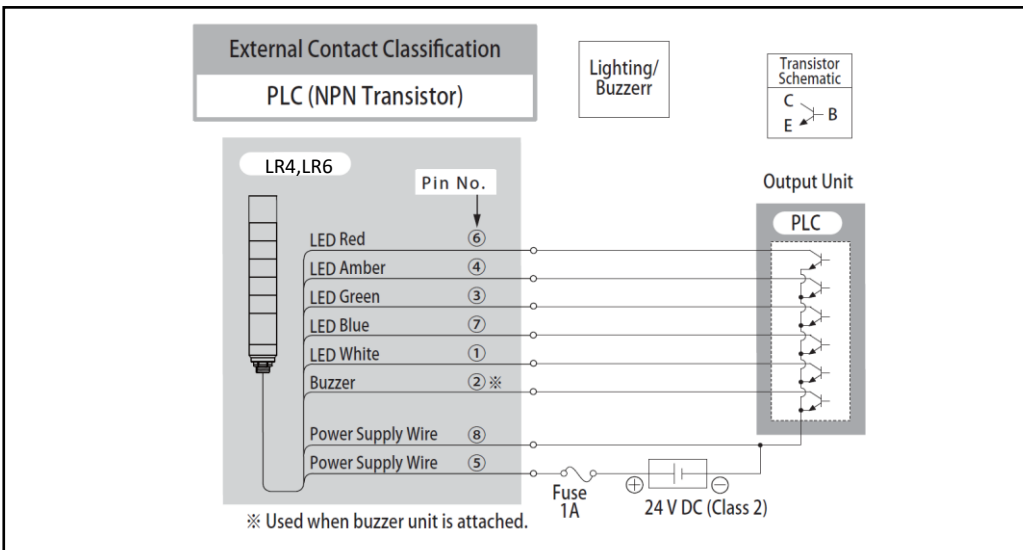
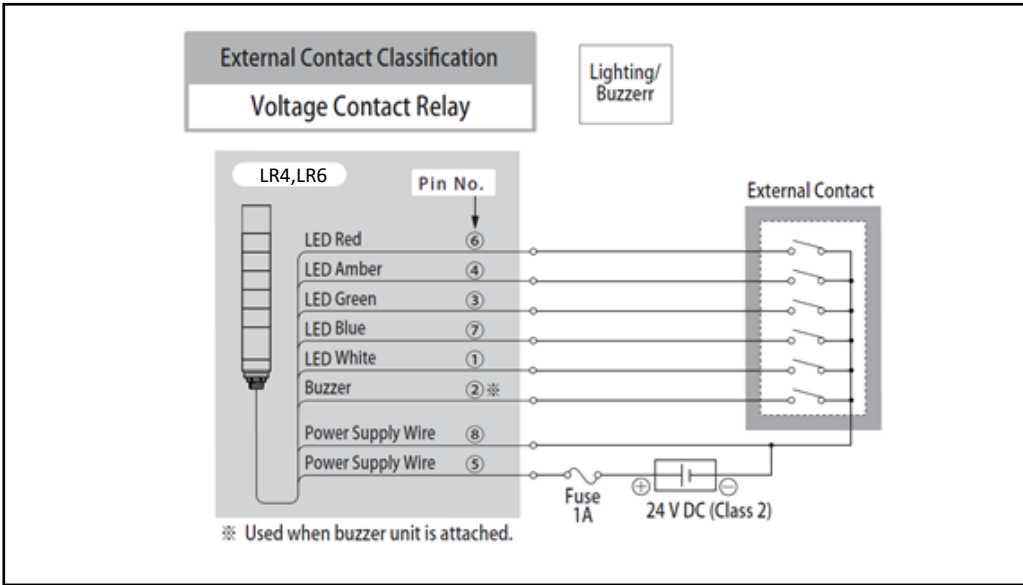
**Optional Parts**

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

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

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

### 5.4 Wiring Example



### 5.5 External Contact Capacity

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

Rated Load Voltage		24VDC			
LED Unit (1 Tier)	Signal Wire Current (Max.) / Voltage	45mA / Power Supply Voltage			
	Recommended Contact Capacity	$I_S \geq 100\text{mA}$ $V_S \geq 35\text{VDC}$			
Buzzer	Signal Wire Current (Max.) / Voltage	250mA / Power Supply Voltage			
	Recommended Contact Capacity	$I_S \geq 300\text{mA}$ $V_S \geq 35\text{VDC}$			
Power Supply	Current Consumption (Max.)	250mA (※1)			
	Signal Wire Current (Max.) / Voltage	$I_S \geq 500\text{mA}$ $V_S \geq 35\text{VDC}$			
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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