

SPECIFICATIONS

[1. General Specifications]

| | | | |
|-------------------------------|----------------------------|---|------------------------------------|
| Product Name | | Signal Tower | |
| Model | | LR6-□02W□□W-□+FB295 | |
| 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 | | IP67(IEC 60529) / IP69K(DIN 40050 PART9) | |
| Environmental Condition | | 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%) | | Body Unit + (LED Unit) + [Buzzer Unit] | |
| | | LR6-WC | 0.17kg + (0.06kg)×Tiers + [0.06kg] |
| | | LR6-WM | 0.21kg + (0.06kg)×Tiers + [0.06kg] |
| Compatible Unit (Optional) | LED Unit Model | LR6-E-R,Y,G,B,C,MZ+FB295 | |
| | Buzzer Unit Model | LR6-BW+FB295 | |
| Conformity Standards | UL, cUL | UL 508, CSA-C22.2 No. 14 | |
| | FCC | FCC Part 15 SubpartB Class A | |
| | CE Marking UKCA Marking | EN 61000-6-4, EN 61000-6-2, EN IEC 63000 | |
| | KC | KS C 9610-6-4, KS C 9610-6-2 | |
| 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 tone and brightness of every product may occur. UL Recognized Component (File No.E215660) | |

| | | |
|---------------|------|-------|
| Drawing No. | Rev. | Page |
| LR6-FB295-W18 | A | 2 / 9 |

[2.Model Number Configuration]

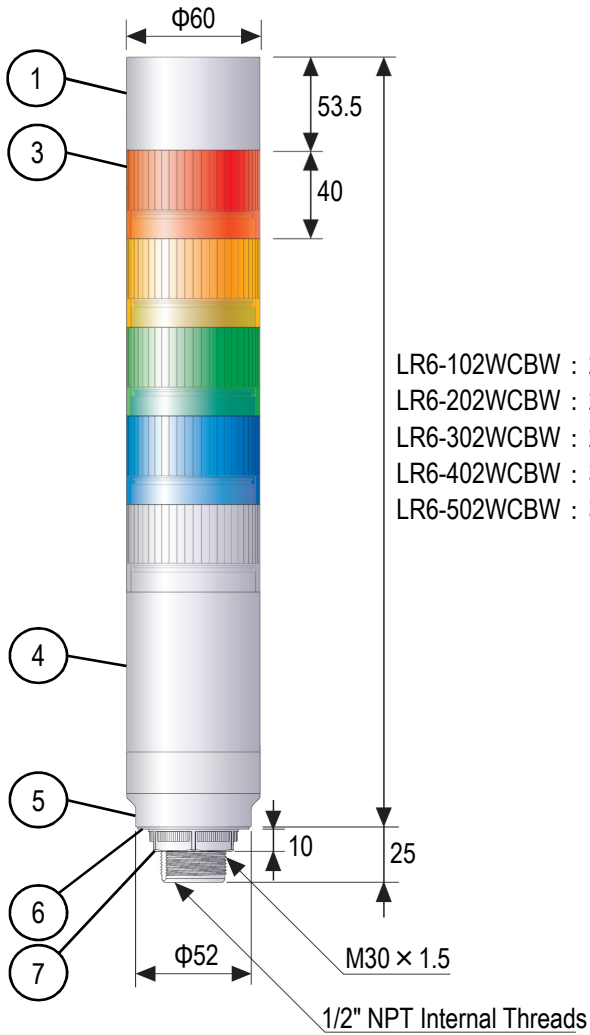
| Model | Size | Tiers | Rated Voltage | Mounting/Wiring | Flashing/Buzzer | Body Color | LED Unit Color | Custom Order Number | | | | |
|---|------|--|---------------|--|-----------------|---------------|----------------|---|---|-------|---|-------|
| Assembly Model | LR | 6 | - | ↓ | 02 | ↓ | ↓ | W | - | ↓ | + | FB295 |
| Size | | Rated Voltage | | Flashing / Buzzer | | Body Color | | LED Unit Color | | | | |
| 6 φ60 | | 02 24V DC | | B No Flashing / Buzzer N No Flashing / Buzzer | | W Off-white | | R Red Y Yellow G Green B Blue C White | | | | |
| Tiers | | Mounting / Wiring | | LED Unit Color | | | | | | | | |
| 1 1Tier 2 2Tiers 3 3Tiers 4 4Tiers 5 5Tiers | | WC Direct Mount / M12 Connector (Mounting with M30 Nut) WM Direct Mount / M12 Connector (Mounting with 3 Hexagon Bolts) | | From top to bottom | | | | | | | | |
| Unit Model(Body Unit) | LR | 6 | - | ↓ | 02 | ↓ | N | W | + | FB295 | | |
| Size | | Rated Voltage | | Flashing / Buzzer | | Body Color | | | | | | |
| 6 φ60 | | 02 24V DC | | N No Flashing / Buzzer | | W Off-white | | | | | | |
| Tiers | | Mounting / Wiring | | | | | | | | | | |
| 1 1Tier 2 2Tiers 3 3Tiers 4 4Tiers 5 5Tiers | | WC Direct Mount / M12 Connector (Mounting with M30 Nut) WM Direct Mount / M12 Connector (Mounting with 3 Hexagon Bolts) | | | | | | | | | | |

[3.Outer Dimensions]

■ LR6-□02WCBW-□+FB295

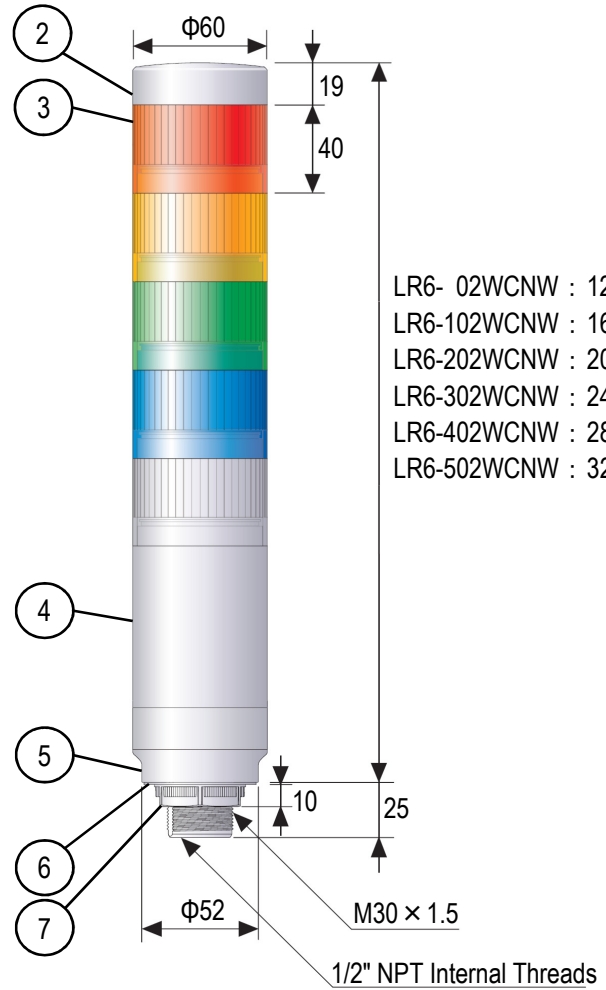
■ LR6-□02WCNW-□+FB295

[mm]



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

Maximum Board Thickness : 10



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

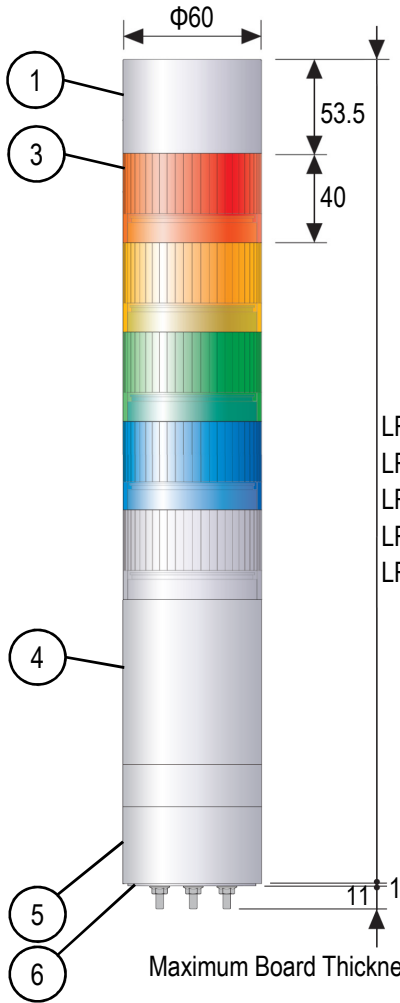
Maximum Board Thickness : 10

| Number | Name | Material | UL Flammability |
|--------|---------------------------|-----------------|-----------------|
| 1 | Buzzer Case (Buzzer Unit) | PC | V-2 |
| 2 | Head Cover | PC | V-2 |
| 3 | Globe (LED Unit) | PC | V-2 |
| 4 | Body | PC | V-2 |
| 5 | Direct Mount Bracket | PC | V-2 |
| 6 | Mounting Gasket | Silicone Rubber | - |
| 7 | M30 Nut | PC | V-2 |

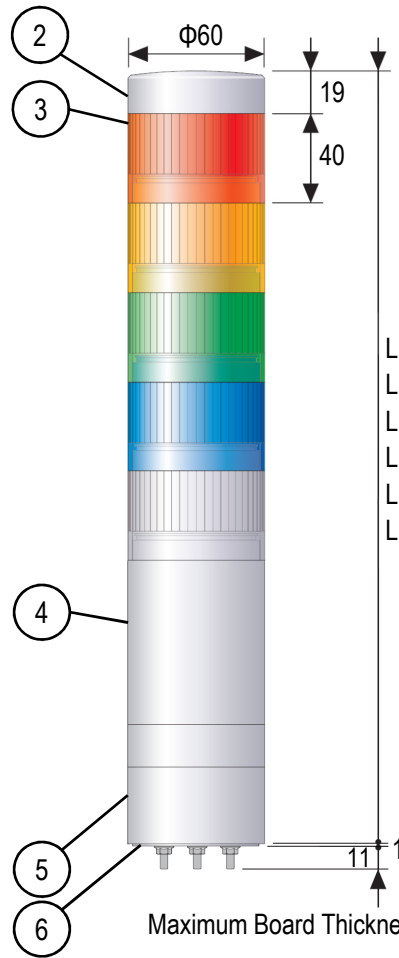
■ LR6-□02WMBW-□+FB295

■ LR6-□02WMNW-□+FB295

[mm]

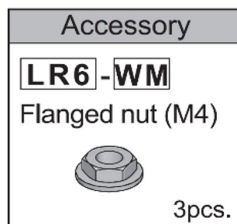


- LR6-102WMBW : 225.5
- LR6-202WMBW : 265.5
- LR6-302WMBW : 305.5
- LR6-402WMBW : 345.5
- LR6-502WMBW : 385.5



- LR6- 02WMNW : 151
- LR6-102WMNW : 191
- LR6-202WMNW : 231
- LR6-302WMNW : 271
- LR6-402WMNW : 311
- LR6-502WMNW : 351

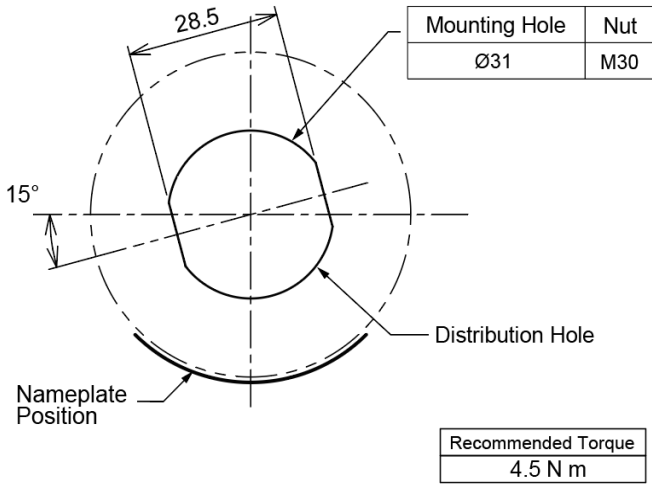
| Number | Name | Material | UL Flammability |
|--------|---------------------------|-----------------|-----------------|
| 1 | Buzzer Case (Buzzer Unit) | PC | V-2 |
| 2 | Head Cover | PC | V-2 |
| 3 | Globe (LED Unit) | PC | V-2 |
| 4 | Body | PC | V-2 |
| 5 | Direct Mount Bracket | PC | V-2 |
| 6 | Mounting Gasket | Silicone Rubber | - |



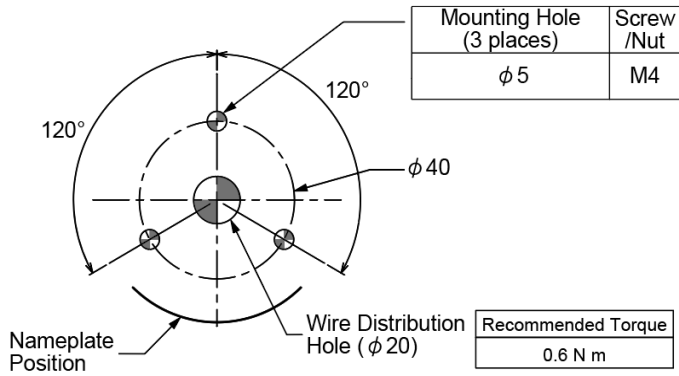
[4.Mounting Dimensional Drawing]

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

[mm]

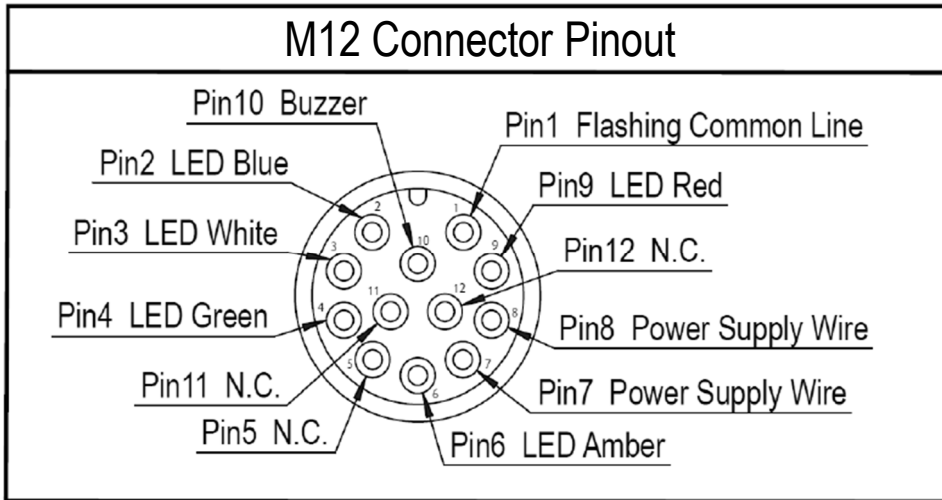


■ **WM** Mounting Dimensional Drawing

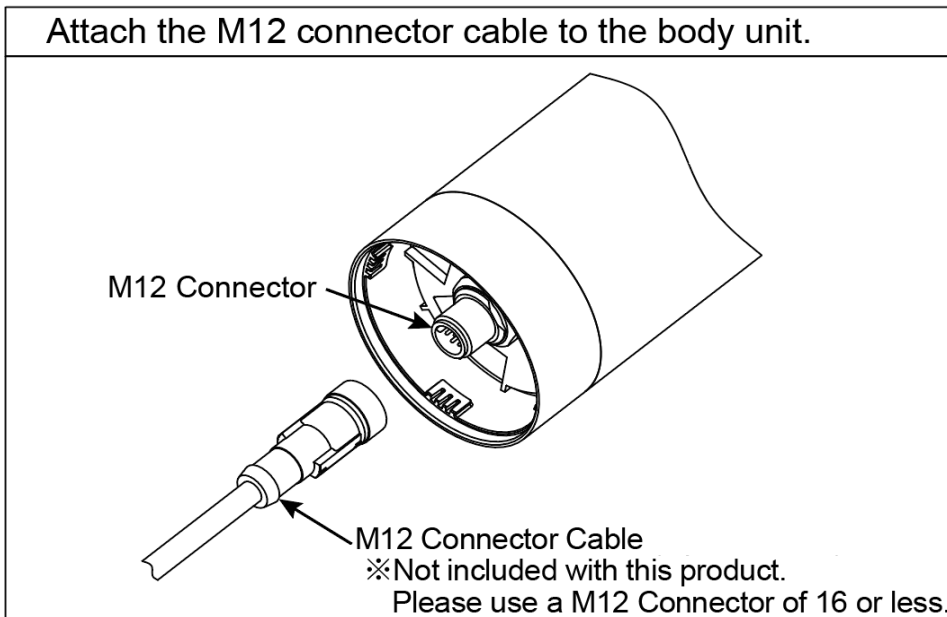


[5.Wiring Diagram]

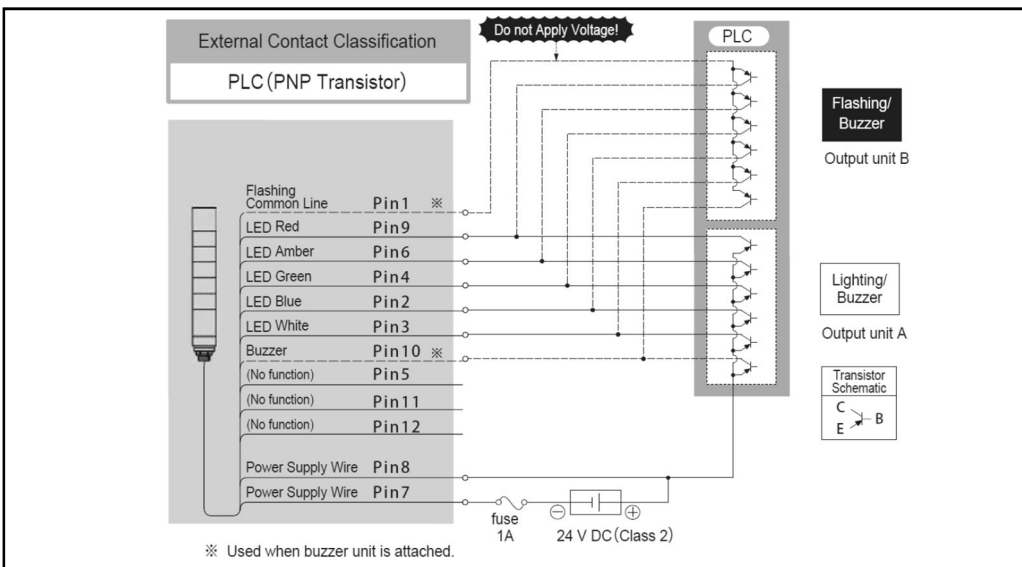
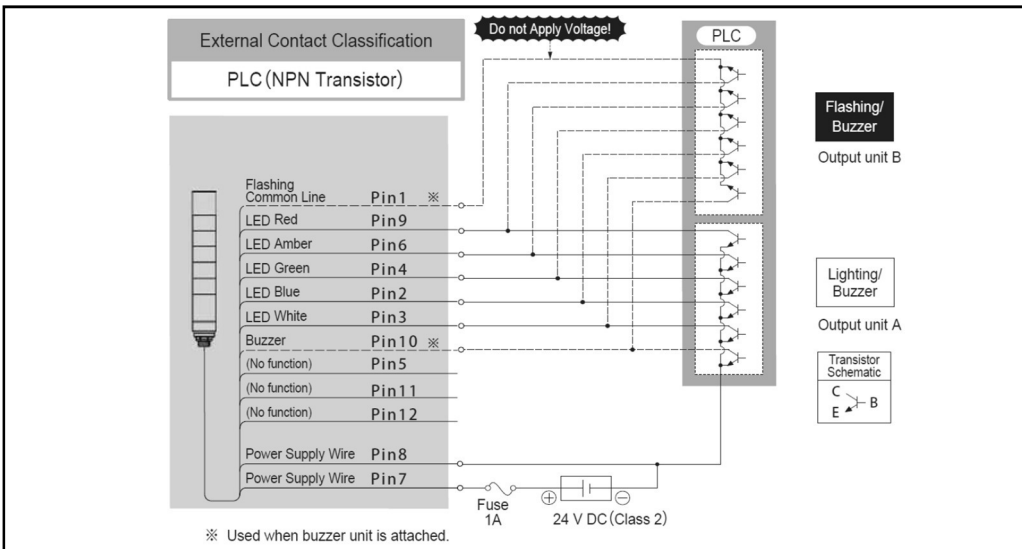
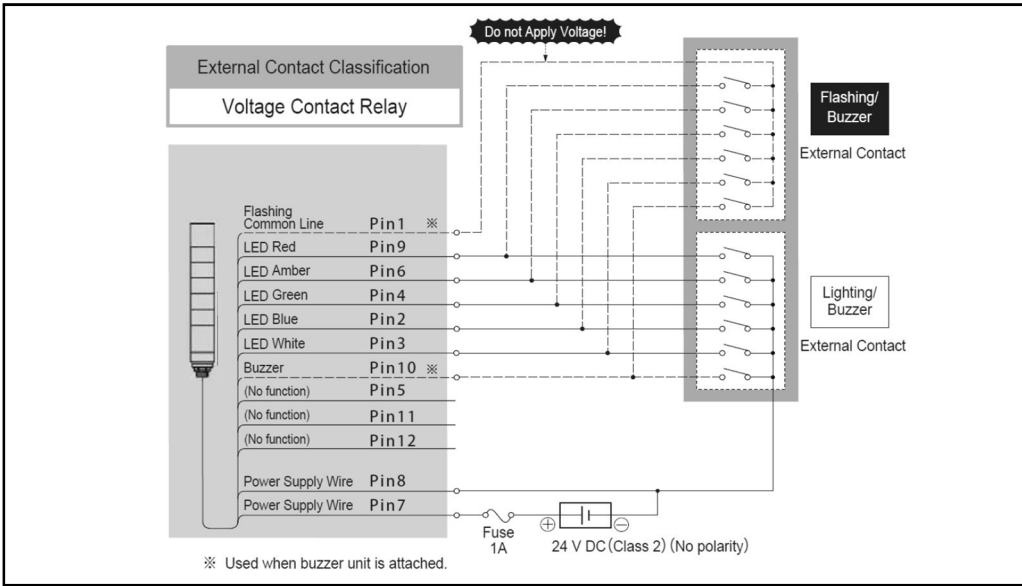
5.1 M12 Connector Pin Layout
12-pin male(plug)



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



5.4 Wiring Example



5.4 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.

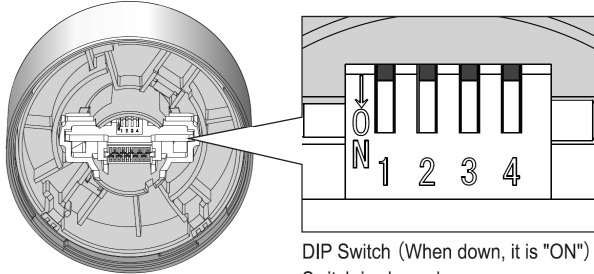
■ Recommended Fuse

| | |
|---------------------|---|
| Fuse Ampere Ratings | 250 V / 1A (5x20mm Fast-Acting Glass Body Cartridge Fuse) |
|---------------------|---|

[6. Buzzer Pattern Set-up]

The **B** Flashing/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.

Buzzer Unit Underside View



DIP Switch (When down, it is "ON")
Switch is shown by ■.

■ Pattern 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 3 | Volume |
|--------------|-----------------|
| OFF | Normal |
| ON | Sound Reduction |

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