

## TL Tower Lights

TL30 (30mm) TL50 (50mm) TL70 (70mm) TL90 (90mm)

### Features

- Modular design allows for combinations as needed
- Replaceable LED bulb
- Modules can be assembled within seconds
- LED lights provide long life up to 50,000 hours maintenance free.
- Four sizes (30mm, 50mm, 70mm and 90mm diameter) for different size machines
- Steady and flashing mode can be switched as needed with the same module
- Wide range of audible elements including high dB siren



### CHARACTERISTICS

|                                                 |                                                              |                                 |
|-------------------------------------------------|--------------------------------------------------------------|---------------------------------|
| Ambient Air Temperature                         | Storage                                                      | -40 to + 158 °F (-40 to +70 °C) |
|                                                 | Operation                                                    | -13 to +122 °F (-25 to +50 °C)  |
| Electric Shock Protection conforming to IEC 536 | Tube mounting                                                | Class 1                         |
|                                                 | Direct mounting on base unit                                 | Class 2                         |
| Degree of Protection                            | To IEC 60529 and NF C 20-010<br>To UL 50 and CSA 22.2 No. 94 | IP 65<br>Type 1, 12, 13         |
| Material                                        | Illuminated lens unit                                        | Polycarbonate UL 94-V2          |
|                                                 | Base unit and top cover                                      | ABS + Polycarbonate UL 94-V2    |
|                                                 | Ring on lens and base                                        | Polyamide                       |
|                                                 | Tube mounting                                                | Aluminum                        |
|                                                 | Tulip                                                        | ABS + Polycarbonate             |
| Conforming to standards                         | CE Marked                                                    | IEC/EN 60947-5-1. UL 508        |

### Electrical Characteristics

|                                 |                                     |                                                           |
|---------------------------------|-------------------------------------|-----------------------------------------------------------|
| Rated Insulation Voltage (UL)   | Conforming to IEC 60947-1           | 250 Vac                                                   |
| Consumption                     | LED unit (50,000hours)              | 24 Vac/Vdc: < 0.1A<br>120-230 Vac: < 50 mA                |
|                                 | Audible sounder units (20,000hours) | 24 Vdc, 15 mA; 120 Vac, 15 mA; 230 Vac, 15 mA             |
| Rated Impulse withstand voltage | Conforming to IEC 60947-1           | U imp = 4 kV                                              |
| Audible sounder units           | Signal                              | At one meter: 85-105 dB                                   |
| Terminal marking                | Common                              | 1 terminal marked -/N                                     |
|                                 | Depending on type of units          | 1 to 5 terminals marked 1+/L to 5+/L                      |
|                                 | Ground                              | Marked with grounding symbol                              |
| Cable size                      | Maximum wire size                   | 2 x #16 AWG (1.5 mm <sup>2</sup> ) with cable end         |
| Terminals                       | Torque requirement                  | Removable and captive screw terminals: 4.4 lb-in (0.5 Nm) |

### Selection Guide (Complete Assembly):

|             |   |                     |                          |   |                                   |                  |                        |                  |
|-------------|---|---------------------|--------------------------|---|-----------------------------------|------------------|------------------------|------------------|
| <b>TL30</b> | - | <b>L</b>            | <b>24</b>                | - | <b>RAG</b>                        | -                | <b>S</b>               | <b>80</b>        |
| Diameter    |   | Type                | Voltage                  |   | Modules                           |                  | Mounting Base          | Mounting Base    |
| 30: 30mm    |   | L: Stackable module | 12: 12V                  |   | Stacking Sequence (top to bottom) |                  | (Refer to Accessories) | Pole Length (mm) |
| 50: 50mm    |   | A: Single lens      | 24: 24V                  |   | S: Siren (TL70 only)              |                  |                        |                  |
| 70: 70mm    |   |                     | 120: 100-120V            |   | B: Continuous Sound               |                  |                        |                  |
| 90: 90mm    |   |                     | 240: 220-240V            |   | P: Pulse Sound                    |                  |                        |                  |
|             |   |                     | U120: 12-120V            |   | R: Steady Red                     | T1: Strobe Red   | E1: LED Strobe Red     |                  |
|             |   |                     | U240: 12-240V or 48-240V |   | A: Steady Amber                   | T2: Strobe Amber | E2: LED Strobe Amber   |                  |
|             |   |                     |                          |   | G: Steady Green                   | T3: Strobe Green | E3: LED Strobe Green   |                  |
|             |   |                     |                          |   | C: Steady Clear                   | T4: Strobe Blue  | E4: LED Strobe Blue    |                  |
|             |   |                     |                          |   | U: Steady Blue                    | T5: Strobe White | E5: LED Strobe White   |                  |
|             |   |                     |                          |   | M3: 3-color(RAG) Clear Lens       |                  |                        |                  |

## TL Tower Light

TL30 (30mm)    TL50 (50mm)    TL70 (70mm)    TL90 (90mm)

### COMPONENTS



TL30

TL50/TL70/TL90

#### Base Units with Cover (for direct or tube mounting)

| Description        | Color | Catalog Number |          |          |          |
|--------------------|-------|----------------|----------|----------|----------|
|                    |       | 30mm           | 50mm     | 70mm     | 90mm     |
| Cover              | Black | TL30-A01       | TL50-A01 | TL70-A01 | TL90-A01 |
| Cover (for Buzzer) | Black |                | TL50-A02 | TL70-A02 | TL90-A02 |
| Base Unit          |       | TL30-B01       | TL50-B01 | TL70-B01 | TL90-B01 |

#### Illuminated Lens Units (Steady or Flashing)

| Voltage  | Color    | Catalog Number |              |              |              |
|----------|----------|----------------|--------------|--------------|--------------|
|          |          | 30mm           | 50mm         | 70mm         | 90mm         |
| 24VAC/DC | ○ -Clear | TL30-L24-C     | TL50-L24-C   | TL70-L24-C   | TL90-L24-C   |
|          | ● -Green | TL30-L24-G     | TL50-L24-G   | TL70-L24-G   | TL90-L24-G   |
|          | ● -Red   | TL30-L24-R     | TL50-L24-R   | TL70-L24-R   | TL90-L24-R   |
|          | ● -Blue  | TL30-L24-U     | TL50-L24-U   | TL70-L24-U   | TL90-L24-U   |
|          | ● -Amber | TL30-L24-A     | TL50-L24-A   | TL70-L24-A   | TL90-L24-A   |
|          | ●●● -RAG | TL30-L24-M3    | TL50-L24-M3  | TL70-L24-M3  | TL90-L24-M3  |
| 120VAC   | ○ -Clear | TL30-L120-C    | TL50-L120-C  | TL70-L120-C  | TL90-L120-C  |
|          | ● -Green | TL30-L120-G    | TL50-L120-G  | TL70-L120-G  | TL90-L120-G  |
|          | ● -Red   | TL30-L120-R    | TL50-L120-R  | TL70-L120-R  | TL90-L120-R  |
|          | ● -Blue  | TL30-L120-U    | TL50-L120-U  | TL70-L120-U  | TL90-L120-U  |
|          | ● -Amber | TL30-L120-A    | TL50-L120-A  | TL70-L120-A  | TL90-L120-A  |
|          | ●●● -RAG | TL30-L120-M3   | TL50-L120-M3 | TL70-L120-M3 | TL90-L120-M3 |
| 240VAC   | ○ -Clear | TL30-L240-C    | TL50-L240-C  | TL70-L240-C  | TL90-L240-C  |
|          | ● -Green | TL30-L240-G    | TL50-L240-G  | TL70-L240-G  | TL90-L240-G  |
|          | ● -Red   | TL30-L240-R    | TL50-L240-R  | TL70-L240-R  | TL90-L240-R  |
|          | ● -Blue  | TL30-L240-U    | TL50-L240-U  | TL70-L240-U  | TL90-L240-U  |
|          | ● -Amber | TL30-L240-A    | TL50-L240-A  | TL70-L240-A  | TL90-L240-A  |
|          | ●●● -RAG | TL30-L240-M3   | TL50-L240-M3 | TL70-L240-M3 | TL90-L240-M3 |

\*TL30: Add -S for steady -F for flashing

\*TL50/TL70/TL90 lens modules have a slide switch for selecting between steady and flashing modes



## TL Tower Light

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Buzzer



Siren

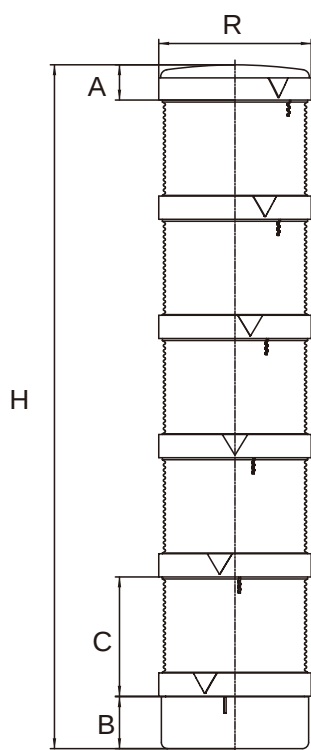
### Sound Modules

| Voltage     | Color              | Catalog Number |             |             |             |
|-------------|--------------------|----------------|-------------|-------------|-------------|
|             |                    | 30mm           | 50mm        | 70mm        | 90mm        |
| 24VAC/DC    | Siren              |                |             | TL70-L24-S  |             |
|             | Buzzer(continuous) | TL30-L24-B     | TL50-L24-B  | TL70-L24-B  | TL90-L24-B  |
|             | Buzzer(pulse tone) | TL30-L24-P     | TL50-L24-P  | TL70-L24-P  | TL90-L24-P  |
| 110-120 VAC | Siren              |                |             | TL70-L120-S |             |
|             | Buzzer(continuous) | TL30-L120-B    | TL50-L120-B | TL70-L120-B | TL90-L120-B |
|             | Buzzer(pulse tone) | TL30-L120-P    | TL50-L120-P | TL70-L120-P | TL90-L120-P |
| 220-240 VAC | Siren              |                |             | TL70-L240-S |             |
|             | Buzzer(continuous) | TL30-L240-B    | TL50-L240-B | TL70-L240-B | TL90-L240-B |
|             | Buzzer(pulse tone) | TL30-L240-P    | TL50-L240-P | TL70-L240-P | TL90-L240-P |

\* Buzzer module: 95dB at 1 meter

\* Siren module: 105db at 1 meter

### Dimensions (mm):

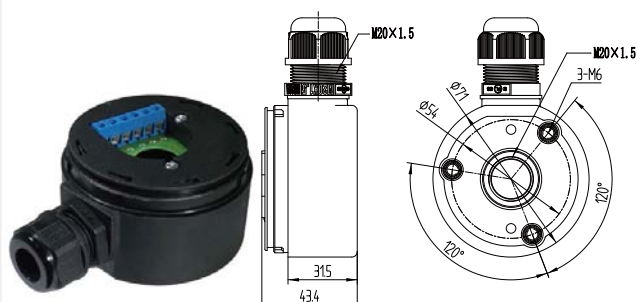


|             | R (Diameter) | A    | B    | C    | H             |
|-------------|--------------|------|------|------|---------------|
| TL30 (30mm) | 30           | 13.0 | 130  | 45   | 237 (1 stack) |
|             |              |      |      |      | 282 (2 stack) |
|             |              |      |      |      | 327 (3 stack) |
|             |              |      |      |      | 371 (4 stack) |
|             |              |      |      |      | 417 (5 stack) |
| TL50 (50mm) | 52.5         | 15.0 | 25.0 | 57.5 | 98 (1 stack)  |
|             |              |      |      |      | 156 (2 stack) |
|             |              |      |      |      | 213 (3 stack) |
|             |              |      |      |      | 270 (4 stack) |
|             |              |      |      |      | 328 (5 stack) |
| TL70 (70mm) | 73.5         | 17.0 | 25.0 | 57.5 | 99 (1 stack)  |
|             |              |      |      |      | 158 (2 stack) |
|             |              |      |      |      | 215 (3 stack) |
|             |              |      |      |      | 273 (4 stack) |
|             |              |      |      |      | 330 (5 stack) |
| TL90 (90mm) | 94.5         | 18.0 | 31.5 | 70   | 120 (1 stack) |
|             |              |      |      |      | 190 (2 stack) |
|             |              |      |      |      | 260 (3 stack) |
|             |              |      |      |      | 330 (4 stack) |
|             |              |      |      |      | 400 (5 stack) |

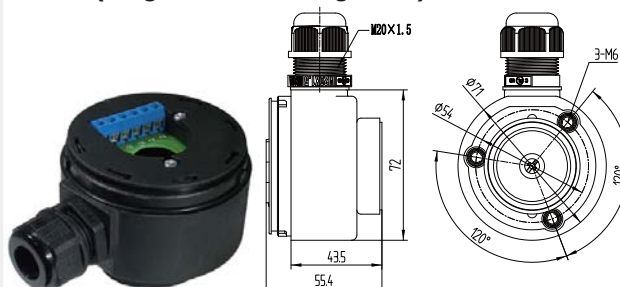
## TL Signal Tower Dimensions

### Mounting Accessories Dimensions (mm)

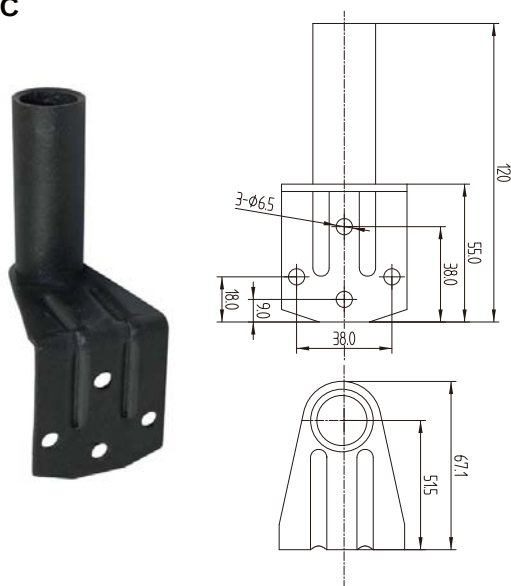
TL-B



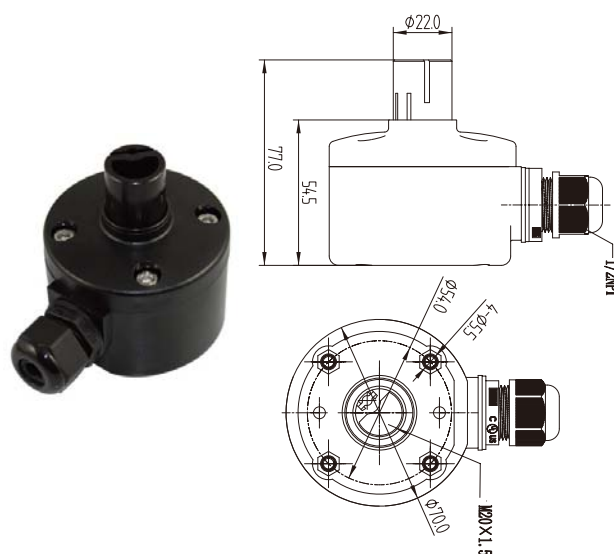
TL-BM(magnetic mounting base)



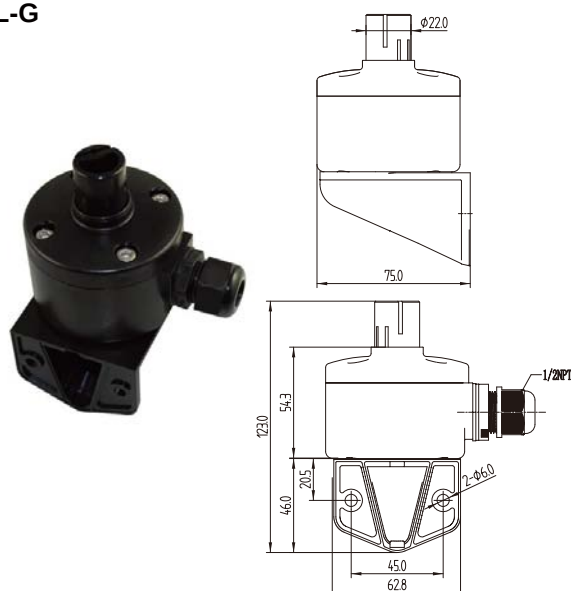
TL-C



TL-F



TL-G



TL70-H

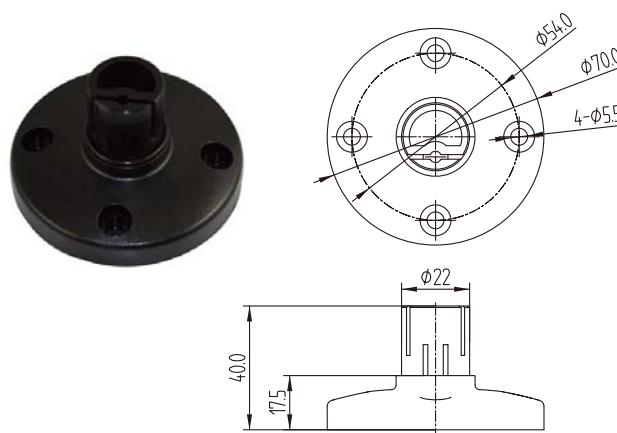


## Mounting Accessories Dimensions (mm)

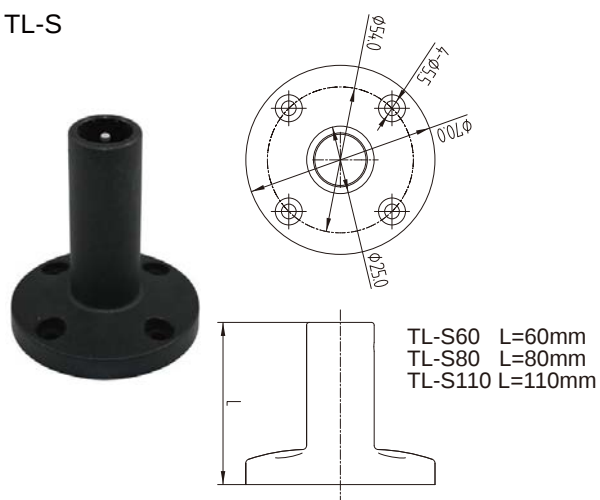
TL-M30(For 30mm mounting hole)



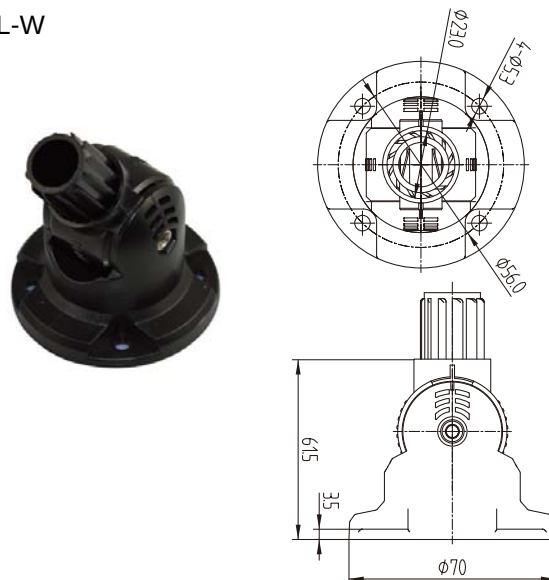
TL-P



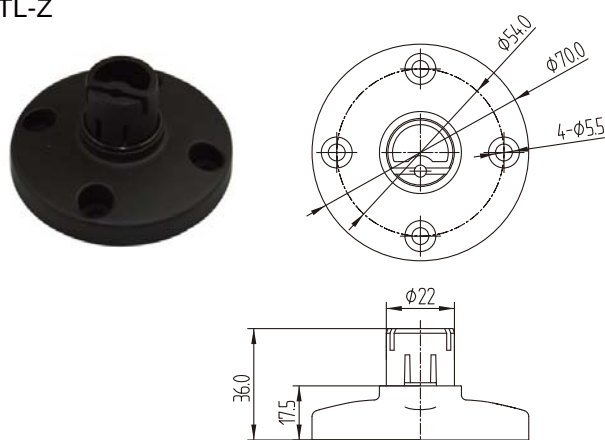
TL-S



TL-W



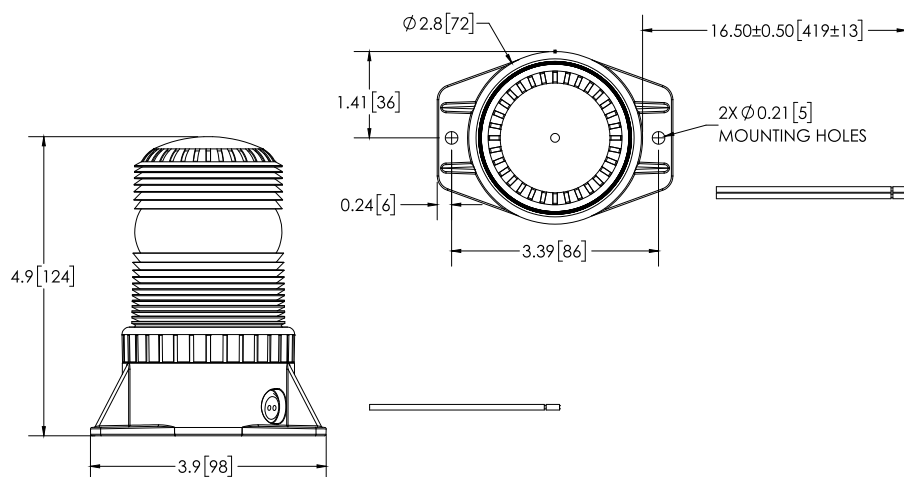
TL-Z



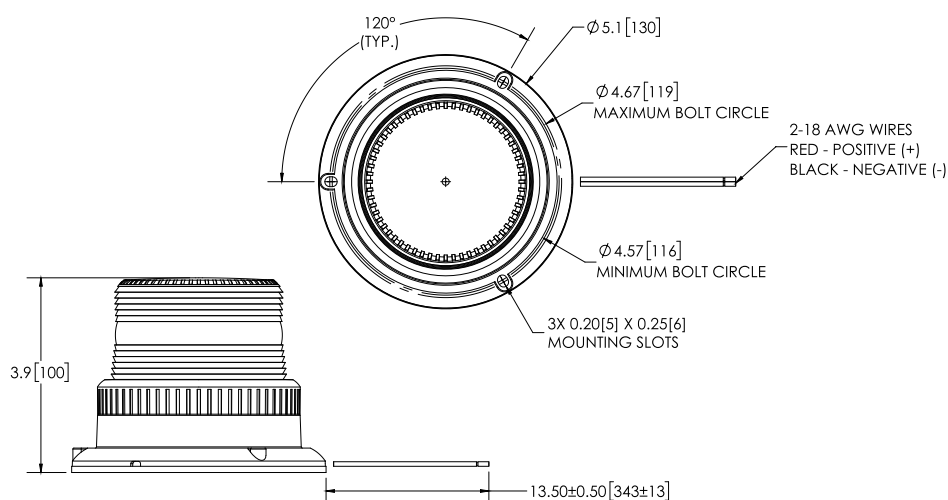
## TL Series Visual Signals



TL70-A24-A-B01



TL90-A24-R-B01



| Cat. No.         | Lens Color | Lamp                              | Revolution Rate | Rating                 | Temperature Range                 |
|------------------|------------|-----------------------------------|-----------------|------------------------|-----------------------------------|
| TL70-A24-A-B01   | Amber      | Pulse LED<br>(80 Flashes Per Min) | 80RPM           | 12-24VDC<br>0.12 A Max | -22°F to +122°F<br>-30°C to +50°C |
| TL70-A24-B-B01   | Blue       |                                   |                 |                        |                                   |
| TL70-A24-C-B01   | Clear      |                                   |                 |                        |                                   |
| TL70-A24-G-B01   | Green      |                                   |                 |                        |                                   |
| TL70-A24-R-B01   | Red        |                                   |                 |                        |                                   |
| TL90-A24-A-B01   | Amber      | Pulse LED<br>(80 Flashes Per Min) | 80RPM           | 12-24VDC<br>0.12 A Max | -22°F to +122°F<br>-30°C to +50°C |
| TL90-A24-B-B01   | Blue       |                                   |                 |                        |                                   |
| TL90-A24-C-B01   | Clear      |                                   |                 |                        |                                   |
| TL90-A24-G-B01   | Green      |                                   |                 |                        |                                   |
| TL90-A24-R-B01   | Red        |                                   |                 |                        |                                   |
| TL70-AU120-A-B01 | Amber      | Pulse LED<br>(80 Flashes Per Min) | 80RPM           | 12-120 V<br>0.12 A Max | -22°F to +122°F<br>-30°C to +50°C |
| TL70-AU120-B-B01 | Blue       |                                   |                 |                        |                                   |
| TL70-AU120-C-B01 | Clear      |                                   |                 |                        |                                   |
| TL70-AU120-G-B01 | Green      |                                   |                 |                        |                                   |
| TL70-AU120-R-B01 | Red        |                                   |                 |                        |                                   |
| TL90-AU120-A-B01 | Amber      | Pulse LED<br>(80 Flashes Per Min) | 80RPM           | 12-120 V<br>0.12 A Max | -22°F to +122°F<br>-30°C to +50°C |
| TL90-AU120-B-B01 | Blue       |                                   |                 |                        |                                   |
| TL90-AU120-C-B01 | Clear      |                                   |                 |                        |                                   |
| TL90-AU120-G-B01 | Green      |                                   |                 |                        |                                   |
| TL90-AU120-R-B01 | Red        |                                   |                 |                        |                                   |