

# LFH



IP66 NEMA 4, 4X, 13

**PATLITE**  
New Frontiers in Safety, Security and Comfort

## Bright & Protected Indoor/Outdoor LED Warning Lights

### Model LFH

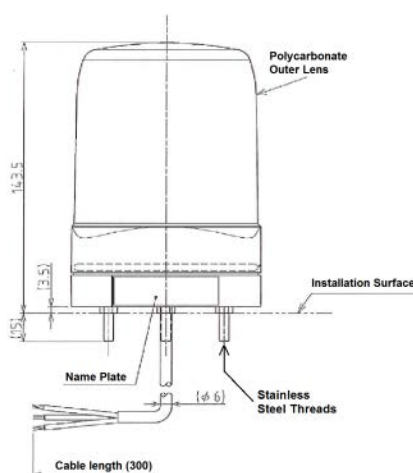
Patlite's Model LFH indoor/outdoor LED Warning Light provides about 110 bright flashes per minute. This Warning Light is available in 12VDC, 24VDC, 48VDC, and 90-250VAC. In the upright position, the LFH offers water resistance (IP66) with its tough construction. Base models are UL 1638 listed and RoHS compliant.

Model LFH has superior visibility as it has a night-time visibility of 3,280 feet (1,000m). The long life LED makes it ideal for placement in hard to service locations.

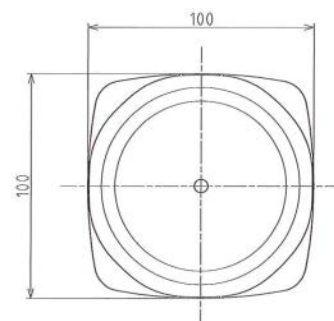
The sun-light visible LED and ruggedness of the LFH allows for it to be used in various environments such as factories, utilities, food and beverage, pharmaceutical, parking lots, and others. The 90m/s<sup>2</sup> (9G)\* vibration resistance allows for the Warning Light to be mounted on forklifts, construction, maintenance, and industrial vehicles.



- Available in 12VDC, 24VDC, 48VDC, and 90-250VAC
- Five dome colors (Red, Yellow, Green, Blue, and Clear)
- Triple flash, 110 +/-10 flashes/minute
- Indoor/Outdoor use
- IP66 (IEC60529)
- Vibration resistant 90m/s<sup>2</sup> (9G)\*
- UL 1638, CAN/ULC-S526-M87
- NEMA Type 4, 4X, 13
- RoHS Directive (EN50581)
- CE
- FCC Part 15 Subpart B Class A



Drawing in millimeters



#### Optional Parts



**SZ-007**  
Wall mount bracket



**SZ-170**  
Heavy duty mount bracket

#### How to Order:

LFH -



#### Rated Voltage

**12:** 12VDC

**24:** 24VDC

**48:** 48VDC

**M2:** 90-250VAC

#### Color

**R:** Red

**Y:** Yellow

**G:** Green

**B:** Blue

**C:** Clear

#### Specifications

| Model                         | LFH-12                                                                                                             | LFH-24        | LFH-48        | LFH-M2                        |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------|---------------|---------------|-------------------------------|
| Rated Voltage                 | 12VDC 24VDC                                                                                                        |               | 48VDC         | 100V/120V/200V/230VAC         |
| Operating Voltage Range       | 9.5VDC ~ 15VDC                                                                                                     | 20VDC ~ 30VDC | 35VDC ~ 60VDC | 90VAC ~ 250VAC                |
| Operating Ambient Temperature | -22°F ~ +158°F (-30°C ~ +70°C)                                                                                     |               |               | -4°F ~ +140°F (-20°C ~ +60°C) |
| Operating Ambient Humidity    | Less than 90% (No condensation)                                                                                    |               |               |                               |
| Mounting Location             | Indoors and Outdoors                                                                                               |               |               |                               |
| Mounting Direction            | Upright, Inverted, and Sideways (in a wet environment upright only)                                                |               |               |                               |
| Vibration Resistance          | 90 m/s <sup>2</sup>                                                                                                |               |               | 20 m/s <sup>2</sup>           |
| Protection Rating             | IP66 (IEC 606529)                                                                                                  |               |               |                               |
| Luminous Intensity            | Red: more than 112cd Yellow: more than 177cd Green: more than 240cd<br>Blue: more than 52cd White: more than 257cd |               |               |                               |
| Weight (+/- 10%)              | 20.1oz (570g)                                                                                                      |               |               | 21.5oz (610g)                 |

\* Vibration resistance 20m/s<sup>2</sup> for the LFH-M2

Patlite (USA) Corporation

# SPECIFICATIONS

[General Specifications]

|                             |                                                                                                                                                                                                    |                                                                                                                         |               |               |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|---------------|---------------|
| Model                       |                                                                                                                                                                                                    | LFH-12                                                                                                                  | LFH-24        | LFH-48        |
| Rated Voltage               |                                                                                                                                                                                                    | 12V DC                                                                                                                  | 24V DC        | 48V DC        |
| Operating Voltage Range     |                                                                                                                                                                                                    | 9.5V DC~15V DC                                                                                                          | 20V DC~30V DC | 35V DC~60V DC |
| Signal Wire Current         | Typ.                                                                                                                                                                                               | 0.42A                                                                                                                   | 0.19A         | 0.13A         |
|                             | Max.                                                                                                                                                                                               | 0.50A                                                                                                                   | 0.23A         | 0.18A         |
| Rated Power Consumption     | Typ.                                                                                                                                                                                               | 5.0W                                                                                                                    | 4.5W          | 6.5W          |
|                             | Max.                                                                                                                                                                                               | 6.0W                                                                                                                    | 5.5W          | 7.5W          |
| Operating Ambient           |                                                                                                                                                                                                    | -30℃ ~ +70℃                                                                                                             |               |               |
| Operating Ambient Humidity  |                                                                                                                                                                                                    | Less than 90% (No condensation)                                                                                         |               |               |
| Storage Ambient Temperature |                                                                                                                                                                                                    | -40℃ ~ +80℃                                                                                                             |               |               |
| Storage Ambient Humidity    |                                                                                                                                                                                                    | Less than 90% (No condensation)                                                                                         |               |               |
| Mounting Location           |                                                                                                                                                                                                    | Indoors and Outdoors                                                                                                    |               |               |
| Mounting Direction          |                                                                                                                                                                                                    | Upright ,Inverted and Sideways (In a wet environment, Upright only)                                                     |               |               |
| Protection Rating           |                                                                                                                                                                                                    | IP66 (IEC 60529)                                                                                                        |               |               |
| Environmental Condition     |                                                                                                                                                                                                    | Upright Mounting                                                                                                        |               |               |
| Vibration Resistance        |                                                                                                                                                                                                    | 90m/s <sup>2</sup>                                                                                                      |               |               |
| Insulation Resistance       |                                                                                                                                                                                                    | More than 1MΩ at 500VDC between the terminals and the chassis                                                           |               |               |
| Withstand Voltage           | The following voltage applied for 1min between terminals and chassis without breaking                                                                                                              |                                                                                                                         |               |               |
|                             | 500V AC                                                                                                                                                                                            |                                                                                                                         | 1000V AC      |               |
| Flashing Rate               |                                                                                                                                                                                                    | 110±10 Flashes Per Minute (Triple Flash Pattern)                                                                        |               |               |
| Luminous Intensity          |                                                                                                                                                                                                    | Red: more than 112cd   Amber: more than 177cd   Green: more than 240cd<br>Blue: more than 52cd   White: more than 257cd |               |               |
| Mass (Tolerance ±10%)       |                                                                                                                                                                                                    | 570g                                                                                                                    |               |               |
| Outer Dimensions            |                                                                                                                                                                                                    | Refer to the "Dimensions" Drawing                                                                                       |               |               |
| Conformity Standards        | UL 1638, CAN/ULC-S526-M87                                                                                                                                                                          |                                                                                                                         |               |               |
|                             | RoHS Directive (EN 50581)                                                                                                                                                                          |                                                                                                                         |               |               |
|                             | EMC Directive (EN 55015, EN 61547)                                                                                                                                                                 |                                                                                                                         | -             |               |
|                             | FCC Part15 SubpartB Class A                                                                                                                                                                        |                                                                                                                         | -             |               |
|                             | ECE Regulation No.10                                                                                                                                                                               |                                                                                                                         | -             |               |
| Remarks                     | UL Listed (File No.S24210)<br>This product conforms to EN standard and shows the CE Marking. (Except for LFH-48)<br>Accessories : Spring Washer (X3) 、 Washer (X3) 、 Nut (X3) 、 Instruction Manual |                                                                                                                         |               |               |
|                             | <div><div>Specifications</div><div>13.4.09</div><div>ATLITE</div></div>                                                                                                                            |                                                                                                                         |               |               |



No. LFH - . -A18A-1\_2

**PATLITE Corporation**

Approved

Checked

Drawn

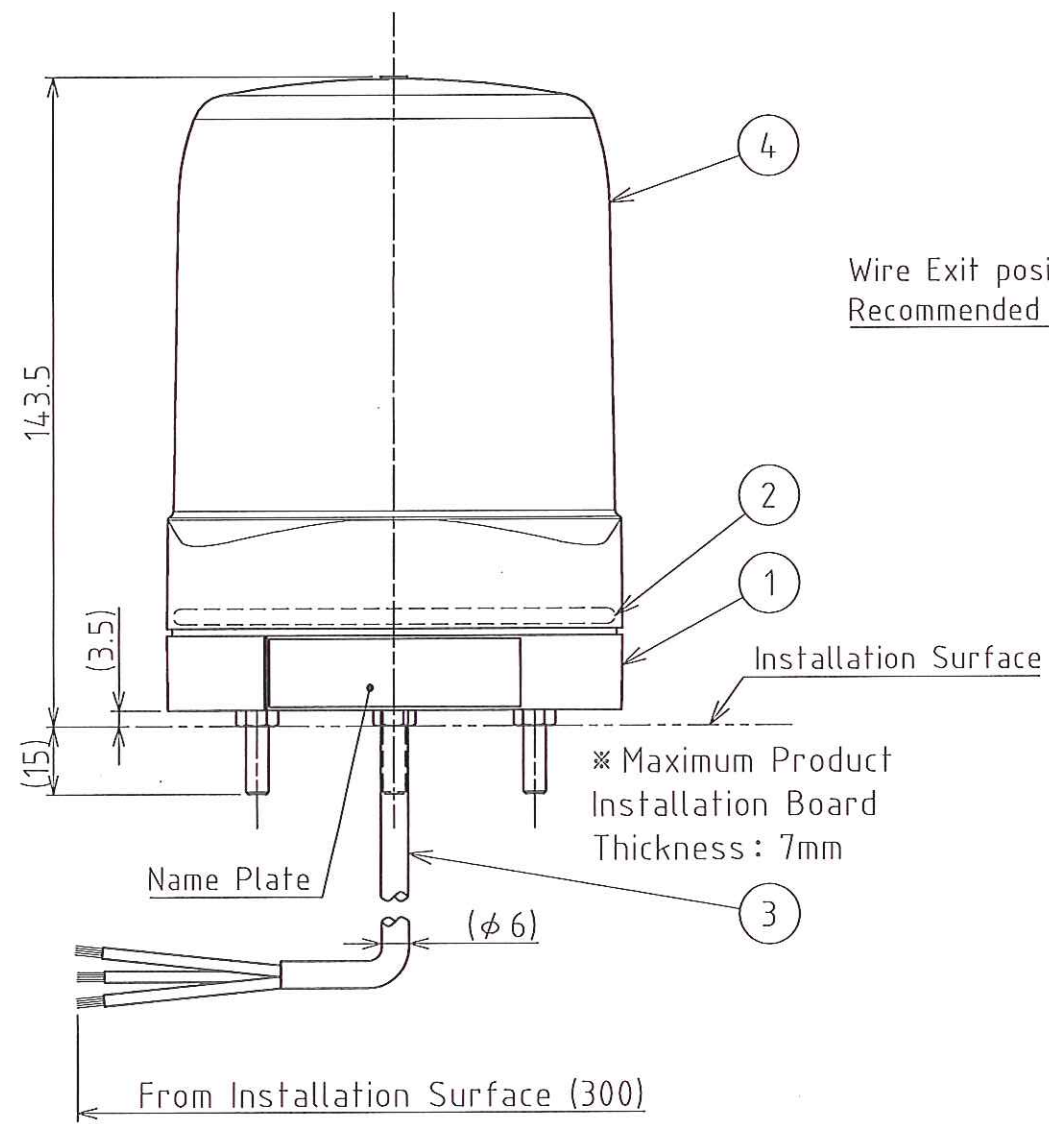
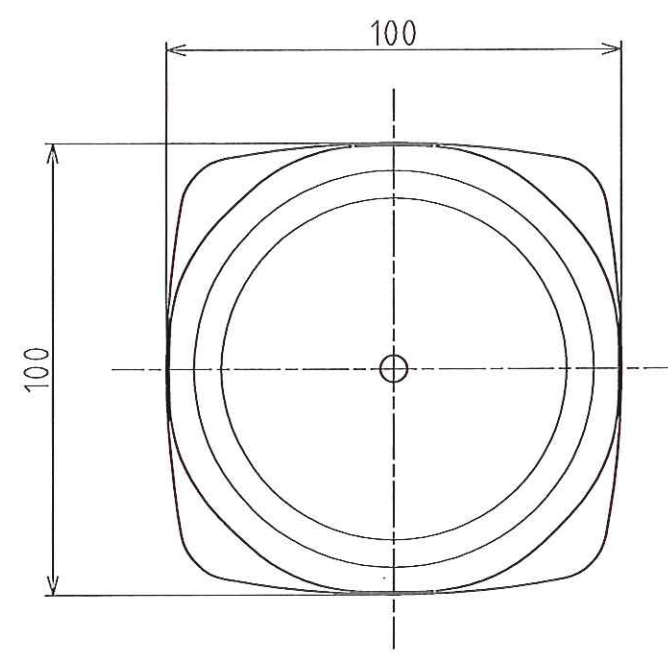
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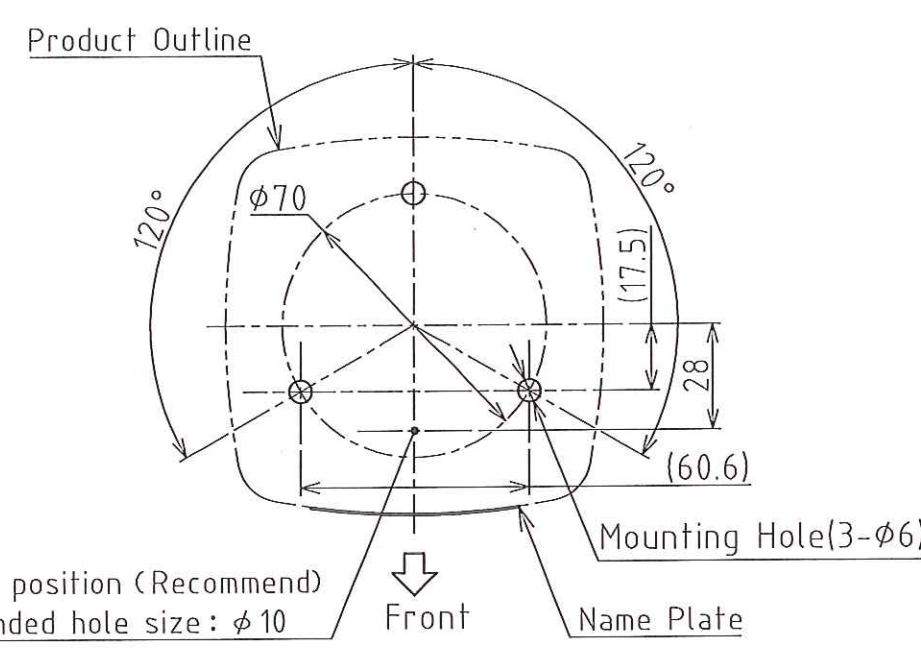
K.Sawano

8. Apr. '13





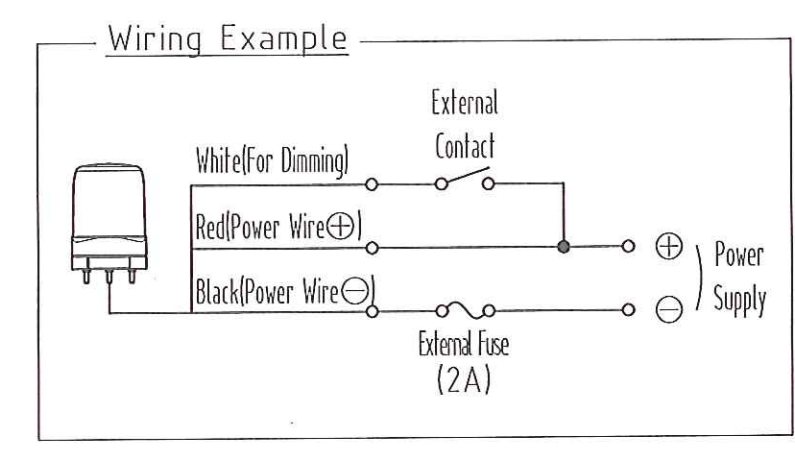
Dimensions



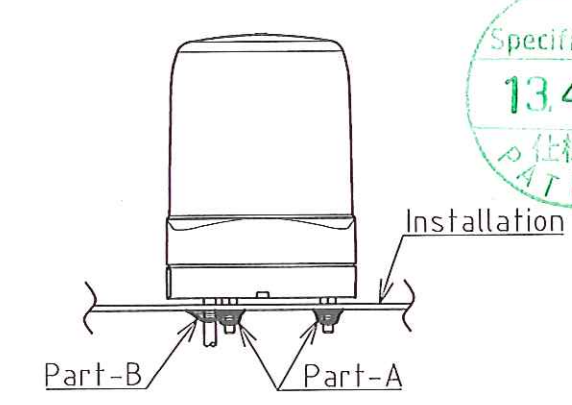
Installation Dimensions [1:2]

Wire Exit position (Recommend)  
Recommended hole size:  $\phi 10$

| 指定<br>公差<br>General<br>Tolerance | 角度公差<br>Angular tolerance ±[°] |                              |     |     | 寸法公差<br>Dimensional tolerance ±[mm] |     |     |     |      |   | 符号<br>Sym. | 年月日<br>Date | 訂正履歴<br>Revisions |  |  | 記印<br>Sgn. | 検印<br>Chk. | 承認<br>App. |
|----------------------------------|--------------------------------|------------------------------|-----|-----|-------------------------------------|-----|-----|-----|------|---|------------|-------------|-------------------|--|--|------------|------------|------------|
|                                  | 短辺<br>Length of<br>short side  | 長辺<br>Length of<br>long side | ~   | 100 | 6                                   | 30  | 120 | 300 | 1000 |   |            |             |                   |  |  |            |            |            |
|                                  | 精<br>f                         | 1                            | 0.5 | 0.3 | 中<br>m                              | 0.1 | 0.3 | 0.5 | 0.7  | 1 |            |             |                   |  |  |            |            |            |
|                                  | 粗<br>v                         | 3                            | 1.5 | 1   | 粗<br>c                              | 0.3 | 0.5 | 1   | 1.2  | 2 |            |             |                   |  |  |            |            |            |



※ If you need the waterproof with downside of Installation, seal the Mounting bolts (Part-A) and Wire Exit hole (Part-B).



Sealing Instruction Example



|                     |                   |                   |                             |                                          |                             |
|---------------------|-------------------|-------------------|-----------------------------|------------------------------------------|-----------------------------|
| 4                   | Globe             | -                 | 1                           | PC resin                                 | Red/Amber/Green /Blue/Clear |
| 3                   | Power Supply Wire | -                 | 1                           | UL2517 AWG20×3c                          |                             |
| 2                   | O-ring            | -                 | 1                           | Silicon                                  | gray                        |
| 1                   | Body              | -                 | 1                           | ABS resin                                | Charcoal gray               |
| 番号<br>No.           | 部品名<br>Part Name  | 品目コード<br>Part No. | 数量<br>Qty.                  | 材料 & 寸法 & 処理<br>Material & Size & Finish | 記事<br>Remarks               |
| 設計<br>Dgn.by        | 製図<br>Drn.by      | 検図<br>Chk.by      | 承認<br>App.by                | 図名<br>Name                               | 機種名 Model                   |
| K.Sawano            | K.Sawano          | Y.Higashi         | Y.Higashi                   | Specifications                           | LFH-12/24/48                |
| 5.Nov.'12           | 8.Apr.'13         | 8.Apr.'13         | 8.Apr.'13                   | Dimensions                               | 品目コード Part No.              |
| 三角法<br>3rd Angle P. | 単位 Unit<br>mm     | 尺度 Scale<br>—     | 株式会社<br>PATLITE Corporation | 図番 Drawing No.                           | LFH-.-A18A-2_2              |