

Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and or property damage. Retain instructions for future reference.

# MS56L Series

# 56mm LED Signal Light







## **Description**

Eye-catching indicators with long-life Red, Yellow, Green, Blue, or White LEDs. Compact LED warning light featuring enhanced illumination. Ideal for use with conveyors and electrical control panels.

- Steady + Flashing light, Rotating light
- Rotation speed adjustment
- Power: 12, 24V AC/DC or 110V, 220V AC
- M20 plastic nut panel mounting

# **Safety Caution**

- \* Always observe rules of "Safety Caution" for safe and correct use of products and for prevention of accident or danger.
- \* "Safety Caution" is divided into two categories, i.e., 'caution' and 'warning', details of which read as below.

| <b>▲</b> Warning | Possibilities where incorrect use or violation of instructions may result in serious personal injury or even death |
|------------------|--|
| ▲ Caution        | Possibilities where incorrect use or violation of instructions may result in minor personal injury                 |

\* Meaning of symbols described on products and Instruction Manual is as follows. **A** is a symbol cautioning that a danger may occur under a particular condition.

# A Warning

- 1. Always attach a dual safety device on life or property-affecting devices (e.g., atomic control, medical devices, automotive vehicles, railway vehicles, airplanes, combustion devices, amusement devices or safety devices) before use. (Fire, personal injury, serious property loss may occur.)
- 2. Do not dissemble or after the product. Contact us for service related functions including inner inspection and repair. (Fire, electrocution and product damage may occur.)
- 3. Avoid wiring, inspecting and repairing while power is being supplied. (Electrocution may occur.)
- 4. Always use rated input voltage, and use a standard electric cord for each product. (Fire and electrocution may occur.)
- 5. Always check if an electric connection is proper before applying a power source. (Fire, electrocution and product damage may occur.)
- 6. Avoid using an excessive electricity higher than rated voltage. (Fire and product damage may occur.)
- 7. Avoid using the product outdoors, at explosion prone places, at places nearinflam mable substances, water, combustible substances and vibration. (Fire, electrocution and personal injury may occur.)

# ▲ Caution

ENGLISH

- Do not disassemble, repair, or modify the product, otherwise severe accidents may result, such as electric shocks, damage, fire, or malfunction.
- Do not pull out or push in the cable of the product, otherwise damage may result. Give slack to the cable while wiring.
- Turn off the power to the product before mounting, dismounting, wiring, and assembling the LED unit. Make sure of correct wiring, otherwise electric shocks or fire may result.
- Do not place obstacles obstructing ventilation near product. (Product damage or product deformation may occur due to heat).
- In case abnormality happens to the product, unplug the input power connection immediately. (There is the danger of fire or product damage.)
- Avoid using at a place of high vibration level. (Product damage may occur).
- Avoid using water or detergent when cleaning, and clean with dry cloth. (Electrocution may occur).

\* Exterior look and performances are subject to change without prior notice for improvement of products.

### **Model No. Configuration**

MS56L - F 0 2 - R

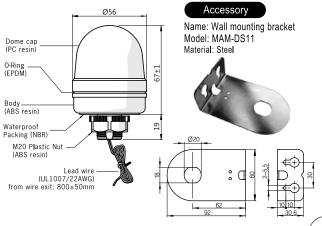
| 1 Light | Style             | 2. Pow | 2. Power supply |  |  |
|---------|-------------------|--------|-----------------|--|--|
| No mark | Steady            | 01     | 12VAC/DC        |  |  |
| F       | Steady + Flashing | 02     | 24VAC/DC        |  |  |
| R       | Rotating          | 10     | 110VAC          |  |  |

#### 3. Lens Color

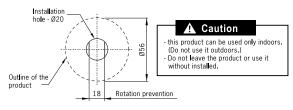
| R | Red    | В | Blue         |
|---|--------|---|--------------|
| Υ | Yellow | С | Clear(White) |
| G | Green  |   |              |

220VAC

#### Part name and Dimensions (unit: mm)



#### Installation dimensions (unit: mm)



### **Specifications**

| Function            | LED Steady, Flashing  | , LED Rotating              |              |  |
|---------------------|---|-----------------------------|--------------|--|
| Power supply        | 12VAC/DC±5% , 24VAC/DC±5%<br>110VAC±10% , 220VAC±10% (AC 50/60Hz) |                             |              |  |
| Dimension           | 56mm  |                             |              |  |
| Flashing function   | Internal PCB board dip  | switch control              |              |  |
| Rotating function   | Internal PCB board volume control (min40~max300±10%rpm)           |                             |              |  |
| Lens color          | Red, Yellow, Green, Blue, Clear                                   |                             |              |  |
| Material            | Lens-PC resin , Base-ABS resin                                    |                             |              |  |
| Vibration           | 0.75mm at 10~55Hz   |                             |              |  |
| Ambient temperature | -15 to 40°C   | Storage ambient temperature | -20 to 70°C  |  |
| Ambient humidity    | 45~85% RH   | Protection structure        | IP65         |  |
| Approvals           | CE, RoHS  | Wire size                   | UL1007/22AWG |  |
| Weight Approx.66g   |   |                             |              |  |

#### Flashing per Minute (±10%)

| Voltage | AC Power | DC Power |
|---------|----------|----------|
| 12V     | 110times | 60times  |
| 24V     | 80times  | 80times  |

| Voltage | AC Power |
|---------|----------|
| 110V    | 80times  |
| 220V    | 80times  |

#### Current Consumption (+10%)

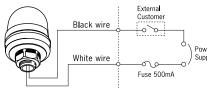
|  | Our cire Consumption (22070) |       |       |             |  |
|--|------------------------------|-------|-------|-------------|--|
|  | Steady                       | 12VAC | 24VAC | 110V/220VAC |  |
|  | Steady                       | 0.1A  | 0.12A | 0.03A       |  |

(Note) 12V/24VDC Current Consumption: 0.06A

| Rotating | 12VAC | 24VAC | 110V  | 220V  |
|----------|-------|-------|-------|-------|
|          | 0.13A | 0.07A | 0.03A | 0.04A |

(Note) 12V/24VDC Current Consumption: 0.06A

## Wiring example

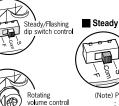


#### A Caution

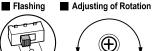
- Before wiring, power supply must be turn off (There is the danger of electrical shock )
- Connect the wires as shown below. Incorrect wiring may damage the internal circuit

## **Feature setting**

When adjusting operating area while using the display light, do not hold the LED area directly by hand after removing the lens. here is the danger of burn, electric shock or injury.







Reduction Increase

(Note) Products shipped

· Steady light setting