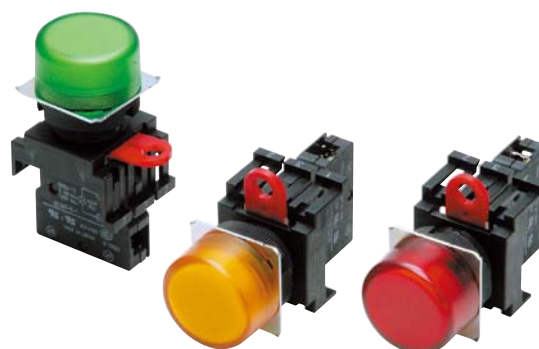




## Round Indicator Series with 22 dia. and 25 dia. (when using a ring)

- Same type as the A22-series Pushbutton Switches.
- Use 25-dia. ring to install in 25-dia. panel cutouts.
- cUL approved
- IP65



### List of Models

| Appearance |                                                                                     | Model |
|------------|-------------------------------------------------------------------------------------|-------|
| Round      | Flat                                                                                | M22-F |
|            |   |       |
| Square     | Projection                                                                          | M22-C |
|            |  |       |

### Model Number Structure

**Model Number Legend**..... Shipped as a set which includes the Display, Lamp, and Socket Unit.  
For information on combinations, refer to Ordering Information.

(1) (2) (3)  
M22 - F G - 24A

#### (1) Display Shape

| Code | Description       |
|------|-------------------|
| F    | Round/Flat        |
| C    | Square/Projection |

#### (2) Illumination Color

| Code | Description |
|------|-------------|
| R    | Red         |
| G    | Green       |
| Y    | Yellow      |
| W    | White       |
| A    | Blue        |

#### (3) Light Source

##### Without Voltage Reduction Unit

| Code | Type              | Operating voltage |
|------|-------------------|-------------------|
| 6D   | LED               | 6 VDC             |
| 6A   |                   | 6 VAC             |
| 12A  |                   | 12 VAC/VDC        |
| 24A  |                   | 24 VAC/VDC        |
| 5    | Incandescent lamp | 5 VAC/VDC         |
| 12   |                   | 12 VAC/VDC        |
| 24   |                   | 24 VAC/VDC        |

##### With Voltage Reduction Unit

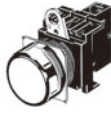
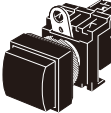
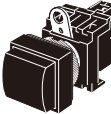
| Code | Type | Operating voltage |
|------|------|-------------------|
| T1   | LED  | 100 VAC           |
| T2   |      | 200 VAC           |

• LED incorporates the 24-VAC/VDC type.

## Ordering Information

**Completely Assembled** .... Shipped as a set which includes the Display, Lamp, and Socket Unit.

### Indicator

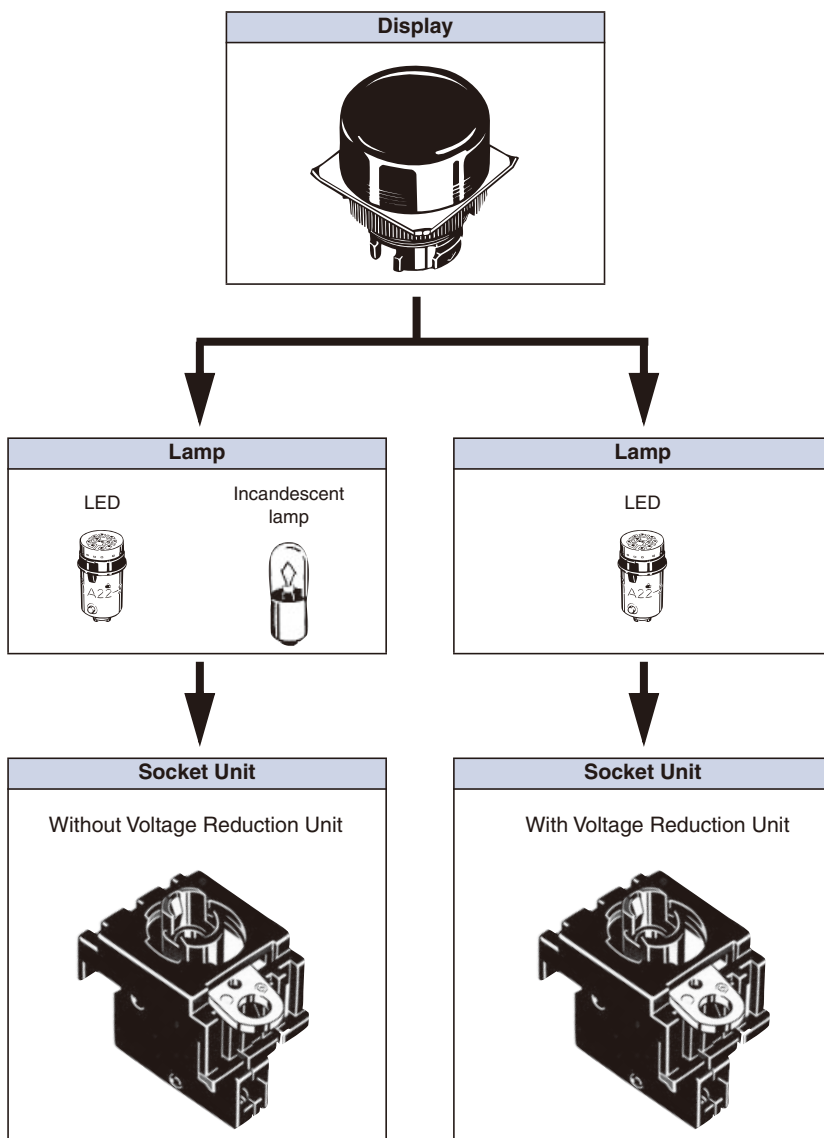
| Appearance                                                                                                                                           | Lighting | Operating voltage | Set               | Illumination color                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------|-------------------|-------------------------------------------------------------|
| Round/Flat<br>without Voltage<br>Reduction Unit<br>M22-F<br>        | LED      | 6 VDC             | <b>M22-F□-6D</b>  | R (red)<br>Y (yellow)<br>G (green)<br>W (white)<br>A (blue) |
|                                                                                                                                                      |          | 6 VAC             | <b>M22-F□-6A</b>  |                                                             |
|                                                                                                                                                      |          | 12 VAC/VDC        | <b>M22-F□-12A</b> |                                                             |
|                                                                                                                                                      |          | 24 VAC/VDC        | <b>M22-F□-24A</b> |                                                             |
| Round/Flat<br>with Voltage<br>Reduction Unit<br>M22-F<br>           | LED      | 100 VAC           | <b>M22-F□-T1</b>  |                                                             |
|                                                                                                                                                      |          | 200 VAC           | <b>M22-F□-T2</b>  |                                                             |
| Square/Projection<br>without Voltage<br>Reduction Unit<br>M22-C<br> | LED      | 6 VDC             | <b>M22-C□-6D</b>  |                                                             |
|                                                                                                                                                      |          | 6 VAC             | <b>M22-C□-6A</b>  |                                                             |
|                                                                                                                                                      |          | 12 VAC/VDC        | <b>M22-C□-12A</b> |                                                             |
|                                                                                                                                                      |          | 24 VAC/VDC        | <b>M22-C□-24A</b> |                                                             |
| Square/Projection<br>with Voltage<br>Reduction Unit<br>M22-C<br>    | LED      | 100 VAC           | <b>M22-C□-T1</b>  |                                                             |
|                                                                                                                                                      |          | 200 VAC           | <b>M22-C□-T2</b>  |                                                             |

Note: Insert a symbol indicating the color of the Operation Unit in the box in the model number above.

## Ordering Information

**Subassembled** ..... The Display, Lamp, or Socket Unit can be ordered separately. Use them in combination for models that are not available as assembled Units. These can also be used as inventory for maintenance parts.

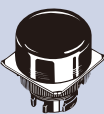
- Ordering: Specify models on the following page.



## Ordering Information

**Subassembled** ..... The Display, Lamp, or Socket Unit can be ordered separately. Use them in combination for models that are not available as assembled Units. These can also be used as inventory for maintenance parts.

### Display

| Sealing                                                                                                         | IP65             |        |
|-----------------------------------------------------------------------------------------------------------------|------------------|--------|
| Appearance                                                                                                      | Color of Display | Model  |
| <b>Round (Flat)</b><br>        | Red              | M22-FR |
|                                                                                                                 | Green            | M22-FG |
|                                                                                                                 | Yellow           | M22-FY |
|                                                                                                                 | White            | M22-FW |
|                                                                                                                 | Blue             | M22-FA |
| <b>Square (Projection)</b><br> | Red              | M22-CR |
|                                                                                                                 | Green            | M22-CG |
|                                                                                                                 | Yellow           | M22-CY |
|                                                                                                                 | White            | M22-CW |
|                                                                                                                 | Blue             | M22-CA |

### Lamp

#### LED

| Operating voltage                                                                  |           |           | 6 V     | 12 V     | 24 V     | 24 V Super-bright |
|------------------------------------------------------------------------------------|-----------|-----------|---------|----------|----------|-------------------|
| Appearance                                                                         | AC/DC     | LED light | Model   |          |          |                   |
|  | DC        | Red       | A22-6DR | —        | —        | —                 |
|                                                                                    |           | Green     | A22-6DG | —        | —        | —                 |
|                                                                                    |           | Yellow *  | A22-6DY | —        | —        | —                 |
|                                                                                    |           | Blue      | A22-6DA | —        | —        | —                 |
|                                                                                    | AC        | Red       | A22-6AR | —        | —        | —                 |
|                                                                                    |           | Green     | A22-6AG | —        | —        | —                 |
|                                                                                    |           | Yellow *  | A22-6AY | —        | —        | —                 |
|                                                                                    |           | Blue      | A22-6AA | —        | —        | —                 |
|                                                                                    | AC and DC | Red       | —       | A22-12AR | A22-24AR | A22-24ASR         |
|                                                                                    |           | Green     | —       | A22-12AG | A22-24AG | A22-24ASG         |
|                                                                                    |           | Yellow *  | —       | A22-12AY | A22-24AY | A22-24ASY         |
|                                                                                    |           | Blue      | —       | A22-12AA | A22-24AA | A22-24ASA         |

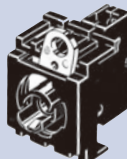
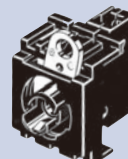
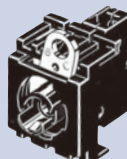
Note: For voltage-reduction lighting, use the A22-24A□. Only 24-V LED lamps can be used.

\* Used when the Display color is yellow or white.

### Incandescent

| Appearance                                                                          | Operating voltage | 5 VAC/VDC | 12 VAC/VDC | 24 VAC/VDC |
|-------------------------------------------------------------------------------------|-------------------|-----------|------------|------------|
|  |                   | A22-5     | A22-12     | A22-24     |

### Socket Unit

| Appearance     |                                                                                     |                                                                                     |                                                                                     |
|----------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Item           |  |  |  |
| Classification | Without Voltage Reduction Unit                                                      | With Voltage Reduction Unit (110 VAC)                                               | With Voltage Reduction Unit (220 VAC)                                               |
| Model          | M22-00                                                                              | M22-00-T1                                                                           | M22-00-T2                                                                           |

Note: For voltage-reduction lighting, use the A22-24A□. Only 24-V LED lamps can be used.

## Specifications

### Ratings

#### LED Lamp

| Rated voltage | Rated current | Operating voltage    |
|---------------|---------------|----------------------|
| 6 VDC         | 60 mA (20 mA) | 6 VDC $\pm 5\%$      |
| 6 VAC         | 60 mA (20 mA) | 6 VAC $\pm 5\%$      |
| 12 VAC/VDC    | 30 mA (10 mA) | 12 VAC/VDC $\pm 5\%$ |
| 24 VAC/VDC    | 15 mA (10 mA) | 24 VAC/VDC $\pm 5\%$ |

Note: The values in parentheses are for blue Indicators.

#### Super-bright LED Indicator

| Rated voltage | Rated current | Operating voltage    |
|---------------|---------------|----------------------|
| 24 VAC        | 15 mA         | 24 VAC/VDC $\pm 5\%$ |

#### Incandescent Lamp

| Rated voltage | Rated current | Operating voltage |
|---------------|---------------|-------------------|
| 6 VAC/VDC     | 200 mA        | 5 V               |
| 14 VAC/VDC    | 80 mA         | 12 V              |
| 28 VAC/VDC    | 40 mA         | 24 V              |

#### Voltage-reduction Lighting

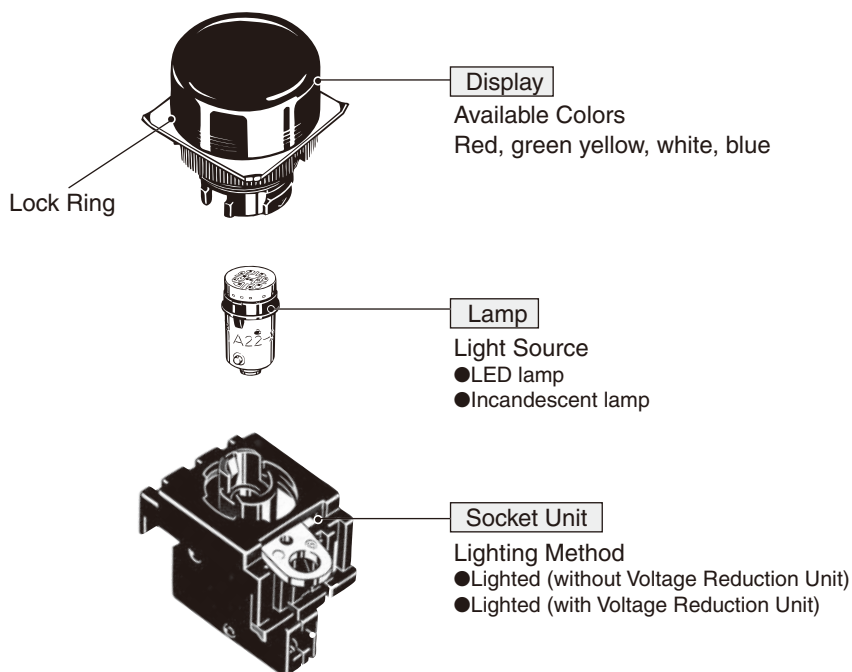
| Rated voltage | Operating voltage      | Applicable lamp<br>(BA9S/Base: 13) |
|---------------|------------------------|------------------------------------|
| 110 VAC       | 100 VAC (95 to 115 V)  | LED lamp (A22-24□)                 |
| 220 VAC       | 200 VAC (190 to 230 V) |                                    |

### Characteristics

|                                 |                  |
|---------------------------------|------------------|
| Ambient operating temperature   | -20°C to 55°C    |
| Ambient operating humidity      | 35% to 85%RH     |
| Ambient storage temperature     | -40°C to 70°C    |
| Degree of protection            | IP65             |
| Electric shock protection class | Class II         |
| PTI (tracking characteristic)   | 175              |
| Degree of contamination         | 3 (IEC60947-5-1) |

## Nomenclature

### Model Structure

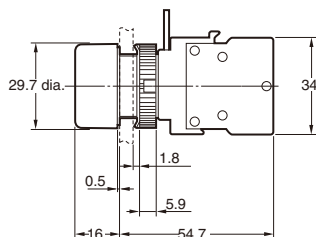


## Dimensions

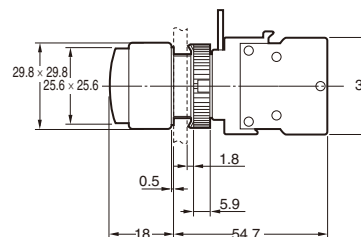
(Unit: mm)

### Indicators

#### Round M22-F

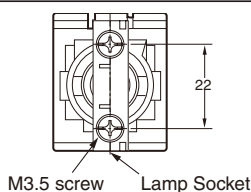


#### Square M22-C



### Terminal Arrangement (Bottom View)

#### With/Without Voltage Reduction Unit

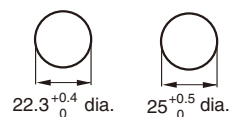


Note: The figure shows an example of the terminal arrangement when the Socket Unit is removed.

### Terminal Connection

| Type                | Without Voltage Reduction Unit | With Voltage Reduction Unit |
|---------------------|--------------------------------|-----------------------------|
| Terminal Connection |                                |                             |

### Panel Cutouts



Lock Ring is provided as a standard item.

- When applying coating such as paint to the panel, the dimensions should be those after the application of coating.
- Recommended panel thickness: 1 to 5 mm.
- Use an A22Z-R25 Ring when mounting to a panel with 25-mm holes.