M2S

CSM_M2S_DS_E_3_2

Indicator Series with Square 40-mm Body

- Same type of Indicator as those in the A3S-series Pushbutton Switch
- Easy panel mounting from the front and simple lamp replacement without tools.





Refer to Safety Precautions for All Pushbutton Switches/Indicators and Safety Precautions for the A3S.

List of Models

Indicators

| Ар | Model | |
|-------------|-------|------|
| Rectangular | | M2SJ |
| Square | | M2SA |

■ Specifications: Refer to page 9.

■ Accessories: Refer to the A3S.

■ Dimensions: Refer to page 10.

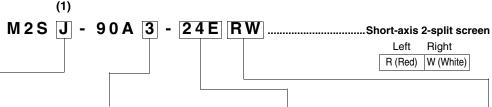
OMRON 1

Model Number Structure

Model Number Legend The model numbers used to order sets of Units are illustrated below. One set comprises the Display, Lamp, and Socket Unit.

For information on combinations, refer to Ordering Information on page 3.





(1) Shape of Display

| Symbol | Shape |
|--------|-------------|
| J | Rectangular |
| Α | Square |

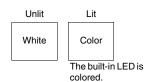
(2) Screen Pattern Illumination-only models

| Symbol | Screen pattern | | |
|--------|---------------------------|--|--|
| | Single screen | | |
| 1 | | | |
| | Short-axis 2-split screen | | |
| 2 | | | |

 Models with colored illumination can be ordered individually. Refer to page 4 for details.

(rectangular models only)

► Colored Illumination



(3) Lighting Method LED-lighted Models

| Symbol | Rated voltage |
|--------|---------------|
| 05E | 5 VDC |
| 12E | 12 VDC |
| 24E | 24 VDC |

Incandescent Lamp-lighted Models

| Symbol | Rated voltage |
|--------|---------------|
| 06 | 6 V |
| 14 | 14 V |
| 28 | 28 V |

(4) Color of Operation Unit LED-lighted Models

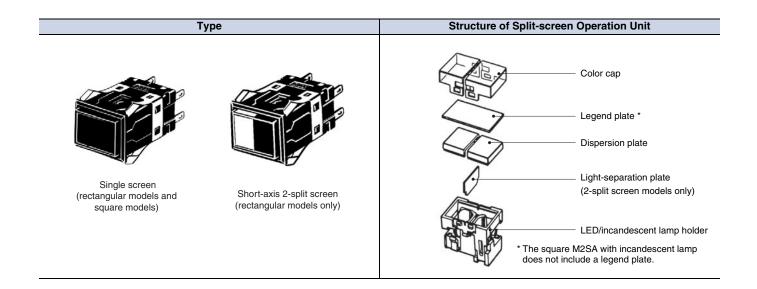
| Symbol | Color |
|--------|--------|
| R | Red |
| Υ | Yellow |
| G | Green |
| W | White |

Incandescent Lamp-lighted Models

| Symbol | Color |
|--------|--------|
| R | Red |
| Υ | Yellow |
| G | Green |
| Α | Blue |
| R | Red |

Number of Built-in LEDs and Incandescent Lamp

| - | | | | |
|----------------------|---------------------------|-----|-------------------|--|
| Model Screen pattern | | LED | Incandescent lamp | |
| M2SJ | Single screen | 2 | 1 | |
| | Short-axis 2-split screen | 2 | 2 | |
| M2SA | Single screen | 1 | 1 | |



Ordering as a SetThe model numbers used to order sets of Units are given in the following tables. One set comprises the Operation Unit, Lamp, and Socket Unit.

Rectangular Models



Single screen M2SJ (1)

Short-axis 2-split screen

(1) (2)

Single screen

| Lighting method | Item | Indicator | Operation Unit color symbol |
|-------------------|--------|----------------|--|
| | 5 VDC | M2SJ-90A1-05E□ | Enter the desired color symbol into the box in the model |
| LED | 12 VDC | M2SJ-90A1-12E□ | number. R (red) Y (yellow) |
| | 24 VDC | M2SJ-90A1-24E□ | |
| | 6 V | M2SJ-90A1-06□ | G (green) A (blue) * |
| Incandescent lamp | 14 V | M2SJ-90A1-14□ | W (white) |
| | 28 V | M2SJ-90A1-28□ | |

^{*} Incandescent lamp only

Short-axis 2-split screen

| Lighting method | Item | Indicator | Operation Unit color symbol |
|-------------------|--------|-----------------|--|
| LED | 24 VDC | M2SJ-90A3-24E□□ | Enter the desired color symbol into the box in the model number. R (red) Y (yellow) |
| Incandescent lamp | 28 V | M2SJ-90A3-28□□ | G (green) A (blue) * W (white) |

^{*} Incandescent lamp only

Square M2KA

Square Models



Single screen M2SA



Single screen

| Lighting method | Item | Indicator | Operation Unit color symbol |
|-------------------|--------|----------------|--|
| | 5 VDC | M2SA-90A1-05E□ | Enter the desired color symbol into the box in the model |
| LED | 12 VDC | M2SA-90A1-12E□ | number. |
| | 24 VDC | M2SA-90A1-24E□ | R (red) Y (yellow) |
| | 6 V | M2SA-90A1-06□ | G (green) |
| Incandescent lamp | 14 V | M2SA-90A1-14□ | A (blue) * W (white) |
| | 28 V | M2SA-90A1-28□ | vv (writte) |

^{*} Incandescent lamp only.

■ Specifications: Refer to page 9.

■ Dimensions: Refer to page 10.

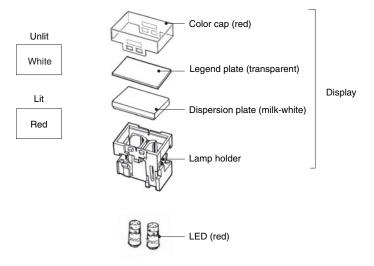
■ Accessories: Refer to the A3S.

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Illumination-Only and Colored Illumination for LED-lighted Models

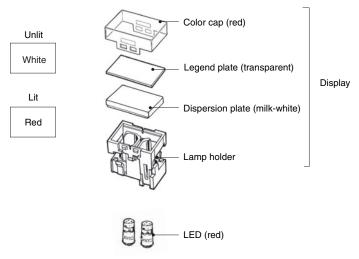
With illumination-only models, the Display surface is the same color whether the LED is lit or not.

Example: Red illumination



With colored illumination models, the Display surface is white when the LED is not lit and colored when it is lit.

Example: Red illumination



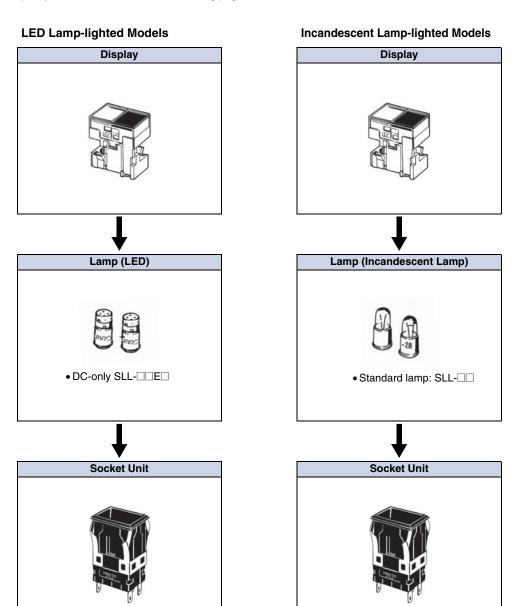
OrderingFor colored illumination, order the Display, Lamp, and Socket Unit individually as shown in the following table.

| Display | | | LED | Socket Unit |
|----------------|------------------------------------|-----------|---|-----------------------------|
| Single screen | ingle screen Rectangular M2SJ-5801 | | | |
| | Square | M2SA-5801 | Select the LED color to be illu- minated when lit (red, yellow, or | Select from the Switches on |
| 2-split screen | Rectangular | M2SJ-5921 | green) from page 8. | page 8. |

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Ordering Individually Displays, Lamps, and Socket Units can be ordered separately. Combinations that are not available as sets can be created using individual Units. Also, store the parts as spares for maintenance and repairs.

OrderingSpecify a model number from the following page.



Ordering set combinations: Refer to page 3.

■ Specifications: Refer to page 9. ■ Dimensions: Refer to page 10.

■ Accessories: Refer to the A3S.

Ordering Individually......Displays, Lamps, and Socket Units can be ordered separately. Combinations that are not available as sets can be created using individual Units. Also, store the parts as spares for maintenance and repairs.

Display

<LED-lighted Models>

(LED is not built in.)

| | | | | Rectangular Models (2 LEDs) | Square Models (1 LED) |
|------------|-----------------------------|----------------|---------------|-------------------------------------|-------------------------------------|
| Appearance | | | · | | |
| | | Screen pattern | Display color | (transparent legend plate built in) | (transparent legend plate built in) |
| | | | White | M2SJ-5801 | M2SA-5801 |
| Single | screen | | Red | M2SJ-5802 | M2SA-5802 |
| Siligio | Screen | | Green | M2SJ-5803 | M2SA-5803 |
| | | | Yellow | M2SJ-5805 | M2SA-5805 |
| | | | White/red | M2SJ-5901 | |
| | Standard split screen | | White/green | M2SJ-5902 | |
| | | | White/yellow | M2SJ-5904 | |
| | | | Red/green | M2SJ-5905 | |
| | | | Red/yellow | M2SJ-5907 | |
| | | | Green/yellow | M2SJ-5909 | |
| | | | Red/white | M2SJ-5911 | |
| 2-split | _ | | Green/white | M2SJ-5912 | |
| screen * | Reverse split | | Yellow/white | M2SJ-5914 | |
| | screen | | Green/red | M2SJ-5915 | |
| | 30.30 | | Yellow/red | M2SJ-5917 | |
| | | | Yellow/green | M2SJ-5919 | |
| | | | White/white | M2SJ-5921 | |
| | One-col- | | Red/red | M2SJ-5922 | |
| | or 2-split screen | | Yellow/green | M2SJ-5923 | |
| | 3010011 | | Yellow/yellow | M2SJ-5925 | |

^{*} Two-split screen configurations are given with the OMRON surface of the case at the bottom.

| Ordering set combinations: Refer to page 3. |
|---|
| |
| |
| |

[■] Specifications: Refer to page 9. ■ Dimensions: Refer to page 10.

[■] Accessories: Refer to the A3S.

Ordering Individually Displays, Lamps, and Socket Units can be ordered separately. Combinations that are not available as sets can be created using individual Units. Also, store the parts as spares for maintenance and repairs.

Display

<Incandescent Lamp-lighted Models>

(Incandescent Lamp is not built in.)

| | | | | Rectangular models | Square models |
|------------------|-----------------|----------------|---------------|-------------------------------------|----------------------------|
| Appearance | | | | | |
| | <u>.</u> | Screen pattern | Display color | (transparent legend plate built in) | Legend plate not included. |
| | | One lamp | White | M2SJ-5301 | M2SA-5301 |
| | | | Red | M2SJ-5302 | M2SA-5302 |
| | | | Green | M2SJ-5303 | M2SA-5303 |
| | | | Blue | M2SJ-5304 | M2SA-5304 |
| Single | screen | | Yellow | M2SJ-5305 | M2SA-5305 |
| Omgic | 2 3010011 | Two lamps | White | M2SJ-5321 | |
| | | | Red | M2SJ-5322 | |
| | | | Green | M2SJ-5323 | |
| | | | Blue | M2SJ-5324 | |
| | | | Yellow | M2SJ-5325 | |
| | | | White/red | M2SJ-5201 | |
| | | | White/green | M2SJ-5202 | |
| | Standard | | White/blue | M2SJ-5203 | |
| | | | White/yellow | M2SJ-5204 | |
| | | | Red/green | M2SJ-5205 | |
| | split screen | | Red/blue | M2SJ-5206 | |
| | Sciecii | | Red/yellow | M2SJ-5207 | |
| | | | Green/blue | M2SJ-5208 | |
| | | | Green/yellow | M2SJ-5209 | |
| | | | Blue/yellow | M2SJ-5210 | |
| | | | Red/white | M2SJ-5211 | |
| 0 ''' | | | Green/white | M2SJ-5212 | |
| 2-split screen * | | | Blue/white | M2SJ-5213 | |
| 3310011 | | | Yellow/white | M2SJ-5214 | |
| | Reverse | | Green/red | M2SJ-5215 | |
| | split screen | screen | Blue/red | M2SJ-5216 | |
| | | | Yellow/red | M2SJ-5217 | |
| | | | Blue/green | M2SJ-5218 | |
| | | | Yellow/green | M2SJ-5219 | |
| | | | Yellow/blue | M2SJ-5220 | |
| | | | White/white | M2SJ-5221 | |
| | One-col- | | Red/red | M2SJ-5222 | |
| | or 2-split | | Green/green | M2SJ-5223 | |
| | screen | | Blue/blue | M2SJ-5224 | |
| | | | Yellow/yellow | M2SJ-5225 | |

^{*} Two-split screen configurations are given with the OMRON surface of the case at the bottom.

Ordering set combinations: Refer to page 3.

■ Specifications: Refer to page 9. ■ Dimensions: Refer to page 10.

■ Accessories: Refer to the A3S.

Ordering Individually......Displays, Lamps, and Socket Units can be ordered separately. Combinations that are not available as sets can be created using individual Units. Also, store the parts as spares for maintenance and repairs.

Lamp

LED

| Operating voltage | 5 VDC | | 12 VDC | | 24 VDC | |
|-------------------|-----------------|-------------------------|-----------------|-------------------------|-----------------|-------------------------|
| Color | Model (DC only) | Applicable lens (color) | Model (DC only) | Applicable lens (color) | Model (DC only) | Applicable lens (color) |
| Red | SLL-05ER | Red | SLL-12ER | Red | SLL-24ER | Red |
| Yellow | SLL-05EY | Yellow | SLL-12EY | Yellow | SLL-24EY | Yellow |
| Green | SLL-05EG | Green | SLL-12EG | Green | SLL-24EG | Green |
| White | SLL-05EW | White | SLL-12EW | White | SLL-24EW | White |

Note: The A3SJ (M2SJ) requires two LEDs for each Switch.

The applicable lens color applies to illumination-only models.

Incandescent Lamp

| Operating voltage Lamp type | Standard lamp | Low-power lamp |
|-----------------------------|---------------|----------------|
| 5 V | SLL-06 | SLL-06H |
| 12 V | SLL-14 | SLL-14H |
| 24 V | SLL-28 | SLL-28H |

Note: The low-voltage lamp is advantageous in terms of heat generation.

Socket Unit (used for both incandescent lamps and LEDs)

| Appearance | Rectangular models | Square models | Selection precautions |
|------------|--------------------|---------------|---|
| Model | M2SJ-8010 | M2SA-7010 | Use the Socket Unit in combination with the same shape Display (rectangular or square) |

Accessories, Replacements, and Tools

The accessories, replacements, and tools are also used with the A3S Pushbutton Switch. Refer to the A3S datasheet

Ordering set combinations: Refer to page 3.

■ Specifications: Refer to page 9. ■ Dimensions: Refer to page 10.

■ Accessories: Refer to the A3S.

Specifications

Approved Standard Ratings UL (File No. E41515), CSA (File No. LR45258)

LED: 24 VDC max.

Incandescent lamp: 28 VAC/VDC,1.2 W max.

Note: Certification has been obtained for the Indicator.
For detailed information on individual products that have received certification, consult your supplier.

Ratings

| Ambient operat- ing temperature | -10 to 50°C (with no icing or condensation) |
|------------------------------------|---|
| Ambient operat- ing humidity | 35% to 85%RH |
| Ambient storage temperature | −25 to 65°C(with no icing or condensation) |

LED and Incandescent Lamp Ratings LED for LED-lighted Models

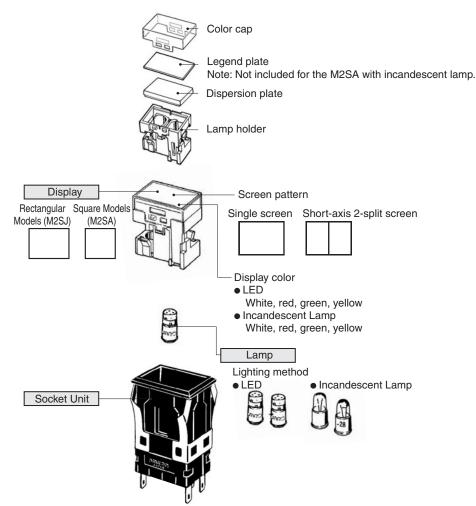
| Туре | Operating voltage | Rated voltage | Rated current | Built-in limit- ing resistance |
|---------|-------------------|---------------|---------------|-----------------------------------|
| | 5 VDC ±5% | 5 VDC | 30 mA | 39 Ω |
| DC only | 12 VDC ±5% | 12 VDC | 15 mA | 270 Ω |
| | 24 VDC ±5% | 24 VDC | 12.5 mA | 1,300 Ω |

Incandescent Lamp

| Operating voltage | Rated voltage | Standard lamp | Low-power lamp |
|-------------------|---------------|---------------|----------------|
| Operating voltage | nateu voitage | Rated current | Rated current |
| 12 VAC/VDC | 14 VAC/VDC | 80 mA | 40 mA |
| 24 VAC/VDC | 28 VAC/VDC | 40 mA | 25 mA |

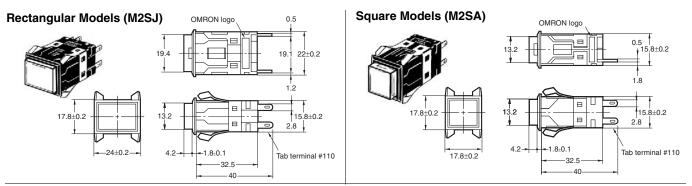
Nomenclature

Structure Display Structure



Note: The M2SJ is shown here as an example.

Dimensions (Unit: mm)

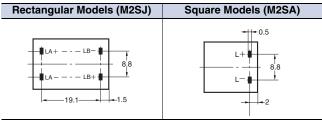


Note: Unless otherwise specified, a tolerance of ± 0.4 mm applies to all dimensions.

Recommended panel thickness: 1 to 4 mm

Terminal Arrangement

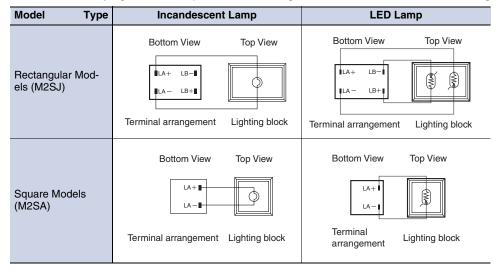
Bottom View (All are shown with the OMRON logo facing down.)



Note: The arrangements given above are not indicated on the Socket Unit.

Terminal connections (All are shown with the OMRON logo facing down.)

Incandescent Lamp-lighted Models (The terminal arrangements are the same as for the LED-lighted models.)



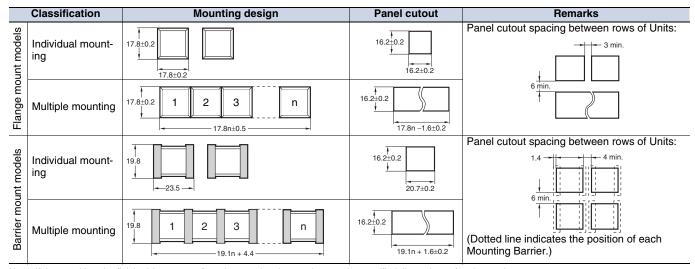
Dimensions (Unit: mm)

Panel Cutout (If a Switch Guard or Seal Cover is to be used, refer to the panel cutout diagrams for the A3S.) M2SJ

| | Classification | Mounting design | Panel cutout | Remarks |
|---------------------|--------------------------------------|--|------------------------------|--|
| | Individual mount- ing, horizontal | 17.8±0.2 + 24±0.2 + | 16.2±0.2 | |
| nodels | Multiple mounting, horizontal | 17.8±0.2 1 2 n | 16.2±0.2 → 24n −1.6±0.2 → | Panel cutout spacing between rows of Units: |
| Flange mount models | Individual mount- ing, vertical | Mount to Long Mounting Plate (A3SJ-3002) before use. | 22.4±0.2 | 6 min. |
| | Multiple mounting, vertical | Mount to Long Mounting Plate (A3SJ-3002) before use. | 22.4±0.2 17.8n -1.6±0.2 | |
| | Individual mount- ing, horizontal | 19.8 | 16.2±0.2 | |
| | Multiple mounting, horizontal | 19.8 1 2 n | 16.2±0.2 ± 25.3n +1.6±0.2 | Panel cutout spacing between rows of Units: |
| | Individual mount- ing, vertical | Mount to Long Mounting Plate (A3SJ-3002) before use. | 22.4±0.2 | (Dotted line indicates the position of each Mounting Barrier.) |
| | Multiple mounting, vertical | Mount to Long Mounting Plate (A3SJ-3002) before use. | 22.4±0.2 19.1n +1.6±0.2 | · |

Note: If the panel is to be finished (e.g., coated), make sure that the panel meets the specified dimensions after the coating.

M2SA



Note: If the panel is to be finished (e.g., coated), make sure that the panel meets the specified dimensions after the coating.

Safety Precautions

Refer to Safety Precautions for All Pushbutton Switches/Indicators and Safety Precautions for the A3S.

Read and Understand This Catalog

Please read and understand this catalog before purchasing the products. Please consult your OMRON representative if you have any questions or comments.

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Dimensions and weights are nominal and are not to be used for manufacturing purposes, even when tolerances are shown.

PERFORMANCE DATA

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In the interest of product improvement, specifications are subject to change without notice.



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