

# M2D

## Indicator (Cylindrical 8-dia.)

CSM\_M2D\_DS\_E\_3\_1

### Cylindrical 8-dia. Indicator

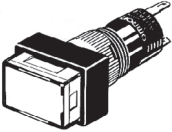
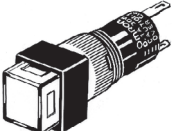
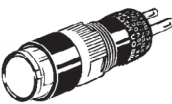
- Same basic design as the A3D Pushbutton Switch.
- Excellent illumination with even surface brightness.
- Cylindrical body means panel cutouts can be made easily.



RoHS Compliant

⚠ Refer to *Safety Precautions for All Pushbutton Switches* and *Safety Precautions for the A3D*.

### List of Models

Appearance		Model
Rectangular		M2DJ
Square		M2DA
Round		M2DT

■ Specifications: Refer to page 4. ■ Dimensions: Refer to page 5. ■ Accessories: Refer to the A3D.  
■ Precautions for correct use and safety precautions: Refer to the A3D.

**Model Number Legend** ..... The model numbers used to order sets of Units are illustrated below. One set comprises the Display (with built-in LED) and Socket Unit.  
For information on combinations, refer to Ordering Information.

(1)                      (2)                      (3)

**M 2 D J - 9 0 A 1 - 0 0 E R**

**(1) Shape of Display**

Symbol	Shape
J	Rectangular
A	Square
T	Round

**(2) Terminal Type**

Symbol	Terminal type
A	Solder terminals

• If PCB terminals are required, use the Socket given under Accessories. For details, refer to A3D.

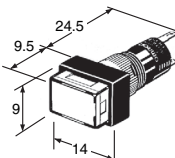
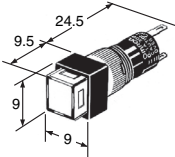
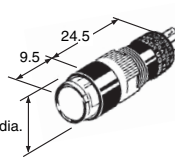
**(3) Color of Display**

Symbol	Color
R	Red
Y	Yellow
G	Green
W	White

• All models are illumination only. Colored-illumination models are not available.  
• An external resistor is required. For details, refer to A3D.

## Ordering Information

**Ordering as a Set** ..... The model numbers used to order sets of Units are given in the following table. One set comprises the Display (with built-in LED), and Socket Unit.

Appearance	Degree of protection	Model number	Color symbol for Display
Rectangular 	IP40	<b>M2DJ-90A1-00E□</b>	R, Y, G, W
Square 		<b>M2DA-90A1-00E□</b>	
Round 		<b>M2DT-90A1-00E□</b>	

Note: Enter the desired color symbol for the Display in □: R (red), Y (yellow), G (green), or W (white)

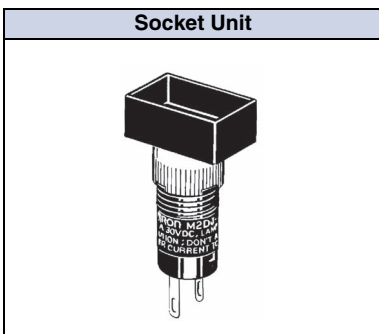
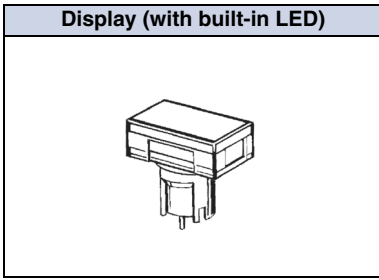
Individual models: Refer to pages 3.  
(The Display and Socket Unit can be ordered separately.)

■ Specifications: Refer to page 4. ■ Dimensions: Refer to page 5.  
■ Accessories: Refer to pages A3D




## Ordering Information

**Ordering Individually** .....Displays 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.

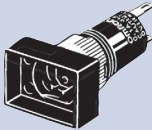
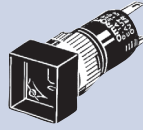
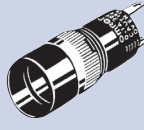
**Ordering: Specify a model number from the following table.**



### Display (with built-in LED)

Appearance	Rectangular	Square	Round	Remarks
Color				
Red	M2DJ-500R	M2DA-500R	M2DT-500R	Refer to the A3D datasheet for information on mounting and replacement.
Yellow	M2DJ-500Y	M2DA-500Y	M2DT-500Y	
Green	M2DJ-500GY	M2DA-500GY	M2DT-500GY	
White	M2DJ-500W	M2DA-500W	M2DT-500W	

### Socket Unit

Sealing	IP40		
	Rectangle	Square	Round
Appearance			
Terminal type	Solder terminals		
Solder terminals	M2DJ-7001	M2DA-7001	M2DT-7001

Ordering set combinations: Refer to page 2.

■ Specifications: Refer to page 4. ■ Dimensions: Refer to page 5.  
■ Accessories: Refer to pages A3D

## Specifications

### Ratings

#### Built-in LED Lamp

(Ta=25°C)

Item	Color of LED Lamp	Red	Yellow (White) *2	Green
Forward voltage, V <sub>F</sub>	Reference value (V) *1	1.7	2.2	2.1
	Maximum value (V)	2.0	2.5	2.5
Forward current, I <sub>F</sub>	Reference value (mA)	20	20	20
	Absolute maximum value (mA)	50	50	50
Permissible dissipation, P <sub>D</sub>	Absolute maximum value (mW)	100	125	122
Reverse voltage, V <sub>R</sub>	Absolute maximum value (V)	4	4	4

Note: The built-in LED lamp has no limiting resistor and so it is necessary to connect an external resistor within the range shown in the above table. For details of calculation formulas, refer to A3D.

\*1. Refer to the characteristic graph of V<sub>F</sub>-I<sub>F</sub> on A3D.

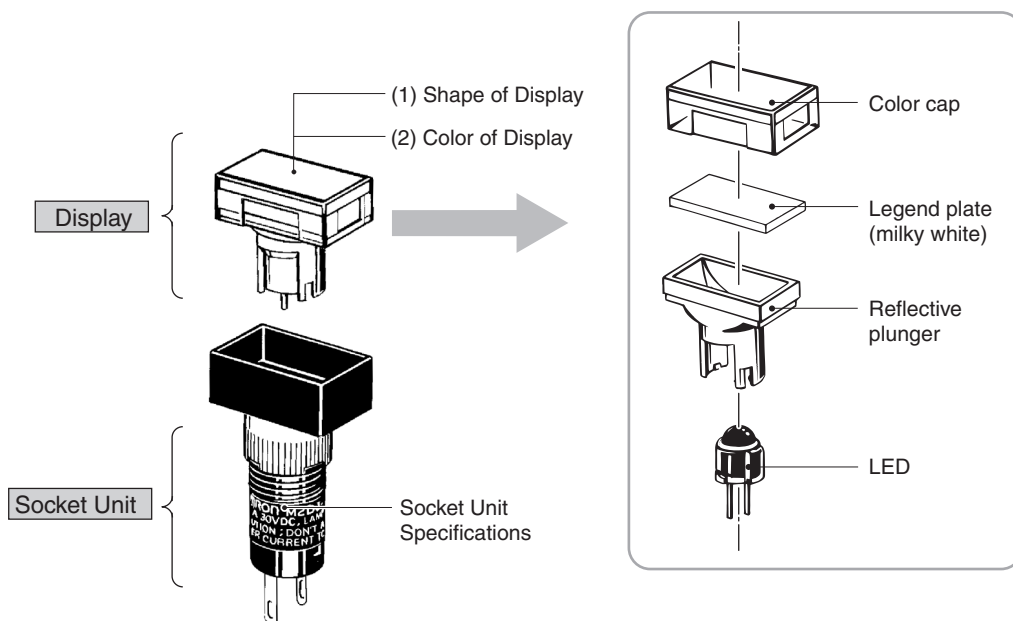
\*2. The white Display is also used for yellow.

### Characteristics

Ambient operating temperature	-10°C to +55°C (with no icing or condensation)
Ambient operating humidity	35 to 85% RH
Ambient storage temperature	-25°C to +65°C (with no icing or condensation)

## Nomenclature

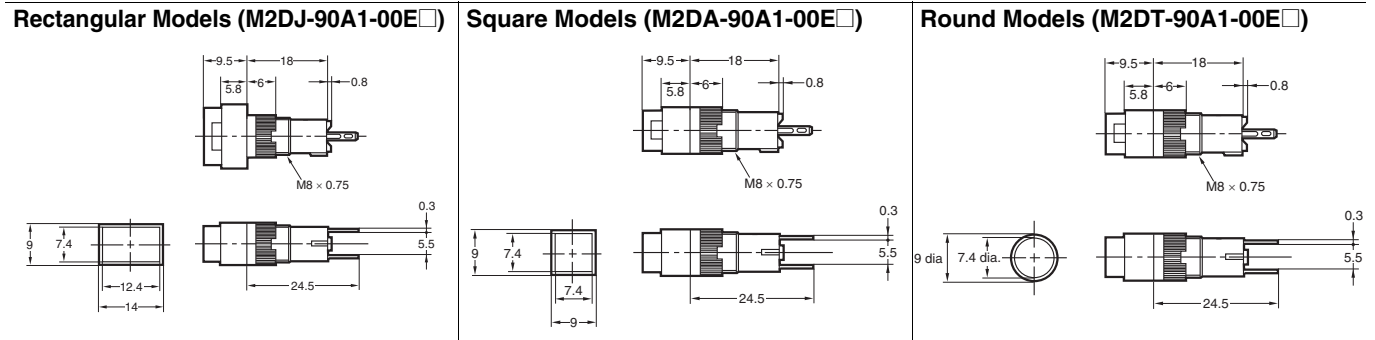
### Model Structure



Note: The M2DJ model is shown here as a representative example.

	Type	Specifications
(1)	Shape of Display Rectangular (M2DJ)    Square (M2DA)    Round (M2DT) 	---
(2)	LED Lamp-lighted Models Red, Yellow, Green, White	The LED lamp is built into the Display.

## Dimensions



Note: Unless specified, there is a tolerance of  $\pm 0.4$  mm for dimensions.

## Terminals

Type	Indicator
Solder Terminals	

## Accessories, Replacements, and Tools

The accessories, replacements, and tools are also used with the A3D Lighted Pushbutton Switch. Refer to the A3D datasheet.

## Panel Cutouts (Top View)

Rectangular models (M2DJ)	Square models (M2DA) and round models (M2DT)
Note: Recommended panel thickness: 1.0 to 3.2 mm.	Note: Recommended panel thickness: 1.0 to 3.2 mm.

- 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* and *Safety Precautions for the A3D*.

- Application examples provided in this document are for reference only. In actual applications, confirm equipment functions and safety before using the product.
- Consult your OMRON representative before using the product under conditions which are not described in the manual or applying the product to nuclear control systems, railroad systems, aviation systems, vehicles, combustion systems, medical equipment, amusement machines, safety equipment, and other systems or equipment that may have a serious influence on lives and property if used improperly. Make sure that the ratings and performance characteristics of the product provide a margin of safety for the system or equipment, and be sure to provide the system or equipment with double safety mechanisms.

**Note: Do not use this document to operate the Unit.**

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**OMRON Corporation**

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