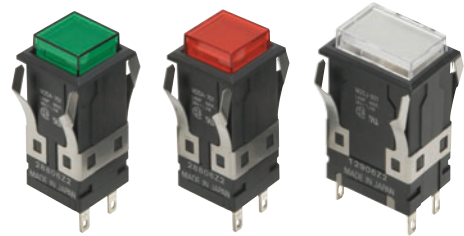


Indicator Series with Square 40-mm Body

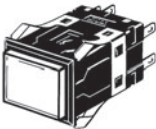
- Same type of Indicator as those in the A3S-series Pushbutton Switch
- Easy panel mounting from the front and simple lamp replacement without tools.



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

List of Models

Indicators

Appearance	Model
Rectangular 	M2SJ
Square 	M2SA

■ Specifications: Refer to page 9.

■ Dimensions: Refer to page 10.

■ Accessories: Refer to the A3S.

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) (2) (3) (4)

1 - 24 E RSingle screen

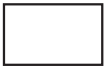
M2S J - 90A 3 - 24E RWShort-axis 2-split screen

Left Right
R (Red) W (White)

(1) Shape of Display

Symbol	Shape
J	Rectangular
A	Square

(2) Screen Pattern
Illumination-only models

Symbol	Screen pattern
1	Single screen 
3	Short-axis 2-split screen  (rectangular models only)

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

► Colored Illumination

Unlit	Lit
White	Color

The built-in LED is colored.

(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

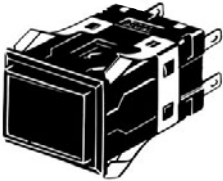
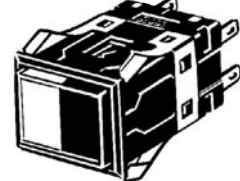
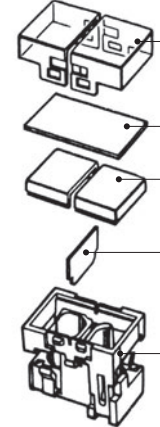
Symbol	Color
R	Red
Y	Yellow
G	Green
W	White

Incandescent Lamp-lighted Models

Symbol	Color
R	Red
Y	Yellow
G	Green
A	Blue
R	Red

Number of Built-in LEDs and Incandescent Lamp

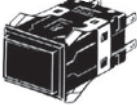
Model	Screen pattern	LED	Incandescent lamp
M2SJ	Single screen	2	1
	Short-axis 2-split screen	2	2
M2SA	Single screen	1	1

Type	Structure of Split-screen Operation Unit
 Single screen (rectangular models and square models)  Short-axis 2-split screen (rectangular models only)	 - Color cap - Legend plate * - Dispersion plate - Light-separation plate (2-split screen models only) - LED/incandescent lamp holder * The square M2SA with incandescent lamp does not include a legend plate.

Ordering Information

Ordering as a Set The 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

(1)

Short-axis 2-split screen

(1) (2)

M2SJ

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

* Incandescent lamp only

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) G (green) A (blue) * W (white)
Incandescent lamp	28 V		M2SJ-90A3-28□□	

* Incandescent lamp only

Square M2KA

Square Models



Single screen

M2SA

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

* Incandescent lamp only.

- Specifications: Refer to page 9.

■ Accessories: Refer to the A3S.

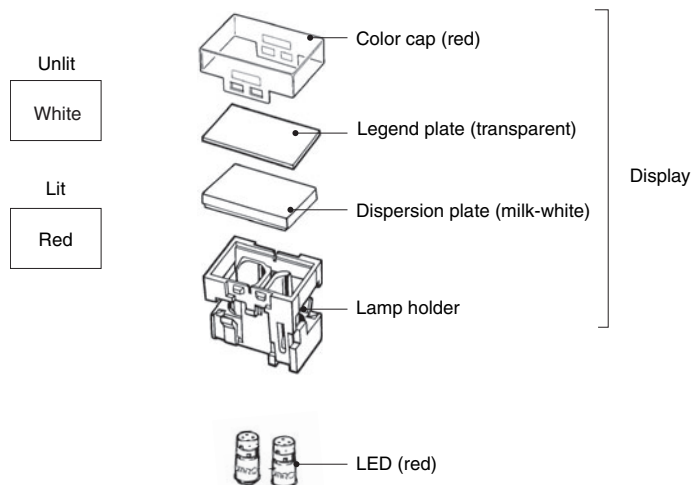
■ Dimensions: Refer to page 10.

Ordering Information

Illumination-Only and Colored Illumination for LED-lighted Models

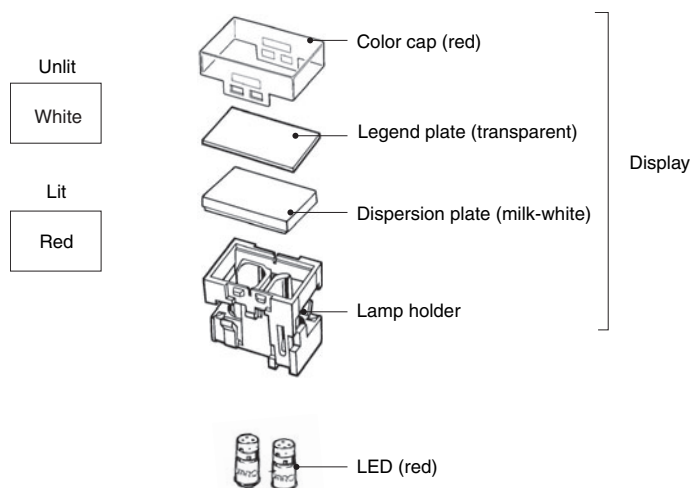
With illumination-only models, the Display surface is the same color whether the LED is lit or not.

Example: Red illumination

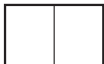


With colored illumination models, the Display surface is white when the LED is not lit and colored when it is lit.

Example: Red illumination



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

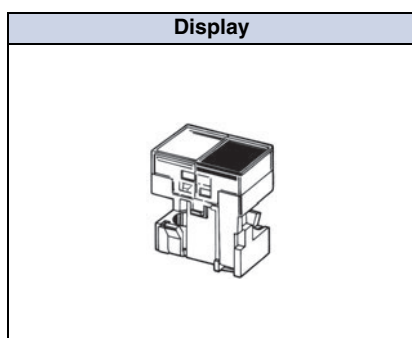
Display			LED	Socket Unit
Single screen 	Rectangular	M2SJ-5801	Select the LED color to be illuminated when lit (red, yellow, or green) from page 8.	Select from the Switches on page 8.
	Square	M2SA-5801		
2-split screen 	Rectangular	M2SJ-5921		

Ordering Information

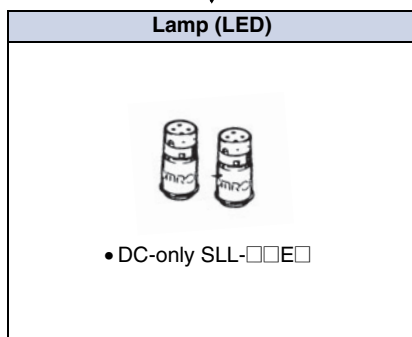
Ordering Individually Displays, Lamps, and Socket Units can be ordered separately. Combinations that are not available as sets can be created using individual Units. Also, store the parts as spares for maintenance and repairs.

Ordering Specify a model number from the following page.

LED Lamp-lighted Models



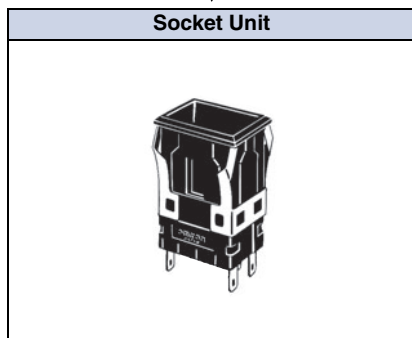
Lamp (LED)



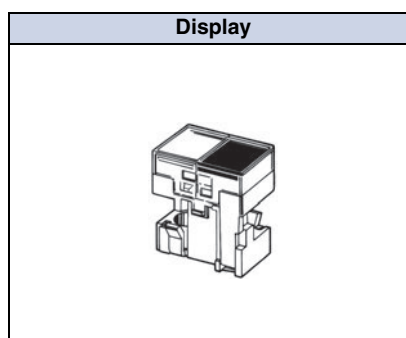
- DC-only SLL-□□E□



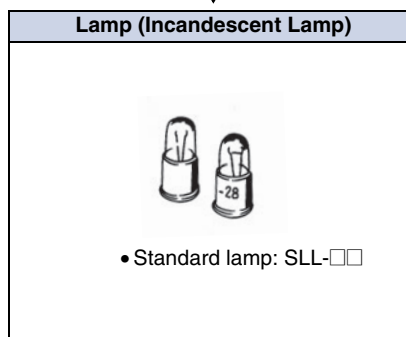
Socket Unit



Incandescent Lamp-lighted Models



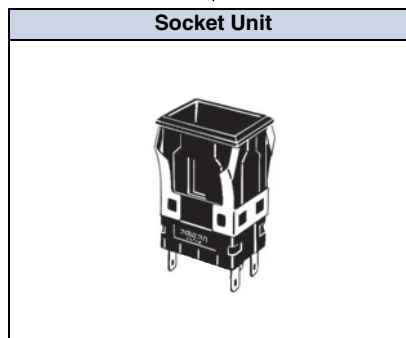
Lamp (Incandescent Lamp)



- Standard lamp: SLL-□□



Socket Unit



Ordering set combinations: Refer to page 3.

■ Specifications: Refer to page 9. ■ Dimensions: Refer to page 10.
■ Accessories: Refer to the A3S.

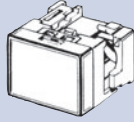
Ordering Information

Ordering IndividuallyDisplays, 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.)

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

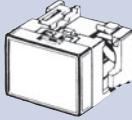
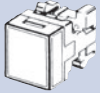
Ordering Information

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.)

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

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 Color	5 VDC		12 VDC		24 VDC	
	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

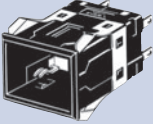
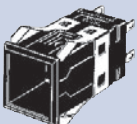
Note: The A3SJ (M2SJ) requires two LEDs for each Switch.
The applicable lens color applies to illumination-only models.

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 operating temperature	−10 to 50°C (with no icing or condensation)
Ambient operating 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

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

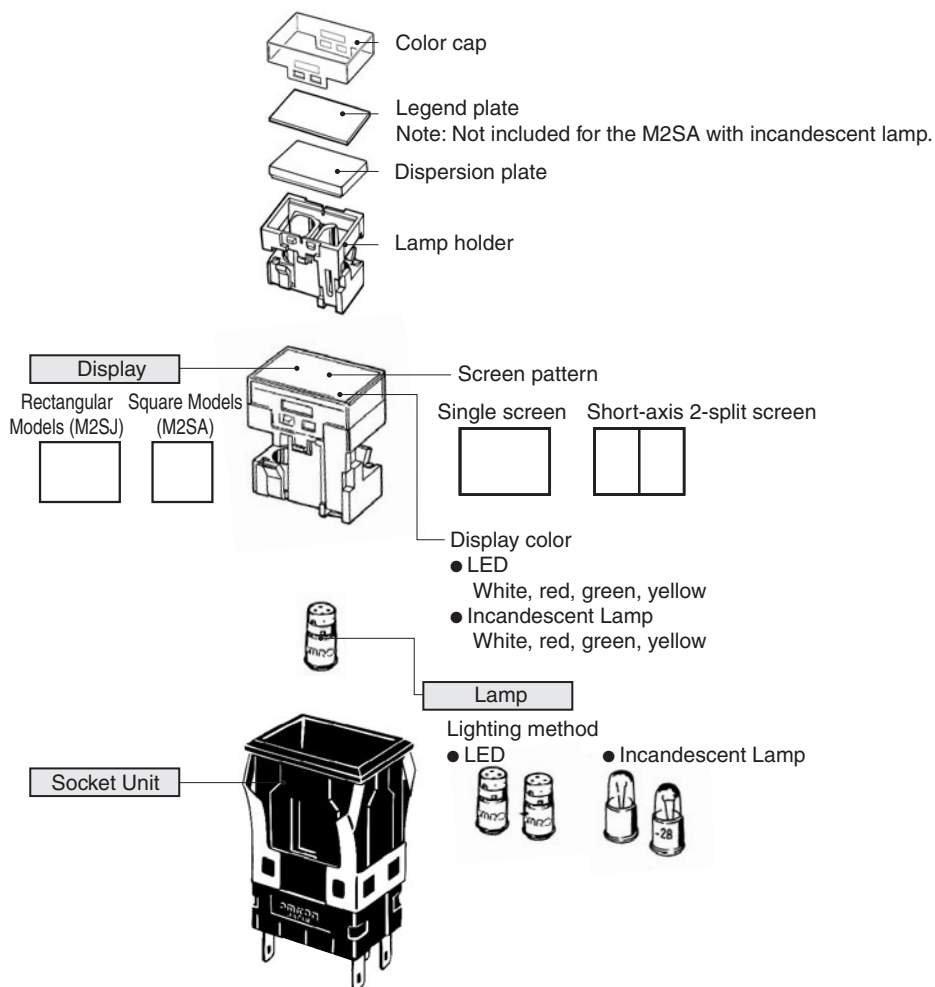
Incandescent Lamp

Operating voltage	Rated voltage	Standard lamp	Low-power lamp
		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

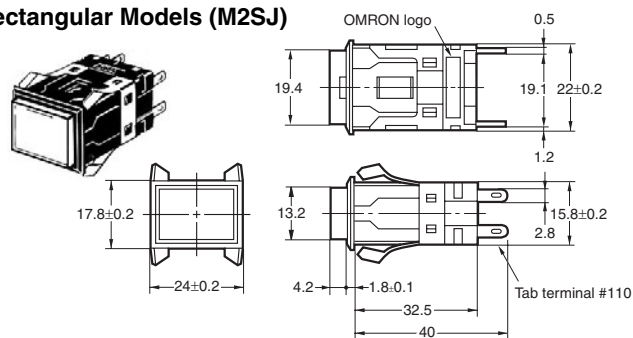
Display Structure



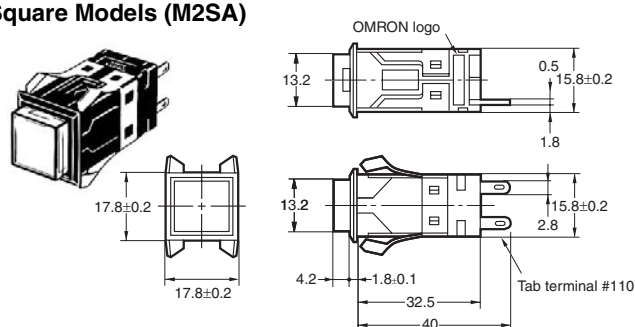
Dimensions

(Unit: mm)

Rectangular Models (M2SJ)



Square Models (M2SA)



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.)

Rectangular Models (M2SJ)	Square Models (M2SA)

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.)

Model	Type	Incandescent Lamp	LED Lamp
Rectangular Models (M2SJ)	Bottom View		
	Top View		
Square Models (M2SA)	Bottom View		
	Top View		

Dimensions

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
Flange mount models	Individual mounting, horizontal 		Panel cutout spacing between rows of Units:
	Multiple mounting, horizontal 		
	Individual mounting, vertical 		
	Multiple mounting, vertical 		
Barrier mount models	Individual mounting, horizontal 		Panel cutout spacing between rows of Units: (Dotted line indicates the position of each Mounting Barrier.)
	Multiple mounting, horizontal 		
	Individual mounting, vertical 		
	Multiple mounting, vertical 		

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

M2SA

Classification	Mounting design	Panel cutout	Remarks
Flange mount models	Individual mounting 		Panel cutout spacing between rows of Units:
	Multiple mounting 		
Barrier mount models	Individual mounting 		Panel cutout spacing between rows of Units: (Dotted line indicates the position of each Mounting Barrier.)
	Multiple mounting 		

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.

Warranty and Limitations of Liability

WARRANTY

OMRON's exclusive warranty is that the products are free from defects in materials and workmanship for a period of one year (or other period if specified) from date of sale by OMRON.

OMRON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, REGARDING NON-INFRINGEMENT, MERCHANTABILITY, OR FITNESS FOR PARTICULAR PURPOSE OF THE PRODUCTS. ANY BUYER OR USER ACKNOWLEDGES THAT THE BUYER OR USER ALONE HAS DETERMINED THAT THE PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE. OMRON DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED.

LIMITATIONS OF LIABILITY

OMRON SHALL NOT BE RESPONSIBLE FOR SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCTS, WHETHER SUCH CLAIM IS BASED ON CONTRACT, WARRANTY, NEGLIGENCE, OR STRICT LIABILITY.

In no event shall the responsibility of OMRON for any act exceed the individual price of the product on which liability is asserted.

IN NO EVENT SHALL OMRON BE RESPONSIBLE FOR WARRANTY, REPAIR, OR OTHER CLAIMS REGARDING THE PRODUCTS UNLESS OMRON'S ANALYSIS CONFIRMS THAT THE PRODUCTS WERE PROPERLY HANDLED, STORED, INSTALLED, AND MAINTAINED AND NOT SUBJECT TO CONTAMINATION, ABUSE, MISUSE, OR INAPPROPRIATE MODIFICATION OR REPAIR.

Application Considerations

SUITABILITY FOR USE

OMRON shall not be responsible for conformity with any standards, codes, or regulations that apply to the combination of products in the customer's application or use of the products.

At the customer's request, OMRON will provide applicable third party certification documents identifying ratings and limitations of use that apply to the products. This information by itself is not sufficient for a complete determination of the suitability of the products in combination with the end product, machine, system, or other application or use.

The following are some examples of applications for which particular attention must be given. This is not intended to be an exhaustive list of all possible uses of the products, nor is it intended to imply that the uses listed may be suitable for the products:

- Outdoor use, uses involving potential chemical contamination or electrical interference, or conditions or uses not described in this catalog.
- Nuclear energy control systems, combustion systems, railroad systems, aviation systems, medical equipment, amusement machines, vehicles, safety equipment, and installations subject to separate industry or government regulations.
- Systems, machines, and equipment that could present a risk to life or property.

Please know and observe all prohibitions of use applicable to the products.

NEVER USE THE PRODUCTS FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCTS ARE PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

PROGRAMMABLE PRODUCTS

OMRON shall not be responsible for the user's programming of a programmable product, or any consequence thereof.

Disclaimers

CHANGE IN SPECIFICATIONS

Product specifications and accessories may be changed at any time based on improvements and other reasons.

It is our practice to change model numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the products may be changed without any notice. When in doubt, special model numbers may be assigned to fix or establish key specifications for your application on your request. Please consult with your OMRON representative at any time to confirm actual specifications of purchased products.

DIMENSIONS AND WEIGHTS

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

PERFORMANCE DATA

Performance data given in this catalog is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of OMRON's test conditions, and the users must correlate it to actual application requirements. Actual performance is subject to the OMRON Warranty and Limitations of Liability.

ERRORS AND OMISSIONS

The information in this document has been carefully checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical, or proofreading errors, or omissions.