OMRON

Indicator M22

22-dia. and 25-dia. Round Indicator Series

- Easy mounting and removal of Socket Unit.
- Use 25-dia. ring to install in 25-dia. panel cutouts.
- Finger protection mechanism on Lamp provided as a standard feature.
- UL and cUL approved (File No. E41515)



LR° *LR*

Model Number Structure

Model Number Legend

Completely Assembled

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



1 Flange Shape

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

2 Illumination Color

-	
Code	Description
R	Red
G	Green
Υ	Yellow
W	White
А	Blue

3 Light Source

Code	Operating voltage				
Without Voltage Reduction Unit					
6D	LED	6 VDC			
6A		6 VAC			
12A		12 VAC/VDC			
24A		24 VAC/VDC			
5	Incandescent	5 VAC/VDC			
12	lamp	12 VAC/VDC			
24		24 VAC/VDC			
H1		100 VAC/VDC			
With Voltage Reduction Unit					
T1	LED	110 VAC			
T2		220 VAC			

Note: The LED lamp (24 VAC/VDC) can be lit by directly applying 110 VAC/VDC (220 VAC/ VDC) to the lamp terminal. LED incorporates the 24-VAC/VDC type.

OMRON

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.

1. Display



2. Lamp



1 Operating Voltage (Rated Voltage)

	Incandescent				
Code	Description				
5	5 VAC (6 VAC)				
12	12 VAC (14 VAC)				
24 24 VAC (28 VAC)					
H1 100 VAC (130 VAC)					
	LED				
6D	6 VDC (6 VDC)				
6A 6 VAC (6 VAC)					
12A 12 VAC/VDC (12 VAC/VDC)					
24A	24A 24 VAC/VDC (24 VAC/VDC)				

2 Illumination Color

A

Blue

Code	Description	
None	Incandescent lamp	
R	Red	
G	Green	
Y	Yellow	
А	Blue	

3. Socket Unit



1 Voltage Reduction Unit

Code	Description	
None Without Voltage Reduction Unit		
T1	110 VAC	
T2	220 VAC	

■ List of Models

Completely Assembled

Indicator

Ар	pearance	Lighting	Operating voltage	Model	Illumination color
Round/Flat	~	LED	6 VDC	M22-F□-6D	Insert one of the
without Voltage			6 VAC	M22-F□-6A	following letters into the box □.
Reduction Unit			12 VAC/VDC	M22-F□-12A	R (red)
	M22-F		24 VAC/VDC	M22-F□-24A	Y (yellow)
Round/Flat with Voltage			110 VAC	M22-F□-T1	G (green) W (white) A (blue)
Reduction Unit	M22-F		220 VAC	M22-F□-T2	, (0,00)
Square/Projection			6 VDC	M22-C□-6D	
without Voltage			6 VAC	M22-C□-6A	
Reduction Unit			12 VAC/VDC	M22-C□-12A	
	M22-C		24 VAC/VDC	M22-C□-24A	
Square/Projection with Voltage	A		110 VAC	M22-C□-T1	
Reduction Unit	M22-C		220 VAC	M22-C□-T2	

OMRON

Subassembled



Display

Appearance		IP65 oil-resistant		
		Color of Display	Model	
Round/Flat		Red	M22-FR	
		Green	M22-FG	
		Yellow	M22-FY	
	M22-F	White	M22-FW	
		Blue	M22-FA	
Square/Projection		Red	M22-CR	
		Green	M22-CG	
		Yellow	M22-CY	
	M22-C	White	M22-CW	
	Ī	Blue	M22-CA	

Lamp

LED

		Operating voltage	6 V	12 V	24 V	24 V Super-bright
Appearance	AC/DC	LED light			Model	
	AC	Red	A22-6DR			
		Green	A22-6DG			
		Yellow (see note 2)	A22-6DY			
		Blue	A22-6DA			
	DC	Red	A22-6AR			
		Green	A22-6AG			
A22-		Yellow (see note 2)	A22-6AY			
Ų		Blue	A22-6AA			
	AC and DC	Red		A22-12AR	A22-24AR	A22-24ASR
		Green		A22-12AG	A22-24AG	A22-24ASG
		Yellow (see note 2)		A22-12AY	A22-24AY	A22-24ASY
		Blue		A22-12AA	A22-24AA	A22-24ASA

Note: 1. For voltage-reduction lighting, use the A22-24A \Box .

2. Used when the Display color is yellow or white.

Incandescent

Operating voltage	6 VAC/VDC	12 VAC/VDC	24 VAC/VDC	100 VAC/VDC
	A22-5	A22-12	A22-24	A22-H1

Case

Appearance		Туре	Model
	IP40	Rectangular	A16-CJM
		Square	A16-CAM
		Round	A16-CTM
	IP65 oil-resistant	Rectangular	A165-CJM
		Square	A165-CAM
		Round	A165-CTM

Socket Unit

Voltage-reduction circuits					
Without Voltage Reduction Unit	With Voltage	e Reduction Unit			
Without Voltage Reduction Unit	With Voltage Reduction Unit (110 VAC)	With Voltage Reduction Unit (220 VAC)			
M22-00	M22-00-T1	M22-00-T2			

Note: For voltage-reduction lighting, use the A22-24A \Box .

Accessories (Order Separately)

The M22 uses the same accessories as the A22. Refer to the relevant information in the corresponding section for the A22.

Specifications

■ Approved Standards

Recognized organization	Standards	File No.
UL, cUL (see note)	UL508	E41515

Note: cUL: CSA C22.2 No. 14

■ Approved Standard Ratings

UL, cUL (File No. E41515) 2-6W, 120 V max.

Ratings

LED Lamp

Rated voltage	Rated current	Operating voltage
6 VDC	60 mA (20 mA)	6 VDC±5%
6 VAC	60 mA (20 mA)	6 VAC±5%
12 VAC/VDC	30 mA (10 mA)	12 VAC/VDC±5%
24 VAC/VDC	15 mA (10 mA)	24 VAC/VDC±5%

Note: The values in parentheses are for blue Indicators.

Super-bright LED Indicator

Rated voltage	Rated current	Operating voltage
24 VAC/VDC	15 mA	24 VAC/VDC±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
130 VAC/VDC	20 mA	100 V

Voltage-reduction Lighting

Rated voltage	Operational voltage	Applicable lamp (BA9S/13□ gold)
110 VAC	95 to 115 VAC	LED lamp (A22-24)
220 VAC	190 to 230 VAC	

■ Characteristics

li	tem	Indicator
		M22
Insulation resistance		100 MΩ min. (at 500 VDC)
Dielectric strength		2,500 VAC, 50/60 Hz for 1 min between terminals of same polarity 2,500 VAC, 50/60 Hz for 1 min between terminals of different polarity and also between each terminal and ground
Vibration resistance		Malfunction (See note 2.): 10 to 55 Hz, 1.5-mm double amplitude
Shock resistance	Mechanical	1,000 m/s ²
	Malfunction (See note 2.)	600 m/s² max.
Ambient temperature (Se	e note 1.)	Operating: –20°C to 55°C Storage: –40°C to 70°C
Ambient humidity		Operating: 35°C to 85°C
Degree of protection		IP65
Electric shock protection	n class	Class II
PTI (tracking characteris	tic)	175
Degree of contamination		3 (IEC947-5-1)

Note: 1. With no icing or condensation.

2. Malfunction within 1 ms.

Nomenclature



Dimensions

Note: All units are in millimeters unless otherwise indicated.

Indicators





Accessories

The M22 uses the same accessories as the A22. Refer to the relevant information in the corresponding section for the A22.

Terminal Arrangement (Bottom View)



Terminal Connection



■ Panel Cutouts (Top View)



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

Installation

The M22 uses the same installation method as the A22. Refer to the relevant information in the Installation section for the A22.

Precautions

The precautions for the M22 are the same as those for the A22. Refer to the relevant information in the *Precautions* section for the A22 and the *Technical Information for Pushbutton Switches* (Cat. No. A143).

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS. To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527

Cat. No. A131-E1-02

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