# M22

# 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



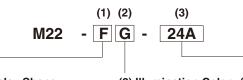
**R R** (8)

#### **List of Models**

	Appearance	
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) Display Shape

Code	Description	
F	Round/Flat	
С	Square/Projection	

#### (2) Illumination Color (3) Light Source

### Without Voltage Reduction Unit

W	Description	Code
(	Red	R
_	Green	G
_	Yellow	Υ
_	White	W
	Blue	Α
_		

Code	Туре	Operating voltage
6D		6 VDC
6A	LFD	6 VAC
12A		12 VAC/VDC
24A		24 VAC/VDC
5	Incan-	5 VAC/VDC
12	descent	12 VAC/VDC
24	lamp	24 VAC/VDC

#### With Voltage Reduction Unit

Code	Type	Operating voltage
T1	LED	100 VAC
T2		200 VAC

<sup>•</sup> LED incorporates the 24-VAC/VDC type.

# **Ordering Information**

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

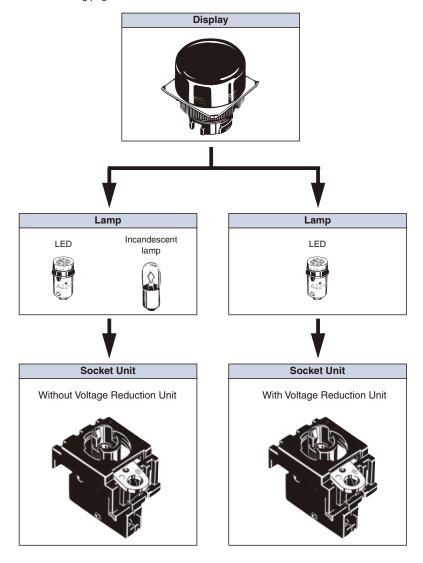
Appeara	ance	Lighting	Operating voltage	Set	Illumination color
Round/Flat		cs.49	6 VDC	M22-F□-6D	
without Voltage Reduction Unit		LED	6 VAC	M22-F□-6A	
M22-F		LLD	12 VAC/VDC	M22-F□-12A	
	A sells		24 VAC/VDC	M22-F□-24A	
Round/Flat with Voltage Reduction Unit	with Voltage Reduction Unit	LED	100 VAC	M22-F□-T1	
M22-F		LLD	200 VAC	M22-F□-T2	R (red) Y (yellow) G (green) W (white) A (blue)
Square/Projection		LED	6 VDC	M22-C□-6D	
without Voltage Reduction Unit			6 VAC	M22-C□-6A	
M22-C			12 VAC/VDC	M22-C□-12A	
			24 VAC/VDC	M22-C□-24A	
Square/Projection with Voltage Reduction Unit M22-C	LED	100 VAC	M22-C□-T1		
		200 VAC	M22-C□-T2		

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	
Round (Flat)	Red	M22-FR	
	Green	M22-FG	
	Yellow	M22-FY	
	White	M22-FW	
	Blue	M22-FA	
Square (Projection)	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		
		Red	A22-6DR	_	_	_
	DC	Green	A22-6DG	_	_	_
		Yellow *	A22-6DY	_	_	_
		Blue	A22-6DA	_	_	_
		Red	A22-6AR	_	_	_
A22-	AC	Green	A22-6AG	_	_	_
A22-	AC	Yellow *	A22-6AY	_	_	_
	Blue	Blue	A22-6AA	_	_	_
	AC and DC Green	Red	_	A22-12AR	A22-24AR	A22-24ASR
		Green	_	A22-12AG	A22-24AG	A22-24ASG
	AC and DC	Yellow *	_	A22-12AY	A22-24AY	A22-24ASY
	Blu	Blue	_	A22-12AA	A22-24AA	A22-24ASA

Note: For voltage-reduction lighting, use the A22-24A\(\subseteq\). 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 $\square$ . 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 ±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	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

#### **Voltage-reduction Lighting**

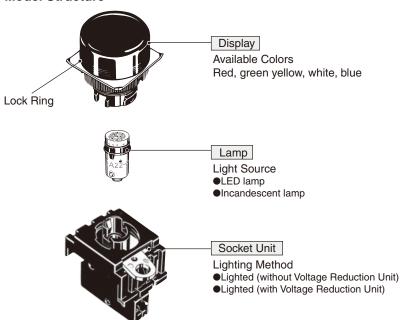
Rated voltage	Operating voltage	Applicable lamp (BA9S/Base: 13)	
110 VAC	100 VAC (95 to 115 V)	LED lamp (A22-24□)	
220 VAC	200 VAC (190 to 230 V)		

#### **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**

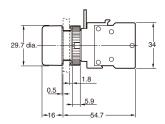
#### **Model Structure**



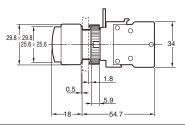
Dimensions (Unit: mm)

#### Indicators

#### Round M22-F

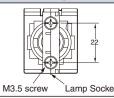


#### Square M22-C



# 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**

Туре	Without Voltage Reduction Unit	With Voltage Reduction Unit
Terminal Connection	(+) (×) (×)	X) X

#### **Panel Cutouts**





 $22.3^{+0.4}_{0}$  dia.  $25^{+0.5}_{0}$  dia.

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.