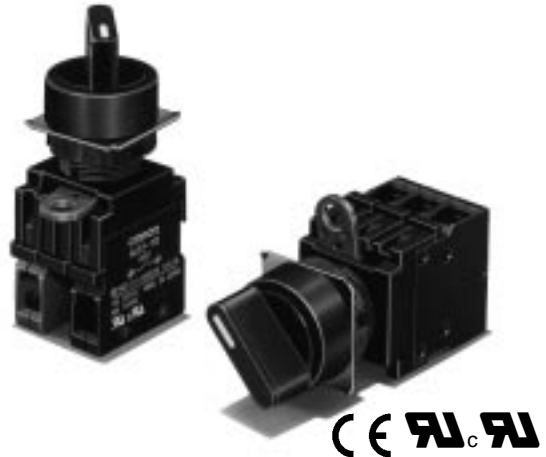


Knob-type Selector Switch

A22S/W

Install in 22-dia. or 25-dia. Panel Cutout

- Easy mounting and removal of Switch Unit.
- Increase wiring efficiency with three-row mounting of Switch Blocks.
- Finger protection mechanism on Switch Unit provided as a standard feature.
- Use 25-dia. ring to install in 25-dia. panel cutouts.
- Mounted using either open-type (fork-type) or closed-type (round-type) crimp terminals.
- IP65 oil resistance (non-lighted models)
IP65 (lighted models)
EN60947-5-1
- UL approved (File No. E41515).



Ordering Information

■ Model Number Legend (Completely Assembled)

Shipped as a set which includes the Selector, Lamp (lighted models only), and Switch.

A22 1 - 2 - 3 - 4 - 5

1 Lighted/Non-lighted

Code	Description
S	Non-lighted
W	Lighted

2 Number of Notches/Reset Method

Code	Description
2M	2 notches/Manual
2A	2 notches/Automatic
3M	3 notches/Manual
3A	3 notches/Automatic

3 Illumination Color

Code	Description
None	Black (for non-lighted models only)
R	Red
G	Green
Y	Yellow
A	Blue

4 Light Source

Without Voltage Reduction Unit		
Code	Rated Voltage	
None	Non-lighted	
6D	LED	6 VDC
6A		6 VAC
12A		12 VAC/VDC
24A		24 VAC/VDC
5	Incandescent lamp	5 VAC/VDC
12		12 VAC/VDC
24		24 VAC/VDC

With Voltage Reduction Unit		
	Non-lighted	
None		
T1	LED	110 VAC (See note 2.)
T2		220 VAC (See note 3.)

5 Contacts

Code	Description
10	SPST-NO (See note 1.)
01	SPST-NC (See note 1.)
11	SPST-NO + SPST-NC
20	DPST-NO
02	DPST-NC

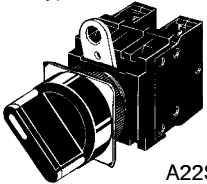




- Note:**
1. For models with 2 notches
 2. The contacts are rated for standard loads. For microloads, refer to *Accessories* on page 184.

- Note:**
1. 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 models.
 2. Operational voltage: 95 to 115 VAC
 3. Operational voltage: 190 to 230 VAC

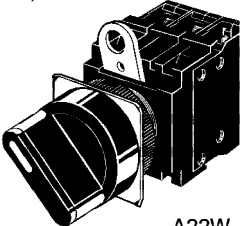





■ List of Models

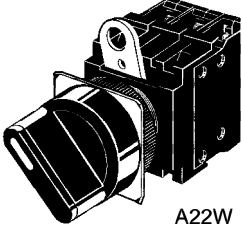

Knob-type Selector Switch (Completely Assembled)

Non-lighted

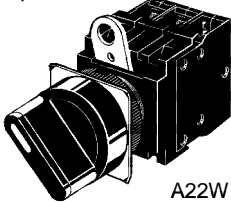




Appearance	Number of notches	Resetting method	Output	Model	Color of Selector
Knob-type Selector Switch  A22S	2 notches	Manual 	SPST-NO	A22S-2M-10	Black
			SPST-NC	A22S-2M-01	
			SPST-NO + SPST-NC	A22S-2M-11	
			DPST-NO	A22S-2M-20	
			DPST-NC	A22S-2M-02	
		Automatic 	SPST-NO	A22S-2A-10	
			SPST-NC	A22S-2A-01	
			SPST-NO + SPST-NC	A22S-2A-11	
			DPST-NO	A22S-2A-20	
			DPST-NC	A22S-2A-02	
	3 notches	Manual 	SPST-NO + SPST-NC	A22S-3M-11	
			DPST-NO	A22S-3M-20	
			DPST-NC	A22S-3M-02	
		Automatic 	SPST-NO + SPST-NC	A22S-3A-11	
			DPST-NO	A22S-3A-20	
DPST-NC			A22S-3A-02		

Lighted (Without Voltage Reduction Unit)

Appearance	Number of notches	Resetting method	Output	Rated voltage	Model	Illumination color
Knob-type Selector Switch LED lighting (without Voltage Reduction Unit)  A22W	2 notches	Manual 	SPST-NO	6 VDC	A22W-2M□-6D-10	Insert one of the following letters into the box □. R (red) Y (yellow) G (green) A (blue)
				6 VAC	A22W-2M□-6A-10	
				12 VAC/VDC	A22W-2M□-12A-10	
				24 VAC/VDC	A22W-2M□-24A-10	
			SPST-NC	6 VDC	A22W-2M□-6D-01	
				6 VAC	A22W-2M□-6A-01	
				12 VAC/VDC	A22W-2M□-12A-01	
				24 VAC/VDC	A22W-2M□-24A-01	
			SPST-NO + SPST-NC	6 VDC	A22W-2M□-6D-11	
				6 VAC	A22W-2M□-6A-11	
				12 VAC/VDC	A22W-2M□-12A-11	
				24 VAC/VDC	A22W-2M□-24A-11	
			DPST-NO	6 VDC	A22W-2M□-6D-20	
				6 VAC	A22W-2M□-6A-20	
				12 VAC/VDC	A22W-2M□-12A-20	
				24 VAC/VDC	A22W-2M□-24A-20	
			DPST-NC	6 VDC	A22W-2M□-6D-02	
				6 VAC	A22W-2M□-6A-02	
	12 VAC/VDC	A22W-2M□-12A-02				
	24 VAC/VDC	A22W-2M□-24A-02				
	Automatic 	2 notches	Automatic 	SPST-NO	6 VDC	A22W-2A□-6D-10
					6 VAC	A22W-2A□-6A-10
					12 VAC/VDC	A22W-2A□-12A-10
					24 VAC/VDC	A22W-2A□-24A-10
				SPST-NC	6 VDC	A22W-2A□-6D-01
					6 VAC	A22W-2A□-6A-01
					12 VAC/VDC	A22W-2A□-12A-01
					24 VAC/VDC	A22W-2A□-24A-01
				SPST-NO + SPST-NC	6 VDC	A22W-2A□-6D-11
					6 VAC	A22W-2A□-6A-11
12 VAC/VDC					A22W-2A□-12A-11	
24 VAC/VDC					A22W-2A□-24A-11	
DPST-NO				6 VDC	A22W-2A□-6D-20	
				6 VAC	A22W-2A□-6A-20	
				12 VAC/VDC	A22W-2A□-12A-20	
				24 VAC/VDC	A22W-2A□-24A-20	
DPST-NC				6 VDC	A22W-2A□-6D-02	
				6 VAC	A22W-2A□-6A-02	
	12 VAC/VDC	A22W-2A□-12A-02				
	24 VAC/VDC	A22W-2A□-24A-02				
3 notches	Manual 	Manual 	SPST-NO + SPST-NC	6 VDC	A22W-3M□-6D-11	
				6 VAC	A22W-3M□-6A-11	
				12 VAC/VDC	A22W-3M□-12A-11	
				24 VAC/VDC	A22W-3M□-24A-11	
			DPST-NO	6 VDC	A22W-3M□-6D-20	
				6 VAC	A22W-3M□-6A-20	
				12 VAC/VDC	A22W-3M□-12A-20	
				24 VAC/VDC	A22W-3M□-24A-20	
			DPST-NC	6 VDC	A22W-3M□-6D-02	
				6 VAC	A22W-3M□-6A-02	
				12 VAC/VDC	A22W-3M□-12A-02	
				24 VAC/VDC	A22W-3M□-24A-02	

Appearance	Number of notches	Resetting method	Output	Rated voltage	Model	Illumination color
Knob-type Selector Switch LED lighting (without Voltage Reduction Unit)  A22W	3 notches	Automatic 	SPST-NO + SPST-NC	6 VDC	A22W-3A□-6D-11	Insert one of the following letters into the box □. R (red) Y (yellow) G (green) A (blue)
				6 VAC	A22W-3A□-6A-11	
				12 VAC/VDC	A22W-3A□-12A-11	
				24 VAC/VDC	A22W-3A□-24A-11	
			DPST-NO	6 VDC	A22W-3A□-6D-20	
				6 VAC	A22W-3A□-6A-20	
				12 VAC/VDC	A22W-3A□-12A-20	
				24 VAC/VDC	A22W-3A□-24A-20	
			DPST-NC	6 VDC	A22W-3A□-6D-02	
				6 VAC	A22W-3A□-6A-02	
				12 VAC/VDC	A22W-3A□-12A-02	
				24 VAC/VDC	A22W-3A□-24A-02	

Lighted (With Voltage Reduction Unit)

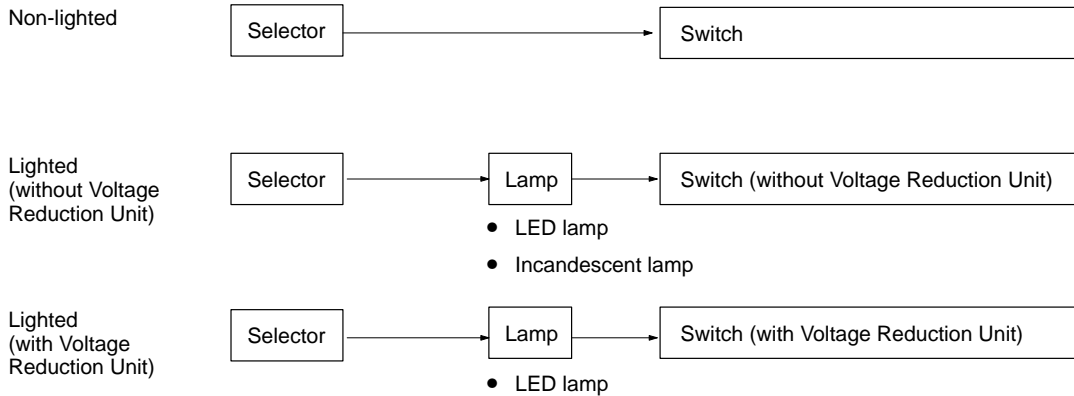
Appearance	Number of notches	Resetting method	Output	Rated voltage	Model	Selector symbol (color)		
Knob-type Selector Switch LED voltage-reduction lighting (with Voltage Reduction Unit)  A22W	2 notches	Manual 	SPST-NO	110 VAC	A22W-2M□-T1-10	Insert one of the following letters into the box □. R (red) Y (yellow) G (green) A (blue)		
				220 VAC	A22W-2M□-T2-10			
			SPST-NC	110 VAC	A22W-2M□-T1-01			
				220 VAC	A22W-2M□-T2-01			
			SPST-NO + SPST-NC	110 VAC	A22W-2M□-T1-11			
				220 VAC	A22W-2M□-T2-11			
			DPST-NO	110 VAC	A22W-2M□-T1-20			
				220 VAC	A22W-2M□-T2-20			
			DPST-NC	110 VAC	A22W-2M□-T1-02			
				220 VAC	A22W-2M□-T2-02			
			Automatic 	2 notches	SPST-NO		110 VAC	A22W-2A□-T1-10
							220 VAC	A22W-2A□-T2-10
	SPST-NC	110 VAC			A22W-2A□-T1-01			
		220 VAC			A22W-2A□-T2-01			
	SPST-NO + SPST-NC	110 VAC			A22W-2A□-T1-11			
		220 VAC			A22W-2A□-T2-11			
	DPST-NO	110 VAC			A22W-2A□-T1-20			
		220 VAC			A22W-2A□-T2-20			
	DPST-NC	110 VAC			A22W-2A□-T1-02			
		220 VAC			A22W-2A□-T2-02			
	3 notches	Manual 			SPST-NO + SPST-NC	110 VAC	A22W-3M□-T1-11	
						220 VAC	A22W-3M□-T2-11	
			DPST-NO	110 VAC	A22W-3M□-T1-20			
				220 VAC	A22W-3M□-T2-20			
DPST-NC			110 VAC	A22W-3M□-T1-02				
			220 VAC	A22W-3M□-T2-02				
Automatic 		SPST-NO + SPST-NC	110 VAC	A22W-3A□-T1-11				
			220 VAC	A22W-3A□-T2-11				
		DPST-NO	110 VAC	A22W-3A□-T1-20				
			220 VAC	A22W-3A□-T2-20				
		DPST-NC	110 VAC	A22W-3A□-T1-02				
			220 VAC	A22W-3A□-T2-02				

Note: When ordering, specify the symbol that indicates color of the Selector in the □ of the model number.

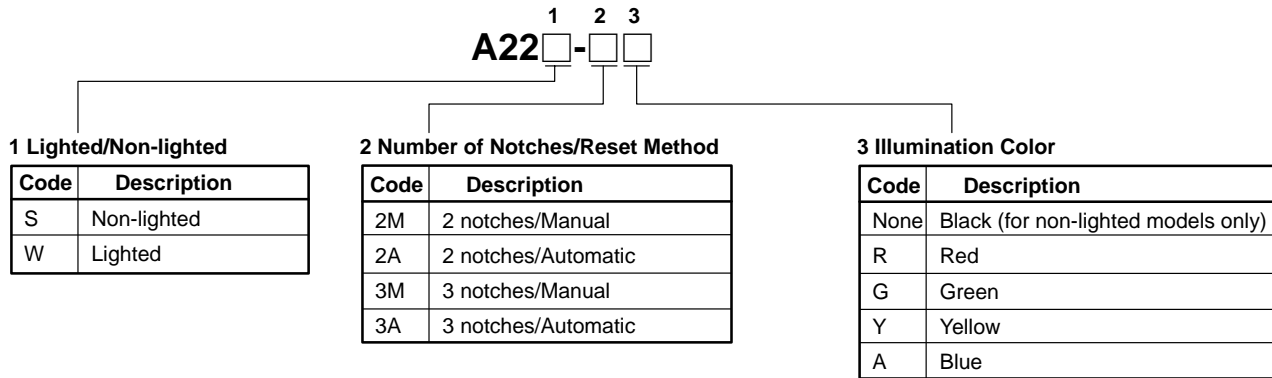
■ Model Number Legend (Subassembly)

The Selector, Lamp, or Switch 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.

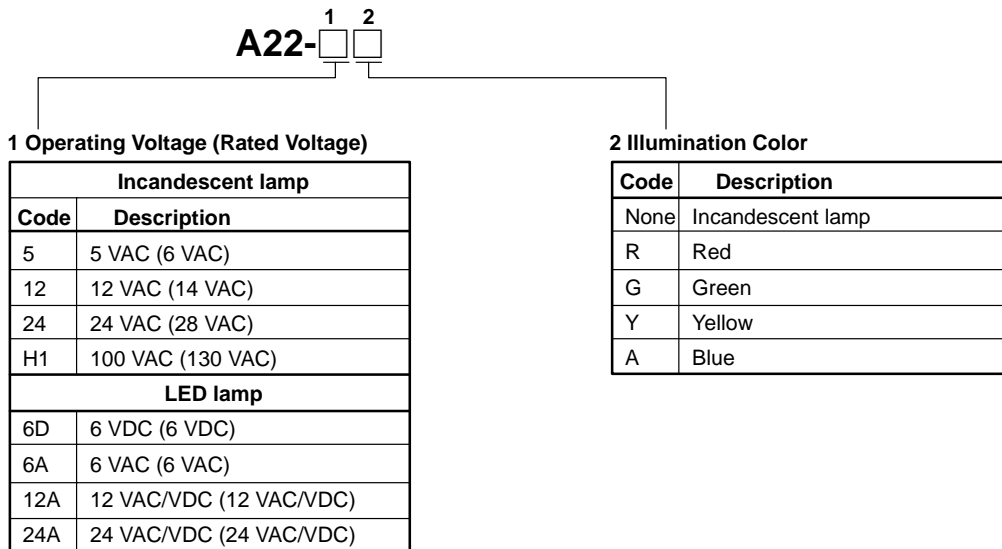
Unit Combinations



1. Selector



2. Lamp



3. Switch (General-purpose Load)

1
2
3
A22 - **M** -

1 Lighted/Non-lighted

Code	Description
None	Non-lighted
L	Lighted

2 Contacts

Code	Description
10	SPST-NO (2-notch only)
01	SPST-NC (2-notch only)
11	SPST-NO + SPST-NC
20	DPST-NO
02	DPST-NC

3 Voltage Reduction Unit (Lighted Models Only)

Code	Description
None	Without Voltage Reduction Unit
T1	110 VAC (See note 1)
T2	220 VAC (See note 2)

Note: 1. Operational voltage: 95 to 115 VAC
2. Operational voltage: 190 to 230 VAC

■ List of Models

■ Knob-type Selector Switch (Subassembly)

Selectors

Non-lighted (Color: Only Black is Available)

Notches	Reset method	Standard lever IP65 (oil-resistant)
2 notches	Manual	A22S-2M
	Automatic	A22S-2A
3 notches	Manual	A22S-3M
	Automatic	A22S-3A
	Left automatic	A22S-3AM
	Right automatic	A22S-3MA

Notches	Reset method	Standard lever IP65 (oil-resistant)
2 notches	Manual	A22S-C2M
	Automatic	A22S-C2A
3 notches	Manual	A22S-C3M
	Automatic	A22S-C3A
	Left automatic	A22S-C3AM
	Right automatic	A22S-C3MA


Lighted

Notches	Reset method	Selector color	Standard lever IP65		
2 notches	Manual	Red	A22W-2MR		
		Green	A22W-2MG		
		Yellow	A22W-2MY		
		Blue	A22W-2MA		
		Automatic	Red	A22W-2AR	
			Green	A22W-2AG	
	Yellow		A22W-2AY		
	Blue		A22W-2AA		
	3 notches		Manual	Red	A22W-3MR
				Green	A22W-3MG
		Yellow		A22W-3MY	
		Blue		A22W-3MA	
Automatic		Red		A22W-3AR	
		Green		A22W-3AG	
		Yellow	A22W-3AY		
		Blue	A22W-3AA		
		Left automatic	Red	A22W-3AMR	
			Green	A22W-3AMG	
Yellow			A22W-3AMY		
Blue			A22W-3AMA		
Right automatic	Red		A22W-3MAR		
	Green		A22W-3MAG		
	Yellow	A22W-3MAY			
	Blue	A22W-3MAA			

Note: Either incandescent lamps or LED lamps can be used with the above models.

Lamps


LED Lamp

Appearance	Rated voltage		6 V	12 V	24 V	24 V Super-bright
	AC/DC	LED light	Model			
	DC	Red	A22-6DR	---	---	---
		Green	A22-6DG	---	---	---
		Yellow (See note 2.)	A22-6DY	---	---	---
		Blue	A22-6DA	---	---	---
	AC	Red	A22-6AR	---	---	---
		Green	A22-6AG	---	---	---
		Yellow (See note 2.)	A22-6AY	---	---	---
		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□.

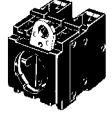
2. Used when the Selector color is yellow or white.

Incandescent Lamp

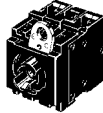
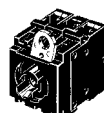
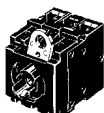
Rated voltage	6 VAC/VDC	14 VAC/VDC	28 VAC/VDC	130 VAC/VDC
	A22-5	A22-12	A22-24	A22-H1

Switches (General-purpose Load)

Non-lighted

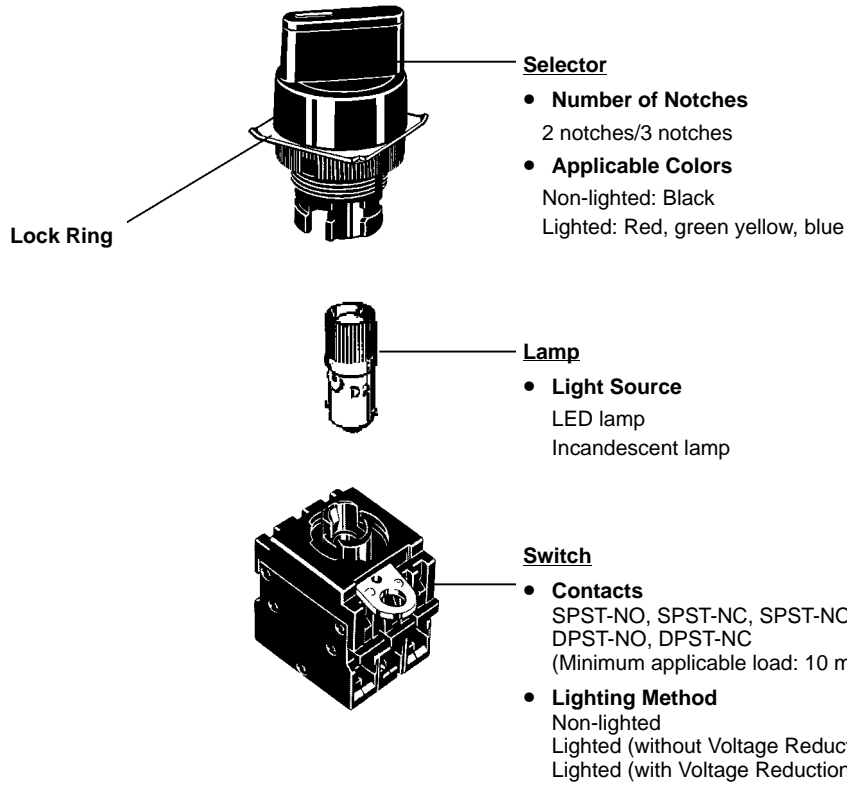
Switch operation	Contacts	Model
		
Automatic	SPST-NO	A22-10M
	SPST-NC	A22-01M
	SPST-NO + SPST-NC	A22-11M
	DPST-NO	A22-20M
	DPST-NC	A22-02M

Lighted

Switch operation	Contacts	Voltage-reduction circuit		
		Without Voltage Reduction Unit	With Voltage Reduction Unit	
			110 VAC	220 VAC
Automatic	SPST-NO			
	SPST-NC	A22L-10M	A22L-10M-T1	A22L-10M-T2
	SPST-NO + SPST-NC	A22L-01M	A22L-01M-T1	A22L-01M-T2
	DPST-NO	A22L-11M	A22L-11M-T1	A22L-11M-T2
	DPST-NC	A22L-20M	A22L-20M-T1	A22L-20M-T2
	DPST-NC	A22L-02M	A22L-02M-T1	A22L-02M-T2

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

Nomenclature



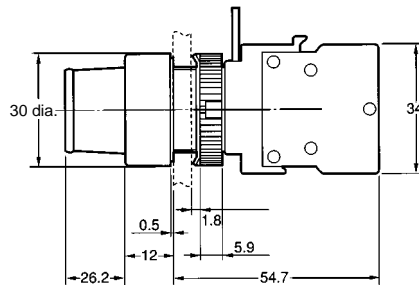
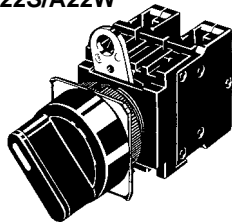
Refer to pages 181 onwards for specifications, accessories, installation, and precautions.

Dimensions

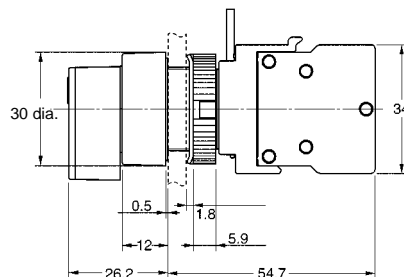
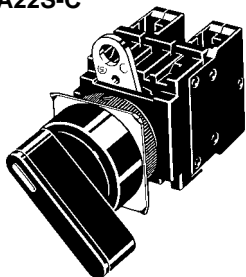
Note: All units are in millimeters unless otherwise indicated.

■ Knob-type Selector Switch (Lighted/Non-lighted)

A22S/A22W

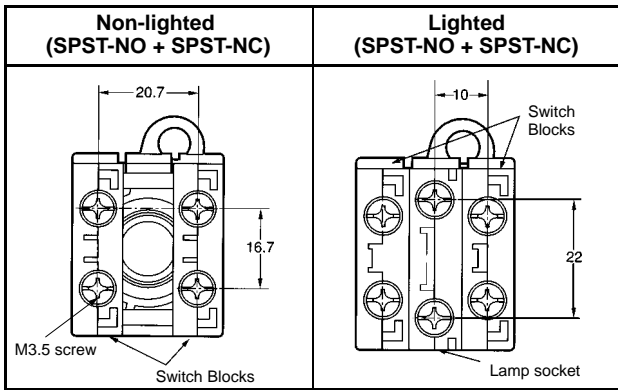


A22S-C

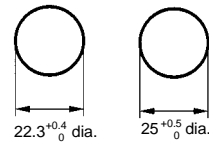


Terminal Arrangement

Terminal Arrangement (Bottom View)



Panel Cutout Dimensions



- Note:**
- 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.
 - Recommended panel thickness: 1 to 5 mm.
 - Use an A22Z-R25 Ring when mounting to a panel with 25-mm holes.

Terminal Connection

Type	Connection diagram
Non-lighted	<p>Bottom view</p>
Lighted without Voltage Reduction Unit	<p>Bottom view</p>
Lighted with Voltage Reduction Unit	<p>Bottom view</p>

Note: The above terminal connection diagrams are examples for SPST-NO + SPST-NC.

Contact Configuration

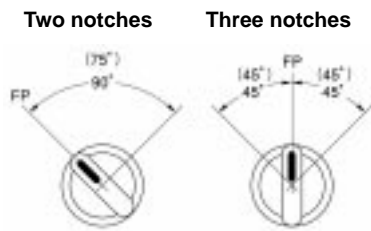
2-notch Type

Knob position	SPST-NO	SPST-NC	SPST-NO + SPST-NC	DPST-NO	DPST-NC

3-notch Type

Knob position	SPST-NO + SPST-NC	DPST-NO	DPST-NC

■ Operation Angle



- Note:**
1. The angle used for automatic reset is shown in parentheses.
 2. FP: Free Position

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.