

## 

30-mm Selector Switches Universal Design. Emphasis on Color Coding, Workability, and Safety.

### **Easy to Use**

- You can connect up to three Contact Blocks in one stage for multistage expansion.
- Screw terminal structure is compatible with round crimp terminals.

### Safety

- Easy-to-operate lock lever for secure locking.
- Easy-mounting Contact Blocks provide finger protection.
- Different colors of Contract Blocks (NO: blue, NC: orange) help prevent wiring errors.

#### **Product Lineup**

- Meets global safety standards.
- Many color variations.





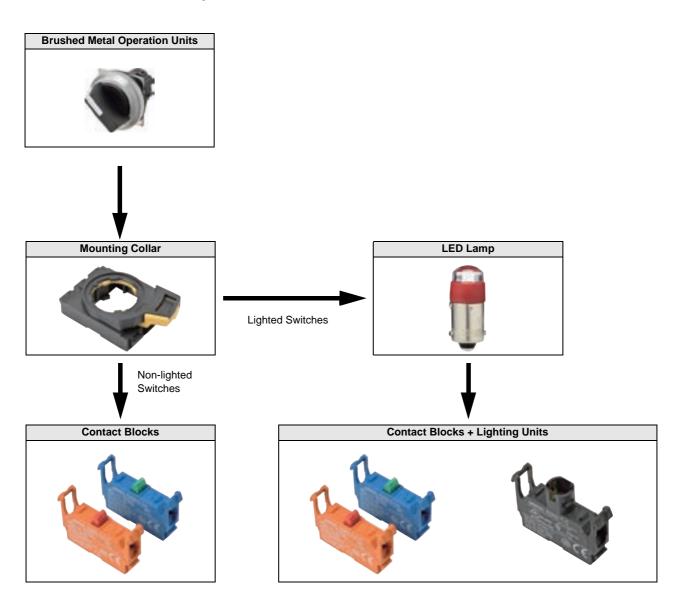
## **Operation Unit Colors**

			Red	Green	Yellow	White	Blue	Black	
Non-lighted Switches			•	•	•	•	•	•	
	Lighted A30NZ-□M□-T□A Switches Transparent	When not lit	Red	Green	Yellow	White	Blue	Orange	White
			•	•	<b>(</b>		•	•	•
		Red	Red	Green	Yellow	White	Blue	Orange	Opaque white*
		When lit							•

<sup>\*</sup>The colors when the Switches are lit are for transparent white Operation Units (code: TW) and yellow LED Lamps (code: Y).

### **Structure**

**Subassemblies** - - - - Order Operation Units, LED Lamps, Mounting Collars, and Contact Blocks individually. The same LED Lamps, Mounting Collars, and Contact Blocks are also used for the A22N Series.



Note: Use a Reinforcement Plate for greater strength.



- Specifications: Refer to page 6 and refer to the A30NZ-M $\square$ - $\square$ A.
- Accessories and tools: Refer to the A22NN/A22NL.
- Dimensions: Refer to page 7.

### **Model Number Structure**

**Model Number Legend** - Order Operation Units, LED Lamps, Mounting Collars, and Contact Blocks individually. The same LED Lamps, Mounting Collars, and Contact Blocks are also used for the A22N Series.

### Subassemblies

### (1) Type

Code	Туре
Z	Subassembly

### (2) Number of Positions and Bezel Material

Code	No. of positions	Bezel material
2M	2	Brushed Metal
3M	3	Brushed Metal

### (3) Reset Method

Code		Reset method	
М	Manual	Two-position manual	\/
IVI	Manual	Three-position manual	$\downarrow$
	Automatia reget en left	Two-position automatic	
L	L Automatic reset on left	Three-position left automatic	$\rightarrow$
R	Automatic reset on right	Three-position right automatic	
В	Automatic reset on left and right	Three-position left or right automatic	<b>\\</b>

### (4) Operation Unit Type and Color

Code	Type and color		
NR	Opaque red		
NG	Opaque green		
NY	Opaque yellow	Non-lighted models only	
NW	Opaque white	Non-lighted models only	
NA	Opaque blue		
NB	Opaque black		
TR	Transparent red		
TG	Transparent green		
TY	Transparent yellow	Lighted models only	
TW	Transparent white Lighted models or		
TA	Transparent blue		
TO	Transparent orange		

### (5) Degree of Protection

Code	Protection
Α	IP66

<sup>■</sup> Specifications: Refer to page 6 and refer to the A30NZ-M□□-□□A.

<sup>■</sup> Dimensions: Refer to page 7.

<sup>■</sup> Precautions for correct use: Refer to the A30NZ-M□□-□□A.

## **Ordering Information**

**Subassemblies** ----- Order Operation Units, LED Lamps, Mounting Collars, and Contact Blocks individually. The same LED Lamps, Mounting Collars, and Contact Blocks are also used for the A22N Series.

Operation Units
Non-lighted Switches

#### **Brushed metal** Bezel material and shape No. of Operation posi-tions Reset method Unit color Manual A30NZ-2MM-NRA Automatic reset on left A30NZ-2ML-NRA A30NZ-3MM-NRA Opaque red Automatic reset on left A30NZ-3ML-NRA Automatic reset on right A30NZ-3MR-NRA Automatic reset on left and right A30NZ-3MB-NRA Manual A30NZ-2MM-NGA 2 Automatic reset on left A30NZ-2ML-NGA Manual A30NZ-3MM-NGA Opaque green Automatic reset on left A30NZ-3ML-NGA 3 Automatic reset on right A30NZ-3MR-NGA Automatic reset on left and right A30NZ-3MB-NGA A30NZ-2MM-NYA Automatic reset on left A30NZ-2ML-NYA Manual A30NZ-3MM-NYA Opaque yellow Automatic reset on left A30NZ-3ML-NYA 3 A30NZ-3MR-NYA Automatic reset on right A30NZ-3MB-NYA Automatic reset on left and right A30NZ-2MM-NWA Manual 2 Automatic reset on left A30NZ-2ML-NWA Manual A30NZ-3MM-NWA Opaque Automatic reset on left white A30NZ-3ML-NWA Automatic reset on right A30NZ-3MR-NWA Automatic reset on left and right A30NZ-3MB-NWA Manual A30NZ-2MM-NAA 2 Automatic reset on left A30NZ-2ML-NAA A30NZ-3MM-NAA Manual Opaque A30NZ-3ML-NAA Automatic reset on left 3 Automatic reset on right A30NZ-3MR-NAA Automatic reset on left and right A30NZ-3MB-NAA Manual A30NZ-2MM-NBA 2 Automatic reset on left A30NZ-2ML-NBA A30NZ-3MM-NBA Opaque black A30NZ-3ML-NBA Automatic reset on left 3 Automatic reset on right A30NZ-3MR-NBA A30NZ-3MB-NBA Automatic reset on left and right

#### **Lighted Switches**

			Brushed metal
	Bezel mate	rial and shape	
No. of posi-tions	Reset method	Operation Unit color	Model
2	Manual		A30NZ-2MM-TRA
	Automatic reset on left		A30NZ-2ML-TRA
	Manual	Transparent	A30NZ-3MM-TRA
3	Automatic reset on left	red	A30NZ-3ML-TRA
J	Automatic reset on right		A30NZ-3MR-TRA
	Automatic reset on left and right		A30NZ-3MB-TRA
2	Manual		A30NZ-2MM-TGA
_	Automatic reset on left		A30NZ-2ML-TGA
	Manual	Transparent	A30NZ-3MM-TGA
3	Automatic reset on left	green	A30NZ-3ML-TGA
3	Automatic reset on right		A30NZ-3MR-TGA
	Automatic reset on left and right		A30NZ-3MB-TGA
2	Manual		A30NZ-2MM-TYA
	Automatic reset on left		A30NZ-2ML-TYA
	Manual	Transparent	A30NZ-3MM-TYA
3	Automatic reset on left	yellow	A30NZ-3ML-TYA
3	Automatic reset on right		A30NZ-3MR-TYA
	Automatic reset on left and right		A30NZ-3MB-TYA
2	Manual		A30NZ-2MM-TWA
2	Automatic reset on left		A30NZ-2ML-TWA
	Manual	Transparent	A30NZ-3MM-TWA
3	Automatic reset on left	white	A30NZ-3ML-TWA
3	Automatic reset on right		A30NZ-3MR-TWA
	Automatic reset on left and right		A30NZ-3MB-TWA
2	Manual		A30NZ-2MM-TAA
2	Automatic reset on left		A30NZ-2ML-TAA
	Manual	Transparent	A30NZ-3MM-TAA
3	Automatic reset on left	blue	A30NZ-3ML-TAA
3	Automatic reset on right		A30NZ-3MR-TAA
	Automatic reset on left and right		A30NZ-3MB-TAA
2	Manual		A30NZ-2MM-TOA
2	Automatic reset on left		A30NZ-2ML-TOA
	Manual	Transparent	A30NZ-3MM-TOA
	Automatic reset on left	orange	A30NZ-3ML-TOA
3	Automatic reset on right		A30NZ-3MR-TOA
	Automatic reset on left and right		A30NZ-3MB-TOA

<sup>■</sup> Specifications: Refer to page 6 and refer to the A30NZ-M□□-□□A.

<sup>■</sup> Accessories and tools: Refer to the A22NN/A22NL.

<sup>■</sup> Dimensions: Refer to page 7.

## **Ordering Information**

**Subassemblies** -- Order Operation Units, LED Lamps, Mounting Collars, and Contact Blocks individually. The same LED Lamps, Mounting Collars, and Contact Blocks are also used for the A22N Series.

### **LED Lamps**

Annogrange	Applied voltage	6 VAC/DC	12 VAC/DC	24 VAC/DC	100/110/120 VAC	200/220/230/240 VAC
Appearance	Color	Model	Model	Model	Model	Model
	Red	A22NZ-L-RA	A22NZ-L-RB	A22NZ-L-RC	A22NZ-L-RD	A22NZ-L-RE
M 17 EM	Green	A22NZ-L-GA	A22NZ-L-GB	A22NZ-L-GC	A22NZ-L-GD	A22NZ-L-GE
	Yellow	A22NZ-L-YA	A22NZ-L-YB	A22NZ-L-YC	A22NZ-L-YD	A22NZ-L-YE
	White	A22NZ-L-WA	A22NZ-L-WB	A22NZ-L-WC	A22NZ-L-WD	A22NZ-L-WE
	Blue	A22NZ-L-AA	A22NZ-L-AB	A22NZ-L-AC	A22NZ-L-AD	A22NZ-L-AE
	Orange	A22NZ-L-OA	A22NZ-L-OB	A22NZ-L-OC	A22NZ-L-OD	A22NZ-L-OE

### **Mounting Collar**

Appearance	Model
	A22NZ-H-01

### **Contact Blocks**

Appearance	Contacts	Model
1.	SPST-NO (blue)	A22NZ-S-G1A
	SPST-NC (orange)	A22NZ-S-G1B

### **Lighting Units**

Appearance	Applied voltage	Model
A	6 VAC/DC	A22NZ-T-A
11	12 VAC/DC	A22NZ-T-B
	24 VAC/DC	A22NZ-T-C
ALC: NO.	100/110/120 VAC	A22NZ-T-D
	200/220/230/240 VAC	A22NZ-T-E

#### **Reinforcement Plate**

Appearance	Model
Sier	A22NZ-A-C01

### $A30NZ-\square M\square-\square\square A$

### **Specifications** (When Operation Unit, LED Lamp, Mounting Collar, and Contact Blocks Are Combined)

### **Characteristics**

	Туре	Selector Switches	
Item		Non-lighted models	Lighted models
Allowable operating frequency	Mechanical	30 operations/minute max.	
	Electrical	30 operations/minute max.	
Insulation resistance		100 MΩ min. (at 500 VDC)	
Contact resistance		100 mΩ max. (initial value)	
Dielectric strength	Between terminals of same polarity	2,500 VAC at 50/60 Hz for 1 min	
	Between each terminal and ground	2,500 VAC at 50/60 Hz for 1 min	
Vibration resistance	Malfunction	10 to 55 Hz, 1.5-mm double amplitude (malfunction within 1 ms)	
Shock resistance	Malfunction	1,000 m/s <sup>2</sup> max. (malfunction within 1 ms)	
Durability	Mechanical	500,000 operations min. (Switches with 3 positions: 300,000 operations min.)	
	Electrical	500,000 operations min. (Switches with 3 positions: 300,000 operations min.)	
Ambient operating temperature*1		−25 to 70°C	−25 to 55°C
Ambient operating humidity		35% to 85% RH	
Ambient storage temperature*1		-40 to 80°C	
Degree of protection*2		IP66	
Electric shock protection class		Class II	
PTI (tracking characteristic)		175	
Degree of contamination (application environment)		3 (IEC 60947-5-1)	
Weight		Approx. 60 g (for 1NC/1NO)	Approx. 75 g (for 1NC/1NO)

**<sup>\*1.</sup>** With no icing or condensation.

### **Operating Characteristics (for SPST-NO/SPST-NC)**

Туре	Selector Switches		
Item	Manual reset	Automatic reset	
Total travel force (torque) (maximum TTF)	0.6 N·m	0.6 N·m	
Total travel (TT)	2 positions: Approx. 90°, 3 positions: Approx. 45°		
Resetting force (torque) (RF)	0.5 N⋅m max.		

### **Examples of Linked Contact Blocks**

Contact Blocks Lighting Units **Selector Switches** 3 positions 2 positions Non-lighted Lighted Lighted Non-lighted Linking example

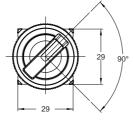
If you use three Contact Blocks in stage 1, you can add one more Contact Block in the middle of stage 2.
 Note: If you increase the number of Contact Blocks, evaluate the Switch under actual working conditions before permanent installation and use the Switch within a number of switching operations that will not adversely affect the Switch's performance.

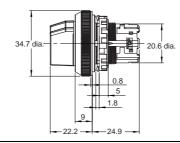
<sup>\*2.</sup> Degree of protection from the front of the panel.

Dimensions (Unit: mm)

### **Lighted and Non-lighted Selection Switches**

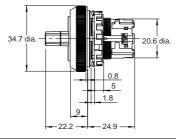
# Two-position Switches with Brushed Metal Bezels A30NZ-2M $\square$



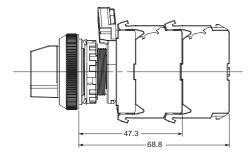


## Three-position Switches with Brushed Metal Bezels A30NZ-3M $\square$





### **Depth with Linked Units**



## **Safety Precautions**

Refer to Safety Precautions for All Pushbutton Switches/Indicators for common precautions. Read the Safety Precautions in the A30NZ-M□-□□A datasheet.

MEMO	
MENU	

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