

# AR series

## Control switch

### Features

For the AR series controlling switch, it is possible to apply 2 types ( $\varnothing 22$  /  $\varnothing 25$ ) panel cutout dimension and in case of using the guide bracket, it is even possible to use it with the  $\varnothing 30$  hole. Various functions and designs have made the selection choice wider and attachment and detachment of the actuator/switch part became very simple.



### Specification

Allowable operating frequency		30 times / min (mechanically / electrically)
Rated voltage (Ue)		500 V a.c 50/60 Hz
Rated current (Ie)		5 A 250 V 50/60 Hz
Applying categories		AC-12, AC-13, AC-14, AC-15
Insulation resistance		100 M $\Omega$ min
Dielectric strength		2,000 V a.c for 1 min (between the same polarities)
Vibration	Malfunction	10 ~ 55 Hz double amplitude 3 mm (within 1 ms)
Shock	Durability	Min 500 $\frac{m}{s^2}$
	Malfunction	Min 100 $\frac{m}{s^2}$
Life expectancy	Mechanically	500,000
	Electrically	100,000
Ambient temperature		-25 °C ~ 40 °C
Ambient humidity		45 ~ 85 % R.H
Storage temperature		-40 °C ~ 70 °C

### Incandescent lamp and LED specification

Classification	Power supply voltage (1st)	Incandescent lamp and LED capacity		Base
Incandescent lamp	220 V a.c (Trans dropping)	6.3 V	150 mA	BA9S (pin type)
	Without voltage dropping	12 V	80 mA	
		24 V	40 mA	
LED	220 V a.c (Trans dropping)	6 V	72 mA	BA9S (pin type)
	Without voltage dropping	12 V	36 mA	
		24 V	18 mA	

Control switch  
Combination display lightPower switch  
Main switch  
Cam switchLimit switch  
Micro switchHoist switch  
Foot switch  
Mono lever switchSign tower  
Signal lightBuzzer  
Terminal block  
Fuse holderControl box  
Cable connectorDiscontinued  
Products

## ●○ Accessories

Types	Appearance	Model	Reference
Switch unit		AR-10a (1a Contact)	Replaced or added by using a bolt
		AR-20b (1b Contact)	
Alternate operation unit		AR-50	Used when changing from a momentary operation to an alternate operation.
Name plate		AR-62	Attaching a name plate prevents the spinning and looks more organized.
		AR-63	
Spin prevention ring		AR-65	Prevents the spinning and looks more organized
		AR-66	Prevents the spinning
Guide bracket		AR-67	Used when attaching onto Ø30 hole panel
Square spinning prevention plate		AR-68	Prevents the spinning

## AR series

Types		Appearance	Model	Reference
Name plates	Standard		AR-71	Attached to the standard type name plate and used
	Large		AR-72	Attached to the large type name plate and used
Water proof cap			AR-73, 74	Water proof silicon transparency rubber cap AR-73 : For ARF-F AR-74 : For ARX-G
			AR-75, 76	Water proof silicon transparency rubber cap AR-75 : For ARE-5B AR-76 : For ARE-7B
Protective cover			AR-77	Used in order to prevent the switch to cause malfunction. But it only can be used with the flush type
Nut tightening tool			QR-82	Used to tightening the fixed nut at the back side of panel
Puller			AR-83	Used when replacing the light operation button.
Lamp extractor			UR-81	It is made of rubber and used when replacing the light bulb.

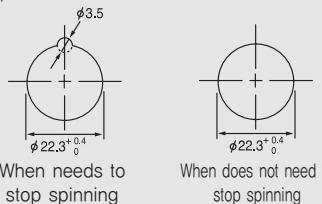
Control  
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## How to use

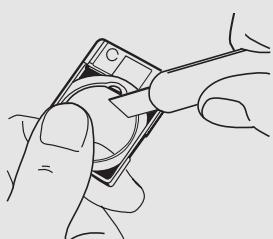
### When installing to the panel

#### ① Panel cutout dimension (in case of $22.3^{+0.4}_0$ )

- Select the panel cutout just like an image below when necessary. The thickness of mounting panel is 1mm to 8mm.

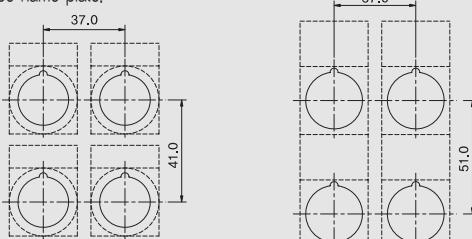


- To prevent its spinning, please use a name plate or a spin prevention ring
- When using a name plate that does not require spinning to stop, please cut the stopping area on the back side



#### ② Pattern mounting

- (1) Processing method for mounting the independent switch and standard type name plate, (2) Processing method for mounting the large name plate,



- Process the spinning prevention work in the direction of where Engravings plate is in present.

Note1) above cutout dimension is the minimum mounting size but excluded the large push button switch and long lever selector switch.

Note2) for the long lever switch, use 40x41 (standard name plate) or 40x51 (large name plate)

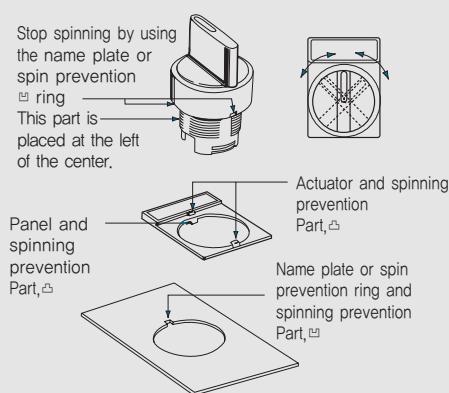
#### ③ Panel cutout dimension (in case of $25^{+0.5}_0$ )

- Must use the name plate or spin prevention ring
- Cut the stopping area in the name plate or spin prevention ring

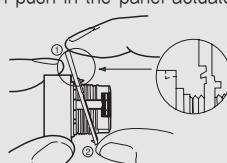
### About the replacement

#### ① Mounting method

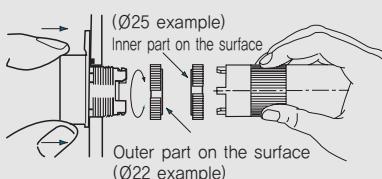
- When using the selector switch and key selector switch, please install the stopper by using the name plate or spin prevention ring



- When using the name plate or spin prevention ring, firstly insert in the 2 wings (on the surface) to the actuator in consecutive order (example: ① and ②) and then push in the panel actuator.

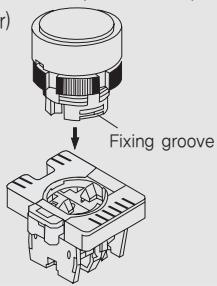


- Actuator is fixed to the panel by pushing in and able to mount by tightening from the backside.

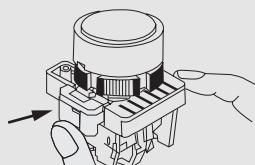


**② Mounting method of switch part and actuator**

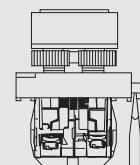
- Assemble it by pushing the switch part until it clicks  
(push to the direction where stopper of actuator and switch part become parallel to each other)

**③ Separating method of switch and actuator**

- Dismount the switch part by pushing the lever to the arrow direction.



- Dismount the switch part by inserting the flat (-) screwdriver near the lever and push it to the arrow direction. Use the flat (-) screwdriver below 5mm.

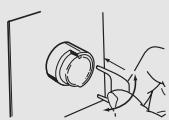


※ Dismounting by hand

※ Dismounting by using the flat screwdriver

**■ Replacing the color cap****① half guard type**

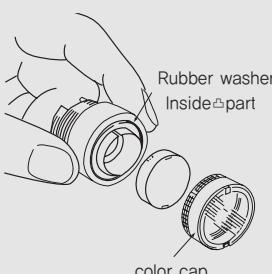
- Push the cap puller at near the part of color cap □ and rotate it,

**② extended type, full guard type, indicator and etc**

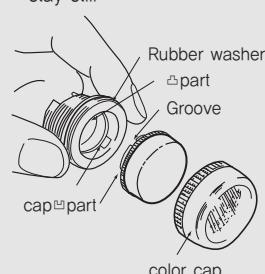
- Rotate the color cap by using hand (finger)

**■ Cap assembling method****① Illuminated push button switch**

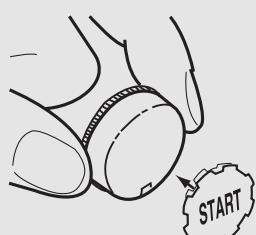
- Mount the color cap so that the protrusions □ inside the cap fit into the grooves in the pushbutton unit

**② Indicator**

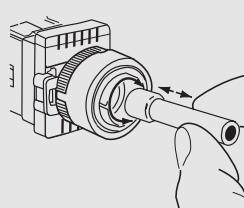
- Mount the color cap so that the protrusions inside the pushbutton unit fit into the grooves in the cap. Please make sure that grooves stay still

**■ Affixing Character Film**

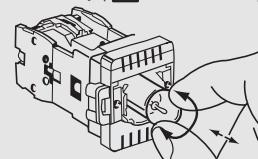
- Make sure that the protruding portions □ of the cap engage the cutout portions □ of the film.

**■ Replacing the lamp****① From the panel surface**

- Insert the lamp extractor into the lamp, and then rotate the extractor while pressing it

**② On the switch**

- Grip the lamp with fingertips and then rotate the lamp while pressing it against the switch. (△ handle with care)



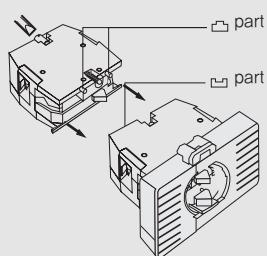
(Note) Use 6.3 V incandescent lamp when using voltage dropping transformer (trans dropping)

Control  
switch  
Combination  
display lightPower switch  
Main switch  
Cam switchLimit switch  
Micro switchHoist switch  
Foot switch  
Mono lever switchSign tower  
Signal lightBuzzer  
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Fuse holderControl box  
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Products

## ■ About the mounting method

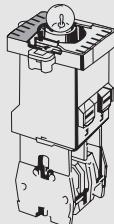
① Switch unit mounting method and position    ② Unit mounting method and position    ③ Ø30 bracket mounting method

- For the connection of switch unit, insert the part of mounting unit to the part and tighten it by the flat screwdriver. Connection of the mounting switch unit is possible up to 2 stages.

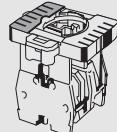


2 stages (Total 4 units)

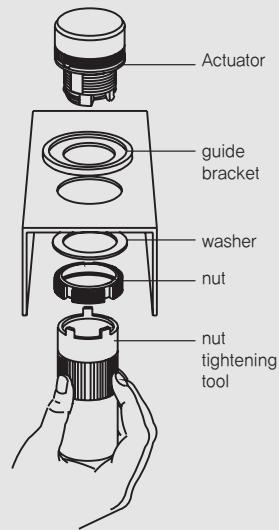
- When changing the momentary operation switch part to the alternative operation, please remove the switch unit, insert the alternative operation unit and lastly insert the switch unit.



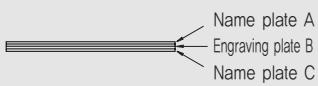
- Mounting position of alternative operation unit is the front side of switch unit.



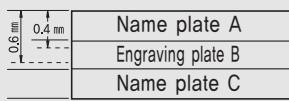
③ Ø30 bracket mounting method



## ■ About the Engraving plate

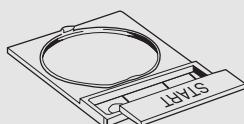


A	B	C
black	white	red

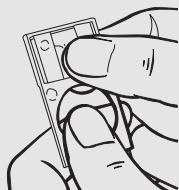


## ■ Mounting and dismounting Engraving plate

- Press name plate unit from the upper side.
- In case of selector switch or key selector switch, the direction of the characters will be changed by the mounting direction of the control panel.



- The name plate is easily removed by pressing engraving plate from the back.



## ● Correct usage

### ■ Mounting

- The tightening torque of mounting nuts is less than 1.96 N.m
- The tightening torque of mounting bolts of each unit is less than 0.49 N.m
- The thickness of panel is 1 ~ 8 mm

### ■ Wiring

- Do not get confused with the wires of lamp terminal and switch terminal
- Terminal bolt uses M3.5 and square washer
- The tightening torque of terminal bolt is less than 0.78 N.m
- Single wires, stranded wires and crimp terminal can be connected to the switch
- The width of crimp terminal is less than 7 mm

# AR series

## Push button switch

- Ø22 and Ø25 hole installation applicable due to the direction of inserting panel fixing nut
- Simple mounting and dismounting between the actuator and contact
- Consecutive installation possible due to the 37 mm x 41 mm installation space



### ● Suffix code

Model	Code				Description
ARF-	Actuator type	□	□	□	□
		F			Flush
		B			Rubber cover
		P			Extended
		G			Full guard
		H			Half guard
		S			Push button selectors
Operation function	1				Momentary
					Alternate
Contact composition		10			1a Contact
		20			1b Contact
		12			1a1b Contact
		11			2a Contact
		22			2b Contact
Color of actuator		R			RED
		G			GREEN
		Y			YELLOW
		A			BLUE
		B			BLACK

\* ARF-S (Push button selectors) is only available Black color.

Control  
switch  
Combination  
display light

Power switch  
Main switch  
Cam switch

Limit switch  
Micro switch

Hoist switch  
Foot switch  
Mono lever switch

Sign tower  
Signal light

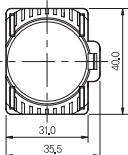
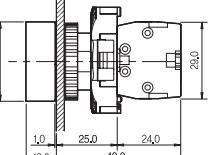
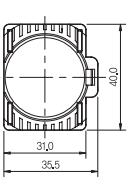
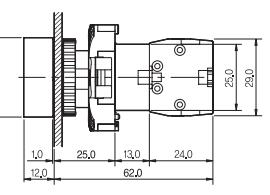
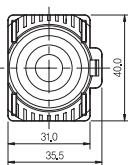
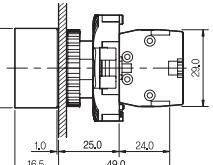
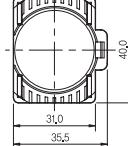
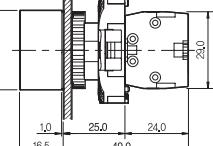
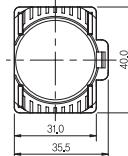
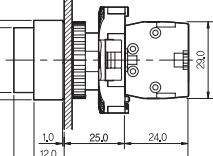
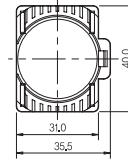
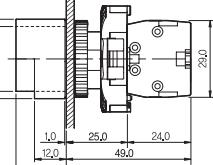
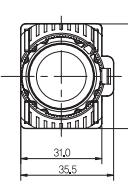
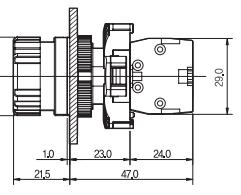
Buzzer  
Terminal block  
Fuse holder

Control box  
Cable connector

Discontinued  
Products

## Control switch / Combination display light

### ● Dimension (unit : mm)

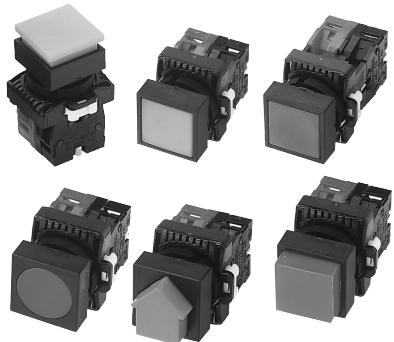
Model	Appearance	Dimension
ARF-F1 (Momentary operation)		 
ARF-F2 (Alternative operation)		 
ARF-B1 (Momentary operation)		 
ARF-G1 (Momentary operation)		 
ARF-P1 (Momentary operation)		 
ARF-H1 (Momentary operation)		 
ARF-S (Momentary operation)		 

※ Please refer the dimension of an alternative-operation switch to "ARF-F2"

# AR series

## Square push button switch

- Ø22 and Ø25 hole installation applicable due to the direction of inserting panel fixing nut
- Simple mounting and dismounting between actuator and contact
- Various square actuators
- Consecutive installation possible due to the 37 mm x 41 mm installation space



### ● Suffix code

Model	Code				Description
ARC-	Actuator type	□	□	□	□
		I			Arrow extended type
		S			Square flush type
		C			Round flush type
		P			Mushroom type
		PS			Square extended type
Operation function	1		Momentary		
	2		Alternate		
Contact composition	Contact composition		10	1a Contact	
	20	1b Contact			
	12	1a1b Contact			
	11	2a Contact			
	22	2b Contact			
Color of actuator	Color of actuator		R	RED	
	G	GREEN			
	Y	YELLOW			
	A	BLUE			

Control  
switch  
Combination  
display light

Power switch  
Main switch  
Cam switch

Limit switch  
Micro switch

Hoist switch  
Foot switch  
Mono lever switch

Sign tower  
Signal light

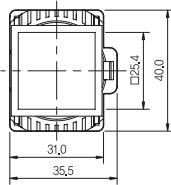
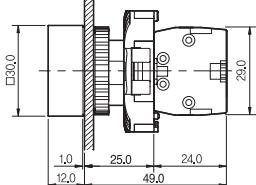
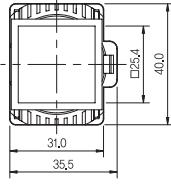
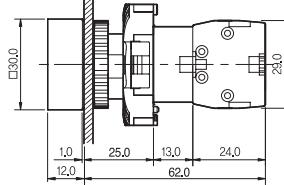
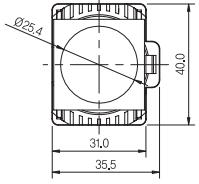
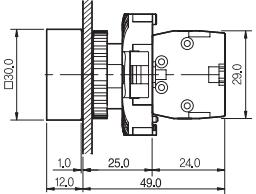
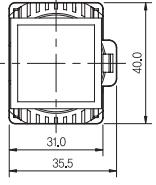
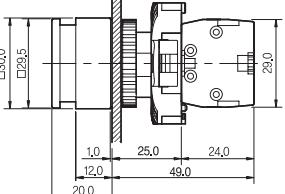
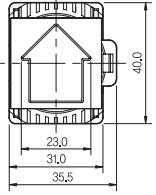
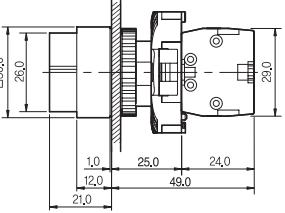
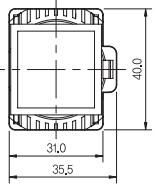
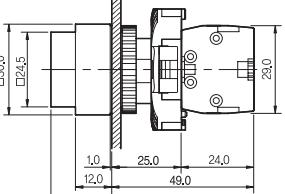
Buzzer  
Terminal block  
Fuse holder

Control box  
Cable connector

Discontinued  
Products

## Control switch / Combination display light

### ● Dimension (unit : mm)

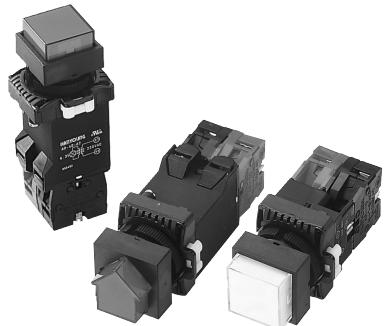
Model	Appearance	Dimension	
ARC-S1 (Momentary operation)			
ARC-S2 (Alternative operation)			
ARC-C1 (Momentary operation)			
ARC-P1 (Momentary operation)			
ARC-I1 (Momentary operation)			
ARC-PS1 (Momentary operation)			

※ Please refer the dimension of an alternative-operation switch to "ARC-S2"

# AR series

## Square illuminated push button switch

- Ø22 and Ø25 hole installation applicable due to the direction of inserting panel fixing nut
- Simple mounting and dismounting between actuator and contact / transformer
- Various square actuators
- Consecutive installation possible due to the 37 mm x 41 mm installation space



### ● Suffix code

Model	Code		Description
ARC-	<input type="checkbox"/>	<input type="checkbox"/>	Square illuminated push button switch
Actuator type	XI		Arrow illuminated extended type
	XS		Square illuminated flush type
Operation function	1		Momentary
	2		Alternate
Contact composition	10		1a Contact
	20		1b Contact
	12		1a1b Contact
	11		2a Contact
	22		2b Contact
Power supply voltage	A1	110 V a.c	Transformer attached (Incandescent lamp 6.3 V)
	A2	220 V a.c	
	LA1	110 V a.c	Transformer attached (LED 6 V)
	LA2	220 V a.c	
	L6	6 V	
	L12	12 V	Without voltage dropping unit (a.c/d.c) (LED)
	L24	24 V	
	LB1	110 V	
	LB2	220 V	
	B6	6.3 V	Without voltage dropping unit (a.c/d.c) (Incandescent lamp)
	B12	12 V	
	B24	24 V	
Color of actuator	R	RED	
	G	GREEN	
	Y	YELLOW	
	A	BLUE	
	W	WHITE	

\* LED bulb : 6 V, 12 V, 24 V, 110 V, 220 V

Control  
switch  
Combination  
display light

Power switch  
Main switch  
Cam switch

Limit switch  
Micro switch

Hoist switch  
Foot switch  
Mono lever switch

Sign tower  
Signal light

Buzzer  
Terminal block  
Fuse holder

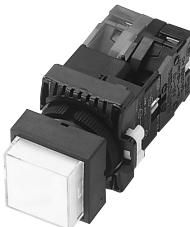
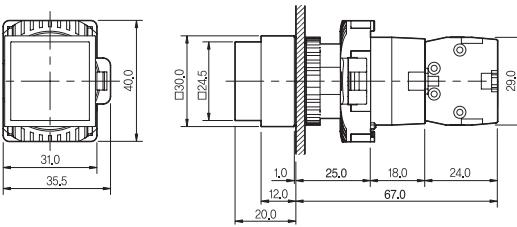
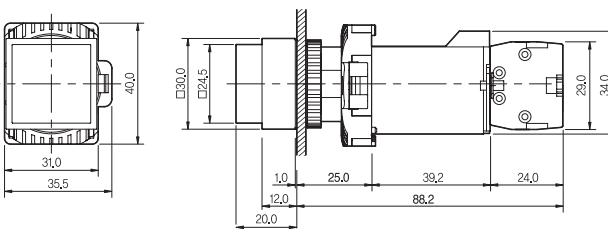
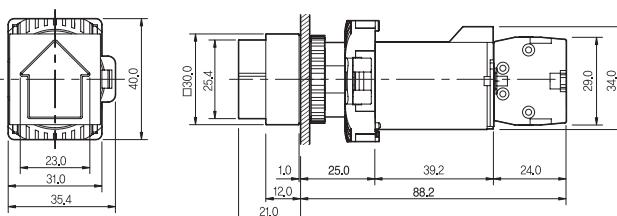
Control box  
Cable connector

Discontinued  
Products

### ● Incandescent lamp and LED specification

Classification	Power supply voltage (1st)	Incandescent lamp and LED capacity		Base
Incandescent lamp	110 V, 220 V a.c (transformer voltage dropping)	6.3 V	150 mA	BA9S (Pin type)
	Without voltage dropping unit	12 V	80 mA	
		24 V	40 mA	
LED	110 V, 220 V a.c (transformer voltage dropping)	6 V	72 mA	
	Without voltage dropping unit	12 V	36 mA	
		24 V	20 mA	
		110 V	5 mA	
		220 V	3 mA	

### ● Dimension (unit : mm)

Model	Appearance	Dimension
ARC-XS (Without voltage dropping)		 Front view dimensions: height 40.0, width 35.5, depth 31.0. Side view dimensions: height 39.0, width 24.5, depth 20.0. Hole positions: 1.0, 25.0, 18.0, 24.0.
ARC-XS (Transformer attached)		 Front view dimensions: height 40.0, width 35.5, depth 31.0. Side view dimensions: height 39.0, width 24.5, depth 20.0. Hole positions: 1.0, 25.0, 39.2, 24.0.
ARC-XI (Transformer attached)		 Front view dimensions: height 40.0, width 35.4, depth 31.0. Side view dimensions: height 39.0, width 25.4, depth 21.0. Hole positions: 1.0, 25.0, 39.2, 24.0.

# AR series

## Selector switch

- Ø22 and Ø25 hole installation applicable due to the direction of inserting panel fixing nut
- Simple mounting and dismounting between actuator and contact
- Consecutive installation possible due to the 37 mm x 41 mm installation space



### ● Suffix code

Model	Code	Description		
ARS-	□ □ □	Selector switch		
Actuator type	S	Standard type		
	L	Long lever type		
Operation function	2	2 positions	Alternative operation	-
	2R		Momentary operation	⟳
	3	3 positions (2a is standard)	Alternative operation	-
	3L		Left Momentary operation	⟲
	3R		Right Momentary operation	⟳
	3LR		Left/right Momentary operation	⟲⟳
	10	1a Contact		
Contact composition	20	1b Contact		
	12	1a1b Contact		
	11	2a Contact		
	22	2b Contact		

### ● Contact composition

#### ■ 2 positions action

Positions selection	1a Contact	1b Contact	1a1b Contact		2a Contact		2b Contact	
			1a	1b	1a	1a	1b	1b
1 positions	OFF	ON	OFF	ON	OFF	OFF	ON	ON
2 positions	ON	OFF	ON	OFF	ON	ON	OFF	OFF

Control switch  
Combination display lightPower switch  
Main switch  
Cam switchLimit switch  
Micro switchHoist switch  
Foot switch  
Mono lever switchSign tower  
Signal lightBuzzer  
Terminal block  
Fuse holderControl box  
Cable connectorDiscontinued  
Products

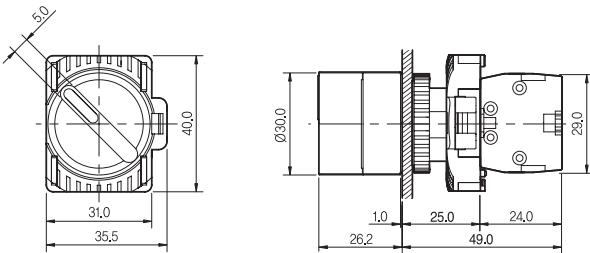
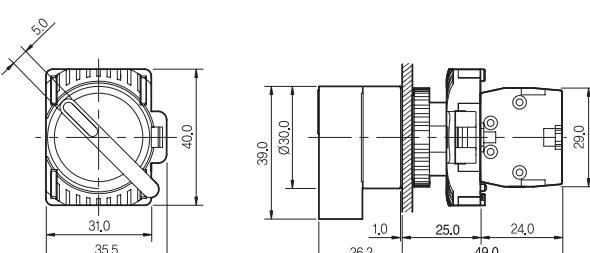
## Control switch / Combination display light

### ■ 3 positions action

Positions selection	1a Contact	1b Contact	1a1b Contact		2a Contact		2b Contact	
			1a	1b	1a	1a	1b	1b
1 positions	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON
2 positions	OFF	ON	OFF	ON	OFF	OFF	ON	ON
3 positions	ON	ON	ON	ON	OFF	ON	ON	OFF

\* Standard type: assembled left and right as 2a contact

### ● Dimension (unit : mm)

Model	Appearance	Dimension
ARS-S		
ARS-L		

# AR series

## Pilot lamp

- Ø22 and Ø25 hole installation applicable due to the direction of inserting panel fixing nut
- Simple mounting and dismounting between actuator and contact / transformer.
- Light source selection: incandescent lamp / LED
- Consecutive installation possible due to the 37 mm x 41 mm installation space



## ● Suffix code

Model	Code	Description
ARP-	□ □ □	Pilot lamp
Actuator type	F	Flush type
	R	Roulette type
Power supply voltage	A1	110 V a.c Transformer attached (Incandescent lamp 6.3 V)
	A2	220 V a.c
	LA1	110 V a.c Transformer attached
	LA2	220 V a.c (LED 6 V)
	L6	6 V
	L12	12 V
	L24	24 V
	LB1	110 V
	LB2	220 V
	B6	6.3 V
	B12	12 V
	B24	24 V
Color of actuator	R	Without voltage dropping unit (a.c/d.c) (LED)
	G	Without voltage dropping unit (a.c/d.c) (Incandescent lamp)
	Y	RED
	W	GREEN
	A	YELLOW
		WHITE
		BLUE

Control  
switch  
Combination  
display light

Power switch  
Main switch  
Cam switch

Limit switch  
Micro switch

Hoist switch  
Foot switch  
Mono lever switch

Sign tower  
Signal light

Buzzer  
Terminal block  
Fuse holder

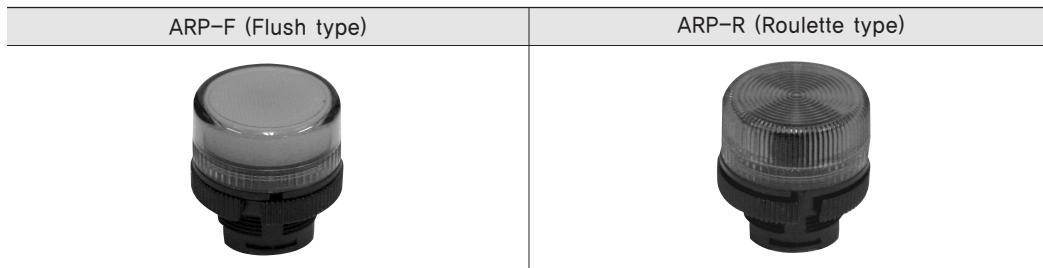
Control box  
Cable connector

Discontinued  
Products

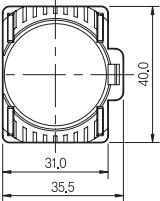
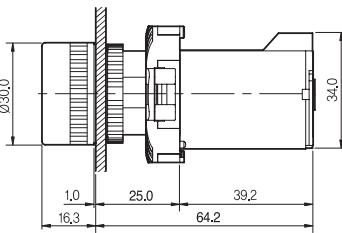
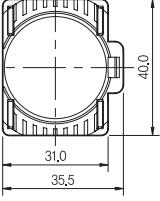
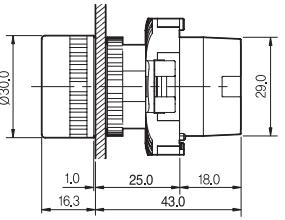
### ● Incandescent lamp and LED specification

Classification	Power supply voltage (1st)	Incandescent lamp and LED capacity		Base
Incandescent lamp	110 V, 220 V a.c (transformer voltages dropping)	6.3 V	150 mA	BA9S (Pin type)
	Without voltage dropping unit	12 V	80 mA	
		24 V	40 mA	
LED	110 V, 220 V a.c (transformer voltages dropping)	6 V	72 mA	
	Without voltage dropping unit	12 V	36 mA	
		24 V	20 mA	
		110 V	5 mA	
		220 V	3 mA	

### ● Shape of indicator



### ● Dimension (unit : mm)

Model	Appearance	Dimension	
ARP-F (Transformer attached)			
ARP-R (Without voltage dropping)			

# AR series

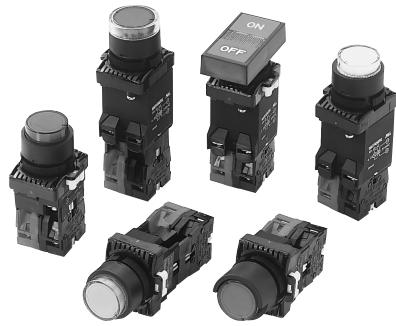
## Illuminated push button switch

- Ø22 and Ø25 hole installation applicable due to the direction of inserting panel fixing nut
- Simple mounting and dismounting between actuator and contact / transformer
- Various square actuators
- Consecutive installation possible due to the 37 mm x 41 mm installation space

### ● Suffix code

Model	Code					Description			
ARX-	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>					Illuminated push button switch			
Actuator type	P					Extended type			
	G								
	H								
	S								
Operation function	1					Momentary			
	2								
Contact composition		10							
		20							
		12							
		11							
		22							
Power supply voltage		A1	110 V a.c		Transformer attached (Incandescent lamp 6.3 V)				
		A2	220 V a.c						
		LA1	110 V a.c						
		LA2	220 V a.c						
		L6	6 V		Without voltage dropping unit (a.c/d.c) (LED)				
		L12	12 V						
		L24	24 V						
		LB1	110 V						
		LB2	220 V						
		B6	6.3 V		Without voltage dropping unit (a.c/d.c) (Incandescent lamp)				
		B12	12 V						
		B24	24 V						
Color of actuator		R	RED						
		G	GREEN						
		Y	YELLOW						
		W	WHITE						
		A	BLUE						

\* Actuator color of type ARX-S: red, green and assigned color



Control  
switch  
Combination  
display light

Power switch  
Main switch  
Cam switch

Micro switch  
Limit switch

Hoist switch  
Foot switch  
Mono lever switch

Sign tower  
Signal light

Buzzer  
Terminal block  
Fuse holder

Control box  
Cable connector

Discontinued  
Products

## ●● Incandescent lamp and LED specification

Classification	Power supply voltage (1st)	Incandescent lamp and LED capacity		Base
incandescent lamp	110 V, 220 V a.c (transformer voltages dropping)	6.3 V	150 mA	BA9S (Pin type)
	Without voltage dropping unit	12 V	80 mA	
		24 V	40 mA	
LED	110 V, 220 V a.c (transformer voltages dropping)	6 V	72 mA	
	Without voltage dropping unit	12 V	36 mA	
		24 V	20 mA	
		110 V	5 mA	
		220 V	3 mA	

## ●● Dimension (unit : mm)

Model	Appearance	Dimension
ARX-P Without voltage dropping (alternative operation)		
ARX-P Transformer attached (momentary operation)		
ARX-P Without voltage dropping (alternative operation)		

Model	Appearance	Dimension
ARX-P Transformer attached (alternative operation)		
ARX-G Without voltage dropping (momentary operation)		
ARX-H Without voltage dropping (momentary operation)		
ARX-S Without voltage dropping (momentary operation)		

※ ARX-S indication I and O are optional

Control  
switch  
Combination  
display light

Power switch  
Main switch  
Cam switch

Limit switch  
Micro switch

Hoist switch  
Foot switch  
Mono lever switch

Sign tower  
Signal light

Buzzer  
Terminal block  
Fuse holder

Control box  
Cable connector

Discontinued  
Products

## AR series

### Illuminated selector switch

- Ø22 and Ø25 hole installation applicable due to the direction of inserting panel fixing nut
- Simple mounting and dismantling between actuator and contact / transformer
- Consecutive installation possible due to the 37 mm x 41 mm installation space



### ● Suffix code

Model	Code		Description
ART-	□	□	Illuminated selector switch
Operation function	2		2 positions manual
	2R		2 positions automatic
	3		3 positions manual
Contact composition	10		1a Contact
	20		1b Contact
	12		1a1b Contact
	11		2a Contact
	22		2b Contact
Power supply voltage	A1	110 V a.c	Transformer attached (incandescent lamp 6.3 V)
	A2	220 V a.c	
	LA1	110 V a.c	Transformer attached (LED 6 V)
	LA2	220 V a.c	
	L6	6 V	
	L12	12 V	Without voltage dropping unit (a.c/d.c) (LED)
	L24	24 V	
	LB1	110 V	
	LB2	220 V	
	B6	6 V (6.3 V)	Without voltage dropping unit (a.c/d.c) (Incandescent lamp)
Color of actuator	B12	12 V	
	B24	24 V	
	R	RED	
	G	GREEN	
	Y	YELLOW	
	A	BLUE	

\* please refers to the incandescent lamp and LED specification

## ● Contact composition

### ■ 2 positions action

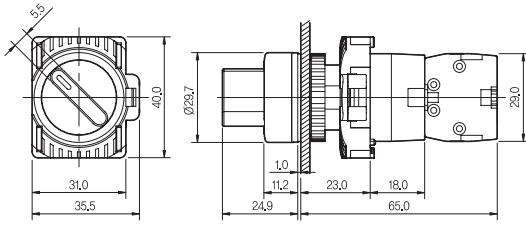
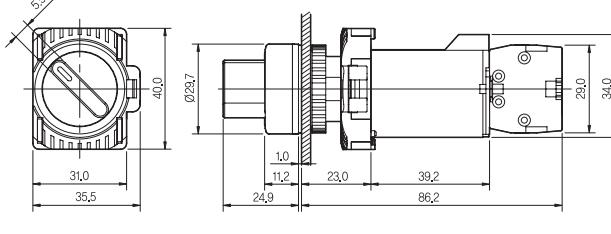
Positions selection	1a Contact	1b Contact	1a1b Contact		2a Contact		2b Contact	
			1a	1b	1a	1a	1b	1b
1 position	OFF	ON	OFF	ON	OFF	OFF	ON	ON
2 positions	ON	OFF	ON	OFF	ON	ON	OFF	OFF

### ■ 3 positions action

Positions selection	1a Contact	1b Contact	1a1b Contact		2a Contact		2b Contact	
			1a	1b	1a	1a	1b	1b
1 position	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON
2 positions	OFF	ON	OFF	ON	OFF	OFF	ON	ON
3 positions	ON	ON	ON	ON	OFF	ON	ON	OFF

\* Standard type: assembled left and right as 2a contact

## ● Dimension (unit : mm)

Model	Appearance	Dimension
ART Without voltage dropping unit		 Front view dimensions: 31.0, 35.5, 0.07, 0.07, 1.0, 24.9, 11.2, 23.0, 18.0, 65.0, 0.02. Side view dimensions: 31.0, 35.5, 0.07, 1.0, 24.9, 11.2, 23.0, 0.02.
ART Transformer attached		 Front view dimensions: 31.0, 35.5, 0.07, 0.07, 1.0, 24.9, 11.2, 23.0, 39.2, 86.2, 0.02. Side view dimensions: 31.0, 35.5, 0.07, 1.0, 24.9, 11.2, 23.0, 0.02.

Control  
switch  
Combination  
display light

Power switch  
Main switch  
Cam switch

Limit switch  
Micro switch

Hoist switch  
Foot switch  
Mono lever switch

Sign tower  
Signal light

Buzzer  
Terminal block  
Fuse holder

Control box  
Cable connector

Discontinued  
Products

# AR series

## Key selector switch

- Ø22 and Ø25 hole installation applicable due to the direction of inserting panel fixing nut
- Simple mounting and dismounting between actuator and contact
- Consecutive installation possible due to the 37 mm x 41 mm installation space



### ● Suffix code

Model	Code			Description
ARK-	□	□	□	Key selector switch
Operation function	2	2 positions	Manual	
	2R			Auto
	3	3 positions	Manual	
	3L		Both	
	3R		Both	
	3LR		Auto	
Contact composition	10	1a Contact		
	20	1b Contact		
	12	1a1b Contact		
	11	2a Contact		
	22	2b Contact		
Key release position	A	Left		
	B	Right		
	C	Middle		
	D	Left and right		
	E	All directions		

## ● Contact composition

### ■ 2 positions action

Positions selection	1a Contact	1b Contact	1a1b Contact		2a Contact		2b Contact	
			1a	1b	1a	1a	1b	1b
1 position	OFF	ON	OFF	ON	OFF	OFF	ON	ON
2 positions	ON	OFF	ON	OFF	ON	ON	OFF	OFF

### ■ 3 positions action

Positions selection	1a Contact	1b Contact	1a1b Contact		2a Contact		2b Contact	
			1a	1b	1a	1a	1b	1b
1 position	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON
2 positions	OFF	ON	OFF	ON	OFF	OFF	ON	ON
3 positions	ON	ON	ON	ON	OFF	ON	ON	OFF

\* Standard type : assembled left and right as 2a contact

## ● Dimension (unit : mm)

Model	Appearance	Dimension
ARK		

Control  
switch  
Combination  
display light

Power switch  
Main switch  
Cam switch

Limit switch  
Micro switch

Hoist switch  
Foot switch  
Mono lever switch

Sign tower  
Signal light

Buzzer  
Terminal block  
Fuse holder

Control box  
Cable connector

Discontinued  
Products

## AR series

### Emergency stop switch

- Ø22 and Ø25 hole installation applicable due to the direction of inserting panel fixing nut
- Simple mounting and dismounting between actuator and contact
- Consecutive installation possible due to the 37 mm x 41 mm installation space



### ● Suffix code

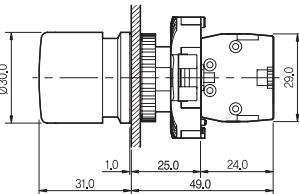
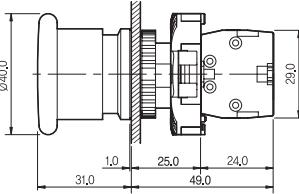
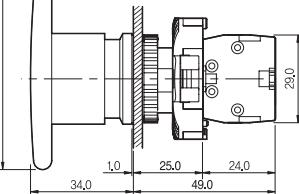
Model	Code	Description
ARE-	□ □ □ □	Emergency stop switch
	3	Ø30 Standard type
Actuator type	4	Ø40 Mushroom type
	6	Ø60 Mushroom type
	B	Momentary operation
Operation function	P	Push-lock Pull-reset
	R	Push-lock Turn-reset
	K	Push lock-Key reset
	10	1a Contact
Contact composition	20	1b Contact
	12	1a1b Contact
	11	2a Contact
	22	2b Contact
	R	Red (Possible applying function code B, P, R, K)
Color of actuator	G	Green (Applying operation function code B)
	Y	Yellow (Applying operation function code 4B)

### ● Standard suffix code

Dimension	Momentary operation	Push lock-pull reset	Push lock-turn reset	Push lock-key reset
Ø30	ARE-3B□□	-	ARE-3R□R ARE-3R□G	ARE-3K□□
Ø40	ARE-4B□□	ARE-4P□R	ARE-4R□R ARE-4R□G	ARE-4K□R
Ø60	ARE-6B□□	ARE-6P□R	ARE-6R□R	ARE-6K□R

● Dimension (unit : mm)

■ Momentary operation

Model	Appearance	Dimension
ARE-3B□□ ⑧ ⑨		 Detailed description: A technical drawing showing the top view of the ARE-3B push button. It has a diameter of Ø70.0, a height of 31.0, and internal dimensions of 1.0, 25.0, 49.0, 24.0, and 28.0 mm.
ARE-4B□□ ⑧ ⑨ ⑩		 Detailed description: A technical drawing showing the top view of the ARE-4B push button. It has a diameter of Ø70.0, a height of 31.0, and internal dimensions of 1.0, 25.0, 49.0, 24.0, and 28.0 mm.
ARE-6B□□ ⑧ ⑨		 Detailed description: A technical drawing showing the top view of the ARE-6B push button. It has a diameter of Ø70.0, a height of 34.0, and internal dimensions of 1.0, 25.0, 49.0, 24.0, and 28.0 mm.

Control  
switch  
Combination  
display light

Power switch  
Main switch  
Cam switch

Limit switch  
Micro switch

Hoist switch  
Foot switch  
Mono lever switch

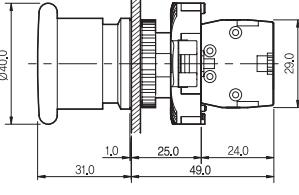
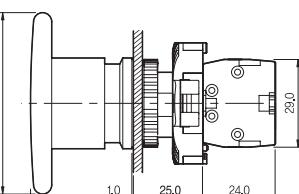
Sign tower  
Signal light

Buzzer  
Terminal block  
Fuse holder

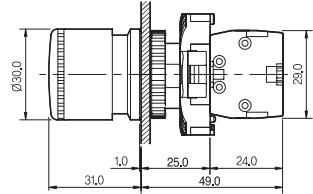
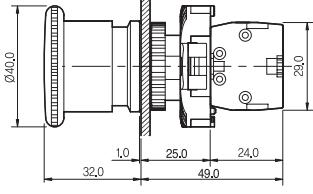
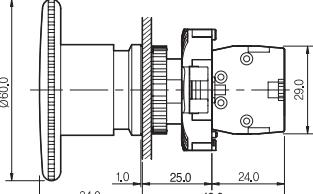
Control box  
Cable connector

Discontinued  
Products

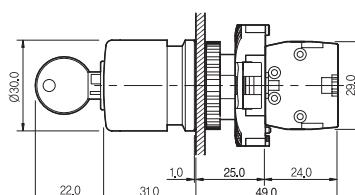
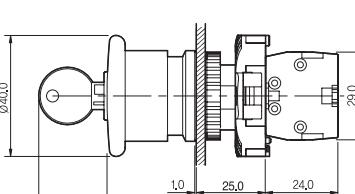
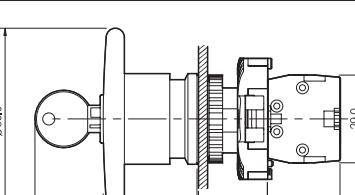
■ Push lock-pull reset

Model	Appearance	Dimension
ARE-4P□R ⑧		 Detailed description: A technical drawing showing the top view of the ARE-4P push button. It has a diameter of Ø70.0, a height of 31.0, and internal dimensions of 1.0, 25.0, 49.0, 24.0, and 28.0 mm.
ARE-6P□R ⑧		 Detailed description: A technical drawing showing the top view of the ARE-6P push button. It has a diameter of Ø70.0, a height of 34.0, and internal dimensions of 1.0, 25.0, 49.0, 24.0, and 28.0 mm.

■ Push lock-turn reset

Model	Appearance	Dimension
ARE-3R□□ ⑥		
ARE-4R□□ ⑥		
ARE-6R□R ⑥		

## ■ Push lock-key reset

Model	Appearance	Dimension
ARE-3K□□ ⑥		 0030 22,0 31,0 1,0 25,0 49,0 24,0 0182
ARE-4K□□ ⑥		 0050 22,0 31,5 1,0 25,0 49,0 24,0 0180
ARE-6K□R ⑥		 0090 22,0 31,5 1,0 25,0 49,0 24,0 0182

Control  
switch  
Combination  
display lightPower switch  
Main switch  
Cam switchLimit switch  
Micro switchHoist switch  
Foot switch  
Mono lever switchSign tower  
Signal lightBuzzer  
Terminal block  
Fuse holderControl box  
Cable connectorDiscontinued  
Products

## AR series

### Illuminated emergency stop switch

- Ø22 and Ø25 hole installation applicable due to the direction of inserting panel fixing nut
- Simple mounting and dismounting between actuator and contact / transformer
- Consecutive installation possible due to the 37 mm x 41 mm installation space

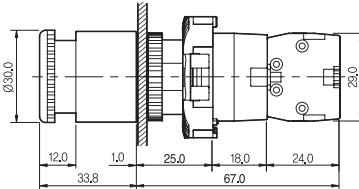
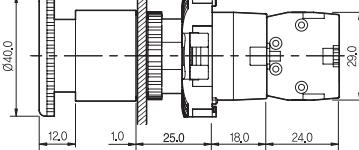


### ● Suffix code

Model	Code					Description
ARE-	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>					Illuminated emergency stop switch
Actuator type	3					Ø30 Mushroom type
	4					Ø40 Mushroom type
Operation function	XR					Push lock-Turn reset
Contact composition	10					1a Contact
	20					1b Contact
	12					1a1b Contact
	11					2a Contact
	22					2b Contact
Power supply voltage	A1					A1 110 V a.c Transformer attached (Incandescent lamp 6.3 V)
	A2					A2 220 V a.c
	LA1					LA1 110 V a.c Transformer attached
	LA2					LA2 220 V a.c (LED 6 V)
	L6					L6 6 V
	L12					L12 12 V
	L24					L24 24 V
	LB1					LB1 110 V
	LB2					LB2 220 V
	B6					B6 6.3 V
Color of actuator	B12					B12 12 V
	B24					B24 24 V
		R	Red			
		G	Green ※ Only for ARE-3XR			

● Dimension (unit : mm)

■ Push lock-turn reset (Without voltage dropping unit)

Model	Appearance	Dimension
ARE-3XR ⑥		
ARE-4XR ⑥		

Control  
switch  
Combination  
display light

Power switch  
Main switch  
Cam switch

Limit switch  
Micro switch

Hoist switch  
Foot switch  
Mono lever switch

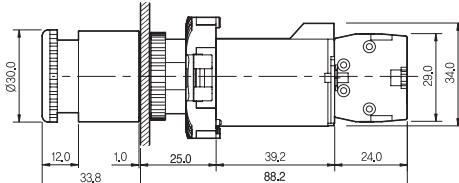
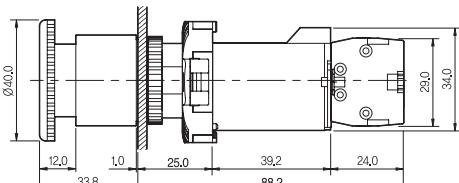
Sign tower  
Signal light

Buzzer  
Terminal block  
Fuse holder

Control box  
Cable connector

Discontinued  
Products

■ Push lock-turn reset (Transformer attached)

Model	Appearance	Dimension
ARE-3XR ⑥ ⑦		
ARE-4XR ⑥		

## AR series

One body type push button switch

- Simple handling because the actuator and contact part are one body type
- Ø22 and Ø25 hole installation applicable due to the direction of inserting panel fixing nut
- Consecutive installation possible due to the 31 mm x 31 mm installation space

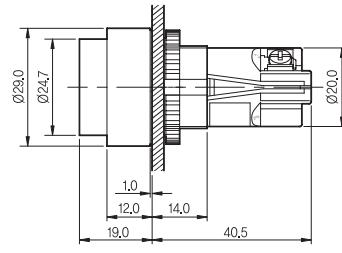
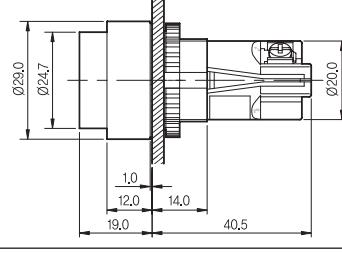


### ● Suffix code

Model	Code				Description
ARF-D	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				One body type push button switch
Actuator type	F				Flush type
	P				Extended type
Operation function	1				Momentary
	2				Alternate
Contact composition	10				1a Contact
	20				1b Contact
	12				1c Contact
Color of actuator	R				RED
	G				GREEN
	Y				YELLOW
	A				BLUE

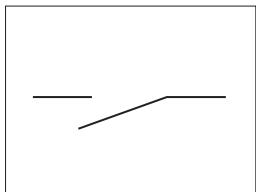
### ● Dimension (unit : mm)

Model	Appearance	Dimension
ARF-DF1 (Momentary operation)		
ARF-DF2 (Alternate operation)		

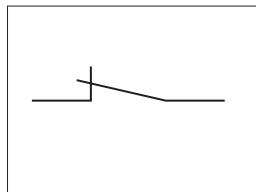
Model	Appearance	Dimension
ARF-DP1 (Momentary operation)		
ARF-DP2 (Alternate operation)		

## ○ Contact composition

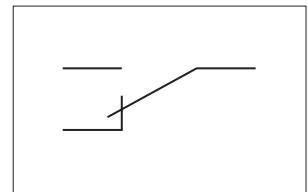
■ a Contact



■ b Contact



■ c Contact



Control  
switch  
Combination  
display light

Power switch  
Main switch  
Cam switch

Limit switch  
Micro switch

Hoist switch  
Foot switch  
Mono lever switch

Sign tower  
Signal light

Buzzer  
Terminal block  
Fuse holder

Control box  
Cable connector

Discontinued  
Products

## AR series

One body type pilot lamp

- Ø22 and Ø25 hole installation applicable due to the direction of inserting panel fixing nut
- Simple handling because the actuator and contact part are one body type
- Consecutive installation possible due to the 31 mm x 31 mm installation space



### ● Suffix code

Model	Code	Description	
ARP-D	□ □ : □	Indicator light	
Actuator type	F	Flush type	
	R	Roulette type	
Power supply voltage	B6	6.3 V	Without voltage dropping unit (a.c/d.c) (Incandescent lamp)
	B12	12 V	
	B24	24 V	
	L6	6 V	Without voltage dropping unit (a.c/d.c) (LED)
	L12	12 V	
	L24	24 V	
	LB1	110 V	
	LB2	220 V	
Color of indicator	R	RED	
	G	GREEN	
	Y	YELLOW	
	W	WHITE	
	A	BLUE	

### ● Dimension (unit : mm)

Model	Appearance	Dimension
ARP-DF (Flush type)		
ARP-DR (Roulette type)		