Pushbuttons/Selectors/Pilot Lights/Buzzers
## AR22 and DR22
General information

The AR22 now uses a release arm with a wedge mechanism developed by Fuji Electric FA. This enables you to mount or remove the operator and contact block without using any tools. When fitting the switch to a panel, you can ignore the panel thickness.
You have only to secure the operator with a locking nut from behind the panel without any need for adjustment. The improved locking nut is capable of mounting the operator in both 22.3mm and 25.5mm dia. panel cutout holes.
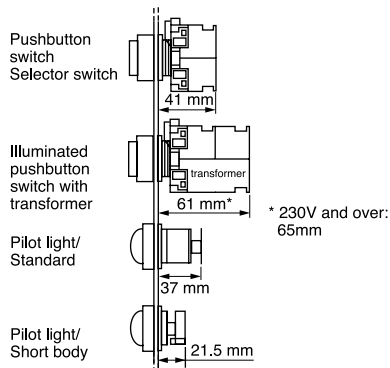
■ Features
Facilitated mounting
• No adjusting of panel thickness is necessary.
• The button and lens can be mounted on a panel while the operator is engaged.
• Mountable even on a panel cutout 25.5mm in diameter.

Panel cutting

Panel thickness
Min. 1 mm

No adjusting

Max. 6 mm

ø22.3 mm

ø25.5 mm
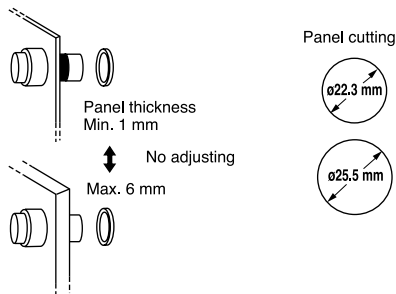
Miniaturization
• Pushbuttons and selector switches with 1NO+1NC: 41mm deep
  Pilot lights: 37mm deep
• The transformer now occupies far less space.

Pushbutton switch
Selector switch

41 mm

Illuminated pushbutton switch with transformer

transformer

61 mm*   * 230V and over:
                65mm

Pilot light/
Standard

37 mm

Pilot light/
Short body

21.5 mm

Illuminated pushbuttons	Pushbuttons	Pilot lights
AF94-318 **AR22F0L**	AF94-319 **AR22E0R**	AF94-333 **DR22D0L**
AF94-357 **AR22E0M**	AF94-297 **AR22E0Y**	AF98-88 **DR22D0L-□8, □9**

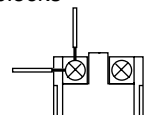| Emergency stop pushbuttons		Selectors
AF97-72 **AR22V0L**	KK03-037 **AR22VGE**	AF94-310 **AR22PR**

Easy replacing contact block and transformer
• Because of a snap-on mounting, replacement or addition of the contact block and transformer unit is very simple.
• The contact block is common to all the pushbuttons of this series.
• Contact block is easily replaced even when the pushbuttons are mounted closely together.
• Replacement of the contact block can be done with a screwdriver, without the need for any special tool.

Connecting to the operator   Detaching

Snap-fitting of contact blocks   Detaching
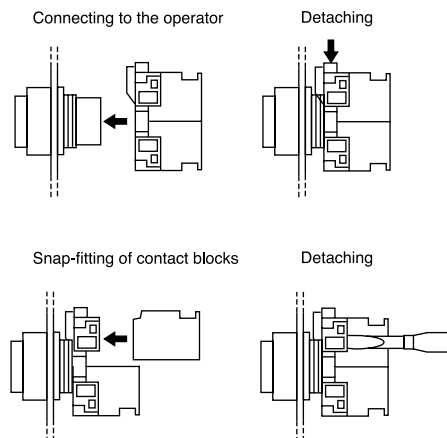
Wiring
• Wiring from two directions is possible.
• Wiring in both vertical and lateral directions facilitates wiring in narrow spaces.
• Color coding of contact blocks makes wiring easy.
  1NO: Blue, 1NC: Red
  Lamp terminal and transformer unit: Black

Safety
• A terminal cover is provided, assuring safety and security.
• FUJI's original Trigger Action mechanism is used in the emergency stop pushbuttons. They are suitable for emergency stop and safety. This mechanism prevents the contacts from moving until the button is pushed and locked.
• Reliability of safety functions increased by integrated operator and contact block construction. (AR22VG)

Protection
• Excellent oil-tight construction (IP65) of the operator.
• Closure of the contact block has been improved.

■ Approvals

■ Emergency stop illuminated pushbutton switches (conform to EN418)

Operator	Type	Operator	Type	Operator	Type
Push-lock, turn-reset (Soft-touch 40mm dia. with white arrow)	**AR22V0L** AF97-72	Push-lock, turn-reset (Soft-touch 40mm dia. transparent in all colors with white arrow)	**AR22VDL** AF97-77	Push-lock, turn-reset (Soft touch 29mm dia. with white arrow)	**AR22VSL** AF99-316
Push-lock, turn-reset (40mm dia.)	**AR22V2L** AF94-307	Push-lock, turn-reset (40mm dia. transparent in all colors)	**AR22VAL** AF94-365	Unibody push-lock, turn-reset (Soft-touch 40mm dia. with white arrow)	**AR22VGF** KK03-036

Note: Provided with the ⊖→ (Direct opening action)

■ Selector switches

Operator	Type	Operator	Type	Operator	Type
Knob	**AR22PR, PCR** AF94-310	Key	**AR22JR, JCR** AF94-311	Lever with square bezel	**AR22WY, WCY** AF94-323
Lever	**AR22WR, WCR** AF94-324	Key (Long durability)	**AR22JAR** AF94-311	Cylindrical knob with square bezel	**AR22RY, RCY** AF94-362
Cylindrical knob	**AR22RR, RCR** AF94-308	Knob with square bezel	**AR22PY, PCY** AF94-309	Key with square bezel	**AR22JY, JCY** AF94-322

■ Illuminated selector switches

Operator	Type	Operator	Type
Knob	**AR22PL** AF94-306	Knob with square bezel	**AR22PP** AF94-318

Illuminated pushbuttons

AR22 E0L – 10 E3 R □
  ①   ②   ③ ④ ⑤ ⑥

① Product category
AR22: 22mm-dia. illuminated pushbutton
      22mm-dia. emergency stop illuminated pushbutton

② Operator
• Illuminated pushbutton
F0L: Flush round head
F5L: Flush round head (Alternate)
E0L: Extended round head
E5L: Extended round head (Alternate)
M0L: Mushroom head (40mm dia.)
M5L: Mushroom head (40mm dia. alternate)
M4L: Mushroom head (29mm dia.)
M9L: Mushroom head (29mm dia. alternate)
G4L: Extended with transparent full guard (24mm dia.)
G9L: Extended with transparent full guard (24mm dia. alternate)
G2L: Extended with full guard (24mm dia. with openings)
G7L: Extended with full guard (24mm dia. with openings, alternate)
G1L: Extended with full guard (24mm dia.)
G6L: Extended with full guard (24mm dia. alternate)
V5L: Push-lock, turn-reset (40mm dia. with white arrow) *1
F0M: Flush square head
F5M: Flush square head (Alternate)
E0M: Extended square head
E5M: Extended square head (Alternate)
F0P: Flush round head with square bezel
F5P: Flush round head with square bezel (Alternate)
E0P: Extended round head with square bezel
E5P: Extended round head with square bezel (Alternate)
M4P: Mushroom head with square bezel (29mm dia.)
• Emergency stop illuminated pushbutton
V0L: Push-lock, turn-reset (Soft-touch 40mm dia. with white arrow)
V2L: Push-lock, turn-reset (40mm dia.)
VDL: Push-lock, turn-reset (Soft-touch 40mm dia. transparent in all colors with white arrow)
VAL: Push-lock, turn-reset (40mm dia. transparent in all colors)
VSL: Push-lock, turn-reset (Soft-touch 29mm dia. with white arrow)
VGF: Unibody push-lock, turn-reset (Soft-touch 40mm dia. with white arrow)

③ Contact arrangement
10:	1NO	30:	3NO
01:	1NC	03:	3NC
11:	1NO+1NC	40:	4NO
20:	2NO	04:	4NC
02:	2NC	50:	5NO
22:	2NO+2NC	05:	5NC

④ Lamp voltage
• Incandescent lamp
54: 5.5V AC/DC, without transformer
C4: 15V AC/DC, without transformer
D4: 20V AC/DC, without transformer
E4: 24V AC/DC, without transformer
H4: 100-110V AC, with transformer
L4: 115-127V AC, with transformer
M4: 200-220V AC, with transformer
Q4: 230-254V AC, with transformer
S4: 350-380V AC, with transformer
T4: 400-440V AC, with transformer
V4: 480V AC, with transformer
W4: 500-550V AC, with transformer
• LED lamp
A3: 6V AC, without transformer
63: 6V DC, without transformer
B3: 12V AC/DC, without transformer
C3: 15V AC/DC, without transformer
E3: 24V AC/DC, without transformer
H3: 100-110V AC, with transformer
L3: 115-127V AC, with transformer
M3: 200-220V AC, with transformer
Q3: 230-254V AC, with transformer
S3: 350-380V AC, with transformer
T3: 400-440V AC, with transformer
V3: 480V AC, with transformer
W3: 500-550V AC, with transformer

• Neon lamp (For AR22VGF)
H1: 110V AC, without transformer
K1: 120V AC, without transformer
M1: 220V AC, without transformer
P1: 240V AC, without transformer

⑤ Color of lens
G:	Green	Y:	Yellow
R:	Red *2	A:	Orange
W:	White	S:	Blue

⑥ Special product
Z9: Resisting water-soluble cutting oils and heat
Z8: With a contact protection cover
Z4: Resisting sulfuration gas
ZB: Meeting IP2X finger-protection standards

Notes: *1 Products with no trigger action mechanism. These products cannot be used as emergency stop switches that comply with EN standards.
     *2 Button color of emergency stop illuminated switches are Red only.
     • The manufacturing range varies depending on the model. For details, refer to the contents of this catalog.

AR22 and DR22
Ratings and specifications

■ Standards approved

UL508	File No. E44592
CSA C22.2 No.14	File No. LR20479
	cUL File No. E44592 (For AR22VG)
TÜV: EN60947-5-1	Pushbutton, Illuminated pushbutton: R9551062,
	Selector, Illuminated selector: R9551060
	Pilot lights: R9551061
	Joy stick selector switch: R2050803
	(Lever switch)
	Buzzer: J9950091
TÜV: EN60947-5-1	Emergency stop pushbutton
EN60947-5-5	Emergency stop illuminated pushbutton
	: R50028146, R50028137 (For AR22VG)

■ Specifications (Indoor use)

Description	Pushbutton switch Illuminated pushbutton switch Emergency stop pushbutton switch Emergency stop illuminated pushbutton switch Selector switch Illuminated selector switch	Joy stick selector (Lever switch)	Pilot light
Rated insulation voltage	600V AC/DC [*1]	250V AC/DC	250V AC/DC [*2]
Mechanical durability	*See page 13*	250,000 operations	–
Electrical durability	500,000 operations at 220V AC 6A 1 million operations at 220V AC 3A (AR22VG type: 100,000 operations)	100,000 operations at 220V AC 1A (Res. load)	–
Operating frequency	1200 operations/hour (On-load factor: 40%) AR22VG type: 1800 operations/hour (On-load factor: 40%)		–
Dielectric strength	2500V AC, 1 minute [*3]	2000V AC, 1 minute [*4]	
Insulation resistance	100MΩ or more (500V DC megger)		
Rated impulse dielectric strength	6kV (AR22VG type: 4kV)	–	6kV
Conditional short-circuit current	1000A	1000A	–
Short-circuit protective device	Fuse 15A	Fuse 1A	–
Pollution degree	3		
Vibration	Resonance: 10 to 55Hz, double amplitude 0.1mm [*5] Constant: 16.7Hz, double amplitude 3mm		
Shock	Malfunction durability: 100m/s^2 [*6] Mechanical durability: 500m/s^2		Mechanical durability: 500m/s^2
Ambient temperature (No condensation or no icing)	-20 to +70°C [*7]	-5 to +70°C	-20 to +50°C
Storage temperature	-40 to +80°C		
Humidity	45 to 85% RH (within -5 to +40°C)		
Degree of protection	IP65		

Notes: [*1] Illuminated type without transformer and AR22VG type: 250V AC/DC
　　　[*2] Pilot light with transformer: 600V AC
　　　[*3] Illuminated type without transformer: 2000V AC, 1 minute (except AR22VGF type)
　　　[*4] Pilot light with transformer: 2500V AC, 1 minute
　　　[*5] Emergency stop type: 10 to 500Hz, double amplitude 0.7mm (acceleration 50m/s^2), according to the test condition of EN60947-5-5 (1998)
　　　[*6] Emergency stop type: 150m/s^2
　　　[*7] AR22VGE type: -20 to +60°C, illuminated type: -20 to +50°C

● **Mechanical durability**

Description		Operations
Pushbutton switch Illuminated pushbutton switch Emergency stop pushbutton switch Emergency stop illuminated pushbutton	Momentary action Alternate action With selector ring Push-lock, turn-reset Push-lock, pull-reset	5 million 1 million 100,000 100,000 30,000
Selector switch	Maintained 1, 2, 3, 4-contact Maintained 5, 6-contact Control type, spring return, spring/manual return	1 million 500,000 200,000

Illuminated selector switch	Maintained
	  Without transformer 1, 2, 3-contact
	                                       4-contact
	  With transformer 1, 2-contact
	                                       3-contact
	
	Spring return, spring/manual return
		1 million
		500,000
		1 million
		500,000
		
		200,000

Note: Key insertion/removal durability for selector switch key types
   • Key type 10,000
   • Key (Long durability) type 20,000

● **Buzzers**

Item	DR22B5	DR22B3	DR22B8
Rated insulation voltage	Without transformer: 60V AC/DC With transformer: 250V AC		
Sound level	90dB (0.1m) 70dB (1m)	80 to 90dB (0.1m) 60 to 70dB (1m)	80dB (0.1m) 60dB (1.0m)
Durability	1000h	200h	1000h
Frequency	2.4 to 3.3kHz		
Intermittent cycle	Approx. 170-cycle/min		
Current consumption	See the table below		
Dielectric strength	Without transformer: 1000V AC 1 minute With transformer: 2000V AC 1 minute		
Insulation resistance	100MΩ or more (500V DC megger)		
Pollution degree	3		
Vibration	Resonance: 10 to 55Hz, double amplitude 0.1mm Constant: 16.7Hz, double amplitude 3.0mm		
Shock	Mechanical durability: 500m/s^2		
Ambient temperature	–20 to +60˚C (No condensation or no icing) (with resistor unit: –20 to +40˚C)		
Storage temperature	–30 to +70˚C		
Humidity	45 to 85%RH (within –5 to 40˚C)		
Degree of protection	IP00		IP54

·**Current consumption**

Operational voltage	Current consumption	
	DR22B5, DR22B8	DR22B3
6V AC	70mA AC	–
6V DC	35mA DC	–
24V AC/DC	40mA AC, 25mA DC	30mA AC, 20mA DC
48V AC/DC	65mA AC, 20mA DC	–
110V AC	30mA AC	30mA AC
110V DC	30mA DC	–
220V AC	15mA AC	15mA AC

AR22 and DR22
Ratings and specifications

■ Contact ratings
● UL/CSA standards
AC (COS ø=0.35)

Contact rated code	120V		240V		480V		600V	
	Making current	Breaking current	Making current	Breaking current	Making current	Breaking current	Making current	Breaking current
A600	60A	6.0A	30A	3.0A	15A	1.5A	12A	1.2A
B300 (AR22VG)	30A	3.0A	15A	1.5A	–	–	–	–

DC $T_{0.95}$= 6P (Max. 300ms)

Description	Contact rated code	Making current · Breaking current		
		125V	250V	301V–600V
Illuminated pushbutton switch Pushbutton (Ring type selector switch: AR22S2R only) Emergency stop pushbutton switch Emergency stop illuminated pushbutton switch (Except the overlap contact types)	P600	1.1A	0.55A	0.2A
	Q300 (AR22VG)	0.55A	0.27A	–
Overlap contact types of products shown above Pushbutton (Ring type selector switch: AR22S1R, S6R only) Selector switch (2-position only, except the overlap contact types) Illuminated selector switch (2-position only, except the overlap contact types)	Q600	0.55A	0.27A	0.1A
Pushbutton (Ring type selector switch: AR22S3R only) Selector switch (2-pos./overlap contact type, 3-, 4-, 5-pos. type) Illuminated selector switch (2-pos./overlap contact type, 3-pos. type)	R300	0.22A	0.11A	–

Note: Joy stick selector switches (Lever switches): 250V AC, 5A (Res. load) 125V DC, 0.2A 24V DC, 1A (Res. load)

● EN standard/TÜV approved

Description	Rated operational current			
	Rated thermal current	Rated operational voltage	AC15 (Ind. load) Rated operational current	DC13 (Ind. load) Rated operational current
Illuminated pushbutton switch Pushbutton (Except the selector ring type) Emergency stop pushbutton switch Emergency stop illuminated pushbutton switch Selector switch (2-position) Illuminated selector switch (2-position)	10A	24V	6.0A	4.0A (AR22VG: 1.5A)
		120V	6.0A (AR22VG: 3A)	–
		125V	–	1.3A (AR22VG: 0.3A)
		240V	6.0A (AR22VG: 3A)	–
		250V	–	0.45A(AR22VG: 0.15A)
		480V	2.5A (AR22VG: –)	–
		600V	2.0A (AR22VG: –)	–
Selector switch (3, 4, 5-position) Illuminated selector switch (3-position) Pushbutton with selector ring	10A	24V	6.0A	2.0A
		120V	6.0A	–
		125V	–	0.65A
		240V	6.0A	–
		250V	–	0.23A
		480V	2.5A	–
		600V	2.0A	–
Joy stick selector switch (Lever switch)	5A	24V	–	0.7A
		120V	0.3A	–
		125V	–	0.15A
		240V	0.3A	–

Lamp rated voltage UL/CSA standards, TÜV approved

	LED lamp	Incandescent lamp	Neon lamp
Full-voltage (without transformer)	Max. 24V AC/DC	Max. 30V AC/DC	Max. 240V AC
With transformer	Max. 550V AC (Short-body type: Max. 220V AC)		–

■ **Operating characteristic** (1NO+1NC)

Description	Pushbutton Illuminated pushbutton	Emergency stop pushbutton Emergency stop illuminated pushbutton		Selector *2 Illuminated selector		
		Push-lock type	Push-pull type	Maintained	Spring/manual return	Spring return
Ave. required operating force	9N (Push-lock type: 20N)	30N (AR22VG: 22N)*1	45N	0.15N·m	0.13N·m	0.1N·m
Operating travel	Approx. 6mm

(Push-lock type: Approx. 9mm, operation angle: Approx. 45°) | Approx. 9mm

(AR22VG: Approx. 10mm, operation angle: Approx. 45°) | Approx. 9mm | 2-position: Approx. 90°

3-position: Approx. 45°

4-position: Approx. 40°

5-position: Approx. 30° | 3-position: Approx. 45° | 2-position: Approx. 60°

3-position: Approx. 45° |
| Required return force | – (Push-lock type: 0.6N·m) | 0.6N·m (AR22VG: 0.2N·m) | 30N (pull) | 0.15N·m | 0.13N·m | – |

Notes: *1 AR22V2R, V4R, V7R, VAL types: 45N
*2 4-position, 5-position: 2NO+2NC

■ **Lamp ratings**
·Illuminated pushbuttons, illuminated selectors, pilot lights

Transformer	Lamp voltage	LED			Incandescent		
		Type	Rated voltage	Consumption	Type	Rated voltage	Consumption
Without transformer	5.5V AC/DC	–	–	–	AHX135	6.3V AC/DC	0.9W
	6V AC	APX510-6□	6V AC	Green, red, orange, amber: 7mA AC Yellow: 26mA AC Blue: 16mA AC	–	–	–
	6V DC	APX510-D6□	6V DC	Green, red, orange, amber: 11mA DC Yellow: 33mA DC Blue: 22mA DC	–	–	–
	12V AC/DC	APX510-12□	12V AC/DC	14mA AC, 11mA DC	–	–	–
	15V AC/DC	APX510-15□	15V AC/DC	13mA AC, 11mA DC	AHX279	18V AC/DC	0.8W
	20V AC/DC	–	–	–	AHX144	24V AC/DC	0.9W
	24V AC/DC	APX510-24□	24V AC/DC	12mA AC, 11mA DC	AHX129	30V AC/DC	0.8W
With transformer (Standard type: AR9T511)	110V AC 127V AC 220V AC	APX510-6□	6V AC	1.5VA	AHX135	6.3V AC/DC	2VA 2VA 2VA
	254V AC 380V AC 440V AC 480V AC 550V AC	APX510-6□	6V AC	2.5VA	AHX135	6.3V AC/DC	2.5VA 2.5VA 2.5VA 2.5VA 2.5VA
With resistor unit (AR9T519-H)	110V DC	APX510-24□	24V AC/DC	1.2W	–	–	–

Notes: • Short body pilot lights: 110V AC, 127V AC, 220V AC only
 • Replace the □ mark by the lamp luminous color code, *see page 16*
 • Except AR22VGF type

·Emergency stop illuminated pushbuttons (AR22VGF type)

Transformer	Lamp	Voltage	Type	Rated voltage	Consumption
Without transformer	LED	24V AC/DC	AR9L002-ER	24V AC/DC	12mA AC 11mA DC
	Neon	110V AC 120V AC 220V AC 240V AC	AR9N001-HA AR9N001-KA AR9N001-MA AR9N001-PA	110V AC 120V AC 220V AC 240V AC	0.19VA 0.21VA 0.30VA 0.30VA

Notes: Lamp base: BA9S/13

■ Lamp durability

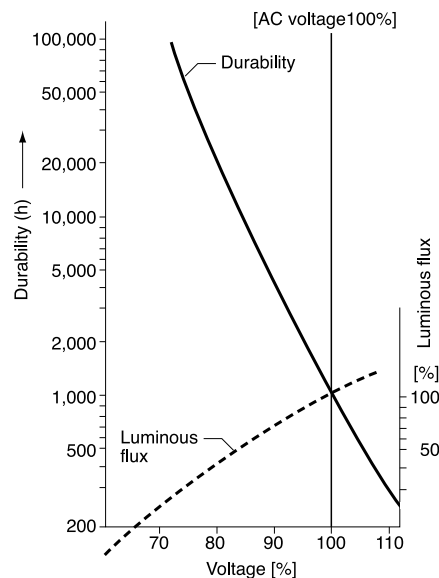| Lamp	Durability	Judgement criterion
LED	Approx. 30000h	When brightness is less than 50% of initial value
Incandescent	Approx. 5000h (AC)	When the bulb burns out
Neon	Approx. 5000h	When a remarkable blackening appears in the glass bulb and the using becomes improper

Note: The operating voltage for incandescent lamps is set at 80 to 90% of the lamp's rated voltage.

Estimated durability for LED lamps
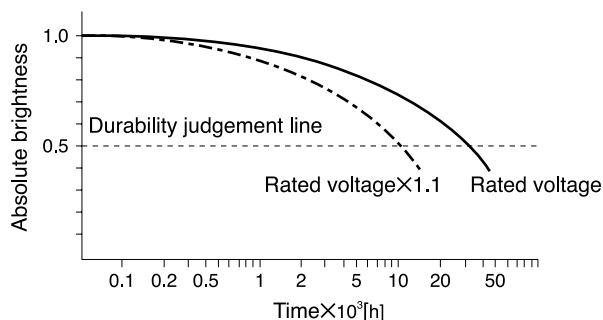
Notes: • Durability at Ta=25˚C
       • Durability is affected by temperature, humidity, and voltage fluctuation.

■ Combination of lens color and LED or neon lamp luminous color

Lens		LED or neon lamp	
Color	Code	Luminous color	Type
Green	G	Green	APX510-■G
Red	R	Red	APX510-■R
White	W	Orange	APX510-■O
Yellow	Y	Yellow	APX510-■Y
Orange *	A	Amber	APX510-■A
Blue	S	Blue	APX510-■S
Red (AR22VGF)	R	Red	AR9L002-ER
		Orange (Neon lamp)	AR9N001-■A

Notes: * DR22F4M: LED lamp color is orange. (APX510-■O)
       • Replace the ■ mark by the lamp voltage code

Incandescent lamp voltage characteristics

■ Emergency stop illuminated pushbutton switches

⊖ (Direct opening action), conform to EN418

Operator	Transformer	Contact	LED lamp Type	Incandescent lamp Type	Neon lamp Type
Push-lock, turn-reset (Soft-touch 40mm dia. with white arrow) AF97-76	Without	1NC 1NO+1NC 2NC 3NC	**AR22V0L-01■3R** **AR22V0L-11■3R** **AR22V0L-02■3R** **AR22V0L-03■3R**	**AR22V0L-01■4R** **AR22V0L-11■4R** **AR22V0L-02■4R** **AR22V0L-03■4R**	— — — —
	With	1NC 1NO+1NC 2NC	**AR22V0L-01■3R** **AR22V0L-11■3R** **AR22V0L-02■3R**	**AR22V0L-01■4R** **AR22V0L-11■4R** **AR22V0L-02■4R**	— — —
Push-lock, turn-reset (40mm dia.) AF94-307	Without	1NC 1NO+1NC 2NC 3NC	**AR22V2L-01■3R** **AR22V2L-11■3R** **AR22V2L-02■3R** **AR22V2L-03■3R**	**AR22V2L-01■4R** **AR22V2L-11■4R** **AR22V2L-02■4R** **AR22V2L-03■4R**	— — — —
	With	1NC 1NO+1NC 2NC	**AR22V2L-01■3R** **AR22V2L-11■3R** **AR22V2L-02■3R**	**AR22V2L-01■4R** **AR22V2L-11■4R** **AR22V2L-02■4R**	— — —
Push-lock, turn-reset (Soft-touch 40mm dia. transparent in all colors with white arrow) AF97-76	Without	1NC 1NO+1NC 2NC 3NC	**AR22VDL-01■3R** **AR22VDL-11■3R** **AR22VDL-02■3R** **AR22VDL-03■3R**	**AR22VDL-01■4R** **AR22VDL-11■4R** **AR22VDL-02■4R** **AR22VDL-03■4R**	— — — —
	With	1NC 1NO+1NC 2NC	**AR22VDL-01■3R** **AR22VDL-11■3R** **AR22VDL-02■3R**	**AR22VDL-01■4R** **AR22VDL-11■4R** **AR22VDL-02■4R**	— — —
Push-lock, turn-reset (40mm dia. transparent in all colors) AF94-364	Without	1NC 1NO+1NC 2NC 3NC	**AR22VAL-01■3R** **AR22VAL-11■3R** **AR22VAL-02■3R** **AR22VAL-03■3R**	**AR22VAL-01■4R** **AR22VAL-11■4R** **AR22VAL-02■4R** **AR22VAL-03■4R**	— — — —
	With	1NC 1NO+1NC 2NC	**AR22VAL-01■3R** **AR22VAL-11■3R** **AR22VAL-02■3R**	**AR22VAL-01■4R** **AR22VAL-11■4R** **AR22VAL-02■4R**	— — —
Push-lock, turn-reset (Soft-touch 29mm dia. with white arrow) AF99-316	Without	1NC 1NO+1NC 2NC 3NC	**AR22VSL-01■3R** **AR22VSL-11■3R** **AR22VSL-02■3R** **AR22VSL-03■3R**	**AR22VSL-01■4R** **AR22VSL-11■4R** **AR22VSL-02■4R** **AR22VSL-03■4R**	— — — —
	With	1NC 1NO+1NC 2NC	**AR22VSL-01■3R** **AR22VSL-11■3R** **AR22VSL-02■3R**	**AR22VSL-01■4R** **AR22VSL-11■4R** **AR22VSL-02■4R**	— — —
Unibody push-lock, turn-reset (Soft-touch 40mm dia. with white arrow)	Without	1NC 1NO+1NC 2NC	**AR22VGF-01E3R** **AR22VGF-11E3R** **AR22VGF-02E3R**	— — —	**AR22VGF-01■1R** **AR22VGF-11■1R** **AR22VGF-02■1R**

Notes: • Button color: Red only • AR22VGF type: Lamp circuit contacts are provided, see page 43. • Contact arrangements indicated in the table can be supplied.

·**Voltage**
Replace the ■ mark by the lamp voltage code

Transformer		Code LED	Incandescent	Neon
Without	6V DC	6	—	—
	6V AC	A	—	—
	5V AC/DC	—	5	—
	12V AC/DC	B	—	—
	15V AC/DC	C	C	—
	20V AC/DC	—	D	—
	24V AC/DC	E	E	—
	110V AC	—	—	H
	120V AC	—	—	K
	220V AC	—	—	M
	240V AC	—	—	P

Transformer		Code LED	Incandescent
With	100-110V AC	H	H
	115-127V AC	L	L
	200-220V AC	M	M
	230-254V AC	Q	Q
	350-380V AC	S	S
	400-440V AC	T	T
	480V AC	V	V
	500-550V AC	W	W

Notes: AR22VGF: LED 24V AC/DC and neon only

■ Dimensions, mm
·Emergency stop illuminated pushbutton switches

Push-lock, turn-reset (40mm dia.)

With transformer

AR22V0L, V2L
AR22VDL, VAL
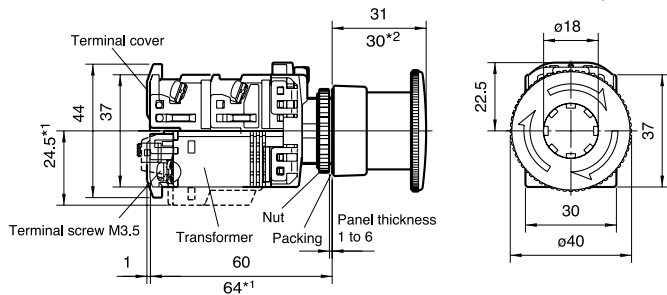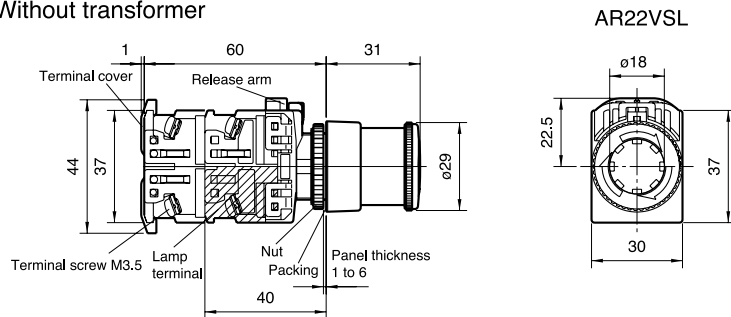
Without transformer
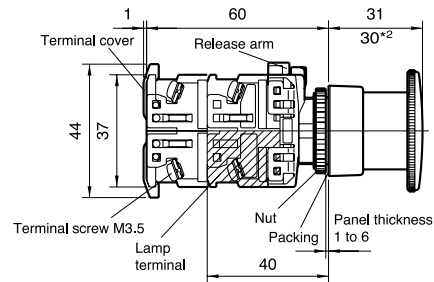
Note: *1 230V and over
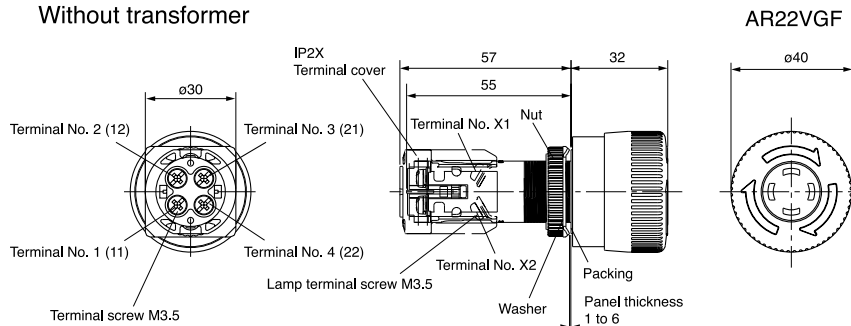   *2 AR22V2L and VAL types only
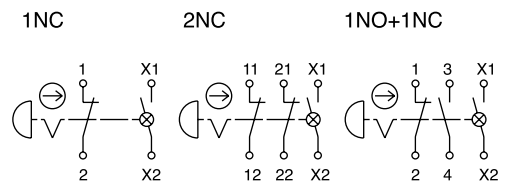
Push-lock, turn-reset (29mm dia.)

Without transformer

AR22VSL

Unibody push-lock, turn-reset (40mm dia.)

Without transformer

AR22VGF

Wiring diagrams

1NC   2NC   1NO+1NC

Note: Terminal No. shown in ( ) are for contact arrangement 2NC.