

Pushbuttons/Selectors/Pilot Lights/Buzzers
AR30 and DR30
Ratings and specifications

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

Description	Pushbutton Illuminated pushbutton	Emergency stop pushbutton		Selector *2		
		Emergency stop illuminated pushbutton		Illuminated selector		
		Push-lock type	Push-pull type	Maintained	Spring/manual return	Spring return
Ave. required operating force	9N (Push-lock type: 20N)	30N *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 (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	30N (pull)	0.15N•m	0.13N•m	–

Notes: *1 AR30V2R type: 45N
*2 4-position, 5-position: 2NO+2NC

■ **Lamp ratings**

• **Illuminated pushbuttons, illuminated selectors, pilot lights (round type)**

Transformer	Lamp voltage	LED (lamp base: BA9S/13)			Incandescent (lamp base: BA9S/13)		
		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
With transformer (Standard type: AR9T511)	24V AC/DC	APX510-24□	24V AC/DC	12mA AC, 11mA DC	AHX129	30V AC/DC	0.8W
	110V AC	APX510-6□	6V AC	1.5VA	AHX135	6.3V AC/DC	2VA
	127V AC						2VA
	220V AC						2VA
	254V AC	APX510-6□	6V AC	2.5VA	AHX135	6.3V AC/DC	2.5VA
	380V AC						2.5VA
440V AC						2.5VA	
480V AC						2.5VA	
550V AC						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 04/73](#)

• **Pilot lights with resistor**

Lamp Voltage	LED (lamp base: E12/15)			Incandescent (lamp base: E12/15)		
	Type	Rated voltage	Consumption	Type	Rated voltage	Consumption
50V DC	APX507-24□ *	24V AC/DC	0.8W	AHX130	18V AC/DC	5W
110V DC			1.7W			10W
220V DC			3.3W			20W

Notes: * White: APX509-24O
• Replace the □ mark by the lamp luminous color code, [see page 04/73](#)

• **Numerical indicators**

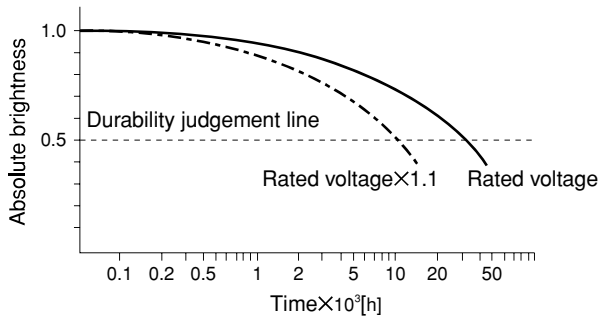
Operational voltage	Current consumption	
	One-digit	Two-digit
12V DC, 24V DC	100mA DC	200mA DC

■ **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

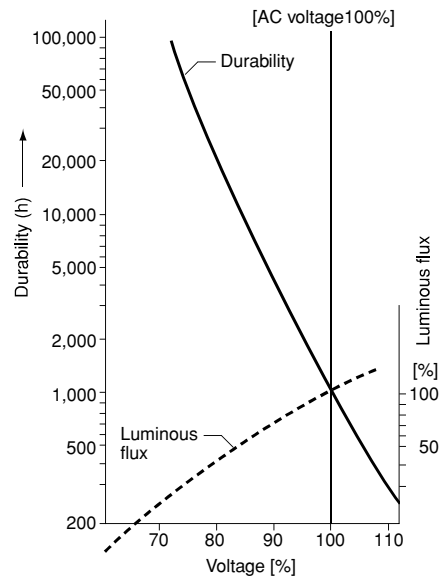
Note: The operating voltage for incandescent lamps is set at 80 to 90% of the lamp's rated voltage.

■ **Estimated durability for LED lamps**



Notes: • Durability at Ta=25°C
 • Durability is affected by temperature, humidity, and voltage fluctuation.

■ **Incandescent lamp voltage characteristics**



■ **Combination of lens color and LED luminous color**

Button color (lens or color plate)		LED lamp (high-brightness)			LED unit			
Color	Code	Luminous color	Type	Type *1	Luminous color	Type *2	Type *3	Type *4
Green	G	Green	APX510-■G	APX507-24G	Yellow	DR9Q003-■Y	DR9Q002-■Y	DR9Q001-■Y
Red	R	Red	APX510-■R	APX507-24R	Red	DR9Q003-■R	DR9Q002-■R	DR9Q001-■R
White	W	Orange	APX510-■O	APX509-24O	Orange	DR9Q003-■O	DR9Q002-■O	DR9Q001-■O
Yellow	Y	Yellow	APX510-■Y	APX507-24Y	Yellow	DR9Q003-■Y	DR9Q002-■Y	DR9Q001-■Y
Orange	A	Amber	APX510-■A	APX507-24A	Amber	DR9Q003-■A	DR9Q002-■A	DR9Q001-■A
Blue	S	Blue	APX510-■S	APX507-24S	—	—	—	—

Notes: *1 For pilot light with resistor
 *2 For DR30F4M type
 *3 For DR30F4N type
 *4 For DR30M4M type
 • Replace the ■ mark by the lamp voltage code, [see page 04/71, 04/72](#)