





Long Service Life with Built-in Z-series Basic Switch

- Using a Basic Switch enables direct switching of large-capacity loads
- Shock-absorbing construction of Operation Unit protects the Switch
- Drip-proof Pushbutton construction enables use in locations subject to splashing water and oil and scattering dust.
- Pushbuttons are available in three shapes and six colors.



 Refer to Safety Precautions for All Pushbutton Switches and Safety Precautions on page 3.

Ordering Information

Classification	Shape of Operation Unit	Output	Operation Unit color					
			Blue (-A)	Black (-B)	Green (-G)	Red (-R)	White (-W)	Yellow (-Y)
Momentary operation		1	ZAP-A	ZAP-B	ZAP-G	ZAP-R	ZAP-W	ZAP-Y
		2	2ZAP-A	2ZAP-B	2ZAP-G	2ZAP-R	2ZAP-W	2ZAP-Y
		1	ZAP-1A	ZAP-1B	ZAP-1G	ZAP-1R	ZAP-1W	ZAP-1Y
		2	2ZAP-1A	2ZAP-1B	2ZAP-1G	2ZAP-1R	2ZAP-1W	2ZAP-1Y
		1	ZAP-2A	ZAP-2B	ZAP-2G	ZAP-2R	ZAP-2W	ZAP-2Y
		2	2ZAP-2A	2ZAP-2B	2ZAP-2G	2ZAP-2R	2ZAP-2W	2ZAP-2Y

Note: Models with special specifications are available for use in environments with high humidity or outdoors.
Contact your OMRON representative for information.

Specifications

Ratings

Item	Rated voltage (V)	Non-inductive load (A)				Inductive load (A)			
		Resistive load		Lamp load		Inductive load		Motor load	
		NC	NO	NC	NO	NC	NO	NC	NO
Built-in Switch	125 VAC	15	3	1.5	1.5	15	15	2.5	2.5
	200 VAC	15	2.5	1.25	1.25	15	3	1.5	1.5
	500 VAC	10	1.5	0.75	0.75	6	1.5	0.75	0.75
	8 VDC	15	3	1.5	1.5	15	5	2.5	2.5
	14 VDC	15	3	1.5	1.5	10	5	2.5	2.5
	30 VDC	6	3	1.5	1.5	5	5	2.5	2.5
	125 VDC	0.5	0.5	0.5	0.5	0.05	0.05	0.05	0.05
	250 VDC	0.25	0.25	0.25	0.25	0.03	0.03	0.03	0.03

- Note: 1. The above values are for steady-state currents.
 2. Inductive load: Power factor = 0.4 (AC); time constant = 7 ms (DC).
 3. The lamp load has an inrush current of 10 times the steady-state current.
 4. The motor load has an inrush current of 6 times the steady-state current.
 5. Standard testing condition.
 (1) Ambient temperature: 20 ±2°C
 (2) Ambient humidity: 65% ±5%RH
 (3) Operating frequency: 20 times/min

Specifications

Characteristics

Operating frequency	Mechanical	60 operations/min
	Electrical	20 operations/min
Insulation resistance		100 MΩ min. (at 500 VDC)
Contact resistance		30 mΩ max. (initial value)
Dielectric strength	Between terminals of same polarity	1,000 VAC, 50/60 Hz for 1 min
	Between current-carrying metal part and ground, and between each terminal and non-current-carrying metal part	2,000 VAC, 50/60 Hz for 1 minute
Vibration resistance	Malfunction	10 to 55 Hz, 1.5-mm double amplitude (1 ms max.)
Shock resistance	Destruction	500 m/s ²
	Malfunction	200 m/s ² max. (1 ms max.)
Durability	Mechanical	1,000,000 operations min.
	Electrical	500,000 operations min.
Weight		Approx. 130 to 210 g
Inrush current	NC	30 A max.
	NO	15 A max.
Ambient operating temperature		-25 to 80°C (with no icing or condensation)
Ambient operating humidity		35% to 85%RH
Ambient storage temperature		-25 to 80°C (with no icing or condensation)
Degree of protection		IP65 (Operation Unit only)
Electric shock protection class		Class II
PTI (proof tracking index)		175
Pollution degree		3 (IEC947-5-1)

Operating Characteristics

Model Operating characteristics	ZAP-□□	2ZAP-□□
Operating force OF	Approx. 9.81 N	Approx. 14.7 N

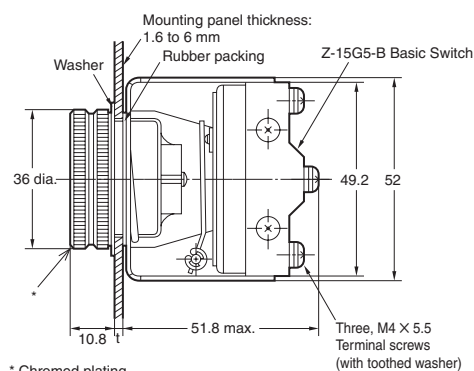
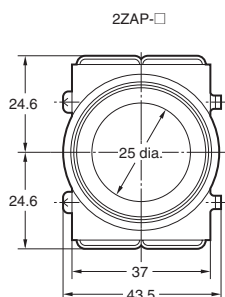
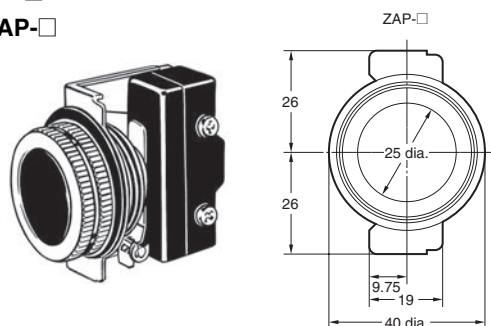
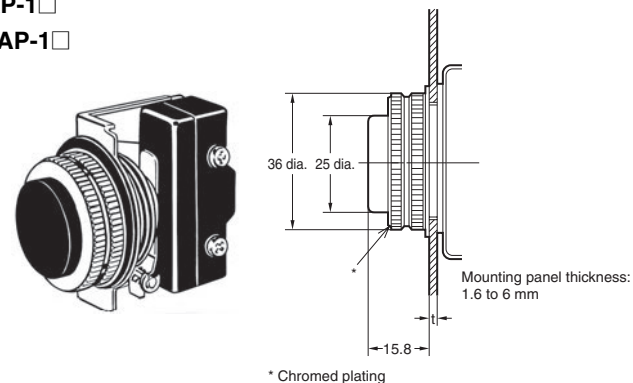
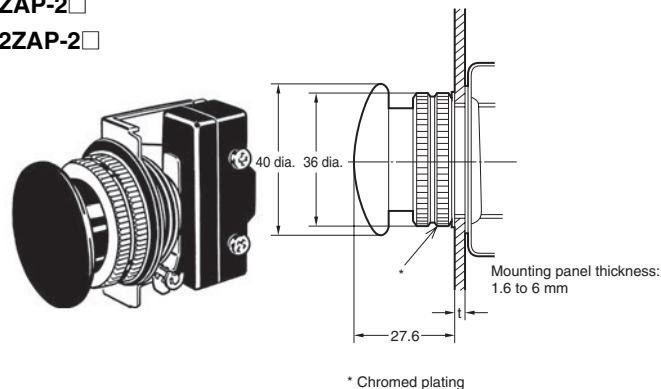
Contact Form

Name	Contact form
Double-throw contacts	

Approved Safety Standards

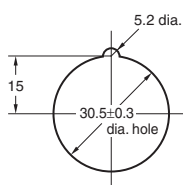
- The built-in Z-15G5-B Switch is approved for UL and CSA.

Dimensions Insert one of the following letters into the box () at the end of the model number. Refer to Ordering Information for color symbols. (Unit: mm)

ZAP-☐2ZAP-☐ZAP-1 ☐2ZAP-1 ☐ZAP-2 ☐2ZAP-2 ☐

Dimensions

Panel Cutouts



Accessories

Rubber Cap

- Use the special rubber cap to use the Switch in locations subject to significant splashing water and oil or scattering dust. Cannot be used, however, with the (2) ZAP-2.

Color	Model
Blue (-A)	ZB-A
Black (-B)	ZB-B
Green (-G)	ZB-G
Red (-R)	ZB-R
White (-W)	ZB-W
Yellow (-Y)	ZB-Y

Safety Precautions

Refer to *Safety Precautions for All Pushbutton Switches*.

Precautions for Correct Use

Insulation

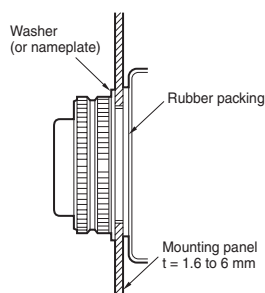
- After wiring the Switch, ensure an appropriate insulating distance.

Wiring

- Tighten the terminal screws to a torque of 0.78 to 1.18 N·m.

Mounting

- Tighten the face nut to a torque of 0.98 to 1.76 N·m.
- For panel mounting, always use a washer (or a nameplate) and rubber packing.



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