

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









CSM_ZAP_DS_E_4_1

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/ Indicators 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	36 dia. 25 dia.	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
	36 dia. 25 dia.	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
	40 dia.	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		Non-inductive load (A)			Inductive load (A)				
	Rated voltage (V)	Resistive load		Lamp load		Inductive load		Motor load	
Built-in Switch		NC	NO	NC	NO	NC	NO	NC	NO
	125 VAC 200 VAC 500 VAC	1	5 5 0	3 2.5 1.5	1.5 1.25 0.75		5 5 6	5 3 1.5	2.5 1.5 0.75
Z-15G5-B	8 VDC 14 VDC 30 VDC 125 VDC 250 VDC	1	5 5 6 0.5 0.25	3 3 3 0.5 0.25	1.5 1.5 1.5 0.5 0.25	1	5 0 5 0.05 0.03	5 5 5 0.05 0.03	2.5 2.5 2.5 0.05 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

OMRON

Specifications

Characteristics

Operat-	Mechanical	60 operations/min		
ing fre- quency	Electrical	20 operations/min		
Insulation resistance		100 MΩ min. (at 500 VDC)		
Contact resistance		30 m $Ω$ 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 termi- nal and non-current-carrying metal part	2,000 VAC, 50/60 Hz for 1 minute		
Vibra- tion re- sistance	Malfunction	10 to 55 Hz, 1.5-mm double amplitude (1 ms max.)		
Shock re-	Destruction	500 m/s ²		
sistance	Malfunction	200 m/s ² max. (1 ms max.)		
Durabili- ty	Mechanical	1,000,000 operations min.		
	Electrical	500,000 operations min.		
Weight		Approx. 130 to 210 g		
Inrush	NC	30 A max.		
current	NO	15 A max.		
Ambient operating temperature		−25 to 80°C (with no icing or condensation)		
Ambient o	perating 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 of	degree	3 (IEC947-5-1)		

Operating Characteristics

Model Operating characteristics	ZAP-□□	2ZAP-□□	
Operating force OF	Approx. 5.88 to 14.71 N	Approx. 9.81 to 17.70 N	

Note: Operating force may vary depending on thickness of mounting panel.

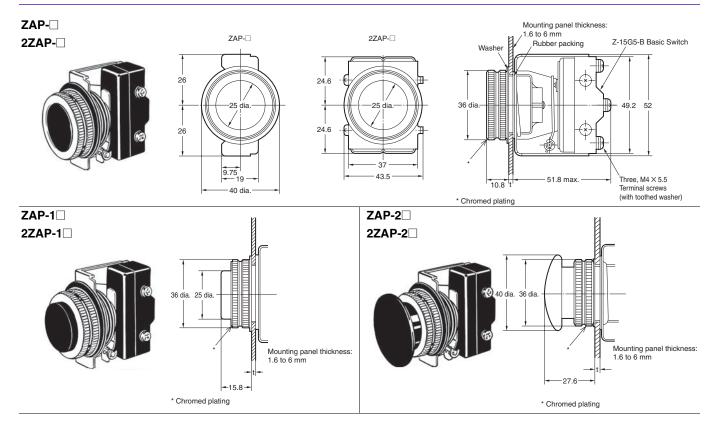
Contact Form

Name	Contact form		
Double-throw contacts	COM		
Double-tillow contacts	NO		

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 (\Box) at the end of the model number. Refer to Ordering Information for color symbols. (Unit: mm)



Dimensions (Unit: mm)

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/Indicators.

Precautions for Correct Use

Insulation

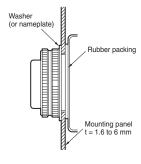
• After wiring the Switch, ensure an appropriate insulating distance.

Wiring

 \bullet 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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