

Special-purpose Basic Switch DZ





勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-34970699
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[Http://www.100y.com.tw](http://www.100y.com.tw)

DPDT Basic Switch for Two Independent Circuit Control

- Incorporates two completely independent built-in switches.
- Ideal for switching the circuits operating on two different voltages, and for controlling two independent circuits.
- Interchangeable with OMRON Z Basic Switches, as both switches are identical in mounting hole dimensions, mounting pitch and pin plunger position.



Ordering Information

Actuator	Terminal	OT (min.)	Solder terminal (-1A) Ⓡ	Screw terminal (-B) Ⓡ
			Model	Model
Pin plunger		0.13 mm	DZ-10G-1A	DZ-10G-1B
Hinge lever		1.6 mm	DZ-10GW-1A	DZ-10GW-1B
		0.4 mm	DZ-10GV-1A	DZ-10GV-1B
Short hinge roller lever		0.9 mm	DZ-10GW22-1A	DZ-10GW22-1B
		0.13 mm	DZ-10GV22-1A	DZ-10GV22-1B
Hinge roller lever		1.2 mm	DZ-10GW2-1A	DZ-10GW2-1B
		0.26 mm	DZ-10GV2-1A	DZ-10GV2-1B

Model Number Legend

DZ-10 G □ - 1 □

1 2 3 4 5

1. Ratings

10: 10 A (250 VAC)

2. Contact Gap

G: 0.5 mm

3. Actuator

None: Pin plunger

Low OT Levers:

V: Hinge lever

V22: Short hinge roller lever

V2: Hinge roller lever

High OT Levers:

W: Hinge lever

W22: Short hinge roller lever

W2: Hinge roller lever

4. Contact Form

1: DPDT

5. Terminals

A: Solder terminal

B: Screw terminal

Specifications

■ Characteristics

Operating speed		0.1 mm to 1 m/s (See note 1)
Operating frequency	Mechanical	240 operations/min
	Electrical	20 operations/min
Contact resistance		15 mΩ max. (initial value)
Insulation resistance		100 MΩ min. (at 500 VDC)
Dielectric strength		1,000 VAC, 50/60 Hz for 1 min between non-continuous terminals 1,500 VAC, 50/60 Hz for 1 min between current-carrying metal parts and non-current-carrying metal part, and between current-carrying metal part and ground and between switches
Vibration resistance	Malfunction	10 to 55 Hz, 1.5-mm double amplitude (See note 2)
Shock resistance	Destruction	1,000 m/s ² max.
	Malfunction	300 m/s ² max. (See notes 1 and 2)
Degree of protection		IP00
Degree of protection against electric shock		Class I
Proof tracking index (PTI)		175
Ambient operating temperature		-25°C to 80°C (with no icing)
Ambient operating humidity		35% to 85%RH
Service life	Mechanical	1,000,000 operations min.
	Electrical	500,000 operations min.
Weight		Approx. 30 to 50 g

- Note: 1. The values are for pin plunger models.
 2. Malfunction: 1 ms max.

■ Ratings

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
125 VAC	10		2	1	6		3	1.5
250 VAC	10		1.5	0.7	4		2	1
8 VDC	10		3	1.5	6		5	2.5
14 VDC	10		3	1.5	6		5	2.5
30 VDC	10		3	1.5	4		3	1.5
125 VDC	0.5		0.5		0.03		0.05	
250 VDC	0.25		0.25				0.03	

- Note: 1. The above values are for steady-state current.
 2. Inductive load has a power factor of 0.4 min. (AC) and a time constant of 7 ms max. (DC).
 3. Lamp load has an inrush current of 10 times the steady-state current.
 4. Motor load has an inrush current of 6 times the steady-state current.
 5. The ratings values apply under the following test conditions:
 (1) Ambient temperature: 20±2°C
 (2) Ambient humidity: 65±5%RH
 (3) Operating frequency: 20 operations/min

■ Contact Specifications

Contacts	Material	Silver alloy
	Gap (standard value)	0.5 mm
Inrush current	NC	30 A max.
	NO	15 A max.

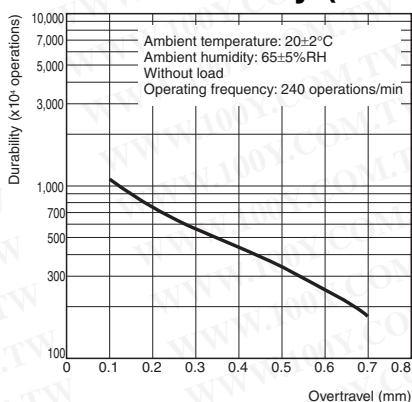
■ Safety Standard Ratings

UL/CSA

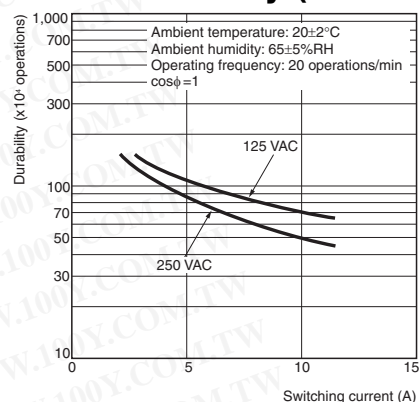
Rated voltage	DZ-10G
125 VAC	10 A and 1/8 HP
250 VAC	10 A and 1/4 HP
480 VAC	2 A
125 VDC	0.5 A
250 VDC	0.25 A

Engineering Data

Mechanical Durability (DZ-10G-1B)

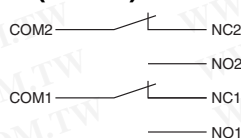


Electrical Durability (DZ-10G-1B)



Structure

Contact Form (DPDT)



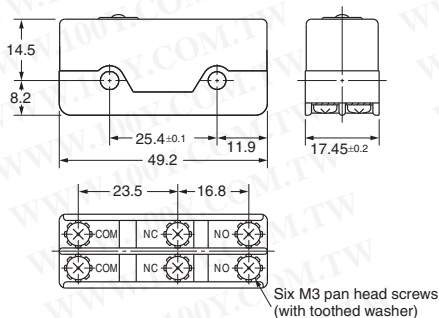
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Dimensions

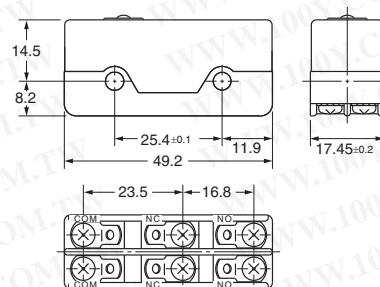
Note: Unless otherwise specified, all units are in millimeters and a tolerance of ± 0.4 mm applies to all dimensions.

Terminals

Screw Terminals (-1B)

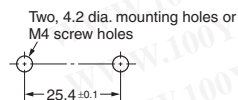


Solder Terminals (-1A)



Mounting

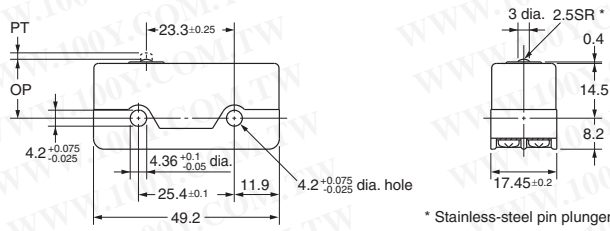
All switches can be mounted using M4 mounting screws with plane washers or spring washers to securely mount the Switch. Tighten the screws to a torque of 1.18 to 1.47 N-m.



Accessories (Terminal Covers, and Separators): Refer to 'Z/A/X/DZ Common Accessories' datasheet

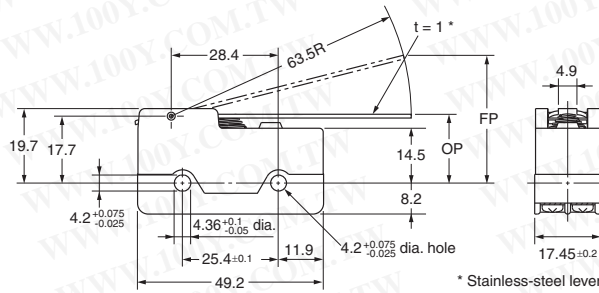
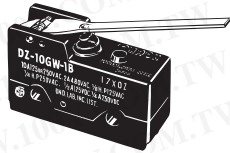
- Note: 1.** The solder terminal model has a suffix "-1A" in its model number and its omitted dimensions are the same as the corresponding dimensions of the pin plunger model.
- 2.** Unless otherwise specified, all units are in millimeters and a tolerance of ± 0.4 mm applies to all dimensions.

Pin Plunger
DZ-10G-1B



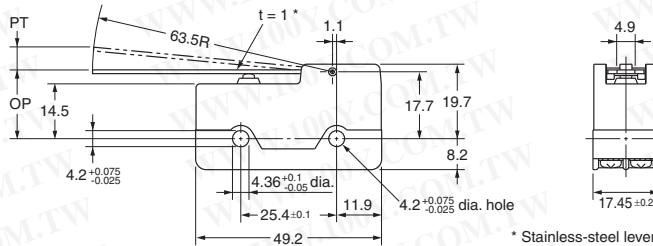
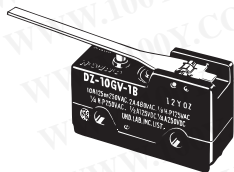
Operating force	OF max.	570 gf
Release force	RF min.	57 gf
Pretravel	PT max.	1.7 mm
Overtravel	OT min.	0.13 mm
Movement Differential	MD max.	0.4 mm
Operating Position	OP	15.6±0.4 mm

Hinge Lever
DZ-10GW-1B



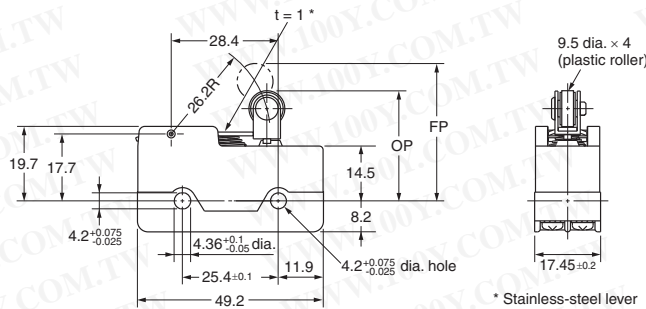
OF max.	170 gf
RF min.	28 gf
OT min.	1.6 mm
MD max.	4 mm
FP max.	46.3 mm
OP	21.8±1 mm

DZ-10GV-1B



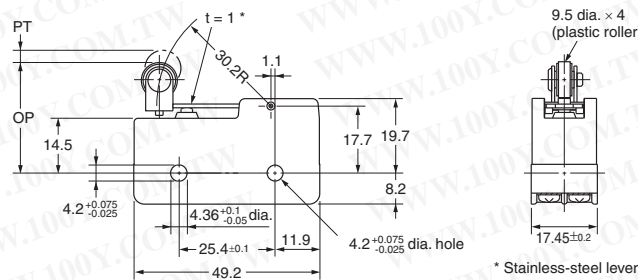
OF max.	200 gf
RF min.	13 gf
PT max.	6 mm
OT min.	0.4 mm
MD max.	1.7 mm
OP	18.3±1 mm

Short Hinge Roller Lever
DZ-10GW22-1B



OF max.	400 gf
RF min.	85 gf
OT min.	0.9 mm
MD max.	2.4 mm
FP max.	39.7 mm
OP	30.2±0.8 mm

DZ-10GV22-1B

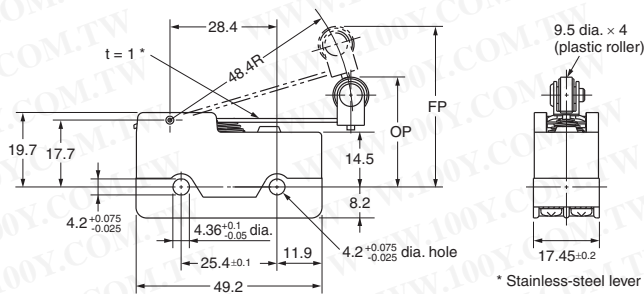
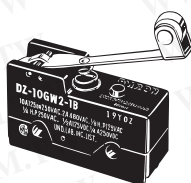


OF max.	430 gf
RF min.	42 gf
PT max.	3 mm
OT min.	0.13 mm
MD max.	0.6 mm
OP	29.4±0.8 mm

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 2. Unless otherwise specified, all units are in millimeters and a tolerance of ± 0.4 mm applies to all dimensions.

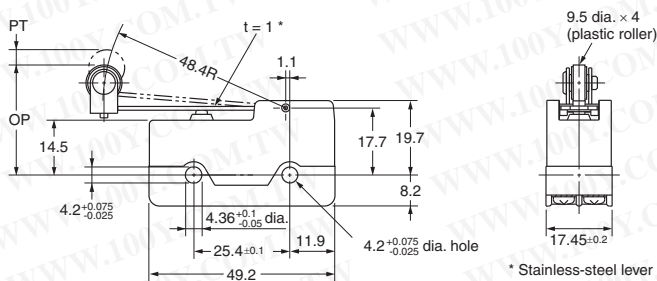
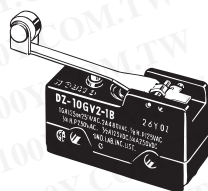
**Hinge Roller Lever
DZ-10GW2-1B**



OF max.	213 gf
RF min.	42 gf
OT min.	1.2 mm
MD max.	3.3 mm
FP max.	47.6 mm
OP	31.8 \pm 0.8 mm

* Stainless-steel lever

DZ-10GV2-1B



OF max.	270 gf
RF min.	34 gf
PT max.	4 mm
OT min.	0.26 mm
MD max.	1.1 mm
OP	29.4 \pm 0.8 mm

* Stainless-steel lever

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