

Basic Switch

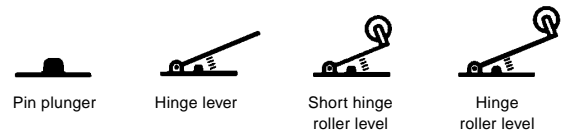
DZ

Special Purpose Basic Switch

- 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 Model Basic Switch, as both switches are identical in mounting hole dimensions, mounting pitch and pin plunger position

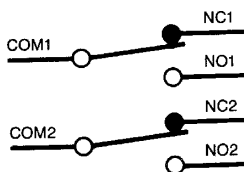


Ordering Information



Actuator	Operating Torque	Part Number	
		Solder Terminal	Screw Terminal
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

CONTACT FORM



Specifications

Non-inductive load (A) Resistive load Rated voltage	Inductive load (A)							
	Lamp load		Inductive load		Motor load			
	NC	NO	NC	NO	NC	NO	NC	NO
125 VAC	10	10	2	1	6	6	3	1.5
250 VAC	10	10	1.5	0.7	4	4	2	1
8 VDC	10	10	3	3	6	6	5	5
14 VDC	10	10	3	3	6	6	5	5
30 VDC	10	10	3	3	4	4	3	3
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

Inrush current NC: 30 A max. NO: 15 A max. (Resistive & Lamp load) NC: 30 A max. NO: 15 A max. (Inductive & Motor load)

- Note: 1. Inductive load has a power factor of 0.4 min. (AC) and a time constant of 7 milliseconds max. (DC).
 2. Lamp load has an inrush current of 10 times the steady-state current, while motor load has an inrush current of 6 times the steady-state current.

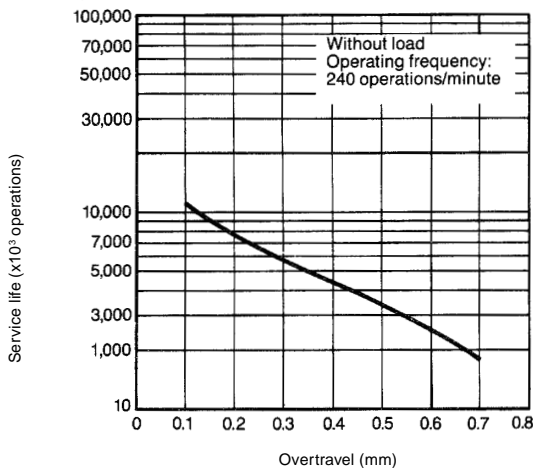
Characteristics

Operating speed	0.1 mm to 1 m/second (0.004 to 39.4 in/second) at pin plunger	
Operating frequency	Mechanical	240 operations per minute
	Electrical	20 operations per minute
Contact resistance	15 mΩ max. (initial)	
Insulation resistance	100 MΩ min. (at 500 VDC)	
Dielectric strength	1,000 VAC, 50/60 Hz for 1 minute between non-continuous terminals 1,500 VAC, 50/60 Hz for 1 minute between current-carrying part and noncurrent-carrying part, between current-carrying part and ground and between switches	
Vibration	Malfunction durability	10 to 55 Hz, 1.5 mm double amplitude
Shock	Mechanical durability	1,000 m/s ² min. (approx. 100 g min.)
	Malfunction durability	300 m/s ² min. (approx. 30 g min.)
Ambient temperature	Operating	-25° to 80°C (with no icing)
Humidity	Operating	35% to 85% RH
Service life	Mechanical	1,000,000 operations min. (at rated OT value)
	Electrical	500,000 operations min. (under rated load)
Weight	Approx. 30 to 50 g	

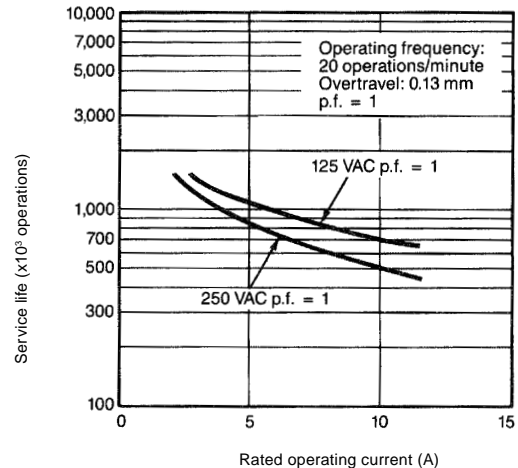
Note: Data shown are of initial value.

CHARACTERISTIC DATA

Mechanical service life (pin plunger type)



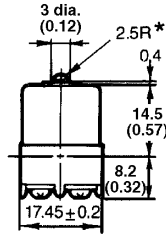
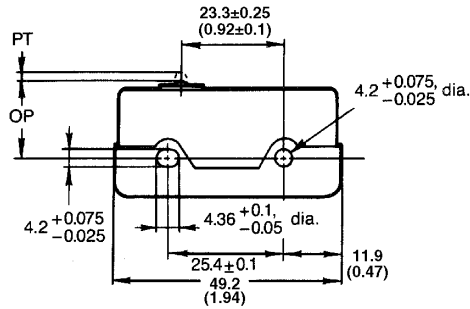
Electrical service life (pin plunger type)



Dimensions

Unit: mm (inch)

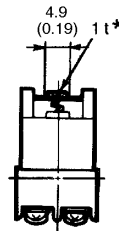
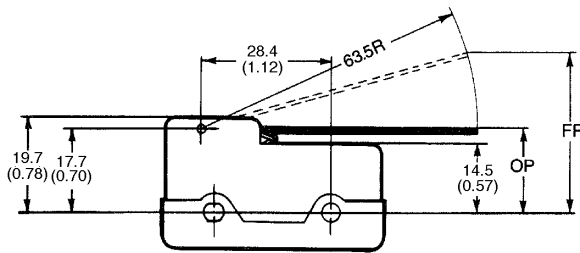
DZ-10G-1B



*Stainless steel pin plunger

Operating characteristics	DZ-10G-1B
OF max.	570 g
RF min.	57 g
PT max.	1.7 mm (0.07 in)
OT min.	0.13 mm (0.01 in)
MD max.	0.4 mm (0.02 in)
OP	15.6 ± 0.4 mm (0.61 ± 0.02 in)

DZ-10GW-1B

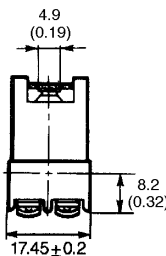
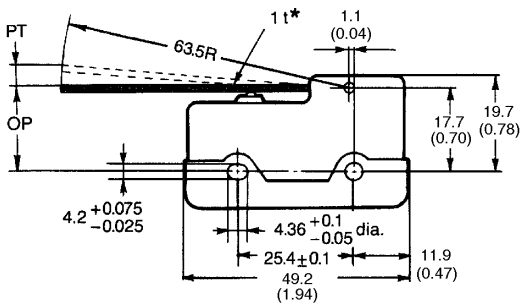


*Stainless steel lever

Operating characteristics	DZ-10GW-1B
OF max.	170 g
RF min.	28 g
PT max.	25.5 mm*
OT min.	1.6 mm (0.06 in)
MD max.	4 mm (0.16 in)
FP max.	46.3 mm (1.82 in)
OP	21.8 ± 1 mm (0.86 ± 0.04 in)

* Reference value

DZ-10GV-1B

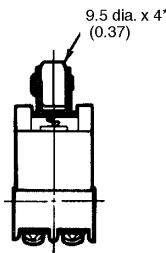
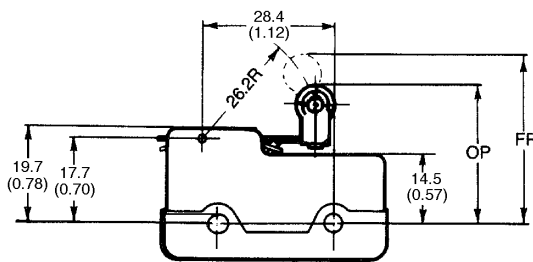


*Stainless steel lever

Operating characteristics	DZ-10GV-1B
OF max.	200 g
RF min.	14 g
PT max.	6 mm (0.24 in)
OT min.	0.4 mm (0.02 in)
MD max.	1.7 mm (0.07 in)
FP max.	23.3 mm* (0.92 in)
OP	18.3 ± 1 mm (0.72 ± 0.04 in)

* Reference value

DZ-10GW22-1B



*Plastic roller

Operating characteristics	DZ-10GW22-1B
OF max.	400 g
RF min.	85 g
PT max.	10.3 mm*(0.41 in)
OT min.	0.9 mm (0.04 in)
MD max.	2.4 mm (0.09 in)
FP max.	39.7 mm* (1.56 in)
OP	30.2 ± 0.8 mm (1.19 ± 0.03 in)

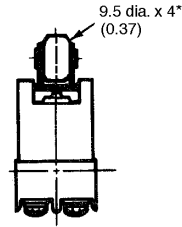
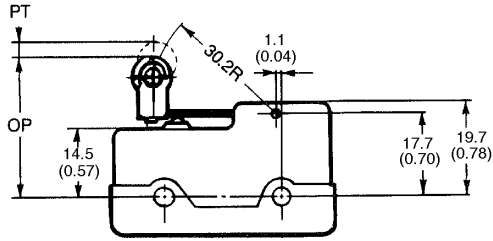
* Reference value

Note: 1. Unless otherwise specified, a tolerance of ± 0.4 mm applies to all dimensions.

2. All drawings show the switches with screw terminals (-1B). For solder terminals add a suffix of "-1A" in place of "-1B" at the end of the part number.

Unit: mm (inch)

DZ-10GV22-1B

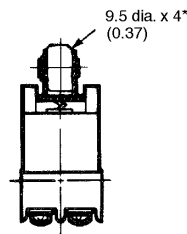
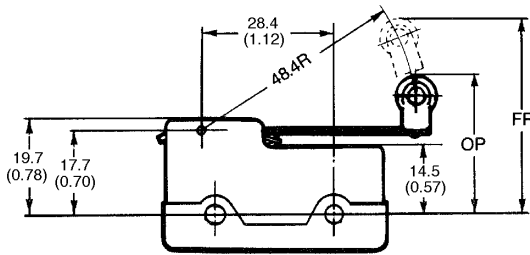


*Plastic roller

Operating characteristics	DZ-10GV22-1B
OF max.	430 g
RF min.	42 g
PT max.	3 mm (0.12 in)
OT min.	0.13 mm (0.01 in)
MD max.	0.6 mm (0.02 in)
FP max.	31.6 mm* (1.24 in)
OP	29.4 ± 0.8 mm (1.16 ± 0.03 in)

* Reference value

DZ-10GW2-1B

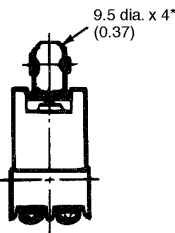
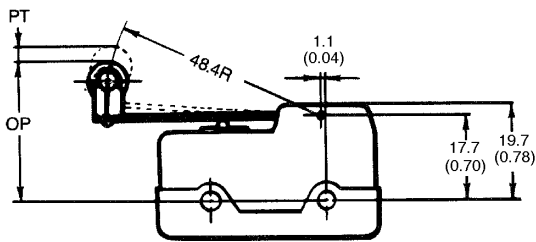


*Plastic roller

Operating characteristics	DZ-10GW2-1B
OF max.	213 g
RF min.	42 g
PT max.	16.6 mm (0.65 in)
OT min.	1.2 mm (0.05 in)
MD max.	3.3 mm (0.13 in)
FP max.	47.6 mm* (1.87 in)
OP	31.8 ± 0.8 mm (12.5 ± 0.03 in)

* Reference value

DZ-10GV2-1B



*Plastic roller

Operating characteristics	DZ-10GV2-1B
OF max.	270 g
RF min.	34 g
PT max.	4 mm (0.16 in)
OT min.	0.26 mm (0.01 in)
MD max.	1.1 mm (0.04 in)
FP max.	34.2 mm* (1.35 in)
OP	29.4 ± 0.8 mm (1.16 ± 0.03 in)

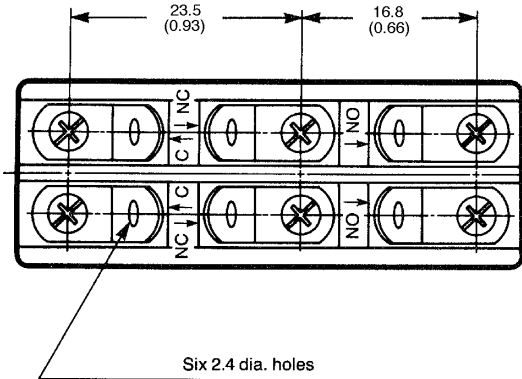
* Reference value

Note: 1. Unless otherwise specified, a tolerance of ± 0.4 mm applies to all dimensions.

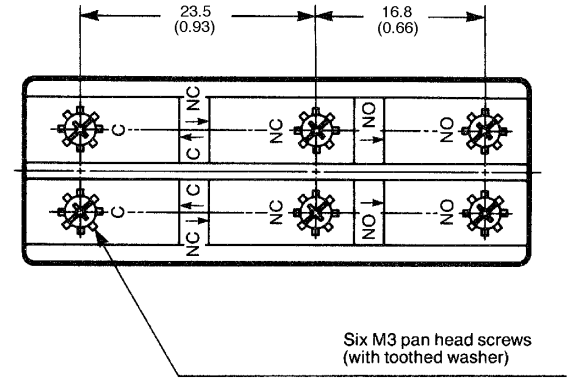
2. All drawings show the switches with screw terminals (-1B). For solder terminals add a suffix of "-1A" in place of "-1B" at the end of the part number.

■ TERMINALS

Solder terminals (-1A)



Screw terminals (-1B)



■ APPROVALS

UL (File No. E41515)

Type	Rating
DZ-10G	10 A, 125 VAC 10 A, 250 VAC 2 A, 480 VAC 1/2 A, 125 VDC 1/4 A, 250 VDC 1/8 HP 125 VAC 1/4 HP 250 VAC

Note: The rated values approved by each of the safety standards (e.g. UL) may be different from the performance characteristics individually defined in this catalog.



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