



Features

- Double circuit type of limit switch
- High mechanical strength, consists of intensive plastic and aluminum cast
- Small size, water-proof and oil-proof construction
- Built-in contact box has double-spring and long mechanical life
- Smooth operation with larger over travel distance
- Conduit design for convenient cabling
- Various actuators for different applications

Contact Form



Ratings

Rated Voltage	Noninductive Load (A)				Inductive Load (A)			
	Resistance Load		Lamp Load		Inductive Load		Motor Load	
	NC	NO	NC	NO	NC	NO	NC	NO
125VAC	5	5	1.5	0.7	3	3	2	1
250VAC	5	5	1	0.5	3	3	1.5	0.8
8VDC	5	5	3	3	5	4	3	3
14VDC	5	5	3	3	4	4	3	3
30VDC	5	5	3	3	4	4	3	3
125VDC	0.4	0.4						
250VDC	0.2	0.2						
Inrush Current	N.C: below 24A, N.O: below 12A							

NOTES: 1. Inductive load has a power factor of 0.4 min.(AC) and a time constant of 7 msec. 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.  
3. Product with spring, its usable range of operating part is within one third of the whole spring length from the front end of spring.

Operating Characteristics

Model	TZ-8	TZ-8104 TZ-8105	TZ-8108 TZ-8109	TZ-8107	TZ-8111	TZ-8112/8122	TZ-8166/8167/8168/8169
Operating force	OF(Max.)	750g	750g	750g	900g	900g	150g
Release force	RF(Min.)	100g	100g	100g	150g	150g	-
Pre-travel	PT(Max.)	20°	20°	20°	1.5mm	1.5mm	30mm
Over travel	OT(Min.)	50°	50°	50°	4mm	4mm	-
Movement differential	MD(Max.)	12°	12°	12°	1mm	1mm	-
Operating position	OP(mm.)	-	-	-	26 ± 0.8mm	37 ± 0.8mm	-

Specifications

Operation speed	5mm-0.5m/s
Operating frequency	Electical: 30 operations/min
Contact resistance	25mΩ max. (initial value)
Insulation resistance	100mΩ min. (below 500VDC)
Dielectric strength	1000VAC, 50/60 Hz for 1 minute between terminals of the same polarity
	1500VAC, 50/60 Hz for 1 minute between current-carrying and non-current-carrying metal parts
Dielectric strength	1500VAC, 50/60 Hz for 1 minute between each terminal and ground
	1500VAC, 50/60 Hz for 1 minute between each terminal and ground
Vibration	10-55Hz, 1.5mm double amplitude
Shock	Mechanical durable: 1,000m/Sec <sup>2</sup> (about 100G'S) Malfunction: 300m/Sec <sup>2</sup> (about 30G'S)
Ambient temperature	Using: -20~+70℃ (With no icing)
Humidity	<95% RH
Electrical life	500,000 operations above
Degree of protection	IP65

Appearance and Dimension

TZ-8104

TZ-8105

TZ-8107

TZ-8108

TZ-8109

TZ-8111

TZ-8112

TZ-8122

TZ-8166

TZ-8167

TZ-8168

TZ-8169