

PRODUCT DATA AND APPLICATION SHEET

PRODUCT NAME **Limit Switches**

DESCRIPTION **Limit Switch**

PRODUCT CODE **TZ-8104, TZ-8107, TZ-8108, TZ-8111 and TZ-8166**

FEATURES

- Limit switches are a contact proximity sensor device that consists of an actuator mechanically linked to a set of output contacts. When an object comes into contact with the actuator, the device operates the contacts to make or break an electrical connection

SPECIFICATION

Models	TZ-8104	TZ-8107	TZ-8108	TZ-8111	TZ-8112	TZ-8166
Operating Force (Max.)	750g	750g	750g	900g	900g	150g
Release Force (Min.)	100g	100g	100g	150g	150g	-
Pre-Travel (Max.)	2°	2°	2°	1.5mm	1.5mm	30mm
Over Travel (Min.)	5°	5°	5°	4mm	4mm	-
Movement Differential (Max.)	12°	12°	12°	1mm	1mm	-
Operational Postion	-	-	-	26±0.8mm	37±0.8mm	-



TZ-8104



TZ-8107



TZ-8108



TZ-8111



TZ-8112



TZ-8166



Electrical Components

4-8 Ferndell St SOUTH GRANVILLE NSW 2142

PO Box 3107 WETHERILL PARK NSW 2164

Ph: (02) 9632-5000

Fax: (02) 9632-5011

ABN: 18 165 515 257

ELECTRICAL RATINGS

Operation speed	0.5mm-50cm/s
Operating frequency	Mechanical: 120 operations/min Electrical: 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
	1500VAC, 50/60 Hz for 1 minute between each terminal and ground
Vibration	10-55Hz, 1.5mm double amplitude
Shock	Mechanical durability: 1000m/s ² (about 100g's)
	Malfunction: 300m/s ² (about 30g's)
Ambient temperature	-5--+65 °C (With no icing)
Humidity	<95% RH
Weight	About 130 to 190g
Life	Mechanical: >10,000,000 operations
	Electrical: >500,000 operations
Degree of protection	IP65

OPERATIONAL CHARACTERISTICS BY MODEL

Rated voltage	Non-inductive Load (A)				Inductive Load (A)			
	Resistive Load		Lamp Load		Inductive Load		Motor Load	
	NC	NO	NC	NO	NC	NO	NO	NC
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 0.4min. (AC) and time constant of 7 msec.max (DC)
2. Lamp load has an inrush current of 10 times the steady-safe current, while motor load has an inrush current of 6 times the steady-state current
3. Product with spring, its usable operation range is within one third of the whole spring length, from the front end of the spring.

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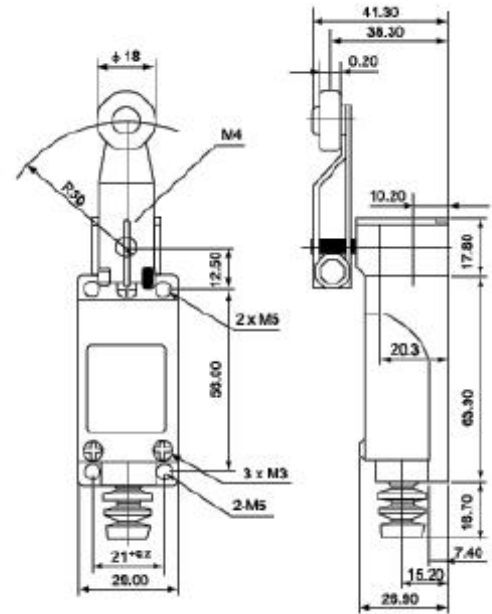
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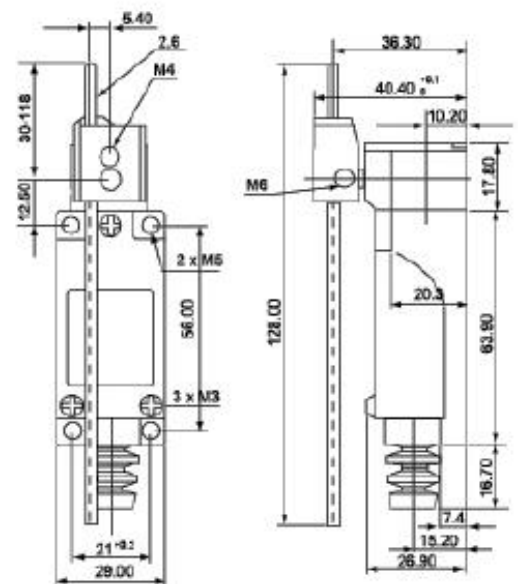
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TZ-8104



TZ-8107



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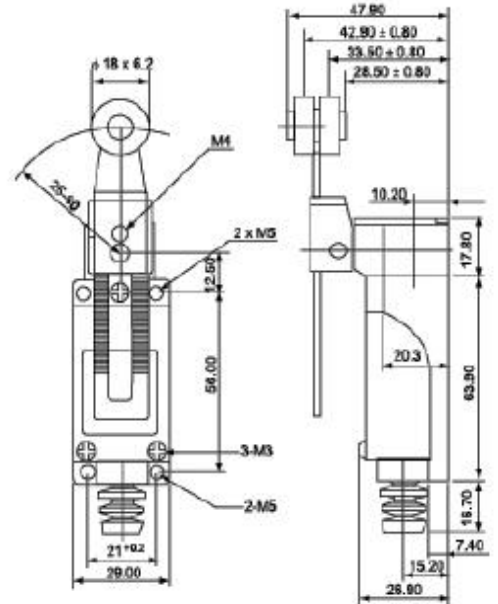
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