



TZ-81() Series Limit Switch Datasheet



Specifications

Models	TZ-8104	TZ-8108	TZ-8107	TZ-8111	TZ-8112/8122	TZ-8166/8167/8168/8169
OF(Max.)	750g	750g	750g	900g	900g	150g
RF(Min.)	100g	100g	100g	150g	150g	-
PT(Max.)	20°	20°	20°	1.5mm	1.5mm	30mm
OT(Min.)	50°	50°	50°	4mm	4mm	-
MD(Max.)	12°	12°	12°	1mm	1mm	-
OP	-	-	-	26±0.8mm	37±0.8mm	-

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

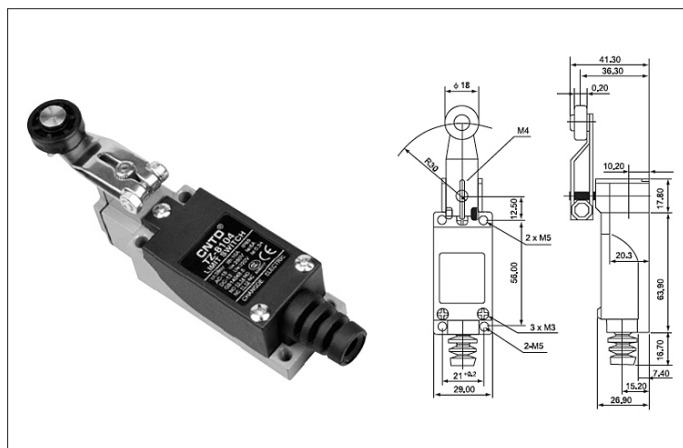
NOTES:

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 operation range is within one third of the whole spring length, from the front end of the spring.

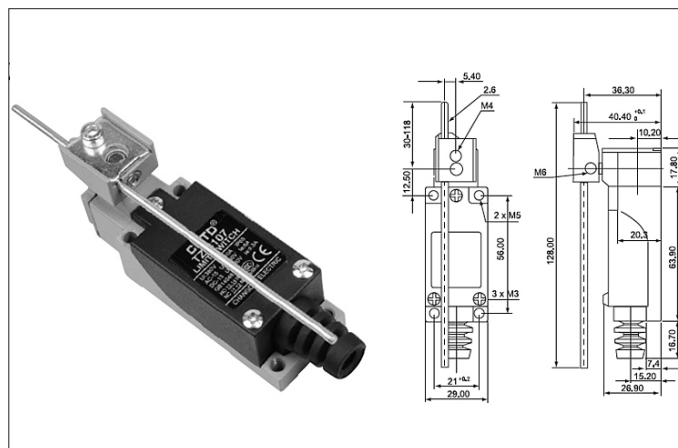
Rated voltage	Non-inductive Load (A)				Inductive Load (A)			
	Resistive Load		Lamp Load		Inductive Load		Motor Load	
	NC	NO	NC	NO	NC	NO	NO	NC
125VAC	5	5	1.5	0.7	3	3	2	1
250VAC	5	5	1	0.5	3	3	1.5	0.8
8VDC	5	5	3	3	5	4	3	3
14VDC	5	5	3	3	4	4	3	3
30VDC	5	5	3	3	4	4	3	3
125VDC	0.4	0.4						
250VDC	0.2	0.2	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

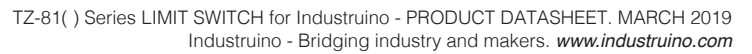
Limit switch models

TZ-8104



TZ-8107



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CMT®
LMS-011L
1/2" BSP
16mm G1/8"
230VAC
50/60Hz
POWER ELECTRONICS

The photograph shows the physical component from a three-quarter perspective, highlighting its compact design and standard electrical connections.

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