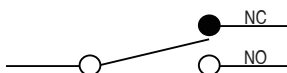




Features

- Virous of actuators, the operation position is adjustable. (such as CZ-7121).
- Outer shell covered with intensive plastic, water-proof and oil-proof.
- The mechanical strength is better than CM type of micro swith, bear hitting.

Contact Form



Contact Form

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	10	3	1.5		10	5	2.5	
250VAC	10	2.5	1.25		10	3	1.5	
480VAC	3	1.5	0.75		2.5	1.5	0.75	
8VDC	10	3	1.5		6	6	5	
14VDC	10	3	1.5		6	6	5	
30VDC	8	3	1.5		6	5	2.5	
125VDC	0.5	0.4	0.4		0.05	0.05	0.05	
250VDC	0.25	0.2	0.2		0.03	0.03	0.03	

NOTES:

- Inductive load has a power factor of 0.4 min.(AC) and a time constant of 7 msec.max.(DC).
- 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

Operation speed	0.5mm-50cm/sec
Operating frequency	Mechanical: 120 operations/minute Electrical: 30 operations minute
Contact resistance	25m Ω max. (initial value)
Insulation resistance	100m Ω min. at 500VDC
Dielectric strength	1000VAC, 50/60 HZ for 1 minute between terminals of the same polarity
	1500VAC, 50/60 HZ for 1 minute between currentcarrying 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 durable: 1, 000m/Sec ² (about 100G'S) Malfunction: 300m/Sec ² (about 30G'S)
Ambient temperature	-5°Cto +65°C
Humidity	<95% RH
Life	Mechanical: 10,000,000 operations above (under rated OT) Electrical: 500,000 operations above
Weight	About 60g
Degree of protection	IP65

Operating characteristics

Models	CZ-7100	CZ-7110	CZ-7310	CZ-7311	CZ-7312	CZ-7120	CZ-7140	CZ-7121	CZ-7141	CZ-7124	CZ-7144	CZ-7166
OF Max.	600g	600g	600g	600g	600g	150g	220g	180g	240g	200g	280g	120g
RF Min.	100g	100g	100g	100g	100g	40g	60g	50g	80g	60g	100g	
PT Max.	2.0mm	2.0mm	2.0mm	2.0mm	100g	13.5mm	8.5mm	11.0mm	6.5mm	11mm	6.5mm	250mm
OT Min.	0.8mm	0.5mm	0.6mm	0.6mm	0.6mm	4.0mm	2.5mm	3.0mm	2.0mm	3.0mm	2.0mm	11mm
MD Max.	0.8mm	0.8mm	0.8mm	0.8mm	0.8mm	3.2mm	2.0mm	2.4mm	1.5mm	2.4mm	1.5mm	
OP	30.5±0.8mm	44±1.2mm	21.8±1.2mm	33.3±1.2mm	33.3±1.2mm	25±1mm	25±1mm	40±1mm	40±1mm	50±1.2mm	50±1.2mm	
FP						35mm	32mm		46mm		56mm	



Features

- Various of actuators, action position is adjustable (such as CM1701)
- High switch on and off capacity (15A)
- High accuracy
- Wide range of operation speed
- Each type of CM series has solder terminal, screw terminal and tab terminal are selective
- Add A for solder terminal, add C for tab terminal, blank for screw terminal

Contact Form



Characteristics

Operation speed	0.01mm-1m/sec
Operating frequency	Mechanical: 240 operations/min. Electrical: 20 operations/min.
Contact resistance	15mΩ max. (initial value)
Insulation resistance	100mΩ min. at 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 durable: 1,000m/Sec ² (about 100G'S) Malfunction: 300m/Sec ² (about 30G'S)
Ambient temperature	General purpose type: -25°C to +80°C, Sealed type: -15°C to +80°C
Humidity	General purpose type: 85% RH max., Sealed type: 95% RH max.
Life	Mechanical: 20,000,000 operations/min. Electrical: 500,000 operations/min.
Weight	About 22g to 58g
Degree of protection	IP65

Contact Form

Rated voltage	Noninductive Load(A)				Inductive Load(A)				Inrush Current	
	Resistance Load		Lamp Load		Inductive Load		Motor Load			
	NC	NO	NC	NO	NC	NO	NC	NO	NC	NO
125VAC	15		3	1.5	15		5	2.5	30 max.	15 max.
250VAC	15		2.5	1.25	15		3	1.5		
500VAC	3		1.5	0.75	2.5		1.5	0.75		
8VDC	15		3	1.5	15		5	2.5		
14VDC	15		3	1.5	10		5	2.5		
30VDC	6(2)		3	1.5	5		5	2.5		
125VDC	0.4		0.4	0.4	0.05		0.05	0.05		
250VDC	0.2		0.2	0.2	0.03		0.03	0.03		

Operating characteristics

Models	CM1300	CM1301	CM1303	CM1305	CM1306	CM1307	CM1308	CM1309	CM1701	CM1702	CM1703	CM1704	CM1705	CM1743
OF Max.	350g	300g	300g	350g	350g	350g	350g	350g	70g	100g	160g	160g	10g	160g
RF Min.	114g	50g	50g	114g	114g	114g	114g	114g	14g	28g	22g	42g	3g	42g
PT Max.	0.4mm	4mm	4mm	0.4mm	0.4mm	0.4mm	0.4mm	0.4mm	10mm	5mm	7.1mm	2.7mm	20mm	2.7mm
OT Min.	0.13mm	1.6mm	1.6mm	1.6mm	1.6mm	5.5mm	3.58mm	3.58mm	5.6mm	2mm	4mm	2.4mm	5.6mm	2.4mm
MD Max.	0.05mm	1.3mm	1.3mm	0.05mm	0.05mm	0.05mm	0.05mm	0.05mm	1.27mm	1mm	1.02mm	0.5mm	3mm	0.5mm
FP Max.		20.6mm	31.8mm						28.2mm	24.8mm	36.5mm	32.5mm		43.6mm
OP(mm)	15.9±0.4	17.4±0.8	28.2±0.5	28.2±0.5	21.5±0.5	21.8±0.8	33.4±1.2	33.4±1.2	19±0.8	19±0.4	30.2±0.8	30.2±0.4	19±0.4	43.1±0.8

Operating characteristics

Definitions of operating characteristics:

OF: operating force

Force needed to add to the executer unit to actuate switch contact

RF: releasing force

Force needed to add to the executer unit to make the switch contact back to normal position

TF: total force

Force needed to make executer unit move from free position to limitation position

FP: free position

Primary position of executer unit without external force adding to executer unit

OP: operating position

The position of executer unit in case of the contact rapidly moving to the contact position for action

RP: releasing position

The position of executer unit in case of the contact rapidly backing to

normal position to action contact position

TTP: total tavel position

The position of executer unit in case of executer unit reaching the limitation position

PT: pretravel

The distance or angle that the executer unit passes since free position to action position

OT: overtravel

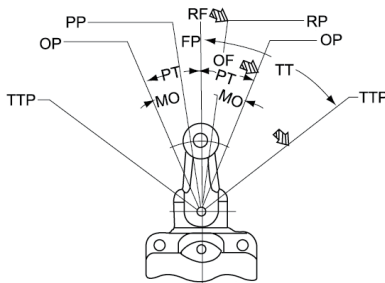
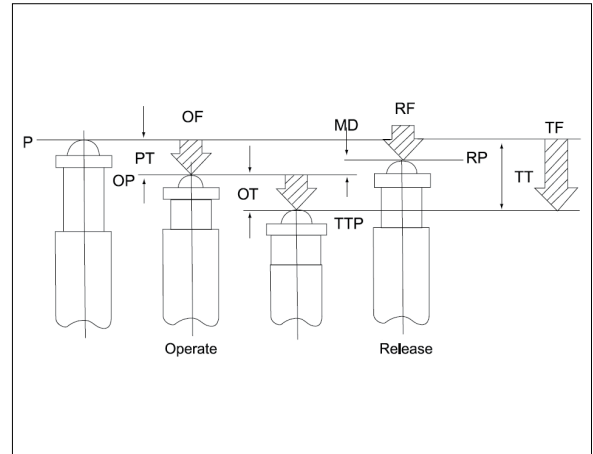
The distance or angle that the executer unit surpasses action position

MD: movement differential

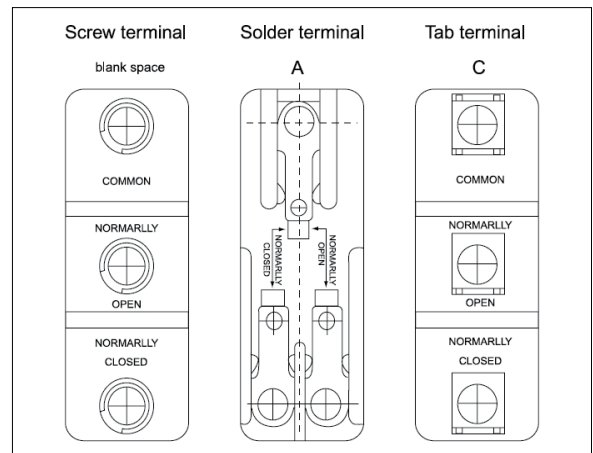
The distance or angle from action position to reversion position

TT: total tavel

The distance or angle represents the movement till action and the total movement after all actions.

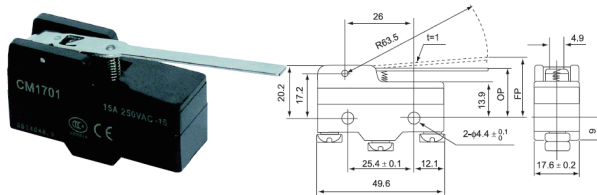


Terminal Type

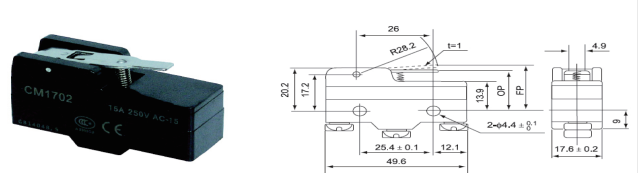


Appearance and dimension

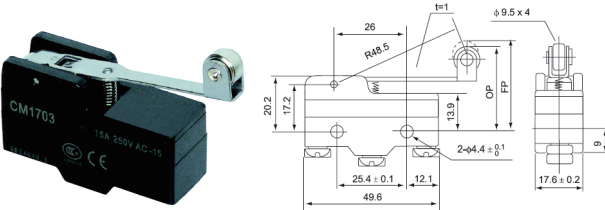
CM-1701



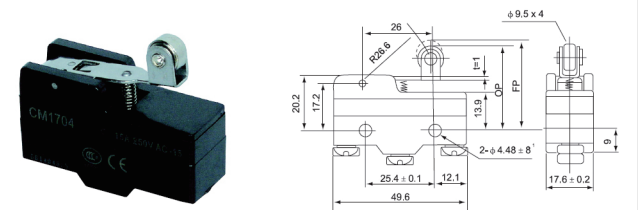
CM-1702



CM-1703



CM-1704

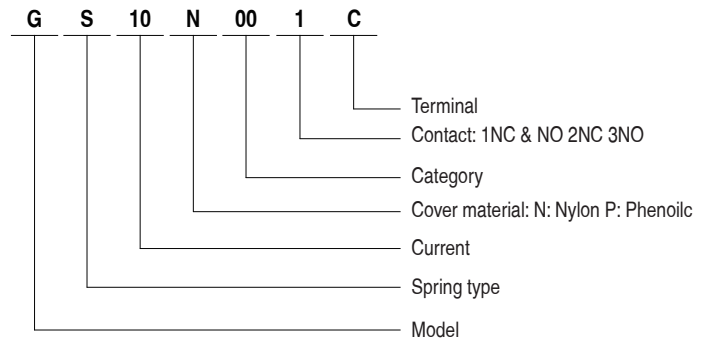


Appearance and dimension

CM-1743	CM-1705
CM-1306	CM-1307
CM-1308	CM-1309
CM-1300	CM-1301
CM-1303	CM-1305



Model designations



Performance

Contact resistance	15 mΩ max. (initial)
Insulation resistance	100m min. (at 500VDC)
Dielectric strength	1,000 VAC 50/60 Hz for 1 minute
Life	Mechanical:10,000,000 operations min. Electrical:100,000 operations min.(full load)

Appearance and dimension

