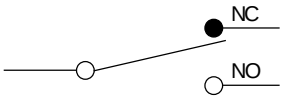
CM Micro Switch

Features

- Virous 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



Ratings

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		

Characteristics

Operation speed	0.01mm-1m/sec
Operating frequency	Mechanical: 240 operations/min. Electical: 20 operations/min.
Contact resistance	15m Ω max. (initial value)
Insulation resistance	100m Ω above (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℃ to +80℃, Sealed type: -15℃ to +80℃
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

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	28.6 ± 0.8	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

CM Micro Switch

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 execter 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

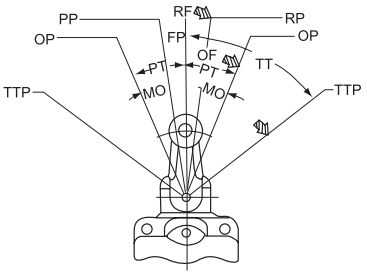
TTP: total tavel position
The position of executer unit in case of executer unit reaching the limitation position

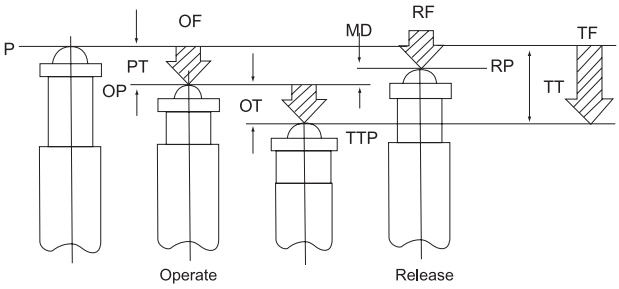
PT: pretravel
The distance or angle that the executer unit passes since free position to action position

OT: overtravel
The distance or angle that the executer unit surpasses action position

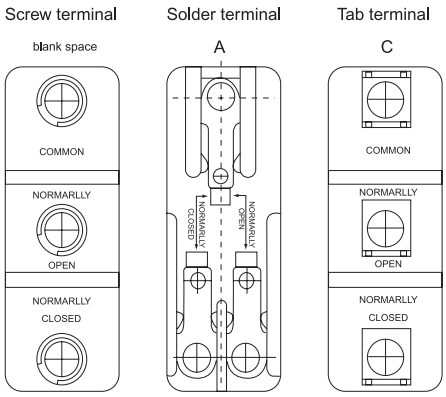
MD: movement differential
The distance or angle from action position to reversion position

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



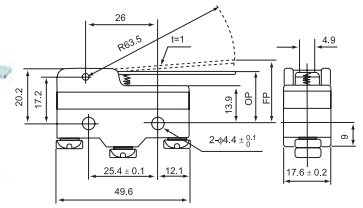


Terminal Type

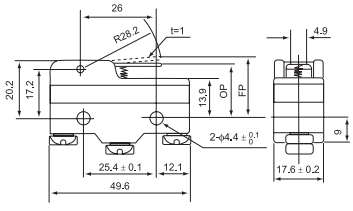


Appearance and dimension

CM-1701



CM-1702



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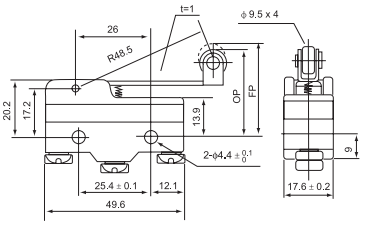

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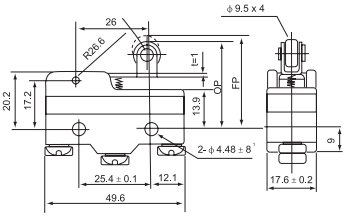
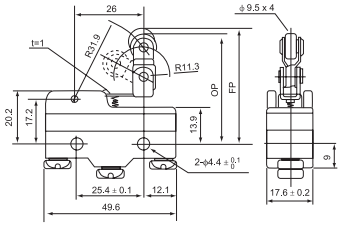
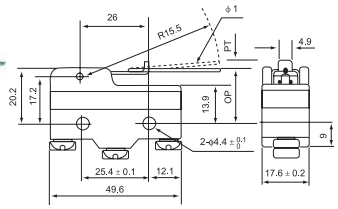


CM Micro Switch

CM-1743



CM-1705



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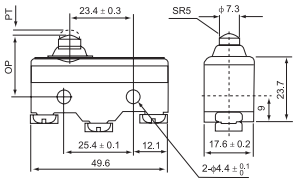

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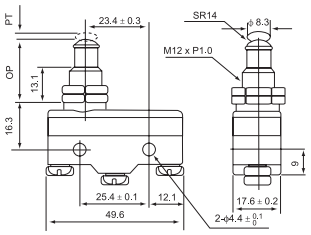

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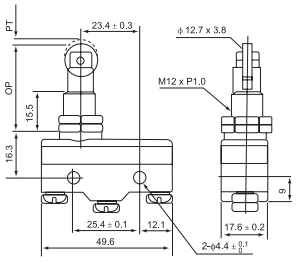

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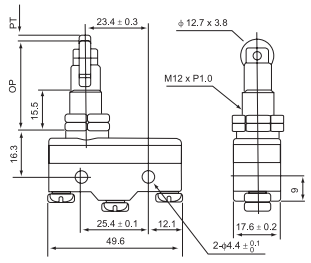
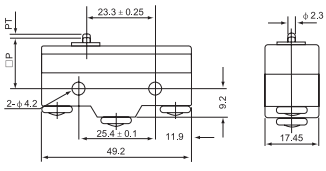


CM-1300



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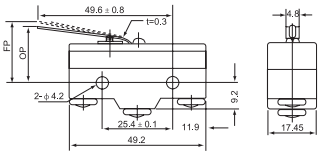

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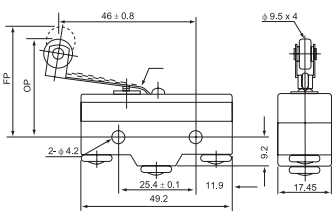
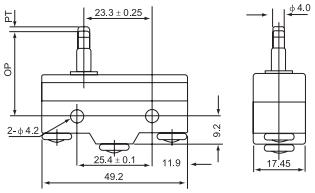
CM-1305