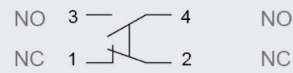


Features

- Double-circuit type of limit switch
- High mechanical strength, mainly consists of aluminum cast
- Water-proof and oil-proof construction
- Various actuators for different applications
- Built-in contact box with double spring mechanism, longer mechanical life

Contact Form



Specifications

Operation speed	1mm 1m/s(CWLCA2)
	1mm-1m/s
	:30
Operating frequency	Electical: 30 operations/min
Contact resistance	25mΩ
	25mΩ max. (initial value)
Insulation resistance	100MΩ 500VDC
	100mΩ min. (below 500VDC)
	1,000VAC, 50/60Hz 1
	1500VAC, 50/60 Hz for 1 minute between current-carrying and non-current-carrying metal parts
Dielectric strength	1,500VAC, 50/60Hz
	1500VAC, 50/60 Hz for 1 minute between current-carrying and non-current-carrying metal parts
	1,500VAC, 50/60Hz 1
	1500VAC, 50/60 Hz for 1 minute between each terminal and ground
Vibration	10 55Hz, 1.5mm 10-55Hz, 1.5mm double amplitude
Shock	:1,000m/Sec ² 100G [°] S)
	:300m/Sec ² 30G [°] S)
	Mechanical durable: 1,000m/Sec ² (about 100G [°] S)
	Malfunction: 300m/Sec ² (about 30G [°] S)
Ambient temperature	Using: -20~+80 [°] C
Humidity	95%RH <95% RH
Electrical life	500,000
	500,000 operations above
Protection level	IP66

NOTES: The default size of conduit connector is M20x1.5, outfitting cable connector. Conduit connector size is PG13.5, with product model number plus (-P), example:CWLCA2-2-P.

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	10	3	1.5	10	5	2.0		
250VAC	5	2	1	5	3	1.0		
480VAC	3	1.5	0.8	3	1.5	0.8		
600VAC	1	1	0.5	1.5	1	0.5		
8VDC	10	6	3	10		6		
14VDC	10	6	3	10		6		
30VDC	6	4	3	6		4		
125VDC	0.8	0.2	0.2	0.8		0.2		
250VDC	0.4	0.1	0.1	0.4		0.1		

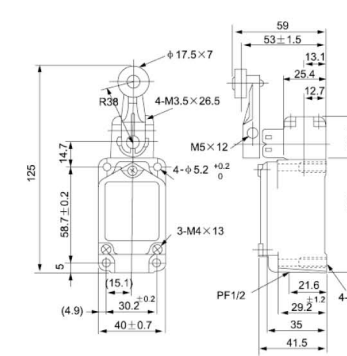
NOTES: 1. Inductive load has a power factor of 0.4 min.(AC) and a time constant of 7 msec. max.(DC).
 2. Lamp load has an inrush current of 10 times the steady-state current, while motor load has an inrush current of 6 times the steady-state current.
 3. Product with spring, its usable range of operating part is within one third of the whole spring length from the front end of spring.

Operating Characteristics

Model	CWL	CWLCA2-2	CWLD2	CWLNJ	CWLNJ-S2	CWLCA12-2-Q	CWLCA12-2-QD	CWLCL	CWLCA32-41	CWLCA32-42	CWLD	CWLNJ-2	CWLNJ-30	CWLD1	CWLD3
Operating Force	OF (Max.)	1360g	2720g	150g	29g	1360g	142g	1200g	2720g	120g	80g	2720g	2720g	2720g	2720g
Release Force	RF (Min.)	227g	910g	-	-	227g	28g	-	910g	-	-	910g	910g	910g	910g
Pre-Travel	PT (Max.)	20°	1.7mm	28mm	28mm	20°	20°	55O	1.7mm	28mm	28mm	1.7mm	1.7mm	1.7mm	1.7mm
Over Travel	OT (Min.)	30°	5.6mm	-	-	30°	30°	35O	6.4mm	-	-	5.6mm	5.6mm	5.6mm	5.6mm
Movement Differential	MD (Max.)	12°	1mm	-	-	12°	12°	-	1mm	-	-	1mm	1mm	1mm	1mm
Total Force	TF (Max.)	2720g	-	-	-	2720g	200g	-	-	-	-	2720g	2720g	2720g	2720g
Total Travel	TT (Min.)	50°	6.5 ± 0.8mm	-	-	50°	50°	OP:90 ± 10o	OP:34 ± 2.8mm	-	-	6.5 ± 0.8mm	9 ± 0.8mm	9 ± 0.8mm	9 ± 0.8mm

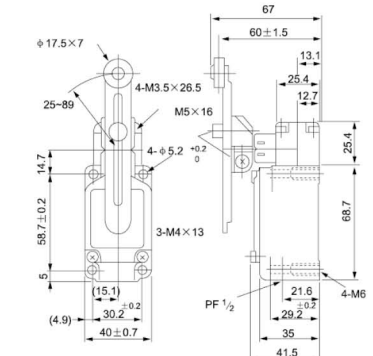
Appearance and Dimension

CWLCA2-2



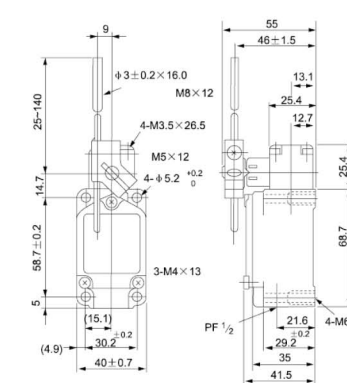
Optional plastic idler wheel

CWLCA12-2-Q

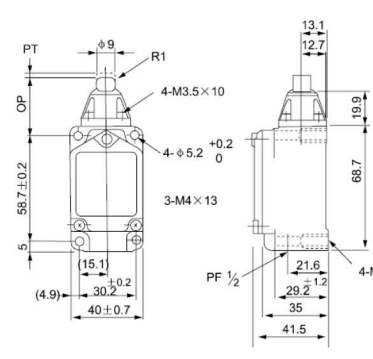


Optional plastic idler wheel

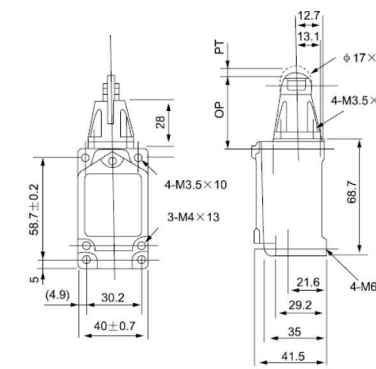
CWLCL



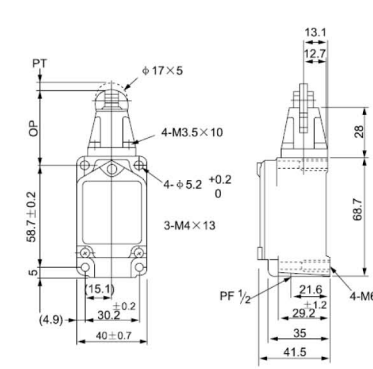
CWLD



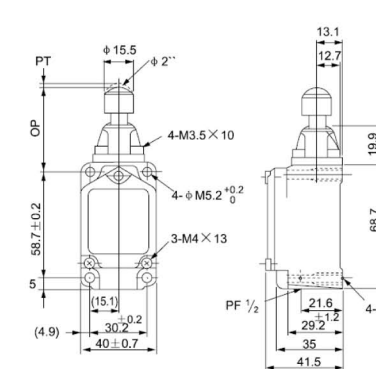
CWLD1



CWLD2



CWLD3



CWLCA12-2-QD

