

Limit Switch

CLS-121M/CLS-191/CLS-111



DESCRIPTION / FEATURES

Double circuit type of limit switch. Economic plastic type of limit switch.

Small size, water-proof and oil-proof construction.

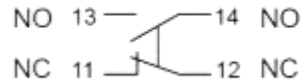
Built-in contact box have double-spring and long mechanical life.

Smooth operation with larger over travel distance.

Various actuators for different applications.

MAIN TECHNICAL DATA

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	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 0.4 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 front end of spring.

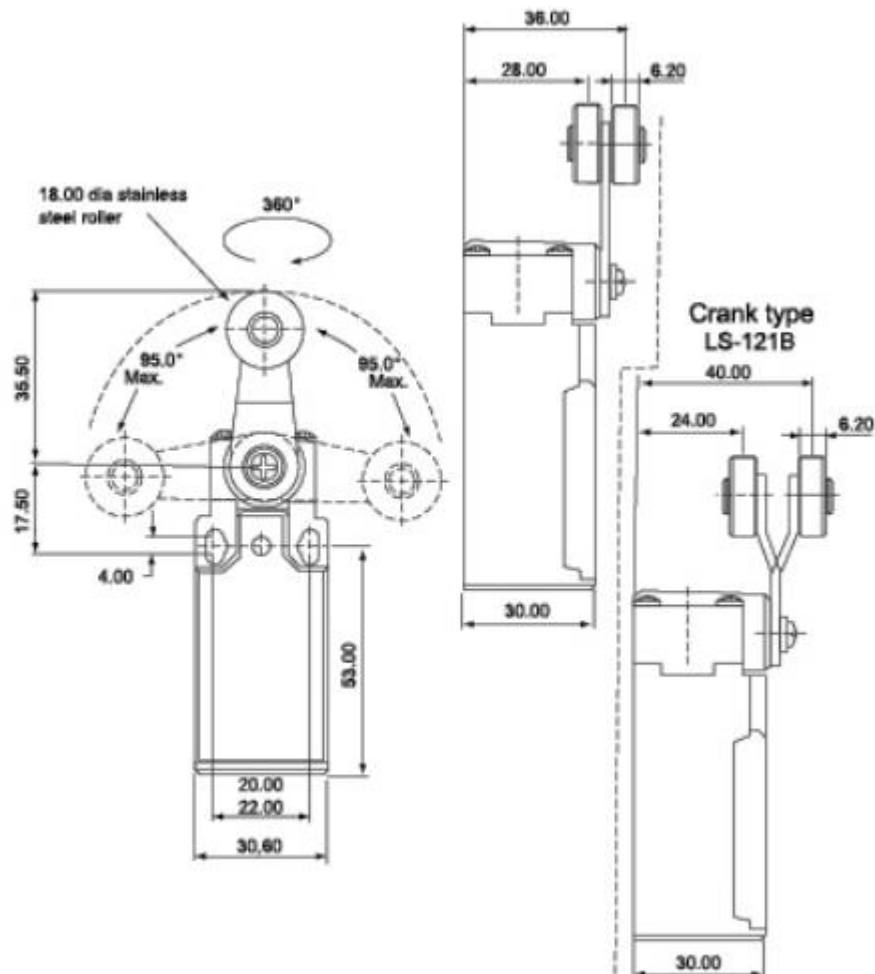
Operation speed	5mm-0.5m/s
Operating frequency	Electrical:30 operations/min
Contact resistance	25mΩ max.(initial value)
Insulation resistance	100mΩ min.(below 500VDC)
Dielectric strength	1500VAC,50/60Hz for 1 minute between current-carrying and non-current-carrying metal parts
	1500VAC,50/60Hz for 1 minute between current-carrying and non-current-carrying metal parts
	1500VAC,50/60Hz for 1 minute between each terminal and ground
Vibration	10-55Hz,1.5mm double amplitude
Shock	Mechanical durable:1000m/Sec ² (about 100G'S)
	Malfunction:300m/Sec ² (about 30G'S)
Ambient temperature	Using:-20~+70°C (With no icing)
Electrical life	500000 operations above
Protection level	IP66

NOTES:The default size of conduit connector is M20x1.5, outfitting cable connector.

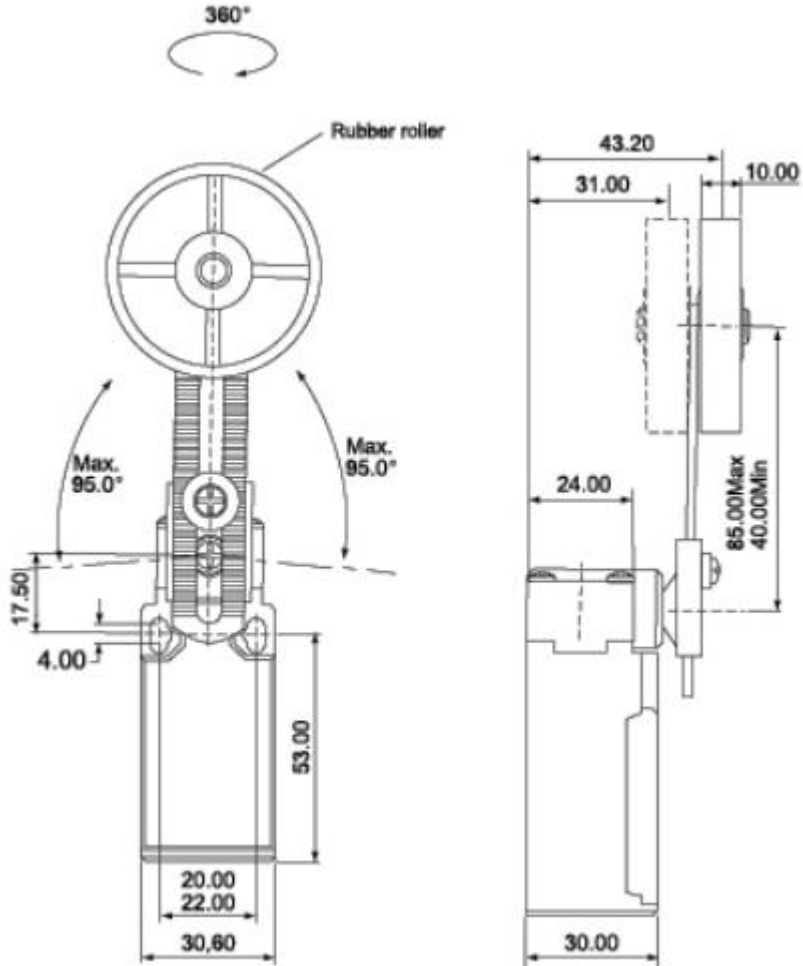
Model(CLS)	111	121/121M	191
Operating force OF(Max.)	700g	500g	500g
Release force RF(Min.)	200g	100g	100g
Pre-travel PT(Max.)	1.8mm	20°	20°
Tripping position TP±10%	2.0mm	22.5°	22.5°
Movement differential MD(Max.)	1.2mm	10°	10°
Over travel OT(Min.)	4.0mm	75°	75°
Total travel TT(Min.)	5.8mm	95°	95°
Rotary indexing		22.5°	22.5°

DIMENSIONS

CLS-121M



CLS-191



CLS-111

