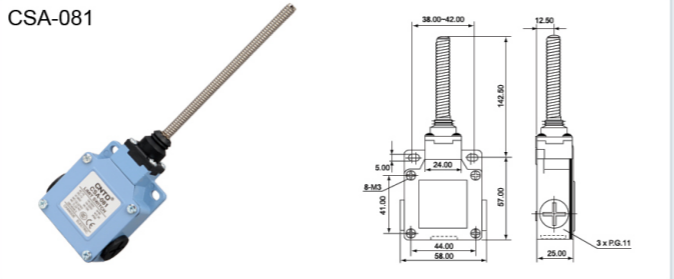
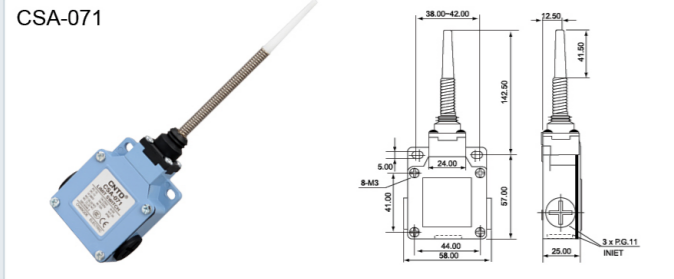
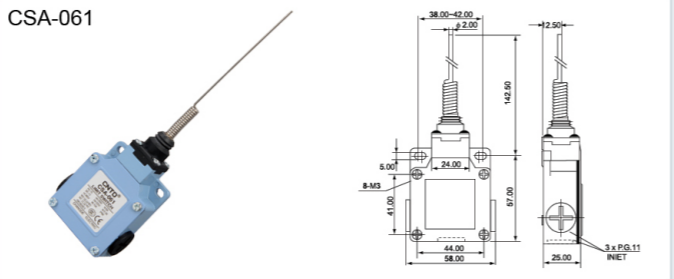
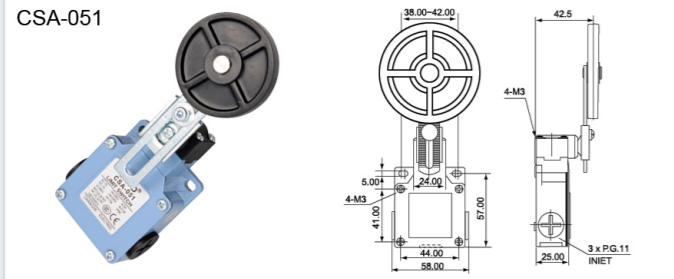
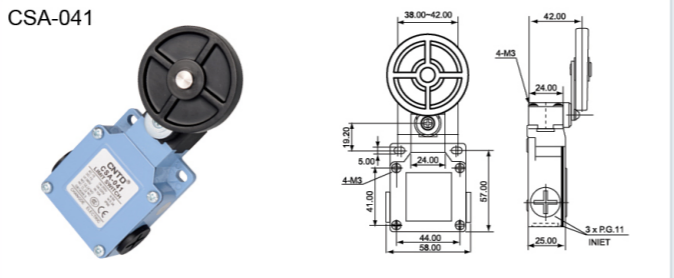
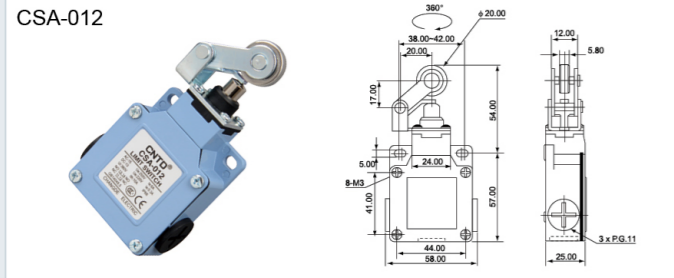
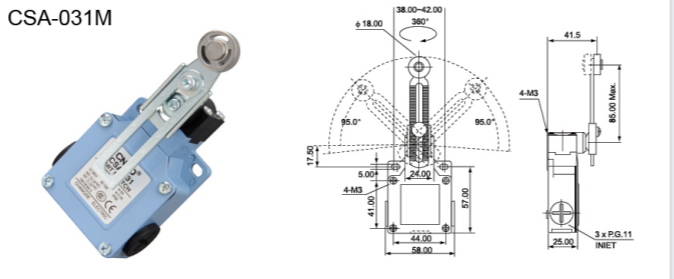
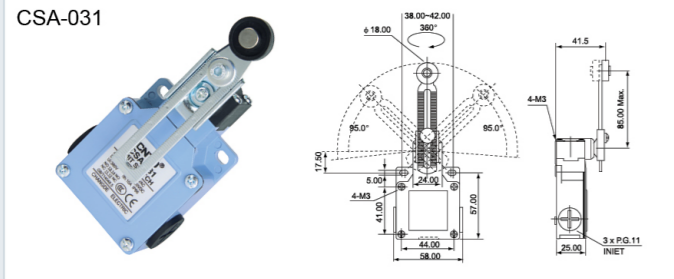
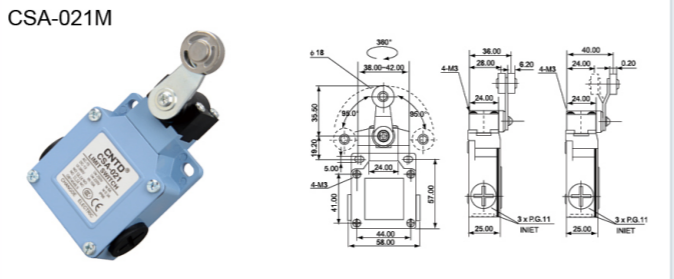
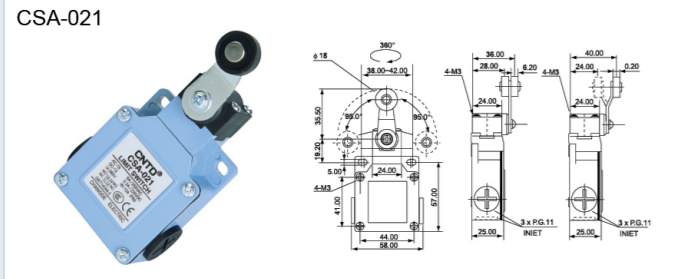
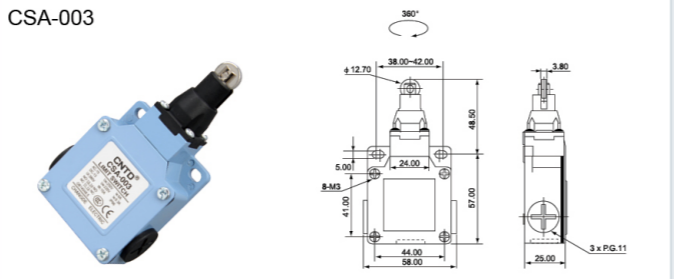
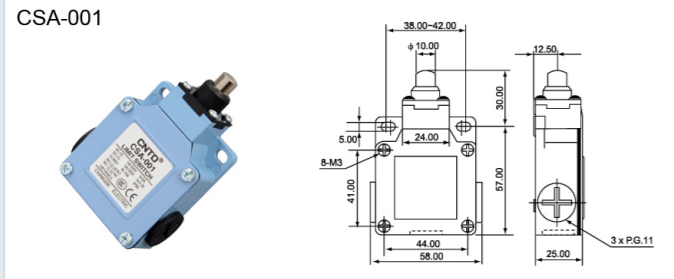


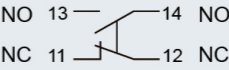
Appearance and Dimension



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 has double-spring and long mechanical life
- Smooth operation with larger over travel distance
- Various actuators for different applications

Contact Form



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	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 from the front end of spring.

Specifications

Operation speed	5mm-0.5m/s
Operating frequency	Electical: 30 operations/min
Contact resistance	25mΩ max. (initial value)
Insulation resistance	100mΩ min. (below 500VDC)
Dielectric strength	1500VAC, 50/60 Hz for 1 minute between current-carrying and non-current-carrying metal parts
	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	Using: -20~+70℃ (With no icing)
Humidity	<95% RH
Electrical life	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:CLS-103-P.

Operating Characteristics

Model	CLS	101 301	102/103 302/303	111 311	121/121M 321/321M	127 327	131/131M 331/331M	161 361	171 371	181 381	191 391
Operating force	OF (Max.)	700g	700g	700g	500g	700g	500g	100g	100g	100g	500g
Release force	RF (Min.)	200g	200g	200g	100g	200g	100g	40g	40g	40g	100g
Pre-travel	PT (Max.)	1.8mm	1.8mm	1.8mm	20°	1.8mm	20°	30mm	30mm	30mm	20°
Tripping position	TP ± 10%	2.0mm	2.0mm	2.0mm	22.5°	2.0mm	22.5°	22.5°	22.5°	22.5°	22.5°
Movement differential	MD(Max.)	1.2mm	1.2mm	1.2mm	10°	1.2mm	10°	14°	14°	14°	10°
Over travel	OT (Min.)	4.0mm	4.0mm	4.0mm	75°	4.0mm	75°	20mm	20mm	20mm	75°
Total travel	TT (Min.)	5.8mm	5.8mm	5.8mm	95°	5.8mm	95°	50mm	50mm	50mm	95°
Rotary indexing					22.5°		22.5°				22.5°