

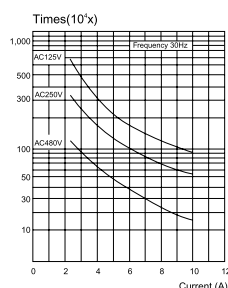
# Limit Switch



## Features

- Metallic bottom shell
- Stainless steel roller, punch and spring
- Strong electric property 10A, 250V, for 500,000 times

## Electrical life



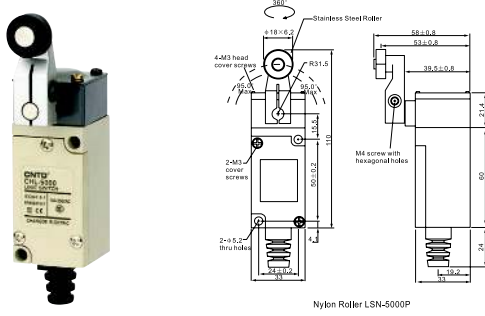
## Specification

Models	HL	5000	5030	5050	5100	5200	5220	5300	5330	5381	5391
Operating force	OF Max.	750g-cm	750g-cm	750g-cm	750g-cm	900g-cm	900g-cm	150g	150g	150g	550g-cm
Release force	RF Min.	100g-cm	100g-cm	100g-cm	200g	200g	200g	30g	30g	30g	100g-cm
Pre-travel	PT Max.	20°	20°	20°	1.8mm	1.8mm	1.8mm	30mm	30mm	30mm	20°
Tripping position	TP 10%	22.5°	22.5°	22.5°	2.0mm	2.0mm	2.0mm	22.5°	22.5°	22.5°	22.5°
Movement differential	MD Max.	10°	10°	10°	1.2mm	1.2mm	1.2mm	14"	14	14"	14"
Over travel	OT Min.	75°	75°	75°	4.0mm	4.0mm	4.0mm	20mm	20mm	20mm	75°
Total travel	TT Min.	95°	95°	95°	5.8mm	5.8mm	5.8mm	50mm	50mm	50mm	95°

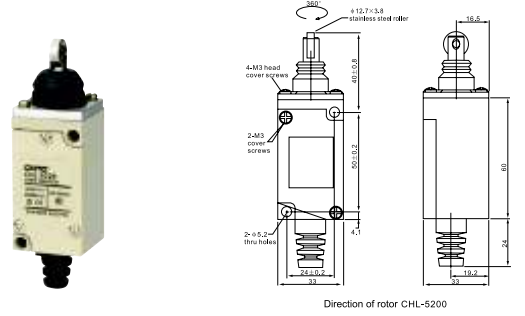
## Characteristics

Double Break Mechanism	INO+INC Force Break snap action
Rated Voltage / Current	10(4)A, 125, 250VAC / 6(2)A, 380VAC For inductance Load, Cos φ =0.4
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 current-carrying and non-current-carrying metal parts
	1500VAC, 50/60 HZ for 1 minute between each terminal and ground
Electrical Life	500,000 at 10A 250VAC Resistive
Mechanical Life	10, 000, 000 operations min. (under rated conditions)
Operating Speed	5mm/s to 0.5m/s
Degree of Protection	IP65
Ambient Temperature Rised	Max 30 ℃ over ambient temperature at rated voltage/current
Conformed Standards	Cenelec EN 50041, EN 50047, IEC 337-1, VDE 0660
Operating Temperature	-5 ℃ ~+65 ℃ (with no icing)
Storage Temperature	-5 ℃ ~+65 ℃ (with no icing)
Ambient Operating Humdity	95% RH Max.
Shock Resistance	Mechanical durable: 1000m/s <sup>2</sup> min.
	Malfunction: 300m/s <sup>2</sup> min.
Vibration Frequency	Malfunction: 10 to 55HZ 1.5mm double amplitude
Terminal Screw Torsional Force	6-8 kgf-cm
Other Screw Torsional Force	Cover 12-14 kgf-cm/Head 8-9 kgf-cm/Mounting 50-60 kgf/cm
Bare Wire Diameter	↑ 2 Max
Cable Diameter	↓ 9 Max(IP 65 if use cable ↓ 8-9)

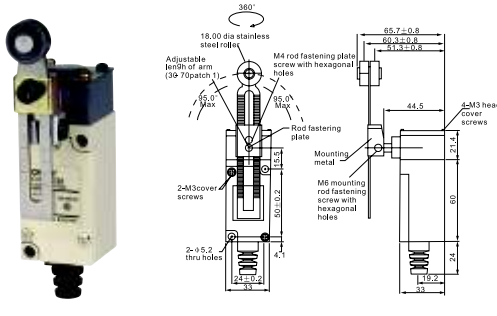
### HL-5000



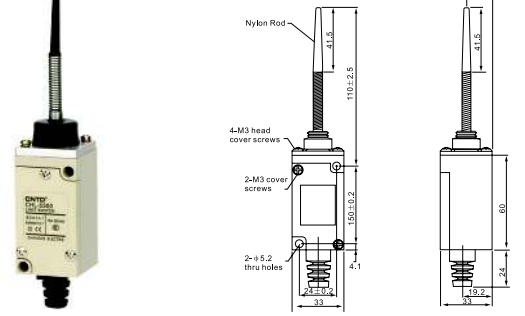
### HL-5220



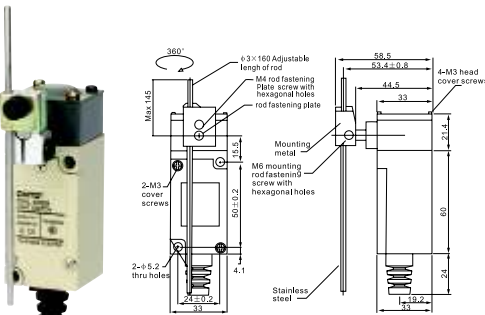
### HL-5030



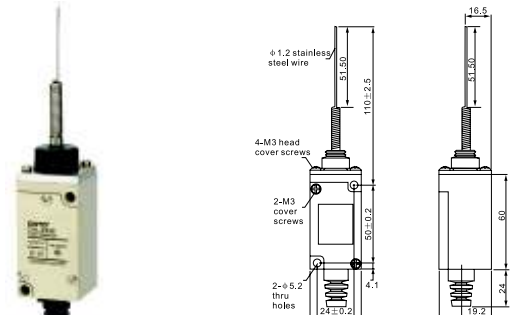
### HL-5300



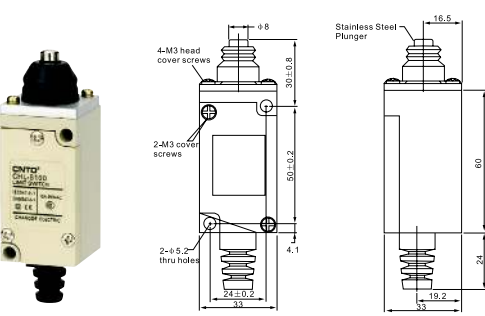
### HL-5050



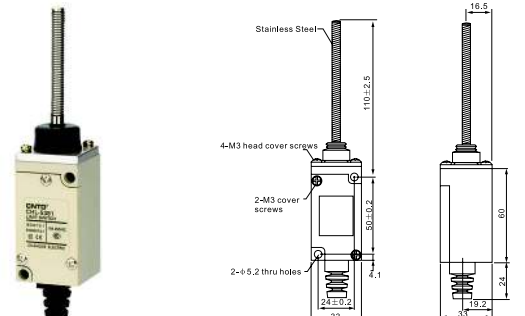
### HL-5330



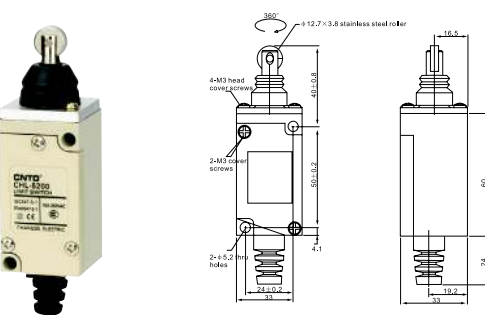
### HL-5100



### HL-5381



### HL-5200



### HL-5391

