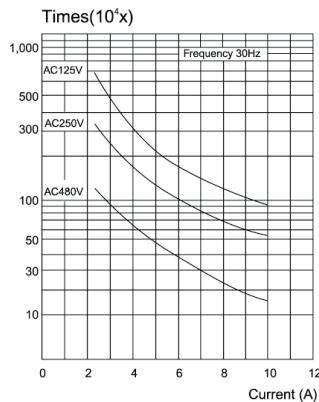




### Features

- Economical & plastic type
- Stainless steel roller, punch and spring
- Swing amplitude, extra large 95°
- PG13.5 cable gland that can be equipped.

### Electrical life



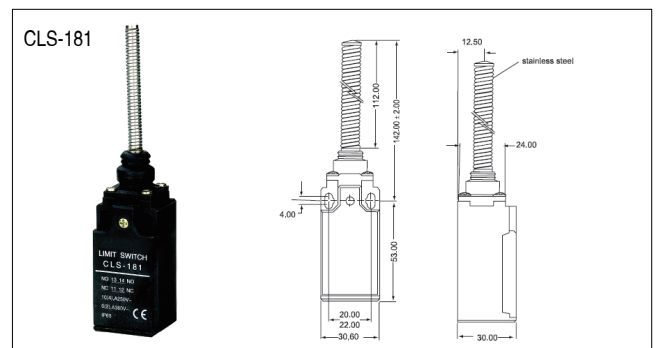
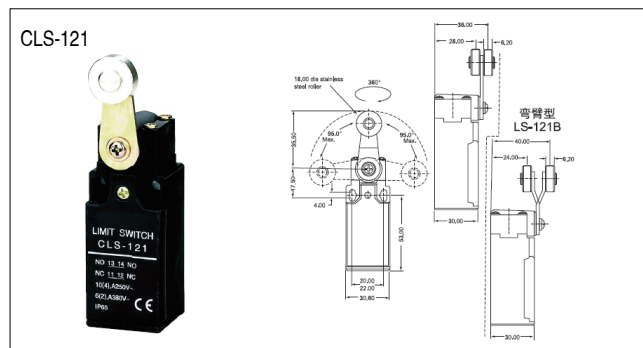
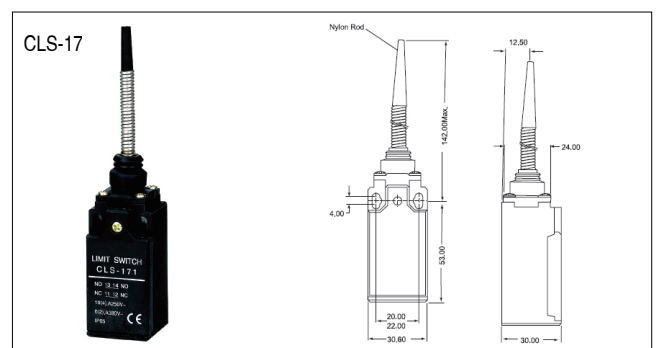
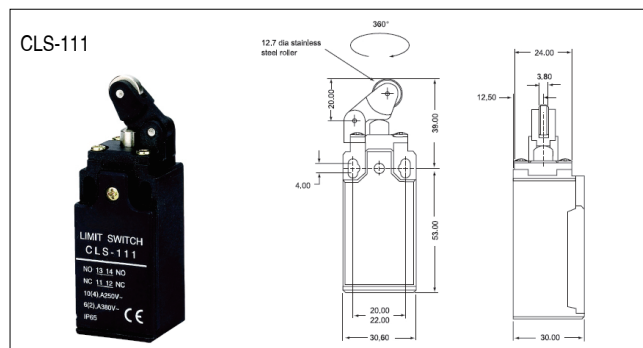
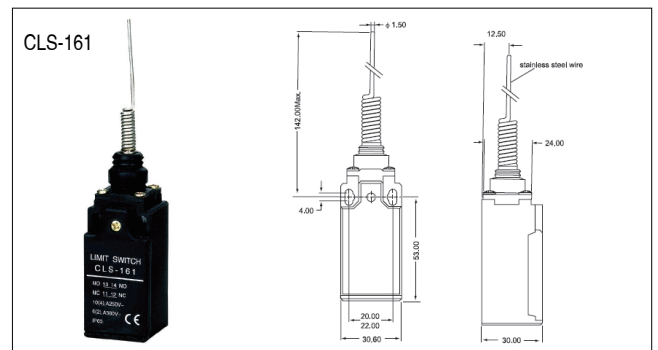
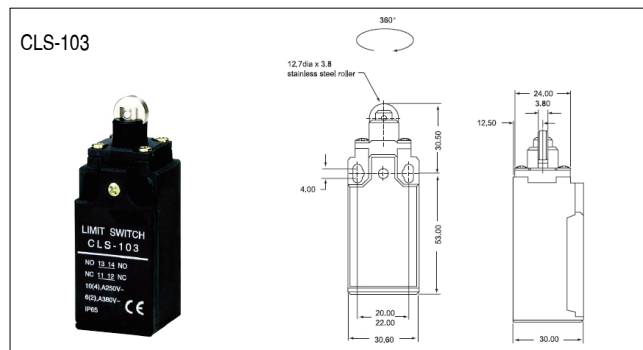
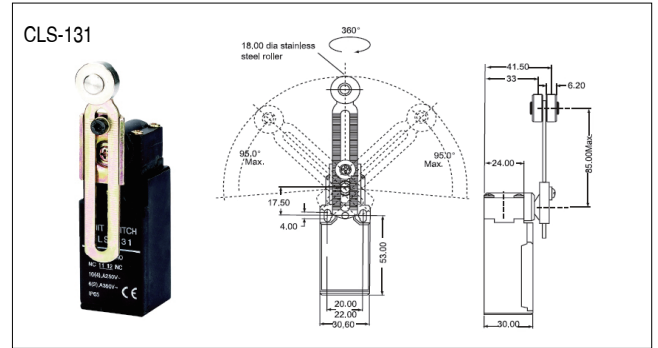
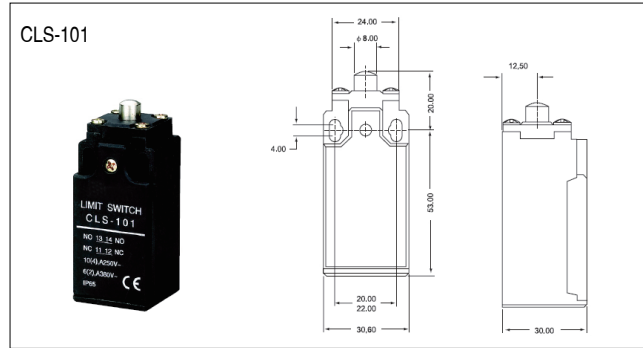
### Specifications

| Model                 | CLS      | 101<br>301 | 103<br>303 | 111<br>311 | 121<br>321 | 127<br>327 | 131<br>331 | 161<br>361 | 171<br>371 | 181<br>381 | 191<br>391 |
|-----------------------|----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Operating force       | OF Max   | 700g       | 700g       | 700g       | 500g       | 700g       | 500g-cm    | 100g       | 100g       | 100g       | 500g-cm    |
| Release force         | RF Min   | 200g       | 200g       | 200g       | 100g-cm    | 200g       | 100g-cm    | 40g        | 40g        | 40g        | 100g-cm    |
| 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°      |            |            |            |            |

### Characteristics

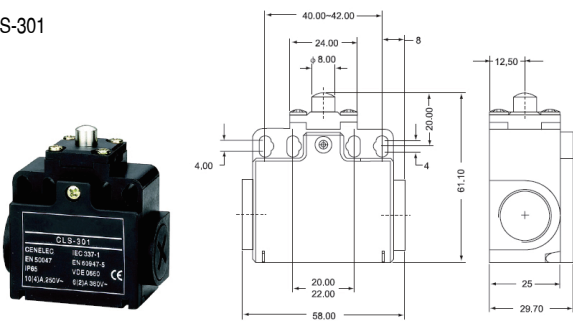
|                                |                                                                                              |
|--------------------------------|----------------------------------------------------------------------------------------------|
| Double Break Mechanism         | INO+INC 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             | 25mΩ max. (initial value)                                                                    |
| Insulation Resistance          | 100mΩ 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°C over ambient temperature at rated voltage/current                                   |
| Conformed Standards            | Cenelec EN 50041, EN 50047, IEC 337-1, VDE 0660                                              |
| Operating Temperature          | -5°C~+65°C(with no icing)                                                                    |
| Storage Temperature            | -5°C~+65°C(with no icing)                                                                    |
| Ambient Operating Humidity     | 95°C 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             | Φ 2Max                                                                                       |
| Cable Diameter                 | Φ 12 Max(IP 65 if use cable Φ 8-9)                                                           |

**Appearance and dimension**

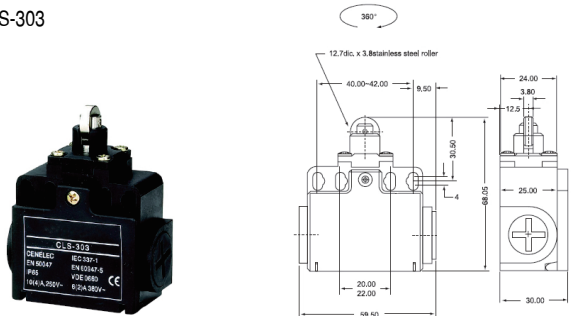


**Appearance and dimension**

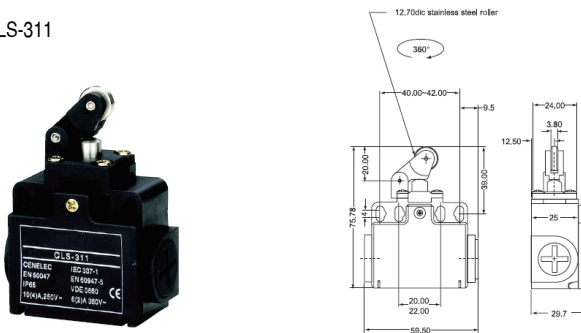
**CLS-301**



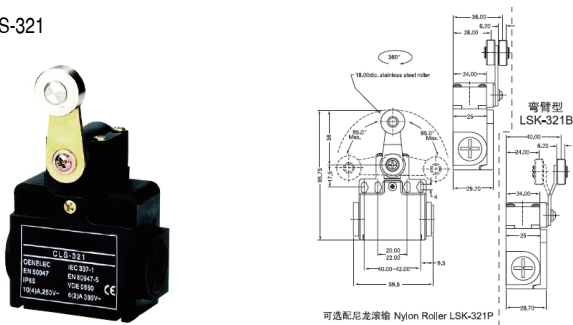
**CLS-303**



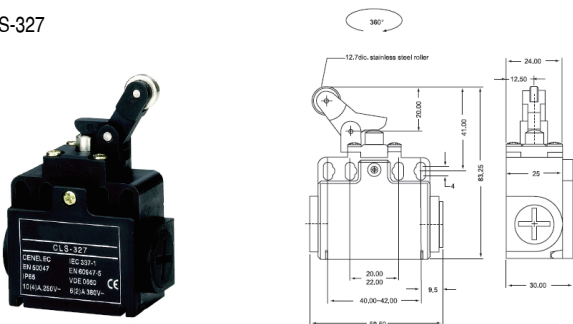
**CLS-311**



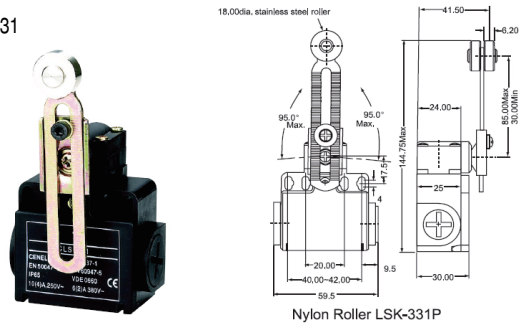
**CLS-321**



**CLS-327**

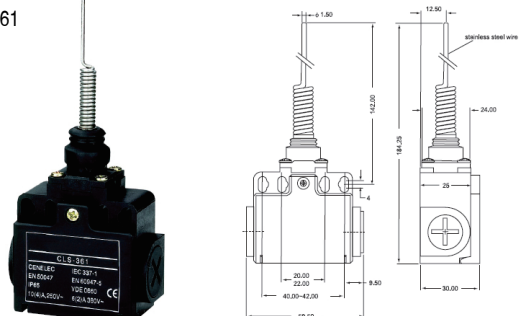


**CLS-331**

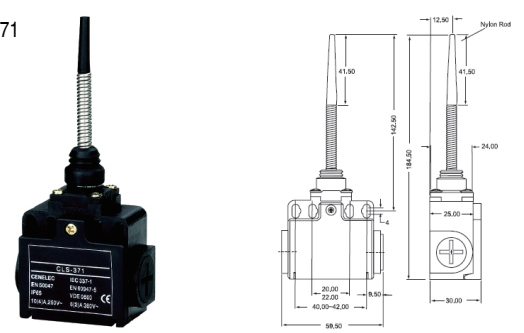


**Nylon Roller LSK-331P**

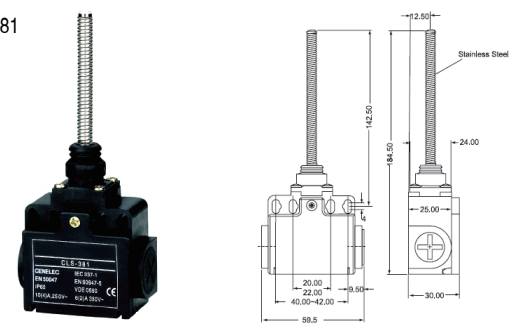
**CLS-361**



**CLS-371**



**CLS-381**



**CLS-391**

