

## CSA Limit Switch

### Features

- Strong metal outer shell, swing arm max.  $\pm 95^\circ$
- Long life (20, 000, 000 mechanical operations)
- Stainless steel idler wheel, punch and spring
- Selective PG11 cable gland

### Specifications

Model	CSA	CSA-001	CSA-003	CSA-012	CSA-021	CSA-031	CSA-061	CSA-071	CSA-081
Operating force	OF Max.	800g	800g	800g	400g-cm	400g-cm	150g	150g	150g
Release force	RF Min.	400g	400g	400g	100g-cm	100g-cm	50g	50g	50g
Pre-travel	PT Max.	1.8mm	1.8mm	1.8mm	20°	20°	30mm	30mm	30mm
Tripping position	TP $\pm 10\%$	2.0mm	2.0mm	2.0mm	22.5°	22.5°	22.5°	22.5°	22.5°
Movement differential	MD Max.	1.2mm	1.2mm	1.2mm	10°	10°	14°	14°	14°
Over travel	OT Min.	4.0mm	4.0mm	4.0mm	75°	75°	20mm	20mm	20mm
Total travel	TT Min.	5.8mm	5.8mm	5.8mm	95°	95°	50mm	50mm	50mm
Rotary indexing					22.5°	22.5°			

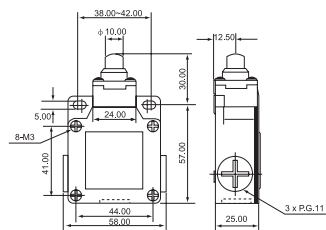
### Characteristics

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 $\phi = 0.4$
Contact Resistance	25m $\Omega$ max. (initial value)
Insulation Resistance	100m $\Omega$ 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° 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	$\phi$ 2 Max
Cable Diameter	$\phi$ 12 Max(IP 65 if use cable $\phi$ 8-9)

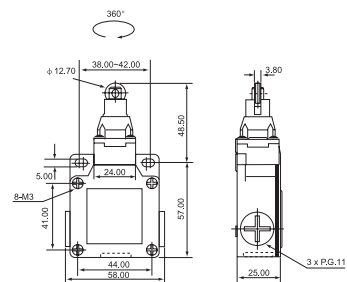
# CSA Limit Switch

## Appearance and dimension

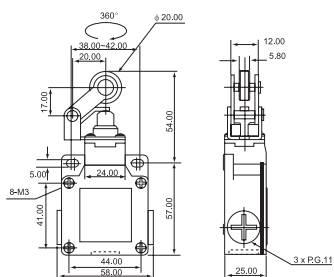
**CSA-001**



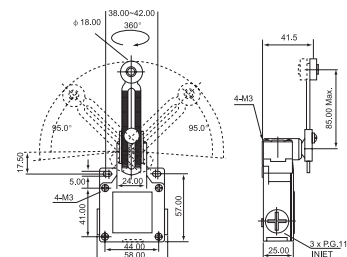
**CSA-003**



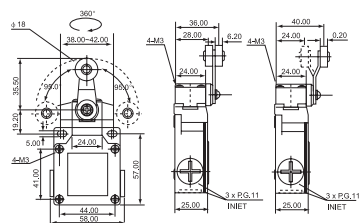
**CSA-012**



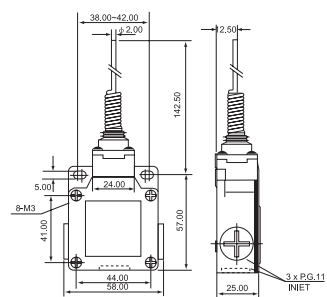
**CSA-031**



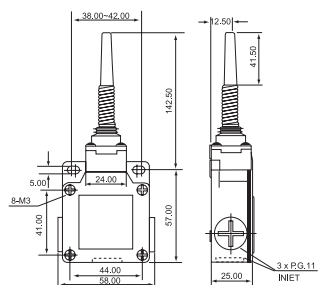
**CSA-021**



**CSA-061**



**CSA-071**



**CSA-081**

