

## CZ-3 Compact Prewired Limit Switch

### Specifications

- DPDS limit switch for multiple applications.
- Rugged aluminum alloy diecast housing
- High mechanical strength.
- Oil resistance, waterproof and dustproof structure.

### 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
125 VAC	5 (0.1)	1.5	0.7	3	2.5	1.3		
250 VAC	3	1	0.5	2	1.5	0.8		
8 VDC	5 (0.1)	2	5	4	3			
14 VDC	5 (0.1)	2	4	4	3			
30 VDC	4 (0.1)	2	3	3	3			
125 VDC	0.4	0.05	0.4	0.4	0.05			
250 VDC	0.2	0.03	0.2	0.2	0.03			

### Operating characteristics

Models	CZ-3101	CZ-3102	CZ-3103	CZ-3104	CZ-3110	CZ-3111	CZ-3112	CZ-3113	CZ-3169
OF Max.	1200gf(11.77N)	1200gf(11.77N)	1200gf(11.77N)	580gf(5.69N)	1200gf(11.77N)	1800gf(17.65N)	1800gf(17.65N)	1800gf(17.65N)	150gf(1.47N)
RF Min.	450gf(4.41N)	450gf(4.41N)	450gf(4.41N)	150gf(1.47N)	450gf(4.41N)	450gf(4.41N)	450gf(4.41N)	450gf(4.41N)	-
PT Max.	1.8mm	1.8mm	1.8mm	25	1.8mm	1.8mm	1.8mm	1.8mm	15°
OT Min.	3mm	3mm	3mm	40	3mm	3mm	3mm	3mm	-
MD Max.	0.2mm	0.2mm	0.2mm	3	0.2mm	0.2mm	0.2mm	0.2mm	-
OP	15.7 ± 1mm	28.5 ± 1mm	28.5 ± 1mm	-	28.5 ± 1mm	24.9 ± 1mm	34.3 ± 1mm	34.3 ± 1mm	-

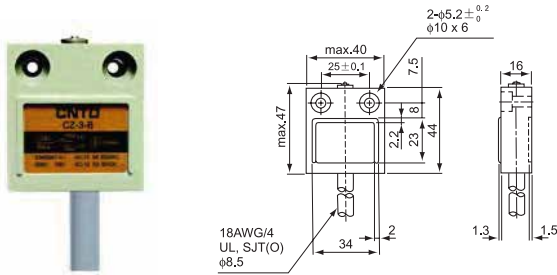
### Characteristics

Rating	5A 125V, 3A 250VAC
Operating speed	1mm~1m/s
Operating frequency	Mechanical:120 operations/min. Electrical:30 operations/min.
Contact resistance	15m Ω max.(initial)
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
Vibration Frequency	10 to 55HZ, 1.5mm double amplitude
Shock	Mechanical:Approx.1000m/s <sup>2</sup> (Approx.100G'S) Electrical:Approx.500m/s <sup>2</sup> (Approx.50G'S)
Ambient temperature	-10℃~+70℃
Humidity	Below 95%RH
Life	Mechanical.10,000,000 operations/min. Electrical.200,000 operations/min.
Degree of protection	IEC:IP67
Weight	Approx.360g(cable length 3m) Approx.540g(cable length 5m)

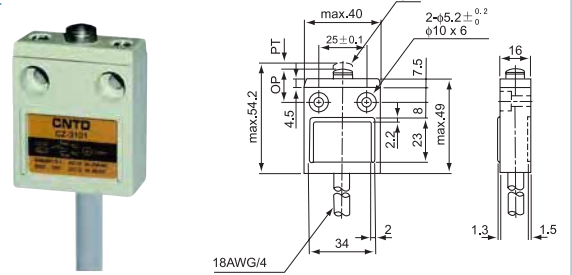
# CZ-3 Compact Prewired Limit Switch

## Appearance and dimension

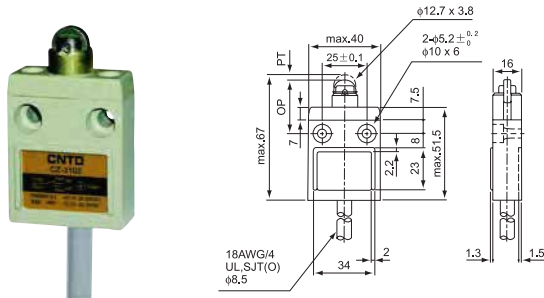
**CZ-3-B**



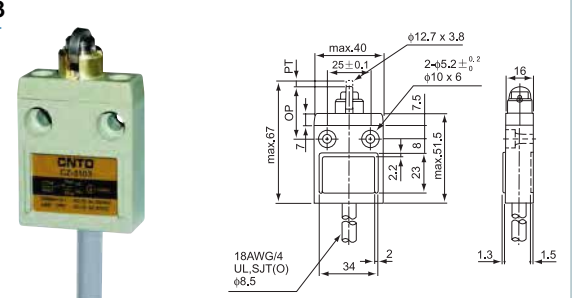
**CZ-3101**



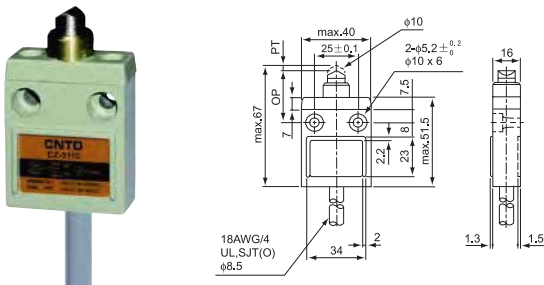
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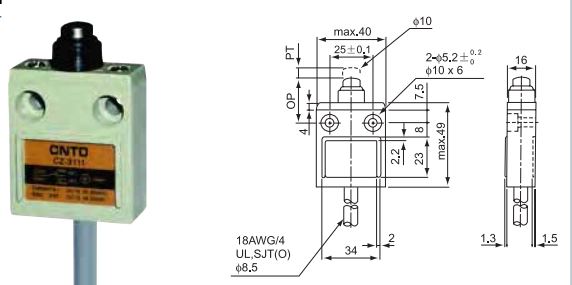
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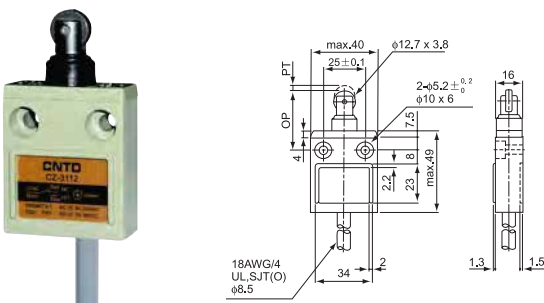
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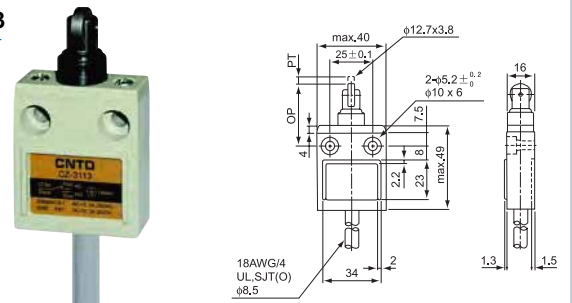
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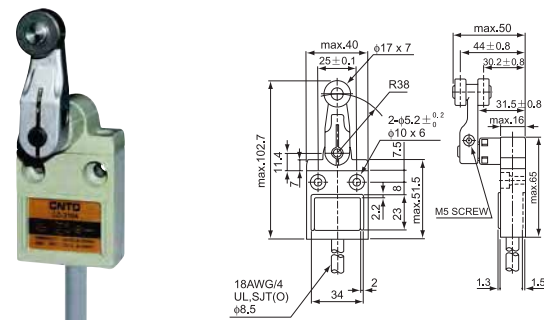
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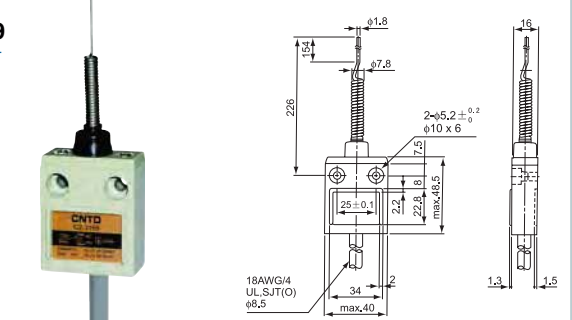
**CZ-3113**



**CZ-3104**



**CZ-3169**

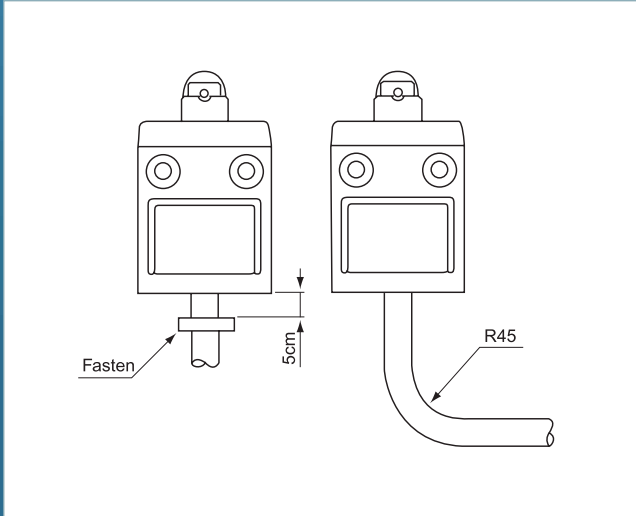


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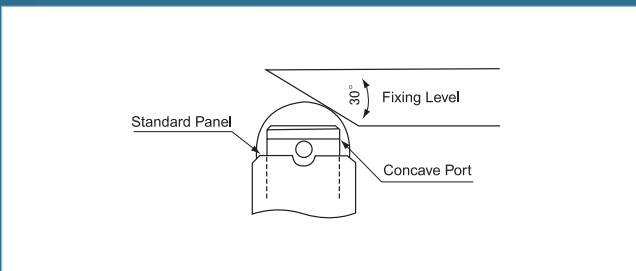
## Fastening of the switch cable

The switch bodies are filled with resin for sealing purposes. To avoid stressing the cable and switch body, fasten the switch at 5 cm or farther away from the switch body, should the wire be bent, the bending radius shall be at least 45mm.

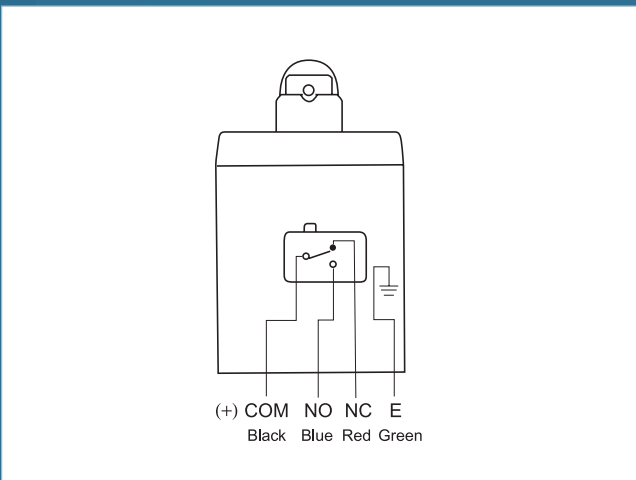


## Installation

The service life and accuracy of switches will be effected by the shape of actuator operation frequency & over travel. So the angular of the fixing level should be about 30°, the surface finish of the fixing level should be over, the hardness is from HV400~500. When installing, the position of the concave part should be above the standard panel

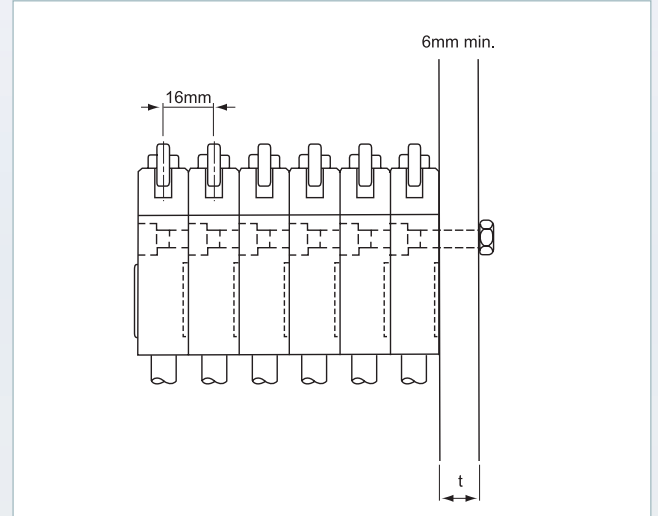


## Contact types



## Switch bank mounting

A maximum of six switches may be mounted together as a switch bank. During the installation, the convex part of the switch back. The mounting panel shall be 6mm or thicker.



## Mounting

Recommended tightening torque according to the following form.

Model	Screw type	Torque
1	M5 fastening screws	43.4~52lb.in (50~60kgf.cm)
2	M3.5 installing screws	6.9~7.9lb.in (8~9kgf.cm)

## Mounting holes

Mount the switch body to a rigid mounting panel using two M5 screws.

