



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	

Note: Product with spring, its usable range of operating part is within one third of the whole spring length from the front end of spring.

Operating Characteristics

Model	CZ-3	CZ-3101	CZ-3102	CZ-3103	CZ-3104 (3107/3108)	CZ-3110	CZ-3111	CZ-3112	CZ-3113	CZ-3169 (3166/3167/3168)
Operating Force	OF(Max.)	11.77N	11.77N	11.77N	5.69N	11.77N	17.65N	17.65N	17.65N	1.47N
Release Force	RF(Min.)	4.41N	4.41N	4.41N	1.47N	4.41N	4.41N	4.41N	4.41N	-
Pre-Travel	PT(Max.)	1.8mm	1.8mm	1.8mm	25	1.8mm	1.8mm	1.8mm	1.8mm	15°
Over Travel	OT(Min.)	3mm	3mm	3mm	40	3mm	3mm	3mm	3mm	-
Movement Differential	MD(Max.)	0.2mm	0.2mm	0.2mm	3	0.2mm	0.2mm	0.2mm	0.2mm	-
Operating Position	OP(mm.)	15.7 ± 1mm	28.5 ± 1mm	28.5 ± 1mm	-	28.5 ± 1mm	24.9 ± 1mm	34.3 ± 1mm	34.3 ± 1mm	-

Features

- High mechanical strength, mainly consists of aluminum cast
- Water proof, oil proof and dust proof construction
- Various actuators for different applications

Contact Form

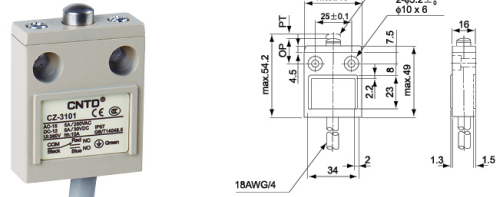


Specifications

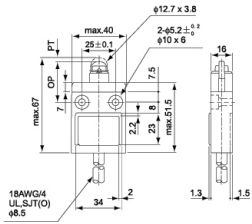
Rating	5A 125V,3A 250VAC
Operating speed	1mm~1m/s(Swing rod type) 0.1mm~0.5m/s(Plunger type)
Operating frequency	Electrical:30 operations/min.
Contact resistance	25mΩ max.(initial)
Insulation resistance	100mΩ min.(at 500VDC)
Dielectric strength	1000VAC, 50/60 Hz for 1 minute between terminals of the 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
Vibration Frequency	10 to 55HZ,1.5mm double amplitude
Shock	Mechanical:Approx.1000m/s ² (Approx.100G'S) Electrical:Approx.500m/s ² (Approx.50G'S)
Ambienttemperature	Using: -20~+70℃ (With no icing)
Humidity	< 95% RH
Electrical life	200,000 operations/min.
Weight	Approx.360g(cable length 3m) Approx.540g(cable length 5m)
Protection level	IP67

Appearance and Dimension

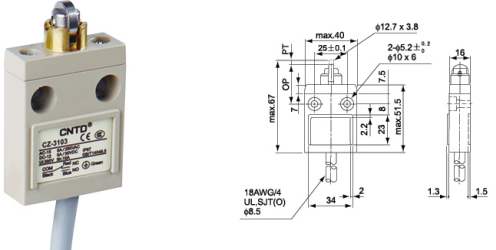
CZ-3101



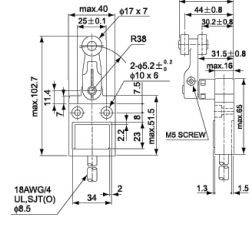
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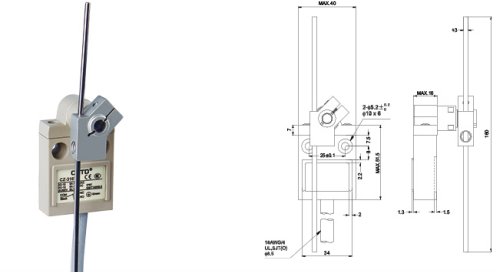
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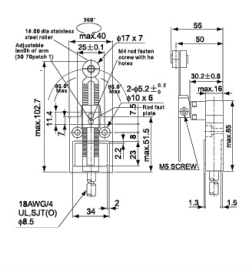
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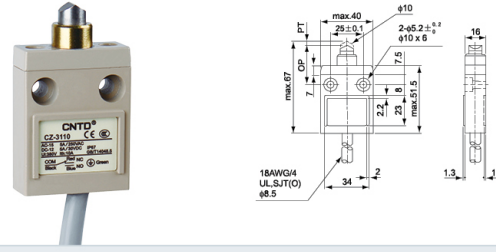
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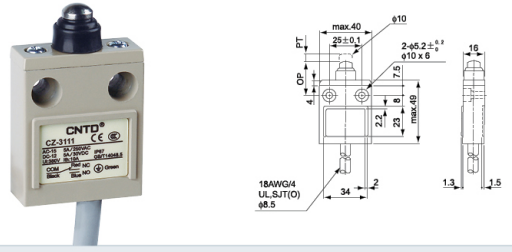
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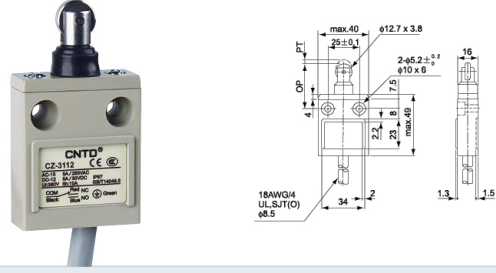
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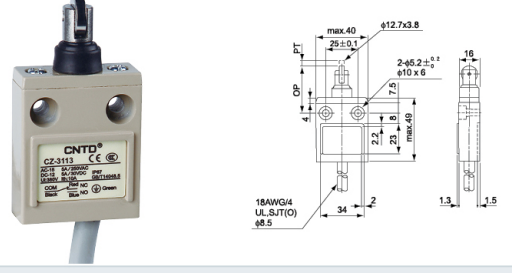
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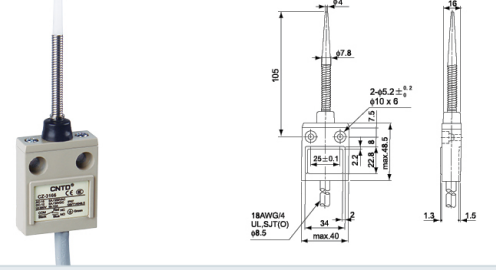
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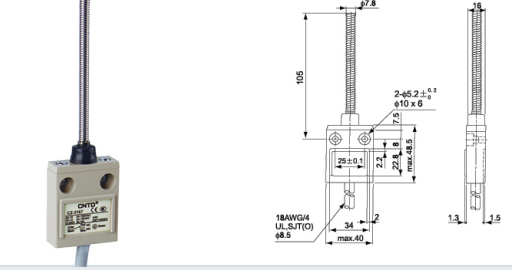
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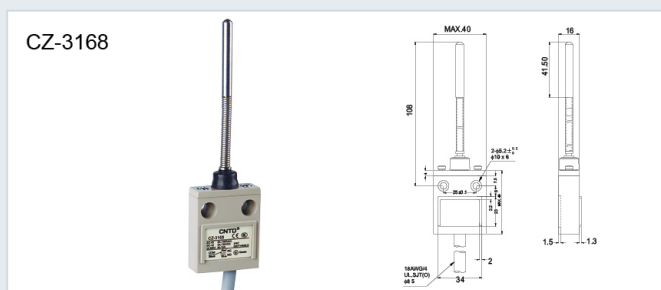


CZ-3166



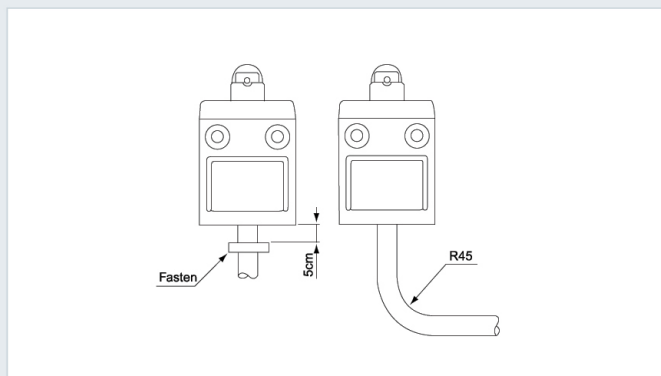
CZ-3167





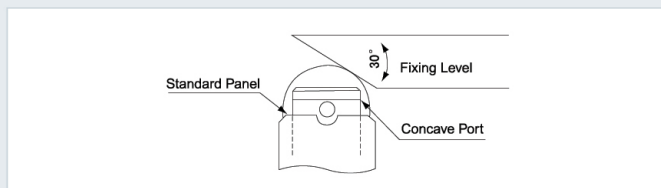
Cabling Attention

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.

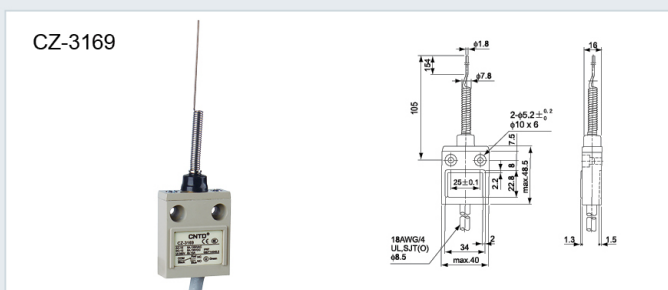
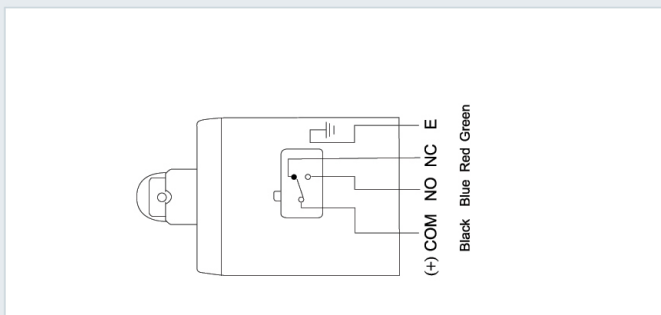


Installation Attention

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

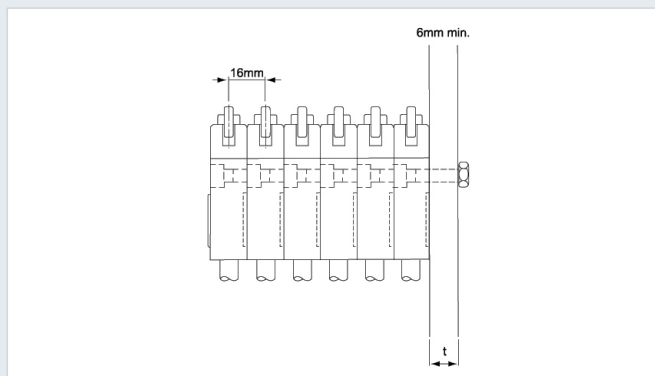


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Quantity Mounted Using Attention

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.

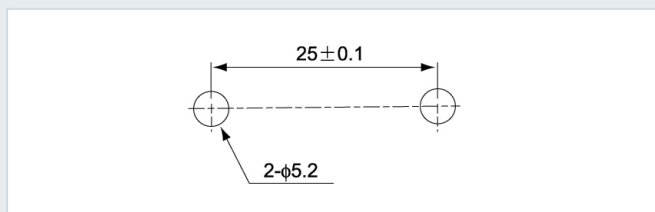


Recommended tightening torque according to the following form.

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

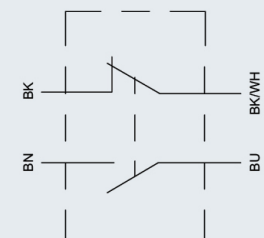
Mount the switch body to a rigid mounting panel using two M5 screws.



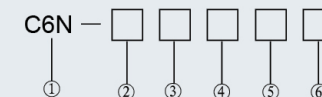
Features

- Integrated injection molded housing with high mechanical strength
IP67 High protection
- Small size, thickness only 16mm, wide applicability
- The installation is simple and convenient

Contact Form



Model Designation



No	Item	Code	Description	Forced disconnection Yes/No
①	Serial number	C6N	High precision type	
②	Shell material	P	Plastic	
③	Contact structure and contact material	1	1NC/1NO	
④	Head and drive rod	04	Ball swing rod type (metal swing rod, resin ball)	Only NC end has forced disconnection
		05	Ball swing rod type (metal swing rod, metal ball)	Only NC end has forced disconnection
		08	Adjustable ball swing rod (metal swing rod, resin ball)	Only NC end has forced disconnection
		09	Adjustable ball swing rod (metal swing rod, metal ball)	Only NC end has forced disconnection
		11	Top plunger type	Only NC end has forced disconnection
		17	M12 Top plunger type	Only NC end has forced disconnection
		22	Top plunger horizontal ball (metal ball) type	Only NC end has forced disconnection
		23	Top plunger vertical ball (metal ball) type	Only NC end has forced disconnection
		24	M12 Top plunger horizontal ball (metal ball) type	Only NC end has forced disconnection
		25	M12 Top plunger vertical ball (metal ball) type	Only NC end has forced disconnection
		15	Single-side cantilever ball type (horizontal to right)	Only NC end has forced disconnection
		16	Single-side cantilever ball type (horizontal to left)	Only NC end has forced disconnection