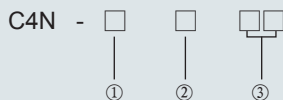




Model Designations



Item	Code	Description
Conduit / connector size	1	Pg13.5 (1 conduit type)
	2	G1/2 (1 conduit type)
	4	M20 (1 conduit type)
	5	Pg13.5 (2 conduits type)
	6	G1/2 (2 conduits type)
	8	M20 (2 conduits type)
Built-in switch	1	1NC/1NO (quick-action type)
	2	2NC (quick-action type)
	A	1NC/1NO (slow-action type)
	B	2NC (slow-action type)
Head and driving rod	20	Roller lever (resin lever, resin ball)
	22	Roller lever (metal lever, resin ball)
	25	Roller lever (metal lever, metal ball)
	2G	Adjustable roller lever, Form Lock (metal lever, resin ball)
	2H	Adjustable roller lever, Form Lock (metal lever, rubber ball)
	2M	Adjustable roller lever, Form Lock (metal lever, metal ball)
	31	Top plunger type
	32	Top plunger ball type
	62	Unilateral cantilever ball type (horizontal)
	72	Unilateral cantilever ball type (vertical)
	80	Whisker type
87	Plastic stick type	

Features

- Forced open action device (NC contacts only), it can disconnect the contact when the contact has fusing and other failures.
- The set safety of lever ensures that gear ratcheting device is used between the action position indicator panel and the lever.
- Strengthened top seal structure improves the sealing performance.
- Built-in contact holder has fast-action type: 1NC/1NO; Slow-action: 1NC/1NO and 2NC

Performance

Protection level*1	IP66	
Life *2	Mechanical	More than 10,000,000 times*5
	Electrical	More than 500,000 times (AC250V 3A, resistive load) *3 More than 300,000 times (AC250V 10A, resistive load)
Operating speed		
Operating frequency		Max. 30 times/min
Contact resistance		25 mΩ or less
Minimum working load *4		1mA resistive load below DC5V (N standard reference value)
Rated insulation voltage (Ui)		
Electric shock proof protection grade		Class II (double insulated)
Pollution degree (environmental conditions)		Pollution degree 3 (EN60947-5-1)
Withstand voltage (EN60947-5-1)	Between homopolar terminals: 2.5kV	
	Between heteropolar terminals: 2.5kV	
	Between terminals and uncharged metal parts: 6kV	
Insulation resistance		Above 100MΩ
Contact gap		Minimum 2 × 0.5mm quick-action type, Minimum 2 × 2mm slow-action type
Vibration	Malfunction	
	10 ~ 55Hz 0.75mm single amplitude	
Impact	Duration	
	1,000m/s ²	
Impact	Malfunction	
	300m/s ²	
Ambient temperature		-20 ~ +70 °C (No ice or dew)
Ambient humidity		Less than 95%RH
Weight		About 82g (D4N-1120) About 99g (D4N-5120)

Note 1. The above values are initial values.

Note 2. Once the contact is connected to a standard load, it can not be used to connect a smaller load. If so, the contact may result in rough surface, thus losing contact reliability.

*1. The protection level is gotten based on test method of (EN60947-5-1). Please make sure its sealing under actual environmental conditions before use. The switch box has dust and oil resistance structure, but it should be used in places without dust, oil and chemicals. Otherwise it may lead to premature wear, damage or malfunction.

*2. The durability is for ambient temperature of 5°C ~ 35°C and humidity of 40% to 70% RH. For additional details, please contact us.

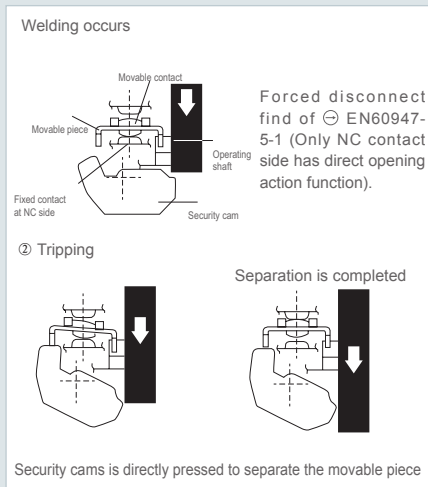
*3. When the ambient temperature is above 35°C, more than 2 circuits 3A 250VAC loads are prohibited.

*4. The values will vary with different switching frequency, environmental conditions, reliability level and other factors. Please confirm on the actual load in advance.

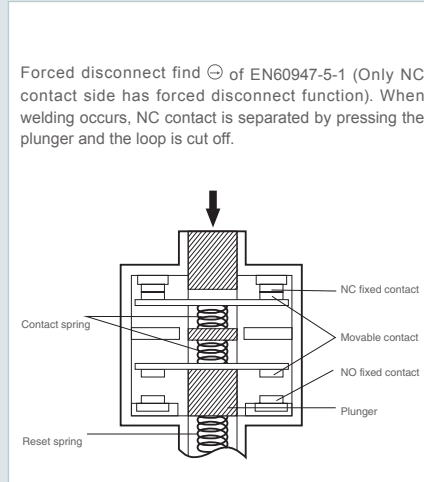
*5. The mechanical life of deadman lever type is more than 10,000,000 times.

Forced disconnect structure

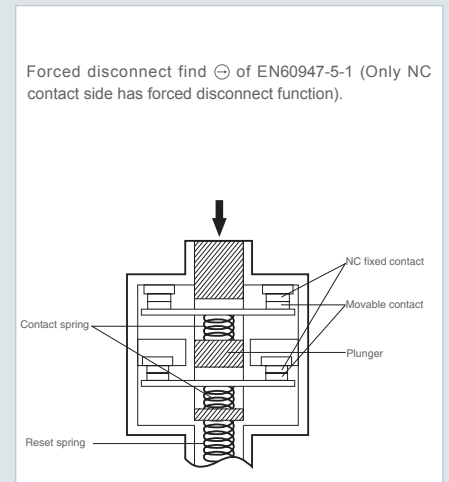
■ 1NC and 1NO contacts (quick-action type)



■ 1NC and 1NO contacts (slow-action type)



■ 2NC contacts (slow-action type)



Contact form

Model	Contact	Contact form	Operation mode	Expatation
C4N-□1□	1NC/1NO (Quick-action type)			Only NC contact (31-32) has forced disconnect function (⊖) Contacts (13-14) and (31-32) can be used as heteropoles.
C4N-□2□	2NC (Quick-action type)			Only NC contact (31-32) has forced disconnect function (⊖) Contacts (11-12) and (31-32) can be used as heteropoles.
C4N-□A□	1NC/1NO (Slow-action type)			Only NC contact (11-12) has forced disconnect function (⊖) Contacts (11-12) and (33-34) can be used as heteropoles.
C4N-□B□	2NC (Slow-action type)			Only NC contact (31-32) has forced disconnect function (⊖) Contacts (11-12) and (31-32) can be used as heteropoles.

Action characteristics

■ Quick-action type (1NC/1NO)(2NC), slow-action type (2NC)

Model			C4N-□120	C4N-□122	C4N-□125	C4N-□226	C4N-□131	C4N-□132	C4N-□162	C4N-□172	C4N-□12H	C4N-□12G	C4N-□□80	C4N-□□87
Action characteristics			C4N-□220	C4N-□222	C4N-□225	C4N-□B26	C4N-□231	C4N-□232	C4N-□262	C4N-□272	C4N-□B2H	C4N-□12M		
			C4N-□B20	C4N-□B22	C4N-□B25		C4N-□B31	C4N-□B32	C4N-□B62	C4N-□B72	C4N-□B2H	C4N-□22G		
Action force	OF	Max.	5.0N			6.5N	6.5N	5.0N	5.0N	4.5N	1.5N	1.5N		
Restore force	RF	Min.	0.5N			1.5N	1.5N	0.8N	0.8N	0.4N				
Pretravel	PT		1827 °			2mm	2mm	4mm	4mm	18 ~ 27°	15°	15°		
Overtravel	OT	Min.	40°			4mm	4mm	5mm	5mm	40°				
Poor response travel	MD	Max.*1	14°			1mm	1mm	1.5mm	1.5mm	14°				
Action position	OP		—			18.2 ± 0.5mm	28.6 ± 0.8mm	37 ± 0.8mm	27 ± 0.8mm	—				
Total travel	TT	*2	(80°)			(6mm)	(6mm)	(9mm)	(9mm)	(80°)				
Forced disconnected pretravel	DOT	Min.*3												
Forced disconnected force	DOF	Min.*3	20N			20N	20N	20N	20N	20N				

Note The simultaneity of ON / OFF operation of 2NC contacts have difference, please make sure before using it.

*1. Only for quick-action type.

*2. Reference values.

*3. Only for slow-action type. For safe use, please make sure that all values are within the range of maximum or minimum.

*4. The property value when length of lever is 32mm.

Action characteristics

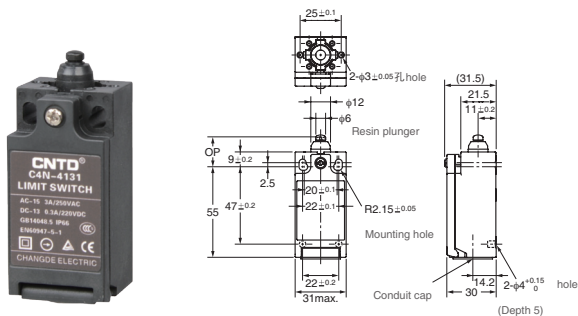
■ Slow-action type (1NC/1NO)

Model			C4N-□A20	C4N-□A22	C4N-□A25	C4N-□A26	C4N-□A31	C4N-□A32	C4N-□A62	C4N-□A72	C4N-□A2H	C4N-□A2G*8
Action characteristics												
Action force	OF	Max.			5.0N		6.5N	6.5N	5.0N	5.0N		4.5N
Restore force	RF	Min.			0.5N		1.5N	1.5N	0.8N	0.8N		0.4N
Pretravel	PT	*1			18 - 27°		2mm	2mm	4mm	4mm		18 - 27°
	PT	(2nd)*2			(44°)		(2.9mm)	(2.9mm)	(5.2mm)	(4.3mm)		(44°)
	PT	*3			27.5 - 36.5°		2.8mm	2.8mm	4mm	4mm		27.5 - 36.5°
	PT	(2nd)*4			(18°)		(1mm)	(1mm)	(1.5mm)	(1.5mm)		(18°)
Overtravel	OT	Min.			40°		4mm	4mm	5mm	5mm		40°
Action position	OP				—		18.2 ± 0.5mm	28.6 ± 0.8mm	37 ± 0.8mm	27 ± 0.8mm		—
	OP	*5			—		17.4 ± 0.5mm	28 ± 0.8mm	36 ± 0.8mm	26.1 ± 0.8mm		—
Total travel	TT	*6			(80°)		(6mm)	(6mm)	(9mm)	(9mm)		(80°)
Forced disconnected pretravel	DOT	Min.*7			50°		3.2mm	3.2mm	5.8mm	4.8mm		50°
Forced disconnected force	DOF	Min.*7			20N		20N	20N	20N	20N		20N

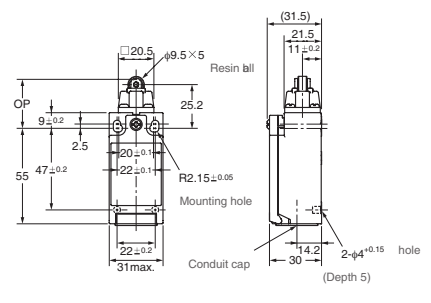
1. NC contact is open.
2. NO contact is closed.
3. Only for MBB type.
4. It is the reference value of MBB type.
5. Only for MBB type.
6. Reference values
7. For safe use, please make sure that all values are within the range of maximum or minimum.
8. The property value when length of lever is 32mm

Appearance and Dimension

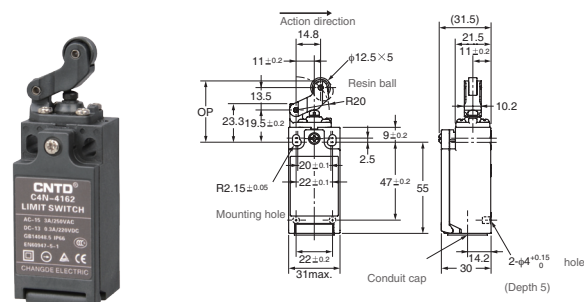
C4N-4131



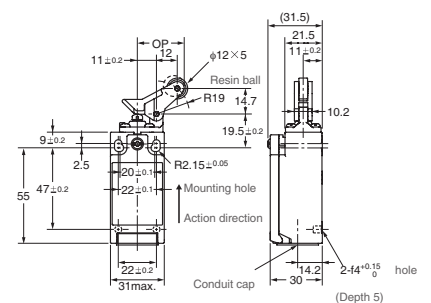
C4N-4132



C4N-4162



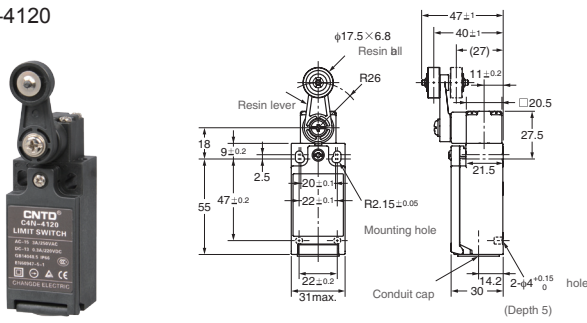
C4N-4172



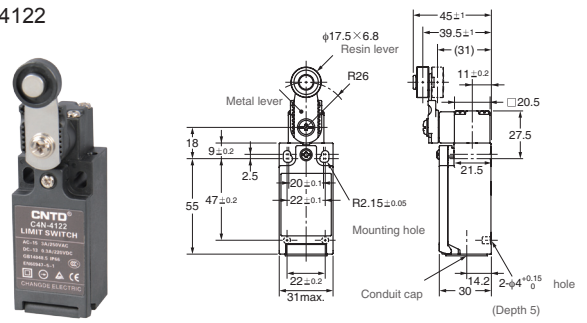
C4N Miniature Safety Limit Switch

Appearance and Dimension

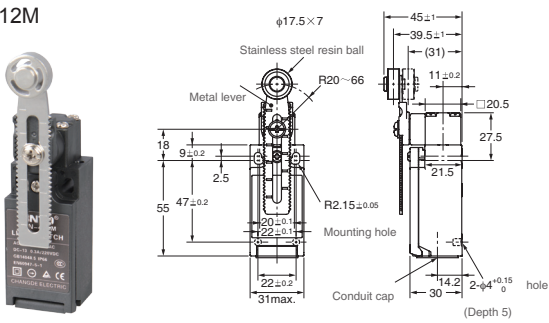
C4N-4120



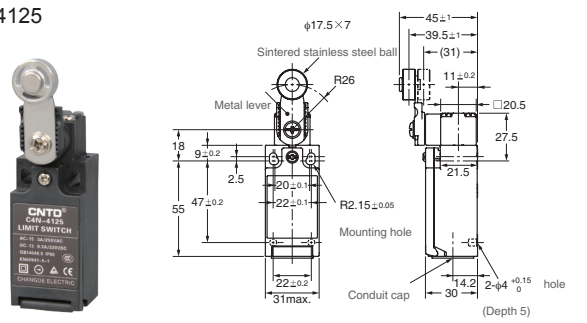
C4N-4122



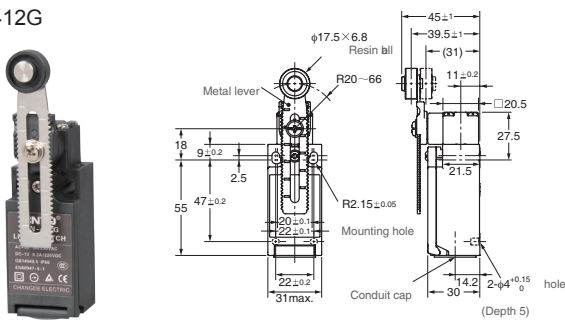
C4N-412M



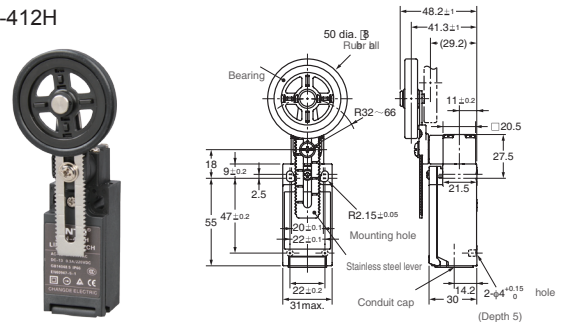
C4N-4125



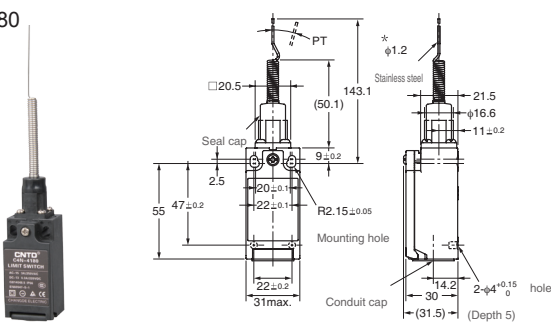
C4N-412G



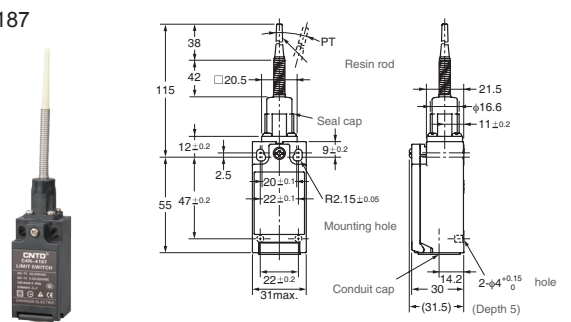
C4N-412H



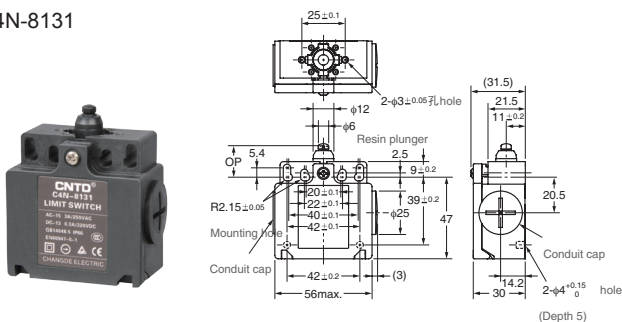
C4N-4180



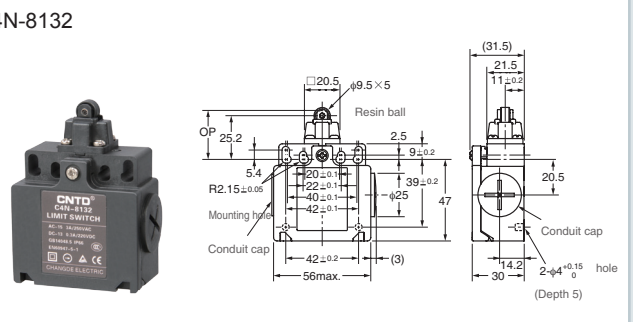
C4N-4187



C4N-8131



C4N-8132

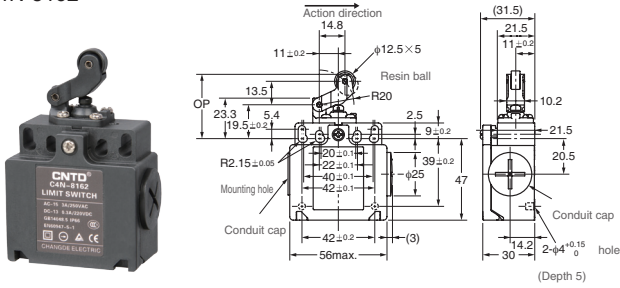


* Use of application of stainless steel washers and plastic stick are within 35mm from the front end, the entire action is within 70mm

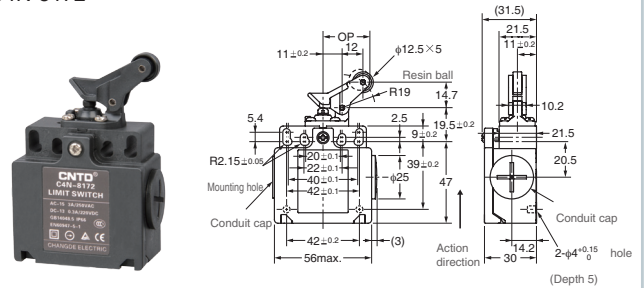
C4N Miniature Safety Limit Switch

Appearance and Dimension

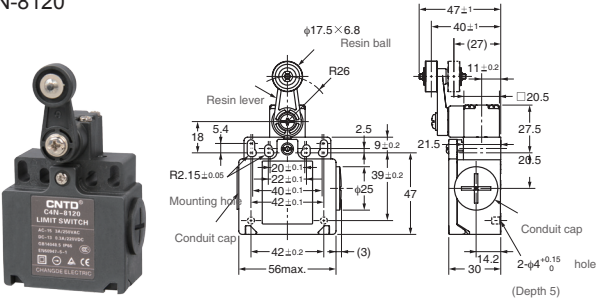
C4N-8162



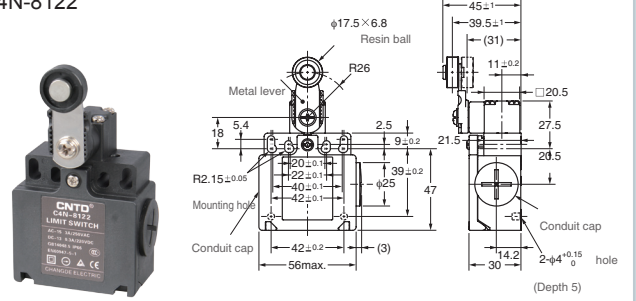
C4N-8172



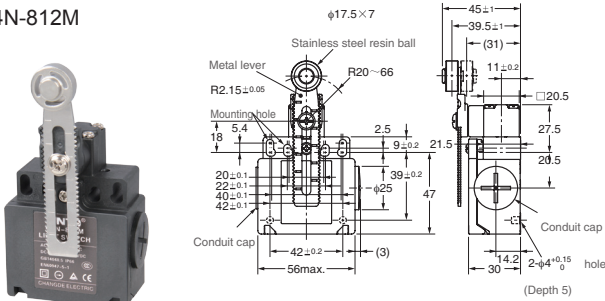
C4N-8120



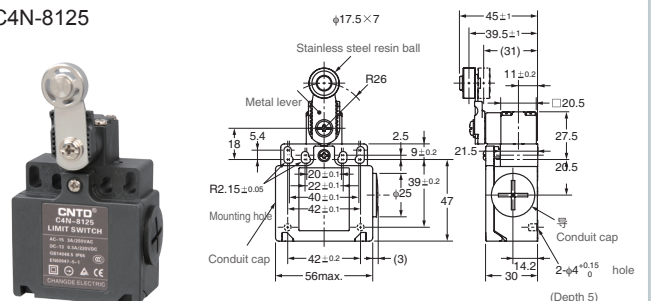
C4N-8122



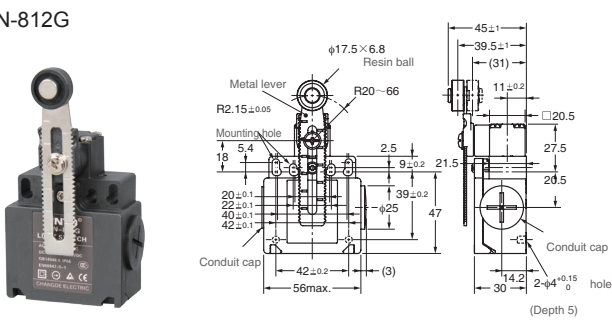
C4N-812M



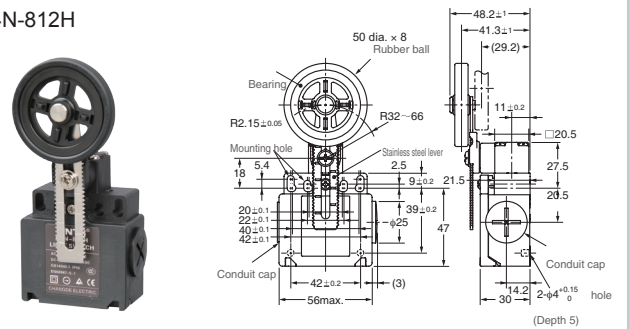
C4N-8125



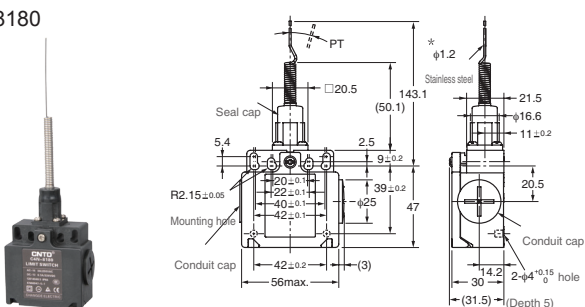
C4N-812G



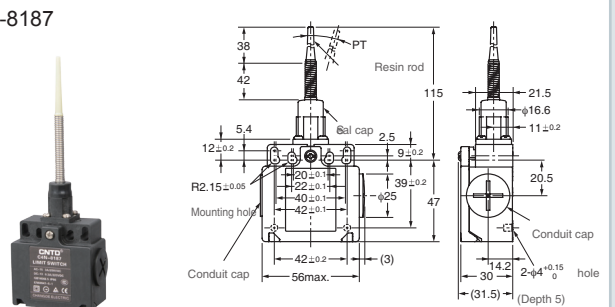
C4N-812H



C4N-8180



C4N-8187



* Use of application of stainless steel washers and plastic stick are within 35mm from the front end, the entire action is within 70mm