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|  | Product name | YG 1201 DC Vehicle Inlet | Document No. | |
| | Product model | YG 1201 DC Vehicle Inlet | Edition | A 0.0 |

YG 1201 DC Vehicle Inlet


Technical Specification

Edit / Date _____

Review / Date _____

Approve / Date _____

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Changes /Revision:

| <input type="checkbox"/> Change <input type="checkbox"/> Revision | Date | Content | Edit | Approver |
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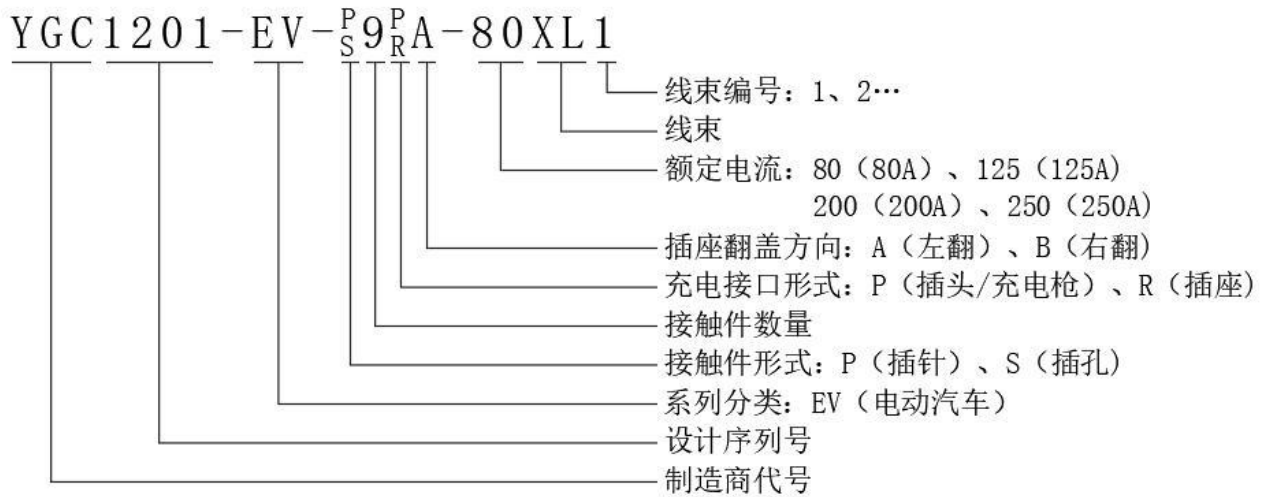
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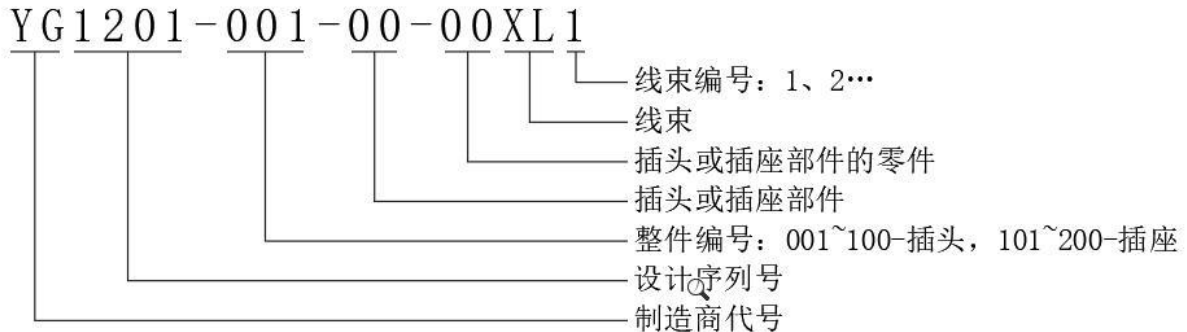
1. YG 1201 DC vehicle inlet model and details

1.1. YG 1201 DC vehicle inlet model naming rules

1.1.1. Naming convention




1.1.2. Product number naming specification



1.2. YG 1201 Model details of DC vehicle inlet (this specification only applies to the models in the following table):


| No. | Name | Identification of product | Port wiring specification (mm ²) | | | | | | | | Ingredients package code | |
|-----|-------------------------------------|---------------------------|--|-----|----|-----|-----|------|------|------|--------------------------|--------------|
| | | | DC+ | DC- | PE | A+ | A- | CC1 | CC2 | S+ | | S- |
| 1 | YGC 1201-EV-S9RA-80 receptacle | YG1201-107-00-00 | 25 | 25 | 25 | 4 | 4 | 0.75 | 0.75 | 0.75 | 0.75 | 113990000954 |
| 2 | The YGC 1201-EV-S9R B-80 receptacle | YG1201-108-00-00 | | | | 2.5 | 2.5 | | | | | |
| 3 | YGC1201-EV-S9RA-80 receptacle | YG1201-107-00-00 | | | | 1.5 | 1.5 | | | | | |
| 4 | The YGC1201-EV-S9R B-80 receptacle | YG1201-108-00-00 | | | | | | | | | | |
| 5 | The YGC1201-EV-S9R A-80 receptacle | YG1201-107-00-00 | | | | | | | | | | |

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|----|------------------------------------|-----------------|----|----|----|------|------|------|------|--|--|--------------|------|------|
| 6 | YGC1201-EV-S 9 RB-80 receptacle | YG1201-108-00-0 | | | | | | | | | | 113990000951 | | |
| 7 | The YGC1201-EV-S9R A-80 receptacle | YG1201-107-00-0 | | | | | | | | | | | 0.75 | 0.75 |
| 8 | YGC1201-EV-S 9 RB-80 receptacle | YG1201-108-00-0 | | | | | | | | | | | | |
| 9 | YGC1201-EV-S9RA-125 receptacle | YG1201-105-00-0 | 35 | 35 | 25 | 0.75 | 0.75 | 0.75 | 0.75 | | | 113990000950 | | |
| 10 | YGC1201-EV-S 9 RB-125 receptacle | YG1201-106-00-0 | | | | | | | | | | | 4 | 4 |
| 11 | YGC1201-EV-S9RA-125 receptacle | YG1201-105-00-0 | | | | | | | | | | | 2.5 | 2.5 |
| 12 | YGC1201-EV-S9R B-125 receptacle | YG1201-106-00-0 | | | | | | | | | | | 1.5 | 1.5 |
| 13 | YGC1201-EV-S9R A-125 receptacle | YG1201-105-00-0 | | | | | | | | | | | 1.5 | 1.5 |
| 14 | YGC1201-EV-S 9 RB-125 receptacle | YG1201-106-00-0 | | | | | | | | | | | 0.75 | 0.75 |
| 15 | YGC1201-EV-S9R A-125 receptacle | YG1201-105-00-0 | | | | | | | | | | | | |
| 16 | YGC1201-EV-S 9 RB-125 receptacle | YG1201-106-00-0 | | | | | | | | | | | | |
| 17 | YGC1201-EV-S9RA-200 receptacle | YG1201-103-00-0 | 50 | 50 | 25 | 0.75 | 0.75 | 0.75 | 0.75 | | | 113990000937 | | |
| 18 | YGC1201-EV-S9R B-200 receptacle | YG1201-104-00-0 | | | | | | | | | | | 4 | 4 |
| 19 | YGC1201-EV-S9RA-200 receptacle | YG1201-103-00-0 | | | | | | | | | | | 2.5 | 2.5 |
| 20 | YGC1201-EV-S9R B-200 receptacle | YG1201-104-00-0 | | | | | | | | | | | 1.5 | 1.5 |
| 21 | YGC1201-EV-S9R A-200 receptacle | YG1201-103-00-0 | | | | | | | | | | | 1.5 | 1.5 |
| 22 | YGC1201-EV-S 9 RB-200 receptacle | YG1201-104-00-0 | | | | | | | | | | | 0.75 | 0.75 |
| 23 | YGC1201-EV-S9R A-200 receptacle | YG1201-103-00-0 | | | | | | | | | | | | |
| 24 | YGC1201-EV-S 9 RB-200 receptacle | YG1201-104-00-0 | | | | | | | | | | | | |
| 25 | YGC1201-EV-S9R A/1-200 receptacle | YG1201-109-00-0 | 70 | 70 | 25 | 0.75 | 0.75 | 0.75 | 0.75 | | | 113990000941 | | |
| 26 | YGC1201-EV-S9RB /1-200 receptacle | YG1201-110-00-0 | | | | | | | | | | | 4 | 4 |
| 27 | YGC1201-EV-S9R A/1-200 receptacle | YG1201-109-00-0 | | | | | | | | | | | 2.5 | 2.5 |
| 28 | YGC1201-EV-S9RB /1-200 receptacle | YG1201-110-00-0 | | | | | | | | | | | | |

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| 29 | YGC1201-EV-S9R A/1-200 receptacle | YG1201-109-00-00 | | | | | | | | | | 113990000939 |
| 30 | YGC1201-EV-S9RB /1-200 receptacle | YG1201-110-00-00 | | | | | | | | | | |
| 31 | YGC1201-EV-S9R A/1-200 receptacle | YG1201-109-00-00 | | | | | | | | | | |
| 32 | YGC1201-EV-S9RB /1-200 receptacle | YG1201-110-00-00 | | | | | | | | | | |
| 33 | YGC1201-EV-S9RA-250 receptacle | YG1201-101-00-00 | 70 | 70 | 25 | | | | | | | 113990000941 |
| 34 | YGC1201-EV-S9R B-250 receptacle | YG1201-102-00-00 | | | | | | | | | | |
| 35 | YGC1201-EV-S9RA-250 receptacle | YG1201-101-00-00 | | | | | | | | | | |
| 36 | YGC1201-EV-S9R B-250 receptacle | YG1201-102-00-00 | | | | | | | | | | |
| 37 | YGC1201-EV-S9RA-250 receptacle | YG1201-101-00-00 | | | | | | | | | | |
| 38 | YGC1201-EV-S 9 RB-250 receptacle | YG1201-102-00-00 | | | | | | | | | | |
| 39 | YGC1201-EV-S9R A-250 receptacle | YG1201-101-00-00 | | | | | | | | | | |
| 40 | YGC1201-EV-S 9 RB-250 receptacle | YG1201-102-00-00 | | | | | | | | | | |

Adapt cable

| No. | Adapt cable specifications | Number of cable core | OD (in: mm) | Standard |
|-----|-----------------------------------|----------------------|-------------|--------------------|
| 1 | 0.75mm ² Non-shielding | 1 | Φ1.8±0.1 | DIN72551-6/ISO6722 |
| 2 | 1mm ² Non-shielding | 1 | Φ2±0.1 | DIN72551-6/ISO6722 |
| 3 | 1.5mm ² Non-shielding | 1 | Φ2.3±0.1 | DIN72551-6/ISO6722 |
| 4 | 2.5mm ² Non-shielding | 1 | Φ3.5±0.15 | Q/CT1037-2016 |
| 5 | 4mm ² Non-shielding | 1 | Φ4.5±0.15 | Q/CT1037-2016 |
| 6 | 25mm ² Non-shielding | 1 | Φ10.2±0.2 | Q/CT1037-2016 |
| 7 | 35mm ² Non-shielding | 1 | Φ11.5±0.2 | Q/CT1037-2016 |
| 8 | 50mm ² Non-shielding | 1 | Φ13.5±0.3 | Q/CT1037-2016 |
| 9 | 70mm ² Non-shielding | 1 | Φ15.5±0.3 | Q/CT1037-2016 |


Attention

- ★ receptacle body and ingredients package matching order, matching ratio: 1:1;
- ★ The above is the general product model, wiring, please choose according to the line diameter requirements, if there is any customized requirements, please consult our company;
- ★ A + / A - / CC1 / CC2 / S + / S - select 0.75mm²Line when you can use 1mm²replace;
- ★ Cable harness for customized products need to be applied according to the actual specific model, consult our company for details;

2. Technical parameters

2.1. Electrical parameters

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| Port definition | DC± | | | | | PE | A± | CC1 | CC2 | S± |
|---|---|-----|-----|-----|-----|--------|--------|-------|-------|-------|
| Wiring specification (unit: mm ²) | 25 | 35 | 50 | 70 | 70 | | 0.75~4 | 0.75 | 0.75 | 0.75 |
| Contact Terminal Diameter (mm) | Φ12 | | | | | Φ6 | Φ3 | Φ3 | Φ3 | Φ3 |
| Rated Operating Voltage (DC) | 750V/1000V | | | | | / | 0~30V | 0~30V | 0~30V | 0~30V |
| Rated Operating Current (DC) | 80 | 125 | 200 | 200 | 250 | | 2~20A | 2A | 2A | 2A |
| Contact resistance | ≤0.3mΩ | | | | | ≤0.4mΩ | ≤3mΩ | | | |
| Insulation resistance | ≥2000MΩ(1000V AC) | | | | | | | | | |
| Pressure withstand (50Hz, AC Normal) | Test after plug wiring: ① Resistance voltage between DC + and DC-3500V AC 1min; ② DC +, DC-and PE, S +, S +, A +, A-resistance voltage 1500V AC 1min; ③ PE and S +, S-, A +, A-respectively resistant voltage 1500V AC 1min; ④ S +, S-, CC1, A +, A-two resistance voltage of 1500V AC 1min; Test after the receptacle is wired: ① Resistance voltage between DC + and DC-3500V AC 1min; ② DC +, DC-and PE, S +, S-, CC1, CC2, A +, A-resistance voltage 1500V AC 1min; ③ PE and S +, S-, CC2, A +, A-resistance voltage 1500V AC 1min; ④ S +, S-, CC2, CC1, A +, A-two mutual voltage resistance of 1500V AC 1min | | | | | | | | | |

2.2. Mechanical performance parameters

Service life: 10000 times

Plug and pull force: 140N

Lock-in force: 200N

2.3. Environmental performance parameters

Before insertion: IP54

After insertion: IP55 (head, seat connection position) IP67 (tail of receptacle, please pay attention to avoid tail wiring bending radius <6x cable OD)

Ambient temperature: -30°C ~ + 50°C

2.4. Materials

Housing: Engineering plastics (temperature resistant PA66 or temperature resistant PC)

Terminal: copper, surface silver-plated

Seals: silicone rubber or elastic

Flame retardant grade of insulation materials: UL94 V-0

2.5. Implementation standards

GB / T 18487.1-2015 EVs-Part 1: General Requirements

GB / T 20234.1-2015 Connecdevices for conductive charging of electric vehicles-Part 1: General Requirements


GB / T 20234.3-2015 Connections for Electric Vehicle-Part 3: DC Charging Interface

3. Electrical principle

3.1. Function definition of each terminal:

| No. | Terminal identification | function definition |
|-----|-------------------------|--|
| 1 | DC+ | The DC power supply is positive, and the connected DC power supply is facing the battery cathode |


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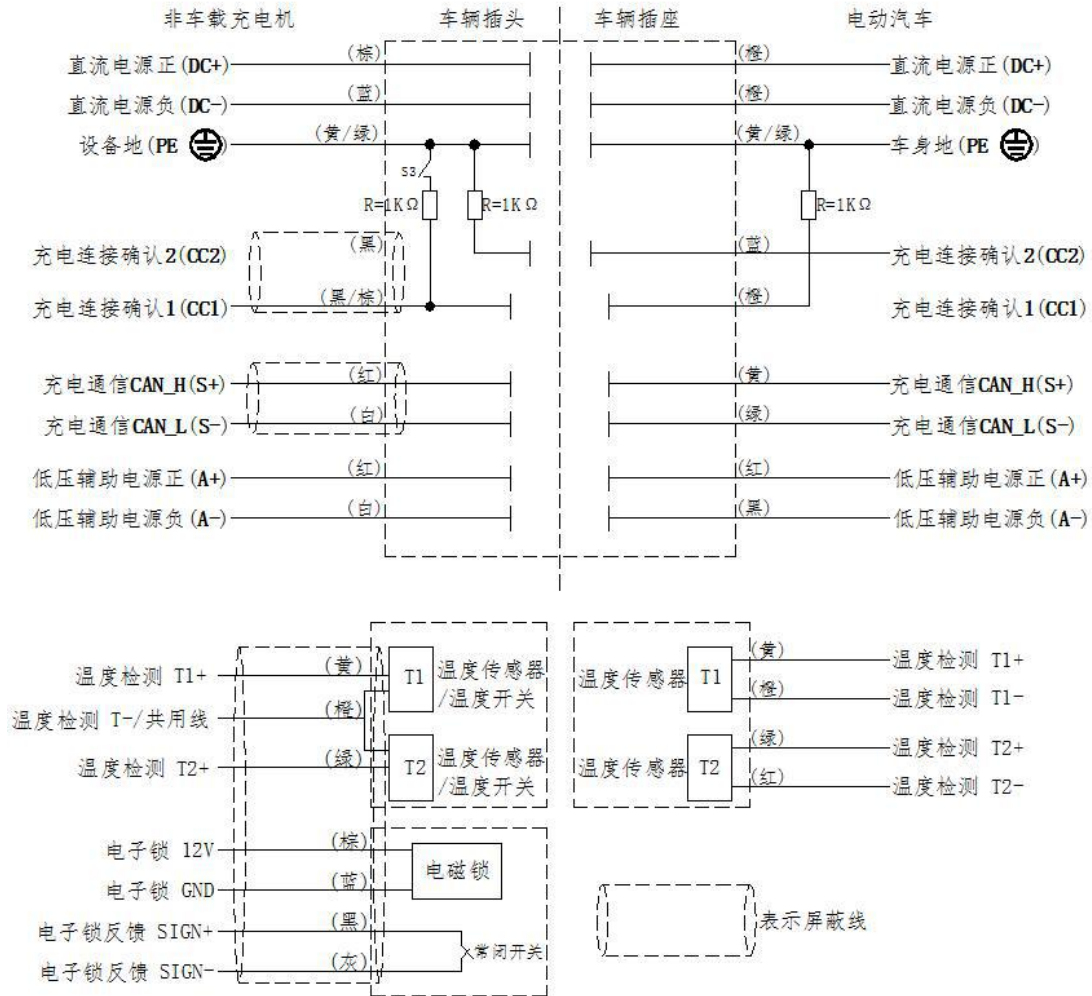
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| 2 | DC- | The DC power is negative, connect the DC power is negative and the battery is negative |
| 3 | PE⊕ | Protective ground (PE), connect to the ground wire of the power supply equipment and the vehicle body ground wire |
| 4 | S+ | Charging communication CAN _ H, connecting the communication line between non-on-board charger and electric vehicle |
| 5 | S- | Charging communication CAN _ L, connecting the communication line between the non-on-board charger and the electric vehicle |
| 6 | CC1 | Charging connection confirmation 1 |
| 7 | CC2 | Charging connection confirmation 2 |
| 8 | A+ | The low voltage auxiliary power supply is connected to the low voltage auxiliary power supply provided by the non-on-board charger for electric vehicles |
| 9 | A- | Low voltage auxiliary power supply is negative, connected to the low voltage auxiliary power supply provided by non-on-board charger for electric vehicles |
| 10 | T1+ | The temperature sensor is positive on the right side of the DC power supply |
| 11 | T1- | The temperature sensor of the DC side is negative |
| 12 | T2+ | The negative-side temperature sensor of the DC power supply is positive |
| 13 | T2- | The temperature sensor is negative on the negative side |
| ★ T1-and T2-are available | | |

3.2. Electrical schematic diagram:

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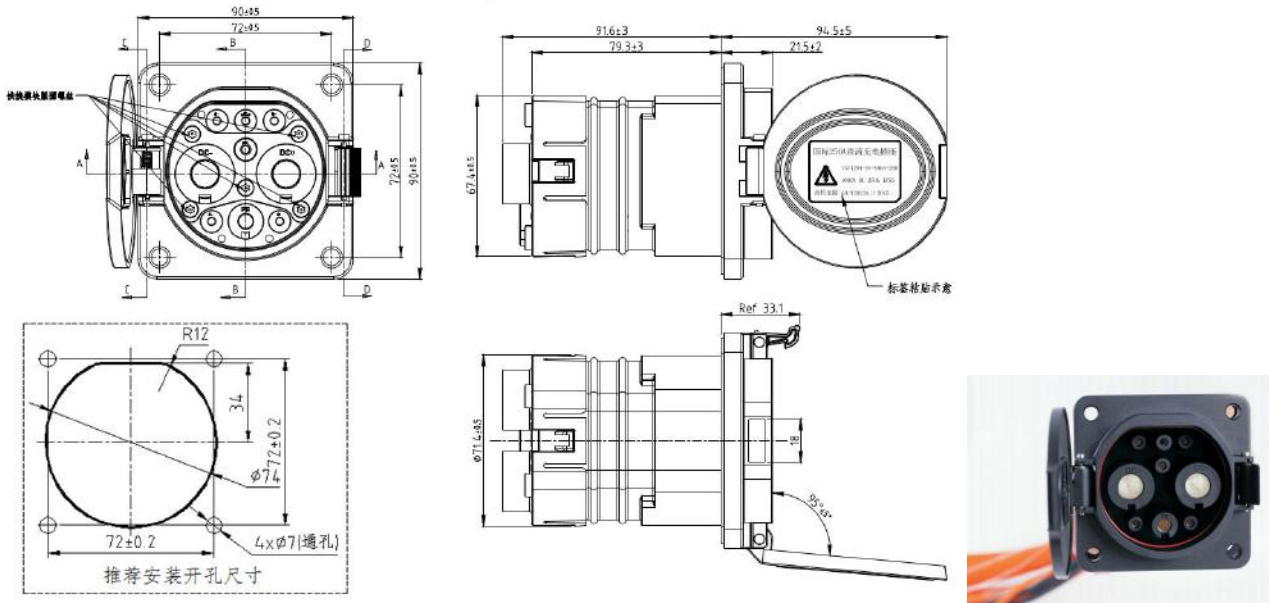


4. Outline drawing and installation hole opening size

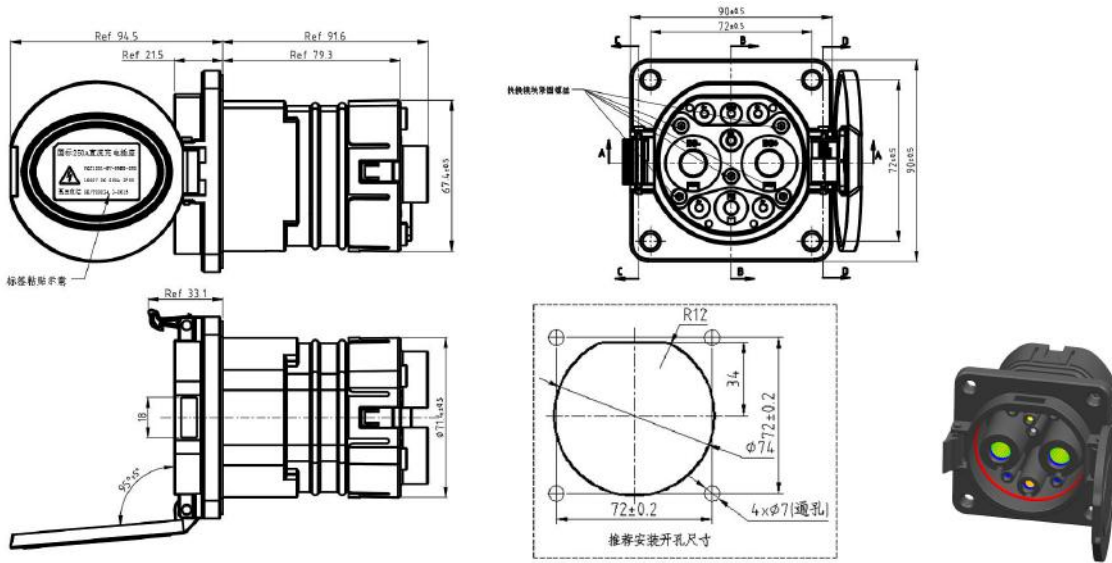
4.1. Vehicle inlet (front-mounted, Flip-top type, left flip-top):

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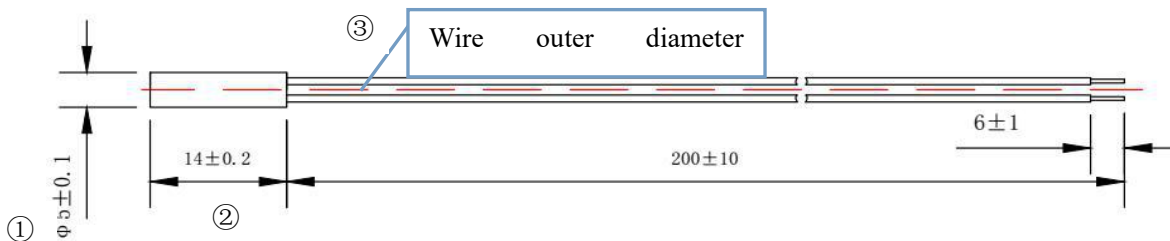


4.2. Vehicle inlet (front-mounted, Flip-top type, right flip-top):




5. Supporting accessories

5.1. NTC/PT Temperature sensor size:



★ Note: ①②③ is the required size, the rest of the dimensions can be customized

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★ Recommended MT20.NTC01.L382 200 thermal temperature sensor (501021702657) with 4 temperature point resistance values as follows:

| 温度 | 对应阻值 | 精度 |
|------|----------|-------|
| 0℃ | 32.75K Ω | ±1.0% |
| 25℃ | 10.00K Ω | |
| 75℃ | 1.47K Ω | |
| 100℃ | 0.67K Ω | |

★ Recommended MT20 PT1000A LA380 200 PT1000 temperature sensor (501021702658), the 4 temperature point resistance values are as follows:

| 温度 | 对应阻值 | 精度 |
|------|-----------|-------|
| 0℃ | 1000.00 Ω | ±0.1% |
| 25℃ | 1097.34 Ω | |
| 75℃ | 1289.85 Ω | |
| 100℃ | 1385.03 Ω | |

★ See the specifications of the above sensor performance;

★ According to the standard, select two sensors in DC + / DC-, and order with the receptacle, order ratio 1:2 (receptacle: temperature sensor).

6. Notes for use:



直流充电接口维护
及检测方法 (通用)


Attached announcement information:

explain:

★ The announcement logo corresponds to the model table "name"

| Announcement logo | Temperature control device | Strong inspection report number | CQC report number |
|-----------------------|----------------------------|---------------------------------|-------------------|
| YGC1201-EV-S9RA-250 | have | QA19EE1XB7261 QA19EG1XB7261 | |
| YGC1201-EV-S9RB-250 | have | QA19EE1XB7261 QA19EG1XB7261 | |
| YGC1201-EV-S9RA/1-200 | have | QA19EE1XB7261 QA19EG1XB7261 | |
| YGC1201-EV-S9RB/1-200 | have | QA19EE1XB7261 QA19EG1XB7261 | |
| YGC1201-EV-S9RA-125 | have | QA19EE1XB7261 QA19EG1XB7261 | |
| YGC1201-EV-S9RB-125 | have | QA19EE1XB7261 QA19EG1XB7261 | |

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|---------------------|------|--------------------------------|--|
| YGC1201-EV-S9RA-80 | have | QA19EE1XB7261 QA19EG1XB7261 | |
| YGC1201-EV-S9RB-80 | have | QA19EE1XB7261 QA19EG1XB7261 | |
| YGC1201-EV-S9RA-200 | have | QA19EE1XB7271 QA19EG1XB7271 | |
| YGC1201-EV-S9RB-200 | have | QA19EE1XB7271 QA19EG1XB7271 | |

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