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	Part NO.	YG1033A Electrical connector	Version	S7.0

# YGC1033A Electrical connector


## Technical Specification <sup>(1)</sup>

Edited by/Date Xiaoyuan Liu 2022. 8. 8

Audited by/Date Yuanxin Chen 2022. 8. 8

Approved by/Date Xiaodong Xiang 2022. 8. 8

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Changes & Revisions

<input type="checkbox"/> Change <input type="checkbox"/> Revision	Date	Main items	Revised by	Approved by
<input checked="" type="checkbox"/> Change <input type="checkbox"/> Revision	2019. 11. 11	Change naming rules and add non-interlocking models	Yang Dai	Xiaodong Xiang
<input type="checkbox"/> Change <input checked="" type="checkbox"/> Revision	2019. 12. 18	Updated some pending codes, added a detailed list of wiring accessories and fool-proof key position instructions.	Yang Dai	Tonggang Li
<input type="checkbox"/> Change <input checked="" type="checkbox"/> Revision	2020. 2. 27	Added 120° bent product naming rules	Wenjun He	Tonggang Li
<input type="checkbox"/> Change <input checked="" type="checkbox"/> Revision	2021. 7. 17	Format adjustment	Wenjun He	Yuanxin Chen
<input type="checkbox"/> Change <input checked="" type="checkbox"/> Revision	2022. 1. 5	Add receptacle protective cover	Daqian Liu	Yuanxin Chen
<input type="checkbox"/> Change <input checked="" type="checkbox"/> Revision	2022. 8. 8	Add storage conditions	Xiaoyuan Liu	Yuanxin Chen

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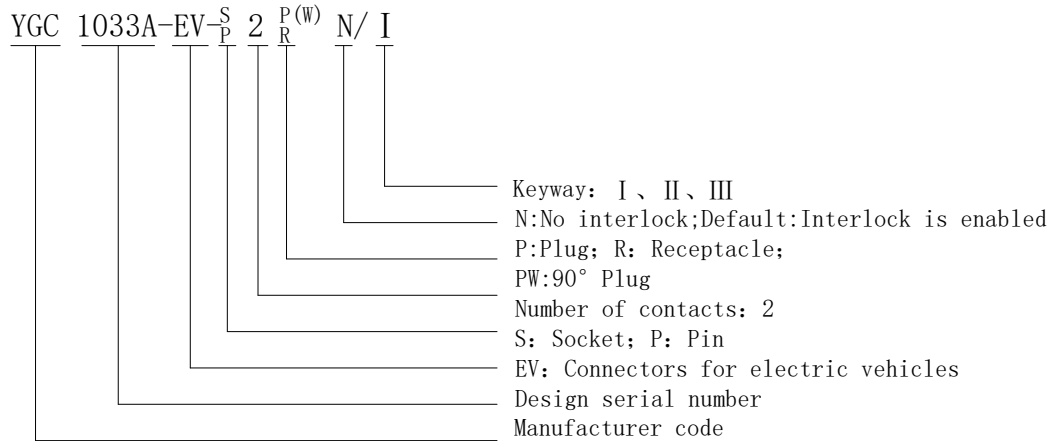
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## 一、Basic Information

### 1. Connector model

YGC1033A Electrical connector naming rules:




### 2. Product introduction

- This series of connectors are dual-core shielded connectors with small size, high power, simple structure and easy operation;
- This product is a high-voltage and high-current connector, mainly used in new energy vehicle electronic control and battery energy systems;
- Protection level: plugs and receptacles meet IPXXB, and after normal plugging and locking, IP67&IP6K9K;
- The plug connector shell is made of aluminum alloy passivation process and 360° shielded to meet high salt spray resistance requirements;
- Some parts of the plug connector need to be ordered separately according to the wiring specifications.

### 3. Material type

No.	Straight plug assembly model	120° plug assembly model	90° plug assembly model	Receptacle assembly model	Fool-proof key
1*	YGC1033A-EV-S2P/ I	YGC1033A-EV-S2PW/ I	YGC1033D-EV-S2P/I	YGC1033A-EV-P2R/ I	I
2	YGC1033A-EV-S2PN/ I	YGC1033A-EV-S2PWN/ I	/	YGC1033A-EV-P2RN/ I	
3	YGC1033A-EV-S2P/ II	YGC1033A-EV-S2PW/ II	/	YGC1033A-EV-P2R/ II	II

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4	YGC1033A-EV-S2PN/II	YGC1033A-EV-S2PWN/II	/	YGC1033A-EV-P2RN/II	
5	YGC1033A-EV-S2P/III	YGC1033A-EV-S2PW/III	/	YGC1033A-EV-P2R/III	III
6	YGC1033A-EV-S2PN/III	YGC1033A-EV-S2PWN/III	/	YGC1033A-EV-P2RN/III	

Note: "\*" is the main recommended model

Accessories (select according to the adapter cable and purchase separately)


Straight plug accessories (180° outlet)				
Accessory code	Adapter cable (cable OD)	Name	Part No.	Quantity
A	35mm <sup>2</sup> Shielded cable ( $\phi$ 14.6~ $\phi$ 15.4)	YG1033A socket assembly $\Phi$ 10-35mm <sup>2</sup> -Silver	113020601607	2
		YG1033A Plug shield sleeve	114022600312	2
		YG1033A Plug shield inner sleeve-35	114022600322	2
		YG1033J Plug sealing body-35mm <sup>2</sup>	114050501333	2
		YG1033A Plug tail cover-35	114069804180	2
B	35mm <sup>2</sup> LV216 Shielded cable ( $\phi$ 14.4 <sub>-0.6</sub> mm)	YG1033A Plug shield sleeve-50 (LV216)	114022600333	2
		YG1033A Plug shield inner sleeve-35 (LV216)	114022600345	2
		YG1033A Socket accessorie $\Phi$ 10-35mm <sup>2</sup> -Sliver	113020601607	2
		YG1033J Plug sealing body-35mm <sup>2</sup> (LV216)	TBD	2
		YG1033A Plug tail cover-35 (LV216)	TBD	2
C	50mm <sup>2</sup> Shielded cable ( $\phi$ 17.5 $\pm$ 0.5mm)	YG1033A Socket assembly $\Phi$ 10-50mm <sup>2</sup> -Sliver	113020601608	2
		YG1033A Plug shield sleeve	114022600312	2
		YG1033A Plug shield inner sleeve-50	114022600323	2

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	Product Name	YGC1033A Electrical connector	Docu NO.	
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		YG1033 Plug sealing body-50mm2	114050501410	2
		YG1033A Plug tail cover-50	114069804181	2
D	50mm <sup>2</sup> LV216 Shielded cable ( $\phi$ 15.8 <sub>-0.6</sub> mm)	YG1033A Socket assembly $\Phi$ 10-50mm <sup>2</sup> -Sliver	113020601608	2
		YG1033A Plug shield sleeve-50 (LV216)	114022600333	2
		YG1033A Plug shield inner sleeve-50 (LV216)	114022600332	2
		YG1033A Plug sealing body-50mm <sup>2</sup> (LV216)	114050501411	2
		YG1033A Plug tail cover-50 (LV216)	114069804287	2
E	70mm <sup>2</sup> Shielded cable ( $\phi$ 19.5 $\pm$ 0.5mm)	YG1033A Socket assembly $\Phi$ 10-70mm <sup>2</sup> -Sliver	113020601609	2
		YG1033A Plug shield sleeve-70	TBD	2
		YG1033A Plug shield inner sleeve-70	114022600324	2
		YG1033 Plug sealing body-70mm <sup>2</sup>	114050501000	2
		YG1033A Plug tail cover-70	114069804182	2
<b>Plug accessories (120° outlet)</b>				
Accessory code	Adapter cable (cable OD)	Name	Part No.	Quantity
F	50mm <sup>2</sup> LV216 Shielded cable ( $\phi$ 15.8 <sub>-0.6</sub> mm)	YG1033A Terminal50mm <sup>2</sup>	114020100846	2
		YG1033A Plug shield sleeve-50 (LV216)	114022600333	2
		YG1033A Plug shield inner sleeve-50 (LV216)	114022600332	2
		YG1033A Plug sealing body-50mm <sup>2</sup> (LV216)	114050501411	2
		YG1033A Plug tail cover-50 (LV216)	114069804287	2
		YG1033A sealing body block $\Phi$ 25 (outside) $\times$ 16.5 (inside)	114039803446	2

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	Product Name	YGC1033A Electrical connector	Docu NO.	
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		YG1152 Stuffy cover	114012000586	2
		O-ring GB/T 3452.1 $\Phi$ 21.4 (inner) $\times$ $\Phi$ 1.8 (red)	501010600111	2
		Cross recessed hexagon head combination screw GB/T 9074.13 M6 $\times$ 12	501010100573	2
G	50mm <sup>2</sup> Shielded cable ( $\Phi$ 17.5 $\pm$ 0.5mm)	YG1033A Terminal50mm <sup>2</sup>	114020100846	2
		YG1033A Plug shield sleeve	114022600312	2
		YG1033A Plug shield inner sleeve-50	114022600323	2
		YG1033 Plug sealing body-50mm <sup>2</sup>	114050501410	2
		YG1033A Plug tail cover-50	114069804181	2
		YG1033A sealing body block $\Phi$ 25 (outside) $\times$ 18.5 (inside)	TBD	2
		YG1152 Stuffy cover	114012000586	2
		O-ring GB/T 3452.1 $\Phi$ 21.4 (inner) $\times$ $\Phi$ 1.8 (red)	501010600111	2
		Cross recessed hexagon head combination screw GB/T 9074.13 M6 $\times$ 12	501010100573	2
<b>Plug accessories (90° outlet)</b>				
H	50mm <sup>2</sup> Unshielded cable $\Phi$ 13.2 (0/-0.8) mm	YGC1033D-EV-S2P/I Plug	111000404645	1
<b>Receptacle accessories</b>				
No.	Remark	Part Name	Part No.	Quantity
1	选配	YG1033A Receptacle dust cover	114069804815	1

## 二、Technical Parameters

### 1. Electrical parameters

■ rated working current:

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150A@35mm<sup>2</sup> shielded cable

200A@50mm<sup>2</sup> shielded cable

250A@70mm<sup>2</sup> shielded cable

3A@0.5 or 0.75mm<sup>2</sup> unshielded cable

■ Rated working voltage: 1000V (power), 24V (signal);

Note: According to GB/T16935.1-2008 (IEC60664-1:2007), pollution level 2, overvoltage category II, altitude below 2000m.

■ Withstand voltage: 3500V (power), 1000V (signal); (50Hz AC normal); leakage current  $\leq 5\text{mA}$

Test standard: performed according to 4.28.2 in QC/T1067.1-2017, duration 60s;

■ Insulation resistance:  $\geq 5000\text{ M}\Omega$  (power),  $\geq 1000\text{ M}\Omega$  (signal); (normal)

Test standard: According to 4.27 in QC/T1067.1-2017, the test voltage is 1000V DC;

■ HVIL: optional

## 2. Mechanical parameters

■ Mechanical life: 50 times

■ Protection level: IP67&IP6K9K&IP68 (1m water depth, 24 hours) (plugged in)

■ After the receptacle and receptacle dust cover are connected: IP3X

## 3. Working environment

■ Working temperature:  $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$ ;

■ Relative humidity: 95% (at  $40^{\circ}\text{C}$ );

■ Flame retardant grade: UL94 V-0;

## 4. Material and salt spray level


■ Receptacle shell: material PA66-GF30 (black)

■ Plug shell: material ADC12, neutral salt spray 96h.

## 5. Storage conditions

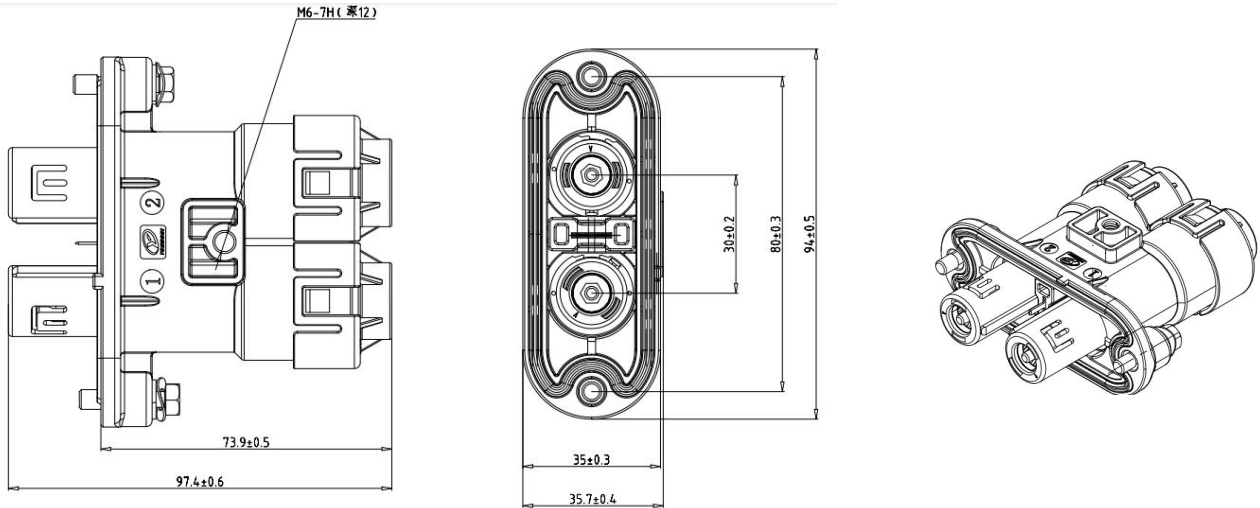
■ Parts must be kept separately and kept neat, clean and ventilated. The storage environment should be controlled at a humidity  $\leq 60\%$  and a temperature between  $5$  and  $30^{\circ}\text{C}$ .

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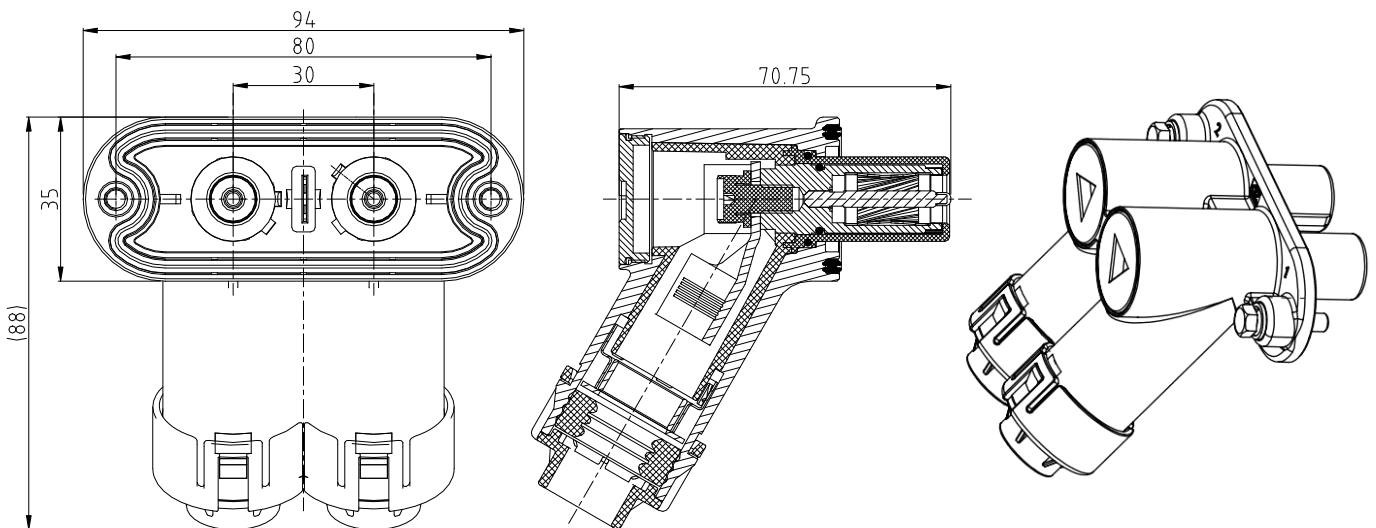
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### 三、Overall dimensions

#### 1. Plug dimensions (straight)




#### 2. Plug dimensions (120° outlet)

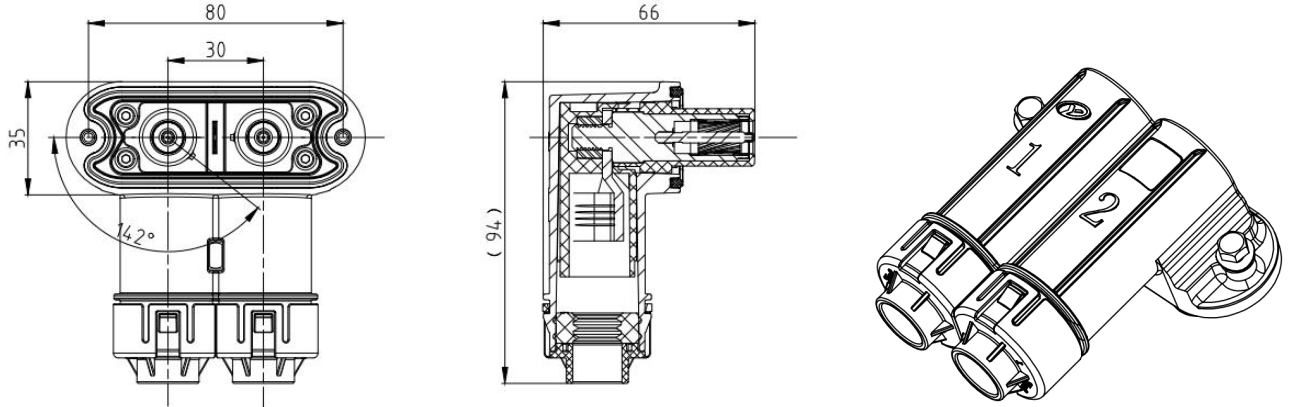


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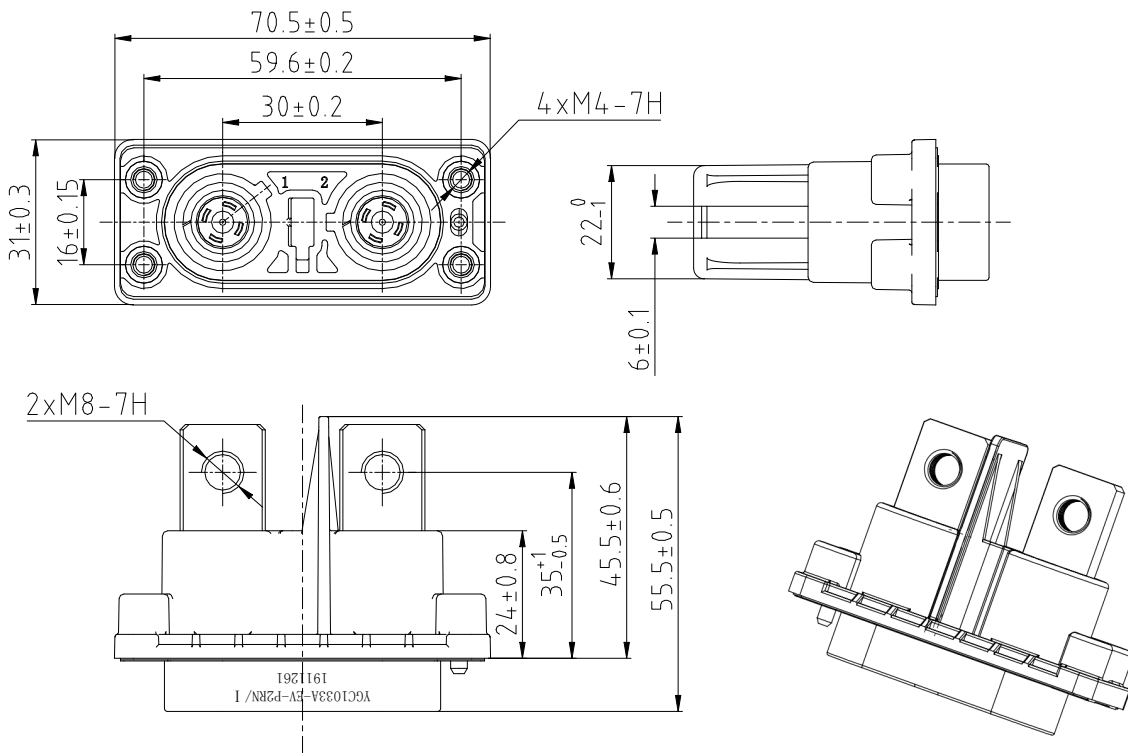


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3. Plug dimensions (90° outlet)



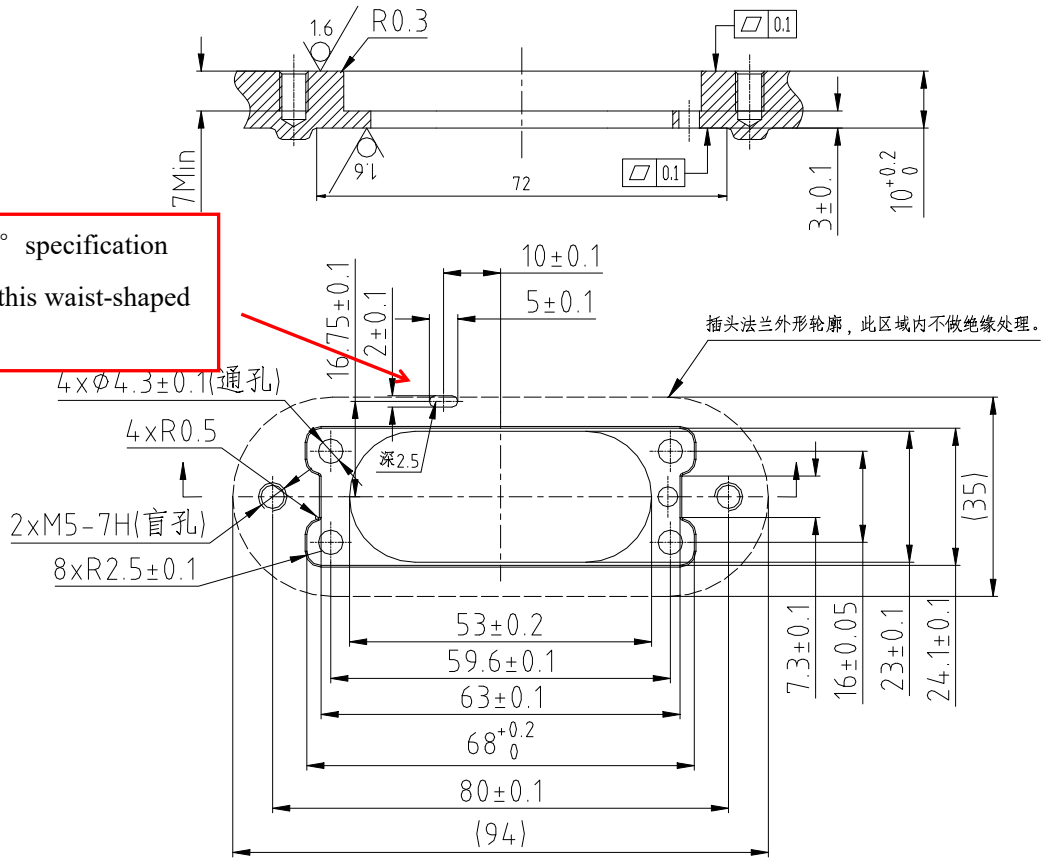
4. Receptacle dimensions




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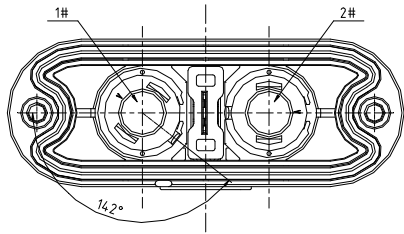
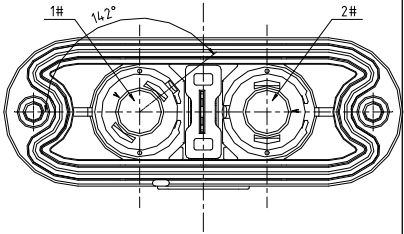
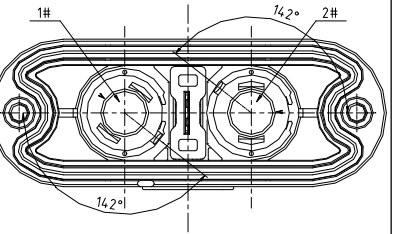
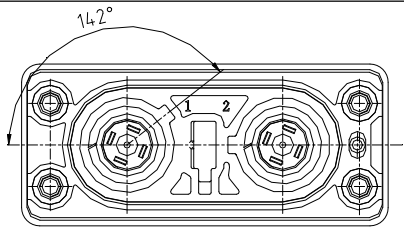
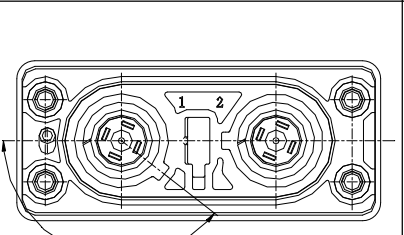
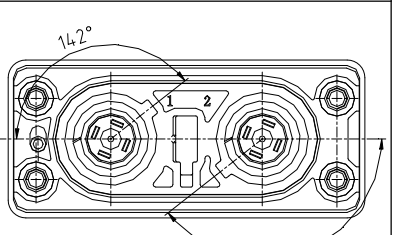
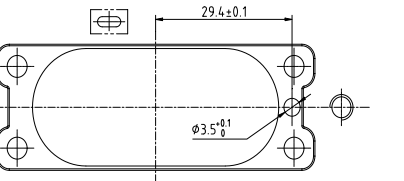
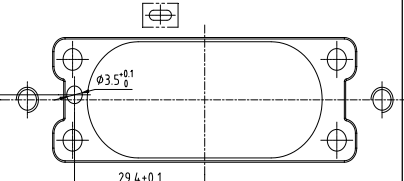
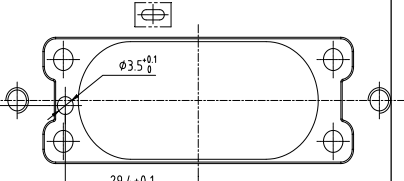
#### 四、Installation dimensions



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### 五、 Fool-proof key position indication and size

Key position	I	II	III
Plug			
Receptacle			
Installation			

Note (1): Product performance and specifications are constantly being improved and are subject to change without prior notice. To obtain the latest product information, please contact the professionals of Yonggui Electric  
The final interpretation right of this matter belongs to Yonggui Electric.

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