	Description	<i>YG740 Type 1 Charging Connector</i>	File No.	
	P/N	YG740D-02-00-00A	Rev.	A


# SAE J1772 Type 1 EV Charging Connector Specification

Prepared / Date Chen Yangping 2022.4.13

Check / Date Yu Tong 2022.4.13

Approval / Date Xiang Xiaodong 2022.4.13

表单编号	部 门	页 码
J3-7.3-48	技术中心	第1页 共6页

	Description	YG740 Type 1 Charging Connector	File No.	
	P/N	YG740D-02-00-00A	Rev.	A


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J3-7.3-48	技术中心	第 2 页 共 6 页

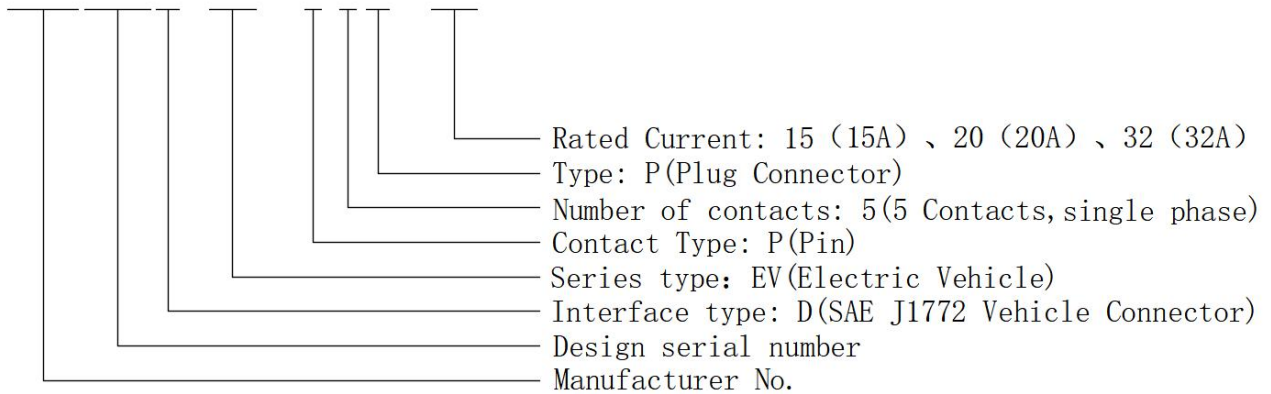
	Description	YG740 Type 1 Charging Connector	File No.	
	P/N	YG740D-02-00-00A	Rev.	A

## 1. Overall Introduction

### 1.1.Naming and Part Number:

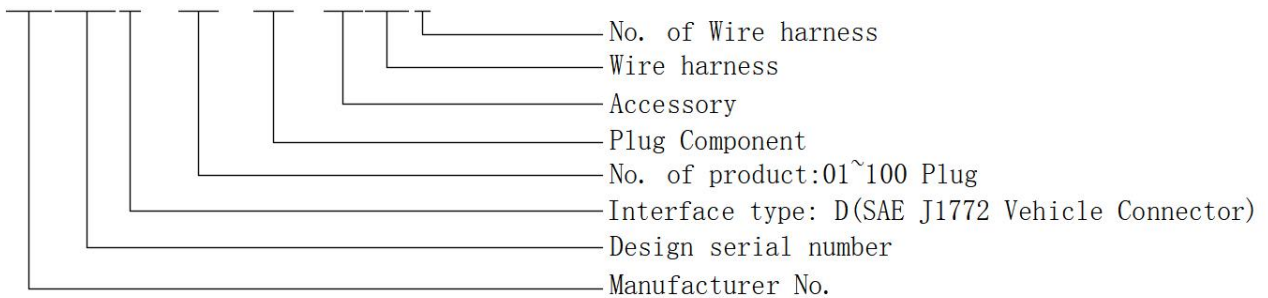
#### 1.1.1.Naming :

YGC740D – EV – P 5 P – 32



#### 1.1.2.P/N:

YG740D – 01 – 00 – 00XL1




### 1.2.Types

No.	Name	Product type	Cable SPEC (AWG)					phase
			L	N	PE	CC	CP	
1	YGC740D-EV-P5P-15	YG740D-01-00-00-XL1	14	14	14	18	18	single
2	YGC740D-EV-P5P-20	YG740D-02-00-00-XL1	14	14	14	18	18	single
3	YGC740D-EV-P5P-32	YG740D-03-00-00-XL1	10	10	10	18	18	single

## 2.Technical specifications

### 2.1 Electric Properties

表单编号	部 门	页 码
J3-7. 3-48	技术中心	第 3 页 共 6 页

	Description	YG740 Type 1 Charging Connector	File No.	
	P/N	YG740D-02-00-00A	Rev.	A

Function	L/N			PE		CS	CP
Cable SPEC (AWG)	14		10	14	10	18	18
Diameter of contact (mm)	Φ 3.6			Φ 2.8		Φ 1.5	Φ 1.5
Rated Voltage (AC)	250V			/		0~30V (DC)	0~30V (DC)
Rated Current (AC)	15A	20A	32A	/		2A (DC)	2A (DC)
Contact Resistance	≤0.5m Ω			≤0.5m Ω		≤3m Ω	
Insulation Resistance	≥500M Ω (1000V AC)						
Withstand Voltage (50Hz, AC)	After the connector crimped with cable: ①Between L and N ≥2000V AC 1min; ②PE to L / N ≥1500V AC 1min; ③CP to L/N/PE ≥1500V AC 1min。						

## 2.2 Mechanical Properties

Life Cycles: ≥10000 Cycles

Mating and Un-mating Force: ≤ 100N

Terminal Retention Force: ≥200N

## 2.3 Operation Environment

Protection Level: Unmated: IP44

Mated: IP55

Environment Temperature Range: -30℃~+50℃

## 2.4 Material

Housing: PA66 or PC

Terminal: Copper alloy, Silver plated

Sealing: Silicone rubber or elastomer

Flammability Rating: UL94-V0

## 2.5 Standards


SAE J1772-2012

## 3. Electric principle

### 3.1 Terminal functions:

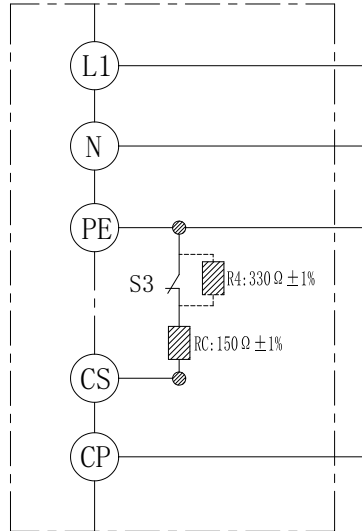
No.	Terminal sign	Function
1	L	Power
2	N	Power
3	PE ⊕	Chassis ground
4	CS	Control pilot

表单编号	部 门	页 码
J3-7.3-48	技术中心	第4页 共6页

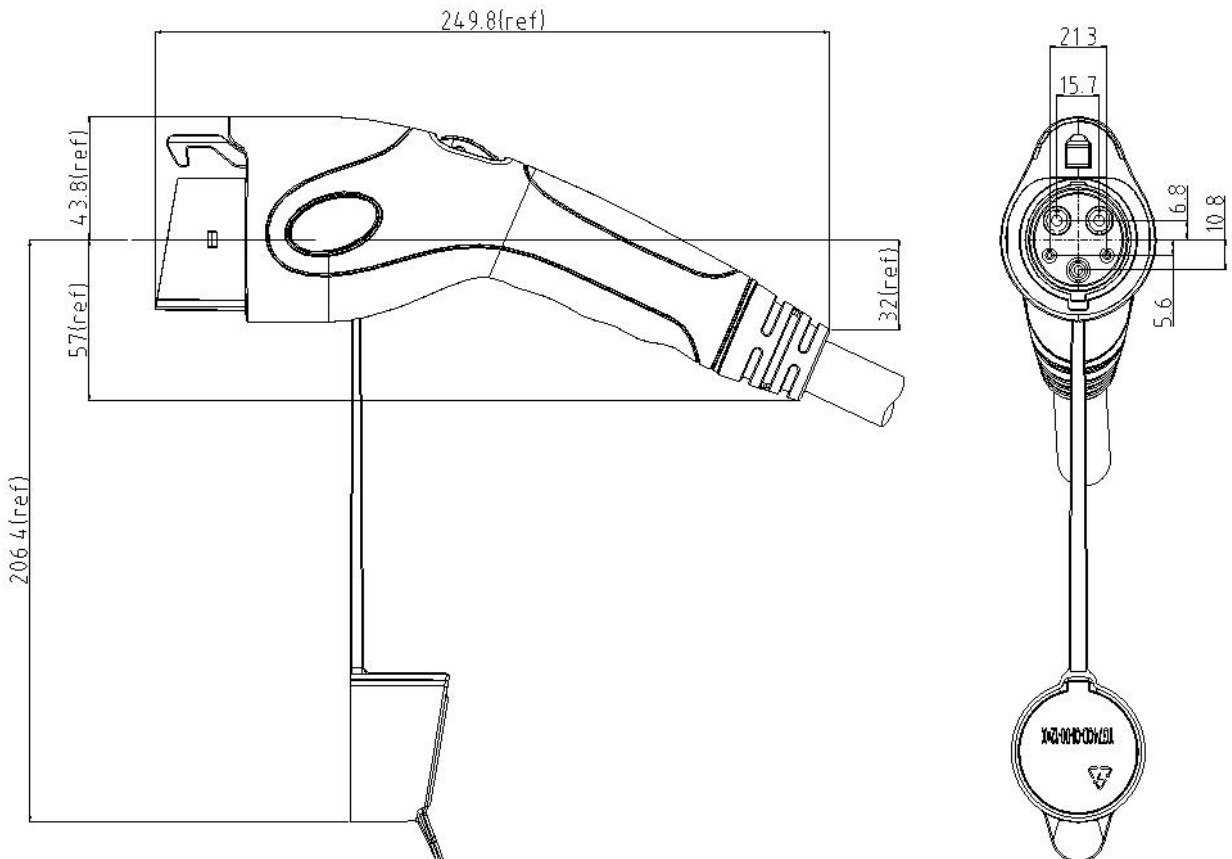
	Description	YG740 Type 1 Charging Connector	File No.	
	P/N	YG740D-02-00-00A	Rev.	A

5	CP	Proximity detection
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### 3.2 Schematic diagram:



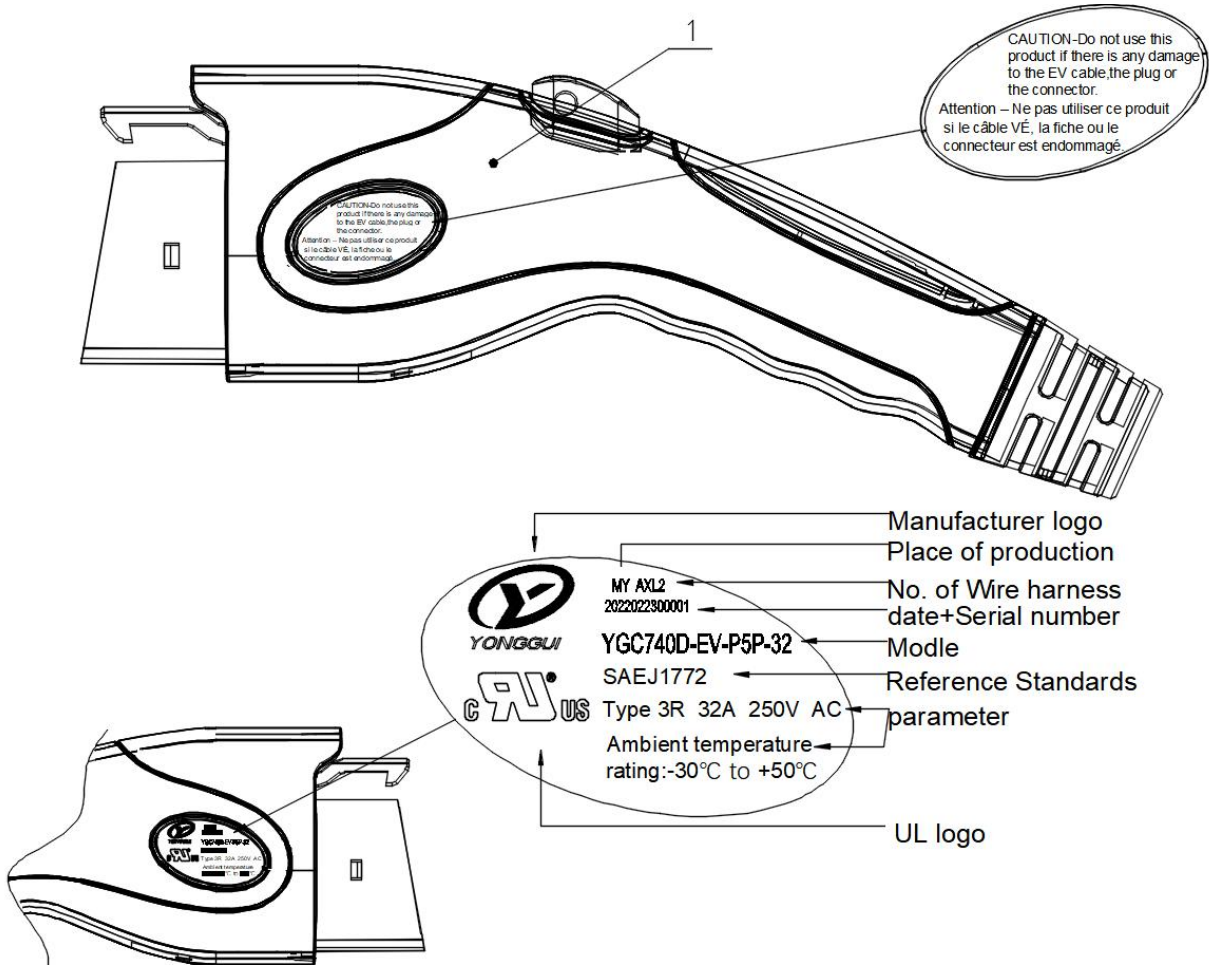
### 4. Overall dimensions



表单编号	部门	页码
J3-7.3-48	技术中心	第5页 共6页

	Description	YG740 Type 1 Charging Connector	File No.	
	P/N	YG740D-02-00-00A	Rev.	A

5. Certification mark



表单编号	部 门	页 码
J3-7.3-48	技术中心	第 6 页 共 6 页