

# Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

<b>Manufacturer</b>	<b>Zhejiang Yuantong Wire &amp; Cable Manufacturing Co., Ltd.</b>
<b>Address</b>	NO.528,Xingguo Road, Yuhang District, Hangzhou, 311108, China
<b>Place of Production</b>	Zhejiang Yuantong Wire & Cable Manufacturing Co., Ltd. NO.528,Xingguo Road, Yuhang District, Hangzhou, 311108, China
<b>Type</b>	Electrical Power Cables
<b>Description</b>	CEF, CEF80, CEF90, CEF82, CEF92, CEFR, CEV, CEV80, CEV90, CEV82, CEV92 CJ85, CJ86, CJPJ, CJPJ, CJPJ85, CJPJ95, CJPJ86, CJPJ96 series of power cables
<b>Trade Name</b>	CEF, CEFR, CEV, CJ, CJPJ, CJPJ
<b>Application</b>	Fixed wiring on ship and offshore installations
<b>Specified Standard</b>	Manufacturer's specification IEC60092-350:2020; IEC60092-353:2016; IEC60092-360:2021; IEC60228:2004; IEC60331-1, -2 :2018; IEC60332-1-2:2004+A1:2015; IEC60332-3-22:2018; IEC60754-1, -2:2011+ A1:2019; IEC61034-1~2:2005+A 2 :2019;
<b>Ratings</b>	<b>Types:</b> /DA, /SA, /NA: CEF, CEF80, CEF90, CEF82, CEF92, CEFR, CEV, CEV80, CEV90,

19th Floor, 550 Yan An dong Road, Shanghai,  
Huangpu District, China

**Ke Lin Zhang**

Lead Specialist to Lloyd's Register  
Classification Society (China) Co Ltd  
A member of the Lloyd's Register group

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

# Type Approval Certificate

CEV82, CEV92

/DC, /SC, /NSC types: CJ85, CJ86, CJPJ, CJPF, CJPJ85, CJPJ95, CJPF86, CJPF96

**Rated Voltage:** 0.6/1 kV

**No. of Cores: 1**

**Conductor Cross Section**(mm<sup>2</sup>): 1~300

**No. of Cores: 2**

**Conductor Cross Section**(mm<sup>2</sup>): 1~120

**No. of Cores: 3**

**Conductor Cross Section**(mm<sup>2</sup>): 1~185

**No. of Cores:** 4, 5, 7, 10, 12, 14, 16, 19, 24, 27, 30, 33, 35

**Conductor Cross Section**(mm<sup>2</sup>): 1, 1.5, 2.5

C: Shipboard power cable

**Insulation:**

J: XLPE;

E: Ethylene Propylene Rubber

**Code for sheath**

PJ: Cross-linked Polyolefin

PF: Thermoplastic Polyolefin

V: PVC sheath

**Code for armour and outer sheath**

**8: Copper wire braid**

**9: Galvanized steel wire braid**

**0: without outer sheath**

**2: PVC outer sheath**

**5: Cross-linked Polyolefin outersheath**

**6: Thermal plastic Polyolefin outersheath**

**Type/DA: Single flame retardant cable, comply with IEC 60332-1;**

**Type/SA: Bunched flame retardant cable, comply with IEC 60332-3 Cat. A;**

**Type/NA: Fire resistant cable, comply with IEC60332-3, Cat. A, IEC60331.**

**Type/DC: Halogen-free Low-smoke Single flame retardant cable, complywith IEC 60332-1, IEC 60754, IEC61034;**

**Type/SC: Halogen-free Low-smoke bunched flame retardant cable, complywith IEC 60332-3 Cat. A, IEC 60754, IEC61034**

**Type/NSC: Halogen-free Low-smoke fire resistant cable, comply with IEC60332-3-22, IEC 60331, IEC 60754, IEC 61034.**

## Type Approval Certificate

**"Conductor Cross-Section" is selected from the following series of conductor size:-**

**1, 1.5, 2.5, 4, 6, 10, 16, 25, 35, 50, 70, 95, 120, 150, 185, 240, 300 mm<sup>2</sup>**  
**Conductor Max. Temp.(°C) : 90**

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register Classification Society (China) Co Ltd of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document LR21253396TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.