



Marine & Offshore

Certificate number: 68353/A0 BV

File number: MPA2104283

Product code: 25011

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

Zhejiang Yuantong Wire & Cable Manufacturing Co., Ltd.

Hangzhou - CHINA

for the type of product

CABLES (LOW VOLTAGE)

CE & CJ series.

0.6/1kV.

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships and Offshore Units.

IEC 60092-350 (2020), IEC 60092-360 (2021)

IEC 60228 (2004)

IEC 60332-1-2 (2015), IEC 60332-3-22 (2018)

IEC 60331-1/2 (2018)

IEC 61034-1/2 (2019)

IEC 60754-1/2 (2019)

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 21 Dec 2026

For Bureau Veritas Marine & Offshore,

At BV SHANGHAI, on 21 Dec 2021,

Jennifer Zhang



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the Internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

Low voltage cables for Marine and Offshore applications.

1.1 - Specifications :

Rated voltage:	0.6/1kV
Temperature class:	90°C
Flame retardant:	IEC 60332-1-2, IEC 60332-3-22 Cat.A
Fire resistance:	IEC 60331-1, IEC 60331-2, N types only.
Low smoke:	IEC 61034
Halogen free:	IEC60754

1.2 - Construction:

Conductor	Tinned stranded annealed copper
Fire proof layer	Mica tape, NA & NSC types
Insulation	XLPE, J type EPR, E type
Inner sheath	SHF2, PJ type SHF1, PF type ST2, V type SE, F type
Amour	Copper wire braided, symbol 8 Steelwire braided, symbol 9
Outer sheath	SHF2, symbol 5 SHF1, symbol 6 ST2, symbol 2 None, symbol 0

1.3 - Approval range:

1.3.1 - CE & CJ series series:

Type	Number of core	Conductor area (mm2)
CEFR, CEF, CEV	1C	1.0 to 185
CEF80, CEF90, CEV80, CEV90	2C	1.0 to 120
CEF82, CEF92, CEV82, CEV92	3C	1.0 to 185
/DA, /SA or /NA	4C to 35C	1.0 to 2.5
CJPJ, CJPF	1C	1.0 to 185
CJPJ85, CJPJ95, CJPF86, CJPF96	2C	1.0 to 120
CJ85, CJ86, CJ95, CJ96	3C	1.0 to 185
/DC, /SC or /NSC	4C to 35C	1.0 to 2.5

2. DOCUMENTS AND DRAWINGS :

Zhejiang Yuantong Wire & cable manufacturing Co., Ltd.:

- Document No. ZJYT01, Rev. 2021Y.
- Specification No. ZJYT03, Rev. 2021Y.
- Technical data sheet No. ZJYT05, Rev. 2021Y.

3. TEST REPORTS :

Shanghai Intelligent Service and Technology Co., Ltd.:

- Tests report No. TN21-1656E, dated 2021.05.10
- Tests report No. TN21-1655E, dated 2021.05.10.

4. APPLICATION / LIMITATION :

BUREAU VERITAS Rules and Regulations for the Classification of Steel Ships and Offshore Units.

5. PRODUCTION SURVEY REQUIREMENTS :

5.1 - The **CE & CJ series** are to be supplied by **Zhejiang Yuantong Wire & cable manufacturing Co., Ltd.** in compliance with the type and the requirements described in this certificate.

5.2 - This type of product is within the category IBV of Bureau Veritas Rule Note NR320.

5.3 - BV product certificate is required.

6. MARKING OF PRODUCT :

The cable shall be marked on the surface outer sheath, in a durable legible and visible manner, with the following information through the length of cable:

- 1) - Voltage grade.
- 2) - Cable symbol and temperature class.
- 3) - Number of conductors and conductor size.
- 4) - Applicable standard(s) to flame retardant and fire resistance if any
- 5) - Manufacturer's name or trade mark.
- 6) - Year of manufacture.

7. OTHERS :

It is **Zhejiang Yuantong Wire & cable manufacturing Co., Ltd.** responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

*** END OF CERTIFICATE ***