

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Electric Power Cable**

with type designation(s)

CJPF/SC 0,6/1 kV & CJPFR 0,6/1 kV

Issued to

Jiangsu Hengtong Wire & Cable Technology Co., Ltd
Suzhou, China

is found to comply with

DNV GL rules for classification – Ships and offshore units**Application :****General power and lighting.****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.****Voltage class (kV) 0,6/1****Temp. class (°C) 90**This Certificate is valid until **2020-10-13**.Issued at **Høvik** on **2015-10-14**DNV GL local station: **Shanghai**Approval Engineer: **Georgy Abramenko**for **DNV GL**

Marit Laumann
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

Product description

Type: CJPFC/SC 0,6/1 kV & CJPFR 0,6/1 kV

Construction:

Conductors: Plain or Tinned stranded copper Class 2 or Class 5
Core insulation: XLPE
Inner covering: PET tape
Outer sheath: SHF1

CJPFC/SC & CJPFR/SC 0,6/1kV

Number of cores	Cross sectional area
1	1,0 - 300
2	1,0 - 120
3	1,0 - 185
4	4 - 50
4 5 7 10 12 14 16 19 24 27 30 33 37	1,0 1,5 2,5

Application/Limitation

The requirements of SOLAS Amendments Chapter II-1, Part D, Reg. 45, 5.2 (provision to be taken to limit Fire Propagation along Bundles of Cables or Wires) are fulfilled without any additional measures.

Type Approval documentation

Tests carried out

Standard	Release	General description	Limitation
IEC 60092-350	2014-08	General construction and test methods of power, control and instrumentation cables for shipboard and offshore applications	
IEC 60092-360	2014-04	Electrical installations in ships - Part 360: Insulating and sheathing materials for shipboard and offshore units, power, control, instrumentation and telecommunication cables.	
IEC 60092-353	2011-08	Single and multicore non-radial field power cables with extruded solid insulation for rated Voltages of 1 kV and 3 kV	
IEC 60332-3-22	2009-02	Tests on electric and optical fibre cables under fire conditions - Part 3-22: Test for vertical flame spread of vertically-mounted bunched wires or cables - Category A	Bunch test Category A
IEC 60754-1	2011-11	Test on gases evolved during combustion of materials from cables - Determination of the amount of halogen acid gas	Low Halogen
IEC 60754-2	2011-11	Test on gases evolved during combustion of materials from cables - Determination of the degree of acidity of gases evolved during the combustion of materials taken from electric cables by measuring pH and conductivity	Halogen free
IEC 61034-1/2	2005-04	Measurement of smoke density of cables burning under defined conditions - Test apparatus, procedure and requirements	Low smoke

Job Id: **262.1-009480-2**
Certificate No: **TAE00000HN**

Marking of product

JIANGSU HENG TONG WIRE & CABLE TECHNOLOGY- CJPF/SC or CJPFR/SC – size – 0,6/1 kV – IEC 60332-3-22
– Batch number.

Periodical assessment

The scope of the retention/renewal survey is to verify that the conditions stipulated for the Type approval is complied with and that no alterations are made to the product design or choice of materials.

The main elements of the survey are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Check test reports from Production Sample Tests (PST) and Routine tests (RT)
- If test reports are not available, tests according to PST and RT shall be carried out
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Survey to be performed at least every second year.

END OF CERTIFICATE