

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Low Voltage Cable**with type designation(s)
Texiline HF90 TW 250V

Issued to

amo specialkabel AB
ALSTERMO, Sweden

is found to comply with

DNV GL rules for classification – Ships, offshore units, and high speed and light craft**Application :****Switchboard wires for control and instrumentation (150/250 V)**
For use inside cabinets only.**Products approved by this certificate are accepted for installation on all vessels classed by DNV GL.****Rated voltage (V) 150/250 V**
Temp. class (°C) 90Issued at **Høvik** on **2018-05-30**This Certificate is valid until **2023-05-29**.DNV GL local station: **Malmö**for **DNV GL**Approval Engineer: **Ivar Bull**

Andreas Kristoffersen
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.



Job Id: **262.1-016295-2**
Certificate No: **TAE00002XC**

Product description

Texiline HF90 TW 250V

Construction Single wire
Conductor Plain or tinned stranded copper; class 5
Core insulation XLPE

No of Elements:	Cross sectional area [mm ²]
1 core	0,5 0,75

Application/Limitation

Wire with flexible conductors (IEC 60228 class 5) are to be terminated using approved compression terminals intended and designed for these conductors. For use inside cabinets only.

Type Approval documentation

Tests carried out

	Release	General description	Limitation
DNVGL-CP-0399	2016-03	Class Programme Electric cables	
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 60092-376	2017-05	Electrical installations in ships - Part 376: Cables for control and instrumentation circuits 150/250 V (300 V)	
IEC 60332-1-2	2006-07	Tests on electric cables under fire conditions. Test for vertical flame propagation for a single insulated wire or cable.	
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 - Part 1: Determination of the halogen acid gas content	Low Halogen: <0,5% Halogen
IEC 61034-1/2	2013-07 2013-09	Measurement of smoke density of cables burning under defined conditions - Test apparatus, procedure and requirements	Low smoke Light transmittance $\geq 60\%$

Marking of product

AMOKABEL Texiline HF90 TW - size 150/-250 V - YYWW

Periodical assessment

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



Job Id: **262.1-016295-2**
Certificate No: **TAE00002XC**

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine tests (RT) and selected type tests (ref. to applicable class programs) checked (if not available these tests 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.

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE