

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Low Voltage Cable

with type designation(s)
HEW TPE / XVH Control Cable

Issued to

HEW-Kabel GmbH
Wipperfürth, Germany

is found to comply with

DNV GL rules for classification – Ships

DNV GL offshore standards

DNV GL rules for classification – High speed and light craft

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Voltage class (V) 600

Temp. class (°C) 105

This Certificate is valid until **2021-12-01**.

Issued at **Hamburg** on **2016-11-22**

DNV GL local station: **Essen**

Approval Engineer: **Carsten Hunsalz**

for **DNV GL**

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Duy Nam Le
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:
Certificate No: **TAE00001D1**

Product description

HEW TPE / XVH Control Cable

Type YHCXVH - t.p.c. / t.p.c.

Rated voltage: 600 V
Temperature range: -40° C up to +105° C (20000h)
Conductor: Flexible stranded, tinned copper conductor
Insulation: TPE-E
Braid/screen: Tinned copper wire braid
Outer sheath: XVH; SHF 1

Number of cores /Cross-sectional area:

t.p.c. 1 x 2 x 0,75 mm²
+ t.p.c. 8 x 2,5 mm²

Application/Limitation

Measures for limitation of the propagation of fire along cable bundles are required (fire stops)

Type Approval documentation

Test report : HEW test report dated of 04/05 2011
VDE Certificate Nov. 2004
BWB Certificate of Approval U3.4h/09025, 25.06.2009

Data Sheet HEW-KABEL: TD-Number 61915-001

Tests carried out

Standard	Release	General description	Limitation
VG 95218-20	2014-12	Electrical cables and insulated wires — Part 20: Single core insulated wires	partly
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.	partly
IEC 60754-2	2011-11	Test on gases evolved during combustion of materials from cables - Part 2: Determination of acidity (by pH measurement) and conductivity	Halogen free: pH > 4,3 Conductivity < 10µS/mm
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 ≥60%
DIN VDE 0482 Teil 265-268	1999-04	Common test methods for cables under fire conditions - Test for resistance to vertical flame propagation for a single insulated conductor or cable	



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Marking of product

Example: HEW-KABEL - DNV GL No. TAE00001D1 – YHCXVH - size – 600 V – special text

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.

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) checked (if not available tests according to RT to 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.

Assessment to be performed at least every second year.

END OF CERTIFICATE