



Certificate no.:
TAE000050W

TYPE APPROVAL CERTIFICATE

This is to certify:

that the **Low Voltage Cable**

with type designation(s)
TEHSICTE

issued to

Koch Kabel AG
Pfaffnau, LU, Switzerland

is found to comply with

DNV rules for classification – Ships, offshore units, and high speed and light craft

Application:

Special supply cables for LNG cryogenic pump (external side), in extended ambient temperature range.

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

Rated voltage (V) 600

Temp. class (°C) 180 (20000 h)

Issued at **Hamburg** on **2025-02-18**

This Certificate is valid until **2030-02-17**.

for **DNV**

DNV local unit: **Augsburg**

Approval Engineer: **Carsten Hunsalz**

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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.

Product description

HEW-FEP/Silicone Cable screened

Type TEHSICTE- t.p.c./t.p.c.

Maximum operating voltage:	U=600V AC (between phase conductors)
Temperature range:	-55°C bis +180°C (20000 h)
Conductor:	Tinned copper conductor, Class 5
Insulation:	FEP
Filling Compound:	Silicone
Braid:	Tinned copper, coverage ≥85%
Sheath:	FEP

Number of cores /Cross-sectional area:

4 x 2,5 mm², 4 x 4 mm², 4 x 6 mm², 4 x 10 mm², 4 x 16 mm², 4 x 25 mm², 4 x 35 mm²

Application/Limitation

Special supply cables for LNG cryogenic pump (external side), in extended ambient temperature range.

Not approved for installation between areas with and without explosive atmospheres.

Not approved for installation inside of LNG tanks.

Type Approval documentation

Tests carried out

Standard	Release	General description	Limitation
UL 758	2024-10	Appliance Wiring Material	
UL Style		1901, 20369	Insulation / Sheath construction
VG 95218-2	2023-12	Cables and insulated wires Part 2: Generic specification	Braid construction
IEC 60228	2023-12	Conductors of insulated cables	Class 5
IEC 60332-1-2	2015-07	Tests on electric and optical fibre cables under fire conditions – Part 1-2: Test for vertical flame propagation for a single insulated wire or cable –Procedure for 1 kW pre-mixed flame	

Marking of product

Koch*Kabel*AG*-*DNV*NO.*TAE000050W*-* TEHSICTE*-*t.p.c./t.p.c.*-*4 G cross-section*-*600V*-*Art.nr.*XXXXXX*-*
week/year-*CE*-*www.kochkabel.ch*-*RoHS*-*meter marking

Place of Production

DNV id: 10376706

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)



Job ID: **262.1-041348-1**
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- 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