Certificate no.:
TAE0000503

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Electric Power Cable

with type designation(s)
RQ 125 Insulated wire

issued to
Nexans Sweden AB
Grimsås, Västra Götalands Län, Sweden

is found to comply with
DNV rules for classification – Ships, offshore units, and high speed and light craft

Application:

Special insulated wire for use on marine engines. Designed according to automotive standard ISO 19642.

Products approved by this certificate are accepted for installation on all vessels classed by DNV.

Rated voltage (kV)	**50V AC or 50V DC**
Temp. class (°C)	**125**

Issued at **Høvik** on **2025-02-03**
This Certificate is valid until **2030-02-02**.
DNV local unit: **Sweden CMC**

for **DNV**

Approval Engineer: **Ivar Bull**

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

Special RQ 125 Insulated wire for use one Marine engines.
Design according to automotive standard ISO 19642.

Conductors: Flexible conductors of plain annealed copper wires acc. to IEC 60228, class 5.
Core insulation: Halogen free flame retardant polypropene acc. to ISO 19642 class C

Number of cores	conductor cross-section mm²
1	0,5 0,75 1 2,5 4 6 10

Application/Limitation

Flame retardant according to IEC 60332-1-2. Bunched/bundled wires longer than 14 meters to be covered with flame retardant cable spiral wrap.

Special cable designed for use on combustion engines up to 125°C.

Due to thinner insulation thickness than IEC 60092-353, cable is approved for reduced voltage level 50V AC or DC sufficient for Volvo Penta applications.

Type Approval documentation

Tests carried out

Tested according to ISO 19642-5:2019 Road vehicles — Automotive cables — Part 5: Dimensions and requirements for 600 V a.c. or 900 V d.c. and 1 000 V a.c. or 1 500 V d.c. *single core copper conductor cables*
Tests for resistance to Ozone and temperature cycling.
Arrhenius accelerated ageing test 3 000h @125°C or 20 000h @100°C.

Marking of product

Nexans – RQ 125 – size – 50 V – IEC 60332-1-2 – Production date.
Engine manufacturer will install cable wires as harness on engine, and marking may be applied on cable reel only.

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) 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