

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Low Voltage Cable**

with type designation(s)

LEONI L SeaLine® LI6YC6Y FEP insulated and sheathed connection cables

Issued to

**LEONI Special Cables GmbH
Friesoythe, Niedersachsen, Germany**

is found to comply with

DNV GL rules for classification – Ships, offshore units, and high speed and light craft**Application :****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.****Rated voltage (V) 150/250****Temp. class (°C) 180**Issued at **Hamburg** on **2020-01-17**This Certificate is valid until **2025-01-16**.for **DNV GL**DNV GL local station: **Hamburg CMC**Approval Engineer: **Carsten Hunsalz**

**Arne Schaarmann
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

LEONI L SeaLine® LI6YC6Y FEP insulated and sheathed connection cables

Rated voltage: 150/250 V
Maximum operating conductor temperature: up to 180° C (acc. DIN VDE 0207-6)
Environmental temperature: -65°C up to 200 °C
Conductor: Stranded copper, plain, tinned, silvered or nickel-plated
Insulation: FEP
Core Wrap (optional): Plastic tape under and above the braiding
Braid: Copper, plain, tinned, silvered or nickel-plated
Outer sheath: FEP

Number of cores: Nominal cross section mm²
2 to 12 0.5 to 4
1 to 4 6 to 10

Application/Limitation

FEP insulated and sheathed connection cables for marine and offshore applications for installation only on and near shipboard engines

Type Approval documentation

Specification: Version 2019-06-24 / F45052-F6900

Test report :
Leoni 2019-09-26 Prüfdokumentation L45551-D21-G17
Leoni 2019-09-26 Prüfdokumentation L45551-D21-G27
Leoni 2019-09-26 Prüfdokumentation L45551-F121-G7
Leoni 2019-09-26 Prüfdokumentation L45571-D110-G40
Leoni 2019-09-27 Prüfdokumentation L45571-F110-G10

Tests carried out

Standard	Release	General description	Limitation
IEC 60092-350	2018-11	Electrical installations in ships - Part 350: General construction and test methods of power, control and instrumentation cables for shipboard and offshore applications	
IEC 60092-376	2017-05	Electrical installations in ships - Part 376: Cables for control and instrumentation circuits 150/250 V (300 V)	partly
IEC 60228	2004-11	Conductors of insulated cables	
DIN VDE 0207-6	2004-10	Insulating and sheathing compounds for cables and flexible cords - Fluorinated polymers	Insulation 6YI1 Sheath 6YM1
UL Style		11193	
UL 758	2019-04	Appliance Wiring Material	
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	

Job Id: **262.1-031456-1**
Certificate No: **TAE00003UU**

Marking of product

Example:

"sequential length in metres" * LEONI L SeaLine® * LI6YC6Y 12X1X1.5 150V/250V * lot number

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.

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