Certificate no.:
TAE000052M

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Category cables

with type designation(s)
Ocean Line Cat 7A S/FTP AWG22/1 LSHF-FR Horizontal cable

issued to
Prysmian Kablo s.r.o.
Bratislava, Bratislavský, Slovakia (Slovak Republic)

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

Application:

Data communication cable. Solid conductor.
Products approved by this certificate are accepted for installation on all vessels classed by DNV.

Issued at **Høvik** on **2025-11-05**
This Certificate is valid until **2030-11-04**.
DNV local unit: **Site Office Komarno**

Approval Engineer: **Ivar Bull**

for **DNV**

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

Ocean Line Cat 7A S/FTP AWG22/1 LSHF-FR Horizontal cable

Conductor:	Solid bare Copper AWG 22/1
Insulation :	Foam skin PE
Cabling / Individual screen:	Twisted pairs with Al-laminated plastic foil around each pair
Overall screen:	Tinned copper wire braid
Outer Sheath:	SHF1

For transmission properties, please refer to Prysmian Technical Datasheet OceanLine Cat 7A LSHF rev.2 ver. 2.3 26.03.2025.

Application/Limitation

The requirements of SOLAS Amendments Chapter II-1, Part D, Reg. 45, 5.2 (provision to be taken to limit Fire Propagation along Bunches of Cables or Wires) are fulfilled without any additional measures.

Cables with solid conductors shall be installed with suitable termination equipment to withstand ship vibrations

Flame retardant in bunch; cat C. Halogen free. Low smoke

Operation temperature:	-20°C to +60°C
Installation temperature	0°C to +50°C

Bending radius during installation:	4 x D
Bending radius during operation:	8 x D

Type Approval documentation

Tests carried out

Standard	Release	General description	Limitation
DNV-CP-0403	2021-09	DNV Type approval program for Data communication cables – category cables	Reference to requirements for cat 7A
IEC 61156-5	2020-04	Multicore and symmetrical pair/quad cables for digital communications – Part 5: Symmetrical pair/quad cables with transmission characteristics up to 1 000 MHz – Horizontal wiring – Sectional specification	Reference to requirements for Cat 7A
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	
IEC 60332-3-24	2018-07	Tests on electric and optical fibre cables under fire conditions – Part 3-24: Test for vertical flame spread of vertically-mounted bunched wires or cables – Category C	
IEC 61034-1/2	2019-11	Measurement of smoke density of cables burning under defined conditions – Part 1: Test apparatus Part 2: Test procedure and requirements	Low smoke Light transmittance >60%

Marking of product

Ocean Line Cat 7A S/FTP AWG22/1 LSHF-FR - IEC 60332-3-24 - batch no. + meter marking

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