



Marine & Offshore

Certificate number: 71351/A0 BV

File number: MPA2201521

Product code: 2502H

*This certificate is not valid when presented without the full attached schedule composed of 7 sections*

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## TYPE APPROVAL CERTIFICATE

*This certificate is issued to*

**PRYSMIAN CABLES SPAIN SA**  
VILANOVA I LA GELTRÚ(BCN) - SPAIN

*for the type of product*

**CABLES (MEDIUM/HIGH VOLTAGE)**

6/10kV and 8.7/15kV

Type: AFUMEX NAU DHATCUA

### Requirements:

Bureau Veritas Rules for the Classification of Steel Ships.

IEC 60092-350 (2020), IEC 60092-354 (2014), IEC 60092-360 (2021)

IEC 60228 (2004)

IEC 60332-1-2 (2015), IEC 60332-3-22 (2018)

IEC 60754-1/2 (2019)

IEC 61034-2 (2019)

*This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.*

**This certificate will expire on: 27 Dec 2027**

**For Bureau Veritas Marine & Offshore,**

At BV BARCELONA, on 27 Dec 2022,

Rhandy Rafael PIÑERO GAUTIER

***This certificate was created electronically and is valid without signature***



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site [www.veristar.com](http://www.veristar.com). Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

The electronic version is available at: <http://www.veristarm.com/veristarnb/jsp/viewPublicPdfTypepec.jsp?id=gzj5hcowjr>

BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

## THE SCHEDULE OF APPROVAL

### 1. PRODUCT DESCRIPTION :

#### 1.1 - Specifications:

Rated voltage:	6/10kV and 8.7/15kV
Flame retardant:	IEC 60332-1-2 & IEC 60332-3-22 Cat.A
Low smoke:	IEC 61034-1/2
Halogen free:	IEC 60754-1/2 & IEC 60684-2

#### 1.2 - Construction:

Conductor:	Flexible copper wire, class 5
Conductor screen:	Extruded semiconducting compound layer.
Insulation:	EPR
Insulation screen:	Extruded semiconducting compound easy stripping layer.
Metallic screen:	Copper wires helically applied with equalizing copper tape
Separator:	Tape
Inner sheath:	SHF1
Aarmor:	Copper wire braid
Outer sheath:	SHF1

#### 1.3 - Approval range:

Type	Number of core	Cross-Sect. area (mm <sup>2</sup> )	Rated Voltage (kV)
AFUMEX NAU DHATCUA	1	95 to 240	6/10
	1	95 to 240	8.7/15

### 2. DOCUMENTS AND DRAWINGS :

Specification, rev.0, dated 27 Jan 2022.

### 3. TEST REPORTS :

#### **PRYSMIAN CABLES SPAIN SA:**

- Test reports N° di17915 and di17917, dated 15 Sep 2020.
- Test reports N° di\_28982 and di\_28990, dated 16 Sep 2020.
- Test reports N° ESP/TLA/DCA/023-22r1 and ESP/TLA/DCA/024-22r1, dated 27 Oct 2022.

### 4. APPLICATION / LIMITATION :

BUREAU VERITAS Rules for the Classification of Steel Ships.

### 5. PRODUCTION SURVEY REQUIREMENTS :

5.1 - The above products are to be supplied by **PRYSMIAN CABLES SPAIN SA** in compliance with the type described in this certificate.

5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.

5.3 - **PRYSMIAN CABLES SPAIN SA** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.

5.4 - For information, **PRYSMIAN CABLES SPAIN SA** has declared to Bureau Veritas the following production site:

**PRYSMIAN CABLES SPAIN, S.A. -Planta SANTA PERPETUA DE MOGODA-**  
**Carrer Can Vinyalets, 2**  
**08130 Santa Perpetua de Mogoda**  
**SPAIN**

### 6. MARKING OF PRODUCT :

The cable shall be marked on the surface outer sheath, in a durable legible and visible manner, with the following information through the length of cable:

- 1) - Voltage grade.
- 2) - Cable symbol and temperature class.
- 3) - Number of conductors and conductor size.
- 4) - Applicable standard(s) to flame retardant and fire resistance if any
- 5) - Manufacturer's name or trade mark.
- 6) - Year of manufacture.

**7. OTHERS :**

It is **PRYSMIAN CABLES SPAIN SA**'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

**\*\*\* END OF CERTIFICATE \*\*\***