



MARINE DIVISION

Certificate number: 11376/B0 BV

File number: ACE 01/731/01

Product code: 2501H

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 Y SISTEMAS, S.L.

Barcelona - SPAIN

for the type of product

CABLES (LOW VOLTAGE)

450/750V

Type: AFUMEX 750 H07Z1-K (AS)

Requirements:

BUREAU VERITAS Rules for the Classification of Steel Ships.

UNE 211002, IEC 60228, IEC 60811, IEC 60332-1, IEC 60332-3-22, IEC 61034-1/2, IEC 60754-1/2.

This certificate is issued to attest that BUREAU VERITAS 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: 11 Jun 2015

For BUREAU VERITAS,

At BV MADRID, on 11 Jun 2010,

Montserrat Espin



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. 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 Division available on the internet site 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 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 SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

Flame retardant, Halogen Free and Low Smoke flexible wire for fixed wiring and control boards.

1.1 - Specifications:

Rated Voltage: 450/750 V
 Temperature Class: 70 °C
 Flame retardant: IEC 60332-1 and IEC 60332-3-22
 Halogen Free: IEC 60754-1/2
 Low Smoke: IEC 61034-1/2

1.2 - Construction:

Conductor: Bare flexible copper - Class 5 according to IEC 60228
 Insulation Thermoplastic type TIZ1 according to UNE 211002

1.3 - Product Range:

Type	Number of core	Cross Sect. Areas (mm ²)	Remarks
AFUMEX 750 H07Z1-K (AS)	1	1.5 to 25	Flame retardant according to IEC 60332-1 & 60332-3-22

2. DOCUMENTS AND DRAWINGS :

PRYSMIAN:

According to specifications N°s RP 42.01 rev.6 dated 2000-09-27 and NCP N° 042/A9 Rev. 02 dated 02/10.
 Documents filed in ACE 01/731/01.

3. TEST REPORTS :

PRYSMIAN:

Test reports: Ref. BCL 700 548/4 (The tests were witnessed by L.R. Surveyor)
 Test Report di6592 (IEC 60332-3-22) issued on 30-11-2009 and witnessed by BV's Surveyor
 Test Report bt2824 (Routine tests) issued on 30-03-2010

4. APPLICATION / LIMITATION :

BUREAU VERITAS Rules for the Classification of Steel Ships and IEC 60092 series.

5. PRODUCTION SURVEY REQUIREMENTS :

5.1 - The cables are to be manufactured, examined and tested by **PRYSMIAN CABLES Y SISTEMAS S.L.** in accordance with the type described in this certificate and Bureau Veritas Rules for the Classification of Steel Ships.

5.2 - Production sites are to be recognized by Bureau Veritas as per NR320 for HBV products. To this end **PRYSMIAN CABLES Y SISTEMAS S.L.** has to make the necessary arrangements for a Society's Surveyor to perform visits and product audits at the production sites.

5.3 - **PRYSMIAN CABLES Y SISTEMAS S.L.** has declared to Bureau Veritas that the type of product described in this certificate are manufactured at the following production site:

PRYSMIAN CABLES Y SISTEMAS, S.L.
CTRA C-15 KM2
POL MASÍA DEL NOTARIO
08800 Barcelona
Vilanova i la Geltru
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.
- 5) - Manufacturer's name or trade mark.
- 6) - Year of manufacture.

7. OTHERS :

7.1 - This approval is given on the understanding that the Society reserves the right to require check tests to be carried out on the cables at any time and that:

PRYSMIAN CABLES Y SISTEMAS, S.L.
CTRA C-15 KM2
POL MASÍA DEL NOTARIO
08800 Barcelona
Vilanova i la Geltru
SPAIN

will accept full responsibility for informing shipbuilders, ship-owners or their sub-contractors of the proper methods of use and general maintenance of the cables and the conditions of this approval.

7.2 - This certificate supersedes the Type Approval Certificate N° 11376/A1 BV issued on 06/11/2006 by the Society.

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