

# Certificado AENOR de Producto

## Cables eléctricos



042/000602

AENOR, Asociación Española de Normalización y Certificación, certifica que la organización

### MIGUELEZ, S.L.

con domicilio social en: AV PARROCO PABLO DIEZ, 157 24010 LEON (ESPAÑA)

suministra: CABLE AISLADO CON POLIETILENO RETICULADO, CON CUBIERTA DE PVC, CONDUCTOR FLEXIBLE (0,6/1 kV).

Designación: RV-K 0,6/1 kV  
Marca Comercial: BARRYFLEX  
Limitación: De 1 a 5 conductores, de 1,5 mm<sup>2</sup> a 300 mm<sup>2</sup>

producido en: AV PARROCO PABLO DIEZ, 157 24010 LEON (ESPAÑA)

conforme con: UNE 21123-2:2004  
UNE 21123-2:2004/1M:2005

Sistema de certificación: Para conceder este Certificado, AENOR ha ensayado el producto y ha comprobado el sistema de la calidad aplicado para su elaboración. AENOR realiza estas actividades periódicamente mientras el Certificado no haya sido anulado, según se establece en el Reglamento Particular RP 42.01.

Fecha de emisión: 2000-01-17  
Fecha de renovación: 2010-01-17  
Fecha de expiración: 2015-01-17

  
AENOR Asociación Española de Normalización y Certificación

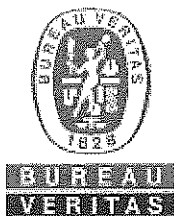
El Director General de AENOR

**AENOR**

Asociación Española de Normalización y Certificación

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MARINE DIVISION

Certificate number: 17390/A0 BV

File number: ACE 01/796/01

Product code: 2501H

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

www.veristar.com

## TYPE APPROVAL CERTIFICATE

*This certificate is issued to*

**MIGUELEZ, S.L.**  
LEON - SPAIN

*for the type of product*

**CABLES (LOW VOLTAGE)**

0.6/1 kV

Type: BARRYFLEX RV-K & AFIRENAS-X RZ1-K

**Requirements:**

BUREAU VERITAS Rules for the Classification of Steel Ships.

IEC 60092-350/351/359/353, IEC 60228, IEC 60332-1, IEC 60332-3-22 Cat.A, IEC 60754-1/2, IEC 61034-1/2.

*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: 19 Feb 2015**

**For BUREAU VERITAS,**

At BV MADRID, on 19 Feb 2010,

Montserrat Espin



**COPY**

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, Marine and Offshore Power, Lighting and Control cables.

#### **1.1 - Specifications:**

Rated voltage: 0.6/1 kV according to IEC 60092-353  
 Temperature class: 90°C  
 Flame retardant: IEC 60332-1 (Both Types) and IEC 60332-3-22 (Z1 Type only)  
 Halogen Free: IEC 60754-1/2 (Z1 Type only)  
 Low Smoke: IEC 61034-1/2 (Z1 Type only)

#### **1.2 - Construction:**

Conductor: Stranded plain annealed copper - Class 5  
 Insulation: Cross-Linked PolyEthylene - XLPE  
 Filler: PVC or Halogen Free Thermoplastic compound depending on type  
 Sheath: Thermoplastic compound - PVC/ST2 (V Type)  
 Halogen Free Thermoplastic compound - SHF1 (Z1 Type)

#### **1.3 - Product Range:**

Type	Number of Core	Cross-Sect. (mm <sup>2</sup> )	Remarks
BARRYFLEX RV-K	1	1.5 to 300	Flame Retardant according to IEC 60332-1
	2 & 3	1.5 to 25	
AFIRENAS-X RZ1-K	4	1.5 to 150	Flame Retardant according to IEC 60332-1 & IEC 60332-3-22 (Cat.A) Halogen Free according to IEC 60754-1/2 Low Smoke according to IEC 61034-1/2
	5	1.5 to 25	

### 2. DOCUMENTS AND DRAWINGS :

#### **Miguelélez:**

Technical Specifications, Barryflex RV-K 2nd Ed. dated January 2009  
 Technical Specifications, Afirenas-x RZ1-K 2nd Ed. dated January 2009  
 Technical Specifications for Cables and Wires both dated January 2009.

### 3. TEST REPORTS :

#### **CEIS:**

RV-K: Test Reports No. CBL.09/3430/09, CBL.09/3431/09 and CBL.09/3432/09 all dated 2009/11/03  
 RZ1-K: Test Reports No. CBL.09/3426/09, CBL.09/3427/09 and CBL.09/3428/09 all dated 2009/11/03.

### 4. APPLICATION / LIMITATION :

4.1 - BUREAU VERITAS Rules for the Classification of Steel Ships.

4.2 - Approval valid for units having to comply with IMO Resolution A649 (The "MODU Code").

### 5. PRODUCTION SURVEY REQUIREMENTS :

5.1 - The cables are to be manufactured, examined and tested by **MIGUELEZ, 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 **MIGUELEZ, 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 - **MIGUELEZ, S.L.** has declared to Bureau Veritas that the type of product described in this certificate are manufactured at the following production site:

**MIGUELEZ, S.L.**  
**Av PABLO DIEZ, 157**  
**24010 LEON**  
**SPAIN**

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**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:

**MIGUELEZ, S.L.**  
**Av PABLO DIEZ, 157**  
**24010 LEON**  
**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.

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

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