



# POWERFLEX RV-K

**Industrial flexible cable for power transmission.**

IEC 60502-1 - UNE 21123-2

## DESIGN

### 1. Conductor

Electrolytic copper, class 5 (flexible), based on EN 60228 and IEC 60228.

### 2. Insulation

Cross-linked polyethylene (XLPE)

The standard identification of insulated conductors is the following:

1 x	Natural
2 x	Blue + Brown
3 G	Blue + Brown + Green/yellow
3 x	Brown + Black + Grey
3 x + 1 x	Brown + Black + Grey + Blue (reduced cross-section)
4 G	Brown + Black + Grey + Green/yellow
4 x	Brown + Black + Grey + Blue
5 G	Brown + Black + Grey + Blue + Green/yellow

### 3. Outer sheath

Flexible PVC, black colour.

## APPLICATIONS

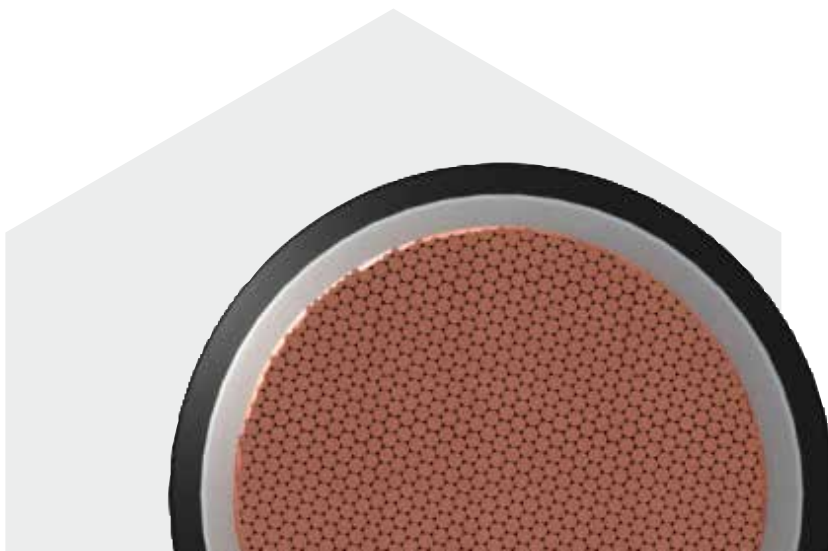
Powerflex RV-K cable is suitable for all types of low voltage industrial-type connections, in urban grids, building installations, etc. Its high flexibility makes the installation process substantially easier and, as a result, is particularly suitable for use in difficult layouts. It can be buried or installed in a tube as well as outdoors without requiring additional protection. This cable can withstand damp conditions including total immersion in water (AD7).

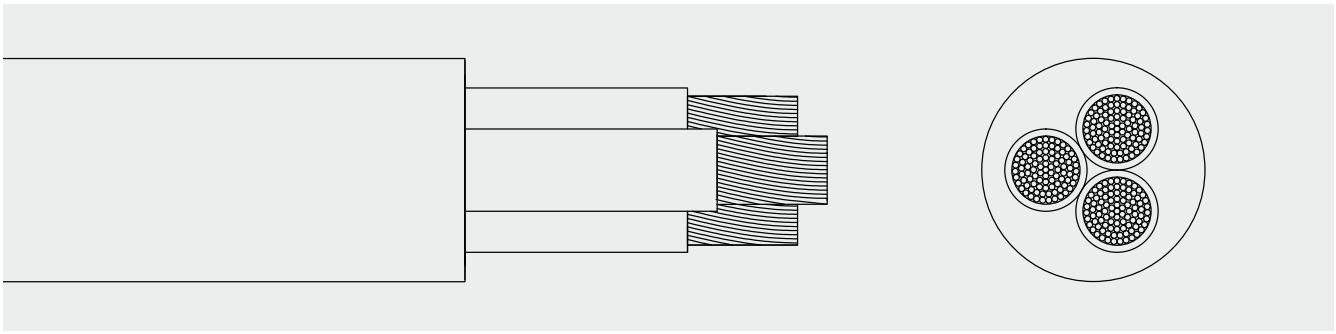
1

2

3

TOP CABLE POWERFLEX RV-K





## CHARACTERISTICS



### Electrical performance

LOW VOLTAGE 0,6/1kV



### Standard

IEC 60502-1 - UNE 21123-2



### Approvals

CE  
SEC  
BUREAU VERITAS  
AENOR  
SASO  
RoHS  
KEMA KEUR



### Thermal performance

Maximum service temperature: 90°C.  
Maximum short-circuit temperature: 250°C (max. 5 s).  
Minimum service temperature: -40°C (fixed and protected installations).



### Fire performance

Flame non-propagation based on UNE-EN 60332-1 and IEC 60332-1.  
Reduced emission of halogens. Chlorine <15%.



### Mechanical performance

Minimum bending radius: x5 cable diameter.  
Impact resistance: AG2 Medium severity.



### Chemical performance

Chemical & Oil resistance: Good.  
UV Resistant: UNE 211605.



### Water performance

Water resistance: AD7 Immersion



### Other

Meter by meter marking.



### Installation conditions

Open Air.  
Buried.  
In conduit.



### Applications

Industrial use.  
Urban grids.



### Packaging

Available in rolls (lengths of 100 m) and drums.



# Certificado AENOR de Producto

## Cables eléctricos

042/000892

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

### TOP CABLE, S.A.

con domicilio social en: PARC D'ACTIVITATS ECONOMIQUES CAN SANT JOAN,  
CAMI VELL DE SANT CUGAT, S/N  
08191 RUBÍ (Barcelona - España)

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

conforme con: UNE 21123-2:2010

Designación: RV-K  
Marca Comercial: TOP CABLE POWERFLEX 6 "344"  
Limitación: Desde 25 mm<sup>2</sup> Gama según norma

producido en: PQ D' ACTIVITATS ECONOMIQUES CAN SANT JOAN,  
CAMI VELL DE SANT CUGAT, S/N  
08191 RUBÍ (Barcelona - España)

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: 2007-02-09  
Fecha de renovación: 2012-02-09  
Fecha de expiración: 2017-02-09

AENOR

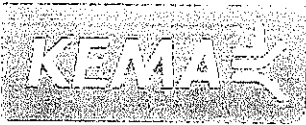
Asociación Española de  
Normalización y Certificación

Avelino BRITO MARQUINA  
Director General de AENOR

AENOR

Asociación Española de  
Normalización y Certificación

Génova, 6. 28004 Madrid. España  
Tel. 902 102 201 - www.aenor.es



# CERTIFICATE

KEMA No.: 2113444.01



Issued to:  
Applicant:

**Top Cable S.A.**  
**Parc d'activitats Economiques**  
**08191 RUBI (BARCELONA)**  
**Spain**

Manufacturer/Licensee:  
**Top Cable S.A.**  
**Parc d'activitats Economiques**  
**08191 RUBI (BARCELONA)**  
**Spain**

Product : cables for fixed wiring  
Trade name : TOP CABLE  
Type : RV-K

The product and any acceptable variation thereto is specified in the Annex to this certificate and the documents therein referred to.

KEMA hereby declares that the above-mentioned product has been certified on the basis of:

- a type test according to the standard IEC 60502-1:2004;
- an inspection of the production location according to CENELEC Operational Document CIG 021
- a certification agreement with the number 974959

KEMA hereby grants the right to use the KEMA-KEUR certification mark.

The KEMA-KEUR certification mark may be applied to the product as specified in this certificate for the duration of the KEMA-KEUR certification agreement and under the conditions of the KEMA-KEUR certification agreement.

This certificate is issued on: 24 April 2008 and expires upon withdrawal of one of the above mentioned standards.

KEMA Quality B.V.

drs. G.J. Zoetbrood  
Managing Director

H.R.M. Barends  
Certification Manager

ACCREDITED BY  
THE DUTCH COUNCIL  
FOR ACCREDITATION



© Integral publication of this certificate is allowed

**SPECIFICATION OF THE CERTIFIED PRODUCT****Product data**

product : cables for fixed wiring  
trade name : TOP CABLE  
type : RV-K  
rated voltage : 0,6/1 kV  
conductors : copper, class 5  
insulations : XLPE compound  
sheath : PVC compound type ST 2  
tested cables : 3x2,5 mm<sup>2</sup> and 1x240 mm<sup>2</sup>

**TESTS****Test requirements**

IEC 60502-1:2004

**Test result**

The test results are laid down in KEMA test file 2113444.01.

**Conclusion**

The examination proved that all test requirements were met.

Tested by : B. Vos Checked by : A.A. Mackenbach **Factory locations**

Alcabe S.A.  
Pae Can Sant Joan  
08191 RUBI (BARCELONA)  
Spain

Orbitel Cables S.A.  
Cr Nacional II, Km 495  
25250 BELPUIG (LLEIDA)  
Spain

**MARINE DIVISION**  
17 Bis Place des Reflets - La Défense 2  
92400 Courbevoie - France  
Tel. 33 1 42 91 53 48  
Fax 33 1 42 91 28 94



Certificate N°:  
10385/A0 BV  
The attached Schedule forms part of the certificate  
File Number: ACE 01/730/01  
Product Code: 2501I

**BUREAU  
VERITAS**

## CERTIFICATE OF TYPE APPROVAL

*This is to certify that the product identified below was found to be in compliance with the relevant hereunder stated Regulations & standards*

**CABLES (LOW VOLTAGE)**  
Type: RV-K, RV, RVFV, YMvK, XVB-F2.

MANUFACTURED BY:

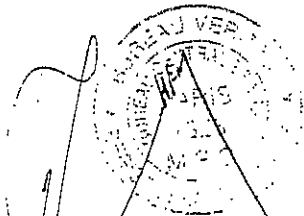
**TOP CABLE, S.A.**  
Rubi (Barcelona) - SPAIN


SPECIFIED REGULATIONS & STANDARDS:  
BV Rules and Regulations for the Classification of Ships.  
IEC 92 series - IEC 60332-1.

The Approval is valid until : 18/01/2006

BUREAU VERITAS MADRID

At Paris la Défense, on : 18/01/2001



  
**J. BENOIT**  
For the Secretary

This Certificate remains valid until the date stated on, hereunder, unless cancelled or revoked, provided the conditions in the attached schedule are complied with and the equipment remains satisfactory into service.  
This Certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested.  
This Certificate is not valid without the stamp of the above mentioned by BUREAU VERITAS Inspection Center.  
The manufacturer should notify BUREAU VERITAS of any modification or changes to the equipment in order to obtain a valid Certificate.  
The latest published Regulations or Standards referred to, above, and the Marine Division General Conditions are applicable.



**BUREAU  
VERITAS**  
MARINE DIVISION

File Number : ACE 01/730/01

## THE SCHEDULE OF APPROVAL

### 1. PRODUCT DESCRIPTION :

TYPE	Number of cores	Cross sectional areas (mm <sup>2</sup> )	TEMP. Class	REMARKS
<b>Power Flex 0.6/1 kV</b>	1	1.5 to 300	85°C	Class 2/ Class 5 Conductor
Type:	2-3-4-5	1.5 to 240		
RV-K RV RVFV YMvK XVB-F2				All cables meet the Flame retarding tests according to IEC 60332-1

#### Main Specifications:

- Conductor: Copper class 2 / class 5.
- Insulation: Cross-linked polyethylene - type XLPE.
- Armour/screen: Double steel tape armour (when applicable).
- Outer sheath: Polyvinyl chloride - type ST2.

### 2. DESIGN DRAWINGS and/or SPECIFICATIONS

As per documents filed in ACE 01/730/01.

### 3. TYPE TEST REPORTS / LABORATORY RECOGNITION STATUS

- 3.1 - Manufacturer's test report issued on 07/07/2000.
- 3.2 - The tests were witnessed by a Society's Surveyor.

### 4. MATERIALS and/or COMPONENTS REQUIRED TO BE TYPE APPROVED

Nil.

### 5. OTHER MATERIALS and/or COMPONENTS

Nil.

### 6. APPLICATION / LIMITATION OF USE

According to BV Rules and Regulations for the Classification of Ships.

### 7. PRODUCTION SURVEY REQUIREMENTS

Arrangement should be made for a Society's Surveyor to inspect equipment of the type referred to in this certificate which is intended for use on BUREAU VERITAS registered ships at the Manufacturer's works.