



CONTACT

Market information
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Speed Up your Operations

Choose the ENERGYFLEX® BE-FAST option and cut installation time by up to 60%. Delivered in twisted pairs, featuring pre-stripped conductors that can be easily separated without tools, the product ensures quick polarity identification and simplifies installation at every step.

STANDARDS

Producto EN 50618; IEC 60228; IEC 62930

DESIGN

Double cores solar cable with low smoke, halogen free, crosslinked insulation and sheath.

1. Conductor

Stranded tinned copper wires class 5 acc. IEC 60228

2. Insulation

Cross-linked halogen-free rubber
 Colour: white

3. Sheath

Cross-linked halogen-free fire retardant rubber
 Colour: black

Example of marking: ENERGYFLEX® USE < HAR > H1Z2Z2-K 62930 IEC 131 1 x S mm² 1.5/1.5 (1,8) kV DC NEXANS 269 MADE IN FRANCE Dca

FEATURES

ENERGYFLEX® cables are dedicated to the photovoltaic system direct current (D.C.) side with a nominal D.C. voltage of 1.5 kV and a maximum D.C. voltage of 1.8 kV. Cable suitable to be used with Class II equipment.

These cables are suitable for permanent outdoor long-term use, under variable and harsh climate conditions. They are designed and tested to operate at a normal maximum conductor temperature of 90°C and for 20,000 hours up to 120°C. Therefore, the expected period use is 30 to 40 years under normal usage conditions (lifetime acc. to Arrhenius Diagram).

ENERGYFLEX® cables have a suitable behaviour in water : tests of Annexes D and E of H07RN8F AD8 cables (100 days at 50 °C under 1 kV AC without breakdown), and additional test of 1,5 year in hot water (85°C) under 1 kV DC without breakdown. They are suitable for submerged installations with a maximum cumulated immersion period of 6 months / year.



Libre de halógenos
 IEC 60754-1



Tensión nominal de servicio U_o/U
 1.0/1.0 (1.2) kV AC
 1.5/1.5 (1.8) kV DC



No propagador del incendio
 EN 50575



No propagación de la llama
 IEC 60332-1-2



Densidad de los humos
 IEC 61034-2



Corrosividad de los gases
 Baja IEC 60754-2



Resistencia a la intemperie
 Excelente



Temp. ambiente de utilización
 -40 ... 90 °C

CHARACTERISTICS**Características de construcción**

| | |
|--------------------|-------------|
| Libre de halógenos | IEC 60754-1 |
|--------------------|-------------|

Características dimensionales

| | |
|--------------------------------|--------|
| Number of cables | 2 |
| Nominal insulation thickness | 0,7 mm |
| Nominal outer sheath thickness | 0,8 mm |

Características eléctricas

| | |
|---|---|
| Tensión nominal de servicio U _o /U | 1.0/1.0 (1.2) kV AC 1.5/1.5 (1.8) kV DC |
|---|---|

Características de uso

| | |
|---|------------------|
| No propagador del incendio | EN 50575 |
| No propagación de la llama | IEC 60332-1-2 |
| Densidad de los humos | IEC 61034-2 |
| Corrosividad de los gases | Baja IEC 60754-2 |
| Resistencia a la intemperie | Excelente |
| Resistencia al ozono | EN 50396 |
| Thermal endurance | IEC 60216-1-2 |
| Temperatura ambiente de utilización (rango) | -40 ... 90 °C |
| Temperatura máxima operativa | 120 °C |
| Estanqueidad | AD8 |

DIMENSIONAL CHARACTERISTICS

| Sección [mm ²] | Nom. cond. diam. [mm] | Nom. insulation thick. [mm] | Nom. outer sheath thick. [mm] | Diám. nom. exterior [mm] | Approx. diam. bunched cable [mm] | Peso aprox. [kg/km] |
|----------------------------|-----------------------|-----------------------------|-------------------------------|--------------------------|----------------------------------|---------------------|
| 4 | 2,5 | 0,7 | 0,8 | 5,7 | 11,8 | 128 |
| 6 | 2,9 | 0,7 | 0,8 | 6,2 | 12,8 | 165 |
| 10 | 4 | 0,7 | 0,8 | 7,3 | 15,0 | 260 |

ELECTRICAL CHARACTERISTICS

| Sección [mm ²] | Max. DC Resist. Cond. 20°C [Ohm/km] | Perm. current rat. air 60°C [A] | Perm. current rating tray 60°C [A] | short circuit conductor 1s [kA] |
|----------------------------|-------------------------------------|---------------------------------|------------------------------------|---------------------------------|
| 4 | 5,09 | 40 | 38 | 0,5 |
| 6 | 3,39 | 51 | 49 | 0,8 |
| 10 | 1,95 | 70 | 68 | 1,4 |

LIST OF CERTIFICATES

NF EN 50618: BUREAU VERITAS LCIE licence 662568
 IEC 62930: BUREAU VERITAS Certificate of conformity 158416-729944
 Construction Product Regulation (CPR) Performance: Dca-s2,d2,a1