



CONTACT

Market information
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Energyflex® cables are designed to comply with the international standards of the solar plants. They 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.

STANDARDS

Producto EN 50618; IEC 62930

DESIGN

Single core fire resistance 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 lynx^{eo} 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; IEC
60754-2



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



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



Corrosividad de los
gases
Baja IEC 60754-2



Densidad de los
humos
IEC 61034-1-2



Resistencia a la
intemperie
Excelente



No propagación de
la llama
IEC 60332-1



Estanqueidad
AD8

CHARACTERISTICS

Características de construcción

Libre de halógenos	IEC 60754-1; IEC 60754-2
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Características dimensionales

Número de conductores	1
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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
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Características de uso

Temperatura ambiente de utilización (rango)	-40 ... 90 °C
Embalaje	Bobina
Corrosividad de los gases	Baja IEC 60754-2
Densidad de los humos	IEC 61034-1-2
Resistencia al ozono	EN 50396
Resistencia a la intemperie	Excelente
No propagación de la llama	IEC 60332-1
Estanqueidad	AD8
No propagador del incendio	EN 50575
Resistencia a radiaciones ultravioletas	Método A, EN 50289-4-17 para 720h. Prueba prestigio Nexans 4000h.
Temperatura máxima operativa	120 °C

VALORES DIMENSIONALES

Sección [mm ²]	Nom. cond. diam. [mm]	Nom. outer sheath thick. [mm]	Diámetro ext. máximo [mm]	Peso aprox. [kg/km]
4	2,5	0,8	5,9	62
6	2,9	0,8	6,4	80
10	4	0,8	7,8	127

VALORES ELÉCTRICOS

Sección [mm ²]	short circuit conductor 1s [kA]	Perm. current rat. air 60°C [A]	Perm. current rating tray 60°C [A]	Max. DC Resist. Cond. 20°C [Ohm/km]
4	0,5	55	52	5,09
6	0,8	70	67	3,39
10	1,3	98	93	1,95

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