ENERGYFLEX PV BE-FAST (1.5kV DC)

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

Produit 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.

Sans halogène	Tension de service nominale Uo/U (Um)	Non propagateur de l'incendie	Non propagateur de la flamme	Densité de fumée dégagée	Corrosivité des fumées	Résistance aux intempéries	Temp. d'utilisation
IEC 60754-1	**1.0/1.0 (1.2) kV AC** **1.5/1.5 (1.8) kV DC**	**EN 50575**	**IEC 60332-1-2**	**IEC 61034-2**	**IEC 60754-2**	**Excellente**	**-40 ... 90 °C**

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CARACTÉRISTIQUES

Caractéristiques de construction	
Sans halogène	IEC 60754-1
Caractéristiques dimensionnelles	
Nombre de câbles	2
Epaisseur nominale de l'isolant	0,7 mm
Epaisseur nom. gaine ext.	0,8 mm
Caractéristiques électriques	
Tension de service nominale Uo/U (Um)	1.0/1.0 (1.2) kV AC 1.5/1.5 (1.8) kV DC
Caractéristiques d'utilisation	
Non propagateur de l'incendie	EN 50575
Non propagateur de la flamme	IEC 60332-1-2
Densité de fumée dégagée	IEC 61034-2
Corrosivité des fumées	IEC 60754-2
Résistance aux intempéries	Excellente
Tenue à l'ozone	EN 50396
Thermal endurance	IEC 60216-1-2
Température ambiante d'utilisation, plage	-40 ... 90 °C
Température de service maximale	120 °C
Etanchéité	AD8

DIMENSIONAL CHARACTERISTICS

Section [mm²]	Diam.nom.cond [mm]	Epaisseur nom. isolant [mm]	Nom. outer sheath thick. [mm]	Diam.ext.nom [mm]	Approx. diam. bunched cable [mm]	Masse approx. [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

Section [mm²]	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