



CONTACT

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Outstanding water proof performance

The ENERGYFLEX® WR patented solar cable is designed to withstand humid or immersed installations over its lifetime.

STANDARDS

Product EN 50618; IEC 60228; IEC 62930

DESIGN

Single core water resistant 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® IWR USE < HAR > H1Z2Z2-K 62930 IEC 131 PV1500-WR 1 x S mm² 1.5/1.5 (1,8) kV DC lynxéo 269 HALOGEN FREE LOW SMOKE Dca

FEATURES

ENERGYFLEX® WR 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® WR cables have been put under testing protocol TÜV 2PfG 2750/09.20 - Requirements for cables with improved water resistance for installation in photovoltaic-systems 84 days (2,016 hours) / 90°C / 3,6 KV DC (vs 1,8 kV DC at 85°C during 240 hours for IEC 62930 / EN 50618 cables). They are suitable for installations immersed in water for 12 months / year.



Senza alogeno
IEC 60754-1



Tensione nominale
U₀/U (Um)
1.0/1.0 (1.2) kV AC
1.5/1.5 (1.8) kV DC



Impermeabilità
Eccellente



Fuoco ritardante
EN 50575



Ritardante la
fiamma
IEC 60332-1-2



Densità fumo
IEC 61034-2



Fumo
IEC 60754-2



Resistenza alle
intemperie
Eccellente

CHARACTERISTICS

Caratteristiche costruttive

Senza alogeno	IEC 60754-1
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Caratteristiche elettriche

Tensione nominale U ₀ /U (Um)	1.0/1.0 (1.2) kV AC 1.5/1.5 (1.8) kV DC
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Caratteristiche d'utilizzo

Impermeabilita'	Eccellente
Fuoco ritardante	EN 50575
Ritardante la fiamma	IEC 60332-1-2
Densita' fumo	IEC 61034-2
Fumo	IEC 60754-2
Resistenza alle intemperie	Eccellente
Resistenza all'ozono	EN 50396
Thermal endurance	IEC 60216-1-2
Temperatura Operativa	-40 ... 90 °C
Temperatura operativa massima	120 °C

DIMENSIONAL CHARACTERISTICS

Sezione del conduttore del cavo [mm ²]	Nom. cond. diam. [mm]	Diametro esterno max [mm]	Peso approssimativo del cavo [kg/km]
4	2,5	6,8	77
6	2,9	7,3	95
10	4	8,2	140

ELECTRICAL CHARACTERISTICS

Sezione del conduttore del cavo [mm ²]	Massima resistenza el. del cond. a 20°C in c.c. [Ohm/km]	Perm. current rat. air 60°C [A]	Perm. current rating tray 60°C [A]	Corrente di corto circuito nel conduttore 1s [kA]
4	5,09	55	52	0,5
6	5,09	50	67	0,8
10	3,39	98	93	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