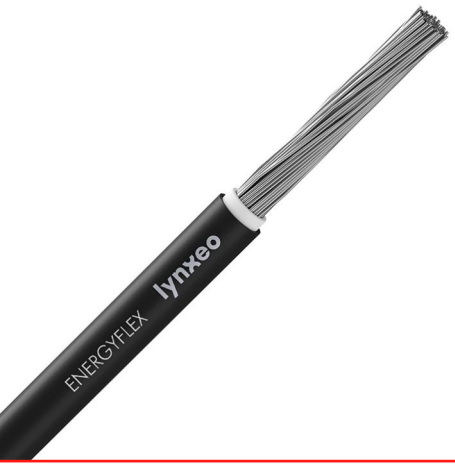
ENERGYFLEX PV WATER RESISTANT (1.5kV DC)

ENERGYFLEX WR 1x4² 1.5kV DC



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

KEY CHARACTERISTICS

Caratteristiche elettriche	
Tensione nominale Uo/U (Um)	1.0/1.0 (1.2) kV AC 1.5/1.5 (1.8) kV DC
Massima resistenza el. del cond. a 20°C in c.c.	5,09 Ohm/km
Permissible current rating in air 60°C	55 A
Permissible current rating on a tray 60°C	52 A
Corrente di corto circuito nel conduttore 1s	0,5 kA

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 lynxeo 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 immerged in water for 12 months / year.

Flessibilità del conduttore
Flessibile classe 5

Senza alogeno
IEC 60754-1

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

Impermeabilita'
Eccellente

Fuoco ritardante
EN 50575

Ritardante la fiamma
IEC 60332-1-2

Densita' fumo
IEC 61034-2

Fumo
IEC 60754-2

CONTACT

Market information
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ENERGYFLEX PV WATER RESISTANT (1.5kV DC)

ENERGYFLEX WR 1x4² 1.5kV DC

CHARACTERISTICS

Caratteristiche costruttive	
Costruzione	
Materiale del conduttore	Rame stagnato
Flessibilità del conduttore	Flessibile classe 5
Isolamento	Gomma reticolata senza alogeni
Guaina esterna	Cross-linked halogen free rubber
Senza alogeno	IEC 60754-1
Caratteristiche dimensionali	
Sezione del conduttore del cavo	4 mm²
Nominal conductor diameter	2,5 mm
Spessore nominale dell'isolante	- mm
Spessore nominale della guaina esterna	- mm
Diametro esterno min	5,8 mm
Diametro esterno nominale del cavo	- mm
Diametro esterno max	6,8 mm
Peso approssimativo del cavo	77 kg/km
Caratteristiche elettriche	
Tensione nominale Uo/U (Um)	1.0/1.0 (1.2) kV AC 1.5/1.5 (1.8) kV DC
Operating Voltage Vo DC	1500 V
Massima resistenza el. del cond. a 20°C in c.c.	5,09 Ohm/km
Permissible current rating in air 60°C	55 A
Permissible current rating on a tray 60°C	52 A
Corrente di corto circuito nel conduttore 1s	0,5 kA
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
Temperatura massima di cortocircuito del conduttore	250 °C

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