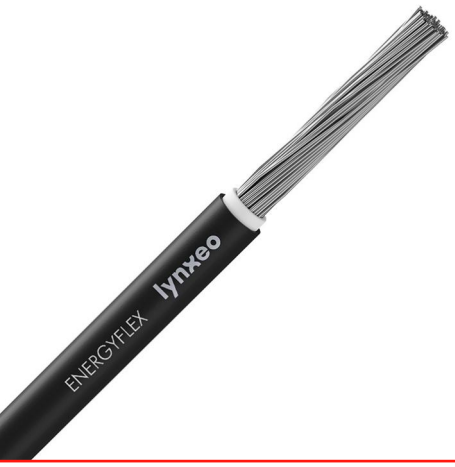
ENERGYFLEX PV WATER RESISTANT (1.5kV DC)

ENERGYFLEX WR 1x6² 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

Producto EN 50618; IEC 60228; IEC 62930

KEY CHARACTERISTICS

Características eléctricas	
Tensión nominal de servicio Uo/U	1.0/1.0 (1.2) kV AC 1.5/1.5 (1.8) kV DC
Resistencia máxima del conductor en CC a 20º C	5,09 Ohm/km
Permissible current rating in air 60°C	50 A
Permissible current rating on a tray 60°C	67 A
Permissible short circuit current conductor 1s	0,8 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) / 90ºC / 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.

Flexibilidad del conductor	Libre de halógenos	Tensión nominal de servicio Uo/U	Estanqueidad	No propagador del incendio	No propagación de la llama	Densidad de los humos	Corrosividad de los gases
Flexible, Clase 5	**IEC 60754-1**	**1.0/1.0 (1.2) kV AC 1.5/1.5 (1.8) kV DC**	**AD8**	**EN 50575**	**IEC 60332-1-2**	**IEC 61034-2**	**Baja IEC 60754-2**

CONTACT

Market information
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CHARACTERISTICS

Características de construcción	
Construction type	
Material del conductor	Cobre estañado
Flexibilidad del conductor	Flexible, Clase 5
Aislamiento	Cross-linked halogen free rubber
Cubierta exterior	Cross-linked halogen free rubber
Libre de halógenos	IEC 60754-1
Características dimensionales	
Sección del conductor	6 mm²
Nominal conductor diameter	2,9 mm
Nominal insulation thickness	- mm
Nominal outer sheath thickness	- mm
Diámetro exterior mínimo	6,2 mm
Diámetro exterior nominal	- mm
Diámetro exterior máximo	7,3 mm
Peso aproximado	95 kg/km
Características eléctricas	
Tensión nominal de servicio Uo/U	1.0/1.0 (1.2) kV AC 1.5/1.5 (1.8) kV DC
Operating Voltage Vo DC	1500 V
Resistencia máxima del conductor en CC a 20º C	5,09 Ohm/km
Permissible current rating in air 60°C	50 A
Permissible current rating on a tray 60°C	67 A
Permissible short circuit current conductor 1s	0,8 kA
Características de uso	
Estanqueidad	AD8
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
Resistancia al ozono	EN 50396
Thermal endurance	IEC 60216-1-2
Temperatura ambiente de utilización (rango)	-40 ... 90 °C
Temperatura máxima operativa	120 °C
Temperatura máxima del conductor en corto-circuito	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