Discover the Power of

FLEXIBLE ALUMINUM

in Your **Photovoltaic System**

First Flexible Aluminum Solar Cable

MANUFACTURED IN BRAZIL

Greater delivery speed and full support from Condumax's technical team.

Reduce your electrical cable costs by up to

30%

Complies with UL 4703 / TUV 2Pfg 2642/01.22 requirements.

120 °C

The new Solarmax Flex AL is applied between modules and string boxes/inverters. In addition to being more economical, it is lighter than traditional copper cables. Developed with a special aluminum alloy, it is an efficient solution, already tested and certified according to international standards.

Condumax®

ELECTRICAL WIRES AND CABLES

TECHNICAL INFORMATION

Conductor
Made from a special aluminum alloy, soft temper, flexible stranding.

Insulation
Halogen-free thermoset elastomeric compound, with low smoke emission, flame retardant, in white color.

Cover
Halogen-free thermoset elastomeric compound, with low smoke emission, flame retardant, UV resistant.

Identification
Black, red, and green/yellow.

Maximum Temperatures of the Conductor
- Ambient temperature: -40 to 90°C
- Maximum conductor temperature: 120°C (20,000 HOURS)
- Short-Circuit Temperature: 250°C (5 SEC.)

Working Voltage
AC (Uo/U) – 600/1.000 V
DC (U) – 1.800 V

Additional Features
- Cost reduction compared to tinned copper conductor cables.
- Excellent thermal properties (120°C non-conductor - 20,000 hours).
- Excellent weather and UV resistance.
- Excellent flexibility.
- Flame retardant.
- Low smoke emission.
- Halogen-free.
- Resistance to acidic and alkaline solutions.
- Resistance to low temperatures (-40°C).
- Free from heavy metals (RoHS compliant).

Applicable Standards
- UL 4703 - ul standard for safety photovoltaic wire
- IEC 60364-7-712 - Low voltage electrical installations: Requirements for special installations or locations - Solar photovoltaic (PV) power supply systems
- NFPA70 - Article 690 - Photovoltaic PV System
- TUV Specification 2PfG 2642/01.22

Dimensional Data

Section (mm²)	Conductor Diameter (mm)	Insulation Thickness (mm)	Cover Thickness (mm)	Outer Diameter (mm)	Net Weight (kg/km)
6,00	3,4	0,7	0,8	6,4	44,9
10,00	4,2	0,8	0,8	7,4	61,2
16,00	5,2	0,9	0,9	8,8	87,9

Current Carrying Capacity

Section in CU/Sn (mm²)	Section in Al (mm²)	Outdoor Installation Protected from the Sun (A) *	Outdoor Installation Exposed to the Sun (A) *	Directly Buried Installation (A) **
4,00	6,00	48	42	42
6,00	10,00	61	53	53
10,00	16,00	85	74	71

** Considerations:*
- *Ambient Temperature: 40°C*
- *Conductor Temperature: 90°C*
- *Two single-core cables, with spacing > 0.75x the outer diameter, in a horizontal layout.*

*** Considerations:*
- *Ambient Temperature: 30°C*
- *Conductor Temperature: 90°C*
- *Depth: 0,5 m*
- *Two single-core cables, laid side by side in a horizontal layout.*
- *Soil Thermal Resistivity: 2.5 km/W*

All you need to your SOLAR CABLING SYSTEM

SOLARMAX 120°C

Connection between photovoltaic modules. Low voltage DC installation between modules and string box.

MAXLINK AL UV OR SAFETYMAX AL UV

Low voltage DC installation between string box and inverter.

MAXLINK AL UV OR SAFETYMAX AL UV

Low voltage AC installation between inverter and transformer.

MAXLINK MV

Medium voltage circuit installation.

NU CA AND CAA ALUMINUM CABLE

Installation in the power transmission line.

Access detailed catalogs online

Condumax
ELECTRICAL WIRES AND CABLES

60 ANOS