

HELUWIND® WK POWERLINE ALU

1,8/3 kV, flexible ALU-Conductor, direct burial



Technical data

- **Temperature range**
flexing -20°C to +90°C
fixed installation -40°C to +105°C
- Permissible conductor **operating temperature** +105°C up to 3000h
- **Nominal voltage**
1,8/3 kV
- **Test voltage**
9 kV
- **Minimum bending radius**
flexing 10x cable Ø
fixed installation 4x cable Ø
- **Flame test**
IEC 60332-1-2
- **Approvals**
in accordance DIN VDE 0250-813

Cable structure

- Aluminium conductor, fine stranded wires
- Special insulation black
- Sheath: special compound
- Sheath colour: black

Properties

- UV resistant
- Oil resistant
- Easy to assemble
- Recyclable
- Direct burial

Note

For more information, especially on custom cables and connectivity solutions, please contact us: wind@helukabel.de

Application

The HELUWIND® WK POWERLINE ALU is a highly flexible, aluminium cable with a finely stranded structure and is designed for use in the power engineering sector, specifically for power cabling in industrial applications. Thanks to its high level of flexibility and reduced weight, this cable is an interesting option compared to fine-stranded copper cables in many applications.

The HELUWIND® WK POWERLINE ALU series unlocks its full potential, when it comes to power wiring of wind power plants. Due to its low weight, cables can be fed through the tower in one length. This eliminates the need for the time-consuming cabling of individual tower segments. However, the key benefit is an increased reliability of the connection technology: The number of interruptions between the topmost tower segment and the converter can be reduced from 90 connection points to just 18 (depending on the number of power cables and tower segments). As a result, the amount of time required for installation can drop from several days, to a few hours. For torsion applications, we recommend the HELUWIND® WK 103-Torsion, WK 135-Torsion or WK 137-Torsion.

The HELUWIND® WK POWERLINE ALU may only be used with certified connection technology from HELUKABEL®. This includes C8 crimp connections and screwed connections; both described in the "Connection Technology" section and tested in accordance with IEC 61238-1 cl. A.

The cable is also available in a halogen-free design, with UL/CSA approval, and a rated voltage of 0.6/1 kV. The "robust" version features a high abrasion and mechanical load resistant PUR sheath.

CE = Product conforms with Low-Voltage Directive 2014/35/EU.

Part no.	No. cores x cross-sec. mm²	AWG-No.	Outer Ø app. mm	AL weight kg / km	Weight app. kg / km
707647	1 x 185	-	26,0	544,0	1020,0
706578	1 x 240	-	30,3	706,0	1250,0

Part no.	No. cores x cross-sec. mm²	AWG-No.	Outer Ø app. mm	AL weight kg / km	Weight app. kg / km
707432	1 x 300	-	33,2	882,0	1520,0
707648	1 x 400	-	37,4	1176,0	1855,0

Dimensions and specifications may be changed without prior notice.