

WILBAwind MV 20/35kV, Alu cl.2

445

Halogen-free, shielded aluminium single-conductor medium-voltage cable

Application

Optimized cable for use in wind energy plants

Materials and components

- Al conductor class 2 (IEC 60228), cord
- Inner cross-linked semiconducting layer
- Core insulation made of cross-linked polyethylene (XLPE)
- Core colour natural
- Outer cross-linked semiconducting layer
- Swelling tape semiconductive
- Shielding from Cu wire and band bare
- Outer sheath made of flame-resistant, cross-linked polyolefine (XLPO)

Jacket colour

- Black similar to RAL 9005

Functions

- Good oil and petrol resistance
- Halogen-free
- High mechanical strength

Environmental conditions

- Good resistance at high and low temperatures
- Ozone- and weather-resistant
- UV radiation-resistant
- Flame retardancy

Performance

Mechanical properties

- Min. bending radius 10 x D (D = cable Ø)

Nominal voltage

- Nominal voltage [AC]: $U_0 / U_{20} / 35$ (42) kV, 50 Hz

Test voltage

- Test voltage [AC]: 70 kV

Current load

- Current carrying capacity acc. to IEC 60502-2, Table B5

Temperature range

- -40°C ... +90°C
- In event of short-circuit, +250°C for 5 sec.
- Conductor temperature max. +90°C

Standards

- Based on IEC 60502-1, IEC 60245, EN 50264
- IEC 60332-1-2 Flame retardancy
- IEC 60754-1 Halogen-free
- IEC 60754-2 Corrosivity of fumes
- IEC 60811-404 Resistance to oil
- IEC 61034-2 Low smoke development
- IEC 60721-3-3 Humidity 3K6
- IEC 60811-403 Resistance to ozone

CPR Guideline

- Fire reacton class acc. EN 13501-6: Eca

Remarks

- D= total Ø
- $d_1 = \emptyset$ over the screen
- Other types upon request

**Technical data**

Cross-section mm ²	Part no.	Ø D mm	Ø d1 mm	Alu-number kg/km	Copper index kg/km	Weight kg/km
1X95/16	53272	38.0	33.5	276.0	182.0	1650

Cross-section mm ²	AC resistance at 60 °C and 50 Hz Ω/km	Reactance at 50 Hz  Ω/km	Ω/km	Capacity at 50 Hz µF/km	Max. tensile strength kN
1X95/16		0.138		0.145	2.8

