

HELUWIND® WK 103k-EMV-D-TORSION

flexible in cold temperatures, EMC-preferred type



HELUWIND® WK 103k-EMV-D-TORSION CE

TECHNICAL DATA

Torsion resistant cable acc. to UL-Std. 758 (AWM) Style 10681, CSA-Std. C22.2 No. 210 - AWM I/II A/B

Temperature range flexible -40°C to +80°C
fixed -40°C to +80°C
during installation -40°C to +80°C

Nominal voltage VDE AC U₀/U 600/1000 V
UL (AWM) AC 1000 V

Max. permissible operating voltage
alternating current (AC) conductor/earth 700 V
three-phase alternating current (AC) conductor/conductor 1200 V
direct current (DC) conductor/earth 900 V
direct current (DC) conductor/conductor 1800 V

Test voltage core/core 4000 V

Test voltage core/screen 2000 V

Minimum bending radius flexible 10x Outer-Ø
fixed 5x Outer-Ø

CABLE STRUCTURE

- Copper wire bare acc. to DIN VDE 0295 / IEC 60228
- Core insulation: kälteflexible Spezialmischung
- Core identification: black
- x = without protective conductor
- Screen: helically wound tinned copper wires
- Outer sheath: kälteflexible Spezialmischung
- Sheath colour: black

PROPERTIES

- resistant to: oil, UV radiation
- Torsion tested
- recyclable
- flame-retardant
- Suitable for use in multiple climates
- Torsion angle: +/- 140°/m

TESTS

- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2, UL VW-1, CSA FT 1

APPLICATION

Designed for flexible use, especially for torsional stress in the cable loop of a wind turbine. The voltage level for all dimensions is designed for 0.6/1 kV. This means that the cable can also be laid in parallel in accordance with UL standards; spatial separation of the cable routes is not necessary. The HELU WK series has been successfully tested with over 18,000 torsion cycles and therefore offers optimum functional reliability far beyond the service life of a wind turbine. EMC = Electromagnetic Compatibility; in order to optimise EMC properties, we recommend a double-sided and all-round large contact area of the D-screen.

NOTES

- the conductor is metrically (mm²) constructed, AWG numbers are approximated, and are for reference only
- Further details, as well as information regarding custom solutions and suitable connection technology, can be found at wind@heluka-bel.de

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
78177	1 x 70	2/0	18.4	739.0	950.0
74006	1 x 95	3/0	21.2	959.0	1253.0
78178	1 x 120	4/0	25.0	1250.0	1574.0
78179	1 x 150	300 kcmil	27.3	1598.0	2000.0

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
78180	1 x 185	350 kcmil	28.0	1904.0	2450.0
703328	1 x 240	450 kcmil	32.5	2451.0	2886.0
704939	1 x 300	500 kcmil	34.6	3027.0	3920.0