HELUWIND® WK 103w-EMV-D-TORSION-TP

heat resistant, EMC-preferred type



TECHNICAL DATA

Torsion resistant cable acc. to UL-Std. 758 (AWM) Style 21179, CSA-Std. C22.2 No. 210 - AWM I/II A/B

Temperature range	flexible -35°C to +90°C fixed -40°C to +90°C during installation -20°C to +90°C
Permissible operating temperature of the conductor	+90°C
Nominal voltage	VDE AC U_0/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: special, heat-resistant compound
- Core identification acc. to DIN 47100, colour coded
- x = without protective conductor
- Cores stranded in pairs with optimal lay lengths, Pairs stranded in layers with optimal lay lengths
- Screen: helically wound tinned copper wires
- Outer sheath: special, heat-resistant compound
- 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 FT1

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@helukabel.de

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
704749	2 x 2 x 0.25	24	8.9	27.0	90.0
704750	4 x 2 x 0.25	24	9.9	39.0	115.0
704751	5 x 2 x 0.25	24	11.1	46.0	130.0
704753	2 x 2 x 0.34	22	9.6	39.0	115.0
704754	4 x 2 x 0.34	22	11.0	47.0	130.0
704756	2 x 2 x 0.5	20	8.5	39.0	115.0
704761	4 x 2 x 0.5	20	11.3	69.5	180.4
704766	2 x 2 x 0.75	19	12.1	62.0	130.0

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
705829	3 x 2 x 0.75	19	11.5	73.0	177.2
704770	4 x 2 x 0.75	19	12.7	91.0	214.5
704773	8 x 2 x 0.75	19	17.1	170.0	410.0
704776	12 x 2 x 0.75	19	17.6	223.0	520.0
704787	2 x 2 x 1.5	16	12.1	92.0	180.0
704789	3 x 2 x 1.5	16	12.8	120.0	235.0
704791	4 x 2 x 1.5	16	14.6	150.0	210.0

30.09.2026 / We reserve the right to make technical changes; the imprint in the image is purely exemplary