# HELUWIND® WK 103k-EMV-D-TORSION-TP

**flexible in cold temperatures, EMC-preferred type**




## TECHNICAL DATA

**Torsion resistant cable acc. to UL-Std. 758 (AWM) Style 2570, CSA-Std. C22.2 No. 210 - AWM I/II A/B**

| | |
|---|---|
| **Temperature range** | flexible -40°C to +80°C<br>fixed -40°C to +80°C<br>during installation -40°C to +80°C |
| **Nominal voltage** | VDE AC $U_0$/U 600/1000 V<br>UL (AWM) AC 1000 V |
| **Max. permissible operating voltage** | |
| | alternating current (AC) conductor/earth 700 V<br>three-phase alternating current (AC) conductor/conductor 1200 V<br>direct current (DC) conductor/earth 900 V<br>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<br>fixed 5x Outer-Ø |

## CABLE STRUCTURE

- Copper wire bare acc. to DIN VDE 0295 / IEC 60228
- Core insulation: kälteflexible Spezialmischung
- 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: 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 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@heluka-bel.de

| Part no. | No. cores x cross-sec. mm² | AWG, approx. | Outer Ø mm, approx. | Cu factor per km | Weight kg/km, approx. |
|---|---|---|---|---|---|
| 704877 | 2 x 2 x 0.25 | 24 | 8.9 | 27.0 | 90.0 |
| 704878 | 4 x 2 x 0.25 | 24 | 9.9 | 39.0 | 115.0 |
| 704879 | 5 x 2 x 0.25 | 24 | 11.1 | 46.0 | 130.0 |
| 704881 | 2 x 2 x 0.34 | 22 | 9.6 | 39.0 | 115.0 |
| 704882 | 4 x 2 x 0.34 | 22 | 11.0 | 47.0 | 130.0 |
| 704884 | 2 x 2 x 0.5 | 20 | 9.8 | 51.0 | 115.0 |
| 704888 | 4 x 2 x 0.5 | 20 | 11.5 | 69.2 | 190.0 |

| Part no. | No. cores x cross-sec. mm² | AWG, approx. | Outer Ø mm, approx. | Cu factor per km | Weight kg/km, approx. |
|---|---|---|---|---|---|
| 704894 | 2 x 2 x 0.75 | 19 | 12.1 | 62.0 | 130.0 |
| 704899 | 4 x 2 x 0.75 | 19 | 12.7 | 91.0 | 211.0 |
| 704902 | 8 x 2 x 0.75 | 19 | 17.1 | 170.0 | 410.0 |
| 704905 | 12 x 2 x 0.75 | 19 | 17.6 | 223.0 | 520.0 |
| 704917 | 2 x 2 x 1.5 | 16 | 12.1 | 92.0 | 180.0 |
| 704919 | 3 x 2 x 1.5 | 16 | 12.8 | 120.0 | 235.0 |
| 704921 | 4 x 2 x 1.5 | 16 | 14.6 | 150.0 | 210.0 |

06.07.2026 / We reserve the right to make technical changes; the imprint in the image is purely exemplary