

# HELUWIND® WK 103k-Torsion

0,6/1 kV, UV resistant, UL/CSA-Style 10269/2570 Single-/Multicore



## Technical data

- **Temperature range**  
flexing -40°C to +80°C  
fixed installation -40°C to +80°C  
installation -40°C to +80°C
- **Nominal voltage**  
VDE U<sub>0</sub>/U 0,6/1 kV  
UL 1000 V
- **Test voltage**  
core/core 4000 V
- **Highest permissible voltage**  
- DC:  
Conductor/Conductor 1,8 kV  
Conductor/Earth 0,9 kV  
- AC: Conductor/Earth 0,7 kV  
- Three phase: Conductor/Conductor 1,2 kV
- **Minimum bending radius**  
flexing 8x cable Ø  
fixed installation 4x cable Ø
- **Torsion application**  
+/- 140° per 1m
- **Approvals**  
Singlecore UL Style 10269  
Multicore UL Style 2570  
cRUus
- **Flame test**  
FT1, VW-1, IEC 60332-1-2

## Cable structure

- Special bare copper conductor, acc. to IEC 60228
- Special insulation material flexible at low temperatures
- Core identification: see table
- Multiconductors cabled
- Special sheath compound flexible at low temperatures
- Sheath: colour black

## Properties

- UV resistant
- Multi-climate operation
- Torsion tested
- Flame retardant
- Oil resistant
- Recyclable
- Easy to assemble

## Note

For more information, especially on custom cables, please contact us: [wind@helukabel.de](mailto:wind@helukabel.de)

## Application

The WK 103k-Torsion has been designed for flexible use, and specifically for torsional load in the cable loop of a wind power plant. The voltage level has been configured as 0.6/1 kV for all dimensions, which means that the cables can also be laid in parallel in compliance with UL standards. It is no longer necessary to separate the cable routes. The WK series has been successfully tested for more than 18,000 torsion cycles and thus offers optimum operational reliability far beyond the service life of the wind power plant.

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

Continuation ►

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## Core identification black with white numbers, 3 cores and more with GN-YE

Part no.	No. cores x cross-sec. mm <sup>2</sup>	AWG-No.	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
704941	4 G 0,5	20	7,4	33,4	99,0
704942	6 G 0,5	20	8,6	51,2	121,0
704943	10 G 0,5	20	10,8	48,0	165,0
704944	12 G 0,5	20	11,1	84,0	208,0
704945	3 G 0,75	19	7,3	22,0	77,0
704946	4 G 0,75	19	7,9	29,0	100,0
704947	5 G 0,75	19	8,6	36,0	120,0
704948	7 G 0,75	19	10,0	51,0	170,0
704949	10 G 0,75	19	11,0	72,0	200,0
704950	12 G 0,75	19	11,8	87,0	220,0
704951	14 G 0,75	19	12,5	101,0	238,0
704952	16 G 0,75	19	13,2	116,0	271,0
704953	18 G 0,75	19	13,9	130,0	310,0
704954	21 G 0,75	19	15,2	152,0	380,0
704955	25 G 0,75	19	16,9	180,0	490,0
704956	32 G 0,75	19	18,2	231,0	560,0
704957	36 G 0,75	19	19,1	260,0	620,0
704958	40 G 0,75	19	20,5	288,0	729,0
704959	41 G 0,75	19	20,8	296,0	729,0
704960	50 G 0,75	19	23,5	441,0	990,0
704961	4 G 1	18	8,3	39,0	100,0
704962	5 G 1	18	9,0	48,0	110,0
704963	7 G 1	18	10,5	68,0	140,0
704964	10 G 1	18	13,0	96,0	220,0
704965	12 G 1	18	13,2	116,0	240,0
704966	14 G 1	18	13,4	135,0	280,0
704967	16 G 1	18	14,1	154,0	310,0
704968	18 G 1	18	15,1	173,0	360,0
704969	21 G 1	18	16,7	202,0	410,0
704970	25 G 1	18	18,4	240,0	500,0
704971	32 G 1	18	19,8	308,0	590,0
704972	36 G 1	18	20,6	346,0	700,0
704973	40 G 1	18	22,4	384,0	800,0
704974	41 G 1	18	22,4	394,0	810,0
704975	50 G 1	18	24,6	480,0	980,0
704976	2 x 1,5	16	7,9	29,0	75,0
704977	3 G 1,5	16	8,0	44,0	110,0
704978	4 G 1,5	16	8,9	58,0	131,0
704979	5 G 1,5	16	9,7	72,0	165,0
704980	7 G 1,5	16	12,0	101,0	210,0
704981	10 G 1,5	16	13,1	144,0	270,0
704982	12 G 1,5	16	14,3	173,0	360,0
704983	14 G 1,5	16	14,9	202,0	420,0
704984	16 G 1,5	16	15,7	231,0	450,0
704985	18 G 1,5	16	16,8	260,0	510,0
704986	21 G 1,5	16	17,8	303,0	590,0
704987	25 G 1,5	16	20,6	360,0	700,0
704988	32 G 1,5	16	22,2	460,0	900,0
704989	36 G 1,5	16	23,1	519,0	980,0
704990	40 G 1,5	16	25,0	576,0	1030,0

Dimensions and specifications may be changed without prior notice.

## Core identification black with white numbers, 3 cores and more with GN-YE

Part no.	No. cores x cross-sec. mm <sup>2</sup>	AWG-No.	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
704991	41 G 1,5	16	25,0	591,0	1050,0
704992	50 G 1,5	16	27,7	720,0	1200,0
704993	3 G 2,5	14	8,9	72,0	151,0
704994	4 G 2,5	14	9,7	96,0	230,0
704995	5 G 2,5	14	10,9	120,0	250,0
704996	7 G 2,5	14	14,4	168,0	360,0
704997	10 G 2,5	14	15,8	240,0	480,0
704998	12 G 2,5	14	16,3	288,0	560,0
705038	19 G 2,5	14	20,4	456,0	591,0
704999	3 G 4	12	10,8	116,0	250,0
705000	4 G 4	12	12,0	154,0	286,8
705001	5 G 4	12	13,6	192,0	370,0
705002	7 G 4	12	15,9	269,0	530,0
705003	12 G 4	12	19,6	461,0	740,0
705004	3 G 6	10	13,1	173,0	340,0
705005	4 G 6	10	14,6	231,0	460,0
705006	5 G 6	10	16,2	288,0	566,4
705007	7 G 6	10	19,6	404,0	780,0
705008	4 G 10	8	17,4	384,0	670,0
705009	5 G 10	8	20,1	480,0	870,0
705010	7 G 10	8	23,5	672,0	1150,0
705011	4 G 16	6	20,7	615,0	1000,0
705012	5 G 16	6	25,4	768,0	1250,0
705013	4 G 25	4	26,5	960,0	1580,0
705014	5 G 25	4	28,2	1200,0	1900,0
705016	4 G 35	2	31,4	1344,0	2286,0
705017	5 G 35	2	35,4	1680,0	2600,0
705018	4 G 50	1	36,7	1920,0	2800,0
704940	4 G 70	2/0	46,0	2688,0	3600,0

## Core identification black

Part no.	No. cores x cross-sec. mm <sup>2</sup>	AWG-No.	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
705015	1 x 35	2	12,9	336,0	460,0
705019	1 x 70	2/0	17,9	672,0	1580,0
705020	1 x 95	3/0	21,9	912,0	1230,0
705021	1 x 120	4/0	23,1	1152,0	1540,0
705022	1 x 150	300 kcmil	27,2	1440,0	1870,0
705023	1 x 185	350 kcmil	27,5	1776,0	2284,0
705024	1 x 240	450 kcmil	31,2	2304,0	2966,8
705025	1 x 300	500 kcmil	35,0	2880,0	3730,0
705026	1 x 400	750 kcmil	39,3	3840,0	4500,0