

# HELUWIND® WK 103k EMV D-Torsion

0,6/1 kV, screened, 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  
core/screen 2000 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 10x cable Ø  
fixed installation 5x 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 flexible insulation material for low temperatures
- Core identification: see table
- Multiconductors cabled
- EMC-screened types have tinned copper wrapping
- 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 EMV D-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.

**EMC** = Electromagnetic compatibility

To optimize the EMC features we recommend a large round contact of the copper wrapping on both ends.

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

Continuation ▶

# HELUWIND® WK 103k EMV D-Torsion

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



## 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
704880	4 G 0,34	22	7,7	32,0	91,0
704883	4 G 0,5	20	8,0	37,8	105,0
704886	6 G 0,5	20	9,2	53,6	130,0
704890	10 G 0,5	20	11,4	73,0	170,0
704891	12 G 0,5	20	11,7	88,4	220,0
704892	3 G 0,75	19	7,7	43,2	97,0
704893	4 G 0,75	19	8,3	52,6	122,0
704895	5 G 0,75	19	9,0	63,0	145,0
704896	7 G 0,75	19	9,7	82,8	200,0
704898	4 x 2 x 0,75	19	12,7	91,0	211,0
704897	8 G 0,75	19	10,7	93,0	220,0
704900	12 G 0,75	19	12,2	126,9	257,5
704903	18 G 0,75	19	14,4	179,0	400,0
704904	12 x 2 x 0,75	19	17,6	223,0	520,0
704906	25 G 0,75	19	17,8	256,0	552,0
704908	41 G 0,75	19	21,2	370,8	795,0
704909	50 G 0,75	19	23,5	441,0	900,0
704914	2 x 1,5	16	6,8	44,0	86,0
704915	3 G 1,5	16	8,8	68,1	133,0
704916	4 G 1,5	16	9,4	87,9	159,0
704918	5 G 1,5	16	10,3	104,0	195,0
704920	7 G 1,5	16	11,9	140,8	247,0
704922	12 G 1,5	16	14,7	229,0	410,0
704923	3 G 2,5	14	10,4	104,4	210,0
704924	4 G 2,5	14	11,2	132,8	264,0
704925	5 G 2,5	14	12,3	161,1	288,0
704926	7 G 2,5	14	14,8	223,1	411,0
704927	12 G 2,5	14	16,7	350,6	560,0
705037	19 G 2,5	14	21,7	561,0	638,0
704928	5 G 4	12	13,6	237,4	382,0
704929	7 G 4	12	16,3	325,0	582,0
704930	12 G 4	12	20,0	532,1	806,0
704931	5 G 6	10	17,4	341,0	640,0
704932	4 G 10	8	17,8	445,6	727,0
704933	5 G 10	8	19,8	550,2	935,0
704934	4 G 16	6	21,1	692,2	1072,0
704935	5 G 16	6	24,4	854,4	1330,0
704936	4 G 25	4	26,0	1059,0	1664,0
704937	5 G 25	4	28,6	1327,0	2014,0
704938	4 G 50	1	37,0	2080,0	3200,0

## Core identification acc. to DIN 47100

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
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	35,0	110,0
704882	4 x 2 x 0,34	22	11,0	47,0	130,0
704884	2 x 2 x 0,5	20	9,8	39,0	115,0
704885	4 x 0,5	20	8,0	37,8	105,0
704887	6 x 0,5	20	9,2	53,6	130,0
704889	8 x 0,5	20	11,3	42,0	150,0
704888	4 x 2 x 0,5	20	11,5	69,2	190,0
704894	2 x 2 x 0,75	19	10,4	54,0	130,0
704899	4 x 2 x 0,75	19	12,7	91,0	211,0
704901	12 x 0,75	19	12,2	126,9	257,5
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
704907	32 x 0,75	19	18,8	294,0	610,0
704910	4 x 1	18	8,7	56,0	110,0
704911	6 x 1	18	10,2	82,0	150,0
704912	8 x 1	18	11,7	106,0	210,0
704913	12 x 1	18	13,3	150,0	280,0
704917	2 x 2 x 1,5	16	12,1	90,0	180,0
704919	3 x 2 x 1,5	16	14,0	120,0	235,0
704921	4 x 2 x 1,5	16	14,6	150,0	210,0

## 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
78177	1 x 70	2/0	19,8	739,0	950,0
74006	1 x 95	3/0	21,2	959,0	1285,8
78178	1 x 120	4/0	25,0	1250,0	1644,2
78179	1 x 150	300 kcmil	28,4	1740,0	2000,0
78180	1 x 185	350 kcmil	30,1	1904,0	2450,0
703328	1 x 240	450 kcmil	32,5	2451,0	2953,3
704939	1 x 300	500 kcmil	39,0	3027,0	3920,0

Dimensions and specifications may be changed without prior notice.