

# Flexible medium voltage cable

## Bitflex<sup>®</sup> DC (N)TMCGCW11Y UL



**Application:** Power supply cable for large electric motors and offshore systems for slow-running energy carrier systems or drum applications.

Current carrying capacity: acc. to IEC 60364-5-52, conductor temperature: 90 °C, ambient temperature: 30 °C, free in air, installation method F: three loaded conductors trefoil

### Construction and technical data:

<b>Standard:</b>	VDE 0250-813 (with ref. to)
<b>Conductor material:</b>	tinned copper
<b>Conductor construction:</b>	Class 5 = flexible
<b>Insulation:</b>	basic EPR
<b>Electrical field control:</b>	inner and outer semiconducting rubber layer
<b>Arrangement of protective conductors:</b>	spirally applied tinned copper wires
<b>Screen coverage:</b>	85 %
<b>Sheathing material:</b>	polyurethan
<b>Colour of outer sheath:</b>	red
<b>Flame-retardant:</b>	VDE 0482-332-1-2/IEC 60332-1-2
<b>Smoke density:</b>	DIN EN 61034/IEC 61034
<b>Halogen-free:</b>	DIN EN 50267/IEC 60754
<b>UV-resistant:</b>	yes
<b>Oil-resistant:</b>	EN 60811-404
<b>Ozone-resistant:</b>	yes
<b>Max. temperature at conductor, °C:</b>	90 °C
<b>Max. short circuit temperature at conductor, °C:</b>	200 °C
<b>Permitted outer cable temperature, fixed, °C:</b>	-40 - +80 °C
<b>Permitted outer cable temperature, moved, °C:</b>	-25 - +80 °C
<b>Bending radius, moving application:</b>	8 x Ø
<b>Maximum tensile strength at the conductor:</b>	15 N/mm <sup>2</sup>



**BiTflex<sup>®</sup> DC (N)TMCGCW11Y 3.6/6 kV**

**Nominal voltage U<sub>o</sub>:** 3.6 kV  
**Nominal voltage U:** 6 kV  
**Maximum permitted operating voltage in three-phase systems:** 7.2 kV  
**Test voltage:** 11 kV

part no.	part name	RI [Ohm/km]	I <sub>bl</sub> [A]	Ø [mm]	Cu	G [kg]
054848	1x35/16	0.565	169	24	518	831

**BiTflex<sup>®</sup> DC (N)TMCGCW11Y 6/10 kV UL**

**Nominal voltage U<sub>o</sub>:** 6 kV  
**Nominal voltage U:** 10 kV  
**Maximum permitted operating voltage in three-phase systems:** 12 kV  
**Test voltage:** 17 kV

part no.	part name	RI [Ohm/km]	I <sub>bl</sub> [A]	Ø [mm]	Cu	G [kg]
053018	1x35/16	0.565	169	27	518	925
054511	1x95/16	0.21	328	29	1066	1521
054743	1x120/16	0.164	383	32	1334	1820
054510	1x150/25	0.132	444	33	1680	2153
054708	1x185/25	0.108	510	36	2059	2510
054777	1x240/25	0.0817	607	39	2587	3080

**BiTflex<sup>®</sup> DC (N)TMCGCW11Y 8.7/15 kV**

**Nominal voltage U<sub>o</sub>:** 8.7 kV  
**Nominal voltage U:** 15 kV  
**Maximum permitted operating voltage in three-phase systems:** 18 kV  
**Test voltage:** 24 kV

part no.	part name	RI [Ohm/km]	I <sub>bl</sub> [A]	Ø [mm]	Cu	G [kg]
054794	01x150/25	0.132	444	33	1723	2162
054795	01x240/25	0.0817	607	38	2587	3077

**BiTflex<sup>®</sup> DC (N)TMCGCW11Y 12/20 kV UL**

**Nominal voltage U<sub>o</sub>:** 12 kV  
**Nominal voltage U:** 20 kV  
**Maximum permitted operating voltage in three-phase systems:** 24 kV  
**Test voltage:** 29 kV

part no.	part name	RI [Ohm/km]	I <sub>bl</sub> [A]	Ø [mm]	Cu	G [kg]
053019	1x35/16	0.565	169	30	518	1135
054778	1x150/25	0.132	444	38	1723	2450
054779	1x240/25	0.0817	607	42	2587	3350

RI	Conductor resistance
I <sub>bl</sub>	Ampacity in air (30 °C)
Ø	outer diameter approx.
Cu	Copper weight (GER)
G	net weight per 1000