

Flexible medium voltage cable BITflex[®] DC (N)TMCGCWOEU UL



Application: Power supply cable can be used in offshore power systems for low-speed energy chains, drum applications or to supply energy to large electrical applications and drives via energy carrier systems.

Operating speed:

- Offshore power systems: 6 m/min.
- Energy chains on cranes: 70 - 240 m/min.

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:

Conductor material:	tinned copper
Conductor construction:	Class 5 = flexible
Insulation:	basic EPR
Electrical field control:	inner and outer semiconducting rubber layer
Arrangement of protective conductors:	verzinnete Kupferdrahtumspinnung
Screen coverage:	86 %
Sheathing material:	rubber 5GM5
Colour of outer sheath:	red
Flame-retardant:	VDE 0482-332-1-2/IEC 60332-1-2
UV-resistant:	yes
Oil-resistant:	EN 60811-404
Ozone-resistant:	yes
Max. temperature at conductor, °C:	90 °C
Max. short circuit temperature at conductor, °C:	200 °C
Permitted outer cable temperature, fixed, °C:	-40 - +80 °C
Permitted outer cable temperature, moved, °C:	-25 - +80 °C
Bending radius, fixed installation:	6 x Ø
Bending radius, moving application:	8 x Ø
Maximum tensile strength at the conductor:	15 N/mm ²



Bitflex® DC (N)TMCGCWÖU UL 6/10 kV

Nominal voltage U_o: 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 _{bl} [A]	Ø [mm]	Cu	G [kg]
054281	1x25/16	0.795	135	25	422	800
054282	1x35/16	0.565	169	23	518	930
054283	1x50/16	0.393	207	28	662	1130
054284	1x70/16	0.277	268	30	854	1375
054285	1x95/16	0.21	328	32	1094	1636
054286	1x120/16	0.164	383	34	1334	1990
054287	1x150/25	0.132	444	36	1723	2320
054288	1x185/25	0.108	510	38	2059	2680
054289	1x240/25	0.0817	607	41	2587	3300

Bitflex® DC (N)TMCGCWÖU UL 12/20 kV

Nominal voltage U_o: 20 kV
Nominal voltage U: 12 kV
Maximum permitted operating voltage in three-phase systems: 24 kV
Test voltage: 29 kV

part no.	part name	RI [Ohm/km]	I _{bl} [A]	Ø [mm]	Cu	G [kg]
054290	1x25/16	0.795	135	29	422	1010
054291	1x35/16	0.565	169	30	518	1160
054292	1x50/16	0.393	207	31	662	1350
054293	1x70/16	0.277	268	34	854	1670
054294	1x95/16	0.21	328	36	1094	1940
054295	1x120/16	0.164	383	38	1334	2230
054296	1x150/25	0.132	444	40	1723	2660
054297	1x185/25	0.108	510	42	2059	3031
054298	1x240/25	0.0817	607	44	2587	3881

RI	Conductor resistance
I _{bl}	Ampacity in air (30 °C)
Ø	outer diameter approx.
Cu	Copper weight (GER)
G	net weight per 1000