

Flexible medium voltage cable

BiTmining[®] (N)TMCGCWOEU



Application: Single core cables are used in short lengths, e.g. for the connection of switchgear cubicles and for the connection of mobile transformer substations. When laying and during operation, care should be taken to protect them from excessive mechanical stress. The outer semi-conducting layer must not be heated before removal.

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:

Standard:	DIN VDE 0250-813 (with ref. to)
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:	spirally applied tinned copper wires
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
For outdoor use:	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:	10 x Ø
Maximum tensile strength at the conductor:	15 N/mm ²



The products and information presented here are for technical calculation only. They are subject to technical progress and in no way represent the ability of shipment. Outer diameters are approximately.

Drag chain application	
Travel lengths:	max. 10 m
Bending radius	min. 300 mm
Travel speed	max. 15 m/min
Temperature range	0 °C up to + 45 °C
Bending cycles /day	not tested

BiTmining® (N)TMCGCWOEU 6/10 kV

Nominal voltage U₀:	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]
052870	1x95/16	0.21	328	31	1348	1545
052871	1x120/16	0.164	383	32	1506	1780
052872	1x150/25	0.132	444	35	1870	2240
052873	1x185/25	0.108	510	38	2059	2600
052929	1x240/25	0.0817	607	40	2587	3090
052883	1x300/25	0.0654	703	42	3163	3865
052884	1x500/35	0.0391	946	49	5194	5925
054865	1x630/35	0.0292	1088	55	6442	7530

BiTmining® (N)TMCGCWOEU 8.7/15 kV

Nominal voltage U₀:	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 _{bl} [A]	Ø [mm]	Cu	G [kg]
053151	1x400/35	0.0495	823	45.2	4244	5065

BiTmining® (N)TMCGCWOEU 12/20 kV

Nominal voltage U₀:	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 _{bl} [A]	Ø [mm]	Cu	G [kg]
052913	1x35/16	0.565	169	29	518	1040
052914	1x50/16	0.393	207	30	662	1220
052915	1x70/16	0.277	268	32	854	1460
052916	1x95/16	0.21	328	35	1094	1785
052917	1x120/16	0.164	383	36	1334	2040

part no.	part name	RI [Ohm/km]	I _{bl} [A]	Ø [mm]	Cu	G [kg]
052918	1x150/25	0.132	444	38	1723	2435
052919	1x185/25	0.108	510	41	2059	2895
052874	1x240/25	0.0817	607	43	2587	3400
052880	1x300/25	0.0654	703	45	3367	4095
052875	1x500/35	0.0391	946	53	5194	6305

BiTmining[®] (N)TMCGCWOEU 18/30 kV

Nominal voltage U_o: 18 kV

Nominal voltage U: 30 kV

Maximum permitted operating voltage in 36 kV

three-phase systems:

Test voltage: 43 kV

part no.	part name	RI [Ohm/km]	I _{bl} [A]	Ø [mm]	Cu	G [kg]
052935	1x50/16	0.393	207	35	662	1485
053103	1x300/25	0.0654	703	49	3160	4400
052925	1x400/35	0.0495	823	54	4234	5635
052979	1x500/35	0.0391	946	57	5204	6660

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