

Flexible medium voltage cable BiTmining[®] (N)TSCGEWUEU-TR



Application: Flexible cable for power supply or for connecting large conveyor or mining machines in open-cast mining. Suitable for trailing applications with extremely high mechanical loads.

Construction and technical data:

Standard:	DIN VDE 250-813 (with ref. to)
Conductor material:	tinned copper
Conductor construction:	Class 5 = flexible
Insulation:	rubber (EPR) 3GI3
Electrical field control:	inner and outer semiconducting rubber layer
Arrangement of protective conductors:	arrange in the outer interstice
Material inner sheath:	rubber 5GM5
Armour:	tear-resistant reinforcing mesh tape over stranding
Torsion protection:	yes
Torsion:	+/- 100 °/m
Sheathing material:	rubber 5GM5
Colour of outer sheath:	black
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:	250 °C
°C:	
Permitted outer cable temperature, fixed, °C:	-50 - +90 °C
Permitted outer cable temperature, moved, °C:	-35 - +80 °C
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.

BiTmining[®] (N)TSCGEWUEU-TR 3.6/6 kV

Nominal voltage U_o: 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 _{bl} [A]	I _k [kA]	L _b [mH/km]	CI [μF/km]	Ø [mm]	F _{zv} [N]	Cu	G [kg]
054813	03x35+3x25/3	0.565	162	4.48	0.34	0.39	49	1575	1248	3222
054831	03x35+2x16+1x10ST	0.565	162	4.5			49	1575	1411	3291
054832	03x70+2x35+1x10ST	0.277	250	9			61	3150	2842	5722
054833	03x120+2x35+1x10ST	0.164	352	15.4			65	5400	4224	7220

BiTmining[®] (N)TSCGEWUEU-TR 6/10 kV

Nominal voltage U_o: 6 kV
Nominal voltage U: 10 V
Maximum permitted operating voltage in three-phase systems: 12 kV
Test voltage: 17 kV

part no.	part name	RI [Ohm/km]	I _{bl} [A]	I _k [kA]	L _b [mH/km]	CI [μF/km]	Ø [mm]	F _{zv} [N]	Cu	G [kg]
054009	03x50+3x25/3	0.393	202	6.4	0.33	0.39	56	2250	1680	4246
053915	03x95+3x50/3	0.21	301	12.16	0.3	0.49	65	4275	3216	6435
054010	03x150+3x70/3	0.132	404	19.2	0.28	0.58	73	6750	4992	8892

BiTmining[®] (N)TSCGEWUEU-TR 12/20 kV

Nominal voltage U_o: 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]	I _k [kA]	L _b [mH/km]	CI [μF/km]	Ø [mm]	F _{zv} [N]	Cu	G [kg]
053349	3x70 + 3x35/3	0.277	265	8.96	0.35	0.3	78	3150	2352	6837

RI	Conductor resistance
I _{bl}	Ampacity in air (30 °C)
I _k	Short-circuit current (1 s)
L _b	Specific inductivity
CI	Specific capacity
Ø	outer diameter approx.
F _{zv}	Tensile strength (during installation)
Cu	Copper weight (GER)
G	net weight per 1000