



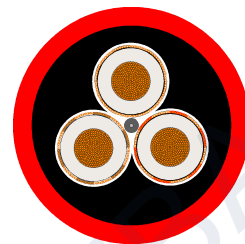
TEBAOFLEX CABLE

DATA SHEET

Mining&Industrial cable

(N)TSCGECEWÖU

3.6/6 kV and 6/10 kV cable



APPLICATION

Flexible cable for fixed energy distribution in mines and alongside material handling equipment. Suitable for indoor and outdoor installations where reliable medium-voltage power supply, mechanical durability and flame-retardant performance are required. Designed for demanding mining and industrial environments with robust rubber insulation and sheath materials.

CONSTRUCTION

Component	Description
Phase conductor	Class 5 tinned copper conductor
Insulation	Rubber compound
Semi-conductive layers	Semi-conductive tape over the conductor, plus inner and outer semi-conductive rubber layers on the insulation
Protective earth conductor	Individual copper wire braid
Central filler	Rubber compound on a textile polyester support
Inner sheath	Rubber compound Type GM1b
Outer sheath	Rubber compound Type 5GM3
Sheath colour	Red

CHARACTERISTICS

- Flexible medium-voltage cable for fixed energy distribution in mines.
- Flame retardant according to IEC/EN 60332-1-2.
- Suitable for indoor and outdoor mining and industrial installations.
- Robust rubber insulation and sheath materials for demanding conditions.

OPERATING CHARACTERISTICS

Parameter	Value
Voltage rating U_0/U	3.6/6 kV; 6/10 kV
Test voltage	11 kV for 3.6/6 kV; 17 kV for 6/10 kV
Ambient temperature	Fixed -90 °C to +90 °C
Maximum short circuit temperature	+250 °C
Minimum bending radius	6 x overall diameter fixed

STANDARDS

Parameter	Value
Cable standards	VDE 0250 Part 813, HD 22.16, VDE 0295, EN 60228
Flame retardant	IEC/EN 60332-1-2
Regulatory compliance	RoHS Directive ; REACH EC

PACKING

Standard length cable packing on drums; other packing and delivery forms available on request.

TECHNICAL DATA

DIMENSIONS

Values are technical parameters only. Cable dimensions may vary due to manufacturing tolerances.

Voltage kV	Cores	Phase mm2	Earth mm2	Cond. dia. mm	Min OD mm	Max OD mm	Tensile N	Weight kg/km
3.6/6	3+3	25	25/3E	6.8	43.9	45.6	1125	2870
3.6/6	3+3	35	25/3E	7.8	45.4	47.1	1575	3230
3.6/6	3+3	50	25/3E	9.4	48.5	50.3	2250	3860
3.6/6	3+3	70	35/3E	11.2	54.1	55.9	3150	5010
3.6/6	3+3	95	50/3E	12.7	58.4	60.2	4257	6150
3.6/6	3+3	120	70/3E	14.4	62.5	64.8	5400	7450
3.6/6	3+3	150	70/3E	16.3	68.9	71.3	6750	8980
3.6/6	3+3	185	90/3E	17.6	71.9	74.3	8325	10290
6/10	3+3	25	25/3E	6.8	43.9	46.2	1125	2910
6/10	3+3	35	25/3E	7.8	45.4	47.7	1575	3270
6/10	3+3	50	25/3E	9.4	48.5	50.9	2250	3900
6/10	3+3	70	35/3E	11.2	54.1	56.5	3150	5050
6/10	3+3	95	50/3E	12.7	58.4	60.8	4257	6190
6/10	3+3	120	70/3E	14.4	62.5	65.5	5400	7490
6/10	3+3	150	70/3E	16.3	68.9	72	6750	9020
6/10	3+3	185	90/3E	17.6	71.9	75	8325	10330

CURRENT CARRYING CAPACITY

Area mm2	Floor A	Air A	1 layer	2 layer	3 layer	4 layer	5 layer	6 layer	7 layer
25	131	138	105	80	64	55	50	35	29
35	162	170	130	99	79	68	62	44	36
50	202	212	162	123	99	85	77	55	44
70	250	263	200	153	123	105	95	68	55
95	301	316	241	184	147	126	114	81	66
120	352	370	282	215	172	148	134	95	77
150	404	424	323	246	198	170	154	109	89
185	461	484	369	281	226	194	175	124	101

Ambient temperature of 30 °C.

VOLTAGE DROP

Area mm2	PF 0.7	PF 0.8	PF 0.9	PF 1.0
25	1.29	1.45	1.6	1.71
35	0.95	1.06	1.16	1.23
50	0.69	0.77	0.83	0.87
70	0.51	0.56	0.6	0.61
95	0.41	0.45	0.47	0.47
120	0.34	0.36	0.38	0.36
150	0.29	0.31	0.32	0.29
185	0.25	0.27	0.27	0.24

ELECTRICAL DATA

DE-RATING FACTORS

Ambient temp.	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C	65°C	70°C	75°C	80°C
De-rating factor	1.15	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82	0.76	0.71	0.65	0.58	0.50	0.41

NOTES

- Current carrying capacity values are stated for the operating conditions shown above.
- Cable dimensions may vary due to manufacturing tolerances.

CERTIFICATIONS



TEBAOFLEX CABLE