



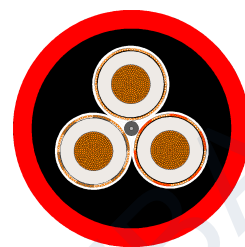
TEBAOFLEX CABLE

DATA SHEET

Mining&Industrial cable

(N)TSCGECEWÖU

8.7/15 kV and 12/20 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
Outer sheath	Rubber compound
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	8.7/15 kV; 12/20 kV
Test voltage	24 kV for 8.7/15 kV; 29 kV for 12/20 kV
Ambient temperature	Fixed -40 °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
8.7/15	3+3	25	25/3E	6.8	47.3	49	1125	3200
8.7/15	3+3	35	25/3E	7.8	48.8	50.6	1575	3570
8.7/15	3+3	50	25/3E	9.4	53.7	55.5	2250	4440
8.7/15	3+3	70	35/3E	11.2	57.5	59.3	3150	5410
8.7/15	3+3	95	50/3E	12.7	60.8	63.1	4275	6480
8.7/15	3+3	120	70/3E	14.4	66.8	69.1	5400	8060
8.7/15	3+3	150	70/3E	16.3	71.5	73.9	6750	9370
12/20	3+3	25	25/3E	6.8	49.8	51.6	1125	3450
12/20	3+3	35	25/3E	7.8	51.3	53.1	1575	3810
12/20	3+3	50	25/3E	9.4	56.3	58.1	2250	4740
12/20	3+3	70	35/3E	11.2	60.1	61.9	3150	5730
12/20	3+3	95	50/3E	12.7	63.3	65.6	4275	6810
12/20	3+3	120	70/3E	14.4	69.3	71.7	5400	8420

CURRENT CARRYING CAPACITY

Area mm2	Floor A	1 layer	2 layer	3 layer	4 layer	5 layer	6 layer	7 layer
25	139	111	85	68	58	53	38	31
35	172	138	105	84	72	65	46	38
50	216	173	132	106	91	82	58	48
70	265	212	162	130	111	101	72	58
95	319	255	195	156	134	121	86	70
120	371	297	226	182	156	141	100	82
150	428	342	261	210	180	163	116	94

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

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