



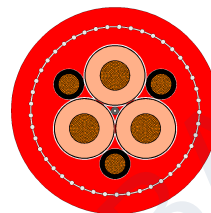
TEBAOFLEX CABLE

DATA SHEET

Mining&Industrial cable

NTSCGEWÖU

3.6/6 kV to 20/35 kV flexible tunnel cable



APPLICATION

Flexible medium-voltage cable for connecting electrical equipment on large material-handling machines used in mining and tunnelling, including excavators, cranes and dumpers. The flexible, reinforced design permits equipment movement during operation and supports demanding mobile power supply service where bending, torsion and repeated direction changes occur.

CONSTRUCTION

Component	Description
Conductor	Electrolytic stranded tinned copper wire, class 5 according to DIN VDE 0295
Insulation	EPR compound type 3GI3
Electrical field control	Inner and outer semi-conductive rubber layers
Protective-earth conductor	Tinned copper conductor with semi-conductive layer
Core arrangement	Three main conductors laid up with three control cores in the outer interstices
Inner sheath	EPR compound type GM1b
Reinforcement	Embedded braid of anti-torsion synthetic threads
Outer sheath	Elastomer compound type 5GM5, red

CHARACTERISTICS

- Flexible power cable for moving mining and tunnelling equipment.
- Suitable for excavators, cranes, dumpers and large material-handling machines.
- Anti-torsion synthetic thread reinforcement for mobile duty.
- Flame retardant according to IEC 60332-1 and DIN EN 60332-1-2.
- Oil resistant according to IEC 60811-2-1.

TECHNICAL INFORMATION

Parameter	Unit	Value
Cable standard		DIN VDE 0250-813
General requirements		DIN VDE 0250-1
Guide for use / bending radius		DIN VDE 0298-3
Current carrying capacities		DIN VDE 0298-4
Rated voltage U_0/U	kV	3.6/6; 6/10; 8.7/15; 12/20; 18/30
AC test voltage	kV	11; 17; 24; 29; 43
Maximum operating voltage AC	kV	4.2/7.2; 6.9/12; 10.4/18; 13.9/24; 20.8/36
Working temperature - fixed	°C	-40 to +90
Working temperature - mobile	°C	-25 to +90
Maximum tensile load	N/mm ²	15
Maximum torsion / travel speed		25 deg/m; max. 30 m/min
Minimum distance for direction change		20 x D

TECHNICAL DATA

DIMENSIONS AND WEIGHT

Dimensions and approximate weights by rated-voltage group.

Number of cores x nominal cross section (No. x mm2)	Overall diameter min.-max. mm	Approx. weight kg/km
3.6/6 kV		
3x25 + 3x25/3	41.8-45.0	2530
3x35 + 3x25/3	44.2-48.9	2900
3x50 + 3x25/3	48.5-51.4	3600
3x70 + 3x35/3	52.6-55.6	4400
3x95 + 3x50/3	55.7-58.8	5630
3x120 + 3x70/3	59.6-65.9	6200
6/10 kV		
3x25 + 3x25/3	43.6-48.1	2600
3x35 + 3x25/3	45.6-50.4	2980
3x50 + 3x25/3	48.3-51.4	3720
3x70 + 3x35/3	53.4-59.1	4510
3x95 + 3x50/3	57.1-63.2	5720
3x120 + 3x70/3	63.0-69.7	6300

NOTES

- Minimum and maximum overall diameters are stated in millimetres. - Cable weights are approximate values stated in kilograms per kilometre.

TECHNICAL DATA

DIMENSIONS AND WEIGHT

Dimensions and approximate weights by rated-voltage group.

Number of cores x nominal cross section (No. x mm2)	Overall diameter min.-max. mm	Approx. weight kg/km
8.7/15 kV		
3x25 + 3x25/3	48.1-53.2	3675
3x35 + 3x25/3	51.8-57.3	4415
3x50 + 3x25/3	55.5-61.4	5135
3x70 + 3x35/3	58.0-64.1	6005
3x95 + 3x50/3	63.4-70.1	7200
3x120 + 3x70/3	67.5-74.6	8700
12/20 kV		
3x25 + 3x25/3	51.1-55.3	4460
3x35 + 3x25/3	54.4-58.2	4990
3x50 + 3x25/3	59.4-63.6	5740
3x70 + 3x35/3	64.2-68.4	6950
3x95 + 3x50/3	69.6-73.8	7870
3x120 + 3x70/3	73.6-77.8	9425
NOTES		

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TECHNICAL DATA

DIMENSIONS AND WEIGHT

Dimensions and approximate weights by rated-voltage group.

Number of cores x nominal cross section (No. x mm2)	Overall diameter min.-max. mm	Approx. weight kg/km
18/30 kV		
3x25 + 3x25/3	66.0-72.8	6360
3x35 + 3x25/3	68.0-75.0	6925
3x50 + 3x25/3	71.6-79.1	7800
3x70 + 3x35/3	75.8-83.7	9140
3x95 + 3x50/3	79.4-87.7	10100
3x120 + 3x70/3	85.3-94.2	12260
20/35 kV		
3x35 + 3x25/3	75.7-83.6	8400
3x50 + 3x25/3	79.5-87.8	9360
3x70 + 3x35/3	82.0-90.6	10400
3x95 + 3x50/3	87.3-96.4	11770
3x120 + 3x70/3	91.4-101.1	13680

NOTES

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CERTIFICATIONS

