



TEBAOFLEX CABLE

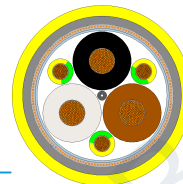
DATA SHEET

Mining&Industrialcable

(N)SSHCOEU

0.6/1 kV cable for variable frequency converter

TUNNELLING | CABLES FOR SEMI-FIXED INSTALLATION



APPLICATION

Suitable for fixed installation and flexible operation as motor power supply cable for frequency converter controlled drives in mining, construction sites and similar applications with heavy mechanical stresses.

CABLE DESIGN

Component	Description
Conductor	Finely stranded tinned copper conductor, class 5 according to DIN EN 60228
Insulation	EPR compound, type 3GI3
Core identification	Natural coloring with black figures
Core arrangement	Three power cores laid up with protective earth conductors split into three outer interstices
Screen	EMC optimized concentric braid of tinned copper wires
Inner sheath	Vulcanized EPR rubber compound, type GM1B
Outer sheath	Synthetic elastomer compound e.g. CR, compound type 5GM5, yellow

CHARACTERISTICS

- Suitable for fixed installation and flexible operation as motor power supply cable.
- Designed for frequency converter controlled drives in mining and construction applications.
- Suitable for heavy mechanical stresses and material handling equipment.
- Can be applied in water up to 40 °C, approximately up to 10 m depth.

OPERATING CHARACTERISTICS

Parameter	Value
Standard	Based on DIN VDE 0250 part 812
Certifications / approvals	MSHA ; EAC certificate
Rated voltage	$U_0/U = 0.6/1$ kV, also permitted for $U_0/U = 640/1140$ V
Max. operating voltage AC	0.7/1.2 kV
Max. operating voltage DC	0.9/1.8 kV
AC test voltage - main cores	5 kV, 5 min.
Fire performance	IEC 60332-1-2
Oil resistance	IEC 60811-404
Weather resistance	Outdoor and indoor use, resistant to ozone and moisture
Thermal ratings	Conductor 90 °C; short circuit 250 °C
Ambient temperature	Fixed -40 °C to +90 °C; fully flexible -25 °C to +90 °C
Mechanical ratings	Tensile load 15 N/mm ² ; torsional stress +/- 25 °/m; bending radii acc. to DIN VDE 0298 part 3

TECHNICAL DATA

DIMENSIONS AND ELECTRICAL CHARACTERISTICS

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

Cross-section mm ²	Conductor diameter max mm	OD min mm	OD max mm	Weight kg/km	Tensile force N	Resistance at 20 °C Ω/km	Capacitance μF/km	Inductance mH/km	Current capacity A	Short circuit kA
3 x 16 + 3 x 2.5	5.4	24.4	27.4	1190	720	1.24	0.42	0.26	99	2.29
3 x 25 + 3 x 4	6.3	28.2	31.2	1680	1125	0.795	0.42	0.26	131	3.58
3 x 35 + 3 x 16/3	7.5	30.5	33.5	2000	1575	0.565	0.49	0.25	162	5.01
3 x 50 + 3 x 25/3	8.9	36.0	39.0	2820	2250	0.393	0.51	0.25	202	7.15
3 x 70 + 3 x 35/3	10.6	41.2	44.2	3800	3150	0.277	0.59	0.24	250	10.01
3 x 95 + 3 x 50/3	12.1	45.7	48.7	4760	4275	0.210	0.60	0.24	301	13.59
3 x 120 + 3 x 70/3	14.1	48.7	52.7	5890	5400	0.164	0.69	0.23	352	17.16
3 x 150 + 3 x 70/3	16.0	55.7	59.7	7230	6750	0.132	0.70	0.23	404	21.45
3 x 185 + 3 x 95/3	17.8	60.4	64.4	8640	8325	0.108	0.71	0.23	461	26.46
3 x 240 + 3 x 120/3	20.2	68.2	72.2	11100	10800	0.0817	0.73	0.23	540	34.32

NOTES

- Current carrying capacity values are nominal for rubber cables laid on a surface at 30 °C ambient temperature.
- For derating factors, refer to the applicable technical appendix and VDE 0298-4 table 15.
- Values are technical parameters only and may vary due to manufacturing tolerances.

CERTIFICATIONS



TEBAOFLEX CABLE