



TEBAOFLEX CABLE

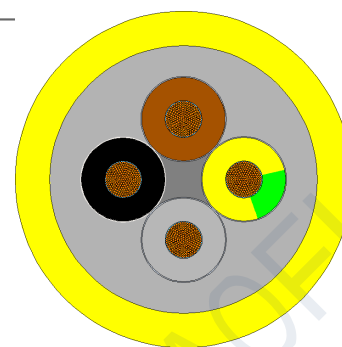
DATA SHEET

Mining&Industrial cable

NSHXOEU

0.6/1 kV flexible rubber cable for mining and industries

Flexible rubber cable for semi-flexible installation under medium mechanical stress.



APPLICATION

For flexible use and fixed installation in underground mining applications, tunnel building, open-cast mining, quarries, construction sites and similar applications with medium mechanical stresses. Suitable indoors and outdoors, in explosion-hazard areas, industry and agriculture. The cable can be used permanently in waste water up to 40 deg C and in industrial, cooling, surface, rain and mixed water; groundwater and seawater use is more limited.

CONSTRUCTION

Component	Description
Conductor	Tinned copper, finely stranded class 5 according to DIN VDE 0295 / IEC 60228
Insulation	EPR rubber compound type 3GI3
Core identification	Up to 5 cores coloured according to DIN VDE 0293-308; from 6 cores light with black numbers
Inner sheath	EPR rubber compound type GM1B, not for single-core cables
Outer sheath	EVA-based rubber compound type 5GM3, yellow

OPERATING CHARACTERISTICS

Property	Value
Rated voltage U ₀ /U	0.6/1 kV
Max. permissible operating voltage AC	0.7/1.2 kV
Max. permissible operating voltage DC	0.9/1.8 kV
AC test voltage, main cores	3 kV / 5 min.
AC test voltage, control cores	2 kV
Max. conductor operating temperature	+90 deg C
Max. conductor short-circuit temperature	+250 deg C
Fixed ambient temperature	-40 deg C to +90 deg C
Fully flexible ambient temperature	-25 deg C to +90 deg C
Max. water temperature	+40 deg C
Max. tensile load on conductor	15 N/mm ²
Minimum bending radius	According to DIN VDE 0298 part 3

STANDARDS AND TESTS

Item	Standard / property
Construction	Based on DIN VDE 0250 part 812
Flame propagation	DIN EN 60332-1-2
Resistance to oil	DIN EN 60811-2-1
Water resistance	EN 50525-2-21

TECHNICAL DATA

DIMENSIONS AND MECHANICAL DATA

Type	No. cores x cross-section	Conductor diameter max. (mm)	Outer diameter min. (mm)	Outer diameter max. (mm)	Bending radius fixed min. (mm)	Weight (kg/km)	Tensile force max. (N)
NSHXOEU-O	1 x 300	22.9	34.5	36.8	147	3330	4500
NSHXOEU-O	1 x 400	26.2	38.5	40.5	162	4210	6000
NSHXOEU-J	3 x 2.5	2	12	13.6	54	250	113
NSHXOEU-J	3 x 50 / 25	8.8	38.1	41.1	164	2930	3000
NSHXOEU-J	3 x 70 / 35	10.6	42.3	45.3	181	3790	4200

TECHNICAL DATA - CONTINUED

DIMENSIONS AND MECHANICAL DATA - CONTINUED

Type	No. cores x cross-section	Conductor diameter max. (mm)	Outer diameter min. (mm)	Outer diameter max. (mm)	Bending radius fixed min. (mm)	Weight (kg/km)	Tensile force max. (N)
NSHXOEU-J	3 x 95 / 50	12.1	48.2	52.2	209	5170	5700
NSHXOEU-J	3 x 120 / 70	14.2	54.6	58.6	234	6482	7200
NSHXOEU-J	3 x 150 / 70	16.1	60	64	256	7568	9000
NSHXOEU-J	3 x 185 / 95	17.9	67.3	71.3	285	9328	11100
NSHXOEU-J	4 x 2.5	2	14.2	16	64	310	150
NSHXOEU-J	5 x 1.5	1.6	12.7	14.3	57	250	113
NSHXOEU-J	5 x 2.5	2	14.7	16.7	67	380	188
NSHXOEU-J	5 x 4	2.4	16.5	18.5	74	500	300
NSHXOEU-J	5 x 6	2.9	18.6	20.6	82	660	450
NSHXOEU-J	5 x 10	3.9	22.5	24.5	98	1000	750
NSHXOEU-J	5 x 16	5.4	26.7	29.7	119	1440	1200
NSHXOEU-J	5 x 25	6.3	31.7	34.7	139	2110	1875
NSHXOEU-J	5 x 35	7.5	36.9	39.9	160	2743	2625

ELECTRICAL DATA

Type	No. cores x cross-section	Conductor resistance at 20 deg C max. (Ohm/km)	Operating capacitance nom. (uF/km)	Inductance nom. (mH/km)	Current carrying capacity (A)	Short-circuit current conductor (kA)
NSHXOEU-O	1 x 300	0.0654	0.76	0.23	843	42.9
NSHXOEU-O	1 x 400	0.0495	0.76	0.24	1024	57.2
NSHXOEU-J	3 x 2.5	8.21	0.23	0.32	30	0.36
NSHXOEU-J	3 x 50 / 25	0.393	0.5	0.25	202	7.15
NSHXOEU-J	3 x 70 / 35	0.277	0.59	0.24	250	10.01
NSHXOEU-J	3 x 95 / 50	0.21	0.6	0.24	301	13.59
NSHXOEU-J	3 x 120 / 70	0.164	0.69	0.23	352	17.16
NSHXOEU-J	3 x 150 / 70	0.132	0.7	0.23	404	21.45
NSHXOEU-J	3 x 185 / 95	0.108	0.71	0.23	461	26.46
NSHXOEU-J	4 x 2.5	8.21	0.23	0.32	30	0.36
NSHXOEU-J	5 x 1.5	13.7	0.22	0.33	23	0.21
NSHXOEU-J	5 x 2.5	8.21	0.23	0.32	30	0.36
NSHXOEU-J	5 x 4	5.09	0.26	0.31	41	0.57
NSHXOEU-J	5 x 6	3.39	0.3	0.29	53	0.86
NSHXOEU-J	5 x 10	1.95	0.32	0.28	74	1.43
NSHXOEU-J	5 x 16	1.24	0.42	0.26	99	2.29
NSHXOEU-J	5 x 25	0.795	0.42	0.26	131	3.58
NSHXOEU-J	5 x 35	0.565	0.49	0.25	162	5.01

Nominal current carrying capacity is for rubber cables laid on a surface at 30 deg C ambient temperature. For derating factors, use the applicable technical appendix tables.

CERTIFICATIONS



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