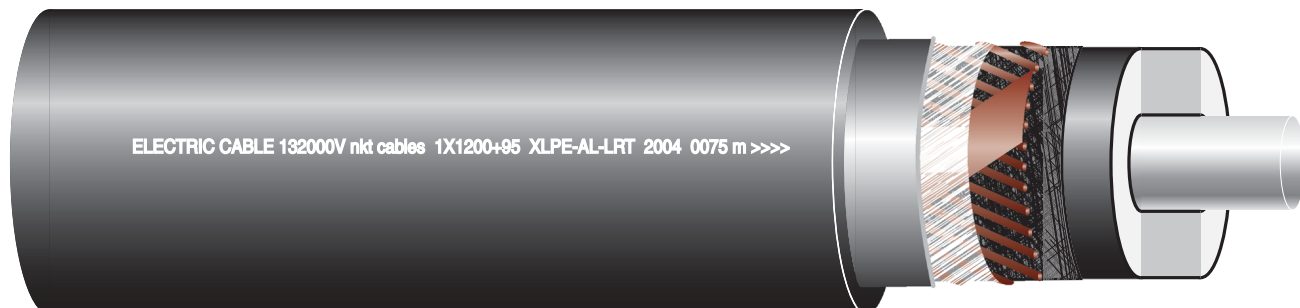


High voltage

132 kV single core cable XLPE-AL-LRT

Halogen free



Application

Application	132 kV A.C. Electricity transmission cable.
Conductor temperature	Max. 90°C
Short circuit temperature	Max. 250°C
Installation temperature	Min. -15°C
Min. radius of bend	15 x D
Max. pulling tension	Directly on conductor 30 N/mm ² of total conductor cross section.

Construction

Conductor	400-800 mm ² circular solid aluminium conductor 1000-2000 mm ² circular stranded sectional aluminium conductor.
Conductor screen	Extruded semi-conducting compound
Insulation	XLPE
Insulation screen	Extruded semi-conducting compound
Winding	Semi-conducting queld-tape
Screen	Concentric layer of copper wires with a copper tape applied in the opposite direction.
Water barrier	Water sweallable tape + aluminium foil.
Outer sheath	PE
Colour of sheath	Black

Technical

Standard	IEC 60840
Marking of sheath	ELECTRIC CABLE 132000 V nkt cables 'Dimension' 'Year' 'Metres' (additional text on request)
Rated voltage	132 kV AC between phases
Standard length	Available on request
Screen sizes	Other screen sizes on request
Outer sheath	Semi-conducting outer layer on request
Cable design	Project specified designs on request

Nominal area of conductor and screen	Diameter of conductor nominal	Radial thickness of insulation	Standard length	Outer dimension max. (D)	Approx weight	EAN-nr
mm ²	mm	mm	m	mm	kg pr. km	
1X400+95	21.9	21	On request	86.5	6500	
1x500+95	25.0	19	-	86.0	6700	
1x630+95	28.3	18	-	87.5	7100	

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Nominal area of conductor and screen	Diameter of conductor nominal	Radial thickness of insulation	Standard length	Outer dimension max. (D)	Approx weight	EAN-nr
mm ²	mm	mm	m	mm	kg pr. km	
1x800+95	32.2	18	-	91.5	7800	
1x1000+95	36.0	17	-	95.5	8400	
1x1200+95	39.0	16	-	96.5	8900	
1x1600+95	45.0	16	-	103.0	10500	
1x2000+95	50.6	15	-	107.0	11800	

Mechanical properties

Area of conductor: Solid circular	mm ²	400	500	630	800	1000	1200	1600	2000
Area of conductor: Stranded sectional	mm ²								
Diameter of conductor, nom.	mm	21.9	25.0	28.3	32.2	36.0	39.2	45.0	50.6
Insulation thickness, nom.	mm	21	19	18	18	17	16	16	15
Diameter over insulation, nom.	mm	66.4	66.0	67.3	70.6	73.6	74.8	80.6	84.2
Area of copper screen, nom.	mm ²	95	95	95	95	95	95	95	95
Diameter over screen, nom.	mm	74.1	73.7	75.0	78.3	81.7	82.9	88.7	92.3
Thickness of sheath, nom.	mm	3.6	3.6	3.7	3.8	3.9	3.9	4.1	4.3
Diameter over sheath, nom.	mm	82.1	81.6	83.0	86.5	90.2	91.5	97.9	101.6
Diameter over sheath, max.	mm	86.5	86.0	87.5	91.5	95.5	96.5	103.0	107.0
weight of cable, appr.	kg/m	6.5	6.7	7.1	7.8	8.4	8.9	10.5	11.8
Radius of bend, min.	mm	1250	1200	1250	1300	1400	1400	1500	1550
Pulling tension on the cable.	kN	13.5	15.8	18.9	23.1	27.9	32.7	42.3	51.9

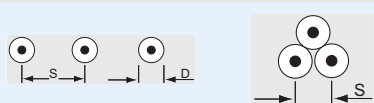
Electrical properties

Area of conductor: solid circular	mm ²	400	500	630	800	1000	1200	1600	2000
Area of conductor: Stranded sectional	mm ²								
Resistance, DC, at 20°C, max.	Ω/km	0.0778	0.0605	0.0469	0.0367	0.0291	0.0247	0.0186	0.0149
Capacitance, max.	μF/km	0.14	0.6	0.18	0.19	0.23	0.25	0.28	0.32
Short circuit rating for 1 sec. Conductor with initial temperature 90°C and final temperature 250°C	kA	37.8	47.2	59.5	75.6	94.5	113.4	151.2	189.0
Short circuit rating for 1 sec. Screen with final screen temperature 300°C	kA	19	19	19	19	19	19	19	19

Current carrying capacity

G) Continuous current carrying capacity for maximum conductor temperature 90°C: Direct in ground at 15°C, dept 1,0 m, thermal resistivity 1,2° Km/W.

A) Continuous current carrying capacity for maximum conductor temperature 90°C: In free air at. 25°C.

Compacted conductor area	mm ²	400	500	630	800	1000	1200	1600	2000
Cable formation									
									
G)									
Screens bonded at both ends									
trefoil formation, close together S = D	A	504	570	640	715	780	825	900	955
flat formation, close together S = D	A	480	535	590	645	695	725	775	800
flat formaton, free distance between cable S = D + 70 mm	A	470	520	565	610	650	675	720	740

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Current carrying capacity

G)Continuous current carrying capacity for maximum conductor temperature 90°C: Direct in ground at 15°C, dept 1,0 m, thermal resistivity 1,2° Km/W.

A)Continuous current carrying capacity for maximum conductor temperature 90°C: In free air at. 25°C.

Compacted conductor area	mm ²	400	500	630	800	1000	1200	1600	2000
Screens bonded at a single point									
trefoil formation, close together S = D	A	525	600	685	770	860	920	1035	1120
flat formation, close together S = D	A	575	590	670	755	835	890	1000	1070
flat formaton, free distance between cable S = D + 70 mm	A	550	630	720	820	920	990	1120	1220
A)									
Screens bonded at both ends									
trefoil formation, close together S = D	A	670	775	885	1005	1135	1220	1380	1485
flat formation, close together S = D	A	650	740	840	935	1030	1095	1210	1280
flat formaton, free distance between cable S = D + 70 mm	A	660	745	830	920	1010	1065	1170	1230
Screens bonded at a single point									
trefoil formation, close together S = D	A	690	800	930	1070	1220	1330	1530	1680
flat formation, close together S = D	A	700	810	935	1070	1215	1320	1510	1650
flat formaton, free distance between cable S = D + 70 mm	A	745	870	1015	1170	1350	1485	1740	1930
Reactance at 50 Hz									
trefoil formation, close together S = D	Ω/km	0.14	0.13	0.13	0.12	0.12	0.11	0.11	0.10
flat formation, close together S = D	Ω/km	0.15	0.14	0.13	0.13	0.12	0.12	0.11	0.11
flat formaton, free distance between cable S = D + 70 mm	Ω/km	0.17	0.16	0.15	0.15	0.14	0.13	0.13	0.12



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