



127/220 (245) kV

XLPE Insulated with Cu Wire + Al Tape

Continuous Current Rating for Single Circuit (A)

COPPER CONDUCTOR

Cross-Sectional Area (mm ²)		400	500	630	800	1000	1200	1600	2000	2500
Direct Buried		696	795	909	1026	1143	1316	1469	1622	1776
Pipe		680	778	890	1006	1126	1299	1455	1614	1776
In Air	Trefoil	771	886	1020	1159	1302	1540	1738	1938	2142
	Flat (S=3D)	923	1072	1254	1437	1633	1905	2169	2434	2723

HDPE pipe diameter = 2D

ALUMINIUM CONDUCTOR

Cross-Sectional Area (mm ²)		400	500	630	800	1000	1200	1600	2000	2500
Direct Buried		545	627	720	820	925	1040	1195	1335	1475
Pipe		534	614	704	805	910	1026	1184	1328	1473
In Air	Trefoil	607	703	812	936	1064	1222	1426	1610	1801
	Flat (S=3D)	726	849	993	1152	1319	1504	1764	2004	2258

HDPE pipe diameter = 2D



CONDUCTOR (Cu)	Cross-Sectional Area (mm ²)	400	500	630	800	1000	1200	1600	2000	2500
	Shape	Circular	Circular	Circular	Circular	Circular	Segmentalled	Segmentalled	Segmentalled	Segmentalled
	Diameter (mm)	23,45	26,4	30,25	34	39	43,5	49,5	56	63,5
Thickness of Conductor Screen (mm)		3,3	1,8	1,2	1,2	1,4	1,4	1,5	1,6	1,6
Thickness of Insulation (mm)		23	22	21	21	20	20	20	20	20
Thickness of Insulation Screen (mm)		1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2
Cu-Screen Cross-Sectional Area (mm ²)		150	150	150	150	150	150	150	150	150
Thickness of Outer Sheath (mm)		3,6	3,6	3,7	3,8	3,8	4	4,2	4,6	4,9
Outer Diameter of Cable (mm)		93	91	92	96	99	105	112	119	128
Weight of Cable (kg/m)		10,3	10,9	12,1	14	16,1	18,3	22,4	26,8	32,8
Max. DC Cu Conductor Resistance at 20°C (ohm/km)		0,047	0,0366	0,0283	0,0221	0,0176	0,0151	0,0113	0,009	0,0072
Capacitance (microfarad/km)		0,139	0,143	0,156	0,168	0,191	0,209	0,229	0,252	0,277
Inductance (mH/km)		0,462	0,434	0,408	0,394	0,375	0,365	0,352	0,339	0,33

CONDUCTOR (Al)	Cross-Sectional Area (mm ²)	400	500	630	800	1000	1200	1600	2000	2500
	Shape	Circular	Circular	Circular	Circular	Circular	Segmentalled	Segmentalled	Segmentalled	Segmentalled
	Diameter (mm)	24,25	27,4	30,6	34,8	39	43,5	50,2	56,5	63,5
Max. DC Al Conductor Resistance at 20°C (ohm/km)		0,0778	0,0605	0,0469	0,0367	0,0291	0,0247	0,0186	0,0149	0,0127
Weight of Cable (kg/m)		8,1	8	8,2	9,1	9,9	11,1	12,8	14,7	17