



290/500 (550) kV

XLPE Insulated with Cu Wire + Al Tape

Continuous Current Rating for Single Circuit (A)

COPPER CONDUCTOR

Cross-Sectional Area (mm ²)		800	1000	1200	1600	2000	2500	3000
Direct Buried		983	1095	1255	1354	1537	1754	1933
Pipe		979	1093	1253	1355	1543	1772	1956
In Air	Trefoil	1139	1280	1498	1637	1877	2168	2394
	Flat (S=3D)	1348	1531	1788	1982	2289	2664	2989

HDPE pipe diameter = 2D

ALUMINIUM CONDUCTOR

Cross-Sectional Area (mm ²)		800	1000	1200	1600	2000	2500	3000
Direct Buried		785	885	991	1118	1269	1399	1597
Pipe		782	883	990	1118	1274	1409	1614
In Air	Trefoil	915	1041	1186	1359	1560	1741	2004
	Flat (S=3D)	1079	1236	1412	1635	1897	2122	2470

HDPE pipe diameter = 2D



CONDUCTOR (Cu)	Cross-Sectional Area (mm ²)	800	1000	1200	1600	2000	2500	3000
	Shape	Circular	Circular	Segmentalled	Segmentalled	Segmentalled	Segmentalled	Segmentalled
	Diameter (mm)	34	39	43,5	49,5	56	63,5	71
Thickness of Conductor Screen (mm)		3	2,4	2,7	2	1,6	1,6	1,6
Thickness of Insulation (mm)		33	33	31	30	30	30	30
Thickness of Insulation Screen (mm)		1,2	1,2	1,2	1,2	1,2	1,2	1,2
Cu-Screen Cross-Sectional Area (mm ²)		185	185	185	185	185	185	185
Thickness of Outer Sheath (mm)		4,7	4,8	4,8	4,9	5,3	5,6	5,8
Outer Diameter of Cable (mm)		130	134	136	139	147	155	162
Weight of Cable (kg/m)		19,3	21,7	23,5	27	31,7	37,6	43,8
Max. DC Cu Conductor Resistance at 20°C (ohm/km)		0,0221	0,0176	0,0151	0,0113	0,009	0,0072	0,006
Capacitance (microfarad/km)		0,132	0,14	0,158	0,172	0,187	0,204	0,219
Inductance (mH/km)		0,456	0,434	0,415	0,394	0,379	0,365	0,354

CONDUCTOR (Al)	Cross-Sectional Area (mm ²)	800	1000	1200	1600	2000	2500	3000
	Shape	Circular	Circular	Segmentalled	Segmentalled	Segmentalled	Segmentalled	Segmentalled
	Diameter (mm)	34,8	39	43,5	50,2	56,5	63,5	71
Max. DC Al Conductor Resistance at 20°C (ohm/km)		0,0367	0,0291	0,0247	0,0186	0,0149	0,0127	0,0099
Weight of Cable (kg/m)		14,5	15,4	16,2	17,6	19,3	21,9	24,5