



# 290/500 (550) kV

XLPE Insulated with Cu Wire +Lead Sheath

Continuous Current Rating for Single Circuit (A)

## COPPER CONDUCTOR

Cross-Sectional Area ( mm <sup>2</sup> )		800	1000	1200	1600	2000	2500	3000
Direct Buried		989	1102	999	1363	1547	1757	1945
Pipe		987	1102	998	1367	1557	1775	1973
In Air	Trefoil	1151	1294	1198	1655	1898	2172	2422
	Flat (S=3D)	1356	1540	1421	1991	2303	2666	3006

HDPE pipe diameter = 2D

## ALUMINIUM CONDUCTOR

Cross-Sectional Area ( mm <sup>2</sup> )		800	1000	1200	1600	2000	2500	3000
Direct Buried		789	891	1263	1126	1277	1408	1607
Pipe		787	891	1264	1129	1284	1421	1628
In Air	Trefoil	925	1051	1513	1374	1577	1759	2025
	Flat (S=3D)	1085	1244	1800	1646	1904	2134	2485

HDPE pipe diameter = 2D



CONDUCTOR (Cu)	Cross-Sectional Area (mm <sup>2</sup> )	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 <sup>2</sup> )		185	185	185	185	185	185	185
Thickness of Lead Sheath (mm)		3,2	3,2	3,2	3,2	3,2	3,2	3,2
Thickness of Outer Sheath (mm)		4,9	5	5	5,1	5,5	5,8	6
Outer Diameter of Cable (mm)		137	141	142	145	153	161	168
Weight of Cable (kg/m)		33,6	36,4	38,4	42,3	47,7	54,6	61,5
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)		0,465	0,443	0,424	0,402	0,388	0,373	0,361

CONDUCTOR (Al)	Cross-Sectional Area (mm <sup>2</sup> )	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)		28,8	30,1	31,2	32,9	35,3	38,9	42,2