



# 64/110 (123) kV

## XLPE Insulated with Lead Sheath

Continuous Current Rating for Single Circuit (A)

### COPPER CONDUCTOR

Cross-Sectional Area ( mm <sup>2</sup> )		240	300	400	500	630	800	1000	1200	1600	2000	2500
Direct Buried		545	617	707	806	921	1041	1159	1342	1495	1654	1815
Pipe		522	592	680	778	892	1011	1133	1314	1471	1637	1807
In Air	Trefoil	576	659	764	880	1015	1155	1300	1560	1761	1971	2189
	Flat (S=3D)	715	822	958	1111	1295	1490	1695	2001	2282	2579	2903

HDPE pipe diameter = 2D

### ALUMINIUM CONDUCTOR

Cross-Sectional Area ( mm <sup>2</sup> )		240	300	400	500	630	800	1000	1200	1600	2000	2500
Direct Buried		424	481	554	636	729	832	938	1060	1219	1362	1501
Pipe		406	462	533	614	705	808	916	1038	1200	1347	1491
In Air	Trefoil	450	516	602	700	810	936	1066	1240	1452	1643	1833
	Flat (S=3D)	558	643	754	881	1026	1194	1370	1580	1863	2120	2372

HDPE pipe diameter = 2D



CONDUCTOR (Cu)	Cross-Sectional Area (mm <sup>2</sup> )	240	300	400	500	630	800	1000	1200	1600	2000	2500	
	Shape	Circular	Circular	Circular	Circular	Circular	Circular	Circular	Circular	Segmentalled	Segmentalled	Segmentalled	Segmentalled
	Diameter (mm)	18	20,4	23,45	26,4	30,25	34	39	43,5	49,5	56	63,5	
Thickness of Conductor Screen (mm)		1	1	1	1	1	1	1,4	1,4	1,5	1,6	1,6	
Thickness of Insulation (mm)		15	15	15	14	14	14	14	14	14	14	14	
Thickness of Insulation Screen (mm)		1	1	1	1	1	1	1	1	1	1	1	
Thickness of Lead Sheath (mm)		2,3	2,4	2,5	2,5	2,6	2,7	2,8	2,9	3,1	3,4	3,5	
Thickness of Outer Sheath (mm)		2,9	3	3,1	3,1	3,3	3,4	3,5	3,7	3,9	4,3	4,5	
Outer Diameter of Cable (mm)		65	68	72	73	77	82	87	93	100	109	117	
Weight of Cable (kg/m)		9,4	10,5	12	13	15,1	17,7	20,8	23,7	28,9	35	42,5	
Max. DC Cu Conductor Resistance at 20°C (ohm/km)		0,0754	0,0601	0,047	0,0366	0,0283	0,0221	0,0176	0,0151	0,0113	0,009	0,0072	
Capacitance (microfarad/km)		0,141	0,152	0,165	0,188	0,206	0,224	0,251	0,275	0,304	0,336	0,372	
Inductance (mH/km)		0,446	0,426	0,408	0,387	0,372	0,361	0,347	0,338	0,327	0,318	0,31	

CONDUCTOR (Al)	Cross-Sectional Area (mm <sup>2</sup> )	240	300	400	500	630	800	1000	1200	1600	2000	2500	
	Shape	Circular	Circular	Circular	Circular	Circular	Circular	Circular	Circular	Segmentalled	Segmentalled	Segmentalled	Segmentalled
	Diameter (mm)	18,5	21,1	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)		0,125	0,1	0,0778	0,0605	0,0469	0,0367	0,0291	0,0247	0,0186	0,0149	0,0127	
Weight of Cable (kg/m)		8	8,8	9,8	10,2	11,3	12,8	14,5	16,4	19,5	22,9	26,8	