



87/150 (170) kV

XLPE Insulated with Cu Wire +Lead Sheath

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		706	807	922	1040	1159	1336	1491	1647	1804
Pipe		687	785	900	1018	1139	1316	1476	1637	1803
In Air	Trefoil	779	896	1033	1174	1320	1565	1769	1975	2185
	Flat (S=3D)	951	1105	1286	1476	1679	1960	2235	2516	2812

HDPE pipe diameter = 2D

ALUMINIUM CONDUCTOR

Cross-Sectional Area (mm ²)		400	500	630	800	1000	1200	1600	2000	2500
Direct Buried		554	636	729	832	938	1056	1213	1356	1498
Pipe		539	619	711	814	921	1040	1201	1347	1495
In Air	Trefoil	614	711	823	948	1079	1243	1452	1641	1839
	Flat (S=3D)	748	876	1018	1183	1356	1548	1818	2067	2332

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	Segmental	Segmental	Segmental	Segmental
	Diameter (mm)	23,45	26,4	30,25	34	39	43,5	49,5	56	63,5
Thickness of Conductor Screen (mm)		1,2	1,2	1,2	1,2	1,4	1,4	1,5	1,6	1,6
Thickness of Insulation (mm)		18	18	18	18	18	18	18	18	18
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)		95	95	95	95	95	95	95	95	95
Thickness of Lead Sheath (mm)		2,2	2,4	2,4	2,4	2,5	2,6	2,8	2,9	3,2
Thickness of Outer Sheath (mm)		3,4	3,5	3,6	3,7	3,9	4	4,2	4,6	4,9
Outer Diameter of Cable (mm)		82	86	90	94	100	106	113	120	130
Weight of Cable (kg/m)		13,9	15,9	17,8	20,1	23,3	26,4	31,5	37,1	45,1
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)		0,148	0,159	0,173	0,187	0,207	0,226	0,249	0,274	0,304
Inductance (mH/km)		0,436	0,421	0,404	0,389	0,374	0,363	0,352	0,34	0,33

CONDUCTOR (Al)	Cross-Sectional Area (mm ²)	400	500	630	800	1000	1200	1600	2000	2500
	Shape	Circular	Circular	Circular	Circular	Circular	Segmental	Segmental	Segmental	Segmental
	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)		11,7	13,1	14	15,6	16,8	18,9	22,1	24,8	29,4