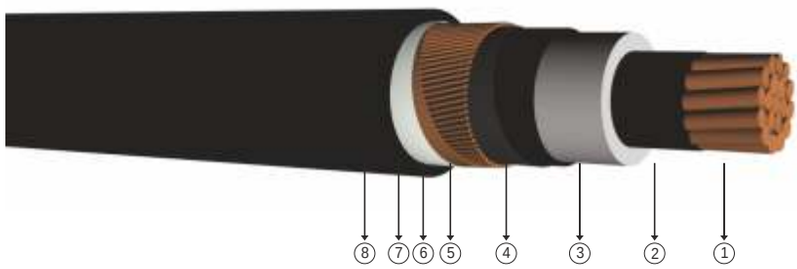
6/10 kV XLPE insulated, single core cables with copper conductor



Code: N2XS2Y

Standards: VDE 0276 - 620

Technical Data

Max. operating temperature : 90 °C
Max. short circuit temperature : 250 °C (max. 5 sec.)
Rated voltage : 6/10 kV

Min. bending radius : 15 x D
D : Cable outer diameter

Application

These are cables with low dielectric losses used in energy networks with sudden load changes. Laid in residential or industrial areas, underground or in ducts.

Construction

1. Stranded copper conductors
2. Inner semi conductive layer
3. XLPE insulation
4. Outer semi conductive layer
5. Semi conductive tape
6. Copper screen
7. Polyester tape
8. PE outer jacket.

DIMENSION AND WEIGHTS			ELECTRICAL PROPERTIES									
Nominal Cross Section	Overall Diameter (approx)	Net Weight (approx)	Delivery Length	DC Conductor Resistance at 20 °C Max	DC Conductor Resistance at 90 °C Max	Operation Inductance		Operation Capacitance	Current Carrying Capacity (A)			
									In ground at 20 °C		In air at 30 °C	
mm²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	*** mH/km	µF/km	***	***	***	***
1x35/16	23,5	768	1000	0,524	0,6707	0,669	0,413	0,223	212	187	231	195
1x50/16	24,5	897	1000	0,387	0,4954	0,644	0,395	0,248	249	220	277	234
1x70/16	26,0	1105	1000	0,268	0,3430	0,613	0,373	0,285	303	269	345	292
1x95/16	27,3	1356	1000	0,193	0,2470	0,588	0,357	0,320	358	321	418	354
1x120/16	29,0	1607	1000	0,153	0,1958	0,570	0,346	0,350	404	364	481	407
1x150/25	30,0	1952	1000	0,124	0,1587	0,552	0,335	0,382	441	405	537	460
1x185/25	32,0	2311	1000	0,0991	0,1268	0,537	0,326	0,415	493	457	612	527
1x240/25	34,3	2867	1000	0,0754	0,0965	0,516	0,314	0,462	563	528	716	621
1x300/25	37,0	3477	1000	0,0601	0,0769	0,500	0,305	0,507	626	593	811	709
1x400/35	39,5	4378	1000	0,0470	0,0602	0,479	0,295	0,573	676	665	901	815
1x500/35	42,8	5389	500	0,0366	0,0468	0,463	0,288	0,631	743	739	1006	921
1x630/35	46,8	6753	500	0,0283	0,0362	0,447	0,280	0,699	820	818	1130	1045

Note : Current carrying capacities are valid under the following conditions;
In ground : 20 °C, 70 cm depth of lay, soil-thermal resistivity 1 K.m/W, load factor 0.7
In air : 30 °C, load factor 1.0
*** : Flat formation, clearance between cables; in air = 1 x Cable outer diameter, in ground = 7 cm
*** : Trefoil formation
Number of system : 1