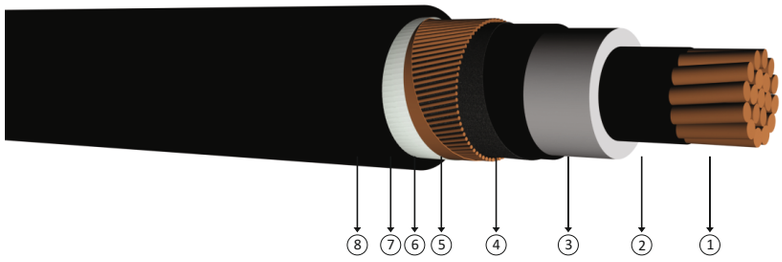
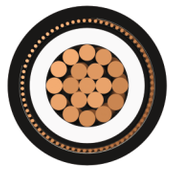
12/20 kV or 12.7/22 kV XLPE insulated, single core cables with copper conductor





Code: N2XS2Y, CU/XLPE/CWS/PE

Standards: IEC 60502 - 2, VDE 0276 - 620, BS 7870-4.10

Technical Data

Max. operating temperature	: 90 °C
Max. short circuit temperature	: 250 °C (max. 5 sec.)
Rated voltage	: 12/20 kV 12.7/22 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	31,0	950	1000	0,524	0,6707	0,678	0,442	0,157	213	189	233	199
1x50/16	32,0	1000	1000	0,387	0,4954	0,652	0,422	0,174	250	223	279	238
1x70/16	34,0	1400	1000	0,268	0,3430	0,621	0,400	0,197	304	273	348	296
1x95/16	35,5	1700	1000	0,193	0,2470	0,597	0,382	0,218	361	325	421	358
1x120/16	37,5	1950	1000	0,153	0,1958	0,578	0,370	0,238	407	368	483	412
1x150/25	34,0	2350	1000	0,124	0,1587	0,561	0,358	0,258	445	410	540	466
1x185/25	41,0	2750	1000	0,0991	0,1268	0,545	0,348	0,278	498	463	615	534
1x240/25	43,5	3300	1000	0,0754	0,0965	0,524	0,335	0,308	569	534	718	627
1x300/25	45,5	3900	1000	0,0601	0,0769	0,508	0,325	0,336	633	601	812	715
1x400/35	49,0	5000	1000	0,0470	0,0602	0,486	0,313	0,377	686	674	904	819
1x500/35	52,5	6000	500	0,0366	0,0468	0,470	0,304	0,413	756	750	1011	927
1x630/35	56,0	7300	500	0,0283	0,0362	0,454	0,295	0,455	842	836	1128	1041

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