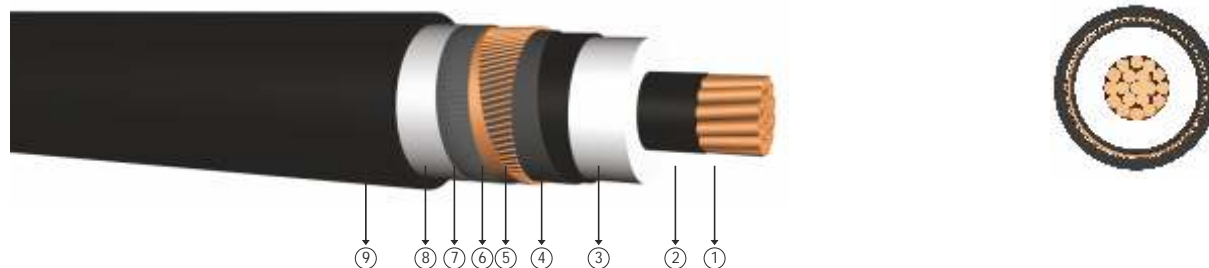




# 12/20 kV XLPE insulated, radial and longitudinally sealed, single core cables with copper conductor



Code: N2XS(FL)2Y

Standards: VDE 0276 - 620

### Technical Data

Max. operating temperature : 90 °C  
 Max. short circuit temperature : 250 °C (max. 5 sec.)  
 Rated voltage : 12/20 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. If the cable gets water inside due to the mechanical damages, swellable tapes prevent the movement of the water inside the cable.

### Construction

- 1 Stranded copper conductors
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive swelling tape
- 6 Copper screen
- 7 Swellable tape
- 8 PE coated aluminium foil.
- 9 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)			
mm <sup>2</sup>	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	** mH/km	µF/km	In ground at 20 °C		In air at 30 °C	
									***	**	***	**
1x35/16	28,9	972	1000	0,524	0,6707	0,678	0,442	0,157	213	189	233	199
1x50/16	30,1	1120	1000	0,387	0,4954	0,652	0,422	0,174	250	223	279	238
1x70/16	31,8	1353	1000	0,268	0,3430	0,621	0,400	0,197	304	273	348	296
1x95/16	33,4	1622	1000	0,193	0,2470	0,597	0,382	0,218	361	325	421	358
1x120/16	34,5	1862	1000	0,153	0,1958	0,578	0,370	0,238	407	368	483	412
1x150/25	35,8	2232	1000	0,124	0,1587	0,561	0,358	0,258	445	410	540	466
1x185/25	37,6	2598	1000	0,0991	0,1268	0,545	0,348	0,278	498	463	615	534
1x240/25	40,0	3186	1000	0,0754	0,0965	0,524	0,335	0,308	569	534	718	627
1x300/25	42,2	3776	1000	0,0601	0,0769	0,508	0,325	0,336	633	601	812	715
1x400/35	45,1	4728	1000	0,0470	0,0602	0,486	0,313	0,377	686	674	904	819
1x500/35	48,6	5784	500	0,0366	0,0468	0,470	0,304	0,413	756	750	1011	927
1x630/35	52,6	7183	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