

12/20 kV or 12,7/22 kV XLPE insulated, round aluminium wire armoured, single core cables with copper conductor



Code: N2XSYR(A)Y, CU/XLPE/CWS/PVC/AWA/PVC

Standards: IEC 60502-2, BS 6622

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 : 20 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 ④ Outer semi conductive layer ⑦ PP tape ⑩ PP tape
- ② Inner semi conductive layer ⑤ Semi conductive tape ⑧ PVC inner sheath ⑪ PVC outer sheath
- ③ XLPE insulation ⑥ Copper screen ⑨ Round aluminium wire

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 (approx)		Operation Capacitance (approx)	Current Carrying Capacity (A)				
mm ²	mm	kg/km	m	Ω/km	Ω/km	*** mH/km	** mH/km	μF/km	In ground at 20°C		In air at 30°C		
									***	**	***	**	
1x35/16	32,6	1482	1000	0,524	0,6707	0,657	0,367	0,123	213	189	233	199	
1x50/16	34,5	1730	1000	0,387	0,4954	0,632	0,351	0,135	250	223	279	238	
1x70/16	36,4	2020	1000	0,268	0,3430	0,601	0,332	0,151	304	273	348	296	
1x95/16	38,1	2330	1000	0,193	0,2470	0,577	0,318	0,166	361	325	421	358	
1x120/16	39,8	2640	1000	0,153	0,1958	0,558	0,308	0,180	407	368	483	412	
1x150/25	41,1	3040	1000	0,124	0,1587	0,541	0,299	0,194	445	410	540	466	
1x185/25	43,0	3465	1000	0,0991	0,1268	0,525	0,292	0,208	498	463	615	534	
1x240/25	46,8	4290	1000	0,0754	0,0965	0,506	0,284	0,229	569	534	718	627	
1x300/25	48,9	4935	500	0,0601	0,0769	0,490	0,279	0,248	633	601	812	715	
1x400/35	52,4	6045	500	0,0470	0,0602	0,471	0,275	0,276	686	674	904	819	
1x500/35	55,8	7185	500	0,0366	0,0468	0,456	0,270	0,301	756	750	1011	927	
1x630/35	56,0	8660	500	0,0283	0,0362	0,440	0,264	0,330	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, gap between cables; in air = 1 x Cable outer diameter, in ground = 7 cm
 ** : Trefoil formation
 Number of system : 1