



Code: CU/XLPE/ATS/HDPE

Standards: VDE 0276 - 632, IEC 60840

Technical Data

Max. operating temperature : 90 °C
 Max. short circuit temperature : 250 °C (max. 5 sec.)
 Rated voltage : 26/45 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. 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 smooth welded aluminium sheath
- 7 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 ²	mm	kg/km	m	ohm/km	ohm/km	*** mH/km	** mH/km	µF/km	In ground at 20 °C		In air at 30 °C	
									***	**	***	**
1x70/16	41,5	1800	1000	0,268	0,3430	0,635	0,439	0,140	306	276	348	299
1x95/16	43,0	2100	1000	0,193	0,2470	0,610	0,419	0,153	363	329	421	362
1x120/16	45,0	2400	1000	0,153	0,1958	0,591	0,405	0,165	410	373	483	416
1x150/25	46,5	2800	1000	0,124	0,1587	0,574	0,342	0,178	449	415	540	469
1x185/25	48,5	3200	1000	0,0991	0,1268	0,557	0,381	0,191	503	468	615	536
1x240/25	51,0	3800	1000	0,0754	0,0965	0,537	0,366	0,209	576	541	718	630
1x300/25	53,0	4450	1000	0,0601	0,0769	0,520	0,354	0,248	641	608	812	717
1x400/35	56,5	5550	1000	0,0470	0,0602	0,499	0,341	0,226	697	684	904	823
1x500/35	60,0	6600	1000	0,0366	0,0468	0,482	0,330	0,274	768	762	1011	929
1x630/35	63,5	7950	1000	0,0283	0,0362	0,466	0,320	0,300	858	847	1128	1043

Note
 In ground : Current carrying capacities are valid under the following conditions;
 : 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