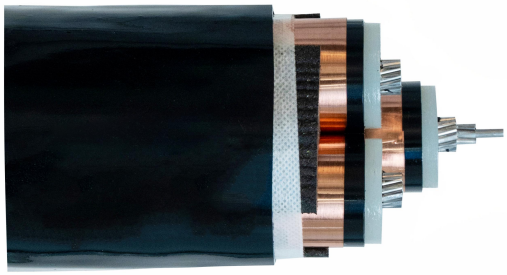
Medium-Voltage Power Cables



12/20 kV XLPE Insulated, Three Core Cables with Aluminum Conductor

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
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 aluminum conductors
② Inner semi-conductive layer
③ XLPE insulation
④ Outer semi conductive layer
⑤ Semi-conductive tape
⑥ Copper tape screen
⑦ Filler
⑧ PVC 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	Operation Inductance (approx)	Operation Capacitance (approx)	Current Carrying Capacity (A)	
mm²	mm	kg/km	m	ohm/km	mH/km	µF/km	In ground at 20 °C	In air at 30 °C
3x35/16	56,5	3500	1000	0,868	0,416	0,141	143	142
3x50/16	59,5	3900	1000	0,641	0,395	0,155	169	169
3x70/16	63	4450	500	0,443	0,373	0,172	206	210
3x95/16	67	5100	500	0,32	0,355	0,191	247	254
3x120/16	71	5700	500	0,253	0,34	0,209	281	294
3x150/25	74,5	6400	500	0,206	0,329	0,225	315	332
3x185/25	78,5	7100	250	0,164	0,319	0,243	356	381
3x240/25	85	8400	250	0,125	0,304	0,273	415	449
3x300/25	90	9500	250	0,1	0,295	0,296	467	510
3x400/35	98	11450	250	0,0778	0,284	0,331	535	585

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
Number of system : 1