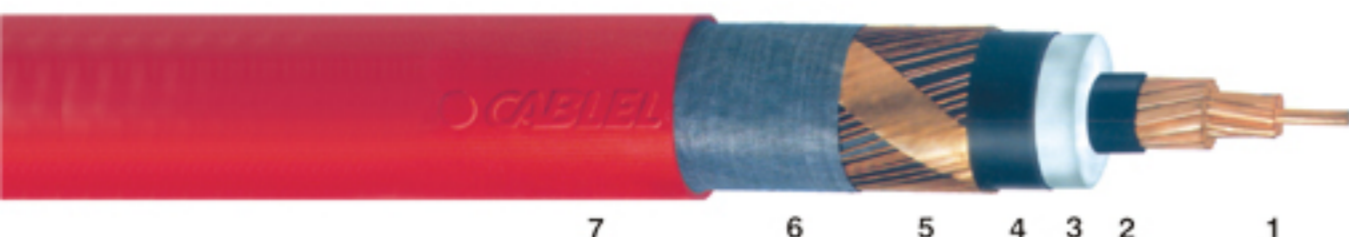


XLPE INSULATED CABLES WITH COPPER WIRE SCREEN AND PVC OVERSHEATH



1. Round stranded compacted conductor*
2. Extruded semi-conductive conductor screen
3. XLPE insulation
4. Extruded semi-conductive conductor screen
5. Copper wires wrapped with a copper tape
laid with an open helix over core
6. Plastic tape
7. PVC oversheath

CABLE TYPE: XLPE/CWS/PVC
NOMINAL VOLTAGE: 130/225 (U_{max}: 245 kV)
SPECIFICATION: IEC 62067

Copper or Aluminium conductor, XLPE insulated, copper wire screened and PVC outsheathed. The conductor and screen can be constructed with protection against longitudinal penetration of water. Additionally the cable screen can be constructed with protection against radial penetration of water by use of Al foil bonded to outsheath.

The outsheath can also consist of MDPE or HDPE compound.

CABLES WITH COPPER CONDUCTOR									
NOMINAL CONDUCTOR CROSS SECTION	NOMINAL INSULATION THICKNESS	NOMINAL COPPER WIRE SCREEN CROSS SECTION	CABLE EXTERNAL DIAMETER (APPROX.)	CABLE NET WEIGHT (APPROX.)	CAPACITANCE	CONTINUOUS CURRENT RATING DIRECT IN GROUND		CONTINUOUS CURRENT RATING IN AIR	
						TREFOIL	FLAT	TREFOIL	FLAT
mm ²	mm	mm ²	mm	kg/km	nF/km	A	A	A	A
400	23,0	140	90	10800	140	610	705	770	920
500	23,0	140	94	12250	150	680	810	890	1060
630	23,0	140	97	14000	160	750	910	1000	1220
800	23,0	140	102	16100	175	930	1020	1180	1400
1000	23,0	140	107	18800	190	1030	1130	1390	1580
1200	23,0	140	111	21000	200	1150	1280	1480	1815
1600	23,0	140	119	25600	225	1290	1470	1700	2140

CABLES WITH ALUMINIUM CONDUCTOR									
NOMINAL CONDUCTOR CROSS SECTION	NOMINAL INSULATION THICKNESS	NOMINAL COPPER WIRE SCREEN CROSS SECTION	CABLE EXTERNAL DIAMETER (APPROX.)	CABLE NET WEIGHT (APPROX.)	CAPACITANCE	CONTINUOUS CURRENT RATING DIRECT IN GROUND		CONTINUOUS CURRENT RATING IN AIR	
						TREFOIL	FLAT	TREFOIL	FLAT
mm ²	mm	mm ²	mm	kg/km	nF/km	A	A	A	A
400	23,0	140	90	8400	140	510	560	630	720
500	23,0	140	94	9100	150	570	640	720	840
630	23,0	140	97	10000	160	675	730	850	980
800	23,0	140	102	10800	175	770	830	980	1120
1000	23,0	140	107	12100	190	850	935	1090	1280
1200	23,0	140	111	13000	200	910	1010	1180	1410
1600	23,0	140	119	15100	225	1020	1145	1340	1640

* For larger cross sections the conductor has a stranded segmental construction (Milliken)

Notes:

- a) The screen cross section can be adjusted to meet client's demands.
- b) Current ratings soil thermal resistivity 1,0 km/w and maximum conductor temperature 90°C. Air temperature 30 °C. Correction factors for different condition are given below.
- c) Trefoil formation (cables touching): Cables single point earthed or cross bonded.
- d) Flat formation: Cables are assumed single point or cross bonded. Cables spacing between cable centres of twice the overall diameter.

Ambient temperature °C:	5	10	15	20	25	30	35	40	45	50
Correction coefficient	1,2	1,17	1,13	1,09	1,04	1,0	0,95	0,9	0,85	0,8

Soil temperature °C:	5	10	15	20	25	30	35	40
Correction coefficient	1,1	1,07	1,03	1,0	0,96	0,92	0,88	0,84

Soil thermal resistivity KM/W:	1,0	1,2	1,5	2,0	2,5
Correction coefficient	1,0	0,93	0,85	0,75	0,69

Laying depth m:	1,0	1,3	1,5	2,0	2,5	3,0
Correction coefficient	1,03	1,0	0,98	0,95	0,93	0,91

Minimum bending radius during installation 30XD
(D = cable overall diameter)