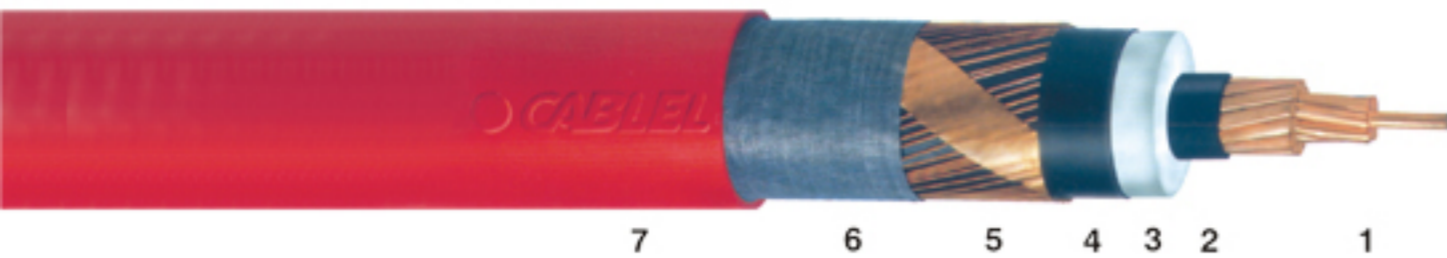


XLPE INSULATED CABLES WITH COPPER WIRE SCREEN AND PVC OVERSHEATH



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 layered with an open helix over core
6. Plastic tape
7. PVC oversheath

CABLE TYPE:
NOMINAL VOLTAGE:
SPECIFICATION:

XLPE/CWS/PVC
230/400 (U_{max}: 420 kV)
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
630	28,0	140	107	15600	140	820	890	1020	1180
800	28,0	140	112	17700	150	900	1000	1140	1340
1000	28,0	140	117	20500	165	990	1100	1280	1510
1200	28,0	140	121	22800	175	1110	1240	1440	1740
1600	28,0	140	129	27500	195	1240	1420	1640	2040

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
630	28,0	140	107	11600	140	660	710	830	940
800	28,0	140	112	12400	150	740	800	940	1080
1000	28,0	140	117	13800	165	820	900	1060	1220
1200	28,0	140	121	14800	175	880	970	1150	1350
1600	28,0	140	129	17000	195	980	1100	1310	1570

* 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)