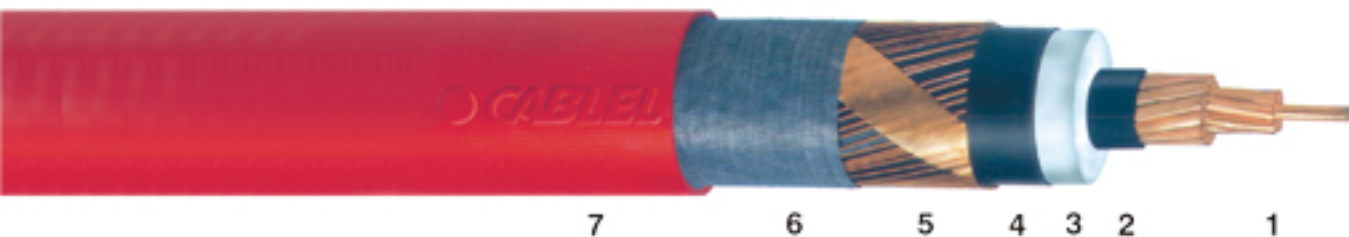


XLPE INSULATED CABLES WITH COPPER WIRE SCREEN AND PVC OVERSHEATH



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: 36/63 (U_{max}: 72,5 kV)
SPECIFICATION: IEC 60840

Copper or Aluminium conductor, XLPE insulated, copper wire screened and PVC oversheathed. 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 oversheath. The oversheath can also consist of MDPE or HDPE.

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
120	10,0	70	49	3500	170	355	380	405	470
150	10,0	70	51	3900	180	395	425	460	530
185	10,0	70	53	4300	190	445	480	525	610
240	10,0	70	55	5100	210	510	555	610	720
300	10,0	70	57	5700	220	570	630	690	820
400	10,0	70	60	6600	245	640	715	790	955
500	10,0	70	64	7800	270	710	815	895	1110
630	10,0	70	67	9500	300	790	925	1025	1285
800	10,0	70	72	11400	320	945	1040	1205	1475
1000	10,0	70	77	13600	365	1035	1150	1335	1670
1200	10,0	70	82	15800	385	1200	1310	1560	1940
1600	10,0	70	89	20100	435	1355	1505	1785	2285

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
120	10,0	70	49	2800	170	280	295	320	365
150	10,0	70	51	2900	180	310	330	360	415
185	10,0	70	53	3100	190	355	370	410	475
240	10,0	70	55	3500	210	405	430	480	560
300	10,0	70	57	3800	220	455	490	550	645
400	10,0	70	60	4200	245	515	560	635	750
500	10,0	70	64	4700	270	580	640	730	875
630	10,0	70	67	5400	300	655	730	835	1015
800	10,0	70	72	6200	320	775	830	990	1180
1000	10,0	70	77	7000	365	860	935	1115	1350
1200	10,0	70	82	7800	385	920	1010	1210	1485
1600	10,0	70	89	9600	435	1030	1155	1385	1750

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

Notes:

- The screen cross section can be adjusted to meet client's demands.
- Current ratings soil thermal resistivity 1,0 km/w and maximum conductor temperature 90°C. Correction factors for different condition are given below.
- Trefoil formation (cables touching): Cables with conductor cross section up to and including 630 mm² are assumed with screens solidly bonded at both ends. Cables with conductor cross section greater than 630 mm² are assumed single point or cross bonded.
- 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)