

POWER CABLES XLPE INSULATED PVC SHEATHED



1. Solid or stranded conductor
2. XLPE insulation
3. Fillers
4. Plastic tapes
5. PVC outersheath

TYPE OF CABLE:
VOLTAGE:
SPECIFICATION:

XLPE/PVC
600/1000 V
IEC 60502-1

Applications

Power cable for fixed installations in dry or wet places in the air or in the ground.

Colours

NUMBER OF CORES	WITH GREEN/YELLOW	WITHOUT GREEN/YELLOW
2	-	BLUE, BROWN
3	GREEN/YELLOW - BLUE - BROWN	BROWN, BLACK, GREY
4	GREEN/YELLOW - BROWN - BLACK - GREY	BLUE, BROWN, BLACK, GREY
5	GREEN/YELLOW, BLUE, BROWN, BLACK, GREY	BLUE, BROWN, BLACK, GREY, BLACK
>5	WHITE CORES WITH BLACK OR YELLOW NUMBERS, THE GREEN/YELLOW CORE IS LOCATED IN THE OUTER LAYER OF THE LAID UP CORES	WHITE CORES WITH BLACK NUMBERS

Notes:

Conductors up to 16 mm² are round solid or stranded and compacted.

Conductors with cross section 25mm² or greater are round stranded and compacted with the exception of 2,3 and 4 core cables which have stranded sector shaped conductors.

HELLENIC CABLES S.A.

can also produce the following cables

- **XLPE** insulated lead sheathed armoured cables suitable for direct burial where cables may be subject to solvent penetration or attack by corrosive agents.

CONDUCTOR NOMINAL CROSS- SECTIONAL AREA	EREXTERNAL DIAMETER (APPROX.)	NET WEIGHT (APPROX.)	MAXIMUM CONDUCTOR DC RESISTANCE 20° C	CONTINUOUS CURRENT RATING		VOLTAGE DROP	
				IN GROUND	IN AIR	1 PHASE AC or DC	3 PHASES AC
				A		mV/A/m	
mm ²	mm	Kg/Km	Ω/Km	A		mV/A/m	
1x1,5	6	50	12,1	44	31	31	27
1x2,5	6	60	7,41	58	40	19	17
1x4	6,5	80	4,61	75	53	12	10
1x6	7	100	3,08	94	66	7,9	6,8
1x10	8	145	1,83	125	91	4,7	4,1
1x16	9	205	1,15	162	120	2,9	2,6
1x25	10,5	300	0,727	210	162	1,9	1,65
1x35	11,5	400	0,524	253	199	1,35	1,15
1x50	13	525	0,387	300	242	1,00	0,87
1x70	15	730	0,268	368	310	0,69	0,60
1x95	17	990	0,193	441	383	0,52	0,45
1x120	18,5	1225	0,153	503	447	0,42	0,37
1x150	20,5	1505	0,124	567	513	0,35	0,30
1x185	22,5	1875	0,0991	643	595	0,29	0,25
1x240	25	2430	0,0754	750	713	0,24	0,21
1x300	29	3030	0,0601	850	822	0,22	0,19
1x400	32	3840	0,0470	980	976	0,20	0,18
1x500	35	4890	0,0366	1130	1153	0,19	0,17
1x630	39	6280	0,0283	1307	1367	0,18	0,16
2x1,5	9,5	130	12,1	34	27	31	-
2x2,5	10	160	7,41	45	36	19	-
2x4	11	205	4,61	59	46	12	-
2x6	12	260	3,08	74	57	7,9	-
2x10	14	370	1,83	97	79	4,7	-
2x16	17	590	1,15	126	107	2,9	-
2x25	17	625	0,727	165	147	1,9	-
2x35	18	810	0,524	204	182	1,35	-
2x50	20	1075	0,387	231	217	1,00	-
2x70	23	1500	0,268	284	280	0,69	-
2x95	26	2020	0,193	340	343	0,52	-
2x120	29	2515	0,153	383	394	0,42	-
2x150	31	3060	0,124	427	447	0,35	-
2x185	35	3840	0,0991	479	510	0,29	-
2x240	41	5010	0,0754	552	599	0,24	-
2x300	43	6170	0,0601	620	684	0,22	-
3x1,5	10	145	12,1	31	24	31	27
3x2,5	11	190	7,41	40	32	19	17
3x4	12	245	4,61	52	42	12	10
3x6	13	320	3,08	64	53	7,9	6,8
3x10	15	465	1,83	86	73	4,7	4,1
3x16	18	730	1,15	111	97	2,9	2,6
3x25	19	900	0,727	145	132	1,9	1,65
3x35	20	1175	0,524	174	162	1,35	1,15
3x50	24	1560	0,387	206	197	1,00	0,87

CONDUCTOR NOMINAL CROSS- SECTIONAL AREA	ERXTERNAL DIAMETER (APPROX.)	NET WEIGHT (APPROX.)	MAXIMUM CONDUCTOR DC RESISTANCE 20° C	CONTINUOUS CURRENT RATING		VOLTAGE DROP	
				IN GROUND	IN AIR	1 PHASE AC or DC	3 PHASES AC
				A		mV/A/m	
mm ²	mm	Kg/Km	Ω/Km	A		mV/A/m	
3x95	31	2960	0,193	305	308	0,52	0,45
3x120	35	3690	0,153	348	359	0,42	0,37
3x150	37	4515	0,124	392	412	0,35	0,30
3x185	42	5670	0,0991	444	475	0,29	0,25
3x240	49	7400	0,0754	517	564	0,24	0,21
3x300	52	9125	0,0601	585	649	0,22	0,19
4x1,5	11	170	12,1	31	24	-	27
4x2,5	12	225	7,41	40	32	-	17
4x4	13	300	4,61	52	42	-	10
4x6	15	390	3,08	64	53	-	6,8
4x10	17	575	1,83	86	73	-	4,1
4x16	20	900	1,15	111	97	-	2,6
4x25	21	1160	0,727	145	132	-	1,65
4x35	23	1530	0,524	174	162	-	1,15
4x50	27	2060	0,387	206	197	-	0,87
4x70	31	2905	0,268	254	250	-	0,60
4x95	35	3905	0,193	305	308	-	0,45
4x120	39	4890	0,153	348	359	-	0,37
4x150	42	5960	0,124	392	412	-	0,30
4x185	48	7510	0,0991	444	475	-	0,25
4x240	55	9800	0,0754	517	564	-	0,21
3x25+16	21	1075	0,727/1,15	145	132	-	1,65
3x35+16	23	1350	0,524/1,15	174	162	-	1,15
3x50+25	27	1840	0,387/0,727	206	197	-	0,87
3x70+35	31	2570	0,268/0,524	254	250	-	0,60
3x95+50	35	3475	0,193/0,387	305	308	-	0,45
3x120+70	40	4415	0,153/0,268	348	359	-	0,37
3x150+70	42	5220	0,124/0,268	392	412	-	0,30
3x185+95	48	6650	0,0991/0,193	444	475	-	0,25
3x240+120	55	8620	0,0754/0,153	517	564	-	0,21
5x1,5	12	195	12,1	31	24	-	27
5x2,5	13	255	7,41	40	32	-	17
5x4	14	345	4,61	52	42	-	10
5x6	16	455	3,08	64	53	-	6,8
5x10	18	660	1,83	86	73	-	4,1
5x16	21	960	1,15	111	97	-	2,6

Note: The above ratings are given for 30°C ambient temperature, temperature of ground 20°C and thermal resistivity of soil 1 Km/W. For other conditions,

Air Temperature °C	15	20	25	35	40	45	50
Correction factor	1,17	1,12	1,06	0,94	0,87	0,79	0,71
Ground Temperature °C	15	20	25	30	35	40	
Correction factor	1,08	1,0	0,95	0,89	0,84	0,77	
Ground Thermal resistivity Km/W:	0,8	1,0	1,2	1,5	2,0	2,5	3,0
Correction factor	1,07	1,0	0,93	0,87	0,79	0,71	0,65

The above ratings for cables installed in ground are for cyclic load with a load factor 0.7. For continuous operation (load factor 1.0) the values must be multiplied with a coefficient equal to 0.93.