

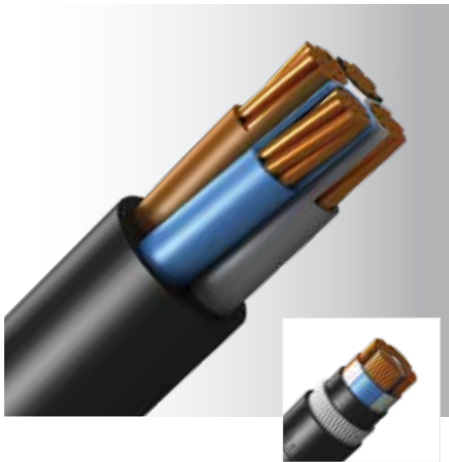
# XLPE-Insulated Cables

600/1000V 2-Core ~ 5-Core

XLPE Insulated, Unarmoured & Armoured, PVC Sheathed Cable

Description: CU/XLPE/PVC or CU/XLPE/PVC/SWA/PVC-AT

Model Code: XP or XPSP-AT



Application :	This cable is primarily used for main power supply. It can be installed in cable ducts, in cable trunking, on cable trays, and on cable ladders
Voltage rating :	600/1000V
Construction :	Plain annealed copper, XLPE insulated, unarmoured or galvanized steel wires armoured, PVC or Anti-termite PVC (for armoured cable only) compound sheathed cable
Insulation colour :	2-Core: (Brown & Blue) 3-Core: (Brown, Black & Grey) 4-Core: (Brown, Black, Grey & Blue) 5-Core & above: (Brown, Black, Grey, Blue, Green/Yellow) (other colour upon request)
Sheath colour :	Black
Specification :	IEC60502-1
Operating Temperature:	90°C

## 2-CORE

Conductor	Insulation	Unarmoured Cable			Armoured Cable		
		Part No.	Approx. Overall Diam.	Approx. Weight	Part No.	Approx. Overall Diam.	Approx. Weight
Nominal Area	Thickness		(mm)	(kg/km)		(mm)	(kg/km)
(mm <sup>2</sup> )	(mm)						
1.5	0.7	<b>07026001</b>	10.1	130	<b>07026025</b>	14.5	325
2.5	0.7	<b>08026001</b>	11.0	160	<b>08026025</b>	15.5	400
4	0.7	<b>09026001</b>	12.0	200	<b>09026025</b>	16.5	475
6	0.7	<b>10026001</b>	13.1	260	<b>10026025</b>	17.5	570
10	0.7	<b>11026001</b>	16.0	380	<b>11026025</b>	20.8	800
16	0.7	<b>12026001</b>	18.0	480	<b>12026025</b>	22.9	1050
25 (cs)	0.9	<b>13026001</b>	21.2	709	<b>13026025</b>	26.7	1471
35 (cs)	0.9	<b>14026001</b>	23.4	925	<b>14026025</b>	29.0	1762
50 (cs)	1.0	<b>15026001</b>	26.8	1214	<b>15026025</b>	32.4	2150
70 (cs)	1.1	<b>16026001</b>	30.4	1675	<b>16026025</b>	36.3	2749
95 (cs)	1.1	<b>17026001</b>	34.0	2244	<b>17026025</b>	41.2	3776
120 (cs)	1.2	<b>18026001</b>	37.0	2799	<b>18026025</b>	44.2	4435
150 (cs)	1.4	<b>19026001</b>	41.0	3426	<b>19026025</b>	48.2	5222
185 (cs)	1.6	<b>20026001</b>	45.8	4264	<b>20026025</b>	54.4	6919
240 (cs)	1.7	<b>21026001</b>	51.8	5540	<b>21026025</b>	60.4	8387
300 (cs)	1.8	<b>22026001</b>	57.4	6873	<b>22026025</b>	66.3	10073
400 (cs)	2.0	<b>23026001</b>	65.0	8769	<b>23026025</b>	74.0	12327

**Current rating and voltage drop**

For Unarmoured Cable, please refer to Tables 16 & 17 (Page 52)  
For Armoured Cable, please refer to Tables 18 & 19 (Page 53)

(cs) : Circular Compact Stranded Conductor

# XLPE-Insulated Cables

600/1000V 2-Core ~ 5-Core

XLPE Insulated, Unarmoured & Armoured, PVC Sheathed Cable

Description: CU/XLPE/PVC or CU/XLPE/PVC/SWA/PVC-AT

Model Code: XP or XPS-AT

3-CORE							
Conductor	Insulation	Unarmoured Cable			Armoured Cable		
Nominal Area	Thickness	Part No.	Approx. Overall Diam.	Approx. Weight	Part No.	Approx. Overall Diam.	Approx. Weight
(mm <sup>2</sup> )	(mm)		(mm)	(kg/km)		(mm)	(kg/km)
1.5	0.7	<b>07036002</b>	10.5	145	<b>07036026</b>	15.0	390
2.5	0.7	<b>08036002</b>	11.4	190	<b>08036026</b>	16.0	435
4	0.7	<b>09036002</b>	12.8	250	<b>09036026</b>	17.0	550
6	0.7	<b>10036002</b>	14.0	320	<b>10036026</b>	18.5	660
10	0.7	<b>11036002</b>	16.9	480	<b>11036026</b>	21.7	900
16	0.7	<b>12036002</b>	19.0	645	<b>12036026</b>	24.0	1260
25 (cs)	0.9	<b>13036002</b>	22.5	968	<b>13036026</b>	28.0	1772
35 (cs)	0.9	<b>14036002</b>	25.0	1278	<b>14036026</b>	30.5	2175
50 (cs)	1.0	<b>15036002</b>	28.5	1688	<b>15036026</b>	34.5	2700
70 (cs)	1.1	<b>16036002</b>	32.6	2365	<b>16036026</b>	40.0	3805
95 (cs)	1.1	<b>17036002</b>	36.5	3197	<b>17036026</b>	44.0	4831
120 (cs)	1.2	<b>18036002</b>	39.7	3982	<b>18036026</b>	47.5	5772
150 (cs)	1.4	<b>19036002</b>	44.0	4872	<b>19036026</b>	53.2	7344
185 (cs)	1.6	<b>20036002</b>	49.2	6074	<b>20036026</b>	58.2	8813
240 (cs)	1.7	<b>21036002</b>	55.6	7903	<b>21036026</b>	65.0	11050
300 (cs)	1.8	<b>22036002</b>	61.6	9822	<b>22036026</b>	71.0	13312
400 (cs)	2.0	<b>23036002</b>	70.0	12533	<b>23036026</b>	80.5	17317

4-CORE							
Conductor	Insulation	Unarmoured Cable			Armoured Cable		
Nominal Area	Thickness	Part No.	Approx. Overall Diam.	Approx. Weight	Part No.	Approx. Overall Diam.	Approx. Weight
(mm <sup>2</sup> )	(mm)		(mm)	(kg/km)		(mm)	(kg/km)
1.5	0.7	<b>07046600</b>	11.5	180	<b>07046603</b>	15.5	430
2.5	0.7	<b>08046600</b>	12.5	230	<b>08046603</b>	16.5	495
4	0.7	<b>09046600</b>	14.0	315	<b>09046603</b>	18.0	610
6	0.7	<b>10046600</b>	15.0	395	<b>10046603</b>	20.0	810
10	0.7	<b>11046600</b>	18.4	590	<b>11046603</b>	23.2	1120
16	0.7	<b>12046600</b>	21.4	860	<b>12046603</b>	27.0	1480
25 (s)	0.9	<b>13046003</b>	22.0	1200	<b>13046027</b>	27.5	2000
35 (s)	0.9	<b>14046003</b>	25.0	1600	<b>14046027</b>	30.5	2400
50 (s)	1.0	<b>15046003</b>	28.0	2100	<b>15046027</b>	34.0	3100
70 (s)	1.1	<b>16046003</b>	32.0	3000	<b>16046027</b>	39.5	4440
95 (s)	1.1	<b>17046003</b>	37.0	4100	<b>17046027</b>	44.0	5700
120 (s)	1.2	<b>18046003</b>	42.0	5160	<b>18046027</b>	50.0	7386
150 (s)	1.4	<b>19046003</b>	46.0	6300	<b>19046027</b>	54.5	8770
185 (s)	1.6	<b>20046003</b>	50.5	7881	<b>20046027</b>	59.0	10750
240 (s)	1.7	<b>21046003</b>	58.0	10500	<b>21046027</b>	68.0	13600
300 (s)	1.8	<b>22046003</b>	64.0	13100	<b>22046027</b>	73.0	16400
400 (s)	2.0	<b>23046003</b>	73.0	16700	<b>23046027</b>	85.0	21740

**Current rating and voltage drop**  
For Unarmoured Cable, please refer to Tables 16 & 17 (Page 52)  
For Armoured Cable, please refer to Tables 18 & 19 (Page 53)

(cs) : Circular Compact Stranded Conductor  
(s) : Sector Shaped Stranded Conductors

# XLPE-Insulated Cables



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600/1000V 2-Core ~ 5-Core

XLPE Insulated, Unarmoured & Armoured, PVC Sheathed Cable

Description: CU/XLPE/PVC or CU/XLPE/PVC/SWA/PVC-AT

Model Code: XP or XPSP-AT

5-CORE							
Conductor	Insulation	Unarmoured Cable			Armoured Cable		
Nominal Area	Thickness	Part No.	Approx. Overall Diam.	Approx. Weight	Part No.	Approx. Overall Diam.	Approx. Weight
(mm <sup>2</sup> )	(mm)		(mm)	(kg/km)		(mm)	(kg/km)
1.5	0.7	<b>07056004</b>	12.8	208	<b>07056028</b>	16.8	455
2.5	0.7	<b>08056004</b>	13.9	263	<b>08056028</b>	17.8	540
4	0.7	<b>09056004</b>	15.4	355	<b>09056028</b>	20.0	795
6	0.7	<b>10056004</b>	16.9	465	<b>10056028</b>	21.8	956
10	0.7	<b>11056004</b>	19.8	700	<b>11056028</b>	24.8	1272
16	0.7	<b>12056004</b>	22.5	1020	<b>12056028</b>	28.6	1845
25 (cs)	0.9	<b>13056004</b>	27.0	1530	<b>13056028</b>	32.6	2500
35 (cs)	0.9	<b>14056004</b>	30.0	2035	<b>14056028</b>	36.2	3140
50 (cs)	1.0	<b>15056004</b>	34.5	2720	<b>15056028</b>	41.5	4300
70 (cs)	1.1	<b>16056004</b>	39.6	3825	<b>16056028</b>	46.8	5585
95 (cs)	1.1	<b>17056004</b>	45.0	5185	<b>17056028</b>	53.0	7675
120 (cs)	1.2	<b>18056004</b>	49.2	6320	<b>18056028</b>	57.6	9125
150 (cs)	1.4	<b>19056004</b>	54.5	7800	<b>19056028</b>	63.0	10824
185 (cs)	1.6	<b>20056004</b>	60.5	9800	<b>20056028</b>	70.0	13211
240 (cs)	1.7	<b>21056004</b>	68.8	12520	<b>21056028</b>	79.2	17466

**Current rating and voltage drop**

For Unarmoured Cable, please refer to Tables 16 & 17 (Page 52)

For Armoured Cable, please refer to Tables 18 & 19 (Page 53)

(cs) : Circular Compact Stranded Conductor

# Current Rating and Voltage Drop

XLPE (or LSZH) Insulated Cables  
Multi-Core, Unarmoured



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www.keystone-cable.com

Multi-Core Cables with XLPE (or LSZH) Insulation, PVC (or LSZH) Outersheath 300/500V or 600/1000V

**Table 16 : Current-Carrying Capacities (Amp) [CU/XLPE/PVC, CU/XLPE/LSZH or CU/MT/XLPE/LSZH Cables]**

Conductor Operating Temperature :90°C

Ambient Temperature :30°C

IEC60502-1

Conductor cross-sectional area	Reference Method 4 (enclosed in an conduit insulated wall etc)	Reference Method 3 (enclosed in conduit on a wall or ceiling, or in trunking)		Reference Method 1 (clipped direct)		Reference Method 11 (on a perforated cable tray), or Reference Method 13 (free air)	
	one 3-core cable or one 4-core cable 3-phase a.c.	one 2-core cable single-phase a.c. or d.c.	one 3-core cable or one 4-core cable 3-phase a.c.	one 2-core cable single-phase a.c. or d.c.	one 3-core cable or one 4-core cable 3-phase a.c.	one 2-core cable single-phase a.c. or d.c.	one 3-core cable or one 4-core cable 3-phase a.c.
1	2	3	4	5	6	7	8
mm <sup>2</sup>	A	A	A	A	A	A	A
1.5	16.5	22	19.5	24	22	26	23
2.5	22	30	26	33	30	36	32
4	30	40	35	45	40	49	42
6	38	51	44	58	52	63	54
10	51	69	60	80	71	86	75
16	68	91	80	107	96	115	100
25	89	119	105	138	119	149	127
35	109	146	128	171	147	185	158
50	130	175	154	209	179	225	192
70	164	221	194	269	229	289	246
95	197	265	233	328	278	352	298
120	227	305	268	382	322	410	346
150	259	334	300	441	371	473	399
185	295	384	340	506	424	542	456
240	346	459	398	599	500	641	538
300	396	532	455	693	576	741	621
400	-	625	536	803	667	865	741

Note : For rating factors of ambient temperature other than 30°C please refer to Table 27  
For rating factors of ground temperature other than 15°C please refer to Table 30

**Table 17 : Voltage Drop (Per Amp Per Meter) [CU/XLPE/PVC, CU/XLPE/LSZH or CU/MT/XLPE/LSZH Cables]**

Conductor Operating Temperature :90°C

Ambient Temperature :30°C

IEC60502-1

Conductor cross-sectional area	2-core cable d.c.	2-core cable single-phase a.c.			3-core or 4-core cable 3-phase a.c.		
1	2	3			4		
mm <sup>2</sup>	mV/A/m	mV/A/m			mV/A/m		
1.5	31						27
2.5	19						16
4	12						10
6	7.9						6.8
10	4.7						4.0
16	2.9						2.5
		r	x	z	r	x	z
25	1.85	1.85	0.160	1.90	1.60	0.140	1.65
35	1.35	1.35	0.155	1.35	1.15	0.135	1.15
50	0.98	0.99	0.155	1.00	0.86	0.135	0.87
70	0.67	0.67	0.150	0.69	0.59	0.130	0.60
95	0.49	0.50	0.150	0.52	0.43	0.130	0.45
120	0.39	0.40	0.145	0.42	0.34	0.130	0.37
150	0.31	0.32	0.145	0.35	0.28	0.125	0.30
185	0.25	0.26	0.145	0.29	0.22	0.125	0.26
240	0.195	0.20	0.140	0.24	0.175	0.125	0.21
300	0.155	0.16	0.140	0.21	0.140	0.120	0.185
400	0.120	0.13	0.140	0.19	0.115	0.120	0.165

Note : r = conductor resistance at operating temperature  
x = reactance  
z = impedance

# Current Rating and Voltage Drop

XLPE (or LSZH) Insulated Cables  
Multi-Core, Armoured



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Multi-Core Cables with XLPE (or LSZH) Insulation, Armoured, PVC or LSZH Outersheath 600/1000V

**Table 18 : Current-Carrying Capacities (Amp)**  
[CU/XLPE/PVC/SWA/PVC, CU/XLPE/LSZH/SWA/LSZH, CU/MT/XLPE/LSZH/SWA/LSZH Cables]

Conductor Operating Temperature :90°C  
Ambient Temperature :30°C  
Ground Temperature :15°C

Depth of Laying :0.5m

BS 6724  
IEC60502-1  
Soil Thermal Resistivity :1.2 k•m/W

Conductor cross-sectional area	Reference Method 1 (clipped direct)		Reference Method 11 (on a perforated horizontal cable tray or Reference Method 13 [free air] )		In single-way ducts		Laid direct in ground	
	one 2-core cable single-phase a.c. or d.c.	one 3-core or 4-core cable 3-phase a.c.	one 2-core cable single-phase a.c. or d.c.	one 3-core or 4-core cable 3-phase a.c.	one 2-core cable single-phase a.c. or d.c.	one 3-core or 4-core cable 3-phase a.c.	one 2-core cable single-phase a.c. or d.c.	one 3-core or 4-core cable 3-phase a.c.
1	2	3	4	5	6	7	8	9
mm <sup>2</sup>	A	A	A	A	A	A	A	A
1.5	27	23	29	25	-	23	-	28
2.5	36	31	39	33	-	30	-	36
4	49	42	52	44	-	40	-	48
6	62	53	66	56	-	50	-	60
10	85	73	90	78	-	65	-	80
16	110	94	115	99	115	94	140	115
25	146	124	152	131	145	125	180	150
35	180	154	188	162	175	150	215	180
50	219	187	228	197	210	175	255	215
70	279	238	291	251	260	215	315	265
95	338	289	354	304	310	260	380	315
120	392	335	410	353	355	300	430	360
150	451	386	472	406	400	335	480	405
185	515	441	539	463	455	380	540	460
240	607	520	636	546	520	440	630	530
300	698	599	732	628	590	495	700	590
400	787	673	847	728	660	560	790	670

Note : For rating factors of ambient temperature other than 30°C please refer to Table 27  
For rating factors of ground temperature other than 15°C please refer to Table 30

**Table 19 : Voltage Drop (Per Amp Per Meter)**  
[CU/XLPE/PVC/SWA/PVC, CU/XLPE/LSZH/SWA/LSZH, CU/MT/XLPE/LSZH/SWA/LSZH Cables]

Conductor Operating Temperature :90°C  
Ambient Temperature :30°C  
Ground Temperature :15°C

Depth of Laying :0.5m

BS 6724  
IEC60502-1  
Soil Thermal Resistivity :1.2 k•m/W

Conductor cross-sectional area	2-core cable d.c.	2 cables, single-phase a.c.			3 or 4 cables, 3-phase a.c.			2 cables, single-phase a.c.	3 or 4 cables, 3-phase a.c.
								In ducts or in ground	In ducts or in ground
1	2	3			4			5	6
mm <sup>2</sup>	mV/A/m	mV/A/m			mV/A/m			mV/A/m	mV/A/m
1.5	31.0	31.0			27.0			31.0	25.0
2.5	19.0	19.0			16.0			19.0	15.0
4	12.0	12.0			10.0			12.0	9.7
6	7.9	7.9			6.8			7.9	6.5
10	4.7	4.7			4.0			4.7	3.9
16	2.9	2.9			2.5			2.9	2.6
		r	x	z	r	x	z		
25	1.850	1.850	0.160	1.900	1.600	0.140	1.650	1.900	1.600
35	1.350	1.350	0.155	1.350	1.150	0.135	1.150	1.350	1.200
50	0.980	0.990	0.155	1.000	0.860	0.135	0.870	1.000	0.870
70	0.670	0.670	0.150	0.690	0.590	0.130	0.600	0.690	0.610
95	0.490	0.500	0.150	0.520	0.430	0.130	0.450	0.520	0.450
120	0.390	0.400	0.145	0.420	0.340	0.130	0.370	0.420	0.360
150	0.310	0.320	0.145	0.350	0.280	0.125	0.300	0.350	0.300
185	0.250	0.260	0.145	0.290	0.220	0.125	0.260	0.290	0.250
240	0.195	0.200	0.140	0.240	0.175	0.125	0.210	0.240	0.210
300	0.155	0.160	0.140	0.210	0.140	0.120	0.185	0.210	0.190
400	0.120	0.130	0.140	0.190	0.115	0.120	0.165	0.190	0.180

Note : r = conductor resistance at operating temperature  
x = reactance  
z = impedance