



Caledonian Medium Voltage Cables

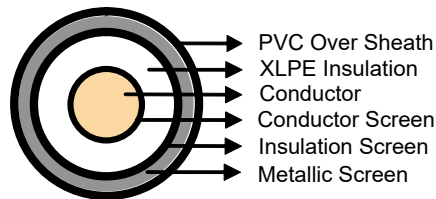
Single Core Cables

APPLICATIONS:

This product is used for an underground distribution cable for the lead-out parts of substations of general power distribution lines including high-capacity power distribution, cable tunnels, pipelines, directly embedded types, raising parts of telephone poles, etc.

STANDARD:

JIS C 3606-2003 (6600V)



CONSTRUCTION:

Conductor: Plain annealed copper with JCS C 3102.

Conductor Screen: The conductor screen consists of an extruded layer of non metallic, semi-conducting compound firmly bonded to the insulation to exclude all air voids.

Insulation: XLPE.

Insulation Screen: The insulation screen consists of an extruded layer of non metallic, semi-conducting compound extruded over the insulation. The extruded semi-conducting layer shall consist of bonded or cold strippable semi-conducting compound capable of removal for jointing or terminating. As an option, a semi-conducting tape may be applied over the extruded semi-conducting layer as a bedding for the metallic layer. The minimum thickness is 0.5 mm. The screen is tightly fitted to the insulation to exclude all air voids and can be easily hand stripped on site.

Metallic Sreen: By sufficiently winding of a soft copper tape on an external semiconductive layer, each core shall be shielded, the tape is wound with overlapping about one-sixth of its width or the equivalent of that.

Over Sheath: Black, PVC or PE.

PHYSICAL PROPERTIES:

Operating Temperature: up to 120°C

Cold Resistant: -15 ± 0.5 °C

Single Core 6600V (Test Voltage=17KV) Dimensional Data

Nom.Cross- Section Area	Nom. Insulation Thickness	Nom. Sheath Thickness	Approx. Overall Diameter	Approx. Weight		
				CV	CE	CE/F
mm ²	mm	mm	mm	kg/km		
8	4.0	1.8	16.5	365	325	355
14	4.0	1.8	17.5	460	425	450
22	4.0	1.9	18.5	525	475	510
38	4.0	2.0	21	730	685	715
60	4.0	2.0	23	1070	1010	1050
100	4.0	2.1	26	1470	1390	1450
150	4.0	2.3	29	1980	1890	1950
200	4.5	2.4	32	2550	2450	2520
250	4.5	2.5	35	3070	2950	3030
325	4.5	2.6	38	3750	3630	3710
400	4.5	2.7	40	4640	4410	4570
500	4.5	2.8	43	5550	5370	5490
600	5.0	2.9	47	6870	6710	6820
800	5.0	3.1	52	9000	8800	8940
1000	5.0	3.3	56	11000	10760	10930

Electrical Data

Nom.Cross- Section Area	Max. Conductor Resistance (20 °C)	Min. Insulation Resistance	Electrostatic Capacitance
mm ²	Ω/km	MΩ-km	μF/ Km
8	2.29	2500	0.21
14	1.31	2500	0.24
22	0.832	2500	0.27
38	0.481	2500	0.32
60	0.305	2500	0.37
100	0.183	1500	0.45
150	0.122	1500	0.52
200	0.0915	1500	0.51
250	0.0739	1500	0.55
325	0.0568	1500	0.61
400	0.0462	1000	0.68
500	0.0369	900	0.74
600	0.0308	900	0.71
800	0.0231	800	0.81
1000	0.0185	800	0.85

Note:C:XLPE V:Vinyl E:PE F:Flame retardant



Caledonian Medium Voltage Cables

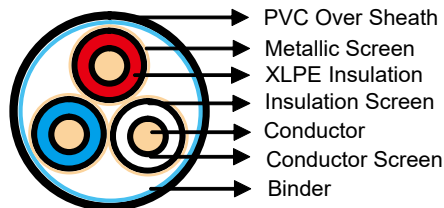
Three Core Cables

APPLICATIONS:

This product is used for an underground distribution cable for the lead-out parts of substations of general power distribution lines including high-capacity power distribution, cable tunnels, pipelines, directly embedded types, raising parts of telephone poles, etc.

STANDARD:

JIS C 3606-2003 (6600V)



CONSTRUCTION:

Conductor: Plain annealed copper with JCS C 3102.

Conductor Screen: The conductor screen consists of an extruded layer of non metallic, semi-conducting compound firmly bonded to the insulation to exclude all air voids.

Insulation: XLPE.

Insulation Screen: The insulation screen consists of an extruded layer of non metallic, semi-conducting compound extruded over the insulation. The extruded semi-conducting layer shall consist of bonded or cold strippable semi-conducting compound capable of removal for jointing or terminating. As an option, a semi-conducting tape may be applied over the extruded semi-conducting layer as a bedding for the metallic layer. The minimum thickness is 0.5 mm. The screen is tightly fitted to the insulation to exclude all air voids and can be easily hand stripped on site.

Metallic Screen: By sufficiently winding of a soft copper tape on an external semiconductive layer, each core shall be shielded, the tape is wound with overlapping about one-sixth of its width or the equivalent of that.

Over Sheath: Black, PVC or PE.

Identification of wire cores: Wire core identification shall be performed with 3 colors, that is, white, red and blue.

PHYSICAL PROPERTIES:

Operating Temperature: up to 120°C

Cold Resistant: -15 ± 0.5 °C

Three Core 6600V (Test Voltage=17KV) Dimensional Data

Nom.Cross- Section Area	Nom. Insulation Thickness	Nom. Sheath Thickness	Approx. Overall Diameter	Approx. Weight		
				CV	CE	CE/F
mm ²	mm	mm	mm	kg/km		
8	4.0	2.4	32	1180	1080	1150
14	4.0	2.5	34	1480	1370	1450
22	4.0	2.5	37	1780	1560	1710
38	4.0	2.7	41	2430	2290	2390
60	4.0	2.9	46	3280	3110	3230
100	4.0	3.1	52	4670	4470	4610
150	4.0	3.3	58	6420	5870	6240
200	4.5	3.6	66	8330	8000	8220
250	4.5	3.8	71	10020	9390	9810
325	4.5	4.0	77	12990	12590	12860

Electrical Data

Nom.Cross- Section Area	Max. Conductor Resistance (20 °C)	Min. Insulation Resistance	Electrostatic Capacitance
mm ²	Ω/km	MΩ-km	μF/ Km
8	2.34	2500	0.21
14	1.34	2500	0.24
22	0.849	2500	0.27
38	0.491	2000	0.32
60	0.311	2000	0.37
100	0.187	1500	0.45
150	0.124	1500	0.52
200	0.0933	1500	0.51
250	0.0754	1500	0.55
325	0.0579	1500	0.61

Note:C:XLPE V:Vinyl E:PE F:Flame retardant



Caledonian Medium Voltage Cables

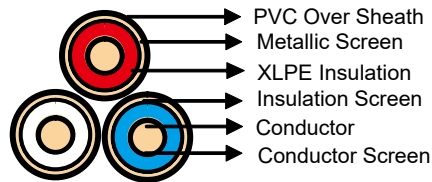
Three Core Cables(triplex)

APPLICATIONS:

This product is used for an underground distribution cable for the lead-out parts of substations of general power distribution lines including high-capacity power distribution, cable tunnels, pipelines, directly embedded types, raising parts of telephone poles, etc.

STANDARD:

JIS C 3606-2003 (6600V)



CONSTRUCTION:

Conductor: Plain annealed copper with JCS C 3102.

Conductor Screen: The conductor screen consists of an extruded layer of non metallic, semi-conducting compound firmly bonded to the insulation to exclude all air voids.

Insulation: XLPE.

Insulation Screen: The insulation screen consists of an extruded layer of non metallic, semi-conducting compound extruded over the insulation. The extruded semi-conducting layer shall consist of bonded or cold strippable semi-conducting compound capable of removal for jointing or terminating. As an option, a semi-conducting tape may be applied over the extruded semi-conducting layer as a bedding for the metallic layer. The minimum thickness is 0.5 mm. The screen is tightly fitted to the insulation to exclude all air voids and can be easily hand stripped on site.

Metallic Sreen: By sufficiently winding of a soft copper tape on an external semiconductive layer, each core shall be shielded,the tape is wound with overlapping about one-sixth of its width or the equivalent of that.

Over Sheath: Black, PVC or PE.

Identification of wire cores:Wire core identification shall be performed with 3 colors, that is, white, red and blue.

PHYSICAL PROPERTIES:

Operating Temperature: up to 120°C

Cold Resistant: -15 ± 0.5 °C

Three Core 6600V (Test Voltage=17KV) Dimensional Data

Nom. Cross-Section Area	Nom. Insulation Thickness	Nom. Sheath Thickness	Wire Core Diameter	Approx. Overall Diameter	Approx. Weight		
					CVT	CET	CET/F
mm ²	mm	mm	mm	mm	kg/km		
22	4.0	2.0	19	42	1590	1450	1550
38	4.0	2.1	21	46	2190	2020	2140
60	4.0	2.2	23	50	2970	2780	2910
100	4.0	2.4	26	57	4340	4100	4260
150	4.0	2.6	30	65	5980	5680	5880
200	4.5	2.8	33	72	7920	7380	7740
250	4.5	3.0	35	76	9320	8910	9190
325	4.5	3.1	39	85	11600	11100	11440
400	4.5	3.3	41	89	14000	13500	13840
500	4.5	3.5	45	98	17000	16400	16800
600	5.0	3.7	49	106	20200	19600	20000

Electrical Data

Nom. Cross-Section Area	Max. Conductor Resistance (20 °C)	Min. Insulation Resistance	Electrostatic Capacitance
mm ²	Ω/km	MΩ-km	μF/ Km
22	0.849	2500	0.27
38	0.491	2000	0.32
60	0.311	2000	0.37
100	0.187	1500	0.45
150	0.124	1500	0.52
200	0.0933	1500	0.51
250	0.0754	1500	0.55
325	0.0579	1500	0.61
400	0.0471	1000	0.68
500	0.0376	900	0.74
600	0.0314	900	0.71

Note: C:XLPE V:Vinyl E:PE F:Flame retardant T:Triplex