CONTEAST CABLES

"wired as one"

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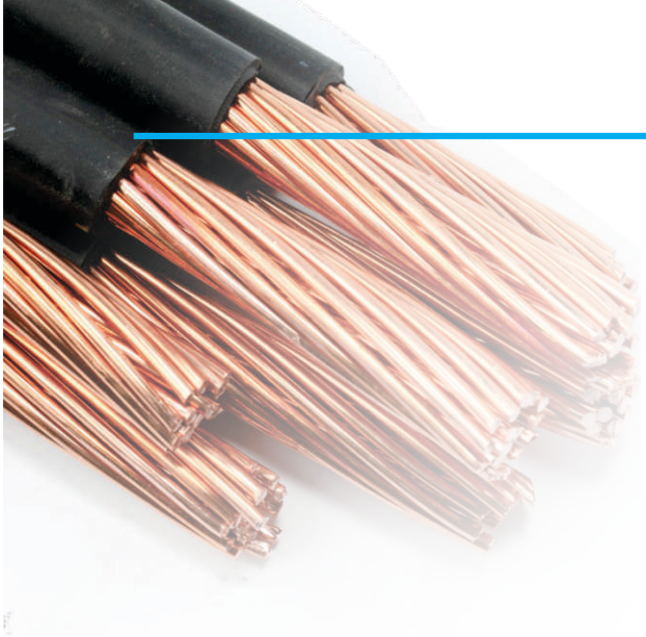
Company Profile and Catalogue



WIRED AS ONE

"Distributors of Cables and Electricals, sourced around the Globe to satisfy our customers needs "

Conteast Cables – We are the best and the biggest cable distributors in Africa.

We started in 2019, to close the gap of huge demand of cables & wires and also to bring new technologies in Africa at Large.

OUR MISSION

Distribution, of special cables for applications in many different industries and of medium and low voltage cables for the construction and infrastructure sectors

Conteast Cables is a leading distributor, provider of the highest quality aluminum, copper and fiber optic wire and cable products and system solutions. Our customer base spans the globe, working in all areas of the energy, construction, industrial, specialty and communications markets.

OUR CORE VALUES

With a focus on our strengths, we are building stronger connections between our people and with our customers

Innovative & Creative
Transparency
Professionalism
Trustworthy
Teamwork
Integrity

NOTE: OUR PRODUCTS ARE **SABS, IEC & ISO APPROVED**

ENERGY

Delivering power all over the world with high-performance electric wire and cable products

CONSTRUCTION

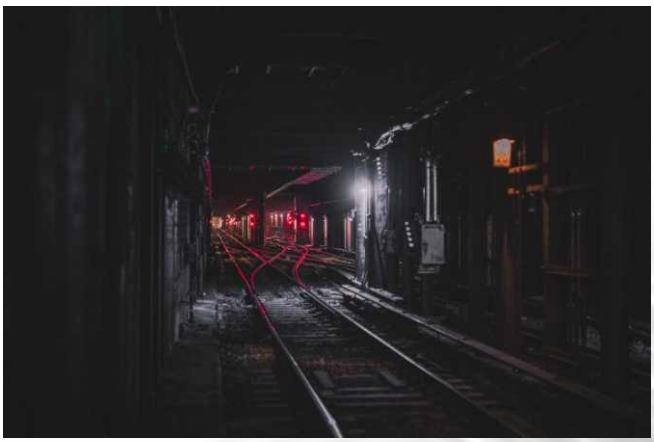
Offering a complete line of aluminum alloy and copper building wire products

COMMUNICATIONS

Connecting customers and communities worldwide with advanced cables

INDUSTRIAL

Generating power and enhancing control with industry-certified cable solutions



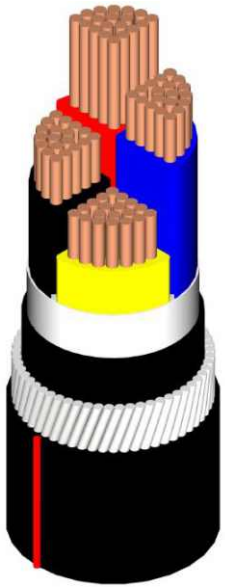
MINING

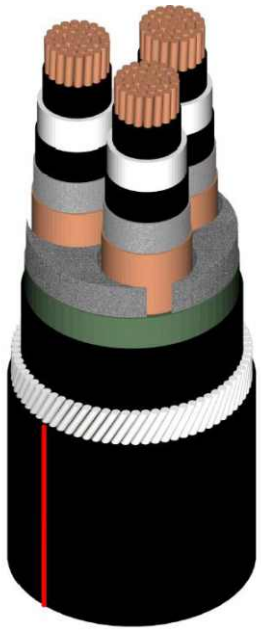
Providing a wide range of specialty wire and cable products

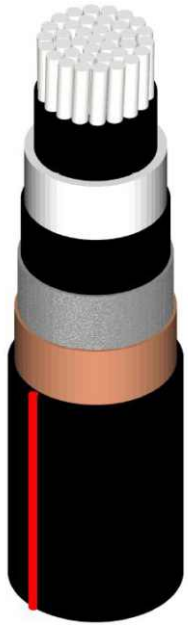
INSTRUMENTATION CONTROL

Enhancing control with industry-certified cable solutions

CONTEAST CABLES
"wired as one"



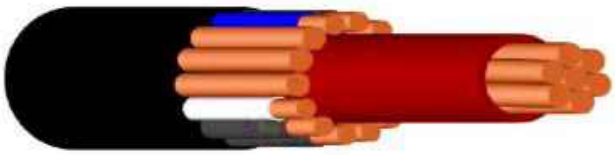




Power Cables - Brochure

Power Distribution Cables: AirDac

Airdac CNE and SNE, 600/1000V, Polyethylene Sheath, SANS 1507, NRS 063 & NRS 017



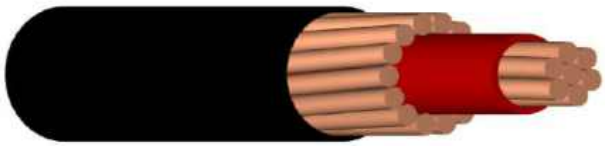
Conductor: Hard Drawn Copper Conductor – Class 2
Insulation: LV-XLPE
Phase Color Code(SNE): Red, Black & Bare Copper
Phase Color Code (CNE): Red & Bare Copper
Application: Used for house connections , with or without coms wire.

Separate Neutral and Earth (SNE) AIRDAC 600/1000V

PHYSICAL PROPERTIES					UNITS
Phase Conductor Area Size	4	6	10	16	mm^2
Neutral Conductor Area Size	4	6	10	16	mm^2
Earth Conductor Wires (No. X dia.)	3/1.35	3/1.38	3/1.78	3/2.20	mm
Phase Conductor Diam.	3.8	4.3	5.1	6.2	mm^2
Pilot Cores dia. or Dummy Fillers	1.2	1.2	1.2	1.2	mm
Overall Diameter	6.5	7.1	8.7	10.6	mm^2
Cable Mass	158	204	325	435	kg/km
ELECTRICAL PROPERTIES					UNITS
Phase Conductor Resistance (DC Resistance @ 20°C)	4.61	3.08	1.83	1.15	Ω/km
Phase Conductor Resistance (AC Resistance @ 90°C)	5.40	3.60	2.10	1.47	Ω/km
Phase Conductor Impedance (Z)	5.49	3.70	2.19	1.39	Ω/km
Current (I) in Air @ 30°C	30	40	50	70	A

Power Distribution Cables: AirDac

Airdac CNE and SNE, 600/1000V, Polyethylene Sheath, SANS 1507, NRS 063 & NRS 017

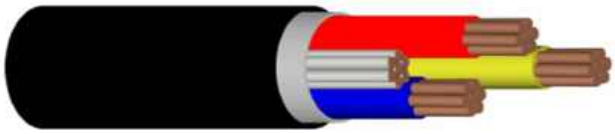


Combine Neutral and Earth (CNE) AIRDAC 600/1000V

PHYSICAL PROPERTIES					UNITS
Phase Conductor Area Size	4	6	10	16	mm^2
Earth Conductor Wires (No. X dia.)	15/0.67	18/0.67	18/0.85	28/0.85	mm^2
Pilot Cores diam.	1.2	1.2	1.2	1.2	mm
Overall Diameter	5.1	9.1	6.8	7.9	mm^2
Cable Mass	123	156	244	359	kg/km
ELECTRICAL PROPERTIES					UNITS
Phase Conductor Resistance (DC Resistance @ 20°C)	4.61	3.08	1.83	1.15	Ω/km
Phase Conductor Resistance (AC Resistance @ 90°C)	5.40	3.60	2.10	1.47	Ω/km
Phase Conductor Impedance (Z)	5.49	3.70	2.19	1.39	Ω/km
Current (I) in Air @ 30°C	30	40	50	70	A

Power Distribution Cables: InterDac

Interdac 3 Cable Low Voltage Power Cable 1.9/3.3 kV, SABS 1507, 90°C, APL MDPE Sheath.



Phase Conductors: Annealed Copper Compacted – Class 2
Earth Conductor: Tinned Annealed Copper – Class 2
Insulation: LV-XLPE
Phase Color Code: Red, Yellow and Blue
Application: Used to transfer power over long distances, e.g. supply power to farm water pump motors.

INTERDAC 3 (1900/3300V)				
PHYSICAL PROPERTIES				**UNITS**
Cable Size	**10**	**16**	**25**	mm²
Conductor Diameter	3.83	4.75	6.1	mm
Phase Core Diameter	8.83	9.75	11.1	mm
Phase Color Identification	Red, Yel & Blue	Red, Yel & Blue	Red, Yel & Blue	
Tinned Bare Copper Earth Conductor Size	10	16	25	mm²
Cable Overall Diameter	24.2	26.4	29.4	mm
Cable Mass	324	903	1071	kg/km
ELECTRICAL PROPERTIES				**UNITS**
Conductor resistance (DC Resistance @ 20°C)	1.830	1.150	0.727	Ω/km
Conductor resistance (AC Resistance @ 90°C)	2.19	1.38	0.93	Ω/km
Conductor Impedance (Z)	2.340	1.474	0.934	Ω/km
Current (A)	80	103	130	A
Symmetrical Short Circuit current (1 Sec.)	1.4	2.3	3.6	kA

Power Distribution Cables: Bundle Conductor

CONTEAST CABLES "wired as one"

Aerial Bundle Conductor (LV-ABC) Low Voltage XLPE Power Cable , SABS 1418, 600/1000V (ABC XLPE Insulated + Insulated Support)

Conductor: Aluminium Compacted Circular- Class 2

Phase Color Identification: Numbered, 1, 2 & 3 + Insulated Support

Application: Used for aerial reticulation (sometimes with street lighting core)

LV ABC - 600/1000V

PHYSICAL PROPERTIES							ELECTRICAL PROPERTIES				
Cable Size	Conductor Diameter	Insulation Diameter	Support Core Size	Overall Diameter	Cable mass	Drum length	Res. DC @ 20°C	Res. AC @ 90°C	Impedance	Symmetrical Current	Current Rating in Air
mm^2	mm	mm	mm^2	mm	kg/km	m	Ω/km	Ω/km	Ω/km	kA	Amps
25	6.5	9.5	54.6	22.9	420	500	1.200	1.54	1.541	2.3	105
35	7.3	10.5	54.6	25.3	555	500	0.868	1.11	1.117	3.3	130
50	8.3	11.7	54.6	28.1	752	500	0.641	0.82	0.826	4.7	165
70	10.2	13.6	54.6	32.8	1012	500	0.443	0.57	0.574	6.6	205
95	12.3	15.9	54.6	38.2	1348	500	0.320	0.41	0.419	9	250
120	13.5	17.1	70	41.2	1651	500	0.253	0.33	0.334	11.3	290
150	15.3	19.3	95	46.5	2065	500	0.206	0.27	0.276	14.2	320

Bare Copper / Earthing: Class 2 & 5

Annealed Bare Stranded Copper Conductor, SANS 1141-1

Conductor: Annealed Bare Stranded Copper Conductor

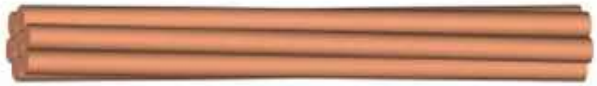
Application: Used as an earth wire

SANS 1411-1				
Annealed Circular Uncompacted Plain Copper Class 2				
Nominal Area	No of Strands and Wire Diameter	Approx. Overall Diameter	Maximum Resistance (DC @ 20°C)	Mass
mm^2	no./mm	mm	ohms/km	kg/km
1.5	7/0.53	1.59	12.1	12.92
2.5	7/0.67	2.01	7.41	21.10
4	7/0.85	2.55	4.61	33.91
6	7/1.04	3.12	3.08	50.76
10	7/1.36	4.08	1.83	91.64
16	7/1.72	5.16	1.15	146.45
25	7/2.11	6.33	0.727	221.14
35	7/2.53	7.59	0.524	316.87
50	19/1.83	9.15	0.387	451.15
70	19/2.14	10.70	0.268	616.95
95	19/2.53	12.65	0.193	865.77
120	19/2.85	14.25	0.153	1094.98
	37/2.04	14.28	0.153	1094.98
150	37/2.25	15.75	0.124	1330.96
160	37/2.36	16.52	0.144	850.04
	61/1.80	16.20	0.144	1409.67
185	37/2.53	17.71	0.0991	1685.78
240	61/2.27	20.43	0.0754	2256.67
300	60/2.53	22.77	0.0601	2803.98

Hard Drawn Bare Stranded Copper Conductor, SANS 182

Conductor: Hard Drawn Bare Stranded Copper Conductor

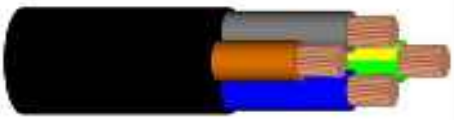
Application: Used for Overhead Distribution Conductor or as an Earth Wire



SANS 182				
Hard Drawn Circular Uncompacted Plain Copper Class 2				
Nominal Area	No of Strands and Wire Diameter	Approx. Overall Diameter	Maximum Resistance (DC @ 20°C)	Mass
mm^2	no./mm	mm	ohms/km	kg/km
1.5	7/0.53	1.59	12.47	12.54
2.5	7/0.67	2.01	7.639	20.47
4	7/0.85	2.55	6.714	23.29
6	7/1.04	3.12	3.155	49.56
10	7/1.36	4.05	1.887	82.85
16	7/1.70	5.10	1.154	146.45
25	7/2.12	6.36	0.756	221.14
40	7/2.65	7.95	0.473	346.00
63	7/13.35	10.00	0.296	553.00
80	7/3.75	11.25	0.236	693.00
100	19/2.65	13.25	0.181	943.00
160	37/2.36	16.52	0.114	1465.00
	61/1.80	16.20	0.114	1465.00
250	37/3.00	21.00	0.0705	2368.00

Cabtyre & Extension Cord

Cabtyre, PVC Insulated, Low Voltage Cable 300/500V, SABS 1574, 70°C



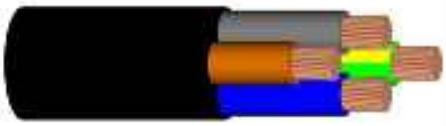
Conductors: Annealed Copper Compacted – Class 5
Insulation: PVC
Phase Color Code: 2 Cores - Blue & Brown
3 Cores – Blue , Brown & Black
4 Cores – Blue, Brown, Black & Grn/Yel
5 Cores – Blue, Brown, Black, Violet, & Grn/Yel
7 Cores - Blue, Brown, Black, Violet, Pink, Orange & Grn/Yel
Application: Used for appliances

CABTYRE Insulated - 300/500V

PHYSICAL PROPERTIES					ELECTRICAL PROPERTIES		
Phase Conductor Size	Number of Cores	Approx. Conductor Diameter	Approx. Overall Diameter	Cable Mass	Coil length	DC Resistance @ 20°C	Current in Air (A)
mm²		No./mm	mm	kg/km	m	Ω/km/phase	
0.5	2	0.9	6.1	5.2	100	36.00	3
	3	0.9	6.4	6.2	100	36.00	3
	4	0.9	7.1	7.5	100	36.00	3
	5	0.9	7.8	8.7	100	36.00	3
	7	0.9	8.5	11.6	100	36.00	3
0.75	2	1.14	6.7	6.1	100	24.50	6
	3	1.14	7.0	7.4	100	24.50	6
	4	1.14	7.8	9.0	100	24.50	6
	5	1.14	8.6	11.3	100	24.50	6
	7	1.14	9.4	14.2	100	24.50	6
1	2	1.13	7.8	7.4	100	18.10	10
	3	1.13	8.2	9.9	100	18.10	10
	4	1.13	9.2	12.0	100	18.10	10
	5	1.13	10.0	15.0	100	18.10	10
	7	1.13	11.0	18.9	100	18.10	10

Cabtyre & Extension Cord

Cabtyre, PVC Insulated, Low Voltage Cable 300/500V, SABS 1574, 70°C



Conductors: Annealed Copper Compacted – Class 5
Insulation: PVC
Phase Color Code: 2 Cores - Blue & Brown
3 Cores – Blue , Brown & Black
4 Cores – Blue, Brown, Black & Grn/Yel
5 Cores – Blue, Brown, Black, Violet, & Grn/Yel
7 Cores - Blue, Brown, Black, Violet, Pink, Orange & Grn/Yel
Application: Used for appliances

CABTYRE Insulated - 300/500V

PHYSICAL PROPERTIES					ELECTRICAL PROPERTIES		
Phase Conductor Size	Number of Cores	Approx. Conductor Diameter	Approx. Overall Diameter	Cable Mass	Coil length	DC Resistance @ 20°C	Current in Air (A)
mm²		No./mm	mm	kg/km	m	Ω/km/phase	
1.5	2	1.38	8.1	9.2	100	12.10	21
	3	1.38	8.5	11.6	100	12.10	21
	4	1.38	9.5	14.2	100	12.10	21
	5	1.38	10.4	17.7	100	12.10	21
	7	1.38	11.4	22.6	100	12.10	21
2.5	2	1.78	9.2	11.9	100	7.41	30
	3	1.78	9.6	15.3	100	7.41	30
	4	1.78	10.7	20.0	100	7.41	30
	5	1.78	11.8	23.9	100	7.41	30
	7	1.78	12.9	31.0	100	7.41	30
4	2	2.55	11.2	17.6	100	4.61	39
	3	2.55	11.8	23.0	100	4.61	39
	4	2.55	13.1	29.9	100	4.61	39
	5	2.55	14.5	35.9	100	4.61	39
	7	2.55	15.9	47.0	100	4.61	39

House Wire: Flat Twin & Earth

Flat Twin & Earth, PVC Insulated, Low Voltage Cable 300/500V, SABS 1574, 70°C

Conductors: Annealed Copper Compacted – Class 2

Insulation: PVC

Phase Color Code: 2 Cores -Red & Black
3 Cores – Red , Yellow & Blue
4 Cores – Red, Yellow, Blue, Black

Application: Used for House/Building and factory wiring.

FLAT TWIN & EARTH - 300/500V

PHYSICAL PROPERTIES				ELECTRICAL PROPERTIES		
Phase Conductor Size	Earth Conductor Wires	Approximate Dimensions	Cable Mass	Coil Length	DC Resistance @ 20°C	Current in Air (A)
mm²	mm2	mm	kg/km	m	Ω/km/phase	
1	1	4.7 x 11	65	100	18.10	16
1.5	1	5.4 x 12.5	90	100	13.60	21
2.5	1.5	6.2 x 14.5	129	100	7.41	30
4	2.5	7.4 x 18	196	100	4.61	39
6	4	8.0 x 20.0	260	100	3.08	50
10	6	9.6 x 25.5	385	100	1.83	68
16	10	11 x 29.5	565	100	1.15	91

House Wire: General Purpose Single Core

CONTEAST CABLES
"wired as one"

House Wire, Single Core PVC Insulated, Low Voltage Cable 0.6/1 kV, SABS 1507, 70°C

Conductors: Annealed Copper Compacted – Class 2
Insulation: PVC
Phase Color Code: Red, Yellow, Blue, Black, Grn/Yellow, Orange, Pink, Violet , White or any color required by customer
Application: Used for House/Building wiring.

HOUSE WIRE PVC INSULATED - 600/1000V

PHYSICAL PROPERTIES				ELECTRICAL PROPERTIES		
Phase Conductor Size	Conductor Diameter	Approximate Diameter	Cable Mass	Drum	DC Resistance @ 20°C	Current unenclosed in Air (A)
mm²	mm²	mm	kg/km	m	Ω/km/phase	
1	1.13	2.8	20	500	18.100	14
1.5	1.5	3.1	23	500	12.100	18
2.5	1.9	3.5	33	500	7.410	25
4	2.4	4.4	52	500	4.610	33
6	2.9	4.9	74	500	3.080	43
10	3.7	5.7	114	500	1.830	59
16	4.8	6.8	173	500	1.150	82
25	6.1	8.5	269	500	0.727	111
35	7.1	9.5	364	500	0.524	136
50	8.2	11.0	517	500	0.387	166
70	9.9	12.7	708	500	0.268	214
95	11.7	14.9	960	500	0.193	261
120	13.4	16.6	1199	500	0.153	303
150	14.6	18.2	1496	500	0.124	350
185	16.4	20.4	1847	500	0.099	418
240	18.8	23.2	2388	500	0.075	490
300	21.4	26.2	2980	500	0.060	570
400	24.3	29.5	3944	500	0.047	652
500	27.3	32.9	4913	500	0.060	773
630	31.0	36.6	6133	500	0.050	872
800	35.1	40.7	7716	500	0.030	996
1000	39.1	45.1	9614	500	0.030	1081

Panel & Welding Wire

Genflex Wire, Single Core PVC Nitrile Insulated, Low Voltage Cable 1000V, SABS 1574, 70°C

Conductors: Flexible Copper – Class 5

Insulation: PVC-Nitrile (Flexible Grade)

Phase Color Code: Red or as requested by customer

Application: Used for Panel and Instrument Wiring

PANEL/INSTRUMENT WIRE PVC NITRILE INSULATED - 600/1000V

PHYSICAL PROPERTIES				ELECTRICAL PROPERTIES		
Phase Conductor Size	Conductor Diameter	Approximate Diameter	Cable Mass	Coils/Drums	DC Resistance @ 20°C	Current unenclosed in Air (A)
mm²	mm²	mm	kg/km	m	Ω/km/phase	
0.5	1	2.4	10	100	39.000	3
0.75	1.3	2.7	14	100	26.000	6
1	1.5	3.1	18	100	19.500	10
1.5	1.7	3.3	24	100	13.300	16
2.5	2.2	3.8	35	100	7.980	25
4	2.6	4.6	54	100	4.950	32
6	3.9	5.9	78	100	3.300	43
10	4.7	7.2	121	100	1.910	59
16	5.8	8.4	181	100	1.210	82
25	7.3	10.2	279	500	0.780	111
35	9.4	12.3	381	500	0.554	136
50	11.2	14.5	542	500	0.386	166
70	13.1	16.4	736	500	0.272	214
95	15.3	19.1	995	500	0.206	261
120	16.9	20.7	1234	500	0.161	303
150	20.1	24.2	1553	500	0.129	350
185	20.8	25.4	1901	500	0.106	418

House Wire: General Purpose Single Core

Ripcord, PVC Insulated, Low Voltage Cable 300/300V, SABS 1574, 70ºC

Conductors: Flexible Copper – Class 5

Insulation: PVC

Phase Color Code: White, Transparent or Black with identification thread and Black with Red

Application: Used for House Lighting Appliances, Audio and Alarm Systems

Ripcord - 300/300V

PHYSICAL PROPERTIES				ELECTRICAL PROPERTIES		
Phase Conductor Size	Conductor Diameter	Approximate Dimensions	Cable Mass	Coil Length	DC Resistance @ 20°C	Current in Air (A)
mm²	mm2	mm	kg/km	m	Ω/km/phase	
0.5	1	2.4 x 4.8	21	100	39.00	3
0.75	1.3	2.7 x 5.4	28	100	26.00	6
1	1.5	3.1 x 6.2	37	100	19.50	10
1.5	1.7	3.3 x 6.6	47	100	13.30	16
2.5	2.2	3.8 x 7.6	69	100	7.98	25

Overhead Lines: AAAC

CONTEAST CABLES "wired as one"

All Aluminium Alloy Conductors (AAAC) Overhead Conductors

Cable Description: All Aluminium Alloy Conductors (AAAC)
Application: Used for overhead power lines
Specification: SANS 182 & IEC 61089

CODE Name	Equival. copper area	Stranding and wire diameter	Overall diameter	Aluminium area	Mass	Ultimate tensile strength	Coefficient of linear expansion	Initial modulus of elasticity	final modulus of elasticity	DC resistance at 20°C	Current rating	Standard drum length
	mm²	mm	mm	mm²	kg/km	Newton	/C°x10-6	MPa	MPa	Ω/km	A	m
ACACIA	13	7/2,08	6,24	23,79	65	6690	23	52500	61000	1,39	133	3000
ALMOND	16	7/2,34	7,02	30,10	82	8440	23	52400	61000	1,10	153	2500
CEDAR	19	7/2,54	7,59	35,47	97	9960	23	52400	61000	0,934	169	2500
35	22	7/2,77	8,31	42,18	115	11860	23	52400	61000	0,785	189	2500
FIR	25	7/2,95	8,85	47,84	131	13430	23	52400	61000	0,692	204	2500
HAZEL	32	7/3,30	9,90	59,87	164	16820	23	52400	61000	0,553	235	2500
PINE	38	7/3,61	10,83	71,65	196	20200	23	52400	61000	0,462	262	2500
70	45	7/3,91	11,73	84,05	230	23630	23	52400	61000	0,394	290	2000
WILLOW	48	7/4,04	12,12	89,73	245	25200	23	52400	61000	0,369	302	1500
80	51	7/4,19	12,57	96,52	264	27060	23	52400	61000	0,343	316	1500
90	58	7/4,45	13,35	108,9	298	30400	23	52400	61000	0,306	339	1000
OAK	63	7/4,65	13,95	118,9	325	33330	23	52400	61000	0,279	359	1000
100	63	19/2,82	14,10	118,7	326	33330	23	49650	59650	0,280	359	2000
MULBERRY	80	19/3,18	16,90	150,9	415	42350	23	49650	59650	0,221	416	2000
ASH	96	19/3,48	17,40	180,7	497	50690	23	49650	59650	0,184	467	2000
ELM	112	19/3,76	18,80	210,9	580	59220	23	49650	59650	0,158	513	2000
POPLAR	119	37/2,87	20,09	239,4	660	67350	23	48250	58600	0,139	551	2000
225	143	37/3,05	21,35	270,3	744	75780	23	48250	58600	0,123	600	2000
SYCAMORE	161	37/3,23	22,61	303,2	835	85000	23	48250	58600	0,110	643	2000
UPAS	192	37/3,53	24,71	362,1	997	101670	23	48250	58600	0,0921	718	2000
350	224	37/3,81	26,67	421,8	1162	118430	23	48250	58600	0,0791	789	1500
YEW	254	37/4,06	28,42	479,0	1319	134510	23	48250	58600	0,0696	853	1500

Overhead Lines: AAC

All Aluminium Conductors (AAC) Overhead Conductors

Cable Description: All Aluminium Conductors (AAAC)
Application: Used for overhead power lines
Specification: SANS 182 & IEC 61089

Code Name	Area of Aluminium		Stranding N. of wires X Diam.	Nominal Diameter of Conductor	Nominal Mass	Rated Strength	Current Carrying Capacity (Amperes)	Electrical Resistance at 20°C Maximum
	Nominal	Actual						
	(mm²)	(mm²)	(mm)	(mm)	(kg/kg)	(kN)	Amperes)	(ohm/km)
MIDGE	22	23,33	7X2,06	6,18	64,3	4,26	135	1,23572
APHIS	25	24,89	3X3,35	7,21	68,6	4,38	150	1,15827
GNAT	25	26,85	7X2,21	6,63	74,0	4,90	150	1,07372
WEEVIL	30	31,56	3X3,66	7,87	87,0	5,12	170	0,91348
MOSQUITO	35	36,88	7X2,59	7,77	101,7	6,37	185	0,78170
LADYBIRD	40	42,79	7X2,79	8,37	118,0	7,39	200	0,67374
ANT	50	52,83	7X3,10	9,30	145,7	8,62	230	0,54570
FLY	60	63,55	7X3,40	10,20	175,2	10,37	260	0,45365
BLUEBOTTLE	70	73,65	7X3,66	10,98	203,1	12,02	285	0,39144
EARWIG	75	78,55	7X3,78	11,34	216,6	12,82	290	0,36702
GRASSHOPPER	80	84,05	7X3,91	11,73	231,7	13,31	310	0,34300
CLEGG	90	95,60	7X4,17	12,51	263,6	15,14	340	0,30156
WASP	100	106,0	7X4,39	13,17	292,2	16,79	360	0,27197
BEETLE	100	106,4	19X2,67	13,35	293,3	17,81	365	0,27095
BEE	125	132,0	7X4,90	14,70	363,9	20,91	415	0,21840
CRICKET	150	157,9	7X5,36	16,08	435,3	24,21	470	0,18258
HORNET	150	157,6	19X3,25	16,25	434,5	24,91	470	0,18292
CATERPILLAR	175	185,9	19X3,53	17,65	512,5	29,39	520	0,15508
CHAFER	200	213,2	19X3,78	18,90	587,8	33,71	570	0,13522
SPIDER	225	237,6	19X3,99	19,95	655,1	36,46	610	0,12134
COCKROACH	250	265,7	19X4,22	21,10	732,6	40,77	655	0,10850
BUTTERFLY	300	322,7	19X4,65	23,25	889,7	49,52	745	0,08934
MOTH	350	373,1	19X5,00	25,00	1028	57,25	820	0,07727
DRONE	350	372,4	37X3,58	25,06	1027	57,51	815	0,07741
LOCUST	400	428,7	19X5,36	26,80	1182	63,79	890	0,06725
CENTIPEDE	400	415,2	37X3,78	26,46	1145	64,23	875	0,06943
MAYBUG	450	486,1	37X4,09	28,63	1340	72,99	970	0,05930
SCORPION	500	529,8	37X4,27	29,89	1461	79,44	1020	0,05451
CICADA	600	628,3	27X4,65	32,55	1732	94,34	1115	0,04588
TARANTULA	750	794,9	27X5,23	36,61	2068	119,4	1295	0,3626

Overhead Lines: ACSR

Aluminium Conductor Steel Reinforced (ACSR) Overhead Conductors

Cable Description: Aluminium Conductor Steel Reinforce d

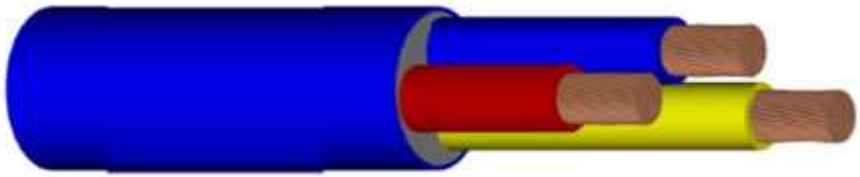
Application: Used for overhead power lines

Specification: SANS 182 & IEC 61089

Code name	Equival. Copper area	Stranding and wire diameter	Diameter over steel	Overall diameter (Std.)	Aluminium area	Steel area	Total area	Mass kg/km			Ultimate tensile strength	Breaking load	Coefficient of linear expansion	Initial modulus of elasticity	Final modulus of elasticity	DC resistance at 20°C (Std)	Current rating	Standard drum length
								Aluminium	Steel	Total								
	mm²	mm	mm	mm	mm²	mm²	mm²				newtons	kg	/C° x10-6	N/mm²	N/mm²	ohms/km	amps	m
MOLE	6,45	6/1/1,50	1,50	4,50	10,60	1,77	12,37	29,20	13,90	43,10	4780	487	19,31	65000	80400	2,7062	87	3000
SQUIRREL	12,90	6/1/2,11	2,11	6,33	20,98	3,50	24,48	57,70	27,50	85,20	9020	818	19,31	54600	80400	1,3677	130	3000
GOPHER	16,30	6/1/2,36	2,36	7,08	26,25	4,37	30,62	72,20	34,40	107	9610	990	19,31	52700	80400	1,0933	150	3000
WEASEL	19,35	6/1/2,59	2,59	7,77	31,61	5,27	36,88	87,00	41,50	129	11450	1160	19,31	51500	80400	0,9077	170	2500
FOX	22,58	6/1/2,79	2,79	8,37	36,68	6,11	42,80	101	48,10	149	13100	1340	19,31	50700	80400	0,7822	190	2500
FERRET	25,81	6/1/3,00	3,00	9,00	42,41	7,07	49,48	117	55,60	173	15200	1530	19,31	50200	80400	0,6766	210	1500
RABBIT	32,26	6/1/3,35	3,35	10,05	52,88	8,81	61,70	145	69,40	214	18500	1890	19,31	49500	80400	0,5426	240	1500
MINK	38,71	6/1/3,66	3,66	10,98	63,13	10,52	73,65	174	82,80	257	21900	2230	19,31	49100	80400	0,4546	260	1500
SKUNK	38,71	12/7/2,59	7,77	12,95	63,22	36,88	100,10	175	292	467	52900	5390	15,84	71900	108000	0,4571	270	2000
BEAVER	45,16	6/1/3,99	3,99	11,97	75,02	12,50	87,53	206	98,40	304	25900	2640	19,31	48800	80400	0,3925	290	1500
HORSE	45,16	12/7/2,79	8,37	13,95	73,36	42,80	116,16	203	338	541	60700	6190	15,84	71000	108000	0,3939	300	2000
RACCOON	48,39	6/1/4,09	4,09	12,27	78,83	13,14	91,97	217	103	320	27200	2770	19,31	48700	80400	0,3540	300	1500
OTTER	51,61	6/1/4,22	4,22	12,66	83,92	13,99	97,91	231	110	341	28900	2950	19,31	48700	80400	.03419	310	1500
CAT	58,06	6/1/4,50	4,50	13,50	95,43	15,90	111,33	263	125	388	32800	3340	19,31	48500	80400	0,3007	340	1500
HARE	64,52	6/1/4,72	4,72	14,16	104,98	17,50	122,48	289	138	427	36000	3670	19,31	48500	80400	0,2733	360	1500
DOG	64,52	6/4,72	4,71	14,15	104,98	12,70	117,69	289	100	389	34700	3540	19,92	48800	76400	0,2733	360	2000
		+7/1,57																
HYENA	64,52	7/4,39	5,79	14,57	105,95	20,48	126,43	291	162	453	41900	4270	18,93	52400	82200	0,2697	360	2000
		+7/1,93																
LEOPARD	80,65	6/5,28	5,28	15,81	131,37	16,84	148,21	361	133	494	42200	4300	19,54	47800	76300	0,2184	410	2000
		+7/1,75																
COYOTE	80,65	26/2,87	5,73	15,89	131,74	20,06	151,80	365	159	524	47300	4820	19,54	51900	76000	0,3035	420	2000
		+7/1,91																
TIGER	80,65	30/7/2,36	4,72	16,52	131,23	30,62	161,85	364	242	606	58700	5960	18,43	56900	83400	0,2202	420	2000
WOLF	96,77	30/7/2,59	7,77	18,13	158,06	36,88	194,94	438	292	730	69200	7050	18,43	55700	83400	0,1828	470	2000
LYNX	112,90	30/7/2,79	8,37	19,53	183,41	42,80	226,20	508	338	846	79300	8080	18,43	54900	83400	0,1576	520	2000
PANTHER	129,00	30/7/3,00	9,00	21,00	212,06	49,48	261,54	588	391	979	90800	9260	18,43	54300	83400	0,1363	560	2000
LION	145,20	30/7/3,18	9,54	22,26	238,27	55,60	293,86	660	440	1100	101000	10300	18,43	53900	83400	0,1213	610	2000
BEAR	161,30	30/7/3,35	10,05	23,45	264,42	61,70	326,12	733	488	1220	112000	11400	18,43	53600	83400	0,1093	650	2000
GOAT	193,50	30/7/3,71	11,13	25,97	324,31	75,67	399,98	899	598	1500	136000	13900	18,43	53100	83400	0,0891	730	2000
SHEEP	225,80	30/7/3,99	11,97	27,93	375,11	87,53	462,63	1040	692	1730	157000	16000	18,43	52900	83400	0,0770	800	2000
ANTELOPE	225,80	54/7/2,97	8,91	26,73	374,11	48,50	422,60	1040	383	1420	117000	11900	19,91	47700	73200	0,0773	790	2000
BISON	225,80	54/7/3,00	9,00	27,00	381,70	49,48	431,18	1060	391	1450	119000	12100	19,91	47600	73200	0,0757	800	2000
DEER	258,10	30/7/4,27	12,81	29,89	429,60	100,24	529,84	1190	792	1980	179000	18200	18,43	52800	83400	0,0673	870	2000
ZEBRA	258,10	54/7/3,18	9,54	28,62	428,88	55,60	484,48	1190	440	1630	133000	13600	19,91	47300	73200	0,0674	860	1500
ELK	290,30	30/7/4,50	13,50	31,50	477,13	111,33	588,46	1320	880	2200	199000	20300	18,43	52700	83400	0,0606	930	2000
CAMEL	290,30	54/7/3,35	10,05	30,15	476,96	61,70	537,66	1320	488	1810	147000	15000	19,91	47000	73200	0,0607	920	2000
MOOSE	322,50	54/7/3,53	10,59	31,77	528,49	68,51	596,99	1460	542	2000	162000	16500	19,91	46700	73200	0,0547	980	2000

Submersible & Marine Cables

Flexible PVC Insulated Submersible Pump Cable, Low Voltage Power Cable 0.6/1 kV, SABS 1574, 70ºC



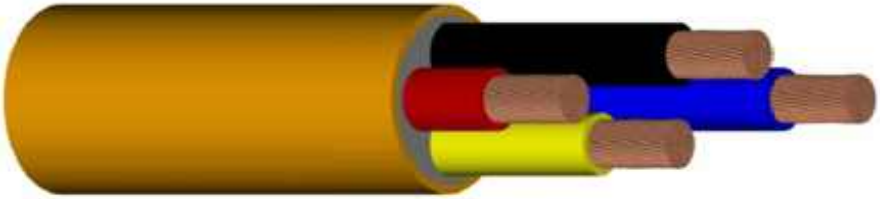
Conductor: Flexible Copper – Class 5
Insulation: PVC Nitrile Flexible Grade
Sheathing: PVC Nitrile Flexible Grade
Phase Color Code: Red , Yellow, Blue or Black
Application: Used for outdoors and indoors, mobile, portable and fixed pumping equipment. Three core with blue outer-sheath and four cores with green outer-sheath.

Flexible PVC Submersible Pump Cable - 600/1000V

PHYSICAL PROPERTIES								ELECTRICAL PROPERTIES		
			Approximate Diameter		Approximate Mass					
Cable Size	Cond. Diam.	Insul. Diam.	3C	4C	3C	4C	Drum length	DC Resistance @ 20°C	Symmetrical Current	Current in Air
mm²	mm	mm	mm	mm	Kg/km	kg/km	m	Ω/km/phase	kA(1 sec)	Amps
1.5	1.7	3.3	9.7	10.7	120	145	500	13.300	0.2	16
2.5	2.2	3.8	10.8	11.9	160	195	500	7.980	0.3	20
4	2.6	4.6	12.9	14.7	240	310	500	4.950	0.5	25
6	3.9	5.9	16.0	18.2	345	445	500	3.300	0.7	34
10	4.7	7.2	19.3	21.8	520	660	500	1.910	1.2	47
16	5.8	8.4	22.1	25.3	740	970	500	1.210	1.8	63
25	7.3	10.2	26.7	30.2	1125	1440	500	0.780	2.9	83
35	9.4	12.3	32.0	36.1	1552	1980	500	0.554	4.0	102
50	11.2	14.5	37.9	43.1	2205	2835	500	0.386	5.8	124
70	13.1	16.4	41.8	47.6	2870	3700	500	0.272	8.1	158
95	15.3	19.1	49.0	55.6	3925	5040	500	0.206	10.9	192

Flexible Cables

PVC Nitrile Trailing Cable, Low Voltage Power Cable 0.6/1 kV, SABS 1574, 70ºC



Conductor: Flexible Copper – Class 5
Insulation: PVC Nitrile Flexible grade
Sheathing: PVC Nitrile Flexible Grade
Phase Color Code: Red , Yellow, Blue or Black
Application: Used for outdoors and indoors, mobile, portable and fixed pumping equipment.

PVC Nitrile Trailing Cable - 600/1000V

PHYSICAL PROPERTIES						ELECTRICAL PROPERTIES		
Cable Size	Cond. Diam.	Insul. Diam.	Approximate Diameter	Approximate Mass	Drum length	DC Resistance @ 20°C	Symmetrical Current	Current in Air
mm²	mm	mm	mm	Kg/km	m	Ω/km/phase	kA(1 sec)	Amps
1.5	1.7	3.3	10.7	150	500	13.300	0.2	16
2.5	2.2	3.8	11.9	202	500	7.980	0.3	20
4	2.6	4.6	14.7	320	500	4.950	0.5	25
6	3.9	5.9	18.2	456	500	3.300	0.7	34
10	4.7	7.2	21.8	680	500	1.910	1.2	47
16	5.8	8.4	25.3	990	500	1.210	1.8	63
25	7.3	10.2	30.2	1470	500	0.780	2.9	83
35	9.4	12.3	36.1	2015	500	0.554	4.0	102
50	11.2	14.5	43.1	2890	500	0.386	5.8	124
70	13.1	16.4	47.6	3760	500	0.272	8.1	158
95	15.3	19.1	55.5	5120	500	0.206	10.9	192

Railway Cables

TROLLEY WIRE

Conductor: Copper Rod with Groove

Application: Used for Fixed Electric Traction Installation

Specification: BS EN 50149 + Customer

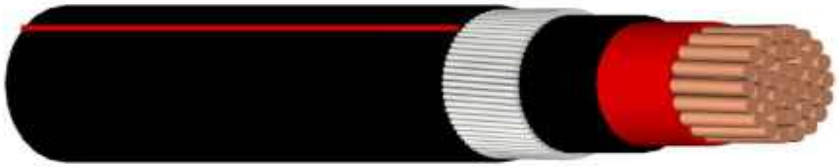
Trolley Wire

PHYSICAL PROPERTIES				MECHANICAL & ELECTRICAL PROPERTIES				
Cable Size	Approx. Diameter	Approximate Mass	Drum length	Tensile Strength	Hardness	Torsion Test	Bending Test	DC Resistance @ 20°C
mm^2	mm	Kg/km	m					
81	10.6	711	1000	355	54	5	5	0.229
107	12.3	951	1000	350	54	5	5	0.170
161	15.0	1431	1000	318	54	5	5	0.108

Low Voltage Power Cable 1kV: Single Core

CONTEAST CABLES
"wired as one"

Armoured XLPE Low Voltage Power Cable 0.6/1 kV, SABS 1507, 90ºC, PVC-FR Sheath.



Conductor: Annealed Copper or Aluminium Compacted – Class 2
Insulation: LV-XLPE
Phase Color Code: Red or Black
Application: Used for reticulation and underground power supply .
Outer sheath can also be stripped blue or white .

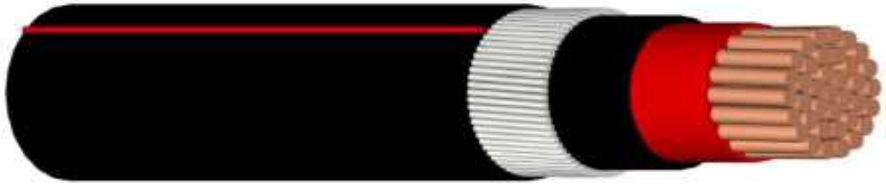
600/1000V - 1 Cores XLPE AWA

PHYSICAL PROPERTIES							ELECTRICAL PROPERTIES												
Cable Size	Core Diam.	Insulation Screen Diam.	Overall Diameter	Cable Mass		Drum length	DC Resistance @ 20°C		AC Resistance @ 90°C		Impedance		Sym. Current, in 1sec		Asym. Current,in 1sec	Current (I)			
																Ground		Air	
				CU	AL		CU	AL	CU	AL	CU	AL	CU	AL		CU	AL	CU	AL
mm²	mm	mm	mm	kg/km		m	Ω/km/phase		Ω/km/phase		Ω/km/phase		kA			Amps			
16	4.8	6.2	13.3	342.7	242.7	500	1.15	1.91	1.47	2.420	1.47	2.460	2.3	1.5	2.6	91	71	88	69
25	6.1	7.9	15.0	463.1	306.9	500	0.73	1.20	0.93	1.540	0.93	1.542	3.5	2.3	3.0	117	93	114	92
35	7.1	8.9	16.0	576.8	358.1	500	0.52	0.87	0.67	1.110	0.68	1.11	5.0	3.3	3.4	147	113	147	113
50	8.2	10.2	17.3	742.0	429.6	500	0.39	0.64	0.49	0.820	0.52	0.84	7.2	4.7	3.7	174	135	174	136
70	9.9	12.1	19.4	974.3	536.9	500	0.27	0.44	0.34	0.570	0.37	0.59	10.0	6.6	4.2	217	169	223	173
95	11.7	13.9	21.2	1242.4	648.8	500	0.19	0.32	0.25	0.410	0.28	0.43	13.6	9.0	4.8	261	203	242	209
120	13.4	15.8	24.1	1572.2	822.4	500	0.15	0.25	0.2	0.330	0.24	0.350	17.2	11.3	5.4	304	236	269	248
150	14.6	17.4	25.7	1891.9	954.5	500	0.12	0.21	0.16	0.270	0.2	0.29	21.5	14.2	5.9	342	266	361	280
185	16.4	19.6	28.8	2351.9	1195.9	500	0.10	0.16	0.13	0.210	0.18	0.24	26.5	17.5	8.5	388	303	410	364
240	18.8	22.2	31.4	2929.0	1429.2	500	0.08	0.13	0.1	0.160	0.15	0.200	34.3	22.7	9.5	456	356	488	381
300	21.4	25.0	35.4	3681.9	1807.2	500	0.06	0.10	0.08	0.130	0.14	0.17	42.9	28.3	13.4	525	412	573	450
400	24.3	28.3	39.5	4778.5	2279.0	500	0.05	0.08	0.06	0.100	0.13	0.15	57.2	37.8	14.8	596	473	652	518
500	27.3	31.7	42.9	5823.5	2699.1	500	0.04	0.06	0.05	0.080	0.120	0.14	71.5	47.2	16.6	693	556	773	622
630	31.0	35.8	48.8	7411.1	3474.3	500	0.03	0.05	0.04	0.060	0.11	0.12	90.1	59.5	23.7	778	675	872	712
800	35.1	40.3	53.3	9143.1	4144.0	500	0.02	0.03	0.04	0.042	0.039	0.045	114.4	73.6	26.0	843	702	996	918
1000	39.1	44.7	58.1	11206.2	4957.3	500	0.02	0.03	0.03	0.038	0.034	0.040	143.0	92.0	28.3	895	774	1081	963

Low Voltage Power Cable 3.3kV: Single Core

CONTEAST CABLES "wired as one"

Armoured XLPE Low Voltage Power Cable 1.9/3.3 kV, SABS 1507, 90°C, PVC-FR Sheath.



Conductor: Annealed Copper or Aluminium Compacted – Class 2
Insulation: LV-XLPE
Phase Color Code: Red or Black
Application: Used for reticulation and underground power supply .
Outer sheath can also be stripped blue or white .

1900/3300V - 1 Cores XLPE AWA

PHYSICAL PROPERTIES							ELECTRICAL PROPERTIES												
Cable Size	Core Diam.	Insulation Screen Diam.	Overall Diameter	Cable Mass		Drum length	DC Resistance @ 20°C		AC Resistance @ 90°C		Impedance		Sym. Current, in 1sec		Asym. Current,in 1sec	Current (I)			
																Ground		Air	
				CU	AL		CU	AL	CU	AL	CU	AL	CU	AL		CU	AL	CU	AL
mm²	mm	mm	mm	kg/km		m	Ω/km/phase		Ω/km/phase		Ω/km/phase		kA			Amps			
16	4.8	8.8	15.9	420.3	320.4	500	1.15	1.91	1.47	2.42	1.474	2.46	2.3	1.5	3.2	91	71	88	69
25	6.1	10.1	17.2	536.7	380.5	500	0.727	1.2	0.93	1.54	0.934	1.542	3.5	2.3	3.7	117	93	114	92
35	7.1	11.1	18.4	659.3	440.5	500	0.524	0.87	0.67	1.11	0.676	1.113	5	3.3	3.9	147	113	147	113
50	8.2	12.2	19.5	823.3	510.9	500	0.387	0.640	0.490	0.820	0.517	0.836	7.2	4.7	4.3	174	135	174	136
70	9.9	13.9	21.2	1046.1	608.7	500	0.268	0.440	0.340	0.570	0.371	0.586	10.0	6.6	4.8	217	169	223	173
95	11.7	15.7	23.0	1315.6	722.0	500	0.193	0.320	0.250	0.410	0.282	0.433	13.6	9.0	5.2	261	203	242	209
120	13.4	17.4	25.7	1646.9	897.0	500	0.153	0.250	0.200	0.330	0.236	0.350	17.2	11.3	5.9	304	236	269	248
150	14.6	18.6	26.9	1950.3	1013.0	500	0.124	0.210	0.160	0.270	0.204	0.294	21.5	14.2	6.3	342	266	361	280
185	16.4	20.4	29.6	2392.4	1236.3	500	0.099	0.160	0.130	0.210	0.177	0.244	26.5	17.5	8.7	388	303	410	364
240	18.8	22.8	32.0	2962.9	1463.1	500	0.075	0.130	0.100	0.160	0.153	0.200	34.3	22.7	9.7	456	356	488	381
300	21.4	25.4	35.8	3702.8	1828.1	500	0.060	0.100	0.080	0.130	0.139	0.173	42.9	28.3	13.4	525	412	573	450
400	24.3	28.3	39.5	4778.5	2279.0	500	0.047	0.080	0.060	0.100	0.129	0.151	57.2	37.8	14.8	596	473	652	518
500	27.3	31.7	42.9	5823.5	2699.1	500	0.037	0.060	0.050	0.080	0.120	0.135	71.5	47.2	16.6	693	556	773	622
630	31.0	35.8	48.8	7411.1	3474.3	500	0.028	0.050	0.040	0.060	0.112	0.122	90.1	59.5	23.7	778	675	872	712
800	35.1	40.3	53.3	9143.1	4144.0	500	0.021	0.033	0.036	0.042	0.039	0.045	114.4	73.6	26.0	843	702	996	918
1000	39.1	44.7	58.5	11263.3	5014.5	500	0.019	0.032	0.032	0.038	0.034	0.04	143	92	28.3	895	774	1081	963

Low Voltage Power Cable 1kV: Single Core U/A

Unarmoured XLPE Low Voltage Power Cable 0.6/1 kV, SABS 1507, 90ºC, PVC-FR Sheath.

Conductor: Annealed Copper or Aluminium Compacted – Class 2
Insulation: LV-XLPE
Phase Color Code: Red or Black
Application: Used for reticulation and underground power supply .
Outer sheath can also be stripped blue or white .

600/1000V - 1 Cores XLPE Unarmoured

PHYSICAL PROPERTIES							ELECTRICAL PROPERTIES											
Cable Size	Cond. Diam.	Insulation Screen Diam.	Overall Diameter	Cable Mass		Drum length	DC Resistance @ 20°C		AC Resistance @ 90°C		Impedance		Sym. Current, in 1sec		Current (I) in Trefoil			
															Ground		Air	
				CU	AL		CU	AL	CU	AL	CU	AL	CU	AL	CU	AL	CU	AL
mm²	mm	mm	mm	kg/km		m	Ω/km/phase		Ω/km/phase		Ω/km/phase		kA		Amps			
16	4.8	6.2	9.4	216	117	500	1.15	1.91	1.47	2.420	1.47	2.460	2.3	1.5	91	71	88	69
25	6.1	7.9	11.1	318	162	500	0.73	1.20	0.93	1.540	0.93	1.542	3.5	2.3	117	93	114	92
35	7.1	8.9	12.1	418	199	500	0.52	0.87	0.67	1.110	0.68	1.11	5.0	3.3	147	113	147	113
50	8.2	10.2	13.8	582	270	500	0.39	0.64	0.49	0.820	0.52	0.84	7.2	4.7	174	135	174	136
70	9.9	12.1	15.7	787	349	500	0.27	0.44	0.34	0.570	0.37	0.59	10.0	6.6	217	169	223	173
95	11.7	13.9	17.5	1033	439	500	0.19	0.32	0.25	0.410	0.28	0.43	13.6	9.0	261	203	242	209
120	13.4	15.8	19.4	1284	534	500	0.15	0.25	0.2	0.330	0.24	0.350	17.2	11.3	304	236	269	248
150	14.6	17.4	21	1582	644	500	0.12	0.21	0.16	0.270	0.2	0.29	21.5	14.2	342	266	361	280
185	16.4	19.6	23.2	1934	778	500	0.10	0.16	0.13	0.210	0.18	0.24	26.5	17.5	388	303	410	364
240	18.8	22.2	26.2	2494	994	500	0.08	0.13	0.1	0.160	0.15	0.200	34.3	22.7	456	356	488	381
300	21.4	25.0	29.0	3080	1205	500	0.06	0.10	0.08	0.130	0.14	0.17	42.9	28.3	525	412	573	450
400	24.3	28.3	32.3	4042	1542	500	0.05	0.08	0.06	0.100	0.13	0.15	57.2	37.8	596	473	652	518
500	27.3	31.7	36.1	5044	1919	500	0.04	0.06	0.05	0.080	0.120	0.14	71.5	47.2	693	556	773	622
630	31.0	35.8	40.2	6299	2363	500	0.03	0.05	0.04	0.060	0.11	0.12	90.1	59.5	778	675	872	712
800	35.1	40.3	45.1	7969	2970	500	0.02	0.03	0.04	0.042	0.039	0.045	114.4	73.6	843	702	996	918
1000	39.1	44.7	50.0	9874	3625	500	0.02	0.03	0.03	0.038	0.034	0.040	143.0	92.0	895	774	1081	963

Low Voltage Power Cable 3.3kV: Single Core U/A

Unarmoured XLPE Low Voltage Power Cable 1.9/3.3 kV, SABS 1507, 90ºC, PVC-FR Sheath.

Conductor: Annealed Copper or Aluminium Compacted – Class 2
Insulation: LV-XLPE
Phase Color Code: Red or Black
Application: Used for reticulation and underground power supply .
Outer sheath can be stripped blue or white .

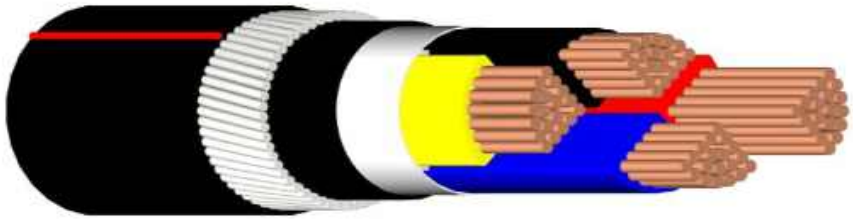
1900/3300V - 1 Cores XLPE Unarmoured

PHYSICAL PROPERTIES							ELECTRICAL PROPERTIES											
Cable Size	Cond. Diam.	Insulation Screen Diam.	Overall Diameter	Cable Mass		Drum length	DC Resistance @ 20°C		AC Resistance @ 90°C		Impedance		Sym. Current, in 1sec		Current (I)			
															Ground		Air	
				CU	AL		CU	AL	CU	AL	CU	AL	CU	AL	CU	AL	CU	AL
mm²	mm	mm	mm	kg/km		m	Ω/km/phase		Ω/km/phase		Ω/km/phase		kA		Amps			
16	4.8	8.8	12	265	165	500	1.15	1.91	1.47	2.42	1.474	2.46	2.3	1.5	91	71	88	69
25	6.1	10.1	13.7	377	221	500	0.727	1.2	0.93	1.54	0.934	1.542	3.5	2.3	117	93	114	92
35	7.1	11.1	14.7	481	263	500	0.524	0.87	0.67	1.11	0.676	1.113	5.0	3.3	147	113	147	113
50	8.2	12.2	15.8	632	320	500	0.387	0.640	0.490	0.820	0.517	0.836	7.2	4.7	174	135	174	136
70	9.9	13.9	17.5	837	399	500	0.268	0.440	0.340	0.570	0.371	0.586	10.0	6.6	217	169	223	173
95	11.7	15.7	19.3	1087	494	500	0.193	0.320	0.250	0.410	0.282	0.433	13.6	9.0	261	203	242	209
120	13.4	17.4	21.0	1337	587	500	0.153	0.250	0.200	0.330	0.236	0.350	17.2	11.3	304	236	269	248
150	14.6	18.6	22.2	1624	686	500	0.124	0.210	0.160	0.270	0.204	0.294	21.5	14.2	342	266	361	280
185	16.4	20.4	24.4	1988	832	500	0.099	0.160	0.130	0.210	0.177	0.244	26.5	17.5	388	303	410	364
240	18.8	22.8	26.8	2519	1019	500	0.075	0.130	0.100	0.160	0.153	0.200	34.3	22.7	456	356	488	381
300	21.4	25.4	29.4	3098	1224	500	0.060	0.100	0.080	0.130	0.139	0.173	42.9	28.3	525	412	573	450
400	24.3	28.3	32.3	4042	1542	500	0.047	0.080	0.060	0.100	0.129	0.151	57.2	37.8	596	473	652	518
500	27.3	31.7	36.1	5044	1919	500	0.037	0.060	0.050	0.080	0.120	0.135	71.5	47.2	693	556	773	622
630	31.0	35.8	40.2	6299	2363	500	0.028	0.050	0.040	0.060	0.112	0.122	90.1	59.5	778	675	872	712
800	35.1	40.3	45.1	7969	2970	500	0.021	0.033	0.036	0.042	0.039	0.045	114.4	73.6	843	702	996	918
1000	39.1	44.7	49.5	9874	3625	500	0.019	0.032	0.032	0.038	0.034	0.04	143.0	92.0	895	774	1081	963

Low Voltage Power Cable 1kV: XLPE 4 Core

CONTEAST CABLES "wired as one"

Armoured XLPE Low Voltage Power Cable 0.6/1 kV, SABS 1507, 90°C, PVC-FR Sheath



Conductor: Annealed Copper or Aluminium Compacted – Class 2
Insulation: LV-XLPE
Phase Color Code: Red , Yellow, Blue or Black
Application: Used for reticulation and underground power supply .
Outer sheath can also be stripped blue or white .

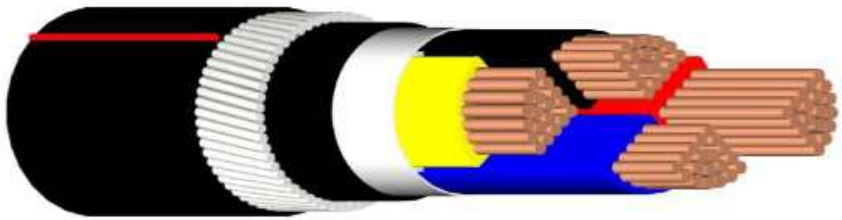
600/1000V - 2,3 & 4 Cores XLPE SWA Armoured

PHYSICAL PROPERTIES													ELECTRICAL PROPERTIES														
Cable Size	Cond. Diam.	Insul. Diam.	Overall Diameter			Cable Mass (kg/km)						Drum length	DC Resistance @ 20°C		AC Resistance @ 90°C		Impedance		Sym. Current		Asym. Current			Current (I)			
																								Ground		Air	
			2C	3C	4C	2C		3C		4C			CU	AL	CU	AL	CU	AL	CU	AL	2C	3C	4C	CU	AL	CU	AL
mm²	mm	mm	mm	mm	mm	CU	AL	CU	AL	CU	AL	m	Ω/km/phase		Ω/km/phase		Ω/km/phase		kA(1sec)					Amps			
1	1.19	2.59	12.0	12.4	13.1	270	-	293	-	322	-	500	18.20	-	19.150	-	19.200	-	0.1	-	0.7	0.8	0.8	14	-	15	-
1.5	1.46	2.86	12.5	12.9	13.7	298	-	325	-	360	-	500	13.60	-	14.400	-	14.433	-	0.2	-	0.8	0.8	0.9	18	-	19	-
2.5	1.86	3.26	13.3	13.8	14.7	343	-	379	-	423	-	500	7.410	-	8.600	-	8.660	-	0.4	-	0.8	0.9	1	24	-	25	-
4	2.35	3.75	14.3	14.9	15.9	401	-	450	-	514	-	500	4.610	-	5.400	-	5.485	-	0.6	-	1	1	1.1	32	-	34	-
6	2.89	4.29	15.4	16	17.1	474	-	540	-	628	-	500	3.080	-	3.600	-	3.695	-	0.9	-	1.1	1.1	1.2	41	-	43	-
10	3.74	5.15	17.1	18.1	19.4	607	-	714	-	845	-	500	1.830	-	2.100	-	2.193	-	1.4	-	1.2	1.3	1.4	57	-	65	-
16	4.72	6.12	19.3	20.2	22.8	787	-	939	-	1189	-	500	1.150	-	1.470	-	1.385	-	2.3	-	1.4	1.5	1.7	103	-	101	-
25	4.1	5.87	21.7	24.9	27.5	1227	930	1608	1162	1960	1365	500	0.727	1.250	0.930	1.540	0.528	1.542	3.5	2.3	2.8	3.3	3.7	132	101	126	95
35	4.9	6.67	23.3	26.1	30.1	1469	1055	1908	1288	2416	1589	500	0.524	0.868	0.670	1.110	0.675	1.120	5.0	3.3	3	3.5	4.1	158	121	155	116
50	5.5	7.5	24.9	28.7	33.0	1760	1198	2371	1528	3002	1877	500	0.387	0.641	0.490	0.820	0.501	0.825	7.2	4.7	3.3	3.9	4.6	186	142	189	142
70	6.4	8.6	27.0	31.9	38.8	2223	1412	3071	1856	4286	2663	500	0.268	0.443	0.340	0.570	0.352	0.572	10.0	6.6	3.6	4.4	6.9	229	175	241	180
95	11.6	12.7	-	39.0	44.8	-	-	4371	2679	5553	3297	300	0.193	0.320	0.250	0.410	0.260	0.416	13.6	9.0	-	6.8	8	275	210	297	223
120	12.5	13.0	-	39.7	49.9	-	-	5050	2918	7178	4334	300	0.153	0.253	0.200	0.330	0.211	0.331	17.2	11.3	-	6.9	11	312	239	347	260
150	14.5	14.6	-	43.5	56.0	-	-	6053	3416	8642	5126	300	0.124	0.164	0.160	0.270	0.177	0.220	21.5	14.2	-	7.7	12.5	351	268	398	298
185	16.0	17.7	-	52.0	60.6	-	-	7974	4679	10106	5714	300	0.099	0.125	0.130	0.210	0.150	0.173	26.5	17.5	-	11	12.7	397	305	460	346
240	18.5	20.2	-	57.9	67.9	-	-	9903	5571	12419	6642	300	0.075	0.100	0.100	0.160	0.125	0.144	34.3	22.7	-	13	12.8	459	353	547	412

Low Voltage Power Cable 1kV: PVC 4 Core

CONTEAST CABLES
"wired as one"

Armoured PVC Low Voltage Power Cable 0.6/1 kV, SABS 1507, 70ºC, PVC-FR Sheath



Conductor: Annealed Copper or Aluminium Compacted – Class 2
Insulation: PVC
Phase Color Code: Red , Yellow , Blue and Black
Application: Used for reticulation and underground power supply .
Outer sheath can also be stripped blue or white .

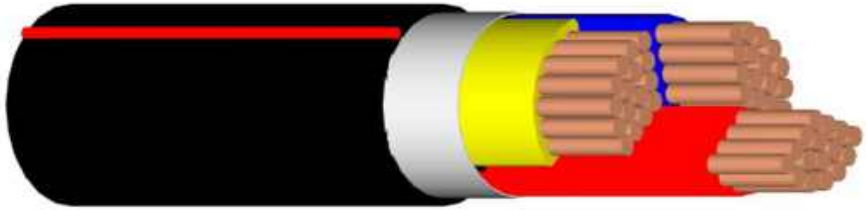
600/1000V - 2,3 & 4 Cores PVC SWA Armoured

PHYSICAL PROPERTIES													ELECTRICAL PROPERTIES														
Cable Size	Cond. Diam.	Insul. Diam.	Overall Diameter			Cable Mass (kg/km)						Drum length	DC Resistance @ 20°C		AC Resistance @ 70°C		Impedance		Sym. Current		Asym. Current			Current (I)			
																								Ground		Air	
			2C	3C	4C	2C		3C		4C			CU	AL	CU	AL	CU	AL	CU	AL	2C	3C	4C	CU	AL	CU	AL
mm²	mm	mm	mm	mm	mm	CU	AL	CU	AL	CU	AL	m	Ω/km/phase		Ω/km/phase		Ω/km/phase		kA(1sec)					Amps			
1	1.19	2.59	12.0	12.4	13.1	270	-	293	-	322	-	500	18.2	-	19.150	-	19.20	-	0.1	-	0.7	0.8	0.8	15	-	14	-
1.5	1.46	2.86	12.5	12.9	13.7	298	-	325	-	360	-	500	13.6	-	14.430	-	14.43	-	0.2	-	0.8	0.8	0.9	18	-	17	-
2.5	1.86	3.26	13.3	13.8	14.7	343	-	379	-	423	-	500	7.41	-	8.660	-	8.66	-	0.3	-	0.8	0.9	1	25	-	24	-
4	2.35	3.75	14.3	14.9	15.9	401	-	450	-	514	-	500	4.61	-	5.480	-	5.48	-	0.5	-	1	1	1.1	32	-	33	-
6	2.89	4.29	15.4	16	17.1	474	-	540	-	628	-	500	3.08	-	3.700	-	3.70	-	0.7	-	1.1	1.1	1.2	41	-	42	-
10	3.74	5.15	17.1	18.1	19.4	607	-	714	-	845	-	500	1.83	-	2.190	-	2.19	-	1.2	-	1.2	1.3	1.4	57	-	60	-
16	4.72	6.12	19.3	20.2	22.8	787	-	939	-	1189	-	500	1.15	-	1.380	-	1.38	-	1.8	-	1.4	1.5	1.7	91	-	80	-
25	4.1	5.87	21.7	24.9	27.5	1245	943	1632	1178	1988	1384	500	0.727	1.250	1.500	2.500	1.50	2.50	2.9	1.9	2.8	3.3	3.7	119	93	101	84
35	4.9	6.67	23.3	26.1	30.1	1491	1070	1937	1307	2451	1612	500	0.524	0.868	1.100	1.800	1.10	1.80	4.0	2.7	3	3.5	4.1	143	112	126	102
50	5.5	7.5	24.9	28.7	33.0	1786	1216	2406	1550	3046	1905	500	0.387	0.641	0.800	1.350	0.81	1.35	5.8	3.8	3.3	3.9	4.6	169	133	153	122
70	6.4	8.6	27.0	31.9	38.8	2255	1432	3118	1883	4349	2702	500	0.268	0.443	0.550	0.900	0.57	0.92	8.1	5.3	3.6	4.4	6.9	210	165	196	154
95	11.6	12.7	-	39.0	44.8	-	-	4437	2718	5635	3346	300	0.193	0.320	0.410	0.670	0.43	0.68	10.9	7.2	-	6.8	8	251	197	238	189
120	12.5	13.0	-	39.7	49.9	-	-	5125	2961	7286	4399	300	0.153	0.253	0.330	0.530	0.35	0.55	13.8	9.1	-	6.9	11	285	225	276	219
150	14.5	14.6	-	43.5	56.0	-	-	6143	3466	8771	5203	300	0.124	0.164	0.260	0.420	0.29	0.44	17.3	11.4	-	7.7	12.5	320	252	319	249
185	16.0	17.7	-	52.0	60.6	-	-	8093	4749	10257	5799	300	0.099	0.125	0.210	0.340	0.25	0.37	21.3	14.1	-	11.4	12.7	361	286	364	287
240	18.5	20.2	-	57.9	67.9	-	-	10052	5654	12604	6741	300	0.075	0.100	0.165	0.260	0.21	0.35	27.8	18.2	-	12.7	12.8	416	331	430	339

Low Voltage Power Cable 3.3kV : 3 Core U/A

CONTEAST CABLES
"wired as one"

Unarmoured XLPE Low Voltage Power Cable 1.9/3.3 kV, SABS 1507, 90ºC, PVC-FR Sheath.



Conductor: Annealed Copper or Aluminium Compacted – Class 2
Insulation: LV-XLPE
Phase Color Code: Red, Yellow & Blue
Application: Used for reticulation and underground power supply .
Outer sheath can also be stripped blue or white .

1900/3300V - 3 Cores XLPE Unarmoured

PHYSICAL PROPERTIES							ELECTRICAL PROPERTIES											
Cable Size	Cond. Diam.	Insulation Diam.	Overall Diameter	Cable Mass		Drum length	DC Resistance @ 20°C		AC Resistance @ 90°C		Impedance		Sym. Current, in 1sec		Current (I) in Trefoil			
															Ground		Air	
				CU	AL		CU	AL	CU	AL	CU	AL	CU	AL	CU	AL	CU	AL
mm²	mm	mm	mm	kg/km		m	Ω/km/phase		Ω/km/phase		Ω/km/phase		kA		Amps			
10	3.8	7.7	20	580	-	500	1.15	-	1.47	-	1.47	-	2.3	-	91	-	88	-
16	4.7	8.7	22	781	-	500	0.73	-	0.93	-	0.93	-	3.5	-	117	-	114	-
25	5.2	9.2	23	1048	944	500	0.52	0.87	0.67	1.110	0.68	1.11	5.0	3.3	147	113	147	113
35	5.7	9.7	25	1376	1220	500	0.39	0.64	0.49	0.820	0.52	0.84	7.2	4.7	174	135	174	136
50	6.6	10.6	26	1826	1544	500	0.27	0.44	0.34	0.570	0.37	0.59	10.0	6.6	217	169	223	173
70	7.9	11.9	29	2430	2087	500	0.19	0.32	0.25	0.410	0.28	0.43	13.6	9.0	261	203	242	209
95	10.5	14.5	35	3266	2844	500	0.15	0.25	0.2	0.330	0.24	0.350	17.2	11.3	304	236	269	248
120	10.6	14.6	36	3961	3431	500	0.12	0.21	0.16	0.270	0.2	0.29	21.5	14.2	342	266	361	280
150	11.8	15.8	38	4840	4116	500	0.10	0.16	0.13	0.210	0.18	0.24	26.5	17.5	388	303	410	364
185	14.5	18.5	43	5918	5103	500	0.08	0.13	0.1	0.160	0.15	0.200	34.3	22.7	456	356	488	381
240	16.8	20.8	49.0	7594	6600	500	0.06	0.10	0.08	0.130	0.14	0.17	42.9	28.3	525	412	573	450

Low Voltage Power Cable 3.3kV : 3 Core

CONTEAST CABLES
"wired as one"

Armoured XLPE Low Voltage Power Cable 1.9/3.3 kV, SABS 1507, 90°C, PVC-FR Sheath.

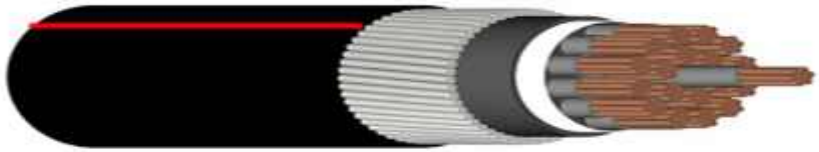
Conductor: Annealed Copper or Aluminium Compacted – Class 2
Insulation: LV-XLPE
Phase Color Code: Red, Yellow & Blue
Application: Used for reticulation and underground power supply .
Outer sheath can also be stripped blue or white .

1900/3300V - 3 Cores XLPE AWA

PHYSICAL PROPERTIES							ELECTRICAL PROPERTIES												
Cable Size	Core Diam.	Insulation Screen Diam.	Overall Diameter	Cable Mass		Drum length	DC Resistance @ 20°C		AC Resistance @ 90°C		Impedance		Sym. Current, in 1sec		Asym. Current,in 1sec	Current (I)			
																Ground		Air	
				CU	AL		CU	AL	CU	AL	CU	AL	CU	AL		CU	AL	CU	AL
mm²	mm	mm	mm	kg/km		m	Ω/km/phase		Ω/km/phase		Ω/km/phase		kA			Amps			
10	3.8	7.8	26.1	1355	-	500	1.15	-	1.47	-	1.474	-	2.3	1.5	4.1	91	-	88	-
16	4.7	8.7	28.1	1636	-	500	0.727	-	0.93	-	0.934	-	3.5	2.3	4.6	117	-	114	-
25	5.2	9.2	29.1	1939	1835	500	0.524	0.87	0.67	1.11	0.676	1.113	5	3.3	4.8	147	113	147	113
35	5.7	9.7	30.6	2307	2151	500	0.387	0.640	0.490	0.820	0.517	0.836	7.2	4.7	5.0	174	135	174	136
50	6.6	10.6	32.5	2831	2549	500	0.268	0.440	0.340	0.570	0.371	0.586	10.0	6.6	5.4	217	169	223	173
70	7.9	11.9	36.9	3883	3539	500	0.193	0.320	0.250	0.410	0.282	0.433	13.6	9.0	7.6	261	203	242	209
95	10.5	14.5	42.7	4977	4555	500	0.153	0.250	0.200	0.330	0.236	0.350	17.2	11.3	8.9	304	236	269	248
120	10.6	14.6	42.9	5684	5153	500	0.124	0.210	0.160	0.270	0.204	0.294	21.5	14.2	9.1	342	266	361	280
150	11.8	15.8	45.8	6730	6006	500	0.099	0.160	0.130	0.210	0.177	0.244	26.5	17.5	9.7	388	303	410	364
185	14.5	18.5	53.3	8685	7870	500	0.075	0.130	0.100	0.160	0.153	0.200	34.3	22.7	14.2	456	356	488	381
240	16.8	20.8	58.7	10665	9671	500	0.060	0.100	0.080	0.130	0.139	0.173	42.9	28.3	15.9	525	412	573	450

Instrument & Control Cables: Armoured

Armoured Multi-Core Low Voltage Power Cable 0.6/1 kV, SABS 1507, 90°C, PVC-FR Sheath



Conductor: Annealed Stranded Copper – Class 2
Insulation: LV-XLPE
Phase Identification: Numbers
Application: Used to power control circuits like robots, etc.
Outer sheath can also be stripped blue or white .

600/1000V 7-37 Cores Armoured

PHYSICAL PROPERTIES							ELECTRICAL PROPERTIES					
Cable Size	No. of Cores	Core Diam.	Insulation Diam.	Overall Diameter	Cable Mass	Drum length	DC Resistance @ 20°C	AC Resistance @ 90°C	Impedance	Sym. Current, in 1sec	Current (I)	
											Ground	Air
mm^2		mm	mm	mm	kg/km	m	Ω/km/phase	Ω/km/phase	Ω/km/phase	kA	Amps	
1	7	1.19	2.59	15.5	300	500	18.2	19.15	19.15	0.1	15	14
	12	1.19	2.59	20.7	480	500	18.2	19.15	19.15	0.1	14	13
	19	1.19	2.59	21.7	700	500	18.2	19.15	19.15	0.1	13	12
	27	1.19	2.59	27.0	960	500	18.2	19.15	19.15	0.1	12	11
	37	1.19	2.59	28.9	1380	500	18.2	19.15	19.15	0.1	11	10
1.5	7	1.46	2.86	17.0	629	500	13.6	14.43	14.47	0.2	18	15
	12	1.46	2.86	21.2	901	500	13.6	14.43	14.47	0.2	15	12
	19	1.46	2.86	25.9	1404	500	13.6	14.43	14.47	0.2	12	11
	27	1.46	2.86	29.8	1783	500	13.6	14.430	14.47	0.2	11	10
	37	1.46	2.86	32.8	2153	500	13.6	14.430	14.47	0.2	9	8
2.5	7	1.86	3.26	18.5	756	500	7.41	8.66	8.86	0.3	24	20
	12	1.86	3.26	24.8	1306	500	7.41	8.66	8.86	0.3	19	17
	19	1.86	3.26	28.1	1695	500	7.41	8.66	8.86	0.3	16	14
	27	1.86	3.26	32.6	2181	500	7.41	8.66	8.86	0.3	14	13
	37	1.86	3.26	37.6	3011	500	7.41	8.66	8.86	0.3	12	11
4	7	2.35	3.75	21.0	986	500	4.61	5.48	5.51	0.5	31	26
	12	2.35	3.75	28.2	1211	500	4.61	5.48	5.51	0.5	25	22
	19	2.35	3.75	32.5	2282	500	4.61	5.48	5.51	0.5	21	19
	27	2.35	3.75	39.8	3354	500	4.61	5.48	5.51	0.5	18	17
	37	2.35	3.75	43.8	4124	500	4.61	5.48	5.51	0.5	16	15
6	7	2.89	4.29	24.4	1412	500	3.08	3.68	3.7	0.7	38	33

Instrument & Control Cables

CONTEAST CABLES
"wired as one"

Unarmoured Multi-Core Low Voltage Power Cable 0.6/1 kV, SABS 1507, 90ºC, PVC-FR Sheath

Conductor: Annealed Stranded Copper – Class 2
Insulation: LV-XLPE
Phase Identification: Numbers
Application: Used to power control circuits like robots, etc.
Outer sheath can be stripped red, blue or white .

600/1000V 7-37 Cores Unarmoured

PHYSICAL PROPERTIES							ELECTRICAL PROPERTIES					
Cable Size	No. of Cores	Core Diam.	Insulation Diam.	Overall Diameter	Cable Mass	Drum length	DC Resistance @ 20°C	AC Resistance @ 90°C	Impedance	Sym. Current, in 1sec	Current (I)	
											Ground	Air
mm^2		mm	mm	mm	kg/km	m	Ω/km/phase	Ω/km/phase	Ω/km/phase	kA	Amps	
1	7	1.19	2.59	10	150	500	18.2	19.15	19.15	0.1	15	14
	12	1.19	2.59	12.9	240	500	18.2	19.15	19.15	0.1	14	13
	19	1.19	2.59	14.9	350	500	18.2	19.15	19.15	0.1	13	12
	27	1.19	2.59	17.9	480	500	18.2	19.15	19.15	0.1	12	11
	37	1.19	2.59	21.2	690	500	18.2	19.15	19.15	0.1	11	10
1.5	7	1.46	2.86	11.4	195	500	13.6	14.43	14.47	0.2	18	15
	12	1.46	2.86	15.0	320	500	13.6	14.43	14.47	0.2	15	12
	19	1.46	2.86	16.9	450	500	13.6	14.43	14.47	0.2	12	11
	27	1.46	2.86	21.1	670	500	13.6	14.43	14.47	0.2	11	10
	37	1.46	2.86	22.7	840	500	13.6	14.43	14.47	0.2	9	8
2.5	7	1.86	3.26	13.3	300	500	7.41	8.66	8.86	0.3	24	20
	12	1.86	3.26	17.5	490	500	7.41	8.66	8.86	0.3	19	17
	19	1.86	3.26	21	760	500	7.41	8.66	8.86	0.3	16	14
	27	1.86	3.26	24.8	1030	500	7.41	8.66	8.86	0.3	14	13
	37	1.86	3.26	27.9	1380	500	7.41	8.66	8.86	0.3	12	11
4	7	2.35	3.75	15.4	493	500	4.61	5.48	5.51	0.5	31	26
	12	2.35	3.75	17.3	606	500	4.61	5.48	5.51	0.5	25	22
	19	2.35	3.75	22.9	1141	500	4.61	5.48	5.51	0.5	21	19
	27	2.35	3.75	27.1	1677	500	4.61	5.48	5.51	0.5	18	17
	37	2.35	3.75	30.8	2062	500	4.61	5.48	5.51	0.5	16	15
6	7	2.89	4.29	17	707	500	3.08	3.68	3.7	0.7	38	33

Medium Voltage: Armoured, Single Core

CONTEAST CABLES
"wired as one"

Armoured Medium Voltage (MV) XLPE Type A, Single Core, Power Cable , SANS 1339

Conductor: Annealed Copper or Aluminium Circular Compacted - Class 2

Application: Used for underground reticulation, main distribution system, sub-station and mining. Can be manufactured with corrugated aluminium or steel tape. Outer-sheath can also be stripped blue or white according to customer requirements.

3.8/6.6kV - 1 Cores AWA

PHYSICAL PROPERTIES							ELECTRICAL PROPERTIES															
Cable Size	Core Diam.	Insulation Screen Diam.	Overall Diameter	Cable Mass		Drum length	Resistance @ 20°C		Resistance @ 90°C		Impedance		Sym. Current, in 1sec		Asym. Current,in 1sec	Capacitance	Current (I)					
																	Ground		Air		Duct	
				CU	AL		CU	AL	CU	AL	CU	AL	CU	AL		uf/km/phase	CU	AL	CU	AL	CU	AL
mm²	mm	mm	mm	kg/km		m	Ω/km/phase		Ω/km/phase		Ω/km/phase		kA				Amps					
50	8.4	16.7	26.7	1252	943	500	0.387	0.641	0.494	0.822	0.513	0.834	7.2	4.7	9.0	323.754	206	161	239	186	165	129
70	9.9	18.2	28.2	1495	1062	500	0.268	0.443	0.342	0.568	0.366	0.583	10.0	6.6	9.6	363.980	250	195	295	230	200	156
95	11.7	20.0	30.2	1810	1223	500	0.193	0.320	0.247	0.411	0.275	0.429	13.6	9.0	10.4	412.112	298	233	358	280	238	186
120	13.4	21.7	31.9	2107	1365	500	0.153	0.253	0.196	0.325	0.229	0.346	17.2	11.3	11.1	457.470	336	264	412	324	269	211
150	14.6	22.9	33.3	2443	1515	500	0.124	0.206	0.159	0.265	0.196	0.288	21.5	14.2	11.6	489.445	373	294	464	365	298	235
185	16.4	24.7	35.9	2927	1782	500	0.099	0.164	0.128	0.211	0.170	0.239	26.5	17.5	15.4	537.356	411	328	520	414	329	262
240	18.8	27.3	38.7	3563	2079	500	0.075	0.125	0.098	0.161	0.146	0.194	34.3	22.7	16.7	580.516	468	376	605	485	374	301
300	21.4	30.3	41.9	4276	2420	500	0.060	0.100	0.079	0.130	0.131	0.167	42.9	28.3	18.3	605.340	522	422	690	557	418	338
400	24.3	33.6	45.4	5365	2890	500	0.047	0.077	0.063	0.102	0.121	0.145	57.2	37.8	20.1	633.487	580	476	784	641	464	381
500	27.3	37.5	50.9	6724	3630	300	0.037	0.061	0.051	0.080	0.115	0.130	71.5	47.2	27.6	670.139	618	522	860	722	494	418
630	31.0	41.2	55.0	8143	4246	300	0.028	0.047	0.041	0.064	0.107	0.118	90.0	59.5	30.1	746.857	669	576	949	814	535	461

6.35/11kV 1 Cores AWA

50	8.4	18.5	28.6	1359	1049	500	0.387	0.641	0.494	0.82	0.513	0.834	7.2	4.7	9.7	253.773	206	161	242	188	165	129
70	9.9	20.0	30.3	1621	1188	500	0.268	0.443	0.342	0.57	0.366	0.583	10.0	6.6	10.4	283.609	250	195	297	232	200	156
95	11.7	21.8	32.1	1927	1339	500	0.193	0.320	0.247	0.41	0.275	0.429	13.6	9.0	11.1	319.249	297	233	361	283	238	186
120	13.4	23.5	34.0	2246	1503	500	0.153	0.253	0.196	0.33	0.229	0.346	17.2	11.3	12	352.793	334	263	412	324	267	210
150	14.6	24.7	36.2	2680	1752	500	0.124	0.206	0.159	0.27	0.196	0.288	21.5	14.2	15.3	376.419	370	292	464	366	296	234
185	16.4	26.5	38.0	3081	1937	500	0.099	0.164	0.128	0.21	0.170	0.239	26.5	17.5	16.3	411.798	412	328	524	416	330	262
240	18.8	28.9	40.6	3712	2227	500	0.075	0.125	0.098	0.16	0.146	0.194	34.3	22.7	17.7	458.882	470	377	611	489	376	302
300	21.4	31.5	43.2	4377	2521	500	0.06	0.100	0.079	0.13	0.131	0.167	42.9	28.3	19.1	509.806	520	421	688	555	416	337
400	24.3	34.4	46.5	5460	2986	500	0.047	0.077	0.063	0.1	0.121	0.145	57.2	37.8	20.5	566.532	579	476	783	640	463	381
500	27.3	37.9	51.4	6764	3670	300	0.037	0.061	0.051	0.08	0.115	0.130	71.5	47.2	27.8	634.529	620	523	864	724	496	418
630	31.0	41.6	55.5	8187	4289	300	0.028	0.047	0.041	0.06	0.107	0.118	90.0	59.5	30.5	706.761	672	579	957	819	538	463

Medium Voltage: Armoured, Single Core

Armoured Medium Voltage (MV) XLPE Type A, Single Core, Power Cable , SANS 1339

Conductor: Annealed Copper or Aluminium Circular Compacted - Class 2

Application: Used for underground reticulation, main distribution system, sub-station and mining. Can be manufactured with corrugated aluminium or steel tape. Outer-sheath can also be stripped blue or white according to customer requirements.

12.7/22kV - 1 Cores AWA

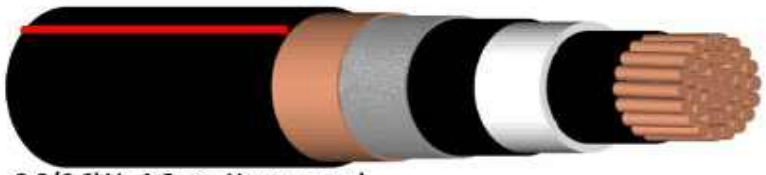
PHYSICAL PROPERTIES							ELECTRICAL PROPERTIES															
Cable Size	Core Diam.	Insulation Screen Diam.	Overall Diameter	Cable Mass		Drum length	Resistance @ 20°C		Resistance @ 90°C		Impedance		Sym. Current in 1sec		Asym. Current in 1sec	Capacitance	Current (I)					
																	Ground		Air		Duct	
				CU	AL		CU	AL	CU	AL	CU	AL	CU	AL		uf/km/phase	CU	AL	CU	AL	CU	AL
mm²	mm	mm	mm	kg/km		m	Ω/km/phase		Ω/km/phase		Ω/km/phase		kA				Amps					
50	8.4	23.0	33.5	1668	1358	500	0.39	0.64	0.49	0.82	0.517	0.836	7.2	4.7	11.8	182.108	206	160	243	189	165	128
70	9.9	24.5	35.8	2018	1585	500	0.27	0.44	0.34	0.57	0.371	0.586	10.0	6.6	15.3	201.132	250	195	302	236	200	156
95	11.7	26.3	37.8	2361	1774	500	0.19	0.32	0.25	0.41	0.282	0.433	13.6	9.0	16.3	223.777	297	232	365	286	238	186
120	13.4	28.0	39.5	2680	1938	500	0.15	0.25	0.2	0.33	0.236	0.350	17.2	11.3	17	245.028	333	263	416	327	266	210
150	14.6	29.2	40.9	3036	2108	500	0.12	0.21	0.16	0.27	0.204	0.294	21.5	14.2	17.8	259.969	372	293	471	370	298	234
185	16.4	31.0	42.7	3451	2306	500	0.1	0.16	0.13	0.21	0.177	0.244	26.5	17.5	18.8	282.305	414	329	531	421	331	263
240	18.8	33.4	45.1	4101	2616	500	0.08	0.13	0.1	0.16	0.153	0.200	34.3	22.7	19.9	311.978	470	377	616	491	376	302
300	21.4	36.0	48.9	4993	3137	500	0.06	0.1	0.08	0.13	0.139	0.173	42.9	28.3	26.7	344.019	509	415	681	552	407	332
400	24.3	38.9	52.4	6089	3615	500	0.05	0.08	0.06	0.1	0.129	0.151	57.2	37.8	28.4	379.662	567	468	775	636	454	374
500	27.3	42.4	56.3	7271	4178	300	0.04	0.06	0.05	0.08	0.120	0.135	71.5	47.2	31	423.213	622	523	669	725	498	418
630	31	46.1	60.4	8727	4829	300	0.03	0.05	0.04	0.06	0.112	0.122	90.0	59.5	33.2	468.578	676	580	963	821	541	464

19/33kV 1 Cores AWA

50	8.4	28.2	39.9	2169	1860	500	0.39	0.64	0.49	0.82	0.517	0.836	7.2	4.7	17.4	141.7481	206	160	243	189	165	128
70	9.9	29.7	41.4	2445	2011	500	0.27	0.44	0.34	0.57	0.371	0.586	10.0	6.6	18.1	155.2100	250	195	302	236	200	156
95	11.7	31.5	43.4	2806	2218	500	0.19	0.32	0.25	0.41	0.282	0.433	13.6	9.0	19.1	171.1653	297	232	365	286	238	186
120	13.4	33.2	45.1	3140	2397	500	0.15	0.25	0.2	0.33	0.236	0.350	17.2	11.3	19.8	186.0854	333	263	416	327	266	210
150	14.6	34.4	47.7	3687	2759	500	0.12	0.21	0.16	0.27	0.204	0.294	21.5	14.2	25.7	196.5494	372	293	471	370	298	234
185	16.4	36.2	49.7	4149	3004	500	0.1	0.16	0.13	0.21	0.177	0.244	26.5	17.5	26.7	212.1616	414	329	531	421	331	263
240	18.8	38.6	52.1	4807	3322	500	0.08	0.13	0.1	0.16	0.153	0.200	34.3	22.7	28.4	232.8540	470	377	616	491	376	302
300	21.4	41.2	55.1	5580	3724	500	0.06	0.1	0.08	0.13	0.139	0.173	42.9	28.3	30	255.1489	509	415	681	552	407	332
400	24.3	44.1	58.2	6705	4231	500	0.05	0.08	0.06	0.1	0.129	0.151	57.2	37.8	23.1	279.9040	567	468	775	636	454	374
500	27.3	47.6	62.1	7926	4832	300	0.04	0.06	0.05	0.08	0.120	0.135	71.5	47.2	34.3	309.9635	622	523	669	725	498	418
630	31	51.3	66.0	9387	5489	300	0.03	0.05	0.04	0.06	0.112	0.122	90.0	59.5	36.5	341.3560	676	580	963	821	541	464

Medium Voltage: Un-armoured, Single Core

Unarmoured Medium Voltage (MV) XLPE Type B, Single Core, Power Cable , SANS 1339



Conductor: Circular Annealed Copper or Aluminium Circular Compacted - Class 2

Application: Used for underground reticulation, main distribution system, sub-station and mining. Can be manufactured with corrugated aluminium or steel tape. Outer-sheath can also be stripped blue or white according to customer requirements.

3.8/6.6kV - 1 Cores Unarmoured

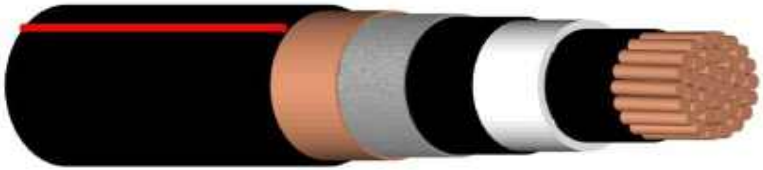
PHYSICAL PROPERTIES							ELECTRICAL PROPERTIES															
Cable Size	Core Diam.	Insulation Screen Diam.	Overall Diameter	Cable Mass		Drum length	Resistance @ 20°C		Resistance @ 90°C		Impedance		Sym. Current, in 1sec		Asym. Current,in 1sec	Capacitance	Current (I)					
																	Ground		Air		Duct	
				CU	AL		CU	AL	CU	AL	CU	AL	CU	AL		uf/km/phase	CU	AL	CU	AL	CU	AL
mm²	mm	mm	mm	kg/km		m	Ω/km/phase		Ω/km/phase		Ω/km/phase		kA				Amps					
50	8.4	16.7	21.1	953	644	500	0.387	0.641	0.494	0.822	0.513	0.834	7.2	4.7	2.5	323.754	206	161	239	186	165	129
70	9.9	18.2	22.5	1188	755	500	0.268	0.443	0.342	0.568	0.366	0.583	10.0	6.6	2.7	363.980	250	195	295	230	200	156
95	11.7	20.0	24.3	1469	881	500	0.193	0.320	0.247	0.411	0.275	0.429	13.6	9.0	3.0	412.112	298	233	358	280	238	186
120	13.4	21.7	26.2	1760	1017	500	0.153	0.253	0.196	0.325	0.229	0.346	17.2	11.3	3.2	457.470	336	264	412	324	269	211
150	14.6	22.9	27.4	2066	1138	500	0.124	0.206	0.159	0.265	0.196	0.288	21.5	14.2	3.4	489.445	373	294	464	365	298	235
185	16.4	24.7	29.4	2452	1307	500	0.099	0.164	0.128	0.211	0.170	0.239	26.5	17.5	3.7	537.356	411	328	520	414	329	262
240	18.8	27.3	32.0	3035	1550	500	0.075	0.125	0.098	0.161	0.146	0.194	34.3	22.7	4.0	580.516	468	376	605	485	374	301
300	21.4	30.3	35.1	3593	1742	500	0.060	0.100	0.079	0.130	0.131	0.167	42.9	28.3	3.0	605.340	522	422	690	557	418	338
400	24.3	33.6	38.8	4647	2172	500	0.047	0.077	0.063	0.102	0.121	0.145	57.2	37.8	3.3	633.487	580	476	784	641	464	381
500	27.3	37.5	42.9	5722	2628	300	0.037	0.061	0.051	0.080	0.115	0.130	71.5	47.2	3.7	670.139	618	522	860	722	494	418
630	31.0	41.2	46.8	7031	3134	300	0.028	0.047	0.041	0.064	0.107	0.118	90.0	59.5	4.0	746.857	669	576	949	814	535	461

6.35/11kV 1 Cores Unarmoured

50	8.4	18.5	23.2	1050	741	500	0.387	0.641	0.494	0.82	0.513	0.834	7.2	4.7	2.8	253.773	206	161	242	188	165	129
70	9.9	20.0	24.4	1278	845	500	0.268	0.443	0.342	0.57	0.366	0.583	10.0	6.6	3.0	283.609	250	195	297	232	200	156
95	11.7	21.8	26.4	1578	990	500	0.193	0.320	0.247	0.41	0.275	0.429	13.6	9.0	3.3	319.249	297	233	361	283	238	186
120	13.4	23.5	28.1	1861	1119	500	0.153	0.253	0.196	0.33	0.229	0.346	17.2	11.3	3.5	352.793	334	263	412	324	267	210
150	14.6	24.7	29.5	2186	1258	500	0.124	0.206	0.159	0.27	0.196	0.288	21.5	14.2	3.7	376.419	370	292	464	366	296	234
185	16.4	26.5	31.3	2562	1418	500	0.099	0.164	0.128	0.21	0.170	0.239	26.5	17.5	3.9	411.798	412	328	524	416	330	262
240	18.8	28.9	33.9	3156	1671	500	0.075	0.125	0.098	0.16	0.146	0.194	34.3	22.7	4.3	458.882	470	377	611	489	376	302
300	21.4	31.5	36.6	3697	1841	500	0.06	0.100	0.079	0.13	0.131	0.167	42.9	28.3	3.1	509.806	520	421	688	555	416	337
400	24.3	34.4	39.7	4705	2230	500	0.047	0.077	0.063	0.1	0.121	0.145	57.2	37.8	3.4	566.532	579	476	783	640	463	381
500	27.3	37.9	43.4	5753	2660	300	0.037	0.061	0.051	0.08	0.115	0.130	71.5	47.2	3.7	634.529	620	523	864	724	496	418
630	31.0	41.6	47.3	7065	3168	300	0.028	0.047	0.041	0.06	0.107	0.118	90.0	59.5	4.1	706.761	672	579	957	819	538	463

Medium Voltage: Un-armoured, Single Core

Unarmoured Medium Voltage (MV) XLPE Type B, Single Core, Power Cable , SANS 1339



Conductor: Annealed Copper or Aluminium Circular Compacted - Class 2

Application: Used for underground reticulation, main distribution system, sub-station and mining. Can be manufactured with corrugated aluminium or steel tape. Outer-sheath can also be stripped blue or white according to customer requirements.

12.7/22kV - 1 Cores Unarmoured

PHYSICAL PROPERTIES							ELECTRICAL PROPERTIES															
Cable Size	Core Diam.	Insulation Screen Diam.	Overall Diameter	Cable Mass		Drum length	Resistance @ 20°C		Resistance @ 90°C		Impedance		Sym. Current in 1sec		Asym. Current in 1sec	Capacitance	Current (I)					
																	Ground		Air		Duct	
				CU	AL		CU	AL	CU	AL	CU	AL	CU	AL		uf/km/phase	CU	AL	CU	AL	CU	AL
mm²	mm	mm	mm	kg/km		m	Ω/km/phase		Ω/km/phase		Ω/km/phase		kA				Amps					
50	8.4	23.2	28.0	1298	988	500	0.39	0.64	0.49	0.82	0.517	0.836	7.2	4.7	3.4	182.108	206	160	243	189	165	128
70	9.9	24.7	29.4	1551	1118	500	0.27	0.44	0.34	0.57	0.371	0.586	10.0	6.6	3.6	201.132	250	195	302	236	200	156
95	11.7	26.5	31.2	1852	1264	500	0.19	0.32	0.25	0.41	0.282	0.433	13.6	9.0	3.9	223.777	297	232	365	286	238	186
120	13.4	28.2	33.1	2164	1422	500	0.15	0.25	0.2	0.33	0.236	0.350	17.2	11.3	4.2	245.028	333	263	416	327	266	210
150	14.6	29.4	34.3	2483	1555	500	0.12	0.21	0.16	0.27	0.204	0.294	21.5	14.2	4.3	259.969	372	293	471	370	298	234
185	16.4	31.2	36.2	2786	1641	500	0.1	0.16	0.13	0.21	0.177	0.244	26.5	17.5	3.0	282.305	414	329	531	421	331	263
240	18.8	33.6	38.8	3393	1908	500	0.08	0.13	0.1	0.16	0.153	0.200	34.3	22.7	3.3	311.978	470	377	616	491	376	302
300	21.4	36.2	41.4	4034	2178	500	0.06	0.1	0.08	0.13	0.139	0.173	42.9	28.3	3.5	344.019	509	415	681	552	407	332
400	24.3	39.1	44.5	5066	2591	500	0.05	0.08	0.06	0.1	0.129	0.151	57.2	37.8	3.8	379.662	567	468	775	636	454	374
500	27.3	42.5	48.2	6142	3048	300	0.04	0.06	0.05	0.08	0.120	0.135	71.5	47.2	4.2	423.213	622	523	669	725	498	418
630	31.0	46.2	52.1	7484	3586	300	0.03	0.05	0.04	0.06	0.112	0.122	90.0	59.5	4.5	468.578	676	580	963	821	541	464

19/33kV 1 Cores Unarmoured

50	8.4	28.4	33.5	1588	1278	500	0.39	0.64	0.49	0.82	0.517	0.836	7.2	4.7	2.8	141.7481	206	160	243	189	165	128
70	9.9	29.9	34.7	1787	1354	500	0.27	0.44	0.34	0.57	0.371	0.586	10.0	6.6	2.9	155.2100	250	195	302	236	200	156
95	11.7	31.7	36.7	2114	1526	500	0.19	0.32	0.25	0.41	0.282	0.433	13.6	9.0	3.1	171.1653	297	232	365	286	238	186
120	13.4	33.4	38.4	2419	1677	500	0.15	0.25	0.2	0.33	0.236	0.350	17.2	11.3	3.3	186.0854	333	263	416	327	266	210
150	14.6	34.6	39.8	2764	1836	500	0.12	0.21	0.16	0.27	0.204	0.294	21.5	14.2	3.4	196.5494	372	293	471	370	298	234
185	16.4	36.4	41.6	3164	2019	500	0.1	0.16	0.13	0.21	0.177	0.244	26.5	17.5	3.6	212.1616	414	329	531	421	331	263
240	18.8	38.8	44.2	3793	2308	500	0.08	0.13	0.1	0.16	0.153	0.200	34.3	22.7	3.8	232.8540	470	377	616	491	376	302
300	21.4	41.4	47.0	4480	2623	500	0.06	0.1	0.08	0.13	0.139	0.173	42.9	28.3	4.0	255.1489	509	415	681	552	407	332
400	24.3	44.3	50.1	5539	3065	500	0.05	0.08	0.06	0.1	0.129	0.151	57.2	37.8	4.3	279.9040	567	468	775	636	454	374
500	27.3	47.8	53.8	6649	3555	300	0.04	0.06	0.05	0.08	0.120	0.135	71.5	47.2	4.7	309.9635	622	523	669	725	498	418
630	31.0	51.5	57.7	8025	4128	300	0.03	0.05	0.04	0.06	0.112	0.122	90.0	59.5	5.0	341.3560	676	580	963	821	541	464

Medium Voltage: Armoured, 3-Core 6.6kV & 11kV

CONTEAST CABLES "wired as one"

Armoured Medium Voltage (MV) XLPE Type A, 3 Cores, Power Cable , SANS 1339

Conductor: Annealed Copper or Aluminium Circular Compacted - Class 2

Phase Color Identification: Numbered, 1, 2 & 3

Application: Used for underground reticulation, main distribution system, sub-station and mining. Can be manufactured with corrugated aluminium or steel tape. Outer-sheath can also be stripped blue or white according to customer requirements.

3.8/6.6kV - 3 Cores SWA

PHYSICAL PROPERTIES							ELECTRICAL PROPERTIES															
Cable Size	Core Diam.	Insulation Screen Diam.	Overall Diameter	Cable Mass		Drum length	Resistance @ 20°C		Resistance @ 90°C		Impedance		Sym. Current, in 1sec		Asym. Current,I n 1sec	Capacitance	Current (I)					
																	Ground		Air		Duct	
				CU	AL		CU	AL	CU	AL	CU	AL	CU	AL		uf/km/phase	CU	AL	CU	AL	CU	AL
mm²	mm	mm	mm	kg/km		m	Ω/km/phase		Ω/km/phase		Ω/km/phase		kA				Amps					
25	6.0	14.3	43.5	3531	3067	500	0.727	1.200	0.927	1.540	0.935	1.543	3.6	2.3	15.8	259.035	131	108	125	101	122	91
35	7.2	15.5	46.2	4039	3389	500	0.524	0.868	0.668	0.110	0.678	1.119	5.0	3.2	17.1	291.463	160	127	151	123	147	110
50	8.4	16.7	50.4	5194	4266	500	0.387	0.641	0.494	0.822	0.506	0.829	7.2	4.6	15.8	323.754	198	150	190	149	177	130
70	9.9	18.2	53.9	6071	4772	500	0.268	0.443	0.342	0.568	0.357	0.577	10.0	6.4	17.1	363.980	240	183	233	184	211	159
95	11.7	20.0	58.1	7182	5419	500	0.193	0.320	0.247	0.411	0.265	0.422	13.6	8.7	18.6	412.112	282	219	291	222	250	192
120	13.4	21.7	62.2	8281	6054	500	0.153	0.253	0.196	0.325	0.217	0.338	17.2	11.0	19.9	457.470	320	249	324	258	284	215
150	14.6	22.9	65.0	9388	6604	500	0.124	0.206	0.159	0.265	0.183	0.280	21.5	13.8	20.9	489.445	358	282	372	288	322	244
185	16.4	24.7	70.6	11617	8183	500	0.099	0.164	0.128	0.211	0.155	0.229	26.5	17.0	27.7	537.356	405	314	423	336	362	278
240	18.8	27.3	76.8	13886	9432	500	0.075	0.125	0.099	0.162	0.131	0.183	34.3	22.1	30.2	580.516	462	357	493	394	416	321
300	21.4	30.3	84.1	16473	10905	500	0.060	0.099	0.080	0.130	0.116	0.155	42.9	27.6	33.5	605.340	508	406	553	441	449	356

6.35/11kV 3 Cores SWA

25	6	16.1	49.1	4425	3961	500	0.727	1.200	0.927	1.540	0.935	1.543	3.6	2.3	15.5	205.632	131	108	125	101	122	91
35	7.2	17.3	51.9	4974	4324	500	0.524	0.868	0.668	0.110	0.678	1.119	5.0	3.2	16.4	229.780	160	127	151	123	147	110
50	8.4	18.5	54.9	5704	4776	500	0.387	0.641	0.494	0.822	0.506	0.829	7.2	4.6	17.4	253.773	198	150	190	149	177	130
70	9.9	20.0	58.3	6600	5301	500	0.268	0.443	0.342	0.568	0.357	0.577	10.0	6.4	18.6	283.609	240	183	233	184	211	159
95	11.7	21.8	62.6	7734	5971	500	0.193	0.320	0.247	0.411	0.265	0.422	13.6	8.7	20.2	319.249	282	219	291	222	250	192
120	13.4	23.5	66.9	8889	6662	500	0.153	0.253	0.196	0.325	0.217	0.338	17.2	11.0	21.5	352.793	320	249	324	258	284	215
150	14.6	24.7	71.0	10836	8052	500	0.124	0.206	0.159	0.265	0.183	0.280	21.5	13.8	27.7	376.419	358	282	372	288	322	244
185	16.4	26.5	75.2	12322	8888	500	0.099	0.164	0.128	0.211	0.155	0.229	26.5	17.0	29.7	411.798	405	314	423	336	362	278
240	18.8	28.9	81.0	14559	10105	500	0.075	0.125	0.099	0.162	0.131	0.183	34.3	22.1	32.1	458.882	462	357	493	394	416	321
300	21.4	31.5	87.2	16997	11429	500	0.06	0.099	0.080	0.130	0.116	0.155	42.9	27.6	34.5	509.806	508	406	553	441	449	356

Medium Voltage Cable: Armoured, 3-Core 15kV

CONTEAST CABLES "wired as one"

Armoured Medium Voltage (MV) XLPE Type A, 3 Cores, Power Cable SANS 1339

Conductor: Annealed Copper or Aluminium Circular Compacted - Class 2

Phase Color Identification: Numbered, 1, 2 & 3

Application: Used for underground reticulation, main distribution system, sub-station and mining. Can be manufactured with corrugated aluminium or steel tape. Outer-sheath can also be stripped blue or white according to customer requirements.

8.7/15kV - 3 Cores SWA

PHYSICAL PROPERTIES							ELECTRICAL PROPERTIES															
Cable Size	Core Diam.	Insulation Screen Diam.	Overall Diameter	Cable Mass		Drum length	AC Resistance @ 20°C		AC Resistance @ 90°C		Impedance		Sym. Current in 1sec		Asym. Current in 1sec	Capacitance	Current (I)					
																	Ground		Air		Duct	
				CU	AL		CU	AL	CU	AL	CU	AL	CU	AL		uf/km/phase	CU	AL	CU	AL	CU	AL
mm²	mm	mm	mm	kg/km		m	Ω/km/phase		Ω/km/phase		Ω/km/phase		kA				Amps					
25	6.0	14.3	36.9	4975	4511	500	0.727	1.200	0.927	1.540	0.935	1.543	3.6	2.3	17.0	174.527	131	108	125	101	122	91
35	7.2	15.5	39.6	5539	4889	500	0.524	0.868	0.668	0.110	0.678	1.119	5.0	3.2	18.0	193.942	160	127	151	123	147	110
50	8.4	16.7	42.4	6327	5399	500	0.387	0.641	0.494	0.822	0.506	0.829	7.2	4.6	18.9	213.192	198	150	190	149	177	130
70	9.9	18.2	45.9	7250	5951	500	0.268	0.443	0.342	0.568	0.357	0.577	10.0	6.4	20.2	237.085	240	183	233	184	211	159
95	11.7	20	49.9	8385	6622	500	0.193	0.320	0.247	0.411	0.265	0.422	13.6	8.7	21.8	265.580	282	219	291	222	250	192
120	13.4	21.7	53.8	10359	8132	500	0.153	0.253	0.196	0.325	0.217	0.338	17.2	11.0	28.2	292.362	320	249	324	258	284	215
150	14.6	22.9	56.6	11528	8744	500	0.124	0.206	0.159	0.265	0.183	0.280	21.5	13.8	29.7	311.210	358	282	372	288	322	244
185	16.4	24.7	60.7	13109	9676	500	0.099	0.164	0.128	0.211	0.155	0.229	26.5	17.0	31.6	339.413	405	314	423	336	362	278
240	18.8	27.3	66.7	15325	10870	500	0.075	0.125	0.099	0.162	0.131	0.183	34.3	22.1	34.0	376.918	462	357	493	394	416	321

Medium Voltage: Armoured, 3-Core 22 & 33kV

CONTEAST CABLES
"wired as one"

Armoured Medium Voltage (MV) XLPE Type A, 3 Cores, Power Cable , SANS 1339

Conductor: Annealed Copper or Aluminium Circular Compacted - Class 2

Phase Color Identification: Numbered, 1, 2 & 3

Application: Used for underground reticulation, main distribution system, sub-station and mining. Can be manufactured with corrugated aluminium or steel tape. Outer-sheath can also be stripped blue or white according to customer requirements.

12.7/22kV - 3 Cores SWA

PHYSICAL PROPERTIES							ELECTRICAL PROPERTIES															
Cable Size	Core Diam.	Insulation Screen Diam.	Overall Diameter	Cable Mass		Drum length	Resistance @ 20°C		Resistance @ 90°C		Impedance		Sym. Current, in 1sec		Asym. Current, in 1sec	Capacitance	Current (I)					
																	Ground		Air		Duct	
				CU	AL		CU	AL	CU	AL	CU	AL	CU	AL		uf/km/phase	CU	AL	CU	AL	CU	AL
mm²	mm	mm	mm	kg/km		m	Ω/km/phase		Ω/km/phase		Ω/km/phase		kA				Amps					
25	6.0	20.6	59.6	5644	5180	500	0.727	1.200	0.927	1.540	0.935	1.543	3.6	2.3	19.0	178.367	131	108	125	101	122	91
35	7.2	21.8	62.4	6228	5579	500	0.524	0.868	0.668	0.110	0.678	1.119	5.0	3.2	19.9	197.244	160	127	151	123	147	110
50	8.4	23.0	65.2	6959	6031	500	0.387	0.641	0.494	0.822	0.506	0.829	7.2	4.6	21.1	219.704	198	150	190	149	177	130
70	9.9	24.5	70.1	8752	7452	500	0.268	0.443	0.342	0.568	0.357	0.577	10.0	6.4	27.3	240.775	240	183	233	184	211	159
95	11.7	26.3	74.6	10031	8268	500	0.193	0.320	0.247	0.411	0.265	0.422	13.6	8.7	29.2	255.586	282	219	291	222	250	192
120	13.4	28.0	78.5	11207	8980	500	0.153	0.253	0.196	0.325	0.217	0.338	17.2	11.0	31.1	277.726	320	249	324	258	284	215
150	14.6	29.2	81.5	12447	9663	500	0.124	0.206	0.159	0.265	0.183	0.280	21.5	13.8	32.1	255.586	358	282	372	288	322	244
185	16.4	31.0	85.9	14033	10599	500	0.099	0.164	0.128	0.211	0.155	0.229	26.5	17.0	34.0	277.726	405	314	423	336	362	278
240	18.8	33.4	91.5	16302	11847	500	0.075	0.125	0.099	0.162	0.131	0.183	34.3	22.1	36.4	307.134	462	357	493	394	416	321
300	21.4	36.0	97.5	18762	13193	500	0.060	0.099	0.080	0.130	0.116	0.155	42.9	27.6	38.9	338.884	508	406	553	441	449	356

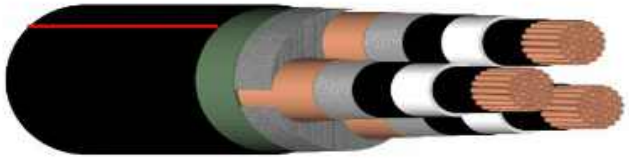
19/33kV 3 Cores SWA

50	8.4	228.4	79.8	9748	8820	500	0.387	0.641	0.494	0.822	0.506	0.829	7.2	4.6	31.6	140.887	198	150	190	149	177	130
70	9.9	29.9	83.3	10735	9436	500	0.268	0.443	0.342	0.568	0.357	0.577	10.0	6.4	33.0	154.233	240	183	233	184	211	159
95	11.7	31.7	88.3	12680	10916	500	0.193	0.320	0.247	0.411	0.265	0.422	13.6	8.7	38.9	170.048	282	219	291	222	250	192
120	13.4	33.4	92.4	13997	11769	500	0.153	0.253	0.196	0.325	0.217	0.338	17.2	11.0	40.8	184.836	320	249	324	258	284	215
150	14.6	34.6	95.2	15249	12465	500	0.124	0.206	0.159	0.265	0.183	0.280	21.5	13.8	42.0	195.207	358	282	372	288	322	244
185	16.4	36.4	99.5	16886	13453	500	0.099	0.164	0.128	0.211	0.155	0.229	26.5	17.0	44.4	210.679	405	314	423	336	362	278
240	18.8	38.8	105.2	19328	14873	500	0.075	0.125	0.099	0.162	0.131	0.183	34.3	22.1	46.8	231.183	462	357	493	394	416	321
300	21.4	41.4	111.4	21984	16415	500	0.06	0.099	0.080	0.130	0.116	0.155	42.9	27.6	49.9	253.275	508	406	553	441	449	356

Medium Voltage: Un-armoured, 3-Core 6.6 & 11kV

CONTEAST CABLES "wired as one"

Unarmoured Medium Voltage (MV) XLPE Type B, 3 Core, Power Cable , SANS 1339



Conductor: Annealed Copper or Aluminium Circular Compacted - Class 2

Phase Color Identification: Numbered, 1, 2 & 3

Application: Used for underground reticulation, main distribution system, sub-station and mining. Can be manufactured with corrugated aluminium or steel tape. Outer-sheath can also be stripped blue or white according to customer requirements.

3.8/6.6kV - 3 Cores Unarmoured

PHYSICAL PROPERTIES							ELECTRICAL PROPERTIES																
Cable Size	Core Diam.	Insulation Screen Diam.	Overall Diameter	Cable Mass		Drum length	Resistance @ 20°C		Resistance @ 90°C		Impedance		Sym. Current, in 1sec		Asym. Current, in 1sec	Capacitance	Current (I)					
																	Ground		Air		Duct	
				CU	AL		CU	AL	CU	AL	CU	AL	CU	AL		uf/km/phase	CU	AL	CU	AL	CU	AL
mm²	mm	mm	mm	kg/km		m	Ω/km/phase		Ω/km/phase		Ω/km/phase		kA				Amps					
25	6.0	14.3	36.9	1807	1343	500	0.727	1.200	0.927	1.540	0.935	1.543	3.6	2.3	2.0	259.035	131	108	125	101	122	91
35	7.2	15.5	39.6	2195	1545	500	0.524	0.868	0.668	0.110	0.678	1.119	5.0	3.2	2.2	291.463	160	127	151	123	147	110
50	8.4	16.7	42.4	2728	1800	500	0.387	0.641	0.494	0.822	0.506	0.829	7.2	4.6	2.4	323.754	198	150	190	149	177	130
70	9.9	18.2	45.9	3422	2122	500	0.268	0.443	0.342	0.568	0.357	0.577	10.0	6.4	2.6	363.980	240	183	233	184	211	159
95	11.7	20	49.9	4276	2513	500	0.193	0.320	0.247	0.411	0.265	0.422	13.6	8.7	2.8	412.112	282	219	291	222	250	192
120	13.4	21.7	53.8	5126	2899	500	0.153	0.253	0.196	0.325	0.217	0.338	17.2	11.0	3.1	457.470	320	249	324	258	284	215
150	14.6	22.9	56.6	6082	3298	500	0.124	0.206	0.159	0.265	0.183	0.280	21.5	13.8	3.2	489.445	358	282	372	288	322	244
185	16.4	24.7	60.7	7224	3790	500	0.099	0.164	0.128	0.211	0.155	0.229	26.5	17.0	3.5	537.356	405	314	423	336	362	278
240	18.8	27.3	66.7	9043	4588	500	0.075	0.125	0.099	0.162	0.131	0.183	34.3	22.1	3.9	580.516	462	357	493	394	416	321
300	21.4	30.3	73.6	11068	5499	500	0.060	0.099	0.080	0.130	0.116	0.155	42.9	27.6	4.3	605.340	508	406	553	441	449	356

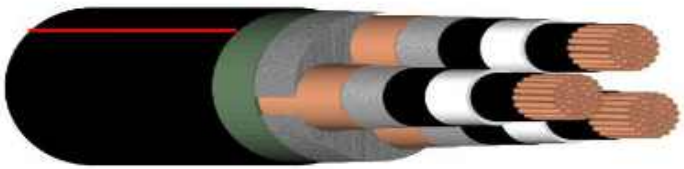
6.35/11kV 3 Cores Unarmoured

25	6	16.1	41.1	2025	1561	500	0.73	1.200	0.927	1.540	0.935	1.543	3.6	2.3	2.3	205.632	131	108	125	101	122	91
35	7.2	17.3	43.9	2426	1776	500	0.52	0.868	0.668	0.110	0.678	1.119	5.0	3.2	2.5	229.780	160	127	151	123	147	110
50	8.4	18.5	46.7	2973	2045	500	0.39	0.641	0.494	0.822	0.506	0.829	7.2	4.6	2.6	253.773	198	150	190	149	177	130
70	9.9	20.0	50.1	3683	2383	500	0.27	0.443	0.342	0.568	0.357	0.577	10.0	6.4	2.9	283.609	240	183	233	184	211	159
95	11.7	21.8	54.4	4583	2819	500	0.19	0.320	0.247	0.411	0.265	0.422	13.6	8.7	3.1	319.249	282	219	291	222	250	192
120	13.4	23.5	58.3	5453	3226	500	0.15	0.253	0.196	0.325	0.217	0.338	17.2	11.0	3.3	352.793	320	249	324	258	284	215
150	14.6	24.7	61.1	6424	3640	500	0.12	0.206	0.159	0.265	0.183	0.280	21.5	13.8	3.5	376.419	358	282	372	288	322	244
185	16.4	26.5	65.1	7588	4154	500	0.1	0.164	0.128	0.211	0.155	0.229	26.5	17.0	3.8	411.798	405	314	423	336	362	278
240	18.8	28.9	70.5	9365	4911	500	0.08	0.125	0.099	0.162	0.131	0.183	34.3	22.1	4.1	458.882	462	357	493	394	416	321
300	21.4	31.5	76.5	11340	5771	500	0.06	0.099	0.080	0.130	0.116	0.155	42.9	27.6	4.5	509.806	508	406	553	441	449	356

Medium Voltage: Un-armoured, 3-Core 22 & 33kV

CONTEAST CABLES "wired as one"

Unarmoured Medium Voltage (MV) XLPE Type B, 3 Core, Power Cable , SANS 1339



Conductor: Annealed Copper or Aluminium Circular Compacted - Class 2

Phase Color Identification: Numbered, 1, 2 & 3

Application: Used for underground reticulation, main distribution system, sub-station and mining. Can be manufactured with corrugated aluminum or steel tape. Outer-sheath can also be stripped blue or white according to customer requirements.

12.7/22kV - 3 Cores Unarmoured

PHYSICAL PROPERTIES							ELECTRICAL PROPERTIES															
Cable Size	Core Diam.	Insulation Screen Diam.	Overall Diameter	Cable Mass		Drum length	Resistance @ 20°C		Resistance @ 90°C		Impedance		Sym. Current, in 1sec		Asym. Current, in 1sec	Capacitance	Current (I)					
																	Ground		Air		Duct	
				CU	AL		CU	AL	CU	AL	CU	AL	CU	AL		uf/km/phase	CU	AL	CU	AL	CU	AL
mm²	mm	mm	mm	kg/km		m	Ω/km/phase		Ω/km/phase		Ω/km/phase		kA				Amps					
25	6.0	20.6	51.6	2679	2216	500	0.727	1.200	0.927	1.540	0.935	1.543	3.6	2.3	2.9	147.703	131	108	125	101	122	91
35	7.2	21.8	54.4	3116	2466	500	0.524	0.868	0.668	0.110	0.678	1.119	5.0	3.2	3.1	163.122	160	127	151	123	147	110
50	8.4	23.0	57.2	3697	2770	500	0.387	0.641	0.494	0.822	0.506	0.829	7.2	4.6	3.3	178.367	198	150	190	149	177	130
70	9.9	24.5	60.6	4450	3151	500	0.268	0.443	0.342	0.568	0.357	0.577	10.0	6.4	3.5	197.244	240	183	233	184	211	159
95	11.7	26.3	64.7	5373	3610	500	0.193	0.320	0.247	0.411	0.265	0.422	13.6	8.7	3.7	219.704	282	219	291	222	250	192
120	13.4	28.0	68.6	6289	4062	500	0.153	0.253	0.196	0.325	0.217	0.338	17.2	11.0	4.0	240.775	320	249	324	258	284	215
150	14.6	29.2	71.6	7330	4546	500	0.124	0.206	0.159	0.265	0.183	0.280	21.5	13.8	4.1	255.586	358	282	372	288	322	244
185	16.4	31.0	75.6	8543	5109	500	0.099	0.164	0.128	0.211	0.155	0.229	26.5	17.0	4.4	277.726	405	314	423	336	362	278
240	18.8	33.4	81.2	10427	5972	500	0.075	0.125	0.099	0.162	0.131	0.183	34.3	22.1	4.7	307.134	462	357	493	394	416	321
300	21.4	36.0	87.0	12435	6867	500	0.060	0.099	0.080	0.130	0.116	0.155	42.9	27.6	5.1	338.884	508	406	553	441	449	356

19/33kV 3 Cores Unarmoured

50	8.4	28.4	69.7	4707	3779	500	0.39	0.641	0.494	0.822	0.506	0.829	7.2	4.6	4.0	140.887	198	150	190	149	177	130
70	9.9	29.9	73.2	5509	4209	500	0.27	0.443	0.342	0.568	0.357	0.577	10.0	6.4	4.2	154.233	240	183	233	184	211	159
95	11.7	31.7	77.2	6489	4726	500	0.19	0.320	0.247	0.411	0.265	0.422	13.6	8.7	4.5	170.048	282	219	291	222	250	192
120	13.4	33.4	81.3	7501	5274	500	0.15	0.253	0.196	0.325	0.217	0.338	17.2	11.0	4.7	184.836	320	249	324	258	284	215
150	14.6	34.6	84.1	8548	5764	500	0.12	0.206	0.159	0.265	0.183	0.280	21.5	13.8	4.9	195.207	358	282	372	288	322	244
185	16.4	36.4	88.2	9819	6385	500	0.1	0.164	0.128	0.211	0.155	0.229	26.5	17.0	5.1	210.679	405	314	423	336	362	278
240	18.8	38.8	93.7	11784	7329	500	0.08	0.125	0.099	0.162	0.131	0.183	34.3	22.1	5.5	231.183	462	357	493	394	416	321
300	21.4	41.4	99.5	13873	8304	500	0.06	0.099	0.080	0.130	0.116	0.155	42.9	27.6	5.8	253.275	508	406	553	441	449	356

Copper Shapes

COPPER BUSBARS

Conductor: Copper Busbars

Application: Used in Transformers, Mini-Substation, Switch Gears & Distribution kiosks Connections.

Specification: BS 1433

COPPER BUSBARS

Copper Busbar Sizes

Width (mm)	Thickness (mm)
18	5
20	6
25	6
40	18
40	40
60	5
60	10
60	14
63	15
70	13
75	10
80	6
100	5
100	10
100	20
120	5
120	10
120	15
120	20
150	10
150	20

CONTEAST CABLES

"wired as one"

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SABS APPROVED

IEC International Electrotechnical Commission

ISO 9001:2008 CERTIFIED