



SOUTH OCEAN

ELECTRIC WIRE COMPANY (PTY) LTD



Catalogue

Volume 3



South Ocean
HOLDINGS

Member of the JSE Listed Co

Company Profile



INTRODUCTION

South Ocean Electric Wire Company (Pty) Ltd (SOEW) was established in 1989 and is a subsidiary of the JSE listed company, South Ocean Holdings Ltd. SOEW operates a manufacturing plant in Alrode, since relocating from King Williams Town in December 2001. A full range of low voltage electrical cables are manufactured, from typical household wiring to industrial steel wire armoured cables. These are sold to electrical wholesalers and distributors who supply the building, construction, mining and retail industries. Manufacturing processes utilise practices which minimize any potential harmful impact on the environment.

SOEW is a medium sized manufacturer of electrical cables with its main market in the general-purpose market, focusing on the wholesale sector. In 2008, the company initiated exports into new markets in Africa and this growth has been steady.

SOEW endeavours to maintain excellent customer relationships, meeting their short and long term requirements, which is supported by excellent service and competitive pricing. The products are delivered to customers by SOEW's fleet of trucks and delivery vehicles.

Quality products are supplied to customers and our products comply with standards laid down by the South African Bureau of Standards. The company was certified compliant with ISO 9001:2008 Management Standard in July 2009.

The plant has quality control facilities and a testing laboratory to ensure that SOEW products perform optimally.

SOEW employs approximately 265 people who represent the full complement of personnel necessary to sustain the growth of our operation and includes electrical, engineering, administration, marketing and semi-skilled personnel.

The company consistently works to improve the skill levels of staff, encouraging growth and development. The company emphasises on-the-job training and provides Adult Basic Education and Training to staff members.

The company values the Health and Safety of its employees, creating a safe environment to operate in.

MISSION STATEMENT

- To Offer Excellent and Reputable Service to our Shareholders, Customers, Suppliers and Staff.
- To be the Lowest Cost Producer with Products of the Highest Quality.
- To Remain an Entrepreneurial Company, and Create an Environment that Develops all of our Employees to Attain their True Potential.

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Bare Copper Earth Wire

DESCRIPTION

Single core stranded, annealed copper conductor

SPECIFICATION SANS 1411 Part 1

Packaging

5 Kg Coils
25 Kg Coils
500 Kg Drums

TECHNICAL INFORMATION

CABLE SIZE	+2,5%	NOMINAL STRANDING No.x DIAMETER	APPROX. OVERALL DIAMETER	CURRENT RATING NOTE 1	VOLT DROP NOTE 1	APPROX.CABLE WEIGHT MASS PER 100M COIL
(mm ²)	(M/KG)		(mm)	(A)	(MV/A/M)	(Kg)
1.5	76.336	7 x 0.53	1.6	20	29.00	1.4
2.5	46.729	7 x 0.66	2.0	27	18.00	2.1
4.0	29.070	7 x 0.85	2.6	37	11.00	3.5
6.0	19.417	7 x 1.04	3.1	47	7.30	5.3
10.0	11.534	7 x 1.35	4.1	65	4.40	9.0
16.0	7.252	7 x 1.67	5.0	87	2.80	13.7
25.0	4.583	7 x 2.14	6.4	114	1.75	23.6
35.0	3.297	19 x 1.53	7.7	141	1.25	31.7
50.0	2.435	19 x 1.78	8.9	182	0.95	42.5
70.0	1.68	19 x 2.14	10.7	234	0.66	61.5
95.0	1.21	19 x 2.52	12.6	284	0.50	84.2
120.0	0.962	37 x 2.03	14.2	330	0.41	108.2
150.0	0.779	37 x 2.25	15.8	381	0.34	136.9
185.0	0.623	37 x 2.52	17.6	436	0.29	164.5
240.0	0.474	61 x 2.25	20.2	515	0.25	205.8
300.0	0.378	61 x 2.52	22.7	594	0.22	233.2
400.0	0.296	61 x 2.80	26.0	694	0.20	361.0
500.0	0.23	61 x 3.20	29.2	792	0.185	455.1
630.0	0.177	91 x 2.97	32.7	904	0.175	571.7

Note 1 : These ratings are for 2 cables single phase AC or DC clipped direct as per SANS 0142 table 6.2

General Purpose House Wire

DESCRIPTION

Plain annealed stranded copper conductors, insulated with a general purpose grade PVC.

APPLICATION

For the wiring of:

Housing | Buildings | Control Panels | Appliances

SPECIFICATION

SANS 1507/2002

Voltage Rating

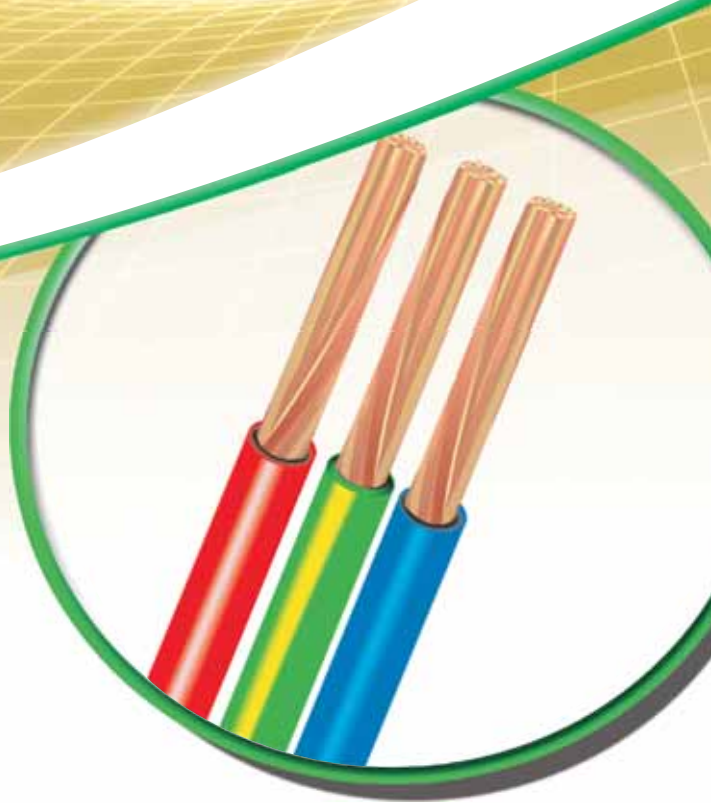
600/1000 V

Temperature Range

-10°C to 70°C

Colour Option

Black, Blue, Brown, Green/Yellow, Grey,
Orange, Pink, Purple, Red, White, Yellow



TECHNICAL INFORMATION

CABLE SIZE	NOMINAL STRANDING No.x DIAMETER	APPROX. OVERALL DIAMETER	CURRENT RATING NOTE 1	VOLT DROP NOTE 1	APPROX. CABLE WEIGHT MASS PER 100M COIL
(mm ²)		(mm)	(A)	(MV/A/M)	(Kg)
1.0	7 x 0.43	2.9	15	44.00	1.7
1.5	7 x 0.53	3.2	20	29.00	2.3
2.5	7 x 0.66	3.6	27	18.00	3.3
4.0	7 x 0.85	4.5	37	11.00	5.2
6.0	7 x 1.04	5.1	47	7.30	7.2
10.0	7 x 1.35	6.0	65	4.40	11.2
16.0	7 x 1.67	7.0	87	2.80	17.0
25.0	19 x 1.31	8.6	114	1.75	26.6
35.0	19 x 1.53	10.0	141	1.25	35.7
50.0	19 x 1.78	11.5	182	0.95	48.3
70.0	19 x 2.14	13.3	234	0.66	68.0
95.0	19 x 2.52	15.5	284	0.50	94.0
120.0	37 x 2.03	17.1	330	0.41	115.4
150.0	37 x 2.25	19.0	381	0.34	142.6
185.0	37 x 2.52	21.2	436	0.29	179.0
240.0	61 x 2.25	24.1	515	0.25	233.5
300.0	61 x 2.52	27.0	594	0.22	295.0
400.0	61 x 2.80	30.3	694	0.20	375.0
500.0	61 x 3.20	34.1	792	0.185	479.0
630.0	91 x 2.97	38.0	904	0.175	612.0

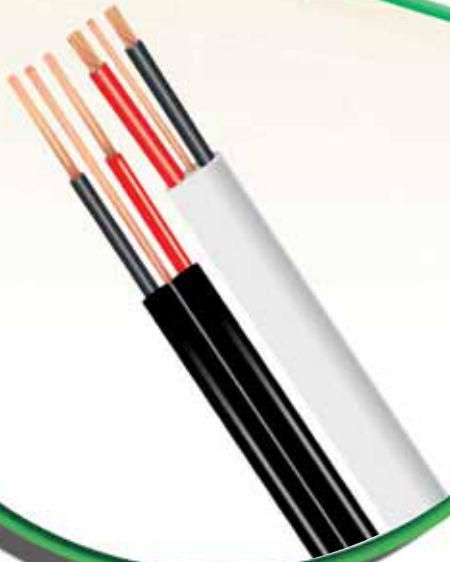
Note 1 : These ratings are for 2 cables single phase AC or DC clipped direct as per SANS 0142 table 6.2

Packaging

Shrink-wrapped coils 100 metre

Also available on Wooden Drums 500 metre

Flat Twin and Earth



DESCRIPTION

Solid or stranded plain copper conductors, PVC insulated, laid up with bare copper earth wire, PVC Sheathed overall.

APPLICATION

For the wiring of:

Under Plastering Wiring | Roof Wiring | Under-floor Wiring

SPECIFICATION

SANS 1507/2002

Voltage Rating	300/500 V
Temperature Range	-10°C to 70°C
Sheath Colours	Black and White
Core Colours	2 core- Black and Red
	3 core- Blue, Red and Yellow
	4 core- Black, Blue, Red and Yellow

TECHNICAL INFORMATION

CABLE SIZE	CONDUCTOR TYPE		APPROX. OVERALL DIAMETER	CURRENT RATING NOTE 1	VOLT DROP NOTE 1	APPROX. CABLE WEIGHT MASS PER 100M COIL
(mm ²)	(MAIN)	(EARTH)	(mm)	(A)	(MV/A/M)	(Kg)
1.0	1/1.15	1/1.15	7.9 x 4.3	15	44	6.76
1.5	1/1.38	1/1.15	8.8 x 4.8	19	29	8.33
2.5	1/1.78	1/1.38	10.4 x 5.6	27	18	11.7
4.0	7/0.86	1/1.38	12.2 x 6.2	36	11	18.3
6.0	7/1.04	1/1.78	13.7 x 7.2	46	7.3	23.4
10.0	7/1.38	7/0.86	17.2 x 8.6	63	4.4	37.1
16.0	7/1.72	7/1.04	20.0 x 9.8	85	2.8	52.0

Note 1 : These ratings are for 2 cables single phase AC or DC clipped direct as per SANS 0142 table 6.3
Conductors of 4mm² and over are stranded

Packaging

Shrink-wrapped coils	100 metre
Also available on Wooden Drums	1000 metre

Surface Wiring

DESCRIPTION

Plain copper conductors, PVC Insulated, laid up with a tinned earth wire in contact with longitudinal aluminum foil tape, PVC Sheathed overall.

APPLICATION

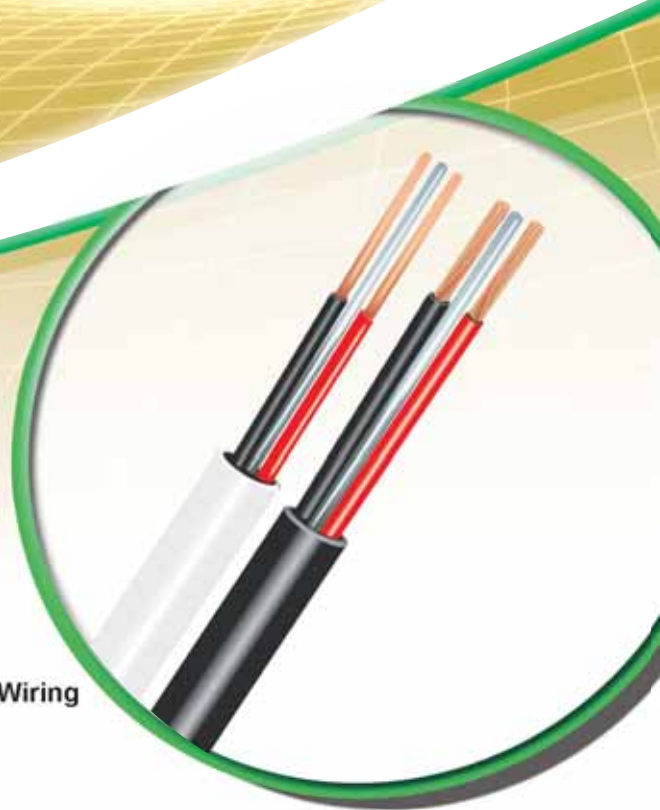
For the wiring of:

Under Plastering Wiring | Roof Wiring | Under-floor Wiring | Surface Wiring

SPECIFICATION

SANS 1507/2002

Voltage Rating	300/500 V
Temperature Range	-10°C to 70°C
Sheath Colours	Black and White
Core Colours	2 core- Black and Red 3 core- Blue, Red and Yellow 4 core- Black, Blue, Red and Yellow



TECHNICAL INFORMATION

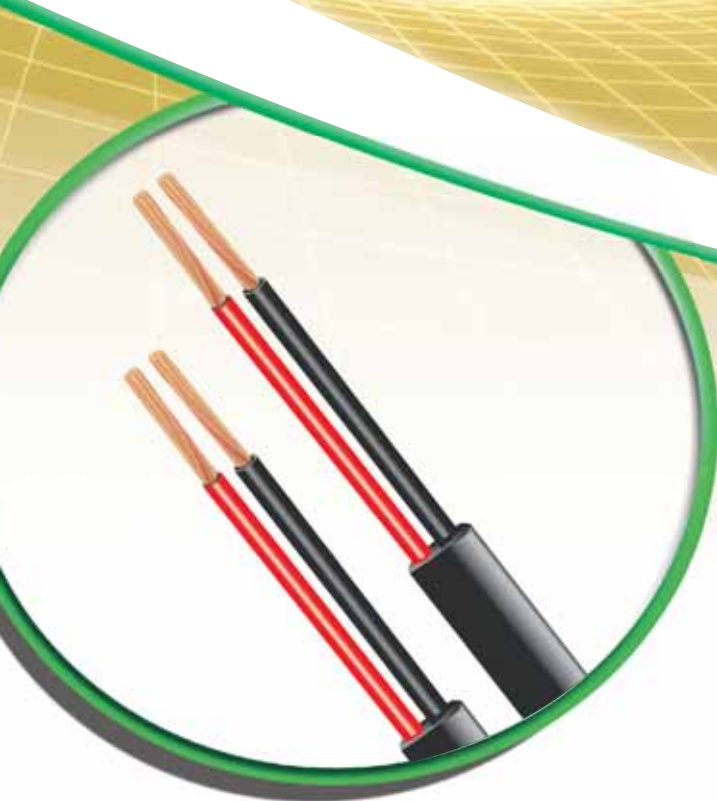
CABLE SIZE	CONDUCTOR TYPE		APPROX. OVERALL DIAMETER			CURRENT RATING	VOLT DROP		APPROX.CABLE WEIGHT MASS PER 100M COIL			
						NOTE 1		NOTE 1				
(mm²)			(mm)			(A)	(MV/A/M)		(Kg)			
	Main	Earth	2C	3C	4C	2C	3C & 4C	2C	3C & 4C	2C	3C	4C
1.5	1.5	1/1.15	8.1	7.6	8.8	19	17	29.0	25.0	10.2	12.1	14.1
2.5	2.5	1/1.38	9.4	8.8	10.3	27	24	18.0	15.0	14.4	16.5	19.6
4.0	4.0	1/1.38	11.1	10.4	12.2	36	32	11.0	9.5	18.6	23.5	28.1
6.0	6.0	1/1.78	12.3	11.5	13.5	46	41	7.3	6.4	27.5	31.7	41.4
10.0	10.0	7/0.86	14.4			63		4.4		35.6		

Note 1 : These ratings are for 2 cables single phase AC or DC clipped direct as per SANS 0142 table 6.3

Packaging

Shrink-wrapped coils	100 metre
Also available on Wooden Drums	1000 metre

Twin Illumination Cable



DESCRIPTION

Stranded plain copper conductors, PVC insulated, laid flat with a PVC outer Sheath.

APPLICATION

For the wiring of:

Outdoor Lighting using quickfit lampholders.

SPECIFICATION

SANS 1507/2002

Voltage Rating	300/500 V
Temperature Range	-10°C to 70°C
Sheath Colours	Black or White
Core Colours	2 core- Black and Red

TECHNICAL INFORMATION

CABLE SIZE	NOMINAL STANDING NO.x DIAMETER	APPROX. OVERALL DIAMETER	CURRENT RATING NOTE 1	VOLT DROP NOTE 1	APPROX.CABLE WEIGHT MASS PER 100M COIL
(mm ²)		(mm)	(A)	(MV/A/M)	(Kg)
2.5	7x 0.67	5.6 x 10.2	25	15	11.5

Packaging

Shrink-wrapped coils 100 metre

DESCRIPTION

Flexible plain copper conductors, PVC Insulated,
PVC Sheathed overall.

APPLICATION

For the wiring of:

Extension Cords | Kitchen Appliances | Power Tools

SPECIFICATION

SANS 1574/2004

Voltage Rating

Light Duty (LD)300/300 V
Normal Duty (ND)300/500 V

Temperature Range

-10°C to 70°C

Sheath Colours

Black, White, Grey, Red and Orange

Core Colours

2 core- Brown and Blue

3 core- Blue, Brown and Green/Yellow

4 core- Black, Blue, Brown and Green/Yellow

5 core- Black, Blue, Brown, Green/Yellow and Violet

7 core- Black, Blue, Brown, Green/Yellow, Violet, Pink and Orange



TECHNICAL INFORMATION

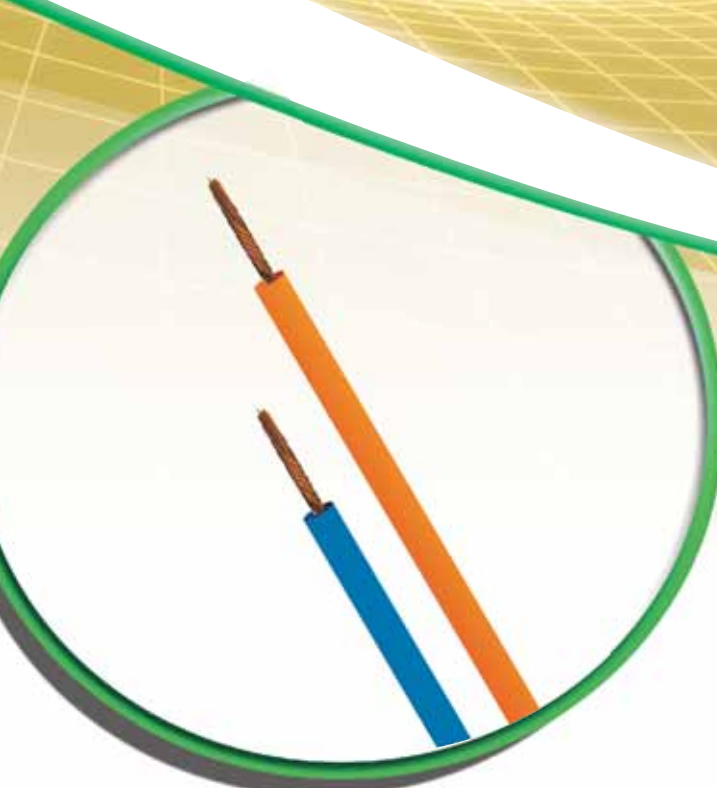
CABLE SIZE	CONDUCTOR STRANDS NO. x DIAMETER	APPROX. OVERALL DIAMETER					CURRENT RATING NOTE 1	VOLT DROP NOTE 1		APPROX.CABLE WEIGHT MASS PER 100M COIL					
(mm²)		(mm)					(A)	(MV/A/M)		(Kg)					
		2C	3C	4C	5C	7C		2C	3,4,5&7C	2C	3C	4C	5C	7C	
LIGHT DUTY															
	0.5	16 x 0.20	5.2	5.6	6.1	6.6	-	3	93	80	4.7	5.3	15.6	6.7	-
	0.75	24 x 0.20	5.7	5.9	6.6	-	-	6	62	54	4.9	5.6	6.70	-	-
NORMAL DUTY	0.75	24 x 0.20	6.1	6.5	7.0	7.9	9.3	6	62	54	5.8	6.8	8.0	9.9	12.2
	1.0	30 x 0.20	6.7	7.11	7.76	8.6	10.9	10	46	40	6.7	7.6	9.7	11.6	14.8
	1.5	30 x 0.25	7.8	8.50	9.50	10.1	13.2	16	32	27	8.9	10.6	13.4	16.2	20.6
	2.5	50 x 0.25	9.5	10.4	11.3	12.2	14.1	20	19	16	13.4	16.0	20.1	24.2	31.5
	4.0	56 x 0.30	10.3	11.7	12.9	14.1		25	12	10	17.6	22.2	27.5	33.9	-

Note 1 : Based on a max ambient temperature of 30°C and a max conductor temperature of 70°C

Packaging

Shrink-wrapped coils 100 metre
Also available on Wooden Drums 1000 metre

Single Core Flex



DESCRIPTION

Plain annealed flexible copper conductor, insulated with a flexible grade PVC.

APPLICATION

For the wiring of:

Control Panels | Light fittings | Appliances

SPECIFICATION

SANS 1574/2004

Voltage Rating
Temperature Range
Core Colours

600/1000V
-10°C to 70°C
Black, blue, brown, green/yellow,
grey, orange, pink, purple, red,
white, yellow

TECHNICAL INFORMATION

CABLE SIZE	NOMINAL STANDING NO.x DIAMETER	APPROX. OVERALL DIAMETER	CURRENT RATING NOTE 1	VOLT DROP NOTE 1	APPROX.CABLE WEIGHT MASS PER 100M COIL
(mm ²)		(mm)	(A)	(MV/A/M)	(Kg)
0.5	15w x 0.20	2.48	3	93.00	0.99
0.75	22w x 0.20	2.68	6	62.00	1.07
1.0	29w x 0.20	2.86	10	44.00	1.53
1.5	28w x 0.25	3.12	16	29.00	2.00
2.5	46w x 0.25	3.54	27	18.00	2.94
4.0	52w x 0.30	4.48	37	11.00	4.72
6.0	84w x 0.30	5.20	47	7.30	7.30
10.0	140w x 0.30	6.12	65	4.40	11.34
16.0	200w x 0.30	9.50	87	2.80	22.0
25.0	312w x 0.30	12.50	114	1.75	30.0
35.0	440w x 0.30	12.90	141	1.25	40.0

Note 1 : Based on a max ambient temperature of 30°C and a max conductor temperature of 70°C

Packaging

Shrink-wrapped coils
Also available on
Wooden Drums

100 metre

1000 metre

Solid Panel Wire

DESCRIPTION

High Conductivity, solid copper conductor to sans 1411 part 1, PVC insulated 105°C.

APPLICATION

For the wiring of:

Ballasts | Fluorescent Lights

SPECIFICATION

SANS 1507-2

Voltage Rating

300/500V

Temperature Range

-10°C to 105°C

Sheath Colours

Black, blue, brown, green, grey
orange, pink, red, white, yellow



TECHNICAL INFORMATION

CABLE SIZE	NOMINAL STANDING NO.x DIAMETER	APPROX. OVERALL DIAMETER	CURRENT RATING	VOLT DROP	APPROX.CABLE WEIGHT MASS PER 100M COIL NOTE1
			NOTE 1	NOTE 1	NOTE1
(mm ²)		(mm)	(A)	(MV/A/M)	(Kg)
0.5	1 x 0.8	2.00	10	93	0.83
1.0	1 x 1.2	2.31	15	44	1.3

Note 1 : Based on a max ambient temperature of 30°C and a max conductor temperature of 105°C

Packaging

Shrink-wrapped coils

100 metre


DESCRIPTION

Plain annealed flexible copper conductor, flexible PVC bedded, with a Nitrile PVC sheath.

APPLICATION

For the wiring of:

Control panels and power installations where a flexible conductor is required.

SPECIFICATION
SANS 1507/2002

Voltage Rating
Temperature Range
Sheath Colours

600/1000V
-10°C to 70°C
Black, red, green/yellow, blue
Other colours available on request.

TECHNICAL INFORMATION

CABLE SIZE	NOMINAL STANDING NO.x DIAMETER	APPROX. OVERALL DIAMETER	CURRENT RATING	VOLT DROP	APPROX.CABLE WEIGHT MASS PER 100M COIL
			NOTE 1	NOTE 1	
(mm ²)		(mm)	(A)	(MV/A/M)	(Kg)
16.0	240 x 0.3	10.3	80	2.420	21.2
25.0	329w x 0.3	11.9	114	1.560	29.4
35.0	455w x 0.3	13.6	141	1.108	38.7
50.0	670w x 0.3	15.7	182	0.772	55.7
70.0	904w x 0.3	17.0	234	0.544	73.6
95.0	1190w x 0.3	19.1	284	0.412	95.3
120.0	1530w x 0.3	22.9	330	0.161	131.0
150.0	1917w x 0.3	25.8	376	0.258	155.3

Note 1 : Based on a max ambient temperature of 30°C and a max conductor temperature of 70°C

Packaging

Shrink-wrapped coils
Also available on
Wooden Drums

100 metre
500 metre

DESCRIPTION

Flexible plain copper conductors, PVC insulated.

APPLICATION

For the wiring of:

Lamps | Audio | Equipment | Intercoms | Alarm Systems

SPECIFICATION

SANS 1574/2004

Voltage Rating 80V
 Temperature Range -10°C to 70°C
 Sheath Colours Black, White, Brown, Transparent,
 Other colours available on request.



TECHNICAL INFORMATION

CABLE SIZE	NOMINAL STANDING NO.x DIAMETER	APPROX. OVERALL DIAMETER	CURRENT RATING NOTE 1	VOLT DROP NOTE 1	APPROX.CABLE WEIGHT MASS PER 100M COIL
(mm ²)		(mm)	(A)	(MV/A/M)	(Kg)
0.5	16 x 0.20	2.4 x 4.8	5	93	2.2
0.75	24 x 0.20	2.6 x 5.2	6	62	2.8

Note 1 : Based on a max ambient temperature of 30°C and a max conductor temperature of 70°C

Packaging

Shrink-wrapped coils 100 metre


DESCRIPTION

Flexible plain copper conductors, PVC insulated laid flat with a PVC outer sheath.

APPLICATION

For the wiring of:

Lamps | Light Household Appliances | Visual Equipment

SPECIFICATION

SANS 1574/2004

Voltage Rating
Temperature Range
Sheath Colours
Core Colours

300/300V
-10°C to 70°C
Black, white
2 core - Brown and Blue

TECHNICAL INFORMATION

CABLE SIZE	NOMINAL STANDING NO.x DIAMETER	APPROX. OVERALL DIAMETER	CURRENT RATING NOTE 1	CONDUCTOR RESISTANCE AT 20C MAXIMUM	VOLT DROP NOTE 1	APPROX.CABLE WEIGHT MASS PER 100M COIL
(mm ²)		(mm)	(A)	(Ω/KM)	(MV/A/M)	(Kg)
0.5	0.20 X 16	3.1 X 5.0	3	39.0	93	4.0
0.75	0.20 X 24	3.8 X 6.1	6	26.0	62	4.2

Note 1 : Based on a max ambient temperature of 30°C and a max conductor temperature of 70°C

Packaging

Shrink-wrapped coils

100 metre

Submersible Pump Cable

DESCRIPTION

Flexible plain copper conductors, PVC insulated, PVC Nitrile sheathed overall.

APPLICATION

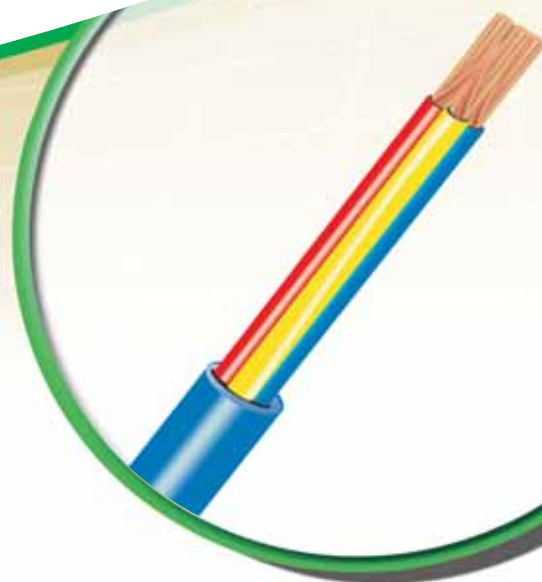
For the wiring of:

Submersible Pumps | Boreholes | Farms

SPECIFICATION

SANS 1574/2004

Voltage Rating	600/1000 V
Temperature Range	-10°C to 70°C
Sheath Colour	3 Core - Royal Blue 4 Core - Green
Core Colours	3 core - Red, Yellow, Blue 4 core - Red, Yellow, Blue, Black



TECHNICAL INFORMATION

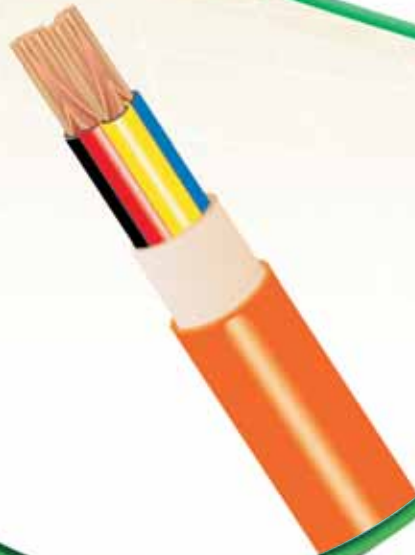
CABLE SIZE	NOMINAL STANDING NO.x DIAMETER	APPROX. OVERALL DIAMETER	CURRENT RATING NOTE 1	VOLT DROP NOTE 1	APPROX.CABLE WEIGHT MASS PER 100M COIL
(mm ²)		(mm)	(A)	(MV/A/M)	(Kg)
1.5 X 3	28w x 0.25	9.0	15	26.0	12
2.5 X 3	46w x 0.25	10.0	20	16.0	17
4.0 X 3	52w x 0.30	11.9	30	10.0	23
6.0 X 3	84w x 0.30	14.5	35	6.4	42
10.0 X 3	140w x 0.30	17.0	50	3.8	52
16.0 X 3	210w x 0.30	19.0	65	2.4	70
4 CORE (mm ²)		(mm)	(A)	(MV/A/M)	(Kg)
1.5 X 4	28w x 0.25	10.5	15	26.0	20
2.5 X 4	46w x 0.25	11.0	20	16.0	25
4.0 X 4	52w x 0.30	13.5	30	10.0	32
6.0 X 4	84w x 0.30	16.0	35	6.4	48
10.0 X 4	140w x 0.30	18.3	50	3.8	68
16.0 X 4	210w x 0.30	21.0	65	2.4	90

Note 1 : Based on a max ambient temperature of 30°C and a max conductor temperature of 70°C

Packaging

Shrink-wrapped coils	100 metre
Also available on Wooden Drums	500 metre

Nitrile Trailing Cable



DESCRIPTION

Flexible plain copper conductors, PVC insulated, PVC bedded, PVC Nitrile sheathed overall.

APPLICATION

For the wiring of:

Portable and mobile machinery.

SPECIFICATION

SANS 1574/2004

Voltage Rating
Temperature Range
Sheath Colour
Core Colours

600/1000 V
-10°C to 70°C
Orange
4core - Red, Yellow, Blue, and Black

TECHNICAL INFORMATION

CABLE SIZE	NOMINAL STANDING NO.x DIAMETER	APPROX. OVERALL DIAMETER	CURRENT RATING	VOLT DROP	APPROX.CABLE WEIGHT MASS PER 100M COIL
(mm ²)		(mm)	(A)	(MV/A/M)	(Kg)
1.5 x 4	30 x 0.25	12.0	16	27.0	22
2.5 x 4	50 x 0.25	13.5	25	16.0	27
4.0 x 4	56 x 0.30	15.5	32	10.0	38
6.0 x 4	84 x 0.30	18.0	37	6.5	52
10.0 x 4	140 x 0.30	20.0	50	3.8	72
16.0 x 4	224 x 0.30	24.0	65	2.4	104
25.0 x 4	376 x 0.30	28.0	89	1.5	149

Note 1 : Based on a max ambient temperature of 30°C and a max conductor temperature of 70°C

Packaging

Shrink-wrapped coils
Also available on
Wooden Drums

100 metre
500 metre

PVC Nitrile Welding Cable

DESCRIPTION

A Light Duty welding cable comprising of a flexible conductor insulated with a Nitrile / PVC (Synthetic Rubber) compound.

APPLICATION

A welding cable for use in an environment where there is minimal abrasion or oil.

SPECIFICATION

SANS 1576 AS A GUIDE

Voltage Rating

100/100V



TECHNICAL INFORMATION

CABLE SIZE	COLOUR	APPROX. OVERALL DIAMETER	MAXIMUM CONDUCTOR RESISTANCE	APPROX. CABLE WEIGHT MASS PER 100M COIL	CURRENT RATING AT A DUTY CYCLE OF: NOTE 1				
					100% (60 Min/Hr)	85% (50 Min/Hr)	60% (36 Min/Hr)	30% (18 Min/Hr)	20% (12 Min/Hr)
(mm ²)		(mm)	(Ohm Per Km)	(Kg)	(AMPS)				
16.0	Green	10.3	1.19	21.2	110	120	140	200	245
25.0	Blue	11.9	0.78	29.4	140	150	180	255	315
35.0	Grey	13.6	0.55	38.7	185	200	240	340	415
50.0	Red	15.7	0.39	55.7	230	250	295	420	515
70.0	Brown	17.0	0.28	73.6	290	315	375	530	650
95.0	Yellow	19.1	0.21	95.3	350	380	450	640	785
120.0	Black	22.9	0.16	131.0	405	440	525	740	905

Note 1 : Based on a max ambient temperature of 30°C and a max conductor temperature of 70°C

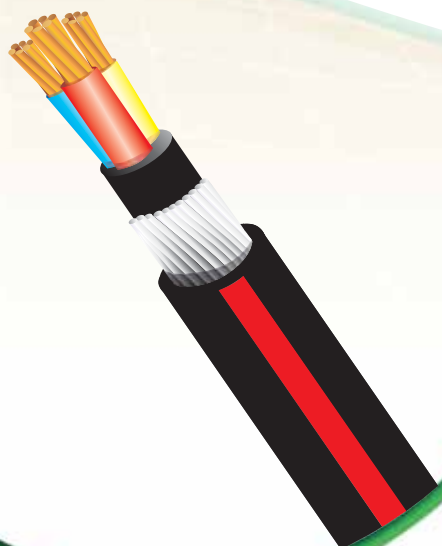
Packaging

Shrink-wrapped coils
Also available on
Wooden Drums

100 metre

500 metre

Flame Retardent (FR) Armoured Cable



DESCRIPTION

Plain Annealed copper conductors, PVC insulated, PVC Bedded, Galvanised Steel Wire Armour, PVC (FR) Sheath.

APPLICATION

These cables may be used for main power distribution in general industries, houses and commercial buildings. These cables are suitable for direct burial installations as well as in air or ducts. The flame retardancy in the PVC of the cable prevents the spread of fire.

SPECIFICATION

SANS 1507/2002

Voltage Rating
Sheath Colours
Core Colours

600/1000V
Black with Red stripe
2 core - Black and Red
3 core - Red, Yellow and Blue
4 core - Red, Yellow, Blue and Black
7 core - Red, Yellow, Blue, Black,
Violet, Brown and Orange

TECHNICAL INFORMATION

CABLE SIZE	APPROX. OVERALL DIAMETER				CURRENT RATING	VOLT DROP	APPROX.CABLE WEIGHT MASS PER 100M COIL				
					NOTE 1	NOTE 1					
(mm²)	(mm)				(AMPS)		(MV/A/M)	(Kg)			
	2C	3C	4C	7C	2C	3,4,&7C		2C	3C	4C	7C
1.5	13.9	14.4	15.2	17.2	21	18	29.0	38	44	48	61
2.5	14.6	15.2	16.2	18.3	28	25	18.0	44	49	56	74
4.0	16.7	17.4	18.9	21.2	38	33	11.0	56	64	73	99
6.0	17.8	18.8	20.2	23.2	49	42	7.30	67	77	88	119
10.0	19.9	20.8	22.5	-	67	58	4.40	84	96	113	-
16.0	17.8	20.1	22.2	-	89	77	2.80	76	103	128	-
25.0	-	26.5	28.4	-	118	102	1.75	-	164	192	-
35.0	-	27.9	31.2	-	145	125	1.25	-	220	237	-
50.0	-	31.5	36.5	-	175	151	0.93	-	287	320	-
70.0	-	35.5	40.1	-	222	192	0.63	-	361	450	-
95.0	-	40.0	44.7	-	269	231	0.46	-	490	596	-
120.0	-	42.2	47.4	-	310	267	0.36	-	572	710	-
150.0	-	46.0	52.7	-	356	306	0.29	-	690	925	-
185.0	-	51.2	57.5	-	405	348	0.23	-	869	1103	-
240.0	-	57.2	64.2	-	476	409	0.18	-	1076	1372	-
300.0	-	62.2	70.2	-	547	469	0.145	-	1295	1654	-

Note 1 : These ratings are per SANS 0142 table 6.4

Packaging

Wooden Drums

300 & 500 metre

Low Halogen (LHFR) Armoured Cable

DESCRIPTION

Plain Annealed copper conductors, PVC insulated, PVC (LH) Bedded, Galvanised Steel Wire Armour, PVC (LH) Sheath.

APPLICATION

These cables may be used for main power distribution in general industries, houses and commercial buildings. These cables are suitable for direct burial installations as well as in air or ducts. The PVC in LHC armoured cable is specially formulated to reduce corrosive halogen gasses which are produced by burning PVC, so are suitable for use in closed areas such as mines and offices.

SPECIFICATION

SANS 1507/2002

Voltage Rating	600/1000V
Sheath Colour	Black with Blue stripe
Core Colours	2 core - Black and Red
	3 core - Red, Yellow and Blue
	4 core - Red, Yellow, Blue and Black
	7 core - Red, Yellow, Blue, Black, Violet, Brown and Orange

TECHNICAL INFORMATION

CABLE SIZE	APPROX. OVERALL DIAMETER				CURRENT RATING	VOLT DROP	APPROX.CABLE WEIGHT MASS PER 100M COIL				
					NOTE 1	NOTE 1					
(mm²)	(mm)				(AMPS)		(MV/A/M)	(Kg)			
	2C	3C	4C	7C	2C	3,4,&7C		2C	3C	4C	7C
1.5	13.9	14.4	15.2	17.2	21	18	29.00	39	45	49	63
2.5	14.6	15.2	16.2	18.3	28	25	18.00	45	50	58	76
4.0	16.7	17.4	18.9	21.6	38	33	11.00	58	66	75	102
6.0	17.8	18.8	20.2	23.2	49	42	7.30	69	79	91	123
10.0	19.9	20.8	22.5	-	67	58	4.40	87	99	116	-
16.0	17.8	20.1	22.2	-	89	77	2.80	78	106	132	-
25.0	-	26.5	28.4	-	118	102	1.75	-	169	198	-
35.0	-	27.9	31.2	-	145	125	1.25	-	227	244	-
50.0	-	31.5	36.5	-	175	151	0.93	-	296	330	-
70.0	-	35.5	40.1	-	222	192	0.63	-	372	464	-
95.0	-	40.0	44.7	-	269	231	0.46	-	505	614	-
120.0	-	42.2	47.4	-	310	267	0.36	-	589	731	-
150.0	-	46.0	52.7	-	356	306	0.29	-	711	953	-
185.0	-	51.2	57.5	-	405	348	0.23	-	895	1136	-
240.0	-	57.2	64.2	-	476	409	0.18	-	1108	1413	-
300.0	-	62.2	70.2	-	547	469	0.145	-	1334	1703	-

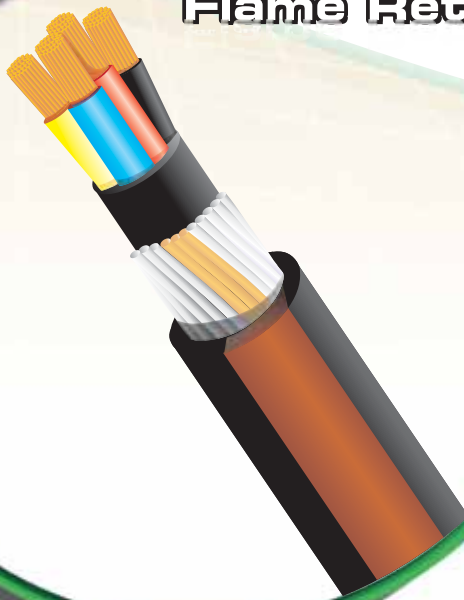
Note 1 : These ratings are per SANS 0142 table 6.4

Packaging

Wooden Drums

300 & 500 metre

Flame Retardent (ECC FR) Armoured Cable



DESCRIPTION

Plain annealed copper conductors, PVC insulated, PVC Bedded, Galvanised Steel Wire Armour with Earth continuity Conductors in the armour, PVC Sheath.

APPLICATION

These cables may be used for main power distribution in general industries, houses and commercial buildings where the concentric earth eliminates the need for a supplementary earth continuity conductor.

SPECIFICATION SANS 1507/2002

Voltage Rating	600/1000V
Sheath Colours	Black with Brown stripe
Core Colours	2 core - Black and Red 3 core - Red, Yellow and Blue 4 core - Red, Yellow, Blue and Black 7 core - Red, Yellow, Blue, Black, Violet, Brown and Orange

TECHNICAL INFORMATION

CABLE SIZE	SIZE OF ECC	APPROX. OVERALL DIAMETER				CURRENT RATING	VOLT DROP	APPROX.CABLE WEIGHT MASS PER 100M COIL				
						NOTE 1	NOTE 1					
(mm²)	(mm²)	(mm)				(AMPS)		(MV/A/M)	(Kg)			
		2C	3C	4C	7C	2C	3,4,&7C		2C	3C	4C	7C
1.5	1.0	13.9	14.4	15.2	17.2	21	18	29.00	39	45	49	63
2.5	1.5	14.6	15.2	16.2	18.3	28	25	18.00	45	50	58	76
4.0	2.5	16.7	17.4	18.9	21.6	38	33	11.00	58	66	75	102
6.0	4.0	17.8	18.8	20.2	23.2	49	42	7.30	69	79	91	123
10.0	6.0	19.9	20.8	22.5	-	67	58	4.40	87	99	116	-
16.0	10.0	17.8	20.1	22.2	-	89	77	2.80	78	106	132	-
25.0	16.0	-	26.5	28.4	-	118	102	1.75	-	169	198	-
35.0	16.0	-	27.9	31.2	-	145	125	1.25	-	227	244	-
50.0	25.0	-	31.5	36.5	-	175	151	0.93	-	296	330	-
70.0	35.0	-	35.5	40.1	-	222	192	0.63	-	372	464	-
95.0	50.0	-	40.0	44.7	-	269	231	0.46	-	505	614	-
120.0	70.0	-	42.2	47.4	-	310	267	0.36	-	589	731	-
150.0	70.0	-	46.0	52.7	-	356	306	0.29	-	711	953	-
185.0	95.0	-	51.2	57.5	-	405	348	0.23	-	895	1136	-
240.0	120.0	-	57.2	64.2	-	476	409	0.18	-	1108	1413	-
300.0	150.0	-	62.2	70.2	-	547	469	0.145	-	1334	1704	-

Note 1 : These ratings are per SANS 0142 table 6.4

Packaging

Wooden Drums

300 & 500 metre

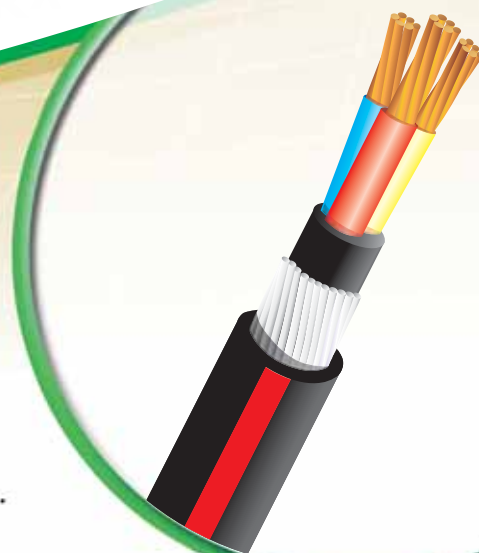
Armoured Cable (FR) 1.9/3.3 Kv

DESCRIPTION

Shaped stranded copper conductors, PVC insulated, PVC Bedded Galvanised steel wire Armour, PVC (FR) Sheathed.

APPLICATION

These cables may be used for main power distribution in general industries, houses and commercial buildings. These cables are suitable for direct burial installations as well as in air or ducts. The flame retardancy in the PVC of the cable prevents the spread of fire.



SPECIFICATION

SANS 1507/1: 2007

Voltage Rating 1900/3300V
Sheath Colour Black with Red stripe
Core Colours 3 core - Red, Yellow and Blue

TECHNICAL INFORMATION

CABLE SIZE		APPROX. OVERALL DIAMETER		CURRENT RATING		IMPEDANCE	VOLT DROP	APPROX.CABLE WEIGHT MASS PER 100M COIL
				NOTE 1				
(mm²)	(mm)	(mm)				(Ω /KM)	(MV/A/M)	(Kg/Km)
	OVER INSULATION	OVERALL	GROUND (A)	DUCTS (A)	AIR (A)			
25.0	21	27	119	96	110	0.727	1.257	182
35.0	23	29	143	116	135	0.524	0.907	216
50.0	25	31	169	138	163	0.387	0.670	254
70.0	27	35	210	171	207	0.268	0.464	347
95.0	35	43	251	205	251	0.193	0.334	492
120.0	38	46	285	234	290	0.153	0.265	580
150.0	42	50	320	263	332	0.124	0.215	688
185.0	46	56	361	298	378	0.153	0.265	859
240.0	58	69	416	344	445	0.104	0.180	1035
300.0	65	76	465	385	510	0.078	0.135	1279

Note 1 : These ratings are per SANS 0142 table 6.4

Packaging

Wooden Drums

300 & 500 metre

Single Core Double PVC Cable



DESCRIPTION

Plain annealed stranded copper conductors, insulated with a general purpose grade PVC, unarmoured, PVC Sheath

APPLICATION

Power Distribution:

Distribution Panels and Transformers

SPECIFICATION

SANS 1507/2002

Voltage Rating
Temperature Range
Colour Option

600/1000 V
-10°C to 70°C
Black
(other colours available on request)

TECHNICAL INFORMATION

CABLE SIZE (mm ²)	NOMINAL STRANDING No.x DIAMETER	APPROX. OVERALL DIAMETER (mm)		CURRENT RATING (A) NOTE 1	VOLT DROP (MV/A/M)	APPROX. CABLE WEIGHT MASS PER 100M COIL (Kg)
		Insulation	Sheath			
120.0	37 x 2.03	17.1	20.2	330	0.410	129
150.0	37 x 2.25	19.0	22.2	381	0.340	158
185.0	37 x 2.52	21.2	24.7	436	0.290	197
240.0	61 x 2.25	24.1	27.8	515	0.250	256
300.0	61 x 2.52	26.9	30.9	594	0.220	322
400.0	61 x 2.80	30.3	34.4	694	0.200	407
500.0	61 x 3.20	34.0	38.3	792	0.185	516
630.0	91 x 2.97	37.9	42.5	904	0.175	655

Note 1 : These ratings are for 2 cables single phase AC or DC clipped direct as per SANS 0142 table 6.2

Packaging

Wooden Drums

500 metre

Single Core PVC AWA PVC Cable

DESCRIPTION

Plain annealed stranded copper conductors, insulated with a general purpose grade PVC, AWA, PVC Sheath.

APPLICATION

Power Distribution:

Distribution Panels and Transformers

SPECIFICATION

SANS 1507/2002

Voltage Rating 600/1000V
 Temperature Range -10°C to 70°C
 Colour Option Black (other colours available on request)



TECHNICAL INFORMATION

CABLE SIZE	NOMINAL STRANDING No.x DIAMETER	APPROX. DIAMETER			CURRENT RATING NOTE 1			VOLT DROP NOTE 1	APPROX.CABLE WEIGHT MASS PER 100M COIL
(mm ²)		(mm)			(A)			(MV/A/M)	(Kg)
		Insulation	AWA	Sheath	Ground (A)	Duct (A)	Air (A)		
120.0	37 x 2.03	17.1	1.6	25.66	301	269	314	0.41	178
150.0	37 x 2.25	19.00	1.6	28.00	336	299	357	0.34	210
185.0	37 x 2.52	21.2	1.6	30.3	370	329	401	0.29	254
240.0	61 x 2.25	24.1	1.6	33.3	410	363	481	0.25	311
300.0	61 x 2.52	26.9	2.0	37.7	476	420	546	0.22	412
400.0	61 x 2.80	30.3	2.0	42.3	529	465	622	0.20	513
500.0	61 x 3.20	34.0	2.0	46.00	581	509	695	0.18	620
630.0	91 x 2.97	37.9	2.5	50.9	623	541	779	0.17	821

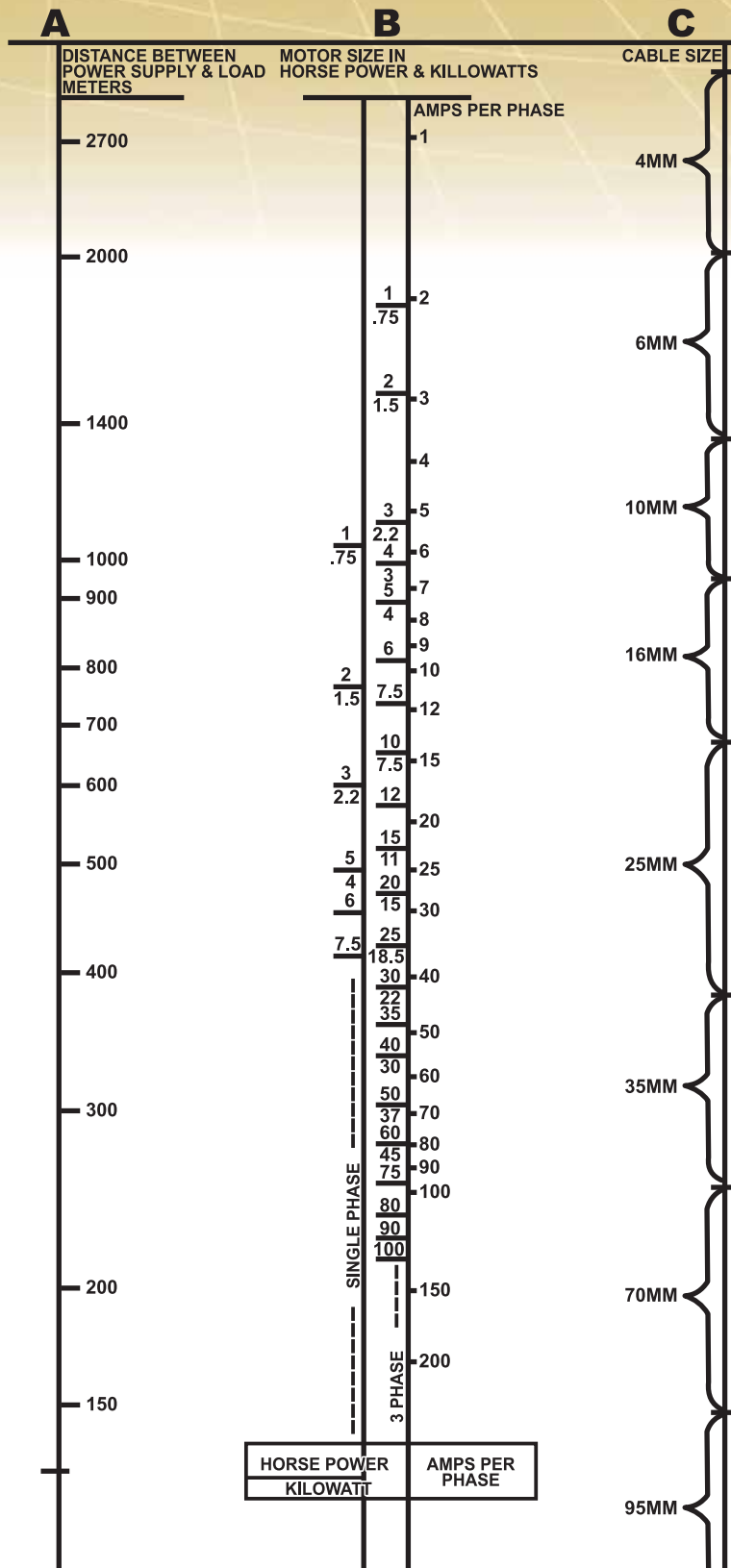
Note 1 : These ratings are for 2 cables single phase AC or DC clipped direct as per SANS 0142 table 6.2

Packaging

Wooden Drums

500 metre

Quick Cable Selection Guide



FOR ANY GIVEN LOAD OVER A DISTANCE OF 100 METRES AND OVER

INSTRUCTIONS FOR USE

1. From Column "B" select the size of the motor, i.e. HORSEPOWER/KILO-WATT.

Alt. If the motor current is known then select the current to be drawn

N.B. If working in H.P./KW be careful to select 1 phase/3 phase as need be.

2. Now select the distance from the motor to the distribution point under column A.

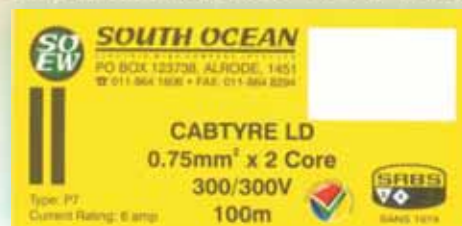
3. Line a ruler up with the points selected on both "A" and "B" and look at column "C" for conductor size of the cable needed for the given installation.

Colour Coded Chart for 100M Coils

For quick identification, South Ocean Electric Wire coil labels are colour coded with a specific colour per size



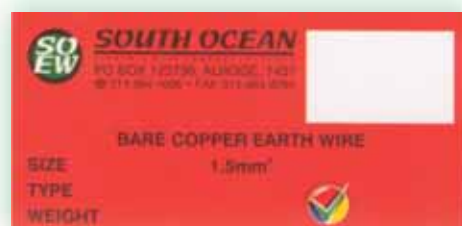
0.50mm²



0.75mm²



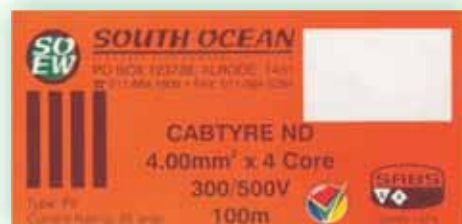
1.00mm²



1.5mm²



2.5mm²



4.0mm²



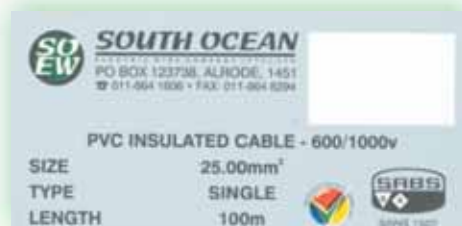
6.0mm²



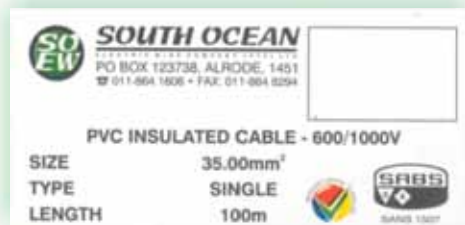
10.0mm²



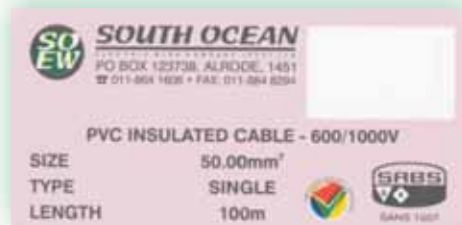
16.0mm²



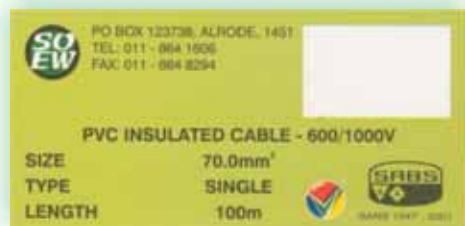
25.0mm²



35.0mm²



50.0mm²



70.0mm²



Bare Copper Chart

BARE COPPER CHART

	+ -2,5%	5KG = M	10KG =M	25KG =M	500KG = M
SIZE	M/KG	5	10	25	500
1.5	76.336	382	763	1908	38168
2.5	46.729	234	467	1168	23365
4.0	29.07	145	291	727	14535
6.0	19.417	97	194	485	9709
10.0	11.534	58	115	288	5767
16.0	7.252	36	73	181	3626
25.0	4.583	23	46	115	2292
35.0	3.297	16	33	82	1649
50.0	2.435	12	24	61	1218
70.0	1.68	8	17	42	840
95.0	1.21	6	12	30	605
120.0	0.962	5	10	24	481
150.0	0.779	4	8	19	390
185.0	0.623	3	6	16	312
240.0	0.474	2	5	12	237
300.0	0.378	2	4	9	189
400.0	0.296	1	3	7	148
500.0	0.23	1	2	6	115
630.0	0.177	1	2	4	89



SOUTH OCEAN

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