

SPECIAL CABLES BY Amokabel Australia

Australian Manufacturer of Quality Special and Custom Cables



CABLE MANUFACTURING SINCE 1992

The first company in the Amokabel group was established in 1992. By focusing on technological development and modernisation, we have organically managed to build a profitable and successful group in a short period of time. Our constant pursuit of growth has resulted in several new companies active in the manufacturing and distribution of cable.

The Amokabel factory in Sweden has a total of 41 000 m² production area. The main office and factory are located in the city of Alstermo in the Småland region of Sweden, 70 km from Växjö and Kalmar.





THE AMOKABEL VISION

Our vision is to innovate, design and produce cables today that meet the needs of tomorrow. We work closely with our customers to tailor solutions and find the right cable for the right application or system. Our broad experience and technical expertise together with state-of-the- art production of cables has enabled us to become the leading global manufacturer of special cables.

At Amokabel, we are strongly committed to a sustainable world. Through large investments in solar, wind and hydro power generation, we produce more green electricity than we consume.

Amokabel's headquarters factory in Sweden is the only cable manufacturer in the world to run solely on its own renewable energy.

Amokabel - Cable for life.

FACTS AND KEY FIGURES

Cable Segments

>€140

>300

Subsidiaries in 6 Countries

>9500

>300 Year founded in Sweden

6M€ Investeed in green energy

2021 **Australian Entity Started**

OUR PRODUCT SEGMENTS

SUBSEA

INDUSTRY

POWER NETWORKS

BUILDING

HIGH-TEMP **BRAND REX**











KEY APPLICATIONS

- Submarine
- Fishfarm
- ROV
- Umbilicals
- Renewables
- Mining
- Automotive
- Marine
- Control & Machinery
- Internal wires
- Airport
- E-mobility

 Covered conductors 1-52kV

- Bare conductors
- 1 kV cable
- Cable for earthing
- Stay wire



Single core conductor

Telecom/Safety cables

• Building cable

• Flexible cable

amoPro series

- Defence
- Industry
- Automotive
- Marine

KEY SOLUTIONS Provides all kinds of cables with steel or aramid for full loads up to several tons, together with water blocking, neutrally buoyant or floating as customer choices.

Offer a diverse and comprehensive product portfolio within the industry segment, from standardized cables to customized products.

The covered conductor systems span from 1kV to 52Kv and offer customers solutions for safe and costeffective systems of electric distribution.

Cable for the professional electrician's demands for high productivity at all levels. Offers "brand label" concept with a specific customer profile.

Customized cables for extreme environment which requires flour polymers cables to withstand high temperatures.

AMOKABEL AUSTRALIA PTY LTD

BACKGROUND

Amokabel Australia excels in the design and manufacture of many unique and highly specialized cables. Before being acquired by Amokabel in 2022, the local company was originally established by two professional engineers with extensive experience in the cable industry who built a successful special cable business based on quality and local production. Amokabel Australia retains those advantages and also has access to the resources and products of the international Amokabel Group.

The company is based in Sydney and supplies products across Australia and overseas.

The company prides itself on being able to provide both custom and standard cables that are manufactured at our facility in Western Sydney. The company can manufacture a wide range of products, many of which are custom designed and made to meet our clients' requirements.



OUR SERVICES AND SUPPLY INCLUDE:

- Communication Cables
- Geotechnical Cables
- Galvanised Steel Wire Armouring
- Low Smoke Zero Halogen Cables (LSZH)
- Nylon Jacketed Cables
- Polyethylene Sheath (LDPE or HDPE)
- Polyurethane Sheath
- Blue Intrinsically Safe Cables
- PVC including Rubberized versions
- Oversheathing (colour changes)
- Copper tapes
- Double Brass Tapes
- Composite Cables



BESPOKE CABLE DESIGNS

Amokabel has excelled in the design and manufacture of many unique and highly specialized cables, specifically designed to suit customer requirements. We can combine several of your or our supplied cables to make an easy to install Composite cable.

Examples of various Composite cables designed to meet your needs:

- 2 x Cat5/6/6A + SWA or 7 x Cat5/6/6A under one sheath.
- Figure 8 + multi cores/pairs/Coax.
- Many combinations of different cables with Optical Fibre.
- Kevlar, Braided, Vectran, all with various sheathing options.
- Nylon tubes combined with paired or multi core cables.
- Various specialised Instrumentation, Data and Control cables for the Mining Industry.

CABLE OVERSHEATHING

This provides an added level of protection to your pre-supplied cable, our stock range or our custom made cables.

Our Nylon Jacketing Protection Extrusion Line is capable of applying Black Nylon Jacketing, with or without a PVC Sacrificial Sheath over your or our supplied cables. Nylon manufacturing time is typically 1 week. As Nylon has good weather wear resistance and tear strength, it is commonly used in the manufacture of cables for the resistance to TERMITE attack.

Nylon Jacket

Description: Amokabel can apply a Nylon Jacket over any of the following cables:

- (i) All products from the Amokabel range of Standard Products with Diameter between 5 to 37mm
- (ii) Cables specially designed by Amokabel to suit your application and specifications.
- (iii) Your pre-supplied cable who's diameter is between 5 to 37mm. Outside these diameter's please ring

Application: Nylon provides a guard against termites and ants.

Option: A PVC Sacrificial Sheath may also be applied over the nylon for protection during installation.

Polyethylene Sheath

Description: A tough and abrasion resistant sheathing which may be applied over existing cables. **Application:** Underground applications.

Polyurethane Sheath

Description: A tough and abrasion resistant flexible sheathing which may be applied either over existing cables or during manufacturing as an alternative to conventional PVC.

Application: Rugged Installations.

Rubberized PVC Sheath

Application: Applied as sheathing on cables to enhance such properties as flexibility and durability in comparison to conventional PVC Sheathed Cables.

Blue Intrinsically Safe

Application: Blue PVC, normally used in Petrochemical Plants, Oil refineries or similar areas for cable identification.

STEEL WIRE ARMOURING

Description: Steel Wire Armouring involves the wrapping of multiple, galvanised Steel Wires around existing cables or newly manufactured cables plus a further PVC retainer sheath.

Application: For mechanical protection or if direct burial is required.

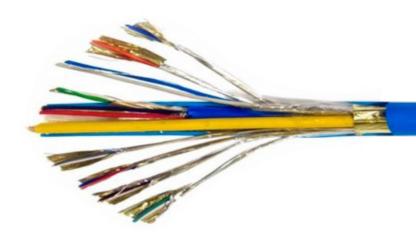
Cables Suitable for Armouring:

- (i) All products from the Amokabel range of Standard Products with a diameter between 4 to 13mm.
- (ii) Cables specially designed by Amokabel to suit your application and specifications.
- (iii) Your pre-supplied cable (at the discretion of Amokabel)



COMPOSITE CABLE EXAMPLE

Description: 1 Pair, 30/0.25 PACW, PVC Insulated, individually Aluminium/Mylar Tape Screened with a 7/0.25mm TACW Drain wire, Screened Isolated, plus 6 Pairs 1/0.90 PACW Polyethlene Insulated, Individually Aluminium/Mylar Tape Screened with a 7/0.25mm TACW Drain wire, screened Isolated, Laid up with a K2G4IP Cable and a 6 Core Fibre Cable plus fillers, Overall Aluminium/Mylar Tape screened with a 7/0.25mm TACW Drain wire, PVC Sheathed



TERMITE PROTECTION

When you need termite Protection in a hurry and long lead times are not acceptable, Amokabel has the answer; We can supply locally with a fast 2-week turnaround possible from when the base cable is provided by the customer.

Termite Protection for your Valuable Cables, Protect Your Cables with a Nylon Jacket and a PVC Sacrificial Sheath

NYLON JACKETING AND SACRIFICIAL SHEATHING OF CABLES

Amokabel will apply a Nylon Jacket and a PVC Sacrificial Sheath over pre-supplied or our Manufactured Cables.

- (a) Base Cable: Supplied (various types)
- (a) Jacketing: Nylon 12 Black UV Stabilised Radial Thickness: 0.5mm (nominal)
- (b) Sacrificial Sheath: PVC Black UV Stabilised V90 to AS3808

Radial Thickness: 1.0mm (nominal)
PVC Orange V90 to AS3808

Radial Thickness: 1.0mm (nominal)



CSIRO TERMITE RISK MAP

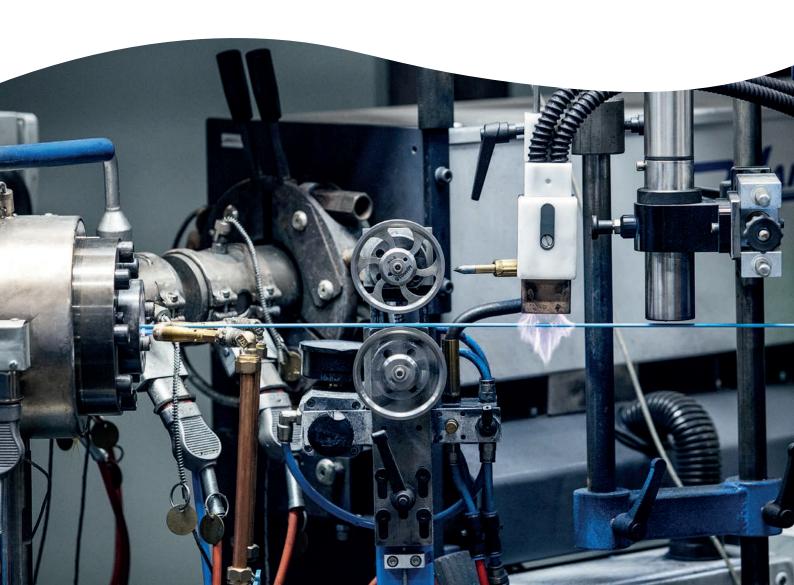
AS 5000.1

When protection from insect attack is required, an extruded jacket of polyamide 12, or copper, brass or stainless-steel tapes helically applied, or other suitable means, may be incorporated in the cable construction. AS 5000.1 recommends a 0.2mm jacket at any point. We apply a 0.5mm Nylon 12 Jacket (nominal).

As Nylon has good weather wear resistance and tear strength, it is commonly used in the manufacture of cables as a Jacket which requires resistance to TERMITE attack. Nylon resists termite destruction due to its surface hardness and smooth texture. Termites are unable to breach the nylon layer as their mandibles are unable to grip the surface or penetrate. Because the nylon layer is thin, a sacrificial sheath of HDPE or PVC is further applied to the cable to prevent mechanical damage to the nylon sheath during installation.

CONDUCTOR INFORMATION

CSA [mm²]	AWG	Class 2 Strands	Class 5 Strands	Class 6 Strands	Resistance @20°C [Ω / Klm]	Current [Amps]	Weight [kgs / klm]
0,14	26	7 x 0.16		18 × 0.10	135	0,8	1,35
0,25	24	7 x 0.20	14 x 0.16	32 × 0.10	84	1,4	2,4
0,34	22	7 x 0.25	19 x 0.16	42 × 0.10	53	2,0	3,3
0,50	20	7 x 0.30	16 x 0.20	28 x 0.16	33	3,0	4,8
0,75	18	7 x 0.37	24 × 0.20	42 × 0.16	21	4,5	7,2
1,00	18	7 x 0.43	32 x 0.20	56 x 0.16	13,2	9,0	9,6
1,50	16	7 × 0.50	30 x 0.25	84 × 0.16	13,2	9,0	14,4
2,50	13	7 x 0.67	50 x 0.25	140 x 0.16	6,6	15,0	24
4,00	12	7 x 0.85	56 x 0.30	224 x 0.16	4,1	25,0	38
6,00	10	7 x 1.04	84 x 0.30	192 x 0.21	3,3	35,0	58
10,00	8	7 x 1.35	80 x 0.41	320 x 0.21	1,8	40,0	96
16,00	6	7 x 1.70	128 x 0.41	512 x 0.21	1,0	75,0	154
25,00	4	7 x 2.14	200 x 0.41	500 x 0.21	0,7	95,0	240
35,00	2	7 x 2.52	280 x 0.41	1,120 x 0.21	0,5	130,0	336



COLOUR CHART

Chart A

Pair No.	Colour	Pair No.	Colour	Pair No.	Colour	Pair No.	Colour
1	White - Blue	11	Black - Blue	21	Violet - Blue	31	Turqoise - Blue
2	White - Orange	12	Black - Orange	22	Violet - Orange	32	Turqoise - Orange
3	White - Green	13	Black - Green	23	Violet - Green		
4	White - Brown	14	Black - Brown	24	Violet - Brown		
5	White - Grey	15	Black - Grey	25	Violet - Grey		
6	Red - Blue	16	Yellow - Blue	26	Pink - Blue		
7	Red - Orange	1 <i>7</i>	Yellow - Orange	27	Pink - Orange		
8	Red - Green	18	Yellow - Green	28	Pink - Green		
9	Red - Brown	19	Yellow - Brown	29	Pink - Brown		
10	Red - Grey	20	Yellow - Grey	30	Pink - Grey		

Chart B

Wire No.	Colour	Wire No.	Colour	Wire No.	Colour	Wire No.	Colour
1	Red	14	Green/Red	27	Green/Black	40	Yellow/Grey
2	Blue	15	Yellow/Red	28	Orange/Green	41	Yellow/Black
3	Green	16	White/Red	29	Gray/Green	42	Grey/Orange
4	Yellow	17	Red/Black	30	Yellow/Brown	43	Grey/Red
5	White	18	Red/Brown	31	White/Brown	44	Grey/Black
6	Black	19	Yellow/Blue	32	Brown/Black	45	Orange/Brown
7	Brown	20	White/Blue	33	Grey/Brown	46	Orange/Black
8	Violet	21	Blue/Black	34	Yellow/Violet	47	Green/Brown
9	Orange	22	Orange/Blue	35	Violet/Black	48	Blue/Brown
10	Pink	23	Green/Blue	36	White/Violet	49	Pink/Blue
11	Turquoise	24	Grey/Blue	37	White/Orange	50	Pink/Orange
12	Grey	25	Yellow/Green	38	White/Grey		
13	Red/Blue	26	White/Green	39	White/Black		

Chart C

Pair No.	Colour	Pair No.	Colour	Pair No.	Colour	Pair No.	Colour
1	Red - Blue	8	Red - White	15	Green - Blue	22	White - Orange
2	Green - Yellow	9	Red - Green	16	Green - Black	23	Blue - Yellow
3	White - Black	10	Red - Black	17	Green - Brown	24	Blue - Brown
4	Brown - Violet	11	Red - Yellow	18	Green - Orange	25	Blue - Orange
5	Orange - Pink	12	Red - Brown	19	White - Yellow		
6	Turquoise - Grey	13	Red - Orange	20	White - Violet		
7	Black - Orange	14	Green - White	21	White - Brown		

Chart D

Pair No.	Colour	Pair No.	Colour	Pair No.	Colour
1	White - Blue	9	White - Blue/Brown	17	White - Green/Grey
2	White - Orange	10	White - Blue/Grey	18	White - White/Brown
3	White - Green	11	White - White/Orange	19	White - Brown/Grey
4	White - Brown	12	White - Orange/Green	20	White - White/Grey
5	White - Grey	13	White - Orange/Brown	21-40	Yellow
6	White - White/Blue	14	White - Orange/Grey		Repeat Sequence
7	White - Blue/Orange	15	White - White/Green	41-50	Black
8	White - Blue/Green	16	White - Green/Brown		Repeat Sequence



CONTACT

Sales Enquiries enquiries.au@amokabel.com

Administrative and Accounts

admin.au@amokabel.com

Amokabel Australia

8 Epic Place Villawood NSW 2163

Ph: +61 (02) 9645-5444