

# Marine cables

From oil tankers to cruise vessels.



A brand of the

**Prysmian**  
Group



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# Why do business with Prysmian?

Because it pays off.

You might ask yourself why you should choose cables from us, and not from somewhere else? It's a fair question. There are many very good reasons.

First of all we're Australians. We've been producing tailor-made cables here since 1944. We know what it takes to deal with the many different challenges that tough Australian conditions require.

Second of all we combine this local knowledge with the strength of being a global market leader. Being the world's largest producer of power and telecommunication cables means we have the muscles to innovate and customise our solutions to perfectly match your needs. At our disposal we have 97 manufacturing plants, 17 research and development centres and around 22 000 employees.

In addition we co-operate with universities, scientific institutions and, perhaps most importantly, with you. Your satisfaction is our livelihood. Based on your needs and your feedback we constantly improve to make sure our offer fits the bill.

No matter what kind of cable you need, we have it. And if not, we'll invent it. And it doesn't end there. In our offer you'll find the best technical support on the market – before, during and after.

That's why doing business with us pays off.

Prysmian Australia Pty Ltd proudly manufactures in Australia and operates certified management systems compliant with the requirements of:

**ISO 9001:2008**

Quality Management Systems

**AS/NZS 4801:2001**

Occupational Health & Safety Management Systems

**OHSAS 18001:2007**

Assessment Specification for Occupational

Health & Safety Management Systems

**ISO 14001:2004**

Environmental Management Systems



# From oil tankers to cruise vessels.

By tailoring our product range to our customers requirements we believe that we as cable makers are taking an important step towards supplying cabling solutions that will have a decisive impact on increasing our customers' profitability.

## MARINE CABLES

### Applications

This product range is designed to create added value for our customers: shipyards, owners, marine installators, distributors and marine OEM companies.

### Easy and quick to install

On board a ship there is very little room. Installing cables can be very slow and hard work. To minimise this, cables must be easy to install. Prysmian has developed cables that are flexible, easy to bend, easy to peel and easy to pull. This saves time and money.

### Light and small

Weight is a major concern for shipbuilders and owners. All items on board should weigh as little as possible. Cables are no exception. Space is a scarce commodity on a ship. Prysmian's cables are designed with small diameters and light constructions. This provides overall benefits to the ship's weight and operation. Smaller cable trays can be used, again saving more space and weight.

### Fire performance

All cables are halogen free and low smoke.

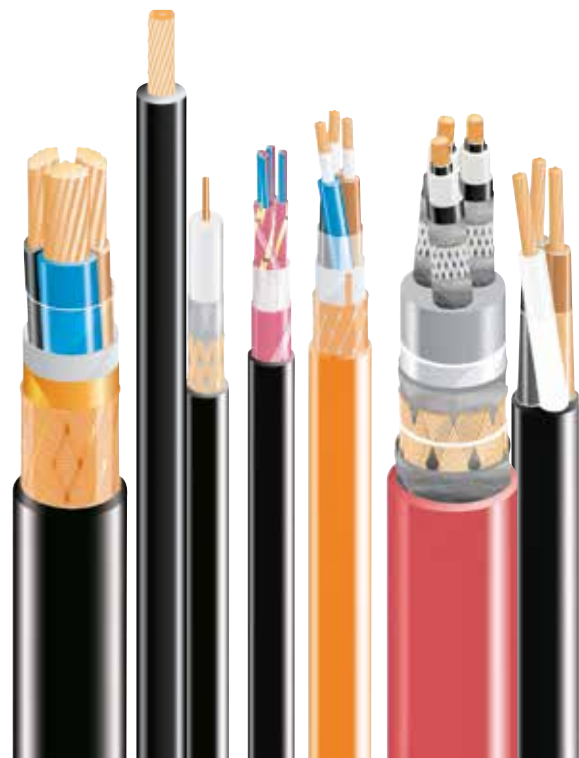
- Evacuation is made easier in the event of fire because good visibility.
- No toxic gasses, only water vapour.
- Good visibility and no toxic gases help saving passengers lives.
- Expensive equipment and other metal parts will not be severely affected due to acidic corrosion.
- Environmentally safe.

### Availability

The cables must be available when our customers need them. In order to achieve this, Prysmian has focused on creating an efficient and fast logistic system. This does not only mean transporting cables from A to B, but also keeping a wide range of items on stocks.

### A wide range

Prysmian's Technergy™ cables collection incorporates a very wide range of marine cables covering all possible uses on board a ship. There are all kinds of cables from 1 kV to 20 kV power cables, there are telecom cables with various braiding and shielding alternatives as well as special bus and fibre optic cables. In addition there are a range of coaxial, radiating antenna cables and data cables. The variety of cable sizes allows a wide customer choice.







**Technergy integrated cabling solutions™**

Prysmian’s Technergy integrated cabling solutions™ is one of the world’s most comprehensive and technologically advanced answers to industry, infrastructure, contractors and OEM’s specific requirements.

Technergy integrated cabling solutions™ are designed and structured into twelve different product lines. Each of these offer tailored designs and added value solutions to the most diverse functional and environmental requirements in the following fields:

- Trains
- Cranes & Mobile Equipments
- Marine
- Electro-Mechanical
- Oil & Gas
- Data & Communication
- Plant & Petrochem
- Transportation Infrastructures
- Mining & Tunnelling
- Building & Civil Engineering
- Defence
- Power Plants

**Approvals**

Prysmian works closely with major classification societies. Prysmian’s marine cable factories have approvals with the following organisations:

- Lloyd’d Register of Shipping (LR)
- Det Norske Veritas (DNV)
- Germanischer Lloyd (GL)
- Registro Italiano Navale (RINA)
- Bureau Veritas (BV)
- American Bureau of Shipping (ABS)
- Russian Maritime Register of Shipping (RMRS)

**Reference projects**

Project	Customer	Country
Cruise Liner	Carnival Pride	Kværner - Masa Yards, Finland
Cruise Liner	Mykonos	Hellenic Shipyards, Greece
Fast Ferry	Super Fast 9	HDW, Germany
Cruise Liner	Golden Princess	Fincantieri, Italy
Passenger Vessel	Nils Holgersson	SSW, Germany
Trawler	Gitte Henning	Karstensens, Denmark
Cable Laying Vessel	Asean Explorer	Jurong, Singapore
Bulk Carrier	Bottiglieri	Fincantieri, Germany
Dredger	De Ballast	Van der Giessen, Netherlands
High Speed Ferry	Armas	Rodriques, Italy
Tanker	Sirius I°	Astilleros Españoles
Icebreaking	Vessel Arcticaborg	Kværner - Masa Yards, Finland

## MARINE CABLES

### Cable families at a glance.

Technergy™ Marine range	General description	Use
TEMA	Unarmoured 1 kV power and control cables.	General multi-purpose 1 kV power cables.
TEMA-A	Armoured 1 kV power and control cables.	General multi-purpose 1 kV power cables where a mechanical and/or electrical protection is needed.
TEMA-FR	Fire Resistant, unarmoured 1 kV power and control cables.	Multi-purpose 1 kV power cables for applications where the cable should function in the event of fire.
TEMA-AFR	Armoured Fire Resistant 1 kV power and control cables.	Multi-purpose 1 kV power cables where a mechanical or electrical protection is needed and for applications where the cable should function in the event of fire.
TEMA-TA	Twisted pair cables for Telecommunication and instrumentation, Armoured, 60 & 250 V.	General telecommunication and instrumentation cables where a mechanical and/or electrical protection is needed from external disturbances.
TEMA-TI	Twisted pair cables for Telecommunication and instrumentation, Individually screened, unarmoured, 60 & 250 V.	Telecommunication and instrumentation cables for applications where very strong protection is needed against cross talk but where protection against outer disturbances, both mechanical and electrical, is less critical.
TEMA-TIA	Twisted pair cables for Telecommunication and instrumentation, Individually screened, Armoured, 60 & 250 V.	Telecommunication and instrumentation cables for applications where very strong protection is needed against cross talk and where a mechanical and/or electrical protection is needed.
TEMA-TIO	Twisted pair cables for Telecommunication and instrumentation, Individually and Overall screened, 60 & 250 V	Telecommunication and instrumentation cables for applications where very strong protection is needed against cross talk and where protection against external electrical disturbances is critical, however mechanical protection is less critical.
TEMA-TIOA	Twisted pair cables for Telecommunication and instrumentation, Individually and Overall screened, Armoured, 60 & 250 V	Telecommunication and instrumentation cables for applications where very strong protection is needed against cross talk and where protection against external electrical and mechanical disturbances is critical. General telecommunication and instrumentation. cables for applications where protection against external electrical disturbances is critical.
TEMA-TO	Twisted pair cables for Telecommunication and instrumentation, Overall screened, unarmoured, 60 & 250 V.	General telecommunication and instrumentation cables for applications where protection against external electrical disturbances is critical.
TEMA-TOA	Twisted pair cables for Telecommunication and instrumentation, Overall screened, Armoured, 60 & 250 V.	General telecommunication and instrumentation cables for applications where protection against external electrical disturbances is critical.

## MARINE CABLES

### Cable families at a glance.

Technergy™ Marine range	General description	Use
TEMA-TAFR	Twisted pair cables for Telecommunication and instrumentation, Armoured and Fire Resistant, 60 & 250 V.	Telecommunication and instrumentation cables where a mechanical and/or electrical protection is needed for external disturbances and where the cable should function in the event of fire, e.g. public address purposes.
TEMA-AFC	Armoured Frequency Converter cables EMC- optimized.	Cables used for frequency converters where mechanical protection is needed and where it is important that the cable's electro magnetic compatibility is optimized.
TEMA-SB	1 kV switch board cables.	Power cables used in switchboards and in various equipment
TEMA-MVFC	Unarmoured Medium Voltage Frequency Converter cable, EMC-optimized.	Cables used for frequency converters in medium voltage areas where mechanical protection is not critical and where it is important that the cable's electro magnetic compatibility is optimized.
TEMA-A 10 kV	Armoured medium voltage power cable.	Main power supply cables for vessels.
TEMA-MVAFC	Unarmoured Medium Voltage Frequency Converter cable, EMC-optimized.	Cables used for frequency converters in medium voltage areas where mechanical protection is not critical and where it is important that the cable's electro magnetic compatibility is optimized
TEMA-A 10 kV	Armoured medium voltage power cable.	Main power supply cables for vessels
TEMA-MVAFC	Medium Voltage Armoured Frequency Converter cable, EMC-optimized.	Cables used for frequency converters in medium voltage areas where mechanical protection is critical and where it is important that the cable's electro magnetic compatibility is optimized.
TEMA-PROFIBUS	Bus-cable	Simultaneous data feeding cables for various applications, according to EN 50170-2.
TEMA-INTERBUS	Bus-cable	Simultaneous data feeding cables for various applications, according to EN 50254.
TEMA-DUPLEX		Optical data transmission.

In addition there are a variety of Coaxial, radiating and category 5 and 6 data cables as well as customer tailored designs available.

# Linking the future

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