



# Cranes & Mobile Equipment Cables



## Application

Cranes and lifts are used to move goods in different industries. Such devices are used in applications from industrial plants to commercial harbours and require high levels of safety and reliability.

Environmental conditions are often extreme. In addition to atmospheric agents, also aggressive chemical elements and heavy mechanical stresses are crucial issues of this application. The same conditions apply also to those cables which are responsible for the safe and reliable transmission of energy and data.

**Technergy™** Cranes & Mobile Equipment cables offer a complete range of cables from power to data to



## Benefits

### > Extraordinary Physical and Mechanical Performance in Harsh Environment

Cranes and material handling equipment are constantly subject to heavy mechanical stresses that affect their operational performance and service life. These include high static and dynamic tensile load, torsional stress, small bending radii, multiple bending and deflection, high travel speed and tumbling.

**Technergy™** Crane cables have been designed to assure considerable reliability and maximum performance even under extremely severe conditions.

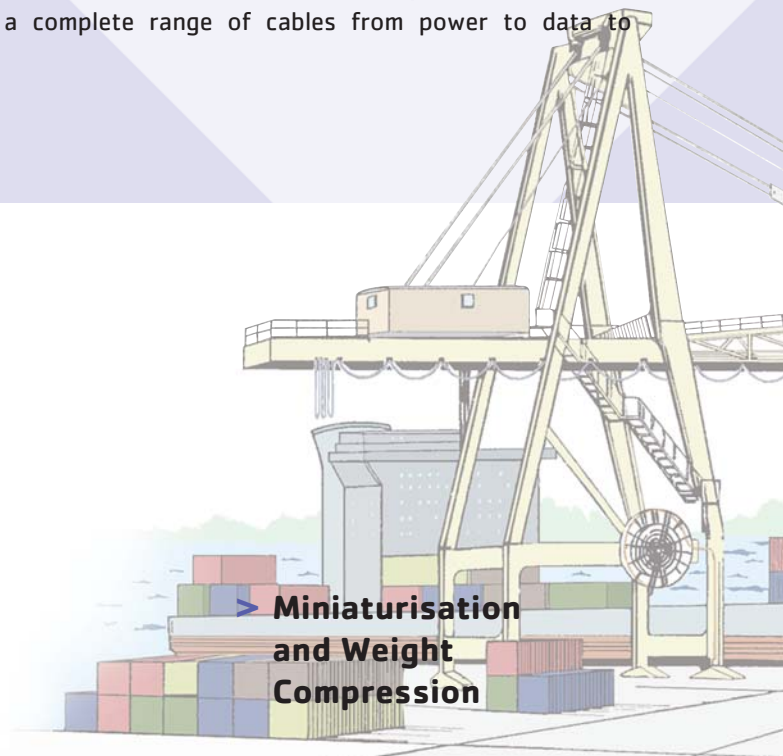
### > Longer Lifetime

**Technergy™** Crane cables, as both Prysmian in-house testing rooms and a wide span of worldwide customers and application fields have demonstrated, have a significant longer lifetime than any other specialised crane cable.

This results in a shorter downtime of the crane and lower maintenance costs, as well as guaranteeing the best value for money all over the marketplace.

### > Miniaturisation and Weight Compression

Reduced cables size and weight are characteristics which are very much welcomed by many OEM and end-users. Lower handling and transport costs, easier installation, reduced power consumption and, in general, a lower total cost of ownership put **Technergy™** Crane cables (SMK) at the forefront of miniaturisation and flexibility, without affecting their very high physical and mechanical performance standards.



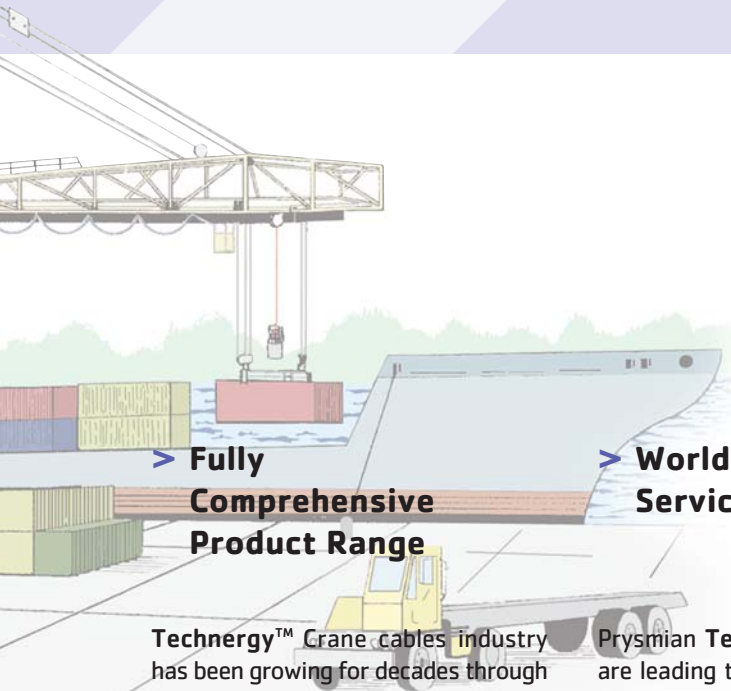
# FROM CRANES TO MOBILE EQUIPMENTS



multifunctional cables, specifically manufactured with innovative materials and designs.

These, together with state-of-the-art production technologies provide cables with high duty flex and fault safe features as well as a high resistance to mechanical wear and in the different atmospheric and chemical agents.

The new generation of SMK flexible reeling cables represent the most beneficial solution in terms of cost. Optimised dimensions and weight, together with extremely severe application profiles, durability and longer lifetime are the winning benefits of this milestone in the cable industry.



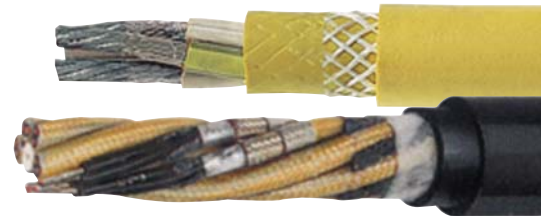
## > Fully Comprehensive Product Range

**Technergy™** Crane cables industry has been growing for decades through partnerships and co-developments with the major worldwide crane manufacturers and end-users. Any specific need related to spreaders, reels, festoons, electronic handling systems, lifts, etc. can be met at international level by the **Technergy™** Crane cables. The product range includes power transmission, signalling and control, optical data transmission cables and accessories.

## > World-Class Services

Prysmian **Technergy™** Crane cables are leading the way for international services and customer assistance. This is the range of services provided:

- Crane cables pre and post-sale online and on-site assistance all over the world, including consultancy, specifications, installation and repairing (see Worldwide Excellence Centre contact at the bottom of the back page of this leaflet).
- Ongoing stock availability of 80 different items, quickly deliverable anywhere in the world.
- Product availability after many years.
- Product customisation.



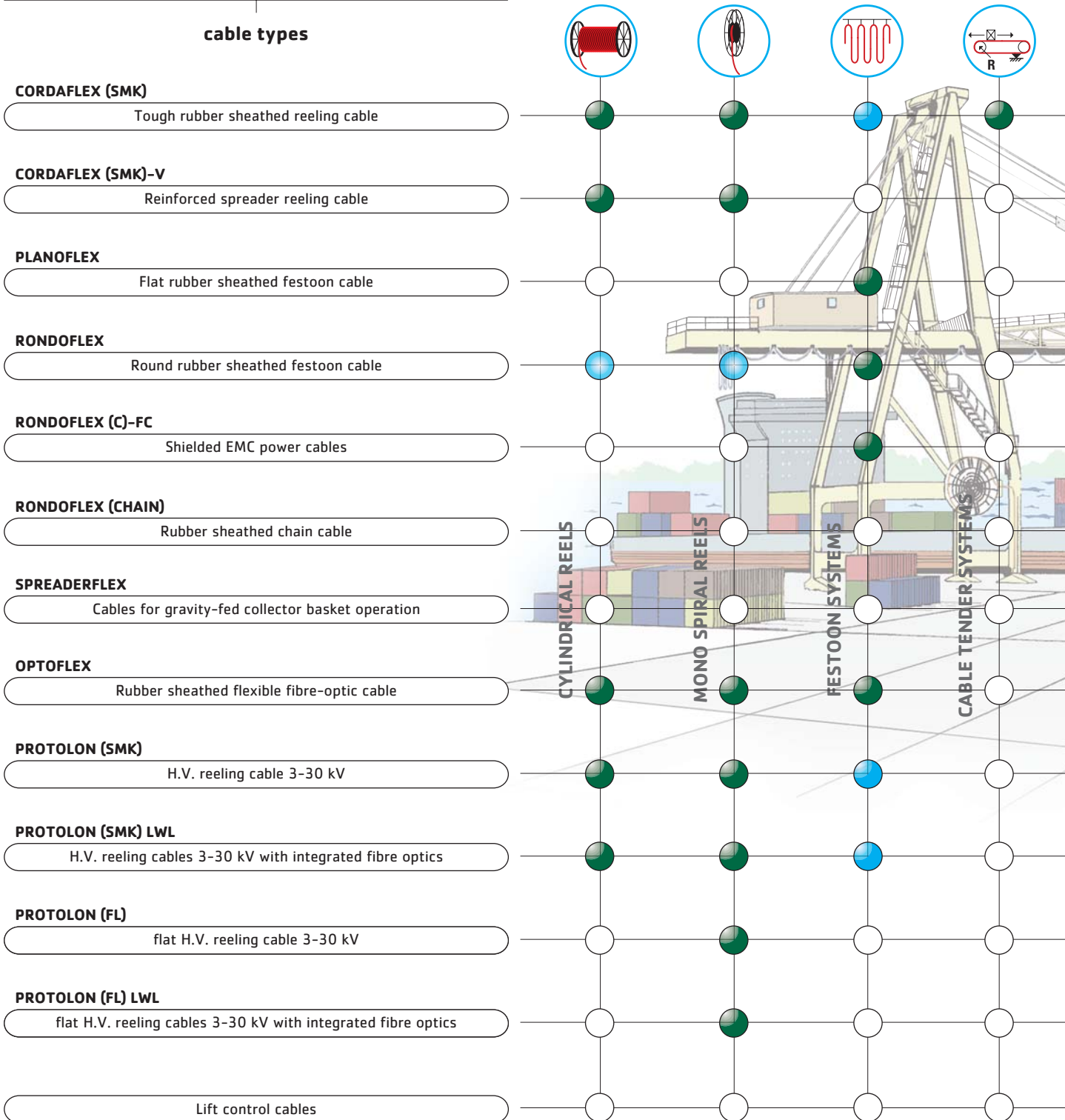
## > Technergy™ Crane Cables at Home in Every Harbour

Prysmian **Technergy™** Crane cables are used in almost any major port in the world. Customers in Europe, Asia, Africa, Australia and the Americas have been relying on this high quality product for many years. Compliance with most of the worldwide standards is ensured. The cables are manufactured in Germany according to not only the well-known DIN VDE standard, but also to IEC, MSHA and all major national standards and, for certain types, also to AS (Australia) and UL (USA) standards.

# Cable families at a glance

## CABLE GUIDANCE SYSTEMS

### cable types





## About us

Prysmian Cables & Systems is a world-class multinational company. Founded in 1872 as "Ditta Pirelli & C.", it has achieved a leading position for more than a century of operations in its two key international markets - "Energy Cables & Systems" and "Telecom Cables & Systems".

Prysmian Cables and Systems is the world's largest manufacturer of power and telecommunications cables, with 52 manufacturing facilities in 21 countries in five continents and a market share in excess of 10%.

Prysmian Energy Cables and Systems is a global solutions provider, offering a wide range of integrated solutions, such as cable systems, system design and engineering, project management, installation and post-sale services.

Prysmian Energy Cables and Systems concentrates on continuous product innovation and on achieving a competitive edge by focusing on research and development. This is done through Prysmian's own R&D centres and by co-operating with universities, scientific institutions and above all, our customers. Prysmian's world-wide organisation makes and delivers advanced technological solutions to customers anywhere in the world.



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

To find out more about the TECHNERGY integrated cabling solutions™, Prysmian Cables and Systems invites you to visit the web site: [www.prysmian.com](http://www.prysmian.com)



## Quality commitment



Prysmian has a built in multi-step quality assurance program, covering the production process from cable design and raw material purchasing to final inspection and testing documentation.

The quality system of Prysmian has been assessed and approved and is audited regularly by **Lloyd's Register of Quality Assurance to the ISO 9001 and ISO 14001 Quality System Standards.**

The ISO 14001 is the environment quality standard.



## References projects (extract)

	Site	Country
EUROPE	HHLA, Hamburg	Germany
	Eurogate, Hamburg	Germany
	ECT Rotterdam	The Netherlands
	Antwerp	Belgium
	Felixtowe	UK
	Algeciras	Spain
	Le Havre	France
	Barcelona	Spain
	Zeebrugge	Belgium
	Goteborg	Sweden
	Thamesport	UK
	Dublin	Eire
	Malta	Malta
USA	Los Angeles	USA
	Vancouver	Canada
	NASA Cape Canaveral	USA
	Long Beach	USA
	New York	USA
	Seattle	USA
	Montreal	Canada
	Singapore	Singapore
ASIA	Hong Kong	China
	Shenzhen	China
	Westport	Malaysia
	Port Klang	Malaysia
	Manila	Filippine
	Qingdao	Cina
	Shanghai	Cina

## Cable service

### Rubber Insulated Flexible Cables

#### ASSEMBLY AND TERMINATION

In our factory or on the spot we will make up your special cables (1–35 kV AC) ready for connection according to your requirements. We can also supply installation sets designed specifically for your requirements:

- > Sealing ends (cast-resin, hybrid and vulcanization types)
- > Special sealing ends
- > Medium Voltage plug-on sealing ends

#### REPAIR AND CONNECTION

In the event of major or minor damage to special cables, we provide quick assistance at a favourable price. We will repair your rubber insulated flexible cables either on site or in our factory. We use original materials and work with proven technology. Our qualified expert fitters ensure that the serviceability of your cables is not adversely affected. You can of course do the repair connection yourself; we provide all necessary original materials in the form of installation sets. We make sure that the connection is right between a number of special rubber insulated cables, or between special cables and fixed-mounted cables. We always adhere to specified criteria:

- > To suit the application concerned
- > Shrink-on, cast-resin or vulcanization method
- > Proven materials
- > Work done by qualified technicians
- > Serviceability upheld

#### CUSTOMIZED SYSTEM CONCEPTS AND TRAINING

Right at the planning stage we are there to help you. We will be pleased to advise you on selection and dimensioning of your cables, on termination methods and on how they should be assembled and made up. If desired, we will provide you with the necessary components and handle subprojects in conjunction with our products. We will train your fitters on best practice installation. You can always specify your requirements, including dates, time scales, scope and duration of training. We can provide training either in our factory or on your premises. Completion of training is always documented by an appropriate certificate.

#### FIBRE-OPTIC PREASSEMBLY AND CONNECTION

We will make up glass fibre-optic cable systems for industrial applications, involving all kinds of plug connections:

- > With high mechanical strength
- > Protected against ingress of moisture
- > Compact dimensions
- > With fibre count 6, 12 or 18

We connect glass fibre-optic cables and combined cables with integrated optical fibres:

- > With splicing box
- > By crimp method (with quick jointing sleeve)
- > Using the fusion splicing method
- > In repair work involving combined cables with integrated optical fibre

#### FIBRE-OPTIC MEASUREMENT

We possess all the customary fibre-optic measuring methods, so we can meet all requirements:

- > Visual checks
- > Attenuation measurement for various wavelengths by the insertion loss technique
- > Attenuation measurement and fault location by reflectometry (OTDR, OFL)
- > Temperature measurement on multimode fibres throughout the entire run (monitoring / sensing)

**IN CASE OF EMERGENCY HOTLINE: +49 9568 895 1262**



#### ARGENTINA

Prysmian Energía Cables y Sistemas de Argentina S. A.  
Fábrica La Rosa, Av. da Argentina 6784  
1439 Capital Federal  
tel. +54 11 46302000  
fax +54 11 46302100

#### AUSTRALIA

Prysmian Power Cables & Systems  
Australia PTY LTD  
1 Heathcote Road  
Locked Bag 7042, Liverpool Business Centre 1871  
NSW  
tel. +61 2 96000 777  
fax +61 2 96000 747

#### AUSTRIA

Prysmian OEKW GmbH  
Lembockgasse 47A, 1230 Wien  
tel. +43 1 866770  
fax +43 1 86677109

#### BRAZIL

Prysmian Energia Cabos e Sistemas do Brasil S. A.  
Av. Alexandre de Gusmao 145  
09110-900 Santo André - SP  
tel. +55 11 49984000  
fax +55 11 49984811

#### CHINA

Prysmian Tianjin Cables Co. Ltd.  
513, Huang He Road, Nankai District  
Tianjin, 300112  
tel. +86 22 2753 9679  
fax +86 22 2753 3485

#### EGYPT

Prysmian Cables & Systems  
8 Abd El Azim Aoudallah st. Hegaz sq.  
Heliopolis - Cairo  
tel. +20 2 2418557  
fax +20 2 6381327

#### FINLAND

Prysmian Cables & Systems Oy  
P.O. Box 13  
FIN-02401 Kirkkonummi  
tel. +358 10 77551  
fax +358 9 2982204

#### FRANCE

Prysmian Energie Cables et Systèmes France s.a.  
19, Avenue de la Paix - BP 712  
Paron - 89100, Sens Cedex  
tel. +33 3 86957769  
fax +33 3 86957781

#### GERMANY

Prysmian Kabel und Systeme GmbH  
Austrasse 99  
96465 Neustadt bei Coburg  
tel. +49 9568 895 1256  
fax +49 9568 895 1270

#### HONG KONG

Prysmian Cable Systems Pte. Ltd.  
Unit A, 18/F, China Overseas Building  
139 Hennessy Road  
Wanchai, Hong Kong  
tel. +85 2 2827 8308  
fax +85 2 2827 7212

#### HUNGARY

Prysmian MKM Magyar Hungarian Cable Works Co. Ltd.  
Barázda u. 38  
H-1116 Budapest  
tel. +36 1 3822222  
fax +36 1 3822202

#### INDONESIA

PT. Prysmian Cables Indonesia  
Gedung BRI II, Suite 1502  
Jln. Jend Sudirman No 44-46  
Jakarta 10210  
tel. +62 264 351222  
fax +62 264 351780

#### ITALY

Prysmian Cavi e Sistemi Energia Italia Srl  
Viale Sarca 222, 20126 Milano  
tel. +39 02 6449 7679  
fax +39 02 6440 7679

#### MALAYSIA

Prysmian Cable Systems Pte. Ltd.  
Lot 2 Jalan Kawat 15/18, 40702 Shah Alam  
Selangor Darul Ehsan  
tel. +60 3 5518 4575  
fax +60 3 5511 9590

#### NETHERLANDS

Prysmian Cables and Systems B.V.  
Schieweg 9, 2627 AN Delft  
P.O. Box 495, 2600 AL Delft  
The Netherlands  
tel. +31 15 260 5260  
fax +31 15 261 3808

#### NEW ZEALAND

Prysmian Cables & Systems  
71 Hugi Johnson Drive, P.O. Box 12162  
Penrose, Auckland  
tel. +64 9 5251260  
fax +64 9 5251262

#### NORTH AMERICA

Prysmian Cables & Systems North America  
700 Industrial Drive  
Lexington, SC 29072 - USA  
tel. +1 803 9511130  
fax +1 803 9511092

#### NORWAY

Prysmian Kabler og Systemer AS  
P.O.Box 1384, N - 1401 Ski  
tel. +47 64 915713  
fax +47 64 915714

#### ROMANIA

Prysmian Cabluri si Sisteme SA  
Soseaua Draganesti, Km. 4  
0500 Slatina  
tel. +40 49 435699  
fax +40 49 433484

#### RUSSIA

Prysmian Cables and Systems  
20/12, Str.1, Podsosenskiy Per.  
Moscow 105062, Russia  
tel. +7 095 933 7036  
fax +7 095 933 7035

#### SINGAPORE

Prysmian Cable Systems Pte. Ltd.  
No 4 Tuas Avenue 12. 3rd Storey  
639047 Singapore  
tel. +65 6862 9866  
fax +65 6862 9877

#### SLOVAKIA

Prysmian Kablo s.r.o.  
Tovarenska 11  
812 61 Bratislava  
tel. +421 7 50211111  
fax +421 7 52961773

#### SPAIN

Prysmian Cables y Sistemas S.L.  
Carretera C-15, Km. 2  
08800 Vilanova i la Geltrú (Barcelona)  
tel. +34 93 811 6181  
fax +34 93 811 6011

#### SWEDEN

Prysmian Kablar och System Ab  
Gustavslundsvägen 141  
P.O.Box 14147  
SE-16714 Bromma  
tel. +46 8 260416  
fax +46 8 260413

#### TURKEY

Türk Prysmian Kablo ve Sistemleri A.S.  
Buyukdere Caddesi No 117  
34394 Gayrettepe, Istanbul  
tel. +90 212 3551500  
fax +90 212 2175810

#### U.A.E. (Dubai)

Prysmian Cables and Systems Middle East  
P.O. Box 72125, Dubai  
tel. +971 4 345 7870  
fax +971 4 345 7101

#### UK

Prysmian Cables & Systems Limited  
P. O. Box 6  
Leigh Road  
Eastleigh  
Hampshire, SO50 9YE  
tel. +44 2380 295555  
fax +44 2380 295111

## World Wide Excellence Center

tel. +49 9568 895 1256, fax +49 9568 895 1270

## Head Office

Prysmian Cables and Systems - Viale Sarca 222, 20126 Milano, Italy - tel. +39 02 6449 1, fax +39 02 6449 2931 - www.prysmian.com