

# We'll spread your net wider.

Our complete range of Power Distribution cables gives you all the options you need.



**Prysmian**  
Group

Linking  
the Future

# Linking the future

As the worldwide leader in the cable industry, Prysmian Group believes in the effective, efficient and sustainable supply of energy and information as a primary driver in the development of communities.

With this in mind, we provide major global organisations in many industries with best-in-class cable solutions, based on state-of-the-art technology. Through three renowned commercial brands – Prysmian, Draka and General Cable – based in almost 50 countries, we're constantly close to our customers, enabling them to further develop the world's energy and telecoms infrastructures, and achieve sustainable, profitable growth.

In our energy business, we design, produce, distribute and install cables and systems for the transmission and distribution of power at low, medium, high and extra-high voltage.

In telecoms, the Group is a leading manufacturer of all types of copper and fibre cables, systems and accessories – covering voice, video and data transmission.

Drawing on over 130 years' experience and continuously investing in R&D, we apply excellence, understanding and integrity to everything we do, meeting and exceeding the precise needs of our customers across all continents, at the same time shaping the evolution of our industry.



# Our complete range of Power Distribution cables gives you all the options you need.

We exist to help you distribute the energy that powers every aspect of the world. Our product portfolio includes the lot. From state-of-the-art MV cable systems connected to the distribution network, to LV cable systems for power distribution and cabling to buildings. Of course including all the connection appliances and services that you might need. Choose Prysmian Group and let your network grow.

## Introduction

Prysmian Group Germany is your reliable destination for high performance power distribution cables. We are the premier manufacturer and produce electric cables to strict European standards. We provide engineering services capable of fulfilling any power system specification or requirement and of delivering customised solutions.

## Application

Our power distribution offer includes Medium Voltage cables and systems to connect industries, offices and domestic constructions to the primary distribution networks and Low Voltage cables and systems for power distribution and wiring in buildings.



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COMMITTED TO QUALITY

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# Good isn't good enough. Outstanding is better.

*Our entire culture is built around quality. Why? We believe that our customers, and their customers, deserve only the exceptional.*

Customer satisfaction through superior quality is our number one priority. We have numerous polices and rigorous monitoring processes in place that guarantee best practice, encourage our employees to question everything, and deliver added value on all levels. That way we're able to deliver market-leading quality and excellence worldwide, at every single stage of a product's life.

From the procurement of raw material to the delivery of the finished article; from supplier selection to strict quality testing and certification, and from our "zero defects" to our "right first-time" approach to everything we do.

That's the reason why you can be safe in the knowledge that our solutions are the best they can be. Always.





# Tougher than the rest.

Our MV cables stay cool when the heat is on.

The ingenious engineers at our R&D department in Schwerin have developed a new cable sheath compound which is way more resistant to fire than other Medium Voltage cables. As one of few manufacturers we can now deliver MV cables tested and secured for CPR class E<sub>ca</sub>. That's our definition of hard-core cables.



## Curious about CPR?

Whatever role you play in the retail chain – wholesaler, planner or installer: You are legally responsible for safety in the event of a fire and compliance with the Construction Products Regulation (CPR).

All cables and wires that are installed in any type of building are subject to the CPR. In the EU there are uniform regulations for fire classes and test methods that describe the fire properties. The new standard EN 50575 relates to power cables and lines, communication and control cables for permanent installation in buildings.

Since July 1, 2017, the CE marking according to CPR has been mandatory on packaging and all national standards that do not meet the new standard may no longer be applied.

In addition to the CE marking, a Declaration of Performance (DoP) must be issued, with which the manufacturer guarantees that his product meets the requirements. This also contains the most important properties of the product, which are uniformly evaluated and described in Europe. This makes the products comparable across Europe.

Fire protection is of course a top priority at Prysmian Group and we do everything to ensure that our extensive product portfolio includes the cables and wires you need for your application. The cables listed in this brochure have all been tested according to fire protection criteria and are approved for different classes. Simply inform yourself on the following pages or get in touch with us.



*Since July 1, 2017, the CE marking according to CPR has been mandatory on packaging.*





# Our products and brands.

## PROTODUR CABLE (PVC INSULATION)

PROTODUR cables for low and medium voltage have a thermoplastic insulation based on polyvinyl chloride (PVC).

## PROTOTHEN-X CABLE (VPE INSULATION)

PROTOTHEN-X cables have a high-quality insulation based on high-molecular, pure polyethylene with a cross-linked structure (VPE). The inner and outer conductive layers of our PROTOTHEN-X medium voltage cables are extruded together with and firmly attached to the insulation, giving the cable a high level of retardation against water treeing (Triple extrusion line).

### Conductor

The conductors comply with DIN EN 60228. The type and structure of the conductor, whether round solid (RE) or round stranded (RM), sector-shaped solid (SE) or sector-shaped stranded (SM), can be found in the respective data sheets.

### Concentric conductors

Concentric copper conductors for LV cables are provided as PE or PEN conductors, or as protection against accidental contact. On NAYCWY cables, the wires of the concentric conductor lie in waves ("CEANDER" conductor) on the common core sheath. After removing the cable sheath, such conductors can easily be lifted off and bundled to the side. This means there is space for the branch connections without the CEANDER conductor having to be cut or stretched.

### Plastic sheaths

PROTOTHEN-X cables for LV and PROTODUR cables usually have a PVC sheath that is flame-retardant in accordance with DIN EN 60332-1-2 (CPR class E<sub>ca</sub>).

Our XLPE-insulated MV cables generally have a sheath made of mechanically resistant PE with a significantly lower water vapor permeability than PVC. PVC sheaths can also be provided (especially for industrial plants and power plants).







# Made in Schwerin.

Outside the beautiful city of Schwerin, one of our biggest E&I plants is situated. In these facilities our skilled co-workers are manufacturing thousands of kilometres of power distribution cables – every year! And we will continue to do so. To make sure we have everything we need to serve you, we also have our Research & Development department for energy cables located at this Centre of Excellence.

There are several advantages connected to having production and development based in Germany. First of all, it is our own market. We know what you need and can make the cables meet the quality demands that you ask for. Secondly the lead times get a lot shorter. The cables will be in place where and when you need it. Thirdly we can lower transport distances, which will save all of us both on money and the environment. It is a win-win, for all of us.





# Low Voltage Cables

Copper conductor

NYY



Distribution cables, connecting cables and installation cables in power stations, industrial plants and distribution mains. Laying: in ground, in tube, free in air, indoors, in concrete and in water. UV-resistant.

NYY	
Brand	PROTODUR
Type designation	NYY
CPR class	E <sub>ca</sub>
Standard	DIN VDE 0276-603, IEC 60502-1
Conductor	Copper
Insulation	Polyvinylchloride (PVC)
Rated voltage kV	0.6/1
Laying temperature min.	-5 °C
Max. operating temperature	70 °C
Short circuit temperature	160 °C



Link Web catalogue:  
[https://de-catalogue.prysmiangroup.com/s/#!/family/PROTODUR\\_NYY\\_0,6-1kV](https://de-catalogue.prysmiangroup.com/s/#!/family/PROTODUR_NYY_0,6-1kV)

NY2Y



Distribution cables, connecting cables and installation cables in power stations, industrial plants and distribution mains. Laying: in ground, in tube, free in air, indoors, in concrete and in water. UV-resistant.

NY2Y	
Brand	PROTODUR
Type designation	NY2Y
CPR class	F <sub>ca</sub>
Standard	DIN VDE 0276-603, IEC 60502-1
Conductor	Copper
Insulation	Polyvinylchloride (PVC)
Rated voltage kV	0.6/1
Laying temperature min.	-5 °C
Max. operating temperature	70 °C
Short circuit temperature	160 °C



Link Web catalogue:  
[https://de-catalogue.prysmiangroup.com/s/#!/family/PROTODUR\\_NY2Y\\_0,6-1kV](https://de-catalogue.prysmiangroup.com/s/#!/family/PROTODUR_NY2Y_0,6-1kV)

NYCY



Distribution cables, connecting cables and installation cables in power stations, industrial plants and distribution mains. Laying: in ground, in tube, free in air, indoors, in concrete and in water. UV-resistant.

NYCY	
Brand	PROTODUR
Type designation	NYCY
CPR class	E <sub>ca</sub>
Standard	DIN VDE 0276-603, IEC 60502-1
Conductor	Copper
Insulation	Polyvinylchloride (PVC)
Rated voltage kV	0.6/1
Laying temperature min.	-5 °C
Max. operating temperature	70 °C
Short circuit temperature	160 °C



Link Web catalogue:  
[https://de-catalogue.prysmiangroup.com/s/#!/family/PROTODUR\\_NYCY\\_0,6-1kV](https://de-catalogue.prysmiangroup.com/s/#!/family/PROTODUR_NYCY_0,6-1kV)

NYCWY



Distribution cables, connecting cables and installation cables in power stations, industrial plants and distribution mains. Laying: in ground, in tube, free in air, indoors, in concrete and in water. UV-resistant.

NYCWY	
Brand	PROTODUR
Type designation	NYCWY
CPR class	E <sub>ca</sub>
Standard	DIN VDE 0276-603, IEC 60502-1
Conductor	Copper
Insulation	Polyvinylchloride (PVC)
Rated voltage kV	0.6/1
Laying temperature min.	-5 °C
Max. operating temperature	70 °C
Short circuit temperature	160 °C



Link Web catalogue:  
[https://de-catalogue.prysmiangroup.com/s/#!/family/PROTODUR\\_NYCWY\\_0,6-1kV](https://de-catalogue.prysmiangroup.com/s/#!/family/PROTODUR_NYCWY_0,6-1kV)



## Aluminium conductor

### NAYY



Distribution cables in supply networks. Connection cables inside wind power stations. Laying: in ground, in tubes, free in air, indoors, in concrete and in water. UV-resistant.

NAYY	
Brand	PROTODUR
Type designation	NAYY
CPR class	E <sub>ca</sub>
Standard	DIN VDE 0276-603, IEC 60502-1
Conductor	Aluminium
Insulation	Polyvinylchloride (PVC)
Rated voltage kV	0.6/1
Laying temperature min.	-5 °C
Max. operating temperature	70 °C
Short circuit temperature	160 °C



Link Web catalogue:  
[https://de-catalogue.prysmiangroup.com/s/#/family/PROTODUR\\_NAYY\\_0,6-1kV](https://de-catalogue.prysmiangroup.com/s/#/family/PROTODUR_NAYY_0,6-1kV)

### NAY2Y



Distribution cables in supply networks. Laying: in ground, in tubes, free in air, indoors, in concrete and in water. UV-resistant.

NAY2Y	
Brand	PROTODUR
Type designation	NAY2Y
CPR class	F <sub>ca</sub>
Standard	DIN VDE 0276-603, IEC 60502-1
Conductor	Aluminium
Insulation	Polyvinylchloride (PVC)
Rated voltage kV	0.6/1
Laying temperature min.	-5 °C
Max. operating temperature	70 °C
Short circuit temperature	160 °C



Link Web catalogue:  
[https://de-catalogue.prysmiangroup.com/s/#/family/PROTODUR\\_NAY2Y\\_0,6-1kV](https://de-catalogue.prysmiangroup.com/s/#/family/PROTODUR_NAY2Y_0,6-1kV)

### NAYCWY



Distribution and connection cable for energy supply companies, in industrial and power plants. Laying: in ground, in tubes, free in air, indoors, in concrete and in water. UV-resistant.

NAYCWY	
Brand	PROTODUR
Type designation	NAYCWY
CPR class	E <sub>ca</sub>
Standard	DIN VDE 0276-603, IEC 60502-1
Conductor	Aluminium
Insulation	Polyvinylchloride (PVC)
Rated voltage kV	0.6/1
Laying temperature min.	-5 °C
Max. operating temperature	70 °C
Short circuit temperature	160 °C



Link Web catalogue:  
[https://de-catalogue.prysmiangroup.com/s/#/family/PROTODUR\\_NAYCWY\\_0,6-1kV](https://de-catalogue.prysmiangroup.com/s/#/family/PROTODUR_NAYCWY_0,6-1kV)

## Aluminium conductor

### NA2XY



Distribution cables in supply networks. Laying: in ground, in tube, free in air, indoors and in concrete. UV-resistant.

NA2XY	
Brand	PROTOTHEN-X
Type designation	NA2XY
CPR class	E <sub>ca</sub>
Standard	DIN VDE 0276-603, IEC 60502-1
Conductor	Aluminium
Insulation	Cross-linked polyethylene (XLPE)
Rated voltage kV	0.6/1
Laying temperature min.	-5 °C
Max. operating temperature	90 °C
Short circuit temperature	250 °C



Link Web catalogue:  
[https://de-catalogue.prysmiangroup.com/s/#/family/PROTOTHEN\\_X\\_NA2XY\\_0,6-1KV](https://de-catalogue.prysmiangroup.com/s/#/family/PROTOTHEN_X_NA2XY_0,6-1KV)

### NA2X2Y



Distribution cables in supply networks. Laying: in ground, in tube, free in air, indoors, in concrete and in water. UV-resistant.

NA2X2Y	
Brand	PROTOTHEN-X
Type designation	NA2X2Y
CPR class	F <sub>ca</sub>
Standard	DIN VDE 0276-603, IEC 60502-1
Conductor	Aluminium
Insulation	Cross-linked polyethylene (XLPE)
Rated voltage kV	0.6/1
Laying temperature min.	-20 °C
Max. operating temperature	90 °C
Short circuit temperature	250 °C



Link Web catalogue:  
[https://de-catalogue.prysmiangroup.com/s/#/family/PROTOTHEN\\_X\\_NA2X2Y\\_0,6-1KV](https://de-catalogue.prysmiangroup.com/s/#/family/PROTOTHEN_X_NA2X2Y_0,6-1KV)



# Medium Voltage Cables

Copper conductor

N2XS2Y



Distribution and interconnection cable for industry and power generation networks. Laying: in ground, in tubes, free in air, indoors and in water.

N2XS2Y	
Brand	PROTOTHEN-X
Type designation	N2XS2Y
CPR class	F <sub>ca</sub>
Standard	DIN VDE 0276-620, IEC 60502-2
Conductor	Copper
Insulation	Cross-linked polyethylene (XLPE)
Rated voltage kV	6/10   12/20   18/30
Laying temperature min.	-20 °C
Max. operating temperature	90 °C
Short circuit temperature	250 °C



Link Web catalogue:  
[https://de-catalogue.prysmiangroup.com/s/#/family/PROTOTHEN\\_X\\_N2XS2Y\\_6-10kV](https://de-catalogue.prysmiangroup.com/s/#/family/PROTOTHEN_X_N2XS2Y_6-10kV)

N2XS(F)2Y



Distribution and interconnection cable for industry and power generation networks. Laying: in ground, in tubes, free in air, indoors and in water. Longitudinal watertight screen.

N2XS(F)2Y	
Brand	PROTOTHEN-X
Type designation	N2XS(F)2Y
CPR class	F <sub>ca</sub>
Standard	DIN VDE 0276-620, IEC 60502-2
Conductor	Copper
Insulation	Cross-linked polyethylene (XLPE)
Rated voltage kV	6/10   12/20   18/30
Installation temperature min.	-20 °C
Max. operating temperature	90 °C
Short circuit temperature	250 °C



Link Web catalogue:  
[https://de-catalogue.prysmiangroup.com/s/#/family/PROTOTHEN\\_X\\_N2XS\(F\)2Y\\_6-10kV](https://de-catalogue.prysmiangroup.com/s/#/family/PROTOTHEN_X_N2XS(F)2Y_6-10kV)

N2XS(FL)2Y



Distribution and interconnection cable for industry and power generation networks. Laying: in ground, in tubes, free in air, indoors and in water. Vapour tight barrier in radial direction. Longitudinal watertight screen.

N2XS(FL)2Y	
Brand	PROTOTHEN-X
Type designation	N2XS(FL)2Y
CPR class	F <sub>ca</sub>
Standard	DIN VDE 0276-620, IEC 60502-2
Conductor	Copper
Insulation	Cross-linked polyethylene (XLPE)
Rated voltage kV	6/10   12/20   18/30
Laying temperature min.	-20 °C
Max. operating temperature	90 °C
Short circuit temperature	250 °C



Link Web catalogue:  
[https://de-catalogue.prysmiangroup.com/s/#/family/PROTOTHEN\\_X\\_N2XS\(FL\)2Y\\_6-10KV](https://de-catalogue.prysmiangroup.com/s/#/family/PROTOTHEN_X_N2XS(FL)2Y_6-10KV)



Copper conductor

N2XSY



Distribution and interconnection cable for industry and power generation networks. Laying: in ground, in tubes, free in air, indoors and in water.

N2XSY	
Brand	PROTOTHEN-X
Type designation	N2XSY
CPR class	F <sub>ca</sub>
Standard	DIN VDE 0276-620, IEC 60502-2
Conductor	Copper
Insulation	Cross-linked polyethylene (XLPE)
Rated voltage kV	6/10   12/20   18/30
Laying temperature min.	-5 °C
Max. operating temperature	90 °C
Short circuit temperature	250 °C



Link Web catalogue:  
[https://de-catalogue.prysmiangroup.com/s/#/family/PROTOTHEN\\_X\\_N2XSY\\_6-10kV](https://de-catalogue.prysmiangroup.com/s/#/family/PROTOTHEN_X_N2XSY_6-10kV)

N2XSH



Distribution and connection cable in industry and power stations, trackside cables in railway applications – especially in tunnels. Laying: in ducts, free in air, indoors and outdoors.

N2XSH	
Brand	AFUMEX
Type designation	N2XSH
CPR class	-
Standard	DIN VDE 0276-622, IEC 60502-2
Conductor	Copper
Insulation	Cross-linked polyethylene (XLPE)
Rated voltage kV	6/10   12/20   18/30
Laying temperature min.	-5 °C
Max. operating temperature	90 °C
Short circuit temperature	250 °C



Link Web catalogue:  
[https://de-catalogue.prysmiangroup.com/s/#/family/AFUMEX\\_N2XSH\\_6-10KV](https://de-catalogue.prysmiangroup.com/s/#/family/AFUMEX_N2XSH_6-10KV)

# The search is over!

Our product information is now very easy to find.



Aluminium conductor

NA2XS2Y



Distribution cable in supply networks. Laying: in ground, in tubes, free in air, indoors and in water.

NA2XS2Y FR



Distribution cable in supply networks. Laying: in ground, in tubes, free in air, indoors and in water.

NA2XS2Y			
Brand	PROTOTHEN-X		
Type designation	NA2XS2Y		
CPR class	F <sub>ca</sub>		
Standard	DIN VDE 0276-620, IEC 60502-2		
Conductor	Aluminium		
Insulation	Cross-linked polyethylene (XLPE)		
Rated voltage kV	6/10	12/20	18/30
Laying temperature min.	-20 °C		
Max. operating temperature	90 °C		
Short circuit temperature	250 °C		



Link Web catalogue:  
[https://de-catalogue.prysmiangroup.com/s/#!/family/PROTOTHEN\\_X\\_NA2XS2Y\\_6-10kV](https://de-catalogue.prysmiangroup.com/s/#!/family/PROTOTHEN_X_NA2XS2Y_6-10kV)

NA2XS2Y FR			
Brand	PROTOTHEN-X		
Type designation	NA2XS2Y FR		
CPR class	E <sub>ca</sub>		
Standard	DIN VDE 0276-620, IEC 60502-2		
Conductor	Aluminium		
Insulation	Cross-linked polyethylene (XLPE)		
Rated voltage kV	6/10	12/20	18/30
Laying temperature min.	-20 °C		
Max. operating temperature	90 °C		
Short circuit temperature	250 °C		

NA2XS(F)2Y



Distribution cable in supply networks. Laying: in ground, in tubes, free in air, indoors and in water. Longitudinal watertight screen.

NA2XS(F)2Y FR



Distribution cable in supply networks. Laying: in ground, in tubes, free in air, indoors and in water. Longitudinal watertight screen.

NA2XS(F)2Y			
Brand	PROTOTHEN-X		
Type designation	NA2XS(F)2Y		
CPR class	F <sub>ca</sub>		
Standard	DIN VDE 0276-620, IEC 60502-2		
Conductor	Aluminium		
Insulation	Cross-linked polyethylene (XLPE)		
Rated voltage kV	6/10	12/20	18/30
Installation temperature min.	-20 °C		
Max. operating temperature	90 °C		
Short circuit temperature	250 °C		



Link Web catalogue:  
[https://de-catalogue.prysmiangroup.com/s/#!/family/PROTOTHEN\\_X\\_NA2XS\(F\)2Y\\_6-10kV](https://de-catalogue.prysmiangroup.com/s/#!/family/PROTOTHEN_X_NA2XS(F)2Y_6-10kV)

NA2XS(F)2Y FR			
Brand	PROTOTHEN-X		
Type designation	NA2XS(F)2Y FR		
CPR class	E <sub>ca</sub>		
Standard	DIN VDE 0276-620, IEC 60502-2		
Conductor	Aluminium		
Insulation	Cross-linked polyethylene (XLPE)		
Rated voltage kV	6/10	12/20	18/30
Laying temperature min.	-20 °C		
Max. operating temperature	90 °C		
Short circuit temperature	250 °C		



Link Web catalogue:  
[https://de-catalogue.prysmiangroup.com/s/#!/family/PROTOTHEN\\_X\\_NA2XS\(F\)2Y\\_FR\\_12-20kV](https://de-catalogue.prysmiangroup.com/s/#!/family/PROTOTHEN_X_NA2XS(F)2Y_FR_12-20kV)

## NA2XS(FL)2Y



Distribution cable in supply networks. Laying: in ground, in tubes, free in air, indoors and in water. Vapour tight barrier in radial direction. Longitudinal watertight screen.

NA2XS(FL)2Y	
Brand	PROTOTHEN-X
Type designation	NA2XS(FL)2Y
CPR class	F <sub>ca</sub>
Standard	DIN VDE 0276-620, IEC 60502-2
Conductor	Aluminium
Insulation	Cross-linked polyethylene (XLPE)
Rated voltage kV	6/10   12/20   18/30
Laying temperature min.	-20 °C
Max. operating temperature	90 °C
Short circuit temperature	250 °C



Link Web catalogue:  
[https://de-catalogue.prysmiangroup.com/s/#!/family/PROTOTHEN\\_X\\_NA2XS\(FL\)2Y\\_6-10KV](https://de-catalogue.prysmiangroup.com/s/#!/family/PROTOTHEN_X_NA2XS(FL)2Y_6-10KV)

## NA2XSY



Distribution and interconnection cable for industry and power generation networks. Laying: in ground, in tubes, free in air, indoors and in water.

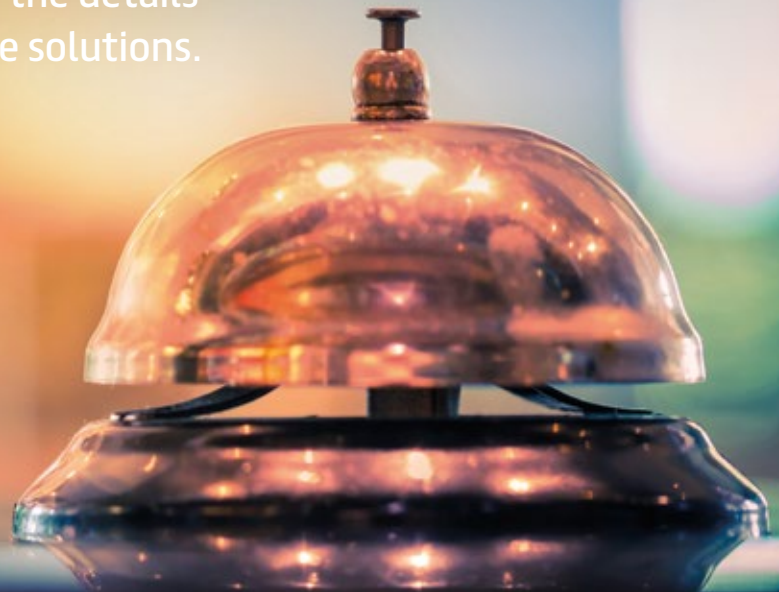
NA2XSY	
Brand	PROTOTHEN-X
Type designation	NA2XSY
CPR class	F <sub>ca</sub>
Standard	DIN VDE 0276-620, IEC 60502-2
Conductor	Aluminium
Insulation	Cross-linked polyethylene (XLPE)
Rated voltage kV	6/10   12/20   18/30
Laying temperature min.	-5 °C
Max. operating temperature	90 °C
Short circuit temperature	250 °C



Link Web catalogue:  
[https://de-catalogue.prysmiangroup.com/s/#!/family/PROTOTHEN\\_X\\_NA2XSY\\_12-20kV](https://de-catalogue.prysmiangroup.com/s/#!/family/PROTOTHEN_X_NA2XSY_12-20kV)

# At your service!

Give the signal and we'll fix all the details for your rubber-insulated cable solutions.





## PRYSMIAN GROUP

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