# Let’s Roll!

Choose our complete Rolling Stock cable offer and enjoy the ride.


prysmian

The planet’s pathways

# Connecting the world.

# Today and in the future.

Prysmian – the world leader in the energy and telecom cables and systems industry.

With 150 years' experience, Prysmian is strongly positioned in high-tech markets and offers the widest possible range of products, services, technologies and know-how.

**150**
YEARS OF EXPERIENCE

**26**
R&D CENTRES AROUND THE WORLD

**We specialise in underground and submarine cables and systems** for power transmission and distribution, special cables for applications in many different industries, and medium and low voltage cables for the construction and infrastructure sectors.

**For the telecommunications industry, Prysmian is the world's largest provider** of cutting-edge cables and accessories for voice, video and data transmission, offering a comprehensive range of optical fibres, optical and copper cables and connectivity systems.

**We are committed to environmental responsibility** in our production processes, the protection of the global environment, and the responsible management of relations with the local communities in which we work.

**For us, innovation means meeting the needs of our customers and communities** by understanding their business drivers as quickly as they do. To do that, our team of over 900 Research & Development professionals is constantly looking to the future, predicting and identifying emerging trends in each of our industries and sectors. Acting on this intelligence from 26 R&D centres around the world, we're constantly close to our customers in their own local markets.

# Rolling Stock cables

**As the world turns towards more sustainable transportations, the request for trains will increase rapidly. As the demands for speed, comfort and safety will grow at the same pace, the amount of high-quality cables will become indispensable. This has an impact on all types of rolling stock vehicles and carriages.**

**With the goal of maximizing passengers' comfort, operational efficiency, safety and speed, Prysmian promotes and drives product development and innovation.**
**We put a lot of effort into minimizing the size and weight of cables and reducing the wall thickness of insulation and outer sheath, whilst maintaining or even enhancing performances.**

## LIGHTER TRAINS, GREATER GAINS

- **Shed Every Extra Pound**
  Reducing cable weight significantly lightens the overall train load.
- **Green by Design**
  Our lightweight, high-efficiency cables foster a sustainable future.
- **Trimmed Weight, Enhanced Efficiency**
  Lighter trains result in lower energy consumption.
- **Superior Performance**
  State-of-the-art materials ensure long-lasting strength and reliability.
- **Thinner Walls, Greater Impact**
  Our pioneering MOVIS cables are significantly lighter without compromising strength.

MOVIS Thin Wall Cables:
Revolutionizing Rolling Stock Efficiency.

## Choose our complete Rolling Stock cable offer and enjoy the ride.

Our cable solutions sit at the heart of significant rolling stock projects all over the world. Our all-including range covers everything from power and instrumentation cables to data and telecom. From high temperature to thin wall designs and to harnessing solutions according to specific customer needs. Furthermore, we can provide you with all the services you might need – before, during and after.

## What we offer.

Prysmian offers a complete cable portfolio covering all aspects needed in rolling stock equipment.

**Advanced technology and performance.**

Our cables allow: bending radius up to 3 times the cable outer diameter; smallest dimensions possible; higher working temperature with scaled-down conductor cross-sections; higher physical and mechanical resistance for properties such as abrasion, cut-through, notch propagation, repeated bending and vibrations. Easy peeling and low friction properties.

**Unique safety in fire hazards.**

Self-extinguishing properties, no toxic and corrosive gases released, and reduced smoke emission prevent the cables from contributing to fire propagation and related consequences to people safety and to equipment integrity. Our cables are suitable in the most critical conditions such as tunnels and deep metro lines.

**Tailor-made solutions.**

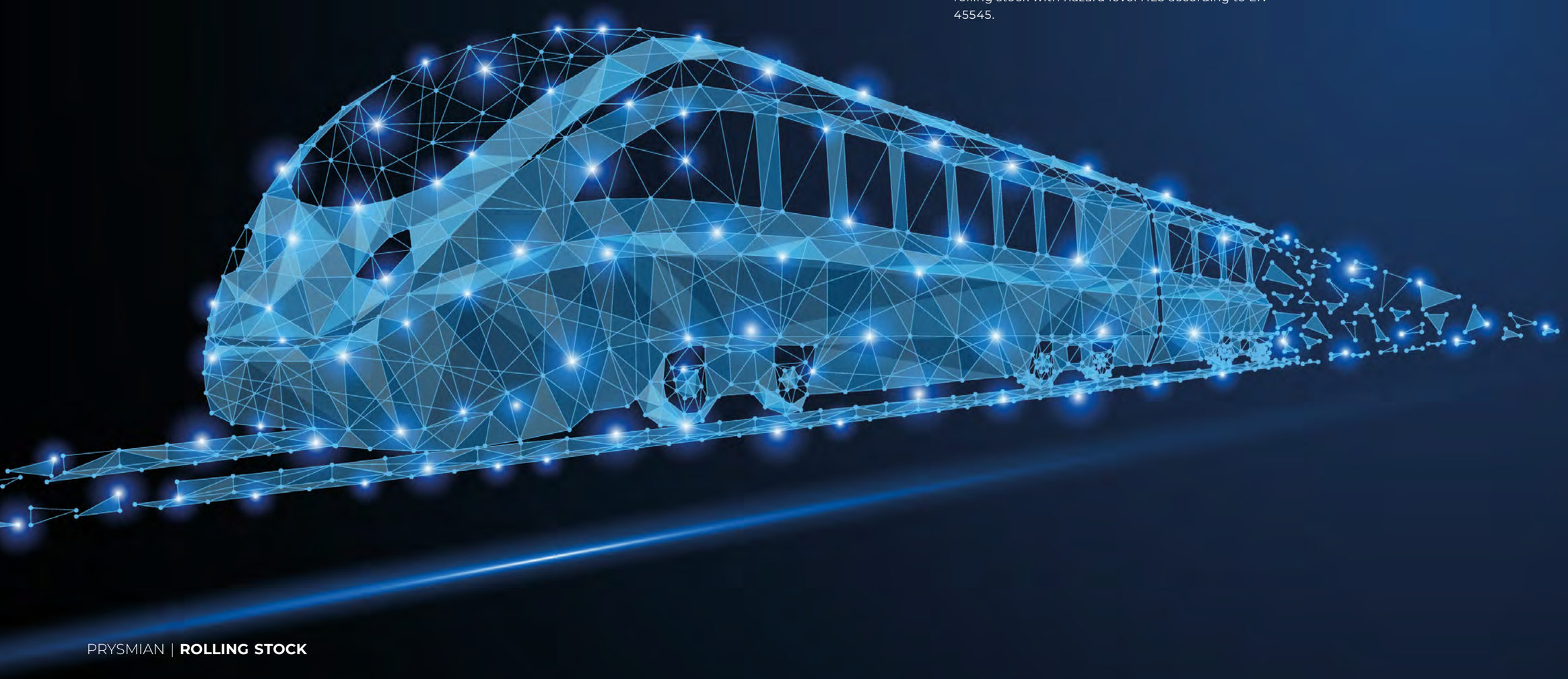
Thanks to extended technological capabilities we are able to manufacture a broad range of specifically developed compounds and cable designs as well as harnessing solutions according to specific customer needs.

# Complete solutions

Prysmian cables are suitable for equipping all kinds of rolling stock vehicles and carriages, including tramlines, underground and mass transit lines as well as regional trains.

- **Control cables**
- **Power cables**
- **High temperature**
- **Data cables**
- **Jumper cables**
- **Composite cables**
- **Pantograph**
- **Coaxial cables**

All Prysmian Rolling Stock cables are Reach and RoHs compliant and all manufacturing facilities are certified according to ISO/TS 22163 (IRIS).



# Products & Brands

### MOVIS Power and Control cables

Halogen free, single core, with special fire performance, increased heat resistance (120 °C) and reduced dimensions. For use as fixed wiring or where limited flexing in operation is encountered. Usable on rolling stock with hazard level HL3 according to EN 45545. Fire resistant (EN 50200) available.

### MOVIS Data and Communication cables

Halogen free data cables with special fire performance and increased heat resistance. Usable on rolling stock with hazard level HL3 according to EN 45545.

### MOVIS Thin Wall

Thin wall control cables for equipment control and monitoring circuits, internal wiring of equipment, interlocking circuits, indicating circuits. According to EN 50306 with special fire performances. Usable on rolling stock with hazard level HL3 according to EN 45545.

### Sienopyr (120)

Power and control cables according to EN with increased heat resistance (120 °C), fulfilling EN 45545 fire and smoke properties. Fire resistant (EN 50200) versions available.

### Sienopyr (180)

High temperature cables based on EN 50382-2 with increased heat resistance (180 °C), fulfilling EN 45545.

### TENAX TRAIN Plus and PROTOLON (HMK)

Halogen free single core HD flexible cables with special fire performance and reduced dimensions. Used for connection of pantographs in locomotives and trains. Special design also for flexible connections to distribute power along the train.

# Engineered to perfection

At our Centres of Excellence in Neustadt and Wuppertal, Germany, our skilled engineers and technicians are developing state-of-the art cables for the rolling stock industry. By putting special attention to every such detail we've built an outstanding portfolio covering all aspects of the hyper modern vehicles through the Art of German Engineering.

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.

Made in Germany

IRIS™ Certification

## Content

## MOVIS 2 GKW Flex


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| MOVIS 2 GKW Flex | |
|---|---|
| Brand | MOVIS |
| Type designation | 2 GKW Flex |
| Standard | DIN EN 50264-3-2<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | – |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 300/500 V |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

Link Web catalogue:
https://de-catalogue.prysmiangroup.com/s/#/family/MOVIS_2GKW_FLEX_300-500V



## MOVIS 2 GKW FR Flex


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| MOVIS 2 GKW FR Flex | |
|---|---|
| Brand | MOVIS |
| Type designation | 2 GKW FR Flex |
| Standard | DIN EN 50264-1<br>DIN EN 50200<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | – |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 300/500 V |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

## MOVIS 2 GKW C Flex


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| MOVIS 2 GKW C Flex | |
|---|---|
| Brand | MOVIS |
| Type designation | 2 GKW C Flex |
| Standard | DIN EN 50264-3-2<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 300/500 V |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

Link Web catalogue:
https://de-catalogue.prysmiangroup.com/s/#/family/MOVIS_2GKW_C_FLEX_300-500V

## MOVIS 2 GKW C FR Flex


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| MOVIS 2 GKW C FR Flex | |
|---|---|
| Brand | MOVIS |
| Type designation | 2 GKW C FR Flex |
| Standard | DIN EN 50264-1<br>DIN EN 50200<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 300/500 V |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

## MOVIS 2 GKW J Flex


These cables are intended for flexible use in rail vehicles, for use both in- and outdoors, e.g. movable between carriages or between carriage floor and bogies.

| MOVIS 2 GKW J Flex | |
|---|---|
| Brand | MOVIS |
| Type designation | 2 GKW J Flex |
| Standard | DIN EN 50264-3-2<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | – |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 300/500 V |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

## MOVIS 2 GKW C J Flex


These cables are intended for flexible use in rail vehicles, for use both in- and outdoors, e.g. movable between carriages or between carriage floor and bogies.

| MOVIS 2 GKW C J Flex | |
|---|---|
| Brand | MOVIS |
| Type designation | 2 GKW C J Flex |
| Standard | DIN EN 50264-3-2<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 300/500 V |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |



## MOVIS 3 GKW


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| MOVIS 3 GKW | |
|---|---|
| Brand | MOVIS |
| Type designation | 3 GKW |
| Standard | DIN EN 50264-3-1<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | – |
| Sheath | – |
| Nominal voltage | 0.6/1 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

Link Web catalogue:
https://de-catalogue.prysmiangroup.com/s/#/family/MOVIS_3GKW_0,6-1KV

## MOVIS 3 GKW C


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| MOVIS 3 GKW C | |
|---|---|
| Brand | MOVIS |
| Type designation | 3 GKW C |
| Standard | DIN EN 50264-3-1<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 0.6/1 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

Link Web catalogue:
https://de-catalogue.prysmiangroup.com/s/#/family/MOVIS_3GKW_C_0,6-1KV

## MOVIS 3 GKW Flex


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| MOVIS 3 GKW Flex | |
|---|---|
| Brand | MOVIS |
| Type designation | 3 GKW Flex |
| Standard | DIN EN 50264-3-2<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | – |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 0.6/1 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

Link Web catalogue:
https://de-catalogue.prysmiangroup.com/s/#/family/MOVIS_3GKW_FLEX_0,6-1KV



## MOVIS 3 GKW FR


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| MOVIS 3 GKW FR | |
|---|---|
| Brand | MOVIS |
| Type designation | 3 GKW FR |
| Standard | DIN EN 50264-3-1<br>DIN EN 50200<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | – |
| Sheath | – |
| Nominal voltage | 0.6/1 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

Link Web catalogue:
https://de-catalogue.prysmiangroup.com/s/#/family/MOVIS_3GKW_FR_0,6-1KV

## MOVIS 3 GKW C Flex


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| MOVIS 3 GKW C Flex | |
|---|---|
| Brand | MOVIS |
| Type designation | 3 GKW C Flex |
| Standard | DIN EN 50264-3-2<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 0.6/1 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

Link Web catalogue:
https://de-catalogue.prysmiangroup.com/s/#/family/MOVIS_3GKW_C_FLEX_0,6-1KV

## MOVIS 3 GKW C FR


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| MOVIS 3 GKW C FR | |
|---|---|
| Brand | MOVIS |
| Type designation | 3 GKW C FR |
| Standard | DIN EN 50264-3-1<br>DIN EN 50200<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 0.6/1 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

## MOVIS 3 GKW J


These cables are intended for flexible use in rail vehicles, for use both in- and outdoors, e.g. movable between carriages or between carriage floor and bogies.

| MOVIS 3 GKW J | |
|---|---|
| Brand | MOVIS |
| Type designation | 3 GKW J |
| Standard | DIN EN 50264-3-1<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | – |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 0.6/1 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

## MOVIS 3 GKW C J


These cables are intended for flexible use in rail vehicles, for use both in- and outdoors, e.g. movable between carriages or between carriage floor and bogies.

| MOVIS 3 GKW C J | |
|---|---|
| Brand | MOVIS |
| Type designation | 3 GKW C J |
| Standard | DIN EN 50264-3-1<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 0.6/1 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

MOVIS

## MOVIS 3 GKW J Flex


These cables are intended for flexible use in rail vehicles, for use both in- and outdoors, e.g. movable between carriages or between carriage floor and bogies.

| MOVIS 3 GKW J Flex | |
|---|---|
| Brand | MOVIS |
| Type designation | 3 GKW J Flex |
| Standard | DIN EN 50264-3-1<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | – |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 0.6/1 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

## MOVIS 3 GKW C J Flex


These cables are intended for flexible use in rail vehicles, for use both in- and outdoors, e.g. movable between carriages or between carriage floor and bogies.

| MOVIS 3 GKW C J Flex | |
|---|---|
| Brand | MOVIS |
| Type designation | 3 GKW C J Flex |
| Standard | DIN EN 50264-3-1<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 0.6/1 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

## MOVIS 4 GKW


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| MOVIS 4 GKW | |
|---|---|
| Brand | MOVIS |
| Type designation | 4 GKW |
| Standard | DIN EN 50264-1<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | – |
| Sheath | – |
| Nominal voltage | 1.8/3 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

Link Web catalogue:
https://de-catalogue.prysmiangroup.com/s/#/family/MOVIS_4GKW_1,8-3KV



## MOVIS 4 GKW Flex


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| MOVIS 4 GKW Flex | |
|---|---|
| Brand | MOVIS |
| Type designation | 4 GKW Flex |
| Standard | DIN EN 50264-1<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | – |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 1.8/3 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

## MOVIS 4 GKW C


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| MOVIS 4 GKW C | |
|---|---|
| Brand | MOVIS |
| Type designation | 4 GKW C |
| Standard | DIN EN 50264-1<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 1.8/3 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

Link Web catalogue:
https://de-catalogue.prysmiangroup.com/s/#/family/MOVIS_4GKW_C_1,8-3KV

## MOVIS 4 GKW C Flex


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| MOVIS 4 GKW C Flex | |
|---|---|
| Brand | MOVIS |
| Type designation | 4 GKW C Flex |
| Standard | DIN EN 50264-1<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 1.8/3 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

Link Web catalogue:
https://de-catalogue.prysmiangroup.com/s/#/family/MOVIS_4GKW_C_FLEX_1,8-3KV

## MOVIS 4 GKW FR


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| MOVIS 4 GKW FR | |
|---|---|
| Brand | MOVIS |
| Type designation | 4 GKW FR |
| Standard | DIN EN 50264-1<br>DIN EN 50200<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | – |
| Sheath | – |
| Nominal voltage | 1.8/3 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

Link Web catalogue:
https://de-catalogue.prysmiangroup.com/s/#/family/MOVIS_4GKW_FR_1,8-3KV



## MOVIS 4 GKW J


These cables are intended for flexible use in rail vehicles, for use both in- and outdoors, e.g. movable between carriages or between carriage floor and bogies.

| MOVIS 4 GKW J | |
|---|---|
| Brand | MOVIS |
| Type designation | 4 GKW J |
| Standard | DIN EN 50264-3-1<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | – |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 1.8/3 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

## MOVIS 4 GKW C FR


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| MOVIS 4 GKW C FR | |
|---|---|
| Brand | MOVIS |
| Type designation | 4 GKW C FR |
| Standard | DIN EN 50264-1<br>DIN EN 50200<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 1.8/3 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

## MOVIS 4 GKW C J


These cables are intended for flexible use in rail vehicles, for use both in- and outdoors, e.g. movable between carriages or between carriage floor and bogies.

| MOVIS 4 GKW C J | |
|---|---|
| Brand | MOVIS |
| Type designation | 4 GKW C J |
| Standard | DIN EN 50264-3-1<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 1.8/3 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

Link Web catalogue:
https://de-catalogue.prysmiangroup.com/s/#/family/MOVIS_4GKW_C_JUMPER_1,8-3KV

## MOVIS 4 GKW J Flex


These cables are intended for flexible use in rail vehicles, for use both in- and outdoors, e.g. movable between carriages or between carriage floor and bogies.

| MOVIS 4 GKW J Flex | |
|---|---|
| Brand | MOVIS |
| Type designation | 4 GKW J Flex |
| Standard | DIN EN 50264-1<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | – |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 1.8/3 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

## MOVIS 4 GKW C J Flex


These cables are intended for flexible use in rail vehicles, for use both in- and outdoors, e.g. movable between carriages or between carriage floor and bogies.

| MOVIS 4 GKW C J Flex | |
|---|---|
| Brand | MOVIS |
| Type designation | 4 GKW C J Flex |
| Standard | DIN EN 50264-1<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 1.8/3 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

MOVIS

## MOVIS 9 GKW


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| MOVIS 9 GKW | |
|---|---|
| Brand | MOVIS |
| Type designation | 9 GKW |
| Standard | DIN EN 50264-1<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | – |
| Sheath | – |
| Nominal voltage | 3.6/6 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

Link Web catalogue:
https://de-catalogue.prysmiangroup.com/s/#/family/MOVIS_9GKW_3,6-6KV

## MOVIS 9 GKW C


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| MOVIS 9 GKW C | |
|---|---|
| Brand | MOVIS |
| Type designation | 9 GKW C |
| Standard | DIN EN 50264-1<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 3.6/6 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

Link Web catalogue:
https://de-catalogue.prysmiangroup.com/s/#/family/MOVIS_9GKW_C_3,6-6KV

## MOVIS 9 GKW C Flex


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| MOVIS 9 GKW C Flex | |
|---|---|
| Brand | MOVIS |
| Type designation | 9 GKW C Flex |
| Standard | DIN EN 50264-1<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 3.6/6 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

## MOVIS 9 GKW J


These cables are intended for flexible use in rail vehicles, for use both in- and outdoors, e.g. movable between carriages or between carriage floor and bogies.

| MOVIS 9 GKW J | |
|---|---|
| Brand | MOVIS |
| Type designation | 9 GKW J |
| Standard | DIN EN 50264-3-1<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | – |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 3.6/6 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

Link Web catalogue:
https://de-catalogue.prysmiangroup.com/s/#/family/MOVIS_9GKW_J_3,6-6KV

MOVIS

## MOVIS 9 GKW C J


These cables are intended for flexible use in rail vehicles, for use both in- and outdoors, e.g. movable between carriages or between carriage floor and bogies.

| MOVIS 9 GKW C J | |
|---|---|
| Brand | MOVIS |
| Type designation | 9 GKW C J |
| Standard | DIN EN 50264-3-1<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 3.6/6 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

Link Web catalogue:
https://de-catalogue.prysmiangroup.com/s/#/family/MOVIS_9GKW_C_J_3,6-6KV

## MOVIS 9 GKW C J Flex


These cables are intended for flexible use in rail vehicles, for use both in- and outdoors, e.g. movable between carriages or between carriage floor and bogies.

| MOVIS 9 GKW C J Flex | |
|---|---|
| Brand | MOVIS |
| Type designation | 9 GKW C J Flex |
| Standard | DIN EN 50264-1<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 3.6/6 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

NEW

## MOVIS Thin Wall


These cables are intended for fixed wiring or for connections where occasional movement in operation appears in railway rolling stock.

Typical uses are equipment control and monitoring circuits as well as internal wiring of equipment.

In other respects, DIN EN 50355 applies; attention should be paid to the rules for installation of cabling (DIN EN 50343).

Usable on railway vehicles having the hazard level HL3 acc. to EN45545-1:2013

| MOVIS Thin Wall | |
|---|---|
| Brand | MOVIS |
| Type designation | TW EN50306-3 300V MM S 90 |
| Standard | EN 50306-3<br>& PRYSMIAN specification |
| Conductor | Copper, tinned, finely round stranded according to DIN EN 50306-2 |
| Insulation | Halogen-free, heat-resistant, cross-linked polyolefin special compound acc. to EN 50306-2; standard color: white with printed black numbers |
| Screen | Braid of tinned copper wires |
| Sheath | Halogen-free, heat-resistant, cross-linked elastomeric special compound, type S2 acc. to EN 50306-1/-3 |
| Nominal voltage | 300/500 V |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 110 °C |
| Short circuit temperature | 250 °C |





# WHY MOVIS THIN WALL CABLES?

By **reducing mass**, **less force** is required to accelerate the rolling stock. Less force means **lower energy consumption**.

**F**orce = **m**ass x **a**cceleration

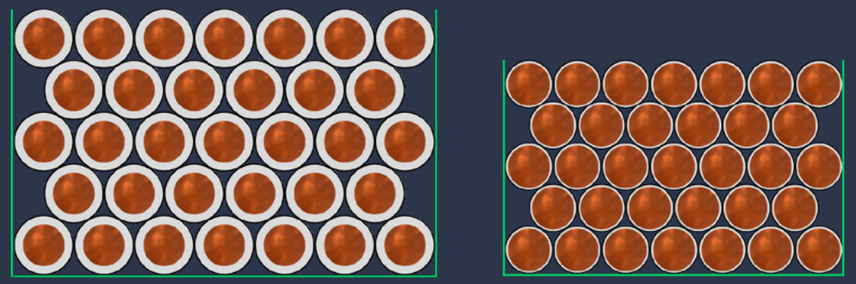
With the reduction in the size of our cables for trains, we achieve exactly that: more efficient energy use, contributing to a **more sustainable and eco-friendly railway system**.

Our cables, compliant with the EN 50306-3 standard, are designed to meet the **highest safety** and performance requirements while minimizing environmental impact.

Additionally, our **electro-beam production** process ensures enhanced durability, **reduced material waste**, and **lower emissions** during manufacturing, further supporting our commitment to sustainability and energy efficiency.

**This combination results in a more cost-effective and greener solution for modern train operations.**

Standard Cables vs Thin Wall Cables



## MOVIS CAT 5e


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| MOVIS CAT 5e | |
|---|---|
| Brand | MOVIS |
| Type designation | CAT 5e |
| Standard | DIN EN 50264-1<br>DIN EN 50288-2-2<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Polypropylene (foam-skin) |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | max. 300 V |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | – |
| Short circuit temperature | – |

## MOVIS CAT 5/7


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| MOVIS CAT 5/7 | |
|---|---|
| Brand | MOVIS |
| Type designation | CAT 5/7 |
| Standard | DIN EN 50264-1<br>DIN EN 50288-2-2/-4-2<br>IEC 61156-6<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Polypropylene (foam-skin) |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | max. 300 V |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | – |
| Short circuit temperature | – |

MOVIS Data cables

## MOVIS Jumper UIC 541-5


These cables are intended for fixed or flexible installation, especially between carriages in rolling stock.

| MOVIS Jumper UIC 541-5 | |
|---|---|
| Brand | MOVIS |
| Type designation | UIC 541-5 |
| Standard | DIN EN 50264-3-2<br>UIC 541-5<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 6 |
| Insulation | Cross-Linked LSOH<br>Polypropylene (foam-skin) |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 300/500 V |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | – |
| Short circuit temperature | 250 °C |

## MOVIS Jumper UIC 558


These cables are intended for fixed or flexible installation, especially between carriages in rolling stock.

| MOVIS Jumper UIC 558 | |
|---|---|
| Brand | MOVIS |
| Type designation | UIC 588 |
| Standard | DIN EN 50264-3-2<br>UIC 588<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 6 |
| Insulation | Cross-Linked LSOH<br>Polypropylene (foam-skin) |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | max. 300 V |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | – |
| Short circuit temperature | – |

## MOVIS MVB


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| MOVIS MVB | |
|---|---|
| Brand | MOVIS |
| Type designation | MVB |
| Standard | DIN EN 50264-1<br>IEC 61375-3-1<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Polypropylene (foam-skin) |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | max. 300 V |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | – |
| Short circuit temperature | – |

## MOVIS WTB


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| MOVIS WTB | |
|---|---|
| Brand | MOVIS |
| Type designation | WTB |
| Standard | DIN EN 50264-1<br>IEC 61375-2-1<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Polypropylene (foam-skin) |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | max. 300 V |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | – |
| Short circuit temperature | – |

## SIENOPYR(120) HXSLHXOE 300 V FM


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| SIENOPYR(120) HXSLHXOE 300 V FM | |
|---|---|
| Brand | SIENOPYR(120) |
| Type designation | HXSLHXOE |
| Standard | DIN EN 50264-3-2<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | – |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 300/500 V |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

## SIENOPYR(120) HXSLCHXOE 300 V FM S


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| SIENOPYR(120) HXSLCHXOE 300 V FM S | |
|---|---|
| Brand | SIENOPYR(120) |
| Type designation | HXSLCHXOE |
| Standard | DIN EN 50264-3-2<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 300/500 V |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |



## SIENOPYR(120) HXELHXOE 0.6/1 kV FM


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| SIENOPYR(120) HXELHXOE 0.6/1 kV FM | |
|---|---|
| Brand | SIENOPYR(120) |
| Type designation | HXELHXOE |
| Standard | DIN EN 50264-3-2<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | – |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 0.6/1 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

## SIENOPYR(120) HXELCHXOE 0.6/1 kV FM S


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| SIENOPYR(120) HXELCHXOE 0.6/1 kV FM S | |
|---|---|
| Brand | SIENOPYR(120) |
| Type designation | HXELCHXOE |
| Standard | DIN EN 50264-3-2<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 0.6/1 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

## SIENOPYR(120) (N)HX4GAF 0.6/1 kV


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| SIENOPYR(120) (N)HX4GAF 0.6/1 kV | |
|---|---|
| Brand | SIENOPYR(120) |
| Type designation | (N)HX4GAF |
| Standard | DIN EN 50264-3-1<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | – |
| Sheath | – |
| Nominal voltage | 0.6/1 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

Link Web catalogue:
https://de-catalogue.prysmiangroup.com/s/#/family/SIENOPYR(120)_(N)HX4GAF_0,6-1KV

## SIENOPYR(120) (N)HX4GAF 1.8/3 kV


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| SIENOPYR(120) (N)HX4GAF 1.8/3 kV | |
|---|---|
| Brand | SIENOPYR(120) |
| Type designation | (N)HX4GAF |
| Standard | DIN EN 50264-3-1<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | – |
| Sheath | – |
| Nominal voltage | 1.8/3 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

SIENOPYR

## SIENOPYR(120) (N)HXSGAFHXOE 1.8/3 kV


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| SIENOPYR(120) (N)HXSGAFHXOE 1.8/3 kV | |
|---|---|
| Brand | SIENOPYR(120) |
| Type designation | (N)HXSGAFHXOE |
| Standard | DIN EN 50264-3-1<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | – |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 1.8/3 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

Link Web catalogue:
https://de-catalogue.prysmiangroup.com/s/#/family/SIENOPYR(120)_(N)HXSGAFHXOE_1,8-3KV

## SIENOPYR(120) (N)HXSGAFCHXOE 1.8/3 kV


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| SIENOPYR(120) (N)HXSGAFCHXOE 1.8/3 kV | |
|---|---|
| Brand | SIENOPYR(120) |
| Type designation | (N)HXSGAFCHXOE |
| Standard | DIN EN 50264-3-1<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 1.8/3 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

Link Web catalogue:
https://de-catalogue.prysmiangroup.com/s/#/family/SIENOPYR(120)_(N)HXSGAFCHXOE_1,8-3KV

## SIENOPYR(120) (N)HXSGAFHXOE 3.6/6 kV


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| SIENOPYR(120) (N)HXSGAFHXOE 3.6/6 kV | |
|---|---|
| Brand | SIENOPYR(120) |
| Type designation | (N)HXSGAFHXOE |
| Standard | DIN EN 50264-3-1<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | – |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 3.6/6 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

Link Web catalogue:
https://de-catalogue.prysmiangroup.com/s/#/family/SIENOPYR(120)_(N)HXSGAFHXOE_3,6-6KV

## SIENOPYR(120) (N)HXSGAFCHXOE 3.6/6 kV


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered.

| SIENOPYR(120) (N)HXSGAFCHXOE 3.6/6 kV | |
|---|---|
| Brand | SIENOPYR(120) |
| Type designation | (N)HXSGAFCHXOE |
| Standard | DIN EN 50264-3-1<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Cross-linked LS0H |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 3.6/6 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

Link Web catalogue:
https://de-catalogue.prysmiangroup.com/s/#/family/SIENOPYR(120)_(N)HXSGAFCHXOE_3,6-6KV



## SIENOPYR(120) JUMPER (N)HXSGAFCHXOE 3.6/6 kV FM S


These cables are intended for flexible usage, especially between carriages in rolling stock.

| SIENOPYR(120) (N)HXSGAFCHXOE 3.6/6 kV FM S | |
|---|---|
| Brand | SIENOPYR(120) |
| Type designation | (N)HXSGAFCHXOE |
| Standard | DIN EN 50264-3-1<br>UIC 552<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5+ |
| Insulation | Cross-linked LS0H |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 3.6/6 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

## SIENOPYR(120) JUMPER NSHXAFCMOE 3.6/6 kV FM S


These cables are intended for flexible usage, especially between carriages in rolling stock.

| SIENOPYR(120) NSHXAFCMOE 3.6/6 kV FM S | |
|---|---|
| Brand | SIENOPYR(120) |
| Type designation | NSHXAFCMOE |
| Standard | DIN EN 50264-3-1<br>UIC 552; E DIN VDE 0250-606<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5+ |
| Insulation | Cross-linked LS0H |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 3.6/6 kV |
| Laying temperature min. | –40 °C |
| Recommended operating temperature | 90 °C |
| Max. operating temperature (20.000 hours) | 120 °C |
| Short circuit temperature | 250 °C |

## SIENOPYR(180) (N)HXSGAFHXOE 1.8/3 kV OM


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered. For use both in- and outdoors, e.g. movable between carriages or between carriage floor and bogies.

| SIENOPYR(180) (N)HXSGAFHXOE 1.8/3 kV OM | |
|---|---|
| Brand | SIENOPYR(180) |
| Type designation | (N)HXSGAFHXOE |
| Standard | DIN EN 50382<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Silicone Rubber (SIR) |
| Screen | – |
| Sheath | Silicone Rubber (SIR) |
| Nominal voltage | 1.8/3 kV |
| Laying temperature min. | –50 °C |
| Recommended operating temperature | 150 °C |
| Max. operating temperature (20.000 hours) | 180 °C |
| Short circuit temperature | 350 °C |

Link Web catalogue:
https://de-catalogue.prysmian.com/s/#/family/SIENOPYR(180)_(N)HXSGAFHXOE_1,8-3KV_OM_150C

## SIENOPYR(180) (N)HXSGAFCHXOE 1.8/3 kV OM S


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered. For use both in- and outdoors, e.g. movable between carriages or between carriage floor and bogies.

| SIENOPYR(180) (N)HXSGAFCHXOE 1.8/3 kV OM S | |
|---|---|
| Brand | SIENOPYR(180) |
| Type designation | (N)HXSGAFCHXOE |
| Standard | DIN EN 50382<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Silicone Rubber (SIR) |
| Screen | Copper, tinned |
| Sheath | Silicone Rubber (SIR) |
| Nominal voltage | 1.8/3 kV |
| Laying temperature min. | –50 °C |
| Recommended operating temperature | 150 °C |
| Max. operating temperature (20.000 hours) | 180 °C |
| Short circuit temperature | 350 °C |

Link Web catalogue:
https://de-catalogue.prysmian.com/s/#/family/SIENOPYR(180)_(N)HXSGAFCHXOE_1,8-3KV_OM_S_150C



## SIENOPYR(180) (N)HXSGAFHXOE 3.6/6 kV OM


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered. For use both in- and outdoors, e.g. movable between carriages or between carriage floor and bogies.

| SIENOPYR(180) (N)HXSGAFHXOE 3.6/6 kV OM | |
|---|---|
| Brand | SIENOPYR(180) |
| Type designation | (N)HXSGAFHXOE |
| Standard | DIN EN 50382<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Silicone Rubber (SIR) |
| Screen | – |
| Sheath | Silicone Rubber (SIR) |
| Nominal voltage | 3.6/6 kV |
| Laying temperature min. | –50 °C |
| Recommended operating temperature | 150 °C |
| Max. operating temperature (20.000 hours) | 180 °C |
| Short circuit temperature | 350 °C |

Link Web catalogue:
https://de-catalogue.prysmiangroup.com/s/#/family/SIENOPYR(180)_(N)HXSGAFHXOE_3,6-6KV_OM_150C

## SIENOPYR(180) (N)HXSGAFCHXOE 3.6/6 kV OM S


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered. For use both in- and outdoors, e.g. movable between carriages or between carriage floor and bogies.

| SIENOPYR(180) (N)HXSGAFCHXOE 3.6/6 kV OM S | |
|---|---|
| Brand | SIENOPYR(180) |
| Type designation | (N)HXSGAFCHXOE |
| Standard | DIN EN 50382<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Silicone Rubber (SIR) |
| Screen | Copper, tinned |
| Sheath | Silicone Rubber (SIR) |
| Nominal voltage | 3.6/6 kV |
| Laying temperature min. | –50 °C |
| Recommended operating temperature | 150 °C |
| Max. operating temperature (20.000 hours) | 180 °C |
| Short circuit temperature | 350 °C |

Link Web catalogue:
https://de-catalogue.prysmiangroup.com/s/#/family/SIENOPYR(180)_(N)HXSGAFCHXOE_3,6-6KV_OM_S_150C


destinazione destination
treno train
partenza departure
Informazioni information
ENDERE DAI TRENI IN MOVIMENTO - E' L
FRECCIAROSSA
ROMA TERMINI
AV 9627
partenza departure
12:00
IN ATTESA DEI TRENI. -GATE D-NUOVO
TRENITALIA
Biglietti
Tickets
ROSSA
12
08
2

## TENAX-TRAIN-Plus (N)TMCOEU 26/45 kV


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered. For use both in- and outdoors.

| TENAX-TRAIN-Plus (N)TMCOEU 26/45kV | |
|---|---|
| Brand | TENAX-TRAIN-Plus |
| Type designation | (N)TMCOEU |
| Standard | DIN VDE 0250-813<br>IEC 60840<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Hard grade Ethylene Propylene Rubber (HEPR) |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 26/45 kV |
| Laying temperature min. | –40 °C |
| Max. operating temperature | 90 °C |
| Short circuit temperature | 250 °C |

Link Web catalogue:
https://de-catalogue.prysmiangroup.com/s/#/family/TENAX-TRAIN-PLUS_(N)TMCWOEU_26-45KV

## TENAX-TRAIN-Plus Jumper (N)TMCWOEU 26/45 kV


These screened cables are intended for use in railway rolling stock as flexible connection, they may be used both in- and outdoors, e.g. flexible between coaches.

| TENAX-TRAIN-Plus Jumper (N)TMCWOEU 26/45kV | |
|---|---|
| Brand | TENAX-TRAIN-Plus |
| Type designation | Jumper (N)TMCWOEU |
| Standard | DIN VDE 0250-813<br>IEC 60840<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Hard grade Ethylene Propylene Rubber (HEPR) |
| Screen | Copper, tinned |
| Sheath | Ethylene Vinyl Acetate rubber (EVA) |
| Nominal voltage | 26/45 kV |
| Laying temperature min. | –40 °C |
| Max. operating temperature | 90 °C |
| Short circuit temperature | 250 °C |

Link Web catalogue:
https://de-catalogue.prysmiangroup.com/s/#/family/TENAX-TRAIN-PLUS_JUMPER_(N)TMCWOEU_BK_26-45KV



## PROTOLON (HMK) (N)TMCGCHXOEUK 26/45 kV


These cables are indented for use in railway rolling stock as fixed wiring, or wiring where limited flexing in operation is encountered. For use both in- and outdoors.

| PROTOLON (HMK) (N)TMCGCHXOEUK 26/45kV | |
|---|---|
| Brand | TENAX-TRAIN-Plus |
| Type designation | (N)TMCGCHXOEUK |
| Standard | DIN VDE 0250-813<br>IEC 60840<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Hard grade Ethylene Propylene Rubber (HEPR) |
| Screen | Copper, tinned |
| Sheath | Cross-linked LS0H |
| Nominal voltage | 26/45 kV |
| Laying temperature min. | –50 °C |
| Max. operating temperature | 90 °C |
| Short circuit temperature | 250 °C |

## PROTOLON (HMK) Jumper (N)TMCGCHXOEUK 26/45 kV


These screened cables are intended for use in railway rolling stock as flexible connection, they may be used both in- and outdoors, e.g. flexible between coaches.

| PROTOLON (HMK) Jumper (N)TMCGCHXOEUK 26/45kV | |
|---|---|
| Brand | TENAX-TRAIN-Plus |
| Type designation | Jumper (N)TMCGCHXOEUK |
| Standard | DIN VDE 0250-813<br>IEC 60840<br>DIN EN 45545 HL3 |
| Conductor | Copper, tinned,<br>finely stranded class 5 |
| Insulation | Hard grade Ethylene Propylene Rubber (HEPR) |
| Screen | Copper, tinned |
| Sheath | Cross-linked LS0H |
| Nominal voltage | 26/45 kV |
| Laying temperature min. | –50 °C |
| Max. operating temperature | 90 °C |
| Short circuit temperature | 250 °C |

# Intact drums secure fully functional cables.

A cable is a valuable product and it is normally transported on a cable drum. The battens on the drum seem thick enough to remain unbroken, but with a cable weighing more than four tons, it becomes very vulnerable. If the handling is done correctly, the drum will protect the cable from transportation damages.

If the drum is damaged, the cable can also be damaged. And it might not be discovered until after installation, when repairs can be extremely expensive. Scan the QR-code below and learn how damages can be avoided by correct drum handling.

Drum handling brochure
www.prysmian.de

The planet's pathways

PRYSMIAN

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kontakt@prysmian.com



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