

LET'S ROLL

Complete Rolling Stock Solutions.
All from One Source.

prysmian

The planet's pathways

Connecting the World.

Today and in the Future.

150
YEARS OF EXPERIENCE

30
F&E CENTRES WORLDWIDE

Prysmian is among the world's leading providers of cable and system solutions for the energy and telecommunications sectors.

Backed by more than 150 years of experience, the company delivers a comprehensive portfolio of products, services and engineering expertise.



Our expertise spans underground and submarine cable systems for power transmission and distribution, as well as specialised cable solutions for a wide range of industries. We also offer a comprehensive range of medium- and low-voltage cables for construction and infrastructure projects.



Prysmian provides a comprehensive range of cable and system solutions for modern telecommunications networks. The portfolio includes optical fibres, fibre optic and copper cables, as well as connectivity products and accessories for the reliable transmission of voice, video and data.



We are committed to environmental and social responsibility across our operations, supporting the protection of the global environment and creating lasting value for the people and communities connected to our business.



Innovation means anticipating our customers' needs and the challenges of tomorrow, and transforming them into high-performance solutions. Supported by a global network of research and development centres, we drive technological progress, share expertise across borders and remain closely connected to our customers and their markets.

CABLE & SYSTEM SOLUTIONS FOR RAIL

The right solution for every connection

As the world continues to embrace more sustainable modes of transport, demand for rail vehicles is expected to grow significantly. At the same time, increasing expectations regarding speed, passenger comfort and safety are driving the need for high-performance cable and wiring solutions across all types of rolling stock.

To maximise passenger comfort, operational efficiency, safety and performance, Prysmian continuously invests in product development and innovation. We focus on reducing cable size and weight, optimising insulation and sheath thicknesses, and improving overall performance to support the next generation of rail vehicles.

LIGHTER TRAINS. GREATER EFFICIENCY.

- **Reducing Unnecessary Weight**
  Reducing cable weight significantly lowers the overall weight of the train.
- **Sustainable by Design**
  Our lightweight, high-performance cables support a more sustainable future.
- **Lower Weight. Greater Efficiency.**
  Lighter trains consume less energy, improving overall efficiency.

Our cable solutions play a key role in major projects worldwide. With a comprehensive portfolio ranging from power and instrumentation cables to data and telecommunications solutions, high-temperature cables, thin-wall technologies and customised harnessing solutions, Prysmian supports every stage of modern rail projects. Complementing our products, we provide a wide range of services and support throughout the entire project lifecycle.



OUR PORTFOLIO

Prysmian offers a comprehensive portfolio of cables and cable solutions designed to meet the requirements of the rolling stock industry.

ADVANCED TECHNOLOGY & PERFORMANCE

Our cables deliver outstanding performance while minimising space requirements. They support tight bending radii, compact designs and higher operating temperatures with reduced conductor cross-sections. At the same time, they provide exceptional resistance to abrasion, cut-through, notch propagation, repeated bending and vibration. Optimised surface properties also ensure easy handling and efficient installation.

EXCEPTIONAL FIRE SAFETY

Self-extinguishing properties, low smoke emission and reduced release of toxic and corrosive gases contribute significantly to the safety of people and infrastructure. Our cable solutions meet the highest safety standards and perform reliably even in critical environments such as tunnels and underground rail systems.

CUSTOMISED SOLUTIONS

Supported by advanced technologies and engineering expertise, we are able to develop a wide range of customised compounds, cable designs and harnessing solutions tailored to specific customer requirements.

COMPLETE SOLUTIONS FROM A SINGLE SOURCE

Prysmian offers a comprehensive portfolio of cable solutions for all rolling stock applications. Manufactured to the highest quality standards, all products comply with REACH and RoHS requirements, while all production facilities are certified according to ISO/TS 22163 (IRIS).

- **Control Cables**
- **Power Cables**
- **High-Temperature Power Cables**
- **Data & Communication Cables**
- **Jumper Cables**
- **Composite Cables**
- **Pantograph Cables**
- **Coaxial Cables**

Our solutions support a wide range of rail vehicles, including trams, metro systems, suburban rail networks and regional trains.



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)

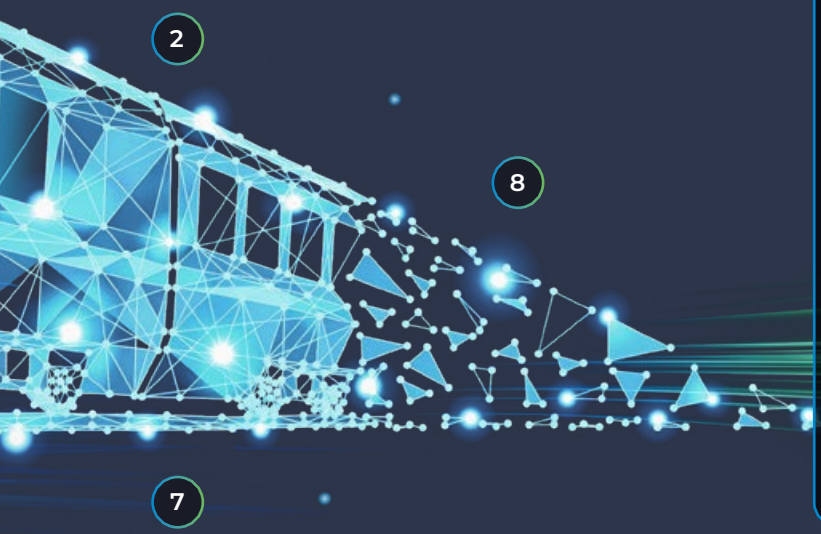
Power and control cables according to EN with increased heat resistance (120 °C), fulfilling EN 45545 fire and smoke properties. Fire resistant (EN 50200) versions available.

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.



PRODUCTFAMILIES

1. Control Cables
2. Power Cables
3. High-Temperature Cables (1.8/3 kV & 3.6/6 kV)
4. Power & Control Cables
5. Data & Communication Cables
6. Speciality Cables
7. Jumper Cables
8. Composite Cables
9. Pantograph Cables

THE MOBILITY OF TOMORROW – ENGINEERED IN GERMANY

Engineering Expertise, Quality and Innovation for Modern Rolling Stock

Developed in Germany. Running on rail networks around the world. At our centres of excellence in Neustadt near Coburg and Wuppertal, we develop innovative cable and system solutions for modern rolling stock. Decades of engineering expertise, the highest quality standards and a deep understanding of the rail industry form the foundation of a portfolio designed to meet the challenges of today and tomorrow.

Our close proximity to customers enables short development and delivery times, a high degree of flexibility and tailored solutions. At the same time, we reduce transport distances and create efficient, sustainable processes throughout the entire value chain.

HIGH QUALITY
MADE IN GERMANY

IRIS® Certification



PRODUCT-PORTFOLIO

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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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 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 DIN EN 50200 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 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 DIN EN 50200 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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

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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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
Kurzschlusstemperatur	250 °C

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 DIN EN 50200 DIN EN 45545 HL3
Conductor	Copper, tinned, 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

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 DIN EN 50200 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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

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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 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	
Warenzeichen	MOVIS
Typenbezeichnung	4 GKW C Flex
Norm	DIN EN 50264-1 DIN EN 45545 HL3
Leiter	Copper, tinned, finely stranded class 5
Isolierung	Cross-linked LS0H
Schirm	Copper, tinned
Mantel	Ethylene Vinyl Acetate rubber (EVA)
Nennspannung	1,8/3 kV
Verlegetemperatur min.	–40 °C
Empfohlene Betriebstemperatur	90 °C
Max. Betriebstemperatur (20.000 Stunden)	120 °C
Kurzschlusstemperatur	250 °C

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 DIN EN 50200 DIN EN 45545 HL3
Conductor	Copper, tinned, 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

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 DIN EN 50200 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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



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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 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. .

4 GKW J Flex	
Brand	MOVIS
Type designation	4 GKW J Flex
Standard	DIN EN 50264-1 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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

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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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

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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 THIN WALL

Less Weight. More Possibilities.

With the new MOVIS Thin Wall product family, Prysmian expands its portfolio with innovative reduced-wall cables for modern rolling stock applications.

The specially engineered design enables smaller cable diameters and lower weight while maintaining the highest standards of safety, performance and quality. As a result, MOVIS Thin Wall cables make an important contribution to improving the energy efficiency and sustainability of modern rail vehicles.

YOUR BENEFITS AT A GLANCE

- Reduced Weight
- Compact Cable Design
- Optimised Space Utilisation
- Improved Energy Efficiency
- High Mechanical Resistance
- Compliance with Railway

The neue MOVIS Thin Wall Familie

Discover the new MOVIS Thin Wall cable types and their technical characteristics on the following pages, designed for a wide range of rolling stock applications.

MOVIS TW EN50306-2 300V M 105



MOVIS TW cables are designed for flexible use in rolling stock applications. They are suitable for both indoor and outdoor environments, including moving connections between rail vehicles as well as between vehicle bodies and bogies.

MOVIS TW EN50306-2	
Brand	MOVIS
Type designation	TW EN50306-2 300V M 105
Standard	DIN EN 50306-2 DIN EN 45545 HL3
Conductor	Copper, tinned, finely stranded
Insulation	Halogen-free, heat-resistant, e-beam cross-linked polyolefin
Screen	–
Sheath	–
Nominal voltage	300/500 V (according to standard) 0,6/1 kV (according to Prysmian specification)
Laying temperature min.	–40 °C
Recommended operating temperature	90 °C
Max. operating temperature (20.000 hours)	110 °C
Short circuit temperature	250 °C

MOVIS TW EN50306-3 300V MM S 90



MOVIS TW cables are designed for flexible use in rolling stock applications. They are suitable for both indoor and outdoor environments, including moving connections between rail vehicles as well as between vehicle bodies and bogies.

MOVIS TW EN50306-3	
Brand	MOVIS
Type designation	TW EN50306-3 300V MM S 90
Standard	DIN EN 50306-3 DIN EN 45545 HL3
Conductor	Copper, tinned, finely stranded
Insulation	Halogen-free, heat-resistant, electron beam cross-linked polyolefin
Screen	Copper wires, tinned
Sheath	Halogen free, heat resistant, e-beam cross-linked elastomeric special compound
Nominal voltage	300/500 V (according to standard) 0,6/1 kV (according to Prysmian specification)
Laying temperature min.	–40 °C
Recommended operating temperature	90 °C
Max. operating temperature (20.000 hours)	110 °C
Short circuit temperature	250 °C

MOVIS TW EN50306-4 1P/1E 300V MM 90



MOVIS TW cables are designed for flexible use in rolling stock applications. They are suitable for both indoor and outdoor environments, including moving connections between rail vehicles as well as between vehicle bodies and bogies.

MOVIS TW EN50306-4 1P/1E	
Brand	MOVIS
Type designation	TW EN50306-4 1P 300V MM S 90 (for protected installation) TW EN50306-4 1E 300V MM S 90 (for exposed installation)
Standard	DIN EN 50306-4 DIN EN 45545 HL3
Conductor	Copper, tinned, finely stranded
Insulation	Halogen free, heat resistant, e-beam cross-linked polyolefin
Screen	Copper wires, tinned
Sheath	Halogen free, heat resistant, e-beam cross-linked elastomeric special compound
Nominal voltage	300/500 V (according to standard) 0,6/1 kV (according to Prysmian specification)
Laying temperature min.	–40 °C
Recommended operating temperature	90 °C
Max. operating temperature (20.000 hours)	110 °C
Short circuit temperature	250 °C

MOVIS TW EN50306-4 3P/3E 300V MM S 90



MOVIS TW cables are designed for flexible use in rolling stock applications. They are suitable for both indoor and outdoor environments, including moving connections between rail vehicles as well as between vehicle bodies and bogies.

MOVIS TW EN50306-4 3P/3E	
Brand	MOVIS
Type designation	TW EN50306-4 3P 300V MM S 90 (for protected installation) TW EN50306-4 3E 300V MM S 90 (for exposed installation)
Standard	DIN EN 50306-4 DIN EN 45545 HL3
Conductor	Copper, tinned, finely stranded
Insulation	Halogen free, heat resistant, cross-linked polyolefin special compound
Screen	Copper wires, tinned
Sheath	Halogen free, heat resistant, cross-linked elastomeric special compound
Nominal voltage	300/500 V (according to standard) 0,6/1 kV (according to Prysmian specification)
Laying temperature min.	–40 °C
Recommended operating temperature	90 °C
Max. operating temperature (20.000 hours)	110 °C
Short circuit temperature	250 °C

MOVIS TW EN50306-4 7P/7E 300V MM S 90



MOVIS TW cables are designed for flexible use in rolling stock applications. They are suitable for both indoor and outdoor environments, including moving connections between rail vehicles as well as between vehicle bodies and bogies.

MOVIS TW EN50306-4 7P/7E	
Brand	MOVIS
Type designation	TW EN50306-4 7P 300V MM S 90 (for protected installation) TW EN50306-4 7E 300V MM S 90 (for exposed installation)
Standard	DIN EN 50306-4 DIN EN 45545 HL3
Conductor	Copper, tinned, finely stranded
Insulation	Halogen free, heat resistant, cross-linked polyolefin special compound
Screen	Twisted with staggered lay length for electromagnetic decoupling
Sheath	Copper wires, tinned, as common screen
Nominal voltage	300/500 V (according to standard) 0,6/1 kV (according to Prysmian specification)
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?



Reducing cable weight helps to lower the overall mass of the train. As a result, less energy is required for acceleration, improving efficiency and supporting more sustainable railway operations.

$$F = m \cdot a$$

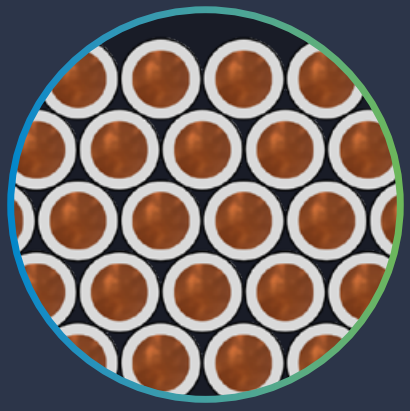
Force Masse Acceleration

By reducing cable diameter and weight, we help lower the overall mass of the train. A lower mass requires less energy for acceleration, improving energy efficiency and contributing to a more sustainable railway system.

Designed in accordance with **EN 50306-3**, our cables meet the highest safety and performance requirements while helping to minimise environmental impact.

In addition, our **Electron Beam cross-linking technology** enhances durability, reduces material waste and lowers manufacturing emissions, further supporting our commitment to sustainability and energy efficiency.

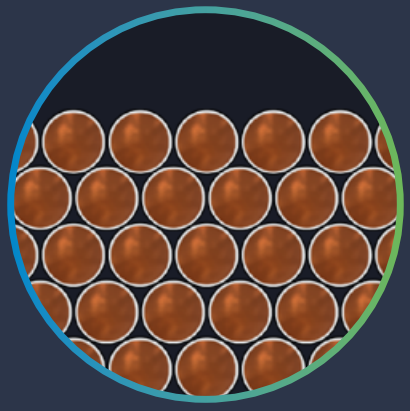
The result is a more cost-effective and environmentally responsible solution for modern rail operations.



STANDARD CABLES

VS.

THIN WALL CABLES



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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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

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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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(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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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

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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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

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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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

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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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

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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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

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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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

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 DIN EN 45545 HL3
Conductor	Copper, tinned, 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



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 DIN EN 50288-2-2 DIN EN 45545 HL3
Conductor	Copper, tinned, finely stranded class 5
Insulation	Polypropylen (foam-skin)
Screen	Copper, tinned
Sheath	Ethylen-Vinylacetat-Rubber (EVA)
Nominal voltage	Max. 300 V
Laying temperature min.	–40 °C
Recommended operating	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 DIN EN 50288-2-2/-4-2 IEC 61156-6 DIN EN 45545 HL3
Conductor	Copper, tinned, finely stranded class 5
Insulation	Polypropylen (foam-skin)
Screen	Copper, tinned
Sheath	Ethylen-Vinylacetat-Rubber (EVA)
Nominal voltage	Max. 300 V
Laying temperature min.	–40 °C
Recommended operating	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.

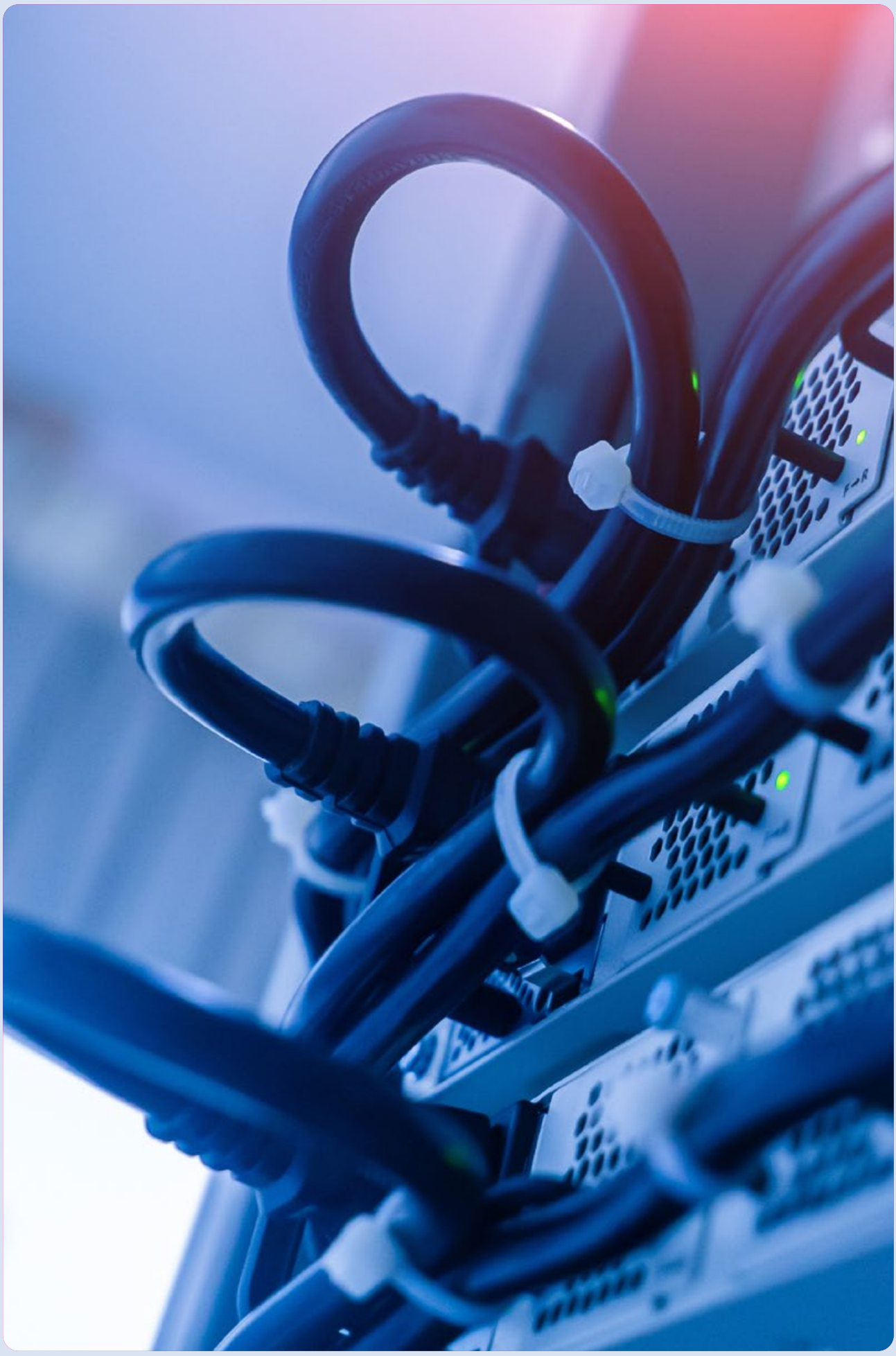
MOVIS MVB	
Brand	MOVIS
Type designation	MVB
Standard	DIN EN 50264-1 IEC 61375-3-1 DIN EN 45545 HL3
Conductor	Copper, tinned, finely stranded class 5
Insulation	Polypropylen (foam-skin)
Screen	Copper, tinned
Sheath	Ethylen-Vinylacetat-Rubber (EVA)
Nominal voltage	Max. 300 V
Laying temperature min.	–40 °C
Recommended operating	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 IEC 61375-2-1 DIN EN 45545 HL3
Conductor	Copper, tinned, finely stranded class 5
Insulation	Polypropylen (foam-skin)
Screen	Copper, tinned
Sheath	Ethylen-Vinylacetat-Rubber (EVA)
Nominal voltage	Max. 300 V
Laying temperature min.	–40 °C
Recommended operating	90 °C
Max. operating temperature (20.000 hours)	–
Short circuit temperature	–



TENAX-TRAIN-PLUS (N)TMCOEU 26/45 KV



These cables are designed for fixed installations or wiring applications with limited movement in rolling stock. Suitable for both indoor and outdoor applications.

TENAX-TRAIN-Plus (N)TMCOEU 26/45 kV	
Brand	TENAX-TRAIN-Plus
Type designation	(N)TMCOEU
Standard	DIN VDE 0250-813 IEC 60840 DIN EN 45545 HL3
Conductor	Copper, tinned, finely stranded class 5
Insulation	Hard grade Ethylen-Propylen-Rubber (HEPR)
Screen	Copper, tinned
Sheath	Ethylen-Vinylacetat-Rubber (EVA)
Nominal voltage	26/45 kV
Laying temperature min.	–40 °C
Max. operating temperature (20.000 hours)	90 °C
Short circuit temperature	250 °C

PROTOLON (HMK) (N)TMCGCHXOEUK 26/45 KV



These cables are designed for fixed installations or wiring applications with limited movement in rolling stock. Suitable for both indoor and outdoor applications.

PROTOLON (HMK) (N)TMCGCHXOEUK 26/45 kV	
Brand	TENAX-TRAIN-Plus
Type designation	(N)TMCGCHXOEUK
Standard	DIN VDE 0250-813 IEC 60840 DIN EN 45545 HL3
Conductor	Copper, tinned, finely stranded class 5
Insulation	Hard grade Ethylen-Propylen-Rubber (HEPR)
Screen	Copper, tinned
Sheath	Cross-linked LS0H
Nominal voltage	26/45 kV
Laying temperature min.	–50 °C
Max. operating temperature (20.000 hours)	90 °C
Short circuit temperature	250 °C

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 UIC 541-5 DIN EN 45545 HL3
Conductor	Copper, tinned, finely stranded class 6
Insulation	Cross-linked LS0H Polypropylen (foam-skin)
Screen	Copper, tinned
Sheath	Ethylen-Vinylacetat-Rubber (EVA)
Nominal voltage	300/500 V
Laying temperature min.	–40 °C
Recommended operating	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 UIC 588 DIN EN 45545 HL3
Conductor	Copper, tinned, finely stranded class 6
Insulation	Cross-linked LS0H Polypropylen (foam-skin)
Screen	Copper, tinned
Sheath	Ethylen-Vinylacetat-Rubber (EVA)
Nominal voltage	Max. 300 V
Laying temperature min.	–40 °C
Recommended operating	90 °C
Max. operating temperature (20.000 hours)	–
Short circuit temperature	–

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 UIC 541-5 DIN EN 45545 HL3
Conductor	Copper, tinned, finely stranded class 6
Insulation	Cross-linked LS0H Polypropylen (foam-skin)
Screen	Copper, tinned
Sheath	Ethylen-Vinylacetat-Rubber (EVA)
Nominal voltage	300/500 V
Laying temperature min.	–40 °C
Recommended operating	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 UIC 588 DIN EN 45545 HL3
Conductor	Copper, tinned, finely stranded class 6
Insulation	Cross-linked LS0H Polypropylen (foam-skin)
Screen	Copper, tinned
Sheath	Ethylen-Vinylacetat-Rubber (EVA)
Nominal voltage	Max. 300 V
Laying temperature min.	–40 °C
Recommended operating	90 °C
Max. operating temperature (20.000 hours)	–
Short circuit temperature	–

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 UIC 552 DIN EN 45545 HL3
Conductor	Copper, tinned, 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 UIC 552; E DIN VDE 0250-606 DIN EN 45545 HL3
Conductor	Copper, tinned, 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

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 26/45 kV	
Brand	TENAX-TRAIN-Plus
Type designation	Jumper (N)TMCWOEU
Standard	DIN VDE 0250-813 IEC 60840 DIN EN 45545 HL3
Conductor	Copper, tinned, 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

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 26/45 kV	
Brand	TENAX-TRAIN-Plus
Type designation	Jumper (N)TMCGCHXOEUK
Standard	DIN VDE 0250-813 IEC 60840 DIN EN 45545 HL3
Conductor	Copper, tinned, 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

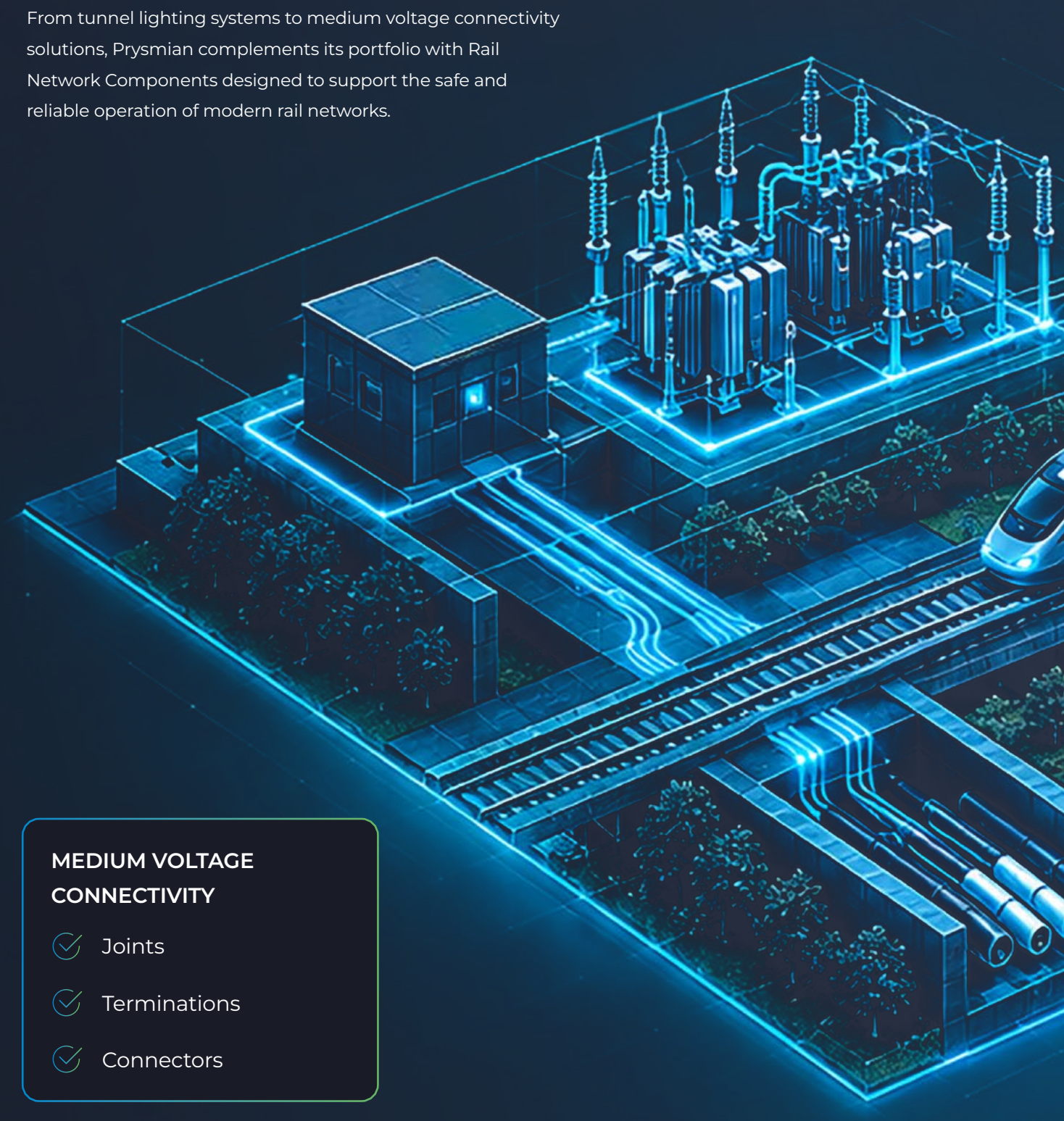




RAIL NETWORK COMPONENTS

More than cable for modern rail infrastructure

From tunnel lighting systems to medium voltage connectivity solutions, Prysmian complements its portfolio with Rail Network Components designed to support the safe and reliable operation of modern rail networks.

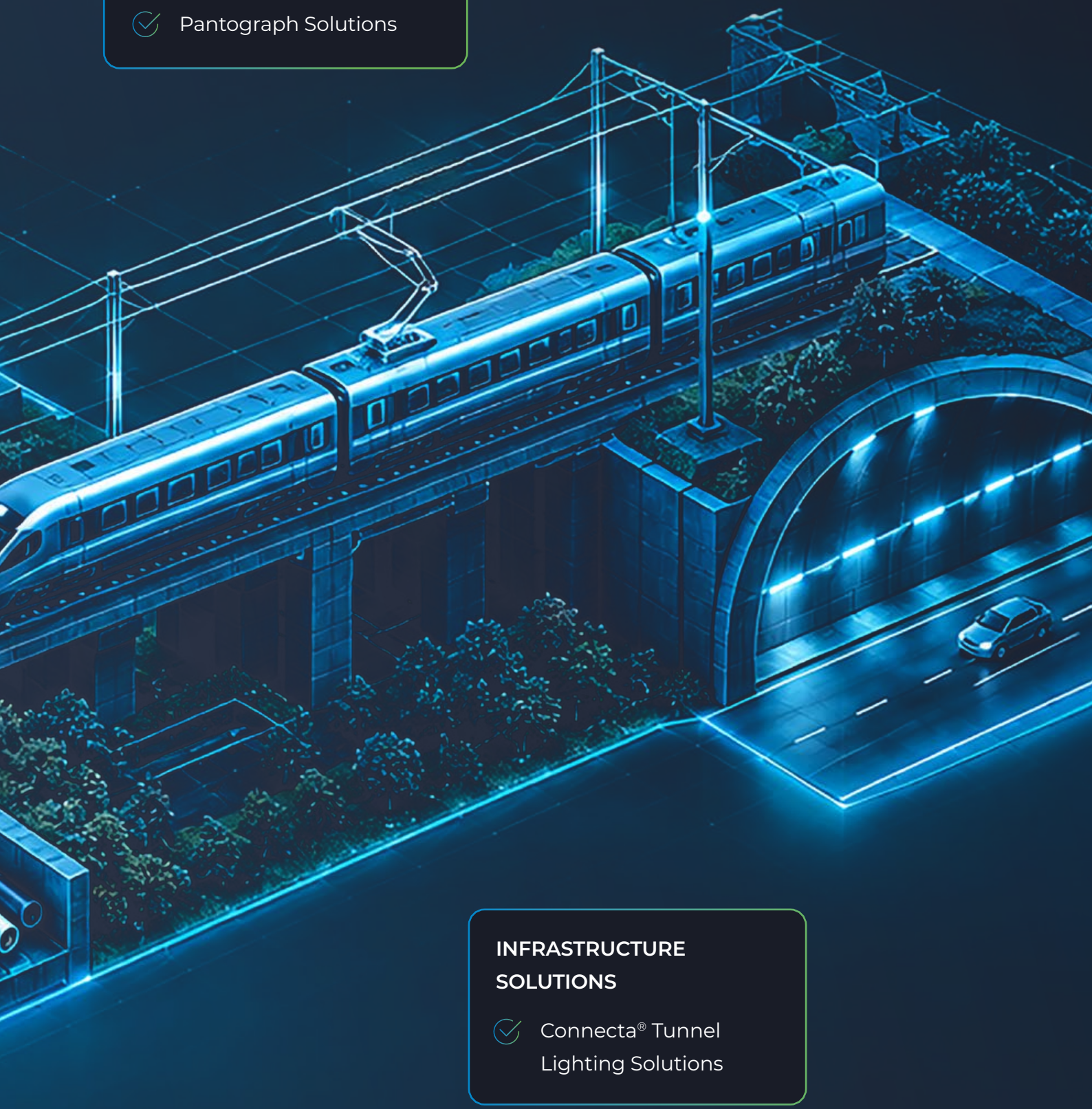


MEDIUM VOLTAGE CONNECTIVITY

- Joints
- Terminations
- Connectors

ROLLING STOCK CONNECTIVITY

- Dynamic Cable Links
- Pre-Harnessed Solutions
- Pantograph Solutions



INFRASTRUCTURE SOLUTIONS

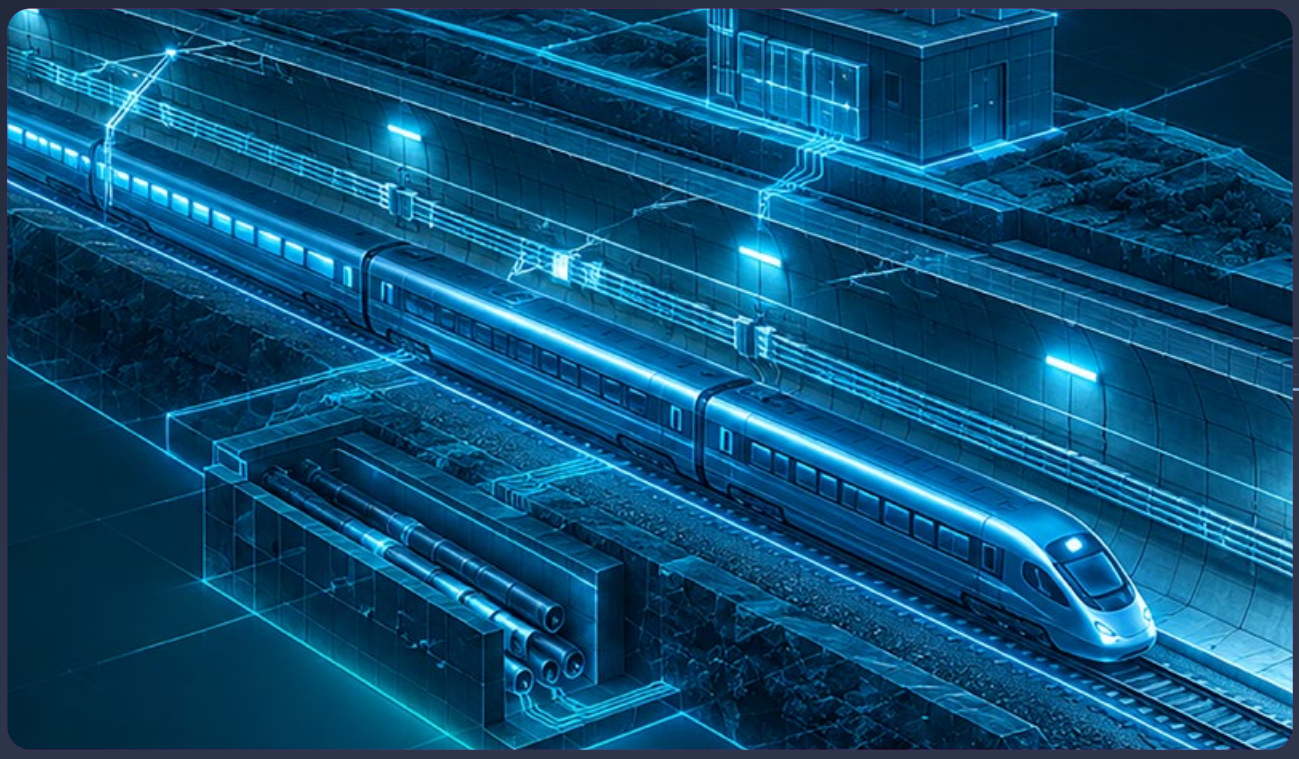
- Connecta® Tunnel Lighting Solutions

NETWORK COMPONENTS & CONNECTIVITY SOLUTIONS

More than cable. Complete connectivity solutions for the railway industry.

Beyond cable and wiring solutions, Prysmian offers a comprehensive portfolio of Network Components and Connectivity Solutions for rolling stock and rail infrastructure. From medium voltage connectivity products to connectors and pre-assembled connection solutions, our systems support safe, efficient and reliable railway operations.

Designed to reduce installation time, improve operational reliability and meet the requirements of modern rail networks and rolling stock, our solutions help optimise performance across a wide range of applications.



ROLLING STOCK CONNECTIVITY

More than cable. Intelligent connectivity solutions for modern rolling stock.

Dynamic Cable Links

Pre-assembled connection solutions for high-speed trains

Pre-assembled Dynamic Cable Links provide electrical connections between rail vehicles in modern high-speed trains. Factory-fitted terminations reduce installation time while ensuring high reliability under demanding dynamic operating conditions.

BENEFITS

- Pre-assembled terminations
- Reduced installation time
- High mechanical durability
- Designed for high-speed rail applications

Pantograph Connections

Reliable high-voltage connections for rolling stock

Specially designed connection and high-voltage solutions for efficient power transfer between the overhead line and the vehicle.

Pre-Harnessed Solutions

Pre-assembled systems for faster installation

Pre-assembled wiring solutions that reduce installation time, complexity and assembly effort during vehicle manufacturing.

CONNECTIVITY & ACCESSORIES

For safe and reliable rail networks

Prysmian offers a comprehensive portfolio of medium voltage connectivity solutions for railway and infrastructure applications.

MEDIUM VOLTAGE CONNECTIVITY



ELASPEED® Joints

Reliable medium voltage cable joints

ELASPEED® cold-shrink joints have been designed for fast and reliable installation. Their compact design minimises space requirements while ensuring dependable long-term performance in applications up to 42 kV.

BENEFITS

- Quick installation
- Compact design
- Proven reliability
- Suitable for applications up to 42 kV



Slip-on Terminations

Flexible terminations for modern energy networks

Prysmian Slip-on Terminations provide a simple and reliable solution for a wide range of installation conditions. The one-piece design eliminates the need for special tools, simplifying installation and increasing flexibility on site.

BENEFITS

- Quick installation
- Compact design
- High flexibility
- Suitable for applications up to 42 kV



ELASCON® Separable Connectors

Safe and flexible separable connectors

ELASCON® Separable Connectors are designed to provide safe and reliable connections for medium voltage systems. Multiple configurations offer maximum flexibility for a wide range of railway and infrastructure applications.

BENEFITS

- Safe and reliable connections
- High electrical performance
- Flexible configurations
- Suitable for applications up to 72.5 kV

INFRASTRUCTURE SOLUTIONS



Connecta® Tunnel Lighting System

Safety when it matters most

Connecta® has been specifically developed for tunnel applications and provides a reliable power supply for lighting systems, even under demanding conditions. Its plug-and-play design and halogen-free, fire-resistant components help reduce installation time and simplify maintenance.

BENEFITS

- Plug-and-play installation
- Halogen-free components
- High operational reliability
- Reduced installation time
- Ideal for tunnel and infrastructure projects



CABLE QUALITY BEGINS WITH TRANSPORT

A cable is a valuable asset and is normally transported on a cable drum. While the individual components of a drum may appear robust, they can become vulnerable when carrying cables weighing more than four tonnes. When handled correctly, the drum protects the cable from damage during transport.

If the drum is damaged, the cable may also be affected. In some cases, such damage is only detected after installation, when repairs can become extremely costly. Scan the QR code to learn how proper drum handling can help prevent damage and protect your investment.



ALESEA® – Intelligent Cable Drum Management

With ALESEA®, cable drums become intelligent assets. The solution provides real-time drum tracking and automated inventory monitoring, creating greater visibility across the entire supply chain. This helps optimise logistics processes, improve inventory management and reduce losses.

MORE INFORMATION ABOUT ALESEA®

Scan the QR code to learn more about proper drum handling and discover the digital capabilities of ALESEA®.





The correct handling of cable drums

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