

PMA® cable protection solutions in service put to the test with a public transport company

Multilayer conduit and modular support system are put through their paces at BERNMOBIL

PMA

PMA® cable solutions combines materials on new ways offering additional protection and safety for the rail industry

BERNMOBIL, the city of Bern's public transport operator, transporting over 100 million passengers annually on its network, draws a positive conclusion after carrying out a thorough test of ABB's latest PMA® cable protection products.

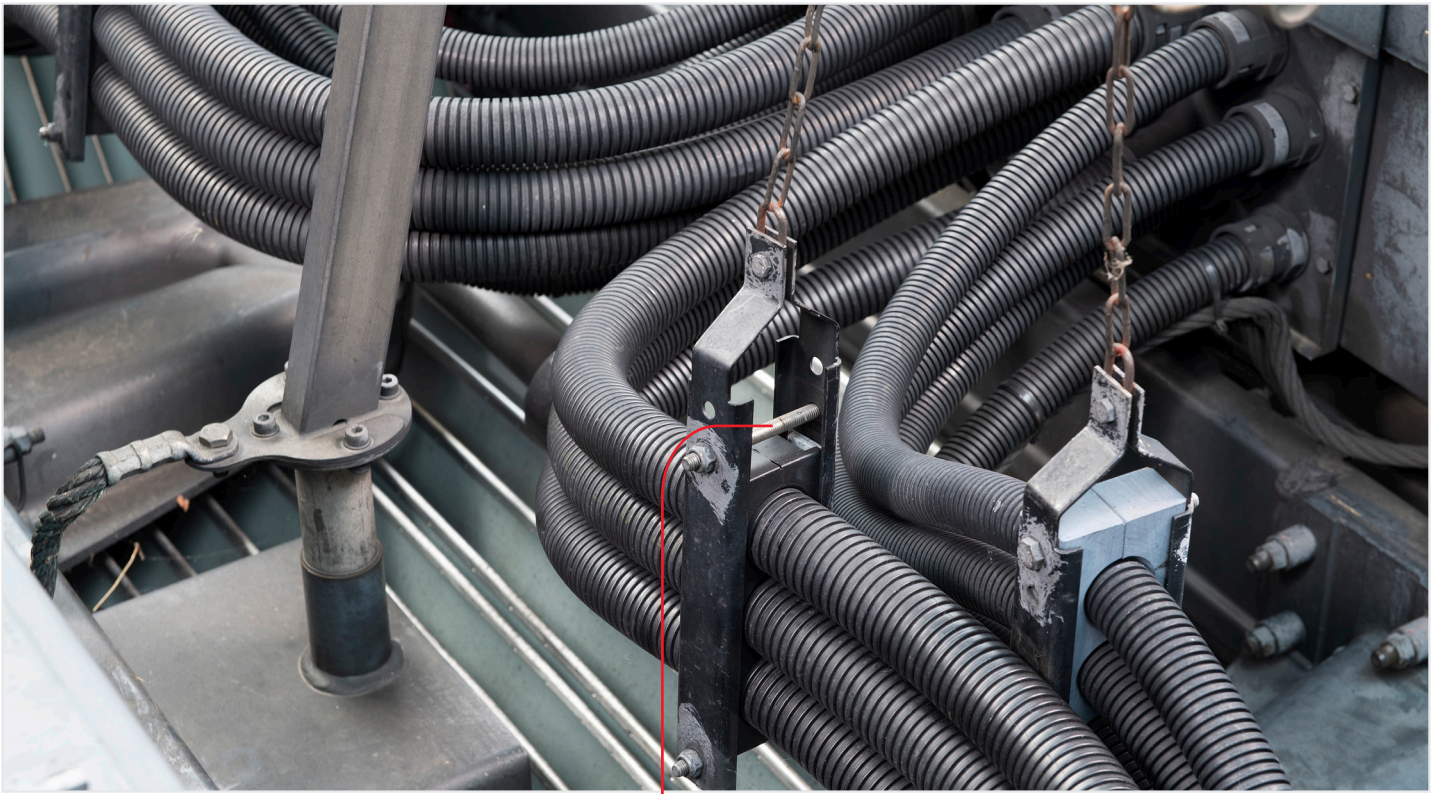


PMA® is there for its customers:

Test passed
thanks to excellent cooperation
and great products

For over 125 years, BERNMOBIL has been responsible for public transport in Switzerland's capital city. BERNMOBIL's workforce of 1,000 operates 48 trams and 163 buses every day in all weather conditions, and serving 336 stops.





PMA® provides comprehensive
cable protection
 ideally suited to BERNMOBIL's needs

PMA TRUST™ modular support system represents the latest generation of modular support systems for conduits and cables; it redefines the state of technology for rail vehicle applications with ease of assembly, flexibility, weight, stability and compact design.

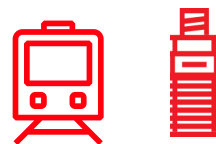
To continue this high degree of reliability, it is essential for BERNMOBIL's vehicle fleet to be in perfect working order. Maintenance and repair work has to be carried out quickly and thoroughly so that vehicle downtime are kept to a minimum and BERNMOBIL's trams are available to transport passengers through the inner-city traffic without hold-ups.



PMA has been working with BERNMOBIL to ensure that two new and innovative cable protection products – the PMA TRUST™ modular support system and the XPCSF multilayer conduit – are installed in BERNMOBIL's vehicles, to ensure they can operate around the clock 365 days a year.

PMA's multilayer technology embodied in the XPCSF conduit allows materials possessing enhanced product characteristics for the rail sector to be combined in entirely new ways. By combining two specially modified polyamides with different material properties, this multilayer solution offers additional protection and safety. These new materials improve the overall performance of the





PMA® Connectors and

multilayer conduits

for maximum safety and high-quality
cable protection solutions

— The PMA TRUST™ modular support system, the XPCS multilayer conduit and the PMA FIX connectors provide the BERNMOBIL workshop team with professional and comprehensive cable protection solutions.

conduits. The XPCSF multilayer conduit with its orange-coloured inner layer is particularly suited for use in external applications on rail vehicles – such as BERNMOBIL's trams for example. It complies with the EN45545-2 HL3 fire prevention standard in accordance with Requirement Set R23 and is suitable for use with trains of all types and all operating modes – and, in particular, for roof installations, where sparks from the current collector are unavoidable.

The new, extremely impact-resistant PMA TRUST™ modular support system was installed as a lightweight, compact solution for supporting the conduits. Thanks to its innovative design, the conduit is able to move within the support system, thus preventing it from cracking due to torsional stress. The external dimensions of this new design have been reduced to the minimum and the spacing between parallel conduits is very small. The system has been specially designed for use in the rail vehicle construction sector and for other applications where conduits and cables running in parallel need to be held in position.

“The PMA TRUST™ support and the XPCSF multilayer conduit passed the test with flying colours.”

Working together with the PMA team, BERNMOBIL's workshop team installed an initial PMA TRUST™ modular cable support system in 2020 to test how well the support system interacted with the PMA multilayer conduits when subjected to the demands of everyday use.

“After being in constant use for nearly two years, we concluded that both the PMA TRUST™ modular support system and the XPCSF multilayer conduit had passed with flying colours. The promising features of both products were confirmed during demanding everyday use and we shall certainly be able to count on them in future,” stated Michael Aufdenblatten, Project Manager for trams at BERNMOBIL.





With its PMA® cable protection range, ABB provides a comprehensive portfolio of conduits, screw connections and accessories for varied markets and applications.

ABB PMA and BERNMOBIL

Mutual confidence in each other's knowledge of the rail technology sector is what cements the partnership between BERNMOBIL and ABB PMA. PMA® provides BERNMOBIL with cable protection conduit and cable solutions specifically and individually tailored to the needs of its vehicle fleet and to its technical requirements, helping to ensure its operations can be conducted 365 days a year. Solving important tasks like this together with its customers is one of the core areas of expertise which the PMA team is able to offer.

BERNMOBIL

For over 125 years, Bernmobil has been responsible for public transport in Switzerland's capital city. Bernmobil's workforce of some 1,000 operates 48 trams and 163 buses every day and in all weather conditions, serving 336 stops. Thanks to electricity from renewable sources, more than 70 per cent of all passenger services in the city already operate in an environmentally-friendly manner – convincing proof that Bernmobil is on the right path. A survey has shown that 93 per cent of passengers are either satisfied or very satisfied with the services provided.

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