

A yellow rectangular box containing the text 'AGRU cable protection pipe programme' in white, sans-serif font.

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The energy transition is bringing profound changes to the energy infrastructure.

The increasing expansion of photovoltaic and wind power installations is leading to greater decentralisation of electricity generation and makes the transport of renewable energy over greater distances necessary. To integrate this new distribution efficiently and safely into the power grid, extensive grid reinforcement and the construction of new transmission routes are required. For reasons of landscape protection, as well as for supply security and public acceptance, underground cabling is becoming increasingly important.

Cable protection pipes play a central role in this: they enable protected, durable and maintenance-free installation of high and extra-high voltage cables in the ground. As a technical basis, they ensure the reliable operation of future power grids and thus make a significant contribution to the successful implementation of the energy transition.

The AGRU cable protection pipe programme, comprising pipes, fittings and welding technology, offers a long-term solution for the protection of power cables in the context of grid expansion for the energy transition – even under demanding environmental conditions.

Two powerful variants are available:



BLACK LINE / PE 100-RC:

Manufactured from high-quality PE 100-RC, this system is ideal for standard applications in the high-voltage sector for temperatures of up to 60 °C. It offers high mechanical strength and excellent resistance to point loads and slow crack growth, making it particularly suitable for sandbed-free installation.

**Pipes, electrofusion couplers, reducers
and SDR transitions**

Dimensions 63–500 mm, SDR 11, 17, 21, 26

(other SDR grades available on request)



RED LINE / PE 100-RC-RT:

Manufactured from innovative, high-temperature-resistant PE 100-RC-RT, this variant is designed specifically for extreme requirements in the extra-high-voltage sector up to 525 kV and continuous temperatures up to 70 °C. It combines enhanced temperature and stress-crack resistance (RC quality) and is ideal for demanding projects with thermally highly stressed cable systems and sandbed-free installation. The complete system includes pipes and electrofusion couplers made of PE 100-RC-RT, a unique feature.

**Pipes, electrofusion couplers, reducers
and SDR transitions**

Dimensions 200–400 mm, SDR 11, 17, 21, 26

(other SDR grades available on request)

RED LINE / BLACK LINE

Both systems consist of pipes and matching fittings for continuous, flexible and sandbed-free installation, including alternative installation techniques such as horizontal directional drilling.

The high ring stiffness provides lasting protection, while the smooth inner surface facilitates cable pulling and later replacement – even after decades.

Depending on the requirements, the pipes can be joined homogeneously and with tensile strength using electrofusion couplers, butt welding with internal bead removal, or the specially developed butt welding without internal bead for this application.

**RED LINE
pipes and electrofusion
couplers
PE 100-RC-RT**



**BLACK LINE
pipes and electro-
fusion couplers
PE 100-RC**



The Plastics Experts.

