SEANEX
High-voltage connection system for inter-array cables

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SEANEX
66 kV reliably connected!

Constructing an offshore wind farm is a huge task for everyone involved. After completion, power generation and distribution has to be guaranteed for a minimum of 25 years. The electrical installations in modern offshore wind farms operate at 66 kV high voltage – and rising.

Compared to constructing the wind farm, connecting and linking the electrical systems is a small though significant part. It is only with reliable interfaces that the electricity supply from offshore wind farms can be guaranteed. Yet some operators rely on medium-voltage connection technology at precisely these sensitive interfaces – not without risk.

With SEANEX, PFISTERER offers a robust inner cone HV connection system for 66 kV offshore applications. In addition, connections and links up to 550 kV can be implemented with the CONNEX system. Shipbuilding materials are used for all SEANEX components. They are fully submersible and salt water resistant, without affecting the service life.

What is SEANEX?
SEANEX is a inner cone connection and contact system specifically for offshore applications. It is based on the CONNEX system by PFISTERER for voltages up to 550 kV. SEANEX components have been optimised for requirements at sea, are DNV-GL certified and meet the new IEC 63026 offshore standard.

Connection joint advantages
The cast resin connection joint in the SEANEX system enables rapid connection of the wind turbine to the wind farm network. All that is required offshore is to fit the pluggable connectors to the seaward cables. The attachment of the joints using four screws can be carried out on land.

All cable sections between the joint and switchgear and between switchgear and transformer are supplied preassembled, pretested and ready to plug in. There is no longer any need to test these preassembled cables offshore.

- Very short offshore installation time
- Clear interface between sea cable and wind turbine
- Establishes clear responsibilities for each construction and project phase
- Joint can be used as test equipment with dummy plug
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SEANEX facts
- Proven HV connection system
- Quick and simple installation
- Separate electrical and mechanical contact
- Touch-safe
- Offshore certified by DNV GL
- Salt water resistant
- Maintenance-free

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Separate electrical and mechanical contact
Compared to other connection solutions, SEANEX is the much more robust system. Electrical and mechanical contacts are separate from one another. The proven lamella contact technology and spring system ensure reliable power transmission – even during sudden load changes.

For installation, the SEANEX connectors simply plug into the corresponding sockets and joints, and are secured with three screws. The rotatable bell flange enables 360° installation.

- Electricity flows in a line – no angles, corners or edges
- Transition box eliminated
- Touch safe thanks to metallic encapsulation
- No twisting of cables
- Connection can be separated without loss of quality

Video
In 1921, Karl Pfister founded his factory in Stuttgart for special electrical products with the aim of improving the world of power transmission. The PFISTERER Group has pursued this goal of quality and technological leadership for more than 100 years. Today, PFISTERER is one of the world’s leading specialists and system suppliers for energy infrastructure – with a complete range of cable accessories, overhead line technology and components along the entire transmission chain from power generation to consumption. With state-of-the-art manufacturing processes and 1,200 employees at 18 international locations, PFISTERER not only connects the power grids of today and tomorrow, but also makes an important contribution to a sustainable and secure energy supply.