

# Bending the laws of physics.

Our Feltoflex® HV cable is taking flexibility to a new level.



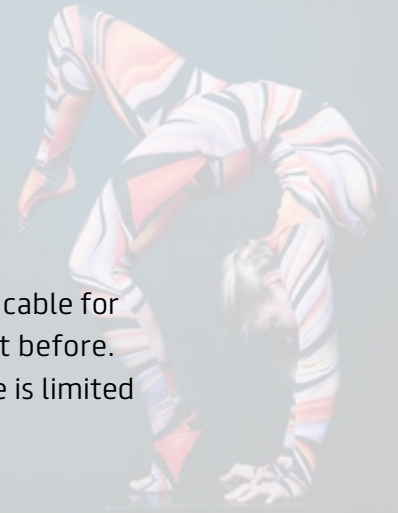
**Prysmian**  
Group

*Small bending radii can  
accomplish great things.*



# Our Feltoflex® HV cable is taking flexibility to a new level.

By only allowing first-rate pliability in all components, our Feltoflex® HV cable for wind power stations have reached a flexibility not known on the market before. The pliancy makes the cable well fitted for many applications where space is limited and mobility demanded. That's what we call At Full Stretch.



## FELTOFLEX®-RC (N)TMCHXOEU 66 – 155 kV

### Application

This high-quality and fully qualified flexible HV cable system is intended for use as flexible connection between offshore platforms as well as in switch-gears and transformers where very small bending radius and/or very low temperature is required, in dry or damp areas and outdoors. The pliability saves construction/building costs and the toughness makes the cables suitable for installation during winter and cold weather. The flexibility of the cable allows operating equipment to be moved while running.



## MAIN FEATURES

- ✓ Flexible – perfect for cramped areas
- ✓ Allows operating equipment to be moved while running
- ✓ Operational from -50 °C to +90 °C
- ✓ Low Smoke Zero Halogen – fire resistant; emits less toxic smoke compared to PVC cables and no corrosive substances in case of a fire
- ✓ Tailor-made and fully turn-key solutions from design to monitoring

COMMITTED TO SUSTAINABILITY

# We offer solutions to reduce carbon emissions.

There can be no transition to clean energy without cables. US investment banks Morgan Stanley and Citi both recently included Prysmian Group among 33 companies with products that will help the world meet sustainable development goals. One example is our specially-engineered undersea energy cables, which enable offshore wind farms to transport energy back to land.

## ASSEMBLY AND TERMINATION

We can harness all the wind turbine cables that you need for your on- and offshore wind turbine. In our factory or on spot – we will make up the cables ready for connection according to your requirements. We can also supply installation sets designed specifically for your requirements.

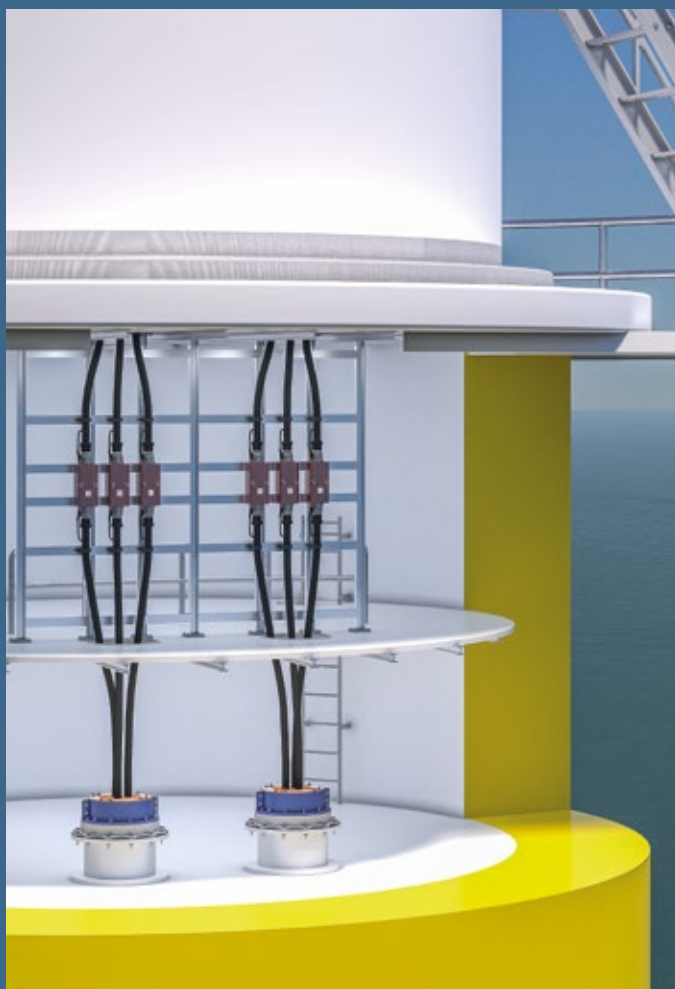
- Terminations of cast-resin, hybrid and vulcanization type
- Special terminations
- High-voltage plug-on terminations
- Inner and outer cone connectors

### Benefits

- Ready-to-plug solutions – fast and easy to install
- Customised to your specific requirements
- Torsion secured down to -15 °C
- At least 25 years of service life



Picture: PFISTERER



## Best at the base.

The HV members of the ultra-flexible cable system Feltoflex<sup>®</sup>, are superior at the base of wind turbines where space is limited and the generated energy is to be transmitted from the tower to the grid.

### MAIN FEATURES

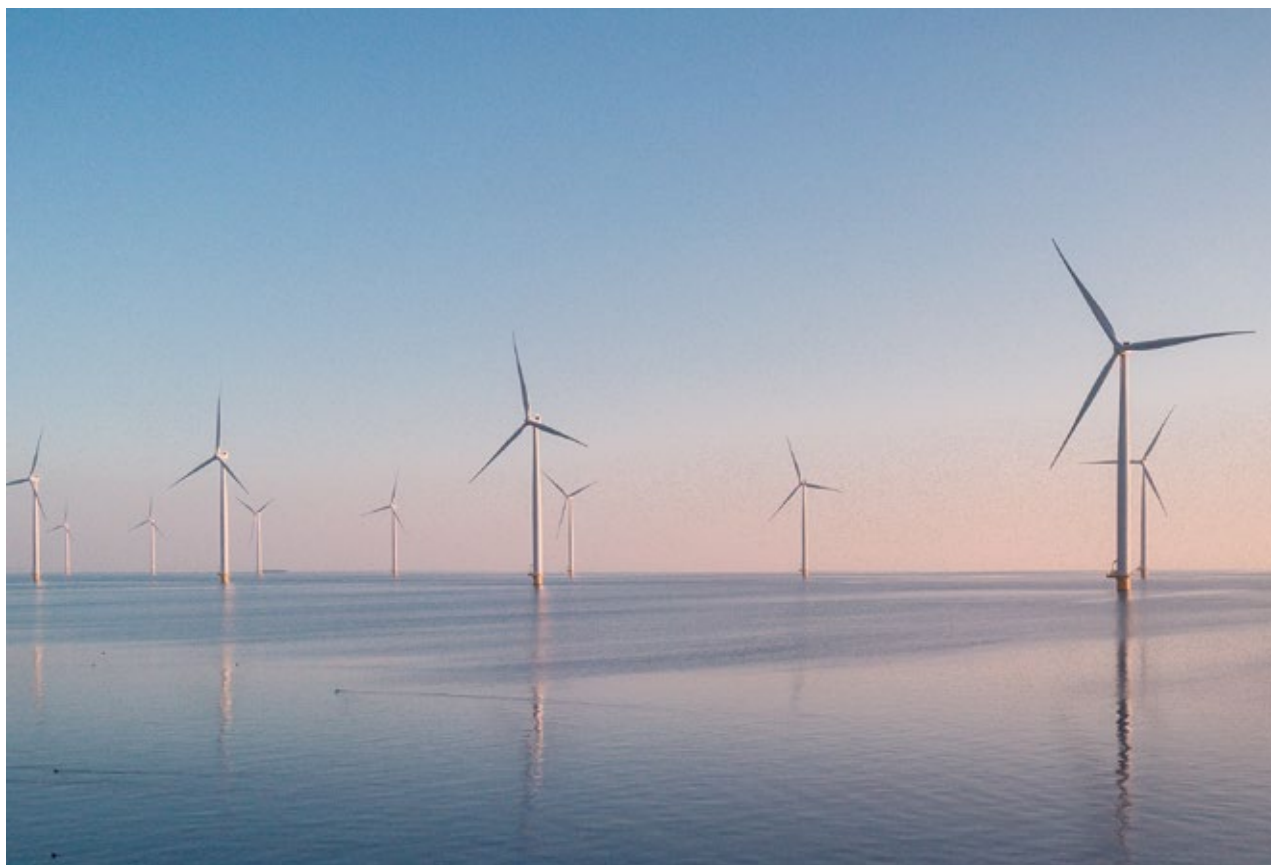
- ✔ Feltoflex<sup>®</sup>-RC – up to 155 kV ultra-flexible cable system
- ✔ High quality and fully qualified HV cable systems solution
- ✔ Flexible Cu conductor up to 800 mm<sup>2</sup> (mobile use)
- ✔ HEPR insulation, super clean, extra flexible
- ✔ Type-tested according to IEC 60840
- ✔ System released by PFISTERER

## TECHNICAL DATA

Feltoflex®-RC (N)TMCHX0EU 66 – 155 kV	
Global data	
Brand	FELTOFLEX®-RC
Type designation	(N)TMCHX0EU
Standard	Based on DIN VDE 0250-813 Based on IEC 60840-2011
Certifications / Approvals	Typetest report KEMA TIC 3113-13
Construction characteristics	
Conductor	Bare copper, fine wire class 5 according to IEC 60228
Insulation	Rubber, compound type HEPR
Electrical field control	Inner and outer layer of semi-conductive rubber compound
Screen	Spiral of tinned copper wires
Outer sheath	Compound HXM1 acc. to DIN VDE 0266 Optional: Semiconductive layer above outer sheath
Outer sheath colour	Black (different colours on request)
Electrical parameters	
Rated voltage	66 kV, 110 kV, 132 kV and 155 kV
Chemical parameters	
Zero halogene, corrosiveness of the combustion gases	EN 50525-1 Annex B
Toxicity of smoke	IEC 60754-2

Feltoflex®-RC (N)TMCHX0EU 66 – 155 kV	
Flame propagation	DIN EN 60332-1-2 DIN EN 60332-3-24
Resistance to oil	DIN EN 60811-404 / IEC 60811-404 IRM 902 – 24 h at 100 °C
UV-resistance	Yes
Ozone resistance	DIN EN 60811-403 IEC 60811-403
Thermal parameters	
Max. operating temperature of the conductor	90 °C
Max. short circuit temperature of the conductor	250 °C
Ambient temperature for fixed installation	-50 °C – +80 °C
Ambient temperature in fully flexible operation	-40 °C – +80 °C
Mechanical parameters	
Max. tensile load on the conductor	15 N/mm <sup>2</sup>
Bending radii min.	Moved: 10 x D Fixed: 5 x D, acc. to DIN VDE 0298 part 3, table 3

Single datasheets with more information, e.g. the different cross sections, are available upon request.



# Linking the future

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