



# Solutions for Power and Data Transmission in Wind Turbines



# Solutions for Power and Data Transmission in Wind Turbines

... from Conductix-Wampfler, the global leader in high-quality power and data transmission solutions for all industrial mobile consumers, especially for harsh and demanding environments.



1

## Pitch Control Sliprings

For transmission of power and data from nacelle into the rotating hub

- for reliable transmission of pitch control power and control of safety systems



2

## Yaw Sliprings

For transmission of power and data from nacelle into the tower

- for reliable transmission of LV and MV power without the limitations of cable loops



3

## Towerbuss

For down-tower power transmission

- An innovative, rigid insulated conductor system to replace copper cables for conducting generator output down the tower



1



## Sliprings for Hub Power & Data Transmission

- Modular design
  - slipring tailored to customer requirements
- Contacts
  - Carbon brush or gold wire
  - flexibility of specification to meet all potential requirements
- Main and auxiliary power rings for transfer up to 100A
- Data rings or optional fibre optic rotating joints for high-speed data transmission
  - compatible with all common modes, such as CANbus, Profibus, Asi-Bus, Ethernet
- Data Rings v-grooved
  - signal loss minimised through redundancy
- Double contacts for high signal contact integrity and low noise
- Unique gold wire alloy composition gives long service intervals, up to 2 years, and low cost of ownership
- Long service life
  - up to 100 million revolutions
- Industry standard connections for ease of installation/replacement
- Choice of strong alloy or polymer housing gives ability to select best combination of weight/strength/cost/protection
- Optional encoder mounting

2



## Sliprings for Yaw Power Transmission

- Sliprings tailored to customer requirements
- For LV and MV transmission to meet all potential requirements
- Combination units for power and data

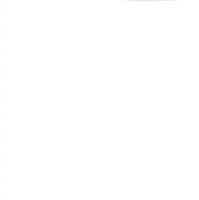


3



## Towerbuss for Down-Tower Power Transmission

- Easily pre-installed in the tower sections whilst on the ground or in the factory
- Conductor lengths can be designed to match each tower section length
- Modular design requires less installation labour than copper cables
  - Installed costs (labour and materials) are 10 - 20% less than copper cable systems
- Rigid aluminium extrusions flex to conform to dynamic, thermal and seismic movement of tower
- Modular design enables sections to be easily replaced if damage occurs
- Electrical specifications meet or exceed copper cable



# www.conductix.com

**Conductix-Wampfler** has just one critical mission: To provide you with energy and data transmission systems that will keep your operations up and running 24/7/365.

To see how we can help you, contact us at  
**info.de@conductix.com**  
**www.conductix.com**

