



Sehr geehrter Herr Mustermann,

in this newsletter, we inform you about our encoders in applications of wind energy.

However, we prefer to be there for you on site, in a web conference or on the phone. Talk to us! Because the best ideas and solutions come from personal dialog!

You can find the direct line to us here:

[Contact partners](#)

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### **Pitch motor control**



To optimally control a wind turbine, the actual position of the rotor blades must be measured. The ideal rotation of the rotor blades with and into the wind reduces the (structural) load on the rotor blades (mechanics). Correct

adjustment of the blade angle position is achieved by pitch motor control. In addition to measuring directly at the motor, blade angle monitoring requires measurement directly at the rotor blade. The SSI absolute encoder WDGA can be used for this purpose, providing accurate and reliable measurements. The encoder is available with other absolute interfaces and with solid or hollow shaft ends. Wachendorff can also provide a suitable solution for applications with redundant systems.

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#### Features Encoder WDGA 58B SSI:

- 16-bit single- / 43-bit multiturn
- EnDra® multiturn technology: maintenance-free and environmentally friendly
- SSI with Gray or Binary
- Advanced technology with 32-bit processor
- 2-colour LED to indicate operating status
- Highest bearing loads up to 220 N radial, 120 N axial
- Operating temperature: -40 °C to +85 °C
- Protection class: IP67 (housing), IP65 (shaft), IP67 all-round possible



Encoder WDGA 58B SSI

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#### Features Encoder WDGA 36A SSI:

- 16-bit single- / 43-bit multiturn
- EnDra® multiturn technology: maintenance-free and environmentally friendly
- SSI with Gray or Binary
- Advanced technology with 32-bit processor
- 2-colour LED to indicate operating status
- Operating temperature: -40 °C to +85 °C



Encoder WDGA 36A SSI

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## Azimuth motor control



In order to harness the maximum amount of energy from the wind, wind turbines need to be aligned with the direction of the wind as best as possible. Azimuth motors rotate the nacelle of the wind turbine, ensuring it is optimally aligned. Precise positioning of the nacelle is made possible by encoders. The requirements for such encoders include high precision and robustness. With the WDGA series, Wachendorff offers a wide range of high-quality absolute encoders, available with various interfaces and solid or hollow shaft options. The WDGE series can be used for redundant applications.

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### Features Encoder WDGA 58E CANopen:

- EnDra<sup>®</sup>: Maintenance-free and environmentally friendly
- CANopen, single- and multiturn
- Communication profile CiA 301
- Device profile CiA 406
- Single-/Multiturn (max. 16 bit / 43 bit)

- Advanced technology with 32 bit processor
- 2-color LED as indication of operating status and error message according to CiA 303-3



Encoder WDGA 58E CANopen

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#### Features Encoder WDGA 58D CANopen galv. isolation:

- EnDra®: Maintenance-free and environmentally friendly
- CANopen, single- and multiturn
- Galvanic isolation
- Communication profile CiA 301
- Device profile CiA 406
- Single-/Multiturn (max. 16 bit / 43 bit)
- Advanced technology with 32 bit processor
- 2-color LED as indication of operating status and error message according to CiA 303-3
- Highest bearing loads up to 500 N radial, 500 N axial



Encoder WDGA 58D CANopen galv. isolation

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## Industry solutions with Wachendorff encoders and systems:

- Mobile working machines
- Wind energy
- Cranes
- Aerial rescue vehicles
- Automated guided vehicle
- Industrial automation
- Heavy Industry
- Markers and labeling machines



Industry solutions

Further reference projects can be found here.



Further reference projects

If you have any questions - our sales team will be happy to help you.  
Give us a call or send us an e-mail.

Your contact persons

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Best regards  
Your



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