

# Encoders and Systems

[wachendorff-automation.com](http://wachendorff-automation.com)

DEVELOPED AND  
MADE IN GERMANY  
5 YEARS WARRANTY



# Precision automation with encoders and systems

- Absolute encoders WDGA with EnDra<sup>®</sup> and QuattroMag<sup>®</sup>
- Incremental encoders
- Maximum permissible loads
- 24-hour express production
- 5 years warranty
- Own development and production  
“Made in Germany”



## Incremental Encoders

- Optical up to 25000 ppr, magnetic 1 up to 16384 ppr
- High shaft load up to 500 N radial, 500 N axial
- Full connection protection with 10 VDC to 30 VDC
- Optional: -40 °C to +85 °C
- Connections: shielded cable or connector, axial or radial



## Configurable via smartphone WDGn encoders

- Any number of pulses up to 16384 configurable via NFC
- HTL/TTL configurable via NFC
- Protection class up to IP67+IP69K
- Shaft load up to 300 N axial / radial
- High output frequency up to 1 MHz
- Reverse polarity protection and short-circuit protection at 4.75 VDC to 32 VDC

# Absolute encoders WDGA with EnDra® and QuattroMag®



## Absolute encoders WDGA

- EnDra®-Technology: No gears and no battery maintenance-free, free of wear, environmentally friendly, energy efficient
- QuattroMag®-Technology: Accuracy of  $\pm 0.0878^\circ$  (12 bits) and a dynamic of 50  $\mu\text{s}$
- Single-turn/Multi-turn (16 bit / 43 bit)
- 2-colour-LED as indicator for operating condition and error message



## Absolute Encoders Industrial Ethernet

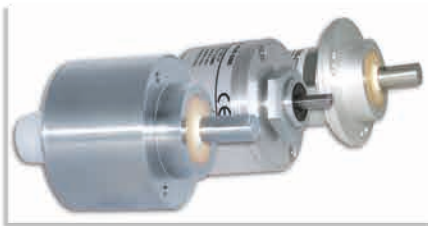
- 58F – World smallest Industrial Ethernet encoder
- Integrated Webserver – Diagnostics and Updates
- Programmable resolution
- All functions can be used even with the fastest cycle times
- Optimizes storage costs



## Absolute Encoders WDGA IO-Link

- IO-Link, Single-turn and Multi-turn (16 bit / 43 bit)
- Device Profile for encoder Smart Sensor Profile (SSP)
- Single-turn/Multi-turn (16 bit / 43 bit)
- LED as indicator for operating condition and Error message
- Monitoring the power supply
- Cam switches for position and velocity with hysteresis

# Systems and Encoders



## Corrosion resistant encoder

**Resistance to salt mist (IEC 60068-2-11) succeeded.**

- Specifically for applications in offshore and harbor
- Incremental and absolute  
CANopen, SSI, RS485, SAE J1939
- High protection rating: IP68 all around or IP67 all around + IP69k
- Extremely robust



## Robust length measurement systems

- Spring lever with adjustable pretensioning force:  
0 - 30 N / 0 - 20 N in 5 N steps
- Lock function
- Measuring wheels for encoder, for different surfaces
- High resolutions: up to 0.008 mm/pulse / 0.0125 mm/pulse,  
other resolutions available



## Draw-wire systems SZG

- Exceptionally rugged length sensor
- Measuring range: 1.25 m up to 40 m
- Output: incremental or absolute
- Quick installation
- High-precision mechanics with high linearity

# Systems and Encoders



## Silent Move

The belt system, proven to be the quietest in the world, offering outstanding benefits:

- Smooth running
- Fast
- Quiet
- Circumferential or guided belt system

Our rugged encoders measure with their usual precision.



## Add-on kit frequency inverter feedback

- Complete retrofit set
- Quickly and reliably fitted with the aid of the accessories
- Cost-effective modernisation solution
- TTL, HTL output
- Threads: M8, M10, M12, M14, M16 und M20
- 15 m ready made cable for different frequency inverters



## speedMATE®

### Non-Contact optical speed measurement

- Non-contact measurement of speeds and lengths
- Adjustable encoder output A/B up to 120 pulses/mm
- Trigger function
- Slip-free
- Working distance: 15 mm up to 60 mm



## Large accessories program

- Torque supports and mounting accessories
- Shaft adapters and adapter sleeves
- Helical-, spring disc-, bellows-, jointed-, slit- and double loop couplings
- Female cable connectors
- Ready made cable
- Spring lever for length determination
- Measuring wheels for all surface areas

For further information please contact:

# WACHENDORFF

The Encoder Experts

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