**WDG has become WDGI**

**WDGI encoder… the new incremental industry standard**

*For more than 25 years, Wachendorff Automation has been developing systems and encoders for global use in a wide variety of applications in the fields of mechanical / plant engineering, lift construction, mobile machines and renewable energies.*

*The more than 1,250 customer variants Wachendorff has implemented clearly demonstrate the high degree of flexibility and absolute customer focus. Since Wachendorff attaches such a great deal of importance to mechanical and electrical stability, Wachendorff offers a five-year guarantee.*

**WDG has become WDGI**

Wachendorff Automation has completely revised the incremen­tal encoders of the WDG series, which are based on the 58 mm design size industry standard. This can only mean one thing: WDG has become WDGI.

**Modern industrial design and further enhanced technical properties**

But it‘s the enhanced benefits for you as a user that really mat­ter. In addition to a modern design, Wachendorff have attached a great deal of importance to improving key technical properties.

**Extended temperature range:**

The operating temperature range of the WDGI standard enco­der with connector outlet has been expanded to temperatures of between -40 °C and +85 °C. This extended temperature range can be implemented as an option for encoders with cable outlet, thereby widening the possible range of applications without shortening the encoder‘s service life.

**Maximum pulse frequencies: 600 kHz to 2 MHz**

The WDGI encoders offer the option of working at pulse rates from 1,200 ppr with pulse frequencies of up to 600 kHz (TTL) or 2 MHz (HTL). Consequently, high pulse rates can be deployed at high speeds, considerably increasing the machine‘s measu­rement accuracy at high throughput rates.

**Maximum bearing loads: 500 N**

The WDGI58D heavy-duty variant offers an up to 25 % higher potential bearing load than its predecessor model as standard. This translates into 500 N in both an axial and a radial load direction. The encoder therefore also has sufficient reserves even when faced with extreme shaft loads, which is decisive for a long service life. A long tool life and low maintenance costs are guaranteed.

**New option: self-adhesive membrane**

This membrane guarantees that the encoder is highly reliable, even when temperatures change quickly – during use in mobile work machines or generally in high air humidity, for example. In spite of the membrane, the encoders retain their high protection class of up to IP67 and are still resistant to harsh environmental conditions.

**Choice of materials and processing with a view to environmental compatibility**

The newly designed encoder cover is made of die-cast alu­minium. So, unlike the die-cast zinc cover which is commonly used on the market, the housing‘s eco-friendly powder coating can be maintained. Customers can therefore choose the colour they‘d like with a clear conscience.

**Evidence of our experience down to the smallest of details**

A special feature derived from customer requests is the eyelet integrated in the housing cover, to which a labelling strip can be attached (e.g. to identify the system / location).

**A summary of the key properties:**

• Robust standard industrial encoder

• Die-cast aluminium housing with particularly eco-friendly powder coating

• Up to 25,000 pulses thanks to high-quality electronics

• Protection class of IP67; shaft sealet to IP65

• Immunity to interference

• Extremely high bearing load: up to 500 N in axial / radial direction

• Maximum mechanical and electrical safety

• Full connection protection at 10 VDC up to 30 VDC

• High output frequency of up to 600 kHz / 2 MHz

• Operating temperature with connector outlet: -40 °C to +85 °C

• Optional: pressure compensation membrane

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

Images (Wachendorff Automation):

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