Die-cast aluminium housing, powder coated

- Maximum bearing loads of up to 500 N, axial / radial
- Self-adhesive membrane
- High output frequency 600 kHz / 2 MHz
- Extended operating temperature -40 °C to +85 °C

**WDGI encoder**

...the new incremental industry standard

- Know-how in the application
  - The variety of applications, adapted design and extensive construction type tests
  - High protection class of up to IP67 + IP69K

- Wear-free and intelligent
  - Contactless; optical or magnetic
  - Highly integrated electronics

- Designed for harsh everyday use
  - 400 standards and guidelines
  - 100 construction type tests, incl. HALT
  - More than 25 years of experience
  - 25 company standards
  - One solution for your application

- Perfect communication
  - square-wave or sine/cosine
  - PROFIBUS
  - CANopen / LIFT
  - SAE J1939
  - SSI
  - RS485

- Durable and reliable
  - Wide temperature range: -40 °C to +85 °C
  - Vibration- and shock-proof
  - High bearing loads of up to 500 N

- Individual, yet a series product
  - Multitude of connector / cable variants as standard: M12, M16, etc.
  - Easily adapted to your application
  - Mechanics, logistics and assembly
  - Certified pursuant to ISO 9001 / 14001

**Shaping innovation together**

- Many years of competent application advice
- Sustainable and systematic: ISO-certified
- „Made in Germany“; five-year guarantee

Together with the Wachendorff Group, Wachendorff Automation develops and manufactures robust rotary encoders and systems for use in industrial and automotive applications.

Extensive construction type tests performed at the same time as the development process demonstrably guarantee reliable and durable use in many branches of industry and mean that mobile work machines can be put to use in the harshest of environmental conditions.

The software-controlled production process ensures that each individual device is fully traceable.

There are more than 1,250 series solutions in use around the world.

Our Product Management and R&D teams look forward to working with you!

**Any questions?** Just call us at (+49) 0 67 22 / 99 65 - 10, send us an E-Mail to wdgi@wachendorff.de or call your local distributor: www.wachendorff-automation.com/distri

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**WDGI encoder**

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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, robotics, mobile machines and renewable energies. The more than 1,250 customer variants we have implemented clearly demonstrate our high degree of flexibility and absolute customer focus. Since we attach such a great deal of importance to mechanical and electrical stability, we offer a five-year guarantee.

**WDGI has become WDGI**

Wachendorff Automation has completely revised the incremental encoders of the WDGI series, which are based on the 58 mm design size industry standard. This can only mean one thing: WDGI 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, we 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 (HL). 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 WDGI58B 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.

A summary of the key properties:

- Robust standard industrial encoder
- Die-cast aluminium housing with particularly eco-friendly powder coating
- Up to 2,500 pulses thanks to high-quality electronics
- Protection class of IP67; shaft sealed 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

Evidence of our experience down to the smallest of details

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

http://www.wachendorff-automation.com