

# WDG 100H

Hollow shaft encoder for precise measurement on power motors

- Robust and extremely flat
- Simple assembly
- High protection level up to IP55
- Up to 20,480 PPR



# Hollow shaft encoder WDG 100H

## ... now with up to 20,480 PPR

- Robust and very flat hollow shaft encoder
- Extremely reliable
- Working temperature of -40 °C to +80 °C
- High protection level of up to all around IP55
- Full terminal protection from 10 VDC to 30 VDC

[www.wachendorff-automation.com/wdg100h](http://www.wachendorff-automation.com/wdg100h)

The challenge with gear motors which can also be driven at a lower speed is the high-precision registering of revolutions. An even driving curve over the entire motor speed is only guaranteed by the high number of impulses combined with a frequency converter. For many years Wachendorff has been supplying incremental shaft encoders for propulsion technology, elevator construction in particular.

The WDG 100H hollow shaft encoder can be mounted directly on the motor shaft (e. g. before the hand wheel) on account of the numerous possible hollow shaft diameters. In order to meet the demand for even higher levels of accuracy, Wachendorff has expanded the range of the number of impulses.

Now available: 8,192, 10,240, 16,384 and 20,480 PPR

The high resolution, the mechanical robustness and the high protection level make the WDG 100H the ideal shaft encoder for the gear motor.

For most frequency converter models, Wachendorff supplies the WDG 100H as a ready-to-connect solution – with made-to-measure cable lengths, socket and sub-D plug.

### Encoder WDG incremental



<b>Type:</b>	WDG 100H
<b>Material:</b>	Aluminium
<b>Resolution:</b>	up to 20.480 PPR
<b>Housing Ø:</b>	100 mm
<b>Shaft Ø:</b>	up to 45 mm
<b>Max. operating speed:</b>	3.500 RPM (1.500 rpm at IP55 all around)
<b>Permitted load on shaft end:</b>	max. 200 N radial, max. 100 N axial
<b>Output circuit:</b>	TTL, RS422 comp., HTL, 1 VSS Sin/Cos
<b>Channels:</b>	AB, ABN and inverted
<b>Max. pulse frequency:</b>	up to 2 MHz
<b>Power supply:</b>	4,75 VDC up to 5,5 VDC, 5 VDC up to 30 VDC, 10 VDC up to 30 VDC
<b>Operating temperature:</b>	-20 °C up to +80 °C, 1 Vss: -10 °C up to +70 °C, optional -40 °C up to +80 °C
<b>Protection rating (EN 60529):</b>	IP54, optional IP55 all around
<b>Further information:</b> <a href="http://www.wachendorff-automation.com">www.wachendorff-automation.com</a>	/wdg100h

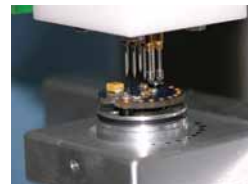
## Your success: being innovative together

- Many years of expert application consultancy
- Sustainable and systematic, ISO certified
- „Made in Germany“, 5-years warranty

Wachendorff Automation, a member of the Wachendorff Group, develops and manufactures industrial-grade and automotive-grade encoders and systems. Developing-accompanying and extensive design tests ensure the reliable and long-lasting

application (as can be proved) in many industrial branches and mobile working machines in the roughest environmental conditions. This guarantees reliable and long-lasting applications under the most exacting on-site conditions. Software-controlled manufacturing ensures the complete traceability of each individual device. More than 750 individual serial solutions are in use around the world.

Wachendorff Product Management and our R&D team look forward to meet your challenges!



**Any Questions?** Just call us at +49 (0) 6722/9965-10, send us an E-Mail to [wdg@wachendorff.de](mailto:wdg@wachendorff.de) or call your local distributor: [www.wachendorff-automation.com/distri](http://www.wachendorff-automation.com/distri)



Wachendorff Automation GmbH & Co. KG  
Industriestrasse 7 • D-65366 Geisenheim

Tel.: +49 (0) 67 22 / 99 65 - 25  
Fax: +49 (0) 67 22 / 99 65 - 70  
E-Mail: [wdg@wachendorff.de](mailto:wdg@wachendorff.de)  
[www.wachendorff-automation.com](http://www.wachendorff-automation.com)



Your distributor: