WACHENDORFF
The Encoder Experts

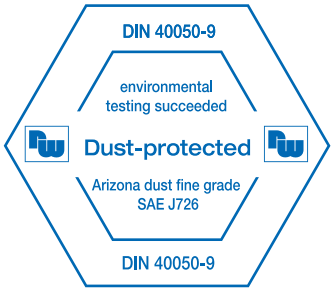
Encoder WDG 145H

Dust-protected according DIN 40050-9

DEVELOPED AND
MADE IN GERMANY
5 YEARS WARRANTY

wachendorff-automation.com/wdg140H

Increase efficiency
Optimise energy yields with encoders
Perfect for use in dusty environmental
Qualified and certified



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IndustrieROBUST

Dust-protected encoders WDG 145H
… Dust test DIN 40050-9 succeeded

Thru-Bore encoder for direct installation on large motor shafts

- Maximum mechanical and electrical safety
- Highly interference-resistant when used with frequency converters
- Meets protection class IP54; optional: full version of protection class IP64
- Full connection protection with 10 VDC up to 30 VDC
- With light reserve warning

www.wachendorff-automation.com/wdg145h

Sealing larger diameters the challenge is the ideal combination of several influencing factors.
The engineers of Wachendorff solved this with the selection of the correct sealing material, the development of an intelligent sealing geometry with appropriate chicanes and lips and the design of a suitable surface finish of the rotating shaft.
After construction, Wachendorff subjects the prototypes to intensive qualification and comprehensive stress tests principally in the company's own environment simulation laboratory and with external testing institutions. For the hollow-shaft encoder WDG145H, the tests were carried out based on DIN 40 050 Part 9 and/or ISO 20653 with Arizona dust (fine grade) SAE J726 conforming with ISO 12103-1 A2 and the test devices passed successfully.

Besides many other possible areas of application, the enhanced encoder WDG145H from Wachendorff Automation can be used in applications on open-air sites anywhere in the world. E.g. with solar trackers this encoder can greatly increase the efficiency of the solar plant because the controller can continuously and precisely reposition the solar panels at the optimum angle to the sun. This is the only way to achieve above-average energy yields. The high protection class prevents unwanted influence on the high-resolution electronics by the often harsh environmental conditions and thus ensures high operational security and efficiency.

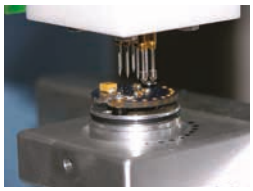
Also lifts that are subject to harsh environmental influences, e.g. in leisure parks or on site, can now run more smoothly with this encoder, can be perfectly controlled in speed and more precisely moved into position.

	Encoder WDG incremental
Type:	WDG 145H
Material:	Aluminium
Resolution:	up to 2,500 PPR
Housing Ø:	145 mm
Shaft Ø:	45, 48, 50, 55, 60, 65, 72 mm
Max. operating speed:	1,600 min-1 (IP64: 500 min-1)
Permitted load of shaft end:	max. 200 N radial, max. 100 N axial
Output circuit:	TTL, RS422 comp., HTL
Channels:	AB, ABN and inverted
Max. pulse frequency:	up to 200 kHz
Power supply:	4.75 VDC up to 5.5 VDC, 10 VDC up to 30 VDC
Operating temperature:	-20 °C up to +80 °C
Protection rating:	IP54, optional full version of protection class IP64
Further information: www.wachendorff-automation.com	/wdg145h

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) 67 22 / 99 65 414, send us an E-Mail to support-wa@wachendorff.de or call your local distributor: **www.wachendorff-automation.com/distri**

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

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

2024

Your distributor: