

# WACHENDORFF

The Encoder Experts



## PROFIBUS Absolute Encoder WDGA with EnDra<sup>®</sup> Technology



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



- Compact design
- Very high shaft loading
- Flexible connectivity
- Class 3 and 4 switchable
- Programmable resolution



**Industrie ROBUST**

# PROFIBUS Absolute Encoder WDGA

## ... with EnDra<sup>®</sup>-Technology

With an overall depth of just 60.7 mm, the WDGA series singleturn and multiturn encoder are the most compact PROFIBUS encoder with bus cover on the market. In this respect they support the progressive miniaturisation in the field of mechanical engineering and are also maintenance and wear-free. It's all thanks to EnDra<sup>®</sup> technology!

The bus cover is designed for cable and connector solutions. There are also models with housing connectors. In this way, the optimum connection method can be put in place for any application. The port can be quickly and simply configured for classes 1 to 4 using the GSD file. Two LEDs for displaying the operating mode and bus monitoring make the start-up easier.



Buscover with terminal block

**EnDra<sup>®</sup>**  
Technology

| WDGA 58A<br><i>bus cover</i> | WDGA 58A<br><i>connector</i> | WDGA 58B<br><i>bus cover</i> | WDGA 58B<br><i>connector</i> | WDGA 58D<br><i>bus cover</i> | WDGA 58D<br><i>connector</i> | WDGA 58E<br><i>bus cover</i> | WDGA 58E<br><i>connector</i> |
|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
|                              |                              |                              |                              |                              |                              |                              |                              |

| Mechanical Data                    |   |             |            |                 |                                |             |                              |             |
|------------------------------------|---|-------------|------------|-----------------|--------------------------------|-------------|------------------------------|-------------|
| <b>Flange type</b>                 | synchro flange  |             |            | clamping flange |                                |             | hollow bore (blind)          |             |
| <b>Shaft Ø</b>                     | 6 mm, 8 mm, 10 mm, 3/8"   |             |            |                 |                                |             | 12 mm                        |             |
| <b>Permissible shaft loading</b>   | radial: 125 N (Ø 6 mm, 8 mm) / 220 N (Ø 10 mm, 3/8");<br>axial: 120 N             |             |            |                 | radial: 400 N;<br>axial: 400 N |             | radial: 80 N;<br>axial: 50 N |             |
| Electrical Data                    |   |             |            |                 |                                |             |                              |             |
| <b>Supply voltage</b>              | 10 VDC up to 32 VDC, max. 100 mA (24 VDC)   |             |            |                 |                                |             |                              |             |
| <b>Power consumption</b>           | max. 2,5 W  |             |            |                 |                                |             |                              |             |
| <b>Resolution</b>                  | Singleturn: max. 14 Bit, Multiturn: max. 39 Bit                                   |             |            |                 |                                |             |                              |             |
| <b>Accuracy</b>                    | Accuracy: < ± 0,35°; Repeat accuracy: < ± 0,20°                                   |             |            |                 |                                |             |                              |             |
| Connection Options                 |   |             |            |                 |                                |             |                              |             |
| <b>Bus cover, PG cable glands</b>  | ●   | ○           | ●          | ○               | ●                              | ○           | ●                            | ○           |
| <b>Bus cover, 3x M12-connector</b> | ●   | ○           | ●          | ○               | ●                              | ○           | ●                            | ○           |
| <b>Connector, 2x M12, 1x M8</b>    | ○   | ●           | ○          | ●               | ○                              | ●           | ○                            | ●           |
| Interface                          |   |             |            |                 |                                |             |                              |             |
| <b>Description</b>                 | PROFIBUS-DPV0/V2; switchable; Class 3, 4; RS485, galvanic isolated; max. 12 MBaud |             |            |                 |                                |             |                              |             |
| <b>Parameter</b>                   | steps per rotation, counts of revolution, preset, scale, counting direction       |             |            |                 |                                |             |                              |             |
| <b>Status</b>                      | 2 colour-duo LEDs as indicator for operating condition and bus status             |             |            |                 |                                |             |                              |             |
| Environmental data                 |   |             |            |                 |                                |             |                              |             |
| <b>Operating temperature</b>       | -40 °C up to + 85 °C  |             |            |                 |                                |             |                              |             |
| <b>Storage temperature</b>         | -40 °C up to + 100 °C   |             |            |                 |                                |             |                              |             |
| <b>Protection class (EN 60529)</b> | IP67, shaft sealed to IP65  |             |            |                 |                                |             |                              |             |
| wachendorff-automation.com         | /wdga58abp  | /wdga58acon | /wdga58bbp | /wdga58bcon     | /wdga58dbp                     | /wdga58dcon | /wdga58ebp                   | /wdga58econ |

**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](http://www.wachendorff-automation.com/distri)

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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



Your distributor: