



# Online Data Sheet

## 인크리멘탈 옵티컬 로터리 엔코더 - Ø58mm

### WDG 58T 시리즈

#### Wachendorff Automation

#### ... systems and encoders

- Complete systems
- Industrial rugged encoders to suit your application
- Standard range and customer versions
- Maximum permissible loads
- 48-hour express production
- Made in Germany
- Worldwide distributor network

## Encoder WDG 58T

[www.wachendorff-automation.com/wdg58t](http://www.wachendorff-automation.com/wdg58t)

**Industrie ROBUST**

## Encoder WDG 58T - Available ex-stock



Available ex-stock



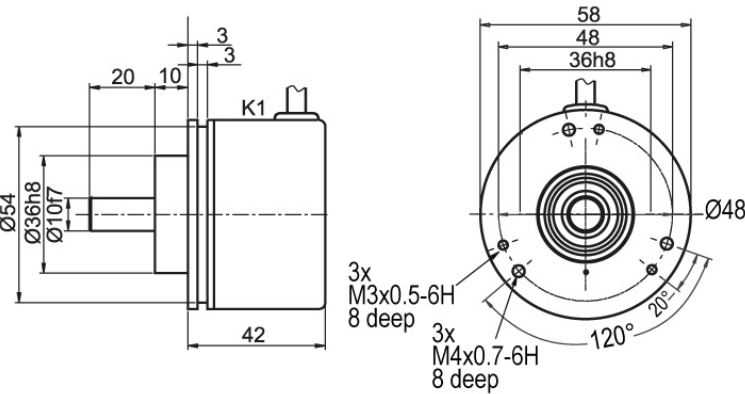
1. 산업 장비의 표준 사이즈 - 58mm  
- 범용 적으로 사용 할 수 있음

2. CE 및 UL 인증 제품

[www.wachendorff-automation.com/wdg58t](http://www.wachendorff-automation.com/wdg58t)

| Resolution                                             |                                                                                                                                                                   |
|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Max. pulses per revolution PPR                         | 360 PPR, 500 PPR, 1024 PPR                                                                                                                                        |
| Mechanical Data                                        |                                                                                                                                                                   |
| Housing                                                |                                                                                                                                                                   |
| Flange                                                 | clamping flange                                                                                                                                                   |
| Flange material                                        | aluminum                                                                                                                                                          |
| Housing cap                                            | aluminum                                                                                                                                                          |
| Housing                                                | Ø 58 mm                                                                                                                                                           |
| Cam mounting                                           | pitch 69 mm                                                                                                                                                       |
| Shaft(s)                                               |                                                                                                                                                                   |
| Shaft material                                         | stainless steel                                                                                                                                                   |
| Starting torque                                        | approx. 1 Ncm at ambient temperature                                                                                                                              |
| Shaft                                                  | Ø 10 mm                                                                                                                                                           |
| Shaft length                                           | L: 20 mm                                                                                                                                                          |
| Max. Permissible shaft loading radial                  | 220 N                                                                                                                                                             |
| Max. Permissible shaft loading axial                   | 120 N                                                                                                                                                             |
| Bearings                                               |                                                                                                                                                                   |
| Bearings type                                          | 2 precision ball bearings                                                                                                                                         |
| Nominal service life                                   | 1 x 10 <sup>9</sup> revs. at 100 % rated shaft load<br>1 x 10 <sup>10</sup> revs. at 40 % rated shaft load<br>1 x 10 <sup>11</sup> revs. at 20 % rated shaft load |
| Max. operating speed                                   | 8000 rpm                                                                                                                                                          |
| Machinery Directive: basic data safety integrity level |                                                                                                                                                                   |
| MTTF <sub>d</sub>                                      | 200 a                                                                                                                                                             |
| Mission time (TM)                                      | 25 a                                                                                                                                                              |
| Nominal service life (L10h)                            | 1 x 10 <sup>11</sup> revs. at 20 % rated shaft load and 8000 rpm                                                                                                  |
| Diagnostic coverage (DC)                               | 0 %                                                                                                                                                               |
| Electrical Data                                        |                                                                                                                                                                   |
| Power supply/Current consumption                       | 5 VDC up to 30 VDC: typ. 70 mA                                                                                                                                    |
| Output circuit                                         | HTL<br>HTL, inv.                                                                                                                                                  |
| Pulse frequency                                        | ≤ 1024 ppr: max. 150 kHz                                                                                                                                          |
| Channels                                               | ABN<br>and inverted signals                                                                                                                                       |
| Load                                                   | max. 40 mA / channel                                                                                                                                              |

| Circuit protection                                                                                                                                  | inverse-polarity protection only                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| Accuracy                                                                                                                                            |                                                                |
| Phase offset                                                                                                                                        | 90° ± max. 7.5 % of the pulse length                           |
| pulse-/pause-ratio                                                                                                                                  | 50 % ± max. 7 %                                                |
| General Data                                                                                                                                        |                                                                |
| Weight                                                                                                                                              | approx. 250 g                                                  |
| Connections                                                                                                                                         | radial cable outlet, 1 m, shield not connected (Order key: K1) |
| Protection rating (EN 60529)                                                                                                                        | IP40, shaft sealed to IP54                                     |
| Operating temperature                                                                                                                               | -10 °C up to +70 °C                                            |
| Storage temperature                                                                                                                                 | -30 °C up to +80 °C                                            |
| More Information                                                                                                                                    |                                                                |
| General technical data and safety instructions<br><a href="http://www.wachendorff-automation.com/gtd">http://www.wachendorff-automation.com/gtd</a> |                                                                |
| Options<br><a href="http://www.wachendorff-automation.com/acc">http://www.wachendorff-automation.com/acc</a>                                        |                                                                |

**Cable connection K1 (IP40) with 1 m cable****Description****ABN inv. poss.****K1** radial, shield not connected (IP40)

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| Assignments           |           |
|-----------------------|-----------|
|                       | <b>K1</b> |
| Circuit               | R30       |
| GND                   | WH        |
| (+) Vcc               | BN        |
| A                     | GN        |
| B                     | YE        |
| N                     | GY        |
| Light reserve warning | -         |
| A inv.                | RD        |
| B inv.                | PK        |
| N inv.                | BU        |
| Shield                | flex      |

| Example Order No. | Type                                       |                  |                |                       |           | Your encoder |
|-------------------|--------------------------------------------|------------------|----------------|-----------------------|-----------|--------------|
| WDG 58T           | WDG 58T                                    |                  |                |                       |           | WDG 58T      |
|                   |                                            |                  |                |                       |           |              |
|                   | Pulses per revolution PPR:                 |                  |                |                       |           |              |
| 500               | 360, 500, 1024<br>Other PPRs on request    |                  |                |                       |           |              |
|                   |                                            |                  |                |                       |           |              |
|                   | Channels:                                  |                  |                |                       |           |              |
| ABN               | ABN                                        |                  |                |                       |           |              |
|                   |                                            |                  |                |                       |           |              |
|                   | Output circuit                             |                  |                |                       |           |              |
| R30               | Resolution PPR                             | Power supply VDC | Output circuit | Light reserve warning | Order key |              |
|                   | 360, 500, 1024                             | 5 - 30           | HTL inverted   | -                     | R30       |              |
|                   |                                            |                  |                |                       |           |              |
|                   | Electrical connections                     |                  |                |                       |           |              |
| K1                | Description                                |                  |                | ABN inv. poss.        | Order key |              |
|                   | Cable: length (2 m standard, WDG 58T: 1 m) |                  |                |                       |           |              |
|                   | radial, shield not connected (IP40)        |                  |                | •                     | K1        |              |

|                           |         |     |     |     |    |  |         |  |  |  |  |  |                     |
|---------------------------|---------|-----|-----|-----|----|--|---------|--|--|--|--|--|---------------------|
| <b>Example Order No.=</b> | WDG 58T | 500 | ABN | R30 | K1 |  | WDG 58T |  |  |  |  |  | <b>Your encoder</b> |
|---------------------------|---------|-----|-----|-----|----|--|---------|--|--|--|--|--|---------------------|



For further information please contact our local distributor.  
Here you find a list of our distributors worldwide.  
[http://www.wachendorff-automation.com/distributors\\_worldwide.html](http://www.wachendorff-automation.com/distributors_worldwide.html)

# CREKEN

주식회사 크레켄

경기도 성남시 중원구 사기막골로 124  
SKn테크노파크 메가동 514호 우편번호:13207

Phone: 031) 608-3200 Fax: 031) 776-2320  
E-Mail: [sales@creken.co.kr](mailto:sales@creken.co.kr)  
[www.creken.co.kr](http://www.creken.co.kr)



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

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

