



## Online Data sheet

### Encoder WDG 58T

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

#### 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 (optical) - Available ex-stock



- Rugged industrial standard encoder
- All-purpose encoder
- Protection to IP40, shaft sealed to IP54
- Highest mechanical safety

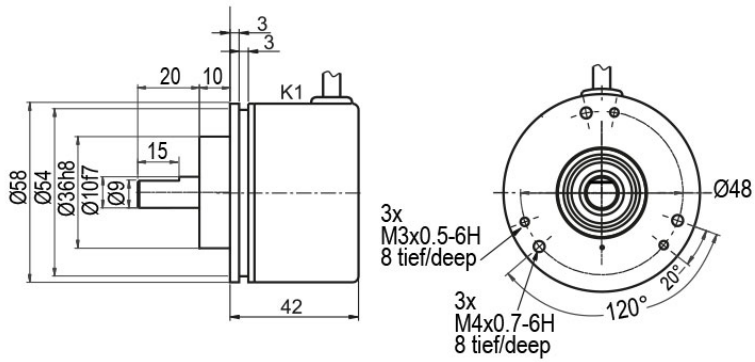
[www.wachendorff-automation.com/wdg58t](http://www.wachendorff-automation.com/wdg58t)

Available ex-stock

Resolution	
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 1 x 10 <sup>10</sup> revs. at 40 % rated shaft load 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 HTL, inv.
Pulse frequency	1024 ppr: max. 150 kHz
Channels	ABN and inverted signals
Load	max. 40 mA / channel
Circuit protection	inverse-polarity protection only

Accuracy	
Phase offset	90° ± max. 7.5 % of the period duration
pulse-/pause-ratio	50 % ± max. 7 %
Environmental data	
ESD (DIN EN 61000-4-2):	8 kV
Burst (DIN EN 61000-4-4):	2 kV
includes EMC:	DIN EN 61000-6-2 DIN EN 61000-6-3
Vibration: (DIN EN 60068-2-6)	50 m/s <sup>2</sup> (10 Hz up to 2000 Hz)
Shock: (DIN EN 60068-2-27)	1000 m/s <sup>2</sup> (6 ms)
Design:	according DIN VDE 0160
Duty information	
Customs tariff number:	90318020
Country of origin:	Germany
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 <a href="http://www.wachendorff-automation.com/gtd">http://www.wachendorff-automation.com/gtd</a>	
Options <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.

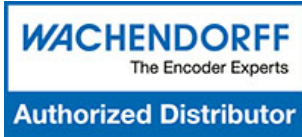
**K1** radial, shield not connected (IP40)

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

Example Order No.	Type					Your encoder
WDG 58T	WDG 58T					WDG 58T
<b>Pulses per revolution PPR:</b>						
500	360, 500, 1024 Other PPRs on request					
<b>Channels:</b>						
ABN	ABN					
<b>Output circuit</b>						
R30	<b>Resolution PPR</b>	<b>Power supply VDC</b>	<b>Output circuit</b>	<b>Light reserve warning</b>	<b>Order key</b>	
	360, 500, 1024	5 - 30	HTL, inv. (TTL/RS422 comp. at 5 VDC)	-	R30	
<b>Electrical connections</b>						
K1	<b>Description</b>			<b>ABN inv. poss.</b>	<b>Order key</b>	
	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>
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For further information please contact our local distributor.  
Here you find a list of our distributors worldwide.  
<https://www.wachendorff-automation.com/contact-sales-en/>

# WACHENDORFF

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