



Online Data sheet

Encoder WDG 58T

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

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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
Nominale service life	1 x 10 ⁹ revs. at 100 % rated shaft load 1 x 10 ¹⁰ revs. at 40 % rated shaft load 1 x 10 ¹¹ revs. at 20 % rated shaft load
Max. operating speed	8000 rpm

Machinery Directive: basic data safety integrity level	
MTTF _d	200 a
Mission time (TM)	25 a
Nominale service life (L10h)	1 x 10 ¹¹ revs. at 20 % rated shaft load and 8000 rpm
Diagnostic coverage (DC)	0 %

Electrical Data	
Power supply VDC	5 - 30 VDC
Current consumption	typ. 70 mA
Signal shape	square-wave
Output circuit	HTL, inv. (TTL/RS422 comp. at 5 VDC)
Channels	AB, ABN, and inverted signals
Output	push-pull
Load	max. 40 mA / channel

Signal level mA	at 20 mA
Signal level H>	H > V _{cc} - 10 % V _{cc}
Signal level L	L < 2.5 VDC
Output frequency	max. 200 kHz
Circuit protection	inverse-polarity protection only
Light reserve warning	no

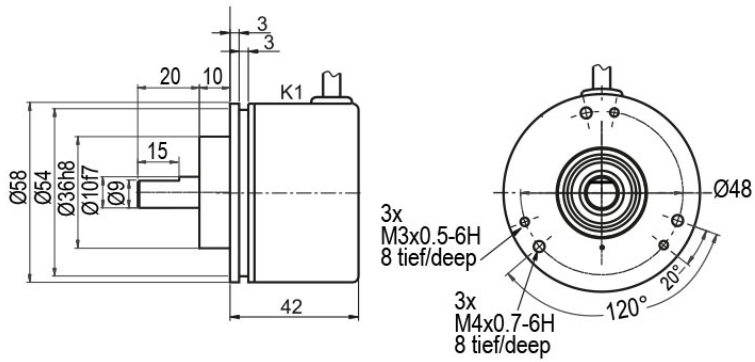
Environmental data	
ESD (DIN EN 61000-4-2):	8 kV
Burst (DIN EN 61000-4-4):	2 kV
includes EMC:	DIN EN 61000-6-2 DIN EN 61000-6-3
Vibration: (DIN EN 60068-2-6)	50 m/s ² (10 Hz up to 2000 Hz)
Shock: (DIN EN 60068-2-27)	1000 m/s ² (6 ms)
Design:	according DIN VDE 0160

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 http://www.wachendorff-automation.com/gtd	
Options http://www.wachendorff-automation.com/acc	

Cable connection K1 (IP40) with 1 m cable



Description

ABN inv. poss.

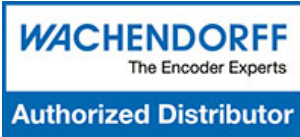
K1 radial, shield not connected (IP40)

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Assignments	
	K1
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:						
360	360, 500, 1024					
Channels:						
ABN	ABN					ABN
Output circuit						
R30	Resolution PPR	Power supply VDC	Output circuit	Light reserve warning	Order key	R30
	360, 500, 1024	5 - 30	HTL, inv. (TTL/RS422 comp. at 5 VDC)	-	R30	
Electrical connections						
K1	Description			ABN inv. poss.	Order key	K1
	Cable: length (2 m standard, WDG 58T: 1 m) radial, shield not connected (IP40)			•	K1	
Options						
Description			Order key			

Example Order No.=	WDG 58T	360	ABN	R30	K1		WDG 58T		ABN	R30	K1		Your encoder
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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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