



Online Data Sheet

Encoder WDG 58T

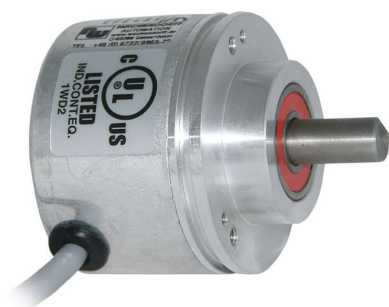
www.wachendorff-automation.com/wdg58t

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

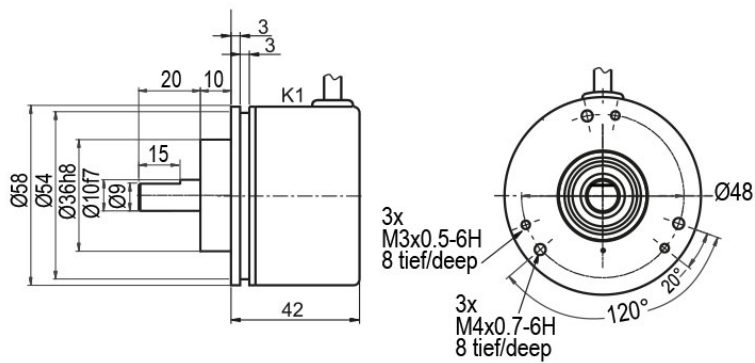
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Available ex-stock

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
Nominal 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
Nominal service life (L10h)	1 x 10 ¹¹ 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 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)	•

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:					
500	360, 500, 1024 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, inv. (TTL/RS422 comp. at 5 VDC)	-	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	

Example Order No.=	WDG 58T	500	ABN	R30	K1		WDG 58T						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/>



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