

Encoder WDGA 58D Universal IE (cov)

www.wachendorff-automation.com/wdga58duie

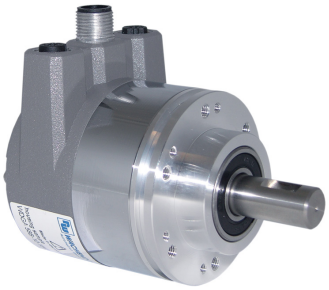
Wachendorff Automation

... 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

IndustrieROBUST

Encoder WDGA 58D absolute Universal IE magnetic, with bus cover and with EnDra®- Technology



EnDra® Technologie

Universal-IE Industrial Ethernet

Heavy duty

- EnDra®: maintenance-free and environmentally friendly
- Universal IE Single-turn/Multi-turn
- Compact design with bus cover
- Single-turn/Multi-turn (max. 16 bit/43 bit)
- Forward-looking
- 2 colour-duo LED´s as indicator for operating condition and bus status and 2 L/A LED´s
- High shaft load up to 500 N radial, 500 N axial

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Mechanical Data	
Housing	
Flange	clamping flange
Flange material	aluminum
Housing cap	steel case chrome-plated, magnetic shielding
Connection cover	die cast aluminum, powder coated
Housing	Ø 58 mm

Shaft(s)	
Shaft material	stainless steel
Starting torque	approx. 1 Ncm at ambient temperature

Shaft	Ø 12 mm
Shaft length	L: 25 mm
Max. Permissible shaft loading radial	500 N
Max. Permissible shaft loading axial	500 N

Bearings	
Bearings type	3 precision ball bearings
Nominale service life	2 x 10'8 revs. at 100 % rated shaft load 3.5 x 10'9 revs. at 40 % rated shaft load 2.5 x 10'10 revs. at 20 % rated shaft load
Max. operating speed	8000 rpm

Machinery Directive: basic data safety integrity level	
$MTTF_d$	300 a
Mission time (TM)	20 a
Nominale service life (L10h)	2.5 x 10'10 revs. at 20 % rated shaft load and 8000 rpm
Diagnostic coverage (DC)	0 %

Electrical Data	
Power supply/Current consumption	10 VDC up to 32 VDC: typ. 125 mA
Power consumption	typ. 3 W

Sensor data	
Single-turn technology	innovativ hall sensor technology
Single-turn resolution	up to 65,536 steps/360° (16 bit)
Single-turn accuracy	± 0.0878° (≤ 12 bit)
Single-turn repeat accuracy	± 0.0878° (≤ 12 bit)
Internal cycle time	50 µs
Multi-turn technology	patented EnDra® technology no battery and no gear.
Multi-turn resolution	43 bit

Integrated web server:	
Configurable	Selectable: PROFINET-IO, EtherNet/IP, EtherCAT IP addres Subnet mask Gateway address
Readable	Encoder parameters
Update	Firmware

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)	200 m/s^2 (10 Hz up to 1000 Hz)
Shock: (DIN EN 60068-2-27)	5000 m/s^2 (6 ms)
Design:	according DIN VDE 0160
Turn on time:	<1,5 s

Duty information	
Customs tariff number:	90318020
Country of origin:	Germany

Interface	
Interface:	**Universal Industrial Ethernet**
Protocol:	selectable (PROFINET-IO, EtherCAT, EtherNET/IP)
Data Transfer:	100BASE-TX
Function:	Multiturn
Code:	binary, CW default, programable
Features, physical layer, cycle times, functions, parameters, objects and characteristics	Details can be found at the respective products with the individual interface.
Diagnostics: (LED)	Traffic and connection management: L/A1: Port 1 L/A2: Port 2

Status LED:	STAT, MOD: status of encoder and bus

General Data	
Weight	approx. 700 g
Connections	bus cover
Protection rating (EN 60529)	Housing: IP65, IP67; shaft sealed: IP65
Operating temperature	-40 °C up to +85 °C
Storage temperature	-40 °C up to +100 °C

More Information
General technical data and safety instructions **http://www.wachendorff-automation.com/gtd**
Options **http://www.wachendorff-automation.com/acc**

Example Order No.	Type		Your encoder
WDGA 58D	WDGA 58D		WDGA 58D
	Shaft	**Order key**	
12	Ø 12 mm	12	
	Single-turn Resolution	**Order key**	
16	Single-turn resolution 16 bit	16	
	Multi-turn Resolution	**Order key**	
43	Multi-turn 43 bit	43	
	Data protocol	**Order key**	
IE	Universal IE (with bus cover)	IE	IE
	Software	**Order key**	
U	up to date release	U	U
	Code	**Order key**	
B	binary	B	B
	Power supply	**Order key**	
0	10 V up to 32 V (standard)	0	0
	Galvanic isolation	**Order key**	
1	yes	1	1
	Electrical connections	**Order key**	

Example Order No.	WDGA 58D	12	16	43	IE	U	B	0	1		
	WDGA 58D				IE	U	B	0	1		**Your encoder**



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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