



Online Data Sheet

엠펬루트 CAN 통신 마그네틱 로터리 엔코더 WDGA 58V 시리즈

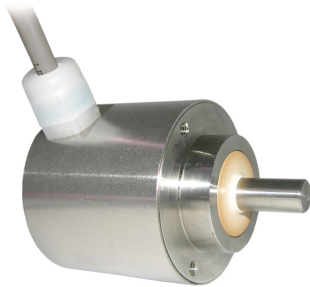
Wachendorff Automation ... systems and encoders

- 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 WDGA 58V CANopen
www.wachendorff-automation.com/wdga58vcan

Industrie ROBUST

Encoder WDGA 58V absolute CANopen magnetic, with EnDra®-Technology



EnDra®
Technologie

CANopen®

Especially for food and beverage industry
Acid- and alkaline resistance

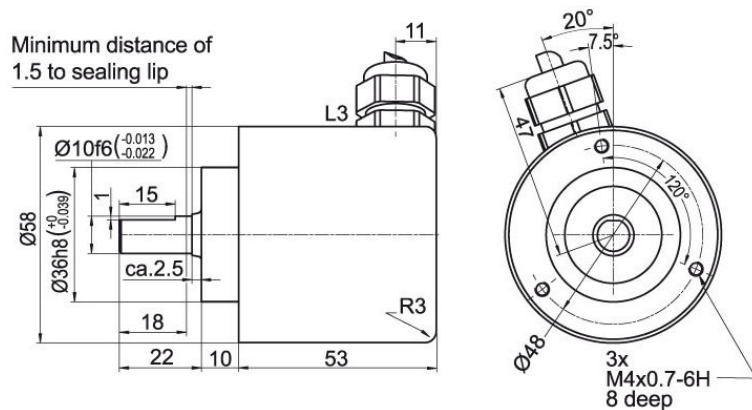
1. **CANopen** 프로토콜 절대형 로터리 엔코더
 - 통신 프로파일 **CiA301**
 - 디바이스 프로파일 **CiA406 V3.2 class C2**
2. **EnDra®** 기술을 활용한 멀티턴 분해능
 - 최대 **39bit** 대응
 - 위치 기억을 위한 배터리, 기어 불필요
3. **EHEDG**(European Hygienic Engineering & Design Group)
 - 유럽 식품 위생 인증 제품
 - 제약 및 식품 공정의 정밀 기계사용
4. **Ecolab**의 세척 및 소독 저항에 대한 인증
 - **Acid&alkaline** 저항성
5. **IEC 60068-2-11** 규격의 염수 분무 시험 통과
6. **PTFE**(테프론) **Sealing**으로 완전 방수
 - **IP69K** 보호 등급
 - 고압 / 스팀 클리닝 대응

Mechanical Data	
Housing	
Flange	clamping flange
Flange material	stainless steel, V4A
Housing cap	stainless steel, V4A
Housing	Ø 58 mm
Shaft(s)	
Shaft material	stainless steel, V4A
Starting torque	approx. 1 Ncm at ambient temperature
Shaft	Ø 10 mm
Shaft length	L: 18 mm
Max. Permissible shaft loading radial	100 N
Max. Permissible shaft loading axial	100 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	3600 rpm
Machinery Directive: basic data safety integrity level	
MTTF _d	1000 a
Mission time (TM)	20 a
Nominal service life (L10h)	1 x 10 ¹¹ revs. at 20 % rated shaft load and 3600 rpm
Diagnostic coverage (DC)	0 %
Electrical Data	
Power supply/Current consumption	10 VDC up to 32 VDC: typ. 50 mA
Power consumption	max. 0.5 W
Sensor data	
Single-turn technology	innovative hall sensor technology
Single-turn resolution	16,384 steps/360° (14 bit)
Single-turn accuracy	< ±0.35°
Single-turn repeat accuracy	< ±0.20°
Internal cycle time	≤ 600 µs

Multi-turn technology	patented EnDra® technology no battery and no gear.
Multi-turn resolution	up to 262,144 revolutions (18 bit) with high precision value up to 39 bit.
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
Turn on time:	<1,5 s
Interface	
Interface:	CAN
Protocol:	CANopen • Communication profil CiA 301 • Device Profile for encoder CiA 406 V3.2 class C2
Node number:	1 up to 127 (default 127)
Baud rate:	10 kBaud up to 1 MBaud with automatic bit rate detection.
Advice:	The standard settings as well as any customization in the software can be changed via LSS (CiA 305) and the SDO protocol, e. g. PDOs, Scaling, Heartbeat, Node-ID, Baud rate, etc.
Programmable CAN transmission modes:	Synchronous mode: when a synchronisation telegram (SYNC) is received from another bus node, PDOs are transmitted independently. Asynchronous mode: a PDO message is triggered by an internal event. (e.g. change of measured valued, internal timer, etc.)

General Data	
Weight	approx. 600 g
Connections	cable outlet (TPE)
Protection rating (EN 60529)	IP67 all around and IP69K. Resistance to salt mist (IEC 60068-2-11) after 672 hours.
Operating temperature	-20 °C up to +80 °C
Storage temperature	-20 °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 L3 with 2 m cable

Description

L3 radial, shield connected to encoder housing

Assignments	
(+) Vcc	BN
GND	OG
CANHigh	GN
CANLow	YE
CANGND shield	shield

Example Order No.	Type	Your encoder	
WDGA 58V	WDGA 58V	WDGA 58V	
	Shaft	Order key	
10	Ø 10 mm	10	
	Single-turn Resolution	Order key	
12	Single-turn resolution 1 bit up to 14 bit: (e. G. 12 bit)	12	
	Multi-turn Resolution	Order key	
18	Multi-turn resolution: (examples) 18 bit = 18 39 bit = 39 no Multiturn = 00	18	
	Data protocol	Order key	
CO	CANopen	CO	
	Software	Order key	
A	up to date release	A	
	Code	Order key	
B	binary	B	
	Power supply	Order key	
0	10 V up to 32 V (standard)	0	
	Galvanic isolation	Order key	
0	no	0	
	Electrical connections	Order key	
L3	Cable:		
	radial, shield connected to encoder housing	L3	

Example Order No.	WDGA 58V	10	12	18	CO	A	B	0	0	L3
--------------------------	----------	----	----	----	----	---	---	---	---	----

WDGA 58V										Example Order No.
----------	--	--	--	--	--	--	--	--	--	--------------------------



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

CREKEN

주식 회사 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
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
www.wachendorff-automation.de

