

# Absolute-Encoder CMS582 - PROFINET IO

Ref.: K-CMS58\_2-PN-1

24.06.2021

0101020058010302

## Advantages

- Fast start-up, FSU
- Isochronous applications, IRT
- Media-Redundancy Protocol, MRP
- PNO Encoder Profile, CL 3/4
- Preset "on the fly"



## General Data

Nominal voltage	
- Specific value	24 VDC
- Limit values, min/max	10/30 VDC
Nominal current, typically	
- Specific value	120 mA
- Condition	unloaded
Supply	
- In case of UL / CSA approval	according to NEC Class 2
Device design	
- Type	Single-/Multi-Turn
Total resolution	$\leq 31$ Bit
Number of steps per revolution	$\leq 8192$
Number of revolutions	$\leq 256000$
Accuracy	$\pm 0.5^\circ$
PROFINET IO - Interface	
- PROFINET IO – Device	IEC 61158, IEC 61784-1
- Physical Layer	Fast Ethernet, ISO/IEC 8802-3
- PROFINET-Specification	V2.3
- Conformance Class	B, C
- Real-Time-Classes	Class 1, 2 (RT), Class 3 (IRT)
- Media Redundancy Protocol, MRP	yes, is supported
- PNO Encoder-Profile	Class 3 and 4, V4.1

Subject to change.

TR-Electronic GmbH  
 Eglisshalde 6  
 78647 Trossingen  
 Tel. +49 (0) 7425 228-0  
 info@tr-electronic.de  
[www.tr-electronic.de](http://www.tr-electronic.de)

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## General Data continuation

- Fast Start-Up (FSU)	3-times faster start-up
SSI - Interface	
- Equipment	Optional interface
- SSI-Clock input	Optocoupler
- SSI-Data output	RS-422, 2-wire
- SSI-Clock frequency	80...1000 kHz
- SSI-Mono time, typically	4...999 $\mu$ s
- Output code	Binär, Gray, Gray clipped
- Number of data bits	1...64
- Type of parametrization	programmable
Transmission rate	
- Specific value	100 MBit/s
Parameter/Function, changeable	Addressing
	Adjustment - Parameter
	Scaling parameter
	Counting direction
	Velocity parameter
Type of parametrization	programmable
Programming - Tool	Fieldbus-Device
Maximum Speed, mechanically	$\leq$ 12000 1/min
Shaft load, axial/radial	Own mass
Bearing life time	$\geq$ 3.9E+10 revolutions
Bearing life time - Parameter	
- Speed	6000 1/min
- Operating temperature	60 °C
Shaft type	
- Shaft diameter [mm]	8
- Shaft diameter [mm]	10
- Shaft diameter [mm]	11
- Shaft diameter [mm]	12
- Shaft diameter [mm]	14
- Shaft diameter [mm]	15
- Shaft diameter ["]	1/4
- Shaft diameter ["]	3/8
- Shaft diameter ["]	1/2
Angular acceleration	$\leq$ 10E+4 rad/s <sup>2</sup>
Moment of inertia, typically	1.3E-6 kg m <sup>2</sup>
Start-up torque, 20 °C	2 Ncm

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## General Data continuation

Concentricity tolerance	± 0.3 mm (static, radial)
Mass, typically	0.25...0.35 kg

## Environmental conditions

Vibration	DIN EN 60068-2-6
- Specific value	≤ 100 m/s <sup>2</sup>
- Sine	50...2000 Hz
Shock	DIN EN 60068-2-27
- Specific value	≤ 1000 m/s <sup>2</sup>
- Half sine	11 ms
Immunity to disturbance	DIN EN 61000-6-2
Transient emissions	DIN EN 61000-6-3
Working temperature	
- Standard	-20...+75 °C
- Optional	-40...+85 °C;
Storage temperature, dry	-30...+85 °C
Relative humidity	98 %, non condensing
Protection class	
- Standard	IP65
Resistance	
- against salt (seawater)	DIN EN IEC 60068-2-52
- Test method	Test method 1
- excluded are	Attachment parts

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# Absolute-Encoder CMS582 - PROFINET IO

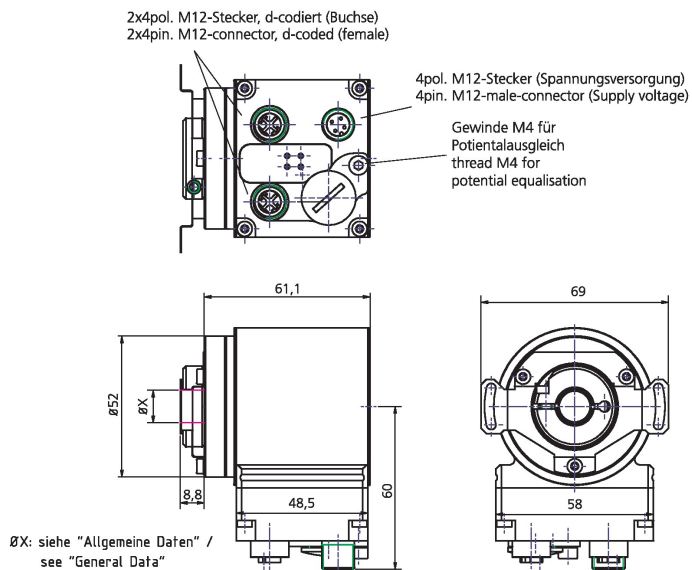
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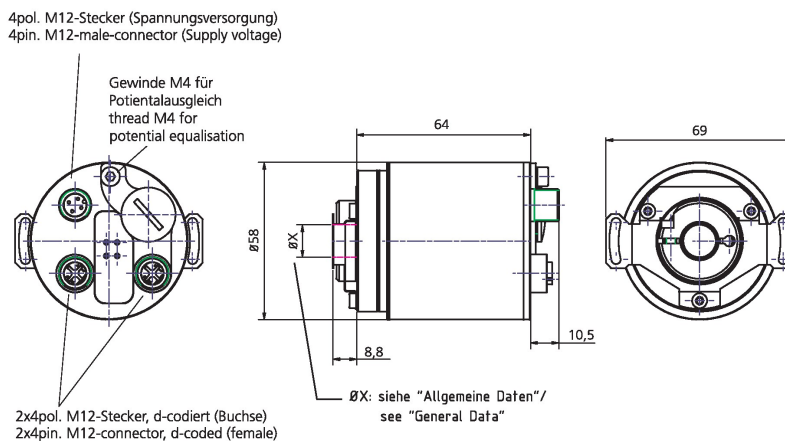
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## Dimensional drawing

### Radial



### Axial



Fehlende Abmaße, siehe Art.-Nr. bezogene Zeichnung /  
Missing dimensions, see drawing related to the order number

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### Suggested products

CMS582M*8192/4096 EPN DMS 10H7 KRF 3xM12 axial	CMS582M-00001
CMS582M*8192/4096 EPN DMS 15H7 KRF 3xM12 radial	CMS582M-00004
CMS582M*8192/4096 EPN DMS 15H7 KRF 3xM12 axial	CMS582M-00010
CMS582M*8192/4096 EPN DMS 12H7 KRF 3xM12 axial	CMS582M-00011
CMS582M*8192/4096 EPN DMS 12H7 KRF 3xM12 radial	CMS582M-00014
CMS582M*8192/4096 EPN DMS 10H7 KRF 3xM12 radial	CMS582M-00015
CMS582M*8192/4096 EPN DMS 14H7 KRF 3xM12 radial	CMS582M-00017
CMS582M*4096/4096 EPN DMS 8H7 KRF 3xM12 axial	CMS582M-00019
CMS582M*8192/4096 EPN DMS 12H7 KRF	CMS582M-00021

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