

CEH582M*8192/4096 EPN DMS 12H7 KRF

3xM12 radial



Stock photo



Order-#: CEH582M-00004

3.1.2024 / 010102058202030202

Advantages

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

Technical data for CEH582M-00004

NO.OF STEPS/REV	8.192,000
NO. OF REVOLUTIONS	4.096,000
PARAMETERIZABLE	VIA INTERFACE
INTERFACE	PROFINET IO
CODE	BINARY
SUPPLY VOLTAGE	10-30V
CONNECTOR TYPE	1x M12 04-PIN A-CODE MALE
	2x M12 04-PIN D-CODE FEMALE
CONNECTOR-POSITION	RADIAL
FLANGE TYPE	DMS 2 FLÜGEL TEILKREIS 63
	DREHMOMENTSTÜTZE (DMS)
SHAFT EXECUTION	(H) Hollow shaft
SHAFT TYPE	D12H7

Subject to change.

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Technical data for CEH582M-00004 continuation

OPERATING TEMPERATURE	-20°C... +75°C
PROTECTION Class	IP54
MTTFd [y] (T=45°C, DC=0) >=	100
OPTIONS ENC	CLAMPING RING FRONT SIDE
PINOUT NO.	TR-ECE-TI-DGB-0306
DRAWING NO.	04-CEH582M-M0129
AL:	N
ECCN:	N
UL-APPROVALS	USA+CANADA

General data for K-CEH58_2-PN-1

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	<= 33 Bit
Number of steps per revolution	<= 32768
Number of revolutions	<= 256000
Output capacity	<= 30 Bit
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/V4.2
- Fast Start-Up (FSU)	3-times faster start-up
SSI - Interface	
- Equipment	Optional interface
- SSI-Clock input	Optocoupler

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General data for K-CEH58_2-PN-1 continuation

- SSI-Data output	RS-422, 2-wire
- SSI-Clock frequency	80...1000 kHz
- SSI-Mono time, typically	4...999 µs
- Output code	Binär, Gray, Gray clipped
- Number of data bits	1...64
- Type of parametrization	programmable
Incremental - Interface	
- Equipment	Optional interface
- Signal form	Square wave
- Incremental signals, square	K1± K2± K0±
- Impulses, square wave	1...36000
- Output driver, TTL	RS-422, 5 VDC
- Output driver, HTL	Push-Pull, Supply Voltage
- Type of parametrization	programmable
Transmission rate	
- Specific value	100 MBit/s
Preset writing cycles	>= 1 000 000
Parameter/Function, changeable	Addressing
	Adjustment - Parameter
	Scaling parameter
	Counting direction
	Velocity parameter
Type of parametrization	programmable
Programming - Tool	Fieldbus-Device
Maximum Speed, mechanically	<= 6000 1/min
Shaft load, axial/radial	Own mass
Bearing life time	>= 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

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General data for K-CEH58_2-PN-1 continuation

- Shaft diameter ["]	3/8
Angular acceleration	$\leq 10E+4 \text{ rad/s}^2$
Moment of inertia, typically	$2.5E-6 \text{ kg m}^2$
Start-up torque, 20 °C	3.7 Ncm
Circular runout	$\pm 0.3 \text{ mm}$ (static, radial)
Mass, typically	0.3 kg

Environmental data

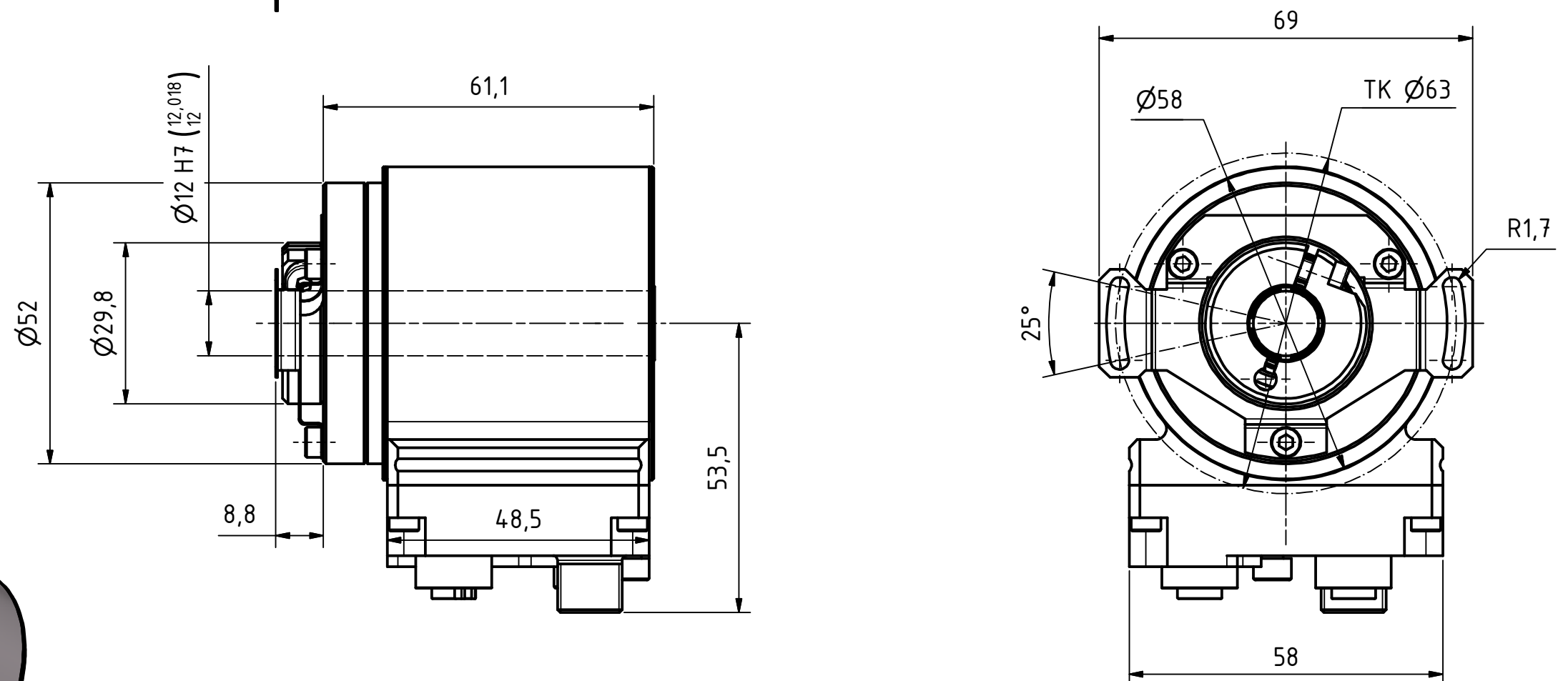
Vibration	DIN EN 60068-2-6
- Specific value	$\leq 100 \text{ m/s}^2$
- Sine	50...2000 Hz
Shock	DIN EN 60068-2-27
- Specific value	$\leq 1000 \text{ m/s}^2$
- Half sine	11 ms
Immunity to disturbance	DIN EN 61000-6-2
Transient emissions	DIN EN 61000-6-3
Working temperature	
- Standard	-20...+75 °C
- Optional	-40...+85 °C;
Storage temperature, dry	-30...+85 °C
Relative humidity	98 %, non condensing
Protection class	
- Standard	IP54
Resistance	
- against salt (seawater)	DIN EN IEC 60068-2-52
- Test method	Test method 1
- excluded are	Attachment parts

Subject to change.

Alle nicht tolerierten Maße sind Richtwerte. [All non-tolerated dimensions are guide values.]
Technische Änderungen grundsätzlich vorbehalten. [We reserve the right to make technical changes.]

M12-Stecker 4pol. A-kodiert
[M12-male 4pin. A-coded]

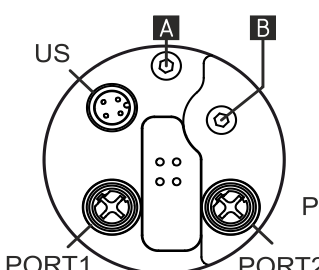
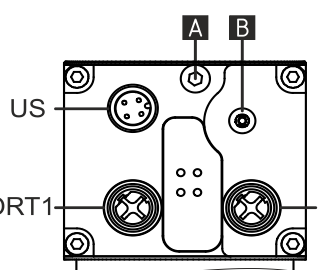
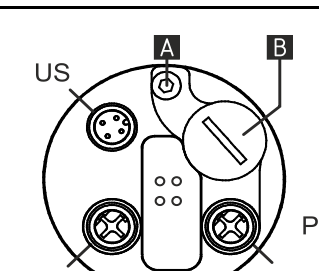
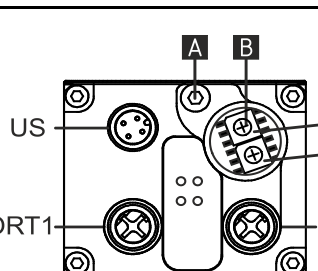
M4 für Potentialausgleich
[M4 for potential equalisation]

Reset-Taste
[reset-button]

Tolerierung [Tolerancing] ISO 8015		alle Maße in mm [all dimensions in mm]		 Maßstab [Scale] 1 : 1		DIN A3	
E-Mail: info@tr-electronic.de Support: http://tr-e.info/01		CAD: STEP		Artikel-Nr. und Steckerbelegung: siehe Datenblatt [Article-No. and pin assignment: see data sheet]			
				Datum	Name	Bezeichnung [Designation]: CEH-582-M, Ø12H7	
			Erst.	16.02.2023	FLAIG		
			Bearb.	16.02.2023	FLAIG		
			Gepr.	20.02.2023	NEMECZ		
			Norm				
				 TR Electronic GmbH Eglishalde 6 D-78647 Trossingen Tel. +49 7425 228-0 www.tr-electronic.de		Zeichnung-Nr. [Drawing-No.]: 04-CEH582M-M0129	
1	Neuzeichn. EPN mit Resetaste	16.02.2023	FLA				
Zust.	Änderungen	Datum	Name			Dok.Art. IDW Teil-Dok. 000 Dok.Vs. 00 1/1 Bl.	

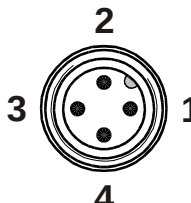
Steckerbelegung / Pin assignment

Baureihe 582 / 802 / 1102 PROFINET

	axialer Steckerabgang / axial connector outlet	radialer Steckerabgang / radial connector outlet	Netzwerkparameter zurücksetzen / Reset Network Parameters
Taster / Button			- Verschlusschraube entfernen / Remove sealing screw - Taster ≥ 3 sek. betätigen / Press button ≥ 3 sec. -> LED2 grün / green 2 Hz
Drehhalter / Rotary switch			- Verschlusschraube entfernen / Remove sealing screw - SW1 = 0, SW2 = 0 - warten / wait 3s - SW2 = 5, SW1 = 2 - warten / wait 3s -> LED2 grün / green 2 Hz - SW1 = 0, SW2 = 0

A Potentialausgleich / *Potential equalisation*

B Option: Rückstellung der Netzparameter / *Option: Resetting of the network parameters*

US	Flanschstecker / <i>Male socket</i> (M12x1-4 pol. A-coded)			
1	10 – 30 V DC	Encoder-Versorgungsspannung / <i>Encoder-Supply Voltage</i>	Steckseite <i>Mating Face</i>	
2	-	N.C.		
3	0 V	Encoder-Versorgungsspannung / <i>Encoder-Supply Voltage</i>		
4	-	N.C.		

PORT 1	Flanschdose / <i>Female socket</i> (M12x1-4 pol. D-coded)			
1	TxD+	Sendedaten +	<i>Transmission Data +</i>	Steckseite <i>Mating Face</i>
2	RxD+	Empfangsdaten +	<i>Receive Data +</i>	
3	TxD-	Sendedaten -	<i>Transmission Data -</i>	
4	RxD-	Empfangsdaten -	<i>Receive Data -</i>	

PORT 2	Flanschdose / <i>Female socket</i> (M12x1-4 pol. D-coded)			
1	TxD+	Sendedaten +	<i>Transmission Data +</i>	Steckseite <i>Mating Face</i>
2	RxD+	Empfangsdaten +	<i>Receive Data +</i>	
3	TxD-	Sendedaten -	<i>Transmission Data -</i>	
4	RxD-	Empfangsdaten -	<i>Receive Data -</i>	

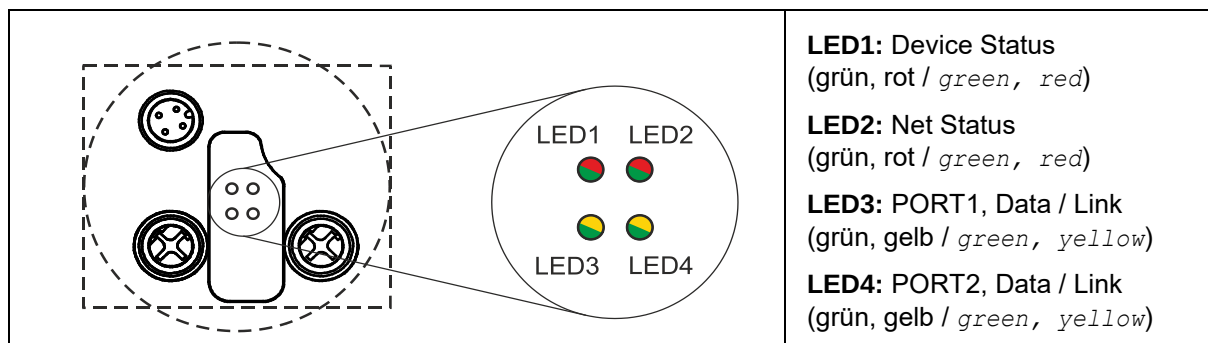
Steckerbelegung / Pin assignment



Die Schirmung ist großflächig auf das Gegensteckergehäuse aufzulegen!
Empfehlung: Potentialausgleich [A] großflächig mit dem Erdungsanschluss verbinden. /

*The shielding is to be connected with large surface on the mating connector housing!
Recommendation: Connect the potential equalisation [A] to the grounding connection across a sufficiently sized surface.*

Status-LEDs

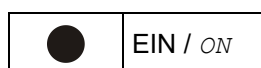


LED1: Device Status
(grün, rot / green, red)

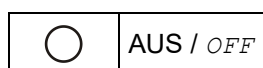
LED2: Net Status
(grün, rot / green, red)

LED3: PORT1, Data / Link
(grün, gelb / green, yellow)

LED4: PORT2, Data / Link
(grün, gelb / green, yellow)



EIN / ON



AUS / OFF



BLINKEND / FLASHING

LED1	DEV - Device-Status LED
	Spannungsversorgung fehlt; Hardware defekt / <i>Voltage supply absent, Hardware defective</i>
	Mess-System defekt; falsche Positionsausgabe; Speicherfehler; Presetwert außerhalb Bereich / <i>Measuring system defective; wrong Position output; Memory error; Preset value out of range</i>
	Normalbetrieb; Datenaustausch / <i>Normal operation; Data exchange</i>

LED2	NET - Net-Status LED
	Spannungsversorgung fehlt; Hardware defekt / <i>Voltage supply absent, Hardware defective</i>
	keine Verbindung zu einem IO-Controller; kein Datenaustausch / <i>No connection to a IO controller; no data exchange</i>
	Parametrierungsfehler; ungültige Konfigurationsparameter; kein Datenaustausch; Master-Lebenszeichenfehler / <i>Parameterisation fault; invalid configuration parameters; no data exchange; Master Sign-Of-Life failure</i>
	Datenaustausch / <i>Data exchange</i>

LED3 / LED4	PORT1 / PORT2 - Link/Data LEDs
	keine Ethernet-Verbindung hergestellt / <i>No ethernet connection established</i>
	Ethernet-Verbindung hergestellt / <i>Ethernet connection established</i>
	Datenaustausch aktiv / <i>data exchange active</i>