Absolute rotary Encoder

CDS582M*8192/65536 EPN NTS 8H7 + FS2

Order No.:CDS582M-00066
16.5.2023 / 010102158201020203

Technical data

STANDARD	EN 61508
STANDARD	EN 61800-5-2
STANDARD	EN 62061 / EN ISO 13849
STANDARD	IEC 61800-5-3
SAFETY	CDS582MD+FS02 EPN SIL2/PLd
NO.OF STEPS/REV	8.192,000
NO. OF REVOLUTIONS	65.536,000
SHAFT EXECUTION	(S) Blind shaft
FLANGE TYPE	SLOT FOR PIN D4
SHAFT TYPE	8H7 BLIND SHAFT
SUPPLY VOLTAGE	10-30VDC
POWER DISSIPATION	< 3W
PROTECTION Class	IP65
OPERATING TEMPERATURE	-40+85°C
OPTIONS ENC	CONFORMANCE CLASS C
OPTIONS ENC	IEC 61158 / IEC 61784-1
OPTIONS ENC	Legacy-Profil
OPTIONS ENC	MOMENT SUPPORT PIN/GROOVE
OPTIONS ENC	PN Spec. 2.3
OPTIONS ENC	PNO-PROFILE
OPTIONS ENC	PRESET VIA BUS
OPTIONS ENC	PROFIsafe-Profile V2.4
OPTIONS ENC	PROFIsafe-Profile V2.6.1
OPTIONS ENC	TR-Profil
OPTIONS ENC	VELOCITY
INTERFACE	PROFINET/PROFISAFE
CONNECTOR TYPE	1X4P.M12-CONNECTOR (A-COD)
CONNECTOR TYPE	2X4P.M12-FEMALE (D-COD)
CONNECTOR-POSITION	AXIAL
PINOUT NO.	TR-ECE-TI-DGB-0323
DRAWING NO.	04-CDS582M-M0009
VERSIONNO	000
MATING PLUG	NO
DOCUMENTATION NO	DOKUMENTE
AL:	N
ECCN:	N
UL-APPROVALS	USA+CANADA

GL	Wellenausführung glatt / shaft type cylindrical
FL	Wellenausführung mit Fläche / shaft type with flat surface
N	Wellenausführung mit Nut / shaft type with slot
Hohlw	Hohlwelle / hollow shaft
Klemme	mit Klemmring / with clamping ring
Grundw	Grundwelle / fundamental shaft
SLG	Seillängengeber / cable retractor
ZB	Zentrierbund / centre ring
Tachofl	Tachoflansch / tachometer flange
DAG	DAG-Schutzgehäuse / DAG protective housing
TK	Teilkreis / pitch circle

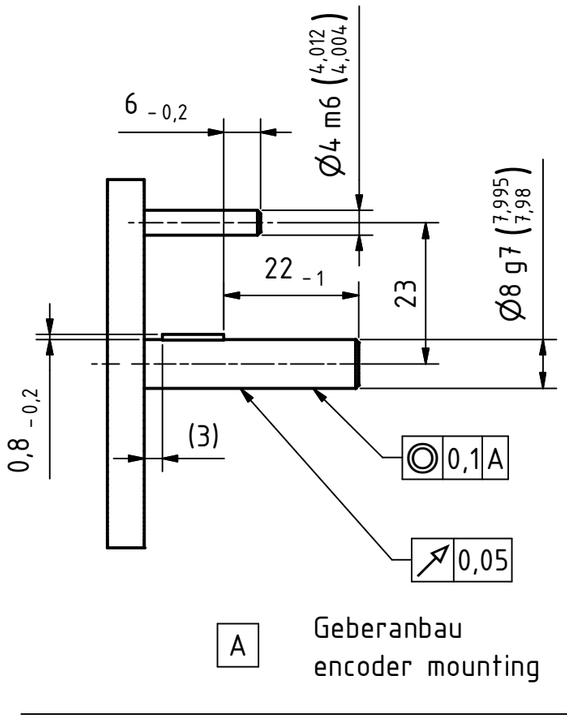
Subject to change.

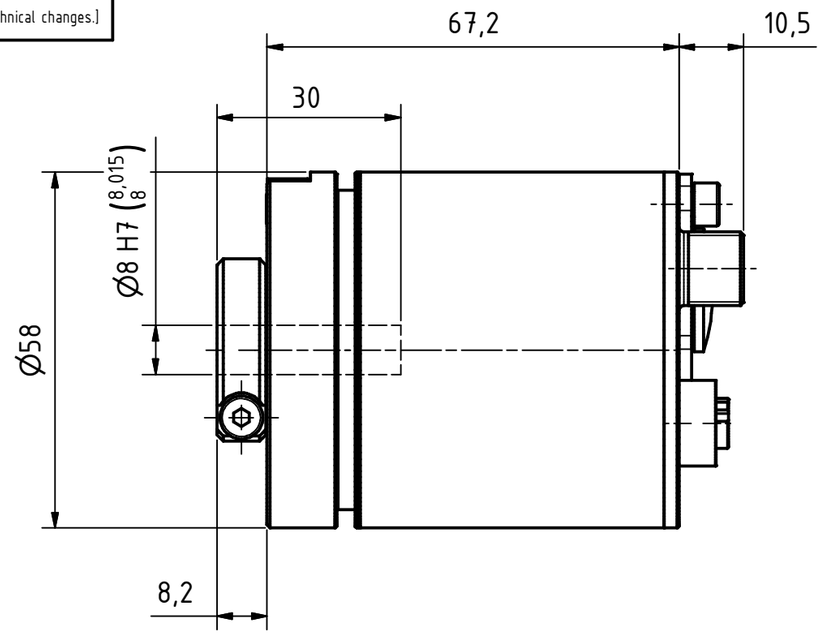
TR-Electronic GmbH
Eglishalde 6
78647 Trossingen
Tel. +49 (0) 7425 228-0
info@tr-electronic.de
www.tr-electronic.de

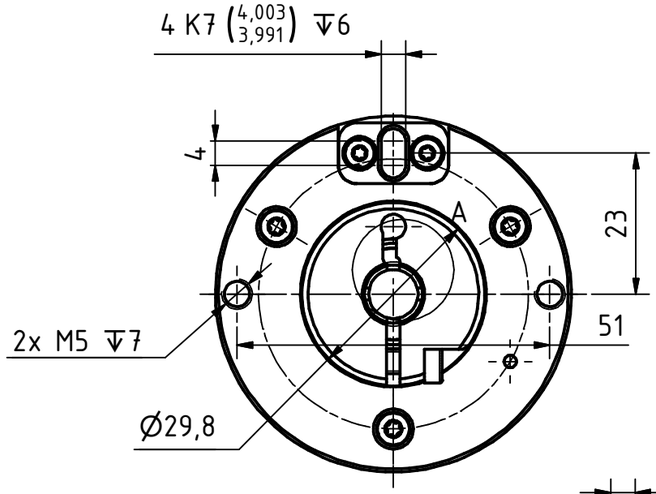
Alle nicht tolerierten Maße sind Richtwerte. [All non-tolerated dimensions are guide values.]
Technische Änderungen grundsätzlich vorbehalten. [We reserve the right to make technical changes.]

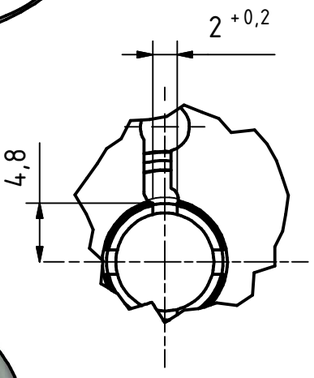
Anforderung an Kundenwelle
[requirements for the customer shaft]

Passfeder [feather key]
DIN 6885-A-2x2x10

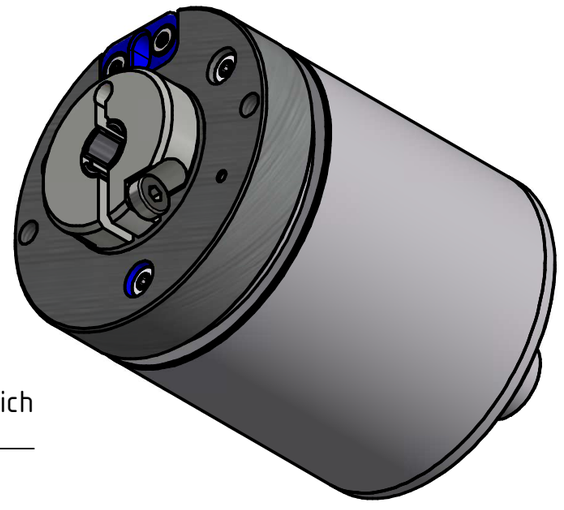


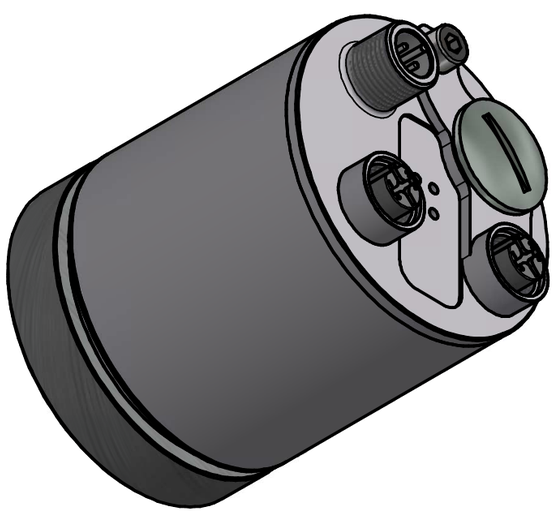




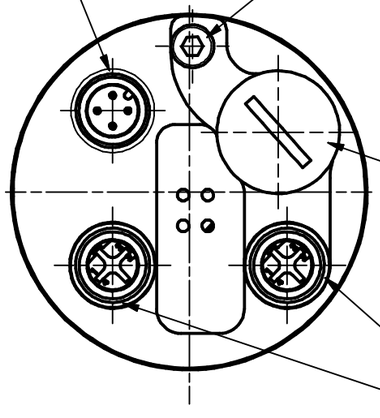


A (2 : 1)





Isometrie (1 : 1)



Tolerierung [Toleranzing] ISO 8015				alle Maße in mm [all dimensions in mm]		
E-Mail: info@tr-electronic.de Support: http://tr-e.info/01				CAD: STEP		
					Datum	Name
				Erst.	14.01.2019	FLAIG
				Bearb.	22.06.2022	FLAIG
				Gepr.	23.06.2022	NEMECZ
				Norm		
1	Überarbeitung	22.06.2022	FLA			
Zust.	Änderungen	Datum	Name			

TR Electronic GmbH
Eglishalde 6
D-78647 Trossingen
Tel. +49 7425 228-0
www.tr-electronic.de

Maßstab [Scale] 1 : 1 — DIN A3

Artikel-Nr. und Steckerbelegung: siehe Datenblatt
[Article-No. and pin assignment: see data sheet]

Bezeichnung [Designation]:
CDS-582-M, Ø8H7

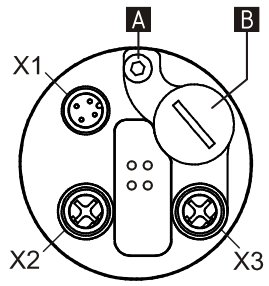
Zeichnung-Nr. [Drawing-No.]:
04-CDS582M-M0009

Dok.Art. IDW | Teil-Dok. 000 | Dok.Vs. 01 | 1/1 Bl.

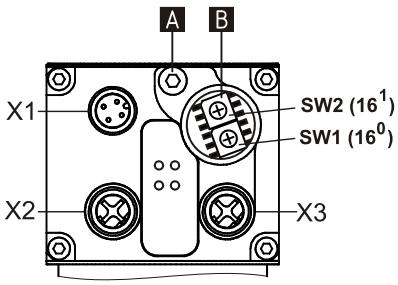
Steckerbelegung / Pin assignment

AD_-582 / CD_-582 PROFINET / PROFIsafe

axialer Steckerabgang /
axial connector outlet



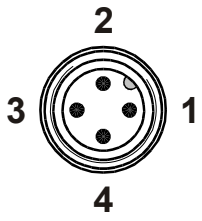
radialer Steckerabgang /
radial connector outlet

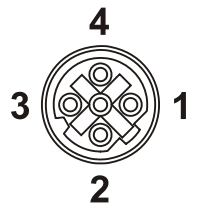


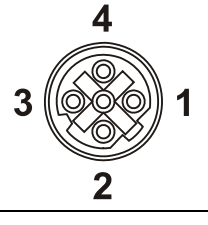
A Potentialausgleich /
Potential equalisation

B PROFIsafe-Zieladresse /
PROFIsafe destination address
- Valid addresses = 1 – 255

Rücksetzen auf Werkseinstellungen /
Reset to factory settings
- Set SW1 / SW2 = 0x00
- 3 Sek. warten
- Set SW2 / SW1 = 0x52
- Wait 3s -> LED green 2 Hz
- Set SW1 / SW2 = 0x00

X1	Flanschstecker / *Male socket* (M12x1-4 pol. A-coded)			
1	10 – 30 V DC	Encoder-Versorgungsspannung / *Encoder-Supply Voltage*	Steckseite *Mating Face*	
2	-	N.C.		
3	0 V	Encoder-Versorgungsspannung / *Encoder-Supply Voltage*		
4	-	N.C.		

X2 = PORT 1		Flanschdose / *Female socket* (M12x1-4 pol. D-coded)			
1	TxD+	Sendedaten +	*Transmission Data +*	Steckseite *Mating Face*	
2	RxD+	Empfangsdaten +	*Receive Data +*		
3	TxD–	Sendedaten –	*Transmission Data –*		
4	RxD–	Empfangsdaten –	*Receive Data –*		

X3 = PORT 2		Flanschdose / *Female socket* (M12x1-4 pol. D-coded)			
1	TxD+	Sendedaten +	*Transmission Data +*	Steckseite *Mating Face*	
2	RxD+	Empfangsdaten +	*Receive Data +*		
3	TxD–	Sendedaten –	*Transmission Data –*		
4	RxD–	Empfangsdaten –	*Receive Data –*		

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

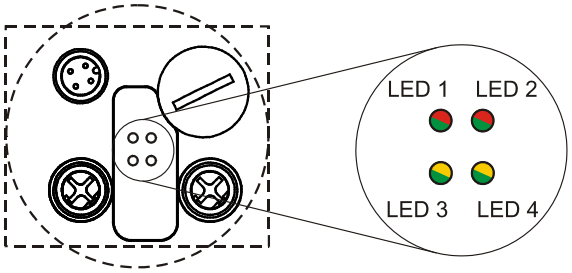
The shielding is to be connected with large surface on the mating connector housing!
Recommendation: Connect the potential equalisation [A] to the grounding connection across a sufficiently sized surface.

Betriebsanleitung beachten! - *Observe User Manual!*

Änderungen vorbehalten / Subject to change

Steckerbelegung / Pin assignment

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, Device Status

grün / *green*	
○	Versorgung fehlt, Hardwarefehler / *No supply voltage, hardware error*
●	Betriebsbereit / *Operational*
◉ 3x 2.5 Hz	Re-Integration gefordert / *Re-integration required*

rot / *red*	
●	System- oder Sicherheitsfehler / *System or safety relevant error*
◉ 3x 2.5 Hz	Warnungen, Parameter- oder F-Parameterfehler / *Warnings, Parameter- or F-Parameter error*

LED2, Net Status

grün / *green*	
○	Versorgung fehlt, Hardwarefehler / *No supply voltage, hardware error*
●	Datenaustausch / *Data exchange*

rot / *red*	
●	Keine Verbindung zum IO-Controller / *No link to the IO-Controller*

LED3 / LED4, PORT1 / PORT2 - Link/Data LEDs

grün / *green*	
○	keine Ethernet-Verbindung hergestellt / *No ethernet connection established*
●	Ethernet-Verbindung hergestellt / *Ethernet connection established*

gelb / *yellow*	
◉ / ●	Datenaustausch aktiv / *data exchange active*

Betriebsanleitung beachten! - *Observe User Manual!*

Änderungen vorbehalten / Subject to change