

## Absolute rotary Encoder

# CMH802M\*1024/4096 SSI NTS 25H7N KRF

Order No.: CMH802M-00001

9.10.2026 / 010102080201010202

### Technical data

|                             |                                |
|-----------------------------|--------------------------------|
| NO.OF STEPS/REV             | 1.024,000                      |
| NO. OF REVOLUTIONS          | 4.096,000                      |
| PARAMETERIZABLE             | VIA TRWINPROG                  |
| INTERFACE                   | SSI+INK                        |
| CODE                        | GRAY                           |
| SUPPLY VOLTAGE              | 10-30V                         |
| PROTECTION CLASS            | IP54                           |
| OPERATING TEMPERATURE       | -20°C... +75°C                 |
| FLANGE TYPE                 | DREHMOMENTSTÜTZE (DMS)         |
| FLANGE TYPE                 | FLANSCHRING STIFT/NUT (FRSN)   |
| FLANGE TYPE                 | PIN ADAPTER FLNG 1xD4          |
| FLANGE TYPE                 | TORQUE SPRT 1 WING PC 105-109  |
| SHAFT EXECUTION             | (H) Hollow shaft               |
| SHAFT TYPE                  | CLAMPING RING WITH KEY WAY     |
| SHAFT TYPE                  | D25H7 NUT8                     |
| CONNECTION TYPE             | 1x M23 12-PIN 0°-CODE MALE CCW |
| DIRECTION OF CONNECTION     | RADIAL                         |
| PINOUT NO.                  | ST3903B                        |
| OPTIONS ENC                 | CLAMPING RING FRONT SIDE       |
| OPTIONS ENC                 | INC LEVEL: TTL                 |
| OPTIONS ENC                 | INC PPR: 4096                  |
| OPTIONS ENC                 | INC TRACKS: A B /A /B          |
| OPTIONS ENC                 | SSI MONO TIME: 20µs            |
| OPTIONS ENC                 | SSI-DATENBITS: 22              |
| DRAWING NO.                 | 04-CMH802M-M0001               |
| AL:                         | N                              |
| ECCN:                       | N                              |
| MTTFd [y] (T=45°C, DC=0) >= | 200                            |
| UL-APPROVALS                | USA+CANADA                     |

|         |                                                               |
|---------|---------------------------------------------------------------|
| GL      | Wellenausführung glatt /<br>shaft type cylindrical            |
| FL      | Wellenausführung mit Fläche /<br>shaft type with flat surface |
| N       | Wellenausführung mit Nut /<br>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 /<br>DAG protective housing                 |
| TK      | Teilkreis / pitch circle                                      |

Subject to change.

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## Pin assignment

Pin assignment number: 3903

Index: B

24.07.2024

Connector name: M23 12-pol

Pin-count: 12

Page: 1/1

| Pin | Designation         | Description                      | Colour |
|-----|---------------------|----------------------------------|--------|
| 1   | SSI_DATA+_OUT       | Data output +                    | -      |
| 2   | SSI_DATA-_OUT       | Data output -                    | -      |
| 3   | SSI_Clock+_IN       | Clock input +                    | -      |
| 4   | SSI_Clock-_IN       | Clock input -                    | -      |
| 5   | CH_A_OUT            | Channel A                        | -      |
| 6   | /CH_A_OUT           | Channel A inverted               | -      |
| 7   | CH_B_OUT            | Channel B                        | -      |
| 8   | /CH_B_OUT           | Channel B inverted               | -      |
| 9   | Ser.Program+_IN/OUT | Ser. programming interface RS485 | -      |
| 10  | Ser.Program-_IN/OUT | Ser. programming interface RS485 | -      |
| 11  | Supply Voltage IN   | Supply voltage                   | -      |
| 12  | Ground IN           | Ground                           | -      |

### WARNING

'De-energize the system before carrying out wiring work or opening and closing electrical connections !

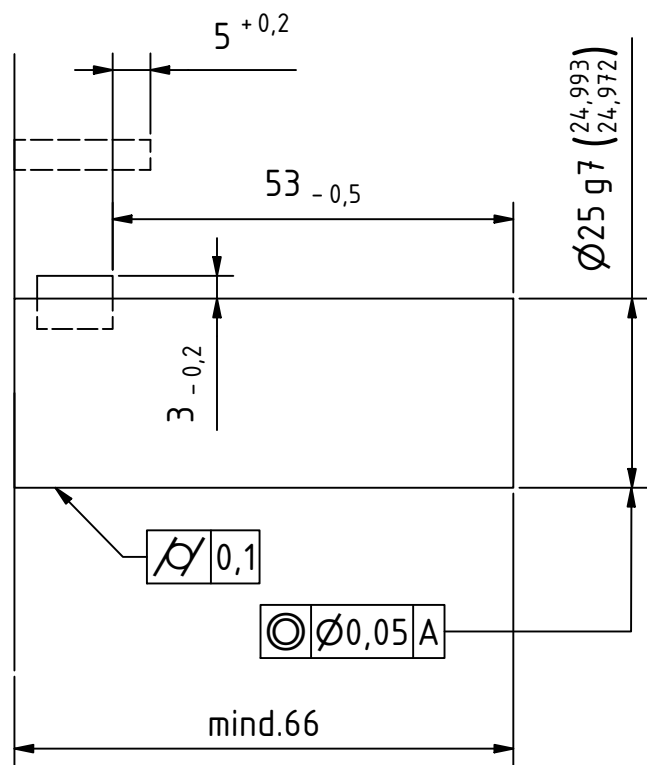
Short-circuits, voltage peaks, etc. can cause operating failures and uncontrolled operating states, as well as serious personal injuries and damage to property.

Verdrahtungsarbeiten, Öffnen und Schließen von elektrischen Verbindungen nur im spannungslosen Zustand durchführen ! Kurzschlüsse, Spannungsspitzen etc. können zur Fehlfunktion und unkontrollierten Zuständen der Anlage bzw. zu erheblichen Personen- und Sachschäden führen.

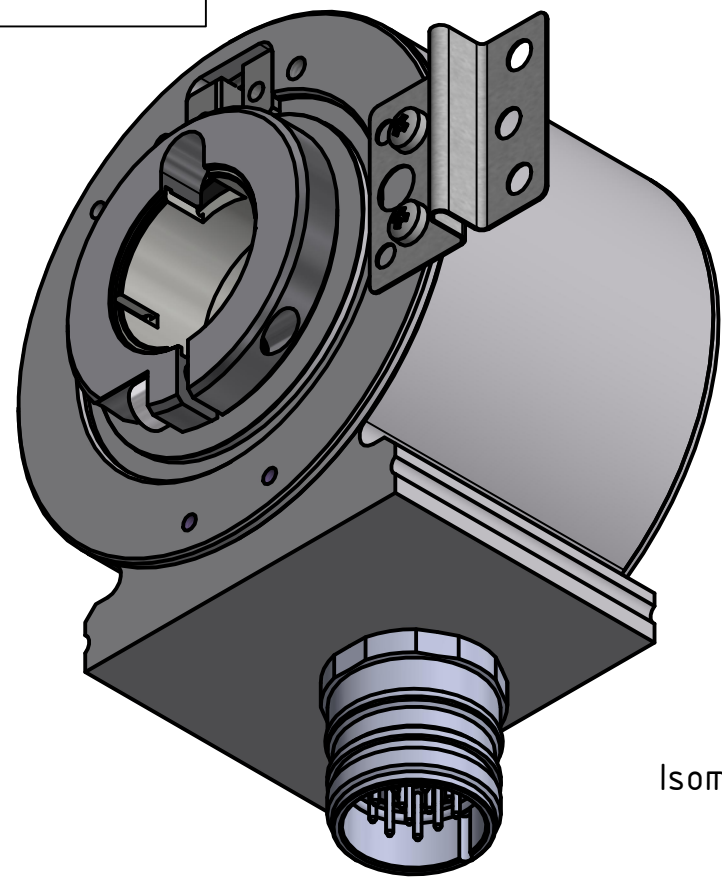
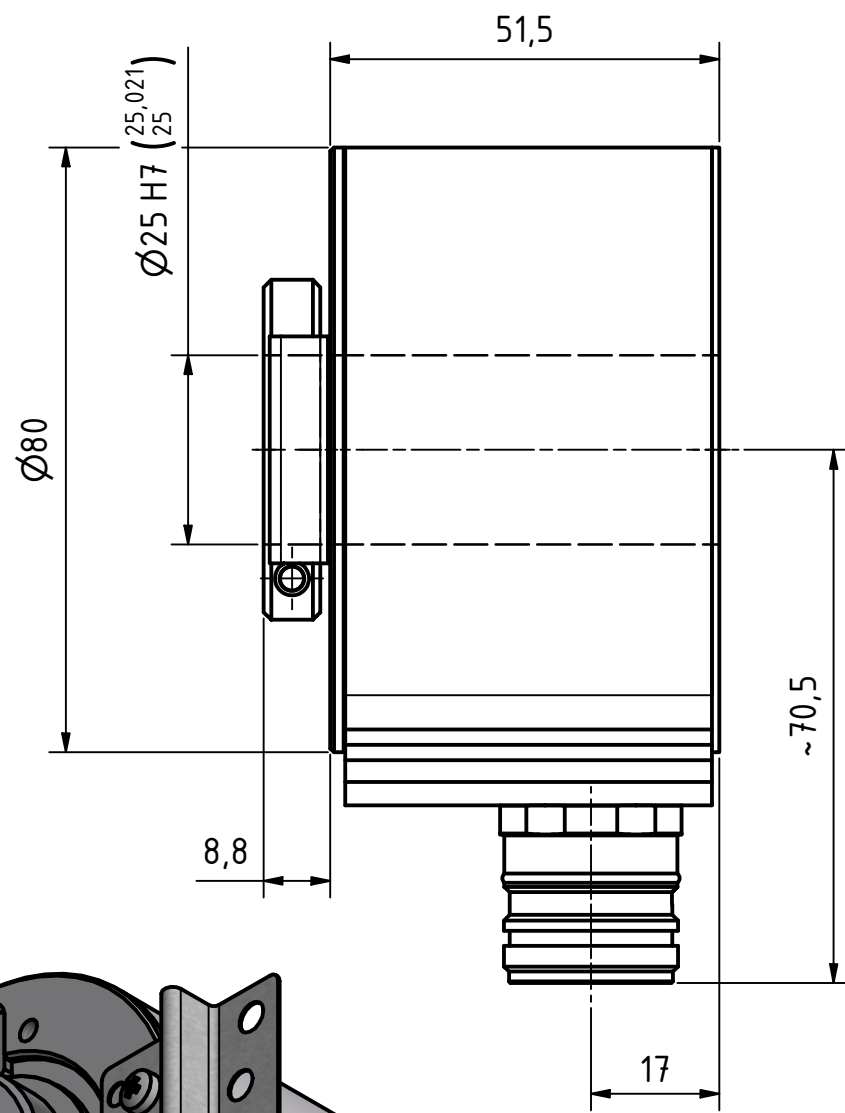
**i** Alle nicht tolerierten Maße sind Richtwerte. [All non-tolerated dimensions are guide values.]  
Technische Änderungen grundsätzlich vorbehalten. [We reserve the right to make technical changes.]

**Anforderung an Kundenwelle**  
[Requirements for the customer shaft]

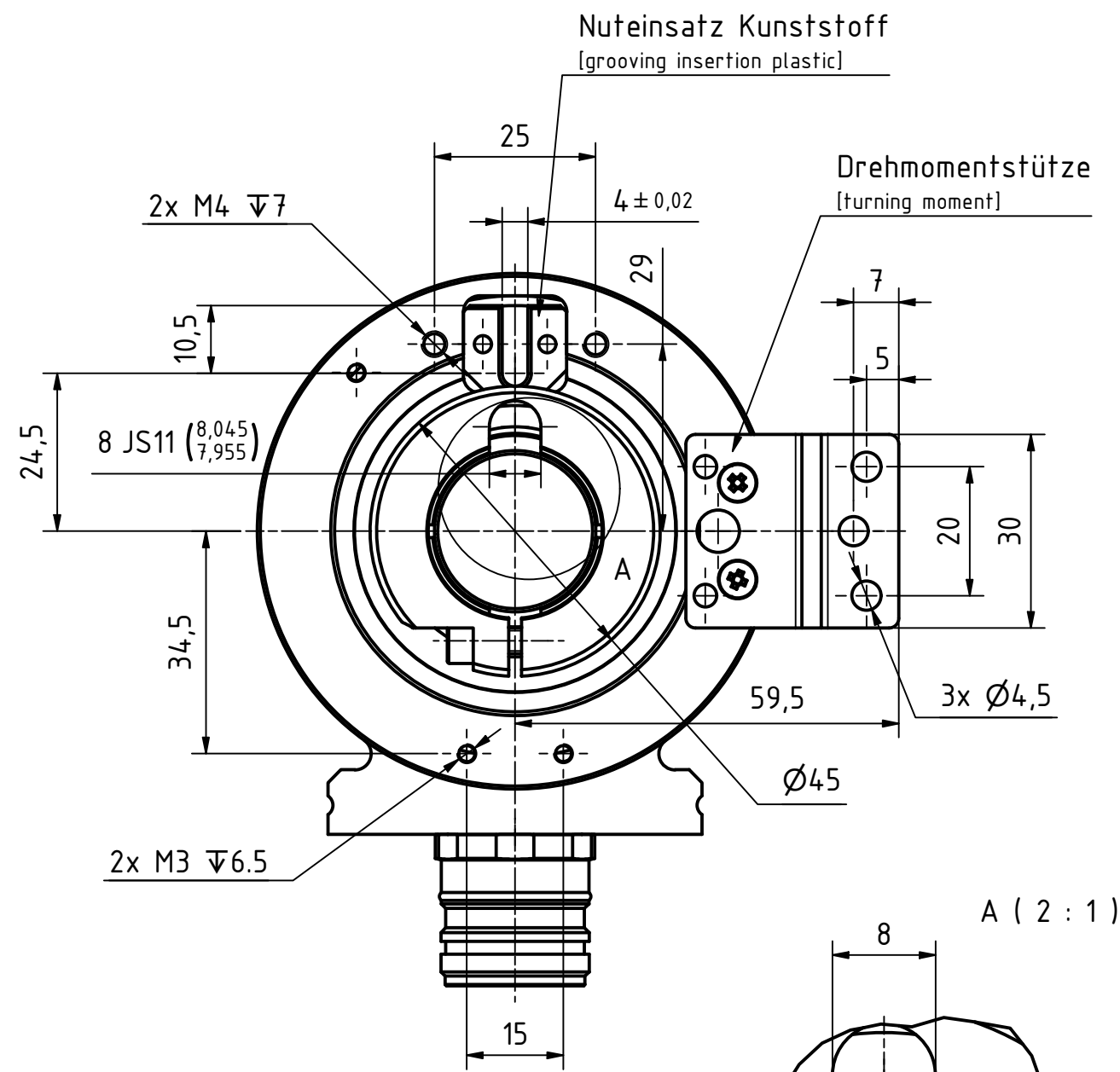
Paßfeder [feather key]  
D]IN6885-A-8x7x10



**A** Geberanbau  
[Encoder mounting]



Isometrie ( 1 : 1 )



12pol. Stecker  
[12pin. connector]

|                                                               |            |  |       |                                                                                                                                                                                                |            |        |  |                                                                                                       |              |                       |               |                                                                                       |            |  |         |  |
|---------------------------------------------------------------|------------|--|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------|--|-------------------------------------------------------------------------------------------------------|--------------|-----------------------|---------------|---------------------------------------------------------------------------------------|------------|--|---------|--|
| Tolerierung [Tolerancing] ISO 8015                            |            |  |       | alle Maße in mm [all dimensions in mm]                                                                                                                                                         |            |        |  |                  |              | Maßstab [Scale] 1 : 1 |               | DIN A3                                                                                |            |  |         |  |
| E-Mail: info@tr-electronic.de<br>Support: http://tr-e.info/01 |            |  |       | CAD: STEP                                                                                                                                                                                      |            |        |  | Artikel-Nr. und Steckerbelegung: siehe Datenblatt<br>[Article-No. and pin assignment: see data sheet] |              |                       |               |                                                                                       |            |  |         |  |
|                                                               |            |  |       |                                                                                                                                                                                                | Datum      | Name   |  | Bezeichnung [Designation]:<br><br>CMH-802-M, Ø25H7 Nut                                                |              |                       |               |                                                                                       |            |  |         |  |
|                                                               |            |  |       | Erst.                                                                                                                                                                                          | 25.07.2024 | FLAIG  |  |                                                                                                       |              |                       |               |                                                                                       |            |  |         |  |
|                                                               |            |  |       | Bearb.                                                                                                                                                                                         | 25.07.2024 | FLAIG  |  |                                                                                                       |              |                       |               |                                                                                       |            |  |         |  |
|                                                               |            |  |       | Gepr.                                                                                                                                                                                          | 29.07.2024 | NEMECZ |  |                                                                                                       |              |                       |               |                                                                                       |            |  |         |  |
|                                                               |            |  |       | Norm                                                                                                                                                                                           |            |        |  |                                                                                                       |              |                       |               |                                                                                       |            |  |         |  |
|                                                               |            |  |       |  TR Electronic GmbH<br>Eglisshalde 6<br>D-78647 Trossingen<br>Tel. +49 7425 228-0<br>www.tr-electronic.de |            |        |  | Zeichnung-Nr. [Drawing-No.]:                                                                          |              |                       |               |  |            |  |         |  |
|                                                               |            |  |       |                                                                                                                                                                                                |            |        |  | 04-CMH802M-M0001                                                                                      |              |                       |               |                                                                                       |            |  |         |  |
|                                                               |            |  |       |                                                                                                                                                                                                |            |        |  |                                                                                                       |              |                       |               |                                                                                       |            |  |         |  |
| Zust.                                                         | Änderungen |  | Datum | Name                                                                                                                                                                                           |            |        |  |                                                                                                       | Dok.Art. IDW |                       | Teil-Dok. 000 |                                                                                       | Dok.Vs. 00 |  | 1/1 Bl. |  |