



External interface box in cable form
Externe Interface-Box in Kabelform
Boîtier d'interface externe sous forme de câblage
Extern Interface-Box in versione cavo
Interface-Box externo en forma de cable



www.heidenhain.com/documentation

HEIDENHAIN

Mounting Instructions
Montageanleitung
Instructions de montage
Istruzioni di montaggio
Instrucciones de montaje

EIB 3392 F

08/2022

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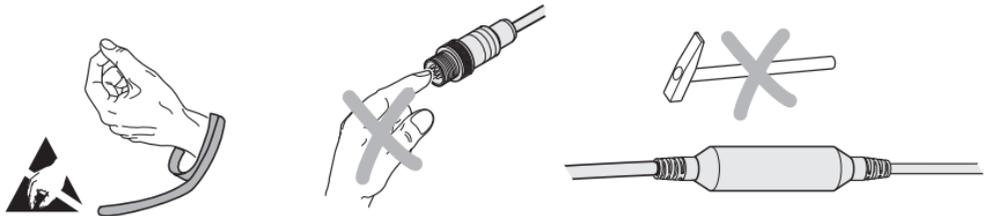
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Warnings Warnhinweise



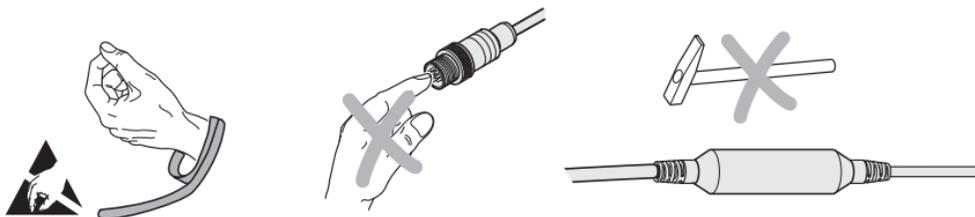
Note:

- Mounting and commissioning is to be conducted by a qualified specialist under compliance with local safety regulations.
- Do not engage or disengage any connections while under power.
- The system must be disconnected from power.
- Avoid direct contact of aggressive media with the encoder and connector.
- Do not clean the encoder with organic solvents like thinners, alcohol or benzine.

Achtung:

- *Die Montage und Inbetriebnahme ist von einer qualifizierten Fachkraft unter Beachtung der örtlichen Sicherheitsvorschriften vorzunehmen.*
- *Die Steckverbindung darf nur spannungsfrei verbunden oder gelöst werden.*
- *Die Anlage muss spannungsfrei geschaltet sein!*
- *Der direkte Kontakt von aggressiven Medien mit Messgerät und Steckverbinder ist zu vermeiden.*
- *Reinigen Sie das Gerät nicht mit organischen Lösungsmitteln wie Verdünner, Alkohol oder Benzin.*

Avertissements Avvertenze



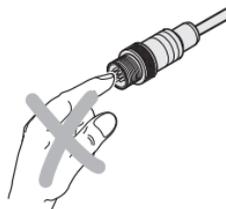
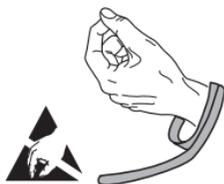
Attention :

- Le montage et la mise en service doivent être assurés par un personnel qualifié dans le respect des consignes de sécurité locales.
- Le connecteur ne doit être connecté ou déconnecté qu'hors tension.
- L'équipement doit être hors tension.
- Eviter le contact direct de produits agressifs avec les systèmes de mesure et les connecteurs.
- Ne pas nettoyer l'appareil avec des solvants organiques tels que diluant, alcool ou essence.

Attenzione:

- *Il montaggio e la messa in funzione devono essere eseguite da personale qualificato nel rispetto delle norme di sicurezza locali.*
- *I cavi possono essere collegati o scollegati solo in assenza di tensione.*
- *L'impianto deve essere spento.*
- *È da evitare il contatto diretto di mezzi aggressivi con il sistema di misura e il connettore.*
- *Non pulire l'apparecchio con solventi organici quali diluenti, alcool o benzina.*

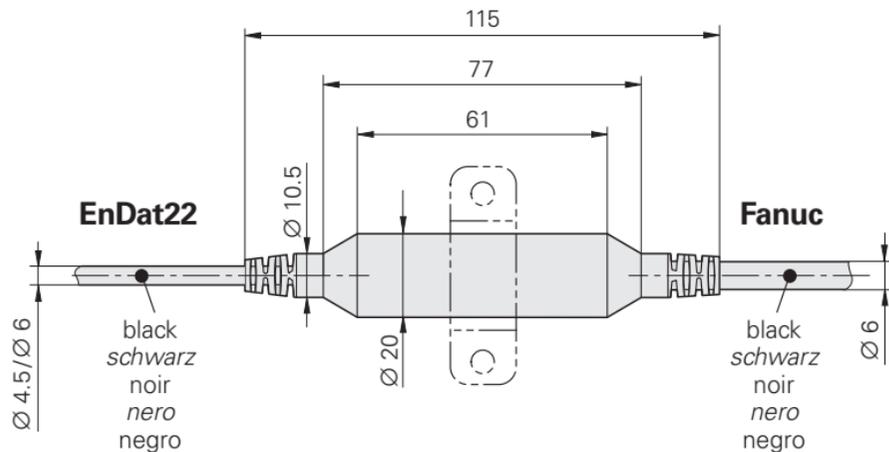
Advertencias



Atención:

- El montaje y la puesta en marcha deben ser realizados por un especialista cualificado, observando las prescripciones locales de seguridad.
- Conectar o desconectar el conector sólo en ausencia de tensión.
- ¡La instalación debe ser conectada en ausencia de tensión!
- Debe evitarse el contacto directo de medios agresivos con el sistema de medida y con el conector.
- No limpiar el aparato con disolventes orgánicos como diluyentes, alcohol o gasolina.

Dimensions [mm]
Abmessungen [mm]
Dimensions [mm]
Dimensioni [mm]
Dimensiones [mm]



| | | |
|------------------------------|--------------------------|--------------------------|
| | | |
| $\varnothing 4.5 \text{ mm}$ | $R_1 \geq 10 \text{ mm}$ | $R_2 \geq 50 \text{ mm}$ |
| $\varnothing 6 \text{ mm}$ | $R_1 \geq 20 \text{ mm}$ | $R_2 \geq 75 \text{ mm}$ |

Mounting
Montage
Montage
Montaggio
Montaje

We recommend using a cable clamp with an inside diameter of 20 mm for mounting.

Zur Montage empfehlen wir eine Kabelschelle mit Innendurchmesser 20 mm.

Pour le montage, il est recommandé d'utiliser un serre-câble d'un diamètre intérieur de 20 mm.

Per il montaggio è consigliata un pressacavo con diametro interno di 20 mm.

Para el montaje se recomienda una brida de cable con un diámetro interior de 20 mm.

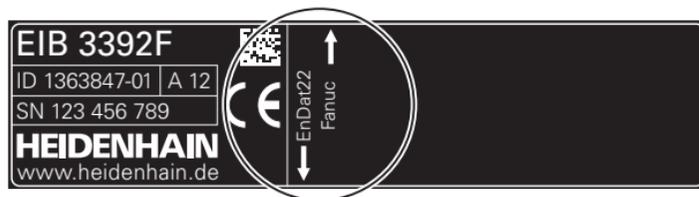
Arrows indicate the connection.

Pfeile kennzeichnen den Anschluss.

Les flèches identifient le raccordement.

Le frecce indicano il collegamento.

Las flechas señalan la conexión.



Monitoring-Identifler
Monitoring-Identifler
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Monitoring-Identifler
Monitoring-Identifler

The Monitoring-Identifler defines the structure of the position format and is required in conjunction with testing devices from HEIDENHAIN in Monitoring mode.

Der Monitoring-Identifler definiert den Aufbau des Positionsformats und wird zusammen mit Prüfgeräten von HEIDENHAIN im Monitoring-Betrieb benötigt.

Le Monitoring-Identifler définit le montage du format de position ; il est requis pour pouvoir utiliser des appareils de contrôle HEIDENHAIN en mode Monitoring.

Monitoring-Identifler definisce la configurazione del formato di posizione ed è richiesto in modalità Monitoring insieme alle apparecchiature di diagnostica HEIDENHAIN.

El «Monitoring-Identifler» define la estructura del formato de posición y es necesario junto con los dispositivos de comprobación de HEIDENHAIN en el modo de funcionamiento monitorización.

| linear encoder | resolution EnDat22 in nm | resolution alpha-i in nm | resolution alpha in nm | monitoring identifier |
|--------------------------------|---------------------------------|---------------------------------|-------------------------------|------------------------------|
| LC x15, LC x16, LC 2x1 (1 nm) | 1 | 1,25 | 10 | 10125030800E |
| LC x15, LC x16, LC 2x1 (10 nm) | 10 | 12,5 | 50 | 112500304000 |
| other linear encoder | 1 | 1 | 1 | 100001201001 |
| | 5 | 5 | 5 | 100005201006 |
| | 10 | 10 | 10 | 100010201002 |
| | 50 | 50 | 50 | 10005020100B |
| | 100 | 100 | 100 | 100100201000 |
| | 250 | 250 | 250 | 100250201003 |
| | 500 | 500 | 500 | 100500201001 |
| | 1000 | 1000 | 1000 | 10100020100F |

| rotary encoder singleturn | resolution EnDat22 in bit | resolution alpha-i in bit | resolution alpha in bit | monitoring identifier |
|---------------------------------------|----------------------------------|----------------------------------|--------------------------------|------------------------------|
| singleturn encoder, 31 bit resolution | 31 | 31 | 27 | 200031416008 |
| singleturn encoder, 30 bit resolution | 30 | 30 | 27 | 200030408000 |
| singleturn encoder, 29 bit resolution | 29 | 29 | 27 | 20002940400B |
| singleturn encoder, 28 bit resolution | 28 | 28 | 27 | 20002840200F |
| singleturn encoder, 27 bit resolution | 27 | 27 | 27 | 20002740100A |
| singleturn encoder, 26 bit resolution | 26 | 26 | 26 | 20002640100D |
| singleturn encoder, 25 bit resolution | 25 | 25 | 25 | 200025401000 |
| singleturn encoder, 24 bit resolution | 24 | 24 | 24 | 200024401002 |
| singleturn encoder, 23 bit resolution | 23 | 23 | 23 | 200023401005 |
| singleturn encoder, 22 bit resolution | 22 | 22 | 22 | 200022401008 |
| singleturn encoder, 21 bit resolution | 21 | 21 | 21 | 20002140100B |
| singleturn encoder, 20 bit resolution | 20 | 20 | 20 | 20002040100E |
| singleturn encoder, 19 bit resolution | 19 | 19 | 19 | 200019401006 |
| singleturn encoder, 18 bit resolution | 18 | 18 | 18 | 200018401009 |

| rotary encoder multiturn | resolution EnDat22 in bit | resolution alpha-i in nm | resolution alpha in bit | monitoring identifier |
|-------------------------------------|----------------------------------|---------------------------------|--------------------------------|------------------------------|
| 25 bit singleturn, 12 bit multiturn | 25 / 12 | 25 / 12 | not supported | 31202550100F |

Power supply
Spannungsversorgung
Tension d'alimentation
Tensione di alimentazione
Tensión de alimentación



*) Without load from the connected encoder
Ohne Stromaufnahme des angeschlossenen Messgerätes
 Sans consommation en courant du système de mesure raccordé
 Senza consumo di corrente da parte del sistema di misura collegato
 No hay consumo de corriente del sistema de medida conectado

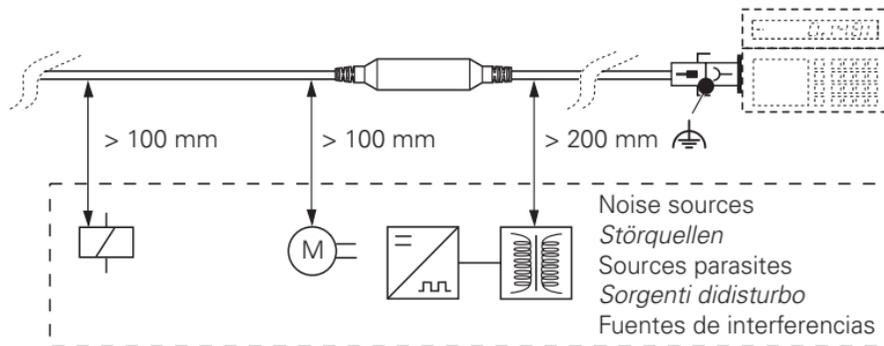
Minimum distance from sources of interference

Mindestabstand von Störquellen

Distance minimale avec les sources de perturbation

Distanza minima dalla fonte di disturbo

Distancia mínima respecto a las fuentes de interferencias



Noise sources
Störquellen
 Sources parasites
 Sorgenti di disturbo
 Fuentes de interferencias

Pin Layout

Anschlussbelegung

Affectation des plots

Piedinatura

Distribución del conector



4AB08-C4



$M_d = 0.6 \text{ Nm} \dots 0.8 \text{ Nm}$

EnDat22

| 8 | 2 | 5 | 1 | 3 | 4 | 7 | 6 |
|----------|--------------------|----|--------------|------|--------------------------|-------|---------------------------|
| U_{P2} | Sensor U_{P2} | 0V | Sensor 0V | DATA | $\overline{\text{DATA}}$ | CLOCK | $\overline{\text{CLOCK}}$ |
| | | | | | | | |

The sensor line is connected inside the EIB to the supply line.

Die Sensorleitung ist intern in der EIB mit der Versorgungsleitung verbunden.

La ligne sensor est reliée en interne dans l'EIB à la ligne d'alimentation.

La linea del sensore è collegata internamente al EIB con la linea di alimentazione.

La línea de sensor está unida en la EIB internamente con la línea de alimentación.

External shield connected to housing

Außenschirm mit Gehäuse verbunden

Blindage extérieur connecté au boîtier

Schermo del cavo collegato alla carcassa

Apantallado exterior unido a la carcasa



① M12

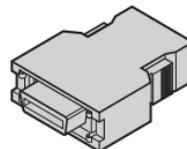
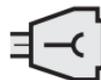


$M_d = 0.6 \text{ Nm} \dots 0.8 \text{ Nm}$

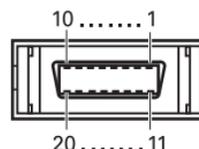
1SS08-C4



② 15-pin Fanuc connector



0BB015



Fanuc

| | | | | | | | | | |
|---|-----------------|---------------------------|----|--------------|------------------|-------------|-------------|---------|---------|
| ① | 8 | 2 | 5 | 1 | / [*]) | 3 | 4 | 7 | 6 |
| ② | 9 | 18/20 | 12 | 14 | 16 | 1 | 2 | 5 | 6 |
| | U _{P1} | Sensor U _{P1} | 0V | Sensor 0V | Shield | Serial Data | Serial Data | Request | Request |
| | ● | ● | ● | ● | | | | | |

Vacant pins or wires must not be used!
Nichtverwendete Pins oder Adern dürfen nicht belegt werden!
 Les plots ou fils non utilisés ne doivent pas être raccordés!
I pin o i fili inutilizzati non devono essere occupati!
 ¡No conectar los pins o hilos no utilizados!

^{*}) External shield connected to housing
Außenschirm mit Gehäuse verbunden
 Blindage extérieur connecté au boîtier
Schermo del cavo collegato alla carcassa
 Apantallado exterior unido a la carcasa

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