



HEIDENHAIN

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



ECN 223 F

Fanuc Serial Interface
(High resolution type A)

4/2012

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Achtung: Die Montage und Inbetriebnahme ist von einer Fachkraft für Elektrik und Feinmechanik unter Beachtung der örtlichen Sicherheitsvorschriften vorzunehmen.

Die Steckverbindung darf nur spannungsfrei verbunden oder gelöst werden.

Der Antrieb darf während der Montage nicht in Betrieb gesetzt werden.

Note: *Mounting and commissioning is to be conducted by a specialist in electrical equipment and precision mechanics under compliance with local safety regulations.*

Do not engage or disengage any connections while under power.

The drive must not be put into operation during installation.

Attention: Le montage et la mise en service doivent être réalisés par une personne qualifiée en électricité et mécanique de précision dans le respect des règles de sécurité locales.

Le connecteur ne doit être branché ou débranché que hors tension.

L'entraînement ne doit pas être mis en route pendant le montage.

Attenzione: *far eseguire montaggio e messa in servizio da un tecnico specializzato in impianti elettrici e meccanica di precisione in ottemperanza alle disposizioni di sicurezza locali.*

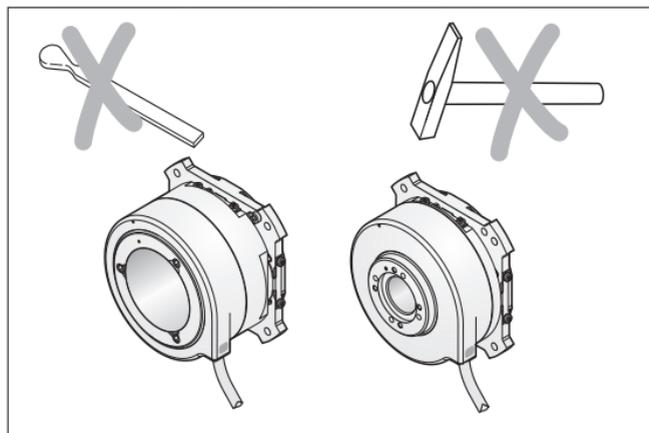
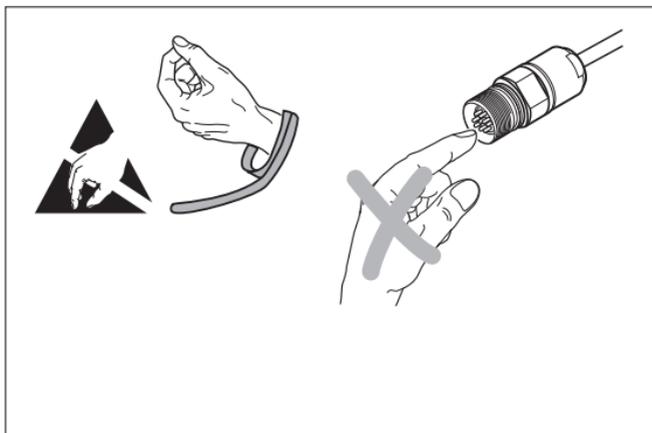
Collegare o staccare i collegamenti soltanto in assenza di tensione.

L'azionamento non deve essere messo in funzione durante il montaggio.

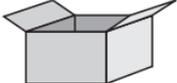
Atención: El montaje y la puesta en marcha deben ser realizados por un especialista en electricidad y mecánica de precisión, observando las prescripciones locales de seguridad.

Conectar o desconectar el conector sólo en ausencia de tensión.

El accionamiento no debe estar en marcha durante el montaje.



 °C
(°F)

 -30 °C ... 80 °C
(-22 °F ... 176 °F)

Lagertemperatur
Storage temperature
Température de stockage
Temperatura di immagazzinaggio
Temperatura en almacén

Maße in mm
Dimensions in mm
Cotes en mm
Dimensioni in mm
Dimensiones en mm



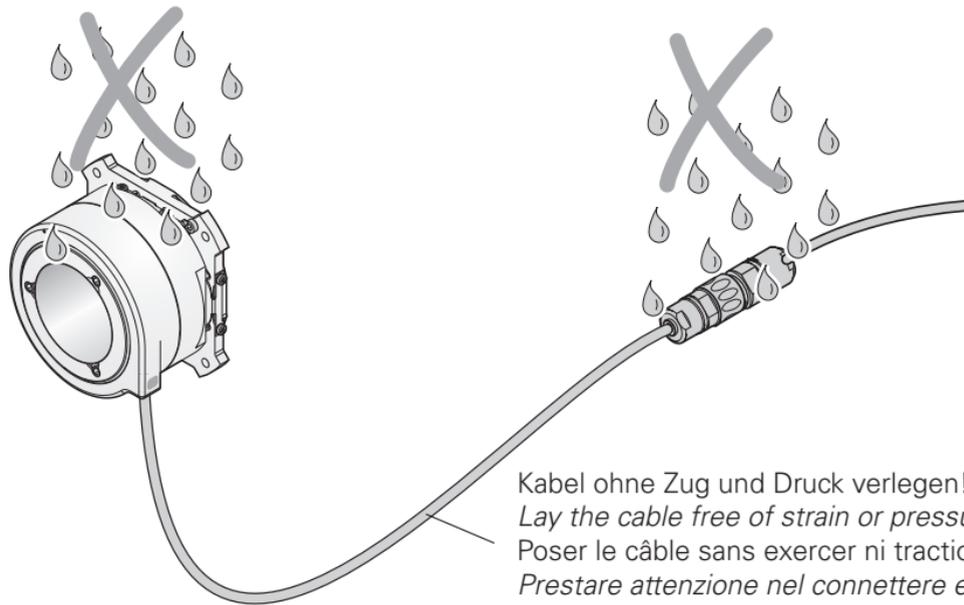
Vorsicht: Der direkte Kontakt von Flüssigkeiten mit Messgerät und Steckverbinder ist zu vermeiden!

Attention: Avoid direct contact of fluids with the encoder and connector!

Attention: Eviter le contact direct de liquides sur le système de mesure et le connecteur!

Attenzione: Evitare che lo strumento di misura e il connettore vengano a contatto con liquidi

Atención: ¡Evitar el contacto directo de líquidos con el sistema de medida y el conector!



Kabel ohne Zug und Druck verlegen!

Lay the cable free of strain or pressure!

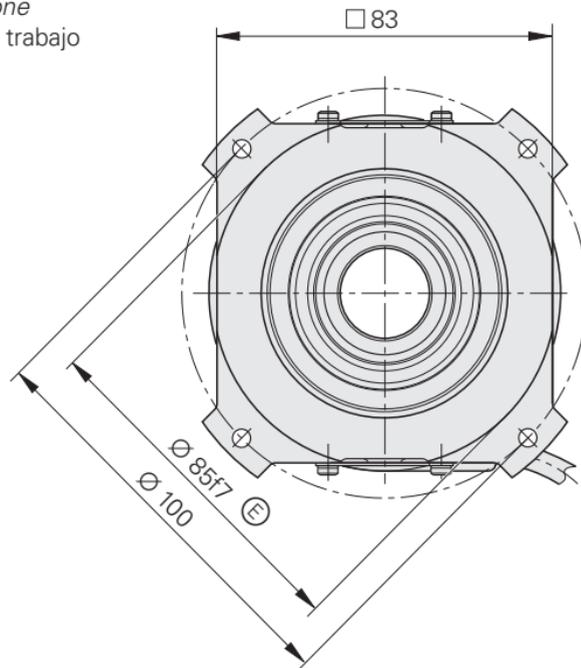
Poser le câble sans exercer ni traction ni pression

Prestare attenzione nel connettere e sconnettere il cavo!

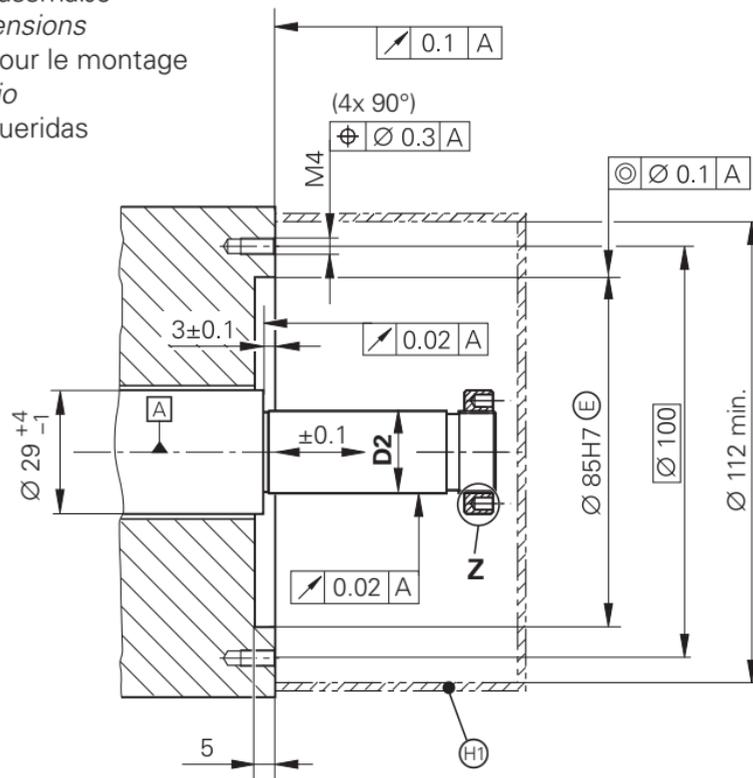
¡Colocar el cable sin tirones ni presiones!

Ⓜ = Meßpunkt Arbeitstemperatur
Operating temperature measuring point
Température de travail point de mesure
Temperatura di lavoro punto di misurazione
Punto de medición de la temperatura de trabajo

Ⓜ₁ = Nullposition ±15°
Zero position ±15°
Position zéro ±15°
Punto di zero ±15°
Posición cero ±15°



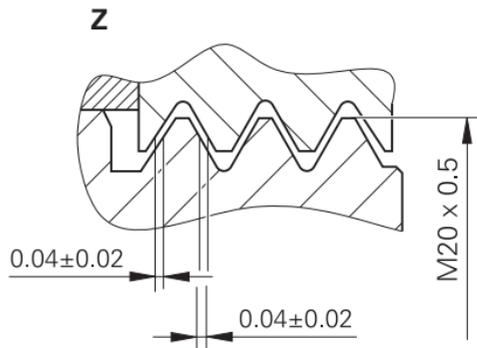
Kundenseitige Anschlussmaße
 Required mating dimensions
 Conditions requises pour le montage
 Quote per il montaggio
 Cotas de montaje requeridas

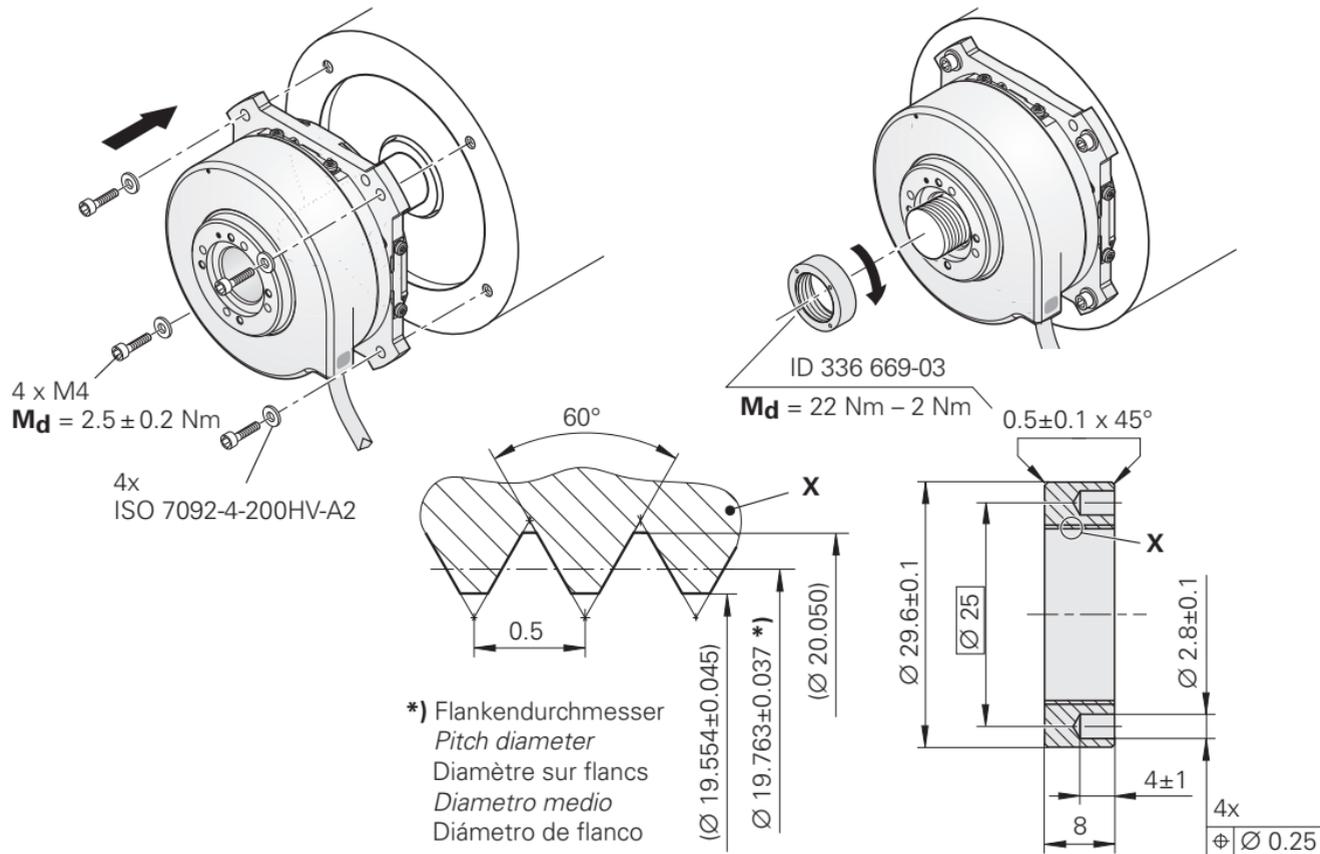


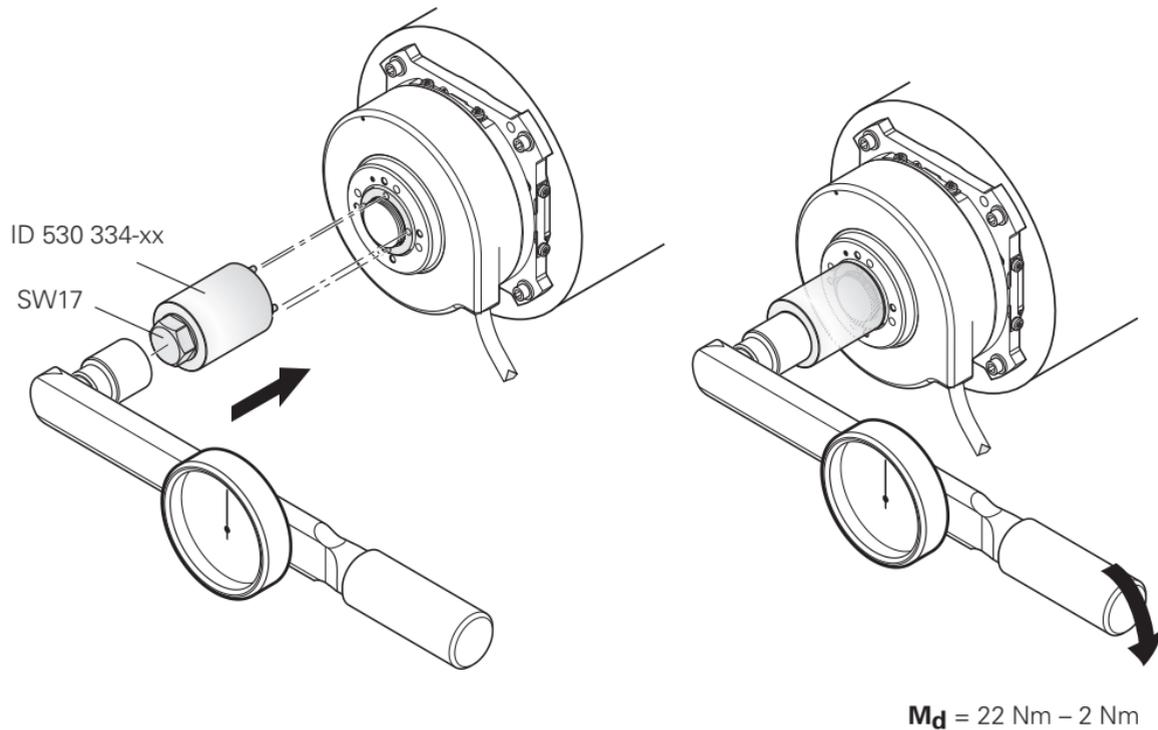
D2
$\text{Ø } 20\text{g7 (E)}$
$\text{Ø } 22\text{g7 (E)}$

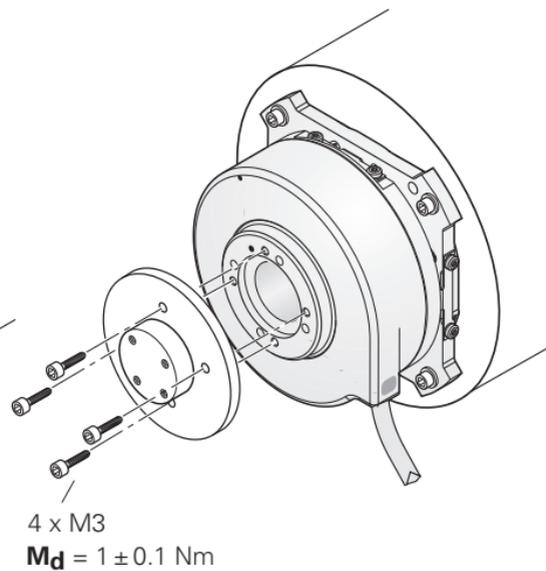
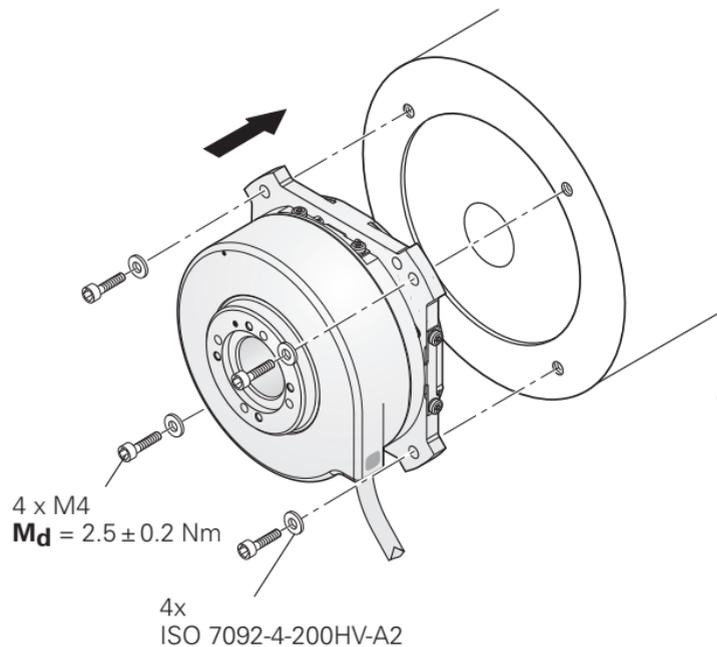
Ⓐ = Lagerung
Bearing
Roulement
Cuscinetto
Rodamiento

Ⓜ = Auf Berührungsschutz achten, (EN 60529).
Protect against contact, (EN 60529).
Veiller à la protection contre les contacts directs, (EN 60529).
Prestare attenzione alla protezione, (EN 60529).
Tener en cuenta la protección ante contacto, (EN 60529).









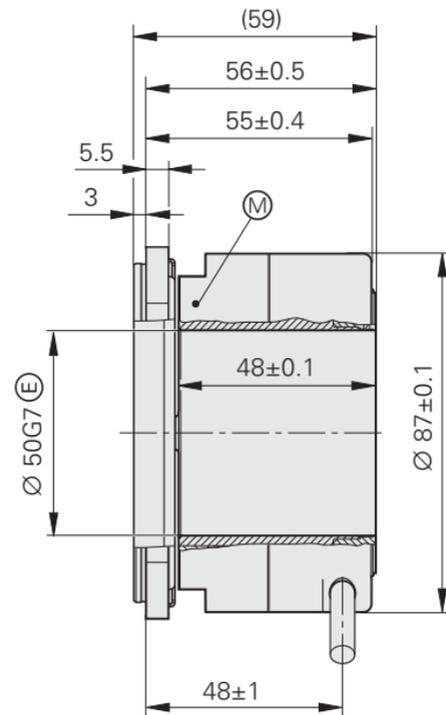
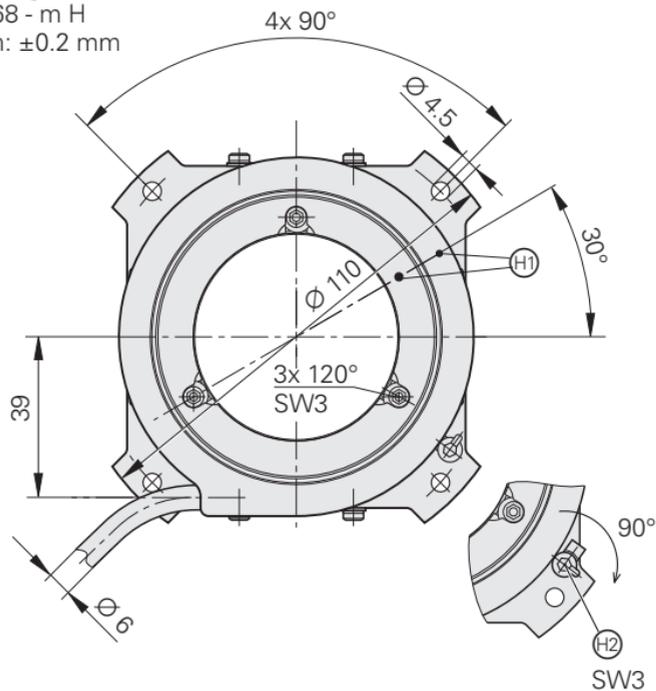
mm



Tolerancing ISO 8015

ISO 2768 - m H

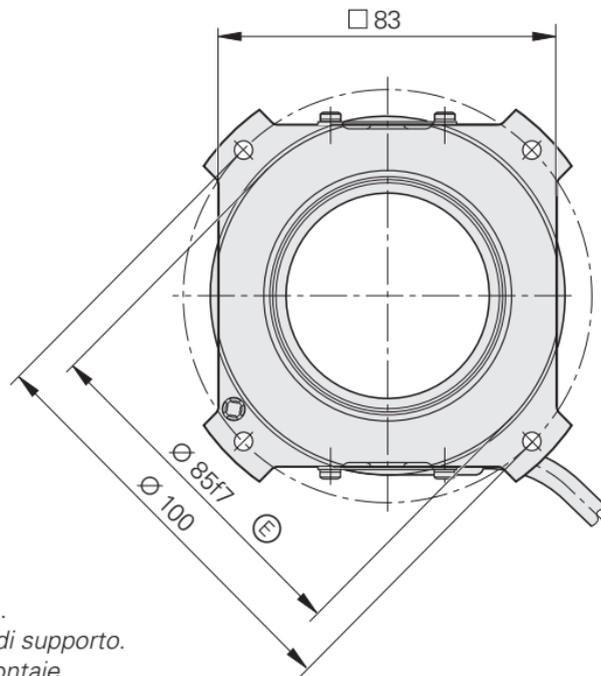
< 6 mm: ±0.2 mm



Ⓜ = Meßpunkt Arbeitstemperatur
Operating temperature measuring point
Température de travail point de mesure
Temperatura di lavoro punto di misurazione
Punto de medición de la temperatura de trabajo

Ⓜ1 = Nullposition $\pm 15^\circ$
Zero position $\pm 15^\circ$
Position zéro $\pm 15^\circ$
Punto di zero $\pm 15^\circ$
Posición cero $\pm 15^\circ$

Ⓜ2 = Vor Inbetriebnahme Montagehilfe freidrehen.
Release the mounting aid before initial operation.
Avant la mise en service, dégager l'outil de montage.
Prima della messa in servizio svincolare I dispositivi di supporto.
Antes de la puesta en marcha, liberar la ayuda de montaje.



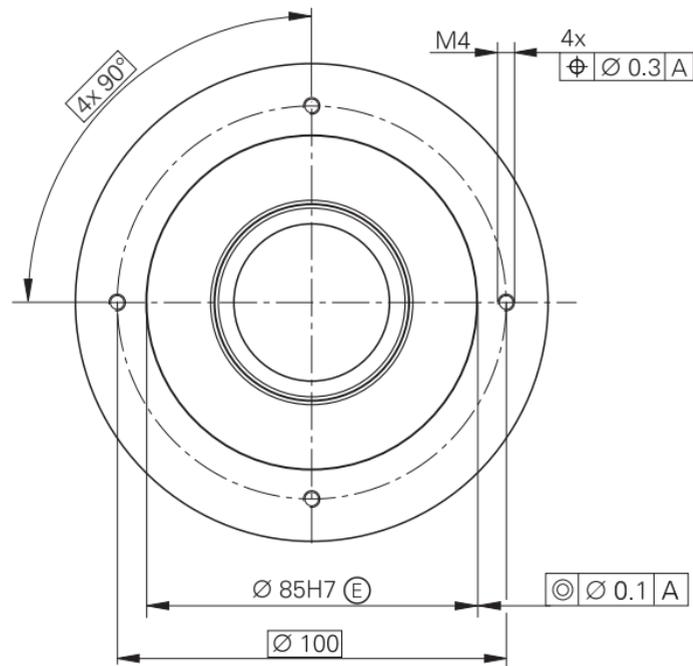
Kundenseitige Anschlussmaße

Required mating dimensions

Conditions requises pour le montage

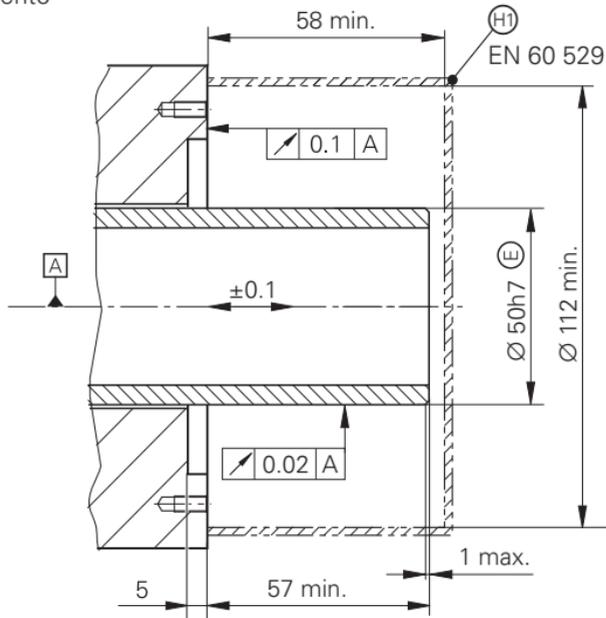
Quote per il montaggio

Cotas de montaje requeridas



[A] = Lagerung
Bearing
Roulement
Cuscinetto
Rodamiento

(H) = Auf Berührungsschutz achten
Protect against contact
Veiller à la protection contre les contacts directs
Prestare attenzione alla protezione
Tener en cuenta la protección ante contacto





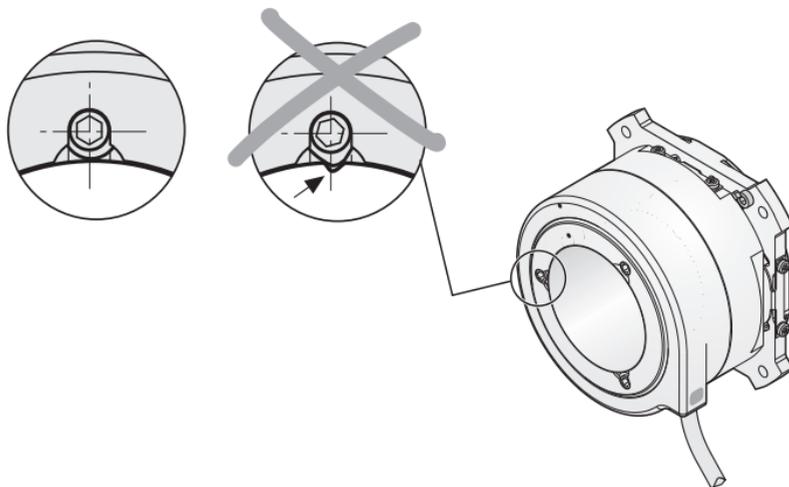
Achtung: Exzenter nur bei montiertem Messgerät festziehen, Messgerät kann beschädigt werden!

Caution: To avoid damage to the encoder, do not tighten the eccentric screw until the encoder is mounted!

Attention: Ne serrer l'excentrique qu'une fois le système de mesure monté. Celui-ci ne doit pas être endommagé!

Attenzione: Fissare gli eccentrici solo con il sistema montato, il sistema può venire danneggiato

Atención: Sujetar la excéntrica sólo durante el montaje del sistema de medición. ¡El sistema de medición puede resultar dañado!



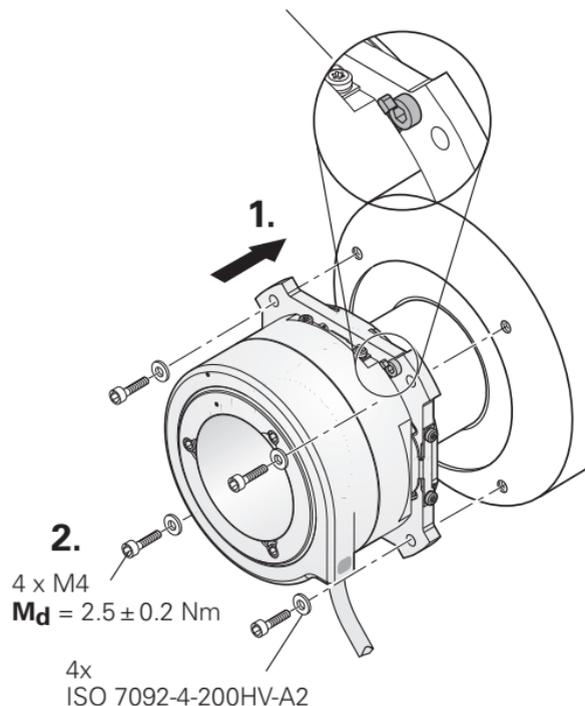
Montagehilfe zur Einhaltung des Montagemaßes 2.5 ± 0.3 mm.

Mounting aid ensures compliance with mounting dimension 2.5 ± 0.3 mm.

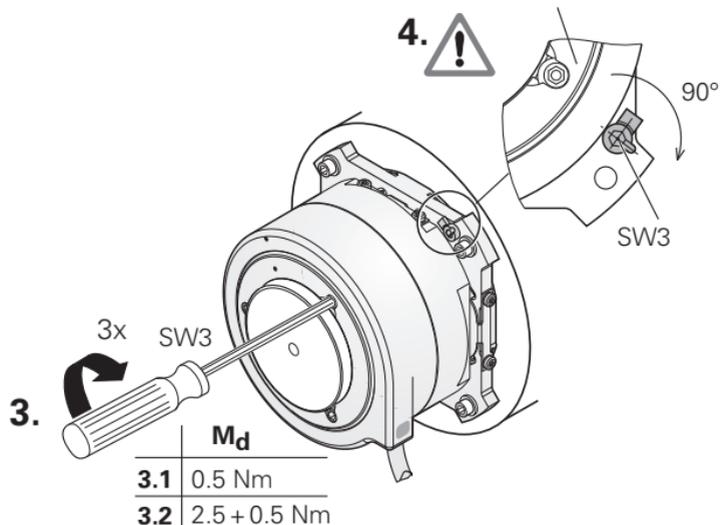
Outil de montage pour respecter la cote de montage de 2.5 ± 0.3 mm.

Dispositivi di supporto per il rispetto delle dimensioni di montaggio 2.5 ± 0.3 mm.

Ayuda de montaje para el cumplimiento de la cota de montaje 2.5 ± 0.3 mm.

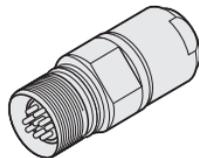
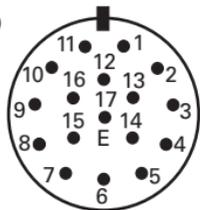


Vor Inbetriebnahme Montagehilfe freidrehen.
Release the mounting aid before initial operation.
Avant la mise en service, dégager l'outil de montage.
Prima della messa in servizio svincolare i dispositivi di supporto.
Antes de la puesta en marcha, liberar la ayuda de montaje.





← 03S17-0D



Außenschirm auf Gehäuse
External shield on housing
 Blindage externe sur boîtier
Schermo esterno sulla carcassa
 Blindaje externo a carcasa

7	1	10	4	14	17	8	9
Up	Sensor Up	0V	Sensor 0V	Data	Data	Request	Request
●	●	●	●				
BNGN	BU	WHGN	WH	GY	PK	VT	YE

Die Sensorleitung ist intern mit der Versorgungsleitung verbunden.

The sensor line is connected internally with the power supply.

La ligne de palpeur est reliée de manière interne à la ligne d'alimentation.

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

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

Nichtverwendete Pins oder Litzen dürfen nicht belegt werden!

Vacant pins or wires must not be used!

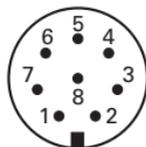
Les plots ou fils non utilisés ne doivent pas être raccordés!

I pin o i fili inutilizzati non devono essere occupati!

¡No conectar los pins o hilos no utilizados!



1SS08-C4



Außenschirm auf Gehäuse
External shield on housing
 Blindage externe sur boîtier
Schermo esterno sulla carcassa
 Blindaje externo a carcasa

2	8	1	5	3	4	7	6
Up	Up	0V	0V	DATA	<u>DATA</u>	CLOCK	<u>CLOCK</u>
BU	BN	WH	WHGN	GY	PK	VT	YE

Spannungsversorgung

Power supply

Tension d'alimentation

Tensione di alimentazione

Tensión de alimentación

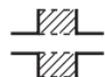
Up: DC 3.6 V – 5.25 V

am Gerät, *at encoder*, sur l'appareil, *integrato*, en el aparato.

I max. 200 mA

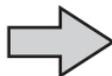
(ohne Last, *Without load*, sans charge, *senza carico*, sin carga)

RS-485



Request

Request



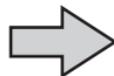
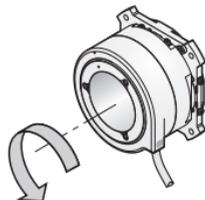
Ausgangssignale am Gerät

Output signals at encoder

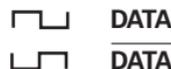
Signaux de sortie sur l'appareil

Segnali in uscita integrato

Señales de salida en el aparato

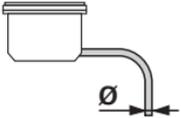
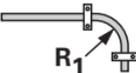
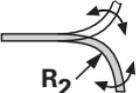
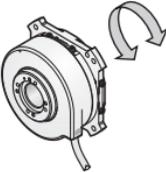


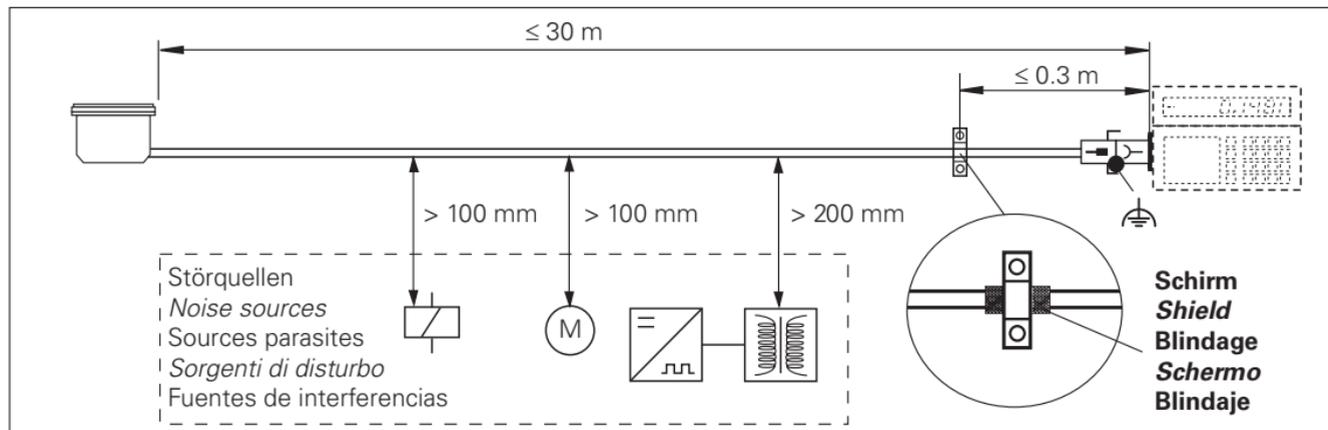
RS-485



DATA

DATA

	 <p>$T \geq -40\text{ °C}$ (-40 °F)</p>	 <p>$T \geq -10\text{ °C}$ (14 °F)</p>		<p>$M_d \leq 0.10\text{ Nm}$ (20 °C) $I = 138 \cdot 10^{-6}\text{ kgm}^2$</p>
<p>$\text{Ø } 6\text{ mm}$</p>	<p>$R_1 \geq 20\text{ mm}$</p>	<p>$R_1 \geq 75\text{ mm}$</p>		<p>$M_d \leq 0.15\text{ Nm}$ (20 °C) $I = 215 \cdot 10^{-6}\text{ kgm}^2$</p>
<p>$\text{Ø } 8\text{ mm}$</p> 	<p>$R_1 \geq 40\text{ mm}$</p>	<p>$R_2 \geq 100\text{ mm}$</p>		



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