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TECHNOLOGY GROUP

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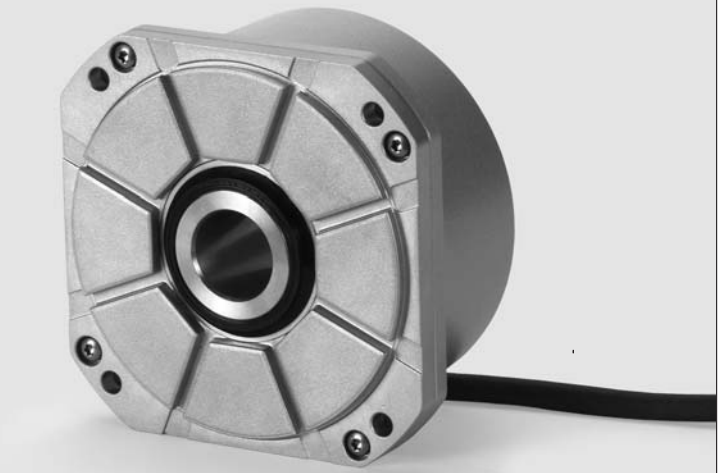
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# HEIDENHAIN

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

**SALES & SERVICE:**
**A Tech Authority, Inc.**
13745 Stockton Ave.
Chino CA 91710
909-614-4522
sales@atechauthority.com

# RON 255

**1/2011**

Warnhinweise
*Warnings*
Recommandations
*Avvertenze*
Advertencias

**4**  **3, 5**

Abmessungen
*Dimensions*
Dimensions
*Dimensioni*
Dimensiones

**6, 8**  **7, 9**

Montage
*Assembly*
Montage
*Montaggio*
Montaje

**10**  **11**

Technische und Elektrische Kennwerte
*Technical and electrical data specifications*
Caractéristiques techniques et électriques
*Dati tecnici e elettrici*
Datos técnicos y eléctricos

**12, 14**  **13, 15**

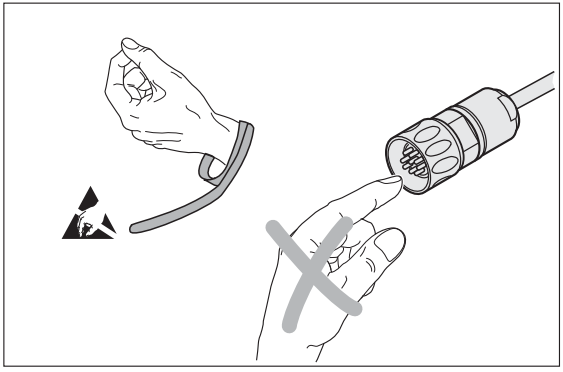
**Achtung:** Die Montage und Inbetriebnahme ist von einer Fachkraft für Elektrik und Feinmechanik unter Beachtung der örtlichen Sicherheitsvorschriften vorzunehmen.
Die Steckverbindung darf nur spannungsfrei verbunden oder gelöst werden.
Der Antrieb darf während der Montage nicht in Betrieb gesetzt werden.

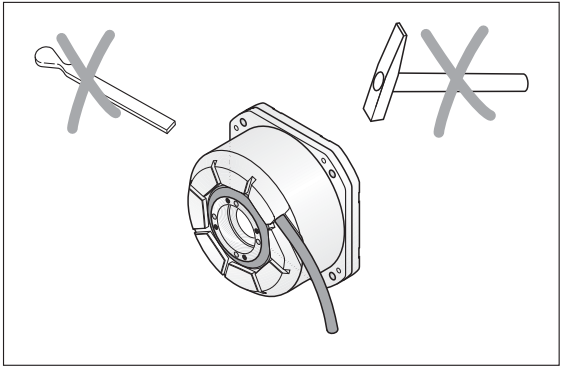
***Note:*** *Mounting and commissioning is to be conducted by a specialist in electrical equipment and precision mechanics under compliance with local safety regulations.*
*Do not engage or disengage any connections while under power.*
*The drive must not be put into operation during installation.*

**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.

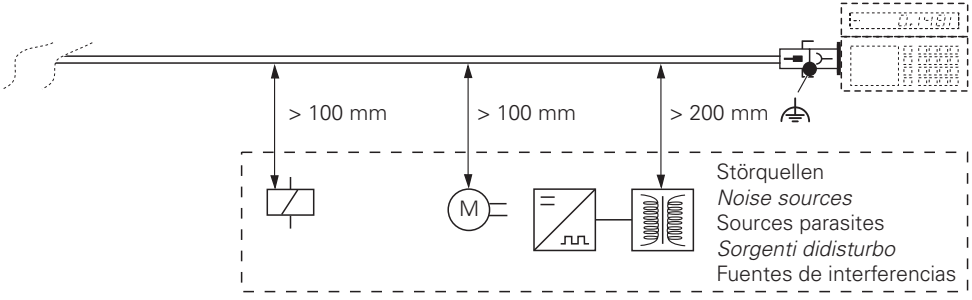




**Maße in mm**
***Dimensions in mm***
**Cotes en mm**
***Dimensioni in mm***
**Dimensiones en mm**

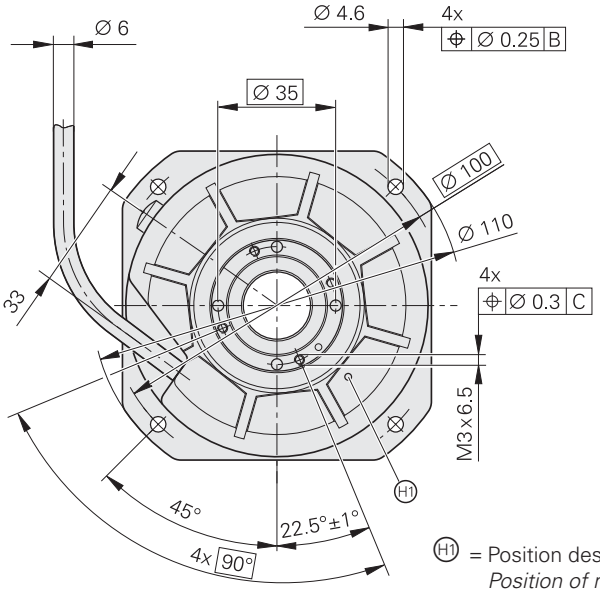
**Vorsicht:** Der direkte Kontakt von Flüssigkeiten mit Messgerät und Steckverbinder ist zu vermeiden!
***Attention:*** *Avoid direct contact of fluids with the encoder and connector!*
**Attention:** Eviter le contact direct de liquides sur le système de mesure et le connecteur!
***Attenzione:*** *Evitare 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!



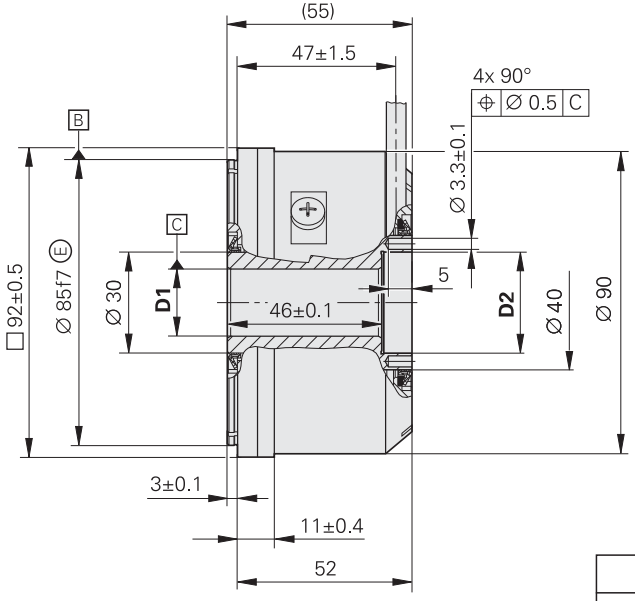


mm

Tolerancing ISO 8015
ISO 2768 - m H
< 6 mm: ±0.2 mm

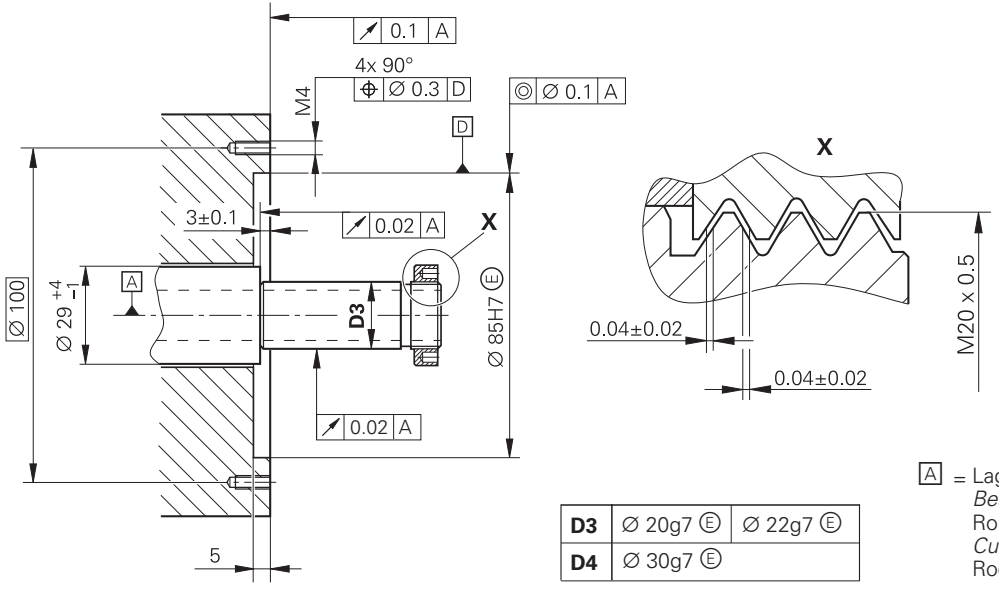



H1 = Position des Referenzsignals ± 5°
*Position of reference signal ± 5°*
Position du signal de référence ± 5°
*Posizione del segnale di riferimento ± 5°*
Posición de la señal de referencia ± 5°




| D1 | D2 |
|---|---|
| Ø 20H7 Ⓔ<br>Ø 22H7 Ⓔ | Ø 30H7 Ⓔ |

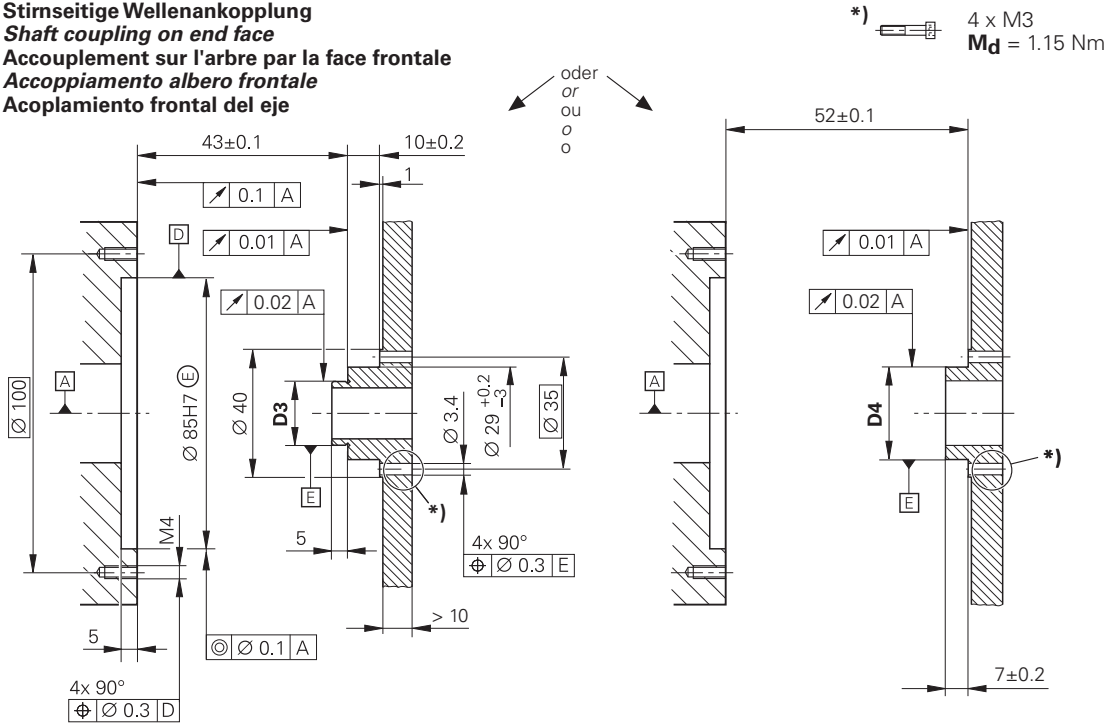
**Kundenseitige Anschlussmaße mit Ringmutter**
***Required mating dimensions with ring nut***
**Conditions requises pour le montage avec écroù à anneau**
***Quote per il montaggio con ghiera di fissaggio***
**Cotas de montaje requeridas con tuerca anular**

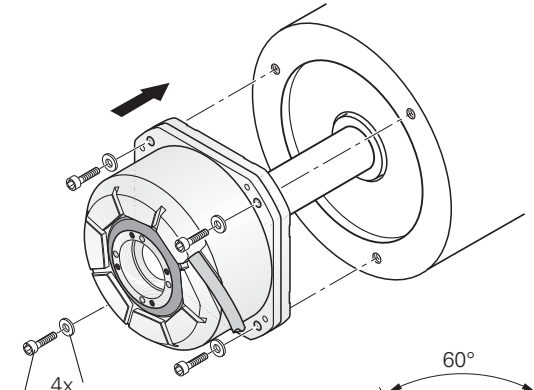


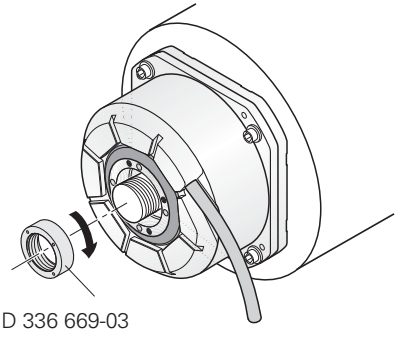

| | | |
|---|---|---|
| **D3** | Ø 20g7 Ⓔ | Ø 22g7 Ⓔ |
| **D4** | Ø 30g7 Ⓔ | |

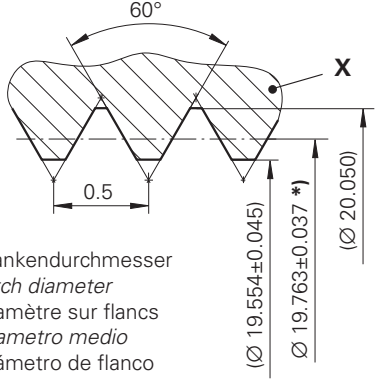
A = Lagerung
*Bearing*
Roulement
*Cuscinetto*
Rodamiento

**Stirnseitige Wellenankopplung**
***Shaft coupling on end face***
**Accouplement sur l'arbre par la face frontale**
***Accoppiamento albero frontale***
**Acoplamiento frontal del eje**

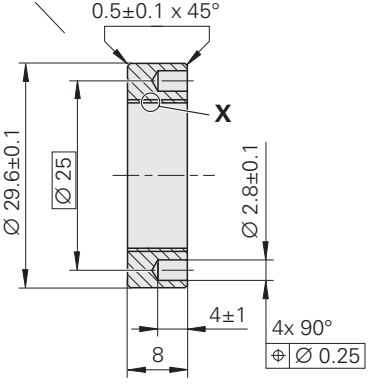


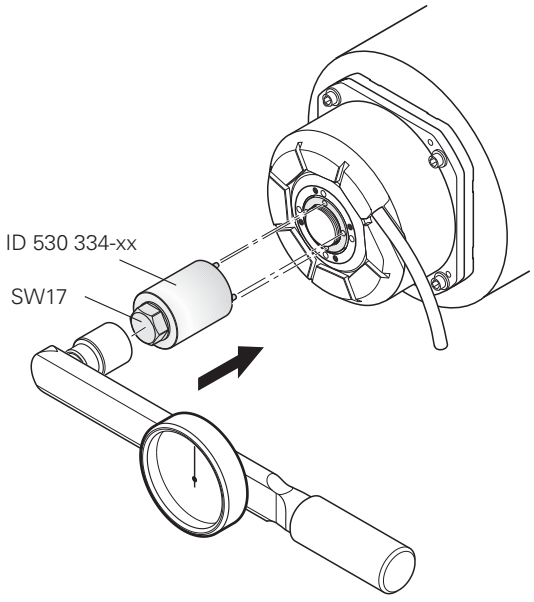


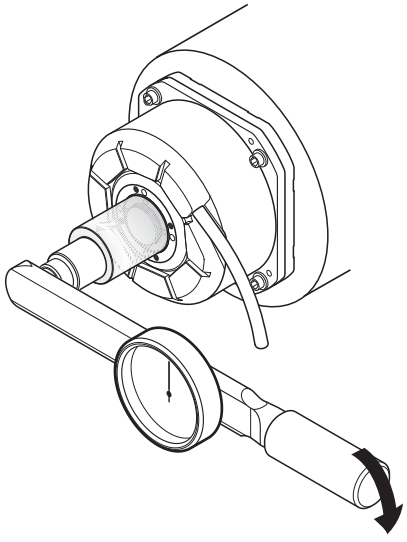



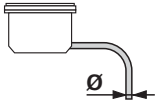
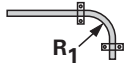
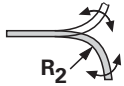

***)** Flankendurchmesser
*Pitch diameter*
Diamètre sur flancs
*Diametro medio*
Diámetro de flanco

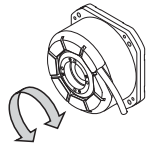




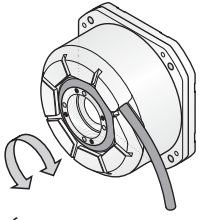
**$M_d$** = 22 Nm – 2 Nm

|  |  T ≥ –40 °C (–40 °F) |  T ≥ –10 °C (14 °F) |
|---|---|---|
| **Ø 6 mm** | $R_1 \geq$ 20 mm | $R_2 \geq$ 75 mm |
| **Ø 8 mm**  | $R_1 \geq$ 40 mm | $R_2 \geq$ 100 mm |



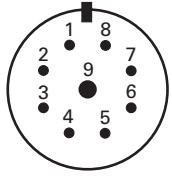
$\mathbf{M_d} \leq 0.08$ Nm (20 °C)

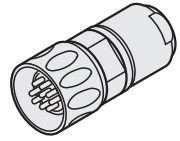
$\mathbf{I} = 73 \cdot 10^{-6}$ kgm$^2$



Z = Strichzahl
*Line count*
Nombre de traits
*Numero di impulsi*
Número de impulsos

$$n \leq \begin{cases} \frac{160}{Z} \cdot 10^3 \cdot 60 \text{ min}^{-1} \text{ (–3dB)} \\ 3\,000 \text{ min}^{-1} \end{cases}$$



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

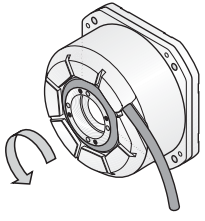
**1)** Innenschirm
*Internal shield*
Blindage interne
*Schermo interno*
Blindaje interno

| 3 | 4 | 1 | 2 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|
| **5 V $U_P$** | **0 V $U_N$** | **$I_1$+** | **$I_1$–** | **$I_2$+** | **$I_2$–** | **$I_0$+** | **$I_0$–** | **1)** |
| BN | WH | GN | YE | BU | RD | GY | PK | WHBN |

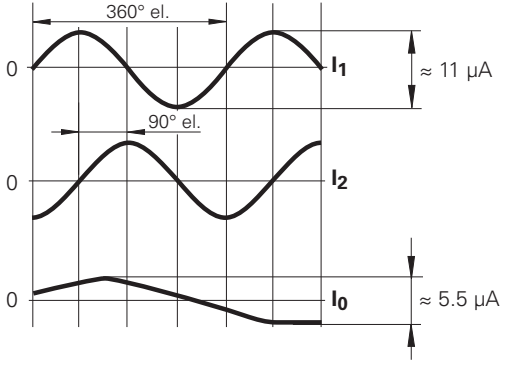
**Spannungsversorgung**
***Power supply***
**Tension d'alimentation**
***Tensione di alimentazione***
**Tensión de alimentación**

**Up: DC 5 V** ± 0.25 V
am Gerät, *at encoder,* sur l'appareil, *integrato,* en el aparato.
I max. 150 mA
(ohne Last, *Without load,* sans charge, *senza carico,* sin carga)

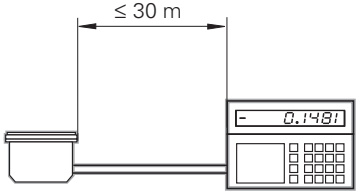
**Ausgangsignale**
***Output signals***
**Signaux de sortie**
***Segnali in uscita***
**Señales de salida**

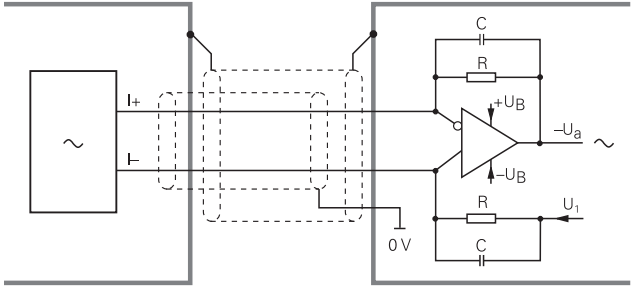


**$I_1$, $I_2$, $I_0$**




**RON 255:** 1x$I_0$
**RON 255C:** 36x$I_0$




RC 4157
C = 27 pF
R = 100 kΩ
$U_1$ = 2.5 V

# HEIDENHAIN

**DR. JOHANNES HEIDENHAIN GmbH**
Dr.-Johannes-Heidenhain-Straße 5
**83301 Traunreut, Germany**
☏ +49 8669 31-0
FAX +49 8669 5061
E-mail: info@heidenhain.de

**Technical support** FAX +49 8669 32-1000
**Measuring systems** ☏ +49 8669 31-3104
E-mail: service.ms-support@heidenhain.de
**TNC support** ☏ +49 8669 31-3101
E-mail: service.nc-support@heidenhain.de
**NC programming** ☏ +49 8669 31-3103
E-mail: service.nc-pgm@heidenhain.de
**PLC programming** ☏ +49 8669 31-3102
E-mail: service.plc@heidenhain.de
**Lathe controls** ☏ +49 8669 31-3105
E-mail: service.lathe-support@heidenhain.de

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CE

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