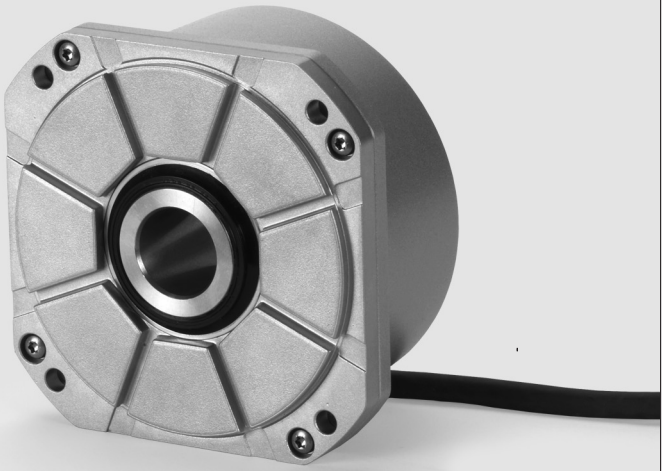


HEIDENHAIN

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

RON 285

11/2013

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**

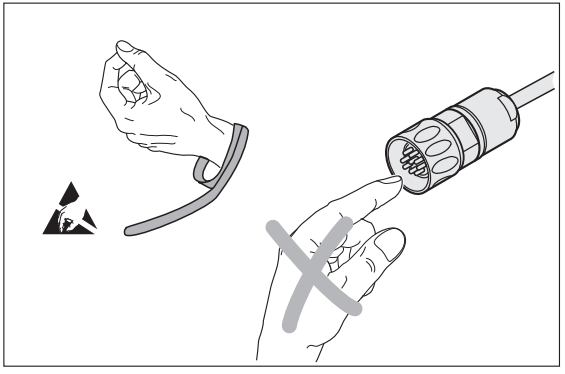
Achtung: Die Montage und Inbetriebnahme ist von einer Fachkraft für Elektrik und Feinmechanik unter Beachtung der örtlichen Sicherheitsvorschriften vorzunehmen.
Die Steckverbindung darf nur spannungsfrei verbunden oder gelöst werden.
Der Antrieb darf während der Montage nicht in Betrieb gesetzt werden.

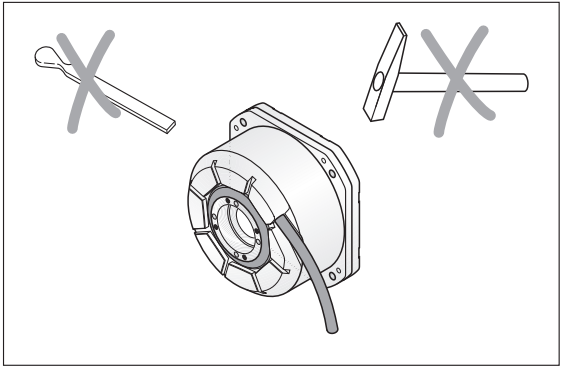
Note: *Mounting and commissioning is to be conducted by a specialist in electrical equipment and precision mechanics under compliance with local safety regulations.*
Do not engage or disengage any connections while under power.
The drive must not be put into operation during installation.

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.

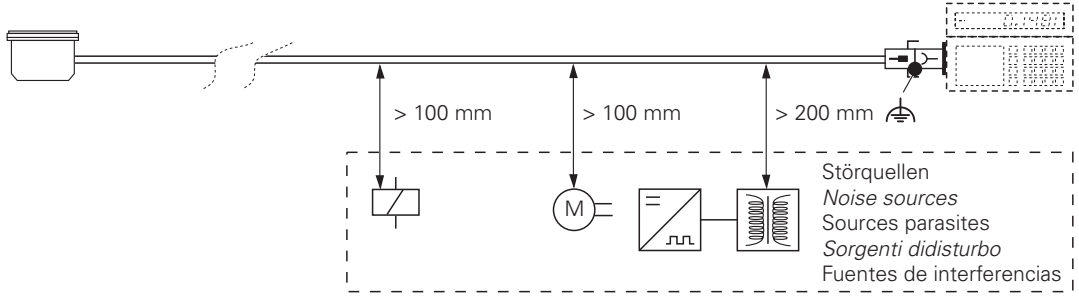
Atención: El montaje y la puesta en marcha deben ser realizados por un especialista en electricidad y mecánica de precisión, observando las prescripciones locales de seguridad.
Conectar o desconectar el conector sólo en ausencia de tensión.
El accionamiento no debe estar en marcha durante el montaje.





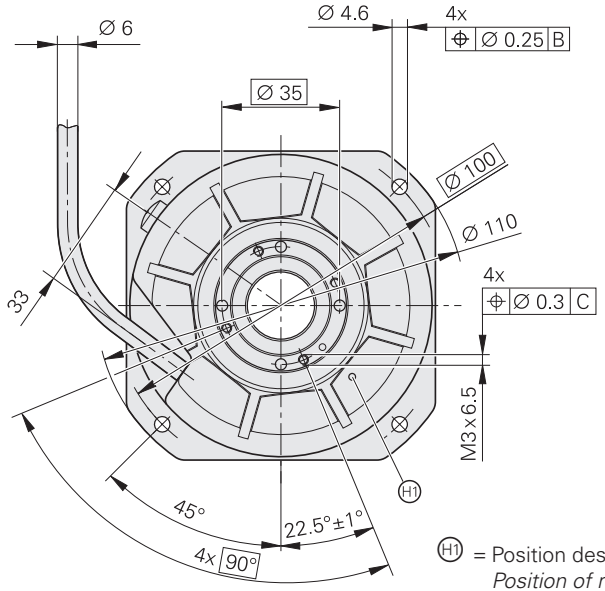
Maße in mm
Dimensions in mm
Cotes en mm
Dimensioni in mm
Dimensiones en mm

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!

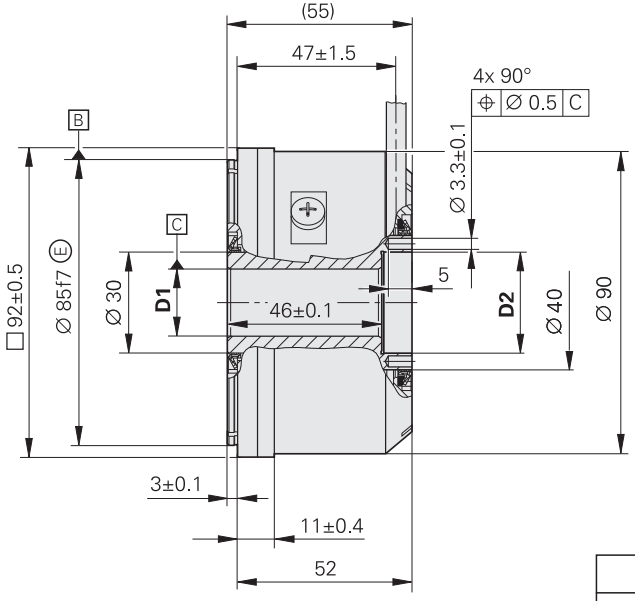


mm

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

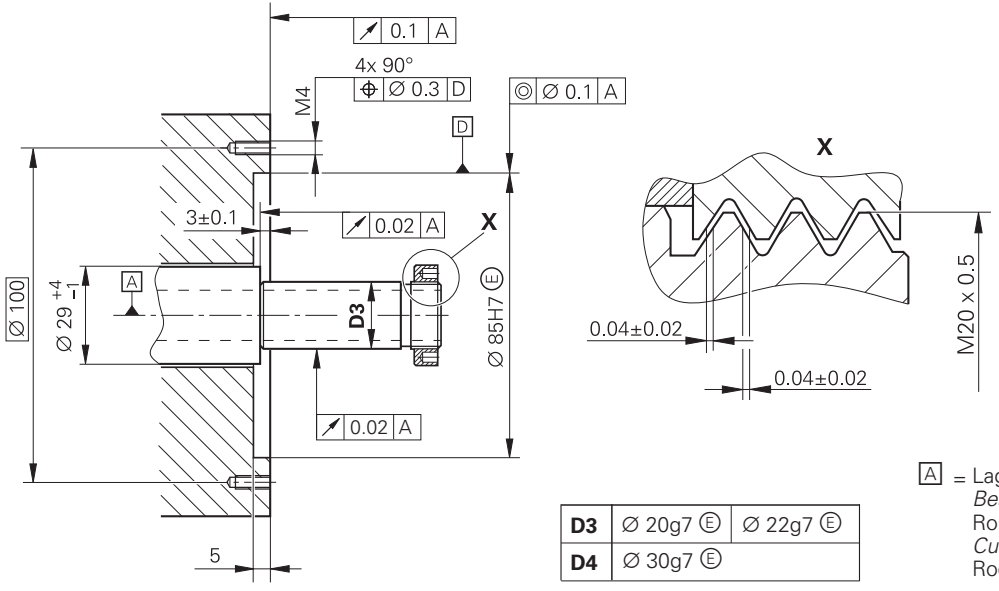


H1 = Position des Referenzsignals ± 5°
Position of reference signal ± 5°
Position du signal de référence ± 5°
Posizione del segnale di riferimento ± 5°
Posición de la señal de referencia ± 5°



D1	D2
Ø 20H7 Ⓔ Ø 22H7 Ⓔ	Ø 30H7 Ⓔ

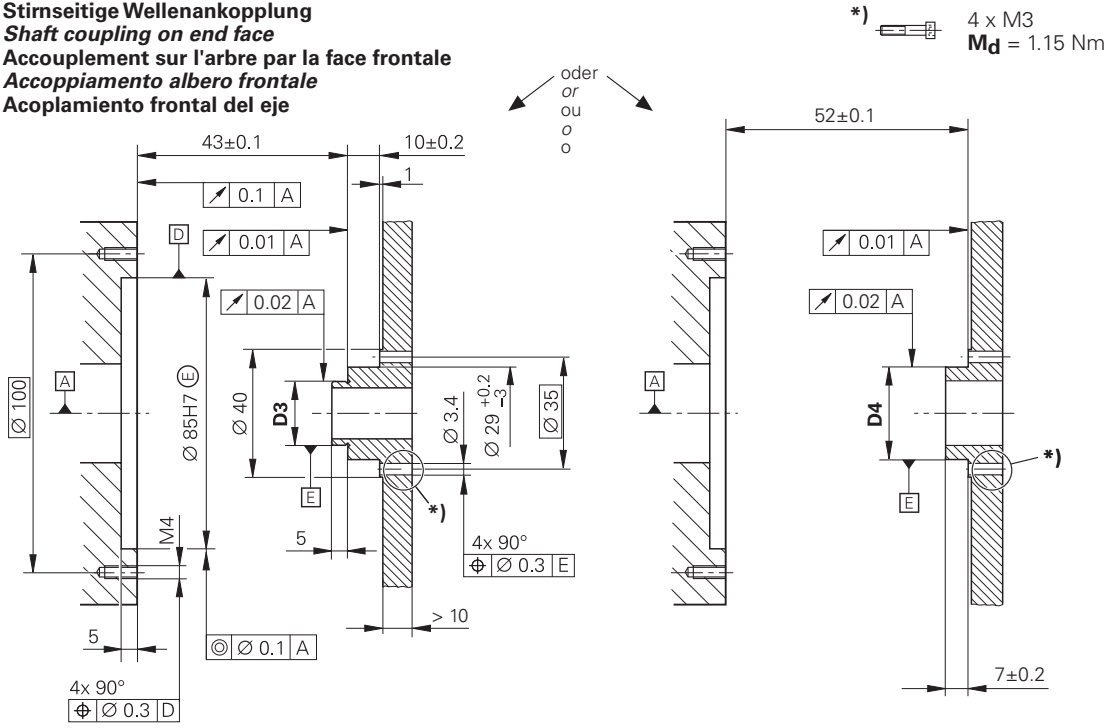
Kundenseitige Anschlussmaße mit Ringmutter
Required mating dimensions with ring nut
Conditions requises pour le montage avec écroù à anneau
Quote per il montaggio con ghiera di fissaggio
Cotas de montaje requeridas con tuerca anular

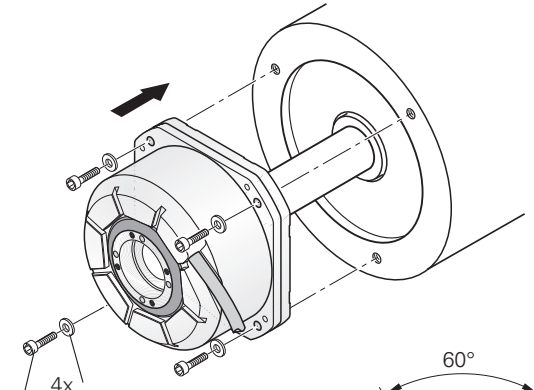


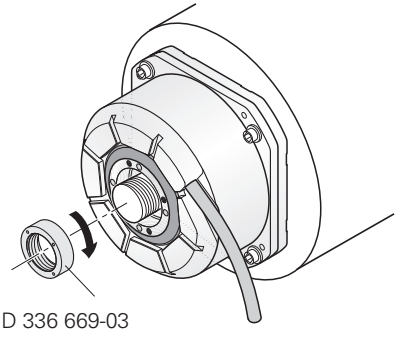
D3	Ø 20g7 Ⓔ	Ø 22g7 Ⓔ
D4	Ø 30g7 Ⓔ	

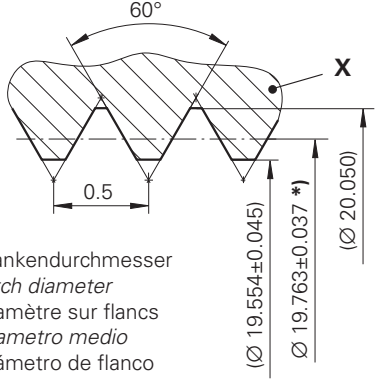
A = Lagerung
Bearing
Roulement
Cuscinetto
Rodamiento

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

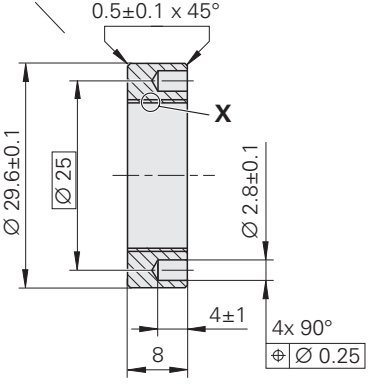


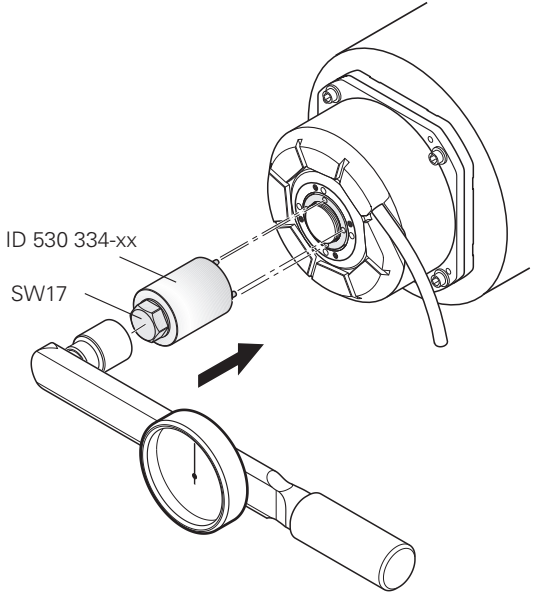


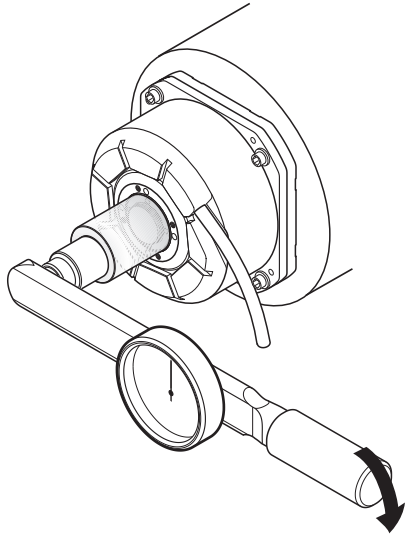




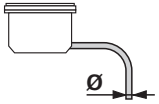
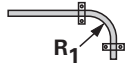
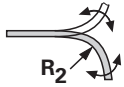
***)** Flankendurchmesser
Pitch diameter
Diamètre sur flancs
Diametro medio
Diámetro de flanco

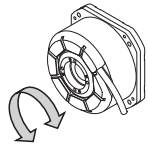




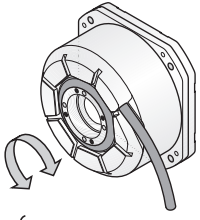


M_d = 22 Nm – 2 Nm

	 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

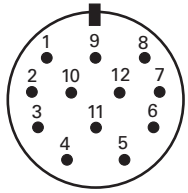


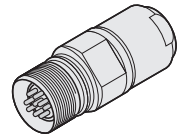
M_d ≤ 0.08 Nm (20 °C)
I = 73 · 10^{-6} kgm^2

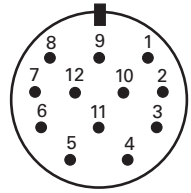


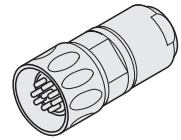
Z = Strichzahl
Line count
Nombre de traits
Numero di impulsi
Número de impulsos

$$n \leq \begin{cases} \frac{180}{Z} \cdot 10^3 \cdot 60\ \text{min}^{-1}\ (-3\text{dB}) \\ 3\,000\ \text{min}^{-1} \end{cases}$$









12	2	10	11	5	6	8	1	3	4	7	/	9
U_P	**Sensor** U_P	**0 V**	**Sensor** 0 V	**A+**	**A–**	**B+**	**B–**	**R+**	**R–**	**/**	**/**	**/**
BNGN	BU	WHGN	WH	BN	GN	GY	PK	RD	BK	VT	YE	**/**

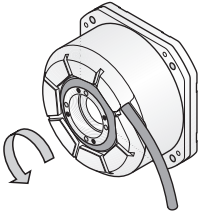
Die Sensorleitung ist intern mit der Versorgungsleitung verbunden.
The sensor line is connected internally with the power supply.
La ligne de palpeur est reliée de manière interne à la ligne d'alimentation.
La linea del sensore è collegata internamente con la linea di alimentazione.
La línea de sensor está unida internamente con la línea de alimentación.

Schirm auf Gehäuse
Shield on housing
Blindage sur boîtier
Schermo sulla carcassa
Blindaje a carcasa

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

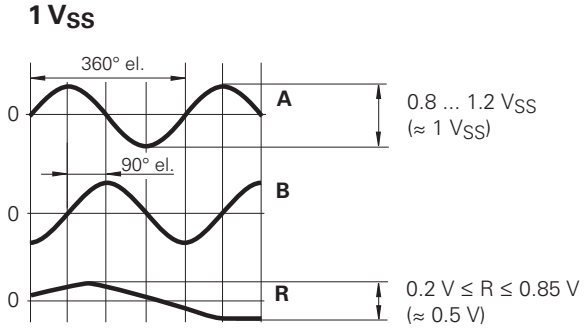
Up: DC 5 V ± 0.5 V
am Gerät, *at encoder,* sur l'appareil, *integrato,* en el aparato.
I max. 150 mA
(ohne Last, *Without load,* sans charge, *senza carico,* sin carga)

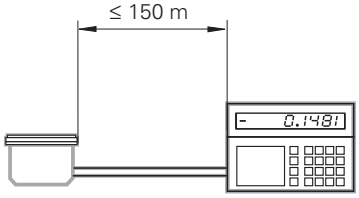
Ausgangsignale
Output signals
Signaux de sortie
Segnali in uscita
Señales de salida

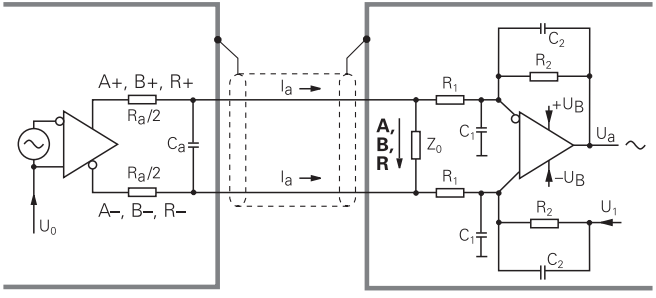


A, B, R

RON 285: 1xR
RON 285C: 36xR







$R_a < 100\ \Omega$
$C_a < 50$ pF
$\Sigma I_a < 1$ mA
$U_0 = 2.5\,V \pm 0.5\,V$

$Z_0 = 120\ \Omega$
$U_1 \approx U_0$

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