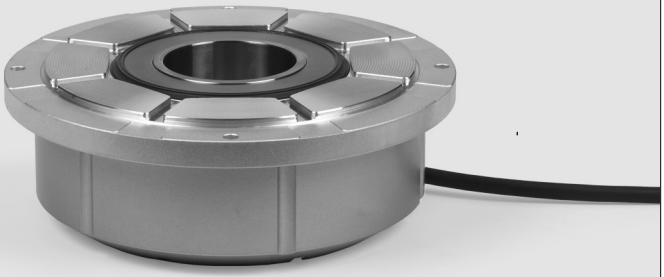


HEIDENHAIN

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

RON 785

3/2010

Warnhinweise *Warnings* Recommandations *Avvertenze* Advertencias	**4** ◄ ► **3, 5**
Abmessungen *Dimensions* Dimensions *Dimensioni* Dimensiones	**6** ◄ ► **7**
Montage *Assembly* Montage *Montaggio* Montaje	**8** ◄ ► **9**
Technische und Elektrische Kennwerte *Technical and electrical data specifications* Caractéristiques techniques et électriques *Dati tecnici e elettrici* Datos técnicos y eléctricos	**10, 12, 14** ◄ ► **11, 13, 15**

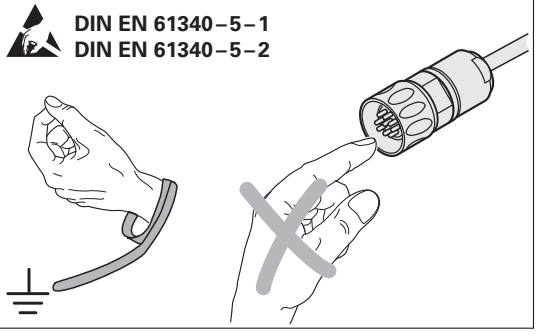
Achtung: Die Montage und Inbetriebnahme ist von einer Fachkraft für Elektrik und Feinmechanik unter Beachtung der örtlichen Sicherheitsvorschriften vorzunehmen.
Die Steckverbindung darf nur spannungsfrei verbunden oder gelöst werden.
Der Antrieb darf während der Montage nicht in Betrieb gesetzt werden.

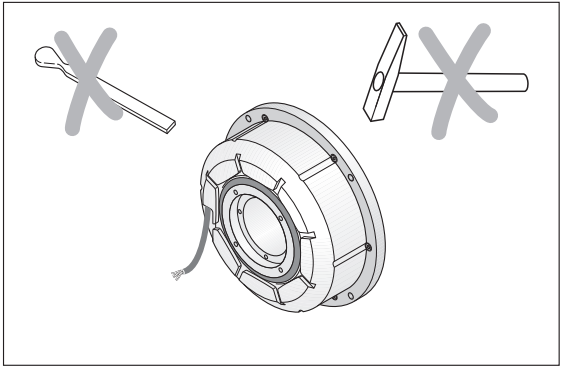
Note: *Mounting and commissioning is to be conducted by a specialist in electrical equipment and precision mechanics under compliance with local safety regulations.*
Do not engage or disengage any connections while under power.
The drive must not be put into operation during installation.

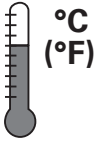
Attention: Le montage et la mise en service doivent être réalisés par une personne qualifiée en électricité et mécanique de précision dans le respect des règles de sécurité locales.
Le connecteur ne doit être branché ou débranché que hors tension.
L'entraînement ne doit pas être mis en route pendant le montage.

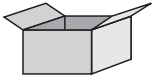
Attenzione: *far eseguire montaggio e messa in servizio da un tecnico specializzato in impianti elettrici e meccanica di precisione in ottemperanza alle disposizioni di sicurezza locali.*
Collegare o staccare i collegamenti soltanto in assenza di tensione.
L'azionamento non deve essere messo in funzione 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.







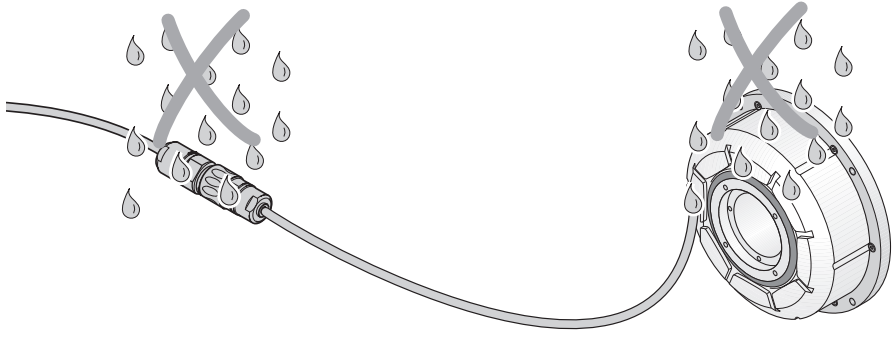


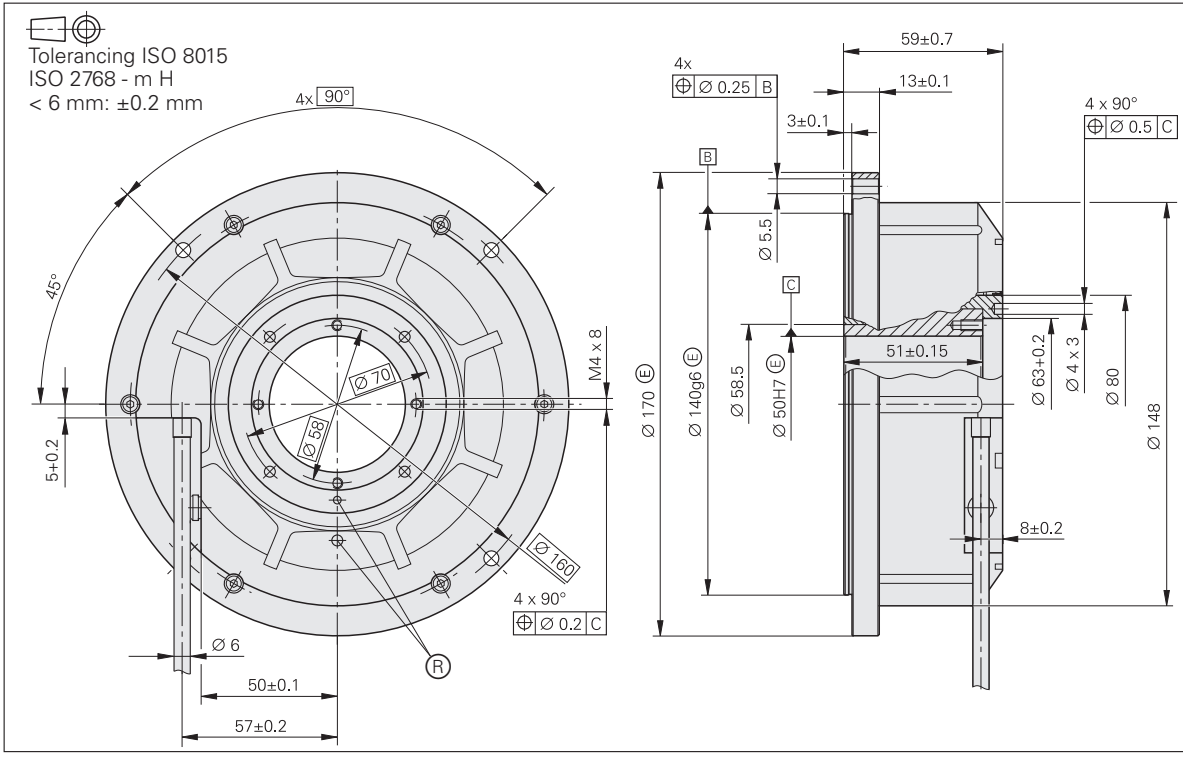
–30 ... 80 °C
(–22 ... 176 °F)

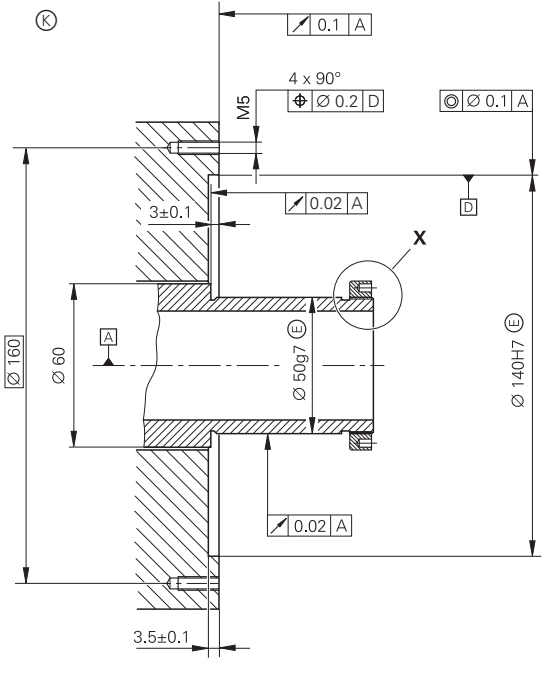
Lagertemperatur
Storage temperature
Température de stockage
Temperatura di immagazzinaggio
Temperatura en almacén

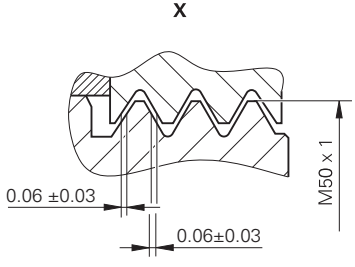
Maße in mm
Dimensions in mm
Cotes en mm
Dimensioni in mm
Dimensiones en mm

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!




Tolerancing ISO 8015
ISO 2768 - m H
< 6 mm: ±0.2 mm
4x 90°
45°
5±0.2
Ø 70
Ø 58
M4 x 8
Ø 160
4 x 90°
Ø 0.2 C
Ø 6
R
50±0.1
57±0.2
59±0.7
4x
Ø 0.25 B
13±0.1
3±0.1
4 x 90°
Ø 0.5 C
B
Ø 5.5
C
51±0.15
Ø 170 E
Ø 140g6 E
Ø 58.5
Ø 50H7 E
Ø 63+0.2
Ø 4 x 3
Ø 80
Ø 148
8±0.2

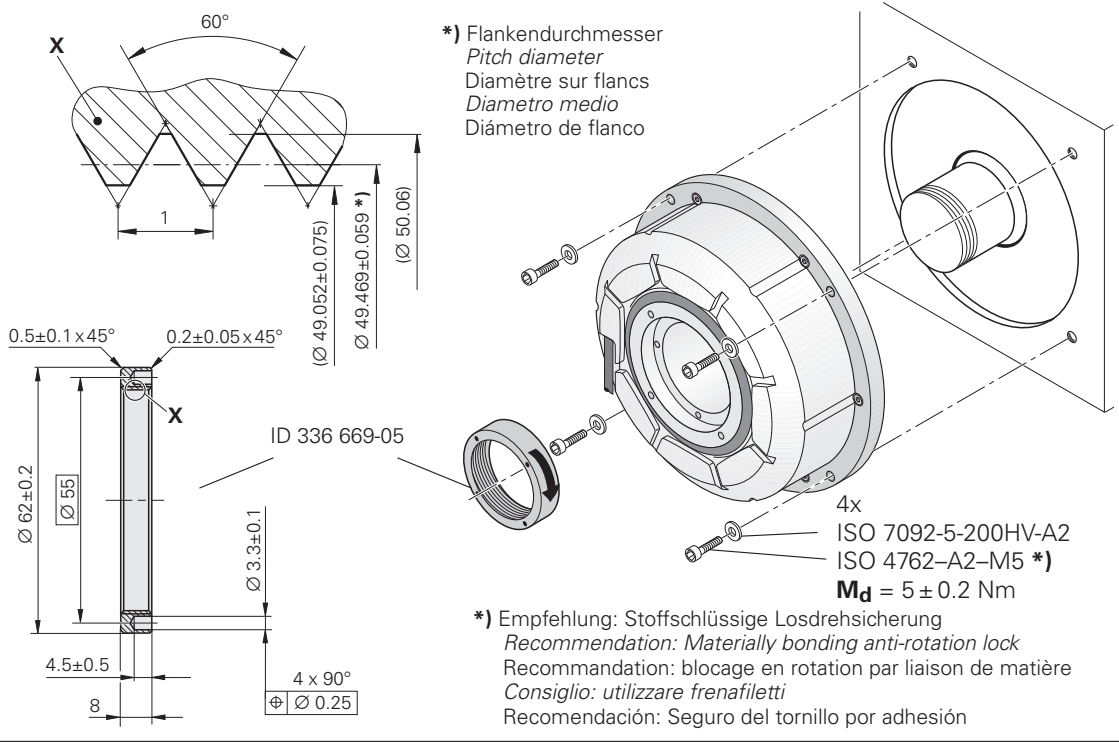


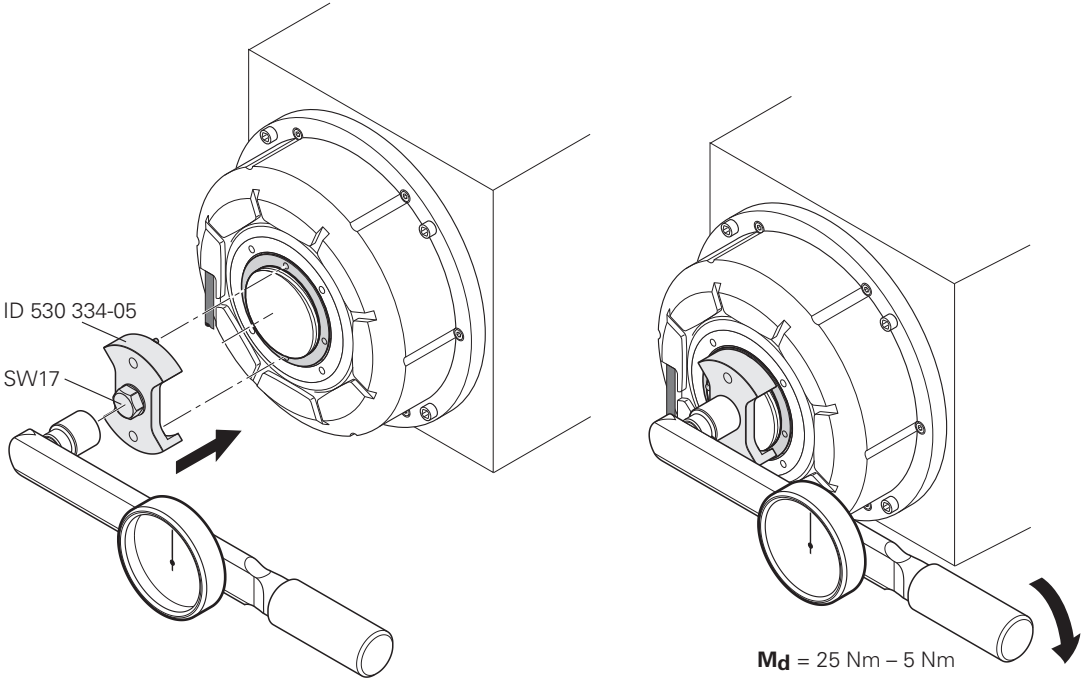


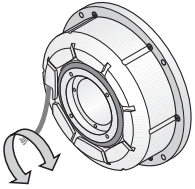
A = Lagerung
Bearing
Roulement
Cuscinetto
Rodamiento

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

R = Position des Referenzsignals
Position of reference signal
Position du signal de référence
Posizione del segnale di riferimento
Posición de la señal de referencia


60°
X
1
(Ø 49.052±0.075)
Ø 49.469±0.059 *)
(Ø 50.06)
*) Flankendurchmesser
Pitch diameter
Diamètre sur flancs
Diametro medio
Diámetro de flanco
0.5±0.1 x 45°
0.2±0.05 x 45°
X
Ø 62±0.2
Ø 55
Ø 3.3±0.1
4.5±0.5
8
4 x 90°
⊕ Ø 0.25
ID 336 669-05
4x
ISO 7092-5-200HV-A2
ISO 4762–A2–M5 *)
Md = 5 ± 0.2 Nm
*) Empfehlung: Stoffschlüssige Losdrehsicherung
Recommendation: Materially bonding anti-rotation lock
Recommandation: blocage en rotation par liaison de matière
Consiglio: utilizzare frenafiletti
Recomendación: Seguro del tornillo por adhesión

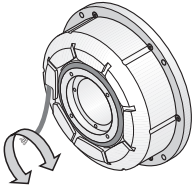

ID 530 334-05
SW17
Md = 25 Nm – 5 Nm



$\mathbf{M_d} \leq 0.06$ Nm (20 °C; **IP 40**)

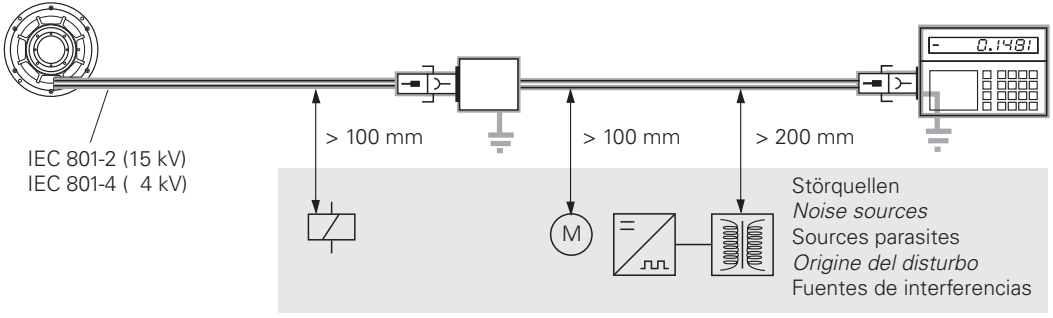
$\mathbf{M_d} \leq 0.5$ Nm (20 °C; **IP 64**)

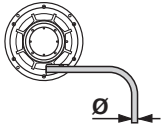
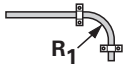
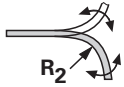
$\mathbf{I} = 1.05 \cdot 10^{-3}$ kgm^2



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

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

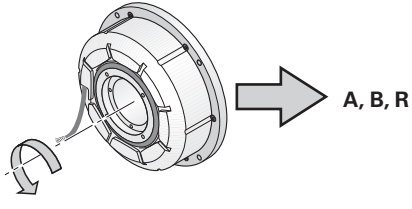


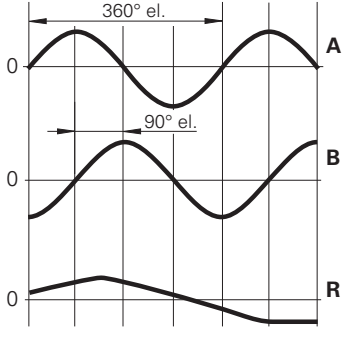
	 T ≥ –40 °C (–40 °F)	 T ≥ –10 °C (14 °F)
Ø 6 mm	$R_1 \geq$ 20 mm	$R_2 \geq$ 75 mm
Ø 8 mm	$R_1 \geq$ 40 mm	$R_2 \geq$ 100 mm

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

U_P = 5 V ± 10%
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)
EN 50 178
PELV ⏚ EN 60 204-1

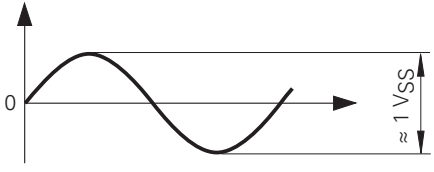
Ausgangsignale
Output signals
Signaux de sortie
Segnali in uscita
Señales de salida



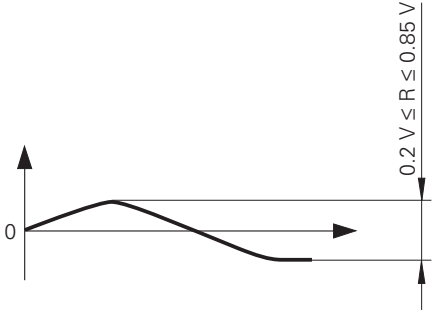


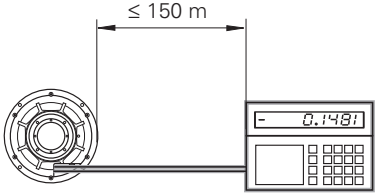
RON 785: 1 x R
RON 785C: 36 x R

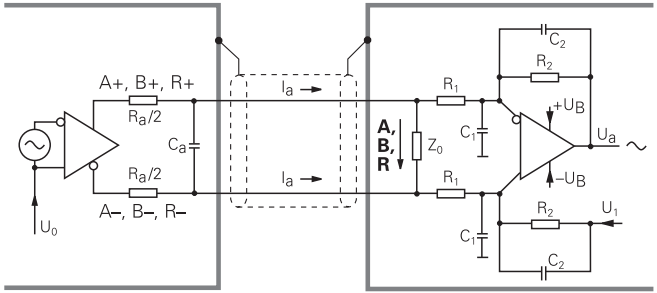
A, B



R

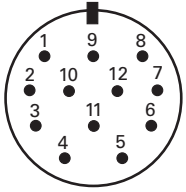


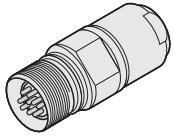




$R_a < 100\ \Omega$
$C_a < 50$ pF
$\Sigma I_a < 1$ mA
$U_0 = 2.5\ V \pm 0.5\ V$

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





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

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