

# HEIDENHAIN

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

## **RCN 223 F**

Fanuc Serial Interface  
(High resolution type A)

## **RCN 227 F**

Fanuc Serial Interface  
(High resolution type B)

6/2010

Warnhinweise  
*Warnings*  
Recommandations  
*Avvertenze*  
Advertencias



Abmessungen  
*Dimensions*  
Dimensions  
*Dimensioni*  
Dimensiones



Montage  
*Assembly*  
Montage  
*Montaggio*  
Montaje



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





**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.*

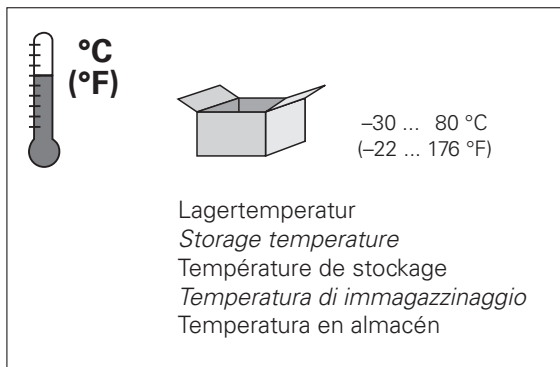
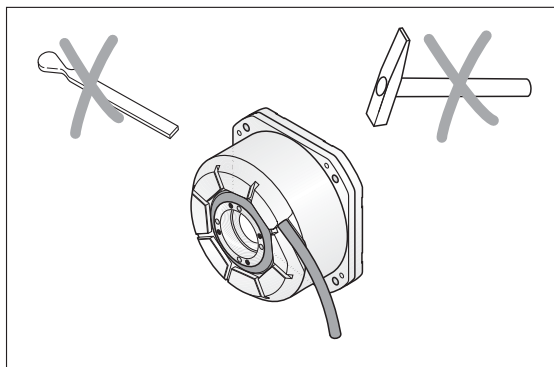
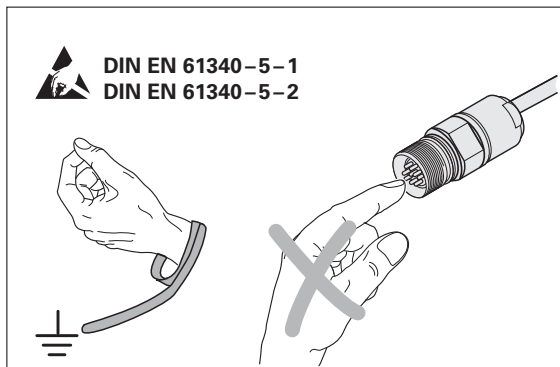
*Collegare o staccare i collegamenti soltanto in assenza di tensione.*

*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**



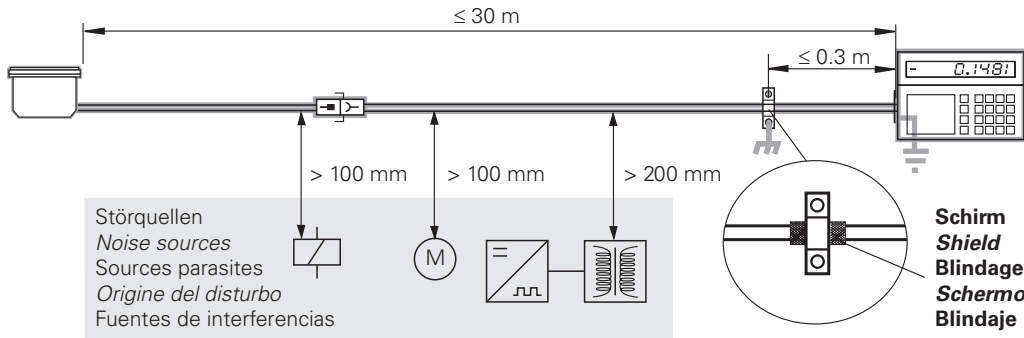
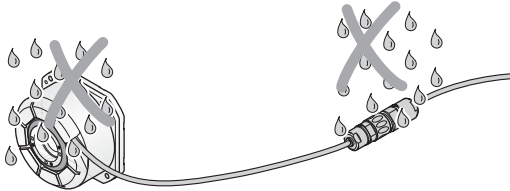
**Vorsicht:** Der direkte Kontakt von Flüssigkeiten mit Messgerät und Steckverbinder ist zu vermeiden!

**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!



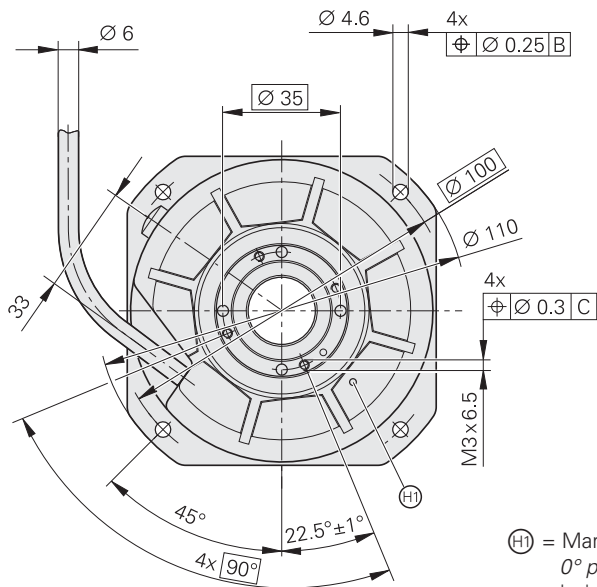
mm



Tolerancing ISO 8015

ISO 2768 - m H

< 6 mm:  $\pm 0.2$  mm

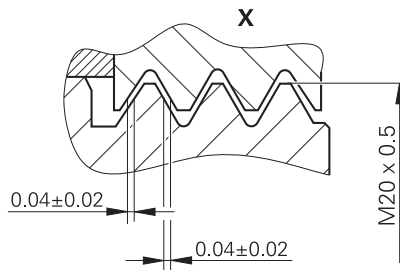
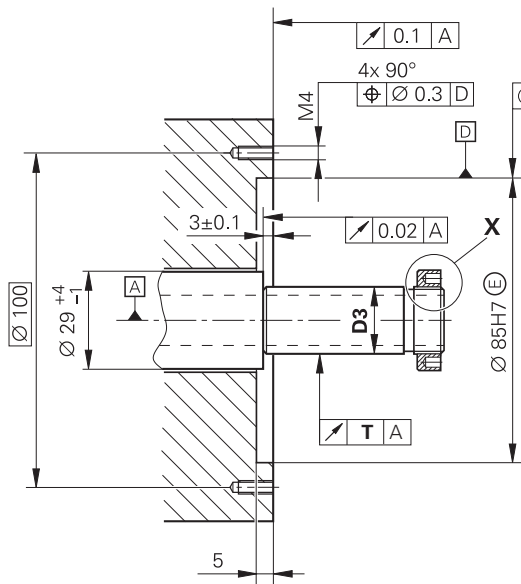


(H1) = Markierung der 0° Position ( $\pm 5^\circ$ )  
 0° position index  $\pm 5^\circ$   
 Index position  $0^\circ \pm 5^\circ$   
 Tacca della posizione  $0^\circ \pm 5^\circ$   
 Marcación de la posición  $0^\circ \pm 5^\circ$



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

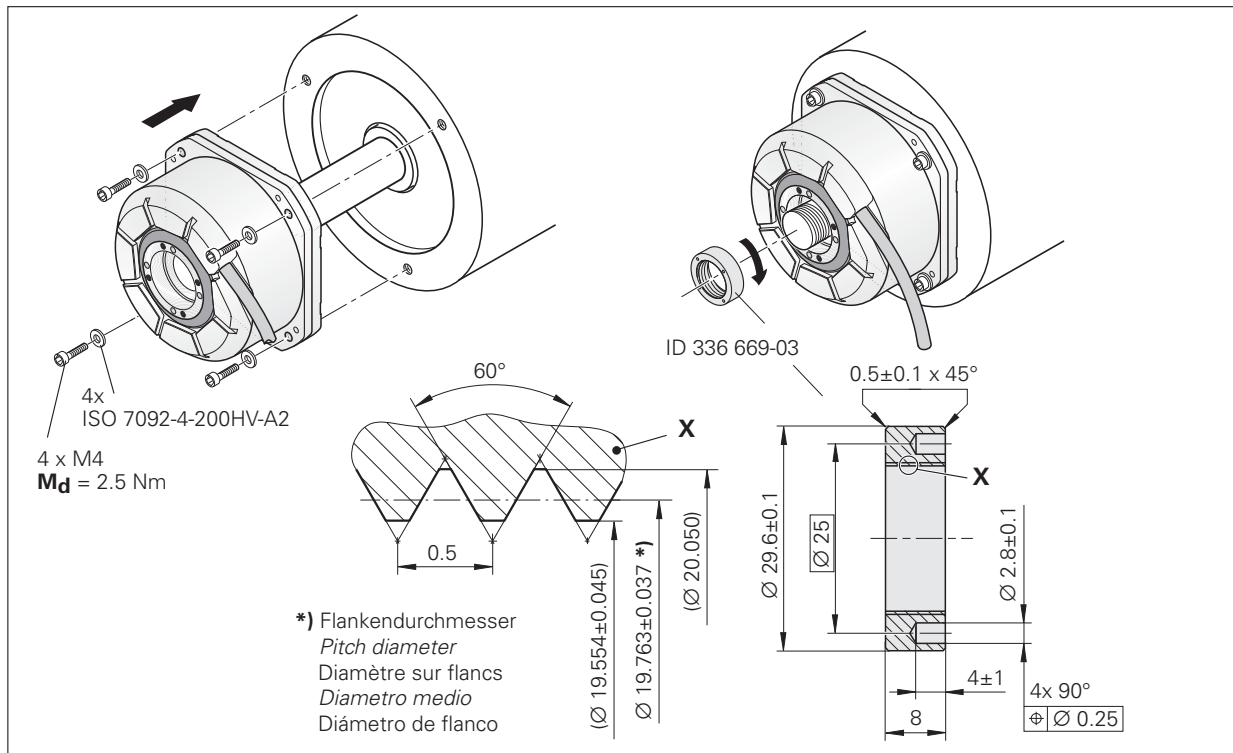
**A** = Lagerung  
 Bearing  
 Roulement  
 Cuscinetto  
 Rodamiento



	2.5"		5"	
<b>D3</b>	Ø 20g6 $\text{E}$	Ø 22g6 $\text{E}$	Ø 20g7 $\text{E}$	Ø 22g7 $\text{E}$
<b>D4</b>	Ø 30g6 $\text{E}$		Ø 30g7 $\text{E}$	
<b>T</b>	0.01		0.02	

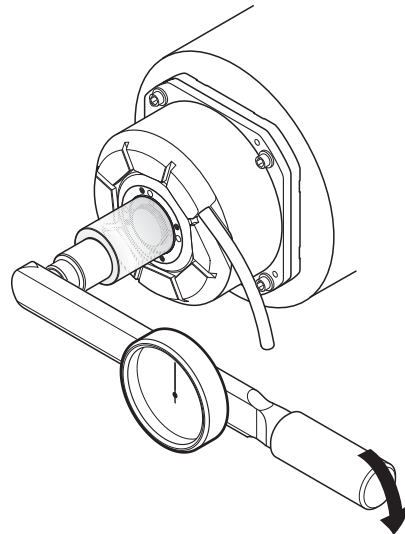
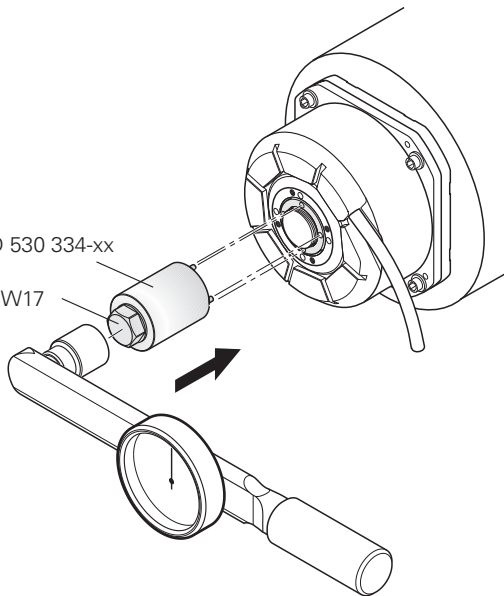




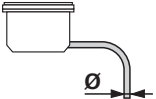
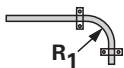
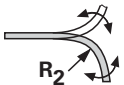
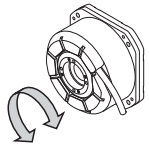



ID 530 334-xx

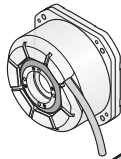
SW17



**M<sub>d</sub>** = 22 Nm – 2 Nm

	 <p><math>T \geq -40\text{ °C}</math> (<math>-40\text{ °F}</math>)</p>	 <p><math>T \geq -10\text{ °C}</math> (<math>14\text{ °F}</math>)</p>		<p><math>M_d \leq 0.08\text{ Nm}</math> (20 °C; IP 64)</p> <p><math>I = 73 \cdot 10^{-6}\text{ kgm}^2</math></p>
<p><b>Ø 6 mm</b></p>	<p><math>R_1 \geq 20\text{ mm}</math></p>	<p><math>R_1 \geq 75\text{ mm}</math></p>		
<p><b>Ø 8 mm</b></p> 	<p><math>R_1 \geq 40\text{ mm}</math></p>	<p><math>R_2 \geq 100\text{ mm}</math></p>		

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



**U<sub>p</sub> = 3.6 V ... 5.25 V**

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

I<sub>max</sub>. 350 mA

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

EN 50 178

PELV  $\neq$  EN 60 204-1

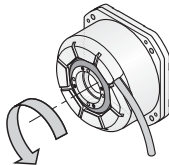
**RS-485**



**Request**

**Request**

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

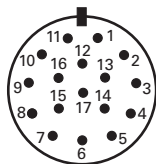
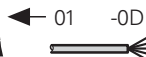


**RS-485**

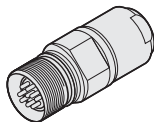


**DATA**

**DATA**



03S17-0D



Kabelschirm mit Gehäuse verbunden.  
*Cable shield connected to housing.*  
 Blindage du câble relié au boîtier.  
*Collegare lo schermo del cavo alla carcassa.*  
 Pantalla del cable conectada a carcasa.

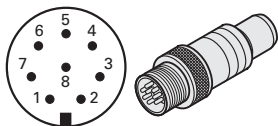
	7	1	10	4	14	17	8	9
	Up	Sensor Up	0V	Sensor 0V	Serial Data	Serial Data	Request	Request
	● ——— ●		● ——— ●					
	BNGN	BU	WHGN	WH	GY	PK	VT	YE

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.




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

1SS08-C4



Kabelschirm mit Gehäuse verbunden.  
*Cable shield connected to housing.*  
 Blindage du câble relié au boîtier.  
*Collegare lo schermo del cavo alla carcassa.*  
 Pantalla del cable conectada a carcasa.

	8	2	5	1	3	4	7	6
	<b>Up</b>	<b>Sensor</b> Up	<b>0V</b>	<b>Sensor</b> 0V	<b>Serial Data</b>	<b>Serial Data</b>	<b>Request</b>	<b>Request</b>
	●	●	●	●				
	BNGN	BU	WHGN	WH	GY	PK	VT	YE

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*La linea del sensore è collegata internamente con la linea di alimentazione.*  
 La línea de sensor está unida internamente con la línea de alimentación.

# HEIDENHAIN

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