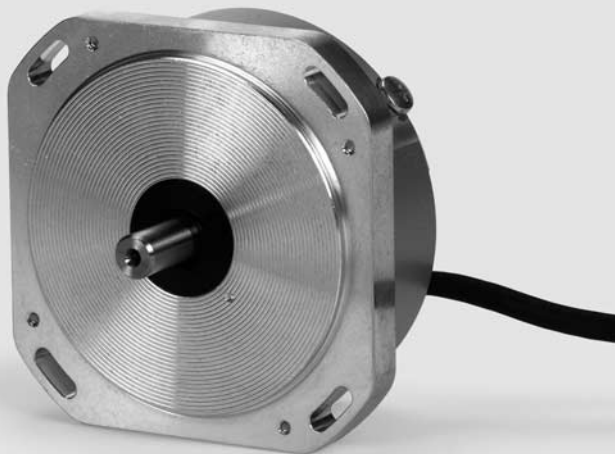




HEIDENHAIN



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

ROD 270

11/2015



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

Die Steckverbindung darf nur spannungsfrei verbunden oder gelöst werden.

Die Anlage muss spannungsfrei geschaltet sein!

Note: *Mounting and commissioning is to be conducted by a qualified specialist under compliance with local safety regulations.*

Do not engage or disengage any connections while under power.

The system must be disconnected from power.

Attention: Le montage et la mise en service doivent être assurés par un personnel qualifié dans le respect des consignes de sécurité locales.

Le connecteur ne doit être connecté ou déconnecté qu'hors potentiel.

L'équipement doit être connecté hors potentiel!

Attenzione: *Il montaggio e la messa in funzione devono essere eseguite da personale qualificato nel rispetto delle norme di sicurezza locali.*

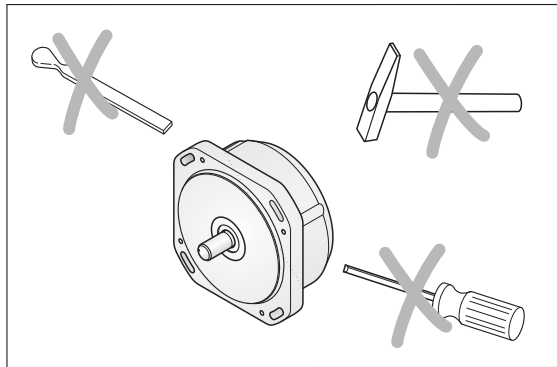
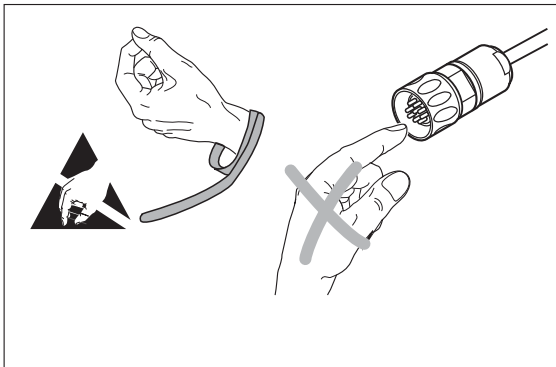
I cavi possono essere collegati o scollegati solo in assenza di tensione.

L'impianto deve essere spento!

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

Conectar o desconectar el conector sólo en ausencia de tensión.

¡La instalación debe ser conectada en ausencia de tensión!



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

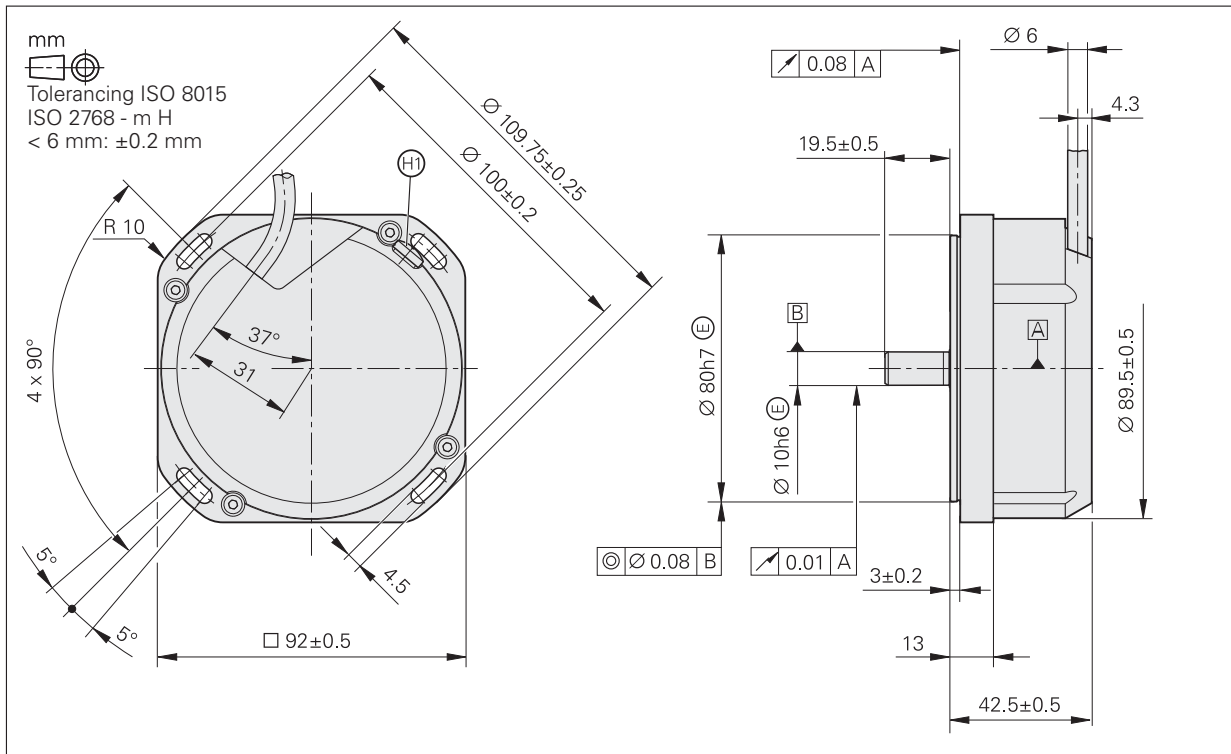
Avoid direct contact of fluids with the encoder and connector!

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

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

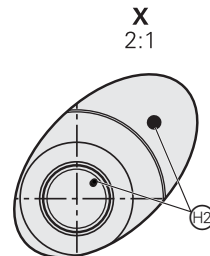
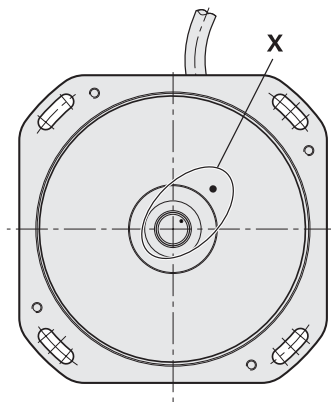
¡Evitar el contacto directo de líquidos con el sistema de medida y el conector!





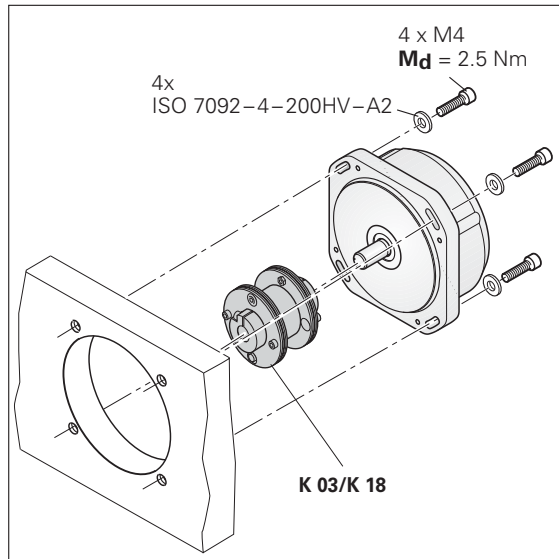
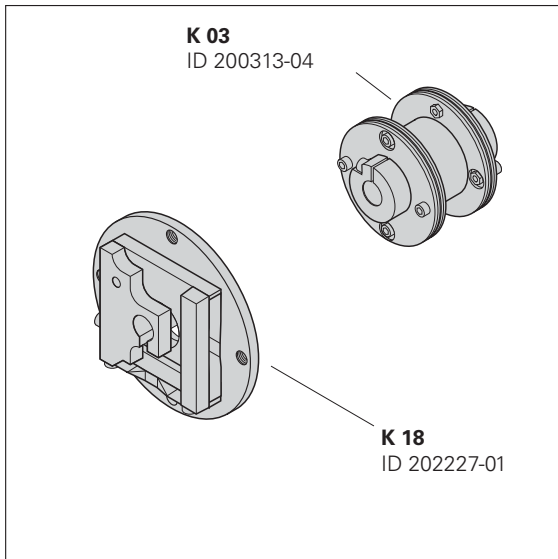
Ⓐ = Lagerung
Bearing
Roulement
Cuscinetto
Rodamiento

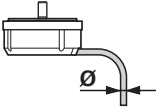


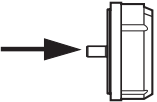


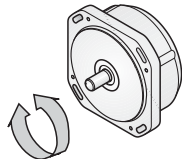
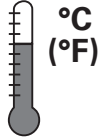
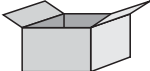
Ⓜ1 = Druckluftanschluss M5
Compressed air connection M5
Raccordement d'air comprimé M5
Connessione aria-compressa M5
Conexión de aire comprimido M5



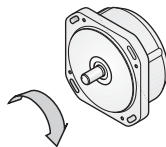
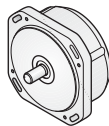
Ⓜ2 = Lage der Referenzmarke: 1 Referenzmarke $\pm 10^\circ$, 36 Referenzmarken $\pm 5^\circ$
Position of the reference mark: 1 reference mark $\pm 10^\circ$, 36 reference marks $\pm 5^\circ$
Position marque de référence: 1 marque de référence $\pm 10^\circ$, 36 marques de référence: $\pm 5^\circ$
Posizione dell'indice di riferimento: 1 indice di riferimento $\pm 10^\circ$, 36 indici di riferimento $\pm 5^\circ$
Posición de la marca de referencia: 1 marca de referencia $\pm 10^\circ$, 36 marcas de referencia $\pm 5^\circ$

	<p>K 03: $\lambda \leq 0.3 \text{ mm}$</p> <p>K 03: $\alpha \leq 0.5^\circ$</p> <p>K 03: $\delta \leq 0.2 \text{ mm}$</p>	<p>K 18: $\lambda \leq 0.3 \text{ mm}$</p> <p>K 18: $\alpha \leq 0.5^\circ$</p> <p>K 18: $\delta \leq 0.2 \text{ mm}$</p>
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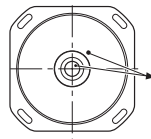
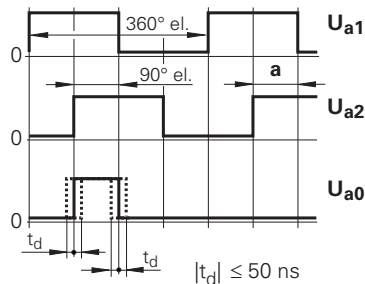


	 <p>$T \geq -40\text{ °C}$ (40 °F)</p>	 <p>$T \geq -10\text{ °C}$ (14 °F)</p>		<p>max. 10 N</p>
<p>Ø 6 mm</p>	<p>$R_1 \geq 20\text{ mm}$</p>	<p>$R_2 \geq 75\text{ mm}$</p>		<p>max. 10 N</p>
<p>Ø 8 mm</p> 	<p>$R_1 \geq 40\text{ mm}$</p>	<p>$R_2 \geq 100\text{ mm}$</p>		<p>M_d ≤ 0.01 Nm (20 °C) I = 20 · 10⁻⁶ kgm²</p>
	 <p>-30 ... 80 °C (-22 ... 176 °F)</p>			

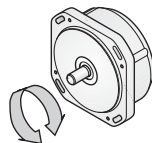
U_p: DC 5 V ± 0.5 V
(max. 150 mA)



$\frac{U_{a1}, U_{a2}, U_{a0}}{U_{a1}, U_{a2}, U_{a0}, U_{aS}}$



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



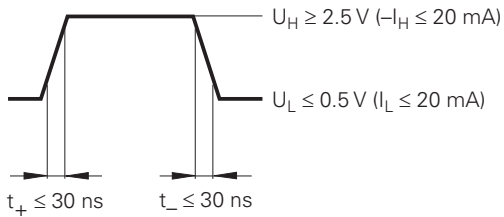
f_{max.} = Abtastfrequenz
Scanning frequency
Fréquence de balayage
Frequenza di scansione
Frecuencia de captación

$$n \leq \begin{cases} \frac{f_{\max.}}{Z} \cdot 10^3 \cdot 60 \text{ min}^{-1} \\ 10000 \text{ min}^{-1} \end{cases}$$

	f _{max.}	a
TTLx5	50 kHz	≥ 0.96 μs
TTLx10	100 kHz	≥ 0.225 μs

ROD 270: 1xU_{a0}
ROD 270C: 36xU_{a0}

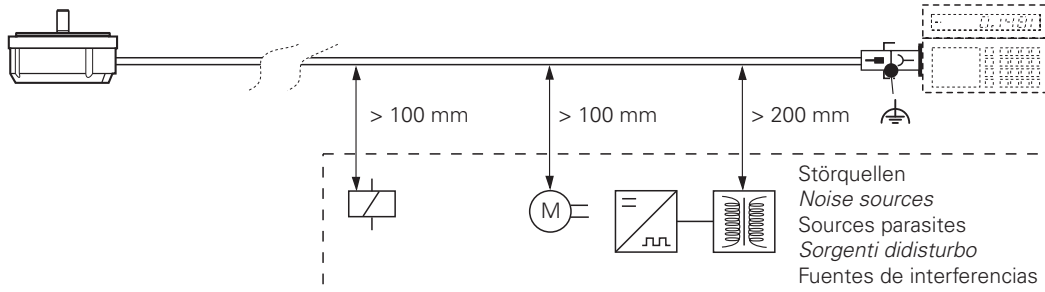
TTL

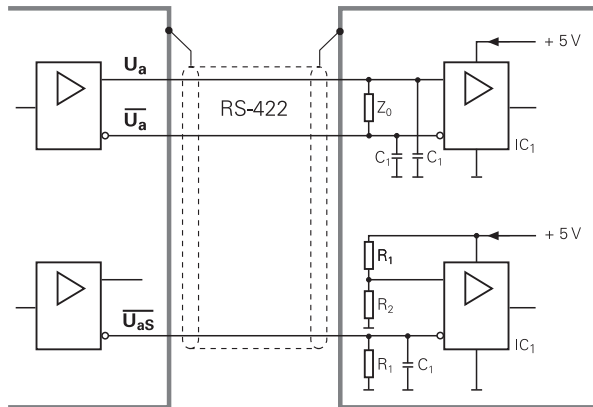
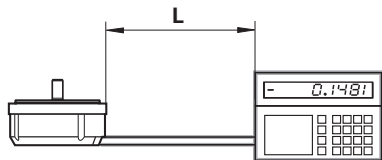


$\overline{U_{aS}}$: Störungssignal
Fault detection signal
Signal de perturbation
Segnale di malfunzionamento
Señal de avería

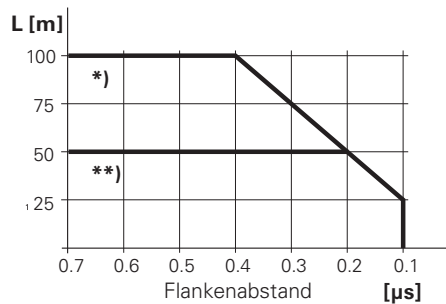
$\overline{U_{aS}} = \text{High}$: ✓

$\overline{U_{aS}} = \text{Low}$: ⚠



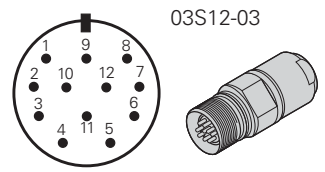
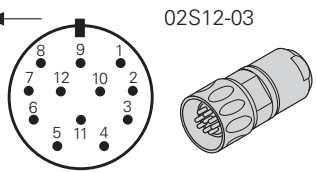


$R_1 = 4.7 \text{ k}\Omega$
 $R_2 = 1.8 \text{ k}\Omega$
 $Z_0 = 120 \text{ }\Omega$
 $C_1 = 220 \text{ pF}$



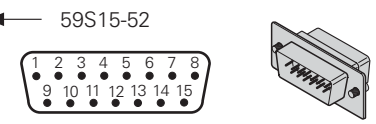
Flankenabstand
 Edge separation
 Ecart entre les fronts
 Distanza tra i fronti
 Distancia entre flancos

- *) ohne
 without
 sans
 senza
 sin
- **) mit
 with
 avec
 con
 con



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

12	2	10	11	5	6	8	1	3	4	7	/	9
Up	Sensor Up	0V	Sensor 0V	U _{a1}	$\overline{U_{a1}}$	U _{a2}	$\overline{U_{a2}}$	U _{a0}	$\overline{U_{a0}}$	$\overline{U_{aS}}$	/	/
BNGN	BU	WHGN	WH	BN	GN	GY	PK	RD	BK	VT	YE	/



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

15	7	8	6	10	9	3	2	5	4	14	12	1, 11, 13
Up	Sensor Up	0V	Sensor 0V	U _{a1}	$\overline{U_{a1}}$	U _{a2}	$\overline{U_{a2}}$	U _{a0}	$\overline{U_{a0}}$	$\overline{U_{aS}}$	1)	/
BNGN	BU	WHGN	WH	BN	GN	GY	PK	RD	BK	VT	WHBN	/

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