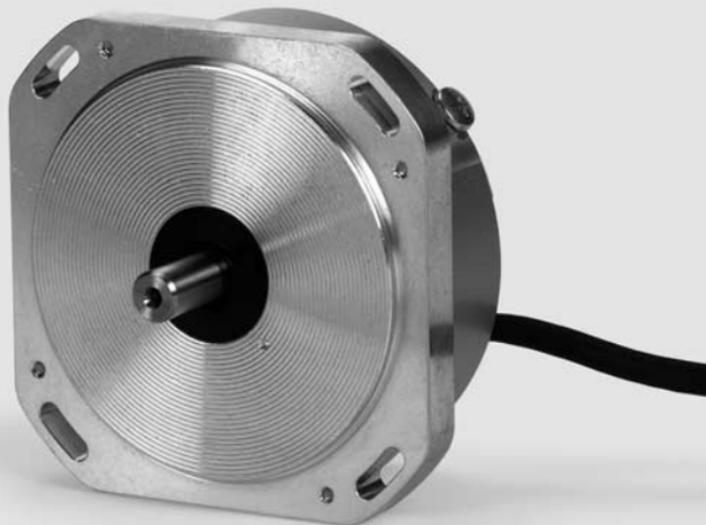




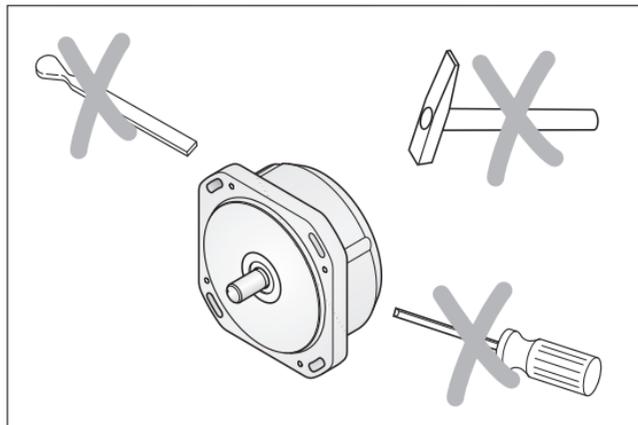
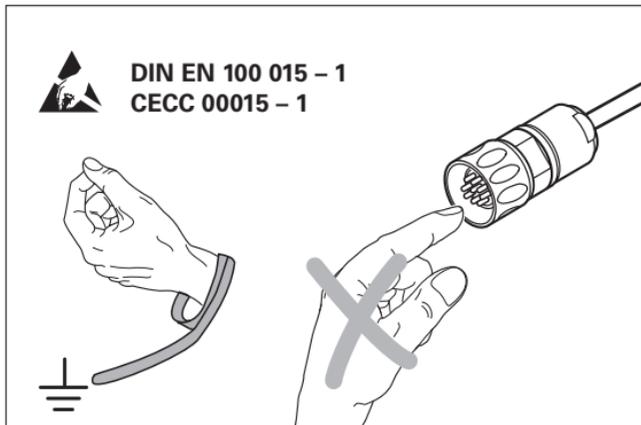
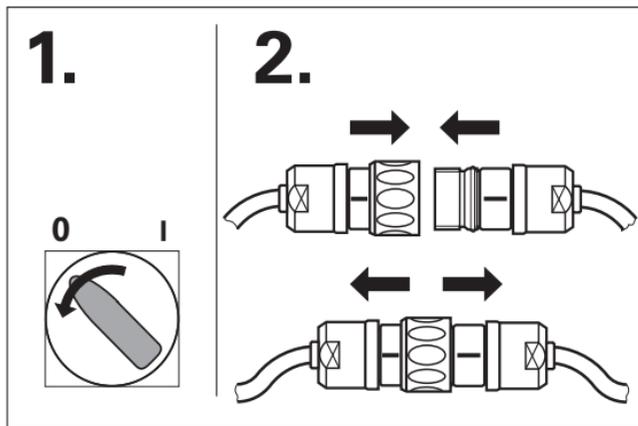
HEIDENHAIN



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

ROD 270

5/2006





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!

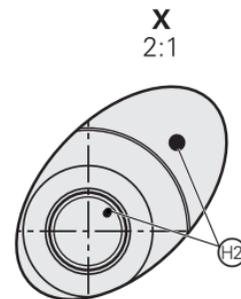
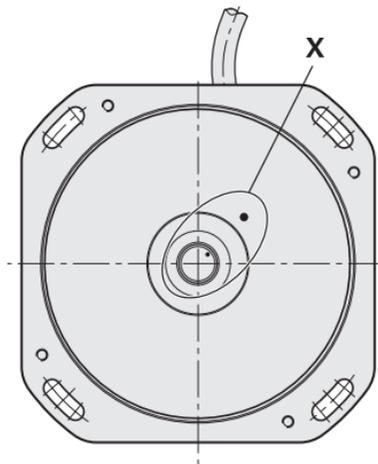
Evitare che lo strumento di misura e il connettore vengano a contatto con liquidi

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



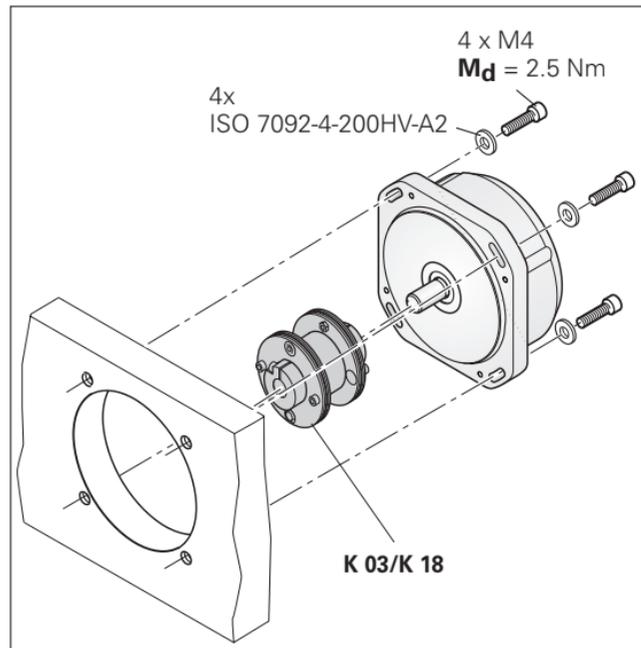
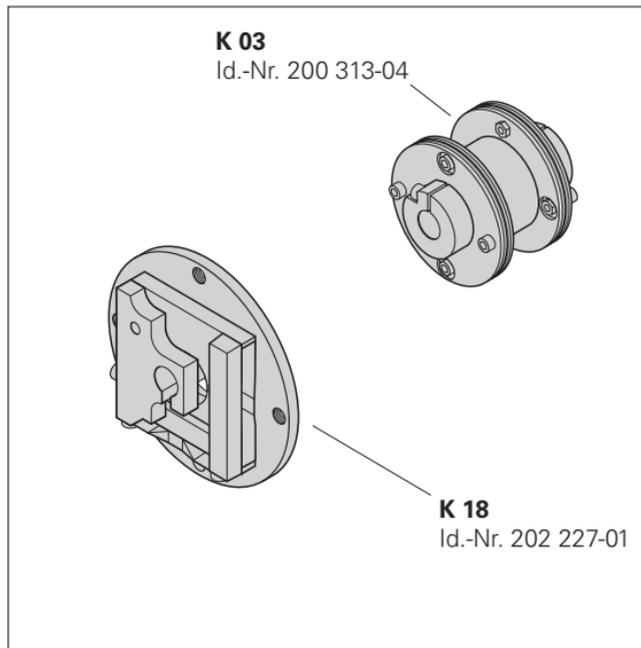
Ⓐ = Lagerung
Bearing
Roulement
Cuscinetto
Rodamiento

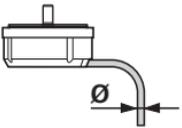
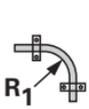
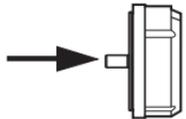
Ⓜ1 = Druckluftanschluss M5
Compressed air connection M5
Raccordement d'air comprimé M5
Connessione aria-compressa M5
Conexión de aire comprimido M5

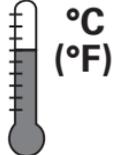
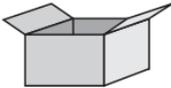
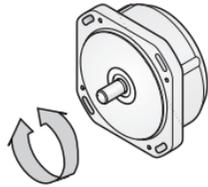


Ⓜ2 = Lage der Referenzmarke: 1 Referenzmarke $\pm 10^\circ$, 36 Referenzmarken $\pm 5^\circ$
Position of the reference mark: 1 reference mark $\pm 10^\circ$, 36 reference marks $\pm 5^\circ$
Position marque de référence: 1 marque de référence $\pm 10^\circ$, 36 marques de référence: $\pm 5^\circ$
Posizione 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 $\pm 5^\circ$

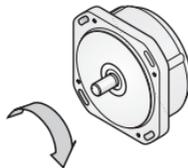
	<p>K 03: $\lambda \leq 0.3 \text{ mm}$</p> <p>K 03: $\alpha \leq 0.5^\circ$</p> <p>K 03: $\delta \leq 0.2 \text{ mm}$</p>	<p>K 18: $\lambda \leq 0.3 \text{ mm}$</p> <p>K 18: $\alpha \leq 0.5^\circ$</p> <p>K 18: $\delta \leq 0.2 \text{ mm}$</p>
--	---	---



	 <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>-30 ... 80 °C (-22 ... 176 °F)</p>		<p>M_d ≤ 0.01 Nm (20 °C) I = 20 · 10⁻⁶ kgm²</p>
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$U_p = 5V \pm 10\%$
(max. 150 mA)

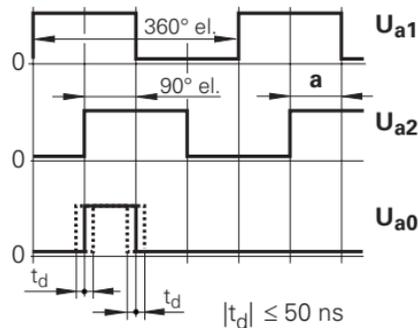


U_{a1}, U_{a2}, U_{a0}
 $\overline{U_{a1}}, \overline{U_{a2}}, \overline{U_{a0}}, \overline{U_{aS}}$



EN 50 178/4.98; 5.2.9.5
IEC 364-4-41: 1992; 411 (PELV/SELV)

(siehe, see, voir, vedi, véase
HEIDENHAIN D 231 929)



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



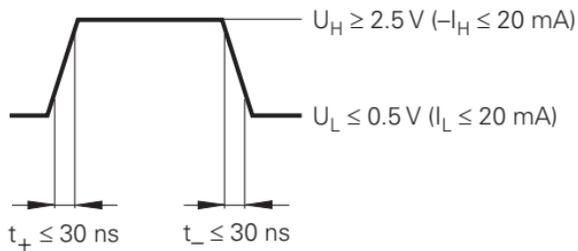
fmax. = Abtastfrequenz
Scanning frequency
Fréquence de balayage
Frequenza di scansione
Frecuencia de captación

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

	fmax.	a
TTLx5	50 kHz	$\geq 0.96 \mu\text{s}$
TTLx10	100 kHz	$\geq 0.225 \mu\text{s}$

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

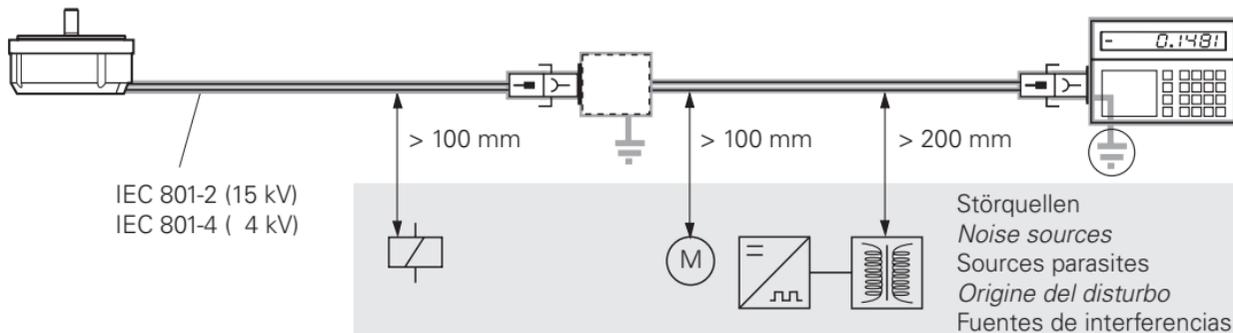
TTL

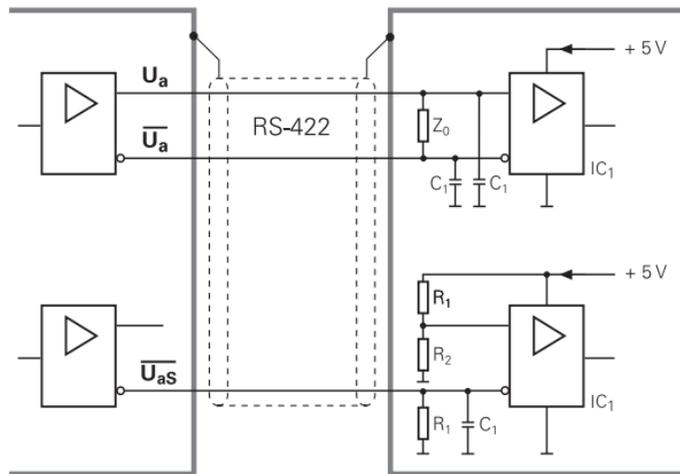
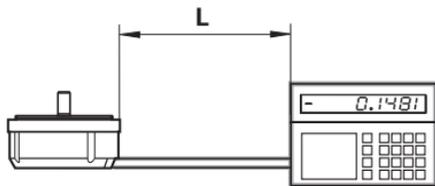


$\overline{U_{aS}}$: Störungssignal
Fault detection signal
Signal de perturbation
Segnale di malfunzionamento
Señal de avería

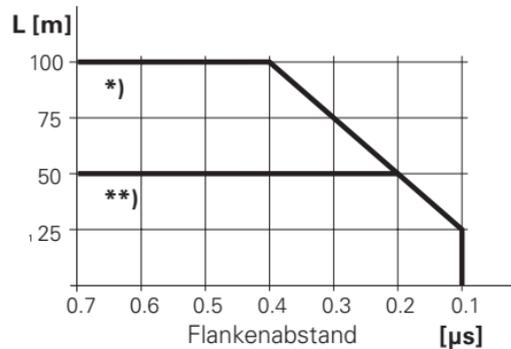
$\overline{U_{aS}} = \text{High}$: ✓

$\overline{U_{aS}} = \text{Low}$: ⚠





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



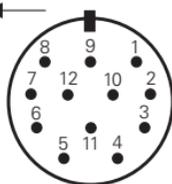
Flankenabstand
 Edge separation
 Écart entre les fronts
 Distanza tra i fronti
 Distancia entre flancos

*) ohne
 without
 sans
 senza
 sin

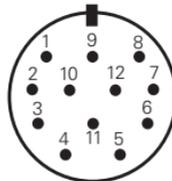
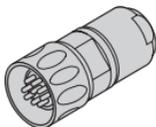
$\overline{U_{aS}}$

**) mit
 with
 avec
 con
 con

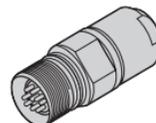
$\overline{U_{aS}}$



02S12-03



03S12-03

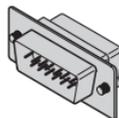
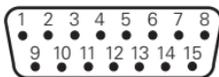


Schirm auf Gehäuse
Shield on housing
Blindage sur boîtier
Schermo sulla carcassa
Blindaje a carcasa

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}	$\overline{U_{a0}}$	$\overline{U_{aS}}$	/	/
brgn BN/GN	bl BL	wsgn WH/GN	ws WH	br BN	gn GN	gr GY	rs PK	rt RD	sw BK	vio VI	ge YL	/



59S15-52



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)	/
brgn BN/GN	bl BL	wsgn WH/GN	ws WH	br BN	gn GN	gr GY	rs PK	rt RD	sw BK	vio VI	wsbr WH/BN	/

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560 298-91 · 5 · 5/2006 · E · Printed in Germany

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