

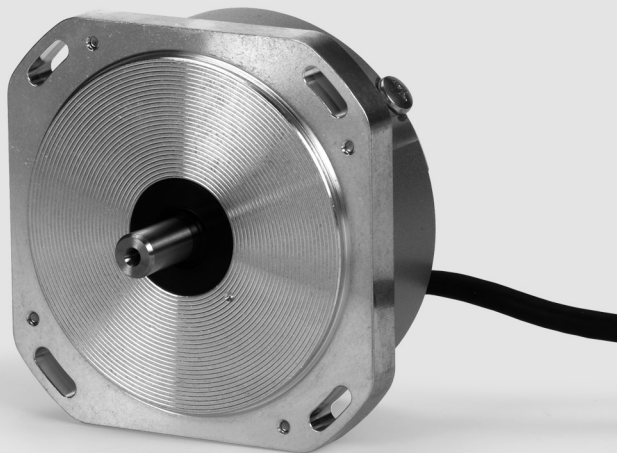


# HEIDENHAIN

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

## ROD 280

1/2013





**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.*

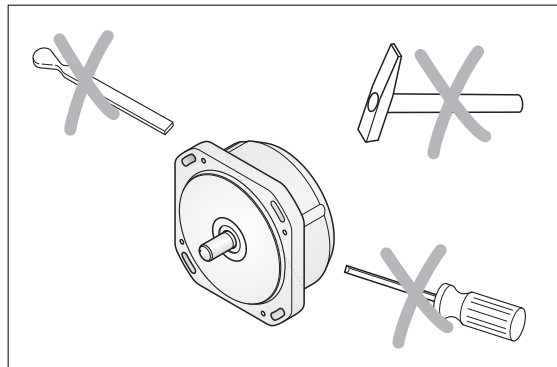
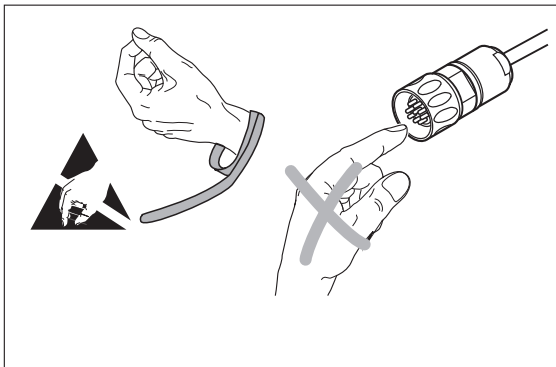
*I cavi posso essere collegati o scollegati solo in assenza di tensione.*

*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!



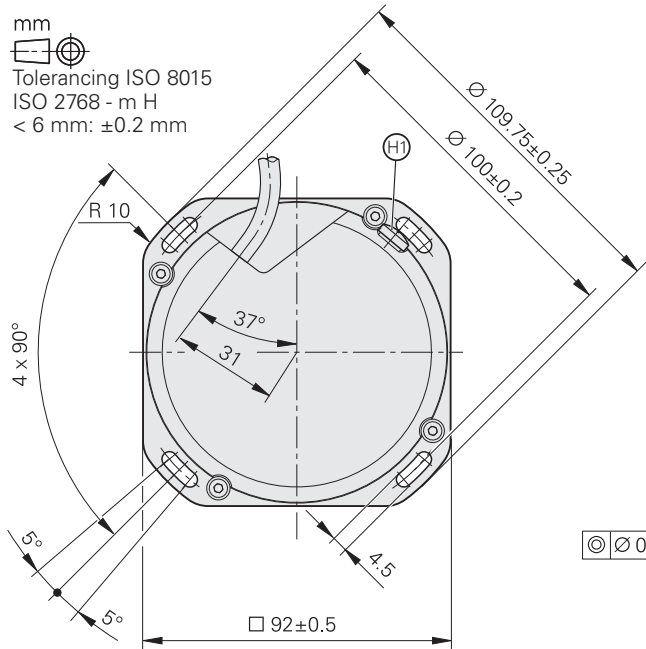
mm



Tolerancing ISO 8015

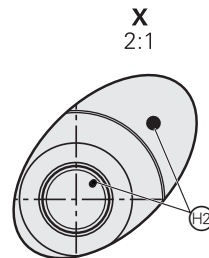
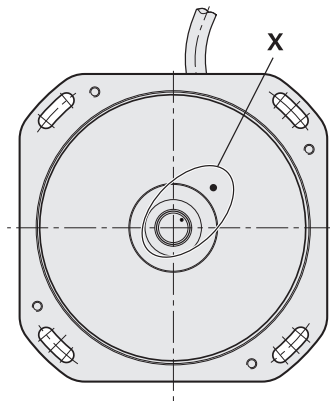
ISO 2768 - m H

< 6 mm:  $\pm 0.2$  mm

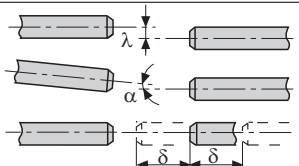


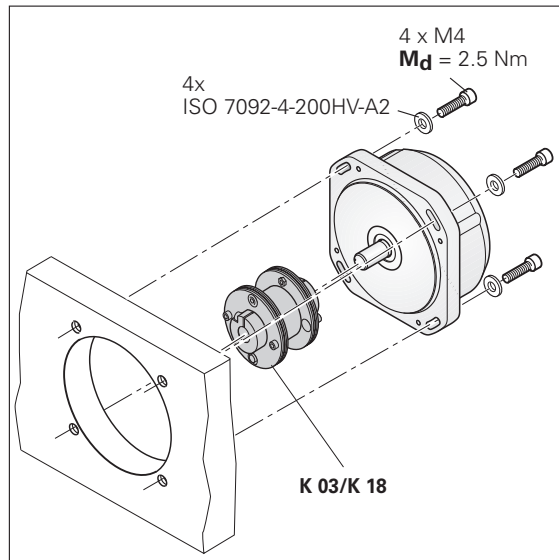
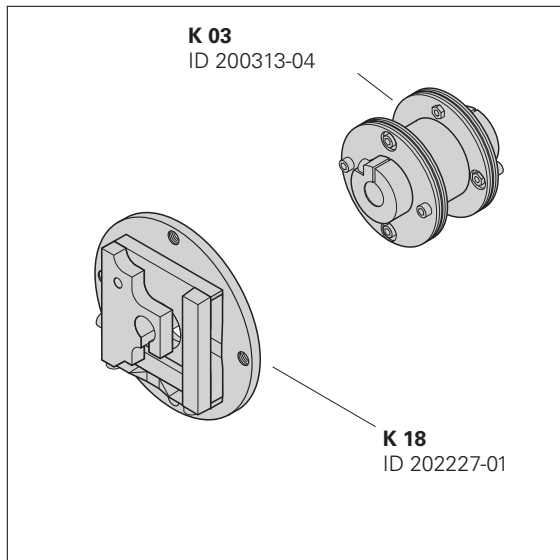
Ⓐ = Lagerung  
Bearing  
Roulement  
Cuscinetto  
Rodamiento

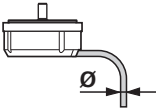


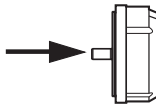


Ⓗ1 = Druckluftanschluss M5  
Compressed air connection M5  
Raccordement d'air comprimé M5  
Connessione aria-compressa M5  
Conexión de aire comprimido M5

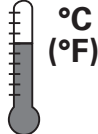
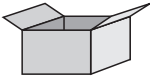
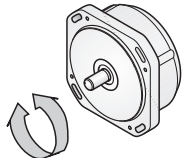


Ⓗ2 = Lage der Referenzmarke: 1 Referenzmarke  $\pm 10^\circ$ , 36 Referenzmarken  $\pm 5^\circ$   
Position of the reference mark: 1 reference mark  $\pm 10^\circ$ , 36 reference marks  $\pm 5^\circ$   
Position marque de référence: 1 marque de référence  $\pm 10^\circ$ , 36 marques de référence:  $\pm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

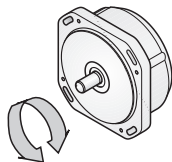
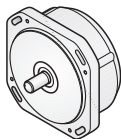
	<p><b>K 03:</b> <math>\lambda \leq 0.3 \text{ mm}</math></p> <p><b>K 03:</b> <math>\alpha \leq 0.5^\circ</math></p> <p><b>K 03:</b> <math>\delta \leq 0.2 \text{ mm}</math></p>	<p><b>K 18:</b> <math>\lambda \leq 0.3 \text{ mm}</math></p> <p><b>K 18:</b> <math>\alpha \leq 0.5^\circ</math></p> <p><b>K 18:</b> <math>\delta \leq 0.2 \text{ mm}</math></p>
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	 <p><math>T \geq -40\text{ °C}</math> (40 °F)</p>	 <p><math>T \geq -10\text{ °C}</math> (14 °F)</p>		<p>max. <b>10 N</b></p>
<p><b>Ø 6 mm</b></p>	<p><math>R_1 \geq 20\text{ mm}</math></p>	<p><math>R_2 \geq 75\text{ mm}</math></p>		<p>max. <b>10 N</b></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>		

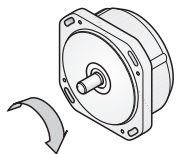
	 <p>-30 ... 80 °C (-22 ... 176 °F)</p>		<p><b>M<sub>d</sub></b> ≤ 0.01 Nm (20 °C)  <b>I</b> = 20 · 10<sup>-6</sup> kgm<sup>2</sup></p>
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**U<sub>p</sub>: DC 5 V ± 0.5 V**  
(max. 150 mA)

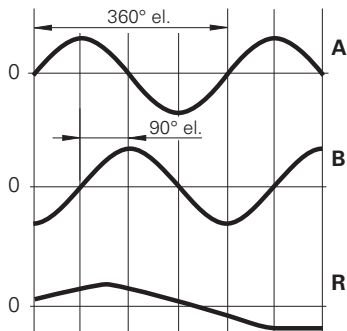
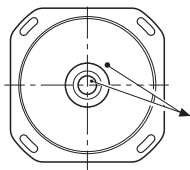


Z = Strichzahl  
*Line count*  
Nombre de traits  
*Numero di impulsi*  
Número de impulsos

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



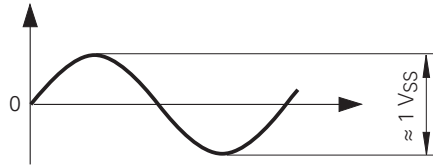
A, B, R



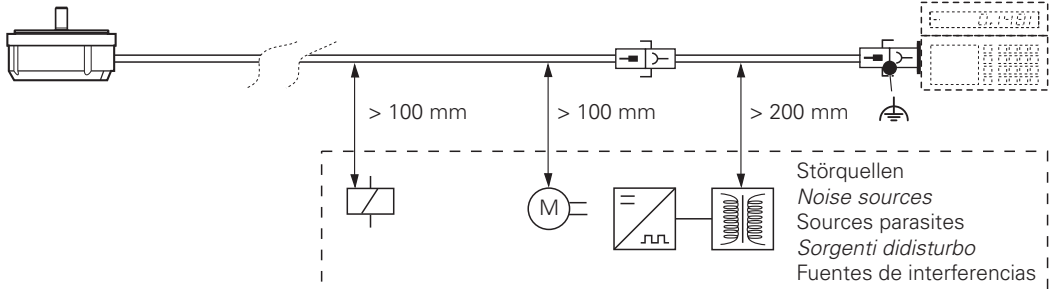
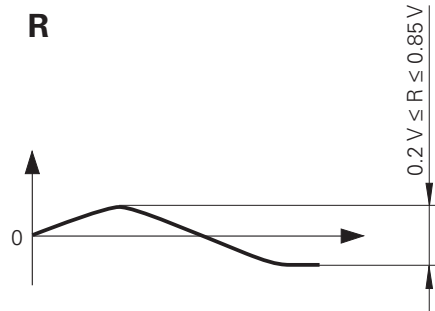
**R** **ROD 280:** 1xR  
**ROD 280C:** 36xR

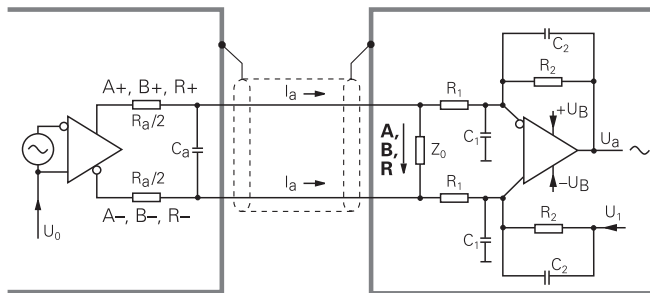
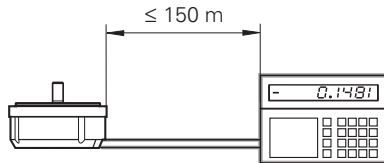


**A, B**



**R**



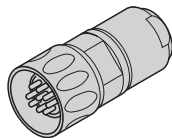
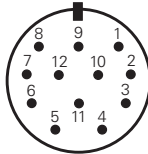


$R_a < 100 \Omega$   
 $C_a < 50 \text{ pF}$   
 $\Sigma I_a < 1 \text{ mA}$   
 $U_0 = 2.5 \text{ V} \pm 0.5 \text{ V}$

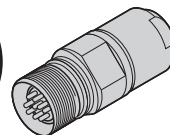
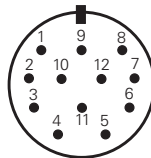
$Z_0 = 120 \Omega$   
 $U_1 \approx U_0$   
 $R_1 = 10 \text{ k}\Omega, C_1 = 100 \text{ pF}$   
 $R_2 = 34.8 \text{ k}\Omega, C_2 = 10 \text{ pF}$



02S12-03



03S12-03



<b>12</b>	<b>2</b>	<b>10</b>	<b>11</b>	<b>5</b>	<b>6</b>	<b>8</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>7</b>	<b>/</b>	<b>9</b>
<b>Up</b>	<b>Sensor</b> Up	<b>0 V</b>	<b>Sensor</b> 0 V	<b>A+</b>	<b>A-</b>	<b>B+</b>	<b>B-</b>	<b>R+</b>	<b>R-</b>	<b>/</b>	<b>/</b>	<b>/</b>
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.

Außenschirm auf Gehäuse

*External shield on housing*

Blindage externe sur boîtier

*Schermo esterno sulla carcassa*

Blindaje externo a carcasa

# HEIDENHAIN

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