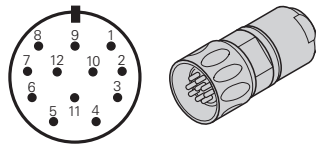
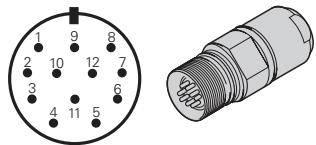


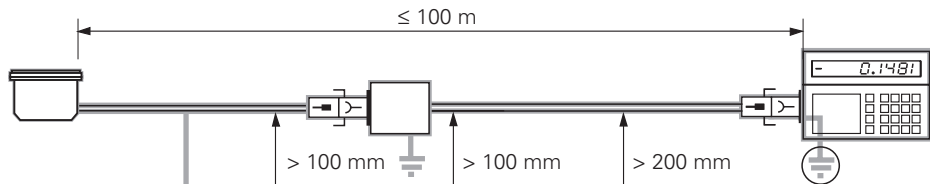
ERN 120 ← 03S12-03

02S12-03

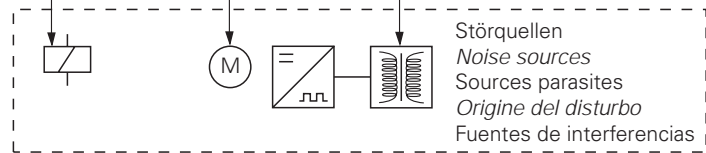


5	6	8	1	3	4	12	10	2	11	7	/
U <sub>a1</sub>	$\overline{U_{a1}}$	U <sub>a2</sub>	$\overline{U_{a2}}$	U <sub>a0</sub>	$\overline{U_{a0}}$	5 V U <sub>P</sub>	0 V U <sub>N</sub>	5 V sensor	0 V sensor	$\overline{U_{aS}}$	/
braun brown brun marrone marrón	grün green vert verde verde	grau gray gris grigio gris	rosa pink rose rosa rosa	rot red rouge rosso rojo	schwarz black noir nero negro	braun/grün brown/green brun/vert marrone/verde marrón/verde	weiß/grün white/green blanc/vert bianco/verde blanco/verde	blau blue bleu azzurro azul	weiß white blanc bianco blanco	violett violet violet viola violeta	gelb yellow jaune giallo amarillo

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



	 R <sub>1</sub> T ≥ -40 °C (-40 °F)	 R <sub>2</sub> T ≥ -10 °C (14 °F)
Ø 6 mm	R <sub>1</sub> ≥ 20 mm	R <sub>2</sub> ≥ 75 mm
	R <sub>1</sub> ≥ 40 mm	R <sub>2</sub> ≥ 100 mm
Ø 8 mm	R <sub>1</sub> ≥ 40 mm	R <sub>2</sub> ≥ 100 mm

°C  
(°F)

-30 ... 80 °C  
(-22 ... 176 °F)

# ERN 120

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

11/2004



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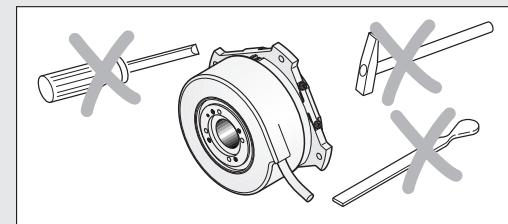
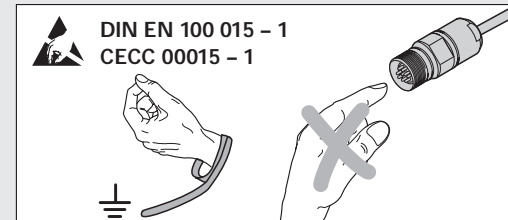
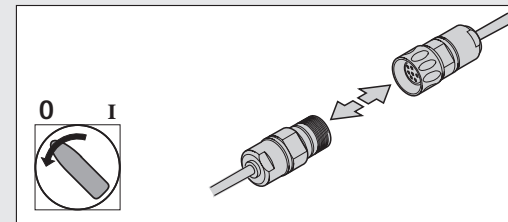
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www.heidenhain.de



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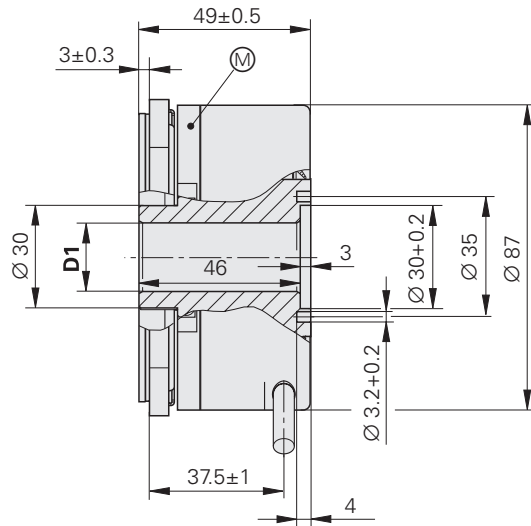
Subject to change without notice · Sous réserve de modifications · Con riserva di modifiche · Sujeto a modificaciones



# ERN 120

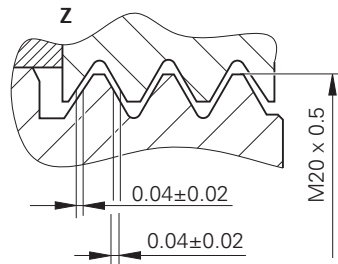
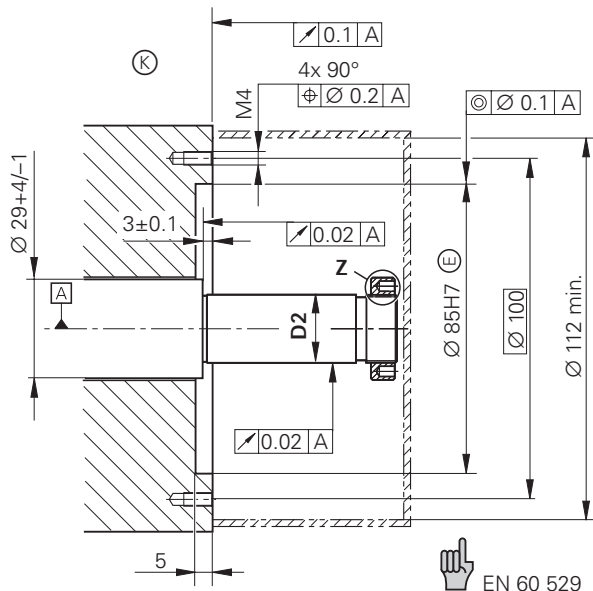
Tolerancing ISO 8015  
ISO 2768 - m H

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

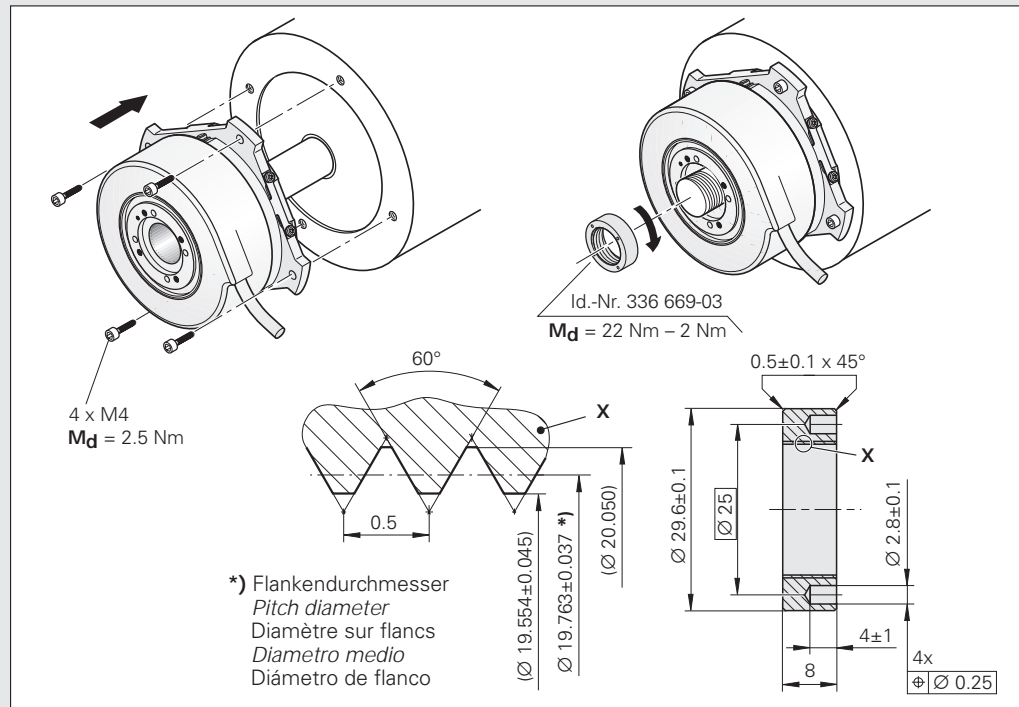


D1	D2
Ø 20H7 $\text{\textcircled{E}}$	Ø 20g7 $\text{\textcircled{E}}$
Ø 22H7 $\text{\textcircled{E}}$	Ø 22g7 $\text{\textcircled{E}}$

$\text{\textcircled{K}}$  = Kundenseitige Anschlussmaße  
Required mating dimensions  
Conditions requises pour le montage  
Quote per il montaggio  
Cotas de montaje requeridas  
 $\text{\textcircled{A}}$  = Lagerung  
Bearing  
Roulement  
Cuscinetto  
Rodamiento  
 $\text{\textcircled{M}}$  = Meßpunkt Arbeitstemperatur  
Operating temperature measuring point  
Température de travail point de mesure  
Temperatura di lavoro punto di misurazione  
Punto de medición de la temperatura de trabajo



$\text{\textcircled{A}}$  EN 60 529



$U_p = 5 V \pm 10 \%$   
 (max. 150 mA)

$\text{\textcircled{A}}$  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)

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

$\overline{U_{as}} = \text{High}$ : ✓

$\overline{U_{as}} = \text{Low}$ : ⚠

**TTL**

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

TTL:  $a \geq 0.45 \mu s$   
 TTL x 2:  $a \geq 0.22 \mu s$

$|t_{d}| \leq 50 \text{ ns}$