

| | | | | | | | | | | | | |
|---------------|--------------|---------------|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------|---|
| 12 | 2 | 10 | 11 | 5 | 6 | 8 | 1 | 3 | 4 | 7 | / | 9 |
| Up | Sensor Up | 0V | Sensor 0V | U _{a1} | U _{a1} | U _{a2} | U _{a2} | U _{a0} | U _{a0} | 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 | / |

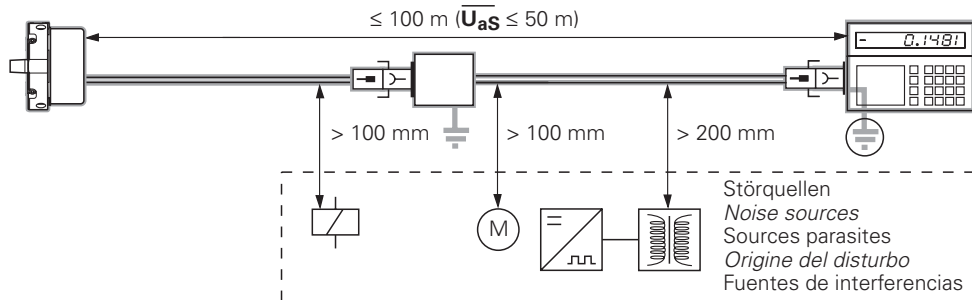
Die Sensorleitung ist intern mit der Versorgungsleitung verbunden.
The sensor line is connected internally with the power supply.
 La ligne de palpeur est reliée de manière interne à la ligne d'alimentation.
 La linea del sensore è collegata internamente con la linea di alimentazione.
 La línea de sensor está unida internamente con la línea de alimentación.

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

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

U_{aS} = High: ✓

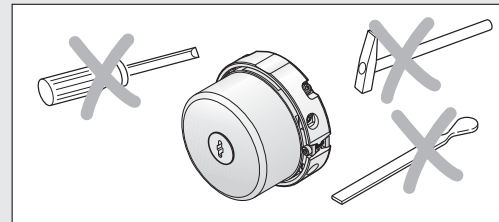
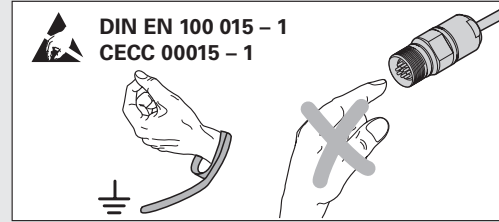
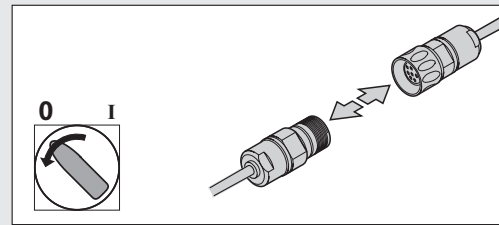
U_{aS} = Low: ⚠



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

°C (°F)

-30 ... 80 °C
(-22 ... 176 °F)



HEIDENHAIN

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

ERN 421

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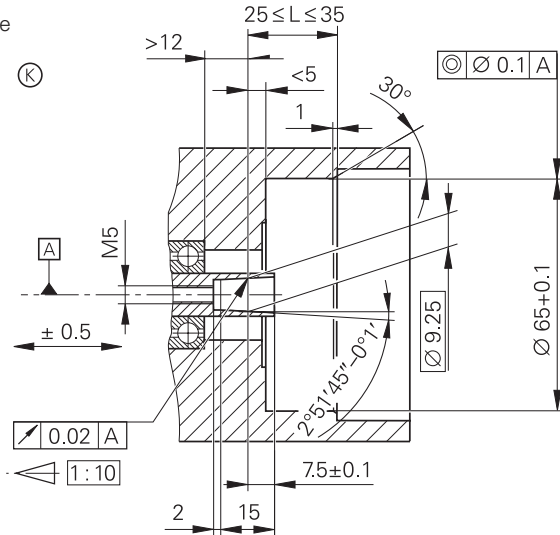
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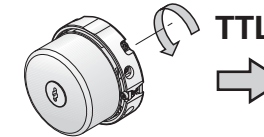
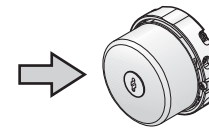
Ⓚ = Kundenseitige Anschlussmaße
 Required mating dimensions
 Conditions requises pour le montage
 Quote per il montaggio
 Cotas de montaje requeridas

Ⓐ = Lagerung
 Bearing
 Roulement
 Cuscinetto
 Rodamiento



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

$U_p = 5V \pm 10\%$
 (I max. 120 mA)

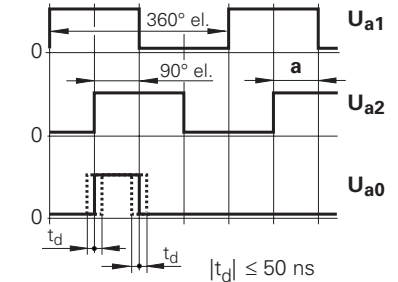


TTL
 $\frac{U_{a1}, U_{a2}, U_{a0}}{U_{a1}, U_{a2}, U_{a0}, U_{aS}}$

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)



| | fmax. | a |
|---------|---------|-------------------|
| TTL | 300 kHz | $\geq 0.39 \mu s$ |
| TTL x 2 | 150 kHz | $\geq 0.25 \mu s$ |

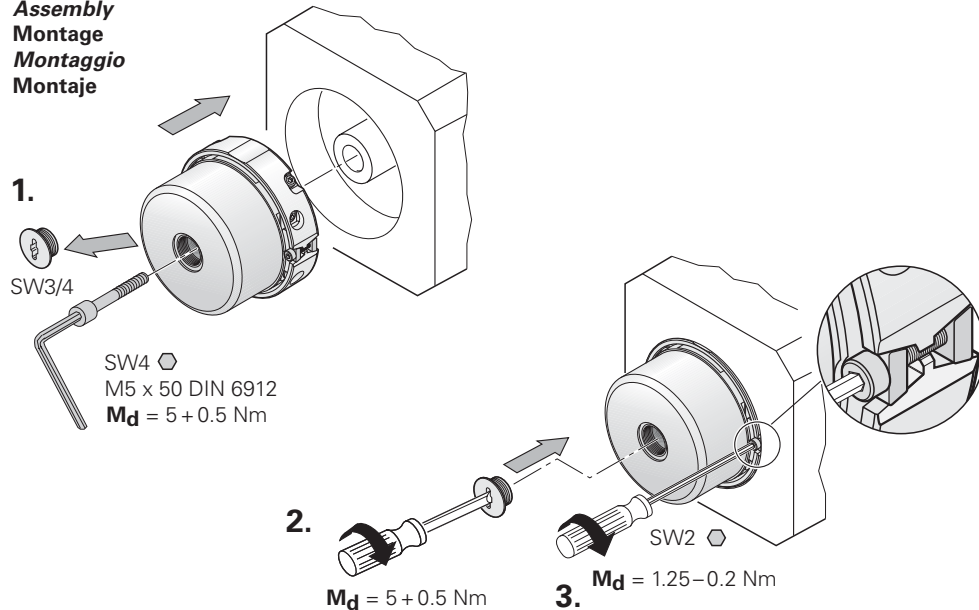


fmax. = Abtastfrequenz
 Scanning frequency
 Fréquence de balayage
 Frequenza di scansione
 Frecuencia de captación

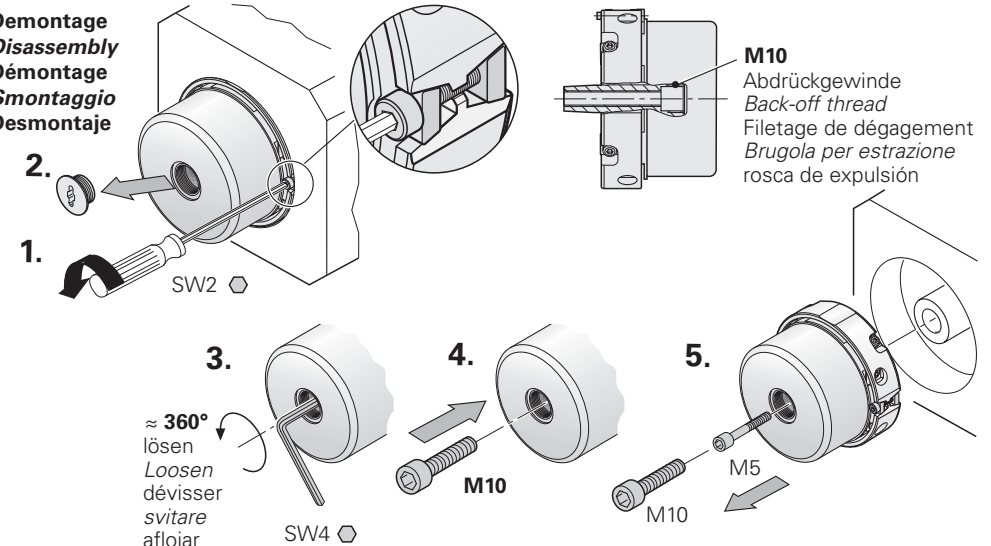


$U_H \geq 2.5 V$ ($-I_H \leq 20 mA$)
 $U_L \leq 0.5 V$ ($I_L \leq 20 mA$)

Montage Assembly Montage Montaggio Montaje



Demontage Disassembly Démontage Smontaggio Desmontaje



M10 Schraube nur soweit eindrehen, bis sich die Konusverbindung löst.
 Turn the M10 screw only far enough in to release the taper shaft.
 Ne tourner la vis M10 que jusqu'à ce que l'attache du cône se desserre.
 Ruotare la brugola M10 fino al distacco della sede conica dell'albero.
 Apretar el tornillo M10 sólo hasta que la conexión cónica se suelte.