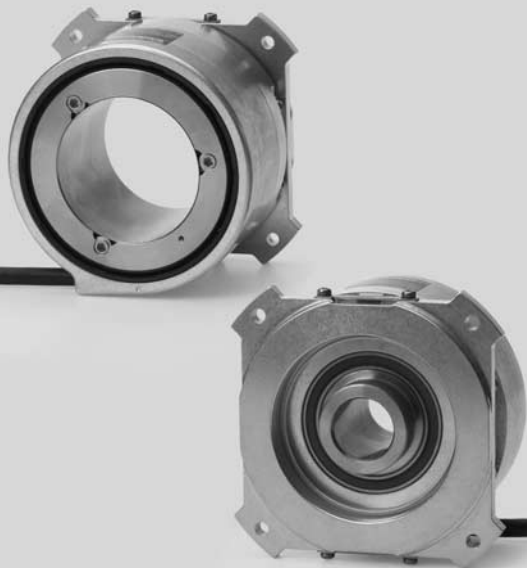




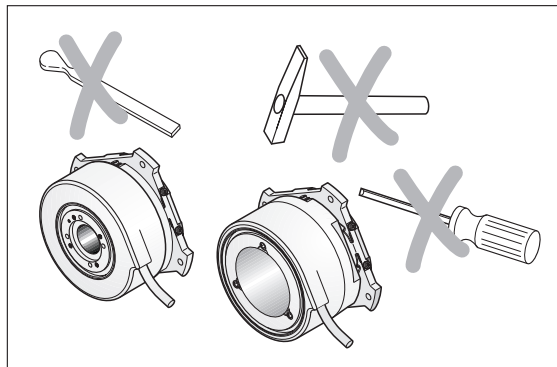
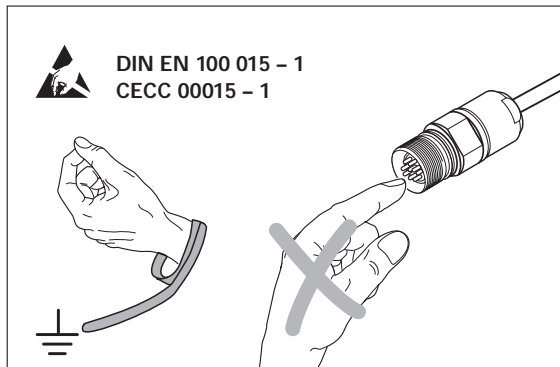
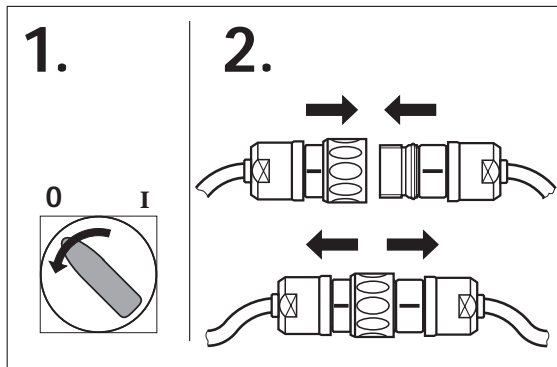
HEIDENHAIN



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

ECN 223  **EnDat**

ECN 223  **SSI**



**Achtung:**

Die Parameter im Speicherbereich des OEM müssen im Servicefall angeglichen werden.

CAUTION:

The parameters in the OEM memory area must be adjusted if service becomes necessary.

Attention:

Les paramètres de la zone de mémorisation du constructeur de la machine doivent être mis à jour en cas de service après-vente.

Attenzione:

In caso di assistenza tecnica, i parametri nella memoria OEM devono essere adattati.

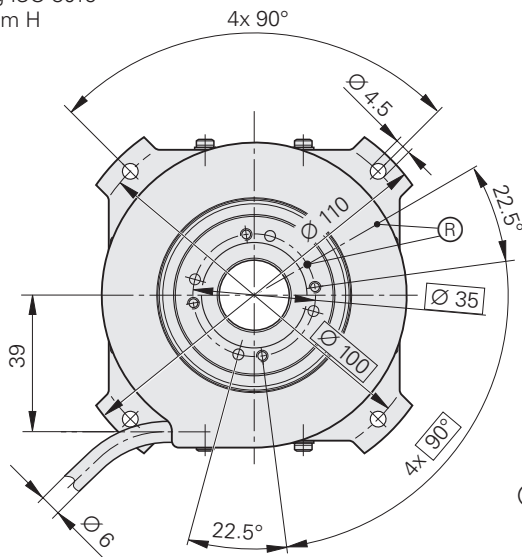
Atención:

Los parámetros del área de memoria del OEM deben ser ajustados en caso de servicio.

mm

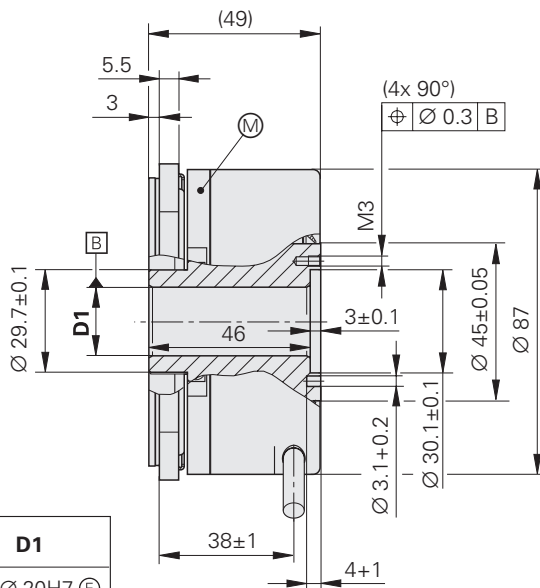


Tolerancing ISO 8015
ISO 2768 - m H

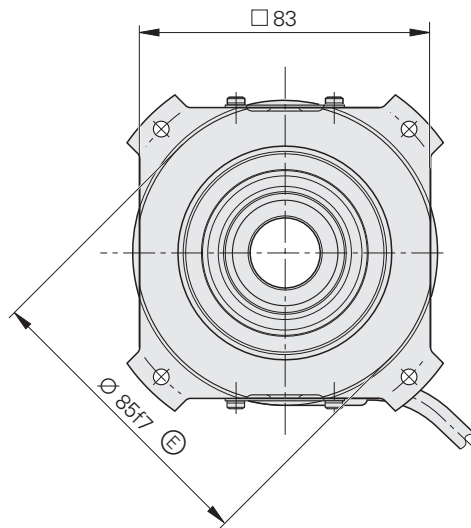


Ⓜ = Meßpunkt Arbeitstemperatur
Operating temperature measuring point
Température de travail point de mesure
Temperatura di lavoro punto di misurazione
Punto de medición de la temperatura de trabajo

Ⓡ = Nullposition $\pm 15^\circ$
Zero position $\pm 15^\circ$
Position zéro $\pm 15^\circ$
Punto di zero $\pm 15^\circ$
Posición cero $\pm 15^\circ$



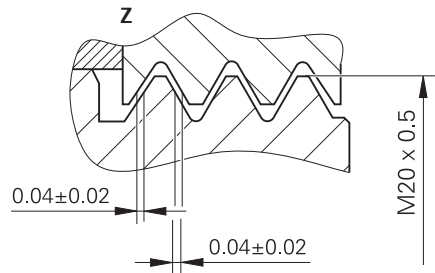
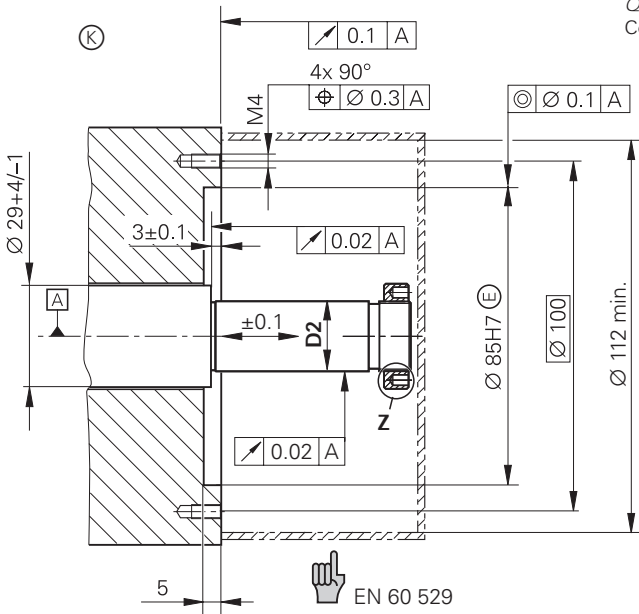
D1
Ø 20H7 (E)
Ø 22H7 (E)



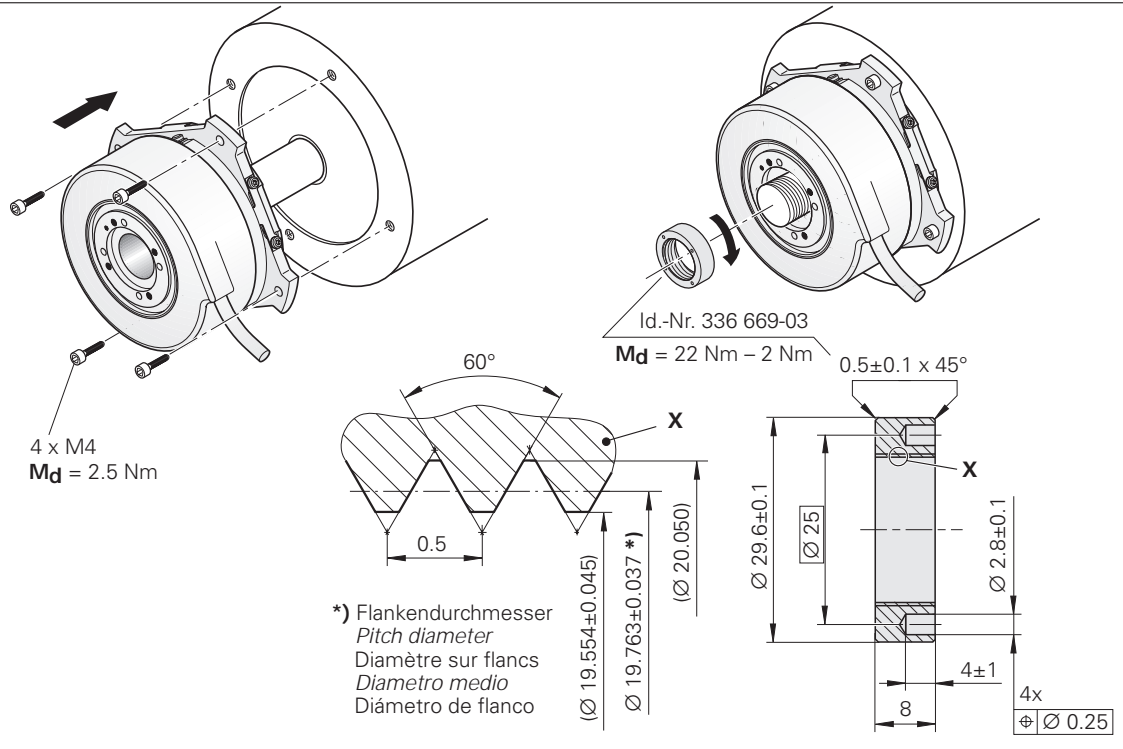
mm
 Tolerancing ISO 8015
 ISO 2768 - m H

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

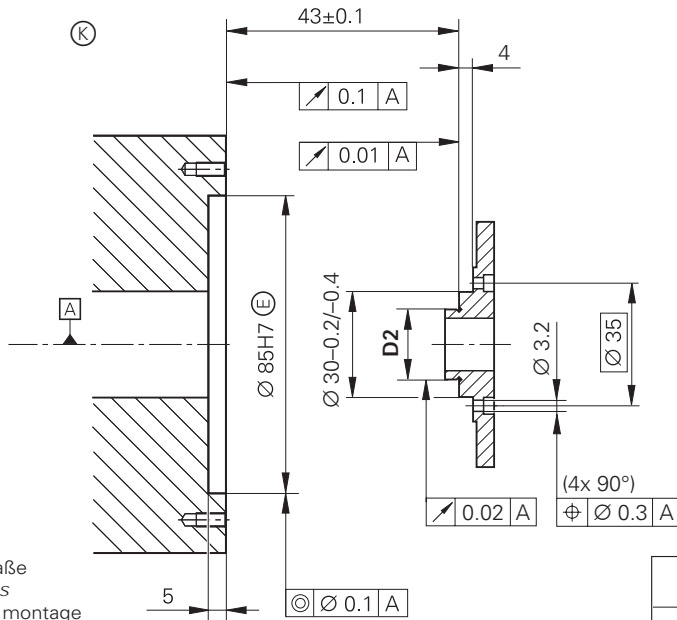
[A] = Lagerung
 Bearing
 Roulement
 Cuscinetto
 Rodamiento



D2
$\text{Ø} 20\text{g}7$ E
$\text{Ø} 22\text{g}7$ E



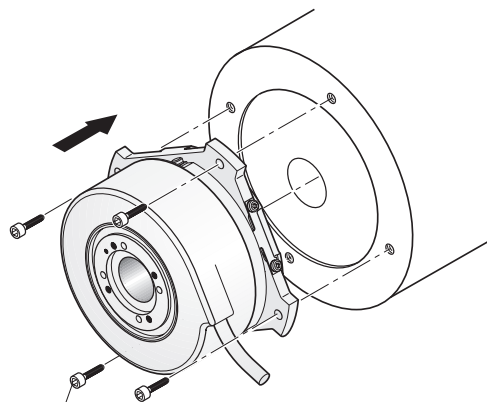
mm
 Tolerancing ISO 8015
 ISO 2768 - m H



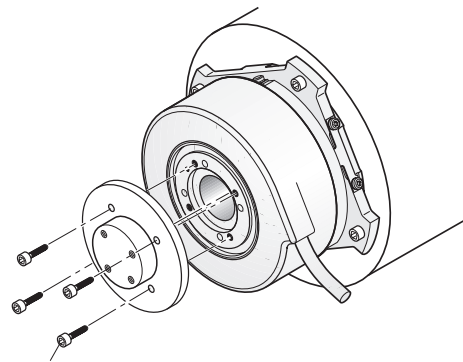
[A] = Lagerung
 Bearing
 Roulement
 Cuscinetto
 Rodamiento

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

D2
$\varnothing 20g7$ (E)
$\varnothing 22g7$ (E)



4 x M4
 $M_d = 2.5 \text{ Nm}$

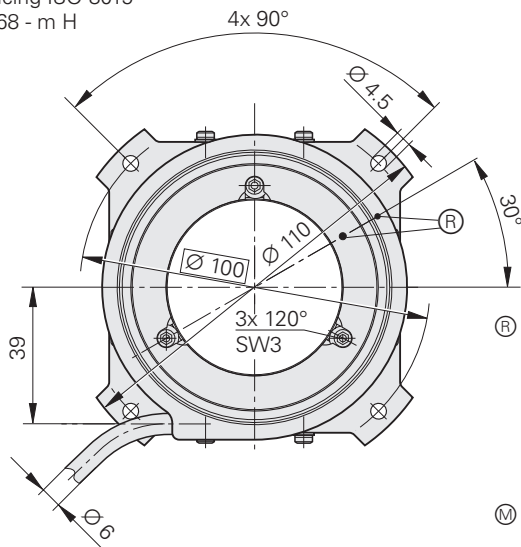


4 x M3
 $M_d = 1 \text{ Nm}$

mm



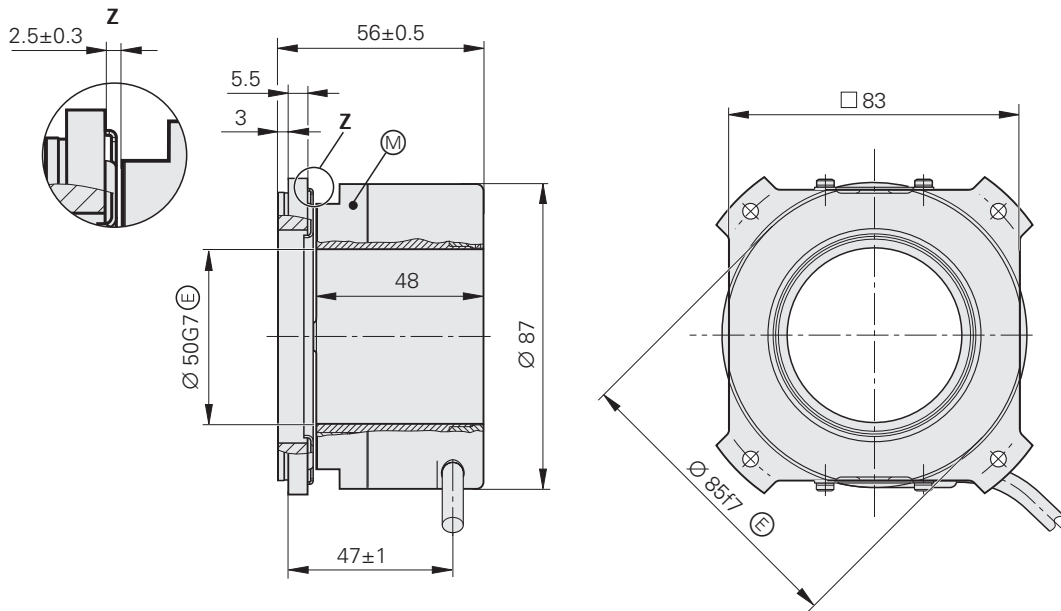
Tolerancing ISO 8015
ISO 2768 - m H



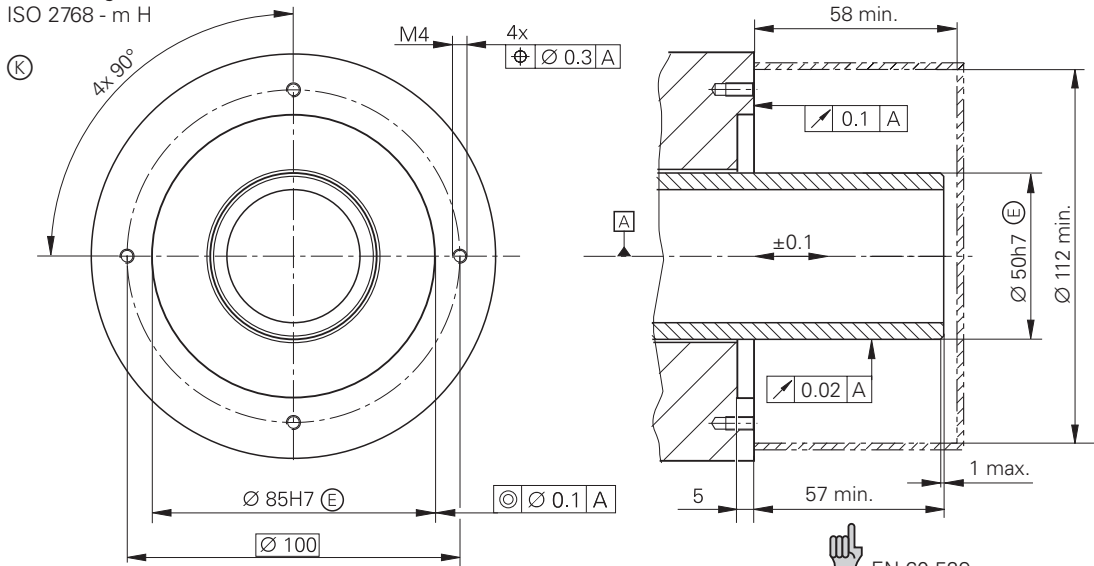
Z = Montagemaß: Grundplatte - Geberflansch
Mounting dimension: base plate - encoder flange
Cote de montage: plaque de base - bride codeur
Dimensioni di montaggio: piastra base - flangia encoder
Dimensión de montaje: placa base - brida del encoder

R = Nullposition $\pm 15^\circ$
Zero position $\pm 15^\circ$
Position zéro $\pm 15^\circ$
Punto di zero $\pm 15^\circ$
Posición cero $\pm 15^\circ$

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



mm
 Tolerancing ISO 8015
 ISO 2768 - m H

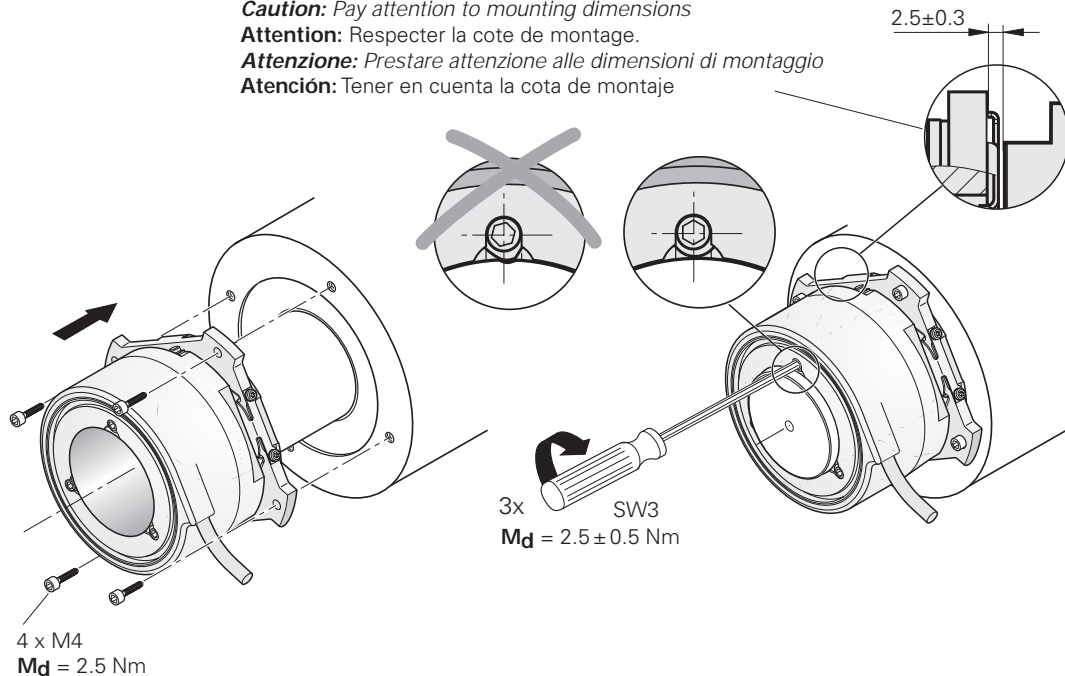


Ⓚ = Kundenseitige Anschlussmaße
 Required mating dimensions
 Conditions requises pour le montage
 Quote per il montaggio
 Cotas de montaje requeridas

A = Lagerung
 Bearing
 Roulement
 Cuscinetto
 Rodamiento

 EN 60 529

Achtung: Auf Montagemaß achten
Caution: Pay attention to mounting dimensions
Attention: Respecter la cote de montage.
Attenzione: Prestare attenzione alle dimensioni di montaggio
Atención: Tener en cuenta la cota de montaje





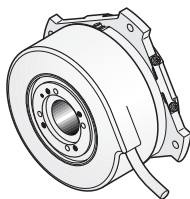
RS-485



CLOCK



CLOCK



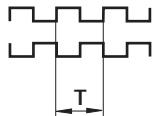
U_p = 5 V ± 5 %
(max. 300 mA)



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)

RS-485

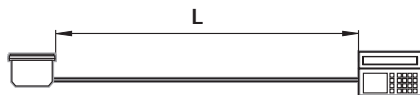


CLOCK

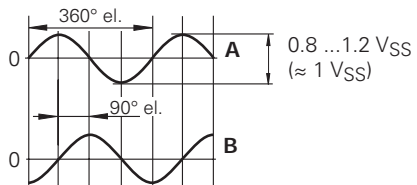
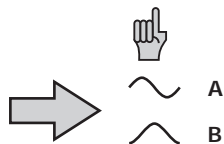
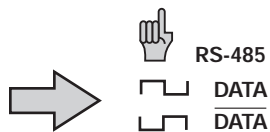
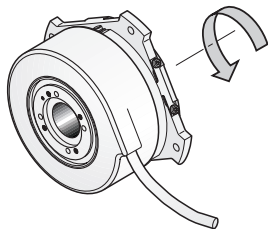
CLOCK

EnDat: T = 0.5 ... 10 μs
f = 2000 ... 100 kHz

SSI: T = 0.9 ... 11 μs
f = 1100 ... 90 kHz

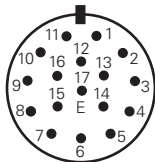


L	T	f
10 m	0.5...10μs	△ 2000... 100 kHz
50 m	1.0...10μs	△ 1000... 100 kHz
100 m	2.0...10μs	△ 500... 100 kHz
150 m	3.3...10μs	△ 300... 100 kHz

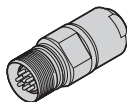




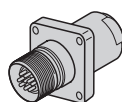
01-7V



03S17-7V



35S17-7V



Außenschirm auf Gehäuse
External shield on housing
 Blindage externe sur boîtier
Schermo esterno sulla carcassa
 Blindaje externo a carcasa

15	16	12	13	14	17	8	9	7	10	1	4	2, 3, 5, 6, 11
A		B		DATA	$\overline{\text{DATA}}$	CLOCK	$\overline{\text{CLOCK}}$	5V U _P	0V U _N	5V sensor	0V sensor	/
+	-	+	-									
gn/sw GN/BK	ge/sw YL/BK	bl/sw BL/BK	rt/sw RD/BK	gr GY	rs PK	vio VI	ge YL	br/gn BN/GN	ws/gn WH/GN	bl BL	ws WH	

Die Sensorleitung ist intern mit der Versorgungsleitung verbunden.

The sensor line is connected internally with the power supply.

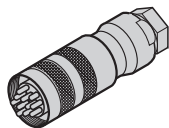
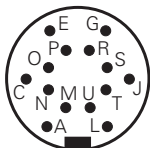
La ligne de palpeur est reliée de manière interne à la ligne d'alimentation.

La linea del sensore è collegata internamente con la linea di alimentazione.

La línea de sensor está unida internamente con la línea de alimentación.



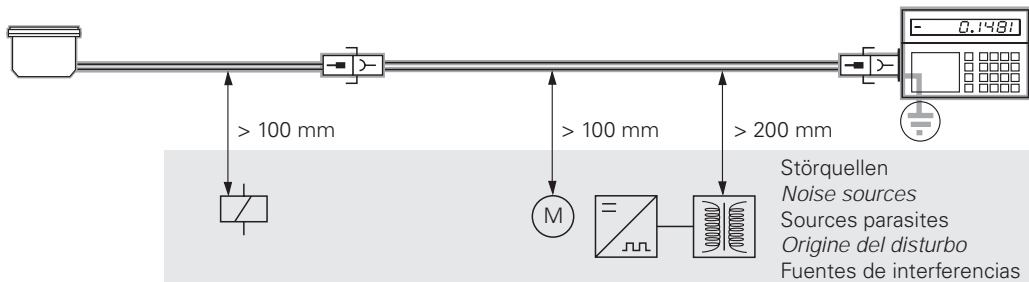
73S14-7U

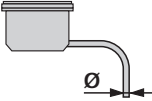
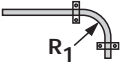
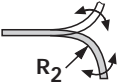



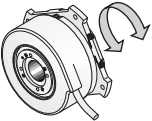
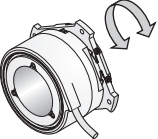
Außenschirm auf Gehäuse
External shield on housing
 Blindage externe sur boîtier
 Schermo esterno sulla carcassa
 Blindaje externo a carcasa


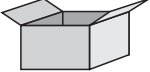
U	L	T	J	P	E	G	R	O	S	C	N	A, M
A		B		DATA	DATA	CLOCK	CLOCK	5V Up	0V Un	5V sensor	0V sensor	/
+	-	+	-									
gn/sw GN/BK	ge/sw YL/BK	bl/sw BL/BK	rt/sw RD/BK	gr GY	rs PK	vio VI	ge YL	br/gn BN/GN	ws/gn WH/GN	bl BL	ws WH	

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.



	 <p>$T \geq -40\text{ °C}$ (-40 °F)</p>	 <p>$T \geq -10\text{ °C}$ (14 °F)</p>
<p>Ø 6 mm</p>	<p>$R_1 \geq 20\text{ mm}$</p>	<p>$R_2 \geq 75\text{ mm}$</p>
<p>Ø 8 mm</p> 	<p>$R_1 \geq 40\text{ mm}$</p>	<p>$R_2 \geq 100\text{ mm}$</p>

	<p>$M_d \leq 0.10\text{ Nm (20 °C)}$ $I = 115 \cdot 10^{-6}\text{ kgm}^2$</p>
	<p>$M_d \leq 0.15\text{ Nm (20 °C)}$ $I = 215 \cdot 10^{-6}\text{ kgm}^2$</p>

 <p>°C (°F)</p>	 <p>-30 ... 80 °C (-22 ... 176 °F)</p>
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