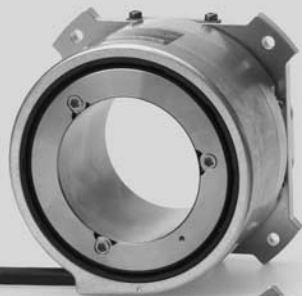




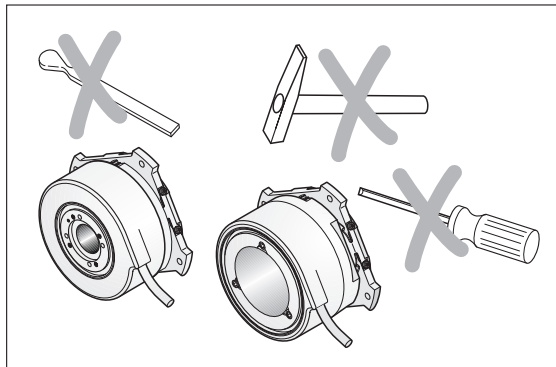
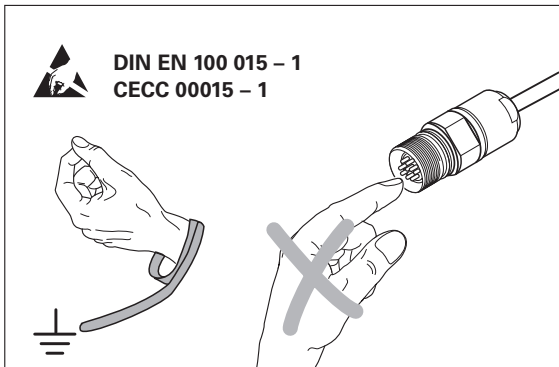
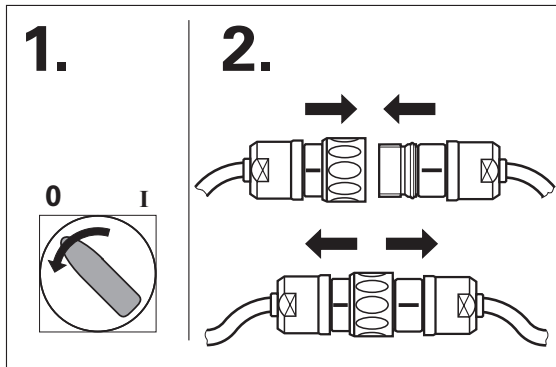
HEIDENHAIN

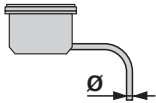
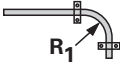
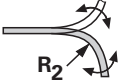



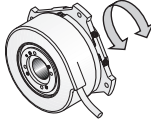
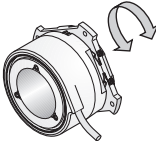
Montageanleitung
Mounting Instructions
Instructions de montage
Istruzioni di montaggio
Instrucciones de montaje

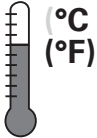
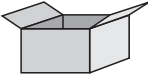
ECN 223
MITSUBISHI-Interface

5/2004



	 <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>

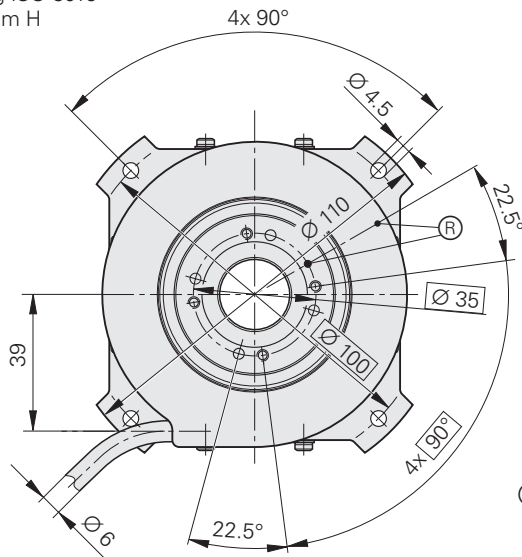
	<p>$M_d \leq 0.10\text{ Nm (20 °C)}$ $I = 115 \cdot 10^{-6}\text{ kgm}^2$</p>
	<p>$M_d \leq 0.15\text{ Nm (20 °C)}$ $I = 215 \cdot 10^{-6}\text{ kgm}^2$</p>

	 <p>$-30 \dots 80\text{ °C}$ ($-22 \dots 176\text{ °F}$)</p>
---	---

mm

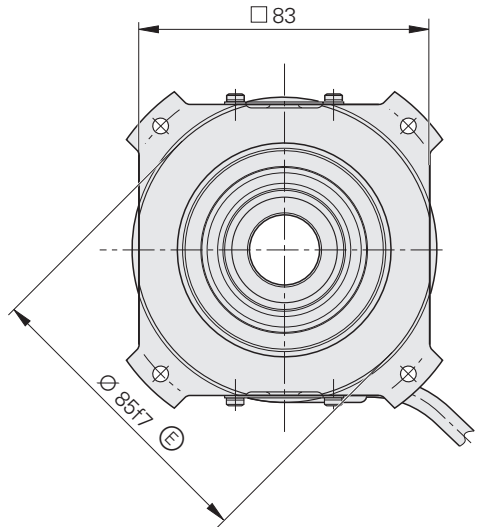
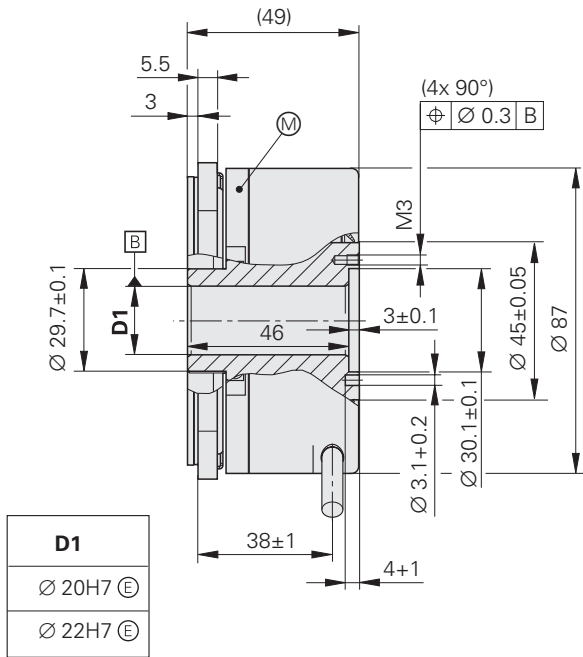


Tolerancing ISO 8015
ISO 2768 - m H



Ⓜ = 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

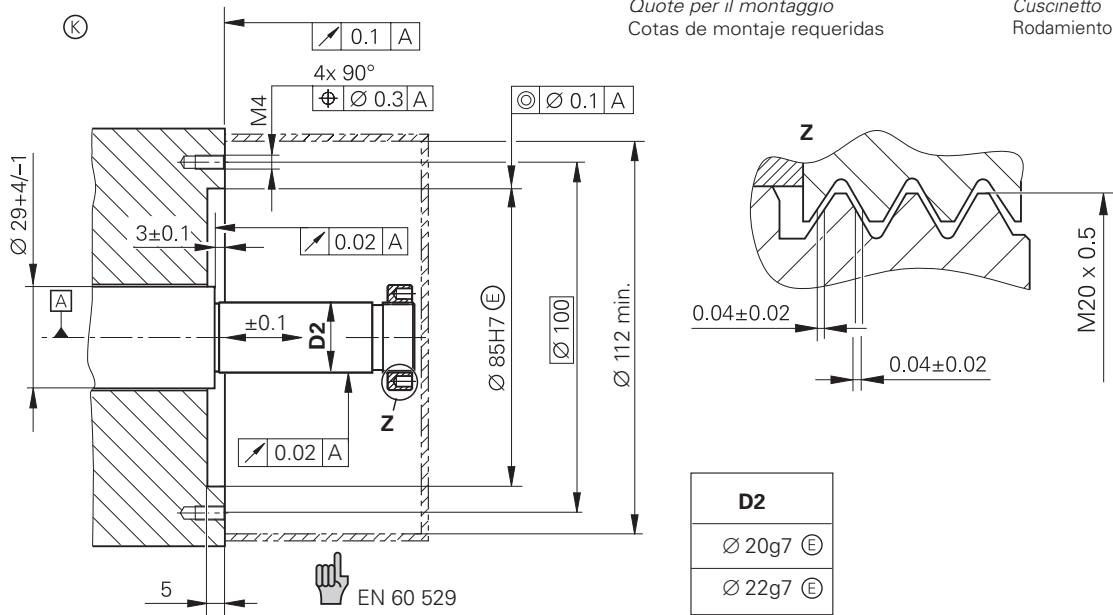
Ⓡ = Nullposition ±15°
Zero position ±15°
Position zéro ±15°
Punto di zero ±15°
Posición cero ±15°



mm
 Tolerancing ISO 8015
 ISO 2768 - m H

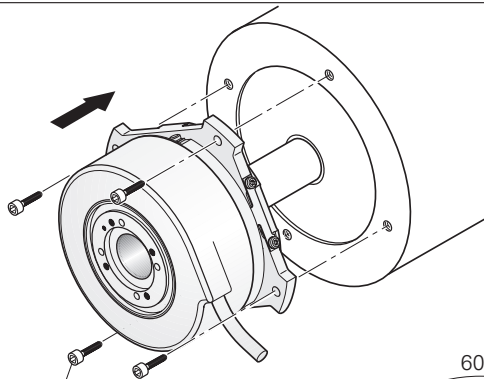
Ⓚ = Kundenseitige Anschlussmaße
Required mating dimensions
 Conditions requises pour le montage
 Quote per il montaggio
 Cotas de montaje requeridas

Ⓐ = Lagerung
 Bearing
 Roulement
 Cuscinetto
 Rodamiento

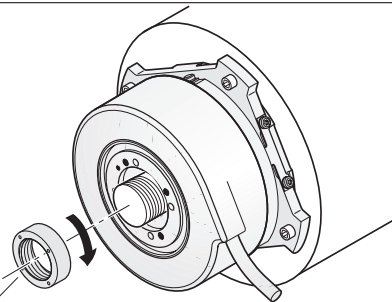


D2
$\text{\O} 20\text{g7 (E)}$
$\text{\O} 22\text{g7 (E)}$

 EN 60 529

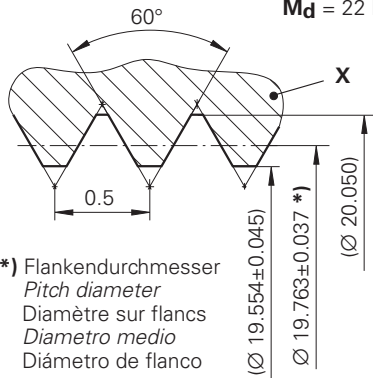


4 x M4
M_d = 2.5 Nm

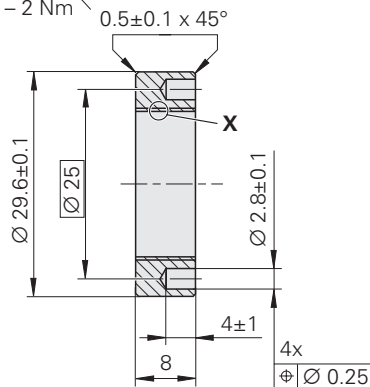


Id.-Nr. 336 669-03

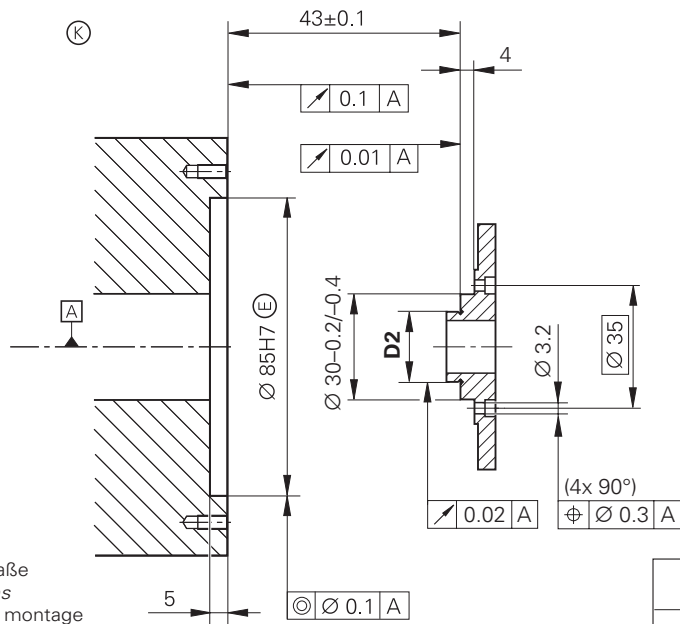
M_d = 22 Nm – 2 Nm



*) Flankendurchmesser
 Pitch diameter
 Diamètre sur flancs
 Diámetro medio
 Diámetro de flanco



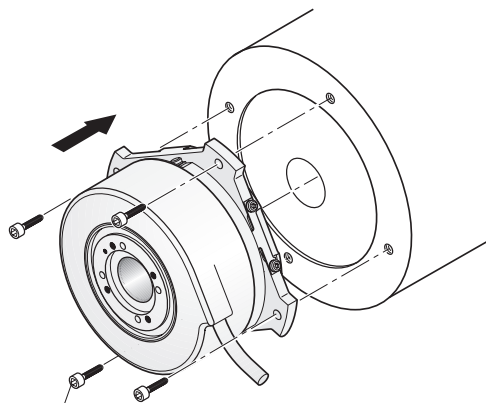
mm
 Tolerancing ISO 8015
 ISO 2768 - m H



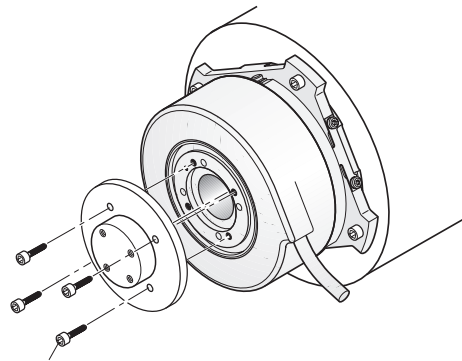
A = Lagerung
 Bearing
 Roulement
 Cuscinetto
 Rodamiento

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 Nm

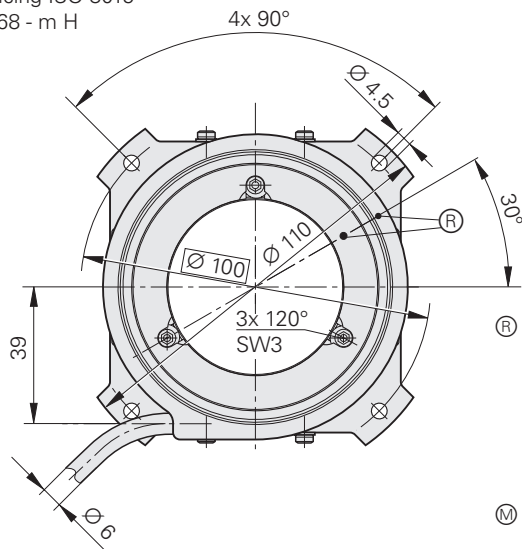


4 x M3
M_d = 1 Nm

mm



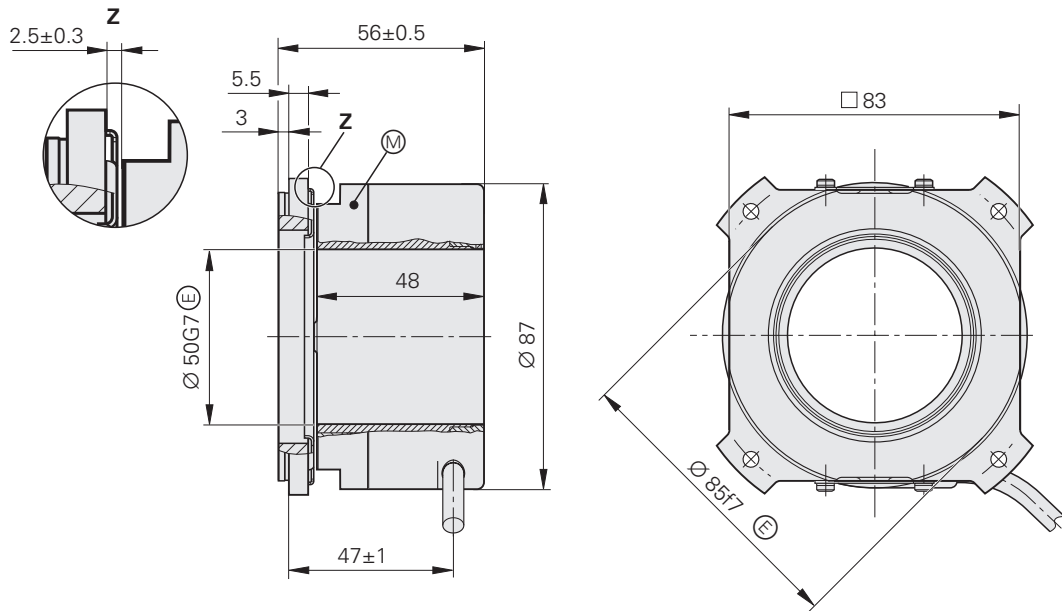
Tolerancing ISO 8015
ISO 2768 - m H



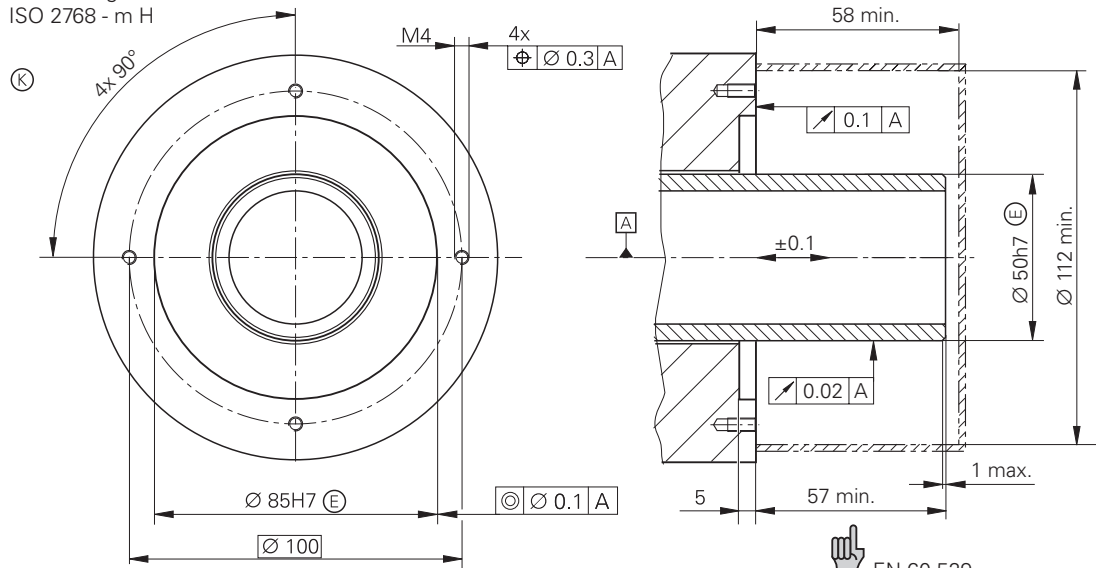
Z = Montagemaß: Grundplatte - Geberflansch
Mounting dimension: base plate - encoder flange
Cote de montage: plaque de base - bride codeur
Dimensioni di montaggio: piastra base - flangia encoder
Dimensión de montaje: placa base - brida del encoder

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

Ⓜ = 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



(K) = 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

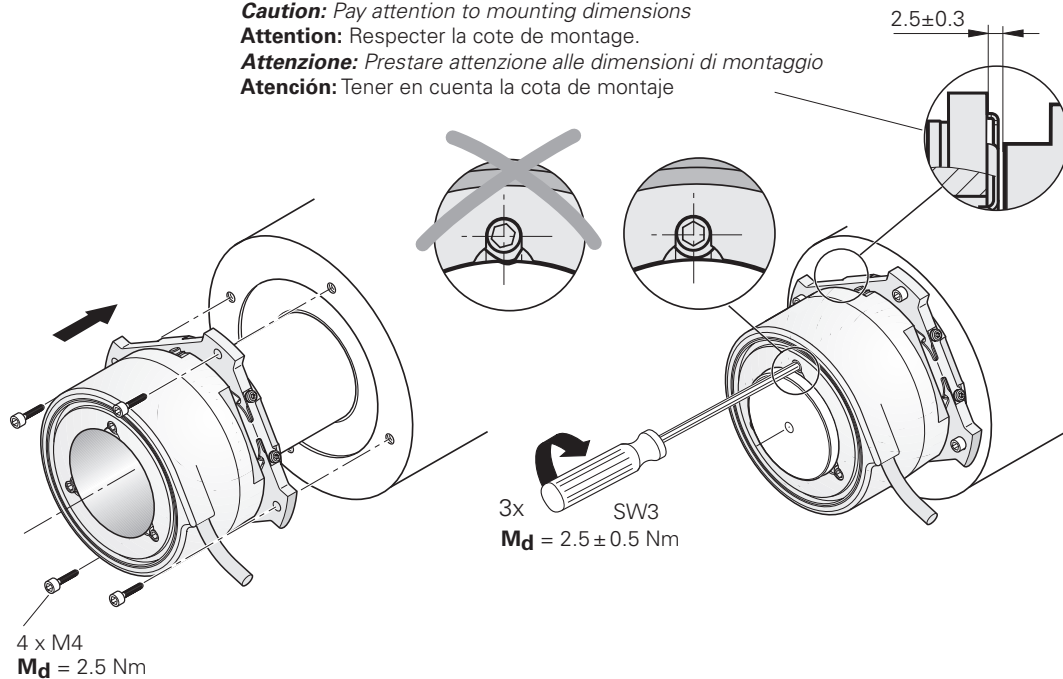
Achtung: Auf Montagemaß achten

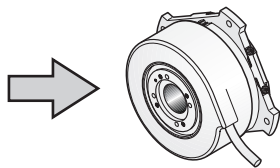
Caution: Pay attention to mounting dimensions

Attention: Respecter la cote de montage.

Attenzione: Prestare attenzione alle dimensioni di montaggio

Atención: Tener en cuenta la cota de montaje





U_p = 5 V ± 5 % (Remote Sensing)
(max. 350 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)

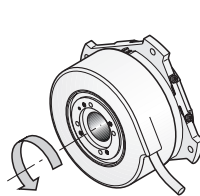


RS-485



Request Frame

Request Frame



RS-485

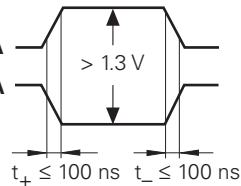


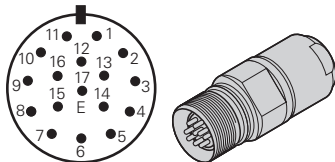
DATA
DATA



RS-485

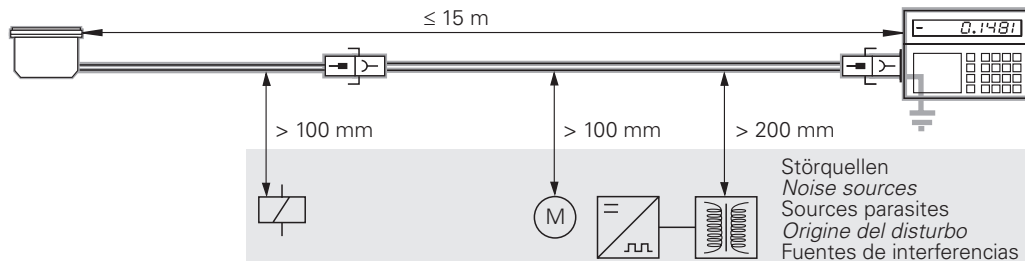
DATA
DATA





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

14	17	8	9	7	10	1)	1	4
DATA	DATA	Request Frame	Request Frame	5V Up	0V U _N		5V sensor	0V sensor
grau gray gris grigio gris	rosa pink rose rosa rosa	violett violet violet viola violeta	gelb yellow jaune giallo amarillo	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



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