



HEIDENHAIN



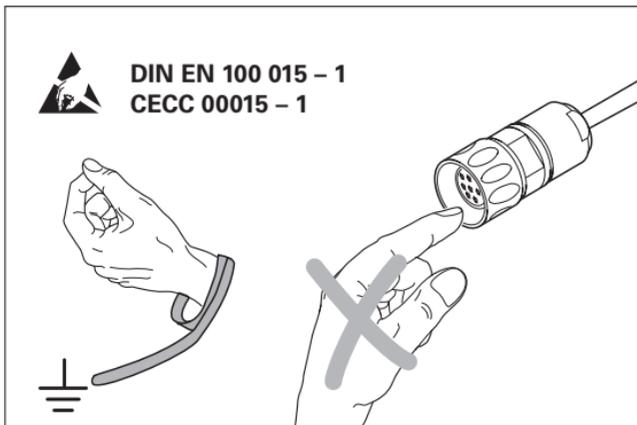
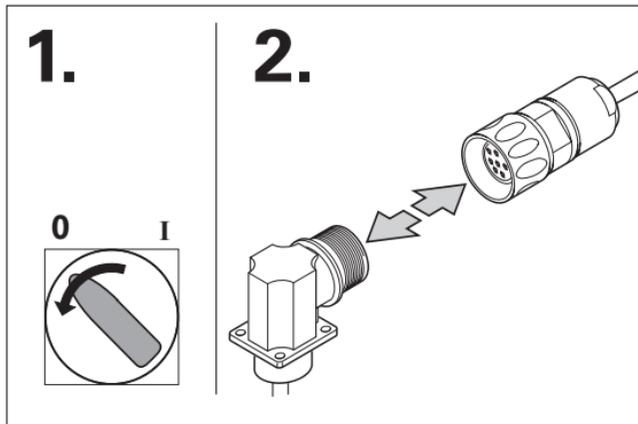
Montageanleitung
Mounting Instructions
Instructions de montage
Istruzioni di montaggio
Instrucciones de montaje

ERN 1323
ERN 1326

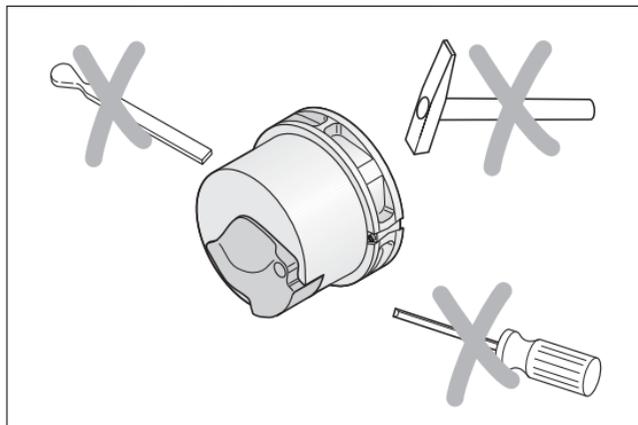
7/2003

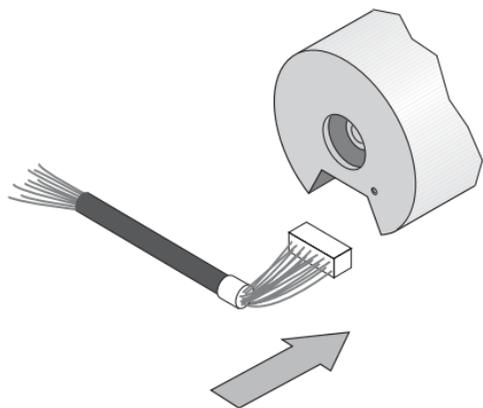


Maße in mm
Dimensions in mm
Cotes en mm
Dimensioni in mm
Dimensiones en mm



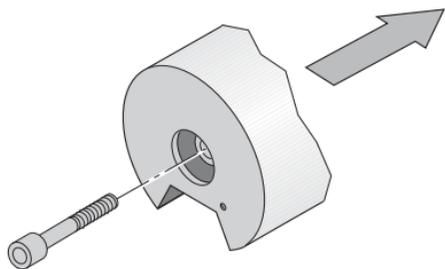
DIN EN 100 015 - 1
CECC 00015 - 1



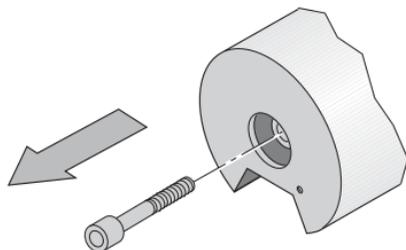


Elektrischen Anschluss herstellen
Electrical connection
Préparer le raccordement électrique
Realizzare il collegamento elettrico
Establecer conexión eléctrica



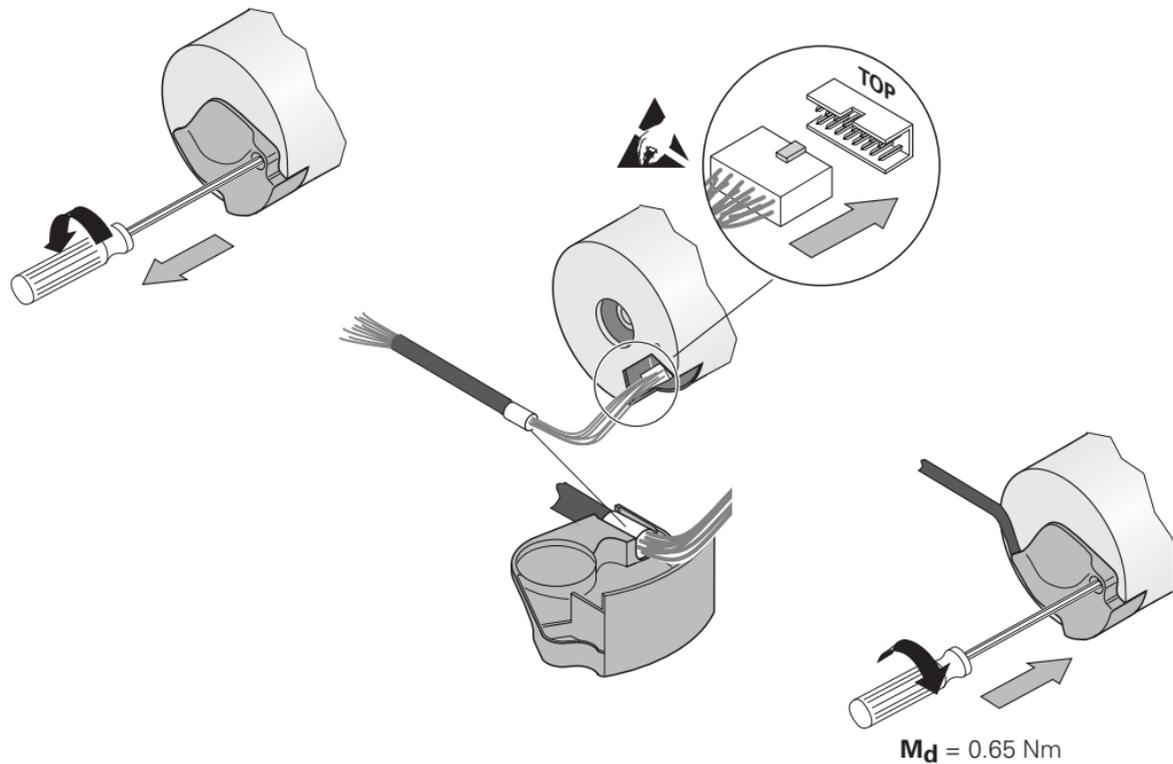


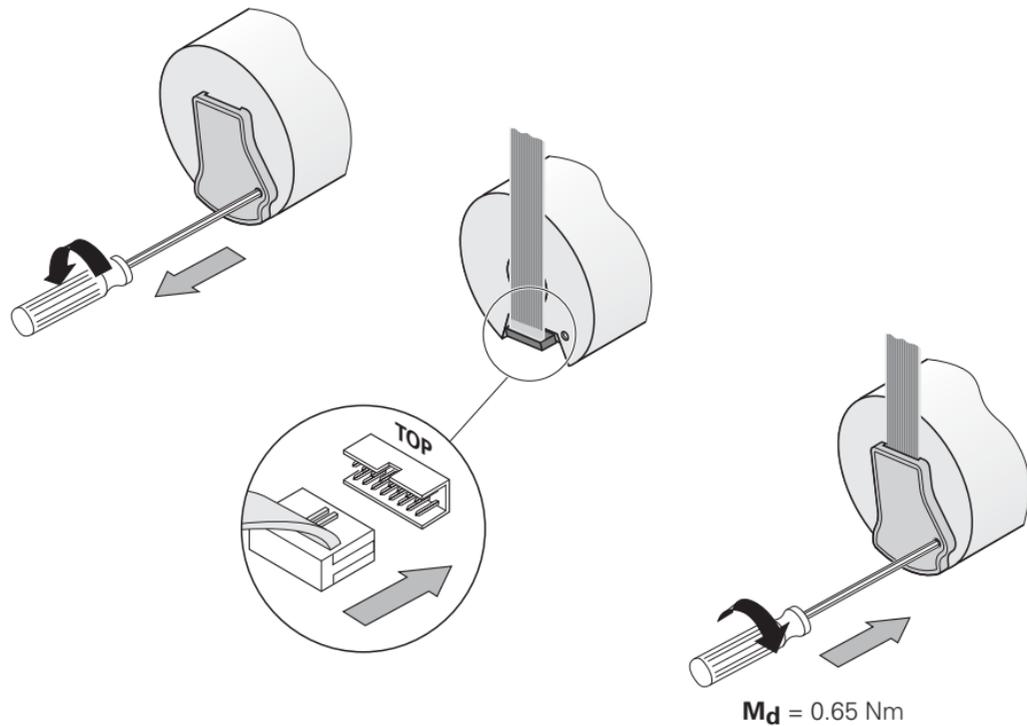
Mechanische Montage des Drehgebers
Mounting the encoder
Montage mécanique du capteur rotatif
Montaggio meccanico dell'encoder
Montaje mecánico del encoder



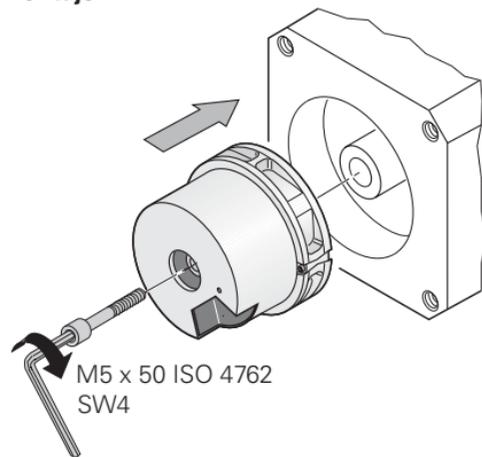
Demontage des Drehgebers
Removing the encoder
Démontage du capteur rotatif
Smontaggio dell'encoder
Desmontaje del encoder





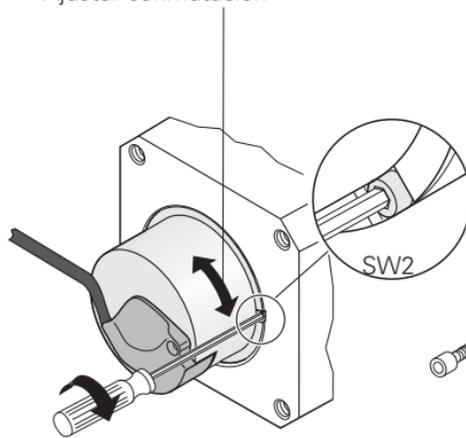


Montage
Assembly
Montage
Montaggio
Montaje



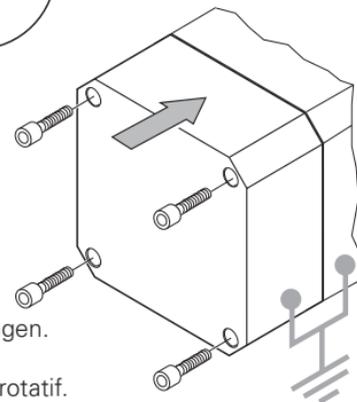
$M_d = 5 \text{ Nm}$

Kommutierung einstellen
Adjusting the commutation
Régler la commutation
Settare la commutazione
Ajustar conmutación



$M_d = 1.25 \text{ Nm}$

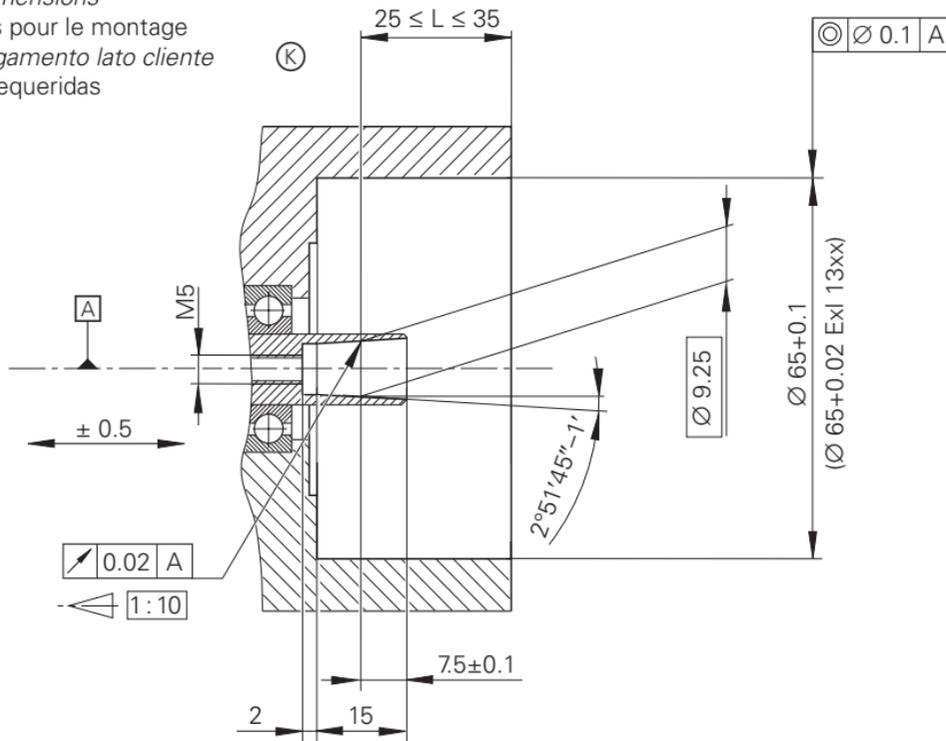
ERN 1326 Id.-Nr. 341 208-01
Id.-Nr. 341 208-02
Id.-Nr. 341 208-03
Id.-Nr. 341 208-04
Id.-Nr. 341 208-05
Id.-Nr. 341 208-07
Id.-Nr. 341 208-08
Id.-Nr. 341 208-14



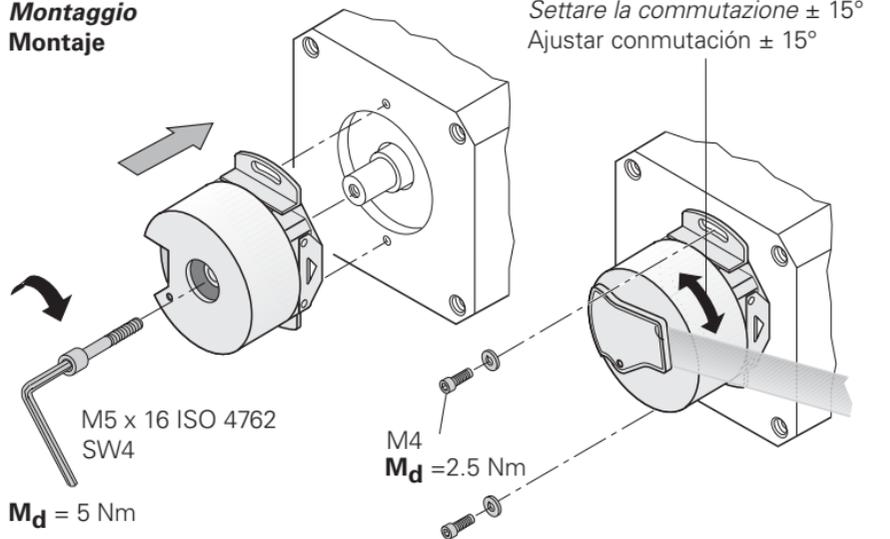
Bei der Montage darauf achten, dass keine Verschmutzungen in den Drehgeber gelangen.
Make sure that the rotary encoder does not become contaminated during mounting.
Lors du montage, veiller à ce des salissures ne pénètrent pas à l'intérieur du capteur rotatif.
Durante il montaggio, prestare attenzione che non entri sporcizia nell'encoder.
Durante el montaje prestar atención de que no entre suciedad en el encoder.

(K) = Kundenseitige Anschlussmaße
 Required mating dimensions
 Conditions requises pour le montage
 Dimensioni di collegamento lato cliente
 Cotas de montaje requeridas

(A) = Lagerung
 Bearing
 Roulement
 Cuscinetto
 Rodamiento

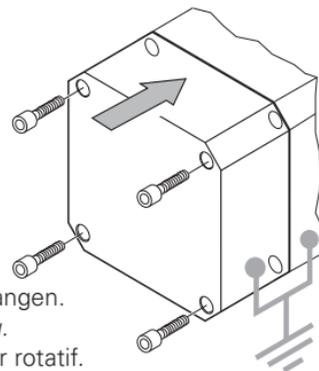


Montage
Assembly
Montage
Montaggio
Montaje



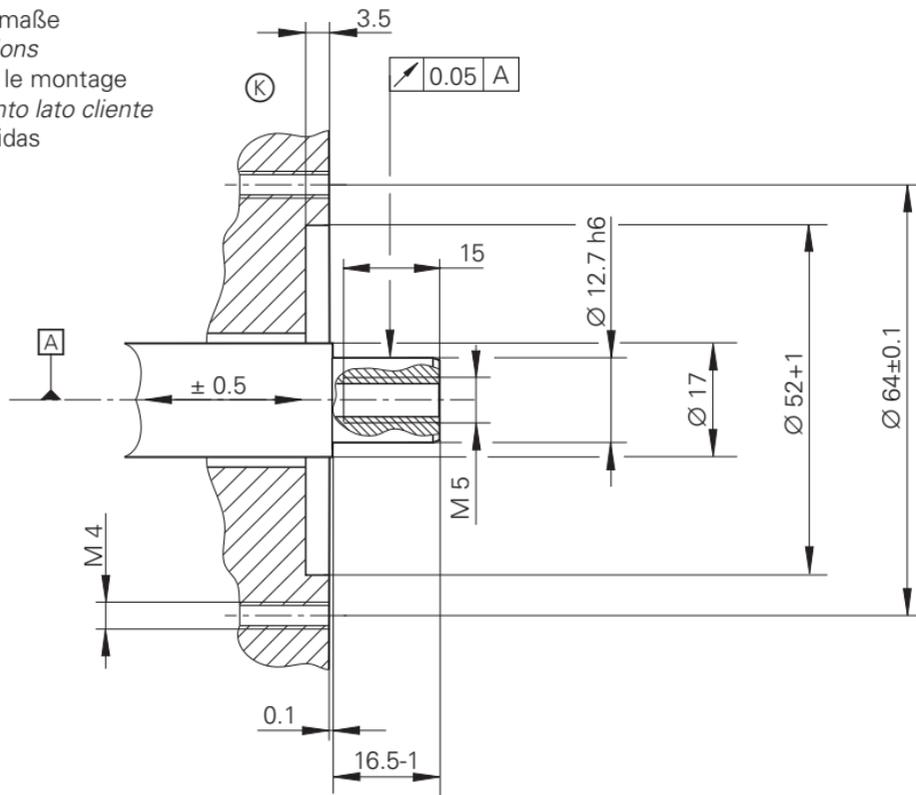
ERN 1323 Id.-Nr. 345 322-01
Id.-Nr. 345 322-02
Id.-Nr. 345 322-03
Id.-Nr. 345 322-12
Id.-Nr. 345 322-13

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(K) = Kundenseitige Anschlussmaße
Required mating dimensions
 Conditions requises pour le montage
Dimensioni di collegamento lato cliente
 Cotas de montaje requeridas

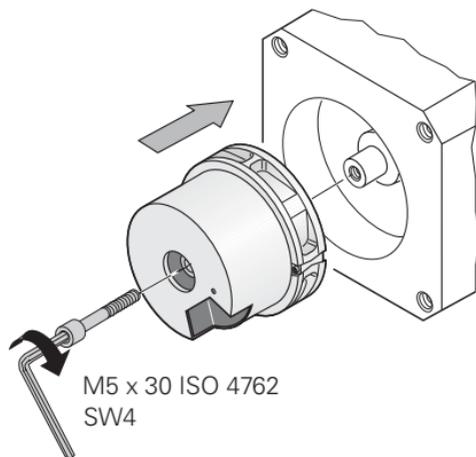
(A) = Lagerung
Bearing
 Roulement
Cuscinetto
 Rodamiento



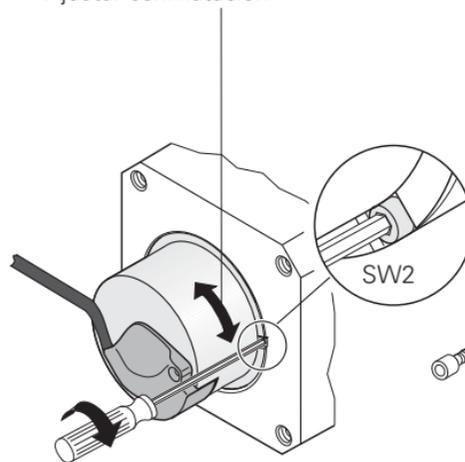
Montage
Assembly
Montage
Montaggio
Montaje

ERN 1323 Id.-Nr. 345 322-05

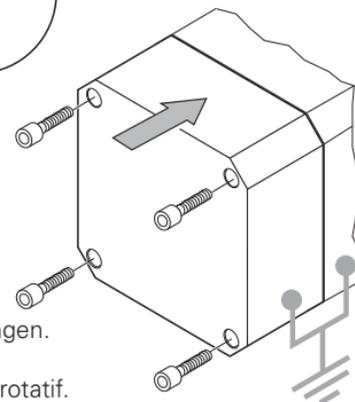
Kommutierung einstellen
Adjusting the commutation
Régler la commutation
Settare la commutazione
Ajustar conmutación



$M_d = 5 \text{ Nm}$



$M_d = 1.25 \text{ Nm}$



Bei der Montage darauf achten, dass keine Verschmutzungen in den Drehgeber gelangen.

Make sure that the rotary encoder does not become contaminated during mounting.

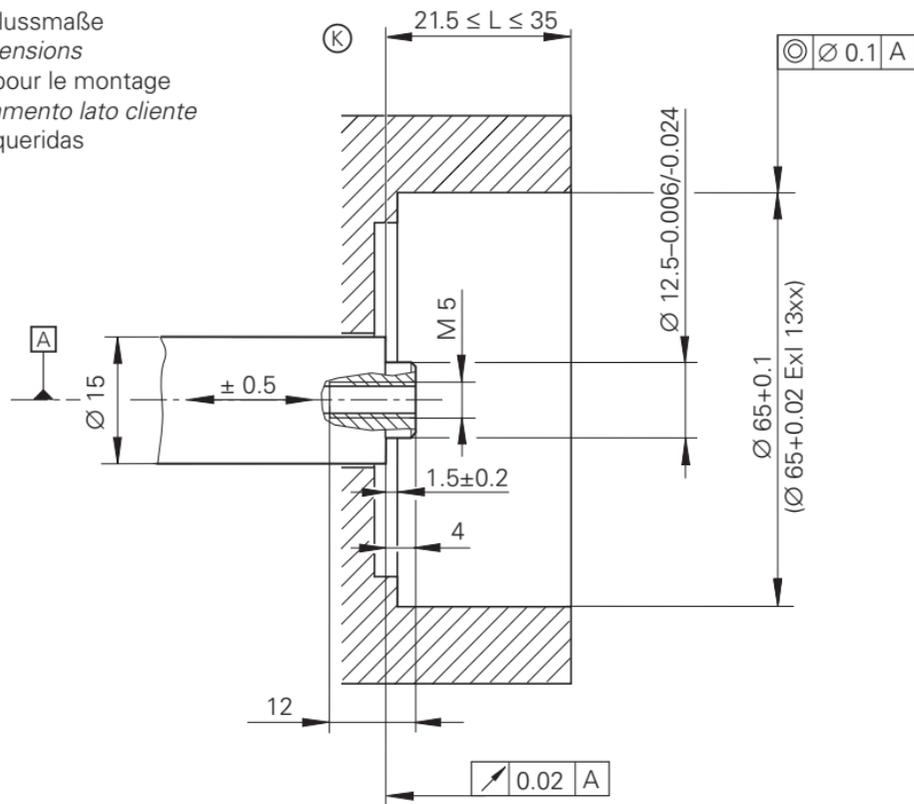
Lors du montage, veiller à ce des salissures ne pénètrent pas à l'intérieur du capteur rotatif.

Durante il montaggio, prestare attenzione che non entri sporcizia nell'encoder.

Durante el montaje prestar atención de que no entre suciedad en el encoder.

(K) = Kundenseitige Anschlussmaße
 Required mating dimensions
 Conditions requises pour le montage
 Dimensioni di collegamento lato cliente
 Cotas de montaje requeridas

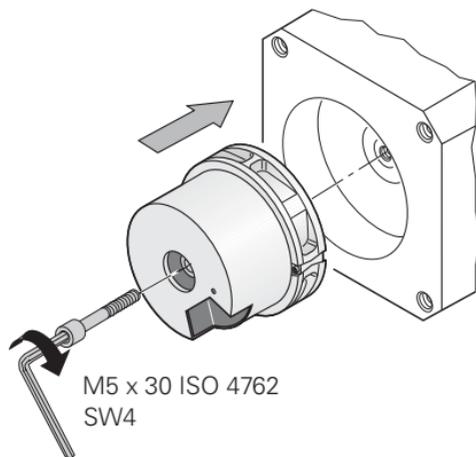
(A) = Lagerung
 Bearing
 Roulement
 Cuscinetto
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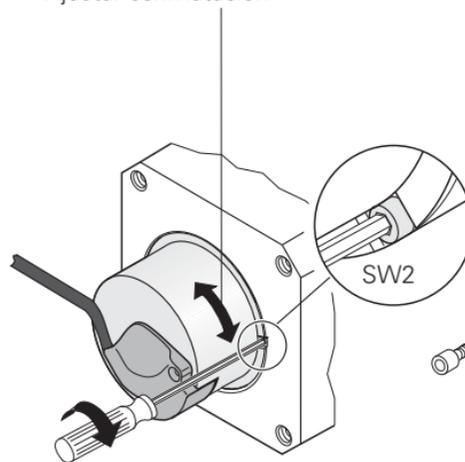
Montage
Assembly
Montage
Montaggio
Montaje

ERN 1323 Id.-Nr. 345 322-15

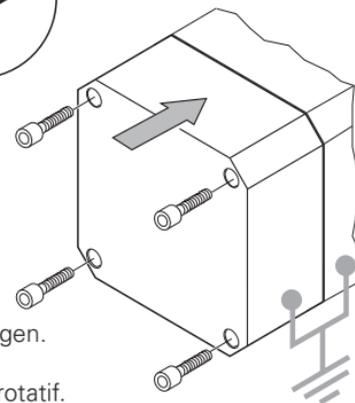
Kommutierung einstellen
Adjusting the commutation
Régler la commutation
Settare la commutazione
Ajustar conmutación



$M_d = 5 \text{ Nm}$



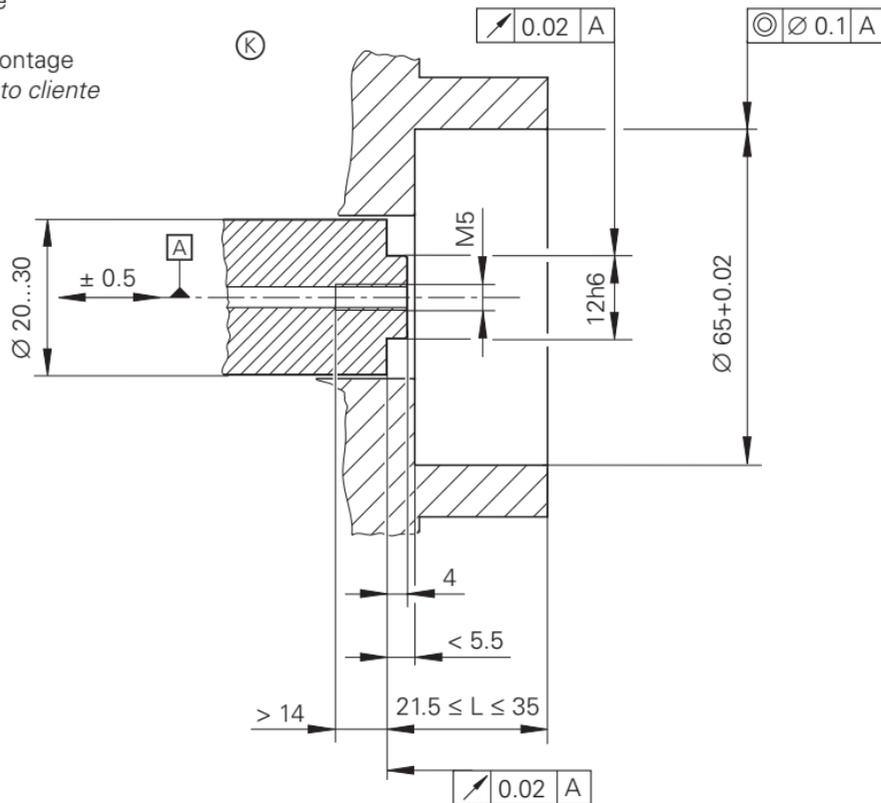
$M_d = 1.25 \text{ Nm}$



Bei der Montage darauf achten, dass keine Verschmutzungen in den Drehgeber gelangen.
Make sure that the rotary encoder does not become contaminated during mounting.
Lors du montage, veiller à ce des salissures ne pénètrent pas à l'intérieur du capteur rotatif.
Durante il montaggio, prestare attenzione che non entri sporczia nell'encoder.
Durante el montaje prestar atención de que no entre suciedad en el encoder.

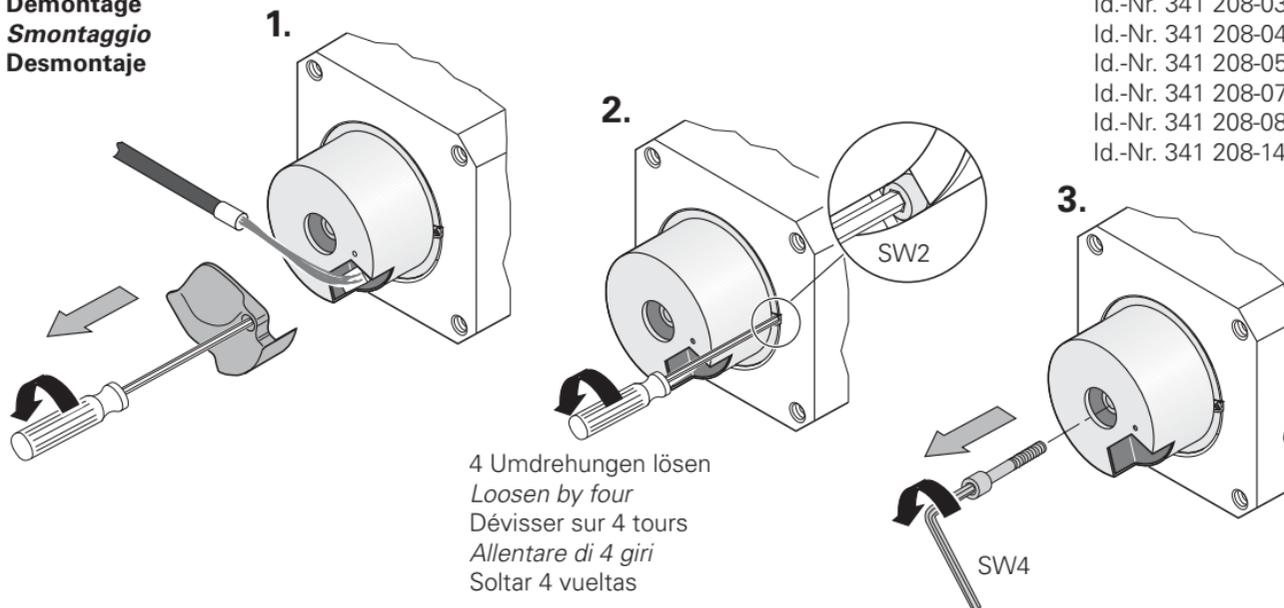
(K) = Kundenseitige Anschlussmaße
Required mating dimensions
 Conditions requises pour le montage
Dimensioni di collegamento lato cliente
 Cotas de montaje requeridas

(A) = Lagerung
Bearing
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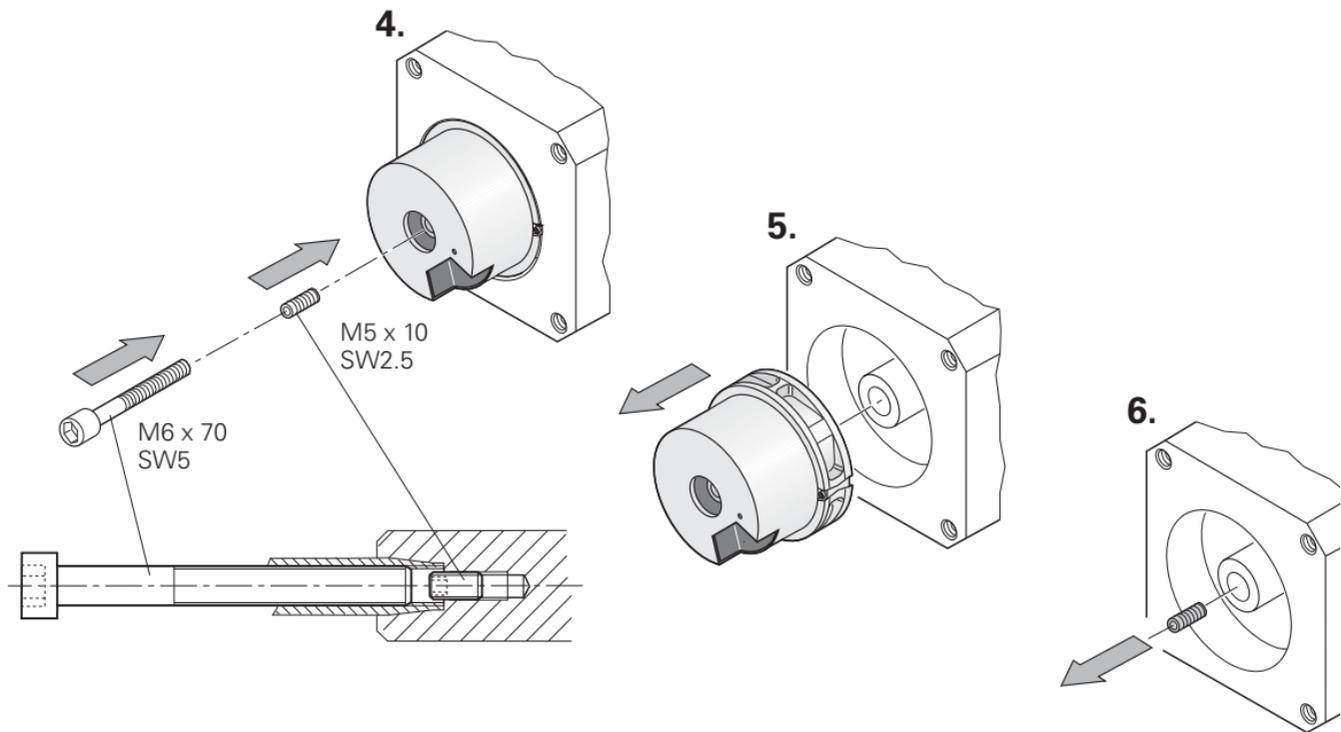


Demontage
Disassembly
Demontage
Smontaggio
Desmontaje

ERN 1326 Id.-Nr. 341 208-01
Id.-Nr. 341 208-02
Id.-Nr. 341 208-03
Id.-Nr. 341 208-04
Id.-Nr. 341 208-05
Id.-Nr. 341 208-07
Id.-Nr. 341 208-08
Id.-Nr. 341 208-14

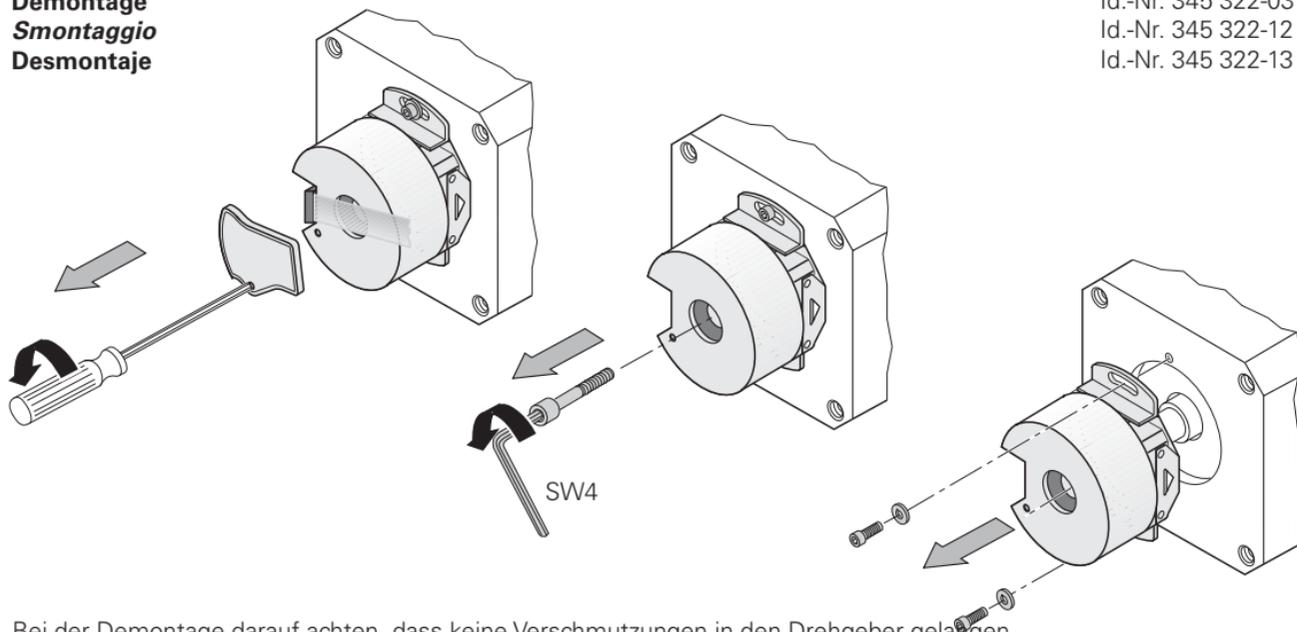


Bei der Demontage darauf achten, dass keine Verschmutzungen in den Drehgeber gelangen.
Make sure that the rotary encoder does not become contaminated during removal.
Lors du démontage, veiller à ce des salissures ne pénètrent pas à l'intérieur du capteur rotatif.
Durante lo smontaggio, prestare attenzione che non entri sporcizia nell'encoder
Durante el desmontaje prestar atención de que no entre suciedad en el encoder.

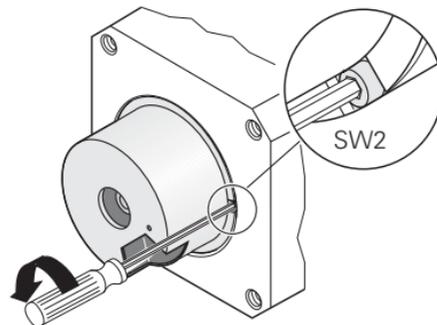
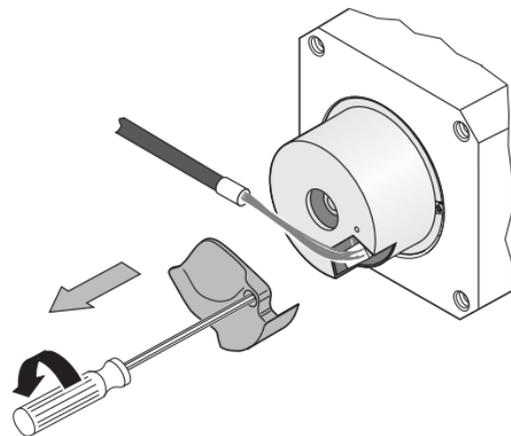


Demontage
Disassembly
Demontage
Smontaggio
Desmontaje

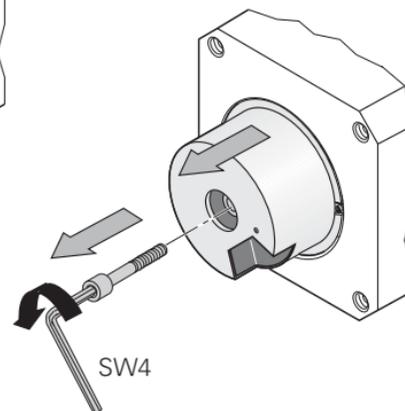
ERN 1323 Id.-Nr. 345 322-01
Id.-Nr. 345 322-02
Id.-Nr. 345 322-03
Id.-Nr. 345 322-12
Id.-Nr. 345 322-13

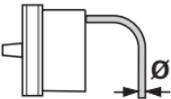
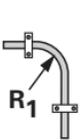
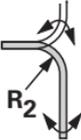


Bei der Demontage darauf achten, dass keine Verschmutzungen in den Drehgeber gelangen.
Make sure that the rotary encoder does not become contaminated during removal.
Lors du démontage, veiller à ce des salissures ne pénètrent pas à l'intérieur du capteur rotatif.
Durante lo smontaggio, prestare attenzione che non entri sporcizia nell'encoder.
Durante el desmontaje prestar atención de que no entre suciedad en el encoder.



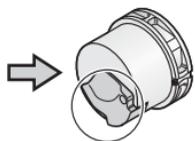
4 Umdrehungen lösen
Loosen by four
dévisser sur 4 tours
allentare di 4 giri
soltar 4 vueltas



	 <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>



M_d = 0.01 Nm
20 °C
(68 °F)

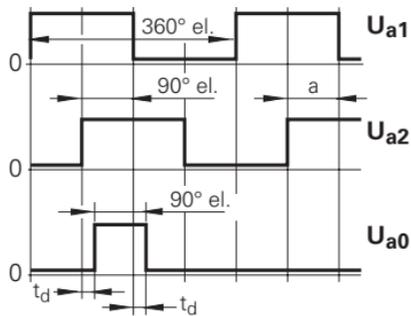
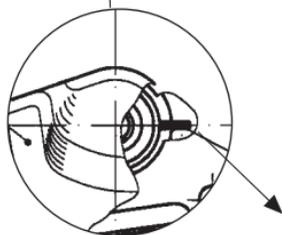


$U_p = 5\text{ V} \pm 5\%$
(max. 150 mA)



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)



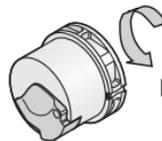
$|t_d| \leq 50\text{ ns}$

$a \geq 0.45\text{ }\mu\text{s}$



$U_H \geq 2.5\text{ V}$ ($-I_H = 20\text{ mA}$)

$U_L \leq 0.5\text{ V}$ ($I_L = 20\text{ mA}$)



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

I, II, III

$\overline{\text{I}}, \overline{\text{II}}, \overline{\text{III}}$

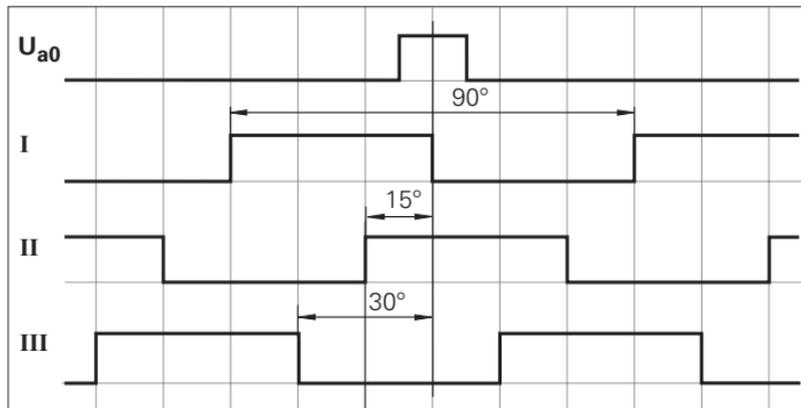
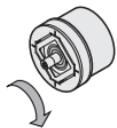
TTL: max. 300 kHz

TTLx2: max. 600 kHz

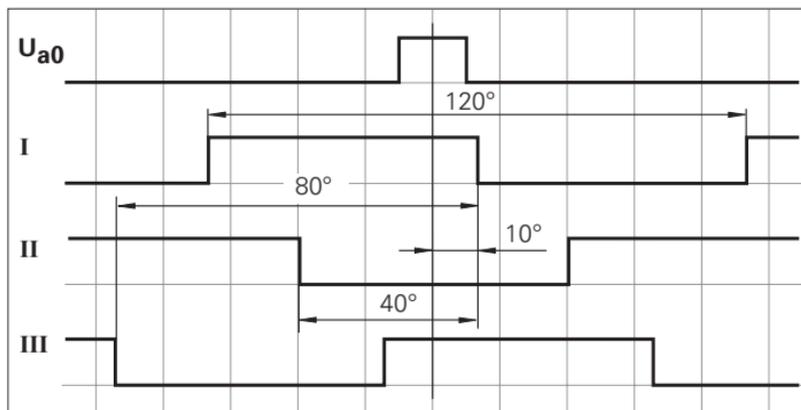
$\overline{U_{aS}}$: Störungssignal
Fault detection signal
Signal de perturbation
Segnale di malfunzionamento
Señal de avería

$\overline{U_{aS}} = \text{High}$: ✓

$\overline{U_{aS}} = \text{Low}$: ⚠

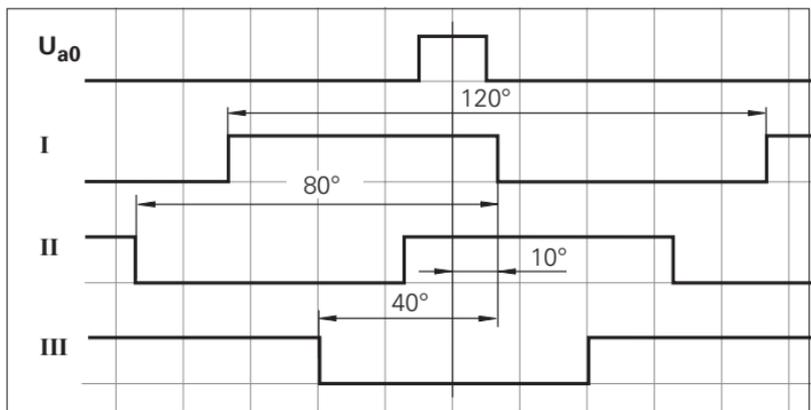


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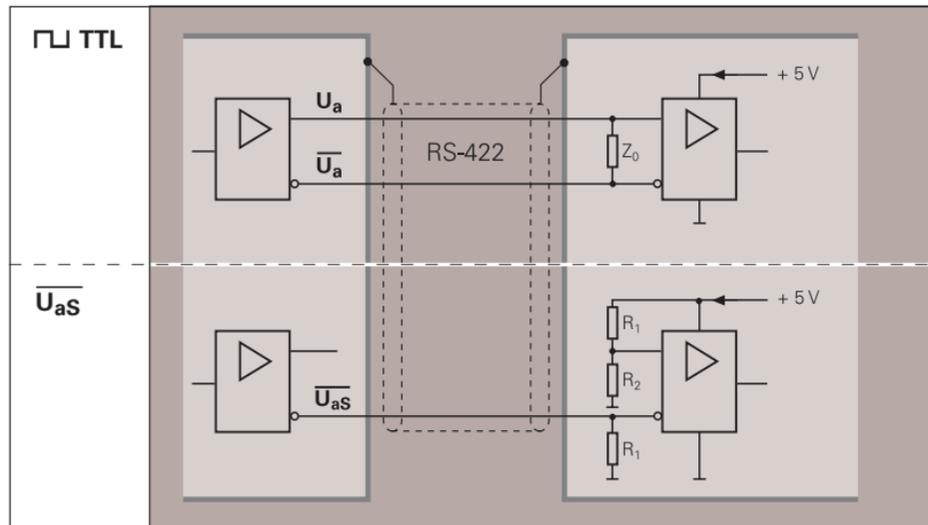
ERN 1326 Id.-Nr. 341 208-01
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 Id.-Nr. 341 208-14

ERN 1323 Id.-Nr. 345 322-05



ERN 1323 Id.-Nr. 345 322-15

ERN 1326 Id.-Nr. 341 208-05
Id.-Nr. 341 208-08



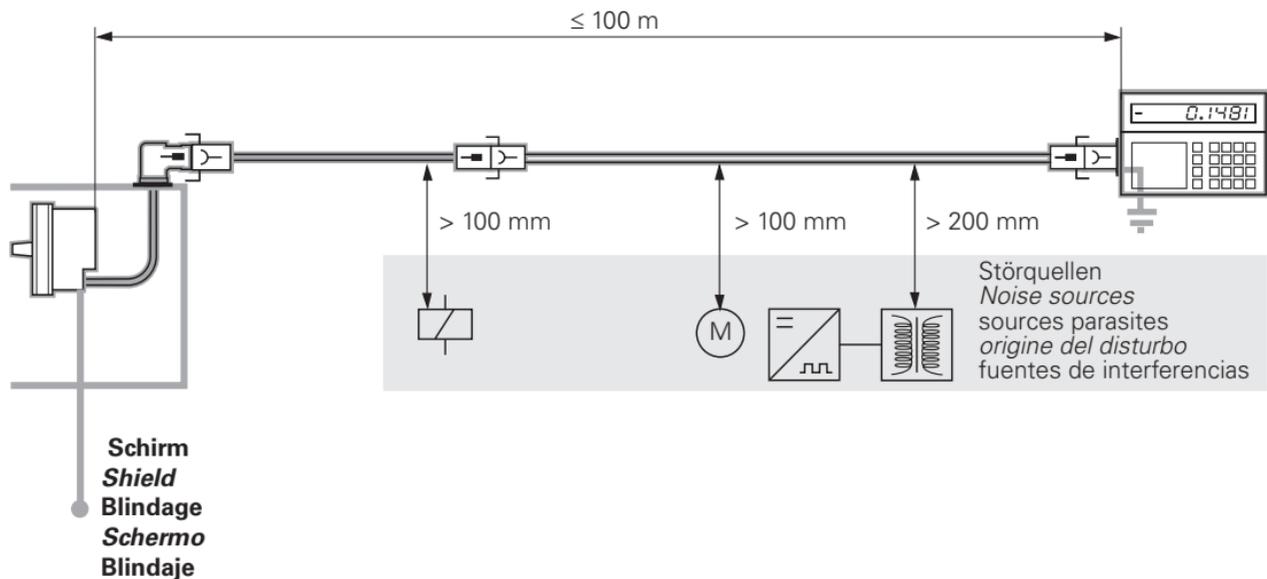
AM 26 LS 32
 MC 3486
 SN 75 ALS 193

$R_1 = 4.7 \text{ k}\Omega$
 $R_2 = 1.8 \text{ k}\Omega$
 $Z_0 = 120 \text{ }\Omega$



EN 50 178/4.98; 5.2.9.5
IEC 364-4-41: 1992; 411 (PELV/SELV)

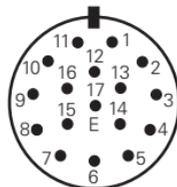
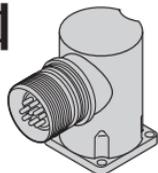
(siehe, see, voir, vedi, véase
HEIDENHAIN D 231 929)



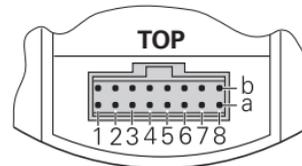
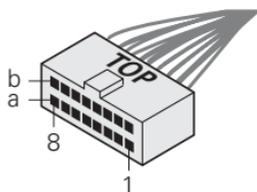


62S16-1L

Id.-Nr. 341 370-xx



Id.-Nr. 341 369-xx



	15	16	12	13	3	2	7	10
	5b	5a	4b	4a	3b	3a	1b	1a
	U_{a1}	\overline{U}_{a1}	U_{a2}	\overline{U}_{a2}	U_{a0}	\overline{U}_{a0}	5 V U_p	0 V U_N
	grün/schwarz <i>green/black</i> vert/noir <i>verte/hero</i> verde/hero verde/negro	gelb/schwarz <i>yellow/black</i> jaune/noir <i>giallo/nero</i> amarillo/negro	blau/schwarz <i>blue/black</i> bleu/noir <i>azzurro/hero</i> azul/negro	rot/schwarz <i>red/black</i> rouge/noir <i>rosso/hero</i> rojo/negro	rot <i>red</i> rouge <i>rosso</i> rojo	schwarz <i>black</i> noir <i>nero</i> negro	braun/grün <i>brown/green</i> brun/vert <i>marrone/verde</i> marrón/verde	weiß/grün <i>white/green</i> blanc/vert <i>bianco/verde</i> blanco/verde

1) Innenschirm Pin 11
Internal shield pin 11
 Blindage interne pin 11
Schermo interno pin 11
 Blindaje interno pin 11

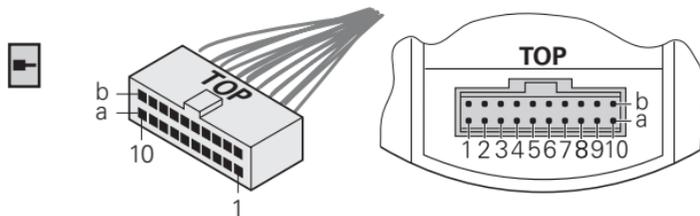
Schirm auf Gehäuse
Shield on housing
 Blindage sur boîtier
Schermo sulla carcassa
 Blindaje a carcasa

11	1	4	5	6	14	17	9	8
/	2b	2a	8b	8a	7b	7a	6b	6a
1)	5V sensor	$\overline{U_{aS}}$	I	\overline{I}	II	\overline{II}	III	\overline{III}
/	blau <i>blue</i> bleu azzurro azul	weiß <i>white</i> blanc <i>bianco</i> blanco	grün <i>green</i> vert verde verde	braun <i>brown</i> brun marrone marrón	gelb <i>yellow</i> jaune <i>giallo</i> amarillo	violett <i>violet</i> violet viola violeta	grau <i>gray</i> gris <i>grigio</i> gris	rosa <i>pink</i> rose <i>rosa</i> rosa



62S20-0A

Id.-Nr. 334 523-xx



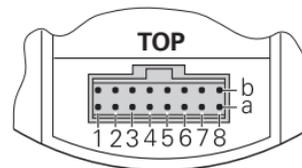
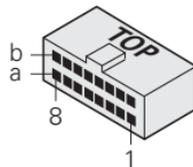
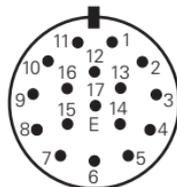
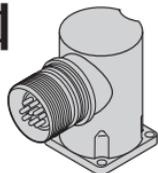
Schirm auf Gehäuse
Shield on housing
 Blindage sur boîtier
Scherma sulla carcassa
 Blindaje a carcasa

	6b	6a	5b	5a	4b	4a	2a	1a
	U_{a1}	$\overline{U_{a1}}$	U_{a2}	$\overline{U_{a2}}$	U_{a0}	$\overline{U_{a0}}$	5V U_p	0V U_N
	grün/schwarz <i>green/black</i> vert/noir <i>verte/nero</i> verde/negro	gelb/schwarz <i>yellow/black</i> jaune/noir <i>giallo/nero</i> amarillo/negro	blau/schwarz <i>blue/black</i> bleu/noir <i>azzurro/nero</i> azul/negro	rot/schwarz <i>red/black</i> rouge/noir <i>rosso/nero</i> rojo/negro	rot <i>red</i> rouge <i>rosso</i> rojo	schwarz <i>black</i> noir <i>nero</i> negro	braun/grün <i>brown/green</i> brun/vert <i>marrone/verde</i> marrón/verde	weiß/grün <i>white/green</i> blanc/vert <i>bianco/verde</i> blanco/verde

	2b	1b	3b	3a	10b	10a	9b	9a	8b	8a	7b	7a
	5V sensor	0V sensor	U_{aS}	$\overline{\text{U}}_{\text{aS}}$	I	$\overline{\text{I}}$	II	$\overline{\text{II}}$	III	$\overline{\text{III}}$	SDA	SCL
	blau <i>blue</i> bleu azzurro azul	weiß <i>white</i> blanc <i>bianco</i> blanco	frei <i>Vacant</i> libre <i>libero</i> libre	frei <i>Vacant</i> libre <i>libero</i> libre	grün <i>green</i> vert <i>verde</i> verde	braun <i>brown</i> brun marrone marrón	grau <i>gray</i> gris <i>grigio</i> gris	rosa <i>pink</i> rose <i>rosa</i> rosa	gelb <i>yellow</i> jaune <i>giallo</i> amarillo	violett <i>violet</i> violet <i>viola</i> violeta	frei <i>Vacant</i> libre <i>libero</i> libre	frei <i>Vacant</i> libre <i>libero</i> libre



62S16-0Y



15

16

12

13

3

2

7

10



5b

5a

4b

4a

3b

3a

2a

1a

U_{a1}

$\overline{U_{a1}}$

U_{a2}

$\overline{U_{a2}}$

U_{a0}

$\overline{U_{a0}}$

5 V
 U_p

0 V
 U_N



grün/schwarz
green/black
vert/noir
verde/nero
verde/negro

gelb/schwarz
yellow/black
jaune/noir
giallo/nero
amarillo/negro

blau/schwarz
blue/black
bleu/noir
azzurro/nero
azul/negro

rot/schwarz
red/black
rouge/noir
rosso/nero
rojo/negro

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

1) Innenschirm Pin 11
Internal shield pin 11
 Blindage interne pin 11
Schermo interno pin 11
 Blindaje interno pin 11

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

11	1	4	5	6	14	17	9	8
/	2b	1b	8b	8a	6b	6a	7b	7a
1)	5V sensor	0V sensor	I	Ī	II	IĪ	III	IIĪ
/	blau <i>blue</i> bleu azzurro azul	weiß <i>white</i> blanc <i>bianco</i> blanco	grün <i>green</i> vert verde verde	braun <i>brown</i> brun marrone marrón	gelb <i>yellow</i> jaune <i>giallo</i> amarillo	violett <i>violet</i> violet viola violeta	grau <i>gray</i> gris <i>grigio</i> gris	rosa <i>pink</i> rose <i>rosa</i> rosa

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