



HEIDENHAIN

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

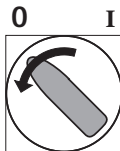
ERN 1380
ERN 1381
ERN 1385
ERN 1387
ERN 1388

7/2003

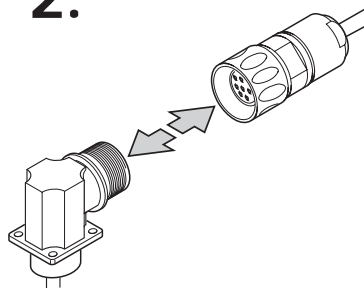




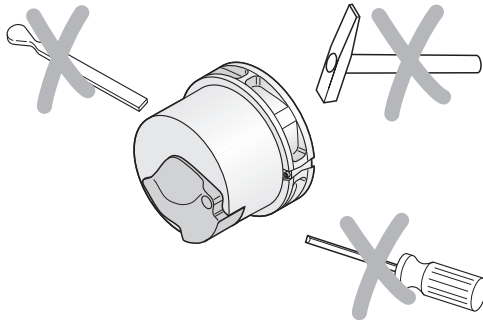
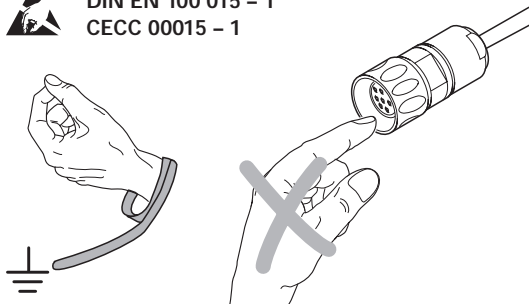
1.

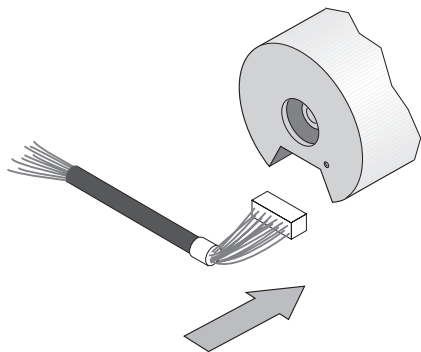


2.



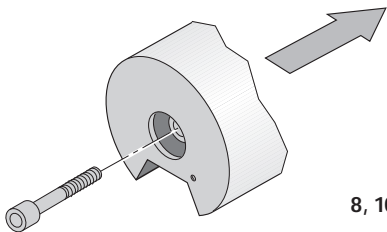
DIN EN 100 015 - 1
CECC 00015 - 1



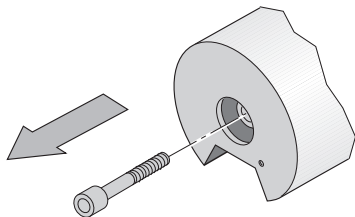


Elektrischen Anschluss herstellen
Electrical connection
préparer le raccordement électrique
realizzare il collegamento elettrico
establecer conexión eléctrica





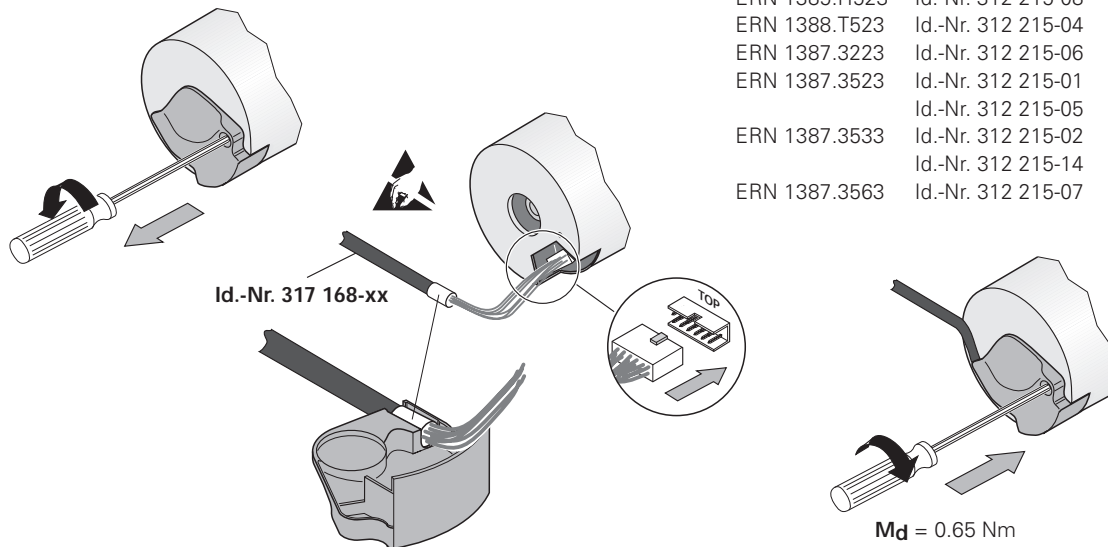
Mechanische Montage des Drehgebers
Mounting the encoder
montage mécanique du capteur rotatif
montaggio meccanico dell'encoder
montaje mecánico del encoder



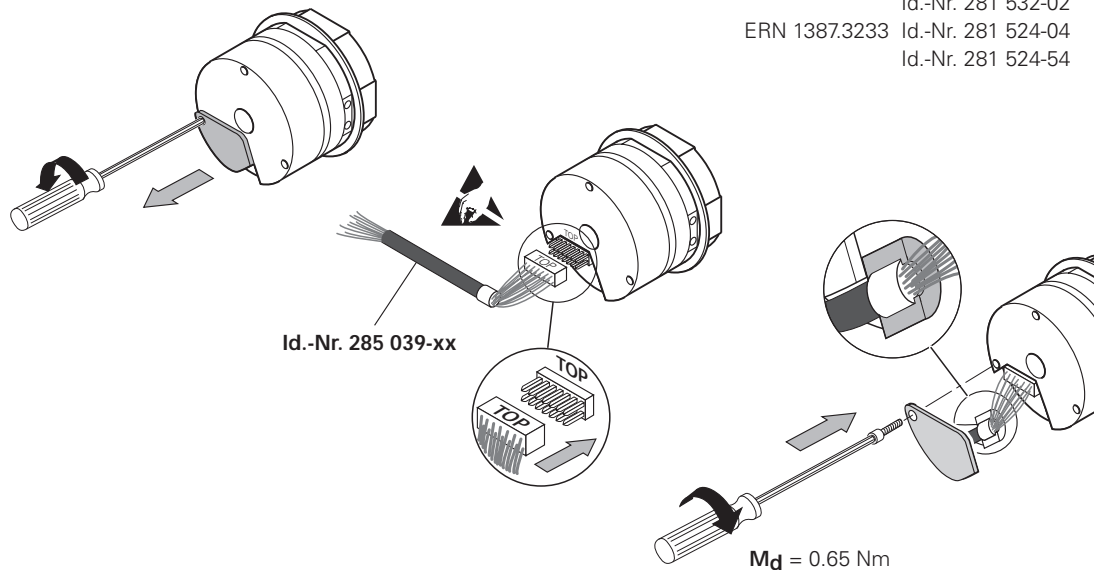
Demontage des Drehgebers
Removing the encoder
démontage du capteur rotatif
smontaggio dell'encoder
desmontaje del encoder



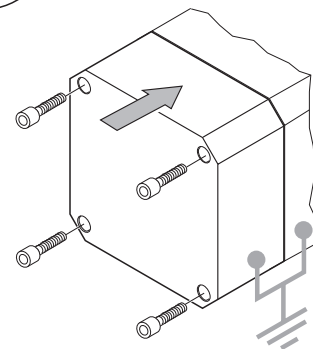
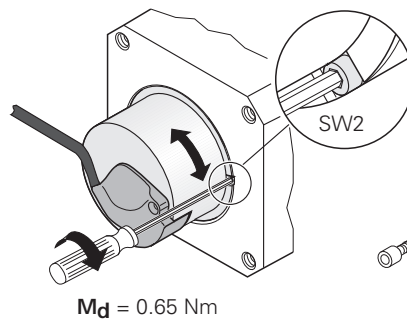
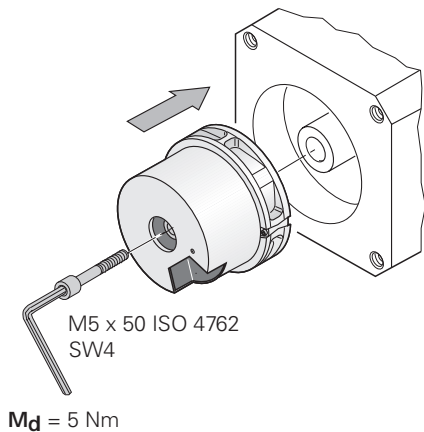
ERN 1381.3233	Id.-Nr. 313 453-01
	Id.-Nr. 313 453-02
	Id.-Nr. 313 453-06
ERN 1381.3223	Id.-Nr. 313 453-04
ERN 1381.3523	Id.-Nr. 313 453-03
ERN 1385.H523	Id.-Nr. 312 215-08
ERN 1388.T523	Id.-Nr. 312 215-04
ERN 1387.3223	Id.-Nr. 312 215-06
ERN 1387.3523	Id.-Nr. 312 215-01
	Id.-Nr. 312 215-05
ERN 1387.3533	Id.-Nr. 312 215-02
	Id.-Nr. 312 215-14
ERN 1387.3563	Id.-Nr. 312 215-07



ERN 1381.3223 Id.-Nr. 285 060-01
Id.-Nr. 285 060-02
ERN 1387.3223 Id.-Nr. 281 532-A1
Id.-Nr. 281 532-01
Id.-Nr. 281 532-02
ERN 1387.3233 Id.-Nr. 281 524-04
Id.-Nr. 281 524-54

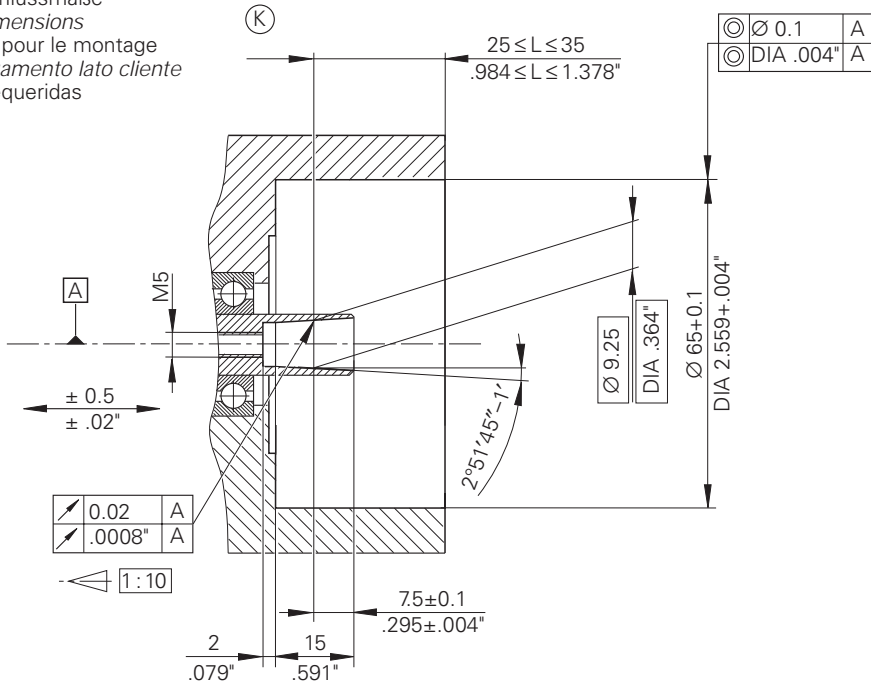


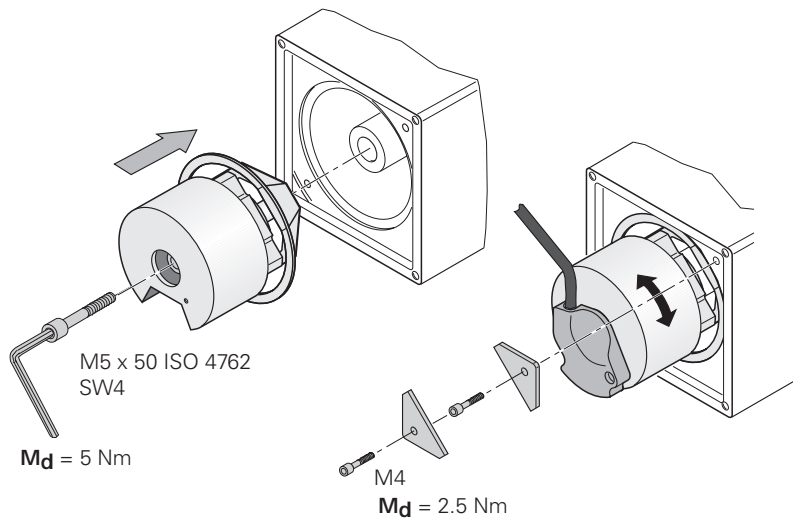
ERN 1381.3523 Id.-Nr. 313 453-03
ERN 1387.3523 Id.-Nr. 312 215-01
Id.-Nr. 312 215-05



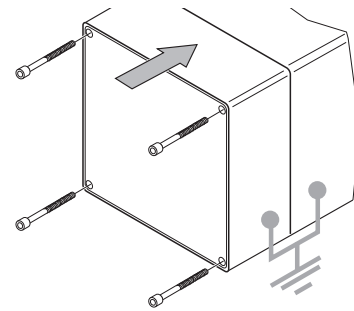
(K) = Kundenseitige Anschlussmaße
Required mating dimensions
 conditions requises pour le montage
dimensioni di collegamento lato cliente
 cotas de montaje requeridas

(A) = Lagerung
 Bearing
 roulement
 cuscinetto
 rodamiento



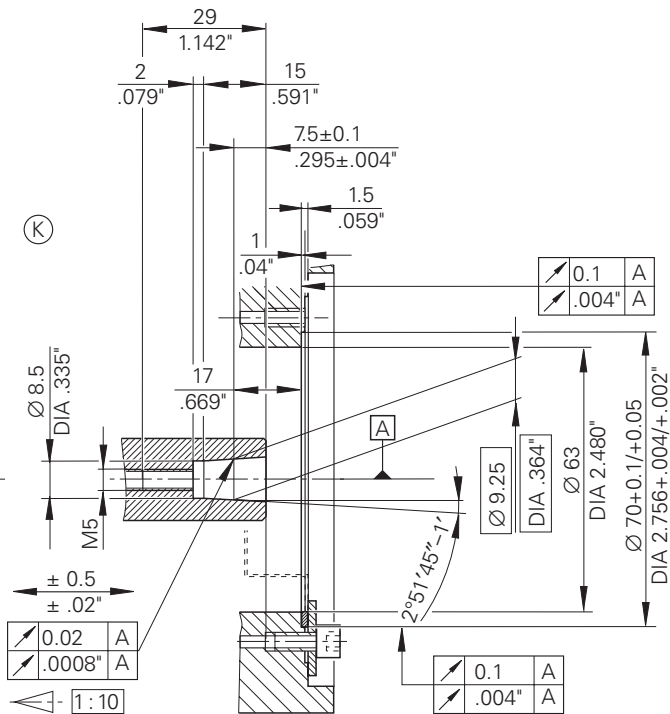
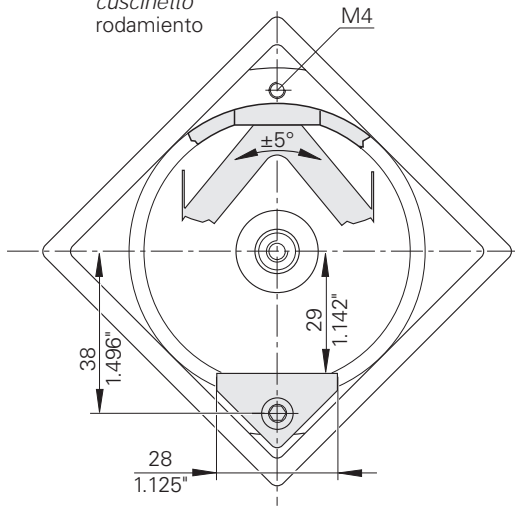


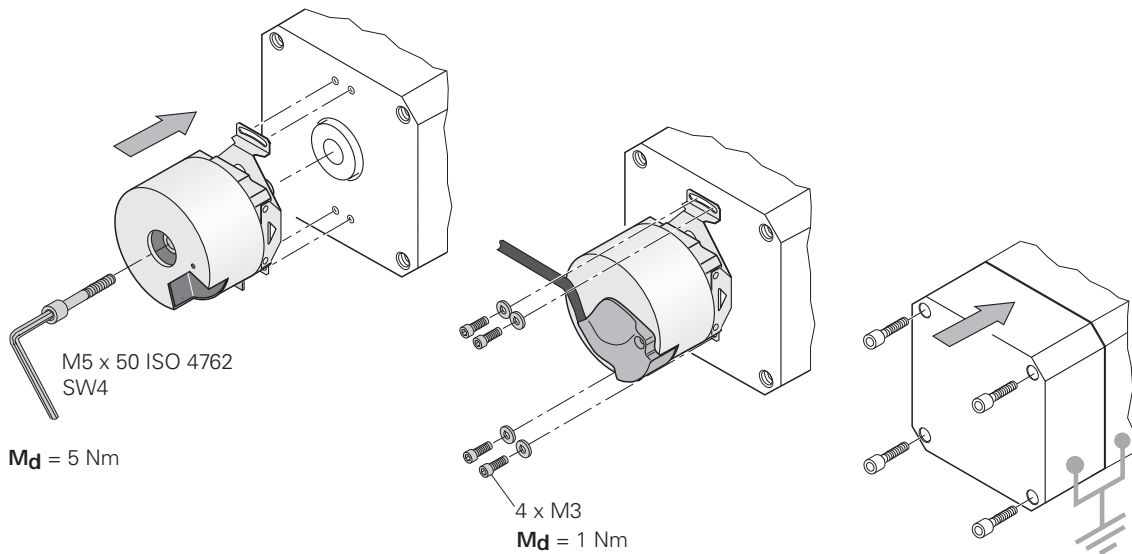
ERN 1381.3223	Id.-Nr. 285 060-01
	Id.-Nr. 285 060-02
	Id.-Nr. 313 453-04
ERN 1381.3533	Id.-Nr. 313 453-02
	Id.-Nr. 313 453-06
ERN 1387.3223	Id.-Nr. 281 532-A1
	Id.-Nr. 281 532-01
	Id.-Nr. 281 532-02
	Id.-Nr. 312 215-06
ERN 1387.3233	Id.-Nr. 281 524-04
	Id.-Nr. 281 524-54
	Id.-Nr. 312 215-52
ERN 1387.3533	Id.-Nr. 312 215-02
	Id.-Nr. 312 215-14
	Id.-Nr. 312 215-64



(K) = Kundenseitige Anschlussmaße
 Required mating dimensions
 conditions requises pour le montage
 dimensioni di collegamento lato cliente
 cotas de montaje requeridas

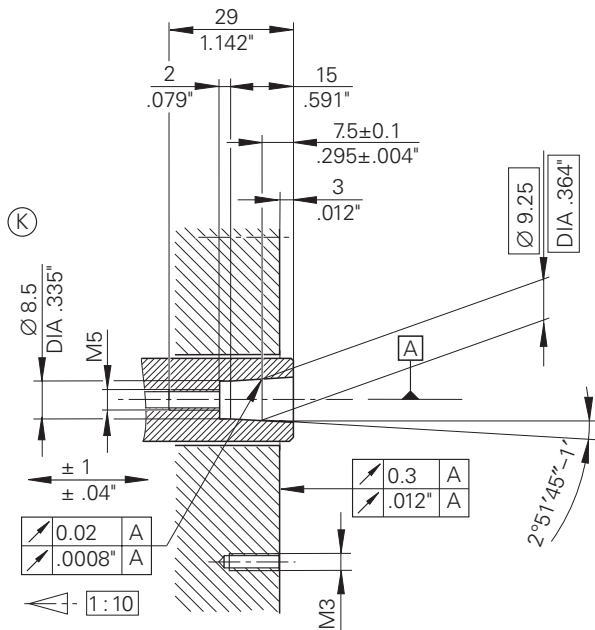
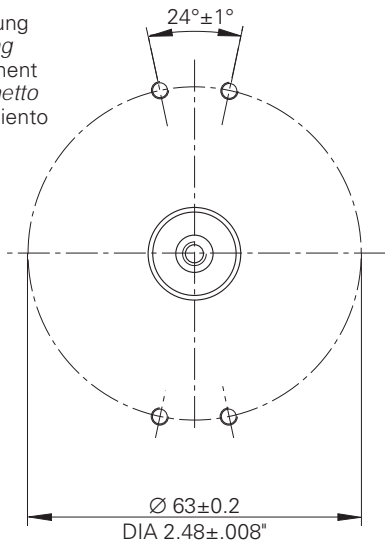
(A) = Lagerung
 Bearing
 roulement
 cuscinetto
 rodamiento



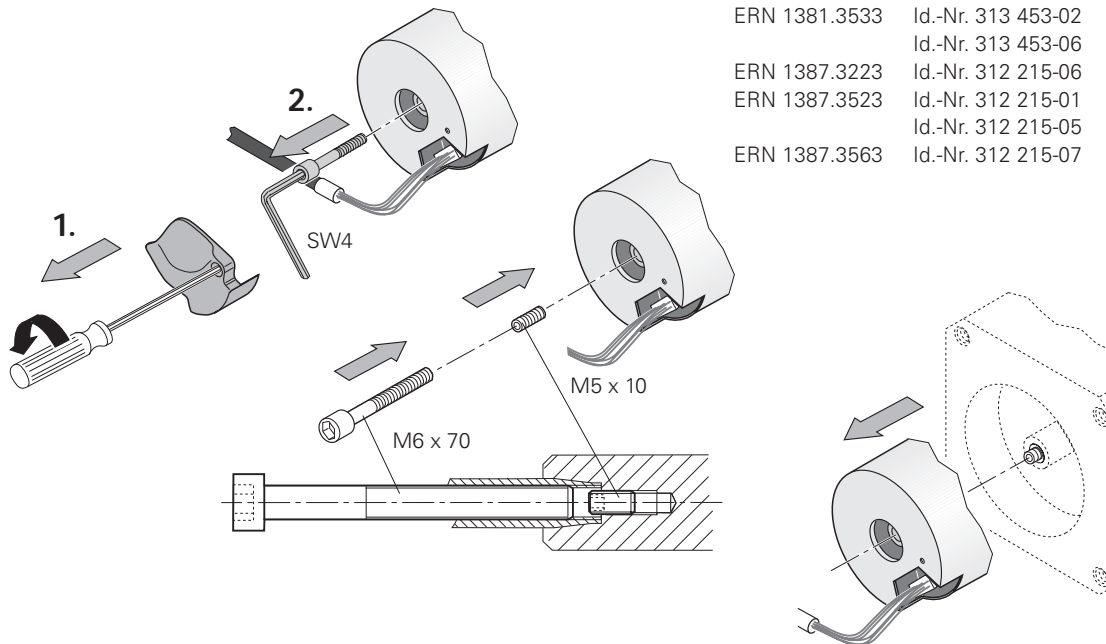


(K) = Kundenseitige Anschlussmaße
 Required mating dimensions
 conditions requises pour le montage
 dimensioni di collegamento lato cliente
 cotas de montaje requeridas

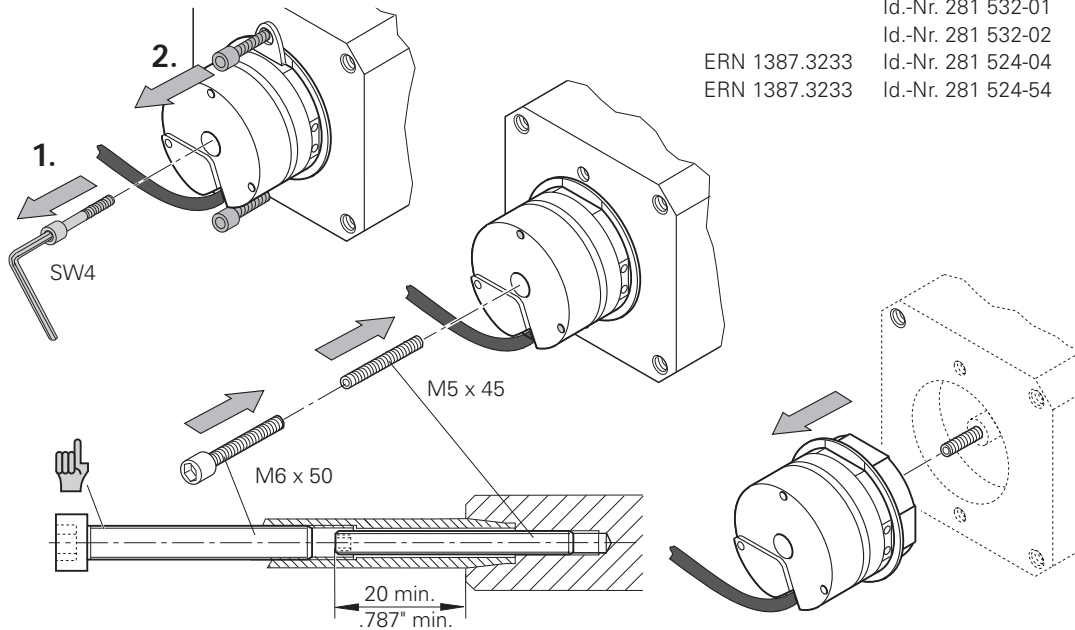
(A) = Lagerung
 Bearing
 roulement
 cuscinetto
 rodamiento

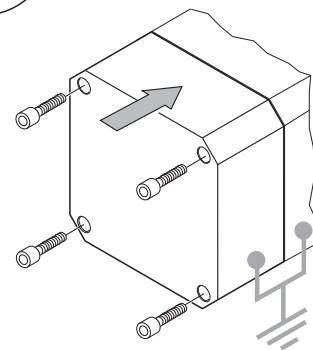
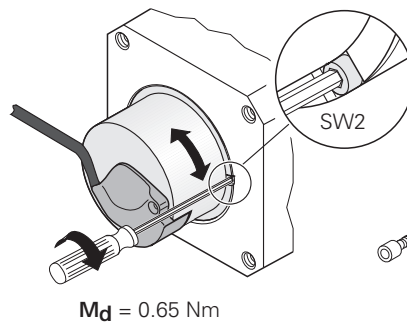
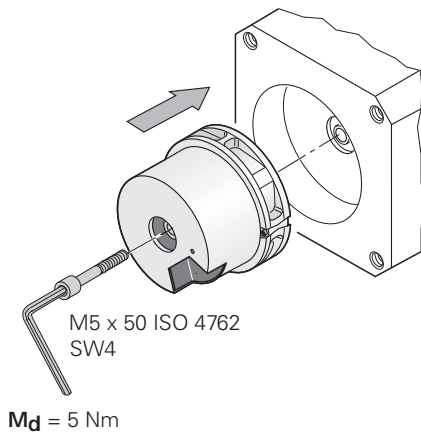


ERN 1381.3223	Id.-Nr. 313 453-04
ERN 1381.3523	Id.-Nr. 313 453-03
ERN 1381.3533	Id.-Nr. 313 453-02
	Id.-Nr. 313 453-06
ERN 1387.3223	Id.-Nr. 312 215-06
ERN 1387.3523	Id.-Nr. 312 215-01
	Id.-Nr. 312 215-05
ERN 1387.3563	Id.-Nr. 312 215-07



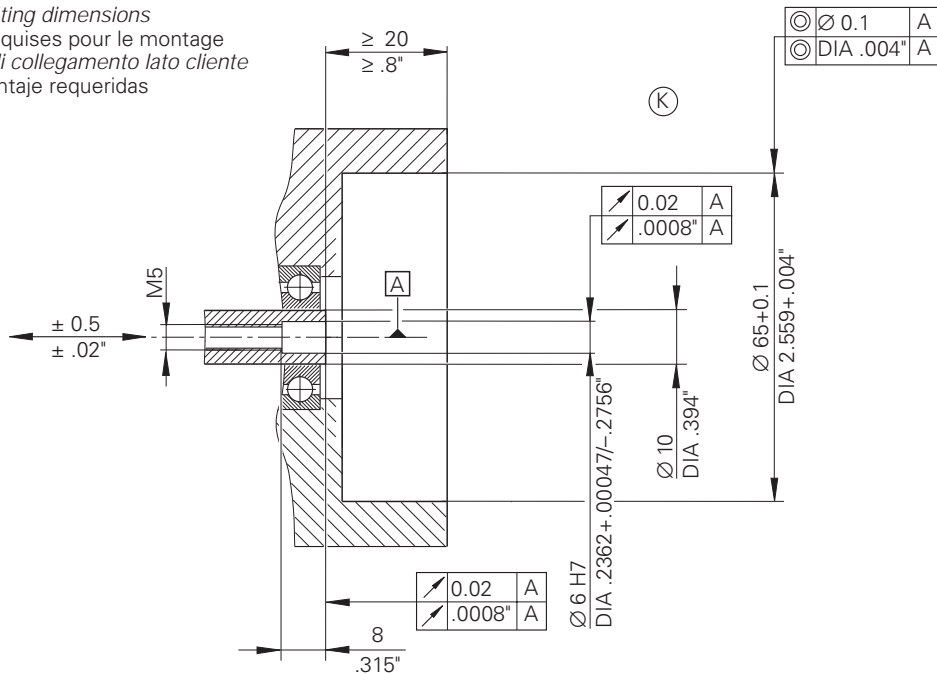
ERN 1381.3223	Id.-Nr. 285 060-01
	Id.-Nr. 285 060-02
ERN 1387.3223	Id.-Nr. 281 532-A1
	Id.-Nr. 281 532-01
	Id.-Nr. 281 532-02
ERN 1387.3233	Id.-Nr. 281 524-04
ERN 1387.3233	Id.-Nr. 281 524-54





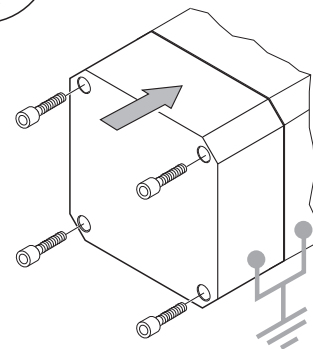
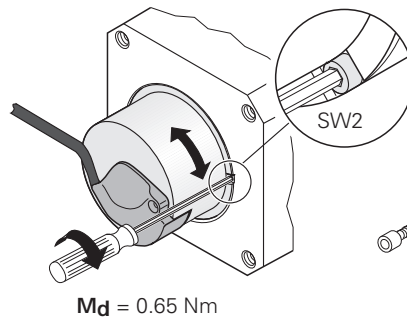
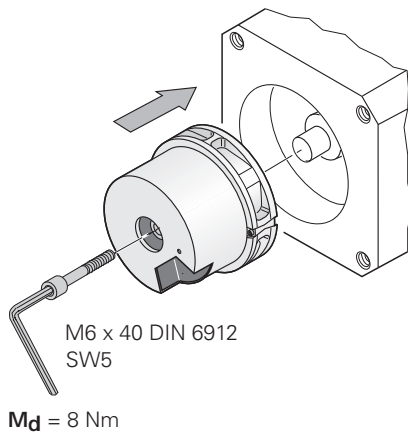
(K) = Kundenseitige Anschlussmaße
 Required mating dimensions
 conditions requises pour le montage
 dimensioni di collegamento lato cliente
 cotas de montaje requeridas

[A] = Lagerung
 Bearing
 roulement
 cuscinetto
 rodamiento



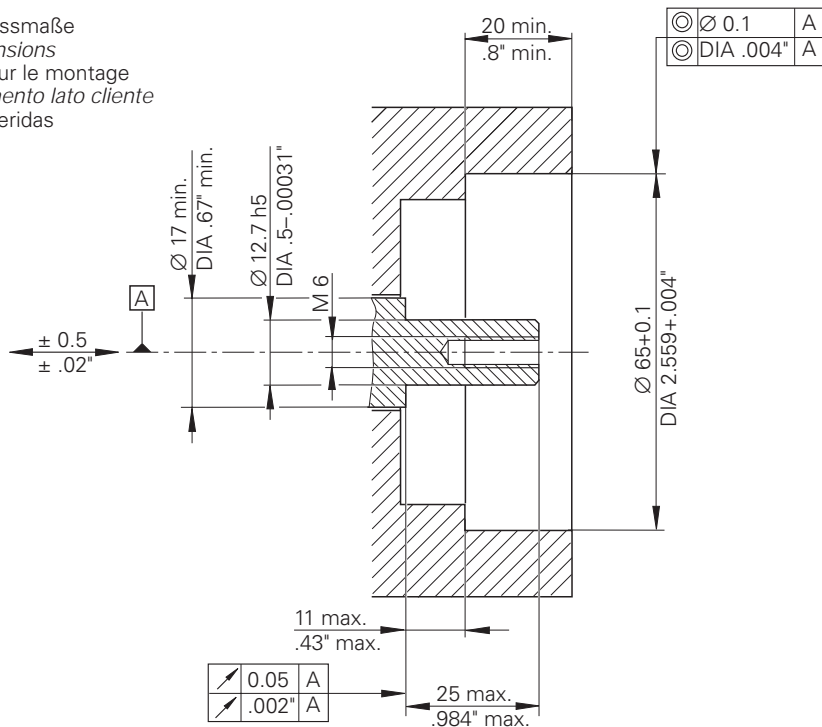
ERN 1380.H523

ERN 1385.H523 Id.-Nr. 312 215-08



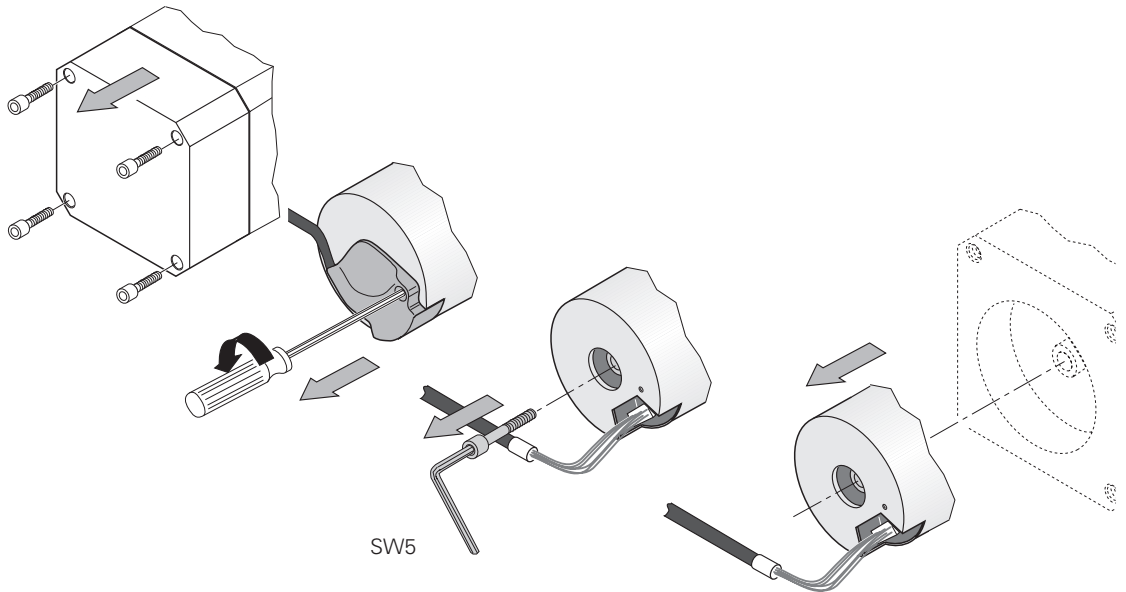
(K) = Kundenseitige Anschlussmaße
Required mating dimensions
 conditions requises pour le montage
dimensioni di collegamento lato cliente
 cotas de montaje requeridas

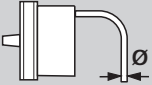

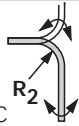
(A) = Lagerung
Bearing
 roulement
cuscinetto
 rodamiento

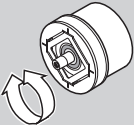


ERN 1380.H523

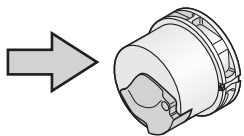
ERN 1385.H523 Id.-Nr. 312 215-08



	 <p>$T \geq -40\text{ °C}$ (-40 °F)</p>	 <p>$T \geq -10\text{ °C}$ (14 °F)</p>
<p>Ø 6 mm DIA .236 in.</p>	<p>$R_1 \geq 20\text{ mm}$ $R_1 \geq .8\text{ in.}$</p>	<p>$R_2 \geq 75\text{ mm}$ $R_2 \geq 3\text{ in.}$</p>
<p>Ø 8 mm DIA .315 in.</p>	<p>$R_1 \geq 40\text{ mm}$ $R_1 \geq 1.6\text{ in.}$</p>	<p>$R_2 \geq 100\text{ mm}$ $R_2 \geq 4\text{ in.}$</p>



M_d = 0.01 Nm
20 °C
(68 °F)

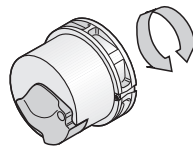


$U_p = 5V \pm 5\%$
(max. 120 mA) ERN 1380
ERN 1381
(max. 150 mA) ERN 1385
ERN 1387
ERN 1388



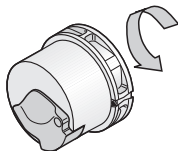
EN 50 178/4.98; 5.2.9.5
IEC 364-4-41: 1992; 411(PELV/SELV)

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

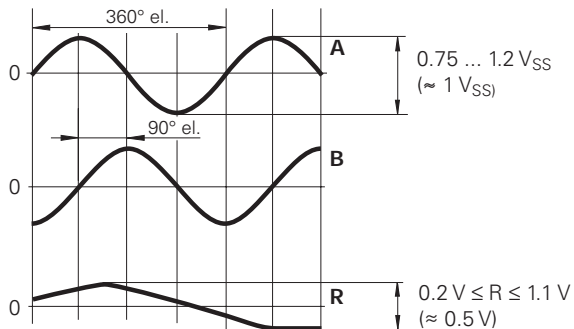


$n \leq 15\,000 \text{ min}^{-1}$

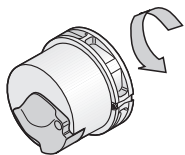
ERN 1380 ERN 1381



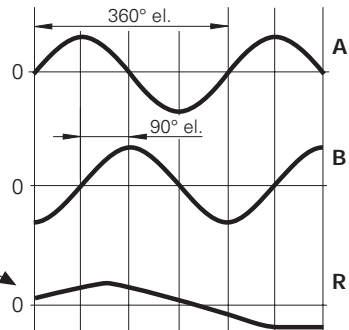
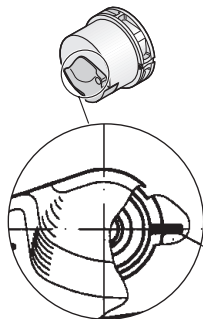
A, B, R



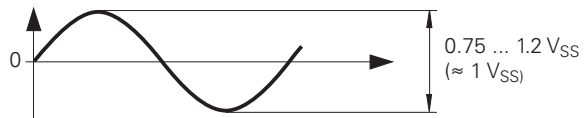
ERN 1385
ERN 1387
ERN 1388



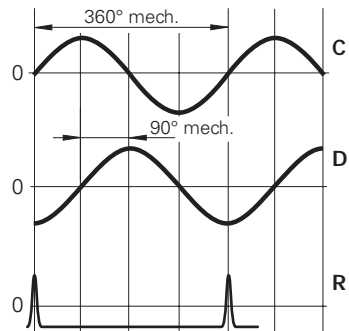
A, B, R,
C, D

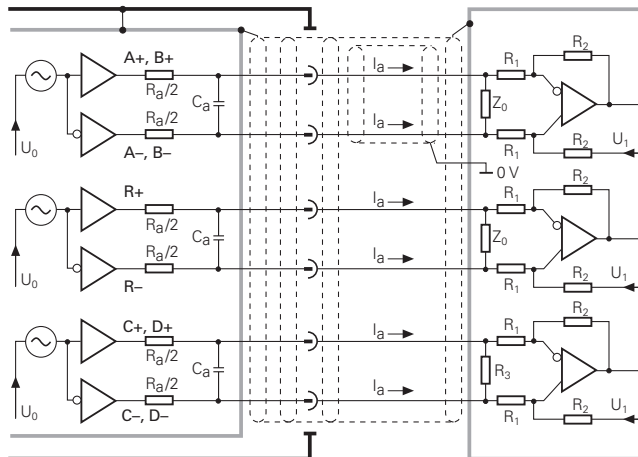


A, B, C, D



R

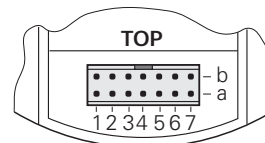
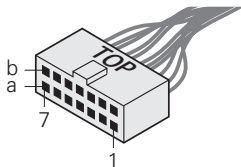




$R_a < 100 \Omega$
 $C_a < 50 \text{ pF}$
 $\Sigma I_a < 1 \text{ mA}$
 $U_0 = 2.5 \text{ V} \pm 0.5 \text{ V}$

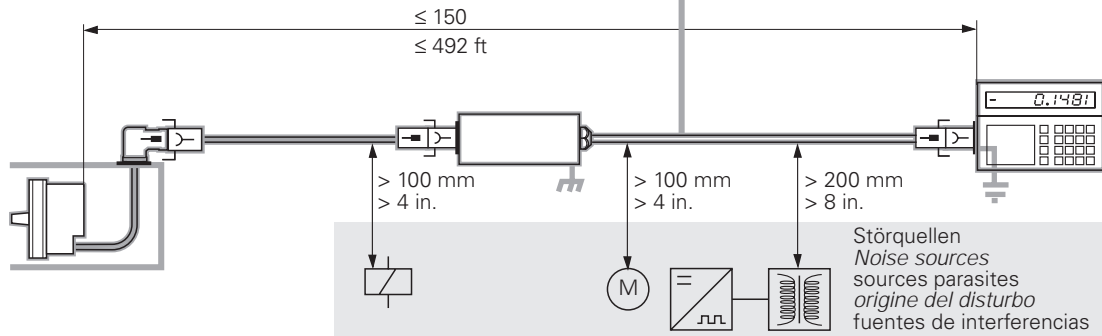
$Z_0 = 120 \Omega$
 $R_3 = 1 \text{ k}\Omega$
 $U_1 \approx U_0$

C,D: ERN 1385
 ERN 1387
 ERN 1388

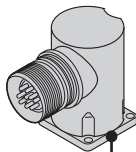


*) ERN 1385
ERN 1387
ERN 1388

6 b	2 a	3 b	5 a	4 b	4 a	7 b	1 a	2 b	6 a	Schirm Shield blindage schermo blindaje	1 b	5 b	7 a	3 a
A		B		R		C *)		D *)			5 V U _P	0 V U _N	5 V sensor	0 V sensor
+	-	+	-	+	-	+	-	+	-					



$U_p = 5\text{ V}$
Id.- Nr. 318 467-xx

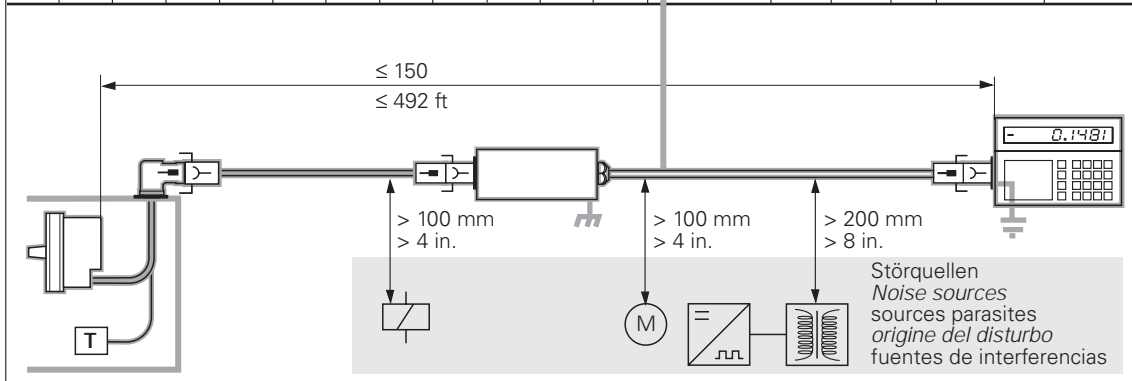


$U_p = 7\text{ V} \dots 12\text{ V}$
Id.- Nr. 323 092 ..

1) nicht belegt
Not assigned
non raccordé
libero
sin ocupar

*) Innenschirm
Internal shield
blindage interne
schermo interno
blindaje interno

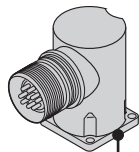
15	16	12	13	3	2	14	17	9	8	5	6	Schirm Shield blindage schermo blindaje	7	10	11	1	4
A		B		R		C		D		T			U_p	0 V U_N	*)	U_p 1) sensor	0 V 1) sensor
+	-	+	-	+	-	+	-	+	-	+	-						



$U_p = 5\text{ V}$

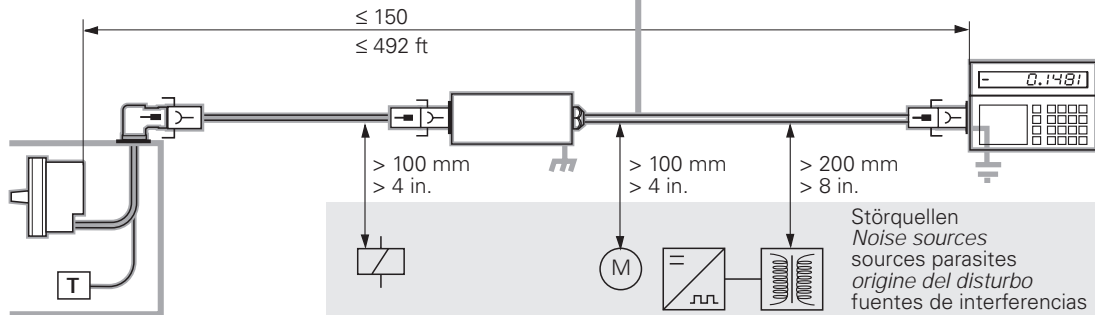
Id.- Nr. 316 468-xx

Id.- Nr. 317 169-xx



*) Innenschirm
Internal shield
blindage interne
schermo interno
blindaje interno

1	2	11	12	3	13	5	6	14	4	8	9	Schirm Shield blindage schermo blindaje	10	7	17	16	15
A		B		R		C		D		T			5 V U_p	0 V U_N	*)	U_p sensor	0 V sensor
+	-	+	-	+	-	+	-	+	-	+	-						



DR. JOHANNES HEIDENHAIN GmbH

Dr.-Johannes-Heidenhain-Straße 5

83301 Traunreut, Germany

☎ +49/8669/31-0

FAX +49/8669/5061

e-mail: info@heidenhain.de

Technical support FAX +49/8669/31-1000

Measuring systems ☎ +49/8669/31-3104

e-mail: service.ms-support@heidenhain.de

TNC support ☎ +49/8669/31-3101

e-mail: service.nc-support@heidenhain.de

NC programming ☎ +49/8669/31-3103

e-mail: service.nc-pgm@heidenhain.de

PLC programming ☎ +49/8669/31-3102

e-mail: service.plc@heidenhain.de

Lathe controls ☎ +49/711952803-0

e-mail: service.hsf@heidenhain.de

www.heidenhain.de
