



HEIDENHAIN



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

LS 303

3/2002

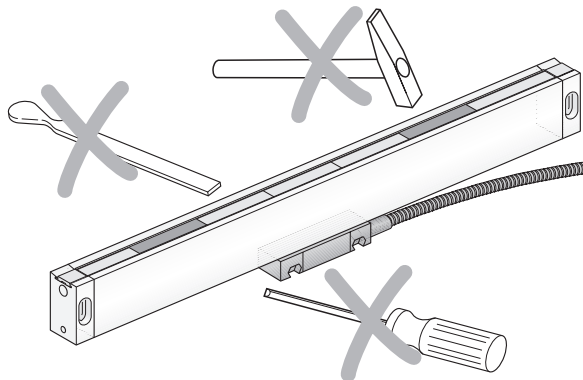
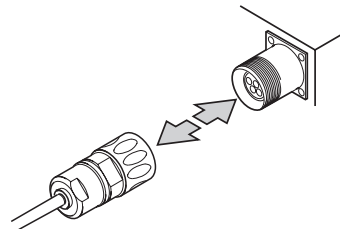
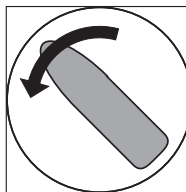


DIN EN 100 015 – 1
CECC 00015 – 1

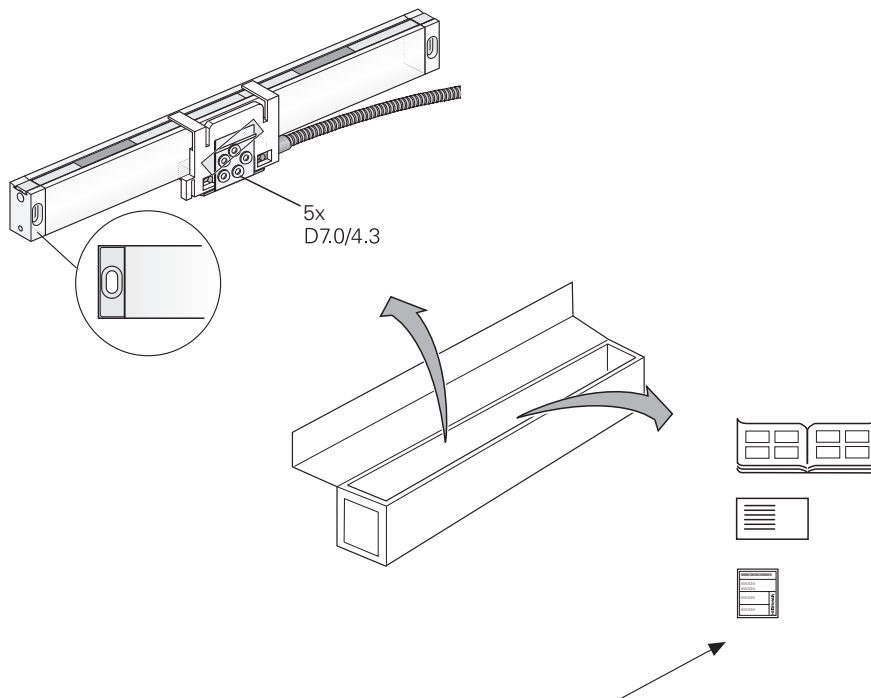


0

1



Maße in mm
Dimensions in mm
cotes en mm
dimensioni in mm
dimensiones en mm



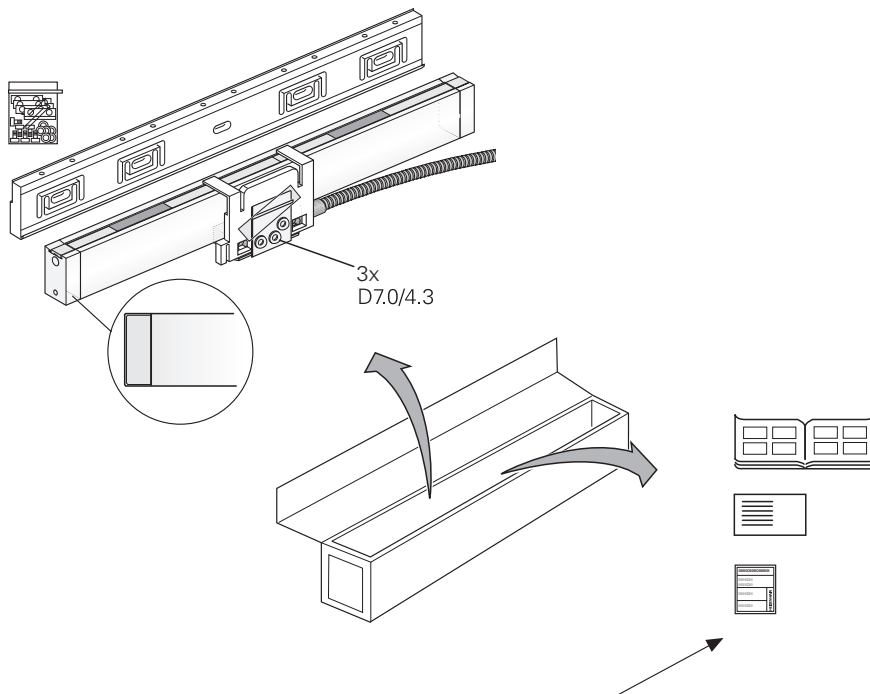
Bei Montage bitte Geräteschild-Aufkleber anbringen (Schaltschrank, Maschinen-Handbuch usw.)

Apply the encoder ID label to an appropriate surface, e.g. the electrical cabinet or machine manual

lors du montage, accoler S.V.P. l'étiquette signalétique de l'appareil (armoire électrique, manuel de la machine, etc.)

completato il montaggio, ricordarsi di applicare l'etichetta (manuale della macchina, quadro elettrico)

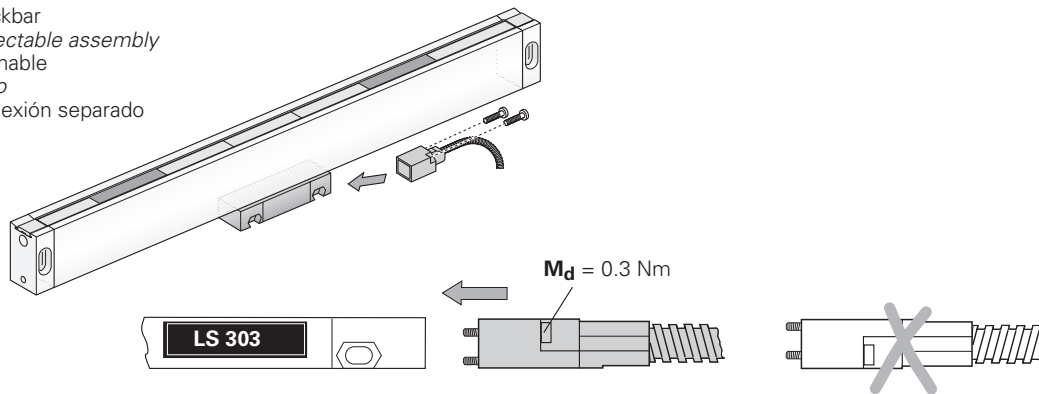
por favor, durante el montaje, colocar el adhesivo del letrero del aparato (armario eléctrico, modo de empleo de la máquina, etc.)



Bei Montage bitte Geräteschild-Aufkleber anbringen (Schaltschrank, Maschinen-Handbuch usw.)
Apply the encoder ID label to an appropriate surface, e.g. the electrical cabinet or machine manual
 lors du montage, accoler S.V.P. l'étiquette signalétique de l'appareil (armoire électrique, manuel de la machine, etc.)
completato il montaggio, ricordarsi di applicare l'etichetta (manuale della macchina, quadro elettrico)
 por favor, durante el montaje, colocar el adhesivo del letrero del aparato (armario eléctrico, modo de empleo de la máquina, etc.)

Kabelanschluss · Cable Connection · Raccordement du cable · Cavo di colleganto · Conexión de cable

Abtasteinheit, Kabel steckbar
 Scanning unit with connectable assembly
 tête caprice, câble enfichable
 testina con cavo separato
 cabezal con cable de conexión separado

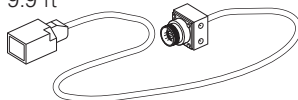


Separat bestellen
 Order separately
 a commander séparément
 ordinare a parte
 para pedir por separado

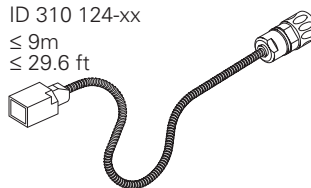
ID 310 125-xx
 ≤ 9m
 ≤ 29.6 ft



ID 266 656-xx
 3m
 9.9 ft

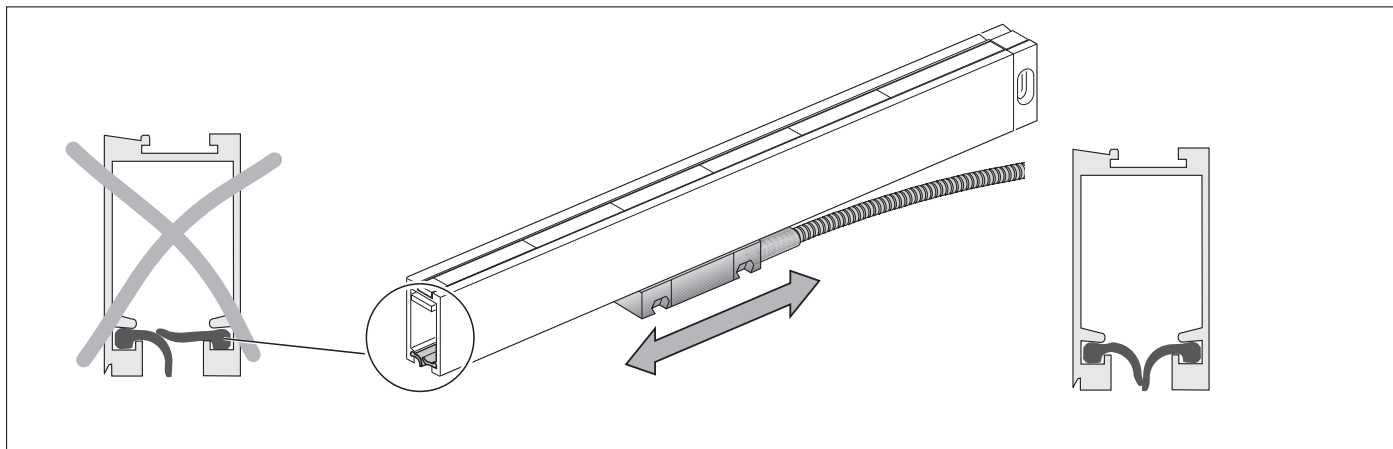


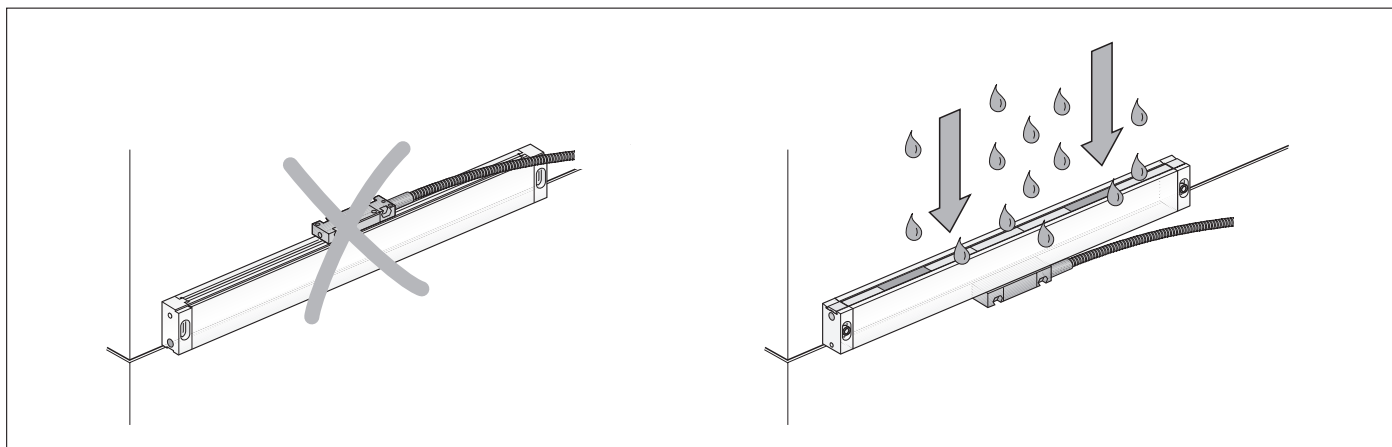
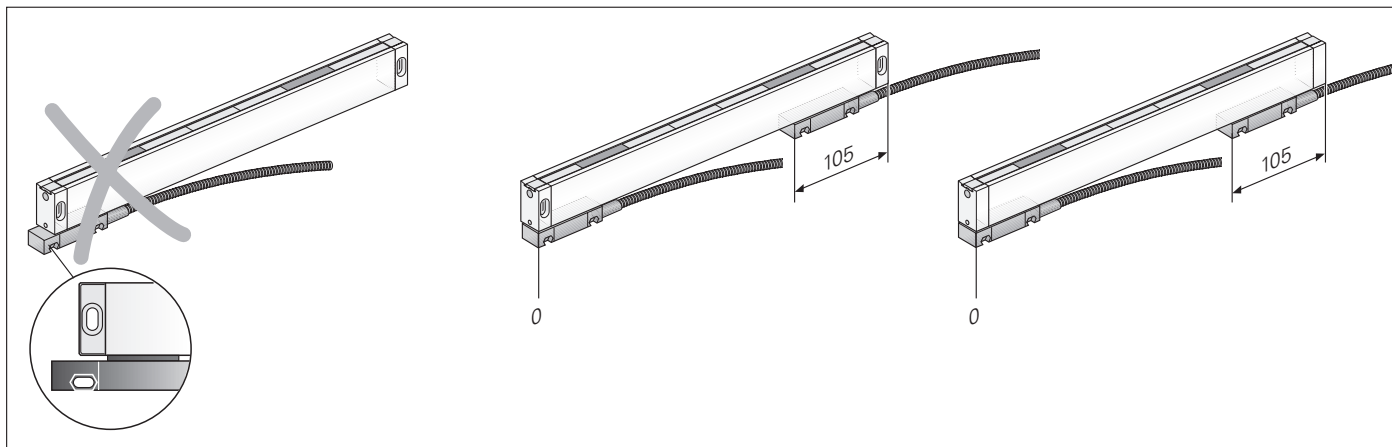
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 ≤ 29.6 ft



ID 288 593-xx
 ≤ 9m
 ≤ 29.6 ft

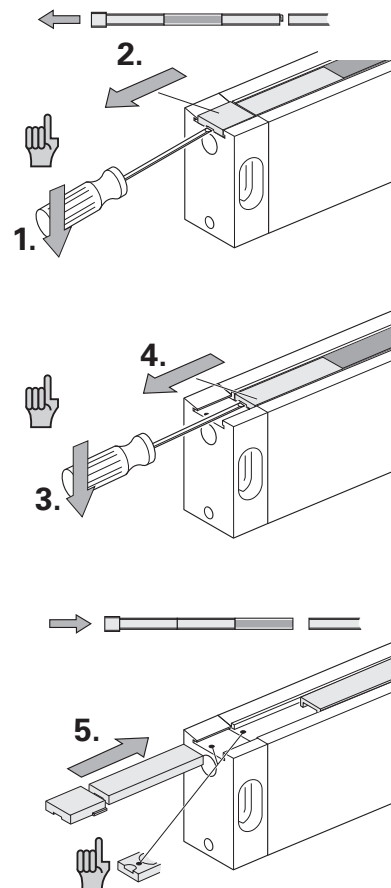
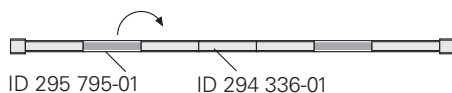
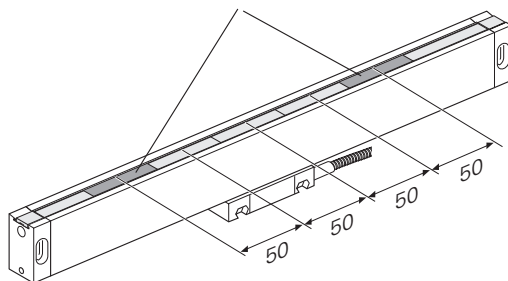


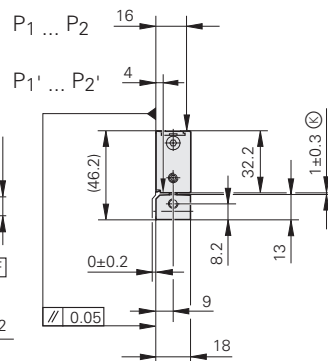




LS 303

Referenzmarken-Lage
Reference mark
Marque de référence
Indici di riferimento
Marca de referencia





P = Messpunkte zum Ausrichten
Gauging points for alignment
 points de mesure pour dé gauchissage
 punti di misura per allineamento
 puntos medición alineamiento

Ⓐ1 = Abtasteinheit mit festem Kabel
Scanning unit with permanent cable assembly
 tête caprice avec câble fixe
 testina con cavo fisso
 cabezal con cable fijo

Ⓔ = Beginn der Messlänge ML
Begin. of meas. length ML
 début longueur utile ML
 inizio lunghezza di misura ML
 comienzo longitud útil ML

Ⓐ2 = Abtasteinheit, Kabel steckbar
Scanning unit with connectable assembly
 tête caprice, câble enfichable
 testina con cavo separato
 cabezal con cable de conexión separado

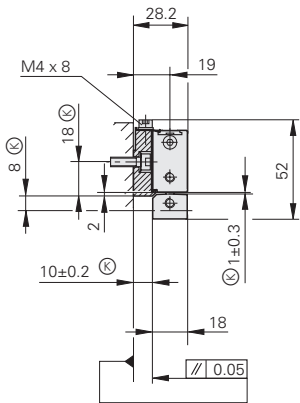
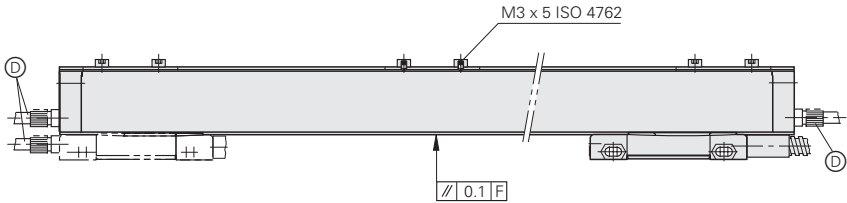
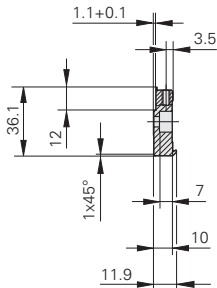
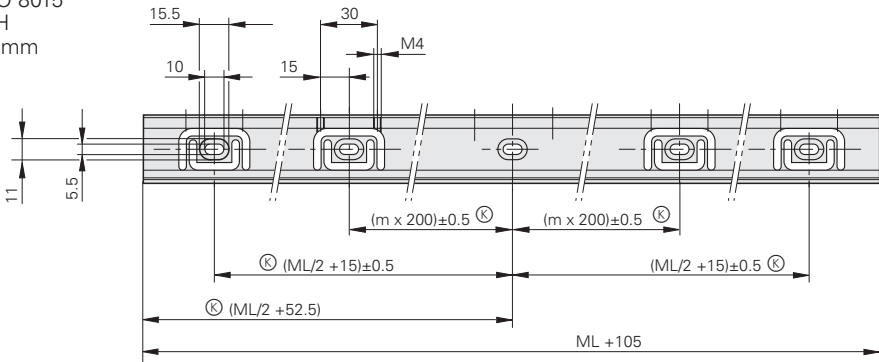
Ⓔ = Referenzmarken-Lage
Reference mark
 marque de référence
 indici di riferimento
 marca de referencia

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

ML 70 ... 1020	ML 1140 ... 2040
Z = 35	Z = 45
Z _i = ML – 70	Z _i = ML – 90



Tolerancing ISO 8015
ISO 2768 - m H
< 6 mm: ±0.2 mm

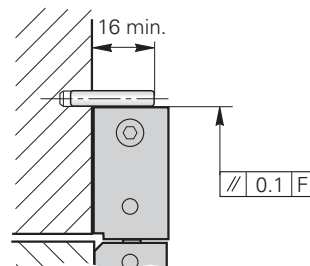
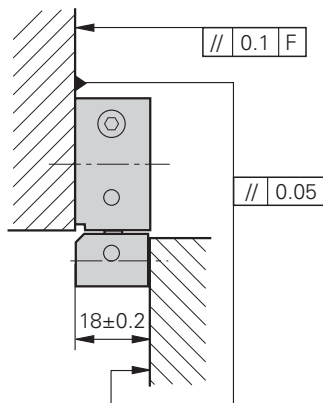
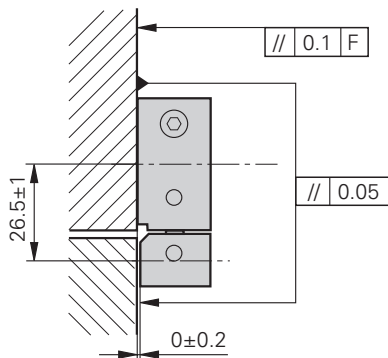
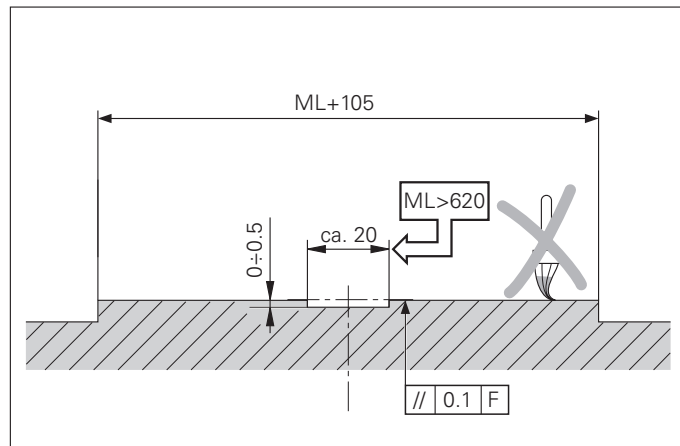
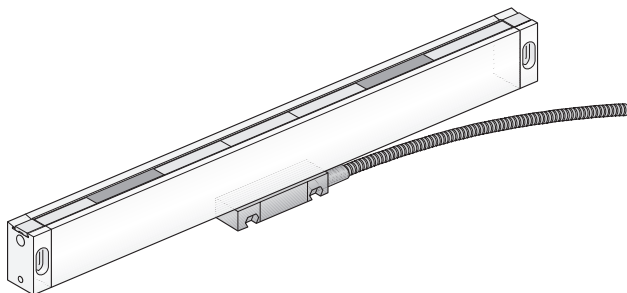


ML	m
70 ... 520	0
570 ... 920	1
1020 ... 1340	2
1440 ... 1740	3
1840 ... 2040	4

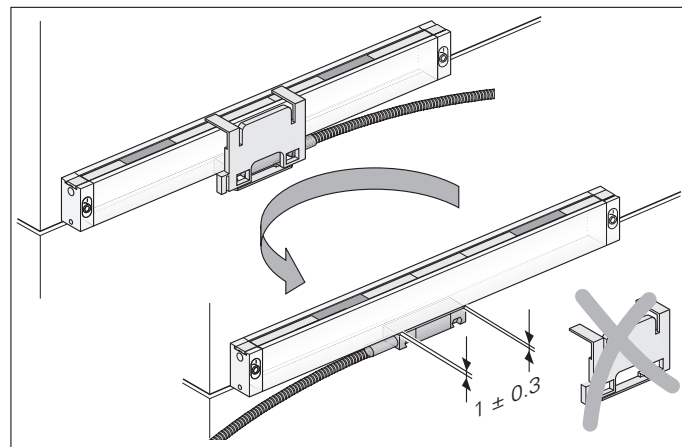
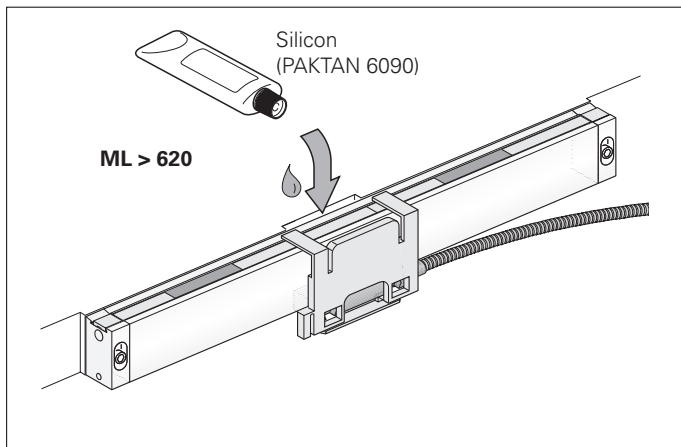
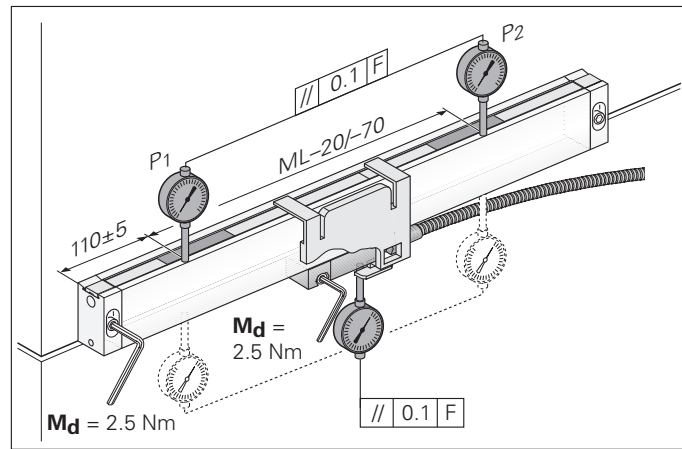
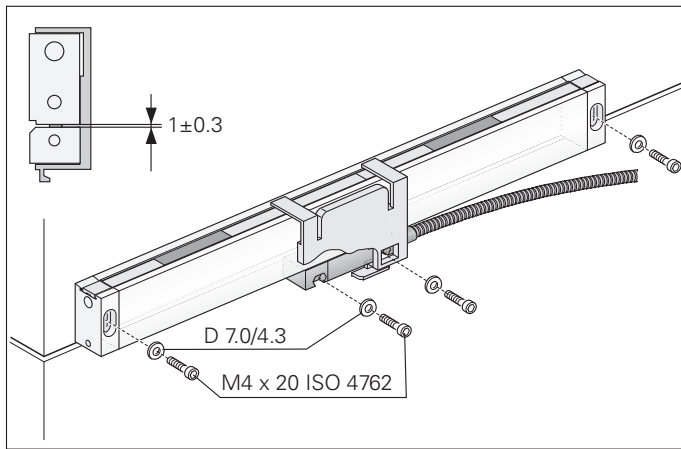
Ⓚ = Kundenseitige Anschlussmaße
Required mating dimensions
conditions requises pour le montage
dimensioni di collegamento lato cliente
cotas de montaje requeridas

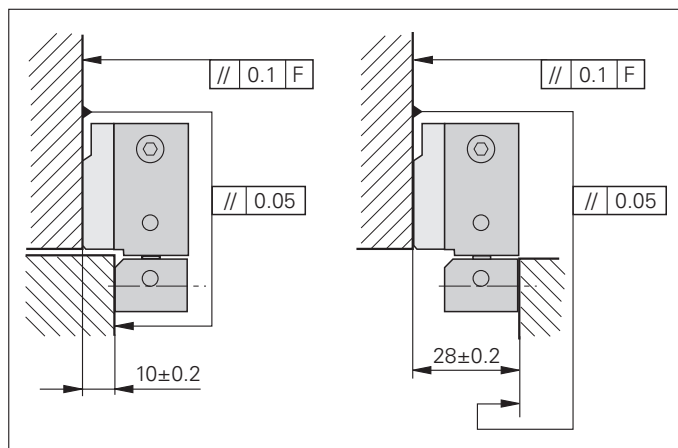
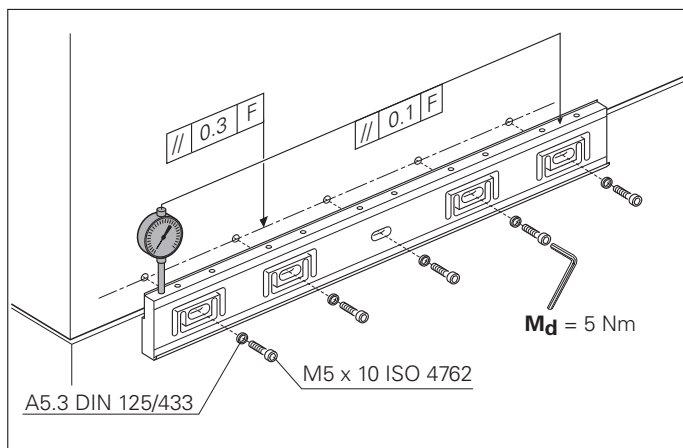
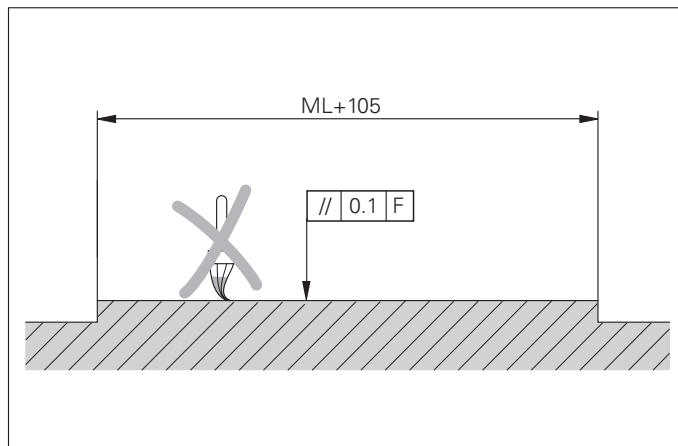
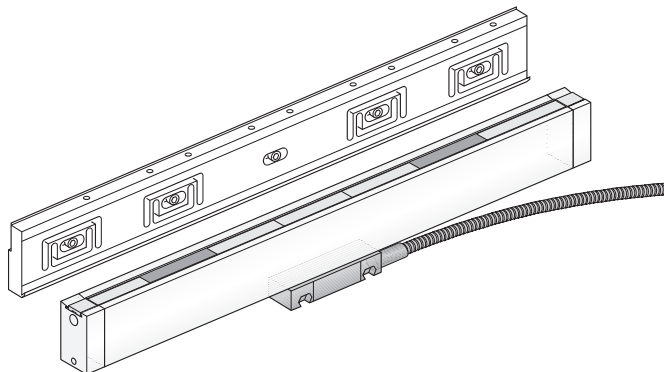
F = Maschinenführung
Machine guideway
guidage de la machine
guida della macchina
guía de la máquina

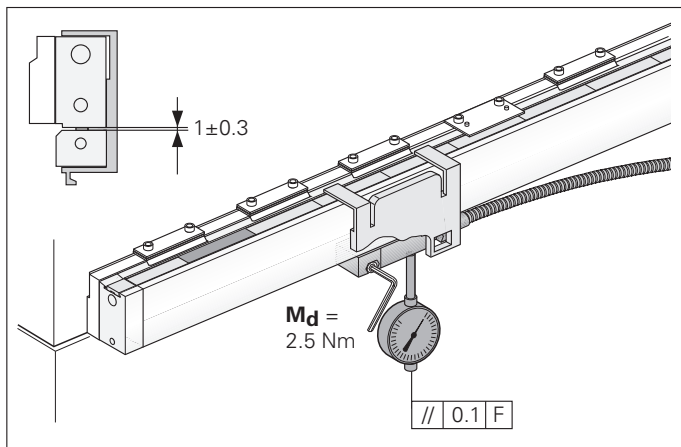
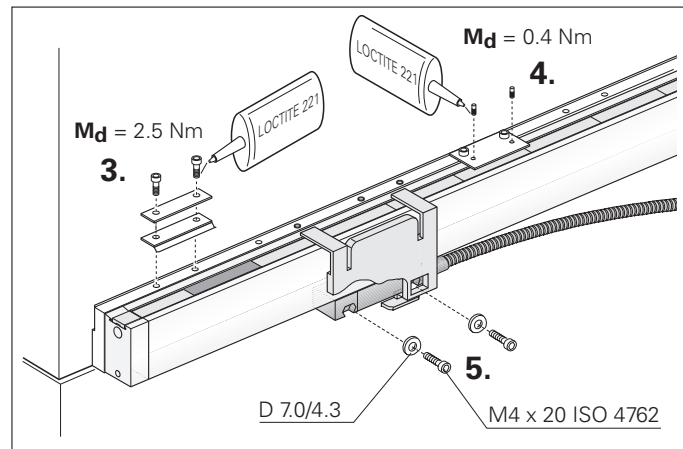
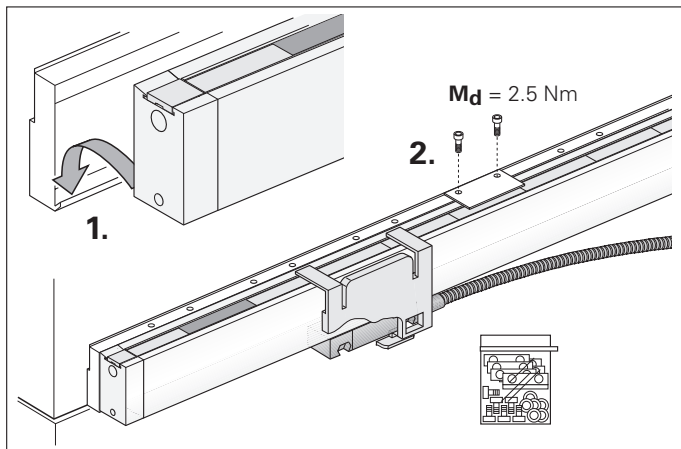
Ⓛ = Druckluftanschluss
Compressed air inlet
raccordement d'air comprimé
ingresso per pressurizzazione
conexión de aire comprimido

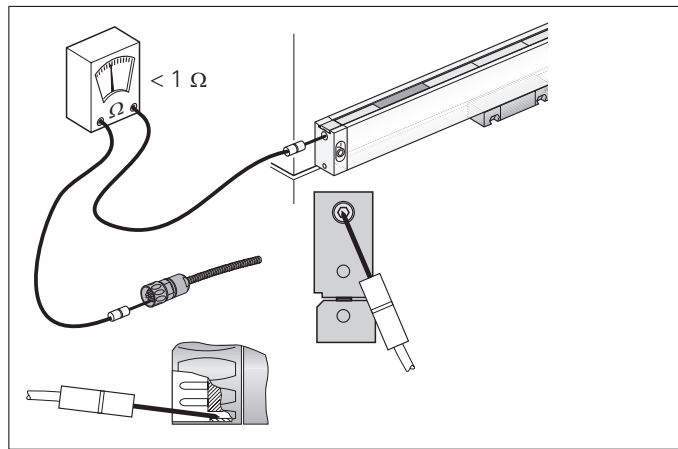
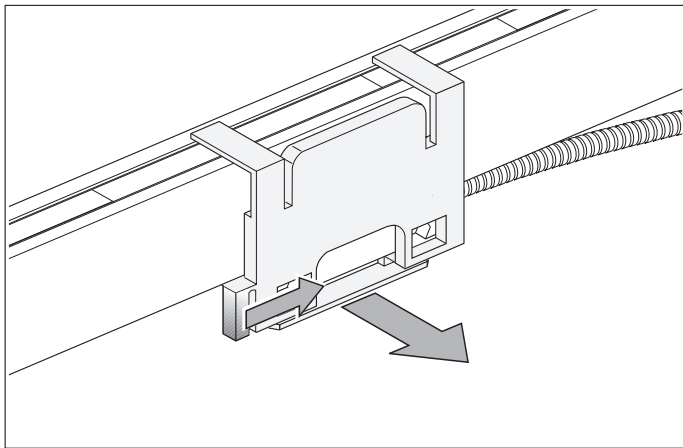


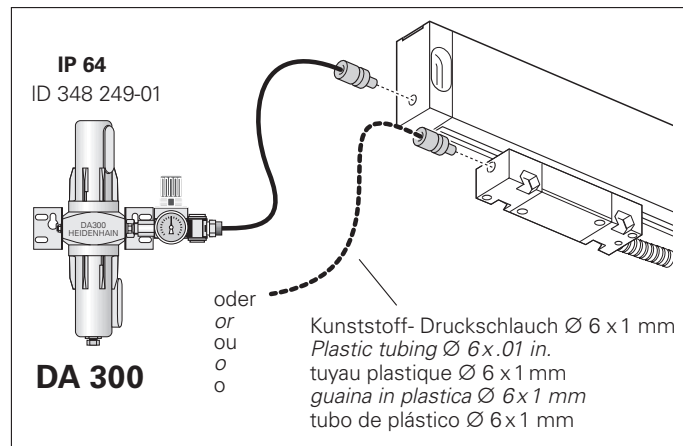
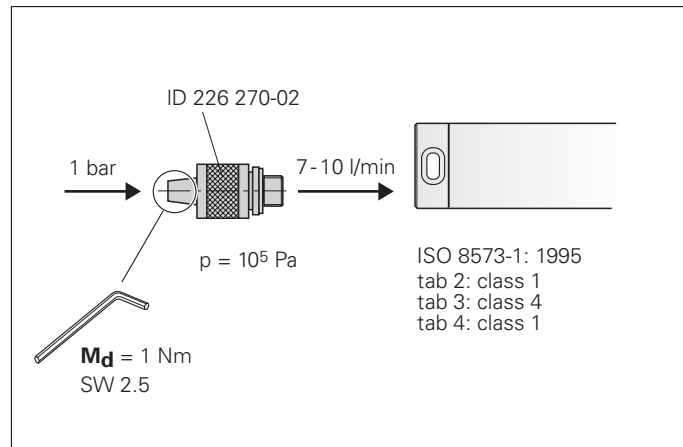
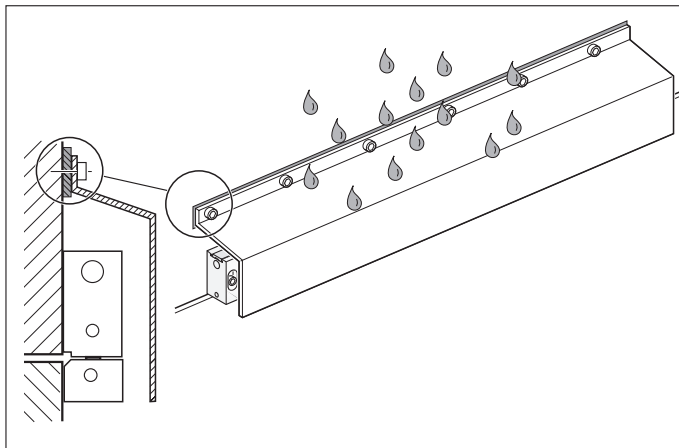
weitere Anbaumöglichkeit mit Anschlagstifte
Additional mounting option with stop pins
 autre possibilité de montage avec goupilles d'arrêt
altra possibilità di montaggio con perno di battuta
 otra posibilidad de montaje con espigas de ajuste

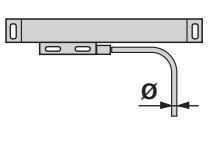
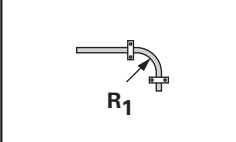
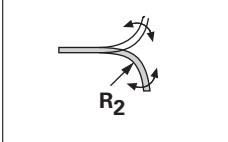


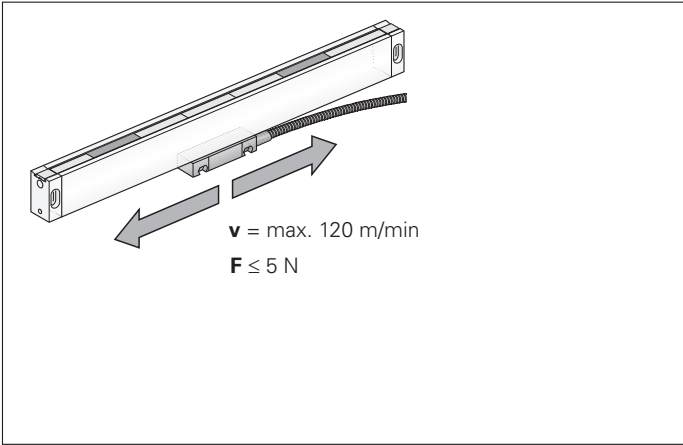


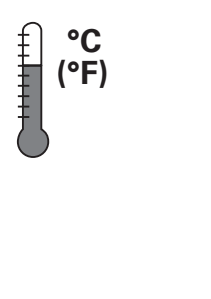
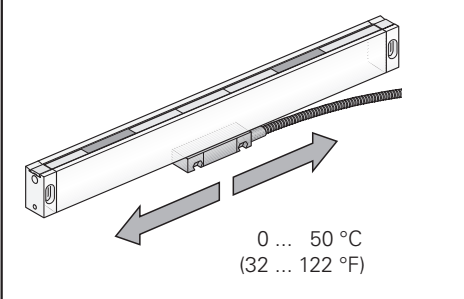
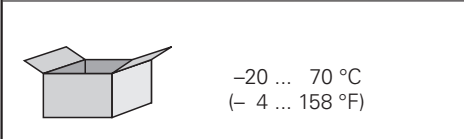


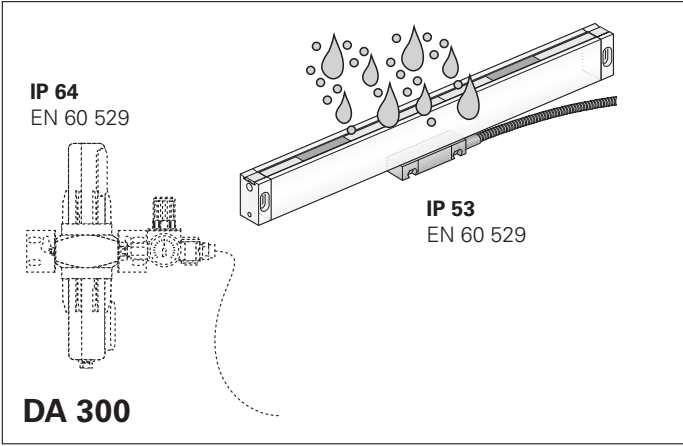


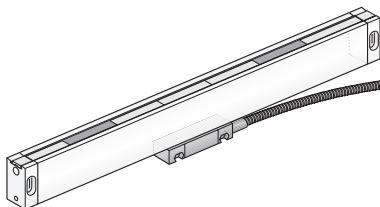


		
Ø 6 mm	$R_1 \geq 20 \text{ mm}$	$R_2 \geq 75 \text{ mm}$
Ø 10 mm	$R_1 \geq 35 \text{ mm}$	$R_2 \geq 75 \text{ mm}$
 Ø 8 mm	$R_1 \geq 40 \text{ mm}$	$R_2 \geq 100 \text{ mm}$

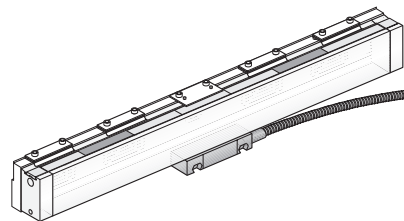


 °C (°F)	 0 ... 50 °C (32 ... 122 °F)
	 -20 ... 70 °C (- 4 ... 158 °F)



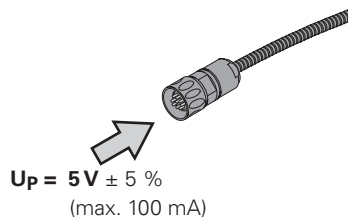


EN 60 068-2-6 (55 ... 2000 Hz): max. 100 m/s²
 EN 60 068-2-27 (11 ms): max. 200 m/s²

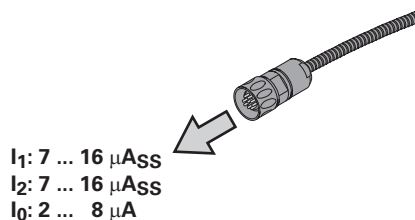


EN 60 068-2-6 (55 ... 2000 Hz): max. 200 m/s²
 EN 60 068-2-27 (11 ms): max. 200 m/s²

Elektrische Kennwerte · *Electrical Data* · Caractéristiques électriques · *Dati elettrici* · Características eléctricas



U_p = 5V ± 5 %
 (max. 100 mA)

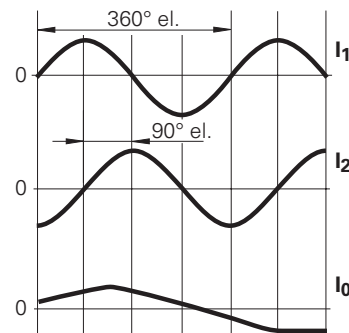


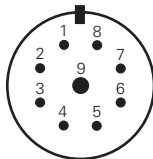
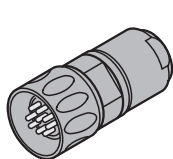
I₁: 7 ... 16 μAss
I₂: 7 ... 16 μAss
I₀: 2 ... 8 μA



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)

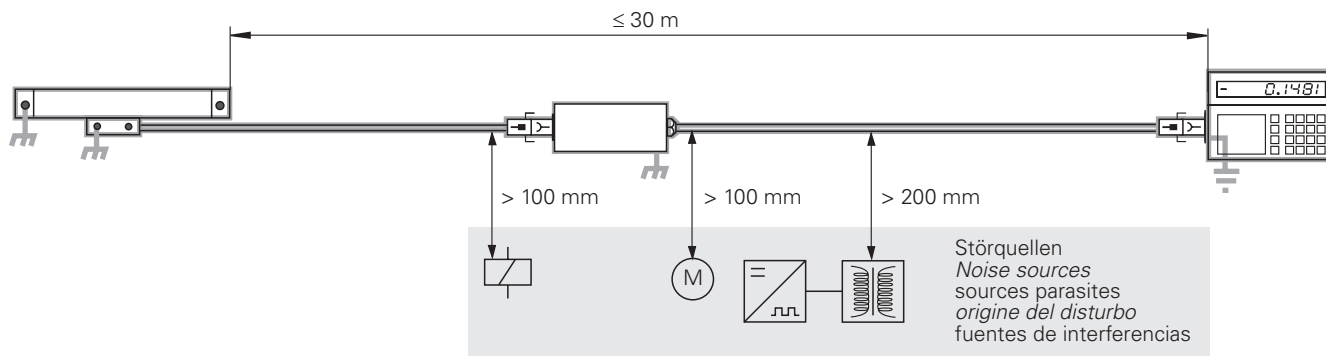


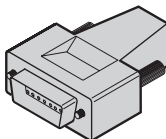
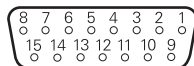


- 1) Außenschirm Gehäuse
External shield on housing
blindage externe sur boîtier
schermo esterno sulla carcassa
blindaje externo a carcasa

- 2) Innenschirm
Internal shield
blindage interne
schermo interno
blindaje interno

1	2	5	6	7	8	3	4	1)	9
I ₁		I ₂		I ₀		5 V U _P	0 V U _N		2)
+	–	+	–	+	–				
grün <i>green</i> vert <i>verde</i> verde	gelb <i>yellow</i> jaune <i>giallo</i> amarillo	blau <i>blue</i> bleu <i>azzurro</i> azul	rot <i>red</i> rouge <i>rosso</i> rojo	grau <i>gray</i> gris <i>grigio</i> gris	rosa <i>pink</i> rose <i>rosa</i> rosa	braun <i>brown</i> brun <i>marrone</i> marrón	weiß <i>white</i> blanc <i>bianco</i> blanco		weiß/braun <i>white/brown</i> blanc/brun <i>bianco/marrone</i> blanco/marrón





1) Außenschirm auf Gehäuse
External shield on housing
 blindage externe sur boîtier
schermo esterno sulla carcassa
 blindaje externo a carcasa

2) Innenschirm
Internal shield
 blindage interne
schermo interno
 blindaje interno

3	4	6	7	10	12	1	2	1)	13
I ₁		I ₂		I ₀		5 V U _P	0 V U _N		2)
+	–	+	–	+	–				
grün <i>green</i> vert <i>verde</i> verde	gelb <i>yellow</i> jaune <i>giallo</i> amarillo	blau <i>blue</i> bleu <i>azzurro</i> azul	rot <i>red</i> rouge <i>rosso</i> rojo	grau <i>gray</i> gris <i>grigio</i> gris	rosa <i>pink</i> rose <i>rosa</i> rosa	braun <i>brown</i> brun <i>marrone</i> marrón	weiß <i>white</i> blanc <i>bianco</i> blanco		weiß/braun <i>white/brown</i> blanc/brun <i>bianco/marrone</i> blanco/marrón

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PLC programming ☎ +49 (86 69) 31-31 02

E-Mail: service.plc@heidenhain.de

Lathe controls ☎ +49 (86 69) 31-31 05

E-Mail: service.lathe-support@heidenhain.de

www.heidenhain.de

