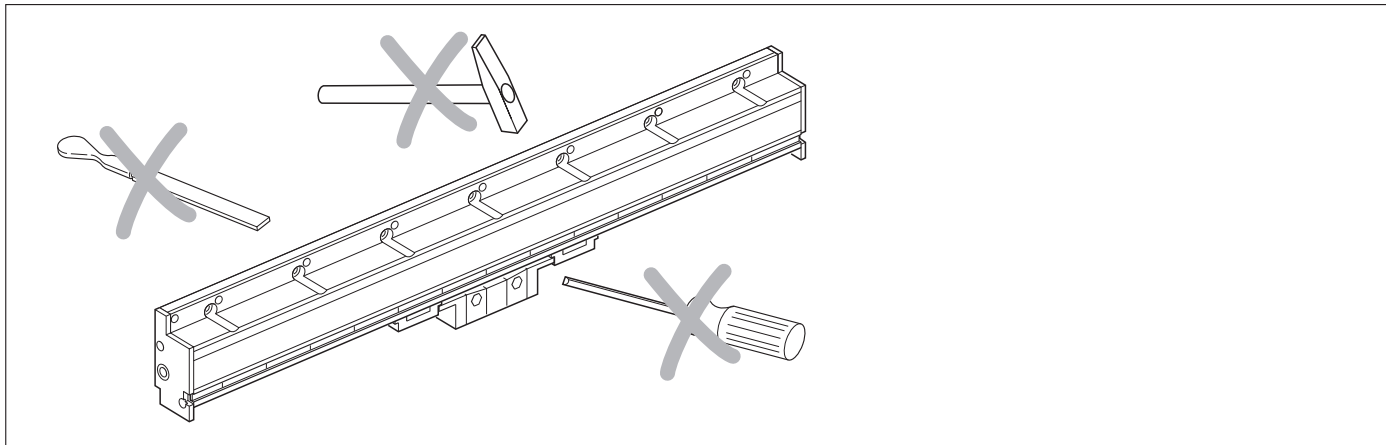
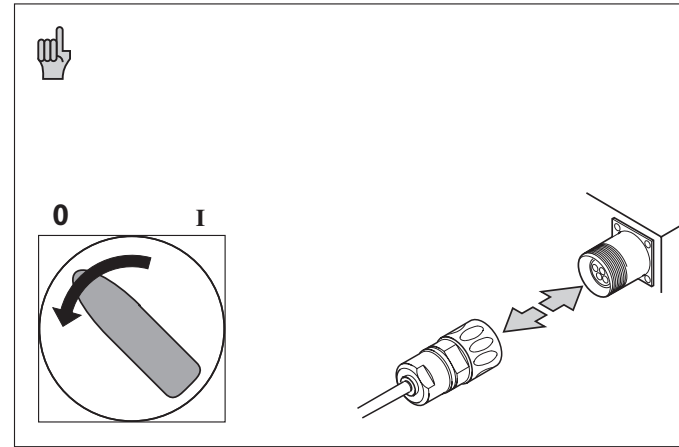
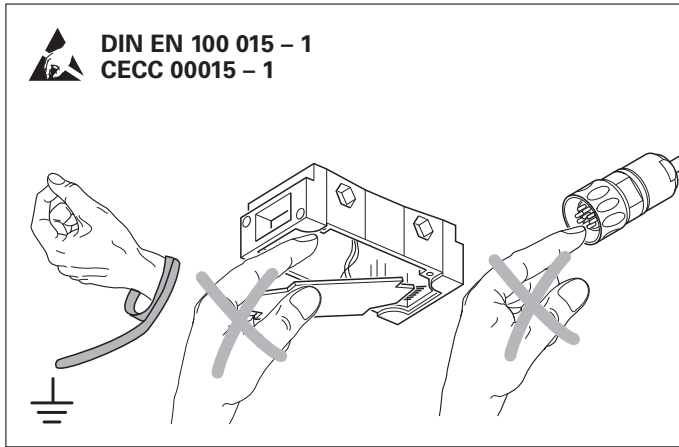


Montageanleitung  
*Mounting Instructions*  
Instructions de montage  
*Istruzioni di montaggio*  
Instrucciones de montaje

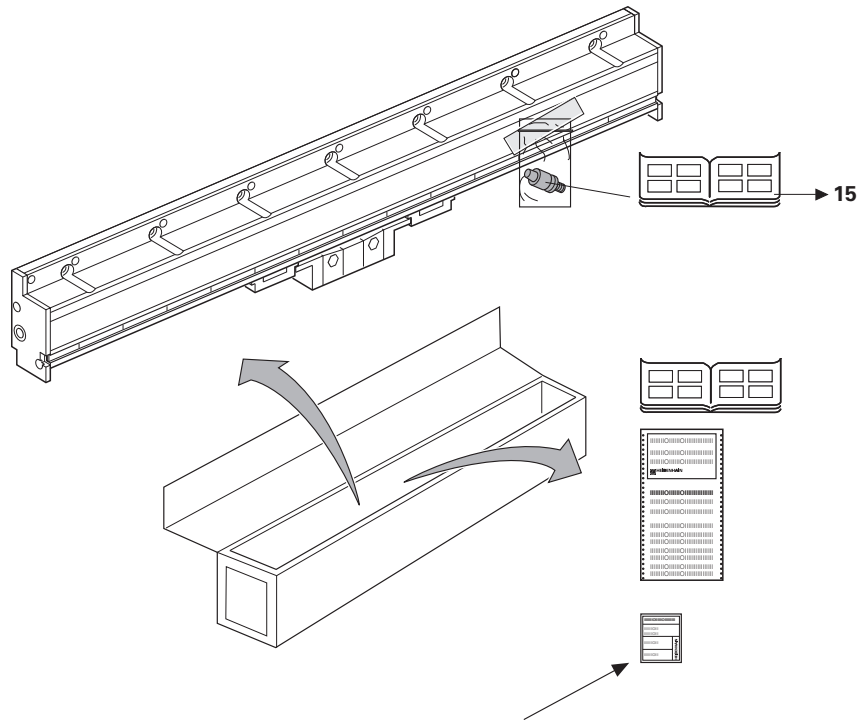
**LF 103/LF 103 C**  
**LF 183/LF 183 C**

11/2000

Warnhinweise · Warnings · Recommendations · Avvertenze · Advertencias

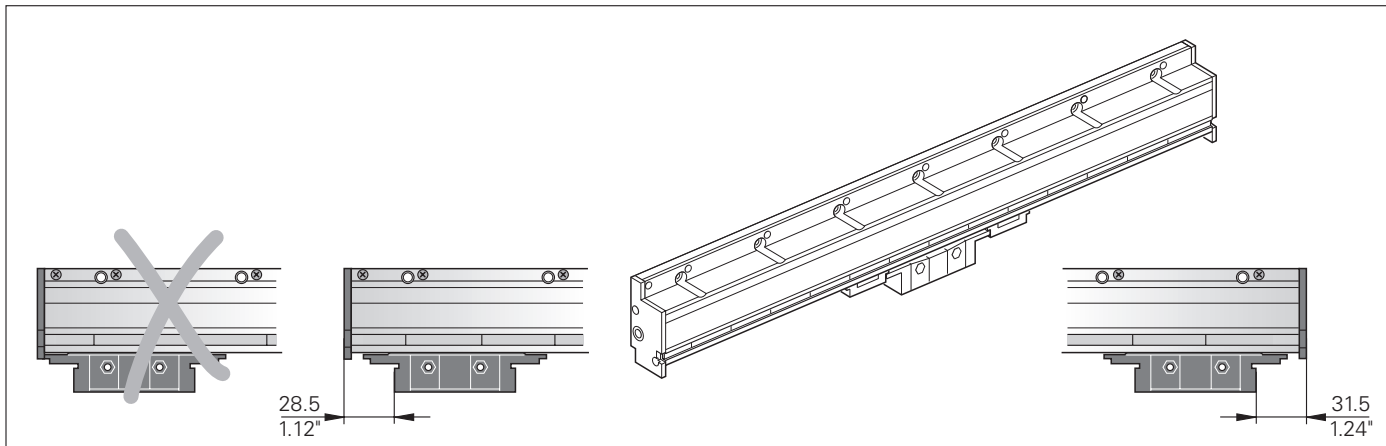
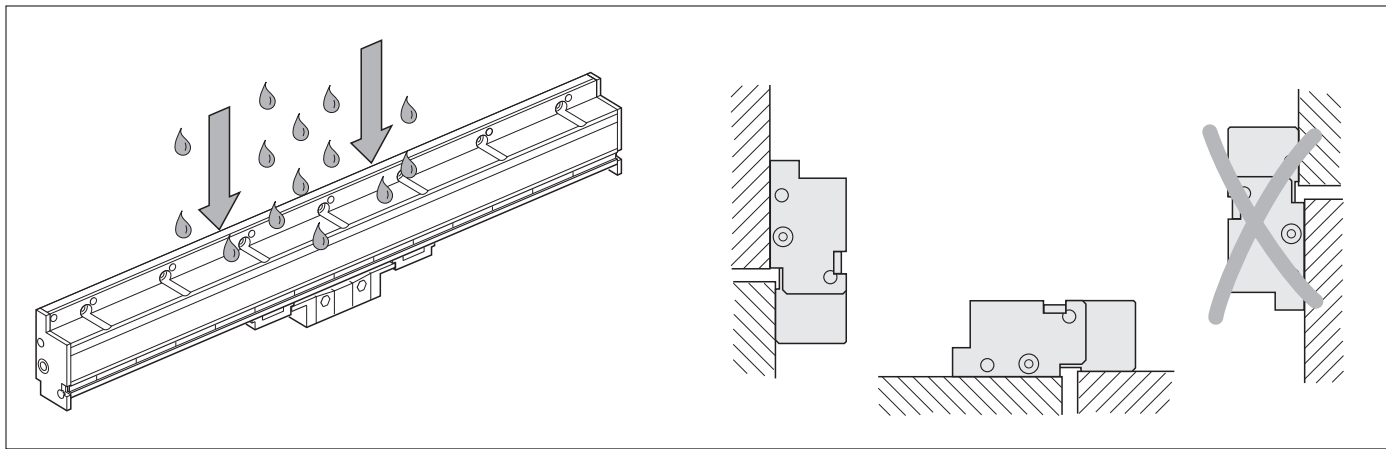


Lieferumfang · Items Supplied · Contenu de la fourniture · Standard di forniture · Elementos suministrados

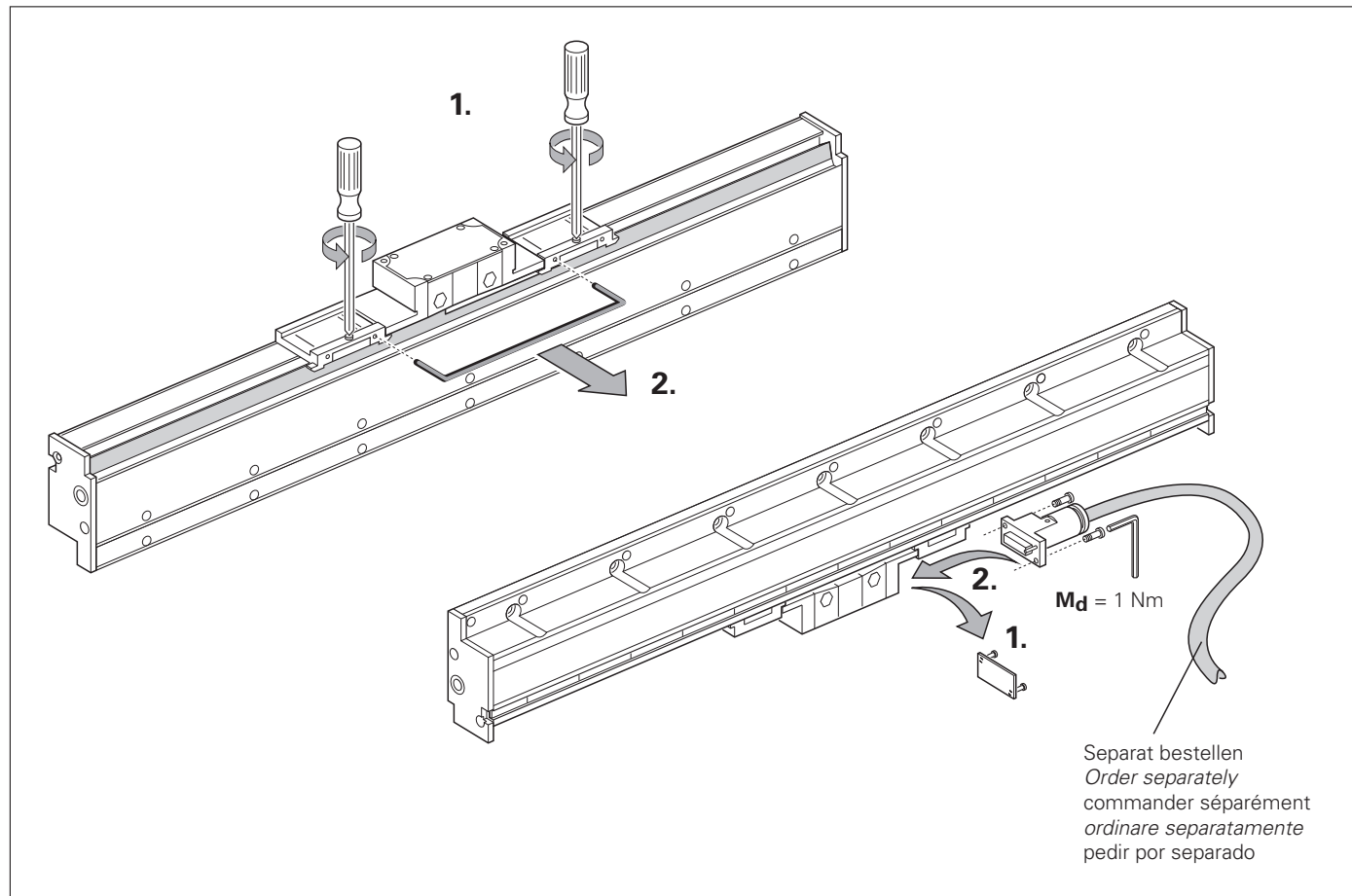


Bei Montage bitte Geräteschild-Aufkleber anbringen (Schaltschrank, Maschinen-Handbuch usw.)  
Apply the encoder ID label to an appropriate surface, e.g. the electrical cabinet or machine manual  
lors du montage, accoler S.V.P. l'étiquette signalétique de l'appareil (armoire électrique, manuel de la 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.)

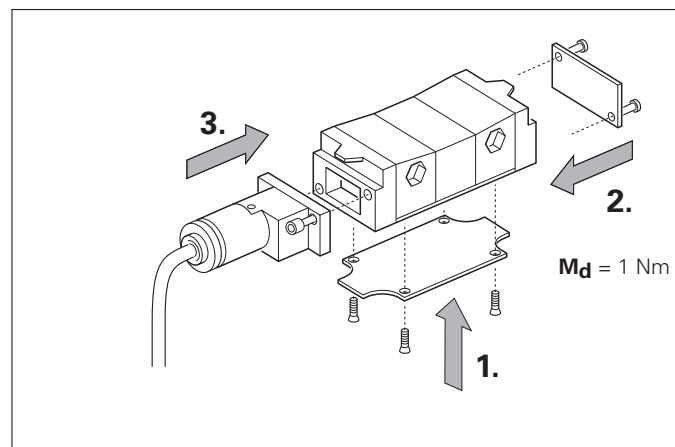
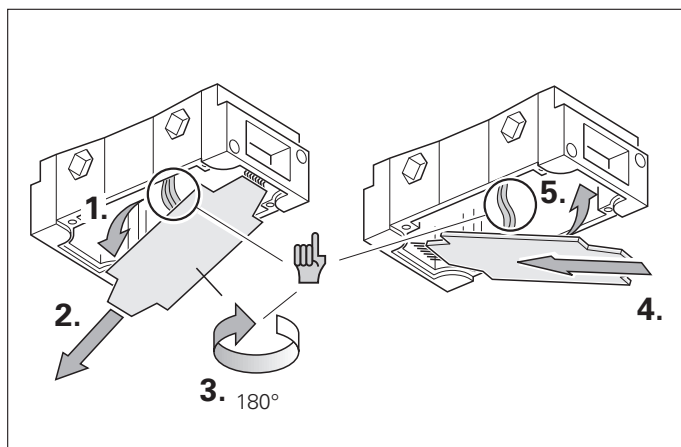
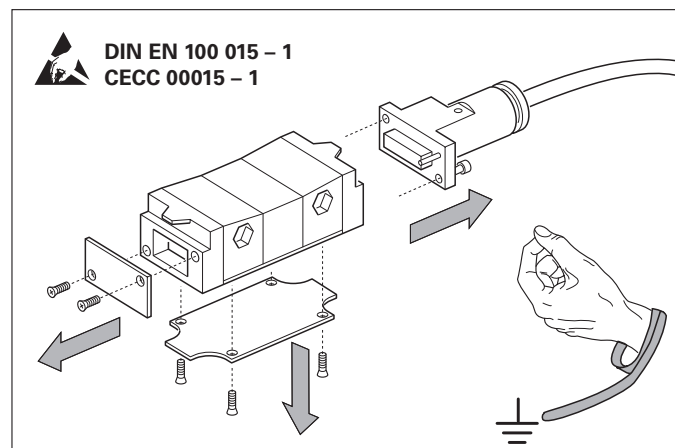
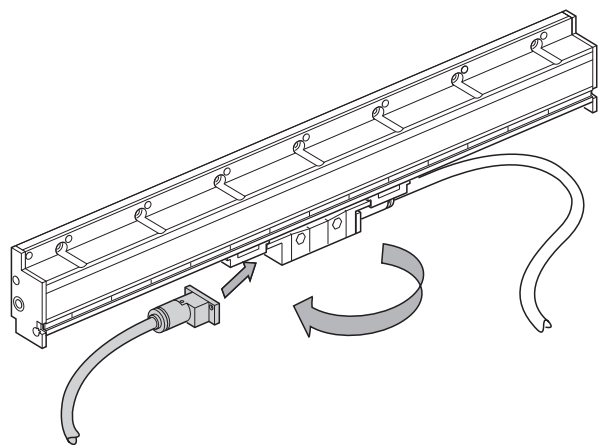
Hinweise zur Montage · Mounting Procedure · Procédures pour le montage · Avvertenze per il montaggio · Indicaciones para el montaje



Montage- · Preparatory · Préparation · Operazioni · Trabajos  
Vorbereitungen · Work · du montage · preliminari · previos

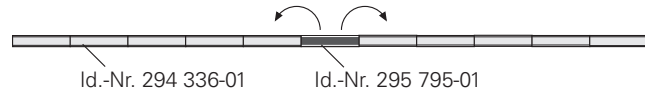


Kabelausgang · *Changing the* · Poser · *Configurazione* · Colocar  
 verlegen · *Cable Outlet* · la sortie du câble · *dell'uscita del cavo* · cable de salida

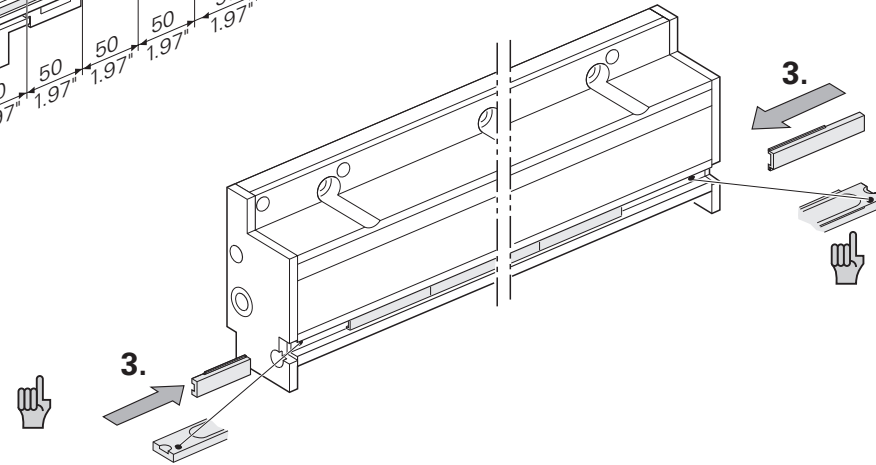
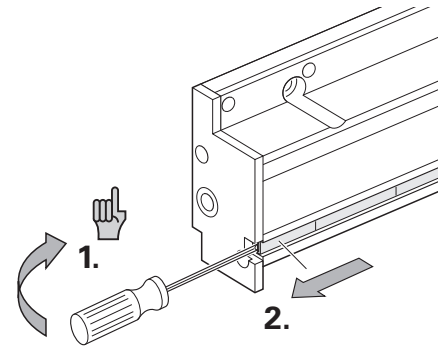
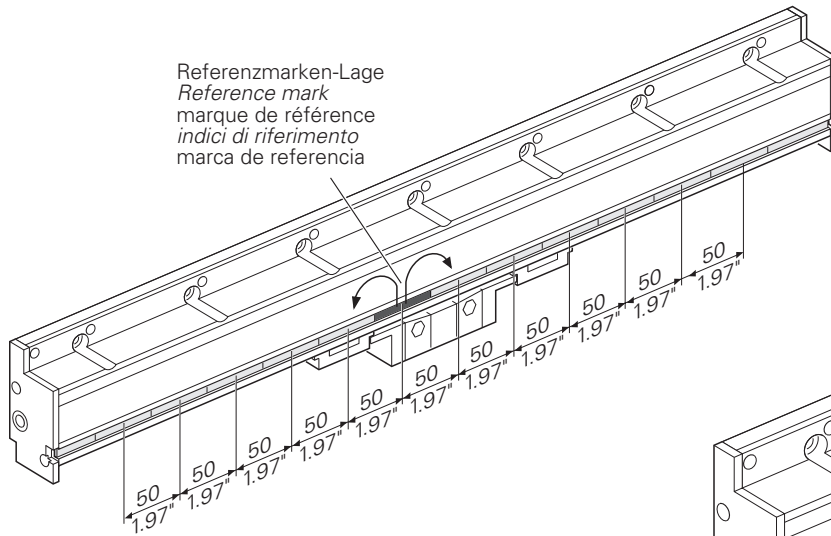


Referenzmarken- · *Reference Mark* · Sélection marques · *Selezione indici* · Selección marca  
 Auswahl · *Selection* · de référence · *di riferimento* · de referencia

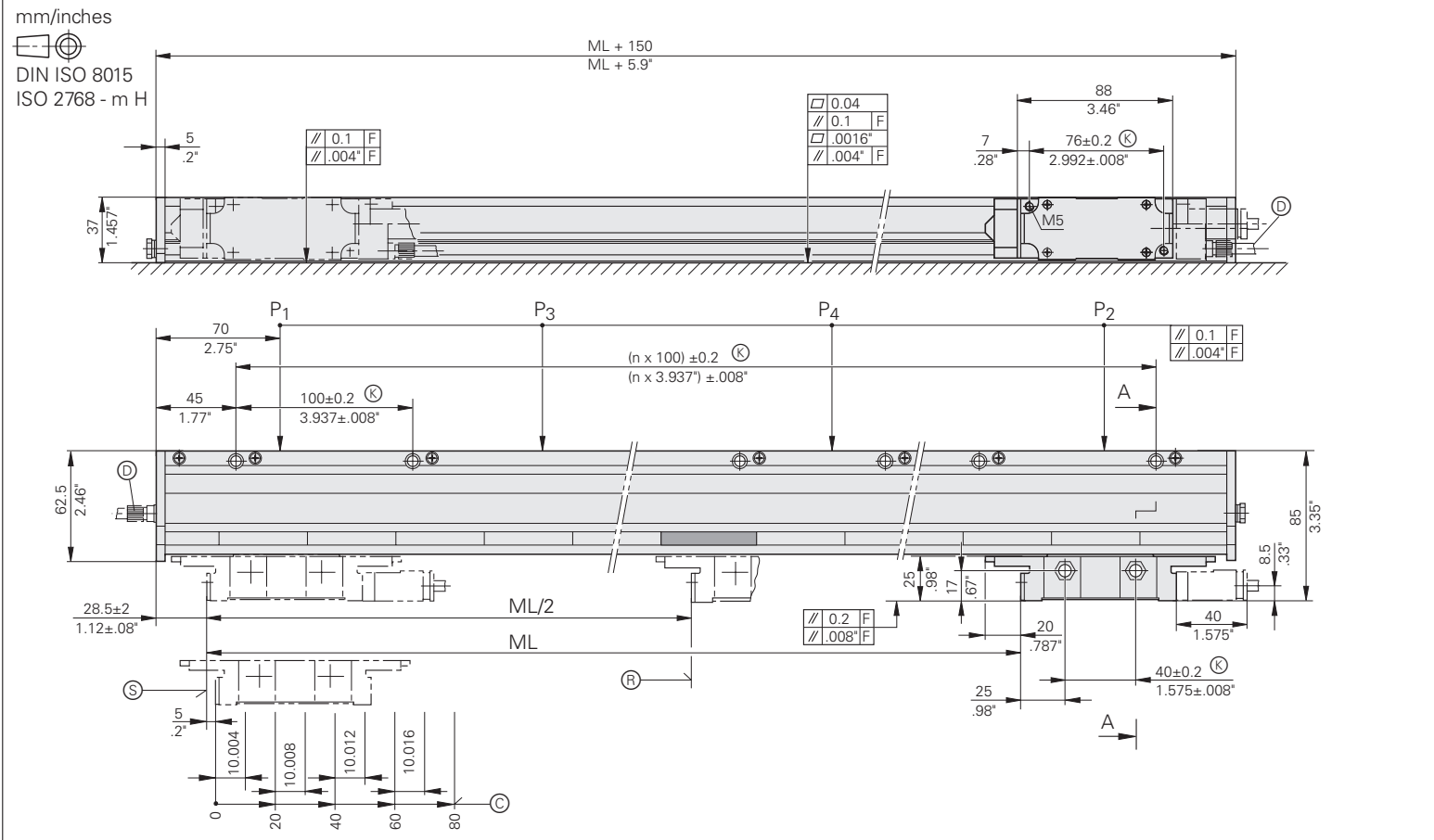
**LF 1x3**



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



Abmessungen · Dimensions · Dimensions · Dimensioni · Dimensiones





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

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

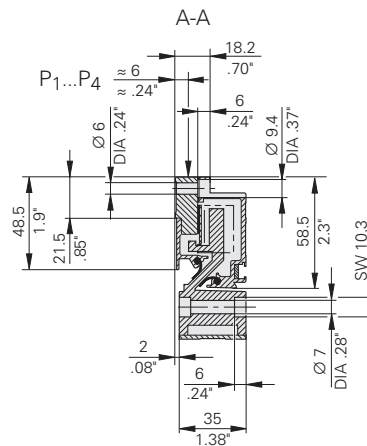
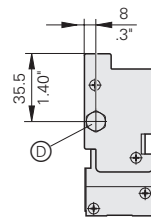
Ⓡ = Referenzmarken-Lage LF 103/183  
*Reference mark position LF 103/183*  
 marque de référence LF 103/183  
 indici di riferimento LF 103/183  
 marca de referencia LF 103/183

Ⓒ = Referenzmarken-Lage LF 103/183 C  
*Reference mark position LF 103/183 C*  
 marque de référence LF 103/183 C  
 indici di riferimento LF 103/183 C  
 marca de referencia LF 103/183 C

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

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

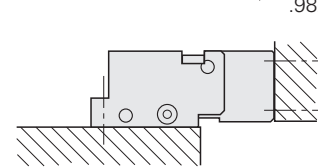
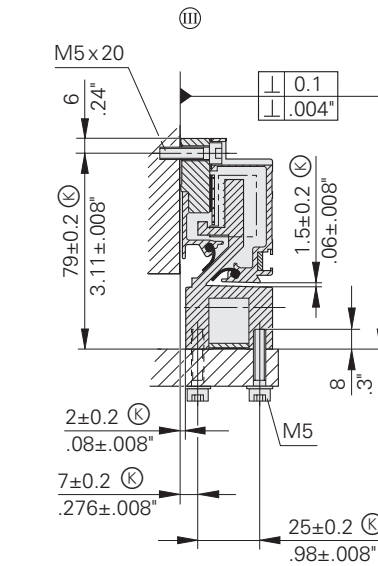
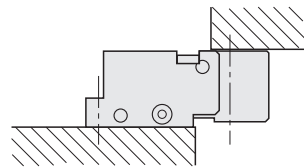
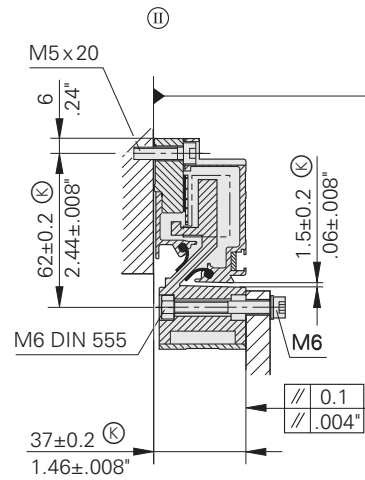
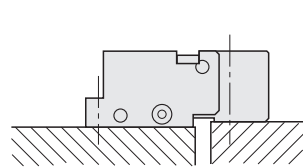
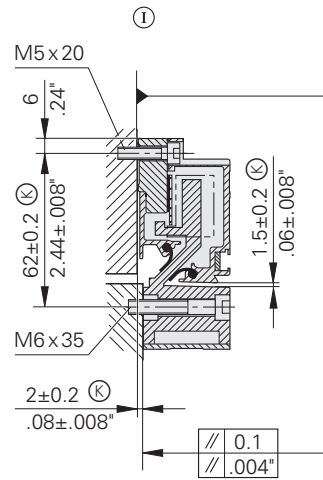
Ⓚ = Kundenseitige Anschlussmaße  
*Required mating dimensions*  
 conditions requises pour le montage  
 dimensioni di collegamento lato cliente  
 cotas de montaje requeridas



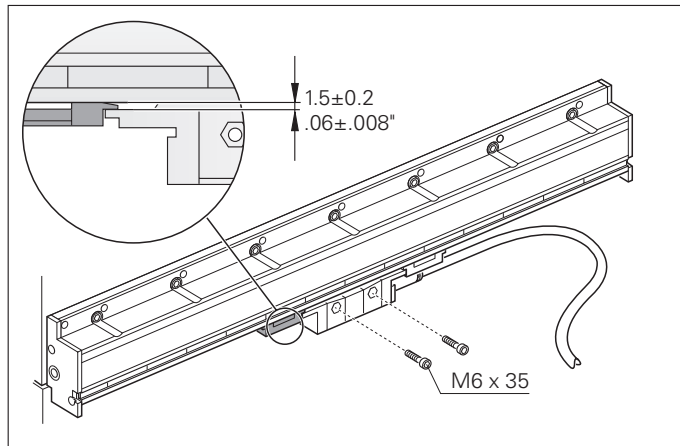
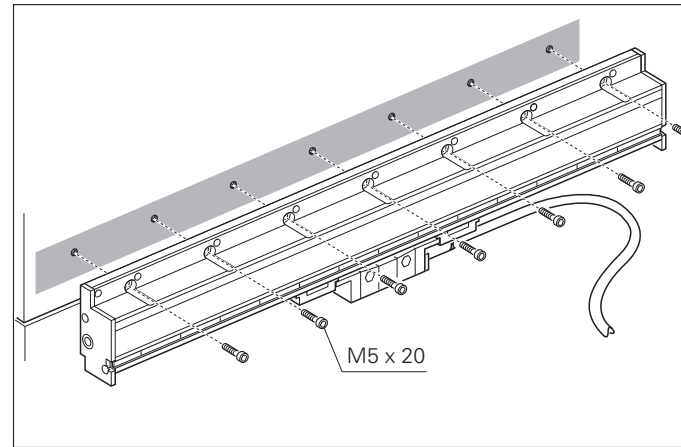
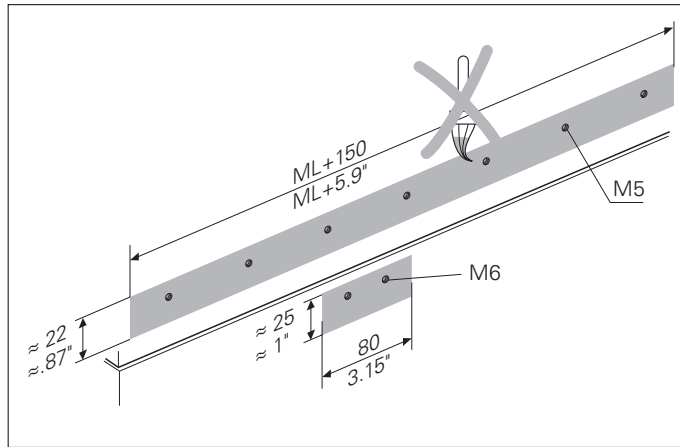
Anbaumaße · *Mounting Dimensions* · Cote d'encombrement · *Dimensioni di montaggio* · Medidas para el montaje

①②③ = Montage-Möglichkeiten  
*Mounting possibilities*  
 options de montage  
*possibilità di montaggio*  
 posibilidades de montaje

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

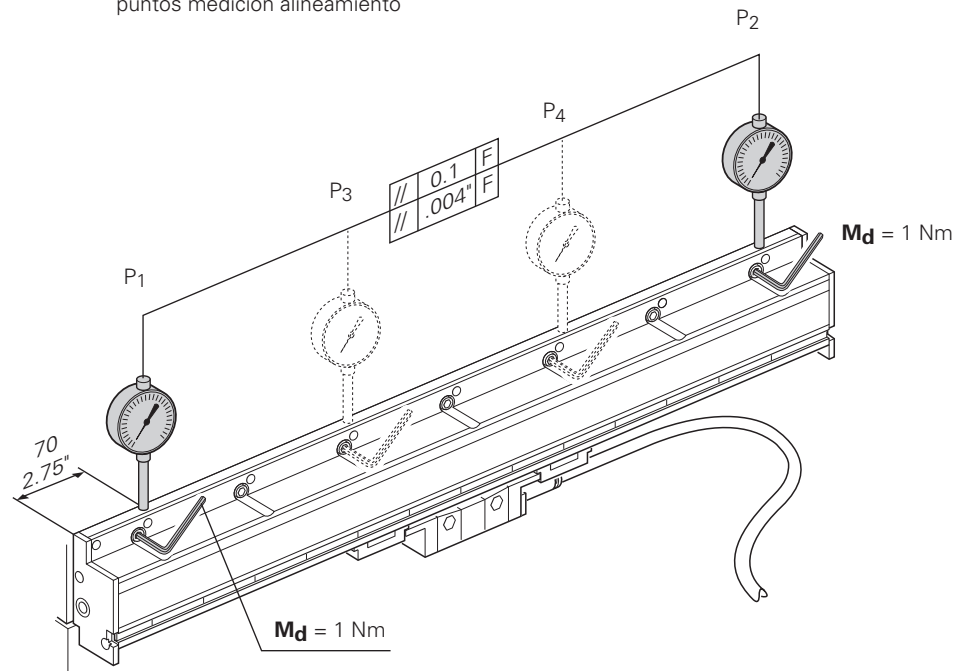


Anbau · Mounting · Montage · Montaggio · Instalación

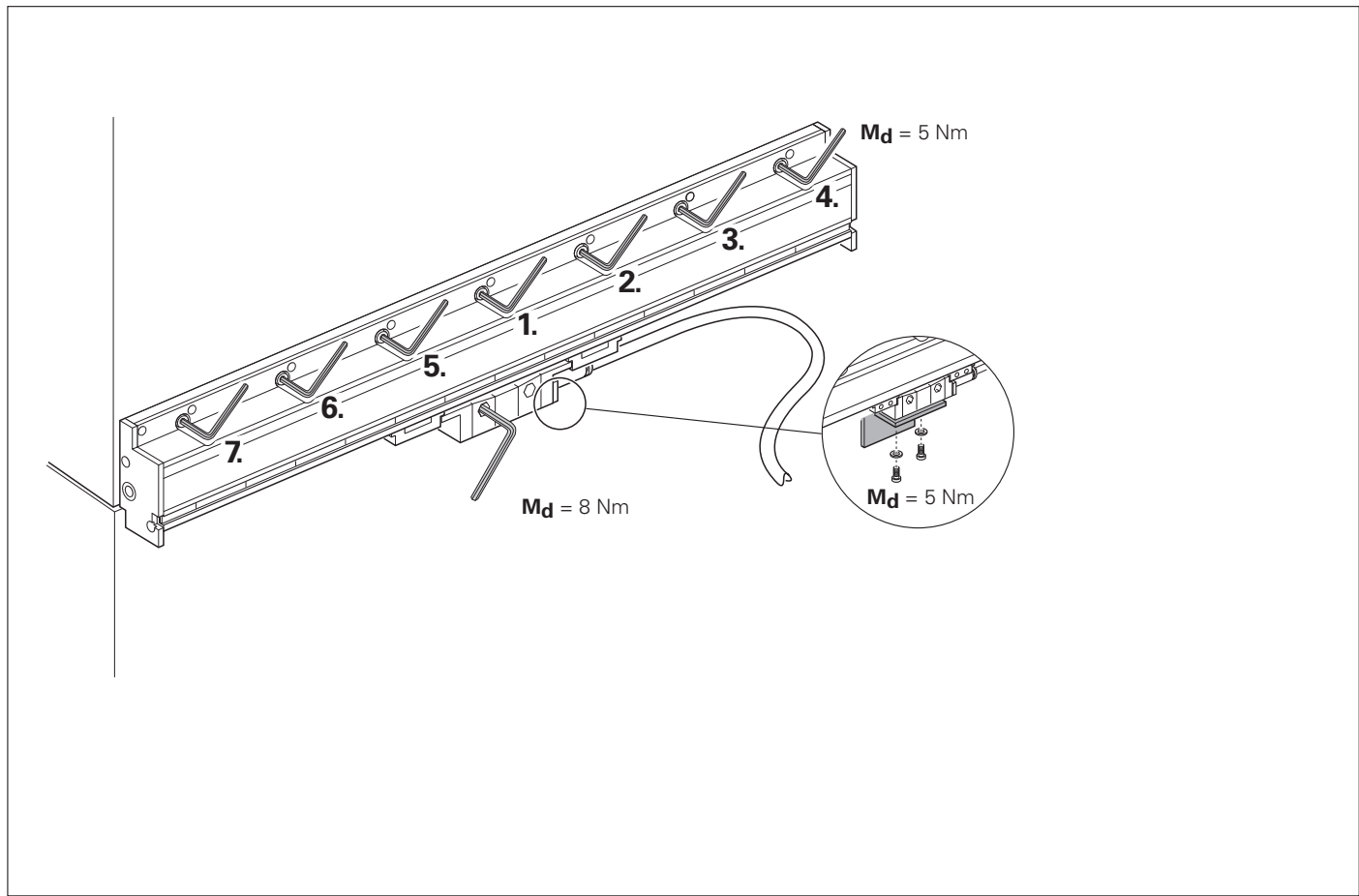


**Ausrichten · Alignment · Alignement · Allineamento · Alinear**

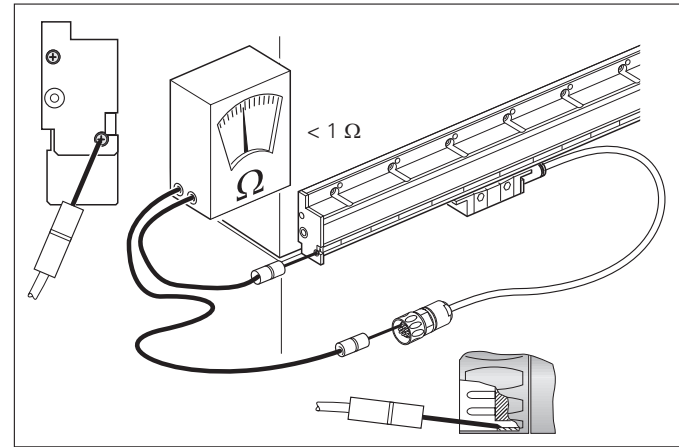
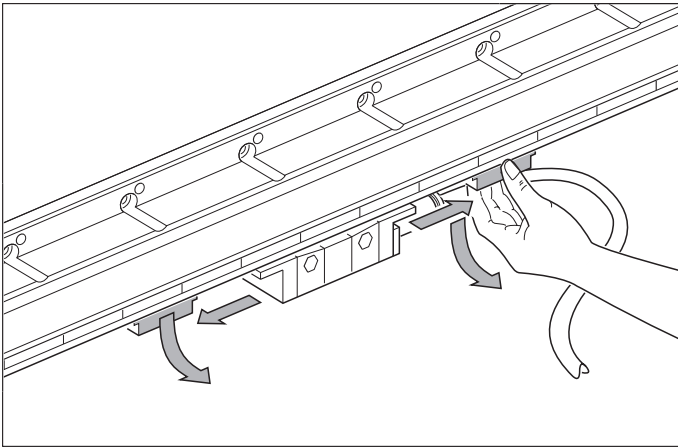
P = Messpunkte zum Ausrichten  
 Gauging points for alignment  
 points de mesure pour dé gauchissage  
 punti di misura per allineamento  
 puntos medición alineamiento



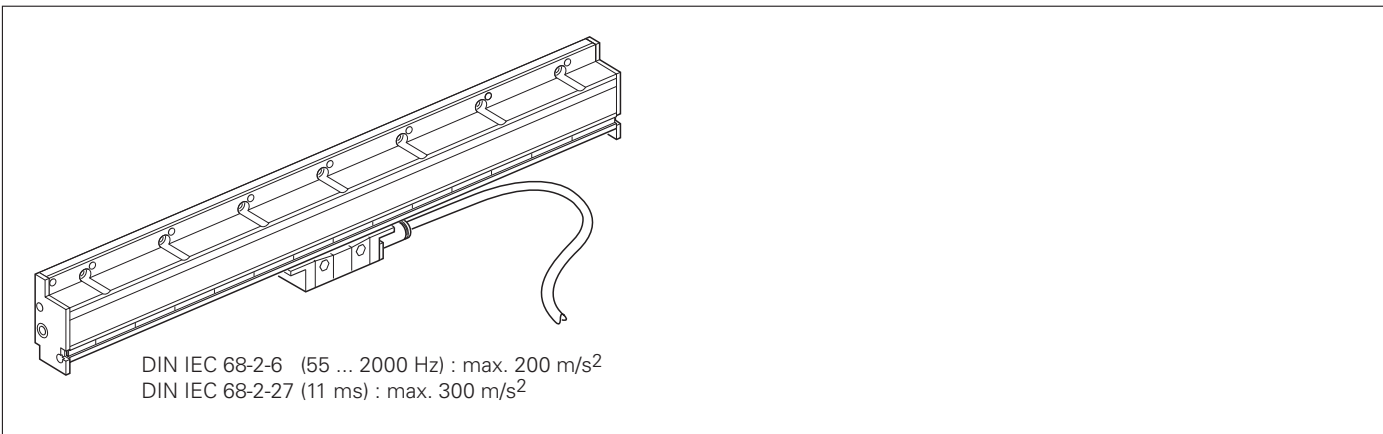
| ML       |           |
|----------|-----------|
| ≤ 840mm  | <b>2x</b> |
| ≤ 1740mm | <b>3x</b> |
| ≤ 3040mm | <b>4x</b> |



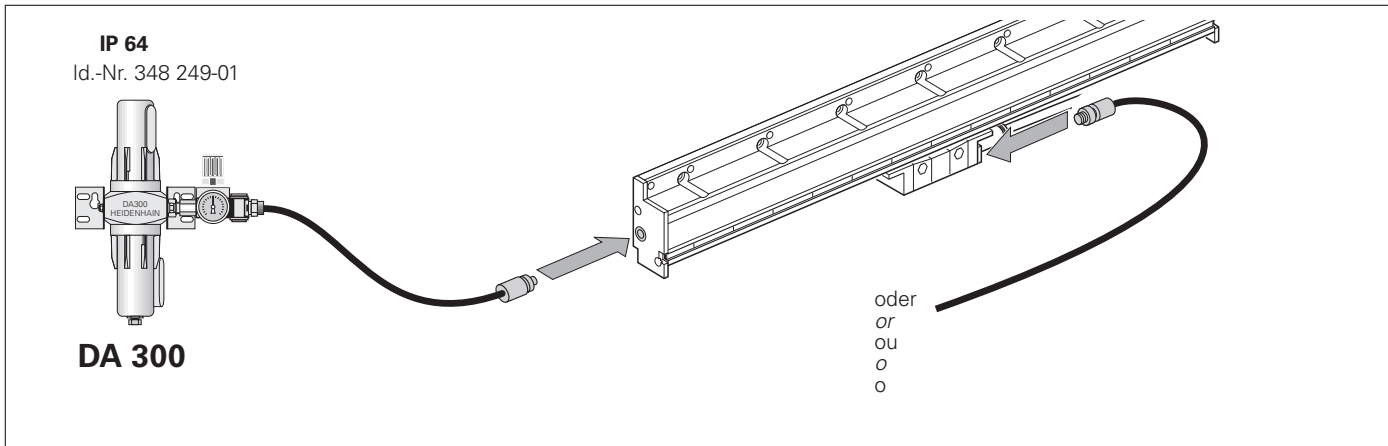
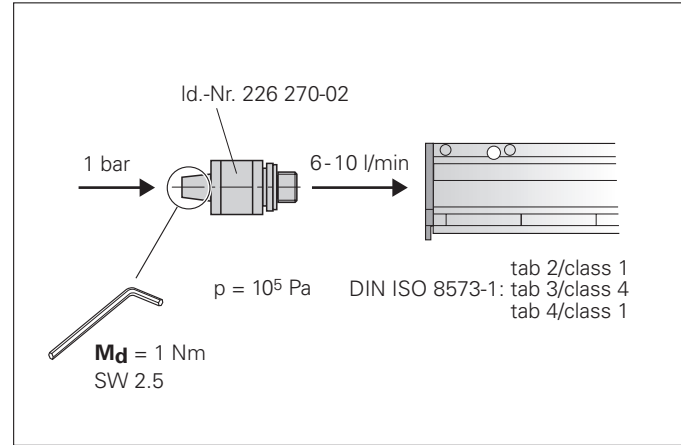
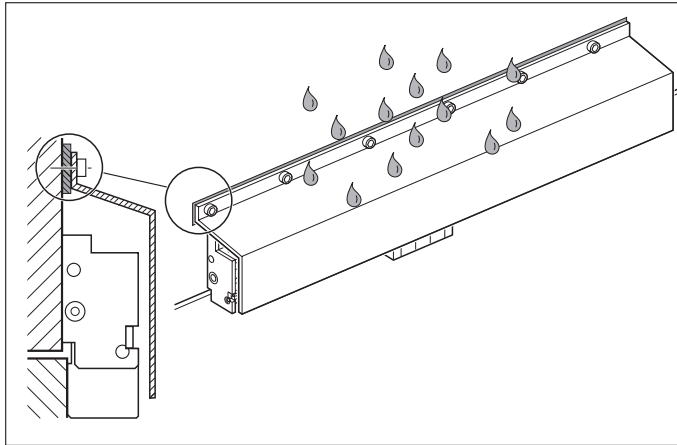
**Abschließende Arbeiten · Final Steps · Opérations finales · Operazioni finali · Trabajos finales**



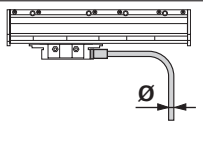
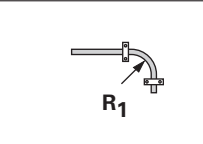
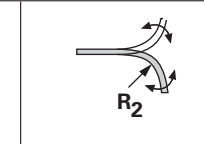

**Vibration/Schock · Vibration/Shock · Vibrations/Chocs · Vibrazioni/Shock · Vibración/Choque**

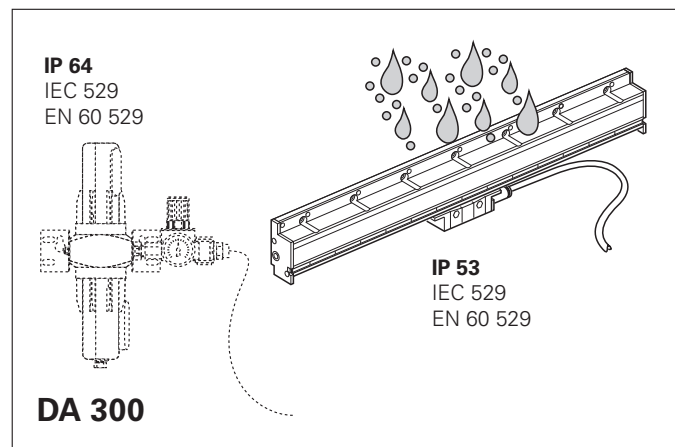
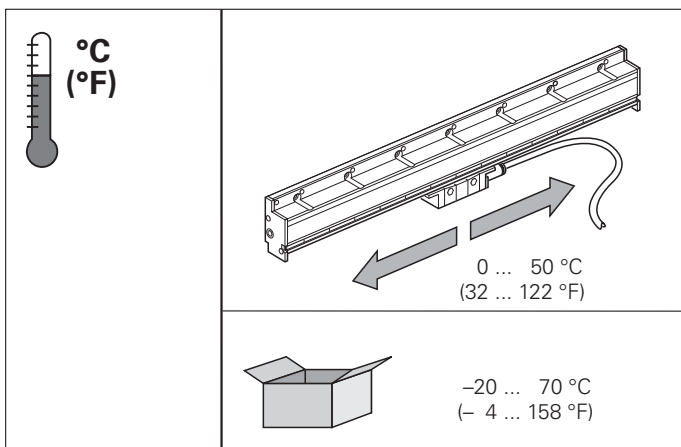
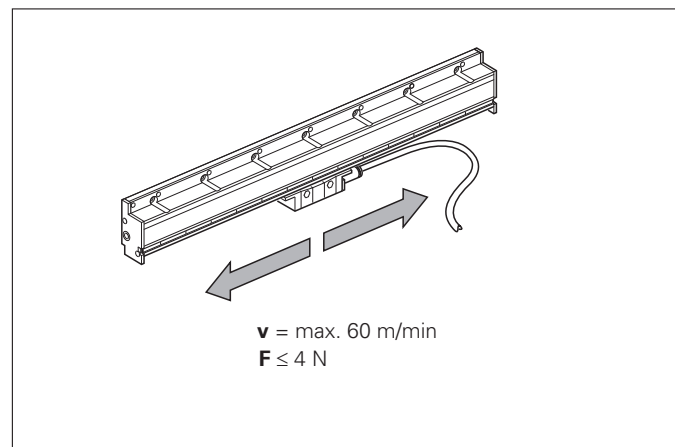


Schutzmaßnahmen · Protective Measures · Mesures préventives · Precauzioni · Medidas de protección



Technische Kennwerte · Specifications · Caractéristiques techniques · Dati tecnici · Datos técnicos

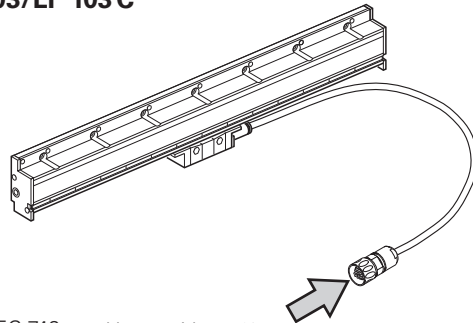
|   |   |  |
|---|---|--|
|  |  |  |
| <b>Ø 6 mm</b><br><b>DIA .236 in.</b>  | $R_1 \geq 20 \text{ mm}$<br>$R_1 \geq .8 \text{ in.}$                             | $R_2 \geq 75 \text{ mm}$<br>$R_2 \geq 3 \text{ in.}$                               |
| <b>Ø 10 mm</b><br><b>DIA .394 in.</b>   | $R_1 \geq 35 \text{ mm}$<br>$R_1 \geq 1.4 \text{ in.}$                            | $R_2 \geq 75 \text{ mm}$<br>$R_2 \geq 3 \text{ in.}$                               |
|  | $R_1 \geq 40 \text{ mm}$<br>$R_1 \geq 1.6 \text{ in.}$                            | $R_2 \geq 100 \text{ mm}$<br>$R_2 \geq 4 \text{ in.}$                              |





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

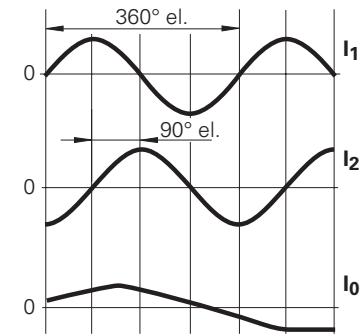
**LF 103/LF 103 C**



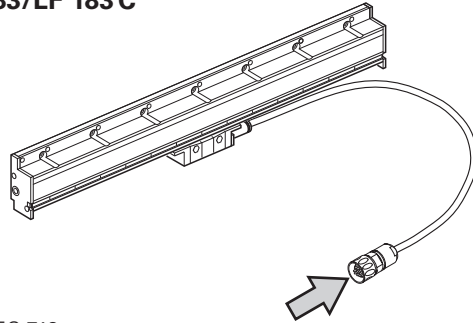
IEC 742  
EN 50 178

$U_P = 5\text{ V} \pm 5\%$   
(max. 100 mA)

$I_1: 7 \dots 16 \mu\text{A}_{SS}$   
 $I_2: 7 \dots 16 \mu\text{A}_{SS}$   
 $I_0: 2 \dots 8 \mu\text{A}$



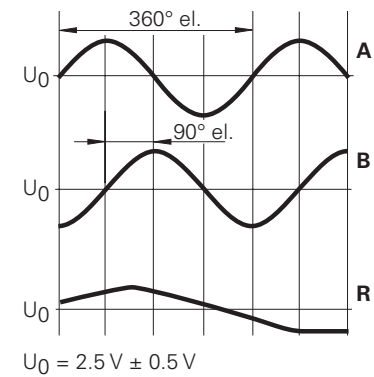
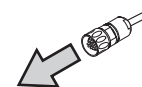
**LF 183/LF 183 C**



IEC 742  
EN 50 178

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

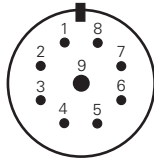
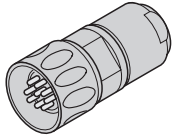
$A: 0.6 \dots 1.2 V_{SS}$   
 $B: 0.6 \dots 1.2 V_{SS}$   
 $R: 0.2 \dots 0.85\text{ V}$



$U_0 = 2.5\text{ V} \pm 0.5\text{ V}$

Elektrischer Anschluß · *Electrical Connection* · Raccordement électrique · *Collegamento elettrico* · Conexión eléctrica

**LF 103/LF 103 C**



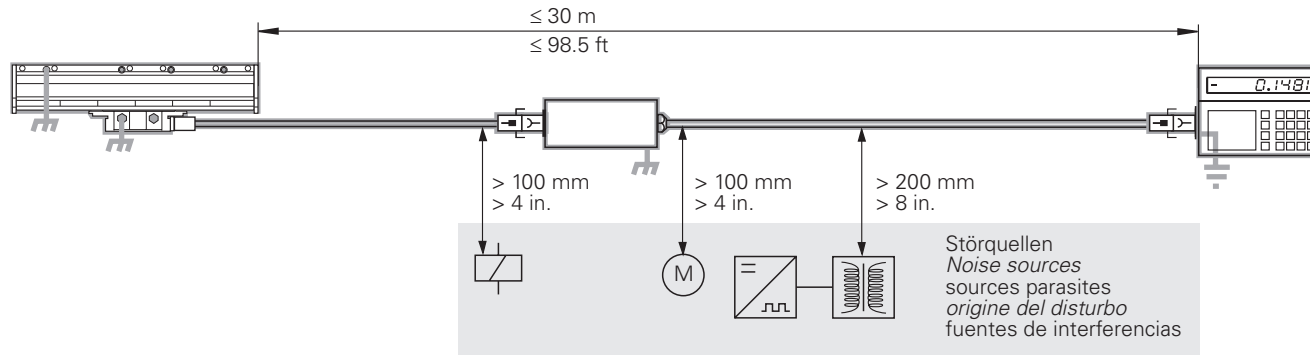
Id.-Nr. 291 697-03

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

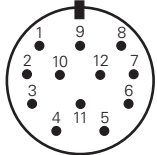
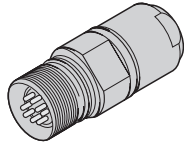
2) Innenschirm Pin 9  
*Internal shield pin 9*  
 blindage interne pin 9  
 schermo interno pin 9  
 blindaje interno pin 9

| 1   | 2   | 5   | 6  | 7  | 8  | 3   | 4  | 1) | 9 |
|---|---|---|--|--|--|---|--|----|---|
| $I_1$   |   | $I_2$   |  | $I_0$  |  | 5V<br>$U_P$   | 0V<br>$U_N$  |    |   |
| +   | -   | +   | -  | +  | -  |   |  |    |   |
| grün<br><i>green</i><br>vert<br><i>verde</i><br>verde | gelb<br><i>yellow</i><br>jaune<br><i>giallo</i><br>amarillo | blau<br><i>blue</i><br>bleu<br><i>azzurro</i><br>azul | rot<br><i>red</i><br>rouge<br><i>rosso</i><br>rojo | grau<br><i>gray</i><br>gris<br><i>grigio</i><br>gris | rosa<br><i>pink</i><br>rose<br><i>rosa</i><br>rosa | braun<br><i>brown</i><br>brun<br><i>marrone</i><br>marrón | weiß<br><i>white</i><br>blanc<br><i>bianco</i><br>blanco |    |   |

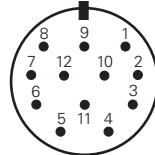
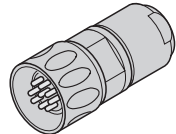
IEC 742 EN 50 178



### LF 183/LF 183 C



Id.-Nr. 291 698-03

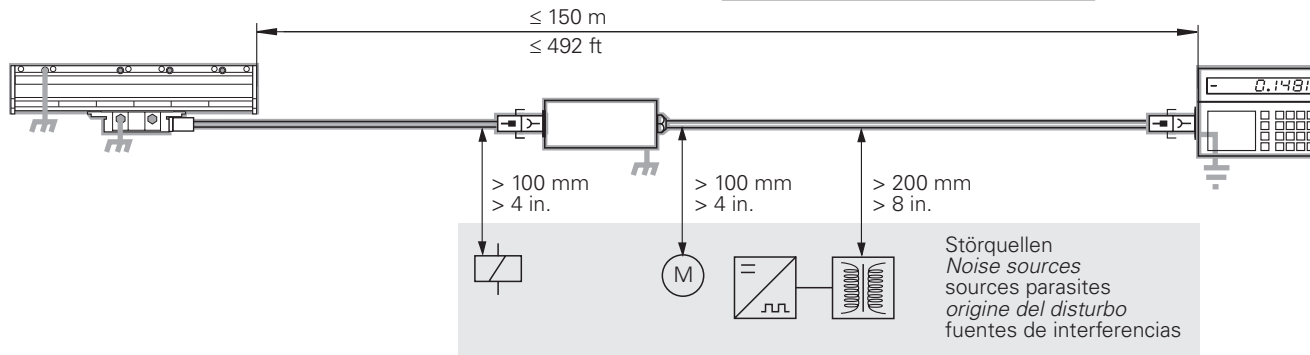


Id.-Nr. 291 697-07

Schirm auf Gehäuse  
Shield on housing  
blindage sur boîtier  
schermo sulla carcassa  
blindaje a carcasa

| 5   | 6   | 8  | 1  | 3  | 4   | 2   | 11   | 12  | 10   | /   | 7   | 9 |
|---|---|--|--|--|---|---|--|---|--|---|---|---|
| A   |   | B  |  | R  |   | 5 V sensor  | 0 V sensor   | 5 V U <sub>P</sub>  | 0 V U <sub>N</sub>   | /   | /   | / |
| +   | -   | +  | -  | +  | -   |   |  |   |  |   |   |   |
| braun<br><i>brown</i><br>brun<br><i>marrone</i><br>marrón | grün<br><i>green</i><br>vert<br><i>verde</i><br>verde | grau<br><i>gray</i><br>gris<br><i>grigio</i><br>gris | rosa<br><i>pink</i><br>rose<br><i>rosa</i><br>rosa | rot<br><i>red</i><br>rouge<br><i>rosso</i><br>rojo | schwarz<br><i>black</i><br>noir<br><i>nero</i><br>negro | blau<br><i>blue</i><br>bleu<br><i>azzurro</i><br>azul | weiß<br><i>white</i><br>blanc<br><i>bianco</i><br>blanco | braun/grün<br><i>brown/green</i><br>brun/vert<br><i>marrone/verde</i><br>marron/verde | weiß/grün<br><i>white/green</i><br>blanc/vert<br><i>bianco/verde</i><br>blanco/verde | gelb<br><i>yellow</i><br>jaune<br><i>giallo</i><br>amarillo | violett<br><i>violet</i><br>violet<br><i>viola</i><br>violeta |   |

IEC 742 EN 50 178



# HEIDENHAIN

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<http://www.heidenhain.de>

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311 742-92 · 6 · 1/2001 · E · Printed in Germany

Änderungen vorbehalten · *Subject to change without notice* · Sous réserve de modifications · *Con riserva di modifiche* · Sujeto a modificaciones

