



HEIDENHAIN

SALES & SERVICE:

A Tech Authority, Inc.

13745 Stockton Ave.

Chino CA 91710

909-614-4522

sales@atechauthority.com

Montageanleitung

Mounting Instructions

Instructions de montage

Istruzioni di montaggio

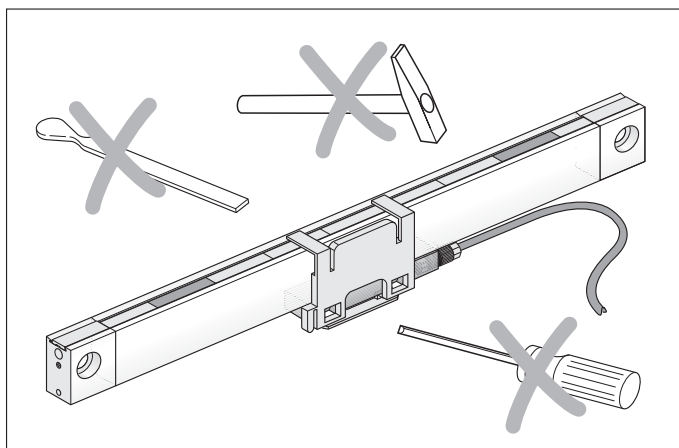
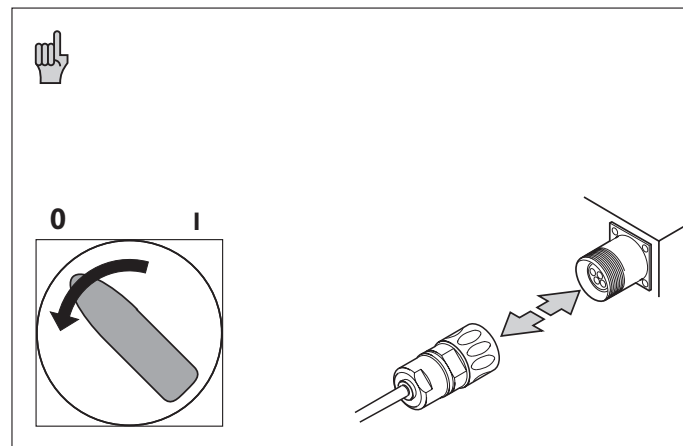
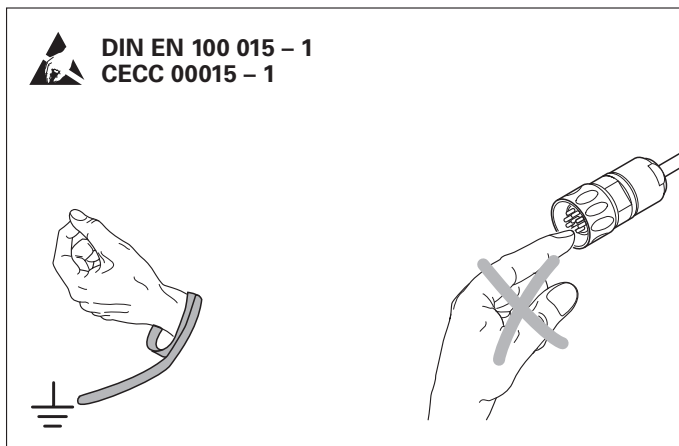
Instrucciones de montaje

LS 477

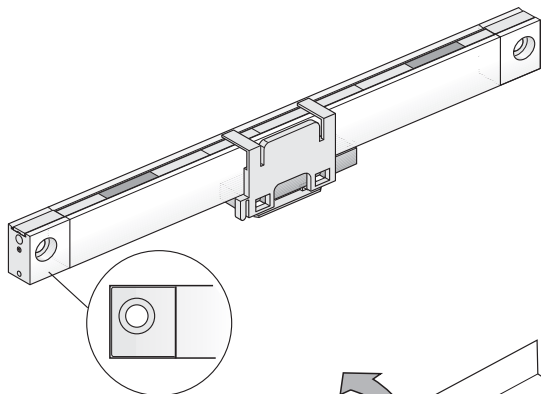
LS 487

4/2007

Warnhinweise · Warnings · Recommendations · Avvertenze · Advertencias



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

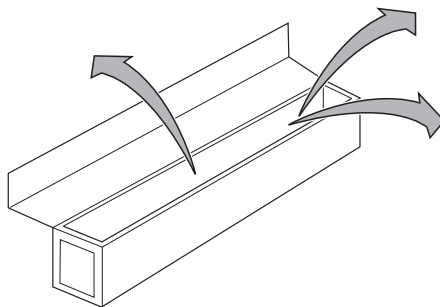


2x
M8x25 DIN 6912

2x
M8x25 ISO 4762

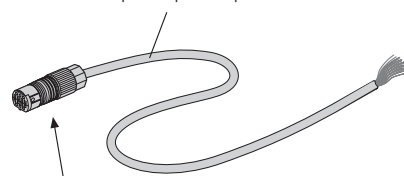
2x
D13.0/8.4

3x
D7.0/4.3



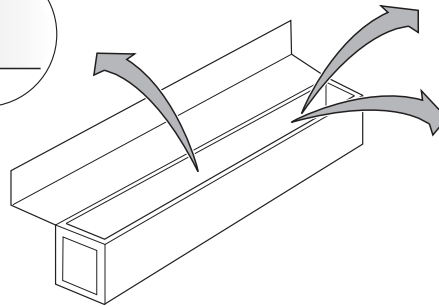
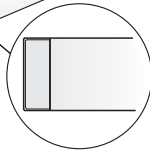
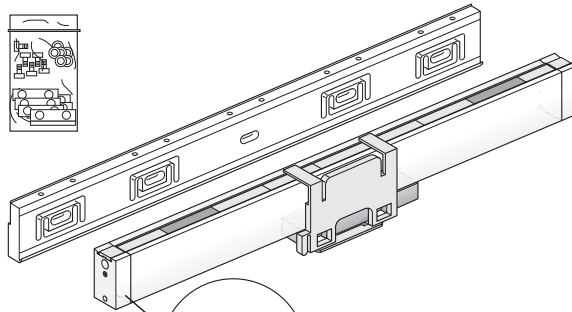
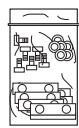
Geräteschild-Aufkleber aufbewahren
Retain the encoder ID label
 Conserver l'autocollant de l'étiquette signalétique
Conservare targhetta adesiva
 Conservar la etiqueta adhesiva del aparato

Separat bestellen
Order separately
 A commander séparément
Ordinare a parte
 Para pedir por separado



M_d = 3 Nm

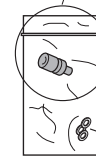
mit Loctite 222 sichern
Secure with Loctite 222
 Consolider avec Loctite 222
Fissare con Loctite 222
 fijar con Loctite 222



Geräteschild-Aufkleber aufbewahren
Retain the encoder ID label
 Conserver l'autocollant de l'étiquette signalétique
 Conservare targhetta adesiva
 Conservar la etiqueta adhesiva del aparato



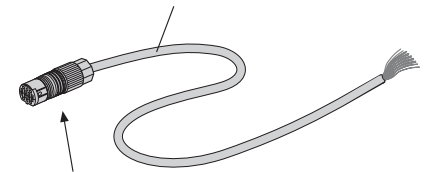
→ 17



3x
D7.0/4.3



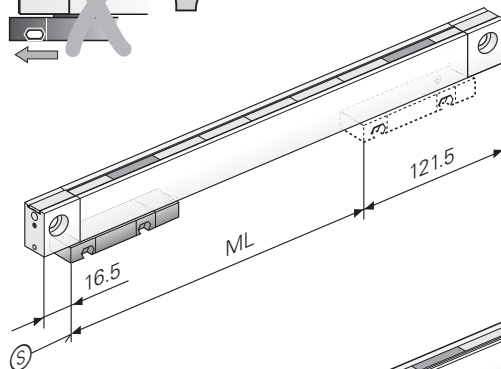
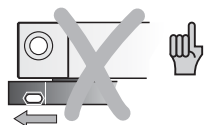
Separat bestellen
Order separately
 A commander séparément
 Ordinare a parte
 Para pedir por separado



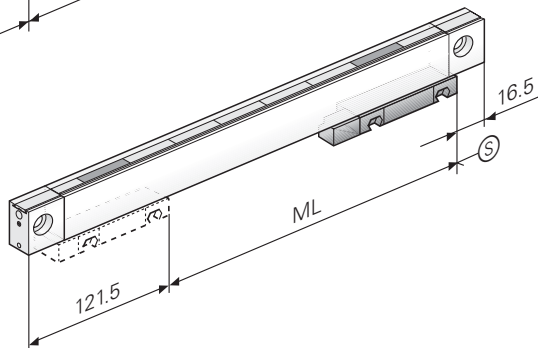
M_d = 3 Nm

mit Loctite 222 sichern
Secure with Loctite 222
 Consolider avec Loctite 222
 Fissare con Loctite 222
 fijar con Loctite 222

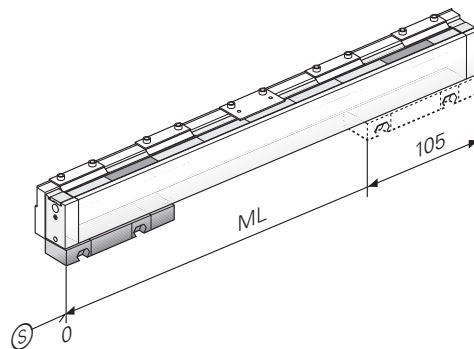
Hinweise zur Montage · Mounting Procedure · Procédures pour le montage

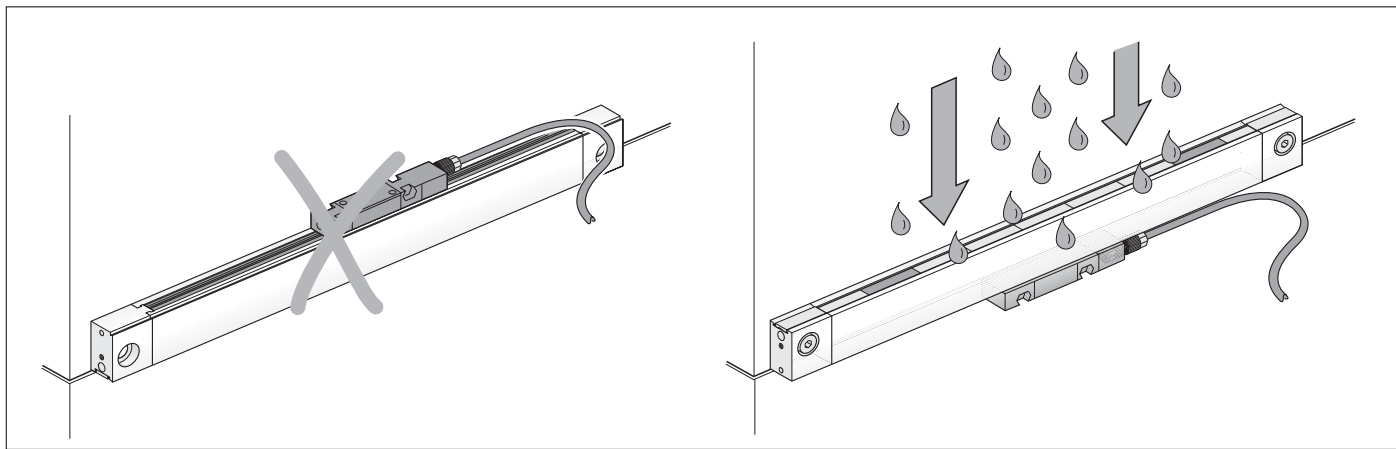


180° gedreht angebaut
 Mounted rotated by 180°
 Montage avec rotation de 180°
 Montaggio ruotato di 180°
 Montado girado 180°



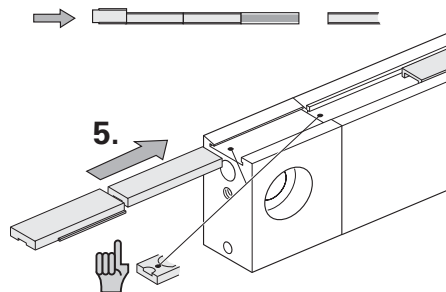
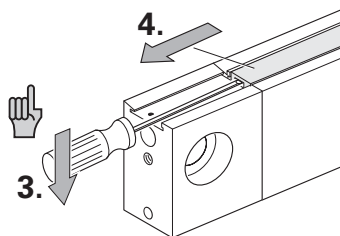
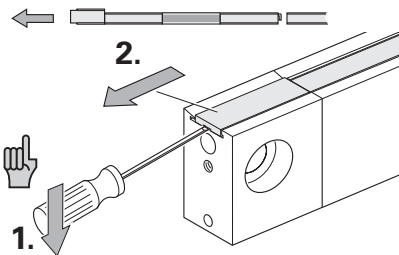
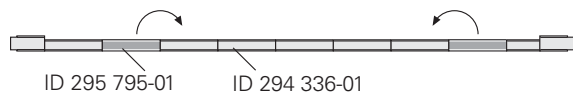
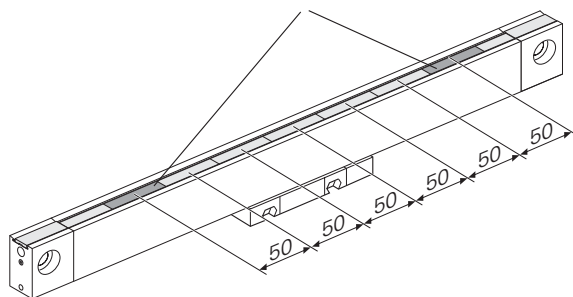
Ⓢ = Beginn der Messlänge ML
 Begin. of meas. length ML
 Début longueur utile ML
 Inizio lunghezza di misura ML
 Comienzo longitud útil ML

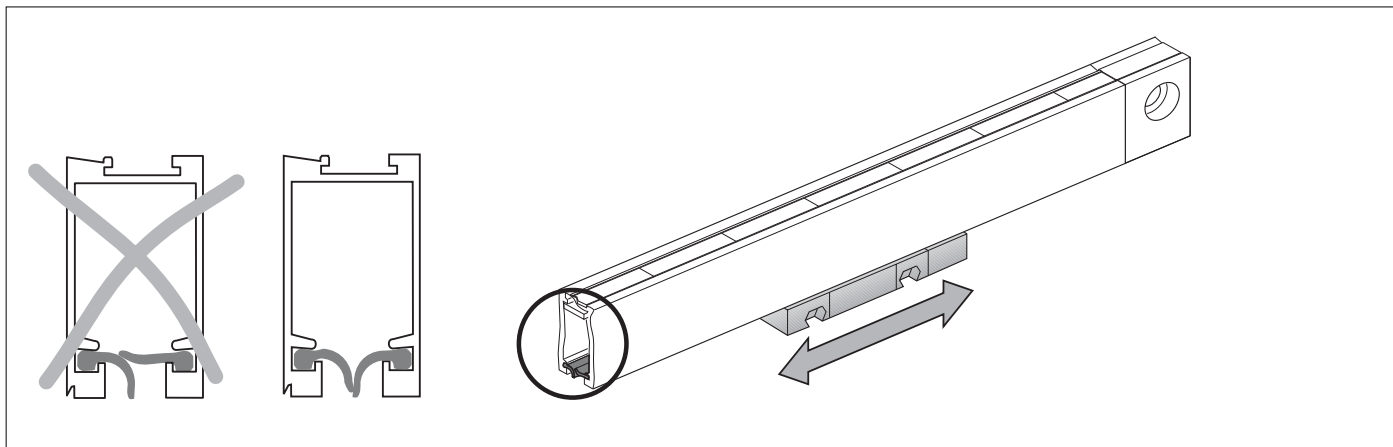




LS 4x7

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





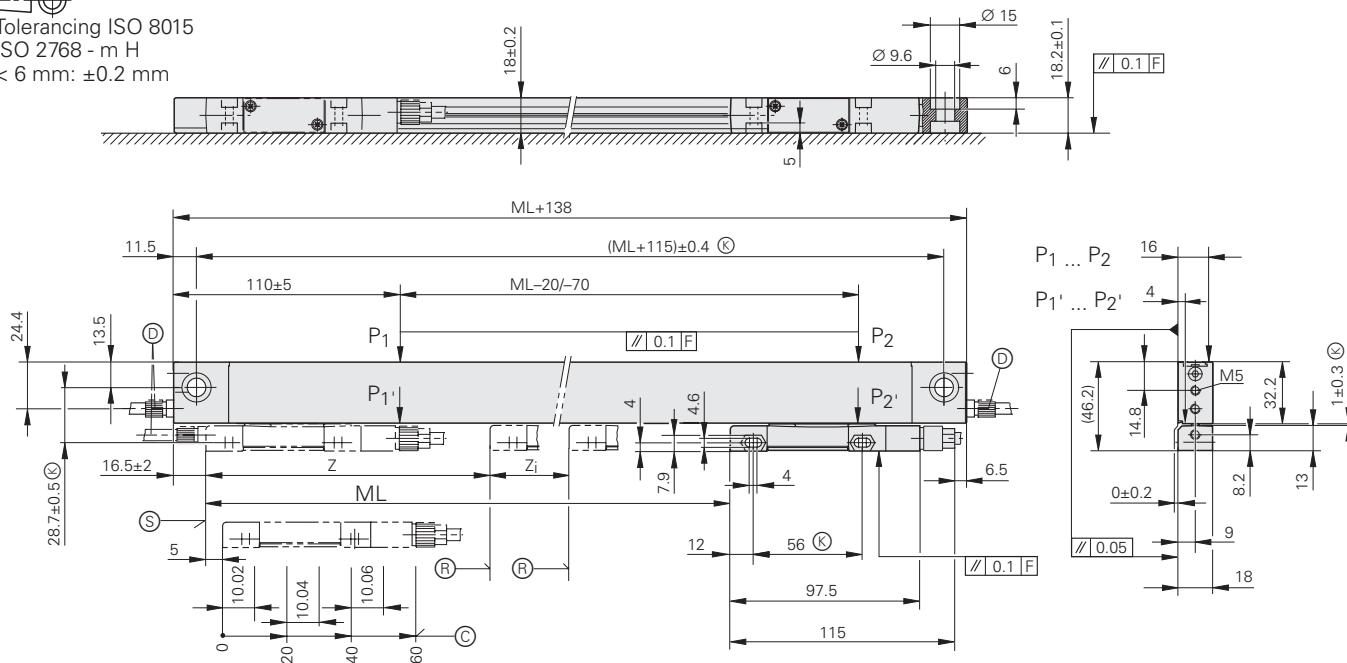
mm



Tolerancing ISO 8015

ISO 2768 - m H

< 6 mm: ± 0.2 mm



ML 70 ... 1020

ML 1140 ... 1240

z = 35 mm

z = 45 mm

z_i = ML - 70 mm

z_i = ML - 90 mm

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

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

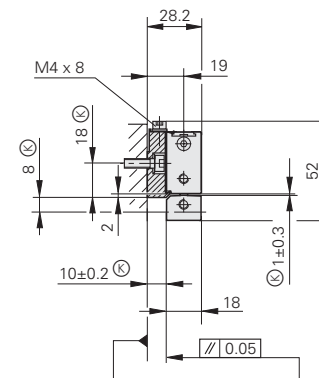
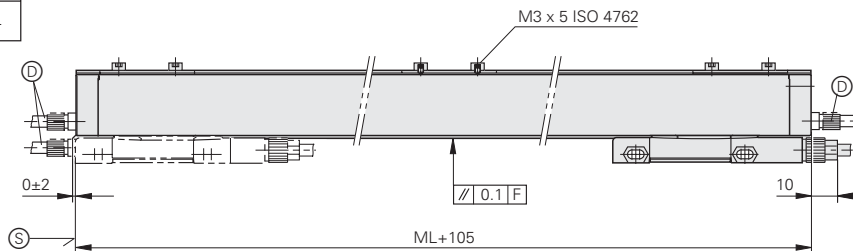
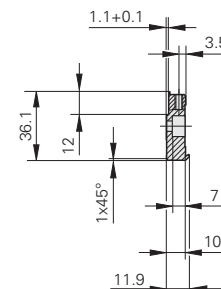
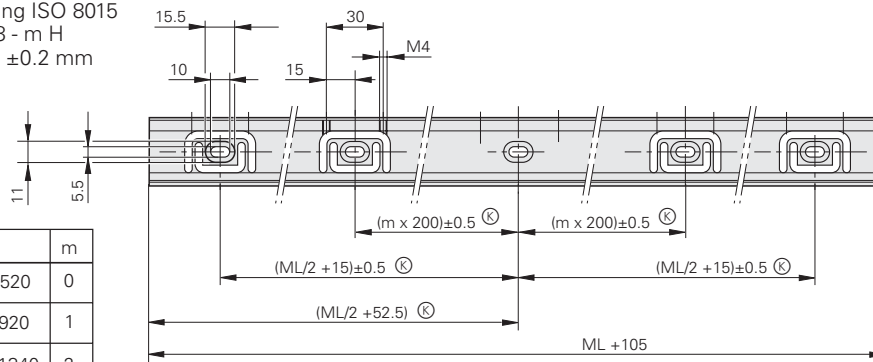
Ⓡ = Referenzmarken-Lage
Reference mark
marque de référence
indici di riferimento
marca de referencia

mm



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

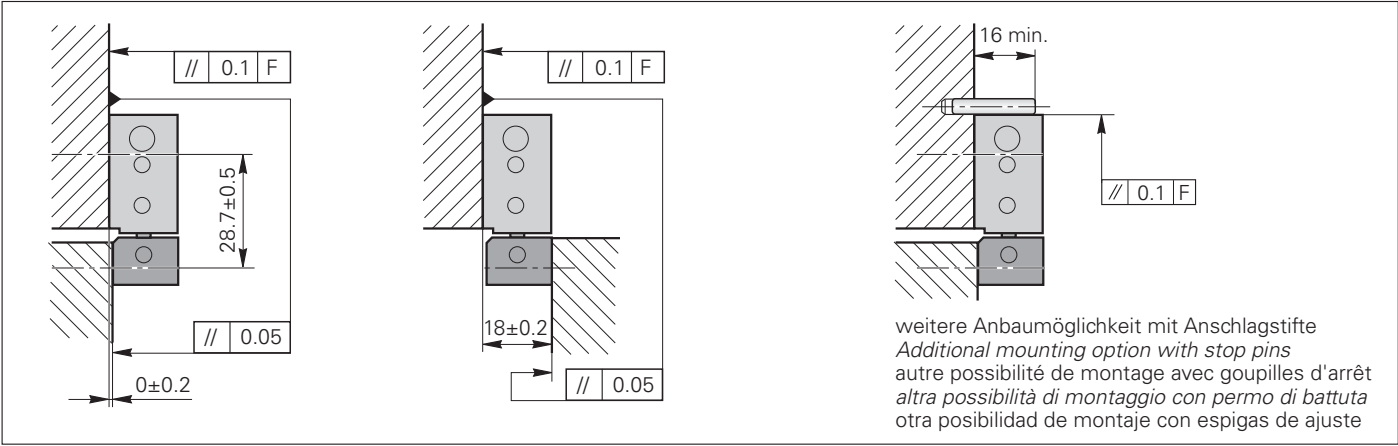
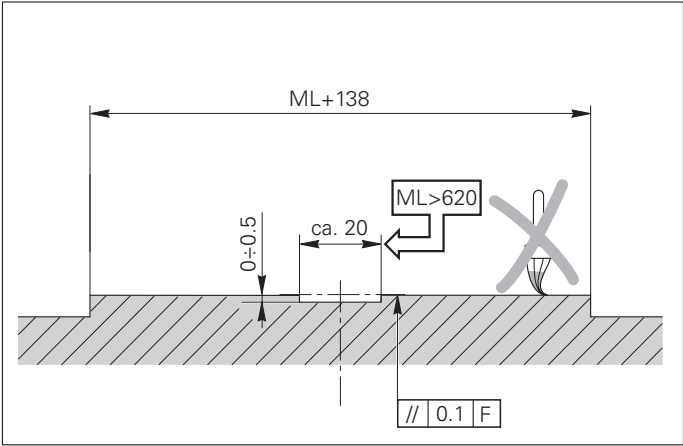
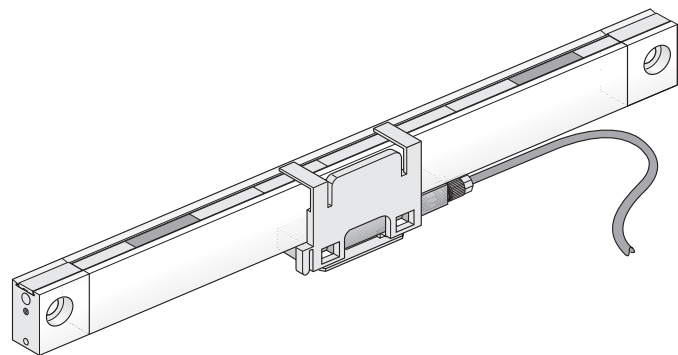


(K) = Kundenseitige Anschlussmaße
Required mating dimensions
conditions requises pour le montage
dimensioni di collegamento lato cliente
cotas de montaje requeridas

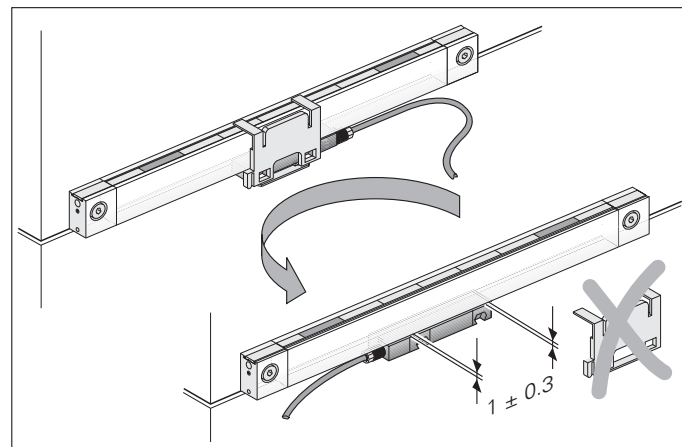
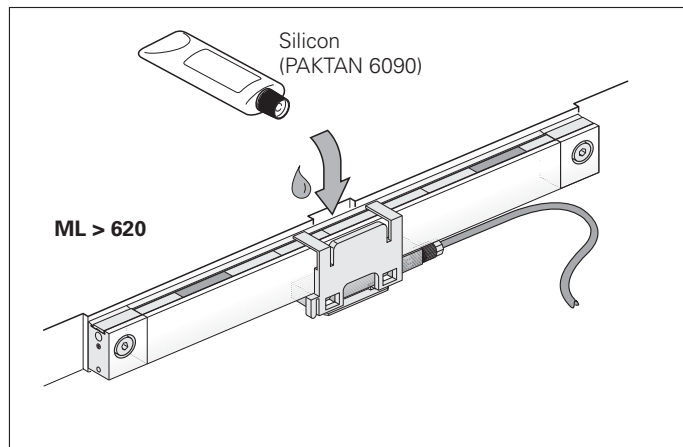
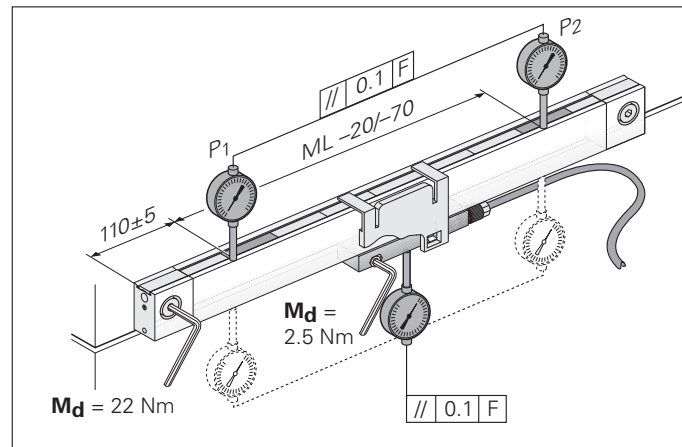
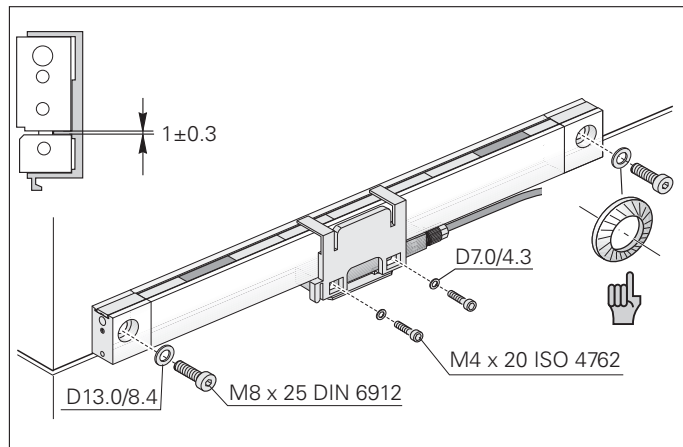
F = Maschinenführung
Machine guideway
guidage de la machine
guida della macchina
guía de la máquina

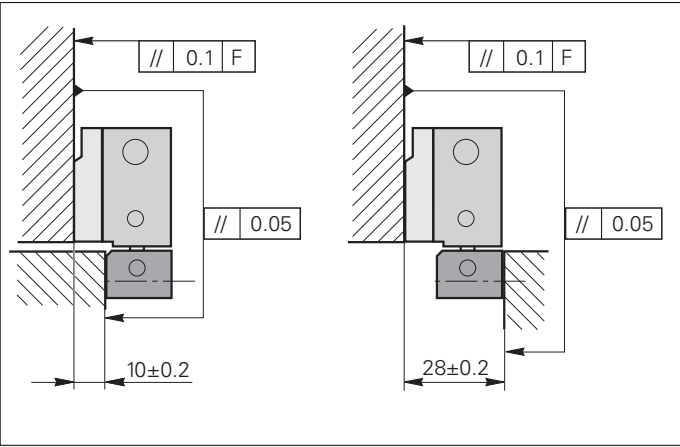
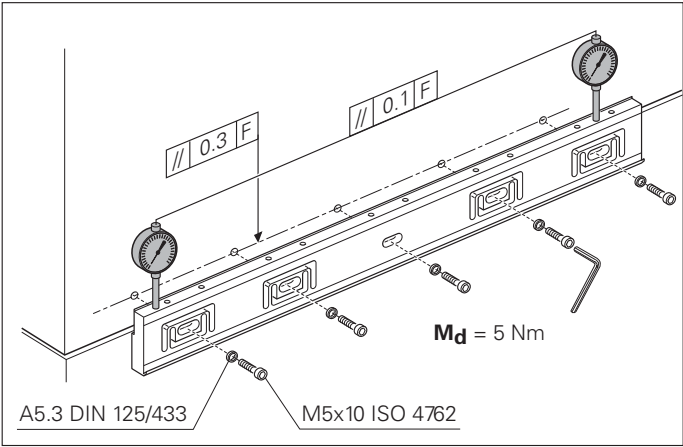
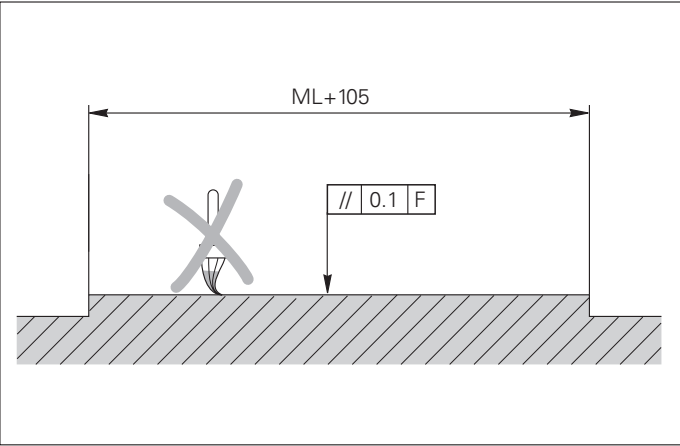
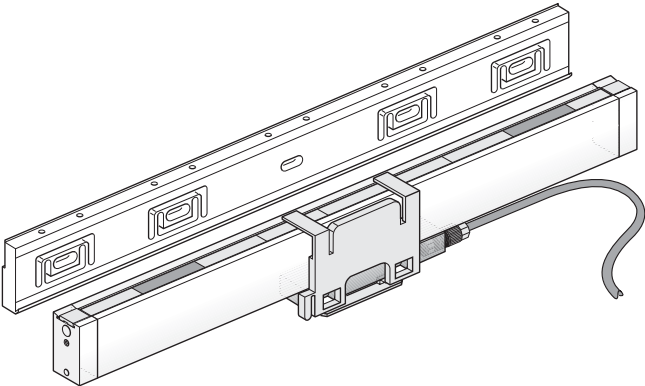
(D) = Druckluftanschluss
Compressed air inlet
raccordement d'air comprimé
ingresso per pressurizzazione
conexión de aire comprimido

Anbau ohne Montageschiene · *Mounting without Mounting Spar* · Montage sans rail de guidage

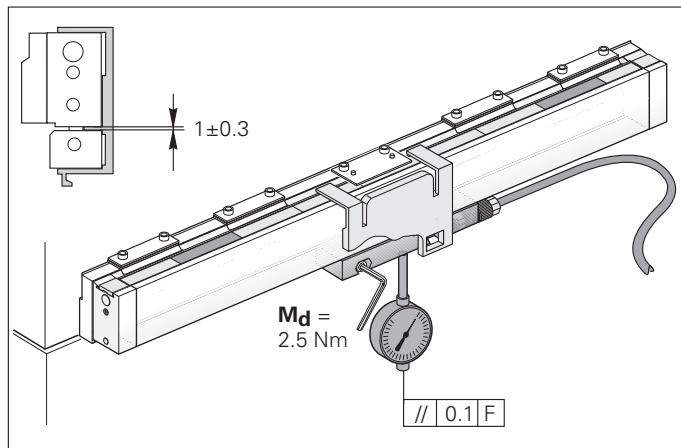
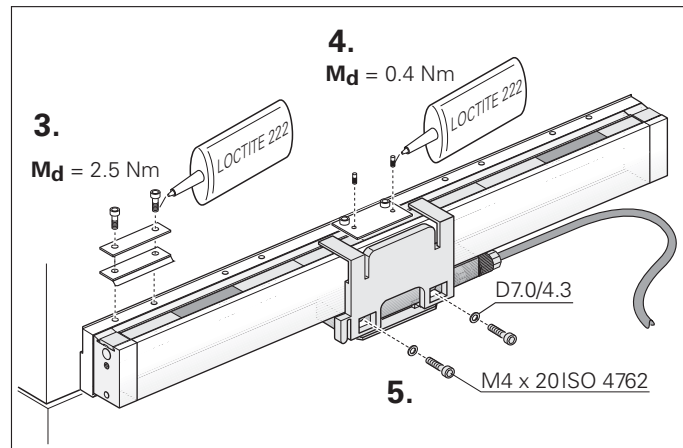
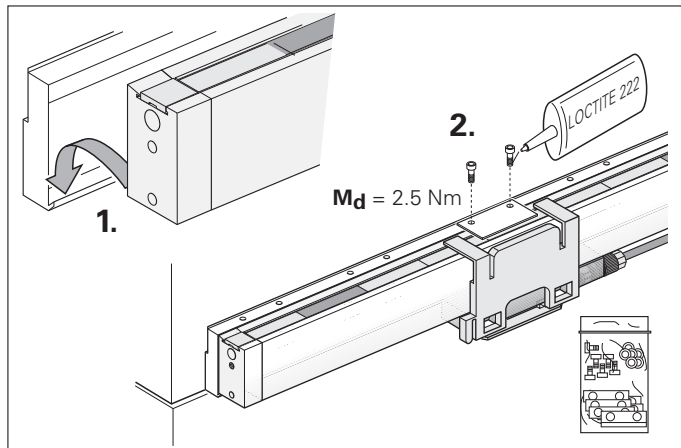


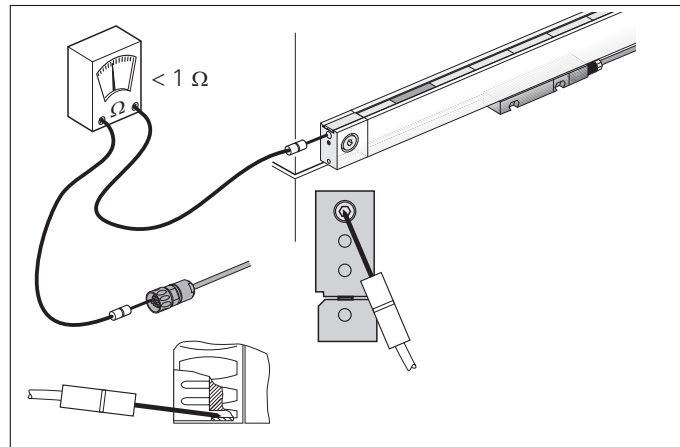
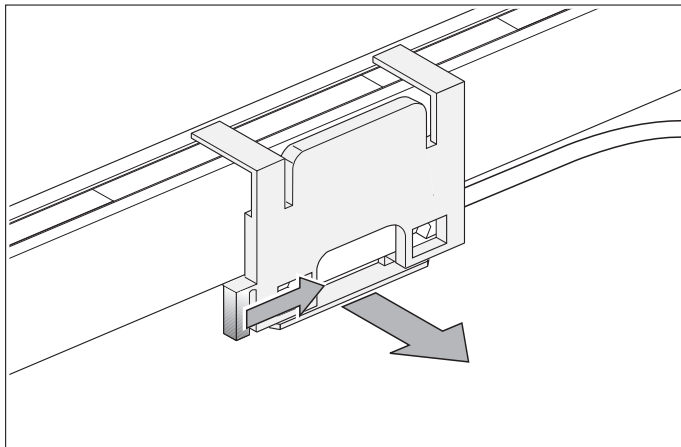
Montaggiosenza guida · Instalación sin guía de montaje





Montaggio con guida · Instalación con guía de montaje





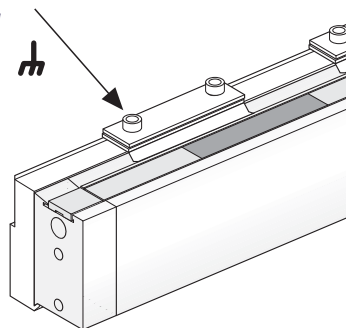
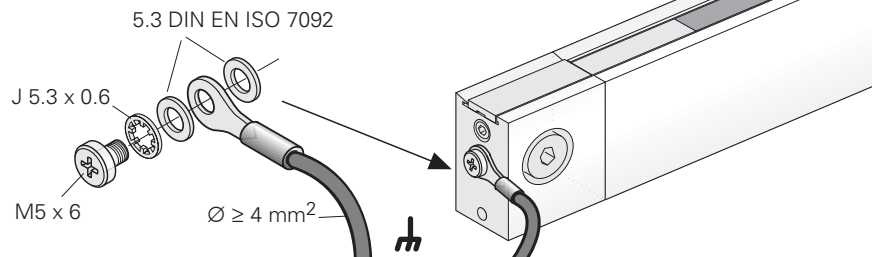
Bei Erdungsproblemen zusätzlich Endstück oder Montageschiene erden!

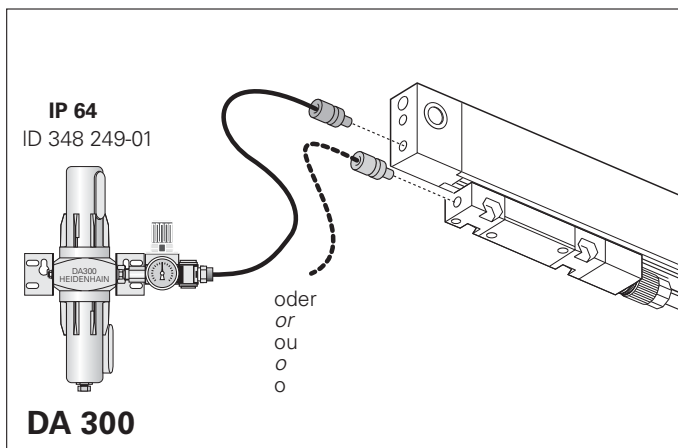
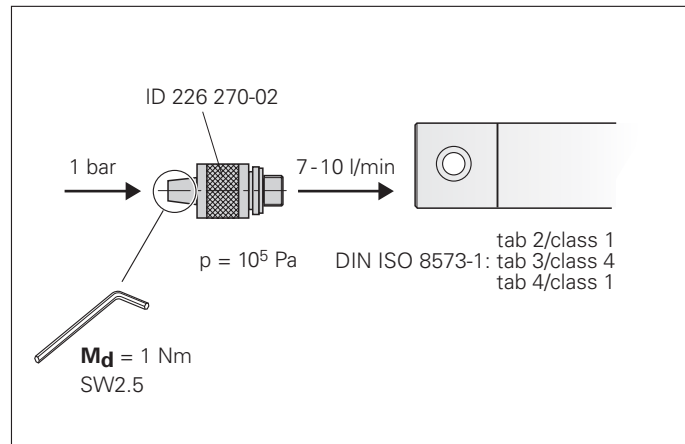
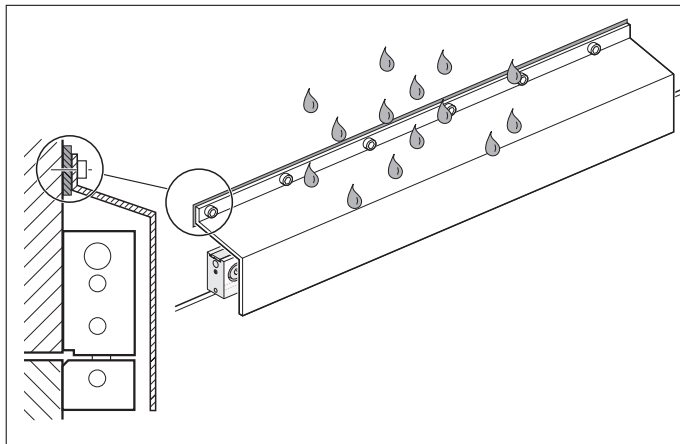
If grounding problems occur, ground also the end piece or mounting spar!

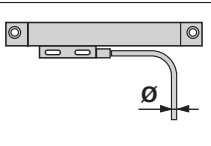
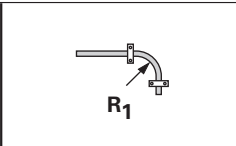
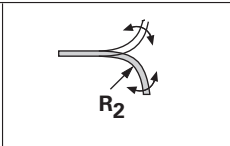
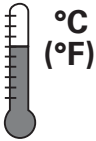
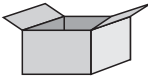
En cas de problèmes de mise à la terre, mettre aussi l'embout ou le rail de montage à la terre!

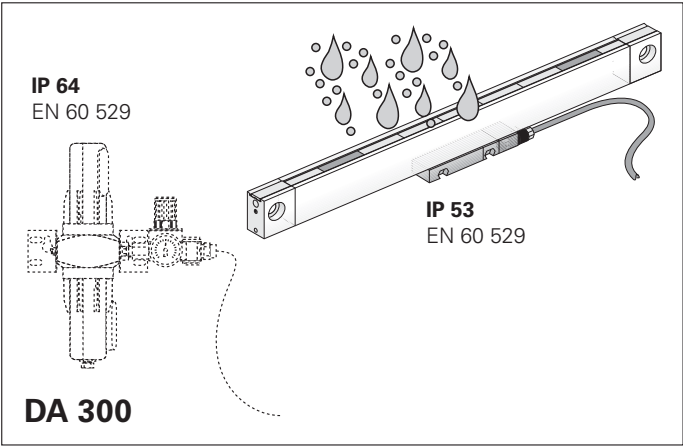
Nel caso di problemi di messa a terra, mettere a terra anche il blocchetto terminale o la guida di montaggio!

¡En caso de problemas de tierras, poner a tierra adicionalmente la pieza final o la guía de montaje!

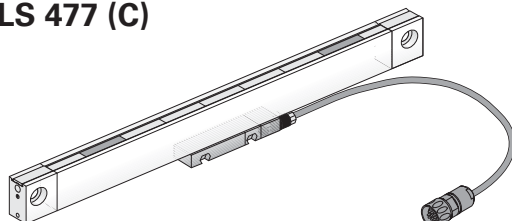




			  -20 ... 70 °C (- 4 ... 158 °F)
Ø 6 mm	$R_1 \geq 20 \text{ mm}$	$R_2 \geq 75 \text{ mm}$	
Ø 10 mm	$R_1 \geq 35 \text{ mm}$	$R_2 \geq 75 \text{ mm}$	
 Ø 8 mm	$R_1 \geq 40 \text{ mm}$	$R_2 \geq 100 \text{ mm}$	



LS 477 (C)



$$U_P = 5V \pm 5\% \quad (\text{max. } 140 \text{ mA})$$

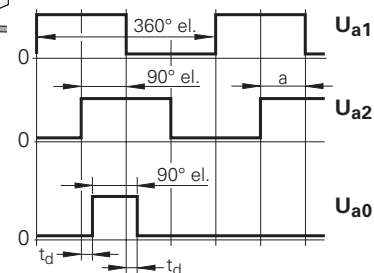


EN 50 178/4.98; 5.2.9.5
IEC 364-4-41: 1992; 411 (PELV/SELV)

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



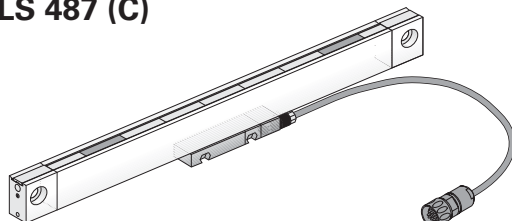
U_{a1}, U_{a2}, U_{a0}
 $\overline{U_{a1}}, \overline{U_{a2}}, \overline{U_{a0}}, \overline{U_{aS}}$



$$|t_d| \leq 0.1 \mu s$$

$$a \geq 0.5 \mu s$$

LS 487 (C)

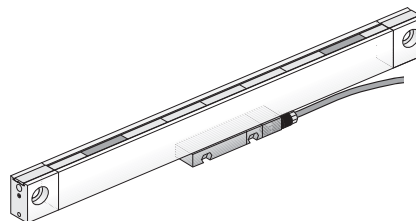


$$U_P = 5V \pm 5\% \quad (\text{max. } 150 \text{ mA})$$

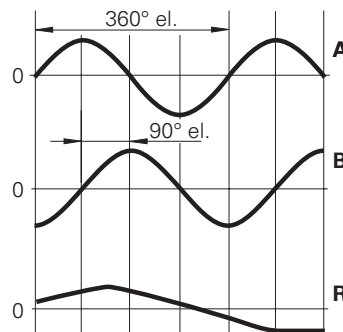


EN 50 178/4.98; 5.2.9.5
IEC 364-4-41: 1992; 411 (PELV/SELV)

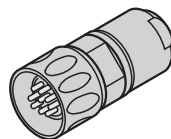
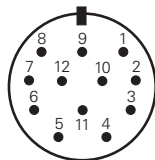
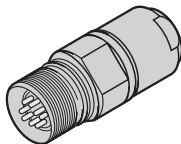
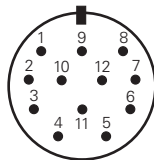
(siehe, see, voir, vedi, véase
HEIDENHAIN D 231 929)



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

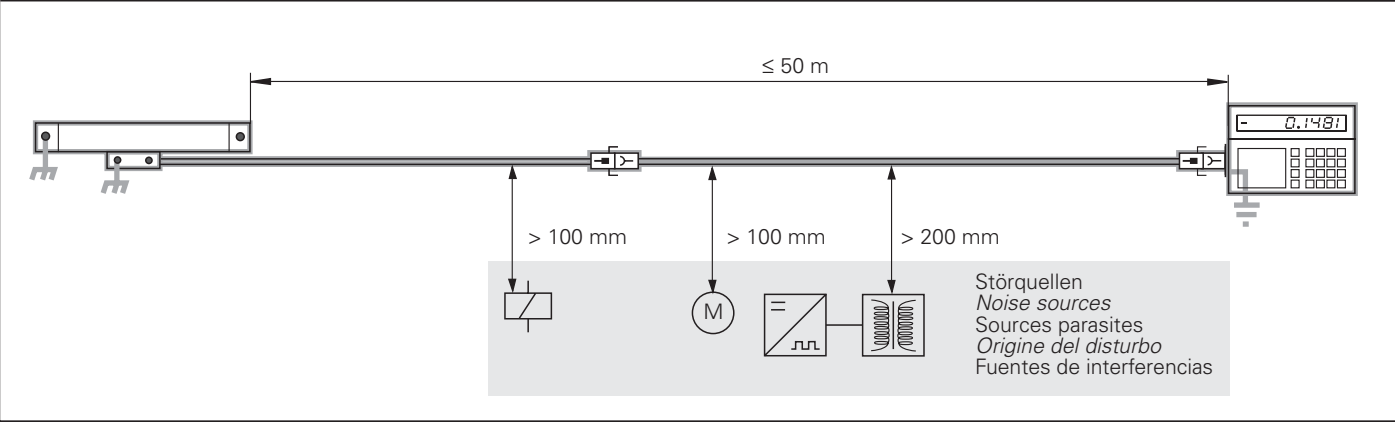


LS 477 (C)

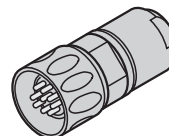
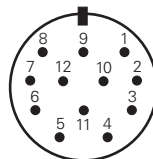
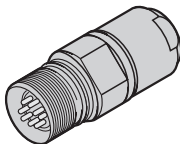
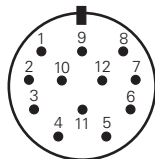


Schirm auf Gehäuse
Shield on housing
Blindage sur boîtier
Schermo sulla carcassa
Blindaje a carcasa

5	6	8	1	3	4	12	10	2	11	7	/
U_{a1}	$\overline{U_{a1}}$	U_{a2}	$\overline{U_{a2}}$	U_{a0}	$\overline{U_{a0}}$	5V U_P	0V U_N	5V sensor	0V sensor	$\overline{U_{aS}}$	/
braun <i>brown</i> brun <i>marrone</i> marrón	grün <i>green</i> vert <i>verde</i> verde	grau <i>gray</i> gris <i>grigio</i> gris	rosa <i>pink</i> rose <i>rosa</i> rosa	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> marron/verde	weiß/grün <i>white/green</i> blanc/vert <i>bianco/verde</i> blanco/verde	blau <i>blue</i> bleu <i>azzurro</i> azul	weiß <i>white</i> blanc <i>bianco</i> blanco	violett <i>violet</i> violet <i>viola</i> violeta	gelb <i>yellow</i> jaune <i>giallo</i> amarillo

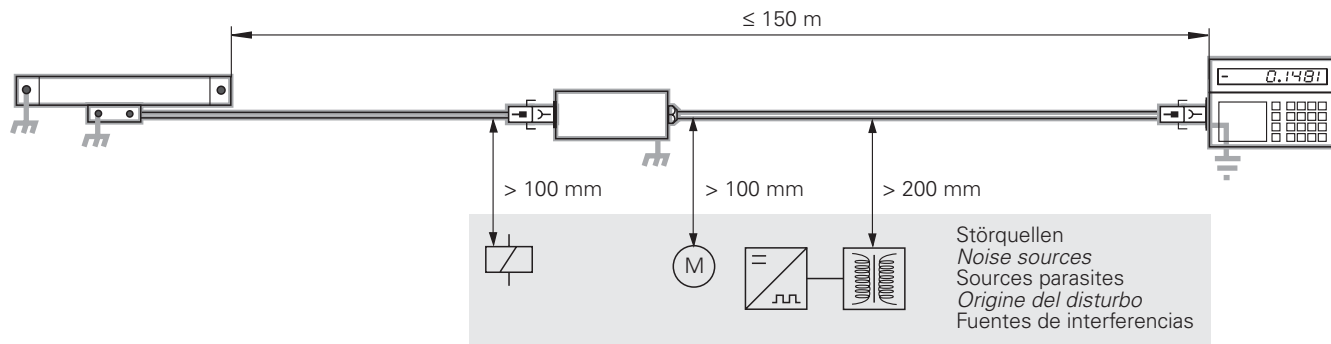


LS 487 (C)



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

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



HEIDENHAIN

DR. JOHANNES HEIDENHAIN GmbH

Dr.-Johannes-Heidenhain-Straße 5

83301 Traunreut, Germany

☎ +49 (86 69) 31-0

FAX +49 (86 69) 50 61

E-Mail: info@heidenhain.de

Technical support FAX +49 (86 69) 32-10 00

Measuring systems ☎ +49 (86 69) 31-31 04

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

TNC support ☎ +49 (86 69) 31-31 01

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

NC programming ☎ +49 (86 69) 31-31 03

E-Mail: service.nc-pgm@heidenhain.de

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

SALES & SERVICE:

A Tech Authority, Inc.

13745 Stockton Ave.

Chino CA 91710

909-614-4522

sales@atechauthority.com



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