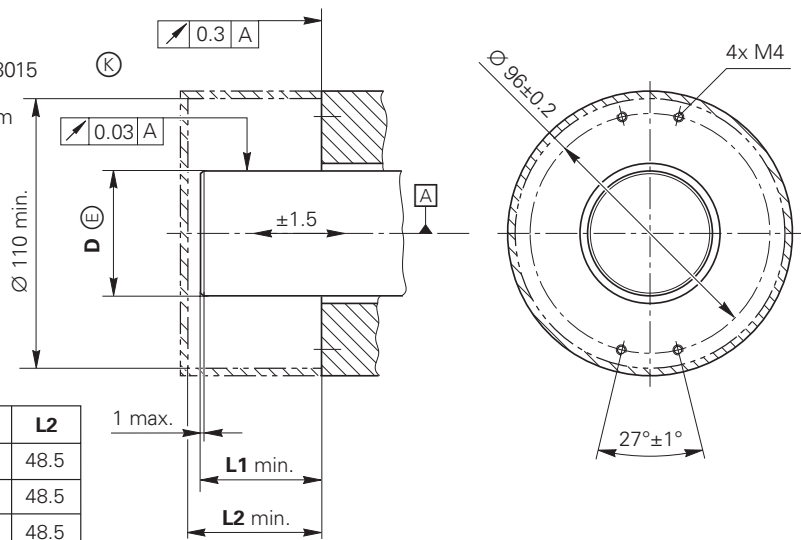


mm  
 Tolerancing ISO 8015  
 ISO 2768 - m H  
 < 6 mm: ±0.2 mm

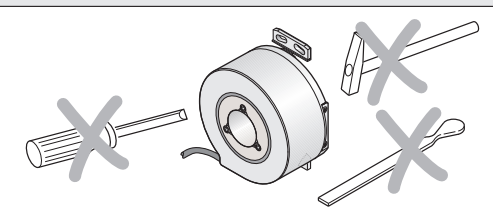
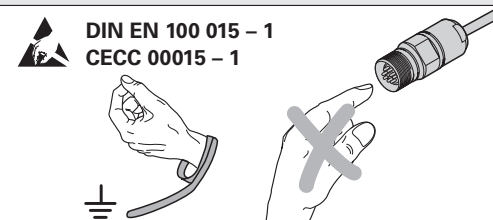
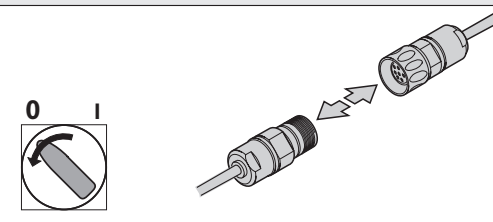
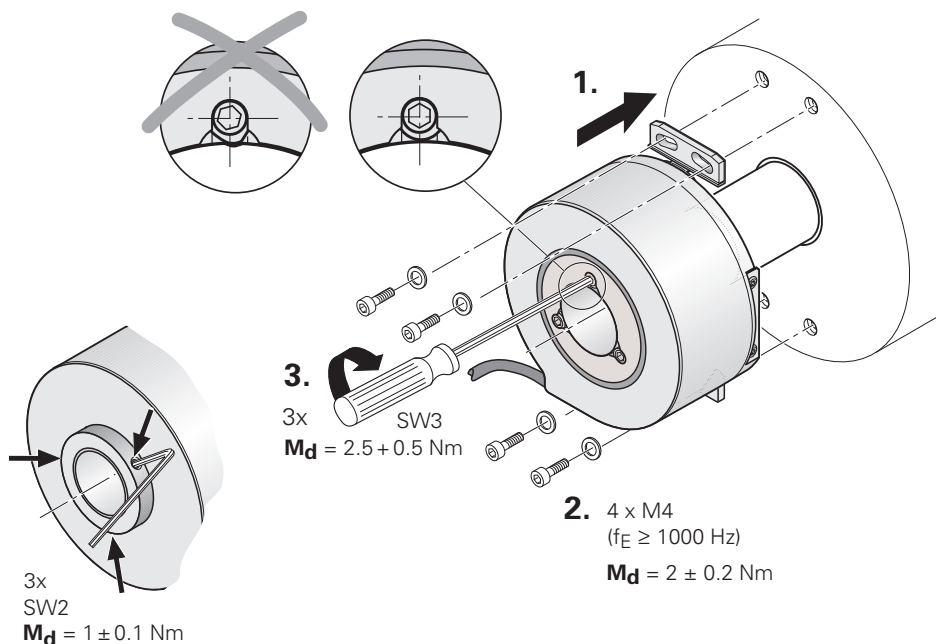
EN 60 529



D	L1	L2
Ø 20h7	46	48.5
Ø 25h7	46	48.5
Ø 28h7	46	48.5
Ø 30h7	46	48.5
Ø 38h7	56	58.5
Ø 40h7	56	58.5
Ø 48h7	56	58.5
Ø 50h7	56	58.5

Ⓚ = Kundenseitige Anschlussmaße  
 Required mating dimensions  
 Conditions requises pour le montage  
 Quote per il montaggio  
 Cotas de montaje requeridas

ⓐ = Lagerung  
 Bearing  
 Roulement  
 Cuscinetto  
 Rodamiento



# HEIDENHAIN

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

## ERN 180

4/2003

### DR. JOHANNES HEIDENHAIN GmbH

Dr.-Johannes-Heidenhain-Straße 5

83301 Traunreut, Germany

☎ +49 (8669) 31-0

FAX +49 (8669) 50 61

E-Mail: info@heidenhain.de

**Technical support** ☎ +49 (8669) 32-10 00

**Measuring systems** ☎ +49 (8669) 31-31 04

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

**TNC support** ☎ +49 (8669) 31-31 01

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

**NC programming** ☎ +49 (8669) 31-31 03

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

**PLC programming** ☎ +49 (8669) 31-31 02

E-Mail: service.plc@heidenhain.de

**Lathe controls** ☎ +49 (8669) 31-31 05

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

[www.heidenhain.de](http://www.heidenhain.de)



Ve 00

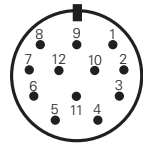
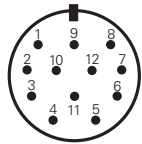
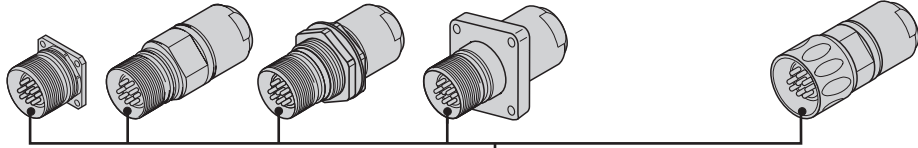
385 514-91 · 12 · 5/2007 · E · Printed in Germany · Änderungen vorbehalten

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

# ERN 180



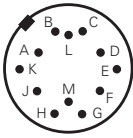
27S12-03    03S12-03    80S12-03    35S12-03    02S12-03



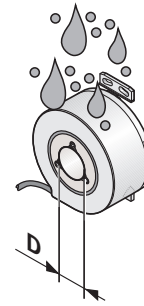
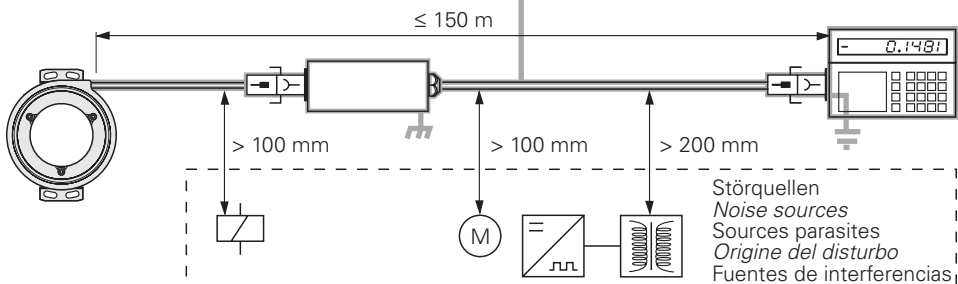
5	6	8	1	3	4	Schirm Shield Blindage Scherma Blindaje	12	10	2	11
A		B		R			5V U <sub>P</sub>	0V U <sub>N</sub>	5V sensor	0V sensor
+	-	+	-	+	-					
braun brown brun marrone marrón	grün green vert verde verde	grau gray gris gris	rosa pink rose rosa rosa	rot red rouge rosso rojo	schwarz black noir nero negro			braun/grün brown/green brun/vert marrone/verde marrón/verde	weiß/grün white/green blanc/vert bianco/verde blanco/verde	blau blue bleu azzurro azul



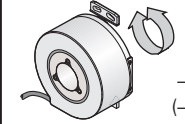
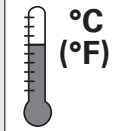
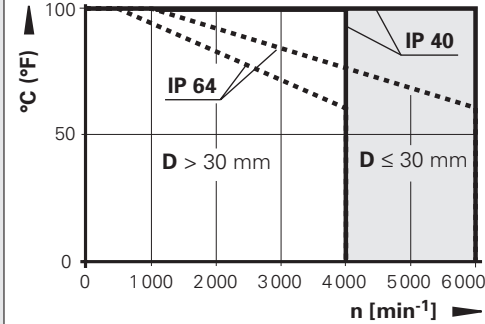
28S12-2Z



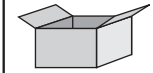
E	F	H	A	C	D	Schirm Shield Blindage Scherma Blindaje	M	K	B	L
A		B		R			5V U <sub>P</sub>	0V U <sub>N</sub>	5V sensor	0V sensor
+	-	+	-	+	-					
braun brown brun marrone marrón	grün green vert verde verde	grau gray gris gris	rosa pink rose rosa rosa	rot red rouge rosso rojo	schwarz black noir nero negro			braun/grün brown/green brun/vert marrone/verde marrón/verde	weiß/grün white/green blanc/vert bianco/verde blanco/verde	blau blue bleu azzurro azul



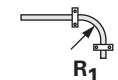
IP xx  
EN 60 529



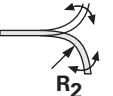
-40 ... 100 °C  
(-40 ... 212 °F)



-30 ... 80 °C  
(-22 ... 176 °F)



T ≥ -40 °C  
(-40 °F)



T ≥ -10 °C  
(14 °F)

Ø 6 mm

R<sub>1</sub> ≥ 20 mm

R<sub>2</sub> ≥ 75 mm

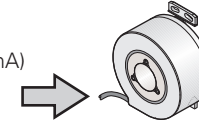


Ø 8 mm

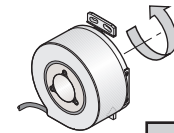
R<sub>1</sub> ≥ 40 mm

R<sub>2</sub> ≥ 100 mm

U<sub>P</sub> = 5V ± 10 %  
(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)



A, B, R

