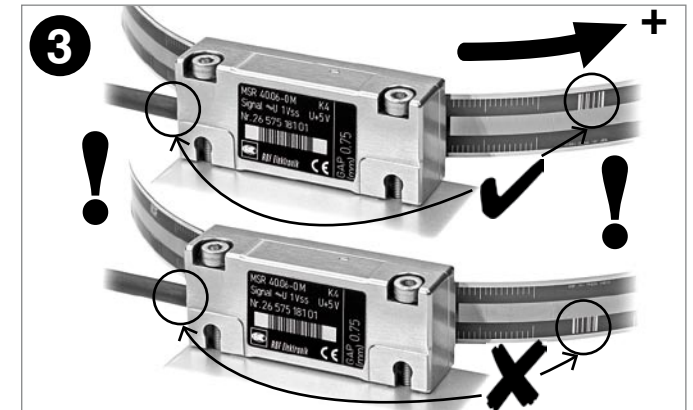
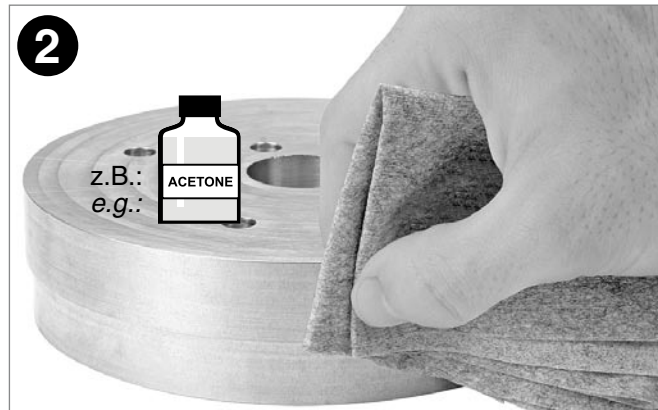
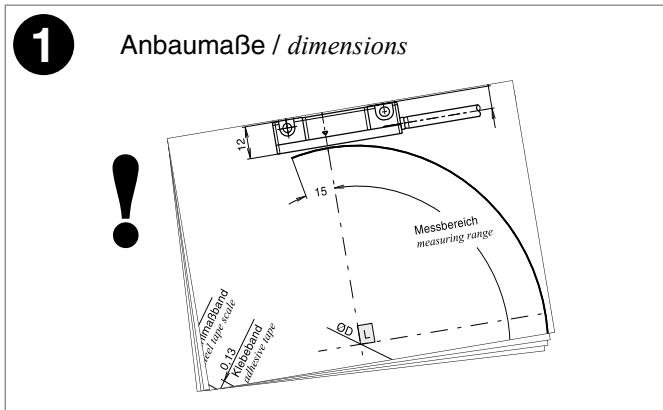
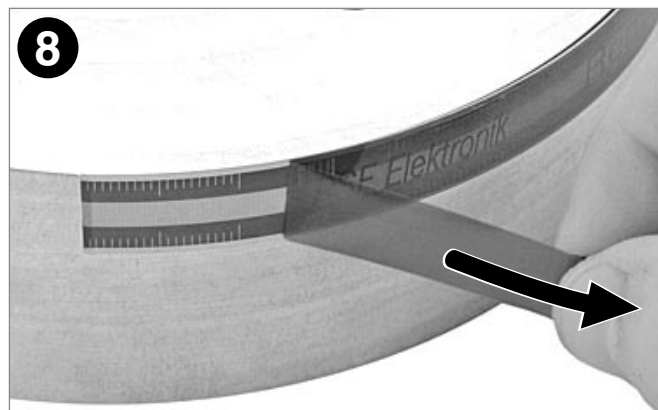
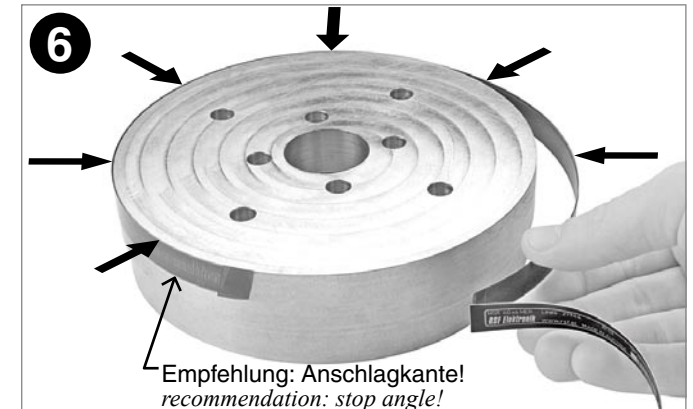
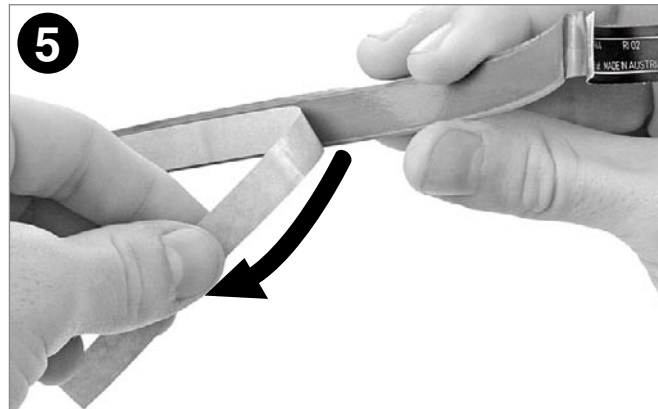


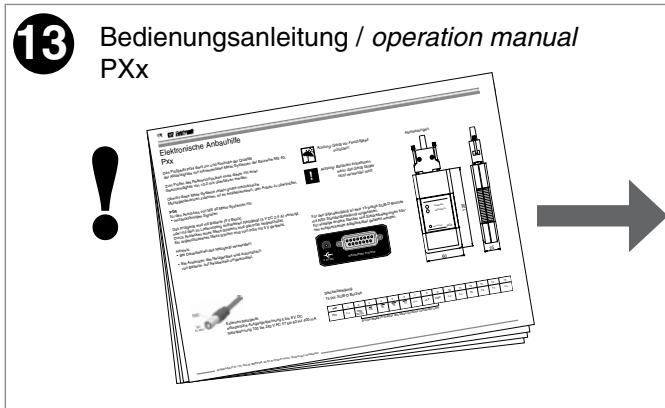
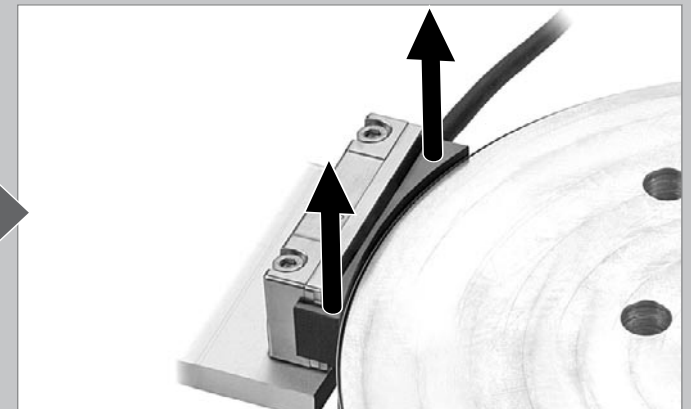
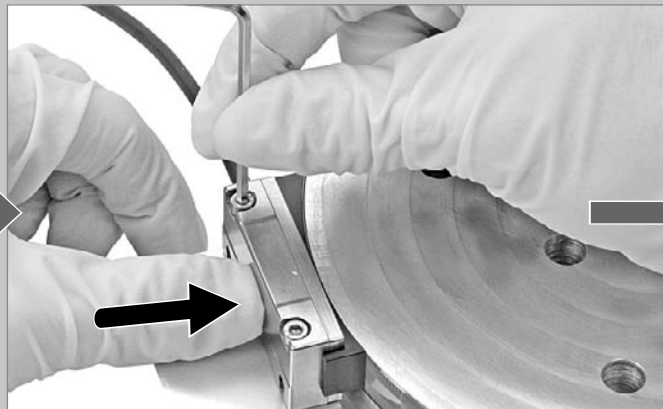
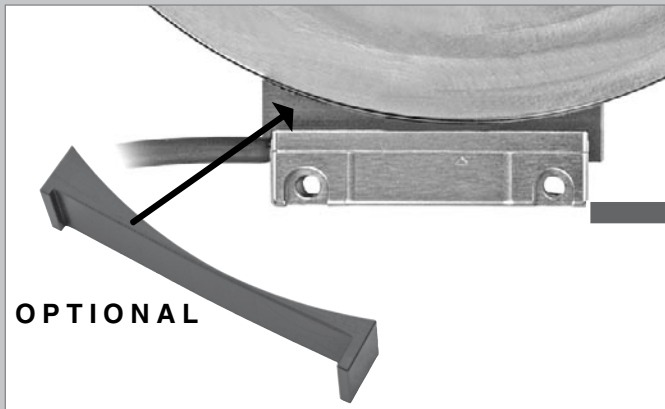
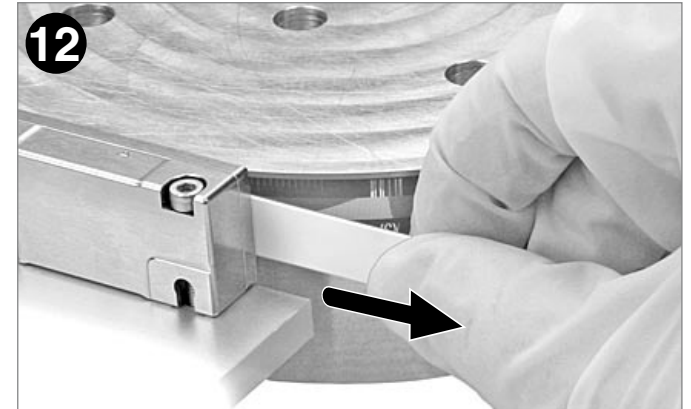
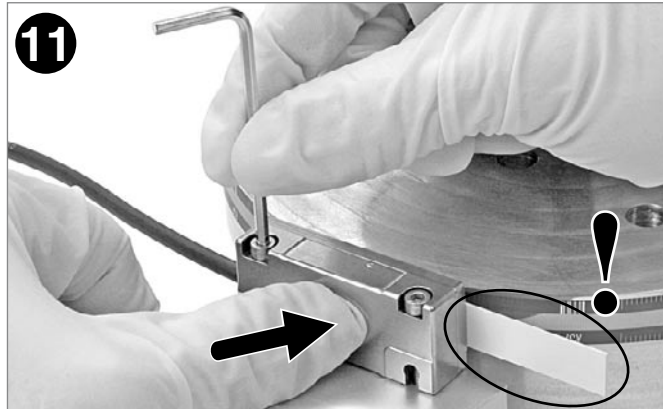
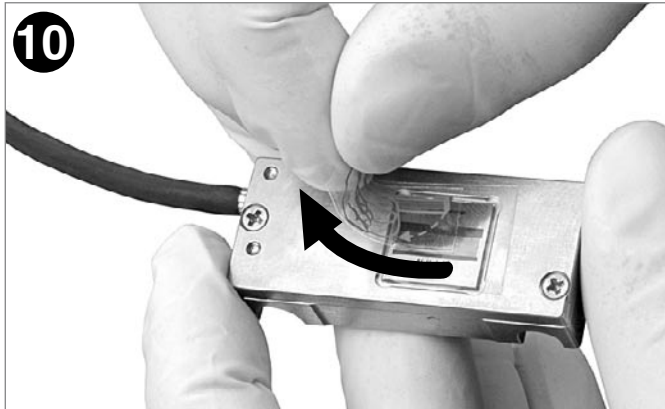
# Montageanleitung / *Mounting Instruction*

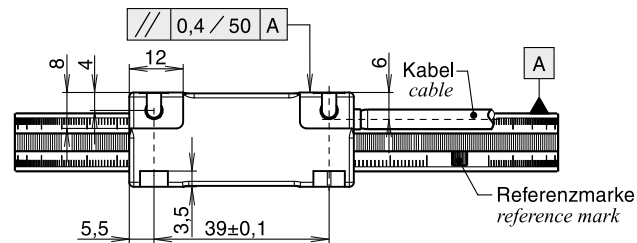
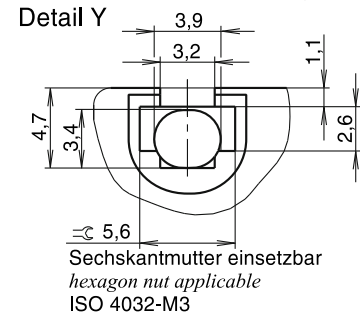
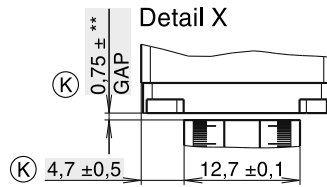
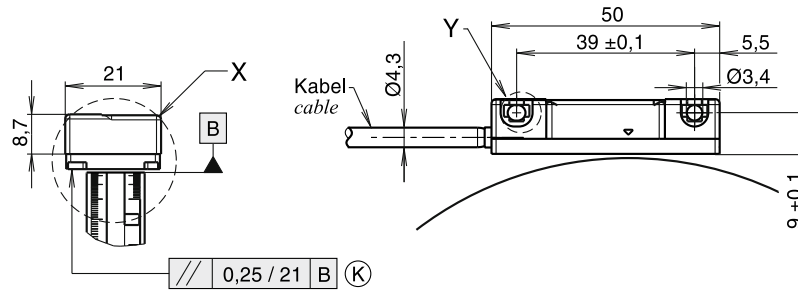
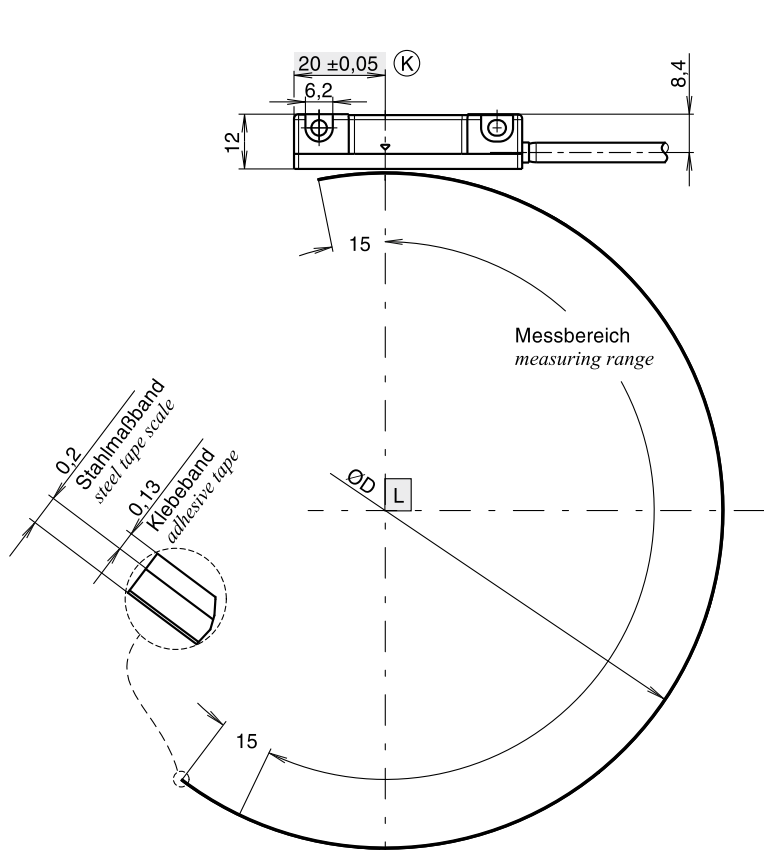
## MSR 40 MKS Stahlmaßband mit aufgezogenem Klebeband / *steel tape scale with adhesive tape*



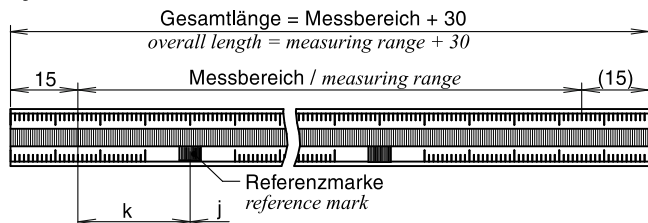
- 4**
- Verklebungstemperatur zwischen +18 °C und +38 °C, unter +15 °C keine ausreichende Soforthaftung!  
*adhesion temperature is from 64 °F to 100 °F, below 59 °F no sufficient bond strength!*
  - auf ausreichenden, gleichmäßigen Anpressdruck achten!  
*keep attention to a firm application pressure!*
  - Endklebekraft nach ca. 72 Stunden  
*bond strength after approx. 72 hours*







Darstellung gestreckt  
representation stretched



(K) = kundenseitige Anbaumaße  
required mating dimensions

\*\* D < Ø500 = +0,2 mm / -0,1 mm

\*\* D ≥ Ø500 = +0,4 mm / -0,2 mm

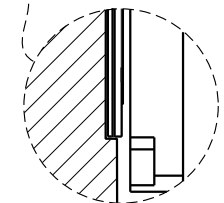
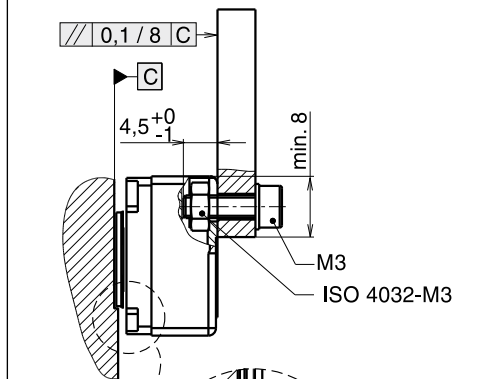
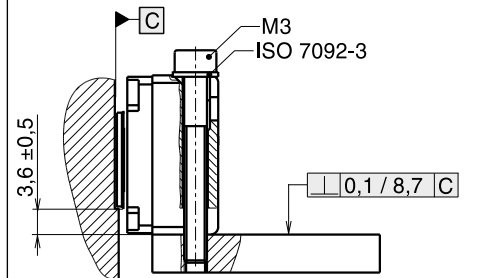
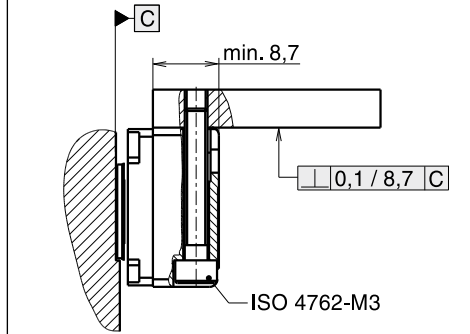
L = Lagerung  
bearing

D = Wellendurchmesser  
shaft diameter

**Referenzmarke / reference mark:**

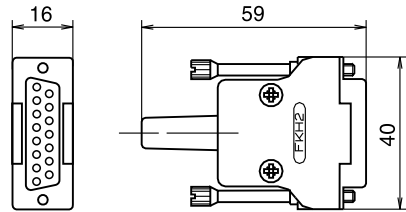
k = beliebige Position der Referenzmarke vom Beginn der Messlänge  
= any position of reference mark from the beginning of measuring length

j = zusätzliche Referenzmarken im Abstand von n x 100 mm  
= additional reference marks separated by n x 100 mm

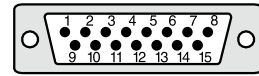


**Empfehlung: Anschlagkante!**  
recommendation: stop angle!

**Stecker LD15 15-polig**  
*Connector LD15 15-pin*



**PIN Belegung (Sicht auf Stiftseite)**  
*Pin-out (view on pins)*



**Steckerbelegung / Connector pin out**

PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Rechtecksignale über Line Driver <i>Square wave signals via Line Driver</i>	nc	Sensor 0 V	Us	RI	T2	T1	Sensor +5 V	+5 V	0 V	nc	nc	RI	T2	T1	Schirm shield

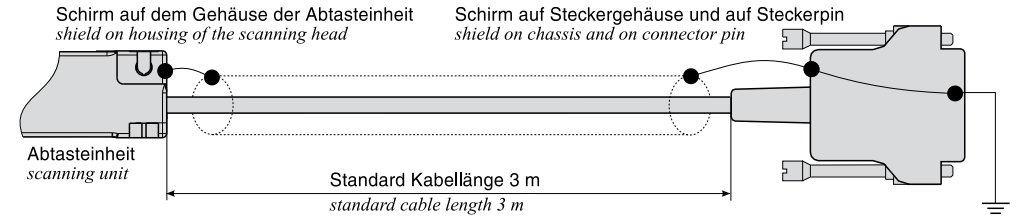
PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Spannungssignale <i>Voltage signals</i>	nc	Sensor 0 V	nc	RI	A2	A1	Sensor +5 V	+5 V	0 V	nc	nc	RI	A2	A1	Schirm shield

- **Sensor:**  
 Die Sensor-Pins sind im Steckergehäuse auf die jeweilige Spannungsversorgung gebrückt  
*The sensor-pins are bridged in the chassis with the particular power supply*
- **Schirm** ist zusätzlich mit dem Steckergehäuse verbunden  
*The shield is connected with the chassis*

**Schirmverbindungen / Cable shielding**

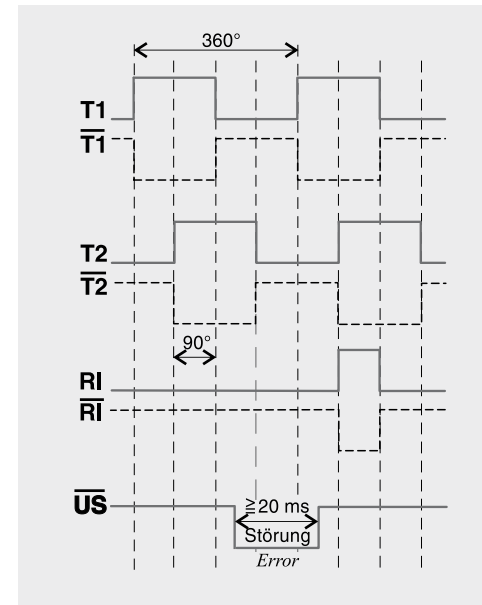
Geschirmtes PUR-Kabel, Standard, Ø4,3 mm  
 Biegeradius einmalig > 10 mm, dauernd > 50 mm,  
 Torsion > 300.000 Zyklen, Schleppkette > 5.000.000 Zyklen  
 Das Steckergehäuse muss galvanisch mit Schutzerde verbunden sein

*Shielded PUR-cable, standard, Ø 4.3 mm*  
*bending radius fixed mounting > 10 mm, continuous flexing > 50 mm*  
*torsion > 300,000 cycles, dragchain > 5,000,000 cycles*  
 The connector housing must be connected to protective ground

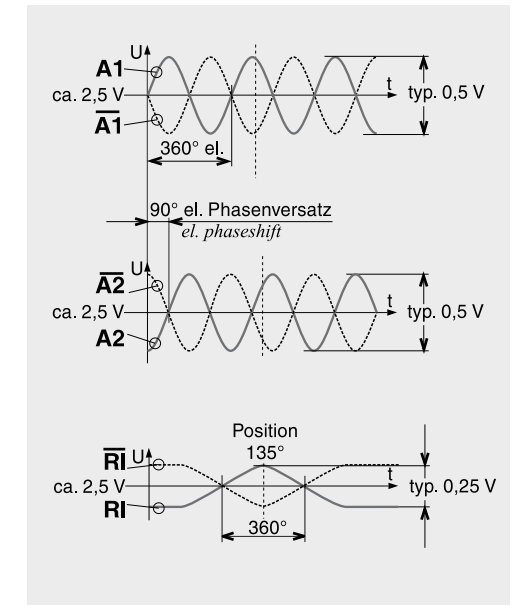


**Ausgangssignale / Output signals**

**Rechtecksignale**  
*Square wave signals*



**Sinusförmige Spannungssignale**  
*Voltage signals*

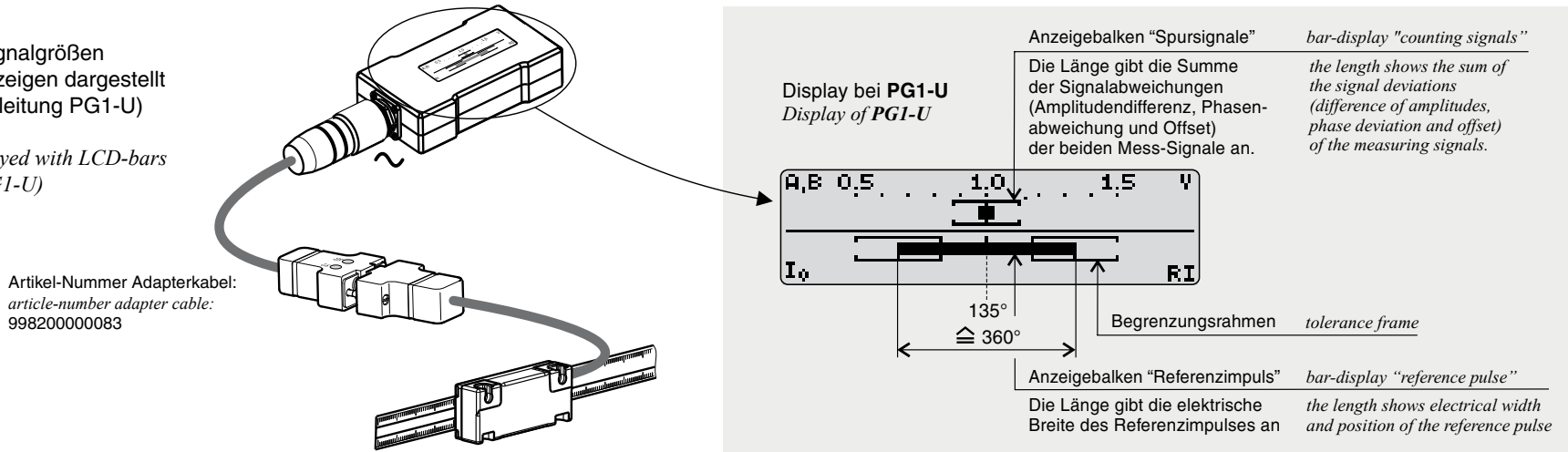




Zur einfacheren Kontrolle bietet RSF Elektronik verschiedene Prüfgeräte an, mit deren Hilfe dieser Vorgang schnell und komfortabel durchzuführen ist.  
 For the easier control RSF offers various signal test boxes. With these test boxes all encoder signals can be quickly and easily checked.

Sinusförmige Spannungssignale 1 V<sub>ss</sub> / *Voltage signals 1 V<sub>pp</sub>* = **PG1-U, PG-U**  
 Rechtecksignale / *Square wave signals* = **PG4, PS4**

- **PG1-U:**  
 alle funktionsrelevanten Signalgrößen werden mit LCD-Balkenanzeigen dargestellt (siehe auch Bedienungsanleitung PG1-U)  
*all relevant signals are displayed with LCD-bars (also in operation manual PG1-U)*



- **PG4 / PG-U, PS4**  
 alle funktionsrelevanten Signalgrößen werden mit LED's angezeigt (siehe auch Bedienungsanleitung PG4, PG-U, PS4)  
*all relevant signals are displayed with LED's (also in operation manual PG4 resp. PG-U, PS4)*

