

## EX Instructions


### Number of EC type examination certificate

TÜV 96 ATEX 1122 X

### Amendment to operating instructions for these type series

<u>Type</u>	<u>Description</u>	<u>Instructions</u>
CG2011	Submersible pressure transmitter	BA_048

### Marking

 II 1 G Ex ia IIC T6 Ga

- BG: Ако не разбирате указанията за безопасност, можете да изискате превод на вашия език.
- CZ: Pokud těmto bezpečnostním pokynům nerozumíte, můžete si vyžádat jejich překlad do vašeho jazyka.
- DA: Hvis du ikke forstår sikkerhedshenvisningerne, kan du forespørge en oversættelse i dit sprog.
- DE: Wenn Sie diese Sicherheitshinweise nicht verstehen, können Sie eine Übersetzung in Ihrer Landessprache anfordern.
- EL: Εάν δεν καταλαβαίνετε αυτές τις υποδείξεις ασφαλείας, μπορείτε να ζητήσετε μια μετάφραση στη μητρική σας γλώσσα.
- ES: Si no entiende estas indicaciones de seguridad, puede solicitar una traducción en su idioma.
- ET: Kui need ohutusnõuded ei ole teile arusaadavad, võite tellida meilt tõlke oma keelde.
- FI: Jos et ymmärrä näitä turvaohjeita, voi pyytää ne lähetettäväksi omalle kielellesi käännettynä.
- FR: Si vous ne comprenez pas les consignes de sécurité, vous pouvez faire la demande d'une traduction dans votre langue.
- HU: Amennyiben nem érti ezeket a biztonsági utasításokat, akkor kérheti ezeknek az Ön nyelvére lefordított változatát.
- IT: Nel caso non capite queste avvertenze di sicurezza, ne potete richiedere una traduzione nella vs. lingua.
- LT: Jei nesuprantate šių saugos reikalavimų, galite užsisakyti jų vertimą į Jūsų kalbą.
- LV: Ja jūs nesaprotat šos drošības norādījumus, jūs varat pieprasīt tulkojumu jūsu valodā.
- NL: Indien u deze veiligheidsinstructies niet begrijpt, kunt u een vertaling in uw eigen taal aanvragen.
- PL: Jeżeli niniejsze przepisy bezpieczeństwa są niezrozumiałe, można poprosić o tłumaczenie we własnym języku.
- PT: Se não compreender os avisos de segurança, pode solicitar uma tradução no seu idioma.
- RO: Dacă nu înțelegeți aceste instrucțiuni de siguranță puteți cere traducerea acestora în limba dvs.
- SK: Ak ste nepochopili bezpečnostné pokyny, môžete si vyžiadať preklad do svojho jazyka.
- SL: Če teh navodil ne razumete, lahko zahtevate prevod v Vaš jezik.
- SV: Om du inte förstår den här säkerhetsanvisningen kan du begära att få en översättning till ditt språk.

## 1 General Safety Notes

The installation, set up, service or disassembly of this device must only be done by trained, qualified personnel using suitable equipment and authorized to do so.

Ensure that the device is suitable for the process and undamaged.

Measuring devices in explosive environments must be installed and commissioned by competent personnel that are familiar with the specialties of explosion protection. Modifications or damage of devices or electrical connections might negatively influence the operating safety or the ex-proofing.

Observe the regulations and standards for erection and operation of electrical installations in explosive atmospheres as well as the installation and safety notes in the corresponding operation instructions.

Avoid electrostatic charge on plastic surfaces, if present.

## 2 Requirements for intrinsically safe supply

Connect the pressure transmitter to a certified intrinsically safe power circuit.

The following maximum connected values apply to the pressure transmitter power circuit:

$$U_i \leq 30 \text{ V}$$

$$I_i \leq 150 \text{ mA}$$

$$P_i \leq 700 \text{ mW}$$

Effective internal inductance:

$$L_i \leq 50 \text{ } \mu\text{H}$$

Effective internal capacity:

$$C_i \leq 20 \text{ nF}$$

The following maximum connected values apply to the Pt100 power circuit:

$$U_i \leq 20 \text{ V}$$

$$I_i \leq 320 \text{ mA}$$

$$P_i \leq 100 \text{ mW}$$

Effective internal inductance:

$$L_i \leq 50 \text{ } \mu\text{H}$$

Effective internal capacity:

$$C_i \leq 6 \text{ nF}$$

The effective internal inductance and capacities apply for a max. cable length of 50 metres, both for the pressure transmitter power circuit as well as the Pt100 power circuit.

Since the intrinsically safe signal circuit is connected with earth potential for safety reasons, potential equalisation has to exist in the complete course of the erection of the intrinsically safe circuit.

### 3 Permissible media and ambient temperatures

Type	Marking	Class	Medium	Ambient
All	II 1 G Ex ia IIC T6 Ga	T4	-20...70 °C	-20...70 °C
		T5	-20...40 °C	-20...40 °C
		T6	-20...40 °C	-20...40 °C
for zone 0		T6	-20...40 °C	-20...40 °C

For temperature classes T1, T2 and T3 the temperature limits for T4 apply.

### 4 Additional Requirements

If category 1 requirements apply the submersible pressure transmitter must only be operated at atmospheric conditions (0.8 to 1.1 bar).

Avoid electrostatic charges on powder-coated housing parts.

Submersible pressure transmitters with a titanium housing need to be secured against vibrations and oscillations to avoid sparking.



Lösungen nach Maß für industrielle Druck- und Temperaturmessungen in den Bereichen Food, Pharma, Biotechnik, Chemie, Petrochemie, Energie, Umweltschutz und Seeschifffahrt.  
"Made to Measure" Process Instrumentation for Pressure and Temperature Measurement in the Food, Pharmaceutical, Bio-Technology, Chemical, Petro-Chemical, Power, Environmental and Maritime Industries.

## EU-Konformitätserklärung *EU Declaration of Conformity*

KE\_024

Hersteller / Manufacturer

**LABOM Mess- und Regeltechnik GmbH**  
Im Gewerbepark 13, 27798 Hude

Die CE-Kennzeichnung der Geräte

*The CE symbol on the devices*

**Tauchsonde** der Typenreihe

***Submersible pressure transmitter, type series***

**CG201x**

weist auf die Übereinstimmung mit den relevanten Richtlinien hin.

*indicates their compliance with the relevant directives.*

Folgende Richtlinien werden angewandt:

*The following directives are applied:*

2014/30/EU      EMV      EN 61326-1:2013  
                         EMC

2011/65/EU      RoHS      EN 50581:2012

2014/34/EU      ATEX      EN 60079-0:2012/A11:2013  
   EN 60079-11:2012  
   EN 60079-26:2015  
   EN 1127-1:2011

Für Typenreihe / *For type series* **CG2011**  
Nr. der EG-Baumusterprüfbescheinigung  
*EC-type examination certificate*  
**TÜV 96 ATEX 1122 X**

Ausgestellt von / *issued by*  
0044 TÜV NORD CERT

Hude, 28.12.2017

ppa. Dr. Thomas Köster  
Leiter Bereich Entwicklung / *R & D Director*

benannte Stellen für Auditierung des QS-Systems nach  
*notified bodies for auditing the QS-system according to*

ATEX  
Zertifikat / *certificate*

**0044 TÜV NORD CERT**  
**TÜV 00 ATEX 1582 Q**

DGRL / *PED*  
Zertifikat / *certificate*

**0045 TÜV NORD Systems**  
**07 202 1321 Z 0042/12/02**