EX instructions

Number of EC type examination certificate
TÜV 02 ATEX 1971 X

Number of IECEx-Certificate
IECEx TUN 04.0008X

Amendment to operating instructions for these type series

Type	Description	Instructions
Cx1xx1 Cx2xx1	Pressure transmitter UNIVERSAL	BA_020
CX2001	High temperature pressure transmitter	BA_077

ATEX-Marking

- II 2 G Ex ia IIC T4 Gb
- II 2 G Ex ia IIC T4/T5/T6 Gb
- II 1/2 G Ex ia IIC T4 Ga/Gb
- II 1/2 G Ex ia IIC T4/T5/T6 Ga/Gb

IECEx-Marking

Ex ia IIC T4/T5/T6 Gb

Ex ia IIC T4/T5/T6 Ga/Gb

Ex ia I Ma

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 înţelegeţi aceste instrucţiuni de siguranţă puteţi 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.

Warning

Media can escape if unsuitable devices are used or if the installation is not correct.

Danger of severe injury or damage

- ➢ 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.

For units with plastic components, avoid electrostatic charging of the plastic surfaces through manual rubbing or particles in flowing media.

2 Requirements for intrinsically safe supply

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

Permissible maximum values:

$U_i \leq 30$ V

$I_i \leq 100$ mA

$P_i \leq 700$ mW

Depending on the signal mode of the pressure transmitter, the following effective internal capacitances and inductances result:

Signal mode	C_i	L_i
2-wire 4 … 20 mA	33 nF	20 µH
3-wire 0 (2) … 10 V	43 nF	30 µH
3-wire 0 … 5 V	43 nF	30 µH
3-wire 0 (4) … 20 mA	43 nF	30 µH

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.

The connection cable is not part of the EC type-examination certificate and must be considered separately per EN 60079-14:2014 section 16.2.2.2. According to that standard, you can assume the following values:

$C_c \leq 200$ pF/m

$L_c \leq 1$ µH/m

3 Permissible media and ambient temperatures

Type	EPL of the pressure transmitter	Class	Media max.	Ambient
All	Gb	T4	70 °C	-20…70 °C
		T5	70 °C	-20…70 °C
		T6	55 °C	-20…70 °C
	Ga/Gb	T4	60 °C	-20…70 °C
		T5	60 °C	-20…70 °C
		T6	40 °C	-20…70 °C
	Ex ia I Ma		70 °C	-20…70 °C

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

The maximum permissible media and ambient temperatures for the specific application depend on the device type and its configuration as documented in the data sheet, as well as on the temperature limits specified above and, if applicable, supplementary information in our order confirmation. Please pay attention to all mentioned aspects!

The permissible range lies between the lowest value of the upper limit and the highest value of the lower limit.

4 Additional requirements

If category 1 requirements apply the pressure transmitter measuring insert must only be operated at atmospheric conditions (temperature from -20 °C to 60 °C, pressure from 0.8 bar to 1.1 bar).

EU-Konformitätserklärung
EU Declaration of Conformity

Hersteller
Manufacturer

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

Gegenstand der Erklärung
Object of the declaration

Typenreihen
type series
CB1(2)xxx, CE1(2)xxx, CC1(2)xxx, CD1(2)xxx, CX1(2)xxx, CP131x

für Messgeräte … ***for devices …***	**EU-Richtlinie** ***EU directive***	**Harmonisierte Norm** ***harmonised standard***
in allen Ausführungen *in all versions*	RoHS 2011/65/EU 2015/863/EU	EN IEC 63000:2018
in allen Ausführungen *in all versions*	EMV *EMC* 2014/30/EU	EN 61326-1:2013
mit PS > 200 bar (druckhaltendes Ausrüstungsteil) oder mit Rohrdruckmittler > DN 25 *with PS > 200 bar (pressure accessory)* *or with inline diaphragm seal > DN 25*	DGRL *PED* 2014/68/EU Modul A bzw. H *module A resp. H*	AD 2000
mit EG-Baumusterprüfbescheinigung *with EC-type examination certificate* **TÜV 02 ATEX 1971 X** ausgestellt von / *issued by* 0044 TÜV NORD CERT	ATEX 2014/34/EU	EN IEC 60079-0:2018 EN 60079-11:2012 EN 60079-26:2015 EN 1127-1:2019

LABOM Mess- und Regeltechnik GmbH
Hude, 06.04.2022

T Köster

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

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

ATEX **0044 TÜV NORD CERT**
Zertifikat / *certificate* **TÜV 00 ATEX 1582 Q**

DGRL / *PED* **0045 TÜV NORD Systems & Co. KG**
Große Bahnstr. 31
D-22525 Hamburg
Zertifikat / *certificate* **0045/202/1201/Z/00497/21/D/001(00)**