

EX Instructions

Number of EU-Type Examination Certificate

<u>Type of initiator</u>	<u>No. of EU-Type Examination Certificate</u>	<u>No. of UKEX-Certificate</u>
SJ2-N / SJ3,5-N	PTB 99 ATEX 2219 X	CML 21UKEX2893X
SJ2-SN / SJ3,5-SN / SJ3,5-S1N	PTB 00 ATEX 2049 X	CML 21UKEX2977X

The initiator type is marked on the type plate of the measuring device.

Amendment to operating instructions for these type series

<u>Type</u>	<u>Description</u>	<u>Instructions</u>
BE4xxx, BR42xx, BE2xxx, BF2xxx, BGxxxx, BN4xxx, BP4xxx	Pressure gauges with switch function	BA_037
BX1008	High temperature pressure gauges with switch contact	BA_035
FPxxxx, FUxxxx	Mechanical thermometers with switch function	BA_066
GFxxxx	Gas expansion thermometer with integrated Pt100	BA_070
XA0001, XA0002	Level Transducer with mechanical display and switch function	-

Marking

 II 2G Ex ia IIC T4/T5/T6 Gb

Inductive contact Pepperl+Fuchs in mechanical gauges

- 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 érte 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 šiu saugos reikalavimų, galite užsisakyti jų vertimą į Jūsų kalbą.
- LV: Ja jūs nesaprotāt 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.



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.

2 Operating conditions

Depending on the initiator type, the following inner capacity and inductance must be considered:

SJ2-N / SJ2-SN / SJ3,5-SN / SJ3,5-S1N	SJ3,5-N
$C_i = 30 \text{ nF}$ $L_i = 100 \text{ }\mu\text{H}$	$C_i = 50 \text{ nF}$ $L_i = 250 \text{ }\mu\text{H}$

A cable length of 10 m is taken into account. Connection cables with a length >10 m must be considered separately in accordance with EN 60079-14:2014 section 16.2.2.2. According to that standard, the following values can be assumed:

$$C_c \leq 200 \text{ pF/m}$$

$$L_c \leq 1 \text{ }\mu\text{H/m}$$

Connect the gauges to a certified intrinsically safe power circuit in type of protection Ex ia IIC/IIB or Ex ib IIC/IIB.

The relationship between the maximum permissible values of voltage, current and power of the connected circuit and the maximum permissible ambient temperature as a function of the temperature class can be found in the following table:

Voltage U_i	Current I_i	Power P_i	Ambient temperature at			
			T4 ¹⁾	T4 ²⁾	T5	T6
≤ 16 V	≤ 25 mA	≤ 34 mW	≤ 100 °C	≤ 100 °C	≤ 88 °C	≤ 73 °C
	≤ 25 mA	≤ 64 mW	≤ 100 °C	≤ 100 °C	≤ 81 °C	≤ 66 °C
	≤ 52 mA	≤ 169 mW	≤ 78 °C	≤ 89 °C	≤ 60 °C	≤ 45 °C
	≤ 76 mA	≤ 242 mW	≤ 57 °C	≤ 74 °C	≤ 45 °C	≤ 30 °C

¹⁾ for SJ2-N / SJ2-SN - Initiators

²⁾ for SJ3,5-N / SJ3,5-SN / SJ3,5-S1N - Initiators

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