

KONTUR *flex* Ex measuring light curtain

Supplement to the technical description



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1 General information

1.1 About this technical description

This technical description is a component of the delivery contents and is to be observed during commissioning, mounting, etc. as well. Listed here are the key changes and additions relevant to potentially explosive areas.

The notices regarding safety and operation in the Konturflex technical description remain valid.

1.2 Explanation of symbols

The symbols used in this technical description are explained below.



Attention!

Observe passages marked with this symbol. Failure to heed this information may lead to injuries to personnel or damage to the equipment.

2 Safety notices

2.1 General safety notices

Operation of the KONTURflex EX in potentially explosive areas is also subject to the provisions of directive 1999/92 EC. In the European states, these have been formulated in corresponding national laws, for example the operating safety law ("BetrSichG") in the Federal Republic of Germany.



Attention!

All assembly, installation and commissioning work must only be performed by appropriately qualified specialist personnel. It is imperative that the requirements in the KONTURflex technical description as well as those in this supplement and, in particular, building standards EN 60079-14 for gases or EN 50281-1-2 for dust be adhered to.

Leuze electronic GmbH + Co. KG is not liable for damages caused by improper use. Knowledge of this manual is an element of proper use.






2.2 Intended use

KONTURflex EX was developed in conformity with the provisions of EC directive 94/9/EC (Ex directive). It corresponds to Device Group II, Category 3 and is intended for use in potentially explosive areas of Zone 2 (gases) in accordance with EN50021 and Zone 22 (dust) in accordance with EN 50281-1-1. One exception to this is use in the case of "conductive dust". The technical data stated below, as indicated on the name plate, are applicable.

If used in dusty areas, note that the surface temperature of the KONTURflex EX may be as high as 135°C. Thus, its use in dusty atmospheres is permissible only if the dust can be ignited at far higher temperatures.

2.3 Additional EX rating plate

The rating plate shown here contains the details for use in potentially explosive areas and is affixed in addition to the standard rating plate. IP protection class IP54, which deviates from the standard rating plate, would still apply if the transmitter and/or receiver were to be damaged by impact in accordance with the requirements of EN 50014.

Leuze electronic GmbH + Co. KG In der Braike 1 73277 Owen/Teck	
Typ KONTURflex Kx xx xx EX, Baujahr 2006	
  II 3 G	  II 3 D
EEx nA II T4	T 135°C
0°C ≤ Ta ≤ +55°C	
IP 54	
 Nicht unter Spannung trennen! Do not disconnect under voltage! Ne pas déconnecter sous tension!	

3 Mounting

3.1 Mounting in potentially explosive areas

Mount and commission only during a process break. This means that the transmitter and the receiver must be completely mounted in accordance with the operating instructions before the process can restart. Note that the control device is not permitted for operation in potentially explosive areas and must, therefore, always be placed outside the potentially explosive area. The lines must be laid so that they cannot be damaged.

The light strips are mounted and installed in conformity with the operating instructions. The guard bracket, which protects the plugs against inadvertent removal while under voltage, must also be mounted. Secure the guard bracket with the provided screws. Under no circumstances may you use other screws, especially not slotted or cross-recessed screws.



Do not disconnect under voltage!

Removing the plugs under live voltage may produce sparks and may lead to explosion of gases or dust in the potentially explosive area! Therefore, the plugs must only be disconnected after the power supply voltage has been disconnected and safeguarded against re-connection. Wait for at least 60 seconds after switching off.

3.2 Warning signs

When the devices are mounted, the "Do not disconnect under voltage" and "Clean front cover with moist cloth only" warnings must be easily legible on the transmitter and receiver.



**Nicht unter Spannung trennen!
Do not disconnect under voltage!
Ne pas déconnecter sous tension!**



**Frontscheibe nur mit feuchtem Tuch reinigen!
Clean front cover with moist cloth only!
Ne nettoyez la vitre qu' avec un chiffon humide!**

4 Maintenance

The KONTURflex light curtain does not require maintenance. The device and the front covers must be cleaned at suitable intervals with moist cloths. Otherwise, the range might be reduced and impermissible thick dust deposits could form.



Clean front cover with moist cloth only!

*It is important to moisten cloths to prevent **electric charging** on the front covers! Electric charging may cause explosive gases or dust to ignite!*

5 Tests

In the event of malfunctions, first visually check the connections and cables, but without touching them.



Attention!

If, when performing a visual check, you discover damage to the devices, cables or connectors, you must not touch the damaged components! Instead, evacuate all persons present in the potentially explosive area and, outside of the potentially explosive area, switch off the supply voltage and safeguard it against reactivation. Only then may the devices be removed and examined further outside the potentially explosive area. To remove the devices, use approved tools which do not cause sparks to form.

If necessary, contact our hotline.

Under no circumstances is it permissible to open the devices. In this case, your claims against the manufacturer will be rendered null and void. The user is liable for resulting damage.

6 Declaration of Conformity



Leuze electronic

EG-Konformitätserklärung

EC Declaration of Conformity

Name des Herstellers:

Name of the manufacturer

Leuze electronic GmbH+Co KG.

Anschrift :

Address :

In der Braike 1 D-73277 Owen/ Teck

erklärt unter alleiniger Verantwortung, dass der Artikel :

declares under sole responsibility that the equipment :

Artikelbeschreibung :

Equipment description :

Messender Lichtvorhang

Measuring Light Curtain

Typenbezeichnung / Bestellnummer :

Type designation / Order number :

KONTURflex Ex

**KT 10-xxxx ex; KR 10-xxxx ex
KT 20-xxxx ex; KR 20-xxxx ex
KT 40-xxxx ex; KR 40-xxxx ex**

Kennzeichnung Gas / Staub :

Marking for gas / dust :

Ex II 3G EEx nA II T4 / Ex II 3D IP54 T135°C

folgenden Richtlinien entspricht und bei bestimmungsgemäßer Verwendung und Beachtung der Betriebsanleitung die grundlegenden Sicherheits- und Gesundheitsanforderungen für die Konzeption und den Bau von Geräten und Schutzsystemen in explosionsgefährdeten Bereichen erfüllt.

conforms to the following directives and standards. When used as intended and in accordance with the operating manual it complies with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems in potentially explosive atmospheres.

Richtlinien/ Directives :

Normen/ Standards :

94/9/EG

**EN 1127-1: 1997-10
EN 50014: 1997+A1+A2
EN 50021: 2000-02
EN 50281-1-1: 1998+A1: 2002**

89/336/EWG

EN 60825-1: 1994+A1+A2

EN 60204-1: 1998-11

Qualitätssicherung Produktion :

Production Quality Assessment :

DMT 02 ATEX ZQS/ E 166

Owen, den

11.9.06

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