IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx TUN 17.0032X

Issue No: 0

Certificate history:
Issue No. 0 (2018-02-05)

Status: **Current**

Date of Issue: **2018-02-05**

Applicant: **Baumer A/S**
Runetoften 19
8210 Aarhus V
Denmark

Equipment: **LBFx**

Optional accessory:

Type of Protection: **Intrinsic safety 'ia', protection by enclosure 'ta', type of protection 'nA'**

Marking:

Type LBFx-xx.xxx.xxxxxx.x.4xxx.x

Ex ia IIC T5/T4 Ga resp.

Ex ta IIIC T100°C Da

Type LBFx-xx.xxx.xxxxxx.x.3xxx.x

Ex nA IIC T4/T5 Gc

Approved for issue on behalf of the IECEx Certification Body: Andreas Meyer

Position: Head of the Certification Body

Signature:
(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

TÜV NORD CERT GmbH
Hanover Office
Am TÜV 1, 30519 Hannover
Germany

IECEx Certificate of Conformity

Certificate No:	IECEx TUN 17.0032X	Issue No: 0
Date of Issue:	**2018-02-05**	Page 2 of 3
Manufacturer:	**Baumer A/S** Runetoften 19 8210 Aarhus V **Denmark**	

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-15 : 2010 Edition:4	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

DE/TUN/ExTR17.0036/00

Quality Assessment Report:

DE/TUN/QAR13.0001/01

IECEx Certificate of Conformity

Certificate No: IECEx TUN 17.0032X Issue No: 0

Date of Issue: 2018-02-05 Page 3 of 3

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Level sensor Cleverlevel type LBFx is used for measuring the level of a fluid or powder media. The level sensor supplies a signal as soon as a fluid or powder has contact with the measuring tip of the sensor.

The sensor is assembled in stainless steel housing and sealed to achieve an IP protection degree of IP 67. The shape of the steel housing may vary, but will always fully enclose the PCB and sensor.

The connection is done via an M12 plug or a permanent cable.

For type key, technical data, electrical data see Attachment.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The sensor can be delivered with factory mounted M12 plug connector. The sensor can alternatively be delivered without the M12 plug connector. In case delivery is without plug connector a connector meeting ingress protection IP 67 must be chosen.
2. The user manual has to be observed.

Annex:

Attachement IECEx TUN 17.0032X.pdf

TÜV NORD CERT GmbH
Hannover Office
Am TÜV 1
30519 Hannover
Germany

Attachment to IECEx TUN 17.0032 X issue No.: 0

Product:

The Level sensor Cleverlevel type LBFx is used for measuring the level of a fluid or powder media. The level sensor supplies a signal as soon as a fluid or powder has contact with the measuring tip of the sensor.

The sensor is assembled in stainless steel housing and sealed to achieve an IP protection degree of IP 67. The shape of the steel housing may vary, but will always fully enclose the PCB and sensor.
The connection is done via an M12 plug or a permanent cable.

Type key:
LBFx-xx.xxx.xxxxxx.x.4xxx.x Type of protection Ex ia and ta
LBFx-xx.xxx.xxxxxx.x.3xxx.x Type of protection Ex nA
x – various numbers and signs used to describe the product without influence to the ex protection.

Technical Data:

Maximum permissible ambient temperature range:

-40 °C up to 85 °C T4 resp. T100°C

Electrical Data:

For LBFx-xx.xxx.xxxxxx.x.4xxx.x Type of protection Ex ia and ta

Supply and Signal circuit:
[Brown, Blue, White/Black]

only for connection to an intrinsically safe circuit with the following maximum values:

U_i	=	30	VDC
I_i	=	100	mA
P_i	=	0.75	W
C_i	=	63	nF
L_i	=	617	uH

For LBFx-xx.xxx.xxxxxx.x.3xxx.x Type of protection Ex nA

Supply and Signal circuit:
[Brown, Blue, White/Black]

only for connection to a circuit with the following values:

U_n	=	30	VDC
I_n	=	100	mA

Special Conditions for Safe Use / Notes for Erection:

1. The sensor can be delivered with factory mounted M12 plug connector. The sensor can alternatively be delivered without the M12 plug connector. In case delivery is without plug connector a connector meeting ingress protection IP 67 must be chosen.
2. The user manual has to be observed.