

Translation

(1) **EU-Type Examination Certificate**

(2) Equipment and protective systems intended for use in potentially explosive atmospheres, **Directive 2014/34/EU**



(3) **Certificate Number** TÜV 17 ATEX 188894 X **issue:** 00

(4) for the product: Level sensor Cleverlevel type LBFx

(5) of the manufacturer: **Baumer A/S**

(6) Address: Runetofte 19
8210 Aarhus V
Denmark

Order number: 8000465061

Date of issue: 2017-11-15

(7) The design of this product and any acceptable variation thereto are specified in the schedule to this EU-Type Examination Certificate and the documents therein referred to.

(8) The TÜV NORD CERT GmbH, Notified Body No. 0044, in accordance with Article 17 of the Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential ATEX Assessment Report No. 17 203 188894.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012+A11:2013 EN 60079-11:2012 EN 60079-31:2014

except in respect of those requirements listed at item 18 of the schedule.

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions for Use specified in the schedule to this certificate.

11) This EU-Type Examination Certificate relates only to the design, and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

(12) The marking of the product shall include the following:



**II 1 G Ex ia IIC T4 Ga resp.
II 1 D Ex ta IIIC T100°C Da**

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, notified by the central office of the countries for safety engineering (ZLS), Ident. Nr. 0044, legal successor of the TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

The head of the notified body


Meyer

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This certificate may only be reproduced without any change, schedule included.
Excerpts or changes shall be allowed by the TÜV NORD CERT GmbH

(13) **SCHEDULE**

(14) **EU-Type Examination Certificate No. TÜV 17 ATEX 188894 X issue 00**

(15) Description of product

The Level sensor Cleverlevel type LBFx is designed to detect levels in tanks, media separation and provide empty-pipe detection or dry-run protection for pumps. A high frequency sweep signal is radiated from the sensor tip into the tank. The media will act as a virtual capacitor, which together with a coil in the sensor head, will form a circuit creating the switch point signal. The virtual capacitance will depend of the dielectric value of the media.

The Level sensor can be delivered in different mechanical type variants covering e.g., output configuration, process connection thread size, housing material in accordance with the below listed type code list.

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

x – various numbers and signs used to describe the product without influence to the ex protection.

Technical data:

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

Permissible range of ambient temperature:
-40 °C up to 85 °C T4 resp. T100°C

(16) Drawings and documents are listed in the ATEX Assessment Report No. 17 203 188894

(17) Specific Conditions for Use

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.

(18) Essential Health and Safety Requirements

no additional ones

- End of Certificate -