



EC-TYPE EXAMINATION CERTIFICATE

- 1.
2. **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 94/9/EC**
3. EC-Type Examination Certificate Number: **ITS09ATEX16438X**
4. Equipment or Protective System: **FlexLevel Switch 4401 2xx**
5. Manufacturer: **Baumer A/S**
6. Address: **Jacob Knudsens Vej 14, DK-8230 Aabyhoj, Denmark**
7. This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
8. Intertek Testing and Certification Limited, notified body number 0359 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Intertek Report Ref ETS 3592 dated 10 September 2009
9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with standards EN 61241-0: 2006, EN 61241-1: 2004 except in respect of those requirements referred to at item 18 of the Schedule.
10. If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
11. This EC-Type examination certificate relates only to the design and construction of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.
12. The marking of the equipment or protective system shall include the following:-

 II 1D Ex tD A20 IP67 100°C


Peter T. Lauritzen
Deputy Certification Officer
Date: 30-09-2009

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13. SCHEDULE

14. EC-TYPE EXAMINATION CERTIFICATE NUMBER ITS09ATEX16438X

15. Description of Equipment or Protective System

FlexLevel Switch 4401xxx is used for level measuring of liquids or powder. The functionality is based on the DK value of the media. The product contains a printed circuit board which contains all the electronic for the functionality. This circuit board is mounted in a plastic housing and encapsulated in Silicone gel. Terminals are placed on the outside of this plastic housing. This plastic housing is again mounted in a stainless steel AISI 316L housing (diameter 55mm). The cable connections is lead through a cable gland made of brass or plastic or through a M12 plug mounted in the stainless steel housing. The sensor is terminated internally to the screw terminals on the plastic housing.

FlexLevel Switch

4401 x x x

Safety:

Standard

0

1G (Zone 0,1,2)

1

1D (Zone 20, 21, 22)

2

3G (Zone 2)

3

Electrical connections:

Plug, M12

1

Cable gland Brass M16

2

Cable gland Polyamide M16

3

Process connection:

G1/2, PEEK tip

1

3A Hygienic connection DN38

2

G1/2, PEEK tip, sliding connection, 100mm

3

G1/2, PEEK tip, sliding connection, 250mm

4

Input specifications.

Ui: 30Vdc

Ii: 100mA

16. Report Number:

Intertek Report ETS3592 dated 10 September, 2009

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13. SCHEDULE

14. EC-TYPE EXAMINATION CERTIFICATE NUMBER ITS09ATEX16438X

17. CONDITIONS OF CERTIFICATION:

- (a). Special Conditions for safe use

It is essential that the media temperature is considered according to the below tables and the description in the Installation Manual provide by the manufacturer.

FlexLevel 4401 2x1/2 (G1/2, PEEK tip and 3A Hygienic connection DN38)

Ambient temperature	Maximum media/process temperature	T-Class
-40°C < Tamb < 85°C	85°C	100 °C
-40°C < Tamb < 60°C	95°C (*)	100 °C
-40°C < Tamb < 40°C	115°C (*)	100 °C

(*) provided that the sensor tip at the sliding connection is the only part in contact with the media

FlexLevel 4401 2x3 (G1/2, PEEK tip, sliding connection, cooling neck, 100mm)

Ambient temperature	Maximum media temperature	T-Class
-40°C < Tamb < 85°C	85°C	100 °C
-40°C < Tamb < 60°C	150°C (*)	100 °C
-40°C < Tamb < 40°C	175°C (*)	100 °C

(*) provided that the sensor tip at the sliding connection is the only part in contact with the media

FlexLevel 4401 2x4 (G1/2, PEEK tip, sliding connection, cooling neck, 250mm)

Ambient temperature	Maximum media temperature	T-Class
-40°C < Tamb < 85°C	85°C	100 °C
-40°C < Tamb < 60°C	195°C (*)	100 °C
-40°C < Tamb < 40°C	200°C (*)(**)	100 °C

(*) provided that the sensor tip at the sliding connection is the only part in contact with the media

(**) Maximum allowed media/process temperature.

The following warning must be present on the marking plate:

"DO NOT OPEN WHEN AN EXPLOSIVE DUST ATMOSPHERE IS PRESENT"

- (b). Conditions For Use (Routine Tests)

18. Essential Health and Safety Requirements (EHSR's)

The relevant EHSR's have been identified and assessed in Intertek Report ETS 3592 dated 10 September 2009.

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13. SCHEDULE
14. EC-TYPE EXAMINATION CERTIFICATE NUMBER ITS09ATEX16438X
19. Drawings and Documents

Document No.	Sheets	Document Title	Issue	Date (yyyy/mm/dd)
5520-533	1	FlexLevel Switch 4xxx	C1	2009-11-02
5551-533	1	Assembly	D2	2009-08-25
5502-007	1	FlexLevel Switch Samlingstegning	B2	2009-06-15
5502-005	1 of 3	Instrument Drawings 1/2" Nippel	A2	2009-07-06
5502-005	2 of 3	DN38 3A Hygienic	A2	2009-06-17
5502-005	3 of 3	Sliding connection with welding parts and seal / clamp ring	A2	2009-07-07
5502-008	1	Samling Control Unit	A2	2009-04-14
3031-040	1	Jul 30 255 mm Med lys indikator	B1	2009-10-22
3031-050	1	Dæksel for låg med lys. LSM	B1	2009-10-12
3011087	1	Housing Ø55	A1	2009-04-21
2008970	1	Etiket FlexLevel Switch 4401 2xx Ex Dust	A1	2009-08-25

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1. **SUPPLEMENTARY EC-TYPE EXAMINATION CERTIFICATE**

2. **Equipment or Protective System Intended for use in**

Potentially Explosive Atmospheres Directive 94/9/EC

3. Supplementary EC-Type Examination Certificate Number: ITS09ATEX16438X

4. Equipment or Protective System: FlexLevel Switch 4401 2xx

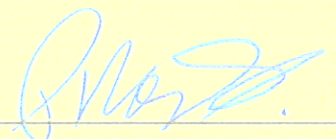
5. Manufacturer: **Baumer A/S**

6. Address: Jacob Knudsens Vej 14, DK-8230 Aabyhoj, Denmark

7. This supplementary certificate extends EC-Type Examination Certificate Number to apply to equipment or protective systems designed and constructed in accordance with the specification set out in the Schedule of the said Certificate but having variations specified in the Schedule attached to this certificate and the documents therein referred to.

Intertek Report Ref 09 041750 ETS 3592

This Supplementary Certificate shall be held with the original Certificate



P Moss
Certification Officer
30th July 2010

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Schedule

SUPPLEMENTARY EC-TYPE EXAMINATION CERTIFICATE NUMBER: ITS09ATEX16438X-V1

VARIATION ONE

Description of the Variation to the Equipment or Protective System.

To permit the following change:

FlexLevel Switch 4401 2xx will now be known as the Level Switch LFFS 2xx and is identical in every other aspect.

Level Switch	LFFS	x	x	x
Safety:				
Standard		0		
1G (Zone 0,1,2)		1		
1D (Zone 20, 21, 22)		2		
3G (Zone 2)		3		
Electrical connections:				
Plug, M12			1	
Cable gland Brass M16			2	
Cable gland Polyamide M16			3	
Process connection:				
G1/2, PEEK tip				1
3A Hygienic connection DN38				2
G1/2, PEEK tip, sliding connection, 100mm				3
G1/2, PEEK tip, sliding connection, 250mm				4

Report No.

Intertek Report Ref: See original Report

CONDITIONS OF CERTIFICATION

(a) Special Conditions for Safe Use:

Level Switch LFFS 2x1/2 (G1/2, PEEK tip and 3A Hygienic connection DN38)

Ambient temperature	Maximum media/process temperature	T-Class
-40°C < Tamb < 85°C	85°C	100 °C
-40°C < Tamb < 60°C	95°C (*)	100 °C
-40°C < Tamb < 40°C	115°C (*)	100 °C

(*) provided that the sensor tip at the sliding connection is the only part in contact with the media

Level Switch LFFS 2x3 (G1/2, PEEK tip, sliding connection, cooling neck, 100mm)

Ambient temperature	Maximum media temperature	T-Class
-40°C < Tamb < 85°C	85°C	100 °C
-40°C < Tamb < 60°C	150°C (*)	100 °C
-40°C < Tamb < 40°C	175°C (*)	100 °C

(*) provided that the sensor tip at the sliding connection is the only part in contact with the media

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Schedule

SUPPLEMENTARY EC-TYPE EXAMINATION CERTIFICATE NUMBER: ITS09ATEX16438X-V1

Level Switch LFFS 2x4 (G1/2, PEEK tip, sliding connection, cooling neck, 250mm)

Ambient temperature	Maximum media temperature	T-Class
-40°C < Tamb < 85°C	85°C	100 °C
-40°C < Tamb < 60°C	195°C (*)	100 °C
-40°C < Tamb < 40°C	200°C (**)(**)	100 °C

(*) provided that the sensor tip at the sliding connection is the only part in contact with the media

(**) Maximum allowed media/process temperature.

The following warning must be present on the marking plate:

"DO NOT OPEN WHEN AN EXPLOSIVE DUST ATMOSPHERE IS PRESENT"

(b) Conditions for Use (Routine Tests):

See original certificate

Essential Health and Safety Requirements

See original certificate

DRAWINGS

Document No.	Sheets	Document Title	Issue	Date (yyyy/mm/dd)
2008970	1	Etiket Level Switch LLFS 2xx Ex Dust A3	B1	2010-07-27

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