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 21 ATEX 302227 X** **Issue:** 00

(4) for the product: Filling Level Sensor type AT…

(5) of the manufacturer: **ASSYTECH S. r. l.**

(6) Address: Via Val d'Aosta, 169 - 23018 Talamona (SO) - Italy

Order number: 8003035426

Date of issue: See date of signature

(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. 21 203 302227.

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

EN IEC 60079-0:2018 **EN 60079-11:2012** **EN 60079-26:2015**

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:

See item 15 of the schedule

TÜV NORD CERT GmbH, Am TÜV 1, 45307 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

Digital unterschrieben von Roder Christian
Datum: 2021.11.12 22:07:57 +01'00'

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(13) **S C H E D U L E**

(14) **EU-Type Examination Certificate No. TÜV 21 ATEX 302227 X Issue 00**

(15) Description of product

The filling level sensors are used for continuous measurement of liquid levels within potentially explosive areas. Floaters are used to detect the fluid levels. These slide on a sensor tube. For interface or water detection, a second float can be mounted on the sensor tube. In addition, the density of the liquid can be determined by means of a density module.

The marking is as follows:

Type AT11610

Ex	II 1 G	Ex ia IIC T6…T5 Ga	resp.	II 1/2 G	Ex ia IIC T6…T4 Ga/Gb	resp.
	II 2 G	Ex ia IIC T6…T4 Gb	resp.	II 1 D	Ex ia IIIC T135 °C Da	

Type AT05410 resp. AT05510

Ex	II 1 G	Ex ia IIB T6…T5 Ga	resp.	II 1/2 G	Ex ia IIB T6…T4 Ga/Gb	resp.
	II 2 G	Ex ia IIB T6…T4 Gb	resp.	II 1 D	Ex ia IIIC T135 °C Da	

Type AT09121

Ex	II 1 G	Ex ia IIC T6…T4 Ga	resp.	II 1/2 G	Ex ia IIC T6…T4 Ga/Gb	resp.
	II 2 G	Ex ia IIC T6…T4 Gb	resp.	II 1 D	Ex ia IIIC T125 °C Da	

Type AT09321 bzw. AT09221

Ex	II 1 G	Ex ia IIB T6…T4 Ga	resp.	II 1/2 G	Ex ia IIB T6…T4 Ga/Gb	resp.
	II 2 G	Ex ia IIB T6…T4 Gb	resp.	II 1 D	Ex ia IIIC T125 °C Da	

Type designation:

AT11610	Standard level sensor with serial communication
AT05410	Advanced precision of measurement and with serial communication
AT05510	Flexibles sensor tube and with serial communication
AT09121	Standard level sensor with communication via RS-485
AT09321	Advanced precision of measurement and with communication via RS-485
AT09221	Flexibles sensor tube and with communication via RS-485

Schedule to EU-Type Examination Certificate No. TÜV 21 ATEX 302227 X Issue 00

Technical data:

Type AT11610, AT05410 resp. AT05510
Signal- and power circuit
(terminals +, -, A, B) in type of protection “Intrinsic Safety” Ex ia IIC/IIB/IIIC
only for the connection to a certified intrinsically safe circuit
Maximum values: U_i = 15 V
I_i = 60 mA
P_i = 100 mW
L_i = 100 µH
C_i = 10 nF
The types AT05410 and AT05510 are only for gas group IIB allowed.

Type AT09121, AT09321 resp. AT09221
Signal- and power circuit
(terminals +, -, A, B) in type of protection “Intrinsic Safety” Ex ia IIC/IIB/IIIC
only for the connection to a certified intrinsically safe circuit
Maximum values: U_i = 30 V
I_i = 200 mA at $T_a \leq +70$ °C resp.
I_i = 100 mA at $T_a \leq +85$ °C
P_i = 1 W
L_i = 20 µH
C_i = 10 nF
The types AT09321 and AT09221 are only for gas group IIB allowed.

Permissible ambient temperature range:

Use as category 1G apparatus
Typ AT11610, AT05410 bzw. AT05510

Temperature class	Ambient and Medium temperature range
T6	-20 °C to +50 °C
T1 to T5	-20 °C to +60 °C

Typ AT09121, AT09321 bzw. AT09221

Temperature class	Ambient and Medium temperature range
T6	$I_i \leq 100$ mA: -20 °C to +40 °C $I_i \leq 200$ mA: -20 °C to +25 °C
T5	$I_i \leq 100$ mA: -20 °C to +55 °C $I_i \leq 200$ mA: -20 °C to +40 °C
T1 to T4	-20 °C to +60 °C

The process pressure for the media must be between 0.8 bar and 1.1 bar where explosive vapour-air mixtures are present. If no explosive mixtures are present, the equipment may also be operated outside this area according to the manufacturer's specification.

Schedule to EU-Type Examination Certificate No. TÜV 21 ATEX 302227 X Issue 00

Use as category 1/2G apparatus

Type AT11610, AT05410 resp. AT05510

Temperature class	Ambient temperature range	Medium temperature range
T6	-40 °C to +50 °C	-20 °C to +50 °C
T5	-40 °C to +65 °C	-20 °C to +60 °C
T1 to T4	-40 °C to +85 °C	-20 °C to +60 °C

Type AT09121, AT09321 resp. AT09221

Temperature class	Ambient temperature range	Medium temperature range
T6	$I_i \leq 100$ mA: -40 °C to +40 °C $I_i \leq 200$ mA: -40 °C to +25 °C	$I_i \leq 100$ mA: -20 °C to +40 °C $I_i \leq 200$ mA: -20 °C to +25 °C
T5	$I_i \leq 100$ mA: -40 °C to +55 °C $I_i \leq 200$ mA: -40 °C to +40 °C	$I_i \leq 100$ mA: -20 °C to +55 °C $I_i \leq 200$ mA: -20 °C to +40 °C
T1 to T4	$I_i \leq 100$ mA: -40 °C to +85 °C $I_i \leq 200$ mA: -40 °C to +70 °C	-20 °C to +60 °C

The process pressure for the media must be between 0.8 bar and 1.1 bar where explosive vapour-air mixtures are present. If no explosive mixtures are present, the equipment may also be operated outside this area according to the manufacturer's specification.

Use as category 2G apparatus

Type AT11610, AT05410 resp. AT05510

Temperature class	Ambient temperature range	Medium temperature range
T6	-40 °C to +50 °C	-40 °C to +85 °C
T5	-40 °C to +65 °C	-40 °C to +100 °C
T4	-40 °C to +85 °C	-40 °C to +135 °C
T3	-40 °C to +85 °C	-40 °C to +200 °C
T2	-40 °C to +85 °C	-40 °C to +300 °C
T1	-40 °C to +85 °C	-40 °C to +450 °C

Type AT09121, AT09321 resp. AT09221

Temperature class	Ambient temperature range	Medium temperature range
T6	$I_i \leq 100$ mA: -40 °C to +40 °C $I_i \leq 200$ mA: -40 °C to +25 °C	-40 °C to +85 °C
T5	$I_i \leq 100$ mA: -40 °C to +55 °C $I_i \leq 200$ mA: -40 °C to +40 °C	-40 °C to +100 °C
T4	$I_i \leq 100$ mA: -40 °C to +85 °C $I_i \leq 200$ mA: -40 °C to +70 °C	-40 °C to +135 °C
T3	$I_i \leq 100$ mA: -40 °C to +85 °C $I_i \leq 200$ mA: -40 °C to +70 °C	-40 °C to +200 °C
T2	$I_i \leq 100$ mA: -40 °C to +85 °C $I_i \leq 200$ mA: -40 °C to +70 °C	-40 °C to +300 °C
T1	$I_i \leq 100$ mA: -40 °C to +85 °C $I_i \leq 200$ mA: -40 °C to +70 °C	-40 °C to +450 °C

Schedule to EU-Type Examination Certificate No. TÜV 21 ATEX 302227 X Issue 00

Use as category 1D apparatus

Type AT11610, AT05410 resp. AT05510

Maximum surface temperature		Ambient temperature T_a
Dust layer ≤ 5 mm	Immersed in dust	
T_a + 30 °C	135 °C	-40 °C to +85 °C

Type AT09121, AT09321 resp. AT09221

Maximum surface temperature		Ambient temperature T_a
Dust layer ≤ 5 mm	Immersed in dust	
I_i ≤ 100 mA: T_a + 40 °C	Observe EN 60079-14	-40 °C to +85 °C
I_i ≤ 200 mA: T_a + 55 °C	Observe EN 60079-14	-40 °C to +70 °C

(16) Drawings and documents are listed in the ATEX Assessment Report No. 21 203 302227

(17) Specific Conditions for Use

1. When using plastic floats, there is a danger of ignition due to electrostatic discharge. The manufacturer's instructions must be observed.

(18) Essential Health and Safety Requirements

no additional ones

- End of EU-Type Examination Certificate -