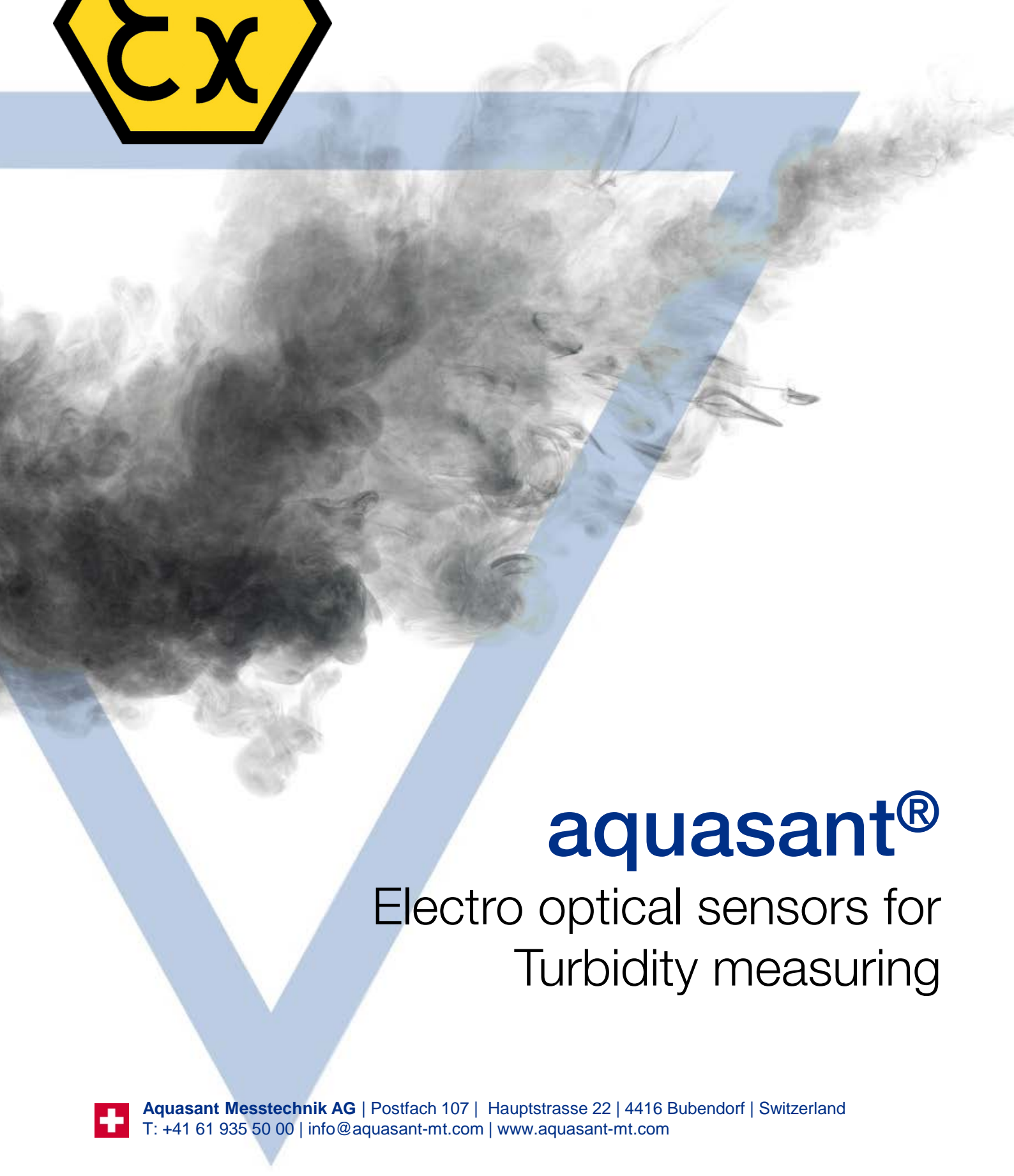


we create solutions

aquasant 

CERTIFICATE: ATEX / ISO



aquasant[®]

Electro optical sensors for
Turbidity measuring



Aquasant Messtechnik AG | Postfach 107 | Hauptstrasse 22 | 4416 Bubendorf | Switzerland
T: +41 61 935 50 00 | info@aquasant-mt.com | www.aquasant-mt.com



CERTIFICATE

Certificate no. 6972

aquasant 

Aquasant Messtechnik AG
Hauptstrasse 22
CH-4416 Bubendorf

QS ZÜRICH AG certifies that the management system of the above mentioned company and location(s) has been evaluated and meets the requirements established by the following rules:

ISO 9001: 2015

The management system includes:

Development, manufacturing and sales of measuring-, monitoring- and controlling-equipment for the chemical industry, the biotechnology, the food industry and the petrochemistry

During the period of validity of this certificate, the management system of the company must always comply with the requirements of the certified standards.

For updated amendments within the scope of certification of the present certificate, please refer to

<http://www.quality-service.ch/>



First certification date:

01.03.1996

Date of issue:

25.05.2021

Expiration date:

01.07.2024

Subject to successful surveillance audit

QS ZÜRICH AG

P.O. Box 6335

CH-8050 Zürich

info@quality-service.ch




Management



1 **PRODUCTION/PRODUCT QUALITY ASSURANCE NOTIFICATION**

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

Conformity to Type based on Quality Assurance of the Production Process/Product Quality Assurance

3 Notification No. **KIWA 19ATEXQ1234**

4 Equipment, protective system or components as listed:

Controllers and sensors for Impedance measuring technique of parting, threshold, level;
Electro-optical fluid overfill protection;
Electro-optical turbidity measurement;
Treshold conductivity sensor technique;
Radar level measurement

Flameproof Enclosures (d)
Increased Safety (e)
Non-electrical equipment (h)
Intrinsic Safety (i)
Encapsulation (m)
Optical Radiation (op is)
Dust Ignition Protection by Enclosure (t)

5 Manufacturer or
Authorised Representative:

Aquasant Messtechnik AG
Hauptstr. 22
4416 Bubendorf
Switzerland

6 Manufacturing locations: As above

7 CSA Group Netherlands B.V., notified body number 2813 in accordance with Article 17 of the Council Directive 2014/34/EU, notifies that the manufacturer has a quality system which complies with the requirements of Annexes IV & VII of Directive 2014/34/EU.

8 This notification is based upon Report No. 80135863 issued on 22 July 2022. This notification can be withdrawn if the manufacturer no longer satisfies the requirements of Annexes IV/VII. Results of periodical assessment of the quality system form part of this notification.

9 According to Article 16 [3] of Directive 2014/34/EU the CE marking shall be followed by the identification number 2813 of CSA Group Netherlands B.V., as the Notified Body involved in the production control stage.

Date of Initial Certification: 06 November 2019

Date of Issue: 18 August 2022

Date of Expiry: 24 October 2025

Michelle Halliwell

On behalf of CSA Group Netherlands B.V.



Notification No. **KIWA 19ATEXQ1234**

This certificate remains valid subject to the company maintaining its system to the required standards, which will be monitored by CSA. The use of this certificate, marks and logos are subject to the Regulations Applicable to Holders of CSA Group Netherlands BV certificates
CSA Group Netherlands B.V. Utrechtseweg 310, Building B42, 6812AR, Netherlands

EU-DECLARATION OF CONFORMITY



Manufacturer: Aquasant Messtechnik AG, Hauptstrasse 22, 4416 Bubendorf, Switzerland

Brand: aquasant®

Notified body: N° 2813, CSA Group Testing UK Ltd

Description: Electrooptical rod turbidity sensor with coupler measuring electronics in the connection head or separate housing with fiber optic connection for connection to ATM1*-Aquasant control units, according to ATEX 18 type code.

We hereby declare under our sole responsibility that the products:

Product: Turbidity measuring system (Coupler electronics with turbidity sensor)
Model: ATA100*E* & AFE*
EU-Type Examination Certificate Number: SEV 18 ATEX 0135 X
Eurofins Electrosuisse Produkt Testing AG Nr.: 1258

comply with the following European guidelines under the harmonised standards or normative documents:

ATEX RL 2014/34/EU	EN IEC 60079-0:2018 EN 60079-7:2015 EN 60079-18:2015/A1:2017 EN 60079-28:2015 EN ISO 80079-36:2016
EMV RL 2014/30/EU	EN 61000 EN 61326
RoHS RL 2011/65/EU	EN IEC 63000:2018

Bubendorf, 15.03.2021



Roger Inauen
Head Manufacturing





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

(2) Equipment or protective system intended for use in potentially explosive atmospheres - **Directive 2014/34/EU**

(3) Certificate number: **SEV 18 ATEX 0135 X**

(4) Product: Turbidity measurement equipment
Type: ATA100** ExG, AF E*

(5) Manufacturer: Aquasant Messtechnik AG

(6) Address: Hauptstrasse 22, 4416 Bubendorf, SWITZERLAND

(7) The equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) Eurofins, notified body No. 1258, in accordance with article 17 of Directive 2014/34/EU of the European parliament and of the council, dated 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 confidential report no 18-Ex-0092.X01

(9) Compliance with the essential health and safety requirements has been assured by compliance with:

EN 60079-0:12 + A11:13

EN 60079-18:15

EN 60079-28:15

EN 60079-7:15

EN ISO 80079-36:16

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 subjected to special conditions for safe use specified in the schedule to this certificate.

(11) This EU type examination certificate relates only to design and construction of the specified product. Further requirements of this directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

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

See page 3, Description of product

Eurofins Electrosuisse Product Testing AG
Notified Body ATEX

Martin Plüss
Product Certification



(13)

Appendix

(14)

EU-Type Examination Certificate no. SEV 19 ATEX 3001

(15) **Description of product**

AFE 44 *

Probe for optical concentration measurement of solids up to 60g dry yeast per litre. The probe is compatible with the coupler electronics ATA 100*. The materialization and dimensions of the probe can be adapted to customer specifications according to the type code.

AFE 43 *

Probe for optical concentration measurement of solids up to 200g dry yeast per litre. The probe is compatible with the coupler electronics ATA 100*. The materialization and dimensions of the probe can be adapted to customer specifications according to the type code.

Turbidity measuring probes AF* G * ATA*

AF * G *

Probe for optical concentration measurement of solids with built-in coupler electronics ATA*. The built-up housing is made of aluminium.

The materialization and dimensions of the probe can be adapted to customer specifications according to the type code.

AF * Gv *

Probe for optical concentration measurement of solids with built-in coupler electronics ATA*. The built-up housing is made of stainless steel.

The materialization and dimensions of the probe can be adapted to customer specifications according to the type code.

Turbidity measuring device coupler electronics ATA 100 *

ATA 100* G

Measuring amplifier for optical concentration measurement of solids in aluminium housing. The coupler electronics ATA is compatible with the turbidity measuring probes AF * 4 * and the turbidity analysers

ATM *


ATA 100* Gv


Measuring amplifier for optical concentration measurement of solids in stainless steel housing. The coupler electronics ATA is compatible with the turbidity measuring probes AF * 4 * and the turbidity analysers


ATM *

Classification of installation and use:	stationary
Ingress protection:	IP65; IP68
Rated ambient temperature range:	Refer to ratings at page 3

Rating:

Type: ATA 100**ExG
Marking:  II 2 G Ex eb mb [op is] IIC T4 Gb
Nominal values: U_N : 25 V DC
 I_N : 100 mA
Optical output: Max irradiated power: ≤ 15 mW
Signal: pulse
Measurement frequency: 25 - 30 Hz
Ambient temperature: $+5\text{ °C} \leq T_{amb} \leq +60\text{ °C}$

Type: AFE*
Marking:  II 1/2 G Ex h op is IIC T6...T4 Ga/Gb
Ambient temperature: $+5\text{ °C} \leq T_{amb} \leq +60\text{ °C}$
Process media temperature: $-45\text{ °C} \leq T_{amb} \leq +130\text{ °C}$

Type: AFE*G* respective AFE*Gv*
Marking:  II 1/2 G Ex eb h mb op is IIC T4 Ga/Gb
Nominal values: U_N : 25 V DC
 I_N : 100 mA
Optical output: Max irradiated power: ≤ 15 mW
Signal: pulse
Measurement frequency: 25 - 30 Hz
Ambient temperature: $+5\text{ °C} \leq T_{amb} \leq +60\text{ °C}$
Process media temperature: $-45\text{ °C} \leq T_{amb} \leq +130\text{ °C}$

(16) **Report number** 18-Ex-0092.X01

(17) **Specific conditions of use**

- When used in EPL Ga or Gb, a probe AFE * Z * made of zirconium must be installed protected against impact and friction.
- When used in EPL Ga, a probe type AFE * M / Mv * made of aluminium must be installed protected against impact and friction.
- The AQUASANT® turbidity measuring probe type: AFE4 * may only be operated with the AQUASANT® preamplifier type ATA100E.
- The assignment between the temperature class and the maximum permissible ambient respective media temperature for the AQUASANT turbidity measuring probe type: AFE4 * is shown in the following table:

Temperature class	Ambient temperature
T6	80 °C
T5	95 °C
T4	130 °C

(18) **Essential health and safety requirements**

In addition to the essential health and safety requirements (EHSRs) covered by the standards listed at item 9, the following are considered relevant to this product, and conformity is demonstrated in the report:

Clause	Subject
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(19) **Drawings and Documents**

See test report "Manufacturer's Documents"

Overview application aquasant® types AFE44*

Turbidity measurement :

The turbidity sensor AFE44 * is suitable for research, development and production in the Ex area. With the aid of the ATA100E * coupler electronics and the associated ATM 100 evaluation electronics with PC software, you can achieve continuous quantitative monitoring.

Benefit from our many years of experience and request an offer.

