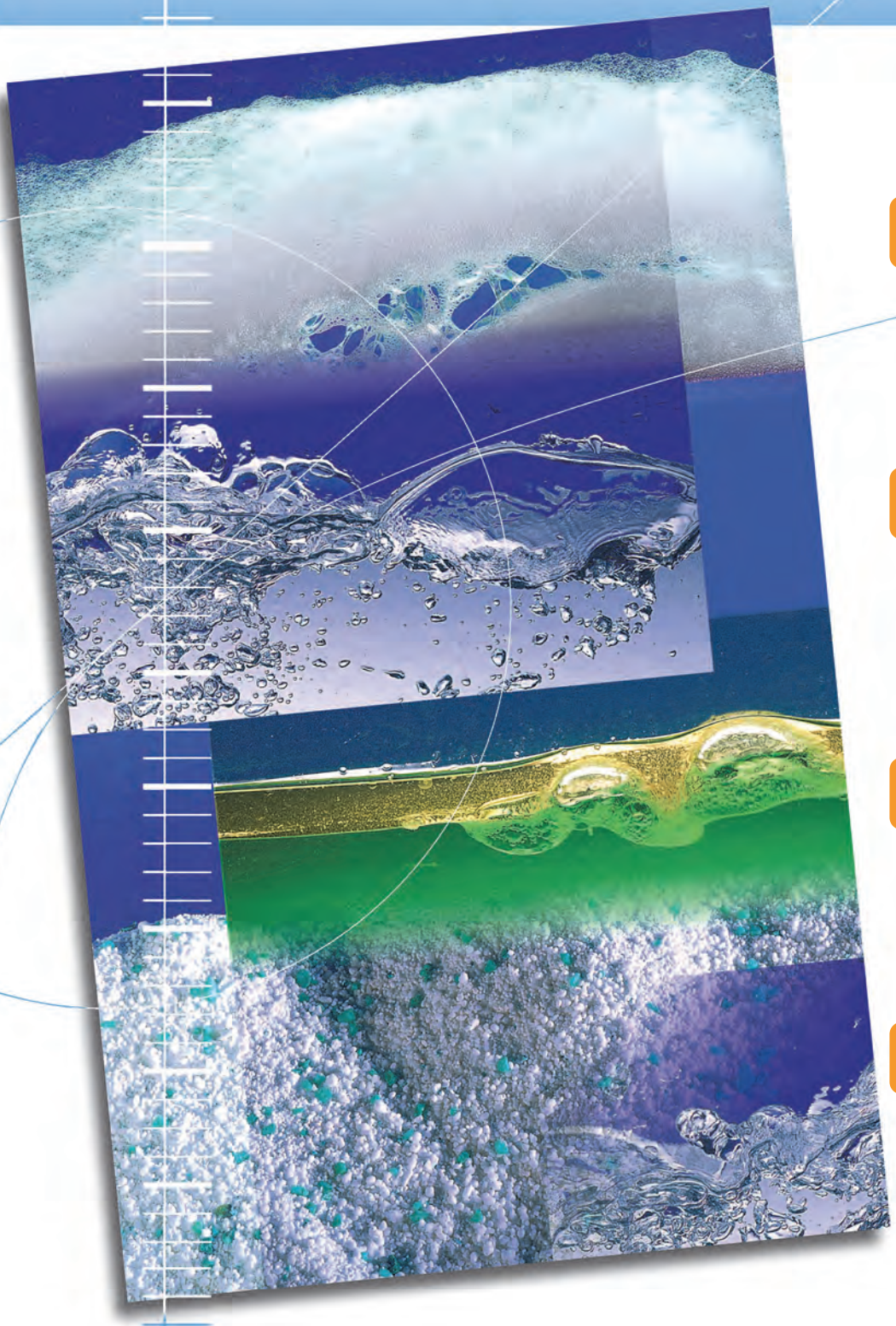
Instrumentation and control technology



Interfacial Layer

Batch separation or continuous measurement of the interfacial layer, detection of two immiscible liquids

Filling Level

Level measurement for different applications (product-compensated for process level measurement), for organic up to aqueuous liquids, foams and powders

Limit Switch

Full-/empty or level display for organic up to aqueuous liquids, foams or powders of small bulk weights (10 g per liter)

Process Analysis

Product monitoring and identification, concentration and end point determination of organic chemical reactions

SEV 09 ATEX 0133 X CE 0036/1254

ISO 9001
ISO 80079

aquasant-mt
SWITZERLAND
creating solutions

QS
QUALITY SERVICE

CERTIFICATE

Certificate no. 6972

aquasant-mt
SWITZERLAND

Aquasant measuring technique Ltd

CH - 4416 Bubendorf

QS Zürich AG certifies that the management system of the above mentioned company has been assessed and meets the requirements established by the following rules:

ISO 9001: 2008

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

EA Sector 19

In the course of the validity of the present certificate the enterprise management system must permanently satisfy the requirements of the international regulations.
The fulfilment of these regulations will be regularly controlled by QS Zürich AG.

For precise and updated information concerning possible changes occurred in the certification object of the present certificate, please contact info@quality-service.ch

QUALITY SWISS

First certification date: 01.03.1996

Date of issue: 27.03.2014

Expiration date: 24.03.2017

QS Zürich AG
P.O. Box 6335
CH-8050 Zürich
qs-zuerich@quality-service.ch

CERTIFIED QS QUALITY SERVICE MANAGEMENT SYSTEM

SWISS CERTIFICATION

MEMBER OF MULTILATERAL RECOGNITION ARRANGEMENT IAF

SCESm 047
www.sas.ch

Direction

EG-KONFORMITÄTSERKLÄRUNG
EC DECLARATION OF CONFORMITY

des Herstellers über die Fertigung und Prüfung von Mess- und Steuergeräten
over manufacturing and testing of measuring equipment units
nach der ATEX Richtlinie 2014/34/EU und EMV 2014/30/EU
as per directive ATEX 2014/34/EU and EMV 2014/30/EU

Hersteller: / *Manufacturer:* Aquasant Messtechnik AG, Hauptstrasse 22, 4416 Bubendorf, Switzerland

Benannte Stelle: / *notified body:* N° 1254, **QS** Zürich AG, Postfach 6335, 8050 Zürich, Switzerland

Wir erklären in alleiniger Verantwortung, dass die

We hereby declare under our sole responsibility that the

Mikroprozessor-Steuergeräte: / *Microprocessor control units:*
Modell: / *Model:* **mipromex® Typ MAT **** ***
EG Baumusterprüfbescheinigung: / *EC-Type Examination Certificate Number:* SEV 09 ATEX 0132

den folgenden harmonisierten Europäischen Normen entsprechen:

correspond to the following harmonized European standards:

- Allgemeine Bestimmungen	- *General regulations*	EN 60079-0:2012
- Eigensicherheit "i"	- *Intrinsic safety "i"*	EN 60079-11:2012
- Explosionsschutz, Grundlagen und Methodik	- *Explosion protection, Basic concepts and methodology*	EN 1127-1:2011
- Immunitätsprüfungen	- *Immunity tests*	EN 61000-6-2:2005
- Emissionsmessungen	- *Emission measures*	EN 61000-6-4-2007

Die sicherheitsbezogenen Teile der obenaufgeführten Geräte entsprechen den allgemeinen Gestaltungsgrundsätzen Teil 1 EN 13849-1:2008 (Sicherheit von Maschinen - Sicherheitsbezogene Teile von Steuerungen der Kategorie 4).

The safety relevant parts of the above mentioned equipments correspond to the general principles of presentation of standards Part 1 EN 13849-1:2008 (Safety of Machines - safety relevant parts of control systems of category 4).

Date: 20.04.2016 ***Signed:***

Roland Inauen
Management CEO

Roger Inauen
Head Manufacturing

ISO 9001
ISO 80079

Aquasant Messtechnik AG
Hauptstrasse 22 | CH-4416 Bubendorf
Switzerland

T +41 61 935 5000 | F +41 61 931 2777
info@aquasant-mt.com | aquasant-mt.com

Swiss made

aquasant-mt
SWITZERLAND
creating solutions

EG-KONFORMITÄTSERKLÄRUNG
EC DECLARATION OF CONFORMITY

des Herstellers über die Fertigung und Prüfung von Mess- und Steuergeräten
over manufacturing and testing of measuring equipment units
nach der ATEX Richtlinie 2014/34/EU und EMV 2014/30/EU
as per directive ATEX 2014/34/EU and EMV 2014/30/EU

Hersteller: / *Manufacturer:* Aquasant Messtechnik AG, Hauptstrasse 22, 4416 Bubendorf, Switzerland

Benannte Stelle: / *notified body:* N° 1254, **QS** Zürich AG, Postfach 6335, 8050 Zürich, Switzerland

Wir erklären in alleiniger Verantwortung, dass die

We hereby declare under our sole responsibility that the

Mikroprozessor-Steuergeräte: / *Microprocessor control units:*
Modell: / *Model:* **mipromex® Typ MIL **** ***
EG Baumusterprüfbescheinigung: / *EC-Type Examination Certificate Number:* SEV 09 ATEX 0132

den folgenden harmonisierten Europäischen Normen entsprechen:

correspond to the following harmonized European standards:

- Allgemeine Bestimmungen	- *General regulations*	EN 60079-0:2012
- Eigensicherheit "i"	- *Intrinsic safety "i"*	EN 60079-11:2012
- Explosionsschutz, Grundlagen und Methodik	- *Explosion protection, Basic concepts and methodology*	EN 1127-1:2011
- Immunitätsprüfungen	- *Immunity tests*	EN 61000-6-2:2005
- Emissionsmessungen	- *Emission measures*	EN 61000-6-4-2007

Die sicherheitsbezogenen Teile der obenaufgeführten Geräte entsprechen den allgemeinen Gestaltungsgrundsätzen Teil 1 EN 13849-1:2008 (Sicherheit von Maschinen - Sicherheitsbezogene Teile von Steuerungen der Kategorie 4).

The safety relevant parts of the above mentioned equipments correspond to the general principles of presentation of standards Part 1 EN 13849-1:2008 (Safety of Machines - safety relevant parts of control systems of category 4).

Date: 20.04.2016 ***Signed:***

Roland Inauen
Management CEO

Roger Inauen
Head Manufacturing

ISO 9001
ISO 80079

Aquasant Messtechnik AG
Hauptstrasse 22 | CH-4416 Bubendorf
Switzerland

T +41 61 935 5000 | F +41 61 931 2777
info@aquasant-mt.com | aquasant-mt.com

Swiss made

aquasant-mt
SWITZERLAND
creating solutions

EG-KONFORMITÄTSERKLÄRUNG
EC DECLARATION OF CONFORMITY

des Herstellers über die Fertigung und Prüfung von Mess- und Steuergeräten
over manufacturing and testing of measuring equipment units
nach der ATEX Richtlinie 2014/34/EU und EMV 2014/30/EU
as per directive ATEX 2014/34/EU and EMV 2014/30/EU

Hersteller: / *Manufacturer:* Aquasant Messtechnik AG, Hauptstrasse 22, 4416 Bubendorf, Switzerland

Benannte Stelle: / *notified body:* N° 1254, **QS** Zürich AG, Postfach 6335, 8050 Zürich, Switzerland

Wir erklären in alleiniger Verantwortung, dass die

We hereby declare under our sole responsibility that the

Mikroprozessor-Steuergeräte: / *Microprocessor control units:*
Modell: / *Model:* **mipromex® Typ MIQ **** ***
EG Baumusterprüfbescheinigung: / *EC-Type Examination Certificate Number:* SEV 09 ATEX 0132

den folgenden harmonisierten Europäischen Normen entsprechen:

correspond to the following harmonized European standards:

- Allgemeine Bestimmungen	- *General regulations*	EN 60079-0:2012
- Eigensicherheit "i"	- *Intrinsic safety "i"*	EN 60079-11:2012
- Explosionsschutz, Grundlagen und Methodik	- *Explosion protection, Basic concepts and methodology*	EN 1127-1:2011
- Immunitätsprüfungen	- *Immunity tests*	EN 61000-6-2:2005
- Emissionsmessungen	- *Emission measures*	EN 61000-6-4-2007

Die sicherheitsbezogenen Teile der obenaufgeführten Geräte entsprechen den allgemeinen Gestaltungsgrundsätzen Teil 1 EN 13849-1:2008 (Sicherheit von Maschinen - Sicherheitsbezogene Teile von Steuerungen der Kategorie 4).

The safety relevant parts of the above mentioned equipments correspond to the general principles of presentation of standards Part 1 EN 13849-1:2008 (Safety of Machines - safety relevant parts of control systems of category 4).

Date: 20.04.2016 ***Signed:***

Roland Inauen
Management CEO

Roger Inauen
Head Manufacturing

ISO 9001
ISO 80079

Aquasant Messtechnik AG
Hauptstrasse 22 | CH-4416 Bubendorf
Switzerland

T +41 61 935 5000 | F +41 61 931 2777
info@aquasant-mt.com | aquasant-mt.com

Swiss made

aquasant-mt
SWITZERLAND
creating solutions

EG-KONFORMITÄTSERKLÄRUNG
EC DECLARATION OF CONFORMITY

des Herstellers über die Fertigung und Prüfung von Mess- und Steuergeräten
over manufacturing and testing of measuring equipment units
nach der ATEX Richtlinie 2014/34/EU und EMV 2014/30/EU
as per directive ATEX 2014/34/EU and EMV 2014/30/EU

Hersteller: / *Manufacturer:* Aquasant Messtechnik AG, Hauptstrasse 22, 4416 Bubendorf, Switzerland

Benannte Stelle: / *notified body:* N° 1254, **QS** Zürich AG, Postfach 6335, 8050 Zürich, Switzerland

Wir erklären in alleiniger Verantwortung, dass die

We hereby declare under our sole responsibility that the

Mikroprozessor-Steuergeräte: / *Microprocessor control units:*
Modell: / *Model:* **mipromex® Typ MLS **** ***
EG Baumusterprüfbescheinigung: / *EC-Type Examination Certificate Number:* SEV 09 ATEX 0132

den folgenden harmonisierten Europäischen Normen entsprechen:

correspond to the following harmonized European standards:

- Allgemeine Bestimmungen	- *General regulations*	EN 60079-0:2012
- Eigensicherheit "i"	- *Intrinsic safety "i"*	EN 60079-11:2012
- Explosionsschutz, Grundlagen und Methodik	- *Explosion protection, Basic concepts and methodology*	EN 1127-1:2011
- Immunitätsprüfungen	- *Immunity tests*	EN 61000-6-2:2005
- Emissionsmessungen	- *Emission measures*	EN 61000-6-4-2007

Die sicherheitsbezogenen Teile der obenaufgeführten Geräte entsprechen den allgemeinen Gestaltungsgrundsätzen Teil 1 EN 13849-1:2008 (Sicherheit von Maschinen - Sicherheitsbezogene Teile von Steuerungen der Kategorie 4).

The safety relevant parts of the above mentioned equipments correspond to the general principles of presentation of standards Part 1 EN 13849-1:2008 (Safety of Machines - safety relevant parts of control systems of category 4).

Date: 20.04.2016 ***Signed:***

Roland Inauen
Management CEO

Roger Inauen
Head Manufacturing

ISO 9001
ISO 80079

Aquasant Messtechnik AG
Hauptstrasse 22 | CH-4416 Bubendorf
Switzerland

T +41 61 935 5000 | F +41 61 931 2777
info@aquasant-mt.com | aquasant-mt.com

Swiss made

aquasant-mt
SWITZERLAND
creating solutions

EG-KONFORMITÄTSERKLÄRUNG
EC DECLARATION OF CONFORMITY

des Herstellers über die Fertigung und Prüfung von Mess- und Steuergeräten
over manufacturing and testing of measuring equipment units
nach der ATEX Richtlinie 2014/34/EU und EMV 2014/30/EU
as per directive ATEX 2014/34/EU and EMV 2014/30/EU

Hersteller: / *Manufacturer:* Aquasant Messtechnik AG, Hauptstrasse 22, 4416 Bubendorf, Switzerland

Benannte Stelle: / *notified body:* N° 1254, **QS** Zürich AG, Postfach 6335, 8050 Zürich, Switzerland

Wir erklären in alleiniger Verantwortung, dass die

We hereby declare under our sole responsibility that the

Mikroprozessor-Steuergeräte: / *Microprocessor control units:*
Modell: / *Model:* **mipromex® Typ MLT **** ***
EG Baumusterprüfbescheinigung: / *EC-Type Examination Certificate Number:* SEV 09 ATEX 0132

den folgenden harmonisierten Europäischen Normen entsprechen:

correspond to the following harmonized European standards:

- Allgemeine Bestimmungen	- *General regulations*	EN 60079-0:2012
- Eigensicherheit "i"	- *Intrinsic safety "i"*	EN 60079-11:2012
- Explosionsschutz, Grundlagen und Methodik	- *Explosion protection, Basic concepts and methodology*	EN 1127-1:2011
- Immunitätsprüfungen	- *Immunity tests*	EN 61000-6-2:2005
- Emissionsmessungen	- *Emission measures*	EN 61000-6-4-2007

Die sicherheitsbezogenen Teile der obenaufgeführten Geräte entsprechen den allgemeinen Gestaltungsgrundsätzen Teil 1 EN 13849-1:2008 (Sicherheit von Maschinen - Sicherheitsbezogene Teile von Steuerungen der Kategorie 4).

The safety relevant parts of the above mentioned equipments correspond to the general principles of presentation of standards Part 1 EN 13849-1:2008 (Safety of Machines - safety relevant parts of control systems of category 4).

Date: 20.04.2016 ***Signed:***

Roland Inauen
Management CEO

Roger Inauen
Head Manufacturing

ISO 9001
ISO 80079

Aquasant Messtechnik AG
Hauptstrasse 22 | CH-4416 Bubendorf
Switzerland

T +41 61 935 5000 | F +41 61 931 2777
info@aquasant-mt.com | aquasant-mt.com

Swiss made

EG-KONFORMITÄTSERKLÄRUNG
EC DECLARATION OF CONFORMITY

des Herstellers über die Fertigung und Prüfung von Mess- und Steuergeräten
over manufacturing and testing of measuring equipment units
nach der ATEX Richtlinie 2014/34/EU und EMV 2014/30/EU
as per directive ATEX 2014/34/EU and EMV 2014/30/EU

Hersteller: / *Manufacturer:* Aquasant Messtechnik AG, Hauptstrasse 22, 4416 Bubendorf, Switzerland

Benannte Stelle: / *notified body:* N° 1254, **QS** Zürich AG, Postfach 6335, 8050 Zürich, Switzerland

Wir erklären in alleiniger Verantwortung, dass die

We hereby declare under our sole responsibility that the

Mikroprozessor-Steuergeräte: / *Microprocessor control units:*
Modell: / *Model:* **mipromex® Typ MPR **** ***
EG Baumusterprüfbescheinigung: / *EC-Type Examination Certificate Number:* SEV 09 ATEX 0132

den folgenden harmonisierten Europäischen Normen entsprechen:

correspond to the following harmonized European standards:

- Allgemeine Bestimmungen	- *General regulations*	EN 60079-0:2012
- Eigensicherheit "i"	- *Intrinsic safety "i"*	EN 60079-11:2012
- Explosionsschutz, Grundlagen und Methodik	- *Explosion protection, Basic concepts and methodology*	EN 1127-1:2011
- Immunitätsprüfungen	- *Immunity tests*	EN 61000-6-2:2005
- Emissionsmessungen	- *Emission measures*	EN 61000-6-4-2007

Die sicherheitsbezogenen Teile der obenaufgeführten Geräte entsprechen den allgemeinen Gestaltungsgrundsätzen Teil 1 EN 13849-1:2008 (Sicherheit von Maschinen - Sicherheitsbezogene Teile von Steuerungen der Kategorie 4).

The safety relevant parts of the above mentioned equipments correspond to the general principles of presentation of standards Part 1 EN 13849-1:2008 (Safety of Machines - safety relevant parts of control systems of category 4).

Date: 20.04.2016 ***Signed:***

Roland Inauen
Management CEO

Roger Inauen
Head Manufacturing

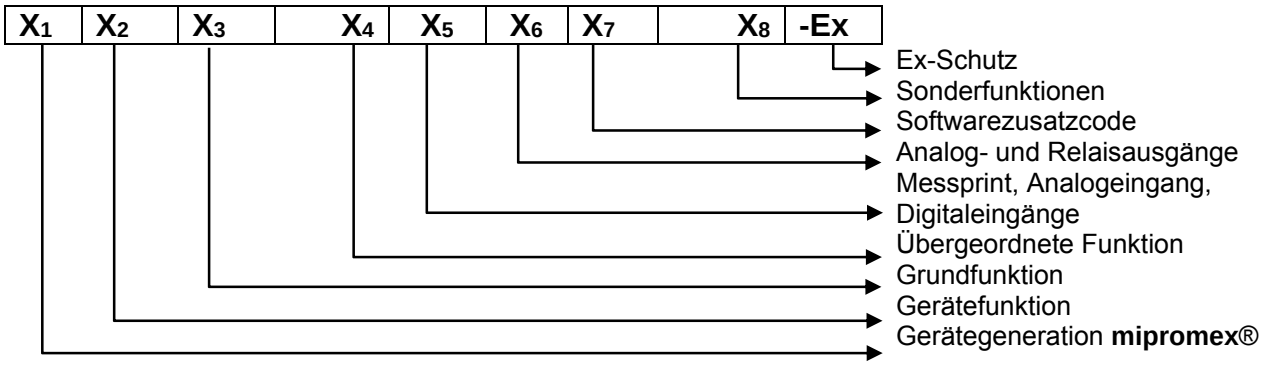
ISO 9001
ISO 80079

Aquasant Messtechnik AG
Hauptstrasse 22 | CH-4416 Bubendorf
Switzerland

T +41 61 935 5000 | F +41 61 931 2777
info@aquasant-mt.com | aquasant-mt.com

Swiss made

mipromex®-Typenschlüssel:



X_1 M = **mipromex®**

X_2
A = Analog
P = Product
I = Interface
L = Level

X_3
C = Concentration
R = Recognition
L = Level
M = Monitoring
Q = Quality
U = Universal
T = Transmitter
S = Switch

X_4
1 = Grenzwert
2 = Leermelder
3 = Vollmelder
4 = Analogausgang
5 = Universal neu
6 = Füllstand
7 =
8 = Trennschicht
9 = Produkt (Qualität, Art, Konzentration)

X_5	Messprint	MW von 2. Gerät	Analogeingang	Digitaleingänge
1	1			3
2	2			3
3	2	1 MW ab Rackbus		3
4	2	2 MW ab Rackbus		3
5	1		1	3
6	2		1	3

X_6	Relais	OC	Analogausgang	DC-Wandler
0	2			
1		1/2	1	1
2		2	2	1
3	2		1	1
4		2	2	2
5	2		2	2
6	2		2	1
7		2		
8	2 intern		1	1
9	1		1	1

Ein DC-Wandler mit Potentialtrennung, Analogausgang gegenüber Speisespannung;
Zwei DC-Wandler, zusätzlich Potentialtrennung, Analogausgänge gegeneinander

X_7
0 = Standard - Software
1 = 1. Erweiterung einer Standard - Software

X_8
- = ohne
C = Controller Regler (Gerät mit Reglerfunktion) z.B. **MIL** 8110 **C** Trennschichtniveauregler
P = Product compensation
S = Segment

Ex
Ex = mit Ex-Schutz nach ATEX II(2)G [Ex ia] IIC // II(2)D [Ex iaD]
Exd = mit Ex D-Schutz nach ATEX II(2)GD [Ex d ia] IIC
NEx = ohne Ex-Schutz auf Messprint

Aquasant Messtechnik AG
Hauptstrasse 22 | CH-4416 Bubendorf
Switzerland
T +41 61 935 5000 | F +41 61 931 2777
info@aquasant-mt.com | aquasant-mt.com

Swiss made

aquasant-mt SWITZERLAND creating solutions

EG-KONFORMITÄTSERKLÄRUNG
EC DECLARATION OF CONFORMITY

des Herstellers über die Fertigung und Prüfung von Mess- und Steuergeräten
over manufacturing and testing of measuring equipment units
nach der ATEX Richtlinie 94/9/EG und EMV 2004/108/EG
as per directive ATEX 94/9 EC; EMV 2004/108/EC

Hersteller: / *Manufacturer:* Aquasant Messtechnik AG, Hauptstrasse 22, CH-4416 Bubendorf/Switzerland

Benannte Stelle: / *notified body:* N° 1254 **QS** Zürich AG Quality Service

Hiermit bestätigen wir, dass die von Aquasant Messtechnik AG hergestellten Sondenelektroniken und Sonden mit den folgenden Typenbezeichnungen

We herewith confirm that all probe measuring electronics and probes built by Aquasant measuring technique Ltd of the following type

Messsonden: / *Measuring probes:*
Modell: / *Model*: S**, K**, F**, TSS
EG Baumusterprüfbescheinigung:/ *EC-Type Examination Certificate Number:* SEV 09 ATEX 0133 X

Beschreibung:
Stab-, Seil-, Flach- und Rohrsonden für Grenzwert, Füllstand, Trennschicht und Analytik mit Impedanz- Messelektronik im Anschlusskopf oder sep. Gehäuse mit HF- Anschluss gemäss ATEX 09 Typenschlüssel

Description:
Bar, rope, flat and pipe probes for limit switch, filling level, interfacial layer and analysis with impedance measuring electronic fix mounted or in separate housing with coax connection in accordance with the ATEX 09 type code

den folgenden harmonisierten Europäischen Normen entsprechen:

are corresponding to the following harmonized European standards:

- Allgemeine Bestimmungen	- *General regulation*	EN 60079-0:2012
- Geräteschutz durch druckfeste Kapselung "d"	- *Equipment protection by flameproof enclosures "d"*	EN 60079-1:2007
- Eigensicherheit "i"	- *Intrinsic safety "i"*	EN 60079-11:2012
- Spezielle Anforderung an Konstruktion, Prüfung und Kennzeichnung	- *Special requirements to construction, testing and marking*	EN 60079-26:2007
- Geräte-Staubexplosionsschutz durch Gehäuse "t"	- *Equipment dust ignition protection by enclosure "t"*	EN 60079-31:2014
- Explosionsschutz, Grundlagen und Methodik	- *Explosionprotection Basic, concepts and methodology*	EN 1127-1:2011
- Immunitätsprüfungen	- *Immunity tests*	EN 61000-6-2:2005
- Emissionsmessungen	- *Emission measures*	EN 61000-6-4-2007

Die sicherheitsbezogenen Teile der obenaufgeführten Geräte entsprechen den allgemeinen Gestaltungsgrundsätzen Teil 1 EN 954-1 (Sicherheit von Maschinen-Sicherheitsbezogene Teile von Steuerungen der Kategorie 4).

The safety relevant parts of above mentioned equipments are corresponding to the general principles of presentation of standards Part 1 EN 954-1 (Safety of Machines-safety relevant parts of control systems of category 4).

Auftragsbezogene Konformationserklärungen werden auf Verlangen abgegeben.
Hinweise für den Betreiber sind der Betriebsanleitung zu entnehmen.

Order depending declaration of conformity are established on request
Information for the user are to be taken from the operation manual

Date: 15.01.2016 ***Signed:***

Roland Inauen
Management CEO

Roger Inauen
Head Manufacturing

ISO 9001
ISO 80079

Aquasant Messtechnik AG
Hauptstrasse 22 | CH-4416 Bubendorf
Switzerland

T +41 61 935 5000 | F +41 61 931 2777
info@aquasant-mt.com | aquasant-mt.com

Production Quality Assurance Notification
(Translation)

(1)

(2) Equipment or protective systems or components intended for use in potentially explosive atmospheres - Directive **94/9/EC**

(3) Notification Number:

QS 11 ATEX 2081

(4) Product group(s): Rigid, flexible and tubular probes / Measuring electronics / Control units
Control unit / Liquid probe / In-situ-electronics
in type of protection Intrinsic Safety "i" and Flameproof Enclosure "d"

(5) The notified body keeps a list of the EC-type examination certificates this notification applies.

(6) Applicant: Aquasant measuring technique Ltd.
Hauptstrasse 22
CH-4416 Bubendorf

(7) Actual manufacturer: Aquasant measuring technique Ltd.
Hauptstrasse 22
CH-4416 Bubendorf

(8) The **QS Zürich AG** confirms to the applicant that its production quality system complies with the Annex IV of the Directive.

(9) This notification is based on the confidential audit report No V-13.1418, issued the 26th March 2014. The notification is valid until **24th March 2017** and can be withdrawn if the actual manufacturer no longer satisfies to the requirements of annex IV.

Results of periodical reassessment of the quality system are a part of this notification.

QS Zürich AG

Zürich, 30th April 2015

Manager of the certification body
L. Beljean

NOTIFIED BODY QS QUALITY SERVICE CE 1254 QUALITY SERVICE SWITZERLAND

Notifications without signature and official stamp shall not be valid. The notification may be circulated only without alteration. Extracts or alterations are subject to approval by QS Zürich AG. In case of dispute, the German text shall prevail.

QS Zürich AG, Postfach 6335, 8050 Zürich

electrosuisse

EC-Type Examination Certificate

(1)

(2) Equipment or protective system intended for use in potentially explosive atmospheres - **Directive 94/9/EC**

(3) Examination Certificate Number

SEV 09 ATEX 0133 X

(4) Equipment: Rigid, flexible and tubular probes with impedance measuring electronics type series S**, K**, F** and TSS

(5) Manufacturer: Aquasant-Messtechnik AG

(6) Address: Hauptstrasse 22, CH-4416 Bubendorf

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

(8) Electrosuisse SEV as notified body No. 1258 in accordance with article 9 of the Council Directive of the European Communities of 23 March 1994 (94/9/EC), certifies that this equipment 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 results of the examination are recorded in confidential report No. 08-IK-0395.01

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

EN 1127-1:2007	**EN 60079-0:2006**	**EN 60079-1:2007**
EN 60079-11:2007	**EN 60079-26:2007**	**EN 61241-0:2006**
EN 61241-1:2004	**EN 61241-11:2006**	

(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 examination certificate relates only to design and construction of the specified equipment in accordance to the directive 94/9/EC. Further requirements of this directive apply to the manufacturing process and the placing on the market of the equipment.

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

see Appendix page 3: (19) Marking

Electrosuisse SEV
Certification Body ATEX

Fehraltorf, 2009-08-19

Martin Plüss
Product Certification

SEV Verband für Elektro-, Energie- und Informationstechnik
SEV Association pour electrotechnique, les technologies de l'enegie et de l'information
SEV Associazione per elettrotecnica, la tecnica energetica e l'informatica
SEV Association for Electrical Engineering, Power and Information Technologies

Luppmenstrasse 1
CH-8320 Fehraltorf

Tel. +41 (0)44 956 11 11
Fax +41 (0)44 956 11 22
info@electrosuisse.ch
www.electrosuisse.ch

(13) # Appendix

(14) **EC-Type Examination Certificate SEV 09 ATEX 0133 X**

(15) Description of the equipment

Rigid, flexible and tubular probes type series S**, K**, F** and TSS with mounted or separate impedance measuring electronics type MTI ***/* used in conjunction with the microprocessor control unit "mipromex®" type M** **** * (SEV 09 ATEX 0132) for measuring signals for limiting values, levels, separating layers and for analysis in potentially explosive atmospheres.

Variants with integrated temperature sensor and associated measuring transmitter as well as use as a deadman's hand-held probe or hand lever probe is possible.

Ratings according to test report.

(16) Test Report 08-IK-0395.01

(17) Special conditions for safe use

1. According to RL 94/9/EC (ATEX 95) Appendix I, the rigid, flexible and tubular probe type series S**, K**, F** and TSS with mounted or separate impedance measuring electronics type MTI ***/* according to type code is a device of equipment group II, category 2G which, according to RL 99/92/EC (ATEX 137) can be used in zones 1 and 2 as well as gas groups IIA, IIB and IIC, which are potentially explosive due to combustible substances in the temperature classes T1 to T6.
   For use/installation, the requirements of EN 60079-14 must be observed.
2. According to RL 94/9/EC (ATEX 95) Appendix I, the rigid, flexible and tubular probe type series S**, K**, F** and TSS with mounted or separate impedance measuring electronics type MTI ***/* according to type code is a device of equipment group II, category 2D which, according to RL 99/92/EC (ATEX 137) can be used in zones 21 and 22 in the presence of combustible dusts.
   For use/installation, the requirements of EN 61241-14 must be observed.
3. According to RL 94/9/EC (ATEX 95) Appendix I, only the medium contacted part of the rigid, flexible and tubular probe type series S**, K**, F** and TSS according to type code is a device of equipment group II, category 1G or category 1D which, according to RL 99/92/EC (ATEX 137) can be used in zone 0 or 20.
4. The medium contacted parts of the rigid, flexible and tubular probe type series S**, K**, F** and TSS according to type code with coating of an insulating material (surface resistance> 1 GΩ) can be used without restriction only for combustible substances in gas groups IIA or IIB. For substances in gas group IIC, the coating must be either conductive (surface resistance < 1 GΩ) or have a coating thickness of maximum 0.2 mm.
5. The variants for use as a deadman's hand-held probe or hand lever probe may only be used in gas groups IIA and IIB.
6. The permissible ambient temperature range for the connecting or measuring transducer part of the rigid, flexible and tubular probe type series S**, K**, F** and TSS according to type code is -20°C to +60°C.
7. The permissible medium temperature for the measuring part of the rigid, flexible and tubular probe type series S**, K**, F** and TSS according to type code must be defined for the selected type (with or without heatsink, dimensions, etc.), so that the requirements of the above code are fulfilled. This verification or relevant information must be added to the operating instructions of each variant.

SEV Verband für Elektro-, Energie- und Informationstechnik
SEV Association pour electrotechnique, les technologies de l'enegie et de l'information
SEV Associazione per elettrotecnica, la tecnica energetica e l'informatica
SEV Association for Electrical Engineering, Power and Information Technologies

Luppmenstrasse 1
CH-8320 Fehraltorf

Tel. +41 (0)44 956 11 11
Fax +41 (0)44 956 11 22
info@electrosuisse.ch
www.electrosuisse.ch

8. As the probe circuit is operationally earthed, a common equipotential bond must exist throughout the wiring run of the probe circuit and supply and signal circuit (within and outside potentially explosive area).
9. When using the variant with integrated temperature sensor and associated measuring transmitter, temperature measuring transducer WIKA type 32.1*.**2 (DMT 98 ATEX E 007 X), the permissible medium temperature or temperature within the area of the measuring part must be minimum 10 K below the ignition temperature or temperature class of the used combustible materials.

(18) Fundamental essential health and safety requirements
Fulfilled by the standards applied

(19) Marking
The marking of the equipment shall include the following:

Rigid, flexible and tubular probe type series S**, K**, F** and TSS with mounted or separate impedance measuring electronics type MTI ***/* according to type key:

Ex	II 1/2G II 1/2D	Ex ia IIC T6 Ex iaD 20/21 IP65 T85°C	and/or

or

Ex	II 1/2G II 1/2D	Ex d ia IIC T6 Ex iaD tD A20/21 IP65 T85°C	and/or

Separate impedance measuring electronics type MTI ***/*.

Ex	II 2G II 2D	Ex ia IIC T6 Ex iaD 21 IP65 T85°C	and/or

Variants for use as a deadman's hand-held probe or hand lever probe:

Ex	II 2G	Ex ia IIB T6

Electrosuisse SEV
Certification Body ATEX

Fehraltorf, 2009-08-19

Martin Plüss
Product Certification

SEV Verband für Elektro-, Energie- und Informationstechnik
SEV Association pour electrotechnique, les technologies de l'enegie et de l'information
SEV Associazione per elettrotecnica, la tecnica energetica e l'informatica
SEV Association for Electrical Engineering, Power and Information Technologies

Luppmenstrasse 1
CH-8320 Fehraltorf

Tel. +41 (0)44 956 11 11
Fax +41 (0)44 956 11 22
info@electrosuisse.ch
www.electrosuisse.ch

electrosuisse

EC-Type Examination Certificate

(1)

(2) Equipment or protective system intended for use in potentially explosive atmospheres - **Directive 94/9/EC**

(3) Examination Certificate Number

SEV 09 ATEX 0132

(4) Equipment: Type M** **** * Microprocessor control unit "mipromex®"

(5) Manufacturer: Aquasant-Messtechnik AG

(6) Address: Hauptstrasse 22, CH-4416 Bubendorf

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

(8) Electrosuisse SEV as notified body No. 1258 in accordance with article 9 of the Council Directive of the European Communities of 23 March 1994 (94/9/EC), certifies that this equipment 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 results of the examination are recorded in confidential report No. 08-IK-0396.01

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

EN 1127-1:2007 **EN 60079-0:2006** **EN 60079-11:2007**
EN 61241-0:2006 **EN 61241-11:2006**

(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 examination certificate relates only to design and construction of the specified equipment in accordance to the directive 94/9/EC. Further requirements of this directive apply to the manufacturing process and the placing on the market of the equipment.

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

see Appendix page 2: (19) Marking

Electrosuisse SEV
Certification Body ATEX

Fehraltorf, 2009-06-25

Martin Plüss
Product Certification

SEV Verband für Elektro-, Energie- und Informationstechnik
SEV Association pour electrotechnique, les technologies de l'enegie et de l'information
SEV Associazione per elettrotecnica, la tecnica energetica e l'informatica
SEV Association for Electrical Engineering, Power and Information Technologies

Luppmenstrasse 1
CH-8320 Fehraltorf

Tel. +41 (0)44 956 11 11
Fax +41 (0)44 956 11 22
info@electrosuisse.ch
www.electrosuisse.ch

(13) # Appendix

(14) **EC-Type Examination Certificate SEV 09 ATEX 0132**

(15) Description of the equipment
The type M** **** * Microprocessor control unit "mipromex®" serve to supply power and evaluate measuring impulses. They may also be equipped for monitor-ing limit values.

(16) Test Report 08-IK-0396.01

(17) Special conditions for safe use
none

(18) Fundamental essential health and safety requirements
Fulfilled by the standards applied

(19) Marking
The marking of the equipment shall include the following:

For standard version:

⟨Ex⟩ **II (2)G [Ex ia] IIC**
II (2)D [Ex iaD] resp.

For the execution for supply of the probes in ignition protections „Ex d ia“

⟨Ex⟩ **II (2)GD**

Electrosuisse SEV
Certification Body ATEX

Fehraltorf, 2008-06-25

Martin Plüss
Product Certification

SEV Verband für Elektro-, Energie- und Informationstechnik
SEV Association pour electrotechnique, les technologies de l'enegie et de l'information
SEV Associazione per elettrotecnica, la tecnica energetica e l'informatica
SEV Association for Electrical Engineering, Power and Information Technologies

Luppmenstrasse 1
CH-8320 Fehraltorf

Tel. +41 (0)44 956 11 11
Fax +41 (0)44 956 11 22
info@electrosuisse.ch
www.electrosuisse.ch

aquasant-mt
SWITZERLAND
creating solutions

KONFORMITÄTSERKLÄRUNG

MANUFACTURER DECLARATION OF CONFORMITY

des Herstellers über die Fertigung und Prüfung von Druckgeräten
over manufacturing and testing of pressure equipment units
nach der Richtlinie 2014/68/EU
as per directive 2014/68/EU

Hersteller: / *Manufacturer:* Aquasant Messtechnik AG; CH-4416 Bubendorf/Switzerland

Beschreibung des Druckgerätes: / *Pressure unit description:*

Rohrsonde / *Pipe probe* / Type :	**TSS 80 / TSS 85/ TSS 90 { }**
Nennweite / *Size* :	**DN 32/40, 50, 80, 100, 125, 150-PN 16 {PN40; DN 150 - PN 16}**
Nennweite / *Size* :	**ANSI 1″, 2″, 3″, 4″, 6″ – PN 150 lbs {300 lbs; ANSI 6″ - 150 lbs}**

Konformitätsbewertungsverfahren: / *Conformity rating procedures:*

Modul / *Module* :	A2/ Kat.II
Fluidgruppe / *Fluid group* :	1, mit Ausnahme instabiler Gase / *1, excluding instable gases*
Prüfdruck / *Test pressure* :	PT = 24 bar / 225 lbs, 60 bar / 450 lbs

Benannte Stelle: / *Conformity services:*

TÜV-CERT-Zertifizierungsstelle für Druckgeräte	*TÜV-CERT certification office for pressure equipment*
des TÜV-Süd Kennnummer CE 0036	*units of the TÜV-South, control number CE 0036*
örtliche Stelle CH-8304 Wallisellen	*local office CH-8304 Wallisellen*
Zertifikat-Nr. Z-EU-CH-WAL-16-11-2688560-24132018	*Certificate No. Z-EU-CH-WAL-16-11-2688560-24132018*
Prüfbericht Nr. P-EU-CH-WAL-16-11-2688560-24132018	*Test report No. P-EU-CH-WAL-16-11-2688560-24132018*

Verweis auf angewendete Normen: / *Reference to applied norms:*

SN EN 12266-1; 2012-06 / SN EN 19; 2016-07 / SN EN 755-1; 2016-09 / SN EN 755-2; 2016-08

Andere Prüfungen: / *Other approvals:*

Ex-Prüfung nach / *Hazardous area approval as per*
Ex ia IIC T6 (Zone 0)
SEV 09 ATEX 0133 X

Ex II 1/2G Ex ia IIC T6 Ga/Gb // II 1/2G Ex d ia IIC T6 Ga/Gb

II 1/2D Ex ia tb IIIC T85°C Da/Db // II 1/2D ia t IIIC T85°C Da/Db

Auftragsbezogene Konformationserklärungen werden auf Verlangen abgegeben.
Hinweise für den Betreiber sind der Betriebsanleitung zu entnehmen.

Order depending declaration of conformity are established on request
Information for the user are to be taken from the operation manual

Date: 21.09.16 ***Signed:***

Roland Inauen
Management CEO

Andreas Kessler
Produktion Prüfung

QS CERTIFIED QS QUALITY SERVICE MANAGEMENT SYSTEM
ISO 9001
ISO 80079

Aquasant Messtechnik AG
Hauptstrasse 22 | CH-4416 Bubendorf
Switzerland
T +41 61 935 5000 | F +41 61 931 2777
info@aquasant-mt.com | aquasant-mt.com

Swiss made

ZERTIFIKAT ◆ CERTIFICATE ◆ 認証書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

Industrie Service

ZERTIFIKAT

gültig bis: 21.09.2017

CERTIFICATE

valid until: 21.09.2017

Interne Fertigungskontrolle mit überwachten Druckgeräteprüfungen in unregelmäßigen Abständen (Modul A2) nach Richtlinie 2014/68/EU

Internal production control plus supervised pressure equipment checks at random intervals (module A2) according to Directive 2014/68/EU

Zertifikat-Nr.: **Z-EU-CH-WAL-16-11-2688560-24132018**
Certificate No.:

Name und Anschrift des Herstellers: **Aquasant Messtechnik AG**
Name and address of manufacturer: **Hauptstr. 22**
4426 Bubendorf

Der Hersteller ist nach Prüfung der Voraussetzungen berechtigt, die von ihm im Rahmen des Geltungsbereichs hergestellten Druckgeräte mit unserer Kennnummer gemäß dem abgebildeten CE-Kennzeichen zu kennzeichnen:

The manufacturer is - after examination of the prerequisites - authorised to provide his pressure equipments manufactured within the scope of the examination with our identification number to the CE-marking as illustrated:

Prüfbericht Nr.: **P-EU-CH-WAL-16-11-2688560-24132018**
Test report No.:

Geltungsbereich: **Rohrsonden Typ: TSS 80, TSS 85, TSS 90**
Scope of examination:

Fertigungsstätte: **Aquasant Messtechnik AG**
Manufacturing plant: **Hauptstr. 22**
4426 Bubendorf

TÜV SÜD Industrie Service GmbH 00 36 Notified Body

Freiburg, 28.11.2016
(Ort, Datum)
(Place, date)

Echtheitsprüfung durch App TÜV SÜD Verify
Verification of Certificate by TÜV SÜD App Verify

TÜV SÜD Industrie Service GmbH
Zertifizierungsstelle für Druckgeräte

Otto Stertz

+41 44 877 62-22
otto.stertz@tuev-sued.de

Notifizierte Stelle, Kennnummer 0036
Notified Body, No. 0036
TÜV SÜD Industrie Service GmbH
Westendstr. 199
80686 München
GERMANY

SWISS TS

SWISS TS TECHNICAL SERVICES AG
DRUCKGERÄTE & APPARATEBAU

Swiss TS Technical Services AG
Richtistrasse 15
Postfach
CH–8304 Wallisellen
Tel. +41 44 877 62 22
Fax +41 44 877 62 10
www.swissts.ch

Zulassung für Umstempelung

Die Swiss TS Technical Services AG als akkreditierte Inspektionsstelle mit der Kennnummer 1253 für die Beurteilung der Gesetzeskonformität und Sicherheit von druckführenden Geräten und Anlagen erteilt der Firma

Aquasant Messtechnik AG
Hauptstrasse 22
CH-4416 Bubendorf

die Zulassung gemäss **Druckgeräterichtlinie 97/23/EG Anhang I, Absatz 3.1.5 und Verordnung über die Sicherheit von Druckgeräten SR 819.121** zur Übertragung von Kennzeichen zwecks Identifikation von Werkstoffen an Halbzeugen oder Bauteilen für das Werk

Aquasant Messtechnik AG
CH-4416 Bubendorf

Die umstempelungsberechtigten Personen sowie deren Kennzeichen sind in der **Zulassung Nr. COS.PQ.5507428** aufgeführt.

Diese Zulassung hat eine Gültigkeit von drei Jahren, sie kann auf Antrag verlängert werden.

Gültig bis
01.07.2017

Zulassung Nr.
COS.PQ. 5507428

Wallisellen, 09.09.2014

Leiter Industrie Service

N. Karathanasis

Sachverständiger

Hansrudolf Geiser