

EU-Type Examination Certificate Supplement 5

Equipment intended for use in potentially explosive atmospheres
Directive 2014/34/EU

EU-Type Examination Certificate Number: **BVS 11 ATEX E 038 X**

Product: **MEMOSENS Sensor type**

EasyFerm Plus	*** MS ***	Polilyte Plus	*** MS ***
Polilyte Plus XP	*** MS ***	Polilyte HT	*** MS ***
EasyFerm Bio	*** MS ***	MecoTrode	*** MS ***
MecoTrode Flat	*** MS ***	ChemoTrode	*** MS ***
ChemoTrode P	*** MS ***	FermoTrode	*** MS ***
OxyFerm	*** MS ***	EasyFerm USD	*** MS ***

Manufacturer: **HAMILTON Bonaduz AG**

Address: **Via Crusch 8, 7402 Bonaduz, Switzerland**

This supplementary certificate extends EU-Type Examination Certificate No. BVS 11 ATEX E 038 X to apply to products designed and constructed in accordance with the specification set out in the appendix of the said certificate but having any acceptable variations specified in the appendix to this certificate and the documents referred to therein.

DEKRA Testing and Certification GmbH, Notified Body number 0158, 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 the confidential Report No. BVS PP 11.2076 EU.

The Essential Health and Safety Requirements are assured in consideration of:

EN IEC 60079-0:2018
EN 60079-11:2012

General requirements
Intrinsic Safety "i"


If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Special Conditions for Use specified in the appendix to this certificate.

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 product. These are not covered by this certificate.

The marking of the product shall include the following:

 **II 1G Ex ia IIC T3/T4/T6 Ga**

DEKRA Testing and Certification GmbH
Bochum, 2021-03-29


Managing Director

13 Appendix

14 EU-Type Examination Certificate

BVS 11 ATEX E 038 X
Supplement 5

15 Product description

15.1 Subject and type

MEMOSENS sensor type

EasyFerm Plus *** MS ***
Polilyte Plus *** MS ***
Polilyte Plus XP *** MS ***
Polilyte HT *** MS ***
EasyFerm Bio *** MS ***
MecoTrode *** MS ***
MecoTrode Flat *** MS ***
ChemoTrode *** MS ***
ChemoTrode P *** MS ***
FermoTrode *** MS ***
EasyFerm USD *** MS ***

Shaft length in mm (50 – 600 mm)

Used glass, non-ex-relevant,
up to 3 letters or none

The differences between the sensors
are not Ex-relevant.

OxyFerm

*** MS ***

Shaft length in mm (50 – 950 mm)

Sensor cap, non-ex-relevant

15.2 Description

Reason for the supplement:

The MEMOSENS sensor type EasyFerm USD *** MS *** was added.

Description of Product:

The MEMOSENS Sensors are used in connection with a MEMOSENS measuring cable type **355350**, type **355351** or type **355352** (BVS 17 ATEX E 108 X) or an in hardware and function identical and certified MEMOSENS measuring cable to measure parameters in fluid media.

The connection between MEMOSENS sensor and MEMOSENS measuring cable is galvanically isolated via a completely isolated connection system (inductive coupling).

The MEMOSENS sensor's electronic circuit is completely encapsulated.

Listing of all components used referring to older standards

Subject and type	Certificate	Standards
MEMOSENS sensor component parts set type 71076376, type 71266569, type 71099249	BVS 15 ATEX E 039 U	EN 60079-0:2012 ⁽¹⁾ EN 60079-11:2012

⁽¹⁾ No applicable technical differences

15.3 Parameters

The MEMOSENS Sensors may be connected to the MEMOSENS measuring cable type **355350**, type **355351** or type **355352** (BVS 17 ATEX E 108 X) or an in hardware and function identical and certified MEMOSENS measuring cable.

Temperature class	Ambient temperature range	
	EasyFerm Plus *** MS *** Polilyte Plus *** MS *** Polilyte Plus XP *** MS *** Polilyte HT *** MS *** EasyFerm Bio *** MS *** Mecotrode *** MS *** Mecotrode Flat *** MS *** ChemoTrode *** MS *** ChemoTrode P *** MS *** FermoTrode *** MS *** EasyFerm USD *** MS ***	OxyFerm *** MS ***
T3	$0\text{ °C} \leq T_a \leq +130\text{ °C}$	$0\text{ °C} \leq T_a \leq +130\text{ °C}$
T4	$0\text{ °C} \leq T_a \leq +120\text{ °C}$	$0\text{ °C} \leq T_a \leq +120\text{ °C}$
T6	$0\text{ °C} \leq T_a \leq +70\text{ °C}$	$0\text{ °C} \leq T_a \leq +45\text{ °C}$

16 Report Number

BVS PP 11.2076 EU, as of 2021-03-29

17 Special Conditions for Use

17.1 The MEMOSENS sensors may be used in the following ambient temperature range: see table section 15.3

17.2 The MEMOSENS sensors may not be operated in electrostatically critical processing conditions. Intense vapour or dust flows directly impacting on the connection system must be avoided.

17.3 The metallic parts of the sensor type OxyFerm *** MS *** have to be mounted at the mounting location electrostatically conductive ($< 1\text{ M}\Omega$).

18 Essential Health and Safety Requirements

The Essential Health and Safety Requirements are covered by the standards listed under item 9.

19 Drawings and Documents

Drawings and documents are listed in the confidential report.