

Translation

EU-Type Examination Certificate

Device with a measuring function for explosion protection
Directive 2014/34/EU

EU-Type Examination Certificate Number: **BVS 19 ATEX G 002 X**

Product: **Portable gas detectors types EX-TEC PM 400, EX-TEC PM 500,
EX-TEC PM 550 and EX-TEC PM 580**

Manufacturer: **Hermann Sewerin GmbH**

Address: **Robert-Bosch-Straße 3, 33334 Gütersloh, Germany**

This product and any acceptable variation thereto are specified in the annex to this certificate and the documents therein referred to.

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 test report PFG-no. 41300519P.

The Essential Health and Safety Requirements with respect to the measuring function for explosion protection are assured in consideration of:

EN 60079-29-1:2016
EN 50271:2018

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:

see TÜV 17 ATEX 171969 X

DEKRA Testing and Certification GmbH
Bochum, 2019-12-06

Signed: Kilisch
Managing Director

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15 Product description

15.1 Subject and type

Portable gas detectors types EX-TEC PM 400, EX-TEC PM 500, EX-TEC PM 550 and EX-TEC PM 580

15.2 Description

The gas detection apparatus types EX-TEC PM 400, EX-TEC PM 500, EX-TEC PM 550 and EX-TEC PM 580 are portable equipment for the measurement of flammable gases and vapours mixed with air, of oxygen and of toxic gases. The apparatus can be equipped with up to 4 sensors. It is not necessary that all sensors are equipped. A battery pack integrated into the enclosure serves as power supply.

15.3 Parameters

see EU-type examination certificate TÜV 17 ATEX 171969 X

15.4 Measuring function for explosion protection

This EU-type examination certificate covers:

- equipment of types EX-TEC PM 400, EX-TEC PM 500, EX-TEC PM 550 and EX-TEC PM 580 with software versions 1.007 (main processor), 1.000 (sensor processor) and V7.17.00u.B18 (infrared sensor)
- measurement of methane propane and n-nonane mixed with air with the catalytic combustion sensor part-no. 1011-0040 in the measuring range 0 % LEL to 100 % LEL in operating mode "Warning" (EX-TEC PM 400)
- measurement of methane and propane mixed with air with the infrared sensors part-no. 1011-0035 and 1011-0044 in the measuring range 0 % LEL to 100 % LEL in operating mode "Warning"
- use of the following outputs for safety relevant purposes:
 - display
 - visible and audible alarm indicators
- use of the following options and accessories:
 - Rechargeable battery pack
 - Battery holder with rechargeable batteries type Fujitsu HR-3UTHC
 - Floating probe (part-no. ZS21-10100)
 - Probe hose 6 m (part.-no. ZS18-10100)
 - Flexible hand probe (part-no. ZS32-10000)
 - Flexible probe HG5 (part-no. ZS44-10000)
 - Short probe PM 5 (part-no. 2620-0033)
 - Probe hose HG 1 m nonane (part-no. ZZ27-10100)
 - Test set SPE AutoFlow (PP05-20000)
 - Docking station PM 5 (part-no.LP12-10000)
 - Docking station PM 5-T (part-no.LP12-20000)
 - Power supply M4 (part-no. LD10-10001)

The EU-type examination includes the following deviations from the operating conditions required by EN 60079-29-1:

- Extended range of pressure at operation: 70 kPa to 120 kPa
- Extended range of humidity of the measured gas: 5 % RH to 95 % RH

16 **Test report**

PFG-no. 41300519P of 2019-12-05

17 **Special Conditions for Use**

- see EU-type examination certificate TÜV 17 ATEX 171969 X.
- Perform a function test after the equipment is exposed to an impact load. Replace the catalytic sensor of equipment type EX-TEC PM 400 if the sensitivity deviates by more than 20 %.
- Do not de-activate the confidence signal.

18 **Essential Health and Safety Requirements**


The Essential Health and Safety Requirements with respect to the measuring function for explosion protection are covered by the standards listed under item 9.

19 **Drawings and Documents**

Drawings and documents are listed in the confidential test report.

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

DEKRA Testing and Certification GmbH
Bochum, dated 2019-12-06



Managing Director