



EC-TYPE EXAMINATION CERTIFICATE

Equipment or Protective System Intended for use
in Potentially Explosive Atmospheres
Directive 94/9/EC

EC-Type Examination Certificate Number : **BAS01ATEX1125X**

Equipment or Protective System: **PRESSURE TRANSMITTER TYPE 2*ISXGXXXXXXXXBXX**

Manufacturer: **GEMS SENSORS**
Division of Danaher UK Ind Ltd

Address: **Basingstoke, Hampshire, RG22 4AW**

This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

The Electrical Equipment Certification Service, notified body number 600 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system 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 examination and test results are recorded in confidential Report N°

00(C)0992 dated 9 July 2001

Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 50014: 1997 + Amds 1 & 2 **EN 50020: 1994** **EN 50284: 1999**
except in respect of those requirements listed at item 18 of the Schedule.

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.

This EC-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified equipment or protective system. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment or protective system.

The marking of the equipment or protective system shall include the following:-

Ex II 1 G **EEx ia IIB T4 (-20°C ≤ T_a ≤ 75°C)**

This certificate may only be reproduced in its entirety and without any change, schedule included.

File No: EECS 1149/02/012

This certificate is granted subject to the general conditions of the Electrical Equipment Certification Service. It does not necessarily indicate that the apparatus may be used in particular industries or circumstances.



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I M CLEARE
DIRECTOR
24 July 2001



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Schedule

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EC-TYPE EXAMINATION CERTIFICATE N° BAS01ATEX1125X

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Description of Equipment or Protective System

The Pressure Transmitter Type 2*ISXGXXXXXXXXBXX is designed to produce an output signal proportional to the pressure in a fluid. The output signal can be configured either as a 2-wire 4-20mA output or as a 3-wire voltage output.

The apparatus comprises a pressure sensor assembly, an amplifier board and an RFI board, all housed in a stainless steel enclosure.

External connections are made via an integral cable having a maximum length of 150 metres.

Optionally, the integral cable may be replaced by a plug and socket arrangement.

Input Parameters

$U_i = 28V$
 $I_i = 100mA$
 $P_i = 0.66W$
 $C_i = 0.37\mu F$
 $L_i = 0.36mH$

Ordering Code

The * may be either a 2 or a 6. The numbers designate the type of external electrical connection.

VARIATION 0.1

To permit the following:-

1. The Pressure Transmitter Type 26ISXGXXXXXXXXBXX to also be known as the Submersible Level Sensor/Transmitter Type TX5814.02 or the Pressure Sensor/Transmitter Type TX6114.02.11.6Z.

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Report No.

00(C)0992

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Special Conditions For Safe Use

1. The screen of the integral cable may be connected internally to the frame of the apparatus and this must be taken into consideration when installing the apparatus.
2. Pin 4 of the optional plug/socket arrangement is connected internally to the frame of the apparatus and this must be taken into consideration when installing the apparatus.



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18. Essential Health and Safety Requirements

| ESSENTIAL HEALTH & SAFETY REQUIREMENTS not covered by standards listed in Section 9 | | |
|---|--|------------------------------------|
| Clause | Subject | Compliance |
| 1.1.3 | Changes in characteristics of materials and combinations thereof | Report No 00(C)0992 Clause 5.1.1.3 |
| 1.2.2 | Components for incorporation or replacement | Report No 00(C)0992 Clause 5.1.2.2 |
| 1.2.5 | Additional means of protection | Report No 00(C)0992 Clause 5.1.2.5 |
| 1.2.7 | Protection against other hazards | Report No 00(C)0999 Clause 5.1.2.7 |
| 1.4.2 | Withstanding attack by aggressive substances | Report No 00(C)0992 Clause 5.1.4.2 |

19 DRAWINGS

DRAWINGS ASSOCIATED WITH ORIGINAL SCHEDULE

| Number | Issue | Date | Description |
|------------------------|-------|---------|---------------------------------------|
| 561758 | A | 12.6.01 | Circuit diagram |
| *561301 | C | 12.6.01 | Wiring diagram, RFI board |
| *561300 | D | 12.6.01 | RFI module assembly |
| 561886 | 3 | 22.6.01 | General assembly |
| *561759 | B | 12.6.01 | Capsule installation assembly details |
| 561888 | 2 | 22.6.01 | Connector details |
| *561905 Sheets 1 to 10 | A | 25.4.01 | Hybrid specification |
| *561905 Sheets 1 to 10 | B | 25.6.01 | Alternative Hybrid specification |
| 561998 | 1 | 22.6.01 | Label, Type 22ISXGXXXXXXXXBXX |
| 561999 | 1 | 22.6.01 | Label, Type 26ISXGXXXXXXXXBXX |

* These drawings are common to Certificate No. MECS 01 ATEX 4126X

DRAWING ASSOCIATED WITH VARIATION 0.1

| Number | Issue | Date | Description |
|--------|-------|---------|--|
| 562000 | 1 | 22.6.01 | Labels, Type TX5814.02 & TX6114.02.11.6Z |

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BASEEFA List Keywords
2TRANSMI



1 **SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC**

3 Supplementary EC - Type Examination Certificate Number: **BAS01ATEX1125X/1**

4 Equipment or protective system: **PRESSURE TRANSMITTER TYPE
2*ISXGXXXXXXBXX**

5 Manufacturer: **GEMS SENSORS**

6 Address: **Basingstoke, Hampshire, RG22 4AW**

7 This supplementary certificate extends EC - Type Examination Certificate No. **BAS01ATEX1125X** to apply to equipment or protective systems designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

This Supplementary Certificate shall be held with the original Certificate

The Electrical Equipment Certification Service, Notified Body Number 0600, retains responsibility for its original documentation. Baseefa (2001) Ltd. is responsible only for the additional work relating to this supplementary certificate and any other supplementary certificate that it has issued.

This certificate may only be reproduced in its entirety, without any change, Schedule included.

Baseefa (2001) Ltd. Customer Reference No. **1149**

Project File No. **02/0090**

This certificate is granted subject to the general terms and conditions of Baseefa (2001) Ltd. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.

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A handwritten signature in black ink, appearing to read "R S Sinclair".

RP R S SINCLAIR

DIRECTOR
On behalf of
Baseefa (2001) Ltd.



Schedule

Description of the variation to the Equipment or Protective System

Variation 1.1

To permit

- a) The introduction of Type 28IS which has enhanced performance
- b) The introduction of absolute versions (types 2*ISXXXXXXXXXGXX) as alternatives to gauge versions
- c) Minor changes to drawings for RFI module, hybrid specification and label

Report No.

02(C)0090

Special Conditions for Safe Use

In addition to the existing special conditions, the following applies:

When absolute versions of the transmitters (types 2*ISXXXXXXXXXGXX) are used, the electrical circuit is not capable of withstanding 500Vrms to earth or frame, and this must be taken into account on installation.

Essential Health and Safety Requirements

See original Certificate

Drawings and Documents

| Number | Issue | Date | Description |
|----------------|-------|----------|---|
| 561998 | 2 | 3-12-02 | Label, Type 22ISXGXXXXXXXXBXX or 22ISXXXXXXXXXGXX |
| 561999 | 2 | 3-12-02 | Label, Type 26ISXGXXXXXXXXBXX or 26ISXXXXXXXXXGXX |
| 562259 | 1 | 23-1-03 | Label, Type 28ISXGXXXXXXXXBXX or 28ISXXXXXXXXXGXX |
| 561886 | 4 | 3-12-02 | General Assembly |
| * 561758 | B | 20.6.02 | Circuit Diagram |
| * 561759 | C | 20.6.02 | Capsule Assembly Details |
| * 561905 | C | 25-6-02 | Hybrid Specification |
| Sheets 1 to 10 | | | |
| * 561300 | E | 23-10-02 | RFI Module Assembly |
| * 561301 | D | 23-10-02 | RFI Module Circuit Diagram |

Note. Drawings marked thus * are common to Certificate MECSS01ATEX4126X.



1 **SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres ,
Directive 94/9/EC**

- 3 Supplementary EC - Type Examination Certificate Number: **BAS01ATEX1125X/2**
- 4 Equipment or Protective System: **Pressure Transmitter Type 2*ISXGXXXXXXXXBXX**
- 5 Manufacturer: **Gems Sensors**
- 6 Address: **Basingstoke, Hampshire, RG22 4AW**
- 7 This supplementary certificate extends EC – Type Examination Certificate No. BAS01ATEX1125X to apply to equipment or protective systems designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

This supplementary certificate shall be held with the original certificate.

The original certificate was issued by The Electrical Equipment Certification Service, Notified Body Number 0600, which retains responsibility for its original documentation. Baseefa (2001) Ltd., Notified Body Number 1180, is responsible only for the additional work relating to this supplementary certificate and any other supplementary certificate it has issued.

This certificate may only be reproduced in its entirety, without any change, schedule included.

Baseefa (2001) Ltd. Customer Reference No. 1149

Project File No. 04/0206

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R S SINCLAIR
DIRECTOR
On behalf of
Baseefa (2001) Ltd.



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Schedule

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Certificate Number BAS01ATEX1125X/2

15 Description of the variation to the Equipment or Protective System

Variation 2.1

To permit the introduction of Types 22ICXGXXXXXXXXBXX, 22ICXAXXXXXXXXXGXX, 26ICXGXXXXXXXXBXX, 26ICXAXXXXXXXXXGXX, 28ICXGXXXXXXXXBXX and 28ICXAXXXXXXXXXGXX, for which the Code is $\text{\textcircled{Ex}}$ II IG, EEx ia IIC T4(-20°C≤Ta≤+75°C).

Input Parameters:

$U_i = 28\text{V}$, $I_i = 100\text{mA}$, $P_i = 0.66\text{W}$, $C_i = 41\text{nF}$, $L_i = 0.44\text{mH}$

16 Report Number

04(C)0206

17 Special Conditions for Safe Use

In addition to the existing special conditions, the following applies:

When absolute versions of the transmitters (types 2*ICXAXXXXXXXXXGXX) are used, the electrical circuit is not capable of withstanding 500Vrms to earth or frame, and this must be taken into account on installation.

18 Essential Health and Safety Requirements

Compliance with the Essential Health and Safety Requirements is not affected by this variation.

19 Drawings and Documents

| Number | Issue | Date | Description |
|----------------|-------|---------|---|
| 562840 | 1 | 25.3.04 | Label, Type 22ICXGXXXXXXXXBXX or 22ICXAXXXXXXXXXGXX |
| 562841 | 1 | 25.3.04 | Label, Type 26ICXGXXXXXXXXBXX or 26ICXAXXXXXXXXXGXX |
| 562842 | 1 | 25.3.04 | Label, Type 28ICXGXXXXXXXXBXX or 28ICXAXXXXXXXXXGXX |
| 562839 | 1 | 25.3.04 | General Assembly |
| 562823 | A | 3.3.04 | Circuit Diagram |
| 562826 | A | 9-3-04 | Hybrid Specification |
| Sheets 1 to 10 | | | |
| 562825 | A | 3.3.04 | RFI Module Assembly |
| 562824 | A | 2.3.04 | RFI Module Circuit Diagram |
| 561888 | 3 | 3.3.04 | Connection Details, 26IC, 26IS, 28IC and 28IS |