



# IECEx Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |             |                                      |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------------------------------|
| Certificate No.:    | <b>IECEx TSA 24.0007X</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Page 1 of 3 | <a href="#">Certificate history:</a> |
| Status:             | <b>Current</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Issue No: 0 |                                      |
| Date of Issue:      | 2024-06-25                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |             |                                      |
| Applicant:          | <b>APLISENS S.A.</b><br>Morelowa 7<br>03-192 Warszawa<br>Poland                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |             |                                      |
| Equipment:          | <b>Pressure transmitter, Differential pressure transmitter, Hydrostatic level probe / PC-28, PCE-28, PC-28Ex Safety, PCE-28Ex Safety, PR-28, PRE-28, PR-28Ex Safety, PRE-28Ex Safety, PC-28P, PCE-28P, SG(E)-25, SG(E)-25S, SG(E)-25C</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |             |                                      |
| Optional accessory: |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |             |                                      |
| Type of Protection: | <b>Intrinsic safety "ia"</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |             |                                      |
| Marking:            | Transmitters Px-28...<br>Ex ia I Ma products with connection PD, PK, PKM, PZ, SG, SGM<br>Ex ia IIC T6/T5/T4 Ga/Gb products with connection PD, PK, PKM, PZ, SG, SGM, PM12, PKD<br>Ex ia IIC T4 Ga/Gb products with ALW, ALM with connection PD or PM12<br>Ex ia IIIC T135°C Da products with connection PD, PK, PKM, PZ, SG, SGM and ALW, ALM with connection PD<br><br>Probes SG(E)-25x<br>Ex ia I Ma all SG... types<br>Ex ia IIC T6/T5/T4 Ga products without plastic tip and plastic cover<br>Ex ia IIB T6/T5/T4 Ga products with cable with protection ETFE or with additional protection by PTFE with metal wire<br>Ex ia IIC T6/T5/T4 Gb products with cable with additional protection by PTFE without metal wire |             |                                      |

Approved for issue on behalf of the IECEx  
Certification Body:

**Debbie Wouters**

Position:

**Acting Quality & Certification Manager**

Signature:  
(for printed version)

Date:  
(for printed version)

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting [www.iecex.com](http://www.iecex.com) or use of this QR Code.



Certificate issued by:

**TestSafe Australia**  
919 Londonderry Road  
Londonderry NSW 2753  
Australia





# IECEx Certificate of Conformity

Certificate No.: **IECEx TSA 24.0007X**

Page 2 of 3

Date of issue: 2024-06-25

Issue No: 0

Manufacturer: **APLISENS S.A.**  
Morelowa 7  
03-192 Warszawa  
**Poland**

Manufacturing  
locations: **APLISENS S.A.**  
Morelowa 7  
03-192 Warszawa  
**Poland**

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

## STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

**IEC 60079-0:2017** Explosive atmospheres - Part 0: Equipment - General requirements  
Edition:7.0

**IEC 60079-11:2011** Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"  
Edition:6.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

## TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

**CZ/FTZU/ExTR13.0005/00**  
**CZ/FTZU/ExTR13.0005/03**

**CZ/FTZU/ExTR13.0005/01**

**CZ/FTZU/ExTR13.0005/02**

Quality Assessment Report:

**PL/KDB/QAR12.0001/07**



# IECEx Certificate of Conformity

Certificate No.: **IECEx TSA 24.0007X**

Page 3 of 3

Date of issue: 2024-06-25

Issue No: 0

## EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The device is used as a pressure transmitter (PC\*-28\*), or differential pressure transmitter (PR\*-28\*), or hydrostatic level probe (PC\*-28P, SG(E)-25\*). The device converts non electrical process variable, which is pressure, into electrical 4...20 mA output signal. It consists of measurement head including pressure sensor (various types), fully encapsulated main PCB (additional small auxiliary PCBs might exist depending on version), steel cylindrical enclosure, cable connector (various types: with cable gland or fixed external cable).

## SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Ambient temperature range – see Instruction manual and marking label.
2. Process temperature (medium) at the diaphragm of the transmitter or probe must be in range of ambient temperature.
3. In case of use the transmitter in dust atmosphere, supplying voltage could occur on transmitter enclosure. It should be taken into consideration during transmitter installation.
4. In case of use titan parts in diaphragm seal, during installation and operation of the device the diaphragm seal should be protected against mechanical impact.
5. Version of the transmitter or probe with surge arrester, marked on the plate "Version SA", does not meet the requirements of Section 6.3.13 of IEC 60079-11:2011 (test of isolation 500 V rms ). This must be taken into account during the installation of transmitters.
6. Transmitters with display (with electrical connections ALW, ALM) and with diaphragm seals covered by PTFE, for Group III, should be installed in a place and in a way that prevents electrostatic charging.
7. In hazardous areas, transmitters with diaphragm seals covered with a PTFE layer should be installed in places and in a manner preventing electrostatic charging.

## Annex:

[Annexe for IECEx TSA 24.0007X.pdf](#)



# IECEX Certificate of Conformity Annexe

|                                    |                    |                   |   |
|------------------------------------|--------------------|-------------------|---|
| <b>Annexe for Certificate No.:</b> | IECEX TSA 24.0007X | <b>Issue No.:</b> | 0 |
|------------------------------------|--------------------|-------------------|---|

## Equipment description continue:

Intrinsically safe parameters

### Transmitters Px-28

Ambient temperature:  $-40\text{ °C} < T_a < T_{\text{amax}}$

| Power supply                                                              | Pi [W] | T <sub>amax</sub> [ °C ] | Temperature class, Group | Surface temperature |
|---------------------------------------------------------------------------|--------|--------------------------|--------------------------|---------------------|
| Linear output characteristic:<br>Ui=28VDC, Ii=0,1A                        | 0.7    | +45 °C                   | T6                       | 85 °C               |
|                                                                           |        | +70 °C                   | T5                       | 110 °C              |
|                                                                           |        | +80 °C                   | T4, Group I, Group III   | 120 °C              |
| Rectangular or Trapezoidal<br>output characteristic:<br>Ui=24VDC, Ii=0,1A | 1.2    | +55 °C                   | T5                       | 110 °C              |
|                                                                           |        | +80 °C                   | T4, Group I, Group III   | 135 °C              |

Input parameters:

Ver A: Ci=25 nF + cable capacitance\*, Li=0,4 mH + cable inductivity\*

Ver B: Ci=2.5 nF + cable capacitance\*, Li=0 mH + cable inductivity\*

\* - concerns versions with PK(M), PKD and SG(M) connectors; cable parameters C=200pF/m, L=1μH/m

### Probes SG(E)-25x

Ambient temperature:  $-25\text{ °C} < T_a < T_{\text{amax}}$

| Power supply                                                              | Pi [W] | T <sub>amax</sub> [ °C ] | Temperature class, Group |
|---------------------------------------------------------------------------|--------|--------------------------|--------------------------|
| Linear output characteristic:<br>Ui=28VDC, Ii=0,1A                        | 0.7    | +45 °C                   | T6                       |
|                                                                           |        | +70 °C                   | T5                       |
|                                                                           |        | +80 °C                   | T4, Group I              |
| Rectangular or Trapezoidal<br>output characteristic:<br>Ui=24VDC, Ii=0,1A | 1.2    | +55 °C                   | T5                       |
|                                                                           |        | +80 °C                   | T4, Group I              |

Input parameters:

Ci=2.5 nF + cable capacitance\*, Li=0 mH + cable inductivity\*

\* - cable parameters C=200pF/m, L=1μH/m

## Drawing list pertaining to Issue 0 of this Certificate:

| Drawing / Document Number: | Sheet No:          | Title:                                                                                           | Date: (yyyy-mm) |
|----------------------------|--------------------|--------------------------------------------------------------------------------------------------|-----------------|
| PC28-A140-00               | 1, 2               | Technical documentation DT.PC.PR-28.Ex.08 List of construction drawings                          | 2024-06         |
| PC28-A150-01               | 1B, 2B, 3B, 4B, 5B | PC-28 and PC-28 Safety series transmitters. Technical description.                               | 2022-05         |
| SG25-A000-04               | 1B, 2B             | Hydrostatic depth probes: SG-25, SGE-25, SG-25S, SGE-25S, SG-25C, SGE-25C. Technical description | 2022-04         |
| PC28-C151-TA               | 1C, 2C             | Rating plate                                                                                     | 2024-02         |
|                            | 3A                 |                                                                                                  | 2022-04         |
| PC28-C152-TA               | 1C, 2C             | Rating plate                                                                                     | 2024-02         |
|                            | 3A                 |                                                                                                  | 2022-04         |

Certificate issued by:

|                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <b>TestSafe Australia</b><br>919 Londonderry Road<br>Londonderry NSW 2753 Australia |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|



# IECEX Certificate of Conformity Annexe

|                                    |                    |                   |   |
|------------------------------------|--------------------|-------------------|---|
| <b>Annexe for Certificate No.:</b> | IECEX TSA 24.0007X | <b>Issue No.:</b> | 0 |
|------------------------------------|--------------------|-------------------|---|

| <b>Drawing / Document Number:</b> | <b>Sheet No:</b>       | <b>Title:</b>                                                                                        | <b>Date:<br/>(yyyy-mm)</b> |
|-----------------------------------|------------------------|------------------------------------------------------------------------------------------------------|----------------------------|
| SG25-C004-TA                      | 1D, 2B                 | Rating plate                                                                                         | 2024-02                    |
| PC28-C157-TA                      | 1                      | Warning plate                                                                                        | 2022-04                    |
| PC28-S151-TA                      | 1                      | PC-28Ex SAFETY series transmitter<br>Electrical diagram of the PC30Ex-rev1 board assembly (SIL_ Ex)  | 2012-08                    |
| PC28-S152-TA                      | 1A                     | PC-28 series transmitter. Electrical diagram of the PC30Ex-rev2 board assembly (Ex version)          | 2015-04                    |
| PC28-S153-TA                      | 1                      | PC-28Ex SAFETY series transmitter.<br>Electrical diagram of the PC30Ex-rev2 board assembly (SIL_ Ex) | 2012-08                    |
| PC28-S126-TA                      | 1                      | Electrical diagram of the PC30-rev7 board assembly                                                   | 2022-04                    |
| (CER.Ex)<br>PC28-S154-02          | 1, 2, 3, 4             | AM1-rev2 display board assembly diagram                                                              | 2015-12                    |
| PC28-B151-TA                      | 1, 2, 3, 4, 5          | PC30Ex-rev1 board assembly.<br>Specification.                                                        | 2012-08                    |
| PC28-B152-TA                      | 1B                     | PC30Ex-rev2 board assembly.                                                                          | 2022-07                    |
|                                   | 2,                     |                                                                                                      | 2012-08                    |
|                                   | 3, 4                   |                                                                                                      | 2012-06                    |
|                                   | 5A                     |                                                                                                      | 2015-03                    |
|                                   | 6A                     |                                                                                                      | 2015-04                    |
| PC28-B126-TA                      | 1, 2, 3, 4             | PC30-rev7 board assembly.                                                                            | 2022-04                    |
| (CER.Ex)PC28-B154-02              | 1, 2, 3, 4, 5, 6, 7    | Display board assembly AM1-rev2<br>Specification                                                     | 2015-12                    |
| APC2000-B122-01                   | 1, 2                   | PZ-11 terminal board assembly                                                                        | 2012-01                    |
| PC28S-B015-TA                     | 1                      | Electrical connection PCB PZ-11 rev2                                                                 | 2024-01                    |
| PC28-A151-TA                      | 1B, 2B, 3B, 4B, 5C, 6C | Pressure transmitter PC-28, PCE-28, PC-28Ex SAFETY, PCE-28Ex SAFETY                                  | 2022-04                    |
| PR28-A152-TA                      | 1B, 2B, 3A, 4B, 5B     | Differential pressure transmitter PR-28, PRE-28, PR-28Ex SAFETY, PRE-28Ex SAFETY                     | 2022-04                    |
| PC28P-A153-TA                     | 1B, 2B, 3A, 4B, 5B     | PC-28P, PCE-28P hydrostatic level probe                                                              | 2022-04                    |
| (CER.Exi)<br>PC28-A156-TA         | 1B, 2B, 3B, 4A, 5      | PC-28 series transmitters with PM12, PKD, ALW, ALM electrical connections                            | 2022-04                    |
| PC28-A154-TA                      | 1C                     | PC-28, PCE-28 pressure transmitters with separators                                                  | 2022-04                    |
|                                   | 2                      |                                                                                                      | 2012-07                    |
| PR28-A155-TA                      | 1C                     | Differential pressure transmitters<br>PR-28, PRE-28 with separators                                  | 2022-04                    |
|                                   | 2                      |                                                                                                      | 2012-07                    |
| SG25-A051-TA                      | 1A, 2A                 | Depth probes SG-25, SG-25S, SG-25C, SGE-25, SGE-25S, SGE-25C                                         | 2022-04                    |
| (CER.Exi)<br>PC28-B155-02         | 1                      | Complete display assembly                                                                            | 2015-11                    |
| PC29-B012-02                      | 1                      | PG2_rev3 board assembly                                                                              | 2010-12                    |
| PC29-B013-01                      | 1                      | PG3_rev1 board assembly                                                                              | 2009-10                    |
| PC29-B014-01                      | 1                      | PG2_rev1 board assembly                                                                              | 2009-10                    |

Certificate issued by:



**TestSafe Australia**  
919 Londonderry Road  
Londonderry NSW 2753 Australia



# IECEX Certificate of Conformity Annexe

|                                    |                    |                   |   |
|------------------------------------|--------------------|-------------------|---|
| <b>Annexe for Certificate No.:</b> | IECEX TSA 24.0007X | <b>Issue No.:</b> | 0 |
|------------------------------------|--------------------|-------------------|---|

| <b>Drawing / Document Number:</b> | <b>Sheet No:</b> | <b>Title:</b>                                     | <b>Date:<br/>(yyyy-mm)</b> |
|-----------------------------------|------------------|---------------------------------------------------|----------------------------|
| PC28-B017-01                      | 1                | PG_rev0 board assembly                            | 2012-08                    |
| PC28-B018-01                      | 1                | PGN_rev0 board assembly                           | 2012-08                    |
| PC28-B019-01                      | 1                | PGG_rev0 board assembly                           | 2012-08                    |
| ZA-002-TA                         | 1C               | Cable assembly                                    | 2022-04                    |
|                                   | 2, 3             |                                                   | 2022-04                    |
| (CER.Ex)SG25-A061-TA              | 1C               | Cable connection SG (Cable seals in the gland)    | 2022-04                    |
| ZG-002-TA                         | 1A               | Header Ø15                                        | 2007-06                    |
| ZG-006-TA                         | 1A               | Culvert                                           | 2004-10                    |
| GC3-001-TA                        | 1D, 2D, 3D       | Head, low, medium and absolute pressure.          | 2019-01                    |
| GC3-003-TA                        | 1B, 2B           | Head with front diaphragm                         | 2019-01                    |
| GC4-001-TA                        | 1D, 2D, 3D       | Medium, high, absolute pressure head.             | 2019-01                    |
| GC4-005-TA                        | 1D, 2D, 3D       | High pressure head                                | 2017-07                    |
| GC4-019-TA                        | 1, 2, 3          | Low pressure head with vacuum                     | 2012-02                    |
| GR40-108-TA                       | 1E, 2E, 3E, 4E   | Differential pressure head in welded version      | 2019-01                    |
| GR40-109-TA                       | 1B, 2B, 3B, 4B   | Differential pressure head                        | 2019-02                    |
| GR40-003-TA                       | 1F, 2F           | Differential pressure head with covers            | 2016-10                    |
| GR50-001-TA                       | 1B, 2B           | Differential pressure head                        | 2010-07                    |
| GR50-102-TA                       | 1, 2             | Differential pressure head without mech. overload | 2021-09                    |
| GSP-002-TA                        | 1, 2             | Level probe head                                  | 2008-10                    |
| GC3-006-TA                        | 1D, 2D           | Probe head SG25, SG25S, SG25C                     | 2022-07                    |
| GC3-018-TA                        | 1A, 2A           | Depth probe head                                  | 2022-08                    |
| GC4-006-TA                        | 1, 2             | Probe head SG25, SG25S, SG25C                     | 2011-08                    |

Certificate issued by:



**TestSafe Australia**  
919 Londonderry Road  
Londonderry NSW 2753 Australia