



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

Certificate No.: **IECEX TSA 24.0007X** Page 1 of 3 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2024-06-25

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

Equipment: **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**

Optional accessory:

Type of Protection: **Intrinsic safety "ia"**

Marking: Transmitters Px-28...
Ex ia I Ma products with connection PD, PK, PKM, PZ, SG, SGM
Ex ia IIC T6/T5/T4 Ga/Gb products with connection PD, PK, PKM, PZ, SG, SGM, PM12, PKD
Ex ia IIC T4 Ga/Gb products with ALW, ALM with connection PD or PM12
Ex ia IIIC T135°C Da products with connection PD, PK, PKM, PZ, SG, SGM and ALW, ALM with connection PD

Probes SG(E)-25x
Ex ia I Ma all SG... types
Ex ia IIC T6/T5/T4 Ga products without plastic tip and plastic cover
Ex ia IIB T6/T5/T4 Ga products with cable with protection ETFE or with additional protection by PTFE with metal wire
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 or use of this QR Code.



Certificate issued by:

TestSafe Australia
919 Londonderry Road
Londonderry NSW 2753
Australia





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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



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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

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Equipment description continue:

Intrinsically safe parameters

Transmitters Px-28

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

Power supply	Pi [W]	T _{amax} [C]	Temperature class, Group	Surface temperature
Linear output characteristic: U _i =28VDC, I _i =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 output characteristic: U _i =24VDC, I _i =0,1A	1.2	+55 °C	T5	110 °C
		+80 °C	T4, Group I, Group III	135 °C

Input parameters:

Ver A: C_i=25 nF + cable capacitance*, L_i=0,4 mH + cable inductivity*

Ver B: C_i=2.5 nF + cable capacitance*, L_i=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 _{amax} [C]	Temperature class, Group
Linear output characteristic: U _i =28VDC, I _i =0,1A	0.7	+45 °C	T6
		+70 °C	T5
		+80 °C	T4, Group I
Rectangular or Trapezoidal output characteristic: U _i =24VDC, I _i =0,1A	1.2	+55 °C	T5
		+80 °C	T4, Group I

Input parameters:

C_i=2.5 nF + cable capacitance*, L_i=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

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Drawing / Document Number:	Sheet No:	Title:	Date: (yyyy-mm)
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 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. 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) 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. 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 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) 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 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) 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

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Drawing / Document Number:	Sheet No:	Title:	Date: (yyyy-mm)
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

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