

TYPE-EXAMINATION CERTIFICATE

1. Type-examination Certificate (Module A)
2. Equipment or Protective System intended for use in potentially explosive atmospheres (Directive 2014/34/EU)



3. Type examination certificate Nr **ITS-I21ATEX28703X R.0**

4. **Product:** EX1503 Series Pressure Sensors

5. **Manufacturer:** PCB Piezotronics, Inc.

Applicant: PCB Piezotronics, Inc.

6. **Address:** 3425 Walden Ave
Depew, NY 14043
USA

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Depew, NY 14043
USA

7. This product and any acceptable variation thereto are specified in the schedule to this certificate and therein referred to.
8. INTERTEK ITALIA S.p.A., certifies that the 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 system intended for use in potentially explosive atmosphere, given in Annex II of the Directive.

The examination and tests results are recorded in confidential technical evaluation Intertek Report Nr. 103974085CRT-004b.

9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN IEC 60079-0:2018 and EN 60079-15:2010...except in respect of those requirements referred to at item 16 of the Schedule
10. If the sign X is placed after the certificate number, it indicates that the product is subject to Special Conditions for Safe Use specified in the schedule to this certificate.
11. This 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.
12. The marking of the product shall include the following:



II 3 G
Ex nA IIC T4 Gc
Tamb: -40°C to +121°C

Certificate issue date

31 March 2021


Todd L. Relyea

Todd L. Relyea
Certification Officer
Intertek Italia S.p.A.



This Certificate is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Certificate. Only the Client is authorized to permit copying or distribution of this Certificate and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek.

Intertek Italia S.p.A. Via Miglioli, 2/A - 20063 Cernusco sul Naviglio, Milano - Italy

LFT-EMEA-IT-ATEX-OP-23p (29 August 2019)



SCHEDULE

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13. DESCRIPTION OF THE EQUIPMENT OR PROTECTIVE SYSTEM

The equipment covered by this certificate are PCB Pressure Sensors with strain gage sensing elements and built-in electronics. The equipment provides a 4-20mA current output when subjected to mechanical motion (pressure). These sensors are designed to be energy limited. The equipment ratings are $U_i = 28V$, $I_i = 100mA$, $P_i = 0.65W$, $C_i = 0F$, $L_i = 2.4\mu H$.

EX1503xyyy Series Pressure Sensors where:

x = A through Z Family Code

yyy = 01 through 999 indicating variations in sensitivity, mounting thread or adaptor.

14. DRAWINGS AND DOCUMENTS

TITLE	DOCUMENT Nr	LEVEL	DATE
ATEX Technical File Non-Arcing (Sheets: 2)	34627	NR	April 9, 2018
Descriptive Notice For The Certification Of PCB Pressure Sensors	34628	NR	April 9, 2018
Approval Board Assembly	74229	NR	-
Etching Drawing	69272	NR	-
Approval Schematic & BOM (Sheets: 2)	69297	NR	1/4/2021
Approval Assembly Model EX1503 Series	74226	NR	1/4/2021
Approval Interconnection (Sheets: 2)	69269	NR	1/4/2021
Instructions For Use – EX1503 Series Pressure Sensors (Sheets: 2)	69307	NR	-

Copies of the above listed documents are kept at Intertek Italia S.p.A. archive.

15. SPECIAL CONDITIONS FOR SAFE USE

The apparatus must be only connected to an equipment whose electrical parameters are compatible with the electrical parameters. The apparatus shall be connected according to drawing 69269 (page 2/2). The connected cable and the connector must provide a minimum ingress protection of IP54, when assessed according to EN 60079-0 and EN60079-15. Unused connector must be fitted with an appropriately rated blanking cover.

16. ESSENTIAL HEALTH AND SAFETY REQUIREMENTS

The relevant essential Health and Safety Requirements have been identified and assessed in Intertek Report Nr. 103974085CRT-004b Revision 0 dated 103974085CRT-004b



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17. ROUTINE (FACTORY) TESTS

Dielectric Strength Test

- A routine dielectric strength test shall be carried out in accordance with Clause 23.2.1. Alternatively, a test shall be carried out at 1.2 times the test voltage but maintained for at least 100ms.