

EU TYPE-EXAMINATION CERTIFICATE

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



3. EU type examination certificate Nr **ITS16ATEX101472X R.1**

4. **Product:** Speed Sensors - 70085-1010-005, 70085-1010-081, 70085-101008130, 70085-1010-327, 70085-1010-328, 70085-1010-329, 70085-101032930, 70085-1010-330, 70085-1010-411, 70085-1010-412, 70085-1010-413, 70085-1010-414, 70085-1010-422, 70085-1010-456

5. Manufacturer:	AI-TEK Instruments, LLC	Applicant:	AI-TEK Instruments, LLC
6. Address:	152 Knotter Drive Cheshire, CT 06410 USA	Address:	152 Knotter Drive Cheshire, CT 06410 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., Notified Body n° 2575 in accordance with article 17 of the Directive 2014/34/EU of the European Parliament and Council of the 26 February 2014, 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. 102685933CRT-002c and 102685933CRT-002d dated 2016-11-10, 103481718CRT-006A dated 26 April 2018, 103481718CRT -006B dated 26 April 2018 and 104722465DAL-006 dated 2022-03-24
9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN IEC 60079-0: 2018 and EN 60079-1: 2014 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 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.
12. The marking of the product shall include the following:



II 2 G
Ex db IIC T4 Gb
Tamb: -65°C to +95°C

30 March 2022

Certificate issue date

Todd Relyea
Certification Officer
Intertek Italia S.p.A. (NB 2575))



PDR N° 277B

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC

Signatory of EA, IAF and ILAC Mutual Recognition Agreements

This certificate has been issued by Intertek Italia S.p.A. NB 2575 on transfer from Intertek Testing & Certification Ltd. (NB 0359) using the same issued original certificate number.



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-23a (28 February 2022)



SCHEDULE

EU TYPE EXAMINATION CERTIFICATE NUMBER: ITS16ATEX101472X R.1

13. DESCRIPTION OF THE EQUIPMENT OR PROTECTIVE SYSTEM

The 70085-1010-005, -327, -328, -330, -411, -412, -413, -414, -081, -329, -422, -456, 70085-101008130 and 70085-101032930 VR Speed Sensors are for use in a Group IIC , zone 2 hazardous environment, using an Ex d protection method. The safety of operation is assured by the design and construction of the unit. Its operating circuitry features low energy capability, very low capacitance and inductance and is mounted in a fully encapsulated, stainless steel housing with no significant amount of light metal. It has a very low temperature rise, <10°C over the ambient or mounting temperature. The minimum wall thickness at the conduit entry is .098" (2.5mm). Models differ in thread diameter and thread length as described below.

Model Description:

P/N	THREAD DIAMETER (mm)	THREAD LENGTH (mm)
70085-1010-005	19.05	47.752
70085-1010-327	19.05	69.85
70085-1010-328	19.05	101.6
70085-1010-330	15.875	101.6
70085-1010-411	15.875	47.752
70085-1010-412	15.875	152.4
70085-1010-413	19.05	38.1
70085-1010-414	19.05	152.4
70085-1010-081	15.875	38.1
70085-101008130	15.875	38.05
70085-1010-329	15.875	69.85
70085-101032930	15.875	69.8
70085-1010-422	15.875	38.1
70085-1010-456	15.875	152.4

CE Marking shall be accompanied by the identification number of the Notified Body responsible for surveillance of production.



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EU TYPE EXAMINATION CERTIFICATE NUMBER: ITS16ATEX101472X R.1

14. DRAWINGS AND DOCUMENTS

TITLE	DOCUMENT Nr	LEVEL	DATE
Housing, Sensor Drawing	097-0593	L	2/20/2018
*Housing, Marked	097-0999	G	08/20/2021
Sensor, Speed Drawing	70085-1010-005	K	11/2/2016
Sensor, Speed Drawing	70085-1010-327	K	11/2/2016
Sensor, Speed Drawing	70085-1010-328	L	11/2/2016
Sensor, Speed Drawing	70085-1010-330	K	11/2/2016
Sensor, Speed Drawing	70085-1010-411	L	11/2/2016
Sensor, Speed Drawing	70085-1010-412	L	11/2/2016
Sensor, Speed Drawing	70085-1010-413	K	11/2/2016
Sensor, Speed Drawing	70085-1010-414	K	11/2/2016
Installation instructions	960-0135-001	B	11/7/16
*INSTALLATION INSTRUCTIONS MAGNETIC SPEED SENSORS	960-0100-001	K	08/20/2021
*INSTALLATION INSTRUCTIONS MAGNETIC SPEED SENSORS	960-0101-001	N	08/20/2021
*DECLARATION OF CONFORMITY	960-0114-001	J	08/20/2021
*DECLARATION OF CONFORMITY	960-0115-001	M	08/20/2021
*DECLARATION OF CONFORMITY	960-0134-001	E	08/20/2021
Sensor, Speed	700-0754	B	10/18/16
*Sensor, Speed UL/CSA/ATEX	70085-1010-081	K	08/20/21
*Sensor, Speed UL/CSA/ATEX	70085-101008130	D	08/20/21
*Sensor, Speed UL/CSA/ATEX	70085-1010-329	J	08/20/21
*Sensor, Speed UL/CSA/ATEX	70085-101032930	D	08/20/21
*Sensor, Speed UL/CSA/ATEX	70085-1010-422	P	08/20/21
*Sensor, Speed UL/CSA/ATEX	70085-1010-456	M	08/20/21

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

15. SPECIFIC CONDITIONS FOR USE

- It is up to the end user to supply a suitably rated cable gland/seal.
- External earthing is maintained by electrical connection through the cable gland, see condition above
- Repair of the flamepath is not intended.

16. ESSENTIAL HEALTH AND SAFETY REQUIREMENTS

The relevant essential Health and Safety Requirements have been identified and assessed in Intertek Report Nr. 102685933CRT-002c and 102685933CRT-002d dated 2016-11-10, 103481718CRT-006A dated 26 April 2018, 103481718CRT -006B dated 26 April 2018 and 104722465DAL-006 dated 2022-03-24

17. ROUTINE (FACTORY) TESTS

N/A



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18. DETAIL OF CERTIFICATE CHANGES under R.1

- Updated Item 4 Product from “Speed Sensors - 70090-XXXXXX SERIES” to “Speed Sensors - 70085-1010-005, 70085-1010-081, 70085-101008130, 70085-1010-327, 70085-1010-328, 70085-1010-329, 70085-101032930, 70085-1010-330, 70085-1010-411, 70085-1010-412, 70085-1010-413, 70085-1010-414, 70085-1010-422, 70085-1010-456”
- Updated item 9 standard from “EN 60079-0:2012+A11: 2013” to “EN IEC 60079-0:2018”
- Updated Item 13 DESCRIPTION OF THE EQUIPMENT OR PROTECTIVE SYSTEM section:
 - Added text “-081, -329, -422, -456, 70085-101008130 and 70085-101032930”
 - Model Description: Added new P/Ns: 70085-1010-081, 70085-101008130, 70085-1010-329, 70085-101032930, 70085-1010-422, 70085-1010-456
- Updated item 14 DRAWINGS AND DOCUMENTS:
 - Updated drawing 097-0999 from “C 3/29/2017” to “G 08/20/2021”
 - Added new drawings 70085-1010-081, 70085-101008130, 70085-1010-329, 70085-101032930, 70085-1010-422, 70085-1010-456, 960-0100-001, 960-0101-001, 960-0114-001, 960-0115-001, 960-0134-001