



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 ETL 16.0039X	Page 1 of 4	<u>Certificate history:</u>
Status:	Current	Issue No: 3	Issue 2 (2018-06-27) Issue 1 (2016-11-10) Issue 0 (2016-10-19)
Date of Issue:	2022-03-30		
Applicant:	AI-TEK Instruments 152 Knotter Dr. Chesire, CT 06410 United States of America		
Equipment:	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		
Optional accessory:			
Type of Protection:	Flameproof "db"		
Marking:	Ex db IIC T4 Gb -65°C ≤ Tamb ≤ 95°C IECEX ETL 16.0039X		

Approved for issue on behalf of the IECEx
Certification Body:

Todd L. Relyea

Position:

Certification Officer

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:

Intertek
3933 US Route 11 South
Cortland NY 13045-2995
United States of America

intertek



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Manufacturer: **AI-TEK Instruments**
152 Knotter Dr. Chesire, CT 06410
United States of America

Manufacturing locations: **AI-TEK Instruments**
152 Knotter Dr. Chesire, CT 06410
United States of America

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 60079-1:2014-06](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

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 Report:

[US/ETL/ExTR16.0064/03](#)

Quality Assessment Report:

[GB/ITS/QAR10.0006/09](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

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 1 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). The models vary in thread diameter and thread length.

See Annex for Manufacture's documents and Model Description

SPECIFIC CONDITIONS OF USE: YES as shown below:

It is up to the end user to supply a suitable 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.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

- Updated Equipment from "Series of VR Speed Sensors" 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 standard from "IEC 60079-0:2011" to "IEC 60079-0:2017"
- Updated Equipment description by adding text "-081, -329, -422, -456, 70085-101008130 and 70085-101032930"
- Updated drawing 097-0999 from "C 3/29/2017" to "G 08/20/21"
- Added 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

Annex:

[Annex for IECEx ETL 16.0039X.pdf](#)



Annex to IECEx Certificate of Conformity

Certificate No:	IECEX ETL 16.0039X	Issue No. 3
Annex No. 1		

Technical Documents			
Title:	Drawing No.:	Rev. Level:	Date:
Housing, Sensor Drawing	097-0593	L	2/20/2018
*Housing, Marked	097-0999	G	08/20/21
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

Special Conditions of 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.

Conditions of Manufacture (routine tests): N/A

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Intertek Testing Services NA, Inc
3933 US Route 11, Cortland, NY
13045, U.S.A.

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Model Information:

P/N	THREAD DIAMNETER (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

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