

INTERNATIONAL ELECTROTECHNICAL COMMISSION

IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx MSC 14.0001X	Page 1 of 4	Certificate history:
Status:	Current	Issue No: 2	Issue 1 (2017-06-21) Issue 0 (2014-02-06)
Date of Issue:	2023-11-16		
Applicant:	Nautitech Mining Systems Pty Limited Unit 3/9 Packard Ave Castle Hills NSW 2154 Australia		
Equipment:	Speed Sensor		
Optional accessory:	Туре 12050		
Type of Protection:	Intrinsic Safety "ia"		
Marking:	Ex ia I Ma		
	$-40^{\circ}C \le Ta \le 110^{\circ}C$		

Approved for issue on behalf of the IECEx Certification Body:

Position:

Signature: (for printed version)

Date: (for printed version)

- This certificate and schedule may only be reproduced in full.
 This certificate is not transferable and remains the property of the issuing body.
 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

Ujen Singh

Quality and Certification Manager

16 November 2023



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Date of issue:	2023-11-16	Issue No: 2
Manufacturer:	Nautitech Mining Systems Pty Limited Unit 3/9 Packard Ave Castle Hills NSW 2154 Australia	
Manufacturing locations:	Nautitech Mining Systems Pty Limited Unit 3/9 Packard Ave Castle Hills NSW 2154 Australia	

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 60079-0:2011	Explosive atmospheres - Part 0: General requirements
Edition:6.0	

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 Report:

AU/MSC/ExTR14.0001/00

Quality Assessment Report:

AU/MSC/QAR21.0001/01



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The Speed Sensor Type 12050 is an intrinsically safe device designed for measurement of rotational speed in a Group I environment.

The Speed Sensor type 12050 consists of a partially encapsulated single three pin connector mounted directly to a fully encapsulated single printed circuit board that contains barrier circuits and signal conditioning circuits and connects through a pair of wire to an inductive pickup circuit which are housed within a stainless steel enclosure.

The Speed Sensor type 12050 is intended for use in fixed installations on stationary or mobile plant and connects to other intrinsically safe equipment through its single 3 pin connector.

SPECIFIC CONDITIONS OF USE: YES as shown below:

Refer to attached Annexe for details.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above) Variations permitted by Issue 2:

The auditing body was changed to TestSafe Australia.

Annex:

IECEx MSC 14.0001X-2_Annexe_1.pdf



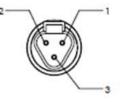
Annexe

Annexe for Certificate No.:	IECEX MSC 14.0001X	Issue No.:	2

Specific Conditions of Use:

It is a specific condition of use that the following parameters are taken into account during any installation:

Terminals	Pins 1 & 3 to 2
Maximum Input Voltage U _i	9 V
Maximum Internal Capacitance C _i	Negligible
Maximum Internal Inductance L _i	Negligible



Drawing list pertaining to Issue 2 of this Certificate:

Document / Drawing No.:	Page/s:	Title:	Revision Level:	Date: (yyyy-mm-dd)
ZUQPTY4FSNWN- 191-136	1 of 4	Part #12050-0.1 SPEED SENSOR COVERSHEET SCHEMATIC	2	2013-01-09
ZUQPTY4FSNWN- 191-136	2 of 4	Part #7510-0.1 SPEED SENSOR SCHEMATIC	2	2013-01-09
ZUQPTY4FSNWN- 191-136	3 of 4	Part #7510-0.1 SSG LOAD SCHEMATIC	2	2013-01-09
ZUQPTY4FSNWN- 191-136	4 of 4	Part #DS_BY-1 IS BARRIER Ui_9V SENSOR SCHEMATIC	2	2013-01-09
ZUQPTY4FSNWN- 191-237	1	PART 12050-1 SPEED SENSOR GENERAL CERTIFICATION DETAIL	1	2013-12-04
12050-A	1	SPEED SENSOR General DATA SHEET	2	2017-05-18
ZUQPTY4FSNWN- 191-235	1 of 6	Part #7509 SPEED SENSOR TOP LAYER PCB ARTWORK	2	2013-01-09
ZUQPTY4FSNWN- 191-235	2 of 6	Part #7509 SPEED SENSOR BOTTOM LAYER PCB ARTWORK	2	2013-01-09
ZUQPTY4FSNWN- 191-235	3 of 6	Part #7509 SPEED SENSOR TOP SILKSCREEN OVERLAY PCB ARTWORK	2	2013-01-09
ZUQPTY4FSNWN- 191-235	4 of 6	Part #7509 SPEED SENSOR BOTTOM SILKSCREEN OVERLAY LAYER PCB ARTWORK	2	2013-01-09
ZUQPTY4FSNWN- 191-235	5 of 6	Part #7509 SPEED SENSOR TOP SOLDER MASK PRINT PCB ARTWORK	2	2013-01-09
ZUQPTY4FSNWN- 191-235	6 of 6	Part #7509 SPEED SENSOR BOTTOM SOLDER MASK PRINT PCB ARTWORK	2	2013-01-09

Note: An "*" is added before the title of documents that are new or revised.

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