



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 MSC 14.0013X**

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Certificate history:

Status: **Current**

Issue No: 2

[Issue 1 \(2017-06-28\)](#)

[Issue 0 \(2014-07-29\)](#)

Date of Issue: 2023-11-16

Applicant: **Nautitech Mining Systems Pty Limited**
Unit 3/9 Packard Ave
Castle Hills NSW 2154
Australia

Equipment: **Process Sensor Type 12072**

Optional accessory:

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

Marking: **Ex ia I Ma**

-40°C ≤ Ta ≤ +120°C

Approved for issue on behalf of the IECEx
Certification Body:

Ujen Singh

Position:

Quality and Certification Manager

Signature:
(for printed version)

Date:
(for printed version)

16 November 2023

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





IECEx Certificate of Conformity

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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/ExTR14.0007/00](#)

Quality Assessment Report:

[AU/MSC/QAR21.0001/01](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The Process Sensor Type 12072 is an intrinsically safe device designed for measurement of process variables in a group I environment. The process sensor takes on a mechanical shape determined by the process type it measures. Each sensor consists of a fully encapsulated printed circuit board and a process element all housed in a metallic enclosure. Connection to the electronic circuits of each of the process sensors is provided through the three pin connector P1.

The Process Sensor Type 12072 consists of the following process sensor range:

Part 12051 Process Sensor (Temperature)

Part 12052 Process Sensor (Absolute Pressure)

Part 12055 Process Sensor (Angle)

Part 12070 Process Sensor (Differential Pressure)

Part 12086 Process Sensor (Position)

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 14.0013X-2_Annexe.pdf](#)



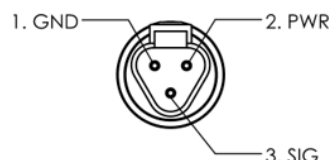
IECEX Certificate of Conformity Annexe

Annexe for Certificate No.:	IECEX MSC 14.0013X	Issue No.:	2
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Specific Condition of Use:

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

P1 Terminals	Pins 2 & 3 to 1
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-191-324	1	PART 12070-2 Process Sensor (Differential Pressure) CERTIFICATION DETAIL	1	2014-04-08
12070-A	1	Pressure Sensor (Differential Pressure) DATASHEET	2	2017-05-25
ZUQPTY4FSNWN-191-337	1 of 4	Part #12072-1.0 Process Sensor Coversheet PT SCHEMATIC	1	2014-03-21
ZUQPTY4FSNWN-191-337	2 of 4	Part #12072-1.0 PCS_Main_PT SCHEMATIC	1	2014-03-21
ZUQPTY4FSNWN-191-337	3 of 4	Part #12072-1.0 PCS_Load_PT SCHEMATIC	1	2014-04-07
ZUQPTY4FSNWN-191-337	4 of 4	Part #DS_ER-1.0 IS BARRIER U_i 10V5 Sensor SCHEMATIC	1	2014-03-20
ZUQPTY4FSNWN-191-338	1	PART 12051-1 Process Sensor (Temperature) CERTIFICATION DETAIL	1	2014-05-19
ZUQPTY4FSNWN-191-339	1	PART 12052-1 Process Sensor (Absolute Pressure) CERTIFICATION DETAIL	1	2014-05-19
12051-A	1	Process Sensor (Temperature) DATASHEET	2	2017-05-26
12052-A	1	Process Sensor (Absolute Pressure) DATA SHEET	2	2017-05-22
ZUQPTY4FSNWN-191-344	1 of 4	Part #12072-1.0 Process Sensor Coversheet A SCHEMATIC	1	2014-03-21
ZUQPTY4FSNWN-191-344	2 of 4	Part #12072-1.0 PCS_Main_A SCHEMATIC	1	2014-03-21
ZUQPTY4FSNWN-191-344	3 of 4	Part #12072-1.0 PCS_Load_A SCHEMATIC	1	2014-04-07
ZUQPTY4FSNWN-191-344	4 of 4	Part #DS_ER-1.0 IS BARRIER U_i 10V5 Sensor SCHEMATIC	1	2014-03-20

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IECEX Certificate of Conformity

Annexe

Annexe for Certificate No.:	IECEX MSC 14.0013X	Issue No.:	2
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Document / Drawing No.:	Page/s:	Title:	Revision Level:	Date: (yyyy-mm-dd)
ZUQPTY4FSNWN-191-346	1	PART 12055-1 Process Sensor (Angle) CERTIFICATION DETAIL	1	2014-05-19
12055-A	1	Process Sensor (Angle) DATASHEET	2	2017-05-23
ZUQPTY4FSNWN-191-348	1	PART 12072-1 Process Sensor CERTIFICATION DETAIL	1	2014-05-26
ZUQPTY4FSNWN-191-349	1 of 6	Part #7549 12072_Process Sensor (Angle) Top Layer PCB Artwork	1	2014-05-27
ZUQPTY4FSNWN-191-349	2 of 6	Part #7549 12072_Process Sensor (Angle) Bottom Layer PCB Artwork	1	2014-05-27
ZUQPTY4FSNWN-191-349	3 of 6	Part #7549 12072_Process Sensor (Angle) Top Silkscreen Overlay PCB Artwork	1	2014-05-27
ZUQPTY4FSNWN-191-349	4 of 6	Part #7549 12072_Process Sensor (Angle) Bottom Silkscreen Overlay PCB Artwork	1	2014-05-27
ZUQPTY4FSNWN-191-349	5 of 6	Part #7549 12072_Process Sensor (Angle) Top Solder Mask Print PCB Artwork	1	2014-05-27
ZUQPTY4FSNWN-191-349	6 of 6	Part #7549 12072_Process Sensor (Angle) Bottom Solder Mask Print PCB Artwork	1	2014-05-27
ZUQPTY4FSNWN-191-350	1 of 6	Part #7530 12072_Process Sensor (Pressure-Temperature) Top Layer PCB Artwork	1	2014-04-08
ZUQPTY4FSNWN-191-350	2 of 6	Part #7530 12072_Process Sensor (Pressure-Temperature) Bottom Layer PCB Artwork	1	2014-04-08
ZUQPTY4FSNWN-191-350	3 of 6	Part #7530 12072_Process Sensor (Pressure-Temperature) Top Silkscreen Overlay PCB Artwork	1	2014-04-08
ZUQPTY4FSNWN-191-350	4 of 6	Part #7530 12072_Process Sensor (Pressure-Temperature) Bottom Silkscreen Overlay PCB Artwork	1	2014-04-08
ZUQPTY4FSNWN-191-350	5 of 6	Part #7530 12072_Process Sensor (Pressure-Temperature) Top Solder Mask Print PCB Artwork	1	2014-04-08
ZUQPTY4FSNWN-191-350	6 of 6	Part #7530 12072_Process Sensor (Pressure-Temperature) Bottom Solder Mask Print PCB Artwork	1	2014-04-08
ZUQPTY4FSNWN-191-366	1	PART 12086-1 Process Sensor (Position) CERTIFICATION DETAIL	1	2014-06-06
12086-A	1	Process Sensor (Position) DATASHEET	2	2017-05-31

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

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