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 21.0010**

Certificate history:

Status: **Current**

Issue No: 0

Date of Issue: 2022-03-23

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

Equipment: **Pressure Sensors Type 5001 series**

Optional accessory:

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

Marking: Ex ia I / IIB T4 Ma Ga
-20°C ≤ Tamb ≤ +90°C/+120°C

Approved for issue on behalf of the IECEx Certification Body: **Geoff Slater**

Position: **MSTC Manager**

Signature: (for printed version)

Date: (for printed version) 24/03/2022

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:

MSTC Mine Safety Technology Centre
8 Hartley Drive
Thornton NSW 2322
PO Box 343
Australia

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Certificate No.: **IECEx MSC 21.0010**

Date of issue: 2022-03-23 Issue No: 0

Manufacturer: **Nautitech Mining Systems Pty Limited**
Unit 3/9 Packard Ave
CASTLE HILL NSW 2154
Australia

Manufacturing locations: **Nautitech Mining Systems Pty Limited**
Unit 3/9 Packard Ave
CASTLE HILL NSW 2154
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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 60079-11:2011 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 Reports:

AU/ITA/ExTR08.0016/00 AU/ITA/ExTR15.0005/00 AU/MSC/ExTR21.0010/00

Quality Assessment Report:

AU/MSC/QAR21.0001/00

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

The Pressure Sensor Type 5001 is designed to provide a 4 to 20 mA signal proportional to the pressure applied to the sensing cell.

The equipment comprises a single printed wiring board containing electronic components including a pressure sensor all encapsulated within a brass enclosure with only the diaphragm of the pressur sensor exposed to the process medium. External connections are made using an integral two core cable.

SPECIFIC CONDITIONS OF USE: NO

- The electrical connections to the integral cable must be housed within a suitable enclosure offering a degree of protection not less than IP20.
- It is a condition of safe use that the following parameters are to be taken into account in the installation:

Ambient temperatures up to 90°C.

Group I	Group IIB
U_i = 16.5 V	U_i = 12 V
P_i = 1.3 W	P_i = 1.3 W
C_i = 4 µF	C_i = 4 µF
L_i = Negligible mH	L_i = Negligible mH

Ambient temperatures up to 120°C.

Group I	Group IIB
U_i = 16.5 V	U_i = 12 V
Pi = 0.6 W	Pi = 0.6 W
C_i = 4 µF	Ci = 4 µF
L_i = Negligible mH	L_i = Negligible mH

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Equipment (continued):

Manufacturer's Documents			
Title:	**Drawing No.:**	**Rev. Level:**	**Date:**
High Pressure Sensor	ExMD500101	A	2007-06-18
Low Pressure Sensor - Female	ExMD500103	A	2007-06-20
Device Markings Sensor Interface Current Based Pressure Sensor	ExMK500101	2.0	2022-03-22
Sensor Interface PCB	ExPB118511-02	A	2007-12-03
Sensor Interface Schematic	ExPS118511-02	A	2007-12-03
5001 Series Pressure Sensor Assemblies *(3 Pages)*	ME5001-2-99-198-A	6	2022-03-22

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Additional information:

- The electrical connections to the integral cable must be housed within a suitable enclosure offering a degree of protection not less than IP20.
- It is a condition of safe use that the following parameters are to be taken into account in the installation:

Ambient temperatures up to 90°C.

Group I	Group IIB
U_i = 16.5 V	U_i = 12 V
P_i = 1.3 W	P_i = 1.3 W
C_i = 4 µF	C_i = 4 µF
L_i = Negligible mH	L_i = Negligible mH

Ambient temperatures up to 120°C.

Group I	Group IIB
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