



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.: IECEx SIR 09.0006U issue No.:2

Status: **Current**

Date of Issue: **2018-03-06** Page 1 of 4

Certificate history:

Issue No. 2 (2018-3-6)

Issue No. 1 (2012-10-10)

Issue No. 0 (2009-3-13)

Applicant: **International Metal Engineering Pte Limited**
Blk 13 Toa Payoh Lorong 8
#06-05 Braddell Tech Park
Singapore
319261
Singapore

Equipment: **Series 1080 and 1088 Instrument Housings**
Optional accessory:


Type of Protection: **Flameproof and Dust**

Marking: Ex db IIC Gb
Ex tb III C Db IP68
Ta = -40°C to 85°C

Approved for issue on behalf of the IECEx Certification Body: C Ellaby

Position: Deputy Certification Manager

Signature:
(for printed version)



Date: 2018-03-06

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 the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

SIRA Certification Service
CSA Group
Unit 6, Hawarden Industrial Park
Hawarden, Deeside, CH5 3US
United Kingdom

sira
CERTIFICATION





IECEX Certificate of Conformity

Certificate No.: IECEx SIR 09.0006U

Date of Issue: 2018-03-06

Issue No.: 2

Page 2 of 4

Manufacturer: **International Metal Engineering Pte Limited**
Blk 13 Toa Payoh Lorong 8
#06-05 Braddell Tech Park
Singapore
319261
Singapore

Additional Manufacturing location(s):

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 apparatus 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 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2014-06 Edition: 7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2013 Edition: 2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*This Certificate **does not** indicate compliance with electrical 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:

GB/SIR/ExTR09.0031/00

GB/SIR/ExTR12.0243/00

GB/SIR/ExTR18.0014/00

Quality Assessment Report:

GB/SIR/QAR07.0040/00



IECEX Certificate of Conformity

Certificate No.: IECEX SIR 09.0006U

Date of Issue: 2018-03-06

Issue No.: 2

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The 1080 Instrument Housings are cylindrical single compartment enclosures comprising a base and cover with a maximum internal volume of 140 cubic cm. The enclosures are manufactured from cast aluminium or stainless steel. Some cast aluminium versions are painted with silver paint or epoxy paint. The cover is blank and fitted with a stainless steel chain which is attached to the cover and base. Each enclosure may have a number of conduit openings and sizes. Both enclosures have passed a 4 times reference pressure test of 53 bar. Therefore a routine pressure test is not required. See table in the annexe.

The 1088 Instrument Housings are similar to the 1080 series with the exception of the internal volume which is 200 cubic cm and is not painted. See table in the annexe.

Refer to the Annexe for additional information, Schedule of Limitations and Conditions of Manufacture.

SPECIFIC CONDITIONS OF USE: NO



IECEX Certificate of Conformity

Certificate No.: IECEx SIR 09.0006U

Date of Issue: 2018-03-06

Issue No.: 2

Page 4 of 4

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

This issue, Issue 2, recognises the following changes; refer to the certificate annex to view a comprehensive history:

Following appropriate assessment to demonstrate compliance with the latest technical knowledge, IEC 60079-1:2007 Ed.6 and IEC 60079-31:2008 Ed.1 were replaced by IEC 60079-1:2014 Ed.7 and IEC 60079-31:2013 Ed.2, the markings were updated accordingly to recognise the new standards, and a Schedule of Limitations was added.

Other external thread types (other than metric or NPT) are not permitted as an option for cable glands in field wiring installations in IEC 60079-1:2014 Annex C.2.2, therefore a specific condition of use is added to this certificate.

Annexe to: IECEx SIR 09.0006U Issue 2

Applicant: International Metal Engineering Pte Limited

Apparatus: Series 1080 and 1088 Instrument Housings



1080 Instrument Housings

IME Part number 1080W IME Part number 1080S IME Part number 1080A			IME Part number 1080WW IME Part number 1080SW				
XX	T1 Thread Size	T2 Thread Size	XX	T1 Thread Size	T2 Thread Size		
01	3/4" NPT	1/2" NPT	01	3/4" NPT	1/2" NPT		
02	1/2" NPT	1/2" NPT	02	1/2" NPT	1/2" NPT		
04	3/4" BSP	1/2" BSP	08	M20 x 1.5	1/2" NPT		
05	M20 x 1.5	1/2" BSP	37	1/2" BSP	1/2" NPT		
08	M20 x 1.5	1/2" NPT	38	3/4" BSP	1/2" NPT		
09	1/2" NPT	3/4" NPT					
10	3/4" NPT	M20 x 1.5					
11	1/2" NPT	M20 x 1.5					
12	M20 x 1.5	M20 x 1.5					
18	1/2" BSP	1/2" BSP					
33	3/4" NPT	3/4" NPT					
36	M20 x 1.5	3/4" NPT					
37	1/2" BSP	1/2" NPT					
38	3/4" BSP	1/2" NPT					
39	1/2" BSP	3/4" NPT				IME Model	Description
40	3/4" BSP	3/4" NPT				1080ST	Stainless steel
41	1/2" BSP	M20 x 1.5				1080SM	Stainless steel
42	3/4" BSP	M20 x 1.5				1080SW	Stainless steel
43	1/2" NPT	1/2" BSP				1080AT	Silver painted low copper aluminium
44	3/4" NPT	1/2" BSP	1080AM	Silver painted low copper aluminium			
45	1/2" NPT	3/4" BSP	1080WT	Epoxy painted low copper aluminium			
46	3/4" NPT	3/4" BSP	1080WM	Epoxy painted low copper aluminium			
47	M20 x 1.5	3/4" BSP	1080WW	Epoxy painted low copper aluminium			
48	1/2" BSP	3/4" BSP					
49	3/4" BSP	3/4" BSP					

Annexe to: IECEx SIR 09.0006U Issue 2

Applicant: International Metal Engineering Pte Limited

Apparatus: Series 1080 and 1088 Instrument Housings



1088 Instrument Housings

IME Part number 1088ST			IME Part number 1088-008		
XX	T1 Thread Size	T2 Thread Size	XX	T1 Thread Size	T2 Thread Size
01	3/4" NPT	1/2" NPT	01	3/4" NPT	1/2" NPT
02	1/2" NPT	1/2" NPT	02	1/2" NPT	1/2" NPT
04	3/4" BSP	1/2" BSP	04	3/4" BSP	1/2" BSP
05	M20 x 1.5	1/2" BSP	05	M20 x 1.5	1/2" BSP
08	M20 x 1.5	1/2" NPT	08	M20 x 1.5	1/2" NPT
09	1/2" NPT	3/4" NPT	09	1/2" NPT	3/4" NPT
10	3/4" NPT	M20 x 1.5	10	3/4" NPT	M20 x 1.5
11	1/2" NPT	M20 x 1.5	11	1/2" NPT	M20 x 1.5
12	M20 x 1.5	M20 x 1.5	12	M20 x 1.5	M20 x 1.5
13	M24 x 1.5	1/2" BSP	13	M24 x 1.5	1/2" BSP
14	M24 x 1.5	1/2" NPT	14	M24 x 1.5	1/2" NPT
15	M24 x 1.5	M24 x 1.5	15	M24 x 1.5	M24 x 1.5
16	3/4" BSP	M24 x 1.5	16	3/4" BSP	M24 x 1.5
17	3/4" NPT	M24 x 1.5	17	3/4" NPT	M24 x 1.5
18	1/2" BSP	1/2" BSP	18	1/2" BSP	1/2" BSP
19	1/2" NPT	M24 x 1.5	19	1/2" NPT	M24 x 1.5
20	M24 x 1.5	M20 x 1.5	20	M24 x 1.5	M20 x 1.5
33	3/4" NPT	3/4" NPT	33	3/4" NPT	3/4" NPT
35	M20 x 1.5	M24 x 1.5	35	M20 x 1.5	M24 x 1.5
36	M20 x 1.5	3/4" NPT	36	M20 x 1.5	3/4" NPT
37	1/2" BSP	1/2" NPT	37	1/2" BSP	1/2" NPT
38	3/4" BSP	1/2" NPT	38	3/4" BSP	1/2" NPT
39	1/2" BSP	3/4" NPT	39	1/2" BSP	3/4" NPT
40	3/4" BSP	3/4" NPT	40	3/4" BSP	3/4" NPT
41	1/2" BSP	M20 x 1.5	41	1/2" BSP	M20 x 1.5
42	3/4" BSP	M20 x 1.5	42	3/4" BSP	M20 x 1.5
43	1/2" NPT	1/2" BSP	43	1/2" NPT	1/2" BSP
44	3/4" NPT	1/2" BSP	44	3/4" NPT	1/2" BSP
45	1/2" NPT	3/4" BSP	45	1/2" NPT	3/4" BSP
46	3/4" NPT	3/4" BSP	46	3/4" NPT	3/4" BSP
47	M20 x 1.5	3/4" BSP	47	M20 x 1.5	3/4" BSP
48	1/2" BSP	3/4" BSP	48	1/2" BSP	3/4" BSP
49	3/4" BSP	3/4" BSP	49	3/4" BSP	3/4" BSP

IME Model	Description
1088ST	1088 stainless steel, electro polished Enclosure

Schedule of Limitations

- i. When this product is certified as Ex equipment, the label for the Ex component (external to the enclosure) shall be removed, in accordance with IEC 60079-1 Annex D.8.
- ii. External thread types other than metric or NPT are not permitted as an option for cable glands in field wiring installations. Therefore, the user shall ensure that no such cable glands are installed in the enclosure entries.

Annexe to: IECEx SIR 09.0006U Issue 2
Applicant: International Metal Engineering Pte Limited
Apparatus: Series 1080 and 1088 Instrument Housings



Full List of Certificate Changes

Issue 1 – this Issue introduced the following change:

- 1 Following appropriate re-assessment to demonstrate compliance with the requirements of the latest IEC 60079 series of standards, the documents previously listed, IEC 60079-0:2007-10 and IEC 61241-1:2004, were replaced by those currently listed.

Issue 2 – this Issue introduced the following changes:

- 1 Following appropriate assessment to demonstrate compliance with the latest technical knowledge, IEC 60079-1:2007 Ed.6 and IEC 60079-31:2008 Ed.1 were replaced by IEC 60079-1:2014 Ed.7 and 60079-31:2013 Ed.2, the markings were updated accordingly to recognise the new standards, and a Schedule of Limitations was added.
- 2 Other external thread types (other than metric or NPT) are not permitted as an option for cable glands in field wiring installations in IEC 60079-1:2014 Annex C.2.2, therefore a specific condition of use is added to this certificate.