



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 TPS 19.0019X Issue No: 0 Certificate history:
Issue No. 0 (2019-05-17)

Status: Current Page 1 of 4

Date of Issue: 2019-05-17

Applicant: SHIMADA ELECTRIC Co., Ltd.
2-29-6, Nakaikagami Ota-ku, Tokyo, 146-0081, Japan 327-0004
Japan

Equipment: Conduit Hubs
Optional accessory: SXCH - series

Type of Protection: Increased Safety Protection "e"; Dust Ignition Protection by Enclosure "t"

Marking: Ex eb IIC Gb
Ex tb IIIC Db

Approved for issue on behalf of the IECEx
Certification Body:

Ing. Kristof De Gersem, MSc.

Position:

Technical Certifier

Signature:
(for printed version)

Date:

2019-05-17

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:

TÜV SÜD Product Service GmbH
Ridlerstr. 65
D-80339 Munich
Germany



Product Service



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Certificate No: IECEx TPS 19.0019X Issue No: 0
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Manufacturer: SHIMADA ELECTRIC Co., Ltd.
2-29-6 Nakaikegami Ota-ku, Tokyo, Japan
Japan

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 : 2017 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2015 Edition:5.0	Explosive atmospheres – Part 7: Equipment protection by increased safety "e"

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:

[DE/TPS/ExTR19.0012/00](#)

Quality Assessment Report:

[CN/CQM/QAR12.0002/04](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The SXCH series type conduit hubs can be used outdoor and indoor.

They consist of a main body and an O-ring fixed in a groove, The main body is made of brass material and stainless steel material. The O-ring is made of NBR or Si. The Explosion protection types are "eb" and "tb".

See Annex for further informations.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Ta (T ambient) has to be seen as the operating temperature (or T service = Service Temperature) at point of entry: -
 $20^{\circ}\text{C} \leq \text{Ta} \leq +80^{\circ}\text{C}$ (NBR); $-60^{\circ}\text{C} \leq \text{Ta} \leq +80^{\circ}\text{C}$ (Si).

It is the end-user's responsibility to ensure that those temperatures limits are complied with during installation keeping into account the ambient temperatures at the place of installation

2. For the internal thread (female part), an additional gasket or seal is required on the connecting equipment part. When no gasket or seal is applied, at least 5 full engaged threads are required (for the G and M threads) and $3\frac{1}{2}$ threads for the NPT threads. This to ensure the IP degree is kept. This must be realised during installation and is the responsibility of the end-user.



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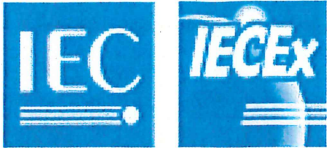
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Additional information:

Annex:

[Annex to CoC IECEx TPS 19.0019X_00.pdf](#)



IECEX Certificate of Conformity



Product Service

Order no. 70.520.19.030.02 Client no.102111
Annex to certificate: IECEx TPS 19.0019X
Applicant: Shimada Electric Co., Ltd.
 2-29-6, Nakaikagami Ota-ku, Tokyo, 146-0081, Japan
Apparatus: Conduit Hubs
Type(s) SXCH - series

Description of equipment

The SXCH - series type conduit hubs can be used outdoor and indoor.

They consist of a main body and an O-ring fixed in a groove, The main body is made of brass material and stainless steel material. The O-ring is made of NBR or Si. The Explosion protection types are "eb" and "tb".

Type code:

SXCH-XX X X X X

 1 2 3 4 5

1: Model

2: External Thread Size

3: Internal Thread Size

4: Material:

C: Brass

S1: Stainless Steel 304

S2: Stainless Steel 316

S3: Stainless Steel 316L

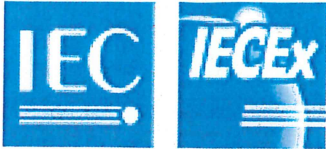
5: O-Ring Material

N: NBR (Nitrile Rubber)

S: Si (Silicone Rubber)

Model difference:

SXCH - series (16 to 54), See table below.



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Apparatus: Conduit Hubs
Type(s) SXCH - series

Technical data:

Unit: mm

TYPE	Conduit size N1	Conduit size N2	Φd	B	ΦC	S1	S2	L	ΦE
SXCH -16	M1.6*1.5-6g	M16*1.5-6H	8.7	35	38	16	24	44	23.6
		G1/2-A 1/2NPT	13						
	G1/2-A M20*1.5-6g	M16*1.5-6H	11						
		M20*1.5-6H	14						
SXCH -22	G3/4-A M25*1.5-6g	G3/4-A 3/4 NPT	18	41	45	16	24	44	30
		M25*1.5-6H	19						
SXCH -28	G 1-A M32*1.5-6g	G 1-A 1 NPT	24	46	50	16	30	50	35.6
		M32*1.5-6H	26.3						
SXCH -36	G11/4-A M40*1.5-6g	G11/4-A 1 1/4NPT	32	55	60	16	30	50	45
		M40*1.5-6H	32.2						
SXCH -42	G11/2-A	G11/2-A 1 1/2NPT	36	65	70	16	30	50	53
		M50*1.5-6H	39						
	M50*1.5-6g	G11/2-A 1 1/2NPT	36						
		M50*1.5-6H	44.1						
SXCH -54	G 2-A	G 2-A 2NPT	48	78	82	16	30	50	67
		M63*1.5-6H	51						
	M63*1.5-6g	G 2-A 2NPT	48						
		M63*1.5-6H	56						

Remark:

- N1: Nominal diameter of external thread
- N2: Nominal diameter of internal thread
- Φd: Inner diameter of conduit
- B: Size between two opposite side (conduit is hexagon with chamferings)
- ΦC: Size between two opposite chamferings(conduit is hexagon with chamferings)
- L1: Height of male thread
- L2: Height of female thread
- L: Height of conduit
- ΦE: Inner diameter of groove which fix O-ring