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 KIWA 19.0022X**

Certificate history:

Status: **Current**

Issue No: 0

Date of Issue: 2019-10-10

Applicant: **SAMSON AKTIENGESELLSCHAFT**
Weismüllerstraße 3
60314 Frankfurt
Germany

Equipment: **Position Transmitter, Type 4749**

Optional accessory:

Type of Protection: **Ex i, Ex d, Ex t**

Marking: Ex ia IIC T6…T4 Gb
Ex ia IIIC T85°C Db
or
Ex db IIC T6…T4 Gb
Ex tb IIIC T80°C Db

Approved for issue on behalf of the IECEx Certification Body: **Harry de Wild**

Position: **Certification Officer**

Signature:
(for printed version)

Date:

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:

Kiwa Nederland B.V. (Unit Kiwa ExVision)
Wilmersdorf 50
7327 AC Apeldoorn
P.O. Box 137
Netherlands

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Certificate No.: **IECEx KIWA 19.0022X**

Date of issue: 2019-10-10 Issue No: 0

Manufacturer: **SAMSON AKTIENGESELLSCHAFT**
Weismüllerstraße 3
60314 Frankfurt
Germany

Additional manufacturing locations:

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 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

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:

NL/KIWA/ExTR19.0025/00

Quality Assessment Report:

DE/TUN/QAR06.0011/08

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

The Position Transmitter Type 4749 is mounted on control valves and converts the lifting or rotating movements of the valve drive into a 4-20 mA current signal.

The position transmitter enclosure is provided with a threaded cover and can be of aluminium or stainless steel.

Type of protection	T-class	Ambient temperature range
Ex ia IIC	T6	-40 °C to +55 °C
	T5	-40 °C to +70 °C
	T4	-40 °C to +80 °C
Ex ia IIIC	T85 °C	-40 °C to +55 °C
Ex db IIC	T6	-55 °C to +65 °C
	T5	-55 °C to +80 °C
	T4	-55 °C to +85 °C
Ex tb IIIC	T80 °C	-55 °C to +65 °C

The Position Transmitter enclosure provides a degree of protection of IP66 in accordance with IEC 60529.

SPECIFIC CONDITIONS OF USE: YES as shown below:
- For the applicable ambient temperature range, refer to the Equipment section above;

- For Type of protection Ex db: The flameproof joints are not intended to be repaired;

- For Type of protection Ex tb and Ex ia IIIC: The equipment shall be installed and maintained such that hazards caused by electrostatic discharge are excluded;

- For Type of protection Ex db, Ex tb and Ex ia IIIC: Heat resisting cables and cable glands, suitable for a temperature of at least 20 K higher than the max. ambient temperature shall be used.

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Equipment (continued):

Type designation

4749-abcde
- a: Approvals
  - 181 (Intrinsically safe / Explosion proof IECEx)
- b: Options
  - 0 (position transmitter 4 - 20 mA)
- c: Reserved
  - X (not safety relevant)
- d: Field wiring entry
  - 0 (M20x1,5)
  - 1 (NPT 1/2")
- e: Enclosure material
  - 0 (aluminium)
  - 1 (stainless steel)

Electrical Data

Type of protection db or tb: Power supply:
12-28 Vdc, 4-20 mA.

Type of protection ia:
Supply and output circuit (terminals +31, -32): in type of protection intrinsic safety Ex ia IIC, only for connection to a certified intrinsically safe circuit, with the following maximum values:
Ui = 28 V; Ii = 115 mA; Pi = 1.0 W; Ci = 19.2 nF; Li = 0 mH