



SITIiAS
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防爆合格证

证 号：GYJ25.1195X

制 造 商 恩德斯+豪斯公司

(地址：Dieselstrasse 24, 70839 Gerlingen, Germany)

产 品 名 称 电导率传感器

型 号 规 格 aLS54 系列

防 爆 标 志 Ex ia IIC T3/ T4/T6 Ga

产 品 标 准 /

图 样 编 号 139726-2B, 138245-1415, 138207-1415

经图样及技术文件的审查和样品检验，确认上述产品符合下列标准：
GB/T 3836.1-2021, GB/T 3836.4-2021

特颁发此证。

本证书有效期：2025年08月08日至2030年08月07日

- 备注
1. 安全使用注意事项见本证书附件。
 2. 证书编号后缀“X”表明产品具有安全使用特殊条件，内容见本证书附件。
 3. 型号规格说明见本证书附件。
 4. 本安电气参数见本证书附件。

批 准

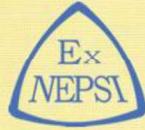
上海仪器仪表自控系统检验测试所有限公司
国家级仪器仪表防爆安全监督检验站
颁 发 日 期 二 〇 二 五 年 八 月 八 日

本证书仅对与认可文件和样品一致的产品有效。

地址：上海市漕宝路103号
邮编：200233

网址：www.nepsi.org.cn
Email: info@nepsi.org.cn

电话：+86 21 64368180
传真：+86 21 64844580



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EXPLOSION PROTECTION CERTIFICATE OF CONFORMITY

Cert No. GYJ25.1195X

Manufacturer	Endress+Hauser Conducta Gmbh+Co.KG (Address:Dieselstrasse 24,70839 Gerlingen,Germany)
Product	Inductive conductivity sensor
Model	aLS54 Series
Ex marking	Ex ia IIC T3/ T4/T6 Ga
Product standard	/
Drawing number	139726-2B, 138245-1415, 138207-1415

The product was found to comply with the following standard(s):

GB/T 3836.1-2021,GB/T 3836.4-2021

Valid until: 2030.08.07

Remarks

- 1.Conditions for safe use are specified in the attachment(s) to this certificate.
- 2.Symbol "X" placed after the certification number denotes specific conditions of use:
- 3.Model designation is specified in the attachment(s) to this certificate.
- 4.Intrinsically safe parameters are specified in the attachment(s) to this certificate.

Approval


**Shanghai Inspection and Testing Institute of
Instruments and Automation Systems Co., Ltd.**
**National Supervision and Inspection Center for
Explosion Protection and Safety of Instrumentation**
Date of issue 2025.08.08

This Certificate is valid for products compatible with the documents and samples approved by NEPSI.

103 Cao Bao Road
Shanghai 200233, China

<http://www.nepsi.org.cn>
Email: info@nepsi.org.cn

Tel: +86 21 64368180
Fax: +86 21 64844580



(GYJ25.1195X)

(Attachment I)

GYJ25.1195X 防爆合格证附件 I

由恩德斯+豪斯公司生产的aLS54系列电导率传感器，经检验符合下列标准：

GB/T 3836.1-2021 爆炸性环境 第1部分：设备 通用要求

GB/T 3836.4-2021 爆炸性环境 第4部分：由本质安全型“i”保护的设

产品防爆标志Ex ia II C T3/T4/T6 Ga，防爆合格证号GYJ25.1195X。

本证书认可的型号规格如下：

Indumax aLS54-****b 2 ccc

a代表可替换产品系列号，可为C，O或OC，与防爆性能无关；

b代表电缆长度，可为1=5m，2=10m，3=20m或4=任意m，最大不超过50m；

ccc代表label partner，可为三位字符（仅当a= O或OC），与防爆性能无关；

*代表与防爆性能无关选项，详见产品使用说明书。

一、产品安全使用特殊条件

产品防爆合格证号后缀“X”表示产品有安全使用特殊要求，具体内容如下：

1、对于aLS54系列电导率传感器，测量介质的最小电导率为10nS/cm，以避免产生静电火花危险。

2、传感器连接头和连接电缆的使用环境温度范围为：-20℃~60℃。

接液部分传感器的介质温度范围和温度组别的关系：

温度组别	T3	T4	T6
介质温度范围	-10℃~+125℃ ¹⁾	-10℃~+105℃	-10℃~+55℃

¹⁾：当最高介质温度为150℃时，最长接触时间为60分钟。

需采用适当措施保证传感器连接头和电缆不受过程温度影响。



3、aLS54系列电导率传感器的金属部分在安装场所应连接接地系统以保证静电传导($1M\Omega$)。

二、产品使用注意事项

1、aLS54系列电导率传感器可与以下设备连接(最大连接长度=50 米):

Liquiline M CM42系列二线制变送器(GYJ24.1279X), 传感器模块FSL11端子11, 12, 13, 15, 16, 83, 84, S;

Liquiline aCM42B系列二线制变送器(GYJ24.1267X), VSL11/控制模块接线端子11, 12, 13, 15, 16, 17, 18, 20。

2、用户不得自行随意更换该产品的电气零部件, 应会同产品制造商共同解决运行中出现的故障, 以免影响防爆性能和损坏现象的发生。

3、产品的安装、使用和维护应同时遵守产品使用说明书、GB/T 3836.13-2021 “爆炸性环境 第13部分: 设备的修理、检修、修复和改造”、GB 3836.15-2024 “爆炸性环境 第15部分: 电气装置的设计、选型和安装”、GB 3836.16-2024 “爆炸性环境 第16部分: 电气装置的检查与维护”、GB/T 3836.18-2017 “爆炸性环境 第18部分: 本质安全电气系统”及GB 50257-2014 “电气设备安装工程爆炸和火灾危险环境电气装置施工及验收规范”

三、制造厂责任

1、产品制造厂必须将上述产品安全使用特殊条件和使用注意事项纳入该产品使用说明书。

2、制造厂必须严格按照 NEPSI 认可的文件资料生产。

上海仪器仪表自控系统检验测试所有限公司
国家级仪器仪表防爆安全监督检验站

二〇二五年八月八日



(GYJ25.1195X)

(Attachment I)

Attachment I to GYJ25.1195X

1. Description

aLS54 Series Conductivity Sensors, manufactured by Endress+Hauser Conducta GmbH+Co. KG, has been certified accords with following standards:

GB/T 3836.1-2021 Explosive atmospheres-Part 1: Equipment-General requirements

GB/T 3836.4-2021 Explosive atmospheres-Part 4: Equipment protection by intrinsic safety“i”

The Ex marking is Ex ia II C T3/T4/T6 Ga, its certificate number is GYJ25.1195X.

Type approved in this certificate is:

Indumax **a**LS54-******b** 2 **ccc**

Note: **a** indicates alternative product designation:C,O or OC (not Ex-relevant);

b indicates Length of cable: 1=5m, 2=10m, 3=20m or 4= n m (maximum 50 m);

ccc indicates label partner : three character (only if **a** =O or OC), not Ex-relevance.

*represents options are not Ex-relevant,refer to the instruction manual for the details.

2. Special Conditions for Safe Use

The suffix “X” placed after the certificate indicates that the product is subject to special conditions for safe use specified as follows:

2.1 The inductive conductivity sensor INDUMAX type **a**LS54 may only be used in liquid media with a conductivity of > 10 nS/cm.

2.2 Ambient temperature range of the connecting head of the sensor or the connecting cable : -20°C ~ +60°C .

The relation between process temperature range with regards to the temperature class (sensor part in contact with media):

Temperature class	T3	T4	T6
Process temperature range	-10°C ~ +125°C ¹⁾	-10°C ~ +105°C	-10°C ~ +55°C

¹⁾ 150 °C for max. 60 min.

Appropriate measures have to be taken in order to guarantee the decoupling of the connecting head of the sensor or the connecting lead from the process temperature.

2.3 Metallic process connection parts of the inductive conductivity sensor INDUMAX type **a**LS54 have to be mounted at the mounting location electrostatically conductive (< 1MΩ).

3. Conditions for Safe Use

3.1 The **a**LS54 Series Conductivity Sensors (Lmax= 50 m) may be connected to the following equipment:
Liquiline M CM42 series Transmitter(GYJ24.1279X),Sensor module FSLI1 terminals 111 to 113 and 215 to 218,
Liquiline **a**CM42B series Transmitter(GYJ24.1267X), VSL11/Cond. imodule (field wiring terminals:11, 12,13,15,16,17,18, 20).

3.2The user shall not change the configuration in order to maintain/ensure the explosion protection performance of the equipment. Any change may impair safety.

3.3 For installation, use and maintenance of the product, the end user shall observe the instruction manual and the following standards:

GB/T 3836.13-2021 “Explosive atmospheres- Part 13:Equipment repair,overhaul,reclamation and modification”.



GB 3836.15-2024 "Explosive atmospheres- Part 15:Electrical installations design, selection and erection".
GB 3836.16-2024 "Explosive atmospheres- Part 16:Electrical installations inspection and maintenance".
GB/T 3836.18-2017 "Explosive atmospheres-Part 18: Intrinsically safe electrical systems".
GB 50257-2014 "Code for construction and acceptance of electric device for explosion atmospheres and fire hazard electrical equipment installation engineering".

4. Manufacturer's Responsibility

4.1 Conditions for safe use and special conditions for safe use, as specified above, should be included in the documentation the user is provided with.

4.2 Manufacturing should be done according to the documentation approved by NEPSI.

Shanghai Inspection and Testing
Institute of Instruments and Automation Systems Co. Ltd.
National Supervision and Inspection Center
for Explosion Protection and Safety of Instrumentation
2025.08.08

