

EU-Type Examination Certificate

- [2] EQUIPMENT OR PROTECTIVE SYSTEM INTENDED FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES DIRECTIVE 2014/34/EU
- [3] EU-Type Examination Certificate Number: Presafe 17 ATEX 10624X Issue 0
- [4] Product: ALS... series Valve Monitor
- [5] Applicant: Wuxi C&W Valve Controls Co., Ltd.
[6] Address: Room 803, No.801 Hongqiao Rd, Binhu District, Wuxi, Jiangsu, 214072, China
- [5] Manufacturer: Wuxi Aphe Flow Smart Controls Maker Co., Ltd.
[6] Address: No.29, Henghua Scientific Park, No.58 Xiuxi Road, Taihu Town, Binhu District, Wuxi, Jiangsu, P.R.China
- [7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] DNV GL Nemko Presafe AS, notified body number 2460, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.
The examination and test results are recorded in confidential reports listed in section 16.
- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with: EN 60079-0:2012/A11:2013 and EN 60079-1:2014.
- [10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.
- [11] This EU - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- [12] The marking of the product shall include the following:



II 2 G

Ex db IIB T6 Gb or Ex db IIB T4 Gb
(refer to type designation for T-code)



Date of issue: 2017-08-15

Asle Kaastad
For DNV GL Nemko Presafe AS

The Certificate has been digitally signed.
See www.presafe.com/digital_signatures for more info

This certificate replaces
previous certificate
issued by DNV.

This certificate may only be reproduced in its entirety and without any change, schedule included.

[13]

Schedule

[14] EU-TYPE EXAMINATION CERTIFICATE No.: Presafe 17 ATEX 10624X Issue 0

[15] **Description of Product**

The ALS... series valve monitors are used for the position indication and feedback signal of automatic control system. The equipment comprises a flammproof enclosure including a shaft operating the indication device. The enclosure may be of stainless steel or aluminium.

Type designation

ALS - □ 00 □

Internal components :

M2: Mechanical switch (2SPDT 16 A 125~250 V a.c.), -20°C to +50°C, T6
M3: Mechanical switch (3SPDT 16 A 125~250 V a.c.), -20°C to +50°C, T4
M4: Mechanical switch (4SPDT 16 A 125~250 V a.c.), -20°C to +50°C, T4
M5: Mechanical switch (2DPDT 16 A 125~250 V a.c.), -20°C to +50°C, T4
M2F: Mechanical switch+Analog output
(2SPDT 16 A 125~250 V a.c.+ 4~20 mA transmitter), -20°C to +50°C, T6
ML2: Low temp. mechanical switch (2SPDT 16 A 125~250 V a.c.), -40°C to +50°C, T6
MG2: Gold contacts mechanical switch (2SPDT 0.1 A 125~250 V a.c.), -20°C to +50°C, T6
LM2: Mechanical switch (2SPDT 16 A 125~250 V a.c.), -20°C to +50°C, T6
PA22: Proximity sensor (10~30 V d.c. ≤ 150 mA 2 wire), -20°C to +50°C, T6
PA23: Proximity sensor (10~30 V d.c. ≤ 150 mA 3 wire), -20°C to +50°C, T6
PP22: Proximity sensor (NCB2-V3-N0 8 V d.c. ≤ 1 mA), -20°C to +50°C, T6
or (NBB3-V3-Z4 5~60 V d.c. 4~100 mA), -20°C to +50°C, T6
QA22: Magnet sensor (5~240 V a.c./d.c. ≤ 300 mA 2 wire), -20°C to +50°C, T6
QA23: Magnet sensor (5~240 V a.c./d.c. ≤ 300 mA 3 wire), -20°C to +50°C, T6
QA43: Magnet sensor (5~240 V a.c./d.c. ≤ 300 mA 3 wire), -20°C to +50°C, T6
AS2: ASi sensor-communication card (20~28 V d.c. ≤ 41 mA), -40°C to +50°C, T6

Material of enclosure:

5: Aluminum alloys enclosure
6: Stainless steel enclosure

ALS:

Valve monitor

Electrical Data

Refer to type designation

Degrees of protection (IP Code)

IP66

Ambient temperature:

-20°C to +50°C

-40°C to +50°C (only for types ALS500ML2, ALS500AS2, ALS600ML2 and ALS600AS2)

Routine tests

- Each Ex d enclosure must be subjected to routine overpressure test of 1.5 MPa (15 bar) for at least 10 s according to clause 16 of EN 60079-1.

[16] Report No.: 2009-3294

Project No.: PRJC-78969-2008-PRC-CHN

[17] Specific Conditions of Use

- Repairs of the flameproof joints must be made in compliance with the structural specifications provided by the manufacturer. Repairs must not be made on the basis of values specified in table 2 of EN 60079-1.

- The mechanical property class of the fasteners which are relevant to the flameproof joint should be at least A*-50 (the yield stress of those fasteners must be at least 310 MPa).

- Use only wet cloth when cleaning the indicator.

- Cables with temperature rating of at least 150°C should be used for field wiring.

[18] Essential Health and Safety Requirements

Essential Health and Safety Requirements (EHSRs) are covered by the standards listed at item 9.

[19] Drawings and documents

Number	Title	Rev.	Date
ALS500-000	Assembly drawing	3	2017-06-16
ALS500-000-AS2	Assembly drawing	3	2017-06-16
ALS600-000	Assembly drawing	3	2017-06-16
ALS600-000-AS2	Assembly drawing	3	2017-06-16
ALS500-001	Body (2 sheets)	3	2017-06-16
ALS500-002	Cover	2	2017-06-16
ALS600-001	Body (2 sheets)	3	2017-06-16
ALS600-002	Cover	2	2017-06-16
ALS210-013	Indicator O-ring	1	2009-02-08
ALS210-015	Shaft O-ring	1	2009-02-08
ALS400-007	Shaft Sleeve	1	2009-02-08
ALS500-003	Body O-ring	1	2009-02-08
ALS500-007	Shaft	1	2009-02-08

Number	Title	Rev.	Date
ALS500-010	Label	3	2017-06-16
ALS500-014	Earthing label	1	2009-02-08
ALS500-015	Warning label	2	2017-05-31
ALS600-005	Body O-ring	1	2009-02-08
ALS600-010	Label	3	2017-06-16

[20] Certificate History

Issue	Description	Issue date	Report no.
0	Original issue (Replaces DNV 09 ATEX 53807X)	2017-08-15	2009-3294, Rev. 04

END OF CERTIFICATE