

EC TYPE EXAMINATION (MODULE B) CERTIFICATE No. MED117622WS/001

This is to certify that RINA Services S.p.A. (Notified Body No. 0474) did undertake the relevant type approval procedures for the equipment identified below, which was found to be in compliance with the Life-Saving appliances requirements of Marine Equipment Directive (MED) 2014/90/EU, including the requirements and testing standards of Regulation (EU) 2021/1158.

MED Item N° MED/1.2a USCG Category N° 161.101

Description Position-indicating lights for life-saving appliances: (a) for

survival craft and rescue boats

Type AQLRL

Applicant AQUASPEC LIMITED

HYS PORT HAMBLE, HAMBLE, SOUTHAMPTON

SO31 4NN Hampshire UNITED KINGDOM

Testing standards IMO Res. MSC.81 (70), as amended, EN 60945:2002 incl. IEC 60945 Corr.

1:2008, ISO 24408:2005.

Reference standards SOLAS 74 Reg.III/34, IMO Res.MSC.36(63)-(1994 HSC Code) 8, IMO

Res.MSC.48(66)-(LSA Code) I, IMO Res.MSC.48(66)-(LSA Code) IV, IMO

Res.MSC.97(73)-(2000 HSC Code) 8.

Issued in SHANGHAI on May 1, 2022

This Certificate is valid until April 30, 2027

This Certificate consists of this sheet plus an attachment

RIA

Qiang Sun
RINA Services S.p.A.





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Manufacturer
XIAMEN LONAKO INDUSTRY & TRADE CO., LTD

Place of Manufacturer
N307
WEIYE BUILDING
CHINA PIONEERING PARK FOR CHINESE OVERSEAS SCHOLARS Xiamen
CHINA

Name & place of Authorised Representative Mr. Johannes Graf Strachwitz Walhallastraße 38, 80639 München, Germany GERMANY

Product Description

Model of light: AQLRL automatically activated after remove the Switch Pin and with on/off manual switch.

Type of light: fixed light for internal and flashing light for external in accordance with IMO Res.MSC 218(82), MSC 207(81) and MSC 226(82);

Description:

The light comprises two items: Internal Light with battery and the External Light with wire;

When the liferaft is inflated, the battery is automatically activated by pulling out the Switch Pin connected to the liferaft. Both lights are activated at the same time;

Each lights can also be switched off and on manually;

The above light is manufactured with following characteristics:

- Dimension of battery body: 71.5 mm x 44.7 mm x 28 mm
- Dimension of external lights: diameter 62.5 mm, height 41.75 mm;
- Type of battery: 2 x 3.6 volts Lithium battery ER14505M;
- Internal light: No.1 LED, SMT LED white;
- External light: No.3 LED, SMT LED white;
- Material of body: ABS + PC;
- Flash rate: 50 ~ 70 flashes per minute;
- Total weight: 120 grams.

Reference Documents

Booklet of Technical Drawings issued by Xiamen LONAKO Industry & Trade Co., Ltd and approved by RINA with No.: SHFP-9363;

Bill of Material issued by Xiamen LONAKO Industry & Trade Co., Ltd and approved by RINA with No.: SHFP-9364; Specification of Battery and filed by RINA with No.: SHFP-9365;







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Continued:

Operation and Maintenance Instructions issued by Xiamen LONAKO Industry & Trade Co., Ltd and filed by RINA with No.: SHFP-9366;

Technical Specification issued by Xiamen LONAKO Industry & Trade Co., Ltd and approved by RINA with No.: SHFP-20218.

Tests Carried Out

Tests for the light are as following:

- Evaluation and Test Report (Survival Craft Position Indicating Lights) (Ref No.: 2016056) issued by Wuhan Testing Center of Marine Life-saving Appliances and filed by RINA with No.: SHFP-20202;
- Mould Growth Test Report (ABS) (Ref No.: 2015059) issued by Wuhan Testing Center of Marine Life-saving Appliances and filed by RINA with No.: SHPF-9383;
- Mould Growth Test Report (PVC Wire) (Ref No.: 20092276) issued by Center of Analysis & Measurement of Shanghai Institute Of Industrial Microbiology and filed by RINA with No.: SHPF-9384;
- Mould Growth Test Report (PC Plastic) (Ref No.: 20092277) issued by Center of Analysis & Measurement of Shanghai Institute Of Industrial Microbiology and filed by RINA with No.: SHPF-9385;
- Chromaticity Test and Light Intensity Datas issued by Wuhan Testing Center of Marine Life-saving Appliances and filed by RINA with No.: SHPF-9386 & 9387;
- Additional Evaluation and Test Report (Ref.: No.2022LR-03A) edit by XIAMEN LONAKO INDUSTRY & TRADE CO., LTD according to Chapter 8.3, 8.5, 8.6, 8.9 and 11.2 of IEC 60945:2002 incl. IEC 60945 Corr.1 (2008) and filed by RINA with No.: SHFP-20205;
- Additional Evaluation and Test Report (Ref.: 2022LR-03A-02) edit by XIAMEN LONAKO INDUSTRY & TRADE CO., LTD according to IMO Res. MSC.81(70) and ISO 24408:2005 and filed by RINA with No.: SHFP-20206.

Field of Application

External and internal light for inflatable liferafts.

Remark

Previous issued MED Module B certificate No.: MED069519WS/001 was annulled and replaced accordingly.



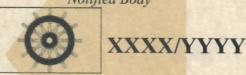




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The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production control phase module (D, E or F) of Annex II of the Directive is fully complied with a written inspection agreement with a Notified Body



"WHEELMARK FORMAT"

XXXX Notified Body number undertaking surveillance module

YYYY The year in which the mark is affixed

USCG Approval marking

This equipment is covered by the scope of the "Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment signed February 27th, 2004 and amended by Decision No. 1/2018 dated February 18th, 2019 according to U.S. Coast Guard approval category 161.101.

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F) as allowed by the MED.

General conditions for the approval

- a) The initial conditions verified by RINA at the time of the approval are to be maintained
- b) Any changes to the initial conditions are to be promptly communicated to RINA, which reserves the right to repeat the relevant assessment
- c) This certificate will no be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with RINA
- d) RINA personnel are to be allowed to witness during the performances of activities, upon their request
- e) The activities are to be carried out in compliance with the RINA Rules and/or other applicable Rules
- f) Should the specified regulations or standards be amended during the validity of this certificate, the product is to be reapproved prior to it being placed on board vessels to which the amended regulations or standards apply.

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