



## EC TYPE EXAMINATION (MODULE B) CERTIFICATE

This is to certify that:

LLOYD'S REGISTER VERIFICATION LIMITED (LRV), designated as a "notified body" under the terms of the Merchant Shipping (Marine Equipment) Regulations 2016 (S.I. 2016 No.1025), did undertake the relevant type approval procedures for the equipment identified below which was found to be in compliance with the essential Life-saving appliances requirements of Marine Equipment Directive (MED) 2014/90/EU and Commission Implementing Regulation (EU) 2018/773 indicating design, construction and performance requirements and testing standards for marine equipment, subject to any conditions in the Design Appraisal Document attached hereto.

<b>Manufacturer (Applicant)</b>	PyroPol GmbH
<b>Address</b>	Lippenhorstweg 29 21514 Hornbek Germany
<b>Reference</b>	<b>Regulation (EU) 2018/773</b>
<b>Regulation Item</b> (No & Item designation)	<b>MED/1.3 LIFEBOUYS SELF- ACTIVATING SMOKE SIGNALS</b> <b>MED/1.2b POSITION INDICATING LIGHTS FOR LIFE-SAVING APPLIANCES: (b) for LIFEBOUYS</b>
<b>Product Type</b>	<b>SELF- ACTIVATING COMBINED LIGHT-SMOKE SIGNALS FOR LIFEBOUYS</b>
<b>Product Description</b>	Self-activating light and smoke signal type :- "ManOverBoard CF4, Light-Smoke-Signal " (also known as "PYROTECH ManOverBoard CF4, Light-Smoke-Signal")
<b>Specified Standard</b>	IMO Resolution MSC.81(70), Part 1, as amended

The attached Design Appraisal Document (schedule) forms part of this certificate.

This certificate remains valid unless cancelled or revoked, provided the conditions in the attached schedule are complied with and the equipment remains satisfactory in service.

Date of issue      10 May 2019      Expiry date      24 April 2024

Certificate No.      MED 1950067/M1      Signed



Sheet No.      1 of 4

Name      L. Thomas  
For and on behalf of Lloyd's Register Verification  
LRV EC Distinguishing No. 0038

**Note:**

**This certificate is issued under the authority of the MCA.**

**This certificate is not valid for equipment; the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify the notified body named on this certificate of any modification or changes to the equipment in order to obtain a valid Certificate.**

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Lloyd's  
Register

## Lloyd's Register Verification Limited

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Document number MED 1950067/M1
Issue number 1

### DESIGN APPRAISAL DOCUMENT

Date 10 May 2019	Quote this reference on all future communications UKITSO/LSA/TA/LT/WP35073825
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#### ATTACHMENT TO EC TYPE EXAMINATION (MODULE B) CERTIFICATE No. MED 1950067/M1

The undernoted documents have been appraised for compliance with the relevant requirements of International Conventions and European Union legislation for the EC Type Examination of Marine Equipment for use on Merchant Ships Registered in the European Economic Area.

This Design Appraisal Document (schedule) forms part of the Certificate.

This certificate is an amendment of Certificate No. MED 1950067

#### EXAMINED DOCUMENTATION

Title	Document No	Date
Drawing Z 3904 - ManOverBoard CF4, Light-Smoke-Signal	Z3904	09.07.18
Datasheet ManOverBoard CF4, Light-Smoke-Signal	Rev.02	01.2019

Mounting & Operating Instructions for ManOverBoard CF4, Light-Smoke-Signal, Document No 3904

#### TEST REPORTS

MSC/Circ.980 series of tests covering Visual Inspection, Temperature Cycling, Rain and Water tightness, Case Resistance, Dome Drop and Floatation tests for LIFEBOUY SELF-IGNITING LIGHTS conducted on 27-03-2019 as witnessed by Lloyd's Register.

MSC/Circ.980 series of tests covering Drop, Fitting, Release and Operation test and Temperature Cycling test data for LIFEBOUY SELF-IGNITING LIGHTS conducted on 17-12-2018 as witnessed by Lloyd's Register.

Eurofins Product Service GmbH, Germany report G0M-1807-7546-CE01IND-V02, for products ManOverBoard CF4 and BuoySmoke CF4 conducted between 19.07.2018 to 16.08.2018 for compliance with MSC 81 (70) and IEC 60945: 2002

Federal Maritime and Hydrographic Agency, Germany report BSH 4542/1023231/18, dated 07.09.2018 lifebuoy self-igniting lights tests for products ManOverBoard Light-Smoke Signal CF4 for compliance with MSC 81 (70).

Drop test from 30 m as per MSC/Circ.980, tested on lifebuoy self activating smoke signals conducted on 17-12-2018 as witnessed by Lloyd's Register surveyor.

MSC/Circ.980 series of tests for LIFEBOUY SELF-ACTIVATING SMOKE SIGNALS conducted on 10-01-2019 as witnessed by Lloyd's Register.

#### CONDITIONS OF CERTIFICATION

1. Maximum installation height: 30 m
2. Light-smoke units powered by batteries shall be marked with a means of determining their age or the date by which they are to be replaced
3. Each light-smoke signal is to be marked with the approved clear and precise instructions along with the date of manufacture and expiry date as required by LSA Code, Chapter 3.3.3.3 and with the information required by LSA Code, regulations 1.2.2.9 and 1.2.3



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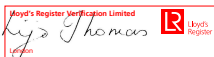
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4. The expiration date for the light-smoke-signal not to exceed 48 months after the month of manufacture
5. For compliance with SOLAS Regulation III/35 and III/36, fully detailed operations and maintenance manuals shall be supplied with each Light-Smoke unit
6. The onboard arrangements and installation of the Light-Smoke Signal on board are not part of this design appraisal or certificate and are to be to the satisfaction of the Surveyors attending on board
7. If the specified standards are amended during the validity of this certificate, this product type is to be re-approved prior to it being supplied to vessels to which the amended standards apply
8. Production items of the subject equipment are to be manufactured in accordance with either an approved Production Quality Assurance system (Module D), a Product-Quality assurance system (Module E) or a Product Verification Process (Module F). **The wheelmark cannot be affixed to the product until a conformity assessment module is in place**
9. Production tests are to be conducted to ensure compliance with SOLAS Chapter III Regulation 5 and recorded by the manufacturer in accordance with either the approved Production Quality Assurance system (Module D), or Product Quality Assurance (Module E), or witnessed by the Notified Body (LRV) as required by the Product Verification (Module F) of the Marine Equipment Directive. This does not preclude any further testing to additional requirements of the Marine Administration of the country where the ship is registered (i.e. the flag state) or those acting on behalf of that Administration
10. Each item, batch or lot of the equipment is to be issued with a "Declaration of Conformity" and have the "Mark of Conformity" affixed after a conformity assessment module is in place
11. Should a change of Place of Production from that stated below be required i.e. where the stages of manufacture/assembly/testing of this product take place, the new Place of Production is to be advised to us prior to the change taking place. This certificate will require to be updated for Approval to be maintained

#### PLACE OF PRODUCTION

PyroPol GmbH  
Lippenhorstweg 29  
21514 Hornbek  
Germany



Lijo Thomas  
Senior Specialist  
Fire & Safety, Statutory Discipline Team  
UK&I Technical Support Office, Marine & Offshore  
For and on behalf of Lloyd's Register Verification  
**LRV EC Distinguishing No. 0038**