

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB00006J3
Revision no.:
3

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

that the **Lifebuoys self-activating smoke signals**

with type designation(s)

IKAROS ManOverBoard MKCI, Light-Smoke-Signal or IKAROS BuoySmoke MKCI, Smoke-Signal, 15 Minutes

issued to

PyroPol GmbH
Hornbek, Germany

is found to comply with the Implementing Regulation (EU) 2024/1975 for
Item no. **MED/1.3** (Row **1 of 1**)

according to the following requirements:

SOLAS 74 Reg. III/7, 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) II, IMO Res. MSC.97(73)-(2000 HSC Code) 8, IMO MSC.1/Circ.1628, SOLAS 74 Reg. III/4, SOLAS 74 Reg. X/3

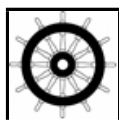
Further details of the equipment and conditions for certification are given overleaf.

Date of issue: **2025-08-06**

Expiry date: **2030-08-05**

DNV local unit:
Hamburg – CMC North/East

Approval Engineer:
Michael Oberländer



Notified Body
no.: **0098**



for **DNV SE**

Digitally Signed By:

Christine Mydlak-Röder

Christine Mydlak-Röder
Head of Notified Body

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 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 1/2023 dated May 26th, 2023.

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-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV SE of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.

Product description

"IKAROS ManOverBoard MKCI, Light-Smoke-Signal or IKAROS BuoySmoke MKCI, Smoke-Signal, 15 Minutes",
a lifebuoy self-activating smoke signal producing orange smoke for at least 15 minutes.

Tested with drop height 30 m

Design weight: 2.75 kg

Body colour: Yellow

The complete unit, self-activating smoke signal combined with the lifebuoy self-igniting light (certificate MEDB00006J4), will then be called "IKAROS ManOverBoard MKCI, Light-Smoke-Signal". The "IKAROS BuoySmoke MKCI, Smoke-Signal, 15 Minutes" is an identical smoke signal but without the self-igniting light.

Application/Limitation

Approved for use as lifebuoy self-activating smoke signal.

Acceptable lifetime: Expiration date not to exceed 48 months after date of manufacture.

The design assessment is based on IMO Res. MSC.48(66), as amended by IMO Res. MSC.207(81) and IMO Res. MSC.218(82).

Production and installation testing shall be carried out according to IMO Res. MSC.81(70), Part 2, Ch.4 and in compliance with ISO 15736:2006 A.2.4.

Each lifebuoy is not to be stowed at a height above the waterline exceeding 30 m. Else a drop test shall be performed to verify correct working at installation heights of more than 30 metres.

Each product is to be supplied with its manual for installation, use and maintenance.

Type Examination documentation

Document No.	Rev.	Title
SO-02118		Declaration dated 21 February 2020 from PyroPol GmbH, Hornbek, Germany.
		Test report dated 10 January 2019 from LR surveyor Oliver Mathey, Hamburg, Germany.
		Test report dated 30 September 2021 from BG-Verkehr, Hamburg, Germany
SO-02194		Declaration dated 11 November 2021 from PyroPol GmbH, Hornbek, Germany.

Tests carried out

Tests are documented in accordance with ISO 15736:2006 and the recommendation on testing of Lifesaving Appliances, IMO Res. MSC.81(70) Part 1, as amended by IMO Res. MSC.226(82), and IMO Res. MSC.323(89).

Marking of product

The product is to be marked in accordance with ISO 15736:2006 4.3, LSA Code 1.2.2.9 and 1.2.3, the MED Mark of Conformity and USCG number if applicable (see first page).

The product should be provided with brief instructions or diagrams clearly illustrating the use printed on the casing.