

# EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of Norway.

## This is to certify:

### That the Lifebuoys

with type designation(s)  
**Livboj FP 450**

Issued to

**Fristad Plast AB**  
**FRISTAD, Sweden**

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2018/773,**

**item No. MED/1.1. SOLAS 74 as amended, Regulation III/4, III/7, III/34 & X/3, LSA Code, 2000 HSC Code 8**

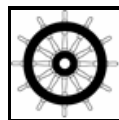
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2024-05-28.**

Issued at **Høvik** on **2019-05-29**

DNV GL local station:  
**Gothenburg**

Approval Engineer:  
**Jasna Jovovic-Lainis**



Notified Body  
No.: **0575**

for **DNV GL AS**

**Roald Vårheim**  
**Head of Notified Body**



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 GL AS 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.



Job Id: **344.1-009218-1**  
Certificate No: **MEDB000057U**

## Product description

"Livboj FP 450", lifebuoy:

Weight:	2.75 kg
Diameter, inner/outer:	445/725 mm
Colour:	orange/red or yellow (RAL 1016)
Max. drop height:	30 m
Buoyancy material:	polyurethane foam
Cover material:	coated vinyl

## Application/Limitation

The lifebuoy does not have sufficient mass to operate the quick-release arrangement provided for self-activated smoke signals and self-igniting lights.

Self-igniting light and retro-reflective material used have to be approved according to the Marine Equipment Directive and bear the Mark of Conformity.

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).

Each lifebuoy shall be marked in block capitals of the Roman alphabet with the name and port of registry of the ship on which it is carried.

Production and installation testing shall be carried out according to IMO Res. MSC.81(70), Part 2, Ch.3.

## Type Examination documentation

Test report No. 117-24672.a dated 2019-03-05 from FORCE Technology, Denmark.

## Tests carried out

Tests are documented in accordance with recommendation on testing of Lifesaving Appliances, IMO Res. MSC.81(70) Part 1, as amended by IMO Res. MSC.200(80) and IMO Res. MSC.226(82).

## Marking of product

The product is to be marked with name and address of manufacturer, type designation, date of manufacture, date of expiry, operational restrictions and Mark of Conformity.