



TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MERB000042G
Revision No:
2

This Certificate is issued by DNV UK Limited based on authorisation of the Maritime & Coast Guard Agency (MCA) as an UK Approved Body to undertake conformity assessments on marine equipment in accordance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2016 as amended.

This is to certify:

That the Open reversible liferaft

with type designation(s)
LR-ORL-6, 15, 25, 30, 50, 65 & 132 Trade names: OCEAN SOLAS, PLASTIMO

Issued to

Ocean Safety Ltd
Southampton, United Kingdom

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

Regulation **MSN 1874 Amendment 7,**

item No. MED/1.39. SOLAS 74 as amended, Regulation III/4 & X/3, LSA Code, 2000 HSC Code 8 and IMO Res. MSC.481(102)

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

This Certificate is valid until **2028-08-17**.

Issued at **London** on **2024-03-13**

DNV local unit:
UK & Ireland CMC & VMC



for **DNV UK Ltd.**

Approval Engineer:
Tessa Biever

Approved Body No.: **0097**

Mydlak-Röder, Christine
MER Service Responsible



**Maritime &
Coastguard
Agency**

UK Approved Body Authorised
by the MCA

This certificate will not be valid if the manufacturer makes any changes or modifications to the approved type of equipment, which have not been notified to, and agreed with the approved body named on this certificate.

During the period of validity of this certificate the applicable regulations (international conventions and the relevant resolutions and circulars of the IMO) and testing standards may change, therefore the product conformity may need to be re-assessed by the Approved 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-control phase module (D, E or F) of Schedule 2 of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended is fully complied with and controlled by a written inspection agreement with an approved body. In case limitations of use apply, these should be indicated in the Annex.

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 300,000 USD.



Product description

'LR-ORL-6, 15, 25, 30, 50, 65 & 132 - Trade names: OCEAN SOLAS, PLASTIMO'

Are an open reversible liferafts in accordance with 2000 HSC Code Ch. 8.10.2, equipped with HSC Pack and stowed in a cylindrical container in two variants.

LR-ORL-25, 30 & 65 may also be manufactured with a square container.

Trade name: OCEAN SOLAS, PLASTIMO

Application/Limitation

Cylindrical Model:

Type	Capacity [82.5kg/person]	Weight [kg] HSCPack	Bollard pull [kN]		Max. installation height [m]
			2 knots	3 knots	
LR-ORL-6	6	54	0.65	0.80	10
LR-ORL-15	15	90	0.80	1.30	10
LR-ORL-25	25	122	1.30	1.53	10
LR-ORL-30	30	144	1.25	1.55	10
LR-ORL-50	50	178	1.46	2.30	10
LR-ORL-65	65	208	1.50	2.40	10
LR-ORL-132	132	346	2.41	4.22	10

Slimline Cylindrical Model:

Type	Capacity [82.5kg/person]	Weight [kg] HSCPack	Bollard pull [kN]		Max. installation height [m]
			2 knots	3 knots	
LR-ORL-25	25	102	1.30	1.53	10
LR-ORL-30	30	141	1.25	1.55	10
LR-ORL-50	50	179	1.46	2.30	10

This liferaft variant is approved for use with a slimline round container type (OS-164-GA-16 or OS-164-GA-20&25).

The liferafts shall be packed with HSC Pack.

Gas cylinders shall be of an approved type.

Components in the gas inflation system should be approved according to ISO 15738:2019.

The liferaft is intended to be installed with external weak link and a hydrostatic release unit. Float free arrangement to be checked upon installation on board.

Liferaft types having a mass of more than 185 kg, are not suitable for side-to-side transfer and have to be stowed for launching directly from the stowed position under unfavorable conditions of trim and list.

The design assessment is based on International Life-Saving Appliances (LSA) Code, IMO Res. MSC.48(66) as amended by IMO Res. MSC.218(82) and IMO Res. MSC.293(87).

Production testing shall be carried out according to IMO Res. MSC.81(70) part 2.

Type Examination documentation

Technical file verified with ref.: 13-002242, 13-026865 and 13-058222.

Test reports: Germanischer Lloyd Shanghai of 2013-03-06, 2013-05-29 and 201608-26.

Inspection report: Shanghai Monitoring and Inspection Center for Rubber Products Quality, No. W(X) 2009-26

Following tests of MSC.81(70), Part 1 have been omitted in accordance with 2000 HSC Code Annex 11.7: 5.5, 5.8, 5.12, 5.16, 5.17.2, 5.17.10, 5.17.11, 5.17.12, 5.18 and 5.20.

The drop height in test 5.1.2 was substituted with 10m.

Additional drop test and weight test for RAFT-R-25/30/50 liferaft with slimline cylindrical container OS-164-GA-16 and OS-164-GA-20&25 have been carried out 2022-03-04 (report: RAFT-R/SYB-2022(I)) and witnessed by DNV.

These liferaft models are technically identical to the liferaft type manufactured by Shanghai Star Rubber (CSM), Raft R-XX certified with MEDB00001MM as agreed in the authorization letter dated 2018-02-12 between Ocean Safety and CSM.

Tests carried out

Prototype tests and test reports in accordance with the Recommendation on Testing of Life-Saving Appliances, IMO Res. MSC.81(70) part 1, including IMO Res. MSC.226(82), MSC.295(87), MSC.323(89) and IMO Res. MSC.481(102) – Type I and II, have been witnessed and evaluated and found to be in compliance.

Marking of product

The product is to be indelibly marked with name and address of manufacturer, type designation, dimensions, date of manufacture and the UK Mark of Conformity (see first page). The marking shall comply with the LSA Code Ch. 4.2.6 and 4.2.7.

The equipment and marking of the liferaft incl. stowage container shall be in accordance with HSC Code 2000 Annex 11.