



Certificate No:
TALB000004F

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Non-SOLAS Liferaft

with type designation(s)
LR-ORL-25(30), LR-ORL-30(37), LR-ORL-50(65) / UK Certificated ORL

Issued to

Ocean Safety Ltd
Southampton, United Kingdom

is found to comply with

UK MCA, Merchant Shipping Notice MSN 1676 (M) Amendment 1, Schedule 4, Part 4

Application :

Product(s) approved by this certificate are intended for installation on UK Class II to VI(A) vessels in accordance with MCA MIN 523(M).

Issued at **Hamburg** on **2023-07-21**

for **DNV**

This Certificate is valid until **2028-07-20**.

DNV local unit: **UK & Ireland CMC & VMC**

Approval Engineer: **Michael Oberländer**

.....
Marcus Ihms
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

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-25(30), LR-ORL-30(37) and LR-ORL-50(65) are UK over capacity open reversible liferafts for Class II to VI(A) vessels in accordance with MCA MIN 523(M) equipped with E Pack and stowed in a cylindrical container in two variants. LR-ORL-25(30), LR-ORL-30(37) and LR-ORL-50(65) may be manufactured alternatively with a rectangular container.

Application/Limitation

Cylindrical Model:

Type	Persons (82.5 kg)	Weight (kg) E Pack	Required bollard pull (kN)		Maximum Stowage Height (m)
			2 knots	3 knots	
LR-ORL-25(30)	30	122	1.03	2.36	10
LR-ORL-30(37)	37	144	1.08	2.72	10
LR-ORL-50(65)	65	178	1.10	3.40	10

This liferaft variant is approved for use with a round container type (GRP/MQ-2-00, GRP/MQ-3-00 & GRP/MQ-4-00) or with a rectangular container type (MQ-100-00 & MQ-67-00)

Slimline Cylindrical Model:

Type	Persons (82.5 kg)	Weight (kg) E Pack	Required bollard pull (kN)		Maximum Stowage Height (m)
			2 knots	3 knots	
LR-ORL-25(30)	30	102	1.03	2.36	10
LR-ORL-30(37)	37	141	1.08	2.72	10
LR-ORL-50(65)	65	179	1.10	3.40	10

This liferaft variant is approved for use with a slimline round container type (OS-164-GA-25&30-ORL & OS-164-GA-50-ORL).

Conditions for approval:

- The liferafts shall be packed with E-PACK in accordance with MSN 1676 Schedule 4 Part 4, Reg.3.8.
- Gas cylinders shall be of an approved type.
- Components of the gas inflation system should be approved according to ISO 15738:2002.
- The liferafts are intended to be installed with external weak link and a hydrostatic release unit.
- The liferafts are to be serviced at intervals as described in MCA MIN 523(M) Sec.3.
- Production tests are to be conducted in accordance with IMO Res. MSC.81(70), Part 2 and recorded by the manufacturer in compliance with the approved Production Quality Assurance System.
- The maintenance of the liferaft shall be carried out according to MSN 1676(M) and the instructions stated in the Manual(s) for installation use and maintenance.

Type Examination documentation

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

Drawings:

- General arrangement OS/ORL/25-30/GA-01 Ed.A, 2022-03-29
- General arrangement OS/ORL/30-37/GA-01 Ed.A, 2022-03-29
- General arrangement OS/ORL/50-65/GA-01 Ed.A, 2023-07-03

These liferaft models are technically identical to the liferaft type manufactured by Shanghai Star Rubber (CSM), Raft R-XX certified with MEDB00001MM for MED/1.39.

Tests carried out

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 HSC Code 2000 Annex 11,7.:
5.5, 5.8 regarding closing arrangements, 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.

Additional tests for compliance with MSN 1676 Schedule 4 Part 4: LR-ORL/SYB-2023 dated 2023-04-20 witnessed by DNV-Shanghai.

Marking of product

The product is to be indelibly marked with name and address of the manufacturer, type designation and date of manufacture and batch or serial number.
Further the equipment and marking of the liferaft incl. stowage container shall be in accordance with MSN 1676 Schedule 4, Part 4, Reg.4.2 and 5.1. The liferaft container is to be marked with "NON-SOLAS REVERSIBLE".

Periodical assessment

DNV's surveyor is to be given permission to perform periodical assessments at any time during the validity of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in Class Programme DNV-CP-0338, Section 4.