EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

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

This is to certify:

That the Automatically self-righting liferafts: inflatable

with type designation(s)
Lalizas Oceano, Throw over-board Self-Righting -6, -8,-10, -12, -15, -16, -20, -25, -30, -35, -50, -66, -100

Issued to
Lalizas Hellas S.A.
Piraeus, **Greece**

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2022/1157,**
item No. MED/1.14a SOLAS 74 as amended Reg. III/4, III/26, III/ 34 and X/3, LSA Code I, IV and 1994 HSC Code 8. 2020 HSC Code 8
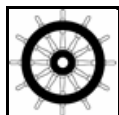
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2028-01-30**.

Issued at **Hamburg** on **2023-02-08**

DNV local unit:
Piraeus

Approval Engineer:
Tessa Biever

Notified Body
No.: **0098**

for **DNV GL SE**

Christine Mydlak-Roeder
Head of Notified Body

Product description

"Lalizas Oceano, Throw over-board Self-Righting -6, -8,-10, -12, -15, -16, -20, -25, -30, -35, -50, -66, -100"
are inflatable and automatically self-righting liferafts.

Materials:

Item	Type	Manufacturer
Container material:	GRP	
Buoyancy tube fabric:	HSR-XB-A (black rubberized fabric)	Jiangsu Haining marine Equipment Co., Ltd.
Exterior canopy fabric:	2x3-2PU (orange rubberized fabric)	Wuxi Mingwei Textile Co., Ltd.
Interior canopy fabric:	100T (blue rubberized fabric)	Wuxi Mingwei Textile Co., Ltd.
Adhesive:	Graft adhesive 800L	Fo Shan Nan Hai Hong Ming Adhesive Co., Ltd.

Application/Limitation

Type designation	Capacity [person@82.5 kg]	Towing strain 2 knots [kN]	Towing strain 3 knots [kN]	Max. stowage height [m]	Liferaft weight [kg]
Lalizas Oceano 6	6	0.62 kN	0.85 kN	50 m	96 (SOLAS A-PACK) 78 (SOLAS B-PACK)
Lalizas Oceano 8	8	0.62 kN	0.90 kN	50 m	105 (SOLAS A-PACK) 85 (SOLAS B-PACK)
Lalizas Oceano 10	10	0.8 kN	1.12 kN	50 m	126 (SOLAS A-PACK) 102 (SOLAS B-PACK)
Lalizas Oceano 12	12	0.92 kN	1.25 kN	50 m	135 (SOLAS A-PACK) 108 (SOLAS B-PACK)
Lalizas Oceano 15	15	1.10 kN	1.38 kN	50 m	156 (SOLAS A-PACK) 124 (SOLAS B-PACK)
Lalizas Oceano 16	16	1.15 kN	1.43 kN	50 m	165 (SOLAS A-PACK) 126 (SOLAS B-PACK)
Lalizas Oceano 20	20	1.20 kN	1.62 kN	50 m	192 (SOLAS A-PACK) 145 (SOLAS B-PACK)
Lalizas Oceano 25	25	1.39 kN	2.12 kN	50 m	235 (SOLAS A-PACK) 175 (SOLAS B-PACK)
Lalizas Oceano 30	30	1.83 kN	2.60 kN	50 m	275 (SOLAS A-PACK) 202 (SOLAS B-PACK)
Lalizas Oceano 35	35	2.05 kN	2.85 kN	50 m	318 (SOLAS A-PACK) 245 (SOLAS B-PACK)
Lalizas Oceano 50	50	1.80 kN	3,00 kN	50 m	425 (SOLAS A-PACK) 290 (SOLAS B-PACK)
Lalizas Oceano 66	66	2.20 kN	3.35 kN	40 m	510 (SOLAS A-PACK) 350 (SOLAS B-PACK)
Lalizas Oceano 100	100	3.20 kN	3.50 kN	40 m	830 (SOLAS A-PACK) 615 (SOLAS B-PACK)

The liferaft shall be packed with a SOLAS A PACK or SOLAS B 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.

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

The liferafts may be approved for extended service intervals up to 30 months in accordance with SOLAS Ch. III, Regulation 20.8.3 provided that:
1. Such extended service intervals have been approved by the ships flag administration.
2. The liferafts are checked onboard in accordance with SOLAS Ch. III Regulation 20.8.3.2 at intervals in accordance with SOLAS Ch. III Regulation 20.8.1.1, according to procedures accepted by the Notified Body.
3. The liferafts shall be serviced at approved servicing stations in accordance with the recommendations in IMO Res. A.761(18) at intervals not exceeding 30 months.

Type Examination documentation

Drawings		
Type	**Drawing no.**	**Name**
Lalizas Oceano -6	ASR-6-00	Type ASR-6 self-righting inflatable liferaft general drawing
	ASR-6-01	Type ASR-6 self-righting Assembly liferaft general drawing
	ASR-6-01-01	Upper buoyancy chamber
	ASR-6-01-02	Lower buoyancy chamber
	ASR-6-01-03	Floor
	ASR-6-01-04	Buoyancy tube
	ASR-6-02	Canopy
	ASR-6-03	Inflation system description for ASR-6 self-righting inflatable liferaft
Lalizas Oceano -8	ASR-8-00	Type ASR-8 self-righting inflatable liferaft general drawing
	ASR-8-01	Type ASR-8 self-righting Assembly liferaft general drawing
	ASR-8-01-01	Upper buoyancy chamber
	ASR-8-01-02	Lower buoyancy chamber
	ASR-8-01-03	Floor
	ASR-8-01-04	Buoyancy tube
	ASR-8-02	Canopy
	ASR-8-03	Inflation system description for ASR-8 self-righting inflatable liferaft
Lalizas Oceano -10	ASR-10-00	Type ASR-10 self-righting inflatable liferaft general drawing
	ASR-10-01	Type ASR-10 self-righting Assembly liferaft general drawing
	ASR-10-01-01	Upper buoyancy chamber
	ASR-10-01-02	Lower buoyancy chamber
	ASR-10-01-03	Floor
	ASR-10-01-04	Buoyancy tube
	ASR-10-02	Canopy
	ASR-10-03	Inflation system description for ASR-10 self-righting inflatable liferaft
Lalizas Oceano -12	ASR-12-00	Type ASR-12 self-righting inflatable liferaft general drawing
	ASR-12-01	Type ASR-12 self-righting Assembly liferaft general drawing
	ASR-12-01-01	Upper buoyancy chamber
	ASR-12-01-02	Lower buoyancy chamber
	ASR-12-01-03	Floor
	ASR-12-01-04	Buoyancy tube
	ASR-12-02	Canopy
	ASR-12-03	Inflation system description for ASR-12 self-righting inflatable liferaft
Lalizas Oceano -15	ASR-15-00	Type ASR-15 self-righting inflatable liferaft general drawing
	ASR-15-01	Type ASR-15 self-righting Assembly liferaft general drawing
	ASR-15-01-01	Upper buoyancy chamber
	ASR-15-01-02	Lower buoyancy chamber
	ASR-15-01-03	Floor
	ASR-15-01-04	Buoyancy tube
	ASR-15-02	Canopy
	ASR-15-03	Inflation system description for ASR-15 self-righting inflatable liferaft
Lalizas Oceano -16	ASR-16-00	Type ASR-16 self-righting inflatable liferaft general drawing
	ASR-16-01	Type ASR-16 self-righting Assembly liferaft general drawing
	ASR-16-01-01	Upper buoyancy chamber
	ASR-16-01-02	Lower buoyancy chamber
	ASR-16-01-03	Floor
	ASR-16-01-04	Buoyancy tube
	ASR-16-02	Canopy
	ASR-16-03	Inflation system description for ASR-16 self-righting inflatable liferaft
Lalizas Oceano -20	ASR-20-00	Type ASR-20 self-righting inflatable liferaft general drawing
	ASR-20-01	Type ASR-20 self-righting Assembly liferaft general drawing
	ASR-20-01-01	Upper buoyancy chamber
	ASR-20-01-02	Lower buoyancy chamber
	ASR-20-01-03	Floor
	ASR-20-01-04	Buoyancy tube
	ASR-20-02	Canopy
	ASR-20-03	Inflation system description for ASR-20 self-righting inflatable liferaft
Lalizas Oceano -25	ASR-25-00	Type ASR-25 self-righting inflatable liferaft general drawing
	ASR-25-01	Type ASR-25 self-righting Assembly liferaft general drawing
	ASR-25-01-01	Upper buoyancy chamber
	ASR-25-01-02	Lower buoyancy chamber
	ASR-25-01-03	Floor
	ASR-25-01-04	Buoyancy tube
	ASR-25-02	Canopy
	ASR-25-03	Inflation system description for ASR-25 self-righting inflatable liferaft

Lalizas Oceano -30	ASR-30-00	Type ASR-30 self-righting inflatable liferaft general drawing
	ASR-30-01	Type ASR-30 self-righting Assembly liferaft general drawing
	ASR-30-01-01	Upper buoyancy chamber
	ASR-30-01-02	Lower buoyancy chamber
	ASR-30-01-03	Floor
	ASR-30-01-04	Buoyancy tube
	ASR-30-02	Canopy
	ASR-30-03	Inflation system description for ASR-30 self-righting inflatable liferaft
Lalizas Oceano -35	ASR-35-00	Type ASR-35 self-righting inflatable liferaft general drawing
	ASR-35-01	Type ASR-35 self-righting Assembly liferaft general drawing
	ASR-35-01-01	Upper buoyancy chamber
	ASR-35-01-02	Lower buoyancy chamber
	ASR-35-01-03	Floor
	ASR-35-01-04	Buoyancy tube
	ASR-35-02	Canopy
	ASR-35-03	Inflation system description for ASR-35 self-righting inflatable liferaft
Lalizas Oceano -50	ASR-50-00	Type ASR-50 self-righting inflatable liferaft general drawing
	ASR-50-01	Type ASR-50 self-righting inflatable liferaft assembling drawing
	HSR-R-100	Container drawing for ASR-50/66 liferafts (SOLAS B PACK)
	HSR-S-50-00	Container drawing for ASR-50/66 liferafts
Lalizas Oceano -66	ASR-66-01-01	Type ASR-66 self-righting inflatable liferaft general drawing
	ASR-66-01-02	Type ASR-66 self-righting inflatable liferaft assembling drawing
Lalizas Oceano -100	ASR-100-01-03	Type ASR-100 self-righting inflatable liferaft general drawing
	ASR-100-01-04	Type ASR-100 self-righting inflatable liferaft assembling drawing
	HSR-S-100-00	Container drawing for ASR-100 liferafts
All types	HSR-PJ-004 (II)	Ballast water bag for ASR/ADLSR type inflatable liferafts
	HSR-PJ-004 (III)	Ballast water bag for ASR-50/66/100 type inflatable liferafts
	HSR-PJ-012 (II)-00	Boarding ladder
	HSR-PJ-025	Sea-anchor
	GDF-I + II	Various drawings for non-return inlet valve

Reports	Date
Prototype test report witnessed by GL	2013-09-11
Prototype test report witnessed by DNVGL Ningbo (15-065264)	2016-01-18
Inspection report from National Supervision and Testing Center of Fishery Machinery and Instrument No. 2015YW003	
Evaluation and test reports for inflatable liferaft materials: Test report no. 2015182 (HSR-XB-A (HN)),	2015-12-01/18
Test report no. 2015185 (HSR-B-W (2x3-2PU)) from Wuhan Testing Centre of Marine Lifesaving Appliances, Wuhan district, Hubei Province, China	2015-12-07/18
Test report no. 2015187 (HSR-B-T (100T)) from Wuhan Testing Centre of Marine Lifesaving Appliances, Wuhan district, Hubei Province, China	2015-12-21/22

Other	Date
Asbestos free declaration from manufacturer	2013-09-20

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), IMO Res. MSC 295(87) and MSC. 323(89), have been witnessed and evaluated and found in compliance.

Marking of product

The product is to be indelibly marked with name and address of manufacturer, type designation, date of manufacture and MED Mark of Conformity. The marking shall comply with the LSA Code (IMO Res. MSC. 48(66)) item 4.2.6 and 4.2.7.