

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No: MEDB00003B4
Revision No:

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**

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for **DNV GL SE**

Notified Body No.: **0098** Christine Mydlak-Roeder 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/FI

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.



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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



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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	Туре	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.
- 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.

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Type Examination documentation

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

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Lalizas	ASR-30-00	Type ASR-30 self-righting inflatable liferaft general dra	wing			
Oceano -30	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	ASR-35-00	Type ASR-35 self-righting inflatable liferaft general drawing				
Oceano -35	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 inf	latable liferaft			
	ASR-50-00	Type ASR-50 self-righting inflatable liferaft general dra	wing			
Lalizas	ASR-50-01	Type ASR-50 self-righting inflatable liferaft assembling drawing				
Oceano -50	HSR-R-100	Container drawing for ASR-50/66 liferafts (SOLAS B P.				
	HSR-S-50-00	Container drawing for ASR-50/66 liferafts				
Lalizas	ASR-66-01-01	Type ASR-66 self-righting inflatable liferaft general dra	wing			
Oceano -66	ASR-66-01-02	Type ASR-66 self-righting inflatable liferaft assembling				
	ASR-100-01-03	Type ASR-100 self-righting inflatable liferaft general dra				
Lalizas	ASR-100-01-04	Type ASR-100 self-righting inflatable liferaft assembling	Type ASR-100 self-righting inflatable liferaft assembling drawing			
Oceano -100	HSR-S-100-00	Container drawing for ASR-100 liferafts				
All types	HSR-PJ-004 (II)	Ballast water bag for ASR/ADLSR type inflatable liferaf	its			
,,	HSR-PJ-004 (III)	Ballast water bag for ASR-50/66/100 type inflatable life				
	HSR-PJ-012 (II)-00	Boarding ladder				
	HSR-PJ-025	Sea-anchor				
	GDF-I + II	Various drawings for non-return inlet valve				
Reports	***************************************	***************************************	Date			
	eport witnessed by GL		2013-09-11			
Prototype test r	eport witnessed by DNVG	GL Ninabo (15-065264)	2016-01-18			
		on and Testing Center of Fishery Machinery and				
Instrument No.		on and resting denier of rishery wachinery and				
Evaluation and	test reports for inflatable I	liferaft materials:	2015-12-01/18			
	2015182 (HSR-XB-A (HN					
Test report no.	2015-12-07/18					
	ıhan district, Hubei Provin					
•	,	7)) from Wuhan Testing Centre of Marine Lifesaving	2015-12-21/22			
	ıhan district, Hubei Provin	ce, China				
Other	Date					
Asbestos free c	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.

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