

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.: **MEDB00001NH** Revision No:

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

This is to certify:

that the Inflatable liferafts

with type designation(s)

CHF (DLR) (SLR) (SCH) (KHF) (HYB) (HNB) (SHB) -A-6, -A-8, -A-10, -A-12, -A-15, -A-16, -A-20, -A-25, -A-30, -A-32, -A-35 (throw-over-board type) SOLAS A and B Pack

issued to

Shanghai Cunhong Marine Lifesaving Appliance Co., Ltd. Shanghai, 020, China

is found to comply with the requirements in the following Regulations/Standards: Regulation (EU) 2023/1667,

item No. MED/1.12. SOLAS 74 as amended, Regulation III/4, III/13, III/21, III/26, III/31, III/34 & X/3, LSA Code I, V, IMO Res. MSC.481(102), IMO MSC/Circ.811, IMO MSC.1/Circ.1630 and 2000 HSC Code 8

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

This Certificate is valid until 2029-07-07.

Issued at Hamburg on 2024-07-08

DNV local unit: **Shanghai**

Approval Engineer:

Michael Oberländer



Notified Body No.: 0098 for **DNV SE**

Digitally Signed By: Christine Mydlak-Röder Location: DNV Hamburg, Germany

Mydlak-Röder, Christine 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

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

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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Product description

The liferafts CHF (DLR) (SLR) (SCH) (KHF) (HYB) (HNB) (SHB) -A-6, -A-8, -A-10, -A-12, -A-15, -A-16, -A-20, -A-25, -A-30, -A-32 and -A-35 are throw-over-board, inflatable liferafts packed with cylindrical/round containers and with double cylinders, as specified below, see Table No.1.

The liferafts CHF (DLR) (SCH) (KHF) (HYB) (HNB) (SHB) -A-6, -A-8, -A-10, -A-12, -A-15, -A-16, -A-20, -A-25 are also produced as throw-over-board, inflatable liferafts packed with cylindrical/round containers and a single cylinder, as specified below, see Table No.2.

The liferafts CHF (DLR) (SLR) (SCH) (KHF) (HYB) (HNB) (SHB) -A-6, -A-8, -A-10, -A-12, -A-15, -A-16 may be also packed in flat, rectangular containers, as specified below, see Table No.3.

Trade names: CUNHONG, TOKUGAWA, SAFINDO, SAFEGARD, PORTMARINE, PETREL, POSEIDON, SHANG HAI

All these liferafts designs are complying with the LSA Code as amended, including MSC. 293(87).

Application/Limitation

Table No.1: The liferafts packed in cylindrical/round containers with double cylinders:

Туре	Persons (82.5 kg)	Weight [kg] SOLAS A	Weight [kg] Required bollard pull [kN] SOLAS B 2 kn 3 kn		llard pull [kN] 3 kn	Max. Stowage Height [m]
CHF (DLR, SLR,	(02.5 kg)	OOLAO A	OOLAO B	Z KII	J KII	ricignit [iii]
SCH, KHF, HYB,	6	81	71	0.45	0.98	50
HNB, SHB) -A-6	U	01	/ '	0.40	0.30	
CHF (DLR, SLR,						
SCH, KHF, HYB,	8	99	82	0.50	1.04	50
HNB, SHB) -A-8	· ·		"-	0.00		
CHF (DLR, SLR,						
SCH, KHF, HYB,	10	103	83	0.50	1.04	50
HNB, SHB) -A-10						
CHF (DLR, SLR,						
SCH, KHF, HYB,	12	123	99	0.20	1.10	50
HNB, SHB) -A-12						
CHF (DLR, SLR,						
SCH, KHF, HYB)	15	132	102	0.60	1.22	50
-A-15						
CHF (DLR, SLR,						
SCH, KHF, HYB,	16	134	102	0.65	1.26	50
HNB, SHB) -A-16						
CHF (DLR, SLR,						
SCH, KHF, HYB,	20	168	128	0.85	1.44	50
HNB, SHB) -A-20						
CHF (DLR, SLR,						
SCH, KHF, HYB,	25	184	135	1.00	1.53	50
HNB, SHB) -A-25						
CHF (DLR, SLR,	00	045	400	4.00	4.05	50
SCH, KHF, HYB,	30	215	160	1.08	1.25	50
HNB, SHB)-A-30						
CHF (DLR, SLR, SCH, KHF, HYB,	32	240	180	1.78	1.98	50
	32	240	100	1.70	1.90	50
HNB, SHB) -A-32 CHF (DLR, SLR,						
SCH, KHF, HYB,	35	240	180	1.78	1.98	50
HNB, SHB) -A-35	33	2 4 0	100	1.70	1.30] 30
11110, OHD) -A-00						

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Table No.2: The liferafts packed in cylindrical/round containers with single cylinder:

Туре	Persons	Weight [kg]	Weight [kg]	Required bollard pull [kN]		Max. Stowage
	(82.5 kg)	SOLAS A	SOLAS B	2 kn	3 kn	Height [m]
CHF (DLR, SLR,						
SCH, KHF, HYB,	6	84	72	0.45	0.98	50
HNB, SHB) -A-6						
CHF (DLR, SLR,						
SCH, KHF, HYB,	8	99	82	0.50	1.04	50
HNB, SHB) -A-8						
CHF (DLR, SLR,						
SCH, KHF, HYB,	10	104	85	0.50	1.04	50
HNB, SHB) -A-10						
CHF (DLR, SLR,						
SCH, KHF, HYB,	12	113	94	0.20	1.10	50
HNB, SHB) -A-12						
CHF (DLR, SLR,						
SCH, KHF, HYB,	15	136	107	0.60	1.22	50
HNB, SHB) -A-15						
CHF (DLR, SLR,						
SCH, KHF, HYB,	16	139	109	0.65	1.26	50
HNB, SHB) -A-16						
CHF (DLR, SLR,						
SCH, KHF, HYB,	20	169	124	0.85	1.44	50
HNB, SHB) -A-20						
CHF (DLR, SLR,						
SCH, KHF, HYB,	25	179	129	1.00	1.53	50
HNB, SHB) -A-25						

Table No.3: The following liferafts may be also packed in flat, rectangular containers with following specifications:

Туре	Persons	Weight [kg]	Weight [kg]	Packed in flat container drawing no.		Max.
	(82.5 kg)	SOLAS A	SOLAS B	SOLAS A Pack	SOLAS B Pack	Stowage
						Height [m]
CHF (DLR, SLR,						
SCH, KHF, HYB,	6	69	55	FA6-06-01	FA6-06-02	50
HNB, SHB) -A-6						
CHF (DLR, SLR,						
SCH, KHF, HYB,	8	88	66	FA8-06-01	FA8-06-02	50
HNB, SHB) -A-8						
CHF (DLR, SLR,						
SCH, KHF, HYB,	10	93	70	FA10-06-01	FA10-06-02	50
HNB, SHB) -A-10						
CHF (DLR, SLR,						
SCH, KHF, HYB,	12	107	78	FA12-06-01	FA12-06-02	50
HNB, SHB) -A-12						
CHF (DLR, SLR,						
SCH, KHF, HYB,	15	125	96	FA15-06-01	FA15-06-02	50
HNB, SHB) -A-15						
CHF (DLR, SLR,						
SCH, KHF, HYB,	16	128	97	FA16-06-01	FA16-06-02	50
HNB, SHB) -A-16						

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- The liferafts are to be serviced annually, provided where in any case this in impracticable, the administration may extend this to a period of 17 months. They shall be serviced at approved service stations which are authorized by the manufacturer.
- 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 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 for Module D of the Marine Equipment Directive 2014/90/EC as amended.

Liferafts having a mass of more than 185 kg may not be used for positions where side-to-side transfer is required.

Type Examination documentation

- Material test reports
- Shanghai Institute of Rubber Products Testing Center, W(X)2006-48 dated 2006-02-10, W(X)2011-2242 dated 2011-12-23 and W(X)2013-791 dated 2013-04-24
- South-China Testing Center for Textile Industry, 2014FW04916 dated 2014-08-07
- The National Supervision and Testing Center of Fishery Machinery and Instrument, China 2014YW039 dated 2014-06-16
- Test report SHA 2006-06-23, 2011-11-30, 2014-06-10, 2016-11-08 and 2019-03-27.
- New drop tests for stowage height of 50m were witnessed by DNV GL Shanghai on 2019-03-07.
- Tests for MSC/Circ.980 for A-30 and A-35 carried out 2020-08-19 until 2020-10-20, witnessed by DNV GL
- Drawings and technical file for CHF A-type liferafts Approval reference no.: 07-004898, 11-099542, 11-153108, 14-027584, 14-088520 Documents list for A-type liferafts

Tests carried out

- Prototype tests and test reports in accordance with the Recommendations on Testing of Life-Saving Appliances, IMO Res. MSC.81(70) Part 1, including IMO Res. MSC.226(82), MSC.295(87) and MSC.323(89), have been witnessed and found to be in compliance.

Marking of product

The product is to be indelibly marked with name and address of the manufacturer, type designation, date of manufacture and the MED Mark of Conformity (see first page). The marking shall comply with the LSA Code (IMO Res.MSC48(66) item 4.2.6.3 and 4.2.7.

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