

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB000062M

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 Automatically self-righting liferafts: inflatable

with type designation(s)

CHF (DLR) (SLR) (SCH) (KHF) (HYB) -Z- 6,8,10,12,15,16,20,25,30,32,35,37,50,65,100,101 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) 2021/1158,

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

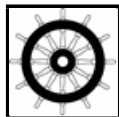
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2026-09-09**.

Issued at **Hamburg** on **2021-09-10**

DNV local station:
Jiangyin NB & CMC

Approval Engineer:
Michael Oberländer



Notified Body
No.: **0098**

for DNV SE

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



Product description

CHF (DLR) (SLR) (SCH) (KHF) (HYB) -Z-6, 8, 10, 12, 15, 16, 20, 25, 30, 32, 35, 37, 50, 65, 100, 101 are automatically self-righting inflatable liferafts, throw overboard type, with SOLAS A or SOLAS B Pack.

Trade names: CUNHONG, TOKUGAWA, SAFINDO, SAFEGARD, PORTMARINE, PETREL

All these liferaft designs are complying with IMO Res. MSC.48(66)-(LSA Code) Ch. I and IV, as amended by IMO Res. MSC.218(82) and IMO Res. MSC.293(87).

Container material:	GRP
Buoyancy tube fabric:	Liferaft rubber fabric (Type A) / Zhejiang Ding Excellent New Mastar Technology Co., Ltd.
Exterior canopy fabric:	Polyester filament Oxford cloth / Suzhou Mingwei water life-saving equipment Co., Ltd
Interior canopy fabric:	Polyester filament cloth / Suzhou Mingwei water life-saving equipment Co., Ltd.
Adhesive	Neoprene glue / Shanghai Cunhong Marine Lifesaving Appliance Co., Ltd.

Application/Limitation

Type	Persons (each 82.5 kg)	Weight [kg]		Required towing force [kN]		Maximum stowage height [m]
		SOLAS A	SOLAS B	2 knots	3 knots	
CHF (DLR)(SLR)(SCH)(KHF)(HYB) -Z-6	6	105	90	0.50	0.80	50
CHF (DLR)(SLR)(SCH)(KHF)(HYB) -Z-8	8	120	100	0.65	1.10	50
CHF (DLR)(SLR)(SCH)(KHF)(HYB) -Z-10	10	125	105	0.70	1.15	50
CHF (DLR)(SLR)(SCH)(KHF)(HYB) -Z-12	12	145	120	0.75	1.20	50
CHF (DLR)(SLR)(SCH)(KHF)(HYB) -Z-15	15	165	135	0.90	1.55	50
CHF (DLR)(SLR)(SCH)(KHF)(HYB) -Z-16	16	170	138	0.90	1.70	50
CHF (DLR)(SLR)(SCH)(KHF)(HYB) -Z-20	20	185	145	1.15	1.85	50
CHF (DLR)(SLR)(SCH)(KHF)(HYB) -Z-25	25	215	165	1.25	2.15	50
CHF (DLR)(SLR)(SCH)(KHF)(HYB) -Z-30	30	245	185	1.50	2.55	50
CHF (DLR)(SLR)(SCH)(KHF)(HYB) -Z-32	32	260	195	1.70	2.60	50
CHF (DLR)(SLR)(SCH)(KHF)(HYB) -Z-35	35	280	205	2.05	2.75	50
CHF (DLR)(SLR)(SCH)(KHF)(HYB) -Z-37	37	295	215	2.20	3.05	50
CHF (DLR)(SLR)(SCH)(KHF)(HYB) -Z-50	50	395	290	2.30	3.10	50
CHF (DLR)(SLR)(SCH)(KHF)(HYB) -Z-65	65	480	340	2.40	3.50	50
CHF (DLR)(SLR)(SCH)(KHF)(HYB) -Z-100	100	750	540	2.80	3.75	40
CHF (DLR)(SLR)(SCH)(KHF)(HYB) -Z-101	101	755	545	2.85	3.80	40

- The liferaft shall be packed with a SOLAS A or SOLAS B Pack.
- Gas cylinders shall be of an approved type.
- Components in the gas inflation system should be approved according to ISO 15738:2002.
- 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/EU as amended.
- If carried on ro-ro passenger ships, these liferafts shall be fitted with a search and rescue locating device in the ratio of one search and rescue locating device for every four liferafts, in accordance with SOLAS III/26.2.5.
- The liferafts are to be serviced annually, provided where in any case this is impracticable, the administration may extend this to a period to 17 months. They shall be serviced at approved service stations which are authorized by the manufacturer.

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, according to SOLAS Reg. III/16.1.2.

Type Examination documentation

Prototype tests for compliance with IMO MSC.1/Circ.1630 4.1 carried out 2020-08-19 until 2020-10-20 and witnessed by DNV.

Technical drawings as listed in Drawings list for Z liferafts, issued by the manufacturer.

Material test report: Shanghai Institute of Rubber Products Testing Center, no. W(X)2011-2242

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 to be complying.

Marking of product

The product is to be indelibly marked with the name and address of the manufacturer, type designation and date of manufacture. The marking shall comply with the LSA Code (IMO Res.MSC.48(66)) item 4.2.6.3 and 4.2.7.