

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 Lifeboats: Free-fall lifeboats

with type designation(s)
GFF 4,9C12 or GFF 4,9C12-T

Issued to

Hatecke GmbH
Drochtersen, Niedersachsen, Germany

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2018/773**,
item No. MED/1.17b. SOLAS 74 as amended, Regulation III/4, III/21, III/31, III/34 & X/3,
LSA Code, IMO MSC/Circ. 1006 & 1423, and 2000 HSC Code 8

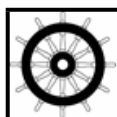
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2024-09-17**.

Issued at **Hamburg** on **2019-09-18**

DNV GL local station:
Hamburg

Approval Engineer:
Roland Priebe



Notified Body
No.: **0098**

for **DNV GL SE**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



Job Id: **344.1-009470-1**
Certificate No: **MEDB00005HE**

Product description

A totally enclosed GRP free-fall lifeboat for 12 persons, available as a dry-cargo version GFF 4,9C12 and a tanker version GFF 4,9C12-T with a self-contained air support system and special fire-protection (waterspray system).

Materials:

Material	Type	Manufacturer
Resin	"DION FR 820 series containing ATH" & POLYTE 516 Series with variants	Reichhold AS
Glass Fiber (Chopped Strand Mat)	E-Glass Chopped Strand M; EMC-Series (20-900 g/m ²)	Changsu Dongyu Insulated Compound Materials Co., Ltd.
Glass Fiber (Woven Rovings)	Woven Rovings (270-1800 g/m ²) with or without CSM (50-600 g/m ²)	
Gel coat	Norpol SVG X2 & Norpol SVG X3	Reichhold AS
Gel coat resin	-	-
Top coat	-	-
Buoyancy Foam	LAMOLTAN-Polyurethane-Rigid-Foam-System NG55-40-5	Lackfa Isolierstoff GmbH & Co. KG
EMC Powder Mat	-	-

Length: 4,90 m
Breadth: 2,20 m
Depth: 1,06 m
Weight of boat, fully equipped: 2080 kg / 2300 kg (tanker version)
Weight of boat, fully manned (82.5 kg/person): 3070 kg / 3290 kg (tanker version)

Hook manufacturer and type: Hatecke GFF-R8 (MEDB00001HX)
Hook SWL: 2234 kg

Hull material: GRP

Propulsion system: Inboard engine
Engine Manufacturer and type: Buhk A/S, DV24RME (MEDB00003FK)

Bollard pull: 3,0 kN

Application/Limitation

Approved engine power: 17,6 kW

Maximum number of persons (82.5 kg/person): 12
Maximum load of persons (82.5 kg/person): 3290 kg

Maximum free-fall certification height: 11,5 m
Minimum launching ramp length: 5,510 m
Launching ramp angle: 35°
Heel angle: 20°

- Unless free-fall lifeboat lashing can be released from inside it shall be arranged to preclude boarding until it is removed.
- For free-fall lifeboats inflatable lifejackets are recommended.
- Lifeboat equipment and marking/instructions to be inspected after installation onboard the ship. Equipment shall comply with LSA Code and IMO Res. MSC.81(70).
- The design assessment is based on IMO Res. MSC.48(66) as amended by IMO Res. MSC.207(81), IMO Res. MSC.218(82) and IMO Res. MSC.272(85).
- Production and installation testing shall be carried out according to IMO Res. MSC.81(70), Part 2.

Type Examination documentation

Basis for approval:

Technical documentation as listed in drawing list LIS-GFF49C12-0 Rev.0	2019-05-22
Manual for operation, maintenance and training GFF-C freefall lifeboats(acc. MSC.1/Circ.1205, 1206) Rev.3	2017-12-20
Acceleration test report CCE-2002-01, Wester Michigan University Kalamazoo, Michigan USA	2002-09-10
Fire testing of lifeboat laminate acc. to IMO MSC/Circ. 1006, SINTEF, Trondheim, Norway	2010-11-08
Material Specification (GRP) for boat type GFF4,9C12 & GFF4,9C12-T	2019-09-17

Prototype test report numbers:

Report. No.	Dated
PCT-GFF49M-2002-03	2002-08-22 – 2002-10-07
PCT-GFF49M-2012-01	2012-03-30
PCT-GFF49C12-2012-02	2012-11-13
STB-1529-1987	1987-05-12

Tests carried out

Tests are documented in accordance with recommendation on testing of Lifesaving Appliances, IMO Res. MSC.81(70), Part 1, as amended by IMO Res. MSC.226(82), IMO Res. MSC.274(85), IMO Res. MSC.323(89) and IMO MSC/Circ.1006.

Marking of product

The product is to be indelibly marked with name and address of manufacture, boat model and serial number, month and year of manufacturer, number of persons approved for and operational restrictions, if any, according to LSA code item 4.4.1.2 and the mark of conformity (see page 1).

List of lifeboat equipment to be posted in the boat.