

Marine & Offshore

Certificate number: 18550/C1 BV

File number: LSA 6337/01 Product code: 6030H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

C M HAMMAR AB

V:a Frölunda - SWEDEN

for the type of product

HYDROSTATIC RELEASE UNITS FOR LIFERAFTS

Non SOLAS Type H 20 Small raft model

Requirements:

IMO Res. MSC.48(66) amended by MSC.207(81), MSC.218(82), MSC.272(85), MSC.293(87), MSC.320(89), MSC.368(93) and MSC.425(98) except 4.1.6.2 (weak link breaking strength)

IMO MSC/Circ. 811

IMO Res. MSC.81(70) amended by MSC.200(80), MSC.226(82), MSC.274(85), MSC.295(87), MSC 321(89), MSC.323(89), MSC.378(93) and MSC.427(98)

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 21 Dec 2021

For Bureau Veritas Marine & Offshore,

At BV GOTHENBURG, on 19 Jun 2018, Magne MOLLER

Mayer H



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

The "HAMMAR H20 Small Rafts model" is designed for liferafts from 4 up to 12 persons and outside SOLAS regulations.

- It is not fitted with a manual operation device.
- It does not need to be periodically serviced (It is of "disposable sealed unit" type).
- Set for release at a depth within approx. 4 metres.

As per the information transmited by the applicant.

2. DOCUMENTS AND DRAWINGS:

• Drawings and specifications:

| Document | Issue | Date |
|---|-------|------------|
| CM HAMMAR AB - DRAWING AND SPECIFICATIONS | 5 | 2018-04-17 |

Manual(s) for installation use and maintenance.

No departure from these documents is permitted without the prior consent of the Society.

3. TEST REPORTS:

Hydrostatic Release Units

| Number | Date | Description |
|----------------|------------|---|
| 31.309.78.212 | 01/10/1985 | Initial type tests |
| 85M51019 | 28/08/1985 | Type tests on the membranes |
| | 29/08/1985 | |
| 21.99-90 34084 | 24/01/1990 | Corrosion tests on the blades |
| M51400 | 04/09/1990 | Corrosion tests on the blades and HRU |
| | 10/12/1993 | Reassessed by the Swedish National Maritime Administration - Maritime |
| | | Safety Inspectorate |
| 96H30094B | 05/06/1995 | Breaking load test of rope sling with fisherman's knot |
| 99H50846 b | 18/11/1999 | Tensile strength test of link/single point metal connector |
| KMyP203085b | 2002/08/06 | Type tests: Corrosion resistance, Temperature cycling, and release test |
| N° KMyP03765 | 2002/09/05 | Type tests: Corrosion resistance, Temperature cycling, and release test |
| KMp I-2013 | 2002/10/28 | Strength test of the rope slings, liferaft for more than 25 persons |
| P801304 | 2008/03/13 | Solar radiation test |
| 8P03320-01 | 09/04/2018 | Corrosion test of knife sets |

Weak Link

| Number | Date | Description |
|--------|------------|----------------|
| | 09/11/2011 | Weak link test |

4. APPLICATION / LIMITATION:

- As per requirements stated on front page of this Certificate.
- Where the weak link (item 20 of drawing A000200 Rev.2) is part of the supply, it shall be of a small raft type. (to break under a strain of 1.2 + 0.4 kN).
- Used in conjunction with the Hydrostatic release unit in the float free arrangement, the "WEAK LINK 1,2 kN" is designed to be used with small liferaft and is not in compliance with the requirement of the § 4.1.6.2 of the LSA Code as amended.
- The onboard installation and the maintenance of the Hydrostatic Release Unit shall be carried out according to manufacturer's instructions.

It needs no annual service, maintenance or spare parts, but must be replaced after two years.

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5. PRODUCTION SURVEY REQUIREMENTS:

The "HAMMAR H20 Small Rafts model" are to be supplied by *C M HAMMAR AB* in compliance with the type described in this certificate.

This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.

C M HAMMAR AB has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.

C M HAMMAR AB has declared to Bureau Veritas the following production site:

C M HAMMAR AB August Barks Gata 15 S-42132 V:a Frölunda SWEDEN

6. MARKING OF PRODUCT:

Shall be permanently marked on the unit or identification plate securely attached to the unit, as follows:

- "HAMMAR H20 Small Rafts model"
- Serial number
- Expiry date
- The notation: "DO NOT PAINT"

7. OTHERS:

It is *C M HAMMAR AB* responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

This certificate supersedes Certificate of Type Approval N° 18550/C0 BV issued by the Society on 14/09/2016.

*** END OF CERTIFICATE ***