



Marine &amp; Offshore

Certificate number: 58421/B0 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

H20 R, Release Depth 1.5-4m

In versions:

H20 R HRU, H20 RX HRU, H20 RL HRU

H20 R ERU, H20 RX ERU, H20 RL ERU

H20 R EBV, H20 RX EBV, H20 RL EBV

**Requirements:**

SOLAS 74 Convention as amended, Regulations III/4, X/3, III/13, III/26 and III/34  
 IMO Res. MSC.48(66) -(LSA Code)- amended by MSC.207(81), MSC.218(82), MSC.272(85), MSC.293(87), MSC.320(89),  
 MSC.368(93), MSC.425(98), MSC.459(101) and MSC.485(103) I, IV  
 IMO Res. MSC.36(63) -(1994 HSC Code)- as amended, 8  
 IMO Res. MSC.97(73) -(2000 HSC Code)- as amended, 8  
 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), MSC.427(98), MSC.472(101) and MSC.488(103)  
 IMO MSC/Circ.811 and IMO MSC.1/Circ.1630

Transport Canada Requirements:

Transport Canada Life Saving Equipment Regulations, TP14475 and TP14612

*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: 07 Sep 2029****For Bureau Veritas Marine & Offshore,**

At BV GOTHENBURG, on 07 Sep 2024,

Hans-erik ERICSSON

***This certificate was created electronically and is valid without signature***

This certificate is recognized by Transport Canada

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](http://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.

## THE SCHEDULE OF APPROVAL

### 1. PRODUCT DESCRIPTION :

The **Hammar H20 Release Unit** is intended for cutting a rope/cable/tubing after impulse from a hydrostatic pressure to set free a vessel's life rafts or other Life Saving Appliances.

The mechanical principle of operation is a spring-loaded knife is held back by a pin fixed in the centre of a flexible membrane. Release of knife, activation, occurs when the flexible membrane is affected in a perpendicular direction from the spring-loaded knife.

<b>Product Designation</b>	H20 R, Release Depth 1.5-4 m
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Version	In-Service Options		
	H20 R (24 months)	H20 RX (30 months)	H20 RL (36 months)
H20 Hydrostatic Release Unit ( <b>HRU</b> ) *	H20 R HRU	H20 RX HRU	H20 RL HRU
H20 Hydrostatic/Electric Release Unit ( <b>ERU</b> ) **	H20 R ERU	H20 RX ERU	H20 RL ERU
H20 HRU with External Breather Valve ( <b>EBV</b> ) ***	H20 R EBV	H20 RX EBV	H20 RL EBV

\* **HRU** have a hydrostatic activation depth of 1.5-4m.

\*\* **ERU** activates on a hydrostatic pressure (at a depth of 1.5-4m) or on an electrical signal from a Control Unit. The electronic system, made by Hammar, set up for remotely activating ERU, is called Electronic Remote Release System (ERRS).

\*\*\* **EBV** have a hydrostatic activation depth of 1.5-4m.

This Type Approval Certificate only covers the hydrostatic function of the H20, as per requirements stated on the front page of this certificate, and does not cover the additional ERRS system, although its design was addressed by the Society to ensure that this additional feature would not impact the performance of the hydrostatic function of the H20.

The H20 is compatible with requirements in LSA 4.1.6.3:

- With the design of the H20 the force of the payload does not affect the release unit hence the marking (mentioned in LSA 4.1.6.3.6) of "suitable for life rafts with a capacity of more than 25 persons" applies to all H20 R Release Units.

### 2. DOCUMENTS AND DRAWINGS :

#### 2.1 - Drawings and Specifications

Document	Issue	Date
Drawings and Specifications	12	2023-12-20
H20 for liferafts scheme-A	R1	2023-10-12

#### 2.2 - Markings

Document	Issue
Top Labels H20 R, 1.5-4m Release Depth TC	0011-01
H20 Expiry Label	0002-02

#### 2.3 - Manual for installation, use and maintenance (Electronic format)

Document	Issue
HAMMAR H20 Manual HT-0019_11.05	11.05

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

**3. TEST REPORTS :**

As per test reports listed in the following document:

**3.1 - Hydrostatic Release Units**

REF	DESCRIPTION	ID	DATE
1	Test report for Hydrostatic Release Unit (HRU), Sjöfartsinspektionen, IMO A521(13)	31.309.78.212	01/03/1985
1	<i>Submergence test</i>	31-309.78.212 Encl 3	15/03/1985
1	<i>Corrosion resistance test</i>	85M51019 Encl 2	28/08/1985
1	<i>Technical test on membranes</i>	85M51019 Encl 4	29/08/1985
1	<i>Technical test on membranes</i>	31-309.78.212 Encl 5	01/10/1985
2	Corrosion tests on the blades	21.99-90 34084	24/01/1990
3	Corrosion tests on the blades and HRU	M51400	04/09/1990
4	Letter Swedish National Maritime Administration Safety Inspectorate	---	10/12/1993
6	Type tests: Corrosion resistance, temperature cycling, and release test	KMyP203085b	06/08/2002
7	Type tests: Corrosion resistance, temperature cycling, and release test	N KMyP03765	05/09/2002
9	Solar radiation test	P801304	13/03/2008
10	H20 X, Disposable Hydrostatic release unit test	---	22/06/2009
12	H20 RX with external breather valve, Disposable Hydrostatic release unit	---	28/02/2012
13	Corrosion resistance test of knife sets	8P03320-01	09/04/2018
14	Type tests: H20RL Temperature cycling and release test	169GTB19	26/04/2019

**3.2 - Weak Link**

REF	DESCRIPTION	ID	DATE
1	Test of Weak links	31-309.78.212 Encl12	01/10/1985
11	Weak link test	---	14/10/2009
17	Testing of Weak Links F214946	F214946	05/09/2002
18	Testing of Weak Links (Red)	82369-10	09/05/2023
15	Additional Material test BG30 tensile test	23-0541	09/05/2023

**3.3 - Rope Sling**

REF	DESCRIPTION	ID	DATE
5	Breaking load test of rope sling	96H30094B	05/06/1996
8	Breaking load test of rope sling	KMp I2013	28/10/2002
14	Strength test of the rope slings fishermans knot (Black)	169GTB19	26/04/2019

**3.4 - Additional Rubbing test - Transport Canada**

Number	Date	Description
	2016/02/22	CM Hammar Rubbing test for Transport Canada

**4. APPLICATION / LIMITATION :**

- As per requirements stated on front page of this Certificate.
- Where the weak link is part of the supply, it shall comply with items N° 4 or 8 on drawing H20 for liferafts scheme-A-R1.
- Since not submitted to the painter strain there is no limitation in respect to the liferaft capacity (the "Rope sling", which is part of the device was strength tested at 15 KN, liferaft for more than 25 persons)
- 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 out according to manufacturer's instructions.
- It shall be provided with a simple system of recording the expiry date (month/year) at which the unit must be replaced.
- If marked with more than a single expiry date (month/year), the unit will be invalid and must be replaced.
- In addition of the Electronic version of the "manual for installation, use and maintenance", a paper version of the manual should always be available free of charge for the consumers who request it.

**5. PRODUCTION SURVEY REQUIREMENTS :**

The **HAMMAR H20** Hydrostatic Release Unit are to be supplied by **CM 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.

**CM 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 :

**CM HAMMAR AB**  
August Barks Gata 15  
S-42132 V:a Frölunda  
SWEDEN

**6. MARKING OF PRODUCT :**

Instructions, Diagrams, Markings illustrating the use of the Hydrostatic Release Unit shall be printed indelibly (to be both in English and in French);

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

- "HAMMAR H20"
- Serial Number
- Expiry date
- BV TAC number : 58421/B0 BV
- The notation: "DO NOT PAINT"

**7. OTHERS :**

It is **CM 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 Type Approval Certificate No 58421/B0 BV, issued on 02/09/2019 by the Society.

**\*\*\* END OF CERTIFICATE \*\*\***