



中国船级社  
CHINA CLASSIFICATION SOCIETY

证书编号/Certificate No.  
SW20PTB00003\_02

型式认可证书  
CERTIFICATE OF TYPE APPROVAL

兹证明本证书所述制造厂具备按照下列标准的要求生产本证书所列产品的能力和条件。

This is to certify that the manufacturer stated in the certificate meets the requirements of the standards listed below and is available with the ability and conditions to produce the products described in the certificate.

制造厂/Manufacturer

SAL Navigation AB

地址/Address

Västberga Allé 36 B, SE-126 30 Hägersten, Sweden

产品名称/Product

航行数据记录仪 (VDR)  
Shipborne Voyage Data Recorder

认可标准/Approval Standard

- 国际海事组织大会决议A.694(17)《作为全球海上遇险和安全系统(遇险和安全系统)组成部分的船载无线电设备和电子助航设备的一般要求》  
IMO Resolution A.694(17) General Requirements for Shipborne Radio Equipment Forming Part of the Global Maritime Distress and Safety System (GMDSS) and for Electronic Navigational Aids
- 国际海事组织海上安全委员会决议MSC.191(79)《船载航行显示器有关航行信息显示的性能标准》  
IMO Resolution MSC.191(79) Performance Standards for the Presentation of Navigation-Related Information on Shipborne Navigational Displays
- 国际海事组织海上安全委员会决议MSC.333(90)《通过经修订的船载航行数据记录仪(VDR)性能标准》  
IMO Resolution MSC.333(90) Adoption of Revised Performance Standards for Shipborne Voyage Data Recorders (VDRs)
- IEC 60945:2002/COR1:2008《船用航行和无线电通信设备及系统-通用要求-试验方法和试验结果的要求》  
IEC 60945:2002/COR1:2008 Maritime Navigation and Radiocommunication Equipment and Systems - General Requirements - Methods of Testing and Required Test Results

用于/Intended for

船舶与海上设施/Ships and Offshore Installations



证书有效期至/ This Certificate is valid until 2022年12月04日/ Dec. 04,2022

发证机构/ Issued by 中国船级社斯德哥尔摩办事处  
CCS Stockholm Office 签发日期/ Date 2020年11月25日  
Nov. 25,2020

本证书根据中国船级社规范和相关规定签发。所有证书页为一个整体，必须同时使用。纸质证书每页均须由本社盖章方为有效，电子证书含数字签名方为有效，本证书复印件无效。任何单位和个人均不应摘录或节选本证书的部分内容。有关方对所持证书的真实性有疑问时，可以向本社检验机构咨询。This Certificate is issued pursuant to the Rules of the Society and related regulation. All pages of the certificate are taken as a whole and are used simultaneously. No paper certificate page is valid without bearing the stamp of the Society, no electronic certificates is valid without the digital signature, and no copied form of the certificate is regarded as valid. Any part of the certificate is not to be extracted or abridged by any unit or individual in any form. Related parties who are doubted about the authenticity of the certificate may inquire of the Society or its offices.



Form No: T01.

联系方式/Contact Us, 见本社官方网站/See official web site of the Society (<http://www.ccs.org.cn>)

UTN:P020-40899869

**产品明细/Product Description****航行数据记录仪 (VDR) /Shipborne Voyage Data Recorder (M0001)**

名称/Name	属性 (值) /Value	单位/Unit
型号/Type	SAL SVF-200	
记录时间/Recording Period	Min 720 hours (LTS); Min 48 hours (capsule)	
系统组成/System Component	See Additional Pages	
电源/Power Source	115-230	VAC
备用电源/Reserve Source	2 hours of continuous audio recording (Battery backup)	
外壳防护等级/Degree of Protection of Enclosure	IP22 (System); IP66 (Microphone outdoor housing)	

**批准的图纸/Approved Drawings**

图纸批准号/ Drawings Approval No. : NP18A03304

**产品认可试验报告/ Approval Test Report**

试验报告编号/ Test Report No. : See Additional Pages

试验报告日期/ Test Report Date :

**认可后的产品检验方式/ Method of Product Inspection after Approval**

按规范认可后应进行产品检验的产品/The product should be inspected in term of the rules:

认可后的产品检验应由本社验船师根据本社规范规定按批准的产品检验计划进行检验，经检验合格后由本社颁发船用产品证书。

After approval, product inspection should be carried out by the Surveyor of the Society in accordance with the approved product inspection scheme, and the Marine Product Certificate will be issued by the Society upon satisfactory inspection.

**认可保持条件/ Maintenance Requirements of Approval**

1. 型式认可后，如果产品及其重要零部件的设计、所用材料或制造方法有所改变，且影响到产品的主要特性、特征；或产品的性能指标有所更改，且超过认可的范围，则有关图纸和文件应经检验机构审批。并在检验机构认为必要时，经本社检验人员见证有关试验和进行检查，其结果应能证实仍符合认可条件。

After type approval, if there are changes to the design, materials used or manufacturing method of the product and important components and such changes affect major characteristics and properties of the product, or property indexes of the product are changed and exceed the scope of approval, related drawings and documents are to be examined and approved by the concerned survey office. Where deemed necessary by the survey office, the surveyor to the Society will go to witness relevant tests and conduct inspection and the results should be able to demonstrate compliance with the approval conditions.

2. 工厂的质量管理体系应保持有效运行，并且与认可时一致。如果质量管理体系发生改变，应经原体系认证机构审核并报本社批准。

The quality management system of the factory shall be ensure effective operation, and shall be the same as the situation of approval. If there are any changes to the quality management system, auditing of the original certification organization for quality management system and the society's approval shall be obtained.

3. 认可证书有效期内，如果出现可能导致本社取消认可的情况，工厂应及时采取有效的纠正措施。

Within the validity of the approval certificate, if cases occur that may cause the Society to withdraw the approval, the manufacturer should take corrective actions in a prompt and effective manner.

4. 在认可证书有效期内，本社检验人员可在未经事先通知的情况下对工厂的产品制造过程进行审核，以验证产品的生产是否符合业经本社批准的图纸和文件。工厂应予以配合。

Within the validity of the approval certificate, the surveyor to the Society may pay unannounced audit to the manufacturing process of the product in order to confirm whether it is in compliance with the drawings and documents approved by the Society. The factory should provide an active cooperation and necessary for the surveyor.

5. 如果属于获得型式认可B 模式证书，且无需颁发船用产品证书/等效证明文件的情况，证书获得者应接受本社每年一次的定期审核，定期审核日为认可证书期满之日对应的每一周年日，检查工作应在周年日的前后三个月内进

行。

If belong to the situation of the product has type approval mode B certificate, and marine product certificate/equivalent document is not necessary, those who have obtained the certificate should be subject to periodical audit every year. The date of periodical audit shall be each anniversary date which corresponds to the date of expiry of the relevant certificate and the periodical audit shall be done within a time span of three months before and after the annual surveillance date.

#### 备注/Remarks

1. 本证书由原型式认可证书 (No. GB18T00019) 变更并替代原证书。

This Certificate is modified from and supersedes the previous Type Approval Certificate No. GB18T00019.

2. 本社已审核了产品厂无石棉声明，但本社的审核不免除产品厂按照合同关系向订货方保证产品无石棉的责任。

The declaration of asbestos-free submitted by manufacturer has been reviewed by the Society. However, liability of the manufacturer to guarantee the products are asbestos-free to purchaser under contract will not be exempted.

**中国船级社斯德哥尔摩办事处**

**CCS Stockholm Office**

注：本证书含有附页，共2页

Note: The certificate is attached with additional 2 page(s)

## System Component of SAL SVF-200

### Components necessary for operation:

Component	Description	SAL P/N	Software Version *
Main Unit	SVF-200 Main Unit	80.31.01	Axx
Audio Mixer Unit	AMU	80.31.02	Axx
Remote Control Unit	RCU2	80.32.01	Axx
Microphone	AM2	80.33.01	N/A
Fixed Capsule	PROCAP 32GB	80.35.01	Fxx
Float free Capsule **	Tron 40 VDR	80.35.02	Axx
Float free Capsule ** with heater	Tron 40 VDR with heater	80.35.03	Axx
Underwater Location Beacon	PT9 NINETY	80.35.04	N/A

\*) Capital letters in the Software Version indicate Major revisions (A, B, C, etc.), whereas "xx" represent Minor revision numbers (01, 02, 03, etc.) with no impact on type approved functionality. ("N/A" means there is no software in the component.)

\*\*\*) One of the two Float Free Capsules shall be used.

### Optional components:

Component	Description	SAL P/N	Software Version *
Video Grabber Unit	VGU	80.31.03	Axx
Video Grabber Unit 2	VGU2	80.31.04	Gxx
Signal converter	DDU	80.31.05	Axx
- Analogue Module 2ch	DDU AI2	80.31.06	
- Digital Module 8ch	DDU DI8-HD	80.31.07	
- Power Distribution 24V	DDU PD 24V	80.31.08	

\*) Capital letters in the Software Version indicate Major revisions (A, B, C, etc.), whereas "xx" represent Minor revision numbers (01, 02, 03, etc.) with no impact on type approved functionality. ("N/A" means there is no software in the component.)

### List of Approval Test Reports

No	Test Report Number	Test Report Date	Laboratory	Manufacturer's Document ID
1	MTkP904761	2009-08-25	SP Technical Research	AA09118
2	DANAK-1910777	2010-01-28	DELTA	AA10060
3	1302125, Ed. 2	2013-06-28	Intertek	AA13043
4	1305247-1	2013-06-07	Intertek	AA13051
5	Certificate No. 809	2013-05-27	BSH	AA13052
6	Certificate No. 878	2014-08-20	BSH	AA14076
7	1400771, Ed.1	2014-02-19	Intertek	AA14005
8	1400260	2014-02-03	Intertek	AA14006
9	1719591STO-002, Ed. 1	2018-02-12	Intertek	AA18022
10	16049.00	2016-04-18	Nemko	AA16066
11	BSH/4543/001/4292646/13-1	2014-08-12	BSH	AA14070
12	1122208	2011-11-04	Intertek	AA11065
13	1317383-2	2014-01-15	Intertek	AA14002
14	900659	2009-08-26	Intertek	AA09116
15	279 480	2009-08-12	INNVENTIA	AA09117
16	1023172-1	2010-12-06	Intertek	AA10070
17	1023130-1	2010-10-27	Intertek	AA10072
18	1023130-3	2010-10-28	Intertek	AA10074
19	1111384-1	2011-03-23	Intertek	AA11021
20	1914940JAR-002	2019-10-01	Intertek	AA19135
21	1914940JAR-001	2019-09-12	Intertek	AA19136
22	1406514STO-001	2014-05-23	Intertek	AA14042
23	DANAK-19/15230	2015-05-07	DELTA	AA15057
24	E13261.06	2015-03-03	Nemko	AA15058
25	BSH/46121/4292377/12	2013-06-17	BSH	AA13113
26	BSH/4543/001/4292646/13	2014-08-12	BSH	AA14069
27	BSH/4543/001/4292910/15-1	2015-06-25	BSH	AA15077
28	BSH/4543/001/4292910/15	2015-06-25	BSH	AA15076
29	454.VDR/Consilium (S)-VDR F2/1	2020-01-27	BSH	AA20003
30	454.VDR/Consilium (S)-VDR F2/1-2	2020-01-27	BSH	AA20004
31	454.VDR/Consilium (S)-VDR F2/1-1	2020-01-27	BSH	AA20005
32	900659/2	2009-07-03	Intertek	AA09119
33	BSH/4543/001/4292646/13-2	2014-08-12	BSH	AA14071

-----End of Certificate-----