



Class
External

Manufacturer's Declaration of Conformity

SAL R100
Water track speed log

We, the undersigned manufacturer

SAL Navigation AB

Västberga Alle 36B, SE-126 30 Hägersten, SWEDEN

Certify and declare that the equipment listed below has been designed; type approved and is manufactured according to the requirements of Marine Equipment Directive (MED) 2014/90/EU and Implementing Regulation (EU) 2024/1975.

Type of equipment:	Item 4.7 Speed and distance measuring equipment (SDME)
Manufacturer:	SAL Navigation AB
Name:	SAL R100

The equipment has been tested and verified to be in conformance with the following regulations and standards:

IMO Resolution A.694(17)	IEC 61023 Ed 3.0 (2007-06)
IMO Resolution A.824(19)	IEC 60945 Ed 4.0 (2002) incl. Corr. 1 (2008)
IMO Resolution MSC.191(79)	IEC 61162-1 Ed 5.0 (2016-08)
IMO Resolution MSC.302(87) *	IEC 62288 Ed 3.0 (2021)
	IEC 62923-1 Ed. 1.0 (2018-08) *
	IEC 62923-2 Ed. 1.0 (2018-08) *

*) The equipment is not capable of issuing alerts.

EC type-examination (module B) certificate Notified body	No: PTL-MED-B-25-111007-25-122020 Phoenix Testlab in Germany (0700)
Quality system (module D) certificate Notified body	No: MEDD00001Y1 DNV AS in Norway (0575)
Marking	

The technical documentation for this equipment is retained at the following address:
SAL Navigation AB, Västberga Alle 36B, SE-126 30 Hägersten, SWEDEN

Date: 13 August 2025

Signature:

Anders Fagergren
Chief Technology Officer

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EC TYPE-EXAMINATION (MODULE B) CERTIFICATE

Marine Equipment Directive (MED) 2014/90/EU

PHOENIX TESTLAB
Notified Body Number **0700**

Recognised by



0800S11/4822/007

BUNDESAMT FÜR
SEESCHIFFFAHRT
UND
HYDROGRAPHIE

This is to certify that:

PHOENIX TESTLAB did undertake the relevant type approval procedures for the type of equipment identified below which was found to be in compliance with the requirements of Marine Equipment Directive (MED) 2014/90/EU, subject to any conditions in the schedule attached hereto.

Certificate No.	PTL-MED-B-25-111007 - 25-122020
Manufacturer Address	SAL Navigation AB Västberga Allé 36 B 126 30 Hägersten Sweden
Directive Reference (No & Item designation)	Directive 2014/90/EU, Regulation (EU) 2024/1975 MED/4.7 (Row 2 of 2): Speed and distance measuring equipment (SDME)
Product Name / Trade Name	SAL R1a / SAL R1a, SAL R100

Regulations SOLAS 74, as amended

Regulations V/18, V/19, X/3, IMO Res. A.694(17), IMO Res. A.824(19), IMO Res. MSC.36(63), IMO Res. MSC.97(73), IMO Res. MSC.191(79), IMO Res. MSC.302(87)

Testing Standards

IEC 60945 Ed. 4.0 (2002) incl. Corr. 1 (2008)	IEC 62288 Ed. 3.0 (2021)
IEC 61023 Ed. 3.0 (2007-06)	IEC 62923-1 Ed. 1.0 (2018-08) *
IEC 61162-1 Ed. 5.0 (2016-08)	IEC 62923-2 Ed. 1.0 (2018-08) *

*) The equipment is not capable of issuing alerts.

Date of issue: **2025-07-02**
USCG Approval Category: **165.105**

Expiry date: **2030-07-01**

This certificate remains valid unless suspended, expired or withdrawn, provided the conditions in the attached schedule are complied with.

The attached Schedule of Approval forms part of this certificate. This certificate consists of 4 pages.



Signed by Klaus Knörig
Notified Body

Schedule of Approval

Components necessary for operation

Component	Consilium Description	Consilium P/N	SAL Description	SAL P/N	Software Version *
Main Unit	SAL R1a ELC	703800D	SAL R100 ELC	80.11.01	Axx
Transducer **	SAL R1 TRU 30M	705050	SAL R1 TRU 30M	705050	N/A
	SAL R1 TRU 40M	705051	SAL R1 TRU 40M	705051	
	SAL R1 TRU EASY TANK 10M WTC	5492300	SAL R1 TRU EASY TANK 10M WTC	5492300	
	SAL R1 TRU EASY TANK 40M	5492410	SAL R1 TRU EASY TANK 40M	5492410	
	SAL R1 TRU EASY TANK 40M WTC	5492400	SAL R1 TRU EASY TANK 40M WTC	5492400	
Display	SAL SD4-3	704043	SAL SD4-3	80.12.03	Cxx

*) 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.)

***) In a speed log system, only one (1) of the transducers shall be used.

Optional Components

Component	Consilium Description	Consilium P/N	SAL Description	SAL P/N	Software Version *
Processing Unit	SAL LPU2	704500	SAL LPU2	80.11.03	Bxx
NMEA Buffer	1N4B	704160	1N4B	704160	N/A
Displays	SAL SD4-2	704042	SAL SD4-2	80.12.02	Cxx
	SAL SD4-4	704044	SAL SD4-4	80.12.04	Cxx
	SIA-3-8	701692	SIA-3-8	701692	N/A
Mounting Box	SD4 BMB	704080	SD4 BMB	704080	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.)

Approval documentation

	Consilium document P/N and name	SAL document P/N and name
User Guide/ Installation Manual	703810, SAL R1a Manual	80.16.01, SAL R100 Manual
Manuals	701695, SIA-3-8 Technical Manual	
Statements	Statement on SAL R1a upgrades, Document Id. TP20025A, 2020-02-18. Statement on MED Implementing Regulation 2018-773, Document Id. TP19016A01, 2019-01-23 Summary of adaptations made to SD4 to comply with 62288 ed 2.0, Document Id. TP15047A01, 2015-02-19 SAL R1a / SAL R100 components and part numbers, Document Id. TP20149B, 2020-12-15 Statement on SAL R1 TRU transducers watertight and non-watertight cables, Document Id. TP21007A01, 2021-01-15 TP23093A02, Differences between 62288 Ed 3.0 and Ed 2.0 affecting SAL T and R systems	



Applied Standards and Test Reports

Specification	Laboratory	Test Report Number / Version
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 11.2, Compass Safe Distance	BSH	Certificate No. 445, 2005-07-04
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 9, 10, EMC	Intertek	1122354-2 Ed. 2, 2012-04-27
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 8.7, 8.2 – 8.4, 12.1, Environmental	Intertek	1122354-1, 2012-03-30
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 8.7, Environmental	Innventia	273 152 B, 2012-01-17
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 8.2, 8.4, Environmental	Intertek	1209547-4, 2012-04-02
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 9, EMC	Jan Linders AB	TP16064 Ver. A01, 2016-04-01
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 9, EMC	Jan Linders AB	TP16065, 2016-03-23
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 8.2 – 8.4, Environmental	Intertek	913128, 2009-10-30
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 9, 10, EMC	SP Technical Research	F917800-A, 2009-12-14
IEC 61023 Ed. 2.0 (1999-07)	BSH	4612/4070407/06, 2006-11-28
IEC 61023 Ed. 3.0 (2007-06)	BSH	4612/4071591/10-1, 2010-03-17
IEC 61023 Ed. 3.0 (2007-06)	BSH	4612/4061984/11, 2011-09-30
IEC 61162-1 Ed. 2.0 (2000-07)	Consilium	TP02111A0, 2002-04-24
IEC 61162-1 Ed. 4.0 (2010-11)	BSH	4612/4071840/11, 2011-01-12
IEC 61162-1 Ed. 3.0 (2007-04)	BSH	46162/0041158/09, 2010-03-22
IEC 61162-1 Ed. 5.0 (2016-08)	SAL Navigation	TP19016A01, 2019-01-23
IEC 62288 Ed. 1.0 (2008-07)	BSH	4612/4071591/10, 2010-03-17
IEC 62288 Ed. 1.0 (2008-07)	Consilium	TP09093B, 2009-10-28
IEC 62288 Ed. 2.0 (2014-07)	Consilium	TP15047A01, 2015-02-20
IEC 62288 Ed. 3.0 (2021)	SAL Navigation	TP23093A02, 2025-03-07

Application/Limitation

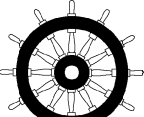
The product is a speed and distance measuring equipment (SDME) for measuring speed and distance through the water.

The equipment is not capable of issuing alerts.



Notes

1. This certificate will not be valid if the manufacturer makes any changes or modifications to the approved type of equipment, which have not been notified to, and agreed with PHOENIX TESTLAB.
2. During the period of validity of this certificate the applicable regulations (international conventions and the relevant resolutions and circulars of the IMO) and testing standards of the Commission Implementing Regulation may change, therefore the product conformity may need to be re-assessed by the Notified Body.

3.  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-control phase module (D, E, or F) of the Directive is fully complied with and controlled by a written inspection agreement with a notified body.

U.S. Coast Guard Approval

This equipment is covered by the scope of the "Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment" signed February 27th, 2004, and amended by Decisions No.1/2018 dated February 18th, 2019, and No. 1/2023 dated May 26th, 2023, according to U.S. Coast Guard approval category 165.105.

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F) as allowed by the MRA.



QS - CERTIFICATE OF ASSESSMENT – EC (MODULE D)

Certificate no.:
MEDD00001Y1
Revision no.:
12

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as “Forskrift om Skipsutstyr” by the Norwegian Maritime Authority. This Certificate is issued by DNV AS under the authority of the Government of Norway.

This is to certify:

that the Quality System for the products

with type designation(s) as specified in the Appendix to this Certificate

issued to

SAL Navigation AB
Hägersten, Sweden

is found to comply with the applicable requirements.

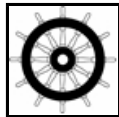
The quality system has been assessed with respect to the procedure of conformity assessment described in Annex II, Module D in the directive 2014/90/EU and regulation (EU) 2024/1975.

Date of issue: **2025-08-12**

Expiry date: **2029-11-20**

DNV local unit:
Sweden CMC

Approval Engineer:
Steinar Kristensen



Notified Body
no.: **0575**



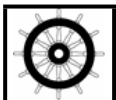
for **DNV AS**

Digitally Signed By:

Christine Mydlak-Röder

Christine Mydlak-Röder
Head of Notified Body

The manufacturer is allowed to affix the U.S. Coast Guard approval number(s) as stated in the appendix attached hereto and as allowed by the Agreement between the United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment signed 17 October 2005, and amended by Decision No 1/2023 dated August 21st, 2023.



0575/yyyy

0575: Notified Body number undertaking quality surveillance
yyyy: The year in which the mark is affixed



The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU. This certificate authorizes the manufacturer in conjunction with the valid EC Type Examination (Module B) Certificate(s) of the equipment listed before to affix the Mark of Conformity (wheelmark) to the product described herein. This certificate loses its validity if the manufacturer makes any changes to the approved quality system which have not been notified to and agreed with the notified body named on this certificate. This certificate remains valid unless suspended, withdrawn, recalled or cancelled. The Manufacturer has to apply for periodical audits to verify the maintenance and application of the quality system every 12 months.

The reference to Module B certificate(s) relate to the revision of the certificate valid at the time of issue of this Module D/E certificate. This module D/E certificate is valid for later revisions of the referenced DNV Module B certificate(s) until their expiration date or within the validity dates of this Module D/E certificate, whichever is less. A new Module B certificate will be required when a modification of a product covered by a Module B certificate is of such extent that a new conformity assessment is required by Directive 2014/90/EU. For Non-DNV Module B certificates, only the revision stated in this Module D/E certificate is regarded valid.

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 USD 300 000.

Item no. MED/4.29 Voyage data recorder (VDR)

Type designation	EC Type-Examination Certificate no.	Expiry date	Notified Body no.	USCG approval number	Places of production
SAL SVF-200	PTL-MED-B-23-111388 - 23-123467	2028-10-17	0700	165.150/EC070 0/PTL-MED-B-23-111388 - 23-123467/EC057 5	1
Consilium VDR F2	PTL-MED-B-22-111810 - 22-123932	2027-12-14	0700	165.150/EC070 0/PTL-MED-B-22-111810 - 22-123932/EC057 5	1

Item no. MED/4.47 Simplified voyage data recorder (S-VDR)

Type designation	EC Type-Examination Certificate no.	Expiry date	Notified Body no.	USCG approval number	Places of production
Consilium S-VDR S2	PTL-MED-B-22-111811 - 22-123933	2027-12-14	0700	165.151/EC070 0/PTL-MED-B-22-111811 - 22-123933/EC057 5	1
SAL SVS-200	PTL-MED-B-23-111395 - 23-123477	2028-10-17	0700	165.151/EC070 0/PTL-MED-B-23-111395 - 23-123477/EC057 5	1

Item no. MED/4.6 Echo-sounding equipment

Type designation	EC Type-Examination Certificate no.	Expiry date	Notified Body no.	USCG approval number	Places of production
SAL T3	PTL-MED-B-23-111243 - 23-123126	2028-09-28	0700	165.107/EC070 0/PTL-MED-B-23-111243 - 23-123126/EC057 5	1
SAL E200, E2d	PTL-MED-B-24-111260-24 -122772	2029-09-15	0700	165.107/EC070 0/PTL-MED-B-24-111260-24 -122772/EC057 5	1

Item no. MED/4.7 Speed and distance measuring equipment (SDME)

Type designation	EC Type-Examination Certificate no.	Expiry date	Notified Body no.	USCG approval number	Places of production
SAL T3	PTL-MED-B-23-111243 - 23-123135	2028-09-28	0700	165.105/EC070 0/PTL-MED-B-23-111243 - 23-123135/EC057 5	1
SAL T2+, SAL T200	PTL-MED-B-23-111244 - 23123127	2028-08-08	0700	165.105/EC070 0/PTL-MED-B-23-111244 - 23123127/EC0 575	1
SAL R200, R1d	PTL-MED-B -24-111261-24-122773	2029-09-15	0700	165.105/EC070 0/PTL-MED-B -24-111261-24-122773/EC057 5	1
JLN-900	PTL-MED-B-23-111867 - 23-124640	2028-11-17	0700	165.105/EC070 0/PTL-MED-B-23-111867 - 23-124640/EC057 5	1
SAL R1a and SAL R100	PTL-MED-B-25-111007 - 25-122020	2030-07-01	0700	165.105/EC070 0/PTL-MED-B-25-111007 - 25-122020/EC057 5	1
SIMRAD R1 Easy Tank	PTL-MED-B-25-111008 - 25-122021	2030-07-01	0700	165.105/EC070 0/PTL-MED-B-25-111008 - 25-122021/EC057 5	1

Places of production

1 SAL Navigation AB, Västberga allé 36 B, Hägersten, 126 30, Sweden