

# 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.

<b>Certificate No.</b>	PTL-MED-B-20-111741
<b>Manufacturer</b>	SAL Navigation AB
<b>Address</b>	Västberga Allé 36 B 126 30 Hägersten Sweden
<b>Directive Reference (No &amp; Item designation)</b>	Directive 2014/90/EU, Regulation (EU) 2020/1170 MED/4.7 Speed and distance measuring equipment (SDME)
<b>Product Name / Trade Name</b>	SAL R1a / SAL R1a, SAL R100

### Specified 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. 2.0 (2014-07) IEC 62923-1 Ed. 1.0 (2018-08) * IEC 62923-2 Ed. 1.0 (2018-08) *

\*) The equipment is not capable of issuing alerts.

Date of issue:	<b>2020-12-09</b>	Expiry date:	<b>2025-12-08</b>
USCG Approval Category:	<b>165.105</b>		

**This certificate remains valid unless suspended, expired or withdrawn, provided the conditions in the attached schedule are complied with.**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

Phone +49(0)5235-9500-24  
Fax +49(0)5235-9500-28  
notifiedbody@phoenix-testlab.de

PHOENIX TESTLAB GmbH  
Königswinkel 10  
D-32825 Blomberg, Germany  
www.phoenix-testlab.de

## 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	5492300	SAL R1 TRU EASY TANK 10M	5492300	
	SAL R1 TRU EASY TANK 40M	5493400	SAL R1 TRU EASY TANK 40M	5493400	
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. TP20149, 2020-10-10	



### 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 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

### Application/Limitation

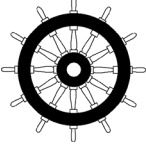
The product is a speed and distance measuring equipment (SDME) for measuring speed and distance through the water.

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. Should the specified regulations or standards be amended during the period of validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on the market and on board vessels to which the amended regulations or standards apply.

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 ANNEX II 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 Decision No.1/2008 dated February 18th, 2019 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.

