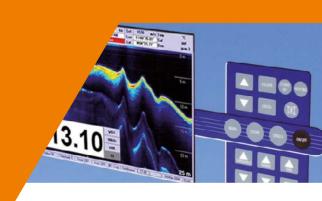


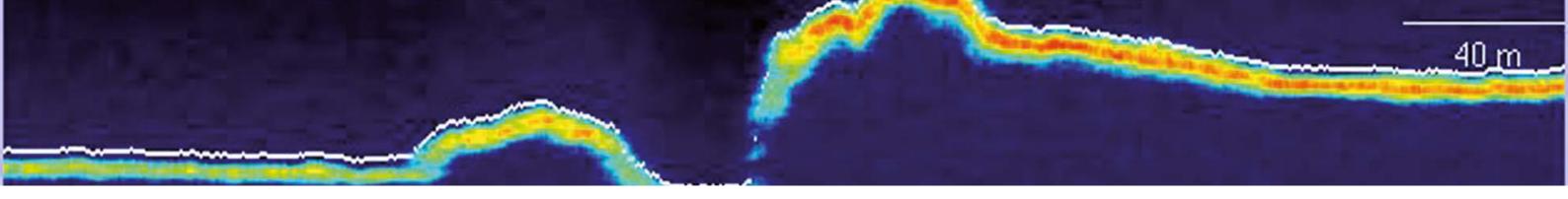
Wärtsilä ELAC VE 5900

Naval echo sounder system for surface vessels



The high-end naval echo sounder system Wärtsilä ELAC VE 5900 is especially designed to meet the requirements of modern surface combatant. No other system meets such a number of military specifications and offers such outstanding modularity for perfect adaptation into a new or existing design.





Wärtsilä ELAC VE 5900

Naval echo sounder systems for surface vessels

The ELAC VE 5900 is the latest model of the VE series with hundreds of systems sold and in service on surface vessels all around the world. Continuing this good tradition, this latest digital version of the ELAC VE 5900 meets all relevant military specifications in terms of shock, vibration, temperature, humidity, EMI and noise – to name only a few. This distinguishes the ELAC VE 5900 from other available systems that may be designed in accordance with these standards but are not type-tested.

Solid as a rock

Key features

Both, control and display, are concentrated in the main unit without any external electronics. Also, data storage is performed within this unit. The large colour display offers intuitive setup and operation as well as recall of recorded data. Economy is an important factor. Therefore, the ELAC VE 5900 is offered for different depth ranges, from 1,000 metres to full ocean depth. The choice of transducers follows these depth ranges and the special installation conditions onboard of the vessel.

In order to fit into any type of new construction or modernisation program, the ELAC VE 5900 is available in numerous configurations. For the main unit, a stand-alone housing with shock mounts is offered. The system may also be installed in an existing 19" rack. Depending on the requirements, the ELAC VE 5900 offers a multitude of equipment to extend the system, like SVT sensors, pressure sensors, digital slave displays and interfaces to ship networks

or printers.

Single- or dual-frequency version Measures depth below keel and diving Interfaces for input and output Blanking interface Network-printer interface

Meets all relevant military standards

Data storage for more than 7 days

Integrated online and offline BITE

Compatible with all VE 59 sensors

19" rack compatible

Single-pulse mode



System overview

Designed to meet defence standards

Tailored performance

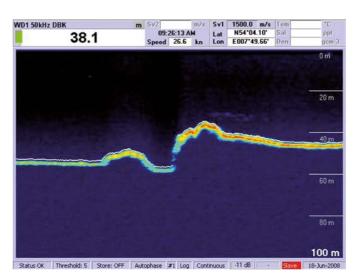
The control and display unit SEB 5900 combines the transceiver electronics, the processor, power supply, interfaces as well as the control and display components. Setup and operation are performed from this unit.

Wärtsilä ELAC Nautik offers a huge variety of transducers for this system. The choice depends on the required depth performance and the type of installation in the surface vessel. The installation design support offered by our engineers guarantees an optimum performance of the chosen setup.

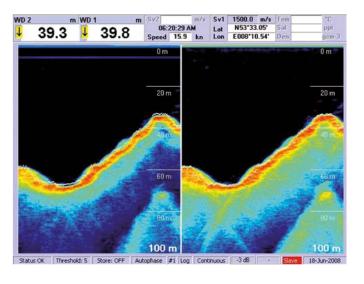
The pre-defined interfaces support the integration of the echo sounder system into the ship's navigation data management system. The blanking interfaces avoid interference with other active or passive systems onboard. Optional components like SVT sensors, pressure sensors, digital slave displays or graphical readouts further enhance the system.



Transducer LSE 136



Display of single- and dual-frequency version





Specifications and technical data

Technical data						
Frequencies	12 / 12.5 / 30 / 50 / 200 / 400 / 1,000 kHz (other frequencies available upon request)					
Max. scale settings	0 - 500 / - 1,000 / - 3,000 / - 6,000 / - 10,000 m					
Units (selectable)	Metres, fathoms, feet					
Display	10.4" VGA TFT					
Interfaces	NMEA 0183, RS422, Ethernet					
Power supply	230 V AC, 50 / 60 Hz 115 V AC, 50 / 60 Hz					
Power consumption	≤ 210 VA					

Environmental qualifications					
Shock	acc. to. BV 0430				
Vibration	acc. to. MIL-STD-167-1A, type I				
Temperature	acc. to. MIL-STD-810G, DEF-STAN 00-35				
Protection	IP 44 with housing				
EMC	acc. to. MIL-STD-461F, BV 0120				

Basic system					
Control and display unit	Including transceiver with processor, power supply, interface and integrated control and display components				
Low frequency transducer	12 - 200 kHz				

Extended system	
Control and display unit	Capable as master system (on request)
Slave units	Additional display units, other terminal
Optional	Graphical, digital readouts and printer Additional features and functions via software adaption and interfacing with appropriate sensors (on request)

Range	Transducer						
[m]	LSE 313	LSE 136	LSE 180	LEG 40	LEG 50	LSE 179	
0 - 10	×	×	×	-	-	-	
0 - 25	×	×	×	+	+	+	
0 - 50	×	×	×	+	+	+	
0 - 100	×	×	×	+	+	+	
0 - 50	×	×	×	+	+	+	
0 - 500	×	×	×	+	+	+	
0 - 1,000	-	×	×	+	+	+	
0 - 3,000	-	_	×	+	+	+	
0 - 6,000	-	_	-	+	+	+	
0 - 10,000	-	-	-	-	+	+	

- **x** for water depth and diving depth
- + for water depth only
- not available

WÄRTSILÄ

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