Speed Log

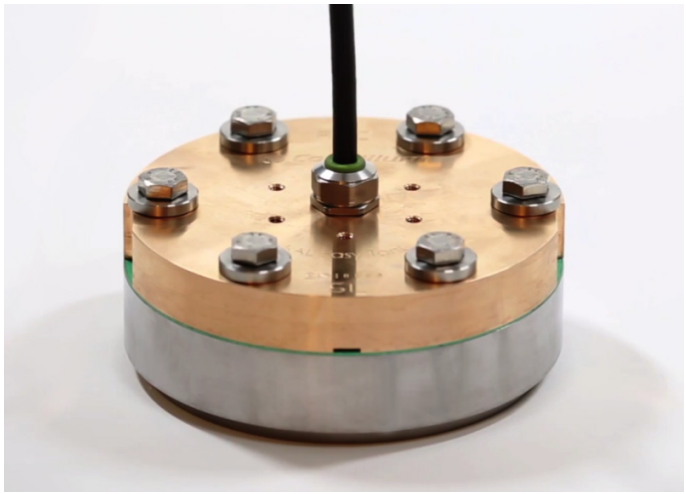
STW

SAL R100

Robust and reliable.
Minimalistic and accurate.

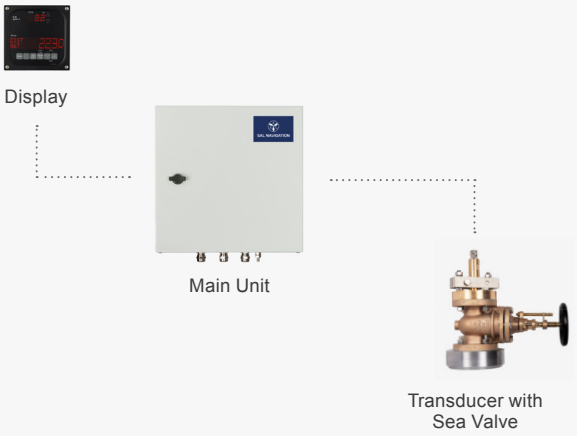
SAL NAVIGATION

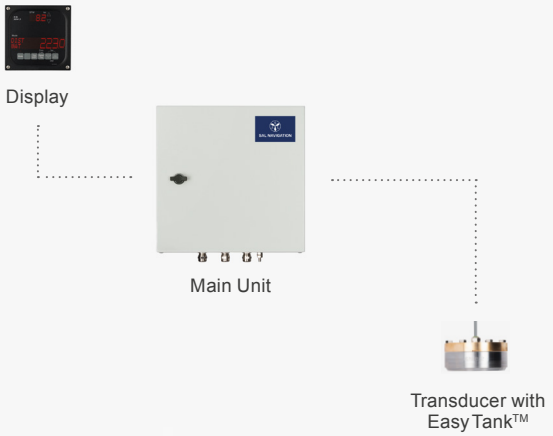
Robust and **reliable** Speed Through Water measurements, with **flexible installation options.**



Easy Tank™ – a cost-efficient alternative to the Sea Valve and traditional tanks, creating possibilities for installations in very tight spaces. Approved by DNV and considered a closed-ended installation. Thus, it does not require any watertight compartment.

Built on experience. With decades of accumulated knowledge and experience incorporated into the design, the result is a highly reliable system with accurate measurements and superb maintainability.





Capabilities

SAL R100 is a Water Track Speed Log designed for vessels up to 50 000 GT.

Regardless of which bottom part solution is preferred – Sea Valve or Easy Tank™ – the small form factor makes installation and maintenance very efficient. Also, the bottom arrangements are compatible with previous models of SAL Imcor and SAL R1, allowing for quick retrofits.

With a minimalistic and robust system design, constantly improved throughout the decades, SAL R100 is built to last. Easily configured and calibrated from the bridge display, it also has multipoint calibration for a very precise reading over the speed range. Together with the unique acoustic correlation technology, this makes sure SAL R100 delivers very robust and accurate speed indications.

Standards

The system fulfills all necessary regulations, test and performance standards:

IMO Resolution A.694(17)
IMO Resolution A.824(19)
IMO Resolution MSC.191(79)
IMO Resolution MSC.302(87) *

IEC 61023 Ed. 3.0 (2007-06)
IEC 60945 Ed. 4.0 (2002) incl. Corr. 1 (2008)
IEC 61162-1 Ed. 5.0 (2016-08)
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.

Key Figures

Speed range	0 – ±50 knots sensed water speed
Speed inaccuracy	< 1% or 0.1 knots, whichever is greater
Distance inaccuracy	< 1% of travelled distance in water
Measuring distance	130 mm below the surface of transducer
Minimum water depth	3 meters below transducer
Frequencies	3.8 MHz and 4.2 MHz

Highly **accurate speed measurements** through our unique **acoustic correlation** technology.

SAL Speed Logs use high-frequency sound waves and acoustic correlation to calculate speed. This measurement technique is very robust and insensitive to interference, allowing for reliable integration with other systems on board that need accurate speed data, like radar, auto-pilot, positioning systems and systems for fuel optimization.

The acoustic correlation technology has advantages compared to other solutions on the market. One of the most important advantages is that it is independent of water temperature and salinity. This means that our speed logs need less calibration and will measure correctly regardless of where in the world the vessels operate.

System Components

Standard

Height: 390 mm
Width: 360 mm
Depth: 170 mm
Weight: 10.5 kg

Main Unit
Operating voltage 110-230 VAC. The Main Unit controls the measurements and contains one independent unit for speed through the water measurement. The speed data calculated is sent as serial NMEA.

Height: 144 mm
Width: 144 mm
Depth: 16 mm
Weight: 0.6 kg

Display (SD4-3)
Operating voltage 24 VDC. Presents longitudinal Speed Through Water and distance measurement. More than one display may be connected to the system if needed.

Height: 160 mm
Diameter: 32 mm
Weight: 3.7 kg (30 m)

Transducer (for Sea Valve) *
Cable length standard 30 meters, optionally 40 meters.

Height: 335 mm
Width: 340 mm
Diameter: 168 mm
Weight: 24 kg

Sea Valve *
The sea valve provides retraction of the transducer without dry-docking or diver assistance. Suitable both for single and double bottom hull. Flange diameter 168 mm.

Height: 84 mm
Diameter: 168 mm
Weight: 5.5 kg (10 m)
+ 12 kg (steel)

Easy Tank™ (with built-in transducer) *
Cable length standard 10 meters, optionally 40 meters. The transducer is fixed to the upper bronze part.

**) Choose between Sea Valve or Easy Tank™.*

Optional

Height: 144 mm
Width: 48 mm
Depth: 29 mm
Weight: 0.2 kg

Dimmer
Used to dim a display from a remote position. Additional displays can be connected to the same dimmer.

Height: 194 mm
Width: 144 mm
Depth: 35 mm
Weight: 0.8 kg

Bulkhead Mounting Box
Displays (SD4 series) can be mounted directly on an indoor or outdoor bulkhead by using this box. IP66.

Height: 128 mm
Width: 77 mm
Depth: 50 mm
Weight: 0.5 kg

NMEA Splitter
Operating voltage 24 VDC. The NMEA Splitter can be used to provide serial NMEA with speed data to other equipment on board. One input, six (6) outputs.

Product images not to scale, please refer to actual measurements. For more technical details, please see separate datasheets.

SAL Speed Logs – built for the future upon decades of experience.

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