



## Thru-Hull SVS



A specific configuration of Valeport's MODUS SVS sound velocity sensor, allowing the probe to be deployed through the vessel's hull and safely recovered for cleaning and maintenance without requiring docking. It is particularly useful for multibeam applications where knowledge of the sound velocity adjacent to the multibeam transducer is necessary.

The probe is also available with an optional PRT temperature sensor.

### Sensors

#### Sound Velocity

Valeport's unique digital time of flight sound velocity sensor. Advanced composite, titanium and polycarbonate construction, together with the digital sampling technique give unmatched levels of accuracy.

Range: 1375 - 1900 m/s  
Accuracy:  $\pm 0.02$  m/s  
Resolution: 0.001 m/s

#### Temperature (optional)

Fast response PRT with guard.

Range: -5 to +35 °C  
Accuracy:  $\pm 0.01$  °C  
Resolution: 0.002 °C

### Valve

The Thru-Hull SVS uses a PN16 ball valve, nominal 100mm bore, operated using a 90° turn lever. The valve is normally supplied in aluminium bronze, and comes complete with full Germanischer Lloyds certification (or equivalent) to allow it to be fitted to the vessel.

### Data

Sampling: Continuous Data at up to 8 Hz, data on demand, or Burst Average mode  
Protocol: RS232, RS485 & RS422 fitted as standard  
Baud Rate: 2400 - 115200 (8,1,N)  
Format: ASCII text in a selection of formats, including tab separated, CSV or NMEA.

### Power

Voltage: 9 - 30VDC  
Power: 0.7W max

### Operation

The valve should be fitted to vessel in dry dock, and left in a closed position. The mounting sleeve is fitted to the valve, and the SVS secured within the sleeve. The SVS features O-ring seals to the sleeve, so once it is fitted, the valve may be opened and the probe pushed into position. To recover the probe, withdraw it into the sleeve, close the valve, and disassemble the sleeve.



### Physical

#### Materials

Instrument: Titanium housing, polyurethane, composite and polycarbonate sensor components  
Mounting: 316 Stainless steel  
Valve: Aluminium Bronze (certified to 3.1b)

#### Dimensions

Probe is 80mmØ x 400mm. Nominal 1m working space required to operate system. Please refer to Valeport for full details.

#### Shipping

Instrument: 65 x 40 x 30cm, 30 kg  
Valve: 36 x 32 x 32cm, 30 kg

#### Software

System is supplied with DataLog Express Windows based PC software, for instrument setup, data extraction and display. DataLog Express is licence free.

#### Ordering

0651016 Thru-Hull SVS in titanium housing. Fitted with 50mm SV sensor. Supplied with DataLog Express software, 50cm pigtail, manual & transit case.  
0400012 Optional PRT temperature sensor  
0651020 Mounting fixture in 316 stainless steel  
0651021 Aluminium Bronze PN16 100mm ball valve with 3.1b certification

#### Note

If the Thru-Hull system is too large for your vessel, Valeport have various other options available. Please contact the factory to discuss your requirements