



## 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:   | ±0.02 m/s       |
| Resolution: | 0.001 m/s       |

#### Temperature (optional)

|             |                              |
|-------------|------------------------------|
| Type:       | Fast response PRT with guard |
| Range:      | -5 to +35 °C                 |
| Accuracy:   | ±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 Lloyd's 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 the 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:  | 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 x2 Windows based PC software, for instrument setup, data extraction and display. DataLog Express is license free.

### Ordering

|         |  |
|---------|--|
| 0651016 | Thru-Hull SVS in titanium<br>Fitted with: <ul style="list-style-type: none"> <li>50mm SV sensor</li> </ul> Supplied with <ul style="list-style-type: none"> <li>50cm pigtail</li> <li>DataLog Express software</li> <li>Manual &amp; transit case</li> </ul> |
| 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 |
|------|--|