Low-Cost Sensor
The S300, ST300 speed and temperature sensors are Airmar’s lowest cost and shortest, thru-hull, speed sensors. As part of Airmar’s Shorty™ Series, they are designed for boats with low headroom. The plastic P371 low-profile outer housing option is nearly flush and minimizes drag with only 5 mm (2/10”) extending outside the hull. The plastic P398 countersunk outer housing version mounts flush, eliminating turbulence for more accurate speed readings.

Thru-Hull Low-Profile Shorty™ Series Speed Sensors

Applications
- P371 housing—cruising sailboats and planing powerboats
- P398 housing—racing sailboats and high-speed powerboats

Features
- Shorty series low-profile is designed for fiberglass and aluminum hulls with low headroom
- Right angle cable exit offers low headroom and protection when transducer is stepped on
- Self-closing sea valve reduces waterflow when paddlewheel is removed for cleaning
- Total height is only 75 mm (2.96”)
- Fins on sides of paddlewheel cavity provide improved accuracy in cross-flow conditions
- Housings are ABYC H-27 compliant
- Blanking plug is supplied with each unit
- Included rubber washer allows tightening of the hull nut to irregular hull surfaces
- P398 housing installation requires special cutter
- Speed only or Speed and temperature
- Available in a plastic housing only
As Airmar constantly improves its products, all specifications are subject to change without notice. All Airmar products are designed to provide high levels of accuracy and reliability, however they should only be used as aids to navigation and not as a replacement for traditional navigation aids and techniques. Shorty™ is a trademark of Airmar Technology Corporation. Other company or product names mentioned in this document may be trademarks or registered trademarks of their respective companies, which are not affiliated with Airmar.

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### Technical Information

#### S300, ST300

<table>
<thead>
<tr>
<th>Nominal Pulse Rate</th>
<th>Per Nautical Mile</th>
<th>Per Knot</th>
</tr>
</thead>
<tbody>
<tr>
<td>P371 housing with fins</td>
<td>17,000 pulses</td>
<td>4.8 Hz</td>
</tr>
<tr>
<td>P371 housing without fins</td>
<td>19,000 pulses</td>
<td>5.3 Hz</td>
</tr>
<tr>
<td>P398 housing with fins</td>
<td>14,400 pulses</td>
<td>4.0 Hz</td>
</tr>
<tr>
<td>P398 housing without fins</td>
<td>17,000 pulses</td>
<td>4.8 Hz</td>
</tr>
</tbody>
</table>

### SPECIFICATIONS

- **Weight**: 0.6 kg (1.3 lb)
- **Speed Range**: 0.1 knot to 40 knots (0.1 MPH to 46 MPH)
- **Supply Voltage**: 5 VDC to 25 VDC
- **Supply Current**: 100 mA at 12 VDC
- **Hole Diameter**: 51 mm (2")
- **Sensor Cable Length**: 10 m (33') standard

### Options

- Temperature sensor
- Intelligent circuitry for linearity correction and jitter control
- No fins alongside paddlewheel
- Two-wire speed circuit
- Pulse division circuitry or other pulse rates
- Over-voltage protection (OVP)

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**DIMENSIONS**

- **P371—Low-Profile Housing**
  - Ø 51 mm (2.00")
  - 2'-12 threads
  - 5 mm (0.20")

- **P398—Flush-Mount Housing**
  - Ø 75 mm (2.95")
  - 2'-12 threads
  - 5 mm (0.20")