

# DST800

Retractable  
TRIDUCER®

Fully-loaded is  
the only option.



## Single Choice for Depth, Speed, and Temperature!

The DST800 is the market's first Retractable TRIDUCER® multisensor offering depth, speed, and temperature in a single, 51 mm (2") fitting. Only one hole through the hull simplifies the installation—an attractive feature for boat builders and boat owners alike.

## Three-In-One

New, patented, speed-signal-processing enhancements provide excellent paddlewheel accuracy below 5 knots (6 MPH) and smooth linear output at all vessel speeds. The transducer's wide, fan-shaped, fore-aft beam is able to find bottom even when installed on steep deadrise hulls or heeling sailboats. And get true water-temperature readings with the DST800's reliable temperature sensor.

## Diversified

This multisensor is designed to work with most electronics on the market today. It's available in analog and digital output configurations, including NMEA 0183, NMEA 2000®, and custom CAN protocols.

## Valve Closes the Gap!

Airmar's new housing design incorporates the popular self-closing valve. When a transducer insert is removed, the valve minimizes water flow into the boat.

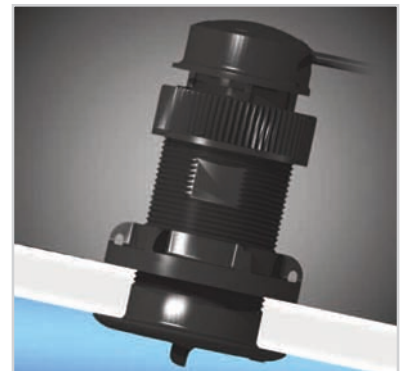
- Recommended for planing hull powerboats and cruising sailboats
- Good sensitivity in a compact housing
- Fast-response temperature sensor provides  $\pm 0.2^{\circ}\text{C}$  ( $\pm 0.1^{\circ}\text{F}$ ) accuracy
- Available as a Smart™ Sensor at 235 kHz or an analog output sensor operating at either 200 kHz or 235 kHz



Bronze




Stainless steel



# DST800

## Technical Information

### Specifications

| Frequencies | Number of Elements and Configuration  | Beam Width (@-3dB) |
|-------------|---|--------------------|
| 235 kHz-F   |  | 10° x 44°          |

#### Weight

|                 |                 |
|-----------------|-----------------|
| Plastic         | 0.9 kg (2.0 lb) |
| Bronze          | 1.6 kg (3.5 lb) |
| Stainless Steel | 1.9 kg (4.2 lb) |

Hull Deadrise Angle. Up to 22°

|  |                                  |
|--|----------------------------------|
| Data Update Rate                         | 1/second                         |
| Minimum Sounding Depth                   | 0.5 m (1.6')                     |
| Maximum Sounding Depth @ 235 kHz         | 70 m (230')                      |
| Pressure Rating                          | 3 m (10')                        |
| Pulse Rate                               | 20,000 p/nm* (5.6 Hz/knot)       |
|  | *p/nm = pulses per nautical mile |
| CE Regulations                           | Complies to IERC945              |
| Smart Sensor Supply Voltage              |                                  |
| @ 100% Sound Power Output                | 11.5 VDC to 25 VDC               |
| Supply Current                           | 40 mA                            |
| Standard Cable Length                    | 6 m (19.5')—NMEA 2000/CAN        |
|  | 10 m (33')—NMEA 0183             |
| NMEA 2000® Load Equivalency Number (LEN) | 3                                |

### Data Output Protocol

#### NMEA 0183 Sentence Structure

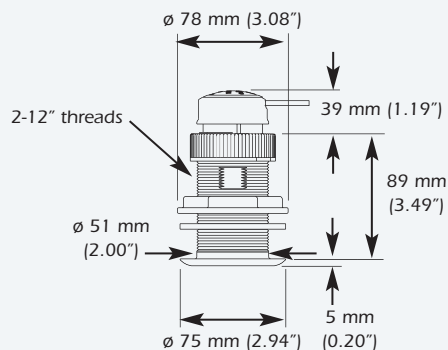
|              |                   |
|--------------|-------------------|
| SSDDBT, DDPT | Depth             |
| SVVWHW       | Speed             |
| SVVWLW       | Distance          |
| SYXMTW       | Water Temperature |
| SYXXDR       | Temp2             |

#### NMEA 2000® Supported PGNs

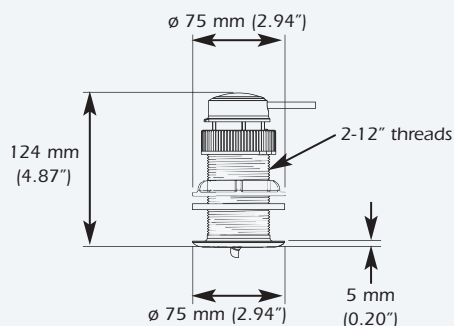
|        |  |        |                                  |
|--------|--|--------|----------------------------------|
| 128259 | Speed (Speed Water Referenced)               | 600928 | ISO Address Claim                |
| 128267 | Water Depth (Water Depth, Transducer)        | 126208 | Acknowledge Group Function       |
| 128275 | Distance Log                                 | 126464 | Transmit PGN List Group Function |
| 130310 | Environmental Parameters (Water Temperature) | 126464 | Received PGN List Group Function |
| 59392  | ISO Acknowledgment                           | 126996 | Product Information              |

### Dimensions

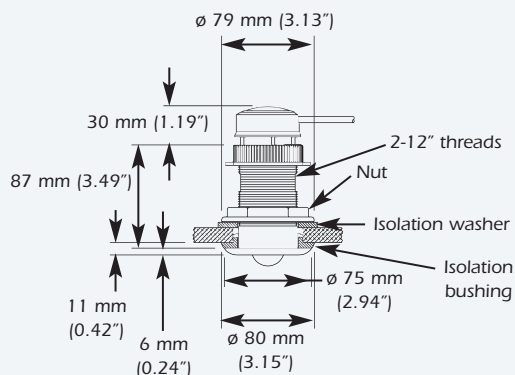
#### DST800 transducer B17 Bronze



#### DST800 transducer P617V Plastic



#### DST800 transducer SS577 Stainless Steel



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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.

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