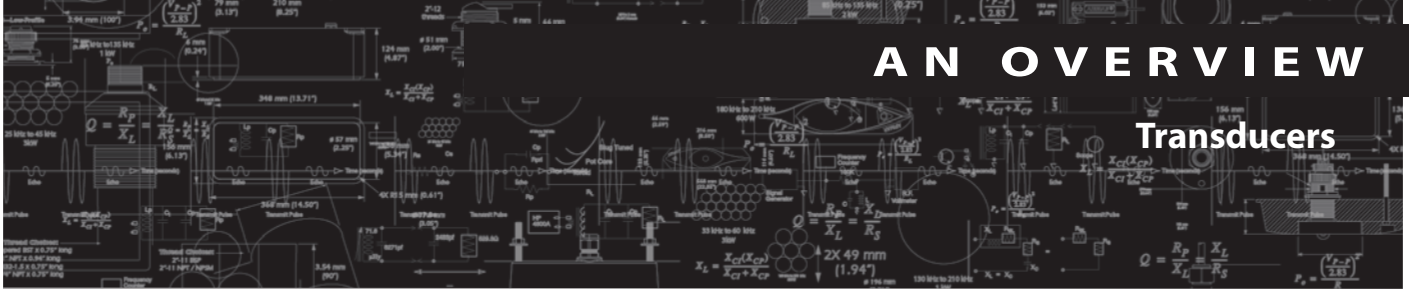
AIRMAR® EMEA

TECHNOLOGY CORPORATION

EUROPE, MIDDLE EAST, AFRICA

Transducers • NMEA Sensors & Accessories • WeatherStation® Instruments
GPS & Heading Sensors • Transducer Accessories

Distributor Catalogue



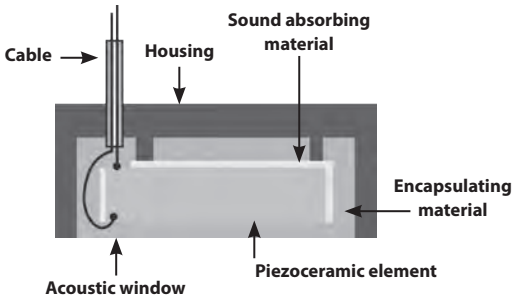
AN OVERVIEW

Transducers

What Goes into the Making of a Transducer?

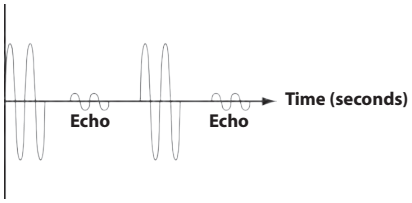
The main component of a depth transducer is the piezoceramic element. It is the part that converts electrical pulses into sound waves, and when the echoes return, the piezoceramic element converts the sound waves back into electrical energy. Piezoceramic elements are most often in a disk form, but they may also be in the shape of a bar or a ring. A transducer may contain one element or a series of elements linked together called an array. A transducer is made up of six separate components:

- Piezoceramic element or an array of elements
- Housing
- Acoustic window
- Encapsulating material
- Sound absorbing material
- Cable



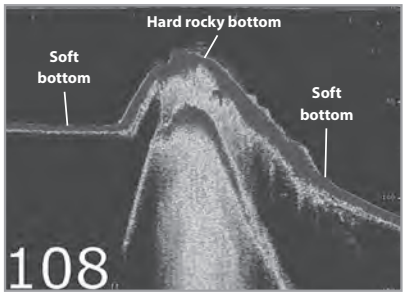
How Does a Transducer Know How Deep the Water is?

The echosounder measures the time between transmitting the sound and receiving its echo. Sound travels through the water at about 1,463 m/s (4,800 ft/s), just less than a mile per second. To calculate the distance to the object, the echosounder multiplies the time elapsed between the sound transmission and the received echo by the speed of sound through water. The echosounder system interprets the result and displays the depth of the water in feet for the user.



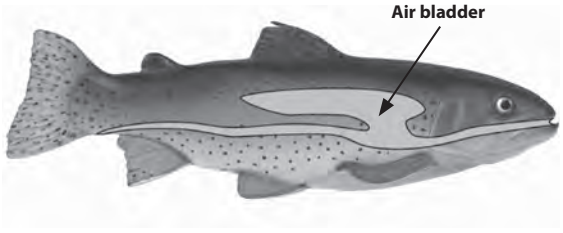
How Does a Transducer Know What the Bottom Looks Like?

As the boat moves through the water, the echoes of some sound waves return more quickly than others. We know that all sound waves travel at the same speed. When a sound wave in one section of the sound field returns more quickly than another, it is because the wave has bounced off something closer to the transducer. These early returning sound waves reveal all the humps and bumps in the underwater surface. Transducers are able to detect whether a bottom is soft or hard and even distinguish between a clump of weeds and a rock, because the sound waves will echo off of these surfaces in a slightly different manner.



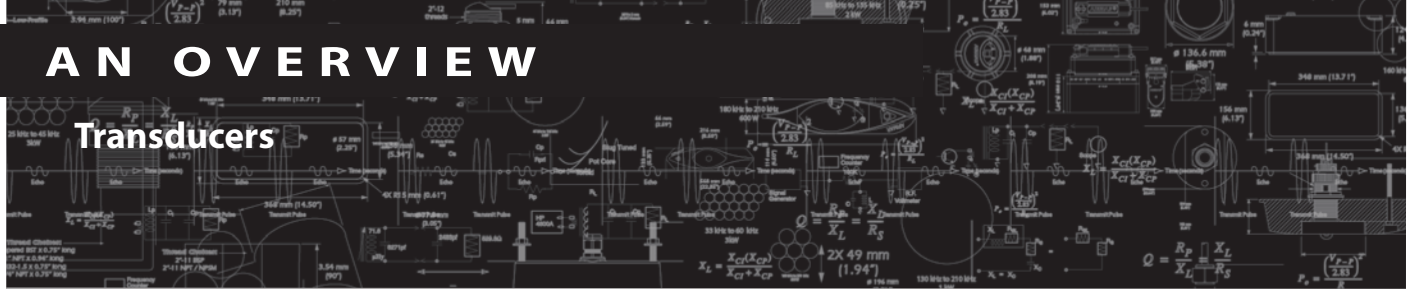
How Does a Transducer Detect Fish?

The transducer can detect fish, because it senses the air bladder. Almost every fish has an organ called an air bladder filled with gas that allows the fish to easily adjust to the water pressure at different depths. The amount of gas in the air bladder can be increased or decreased to regulate the buoyancy of the fish. Because the air bladder contains gas, it is a drastically different density than the flesh and bone of the fish as well as the water that surrounds it. This difference in density causes the sound waves from the echosounder to bounce off the fish distinctively. The transducer receives the echoes and the echosounder is able to recognize these differences. The echosounder then displays it as a fish.



AN OVERVIEW

Transducers



Broadband versus Non-Broadband

Airmar achieves superior results by using a unique ceramic material. It lets transducers operate over a broad range of frequencies while maintaining sensitivity. These Broadband Transducers are, by definition, low-Q devices (refer to "Q" paragraph). In other words, they exhibit very low ringing. There is little variation from transducer to transducer. Additionally, Broadband Transducers are relatively immune to the effects of aging, so their frequency range remains stable over time.

Airmar is the first to introduce affordable Broadband Transducers. This is an enabling technology that provides better fish detection today and will lead to dramatic advances in echosounder performance in the future. While these transducers are more costly to manufacture, the present and future benefits are huge.

Broadband Transducers enhance fish detection on virtually all of today's fishfinders. They give better definition; it is far easier to distinguish among individual fish and between fish and the bottom.

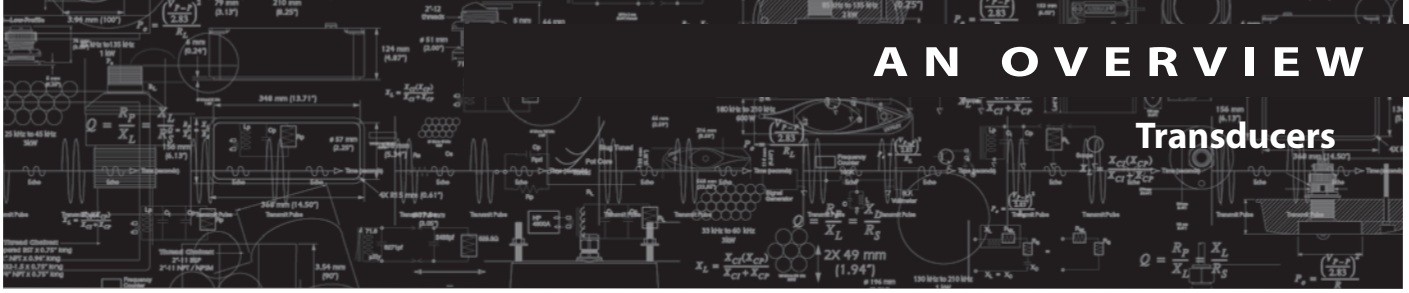
Broadband Benefits Today

Manufacturers now market echosounders that can adjust operating frequency and power output. While these are premium products, the designs are a precursor of things to come. With the ability to adjust frequency, an echosounder can operate Airmar's broadband ceramics anywhere in the 160 kHz to 260 kHz band. By selecting different operating frequencies, two or more sounders can work simultaneously without interference. The frequency can also be adjusted to the mission. Lowering the operation frequency increases the beamwidth and depth capability; raising the frequency narrows the beamwidth, increases echo definition, and improves high-speed performance.

Broadband Future Benefits

Here is where it gets really exciting. In today's fishfinders, good fish detection is obtained by transmitting a long pulse. This puts more energy on the target. With a long pulse, closely-spaced fish cannot be separated—you get a big blob. Fish close to the bottom appear attached to the bottom and are difficult or impossible to detect.

Airmar's broadband transducers enable frequency modulated (FM) transmissions; a.k.a. CHIRP or coded transmissions. Using FM transmissions, you can achieve both the benefits of long pulse, more energy on target, and short pulse, segregation of closely-spaced fish and identification of fish on or close to the bottom. This is because the coding of the transmission is known and the return echoes are similarly coded. The technique is also known as pulse compression. In summary, fishfinders of the future with FM transmissions will have dramatically improved target resolution and signal-to-noise ratio. Airmar's broadband transducer will enable this to happen.



AN OVERVIEW

Transducers

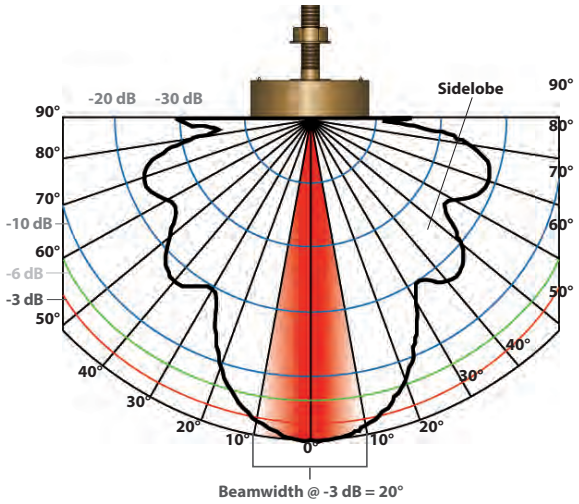
RMS Power versus Peak-To-Peak Power

All Airmar transducers are measured in RMS power as opposed to peak-to-peak power ratings. Peak-To-Peak power ratings are eight times higher than RMS power, which can trick the consumer into thinking that their echosounder and transducer are more powerful than they really are. For example, if a transducer manufacturer advertises 4,000 Watts peak-to-peak power, this is only 500 Watts RMS power. See the chart below for typical Airmar transducers and their power ratings in both RMS and Peak-To-Peak.

RMS Power		Peak-To-Peak Power
250 W RMS	=	2,000 W Peak-To-Peak
600 W RMS	=	4,800 W Peak-To-Peak
1,000 W RMS	=	8,000 W Peak-To-Peak
2,000 W RMS	=	16,000 W Peak-To-Peak

Beamwidth

Airmar measures transducer beamwidth at -3 dB. Other transducer manufacturers measure their beams at -6 dB and -10 dB, stating the beam is wider than it really is at -3 dB. For example, the image below shows a beamwidth of 20° at -3 dB. If the same transducer is measured at -6 dB, the beamwidth increases to 30°.



"Q"

A Transducer's quality factor, "Q" describes the amount of ringing the ceramic element or elements undergo when power is applied to the transducer. Think of a church bell analogy—as the bell is struck it vibrates rapidly and then the vibration will gradually stop. Most competitor's recreational transducers have an average Q between 25 and 35. Airmar Q values range from 1 to 30, depending on models. The lower the "Q" number the less ringing in the transducer and the better the performance. Less ringing greatly improves individual fish separation along with bottom imaging in rapidly changing water depths such as ledges and offshore canyons.

Transmitting Voltage Response

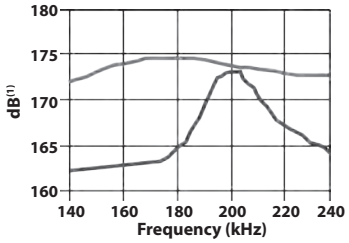
Transmitting Voltage Response (TVR) is computed using Receiving Voltage Response and Impedance. The unit of measure for TVR is dB relative to 1 micropascal per volt at a distance of 1 meter (3').

Receiving Voltage Response

Receiving Voltage Response (RVR) is measured typically by applying 200 V peak-to-peak to the transducer under test, pointing it at a nearly perfect reflector, and measuring the echo amplitude as a function of frequency. The unit of measure is dB relative to 1 Volt per micropascal.

Figure of Merit

This graph is a summation of TVR and RVR and provides a measure of two-way performance. A transducer whose figure of merit response has a wide bandwidth is generally preferred over a transducer with a narrow bandwidth. The former usually rings less and offers most consistent performance over the transducer's range of frequency tolerance.



This Broadband transducer has a flat response and can run across the entire frequency range.

This Non-Broadband transducer peaks its performance at 200 kHz and drops off sharply at frequencies before and after.

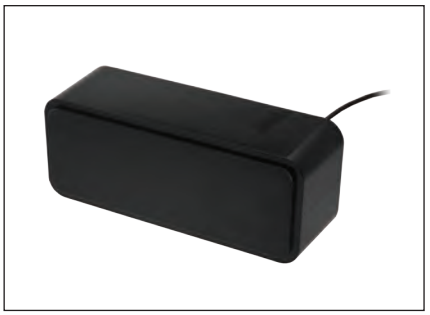
CHIRP

CHIRP-Ready Transducers

Quick Guide

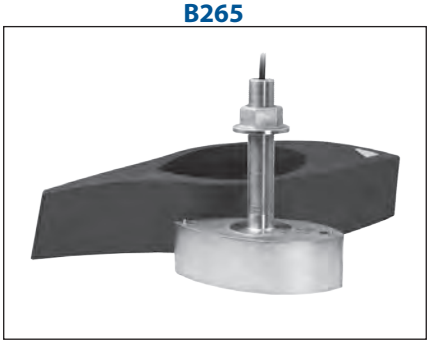
R599

CM599



R509

B265



CM265

TM265

Airmar's new CHIRP-ready transducers represent the next generation of technology that will allow fishermen to unlock new secrets in fishfinding. Echosounder operation away from the traditional 50 kHz and 200 kHz has proven that different fish species return better signals at various frequencies. CHIRP-ready transducers are capable of operating over a wide (or "Broad") frequency band ranging from 25 kHz to 60 kHz, 85 kHz to 135 kHz and from 130 kHz to 210 kHz.

Traditional fishfinders transmit a pulse at a single-frequency (50 kHz or 200 kHz) which is often referred to as a "tone burst". Better deep-water and bottom detection is obtained by transmitting a longer pulse, because the fishfinder is delivering more energy to the transducer. However, the drawback of a long pulse is that it provides reduced target resolution. For example, if a fishfinder transmits a pulse that is 500 microseconds in duration, it has a pulse length of 0.7 m (2.4'). With a tone burst, no targets can be resolved that are closer to one another than the pulse length. So fish less than 0.7 m (2.4') apart, or less than 0.7 m (2.4') from the bottom, can not be detected. Fish schools will appear in this case as a single large mass, while fish close to the bottom will appear attached to the sea bed and will be difficult or impossible to detect.

With CHIRP the transmission pulses are typically very long and may start at 40 kHz and end at 60 kHz. By comparing the shape of the stored transmission pulse with the received echoes from the transducer, it is possible to find echoes in the noise and precisely determine their range with astounding accuracy (see photo). Using CHIRP it is now possible to obtain:

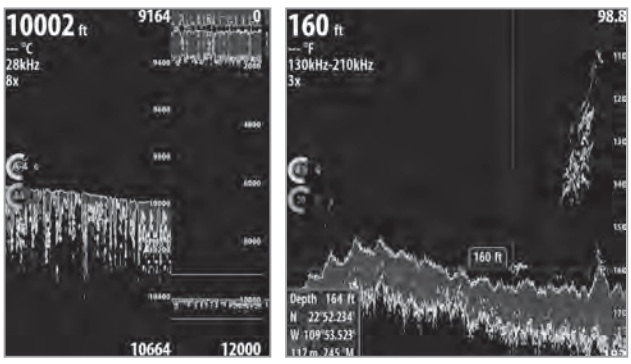
- Much greater range because very long pulses can be used.
- Much better resolution because the sonar pulse is swept across a frequency band (from 40 kHz to 60 kHz, for example).
- Targets precisely located within inches on the display using pattern matching techniques.
- Closely spaced fish and fish laying on the bottom can be accurately detected and displayed as distinct targets.

Because weak fish and bottom echoes can be resolved within the noise (the 'snow' on a conventional fishfinder display), it is possible both to detect targets at far greater depths than before and track the bottom at higher boat speeds.

Features

- CHIRPS across the following bandwidths*:
  - Low-Frequency Options (LF): 28 kHz to 65 kHz
  - Medium-Frequency Options (MF): 85 kHz to 135 kHz
  - High-Frequency (HF) Options: 130 kHz to 210 kHz
- Adjustable Beamwidths*:
  - LF: 12° to 25°, MF: 11° to 16°, & HF: 5° to 10°
- Extreme target detail and image resolution
- Precise separation between baitfish and gamefish
- Bottom discrimination of fish laying on the seabed
- Deep soundings down to 3,000 m (10,000')

* Frequency band, beamwidth, and power vary with model—see specific model for details.



TILTED-ELEMENT

Tilted Element Transducers

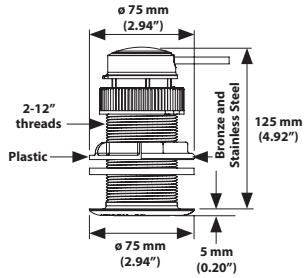
Quick Guide

0° for flat hull (0° - 4° deadrise) • 12° tilted for low v hull (4° - 14° deadrise hull angle)
20° tilted element for deep sea hull (15° - 25° deadrise hull angle)

Airmar® DT800

- 0° for flat hull
- The tilted element compensates for hull deadrise
- Designed for displaying digital depth and temp via NMEA 0183 or NMEA 2000®
- 235 kHz Broadband operation
- Depth and Temperature
- Fixed 0°, 12°, and 20° tilted versions
- No interference with other echosounders on the vessel
- No fairing to install

P617V Plastic, B617V Bronze, SS617V Stainless Steel Dimensions

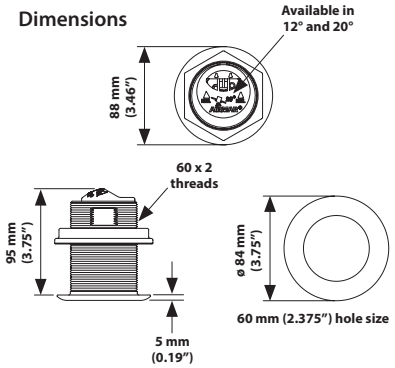


• Also available in B17 and SS577 housings

B60—Good

- The tilted element compensates for hull deadrise
- The ultimate 600 W performer for all types of sport fishing boats
- 600 W power, 50/200 kHz operation
- Depth and Temperature
- Fixed 12° and 20° tilted versions
- No affect on your boats running performance
- No fairing to install
- Available in bronze and stainless steel

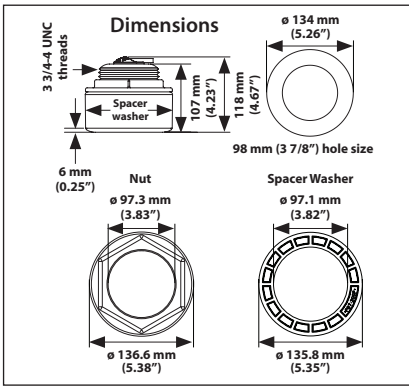
Dimensions



B164—Better

- The tilted element compensates for hull deadrise
- Designed for center console boats
- 1 kW power, 50/200 kHz operation
- Depth and Temperature
- Fixed 0°, 12°, and 20° tilted versions
- Low-profile design leaves no protrusions below the hull
- No fairing to install
- Available in bronze and stainless steel

Dimensions



IN-HULL

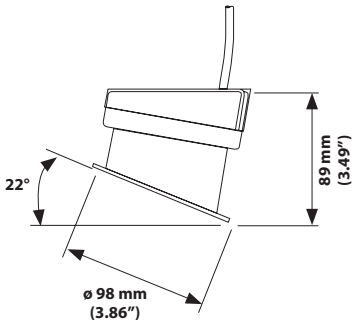
In-Hull Transducers

Quick Guide

P79—Good

- Entry-level in-hull
- 600 W power
- 50/200 kHz operation
- Mounts in a tank inside the hull—no holes to drill
- Can be installed while vessel is in the water

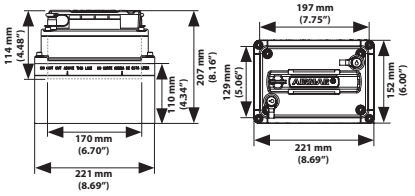
Dimensions



M260—Better

- In-hull version of the popular B260
- 1 kW power
- 50 and 200 kHz broadband operation
- Mounts in a tank inside the hull—no holes to drill
- Can be installed while vessel is in the water
- Flat cut on tank allows for bow-stern or port-starboard mounting

Dimensions



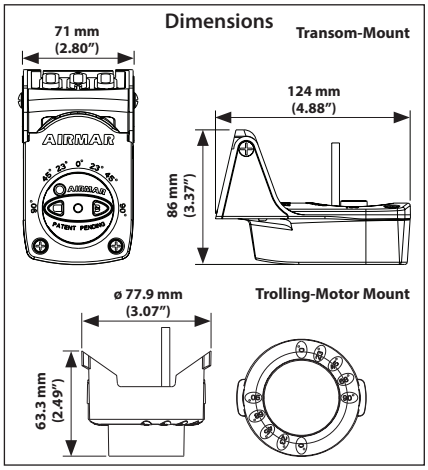
TRANSOM-MOUNT

Transom-Mount Transducers

Quick Guide

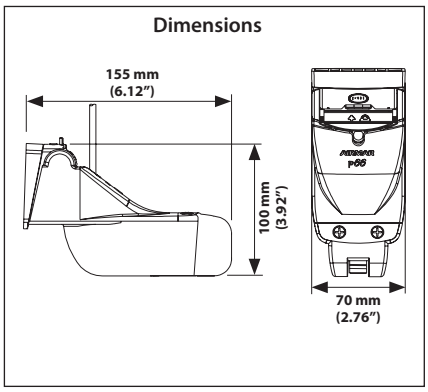
P48W—Good

- Best performing 100 W transom-mount
- Adjustable beam settings
- 100 W power
- 200 kHz operation
- Depth and Temperature
- Designed for boats up to 7 m (2 3′)



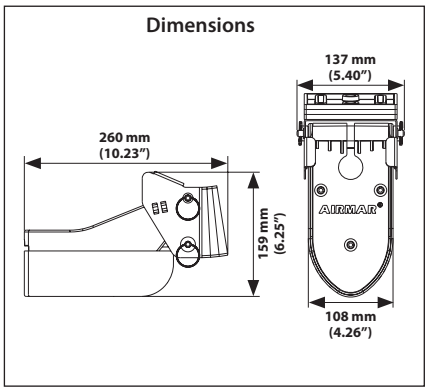
P66—Better

- Best performing 600 W transom-mount
- Depth, Speed, and Temperature
- 600 W power
- 50/200 kHz operation
- Streamlined shape works well at speeds up to 25 knots (29 MPH)



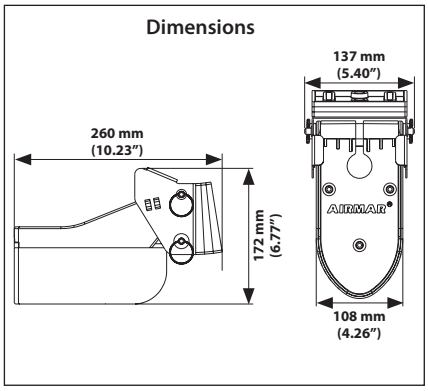
TM258—Best

- Elliptical beam covers larger bottom area
- 1 kW power
- 50/200 kHz operation
- Depth and Temperature
- Streamlined shape works well at speeds up to 25 knots (29 MPH)



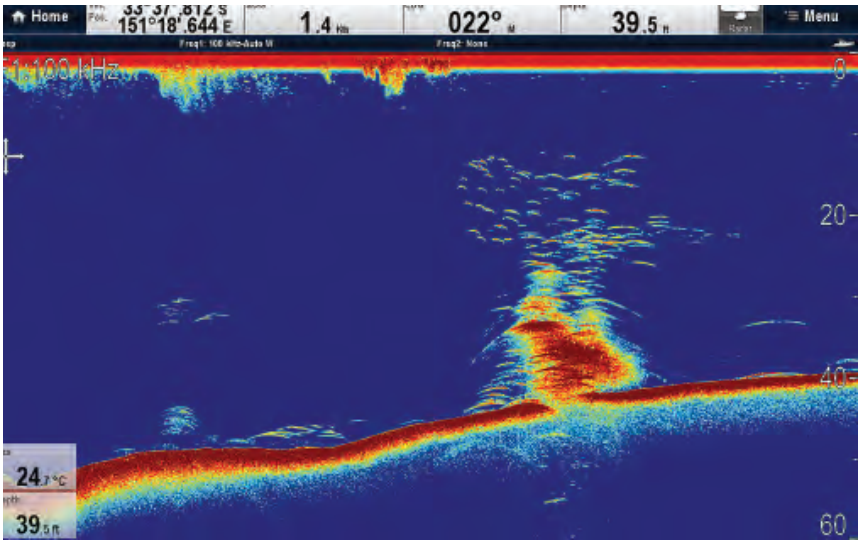
TM260—Superb

- Top-of-the-line transom-mount
- Broadband Ceramic Technology
- 1 kW power
- Separate elements for 50 kHz and 200 kHz
- Depth and Temperature
- Streamlined shape works well at speeds up to 25 knots (29 MPH)

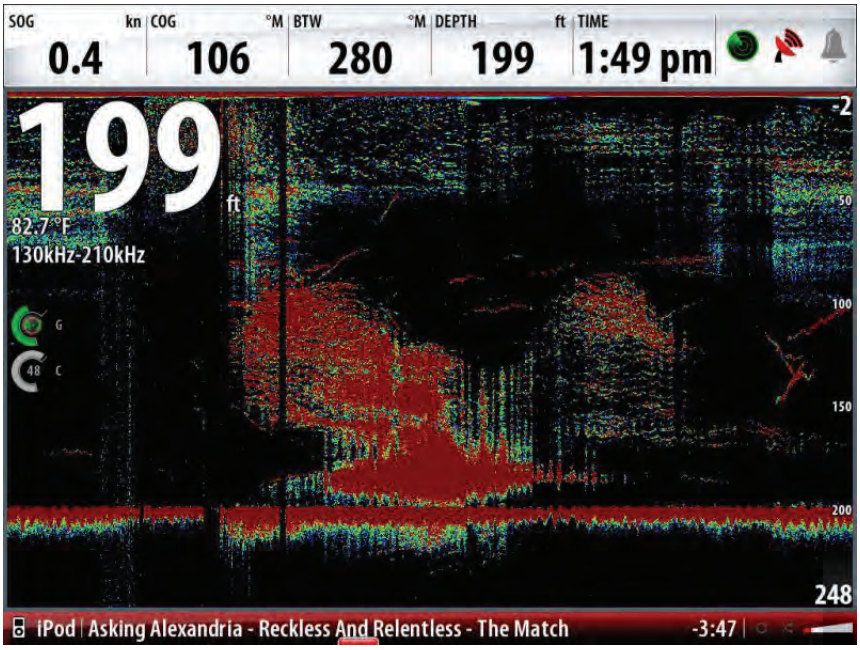


CHIRP TRANSDUCERS

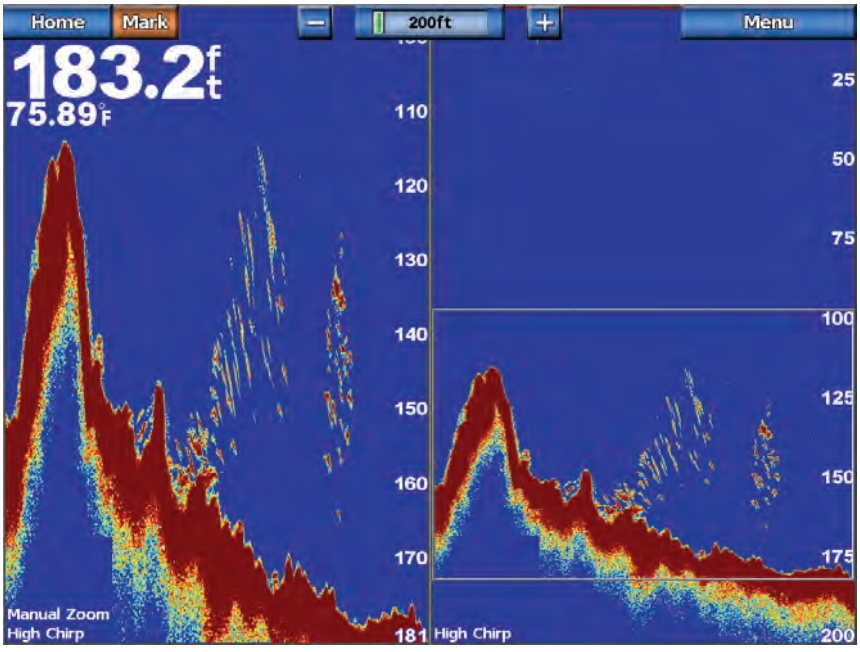
Screenshots



COURTESY OF RAYMARINE



COURTESY OF SIMRAD



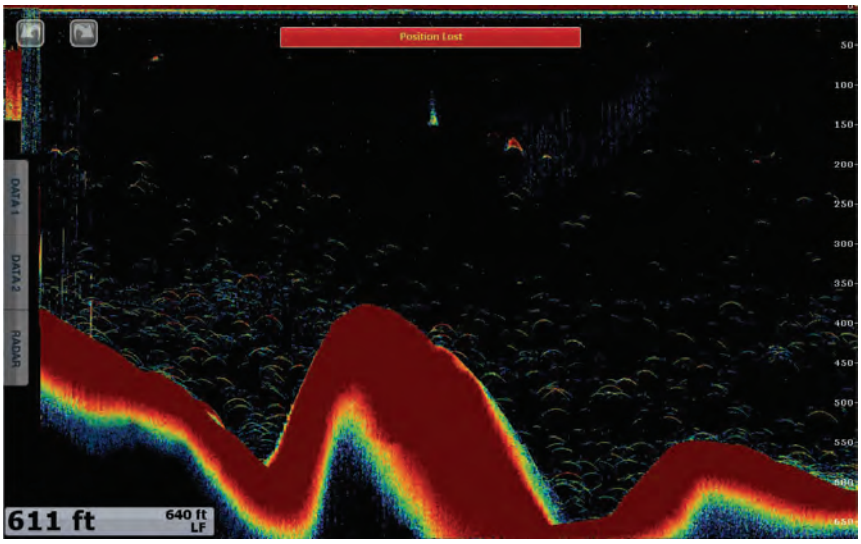
COURTESY OF GARMIN

NMEA 2012 Product Award Recipient

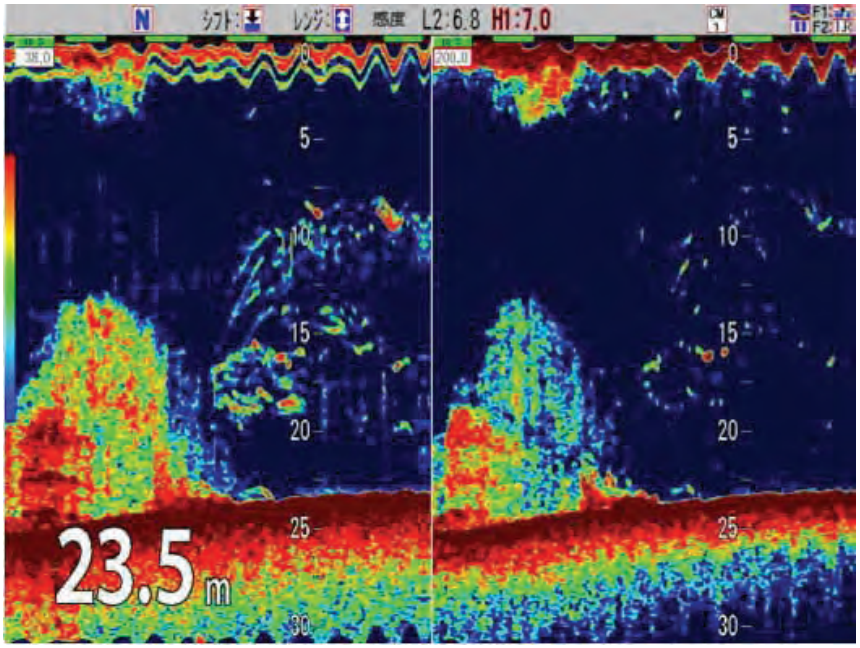
CHIRP TRANSDUCERS

Screenshots

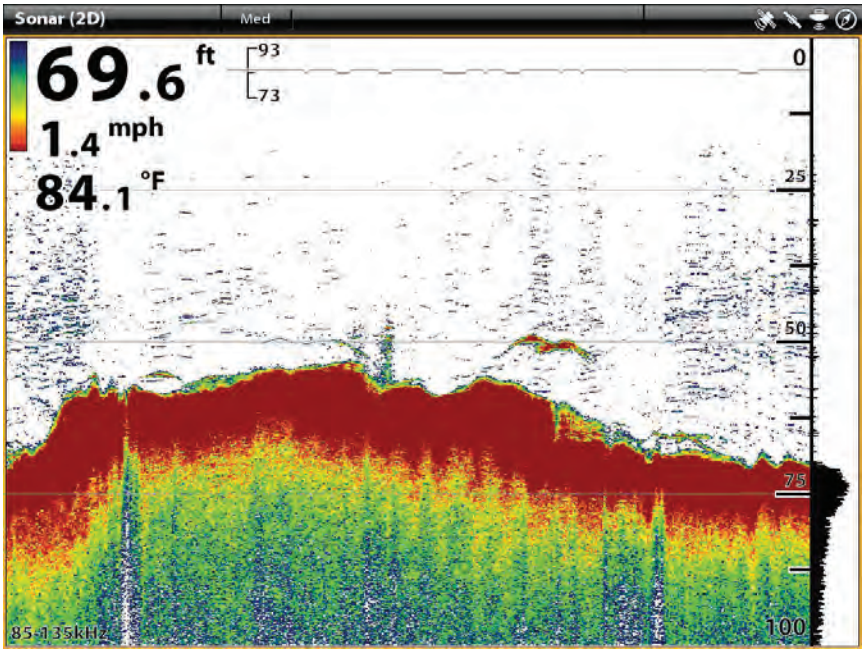
COURTESY OF FURUNO



COURTESY OF SI-TEX



COURTESY OF HUMMINBIRD

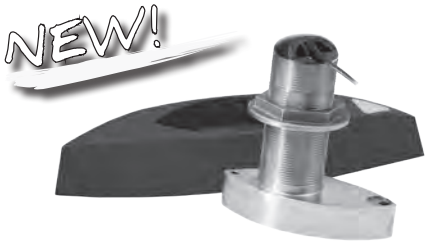


CHIRP TRANSDUCERS

Single Band, Thru-Hull

B785M

B785M Thru-Hull



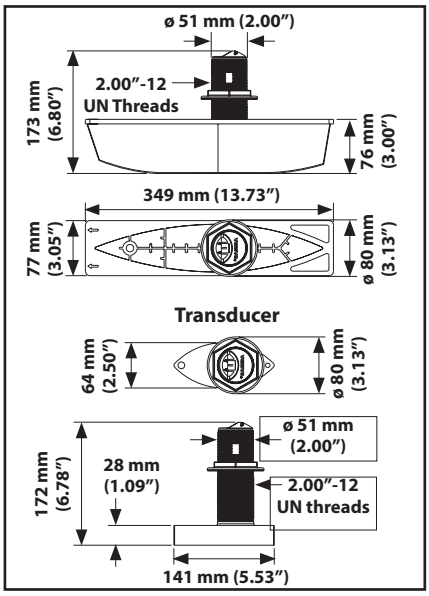
- 600 W
- Depth & fast-response water-temperature sensor
- All the advantages of the larger Thru-Hull CHIRP transducers, suitable for smaller boats

- Bronze transducer housing with High-Performance Fairing
- Boat Size: Up to 9 m (30') and above
- Hull Type: Fiberglass or wood

Medium-Frequency (M)

- Medium—Chirps from 80 kHz to 130 kHz, 24° to 16° beamwidth
- 50 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 88, and 107 kHz plus everything else in the bandwidth

Medium-frequency benefits include the ability to sound deeper than the high-frequency, along with better target resolution than the low-frequency.



Parts & Accessories

Hull Nut

High-Performance Fairing

B785M—Transducers	
No Connector - use Leads	B785-M (Medium-Frequency)
	

CHIRP TRANSDUCERS

Single Band, Thru-Hull

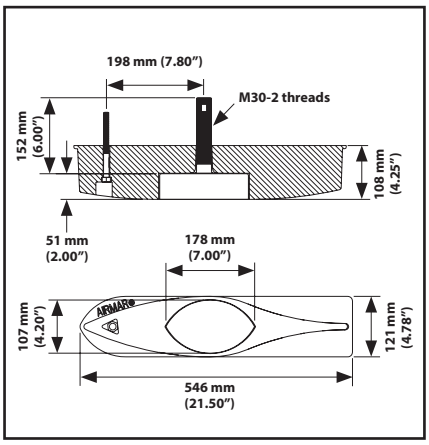
B285M, B285HW

B285M—Thru-Hull

NEW!

Bronze Housing

- Entry-level, 1 kW thru-hull, medium frequency CHIRP
- Depth and fast-response water-temperature sensor
- Recommended for sport fishing boats above 9m (30' and up) and small to mid-size commercial fishing boats
- Provides greater surface area resulting in better sensitivity
- High-Performance Fairing included
- Hull Type: Fiberglass or wood
- All advantages of larger Thru-Hull CHIRP transducers, for smaller boats



Parts & Accessories

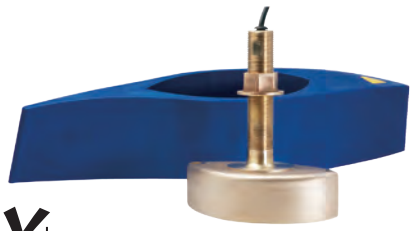
Hull Nut | Standard Fairing | High-Performance Fairing

Frequency: 85-135 kHz
Cone: 16° to 11°
RMS Power: 1 kW

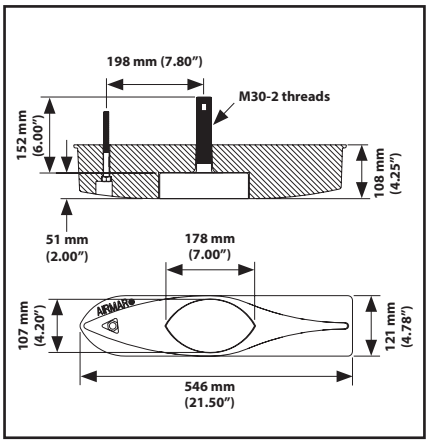
B285HW—Thru-Hull

NEW!

Bronze Housing



- Entry-level, 1 kW thru-hull, wide beam
- Depth and fast-response water-temperature sensor
- Recommended for sport fishing boats above 9m (30' and up) and small to mid-size commercial fishing boats
- Provides greater surface area resulting in better sensitivity
- High-Performance Fairing included
- Hull Type: Fiberglass or wood
- All advantages of larger Thru-Hull CHIRP transducers, for smaller boats



Parts & Accessories

Hull Nut | Standard Fairing | High-Performance Fairing

Frequency: 150-250 kHz
Cone: 25° Constant
RMS Power: 1 kW

CHIRP TRANSDUCERS

Thru-Hull

B265LH/LM, R109LH/LM

B265LH/LM—Thru-Hull

- 8-Internal Broadband Ceramic Assemblies
- Depth & fast-response water-temperature sensor
- Fishing Profile: Commercial and recreational inshore and offshore fishing (deep-water canyon and sea-mount tracking)
- Bronze transducer housing with High-Performance Fairing
- Boat Size: 8 m (25') and above
- Hull Type: Fiberglass or wood
- Useable shaft length ~ 140 mm / (5.5")

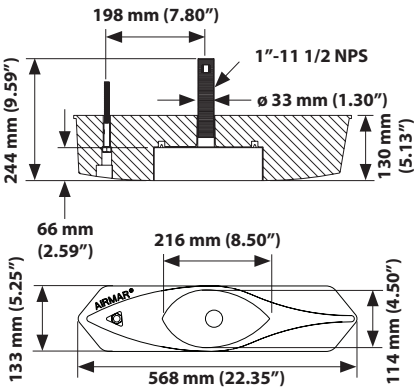
Low & High-Frequency (LH)

- Low—Chirps from 42 kHz to 65 kHz, 25° to 16° beamwidth
- High—Chirps from 130 kHz to 210 kHz, 10° to 6° beamwidth
- 103 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 50 and 200 kHz plus everything else in the bandwidth

Low & Medium-Frequency (LM)

- Low—Chirps from 42 kHz to 65 kHz, 25° to 16° beamwidth
- Medium—Chirps from 85 kHz to 135 kHz,16° to 11° beamwidth
- 73 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 50, 88, and 107 kHz plus everything else in the bandwidth

Dimensions



Medium-frequency benefits include the ability to sound deeper than the high-frequency, along with better target resolution than the low-frequency.

B265LH/LM — Transducers	
No Connector - use Leads	B265-LH (Low & High-Frequency)
	B265-LM (Low & Medium-Frequency)

Parts & Accessories

Hull Nut

High-Performance Fairing

R109LH/LM — Thru-Hull, External

- 16-Internal Broadband Ceramic Assemblies
- Depth & fast-response water-temperature sensor
- Fishing Profile: Commercial and recreational inshore and offshore fishing (deep-water canyon and sea-mount tracking)
- Urethane transducer housing with High-Performance Fairing
- Boat Size: 12 m (40') and above
- Hull Type: Fiberglass, wood, or metal

Low & High-Frequency (LH)

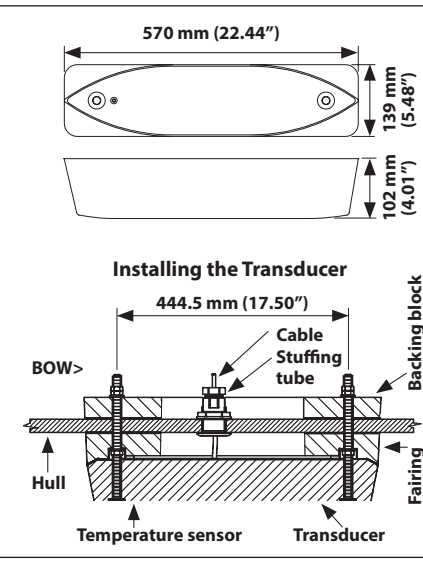
- Low—Chirps from 38 kHz to 75 kHz, 19° to 10° beamwidth
- High—Chirps from 130 kHz to 210 kHz, 8° to 4° beamwidth
- 117 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 38, 50 and 200 kHz plus everything else in the bandwidth

Low & Medium-Frequency (LM)

- Low—Chirps from 38 kHz to 75 kHz, 19° to 10° beamwidth
- Medium—Chirps from 80 kHz to 130 kHz, 13° to 8° beamwidth
- 87 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 38, 50, 88, and 107 kHz plus everything else in the bandwidth

Medium-frequency benefits include the ability to sound deeper than the high-frequency, along with better target resolution than the low-frequency.

Dimensions



R109LH/LM—Transducers	
No Connector - use Leads	R109-LH (Low & High-Frequency)
	R109-LM (Low & Medium-Frequency)

Parts & Accessories

Fairing Block

Stainless Stuffing Tube

CHIRP TRANSDUCERS

In-Hull

R111LH/LM, R599LH/LM

R111LH/LM — In-Hull

- 16-Internal Broadband Ceramic Assemblies
- Depth & fast-response water-temperature sensor
- Fishing Profile: Recreational and commercial inshore and offshore fishing (deep-water canyon and sea-mount tracking)
- Urethane transducer housing
- Hull Type: Solid fiberglass only

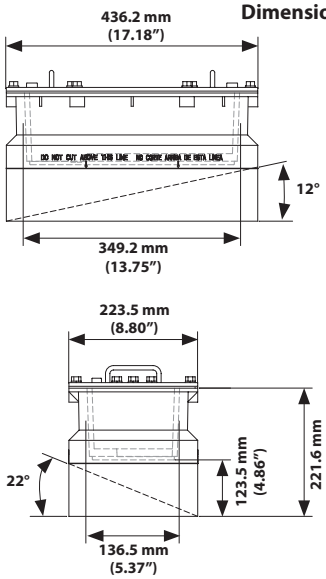
Low & High-Frequency (LH)

- Low—Chirps from 38 kHz to 75 kHz, 19° to 10° beamwidth
- High—Chirps from 130 kHz to 210 kHz, 8° to 4° beamwidth
- 117 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 38, 50 and 200 kHz plus everything else in the bandwidth

Low & Medium-Frequency (LM)

- Low—Chirps from 38 kHz to 75 kHz, 19° to 10° beamwidth
- Medium—Chirps from 80 kHz to 130 kHz, 13° to 8° beamwidth
- 87 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 38, 50, 88, and 107 kHz plus everything else in the bandwidth

Dimensions



R111LH/LM—Transducers

Connector	
	R111-LH (Low & High-Frequency R111-LM (Low & Medium-Frequency)

Medium-frequency benefits include the ability to sound deeper than the high-frequency, along with better target resolution than the low-frequency.

Parts & Accessories

Tank Kit

R599LH/LM — In-Hull

- 25-Internal Broadband Ceramic Assemblies
- Depth only
- Fishing Profile: Recreational and commercial inshore and offshore fishing (deep-water canyon and sea-mount tracking)
- Epoxy transducer housing
- Hull Type: Solid fiberglass only

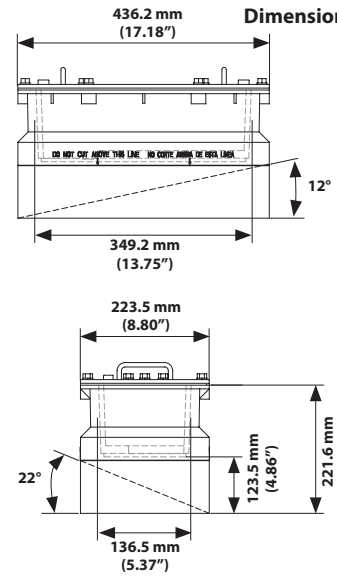
Low & High-Frequency (LH)

- Low—Chirps from 28 kHz to 60 kHz, 23° to 9° beamwidth
- High—Chirps from 130 kHz to 210 kHz, 8° to 4° beamwidth
- 112 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 28, 38, 50 and 200 kHz plus everything else in the bandwidth

Low & Medium-Frequency (LM)

- Low—Chirps from 28 kHz to 60 kHz, 23° to 9° beamwidth
- Medium—Chirps from 80 kHz to 130 kHz, 13° to 8° beamwidth
- 82 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 28, 38, 50, 88, and 107 kHz plus everything else in the bandwidth

Dimensions



R599LH/LM—Transducers

Connector	
	R599-LH (Low & High-Frequency) R599-LM (Low & Medium-Frequency)

Medium-frequency benefits include the ability to sound deeper than the high-frequency, along with better target resolution than the low-frequency.

Parts & Accessories

Tank Kit

CHIRP TRANSDUCERS

Tank/Pocket/Keel-Mount

CM111LH/LM, CM599LH/LM

CM111LH/LM — Tank/Pocket/Keel-Mount

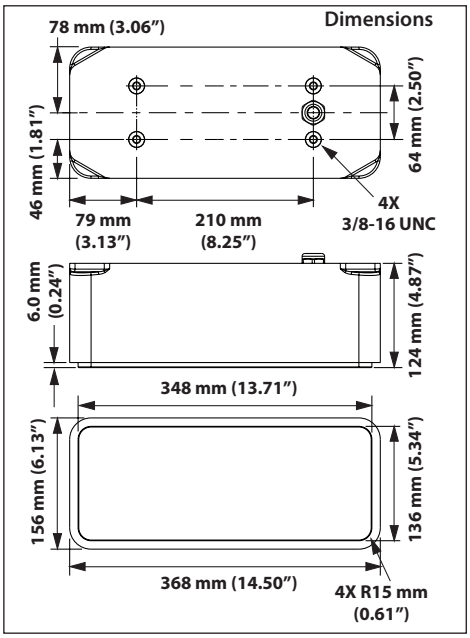
- 16-Internal Broadband Ceramic Assemblies
- Depth & fast-response water-temperature sensor
- Fishing Profile: Recreational and commercial inshore and offshore fishing (deep-water canyon and sea-mount tracking)
- Urethane transducer housing
- Hull Type: Fiberglass only

Low & High-Frequency (LH)

- Low—Chirps from 38 kHz to 75 kHz, 19° to 10° beamwidth
- High—Chirps from 130 kHz to 210 kHz, 8° to 4° beamwidth
- 117 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 38, 50 and 200 kHz plus everything else in the bandwidth

Low & Medium-Frequency (LM)

- Low—Chirps from 38 kHz to 75 kHz, 19° to 10° beamwidth
- Medium—Chirps from 80 kHz to 130 kHz, 13° to 8° beamwidth
- 87 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 38, 50, 88, and 107 kHz plus everything else in the bandwidth



CM111LH/LM—Transducers	
No Connector - use Leads	CM111-LH (Low & High-Frequency)
	CM111-LM (Low & Medium-Frequency)

Medium-frequency benefits include the ability to sound deeper than the high-frequency, along with better target resolution than the low-frequency.

Parts & Accessories

Stainless Stuffing Tube

CM599LH/LM — Tank/Pocket/Keel-Mount

- 25-Internal Broadband Ceramic Assemblies
- Depth & fast-response water-temperature sensor
- Fishing Profile: Recreational and commercial inshore and offshore fishing (deep-water canyon and sea-mount tracking)
- Epoxy transducer housing
- Hull Type: Fiberglass only
- Curved edge design to accommodate for wet box or keel-mount installation

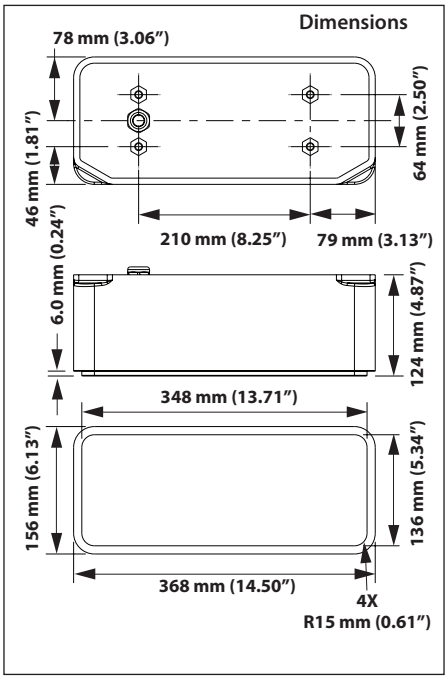
Low & High-Frequency (LH)

- Low—Chirps from 28 kHz to 60 kHz, 23° to 9° beamwidth
- High—Chirps from 130 kHz to 210 kHz, 8° to 4° beamwidth
- 112 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 28, 38, 50 and 200 kHz plus everything else in the bandwidth

Low & Medium-Frequency (LM)

- Low—Chirps from 28 kHz to 60 kHz, 23° to 9° beamwidth
- Medium—Chirps from 80 kHz to 130 kHz, 13° to 8° beamwidth
- 82 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 28, 38, 50, 88, and 107 kHz plus everything else in the bandwidth

Medium-frequency benefits include the ability to sound deeper than the high-frequency, along with better target resolution than the low-frequency.



CM599LH/LM—Transducers	
No Connector - use Leads	CM599-LH (Low & High-Frequency)
	CM599-LM (Low & Medium-Frequency)

Parts & Accessories

Stainless Stuffing Tube

CHIRP TRANSDUCERS

Tilted Element

B175L/M/H

B175L/M/H—Tilted Element™

- B175L—7-Internal Broadband Ceramic Assemblies
- B175M & B175H—1-Internal Broadband Ceramic Assembly
- Available in 0°, 12°, or 20° tilted version
- Depth & fast-response water-temperature sensor
- Bronze transducer housing
- Hull Type: Fiberglass or wood
- Boat Size: Up to 11 m (36′)
- Useable shaft length ~ 71 mm (2.80″)

Parts & Accessories

Hull Nut

Single Handle Wrench

- 0° for flat hull (0°–4° deadrise)
- 12° tilted for low v hull (4°–14° deadrise hull angle)
- 20° tilted element for deep sea hull (15°–25° deadrise hull angle)

Low-Frequency (L)

- Low—Chirps from 40 kHz to 60 kHz, 32° to 21° beamwidth
- 20 kHz of total bandwidth from one transducer
- Covers popular fishing frequency of 50 kHz plus everything else in the bandwidth

Medium-Frequency (M)

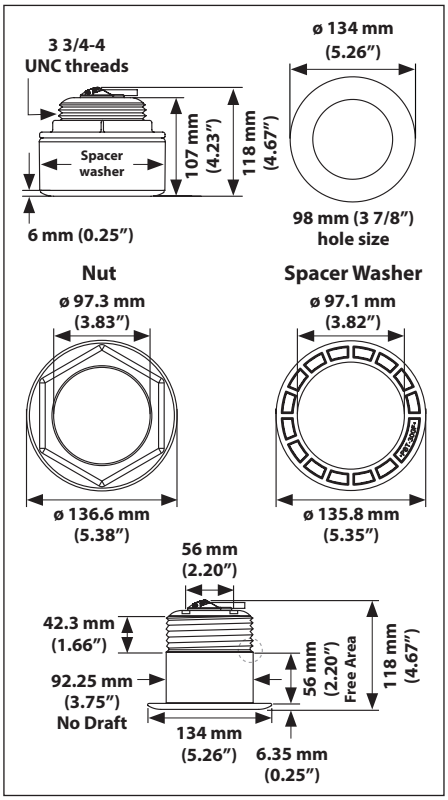
- Medium—Chirps from 85 kHz to 135 kHz, 24° to 16° beamwidth
- 50 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 88 and 107 kHz plus everything else in the bandwidth

Medium-frequency benefits include the ability to sound deeper than the high-frequency, along with better target resolution than the low-frequency.

High-Frequency (H)

- High—Chirps from 130 kHz to 210 kHz, 15° to 9° beamwidth
- 80 kHz of total bandwidth from one transducer
- Covers popular fishing frequency of 200 kHz plus everything else in the bandwidth

Dimensions



B175—0° Transducers—Single transducer for each frequency band (L, M, H)	
No Connector - use Leads	B175-0-L (0° Low-Frequency)
	B175-0-M (0° Medium-Frequency)
	B175-0-H (0° High-Frequency)

B175—12° Transducers—Single transducer for each frequency band (L, M, H)	
No Connector - use Leads	B175-12-L (12° Low-Frequency)
	B175-12-M (12° Medium-Frequency)
	B175-12-H (12° High-Frequency)

B175C—20° Transducers—Single transducer for each frequency band (L, M, H)	
No Connector - use Leads	B175-20-L (20° Low-Frequency)
	B175-20-M (20° Medium-Frequency)
	B175-20-H (20° High-Frequency)

NMEA 2012 Product Award Recipient

CHIRP TRANSDUCERS

Tilted Element

SS175 L/M/H

SS175 L/M/H—Tilted Element™

- SS175L—7-Internal Broadband Ceramic Assemblies
- SS175M & SS175H—1-Internal Broadband Ceramic Assembly
- Available in 0°, 12°, or 20° tilted version
- Depth & fast-response water-temperature sensor
- Bronze transducer housing
- Hull Type: Fiberglass or wood
- Boat Size: Up to 11 m (36′)
- Useable shaft length ~ 71 mm (2.80″)

Parts & Accessories

Hull Nut

Single Handle Wrench

- 0° for flat hull (0°–4° deadrise)
- 12° tilted for low v hull (4°–14° deadrise hull angle)
- 20° tilted element for deep sea hull (15°–25° deadrise hull angle)

Low-Frequency (L)

- Low—Chirps from 40 kHz to 60 kHz, 32° to 21° beamwidth
- 20 kHz of total bandwidth from one transducer
- Covers popular fishing frequency of 50 kHz plus everything else in the bandwidth

Medium-Frequency (M)

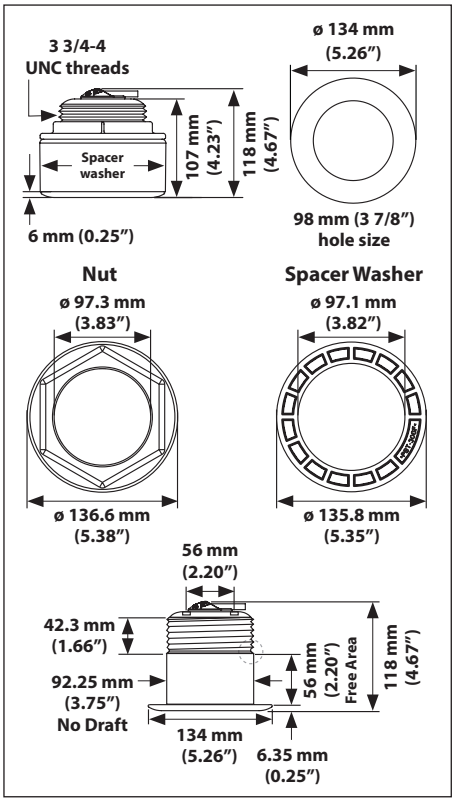
- Medium—Chirps from 85 kHz to 135 kHz, 24° to 16° beamwidth
- 50 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 88 and 107 kHz plus everything else in the bandwidth

Medium-frequency benefits include the ability to sound deeper than the high-frequency, along with better target resolution than the low-frequency.

High-Frequency (H)

- High—Chirps from 130 kHz to 210 kHz, 15° to 9° beamwidth
- 80 kHz of total bandwidth from one transducer
- Covers popular fishing frequency of 200 kHz plus everything else in the bandwidth

Dimensions



SS175—0° Transducers—Single transducer for each frequency band (L, M, H)	
No Connector - use Leads	SS175-0-L (0° Low-Frequency)
	SS175-0-M (0° Medium-Frequency)
	SS175-0-H (0° High-Frequency)

SS175—12° Transducers—Single transducer for each frequency band (L, M, H)	
No Connector - use Leads	SS175-12-L (12° Low-Frequency)
	SS175-12-M (12° Medium-Frequency)
	SS175-12-H (12° High-Frequency)

SS175C—20° Transducers—Single transducer for each frequency band (L, M, H)	
No Connector - use Leads	SS175-20-L (20° Low-Frequency)
	SS175-20-M (20° Medium-Frequency)
	SS175-20-H (20° High-Frequency)

NMEA 2012 Product Award Recipient

CHIRP TRANSDUCERS

Transom & Trolling Mounts / Tilted Element™

TM150M, B150M

Small Boat Products

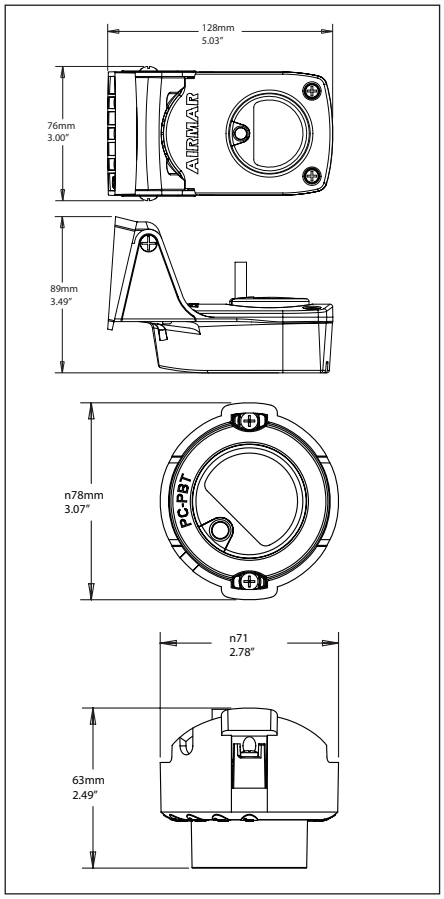
TM150M Transom & Trolling Mounts

As CHIRP continues to redefine recreational fishing, AIRMAR has expanded its lineup of broadband transducers to satisfy the growing demand for this game changing technology. New to the market is AIRMAR's TM150M, an economical CHIRP transducer designed for offshore fishing and freshwater anglers.

Operating at a frequency range of 95-155 kHz, the TM150M delivers sweet spots in shallow waters and at medium depths (up to 2,500 feet*) along with ultra-clear target resolution.

- Depth and fast-response water temperature sensor
- Medium—CHIRPs from 95-155 kHz
- 60 kHz of total bandwidth from one transducer
- Covers popular fishing frequency of 107 kHz plus everything else in the bandwidth
- Fishing Profile: Recreational, medium depths, inland, and freshwater
- Available in plastic transom-mount with stainless steel insert or trolling motor mount installation
  - TM150M trolling motor brackets and hardware
  - TM150M transom bracket and hardware with a custom transom housing and cover
- Hull Type: Fiberglass, wood or metal
- 1 internal ceramic
- 26° to 17° beamwidth
- Boat size: up to 25'

Dimensions



TM150M—Transducers

No Connector - use Leads	TM150M (Medium-Frequency)
	

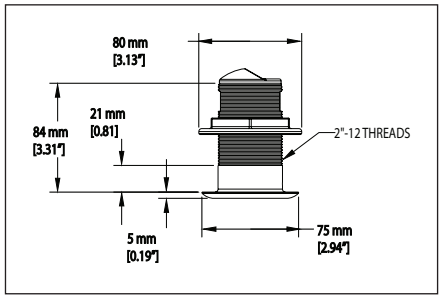
B150M— Tilted Element™

Bronze Housing

Operating at a frequency range of 95-155 kHz, the B150M delivers a sweet spot for fishing in shallow waters and medium depths (up to 2,500 feet*) along with ultra-clear target resolution. The transducer's precise sweep pattern of the medium frequency results in an expanded viewing area with larger and clearer images of the fish displayed on the echo sounder.

- Depth and fast-response water temperature sensor
- Medium—CHIRPs from 95-155 kHz
- 60 kHz of total bandwidth from one transducer
- Covers popular fishing frequency of 107 kHz plus everything else in the bandwidth
- Fishing Profile: Recreational, medium depths, inland, and freshwater
- B619 housing
- Hull Type: Fiberglass, wood or metal
- 1 internal ceramic
- 26° to 17° beamwidth
- 0°, 12° or 20° tilt option
- Boat size: up to 25'

Dimensions



B150M—Transducers

No Connector - use Leads	B150M (Medium-Frequency)
	

CHIRP TRANSDUCERS

Thru-Hull, In-Hull

R509LM/LH, M265LM/LH

R509LM/LH—Thru-Hull, External

- 25-Internal Broadband Ceramic Assemblies
- Depth & fast-response water-temperature sensor
- Fishing Profile: Commercial and recreation-al inshore and offshore fishing (deep-water canyon and sea-mount tracking)
- Epoxy transducer housing with High-Performance Fairing
- Boat Size: 12 m (40') and above
- Hull Type: Fiberglass, wood, or metal

Low & High-Frequency (LH)

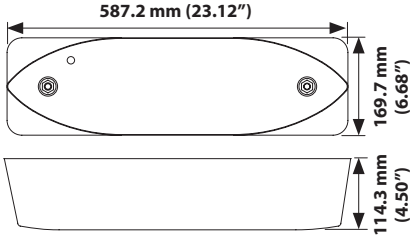
- Low—Chirps from 28 kHz to 60 kHz, 23° to 9° beamwidth
- High—Chirps from 130 kHz to 210 kHz, 8° to 4° beamwidth
- 112 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 28, 38, 50 and 200 kHz plus everything else in the bandwidth

Low & Medium-Frequency (LM)

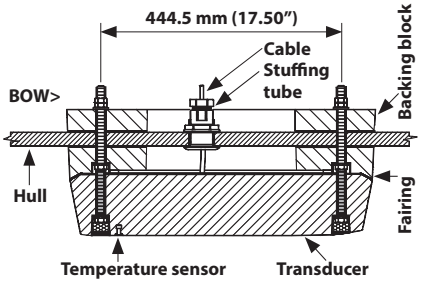
- Low—Chirps from 28 kHz to 60 kHz, 23° to 9° beamwidth
- Medium—Chirps from 80 kHz to 130 kHz, 13° to 8° beamwidth
- 82 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 28, 38, 50, 88, and 107 kHz plus everything else in the bandwidth

Medium-frequency benefits include the ability to sound deeper than the high-frequency, along with better target resolution than the low-frequency.

Dimensions



Installing the Transducer



R509LH/LM—Transducers	
No Connector - use Leads	R509-LH (Low & High-Frequency)
	R509-LM (Low & Medium-Frequency)

Parts & Accessories

Fairing Block

Stainless Stuffing Tube

M265LM/LH—In-Hull

- 8-Internal Broadband Ceramic Assemblies
- Depth Only
- Fishing Profile: Recreational and commercial inshore and offshore fishing (deep-water canyon and sea-mount tracking)
- Plastic / Urethane transducer housing
- Hull Type: Solid fiberglass only

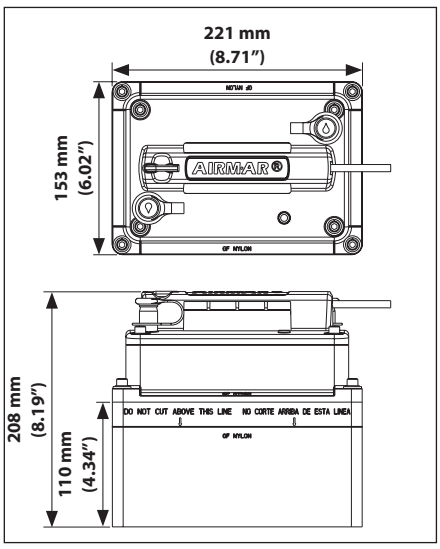
Low & High-Frequency (LH)

- Low—Chirps from 42 kHz to 65 kHz, 25° to 16° beamwidth
- High—Chirps from 130 kHz to 210 kHz, 10° to 6° beamwidth
- 103 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 50 and 200 kHz plus everything else in the bandwidth

Low & Medium-Frequency (LM)

- Low—Chirps from 42 kHz to 65 kHz, 25° to 16° beamwidth
- Medium—Chirps from 85 kHz to 135 kHz, 16° to 11° beamwidth
- 73 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 50, 88, and 107 kHz plus everything else in the bandwidth

Dimensions



Medium-frequency benefits include the ability to sound deeper than the high-frequency, along with better target resolution than the low-frequency.

M265LH/LM—Transducers	
No Connector - use Leads	M265-LH (Low & High-Frequency)
	M265-LM (Low & Medium-Frequency)

Parts & Accessories

M260 Tank

CHIRP TRANSDUCERS

Wet Box, Tank-Mount, Pocket-Mount, Keel-Mount

CM265LH/LM, PM265LH/LM

CM265LH/LM—Wet Box/Tank-Mount

- 8-Internal Broadband Ceramic Assemblies
- Depth & fast-response water-temperature sensor
- Fishing Profile: Commercial and recreational inshore and offshore fishing (deep-water canyon and sea-mount tracking)
- Urethane transducer housing
- Hull Type: Fiberglass or wood
- Curved edge design ideal for wet box installation

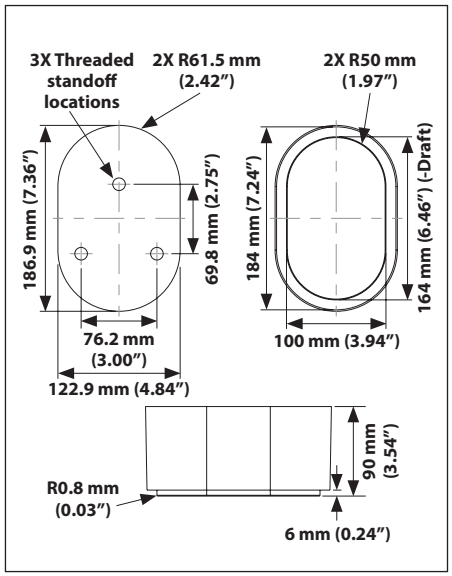
Low & High-Frequency (LH)

- Low—Chirps from 42 kHz to 65 kHz, 25° to 16° beamwidth
- High—Chirps from 130 kHz to 210 kHz, 10° to 6° beamwidth
- 103 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 50 and 200 kHz plus everything else in the bandwidth

Low & Medium-Frequency (LM)

- Low—Chirps from 42 kHz to 65 kHz, 25° to 16° beamwidth
- Medium—Chirps from 85 kHz to 135 kHz, 16° to 11° beamwidth
- 73 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 50, 88, and 107 kHz plus everything else in the bandwidth

Dimensions



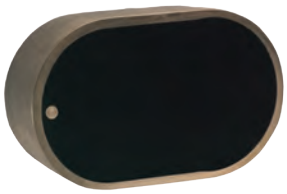
Medium-frequency benefits include the ability to sound deeper than the high-frequency, along with better target resolution than the low-frequency.

CM265CLH/LM—Transducers	
No Connector - use Leads	CM265-LH (Low & High-Frequency)
	CM265-LM (Low & Medium-Frequency)

Parts & Accessories

Stainless Stuffing Tube

PM265LH/LM—Pocket/Keel-Mount



- 8-Internal Broadband Ceramic Assemblies
- Depth & fast-response water temperature sensor
- Fishing Profile: Commercial and recreational inshore and offshore fishing (deep-water canyon and sea-mount tracking)
- Bronze transducer housing
- Hull Type: Fiberglass only
- Flat edge design ideal for pocket / keel mount installation

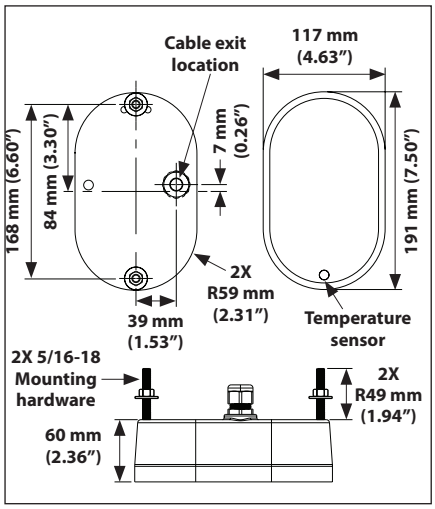
Low & High-Frequency (LH)

- Low—Chirps from 42 kHz to 65 kHz, 25° to 16° beamwidth
- High—Chirps from 130 kHz to 210 kHz, 10° to 6° beamwidth
- 103 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 50 and 200 kHz plus everything else in the bandwidth

Low & Medium-Frequency (LM)

- Low—Chirps from 42 kHz to 65 kHz, 25° to 16° beamwidth
- Medium—Chirps from 85 kHz to 135 kHz, 16° to 11° beamwidth
- 73 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 50, 88, and 107 kHz plus everything else in the bandwidth

Dimensions



Medium-frequency benefits include the ability to sound deeper than the high-frequency, along with better target resolution than the low-frequency.

PM265/LM—Transducers	
No Connector - use Leads	PM265-LH (Low & High-Frequency)
	PM265-LM (Low & Medium-Frequency)

Parts & Accessories

Stainless Stuffing Tube

CHIRP TRANSDUCERS

Tilted Element™

B75L/M/H Tilted Element™

B75L/M/H—Tilted Element™

- 1-Internal Broadband Ceramic Assembly
- Depth & fast-response water-temperature sensor
- Available in 0°, 12°, or 20° tilted version
- Same elements and performance as the B765LH/LM offered in a low-profile housing
- Bronze transducer housing
- Boat Size: Up to 8 m (25')
- Hull Type: Fiberglass or wood
- Useable shaft length ~ 95 mm (3.75")
- Requires 2-13/16" hole

- 0° for flat hull (0°–4° deadrise)
- 12° tilted for low v hull (4°–14° deadrise hull angle)
- 20° tilted element for deep sea hull (15°–25° deadrise hull angle)

Low-Frequency (L)

- Low—Chirps from 40 kHz to 75 kHz, 32° to 21° beamwidth
- 35 kHz of total bandwidth from one transducer
- Covers popular fishing frequency of 50 kHz plus everything else in the bandwidth

Medium-Frequency (M)

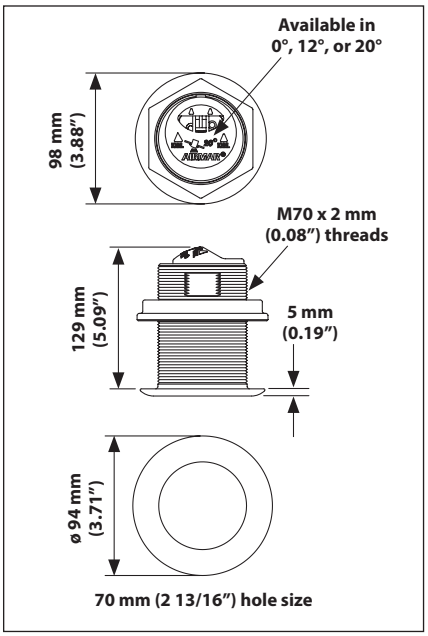
- Medium—Chirps from 80 kHz to 130 kHz, 24° to 16° beamwidth
- 50 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 88 and 107 kHz plus everything else in the bandwidth

Medium-frequency benefits include the ability to sound deeper than the high-frequency, along with better target resolution than the low-frequency.

High-Frequency (H)

- High—Chirps from 130 kHz to 210 kHz, 15° to 9° beamwidth
- 80 kHz of total bandwidth from one transducer
- Covers popular fishing frequency of 200 kHz plus everything else in the bandwidth

Dimensions



Parts & Accessories


Hull Nut


Single Handle Wrench


Double Handle Wrench


Single Handle Wrench


Crows Foot Wrench

B75—0° Transducers—Single transducer for each frequency band (L, M, H)	
No Connector - use Leads	B75-0-L (0° Low-Frequency)
	B75-0-M (0° Medium-Frequency)
	B75-0-H (0° High-Frequency)

B75—12° Transducers—Single transducer for each frequency band (L, M, H)	
No Connector - use Leads	B75-12-L (12° Low-Frequency)
	B75-12-M (12° Medium-Frequency)
	B75-12-H (12° High-Frequency)

B75—20° Transducers—Single transducer for each frequency band (L, M, H)	
No Connector - use Leads	20° Low-Frequency Not available
	B75-20-M (20° Medium-Frequency)
	B75-20-H (20° High-Frequency)

NMEA 2012 Product Award Recipient

CHIRP TRANSDUCERS

Tilted Element™

SS75L/M/H Tilted Element™

SS75L/M/H—Tilted Element™

- 1-Internal Broadband Ceramic Assembly
- Depth & fast-response water-temperature sensor
- Available in 0°, 12°, or 20° tilted version
- Same elements and performance as the B765LH/LM offered in a low-profile housing
- Bronze transducer housing
- Boat Size: Up to 8 m (25′)
- Hull Type: Fiberglass or wood
- Useable shaft length ~ 95 mm (3.75″)
- Requires 2-13/16″ hole

- 0° for flat hull (0°–4° deadrise)
- 12° tilted for low v hull (4°–14° deadrise hull angle)
- 20° tilted element for deep sea hull (15°–25° deadrise hull angle)

Low-Frequency (L)

- Low—Chirps from 40 kHz to 75 kHz, 32° to 21° beamwidth
- 35 kHz of total bandwidth from one transducer
- Covers popular fishing frequency of 50 kHz plus everything else in the bandwidth

Medium-Frequency (M)

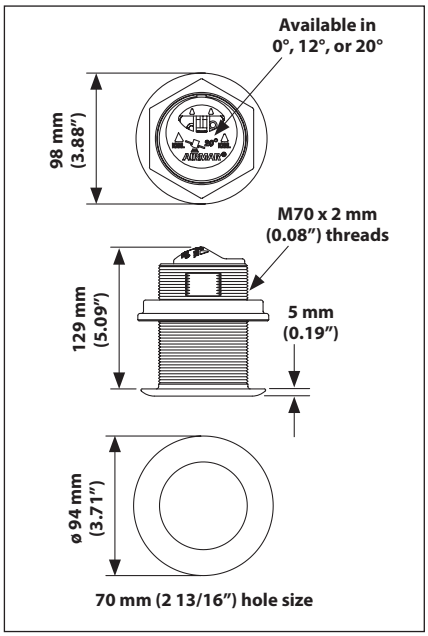
- Medium—Chirps from 80 kHz to 130 kHz, 24° to 16° beamwidth
- 50 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 88 and 107 kHz plus everything else in the bandwidth

Medium-frequency benefits include the ability to sound deeper than the high-frequency, along with better target resolution than the low-frequency.

High-Frequency (H)

- High—Chirps from 130 kHz to 210 kHz, 15° to 9° beamwidth
- 80 kHz of total bandwidth from one transducer
- Covers popular fishing frequency of 200 kHz plus everything else in the bandwidth

Dimensions



Parts & Accessories


Hull Nut


Single Handle Wrench


Double Handle Wrench


Single Handle Wrench


Crows Foot Wrench

SS75—0° Transducers—Single transducer for each frequency band (L, M, H)	
No Connector - use Leads	SS75-0-L (0° Low-Frequency)
	SS75-0-M (0° Medium-Frequency)
	SS75-0-H (0° High-Frequency)

SS75—12° Transducers—Single transducer for each frequency band (L, M, H)	
No Connector - use Leads	SS75-12-L (12° Low-Frequency)
	SS75-12-M (12° Medium-Frequency)
	SS75-12-H (12° High-Frequency)

SS75—20° Transducers—Single transducer for each frequency band (L, M, H)	
No Connector - use Leads	20° Low-Frequency Not available
	SS75-20-M (20° Medium-Frequency)
	SS75-20-H (20° High-Frequency)

NMEA 2012 Product Award Recipient

CHIRP TRANSDUCERS

Single Band, Transom Mount

TM185M, TM185HW

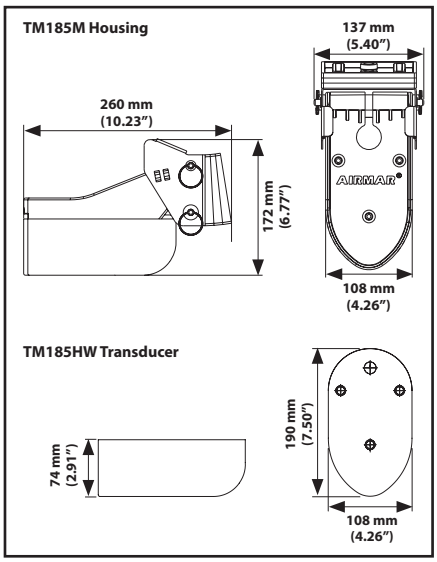
TM185M—Transom Mount

- Medium Frequency CHIRP transom-mount
- Depth and new fast-response water-temperature sensor
- Kick-up assembly locks in the “up” position and will not damage the transom
- Accommodates transom angles between 2° and 20°
- Urethane housing and stainless steel mounting bracket
- Boat Size: 8m to 12m (25’ to 40’)
- Boat Type: Outboards and I/O
- Hull Type: Fiberglass, Wood, or Metal
- Can retrofit to existing TM258, TM260, TM265, and TM275 bracket

Frequency: 85-135 kHz
Cone: 16° to 11°
RMS Power: 1 kW

Parts & Accessories

Transom Bracket Kit:



TM185M—Single Band CHIRP Transducers	
No Connector	TM185M (Medium-Frequency)
	

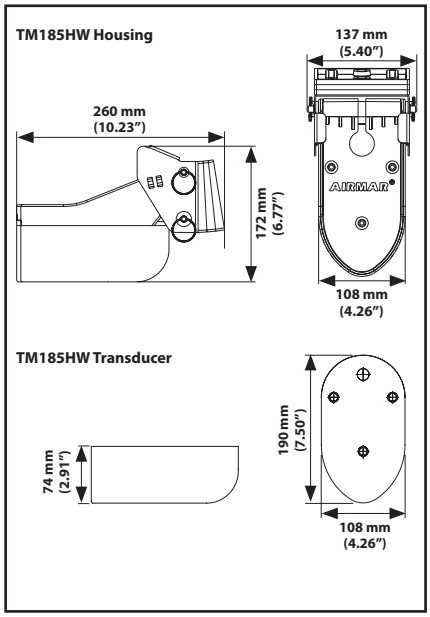
TM185HW—Transom Mount

- Wide beam CHIRP transom-mount
- 25° constant beamwidth
- Depth and new fast-response water-temperature sensor
- Kick-up assembly locks in the “up” position and will not damage the transom
- Accommodates transom angles between 2° and 20°
- Urethane housing and stainless steele mounting
- Boat Size: 8m to 12m (25’ to 40’)
- Urethane housing and stainless steel mounting bracket
- Boat Size: 8m to 12m (25’ to 40’)
- Boat Type: Outboards and I/O
- Hull Type: Fiberglass, Wood, or Metal
- Can retrofit to existing TM258, TM260, TM265, and TM275 bracket

Frequency: 150-250 kHz
Cone: 25° constant
RMS Power: 1 kW

Parts & Accessories

Transom Bracket Kit:



TM185HW—Single Band CHIRP Transducers	
No Connector	TM185HW (Medium-Frequency)
	

CHIRP TRANSDUCERS

Transom-Mount

TM265LH/LM, B765LH/LM

TM265LH/LM—Transom-Mount

- 8-Internal Broadband Ceramic Assemblies
- Depth & fast-response water-temperature sensor
- Fishing Profile: Commercial and recreational inshore and offshore fishing (deep-water canyon and sea-mount tracking)
- Urethane transducer housing and stainless steel mounting bracket
- Boat Size: 8 m to 12 m (25' to 40')
- Hull Type: Fiberglass, wood, or metal

Low & High-Frequency (LH)

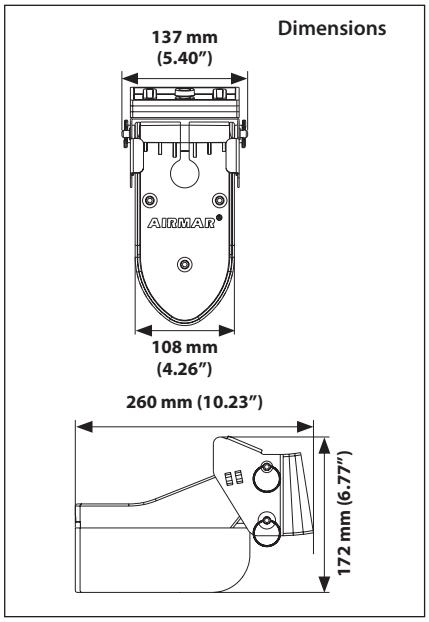
- Low—Chirps from 42 kHz to 65 kHz, 25° to 16° beamwidth
- High—Chirps from 130 kHz to 210 kHz, 10° to 6° beamwidth
- 103 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 50 and 200 kHz plus everything else in the bandwidth

Low & Medium-Frequency (LM)

- Low—Chirps from 42 kHz to 65 kHz, 25° to 16° beamwidth
- Medium—Chirps from 85 kHz to 135 kHz, 16° to 11° beamwidth
- 73 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 50, 88, and 107 kHz plus everything else in the bandwidth

Medium-frequency benefits include the ability to sound deeper than the high-frequency, along with better target resolution than the low-frequency.

Dimensions



TM265LH/LM—Transducers	
No Connector - use Leads	TM265-LH (Low & High-Frequency)
	TM265-LM (Low & Medium-Frequency)

Parts & Accessories

Transom Bracket Kit

B765LH/LM—Thru-Hull

- 2-Internal Broadband Ceramic Assemblies
- Depth & fast-response water-temperature sensor
- All the advantages of the larger Thru-Hull CHIRP transducers, suitable for smaller boats
- Bronze transducer housing with High-Performance Fairing
- Boat Size: Up to 9 m (30') and above
- Hull Type: Fiberglass or wood

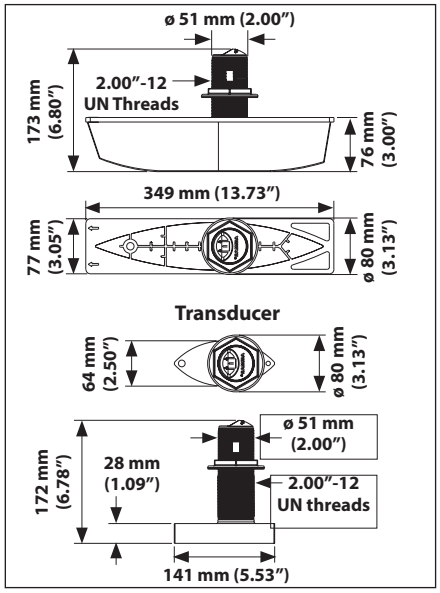
Low & High-Frequency (LH)

- Low—Chirps from 40 kHz to 75 kHz, 32° to 21° beamwidth
- High—Chirps from 130 kHz to 210 kHz, 15° to 9° beamwidth
- 115 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 50 and 200 kHz plus everything else in the band-width

Low & Medium-Frequency (LM)

- Low—Chirps from 40 kHz to 75 kHz, 32° to 21° beamwidth
- Medium—Chirps from 80 kHz to 130 kHz, 24° to 16° beamwidth
- 85 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 50, 88, and 107 kHz plus everything else in the bandwidth

Dimensions



Medium-frequency benefits include the ability to sound deeper than the high-frequency, along with better target resolution than the low-frequency.

B765LH/LM—Transducers	
No Connector - use Leads	B765-LH (Low & High-Frequency)
	B765-LM (Low & Medium-Frequency)

Parts & Accessories

Hull Nut

High-Performance Fairings

CHIRP TRANSDUCERS

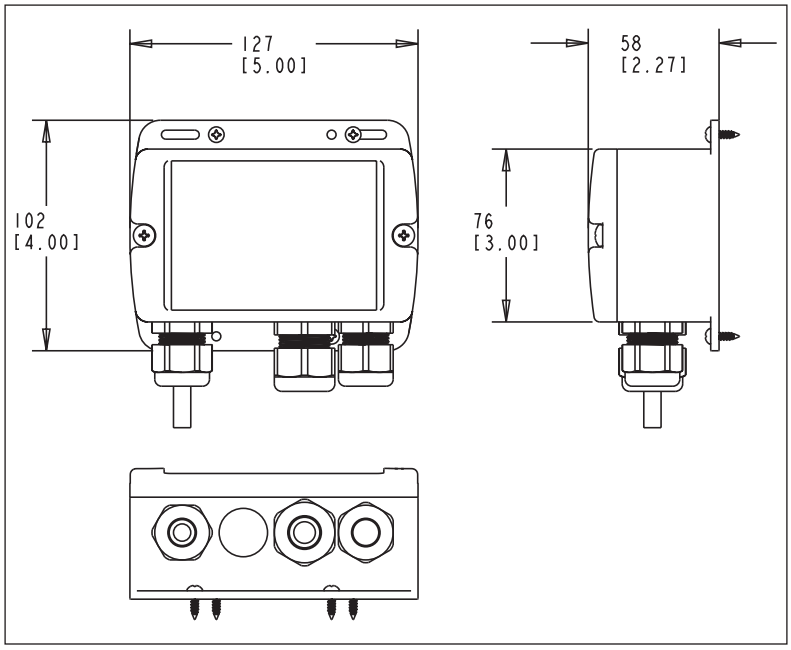
JUNCTION BOX

CHIRP JUNCTION BOX

Specifically designed for use with Raymarine's CP450C

Airmar's new CHIRP Transducer Junction Box allows use of non-connector equipped CHIRP transducers to be used with Raymarine's CP450C module. For example, the B265C-LH dual transmission line transducer, normally sold for the Garmin GSD26 or Navico's BSM-2, can operate with the Raymarine CP450C via the CHIRP Transducer Junction Box. Individual frequency range transducers such as Airmar's B175C's can also be utilized via a second input port. These individual transducers must be used in pairs to function with the Raymarine CP450C.

Dimensions



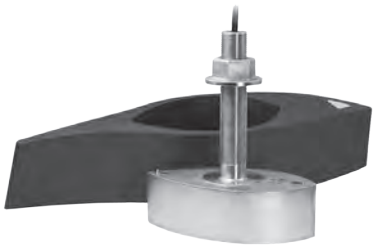
CHIRP TRANSDUCERS

Wide Beam — Thru-Hull, 1 kW, 2 kW

B275LH-W, R109LH-W

B275LH-W Thru-Hull

Bronze Housing

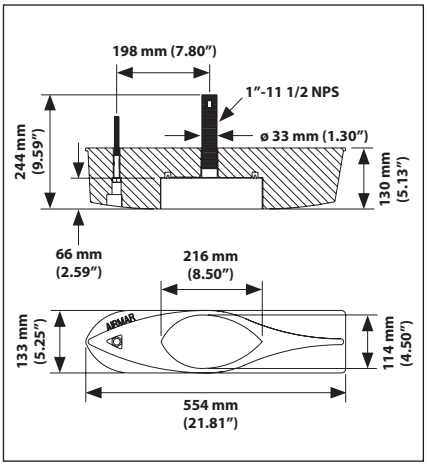


- Ideal for marking baitfish and game fish in shallow to mid-water depths of 300ft - 600ft
- Depth and fast-response water-temperature sensor
- Low—CHIRPS from 42 kHz to 65 kHz 25° to 16° beamwidth
- High—CHIRPS from 150 kHz to 250 kHz 25° constant beamwidth

Get more coverage under the boat with the B275LH-W, Airmar's new wide beam CHIRP transducer. Offering a high frequency range of 150-250kHz and a constant 25 degree beamwidth, this transducer is truly broadband at it's best. In addition to improving the performance of CHIRP-ready echosounders, anglers using the new B275LH-W wide beam transducer will achieve twice the coverage under the boat compared to our current high frequency CHIRP transducers.

- 123 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 50 and 200 kHz plus everything else in the bandwidth
- Boat Size: 8 m (25') and above
- Hull Type: Fiberglass, wood or metal
- 8 internal broadband ceramics
- Can retrofit to existing B260 install

Dimensions



B275LH-W—Wide Beam CHIRP Transducers	
No Connector - use Leads	B275LH-W (Low and High-Frequency)
	

Parts & Accessories

Hull Nut

High-Performance Fairing

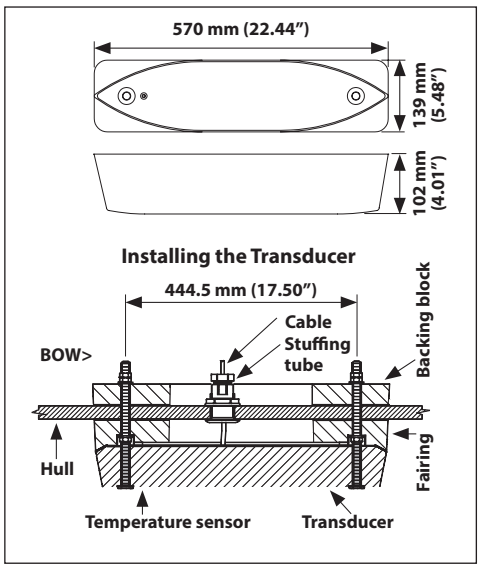
R109LH-W Thru-Hull

- Ideal for marking baitfish and game fish in-shallow to mid-water depths of 300ft - 600ft
- Depth and fast-response water-temperature sensor
- Low—CHIRPS from 38 kHz to 75 kHz, 19° to 10° port-starboard beamwidth (10° to 5° fore-aft beamwidth)
- High—CHIRPS from 150 kHz to 250 kHz 25° constant beamwidth

Get more coverage under the boat with the R109LH-W, Airmar's new wide beam CHIRP transducer. Offering a high frequency range of 150-250kHz and a constant 25 degree beamwidth, this transducer is truly broadband at it's best. In addition to improving the performance of CHIRP-ready echosounders, anglers using the new R109LH-W wide beam transducer will achieve twice the coverage under the boat compared to our current high frequency CHIRP transducers.

- 123 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 50 and 200 kHz plus everything else in the bandwidth
- Boat Size: 8 m (25') and above
- Hull Type: Fiberglass, wood or metal
- 16 internal broadband ceramics

Dimensions



R109LH-W—Wide Beam CHIRP Transducers	
No Connector - use Leads	R109LH-W (Low and High-Frequency)
	

Parts & Accessories

Fairing Block

Stainless Stuffing Tube

CHIRP TRANSDUCERS

Wide Beam — Thru-Hull, Transom-Mount

R509LH-W 3 kW, TM275LH-W 1kW

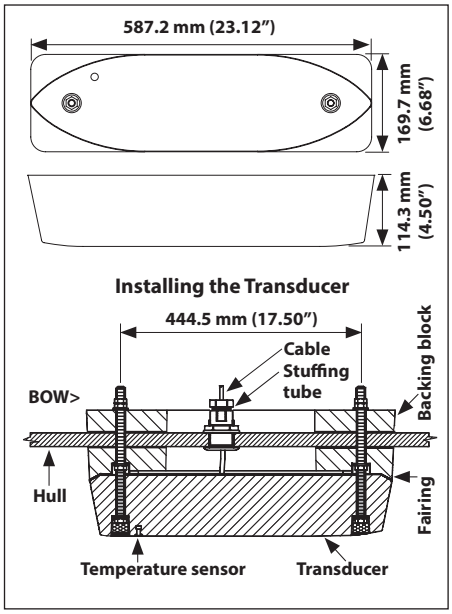
R509LH-W Thru-Hull

- Ideal for marking baitfish and game fish in shallow to mid-water depths of 300ft - 600ft
- Depth and fast-response water-temperature sensor
- Low—CHIRPS from 28 kHz to 60 kHz, 23° to 9° port-starboard beamwidth (11° to 5° fore-aft beamwidth)
- High—CHIRPS from 150 kHz to 250 kHz 25° constant beamwidth

Get more coverage under the boat with the R509LH-W, Airmar's new wide beam CHIRP transducer. Offering a high frequency range of 150-250kHz and a constant 25 degree beamwidth, this transducer is truly broadband at it's best. In addition to improving the performance of CHIRP-ready echosounders, anglers using the new R509LH-W wide beam transducer will achieve twice the coverage under the boat compared to our current high frequency CHIRP transducers.

- 123 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 50 and 200 kHz plus everything else in the bandwidth
- Boat Size: 12 m (40') and above
- Hull Type: Fiberglass, wood or metal
- 25 internal broadband ceramics

Dimensions



R509LH-W—Wide Beam CHIRP Transducers	
No Connector - use Leads	B509LH-W (Low and High-Frequency)
	

Parts & Accessories

Fairing Block

Stainless Stuffing Tube

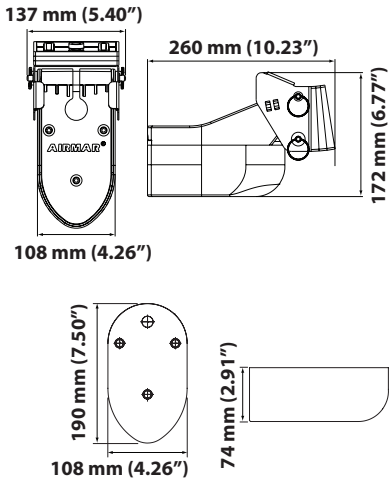
TM275LH-W Transom-Mount

- Ideal for marking baitfish and game fish in-shallow to mid-water depths of 300ft - 600ft
- Depth and fast-response water-temperature sensor
- Low—CHIRPS from 42 kHz to 65 kHz 25° to 16° beamwidth
- High—CHIRPS from 150 kHz to 250 kHz 25° constant beamwidth

Get more coverage under the boat with the TM275LH-W, Airmar's new wide beam CHIRP transducer. Offering a high frequency range of 150-250kHz and a constant 25 degree beamwidth, this transducer is truly broadband at it's best. In addition to improving the performance of CHIRP-ready echosounders, anglers using the new TM275LH-W wide beam transducer will achieve twice the coverage under the boat compared to our current high frequency CHIRP transducers.

- 123 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 50 and 200 kHz plus everything else in the bandwidth
- Boat Size: 8 m (25') to 12 m (40°)
- Hull Type: Fiberglass, wood or metal
- 8 internal broadband ceramics

Dimensions



TM275LH-W—Wide Beam CHIRP Transducers	
No Connector - use Leads	TM275LH-W (Low and High-Frequency)
	

Parts & Accessories

Transom Bracket Kit

CHIRP TRANSDUCERS

Wide Beam — Pocket/Keel-Mount, 2 kW, 1 kW

PM111LH-W, PM275LH-W

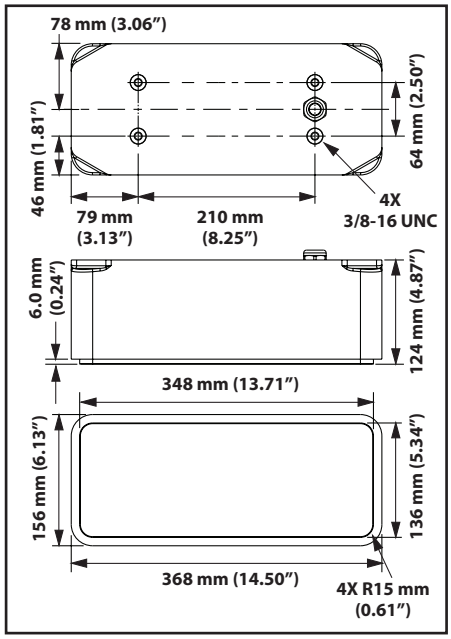
PM111LH-W Pocket/Keel-Mount

- Ideal for marking baitfish and game fish in shallow to mid-water depths of 300ft - 600ft
- Depth and fast-response water-temperature sensor
- Low—CHIRPS from 38 kHz to 75 kHz, 19° to 10° port-starboard beamwidth (10° to 5° fore-aft beamwidth)
- High—CHIRPS from 150 kHz to 250 kHz 25° constant beamwidth

Get more coverage under the boat with the PM111LH-W, Airmar's new wide beam CHIRP transducer. Offering a high frequency range of 150-250kHz and a constant 25 degree beamwidth, this transducer is truly broadband at it's best. In addition to improving the performance of CHIRP-ready echosounders, anglers using the new PM111LH-W wide beam transducer will achieve twice the coverage under the boat compared to our current high frequency CHIRP transducers.

- 123 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 50 and 200 kHz plus everything else in the bandwidth
- Boat Size: 8 m (25') and above
- Hull Type: Fiberglass only
- 16 internal broadband ceramics

Dimensions



PM111LH-W—Wide Beam CHIRP Transducers	
No Connector - use Leads	PM111LH-W (Low and High-Frequency)
	

Parts & Accessories

Stainless Stuffing Tube

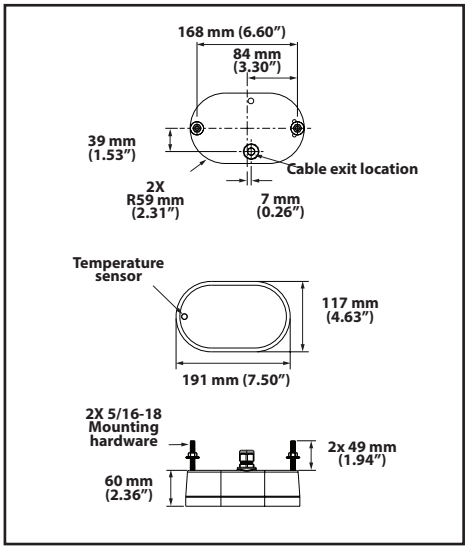
PM275LH-W Pocket/Keel-Mount

- Ideal for marking baitfish and game fish in-shallow to mid-water depths of 300ft - 600ft
- Depth and fast-response water-temperature sensor
- Low—CHIRPS from 42 kHz to 65 kHz 25° to 16° beamwidth
- High—CHIRPS from 150 kHz to 250 kHz 25° constant beamwidth

Get more coverage under the boat with the PM275LH-W, Airmar's new wide beam CHIRP transducer. Offering a high frequency range of 150-250kHz and a constant 25 degree beamwidth, this transducer is truly broadband at it's best. In addition to improving the performance of CHIRP-ready echosounders, anglers using the new PM275LH-W wide beam transducer will achieve twice the coverage under the boat compared to our current high frequency CHIRP transducers.

- 123 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 50 and 200 kHz plus everything else in the bandwidth
- Boat Size: 8 m (25') and above
- Hull Type: Fiberglass only
- 8 internal broadband ceramics

Dimensions



PM275LH-W—Wide Beam CHIRP Transducers	
No Connector - use Leads	PM275LH-W (Low and High-Frequency)
	

Parts & Accessories

Drilling Template

Stainless Stuffing Tube

CHIRP TRANSDUCERS

Wide Beam — Pocket/Keel-Mount & Tank-Mount, 3 kW, 1 kW

CM599LH-W, CM275LH-W

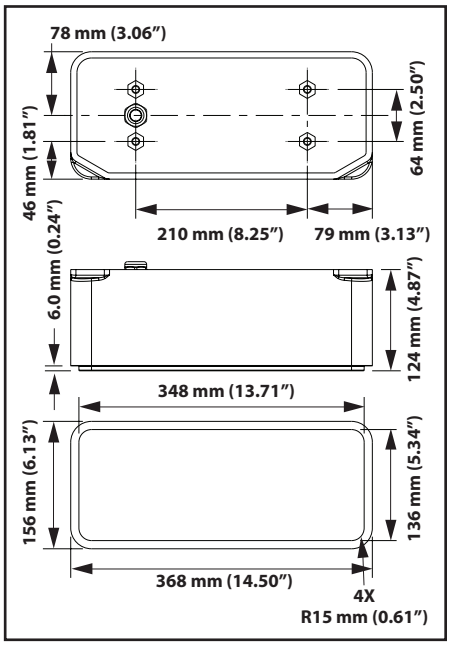
CM599LH-W
Pocket/Keel-Mount

- Ideal for marking baitfish and game fish in shallow to mid-water depths of 300ft - 600ft
- Depth and fast-response water-temperature sensor
- Low—CHIRPS from 28 kHz to 60 kHz, 23° to 9° port-starboard beamwidth (11° to 5° fore-aft beamwidth)
- High—CHIRPS from 150 kHz to 250 kHz 25° constant beamwidth

Get more coverage under the boat with the CM599LH-W, Airmar's new wide beam CHIRP transducer. Offering a high frequency range of 150-250kHz and a constant 25 degree beamwidth, this transducer is truly broadband at it's best. In addition to improving the performance of CHIRP-ready echosounders, anglers using the new CM599LH-W wide beam transducer will achieve twice the coverage under the boat compared to our current high frequency CHIRP transducers.

- 123 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 50 and 200 kHz plus everything else in the bandwidth
- Boat Size: 8 m (25') and above
- Hull Type: Fiberglass only (tank Installation)
- 25 internal broadband ceramics

Dimensions



CM599LH-W—Wide Beam CHIRP Transducers

No Connector - use Leads	CM599LH-W (Low and High-Frequency)
	

Parts & Accessories

Stainless Stuffing Tube

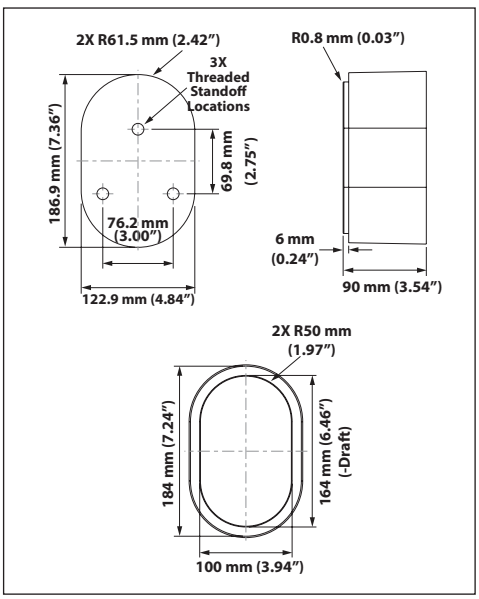
CM275LH-W
Tank-Mount

- Ideal for marking baitfish and game fish in-shallow to mid-water depths of 300ft - 600ft
- Depth and fast-response water-temperature sensor
- Low—CHIRPS from 42 kHz to 65 kHz 25° to 16° beamwidth
- High—CHIRPS from 150 kHz to 250 kHz 25° constant beamwidth

Get more coverage under the boat with the CM275LH-W, Airmar's new wide beam CHIRP transducer. Offering a high frequency range of 150-250kHz and a constant 25 degree beamwidth, this transducer is truly broadband at it's best. In addition to improving the performance of CHIRP-ready echosounders, anglers using the new CM275LH-W wide beam transducer will achieve twice the coverage under the boat compared to our current high frequency CHIRP transducers.

- 103 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 50 and 200 kHz plus everything else in the bandwidth
- Boat Size: 8 m (25') and above
- Hull Type: Fiberglass, wood or tank
- 8 internal broadband ceramics

Dimensions



CM275LH-W—Wide Beam CHIRP Transducers

No Connector - use Leads	CM275LH-W (Low and High-Frequency)
	

Parts & Accessories

Stainless Stuffing Tube

CHIRP TRANSDUCERS

Wide Beam — Tilted Element™

B175H-W

B175H-W
Tilted Element™

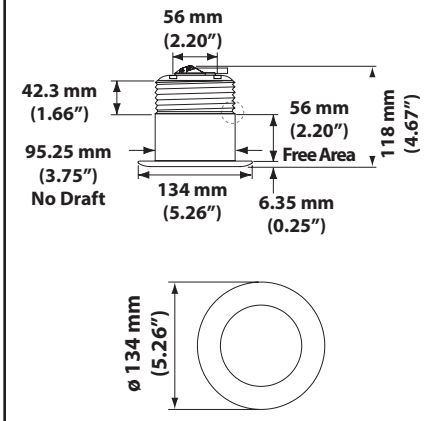
- Ideal for marking baitfish and game fish in shallow to mid-water depths of 300ft - 600ft
- Depth and fast-response water-temperature sensor
- High—CHIRPS from 150 kHz to 250 kHz 25° constant beamwidth

- 0° for flat hull (0°–4° deadrise)
- 12° tilted for low v hull (4°–14° deadrise hull angle)
- 20° tilted element for deep sea hull (15°–25° deadrise hull angle)

Get more coverage under the boat with the B175H-W, Airmar's new wide beam CHIRP transducer. Offering a high frequency range of 150-250kHz and a constant 25 degree beamwidth, this transducer is truly broadband at it's best. In addition to improving the performance of CHIRP-ready echosounders, anglers using the new B175H-W wide beam transducer will achieve twice the coverage under the boat compared to our current high frequency CHIRP transducers.

- 123 kHz of total bandwidth from one transducer
- Covers popular fishing frequencies of 50 and 200 kHz plus everything else in the bandwidth
- Boat Size: 8 m (25') and above
- Hull Type: Fiberglass or wood

Dimensions



98 mm (3 7/8") hole size

B175H-W—Wide Beam CHIRP Transducers	
No Connector - use Leads	B175W-0 (Low and High-Frequency)
	B175W-12 (Low and High-Frequency)
	B175W-20 (Low and High-Frequency)

Parts & Accessories


Single Handle Wrench


Double Handle Wrench


Single Handle Wrench


Crows Foot Wrench

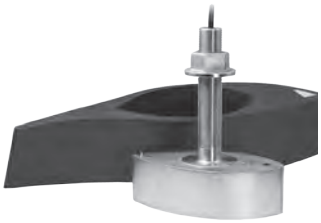
Thru-Hull

BROADBAND TRANSDUCERS

B260

High-Definition, Digital Broadband Transducers

B260 — Bronze Housing



- Top-of-the-line, 1 kW, thru-hull model
- Depth and fast-response water-temperature sensor
- Interfaces to any 600 W or 1 kW echosounder
- Available with a diplexer for single-transmission-line fishfinders or without a diplexer for dual-transmission-line fishfinders

The B260 will enhance fish detection on virtually all of today's fishfinders. High-performance has been redefined with its Broadband Ceramic Technology. The narrow 6° beam 200 kHz ceramic will give you excellent resolution and crisp image detail needed for bottom fishing. The B260's low ringing is perfect for finding fish holding tight to the bottom and other structure. The seven-element 50 kHz array has a wider 19° beam for deeper blue-water fishing. The outcome at both frequencies is excellent resolution and crisp image detail where it's needed most.

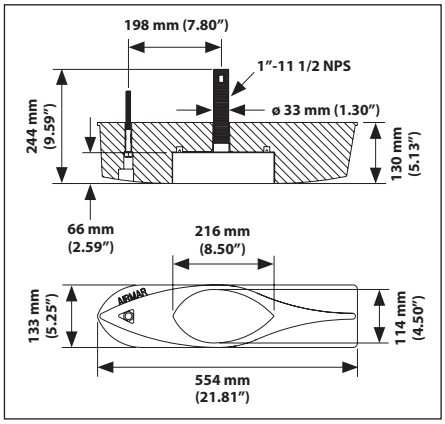
Usable Shaft Length: ~140 mm (5.5")

- Recommended for sportfishing boats above 9 m (30') and small mid-size commercial fishing boats
- High-Performance Fairing included

Frequency:	50 kHz and 200 kHz
Cone:	50 kHz—19° , 200 kHz—6°
RMS Power:	1 kW

Maximum Depth Range:
50 kHz—529 m to 735 m (1,800' to 2,500')
200 kHz—206 m to 294 m (700' to 1,000')

Dimensions



B260—Replacement Parts


Hull Nut


High-Performance Fairing

B260—50/200 kHz Transducers—Kit Includes Transducer and 1 kW Matching Cable

Furuno®

10-pin connector, Depth and temperature
Fits: Furuno units with 10-pin connector

Furuno®

No connector, Depth and temperature
Fits: Furuno dual line units

Garmin®

6-pin connector, Depth and temperature
Fits: Garmin units with 6-pin connector

Garmin®

8-pin connector, Depth and temperature
Fits: GSD24

Geonav®

8-pin connector, Depth and temperature
Fits: Geonav sounder applications

Humminbird®

#9 connector, Depth and temperature
Fits: All 800, 900 and 1100 series except 967 3D

Lowrance® / Simrad®

7-pin Blue Lowrance, Depth and temperature
Fits: Units with blue collar conn., Simrad NSE, NSO, NSS

Navico®

6-pin connector, Depth and temperature
Fits: Navman 6-pin, Northstar M Series, Simrad NX 40/45

Raymarine®

6/9-pin connector, Depth and temperature
Fits: A50, A57, A65, A70, DSM 25, e7

Raymarine®

Radar connector, Depth and temperature
Fits: L755, 760, 770, 1250, DSM30, 250, 300

Koden®

8-pin connector, Depth and temperature
Fits: Koden CVS126/128, CVS 1410, SVS 650

Standard®

8-pin connector, Depth and temperature
Fits: FF520/525, CPF180i/300i

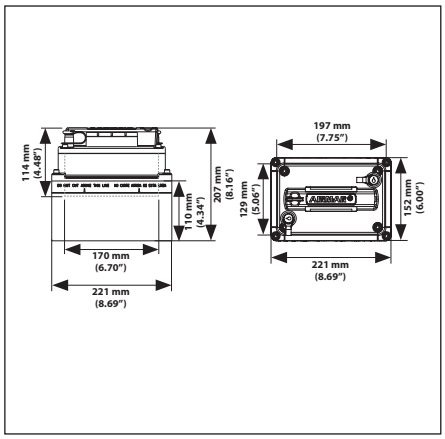
M260 Broadband

It's true! Excellent performance can be achieved from an in-hull mounted transducer. The M260, Airmar's 1 kW in-hull, is designed with Airmar's exclusive Broadband Ceramic Technology. The 200 kHz element provides broadband performance resulting in higher-resolution without sacrificing sensitivity. Combined with a seven-element 50 kHz array, this in-hull has excellent deep-water detection. Because the M260 has narrow beams at both frequencies, separation of individual targets and the ability to distinguish between fish and the bottom makes finding fish easy.

Optimal fishfinder performance no longer requires drilling a hole in the hull! The M260 is able to transmit and receive through solid fiberglass, displaying sharp detailed images. Track the bottom at speeds exceeding 30 knots (34 MPH)! Installation simply requires adhering the tank to the inside of the vessel, leaving a clean and smooth hull exterior!

- Top-of-the-line broadband, in-hull transducer
- Recommended for solid fiberglass hulls
- Depth only
- Innovative tank design allows for bow-stern or port-starboard mounting
- Non-toxic anti-freeze (propylene glycol) is used to fill the tank
- Fiberglass resin or Marine-Tex is used to adhere tank to the hull
- Interfaces to any 600 W or 1 kW echosounder
- Boat Size: 8 m (25') and up

Dimensions



Frequency: 50 kHz and 200 kHz
Cone: 50 kHz—19°, 200 kHz—6°
RMS Power: 1 kW

Maximum Depth Range:
50 kHz—529 m to 735 m (1,800' to 2,500')
200 kHz—206 m to 294 m (700' to 1,000')

M260—Replacement Parts

M260 Tank

Marine-Tex

M260—50/200 kHz Transducers—Kit Includes Transducer and 1 kW Matching Cable

Furuno®	
	10-pin connector, Depth only Fits: Furuno units with 10-pin connector

Furuno®	
	No connector, Depth only Fits: Furuno dual line units

Garmin®	
	6-pin connector, Depth only Fits: Garmin units with 6-pin connector except GDS22

Garmin®	
	6-pin connector, Depth only Fits: Garmin GSD22 only

Garmin®	
	8-pin connector, Depth only Fits: GSD24

Geonav®	
	8-pin connector, Depth only Fits: Geonav sounder applications

Humminbird®	
	#9 connector, Depth only Fits: All 800, 900 and 1100 series except 967 3D

Lowrance®	
	7-pin Blue Lowrance, Depth only Fits: Units with blue collar connector

M260—50/200 kHz Transducers—Kit Includes Transducer and 1 kW Matching Cable

Navico®	
	6-pin connector, Depth only Fits: Navman 6-pin, Northstar M Series, Simrad NX 40/45

Northstar®	
	10-pin connector, Depth only Fits: 490D, 491 (1 kW), Nobeltec

Raymarine®	
	Radar connector, Depth only Fits: L755, 760, 770, 1250, 1260, DSM30, 250, 300

Simrad®	
	7-pin connector, Depth only Fits: Simrad NSE, NSO, NSS

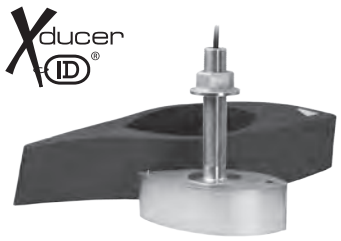
Simrad®	
	7-pin connector, Depth only Fits: 40, 50 series

Koden®	
	8-pin connector, Depth only Fits: Koden CVS126/128, CVS 1410, SVS 650

Standard®	
	8-pin connector, Depth only Fits: Standard FF520, 525, CPF 180i/300i, Koden ES-502

Thru—Hull
BROADBAND TRANSDUCERS
SS260
High-Definition, Digital Broadband Transducers

SS260 —
Stainless Steel Housing



- Top-of-the-line, 1 kW, thru-hull model
- Depth and fast-response water-temperature sensor
- Interfaces to any 600 W or 1 kW echosounder
- Available with a diplexer for single-transmission-line fishfinders or without a diplexer for dual-transmission-line fishfinders

The SS260 will enhance fish detection on virtually all of today's fishfinders. High-performance has been redefined with its Broadband Ceramic Technology. The narrow 6° beam 200 kHz ceramic will give you excellent resolution and crisp image detail needed for bottom fishing. The SS260's low ringing is perfect for finding fish holding tight to the bottom and other structure. The seven-element 50 kHz array has a wider 19° beam for deeper blue-water fishing. The outcome at both frequencies is excellent resolution and crisp image detail where it's needed most.

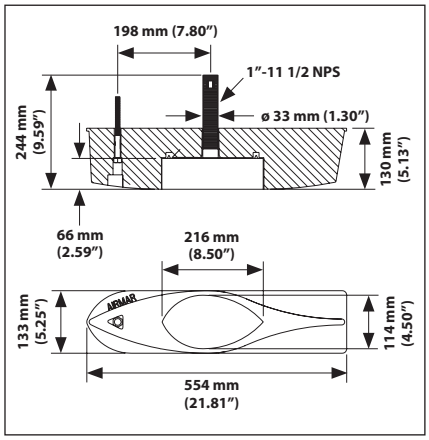
Usable Shaft Length: ~140 mm (5.5″)

- Recommended for sportfishing boats above 9 m (30′) and small mid-size commercial fishing boats
- High-Performance Fairing included

Frequency: 50 kHz and 200 kHz
Cone: 50 kHz—19° , 200 kHz—6°
RMS Power: 1 kW

Maximum Depth Range:
50 kHz—529 m to 735 m (1,800′ to 2,500′)
200 kHz—206 m to 294 m (700′ to 1,000′)

Dimensions



SS260—Replacement Parts


Hull Nut


High-Performance Fairing

SS260—50/200 kHz Transducers—Kit Includes Transducer and 1 kW Matching Cable

Furuno®	
	10-pin connector, Depth and temperature Fits: Furuno units with 10-pin connector
Furuno®	
	No connector, Depth and temperature Fits: Furuno dual line units
Garmin®	
	6-pin connector, Depth and temperature Fits: Garmin units with 6-pin connector
Garmin®	
	8-pin connector, Depth and temperature Fits: GSD24
Geonav®	
	8-pin connector, Depth and temperature Fits: Geonav sounder applications
Humminbird®	
	#9 connector, Depth and temperature Fits: All 800, 900 and 1100 series except 967 3D

Lowrance®/ Simrad®	
	7-pin Blue Lowrance, Depth and temperature Fits: Units with blue collar conn., Simrad NSE, NSO, NSS
Navico®	
	6-pin connector, Depth and temperature Fits: Navman 6-pin, Nstar M Series, NX40/45
Raymarine®	
	6/9-pin connector, Depth and temperature Fits: A50, A57, A65, A70, DSM 25, e7
Raymarine®	
	Radar connector, Depth and temperature Fits: L755, 760, 770, 1250, DSM30, 250, 300
Simrad®/ JRC®	
	7-pin connector, Depth and temperature Fits: FF50, EQ32, 33, 34, Raytheon V850
Koden®	
	8-pin connector, Depth and temperature Fits: Koden CVS126/128, CVS 1410, SVS 650
Standard®	
	8-pin connector, Depth and temperature Fits: FF520/525, CPF180i/300i

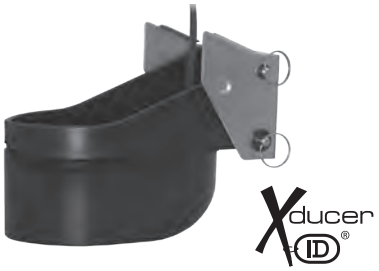
Transom-Mount

BROADBAND TRANSDUCERS

TM260

High-Definition, Digital Broadband Transducers

TM260



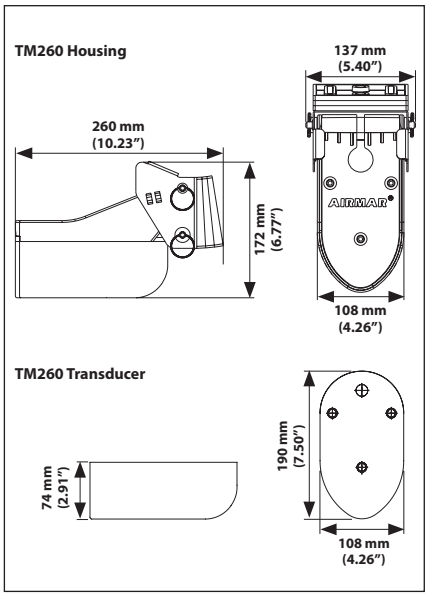
The new TM260 takes the legendary performance of the B260 to your vessel's transom. This top-of-the-line broadband transom-mount brings crystal clear imaging to any of today's fishfinders. The large 200 kHz element and the seven-element 50 kHz array are excellent for bait and game fish separation along with detecting ground fish holding tight to the bottom. The TM260's high-performance mounting bracket is easy-to-install and has a streamlined shape that delivers high-speed performance up to 30 knots (35 MPH).

Frequency:	50 kHz / 200 kHz
Cone:	50 kHz—19°, 200 kHz—6°
RMS Power:	1,000 W

Maximum Depth Range:
50 kHz—529 m to 735 m (1,800' to 2,500')
200 kHz—206 m to 294 m (700' to 1,000')

- Top-of-the-line narrow-beam transom-mount
- Designed for bottom fishing
- Wide 19° beam at 50 kHz
- Narrow 6° beam at 200 kHz
- Interfaces to any 600 W or 1 kW sounder
- Depth and new fast-response water-temperature sensor
- Kick-up assembly locks in the "up" position and will not damage the transom
- Accommodates transom angles between 2° and 20°
- Urethane housing
- Boat Size: Up to 12 m (40')

Dimensions



TM260—Replacement Parts

Transom Bracket Kit

TM260—50/200 kHz Transducers—Kit Includes Transducer and 1 kW Matching Cable

Black Box

8-pin connector, Depth and temperature
Fits: Koden ES502, Standard FF520, FF525, CPF-180i, CPF-300i

Furuno®

No connector, Depth only
Fits: BBFF3, DFF3, 292, 295, 1100, 1150, 1200, 1500

Furuno®

10-pin connector, Depth and temperature
Fits: Furuno units with 10-pin connector

Furuno®

8-pin connector, Depth and temperature
Fits: 667, 582

Garmin®

6-pin connector, Depth and temperature
Fits: Garmin 6-pin units 500W RMS or higher

Garmin®

8-pin connector, Depth and temperature
Fits: GSD24

Geonav®

8-pin connector, Depth and temperature
Fits: Geonav sounder applications

Humminbird®

#9 connector, Depth and temperature
Fits: All 800,900, 1100 series except 967 3D

Navico®

7-pin connector, Depth and temperature
Fits: Lowrance, Simrad NSE, NSO, NSS w/ BL conn

Navman®/N Star®

6-pin, Depth and temperature
Fits: Navman, Northstar, Simrad NX 40/45

Raymarine®

No connector, Depth and temperature
Fits: DSM400

Raymarine®

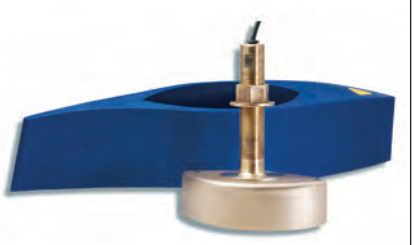
Radar connector, Depth and temperature
Fits: DSM 30, 250 300

Koden®

8-pin connector, Depth and temperature
Fits: CVS 126/128, CVS 1410, SVS 650

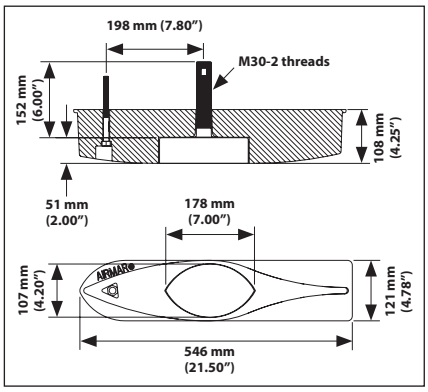
Thru-Hull
1 kW TRANSDUCERS
Quick Guide

B258—*Good*

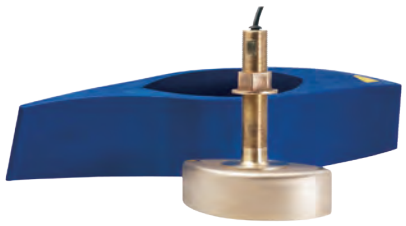


- Entry-level 1 kW
- 1 kW power
- 50/200 kHz operation
- Depth and fast-response water-temperature sensor
- Includes High-Performance Fairing

Dimensions

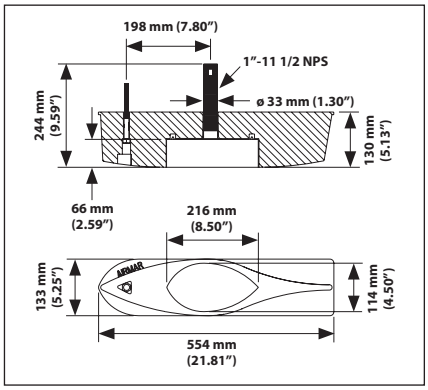


B260 & SS260—*Best*



- High-performance narrow-beam 1 kW
- Designed for bottom fishing
- 1 kW power
- 50 kHz and 200 kHz broadband operation
- Depth and fast-response water-temperature sensor
- 19° at 50 kHz / 6° at 200 kHz
- Includes High-Performance Fairing

Dimensions

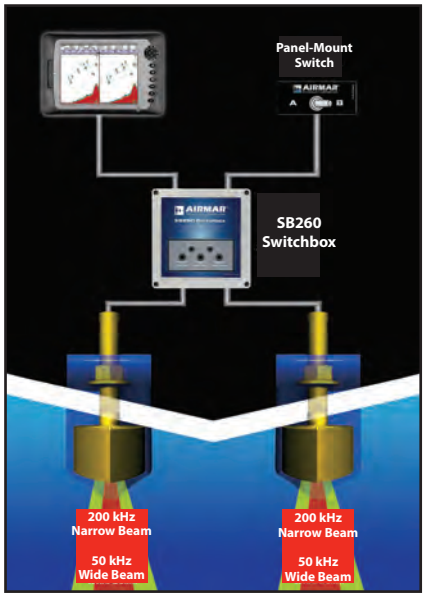


1 kW TRANSDUCERS

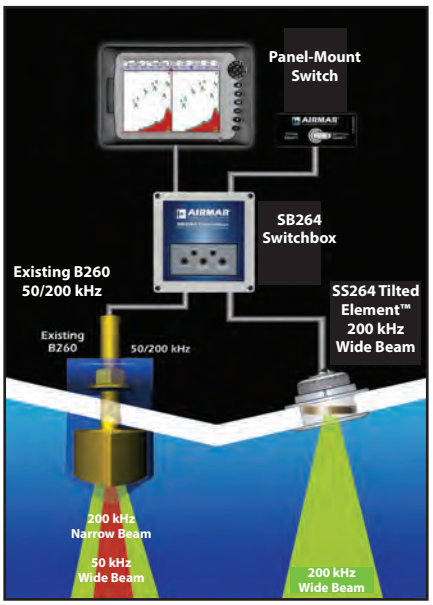
SB260, SB264

SB260 / SB264

- SB260 Allows you to use 2 separate transducers and connect them to a single fishfinder
- SB260 Allows you to switch between transducer A and transducer B
- SB264 Allows you to add a 200 kHz wide beam transducer (such as the SS264-W2) to an existing transducer installation
- SB264 Allows you to switch between 200 Wide and 200 Narrow
- Panel-mount waterproof switch with remote mounted box
- For use with all 1 kW fishfinders
- Operating Voltage: 9 VDC to 30 VDC



SB260

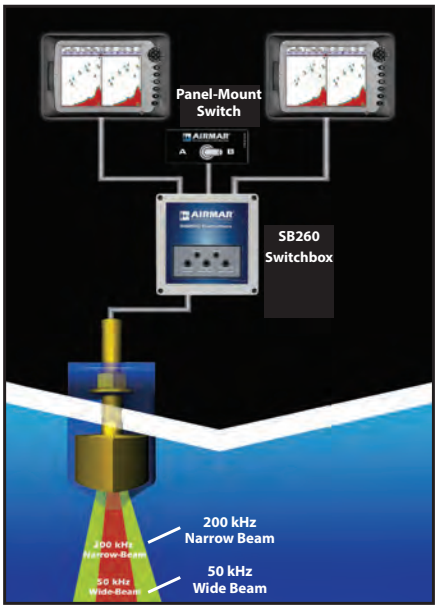


SB264

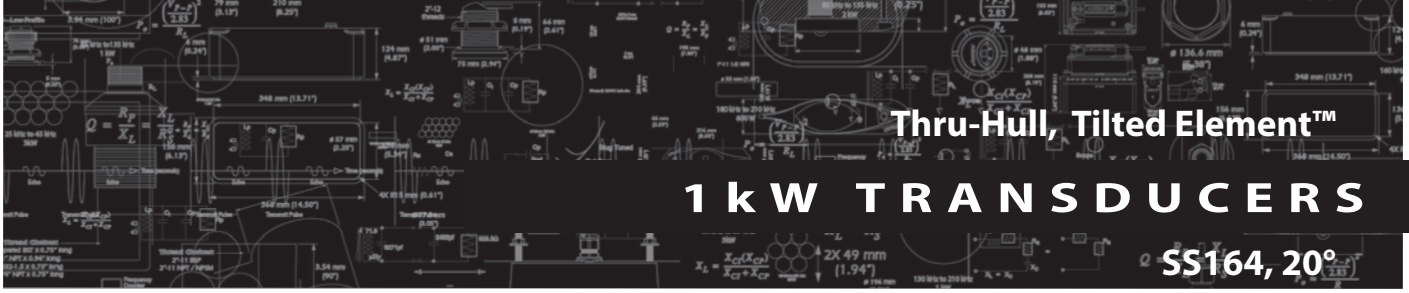
Comparison

SB260 / SB264—1 kW Switchbox

SB260	Switches between 2 transducers
SB264	Switches between narrow and wide



Product Schematic



Thru-Hull, Tilted Element™

1 kW TRANSDUCERS

SS164, 20°

SS164

Stainless Steel Housing

Airmar has taken our innovative Tilted Element™ technology to a higher power. The 1 kW, SS164 transducer is perfect for fast, trailered, tournament, sportfishing vessels that cannot install a thru-hull with a High-Performance Fairing. The low-profile bronze housing protrudes less than 6.35 mm (0.25") outside your hull, which results in excellent performance at speeds up to 30 knots (34 MPH).

- 0° for flat hull (0°–4° deadrise)
- 12° tilted for low v hull (4°–14° deadrise hull angle)
- 20° tilted element for deep sea hull (15°–25° deadrise hull angle)

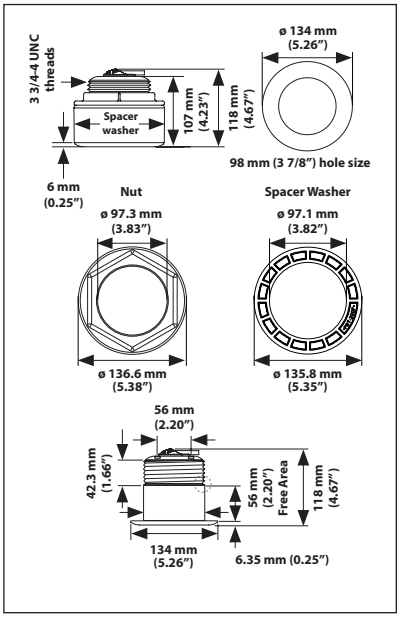
- Fixed 20° tilted version for 16° to 24° hull deadrise
- Fixed 12° tilted version for 8° to 15° hull deadrise

- Fixed 0° tilted version for 0° to 7° hull deadrise
- 1 kW power, 50/200 kHz multiple-ceramics
- Engineered for center-console and trailered boats
- Low-profile protrusion below the hull—no affect on your boats running performance
- Interfaces to any 600 W or 1 kW echosounder
- Bronze or stainless steel housings available
- Depth and new fast-response water-temperature sensor
- Boat Size: 8 m to 11 m (25' to 35')
- Usable Shaft Length: ~71 mm (2.80")

Frequency:	50/200 kHz
Cone:	50 kHz—22° x 20°, 200 kHz— 6° x 6°
RMS Power:	1,000 W

Maximum Depth Range:
50 kHz—353 m to 529 m (1,200' to 1,800')
200 kHz—152 m to 235 m (500' to 800')

Dimensions



SS164—Replacement Parts


Hull Nut


Spacer Washer


Rubber Washer


Isolation Bushing

SS164—50/200 kHz, 20° Tilt Transducers—Kit Includes Transducer and 1 kW Matching Cable

Furuno®

10-pin connector, Depth and temperature
Fits: Furuno units with 10-pin connector

Garmin®

6-pin connector, Depth and temperature
Fits: Garmin units with 6-pin connector

Garmin®

8-pin connector, Depth and temperature
Fits: Garmin GSD24

Geonav®

8-pin connector, Depth and temperature
Fits: Geonav sounder applications

Humminbird®

#9 connector, Depth and temperature
Fits: All 800, 900 and 1100 series except 967 3D

JRC®, Simrad®

7-pin connector, Depth and temperature
Fits: JRC FF-50, Simrad EQ-32, 33, 34

Lowrance®, Simrad®

7-pin Blue Lowrance, Depth and temperature
Fits: Lowrance, Simrad NSE, NSO, NSS with "BL" connector

Navico®

6-pin connector, Depth and temperature
Fits: Navman 6-pin, Northstar M Series, Simrad NX 40/45

Northstar®

10-pin connector, Depth and temperature
Fits: 490S, 491 (600 W), Nobeltec

Raymarine®

Radar connector, Depth and temperature
Fits: L755, 760, 770, 1250, DSM30, 250, 300,

Raymarine®

6/9-pin connector, Depth and temperature
Fits: Raymarine "A" series: DS400X, 500X, 600X, A50, A57, A65, A70, DSM25, e7

Koden®

8-pin connector, Depth and temperature
Fits: Koden CVS 126/128, CVS 1410, SVS 650

Thru-Hull, Low-Profile

1 kW TRANSDUCERS

SS164, 12°

SS164—50/200 kHz, 12° Tilt Transducers—Kit Includes Transducer and 1 kW Matching Cable

Furuno®	
	10-pin connector, Depth and temperature Fits: Furuno units with 10-pin connector

Garmin®	
	6-pin connector, Depth and temperature Fits: Garmin units with 6-pin connector

Garmin®	
	8-pin connector, Depth and temperature Fits: Garmin GSD24

Geonav®	
	8-pin connector, Depth and temperature Fits: Geonav sounder applications

Humminbird®	
	#9 connector, Depth and temperature Fits: All 800, 900 and 1100 series except 967 3D

JRC®, Simrad®	
	7-pin connector, Depth and temperature Fits: JRC FF-50, Simrad EQ-32, 33, 34

Lowrance®, Simrad®	
	7-pin Blue Lowrance, Depth and temperature Fits: Lowrance, Simrad NSE, NSO, NSS with "BL" connector

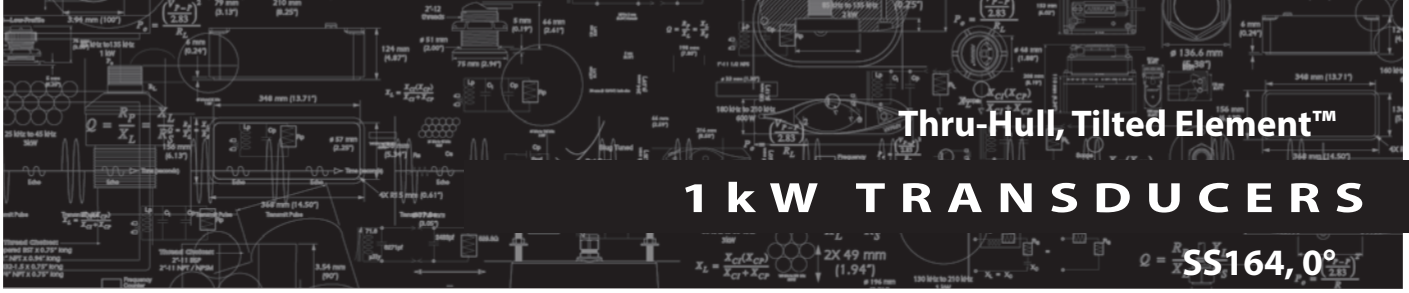
Navico®	
	6-pin connector, Depth and temperature Fits: Navman 6-pin, Northstar M Series, Simrad NX 40/45

Northstar®	
	10-pin connector, Depth and temperature Fits: 490S, 491 (600W), Nobeltec

Raymarine®	
	Radar connector, Depth and temperature Fits: L755, 760, 770, 1250, DSM30, 250, 300,

Raymarine®	
	6/9-pin connector, Depth and temperature Fits: Raymarine "A" series: DS400X, 500X, 600X, A50, A57, A65, A70, DSM25, e7

Koden®	
	8-pin connector, Depth and temperature Fits: Koden CVS 126/128, CVS 1410, SVS 650



SS164—50/200 kHz, 0° Tilt Transducers—Kit Includes Transducer and 1 kW Matching Cable

Furuno®	
	10-pin connector, Depth and temperature Fits: Furuno units with 10-pin connector

Garmin®	
	6-pin connector, Depth and temperature Fits: Garmin units with 6-pin connector

Garmin®	
	8-pin connector, Depth and temperature Fits: Garmin GSD24

Geonav®	
	8-pin connector, Depth and temperature Fits: Geonav sounder applications

Humminbird®	
	#9 connector, Depth and temperature Fits: All 800, 900 and 1100 series except 967 3D

JRC®, Simrad®	
	7-pin connector, Depth and temperature Fits: JRC FF-50, Simrad EQ-32, 33, 34

Lowrance®, Simrad®	
	7-pin Blue Lowrance, Depth and temperature Fits: Lowrance, Simrad NSE, NSO, NSS with "BL" connector

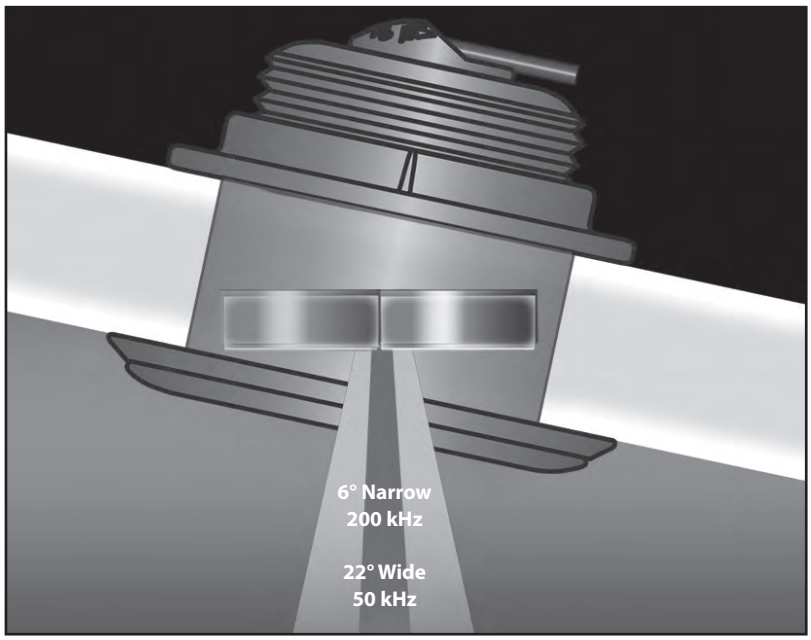
Navico®	
	6-pin connector, Depth and temperature Fits: Navman 6-pin, Northstar M Series, Simrad NX 40/45

Northstar®	
	10-pin connector, Depth and temperature Fits: 490S, 491 (600W), Nobeltec

Raymarine®	
	Radar connector, Depth and temperature Fits: L755, 760, 770, 1250, DSM30, 250, 300,

Raymarine®	
	6/9-pin connector, Depth and temperature Fits: Raymarine "A" series: DS400X, 500X, 600X, A50, A57, A65, A70, DSM25, e7

Koden®	
	8-pin connector, Depth and temperature Fits: Koden CVS 126/128, CVS 1410, SVS 650



The ceramic elements are tilted inside the housing, which compensates for your boats deadrise. This aims the beam straight toward the bottom, resulting in stronger echo returns and more accurate depth readings.

Thru-Hull, Tilted Element™

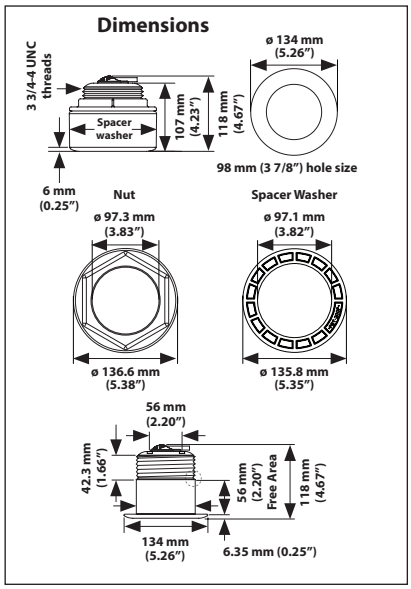
1 kW TRANSDUCERS

B164, 20°

B164 — *Bronze Housing*

- 0° for flat hull (0°–4° deadrise)
- 12° tilted for low v hull (4°–14° deadrise hull angle)
- 20° tilted element for deep sea hull (15°–25° deadrise hull angle)

- Fixed 20° tilted version for 16° to 24° hull deadrise
- Fixed 12° tilted version for 8° to 15° hull deadrise
- Fixed 0° tilted version for 0° to 7° hull deadrise
- 1 kW power, 50/200 kHz multiple-ceramics
- Engineered for center-console and trailered boats
- Low-profile protrusion below the hull—no affect on your boats running performance
- Interfaces to any 600 W or 1 kW echosounder
- Bronze or stainless steel housings available
- Depth and new fast-response water-temperature sensor
- Boat Size: 8 m to 11 m (25′ to 35′)
- Usable Shaft Length: ~71 mm (2.80″)



B164—Replacement Parts


Hull Nut


Spacer Washer


Isolation Bushing


Rubber Washer

Frequency: 50/200 kHz
Cone: 50 kHz—22° x 20°, 200 kHz— 6° x 6°
RMS Power: 1,000 W

Maximum Depth Range:
50 kHz—353 m to 529 m (1,200′ to 1,800′)
200 kHz—152 m to 235 m (500′ to 800′)

B164—50/200 kHz, 20° Tilt Transducers—Kit Includes Transducer and 1 kW Matching Cable

Furuno®	
	10-pin connector, Depth and temperature Fits: Furuno units with 10-pin connector

Garmin®	
	6-pin connector, Depth and temperature Fits: Garmin units with 6-pin connector

Garmin®	
	8-pin connector, Depth and temperature Fits: Garmin GSD24

Geonav®	
	8-pin connector, Depth and temperature Fits: Geonav sounder applications

Humminbird®	
	#9 connector, Depth and temperature Fits: All 800, 900 and 1100 series except 967 3D

JRC®, Simrad®	
	7-pin connector, Depth and temperature Fits: JRC FF-50, Simrad EQ-32, 33, 34

Lowrance®, Simrad®	
	7-pin Blue Lowrance, Depth & temperature Fits: Lowrance, Simrad NSE, NSO, NSS with "BL" connector

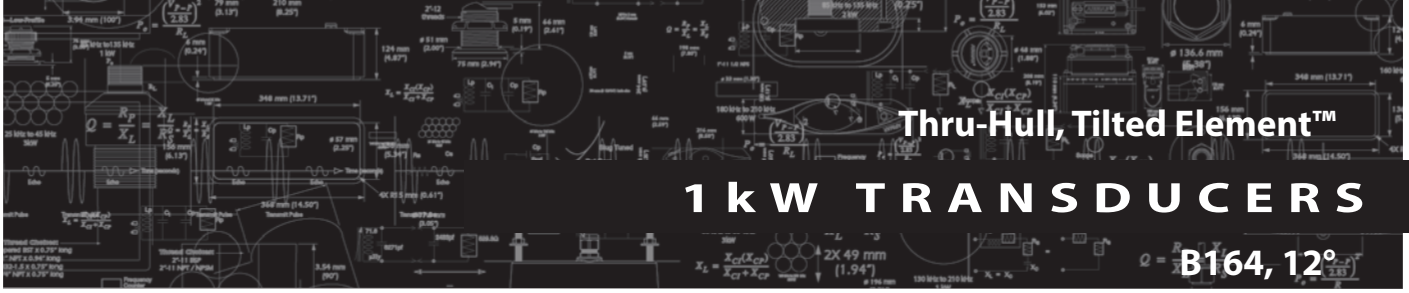
Navico®	
	6-pin connector, Depth and temperature Fits: Navman 6-pin, Northstar M Series, Simrad NX 40/45

Northstar®	
	10-pin connector, Depth and temperature Fits: 490S, 491 (600W), Nobeltec

Raymarine®	
	Radar connector, Depth and temperature Fits: L755, 760, 770, 1250, DSM30, 250, 300

Raymarine®	
	6/9-pin connector, Depth and temperature Fits: Raymarine "A" series: DS400X, 500X, 600X, A50, A57, A65, A70, DSM25, e7

Koden®	
	8-pin connector, Depth and temperature Fits: Koden CVS 126/128, CVS 1410, SVS 650



Thru-Hull, Tilted Element™

1 kW TRANSDUCERS

B164, 12°

B164—50/200 kHz, 12° Tilt Transducers—Kit Includes Transducer and 1 kW Matching Cable

Furuno®	
	10-pin connector, Depth and temperature Fits: Furuno units with 10-pin connector

Garmin®	
	6-pin connector, Depth and temperature Fits: Garmin units with 6-pin connector

Garmin®	
	8-pin connector, Depth and temperature Fits: Garmin GSD24

Geonav®	
	8-pin connector, Depth and temperature Fits: Geonav sounder applications

Humminbird®	
	#9 connector, Depth and temperature Fits: All 800, 900 and 1100 series except 967 3D

JRC®, Simrad®	
	7-pin connector, Depth and temperature Fits: JRC FF-50, Simrad EQ-32, 33, 34

Lowrance®, Simrad®	
	7-pin Blue Lowrance, Depth & temperature Fits: Lowrance, Simrad NSE, NSO, NSS with "BL" connector

Navico®	
	6-pin connector, Depth and temperature Fits: Navman 6-pin, Northstar M Series, Simrad NX 40/45

Northstar®	
	10-pin connector, Depth and temperature Fits: 490S, 491 (600W), Nobeltec

Raymarine®	
	Radar connector, Depth and temperature Fits: L755, 760, 770, 1250, DSM30, 250, 300

Raymarine®	
	6/9-pin connector, Depth and temperature Fits: Raymarine "A" series: DS400X, 500X, 600X, A50, A57, A65, A70, DSM25, e7

Koden®	
	8-pin connector, Depth and temperature Fits: Koden CVS 126/128, CVS 1410, SVS 650

Thru-Hull, Tilted Element™

1 kW TRANSDUCERS

B164, 0°

B164—50/200 kHz, 0° Tilt Transducers—Kit Includes Transducer and 1 kW Matching Cable

Furuno®	
	10-pin connector, Depth and temperature Fits: Furuno units with 10-pin connector

Garmin®	
	6-pin connector, Depth and temperature Fits: Garmin units with 6-pin connector

Garmin®	
	8-pin connector, Depth and temperature Fits: Garmin GSD24

Geonav®	
	8-pin connector, Depth and temperature Fits: Geonav sounder applications

Humminbird®	
	#9 connector, Depth and temperature Fits: All 800, 900 and 1100 series except 967 3D

JRC®, Simrad®	
	7-pin connector, Depth and temperature Fits: JRC FF-50, Simrad EQ-32, 33, 34

Lowrance®, Simrad®	
	7-pin Blue Lowrance, Depth and temperature Fits: Lowrance, Simrad NSE, NSO, NSS with "BL" connector

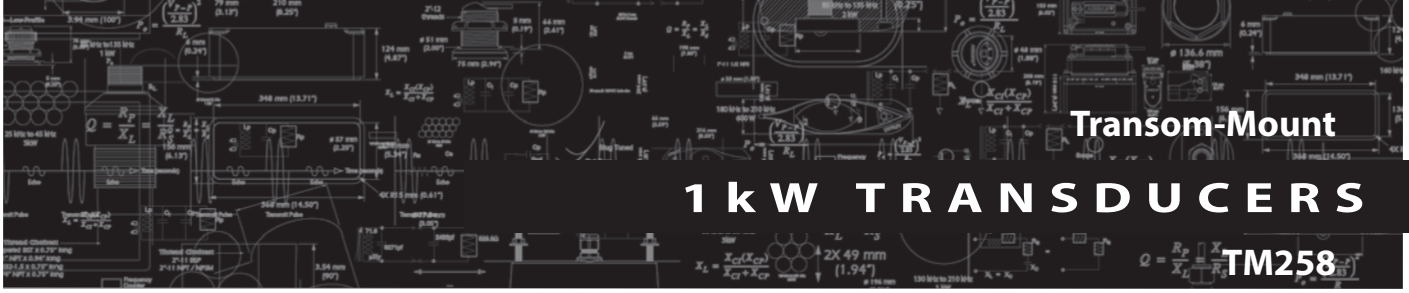
Navico®	
	6-pin connector, Depth and temperature Fits: Navman 6-pin, Northstar M Series, Simrad NX 40/45

Northstar®	
	10-pin connector, Depth and temperature Fits: 490S, 491 (600W), Nobeltec

Raymarine®	
	Radar connector, Depth and temperature Fits: L755, 760, 770, 1250, DSM30, 250, 300,

Raymarine®	
	6/9-pin connector, Depth and temperature Fits: Raymarine "A" series: DS400X, 500X, 600X, A50, A57, A65, A70, DSM25, e7

Koden®	
	8-pin connector, Depth and temperature Fits: Koden CVS 126/128, CVS 1410, SVS 650



Transom-Mount 1 kW TRANSDUCERS

TM258

The industry's first 1 kW transom-mount transducer has a new high-performance mounting bracket. The sleek, new bracket (included) makes the TM258 easier to install. Additionally, its streamlined shape will give you improved high-speed performance up to 30 knots (35 MPH).

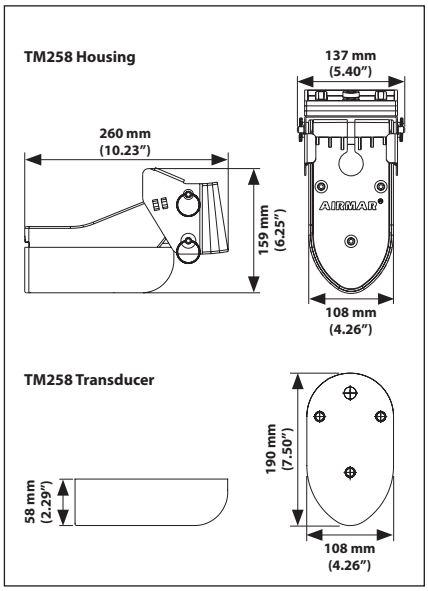
The TM258 will make 600 W sounders respond like a more powerful model. Get 25 times the sensitivity compared with a standard transom-mounted transducer. The TM258 packs four 50/200 kHz elements to focus narrow beams at both frequencies, so you'll see crisp targets and clear bottom definition.

Frequency:	50/200 kHz
Cone:	50 kHz—15° x 21°, 200 kHz—3° x 5°
RMS Power:	1,000 W

Maximum Depth Range:
50 kHz—441 m to 647 m (1,500' to 2,200')
200 kHz—206 m to 294 m (700' to 1,000')

- Depth and new fast-response water-temperature sensor
- Elliptical beam covers larger bottom area
- Bracket kick-up assembly locks in the "up" position and will not damage the transom
- Accommodates transom angles between 3° and 21°
- Urethane housing
- Boat Size: Up to 12 m (40')

Dimensions



TM258—Replacement Parts

Transom Bracket Kit

TM258—50/200 kHz Transducers—Kit Includes Transducer and 1 kW Matching Cable

Black Box	
	8-pin connector, Depth and temperature Fits: Koden ES502, Standard FF520, FF525, CPF-180i, CPF-300i

Humminbird®	
	#9 connector, Depth and temperature Fits: All 800, 900 and 1100 series except 967 3D

Furuno®	
	10-pin connector, Depth and temperature Fits: Furuno units with 10-pin connector

JRC®, Simrad®	
	7-pin connector, Depth and temperature Fits: JRC, Simrad

Furuno®	
	8-pin connector, Depth and temperature Fits: 667, 582

Navico®	
	7-pin connector, Depth and temperature Fits: Lowrance, Simard NSE, NSO, NSS w/ BL connector

Garmin®	
	6-pin connector, Depth and temperature Fits: Garmin 6-pin units 500 W RMS or higher

Navico®	
	6-pin connector, Depth and temperature Fits: Navman, Northstar, Simrad NX40/45

Garmin®	
	8-pin connector, Depth and temperature Fits: Garmin GSD24

Raymarine®	
	Radar Connector, Depth and temperature Fits: L755, L760, 770, 1250, DSM30, 250, 300

Geonav®	
	8-pin connector, Depth and temperature Fits: Geonav sounder applications

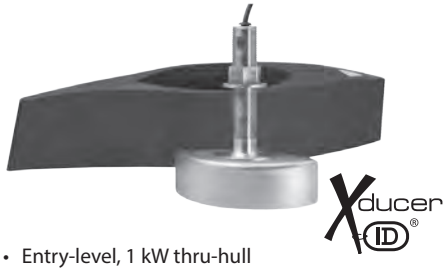
Koden®	
	8-pin connector, Depth and temperature Fits: CVS 126/128, CVS 1410, SVS 650

Thru-Hull, 1 kW

1 kW TRANSDUCERS

B258 *High-Definition, Digital Broadband Transducers*

B258 — *Bronze Housing*



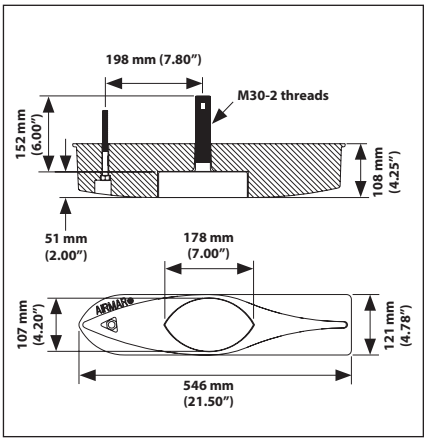
- Entry-level, 1 kW thru-hull
- Depth and fast-response water-temperature sensor
- Recommended for sport fishing boats above 9 m (30′) and small to mid-size commercial fishing boats
- Four 50/200 kHz ceramics as compared to one ceramic in 600 W units

The B258 is 25 times more sensitive than a single-element 50/200 kHz transducer. This innovative 1 kW transducer makes 600 W fishfinders perform like their more powerful big brothers—especially at 50 kHz. How does it do it? The B258 uses Airmar's new and unique ceramic-element construction. The resulting narrow beams will clearly distinguish individual fish and bottom fish from their habitat at depths down to 670 m (2,200′).

Usable Shaft Length: ~121 mm (4.75″)

- Provides greater surface area resulting in better sensitivity
- Compatible with single-transmission line sounders
- High-Performance Fairing included

Dimensions



Frequency: 50/200 kHz
Cone: 50 kHz—14° x 23°, 200 kHz—3° x 5°
RMS Power: 1 kW

Maximum Depth Range:
50 kHz—441 m to 647 m (1,500′ to 2,200′)
200 kHz—206 m to 294 m (700′ to 1,000′)

B258—Replacement Parts


Hull Nut


Standard Fairing


High-Performance Fairing

B258—50/200 kHz Transducers—Kit Includes Transducer and 1 kW Matching Cable

Furuno®	
	10-pin connector, Depth and temperature Fits: Furuno units with 10-pin connector

Garmin®	
	6-pin connector, Depth and temperature Fits: Garmin units with 6-pin connector

Garmin®	
	8-pin connector, Depth and temperature Fits: GSD24

Geonav®	
	8-pin connector, Depth and temperature Fits: Geonav sounder applications

Humminbird®	
	#9 connector, Depth and temperature Fits: All 800, 900 and 1100 series except 967 3D

JRC®	
	7-pin connector, Depth and temperature Fits: JRC FF-50, Simrad EQ32, 33, 34

Lowrance®	
	7-pin Blue Lowrance, Depth and temperature Fits: Units with blue collar connector

Navico®	
	6-pin connector, Depth and temperature Fits: Navman 6-pin, Northstar M Series, Simrad NX 40/45

Raymarine®	
	6/9-pin connector, Depth and temperature Fits: A50, A57, A65, A70, DSM 25, e7

Raymarine®	
	Radar connector, Depth and temperature Fits: L755, 760, 770, 1250, DSM30, 250, 300

Simrad®	
	7-pin blue Lowrance, Depth and temperature Fits: Simrad NSE, NSO, NSS

Koden®	
	8-pin connector, Depth and temperature Fits: ES502, VDO and Interphase Black Box

Koden®	
	8-pin connector, Depth and temperature Fits: Koden CVS126/128, CVS 1410, SVS 650

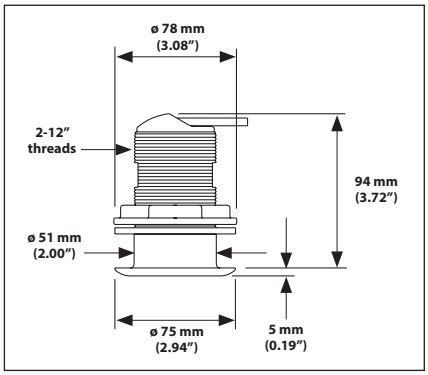
Standard®	
	8-pin connector, Depth and temperature Fits: FF520/525, CPF180i/300i

B117

- Bronze Housing
- Depth and Temperature
- Usable Shaft Length: ~66.5 mm (2.62")
- Replacement nut—405
- 10 m (33') cable length
- Boat Size: 8 m (25') and up

Frequency:	50/200 kHz
Cone:	50 kHz—45°, 200 kHz—12°
RMS Power:	600 W

Dimensions



B117—50/200 kHz Transducers— Kit Includes Transducer and 600 W Matching Cable

Furuno®

10-pin connector, Depth and temperature
Fits: Furuno units with 10-pin connector

Furuno®, Generic

8-pin Fuji connector, Depth and temperature
Fits: Older Furuno, Koden, Raytheon

Garmin®

6-pin connector, Depth and temperature
Fits: Garmin units with 6-pin connector

Garmin®

8-pin connector, Depth and temperature
Fits: GSD24

Geonav®

8-pin connector, Depth and temperature
Fits: Geonav sounder applications

Humminbird®

#9 connector, Depth and temperature
Fits: All 800, 900 and 1100 series except 967 3D

JRC®, Simrad®

7-pin connector, Depth and temperature
Fits: JRC FF-50, Simrad EQ32, 33, 34

Lowrance®

7-pin Blue Lowrance, Depth and temperature
Fits: Units with blue collar connector

Navico®

6-pin connector, Depth and Temperature
Fits: Navman 6-pin, Northstar M Series, Simrad NX40/45

Northstar®

10-pin connector, Depth and temperature
Fits: 490S, 491 (600W) Nobeltec

Raymarine®

6-pin connector, Depth and temperature
Fits: "A" Series, DS400X, 500X, 600X, A50, A57, A65, A70, DSM25, e7

Raymarine®

Radar connector, Depth and temperature
Fits: L755, 760, 770, 1250, DSM30, 250, 300

Raymarine®

Spade connector, Depth only
Fits: Raymarine ST60, ST40, ST30, Uniden

Simrad®

7-pin, blue Lowrance, Depth and temperature
Fits: Simrad NSE, NSO, NSS

Koden®

8-pin connector, Depth and temperature
Fits: Koden ES502, Interphase, Cobra, VDO

Koden®

8-pin connector, Depth and temperature
Fits: Koden CVS126/128, CVS 1410, SVS 650

Standard®

8-pin connector, Depth and temperature
Fits: Standard FF520/525, CPF-180i/300i

Thru-Hull, Tilted Element, Low-Profile

B60, 12°, 20°

600W TRANSDUCERS

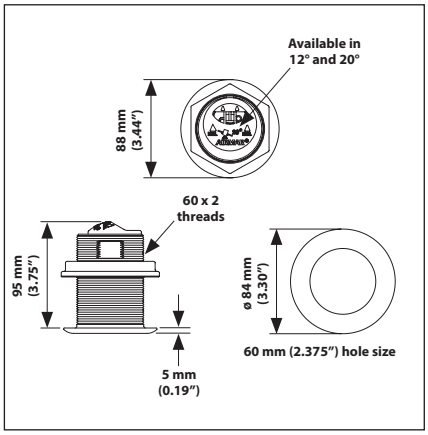
B60 — Bronze Housing

- 12° tilted for low v hull (4°–14° deadrise hull angle)
- 20° tilted element for deep sea hull (15°–25° deadrise hull angle)

- Fixed 20° tilted version for 16° to 24° hull deadrise
- Fixed 12° tilted version for 8° to 15° hull deadrise
- Depth and Temperature
- Engineered for center-console and trailered boats
- Low-profile protrusion below the hull—no affect on your boats running performance
- Boat Size: Up to 8 m (25')
- Usable Shaft Length: ~68.5 mm (2.70")

Frequency:	50/200 kHz
Cone:	50 kHz—45°, 200 kHz—12°
RMS Power:	600 W

Dimensions



Maximum Depth Range:
50 kHz—235 m to 353 m (800' to 1,200')
200 kHz—118 m to 206 m (400' to 700')

B60—50/200 kHz, 12°, 20° Tilt Transducers—Kit Includes Transducer and 600 W Matching Cable

Furuno®

8-pin Fuji, connector, Depth and temperature
Fits: Furuno, Koden, Raytheon

Furuno®

10-pin connector, Depth and temperature
Fits: Furuno units with 10-pin connector

Garmin®

6-pin connector, Depth and temperature
Fits: Garmin units with 6-pin connector

Garmin®

8-pin connector, Depth and temperature
Fits: Garmin GSD24

Geonav®

8-pin connector, Depth and temperature
Fits: Geonav sounder applications

Humminbird®

#9 connector, Depth and temperature
Fits: All 800,900 and 1100 series except 967 3D

JRC®, Simrad®

7-pin connector, Depth and temperature
Fits: JRC FF-50, Simrad EQ-32, 33, 34

Lowrance®

7-pin Blue Lowrance, Depth and temperature
Fits: Lowrance units w/ blue collar connector

Navico®

6-pin connector, Depth and temperature
Fits: Navman 6-pin, Northstar Expl., M series
Simrad NX 40/45

Northstar®

10-pin, Depth and temperature
Fits: Northstar 490S, 491, Black Box (600W)

Raymarine®

Radar connector, Depth and temperature
Fits: L755, 760, 770, 1250, DSM30, 250, 300

Raymarine®

Spade connector, Depth only
Fits: Raymarine ST30, 40, 60, Raydata, QT206

Raymarine®

6/9-pin connector, Depth and temperature
Fits: Raymarine "A" Series: DS400X, 500X,
600X, A50, A57, A65, A70, DSM25, e7

Koden®

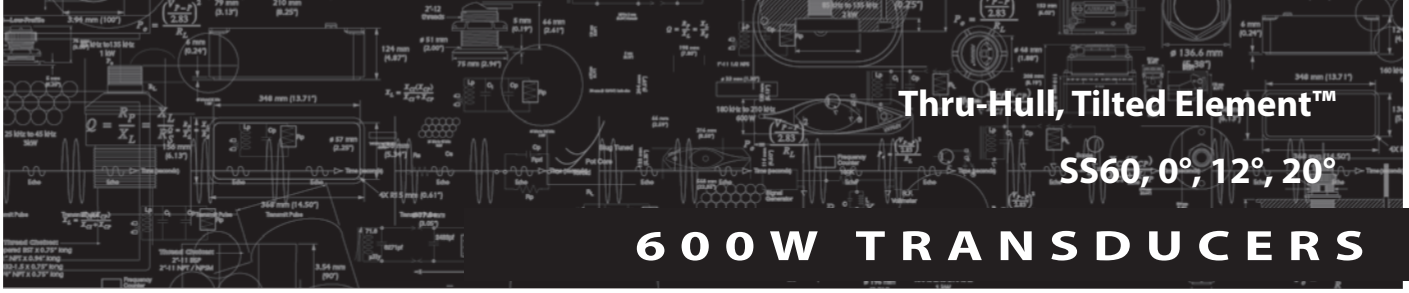
8-pin connector, Depth and temperature
Fits: Koden CVS126/128, CVS 1410, SVS 650

Standard Horiz®

8-pin connector, Depth and temperature
Fits: Standard FF520/525, CPF-180i/300i

Simrad®

7-pin Blue Lowrance, Depth and temperature
Fits: NSE, NSO, NSS



Thru-Hull, Tilted Element™

SS60, 0°, 12°, 20°

600W TRANSDUCERS

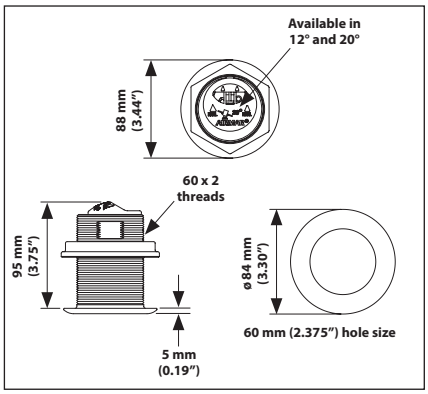
SS60 — Stainless Steel

- 0° for flat hull (0°–4° deadrise)
- 12° tilted for low v hull (4°–14° deadrise hull angle)
- 20° tilted element for deep sea hull (15°–25° deadrise hull angle)

- Fixed 20° tilted version for 16° to 24° hull deadrise
- Fixed 12° tilted version for 8° to 15° hull deadrise
- Fixed 0° tilted version for 0° to 7° hull deadrise
- Depth and Temperature
- Engineered for center-console and trailered boats
- Low-profile protrusion below the hull—no affect on your boats running performance
- Boat Size: Up to 8 m (25')
- Usable Shaft Length: ~68.5 mm (2.70")

Frequency: 50/200 kHz
Cone: 50 kHz—45°, 200 kHz—12°
RMS Power: 600 W

Dimensions



Maximum Depth Range:
50 kHz—235 m to 353 m (800' to 1,200')
200 kHz—118 m to 206 m (400' to 700')

SS60—50/200 kHz, 0°, 12°, 20° Tilt Transducers—Kit Includes Transducer and 600 W Matching Cable

Furuno®	
	8-pin Fuji, connector, Depth and temperature Fits: Furuno, Koden, Raytheon

Lowrance®, Simrad®	
	7-pin connector, Depth only Fits: Lowrance, Simrad NSE, NSO, NSS with "BL" connector

Furuno®	
	10-pin connector, Depth and temperature Fits: Furuno units with 10-pin connector

Navico®	
	6-pin connector, Depth and temperature Fits: Navman 6-pin, Northstar Expl., M series, Simrad NX 40/45

Garmin®	
	6-pin connector, Depth and temperature Fits: Garmin units with 6-pin connector

Northstar®	
	10-pin, Depth and temperature Fits: Northstar 490S, 491, Black Box (600W)

Garmin®	
	8-pin connector, Depth and temperature Fits: Garmin GSD24

Raymarine®	
	Radar connector, Depth and temperature Fits: L755, 760, 770, 1250, DSM30, 250, 300

Generic N/C	
	No connector, Depth and temperature Fits: Bare wire applications

Raymarine®	
	Spade connector, Depth only Fits: Raymarine ST30, 40, 60, Raydata, QT206

Geonav®	
	8-pin connector, Depth and temperature Fits: Geonav sounder applications

Raymarine®	
	6/9-pin connector, Depth and temperature Fits: Raymarine "A" Series: DS400X, 500X, 600X, A50, A57, A65, A70, DSM25, e7 Raymarine #E66062

Humminbird®	
	#9 connector, Depth and temperature Fits: All 800,900 and 1100 series except 967 3D

Koden®	
	8-pin connector, Depth and temperature Fits: Koden CVS126/128, CVS 1410, SVS 650

In-Hull

P79

600W TRANSDUCERS

P79

The P79 is easy-to-install, accommodating hull deadrise angles up to 22°.

1— Mount the base flange inside the hull
2— Adjust the locking ring for the correct hull deadrise angle
3— Fill the base with non-toxic anti-freeze (propylene glycol)
4— Turn and lock the transducer into the base

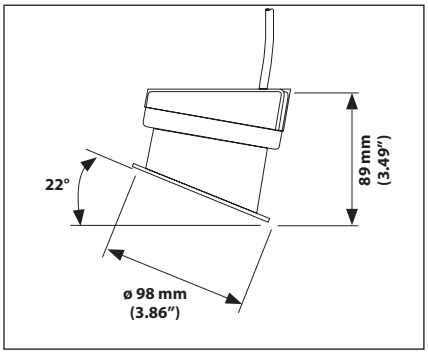
The unique adjustable-angle design ensures the beam is vertically oriented for maximum echo returns and the best possible performance. Because the transducer is mounted inside the hull, it is the perfect solution for rigid inflatable boats (RIBS) and racing sailboats.

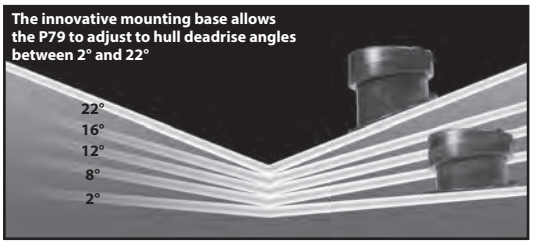
- Adjusts to hull deadrise angles from 2° to 22°
- No holes to drill
- Depth only
- Recommended for solid fiberglass hulls
- Epoxies to aluminum hulls under 0.38 mm (0.150") thick
- Recommended for planing-hull power boats, trailered boats, rigid inflatable boats (RIBS), and racing sailboats
- No hull protrusions
- Boat Size: Up to 8 m (25')

Frequency: 50/200 kHz
Cone: 50 kHz—45°, 200 kHz—12°
RMS Power: 600 W

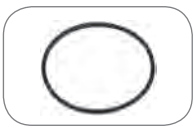
Maximum Depth Range:
50 kHz—206 m to 294 m (700' to 1,000')
200 kHz—118 m to 180 m (400' to 600')

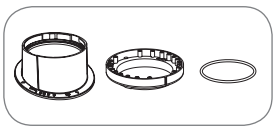
Dimensions





P79—Replacement Parts


O-Ring


Replacement Flange Base Kit


Marine-Tex

P79—50/200 kHz Transducers—Transducer and 600 W Matching Cable

Datamarine®	
	RCA connector, Depth only Fits: Navman, Datamarine, Vertex Standard

Fuji	
	8-pin connector, Depth only Fits: Koden

Furuno®	
	10-pin connector, Depth only Fits: Furuno units with 10-pin connector

Humminbird®	
	#9 connector, Depth only Fits: All 800, 900 and 1100 series except 967 3D

Garmin®	
	6-pin connector, Depth only Fits: Garmin units with 6-pin connector

Garmin®	
	8-pin connector, Depth only Fits: GSD24

Geonav®	
	8-pin connector, Depth and temperature Fits: Geonav sounder applications

Generic	
	3-pin Fuji connector, Depth only Fits: Older 3-pin

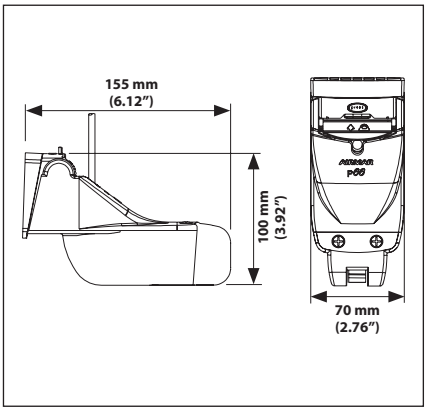
P66

Airmar's P66 is the best performing and most popular transom-mount, TRIDUCER® Multisensor in the market for many reasons. Foremost, the 50 kHz & 200 kHz, oversized, ceramic element produces focused beams highlighting detail in the water column and on the bottom surface.

Because of its hydrodynamic shape, water coming off the transom flows smoothly under the transducer face. This results in accurate, high-speed, depth and speed readings and clear display images. Going a step further, the P66 TRIDUCER® Multisensor also incorporates a patented noise-suppression system. The result is a 5 to 8 knot (6 to 9 MPH) improvement over standard construction through improved shielding from noise and vibration. And the plastic release bracket lets the P66 rotate up to protect the housing if struck by and object while underway.

- Best performing 600W transom-mount
- Depth, Speed, and Temperature
- Plastic kick-up bracket
- Square four-blade paddlewheel improves linearity, especially at low speeds
- Fits transom angles between 2° to 20°
- Transducer can be removed from bracket without the use of tools for easy service
- 10 meter (33') cable length standard for most versions
- Boat Size: Up to 12 m (40')

Dimensions



Frequency:	50/200 kHz
Cone:	50 kHz—45°, 200 kHz—11°
RMS Power:	600 W

Maximum Depth Range:
50 kHz—235 m to 353 m (800' to 1,200')
200 kHz—118 m to 206 m (400' to 700')

P66—Replacement Parts

Transom Bracket Kit

Paddlewheel and Carrier
Late Model, Square Blade

P66—50/200 kHz Transducers—Kit Includes Transducer and 600 W Matching Cable

Furuno®	
	10-pin connector, Depth, speed, and temp. Fits: Furuno units with 10-pin connector
Furuno®	
	8-pin Fuji connector, Depth, speed, and temp. Fits: Units with 8-pin Fuji connector
Garmin®	
	6-pin connector, Depth, speed, and temperature. Garmin #010-10192-01. Fits: Garmin units with 6-pin connector
Garmin®	
	6-pin connector, Depth and temperature Fits: Garmin units with 6-pin connector
Garmin®	
	8-pin connector, Depth and temperature Fits: Garmin GSD24
Geonav®	
	8-pin connector, Depth and temperature Fits: Geonav sounder applications
Humminbird®	
	#9 connector, Depth and temperature Fits: All 800,900 and 1100 series except 967 3D
JRC®, Simrad®	
	7-pin connector, Depth, speed, and temp. Fits: JRC FF-50, Simrad EQ-32,33,34
Navico®	
	7-pin connector, Depth, speed, and temp. Fits: Lowrance/Simrad Units with blue collar connector
Raymarine®	
	Radar connector, Depth, speed, and temperature. Raymarine #E66054. Fits: L755,L760,1250,DSM 30/250/300, C/E series
Koden®	
	8-pin connector, Depth and temperature Fits: Koden CVS126/128, CVS 1410, SVS650
Standard®	
	8-pin Depth, speed, and temperature Fits: FF520/525, CPF-180i/300i

Transom-Mount

P58

600W TRANSDUCERS

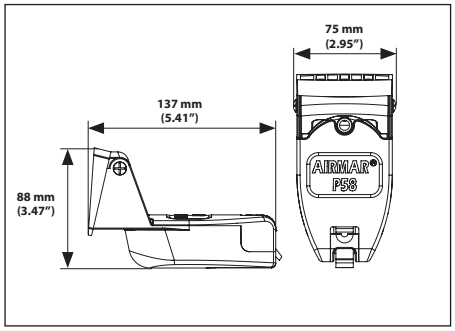
P58

- Transom-Mount
- Depth, Speed, and Temperature
- Sold with transom bracket
- Extension cables (See Transducer Parts and Accessories Section)
- 10 meter (33') cable length

Frequency: 50/200 kHz
Cone: 50 kHz—45°, 200 kHz—11°
RMS Power: 600 W

Maximum Depth Range:
50 kHz—235 m to 353 m (800' to 1,200')
200 kHz—118 m to 206 m (400' to 700')

Dimensions



P58—Replacement Parts

Transom Bracket Kit

Paddlewheel and Carrier
Late Model, Square Blade

P58—50/200 kHz Transducer

Navman	
6-pin connector, Depth, speed, and temp. 31-715-1-02	

Black Box	
	8-pin connector, Depth, speed, and temp. Fits: Koden ES502, Standard FF520, FF525, CPF-180i, CPF-300i 31-492-1-01

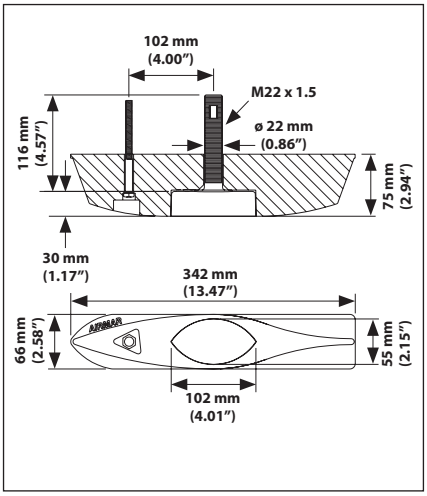
B45

- Bronze housing
- Depth and Temperature
- Recommended for planing-hull powerboats and cruising sailboats up to 9 m (30′)
- Good sensitivity in a compact housing
- Fast-response water-temperature sensor provides ±0.2°C (±0.1°F)
- High-Performance Fairing included
- Usable Shaft Length: ~92 mm (3.62″)
- Standard fairing block—33-351-01

Frequency: 50/200 kHz
Cone: 50 kHz—45° , 200 kHz—12°
RMS Power: 600 W

Maximum Depth Range:
50 kHz—235 m to 353 m (800′ to 1,200′)
200 kHz—118 m to 206 m (400′ to 700′)

Dimensions



B45—50/200 kHz Transducers—Kit Includes Transducer and 600 W Matching Cable

Datamarine®

RCA connector, Depth only
Fits: Navman, Datamarine, Vertex Standard

Furuno®

10-pin connector, Depth and temperature
Fits: Furuno units with 10-pin connector

Furuno®, Generic

8-pin Fuji connector, Depth and temperature
Fits: Raytheon V-700/800 Series,
Koden CVS-106L, 832, 833, Furuno 667, 582

Garmin®

6-pin connector, Depth and temperature
Fits: Garmin units with 6-pin connector

Garmin®

8-pin connector, Depth and temperature
Fits: GSD24

Geonav®

8-pin connector, Depth and temperature
Fits: Geonav sounder applications

Humminbird®

#9 connector, Depth and temperature
Fits: All 800, 900 and 1100 series except 967 3D

JRC®, Simrad®

7-pin connector, Depth and temperature
Fits: JRC FF-50, Simrad EQ32, 33, 34

Lowrance, Simrad®

7-pin, Depth and temperature
Fits: Lowrance, Simrad NSE, NSO, NSS with "BL" connector

Navico®

6-pin connector, Depth and temperature
Fits: Navman 6-pin, Northstar M Series, Simrad NX 40/45

Northstar®

10-pin connector, Depth and temperature
Fits: Northstar 409S, 491, (600W)

Raymarine®

Spade connector, Depth only
Fits: ST 30, 40, 60 Raydata, QT206

Raymarine®

6/9 connector, Depth and temperature
Fits: "A" series

Raymarine®

Radar connector, Depth and temperature
Fits: L755, 760, 770, 1250, DSM30, 250, 300

Koden®

8-pin connector, Depth and temperature
Fits: Koden CVS126/128, CVS 1410, SVS 650

Thru-Hull, TRIDUCER®

B744VL

600W TRANSDUCERS

B744VL

The B744VL TRIDUCER® Multisensor provides you with depth, speed, and temperature in one thru-hull housing. This unit is ideal for all 600 W fishfinders and requires only a single hole in the hull.

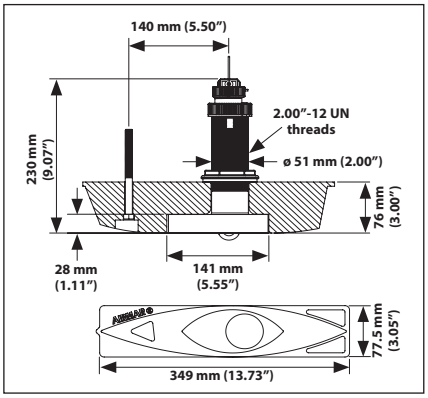
The B744VL's patented valve assembly prevents water from rushing into the hull when the insert is removed for cleaning or storage. The innovative housing design allows the TRIDUCER® Multisensor to be fully recessed into its custom High-Performance Fairing. The end result is a streamlined installation. At speeds above 30 knots (34 MPH), the B744VL will produce clear images and solid bottom tracking!

Usable Shaft Length: ~140 mm (5.5")

- Boat Size: Up to 9 m (30')
- Long-stem version of the B744V
- Depth, Speed, and Temperature
- Greatly improved high-speed performance at both 50 kHz and 200 kHz when installed with a high-performance fairing
- Patented self-closing sea valve reduces water flow into the hull when paddlewheel insert is removed

Frequency:	50/200 kHz
Cone:	50 kHz—45°, 200 kHz—12°
RMS Power:	600 W

Dimensions



Maximum Depth Range:
50 kHz—235 m to 353 m (800' to 1,200')
200 kHz—118 m to 206 m (400' to 700')

Speed Operating Range:
1 knot to 45 knots (1 MPH to 52 MPH)

B744VL—Replacement Parts


Hull Nut


High-Performance Fairings


Blanking Plugs


Paddlewheel Inserts


Plastic Cap Nut


Paddlewheel Only Kit


Paddlewheel & Valve Kit

B744VL—50/200 kHz Transducers

Standard®

8-pin connector, Depth, speed, and temp
Fits: Standard FF520/525, CPF-180i/300i

Furuno®

10-pin connector, Depth, speed, and temp
Fits: Furuno units with 10-pin connector

Garmin®

6-pin connector, Depth, speed, and temp
Fits: Garmin units with 6-pin connector

Garmin®

8-pin connector, Depth, speed, and temp
Fits: GDS24

Generic

8-pin Fuji connector, Depth, speed, and temp
Fits: Raytheon V-700/800 series, Koden CVS-106L, 832, 833, Furuno 667/582

Geonav®

8-pin connector, Depth, speed, and temp
Fits: Geonav sounder applications

JRC®, Simrad®

7-pin connector, Depth, speed, and temp
Fits: JRC FF-50, Simrad EQ/32/33/34 Raytheon V-850

Lowrance, Simrad®

7-pin Blue Lowrance, Depth, speed, and temp
Fits: Units w/ blue collar, Simrad NSE,NSO,NSS

Navico

6/9-pin connector, Depth, speed, and temp
Fits: Navman 6-pin, Northstar M Series, Simrad NX 40/45

Northstar®

10-pin connector, Depth, speed, and temp
Fits: 490S, 491 (600W), Nobeltec

Raymarine®

6/9-pin connector, Depth, speed, and temp
Fits: "A" Series: DS400X, 500X, 600X, A50, A57, A65, A70, DSM25, e7. Raymarine #E66062

Raymarine®

Radar connector, Depth, speed, and temp
Fits: L755, 760, 770, 1250, DSM30, 250, 300

Koden®

8-pin connector, Depth speed, and temp
Fits: Koden CVS126/128, CVS 1410, SVS 650

Koden®

8-pin connector, Depth, speed, and temp
Fits: Koden ES502

600W TRANSDUCERS

Newer B744V

Note: Upper and lower plastic retaining cap

B744VC does not utilize a clevis pin

Measurements

Dimensions figured by measuring points shown

Blanking Plug

Speed Insert

TRIDUCER® Junction Box Style

Thru-Hull, TRIDUCER® Spares

Blanking Plugs

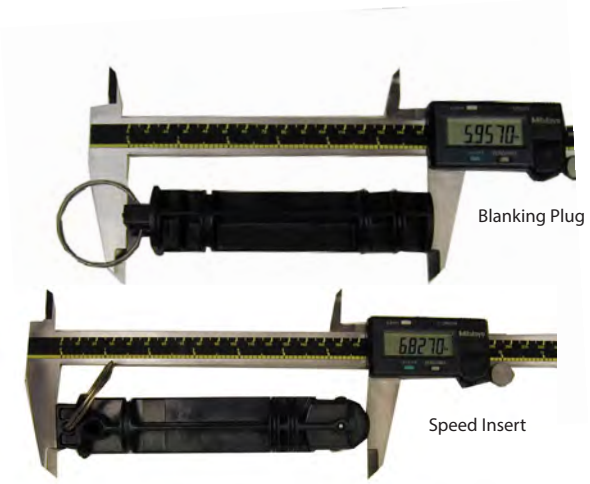
Thru-Hull, TRIDUCER®
Replacement Inserts
600W TRANSDUCERS

Original B744V

Note: Clevis pin with lower plastic retaining cap

Measurements

Dimensions figured by measuring points shown



TRIDUCER® Junction Box Style

25-115 non-valve style

All others, valve style

Thru-Hull, TRIDUCER® Spares

Blanking Plugs

Thru-Hull, Low-Profile

P319

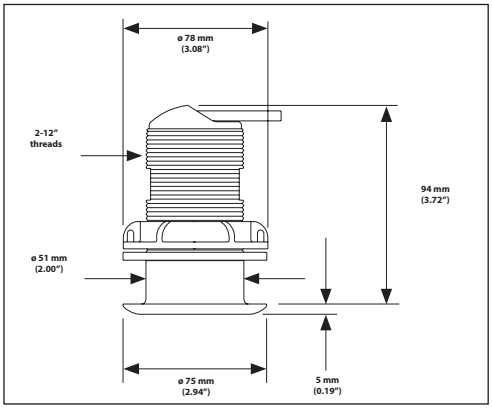
600W TRANSDUCERS

P319

- Plastic Housing
- Depth Only, Depth and Temperature
- Usable Shaft Length: ~63.5 mm (2.5")
- Replacement nut —04-004
- Replacement washer—09-452
- 10 m (33') cable length
- Boat Size: 8 m (25') and up

Frequency: 50/200 kHz
Cone: 50 kHz—45°
200 kHz—12°
RMS Power: 600 W

Dimensions



P319—50/200 kHz Transducers—Kit Includes Transducer and 600 W Matching Cable

Furuno®

10-pin connector, Depth and temperature
Fits: Furuno units with 10-pin connector

Furuno®, Generic

8-pin Fuji connector, Depth and temperature
Fits: Older Furuno, Koden, Raytheon

Garmin®

6-pin connector, Depth and temperature
Fits: Garmin units with 6-pin connector

Garmin®

8-pin connector, Depth and temperature
Fits: GSD24

Geonav®

8-pin connector, Depth and temperature
Fits: Geonav sounder applications

Humminbird®

#9 connector, Depth and temperature
Fits: All 800, 900 and 1100 series except 967 3D

JRC®, Simrad®

7-pin connector, Depth and temperature
Fits: JRC FF-50, Simrad EQ32, 33, 34

Lowrance®

7-pin Blue Lowrance, Depth and temperature
Fits: Units with blue collar connector

Navico®

6-pin connector, Depth and temperature
Fits: Navman 6-pin, Northstar M Series, Simrad NX40/45

Raymarine®

6-pin connector, Depth and temperature
Fits: "A" Series, DS400X, 500X, 600X, A50, A57, A65, A70, DSM25, e7

Raymarine®

Radar connector, Depth and temperature
Fits: L755, 760, 770, 1250, DSM30, 250, 300,

Raymarine®

Spade connector, Depth only
Fits: Raymarine ST60, ST40, ST30, Uniden

Simrad®

7-pin, blue Lowrance, Depth and temperature
Fits: Simrad NSE, NSO, NSS

Koden®

8-pin connector, Depth and temperature
Fits: Koden ES502, Interphase, Cobra, VDO

Koden®

8-pin connector, Depth and temperature
Fits: Koden CVS126/128, CVS 1410, SVS 650

Standard®

8-pin connector, Depth and temperature
Fits: Standard FF520/525, CPF-180i/300i

Thru-Hull, Stem

SS505

600W TRANSDUCERS

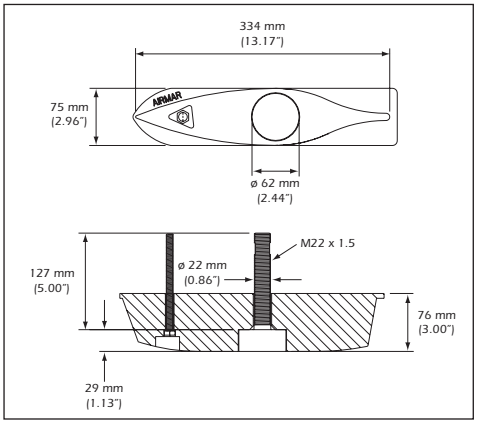
SS505

- Stainless steel housing
- Depth and Temperature
- Boat Size: 9 m (30') and up
- Good sensitivity in a compact housing
- Usable Shaft Length: ~105 mm (4.12")

Frequency: 50/200 kHz
Cone: 50 kHz—45° , 200 kHz—12°
RMS Power: 600 W

Maximum Depth Range:
50 kHz—235 m to 353 m (800' to 1,200')
200 kHz—118 m to 206 m (400' to 700')

Dimensions



SS505—50/200 kHz Transducers—Kit Includes Transducer and 600 W Matching Cable

Datamarine®

RCA connector, Depth only
Fits: Navman, Datamarine, Vertex Standard

Furuno®

10-pin connector, Depth and temperature
Fits: Furuno units with 10-pin connector

Furuno®, Generic

8-pin Fuji connector, Depth and temperature
Fits: Raytheon V-700/800 Series,
Koden CVS-106L, 832, 833, Furuno 667, 582

Garmin®

6-pin connector, Depth and temperature
Fits: Garmin units with 6-pin connector

Geonav®

8-pin connector, Depth and temperature
Fits: Geonav sounder applications

Humminbird®

#9 connector, Depth and temperature
Fits: All 800, 900 and 1100 series except 967 3D

JRC®, Simrad®

7-pin connector, Depth and temperature
Fits: JRC FF-50, Simrad EQ32, 33, 34

Simrad®

7-pin blue Lowrance, Depth and temperature
Fits: Simrad NSE, NSO, NSS

Lowrance®

7-pin, Depth only
Fits: Lowrance with "BL" connector

Navico®

6-pin connector, Depth and temperature
Fits: Navman 6-pin, Northstar M Series

Raymarine®

Radar connector, Depth and temperature
Fits: L755, 760, 1250, DSM 30, 250, 300

Raymarine®

Spade connector, Depth only
Fits: ST 30, 40, 60 Raydata, QT206

Raymarine®

6/9 pin connector, Depth and temperature
Fits: A50, A57, A65, A70, DSM 25, DS400X, 500X, 600X, e7

Simrad®

6-pin connector, Depth and temperature
Fits: Simrad NX 40/45

Koden®

8-pin connector, Depth and temperature
Fits: Koden CVS126/128, CVS 1410, SVS 650

LOW-POWER TRANSDUCERS

Transom-Mount

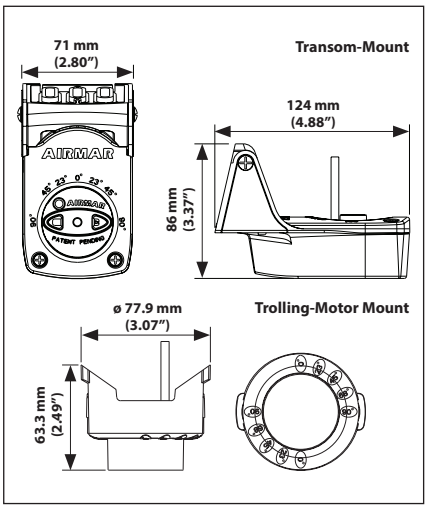
P48W

P48W Wide Beam

The new P48W transom-mount is designed for tournament–circuit freshwater bass fishermen. The ultra-wide 38° wide beam will mark more fish, giving you that tournament winning edge. See things in wide-screen on your fishfinder like a bass attacking your spinner bait as you quickly reel it back to the boat. The highly sensitive ceramic—the heart of the P48 can easily show changes in bottom composition which can help locate spawning beds where defensive bass might be lurking. The P48's innovative design allows you to change the transducer beam direction on the fly based on specific fishing conditions. When the beam is in the default port-starboard position, a wide 38° x 12° beam will mark more fish and bait to the port and starboard of the boat. Turn the beam to the bow-stern position, and the 12° x 38° beam will detect changes in bottom composition as you search along rocky bottom, sandy bottom, or weed beds in search for that ten pounder. Widen the possibilities of both your fishfinder and a tournament win with the P48W.

- The widest transom-mount transducer on the market
- Depth and Temperature
- 200 kHz operation
- 100 Watts RMS power (800 Watts Peak-to-Peak)
- Maximum Depth: 122 m (400')
- Transom or trolling-motor mounting
- True 38° x 12° beam that is measured at -3 dB
- Boat Size: 5 m to 8 m (18' to 25')
- Not compatible with 600 W and higher powered fishfinders

Dimensions



Frequency:	200 kHz
Cone:	38° x 12°
RMS Power:	100 W (800 W Peak-to-Peak)

P48W—Replacement Parts

Transom Bracket Kit

Suction Cup

P48W—200 kHz Transducer

Raymarine®	
	6/9-pin connector, Depth and temperature Fits: Raymarine "A" Series: A50D, A57D, A70D (PN: A102140)

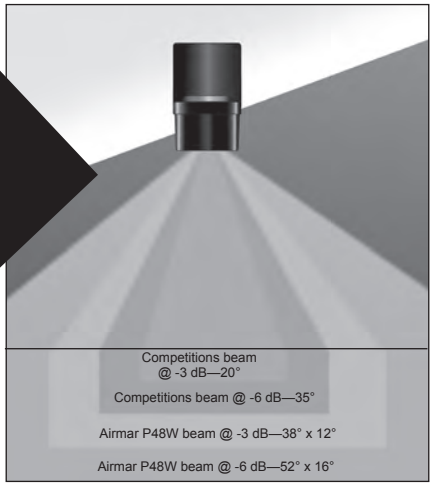
Lowrance®	
	7-pin, Depth and temperature 31-726-1-02

Caution: Operate at 200 kHz only

Operating at any other frequency will permanently damage the transducer and/or the echosounder.

Wider Than The Competition

No matter how you measure transducer beamwidth, the P48 is wider than the competition. Airmar measures transducer beamwidth at -3 dB. Other transducer manufacturers measure their beams at -6 dB and -10 dB, giving the false impression of a wider beam.



LOW-POWER TRANSDUCERS

Thru-Hull, TRIDUCER®

DST800

DST800—Analog

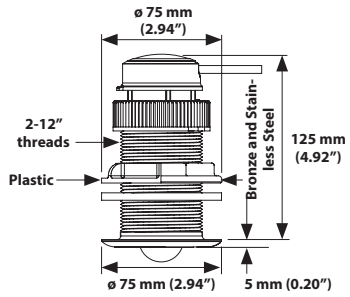
The DST800 is the market's first retractable TRIDUCER® Multisensor offering depth, speed and temperature in a single, 51 mm (2") fitting. Only one hole through the hull simplifies the installation, an attractive feature for boat builders and boat owners alike.

- Plastic housing
- Depth, Speed, and Temperature
- Echo sounding up to 61 m (200')
- Fan shaped transducer beam means no performance loss on hulls with up to 22° of deadrise
- Stable and accurate speed measurement from 0.9 to 52 knots
- Retractable insert
- Many housing options available
- For Digital readout units only
- Not for use with fairing block
- Usable Shaft Length: ~57 mm (2.25")

Frequency:	200 kHz
Cone:	11° / 46°
RMS Power:	100 W

Dimensions

P617V Plastic



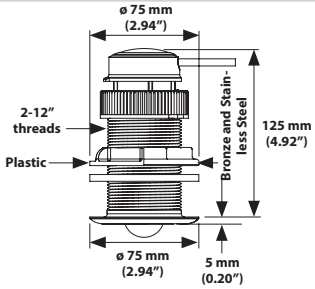
DST800 Smart™—NMEA 0183

- Thru-Hull Depth, Speed, & Temperature
- Maximum Depth Range: Up to 70 m (231')
- Fan shaped transducer beam means no performance loss on hulls with up to 22° of deadrise
- Stable and accurate speed measurement from 0.9 to 52 knots
- Retractable insert provides ease of serviceability
- Many housing options available
- 10 meter cable, no connector
- Usable Shaft Length: ~57 mm (2.25")

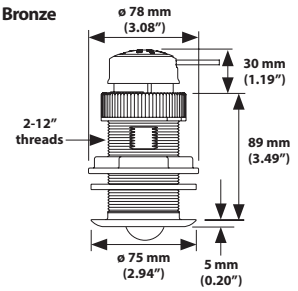
Frequency:	235 kHz
Cone:	10° x 44°
RMS Power:	60 W

Dimensions

P617V Plastic, B617V Bronze, SS617V Stainless



B17V Bronze



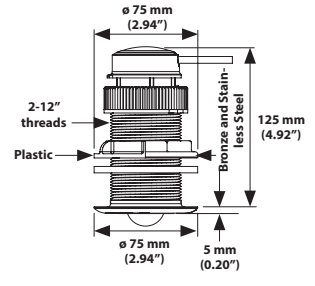
DST800 Smart™—NMEA 2000®

- Thru-Hull
- Depth, Speed, and Temperature
- Maximum Depth Range: Up to 100 m (330')
- Fan shaped transducer beam means no performance loss on hulls with up to 22° of deadrise
- Stable and accurate speed measurement from 0.9 to 52 knots
- Retractable Insert
- 6 m (19.8') NMEA 2000® cable & connector
- Usable Shaft Length: ~57 mm (2.25")

Frequency:	235 kHz
Cone:	10° x 44°
RMS Power:	100 W

Dimensions

P617V Plastic, B617V Bronze, SS617V Stainless



SMART SENSORS

NEW!

TRIDUCERS
ST900/ST950

ST900/ST950

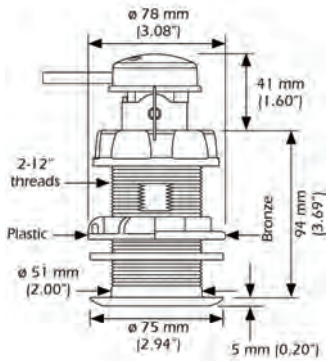
Airmar's new all-in-one ST900/ST950 TRIDUCER® just got smarter. Speed and temperature in one single unit with no moving parts makes this ultrasonic sensor a high precision, low maintenance solution for use on power and sailboats of all types and sizes. Boaters and OEMs will love this next generation technology from the company who invented the Smart™ Sensor.

Benefits

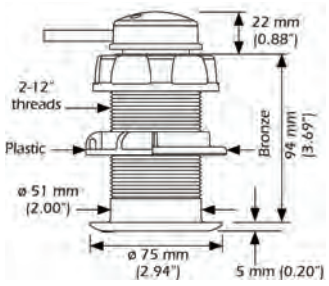
- Speed & temperature in one housing with no moving parts
- Up to five times faster pulse repetition frequency
- More accurate readings at all speeds
- Increased data update rate (up to 10 x per second)
- Increased Speed Range (.01 to 50 knots)

Dimensions

ST950



ST900



Features

High Precision Speed
The state-of-the-art processor in the ST900 calculates speed ten times every second, so it can respond to rapid changes in vessel speed. This translates into the most reliable and accurate ultrasonic speed sensor on the market—at a very competitive price.

Sampling Distance Below the Speed Sensor
25 mm to 1 m (1" to 40"), multiple sample depths

Speed Range
Up to 50 knots (57 MPH)

Available Outputs
- Analog
- NMEA 0183
- NMEA 2000®

Fast Response Water Temperature
With accuracy of ±0.5°C (±1.0°F), the DST900 makes searching for optimum swimming and fishing temperatures easy.

Water Temperature Range
-4°C to 40°C (32°F to 104°F)

Echo Correlation Processor
The ST900's echo correlation processor has proprietary adaptive digital signal processing that automatically adjusts according to boat speed and water clarity. Reliable operation in both salt and fresh water.

Simple Installation and Easy Maintenance
Only one hole through the hull simplifies the installation—an attractive feature for boat builders and boat owners alike.

Technical Information

Speed Sensor Transmit Frequency
4.5 MHz

Sounder Transmit Frequency
235 kHz

Pulse Repetition Frequency
0.5 kHz to 16 kHz (varies with speed)

Speed Reporting Rate
Default once per second (adjustable)

Sensor Cable Type
Airmar 6 m (20')

Sensor Cable Length
10 m (33') standard

Instrument Cable Length
3 m (10') standard, up to 30 m (100') possible

Supply Voltage
9 VDC to 40 VDC

Supply Current
80 mA – 200 mA, Average 125 mA @12 VDC

Sensor Hull Hole Diameter
51 mm (2")

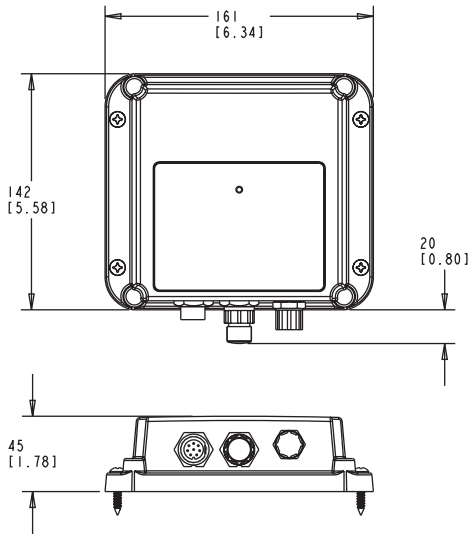
Sensor Insert Material
Plastic

Thru-Hull Housing Material
Plastic or bronze

Blanking Plug
Yes

Weight
—1.4 kg (3 lb)—Plastic
—1.8 kg (4 lb)—Bronze

CE Compliant
Yes

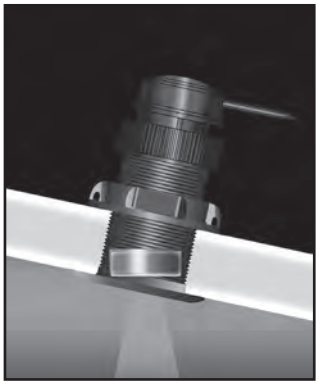


SMART SENSORS

NMEA 2000®

DT800 Tilted Element™, B122 Smart™

DT800 Tilted Element™



The ceramic element is tilted inside the housing, which compensates for your boats deadrise. This aims the beam straight toward the bottom resulting in strong bottom echo returns and accurate depth readings at any speed.

Smart™ Sensor Features

- NMEA 2000® output
- 100 W RMS power
- Maximum Depth Range: 180 m (594')
- Minimum Depth Range: 0.5 m (1.6')

NEW Broadband 235 kHz Ceramic:

- Enhanced depth performance
- Excellent high-speed performance
- Urethane face provides better sensitivity
- Retractable insert provides ease of serviceability
- 235 kHz eliminates mutual interference with fishfinders

- All models have depth and temperature
- 6 m (19.8') NMEA 2000® devicenet cable and connector
- Usable Shaft Length: ~57 mm (2.25")

Frequency:	235 kHz
Cone:	12°
RMS Power:	100 W

- Fixed 20° tilt for 16° to 24° deadrise
- Fixed 12° tilt for 8° to 15° deadrise
- Fixed 0° tilt for 0° to 8° deadrise
- 51 mm (2") housing
- Blanking plug included
- Accommodates maximum hull thicknesses 54 mm (2 1/8")
- Accommodates minimum hull thicknesses 6.3 mm (0.25")

NMEA 2000® DT800 Smart™ Sensors

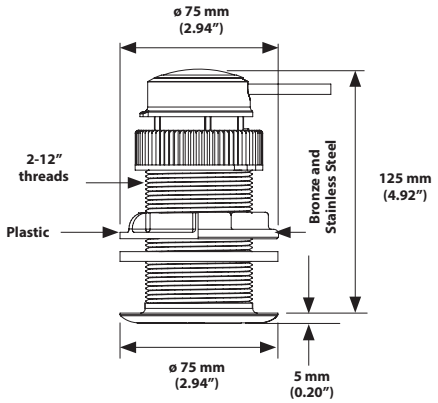
	**Low-Profile 0° Tilt**
	Plastic, with valve
	Bronze, with valve
	Stainless, with valve

	**Low-Profile 12° Tilt**
	Plastic, with valve
	Bronze, with valve
	Stainless, with valve

	**Low-Profile 20° Tilt**
	Plastic, with valve
	Bronze, with valve
	Stainless, with valve

Dimensions

P617V Plastic, B617V Bronze, SS617V Stainless Steel



B122 Smart™— NMEA 2000®

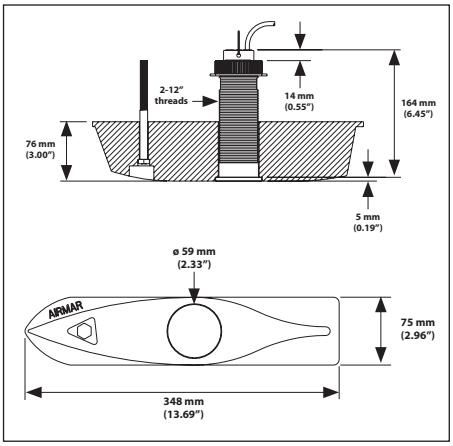
B122—235 kHz Transducer

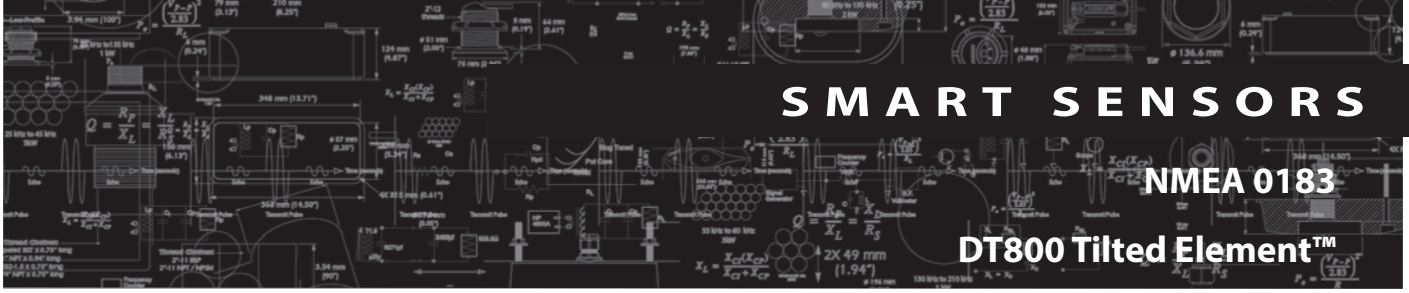
- Thru-Hull
- Depth and temperature
- High-Performance Fairing
- Retractable insert
- 6 m (19.8') NMEA 2000® cable
- Devicenet connector
- Usable Shaft Length: ~55 mm (2.18")

Frequency:	235 kHz
Cone:	12°
RMS Power:	100 W

AIRMAR®	
	Depth and temperature Fits: NMEA 2000® network

Dimensions

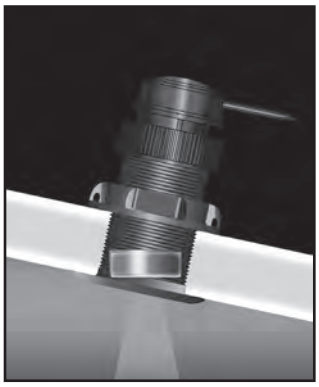




SMART SENSORS

NMEA 0183
DT800 Tilted Element™

DT800 Tilted Element™



(Also available in 170 kHz, call for details)

The ceramic element is tilted inside the housing, which compensates for your boats deadrise. This aims the beam straight toward the bottom resulting in strong bottom echo returns and accurate depth readings at any speed.

Features:

- Fixed 20° tilt for 16° to 24° deadrise
- Fixed 12° tilt for 8° to 15° deadrise
- Fixed 0° tilt for 0° to 8° deadrise
- 10 m (33′) cable length standard
- Maximum cable length 100 m (330′)
- 51 mm (2″) housing
- Blanking plug included
- Accommodates maximum hull thicknesses 54 mm (2 1/8″)
- Accommodates minimum hull thicknesses 6.3 mm (0.25″)

Frequency:	235 kHz
Cone:	12°
RMS Power:	60 W

NMEA 0183 Wiring:

- Red—Positive Voltage
- Black—Negative Voltage
- White—NMEA +
- Blue—NMEA -
- Bare—Shield

Smart™ Sensor Features:

- Broadband 235 kHz Ceramic: available with 0°, 12° and 20° tilt options
- Enhanced depth performance
- Maximum Depth Range: 100 m (330′)
- Minimum Depth Range: 0.5 m (1.6′)
- Urethane face provides better sensitivity
- Excellent high-speed performance

NMEA 0183 output:

- 60 W RMS power
- All models have depth and temperature
- 235 kHz eliminates interference with fishfinders
- Retractable insert provides ease of serviceability
- Reverse polarity protection
- Supply voltage 8.4 to 31.2 VDC
- Supply current 30 mA maximum
- Usable Shaft Length: ~57 mm (2.25″)

NMEA 0183 DT800 Smart™ Sensors

	**Low-Profile 0° Tilt**
	Plastic, with valve
	Bronze, with valve
	Stainless, with valve

	**Low-Profile 12° Tilt**
	Plastic, with valve
	Bronze, with valve
	Stainless, with valve

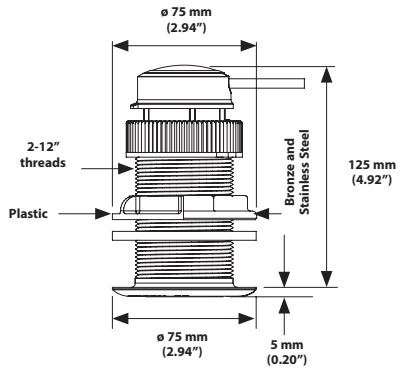
	**Low-Profile 20° Tilt**
	Plastic, with valve
	Bronze, with valve
	Stainless, with valve

	**Furuno® 0° Tilt**
	Plastic, no valve
	Bronze, no valve
	Bronze, no valve

Bronze - includes high-precision temperature sensor
Temperature Accuracy: ±0.3°C (±0.2F)
Resolution: 0.01°C (0.001°F)

Dimensions

P617V Plastic, B617V Bronze, SS617V Stainless Steel



- Also available in B17 and SS577 housings

SMART SENSORS

NMEA 0183

B122 Smart™, P66 Smart™

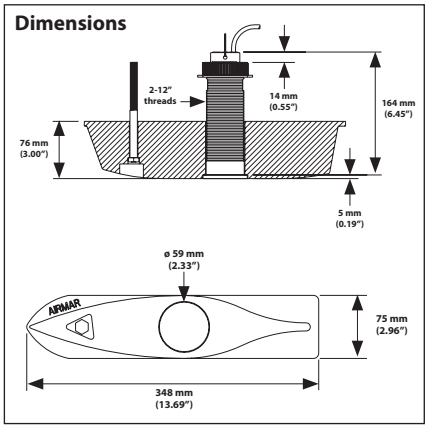
B122 Smart™— NMEA 0183

Can be installed with Low-Profile adaptor ring

- Provides Depth and Temperature
- Long-stem accommodates thick hulls and steep deadrise vessels
- High-Performance Fairing
- Fairing allows for use with up to 28° deadrise hulls
- 55 mm (2.18") usable shaft length
- 10 m (33') cable length
- Retractable Insert
- Usable Shaft Length: ~55 mm (2.18")

Frequency: 235 kHz
Cone: 12°

Dimensions



B122—235 kHz Transducer

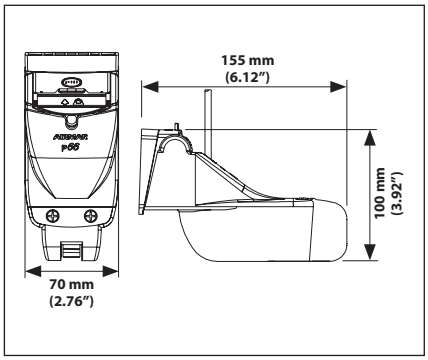
AIRMAR®	
	No connector, Depth and temperature Fits: NMEA 0183 instruments

P66 Smart™— NMEA 0183

- Transom-Mount
- Available as Depth and Temperature OR Depth, Speed, and Temperature
- 10 meter cable, no connector

Frequency: 235 kHz
Cone: 7°

Dimensions



P66—235 kHz Transducers

AIRMAR®	
	No connector, Depth, speed, and temperature Fits: NMEA 0183 instruments

AIRMAR®	
	No connector, Depth and temperature Fits: NMEA 0183 instruments

SMART SENSORS

NMEA 0183

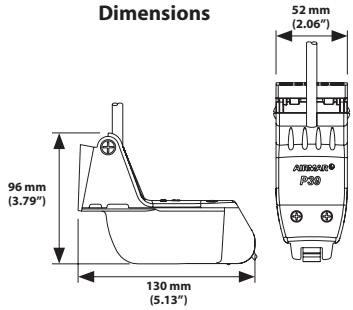
P39 Smart™, T80 Smart™

P39 Smart™— NMEA 0183

- Transom-Mount
- Depth, Speed, and Temperature
- 10 meter cable, no connector

Frequency:	235 kHz
Cone:	11°
RMS Power:	100 W

Dimensions



P39—235 kHz Transducer

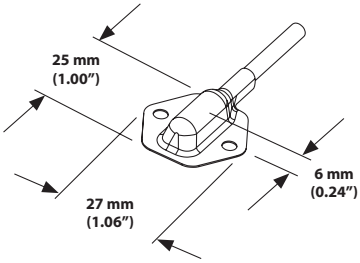
AIRMAR®	
	Depth, speed, and temperature Fits: NMEA 0183 instruments

T80 Smart™ Sensor

- Transom-Mount
- Smart™ temperature sensor with interface box
- NMEA 0183 output

Type Thermistor:	10,000 ohms
Temp Range:	0°C to 30°C (32°F to 86°F)

Dimensions



T80—Smart™ Temperature Sensor

AIRMAR®	
	No connector, Temperature only Fits: Units with NMEA 0183 input port

SMART SENSORS

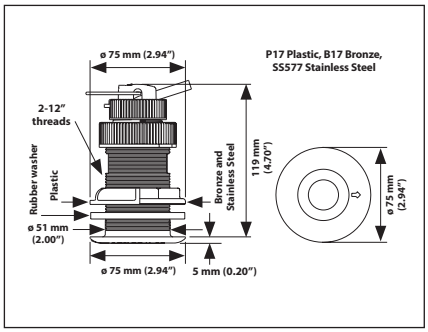
NMEA 2000®

HT200, DT800L, DST800L

HT200—High-Precision Temperature

- Thru-Hull
- Temperature only
- High-Precision readings with 0.01 resolution
- For commercial and sport fishing applications
- 25 mm (1″ exposed bronze button provides instant temperature changes to the display
- Plastic, bronze, or stainless steel, low-profile housings
- 6 m (19.8′) NMEA 2000® cable and connector

Dimensions



HT200—Transducers

AIRMAR®	
	Plastic housing, Temperature only Fits: NMEA 2000® network

AIRMAR®	
	Stainless housing, Temperature only Fits: NMEA 2000® network

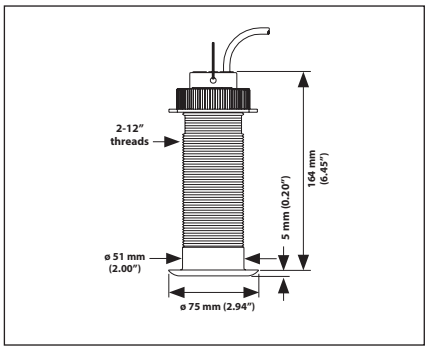
AIRMAR®	
	Bronze housing, Temperature only Fits: NMEA 2000® network

DT800L—Long-Stem

Can be installed with High-Performance Fairing or as a Low-Profile

- Thru-Hull, Long-Stem
- Depth and Temperature
- NMEA 2000® output , 100 W RMS power
- Maximum depth range 180 m (594′)
- Minimum depth range 0.5 m (1.6′)
- Retractable Insert
- 6 m (19.8′) NMEA 2000® cable & connector
- Usable Shaft Length: ~102 mm (4″)
- Can be installed with High-Performance Fairing or can be installed with Low-Profile adaptor ring

Dimensions



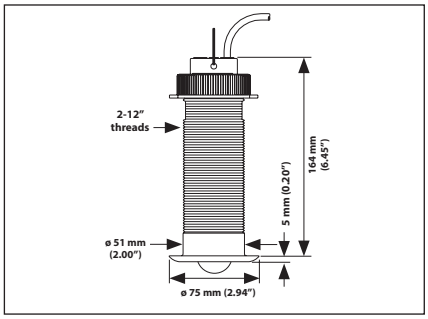
DT800L—Transducer

DST800L—Long-Stem

Can be installed with High-Performance Fairing or as a Low-Profile

- Thru-Hull, Long-Stem
- Depth, Speed, and Temperature
- NMEA 2000® output , 100 W RMS power
- Maximum depth range 100 m (330′)
- Minimum depth range 0.5 m (1.6′)
- Retractable Insert
- 6 m (19.8′) NMEA 2000® cable & connector
- Usable Shaft Length: ~102 mm (4″)
- Can be installed with High-Performance Fairing can be installed with Low-Profile adaptor ring

Dimensions



Specify either fairing or low-profile when ordering.

DST800L—Transducer

AIRMAR®	
	Bronze housing, Depth, speed and temperature Fits: NMEA 2000® network

Specify either fairing or low-profile when ordering.

SMART SENSORS

NMEA 2000®

DST800 Smart™, P39 Smart™, P79 Smart™

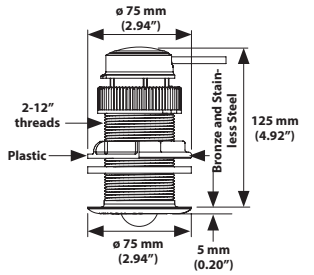
DST800 Smart™— NMEA 2000®

- Thru-Hull
- Depth, Speed, and Temperature
- Maximum Depth Range: Up to 100 m (330')
- Fan shaped transducer beam means no performance loss on hulls with up to 22° of deadrise
- Stable and accurate speed measurement from 0.9 to 52 knots
- Retractable Insert
- 6 m (19.8') NMEA 2000® cable & connector
- Usable Shaft Length: ~57 mm (2.25")

Frequency:	235 kHz
Cone:	10° x 44°
RMS Power:	100 W

Dimensions

P617V Plastic, B617V Bronze, SS617V Stainless



DST800—235 kHz Transducer

AIRMAR®	
	Plastic housing, Depth, speed, and temp Fits: NMEA 2000® network

AIRMAR®	
	Stainless housing, Depth, speed, and temp Fits: NMEA 2000® network

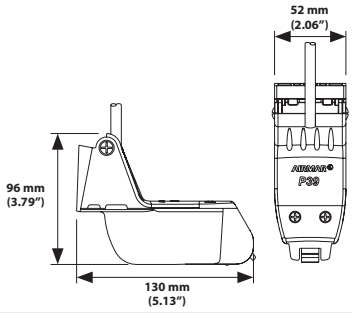
AIRMAR®	
	Bronze housing, Depth, speed, and temp Fits: NMEA 2000® network

P39 Smart™— NMEA 2000®

- Transom-Mount
- Depth, Speed, and Temperature
- 2 m (19.8') NMEA 2000® cable & connector

Frequency:	235 kHz
Cone:	11°
RMS Power:	100 W

Dimensions



P39—235 kHz Transducer

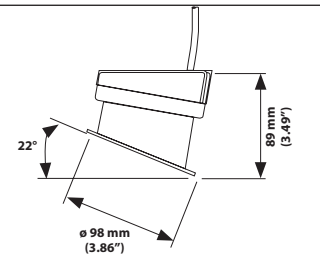
AIRMAR®	
	Depth, speed, and temperature Fits: NMEA 2000® network

P79 Smart™— NMEA 2000®

- In-hull transducer adjusts to deadrise angles up to 22°
- Depth Only
- No holes to drill, no hull protrusions
- 6 m (19.8') NMEA 2000® cable & connector

Frequency:	235 kHz
Cone:	7°
RMS Power:	100 W

Dimensions



P79—235 kHz Transducer

AIRMAR®	
	Depth only Fits: NMEA 2000® network

SMART SENSORS

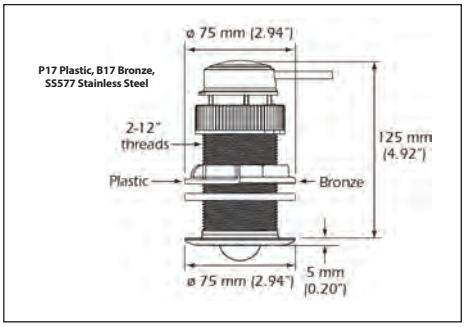
NMEA 2000®

ST850 Smart™, ST800 Smart™

ST850 Smart™— NMEA 2000®

- Thru-Hull
- Speed and Temperature
- Retractable insert with water valve
- 6 m (19.8') NMEA 2000® cable
- Devicenet connector
- Usable Shaft Length: ~57 mm (2.25")

Dimensions



ST850—235 kHz Transducer

AIRMAR®	
	Plastic housing, Speed and temperature Fits: NMEA 2000® network

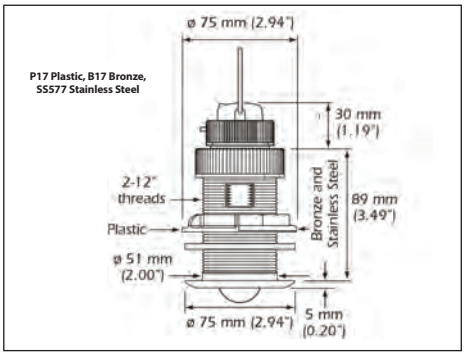
AIRMAR®	
	Stainless housing, Speed and temperature Fits: NMEA 2000® network

AIRMAR®	
	Bronze housing, Speed and temperature Fits: NMEA 2000® network

ST800 Smart™— NMEA 2000®

- Thru-Hull
- Speed and Temperature
- Retractable insert with water valve
- 6 m (19.8') NMEA 2000® cable
- Devicenet connector
- Usable Shaft Length: ~57 mm (2.25")

Dimensions



ST800—235 kHz Transducer

AIRMAR®	
	Plastic housing, Speed and temperature Fits: NMEA 2000® network

AIRMAR®	
	Stainless housing, Speed and temperature Fits: NMEA 2000® network

AIRMAR®	
	Bronze housing, Speed and temperature Fits: NMEA 2000® network

SMART SENSORS

NMEA 0183

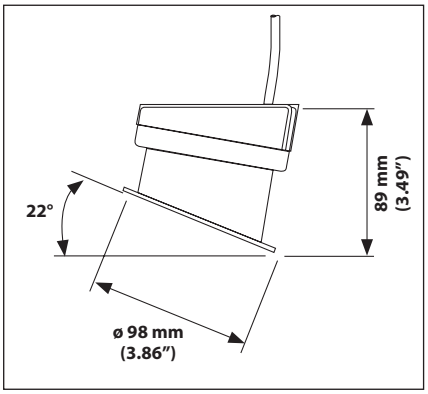
P79 Smart™, DST800 Smart

P79 Smart™— NMEA 0183

- In-hull, depth only transducer adjusts to deadrise angles up to 22°
- No holes to drill and no hull protrusions
- 10 meter cable, no connector

Frequency: 235 kHz
Cone: 7°

Dimensions



P79—235 kHz Transducer

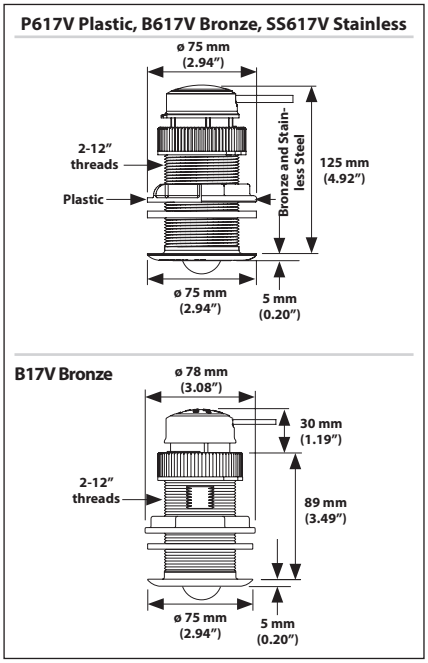
AIRMAR®	
	No connector, Depth only Fits: NMEA 0183 instruments

DST800 Smart™— NMEA 0183

- Thru-Hull Depth, Speed, & Temperature
- Maximum Depth Range: Up to 70 m (231')
- Fan shaped transducer beam means performance loss on hulls with up to 22° of deadrise
- Stable and accurate speed measurement from 0.9 to 52 knots
- Retractable insert provides ease of serviceability
- Many housing options available
- 10 meter cable, no connector
- Usable Shaft Length: ~57 mm (2.25")

Frequency: 235 kHz
Cone: 10° x 44°
RMS Power: 60 W

Dimensions



DST800—235 kHz Transducers

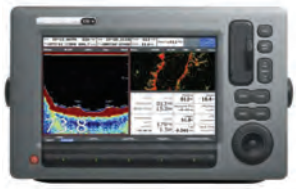
AIRMAR®	
	Plastic housing Fits: NMEA 0183 instruments

AIRMAR®	
	Stainless steel housing Fits: NMEA 0183 instruments

AIRMAR®	
	Bronze housing Fits: NMEA 0183 instruments

MIX & MATCH CABLE

LOWRANCE Raymarine SIMRAD KODEN

Lowrance Mix & Match Cable (30′)

33-561-01—600 W (5-Pin)
Passes Temperature
33-595-01—1 kW (9-Pin)

Raymarine Mix & Match Cable (30′)

33-621-01—600 W (5-Pin)
33-602-01—1 kW (9-Pin)

New Simrad NSE Mix & Match Cable (30′)

33-561-01—600 W (5-Pin)
33-595-01—1 kW (9-Pin

Simrad NX / Navman / Northstar (6-Pin) Mix & Match Cable (30′)

33-914-01—600 W (5-Pin)
33-601-01—1 kW (9-Pin)

Old Simrad / JRC (7-Pin) Mix & Match Cable (30′)

33-396-01—600 W (5-Pin)
33-593-01—1 kW (9-Pin)

New Koden Mix & Match Cable (30′)

33-628-01—600 W (5-Pin)
33-629-01—1 kW (9-Pin)

Old Koden (Fuji Connector) Mix & Match Cable (30′)

33-898-01—600 W (5-Pin)
33-635-01—1 kW (9–Pin)

Black Box*

Black Box* Mix & Match Cable (30′)

33-592-01—1 kW (9-Pin)

*Black Box Fishfinder Brands Include: Seiwa, Techmarine, Lorenz, VDO, Standard Horizon, Radio Ocean, C-Map, Koden, and Cobra, Interphase

600 W Transducers Use 5-Pin Mix and Match Cables

P66
P79
B45
B117
P319
SS505
B60 & SS60

1 kW Transducers Use 9-Pin Mix and Match Cables

B164 & SS164
SS264 Pair
B258
TM258
TM260 & TM270W
B260 & SS260
SS270W
M260
CM260

MIX & MATCH CABLE

FURUNO®

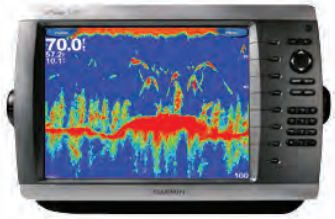
Furuno Mix & Match Cable (30′)

33-564-01—600 W (5-Pin)
33-594-01—1 kW (9-Pin)

Old Furuno (Fuji Connector) Mix & Match Cable (30′)

33-898-01—600 W (5-Pin)
33-598-01—1 kW (9–Pin)

GARMIN™



Garmin 6-pin Mix & Match Cable (30′)

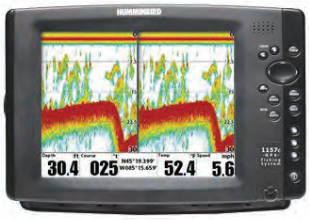
Depth Only
33-271-01—600 W (5-Pin)
33-599-01—1 kW (9-Pin)

Depth & Temperature
33-996-01—600 W (5-Pin)
33-591-01—1 kW (9-Pin)

Garmin 8-pin
(GSD24 only)
Mix & Match Cable (30′)

33-1178-01—600 W (5-Pin)
33-1179-01—1 kW (9-Pin)

HUMMINBIRD®*



Humminbird* Mix & Match Cable (30′)

33-630-01—600 W (5-Pin)
33-631-01—1 kW (9-Pin)

*Humminbird Models:
800 Series—600 W
900 & 1100 Series—1 kW

600 W Transducers Use 5-Pin Mix and Match Cables

P66
P79
B45
B117
P319
SS505
B60 & SS60

1 kW Transducers Use 9-Pin Mix and Match Cables

B164 & SS164
SS264 Pair
B258
TM258
TM260 & TM270W
B260 & SS260
SS270W
M260
CM260

Thru-Hull

SPEED/TEMPERATURE SENSORS

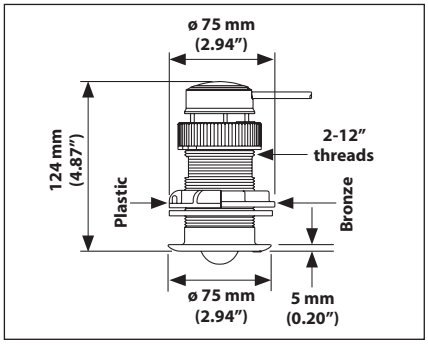
ST850 NMEA 2000®, ST700

ST850

- NMEA 2000® output
- Speed and Temperature
- Thru-Hull, Low-Profile Housing
- 6 m cable with Devicenet connector
- Retractable insert with water valve
- Usable Shaft Length: ~57 mm (2.25″)

Speed Range: 2 to 45 knots (2 to 52 MPH)

Dimensions



ST850—Speed & Temperature NMEA 2000®

AIRMAR®	
	Plastic housing, Speed and temperature Fits: NMEA 2000® network

AIRMAR®	
	Stainless housing, Speed and temperature Fits: NMEA 2000® network

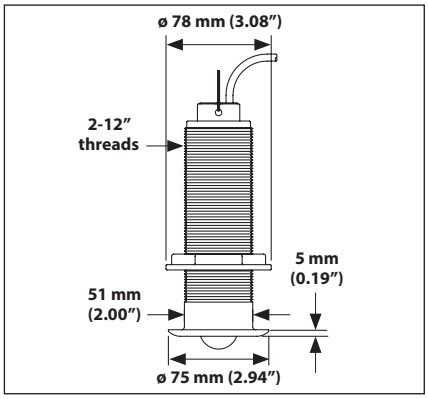
AIRMAR®	
	Bronze housing, Speed and temperature Fits: NMEA 2000® network

ST700

- Speed and Temperature
- Bronze, Long stem
- Thru-Hull, Low-Profile Housing
- 6″ long housing for installation in thick hulls
- Designed with self-closing valve.
  Stops most waterflow upon removal of insert
- Usable Shaft Length: ~124 mm (4.87″)

Supply Voltage: 5 VDC to 25 VDC
Speed Range: 2 to 45 knots (2 to 52 MPH)

Dimensions



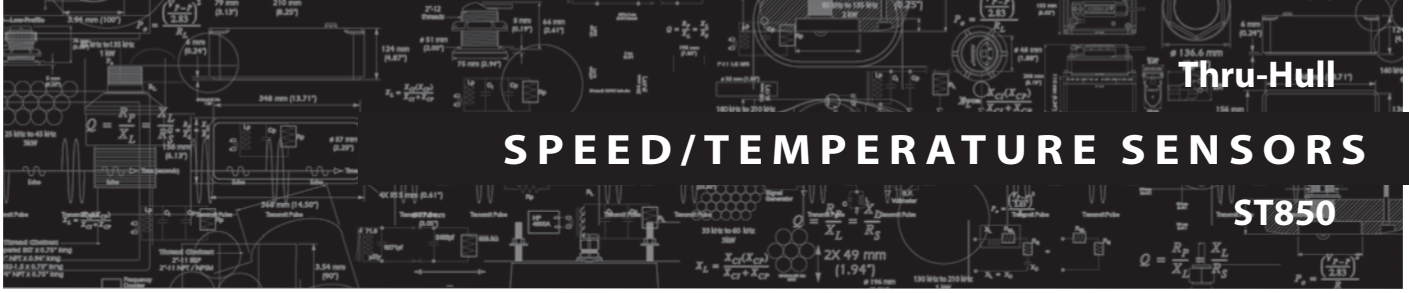
ST700—Replacement Parts

Spare Paddlewheel
and Valve Kit

ST700—Speed & Temperature

AIRMAR®	
	8-pin connector, Speed and temperature Fits: Units with 8-pin connector

AIRMAR®	
	Spade connector, Speed and temperature Fits: ST30, 40, 60, 292, Raydata



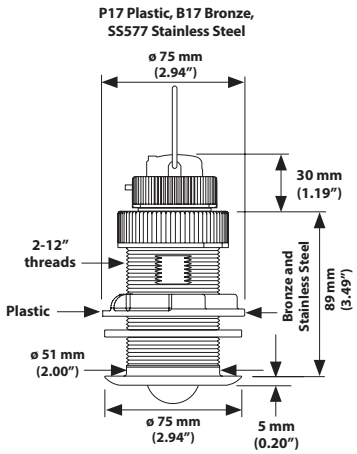
Thru-Hull
SPEED/TEMPERATURE SENSORS
ST850

ST850

- Speed and Temperature
- Thru-Hull, Low-Profile Housing
- Designed with self-closing valve.
  Stops most waterflow upon removal of insert
- Usable Shaft Length: ~57 mm (2.25″)

Supply Voltage: 5 VDC to 25 VDC
Speed Range: 2 to 45 knots (2 to 52 MPH)

Dimensions



ST850—Replacement Parts

Spare Paddlewheel and Valve Kit

Blanking Plug Kit

Stainless Steel Housing

ST850—Speed & Temperature Sensors

AIRMAR®	(Plastic)
	8-pin connector, Speed and temperature Fits: Units with 8-pin connector

AIRMAR®	(Bronze)
	8-pin connector, Speed and temperature Fits: Units with 8-pin connector

B&G®	(Plastic)
	No connector, Speed and temperature Fits: Hardwired units (15 meter cable)

B&G	(Bronze)
	No connector, Speed and temperature Fits: Hardwired units (15 meter cable)

Furuno®	(Plastic)
	6-pin connector, Speed and temperature Fits: Units with 6-pin connector (Not for BBFF3)

Furuno®	(Bronze)
	6-pin connector, Speed and temperature Fits: Units with 6-pin connector (Not for BBFF3)

Garmin®	(Plastic)
	6-pin with Y-cable, Speed and temperature Fits: Units with 6-pin connector

Garmin®	(Bronze)
	6-pin with Y-cable, Speed and temperature Fits: Units with 6-pin connector

Garmin®	(Plastic)
	8-pin with Y-cable, Speed and temperature Fits: GSD24 (010-10365-20)

Garmin®	(Bronze)
	8-pin with Y-cable, Speed and temperature Fits: GSD24

Simrad®	(Plastic)
	7-pin with Y-cable, Speed and temperature Fits: Units with 7-pin connector

Simrad®	(Bronze)
	7-pin with Y-cable, Speed and temperature Fits: Units with 7-pin connector

Raymarine®	(Plastic)
	Spade connector, Speed and temperature Fits: ST30, 40, 60, Raydata

Raymarine®	(Bronze)
	Spade connector, Speed and temperature Fits: ST30, 40, 60, Raydata

Replacement Inserts

SPEED/TEMPERATURE SENSORS

ST850, ST800

ST850 Insert Only

- Replacement insert only
- Speed and Temperature

ST850—Replacement Parts

Spare Paddlewheel

ST850 Insert—Speed and Temperature

AIRMAR®	
	8-pin Fuji connector, Speed and temperature Fits: Units with 8-pin connector

Raymarine®	
	Spade connector, Speed and temperature Fits: ST30, 40, 60, 292, Raydata

B&G®	
	No connector, Speed and temperature Fits: Hardwired units

ST800 Insert Only

- Replacement insert only
- Speed and Temperature

ST800—Replacement Parts

Spare Paddlewheel

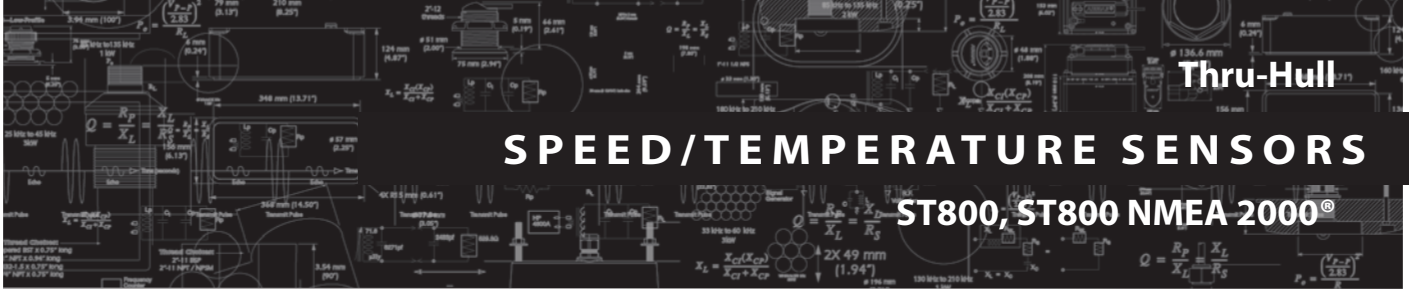
ST800 Insert—Speed and Temperature

Autohelm®	
	5-pin connector, Speed and temperature Fits: ST50

Raymarine®	
	Spade connector, Speed and temperature Fits: ST30, 40, 60, 292, ST50, Raydata

AIR044-103—Converter

AIRMAR®	
	7-pin and bare wire. Temperature only Converts analog temp to NMEA 0183 for adding temp to RD30/other Navnet devices Fits: Analog to NMEA 0183

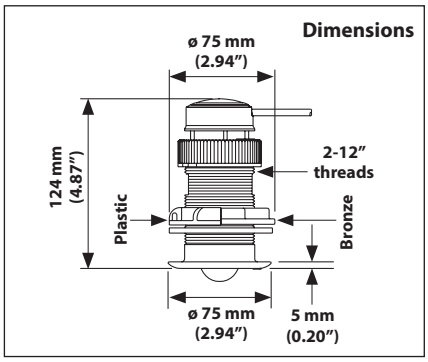


Thru-Hull
SPEED/TEMPERATURE SENSORS
ST800, ST800 NMEA 2000®

ST800

- NMEA 2000® output
- Speed and Temperature
- Thru-Hull, Low-Profile Housing
- Devicenet connector
- Retractable insert with water valve
- 6 m cable with Devicenet connector
- Usable Shaft Length: ~57 mm (2.25")

Speed Range: 2 to 45 knots (2 to 52 MPH)



ST800—Speed & Temperature NMEA 2000®

AIRMAR®	
	Plastic housing, Speed and temperature Fits: NMEA 2000® network

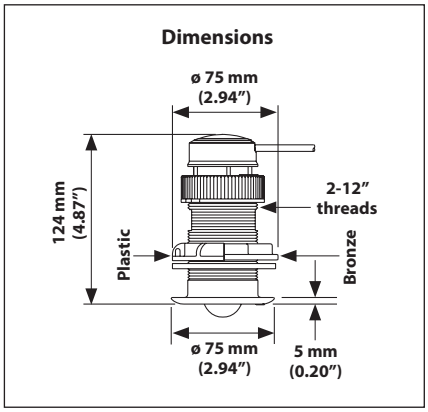
AIRMAR®	
	Stainless housing, Speed and temperature Fits: NMEA 2000® network

AIRMAR®	
	Bronze housing, Speed and temperature Fits: NMEA 2000® network

ST800

- Speed and Temperature
- Thru-Hull, Low-Profile Housing
- Designed with self-closing valve.
  Stops most waterflow upon removal of insert
- Usable Shaft Length: ~57 mm (2.25")

Supply Voltage: 5 VDC to 25 VDC
Speed Range: 2 to 45 knots (2 to 52 MPH)



ST800—Replacement Parts

Spare Paddlewheel and Valve Kit

Blanking Plug Kit

Stainless Steel Housing

ST800—Speed & Temperature

Raymarine®	(Plastic)
	Y-cable, Speed and temperature Fits: L755, L760, 1250, DSM30, 250, 300

Raymarine®	(Bronze)
	Y-cable, Speed and temperature Fits: L755, L760, 1250, DSM30, 250, 300

Raymarine®	(Plastic)
	5-pin, Speed and temperature Fits: ST50 only

Raymarine®	(Bronze)
	5-pin, Speed and temperature Fits: ST50 only

Raymarine®	(Plastic)
	Spade connector, Speed and temperature Fits: ST30, 40, 60, 292, Raydata

Raymarine®	(Bronze)
	Spade connector, Speed and temperature Fits: ST30, 40, 60, 292, Raydata

Thru-Hull

SPEED/TEMPERATURE SENSORS

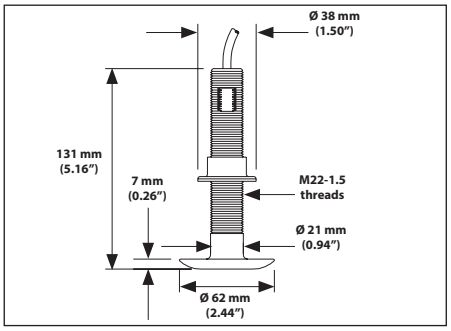
T42, HT200

T42

- Bronze, Thru-Hull, Analog Temperature
- 10,000 ohm thermistor
- Usable Shaft Length ~104 mm (4.10")

Supply Voltage:	6 VDC to 28 VDC
Supply Current:	30 mA maximum
Temp Range:	0°C to 30°C (32°F to 86°F)

Dimensions



T42—Analog Temperature Sensor

Airmar®	
	No connector, Temperature only Fits: Any unit requiring 10k ohm thermistor

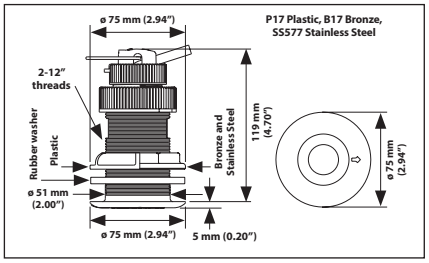
Raymarine®	
	E66022 "Y" cable, Temperature only Fits: L755, L760, 1250, DSM30, 250, 300

Garmin®	
	6-pin "Y" cable, Temperature only Fits: All Garmin 6-pin units

HT200—High-Precision Temperature

- Thru-Hull, Temperature Only
- High-Precision readings with 0.01 resolution
- For commercial and sport fishing applications
- 25 mm (1" exposed bronze button provides instant temperature changes to the display)
- Plastic, bronze, or stainless steel low-profile housings
- 6 m (19.8') NMEA 2000® cable & connector

Dimensions

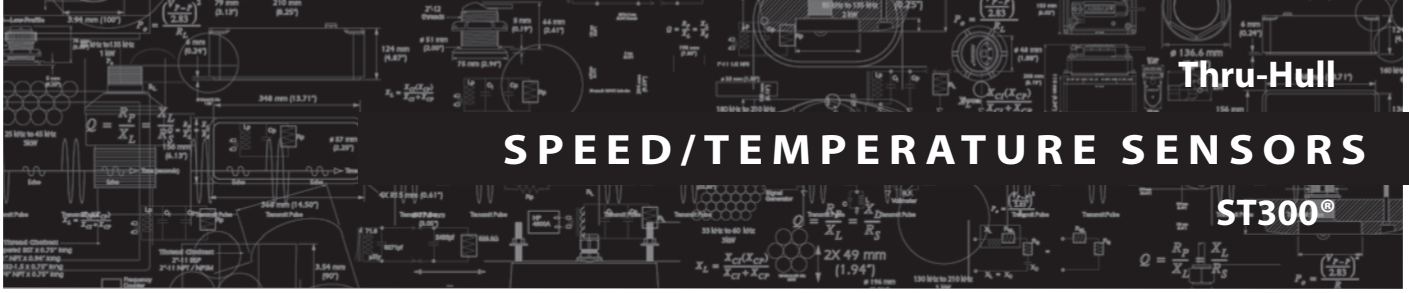


HT200—Transducers

AIRMAR®	
	Plastic housing, Temperature only Fits: NMEA 2000® network

AIRMAR®	
	Stainless housing, Temperature only Fits: NMEA 2000® network

AIRMAR®	
	Bronze housing, Temperature only Fits: NMEA 2000® network



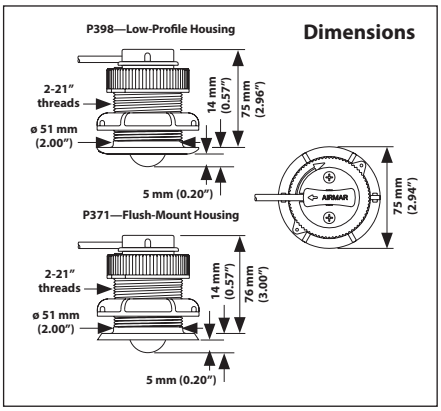
Thru-Hull
SPEED/TEMPERATURE SENSORS
ST300®

ST300 Shorty™ Sensor

The ST300 speed and temperature sensors are Airmar's shortest thru-hull speed sensors. As part of Airmar's Shorty™ Series, they are designed for boats with low headroom. The low-profile outer housing is nearly flush and minimizes drag with only 5 mm (3/16") extending outside the hull.

- Speed and Temperature
- Shorty series designed for fiberglass hulls with low headroom
- Designed for use with all fiberglass and metal sailboats and powerboats
- 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
- Fins on sides of paddlewheel cavity provide improved accuracy in cross-flow conditions
- Available in a plastic housing only
- Usable Shaft Length: ~28 mm (1.12")

Supply Voltage: 5 VDC to 25 VDC
Speed Range: 2 to 45 knots (2 to 52 MPH)



ST300—Replacement Parts

Spare Paddlewheel

Blanking Plug Kit

ST300—Speed & Temperature Sensor

AIRMAR®	
	4-pin Fuji connector, Speed and temperature Fits: Impluse, Vertex Standard

Raymarine®	
	Spade connector, Speed and temperature Fits: ST30, 40, 60, 292, Raydata

AIRMAR®	
	8-pin Fuji connector, Speed and temperature Fits: Koden®

Thru-Hull

SPEED/TEMPERATURE SENSORS

CS4500 Ultrasonic Speed Sensor

CS4500

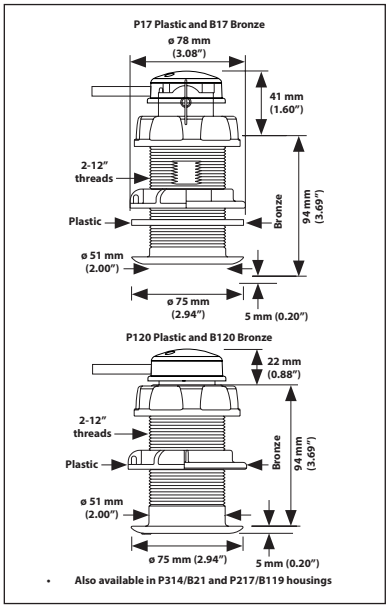
Ultra-accuracy is foremost! With no moving parts, the ultrasonic sensor is capable of speed reading accuracy as low as 0.1 knots (0.1 MPH). By eliminating the traditional paddlewheel, there is no fouling, and drag is reduced to a minimum. Unlike paddlewheels, the CS4500 is engineered to measure water speed below the turbulent boundary layer of the hull, resulting in accurate clean-water readings.

The innovation doesn't stop here. Ultrasonic sensing is a proven technology that has been used on ships for nearly 20 years. Building on this technology, Airmar developed an advanced design which operates at a higher-frequency, enabling reliable operation in both salt and fresh water. The state-of-the-art processor in the CS4500 calculates speed every half second, so it can respond to rapid changes in vessel speed. This translates into the most reliable and accurate ultrasonic speed sensor on the market—at a very competitive price.

Frequency: 4.5 MHz
Speed Range: 0.1 to 40 knots (0.1 to 46 MPH)
Operating Temperature Range: 0°C to 40°C (32°F to 104°F)

- Speed and Temperature
- Unparalleled accuracy as low as 0.1 knots (0.1 MPH)
- Designed for use with all types and sizes of sailboats and powerboats
- No moving parts
- Makes retrofitting a breeze—the retractable insert fits most Airmar 51 mm (2") housings
- Low-profile, plastic, bronze or stainless housings available
- Built-in temperature sensor
- Optional Data Converter changes analog signal to NMEA 0183 data stream (Part Number: NMEA-BOX)

Dimensions



- Also available in P314/B21 and P217/B119 housings

CS4500—Ultrasonic Speed Sensors (Please specify model electronics for correct adaptor cable)

B&G®

P17 Plastic housing
P120 Plastic housing
Bronze housing
Stainless steel housing
20' Cable, No connector (Hercules, Hydra)

Raymarine®

P17 Plastic housing
P120 Plastic housing
Bronze housing
Stainless steel housing
Cable—Spade connector

Furuno®

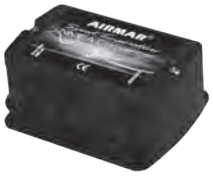
P17 Plastic housing
P120 Plastic housing
Bronze housing
Stainless steel housing
Cable—6-pin connector

Simrad®

P17 Plastic housing
P120 Plastic housing
Bronze housing
Stainless steel housing
Cable—No connector

Garmin®

P17 Plastic housing
P120 Plastic housing
Bronze housing
Stainless steel housing
Cable—6-pin connector



Universal NMEA Box

NMEA-BOX

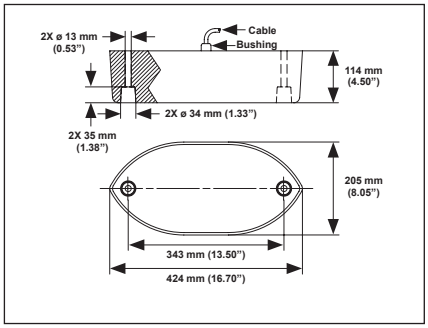
Universal NMEA speed and temperature converter accepts an analog speed and temperature input and converts it to NMEA 0183 that can be sent to any NMEA capable instrument. Typically used to convert CS4500 for use with NMEA instruments.

M42—38 kHz Transducer

- Commercial Fishing
- Navigation Survey

Frequency:	38 kHz
Cone:	10° x 12°
RMS Power:	2.2 kW

Dimensions



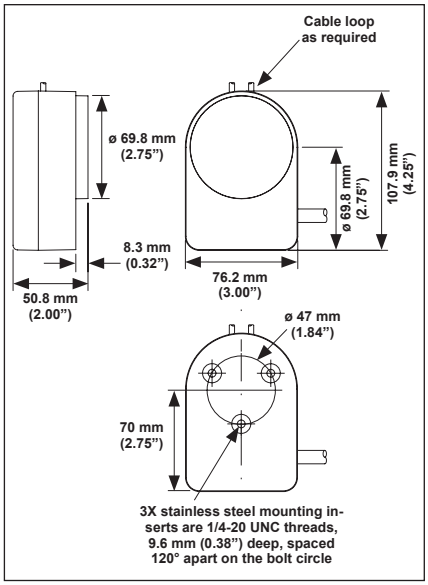
Various	CALL FOR PRICE
	No connector, Depth only Fits: Echotec CV980, CV1000; Furuno FCV381, 382, 1000; JRC JFV86, 90; Koden CVS802, 812C, 8812C, 8814C, 8822C, 8832C; Raytheon V860, JFV90; Skipper CS825

M153—50 kHz Transducer

- Commercial Fishing
- Trawl-Mount

Frequency:	50 kHz
Cone:	46°
RMS Power:	600 W

Dimensions



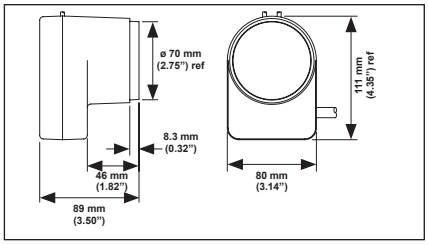
Various	CALL FOR PRICE
	No connector, Depth only Fits: Echotec CV980, CV1000; Furuno FCV381, 382, 1000; JRC JFV86, 90; Koden CVS802, 812C, 8812C, 8814C, 8822C, 8832C; Raytheon V860, JFV90; Skipper CS825

M157—33 & 38 kHz Transducer

- Commercial Fishing
- Trawl-Mount

Frequency:	33 kHz and 38 kHz
Cone:	33 kHz—54°, 38 kHz—53°
RMS Power:	350 W

Dimensions



M157—33 kHz Transducer

Koden®	CALL FOR PRICE
	No connector, Depth only Fits: Koden CVS802, 812C, 8812C, 8814C, 8822C, 8832C

M157—38 kHz Transducer

Various	CALL FOR PRICE
	No connector, Depth only Fits: Echotec CV980, CV1000; Furuno FCV381, 382, 1000; JRC JFV86, 90; Koden CVS802, 812C, 8812C, 8814C, 8822C, 8832C; Raytheon V860, JFV90; Skipper CS825

M194—
200 kHz Transducer

- Shallow-Water Survey

Frequency: 200 kHz
Cone: 8°
RMS Power: 500 W

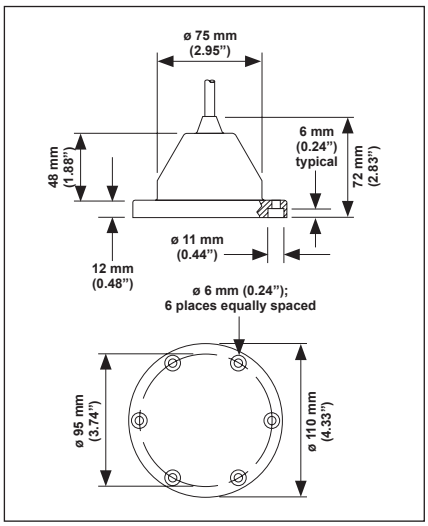
Features

- Broadband with low Q of 2
- Minimal sidelobes for concentrated energy on target providing excellent definition
- Internal transformer provides impedance match to echosounder and allows use of longer cable
- 500 W RMS, power rating is at 2% duty cycle
- Do not strike or use solvents (especially acetone) on the transducer face. Use water base anti-fouling paint only. Do not cut transducer cable.
- Seamless, SEALCAST™, urethane housing resists cuts and abrasion and has excellent, impact resistance

Options

- Impedance to customer's specifications using matching transformer

Dimensions



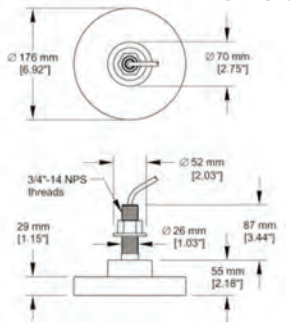
Atlas®	CALL FOR PRICE
	No connector, Depth only

SS549

- Shallow-Water Survey

Frequency: 200 kHz
Cone: 6°
RMS Power: 2 kW

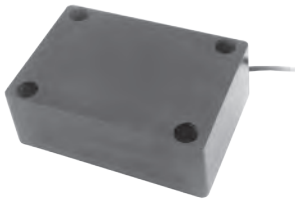
Dimensions



SS549—200 kHz Transducer

Knudsen® Odom	CALL FOR PRICE
	No connector, Depth only Fits: Knudsen Odom, and others

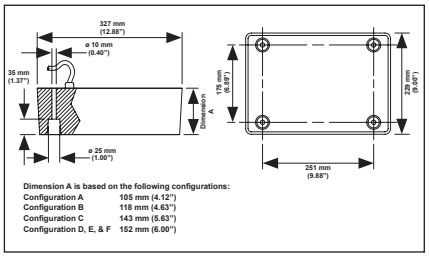
M175—28 & 38 kHz Transducer



- Commercial Fishing
- Navigation Survey

Frequency: 28 kHz to 38 kHz
Cone: 28 kHz—13°, 38 kHz—18°
RMS Power: 3 kW

Dimensions



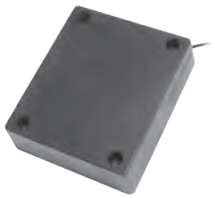
M175—28 kHz Transducer

Koden®	CALL FOR PRICE
	No connector, Depth only Fits: Koden CVS802, 812C, 8812C, 8814C, 8822C, 8832C

M175—38 kHz Transducer

Various	CALL FOR PRICE
	No connector, Depth only Fits: Echotec CV980, CV1000; Furuno FCV381, 382, 1000; JRC JFV86, 90; Koden CVS802, 812C, 8812C, 8814C, 8822C, 8832C; Raytheon V860, JFV90; Skipper CS825

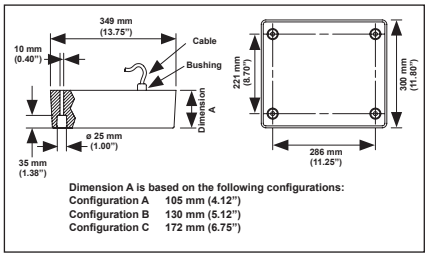
M176—28 & 38 kHz Transducer



- Commercial Fishing
- Navigation Survey

Frequency: 28 kHz, 38 kHz
Cone: 28 kHz—25°, 38 kHz—32°
RMS Power: 3 to 4 kW

Dimensions



M176—28 kHz Transducer

Koden®	CALL FOR PRICE
	No connector, Depth only Fits: Echotec CV980, CV1000; Furuno FCV381, 382, 1000; JRC JFV86, 90; Koden CVS802, 812C, 8812C, 8814C, 8822C, 8832C; Raytheon V860, JFV90; Skipper CS825

M176—38 kHz Transducer

Various	CALL FOR PRICE
	No connect or, Depth only Fits: Echotec CV980, CV1000; Furuno FCV381, 382, 1000; JRC JFV86, 90; Koden CVS802, 812C, 8812C, 8814C, 8822C, 8832C; Raytheon V860, JFV90; Skipper CS825

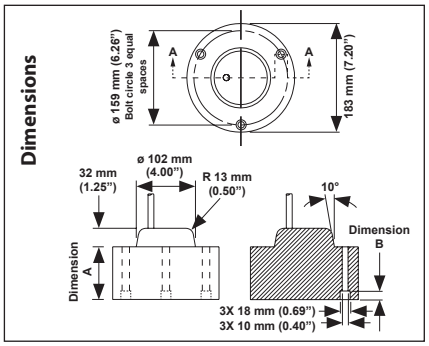
M192—33 & 50 kHz Transducer

- Commercial Fishing
- Navigation Survey

Frequency: 33 kHz to 50 kHz
Cone: 33 kHz—19°, 50 kHz—13°
RMS Power: 1 to 2 kW

Configuration	Dimension A	Dimension B
A	110 mm (4.32")	34 mm (1.34")
B, C, and D	90 mm (3.56")	15 mm (0.59")

Dimensions



M192—33 kHz Transducer

Various	CALL FOR PRICE
	No connector, Depth only Fits: Atlas, Echotec CV980, CV1000; Furuno FCV381, 382, 1000; JRC JFV86, 90; Koden CVS802, 812C, 8812C, 8814C, 8822C, 8832C; Raytheon V860, JFV90; Skipper CS825

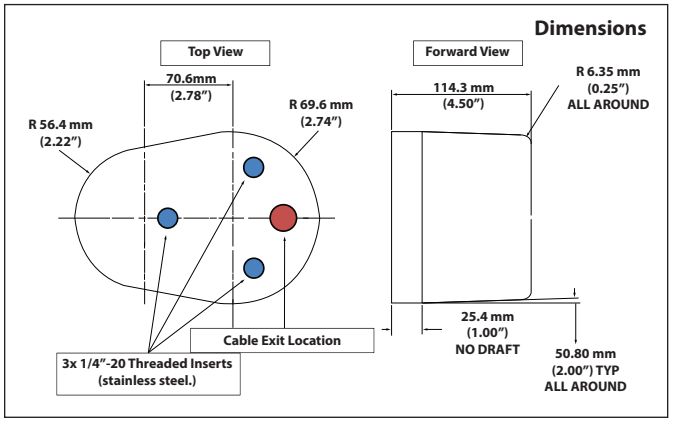
M192—50 kHz Transducer

Various	CALL FOR PRICE
	No connector, Depth only

M195

- Shallow-Water Survey

Frequency: 30 kHz and 200 kHz
Cone: 26° and 9°
RMS Power: 500 W



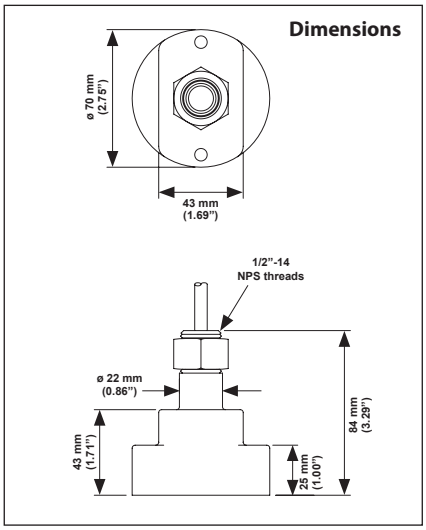
M195—30 kHz and 200 kHz Transducer

	CALL FOR PRICE
	No connector, Depth only Fits: Knudsen Odom, and others

SS510

- Shallow-Water Survey

Frequency: 200 kHz
Cone: 9°
RMS Power: 500 W



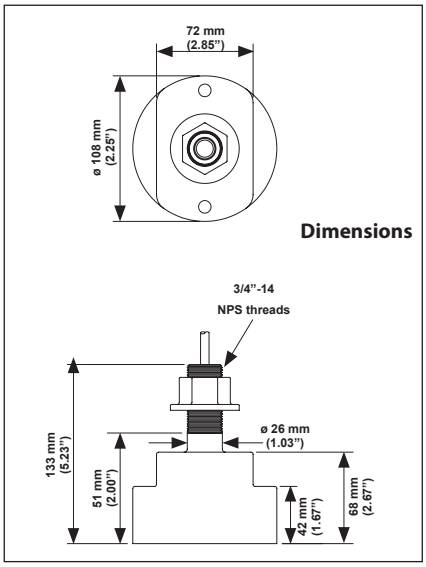
SS510—200 kHz Transducer

Knudsen® Odom	CALL FOR PRICE
	No connector, Depth only Fits: Knudsen Odom, and others

SS538

- Shallow-Water Survey

Frequency: 200 kHz
Cone: 5°
RMS Power: 2 kW



SS538—200 kHz Transducer

Knudsen® Odom	CALL FOR PRICE
	No connector, Depth only Fits: Knudsen Odom, and others

M563

NEW!

Dual-Band
This version of Airmar's M563 offers excellent sensitivity and Broad-band Performance throughout low and high-frequency bands. This performance allows crisp waveforms at discrete frequencies or allows Broadband CHIRP or coded waveforms.

Available with low-band 25 kHz to 45 kHz and high-band options of either 80 kHz to 130 kHz, 130 kHz to 210 kHz, or 160 kHz to 260 kHz.

Options
- Impedance to customer specifications using matching transformer
- Available with low-band 25 kHz to 45 kHz and high-band options of either 80 kHz to 130 kHz, 130 kHz to 210 kHz, or 160 kHz to 260 kHz

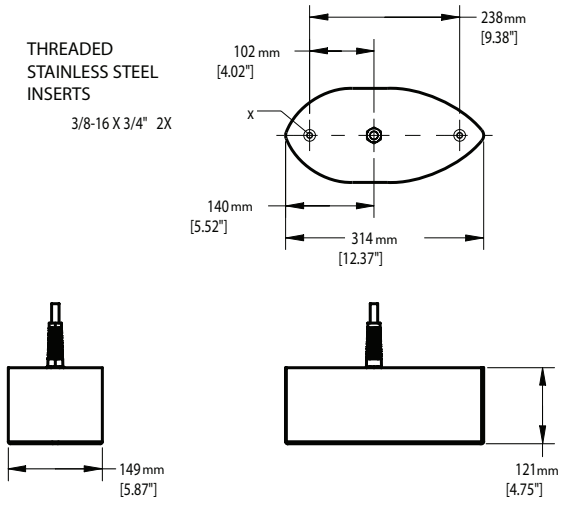
Applications

- Shallow and coastal survey

Features

- Two broadband arrays minimize ringing allows sharp, crisp acoustic pulses and excellent clarity
- Narrow beams and low sidelobes provide clear bottom detail
- Matching transformers provides pure, resistive load
- Can be mounted on a towed body, directly to wood and fiberglass hull, or as an in-hull in a fiberglass hull for precise echosounding
- Streamlined shape minimizes drag
- CHIRP-ready
- Seamless, SEALCAST™, urethane housing for long life underwater
- Exclusive Transducer ID™ technology
- High precision temperature probe

Dimensions



Specifications

Weight:	10 kg (22 lb)
Acoustic Window:	Urethane
Housing Material:	Cast urethane
Cable Type:	C44-02

Three shielded twisted pair (two 2-18 AWG and one 2-22 AWG) with foil and braided shield overall, black TPR jacket, 11 mm (7/16") diameter

Compatibility

- Knudsen CHIRP
- Teledyne Odom Hydrographic Chirp III

WeatherStation® Instruments

SPECIALTY PRODUCTS

Delivering an Accurate, Affordable, All-in-One Unit for Many Industries

Whether you are trying to improve the efficiency for sprayer applications or monitor maximum gust conditions, the WX Series Ultrasonic WeatherStation® Instruments meet a growing need for real-time, site-specific weather information. These accurate units offer weather specific data to help organizations monitor weather conditions on-site or in remote locations.

These all-in-one weather sensors measure apparent wind speed and direction, barometric pressure, air temperature, relative humidity, dew point and wind chill temperature. With the optional internal compass and GPS (available in the 150WX model), true wind speed and direction can also be calculated. The UV stabilized, compact housing is fully waterproof and resistant to chemicals and sunlight.

These new units offer a truly best-in-class solution at a better price point than any other weather monitoring system on the market today.

Key Features

- The only WeatherStation that combines up to seven sensors, all with no moving parts, in one compact unit to:
  - improve reliability for superior accuracy and longevity in the field
  - offer true and apparent wind speeds (without additional sensors) with improved wind resolution from 0.5 knots to 0.1 knots

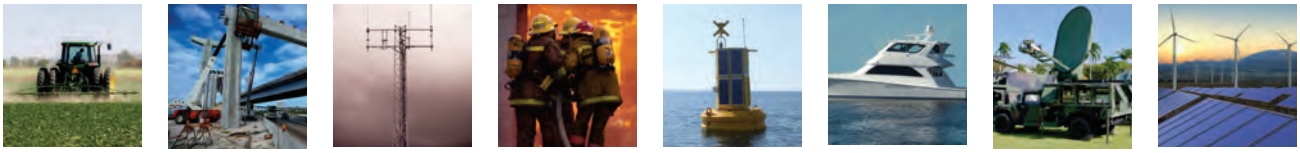
Other weather stations would take at least three separate sensors to achieve all of the weather data Airmar WeatherStations provide.

- Wind readings are not affected by the common problems known in mechanical anemometers and weather measuring devices like bearing wear, salt and dirt build-up or bird perching, which can all result in failure or data inaccuracy.
- Each unit is factory calibrated in our wind-tunnel testing lab prior to shipping.
- For a low-cost, the units are easy-to-install either permanently, or as a portable system. They can be installed on a standard VHF mount with 1″-14 UNS threads.

- IPX6 water proof rated.
- Includes a removeable humidity sensor that is serviceable in the field and IPX4 water proof rated.
- Offers a new power supply featuring a 50% reduction in current draw for use in remote locations that utilize solar or battery power.
- Wider operating voltage range of 9-40 VDC.
- Includes adjustable unfiltered wind data, available to monitor maximum gust conditions.
- Provides output via a single cable (various lengths available) for power and either RS232 (NMEA 0183) or RS422 (NMEA 0183) and CAN BUS (NMEA 2000®) data interface.
- WeatherCaster™ PC Software included for viewing and customizing data sentences.

WeatherCaster™ Software

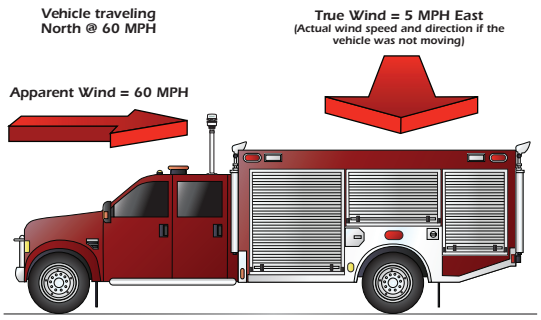
Included with all of the WX Series WeatherStation models, AIRMAR's WeatherCaster™ Software puts your own personal weatherman on your PC 24 hours a day. Available with analog and digital weather information, this software is easy-to-use, customizable to your preferred settings, and allows for plug and play connectivity.



Understanding True and Apparent Wind

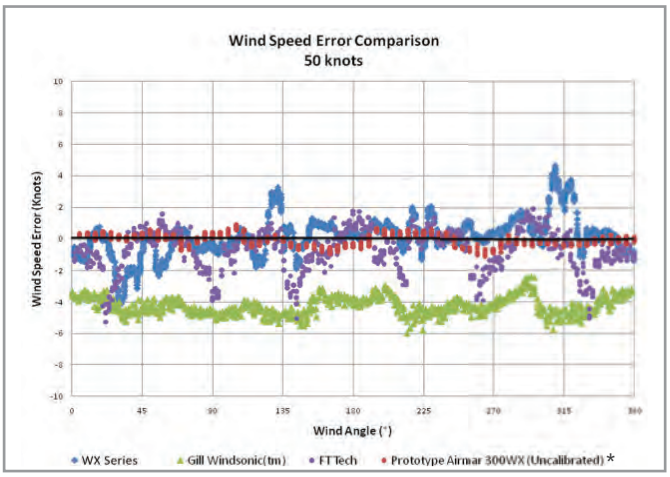
Virtually all mechanical and ultrasonic anemometers report apparent wind speed and direction. The Airmar® WX Series is unique because it calculates both true and apparent wind speed and direction. These wind readings are the same if the unit is mounted in a fixed location. However, if the WX Series is mounted on a moving vehicle, the apparent wind is the wind you would feel on your hand if you held it out the window while going down the highway. Since the WX Series has a built in GPS and compass, it calculates the true wind based upon the apparent wind, speed of the vehicle, and compass heading.

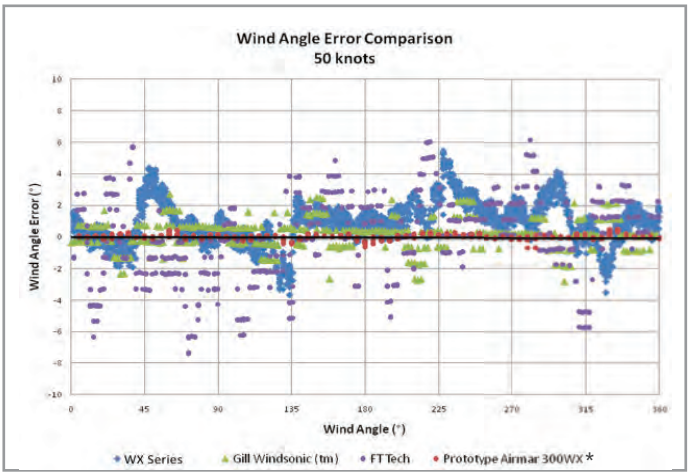
True wind information on hazardous response vehicles can also prove to be very valuable. When enroute to an emergency situation, responders can use the true wind readings to predict wind conditions at the disaster site before they even arrive, giving vital information for planning operations and staging apparatus.

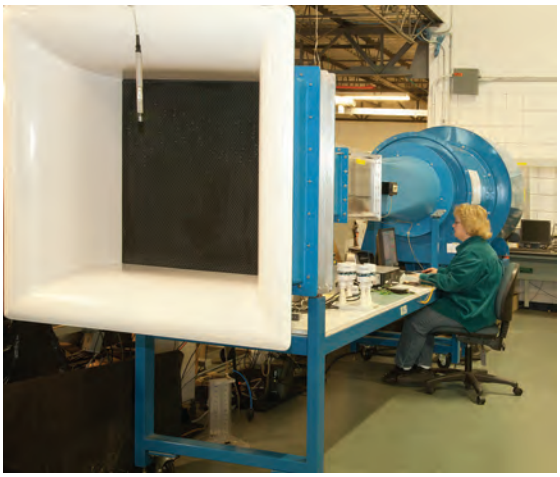


Airmar's WX Series WeatherStations are the only all-in-one unit to offer true and apparent wind speeds without additional sensors.

Performing Above and Beyond Competitive Products on the Market







AIRMAR's Test Tunnel
Each WeatherStation Instrument is factory calibrated in a wind tunnel at our state-of-the-art facility located in Milford, New Hampshire, USA.

WeatherStation® Instruments

100WX, 110WX, 150WX, 200WX

SPECIALTY PRODUCTS

100WX, 110WX, 150WX, 200WX

Offering Many Product Models to Satisfy Multiple Weather Needs

Apparent Wind Models

Recommended for Stationary Applications

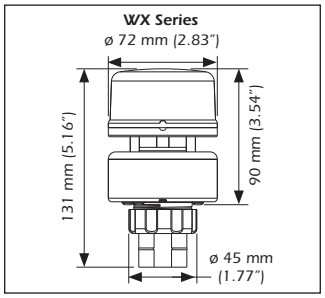
100WX

- Apparent wind speed and direction
- Ultrasonic wind readings up to 90 MPH/78 KTS (40 m/s)
- Barometric pressure
- Air temperature
- Calculated wind chill temperature
- Output options include:
  - NMEA 0183 (RS422)
  - NMEA 0183 (RS232)

110WX

Includes all 100WX base model features, plus:

- Optional field-serviceable relative humidity
  - Calculated dew point
  - Calculated heat index
- Optional heater and upper ring
- Output options include:
  - NMEA 0183 (RS422)/NMEA 2000® (CAN BUS)
  - NMEA 0183 (RS232)



Apparent and True Wind Models

Recommended for Moving Vehicle Applications

150WX

Includes all 110WX model features, plus:

- True wind speed and direction
- 10 Hz GPS (COG/SOG/Position)
- Three-axis solid state compass
- Three-axis accelerometer for pitch and roll
- Output options include:
  - NMEA 0183 (RS422)/NMEA 2000® (CAN BUS)
  - NMEA 0183 (RS232)

200WX

Includes all 150WX model features, plus:

- Three-axis solid-state compass with dynamic stabilization*
- Better than 1° static compass accuracy
- Best-in-class 2° dynamic compass accuracy
- Three-axis rate gyros provide rate-of-turn data
- Best-in-class pitch and roll accuracy

Specifications

Wind Speed Range	0 knots to 78 knots (0 MPH to 90 MPH, 0 m/s to 40 m/s)	**Air Temperature Accuracy—**	±1.1°C (±2°F)* @>4 knots wind (>4.6 MPH wind) (>2 m/s wind)
Wind Speed Resolution	0.1 knot (0.1 MPH, 0.1 m/s)	**Barometric Pressure Range**	300 mbar to 1100 mbar (24 inHg to 33 inHg, 800 hPa to 1100 hPa)
Wind Speed Accuracy @ 0°C to 55°C (32°F to 131°F), No Precipitation**	Low Wind Speeds—0 knots to 10 knots; RMS error of 1 knot +10% of reading (0 MPH to 11.5 MPH; RMS error of 1.1 MPH + 10% of reading) (0 m/s to 5 m/s; RMS error of 0.5 m/s +10% of reading)	**Barometric Pressure Resolution**	0.1 mbar (0.029 inHg, 0.1 hPa)
	High Wind Speeds—10 knots to 78 knots; RMS error of 2 knots or 5% RMS, whichever is greater (11.5 MPH to 90 MPH; RMS error of 2.3 MPH 5% RMS whichever is greater) (5 m/s to 40 m/s; RMS error of 1 m/s 5% RMS, whichever is greater)	**Barometric Pressure Accuracy**	±1 mbar (±0.029 inHg, ±1 hPa) when altitude correction is available
Wind Speed Accuracy in Wet Conditions**	5 knots RMS (5.7 MPH RMS, 2.5 m/s RMS)	**Operating Temperature Range**	-25°C to 55°C (-13°F to 131°F)
Wind Direction Range	0° to 360°	**Relative Humidity Range**	10% to 95% RH—(110WX, 150WX & 200WX)
Wind Direction Resolution	0.1°	**Relative Humidity Accuracy**	±5% units RH—(110WX, 150WX & 200WX)
Wind Direction Accuracy in wet conditions (8° RMS Typical)**	>8 knots (>9.2 MPH, >4 m/s)	**GPS Position Accuracy**	3m (10') with WAAS/EGNOS (95% of the time, SA off)—(150WX & 200WX)
Wind Direction Accuracy @ 0°C to 55°C (32°F to 131°F), No Precipitation**	Low Wind Speeds—5° RMS tyipcal >4 knots to 10 knots (4.6 MPH to 11.5 MPH, 2 m/s to 5 m/s) High Wind Speeds—2° RMS typical >10 knots (>11.5 MPH, >5 m/s)	**Supply Voltage**	9 VDC to 40 VDC
		Supply Current (@12 VDC):	<600mW (<50 mA) —100WX, <750mW (<60 mA) —110WX, <1.1W (<90 mA) —150WX, <1.7W (<140 mA) —200WX
Compass Accuracy	1° RMS when level—(150WX only), 1° static heading accuracy; 2° dynamic heading accuracy—(200WX only)	**Weight**	300 grams (0.8 lb)
Pitch and Roll Range/Accuracy	±50° / <1°—(150WX & 200WX)	**Communication Interface**	RS422 & CAN
Air Temperature Range	-40°C to 55°C (-40°F to 131°F)	**Mounting Thread Size on Base**	1"-14 UNS
Air Temperature Resolution	0.1°C (0.1°F)	**Certifications and Standards (Pending)**	CE, IPX6 (Relative Humidity/IPX4), RoHS, IEC61000-4-2, IEC60945, IEC60950_1C, IEC60950_22A, EN55022, EN55024, EN15014982

RMS—Root Mean Square, LEN—Load Equivalency Number
Humidity and temperature readings compared to Vaisala® Instruments

*When the wind speed is less than 2 m/s (4.6 MPH) and/or air temperature is below 0°C (32°F), wind, temperature, and relative humidity readings will be less accurate.
**Wet conditions include moisture, rain, frost, dew, snow, ice and/or sea spray in the wind channel.

WeatherStation® Instruments with 60-Watt Heater

110WX, 150WX, 200WX with Heater

SPECIALTY PRODUCTS

110WX, 150WX, 200WX with Heater

150WX
NMEA 2000®

200WX
NMEA 2000®

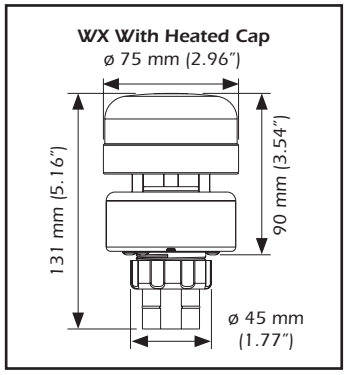
WX Series WeatherStation® Instruments with 60-Watt Heater

The WX Series WeatherStation instruments meets a growing need for real-time, site-specific weather information.

Available with a 60-watt heater to accommodate for environments where icing can occur, these all-in-one weather sensors offer a best-in-class solution at a better price point than any other weather monitoring system on the market today.

- Apparent wind speed and direction
- Ultrasonic wind readings up to 90 MPH/78 KTS (40 m/s)
- Barometric pressure
- Air temperature
- Calculated wind chill temperature
- Provides output via a single cable (various lengths available) for power and either RS232 (NMEA 0183) or RS422 (NMEA 0183) and CANbus (NMEA 2000®) data interface

All the benefits of the WX Series plus heater capabilities!



Replacement Parts

Connector Collar

Cable Extension Adaptor

150WX to a PC

When connecting the 150WX to a PC only, a USB converter is required to use the WeatherCaster™ PC Software. The WeatherStation® Instrument attaches to the USB converter via a plug-in cable and a 1.8 m (6') USB lead, which then outputs data to the PC. The USB also includes a 1.8 m (6') power cord for supplying required battery voltage.

WX Series—WeatherStation® Instruments with 60-Watt Heater

Specifications

Wind Speed Range	0 knots to 78 knots (0 MPH to 90 MPH, 0 m/s to 40 m/s)	**Barometric Pressure Resolution**	0.1 mbar (0.029 inHg, 0.1 hPa)
Wind Speed Resolution	0.1 knot (0.1 MPH, 0.1 m/s)	**Barometric Pressure Accuracy**	±1 mbar (±0.029 inHg, ±1 hPa) when altitude correction is available
Wind Speed Accuracy @ 0°C to 55°C (32°F to 131°F), no precipitation*	Low Wind Speeds—0-10 knots; 1 knot RMS +10% of reading (0 MPH to 11.5 MPH; 1.1 MPH + 10% of reading) (0 m/s to 5 m/s; 0.5 m/s + 10% of reading)	**Relative Humidity Range*****	10% to 95% RH—(110WX, 150WX & 200WX)
	High Wind Speeds—10-78 knots; 2 knots RMS or 5%, whichever is greater (11.5 MPH to 90 MPH; 2.3 MPH or 5%, whichever is greater) (5 m/s to 40 m/s; 1 m/s or 5%, whichever is greater)	**Relative Humidity Accuracy***	±5% units RH—(110WX, 150WX & 200WX)
Wind Speed Accuracy in wet conditions**	5 knots RMS (5.7 MPH RMS, 2.5 m/s RMS)	**GPS Position Accuracy:**	3 m (10') with WAAS/EGNOS (95% of the time, SA off)—(150WX & 200WX)
Wind Direction Range	0° to 360°	**Operating Temp. Range**	-25°C to 55°C (-13°F to 131°F)
Wind Direction Resolution	0.1°	**Heater Operating Temp. Range**	-40°C to 55°C, Heater cycles on when sensor reaches 1°C
Wind Direction Accuracy @ 0°C to 55°C (32°F to 131°F), no precipitation***	Low Wind Speeds—5° RMS typical 4 -10 knots (4.6 MPH to 11.5 MPH, 2 m/s to 5 m/s) High Wind Speeds—2° RMS typical >10 knots (>11.5 MPH, >5 m/s)	**Supply Voltage**	9 VDC to 40 VDC
Wind Direction Accuracy in wet conditions (8° RMS Typical)**	>8 knots (9.2 MPH, >4 m/s)	**Heater Supply Voltage**	24 VDC
Compass Accuracy	1° RMS when level—(150WX only), 1° static heading accuracy; 2° dynamic heading accuracy—(200WX only)	**Supply Current @ 24 VDC**	<750mW (<30 mA) —110WX <1.7W (<70 mA) —200WX <1.1W (<45 mA) —150WX
Pitch and Roll Range / Accuracy	±50° / <1°—(150WX & 200WX)	**Heater Supply Current @ 24 VDC**	<60W (2.5 A)
Air Temperature Range***	-40°C to 55°C (-40°F to 131°F)	**Weight**	300 grams (0.8 lb)
Air Temperature Resolution	0.1°C (0.1°F)	**Communication Interface**	RS422 & CAN
Air Temperature Accuracy	±1.1°C (±2°F)* @ >4 knots wind (>4.6 MPH wind) (>2 m/s wind)	**Mounting Thread Size on Base**	1"-14 UNS
Barometric Pressure Range	300 mbar to 1100 mbar (24 inHg to 33 inHg, 800 hPa to 1100 hPa)	**Certifications and Standards (Pending)**	CE, IPX6 (Relative Humidity/IPX4), RoHS, IEC61000-4-2, IEC60945

RMS—Root Mean Square
*When the wind speed is less than 2 m/s (4.6 MPH) and/or air temperature is below 0°C (32°F), wind, temperature, and relative humidity readings will be less accurate.
**Wet conditions include moisture, rain, frost, dew, snow, ice and/or sea spray in the wind channel.
***Temperature and Relative Humidity report invalid during heater operation.

WeatherStation® App

OnSiteWX App

SPECIALTY PRODUCTS

NEW!

OnSiteWX App provides WeatherCaster™ functionality at your fingertips

Airmar is pleased to launch the OnSiteWX app which will make much of the functionality of our WeatherCaster™ PC software available on iPhone, iPad and iPod smart phones and tablets running iOS 6.1 and newer. By displaying data sent from an NMEA 2000® or NMEA 0183 network over a WiFi adapter connected to the network, OnSiteWX gives you easy access to data at sea or on land on your hand-held mobile device 24 hours a day. OnSiteWX is easy-to-use, customizable to your preferred settings, and allows for connectivity to many popular WiFi adapters.

Features:

- Displays data from Airmar WeatherStation® instruments and Smart™ transducers
- Custom pages include just the gauges you need
- All pages can be switched on or off, and the order in which they are displayed can be changed
- Gauges can be viewed in white, black or night themes
- Gauges can be shown as analog or digital versions
- Displays can be in US or metric units
- Tachometers can have a maximum of 4000 or 6000 rpm
- Speedometers can have a range of 0-10, 0-20 or 0-60 knots
- Works with DMK Box, Chetco SeaSmart, ShipModul MiniPlex, GoFree WiFi-1, Digital Yacht WLN10, and Digital Yacht NavLink WiFi adapters
- Contains a demonstration mode that plays back the log of a fishing trip

For NMEA 2000® networks with single or dual engine interfaces, additional engine, fuel and tank gauges are available through an in-app purchase.

This app is for the iPad, iPad Mini, iPhone5 and iPod Touch Gen5.

Available in the Apple App Store by searching for "Airmar", "WeatherStation" or "WeatherCaster"

What's New in Version 2.2

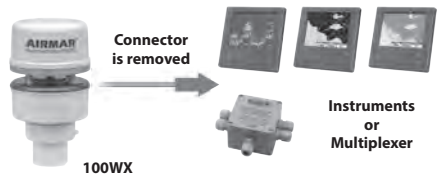
Version 2.2 adds support for the Navico/ Lowrance/Simrad GoFree WiFi adapter and for the Digital Yacht WLN10 and NavLink adapters. Historical data is available for selected readings in bar graph form, and the data streaming in from the adapters can be seen in raw or NMEA format.

Custom pages include just the gauges you need, when you need them!

100WX WeatherStation® Instrument Protocol is NMEA 0183 / RS422

Many marine instruments currently available in the market cannot interpret and display all of the NMEA sentences that the Ultrasonic WeatherStation® is capable of outputting. For this reason, each WeatherStation® Instrument is supplied with a Windows® based software program that is completely customizable and capable of displaying all of the data from the WeatherStation® Instrument head. An optional USB converter allows the WeatherStation® Instrument data to be effortlessly converted and sent to the PC. An available USB/NMEA combiner allows simultaneous display of the WeatherStation® Instrument data on both a PC, an NMEA capable instrument, and up to three additional NMEA input devices to a single NMEA/USB output. As an example, an Airmar® Smart™ Sensor can be connected to the combiner so that depth, speed, and water temperature, as well as all WeatherStation® Instrument functions, can be output on a single USB and/or NMEA data line.

100WX Connections—NMEA 0183 Only

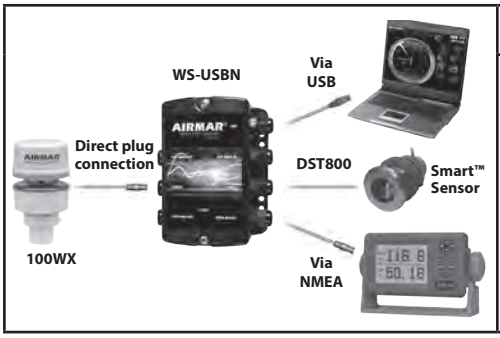


100WX to NMEA 0183 Instruments

When using the 100WX with NMEA 0183 Instruments, the connector is removed and the cable is wired to the instrument input or a combiner/multiplexer. The 100WX will output to any NMEA instrument. A multiplexer such as Actisense® or NoLand can be used to output the data to multiple displays.

100WX to a PC

When connecting the 100WX to a PC only, a USB converter is required. The WeatherStation® Instrument attaches to the USB converter via a plug-in cable and a 1.8 m (6') USB lead, which then outputs data to the PC. The USB converter also includes a 1.8 m (6') power cord for supplying required battery voltage.



100WX to a PC and an NMEA 0183 Device

When simultaneous connection to both a PC and an NMEA device is preferred, a USB/NMEA combiner is required. The WeatherStation® Instrument attaches to the USB/NMEA combiner via a plug-in cable. The combiners' included 1.8 m (6') USB lead outputs the data to a PC. The installer supplies the desired length NMEA output cable, and a battery power is supplied to the included power cord. Up to three additional NMEA devices can be brought into the USB/NMEA combiner, such as an Airmar® Smart™ Sensor. The data is combined and available to both the USB and NMEA outputs.

100WX to a Furuno NMEA Display or NavNet Device

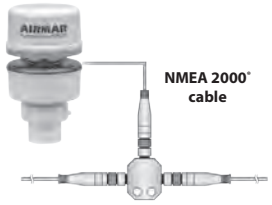
When using the WeatherStation® Instrument with a Furuno device, a direct-connect interface cable is supplied. One end of the cable plugs into the 100WX and the other end includes a 7-pin Furuno connector. The 100WX is powered via the Furuno display.

WeatherStation Programming Kit

The WeatherStation programming kit is a shop tool designed to allow installers to customize NMEA sentences and update the WeatherStation software from a PC before it is installed on the vessel.

Kit Includes: USB converter with software, power and USB cable, 1 m (3') standard WeatherStation cable, and 0.3 m (1') adapter that allows a Furuno cable to plug into USB converter.

150WX Connections—NMEA 0183 and NMEA 2000®

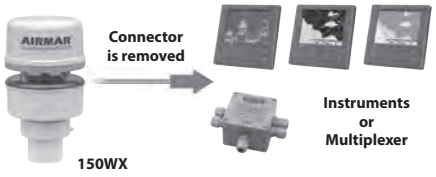


150WX to NMEA 2000® Network

When connecting the 150WX WeatherStation® Instrument to a NMEA 2000® network backbone, a devicenet cable is needed. See page 7 for all cable options.

150WX to a Furuno NMEA 0183 Display or NavNet Device

When using the WeatherStation® Instrument with a Furuno NMEA 0183 device, a direct-connect interface cable is needed. One end of the cable plugs into the PB200 and the other end includes a 7-pin Furuno connector. The 150WX is powered via the Furuno Display.

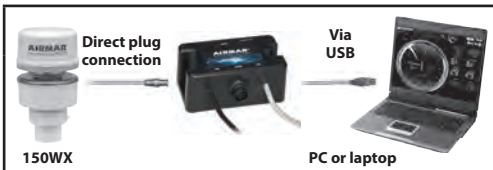


150WX to NMEA 0183 Instruments

When using the 150WX with NMEA 0183 Instruments, the 8-pin connector is removed and the cable is wired to the instrument or a combiner/multiplexer. The 150WX will output to any NMEA instrument. A multiplexer such as Actisense® or NoLand can be used to output the NMEA 0183 data to multiple displays.

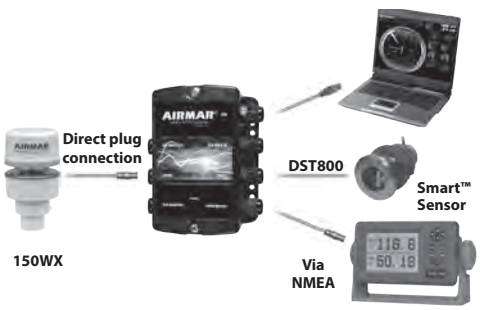
150WX to both NMEA 0183 and NMEA 2000® Networks

When simultaneously connecting the 150WX to both NMEA 2000® and NMEA 0183 networks, a combination cable kit is required. This kit contains either a 15 m (50') or 30 m (100') combination cable, splitter box, 3M connectors, and a 6 m (20') devicenet cable for connecting to the NMEA 2000® network.



150WX to a PC

When connecting the 150WX to a PC only, a USB converter is required to use the WeatherCaster™ PC Software. The WeatherStation® Instrument attaches to the USB converter via a plug-in cable and a 1.8 m (6') USB lead, which then outputs data to the PC. The USB also includes a 1.8 m (6') power cord for supplying required battery voltage.



150WX to a PC and an NMEA 0183 Device

When simultaneous connection to both a PC and an NMEA device is preferred, a USB/NMEA combiner is required. The WeatherStation® Instrument attaches to the USB/NMEA combiner via a plug-in cable. The combiner's included 1.8 m (6') USB lead outputs the data to a PC. The installer supplies the desired length NMEA output cable, and battery power is supplied to the included power cord. Up to three additional NMEA devices can be brought into the USB/NMEA combiner, such as an Airmar® Smart™ Sensor. The data is combined and available to both the USB and NMEA outputs.

Combination NMEA 0183/NMEA 2000® Cable Kits

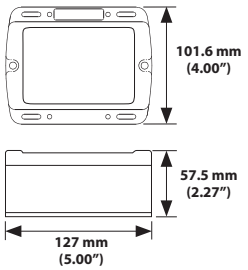
15 m (50') NMEA 0183 & NMEA 2000® Cable

30 m (100') NMEA 0183 & NMEA 2000® Cable

Allows the sensor data to be shown on both NMEA 0183 devices and NMEA 2000® networked instruments simultaneously. For WeatherStation® Instrument, GPS Receiver, and Heading Sensor.

Contains: NMEA 0183 and NMEA 2000® cable, 3M connectors, Junction Box, and 6 m (20') devicenet cable with molded NMEA 2000® male connector.

Dimensions



NMEA 0183 USB Converter

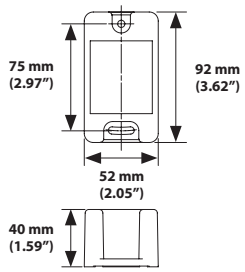
WS-USB

Airmar's converter allows the NMEA 0183 data coming from the PB150, LB150, PB200, 110WX, G2183, H2183, and GH2183 sensors to be displayed on a PC via an available USB port. This will allow the sensor's data to be viewed in the WeatherCaster™ PC Software or other PC based navigation software.

A 1.8 m (6') USB and 1.8 m (6') power cable are included.

Mounting Dimensions: 76 mm x 51 mm (3 5/8" x 2")

Dimensions



U200 USB Gateway NMEA 2000®

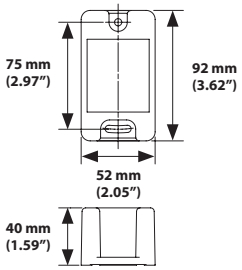
WS2-USB

Airmar's converter allows the NMEA 2000® data coming from the PB200, 110WX, G2183, H2183, and GH2183 sensors to be displayed on a PC via an available USB port. This will allow the sensor's data to be viewed in the WeatherCaster™ PC Software or other PC based navigation software.

A 1.8 m (6') USB cable and a 6 m (20') NMEA cable and WeatherCaster PC Software are included.

Mounting Dimensions: 76 mm x 51 mm (3 5/8" x 2")

Dimensions



100WX, 110WX, 150WX, 200WX, G2183, H2183, and GH2183 Cable Options

NMEA 0183 Cables—Airmar® Connector

- (15 m / 49′)
- (25 m / 82′)
- (35 m / 115′)
- (45 m / 148′)
- (Replacement 8-Pin Connector CX-128)

Furuno® NMEA 0183 Cables—Furuno® 7-Pin Connector

- (0.3 m / 1′—Airmar® to Furuno® Pigtail Adaptor)

NMEA 2000® Cables—5-Pin DeviceNet (Male)

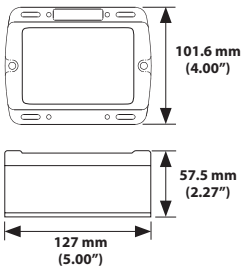
- (6 m / 20′)
- (10 m / 33′)
- (30 m / 100′)

Combination NMEA 0183/NMEA 2000® Cable Kits

- 15 m (50′) NMEA 0183 & NMEA 2000® Cable
- 30 m (100′) NMEA 0183 & NMEA 2000® Cable

Allows the sensor data to be shown on both NMEA 0183 devices and NMEA 2000® networked instruments simultaneously. For WeatherStation® Instrument, GPS Receiver, and Heading Sensor.

Contains: NMEA 0183 and NMEA 2000® cable, 3M connectors, Junction Box, and 6 m (20′) devicenet cable with molded NMEA 2000® male connector.



G2183

Pole / Rail-Mount Version

Deck-Mount Version

The G2183 is a high-accuracy, NMEA, WAAS/EGNOS, 10 Hz GPS antenna. It scores high in superior sensitivity for quick signal acquisition, reliable position accuracy, and accurate speed and course-over-ground readings. The G2183 can connect to both NMEA 0183 and NMEA 2000® networks that may be installed on the vessel, as the unit outputs both protocols simultaneously. It features a compact size that is easy to flush-mount, pole-mount, or rail-mount. The G2183 is designed for all marine environments, as the IPX6 waterproof housing can withstand virtually any condition Mother Nature throws at it.

- WAAS/EGNOS 10 Hz GPS
- Provides:
  - Latitude and Longitude
  - Course Over Ground (COG)
  - Speed Over Ground (SOG)
  - Time and Date
  - Magnetic Variation
- Outputs NMEA 0183 and NMEA 2000®
- IPX6 waterproof enclosure
- Available as a combination GPS/Heading Sensor (GH2183)

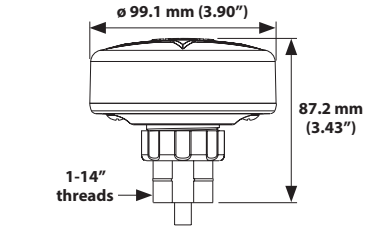
Replacement Parts

Connector Collar

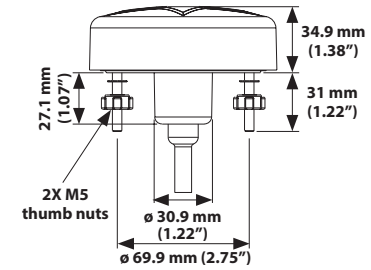
Cable Extension Adaptor

Dimensions

Pole / Rail-Mount



Flush-Mount



G2183—NMEA GPS Sensor

Specifications

Supply Voltage	**9 VDC to 40 VDC**	**Cold Start Acquisition**	**<52 seconds**
Supply Current	**<80 mA @ 12 VDC**	**GPS Position Accuracy**	**3 m (10') with WAAS (95% of the time, SA off)**
GPS Satellite Tracked	**14-channel (maximum)**	**NMEA 2000® Load Equivalency Number (LEN)**	**2**
GPS Satellite Acquired	**51 maximum**	**Certifications and Standards**	**CE, IPX6, RoHS, IEC60945**
WAAS / EGNOS Satellites Tracked	**Any**	**Operating Temp. Range**	**-25° C to 55° C**
GPS-Fix Update Rate	**10 x per second**	**Storage Temp. Range**	**-30° C to 70° C**

NMEA 0183 Sentence Structure

$GPDTM..... Datum Reference
$GPGGA..... GPS Fix Data
$GPGLL..... Geographic Position—Latitude & Longitude
$GPGSA..... GNSS DOP and Active Satellite
$GPGSV..... Satellite in View
$GPRMC..... Recommended Minimum GNSS
$GPVTG..... COG and SOG
$GPZDA..... Time and Date

NMEA 2000® Support PGNs

127258 ..... Magnetic Variation
129025 ..... Position, Rapid Update
129026 ..... COG and SOG, Rapid Update
129029 ..... GNSS Position Data
129033 ..... Time and Date
129044 ..... Datum
129538 ..... GNSS Control Status
129539 ..... GNSS DOPs
129540 ..... GNSS Sats in View
129541 ..... GPS Almanac Data

NMEA Heading Sensor With GPS

GH2183

SPECIALTY PRODUCTS

GH2183

Pole / Rail-Mount Version

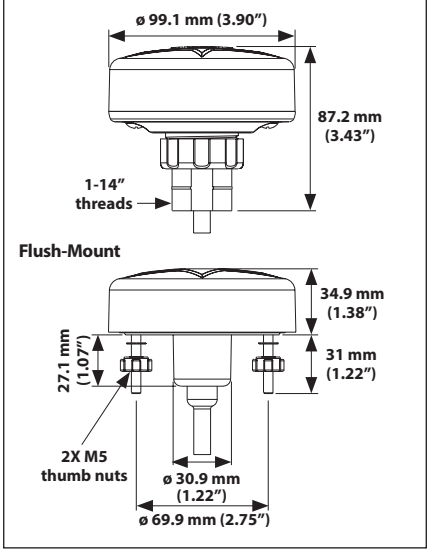
Flush-Mount Version

The Airmar GH2183 combines 10 Hz GPS positioning and highly accurate heading information in one compact antenna. The GH2183 eliminates the need to install a GPS antenna above deck and an electronic compass below deck. Only one installation above the deck is required, saving installation time and money. The waterproof housing protects the internal components—all of which are solid-state (no moving parts). This means the GH2183 can withstand almost any condition that exists in the marine environment.

What sets the GH2183 above the competition is our 2° heading accuracy in dynamically changing conditions including rough seas, hard turns, and steep heeling. Airmar's unique dynamic motion correction software is the key difference, allowing the GH2183 to maintain 2° of accuracy even if the vessel is pitching and rolling up to 30°. Also unique to the GH2183 is that the three-axis accelerometer and three-axis rate gyro are temperature compensated across the entire operating range, resulting in precise tilt and rate of turn data. The fast 10 Hz update rate, along with best-in-class heading and 10 Hz GPS data, make it the best choice for interfacing with autopilots, chartplotters, navigation software, and radar systems.

- GPS and heading sensor combined into one housing
- Saves installation time and money
- Better than 1° static heading accuracy
- Best-in-class 2° dynamic heading accuracy
- Three-axis solid-state compass provides heading data
- Three-axis accelerometer for pitch and roll
- Three-axis rate gyro provides rate-of-turn data
- Only recreational heading sensor that uses a three-axis rate gyro
- Compass calibration can be easily done on any display or PC
- Perfect product for metal hulled boats
- WAAS 10 Hz GPS provides latitude, longitude COG, SOG, time and date, and magnetic variation
- Optionally available as GPS only (G2183)
- IPX6 waterproof enclosure
- Outputs NMEA 0183 and NMEA 2000®

Dimensions



Replacement Parts

Connector Collar

Cable Extension Adaptor

GH2183—NMEA Heading Sensor With GPS

Specifications

Static Compass Accuracy	**1° RMS when level**	**Pitch and Roll Data Output Update Rate**	—2 Hz—NMEA 0183 (Adjustable up to 10 Hz) —Adjustable up to 20 Hz—NMEA 2000®
Dynamic Compass Accuracy	**2° RMS (Best-in-Class)**	**Supply Voltage**	**9 VDC to 40 VDC**
Heading Display Resolution	**0.1°**	**Supply Current**	**<80 mA @ 12 VDC**
Settling Time	**1 second (adjustable)**	**Power**	**1,100 mW**
Heading Data Output Update Rate	—10 Hz—NMEA 0183 —Adjustable up to 20 Hz—NMEA 2000®	**GPS Satellite Tracked**	**14-channel (maximum)**
Heading Variation	Yes	**GPS Satellite Acquired**	**51**
Rate-of-Turn Range	0° to 70° per second	**GPS Position Accuracy**	**3 m (10') with WAAS (95% of the time, SA off)**
Rate-of-Turn Accuracy	**1° per second**	**GPS-Fix Update Rate**	**10 x per second**
Rate-of-Turn Data Output Update Rate	—2 Hz—NMEA 0183 (Adjustable up to 10 Hz) —Adjustable up to 20 Hz—NMEA 2000®	**Cold Start Acquisition**	**>52 seconds**
Pitch and Roll Range	±50°	**WAAS / EGNOS Satellites Tracked**	**Any available**
Static Pitch and Roll Accuracy	**<1°**	**NMEA 2000® Load Equivalency Number (LEN)**	**2**
Dynamic Pitch and Roll Accuracy	**<3°**	**Certifications and Standards**	**CE, IPX6, RoHS, IEC60945**
Pitch and Roll Display Resolution	**0.1°**	**Operating Temp. Range**	**-25° C to 55° C**
Pitch and Roll Boat Alignment	**Yes (with software)**	**Storage Temp. Range**	**-30° C to 70° C**

NMEA 0183 Sentence Structure

$GPDTM	Datum Reference
$GPGGA	GPS Fix Data
$GPGLL	Geographic Position—Latitude & Longitude
$GPGSA	GNSS DOP and Active Satellite
$GPGSV	Satellite in View
$GPRMC	Recommended Minimum GNSS Data
$GPVTG	COG and Ground Speed
$GPZDA	Time and Date
$HCHDG	Heading, Deviation, and Variation
$HCHDT	True Heading
$TIROT	Rate of Turn
$YXXDR	Transducer Measurements: Vessel Attitude

NMEA 2000® Support PGNs

127250	Vessel Heading
127251	Rate of Turn
127257	Attitude
127258	Magnetic Variation
129025	Position, Rapid Update
129026	COG and SOG, Rapid Update
129029	GNSS Position Data
129033	Time and Date
129044	Datum
129538	GNSS Control Status
129539	GNSS DOPs
129540	GNSS Sats in View
129541	GPS Almanac Data

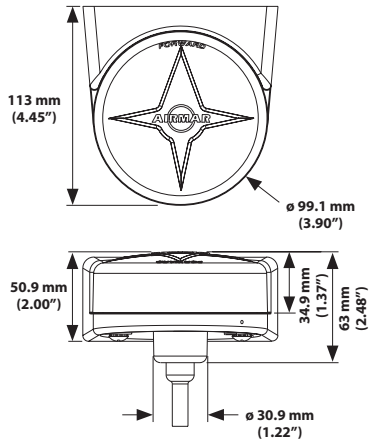
H2183

Whether you are offshore fishing or just enjoying family time on the water, feel confident and comfortable that the H2183 is your reliable source for heading information. The solid-state three-axis compass, combined with Airmar's additional advanced sensors and software provide unparalleled performance. What sets the H2183 apart from the competition is its ability to maintain 2° of heading accuracy under dynamic motion conditions, such as steep heeling, hard turns, and rough seas. Heading integrated with the three-axis rate gyro and three-axis accelerometer data allows the H2183 to maintain 2° of accuracy even if the vessel is pitching and rolling up to 30°. This level of accuracy is perfect for interfacing with autopilots, chart plotters, and radar systems.

The H2183's innovative circular design easily mounts and aligns on ANY angled bulkhead. Designed for simultaneous use with NMEA 0183 and NMEA 2000® devices, the waterproof, easy-to-install sensor comes with a single cable which can be wired into both NMEA 0183 and NMEA 2000 networks on the vessel.

- Better than 1° static heading accuracy
- Best-in-class 2° dynamic heading accuracy
- Three-axis solid-state compass
- Three-axis accelerometer for pitch and roll
- Three-axis rate gyro provides rate-of-turn
- Only recreational heading sensor that uses a three-axis rate gyro
- Compass calibration can be easily done on any display or PC
- Easily mounts on any angled bulkhead
- IPX6 waterproof enclosure
- Default 10 Hz update rate for heading
- Outputs NMEA 0183 and NMEA 2000® data simultaneously

Dimensions



Replacement Parts

Connector Collar

Cable Extension Adaptor

H2183—NMEA Heading Sensors

Specifications

Static Compass Accuracy	**1° RMS when level**	**Dynamic Pitch and Roll Accuracy**	**<3°**
Dynamic Compass Accuracy	**2° RMS (Best-in-Class)**	**Pitch and Roll Display Resolution**	**0.1°**
Heading Display Resolution	**0.1°**	**Pitch and Roll Boat Alignment**	**Yes (with software)**
Settling Time	**1 second (adjustable)**	**Pitch and Roll Data Output Update Rate**	—2 Hz—NMEA 0183 (Adjustable up to 10 Hz) —Adjustable up to 20 Hz—NMEA 2000®
Heading Data Output Update Rate	—10 Hz—NMEA 0183 —Adjustable up to 20 Hz—NMEA 2000®	**Supply Voltage**	**9 VDC to 40 VDC**
Rate-of-Turn Range	0° to 70° per second	**Supply Current**	**<30 mA**
Rate-of-Turn Accuracy	**1° per second**	**NMEA 2000® Load Equivalency Number (LEN)**	**1**
Rate-of-Turn Data Output Update Rate	—2 Hz—NMEA 0183 (Adjustable up to 10 Hz) —Adjustable up to 20 Hz—NMEA 2000®	**Certifications and Standards**	**CE, IPX6, RoHS, IEC60945**
Pitch and Roll Range	±50°	**Operating Temp. Range**	**-25° C to 55° C**
Static Pitch and Roll Accuracy	**<1°**	**Storage Temp. Range**	**-30° C to 70° C**

NMEA 0183 Sentence Structure

$HCHDG.....Heading, Deviation, and Variation
$HCHDT.....True Heading
$TIROT.....Rate of Turn
$YXXDR.....Transducer Measurements

NMEA 2000® Support PGNs

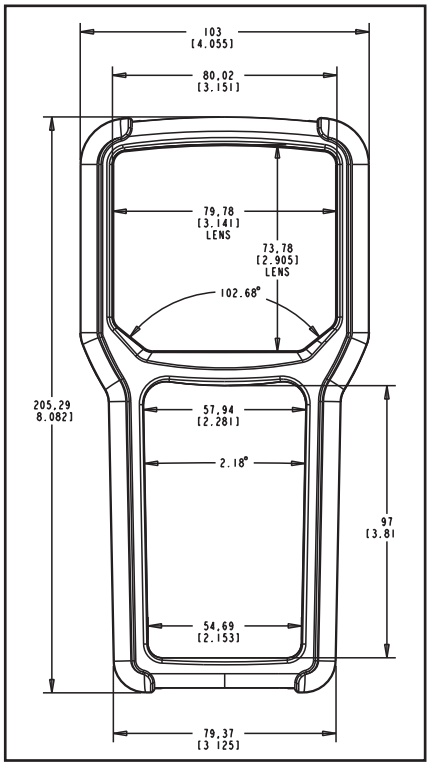
127250.....Vessel Heading
127251.....Rate of Turn
127257.....Attitude

Diagnostic Tester

TDT1000 Transducer Tester

SPECIALTY PRODUCTS

- Email results to a dealer, installer, boat owner, or even an Airmar Technician
- Add your own transducer test parameters and limits (saved on your mobile device for later use)
- Automatically read Transducer ID features such as transducer model, frequency, part number and serial number
- Transducer test cable and power supply included
- Connect directly to Airmar's database and compare the vessel's onboard transducer to its original, factory approved test results.
- Simply install Airmar's custom App on your bluetooth LE-enabled iOS or Android device, connect to the TDT and get started.



Eliminate the guesswork and determine if your transducer is in proper working condition quickly with Airmar's TDT1000, the first transducer diagnostic test device for use with most transducers.

- Test impedance for transducer frequencies ranging from 10 kHz to 1 MHz
  - Piezoelectric transducers
  - Transformer coupled transducers
- View preprogrammed data sets from factory-tested Airmar transducers

Coming in 2015!

TDT1000—Specifications

Frequency range	10 kHz to 1 MHz	Battery type	Internal rechargeable lithium ion battery
Frequency accuracy	0.05% of indicated frequency +/- 1 digit	Power supply	5 V micro USB adapter
Frequency resolution	10 Hz	Est battery life	8 hours continuous use with alkaline battery
Impedance range	5 - 10,000 ohm	Cable	Universal flying leads or custom available
Impedance accuracy	10% of indicated reading	Weight	1 pound
Transducer types	All types, including transformer coupled	Shipping weight	2 pounds

Product	Fits	Description
	**P17**	P17 plastic low-profile housing Fits: Airmar P17 depth insert, ST550, ST650, ST850, ST950 & Smart™
	**B17**	B17 bronze low-profile housing Fits: Airmar P17 depth insert, ST550, ST650, ST850, ST950 & Smart™
	**P617V**	P617V plastic low-profile housing with integrated valve assembly Fits: Airmar DT800, DST800, ST950, DST900, & Smart™
	**B617V**	B617V bronze low-profile housing with integrated valve assembly Fits: Airmar DT800, DST800, ST950, DST900, and Smart™
	**SS617V**	SS617V stainless steel low-profile housing with integrated valve assembly Fits: Airmar DT800, DST800, ST950, DST900, and Smart™
	**P314**	P314 plastic taper-flush housing Fits: Airmar P17 depth insert, ST550, ST650, ST850, ST950 & Smart™
	**P120**	ST600, ST800, ST900 plastic low-profile housing with integrated valve Fits: Raymarine speed/temperature sensors only
	**B120**	ST600, ST800, ST900 bronze, low-profile housing with intergrated valve Fits: Raymarine speed/temperature sensors only

PARTS & ACCESSORIES

Blanking Plugs

To Order: 33 (0)2 23 52 06 48

AIRMAR®

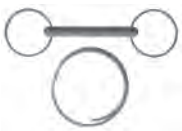
Product	Fits	Description
	**ST600, ST610**	Raymarine ST600, ST610 speed and temperature sensor, P120/B120 housings
	**ST650**	ST650 speed and temperature sensor P17/B17 housings
	**ST300**	ST300 speed and temperature sensor P371, P398 housings
	**ST200**	ST800, ST950 speed and temperature sensors, P120, B120 housings
	**ST550, P17**	D800, DT800 non-valve models P17, B17 housings
	**ST550, P17**	ST550 speed and temperature sensors and P17 depth sensors, B17 housings. Has bronze cap nut.
	**ST800, ST900**	ST800, ST950 speed and temperature sensors, P120, B120 housings
	**DT800, DST800**	D800, DT800 non-valve models P17, B17 housings
	**DT800V, DST800V, P617**	D800, DT800, DST800, DST900, DST950 and P617 valve models, B617V housings
	**P8**	P8 depth sensors, P8 housings
	**ST850**	ST850 blanking plug kit, P17, B17 housings
	**408BP**	408 depth sensors and 408ST speed/ temperature sensors, 408P housings

PARTS & ACCESSORIES

Isolation Bushings

Caps, Spacers Washers

AIRMAR®

Product	Fits	Description
	**B122 Cap Nut**	Bronze cap nut Fits: B122
	**Cap Nut**	Plastic cap nut Fits: B44V, B744V, B744VL, ST850, ST650, ST800, ST600, ST600, ST300, P8, P17, P217, P314, B17, B21, B120, SS557
	**B122 Adapter Ring**	Adapter for flush mounting B122 Fits: B122
	**51 mm (2") Spacer**	Hull Spacer Fits:51 mm (2") low-profile transducers
	**B164 Spacer**	Hull Spacer Fits: B164, B175C, SS164, SS264
	**B60 Washer**	Rubber Washer Fits: B60, SS60
	**SS555 Bushing**	Isolation bushing Fits: SS555
	**Clevis Pin**	Retaining Pin and rings Fits: ST650, B744V, B744VL
	**Clevis Pin**	Clevis Pin and ring Fits: 408
	**O-Ring**	O-Ring Fits: P79

PARTS & ACCESSORIES

Paddlewheels

To Order: 33 (0)2 23 52 06 48

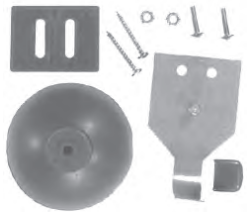
AIRMAR®

Product	Fits	Description
	**S200, ST200**	Contains all wearing parts in the paddlewheel and plug assembly Contains: • 1 paddlewheel and shaft • 4 o-rings Note: **Not** for use with TRIDUCER® Multisensor
	**S300, ST300**	Thru-hull spares kit. Contains all wearing parts in the paddlewheel and blanking plug assemblies Contains: • 1 paddlewheel and shaft • 2 sets of o-rings
	**B744V,** **B44V, B66V, B66VL, B744VC B744VCL, ST650, ST850, Datamarine ASTX-20NTH**	Thru-Hull TRIDUCER® Multisensor spares kit. Contains all wearing parts in the paddlewheel and plug assembly Contains: • 1 paddlewheel and shaft • 4 o-rings
	**B744V** **B44V, B66V, B744VL**	Thru-Hull TRIDUCER® Multisensor spares kit. Contains all wearing parts in the paddlewheel and plug assembly Contains: • 1 paddlewheel and shaft • 4 o-rings • 1 valve assembly • 2 pull rings
	**B744VC** **B744VLC (small cap no clevis pin)**	Thru-Hull TRIDUCER® Multisensor spares kit. Contains all wearing parts in the paddlewheel and plug assembly Contains: • 1 paddlewheel and shaft • 4 o-rings • 1 valve assembly • 2 pull rings
	**ST600, ST700** **Raymarine ST600, ST700**	Thru-hull spares kit. Contains all wearing parts in the paddlewheel assembly Contains: • 1 paddlewheel and shaft • 6 o-rings • 1 valve • 1 retaining ring
	**S650, ST650**	Thru-hull spares kit for S650, ST650. Contains all wearing parts in the paddlewheel and blanking plug assemblies Contains: • 1 paddlewheel and shaft • 4 o-rings • 1 valve sleeve Note: **Not** for Raymarine ST600. ST650 uses a clevis pin. Manufacturers using ST650: B&G, Cetrek, Datamarine, Furuno, Interphase, JRC, KVH, Low, Simrad
	**S800, ST800**	Thru-hull spares kit for S800, ST800. Contains all wearing parts in the paddlewheel and blanking plug assemblies Contains: • 1 paddlewheel and shaft • 2 o-rings • 1 valve sleeve • 1 retaining ring Note: **Not** the same as the ST600
	**S850, ST850**	Thru-hull spares kit for S850, ST850. Contains all wearing parts in the paddlewheel and plug assemblies Contains: • 1 paddlewheel and shaft • 4 o-rings • 1 valve sleeve Note: **Not** for Raymarine ST600 or ST800. ST850 uses a secondary screw down cap

Transom and Portable-Mount Brackets, Fairing Blocks

AIRMAR®

Transom and Portable-Mount Brackets

Product	Fits	Description
	**P23, P32**	• Portable bracket kit • Converts P23 and P32 transom mounted housing styles to portable units

Fairing Blocks

Product	Fits	Description
	**B258, SS258 HP**	Fairing: High-Performance Dimensions: 22″ x 5.25″ x 5″T
	**B45**	Fairing: Low-Speed Model: B45 Dimensions: 4.25″ x 2.37″ x 1.87″T
	**B45 HP**	Fairing: High-Performance Dimensions: 13.75″ x 2.56″ x 2.94″T
	**B122 HP**	Fairing: High-Performance Dimensions: 13.5″ x 2.94″ x 2.96″T
	**R99, R109C HP**	Fairing: High-Performance Dimensions: 22.44″ x 5.48″ x 3.69″T
	**B744V** **B744VL** **B744VC, B744VLC**	Fairing: Low-Speed Dimensions: 6.75″ x 2.81″ x 1.88″T
	**B744V,** **B744VL** **B765C HP** **B744VC, B744VLC**	Fairing: High-Performance Dimensions: 13.6″ x 3″ x 3″T
	**R509C**	Fairing: High-Performance Dimensions: 23.12″ x 6.68″ x 3.77″T

Transducer Wrenches

To Order: 33 (0)2 23 52 06 48

AIRMAR®

Bronze Low-Profile Transducer Wrenches

- Transducer wrenches are available for all bronze low profile transducers. They are used to facilitate holding of the transducer and tightening of the hull nut.
- Wrenches are constructed of 3/16" thick mild steel. They can easily be bent or modified to accommodate challenging installation locations.

Crows Foot Wrench

117WR-1
Fits: B117, B744V, B744VL, B765C, SS555. Bronze and stainless steel thru-hulls
60WR-1
Fits: B60, SS60. Bronze and stainless steel thru-hulls
75WR-1
Fits: B75, SS75 Bronze and stainless steel CHIRP thru-hulls
164WR-1
Fits: B164, SS164, B175C, SS264 Bronze and stainless steel thru-hulls

Single Handle Wrench

117WR-2
Fits: B117, B744V, B744VL, B765C, SS555. Bronze and stainless steel thru-hulls
60WR-2
Fits: B60, SS60. Bronze and stainless steel thru-hulls
75WR-2
Fits: B75, SS75 Bronze and stainless steel CHIRP thru-hulls
164WR-2
Fits: B164, SS164, B175C, SS264 Bronze and stainless steel thru-hulls

Double Handle Wrench

117WR-3
Fits: B117, B744V, B744VL, B765C, SS555. Bronze and stainless steel thru-hulls
60WR-3
Fits: B60, SS60. Bronze and stainless steel thru-hulls
75WR-3
Fits: B75, SS75 Bronze and stainless steel CHIRP thru-hulls
164WR-3
Fits: B164, SS164, B175C, SS264 Bronze and stainless steel thru-hulls

Single Handle Wrench

117WR-4
Fits: B117, B744V, B744VL, B765C, SS555. Bronze and stainless steel thru-hulls
60WR-4
Fits: B60, SS60. Bronze and stainless steel thru-hulls
75WR-4
Fits: B75, SS75 Bronze and stainless steel CHIRP thru-hulls
164WR-4
Fits: B164, SS164, SS264 Bronze and stainless steel thru-hulls
175WR-4
Fits: B175, New Model B164 Bronze and stainless steel thru-hulls

Product	Fits	Description
	**P208, P8**	Shorty™ taper flush depth housing kit
	**P371, ST300** speed and speed/ temperature	Shorty™ low-profile speed/temperature housing with valve assembly
	**P398 ST300** speed and speed/ temperature	Shorty™ taper flush speed/temperature housing with valve assembly
	**Stuffing Tube (bronze) R99, R209, R309, CM199, CM265, CM299, R109, R509**	Replacement stuffing tube for R99, R209, R309, CM199, CM265, CM299, R109, R509 series and most other transducer thru-cable applications • Hole I.D. 1"/25mm • Shaft O.D. 1.68"/43mm • Usable shaft length ~1.85"
	**Stuffing Tube (stainless) R99, R209, R309, CM199, CM265, CM299, R109, R509**	Replacement stuffing tube for R99, R209, R309, CM199, CM265, CM299, R109, R509 series and most other transducer thru-cable applications • Hole I.D. 1"/25mm • Shaft O.D. 1.68"/43mm • Usable shaft length ~1.85"

Paints, Sprays Lubricants

Product	Fits	Description
 MDR	**Transducer Paint – Black**	MDR's anti-fouling transducer paint is formulated to resist barnacles and marine growth in fresh or salt water, improving depth sounder performance. The brush in the cap makes application easy on both transom and thru-hull, plastic or bronze transducers. The water-based formula will not attack the transducer face. **Black.**
 DEBOND CORP	**Adhesive Removal**	Specially formulated product that cleans and removes polyurethane adhesives, silicone sealants. • Cured 3M 4200, 5200 • Liquid nails • Adhesive tape residue • Silicone rubber • Black rub marks • Paint overspray

PARTS & ACCESSORIES

Paddlewheels

Transom-Mount

Product	Fits	Description
	**P37, P52, P55, S61, ST63**	Transom paddlewheel and carrier Fits: P37, P52, P55, S61 and ST63 multi-function transducers and speed sensors with detachable paddlewheel assembly
	**S61, S63, ST63**	Transom speed repair kit for S61 (can also use complete 33-105) and S63 transom paddlewheel speed sensors with cable Contains: • 1 paddlewheel and shaft • 2 yokes with shear pins (for S63,ST63 use only)
	**P58**	Contains all wearing parts of the transom wheel for the P58 TRIDUCER® Multisensor Contains: • 1 paddlewheel and shaft • 1 paddlewheel cover
	**P66**	Complete transom wheel assembly for 2004 and newer P66 TRIDUCER® Multisensor Contains: 1 paddlewheel and carrier with all parts necessary for replacement Note: Please compare wheels. Only for use with newer P66's
	**P39**	Complete transom wheel assembly for P39 TRIDUCER® Multisensor Contains: 1 paddlewheel and carrier with all parts necessary for replacement

Paddlewheels

DST800

33-398-04

Thru-hull spares kit for DST800 TRIDUCER® Multisensor

Contains:

• 1 paddlewheel and shaft

• 4 o-rings

Brackets

Transom-Mount

AIRMAR®

Product	Fits	Description
	**P66**	Fits: Newer style P66 transducers Identifier: Horseshoe shaped slot in cover where cable exits Older style P66 bracket (P/N 20-275-01) is no longer available
	**P26, P37, P52, P55**	Fits: P26, P37, P52, and P55 housing styles only • OEM replacement plastic bracket • Adjustable tension • Not designed for manual release
	**P26, P37, P52, P55**	Fits: P26, P37, P52, and P55 housing styles only • Fixed bracket with no kick-up feature
	**P39**	Fits: P39 housing style only • Plastic
	**P23, P32**	Fits: P23 and P32 housing styles only • Plastic
	**P65**	Fits: P65 housing style only • Plastic
	**P48W, P58**	Fits: P48W, P58 housings • Plastic
	**TM258, TM270W, TM260**	Fits: TM258, TM270W, TM260, TM265 housings • Plastic and stainless steel
	**P26, P37, P52, P55**	Fits: P26, P37, P52 and P55 housing only • Optional Stainless kick-up bracket • Adjustable tension

PARTS & ACCESSORIES

Fairing Blocks

To Order: 33 (0)2 23 52 06 48

AIRMAR®

Fairings orient the sound beam straight down by mounting the transducer parallel to the water surface.

Fairing Block Dimensions
Dimensions are taken from the top flat rectangular surface. Due to the tapered nature of most High-Performance Fairing, the length is varied by the angle and depth of your cut.

Yellow Triangle Bolt Plug

Bolt Pack for High-Performance Fairing Blocks

Angle Finder

Model: Angle Finder
Description: Quickly measures boat hull deadrise angle. Accuracy of ±1/2°.

Product	Fits	Description
	**B260, B265C SS260, SS270W**	Fairing: High-Performance Dimensions: 21.63″ x 5.25″ x 5.13″T
	**B258, SS258**	Fairing: Low-Speed Model: B256, B258, SS258 Dimensions: 7.5″ x 4.5″ x 2.63″T

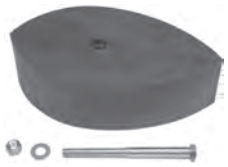
Hull Inserts—Parts and Accessories

Boat builders, there is a simple way to install a flush transducer in the same location on every vessel. Our molded pocket system forms a recess in the hull. The pocket is sized to accept the B260, SS260, and SS270W. However, it will take other popular models by using an inexpensive insert. Or if no transducer is being factory installed, you can use a blank insert. Assure predictable sounder performance while letting the customer choose his own transducer model.

Bolt Pack for INS-BLANK

The pocket is sized for an Airmar® 260, 265 and 270 Series High-Performance Transducer

...and adapters can be inserted to allow flush installation of other common models.

Product	Fits	Description
	**Blank**	Blank hull insert fits into molded hull pocket and is used when a transducer is not installed at the factory.
	**B45**	B45 hull insert fits into molded hull pocket and allows flush mounting of a B45 transducer.
	**B744V, VL, B765C**	B744V hull insert fits into molded hull pocket and allows flush mounting of a B744V / B765C transducer.
	**B258**	B258 hull insert fits into molded hull pocket and allows flush mounting of a B258 transducer.
	**Angle-Finder**	Model: Angle Finder Description: Quickly measures boat hull deadrise angle. Accuracy of ±1/2°.

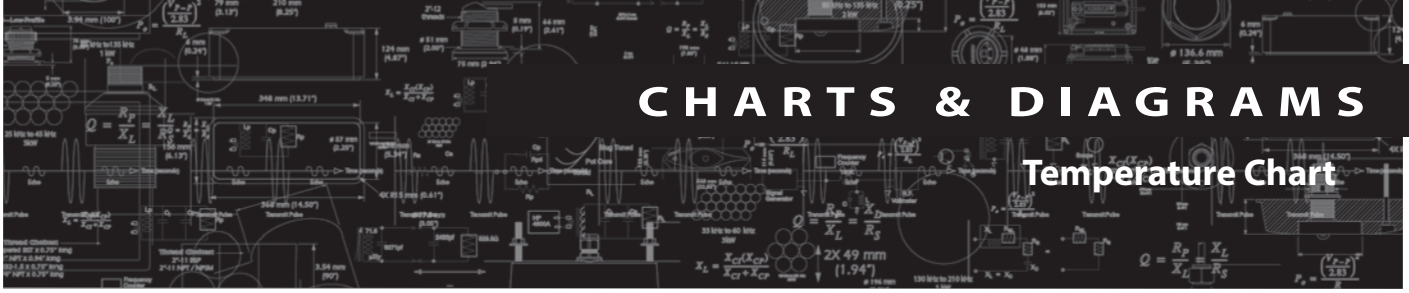
Transducer Adapter Chart

Sounder Models

	Transducer Wiring	Furuno 10-Pin	Raymarine DSM300	Garmin	Lowrance Blue	Simrad 7-Pin	Northstar 10-Pin	Northstar Navman 6-Pin
Furuno 10-Pin								
B744V, P66	91-412 91-827		No - speed not compatible	**Yes** - use cable adaptor 33-569-01	No - temp not compatible	**Yes** - use cable adaptor 33-455-01	**Yes** - use cable adaptor 33-903-01	No - speed not compatible
B164, B258, TM258	91-843 91-883		No - Raymarine requires 1kW sense line	**Yes** - use cable adaptor 33-569-01	**Yes** - depth only hardwire with 33-561-01	**Yes** - use cable adaptor 33-455-01	**Yes** - 600W only use cable adaptor 33-903-01	**Yes** - must be hardwired to CX-106
B260*, SS270W**, SS264***	91-793 91-832		No - Raymarine requires 1kW sense line	**Yes** - adaptor 33-569-01 M260 must be hardwired	No - impedance too low	No - Simrad requires low impedance dual line	No - must be dual line to obtain 1kW power	No - impedance too low
Raymarine DSM300								
B744V, P66	91-605 91-854	No - speed not compatible		No - speed not compatible	No - speed/temp not compatible	No - speed not compatible	No - speed not compatible	**Yes** - must be hardwired to CX-106
B164, B258, TM258	91-761 91-882	**Yes** - must hardwire to 33-333 cable		**Yes** - must be hardwired to field connector CX-106	**Yes** - depth only hardwire with 33-561-01	**Yes** - must be hardwired to CX-107	**Yes** - 600W only must be hardwired to CX-1010	**Yes** - must be hardwired to CX-106
B260*, SS270W**, SS264***	91-744 91-782	**Yes** - must hardwire to 33-333 cable		**Yes** - must be hardwired to field connector CX-106	No - impedance too low	No - Simrad requires low impedance dual line	No - must be dual line to obtain 1kW power	No - impedance too low
Garmin								
B744V, P66	91-231 91-604	**Yes** - must hardwire to 33-333 cable	No - speed not compatible		No - temp not compatible	**Yes** - must be hardwired to CX-107	**Yes** - must be hardwired to CX-1010	No - speed not compatible
B164, B258, TM258	91-720 91-881	**Yes** - must hardwire to 33-333 cable	No - Raymarine requires 1kW sense line		**Yes** - depth only hardwire with 33-561-01	**Yes** - must be hardwired to CX-107	**Yes** - 600W only must be hardwired to CX-1010	**Yes** - must be hardwired to CX-106
B260*, SS270W**, SS264***	91-721 91-805	**Yes** - must hardwire to 33-333 cable	No - Raymarine requires 1kW sense line		No - impedance too low	No - Simrad requires low impedance dual line	No - must be dual line to obtain 1kW power	No - impedance too low
Lowrance Blue								
B744V, P66	91-659 91-849	No - temp not compatible	No - speed/temp not compatible	No - temp not compatible		No - temp not compatible	No - temp not compatible	No - speed/temp not compatible
B164, B258, TM258	91-773 91-905	**Yes** - depth only hardwire to 33-333	No - Raymarine requires 1kW sense line	No - temp not compatible and no XID on some		**Yes** - depth only hardwire to CX-107	**Yes** - 600W depth only hardwire to CX-1010	**Yes** - depth only hardwire to CX-106
B260*, SS264N	91-656 91-804	**Yes** - depth only hardwire to 33-333	No - Raymarine requires 1kW sense line	No - temp not compatible and no XID on some		No - Simrad requires low impedance dual line	No - must be dual line to obtain 1kW power	**Yes** - depth only hardwire to CX-106
Simrad 7-Pin								
B744V, P66	91-386 91-608	**Yes** - must hardwire to 33-333 cable	No - speed not compatible	**Yes** - must be hardwired to field connector CX-106	No - temp not compatible		**Yes** - must be hardwired to CX-1010	No - speed not compatible
B164, B258, TM258	91-389 91-765	**Yes** - must hardwire to 33-333 cable	No - Raymarine requires 1kW sense line	**Maybe** - must have XID & be hardwired to CX-106	**Yes** - depth only hardwire with 33-561-01		**Yes** - 600W only must be hardwired to CX-1010	**Yes** - must be hardwired to CX-106
B260*, SS270W**, SS264***	91-734 91-798	No - dual line & Impedance too low	No - frequency dual line & no 1kW sense line	No - dual line & Impedance too low	No - dual line & Impedance too low		No - impedance too low	No - dual line & impedance too low
Northstar 10-Pin								
B744V, P66	91-688 91-856	**Yes** - must hardwire to 33-333 cable	No - speed not compatible	**Yes** - must be hardwired to field connector CX-106	No - temp not compatible	**Yes** - must be hardwired to CX-107		No - speed not compatible
B164, B258, TM258	91-712	**Yes** - must hardwire to 33-333 cable	No - Raymarine requires 1kW sense line	**Maybe** - must have XID & be hardwired to CX-106	**Yes** - depth only hardwire with 33-561-01	**Yes** - must be hardwired to CX-107		**Yes** - must be hardwired to CX-106
B260*, SS264N	91-687 91-794	No - frequency dual line	No - frequency dual line & no 1kW sense line	No - frequency dual line	No - frequency dual line	No - impedance too high		No - frequency dual line
Northstar / Navman 6-Pin								
B744V, P66	91-850	No - speed not compatible	**Yes** - must be hard wired	No - speed not compatible	No - speed/temp not compatible	No - speed not compatible	No - speed not compatible	
B164, B258, TM258	91-801 91-806	**Yes** - must hardwire to 33-333 cable	No - Raymarine requires 1kW sense line	**Maybe** - must have XID & be hardwired to CX-106	**Yes** - depth only hardwire with 33-561-01	**Yes** - must be hardwired to CX-107	**Yes** - 600W only must be hardwired to CX-1010	
B260*, SS264N	91-705 91-795	**Yes** - must hardwire to 33-333 cable	No - Raymarine requires 1kW sense line	**Maybe** - must have XID & be hardwired to CX-106	**Yes** - depth only hardwire with 33-561-01	No - Simrad requires low impedance dual line	No - must be dual line to obtain 1kW power	

*B260 includes M260, TM260 and SS260 **SS270W includes TM270W ***SS264 includes SS264N and SS264W

Transducers



CHARTS & DIAGRAMS

Temperature Chart

Celsius to Fahrenheit Conversion Chart

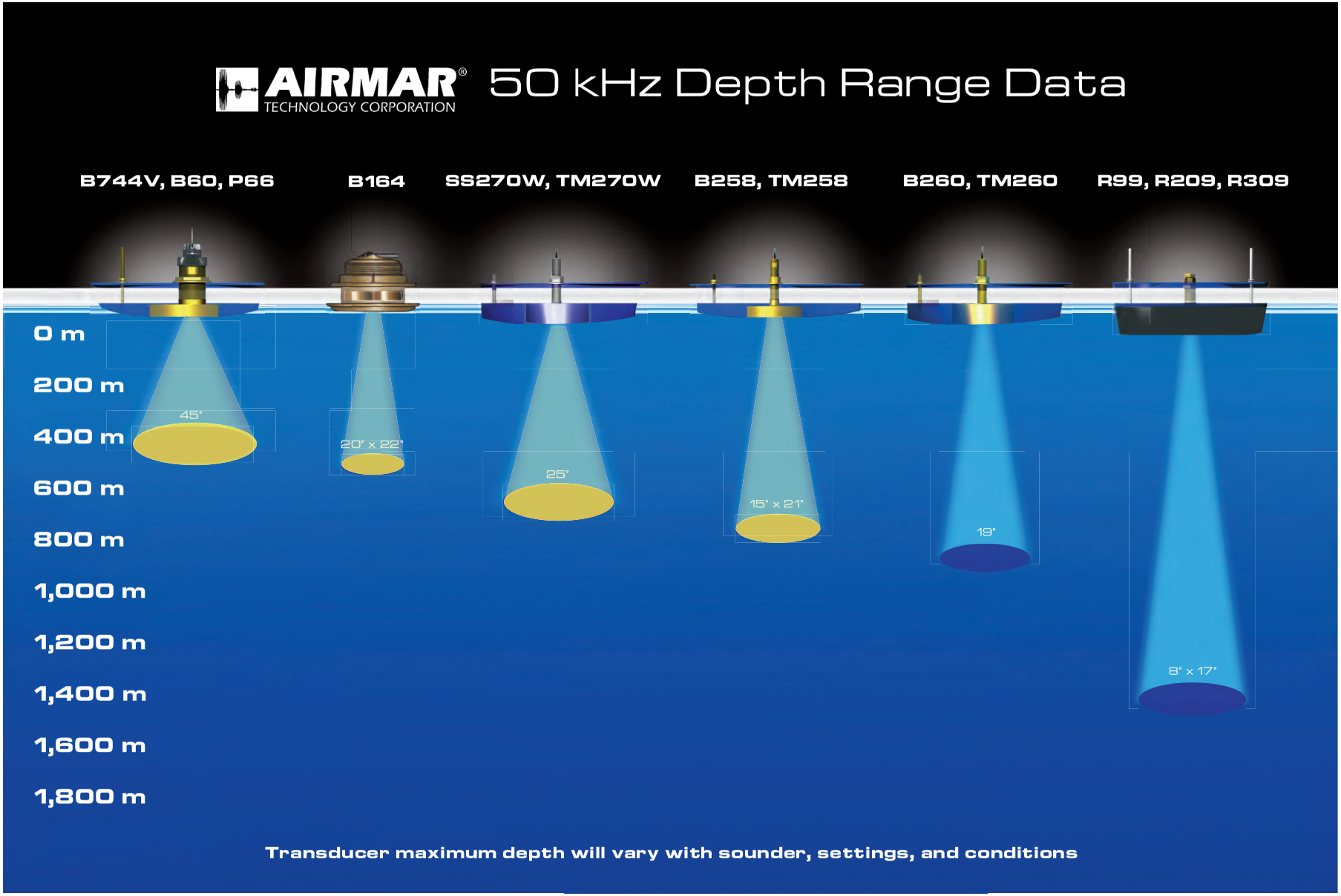
CELSIUS	RESISTANCE	FAHRENHEIT
-20	97083.62	-4
-19	91626.82	-2
-18	86507.95	0
-17	81704.43	1
-16	77198.14	3
-15	72967.79	5
-14	68994.43	7
-13	65258.81	9
-12	61748.23	10
-11	58448.13	12
-10	55344.09	14
-9	52422.74	16
-8	49673.03	18
-7	47083.13	19
-6	44644.56	21
-5	42344.54	23
-4	40177.60	25
-3	38134.17	27
-2	36202.02	28
-1	34387.08	30
0	32670.43	32
1	31048.25	34
2	29516.63	36
3	28069.29	37
4	26701.02	39
5	25407.34	41
6	24184.14	43
7	23026.11	45
8	21930.80	46
9	20892.93	48
10	19911.10	50

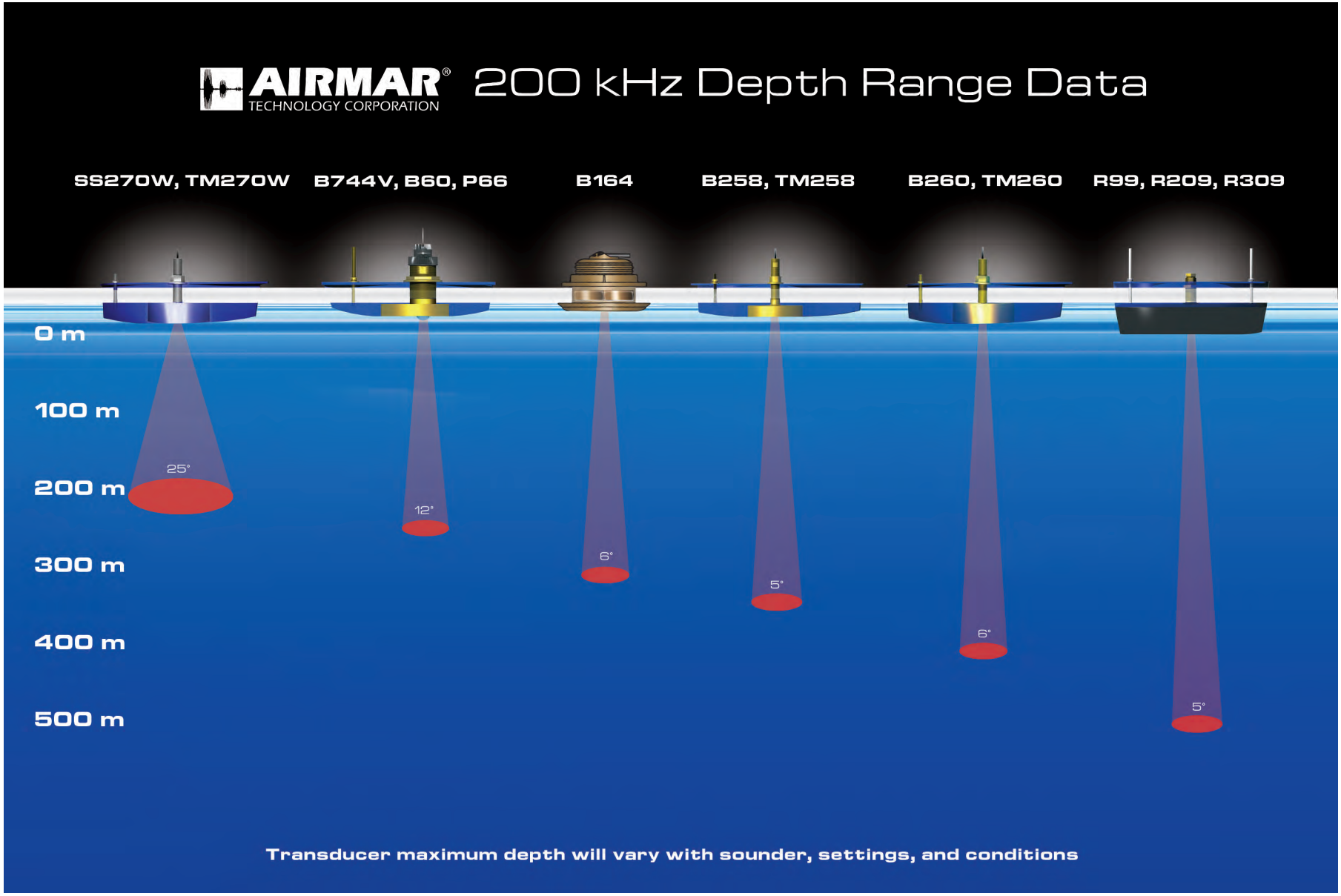
CELSIUS	RESISTANCE	FAHRENHEIT
11	18980.03	52
12	18098.44	54
13	17262.34	55
14	16469.68	57
15	15717.99	59
16	15004.33	61
17	14327.51	63
18	13684.99	64
19	13074.77	66
20	12494.98	68
21	11944.42	70
22	11420.69	72
23	10923.14	73
24	10450.07	75
25	10000.00	77
26	9571.69	79
27	9164.22	81
28	8776.21	82
29	8406.72	84
30	8054.94	86
31	7719.59	88
32	7400.12	90
33	7095.60	91
34	6805.28	93
35	6528.32	95
36	6264.16	97
37	6012.08	99
38	5771.55	100
39	5541.92	102
40	5322.63	104
41	5121.81	106

Temperature sensors used in most marine transducers can easily be tested using a standard volt/ohm meter. The temperature sensor is essentially a thermal resistor with a nominal resistance of 10000 ohms at 25 degrees Celsius or 77 degrees Fahrenheit, although many Lowrance applications use a 5000 ohm nominal resistance at the same temperature. The test can be performed accurately whether the transducer is in air or water.

Verifying a temperature sensor's proper performance is as simple as measuring the resistance across the two leads of the thermistor and comparing the results of that reading to the data in the chart above. Use a thermometer to verify the water or ambient temperature that the transducer is being tested in. The standard tolerance observed should be ± 0.5° C or ± 1° F.

AIRMAR® Depth Range 50 kHz Diagram

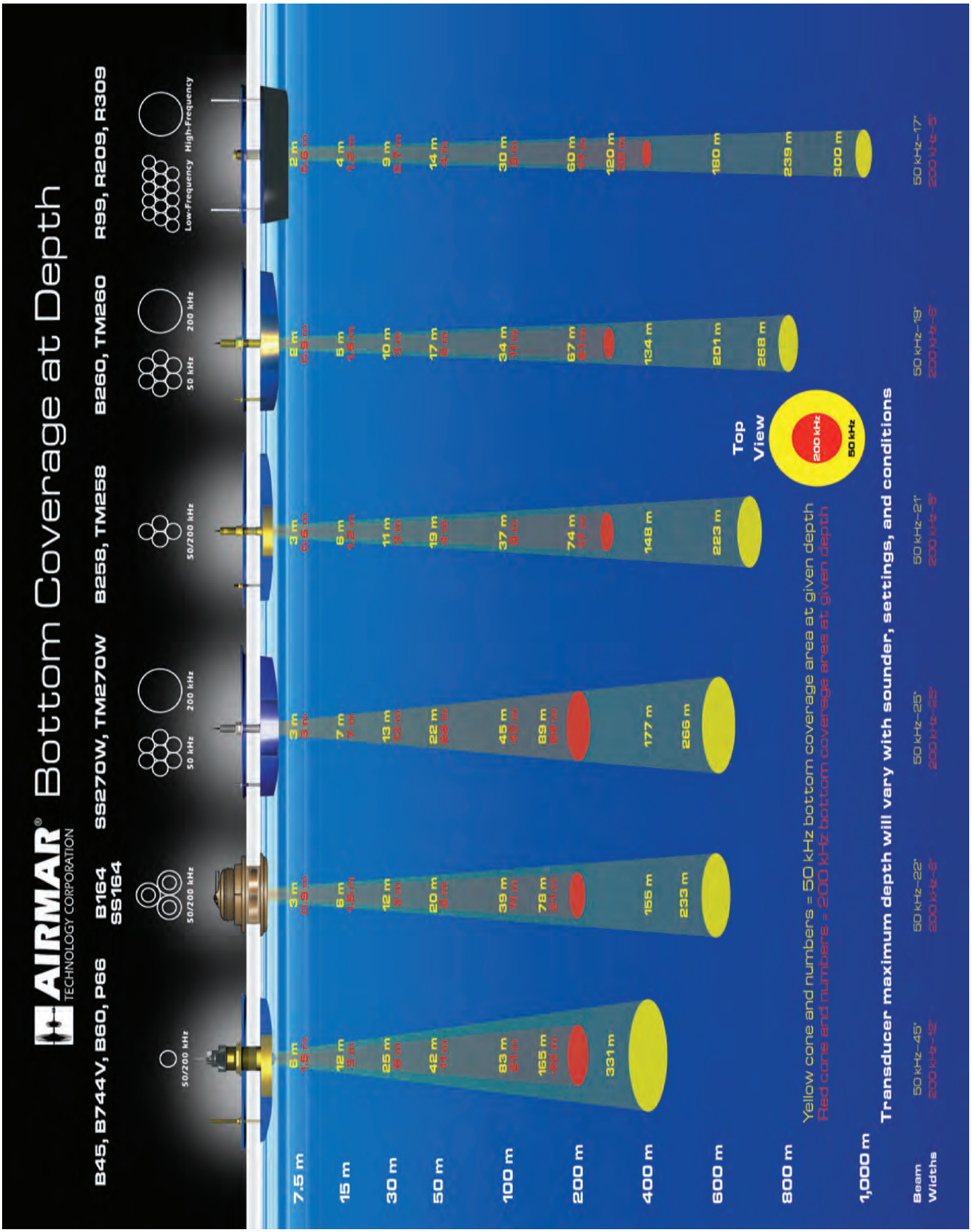



AIRMAR®
TECHNOLOGY CORPORATION
200 kHz Depth Range Data
SS270W, TM270W
B744V, B60, P66
B164
B258, TM258
B260, TM260
R99, R209, R309
0 m
100 m
200 m
300 m
400 m
500 m
25°
12°
6°
5°
6°
5°
Transducer maximum depth will vary with sounder, settings, and conditions

CHARTS & DIAGRAMS

Bottom Coverage Depth Range Diagram

AIRMAR®

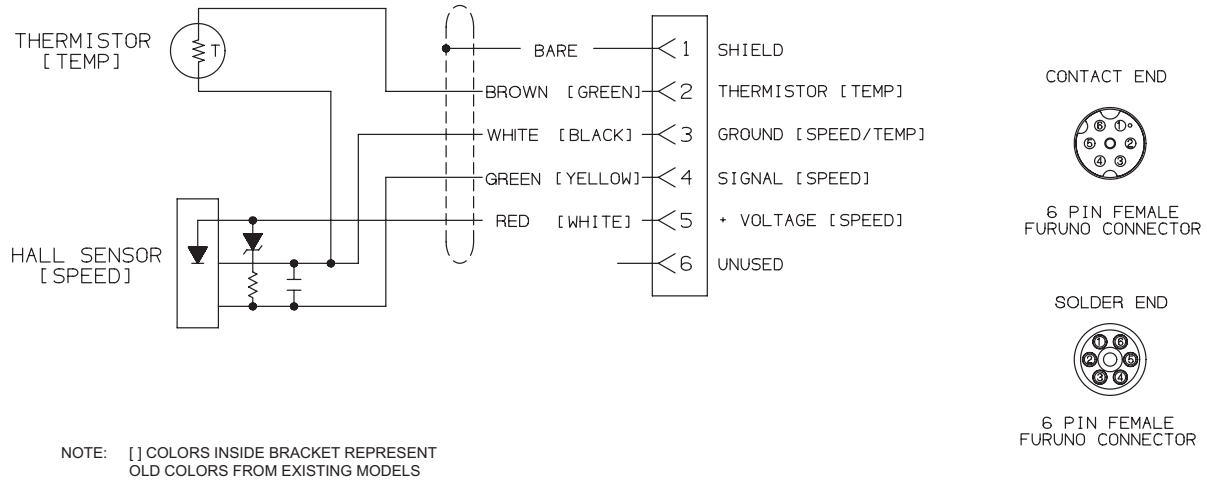


WIRING DIAGRAMS

Furuno®

Furuno®

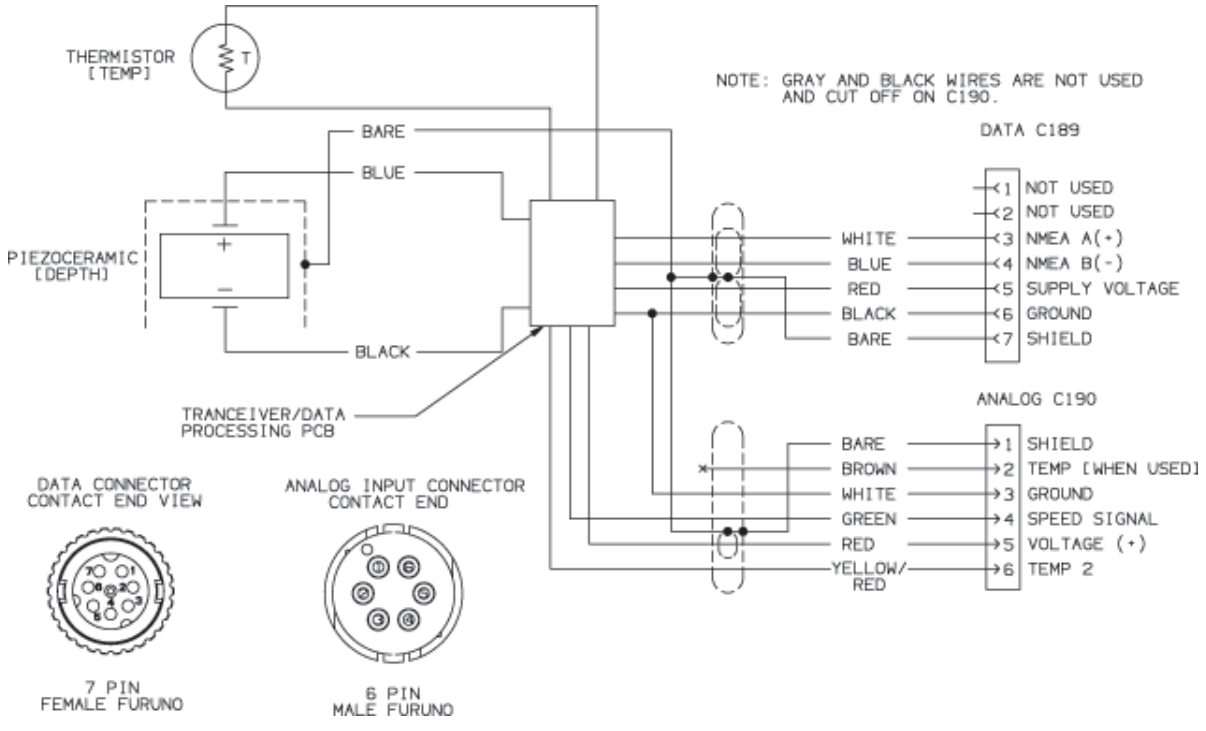
Model(s): Speed and Temperature Sensors



NOTE: [ ] COLORS INSIDE BRACKET REPRESENT OLD COLORS FROM EXISTING MODELS

Furuno®

Model(s): NMEA 0183 Smart™ Sensors with Speed Input

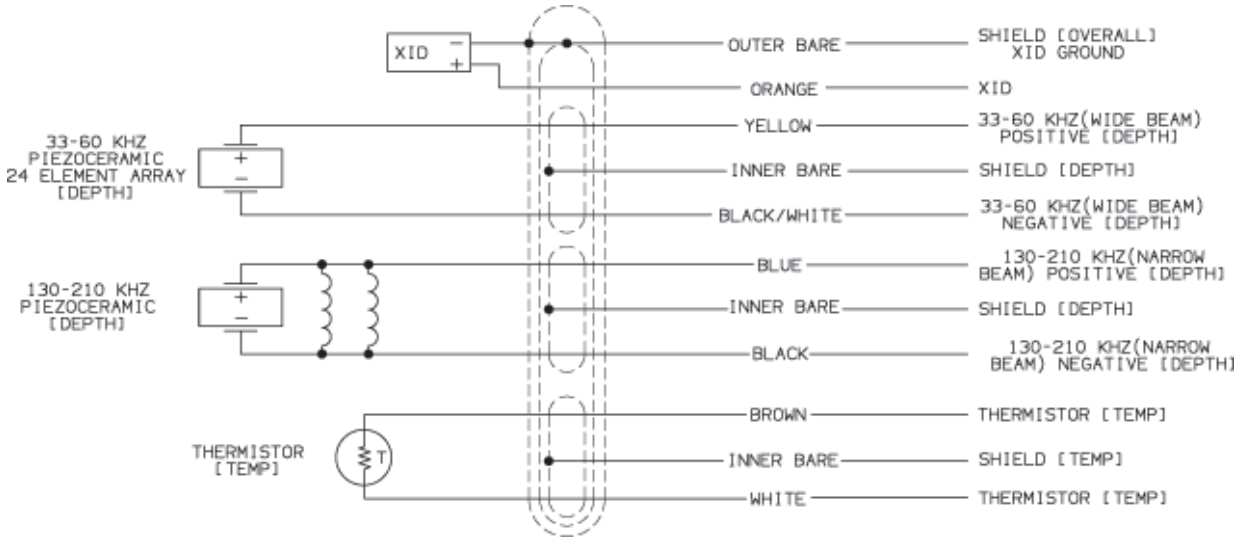


WIRING DIAGRAMS

Furuno®, Garmin®

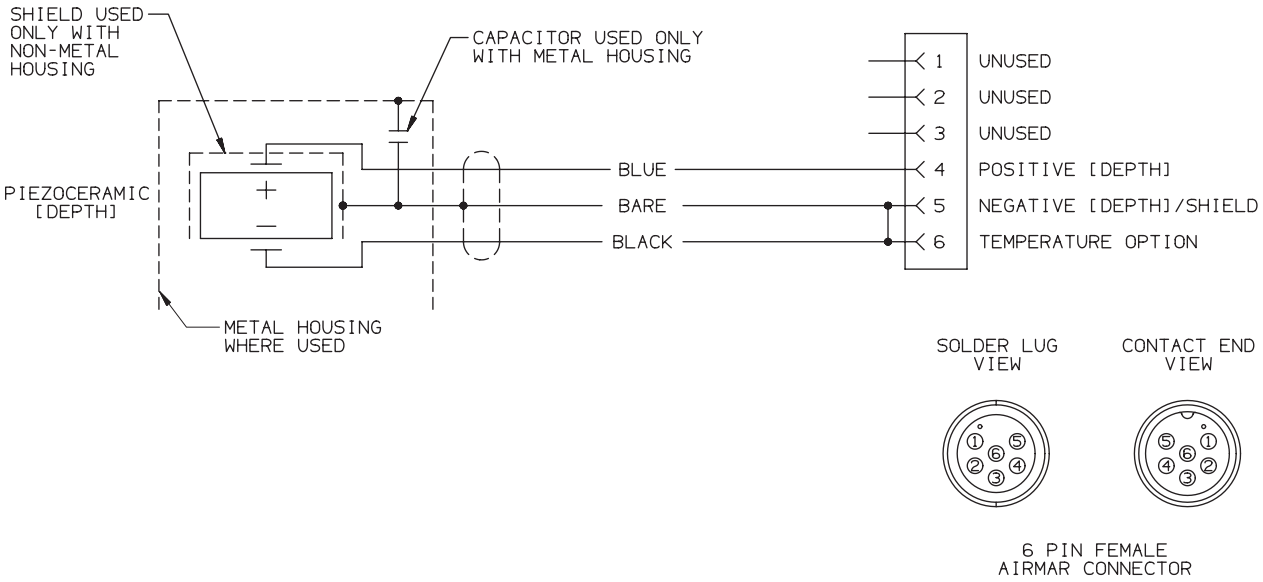
Furuno®

Model(s): Non-Diplexed—1 kW, 2 kW and 3 kW Sensors



Garmin®

Model(s): Depth Only Sensors

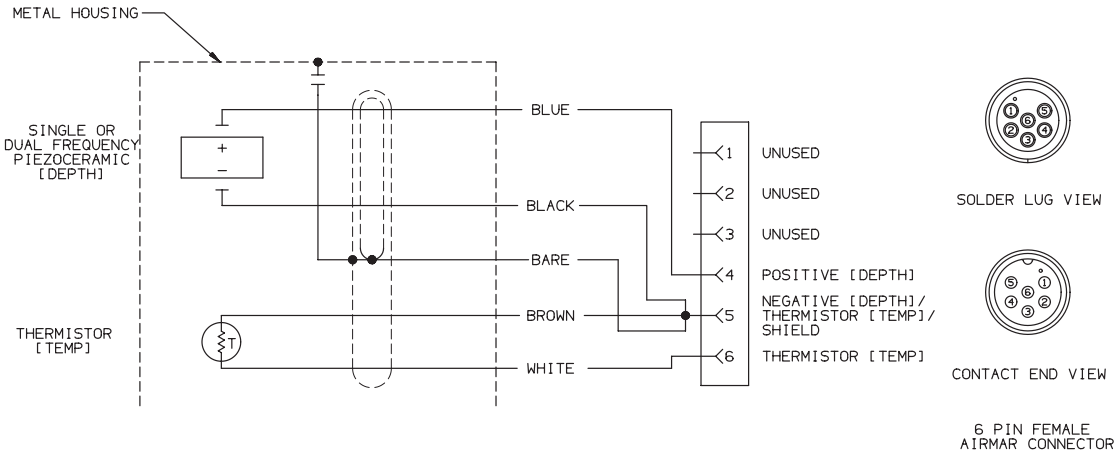


WIRING DIAGRAMS

Garmin®

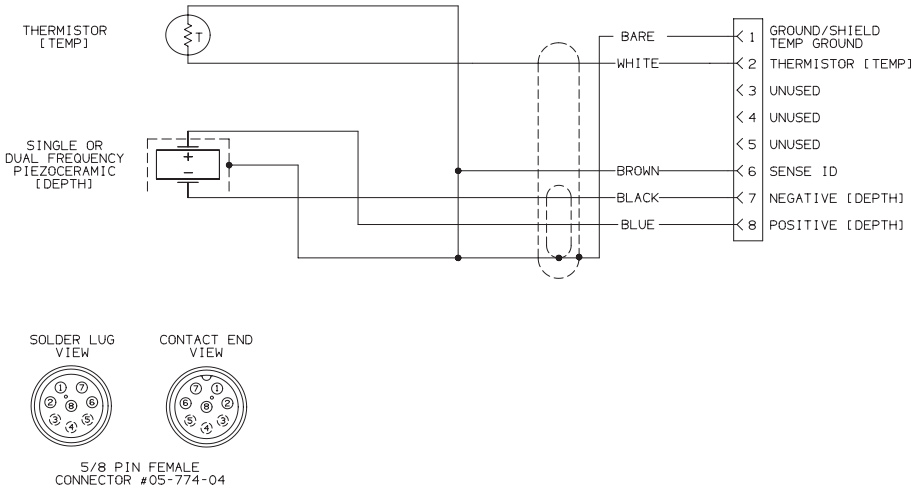
Garmin®

Model(s): Depth and Temperature Sensors



Garmin®

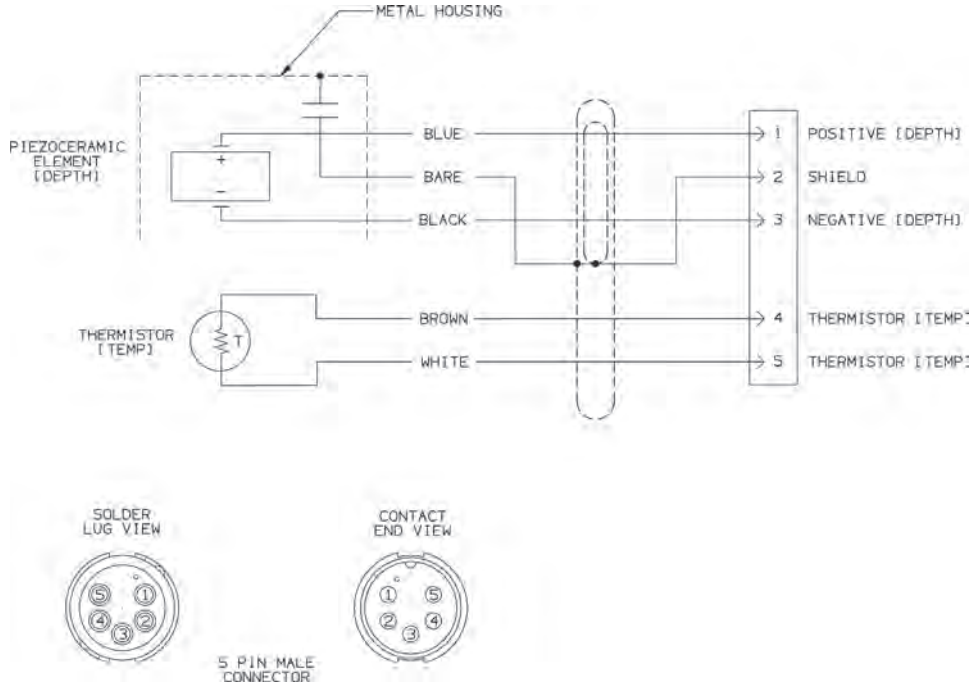
Model(s): Depth and Temperature—P319-DT-8G / GSD24



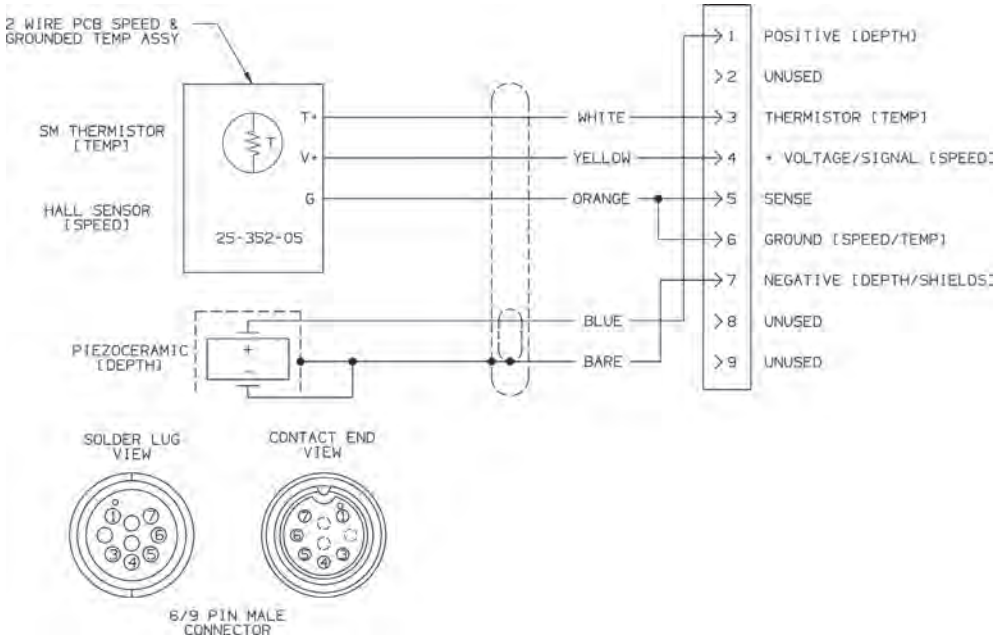
WIRING DIAGRAMS

AIRMAR®

AIRMAR® | Model(s): 600 W Depth and Temperature Mix and Match

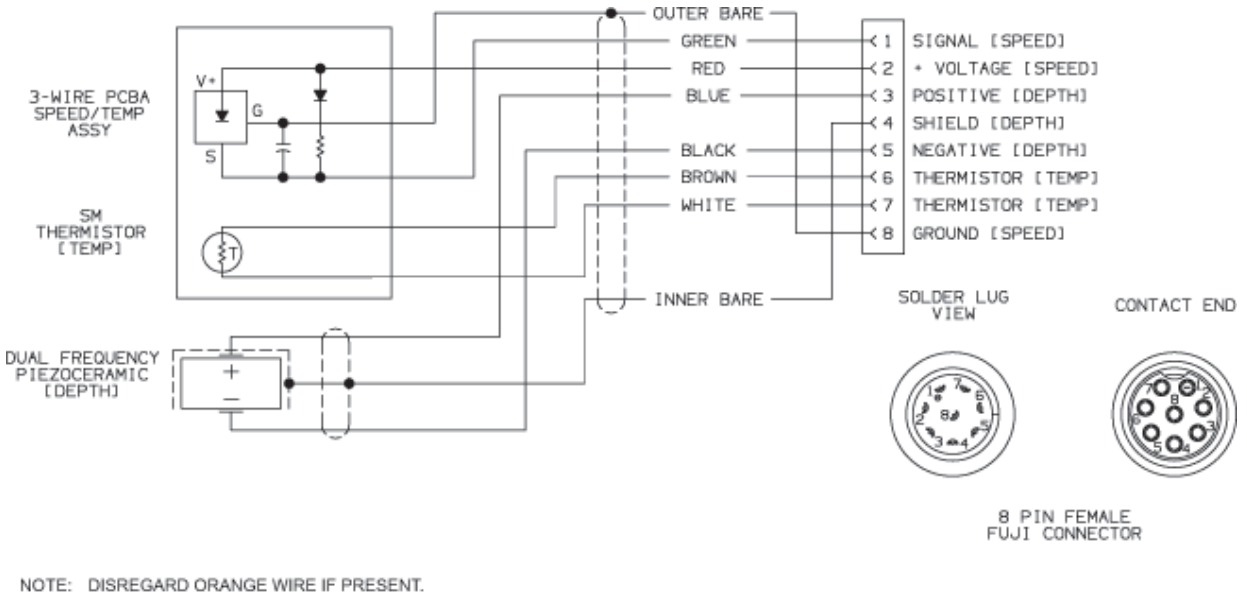


AIRMAR® | Model(s): 1 kW Depth and Temperature Mix and Match



Furuno®

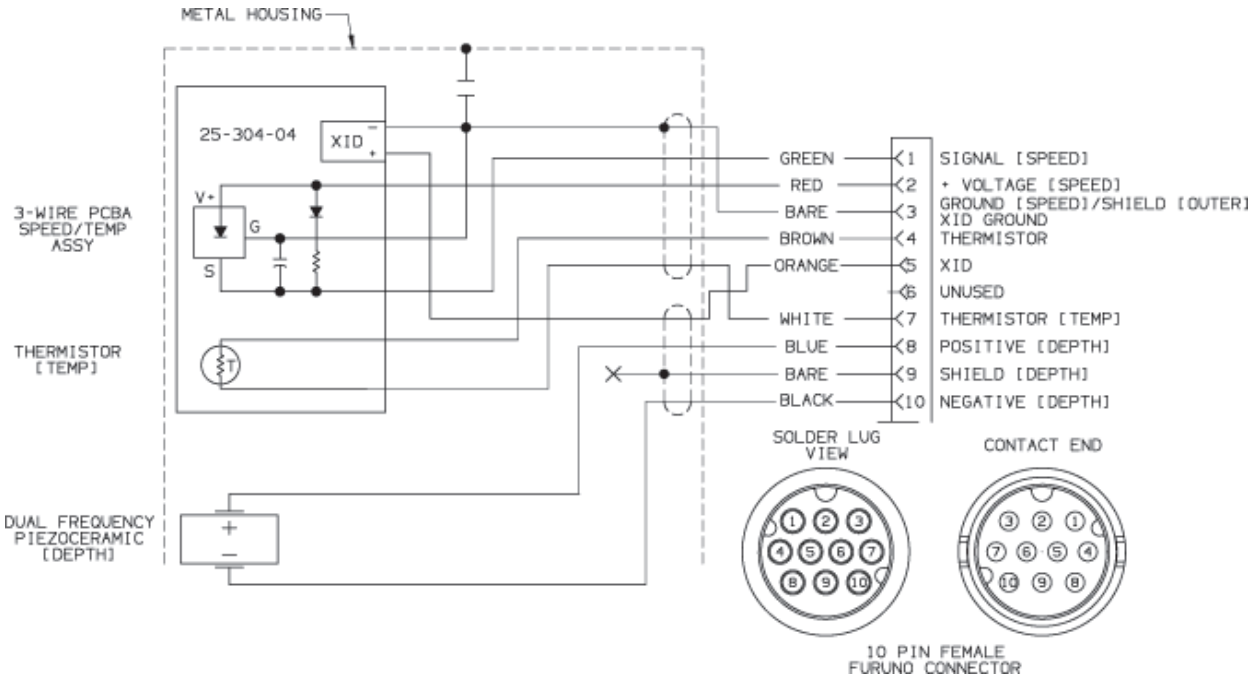
Model(s): 8-Pin—Depth, Speed and Temperature Sensors



NOTE: DISREGARD ORANGE WIRE IF PRESENT.

Furuno®

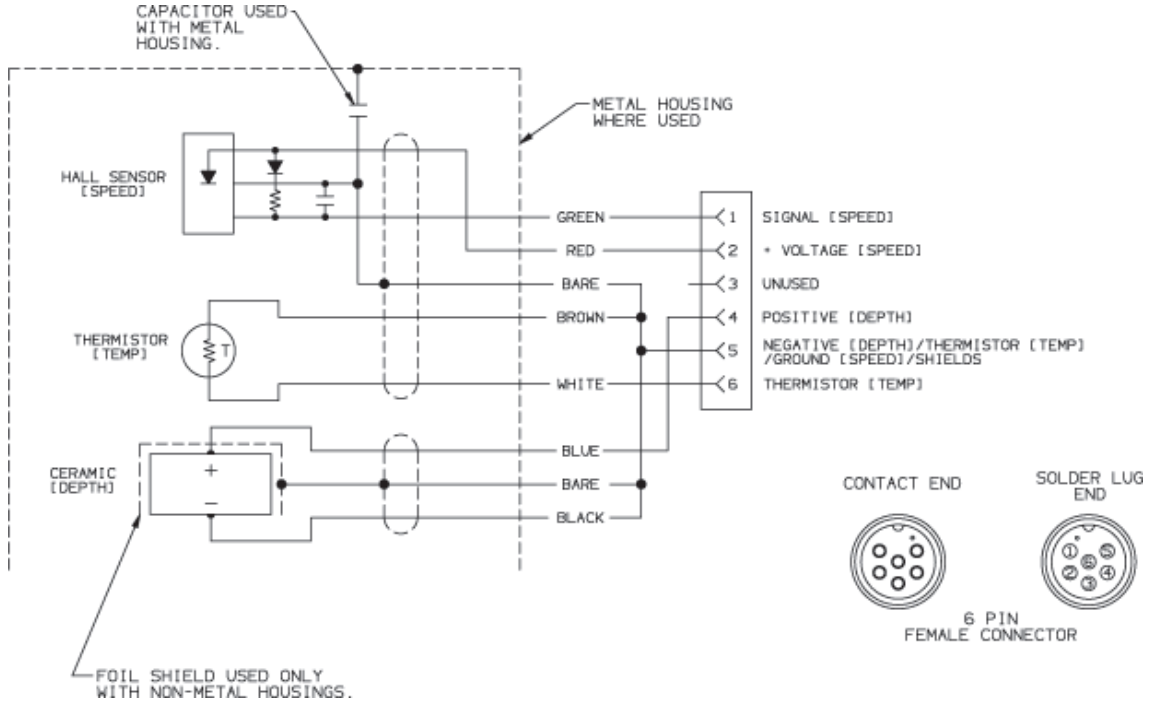
Model(s): 10-Pin—Depth, Speed and Temperature Sensors



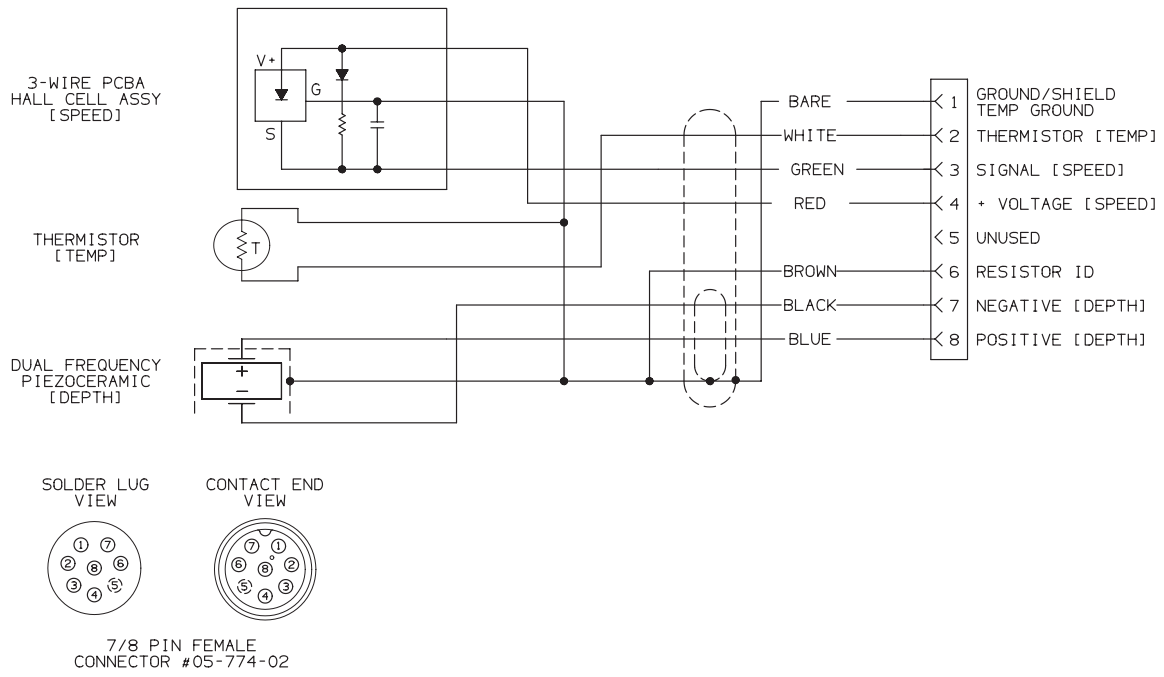
WIRING DIAGRAMS

Garmin®

Garmin® | Model(s): Depth, Speed and Temperature Sensors



Garmin® | Model(s): Depth, Speed and Temperature P66-8G—GSD24

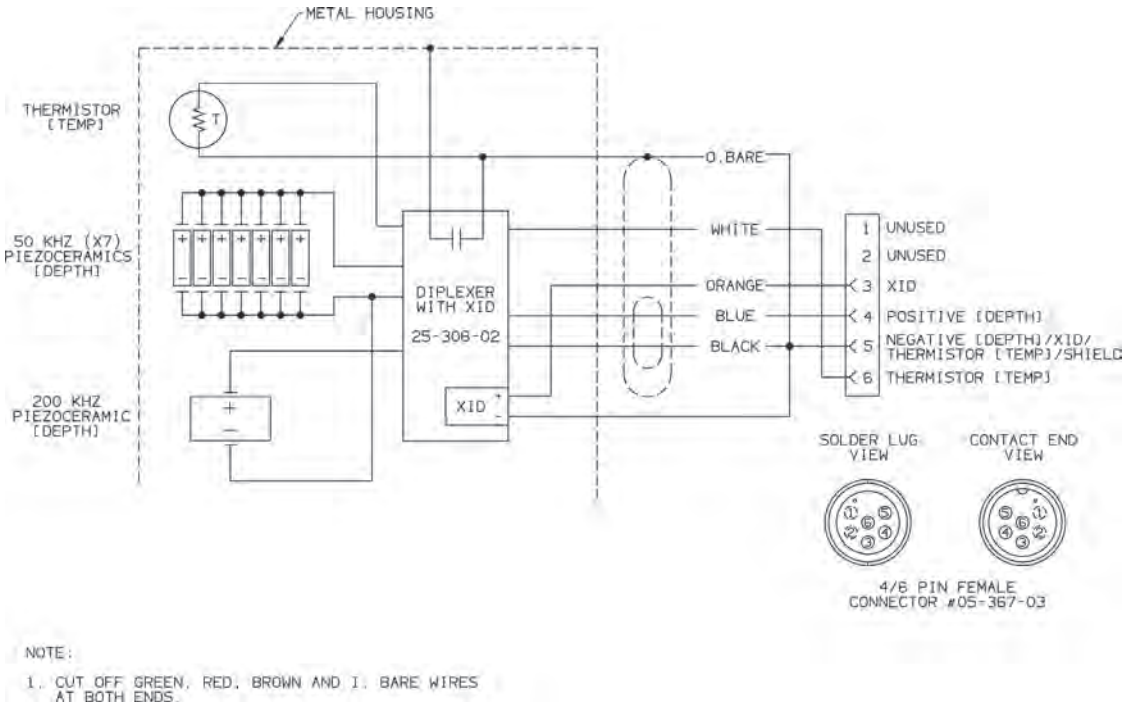


WIRING DIAGRAMS

Garmin®

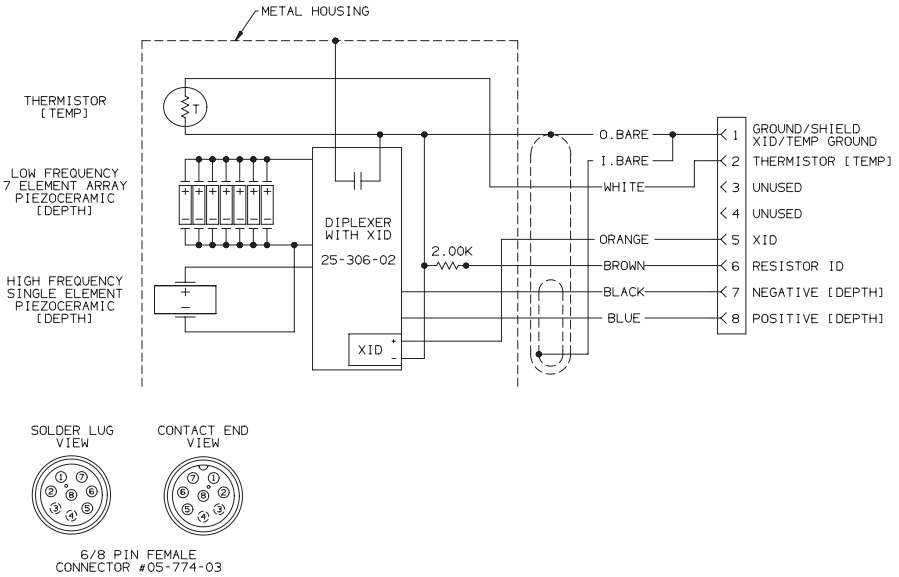
Garmin®

Model(s): 1 kW Depth and Temperature with Xducer ID®



Garmin®

Model(s): Depth and Temp—TM260/B260/SS270W-8G

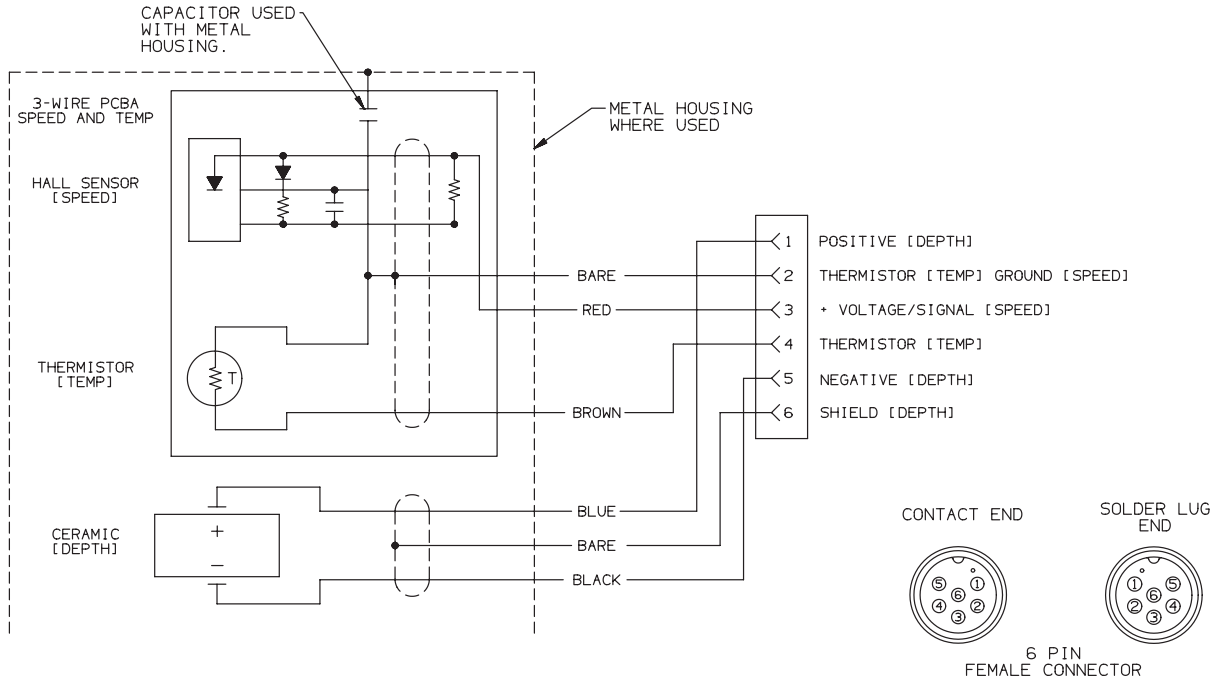


WIRING DIAGRAMS

Navman® / Northstar®, Northstar®

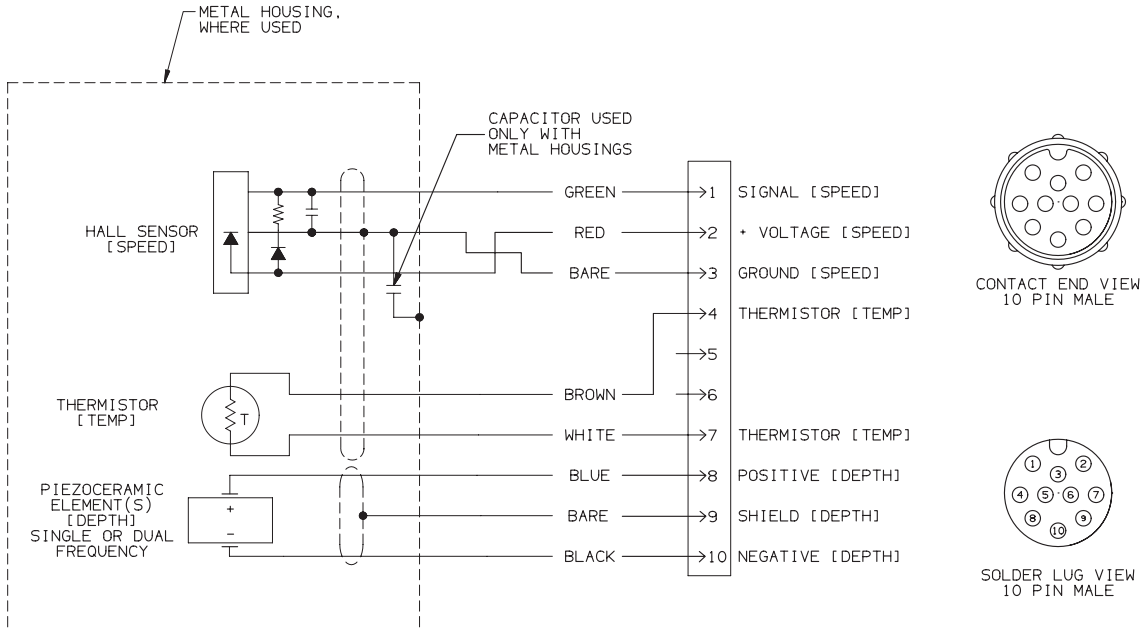
Navman® / Northstar®

Model(s): M-Series, 8000i, 6-Pin Depth, Speed and Temp Sensors



Northstar®

Model(s): 490-S, 491, 10-Pin—600 W Depth, Speed and Temp

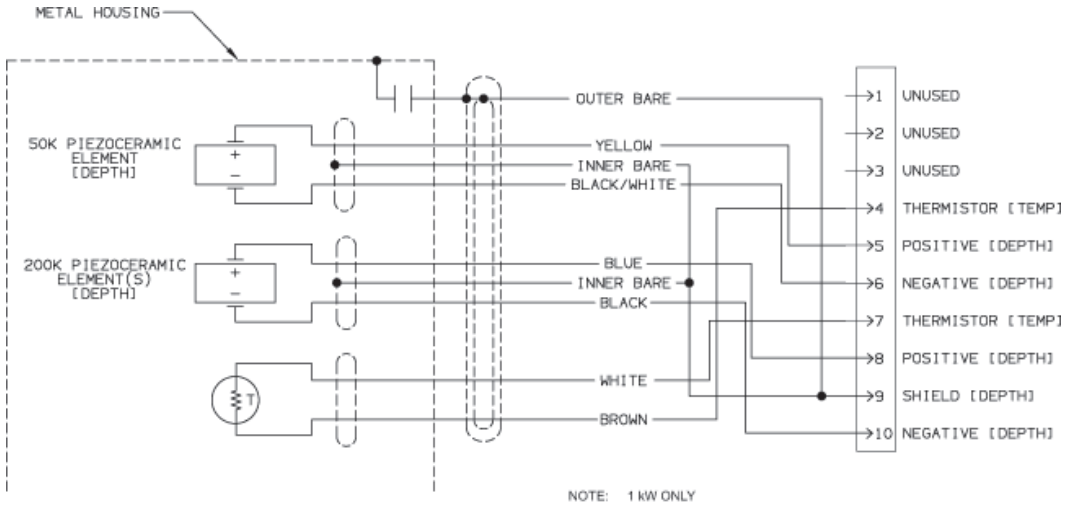


WIRING DIAGRAMS

Northstar®, Raymarine®

Northstar®

Model(s): 490-D, 491—1kW Depth and Temperature Sensors

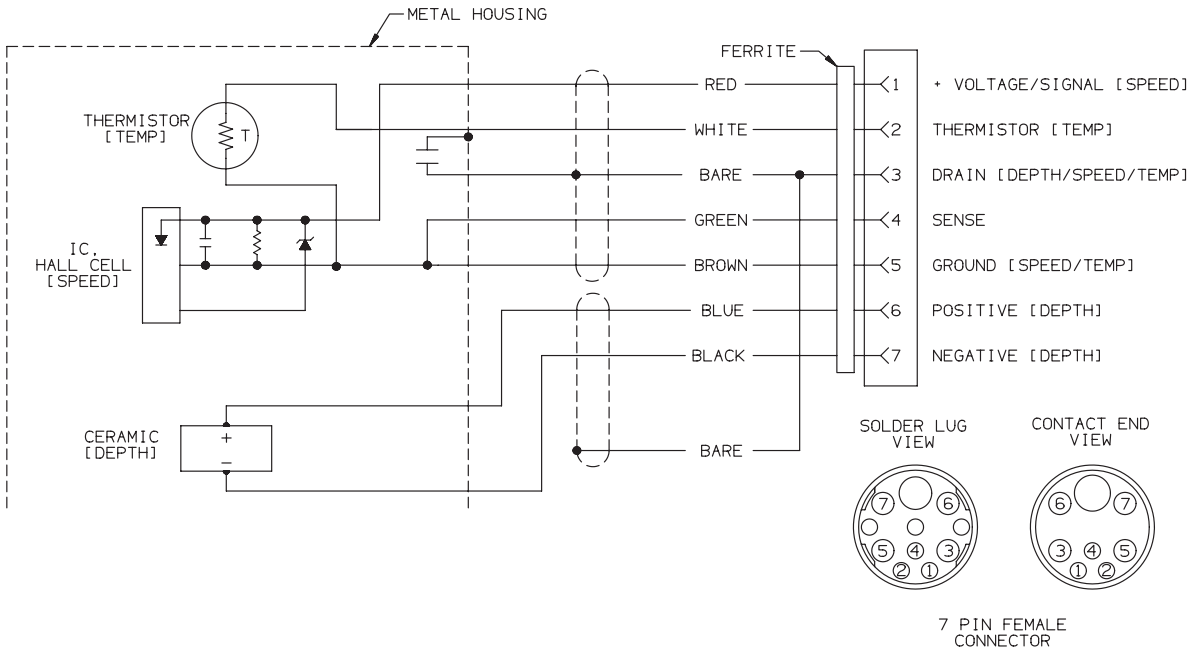


SOLDER LUG VIEW
10 PIN MALE

CONTACT END VIEW
10 PIN MALE

Raymarine®

Model(s): DSM Series—Depth, Speed and Temperature Sensors



SOLDER LUG VIEW

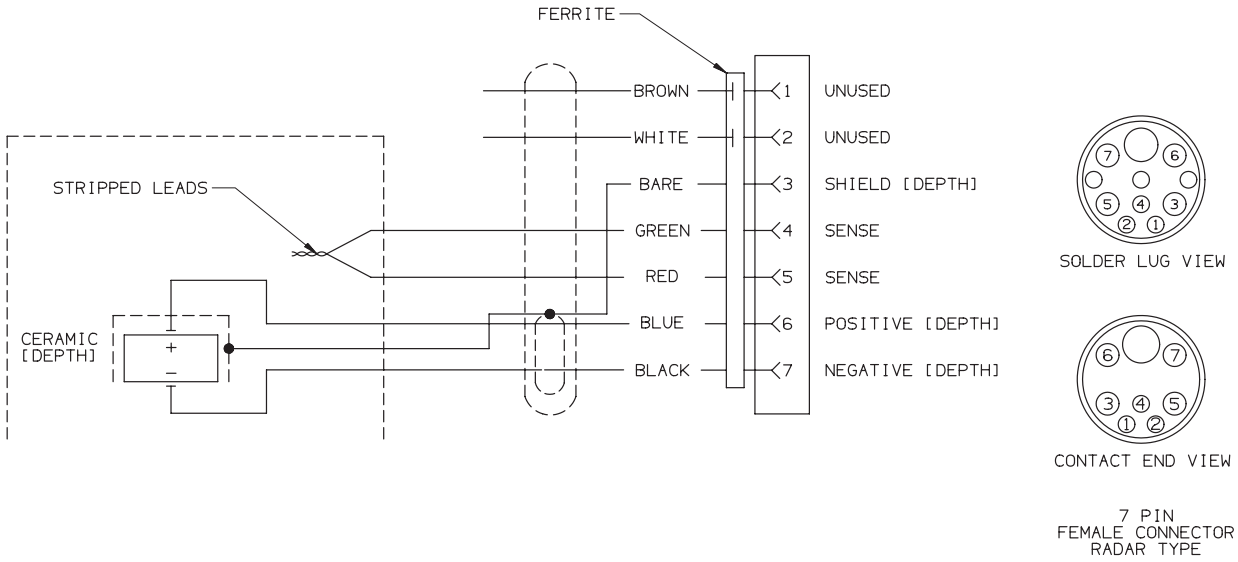
CONTACT END VIEW

7 PIN FEMALE CONNECTOR

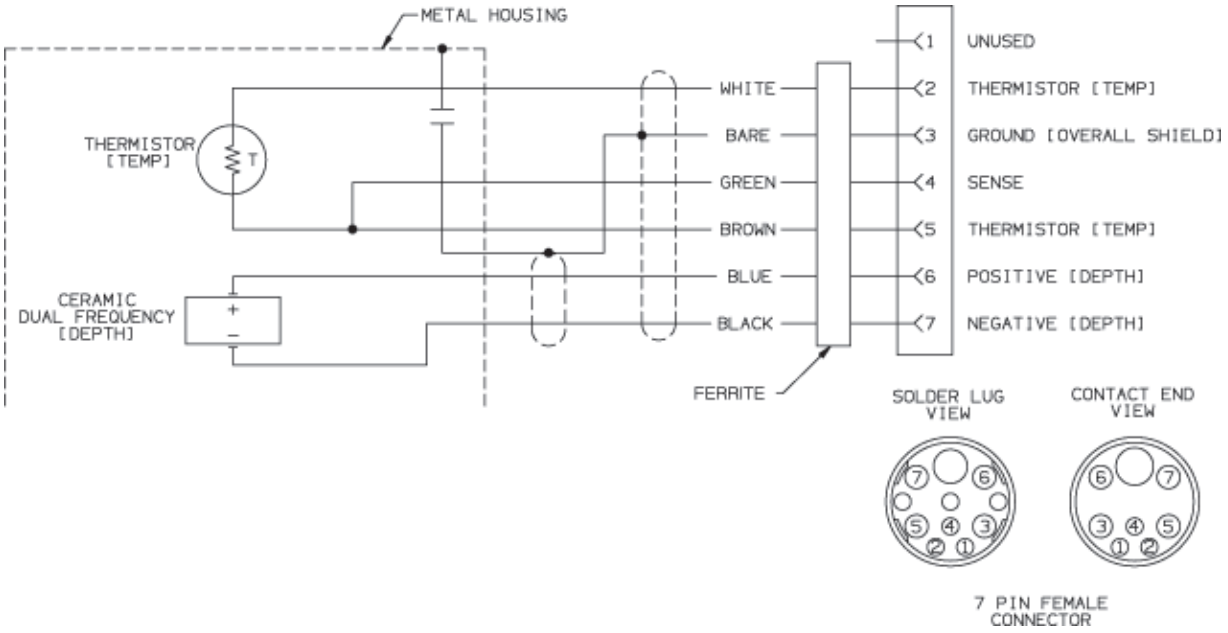
WIRING DIAGRAMS

Raymarine®

Raymarine® | Model(s): DSM Series—Depth Only Sensors



Raymarine® | Model(s): DSM Series—Depth and Temperature Sensors

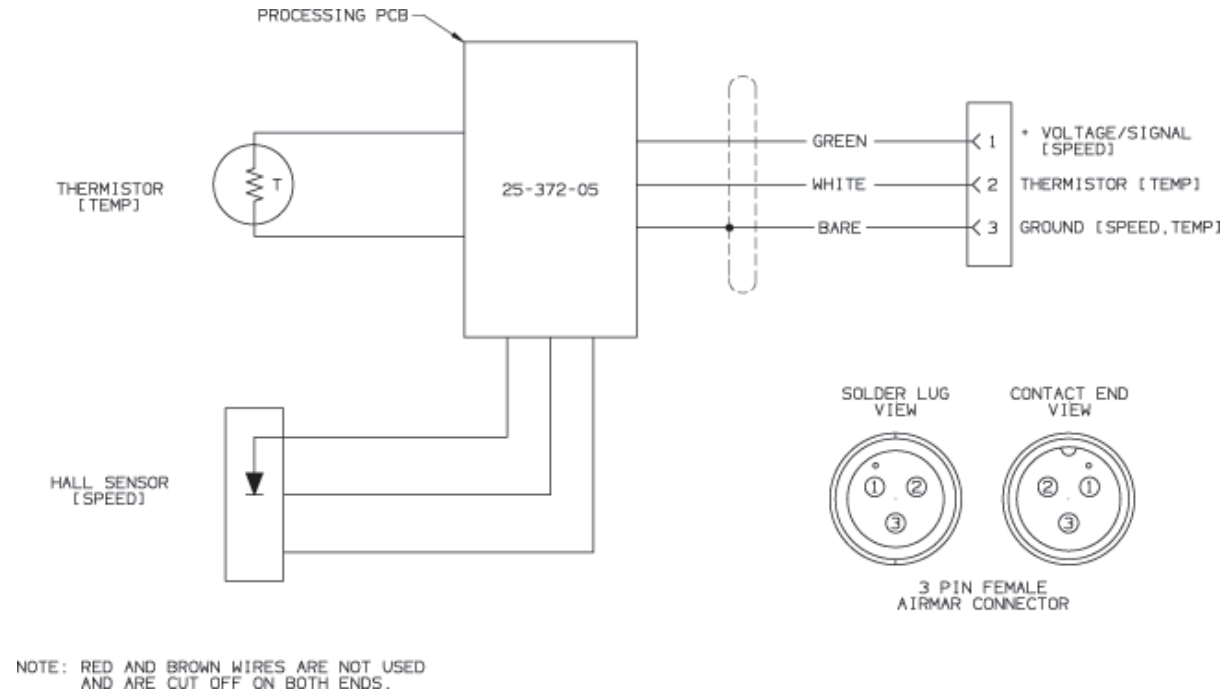


WIRING DIAGRAMS

Raymarine®

Raymarine®

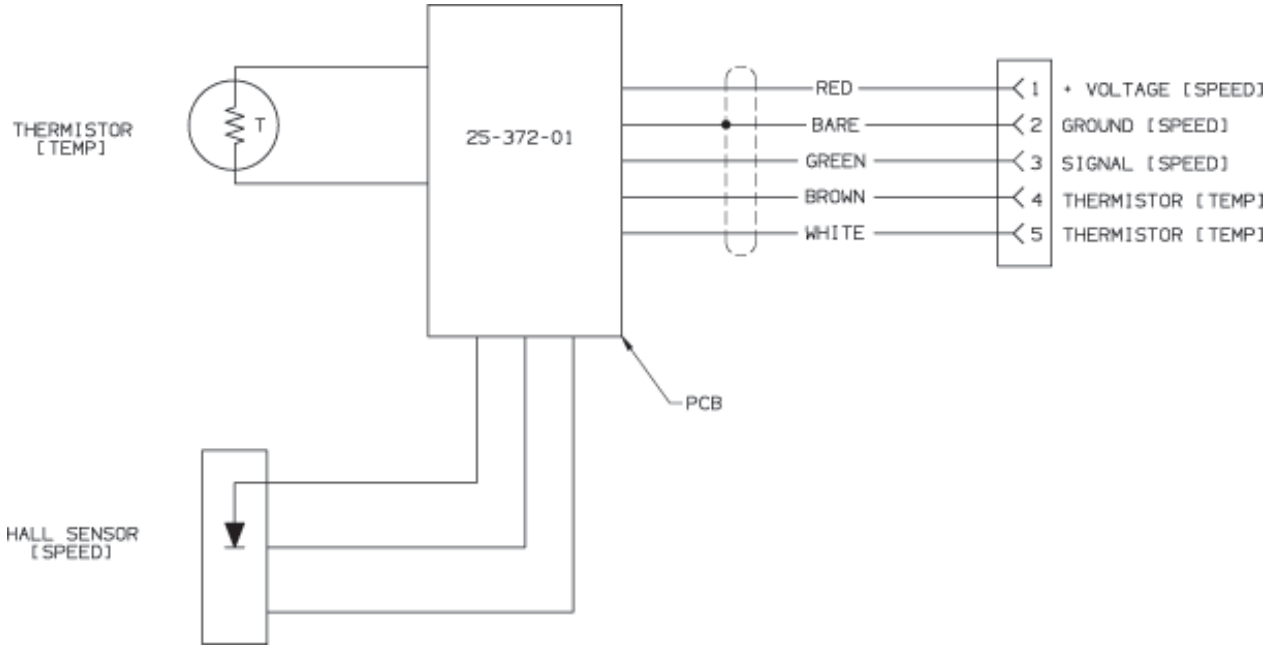
Model(s): DSM Series—Speed and Temperature Sensors



NOTE: RED AND BROWN WIRES ARE NOT USED AND ARE CUT OFF ON BOTH ENDS.

Raymarine®

Model(s): ST40, ST50, ST60, Raydata—Speed and Temp Sensors

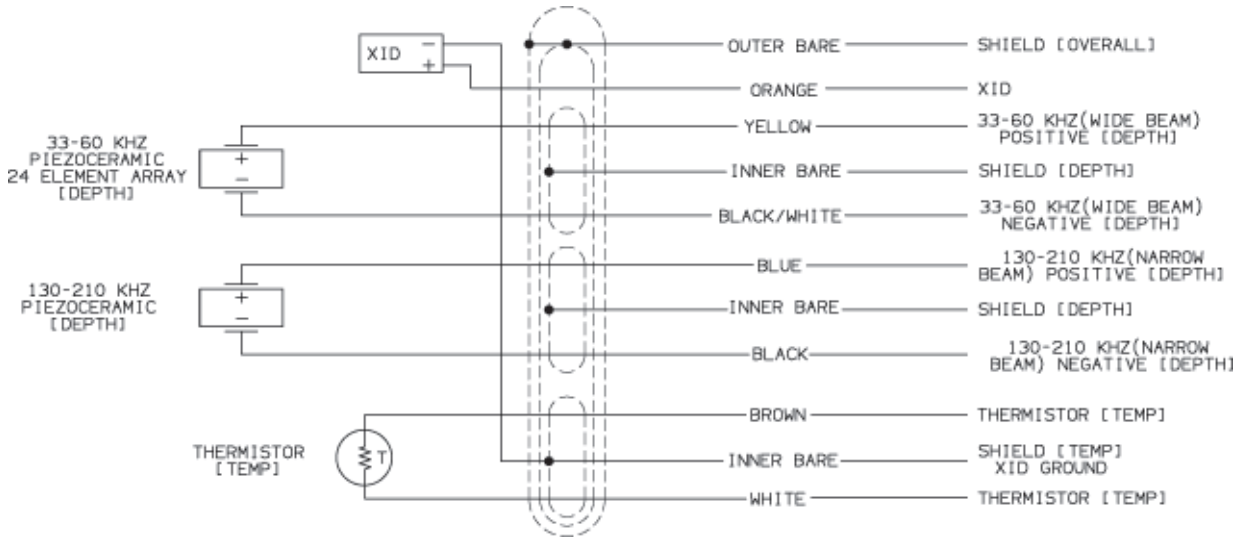


WIRING DIAGRAMS

Raymarine®

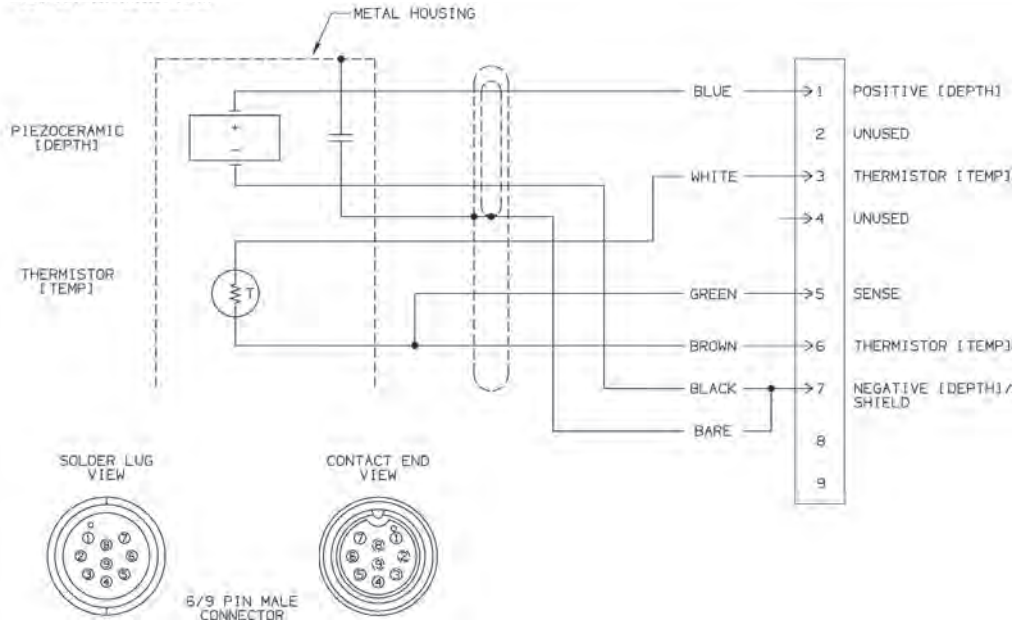
Raymarine®

Model(s): DSM400—2 kW and 3 kW Sensors



Raymarine®

Model(s): A Series—Depth and Temperature Sensors

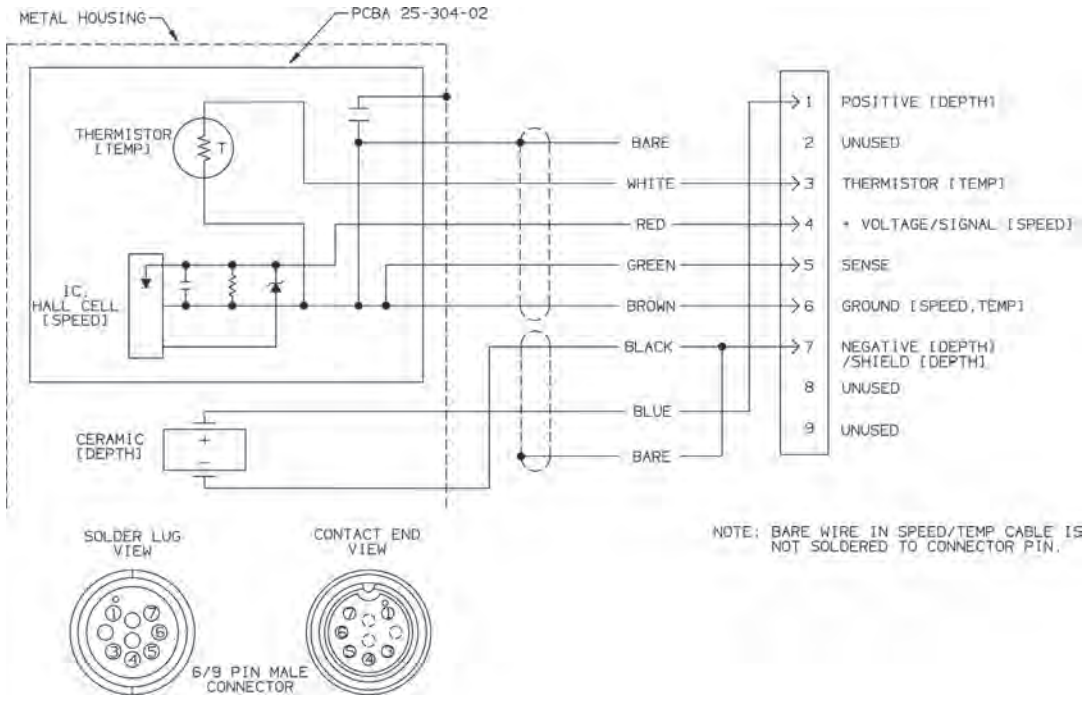


WIRING DIAGRAMS

Raymarine®

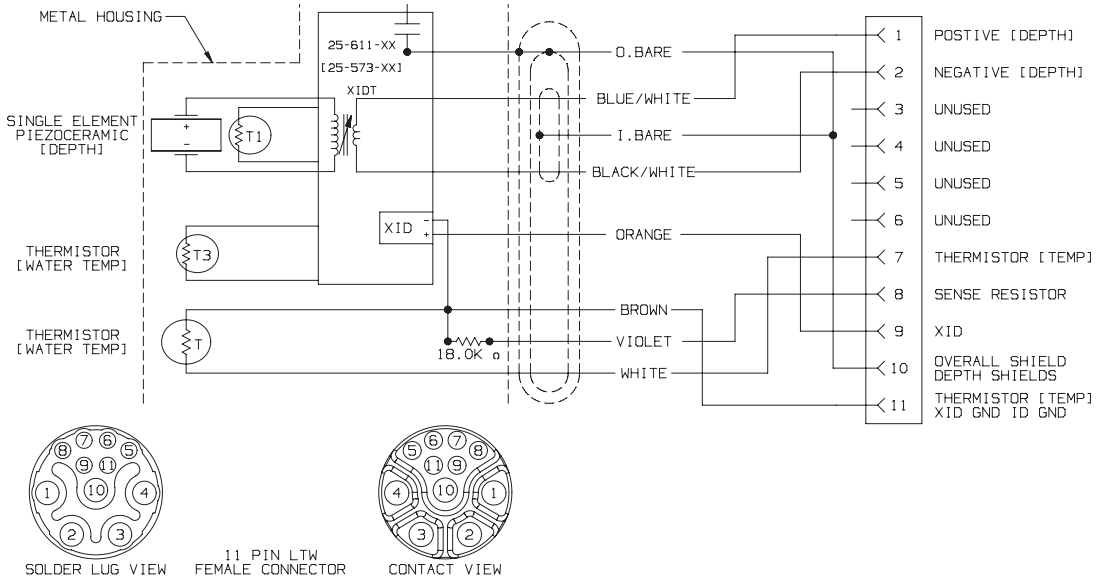
Raymarine®

Model(s): A Series—Depth, Speed and Temperature Sensors



Raymarine® CHIRP

Model(s): B75C—CP450C



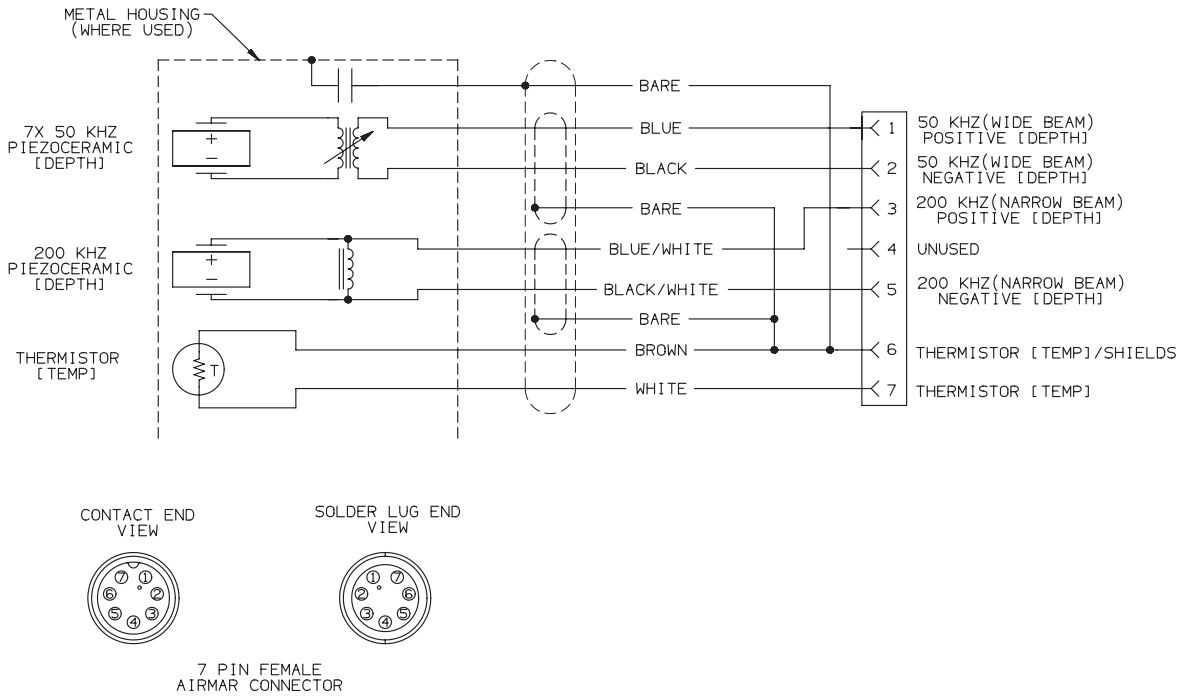
Must be used in pairs with A10246 "Y" Cable

WIRING DIAGRAMS

Simrad®

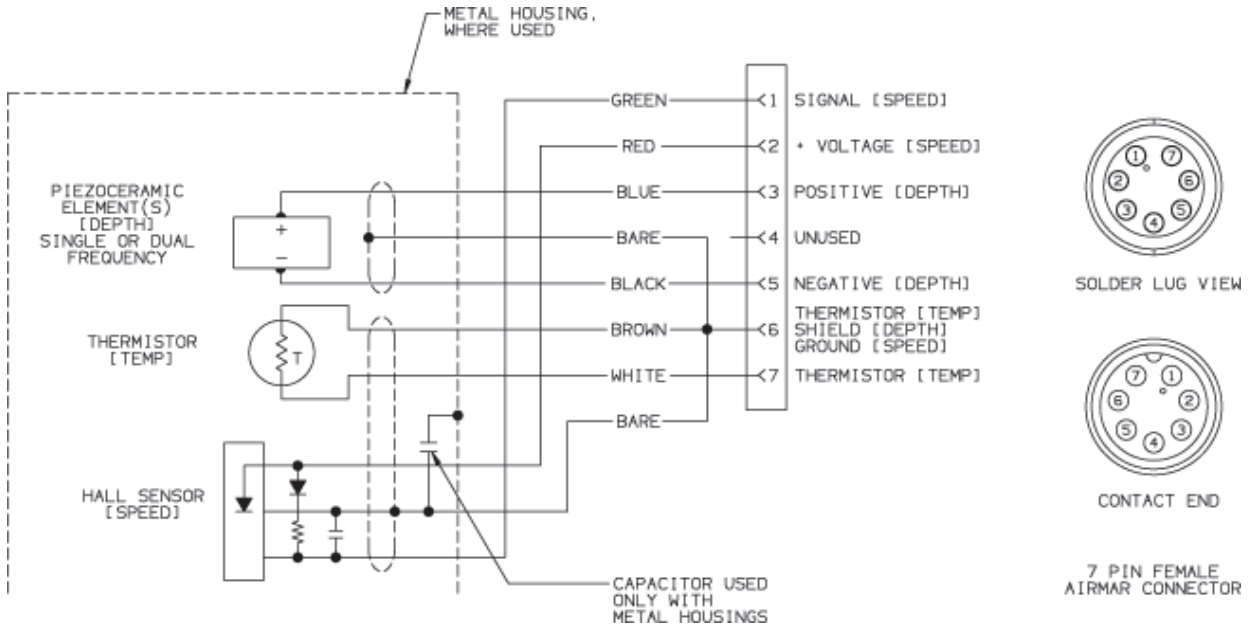
Simrad®

Model(s): 7-Pin, 40/50 Series—1 kW Depth and Temperature Sensors



Simrad®

Model(s): 7-Pin—600 W Depth, Speed and Temperature Sensors

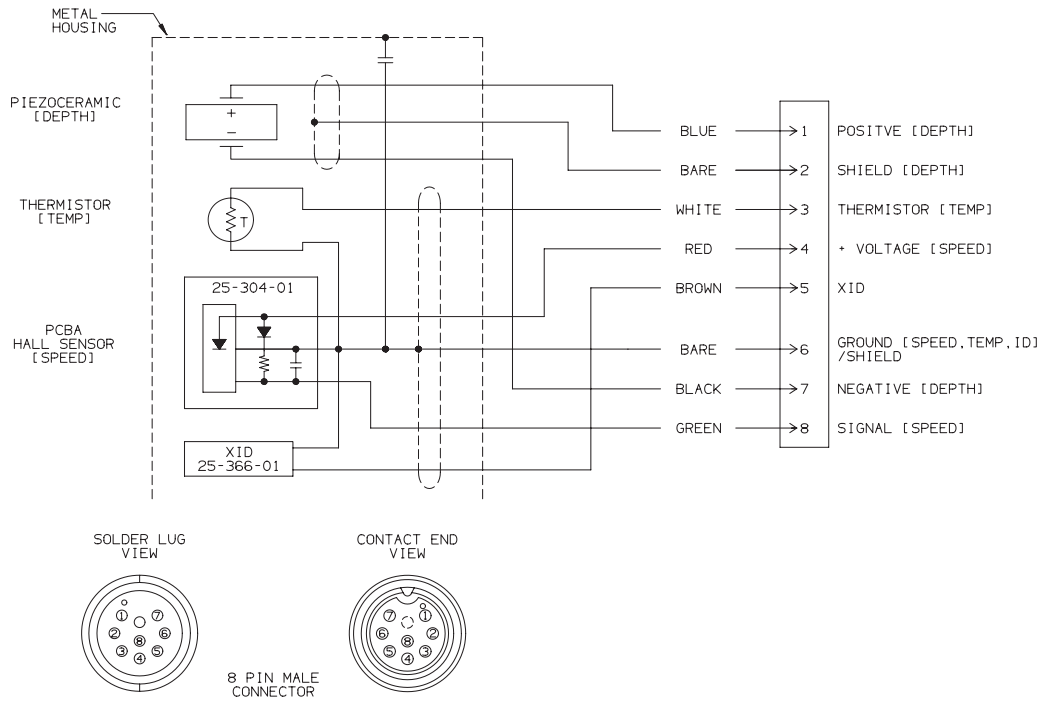


WIRING DIAGRAMS

Standard® / Koden®, RCA®

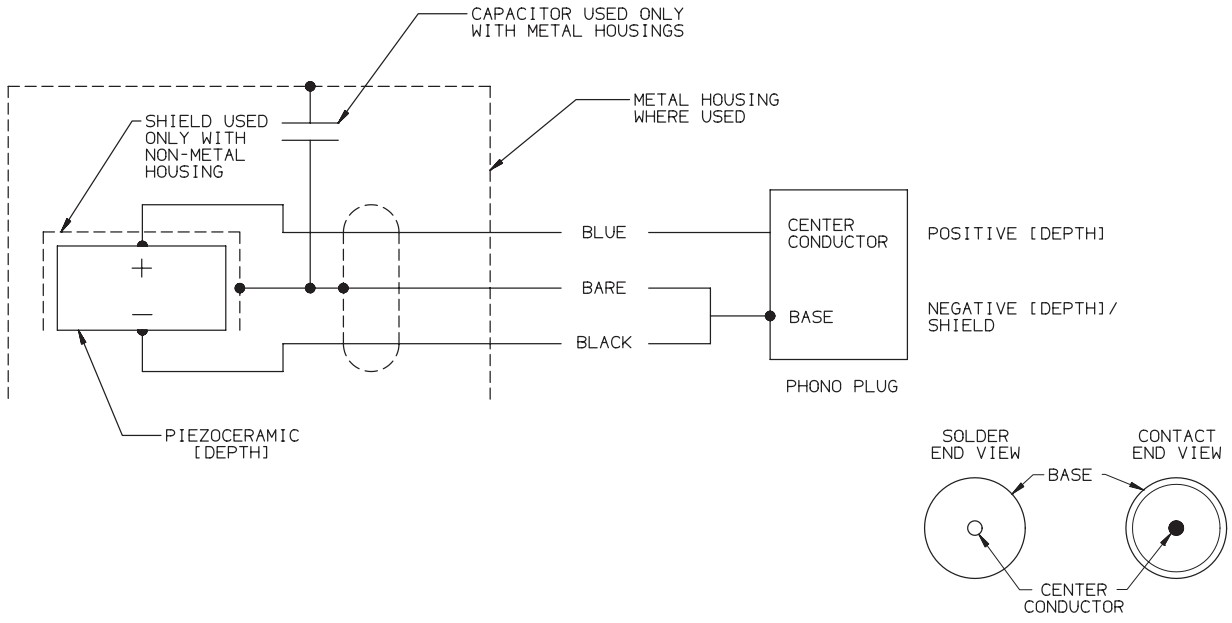
Standard®, Koden®

Model(s): FF520, ES502—Depth, Speed and Temperature Sensors



RCA

Model(s): Depth Only Sensors

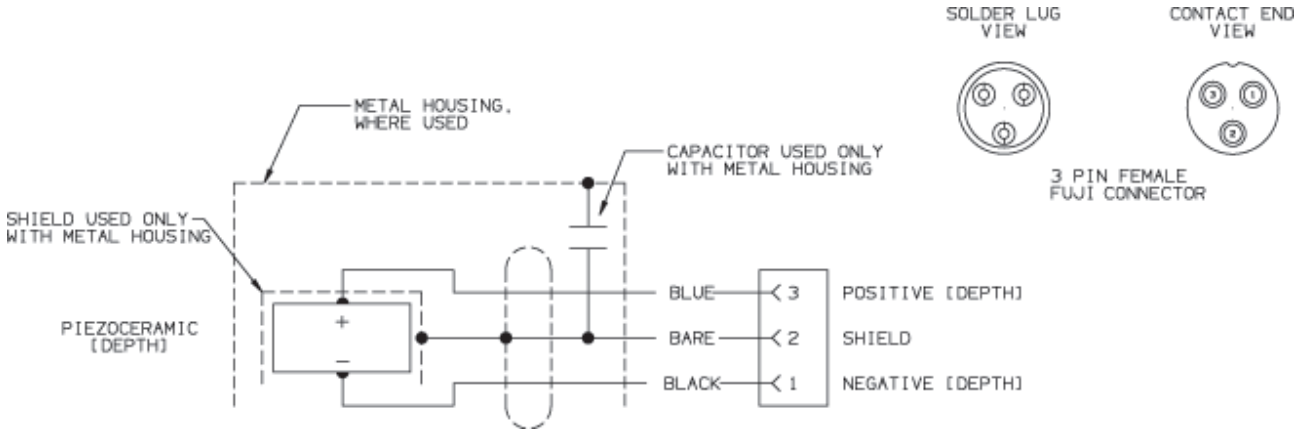


WIRING DIAGRAMS

3-Pin Fuji®, Mix and Match

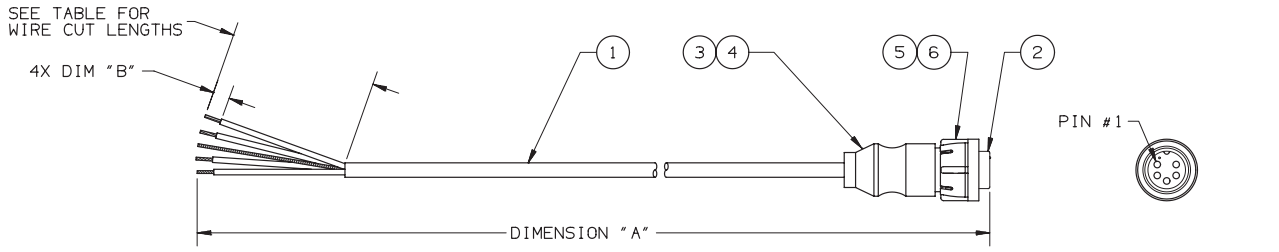
3-Pin Fuji®

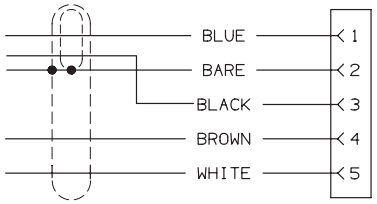
Model(s): Depth Only Sensors

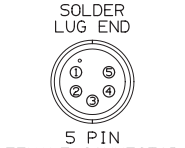


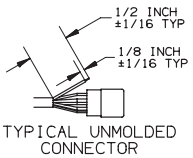
Mix and Match

Model(s): 600 W Mix and Match Terminating Ends









QTY	DESCRIPTION	ITEM NO
1	CABLE, C47	1
A/R	5F-A CONNECTOR	2
1	BACKSHELL	3
A/R	TPR	4
1	O-RING	5
1	RING, LOCKING	6

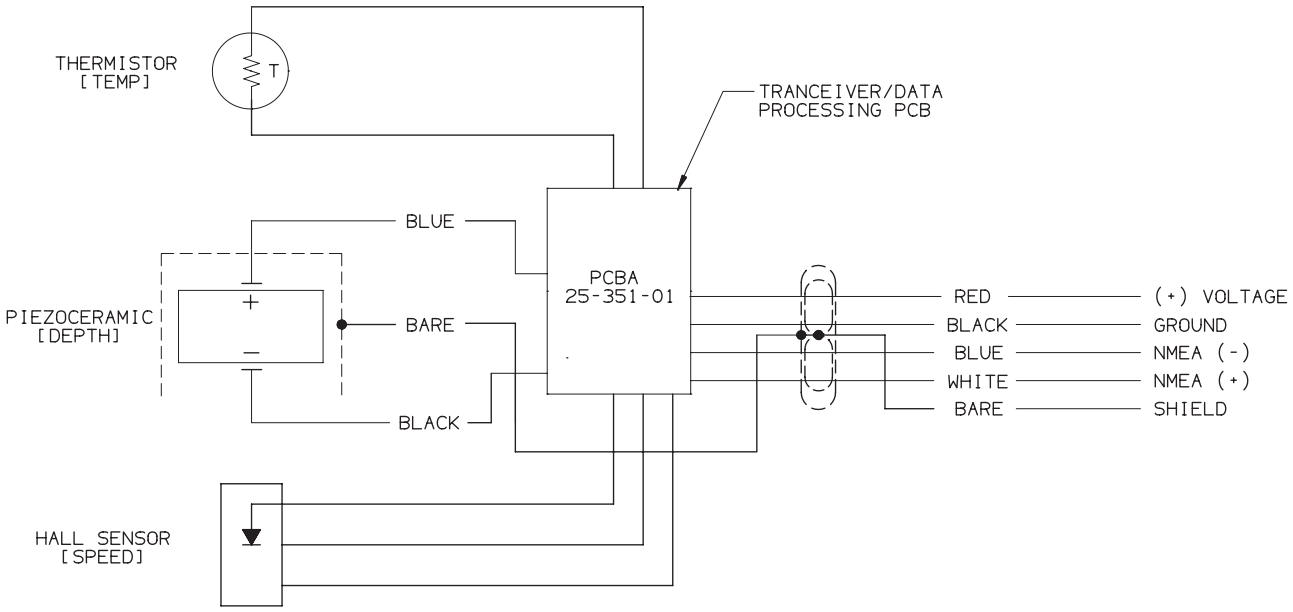
PARTS LIST

WIRING DIAGRAMS

NMEA 0183, NMEA 2000®

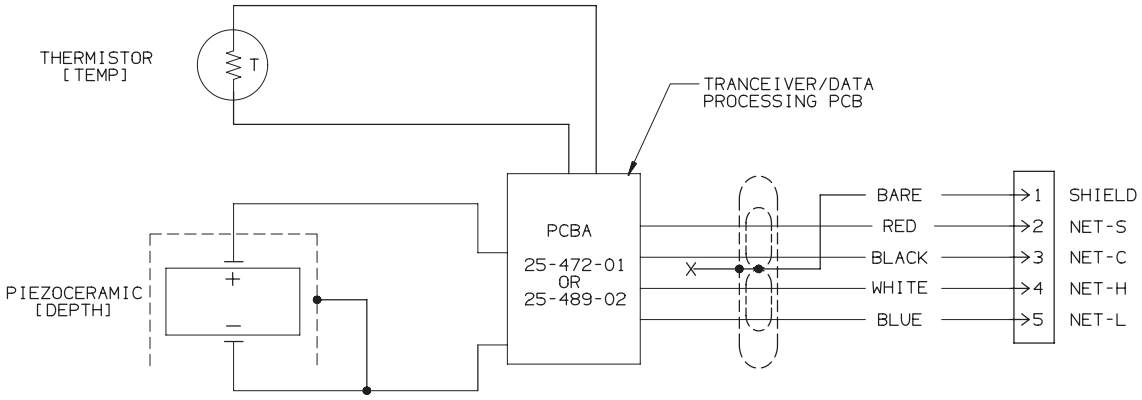
NMEA 0183

Model(s): Depth & Temp and Depth, Speed and Temp Sensors



NMEA 2000®

Model(s): Depth & Temp and Depth, Speed & Temp Sensors



REFERENCE:

NET-S: POWER SOURCE, POSITIVE

NET-C: POWER SOURCE, COMMON

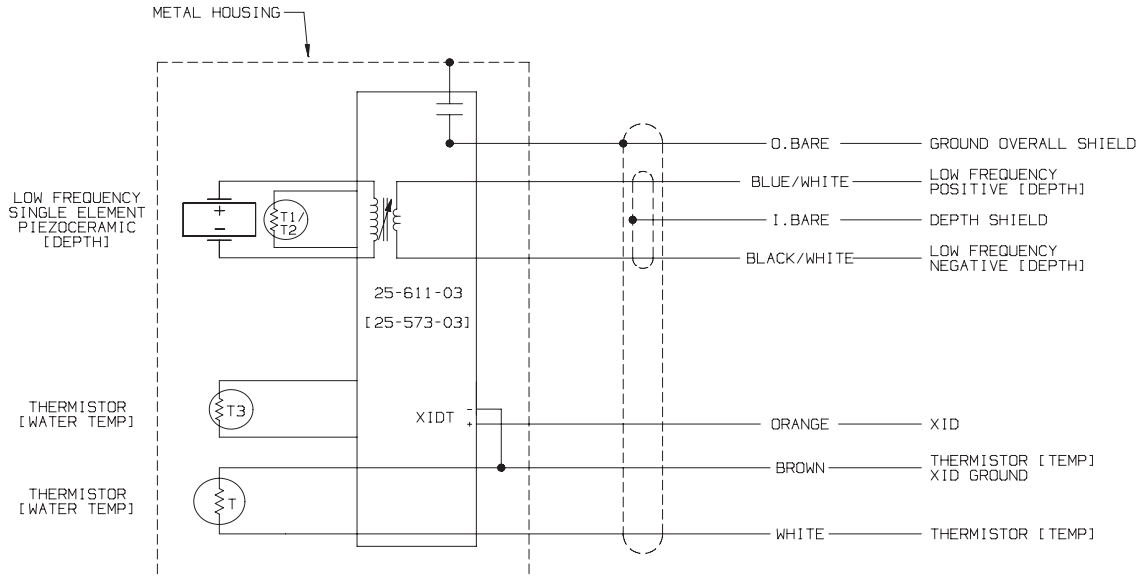
NET-H: CAN "HIGH" SIGNAL LINE

NET-L: CAN "LOW" SIGNAL LINE

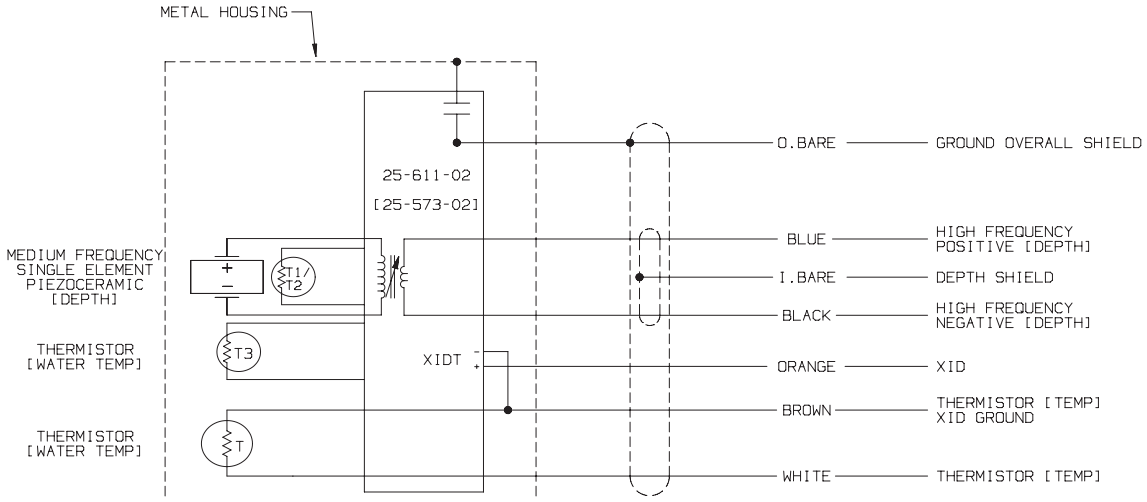
WIRING DIAGRAMS

AIRMAR®

AIRMAR® CHIRP — Model: B75C-L—No Connector—BSM-2/GSD26



AIRMAR® CHIRP — Model: B75C-M—No Connector—BSM-2/GSD26

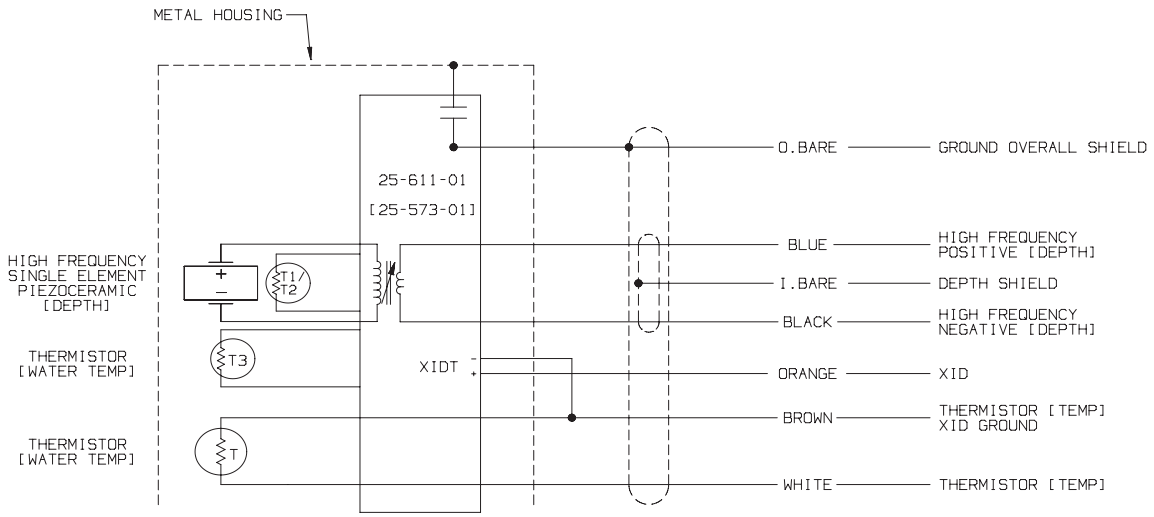


WIRING DIAGRAMS

AIRMAR®

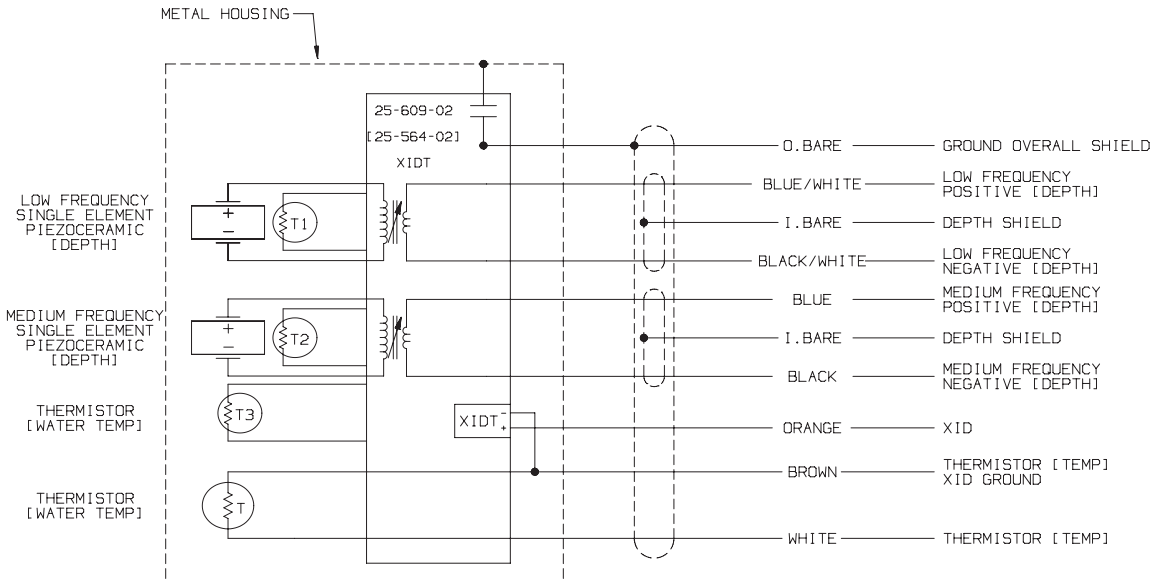
AIRMAR® CHIRP

Model: B75C-H—No Connector—BSM-2/GSD26



AIRMAR® CHIRP

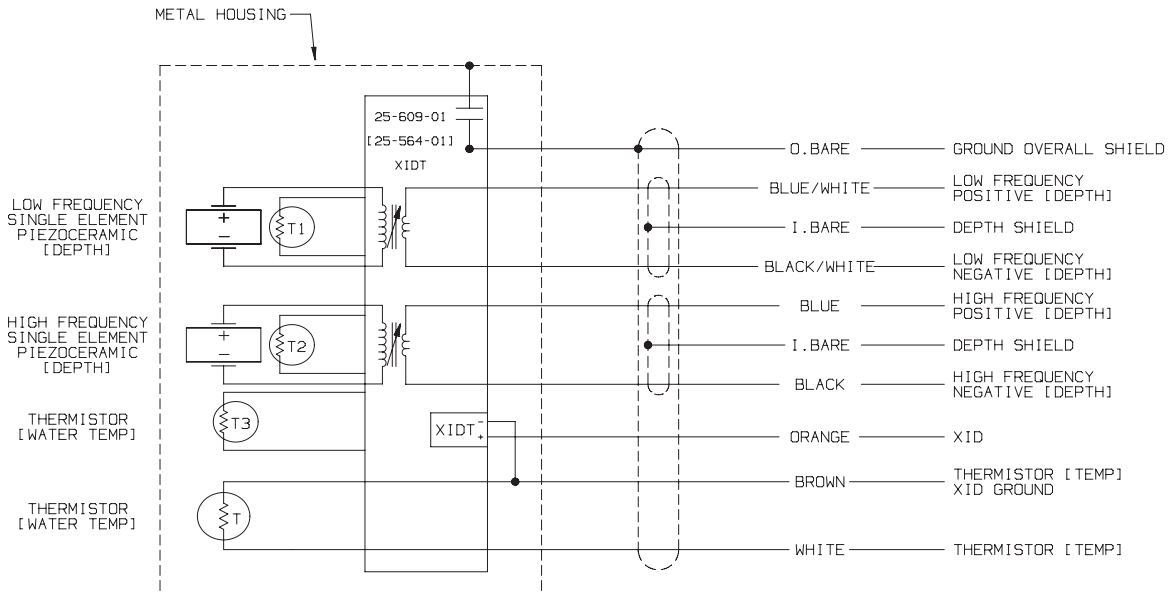
Model: B756C-LM—No Connector—BSM-2/GSD26



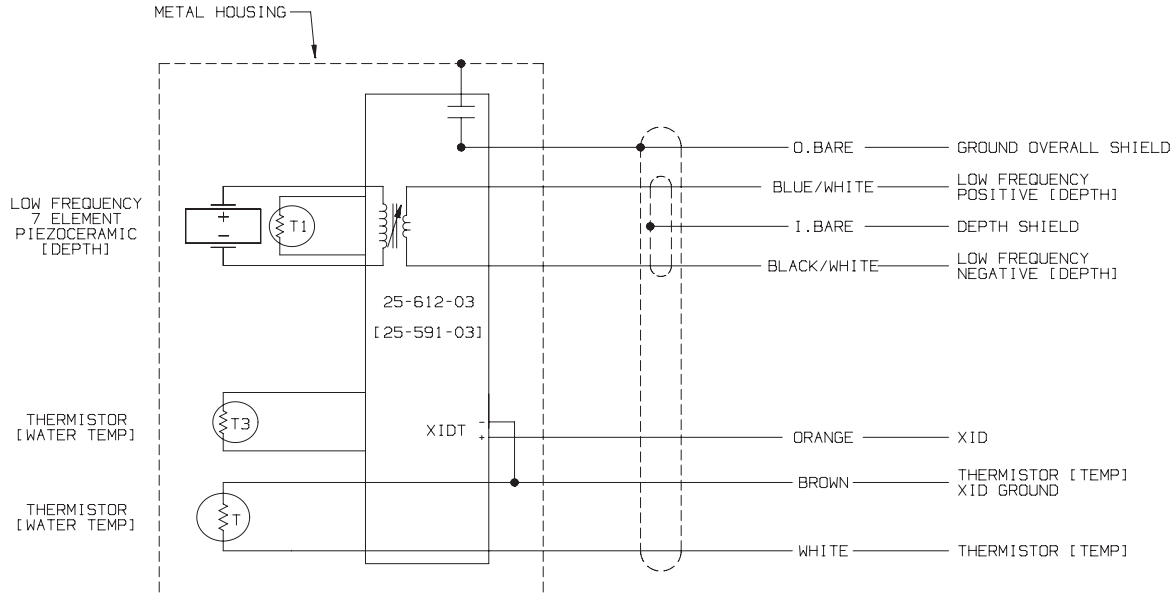
WIRING DIAGRAMS

AIRMAR®

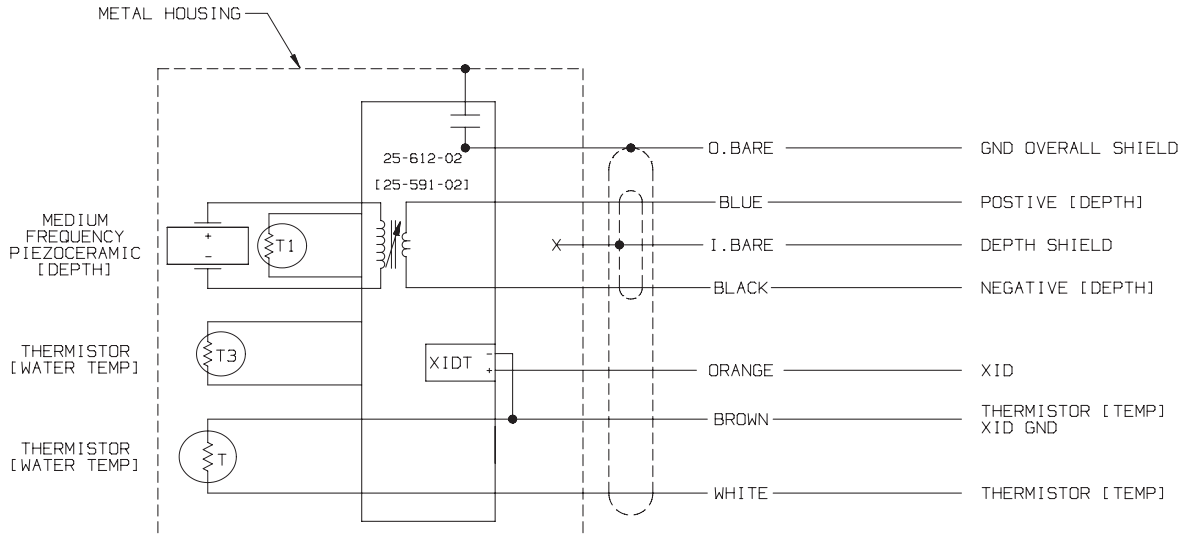
AIRMAR® CHIRP — Model: B765C-LH—No Connector—BSM-2/GSD26



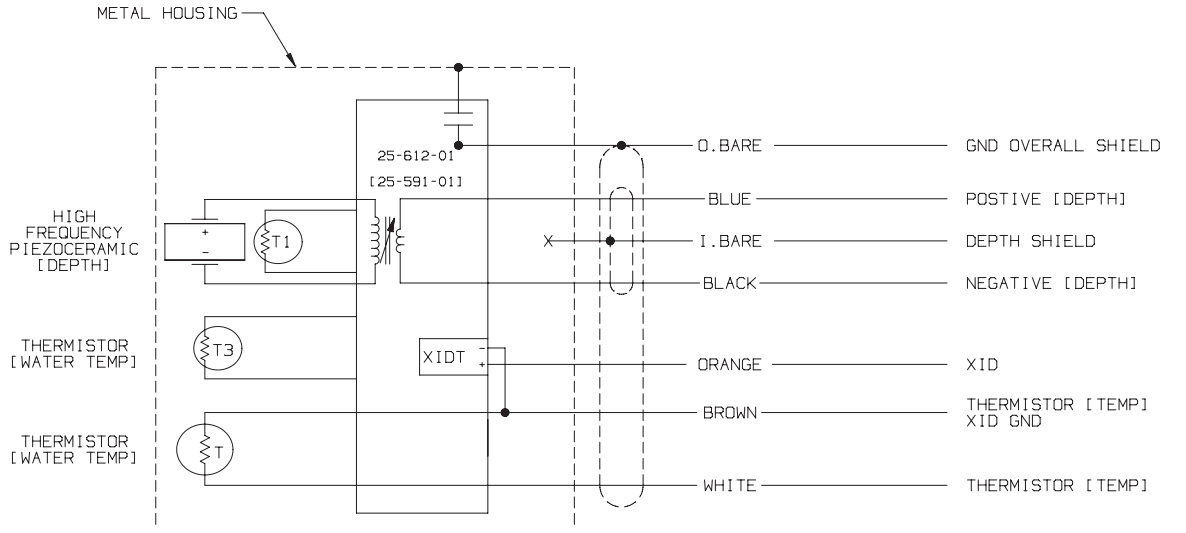
AIRMAR® CHIRP — Model: B175C-L—No Connector—BSM-2/GSD26



AIRMAR® CHIRP — Model: B175C-M—No Connector—BSM-2/GSD26



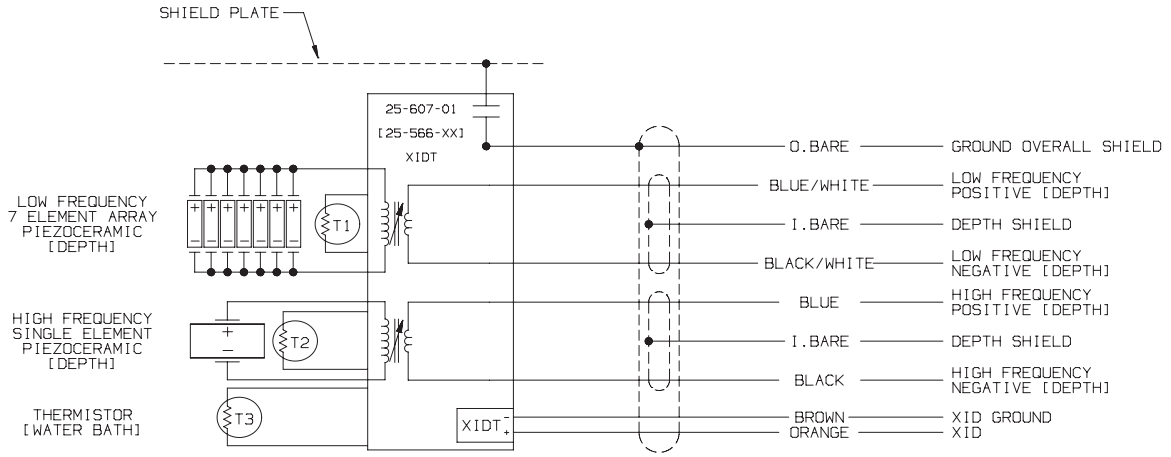
AIRMAR® CHIRP — Model: B175C-H—No Connector—BSM-2/GSD26



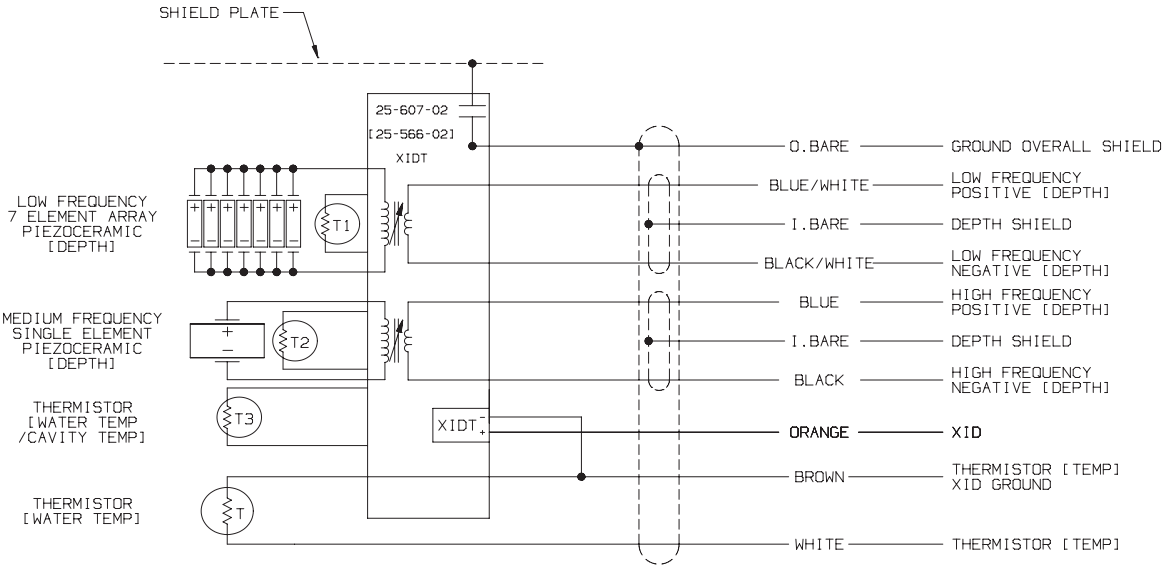
WIRING DIAGRAMS

AIRMAR®

AIRMAR® CHIRP — Model: M265C-LH—No Connector—BSM-2/GSD26



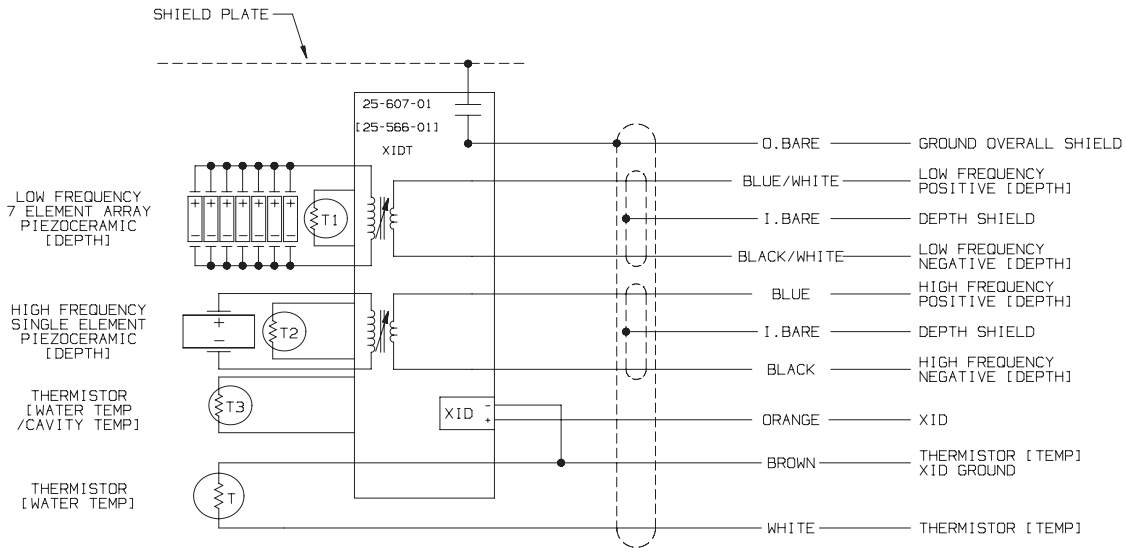
AIRMAR® CHIRP — Model: TM265C-LM—No Connector—BSM-2/GSD26



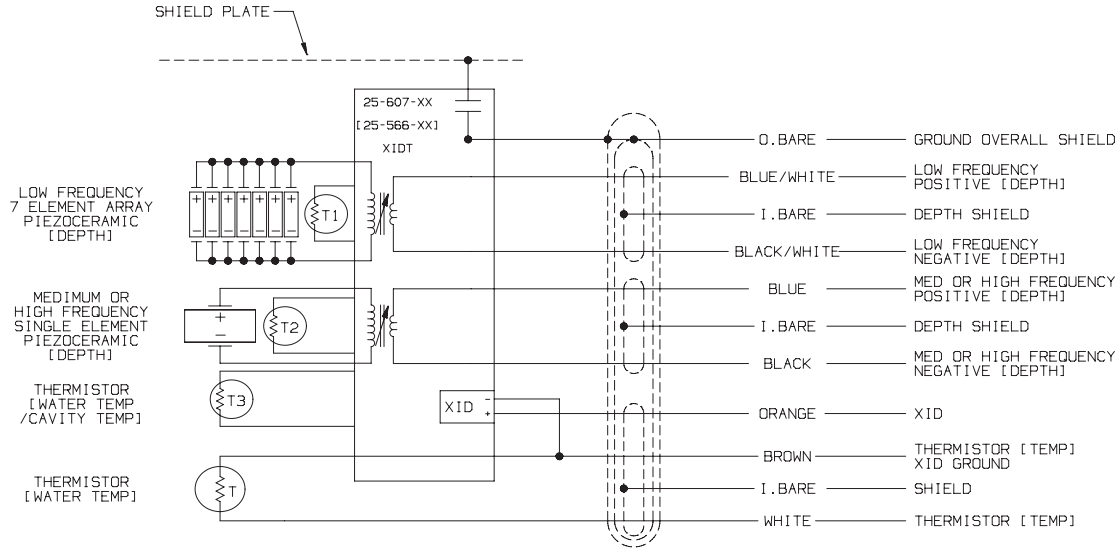
WIRING DIAGRAMS

AIRMAR®

AIRMAR® CHIRP — Model: TM265-LH—No Connector—BSM-2/GSD26



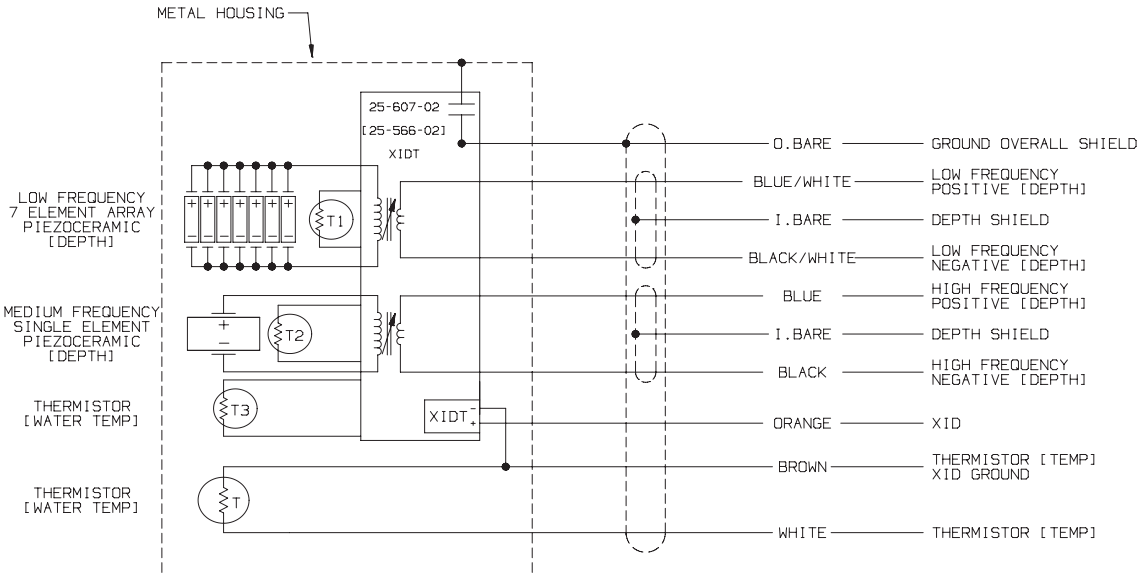
AIRMAR® CHIRP — Model: CM265-LM/LH—No Connector—BSM-2/GSD26



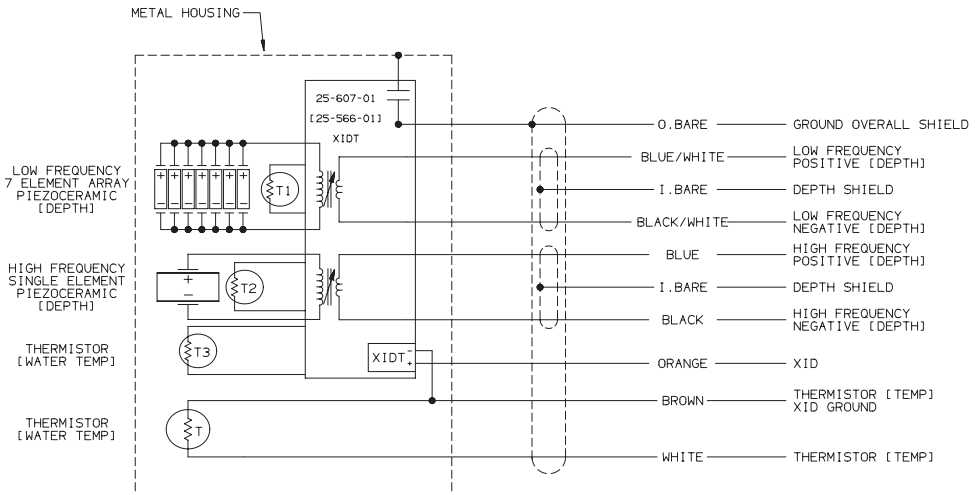
WIRING DIAGRAMS

AIRMAR®

AIRMAR® CHIRP — Model: B265-LM—No Connector—BSM-2/GSD26



AIRMAR® CHIRP — Model: B265-LH—No Connector—BSM-2/GSD26

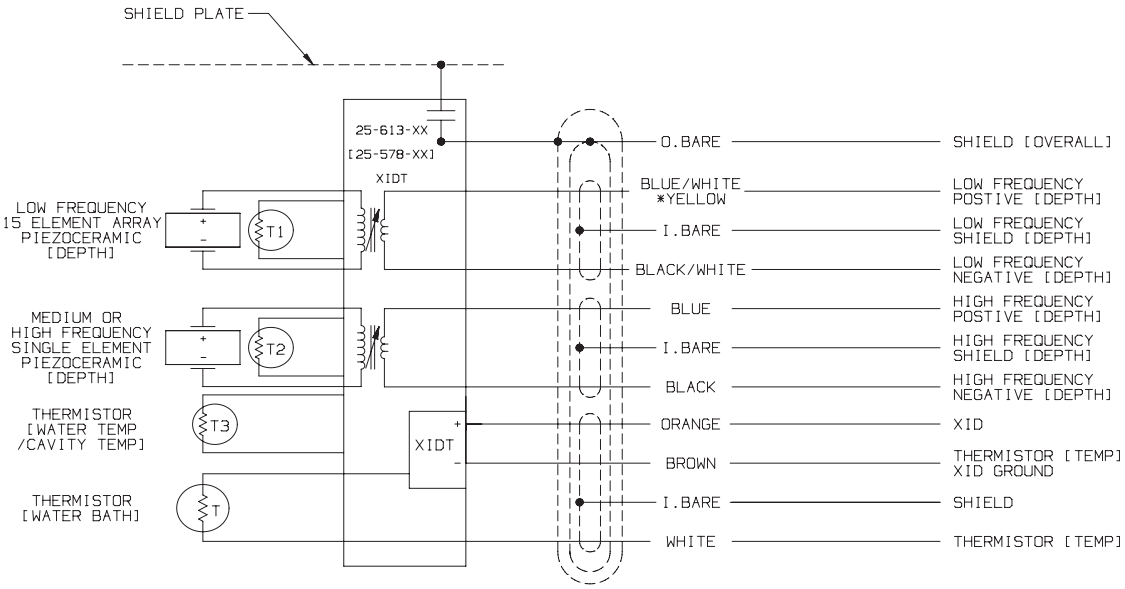


WIRING DIAGRAMS

AIRMAR®

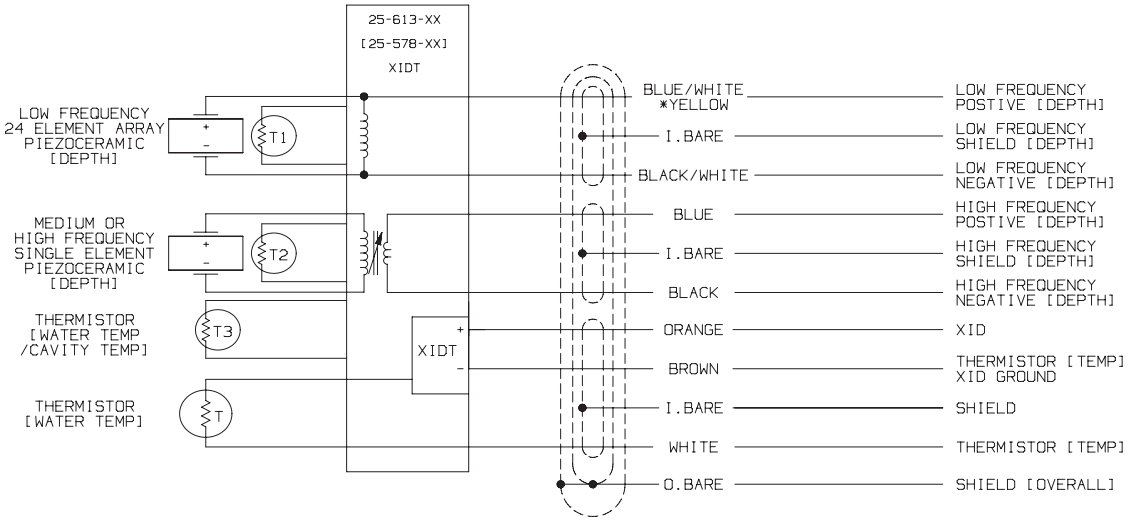
AIRMAR® CHIRP

Model: R109C/R111C-LM/LH—No Connector—BSM-2/GSD26



AIRMAR® CHIRP

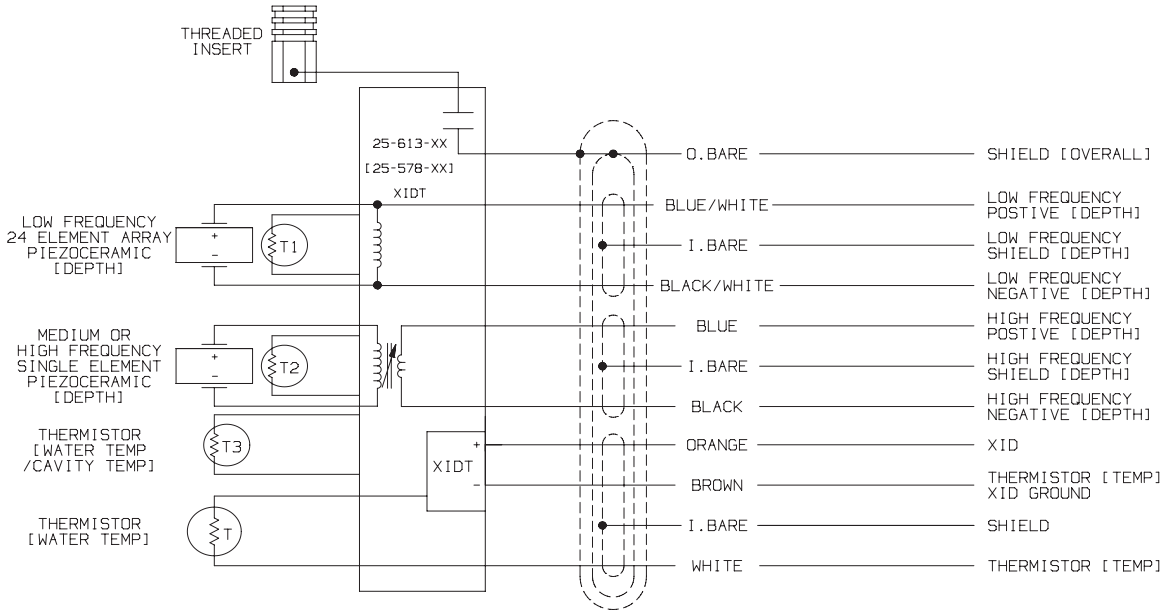
Model: R509C-LM/LH—No Connector—BSM-2/GSD26



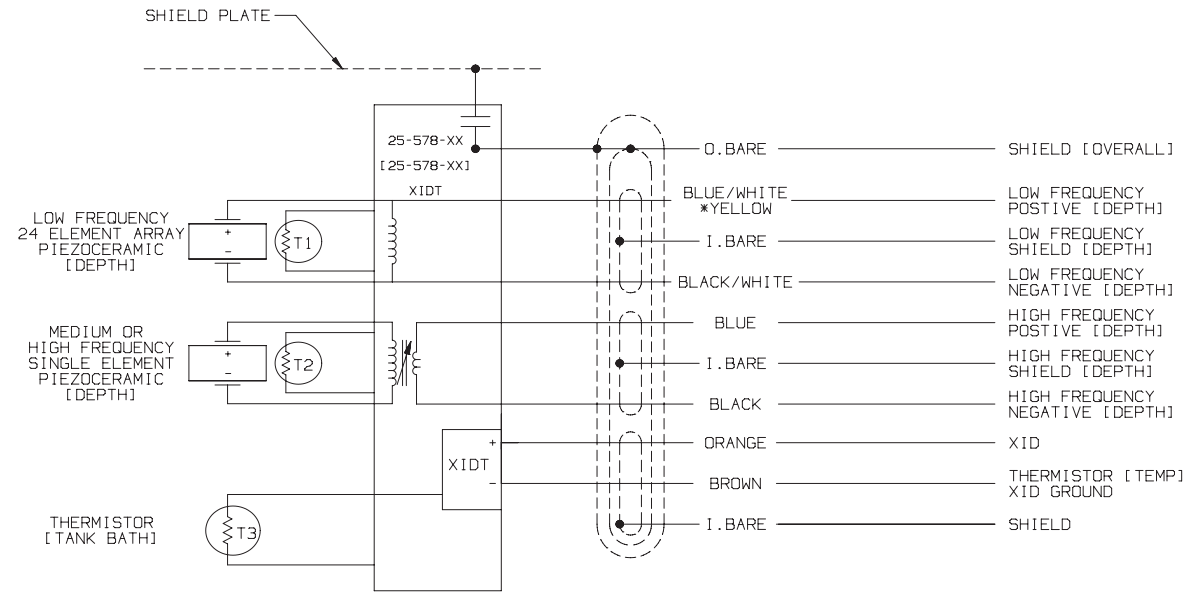
WIRING DIAGRAMS

AIRMAR®

AIRMAR® CHIRP — Model: CM599C-LM/LH—No Connector—BSM-2/GSD26



AIRMAR® CHIRP — Model: R599C-LM/LH—No Connector—BSM-2/GSD26

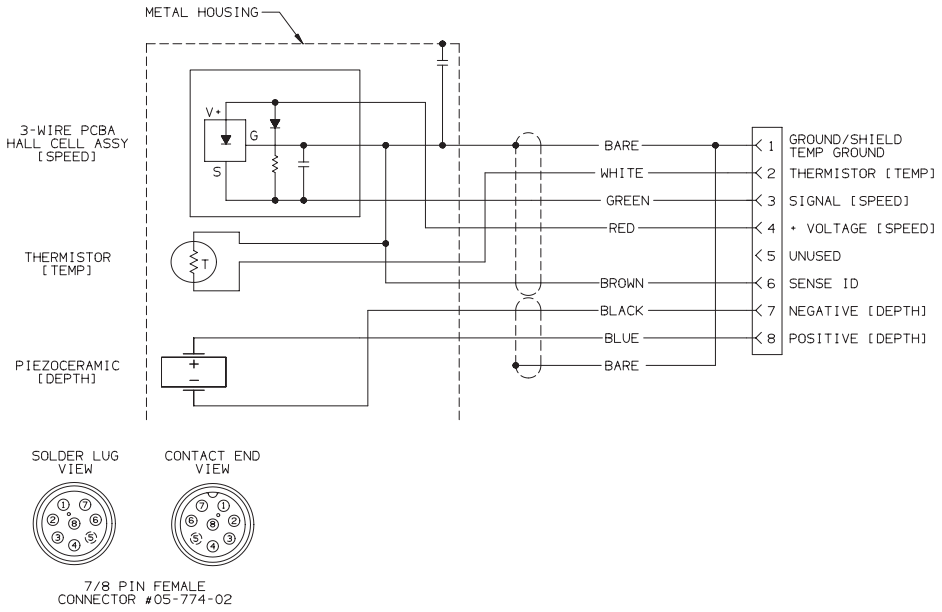


WIRING DIAGRAMS

Garmin®

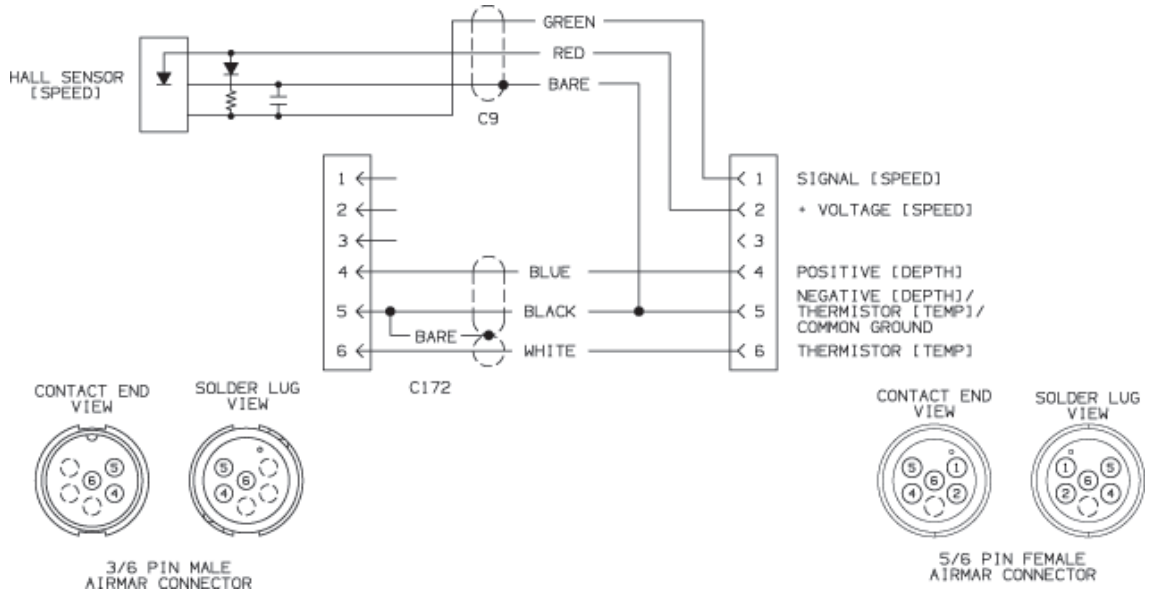
Garmin®

Model(s): B744VC-8G —GSD24



Garmin®

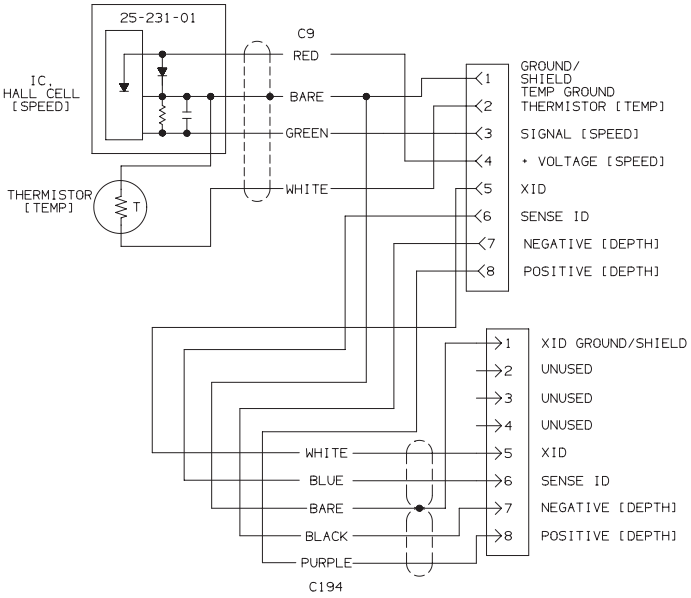
Model(s): Speed Sensor with 6-pin Y-Cable

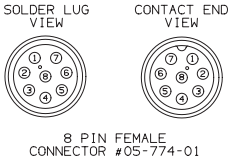


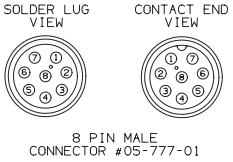
WIRING DIAGRAMS

Garmin®

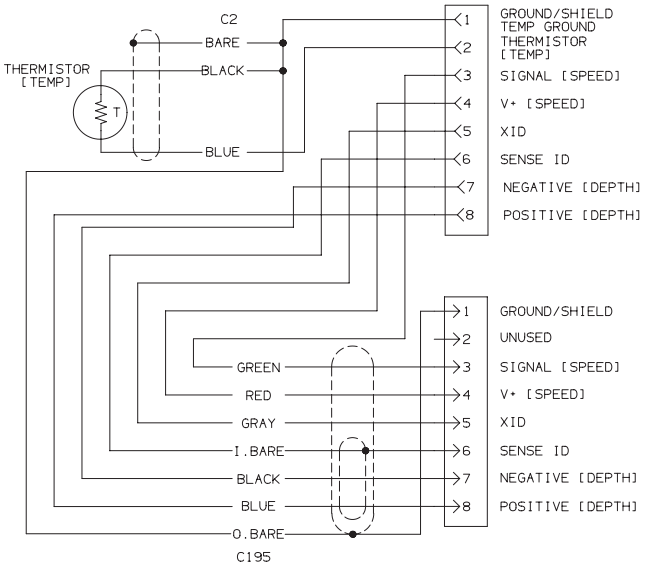
Garmin® | Model(s): ST850-8YG / GSD24

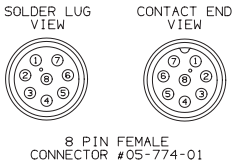


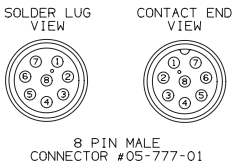




Garmin® | Model(s): T80-8YG / GSD24





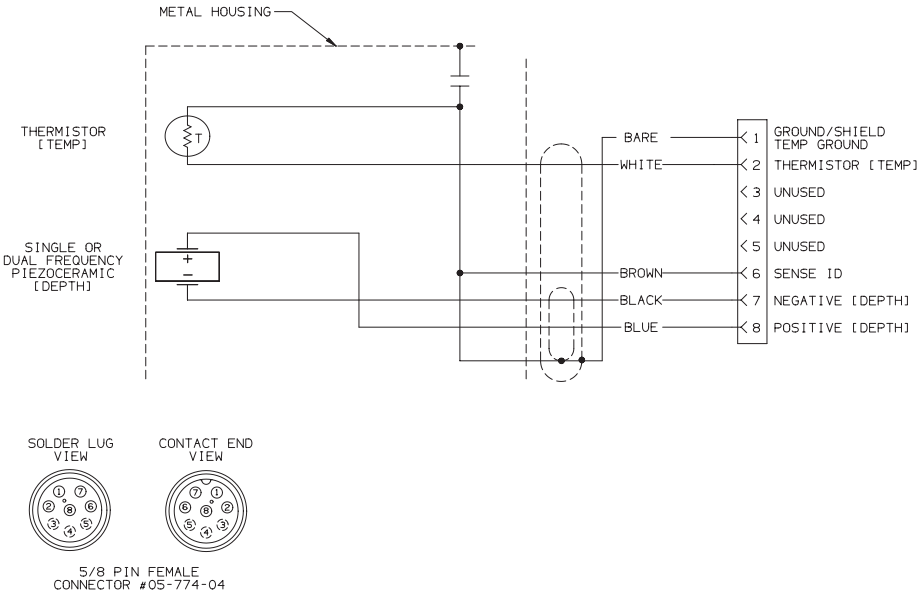


WIRING DIAGRAMS

Garmin®

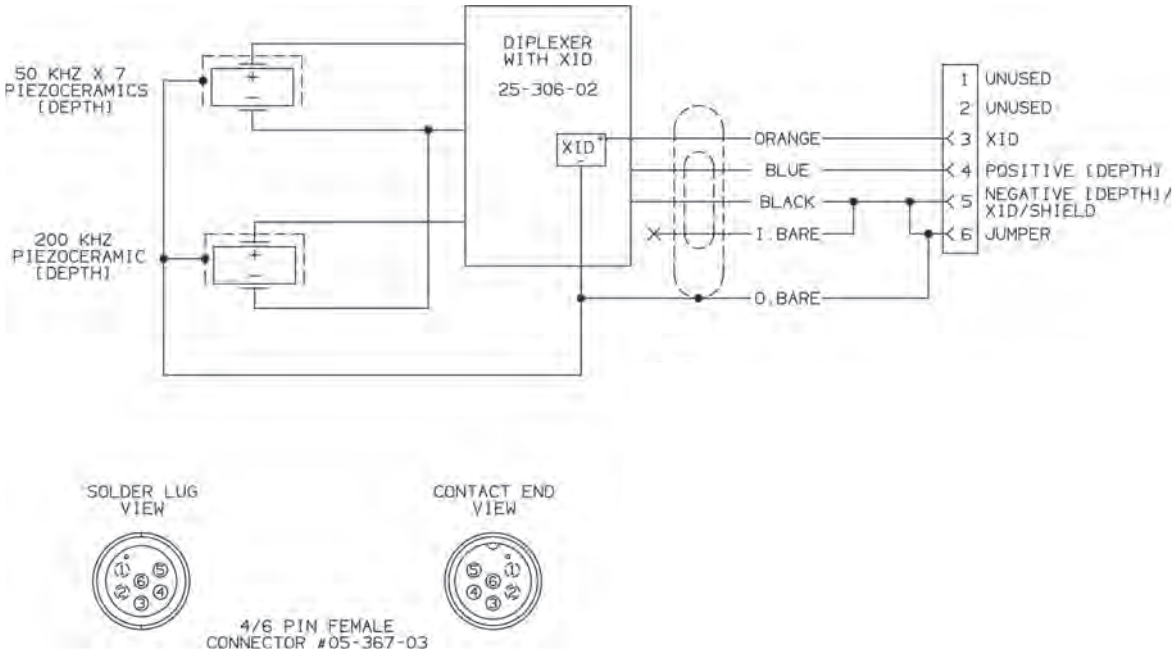
Garmin®

Model(s): 600W Depth and Temperature—B117-8G / GSD24



Garmin®

Model(s): 1 kW Depth Only In-Hull with Xducer ID®

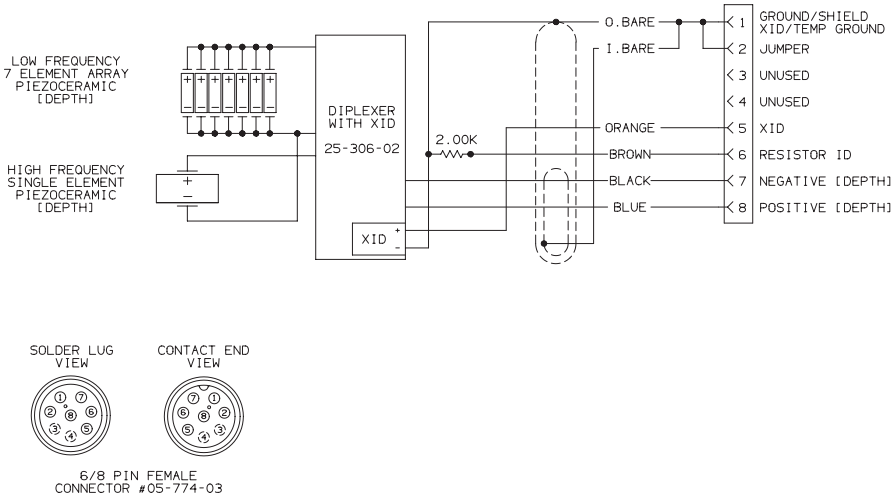


WIRING DIAGRAMS

Garmin®

Garmin®

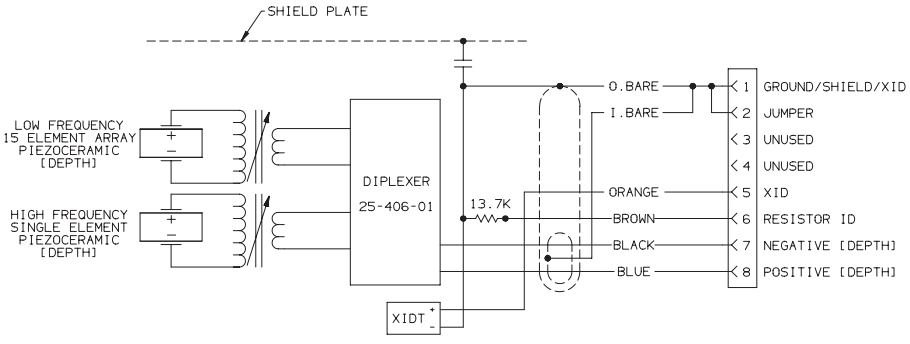
Model(s): 1kW Depth Only—M260-8G / GSD24

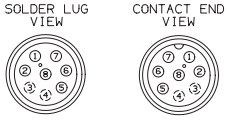


6/8 PIN FEMALE
CONNECTOR #05-774-03

Garmin®

Model(s): 1kW Depth Only—R199-8G / GSD24





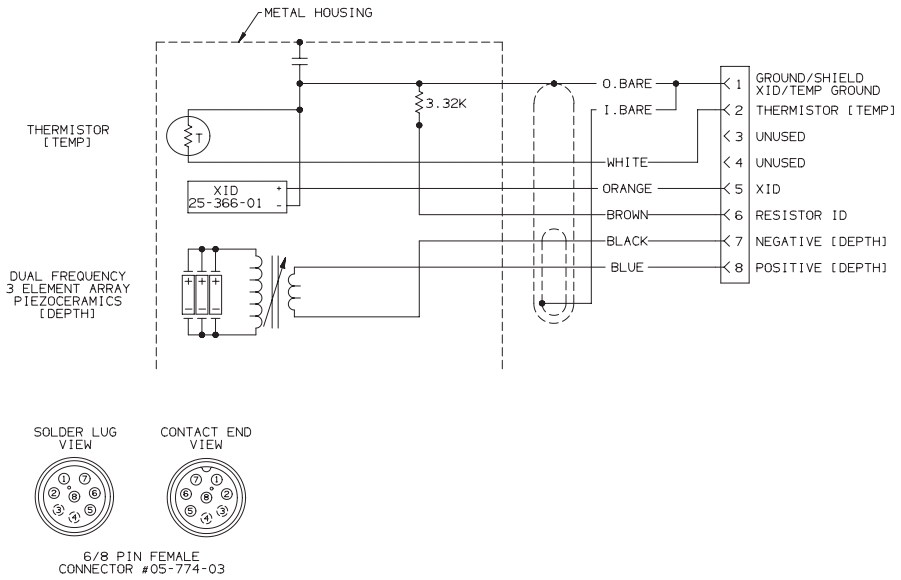
6/8 PIN FEMALE
CONNECTOR #05-774-03

WIRING DIAGRAMS

Garmin®

Garmin®

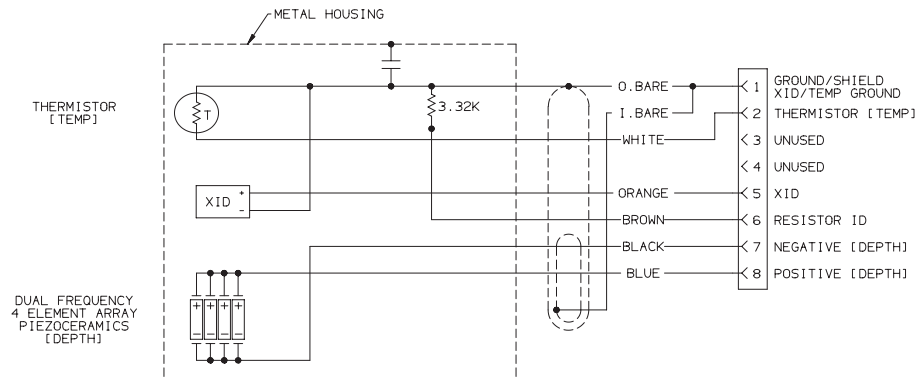
Model(s): 1kW Depth and Temp—B164-8G / GSD24

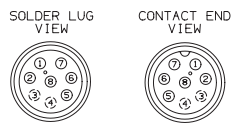


6/8 PIN FEMALE
CONNECTOR #05-774-03

Garmin®

Model(s): 1kW Depth and Temp—B258-8G / GSD24





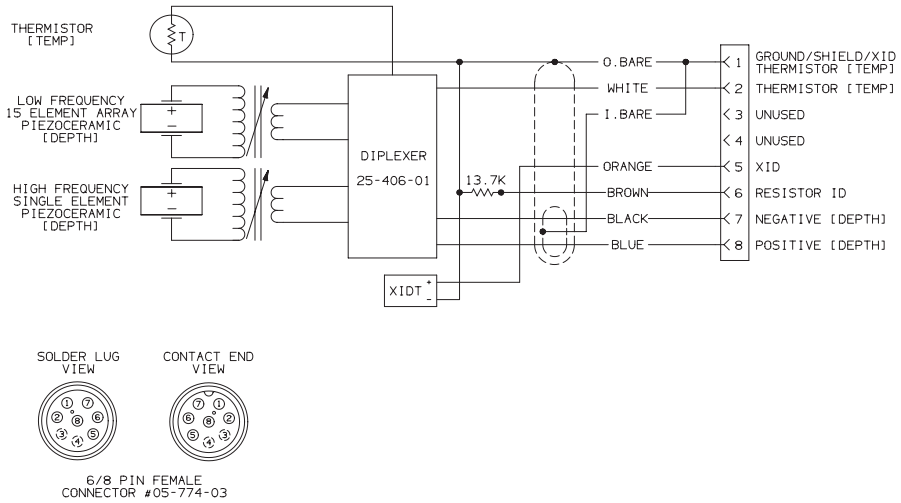
6/8 PIN FEMALE
CONNECTOR #05-774-03

WIRING DIAGRAMS

Garmin®, Lowrance®

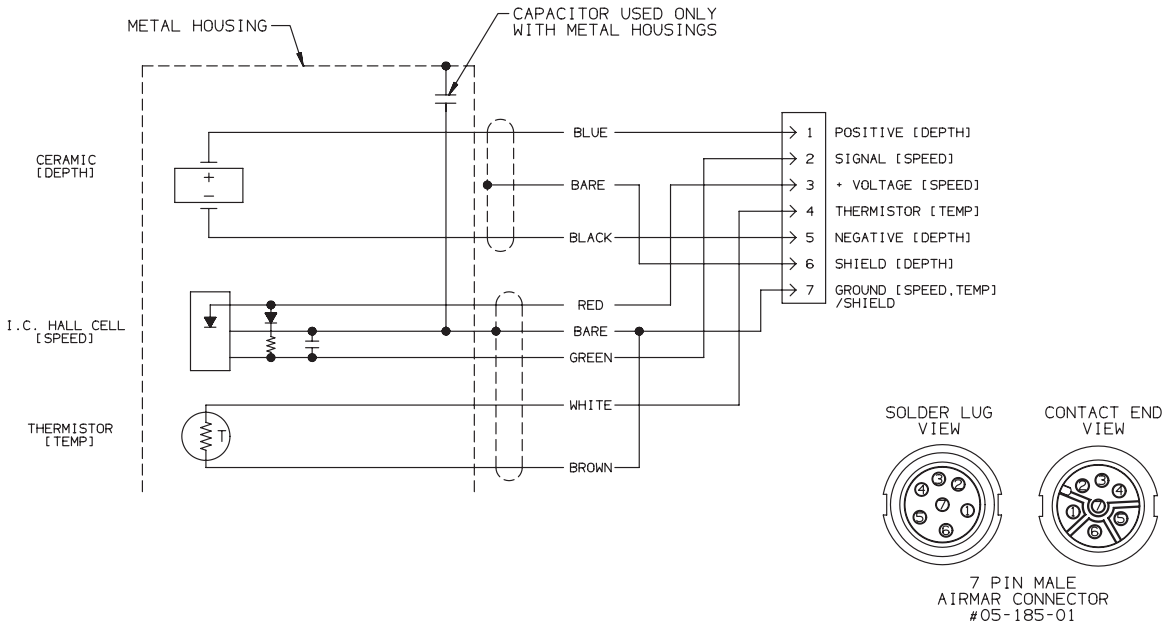
Garmin®

Model(s): 2 kW Depth and Temperature—R99-8G / GSD24



Lowrance®

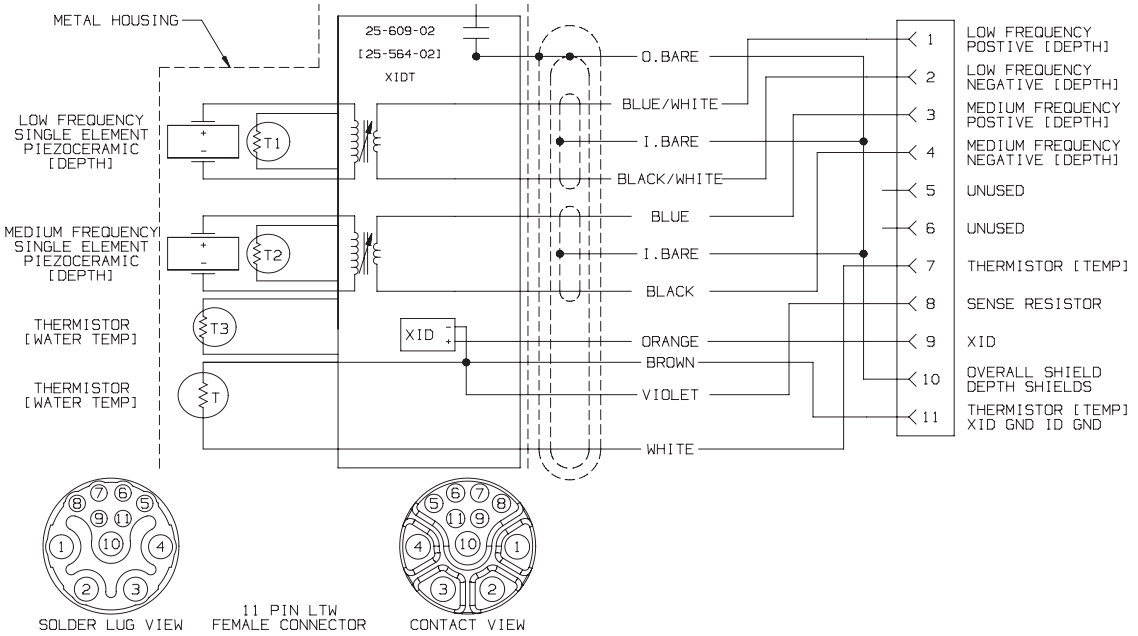
Model(s): Depth, Speed and Temperature Sensors



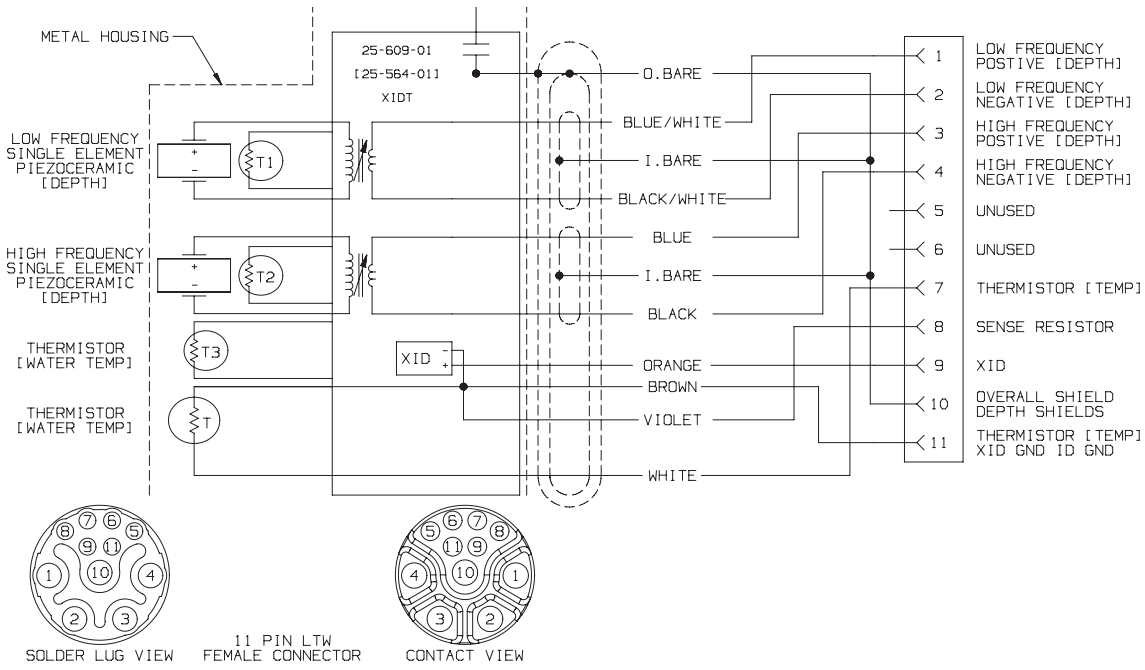
WIRING DIAGRAMS

Raymarine®

Raymarine® CHIRP — Model(s): B765C-LM—CP450C



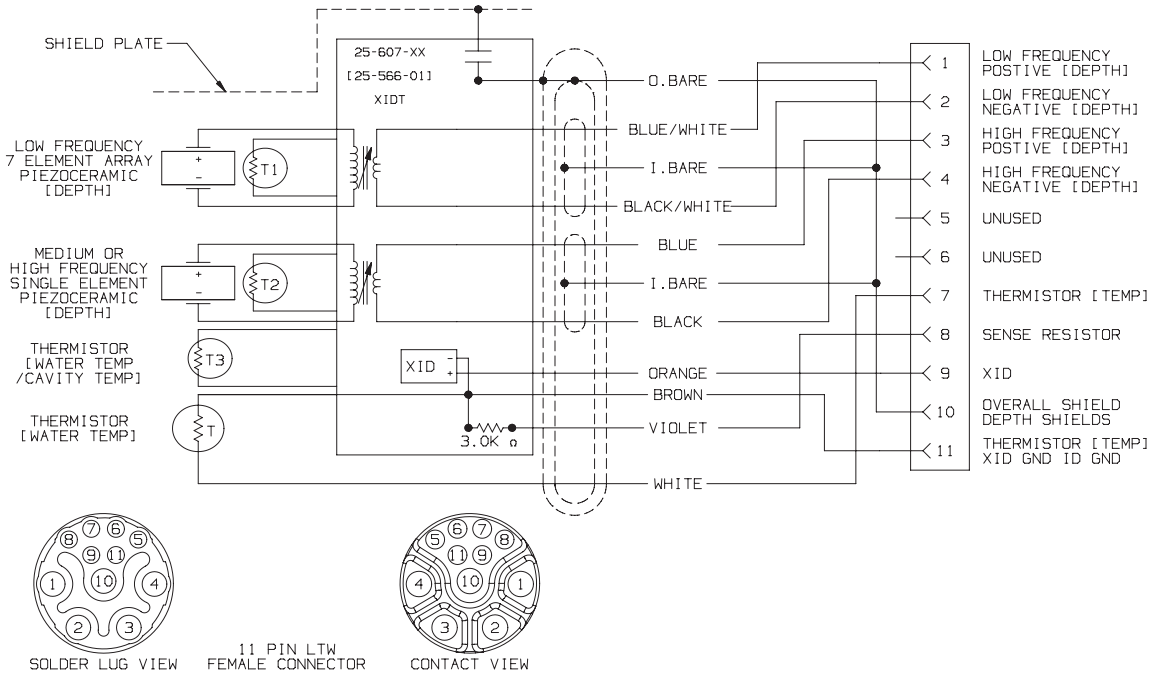
Raymarine® CHIRP — Model(s): B765C-LH—CP450C



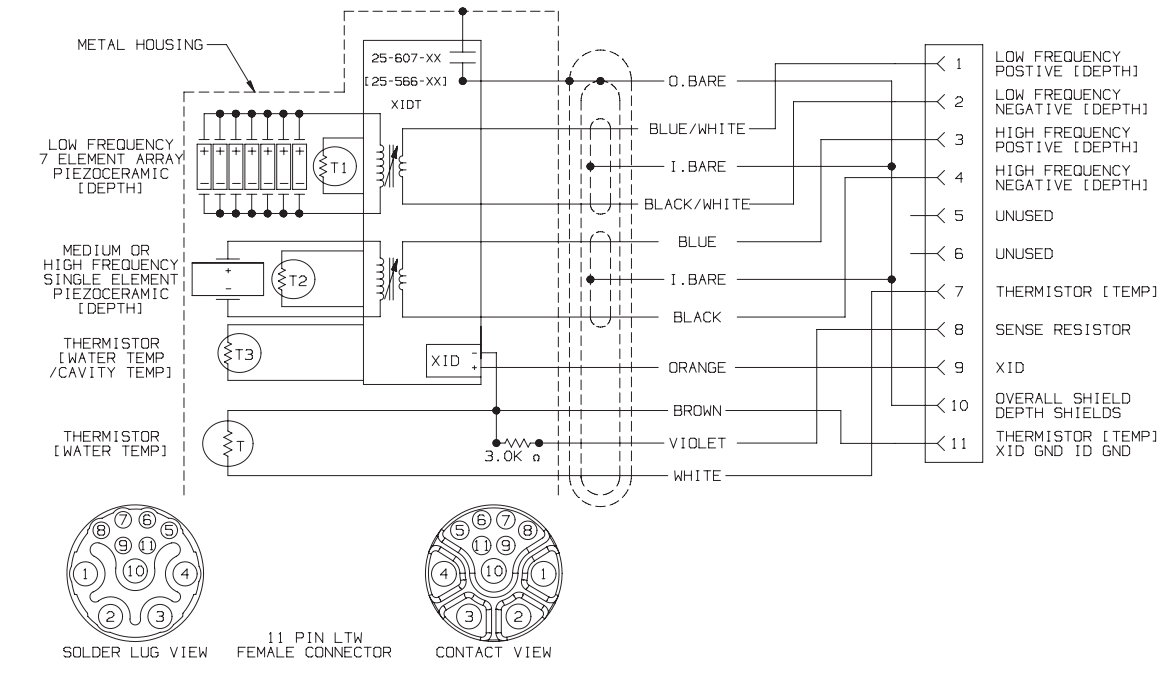
WIRING DIAGRAMS

Raymarine®

Raymarine® CHIRP — Model(s): TM265C-LH—CP450C



Raymarine® CHIRP — Model(s): B265C-LM/LH—CP450C

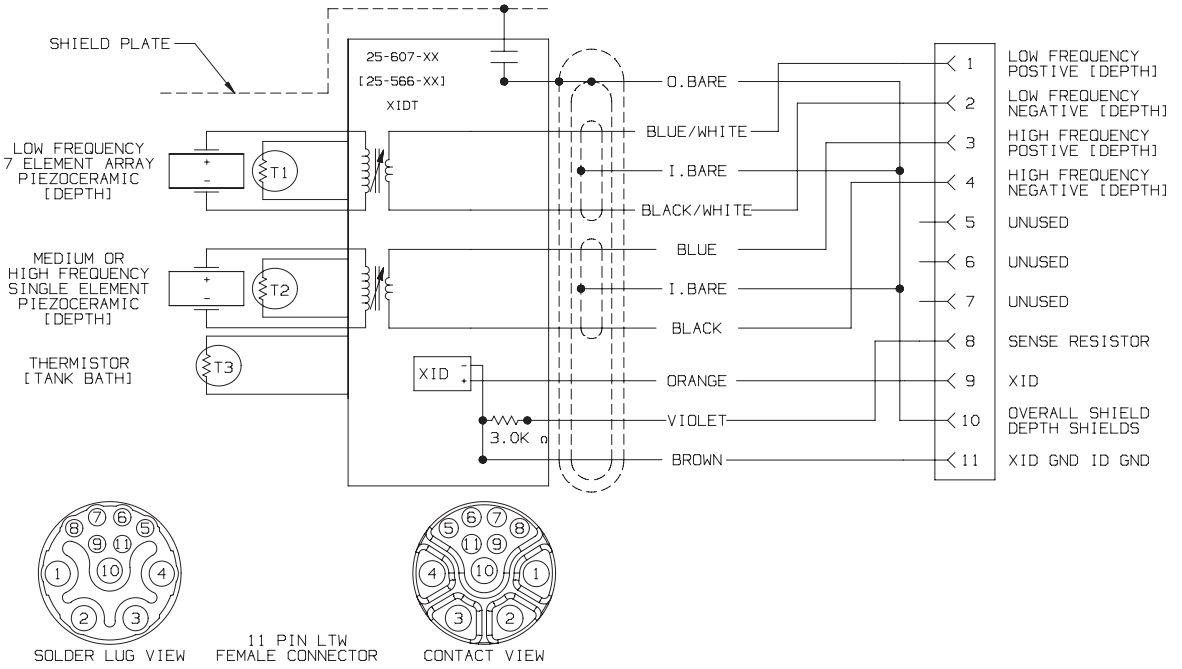


WIRING DIAGRAMS

Raymarine, Simrad®

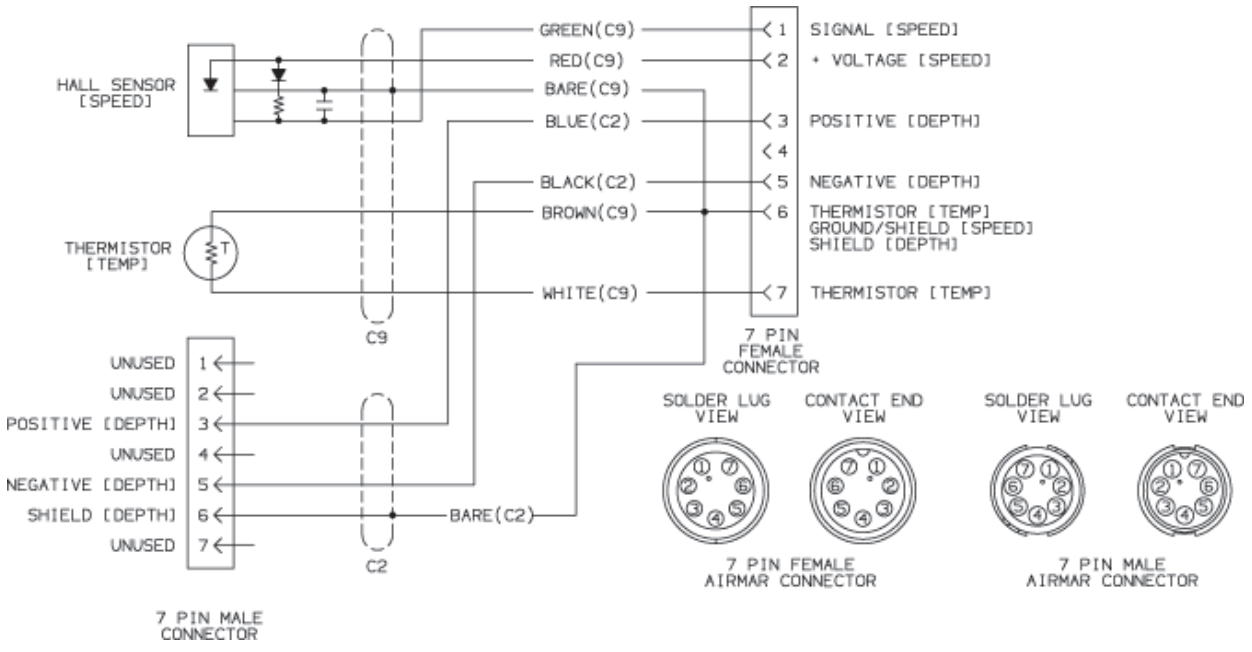
Raymarine® CHIRP

Model(s): M260C-LM/LH—CP450C



Simrad®

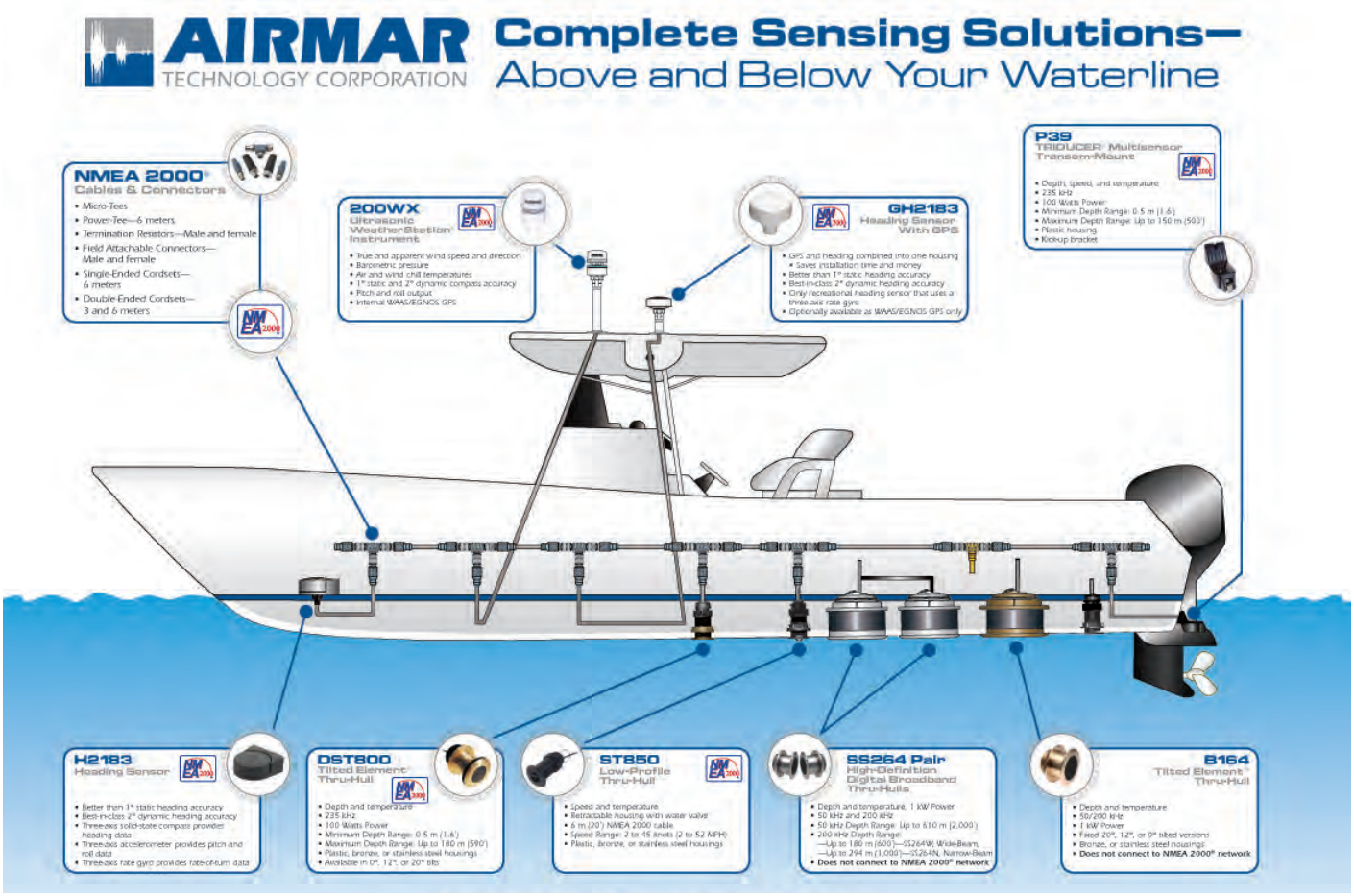
Model(s): ST650, ST850—"Y" Cable Speed & Temp Sensors



COMPLETE SENSING SOLUTIONS

Above and Below Your Waterline
Mixed Media Combinations

Artwork depicts possible product use - not representative of an actual AIRMAR installation



NMEA & AIRMAR

Partnering to Deliver Complete
NMEA 2000® Smart™ Sensor Solutions

Sensor installations in this diagram are a representation only and do not depict recommended locations

Learn more about marine fish finders on our website.