Product Identification Guide

Sensor Types

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BOAT SPEED SENSORS

Impeller Type

<table>
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<tr>
<th>Unit Description</th>
<th>Hull Housing Material/Type</th>
<th>Sensor Body Diameter</th>
<th>Sensor Body Length</th>
<th>Cable Termination</th>
<th>Part Number</th>
<th>Impeller Spares Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed Sensor, Impeller Type</td>
<td>White Plastic</td>
<td>31mm</td>
<td>88mm (excluding top fittings)</td>
<td>Bare Wires</td>
<td>117-00-120</td>
<td>110-10-B21</td>
</tr>
<tr>
<td>Speed Sensor, Impeller Type</td>
<td>Bronze</td>
<td>31mm</td>
<td>88mm (excluding top fittings)</td>
<td>Bare Wires</td>
<td>117-00-060</td>
<td>110-10-B21</td>
</tr>
<tr>
<td>Speed Sensor, Impeller Type for Shut-Off valve Housings</td>
<td>Shut-Off Valve</td>
<td>31mm</td>
<td>251mm</td>
<td>Bare Wires</td>
<td>117-00-124</td>
<td>110-10-B21</td>
</tr>
<tr>
<td>Impeller Spares Kit (Black)</td>
<td>All</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>110-10-B21</td>
<td>110-10-B21</td>
</tr>
</tbody>
</table>

Impeller Type Speed Sensor. Part No. 117-00-120

Impeller Type Speed Sensor for use with a Shut-Off Valve (Part No. 117-00-124)
## Paddlewheel Type

<table>
<thead>
<tr>
<th>Unit Description</th>
<th>Hull Housing Material/Type</th>
<th>Sensor Body Diameter</th>
<th>Sensor Length</th>
<th>Cable Termination</th>
<th>Sensor Part Number</th>
<th>Paddlewheel Spares Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network Paddlewheel, low-speed (6 blades), old type</td>
<td>White Plastic</td>
<td>31mm</td>
<td>105mm</td>
<td>Network Plug</td>
<td>610-0A-026</td>
<td>202-00-129</td>
</tr>
<tr>
<td>Hydra/Focus Paddlewheel, low-speed (6-blades), old type</td>
<td>White Plastic</td>
<td>31mm</td>
<td>105mm</td>
<td>Bare wires</td>
<td>202-00-100</td>
<td>202-00-129</td>
</tr>
<tr>
<td>Network Paddlewheel, low-speed (6-blades), old type</td>
<td>Bronze</td>
<td>31mm</td>
<td>105mm</td>
<td>Network Plug</td>
<td>610-0A-036</td>
<td>202-00-128</td>
</tr>
<tr>
<td>Network Paddlewheel, high speed (4-blades), old type</td>
<td>White Plastic</td>
<td>31mm</td>
<td>105mm</td>
<td>Network Plug</td>
<td>610-0A-129</td>
<td>202-00-161</td>
</tr>
<tr>
<td>Network Paddlewheel, high speed (4-blades), old type</td>
<td>Bronze</td>
<td>31mm</td>
<td>105mm</td>
<td>Network Plug</td>
<td>610-0A-130</td>
<td>202-00-160</td>
</tr>
<tr>
<td>Hydra/Focus Paddlewheel, 6-blades, blue colour</td>
<td>Black Plastic</td>
<td>40mm</td>
<td>93mm</td>
<td>Bare Wires</td>
<td>202-00-045</td>
<td>202-00-054</td>
</tr>
<tr>
<td>Hornet 4 Paddlewheel, 6-blades red colour</td>
<td>Black Plastic or Bronze</td>
<td>40mm</td>
<td>93mm</td>
<td>Bare Wires</td>
<td>202-00-036</td>
<td>202-00-054</td>
</tr>
<tr>
<td>Network Paddlewheel, 4-blades</td>
<td>Bronze or Black Plastic</td>
<td>31mm (insert only)</td>
<td>90mm</td>
<td>Network Plug</td>
<td>SEN-SPEED-N</td>
<td>SEN-SPRS-SPD</td>
</tr>
<tr>
<td>Hydra Paddlewheel, 4-blades</td>
<td>Bronze or Black Plastic</td>
<td>31mm (insert only)</td>
<td>90mm</td>
<td>Bare Wires</td>
<td>SEN-SPEED-H</td>
<td>SEN-SPRS-SPD</td>
</tr>
<tr>
<td>h1000 Speed Sensor, 4-blade, 3m cable</td>
<td>Bronze or Black Plastic</td>
<td>31mm (insert only)</td>
<td>90mm</td>
<td>Bare Wires</td>
<td>SEN-SPEED-P</td>
<td>SEN-SPRS-SPD</td>
</tr>
</tbody>
</table>

Modern Four Blade Paddlewheel Speed Sensor (Part No. SEN-SPEED-N, H, or P)

Hornet 4 Paddlewheel, 6-blades, blue colour

Modern Four Blade Paddlewheel Speed Sensor (Part No. SEN-SPEED-N, H, or P)

Six Blade Paddlewheel Sensor for use with a Shut-Off-Valve (Part No. 202-00-064)
Network Six-Blade, Low-Speed Paddlewheel Sensor (Part No. 610-0A-026)

Network Four-Blade, High-Speed Paddlewheel Speed Sensor (Part No. 610-0A-129)
Six-Blade Paddlewheel Speed Sensor - Hornet 4 System (Part No. 202-00-036)

Four-Blade Paddlewheel Sensor used on (Part No. SEN-SPEED-N, H, or P)
Sonic Speed

Description: Matched pair of sensors connected to a central processor
Date introduced: 1986
Date Discontinued: Current system
Part Number: 184-00-081

The Sonic Speed Sensor System uses two sensors, positioned fore and aft and the boat's speed is calculated by measuring the time taken for a series of sonic pulses to travel through the water between the two sensors.

XTL- Microsonic Speed Sensor

Description: Sonic speed sensors mounted in an underwater fin assembly
Date Introduced: 1988
Date Discontinued: Current system
Part Number: 275-00-001/017, 275-00-032/032, 275-00-039, 275-00-045/046
dependent on stud length and material type
DEPTH FINDERS

Hecta

Description: Transistorised echo sounder
Date Introduced: 1958
Date Discontinued: 1978 - Superseded in 1979 by the 200 meter range Hecta echo sounder
## DEPTH TRANSDUCERS

![Diagram of a depth sensor](image)

**Modern Depth Sensor**
(= Part No. SEN-DEPTH-H)

**Depth Sensor for use with a Shut-Off-Valve**
(= Part No. 157-AA-038)

<table>
<thead>
<tr>
<th>Unit Description</th>
<th>Hull Housing Material/Type</th>
<th>Sensor Body Diameter</th>
<th>Sensor Length</th>
<th>Cable Termination</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydra/Focus Depth Transducer</td>
<td>White Plastic</td>
<td>31mm</td>
<td>109mm</td>
<td>Bare Wires</td>
<td>401-00-011</td>
</tr>
<tr>
<td>Network Depth Transducer</td>
<td>White Plastic</td>
<td>31mm</td>
<td>109mm</td>
<td>Network Plug</td>
<td>610-0A-027</td>
</tr>
<tr>
<td>Hydra/Focus Depth Transducer</td>
<td>Bronze Housing</td>
<td>31mm</td>
<td>109mm</td>
<td>Bare Wires</td>
<td>199-00-018</td>
</tr>
<tr>
<td>Network Depth Transducer</td>
<td>Bronze Housing</td>
<td>31mm</td>
<td>109mm</td>
<td>Network Plug</td>
<td>610-0A-040</td>
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<tr>
<td>Hecta early Hydra Depth Transducer</td>
<td>Bronze</td>
<td>31mm</td>
<td>109mm</td>
<td>Bare Wires</td>
<td>199-00-029</td>
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<tr>
<td>Hecta Mk 6</td>
<td>Bronze</td>
<td>31mm</td>
<td>109mm</td>
<td>Co-ax Connector</td>
<td>111-00-049</td>
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<tr>
<td>Network Depth Transducer</td>
<td>Black Plastic</td>
<td>41mm</td>
<td>89mm</td>
<td>Conexall Connector</td>
<td>SEN-DEPTH-N</td>
</tr>
<tr>
<td>Hydra Depth Transducer</td>
<td>Black Plastic</td>
<td>41mm</td>
<td>89mm</td>
<td>Bare Wires</td>
<td>SEN-DEPTH-H</td>
</tr>
<tr>
<td>h1000 Sail Passive Transducer 170kHz</td>
<td>Black Plastic or Bronze</td>
<td>41mm</td>
<td>89mm</td>
<td>Bare Wires</td>
<td>SEN-DEPTH-P</td>
</tr>
<tr>
<td>h1000 Power Active Transducer 235kHz</td>
<td>Black Plastic or Bronze</td>
<td>41mm</td>
<td>89mm</td>
<td>Bare Wires</td>
<td>SEN-DEPTH-A2</td>
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Housing for an Impeller-Type Speed Sensor (Part No. 117-00-046)

The shut-off-valve is used mainly on larger vessels; the insulation packing prevents corrosion caused by electrolytic action on steel hulled boats. (Part No. Housing – 155-00-025, Insulation Kit -155-30-017).
MASTHEAD UNITS

A-Type Masthead Unit
Description: Used with very old Hornet systems
Date Introduced: 1950’s
Date Discontinued: 1972
Part Number: (No longer available)

C-Type Masthead Unit
Description: Used with Horsa, Hornet and Hercules 190/290 systems
Date Introduced: 1972/73
Date Discontinued: 1986/87
Part Number: 137-00-035 (No longer available)

Mini Masthead Unit
Description: Used with Hercules 190/290 systems
Date Introduced: 1984
Date Discontinued: 1985
Part Number: (No longer available)
283 Masthead Unit
Description: Used with Focus and early Network systems
Date Introduced: 1988
Date Discontinued: 1996
Part Number: 283-00-001

213 Masthead Unit
Description: Used with Hercules 390, Hydra 2000 and Hercules 2000 systems
Date introduced: 1985/86
Date Discontinued: Current Unit
Part Number: 213-00-002
213 Vertical Masthead Unit

Description: Used with Hydra/Hercules systems
Date Introduced: 1999
Date Discontinued: Current Unit
Part Number: BGH031001 (32"), BGH031002 (42"), BGH031002S (Ocean Spec.*), BGH031003 (57") & BGH031003S (Ocean Spec.*).
*Ocean Spec constructed with extra laminate for increased durability
**496 Masthead Unit**

**Description:** Used with Network and h1000 systems  
**Date Introduced:** 1996  
**Date Discontinued:** Current Unit  
**Part Number:** 496-00-001

![Diagram of 496 Masthead Unit](image)

- Wind Vane (Part No. 213-10-056)
- Wind Direction Bearing Assy. (Part No. 213-10-004)
- Skirt and Boss Moulding Pack (Part No. MHU-MLDGS)
- Anemometer Bearing Assy. (Part No. 213-10-038)
- Masthead Unit PCB Fitted Internally (Part No. 496-10-001)
- Wind Cups (Part No. 213-30-027)
- Spar Assy. (Part No. 496-10-003)
- Masthead Unit Cables  
  - (h1000, 24m: h1000-HCM24)  
  - (h1000, 32m: h1000-HCM32)  
  - (Network, 32m: 611-0A-053)

**Type 211 Wind Vane**

**Description:** Primarily used with early B&G industrial systems in conjunction with the 152 Anemometer  
**Date Introduced:** 1976  
**Date Discontinued:** 1985
ANEMOMETERS
Type 150

Rotation of the Fan blades provides the power to operate the readout display, directional. Specialist use, for measuring wind speed in wind tunnels etc.

Fan Type Anemometer

Type 152 Anemometer

Primarily used to provide accurate wind speed information, for early B&G Industrial Systems. This unit, in conjunction with the Model 211 Wind Vane, was also used to provide wind information for early B&G marine systems.
The Model H wind speed and direction indicator is designed and manufactured to the highest standards to meet a wide variety of commercial and industrial applications. It is sealed against moisture and dust and is intended for use at air fields, power stations, hovercraft landing pads, oil rigs, on offshore data collecting buoys and as the controlling sensor for pollution monitoring. It is suitable for any application where accurate wind speed and direction is required. The system comprises a detachable masthead unit, a control unit and the two indicators. All the units are sealed against the ingress of moisture and dust and are corrosion and vibration proof. Reliable operation is obtained at very low wind speeds. The instrument is designed to give a meter read-out or operate pen recorders.
DIRECTION FINDERS

Heron/Homer

Description: Long wave direction finding aerial
Date Introduced: 1955
Date Discontinued: 1963
COMPASS SENSORS
*Fluxgate Type*

**Halcyon 3**

Description: Used with Hercules 190 systems  
Date Introduced: 1981  
Date Discontinued: 1987  
Part Number: No longer available

Sensor viewed from the base showing the connector

Sensor viewed from the top showing mounting orientation
Super Halcyon 3
Description: Used with Hydra/Hercules 190, 290 and 390 systems
Date Introduced: 1987
Date Discontinued: 1997
Part Number: 386-00-009

Sensor viewed from the base showing the connector

Sensor viewed from the top showing mounting orientation
**Halcyon 2000**
Description: Used with Hydra/Hercules systems
Date Introduced: 1997
Date Discontinued: Current unit
Part Number: 486-00-009

View of the sensor showing the FastNet connector

**h1000 Fluxgate Unit**
Description: Used with h1000 systems
Date Introduced: 2002
Date Discontinued: Current unit
Part Number: h1000-CSU

View of sensor showing the two FastNet® Databus connections at the base
Halcyon Gyro Stabilised Compass Sensor

Description: Used with the Halcyon Gyro Processor on Hydra/Hercules systems and ACP Mk2 from 2003
Date Introduced: 1999
Date Discontinued: Current unit
Part Number: BGH060002
RUDDER AND MAST ROTATION SENSORS

Rotary Rudder Position Sensor
Description: Used with the Helmstar, Hydra, Hercules, Network and h1000 autopilot systems
Date Introduced: 1985
Date Discontinued: Current unit
Part Number: RRF-ACP

Linear Feedback Sensor
Description: Used with the Hydra 2000, Hercules 2000 and h1000 autopilots (Blue Type 1 and 2 Rams)
Date Introduced: 2003
Date Discontinued: Current unit
Part Number: SEN-RUD-LFB
TANK CONTENTS/LEVEL SENSING SYSTEM

Description: Used with the Hydra/Hercules Main Processor
Date Introduced: 2002
Date Discontinued: Current unit
Part Number: BGH090001 (aluminium), BGH090002 (brass) or BGH090003 (stainless steel)

Additional Sensor Modules and fittings Part No. BGH091001 (aluminium), BGH091002 (brass) or BGH091003 (stainless steel)
LOADCELL SENSORS

Description: Used with the Hydra 2000 and Hercules 2000 systems
Date Introduced: 2000
Date Discontinued: Current unit
Part Number: Standard Loadcell Part Nos. 
BGH041001 - 12.7mm (1/2”)
BGH041001 - 16mm (5/8”)
BGH041003 – 19mm (3/4”)
BGH041004 – 23mm (7/8”)
BGH041005 – 25.4mm (1”)
BGH041006 – 28.5mm (1 1/8”)
BGH041007 – 32mm (1 ¼”)

Amplifier
Analogue or Digital

ORIENTATION
WASHER

WASHERS

LOADPIN

SPLIT PIN