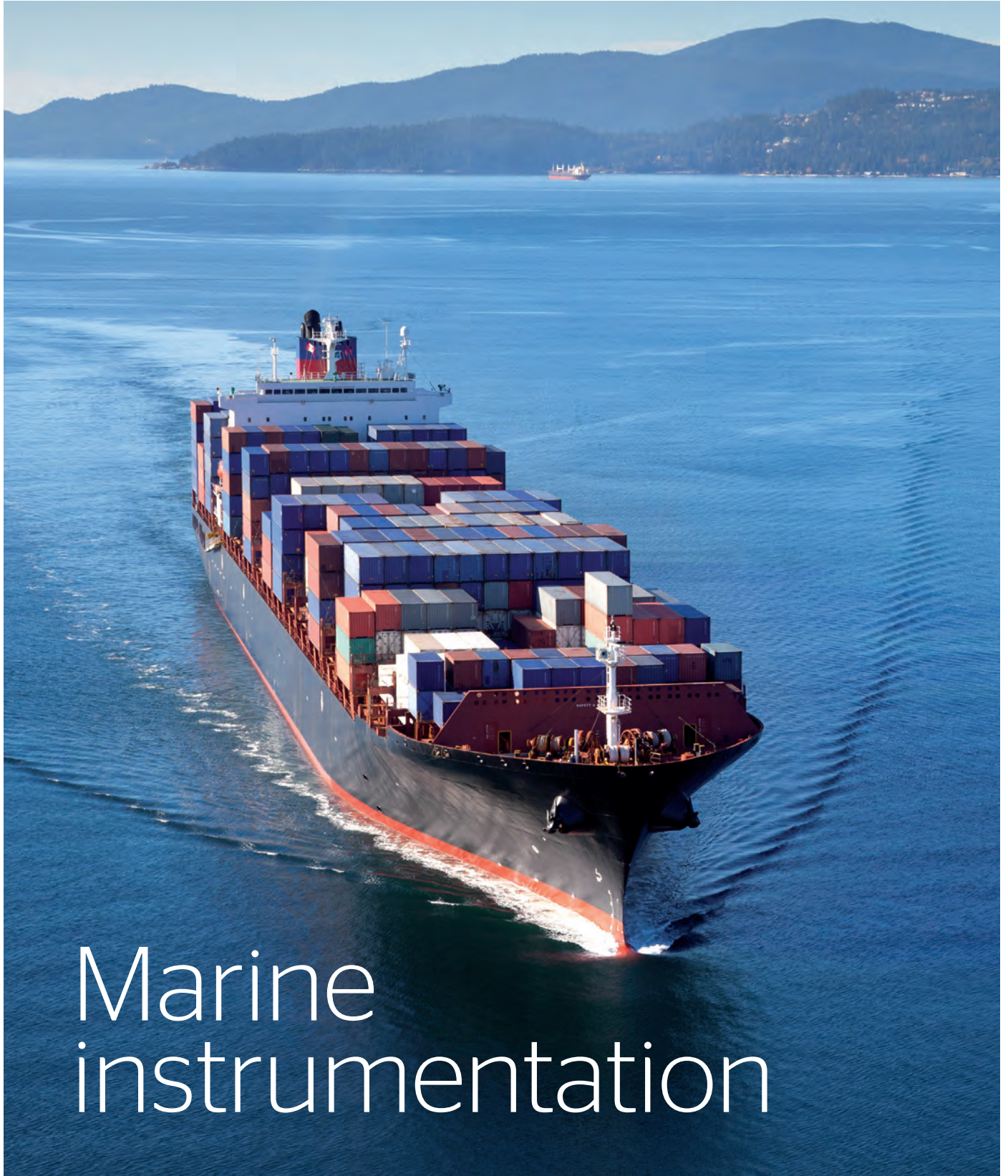




Marine instrumentation

Based in Aix-en-Provence, France,

Atos engineers design, manufacture and sell electronic navigation equipment for maritime forces and merchant fleets, under the BEN Marine brand.



Navigating efficiently with robust and proven equipment



With its experienced engineers, Atos ensures product reliability, compliance with civilian and military standards, constant innovation and adaptation to your requirements.

BEN Marine: excellence through experience

Heir of the Julien navigation instruments workshop in Marseille (Bianchetti, brand dating from 1822), BEN Marine was established in 1962 to develop electromagnetic speed logs and flowmeters. Today BEN Marine is a registered Atos brand and operates in over 40 countries around 50 distributors.

BEN Marine navigation instruments

In response to requirements in different countries, BEN Marine controls the product certification process in compliance with current standards (Wheelmark, Russian Register...). BEN Marine's team of technical specialists and Service Partners worldwide provides it with a strong responsiveness and capacity to take action.

Logistic and Service supports

In order to guarantee the critical systems' lasting security and compliance, Atos has developed a unique expertise in Integrated Logistics Support (ILS) and In-Service Support (ISS).



Summary

▶ EM speed log	4
▶ Repeater	8
▶ Sensor and hull fitting	10
▶ Sensor	11
▶ Econometer	12
▶ How to select the sensor location? How to select your hull parts?	13
▶ Installation diagram	14

EM Log

Electromagnetic Speed Log

The ANTHEA EM speed log is designed for merchant and cruising ships. It is used with maximum 70 m length of cable, between the main cabinet and the sensor.

For standard operations, the ANTHEA log uses a 48 mm sensor. It can be adapted to other BEN Marine sensors that have the same electrical characteristics. ANTHEA standard version speed log consists of:

- ▶ One IP65 metal case
- ▶ One sensor
- ▶ One hull fitting

The choice of the hull equipment depends on the hull type (*please refer to page 13*). ANTHEA is compatible with all navigation peripherals.



CHARACTERISTICS

Main features

- ▶ Automatic gain control
- ▶ Linearization set up: 3-point linearization
- ▶ Damping control via strap
- ▶ Permanent self-tests
- ▶ Dimmer adjustment
- ▶ Automatic scale adjustment
- ▶ 2 alarms threshold adjustment

The cabinet can be flush or bulkhead mounted.

Display features

- ▶ LCD screen
- ▶ 1 line x 16 digits
- ▶ Circular bargraph for speed display
- ▶ Digital speed display
- ▶ Covered distance including reset
- ▶ Error messages display
- ▶ Electromechanical mile counter without reset
- ▶ Scale, test, alarm
- ▶ Alarm LED display
- ▶ Brightness control

Technical specifications

- ▶ Power supply: 24 Vdc - 50 or 60 Hz
- ▶ Outputs:
 - 2 x 1/200 nautical mile (2 x relay outputs 24 Vdc - 250 mA),
 - 1 x 1/10 nautical mile (open collector),
 - 1 x analog output (0 - 500 μ A),
 - 1 x RS232 NMEA 0183 format output,
 - 2 x alarm outputs (2 x relay outputs 50 V - 2 A).
- ▶ Scale: double scale -2 / +25 and -5 / +50 knots
- ▶ Distance: 0 - 99,999.9 nautical miles
- ▶ Speed accuracy: 0.5 % of full scale
- ▶ Distance accuracy: > 0.1 nautical mile / hour
- ▶ Damping: 4, 16 or 32 seconds

Options

- ▶ Power supply: 115 Vac or 230 Vac - 50 or 60 Hz
- ▶ Dual axis version: longitudinal and transversal speed

Standards

- ▶ IEC 60945
- ▶ IEC 61023
- ▶ IEC 61162-1
- ▶ IMO MSC97
- ▶ IMO A694
- ▶ IMO MSC96
- ▶ IMO MSC191

DIMENSIONS

- ▶ Length: 164 mm
- ▶ Width: 244 mm
- ▶ Depth: 95 mm
- ▶ Weight: 4 kg



BLIND ANTHEA

EM Log

Electromagnetic Speed Log

The BLIND ANTHEA EM speed log is designed for all type of civil ships. It can be installed near to the sensor. There is no distance limitation between the cabinet and its peripherals.

For standard operations, BLIND ANTHEA uses model 48 mm. It can be adapted to other BEN Marine sensors that have the same electrical characteristics.

The BLIND ANTHEA speed log consists of:

- ▶ One IP65 metal case
- ▶ One sensor
- ▶ One hull fitting

The choice of the hull equipment depends on the hull type (*please refer to page 13*).

BLIND ANTHEA is compatible with all navigation peripherals.



CHARACTERISTICS

Main features

- ▶ Automatic gain control
- ▶ Damping control via strap
- ▶ Permanent self-test
- ▶ Simple configuration via a software BLASS:
 - Calibration,
 - Correction of 3-point linearization,
 - Display of error messages,
 - Alarm threshold adjustment,
 - Memorization of vessel settings.

The cabinet can be flush or bulkhead mounted.

Technical specifications

- ▶ Power supply: 24 Vdc - 50 or 60 Hz
- ▶ Outputs:
 - 2 x 1/200 nautical mile (2 x relay outputs 24 Vdc / 250 mA),
 - 1 x 1/10 nautical mile (open collector),
 - 1 x analog output (0 - 500 μ A),
 - 1 x RS232 NMEA 0183 format output,
 - 2 x alarm outputs (2 x relay outputs 50 V - 2 A).
- ▶ Scale: double scale -2 / +25 and -5 / +50 knots
- ▶ Distance: 0 - 99,999.9 nautical miles
- ▶ Speed accuracy: 0.5 % of full scale
- ▶ Distance accuracy: > 0.1 nautical mile/hour
- ▶ Damping on: 4, 16 or 32 seconds

Options

- ▶ Power supply: 115 Vac or 230 Vac
 - 50 or 60 Hz
- ▶ Dual axis version: longitudinal and transversal speed

Standards

- ▶ IEC 60945
- ▶ IEC 61023
- ▶ IEC 61162-1
- ▶ IMO MSC97
- ▶ IMO A694
- ▶ IMO MSC96
- ▶ IMO MSC191

DIMENSIONS

- ▶ Length: 164 mm
- ▶ Width: 244 mm
- ▶ Depth: 95 mm
- ▶ Weight: 3 kg

IMO Type approval -
Wheelmark by Bureau Veritas



CALYPSO

EM Log

Electromagnetic Speed Log

The CALYPSO electromagnetic speed log meets IMO regulations. It is specially designed for large commercial ships, with over 100 m cable requirement between the main cabinet and the sensor.

The CALYPSO speed log consists of:

- ▶ One IP65 metal case
- ▶ One blind transmitter located near to the sensor
- ▶ One sensor
- ▶ One hull fitting

The choice of the hull equipment depends on the hull type (*please refer to page 13*).



CHARACTERISTICS

Main features

- ▶ Automatic gain control
- ▶ Linearization set up: 5-point linearization
- ▶ Damping set up
- ▶ Permanent self-tests
- ▶ Dimmer adjustment
- ▶ Automatic scale adjustment

The cabinet can be flush or bulkhead mounted.

Display features

- ▶ LCD screen
- ▶ 2 lines x 16 digits
- ▶ Double scale circular bargraph for speed display
- ▶ Digital speed display
- ▶ Covered distance including reset
- ▶ Error messages display
- ▶ Electromechanical mile counter without reset
- ▶ Scale, alarm, test
- ▶ 2 alarms threshold adjustment
- ▶ Alarm LED display
- ▶ Brightness control

Technical specifications

- ▶ Power supply: 24 Vdc - 50 or 60 Hz
- ▶ Inputs:
 - 2 x frequency inputs (internal communication with transmitter).
- ▶ Outputs:
 - 4 x 1/200 nautical mile (2 x static relays + 2 x dry contacts 24 Vdc / 250 mA or 4 x static relays).
 - 1 x 1/10 nautical mile (open collector 24 Vdc - 500 μ A).
 - 2 x analog outputs (0-500 mA).
 - 2 x RS422 NMEA 0183 format outputs.
- ▶ Scale: automatic scale -2 / +25 and -5 / +50 knots
- ▶ Distance: 0 - 99,999.9 nautical miles
- ▶ Speed accuracy: 0.5% of full scale
- ▶ Distance accuracy: > 0.1 nautical mile / hour
- ▶ Damping on: 60 seconds

Options

- ▶ Power supply: 115 Vac or 230 Vac - 50 or 60 Hz
- ▶ Dual axis version: longitudinal and transversal speed

Standards

- ▶ IEC 60945
- ▶ IEC 61023
- ▶ IEC 62288
- ▶ IEC 61162-1
- ▶ IMO MSC97
- ▶ IMO A694
- ▶ IMO MSC96
- ▶ IMO MSC191
- ▶ IMO A824

DIMENSIONS

- ▶ Length: 164 mm
- ▶ Width: 244 mm
- ▶ Depth: 95 mm
- ▶ Weight: 4 kg



EM Log

Electromagnetic Speed Log

ALIZE is an electromagnetic speed log dedicated to small ships or pleasure boats. Its flat sensor, without mobile or protruding component, offers unequalled accuracy and robustness.

The ALIZE speed log consists of:

- ▶ One main display unit IP67 (wall or bracket mounting)
- ▶ One Noryl retractable sensor with 5 m cable
- ▶ One screw-on type Noryl hull fitting



CHARACTERISTICS

Main features

- ▶ Gain, zero and damping set up through keyboard
- ▶ Chrono function for regatta (10 mn or 6 mn countdown)
- ▶ Programmable low speed alarm
- ▶ Brightness control
- ▶ Electromagnetic sensor

Display features

- ▶ LCD screen
- ▶ Circular bargraph for speed display
- ▶ Digital speed display
- ▶ Distance from last reset
- ▶ Water temperature
- ▶ Average speed

Technical specifications

- ▶ Power supply: 12 Vdc to 16 Vdc
- ▶ Inputs:
 - 1 x RS422 input from sensor.
- ▶ Outputs:
 - 1 x RS422 NMEA 0183 format output,
 - 1/200 nautical mile output,
 - 1 x alarm.
- ▶ Accuracy after calibration: < 0.5 knot
- ▶ Speed scale: digital full scale 60 knots
- ▶ Analog speed display scale: -5 / +30 knots
- ▶ Distance display scale: 0 to 99,999.9 nautical miles

DIMENSIONS

Cabinet:

- ▶ Length: 112 mm
- ▶ Width: 112 mm
- ▶ Depth: 43.5 mm
- ▶ Weight: 1 kg

Sensor:

- ▶ Diameter: 40 mm
- ▶ Length: 108 mm
- ▶ Weight: 1 kg

Hull fitting:

- ▶ Diameter: 75 mm
- ▶ Depth: 95 mm
- ▶ Weight: 1 kg

GALVA120

Repeater

Analog speed and distance repeater

Speed is indicated in analog mode and distance is displayed on a backlit electromechanical counter.

CHARACTERISTICS

- ▶ The cabinet can be flush mounted
- ▶ Integrated backlight
- ▶ Lighting: 24 Vdc - 35 mA
- ▶ Inputs:
 - 1 x speed input: 0 - 500 μ A,
 - 1 x distance input: 1/10 nautical mile.

Option

- ▶ Scale: -2 / +16, -3 / +24 or 0 / +48 knots



DIMENSIONS

- ▶ Total diameter: 110 mm
- ▶ Card diameter: 97 mm
- ▶ Depth: 72 mm
- ▶ Weight: 0.5 kg

IMO Type approval -
Wheelmark by Bureau Veritas



MFR 5.1

Repeater

Multi-function repeater

The MFR 5.1 multifunction repeater displays alphanumeric data from:

- ▶ Navigation network
- ▶ Speed log information
- ▶ GPS
- ▶ Compass
- ▶ Wind network
- ▶ Temperature
- ▶ Others specific sensor displays on request

CHARACTERISTICS

- ▶ The cabinet can be flush or bulkhead mounted
- ▶ LCD screen
- ▶ Each repeater can display from one to four data per page
- ▶ Brightness control
- ▶ Power supply: 10 Vdc to 36 Vdc - 12 W
- ▶ Input: 4 x RS422 NMEA 0183 format inputs
- ▶ Output: 4 x RS422 NMEA 0183 format outputs



DIMENSIONS

- ▶ Length: 117 mm
- ▶ Width: 211 mm
- ▶ Depth: 63.5 mm
- ▶ Weight: 2.2 kg

RGD100

Repeater

Digital speed and distance repeater

The RGD100 repeater displays data from a speed log through an RS232 or NMEA 0183 RS422 serial link. Data is displayed on a LCD screen. Speed is displayed in numerical and pseudo analog modes. Distance is displayed in numerical mode and can be reset by the operator.

CHARACTERISTICS

- ▶ The cabinet can be flush or bulkhead mounted
- ▶ Digital speed: 1/10 knot resolution
- ▶ Pseudo analog speed: 1 knot resolution
- ▶ Distance with reset: 1/10 nautical mile resolution
- ▶ Scale: -2 / +25 and -5 / +50 knots
- ▶ Case: IP55
- ▶ Power supply: 24 Vdc, 115 Vac or 230 Vac - 50 or 60 Hz
- ▶ Distance with reset: 1/10 mile definition
- ▶ Log status (test-high/low speed alarms)
- ▶ Brightness control (dimmer)
- ▶ Standard: IEC 61162-1



DIMENSIONS

- ▶ Length: 144 mm
- ▶ Width: 144 mm
- ▶ Depth: 200 mm
- ▶ Weight: 1.6 kg

IMO Type approval -
Wheelmark by Bureau Veritas



MFR ALIZE

Repeater

Digital speed and distance repeater

CHARACTERISTICS

- ▶ Digital speed and distance repeater
- ▶ Interface RS422 NMEA 0183
- ▶ LCD screen with a keyboard (3 keys) displaying:
 - Digital and pseudo analog speed,
 - Mile totalizer 1/10 nautical mile resolution,
 - Daily mile totalizer 1/100 nautical mile resolution with reset,
 - Water temperature,
 - Average temperature.
- ▶ Power supply: 12 Vdc to 16 Vdc
- ▶ Input: 1 x RS422 NMEA 0183 format input
- ▶ Speed scale: digital full scale 60 knots
- ▶ Analog speed display scale: -5 / +30 knots
- ▶ Distance display scale: 0 to 99,999.9 nautical miles
- ▶ Standard: IEC 61162-1



DIMENSIONS

- ▶ Length: 112 mm
- ▶ Width: 112 mm
- ▶ Depth: 93 mm
- ▶ Weight: 1 kg

48MM

Sensor and hull fitting

Electromagnetic sensor and hull fitting

The 48MM sensor is fitted with a 16 or 32 m cable.

Three versions are available:

- ▶ One for dry cell
- ▶ One for wet cell (water ballast)
- ▶ One dual axis version (longitudinal and transversal speed)

Please refer to page 13 for the hull parts location.

CHARACTERISTICS

- ▶ Mounted into a hull fitting with the following options:
 - Screw-on type in bronze with or without valve (for wooden or plastic hulls),
 - Weldable in inox with or without valve (for steel hull),
 - Weldable in aluminium without valve.
- ▶ Sensor: Retractable at sea (without drydock)
- ▶ Hull fitting 48 mm

Option

- ▶ Dual axis version: longitudinal and transversal speed

Sensor

- ▶ Diameter: 48 mm
- ▶ Length: 194 mm

Hull fitting

- ▶ Diameter: 48 mm
- ▶ Length: 194 mm



- ▶ Weight: 3.6 kg
- ▶ Bronze hull fitting weight: 4.6 kg
- ▶ Inox hull fitting weight: 4.8 kg

IMO Type approval
- Wheelmark by
Bureau Veritas



65MM

Sensor and hull fitting

Electromagnetic sensor and hull fitting

The 65MM sensor is fitted with a 20 m cable.

Three versions are available:

- ▶ One for dry cell
- ▶ One for wet cell (water ballast)
- ▶ One dual axis version (longitudinal and transversal speed)

Please refer to page 13 for the hull parts location.

CHARACTERISTICS

- ▶ Mounted into a hull fitting with the following options:
 - Screw-on type in bronze with valve (for wooden or plastic hull),
 - Weldable in inox with valve (for steel hull).
- ▶ Sensor: Retractable at sea (without drydock)
- ▶ Hull fitting 65 mm

Option

- ▶ Dual axis version: longitudinal and transversal speed

Sensor

- ▶ Diameter: 65 mm
- ▶ Length: 244.5 mm

Hull fitting

- ▶ Diameter: 65 mm
- ▶ Length: 244.5 mm



- ▶ Weight: 5.1 kg
- ▶ Bronze hull fitting weight: 9.5 kg
- ▶ Inox hull fitting weight: 9 kg

IMO Type approval
- Wheelmark by
Bureau Veritas



LENS

Sensor and hull fitting

Electromagnetic sensor and hull fitting

The LENS sensor is designed to give the highest performance on double hull ships. It is available in dual axis version (longitudinal and transversal speed).

It is built of epoxy resin, providing an exceptional lifetime to the equipment.

Please refer to page 13 for the hull parts location.

CHARACTERISTICS

- ▶ Sensor mounted into a hull fitting:
 - Either stainless (for steel hull),
 - Or aluminium (for aluminium hull),
 - Flush mounted type, ejectable by diver.
- ▶ Sensor:
 - Frequency: 8 Hz,
 - Voltage: 18 Vdc,
 - Inductor voltage: 50 mA,
 - Sensitivity: 1.4 milliohm / knot.

Sensor option

- ▶ Dual axis version: longitudinal and transversal speed

Sensor

Hull fitting

- ▶ Diameter: 130 mm
- ▶ Length: 115 mm
- ▶ Diameter: 184 mm
- ▶ Length: 115 mm

- ▶ Weight: 5.1 kg
- ▶ Steel hull fitting weight: 11 kg
- ▶ Aluminium hull fitting weight: 3.7 kg

IMO Type approval
- Wheelmark by
Bureau Veritas



SM2000

Sensor

Smart sensor

The SM2000 electromagnetic sensor is fitted with 3 m cable, with connectors. This is an intelligent and adjustable sensor. It meets the climatic, mechanical and radio electrical resistance standards applicable to equipment onboard navy ships. It can also be integrated in ROV (remotely operated underwater vehicle).

SM2000 consists of:

- ▶ One smart sensor
- ▶ One 3 m cable with connectors

CHARACTERISTICS

- ▶ Interface RS422 NMEA 0183 format
- ▶ Power supply: 12 Vdc to 16 Vdc
- ▶ Output: 1 x RS422 NMEA 0183 format communication
- ▶ Input: 1 x RS422

Options

- ▶ RS422 customer's format on request
- ▶ Possibility to add an external DCC (distributor and commutation cabinet)



DIMENSIONS

- ▶ Diameter: 64 mm
- ▶ Depth: 92 mm
- ▶ Weight: 2 kg

Econometer

Fuel meter

The ORION econometer constantly evaluates the vessel's fuel efficiency. ORION displays the consumption directly on the screen: in volume and in currency.

The ORION standard version consists of:

- ▶ One main cabinet
- ▶ Two fuel meters with oval gears



CHARACTERISTICS

Main features

- ▶ Gain, damping
- ▶ Dimmer adjustments
- ▶ Help to repairing accessible through keyboard
- ▶ All worldwide currencies accepted

Fuel sensors:

- ▶ Two different models are available :
 - 1/2 inch : capacity 60 to 2,400 liters / h,
 - 1 inch: capacity 600 to 9,000 liters / h.

Display features

- ▶ Top LCD display:
 - Instantaneous speed (knot),
 - Instantaneous consumption (liter / hour and euro / hour),
 - Average consumption (liter / hour and euro / hour).
- ▶ Bottom LCD display:
 - Total distance (mile),
 - Daily distance (mile),
 - Total consumption (liter and euro),
 - Daily consumption (liter and euro),
 - Efficiency factor.

Technical specifications

- ▶ Power supply: 12 Vdc to 24 Vdc - max: 100 mA
- ▶ Inputs:
 - 2 x fuel sensor inputs,
 - Either 1 x 1/200 nautical miles log speed input (dry contact),
 - Or 1 x NMEA 0183 format speed frames RMA, RMC, VHW, VLW, VTG with RS422 or RS232 protocol.
- ▶ Outputs:
 - 1 x total consumption dry contact output (liter),
 - Either 1 x serial RS422 NMEA 0183 format output,
 - Or serial RS232 NMEA 0183 format output,
 - 1 x power supply for fuel sensors.

Options

- ▶ Installation of a microns filter before each sensor
- ▶ Heavy fuel or other flows

Standards

- ▶ IEC 61162-1

DIMENSIONS

Cabinet:

- ▶ Length: 114 mm
- ▶ Width: 114 mm
- ▶ Depth: 28 mm
- ▶ Weight: 1 kg

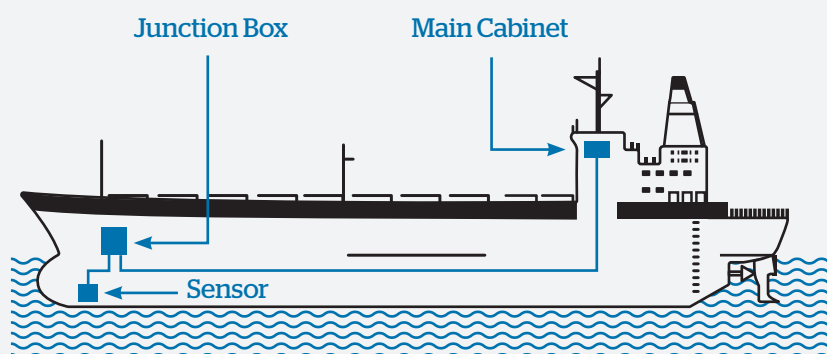
For 1/2 inch fuel meter:

- ▶ Diameter: 110 mm
- ▶ Depth: 106 mm
- ▶ Weight: 1.6 kg

For 1 inch fuel meter:

- ▶ Diameter: 120 mm
- ▶ Depth: 117 mm
- ▶ Weight: 2.6 kg

How to select the sensor location?



The flat sensor surface measures the water speed along the hull. The sensor must be located near to the bow, as far forward as possible. It must always remain immersed.

For special installation cases please contact a BEN Marine certified agent.

How to select your hull parts? (hull fitting and sensor)

HULL PARTS		HULLS		
		STEEL	FIBER GLASS, WOODEN	ALUMINIUM
48MM	With valve			
	481.RVI weldable hull fitting with valve / 481.RVB.16 retractable sensor 16 m standard	X	-	-
	481.RVB screw-on type hull fitting with valve / 481.RVB.16 retractable sensor 16 m standard	-	X	-
	Without valve			
	481.RI weldable hull fitting without valve / 481.RB.16 fixed sensor 16 m standard	X	-	-
	481.RB screw-on type hull fitting without valve / 481.RB.16 fixed sensor 16 m standard	-	X	-
65MM	481.RA weldable hull fitting without valve / 481.RA.16 fixed sensor 16 m standard aluminium	-	-	X
	With valve			
	651.RVI weldable hull fitting with valve / 652.RVB.20 retractable sensor 20 m standard	X	-	-
LENS	651.RVB screw-on type hull fitting with valve / 652.RVB.20 retractable sensor 20 m standard	-	X	-
	Double hull			
LENS	LENS hull fitting for steel double hull / LENS retractable sensor with 30 m cable	X	-	-
	LENS hull fitting for aluminium double hull / LENS retractable sensor XY with 30 m cable	-	-	X

Installation diagram of BEN Marine EM speed logs

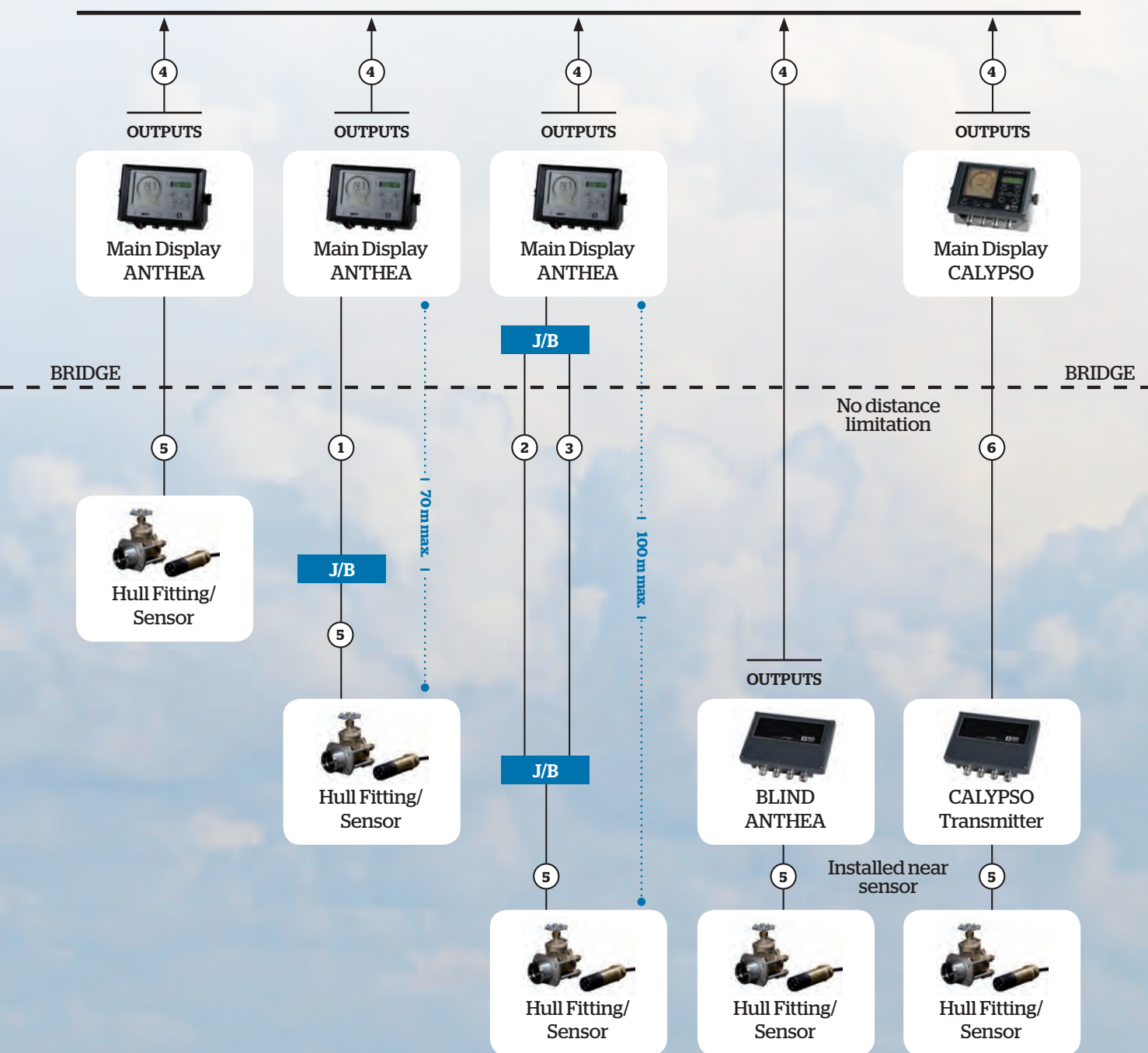
CABLES TYPE:

- ① One cable with 2 individually shielded pairs (Min = 0.34°).
- ② Inductor cable = 1 shielded pair (Min = 0.75°).
- ③ Electrode cable = 1 shielded pair (Min = 0.75°).
- ④ According output type.
- ⑤ Sensor cable is supplied by BEN Marine:
 - 16 m or 32 m with transducer 48 mm
 - 20 m with transducer 65 mm
 - 30 m with transducer LENS
 - other length on request
- ⑥ Standard electrical cable.

Note: For mechanical protection, we advise the use of armoured (braid) cables.



Integrated Bridge Systems, Interfaced Navigation Equipment, Navigation Repeaters...



About Atos & Bull

Atos SE (Societas Europaea) is a leader in digital services with pro forma annual revenue of circa € 12 billion and circa 100,000 employees in 72 countries. Serving a global client base, the Group provides Consulting & Systems Integration services, Managed Services & BPO, Cloud operations, Big Data & Cyber-security solutions, as well as transactional services through Worldline, the European leader in the payments and transactional services industry. With its deep technology expertise and industry knowledge, the Group works with clients across different business sectors: Defense, Financial Services, Health, Manufacturing, Media, Utilities, Public sector, Retail, Telecommunications, and Transportation.

Atos is focused on business technology that powers progress and helps organizations to create their firm of the future. The Group is the Worldwide Information Technology Partner for the Olympic & Paralympic Games and is listed on the Euronext Paris market. Atos operates under the brands Atos, Atos Consulting, Atos Worldgrid, Bull, Canopy, Unify and Worldline.

For more information
atos.net

Bull, the Atos technologies for the digital transformation

Bull is the Atos brand for its technology products and software, which are today distributed in over 50 countries worldwide. With a rich heritage of over 80 years of technological innovation, 2000 patents and a 700 strong R&D team supported by the Atos Scientific Community, it offers products and value-added software to assist clients in their digital transformation, specifically in the areas of Big Data and Cybersecurity.

Bull is the European leader in HPC and its products include bullx, the energy-efficient supercomputer; bullion, one of the most powerful x86 servers in the world developed to meet the challenges of Big Data; Evidian, the software security solutions for identity and access management; Trustway, the hardware security module and Hoox, the ultra-secure smartphone. Bull is part of Atos.

For more information
bull.com
benmarine.fr
benmarine@atos.net

Atos, the Atos logo, Atos Consulting, Atos Worldgrid, Bull, Canopy, Unify, Worldline registered trademarks of the Atos group. All trademarks are the property of their respective owners. Atos reserves the right to modify this document at any time without notice. Some offerings or parts of offerings described in this document may not be available locally. Please contact your local Atos office for information regarding the offerings available in your country. This document does not represent a contractual commitment. May 2016 © 2016 Atos



THIS BROCHURE IS PRINTED ON PAPER COMBINING 40% ECO-CERTIFIED
FIBERS FROM SUSTAINABLE FORESTS MANAGEMENT AND 60% RECYCLED
FIBERS IN LINE WITH CURRENT ENVIRONMENT STANDARDS (ISO 14001).