

**PRODUCT CATALOGUE**

# **PREMIUM QUALITY FOR ALL BOATS**

**OUTDOOR INSTRUMENTATION ENGINEERED IN SWITZERLAND**





# LEADING SOLUTIONS FOR DEMANDING INSTRUMENTATION

We originate from VDO Marine instruments – the first choice in the Marine business. You can expect even more from Veratron.




With more than 45 years experience developing robust designs for the marine, power sports, automotive and industry markets, you can rely on us to provide product performance that is technically outstanding. For more than two decades, our team has been

responsible for the development, production and sales of all the VDO Marine products.

This solid foundation has allowed us to continue developing world-leading instrumentation under our new name, Veratron. Our knowhow – alongside a passionate and experienced team, combined with an automotive background – ensures outstanding quality in all areas.



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# MADE FOR EXTREME

VDO Marine has supplied solutions for pleasure boats, yachts and sailing boats since 1958. In 2018, Veratron was established and took over the existing team, having produced VDO Marine products since 1972. The DNA stays and the team is ready to develop under the name Veratron Marine, to produce even better products for the future.

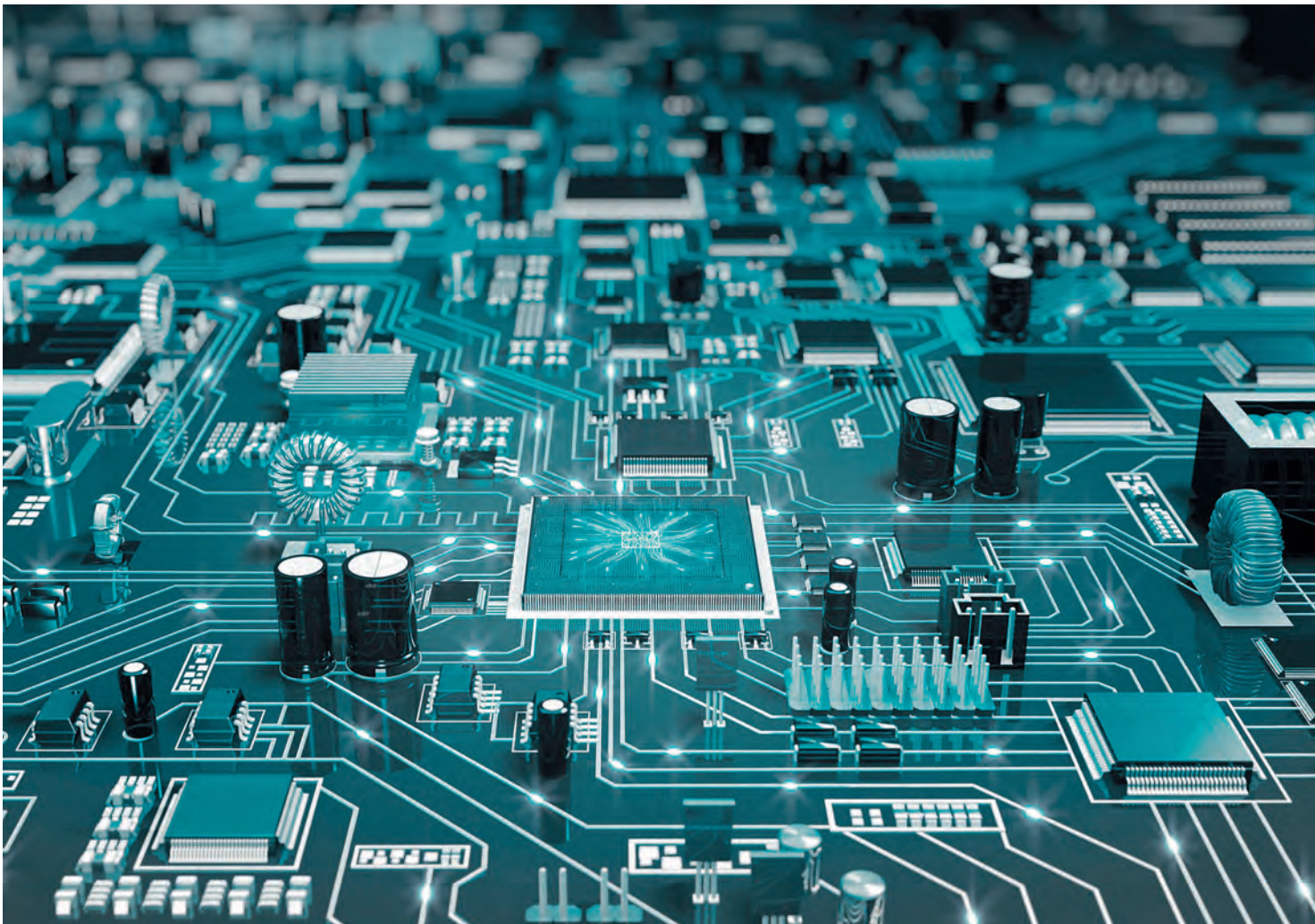
The highest precision and the use of pioneering technologies have always been as important to us as the ease of use and attractive design for all our Marine products. To ensure total reliability – even under the toughest conditions – all our products undergo extensive testing and quality assurance procedures.





# A PARTNER YOU CAN RELY ON

Veratron was established in 2018 to serve its customers with high quality, cost competitive products. With more than 45 years of know-how in our company, we provide the market with premium instruments for vehicles. Our customers know us for our short time to market from development to start of production and reliable supply. We have all competences on board to deliver high value solutions from first sketches to final product.



# OUR HISTORY

The name has changed several times, but many of the people developing our first-class instruments have been with us since the beginning. More than 45 years' experience and knowhow have been accumulated within Veratron, allowing us to provide the market with cutting edge technology and premium instruments for vehicles of all kinds.

## 1972 – 1991 FOUNDATION & GROWTH



### 1972

Foundation of VDO Technik AG at new production plant in Rüthi, Switzerland. Production of passenger car instrument clusters for Swedish car manufacturer, as well as speedo and tachometers for Austrian motorcycle and car manufacturers.

### 1975

First production of mechanical speedometers for bicycles, mechanical fuel level sensors and gauges.

### 1979

The production of central door locking systems for two major German car manufacturers begins.

### 1986

Focus on production of bi-metal instruments for all German car manufacturers. New production processes implemented to produce up to 25 000 units per day.



### 1989

Expansion of facility and integration of marine business.



## 1992 – 2001 DIVERSIFICATION



### 1992

Start of PCB assembly in Rüthi, Switzerland.

### 1998

Production of instruments for British off-road vehicle manufacturer.

### 1999

Engine monitoring instrument for the biggest US out-board engine manufacturer – first development and production of color display for Marine application.

### 2001

ATV instrument – first development for off-road application.



## 2002 – 2007 CHANGE

### 2002

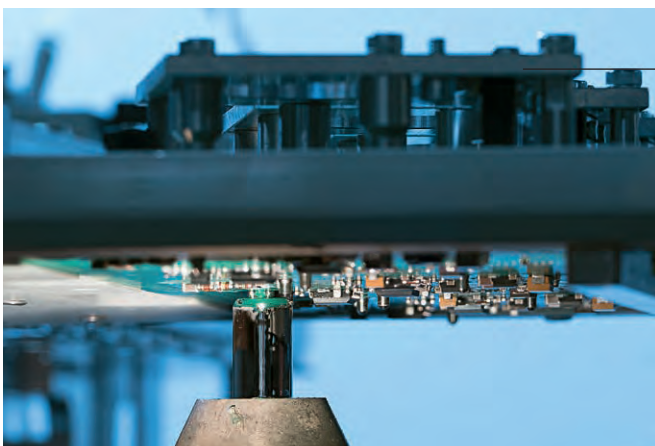
First system solutions for industrial applications developed and produced.

### 2004

Instrumentation for larger US construction machineries manufacturer developed and produced.

### 2005

Icon motorcycle manufacturer in the US orders first instruments in Rüthi.



### 2006

Start of production of fuel level sensors for trucks.

### 2007

Production plant refreshed and made ready for further expansion.

2008 - 2017 NEW OPPORTUNITIES

2008

Production of tractor instrument clusters starts.

2010

Up to date 2 million instruments were delivered to US motorcycle manufacturer.



2013

The biggest marine engine manufacturer becomes the first Japanese customer to order from the Rüthi plant. Two new European premium motorcycle brands follow.

2014

Rüthi becomes the Marine market group within Continental. Further focus on marine instruments.

2017

A famous Japanese engine, motorcycle and car manufacturer is added as the next important customer in the marine segment.



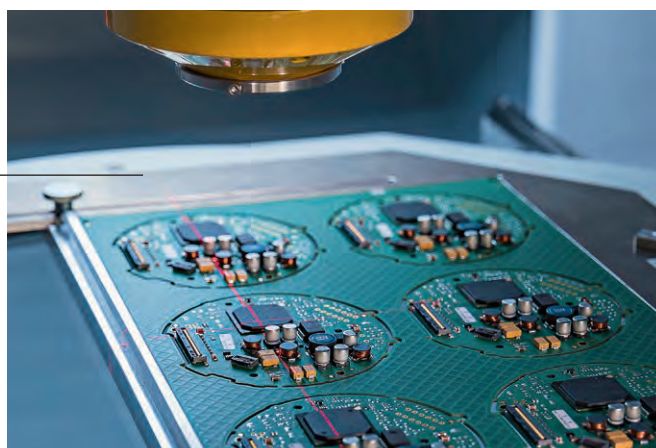
2018 ONWARD

2018

The management being partly on board for over 20 years buys the Marine and PA Business from Continental and founds the new company Veratron.

2019

Development of premium and cutting edge Veratron products. Ongoing development and production of VDO Marine products.





# ACQUALINK™ – TIMELESS INSTRUMENTS HIGH-QUALITY DESIGN

**ACQUALINK™ REALIZES STATE OF THE ART SOLUTIONS TO PROVIDE CUSTOMERS WITH INSTANTANEOUS, ACCURATE NAUTICAL INFORMATION.**

The instruments are designed for performance, whereas ease of use remaining an important attribute. The use of solely premium material, such as mineral glass lenses, guarantees the highest level of reliability and readability, as well as low energy consumption. All AcquaLink™ instruments are lead-free, a token of our commitment to environmental responsibility. In line with

this, our production plant is ISO 14001 and ISO 9001:2015 certified. In addition, the timelessly elegantly stylish yet modern design of AcquaLink™ displays and gauges provides your cockpit with pleasant clarity. Every component of the AcquaLink™ series fulfills highest standards with regard to functionality, design and quality.



low power consumption  
lead-free instruments





### BENEFITS OF USING ACQUALINK™:

- Maximum precision and deployment of pioneering technologies are equally important as the ease of use and stylish design.
- All AcquaLink™ components are made of high class materials, like mineral glass, stainless steel and aluminum.
- All products are manufactured under ISO 9001 certified environment.
- Our plug and play solution design concept offers a high level of installation flexibility.
- We ensure seamless integration and optimum utilization of AcquaLink™ devices for extreme conditions at sea.
- Harmonized dashboard look.



NavControl



4.3" TFT Display







## MAST DISPLAY UNITS

The new Veratron mast brackets are an elegant and efficient solution for mast installation. They hold either one (portrait mode) or three (landscape mode) 7" TFT displays and a rear cover is available with minimum installation space thanks to the AcquaLink™ daisy-chain between displays. Thanks to the easy touch-based interaction to setup the pages, the TFTs can display up to 16 data, such as wind, speed, depth but also battery voltage and distances.

The Mast Display functionality is implemented in all 7" AcquaLink™ TFTs.

- Landscape and Portrait orientation
- New software update required
- Automatic detection of AcquaLink™ NavBox to self configure as Mast Display

### Technical specifications:

- as AcquaLink™ 7" TFT Displays
- IPS technology display
- High readability
- NMEA 2000® compatible
- IP67 exposed
- Touch screen with swipe function
- Touch buttons
- Operating temperature range design for -30 °C to +80 °C

### AFTERMARKET PACKAGING:

**Triple:** Carbon Bracket (B00028501), 3x 7" AcquaLink™ Displays with Black Bezel and Silicone Cover, NMEA 2000® Adapter Cable, Terminator, Cables.

**Single:** Aluminium Bracket, 1x 7" AcquaLink™ Display with Black Bezel and Silicone Cover, NMEA 2000® Adapter Cable, Terminator, Cables.

MAST DISPLAY UNIT	ARTICLE NUMBER
Triple	B00033101
Single	B00044701



Mast Display Unit - Triple



Mast Display Unit - Single



## TFT DISPLAYS

AcquaLink™ multifunction TFT Displays are available in 4.3" and 7" sizes. The full 24 bit /16 m colors optically bonded IPS technology displays feature transmissive layer technology for unprecedented and unsurpassed readability even in direct sunlight. The TFT Displays show a wide array of data received from the AcquaLink™ NavBox or NMEA 2000®. Users can customize up to 40 different data pages with single, double, triple or quadruple grid layouts.

The Displays can be daisy-chained with other AcquaLink™ gauges, displays or NavControls using the unique VDO Marine Bus or directly connected to the NMEA 2000® backbone (optional adapter cable required) for simple installation on any yacht.

7" TFTs are equipped with capacitive multi touch screens to slide between pages whereas 4.3" displays require the use of a NavControl unit for data input and operation.

- 4.3": 1x plug with 2x Video Input
- 7": 2x plugs with 4x Video Input
- 2x VDO Marine Bus connectors
- Operating temperature range -30 °C / +80 °C
- Protection level front and rear IPX9K with connectors plugged

### AFTERMARKET PACKAGE:

TFT Display, Black Bezel, Silicone Cover, Mounting Screws, Drilling Template, Installation Instructions, Safety Instructions.

Optionally white bezel can be selected from the accessories page 72.

VOLTAGE	COLOR	RESOLUTION	ARTICLE NUMBER
<b>4.3"</b>			
12-24 V	Black	480 x 272 (WQVGA)	A2C59501996
<b>7"</b>			
12-24 V	Black	800 x 480 (WVGA)	A2C59501997



AcquaLink™ 7" TFT Display



AcquaLink™ 7" TFT Display



AcquaLink™ 4.3" TFT Display



AcquaLink™ 4.3" TFT Display



## NAVCONTROL

The NavControl can assume control of any TFT Display connected to the VDO Marine Bus or NMEA 2000® network. Even multiple units can be connected to the same Bus without conflicts.

- Compatible with AcquaLink™ and OceanLink™
- 2x VDO Marine Bus connectors
- Operating temperature range -30 °C / +80 °C
- Protection level IPX6
- Reverse polarity protection
- Telltales light indication

### AFTERMARKET PACKAGE:

NavControl, Bezel, Silicone Cover, Mounting Screws, Drilling Template, Installation Instructions, Safety Instructions.

VOLTAGE	COLOR	ARTICLE NUMBER
12-24 V	Black	A2C59501982



NavControl



NavControl

# ACQUALINK™ 110 MM GAUGES

AcquaLink™ 110 mm Gauges feature anti-fog coated mineral glass lenses and LED backlight technology. This allows superb readability in every situation. The gauges can be daisy-chained, using the unique VDO Marine Bus connection or connected to the NMEA 2000® network (optional adapter cable required). The available information provided by the AcquaLink™ NavBox or the NMEA 2000® network is indicated by the pointer movement. The AcquaLink™ Tachometer can master up to 16 additional AcquaLink™ 52 mm Gauges. These gauges can be connected using the patented EasyLink serial bus.

**SPECIFICATIONS:**

- 2x VDO Marine Bus connectors
- Current consumption <150 mA
- Reverse polarity protection
- Anti-fog coated mineral glass lens
- Protection level IPX6
- Operating temperature range -20 °C / +70 °C

**AFTERMARKET PACKAGE:**

Gauge, Bezel, Rubber Seal, Spinlock, Drilling Template, Installation Instructions, Safety Instructions.

## WIND

The VDO Marine Wind Gauges display wind speed and angle information received from the VDO Marine AcquaLink™ NavBox or the NMEA 2000® data bus.

RANGE	VOLTAGE	COLOR	ARTICLE NUMBER
<b>APPARENT WIND ANGLE</b>			
360°	12-24 V	Black White	A2C59501900 A2C1338770001
<b>APPARENT WIND ANGLE MAGNIFIED</b>			
360°	12-24 V	Black White	A2C59501901 A2C1338780001
<b>APPARENT WIND SPEED</b>			
0-50 knots	12-24 V	Black White	A2C59501902 A2C1338940001



110 mm Apparent Wind Angle 360°



110 mm Apparent Wind Angle Magnified 360°



110 mm Apparent Wind Speed 50 knots





## TACHOMETER

The VDO Marine Tachometer displays RPM information received from the VDO Marine AcquaLink™ NavBox or the NMEA 2000® data bus and distributes additional engine information to optional 52 mm AcquaLink™ EasyLink Gauges. With AcquaLink™ Tachometers you may monitor up to 4 boat engines via NMEA 2000® or J1939. Easily assign the dedicated engine to the chosen gauge by using VDO Marine Configuration tool or by a connected TFT Display.

RANGE	VOLTAGE	COLOR	ARTICLE NUMBER
3000 rpm	12 - 24 V	Black White	A2C59501913 A2C1338910001
5000 rpm	12 - 24 V	Black White	A2C59501914 A2C1338920001
7000 rpm	12 - 24 V	Black White	A2C59501915 A2C1338930001



110 mm Tachometer 3000 rpm



110 mm Tachometer 5000 rpm



110 mm Tachometer 7000 rpm

## NAVIGATION

The VDO Marine 110 mm Navigation Gauges display compass, rudder angle, speed and depth information received from the VDO Marine AcquaLink™ NavBox or the NMEA 2000® data bus.

RANGE outer/inner	VOLTAGE	COLOR	ARTICLE NUMBER
<b>COMPASS</b>			
360°	12-24 V	Black White	A2C59501911 A2C1338790001
<b>RUDDER ANGLE</b>			
80°	12-24 V	Black White	A2C59501912 A2C1338860001
<b>DEPTH</b>			
200 m / 660 feet	12-24 V	Black White	A2C59501903 A2C1338810001
600 feet / 180 m	12-24 V	Black White	A2C59501904 A2C1338820001
<b>SPEED OVER GROUND (SOG)</b>			
12 knots	12-24 V	Black White	A2C59501908 A2C1338870001
35 mph / 55 kmh	12-24 V	Black White	A2C59501910 A2C1338880001
70 mph / 115 kmh	12-24 V	Black White	A2C59501909 A2C1338900001
<b>SPEED THROUGH WATER (LOG®)</b>			
12 knots	12-24 V	Black White	A2C59501905 A2C1338830001
50 knots	12-24 V	Black White	A2C59501906 A2C1338850001
35 mph / 55 kmh	12-24 V	Black White	A2C59501907 A2C1338840001



110 mm Compass 360°



110 mm Rudder Angle



110 mm LOG® 50 knots



110 mm SOG 35 mph / 55 kmh



110 mm Depth 600 feet / 180 m







# ACQUALINK™ 52 MM GAUGES

AcquaLink™ 52 mm Gauges are connected directly to any AcquaLink™ 110 mm Tachometer using the patented EasyLink serial bus connection. Up to 16 EasyLink gauges for each Tachometer can be daisy-chained together.

Giving the customer the possibility to customize the cockpit, AcquaLink™ 52 mm Gauges have not included bezel in the packaging. Bezels available are listed in the Accessories section page 72.

**SPECIFICATIONS:**

- AMP Superseal Easylink connector
- Current consumption <100 mA
- 270° pointer deflection angle
- Reverse polarity protection
- Anti-fog mineral glass lens
- Protection level IPX6
- Operating temperature range -20 °C / +70 °C

**AFTERMARKET PACKAGE:**

Gauge, Rubber Seal, Spinlock, Drilling Template, Installation Instructions, Safety Instructions.

## TEMPERATURE

AcquaLink™ 52 mm Temperature Gauges are connected directly to any AcquaLink™ 110 mm Tachometer using the patented EasyLink serial bus connection.

RANGE outer / inner	VOLTAGE	COLOR	ARTICLE NUMBER
<b>COOLANT TEMPERATURE</b>			
120 °C / 250 °F	12 - 24 V	Black White	A2C59501931 A2C3968900001
250 °F / 120 °C	12 - 24 V	Black White	A2C59501932 A2C1338570001
<b>ENGINE OIL TEMPERATURE</b>			
150 °C / 300 °F	12 - 24 V	Black White	A2C59501926 A2C1338620001
300 °F / 150 °C	12 - 24 V	Black White	A2C59501927 A2C1338630001
<b>PYROMETER</b>			
900 °C / 1650 °F	12 - 24 V	Black White	A2C59501933 A2C1338660001
1650 °F / 900 °C	12 - 24 V	Black White	A2C59501934 A2C1338670001



52 mm Coolant Temperature  
120 °C / 250 °F



52 mm Engine Oil Temperature  
300 °F / 150 °C



52 mm Pyrometer 900 °C / 1650 °F



## PRESSURE

AcquaLink™ 52 mm Pressure Gauges are connected directly to any AcquaLink™ 110 mm Tachometer using the patented EasyLink serial bus connection.

RANGE outer/inner	VOLTAGE	COLOR	ARTICLE NUMBER
<b>BOOST PRESSURE</b>			
2 bar/30 psi	12-24 V	Black White	A2C59501944 A2C1338720001
30 psi/2 bar	12-24 V	Black White	A2C59501945 A2C1338730001
<b>ENGINE OIL PRESSURE</b>			
10 bar/150 psi	12-24 V	Black White	A2C59501935 A2C1338600001
150 psi/10 bar	12-24 V	Black White	A2C59501936 A2C1338610001
<b>TRANSMISSION OIL PRESSURE</b>			
30 bar/440 psi	12-24 V	Black White	A2C59501937 A2C1338690001
450 psi/30 bar	12-24 V	Black White	A2C59501938 A2C1338700001



52 mm Boost Pressure  
30 psi/2 bar



52 mm Engine Oil Pressure  
10 bar/150 psi



52 mm Transmission Oil Pressure  
30 bar/440 psi

## LIQUID LEVEL

AcquaLink™ 52 mm Liquid Level Gauges are connected directly to any AcquaLink™ 110 mm Tachometer using the patented EasyLink serial bus connection.

RANGE	VOLTAGE	COLOR	ARTICLE NUMBER
<b>FUEL LEVEL</b>			
Empty - Full	12 - 24 V	Black White	A2C59501930 A2C1338650001
<b>FRESH WATER</b>			
Empty - Full	12 - 24 V	Black White	A2C59501929 A2C1338640001
<b>WASTE WATER</b>			
Empty - Full	12 - 24 V	Black White	A2C59501928 A2C1338760001



52 mm Fuel Level Empty - Full



52 mm Fresh Water Level  
Empty - Full



52 mm Waste Water Level  
Empty - Full





## BATTERY STATUS

AcquaLink™ 52 mm Battery status Gauges are connected directly to any AcquaLink™ 110 mm Tachometer using the patented EasyLink serial bus connection.

RANGE	VOLTAGE	COLOR	ARTICLE NUMBER
<b>CURRENT</b>			
-60/+60 A	12-24 V	Black White	A2C59501942 A2C1338540001
-150/+150 A	12-24 V	Black White	A2C59501943 A2C1338550001
<b>VOLTAGE</b>			
8-16 V	12-24 V	Black White	A2C59501940 A2C1338740001
16-32 V	12-24 V	Black White	A2C59501941 A2C1338750001



52 mm Ammeter 60 A



52 mm Voltmeter 16-32 V





## VESSEL STATUS

AcquaLink™ 52 mm Vessel Status Gauges are connected directly to any AcquaLink™ 110 mm Tachometer using the patented EasyLink serial bus connection.

RANGE	VOLTAGE	COLOR	ARTICLE NUMBER
<b>RUDDER ANGLE</b>			
90°	12-24 V	Black White	A2C59501939 A2C1338680001
<b>ENGINE TRIM</b>			
Up/Down	12-24 V	Black White	A2C59501925 A2C1338710001



52 mm Rudder Angle



52 mm Engine Trim





## NAVBOX



The AcquaLink™ NavBox is the core of the AcquaLink™ VDO Marine system. It acts as a CPU and signal interface. The NavBox provides a wide range of digital and analog input possibilities. It supports up to four electronic engines (J1939 or NMEA 2000®) or one analog engine. It also features two VDO Marine Sumlog™ paddle wheel sensor and one analog VDO Marine Wind Sensor connections, so legacy VDO Marine products can be used and brought to the digital age.



### NAVBOX READS FOLLOWING ANALOG DATA:

- Engine Oil Pressure
- Engine Oil Temperature
- Engine Coolant Temperature
- Transmission Oil Pressure
- Fresh Water, Waste Water and Fuel Level
- Voltage
- Rudder Angle
- Engine Frequency
- Battery Current
- Amperemeter



NavBox

It also features a NMEA 0183 input and output port as well as a buzzer output. All the data received are converted and sent to the NMEA 2000® network and to the VDO Marine Bus. This gateway function allows displaying engine, liquid level, pressure, temperature and other vital information on any compatible display on the NMEA 2000® network or on designed VDO Marine AcquaLink™ devices.

The configuration of the NavBox can be done by using either an AcquaLink™ TFT and NavControl or by using the intuitive VDO Marine configuration tool.

- Reverse polarity protection
- NMEA 2000® certified
- LED signal status indication
- Aluminum base plate
- Front & rear side protection rating IPX4
- 3x VDO Marine bus lines
- 1x J1939 CAN bus
- 1x NMEA 2000® bus
- 1x VDO Marine Analog Wind Sensor Input
- 2x VDO Marine Sumlog™ Inputs
- AMP Super Seal power input
- 26 pin AUX input (analog signals, NMEA 0183)
- Operating temperature range -20 °C / +70 °C

### AFTERMARKET PACKAGE:

NavBox, Power cable & fuse, 26 pin harness with USB interface termination resistors (3 pc.), Mounting Screws, Safety Instructions, Installation and Operation Manual, Drilling Templates.

### VOLTAGE

12-24 V

### ARTICLE NUMBER

A2C59501979



# OCEANLINK™ – PRECISION CAN INSTRUMENTATION FOR LEISURE BOATS

**THE OCEANLINK™ SERIES FOCUSES ON THE NEEDS OF THE MODERN SPORTS AND LEISURE BOATS MARKET.**

**It provides a modular instrumentation concept for electronic navigation and engine monitoring with NMEA 2000®, J1939 and analog connectivity. The new product line offers a wide range of functions as well as great flexibility in installation and design.**

The OceanLink™ series provides three different master instruments as centerpieces of the system: a 4.3" TFT Display, a 7" TFT touch Display and as master instruments 85 mm round gauges. All devices are information

powerhouses, multifunctional tachometers and have embedded Gateway from Analog or J1939 to NMEA 2000®.

The OceanLink™ 85 mm Master gauge and the TFT Displays show various available data (e.g. engine data, depth, course over ground and speed over ground), and send it to all NMEA 2000® devices and to up to 16 additional satellite instruments. All instruments come in a new and stylish design, with perfect to read modern dials.







### **BENEFITS OF USING OCEANLINK™:**

- Easy and effective use.
- Perfectly readable engine monitoring thanks to increased performance presentation.
- The EasyLink data connection and the plug & play solution provide a flexible installation of panel, front and flush mounted instruments.
- Decades of experience guarantee a fully reliable, modern navigation and engine monitoring system with NMEA 2000®.
- A solid housing design completely sealed against dust and highly water resistant (IPX7 front and rear).
- High quality precision instruments designed in Switzerland.

### **FURTHER ADVANCED FEATURES:**

- Master instruments with NMEA 2000® gateway functionality forwarding data, e. g. engine data, to NMEA compatible devices.
- Sunlight readable touch screen IPS TFT Display.
- GPS Speedometer, 85 mm, features NMEA 2000® port, which bridges the position, COG, SOG data to the NMEA 2000® network.

# OCEANLINK™ TFT DISPLAYS

## TFT DISPLAYS



The new OceanLink™ 2.2", 4.3" and 7" multifunction TFT Displays feature a full 24 bit/16 m colors optically bonded display with IPS technology for perfect readability even in direct sunlight. The TFT Displays show and distribute a wide array of data received from NMEA 2000® and J1939 CAN Bus systems and analog sensors directly connected to the display. Users can customize different data pages with single, double, triple or quadruple grid layouts.

### OCEANLINK™ 2.2" TFT DISPLAY:

- Plastic front lens
- Front & rear side protection rating IPX7
- NMEA 2000® interface
- Bluetooth 5.1 Low Energy ready
- 1x NMEA 2000® or J1939
- 1x EasyLink data output
- 2x Analog inputs
- 1x Frequency input
- 1x Programmable alarm output 500 mA
- Operating temperature range -30 °C / +80 °C



OceanLink™ 2.2" TFT Display

### OCEANLINK™ 4.3" TFT DISPLAY:

- Optical bonded mineral glass lens
- Front & rear side protection rating IPX7
- 1x NMEA 2000® connector
- 1x J1939
- 2x 4 – 20 mA inputs
- 2x Analog inputs
- 1x Frequency input
- 1x EasyLink data output
- 1x Programmable alarm output 500 mA
- Operating temperature range -30 °C / +80 °C



OceanLink™ 4.3" TFT Display

### OCEANLINK™ 7" TFT DISPLAY:

- Touch screen function
- Optical bonded mineral glass lens
- Front & rear side protection rating IPX7
- 1x NMEA 2000® connector
- 2x J1939
- 6x Analog inputs
- 2x Frequency inputs
- 2x 4 – 20 mA inputs
- 3x Digital inputs or 0 – 5 V
- 2x Alarm outputs
- 2x Video inputs
- 2x EasyLink data outputs
- 2x Programmable alarm outputs 500 mA
- Operating temperature range -30 °C / +80 °C



OceanLink™ 7" TFT Display



**AFTERMARKET PACKAGE:**

TFT Display, Bezel, Silicone Cover (4.3" and 7"), Mounting Screws, Wiring Harness, Installation Instructions, Safety Instructions.

VOLTAGE	COLOR	RESOLUTION	ARTICLE NUMBER
<b>2.2"</b> 12-24 V	Black	320 x 240 (QVGA)	B00043701
<b>4.3"</b> 12-24 V	Black	480 x 272 (WQVGA)	A2C1352150001
<b>7"</b> 12-24 V	Black	800 x 480 (WVGA)	A2C1865330001

# OCEANLINK™ 85 MM – MASTER GAUGES

OceanLink™ Gauges have a white and black dial version, which is always completed with a bezel in identical color. Optionally, a Chrome Bezel is available as a decorative accessory.

**SPECIFICATIONS:**

- 1x NMEA 2000® input
- 1x J1939
- 1x Frequency input
- 2x Analog inputs
- 1x Alarm output 500 mA
- Reverse polarity protection
- Anti-fog double layer plastic lens
- Protection rating IPX7
- Operating temperature range -20°C/+70°C

**AFTERMARKET PACKAGE:**

Gauge, Bezel, Rubber Seal, Spinlock, Connection Cable, Installation Instructions, Safety Instructions.

**GPS SPEEDOMETER**



The new OceanLink™ GPS Speedometer features an embedded GPS antenna, an inverted dot matrix LCD and NMEA 2000® connectivity. Up to twenty 52 mm satellite gauges can be connected thanks to the integrated EasyLink connectivity.

**DISPLAYED DATA:**

Heading, Depth, Seawater Temperature, Boat Speed, SOG, Date & Time, Battery Status, Air Temperature, Engine Oil Pressure, Fuel Level, RPM, Coolant Temperature, Transmission Gear Temperature, Fresh Water Level, Waste Water Level, Trim, Engine Hours, Rudder Status, Booster Pressure, COG and alarms.



85 mm GPS Speedometer  
0-35 knots/kmh/mph



85 mm GPS Speedometer  
0-14 knots/kmh/mph

RANGE	VOLTAGE	COLOR	ARTICLE NUMBER
0-14 knots/kmh/mph	12-24 V	Black	A2C1351970001
		White	A2C1352010001
0-35 knots/kmh/mph	12-24 V	Black	A2C1351980001
		White	A2C1352080001
0-70 knots/kmh/mph	12-24 V	Black	A2C1351990001
		White	A2C1352090001



## TACHOMETER



The new OceanLink™ Tachometer automatically presents all the key boat data on dot matrix digital display. Besides a CAN interface with NMEA 2000® certified and SAE J1939 data protocol it features two digital and one analog inputs. The innovative EasyLink data connection makes the installation easy and cost effective. Satellite instruments for further dynamic measurement values receive updates from the central instrument every 20 msec.

OceanLink™ is available in various designs and a number of bezel color options. The instruments can also be conveniently integrated into customer-specific panel solutions.

The VDO Marine Tachometer displays all important engine related data and distributes it to up to sixteen 52 mm satellite gauges.



85 mm Tachometer 3000 rpm



85 mm Tachometer 5000 rpm

RANGE	VOLTAGE	COLOR	ARTICLE NUMBER
3000 rpm	12 - 24 V	Black	A2C1065660001
		White	A2C1065670001
5000 rpm	12 - 24 V	Black	A2C1065720001
		White	A2C1065800001
7000 rpm	12 - 24 V	Black	A2C1065810001
		White	A2C1065820001

## NAVIGATION



The OceanLink™ Navigation gauges display compass, wind angle, apparent wind angle magnified, wind speed and depth information received from NMEA 2000® data bus.

RANGE outer/inner	VOLTAGE	COLOR	ARTICLE NUMBER
<b>COMPASS</b>			
360°	12 - 24 V	Black	A2C1957380001
<b>WIND ANGLE</b>			
360°	12 - 24 V	Black	A2C1957400001
<b>APPARENT WIND ANGLE MAGNIFIED</b>			
360°	12 - 24 V	Black	A2C1957390001
<b>WIND SPEED</b>			
0 - 50 knots	12 - 24 V	Black	A2C1957420001
<b>DEPTH</b>			
200 m / 660 feet	12 - 24 V	Black	A2C1957360001



85 mm Wind Angle Magnified

# OCEANLINK™ 52 MM GAUGES

OceanLink™ 52 mm Gauges are connected directly to any OceanLink™ Master unit using the patented EasyLink serial bus connection. Up to 16 EasyLink gauges for each Tachometer or GPS Speedometer can be daisy-chained together. OceanLink™ Gauges have a white and black dial version, which is always completed with a bezel in identical color. Optionally a Chrome Bezel can be selected from the accessories list on page 72.

**SPECIFICATIONS:**

- AMP Superseal Easylink
- Current consumption <100 mA
- 270° pointer deflection angle
- Reverse polarity protection
- Anti-fog double layer plastic lens
- Front & rear protection rating IPX7
- Operating temperature range -20 °C / +70 °C

**AFTERMARKET PACKAGE:**

Gauge, Bezel, Rubber Seal, Spinlock, Installation Instructions, Safety Instructions.

**EASYLINK FLEX**

All the gauges in one gauge! The EasyLink Flex satellite can be wireless programmed via NFC interface directly from your smartphone to display your preferred single data onto its high-performance 1.44" TFT display.

COLOR	ARTICLE NUMBER
Black	B00043201



EasyLink Flex

**ACOUSTIC ALARM BUZZER**

The acoustic alarm buzzer can make you aware of a dangerous situation.

VOLTAGE	COLOR	ARTICLE NUMBER
12 - 24 V	Black	N03-230-702



Acoustic Alarm Buzzer





## TEMPERATURE

OceanLink™ 52 mm Temperature Gauges are connected directly to any OceanLink™ Master unit using the patented EasyLink serial bus connection. Gauges have anti-fog plastic double lens and choice of three various bezels.

RANGE outer/inner	VOLTAGE	COLOR	ARTICLE NUMBER
<b>COOLANT TEMPERATURE</b>			
120°C/250°F	12-24 V	Black White	A2C1065950001 A2C1065970001
Cold/Hot (250°F)	12-24 V	Black White	A2C1065980001 A2C1065990001
<b>ENGINE OIL TEMPERATURE</b>			
150°C/300°F	12-24 V	Black White	A2C1065850001 A2C1065860001
Cold/Hot (300°F)	12-24 V	Black White	A2C1065870001 A2C1065880001
<b>PYROMETER</b>			
900°C/1650°F	12-24 V	Black White	A2C1349690001 A2C1349710001
1650°F/900°C	12-24 V	Black White	A2C1349700001 A2C1349730001



52 mm Coolant Temperature  
120°C/250°F



52 mm Engine Oil Temperature  
150°C/300°F



52 mm Pyrometer 900°C/1650°F

## PRESSURE

OceanLink™ 52 mm Pressure Gauges are connected directly to any OceanLink™ Master unit using the patented EasyLink serial bus connection. Gauges have anti-fog plastic double lens and choice of three various bezels.

RANGE outer/inner	VOLTAGE	COLOR	ARTICLE NUMBER
<b>BOOST PRESSURE</b>			
2 bar / 30 psi	12 - 24 V	Black White	A2C1066140001 A2C1066150001
Low / High (30 psi)	12 - 24 V	Black White	A2C1066160001 A2C1066170001
<b>ENGINE OIL PRESSURE</b>			
10 bar / 150 psi	12 - 24 V	Black White	A2C1066000001 A2C1066010001
Low / High (150 psi)	12 - 24 V	Black White	A2C1066020001 A2C1066030001
<b>TRANSMISSION OIL PRESSURE</b>			
30 bar / 440 psi	12 - 24 V	Black White	A2C1066040001 A2C1066050001
Low / High (440 psi)	12 - 24 V	Black White	A2C1066060001 A2C1066070001



52 mm Boost Pressure, 2 bar / 30 psi



52 mm Engine Oil Pressure, Low / High



52 mm Transmission Oil Pressure, 30 bar / 440 psi

## LIQUID LEVEL

OceanLink™ 52 mm Liquid Level Gauges are connected directly to any OceanLink™ Master unit using the patented EasyLink serial bus connection. Gauges have anti-fog plastic double lens and choice of three various bezels.

RANGE	VOLTAGE	COLOR	ARTICLE NUMBER
<b>FUEL LEVEL</b>			
Empty - Full	12 - 24 V	Black White	A2C1065930001 A2C1065940001
<b>FRESH WATER</b>			
Empty - Full	12 - 24 V	Black White	A2C1065910001 A2C1065920001
<b>WASTE WATER</b>			
Empty - Full	12 - 24 V	Black White	A2C1065890001 A2C1065900001



52 mm Fuel Level Empty - Full



52 mm Fuel Level Empty - Full



52 mm Waste Water Level Empty - Full



## BATTERY STATUS

OceanLink™ 52 mm Battery Status Gauges are connected directly to any OceanLink™ Master unit using the patented EasyLink serial bus connection. Gauges have anti-fog plastic double lens and choice of three various bezels.

RANGE	VOLTAGE	COLOR	ARTICLE NUMBER
<b>CURRENT</b>			
-60/+60 A	12-24 V	Black White	A2C1349640001 A2C1349660001
-150/+150 A	12-24 V	Black White	A2C1349650001 A2C1349680001
<b>VOLTAGE</b>			
8-16 V	12-24 V	Black White	A2C1066100001 A2C1066110001
16-32 V	12-24 V	Black White	A2C1066120001 A2C1066130001



52 mm Current -150/+150 A



52 mm Voltmeter 16-32 V

## VESSEL STATUS

OceanLink™ 52 mm Vessel Status Gauges are connected directly to any OceanLink™ Master unit using the patented EasyLink serial bus connection. Gauges have anti-fog plastic double lens and choice of three various bezels.

RANGE	VOLTAGE	COLOR	ARTICLE NUMBER
<b>RUDDER ANGLE</b>			
90°	12-24 V	Black White	A2C1066080001 A2C1066090001
<b>ENGINE TRIM</b>			
Up/Down	12-24 V	Black White	A2C1065830001 A2C1065840001



52 mm Rudder Angle



52 mm Engine Trim



# VIEWLINE – EASY TO INSTALL, EASY TO CUSTOMIZE, EASY TO USE

## VIEWLINE OFFERS A COMPREHENSIVE MODULAR, MODERN SERIES OF INSTRUMENTS FOR ENGINE MONITORING.

More functions and greater flexibility in installation and design increase the scope for high manufacturing standards and guarantee the highest level of reliability and readability. As the result of ongoing research and development work, we offer an innovative,

comprehensive standard instrumentation platform which is also available for outboard engine use. ViewLine provides maximum freedom to customize the cockpit and is the natural choice for an attractive price / performance ratio.

### **BENEFITS OF USING VIEWLINE:**

- Anti-fog plastic double lens, maximum precision and stylish design with choice of nine various bezels.
- Our plug and play solution design concept offers a high level of installation flexibility for panel, front and flush mounted instruments.
- ViewLine offers maximum freedom in respect of cockpit customization.
- We ensure seamless integration and optimum utilization of ViewLine devices for extreme sea conditions.





# VIEWLINE 110 MM GAUGES

ViewLine accessories bezel concept offers true design flexibility in the layout of instrument panels. The three attractive designs in black, white and chrome are suitable for every machinery instrument panel or special vehicle cockpit.

Based on the ViewLine housing concept, the cluster provides an ideal IP protection class, a modern appearance and high quality standards.

It provides many parameters in NMEA 2000® and there are several customization opportunities to meet specific customer demands.

## AFTERMARKET PACKAGE:

Gauge, GPS speed cable, Bezel, Pushbutton for mode and configuration, Rubber Seal, Spinlock, Drilling Template, Installation Instructions, Safety Instructions.

## GPS SPEEDOMETER

### SPECIFICATIONS:

- Embedded GPS antenna
- Robust and flexible design for versatile applications
- CAN capability (NMEA 2000®)
- Pointer for analog indication of Speed over Ground (SOG)
- Programmable speed alarm
- Fixed segment LCD
- Flush mount possibility
- Front side protection rating IP67
- Compass for Course over Ground (COG)
- Clock
- 110 mm installation diameter
- 126 mm outer diameter
- 50 mm installation depth
- Reverse polarity protection
- 1x Telltale generic alarm
- 1x Telltale alarm (knots/kmh/mph)

### DISPLAYED DATA:

GPS signal quality, Course over ground (COG), UTC time (optional with external push button), Trip distance (optional with external push button), Trip time (optional with external push button)



110 mm GPS Speedometer  
0-12 knots/kmh/mph



110 mm GPS Speedometer  
0-70 knots/kmh/mph

RANGE	VOLTAGE	COLOR	ARTICLE NUMBER
0-12 knots/kmh/mph	8.5-16 V	Black	A2C59501987
0-35 knots/kmh/mph	8.5-16 V	Black	A2C59501782
0-70 knots/kmh/mph	8.5-16 V	Black	A2C59501781





## TACHOMETER

The Viewline Tachometers indicate the number of revolutions of the motor. One LED warning light is integrated as a standard. Our plug and play solution design concept offers a high level of installation flexibility for panel, front and flush mounted instruments. The ViewLine Revolution counter can be connected to conventional marine engines (no data bus). Optionally, bezels can be selected from the accessories page 75.

### VERSIONS WITH LCD:

RANGE	VOLTAGE	COLOR	ARTICLE NUMBER
3000 rpm	8 - 32 V	Black	A2C59512413
4000 rpm	8 - 32 V	Black	A2C59512414
5000 rpm	8 - 32 V	Black	A2C59512415
6000 rpm	8 - 32 V	Black	A2C59512416
8000 rpm	8 - 32 V	Black	A2C59512418



110 mm Tachometer 3000 rpm

# VIEWLINE 85 MM GAUGES

The VDO Marine ViewLine 85 mm Gauges are available in black or white dial versions, which are always completed with a round bezel in identical color. ViewLine accessories bezel concept offers true design flexibility in the layout of instrument panels. The three attractive designs in black, white and chrome are suitable for every machinery instrument panel or special vehicle cockpit.

## SPECIFICATIONS:

- 8 and 14 pole Tyco / Hirschmann bush housing
- Operating voltage 8 – 32 V
- Accuracy +/- 2.5 % of full scale reading
- < 175 mA current consumption with an LED warning light as standard

- Number of pulses programmable via dip switch or PC software (ViewLine programming tool)
- Anti-fog double lens
- Protection rating front IP67, rear IP52
- 85 mm installation diameter
- 50 mm installation depth
- Operating temperature range -20 °C / +70 °C

## AFTERMARKET PACKAGE:

Gauge, Bezel, Rubber Seal, Spinlock, Connection Cable, Installation Instructions, Safety Instructions.

## SPEEDOMETER

Marine 85 mm Speedometer with LCD and push button included offers plug and play solution concept and installation flexibility for panel, front and flush mounted instruments.

RANGE	VOLTAGE	COLOR	BEZEL	ARTICLE NUMBER
0 – 60 kmh	12 – 24 V	Black	Triangular black	A2C59512367
0 – 120 kmh	12 – 24 V	Black	Triangular black	A2C59512369
0 – 200 kmh	12 – 24 V	Black	Triangular black	A2C59512370
0 – 300 kmh	12 – 24 V	Black	Triangular black	A2C59512371



Speedometer 0 – 60 kmh





## TACHOMETER

The Viewline Tachometers indicate the number of revolutions of the motor. One LED warning light is integrated as a standard. Our plug and play solution design concept offers a high level of installation flexibility for panel, front and flush mounted instruments. The ViewLine Revolution counter can be connected to conventional marine engines (no data bus).

### VERSIONS WITHOUT LCD:

RANGE	VOLTAGE	COLOR	ARTICLE NUMBER
3000 rpm	8 - 32 V	Black White	A2C59512430 A2C59512433
4000 rpm	8 - 32 V	Black White	A2C59512431 A2C59512434
6000 rpm	8 - 32 V	Black White	A2C59512432 A2C59512435



85 mm Tachometer 3000 rpm



85 mm Tachometer 4000 rpm

## ENGINE REVOLUTION, ENGINE HOURS, VOLTAGE AND CLOCK

The ViewLine Tachometer is available with or without operating hours counter (digital display) and can be connected to conventional marine engines (no data bus). One LED warning light is integrated as a standard.

- Current consumption < 175 mA, with warning light (LED)
- Output for acoustic alert (option)
- Various sensor inputs
- LCD size 37 mm x 11 mm
- Individually programmable display e.g., for clock, trip, odometer, etc. via externally switchable button or PC software (ViewLine programming tool)
- Reverse polarity protection



85 mm Engine Revolution, Engine Hours, Voltage and Clock, 3000 rpm

### VERSIONS WITH LCD\*:

RANGE	VOLTAGE	COLOR	INPUT	ARTICLE NUMBER
3000 rpm	8-32 V	Black White	W, Ind, Hall, Generator	A2C59512390 A2C59512396
4000 rpm	8-32 V	Black White	W, Ind, Hall, Generator	A2C59512391 A2C59512397
5000 rpm	8-32 V	Black White	W, Ind, Hall, Generator	A2C59512392 A2C59512398
6000 rpm	8-32 V	Black White	W, Ind, Hall, Generator	A2C59512393 A2C59512399
7000 rpm	8-32 V	Black White	W, Ind, Hall, Generator	A2C59512394 A2C59512400
8000 rpm	8-32 V	Black White	W, Ind, Hall, Generator	A2C59512395 A2C59512401

\* With Pushbutton for mode and configuration



85 mm Engine Revolution, Engine Hours, Voltage and Clock, 5000 rpm

## SYNCHRONIZER

On pleasure boats with twin engine installations, the ViewLine synchronizer is an indispensable aid to ensure correct synchronized running of both units.

RANGE	VOLTAGE	COLOR	INPUT	ARTICLE NUMBER
-500/+500 rpm	8-32 V	Black White	W, 1, Ind	A2C59512402 A2C59512403



85 mm Engine Revolution of two engines -500/+500 rpm



## VESSEL STATUS

The Viewline rudder angle instrument for wheel-controlled yachts and pleasure boats displays the current rudder position at all times. This indicator makes it easier to navigate out of harbors or through locks. The gauge is available in 52 and 85 mm installation diameters. Only rudder instruments of the same diameter can be combined.



85 mm Rudder Angle  
-45° / +45°

RANGE	VOLTAGE	COLOR	INPUT	ARTICLE NUMBER
<b>RUDDER ANGLE</b>				
-45° / +45°	8-32 V	Black White	3-180 Ω	A2C59512410 A2C59512411



# VIEWLINE 52 MM GAUGES

The VDO Marine ViewLine 52 mm Gauges are available in black or white dial versions, which are always completed with a round bezel in identical color. ViewLine accessories bezel concept offers true design flexibility in the layout of instrument panels. The three attractive designs in black, white and chrome are suitable for every machinery instrument panel or special vehicle cockpit.

## SPECIFICATIONS:

- 8 pole Tyco/Hirschmann MQS plug
- +/- 3.6° angle degree accuracy over the entire display range
- Operating voltage 8–32 V

- Integrated warning alarm
- Input signal: standard  $\Omega$  values
- Optional make-point switch can be connected
- Reverse polarity protection
- Anti-fog double lens
- Front side protection rating IP67
- 52 mm installation diameter
- 50 mm installation depth

## AFTERMARKET PACKAGE:

Gauge, Bezel, Rubber Seal, Spinlock, Connection Cable, Installation Instructions, Safety Instructions.

## VIEWLINE FLEX

The ViewLine Flex gauge features a sun-readable 1.44" TFT display to always show your preferred data. Wireless configurable through the embedded NFC interface, the NMEA 2000® compatible device makes all your data available to the digital instrumentation of your vessel. It offers three configurable inputs (1x 0–5 V, 1x 0–1 K  $\Omega$ , 1x frequency) designed to directly connect and display different values such as water temperature, oil pressure, fuel level, RPM, or depth.

COLOR	ARTICLE NUMBER
Black	B00043501



ViewLine Flex

## TACHOMETER

The ViewLine Tachometer indicates the number of revolutions of the motor and is also available in 52 mm installation diameter. Anti-fog plastic double lens, maximum precision and stylish design with choice of nine various bezels. Our plug and play solution design concept offers a high level of installation flexibility for panel, front and flush mounted instruments.

RANGE	VOLTAGE	COLOR	ARTICLE NUMBER
4000 rpm	8–32 V	Black	A2C59512344
		White	A2C59512347
6000 rpm	8–32 V	Black	A2C59512345
		White	A2C59512348
8000 rpm	8–32 V	Black	A2C59512346
		White	A2C59512349



52 mm Tachometer 6000 rpm



## TEMPERATURE

ViewLine Temperature gauges with Anti-fog plastic double lens promise maximum precision and stylish design with choice of nine various bezels. One LED warning light is integrated as a standard.

RANGE outer/inner	VOLTAGE	COLOR	INPUT	ARTICLE NUMBER
<b>COOLANT TEMPERATURE</b>				
120°C/250°F	8-32 V	Black White	287.4-22.7 Ω	A2C59514170 A2C59514237
250°F/120°C	8-32 V	Black White	287.4-22.7 Ω	A2C59514176 A2C59514241
<b>ENGINE OIL TEMPERATURE</b>				
150°C/300°F	8-32 V	Black White	322.8-18.6 Ω	A2C59514160 A2C59514231
300°F/150°C	8-32 V	Black White	322.8-18.6 Ω	A2C59514165 A2C59514234
<b>PYROMETER</b>				
900°C/1650°F	8-32 V	Black White	37 mV	A2C59512332 A2C59512333
1650°F/900°C	8-32 V	Black White	37 mV	A2C59512334 A2C59512335
<b>OUTSIDE TEMPERATURE</b>				
+50°C/+120°F	8-32 V	Black White	2k Ω	A2C59512336 A2C59512338
+120°F/+50°C	8-32 V	Black White	2k Ω	A2C59512337 A2C59512339



52 mm Coolant Temperature  
250 °F/120 °C



52 mm Engine Oil Temperature  
150 °C/300 °F



52 mm Pyrometer  
1650 °F/900 °C



52 mm Outside Temperature  
+120 °F/+50 °C



## PRESSURE

ViewLine 52 mm Pressure Gauges are equipped with a red warning LED as a standard. The warning point depends on the chosen pressure sensor with warning contact or can be controlled by installing a make-point switch. Anti-fog plastic double lens, maximum precision and stylish design with choice of nine various bezels.

The 0-5 Volt Gauge compatible with Electronic Pressure Sensors displays the engine or gearbox oil pressure.

RANGE outer/inner	VOLTAGE	COLOR	INPUT	ARTICLE NUMBER
<b>BOOST PRESSURE</b>				
2 bar/30psi	8-32 V	Black White	10-184 Ω	A2C59514149 A2C59514225
<b>ENGINE OIL PRESSURE</b>				
5 bar/80psi	8-32 V	Black White	10-184 Ω	A2C59514123 A2C59514211
80psi/5 bar	8-32 V	Black White	10-184 Ω	A2C59514128 A2C59514214
10bar/150psi	8-32 V	Black White	10-184 Ω	A2C59514111 A2C59514199
150psi/10bar	8-32 V	White	240-33.5 Ω	A2C59514202
<b>TRANSMISSION OIL PRESSURE</b>				
25 bar/350psi	8-32 V	Black White	10-184 Ω	A2C59514136 A2C59514206
30 bar/435psi	8-32 V	Black White	10-184 Ω	A2C59514141 A2C59514208
400psi/25 bar	8-32 V	Black White	10-184 Ω	A2C59514145 A2C59514223
10 bar	12-24 V	Black	0-5 V	A2C1278230001
30 bar	12-24 V	Black	0-5 V	A2C1278250001



52 mm Boost Pressure  
2 bar/30 psi



52 mm Engine Oil Pressure  
30 bar/435 psi



52 mm Transmission Oil Pressure  
25 bar/350 psi





## LIQUID LEVEL

ViewLine 52 mm Liquid Level gauges with anti-fog plastic double lens promise maximum precision and stylish design with choice of nine various bezels. One LED warning light is integrated as a standard.

RANGE	VOLTAGE	COLOR	INPUT	ARTICLE NUMBER
<b>FUEL LEVEL</b>				
Empty-Full	8-32 V	Black White	0-90 $\Omega$	A2C59514085 A2C59514186
0-1/1	8-32 V	Black White	3-180 $\Omega$	A2C59514082 A2C59514184
Empty-Full	8-32 V	Black White	240-33.5 $\Omega$	A2C59514094 A2C59514190
0-1/1	8-32 V	Black White	90-4 $\Omega$	A2C59514079 A2C59514182
Empty-Full	8-32 V	Black White	90-4 $\Omega$	A2C59514088 A2C59514188
<b>FRESH WATER (CAPACITIVE)</b>				
0-1/1	8-32 V	Black White	4-20 mA	A2C59514676 A2C59514677
<b>FRESH WATER (RESISTIVE)</b>				
0-1/1	8-32 V	Black White	3-180 $\Omega$	A2C59514097 A2C59514192
Empty-Full	8-32 V	Black White	3-180 $\Omega$	A2C59514099 A2C59514193
<b>WASTE WATER</b>				
0-1/1	8-32 V	Black White	4-20 mA	A2C59512342 A2C59512343



52 mm Fuel Level  
Empty-Full



52 mm Fresh Water  
0-1/1



52 mm Waste Water  
0-1/1

## BATTERY STATUS

The ViewLine 52 mm Ammeter shows the level of current being drawn and the current supply on a clearly readable dial. The shunt (a measurement resistor) can be inserted into the measurement point in a matter of seconds. The voltmeter displays the status of generator and battery and their loads on a voltage scale. Values exceeding the normal charging voltages can therefore be monitored exactly. Even potential deep discharges can be detected.

RANGE	VOLTAGE	COLOR	INPUT	ARTICLE NUMBER
<b>CURRENT</b>				
-60/+60 A	8-32 V	Black White	60 mV	A2C59512328 A2C59512330
-150/+150 A	8-32 V	Black White	60 mV	A2C59512329 A2C59512331
<b>VOLTAGE</b>				
8-16 V	8-16 V	Black White	8-16 VDC	A2C59512545 A2C59512546
18-32 V	18-32 V	Black White	18-32 VDC	A2C59512458 A2C59512459



52 mm Current  
-60/+60 A



52 mm Voltage  
18-32 V

## VESSEL STATUS

The ViewLine rudder angle instrument for wheel-controlled yachts and pleasure boats displays the current rudder position at all times. This indicator makes it easier to navigate out of harbors or through locks. The gauge is available in 52 and 85 mm installation diameters. Only rudder instruments of the same diameter can be combined.

RANGE	VOLTAGE	COLOR	INPUT	ARTICLE NUMBER
<b>RUDDER ANGLE</b>				
-40°/+40°	8-32 V	Black White	3-180 Ω	A2C59514154 A2C59514230
<b>ENGINE TRIM</b>				
up/down	8-32 V	Black White	167-10 Ω	A2C59514180 A2C59514244



52 mm Rudder Angle  
-40°/+40°



52 mm Engine Trim



## HOURLY COUNTER-VOLTMETER

The new ViewLine Hour Counter-Voltmeter provides you with the battery status and engine hours. The gauge is protected with IP67 front and IP52 on the backside. The new ViewLine gauge is 2 in 1.

VOLTAGE	COLOR	ARTICLE NUMBER
9 – 48 V	Black round bezel	B00005302
	White round bezel	B00006302
9 – 48 V	Black triangular bezel	B00005303
	White triangular bezel	B00006303



52 mm Hour Counter-Voltmeter



52 mm Hour Counter-Voltmeter

## CLOCK

The ViewLine 52 mm Clock with anti-fog plastic double lens promises maximum precision and stylish design with choice of nine various bezels.

VOLTAGE	COLOR	ARTICLE NUMBER
8 – 16 V	Black	A2C59513445
	White	A2C59513443
18 – 32 V	Black	A2C59513446
	White	A2C59513444



52 mm Clock





# NMEA 2000® PRODUCTS

## MEDIABOX



The VDO Marine MediaBox can be mounted literally everywhere on the boat. Listen to radio and weather forecasts with its built in AM/FM Tuner or connect a MP3 player via USB or Bluetooth smartphone to enjoy your favorite music. The MediaBox is NMEA 2000® certified and can be used with the VDO Marine AcquaLink™ and OceanLink™ TFT Displays. Additionally VDO Marine offers a free VDO Marine MediaBox App for your smartphone so that the MediaBox can be used as a stand-alone radio.

- AM/FM radio tuner with RDS
- Bluetooth audio player with 50 m range
- USB input
- Equalizer with volume control
- Power amplifier 4x 28 W (D class)
- NMEA 2000® certified
- IPX5 protection rating
- Operating temperature range -20 °C / +70 °C
- Free VDO Marine MediaBox App



MediaBox

### AFTERMARKET PACKAGE:

MediaBox, Cable Harness, Mounting Screws, Installation Instructions, Safety Instructions.



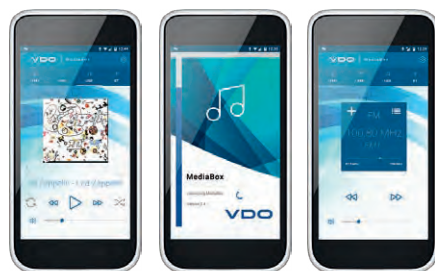
### VOLTAGE

9 – 16 V

### ARTICLE NUMBER

A2C59501980

### VDO Marine MediaBox App:



### ACCESSORIES

- Diameter: 130 mm
- Installation depth 50 mm
- IP55 protection rating

### MARINE SPEAKERS

### AFTERMARKET PACKAGE:

2x Speaker, Rubber Seal, Mounting Screws, Installation Instructions, Safety Instructions.



Marine Speakers

### OUTPUT POWER

150 W

### ARTICLE NUMBER

A2C1856150001

## ENGINEBOX



The EngineBox expands the possibilities of the NavBox for multi-engine applications or can be used as stand-alone when navigation information is not required. The EngineBox has a NMEA2000® and a J1939 CAN port. The EngineBox can also be used on older, completely analog engines, thanks to the analog input ports provided and designed for RPM data, resistive sensors and capacitive sensors.

The EngineBox is available in 2 versions: Single Engine and Dual Engine. The Dual Engine version is designed with doubled frequency and resistive inputs. It allows for a simplified installation wiring within minimized required installation space, therefore reducing the commissioning time.

The EngineBox has to be set up using an intuitive PC configuration tool making it easy for programming the inputs (delivered free of charge). Thanks to the ISO 8846:1990 compliance, the EngineBox is also designed to be installed in engine compartments.

- Analog to NMEA 2000® gateway
- J1939 to NMEA 2000® gateway
- 2 Models for single engine and dual engine configurations
- Compact design
- Status LED
- Operating temperature range -40°C / +85°C
  
- 1x J1939 (2x J1939 Dual Engine)
- 1x M12 5 pins NMEA 2000®
- 1x Input 0-4 kHz for RPM (2 inputs with Dual Engine Model)
- 4x Inputs 0-400 Ω (up to 8 inputs with Dual Engine Model)
- 2x Inputs 4-20 mA
- 1x Input 0-5 V (2 inputs with Dual Engine Model)

### AFTERMARKET PACKAGE:

EngineBox, Cable Harness, Safety Instructions.

ENGINE	ARTICLE NUMBER
Single Engine	A2C1824820001
Double Engine	A2C1767000001



EngineBox





## LINK UP GATEWAYS



These single-sensor gateways are designed to upgrade your vessel sensors to NMEA 2000®. Available in 4 different variants: resistive, voltage, LIN and J1939, those can be easily configured through either the embedded NFC interface or NMEA 2000® by means of our Configuration Tool. The ISO 8846:1990 compliance completes the devices by allowing their installation into compartments.



Link UP Gateways

Optional: Wiring Harness A2C1756300001

VARIANTS	ARTICLE NUMBER
Resistive	B00042201
Pyrometer	B00042301 (Sensor N03-320-264 included)
J1939	B00042401
LIN	B00042501 (Sensor B00043901 included)

## NAVSENSOR



The multifunctional AquaLink™ NavSensor offers an inertial sensor with a GNSS receiver module to provide the accurate readings of speed of travel as well as pitch & roll. Compass readings can be displayed electronically thanks to the embedded Fluxgate compass, which also facilitate course corrections in electronic autopilots. The barometer and air temperature sensors are early indicators of forthcoming weather conditions.

- NMEA 2000® certified
- IPX6 extended protection rating
- GPS Module: Position, time, boats vector, signal quality, satellites
- Compass: +/-40° tilt angle, <2° accuracy, alarm (rapid field strength change, tilt angle overrun, undervoltage condition)
- Barometer and air temperature sensor
- Operating temperature range -20 °C / +70 °C



NavSensor

### AFTERMARKET PACKAGE:

NavSensor, 2x brackets, Installation Instructions, Safety Instructions.

VOLTAGE	ARTICLE NUMBER
12-24 V	A2C59501981

## NMEA 2000® TRIDUCER SENSOR



Through-hull 100 W plastic Airmar triducer provides depth, speed and seawater temperature data. The sensor is NMEA 2000® certified and operates up to a depth of 330 feet and at a frequency of 235 kHz.



NMEA 2000® Triducer Airmar Sensor

VOLTAGE	ARTICLE NUMBER
9-16 V	44-196-2-01

## INTELLIGENT BATTERY SENSOR (IBS)



The Intelligent Battery Sensor (IBS) is the key element of vehicle energy management. The IBS reliably and accurately measures the battery parameters: voltage, current and temperature.



Intelligent Battery Sensor (IBS)

ARTICLE NUMBER
B00043901

## VERATRON GO



All your boat's data close to your finger tips. Veratron GO is NMEA 2000® certified and features an integrated GPS/GLONASS/GALILEO receiver. Compact and easy to install, it does not require any additional protection against harsh weather conditions. The GO Plus variant integrates a Bluetooth 5.1 Low Energy interface allowing the visualization of boat data on your portable devices, such as smartphone or tablet. The DATA variant provides you with Bluetooth.



Veratron GO

VARIANTS	ARTICLE NUMBER
Veratron GO	B00034901
Veratron GO Plus	B00041701
Veratron GO DATA	B00041601



### NMEA 2000® WIND SENSOR



The wind vane turns in the direction of the wind and steers the wind direction gauge. The wind cups record the relative wind speed which in turn is displayed on the wind speed gauge.

VOLTAGE	ARTICLE NUMBER
9 - 16 V	A2C59501984



NMEA 2000® Wind Sensor

### NMEA 2000® VERTICAL MAST UNIT WIND SENSOR



The new VDO Marine Vertical Mast Unit Wind Sensor “VMWS” is the last entry in our large VDO Marine sensors portfolio. It is the result of a long experience of VDO Marine engineering department. Technically improved for better accuracy.

VOLTAGE	ARTICLE NUMBER
9 - 16 V	A2C1029570001



NMEA 2000® Vertical Mast Unit Wind Sensor

### NMEA 2000® LIQUID LEVEL SENSOR (CAPACITIVE)



Our new NMEA 2000® Liquid Level Sensor, with adjustable dip, provides you with fresh and waste water level.

LENGTH	VOLTAGE	ARTICLE NUMBER
200 - 600 mm	12 / 24 V	B00041201
600 - 1200 mm	12 / 24 V	B00041401
1200 - 1500 mm	12 / 24 V	B00041501



NMEA 2000® Liquid Level Sensor (capacitive)



## NAVIGATION KIT AND NAVIGATION KIT PLUS



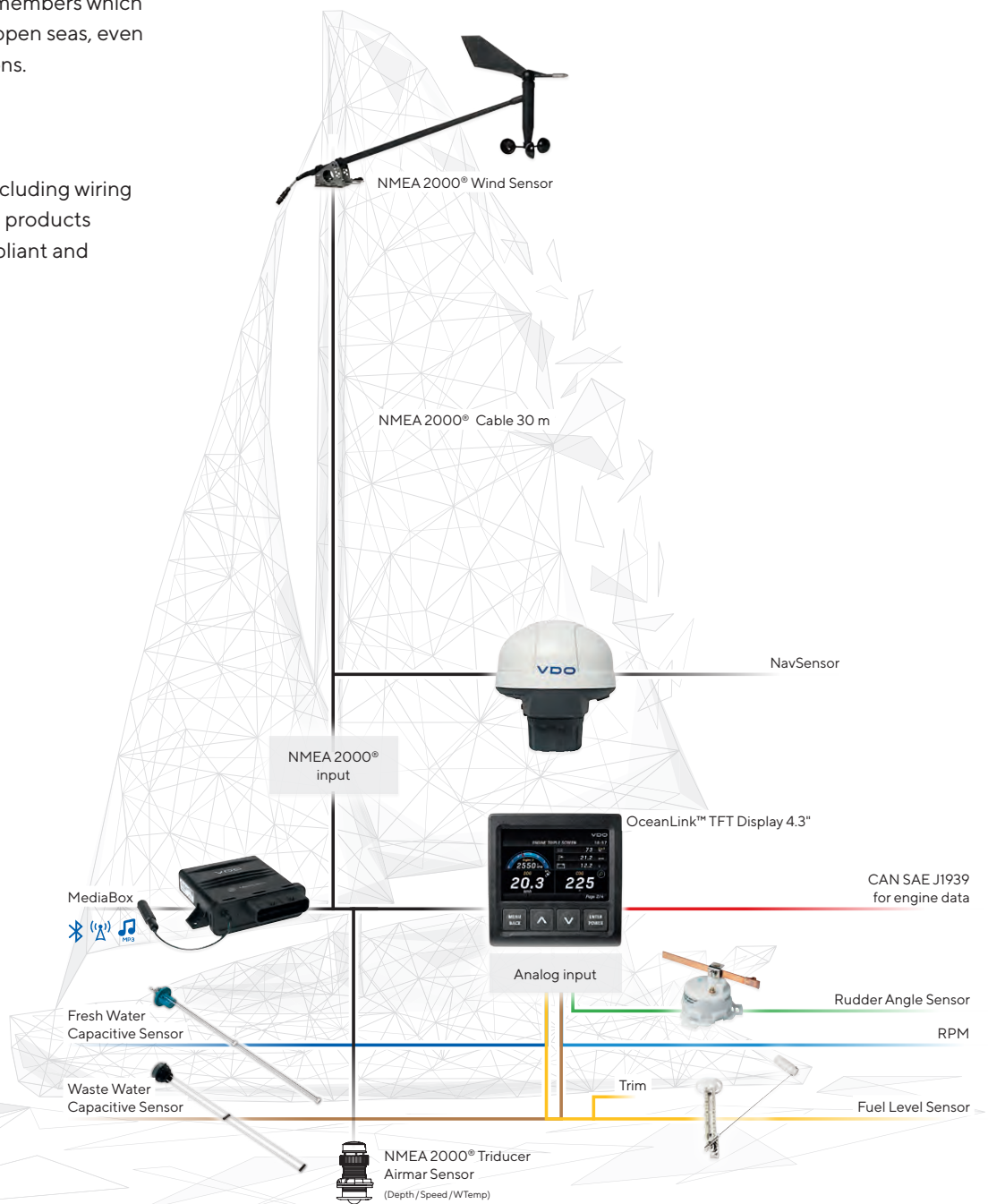
Complex boats need a smart solution. And we have it. VDO Marine OceanLink™ display is the only product on the market able to interpret CAN, NMEA 2000® and analog signals without any additional external device.

### SAFETY, PERFORMANCE, ENTERTAINMENT

VDO Marine Navigation Kit and Navigation Kit Plus is the solution! Our Navigation Kits will become essential crew members which ensure top performance in open seas, even in the most extreme situations.

### ALL IN ONE BOX

All you need is in one box including wiring harness and terminators. All products are REACH and RoHS compliant and NMEA 2000® certified.





## NAVIGATION KIT AND NAVIGATION KIT PLUS



### WIND SENSOR

The wind vane turns in the direction of the wind and steers the wind direction gauge. The wind cups record the relative wind speed which in turn is displayed on the wind speed gauge.



NMEA 2000® Wind Sensor

### NMEA 2000® TRIDUCER AIRMAR SENSOR

Through-hull 100 W plastic Airmar triducer provides depth, speed and seawater temperature data. The sensor is NMEA 2000® certified and operates up to a depth of 330 feet and at frequency of 235 kHz.



NMEA 2000® Triducer Airmar Sensor

### OCEANLINK™ TFT DISPLAY 4.3"

The multifunction TFT Display is NMEA 2000® certified and features a full 24 bit/16 m colors, optically bonded display with IPS technology for perfect readability even in direct sunlight.



OceanLink™ 4.3" TFT Display

### NMEA 2000® ACCESSORIES

Cables, terminators and connectors enable easy connection of all components to the NMEA 2000® network.

### NAVSENSOR (INCLUDED ONLY IN THE KIT NAVIGATION PLUS)

The multifunctional AcquaLink™ NavSensor offers an inertial sensor with a GNSS receiver module to provide the accurate readings of speed of travel as well as pitch & roll. Compass readings can be displayed electronically thanks to the embedded Fluxgate compass, which also facilitate course corrections in electronic autopilots. The barometer and air temperature sensors are early indicators of forthcoming weather conditions.

### NAVIGATION KIT

Wind Sensor NMEA 2000®, NMEA 2000® Triducer Airmar Sensor, OceanLink™ 4.3" TFT Display, NMEA 2000® Cable 30 m, NMEA 2000® Cable 6 m, NMEA 2000® Terminator Female, NMEA 2000® Inline Terminator, 2x NMEA 2000® T-Splitter

### ARTICLE NUMBER

A2C1352150002

### NAVIGATION KIT PLUS

Wind Sensor NMEA 2000®, NMEA 2000® Triducer Airmar Sensor, NavSensor, OceanLink™ 4.3" TFT Display Black, NMEA 2000® Cable 30 m, 3x NMEA 2000® Cable 6 m, NMEA 2000® Terminator Female, NMEA 2000® Inline Terminator, 3x NMEA 2000® T-Splitter

### ARTICLE NUMBER

A2C1352150003



NavSensor

## SAILING KIT



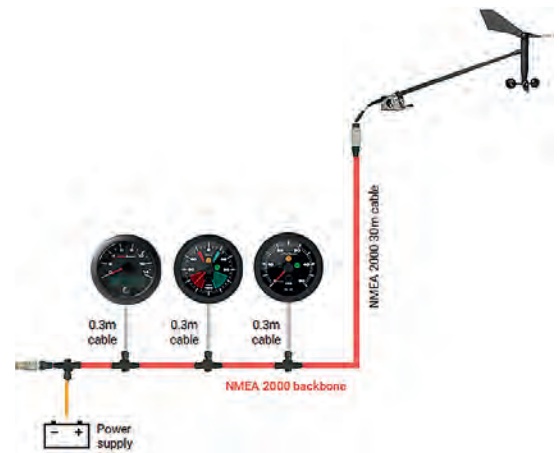
Have your boat ready for the sailing season with the VDO Marine Sailing Kit, the fundamental setting for your sailing boat.

The VDO Marine Sailing Kit brings all the necessary tools for your sailing journeys. All you need is in one box including wiring harness and terminators. All products are REACH, RoHS and NMEA 2000® compliant. The Sailing Kit provides the elementary yet essential set-up to make your sailing trips safe while having access to all necessary information.

The Sailing Kit consists of four devices, namely, one OceanLink™ GPS Speedometer, one wind sensor and two OceanLink™ Navigation gauges, wind angle and wind speed. These products are a must have on a sailing boat and offer a high functionality and readability, thanks to the analog displays. Easy to install, the Sailing Kit provides necessary data to assist you during your journey.

The NMEA 2000® certified GPS Speedometer has an embedded GPS receiver for speed and heading indications, avoiding the need of additional sensors on board. It also serves for calculation of true wind data in combination with the navigation wind gauges featuring an infrared push button for a fast switch from apparent to true wind. The VDO Marine Sailing Kit is low-power consuming and lead-free for our planet's well-being.

Sailing Kit



### ARTICLE NUMBER

A2C3935310001

## SMART KIT



### Upgrade your boat to the digital world

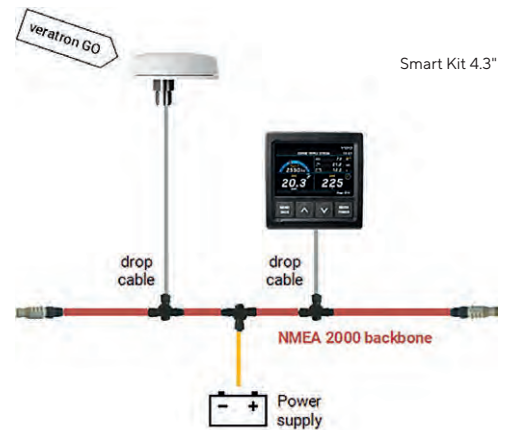
The Smart Kit is composed of an OceanLink™ 4.3" or 7" TFT Display, our new GPS module Veratron GO and all the necessary cables for installation and connection. All your data are displayed on the TFT Display.

### VARIANTS

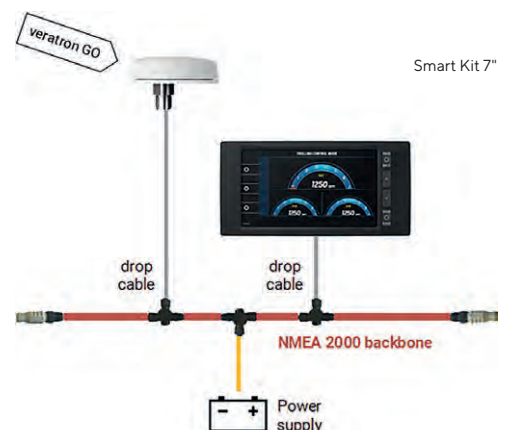
### ARTICLE NUMBER

Smart Kit 4.3"	A2C1352150004
Smart Kit 7"	A2C1865330002

Smart Kit 4.3"



Smart Kit 7"









# SENSORS

Sensors for electronically controlled safety functions are the eyes, ears and antenna of a modern-day high-tech vehicle. Nothing escapes them – neither the smallest temperature deviation inside cooling systems, nor the monitoring of

engine and gear oil temperature. Intelligent safety systems are inconceivable without them. Over the past 60 years, we have continuously refined and perfected our sensors that now have reached an utmost degree of precision.

## SUMLOG™ TRANSDUCER

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The Sumlog™ Transducer is required to measure boat speed through water. The Sumlog™ includes two paddle wheels, which can be exchanged to match the speed range of the boat, thereby supporting speeds from 0 to 18 or up to 50 knots respective of the installed paddle wheel. The NavBox supports up to two Sumlogs™ which can be directly connected to the dedicated Sumlog™ ports using a 4 pin M12 connector extension cable.

### AFTERMARKET PACKAGE:

18 knots Sumlog™ Transducer, additional 50 knots Paddle Wheels, Valve, Plug, 2x Rubber Seal, Installation Instructions, Safety Instructions.

### VOLTAGE

12-24V

### ARTICLE NUMBER

A2C59501986

## ANALOG WIND SENSOR

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The legacy wind vane turns in the direction of the wind and steers the wind direction gauge. The wind cups record the relative wind speed which in turn is displayed on the wind speed gauge. Also compatible with VDO Marine 'Standard' & 'Logic' series.

### VOLTAGE

12-24V

### ARTICLE NUMBER

A2C59501983



Sumlog™ Transducer



Analog Wind Sensor





## RUDDER ANGLE SENSORS

### SINGLE STATION

VOLTAGE	RESISTANCE	ARTICLE NUMBER
12/24 V	10-180 $\Omega$	A2C1102950001

### DUAL STATION (FLY BRIDGE)

VOLTAGE	RESISTANCE	ARTICLE NUMBER
12/24 V	5-90 $\Omega$	A2C1102960001



Rudder Angle Sensor

## FUEL LEVEL SENSORS

### AFTERMARKET PACKAGE:

Fuel Level Sensor (resistive) with adjustable lever, sealing kit N05-801-432

### SINGLE STATION

VOLTAGE	SIGNAL RANGE empty/full	ADJUSTABLE LENGTH	ARTICLE NUMBER
12/24 V	3-180 $\Omega$	150-600 mm	226-801-015-001G
12/24 V	240-33.5 $\Omega$	150-600 mm	A2C1364580001



Fuel Level Sensor

### DUAL STATION (FLY BRIDGE)

VOLTAGE	SIGNAL RANGE empty/full	ADJUSTABLE LENGTH	ARTICLE NUMBER
12/24 V	2-90 $\Omega$	150-600 mm	N02-240-106



## DEEP-PIPE LEVEL SENSORS

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The Deep-Pipe Level Sensor is ideal for usage in fuel tanks. Its 38 mm diameter vertical tube contains a float inside, which measures the liquid's level. Small holes at the top and bottom of the tube act as a baffle to fuel sloshing around in the fuel tank, so the float position remains stable at any sea state. The sensors are made in various lengths starting from 150 mm up to 1200 mm – when selecting the sensor, make sure that the length chosen is at least 4 mm from the base of the fuel tank once fitted.

- TE Superseal Connector IP67
- Compensation chamber
- Flange: PA66 GF30
- Wiring harness with length of 200 mm
- 3 Signal ranges: 90–4  $\Omega$ , 0–180  $\Omega$ , 240–33  $\Omega$ ,
- Length : 150 mm – 1200 mm
- Mounting diameter: 54 mm
- IP67 protection rating



Deep-Pipe Level Sensor

### AFTERMARKET PACKAGE:

Deep-Pipe Level Sensor, Safety Instructions, Installation Instructions, Installation Kit A2C17593300

### ACCESSORIES:

6 m Wiring Harness A2C1756300001

### FLANGE ADAPTER KIT

Small but necessary instrument that will save your money and time. The Flange Adapter Kit can be adapted to our brand-new Fuel Level Sensor replacing the old 80 mm sensor. A cross reference list (provided by our sales offices) will allow you to find the correct sensor replacing the defective one. Our Flange can be adapted to any of our liquid level sensors.

This is a complete solution in case of defective Fuel Level Sensors.

### ARTICLE NUMBER

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B00001201

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Flange Adapter Kit



## DEEP-PIPE LEVEL SENSORS

LENGTH	ARTICLE NUMBER		
	SIGNAL RANGE		
	90-4 $\Omega$	0-180 $\Omega$	240-33 $\Omega$
150 mm	A2C1749300001	A2C1720030001	A2C1746020001
160 mm	A2C1749310001	A2C1742410001	A2C1746030001
170 mm	A2C1749370001	A2C1742980001	A2C1746040001
180 mm	A2C1749950001	A2C1744170001	A2C1746060001
190 mm	A2C1750030001	A2C1744180001	A2C1746100001
200 mm	A2C1750040001	A2C1744190001	A2C1746120001
210 mm	A2C1750100001	A2C1744200001	A2C1746130001
220 mm	A2C1750120001	A2C1744210001	A2C1746140001
230 mm	A2C1750130001	A2C1744220001	A2C1746150001
240 mm	A2C1750170001	A2C1744230001	A2C1746170001
250 mm	A2C1750190001	A2C1744240001	A2C1746190001
260 mm	A2C1750200001	A2C1744250001	A2C1746220001
270 mm	A2C1750210001	A2C1744260001	A2C1746300001
280 mm	A2C1750220001	A2C1744270001	A2C1746390001
290 mm	A2C1750230001	A2C1744280001	A2C1746420001
300 mm	A2C1750240001	A2C1744290001	A2C1746450001
310 mm	A2C1750250001	A2C1744300001	A2C1746990001
320 mm	A2C1750260001	A2C1744310001	A2C1747000001
330 mm	A2C1750270001	A2C1744320001	A2C1747020001
340 mm	A2C1750280001	A2C1744350001	A2C1747030001
350 mm	A2C1750290001	A2C1744360001	A2C1747050001
360 mm	A2C1750300001	A2C1744370001	A2C1747060001
370 mm	A2C1750310001	A2C1744380001	A2C1747080001
380 mm	A2C1750320001	A2C1744390001	A2C1747090001
390 mm	A2C1750330001	A2C1744400001	A2C1747130001
400 mm	A2C1750340001	A2C1744410001	A2C1747140001
410 mm	A2C1750350001	A2C1744420001	A2C1747150001
420 mm	A2C1750360001	A2C1744430001	A2C1747160001
430 mm	A2C1750380001	A2C1744440001	A2C1747170001
440 mm	A2C1750390001	A2C1744450001	A2C1747190001
450 mm	A2C1750420001	A2C1744460001	A2C1747200001
460 mm	A2C1750440001	A2C1744470001	A2C1747210001
470 mm	A2C1750460001	A2C1744480001	A2C1747220001
480 mm	A2C1750470001	A2C1745780001	A2C1747230001
490 mm	A2C1750490001	A2C1745790001	A2C1747240001
500 mm	A2C1750500001	A2C1745800001	A2C1747250001
550 mm	A2C1750530001	A2C1745810001	A2C1747260001
600 mm	A2C1750570001	A2C1720100001	A2C1747270001
650 mm	A2C1750620001	A2C1745820001	A2C1747280001
700 mm	A2C1750650001	A2C1745830001	A2C1747290001
750 mm	A2C1750730001	A2C1745840001	A2C1747300001
800 mm	A2C1750740001	A2C1745880001	A2C1747340001
850 mm	A2C1750750001	A2C1745890001	A2C1747350001
900 mm	A2C1750760001	A2C1745900001	A2C1747360001
950 mm	A2C1750770001	A2C1745910001	A2C1747370001
1000 mm	A2C1750790001	A2C1745920001	A2C1747380001
1050 mm	A2C1750810001	A2C1745930001	A2C1747390001
1100 mm	A2C1750840001	A2C1745940001	A2C1747410001
1150 mm	A2C1750850001	A2C1745950001	A2C1747420001
1200 mm	A2C1750860001	A2C1745960001	A2C1747430001

## FRESH WATER LEVEL SENSORS

### AFTERMARKET PACKAGE:

Fresh Water Level Sensor (capacitive) with adjustable dip, sealing kit N05-001-370

VOLTAGE	SIGNAL RANGE	LENGTH	ARTICLE NUMBER
12/24 V	4-20 mA	80-600 mm	N02-240-402
12/24 V	4-20 mA	600-1200 mm	N02-240-404
12/24 V	4-20 mA	1200-1500 mm	N02-240-406

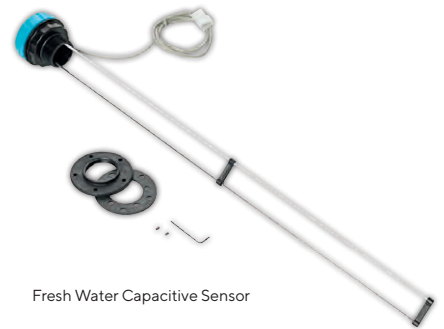


Fresh Water Capacitive Sensor

### AFTERMARKET PACKAGE:

Fresh Water Level Sensor (capacitive) with adjustable dip, sealing kit N05-016-930

VOLTAGE	SIGNAL RANGE	LENGTH	ARTICLE NUMBER
12/24 V	4-20 mA	80-600 mm	N02-240-802



Fresh Water Capacitive Sensor

### AFTERMARKET PACKAGE:

Fresh Water Level Sensor (resistive) with adjustable lever, sealing kit N05-008-750

VOLTAGE	SIGNAL RANGE	LENGTH	ARTICLE NUMBER
12/24 V	3-180 Ω	200-600 mm	226-828-001-001K



Fresh Water Resistive Sensor

## WASTE WATER LEVEL SENSORS

### AFTERMARKET PACKAGE:

Waste Water Level Sensor (capactive) with adjustable dip, sealing kit N05-016-930

VOLTAGE	SIGNAL RANGE	LENGTH	ARTICLE NUMBER
12/24 V	4-20 mA	200-600 mm	N02-240-902
12/24 V	4-20 mA	600-1200 mm	N02-240-904
12/24 V	4-20 mA	1200-1500 mm	N02-240-906



Waste Water Capacitive Sensor



## AMMETER SHUNT

A shunt is a resistor that causes a small voltage drop. This voltage drop in mVolt is proportional with the current in ampere that goes through the resistor. This voltage is measured by the Ammeter. The advantage of the shunt is that thick wires are no longer needed at a high current (>10 A).

To measure the total flow you only need two thin wires from the measuring instrument to the shunt in the earth connection of the main system.



Ammeter Shunt

RANGE	VOLTAGE	INPUT	ARTICLE NUMBER
-60/+60 A	12/24 V	60 mV	A2C59514043
-150/+150 A	12/24 V	60 mV	A2C59514047

## ELECTRONIC PRESSURE SENSORS

The active pressure sensors with voltage output are used to measure pressure of gaseous and liquid media in a variety of applications at various locations.

The pressure sensor unit is based on a stainless steel sensing element and converts fluctuations of measuring medium into a pressure proportional electrical output signal (0.5 – 4.5 V).

RANGE	VOLTAGE	THREAD	ARTICLE NUMBER
10 bar / 150 psi	12-24 V	M12 x 1.5	365-100-010-121K
16 bar / 232 psi	12-24 V	M12 x 1.5	365-100-016-121K
30 bar / 435 psi	12-24 V	M12 x 1.5	365-100-030-121K



Electronic pressure sensor with voltage output

### NOTE:

Tightening Torque depends on threaded port size and sensor body material.

Connector type: Bayonet according to ISO15170 (formerly DIN 72585).

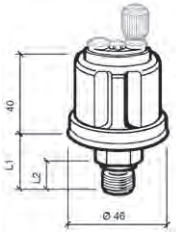

**The Electronic Pressure Sensors are compatible with ViewLine Pressure 52 mm gauges:**

RANGE	VOLTAGE	COLOR	INPUT	ARTICLE NUMBER
<b>Ø 52 MM</b>				
10 bar / 150 psi	12-24 V	Black	0-5 V	A2C1278230001
30 bar / 435 psi	12-24 V	Black	0-5 V	A2C1278250001

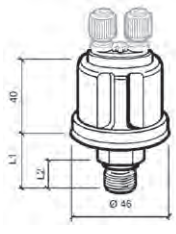
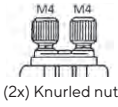
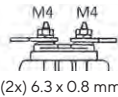
More information on the page 46

## ENGINE OIL PRESSURE SENSORS 5 BAR / 80 PSI

### SINGLE-POLE, COMMON GROUND

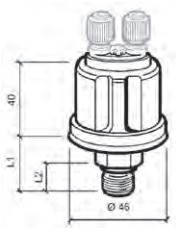
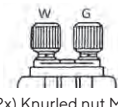

	 Knurled nut M4	RANGE	VOLTAGE	L1	L2	THREAD	ARTICLE NUMBER
		5 bar / 80 psi	6 - 24 V	19.5 mm	11 mm	M10 x 1 tapered, short	360-081-029-001C
5 bar / 80 psi	6 - 24 V	19.5 mm	11 mm	1/8" - 27 NPTF	360-081-029-004C		
5 bar / 80 psi	6 - 24 V	20.5 mm	12 mm	M14 x 1.5	360-081-029-026K		
5 bar / 80 psi	6 - 24 V	20.5 mm	12 mm	M12 x 1.5	360-081-029-085C		

### DUAL-POLE, INSULATED RETURN

	 (2x) Knurled nut M4	RANGE	VOLTAGE	L1	L2	THREAD	ARTICLE NUMBER
		5 bar / 80 psi	6 - 24 V	19.5 mm	11 mm	1/8" - 27 NPTF	360-081-032-001C
5 bar / 80 psi	6 - 24 V	19.5 mm	11 mm	M10 x 1 tapered, short	360-081-032-002C		
5 bar / 80 psi	6 - 24 V	20.8 mm	12 mm	M18 x 1.5	360-081-032-013C		
5 bar / 80 psi	 (2x) 6.3 x 0.8 mm	6 - 24 V	19.5 mm	11 mm	1/8" - 27 NPTF	360-081-032-007C	

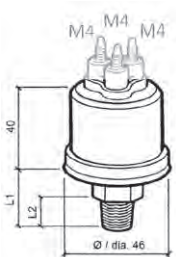
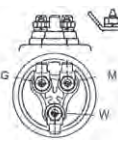
\* without hexagonal nut

### WITH WARNING CONTACT, COMMON GROUND

	 (2x) Knurled nut M4	WARNING RANGE	VOLTAGE	L1	L2	THREAD	ARTICLE NUMBER
		0.7 ± 0.15 bar / 10.15 ± 2.2 psi	6 - 24 V	19.5 mm	11 mm	M10 x 1 tapered, short	360-081-030-004C
0.5 ± 0.15 bar / 7.2 ± 2.2 psi	6 - 24 V	20.5 mm	12 mm	M12 x 1.5	360-081-030-008C		
1.4 ± 0.3 bar / 20.3 ± 4.4 psi	6 - 24 V	19.5 mm	11 mm	1/8" - 27 NPTF	360-081-030-010C		
 W 6.3 x 0.8 mm (50°) G 4.8 x 0.8 mm (50°)	6 - 24 V	19.5 mm	11 mm	1/8" - 27 NPTF	360-081-030-086C		

Images: G = Sensor terminal; W = Warning contact terminal

### WITH WARNING CONTACT, 3 CONNECTIONS

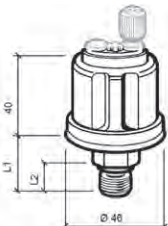



		WARNING RANGE	VOLTAGE	L1	L2	THREAD	ARTICLE NUMBER
		0.8 ± 0.15 bar / 11.6 ± 2.2 psi	6 - 24 V	19.5 mm	11 mm	1/8" - 27 Dryseal NPTF	360-081-039-002C

Images: G = Sensor; M = Ground; W = Warning contact

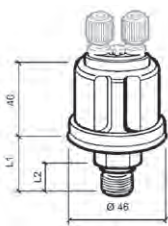
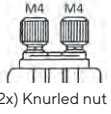


## ENGINE OIL PRESSURE SENSORS 10 BAR / 150 PSI

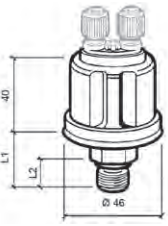
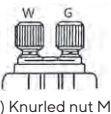
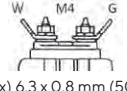
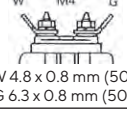
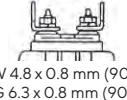
### SINGLE-POLE, COMMON GROUND

				RANGE	VOLTAGE	L1	L2	THREAD	ARTICLE NUMBER
		10 bar / 150 psi	6-24 V	19.5 mm	11 mm	1/8" - 27 NPTF	360-081-029-012C		
		10 bar / 150 psi	6-24 V	20.5 mm	12 mm	M12 x 1.5	360-081-029-013C		
		10 bar / 150 psi	6-24 V	20.5 mm	12 mm	M14 x 1.5	360-081-029-033C		
		10 bar / 150 psi	6-24 V	19.5 mm	11 mm	R 1/8 DIN 2999	360-081-029-062C		

### DUAL-POLE, INSULATED RETURN

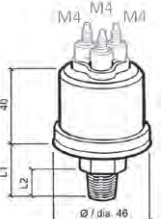
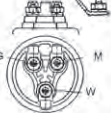
				RANGE	VOLTAGE	L1	L2	THREAD	ARTICLE NUMBER
		10 bar / 150 psi	6-24 V	19.5 mm	11 mm	M10 x 1 tapered, short	360-081-032-003C		
10 bar / 150 psi	6-24 V	20.5 mm	12 mm	M14 x 1.5	360-081-032-006C				
10 bar / 150 psi	6-24 V	19.5 mm	11 mm	1/8" - 27 NPTF	360-081-032-014C				
10 bar / 150 psi	6-24 V	20.5 mm	12 mm	M12 x 1.5	360-081-032-053C				

### WITH WARNING CONTACT, COMMON GROUND

				WARNING RANGE	VOLTAGE	L1	L2	THREAD	ARTICLE NUMBER
		0.5 ± 0.15 bar / 7.3 ± 2.2 psi	6-24 V	19.5 mm	11 mm	M10 x 1 tapered, short	360-081-030-009C		
0.8 ± 0.3 bar / 11.6 ± 4.4 psi	6-24 V	19.5 mm	12 mm	1/8" - 27 NPTF	360-081-030-015C				
0.9 ± 0.15 bar / 13.1 ± 2.2 psi	6-24 V	19.5 mm	11 mm	M10 x 1 tapered, short	360-081-030-017C				
0.7 ± 0.15 bar / 10.2 ± 2.2 psi	6-24 V	20.5 mm	12 mm	M14 x 1.5	360-081-030-030C				
2.0 ± 0.3 bar / 29 ± 4.4 psi	6-24 V	19.5 mm	11 mm	M10 x 1 tapered, short	360-081-030-041C				
0.5 <sup>+0.2</sup> <sub>-0.1</sub> bar / 7.3 psi	6-24 V	19.5 mm	11 mm	1/8" - 27 NPTF	360-081-030-052C				
		0.75 ± 0.15 bar / 10.9 ± 2.2 psi	6-24 V	19.5 mm	11 mm	M10 x 1 tapered, short	360-081-030-039C		
		0.75 ± 0.15 bar / 10.9 ± 2.2 psi	6-24 V	20.5 mm	12 mm	M18 x 1.5	360-081-030-122C		
		1.25 <sup>+0.3</sup> bar / 18.1 psi	6-24 V	19.5 mm	11 mm	1/8" - 27 NPTF	360-081-030-138C		

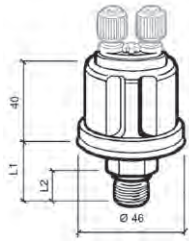
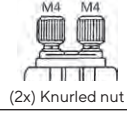
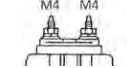
Images: G = Sensor terminal; W = Warning contact terminal

### WITH WARNING CONTACT, 3 CONNECTIONS

				WARNING RANGE	VOLTAGE	L1	L2	THREAD	ARTICLE NUMBER
		0.8 ± 0.15 bar / 11.6 ± 2.2 psi	6-24 V	19.5 mm	11 mm	1/8" - 27 Dryseal NPTF	360-081-039-003C		

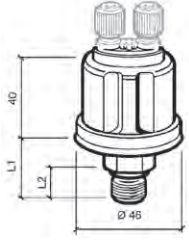
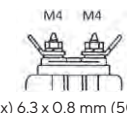
## TRANSMISSION OIL PRESSURE SENSORS 25 BAR / 350 PSI

### DUAL-POLE, INSULATED RETURN

		RANGE	VOLTAGE	L1	L2	THREAD	ARTICLE NUMBER
	 (2x) Knurled nut	25 bar / 350 psi	6-24 V	20.5 mm	12 mm	M18 x 1.5	360-081-038-005C
	 (2x) Hexagonal nut	25 bar / 350 psi	6-24 V	20.5 mm	12 mm	M14 x 1.5	360-081-038-001C
		25 bar / 350 psi	6-24 V	19.5 mm	11 mm	1/8" - 27 NPTF	360-081-038-003C

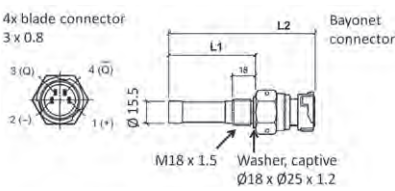
## TURBO PRESSURE SENSORS

### DUAL-POLE, INSULATED RETURN

		RANGE	VOLTAGE	L1	L2	THREAD	ARTICLE NUMBER
	 (2x) 6.3 x 0.8 mm (50°)	2 bar / 30 psi	6-24 V	20.5 mm	12 mm	M12 x 1.5	360-081-032-011C
		2 bar / 30 psi	6-24 V	19.5 mm	11 mm	1/8" - 27 NPTF	360-081-032-025C

## SPEED AND REVOLUTION SENSORS



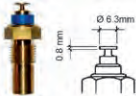
### BLOCKING OSCILLATOR SENSOR 4-POLE, INSULATED RETURN, 8-15 V, 12 MA

		VOLTAGE	L1	L2	ARTICLE NUMBER
		8-15 V	90.2 mm	133 mm	340-216-005-001C
		8-15 V	63.2 mm	106 mm	340-216-005-002C

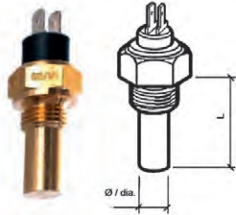


## COOLANT TEMPERATURE SENSORS

### SINGLE-POLE, COMMON GROUND

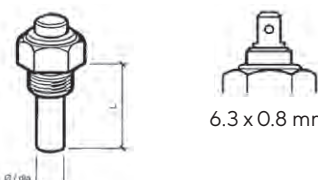


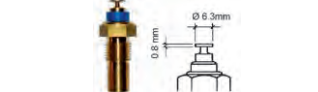

	RANGE	VOLTAGE	LENGTH	Ø	THREAD	ARTICLE NUMBER
	40-120 °C / 105-250 °F	6-24 V	29 mm	9 mm	M14 x 1.5	323-801-001-006N
	40-120 °C / 105-250 °F	6-24 V	29 mm	9 mm	3/8" - 18 NPTF	323-801-001-007N
	40-120 °C / 105-250 °F	6-24 V	29 mm	9 mm	5/8" - 18 UNF-3A	323-801-001-008N
	40-120 °C / 105-250 °F	6-24 V	29 mm	9 mm	M16 x 1.5	323-801-001-040N
 <p>Knurled nut M4</p>	40-120 °C / 105-250 °F	6-24 V	29 mm	9 mm	M16 x 1.5	323-801-001-029N
	40-120 °C / 105-250 °F	6-24 V	29 mm	9 mm	R 3/8" DIN 2999, tapered	323-801-001-058C
	40-120 °C / 105-250 °F	6-24 V	22 mm	8.5 mm	1/8" - 27 NPTF	323-801-005-001D
	40-120 °C / 105-250 °F	6-24 V	10.5 mm	8.4 mm	M10 x 1 tapered, short	323-801-017-001N

### DUAL-POLE, INSULATED RETURN

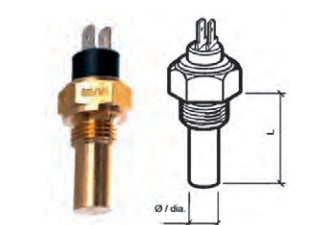


	RANGE	VOLTAGE	LENGTH	Ø	THREAD	ARTICLE NUMBER
	40-120 °C / 105-250 °F	6-24 V	24 mm	11 mm	5/8" - 18 UNF-2A	323-805-001-002A
	40-120 °C / 105-250 °F	6-24 V	29 mm	11 mm	1/2" - 14 NPTF	323-805-001-004N
	40-120 °C / 105-250 °F	6-24 V	29 mm	11 mm	3/8" - 18 Dryseal NPTF	323-805-001-005N
	40-120 °C / 105-250 °F	6-24 V	29 mm	9 mm	M18 x 1.5	323-805-001-015N

## ENGINE OIL TEMPERATURE SENSORS

### SINGLE-POLE, COMMON GROUND

	RANGE	VOLTAGE	LENGTH	Ø	THREAD	ARTICLE NUMBER
	50-150 °C / 120-300 °F	6-24 V	29 mm	9 mm	M14 x 1.5	323-801-004-002N
	50-150 °C / 120-300 °F	6-24 V	29 mm	9 mm	R 1/2	323-801-004-003D
	50-150 °C / 120-300 °F	6-24 V	29 mm	9 mm	M16 x 1.5	323-801-004-012C
	50-150 °C / 120-300 °F	6-24 V	22 mm	6.9 mm	M10 x 1.5	323-801-010-001D
	50-150 °C / 120-300 °F	6-24 V	29 mm	9 mm	1/4" - 18 NPTF	323-801-004-017D

### DUAL-POLE, INSULATED RETURN

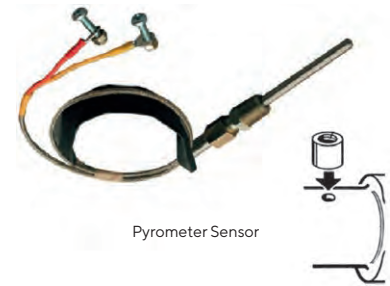
	RANGE	VOLTAGE	LENGTH	Ø	THREAD	ARTICLE NUMBER
	50-150 °C / 120-300 °F	6-24 V	29 mm	11 mm	M14 x 1.5	323-805-003-001N
	50-150 °C / 120-300 °F	6-24 V	29 mm	11 mm	1/4" - 18 NPTF	323-805-003-002N
	50-150 °C / 120-300 °F	6-24 V	29 mm	11 mm	5/8" - 18 UNF-2A with sealing cone	323-805-003-003N

## PYROMETER SENSOR

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### THERMOCOUPLE ELEMENT - COMPATIBLE ONLY WITH VDO

RANGE	TERMINALS	ARTICLE NUMBER
100 - 900° C	Red = Negative	N03-320-264
250 - 1650° F	Yellow = Positive	



### CONNECTING CABLE

RANGE	TERMINALS	ARTICLE NUMBER
6 m	White = Negative	N03-320-268
	Blue = Positive	

### THREADED BUSHING FOR WELDING TO MANIFOLD

#### ARTICLE NUMBER



N03-320-266





# ACCESSORIES

## ACQUALINK™ ACCESSORIES

IMAGE	ITEM SPECIFICS	ARTICLE NUMBER
	Bezel 52 mm single, black	A2C59501965
	Bezel 52 mm single, white	A2C3979480001
	Bezel 52 mm double, black	A2C59501966
	Bezel 52 mm double, white	A2C3979510001
	Bezel 110 mm, black	A2C59501963
	Bezel 110 mm, white	A2C3979530001
	Bezel TFT 4.3", black	A2C59501967
	Bezel TFT 4.3", white	A2C3983920001
	Bezel TFT 7", black	A2C59501968
	Bezel TFT 7", white	A2C3995200001
	Bezel NavControl, black	A2C1156050001
	Bezel NavControl, white	A2C3997600001
	Spinlock nut, 52 mm	A2C5205947101
	Spinlock nut, 110 mm	A2C5323888101
	Silicone instrument cover 52 mm for double bezel	A2C59501971
	Silicone cover for 4.3" TFT Display and 110 mm gauge	A2C59501972
	Silicone cover for 7" TFT Display	A2C59501973
	Silicone cover for NavControl	A2C59501974

## OCEANLINK™ ACCESSORIES

IMAGE	ITEM SPECIFICS	ARTICLE NUMBER
	Spinlock nut, 52 mm	A2C5205947101
	Spinlock nut, 85 mm	A2C1376090001
	Round Bezel 52 mm, black	A2C1141440001
	Round Bezel 52 mm, chrome	A2C5336487001
	Round Bezel 52 mm, white	A2C1352110001
	Round Bezel 85 mm, black	A2C1111380001
	Round Bezel 85 mm, chrome	A2C1141580001
	Round Bezel 85 mm, white	A2C1352140001
	Bezel TFT 4.3", black	A2C1083230001
	Bezel TFT 4.3", white	A2C1152980001
	Bezel TFT 7", black	A2C1697530001
	Bezel TFT 7", white	A2C1697540001
	Silicone cover for 4.3" TFT Display	A2C59501972
	Silicone cover for 7" TFT Display	A2C59501973





## CAN BUS, ACQUALINK™ AND OCEANLINK™ INSTALLATION ACCESSORIES

IMAGE	ITEM SPECIFICS	ARTICLE NUMBER
	VDO Marine Bus to NMEA 2000® Adapter	0.3 m A2C9624490001
	VDO Marine Bus Cable	0.3 m A2C9624460001
		2 m A2C3880570001
		5 m A2C9624500001
		10 m A2C9624510001
	VDO Marine Bus Gender Changer	A2C3880550001
	VDO Marine Bus Termination Resistor	A2C9979390001
	NMEA 2000® Power Cable	A2C3931290001
	NMEA 2000® T Splitter	A2C3931270002
	NMEA 2000® Cable	0.5 m A2C9624370001
		2 m A2C9624380001
		6 m A2C9624400001
		10 m A2C9624420001
		30 m A2C59501950
	NMEA 2000® Terminator Female	A2C3931060001
	NMEA 2000® Terminator Male	A2C3931100001
	NMEA 2000® Inline Terminator	A2C3931250001
	NMEA 2000® Infield Installation Connector Female	A2C3930850001
	NMEA 2000® Infield Installation Connector Male	A2C3931050001
	Infield Installation Connector VDO Marine Bus/Wind Sensor Cable	A2C3880490001
	J1939 Termination Resistor, Inline J1939	A2C9979420001
	Video cable 0.3 m for 4.3" AcquaLink™	A2C9979110001
	Video cable 0.3 m for 7" OceanLink™	A2C1845710001
	32 pin power cable for dual engine	A2C1766930001
	32 pin power cable for single engine	A2C1821960001

## CAN BUS, ACQUALINK™ AND OCEANLINK™ INSTALLATION ACCESSORIES

IMAGE	ITEM SPECIFICS	ARTICLE NUMBER
	Power cable NavBox	A2C9875610001
	26 pin NavBox analog harness	A2C9875480001
	MediaBox cable harness	A2C1313150001
	Power cable and data cable for OceanLink™ Face-lift Master Gauges 85 mm	A2C1433330001
	Power cable and data cable for OceanLink™ first generation Master Gauges 85 mm	A2C5309243201
	EasyLink connecting cable	A2C59500139
	Power cable and data cable for OceanLink™ Master TFT 7" Engine 1	A2C1507870001
	Power cable and data cable for OceanLink™ Master TFT 7" Engine 2	A2C1992110001

## SENSORS ACCESSORIES

IMAGE	ITEM SPECIFICS	ARTICLE NUMBER
	10 m Mast Cable (Analog Wind Sensor)	A2C9979290001
	30 m Mast Cable (Analog Wind Sensor)	A2C9979340001
	10 m Connection Cable (Sumlog™ to NavBox)	A2C3948820001
	Blindplug for Sumlog™	A2C3986520001
	Deep-Pipe Sensor 6 m Wiring Harness	A2C1756300001



## VIEWLINE BEZELS

PROFILE	COLOR	ARTICLE NUMBER
<b>Ø 52 MM</b>		
Flat	Black	A2C5318604001
	White	A2C5318602201
	Chrome	A2C5318602301
Triangular	Black	A2C5318602401
	White	A2C5318602501
	Chrome	A2C5318602601
Round	Black	A2C5318602701
	White	A2C5318602801
	Chrome	A2C5318602901
<b>Ø 85 MM</b>		
Flat	Black	A2C5319291101
	White	A2C5319291201
	Chrome	A2C5319291001
Triangular	Black	A2C5319291701
	White	A2C5319292001
	Chrome	A2C5319291801
Round	Black	A2C5319291301
	White	A2C5319291601
	Chrome	A2C5319291401
<b>Ø 110 MM</b>		
Flat	Black	A2C5321074501
	White	A2C5321074601
	Chrome	A2C5321074701
Triangular	Black	A2C5321076301
	White	A2C5321076401
	Chrome	A2C5321076501
Round	Black	A2C5321074901
	White	A2C5321076001
	Chrome	A2C5321076101



Bezels in chrome, black and white.



## VIEWLINE ACCESSORIES

IMAGE	ITEM SPECIFICS	ARTICLE NUMBER
	Spinlock nut 52 mm	A2C5205947101
	Spinlock nut 80/85 mm	A2C5321223801
	Spinlock nut 110 mm	A2C5323888101
	Pushbutton for LCD 13.6 mm	A2C1028400001
	Connector set 8 pin	A2C59510850
	Connector set 14 pin	A2C59510851
	Adapter cable for 52 mm 5x AMP taps, 6.3 mm 2x AMP taps, 2.8 mm	A2C59510852
	Make-Point Switch 12 V, 52 mm Gauges: temperature, pressure, tank, trim, rudder angle 85/110 mm Gauges: temperature, pressure, tank	A2C59510886
	Adapter cable 8-pole for temperature, pressure, fuel level, trim, pyrometer, outside temperature, fresh water, blackwater, tachometer, speedometer	A2C59512947
	Ammeter ViewLine Harness	A2C59512679
	Adapter cable 14 pole for tachometer with LCD	A2C59512950
	GPS Speed cable	A2C9582260001
	8-pin MQS connector blind plug F	A2C5332466401
	14-pin MQS connector protective cap M	A2C5332467101
	14-pin MQS connector blind plug F	A2C59513492
	Bracket assembly mounting set	A2C59510854
	Flush mount fixing bracket	A2C59510864
	Blindplug for Ø 52 mm	A2C5312164501

## SALES OFFICES

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USA

### **Veratron Japan K.K.**

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