

www.vdo-marine.com



# **VDO** Marine

Timeless instruments.





**Timeless instruments.** Since 1958, VDO Marine provides solutions for recreational boats, motor yachts and sailing yachts and with its 60 years of experience enjoys the reputation of being one of the most reliable suppliers in this sector.

Our instruments are the first choice for marine engine manufacturers since VDO Marine products cover the full spectrum of combination gauges, remotes, integrated systems and more, with products to suit any sailing boat or motor craft bridge. We have appealed to many generations of clients and we have the long-term vision to serve many more generations to come.

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# Premium quality for all boats.



AcquaLink®



OceanLink®



ViewLine







#### Specifications:

- NMEA 2000®. NMEA 0183. SAE J1939 EasyLink protocol
- Easy Chain
- IPX6 protection rating
- Anti-fog mineral glass lens
- Reverse polarity protection
- Operating temperature -20°C/+70°C
- LED Backlight technology
- NavBox Bus sytem
- · Gateway functionality
- Engine Monitoring
- Full Navigation & Vessel Information
- REACH, RoHS Lead-Free

#### Specifications:

- NMEA 2000®, SAE J1939 protocol
- Easy Chain
- IPX7 protection rating
- Anti-fog double plastic lens
- Reverse polarity protection
- Operating temperature -20°C/+70°C
- 85 mm Speedo with embeded GPS module
- Gateway functionality
- Engine Monitoring
- Full Navigation & Vessel Information
- REACH, RoHS Lead-Free

#### Specifications:

- Analog connectivity
- IP67 Front protection rating
- Anti-fog double plastic lens
- Reverse polarity protection
- Operating temperature -20°C/+70°C
- 9 Bezel options
- 110 mm Speedo with embeded GPS
- Full Engine Monitoring
- Vessel information
- REACH, RoHS Lead-Free

#### Portfolio:

- TFT 4.3" Display & Controller
- TFT 7" Touch Display
- Ø 110 mm, 52 mm gauges

## Portfolio:

- TFT 4.3" Display with push-buttons
- TFT 7" Touch Display
- Ø 85 mm, 52 mm gauges

• Ø 110 mm, 85 mm, 52 mm gauges











Powerboats, e.g. yachts up to 60 feet



Smaller powerboats, e.g. tenders up to 25 feet

# 60 years of VDO Marine.

## Brand with tradition.

Since 1958, VDO Marine provides solutions for recreational boats, motor yachts and sailing yachts and with its 60 years of experience enjoys the reputation of being one of the most reliable suppliers in this sector. Since we introduced our first instruments we have earned a reputation as a leading expert for marine instrumentation. In the course of our history,

we have presented eight product lines and supplied a wide range of professional solutions to the marine industry, where VDO Marine is recognized as a brand with tradition. We have appealed to many generations of clients and we have the long-term vision to serve many more generations to come.



## 1958

First Marine Tachometer

In 1958, VDO has produced its first marine tachometers. One of them was built into the Riva boat of Equestrian olympic champion Liselott Linsenhoff. Boatyard owner Carlos Riva was so fascinated by its reliability that he requested to develop a special instrument for his boat. In November 1962, the myth was born: 'Acquarama', an exclusive boat equipped with brand new VDO Marine instruments! Since its presentation at the Milan International Boat Show, everybody wanted to have VDO instruments on the boat!



**1977** 

After this successful path the first marine instrument line named StandardLine was introduced. Gauges were built without corroding parts, just made of plastic. Afterwards in 1981 came the first electronic compass ADIS 360 and echosounder MODIS 120 which again had been highly demanded.



1983-1991

NAVPAC & COMPACT

A further innovative development by VDO was the first bus-driven line named NAVPAC digital displays. Digital indication became a hit! In 1987, VDO released the COMPACT line, which was also having a LCD. In 1990, NAVPAC came with triumph to the market and introduced the first marine GPS gauge ever!

## 1960-1970

Sumlog & Wind Sensor

After its first marine gauges, VDO also developed its first marine sensors! The mechanical speedometer named Sumlog had great success and is demanded till today. In 1970, an electronic wind sensor measuring speed and direction was launched, whose successor is available even today as its functionality is just perfect!



## 1972

Plant expansion

Due to the growing market demand on VDO products, the company needed to expand the scope of production lines. Therefore, in 1972 VDO opened a new location in Switzerland. This Rüthi plant had since the beginning been a proud producer of marine and also automotive parts for customers like Audi, Daimler-Benz, KTM, Piaggio, VOLVO, VW and many more.



1992

After the big boom of digital indicators, the LOGIC line was launched, the first combined analog and digital instruments. Speed boats, sail boats – everybody wanted to have them in these modern days of the 20th century!





## 1996 OceanLine

After the epoch of square instruments, VDO came back with classical round gauges and introduced OceanLine, the perfect instruments for flush-mounted solutions. OceanLine has been used for many different engine manufactures as customized gauge with own logo.



An intelligent new-age system for yachts and motorboats - AcquaLink® line was launched. With AcquaLink® came also NavSensor, the gem of all sensors. NavSensor complements the inbuilt satellite receiver module to provide accurate readings of the speed of travel as well as the pitch & roll and YAW motion of the boat. Compass readings can be displayed electronically thanks to the embedded compass which also facilitates course corrections in electronic autopilots. The

barometer and air temperature sensors are early

indicators of forthcoming weather conditions.

2013 was a year of expansion, when VDO had hit the market again. For instance, VDO has engineered customized displays for VOLVO PENTA or YAMAHA Marine. We set the standards when it comes to marine instruments of highest quality. We create customized products and solutions that are unparalleled the world over.



# VDO Marine Today.

## Quality first.

The highest precision and the use of pioneering technologies are as important to us as the ease of use and appealing design. Moreover, our VDO Marine products enable optional system integration using complete solutions from a single source and specially developed components. To ensure reliability even under the toughest conditions, our marine products undergo extensive testing and quality assurance procedures. VDO Marine instruments

are the first choice for marine engine manufacturers since VDO Marine products cover the full spectrum of combination gauges, remotes, integrated systems and more, with products to suit any sailing boat or motor craft bridge. VDO Marine supplies instrumentations to the engine manufactures such as Mercury Marine, Volvo Penta, Yamaha, Honda Marine or ISUZU Marine and others.

## 2000

OceanLink® CAN & Smartcraft

We rise to each new challenge, making continuous advancements along the way. In the year 2000 we presented new OceanLink® CAN capable instruments, which installation follows the practical plug & play principle, with no need for complicated programming. VDO developed customized OceanLink® instruments for VW Marine, MAN Marine, VOLVO Penta, Mercury Marine and others.



## 2007

ViewLine

In 2007, VDO introduced ViewLine – a new generation of analog gauges with plug & play installation solution. ViewLine provides maximum freedom to customize the cockpit, great flexibility in installation and design. In 2014, a new member of the ViewLine family was born – the GPS Speed gauge with 110 mm diameter.



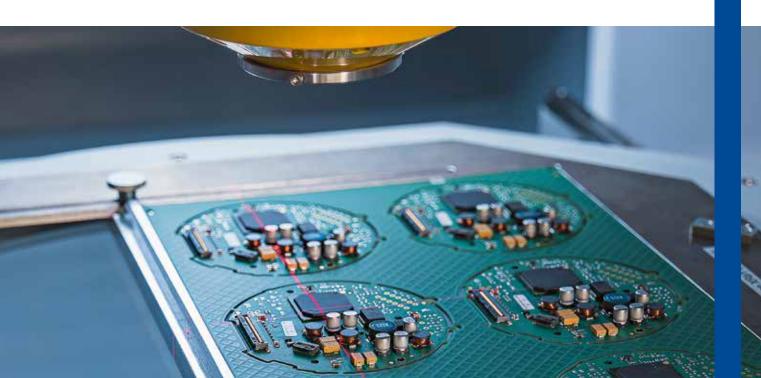
## 2017

New generation of OceanLink®

As OceanLink® round gauges had a great success, we gave them a well-deserved face-lift design. Our new OceanLink® TFT Displays have impressed the market! We are proud to say that we are producing customized TFT OceanLink® displays also for HONDA Marine. In 2017, VDO has likewise presented the new EngineBox which has been designed to be installed in hazardous areas of engine compartments where inflammable gases are present.

Since 01.08.2018, veratron AG has taken over the development, production and sales of VDO Marine products.





# AcquaLink®— Timeless instruments. High-quality design.





low power consumption lead-free instruments

AcquaLink® realizes state of the art solutions to provide customers with instantaneous, accurate nautical information. The instruments are designed for performance, with 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.





## The benefits of using AcquaLink®:

- Maximum precision and the deployment of pioneering technologies are equally important as 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 below ISO 9001 certified environment.
- Our plug and play solution design concept offers a high level of installation flexibility.

- A cross-platform standard offers maximum freedom in respect of cockpit customization.
- We ensure seamless integration and optimum utilisation of AcquaLink® devices for extreme conditions at sea.
- Harmonised dashboard look.



## **TFT Displays**



AcquaLink® 4.3" TFT Display



AcquaLink® 4.3" TFT Display

AcquaLink® multifunction TFT Displays are available in 4.3" and 7" sizes. The full 24 bit/16 m colors optically bonded displays feature transmissive layer technology for unprecedented and unsurpassed readability even in direct sunlight. The TFT Display shows 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, treble or quad grid layouts.

TFT 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.

- 1x plug with 2x Video Input
- 2x VDO Marine Bus connectors
- Operating temperature range -20°C/+70°C
- Protection level front and rear IPX9K with connectors plugged

## Aftermarket package:

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

Voltage	Color	Resolution	Article number
4.3"			
12-24 V	Black White	480 x 272 (WQVGA)	A2C59501996 A2C3983940001
7"			
12-24 V	Black White	800 x 480 (WVGA)	A2C59501997 A2C3997470001



AcquaLink® 7" TFT Display



AcquaLink® 7" 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 -20 °C/+70 °C
- Protection level IPX6
- Reverse polarity protection
- Telltales light indication



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

Voltage	Color	Article number
12-24 V	Black White	A2C59501982 A2C3997620001



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 is a 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
- < 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



110 mm Apparent Wind Angle 360°



110 mm Apparent Wind Angle Magnified 360°



20 30 AWS AMES 40-

110 mm Apparent Wind Speed 50 knots

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	
Apparent Wind Ang	le			
360°	12-24 V	Black White	A2C59501900 A2C1338770001	
Apparent Wind Ang	le Magnified			
360°	12-24 V	Black White	A2C59501901 A2C1338780001	
Apparent Wind Speed				
0-50 knots	12-24 V	Black White	A2C59501902 A2C1338940001	



## **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 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



110 mm Compass 360°

110 mm Rudder Angle

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

Range outer/inner	Voltage	Color	Article number
Compass			
360°	12-24 V	Black White	A2C59501911 A2C1338790001
Rudder Angle			
80°	12-24 V	Black White	A2C59501912 A2C1338860001
Depth			
200 m/660 feet	12-24 V	Black White	A2C59501903 A2C1338810001
600 feet/180 m	12-24 V	Black White	A2C59501904 A2C1338820001
Speed over Ground	(SOG)		
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
Speed through Wat	er (LOG®)		
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 Depth 600 feet/180 m



 $110~\mathrm{mm}~\mathrm{SOG}~35~\mathrm{mph}/55~\mathrm{kmh}$ 



110 mm LOG® 50 knots



# 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 customise the cockpit, AcquaLink® 52 mm Gauges have not included bezel in the packaging. Bezels available are listed in the Accessories section page 62.

#### **Specifications:**

- AMP Superseal Easylink connector
- < 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**



52 mm Coolant Temperature 120 °C/250 °F



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

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		
Coolant Temperatur	e				
120°C/250°F	12-24 V	Black White	A2C59501931 A2C3968900001		
250°F/120°C	12-24 V	Black White	A2C59501932 A2C1338570001		
Engine Oil Tempera	Engine Oil Temperature				
150°C/300°F	12-24 V	Black White	A2C59501926 A2C1338620001		
300°F/150°C	12-24 V	Black White	A2C59501927 A2C1338630001		
Pyrometer	Pyrometer				
900°C/1650°F	12-24 V	Black White	A2C59501933 A2C1338660001		
1650°F/900°C	12-24 V	Black White	A2C59501934 A2C1338670001		



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
Boost Pressure			
2 bar/30 psi	12-24 V	Black White	A2C59501944 A2C1338720001
30 psi/2 bar	12-24 V	Black White	A2C59501945 A2C1338730001
Engine Oil Pressure			
10 bar/150 psi	12-24 V	Black White	A2C59501935 A2C1338600001
150 psi/10 bar	12-24 V	Black White	A2C59501936 A2C1338610001
Transmission Oil Pro	essure		
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



52 mm Fuel Level Empty-Full

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	
Fuel Level				
Empty-Full	12-24 V	Black White	A2C59501930 A2C1338650001	
Fresh Water				
Empty-Full	12-24 V	Black White	A2C59501929 A2C1338640001	
Waste Water				
Empty-Full	12-24 V	Black White	A2C59501928 A2C1338760001	



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
Current			
-60/+60 A	12-24 V	Black White	A2C59501942 A2C1338540001
-150/+150 A	12-24 V	Black White	A2C59501943 A2C1338550001
Voltage			
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**



52 mm Rudder Angle

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	
Rudder Angle				
90°	12-24 V	Black White	A2C59501939 A2C1338680001	
Engine Trim				
Up/Down	12-24 V	Black White	A2C59501925 A2C1338710001	



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 Windsensor connections, so legacy VDO Marine products can be used and brought to the digital age.



NavSensor 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
- Pyrometer

It also features a NMEA 0183 input and output port as well as a buzzer output. All received data 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® gauges or TFT Displays.

The configuration of the NavBox can be done by using an AcquaLink® TFT and NavControl or by using the intuitive VDO Marine diagnostic 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:

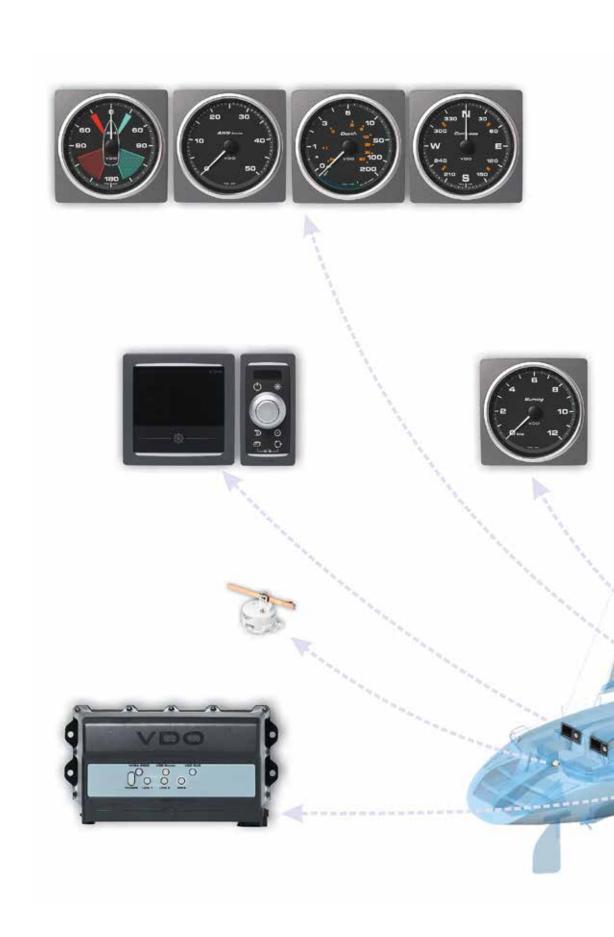
NavBox, Power cable & fuse, 26 pin auxillary harness with USB interface termination resistors (3 pc.), Mounting Screws, Safety Instructions, Installation and Operation Manual, Drilling Templates

Voltage	Article number
12-24 V	A2C59501979





## Installation Example



## Installation Example





# 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, 7" TFT touch Display and round 85 mm master instrument. All instruments are information powerhouses, multifunctional tachometers and have embedded Gateway from Analog or J1939 to NMEA 2000®.

OceanLink® 85 mm Master and TFT Display 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.





## The 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 and flush mounting instruments.
- Decades of experience guarantee a fully reliable, modern navigation and engine monitoring system with NMEA 2000<sup>®</sup>.
- 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 passing on data, e.g. engine data, to NMEA compatible devices.
- GPS Speedometer, 85 mm, features NMEA 2000<sup>®</sup> port, which passes the position, COG, SOG data to the NMEA 2000<sup>®</sup> network.
- Touch screen TFT Display.
- Gateway functionality.



# OceanLink® TFT Display

## **TFT Display**

The new OceanLink® 4.3" and 7" multifunction TFT Display features a full 24 bit/16 m colors optically bonded display with transmissive layer technology for perfect readability even in direct sunlight. The TFT Display shows and distributes 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 up to 40 different data pages with single, double, treble or quad grid layouts.

TFT Displays can be daisy-chained with other OceanLink® 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.



OceanLink® 4.3" 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 Analog input
- 1x Frequency input
- 2x 4-20 mA output
- 1x EasyLink data output
- 1x Programmable alarm output 500 mA
- Operating temperature range -20°C/+70°C



OceanLink® 7" 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 input
- 2x Frequency input
- 2x 4-20 mA
- 3x Digital input or 0−5 V
- 2x Alarm output
- 2x Video input
- 2x EasyLink data output
- 2x Programmable alarm output 500 mA
- $\bullet$  Operating temperature range -20  $^{\circ}\text{C}/+70\,^{\circ}\text{C}$

#### Aftermarket package:

TFT Display, Bezel, Silicone Cover, Mounting Screws, Wiring harness, Installation Instructions, Safety Instructions

Voltage	Color	Resolution	Article number
4.3"			
12-24 V	Black	480 x 272 (WQVGA)	A2C1352150001
7"			
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 bezel in identical color. Optional Chrome Bezel is available as decorative accessory.

#### Specifications:

- 1x NMEA 2000® input
- 1x J1939 and analog input
- 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**



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

The new OceanLink® GPS Speedometer features an embedded GPS antenna, an inverted dot matrix LCD and NMEA 2000® connectivity. Up to 20 satellite gauges of 52 mm each, can be connected thanks to the integrated EasyLink connectivity.

#### Displayed data:

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

Range	Voltage	Color	Article number
0-14 knots/kmh/mph	12-24 V	Black White	A2C1351970001 A2C1352010001
0-35 knots/kmh/mph	12-24 V	Black White	A2C1351980001 A2C1352080001
0-70 knots/kmh/mph	12-24 V	Black White	A2C1351990001 A2C1352090001



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



## **Tachometer**

The new OceanLink® Tachometer automatically presents all the key data ranging from oil pressure and fuel consumption to operating hours – on a generously proportioned inverted dot matrix digital display. Besides a CAN interface with NMEA 2000® certified and SAE J1939 data protocol it features two inputs for analog sensors. 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 distribute it to up to 16 52 mm satellite gauges.

Range	Voltage	Color	Article number
3000 rpm	12-24 V	Black White	A2C1065660001 A2C1065670001
5000 rpm	12-24 V	Black White	A2C1065720001 A2C1065800001
7000 rpm	12-24 V	Black White	A2C1065810001 A2C1065820001





85 mm Tachometer 3000 rpm



85 mm Tachometer 5000 rpm

## **Navigation**

Range outer/inner	Voltage	Color	Article number
Compass			
360°	12-24 V	Black	A2C1957380001
Wind Angle			
360°	12-24 V	Black	A2C1957400001
Apparent Wind Angle Magnified			
360°	12-24 V	Black	A2C1957390001
Wind Speed			
0-50 knots	12-24 V	Black	A2C1957420001
Depth			
200 m/660 feet	12-24 V	Black	A2C1957360001



85 mm Wind Angle Magnified



# OceanLink® 52 mm Gauges

bezels.

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 can be daisy-chained together. OceanLink® Gauges have a white and black dial version, which is always completed with bezel in identical color. Optional Chrome Bezel is available as decorative accessory. OceanLink® accessories are listed on page 62 and 63.

#### **Specifications:**

- AMP Superseal Easylink
- < 100 mA
- 270° pointer deflection angle
- Reverse polarity protection
- Anti-fog double layer plastic lens

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

- Front & rear protection rating IPX7
- Operating temperature range -20°C/+70°C

#### Aftermarket package:

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

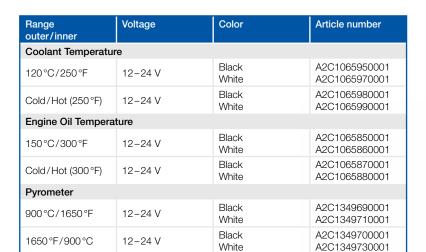
## **Temperature**



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
Boost Pressure			
2 bar/30 psi	12-24 V	Black White	A2C1066140001 A2C1066150001
Low/High (30 psi)	12-24 V	Black White	A2C1066160001 A2C1066170001
Engine Oil Pressure			
10 bar/150 psi	12-24 V	Black White	A2C1066000001 A2C1066010001
Low/High (150 psi)	12-24 V	Black White	A2C1066020001 A2C1066030001
Transmission Oil Pressure			
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 Peressure Low/High





## Liquid Level



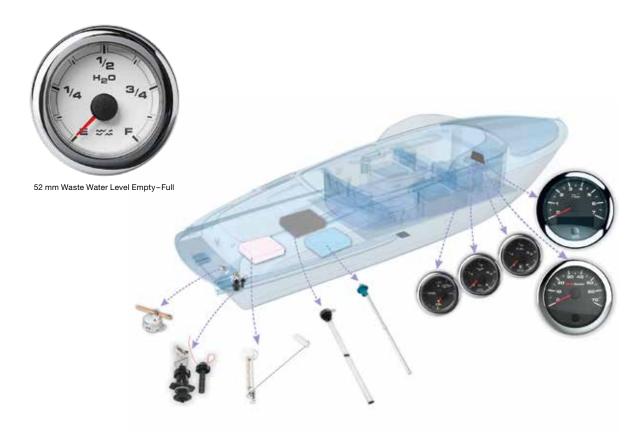
52 mm Fuel Level Empty-Full



52 mm Fuel Level Empty-Full

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
Fuel Level			
Empty-Full	12-24 V	Black White	A2C1065930001 A2C1065940001
Fresh Water			
Empty-Full	12-24 V	Black White	A2C1065910001 A2C1065920001
Waste Water			
Empty-Full	12-24 V	Black White	A2C1065890001 A2C1065900001





## **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	
Current				
-60/+60 A	12-24 V	Black White	A2C1349640001 A2C1349660001	
-150/+150 A	12-24 V	Black White	A2C1349650001 A2C1349680001	
Voltage	Voltage			
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
Rudder Angle			
90°	12-24 V	Black White	A2C1066080001 A2C1066090001
Engine Trim			
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.

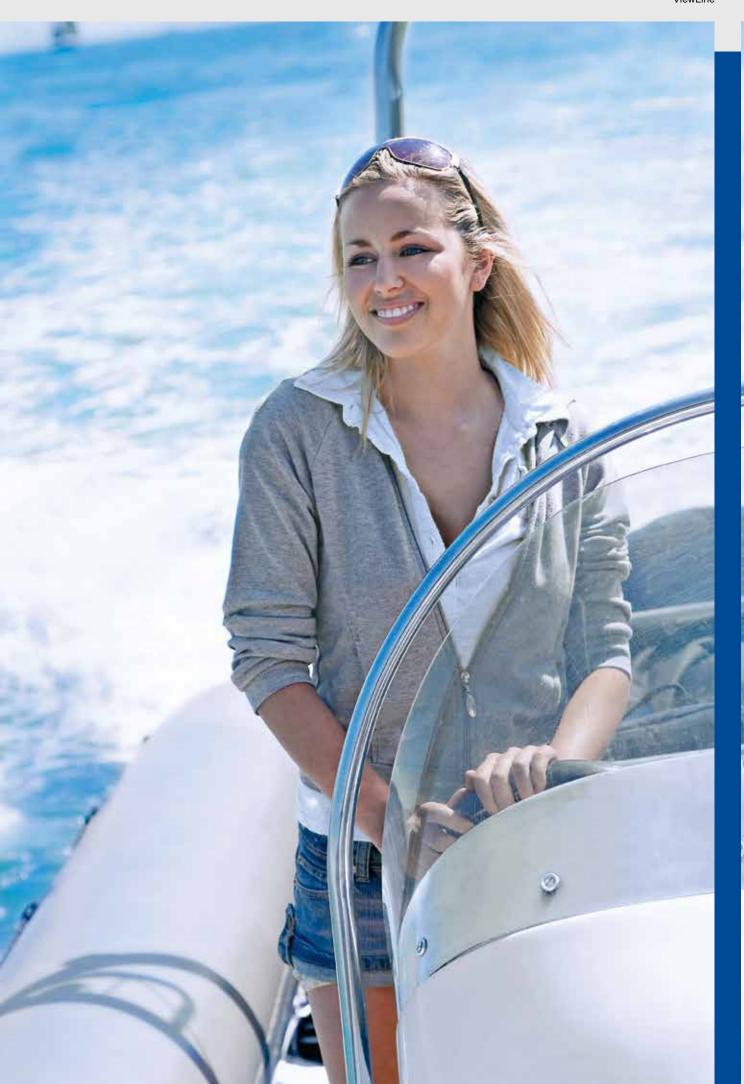
ViewLine offers a comprehensive modular, modern series of instruments for engine monitoring. More functions and greater flexibility in installation and design increase the scope for high manufacturing standards and guarantee the highest level of reliability and readability.

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.

## The 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 and flush mounting instruments.
- A cross-platform standard offers maximum freedom in respect of cockpit customization.
- We ensure seamless integration and optimum utilisation of ViewLine devices for extreme conditions at sea.
- In addition to the standard platform, ViewLine displays and gauges now have solutions to encompass combi and multifunction features.



# 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 or 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**



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

## 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 LC display
- 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 Telltail generic alarm
- 1x Telltail alarm (knots/kmh/mph)

# 30 40 20 PS 50 70

110 mm GPS Speedometer 0-70 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)

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



# ViewLine 85 mm Gauges

The VDO Marine ViewLine 85 mm Gauges are available in black or white dial versions, which are always completed with 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 or 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</li>

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



Speedometer

Marine 85 mm Speedometer with LCD offers plug and play solution concept and installation flexibility for panel and flush mounting 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



#### **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 and flush mounting instruments. The ViewLine Revolution counter can be connected to conventional marine engines (no data bus).

#### Versions without LCD:

Range rpm	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.

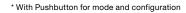
- Current consumption < 175 mA, with warning light (LED)
- Output for acoustic alert (option)
- Various sensor inputs
- LC display size 37 mm x 11 mm
- Individually programmable display e.g., for clock, trip, odometer, etc. via externally switchable button or PC software (ViewLine programming tool)
-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



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

#### Versions with LCD\*:







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

## Synchronizer



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

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

Range rpm	Voltage	Color	Input	Article number
-500/+500 rpm	8-32 V	Black White	W, 1, Ind	A2C59512402 A2C59512403

#### **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
Rudder Angle				
-45°/+45°	8-32 V	Black White	3–180 Ω	A2C59512410 A2C59512411



85 mm Rudder Angle -45°/+45°



# ViewLine 52 mm Gauges

The VDO Marine ViewLine 52 mm Gauges are available in black or white dial versions, which are always completed with 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 or 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
- ullet 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

#### **Tachometer**



52 mm Tachometer 6000 rpm

The ViewLine Tachometer indicates the number of revolutions of the motor and is available in 52 and 85 mm installation diameters. 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 and flush mounting instruments.

Range rpm	Voltage	Color	Article number
4000 rpm	8-32 V	Black White	A2C59512344 A2C59512347
6000 rpm	8-32 V	Black White	A2C59512345 A2C59512348
8000 rpm	8-32 V	Black White	A2C59512346 A2C59512349



## **Temperature**

ViewLine Temperature Gauge 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		
Coolant Temper	Coolant Temperature					
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		
Engine Oil Temp	oerature					
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		
Pyrometer						
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		
Outside Temperature						
+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



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

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. You may find the EPS on page 61.

			1			
Range outer/inner	Voltage	Color	Input	Article number		
Boost Pressure	Boost Pressure					
2 bar/30 psi	8-32 V	Black White	10-184 Ω	A2C59514149 A2C59514225		
Engine Oil Pres	sure					
5 bar/80 psi	8-32 V	Black White	10-184 Ω	A2C59514123 A2C59514211		
80 psi / 5 bar	8-32 V	Black White	10-184 Ω	A2C59514128 A2C59514214		
10bar/150psi	8-32 V	Black White	10-184 Ω	A2C59514111 A2C59514199		
150 psi / 10 bar	8-32 V	White	240-33.5 Ω	A2C59514202		
Transmission O	il Pressure					
25 bar/350 psi	8-32 V	Black White	10-184 Ω	A2C59514136 A2C59514206		
350 psi/25 bar	8-32 V	White	10-184 Ω	A2C59514220		
30 bar / 435 psi	8-32 V	Black White	10-184 Ω	A2C59514141 A2C59514208		
400 psi/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		



# Liquid Level

ViewLine 52 mm Liquid Level gauge 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
Fuel Level				
Empty-Full	8-32 V	Black White	0-90 Ω	A2C59514085 A2C59514186
0-1/1	8-32 V	Black White	3–180 Ω	A2C59514082 A2C59514184
Empty-Full	8-32 V	Black White	240-33.5 Ω	A2C59514094 A2C59514190
0-1/1	8-32 V	Black White	90-4 Ω	A2C59514079 A2C59514182
Empty-Full	8-32 V	Black White	90-4 Ω	A2C59514088 A2C59514188
Fresh Water (ca	apacitive)			
0-1/1	8-32 V	Black White	4-20 mA	A2C59514676 A2C59514677
Fresh Water (re	sistive)			
0-1/1	8-32 V	Black White	3–180 Ω	A2C59514097 A2C59514192
Empty-Full	8-32 V	Black White	3-180 Ω	A2C59514099 A2C59514193
Waste Water				
0-1/1	8-32 V	Black White	4-20 mA	A2C59512342 A2C59512343



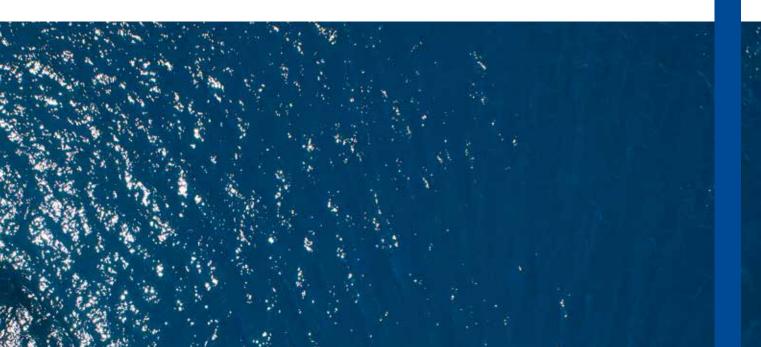
52 mm Fuel Level Empty-Full



52 mm Fresh Water 0-1/1



52 mm Waste Water 0-1/1



#### **Battery Status**



52 mm Current -60/+60 A



52 mm Voltage 18-32 V

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 amp	Voltage	Color	Input	Article number
Current				
-60/+60 A	8-32 V	Black White	60 mV	A2C59512328 A2C59512330
-150/+150 A	8-32 V	Black White	60 mV	A2C59512329 A2C59512331
Voltage				
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

#### **Vessel Status**



52 mm Rudder Angle -40°/+40°



52 mm Engine Trim

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
Rudder Angle				
-40°/+40°	8-32 V	Black White	3–180 Ω	A2C59514154 A2C59514230
Engine Trim				
up/down	8-32 V	Black White	167-10 Ω	A2C59514180 A2C59514244

#### **Hour Counter**

ViewLine 52 mm Engine Hour Counter with illumination and anti-fog plastic double lens promise maximum precision and stylish design with choice of nine various bezels.

Voltage	Color	Article number
9-30 V	Black White	A2C59512453 A2C59512454



52 mm Hour Counter

#### Clock

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

Voltage	Color	Article number
8-16 V	Black White	A2C59513445 A2C59513443
18-32 V	Black White	A2C59513446 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 or smartphone via USB or Bluetooth 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 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 28W (D class)
- NMEA 2000® certified
- IPX5 protection rating
- Operating temperature range -20 °C/+70 °C
- Free VDO Marine MediaBox App



#### Aftermarket package:

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

Voltage	Article number
9-16 V	A2C59501980







#### VDO Marine MediaBox App:











#### **Accessories**

**Marine Speakers** 

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

#### Aftermarket package:

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

Output power	Article number
150 W	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,  $0-400\ \Omega$  sensors and  $4-20\ mA$  sensors.

EngineBox is available in 2 versions: Single Engine and Dual Engine. The Dual Engine version is designed with double frequency and resistive inputs. This allows customers simplified installation wiring, reduced commissioning time and the required installation space.

The EngineBox has to be set up using an intuitive PC configuration tool making it easy for programming the inputs (delivered free of charge). The EngineBox is designed to be installed also in hazardous areas (for additional information please check the technical characteristics described in the installation manual).

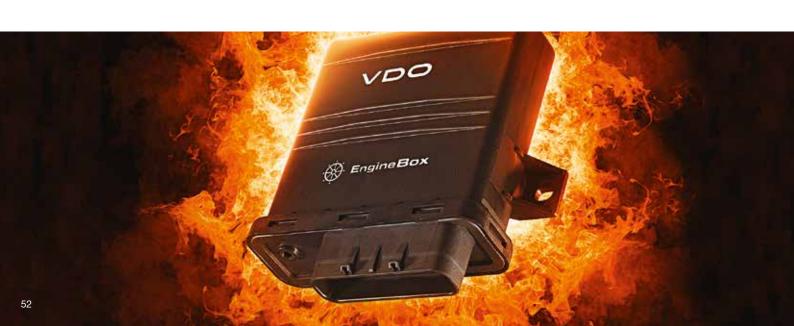
- Analog to NMEA 2000® gateway
- J1939 to NMEA 2000® gateway
- 2 models for single engine and dual engine configurations
- Compact design
- Status LED
- 1x J1939 (2x J1939 Dual Engine)
- 1x M12 5 pins NMEA 2000®
- 1x Input 0-4 kHz for RPM (2 inputs with Dual Engine Model)
- 4x Inputs 0–400  $\Omega$  (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



	Article number
Single Engine	A2C1824820001
Double Engine	A2C1767000001



#### **NavSensor**

The multifunctional AcquaLink® NavSensor is the gem of all sensors. The inertial sensor complements the inbuilt satellite GPS receiver module to provide accurate readings of the speed of travel as well as the pitch & roll (up and down). Compass readings can be displayed electronically thanks to the embeded 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: Air pressure, air temperature sensor
- Operating temperature range -20°C/+70°C

#### Aftermarket package:

NavSensor, 2x brackets, Installation Instructions, Safety Instructions

Voltage	Article number
12-24 V	A2C59501981



#### NMEA 2000® Wind Sensors

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® Triducer Sensors

Through-hull 100 W plastic Airmar triducer provides depth, speed and seawater temperature data. 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

#### Navigation Kit and Navigation Kit Plus

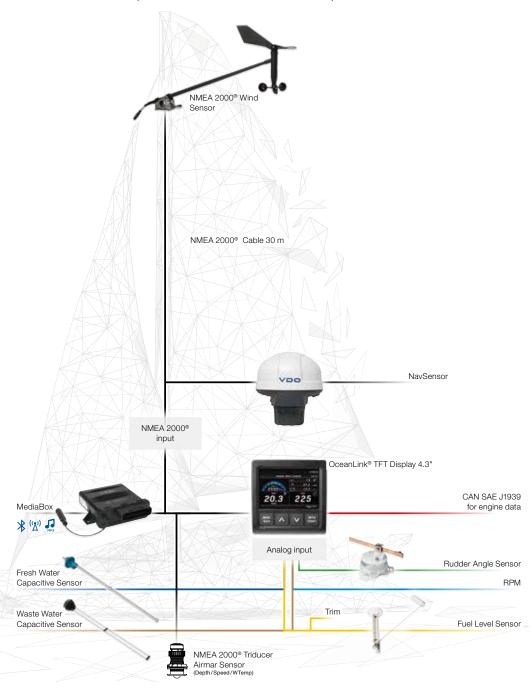
Complex boats need a smart solution. And we have it. VDO Marine OceanLink® display is the only product on the market able to interpret CAN, NMEA 2000® and analog signals without any additional external device.

#### Safety, performance, entertainment

Are you looking for a complex boat system for a simple installation on a yacht? VDO Marine Navigation Kit and Navigation Kit Plus is the solution! Our Navigation Kits will become essential crew members which ensure you top performance in the open sea, 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® Triducer Airmar Sensor

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

# NMEA 2000® Wind 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 transmissive layer technology for perfect readability even in direct sunlight.



NMEA 2000® Triducer Airmar Sensor

#### NMEA 2000® accessory

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

#### NavSensor (Included only in VDO Marine Kit Navigation Plus)

The multifunctional NavSensor is the gem of all sensors. The inertial sensor complements the inbuilt satellite receiver module to provide accurate readings of the speed of travel as well as the pitch & roll (up and down). Compass readings can be displayed electronically thanks to the embeded compass, which also facilitate course corrections in electronic autopilots. The barometer and air temperature sensors are early indicators of forthcoming weather conditions.



NMEA 2000® Triducer Airmar Sensor

#### **Navigation Kit**

Wind Sensor NMEA 2000®, NMEA 2000® Triducer Airmar Sensor, OceanLink® TFT Display unit 4.3" Black, 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® TFT Display unit 4.3" 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



# **Analog Sensors**

Sensors for electronically controlled safety functions are the eyes, ears and the 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



Sumlog® Transducer

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	Article number
12-24 V	A2C59501986

#### **Analog Wind Sensors**



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	Article number
12-24 V	A2C59501983



# Rudder Angle Sensors

Single station		
Voltage	Resistance	Article number
12/24 V	10-180 Ω	A2C1102950001

Dual station (fly bridge)			
Voltage	Resistance	Article number	
12/24 V	5-90 Ω	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 Ω	150-600 mm	A2C1364580001

Dual station (fly bridge)			
Voltage	Signal Range empty/full	Adjustable length	Article number
12/24 V	2-90 Ω	150-600 mm	N02-240-106



#### Deep-Pipe Level Sensors



Deep-Pipe Level Sensor

Deep-Pipe Level Sensor is ideal for usage in fuel tanks. Its 38 mm diameter vertical tube contains a float inside, which measures a level of the liquid. 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. Sensors are made in various lengths starting at 150 mm increasing to 1200 mm – please ensure 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  $\Omega$ ,
- Lengh: 150 mm-1200 mm
  Mounting diameter: 54 mm
  IP67 protection rating

#### Aftermarket package:

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

#### Accessories:

6 m Wiring Harness A2C17563000



# Deep-Pipe Level Sensors

	Article number		
Length		Signal range	
	90-4 Ω	0-180 Ω	240-33 Ω
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	A2C1750700001	A2C1745910001	A2C1747370001
1000 mm	A2C1750770001 A2C1750790001	A2C1745910001 A2C1745920001	A2C1747370001 A2C1747380001
1050 mm	A2C1750790001 A2C1750810001	A2C1745930001	A2C1747390001
1100 mm	A2C1750810001	A2C1745940001	A2C1747410001
1150 mm	A2C1750850001	A2C1745940001 A2C1745950001	A2C1747410001 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



#### 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

#### 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

#### **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.

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 pressue 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	12-24 V	M12 x 1.5	365-100-010-121C
16 bar	12-24 V	M12 x 1.5	365-100-016-121C
30 bar	12-24 V	M12 x 1.5	365-100-030-121C



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
Ø 52 mm				
10 bar	12-24 V	Black	0-5 V	A2C1278230001
30 bar	12-24 V	Black	0-5 V	A2C1278250001

More information on the page 46

# Accessories

# AcquaLink® Accessories

Image	Item specifics	Article number
	Bezel 52 mm single, black	A2C59501965
	Bezel 52 mm single, white	A2C3979480001
Q	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
50	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
80	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	A2C59501968
	Bezel TFT 7", white	A2C3995200001
	Silicone cover for 4.3" TFT Display	A2C59501972
	Silicone cover for 7" TFT Display	A2C59501973

# CAN Bus, AcquaLink® and OceanLink® Installation Accessories

Item specifics		Article number	Image
VDO Marine Bus to NMEA 2000® Adapter	0.3 m	A2C96244900	
C		A2C96244600	
V5044 - 5 044	2 m	A2C38805700	
VDO Marine Bus Cable	5 m	A2C96245000	
	10 m	A2C96245100	
VDO Marine Bus Gender Changer		A2C38805500	
VDO Marine Bus Termination Resistor		A2C99793900	
NMEA 2000® Power Cable		A2C39312900	
NMEA 2000® T Splitter		A2C3931270002	
	0.5 m	A2C9624370001	
	2 m	A2C9624380001	
NMEA 2000® Cable	6 m	A2C9624400001	
	10 m	A2C9624420001	
	30 m	A2C59501950	
NMEA 2000® Terminator Female		A2C3931060001	
NMEA 2000® Terminator Male		A2C3931100001	
NMEA 2000 <sup>®</sup> Inline Terminator		A2C3931250001	4
NMEA 2000® Infield Installation Connector Female		A2C39308500	-
NMEA 2000® Infield Installation Connector Male		A2C39310500	
Infield Installation Connector VDO Marine Bus/Wind Sensor Cable		A2C38804900	
J1939 Termination Resistor, Inline J1939		A2C99794200	
Video cable 0.3 m for 4.3" and 7" AcquaLink®		A2C99791100	
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	
Power cable NavBox		A2C9875610001	

Image	Item specifics	Article number
	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	A2C53092432
34	EasyLink connecting cable	A2C59500139
2	Power cable and data cable for OceanLink® Master TFT	A2C1507870001

#### **Sensors Accessories**

Image	Item specifics		Article number
	Mast Cable (Analog Wind Sensor)	10 m	A2C99792900
		30 m	A2C99793400
	Connection Cable (Sumlog® to NavBox)	10 m	A2C39488200
	Blindplug for Sumlog®		A2C3986520001
	Deep-Pipe Sensor 6 m Wiring Harness		A2C17563000

## ViewLine Bezels

		i			
Profile	Color	Article number			
Ø 52 mm					
Flat	Black White Chrome	A2C5318604001 A2C5318602201 A2C5318602301			
Triangular	Black White Chrome	A2C5318602401 A2C5318602501 A2C5318602601			
Round	Black White Chrome	A2C5318602701 A2C5318602801 A2C5318602901			
Ø 85 mm	Ø 85 mm				
Flat	Black White Chrome	A2C5319291101 A2C5319291201 A2C5319291001			
Triangular	Black White Chrome	A2C5319291701 A2C5319292001 A2C5319291801			
Round	Black White Chrome	A2C5319291301 A2C5319291601 A2C5319291401			
Ø 110 mm					
Flat	Black White Chrome	A2C5321074501 A2C5321074601 A2C5321074701			
Triangular	Black White Chrome	A2C5321076301 A2C5321076401 A2C5321076501			
Round	Black White Chrome	A2C5321074901 A2C5321076001 A2C5321076101			



Bezels in chrome, black and white.



## ViewLine Accessories

Image	Item specifics	Article number
50	Spinlock nut 52 mm	A2C5205947101
	Spinlock nut 80/85 mm	A2C5321223801
	Spinlock nut 110 mm	A2C5323888101
	Pushbutton for LCD 13.6 mm	A2C10284000
70-70-70-70	Connector set 8 pin	A2C59510850
11111	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, Gauges: 52 mm: temperature, pressure, tank, trim, rudder angle 85/110 mm: temperature, pressure, tank	A2C59510886
	Adapter cable 8-pole for temperature, pressure, fuel level, trim, pyrometer, outside temperature, fresh water, blackwater, tachometer, speedometer	A2C59512947
	Adapter cable 8 pole for voltmeter, engine hours counter, clock	A2C59512948
	Adapter cable 14 pole for tachometer with LCD	A2C59512950
	GPS Speed cable	A2C95822600
	8-pin MQS connector blind plug F	A2C53324664
	14-pin MQS connector protective cap M	A2C53324671
, , , , , , , , , , , , , , , , , , ,	14-pin MQS connector blind plug F	A2C59513492
	Dropping Resistor 24 V (without connector)	A2C59510221
	Dropping Resistor 24 V (with connector)	A2C59510853
2311	Bracket assembly mounting set	A2C59510854
	Flush mount fixing bracket	A2C59510864
	Blindplug for Ø 52 mm	A2C53121645





VDO Marine Watch	Article number
Mens Watches with Black Leather belt	A2C19700700
Mens Watches with Black/Grey Textile belt	A2C19709700



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