



Handling a complex world.



advantage

**Ocean Link – easy to install VDO
CAN instrumentation for sports boats.**



VDO Ocean Link

performance

Plug & play – the fastest way to access precision engine data.

Engines on modern sports and leisure boats increasingly feature electronic management. To meet these new requirements, the VDO Ocean Line series now boasts a modular instrumentation concept for marine use: the Ocean Link. The main element and information powerhouse is a multifunctional tachometer with direct access to the CAN bus controlling the engine. The instrument can display and forward all available data to up to 20 additional display instruments.

Installation follows the practical plug & play principle, making further system expansion particularly convenient, with no need for complicated programming. Ocean Link has already established a successful track record with leading engine manufacturers Volvo Penta and MAN.

Engine data

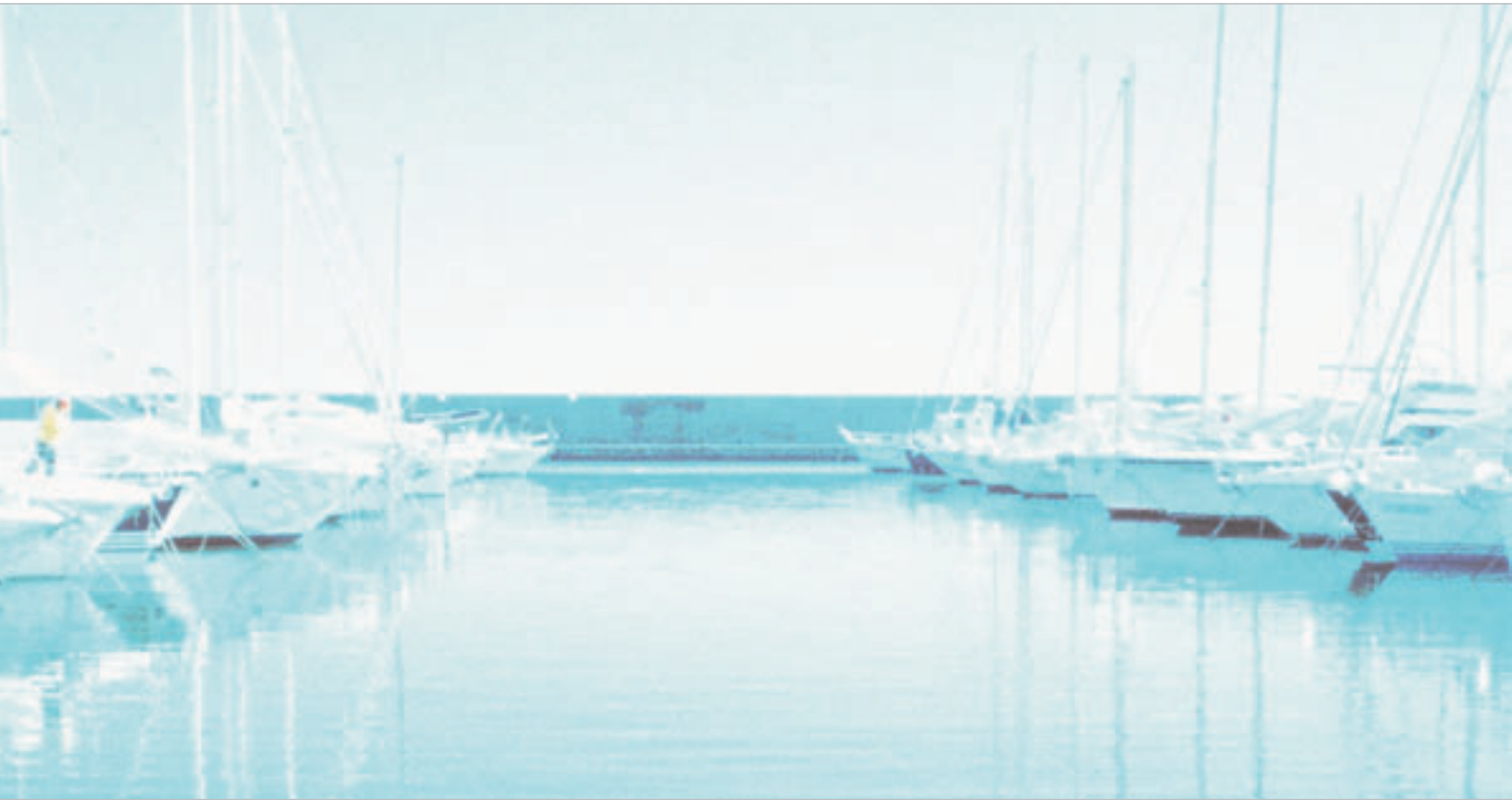


Easy Link gauges

20 slave gauges
per master

VDO Ocean Link

The central instrument automatically presents all the key data – up to 256 standard measurement values ranging from oil pressure and fuel consumption to operating hours – on a generously proportioned digital display. Besides a CAN interface with SAE J1939 data protocol it features two inputs for analogue sensors. The innovative Easy Link data connection renders complicated cabling unnecessary. The CAN interface also allows a second central instrument to be hooked up for positioning on the flybridge, for example. Display instruments for further dynamic measurement values receive updates from the central instrument every 20 ms. Like the rest of the Ocean Line, Ocean Link is available in various designs, including a range of installation depths, metric and imperial scales, and a number of bezel colour options. The instruments can also be conveniently integrated into customer-specific panel solutions.



VDO Easy Link
instrument bus



Engine oil
temp gauge



Exhaust gas
gauge



Gearbox oil
temp gauge



Boost pressure gauge

VDO Ocean Link benefits:

Straightforward system expansion

- Easy Link connector
- Up to 20 other display instruments per central instrument
- Minimal cabling



Gearbox pressure gauge



Fuel tank gauge



Engine load



Fuel flow gauge

Plug & play principle

- Easy installation
- No reprogramming

Customer-specific integration

- Combined instruments
- Panel solutions

All Ocean Line benefits

- Double lens system
- Flush mounting
- Many design options

Facts. Functions. Figures.



Specification

Master (85 mm)

Slave (52 mm)

Version	Translucent backlighting	Translucent backlighting
Housing	Plastic (flame-retardant) according to UL94 – V0	Plastic (flame-retardant) according to UL94 – V0
Bezel	Plastic, coloured	Plastic, coloured, clipable
Lens	Plastic, double lens, anti-reflection	Plastic, double lens, anti-reflection
Dial	Black with white graphics	Black with white graphics
Illumination	Red LED, 8 dimmer steps	Red LED, 8 dimmer steps, adjustable via master
Pointer	Translucent backlighting, black cap, white pointer	Translucent backlighting, black cap, white pointer
Display	132 x 33 dots	
Connections	DELPHI connector, GT 150 Series	Super Seal 1.5 Series AMP connector 282105-1
Installation	Housing nut, nut jam high 0 – 17mm,	Mounted from the front, housing nut, nut jam height 0 – 12 mm, studs 12 – 25 mm flush mount: for 3 mm panel thickness with mounting angle, screws and studs on panel gasket $\text{Æ}51.5/\text{Æ}60 \times 2$ 270° (depending on slave functionality)
Indication area	3000 or 4000 rpm	
Nominal voltage	12/24 volts	
Nominal position	0 – 90° angle according to VDON 2.700.1	
Operating temperature	–20 °C to +70 °C (at nominal voltage)	–20 °C to +70 °C (at nominal voltage)
Storage temperature	–30 °C to +85 °C	–30 °C to +85 °C
EMC	DIN EN 50081-1/1997-11, DIN EN 61000-6-2/ 2000-03 according to EMC Directive 89/336/EEC	CE according to EMC directive
Protection class	IP65, mounted, from the front according to IEC 529	
Max. no. of Slaves		Max. 20 gauges and 20 m cable length connected to master <70 mA with illumination Easy Link bus uni-directional from master to slave
Current consumption	120 mA without, 140 mA with illumination	
Data transfer		
Power supply	10 V – 30 V	

Order data.

Part no.	Description	Range	Type	Dial
N02 012 920	Master tachometer	3000 min-1	85 mm master	black
N02 012 922	Master tachometer	4000 min-1	85 mm master	black
N02 140 154	Gearbox pressure gauge	25 bar	52 mm slave	black
N02 140 156	Engine oil pressure gauge	10 bar	52 mm slave	black
N02 140 508	Boost pressure gauge	3 bar	52 mm slave	black
N02 140 512	Engine oil pressure gauge	0–150 psi	52 mm slave	black
N02 140 516	Gearbox pressure gauge	0–360 psi	52 mm slave	black
N02 224 080	Fuel tank gauge	4/4	52 mm slave	black
N02 226 210	Engine load	0–100%	52 mm slave	black
N02 270 040	Fuel flow gauge	0–80 l/h	52 mm slave	black
N02 311 054	Engine oil temp gauge	150 °C	52 mm slave	black
N02 311 056	Engine coolant temp gauge	120 °C	52 mm slave	black
N02 311 536	Gearbox temp gauge	150 °C	52 mm slave	black
N02 311 540	Exhaust gas gauge	900 °C	52 mm slave	black
N02 311 544	Gearbox oil temp gauge	120–300 °F	52 mm slave	black
N02 311 546	Exhaust gas gauge	200–1700 °F	52 mm slave	black
N02 311 548	Turbo inlet temperature A	200–1700 °F	52 mm slave	black
N02 311 550	Turbo inlet temperature B	200–1700 °F	52 mm slave	black
N02 311 552	Engine coolant temp gauge	100–250 °F	52 mm slave	black
N02 311 554	Turbo inlet temperature A	100–900 °F	52 mm slave	black
N02 311 556	Turbo inlet temperature B	100–900 °F	52 mm slave	black
N02 413 058	Voltmeter	18–32 V	52 mm slave	black
N02 413 066	Voltmeter	8–16 V	52 mm slave	black
N02 311 542	Engine oil temp gauge	100–300 °F	52 mm slave	black

For further information about VDO visit the website: www.vdo.com

Siemens VDO Trading GmbH
Kruppstraße 105
60388 Frankfurt am Main
Germany
Tel.: + 49 69 408 050
Fax: + 49 69 4080 5144
E-Mail: marine@vdo.com

Errors and omissions excepted. Subject to modification.

VU23-0015-08 352 02

VDO Dayton and VDO are proprietary names of Siemens VDO Automotive AG.

www.vdo.com