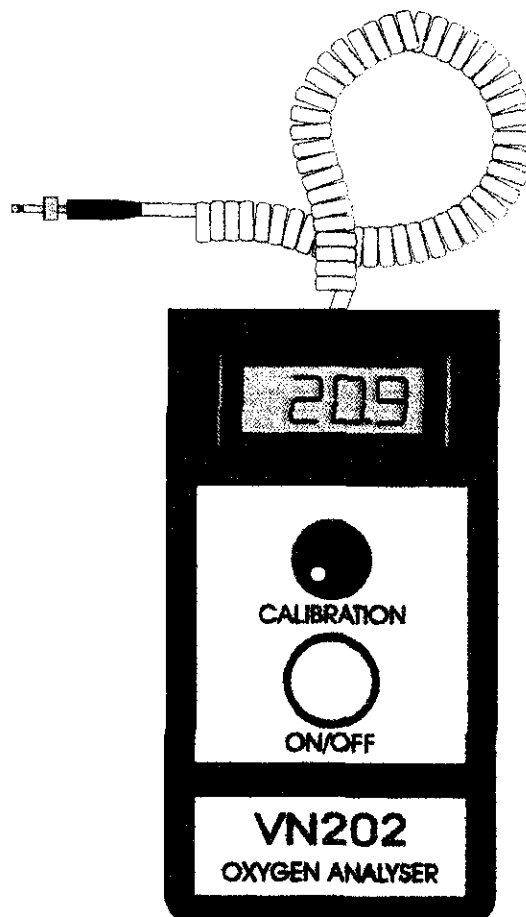


The Vandagraph VN202 Oxygen Analyser

This small lightweight hand held instrument has been specifically designed for the diving environment by divers regularly using Nitrox who have over 25 years experience of Oxygen monitoring instrumentation in the health-care industry.

The VN202 utilises this experience into an analyser offering the diver ease of use, accuracy, reliability, and flexibility.

● degree of 'waterproofing' has been achieved by using special switches and controls. The electronics have been tropicalised against sea water and internally encapsulated in silicon rubber. Although the VN202 cannot always be guaranteed to be 100% waterproof it should survive exposure to severe splashing encountered by divers if care is taken to dry it out.



The VN202 uses the tried and tested Teledyne R-17 sensor. With a response time of 10 seconds (usually less than 6 seconds) this sensor has an expected life of 48 months in air and 10 months in 100% Oxygen. The jack socket connector allows the user to exchange sensors without entering the instrument and the locking ring prevents sea air and water entering the sensor and causing corrosion. The coiled cable enables the VN202 to measure Oxygen with several methods. A restrictor and Tee piece is available for connection directly into a DIN thread or an A-clamp DIN thread adaptor. The sensor alone can be used successfully in a plastic bag with holes. An automatic switch off (which can be factory disabled) extends the battery life. All diving equipment is used in a hostile environment and is subject to accidental damage. If the VN202 does fail (including being run over by a trailer) a replacement service exchange unit, excluding sensor will be shipped to you on receipt of the damaged unit at a low price which will not exceed 30% of the current list price of the complete instrument.

Advantages of the VN202 over other Oxygen Analyzers:

External Sensor

Sensors have two membranes and the sensor requires ambient pressures on the rear to equalize pressures. Sensors respond to Partial Pressure changes so any build up of pressure inside the sensor will appear as an increased electrical output.

The remote sensor is easily changed by the user. To many people the sensor is the least understood and therefore the first thing to be suspect when things go wrong. VN202 sensors can be quickly exchanged without opening the instrument case. No tools are required. The user can change sensors in seconds.

The Analyzer is always vulnerable during measurement. Single handed calibration can be difficult in certain diving activities. The lightweight sensor can be left on the cylinder and the analyzer can be laid on a nearby surface allowing both hands to be free.

Moving gas always generates pressure which is interpreted by the instrument as an Oxygen percentage so ideally the calibration and measurement should always be made in a still gas.

This is the reason for advising the use of either the DIN Kit or a Plastic bag with small holes. Any system with a restrictor and continuous flow requires a constant pressure to produce constant flow. This flowrate must also be used during calibration in air for true accuracy. Most of the currently available flow restrictors depend on their ability to reduce the flow to between 0.5 and 2.0 Ltr per minute either direct from the cylinder or from the direct feed.

With either method time is required to achieve an accurate measurement

1. Flush system out with air or the recommended time (a minimum of 30 secs)
2. Connect the cylinder to be measured
3. Flush out with gas for recommended time
4. Calibrate in Air to check calibration has not changed
5. Long periods in high flow rates will effect the temperature control on the sensor causing drift.

Auto switch off on the VN202:

Attention during measurement is rightly concentrated upon accuracy and correct use. Auto switch off removes one more problem for the diver. A by-product is increased battery life.

Instruction Booklet supplied with the VN202:

This booklet is specifically written for divers and gas mixers.

Carrying/Storage Case

This is the safest place to carry and store the Oxygen analyzer and its accessories

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