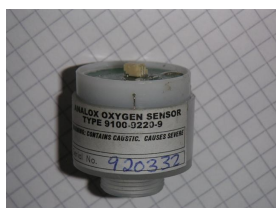


Rationale for Vandagraph EOII sensors

There are two Analox sensors for the EOII analyser. Unfortunately both have the same part number although a Reference Number may be different.

Analox part number is 9100-9220-9



One uses a small JST socket and has a high output 25mV+/- 2mV. In Air

Analox offer a kit SA2EII9B

The Vandagraph equivalent is the R-33DE.

This is constructed using VM3COP40.13 R-33DE sensor assembly



The other 4.5 mV+/- 1mV 7mV- 11mV some very high output sensors may not calibrate down to 21% due to analyser tolerances so far unproven

The Vandagraph equivalent is the R-22DEM

This is constructed using VM3COP40.14 R-22DEM sensor assembly

The outputs required to drive the analysers has been checked with a Microcal Four analysers have been tested. The first was tested with the Microcal open circuit. And was tested over a range of readings. Serial number unknown, A Further three were tested one serial number unknown.

In order to be able to match a Teledyne sensor one analyser was tested with a 4k7 and then a 1k resistor across the Microcal output. The difference was negligible so a 4K7 (or 5K6) will be used in any further tests. 4K7 was chosen as the output of an R-22 can be halved using 2 off 4K7 resistors giving the R-22 the ideal input impedance of 10K.

The analyser tested without an output resistor shows a slightly higher curve but still within the tolerance of the sensor output ranges.

