

March 2, 2005

Stephen W. Nixon
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United Kingdom, BD20 7DT

Dear Mr. Nixon

This letter is to address your questions about the compatibility and testing of our dual cathode oxygen sensor model # PSR-11-915-2 with Drager sensor model # 6850645.

1) Compatibility:

To my knowledge Drager does not publish a specification sheet for their sensors, as most of our competitors do. In developing our PSR-11-915-2 specification we contacted the Drager service organization and received different responses regarding the signal output of their dual cathode sensor. The signal outputs along with the characteristics are the critical elements of a sensor. Therefore we took a conservative approach and selected the tightest of parameters given.

We acquired an adequate number of the Drager sensor model# 6850645 in order to characterize the signal outputs and dimensions.

Having developed the **attached specification**, we have successfully field-tested the sensors in the following Drager equipments: *Narkomed Anesthesia machines, Evita's, Babylog respiratory ventilators, and I8000 incubator.*

2) Testing the outputs of each cathode:

- 1- During production each cathode of our PSR-11-915-2 sensor is tested in current output, and the specification per each cathode is 23-30uA.
- 2- Once a PCB is installed the current output changes to mV and the acceptable range per each cathode is 114-160mV.
- 3- We randomly test batches of our PSR-11-915-2 for linearity. We first install the sensor in our testing device and let the sensor sit between 10-15 minutes in room air for stabilization. Next we calibrate each cathode @ 21% and then introduce 100%O2 to make sure that the cathodes reach 100%± 2% and vice of versa.

If you have any questions regarding the above mentioned, please contact us.

Regards,


Fernando Murillo
Medical Sales Manager
Analytical Industries Inc.