Re: Here is a possible solution.

1 message

Roger Bell <rabrabart@yahoo.co.uk> 19 December 2020 at 19:44
To: "ryan.swaine@vandagraph.co.uk" <ryan.swaine@vandagraph.co.uk>

Hello Ryan, Thank you for the picture and calibration advice. I'm sure I can do that.

I will order your VN202 MK II oxygen analyser with manual switch off,

Part number 7910110. as shown on your website purchase page at £140 / £168 inc VAT.

It may be best due to Christmas post if I pick it up, though I cannot come into any public buildings due to Coronavirus being deadly to me for sound medical reasons.
I can use a credit card or cash as required, prior to being given the device outside.
My brother (ex golf professional) already has the parts for the nitrostick waiting for me to pick up. I would like to get it working quickly..
I will ring you on Monday 'am' to find out how best to proceed.

Best Regards Roger Bell.

On Friday, 18 December 2020, 15:31:20 GMT, Ryan Swaine <office@viamed.co.uk> wrote:

Hi Roger

I am sorry, please find the picture attached.

With regards to the pressure issues, I would run air through the stick and calibrate the analyser to 20.9 and then add the required O2. Calibrating and measuring in the same conditions will ensure that there is no discrepancy due to pressure.

Best regards

Ryan

Ryan Swaine
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On Fri, 18 Dec 2020 at 12:40, Roger Bell <rabrabart@yahoo.co.uk> wrote:

> Hello Ryan, I was just getting rid of any reading drift due to lowered pressure at the botton of the nitrostick it being a pp device and anything to do with flow v static gas variation. Without testing /experience you just don't know the magnitude of effect, so have to take a more complicated elimination approach in design.
> I am sure you are right if that is the common configuration.
>
> I couldn't find an attachment photo. Is the plastic dome mentioned during our phone conversation, the diverter and is the blue sample chamber now irrelevant (shown in your original email).
>
> Regards Roger Bell
>
> On Friday, 18 December 2020, 11:58:26 GMT, Ryan Swaine <office@viamed.co.uk> wrote:
>
> Hi Roger
>
> I have been thinking about your design and I believe it may be more complicated than it needs to be. Nearly all of the nitrox sticks I have come across have the sensor plugged in directly to the base of the stick. I have attached a picture as an example.

I understand you are worried about restricting the flow into the compressor, but I have never known this to be a problem. If you use a flow diverter on the sensor and design the hole so that only the tip of the flow divertor is in the gas flow, I think this would be a better solution.

Please let me know your thoughts or if you have any questions.

Best regards

Ryan

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On Thu, 17 Dec 2020 at 10:46, Roger Bell <rabrabart@yahoo.co.uk> wrote:

> Hello Ryan,
> I have attached a drawing.of something I could build on a board with your meter sensor and t piece.
>
> What do you think?
>
> Regards Roger Bell