

## Specification Datasheet - 0110049

Viamed

R-49V Oxygen Sensor



### Specifications

|                                 |                                                                                                                  |
|---------------------------------|------------------------------------------------------------------------------------------------------------------|
| Part number                     | 0110049                                                                                                          |
| Model                           | R-49V                                                                                                            |
| Output                          | 13 mV – 16 mV                                                                                                    |
| Output connector/connection     | 3 pin Molex 22-11-1031                                                                                           |
| Input connector/connection      | M16 x 1                                                                                                          |
| Input O ring                    | Yes                                                                                                              |
| Range                           | 0 – 100% oxygen                                                                                                  |
| Accuracy                        | < 1% volume oxygen when calibrated in 100% oxygen                                                                |
| Influence of pressure           | Output proportional to change in oxygen partial pressure                                                         |
| Linearity error                 | < 2% relative                                                                                                    |
| Warm up time                    | < 30 minutes after sensor installed                                                                              |
| Zero offset voltage             | < 150 UV oxygen reading in 100% nitrogen @ 25°C after 5 minutes                                                  |
| Cross interference              | Meets requirements of EN ISO 21647                                                                               |
| Response time (t90)             | < 12 s for 90% of final value.                                                                                   |
| Operating humidity              | 0 – 99% R.H. (non-condensing).                                                                                   |
| Influence of humidity           | - 0.03% relative per % R.H. at 25 °C.                                                                            |
| Influence of mechanical shock   | < 1% relative after fall from 1m                                                                                 |
| Operating temperature range     | 0 – 50 °C                                                                                                        |
| Storage temperature             | -20 to +50 °C                                                                                                    |
| Recommended storage temperature | +5 to +15 °C                                                                                                     |
| Temperature compensation        | Integrated NTC thermistor                                                                                        |
| Temperature compensation error  | +20 to +40 °C: 3% relative<br>0 to +50 °C: 8% relative                                                           |
| Nominal sensor life             | > 1,000,000 % oxygen hours                                                                                       |
| Long term output drift          | < 1% volume oxygen per month, typically < -15% over sensor lifetime.                                             |
| Recommended load                | > 10 KΩ                                                                                                          |
| Shelf life                      | 24 months                                                                                                        |
| Weight                          | 28 g                                                                                                             |
| Flow diverter                   | Not included                                                                                                     |
| Standards                       | Meets with requirements of EN ISO 21647. Designed and manufactured according to EN ISO 9001:2008 & EN 13485:2007 |
| Packaging                       | Blister/Blister card                                                                                             |
| Warranty period                 | 15 months from date of sales invoice                                                                             |

All specifications are applicable at standard conditions: 1013 mbar, 25°C dry ambient air.