

automotive

# 'R' Series O<sub>2</sub> Sensors

**Range includes:**

R-17A-LV

R-17A, R-21A, R-22A

R-17AV, R-22AV

R-17AH, R-22AH

As used by most automotive emissions testing equipment manufacturers.



- PTB, BAR90, BAR97 and CE product approval
- Accurate measurement performance
- Exceeds industry requirements
- Long life in the field
- Fast response time
- Consistent linear response
- Stable zero
- Choice of connector and thread options

The 'R' series of Oxygen Sensors from Viamed feature special Rhodium plating on the cathode resulting in greater resistance to the effects of CO<sub>2</sub>, increasing the life of the sensor when used in exhaust emissions testing.

 **VIAMED**

# 'R' Series O<sub>2</sub> Sensors

## Sensor models

R-17A-LV, R-17A, R-21A, R-22A, R-17AV, R-22AV, R-17AH, R-22AH

## Output range

A-LV Model:	7 - 11.5 mV
A Models (R-17A, R-22A):	7 - 13 mV
A Model (R-21A):	9 - 14 mV
AV Models:	9 - 13 mV
AH Models:	10.5 - 13.5 mV
Outputs in air at 25°C, sea level	

## Range

0 to 100% O<sub>2</sub>

## Resolution

Better than 0.1% O<sub>2</sub>

## Linearity

± 1% of full scale at constant temperature and pressure

## Expected life

36 months at 20.9% O<sub>2</sub>, 25°C, 50% RH

## Response time

30 seconds or less 20.9% O<sub>2</sub> to 0.1% O<sub>2</sub>:  
(actual response of sensor is < 6 seconds 0 to 90% O<sub>2</sub>)

## Humidity

0 - 99% RH, non-condensing

## Operating temperature range

0°C to +50°C

## Temperature compensation

± 5% of reading over operating range  
(at thermal equilibrium)

## Cross interference

Less than 0.1% O<sub>2</sub> response to:

15% CO <sub>2</sub> , balance N <sub>2</sub>
7% CO, balance N <sub>2</sub>
3000 ppm NO, balance N <sub>2</sub>
3000 ppm Hexane, balance N <sub>2</sub>

## Connectors

3 pin Molex  
(R-21A, R-22A, R-21AV, R-22AH)  
Switchcraft mini phone jack  
(R-17A-LV, R-17A, R-17AV, R-17AH)

## Approvals

PTB, BAR90, BAR97, CE  
EN60601 (89/336/EEC)

## Connecting thread

R-17A-LV, R-17A, R-17AV, R-17AH	Metric Thread, M16
R-21A, R-21AV	American Thread, 5/8-24 UNEF
R-22A, R-22AV, R-22AH	Metric Thread, M16



**R-17A-LV**  
0110107



**R-17A**  
0110117



**R-21A**  
0110121



**R-22A**  
0110122



**R-17AV**  
0110127



**R-22AV**  
0110132



**R-17AH**  
0110137



**R-22AH**  
0110142

Manufactured By



Specification Subject to Change

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