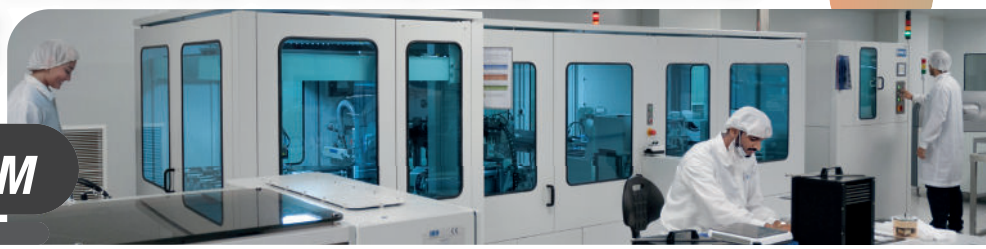
FAE

WE DEVELOP CUSTOMIZED
ELECTRONIC SENSOR SOLUTIONS

OXYGEN SENSOR

+ 20 YEARS OF EXPERIENCE MANUFACTURING CERAMIC SENSORS



+850 PART NUMBERS | **+25k** APPLICATIONS | **+525M** V1O

O2 sensors are an essential component of any vehicle which, because of its operation, emits all sort of gases. It's currently used for internal combustion vehicles to reduce harmful particulate emissions. It's going to be incorporated in hydrogen-powered electric vehicles as it produces a chemical reaction that expels oxygen and water.

It continuously detects the residual oxygen value in the exhaust gases, allowing the Control Unit (ECU) to adjust the air-fuel mixture at injection to the optimum value. In this way, the lambda sensors regulate the air/fuel ratio to improve efficiency and reduce all the vehicle's pollution.

FAE with its Planar Multilayer Ceramic technology has achieved the goal of integrating in one solid the element of the sensor and its calefactory and reducing its size compared to conventional lambda probes. These improvements allow us to reduce the heating power and the time needed to reach the operating temperature (700º Celsius).

Technology	Titania binary	Zirconia binary			Wide Band		
Sensing material	Titanium Dioxide (TiO_2)	Zirconium Dioxide (ZrO_2)			Zirconium Dioxide (ZrO_2)		
Working principle	Resistive	Electrochemical			Electrochemical		
Output signal	Voltage	Voltage			Current		
Thread	M12 / M18	M18		M12	M18		
Size	Standard	Standard		Mini	Standard		
Air reference	X	√	X	√ X	√	X	√
Number of wires	3-4	1-2	3-4	4 2 4	5		4
Heating element	√	X	√	√ X √	√	√	√



Cable
Fluoropolymer cable coating with high performance for extreme temperatures.

Joint
Degree of protection water resistance IP68, capable of functioning in continuous water immersion.

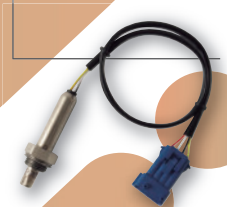
Protective tube

Ceramic clamp
Own manufacturing. Connect the cables with the sensor and prevent them from disconnecting.

Ceramic insulators
It ensures tightness and prevents contamination that cements the sensor and isolates it from vibrations and shocks.

Sensor
Multilayer ceramic planar technology. Formulation of inks and ceramics. Individualized calibration. Integrated heater for ultra-fast ignition.

Oxygen Sensor
Titania



Oxygen Sensor
Zirconia
Planar Technology



Mini



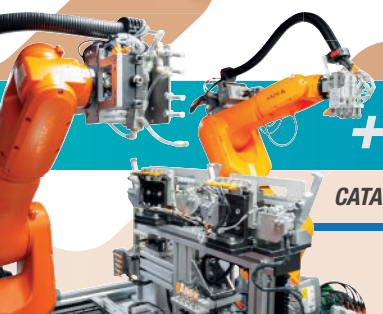
XFour
NEW
COMING SOON

Oxygen Sensor
Wide Band



Air Fuel Ratio





+11 CATALOGUES | **+75** YEARS | **+180M²** ESD ROOM | **+1000M²** CLEAN ROOM | **+5.000** PART NUMBERS | **+12.000M²** BARCELONA

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