

O₂ Sensor

WB-O2 Sensor is a compact device designed to monitor air-combustible mixture in Otto cycle motors. It is prepared to use the standard lambda Bosch wide-band 4.2 or 4.9, according to user needs.

Its OLED 1.54" display shows lambda value. Additionally, an analog 0-5V output allows the user to connect the sensor to any data logging device such as an ECU.

On the other hand, the device can show detailed error detection codes to the user including lambda sensor self-test.

The use of a standard sensor guarantees a wide range of applications and the self-test insures an extraordinary performance either in accuracy or repeatability.



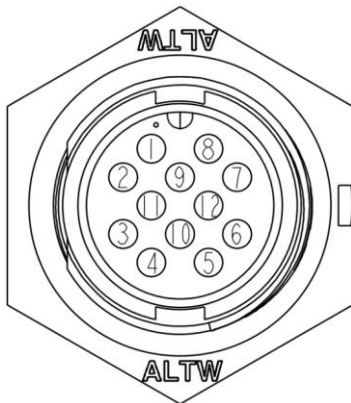
Specifications

Power supply voltage	+9 a 24 VDC
Current	80mA typical
Oxygen sensor	Bosch Wideband 4.2 or 4.9
Analog output	0 - 5V (Corresponding to 0.65λ-2.5λ)
Lambda readings	0.65 λ – 9.99 λ
Operating Temperature	-25°C a +70°C
Dimensions	59x49x18 mm

Connection

Connector

Protection	IP67.
Contact material	Gold alloy
Body material	PA, Nylon, Fiberglass
Connector type	bayonet
Maximum current	2A
Operating temperature	-40°C a +105°C



Pin Out

Pin number	Function description	Function
1	Push button	Pin GND
2	Push button	Switch
3	Sensor O ₂	Heater -
4	Sensor O ₂	Heater +
5	Battery -	GND
6	Battery +	VCC
7	Sensor O ₂	IA
8	Sensor O ₂	IP
9	Sensor O ₂	UN
10	Analog +	
11	Sensor O ₂	VM
12	Analog -	GND Lambda

Error code

Value	Display	Meaning
0xCF	Short-circuit	Short-circuit to GND IA IP
0xEF	Short-circuit	Short-circuit to Vcc IA IP
0xF3	Short-circuit	Short-circuit to GND UN
0xFB	Short-circuit	Short-circuit to Vcc UN
0xFC	Short-circuit	Short-circuit to GND VM
0xFE	Short-circuit	Short-circuit to Vcc VM
0x7F	Sensor out of order	The sensor is not connected.