SPILBA

Data Sheet AIR/FUEL RATIO Narrowband

Datasheet V1.0





Introduction

Knowing the air-fuel mixture ratio is fundamental to achieve maximum performance in high-performance engines. Poor carburetion can result in a rich mixture, where fuel consumption is very high and performance is not optimal. On the other hand, a lean mixture can cause pre-detonation (knocking), which, if repeated for a few seconds, will alter the pressure and temperature in the chamber, causing irreversible damage to the engine.

NARROWBAND SPILBA is designed to measure the air-fuel ratio present in the exhaust gases of a four-stroke engine. Its sleek design, ultra-compact size, and high-brightness LEDs make it ideal for referencing the mixture range.

NARROWBAND SPILBA is compatible with 1, 2, 3, and even 4-wire probes. Below is a reference table with typical color codes and their differences:

Lambda Probes	Description
	- Black – Signal
	- Black – Signal - Grey – GND
	 Black – Signal White – Heater (+12 Vcc) White – Heater (GND)
	- Black – Signal - White – Heater (+12 Vcc)
	- Grey – GND

Probes	
Compatible Types	1, 2, 3 o 4 cables
Maximum exhaust temperature	850 ºC
Normal temperatura range	150 – 800 ºC

Measurements	
Lambda	0.5 - 1.2
Air/Fuel Ratio	7.5 – 17.64

LEDs	
Lean	4
Stoich.	10
Rich	6