

CUSTOMIZED IGNITION SYSTEMS

CAPACITIVE AND INDUCTIVE IGNITION SYSTEMS

- Supply voltage: 12V- and 24V system
- Trig interface: Customer specific
- Customized design with generic coil body
- Replaceable extension in rigid or flexible design
- Fixed or serviceable spark plug boot
- Designs for both M14 or M18 spark plugs
- Optional built-in Noise suppressor
- Coil on Plug or Coil on Side designs
- More than 8 million coils produced



CAPACITIVE

- Spark voltage monitoring
- Misfire detection
- Peak pressure location
- Knock detection
- Pre-ignition detection
- Up to 9 coil driver outputs on one ignition controller



INDUCTIVE

- Built-in ignitor option
- Optional spark current monitoring

CUSTOMIZED EXTENSION SOLUTIONS



Rigid hard plastic extension with serviceable boot. Boot on inside of extension.



Rigid hard plastic extension with serviceable boot. Boot on outside of extension.



Flexible rubber extension with serviceable boot, SEM patent.



Rigid rubber extension with serviceable boot.



Spark plug



Spark plug boot
Customized



Extension
Customized



Coil body
Generic



Housing + connector
Customized

SEM, Swedish Electro Magnets, is a leading global supplier with over 100 years of industrial experience and deep knowledge of electromagnetic applications.

We produce advanced alternative fuel ignition systems, injector stators and linear position sensors for stationary engines and commercial vehicles, and small engine systems for premium forestry hand tools.

GREEN IGNITION WITH PRECISION



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ALTERNATIVE FUEL
IGNITION SYSTEMS



GREEN IGNITION WITH PRECISION

For over 20 years, SEM has been innovating and producing ignition systems for engines powered by alternative fuels such as biogas, natural and hydrogen gas. These products have become a preferred choice for manufacturers delivering products to countries that have adopted tough environmental policies.

Market leading ignition systems for alternative and sustainable fuels ensure a cleaner and greener environment.

With increasing environmental awareness globally, demand for alternative fuel engines is growing rapidly. We are recognized experts in this field, and provide ignition systems tailored and optimized for specific needs in various types of commercial vehicles as well as engines used in stationary applications such as energy generation.

Combustion diagnostics and monitoring are an embedded and crucial element in our solutions that secure precise ignition performance – delivered by SEM's own proprietary technology. With spark voltage monitoring, worn

or damaged spark plugs can be detected. The information can then be used to predict the remaining spark plug life, enabling service-on-demand. Ion-sensing is used to monitor engine combustion, enabling the ignition system to dynamically manage misfire detection, combustion phase estimation, pre-ignition detection and knock detection. These features also lead to reduced fuel consumption, longer duration between services and combustion stability.



GO ECONOMICAL

Lower service frequency, minimized spark-plug wear and considerable reductions of fuel consumption by advanced combustion diagnostics, monitoring and control.

GO GREEN

Substantial reductions of hazardous emissions and particles, NO_x and HC. CO₂ emission free with hydrogen combustion engines.

GO POWER

Significantly increased engine power and efficiency with Peak Pressure Location functionality.