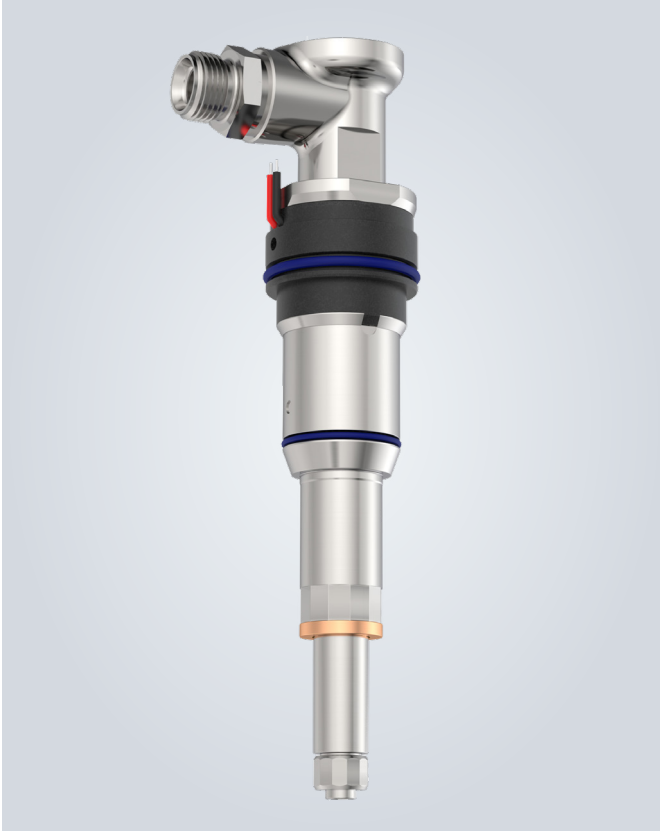


Short description

Hydrogen injector LDI



The injector for hydrogen direct injection LDI has been designed to enable zero greenhouse gas emissions in mobile off-highway applications in the future. Direct injection allows performance characteristics such as power and driving behaviour similar to those of a diesel engine. The LDI injector ensures a consistent and efficient combustion process through stable injection rates. This consistency optimises engine performance and operation stability. Due to the design, a precise and stable minimum volume control is possible for smooth engine behaviour. Utilising advanced sealing technologies, the LDI is completely leakage-free, enhancing both safety and combustion stability. Its flexible and robust construction makes it suitable for a wide range of engine sizes and power levels, characterised by high adaptability and reliability.

Features

- Robustness against high vibration values and various hydrogen purity classes
- Direct actuated injector
- Platform designed for 12 g/s @ 30 bar
- Gas-tight design
- Good dry running capabilities, no lube oil
- Hermetically separated solenoid drive concept
- High flexibility due to customisable diffuser caps
- Compact injector dimensions, similar to diesel injectors
- Top-feed with axial or radial inlet

Technical information

Max. pressure	30 bar
Flow rate	12 g/s @ 30 bar
Min. quantity capability	~ 2 mg/stroke
Injector configuration	Top-feed with axial or radial inlet
Hydrogen fuel temperature	-40 °C to +120 °C