



Combustion



Hybrid

Explore our Technologies

Hydrogen Direct Fuel Injection

for Passenger Cars and Commercial Vehicles

Hydrogen Direct Fuel Injection

Hydrogen propulsion based on existing technology and able to leverage the available fuel supply network, is an attractive and fast-to-market solution for powertrains that contributes to the rapid decarbonization the World needs. It requires only slight adjustments to the internal combustion engine while still meeting both CO₂ targets and future emissions regulations. BorgWarner can supply customers with components as well as with complete turnkey applications.

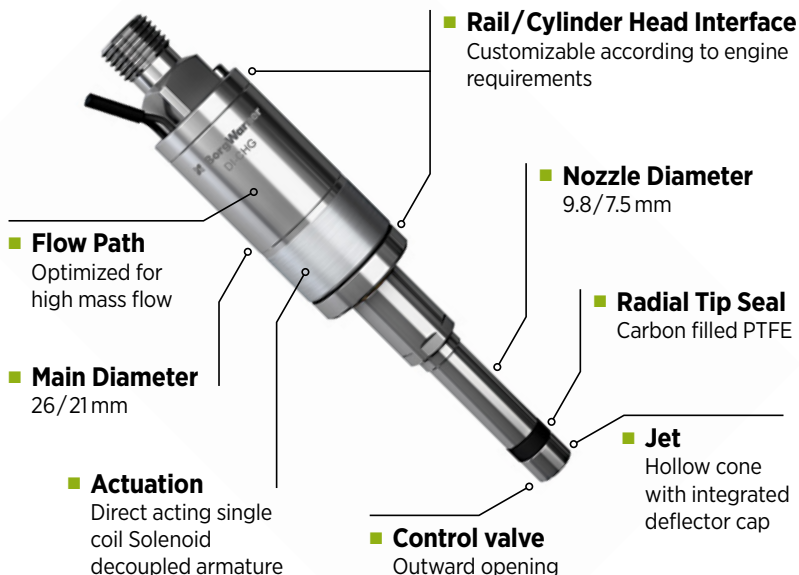
For low pressure applications, BorgWarner provides the PFI H₂ Injector. This injector is an evolution of the serial gaseous fuel injector upgraded for higher flow and reliable to operate with hydrogen.

Specifications

FEATURE	DI-CHG 10	DI-CHG 15
Static flow range [g/s]	Up to 10 at 40 bar (up to 60 kW/cyl)	Up to 15 at 40 bar (up to 90 kW/cyl)
Operating pressure [bar]	Up to 40	
Multiple injection [#]	≥ 2	
Maximum OD [mm]	21	26
Tip diameter [mm]	7.5	9.8

Features and Benefits

- Nominal pressure range: up to 40 bar
- Compatible with CNG and H₂ gases
- Accurate and repeatable delivery
- Multiple injection capability
- Optimized magnetic performance for minimum electrical consumption
- Mixing control – Nominal hollow cone jet but can be customized with integrated deflector cap
- Fuel supply connection: either o-ring or screwed metal to metal interface
- Designed and developed for direct injection
- Can also be mounted in the inlet port
- “Soft opening” and “soft landing” ECU control strategies for low noise
- Compatible with standard OBD strategies



For Additional BorgWarner Information:
borgwarner.com

