Explore our Technologies
Hydrogen Fuel Injector (DI-CHG)
for Passenger Cars, Light and Heavy Commercial Vehicles
Hydrogen (H₂) Fuel Injector

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 medium pressure direct injection in hydrogen applications BorgWarner provides the DI-CHG injector, that meets the needs of powertrains with high flow capacity, optimized mixing, flexible packaging and advanced controls.

### Specifications

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

### 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