

Delphi

Explore our technologies

COMMON RAIL DIESEL INJECTORS

For Heavy Duty Commercial Vehicles





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COMMON RAIL DIESEL INJECTORS

PHINIA's F2 and F3 family of injectors are designed for heavy duty diesel on and off-highway applications up to ~720kW (~120kW/cyl). Supporting a range of cylinder head layouts and including options for remote or on injector high pressure pumps in a range of different configurations.



Features

- In production at 2,500bar, extendable to 2,700bar
- Can be customized to suit a range of engine applications
- Validated for 1.6Mkm lifetime

Design Features

- 3 way control valve for response and efficiency
- Miniaturized control paths for high efficiency multiple injection
- Valves with enhanced wear resistant coatings
- Very high temperature nozzle material

Performance

- 5-10 Cd controlled nozzle holes, 1.3-2.8l/min @100bar
- Square or ramped injection rate options
- Up to 10 injections per cycle
- 250bar minimum injection pressure

Benefits

- Ø1mm valve technology to minimize leakage to levels equivalent to statically leakless
- Resistance to worldwide fuels
- Supports options for closed loop control of injection quantity via onboard sensor, without the need for additional wiring
- Anti-tampering options for on board automatic trim code communication