

Diesel Emissions

Fluid Control Solutions for PM and NOx Reduction

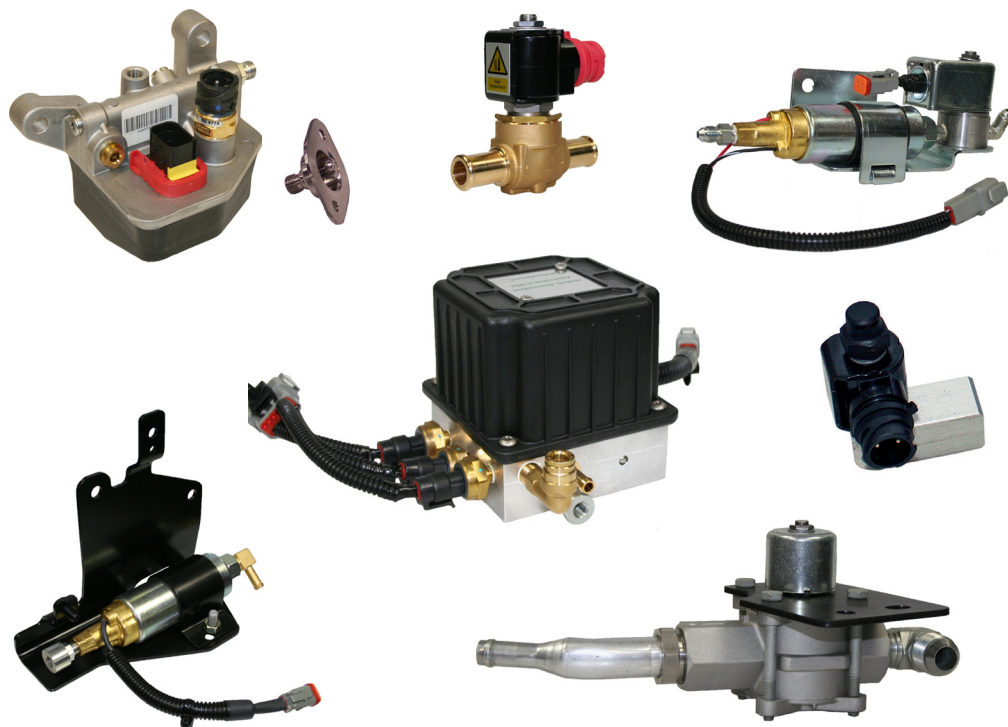


Ongoing global diesel emissions standards for particulate matter and nitrogen oxides require innovative and cost-effective fluid control solutions.

Parker's **hydrocarbon dosing system** eliminates the need for injector cooling lines while offering unmatched atomization for improved fuel evaporation. It reduces unwanted fuel coking at the nozzle by utilizing air purge sequencing. The valve control manifold can be mounted away from high-temperature and high-vibration exhaust areas to improve reliability. Fewer components and ease of assembly help optimize system cost savings.

Parker's **active thermal regeneration** solutions provide precise atomization and fuel delivery for burner system applications. They offer fully integrated, tested, and calibrated components resulting in smaller packaging envelopes, improved reliability, and lower installed costs.

Parker's **solenoid valves** for air and coolant control enable **SCR systems** to function in a wide range of applications.



Contact Information

Parker Hannifin Corporation
Fluid Control Division
95 Edgewood Avenue
New Britain, CT 06051

phone 860 827 2300
fax 860 827 2384
FCDemissions@parker.com

www.parker.com/fcd

Features & Benefits

- Custom Engineered Solutions
- Precise Atomization & Fuel Delivery
- Lower Installed Cost
- Less Maintenance
- On & Off Road Applications
- Fully Integrated, Tested & Calibrated Components
- Small Packaging Envelope
- Improved Reliability



ENGINEERING YOUR SUCCESS.

General Specifications



The Air Atomization Module(AAM) manages the fuel, atomization air, and purge air that is sent to the burner. The module consists of the following key components:

- Master Air Shutoff Solenoid Valve
- Air Atomization Solenoid Valve
- Pressure Balanced Air Pressure Regulator
- Precision Bleed Orifice
- Nozzle Air Pressure OBD Transducer
- Fuel Pressure OBD Transducer
- Fuel Back Pressure Regulator
- PWM Fuel Injector(Application Specific)



The Fuel Delivery Module consists of a positive displacement gerotor style fuel pump and a safety shutoff valve. The pump has the ability to draw from a fuel tank or can be used as a booster pump in the engines return fuel circuit. The module consists of the following components:

- Brush DC commutator coupled to a nonregulated gerotor pump.
- Safety Shutoff Solenoid Valve
- Optional Boost Pressure Transducer
- Customer Specific Mounting Bracket , Fittings and Electrical Connectors.



The SCR Air Valve delivers a preset airflow to the urea doser while the SCR Coolant Valve allows proper heating control for the urea in low temperature conditions. The valves offer the following key benefits:

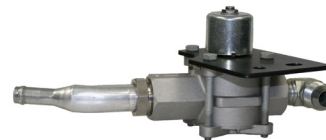
- Customized Valve & Electrical Components
- Adapted to International Anti-Pollution Standards
- Euro4/Euro5/Euro6/US10 for NOx Reduction
- Compact Solutions



* Patent Pending

The Hydrocarbon Dosing System* controls the dosing of diesel fuel into the exhaust upstream of the DOC to allow efficient regeneration of the DPR. The system consists of the following key components:

- Diesel Dosing Solenoid Valve
- Air Purge Solenoid Valve
- Safety Fuel Cutoff Solenoid Valve
- Thermal Relief Valve
- Fuel Pressure OBD Transducer
- Air & Fuel Check Valves
- Fuel Atomization Nozzle Without Cooling Lines
- Customer Specific Fittings & Electrical Connectors



The Integrated Combustion Air Valve (CAV) controls the air flow provided to the burner. The air is generally provided by a Variable Geometry Turbocharger(VGT). The module consists of the following key components:

- Direct Lift Pilot Operated Solenoid Valve Nozzle
- Exhaust Check Valve
- Optional Boost Pressure Transducer
- Inlet Hose Connector
- Outlet High Temperature Hose Assembly (optional)