

SCR METERING SOLENOID PUMP



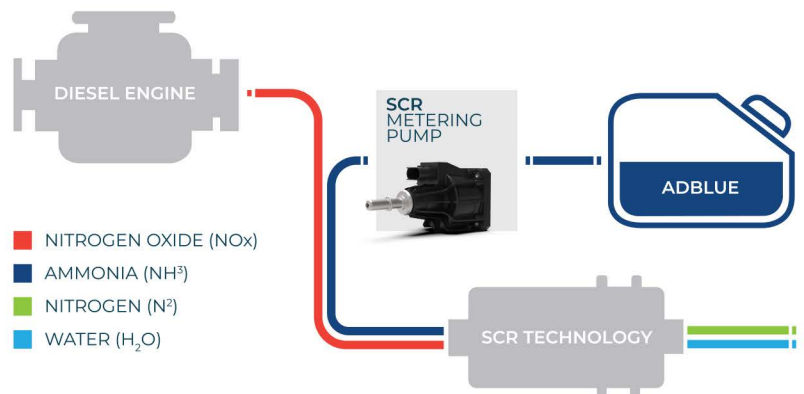
APPLICATION



AUTOMOTIVE
SCR- Selective
Catalytic
Reduction

WHAT IS SCR? THE SCR PROCESS

The **SCR** (Selective Catalytic Reduction) process is a technology used to **reduce nitrogen oxide (NOx) emissions** from diesel engines. It involves the use of a catalyst, often based on ammonia (NH₃), which selectively reacts with the nitrogen oxides present in the exhaust gases, converting them into nitrogen (N₂) and water (H₂O), which are less harmful substances to the environment.



GENERAL OVERVIEW

The **WUP305** pump is a solenoid-driven piston metering pump that operates on **direct current**. It requires **electronic control** unit to send electrical impulses at the frequency determined by temperature and pressure sensors, in conjunction with the NOx detector.

The duty of the WUP305 is to **delivery an accurate amount** of Ad Blue (a mixture of Urea and Demi Water) to a spray nozzle.

STANDARD OPERATING SPECIFICATIONS

- ▤ The nominal flow rate is **65 microliters per stroke**;
- ▤ The required life time is **65K liters of Ad-Blue** (1 Billion of Stroke);
- ▤ At the end of its life time the dosing accuracy must still be within the +/-5%;
- ▤ The pump is submersible, **IP67** and **IP6K9K** approved;
- ▤ The pump shall resist to accelerations up to **50G** without any damage;

SCR METERING GEAR PUMP

APPLICATION



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GA SERIES EAGLEDRIE

OVERVIEW

Micropump's GA Series are the smallest, most compact size and offers the lowest displacement of the suction shoe family of pumps.

PUMP CONSTRUCTION

- Suction shoe style
- Side Port
- Spur gears
- PTFE seal

GB SERIES EAGLEDRIE

OVERVIEW

When you need a low-flow pump that delivers high performance in a small package, the GB Series is an excellent solution.

PUMP CONSTRUCTION

- Suction shoe style
- Stationary shafts
- Two or three helical gears
- O-ring seal

PERFORMANCE SUMMARY

DISPLACEMENT

Gear Set	X21	V21	T23
mL/rev	0.017	0.042	0.092
US gal/1000 rev	0.045	0.01	0.02

MAX RATED DIFFERENTIAL PRESSURE

5.2 Bar (75 psi)

MAX RATED SYSTEM PRESSURE

21 Bar (300 psi)

TEMPERATURE RANGE

-46°C to 177°C (-50°F to 350°F)

VISCOSITY RANGE

0.5 to 1500 cps

PERFORMANCE SUMMARY

MAX RATED DIFFERENTIAL PRESSURE

8.6 Bar (125 psi)

MAX RATED SYSTEM PRESSURE

21 Bar (300 psi)

FLOW RATE AT 5500 RPM

6.4 L/min (1.7 US gpm)

TEMPERATURE RANGE

-29°C to 120°C (-20°F to 248°F)

VISCOSITY RANGE

0.5 to 1500 cps

MAX SPEED

8000 rpm