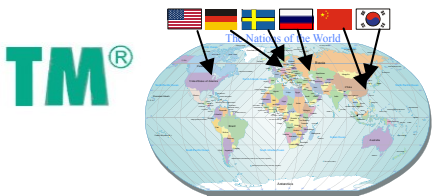
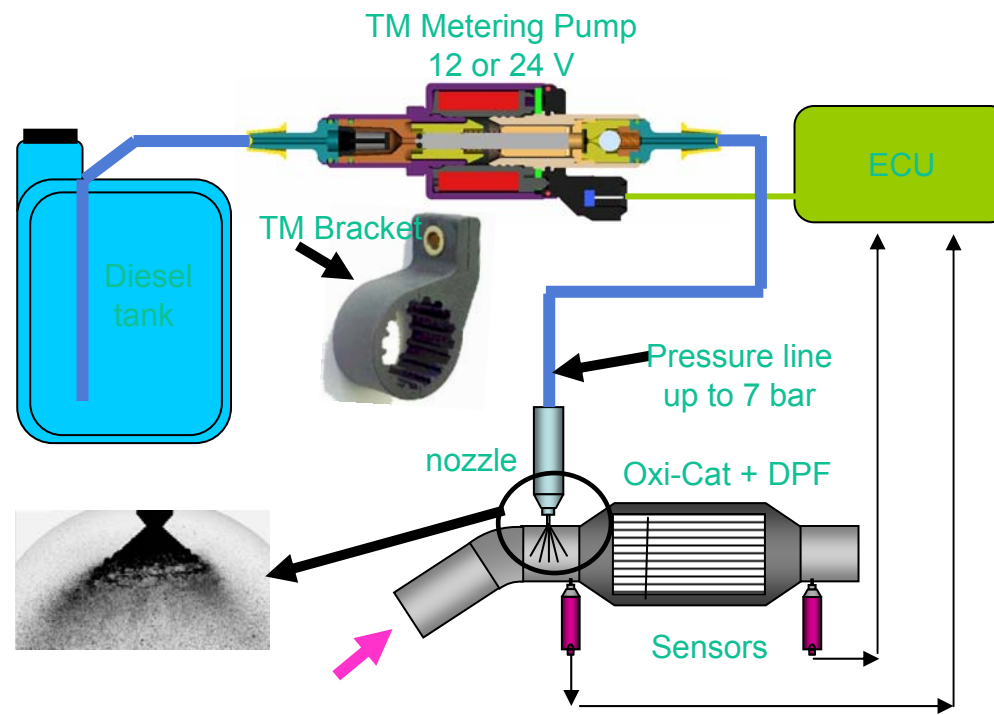


Novel Application of Metering Pump on Diesel Aftertreatment

P-7

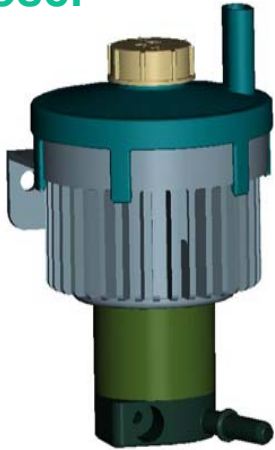
Yi Liu, Ph.D



DPF Active Regeneration

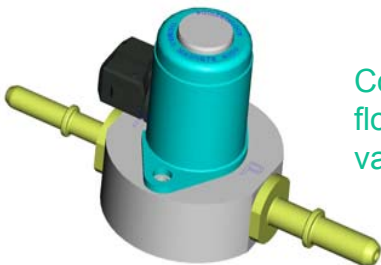
Enabler for Airless SCR

Urea Doser

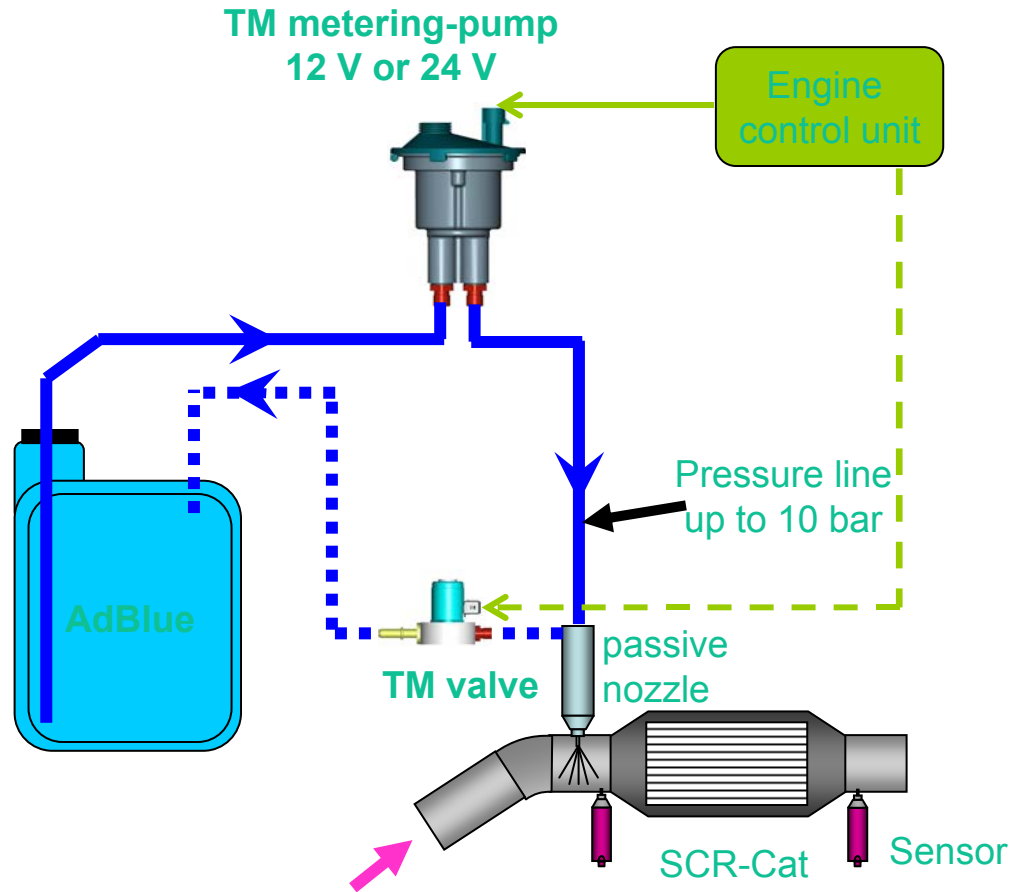


- 5 kg/hour at 10 bar counter pressure
- Durability ~ 1.8 billion cycles, ~ 25,000 hours
- Frequency 0 - 40 Hz, accuracy 1% - 3%
- Self-protection against freezing, self-thawing, self-priming
- 12 /24 V, single electric contact, PWM control
- Optional integration with heating component, temp and pressure sensors, and control unit

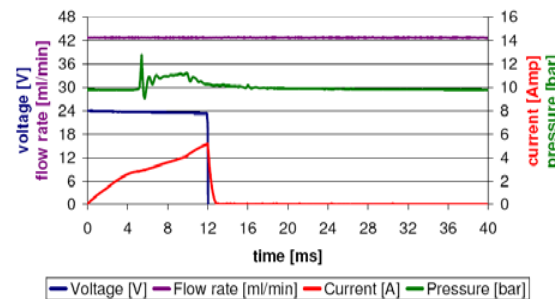
TM®



Cooling and flow control valve



Signal chart of one pump stroke
pump frequency: 25 Hz; switching on-time: 12ms



Thomas
Driven by magnetics