

Euro 5 exhaust emission laws led to the introduction of AdBlue<sup>1)</sup> for trucks and buses. Meanwhile, due to continuously tougher regulations in Europe, most newly registered heavy commercial vehicles are now equipped with an SCR system<sup>2)</sup>.

ELAFLEX supplies a complete range of suitable equipment for this application, see Information 2.13 E.

### Euro 6: A New Challenge

From September 2014, the current Euro 6 emission standard will also apply for new Diesel vehicle models below 3.5 tons. To comply, many cars, vans and light commercial vehicles will have a separate additional tank for AdBlue.

### An Open Issue: The Refilling Method

It is already clear that the separate AdBlue tank will have a volume between 8 to 30 litres and will have an interface (filler inlet) defined by ISO 22241-5.

So far the industry have not made final decisions about the method of refilling. Previously it was assumed that AdBlue would be topped up at the garage workshop as part of the standard service inspection, but recent tests show that prescribed maintenance intervals are too long for most vehicles. Hence there will definitely be a self-service solution.

Special bottles and containers are already available as an interim option at many petrol stations.

However, the industry is looking at a more acceptable and user friendly refilling method by using a forecourt type nozzle integrated onto a Multi-Product Dispenser.

### Field Test: The New Elaflex Nozzle

Since mid 2013, vehicle manufacturers and the oil industry have jointly organised a systematic long term testing programme at some selected public filling stations, in order to gain feasible technical knowledge and evaluate motorist practical experiences.

Based on the requirements of the vehicle manufacturers and oil companies we have constructed the new nozzle type **ZVA AdBlue LV**<sup>3)</sup>. It incorporates a misfilling-proof interface to ISO 22241-5 and a flow rate of not more than 10 l/min.

The prototype of the new nozzle plays an important part in these tests. Technical data see overleaf.



ZVA AdBlue LV

1) Trademark of the German Association of the Automotive Industry (VDA) for Urea solution 32,5% to ISO 22241/DIN 70070. Synonyms: Acqueus Urea Solution "AUS 32", Diesel Exhaust Fluid "DEF" (USA), Agente Reductor Liquido Automotivo "ARLA32" (Brazil)  
 2) Selective Catalytic Reduction, a system to minimise nitrogen oxide emissions by injecting Urea solution into the Diesel exhaust  
 3) LV = 'Light Vehicle', defined as passenger car or small transporter with a weight below 3,5 metric tons

AdBlue® is a registered trademark of VDA.

In the future, owners of Diesel-powered Light Vehicles with current SCR-technology will increasingly see and use it: the new **ZVA AdBlue LV** nozzle.

Operating of the ZVA AdBlue LV is similar to standard ZVA nozzles.

Misfilling prevention (Diesel ↔ AdBlue): Due to the unique spout construction, dispensing is only possible when the nozzle is pushed onto an ISO 22241-5 interface filler inlet (no-screw connection).

Accessories: For suitable dispensing hose, end fittings and safety breaks we recommend our renowned AdBlue components which have been used successfully for many years with heavy commercial vehicles.

#### Technical Data

- Flow rate max. 10 l/min
- Weight ~0,9 kg
- Fulfills all technical requirements of EN 13012
- ATEX approval for use in multi product dispensers
- Spout DN 15, interface ISO 22241-5
- Integrated Drip Stop
- Optional with LeverAssist® hold-open support

# HOW TO USE

