TECHNISCHE ÄNDERUNGEN VORBEHALTEN · NACHDRUCK UND KOPIEN NUR MIT UNSEREM EINVERSTÄNDNIS · *Specifications subject to change without notice · Copyright ELAFLEX*

AdBlue® for Diesel Vehicles to EURO 6 Emission Standard

To achieve the prescribed EURO 6 limits for nitrogen oxides (NOx) the exhaust gas treatment with an urea-SCR process proved the most effective way for diesel vehicles. So far the process has been used to minimise emissions on heavy vehicles. From September 2015 also newly registrered vehicles below 3,5 t must fulfill EURO 6. Most diesel passenger vehicles and vans – grouped together under the expression 'Light Vehicles' – need to have an additional on-board tank of the reagent AdBlue®.

In order to prevent unnecessary waste due to single-use bottles it was necessary to find a comfortable refilling method directly at the dispenser. Elaflex developed the nozzle type **ZVA LV for AdBlue®** which has undergone a successful long term testing programme at public petrol stations since 2013 (see Information 1.14 E).

Technical Data

Automatic nozzle for AdBlue® urea solution to ISO 22241 (DEF / AUS / ARLA 32) for vehicles <3,5 t. To protect against misfilling into the diesel tank, dispensing of urea solution is only possible in conjunction with filling points to ISO 22241-5.

- Max. flowrate 10 l/min (see technical hints)
- Integrated misfilling prevention
- No dripping when removing nozzle from fill point
- Fulfills technical requirements of EN 13012
- ATEX approved for use in MPD dispensers
- Spout with interface for ISO 22241-5 filling points

In comparison: heavy vehicles have filling points to ISO 22241-4 and need the nozzle type ZVA HV for AdBlue® to fill up with urea solution, see catalogue page 521.

ZVA LV for AdBlue®
(LV = 'Light Vehicle')

MATERIAL	WEIGHT	HOSE CONNECTION *)	PART NUMBER **)
Body aluminium, chemically nickel-plated and plastic-coated. Spout fiber-reinforced composite plastic with integrated misfilling protection.	1,05 kg	Swivel (EA 075 LV) 1" BSP male	ZVA LV ... EA 075 LV
Inner parts stainless steel and POM. Hose connection stainless steel and POM. Lever and guard PA. Scuffguard and comfigrip PVC, seals NBR.	1,25 kg	Safety Swivel Break (SSB 16 LV) 1" BSP male	ZVA LV ... SSB 16 LV

Note: AdBlue® is a registered trademark of VDA.

*) Explanations regarding available hose connections see page 2
**) Complete part number breakdown including guard types and scuffguard colour see page 3

Important Technical Hints

Max. flowrate 10 l/min, recommended flowrate at service stations 4–5 l/min. For adjusting the flowrate see installation and operating manual. Required operating pressure (at the nozzle / hose connection) 1,5–3,5 bar.

Operating temperature range -5° C up to +55° C due to the properties of AdBlue®. Use at lower temperatures only in conjunction with a suitable heating system within the dispenser.

Accessories

- **Slimline 16 for AdBlue®** – dispensing hoses for urea solution, cover **black** or **blue**, see Information 2.16
- **M 16 - 1"** for AdBlue® BSP female ferrule type couplings, stainless hose tail, see page 203
- **KS 16** Anti-Kinking Sleeve and **CS 16** colour sleeve **black** or **blue**, see catalogue page 211
- **Product Badges EK 145** with suitable designs, see http://badgeselector.elaflex.de/en

Hose Connections WITH Volume Flow Switch

For the calibration of the dispenser only, a flowrate of 8–10 l/min is required.

For daily operation, the flowrate should be 4–5 l/min in order to fill all current vehicles without problems

Therefore the ZVA LV for AdBlue® is preferably chosen with Swivel EA 075 LV or Safety Swivel Break SSB 16 LV. These hose connections are equipped with a volume flow switch.

For calibration purposes the setting 10 l/min is selected. Standard setting for vehicle filling is 5 l/min.

Material: Stainless steel, POM, seals NBR.

EA 075 LV

Swivel for ZVA LV for AdBlue®.

1" BSP male, nozzle connection thread M 34 x 1,5.

With integrated volume flow switch (see explanation on left hand side) and EW T A calibration key.

Weight: 0,21 kg. Corresponds to EN 13617-4 and ISO 22241.

SSB 16 LV

Safety Break with integrated swivel for ZVA LV AdBlue®.

1" BSP male, nozzle connection thread M 34 x 1,5.

With integrated volume flow switch (see explanation on left hand side) and EW T A calibration key.

Weight: 0,41 kg. Corresponds to EN 13617-2 and ISO 22241.

Hose Connections WITHOUT Volume Flow Switch

Depending on the requirements of the dispenser it is also possible to use swivel EA 075 A, Safety Swivel Break SSB 16 SS or fixed hose inlet, in order to obtain higher flow rates.

These hose connections are not equipped with a volume flow switch. For calibration purposes the dispenser is required to be set to 10 l/min.

The hose connections can be used either in conjunction with ZVA LV for AdBlue® (for verhicles <3,5 t) or with ZVA HV for AdBlue® (for trucks).

Material: Stainless steel, POM, seals NBR

EA 075 A

Swivel for ZVA LV for AdBlue® or ZVA HV for AdBlue®.

1" BSP male, nozzle connection thread M 34 x 1,5.

Weight: 0,16 kg. Corresponds to EN 13617-4 and ISO 22241.

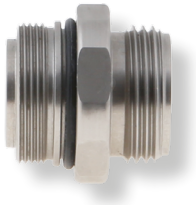
SSB 16 SS

Safety Break with integrated swivel for ZVA for AdBlue LV or ZVA HV for AdBlue®.

1" BSP male, nozzle connection thread M 34 x 1,5.

Weight: 0,32 kg. Corresponds to EN 13617-2 and ISO 22241.

EG 173 A



Fixed hose inlet for ZVA LV for AdBlue® or ZVA HV for AdBlue®.

1" BSP male, nozzle connection thread M 34 x 1,5.

Weight: 0,15 kg. Corresponds to ISO 22241.

Part Number Breakdown

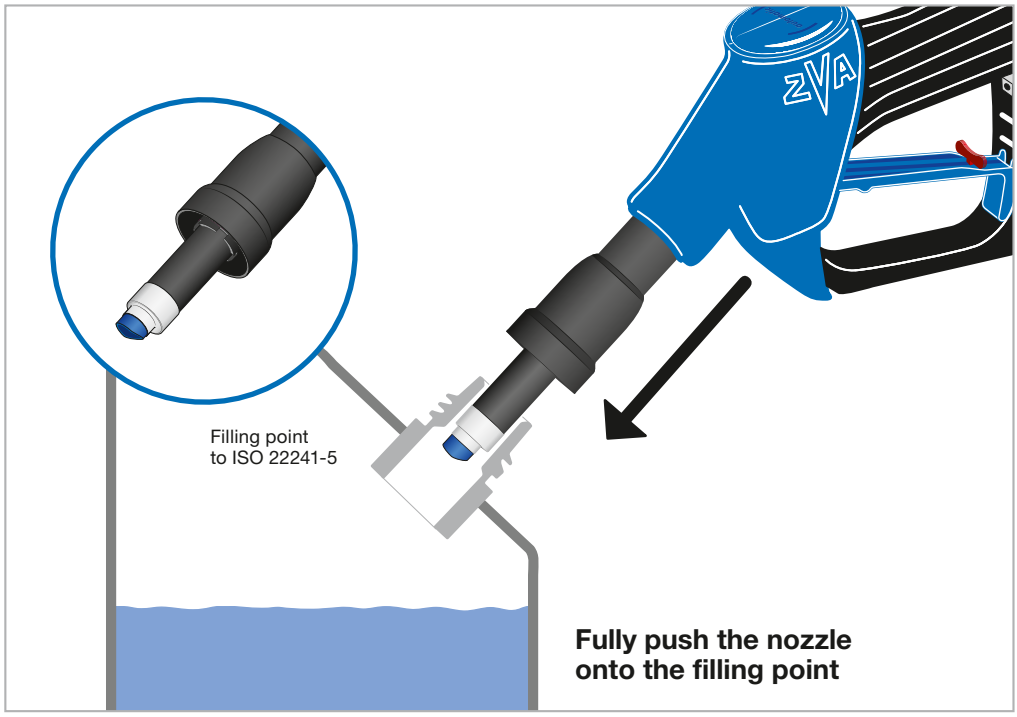
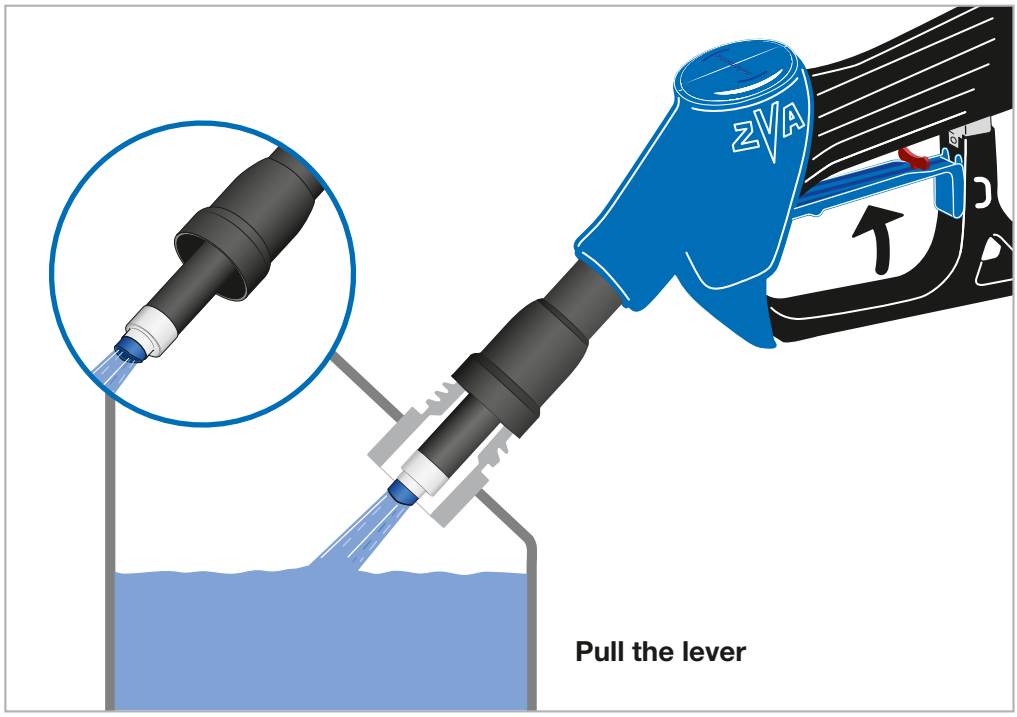
ZVA LV _____ _____ _____ _____ _____ _____

Guard No.	Latching	Scuffguard	Hose Connector	Break Sleeve	Product Badge
1 AF	With = (–)	EK 144 blue	Swivel with volume flow switch = EA 075 LV	Without = (–)	Without = (–)
1M AF	Without = D	EK 144 black	Safety Swivel Break with volume flow switch = SSB 16 LV	BS 16 blue	AdBlue® PKW = EK 145/769
2 AF			Swivel without volume flow switch = EA 075 A	BS 16 black	AdBlue® = EK 145/495
2M AF			Safety Swivel Break without volume flow switch = SSB 16 SS		
3 AF			fixed inlet = F		
3M AF					
4 AF					
4M AF					
8DMrm AF					
Explanation:			Explanation:	Explanation:	Explanation:
AF = conductive			All hose connections 1" BSP male	Choose 'BS' for SSB	Designs see badgeselector.elaflex.de/en
M = block magnet					
rm = ring magnet					

(--) = left blank in part number

Example:

ZVA LV **1M AF** **EK 144 blue** **EA 075 LV** **EK 145/769**

Operation

Handling of the nozzle is similar to conventional ZVA nozzles. In order to dispense the nozzle must be pushed fully onto the filling point of the vehicle AdBlue® tank. Then, the dispensing is done by pulling the lever. When the tank is full, the nozzle will shut off automatically.