

LPG Nozzles - with Know How

'Perceptively better – Feel the difference' is the slogan for the new **ZVG 2** LPG nozzle from ELAFLEX.

The next generation of ZVG LPG nozzles sets new standards in the LPG Autogas industry. The ZVG 2 LPG nozzle is designed for vehicle refuelling. It is available with four end coupling versions each having identical valve bodies and operating mechanisms.

As many motorist will have experienced whilst travelling through Europe there is not a common coupling, instead individual countries such as Belgium, Germany, Ireland and Austria use **ACME**, whereas France, Greece, Italy, Poland, Portugal and Spain use the **DISH** claw connector. The UK and Holland use mainly the Bayonet versions. For several years work has been progressing to develop a common standard (EN 13760) for the **EURO** connector. Some countries like Spain and Portugal have recently decided to adopt this standard so the ZVG 2 can accommodate this demand too.

The focus of the ZVG 2 development was to design a more user-friendly LPG nozzle for the motorist, in particular for those with smaller hands.

The modular design of the ZVG 2 nozzle is feature-rich. The easy rotating swivel helps to reach awkward positions. The lightweight nozzle allows easy refuelling aided by a significant reduction in the force required to squeeze the lever with a conveniently 'easy to use' hold open latch for single handed operation. The nozzle is made from advanced materials whilst having a robust aluminium body. A benefit is that the nozzle can be easily serviced and repaired thus reducing total cost of ownership through the extended lifecycle. The nozzle guard can also be fitted with a magnet for contactless activation of the pump.

Considering the safety aspects, all versions are designed so that the nozzle only allows gas to flow when it is correctly coupled. A new poppet design reduces the LPG discharge volume between the vehicle filling connection and the nozzle, and the new 'failsafe' function closes the nozzle valve in case of emergency. These features ensure a safer refuelling.

The ZVG 2 is approved by TÜV according to EN 13760 and ATEX certified (Class Ex II 1G).



Picture 1: ZVG 2 –
four coupling versions



Picture 2: refuelling

Comprehensive Range of LPG Components

In conjunction with the ZVG 2 nozzle there are other components developed by ELAFLEX to offer a comprehensive specialist equipment program:

The **LPG 16 dispenser hose** meets EN 1762 and German TRbF 131; DVGW approval DG-4621 AU 0049. The hose is plasticiser free to prevent contamination.

It is also suitable for skid mounted units and other industrial applications. The construction is electrically conductive and diffusion resistant. The hose handles like a standard dispenser hose. A notable feature is that the hose stays flexible even at low temperatures down to -40°C and remains flexible throughout its life. Size DN 16; working pressure PN 25, test pressure 40 bar. The burst pressure exceeds 100 bar.

To prevent damage to installed equipment Elaflex also produce the **Safety Break Coupling ARK 19 Mod 2**. It separates the hose in case of drive-offs and avoids on both ends the emission of LPG.

On parting a maximum of 9cm^3 of LPG is released. The coupling can be reassembled without the need to depressurise the system, and without tools. It is assembled as a 'hose break' between a short connection hose and the long LPG hose. It is fixed with a steel lanyard to the dispenser or to another fixed-point.

The coupling is supplied with an 'break sleeve' (BS 19) to reduce damage to the coupling during normal operation and to protect the male section when the coupling is parted.

ARK 19 Mod. 2 meets EN 14678-1, and is certificated by TÜV (TÜV.ST.BCD.007-06).

To complete the package ELAFLEX now also offers a robust, slim and elegant designed aluminum cast **Nozzle Boot**, fitting all ELAFLEX ZVG nozzles and most other common style LPG nozzles.

More information please click:

http://www.elaflex.de/dokumente/download/Prospekt_ZVG2_English.pdf

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Picture 3: at the pump



Picture 4: ZVG 2 ACME with LPG 16 hose and safety break coupling ARK 19 Mod. 2



Picture 5: Nozzle Boot for the dispenser, suitable for all ZVG and other LPG nozzles