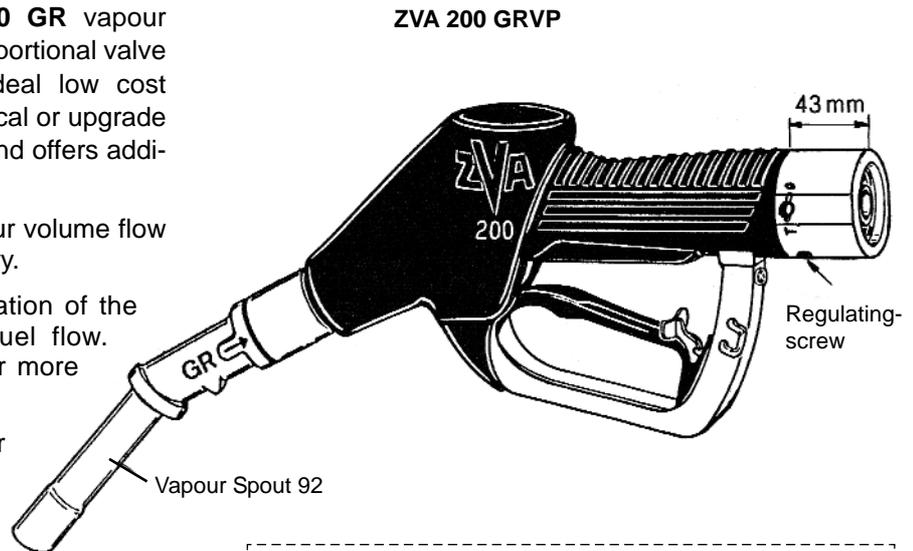


The GRVP version of the **ZVA 200 GR** vapour recovery nozzle has an integrated proportional valve (**GVP**). This feature provides an ideal low cost solution to enable retrofitting mechanical or upgrade older type dispenser to Stage II VR, and offers additional functions:

- Full adjustable control of the vapour volume flow independent of the fuel flow delivery.
- ON/OFF function. Secure termination of the vapour line when there is no fuel flow. Important when connecting two or more hoses to a vacuum pump.
- Mechanical opening of the vapour valve to enable simulation of a 40 l/min fuel delivery.



The "Dry Test":

To do the "Dry Test" open the **GVP** with a key (**EW - T**). For fine tuning insert at position "0", lock in position "T". To meet the German TÜV "Correction factor" certification requirement for different makes of vapour pumps the vapour volume can be adjusted by turning the screw. In doing so, the 100% recovery rate is set.

The Benefit:

No need to open the dispenser housing! The test is carried out by using the nozzle only. Just connect the universal connector UMAX, onto the Vapour Spout 92 to execute the test.

New 40 Litre Simulation Point:

According to the TÜV certificate the max fuel flow rate for vapour recovery is set at 42 l/min. The simulation point for the Dry Test is set at 40 l/min in order to meet the requirements of some weaker fuel and vacuum pumps. In practice, independent of the actual fuel performance which is allowed to be 42 l/min max a delivery of 40 l/min is simulated for the dry test.

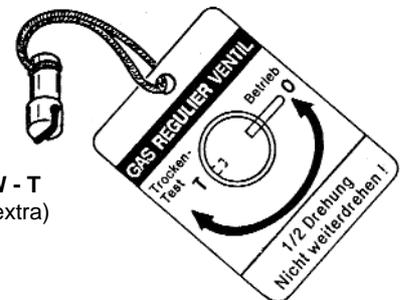
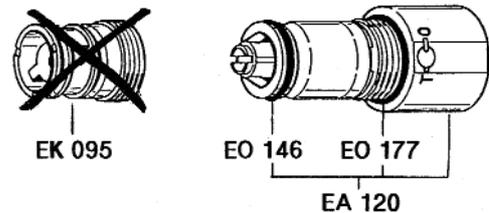
Further Information:

There is no need for additional regulators inside the dispenser for the vapour valve. Only one vacuum pump has to be connected. The **GVP** therefore provides an ideal low cost option for retrofitting or upgrading older type dispensers without electronics. The valve adds only 120g to the nozzle.

ZVA 200 GRVP is in successful use since 1994.

Prices on request.

The **GVP** (EA 120) replaces the vapour valve insert **EK 095**. Please read instructions for retrofitting carefully.



Key **EW - T**
(order extra)

German TÜV- certificates:

The ZVA 200 GR fitted with the **GVP** valve is as a component System-approved by TÜV-Rheinland in use with the following vacuum pumps:

| | |
|--------------------------------|------------------------------|
| ASF Typ 8012 GR2 | back pressure up to 150 mbar |
| ASF Typ 8014 - 1 | back pressure up to 150 mbar |
| ASF Typ TFK3 - G (Brey) | back pressure up to 150 mbar |
| Dürr Typ MEX 0831 - 11 | back pressure up to 150 mbar |
| Fenner Typ G 56 - 1001 | back pressure up to 150 mbar |
| Marconi Typ GR 125 | back pressure up to 50 mbar |

Copies of the certificates are available on request. For vacuum pumps with an approval for 150 mbar back pressure the GVP vapour valve can also be used where vapour return lines to the underground storage tanks are mounted within the pipe system.

Commissioning / Putting into Use:

The **ZVA 200 GRVP** with integrated vapour regulation valve **GVP** is supplied ready for use and can then be connected to COAX VR hoses. The vacuum pump manufacturers instructions for the required speed to achieve the necessary vapour performance - as laid down by the TÜV certificate - must be observed.

The fuel performance of the dispenser is controlled by using the highest latch position on the nozzle and if necessary, reduce to 42 l/min (for example using the bypass valve). Only fine tune by adjusting the screw ①.

Functional description of the GVP:

The spring-loaded floating piston ② is opened by fuel flow. The movement of this piston is transferred to the piston of the vapour valve ③ by a magnetic coupling. In this way the vapour volume is controlled **proportionally** to the fuel flow.

Tuning of the GVP:

During the "Dry Test", a fuel flow of 40 l/min is simulated by turning the vapour vapour regulation shaft ④ up to the "T"- position. Turning the adjusting screw ① with the **EW SK 3** key the vapour volume, as laid down in the TÜV certificate for this fuel flow is set. After that, the shaft is brought into the "0" position (in use position) and the **EW T** key is removed. The nozzle is now ready for use.

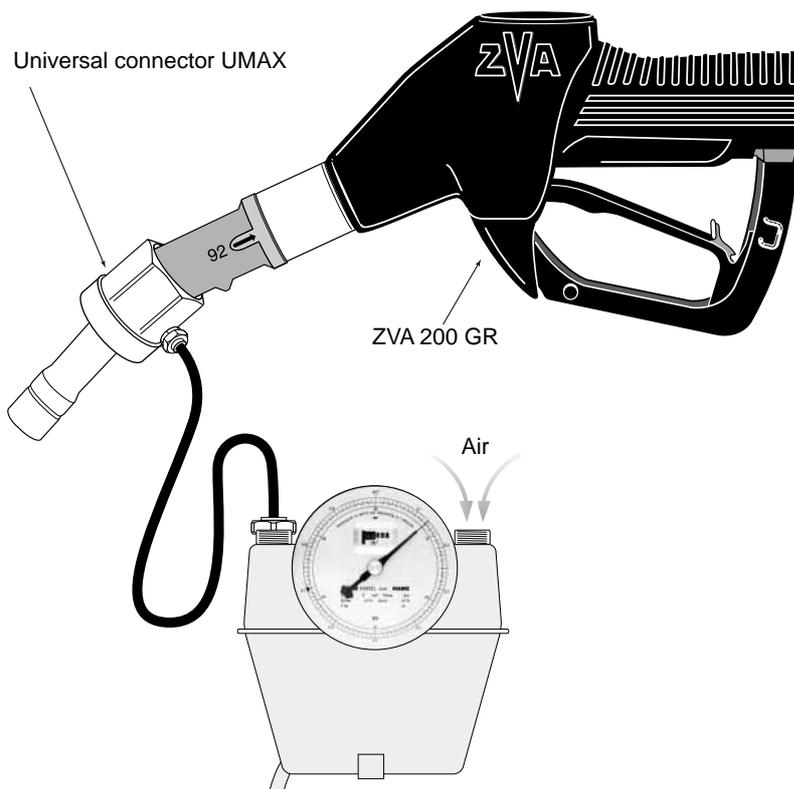
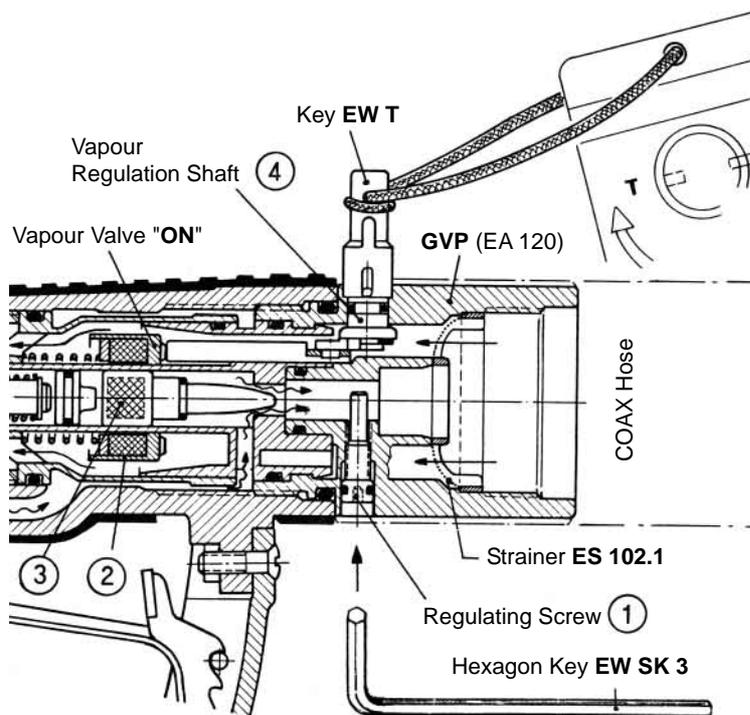
Retrofitting the GVP (EA 120):

Remove the strainer from the **ZVA 200 GR** nozzle. Unscrew vapour insert **EK 095**. The GVP (EA 120) is supplied as assembled, unit set, and tested for vapour tightness. Insert by screwing it into the nozzle body instead of the vapour insert. Fit strainer **ES 102.4** into the **GVP** before connecting to the COAX hose. Test and check before use that fuel area is tight and also around the vapour area (check no dripping from the Vapour Spout; leaks may be caused by dirt during assembly or swollen or damaged O-rings). We recommend that retrofitting is done in a suitable work-shop facility and not at the petrol station. Use recommended Elaflex tools. ZVA 200 GR parts poster available on request.

Fine tune for the "Dry Test" on the dispenser as described above.

Please note - Hose length:

If retrofitting the GVP, the hose assembly extends by 43 mm. Please consider this when specifying the hose length to avoid it trailing on the ground.



The **GVP (EA 120)** is a sealed unit. Disassembly is not possible without damage. The O-rings are supplied as spare parts. If malfunction, the whole **GVP** unit (EA 120) has to be replaced. Assemble and test as described.