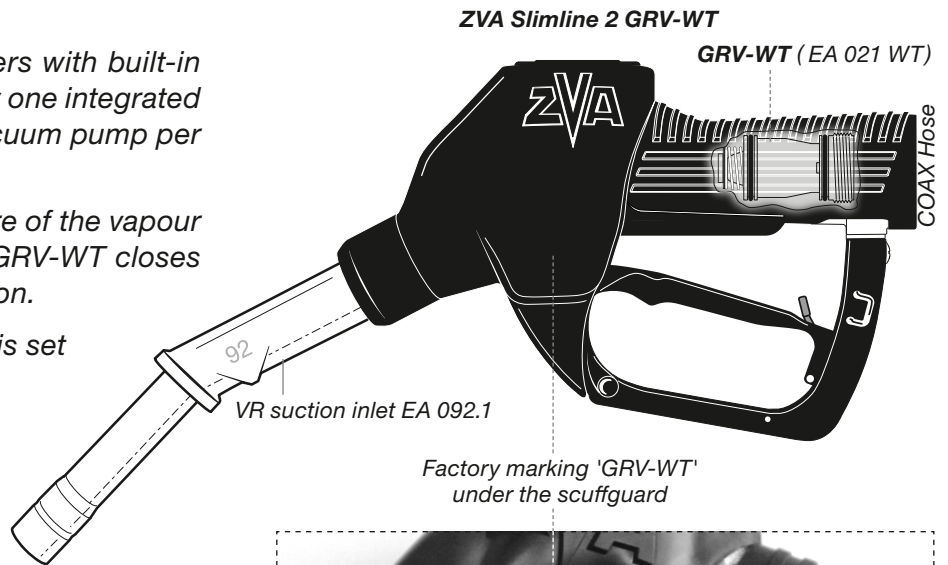


### ZVA Slimline 2 GRV-WT with fully integrated 'ON/OFF' vapour valve:

- Suitable for all modern dispensers with built-in vapour recovery control and only one integrated vacuum pump or one central vacuum pump per service station.
- ON/OFF function: Secure closure of the vapour line when there is no fuel flow. GRV-WT closes automatically in horizontal position.
- Adjustment ring of the GRV-WT is set to position '3' at the factory.
- **Special type** suitable for wet test only - see overleaf. For standard type GRV see information 9.08E.



### MODIFICATION HINTS:

If you want to modify an existing ZVA Slimline 2 GR, ZVA Slimline 2 GRV or ZVA Slimline 2 GRVP-WT to type GRV-WT:

Remove the strainer from the nozzle and unscrew the vapour valve insert (EK 096 or EA 021) with the tool EW 19-22. After greasing the O-Rings EO 048 Vi, screw in the GRV-WT valve (EA 021 WT) into the nozzle body. Fit strainer ES 102.4 before connecting to the COAX hose.

Before use check that the fuel area is tight (no dripping from the vapour spout). Leaks may be caused by dirt during assembly or damaged O-rings.

This work should be done in a suitable workshop facility and not in the field.

Please also note manual 'GRV-WT' and the correct nozzle marking.

### COMMISSIONING / PUTTING INTO USE:

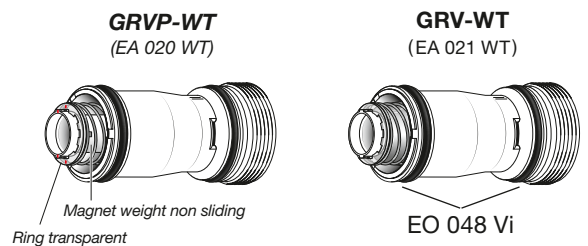
ZVA Slimline 2 GRV-WT is supplied ready for use and can be directly connected to COAX VR hoses.

### TÜV STAGE II CERTIFICATES:

ZVA Slimline 2 GRV-WT is approved by the TÜV Süd. All previous approval certificates for ZVA 200 GRV3 remain valid also for ZVA Slimline 2 GRV-WT, by using the supplementary certificate TÜV Süd No. 85-2.xxx.



The **GRV-WT** (EA 021 WT) can be retrofitted instead of the vapour valve insert **GR**, **GRV** or **GRVP-WT**.



The **GRV-WT** (EA 021 WT) is supplied ready for installation, pre-adjusted and tested for vapour tightness.

Only the O-rings are supplied as spare parts. In the case of a malfunction the whole GRV-WT unit has to be replaced.

### Wet Test

Take the ZVA Slimline 2 GRV-WT from the nozzle boot.  
The vacuum pump starts.

Tightly connect the Elaflex universal connector UMAX 2 onto the vapour spout and connect its hose to the gas meter [fig.1]. Prevent the vapour recovery from being influenced by the measurement accumulation of liquids in the connecting hose. Please check the connections to the gas meter and the UMAX 2 connector (visual inspection of the sealing surfaces)

Start measurement with dispensing min. 20 litres of petrol into a canister. Measure the fuel delivery rate.

The GRV-WT vapour valve opens due to fuel flow.

For the **volume measurement method** the display of the gas meter has to be recorded at the start and at the end of the petrol flow. The difference yields the recovered vapour volume. The petrol volume is read out on the calibrated dispenser.

**Correction factor 'K':** As ambient air is sucked in during the wet test, the calculated air volumetric flow must be divided by the correction factor. If this is not already done automatically by the handheld control, the vapour recovery rate is calculated using one of the following equations:

$$(1) \quad R = \frac{V_a}{k \cdot V_k}$$

$$(2) \quad R = \frac{\overline{Q}_a}{k \cdot V_k} \cdot \frac{t}{60}$$

R petrol vapour / petrol rate

$V_a$  determined air volume, in litres

$V_k$  volume of dispensed petrol during the measurement, in litres

k correction factor (as specified in the certificate)

determined air volume flow rate in  $l/min^{-1}$  (mean value)

$\overline{Q}_a$  measuring time in s

### Dry Test

No dry test possible.

If necessary, use ZVA Slimline 2 GRV or  
ZVA Slimline 2 GRV-FA

For further details please refer to:

EN 16321-2 and VDI 4205 Part 1-3:2003 (German / English)

VdTÜV-Merkblatt Tankanlagen 908 Part 2

