



## Vibration level switch for liquids VibraFox GVG



### Benefits

- Compact design
- WHG approval
- Maintenance-free
- High resistance to chemicals
- Versatile process connections
- Commissioning without calibration

### Application

Suitable for detecting limit levels in liquids with a maximum dynamic viscosity of 10,000 mPa · s and a minimum density of 0.7 kg/dm<sup>3</sup>. Especially useful in cases in which floating switches cannot be used due to currents, turbulence or adherence. Ideally suited as an overflow alarm or for dry-run protection. Due to the WHG approval, VibraFox® can be used as part of an approved overflow prevention system.

### Versions

|  | Installation length | Part no. |
|--|---------------------|----------|
| Vibration level switch VibraFox GVG 10 | 64 mm               | 56164    |
| Vibration level switch VibraFox GVG 10 | 67 mm               | 56165    |
| Vibration level switch VibraFox GVG 11 | 64 mm               | 56166    |
| Vibration level switch VibraFox GVG 11 | 67 mm               | 56167    |
| Vibration level switch VibraFox GVG 12 | 64 mm               | 56168    |
| Vibration level switch VibraFox GVG 12 | 67 mm               | 56169    |
| Vibration level switch VibraFox GVG 13 | 112 mm              | 56170    |
| Vibration level switch VibraFox GVG 13 | 115 mm              | 56171    |
| Vibration level switch VibraFox GVG 14 | 112 mm              | 56172    |
| Vibration level switch VibraFox GVG 14 | 115 mm              | 56173    |

Blue part no. = in-stock items



## Description

The vibration fork of VibraFox® is excited to its resonance frequency. When the fork comes into contact with the medium, there is a change in frequency which is detected by the electronics and converted into a switching signal. The unique evaluation electronics enable the application of the system even under adverse conditions, e.g. in vibrating tanks or with turbulent liquid surfaces.

## Technical specifications

### Density of medium

0.7 – 2.5 kg/dm<sup>3</sup>

### Dynamic viscosity of the medium

0.1 – 10,000 mPa · sec

### Flow rate

Max. 6 m/s (at a viscosity of 10,000 mPa · s)

### Operating temperature range

Medium: -40/+100 °C

Ambient: -40/+70 °C

### Process pressure

-1/+64 bar

### Process connection

G¾A or G1A

### Housing

Stainless steel 316 L

Cap: PEI

Vibration fork: Stainless steel 316 L

### Supply voltage

2-wire: AC/DC 20 – 253 V

3-wire: DC 10 – 55 V

### Load current

2-wire: Min. 10 mA, max. 250 mA

3-wire: Max. 250 mA

### Power input

2-wire: Depending on external load

3-wire: Max. 0.6 W

### Output

2-wire: Non-contact switch

3-wire: Transistor (PNP)

### Switching delay

After transition dry - wetted: 0.5 s,

After transition wetted - dry: 0.5 s

### Switching point

Installation from top: 11 mm,

Installation from bottom: 34 mm

(in water at 25 °C)

### Switching hysteresis

Vertical installation: Approx. 2 mm,

Horizontal installation: 2 mm

(in water at 25 °C)

### Visual indication

Bi-colour LED green/red

### Function test

With test magnet (included)

### Electrical connection

Connector and junction box as per ISO 4400 (DIN 43650-A), IP 65 (EN 60529)

IP 67 (EN 60529)

### Approval for construction products

DIBt: Z-65.11-412

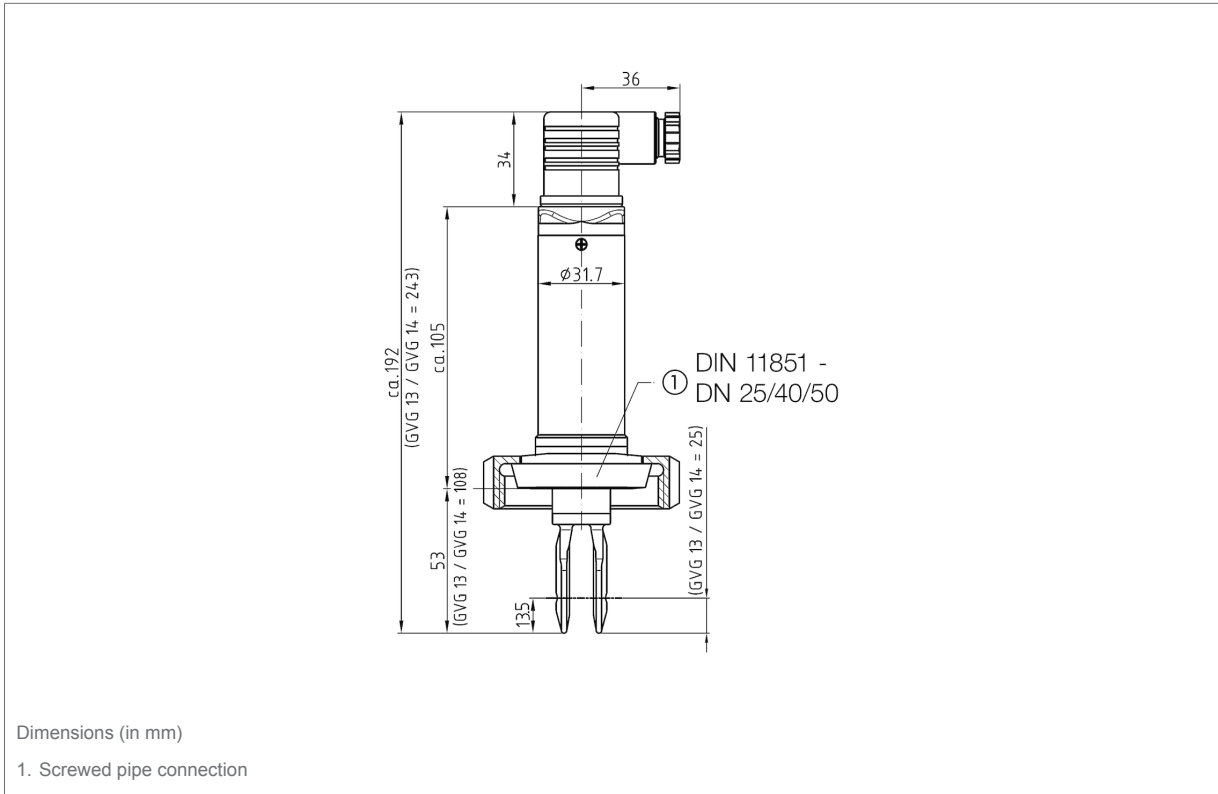
## Options

- Other process connections (e.g. NPT, Clamp, dairy fitting)
- Surface roughness  $R_a < 0.8 \mu\text{m}$
- Other electrical connections
- Coupling relay (only for DC version)
- Extended operating temperature range -40/+150 °C (medium)

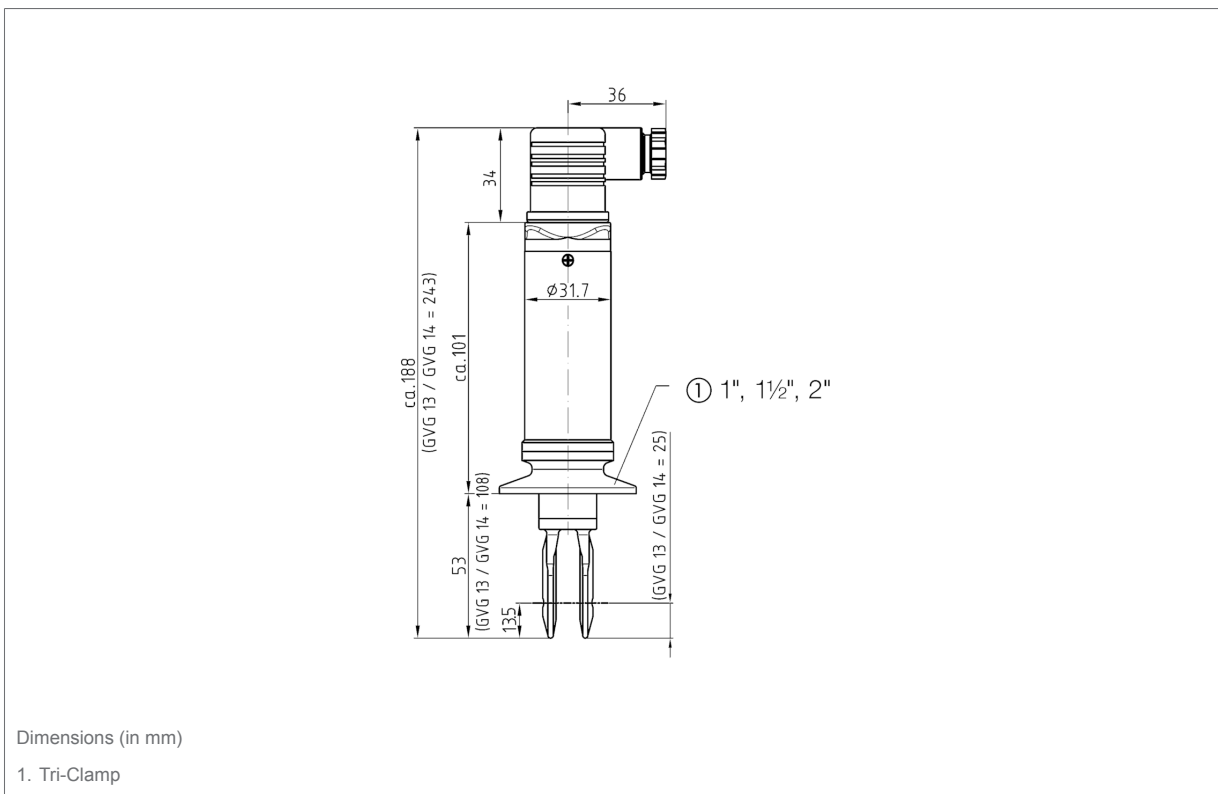


Detail views

GVG 10 MR/GVG 12 MR - dairy fitting

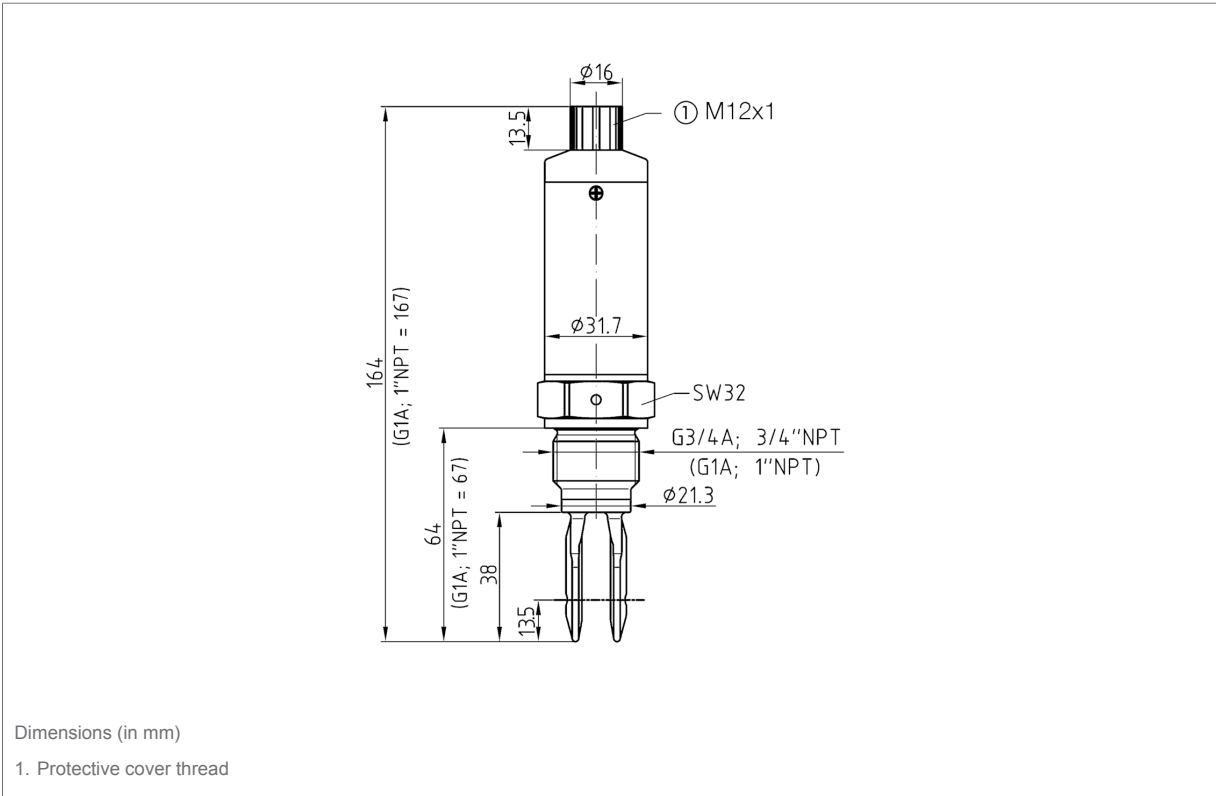


GVG 10 CP/GVG 12 CP Tri-Clamp

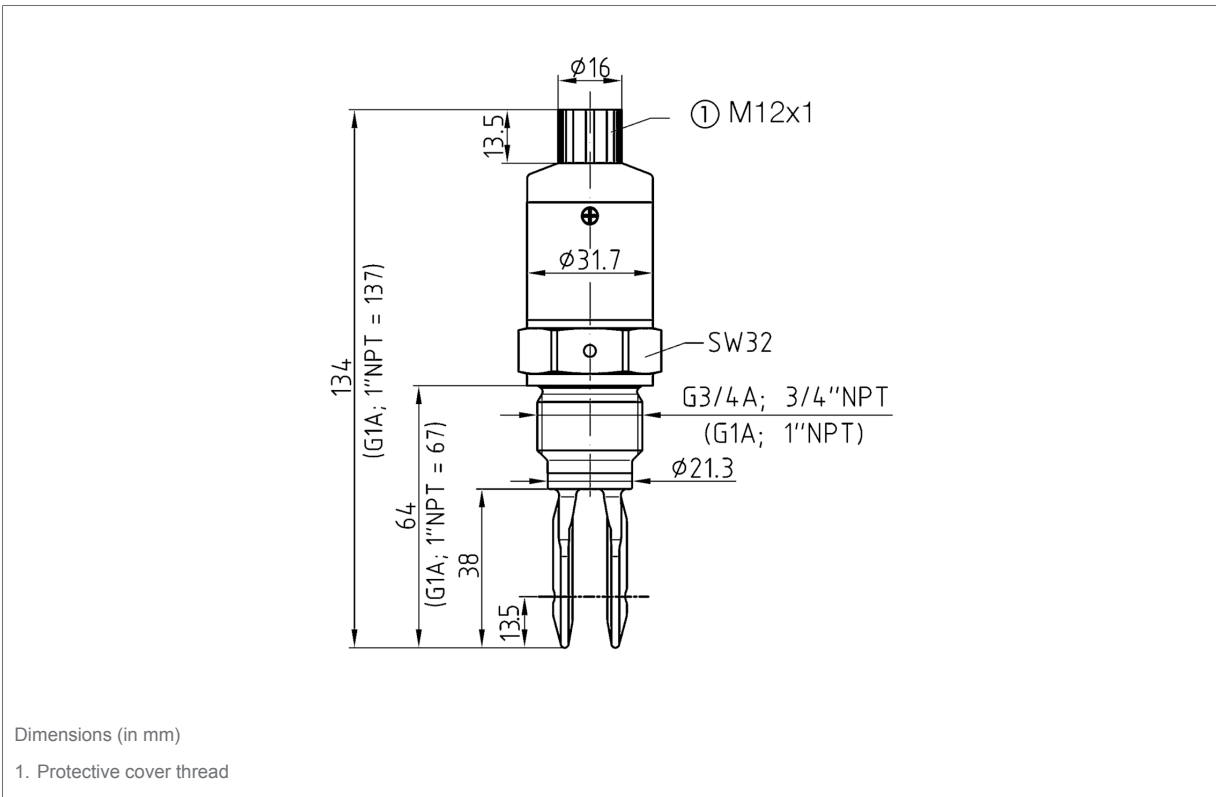




**GVG 11 HT - high temperature version**



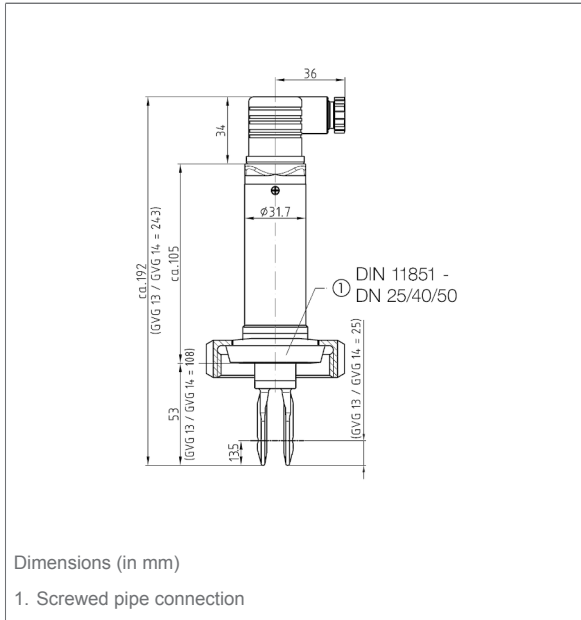
**GVG 11 - standard version**



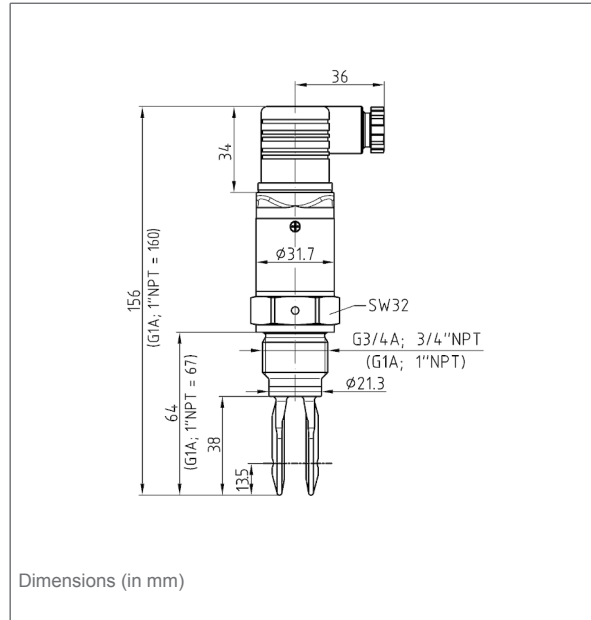


## Technical drawings

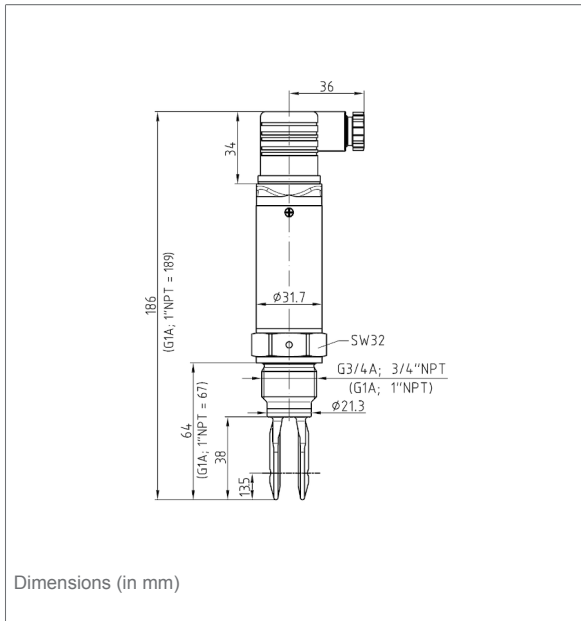
GVG 10 MR/GVG 12 MR - dairy fitting



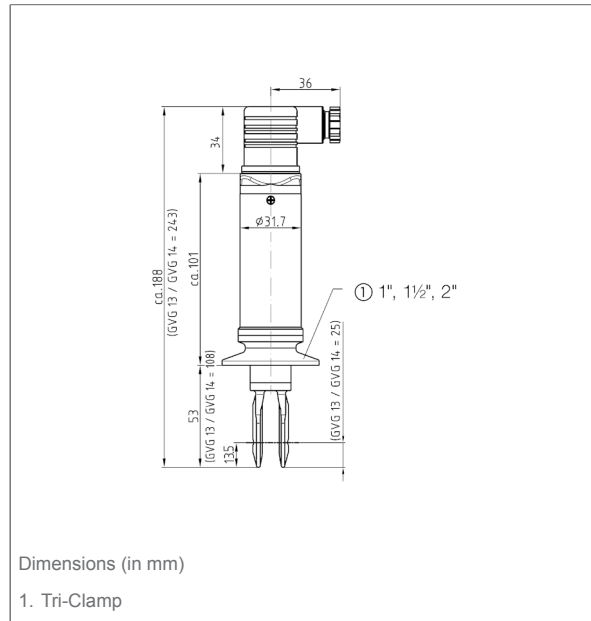
GVG 10 / GVG 12 - standard version



GVG 10 HT/12 HT high temperature version

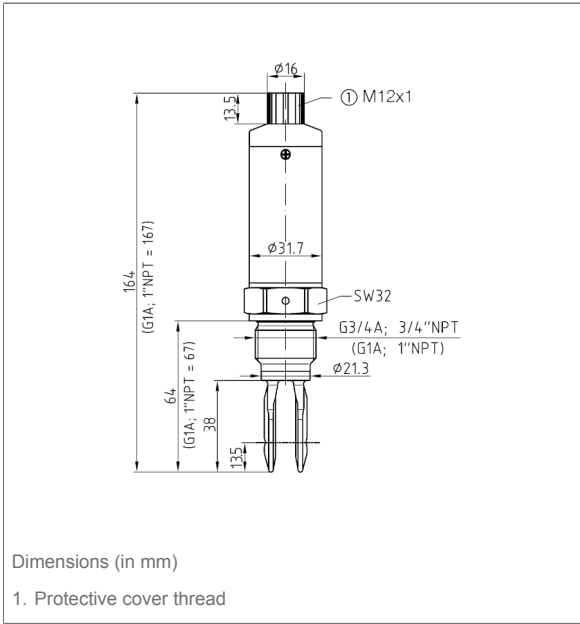


GVG 10 CP/GVG 12 CP Tri-Clamp

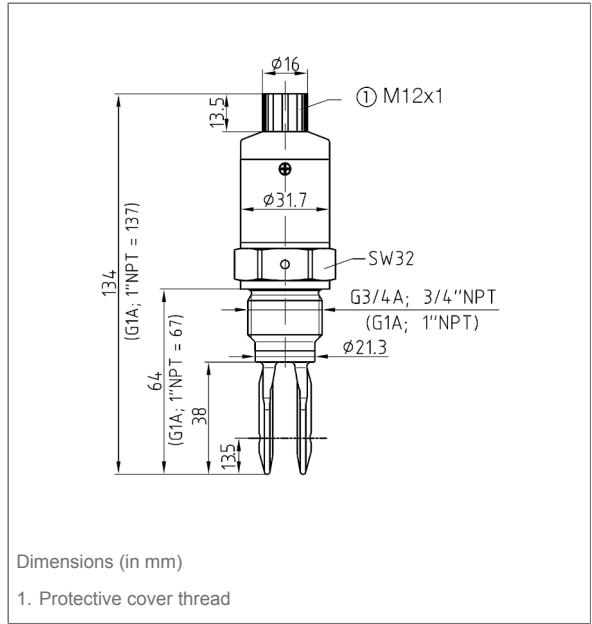




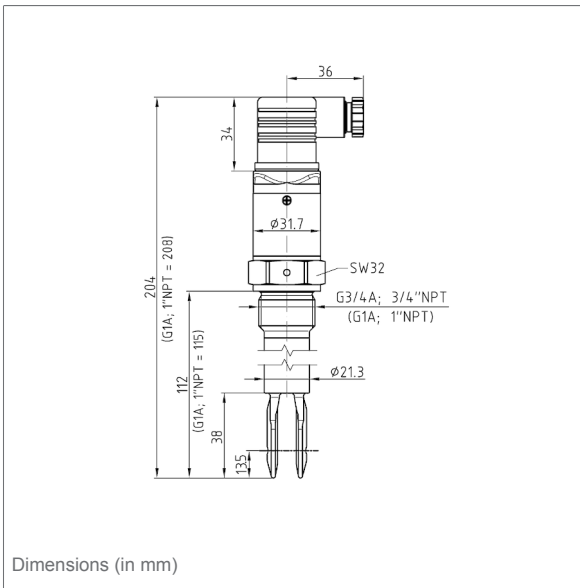
**GVG 11 HT - high temperature version**



**GVG 11 - standard version**



**GVG 13 / GVG 14 - standard version**



**GVG 13 HT/14 HT - high temperature version**

