



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/dm³. Specially 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 overfill 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/dm³

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

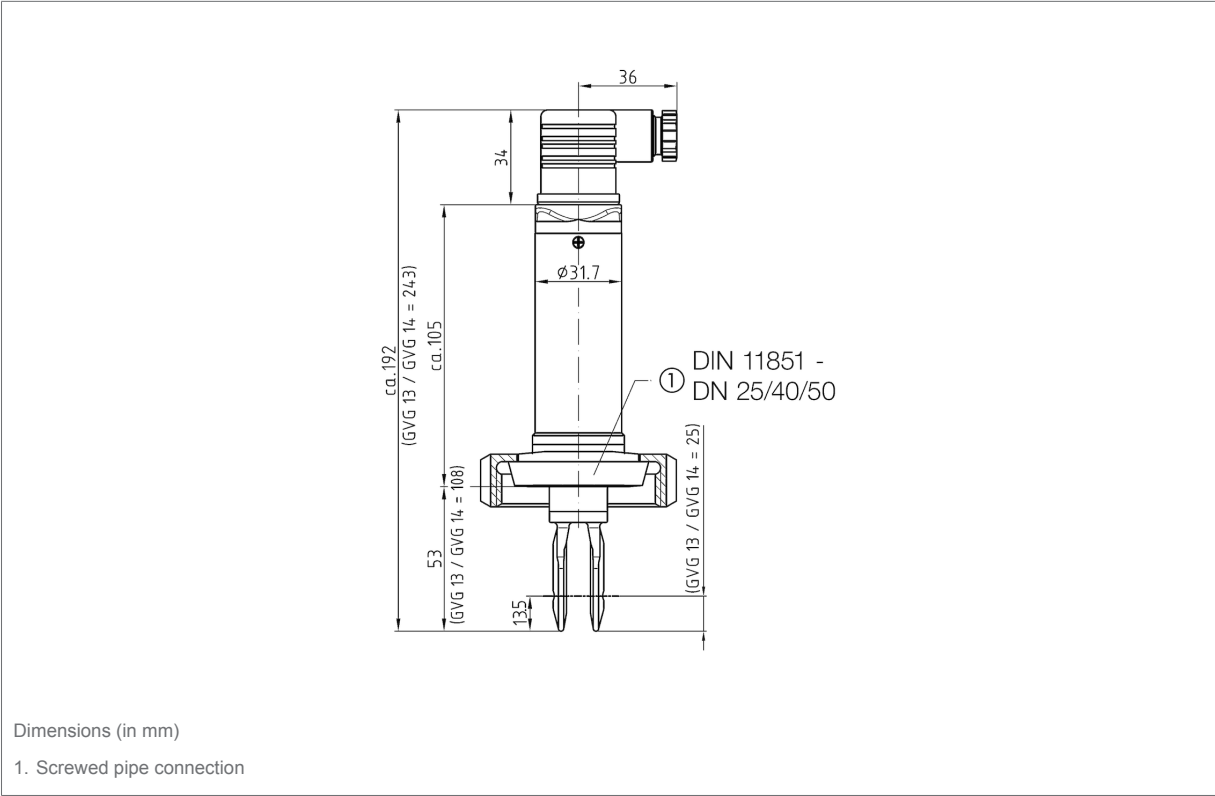
Options

- 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)

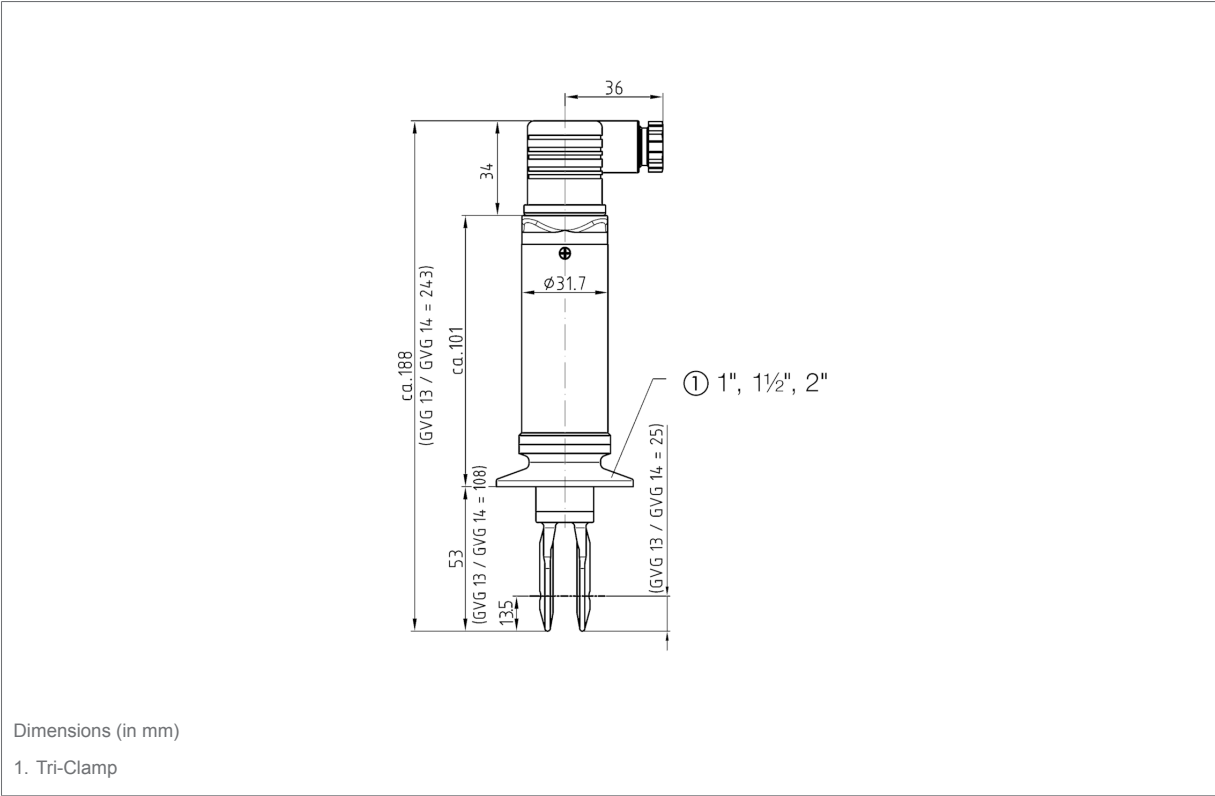


Detail views

GVG 10 MR/GVG 12 MR - dairy fitting

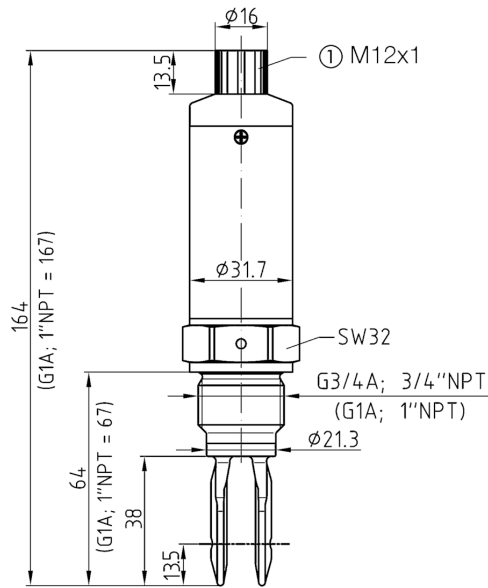


GVG 10 CP/GVG 12 CP Tri-Clamp



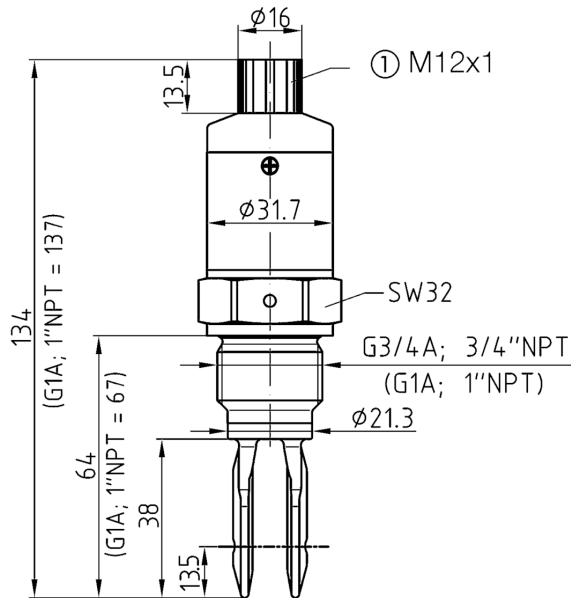


GVG 11 HT - high temperature version



Dimensions (in mm)
1. Protective cover thread

GVG 11 - standard version

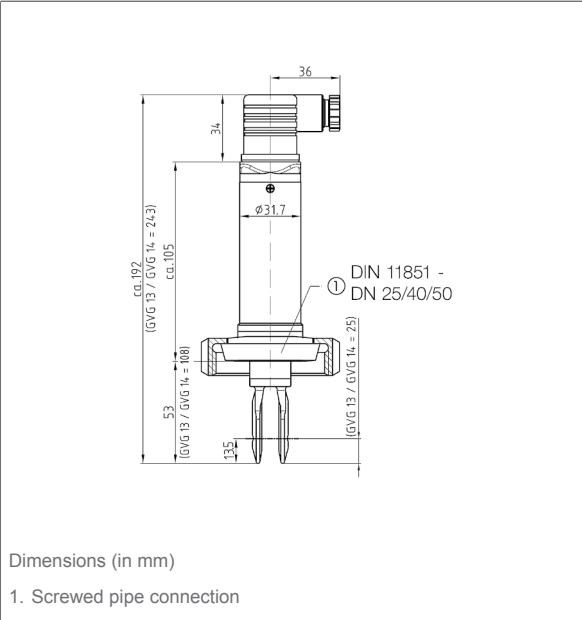


Dimensions (in mm)
1. Protective cover thread

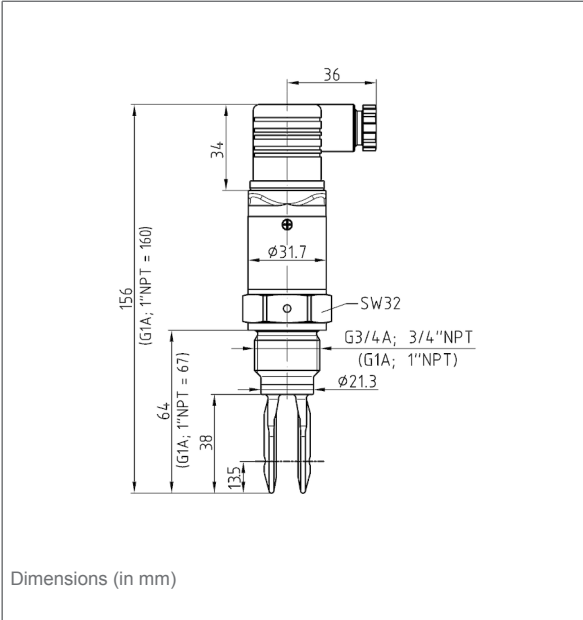


Technical drawings

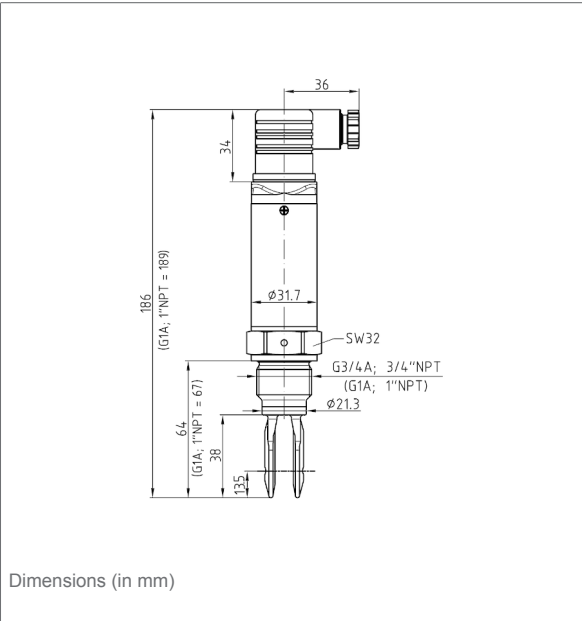
GVG 10 MR/GVG 12 MR - dairy fitting



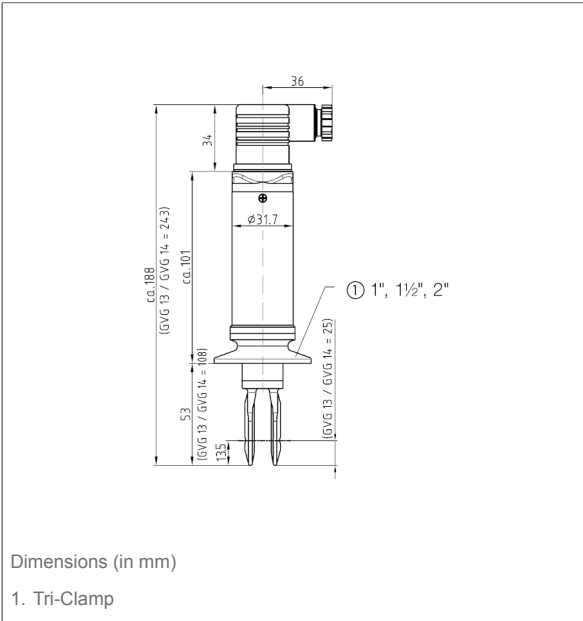
GVG 10 / GVG 12 - standard version



GVG 10 HT/12 HT high temperature version

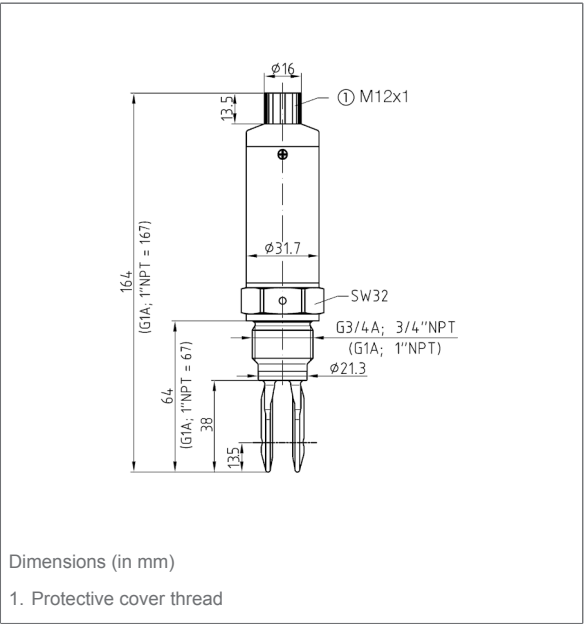


GVG 10 CP/GVG 12 CP Tri-Clamp

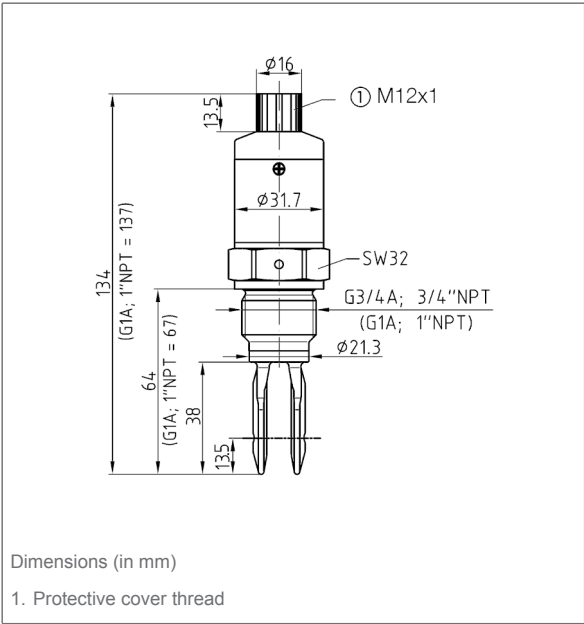




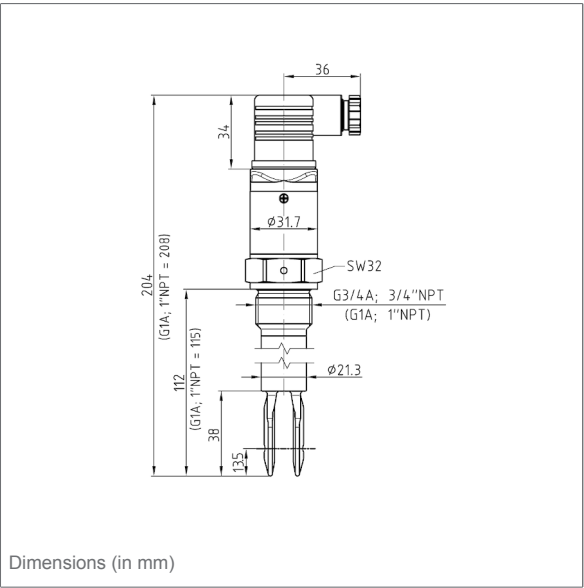
GVG 11 HT - high temperature version



GVG 11 - standard version



GVG 13 / GVG 14 - standard version



GVG 13 HT/14 HT - high temperature version

