

Compact vibration level switch for liquids

VibraFox® GVG



Application

Suitable for detecting levels in liquids with a maximum viscosity of 10,000 mm²/s and a minimum density of 0.7 kg/dm³.

Especially designed for applications in which float switches cannot be used due to liquid flow, turbulence or product adherence. Ideally suited as an overflow alarm or for dry-run protection of pumps. The WHG approved VibraFox® can be used as part of an approved overflow alarm system.

Description

The vibration fork of VibraFox® is excited to its resonance frequency. When the fork comes into contact with the medium a change in frequency occurs 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 tanks with vibration or turbulent liquid surfaces.

VibraFox® vibration level switches feature:

- WHG approval
- Maintenance-free
- Compact design
- High resistance to chemicals
- Easy installation
- Various process connections
- Universal application

Technical specifications

Minimum density of medium
0.7 kg/dm³

Max. viscosity of medium
10,000 mm²/s

Operating temperature range
Medium: -40 °C/ +100 °C
Ambient: -40 °C/ +70 °C

Process pressure
-1 to 64 bar

Process connection
G³/₄B or G1B (PN 64)

Vibration fork
Stainless steel 1.4435
Installation length 69 mm or 117 mm

Supply voltage
AC/DC 20–253 V
Load current min. 10 mA
max. 250 mA or DC 10–55 V
Load current max. 250 mA

Power consumption
AC version: depending on external load
DC version: max. 0.6 W

Output
2-wire AC/DC or transistor (PNP)

Switching delay

After immersion: 0.5 s
After removal: 0.5 s

Switch point

Vertical installation: 13 mm
Horizontal installation: 14 mm
(in water at 25 °C)

Switching hysteresis

Vertical installation: 2 mm
Horizontal installation: 2 mm
(in water at 25 °C)

Visual indication

Bi colour LED green/red

Operational test

With test magnet (included)

Housing

Stainless steel 1.4435, cover PEI

Electrical connection

Plug DIN 43650-A (IP 65)
or M 12 x 1 (IP 67)

Technical Approval of the German Institute for Building Technology:
Z-65.11-412

Options

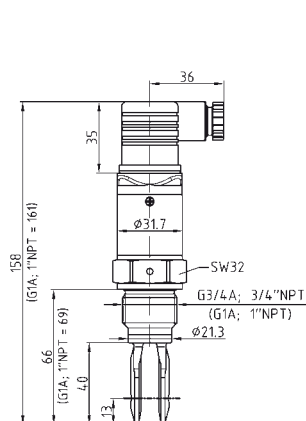
- Extended operating temperature range -40 °C/+150 °C (medium)
- Other process connections
- Surface roughness Ra ≤ 0.8 µm
- Welding gland
- Other electrical connections
- Coupling relay (only for DC version)

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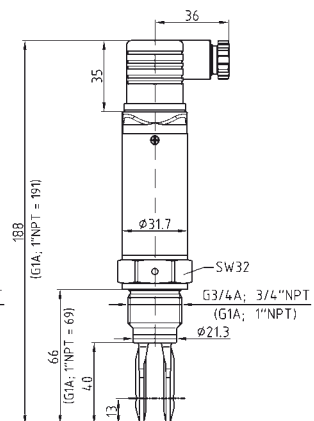
VibraFox® GVG Dimensions (mm) and electrical connections

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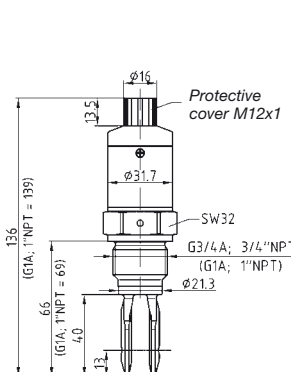
GVG 10/12
Standard version



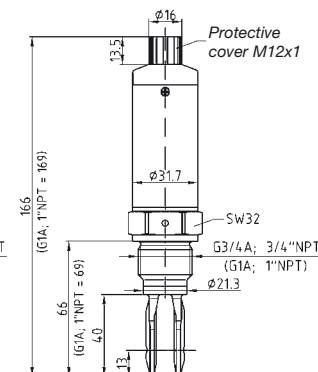
GVG 10 HT/12 HT
High temperature version



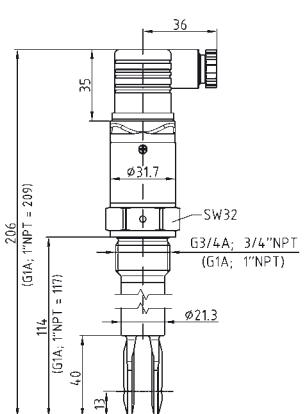
GVG 11
Standard version



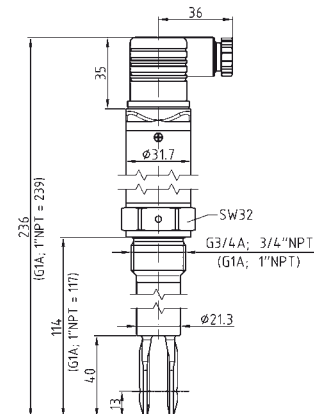
GVG 11 HT
High temperature version



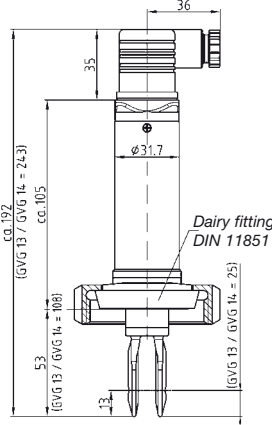
GVG 13/14
Standard version



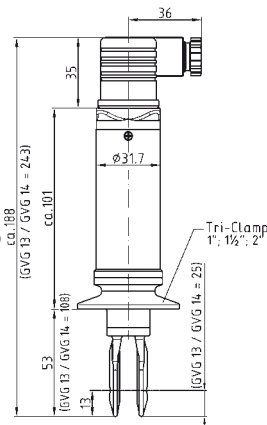
GVG 13 HT/14 HT
High temperature version



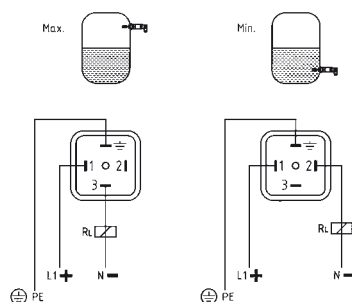
GVG 10 MR/GVG 12 MR
Dairy fitting



GVG 10 CP/GVG 12 CP
Tri-Clamp



Wiring diagram 2-wire switching output



Wiring diagram transistor output PNP

