

## Options and accessories VL 255 PM



- + Si (= Service indication):**  
Time intervals for maintenance are adjustable from 1 up to 63 months.
- + LOD (= remote monitoring Leak detector Online Diagnostics):**  
For a 24/7/365 secure and continuous remote monitoring of the leak detector. All operating conditions and data are recorded and transmitted autonomously every 24 h via Ethernet connection to the LOD server where they are analyzed. In case of an alarm, an automatic notification is given immediately to registered addressees via e-mail.
- + Hood for housing**  
Extra protection for the leak detector against weather conditions in case of outdoor installation; material: stainless 1.4301; dimensions: 348 x 365.5 x 250 mm; article number: 412261



### Technical Data

Weight stainless steel housing	4,5 kg
Operating temperature range	-40 °C bis +60 °C
Sound volume buzzer	70 dB(A) in 1 m
Protection class housing	IP 54
Power supply	100-240VAC, 50-60 Hz or: 24 VDC
Power input	50W (incl. heating)
External signal	max. 24 VDC, max. 300 mA
Potential free relay contacts	DC ≤25 W or AC ≤50 VA

### Switching values VL 255 PM

Type	255
Alarm ON, at the latest:	-255 mbar
Pump OFF, not more than:	-380 mbar
Vacuum operability* of interstitial space given for:	-650 mbar

\* considered fulfilled for double-walled steel tanks; in principle, lower values are possible, if need be with the use of an underpressure valve

### Installation advices

The leak detector is **installed outside** of potentially **explosive areas**.

Due to its **weather protection (P)** the VL 255 PM is intended and ideally suited for outdoor installation.

The **digital manometer (M)** on the housing lid shows the current underpressure of the system at any time.

The **pneumatic connection lines** are to be designed as pipes with at least 6 mm inside clearance.

**Installations kits** for the connection of the tank ensure a simple and safe installation.

For a quick **functional test of the system**, the leak detector VL 255 PMMV is equipped with user-friendly three-way valves in the suction and the measuring line.

**Additional signaler** can be connected directly in the leak detector.

**Potential free relay contacts** for the alarm forwarding are available as standard.

Installation and commissioning must be carried out by **qualified companies/specialist companies**.

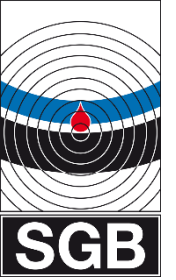


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# LEAK PREVENTION TECHNOLOGY

For a clean and protected environment



## VL 255 PM

### Vacuum leak detector for the leak monitoring of double-walled bottoms of flat bottom tanks

– THE standard at flat bottom tanks –



### NEW:

- Extended operating temperature range
- Flexible power supply
- Optional with remote monitoring LOD

## Vacuum leak detector VL 255 PM

The technically supervised popular VL 255 PM monitors continuously, safely and reliably double bottoms of flat bottom tanks – now even easier to handle!

In its weatherproof stainless steel housing (P), the use of the improved technology (heating/new pump generation/flexible power supply) ensures an extended operating temperature range: **-40 °C up to +60 °C**. Therefore, the VL 255 PM can now also be used in

colder environments – without having to take any further measures!

The VL 255 is pressure-resistant up to 5 bar. In case of a leak, the leak detector withstands occurring overpressures. The digital manometer (M) shows the current underpressure in the system. User-friendly three-way valves in the suction and measuring line enable an efficient and quick function test.

## Vacuum leak detector for flat bottom tanks: VL 255 PM

High-quality and robust **stainless steel box** (IP 54)

User-friendly **digital manometer** (M) showing the current vacuum

Modern **soft-key-pad**

Full **electronic** version

Optional: variably adjustable **service indication Si**

Optional: innovative **remote monitoring LOD**  
Leak detector  
Online Diagnostics



**New technical standard**

Extended operating temperature range: **-40 °C bis +60 °C**

Powerful with **new SMD technology** and **new pump generation**

Flexible power supply with **100–240 VAC** or **24 VDC**

**Pneumatic connections** completely made of **stainless steel** or **brass**

## Monitoring principle

The vacuum leak detector VL 255 PM generates and maintains permanently an operational underpressure (vacuum) in the tank's interstitial space. In case of a leak in one of the both walls, air, stored product or groundwater is sucked into the interstitial space. Due to the vacuum the escape of stored product into the environment is reliably prevented! Any unavoidable minor leak in the system is automatically compensated for by the integrated pump. Relevant leaks lead to pressure increases (vacuum loss). If more air enters the

interstitial space than the vacuum pump can replenish, the pressure in the system drops. Reaching the alarm underpressure, the optic and acoustic alarm are triggered. If stored product or groundwater are sucked in, the interstitial space fills up until the liquid stop valve closes. The remaining underpressure sucks further stored product/groundwater into the interstitial space. Thus, the underpressure drops further. Reaching the alarm pressure, the optic and acoustic alarm are triggered.

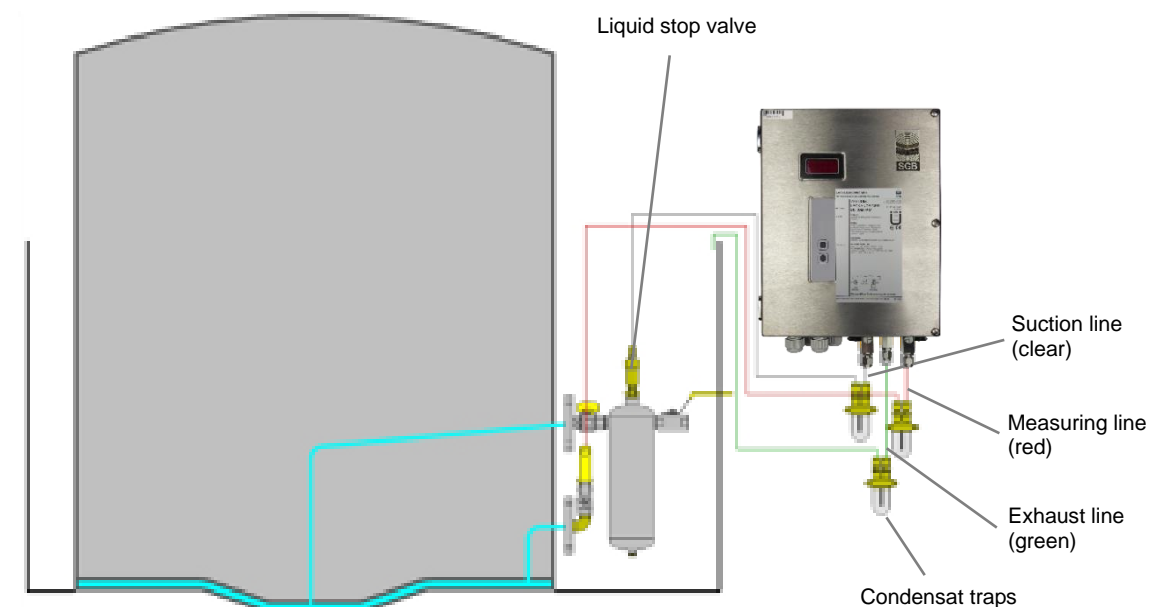
## Monitorable tanks

Leak detectors VL 255 PM monitor flat bottom tanks (e.g. acc. EN 14015 formerly DIN 4119) with double bottoms made of steel or plastic (if sufficiently resistant to the stored product).

## Monitorable liquids

Water-polluting liquids with a flash point above 60 °C (for Germany: 55 °C acc. TRBS and TRGS) such as heating oil, diesel, motor oil.

## Installation scheme



> Flat bottom tank acc. to EN 14015 with double-walled bottom and a suction line to the low point

## Your advantages & benefits of VL 255 PM:

- > Operating temperature range leak detector: **NOW -40°C...+60°C**
- > **Stainless steel box (P)**
- > **New SMD technology and new pump generation**
- > **Digital manometer (M) showing operating pressure permanently**
- > **Flexible power supply with 100...240 VAC or 24 VDC**



A Class 1 leak detection system according to EN 13160: Every leak – no matter in which of the bottoms – is indicated by an acoustical and optical alarm **before** the stored product can escape into the environment. The VL 255 PM thus fulfills the highest safety requirements in environmental and water protection according to European standards!