## **Options and accessories VL 570 PMMV**



### Si (= Service indication): ÷

Time intervals for maintenance are adjustable from 1 up to 63 months

### Hood for housing

Extra protection for the leak detector against weather conditions in case of installation: outdoor material: stainless 1.4301; dimensions: 348 x 365.5 x 250 mm; article number: 412261



# LEAK PREVENTION TECHNOLOGY

For a clean and protected environment

Completely made of stainless steel:

- Tanks with an inner overlay pressure
- Heated tanks
- · Liquids with high densities and/or highly aggressive stored products such as acids and lyes



# Reliable and proven technology

- (successor of the VL 570/EPM)
- Extended operating temperature range

# **Technical Data**

Weight stainless steel housing	4.5 kg
Operating temperature range	-40 °C up to +60 °C
Sound volume buzzer	70 dB(A) in 1 m
Protection class housing	IP 66
Power supply	100-240 VAC, 50-60
	Optional: 24 VDC

Power input External signal Potential free relay contacts

dB(A) in 1 m -240 VAC, 50-60 Hz ional: 24 VDC 50 W (incl. heating) max. 24 VDC, max. 300 mA DC ≤25 W or AC ≤ 50 VA

witching values VL 570 PMMV	
Туре	570
Alarm ON, at the latest:	-570 mbar
Pump OFF, not more than:	-700 mbar
Vacuum operability* of interstitial space given for:	-900 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 an adequate weather protection (P) the leak detector VL 570 PMMV can also be installed outside closed and dry rooms.

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 570 PMMV is equipped with 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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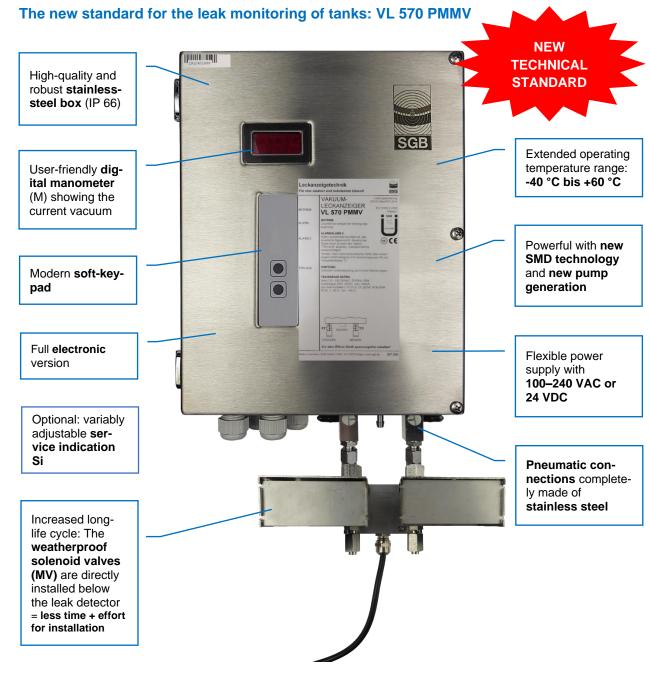
VL 570 PMMV for the leak monitoring of

# Vacuum leak detector VL 570 PMMV

The successor of the proven VL 570/EPM monitors continuously, safely and reliably double-walled tanks. Specially such with an inner overlay pressure of up to 25 bar.

A sensor in the suction line (100 or 150°C) detects occurring liquids and triggers the alarm. This leads to a shutoff of the feed pump and to the closing of the solenoid valves (MV) in the suction line and in the measuring line. Due to the high alarm pressure (-570 mbar) tanks can also be monitored which store liquids with a density of up to 1.9 g/cm<sup>3</sup> or which have a diameter of up to 3 meters. The VL 570 PMMV in a com-

pact and weatherproof stainless-steel box (P) is designed to withstand overpressures up to 25 bar. It can withstand the overpressures that occur in the case of a leak. The digital manometer (M) shows the current underpressure (vacuum) in the system. High-quality stainless steel three-way valves in the suction and the measuring line enable an efficient and quick function test.



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 570 PMMV thus fulfills the highest safety requirements in environmental and water protection according to European standards!

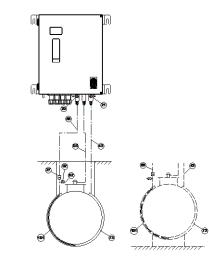
### Monitoring principle

The vacuum leak detector VL 570 PMMV generates and maintains permanently an operational underpressure (vacuum) in the tank's interstitial space. In case of a leak in one of both walls, air, stored product, or groundwater is sucked into the interstitial space. Due to the vacuum, the escape of the 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).

### Monitorable tanks

VL 570 PMMV monitor horizontal double-walled tanks (e.g., acc. DIN 6608, 6616, 6617, EN 12285); vertical tanks (e.g., acc. 6618/2); single-walled tanks with a listed leak protection lining; or other listed suitable tanks - also such with an inner overpressure of up to 25 bar.

### Installation examples:



Horizontal cylindrical tank with a leak protection lining and a suction line to the low point of the interstitial space

# Your advantages & benefits of VL 570 PMMV:

- > 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
- > Stored product temperature up to 100 °C as standard; higher on request
- > Weatherproof solenoid valves (MV)
- > Minimized cost & efforts for installation due to new positioning of the MV below the leak detector

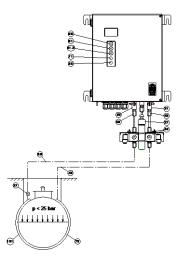


Air leak: If more air enters the interstitial space than the vacuum pump can replenish, the pressure in the system drops. Reaching the alarm underpressure, the optic and acoustic alarm is triggered.

Liquid leak: Stored product or groundwater are sucked into the interstitial space until they reach the liquid sensor which triggers the optic and acoustic alarm. Then also the feed pump shuts off and the solenoid valves in the suction and measuring line will be closed.

# **Monitorable liquids**

Water-polluting liquids with a flash point above 60 °C (for Germany: 55 °C acc. to TRBS and TRGS) such as heating oil, diesel, acids, lyes. The materials used must be durable against the monitored liquids.



Pressure tank

