

Leak indicating units also available for 2 up to 5 sensors:



#### Technical data

##### General data

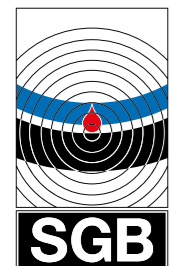
Weight LIU, single-fold:	1,2 kg
six-fold:	5,6 kg
Protection class LIU:	IP 30
Operating temperature LIU:	0 °C to +40 °C
Operating temperature sensor:	-40 °C to +60 °C
Precision of sensor:	2 % FK $\Delta$ = 20 mbar
Max. height for safe operation:	$\leq$ 2000 m NN
Max. relative humidity for safe op.:	95 %
Buzzer volume:	> 70 dB (A) at a distance of 1 m

##### Electrical data

Power supply:	100 to 240 V, 50-60 Hz optional 24 V DC
Terminals 5,6 external signal (only devices with 1 display):	24 V DC, 2 A
Terminals 11 ... 13 (voltage free):	DC $\leq$ 25 W or AC $\leq$ 50 VA
Terminals 17 ... 19 (voltage free):	DC $\leq$ 25 W or AC $\leq$ 50 VA
Device protection:	max. 10 A
Sensor protection:	40 mA; (4000 A)
Oversvoltage category:	2
Level of soiling:	PD2

##### Switching values VLXE-S 350 M

Alarm ON, no later than:	-350 mbar
Alarm OFF, above:	-425 mbar
Refilling required ON, no later than:	-400 mbar
OFF, no later than:	-700 mbar
Recommended applicable operating pressure:	-700 mbar



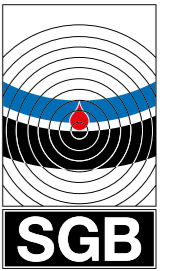
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## LEAK PREVENTION TECHNOLOGY

For a clean and protected environment



### VLXE-S 350 M



## VLXE-S 350 M:

*The electronic vacuum leak detector with Ex sensors for monitoring up to 6 interstitial spaces of double-walled tanks and pipes*

**Also for your filling station retrofit**

24/7 monitoring of both walls

For tanks and pipes

Ex-protected sensors



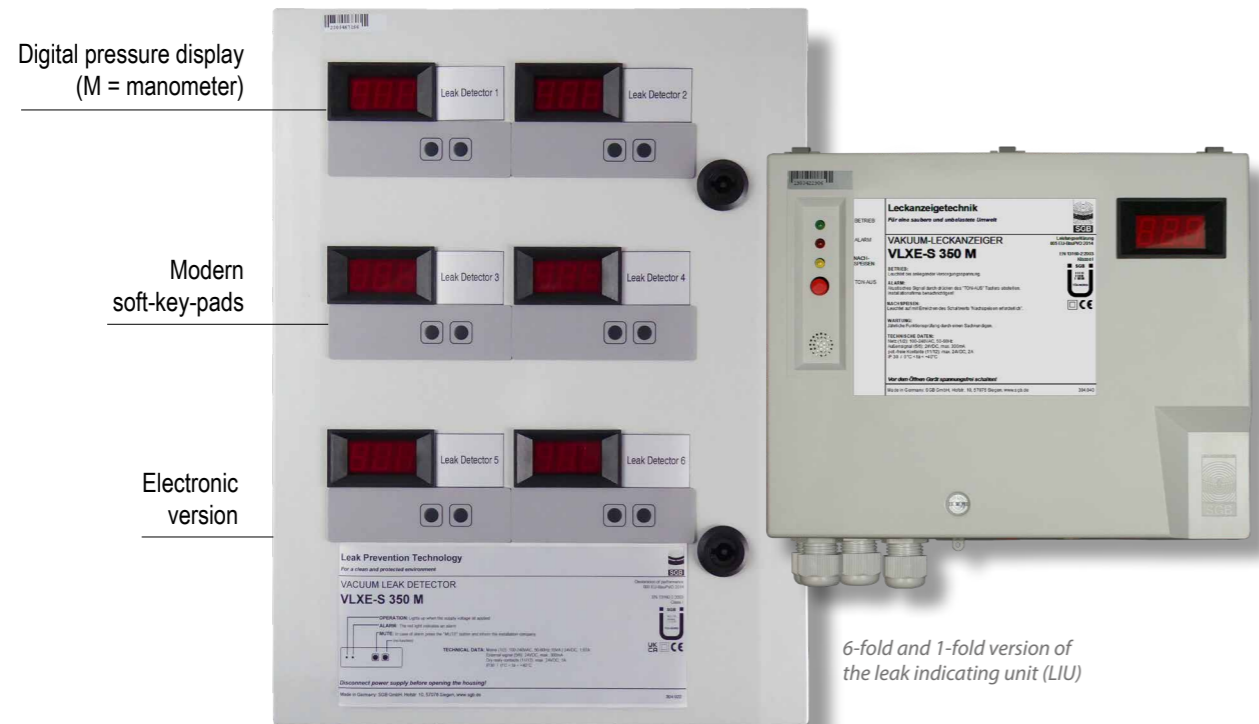
## Vacuum leak detector VLXE-S 350 M – More safety with Ex sensors

The VLXE-S 350 M is a fully electronic leak detection system without its own pressure generator. It is a static system (S) that monitors double-walled tanks with a suction line to the low point of the interstitial space for the leak detector as well as suitable double-walled pipelines. The fully electronically equipped system (E) consists of 1 leak indicating unit and up to 6 explosion-

proof sensors, pneumatically connected to the interstitial space. Thanks to the safe and continuous 24/7 monitoring, every leak - whether in the inner or outer wall - is indicated reliably and as early as possible. That means, an alarm is triggered before the stored or transported liquid can escape into the environment!

The vacuum leak detector VLXE-S 350 M meets the highest environmental protection and safety requirements of EN 13160, class I.

### THE NEW TECHNICAL STANDARD



Digital pressure display (M = manometer)

Modern soft-key-pads

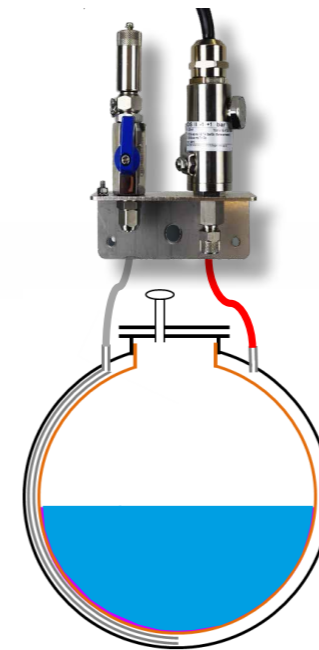
Electronic version

6-fold and 1-fold version of the leak indicating unit (LIU)

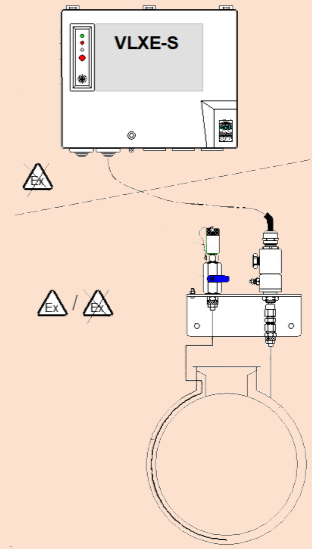
Installation kit with explosion-protected pressure sensor (on the right, stainless steel, IP 65, -20 to +60 °C) and stop valve for the suction connection (on the left)



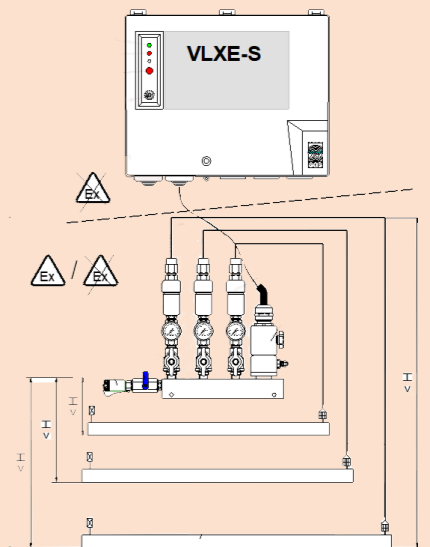
Installation scheme :



### Installation examples



Monitoring of a horizontal cylindrical tank with leak protection lining and suction line to the low point



Monitoring of multiple pipes (connected in parallel)

### How it works:

The interstitial space is evacuated once to a negative pressure of approx. -700 mbar using an external pump. The leak detector then continuously monitors the pressure in the system. The current pressure in the system is shown on the digital display. In the event of a leak (liquid or air leak), the pressure in the interstitial space changes. If the alarm pressure is reached, the indicating unit indicates the alarm status visually, acoustically and by opening a potential-free relay contact.

### Monitorable liquids

- Liquids hazardous to water whose (possibly) occurring vapor-air mixtures (including those that may be generated by the stored/conveyed liquids in combination with air, humidity, condensate or the materials used) can be classified in explosion group II A, II B or II C and in temperature class T1 to T4 (for example petrol, diesel, AdBlue).

### Monitorable tanks (requirements)

- Double-walled tanks with a suction line to the low point of the interstitial space for the leak detector and with a diameter of up to 3 m, whose interstitial space is at least 800 mbar negative pressure resistant
- Other double-walled tanks (including single-walled tanks with a leak protection lining or leak protection jacket) that have a suction line to the low point or an accessible nozzle at the low point
- Tanks with a double bottom and suction line to the low point of the interstitial space (e.g. DIN 4119)
- The tank may be operated with up to 25 bar in the interior.

### Monitorable pipes (requirements)

- Double-walled pipes made of metal or plastic with a qualified certificate of usability
- The delivery pressure in the inner pipe must not exceed 25 bar.
- The interstitial space must be able to withstand an operating vacuum of -700 mbar, taking temperature fluctuations into account.
- When laying the pipes (above and below ground), take temperature fluctuations into account, as these may lead to false alarms!