



Weather-protected solenoid valve directly below the leak detector:
Increased longevity & reduced installation effort

VLXE .. Ex MMV: The **ONLY ONE** for feed and overpressures up to 90 bar

In the version with solenoid valve (MV), the VLXE .. Ex MMV is the only fully electronic and completely explosion-proof leak detection system in the world that can also monitor Ex liquids – at pipes up to 90 bar feed pressure!



Technical data

General data

Weight: 10 kg
Operating temperature: -40°C ... +55°C
Housing protection class: IP 66
Versions
- VLXE .. Ex M: ≤ 5 bar (feed pressure)
- VLXE .. Ex MMV: > 5 ≤ 25 bar (feed pressure)
- VLXE .. Ex MMV with additional pressure switch ZD: > 25 ≤ 90 bar (feed pressure)

Electrical data

Power supply: 100 ... 240 VAC, 50-60 Hz or 24 VDC
Power input: 50 W (incl. heating)
External signal (term. 5, 6): max. 24 VDC, max. 300 mA
Potential-free relay contacts(11-13): DC ≤ 25 W or AC ≤ 50 VA
Fuse: max. 2 A (1500 A)
Overvoltage category: 2

Ex data

Leak detector:
⊕ II 1/2(2)G Ex db eb ib [ib Gb] mb IIB+H2 T4 Ga/Gb
with F 501:
⊕ II 1/2(2)G Ex db eb ib [ib Gb] mb IIB3 T4 Ga/Gb
with F 502:
⊕ II 1/2(2)G Ex db eb ib [ib Gb] mb IIB+H2 T4 Ga/Gb

Switching values VLXE .. Ex M

Type	Alarm ON, at the latest at:	Pump OFF, not more than:	Functional capability* of interstitial space given for:
34	-34 mbar	-120 mbar	-650 mbar
230	-230 mbar	-360 mbar	-650 mbar
255	-255 mbar	-380 mbar	-650 mbar
330	-330 mbar	-450 mbar	-700 mbar
410	-410 mbar	-540 mbar	-750 mbar
500	-500 mbar	-630 mbar	-850 mbar
570	-570 mbar	-700 mbar	-900 mbar

Other switching values on request. Overpressure alarm (VLXE .. Ex MMV) at +50 mbar.
* is considered fulfilled for double-walled steel tanks. In principle, lower values are possible – in certain circumstances with the use of an underpressure valve.



Imprint

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LEAK PREVENTION TECHNOLOGY

For a clean and protected environment



VLXE .. Ex M



VLXE .. Ex M:

The first fully explosion-proof and electronic vacuum leak detector for double-walled tanks and pipes

24/7 leak monitoring of both walls

Direct installation in Ex-zone 1 or 2

Pressures up to 90 bar monitorable



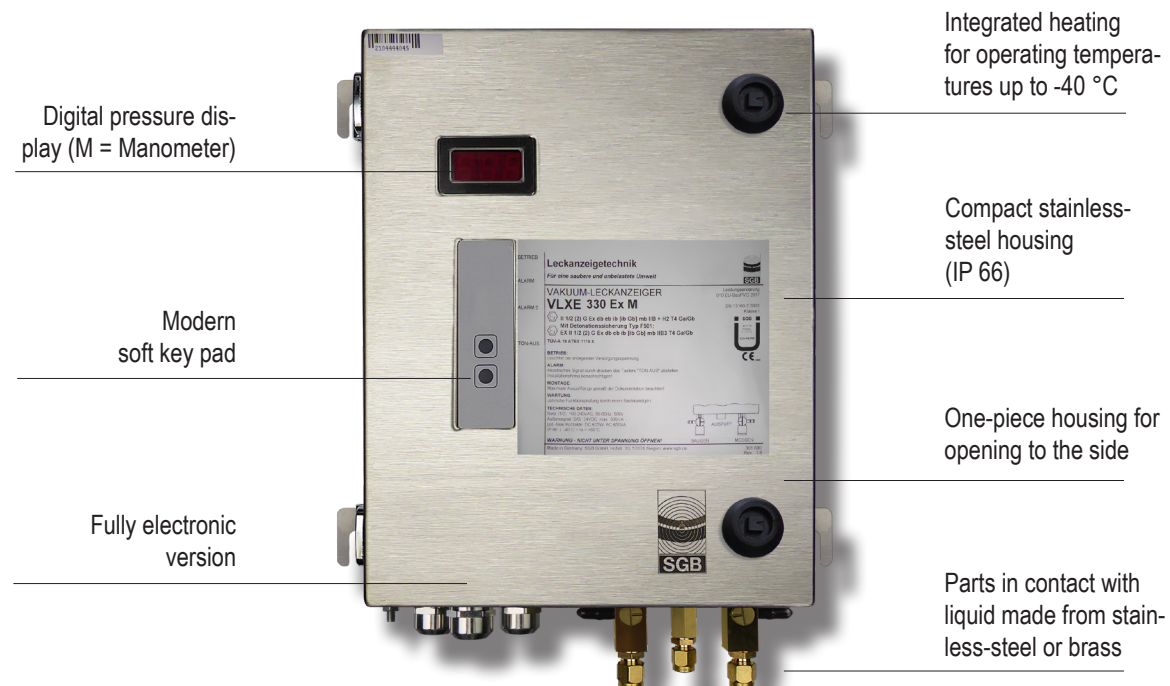
Vacuum leak detector VLXE .. Ex M – Safety in Ex-areas

The VLXE .. Ex M is a fully electronic and explosion-proof vacuum leak detector which is developed for leak monitoring of double-walled tanks and pipes especially in ex-areas. The fully electronic equipment (E) is unique in the market. Due to the safe and continuous 24/7 monitoring, any leak – whether in the inner or outer wall – is reliably in-

dicated. And that's before the stored or conveyed liquid can enter the environment!

=> A class I leak detection system according to EN 13160: The VLXE .. Ex M fulfills the highest safety requirements in environment and water protection according to European standards.

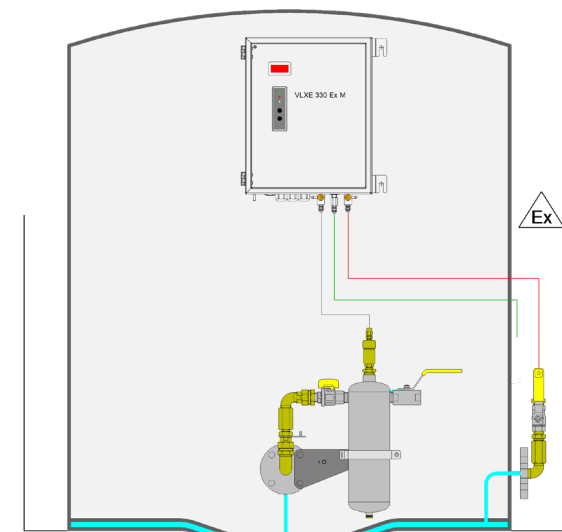
THE NEW TECHNICAL STANDARD



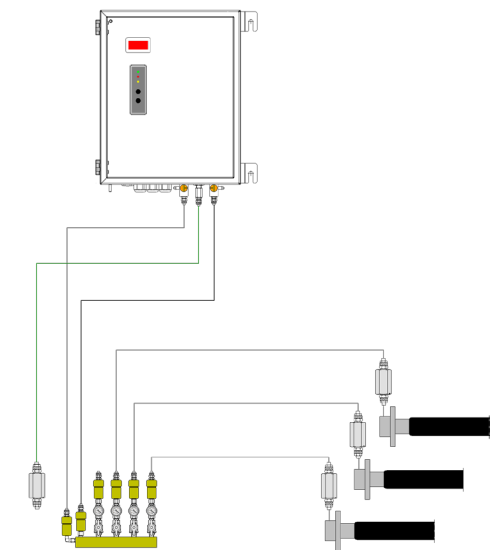
Your advantages and benefits of using our technology:

- Direct installation in Ex-area 1 or 2
- Quick and easy function test in the ex-area
- Microprocessor-controlled measured value acquisition
- Integrated calculation and display of the tightness of the entire system
- Flexible power supply 100–240 V AC and optional 24 V DC
- Resistant to many liquids thanks to brass or stainless-steel design
- As standard, potential free relay contacts as universal interfaces

Installation examples



Monitoring of a double-walled bottom of a flat bottom tank



Monitoring of several pipes

Monitorable tanks

- Single-walled horizontal (under- or aboveground with leak protection lining or leak protection jacket and suction line leading to the low point
- Double-walled horizontal cylindrical (underground or aboveground) tanks, e.g. DIN 6608-2, 6616 or DIN EN 12285-1-2
- Double-walled (or singled-walled with leak protection lining or leak protection jacket) vertical cylindrical tanks or troughs with a dished bottom with a suction line leading to the low point
- Rectangular or cylindrical tanks or troughs with a flat bottom (double-walled or with leak protection lining or jacket) with a suction line to the low point
- Standing cylindrical tanks with double-walled bottom made of metal (e.g. DIN 4119)
- Tanks that operate with an inner overlay pressure of up to 25 bar (see documentation)

Monitorable liquids

Water-polluting liquids for which the leak detector in brass or stainless-steel is considered to be sufficiently resistant. Occurring vapor-air mixtures must be classifiable in gas groups IIA to IIB3 (with F 501) or in gas group IIA to IIB + H2 (with F 502) as well as in temperature classes T1 to T4.

Monitorable pipes

- Suction lines: alarm pressure at least 30 mbar higher than the maximum underpressure in the inner pipe at the high point of the interstitial space
- Pressure lines with feed pressures up to 90 bar. Depending on the feed pressure, the leak detector is equipped with solenoid valves (MV) and an additional pressure switch (ZD).

Installation kits for connecting the leak detector are available from stock for all common pipelines!



If different water-polluting liquids are conveyed in individual pipelines, these should be monitored with several leak detectors for reasons of safety. Possible contamination or undesired chemical reactions can be reliably avoided in this way.