

LEAK PREVENTION TECHNOLOGY

For a clean and protected environment

WORLD PREMIERE:

VLXE .. Ex M

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



- Direct installation in Ex-Zone 1 or 2
- Monitoring of feed and overpressures up to 90 bar
- Best price & highest security

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 bars feed pressure!

Weather-protected solenoid valves (MV) direct under the leak detector = increased longevity & reduced installation effort

Technical data VLXE .. Ex M and VLXE .. Ex MMV

General data

| | |
|---|-------------------------------|
| Weight | 10 kg |
| Operating temperature range | -40 °C to +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 to 240 VAC, 50-60 Hz or: 24 VDC |
| Power input | 50W (incl. heating) |
| External signal (terminals 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

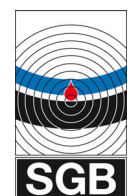
| | |
|---------------|---|
| Leak detector | ⊕ II 1/2(2)G Ex db eb ib [ib Gb] mb IIB+H2 T4 Ga/Gb |
| With F 501 | ⊕ II 1/2(2)G Ex db eb ib [ib Gb] mb IIB3 T4 Ga/Gb |
| With F 502 | ⊕ II 1/2(2)G Ex db eb ib [ib Gb] mb IIB+H2 T4 Ga/Gb |

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 |

Special switching values can be agreed. 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.



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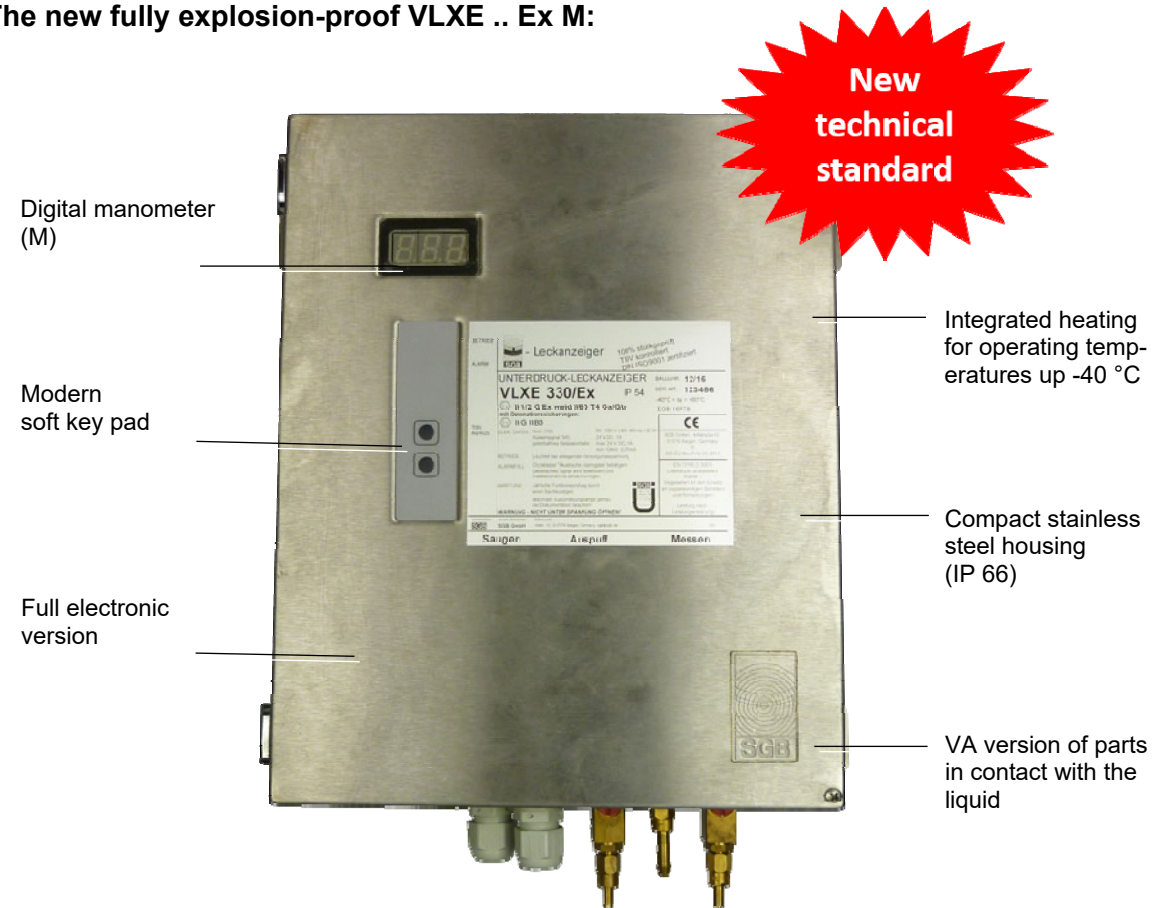
Vacuum leak detector VLXE .. Ex M

The VLXE .. Ex M is a fully electronic and fully explosion-proof vacuum leak detector which is developed for leakage monitoring of double-walled tanks and pipes. The fully electronic equipment (E) is unique worldwide. Thanks to the safe and continuous

24/7 monitoring, any leak – regardless of whether in the inner or outer wall – reliably displayed. And that *before* the stored or conveyed liquid can get into 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 fully explosion-proof VLXE .. Ex M:



Your advantages & benefits of VLXE .. Ex M:

- > Direct installation in Ex zone 1 or 2
- > Quick and easy function test in the Ex zone
- > Digital manometer „M“ & high-quality stainless steel housing with protection class IP 66
- > Microprocessor-controlled measured value acquisition
- > Modern, easy-to-clean soft key pad which is tightly integrated into the housing surface & one-piece housing for opening to the side
- > Integrated calculation and display of the tightness of the entire system
- > Flexible power supply 100–240 V AC and optional 24-V-DC
- > Fully electronic
- > Resistant to many liquids thanks to brass or VA design
- > As standard, potential free relay contacts as universal interfaces

Monitorable tanks

- Single-walled horizontal (underground or above-ground) 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)

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

- Tanks that operate with an inner overlay pressure of up to 25 bar (see documentation)

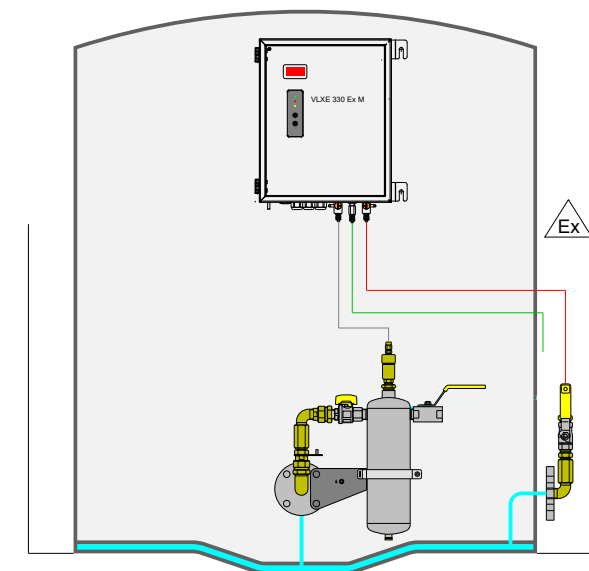
Monitorable pipes

- 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).

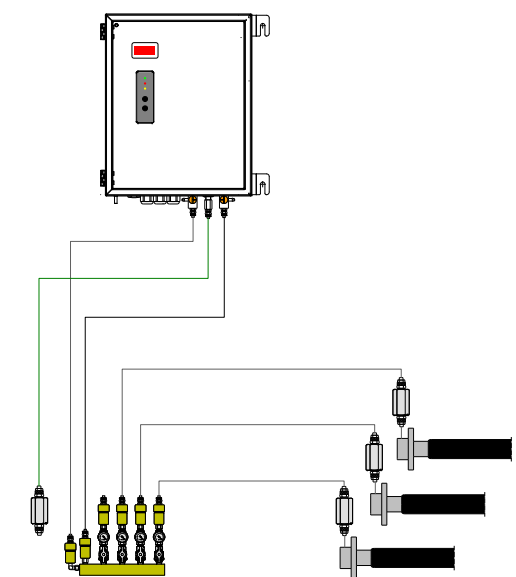
Installation kits for connecting the leak detector are available from stock for all common pipelines!

temperature classes T1 to T4. If different water-polluting liquids are conveyed in individual pipelines, they should be monitored with several leak detectors for reasons of safety. Possible contamination or undesired chemical reactions can be reliably avoided.

Installation examples:



- > VLXE .. Ex M monitors a double-walled bottom of a flat bottom tank



- > VLXE .. Ex M monitors several pipes