

# LEAK DETECTOR TYPE V33 – VACUUM PRINCIPLE

## Field of application:

- The leak detector is applicable for double-walled tanks (providing the monitoring space is suitable for the connection of the leak detector).
- The leak detector is applicable for single-walled tanks, with a lining system and suction line down to the bottom of the tank.
- The leak detector is applicable for double-walled bottoms, or flat base tanks (providing the monitoring space is suitable for the connection of the leak detector).
- All parts of the leak detector, which may come in contact with the stored liquid are made of high resistance materials (e.g. stainless steel).
- The viscosity of the stored media is to be considered (height and diameter of the tank)

**Stored liquids:** Water-endangering liquids regarding approved listings (e.g. DIN6601) with a flash point > 55°C

**Approval:** General Design Permit (DIBT) No. **Z-65.22-6**  
Tested by TÜV Nord, Hamburg

**Assembly place:** Within dry, frost-protected area, or outside into a protective enclosure. It is not allowed to install the leak detector in an ex - zone!

**Function:** The leak detector works on the vacuum principle. Visual and audible alarms are triggered by a pressure increase as a result of leaks in the tank walls, above or below the liquid level. The vacuum pump draws air from the monitoring space through suction line. Normally, the exhaust air is pumped back into the tank. Small system leakages are balanced by the pump automatically.

**Switching values:** in mbar

Pump "off"	$P_{Poff}$	-450
Pump "on"	$P_{Pon}$	-375
Alarm "on"	$P_{Aon}$	-325
Alarm "off"	$P_{Aoff}$	-410

(All values are approximate)

**Note:** Detailed data in the documentation / assembly instructions.

**Standard:** EU Standard for Leak Detection Systems  
Class 1- EN 13160 part 1 to 7

