

# Leak detection technology

For a clean and protected environment



## Vacuum Leak Detector VLR .. E / VLR .. PMMV



The indoor version in a plastic box: VLR .. E – the vacuum leak detector with electronic expansion options for the use on pipes



The weather-proof outdoor version: VLR .. PMMV – the vacuum leak detector for pipes with a digital pressure display (M) and solenoid valves (MV) if required, e.g. at high pressures

**Vacuum leak detector for the leak monitoring of double-walled pipes with the option of connecting additional equipment such as a sensor and/or a solenoid valve.**

### Sensor:

Instead of the liquid barrier if special assembly or stability conditions require it or as a leakage sensor that is used separately e.g. in the collecting area

### Solenoid valve:

Is used at high pressures in the inner pipe (> 5–25 bar) to protect the leak detector from excessive pressures

Each leak in one of the both walls will be detected before the conveyed product can enter the environment.

→ A leak detection system with the highest level of environmental protection acc. to European standard EN 13160, class 1

### Monitorable liquids:

Water-polluting liquids with a flash point > 60 °C (for Germany > 55 °C acc. TRBS and TRGS) where no explosive vapor-air mixtures occur. If different water-polluting liquids are conveyed in individual pipelines and monitored with a leak detector via a manifold, these liquids or their mixing must not have any hazardous effects on one another or cause any chemical reactions.

### Monitorable pipes:

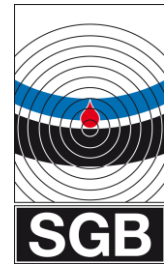
Pipes/hoses made in the factory or on site – depending on the version with up to 25 bar pressure in the inner pipe

### Switching values:

Types	Alarm ON, at the latest at	Pump OFF, not more than	Functionality of the interstitial space given for
VLR 410 E/ VLR 410 PMMV	-410 mbar	-540 mbar	-750 mbar
VLR 570 E/ VLR 570 PMMV	-570 mbar	-700 mbar	-900 mbar

# Leak detection technology

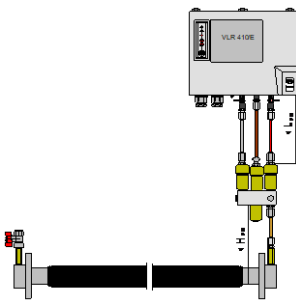
For a clean and protected environment



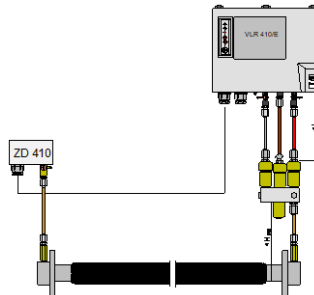
## Application examples

### VLR 410 E

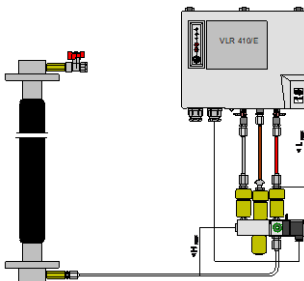
1 monitored pipe with a feed pressure < 5 bar



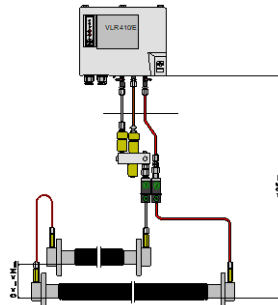
Pipe with an additional pressure switch (ZD) at the opposite end



Rising pipe, max. length 250 m with a density of  $\leq 1,0 \text{ g/cm}^3$



Two pipes in series with 2 solenoid valves (115 V each wired in series) for feed pressures 5 up to 25 bars



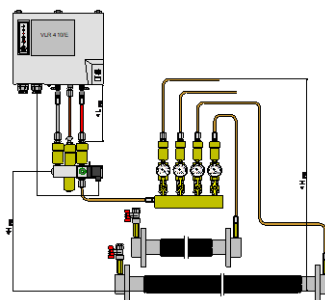
Need for a higher chemical resistance? Your solution:

**VLR 410 E** in the **chemically high-quality PP version**

With polypropylene components or PP hose connection as well as various pneumatic connection variants (PP screw connection, PP hose connection)

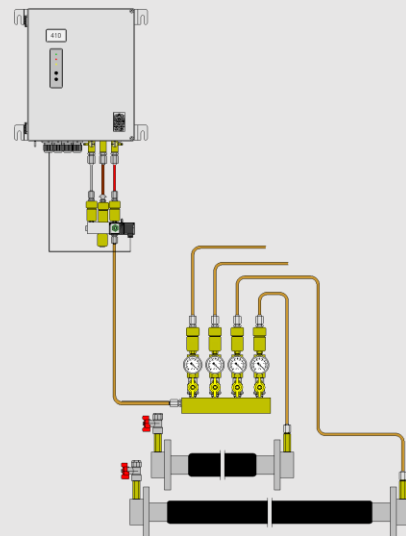


Several pipes connected via a manifold, with a solenoid valve (MV) in the connection line



### VLR 570 PMMV

Double-walled pipe, connected in parallel, with a solenoid valve in the connection line



Double-walled pipe, Connected in series

