# **LEAK PREVENTION TECHNOLOGY**

For a clean and protected environment

# LDU14

Leak Detection Unit for tanks and pipes on petrol stations





**Leak detection unit LDU14:** 100 % continuous monitoring of up to 12 tanks and 12 pipes by pressure leak detection technology. Tanks as well as pipes are monitored separately by two pressure leak detection systems based on air. In case of pressure loss an alarm starts immediately before any product can pollute the environment. LDU14 is in accordance with class I of European standard EN 13160.

# Pressure leak detection: mode of operation

The leak detector LDU14 for tanks and/or pipes creates an operating pressure in the interstitial space. In case of a pressure loss due to a leak an alarm is triggered when the pressure reaches a certain level. All interstitial spaces must be sufficiently pressure resistant.

## **Switching values**

### **►** Tanks/Containments

Type LDU14	Alarm pressure	Operating pressure	Test pressure interstice min.
T280	> 280 mbar	< 320 mbar	400 mbar
T325	> 325 mbar	< 360 mbar	400 mbar
T330	> 330 mbar	< 420 mbar	500 mbar

# ► Pipes

• For fill pipes, vent pipes and suction pipes:

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	Type LDU14	Alarm pressure	Operating pressure	Test pressure interstice min.
	P1.1	> 1,1 bar	< 1,6 bar	2,0 bar
	P2.0	> 2,0 bar	< 2,4 bar	5,0 bar

• For pressurized pipes connected to submersible pumps (max. pressure inner pipe 2.5 bars):

Type LDU14	Alarm pressure	Operating pressure	Test pressure interstice min.
P3.5	> 3,5 bar	< 4,4 bar	5,0 bar

### **Combined solutions for tanks and pipes**

Using the combined solutions LDU14 T330/P1.1, LDU14 T330 P2.0 or LDU14 T330/P3.5 guarantees economic benefits as well as the highest level of quality and safety.

### **Alarms**

- · Red and yellow alarm light
- Signal horn
- Flashing light (optional)
- Alarm to replace filter (optional)
- Remote monitoring (optional)



# Interior view of LDU14 T330/P3.5 (12/12)

Electronic system for pipes

Electronic system for tanks

Solenoid valve in the pressure line for pipes

Check valve

Buzzer

Membrane keyboard with

- LED green, red + yellow
- Acknowledgement key 1
- Acknowledgement key 2

# Advantages & benefits:

- slight container taking less space (390 x 320 x 1202 mm), optional in stainless steel
- solid metal box
- easy installation
- easy control and maintenance of pneumatic parts
- standard positioning of manifolds
- · particular big dry filter
- electronic monitoring of the unit for an easy and fast annual function test

Dust filter

Dry filter: TF 200 for LDU14 T or LDU14 P; TF 300 for LDU14 T/P

Pressure sensor for pipe monitoring

Pressure sensor for tank monitoring

Terminal box for electrical connection

Overpressure valve for tanks

Three-way valve "pressure line" for tanks and three-way valve "measuring line" for tanks

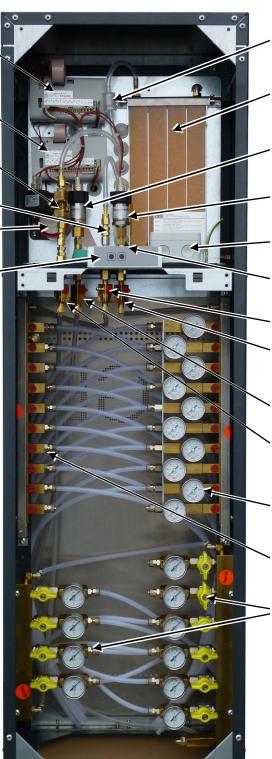
Three-way valve "measuring line" for pipes and Three-way valve "pressure line" for pipes

Manifold measuring for tanks with 1–12 outlets

Manifold pressure for tanks with 1–12 outlets

Manifolds for pipes

\* Pictures are showing the principle of the design and are not binding for the extent of delivery.



## + Filter control FC



The leak detection unit LDU14 is equipped with a dry filter to avoid condensation and corrosion in the interstitial space. The additional dry filter monitoring FC ensures that the consumption of the dry agent is detected and the spent dry agent is exchanged.

▶ an important contribution for a long term run of the tank/pipe!

# + Remote monitoring LOD (Leak detector-Online-Diagnostics)

The innovative LOD technology implements a secure and continuous remote monitoring of a leak detector. All its operating conditions and data are collected and transmitted autonomously via Ethernet connection to the LOD server and analyzed every 24 hours. The correct operation of the leak detector is thus subject to a daily examination.

The notice of alarm mode/maintenance activation is immediately transmitted from the LOD server to registered addressees via e-mail. When using the Ethernet module, data can also be further processed in a company's own system. SGB provides the appropriate protocol.

### PARTICULARLY SUITABLE FOR

- Remote or difficult to access installations
- Unmanned petrol stations
- Emergency power supplies

#### LDU14 variations available

### Only for tanks

•	LDU14 T280	1–12 tanks
•	LDU14 T325	1-12 tanks
•	I DH14 T330	1_12 tanks

### Only for pipes

•	LDU14 P1.1	1–12 pipes
•	LDU14 P2.0	1–12 pipes
•	LDU14 P3.5	1–12 pipes

### Combinations for operating tanks and pipes

•	LDU14 T 330/P1.1	1–12 tanks and 1–12 pipes
•	LDU14 T330/P2.0	1–12 tanks and 1–12 pipes
•	LDU14 T 330/P3.5	1-12 tanks and 1-12 pipes

