

LEAK PREVENTION TECHNOLOGY

For a clean and protected environment



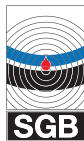
Pressure leak detectors for pipes **DLR-P .. CV**



Variants • Equipment • Accessories

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DLR-P .. CV – PRESSURE LEAK DETECTORS FOR PIPES

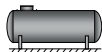
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Legend



suitable for under-
ground tanks

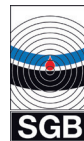


suitable for above-
ground tanks



suitable for pipes

SGB's headquarter in Siegen,
Germany



About SGB's leak detectors

Safety in leak monitoring of double-walled tanks and pipes

Leak detectors made by SGB offer the highest safety and reliability in environmental and water protection. They monitor double-walled tanks and double-walled pipes as well as single-walled containments with a leak protecting lining or a leak protecting jacket safely and permanently for leaks – 365/24/7. Due to the functional principle of the SGB leak detector working with pressure or vacuum, no stored or transported liquid can enter the environment or the groundwater!

- SGB is certified according to DIN EN ISO 9001 (since 1999)
- SGB's leak detectors conform the high requirements of class I of the European Standard
- SGB's leak detectors are individually as well as TÜV tested



Know-how and experience since 1962

More than 430 000 SGB leak detectors globally in use guarantee safety for man and environment in tank farms, refineries, chemical plants, gas stations, drilling rigs, data centers as well as domestic heating oil tanks and many more. Over 55 years of experience with leak detection technology make SGB leak detectors a recognized brand product – at home and abroad.

Pressure leak detectors DLR ..

DLR = Druck- (= Pressure) **-Leak detector for Rohrleitungen** (= pipes)

On the following pages we present you our pressure leak detector DLR-P..CV with integrated pump for leak monitoring on pipes – with its equipment options and accessories.

Further information on our innovative products, services and specialist training can be found on **www.sgb.de**.

Contact

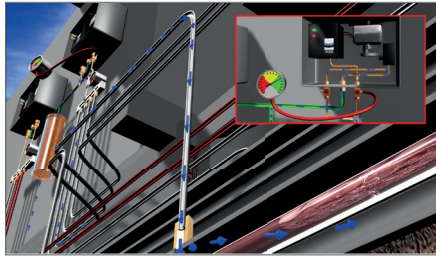
In case of any inquiries please do not hesitate to contact us. Phone us on **+49 271 48964-0** or send an e-mail to **sgb@sgb.de**.
We are happy to be of any help!

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Monitoring principle „overpressure“

With the DLR leak detectors an overpressure is built up in the interstitial space of the pipe. Therefore air or gas is used. The operating pressure and the alarm pressure of the leak detector are higher than the pressure of the transported good or the groundwater against the pipe's walls. In case of a leak in one of the two walls, air/gas escapes from the interstitial space. An escape of the transported material into the environment is thus reliably prevented!



> Leak detectors with refilling function like DLR-G or DLR-P compensate minor leaks in the system.

> Relevant leaks lead to a pressure drop. When the alarm pressure is reached, the visual and/or optical alarm is triggered.

Naming of the leak detectors

- DLR-G .. = **D**ruck-**L**eckanzeiger **R**ohrleitung **G**as. This is a pressure leak detector for pipes working with gas. A pressure cylinder (nitrogen) is used for pressure built-up.
- DLR-GS .. = **D**ruck-**L**eckanzeiger **R**ohrleitung **G**as **s**tatisch. This is a pressure leak detector for pipes working with gas, static. For the pressure built-up a pressure generator must be brought to the building site. The leak detector has neither a pump nor an automatic refilling device.
- DLR-P .. = **D**ruck-**L**eckanzeiger **R**ohrleitung **P**umpe. This is a pressure leak detector for pipes with an integrated pump which is used for building up the pressure.
- DLR-P .. **CV** = **D**ruck-**L**eckanzeiger **R**ohrleitung **P**umpe und **R**ückschlagventil (**C**heck **V**alve). This is a pressure leak detector for pipes equipped with a pump and a check valve.
- .. = The ellipsis dots or the numerical value stand for the alarm pressure of the leak detector in bar.



Optional equipment

M (= Manometer/Pressure gauge)

The leak detector is equipped with a digital pressure display in the cover on the housing. It shows the current pressure of the system.



P (= Protected)

Protection against external weather influences like sunshine, rain, snow, salt water ... Also appropriate depending on the intended use (transported fluid, requirements of the systems).
Material: stainless steel



Si (= Service indication)

When commissioning the leak detector, the time for the prescribed functional test can be freely selected within the specified maintenance interval. There are time intervals from 1 up to 63 months. The service indicator (yellow LED) visually indicates the upcoming function test for the leak detector.



DLR-P .. CV



Air-based pressure leak detector with pump and check-valve especially made for underground unpressurized double-walled plastic pipes in which explosive vapor-air mixtures can occur in the interstitial space due to permeation and if the occurrence of potentially explosive vapor-air mixtures in the inner pipe does not represent any additional dangers, e.g. when entering pumps or exiting at the end of the pipe. Leak detection medium: dried air.

The leak detector:

The DLR-P .. CV continuously monitors the pipe's interstitial space (filled with air) for leaks. The different pressure levels cover a wide range of applications. The pipeline/pipe must have the necessary pressure resistance of 5 bar in the interstitial space. A typical application of the DLR-P .. CV is the monitoring of double-walled plastic pipes at filling stations.

The DLR-P .. CV is equipped with a check valve in the connection line. The check valve avoids that gas may flow towards the leak detector (zone reduction). This avoids that explosive vapors may enter the leak detector. Thus, the leak detector can be used for pipes with a low permeation.

The functional test can be done quickly and easily with SGB's testing device.

For pipes transporting explosive liquids, monitoring with air is less expansive in the long term than with nitrogen.

Monitorable pipes:

Double-walled pipes for which suitability is given

Monitorable liquids:

Water-polluting liquids, even with a flash point ≤ 60 °C (for Germany ≤ 55 °C acc. to TRGS/TRBS). The conveyed product may not react with the leak detection medium used!

Examples: petrol, diesel, heating oil, acids, lyes etc.



DLR-P 1.1 CV with pulsation damper

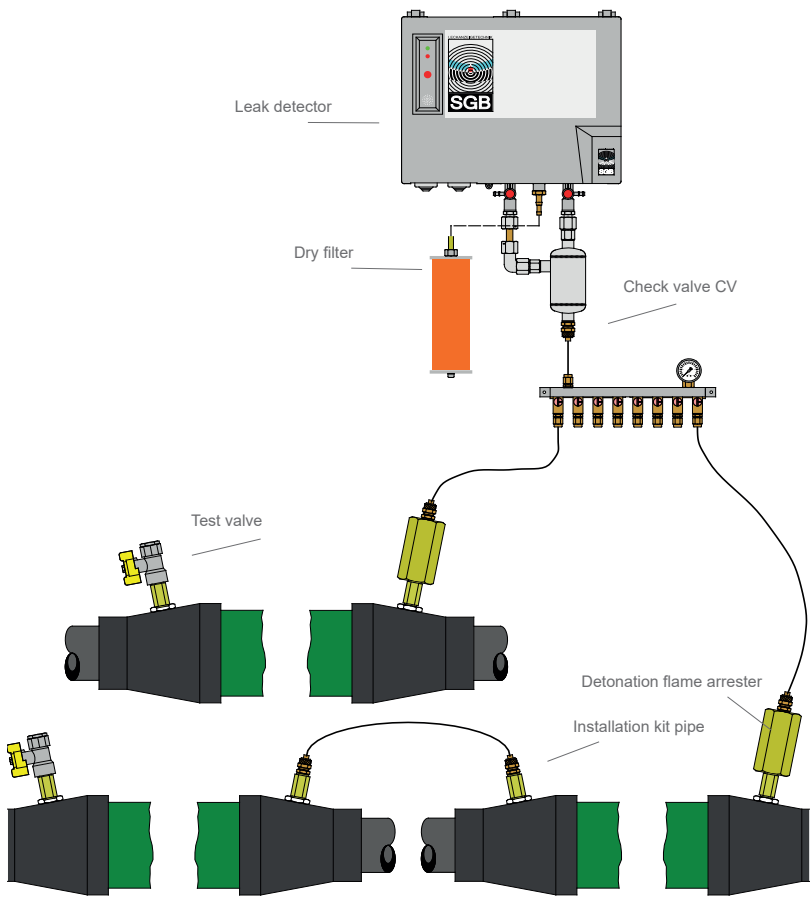
Installation:
Outside Ex areas

Conformity:
EN 13160 class I

Switching values (in bar):

DLR-P ... CV Type/Alarm pressure	1.1	2.0
Feed pressure in inner pipe	pressu- reless	< 1.0
Set pressure	< 1.4	< 2.4
Test pressure interstice	> 5.0	> 5.0

Pressures in bar; further pressure levels on request



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Leak detector



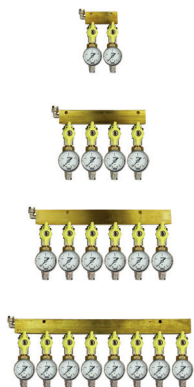
Art-No.	Description	Euro	Qty
078420-07	Leak Detector DLR-P 2.0 CV, pul-d, 100-240VAC, pl-box, QU8/6		1 pce
Overpressure leak detector DLR-P 2.0 CV with a check valve in the connection line towards the interstitial space. The check valve avoids that gas may flow towards the leak detector. This avoids that explosive vapors may enter the leak detector. Therefore the function test of the leak detector only can be executed by ventilation with a test valve at a pipe end or with the SGB testing device. The interstitial space shall be rated for 5 bar overpressure.			
Alternatively, in case 1.1 bar alarm pressure is sufficient:			
078411-07	Leak Detector DLR-P 1.1 CV, pul-d, 100-240VAC, pl-box, QU8/6		1 pce
104852	Additional price service indication, version Si (1-63 months)		1 pce

Dry filter



Art-No.	Description	Euro	Qty
340343	Dry filter TF600, hose connection, dry filter agent, wall holder		1 pce
340345	Dry filter TF1200, hose connection, dry filter agent, wall holder		1 pce

Manifolds



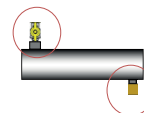
Art-No.	Description	Euro	Qty
196237	Manifold 2 pipes, shut-off valves, gauge till 4bar, QU8/6		1 pce
196337	Manifold 3 pipes, shut-off valves, gauge till 4bar, QU8/6		1 pce
196437	Manifold 4 pipes, shut-off valves, gauge till 4bar, QU8/6		1 pce
196537	Manifold 5 pipes, shut-off valves, gauge till 4bar, QU8/6		1 pce
196637	Manifold 6 pipes, shut-off valves, gauge till 4bar, QU8/6		1 pce
196737	Manifold 7 pipes, shut-off valves, gauge till 4bar, QU8/6		1 pce
196837	Manifold 8 pipes, shut-off valves, gauge till 4bar, QU8/6		1 pce

PA hose



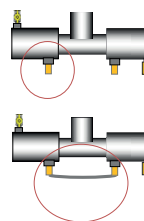
Art-No.	Description	Euro	Qty
260519	PA-hose, PN6, off-white, 8/6x1mm, 100m roll		1 roll

Test valve e.g. KPS



Art-No.	Description	Euro	Qty
190702	Testvalve for KPS-Pipe Con., KV6 o. 1/4" with Cock PN10 and Plug		1 pce

Pipe connection e.g. KPS



Art-No.	Description	Euro	Qty
190795-07	Pipe Connection, KPS - QV8/6 KV6 or 1/4" - 8/6 mm Quick Union, Brass		1 pce



Installation kits (i.e. test valves and pipe connections) for connecting the leak detector are available for all common pipes (types/manufacturers)! We are happy to be of any help – just call us on: +49 271 48964-0

Testing device



Art-No.	Description	Euro	Qty
115395	Testing Device-Press. Resist. up to 4Bar for Overpressure Leak Detector		1 pce

Detonation flame arrester



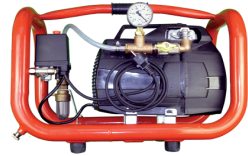
Art-No.	Description	Euro	Qty
193435-07	Deton. Flame Arrester F502, 1/4"-QU8/6 Brass, 1/4" Male, 8/6 mm Quick Union		1 pce
The detonation flame arrester shall be tested for overpressures. The detonation flame arrester type F502 is suitable for pressures up to 3 bars.			

Installation accessories

Installation pumps



Art-No.	Description	Euro	Qty
200820	Vacuum Pump VP218, 240 V, 1,5KW incl. Liquid Stop, Condensate Trap, HM		1 pce
With extra high vacuum volume flow very useful for producing vacuum on large interstitial spaces as on large tanks, double bottoms of flat bottom tanks or with flexible linings. Not explosion protected. Weight 17 kg			



Art-No.	Description	Euro	Qty
200840	pressure-vacuum pump ÜVP218, 240V, 1,5KW liquid Stop, Conden trap, valves, manome		1 pce
Overpressure and vacuum pump with high performance. Useful accessories as valves, manometers, liquid stop valves realises comfortable operation. Not explosion protected. Max. underpressure 850 mbar, max overpressure 8 bar, weight 18 kg			



Art-No.	Description	Euro	Qty
200860	Ex-Vacuum-Pump N026 St.9E EX, 230 V Category 2 in-outside, 1m³/h, G1/4"		1 pce
Explosion-protected vacuum pump for evacuating interstitial spaces in which ex-vapors may occur.			

Testing devices



Art-No.	Description	Euro	Qty
115360	Digital Measuring Device DM 12-2, -1...+2 bar, incl. case		1 pce
Field of use: The sensor is suitable for non-corrosive and non-ionizing gases and liquids (DO NOT use for water-air or hydrofob filters!).			



Art-No.	Description	Euro	Qty
115381	Digital Measuring Device DM 115 Ex, expl protect., -1...+1,5 bar, incl tubing + case		1 pce
Digital overpressure/underpressure measuring device, ex-proof			

Installation accessories

Testing devices



Art-No.	Description	Euro	Qty
115371	Pressure Measuring Device CPH 6200 incl. suitcase, without Sensor		1 pce
Digital hand-held pressure indicator with measuring ranges from 0...25 bar to -1000...0 mbar. The measuring range of the connected pressure sensor will be detected automatically. Incl. adapter for leak detector.			



Art-No.	Description	Euro	Qty
115373	Pressure sensor for CPH 6200 -1...0 bar, process connection 1/2"		1 pce
115375	Pressure sensor for CPH 6200 0...25 bar, process connection 1/2"		1 pce



Art-No.	Description	Euro	Qty
115376	Manual hand Pump CPP30, incl. connecting cable 0,5m, G1/4" female thread		1 pce
For test pressure generation up to max. 35 bar. Vacuum generation down to max. -950 mbar is also possible through the change-over switch. Incl. adapter for leak detector.			

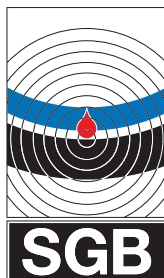


Art-No.	Description	Euro	Qty
115392	Testing Device, max Pressure 1,0 bar Over- and Underpressure Leak Detectors		1 pce
For a simple and quick function test of leak detectors, (overpressure and vacuu) with a pressure of max. 1000 mbar. With a port to connect a gauge. With ventilation device for controlled pressure / vacuum drop. Volume 1 liter. Height 380 mm.			



Art-No.	Description	Euro	Qty
115395	Testing Device-Press. Resist. up to 4Bar for Overpressure Leak Detector		1 pce
For a simple and quick function test of leak detectors, (overpressure and vacuum) with a pressure of max. 4 bar. With a port to connect a gauge. With ventilation device for controlled pressure / vacuum drop. Volume 0,75 liter. Height 380 mm.			

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Subject to technical modifications;
all data without guarantee; 03/2021,
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