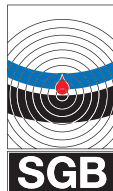


LEAK PREVENTION TECHNOLOGY

For a clean and protected environment



Pressure leak detector for pipes DLR-G

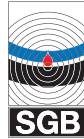


Variants • Equipment • Accessories

SCAN ME



shop.sgb.de
All types,
all information



CONTENT

- 03_ About SGB's leak detectors
- 04_ Monitoring principle „overpressure“
Naming of the leak detectors
- 05_ Optional equipment

PRESSURE LEAK DETECTORS FOR PIPES

- 06_ Pressure leak detector DLR-G
- 07_ Installation scheme
- 08_ Technical standard of DLR-G



ACCESSORIES / SERVICES

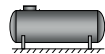
- 09_ Installation equipment
- 11_ Service (professional seminars)



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 13160
- SGB's leak detectors are individually as well as TÜV tested

60
YEARS OF SGB
1962–2022

Know-how and experience since 1962

More than 480 000 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 60 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-G for leak monitoring on pipes with gas – with its' equipment options, accessories and services. Further information on our innovative products, services and specialist training can be found on **sgb.de/en** and **shop.sgb.de/en**.

Contact

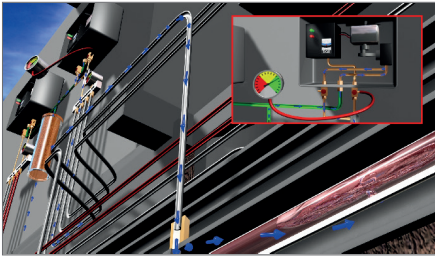
In case of any inquiries please do not hesitate to contact us. Call us on **+49 271 48964-0** or send an e-mail to **sgb@sgb.de**. We are happy to be of any help!

shop.sgb.de
SGB's new B2B
web shop



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 (Check **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

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-G



Pressure leak detector with re-filling function from a stationary connected nitrogen bottle or a compressed gas network (operating mode C = continuous). With optional function for operating mode I (= interval) without automatic re-filling function. A leak detector operating with inert gas (nitrogen) for the leak monitoring of double-walled pipes.

The leak detector:

The leak detector monitors permanently the interstitial space filled with compressed gas. The pressure in the interstitial space is displayed digitally in all versions.

Operating modes:

- C („Continuous“): The nitrogen bottle is permanently attached to the leak detector. For above-ground and underground double-walled pipes and fittings
- I („Intervall“): The pressurized gas cylinder is connected for commissioning/functional testing. Only for applications in which no temperature fluctuations of more than +/- 10 °C occur (e.g. double-walled pipes/fittings installed underground or indoors; no hot media)

Monitorable pipes:

Double-walled sufficiently pressure-resistant pipes and fittings made of metal or plastic in factory or on-site construction.

Monitorable liquids:

Water-polluting liquids, even with a flash point ≤ 60 °C (for Germany ≤ 55 °C acc. to TRGS and TRBS). The conveyed product may not react with the leak detection medium used! Examples: petrol, methanol, diesel, chemicals, acids, lyes.



DLR-G with digital pressure display (M)

Installation:

Outside Ex areas

Conformity:

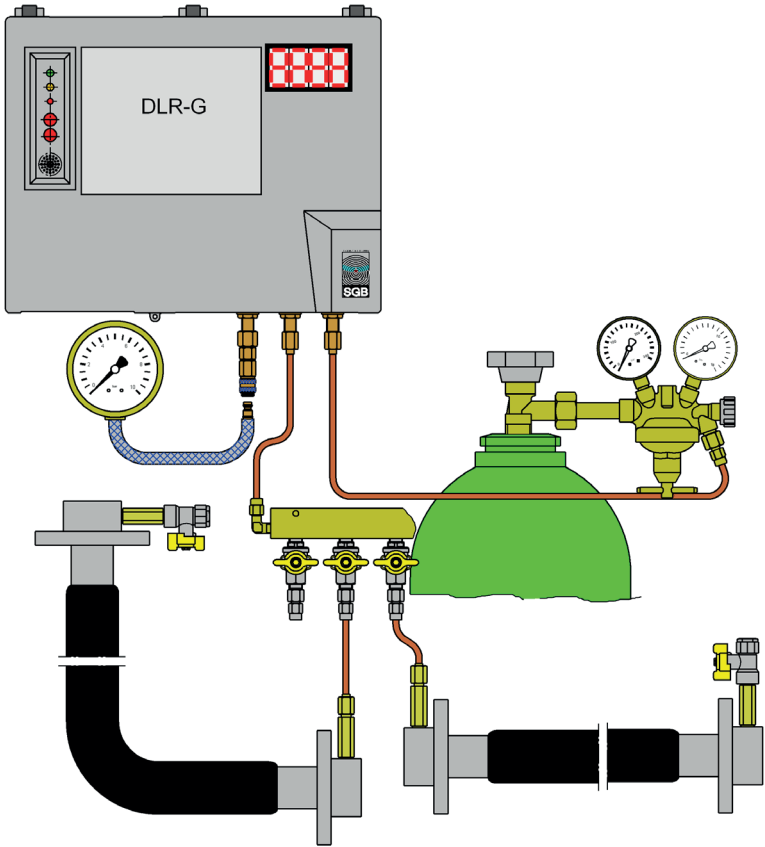
EN 13160 class I

Housing / IP rate / temperature range:

plastic box / IP 30 / -0 °C..+40 °C
stainless steel / IP 66 / -40 °C..+60 °C

Pneumatic connections:

FU6/4: flared union for copper pipe 6/4x1 mm
CF8/6: compression ferrule for copper pipe 8/6x1 mm or polyamide hose 8/6x1 mm



SWITCHING VALUES

| DLR-G ... Type/alarm pressure | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------------------------|-------------------|-------|-------|-------|-------|-------|--------|--------|--------|
| Operating pressure Inner pipe | pressu- reless | < 1 | < 2 | < 3 | < 4 | < 5 | < 6 | < 7 | < 8 |
| Set pressure | < 2 | < 3 | < 4 | < 5 | < 6 | < 7 | < 8 | < 9 | < 10 |
| Test pressure interstice | > 3,4 | > 4,5 | > 5,6 | > 6,7 | > 7,8 | > 8,9 | > 10,0 | > 11,1 | > 12,2 |

SWITCHING VALUES

| DLR-G ... Type/alarm pressure | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
|----------------------------------|--------|--------|--------|--------|--------|--------|------|--------|--------|
| Operating pressure Inner pipe | < 9 | < 10 | < 11 | < 12 | < 13 | < 14 | < 15 | < 16 | < 17 |
| Set pressure | < 12 | < 13 | < 14 | < 15 | < 16 | < 17 | < 18 | < 19 | < 20 |
| Test pressure interstice | > 15,4 | > 16,5 | > 17,6 | > 18,7 | > 19,8 | > 20,9 | > 22 | > 23,1 | > 24,2 |

Technical standard DLR-G

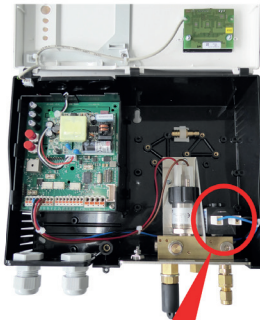


Power supply
100-240 V AC, 50/60 Hz
or 24 V DC

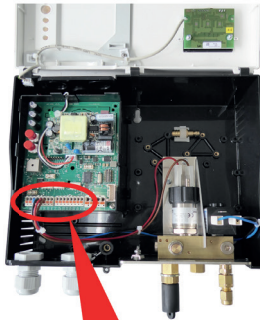
- ▶ Standard design of the potential-free relay contact for the alarm message as a change-over contact
- ▶ Flexible power supply by using a switching power supply of 100 to 240 V AC, 50/60 Hz. At the same time, a 24 V DC supply can be implemented in the same leak detector.
- ▶ Quick and easy connection of the electrical connection lines using tension spring terminal technology
- ▶ Latest SMD electronic components



Pressure sensor



Solenoid valve



Easy to change

Proven advantages of the electronic version

- ▶ Electronic control of the pressure sensor
- ▶ Simple change of the operating mode or, if necessary, the pressure level by means of a dip switch (Note the setting of the pressure relief valve if necessary!)
- ▶ Integrated electronic leakage indicator for the entire system
- ▶ Drilling patterns in the housing base (plastic housing)
- ▶ 2-pin port for querying/forwarding all operating states of the leak detector

Installation accessories DLR-G

Testing device



| Art.-No. | Description | Euro | Qty |
|----------|---|------|-------|
| 115371 | Pressure Measuring Device CPH 6200 incl. suitcase, without Sensor | | 1 pce |

Pressure sensor



| Art.-No. | Description | Euro | Qty |
|----------|---|------|-------|
| 260721 | Pressure sensor for CPH 6200, 0...25 bar, process connection 1/2" | | 1 pce |

Bending pliers



| Art.-No. | Description | Euro | Qty |
|----------|---|------|-------|
| 115830 | Bending pliers MINIBEND for 6/8/10 mm pipes | | 1 pce |

DLR-G options

Protecting box



| Art-No. | Description | Euro | Qty |
|---------|---|------|-------|
| 220696 | Stainless steel cabinet with window, 800x1800x400mm, roof, mounting rails | | 1 pce |

Heating



| Art-No. | Description | Euro | Qty |
|---------|--|------|-------|
| 332230 | Heater 250 Watt with radiator + thermostat for Protective Box KS 1467 and larger | | 1 pce |

Hood for housing



| Art-No. | Description | Euro | Qty |
|---------|--|------|-------|
| 412261 | Hood for housing, stainless steel 1.4301 | | 1 pce |

Service: Professional Training

Professional training:

The selection, construction, and commissioning of leak detectors can present a challenge due to the wide variety of liquids to be stored, types of containers and pipes, different types of leak detectors, and their different uses. There are pressure leak detectors, vacuum leak detectors, several versions for indoor and outdoor use, as well as versions for use in ex-zones. It can be difficult for newcomers to keep track of when each leak detector is required and how it must be put into operation.

Our professional seminars are designed to address these challenges by offering in-depth background information and numerous practical demonstrations.

Our training courses are aimed at

- operators
- engineers
- specialized companies
- installers
- experts
- planners

- + Online training (Webinars)
 - Starter module
 - Module filling stations
 - Module tanks farms/industrial plants
 - Module device training
 Our digital training provides target group-specific and compact information.
- + Classroom training (Day seminars)
 - Filling stations
 - Tank farms/industrial plants/refineries
 Basic theoretical knowledge and demonstrations on our devices – our on-site training courses offer an intensive insight in leak monitoring.

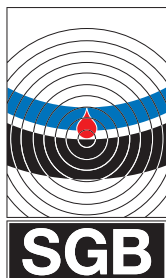
More information and booking on:

sgb.de/en/seminar/

SCAN ME



SGB's training room



Contact and Imprint

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