LEAK PREVENTION TECHNOLOGY

For a clean and protected environment



Pressure leak detector for pipes **DLR-GS**





Variants • Equipment • Accessories





Shop. Sold. de Shop. Sold. de Shop. Sold. de Short de Sho



Pressure leak detectors for pipes – DLR

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 alrm is triggered.

Naming of the leak detectors

- DLR-G.. = Druck-Leckanzeiger Rohrleitung Gas. This is a pressure leak detector for pipes working with gas. A pressure cylinder (nitrogen) is used for pressure built-up.
- DLR-GS.. = Druck-Leckanzeiger Rohrleitung Gas statisch. 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.. = Druck-Leckanzeiger Rohrleitung Pumpe. This is a pressure leak detector for pipes with an integrated pump which is used for building up the pressure.
- DLR-P .. CV = Druck-Leckanzeiger Rohrleitung Pumpe und Rückschlagventil (Check Valve). 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.

DLR-GS .. N

Static pressure leak detector without pressure generator. The operating pressure in the interstitial space is generated e.g. with a nitrogen bottle and then monitored by the leak detector. Especially designed for the monitoring of liquids which are highly explosive and liquids which react sensitive when in contact with air (e.g. cosmetics, foods). With re-filling indication ...N".

The leak detector:

Leak detector DLR-GS is working with air or inert gas (nitrogen) as leak detection media in the interstice. The overpressure is built up manually. When monitoring liquids with a flash point > 55 °C, air can be used instead of nitrogen.

Monitorable pipes:

- · underground double-walled pipes and fittings
- for pipes with up to 15 bar operating pressure in the inner pipe

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.

Installation:

Outside Ex areas

Conformity:

EN 13160 class I



DLR-GS .. N: with relay contact for refilling as standard



DLR-GS .. PMN in stainless steel housing

Switching values (in bar):

DLR-GS Type/alarm pressure	1	2	3	4	6	8	10	13	16
Operating pressure inner pipe	pressu- reless	< 1	< 2	< 3	< 5	< 7	< 9	< 12	< 15
Set pressure	5	6	7	8	10	12	14	17	20
Test pressure interstice	> 6,5	> 8,0	> 9,0	> 10	> 13	> 16	> 18	> 22	> 26

Special switching values on request

Technical standard DLR-GS

Standard design of the potential-free relay contact for the alarm message as a changeover contact



- ► Flexible power supply with 100 to 240 V AC, 50/60 Hz or 24 V DC
- If necessary, simple adjustment of the pressure level via DIP switch
- Quick and easy connection of the electrical connection lines using tension spring terminal technology
- ► Latest SMD electronic components



Proven advantages of the electronic version

- ► Electronic control of the pressure sensor
- ▶ Drilling patterns in the housing base (plastic housing)
- ▶ 2-pin port for querying/forwarding all operating states of the leak detector



Options and additional functions

Optional equipment

M (= Manometer/Pressure gauge)

The leak detector is equipped with a digital pressure display in the cover of 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



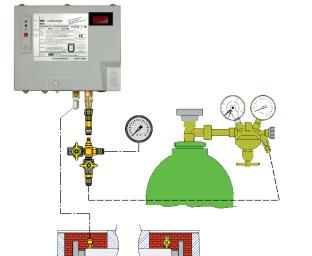
Si (= Service indication)

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.

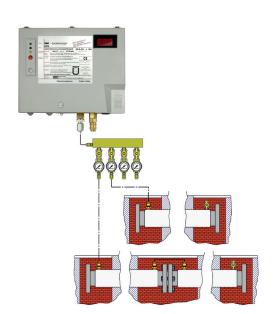


Installation schemes DLR-GS

Installation accessories DLR-GS



Commissioning with a pressure gas bottle



Leak detector, test device and installation kit

Testing device	Art-No.	Description	Euro	Qty
	115520	Testing Device DLR-GS		1 pce

Testing devicesArt-No.	Description	on	Euro	Qty
	115371	Pressure Measuring Device CPH 6200 incl.suitcase, without Sensor		1 pce
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Pressure sensor	Art-No.	Description	Euro	Qty
	115375	Pressure sensor for CPH 6200 025 bar, process connection 1/2"		1 pce



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