# LEAK PREVENTION TECHNOLOGY

For a clean and protected environment



# Pressure leak detectors for tanks **DL 280–450**





Variants • Equipment • Accessories





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# 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 aroundwater!

- 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 DL

**DL** = **D**ruck-(=Pressure)-**L**eak detector with integrated pump

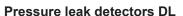
On the following pages we present you our pressure leak detectors DL for leak monitoring on containments/tanks - with their equipment options and accessories.

In addition to the listed pressure levels, we are happy to realize lower and higher pressures e.g. DL 50 or DL 3000. Just talk to us! 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 0271 48964-0 or send an e-mail to sgb@sgb.de.

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### Monitoring principle "overpressure"

With the DL leak detectors an overpressure is built up in the interstitial space of the container. The operating pressure and the alarm pressure of the leak detector are higher than the pressure of the stored goods or the groundwater against the container



walls. In case of a leak in one of the two walls, air escapes from the interstitial space. An escape of the stored material into the environment is thus reliably prevented.

- > Minor leaks in the system are automatically compensated by the integrated pump.
- > Relevant leaks lead to a pressure drop. Upon reaching the alarm pressure an optical and audible alarm will be triggered.

The compressed air in the interstitial space is dried by the dry fi lter mounted to the leak detector. Therefore a condensation of water in the interstitial space is prevented.

An overpressure valve avoids the occurrence of an inadmissible overpressure in the interstitial space.



# **Optional equipment**



- > FC (filter control) (only DL)
- > M (manometer)
- > P (protected)
- > Si (service indication)



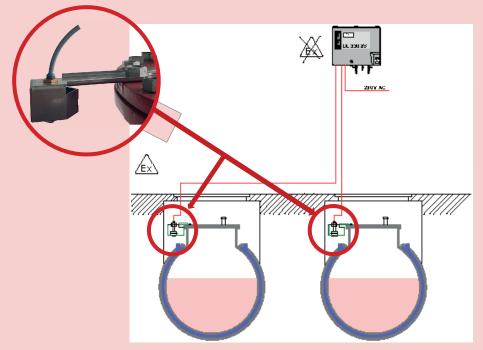
8S: The combined monitoring for leak of containments and manhole chambers, tanks sumps, etc. via leakage sensors

# Now available: DL .. 8S the combined leak monitoring of tanks and sumps with only 1 device

DL .. 8S (S = Leakage sensor) combines the approved leak monitoring of tanks with the simultaneous monitoring of manhole chambers, pump sumps, etc. For this purpose, up to 8 sensors can be connected to the leak detector – one to each monitored dome shaft, pump sump, manhole chamber.

- Choose between 1, 2, 3, 4 ... or up to 8 leakage sensors
- Available with ex-protected sensors for the installation in ex-zones
- for the simultaneous leak monitoring of manhole chambers, pump sumps, dome shafts, etc.

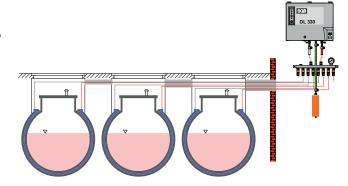
Scheme with 2 sensors:



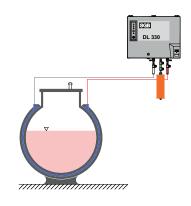
4 5

#### Installation scheme DL ..

One DL 280, 290, 325, 330, or DL 450 is able to monitor several underground tanks via manifolds:



In addition the DL 290, DL 330 as well as the DL 450 are able to monitor one aboveground tank:



#### Installation advices



> The DL is installed outside of potentially explosive atmospheres areas.



> If the leak detector is installed outside of a closed and dry room we recommend to use a protected version or a suitable protec tion box.



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> For the pneumatic connection lines use hose or pipe with a clearance of 6 mm at least.

#### DL 280 / 290 / 325 / 330 / 450



Depending on the tank specifications (size, volume, diameter, pressure resistance, size of the interstitial space, ...) either the DL 280, DL 290, DL 325, DL 330, or DL 450 will be used. The numbers indicate the respective alarm pressure.

#### Monitorable double-walled tanks:

- Diameter up to 2,5 m and test pressure in the interstitial space of min. 400 mbar (e.g. acc. EN 12285-1) > DL 280
- · Test pressure in the interstitial space of min. 450 mbar > DL 290
- Diameter up to 3,0 m and test pressure in the interstitial space of min. 400 mbar (e.g. acc. EN 12285-1 > DL 325
- · Test pressure in the interstitial space of min. 500 mbar, e.g. acc. DIN 6608/2, 6616/2 DL 330
- · Test pressure in the interstitial space of min. 600 mbar, e.g. acc. DIN 6608/2, 6616/2, 6623, 6624 > DL 450

DL 330



Drying filter TF 200

#### Monitorable liquids:

Water polluting liquids e.g. petrol, gasoline, heating oil, diesel, ley, acid

LEAK DETECTORS FOR TANKS

### Switching values DL (in mbar):

Туре	Alarm pressure >	Operating pressure <	Max. pressure to bottom of tank	Min. test pressure of interstitial space	
280	280	320	250	400	
290	290	350	260	450	
325	325	360	300	400	
330	330	410	300	500	
450	450	510	420	600	

Qty

1 pce

1 pce

Qty

1 pce 1 pce

1 pce

# Article report leak detector DL .. with PA-hose as connection line

# Article report leak detector DL .. and articles for assemby with PA-hose as connection line

Leak detector DL 280		ArtNo.	Description	Euro
The second secon	80 12	060028007 060028U07	Leak Detector DL 280, TF180, 230VAC, pl-box, QU8/6  Leak Detector DL 280 FC, TF200, 230VAC, pl-box, QU8/6	
	77 E885			

Laborarymental  oral Statement of the Control of th	000020007	230VAC, pl-box, QU8/6	
-   -   -   -   -   -   -   -   -   -	060028U07	Leak Detector DL 280 FC, TF200, 230VAC, pl-box, QU8/6	
3 7 7 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
Leak detector DL 290	Art-No.	Description	Euro
The Confidence of the Confiden	060029-07	Leak Detector DL 290, 230VAC, pl-box,	

Indicate place of the control o	060029-07	Leak Detector DL 290, 230VAC, pl-box, QU8/6	
a The second	060029107	Leak Detector DL 290, TF200, 230VAC, pl-box, QU8/6	
S North Control of the Control of th	060029U07	Leak Detector DL 290 FC, TF200, 230VAC, pl-box, QU8/6	
u · u	104852	Additional price service indication, version Si (1-63 months)	

Leak detector	DL 325	ArtNo.	Description	Euro	Qty
999 (A.S.) (Constitute of Constitute of Cons		060032-07	Leak Detector DL 325, 230VAC, pl-box, QU8/6		1 pce
SECURITY SEC	500 mm.	060032007	Leak Detector DL 325, TF180, 230VAC, pl-box, QU8/6		1 pce
9	THE STATE OF THE ST	060032U07	Leak Detector DL 325 FC, TF200,		1 pce

- 1865-110-110-110-110-110-110-110-110-110-11		230VAC, pl-box, QU8/6		'
Onlocal Residence Participation Control of C	060032007	Leak Detector DL 325, TF180, 230VAC, pl-box, QU8/6		1 pce
· · · · · · · · · · · · · · · · · · ·	060032U07	Leak Detector DL 325 FC, TF200, 230VAC, pl-box, QU8/6		1 pce
T O				
Leak detector DL 330	Art-No.	Description	Euro	Qty
	060033007	Leak Detector DL 330, TF180, 230VAC, pl-box, QU8/6		1 pce
And the state of t	060033U07	Leak Detector DL 330 FC, TF200, 230VAC, pl-box, QU8/6		1 pce
	060033N07	Leak Detector DL 330 M, TF180, 230VAC, pl-box, QU8/6		1 pce
	060033P07	Leak Detector DL 330 FCM, 230VAC, pl-box, QU8/6		1 pce
2	061033107	Leak Detector DL 330 P, TF200, 230VAC, st-box, QU8/6		1 pce
But the control of th	061033Q07	Leak Detector DL 330 PFCM, TF200,		1 pce

230VAC, st-box, QU8/6

Leak detector DL 450	ArtNo.	Description	Euro	Qty
a converge CC	060045-04	Leak Detector DL 450, 230VAC, pl-box, CF8/6		1 pce
The state of the s	060045M04	Leak Detector DL 450 M, 230VAC, pl-box, CF8/6		1 pce
	061045104	Leak Detector DL 450 P, TF200, 230VAC, st-box, CF8/6		1 pce
	061045N04	Leak Detector DL 450 PM, TF200, 230VAC, st-box, CF8/6		1 pce
111	061045Q04	Leak Detector DL 450 PFCM, TF200, 230VAC, st-box, CF8/6		1 pce
DA hasa	A 4 N	Description	<b>-</b>	04.
PA-hose	ArtNo.	Description	Euro	Qty
	260517	PA-hose, PN 6, red, 8/6x1mm, 100m roll		1 roll
	260519	PA-hose, PN 6, off -white, 8/6x1mm, 100m roll		1 roll
Installation kits	ArtNo.	Description	Euro	Qty
A A	190404-07	Inst. kit DL, R1/2**m - QU8/6, for PA-hose 8/6x1mm		1 pce
	190405-07	Inst. kit DL, R3/4"m - QU8/6, for PA-hose 8/6x1mm		1 pce
	190406-07	Inst. kit DL, R1""m - QU8/6, for PA-hose 8/6x1mm		1 pce
Manifolds for combining				
several underground tanks	ArtNo.	Description	Euro	Qty
A A	196021-07	Manifold 2 tanks, gauge 1bar, QU8/6		1 pce
	196031-07	Manifold 3 tanks, gauge 1bar, QU8/6		1 pce
0000000	196041-07	Manifold 4 tanks, gauge 1bar, QU8/6		1 pce
	196051-07	Manifold 5 tanks, gauge 1bar, QU8/6		<b>%</b> &
	196061-07	Manifold 6 tanks, gauge 1bar, QU8/6		do. Worling
:_ <b>A</b>	196071-07	Manifold 7 tanks, gauge 1bar, QU8/6	chop.	icts no.
	196081-07	Manifold 8 tanks, gauge 1bar, QU8/6	all prod	gdb.de onine!

Euro

Euro

Euro

Euro

Qty

Qty

Qty

Qty

# Article report leak detector DL .. with PVC-hose as connection line

# Articles for assembly with PVC-hose as connection line

Euro

Qty

Leak detector DL 280	ArtNo.	Description	Euro	Qty
	060028000	Leak Detector DL 280, TF180, 230VAC, pl-box, hose with 4 or 6 mm i.d.		1 pce

Art.-No. Description

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Art.-No. Description

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Leak detector DL 290

060029-00	Leak Detector DL 290, 230VAC, pl-box, H4+H6	1 pce
060029100	Leak Detector DL 290, TF200, 230VAC, pl-box, H4+H6	1 pce

Leak detector DL 325		
The second secon	2 44	_
9	CONTROL OF THE PROPERTY OF THE	
	9	F

060032-00	Leak Detector DL 325, 230VAC, pl-box, hose with 4 or 6 mm i.d.	1 pce
060032000	Leak Detector DL 325, TF180, 230VAC, pl-box, hose with 4 or 6 mm i.d.	1 pce

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200	6			
	7	:		

Leak detector DL 330

060033000	Leak Detector DL 330, TF180, 230VAC, pl-box, H4+H6	1 pce
103600	DL 330 complete set, TF180, inst. kit, 20m PVC-hose each color 10/6x2mm	1 pce
104020-00	Leak detector DL 330 P, 230VAC, ss-box, H4+H6	1 pce

Leak detector DL 450				

060045-00	Leak Detector DL 450, 230VAC, pl-box, H4+H6	1 pce
060045P00	Leak Detector DL 450 FCM, 230VAC, pl-box, H4+H6	1 pce
061045-00	Leak Detector DL 450 P, 230VAC, st-box, hose with 4 or 6 mm i.d.	1 pce
061045100	Leak Detector DL 450 P, TF200, 230VAC, st-box, hose with 4 or 6 mm i.d.	1 pce

ArtNo.	Description	Euro	Qty
260111	PVC-hose, red, 10/6x2mm, 100m roll		1 roll
260115	PVC-hose, clear, 10/6x2mm, 100m roll		1 roll
ArtNo.	Description	Euro	Qty
190404-00	Inst. kit DL, R1/2""m - S6, for PVC-hose 10/6x2mm		1 pce
190405-00	Inst. kit DL, R3/4""m - S6, for PVC-hose 10/6x2mm		1 pce
190406-00	Inst. kit DL, R1""m - S4+S6, for PVC-hose with 4 or 6 mm i. d.		1 pce
	260115  ArtNo. 190404-00 190405-00	260111 PVC-hose, red, 10/6x2mm, 100m roll 260115 PVC-hose, clear, 10/6x2mm, 100m roll  ArtNo. Description  190404-00 Inst. kit DL, R1/2""m - S6, for PVC-hose 10/6x2mm  190405-00 Inst. kit DL, R3/4""m - S6, for PVC-hose 10/6x2mm  190406-00 Inst. kit DL, R1""m - S4+S6,	260111 PVC-hose, red, 10/6x2mm, 100m roll 260115 PVC-hose, clear, 10/6x2mm, 100m roll  ArtNo. Description Euro  190404-00 Inst. kit DL, R1/2""m - S6, for PVC-hose 10/6x2mm  190405-00 Inst. kit DL, R3/4"m - S6, for PVC-hose 10/6x2mm  190406-00 Inst. kit DL, R1"m - S4+S6,

Verteilerleisten zum Zusammenschluss mehrerer unterirdischer Behälter
Art.-No. Description









196021-00	Manifold 2 tanks, gauge 1bar, QU8/6	1 pce
196031-00	Manifold 3 tanks, gauge 1bar, QU8/6	1 pce
196041-00	Manifold 4 tanks, gauge 1bar, QU8/6	1 pce
196051-00	Manifold 5 tanks, gauge 1bar, QU8/6	1 pce
196061-00	Manifold 6 tanks, gauge 1bar, QU8/6	1 pce
196071-00	Manifold 7 tanks, gauge 1bar, QU8/6	1 pce
196081-00	Manifold 8 tanks, gauge 1bar, QU8/6	1 pce

#### Installation accessories

#### Installation accessories

Euro

Installation pumps	ArtNo.	Description	Euro



200820	Vacuum Pump VP218, 240 V, 1,5KW incl. Liquid Stop, Condensate Trap, HM	1 Stck
	1 17 17	

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

Qty

ArtNo.	Description	Euro	Qty
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200840	Pressure-vacuum pump ÜVP218, 240V, 1,5KW,liquid Stop, Conden. trap, valves, manometer	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

			_
ArtNo.	Description	Euro	Qty



200860	Ex-Vacuum-Pump N026 St.9E EX, 230 V	1 pce
	Category 2 in-outside, 1m³/h, G1/4"	

Explosion-proof vacuum pump for evacuating interstitial spaces in which ex-vapours may occur

# **Testing devices** Art.-No. Description Euro Qty



	Digital Measuring Device DM 12-2, -1+2 bar, incl. case		1 pce
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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!).

NEW	
	T

115381	Digital Measuring Device DM 115 Ex, expl protect.,-1+1,5 bar,incl tubing + case		1 pce
Digital overnre	essure/underpressure measuring device ex-pro	of	

#### Testing devices



Art.-No. Description

Euro Qty

1 pce

Qty



Digi mba
cally

115371

incl.suitcase, without sensor

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.

Pressure Measuring Device CPH 6200

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			•		
	A.				
4	V		180		
		1			

	·	•
115373	Pressure sensor for CPH 6200 -10 bar, process connection 1/2"	1 pce
115375	Pressure sensor for CPH 6200 025 bar, process connection 1/2"	1 pce



ArtNo.	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. Vaccum generation down to max. -950 mbar is also possible through the change-over switch. Incl. adapter for leak detector.



ArtNo.	Description	Euro	Qt

115392	Testing Device, max Pressure 1,0 bar Over- and Underpressure Leak Detectors		1 pce
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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.



ArtNo.	Description	Euro	Qty
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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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Installation accessories

Dry filter	ArtNo.	Description	Euro	Qty
4	340310	Dry Filter TF 180 incl. Drying Agent and Holder		1 pce
500 mm	Bore holes: 4 Diameter: 54 Height: 120 r	mm		



	ArtNo.	Description	Euro	Qty
$\uparrow$	340342	Dry Filter TF 400 - Hose Connection incl. Drying Agent and Holder		1 pce
Н	Bore holes: 6 Height: 180 r Width: 192 m	mm		

Qty

1 pce



$\stackrel{B}{\longleftrightarrow}$		ArtNo.	Description	Euro	Qty
	<b>'</b> ↑	340345	Dry Filter TF1200 - Hose Connection incl. Drying Agent and Holder		1 pce
	н	Replaces the Bore holes: 6 Height: 520 n Width: 192 m	nm		

Support bracket	ArtNo.	Description	Euro	Qty
	340189	Support bracket for dry filter		1 pce
Drying agent	ArtNo.	Description	Euro	Qty
	Drying agen	nt re-filling sets		
	340311	Dry Agent for TF 180		1 pce
	340215	Dry Agent for TF 200		1 pce
and the second s	340214	Dry Agent for TF 300		1 pce
	340216	Dry Agent for TF 400		1 pce
Section 200	340218	Dry Agent for TF 600		1 pce
The second secon	340272	Dry Agent, 1 Aluminimbottle 1250ml (930 Gramm)		1 pce
	340273	Dry Agent, 1 Aluminimbottle 6250ml (4750 Gramm)		1 pce

# **Professional training LEAK PREVENTION TECHNOLOGY**

The choice, the construction and commissioning of leak detectors is not always easy due to the wide variety of liquids to be stored, containers, different types of leak detectors, and their differentiated use. There are pressure leak detectors, vacuum leak detectors, several versions for indoor and outdoor use as well as version for the use in ex-zones ... Our professional seminar helps here – with in-depth background information and many practical demonstrations.

More information and booking on: www.sgb.de



14 ACCESSORIES



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