





Lasso Technik Corp. Basel, Switzerland www.stopsilent.com

Stop Silent Light at a glance

- Reliable and long-lasting backwater protection
- Airtight odour barrier
- Frog-Flap fonction against small animals
- Suitable for sewage and rainwater
- Available in the sizes: 80, 100, 110, 125, 150, 200, 250 and 300 (Larger sizes on request)
- Designed for back pressure up to 0,5 bar
- Easy and quick installation without any additional costs

Applications

The backwater valve Stop Silent Light

The traditional Swiss company Lasso Technik AG introduces the newly developed STOP SILENT LIGHT sewer backflow preventing valve. This backwater valve sets new standards in terms of its record-breaking fast installation, and guarantees reliable backflow prevention.

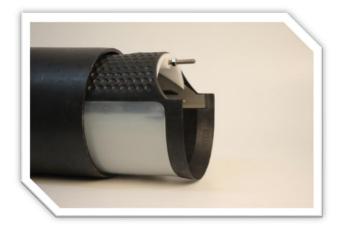
Solve a problem within minutes! The Stop Silent Light sewer backflow preventing valve can be installed into already existing sewer lines or inspection shafts: Reliable back flow prevention guaranteed! The smoothly working rubber membrane is the only moving part.

Available in different sizes, the Swiss made Stop Silent Light check valve is designed for a back pressure up to 0.5bar (7.25psi). This valve stands out through simple and time saving installation.

Besides the backflow preventing function of the valve, Stop Silent Light furthermore serves as a frog flap, preventing small animals from entering into pipe systems.

A third function that gives the valve a competitive advantage is the airtight odour trap, preventing channel gases from flowing back into premises.





Active backwater protection

Flooded basements? Costly renovation of damaged rooms? No problem for households which are protected by a Stop Silent Light check valve.





Emotional and Financial Damage

In addition to damages done to premises and furniture, it is the emotional stress that makes a water damage a high burden.

Flooded basements in a new building

Lupsingen, Switzerland. A quaint, town on the countryside. In this town, family Hartmann decided to build their own home. However, the unfavourable location as the lowermost house of the road, caused two water penetrations in the basement floor within a short time. Alone to dry the parquet floor of their basement, the family had. Fixing the damage and dehumidifying the parquet floor alone, forced family Hartmann to run a drying machine for several weeks which caused considerable noise exposure.

Sewers at the capacity limit

Heavy rains, combined with an ever-increasing concrete surface, bring sewers to their capacity limit. If this limit is reached, the water that is looking for a way out can be pushed back into the property. That's what happened at Hartmann family's house.

A backwater automat with noise and vibration reduction

The constant humming

Water streams can cause the sewer system to vibrate. Drainage pipes absorb the movements and propagate them through vertical pipes to inhabited areas. At first, these noises may be barely perceptible. But because of their uninterrupted constancy, they strain the nerves of the inhabitants - especially during night-time hours.

The rubber membrane of Stop Silent Light absorbs these movements and effectively interrupts the propagation. In this way, resonances and pipe noises are muffled. The resulting calmness has an immediate effect on the quality of sleep of the person suffering from it.

In August 2019, a customer of Lasso Technik also encountered this kind of problem, he testifies:

"For years, we have suffered at night from vibrations and noise from sewers and waterways 70 meters away. By chance, we heard about your check valve. Since the installation of the Stop Silent Light, we sleep much better. We highly recommend this product".

How to keep vermin out of tube systems?

Small animals that invade tube systems are an annoying problem that can be reliably and permanently solved with the new and innovative Stop Silent Light backflow pre-venting valve.

Small animals and vermin that penetrate water tubes can be a problem for the water quality, and can have unpleasant consequences for affected humans. The Stop Silent Light flap gate prevents small animals from entering into tube systems, contributing to a flawless water quality.

Case Study: Bivio, Grison, Switzerland:

Bivio is a small town in the Swiss Alps, 6562 ft. above sea level. After launching a new water collector, the water supply noticed, that amphibians and insects can infiltrate the system through the overfall. In order to solve this problem as fast as possible, Lasso Technik AG installed a Stop Silent Light Flap Gate. Within few minutes the Stop Silent Light valves were installed and ready for use.



What to do when you smell the Sewers?

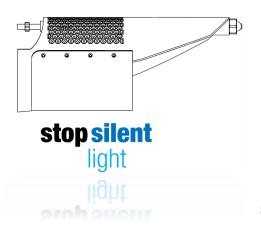
Sewer gases that pass through the canal system back into properties and causing unpleasant odour nuisances. This issue can be permanently solved with a Stop Silent Light backflow prevention valve.

Steaming gullies on cold days, a common sight during the winter season. This steam is the so-called "channel gas" generated by waste water and is the cause for unpleasant stench.

Prevent Odour Nuisance!

This negative effect of the channel gases can be prevented with a Stop Silent Light backflow preventing valve. One main function of Stop Silent Light is the odour Barrier. The odour barrier guarantees an airtight shut of the sewer pipe, avoiding the stack-effect.





Prior Installation: The Stop Silent Light Checklist

Internal diameter

In order to provide you the appropriate valve, we need to know the exact internal diameter of the pipe that needs to be protected.

Nominal Diameter (mm) / (inch)	Clamping Range (mm) / (inch)	Total Length (mm) / (inch)	Weight (kg) / (lb)	Allen key size (metric)
DN80 / 3.15"	75-80 / 2.95-3.15	180 / 7 .08	0,17 / 0,374	3
DN100 / 4"	<mark>93-101</mark> / 3.66-3.98	215 / 8.46	<mark>0,3</mark> /0,661	3
DN110 / 4.3"	<mark>98-106</mark> / 3.86-4.17	<mark>230</mark> / 9.06	<mark>0,34</mark> / 0,75	3
DN125 / 5"	115-125 / 4.53-4.9	270 / 10.63	0,54 / 1,19	3
DN150 / 6"	145-154 / 5.7-6.06	<mark>330</mark> / 12.99	1,0 / 2,205	4
DN200 / 8"	183-197 / 7.20-7.76	420 / 16.54	1,75 / 3,858	4
DN250 / 9.8"	230-252 / 9.05-9.92	<mark>530</mark> / 20.86	<mark>3,09</mark> / 6,812	4
DN300 / 11.8"	280-298 / 11-11.73	<mark>650</mark> / 25.59	5,37 / 11,839	6

Dimensions for bigger sizes are on request available. For intermediate diameters, we provide adapters.

1. Access to the pipe

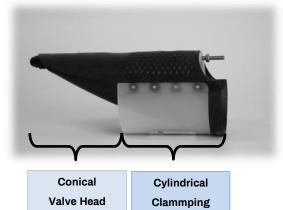
• Hand-moulded shaft bottoms can be too tight and have to be manually adjusted.

2. Length

• The length of the cylindrical clamping range is approximately 1x diameter. Also, the length of the conical valve head is approximately 1x diameter.

3. Minimum Slope to ensure smooth operation

- In sewage you need a constant gradient of 2% before the valve
- In rainwater you need a constant gradient of 1% before the valve.



4. Type of Medium?

- Private- or industrial drain water
- o Rain water

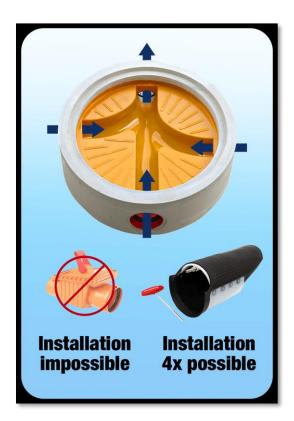
5. Installation in the entrance or exit?

- If no large quantities of rainwater flow into the inspection shaft, the valve should be installed in the outlet. During the backwater, no more water will flow off and the shaft thus serves as a reservoir for its own water. If there is a large amount of rainwater, we recommend installing the valve in the pipe depending on the area to be protected.
- If there are several inlets into the inspection shaft with different slopes (<2%) and different types of water, it is recommended to additionally secure the inlet with the lowest slope with a Stop Silent Light. This prevents deposits of dirt particles in this area as well as odor nuisance.
- Recommended minimum height under floor 30 cm. This guarantees a higher drainage capacity.

6. Problems to plug in?

• For small pipe diameters, soft soap/ soap water can be used to facilitate the insertion of the valve. NO FAT, NO OILS!

During long-lasting floods, the internal pipe system can absorb only a limited amount of water. Low water consumption is recommended.



Installation of the backwater flap in the inspection shaft, without structural adjustments!

Stop Silent Light can be installed quickly and without any additional costs. Our backwater automat does not include any moving mechanical parts or electronics that could fail.

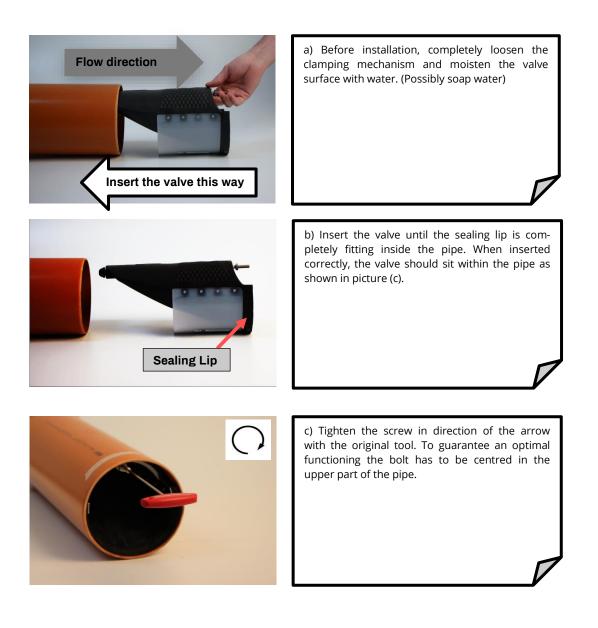
Functionality

By accumulating 3/4 up to pipe filling, pressure is exerted on the diaphragm, which then opens upwards. If the flow stops, the sealing lip restores and closes the valve. In back pressure, the rubber membrane is filled and pressed against the pipe wall.

Installation Guide:

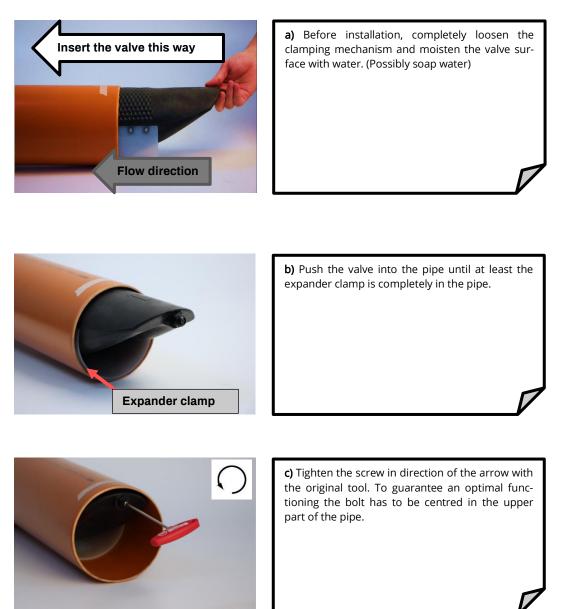
Stop Silent Light is usually installed horizontally. The slope can be very steep but it is not recommended to install it vertically, otherwise residues could accumulate and get stuck in the expansion clamp. A minimum constant incline of 2% is requested when installing Stop Silent Light. An Allen key and installation guide are delivered with the order.

1st Option: Entrance manhole



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2nd Option: Exit of the manhole



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Functional check and maintenance of the valve when used with sewage water

New installed valves have to be checked for function and sedimentation after 4-6 weeks

The valve should be checked twice a year

Open the cover of the inspection shaft and descend. Flush the toilet several times while flushing down toilet paper. Observe whether flushed water including paper passes the valve. Check the membrane for brittleness or flexibility. If necessary, clean the membrane with clean water (You must not use a high-pressure cleaning device)

Functional check and maintenance of the valve when used with rainwater:

The valve should be checked once a year.

The procedure is the same as with sewage water.

Guarantee:

The guarantee period is two (2) years from the date of purchase. Warranty claims can only be made if the product has been used under standard operating conditions* and in according with Lasso Technik AG's recommendations. The guarantee does not cover damage or defects to the product caused by external mechanical forces due by persons, animals or machines. Furthermore, the guarantee is not valid if the Stop Silent Light valve has been modified in any way after being manufactured or if the product has been exposed to high concentrations of chemical substances. The warranty is void if the valve is damaged due to pressure surges and/or vacuum inside the valve. Unless otherwise agreed, the warranty will be void if the flow velocity exceeds 1.5m/s (.5ft/s) through the valve.

In the event of a complaint, clients should contact their Stop Silent Light distributor within 5 working days after the damage has been detected. The liability of Lasso Technik AG is limited to the replacement or repair of defective products. Lasso Technik AG does not reimburse any costs for the removal of defective products or for a later installation of substitute products.

Lasso Technik AG does not assume any transport costs for damaged products or for replacement products. This warranty voids all other explicit or implicit warranties to the entire extent permitted by law. Lasso Technik AG is not liable for any subsequent damages. No employee, agent or representative of Lasso Technik AG is entitled to extend the warranty conditions listed here.

*Normal operating conditions: Normal use of toilets, showers and other drains in the building. No disposal of waste Chemicals Edible oil etc. in accordance with the <u>recommendations</u> of the Cantonal Building Department of the Canton Aargau.



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