



LAMPE

Sewer sealing cushions Sewer sealing systems Lifting cushions

Sewer sealing cushions

Variable use for sewage- and rainwater pipes in case of:
repair works, sewer inspections, relining and pressure tests



Double cone



With pipe bypass





LAMPE

Sewer sealing cushions



Unique advantages and benefits

- LAMPE sewer sealing cushions are fixing themselves in clean pipes. Thus you are saving time and money!
- LAMPE sewer sealing cushions are highly resistant against ageing. We can prove a lifetime of more than 30 years. Further the devices are well resistant against chemicals. Therefore they must not always be replaced or exchanged.
- LAMPE sewer sealing cushions are repairable. You don't have to buy each time a new device in case a cushion should have been damaged.
- All devices can tightly be folded and are low of weight. Even the big devices of the type 1-2200 fit well into each common manhole between 600 and 630mm. This makes the work more simple, faster and thus more efficient.
- LAMPE-sewer sealing cushions shut all profiles, also egg, kite and mouth profiles and rectangular channels. Even pressure tests in special profiles with dry-weather ditch can be performed without any problem.
- One device shuts many different diameters. For example our type 1-1400 shuts all pipes from 500 to 1400mm. You only need a few devices and you will always have the right shut-off device at hand.
- When performing pressure tests, the LAMPE sewer sealing cushions with special sealing can shut off the inspection area completely against air and gas.

Quality and Safety - tested and certified.
You can rely on that.

Quality-
managementsystem



Simple. Save. Tight.

simply safe

LAMPE sewer sealing cushions are self-fixing in a normal clean pipe

In the publication BGI 802 (Procedural Instruction for the work with provisory sewer sealing devices) of the Berufsgenossenschaft (Accident Prevention & Insurance Association) being revised in October 2007, it was specified, that one can waive an additional form-fitting anchorage in case of provisory sewer sealing devices, if the manufacturer of the sewer sealing device does not request an additional anchorage and should the device fail, that there will arise no danger for the insured persons (the persons who use the devices).

Exactly these criteria are fulfilled by LAMPE sewer sealing cushions!

Differently from traditional, expanding pipe plugs, our devices join already at a very low pressure (0,01 bar) - which lies far below the prescribed working pressure of 1 bar - completely to the surface of the sewer. In case of an eventual pressure loss, our devices will not contract, but they will continue to join to the sewer wall and keep the accumulated water head. So, only the cushion would become softer and the accumulated water on the bottom of the sewer -under the not moving cushion- may drain off.

Traditional, expanding pipe plugs however work on the principle, that they will expand when they are inflated. Only after the devices have expanded under pressure they will join to the sewer wall.

In case of a not foreseeable pressure loss of these devices, the contrary would occur: the devices are contracting and would shoot out of the sewer, if they are not anchored. Here a time and cost intensive anchorage is necessary. However, when using LAMPE sewer sealing cushions: absolutely no anchorage is necessary.

High resistance against ageing and good resistance against chemicals

LAMPE sewer sealing cushions are cold vulcanized out of a 100% pure CR (Neoprene) coated material, that means, the devices are glued by applying a special procedure. This manufacturing process needs no admixtions of foreign substances like softeners or sulphur! Therefore LAMPE sewer sealing cushions never spread!

Our devices reach a lifetime of more than 30 years! That you cannot await from traditional pipe plugs.

Traditional plugs are always made of hot-vulcanized synthetic rubbers like e.g. SBR, i.e. the materials are pressed in shape by adding heat and pressure. The hot vulcanization however requires the addition of foreign substances to the original material like softeners or sulphur. These foreign substances escape out of the original material after a certain time (5-10 years, depending on its frequency of use and storage). So, such a normal pipe plug will become one day air-permeable and it will spread (rubber effect). Once this has happen, the device must be replaced.



LAMPE Sewer sealing cushions

All LAMPE sewer sealing cushions are repairable

A great advantage of all LAMPE sewer sealing cushions! Because our cushions are not working with expansion it is quite easy to repair them cost-effectively with patches out of the same material. No expansion has to be considered when repairing the cushions.

Traditional pipe plugs cannot be repaired with a patch, because these plugs are working on the expansion principle and the repaired spot had to show the same expansion capacity like the basic body. As this is not possible there would arise there a very dangerous weak spot.

One device shuts many different diameters

Although our sewer sealing cushions are working without expansion they can be used for a lot of various pipe diameters. Why? Let us take for example the type 1-1400: This device has a utility range of 500 up to 1400mm. If you blow this cushion up outside the sewer wall, then you will receive already the maximum diameter of 1400mm. If you prefer to use this device in a smaller sewer, e.g. DN 500 or 600 you only have to make a fold on the left and right side of the cushion and make sure, that here the material overlaps. Now you have a smaller „package“ which can be pushed into the smaller pipe. The cushion now disposes over more material than what is needed to shut the canal. If you are now inflating the cushion, the remaining material will close these folds again. That's the trick why LAMPE sewer sealing cushions can be used in a lot of various diameters. Traditional sewer plugs never offer such large ranges of coverage!

One LAMPE sewer sealing cushion for all profiles

Our devices may be used in all imaginable profiles, for example for egg, mouth or rectangular profiles. This is the result of our special construction which enables the material always to adjust itself entirely to the sewer wall.

Normal sealing plugs can only be used for round pipes. For other profiles special devices are necessary.

All devices can tightly be folded and are low of weight

The device 1-1400 which can be used for up to 1400mm, weighs e.g. only 25 kg! Therefore it can be handled very easily and fast! Traditional pipe plugs of similar sizes weigh significantly more! But also the possibility to fold the cushion represents an enormous advantage. Even cushions of the type 1-2200 (1000 up to 2200mm) may thus be pushed through any common manhole (620 up to 630mm)!



worldwide market leader

simply safe

Patented, fixed special sealing allows absolutely air and gas-tight sealings for pressure tests

The operating principle of the LAMPE sewer sealing cushions bases on a special folding of these devices. When developing the devices more than 30 years ago, we were confronted with the problem, that the builded folds were not 100% air-tight. Thus the normal devices were absolutely not suited for pressure tests.

Then we developed a special sealing of foam rubber which always seals the developing folds absolutely tight due to its special compressibility.

Many years of experience in the area production and in handling sewer sealing cushions proved, that only devices with fixed special sealing rings may seal a canal hermetically against air and gas, what is absolutely necessary when performing a pressure test with pressure or vacuum.



LAMPE sewer sealing cushions Series 2000

These special devices with pipe bypass maintained most of the advantages of our devices with double cone, but offer additionally the possibility of the geodetic water transport through the cushion. Water can be directed automatically through the cushion by using a PVC-pipe which is located in the middle of the cushion and that without having to use a pump.

In case of need the inner pipe may also be extended in order to direct the water also over a longer route through the construction site. If you wish to shut the canal entirely, you can of course also shut the inner pipe with a traditional sewer sealing cushion.

The advantages are obvious: Time saving by simple handling, cost reduction because no pumps are necessary (a head will do), more flexibility e.g. in the open excavation site with pipe extensions.

Our Know-how for your operation

You need help when operating our devices? You want to know which devices are suited for a special canal? You still have questions? Simply call us! We are sure, that we can help you!

Moreover we offer our customers in regular intervals the possibility to participate in a product training at our premises. Our trained Product Advisors will be glad to explain you in theory and practise the use of our sewer sealing cushions.



LAMPE Standard Product Range

Sewer sealing cushions with double cone Working pressure 1 bar - 14,5 PSI
Back pressure: 5m waterhead (0,5 bar water) 0,2 bar air or vacuum

Area of operation			Article number			
Type	Ø from	Ø up to	Basic device for sealing	with spacial sealing	Bypass	with Bypass & special sealing
			Weight	Weight	Weight	Weight
1-150	80 mm (3 in)	150 mm (6 in)	76311 0,9 kg	76312 1 kg	76313 2,3 kg	76314 2,4 kg
1-400	100 mm (4 in)	400 mm (15 in)	76326 1,9 kg	76327 1,93 kg	76328 3,55 kg	76329 3,6 kg
1-600	200 mm (8 in)	600 mm (23 in)	76336 3,9 kg	76337 4,1 kg	76338 11,8 kg	76339 12 kg
1-800	300 mm (12 in)	800 mm (31 in)	76341 7,2 kg	76342 7,6 kg	76343 17,4 kg	76344 17,8 kg
1-1000	400 mm (15 in)	1.000 mm (40 in)	76346 11,8 kg	76347 12,4 kg	76348 23,7 kg	76349 24,3 kg
1-1200	500 mm (20 in)	1.200 mm (47 in)	76351 14,5 kg	76352 15 kg	76353 28,5 kg	76354 29,2 kg
1-1400	500 mm (20 in)	1.400 mm (55 in)	76356 25,2kg	76357 27,9 kg	76358 41,5 kg	76359 44,2 kg
1-1500	500 mm (20 in)	1.500 mm (59 in)	76365 28,8 kg	76366 29,8 kg	76367 45,1 kg	76368 47,8 kg
1-1600	600 mm (23 in)	1.600 mm (63 in)	76361 38,5g	76362 41,8 kg	76363 56,7 kg	76364 58,5 kg
1-2200	1.000 mm (40 in)	2.200 mm (87 in)	76376 86 kg	76377 90,4 kg	76378 105 kg	76379 109,4 kg
1-2800	1.500 mm (59in)	2.800 mm (110 in)	76391 132 kg	76392 138 kg	76393 152 kg	76394 158 kg
1-3200	1.800 mm (71 in)	3.200 mm (126 in)	76396 179 kg	76397 186 kg	76398 200 kg	76399 207 kg
1-3600	2.200 mm (86 in)	3.600 mm (141 in)	76381 216 kg	76382 224 kg	76383 245 kg	76384 253 kg

Series 2000 with pipe bypass

Type	For use in pipe Ø from	For use in pipe Ø up to	Inner diameter of the cushion Weight without bypass pipe	Size of pipe-bypass (inner pipe)	Bypass pipe Outer diameter max.	Article number
40-80	400 mm (15 in)	800 mm (31 in)	285 mm (11 in) 8,7 kg	250 DN	250 mm (9,5 in)	76221
60-120	600 mm (23 in)	1.200 mm (47 in)	420 mm (16,5 in) 17,6 kg	400 DN	400 mm (15 in)	76222
80-170	800 mm (31 in)	1.700 mm (66 in)	650 mm (25,5 in) 27,7 kg	600 DN	630 mm (25 in)	76223
150-260	1.500 mm (59 in)	2.600 mm (102 in)	660 mm (26 in) 53 kg	600 DN	630 mm (25 in)	76224

All types up to 1-1000 with working pressure 2 bar – 29 psi, max back pressure: 10m water – 1 bar, 14,5 psi available.
Attention: For a correct and regulatory filling it is absolutely necessary, to use the original safety fittings * (Standard: #71427), the original filling hose** (Standard: 5m, #71523) as well as an adapter piece*** being suitable for the used air source!

Original accessory

★ Safety fittings, 1 bar

- 71427 LAMPE safety fitting
For safety reasons LAMPE sewer sealing cushions may only be filled with the original safety fittings. Don't use third-party products for filling the cushion.
- 71425 Automatic Pressure control - safety fitting
Suited for the permanent use of LAMPE sewer sealing cushions. This fitting has the positive characteristic to regulate automatically an eventual pressure loss in case of an opened air source.
- 71474 Large-sized fitting 1" with safety valve for large devices with 1" filling hose
This fitting is urgently recommended for all sewer sealing cushions beginning with Type 1-1500, as the fitting can deliver with 1" double the quantity of air in comparison to traditional standard fittings. In connection with our ejector you may use this fitting both for filling and venting.

★★ Filling hoses

- 71521 Filling hose ½", 2 m
71523 Filling hose ½", 5 m
71524 Filling hose ½", 7.5 m
71525 Filling hose ½", 10 m
71541 Filling hose ½", 10 m
To fill LAMPE sewer sealing cushions beginning with Type 1-1500, may be used in connection with the large-size fitting #71474

★★★ Adapter pieces for various air sources

- 73412 Adapter piece tyre inflating valve (tyre valve/plug-in nipple)
To take pre-pressure out of small compressors with connection for tyre inflating valve
- 73416 Adapter piece double plug-in nipple (plug-in nipple/plug-in nipple)
To take pre-pressure out of pneumatic systems with compressed-air coupling as air outlet.
- 73419 Adapter piece tyre inflating valve, directly to the sewer sealing cushion e.g. with foot pump
Only allowed for filling small cushions up to Type 1-400 when sealing temporary zero pressure pipes. Filling is made via the foot pump #71951 without using a safety fitting and a filling hose.
- 73421 Adapter piece for truck brake system (brake-coupling/plug-in nipple) to take pre-pressure out of truck brake systems
- 73424 Adapter piece compressor-claw-coupling (claw-coupling/plug-in nipple)
To take pre-pressure out of large compressors with a claw-coupling as air outlet

Other accessory

- 71554 Extension hose for pre-pressure, 5 m
To extend the air duct between air source and the LAMPE safety fittings. Inclusive yellow marking for undefined pre-pressure
- 71555 Extension hose for pre-pressure, 40 m
- 73521 Air shut-off valve 1" for sewer sealing cushions
lockable on one side, for uncoupling the large-size fitting with hose 1", control then by using ½"-hoses
- 71559 Pneumatic hose reel, 20m
- 76911 Transparent hose 1", 10 m, 1x D-coupler Storz, pressure control with water
- 76912 Deflation hose 1", 2 m, 1x D-coupler Storz, waterproof test
- 76913 Deflation hose 3", 2 m, 1x D-coupler Storz, waterproof test
- 84642 Bypass shut-off, 2x B-coupler Storz
- 71613 Packing bag 70 x 40 x 25 cm
71611 Packing bag 83 x 45 x 27 cm
- 71623 Repair kit to repair oneself surface material damages and little holes
- 71951 Tip-toe pump to fill sewer sealing cushions Type 1-150 and 1-400 without safety fitting in connection with adapter piece 73419 directly to the cushion. Only suited for temporary sealings of pressureless pipings.
- 71957 Ejector to suck air out of sewer sealing cushions
when leading in undefined pre-pressure (e.g. via a compressor) the sewer sealing cushions are sucked empty by the ejector principle.
- 71961 Airpump 1 bar, Type 600 to fill and vent LAMPE sewer sealing cushions. inclusive built-in safety fitting.
- 27483 Compressed-air cylindre 300 bar
- 71421 Pressure reducer 200/300 bar for compressed air cylinders of German standard





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Sewer sealing cushions Sewer sealing systems Lifting cushions

Simply perfect

✓ simply safe

More than six decades of experience when being confronted with the technical challenges in the areas environmental and canal engineering, rescue and rescue of human life have formed our company. Our company stands for competence, affectivity and 100% reliability. Since 1946 when the foundation stone with the field fire protection was laid for one of the most innovative enterprises for technical components and application procedures, our engineers continue to develop again and again such products which are standing for three main characteristics: Technically perfect, simple operation and most economic.

The first rectangular, flat air lifters worldwide were developed by our company in 1973. Today they are a worldwide standard when rescuing human life. Sewer sealing cushions, gully-sealing plates, stationary shut-off systems for sewage- and rainwater pipes ... the list of our inventions and patents is a long one. We worked hard to acquire this lead in the competition and every day we do our utmost to keep this lead.

Our high quality standards and our co-responsibility for the industrial location Germany are the reason why we are only producing in Germany.

Rely on our products, our staff, on more than 60 years successful company history, on our references and on the certification according to ISO 9001.

Take advantage of our targeted, personal way what we understand of customer support. For us customer support is to answer your questions, to meet your requirements and to make you always available the right product.



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**60 years
Innovation
Experience
Success**