

SUCTION CUP

Application

The suction cup lifters are designed to lift, carry and hold objects with flat, gas-tight surfaces. Other applications are not allowed.



SAFETY INSTRUCTIONS



Suction cup lifters are tools used manually; they may not be used with a crane or other lifting gear.

Although all efforts were made to ensure maximum safety while using suction cups lifters, improper use or incorrect application may damage the suction cup lifter and / or lead to a dangerous situation (e.g. releasing a load) and thereby creating a hazardous situation for the user or to other persons.

You must observe the following regulations to achieve a high level of safety when using a suction cup lifter.

- Never use the suction cup lifter as a hold for people.
- Use the suction cup lifter only when you have experience in working with it or if you are under the supervision of someone who has experience in dealing with this tool.
- Suction cup lifters are available in different versions with different carrying capacity. The indicated value applies to a new suction lifter on a dry and grease-free glass plate (float glass) at an ambient temperature of approx. 20 ° C and an ambient pressure of 1013 m bar after creating the strongest possible vacuum.
- Be aware that the air pressure decreases with increasing height and thus reduces the load capacity.
- In cold weather, humidity or contamination, especially with neglected or damaged suction discs, lifting or carrying materials other than flat glass (e.g. structural glass, plastic, stone, metal, etc.), the holding capacity is significantly reduced or completely lost.
- Always check the suitability of the suction cup lifter for the intended application.
If necessary secure the objects to be lifted or removed.
- Follow the instructions in this operating manual.
- Suction cup lifters must not be exposed to extreme heat for a long time (e.g. open fire, permanent direct sunlight). Constant temperatures of more than Approx. 80 ° C must be avoided.

1. FUNCTION DESCRIPTION

By producing a vacuum, a responding force is created on the suction surface of the object. This power response can be further increased during use. The user

must, under his responsibility, ensure that this does not cause damage (e.g. glass fracture with thin glass or thin plate bending).

Be sure that the suction surface is suitable to handle the forces created by the vacuum (e.g. transporting a cupboard or holding other objects).

Suction cup lifters with a lever create vacuum by tilting the lever; suction cup lifters with a hand pump by operating the hand pump.

Note

The suction discs are made from natural vulcanised rubber with a high adhesion capacity. After the first application and after very long-term applications, a dark ring can be left on the goods to be lifted. This ring can usually be easily removed with methylated spirit. However, it is recommended to perform a cleaning test at a non-visible area to test the reaction of the methylated spirit on the surface.

2. OPERATING

Prior to each use, check that the suction cup lifter is in a **good working condition**.

You must pay special attention to the vulcanized rubber disk: this must be **undamaged with no tears** visible.

Prior to each use, check the vulcanised rubber disc for **reduced elasticity** due to **aging, wear, improper maintenance or storage**.

Damaged vulcanised rubber discs or those with a limited operating life must be replaced immediately.

The suction surface and the vulcanised rubber disc must be clean, dry and grease free. On uneven, rough and porous surfaces the holding capacity is clearly less or completely absent. Pollutants can damage the surface area, the vulcanised rubber disk and possibly the pump mechanism.

3. PULLING VACUUM

- Press the suction cup lifter firmly to the surface which is to be lifted. The discs of vulcanised rubber must be unloaded and lay flat.

Suction cup lifter with lever

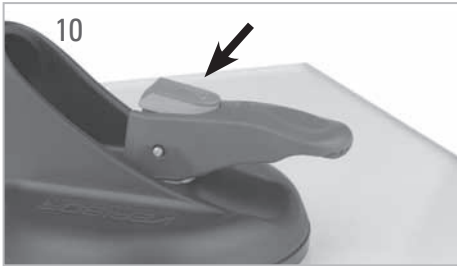
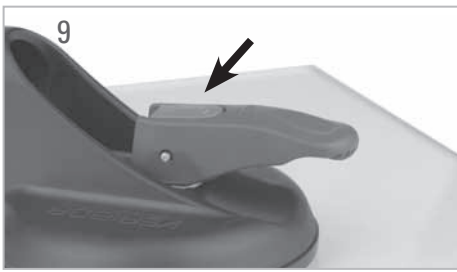


- Create vacuum by pushing down the lever (1) or by bringing together the two-piece gripping bracket (2).

The resistance of the created vacuum must be clearly observable.

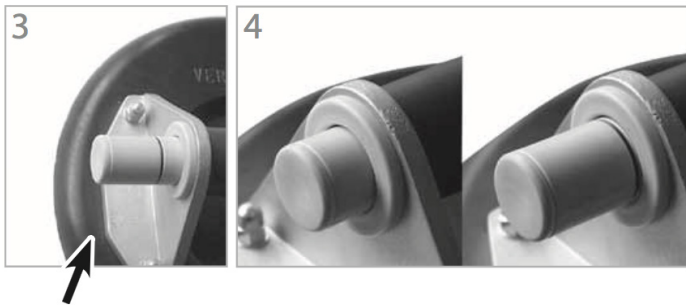
Suction cup lifters with vacuum indication, the vacuum should be continuously checked. If the warning lever is totally inserted (9), the full load bearing capacity has been reached and the suction cup lifter is ready to lift the specified maximum capacity.

If the warning lever has popped up and the red edge is visible (10), remove the suction cup lifter from the surface and pull vacuum again.



Suction cup lifter with a hand pump

Create vacuum by operating the pump several times (3).



- Should the pump valve nozzle does not stay stationary or no sufficient vacuum is displayed on the pressure gauge, or if the indicator light shows no vacuum, test the working of the suction cup lifter on a flat, clean and grease free glass disc. When the suction cup lifter functions well on the test surface, the suction surface of the object is not suitable.

4. LIFTING, CARRYING, HOLDING

Danger of injury!

- The load must not exceed the specified load capacity.
- Loads held by a suction cup lifter should never be transported over the top of people.
- When carrying, avoid lateral pressure to the suction disc.
- Make sure that the warning signs remain visible when transporting and are not being blocked.
- Never use the disengaging levers whilst carrying a load.
- If the vacuum decreases, remove the load immediately and re-apply the suction cup lifter.

The suction cup lifter may only be used for lifting, carrying or holding for a short period of time.

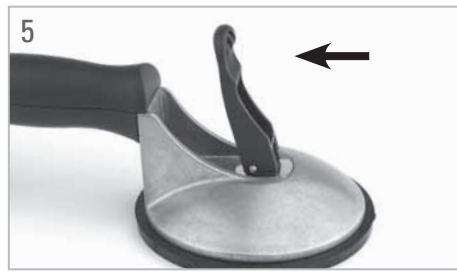
For longer holding periods you must regularly check the vacuum suction and secure the suction cup lifter. You must re-apply the suction lifter as soon as you doubt the holding strength.

5. DISENGAGING

Caution!

Never use pointed or sharp objects (e.g. screwdriver) to remove the suction cup lifter. This damages the suction disc and makes it unusable.

- Verify that the lifted load is secured
- Release lever (5), or operate the ventilation mechanism (6). The vulcanised rubber disc returns to its original flat position.



- Remove the suction cup lifter from the suction surface. When the vulcanised rubber disc "sticks", raise the disc from the side with a finger so that air can get underneath. The "sticking" occurs occasionally with new discs of vulcanised rubber and does not adversely affect its functionality.

6. MAINTENANCE AND CARE

Only use original spare parts.

Keep the suction cup lifter and especially the vulcanised rubber disc clean and free from oil, grease and dust.

Never expose the vulcanised rubber disc for longer periods to sunlight; otherwise she loses her elasticity quicker.

Contact the rental company should you encounter problems with the device!

The product must be returned clean and undamaged.