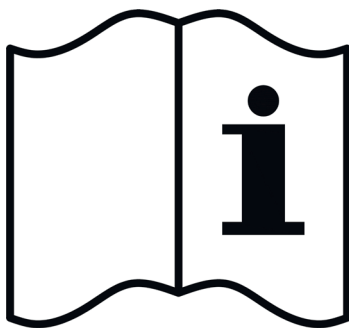
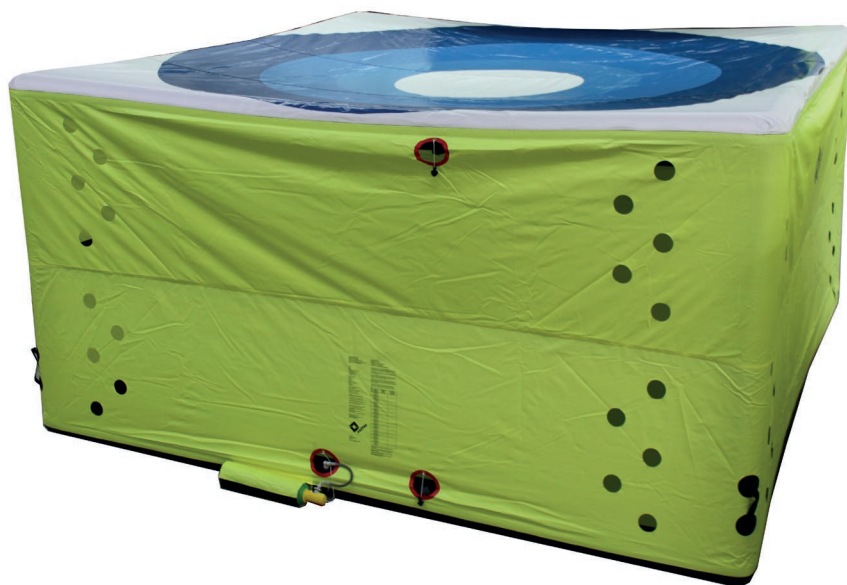


Translation of the original operating instructions

VETTER Safety cushion SP 16



Keep in a safe place for future use



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VETTER safety cushions must only be used for the rescue of jumping or falling persons.

The falling height must not exceed 16 m

No jumps for exercising or demonstration purposes.

Important note!



The Safety Cushion must not be inflated with a pressure container having a valve fitted with an integrated excess flow valve (EFV).

We would like to point out that the implied valves are not marked and that the excess flow valve cannot be recognized in the assembled condition of the valve.

For these reasons, filling is only possible with compressed air/working air containers(basic colour grey, neck is green) and a certification is according to TPED or with post-certified breathing air containers according to PED and TPED taking into consideration the manufacturer's specifications and the test operation. In both cases a valve without outflow protection can be used to comply with the set-up times according to DIN 14151.

1. Preliminary remarks

A prerequisite for the safe use of the VETTER safety cushions is that these operating instructions and the safety instructions are strictly observed after they have been carefully read.

Only duly authorized and trained personnel of the fire department must be commissioned with the use of the safety cushion.

The safety cushion must only be used in case of an emergency for the rescue of jumping or falling persons.

Jumps for training or demonstration purposes are strictly forbidden!

Only specifically designed falling objects, such as sand bags or dummies, must be used for training or test purposes.

Any non-compliance with this instruction is a violation of the preventive measures of the fire departments and will result in the exclusion of any liability. Please note that any non-compliance may have legal consequences.


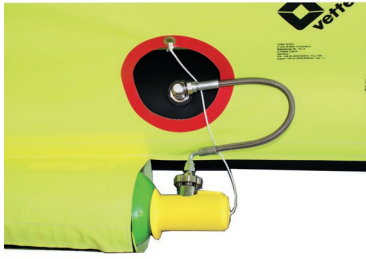
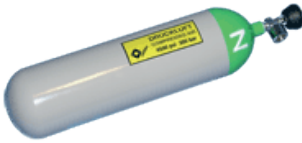


The improper application of or any unauthorized modification to the safety cushion will exclude the liability of the manufacturer for any resultant damage.

Only perfect and tested safety cushions must be used.

Please make sure that only the original Vetter fittings and valves are used for filling the safety cushion.

2. Completeness check

The completeness and integrity of the components must be checked before and after every use.

Safety cushion completely erected	
Inflation hose	
Compressed-air cylinder 6 l/300 bar, filled	
Quick-action ventilating valve, item 1 with air vent key, item 2	
Safety valve	

3. Description

The VETTER safety cushion consists of a self-erecting hose-equipped supporting frame. The supporting frame consists of an extremely tear-proof and neoprene-coated fabric. The material used for the external tarpaulins is hardly flammable and does not disintegrate.

The supporting frame will be inflated with air with a maximum pressure of 0.37 bar when the valve at the compressed-air cylinder is opened. The safety valve integrated in the cylinder fittings will prevent over-inflation and an inadmissible pressure increase due to temperature influences.

The safety cushion will be inflated within 30 sec and erect itself automatically.

It can only be used after it is fully inflated and erected.

When a load hits the safety cushion, the internal supports will collapse.

After the load has been removed, the supporting frame will automatically re-erect itself and restore its original shape.

It may be possible after several load changes that minute quantities of air can leak through the safety valve. This can be easily compensated by briefly opening the air valve of the compressed-air cylinder.

Attention! The position of the safety cushion may change as a result of the previous jump. It will then have to be re-aligned/re-arranged.

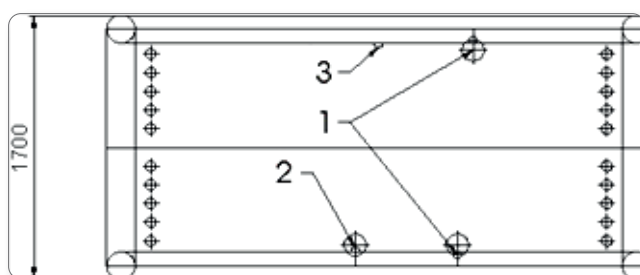
3.1 Technical description

External dimensions, approx. mm 3,500 x 3,500

Height, approx. mm 1,700

Side view of the entire appliance

- 1 Vent valves
- 2 Filling adapter
- 3 Safety valve



3.2 Technical data

Safety cushion SP 16		
External dimensions (L x W x H)	cm	350 x 350 x 170
	inch	138 x 138 x 67
Working pressure	bar	0.37
	psi	5.37
Test pressure	bar	0.48
	psi	6.96
Air requirement	litres	1,374
	cu.ft.	49
Inflating time, approx.	sec.	30
Recovery time	sec.	10
Weight, incl. compressed-air cylinder	kg	55
	lbs	121
Folded size (L x W x H)	cm	87 x 52 x 44
	inch	34 x 21 x 17
Temperature range	°C	- 20 to + 50
	°F	- 4 to + 122

4. Using the Vetter safety cushion

4.1 Possible uses of safety cushions

In rescue operations, safety cushions can be deployed as psychological support and as an additional rescue measure in order to be able to react quickly to unpredictable situations. The safety cushion must only be used if there is no other way of rescuing the person(s) concerned (such as a fire-escape ladder) or if the use of the safety cushion becomes necessary for reasons of time.

Injuries cannot be excluded with absolute certainty when the safety cushion is used.

4.2 Selecting the site

The place where the safety cushion is put up depends primarily on the on the actual situation and the local conditions.

The surface on which the safety cushion is placed should be free from foreign particles that may cut or prick the covering material.

The safety cushion must also be protected against excessive heat.

The jumping height must not exceed 16 m!

The exact location where the safety cushion is to be put up will be determined by the officer in charge of the operation.

The safety cushion must be put up in such a way that only straight jumps forward can be made. The person to be rescued must never be asked to jump sideways.

The safety cushion must be re-aligned after each jump, if necessary.

The safety cushion must only be lifted and re-positioned by its carrier loops. It should not be dragged along on rough ground for safety reasons and to ensure a long service life.

4.3 Preparing the safety cushion for use

Take the safety cushion out of the vehicle and place it on sufficient empty space.

The officer in charge of the operation decides, whether the safety cushion is to be put up at the actual site of emergency or whether it is to be put up at a safe place **before** its use, from where it will be taken to the site of emergency.

Undo the tightening belts of the packaging by pressing the key-locks.

Inflate the safety cushion with air up to a maximum pressure of 0.37 bar by opening the valve of the compressed-air cylinder (turn left).

Attention: Take particular care that no one can jump in the rescue cushions during setup.



If the maximum operating pressure of 0.37 bar is exceeded, the safety valve integrated in the compressed-air cylinder will open automatically and prevent an inadmissible pressure inside the supporting frame.

The safety valve opens at approx. 0.37 bar. If you can hear the safety valve trip during use, you must close the handwheel valve on the compressed air cylinder to be able to use the remaining air for additional jumps.

The safety cushion is only ready for use, when the pressure inside the supporting frame has reached 0.37 bar and when the safety cushion is completely erect.

It is not necessary to refill with compressed air as long as the safety cushion is fully inflated / becomes inflated again after use. Filling the supporting frame is sufficient for securely holding the safety cushion upright in an intact state during use.

Put the safety cushion in its right position by lifting it on the carrier loops.

The jumping height must not exceed 16 m!

The safety cushion may only be used again after the rescued person has completely vacated the safety cushion and it has been completely re-erected.

In exercises with a falling body, according to DIN 14151-3, Clause 10, only falling bodies with a weight of 50 kg may be used and only from a falling height from 12 m maximum (e.g.: sandbags or dummies)

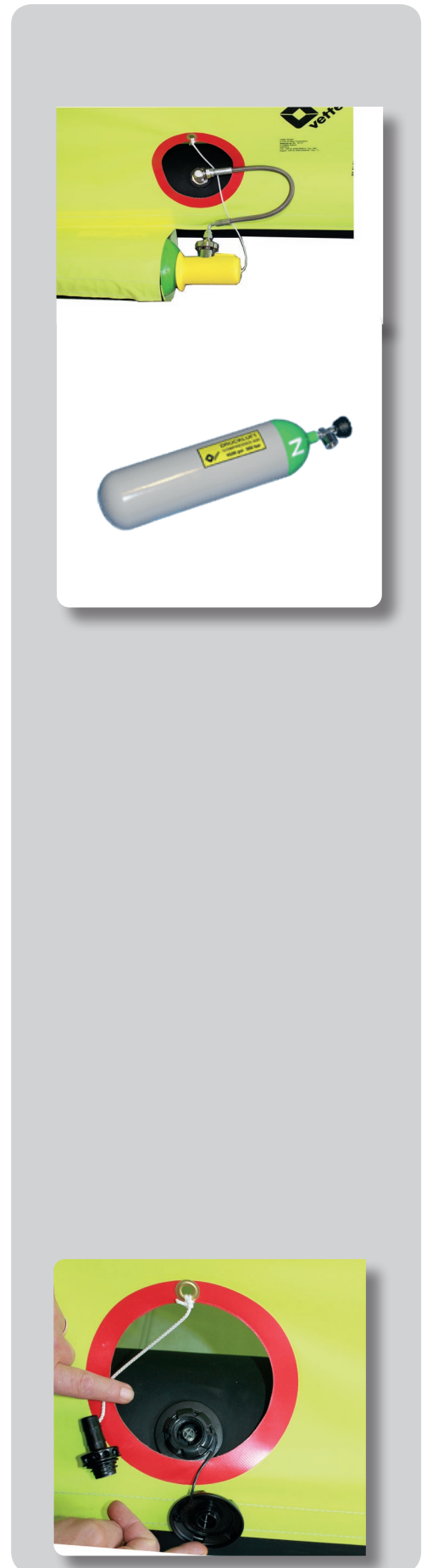
4.4 After the use

Remove safety cushion from the danger zone and empty the support frame in an open space.

Use the vent key to open the vent valve.

To do this, turn the key in the valve until you can feel it latch into position.

Fold together the safety cushion temporarily and prepare for renewed use in the workshop area.





4.5 Inspection and cleaning after use

Re-inflate the soiled safety cushion. Clean it properly with hand-warm clean or soapy water. Rinse the soapy water thoroughly and let the safety cushion dry at normal room temperatures. The empty compressed-air cylinder needs to be refilled or exchanged by a full one.

Important! Check, whether the new compressed-air cylinder is tight.

Inspect the safety cushion and the filling gear for possible damage.

Important Note!

The Safety Cushion **must not** be inflated with a pressure container having a valve fitted with an integrated excess flow valve (EFV).

In doing this the set-up time would be dangerously extended thus making it unsuitable for fire service operation. We would like to point out that the implied valves are not marked and that the excess flow valve cannot be recognized in the assembled condition of the valve.

For these reasons, filling is only possible with compressed air/working air containers(basic colour grey, neck is green) and a certification is according to TPED or with post-certified breathing air containers according to PED and TPED taking into consideration the manufacturer's specifications and the test operation. In both cases a valve without outflow protection can be used to comply with the set-up times according to DIN 14151.

Empty the safety cushion and close the vent valve.

Fold the safety cushion in accordance with the following packing plan.

The Vetter safety cushion is now available for its next use.

4.6 Storage and maintenance

Except in rescue and emergency vehicles, the safety cushion must only be stored in clean and dry conditions as well as in dry rooms.

Only persons, institutions or firms specifically trained by the manufacturer and duly authorized are allowed to carry out maintenance work.

If there are any doubts about the reliable functioning or the safety of the safety cushion ask the manufacturer for a test.

For this purpose return the rescue cushion to the manufacturer only without the compressed air cylinder!

5. Tests and inspections

Safety cushions may only be maintained and repaired by persons who have been authorised in writing, who work in a maintenance point that has been authorised by the manufacturer, and who are knowledge about the pertinent safety regulations and accident prevention regulations that apply here. Persons and institutions exclusively authorized to carry out the inspections:

for the annual test and after each use

As a recommendation of the manufacturer only authorized persons.
We recommend a maintenance interval of 12 months.

the main safety check

As a recommendation of the manufacturer only authorized persons after having attended an additional training course organized by the manufacturer or an instructor authorized by the manufacturer.



This instructor must have been authorized in writing.

This authorization is valid for a maximum period of 60 months and can be extended on application after a further course of training has been attended.

The expert or the test institution in which he works must possess the test equipment necessary to carry out the tests and inspections to the extent required.

the general safety test

The general safety test will be exclusively carried out by the manufacturer.

5.1 Test periods

1. Year	Annual inspection	9. Year	Annual inspection
2. Year	Annual inspection	10. Year	General safety test
3. Year	Annual inspection	11. Year	Annual inspection
4. Year	Annual inspection	12. Year	Annual inspection
5. Year	Main safety check	13. Year	Main safety check
6. Year	Annual inspection	14. Year	Annual inspection
7. Year	Annual inspection	15. Year	Scrapping
8. Year	Main safety check		

If there are any doubts about the reliable functioning or the safety of the safety cushion the manufacturer must always be approached for a general safety test.

For this purpose return the rescue cushion to the manufacturer only without the compressed air cylinder!

For reasons of product safety and liability, the service life of the safety cushion is limited to 15 years. It must not be used thereafter for exercises or any other purposes.

5.2 Test instructions and certificates

The individual tests, checks and inspections shall be carried out in accordance with the operating instructions.

The tests, checks and inspections carried out shall be recorded in a test protocol. (Please make a copy of the page, if required.)

The tests, checks and inspections carried out shall also be recorded permanently in the relevant logbook (included in the scope of supply) and at the safety cushion itself (type plate).

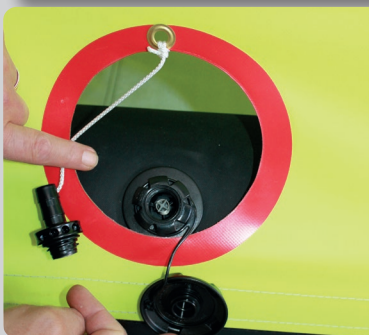
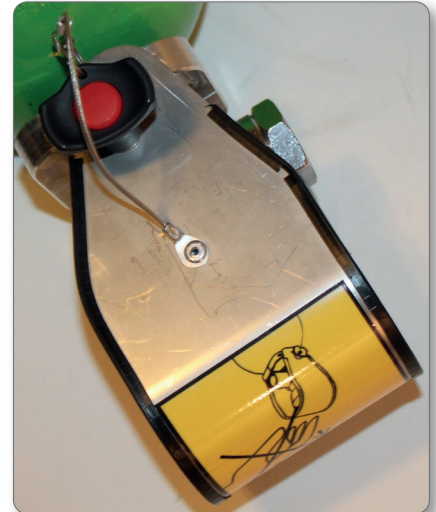
6. Packing instructions

Before packing, check the VETTER safety cushion for damage.

Only pack the compressed air cylinder if full and only together with the inflation hose!

Attention!

The valve protection cap on the rescue cushion does not prevent an uncontrolled opening of the compressed air cylinder during vibrations and transport. For that purpose we recommend a separately available valve protection. Item no. 1600027700 (see photo)



Only safety cushions that have been tested may be packed! (Check as per nameplate) The safety cushion may only be packed if it is clean and dry.

Completely empty the support frame of the safety cushion.

Use the vent key to open the vent valve. To do this, turn the key in the valve until you can feel it latch into position.

After most of the air has escaped, fold together the safety cushion as described in the following folding instructions to press out the remaining air. Then spread out the safety cushion again. Repeat this process if necessary, until the air has completely escaped from the cushion.

or:

1. Lay out the safety cushion uniformly in the square! Place the upper and lower support hoses on top of each other and press the side panel tarpaulin towards the inside.

2. Using vacuum adapter (Art. No.: 1600 0163 01), extract the remaining air completely from the support frame (ejector principle).

To do this, latch the vacuum adapter into the vent valve and connect to an air source (e.g. compressed air cylinder with pressure reducer). Input pressure max. 6 bar, optimally 4 bar. Repeat the process if necessary before attaching the packaging tarpaulin.

3. Do not start packing until the air has been completely removed from the support frame.

4. The starting position and end face is the connection side with the compressed air cylinder. Fold in the side to the left of it up to the compressed air cylinder.

5. Fold over again up to the top of the cylinder body.



6.



6. Fold in the right-hand side of the cushion to the middle.

7.



7. Fold in again on the left-hand side.

8.



8. Now roll up the safety cushion as tightly as possible, rolling towards the compressed air cylinder. The width of the rolled-up safety cushion must not exceed max. 900 mm. Any residual air still in the support frame can escape via the still open vent valve.

If necessary, use the vacuum adapter to extract the remaining air from the support frame!

If the residual air has completely escaped

Close the vent valve!!!

9.



9. To do this, unscrew the vent key (valve then closes automatically) and close the cover of the vent valve.

Position the checked and filled compressed air cylinder in the cylinder bracket.

Put on the valve protection cap.

10.



10. Fold over the packaging tarpaulin. Now use the straps to lash the safety cushion. **Do NOT knot the side tie fastening!** Tighten the straps at the corresponding strap tensioners as required.

It is necessary to ensure that all vent valves are closed and the safety cushion is packed with a full compressed air cylinder! The used compressed air cylinder is a pressure vessel! Periodic test intervals must be complied with!

The safety cushion can then be stowed away on a vehicle.

Place your trust in emergency pneumatics!

We are the company who can help you, find a solution to your problem!

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