

MANUAL

SESAME EXPANSION TANK



CONTENT

1. General	3
2. Important	3
3. Installation expansion tank.....	4
4. Use expansion tank.....	6
5. Air cell replacement.....	6
6. Specifications.....	8
7. Symbols	8
8. Contact details	9
9. Conformity declaration	9
10. Warranty conditions.....	9

1. GENERAL



For your safety, please read the entire manual before installing this product.

The Sesame expansion tank can only be used for water and air in the air cell.

This expansion vessel is prepressurized and under no circumstances should the tank, the fittings or connected system be disassembled prior to the complete discharging of air and fluid pressures.

The warranty is no longer valid in case of use of the appliance with pressure or temperature higher than allowed.

The warranty is not valid when the vessel is not used in accordance with following installation instructions and directions for use.

2. IMPORTANT

Min. ambient temperature: 1°C / 33,8°F

Max. ambient temperature: 50°C / 120°F

Min. water temperature: 1°C / 33,8°F

Max. water temperature (Ts): 50°C / 120°F

Pressure on vessel at delivery*: 1,5 bar / 21,76 psi / 150 kPa

Maximum pressure air cell: 3 bar / 43,52 psi / 300 kPa

Maximum operation pressure (Ps): 8 bar / 116 psi / 800 kPa

Recommended

Recommended cyclic functioning between 2 and 4 bar.

We recommend to locate pressure relief at the highest location of installation.

Conditions for normal use

The pressure vessel can only be used for applications for which it has been designed, calculated and produced (see type on CE label fixed to tank).

*The pressure on the vessel can differ following customer agreements.

Indications for safe use

These indications for safe use intend to point out to any user possible unsafe situations and methods of use. These points of particular interest are NOT limited to the list below:

- Do not knock with or on the vessel;
- Do not knock with or on the connection devices;
- In order to limit external forces, the user needs to take necessary safety measures;
 - o Do not expose to direct sunlight;
 - o Do not expose to open fire or any other heat sources;
 - o The user bears responsibility for any connection;
 - o Externally connected appliances have to be secured or specified as such that maximum operation pressure can never be exceeded.

The manufacturer declines any responsibility in case of damage caused by modifications and repairs which he has not authorized in writing or by not following the present manual.

3. INSTALLATION EXPANSION TANK

WARNING:

The installation must be carried out by qualified personnel bearing the responsibility to follow existing standards and installations procedures. The red seal can only be broken by a qualified installer and is therefore used as a control device for your safety.

1. The manufacturer already made sure 1,5 bar* of air pressure is available in the air cell.
2. Make sure the surface on which the expansion tank is installed is horizontal and flat.
3. Anchor the support of the tank to the surface.
4. Connect to your system and the Sesame tank is ready for use.

IMPORTANT:

The below mentioned points concerning installation of the vessel are not necessarily all comprehensive:

- Before installation of the vessel, please check carefully for possible damage caused during transport;
- Necessary safety appliances (pressure valves) need to be installed by the user in order to always keep operation pressure and temperature lower than the maximum pressure and in between 1°C and 50°C;
- The user is responsible for the choice and installation of above mentioned safety appliances;
- The installer is responsible for installing the tank, preventing overpressure and to follow the correct specifications for the relief valve.
- The "maximum" torque moment for connecting pieces, safety appliances and other have to strictly followed:
 - o 10 Nm for tube connections
 - o 25 Nm for V-clamp or till both ends connect
 - o 30 Nm for bolt lid/air cell.
- The user is responsible for anchoring the vessel;
- The installation of the vessel must be done by qualified persons under the responsibility of the user;
- In case of adaptations/modifications of the vessel, the user needs to ask the manufacturer for advice. The manufacturer declines all responsibility as to possible consequences following adaptations executed without his control.
- The manufacturer declines all responsibility as to possible consequences resulting from the use of incorrect o-rings, the misuse of o-rings, not using o-rings, the use of glue or other fixing techniques;
- The vessel and/or on the vessel installed connections can under no circumstance be used as supportive element in constructions/installations.
- Recommended is to use only original components (all components such as the air cell can be bought from the manufacturer).
- It is strongly recommended to use a flexible or different shock absorber between the supplied plastic tube and the other connections. This flexible will absorb shocks, avoid breaking off the tube and thus prevent damage to the vessel. The manufacturer rejects all responsibility in case of non use of a flexible intermediate piece.

4. USE EXPANSION TANK

Before activating the vessel, please check thoroughly for possible damage caused by installation procedures.

Necessary measures need to be taken in order to prevent and/or solve leakage (a.o. by control of the used o-rings and torque moments).

The expansion vessel can only be used within the recommended limits (pressure and temperature).


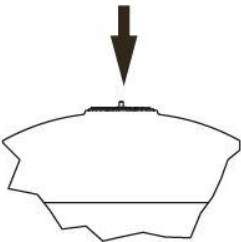
The end user is responsible for the safe installation of the vessel.

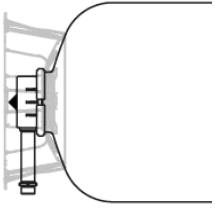
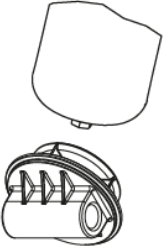
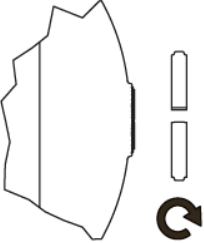

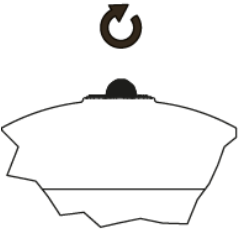
5. AIR CELL REPLACEMENT

WARNING:

The installation must be carried by qualified personnel bearing the responsibility to follow existing standards and installations procedures and to only use original parts.

In case of air cell inspection or replacement, please follow the instructions below:

	<p>STEP 1</p> <p>Shut down the water supply. Release all pressure of the water supply to the tank. Check by opening a tap at drainage side to make sure there is no more water pressure on the tank. Disconnect the tank from your water system. Remove the grey protection cap and unscrew the valve protection on top of the tank to expose the valve.</p>
	<p>STEP 2</p> <p>Unscrew the M16 SW24 nut. Allow all air to escape by pushing down the air valve. A vacuum cleaner can help you to release all air from the vessel (you need to temporarily remove the small inner valve). Put the valve protection back on followed by the grey protection cap.</p>

	<p>STEP 3</p> <p>Put down the tank. Unscrew any tube. Remove the red seal. Unscrew the V-clamp and remove the air cell. Now the air cell and/or the inside of the tank can be inspected.</p>
	<p>STEP 4</p> <p>Install if necessary the support back under the tank and put the air cell back in the tank.</p> <p>Make sure the O-ring is properly situated between lid and tank. Verify the positioning of the air cell at the top of the tank. Fix the nut M16 (30 Nm).</p> <p>Pay attention: the air cell should not be stuck between lid and vessel. Reinstall any tube.</p>
	<p>STEP 5</p> <p>Reinstall the V-clamp. Put some copper grease on the thread. Tighten by screwing.</p> <p>Torque moment 25 Nm or till both sides connect.</p>
	<p>STEP 6</p> <p>Install a new red seal.</p> <p>Put the tank back vertically on its support.</p>
	<p>STEP 7</p> <p>Unscrew the valve protection cap. Inflate the air cell to the manufacturing or desired pressure. Do NOT exceed the maximum pressure as indicated by the manufacturer. Tighten the air valve protection cap. You can start operating the system.</p>





Concerning the frequency and nature of inspections on pressure vessels as well as the life of the vessel, we refer to applicable legal terms.

- When inspecting and maintaining appliances in which the vessels concerned are used, all applicable safety rules need to be followed;
- Before opening connections or other entries to the vessels, the applicable safety measures need to be followed.

6. SPECIFICATIONS

DESCRIPTION	TANK VOLUME		INNER DIAMETER		WEIGHT	TOTAL HEIGHT		INLET HEIGHT	IN-/OUTLET
	liter	gallon	mm	inch		mm	inch		
BASIC expansion tank 60	60	16	460	18	9,9	640	25,20	51	1 ¼'
BASIC expansion tank 115	115	30	460	18	12,9	990	38,98	51	1 ¼'
BASIC expansion tank 150	150	40	460	18	14,8	1230	48,43	51	1 ¼'
BASIC expansion tank 230	230	60	610	24	19,8	1070	42,13	68	1 ¼'
BASIC expansion tank 300	300	80	610	24	22,8	1310	51,57	68	1 ¼'
BASIC expansion tank 450	450	119	610	24	35,2	1880	74,02	68	1 ¼'

7. SYMBOLS

	caution
	gaz under pressure
	keep away from sunlight
	read manual before use

8. CONTACT DETAILS

www.covess.com

9. DECLARATION OF CONFORMITY



The CE declaration of conformity is available upon request.

10. WARRANTY CONDITIONS

The valid warranty conditions are available on our website www.covess.com.

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