

## IMI Pneumatex Statico SD 50L 3bar 3/4

# IMI Pneumatex Statico SD Expansion Vessel User Manual

Model: Statico SD 50L 3bar 3/4

## INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your IMI Pneumatex Statico SD expansion vessel. Please read these instructions carefully before installation and retain them for future reference. Proper installation and maintenance are crucial for the longevity and optimal performance of the unit.

## SAFETY INFORMATION

- Installation must be performed by a qualified professional in accordance with local regulations and standards.
- Ensure the system is depressurized and cooled before attempting any installation or maintenance.
- Do not exceed the maximum operating pressure of 3 bar.
- Wear appropriate personal protective equipment (PPE) during installation and maintenance.
- The expansion vessel contains pressurized gas. Do not attempt to open or modify the vessel.
- Regularly check the pre-charge pressure as specified in the maintenance section.

## PRODUCT OVERVIEW

The IMI Pneumatex Statico SD is a diaphragm expansion vessel designed for use in closed heating and cooling systems. Its primary function is to absorb the volume changes of the system fluid caused by temperature fluctuations, thereby maintaining system pressure within acceptable limits. This model has a capacity of 50 liters and a maximum operating pressure of 3 bar.



**Figure 1:** IMI Pneumatex Statico SD Expansion Vessel. This image displays the blue, spherical expansion vessel, highlighting the threaded connection point at the bottom and the pre-charge valve located centrally on the top surface. A 'Quality Checked' sticker is visible on the upper right side.

## SETUP AND INSTALLATION

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1. **Location:** Install the expansion vessel in an easily accessible location, preferably on the suction side of the circulation pump, where the system pressure is most stable. Ensure adequate space for future maintenance.
2. **Mounting:** The vessel can be wall-mounted using appropriate brackets (not included) or placed on a stable surface. Ensure the mounting is secure enough to support the vessel's weight when full.
3. **Pre-charge Pressure Check:** Before connecting, verify the pre-charge pressure of the vessel using a pressure gauge. Adjust the pressure if necessary to match the system's static head pressure plus a small margin (typically 0.2-0.3 bar). The factory pre-charge is typically 1.5 bar, but this should be confirmed and adjusted for your specific system.
4. **Connection:** Connect the vessel to the heating system using the 3/4 inch threaded connection. Use appropriate sealing materials (e.g., PTFE tape or hemp) to ensure a watertight connection. A shut-off valve and drain valve should be installed between the system and the expansion vessel to facilitate maintenance without draining the entire system.

- 5. **System Filling:** After connecting the vessel, fill the heating system with water and vent all air. Gradually increase the system pressure to the desired operating pressure.
- 6. **Leak Check:** Inspect all connections for leaks once the system is pressurized.

## OPERATING INSTRUCTIONS

Once properly installed and the system is filled and pressurized, the IMI Pneumatex Statico SD expansion vessel operates automatically. It will absorb the expansion of the heating fluid as the system heats up and release the fluid back into the system as it cools down, thereby maintaining a stable system pressure.

- Monitor the system pressure gauge regularly to ensure it remains within the recommended operating range for your heating system.
- Unusual pressure fluctuations may indicate a need for maintenance or troubleshooting.

## MAINTENANCE

Regular maintenance ensures the optimal performance and extends the lifespan of your expansion vessel. It is recommended to perform these checks annually.

- 1. **Check Pre-charge Pressure:**
  - Isolate the expansion vessel from the heating system using the shut-off valve.
  - Drain the water from the vessel using the drain valve.
  - Connect a pressure gauge to the air valve on the top of the vessel.
  - Verify the pre-charge pressure. If it is below the required level (typically 0.2-0.3 bar above static head), repressurize the vessel using an air pump or compressor.
  - Once the correct pressure is achieved, close the air valve, open the shut-off valve, and repressurize the heating system.
- 2. **Visual Inspection:** Check the vessel for any signs of corrosion, damage, or leaks.
- 3. **Connection Integrity:** Ensure all connections are tight and free from leaks.

## TROUBLESHOOTING

Problem	Possible Cause	Solution
System pressure fluctuates excessively	Incorrect pre-charge pressure, damaged diaphragm, undersized vessel	Check and adjust pre-charge pressure. If diaphragm is damaged, replace vessel. Consult a professional for sizing.
Constant pressure relief valve discharge	Over-pressurization, faulty expansion vessel, incorrect pre-charge	Check and adjust pre-charge pressure. Inspect vessel for damage. Verify system operating pressure.
Water leaking from air valve	Damaged diaphragm	The vessel diaphragm is compromised. The expansion vessel needs to be replaced.

## SPECIFICATIONS

- **Model:** IMI Pneumatex Statico SD

- **Capacity:** 50 Liters
- **Maximum Operating Pressure:** 3 bar
- **Connection Size:** 3/4 inch
- **Manufacturer Part Number:** 7101005
- **Item Weight:** 3.63 kg
- **Color:** Blue
- **ASIN:** B00LLGL60A

## WARRANTY AND SUPPORT


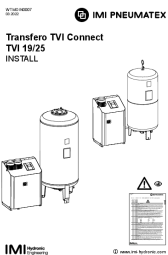

For warranty information or technical support, please refer to the documentation provided with your purchase or contact your local IMI Pneumatex distributor. Keep your proof of purchase for warranty claims.

For further assistance, you may visit the official IMI Pneumatex website or contact their customer service department.

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### Related Documents - Statico SD 50L 3bar 3/4

	<p><a href="#">BrainCube Connect : Guide d'Installation et d'Exploitation</a></p> <p>Manuel d'installation et d'exploitation du système BrainCube Connect d'IMI Pneumatex. Découvrez comment installer, configurer et gérer vos appareils IMI Pneumatex avec cette solution de contrôle intelligente, incluant les configurations maître-esclave et les interfaces de communication.</p>
	<p><a href="#">IMI Pneumatex Simply Vento V 2.1 S &amp; Vento Compact V 2.1 FE Installation Guide</a></p> <p>Comprehensive installation guide for IMI Pneumatex Simply Vento V 2.1 S and Vento Compact V 2.1 FE systems, covering electrical connections, plumbing, and operational parameters.</p>
	<p><a href="#">Zeparo G-Force: Efficiënte Vuil-, Lucht- en Magnetietafscheiders</a></p> <p>Ontdek de Zeparo G-Force serie van IMI Pneumatex, revolutionaire cycloontechnologie voor het afscheiden van vuil, lucht en magnetiet in verwarmings- en koelwatersystemen. Verbeter de efficiëntie en bescherm uw installatie.</p>

 <p>IMI PNEUMATEX Transfero Connect TV 4-14 INSTALL</p>	<p><a href="#">IMI Pneumatex Transfero Connect TV 4-14 Installation Guide</a></p> <p>This document provides comprehensive installation instructions for the IMI Pneumatex Transfero Connect TV 4-14 series. It covers essential safety information, site preparation, system configurations, technical specifications, and electrical connection procedures for various models.</p>
 <p>IMI PNEUMATEX Transfero TVI Connect TVI 19/25 INSTALL</p>	<p><a href="#">IMI Pneumatex Transfero TVI Connect TVI 19/25 Installation Guide</a></p> <p>Installation guide for IMI Pneumatex Transfero TVI Connect series, including TVI 19/25. Covers safety, setup, technical specifications for pressure maintenance, degassing, and water treatment systems.</p>
 <p>IMI PNEUMATEX Zeparo ZU</p> <p>Automaat õhueraldajad ja separaatorid Mikromulid, hõljum, kombinatsioonid</p>	<p><a href="#">IMI Pneumatex Zeparo ZU: Comprehensive Guide to Air Separators and Deaerators</a></p> <p>Explore the IMI Pneumatex Zeparo ZU series, featuring automatic air separators, microbubble separators, and float separators. This guide details their application in heating, solar, and cooling systems, including technical specifications, operational principles, and product variants.</p>