

## Flamco 11082

# Flamco XStream 11082 Vent-Clean Air and Dirt Separator

Model: 11082 | Brand: Flamco

## INTRODUCTION

The Flamco XStream Vent-Clean is an advanced air and dirt separator designed to optimize the performance and efficiency of heating and cooling systems. By effectively removing air and dirt particles, it helps reduce energy consumption and extend the lifespan of system components.

### Key Features:

- Reduced energy consumption: Up to 15% less heating system energy consumption.
- Increased system efficiency: Up to 6% more heating system efficiency.
- Flexible installation: Flow direction is not critical, simplifying setup.
- Integrated insulation: Minimizes heat loss for improved thermal performance.
- Effective air and dirt separation: Ensures a cleaner and more efficient system.



Figure 1: Flamco XStream 11082 Vent-Clean Air and Dirt Separator. This image shows the main unit of the air and dirt separator, featuring its black body, red caps, and brass connections, alongside a separate brass fitting.

## SETUP AND INSTALLATION

Proper installation is crucial for the optimal performance of the Flamco XStream Vent-Clean. It should be installed in the main flow of the heating or cooling system.

### Installation Guidelines:

1. **System Preparation:** Ensure the system is depressurized and drained before installation.
2. **Location:** Install the separator at a point where air and dirt accumulation is most likely, typically in the return line before the boiler or chiller.
3. **Orientation:** The Flamco XStream Vent-Clean can be installed horizontally or vertically. The design allows for

flexible orientation without affecting performance.

4. **Connections:** Connect the unit using appropriate fittings (DN25 G 1 1/4" M). Ensure all connections are tight to prevent leaks.
5. **Filling the System:** After installation, slowly refill the system, allowing air to escape through the automatic air vent on the separator.
6. **Initial Operation:** Monitor the system for any leaks and ensure proper operation.

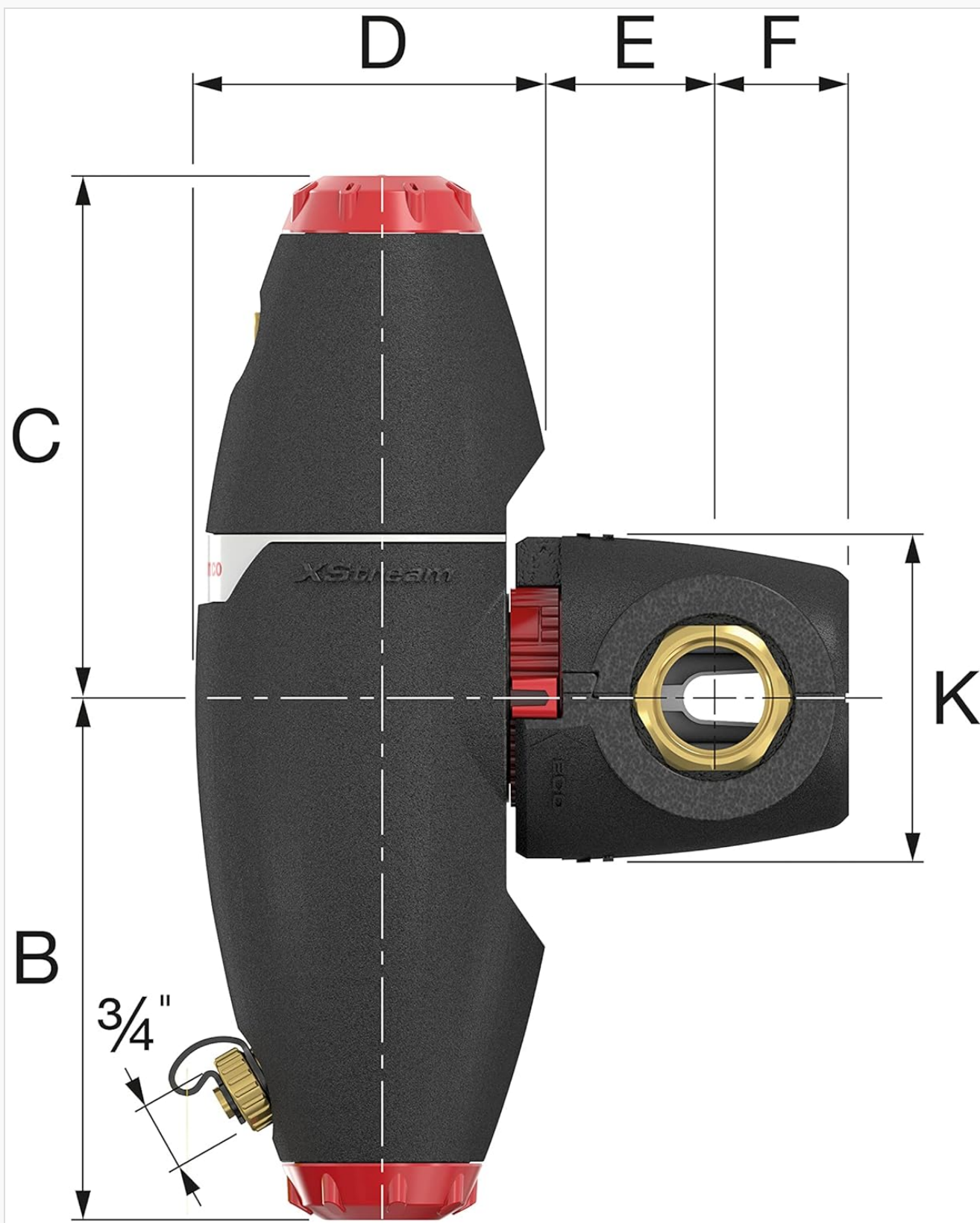


Figure 2: Side view dimensions of the Flamco XStream 11082 Vent-Clean. This diagram illustrates various measurements (C, D, E, F, K, B) of the separator from a side perspective, including the 3/4" connection point.

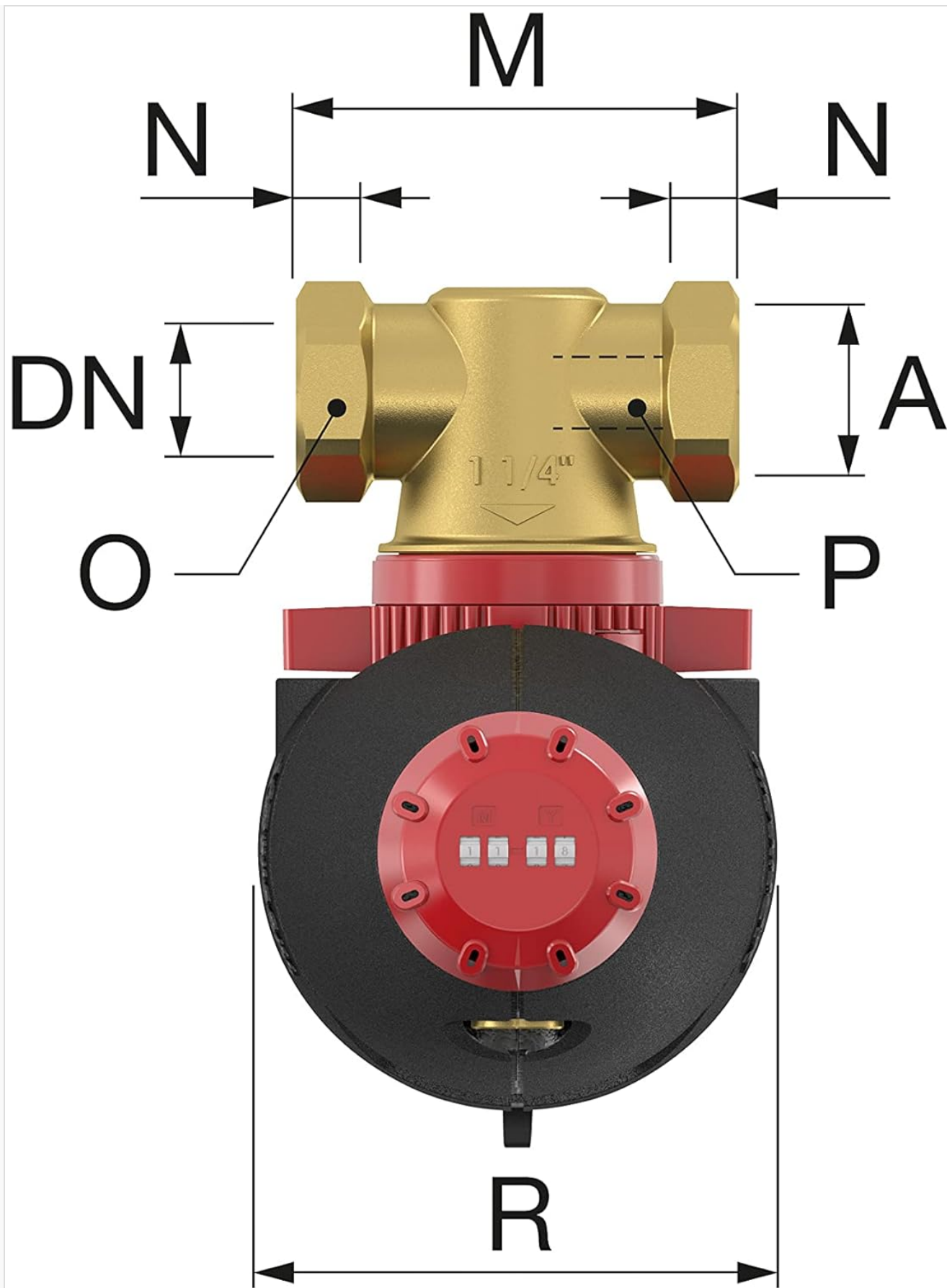


Figure 3: Top view dimensions of the Flamco XStream 11082 Vent-Clean. This diagram provides measurements (M, N, R, A, DN, O, P) of the separator from a top-down perspective, highlighting the 1 1/4" connection and overall width.

## OPERATING PRINCIPLES

The Flamco XStream Vent-Clean operates passively to remove air and dirt from the system fluid. It utilizes a unique

internal design to create a low-velocity zone where microbubbles and dirt particles can separate from the fluid.

- **Air Separation:** Microbubbles rise to the top of the unit and are automatically discharged through the integrated air vent.
- **Dirt Separation:** Dirt particles, including magnetite, settle at the bottom of the unit due to gravity and are collected in the dirt chamber. The magnetic field assists in collecting ferrous particles.
- **Continuous Operation:** The separation process is continuous as long as the system is in operation, ensuring ongoing protection and efficiency.

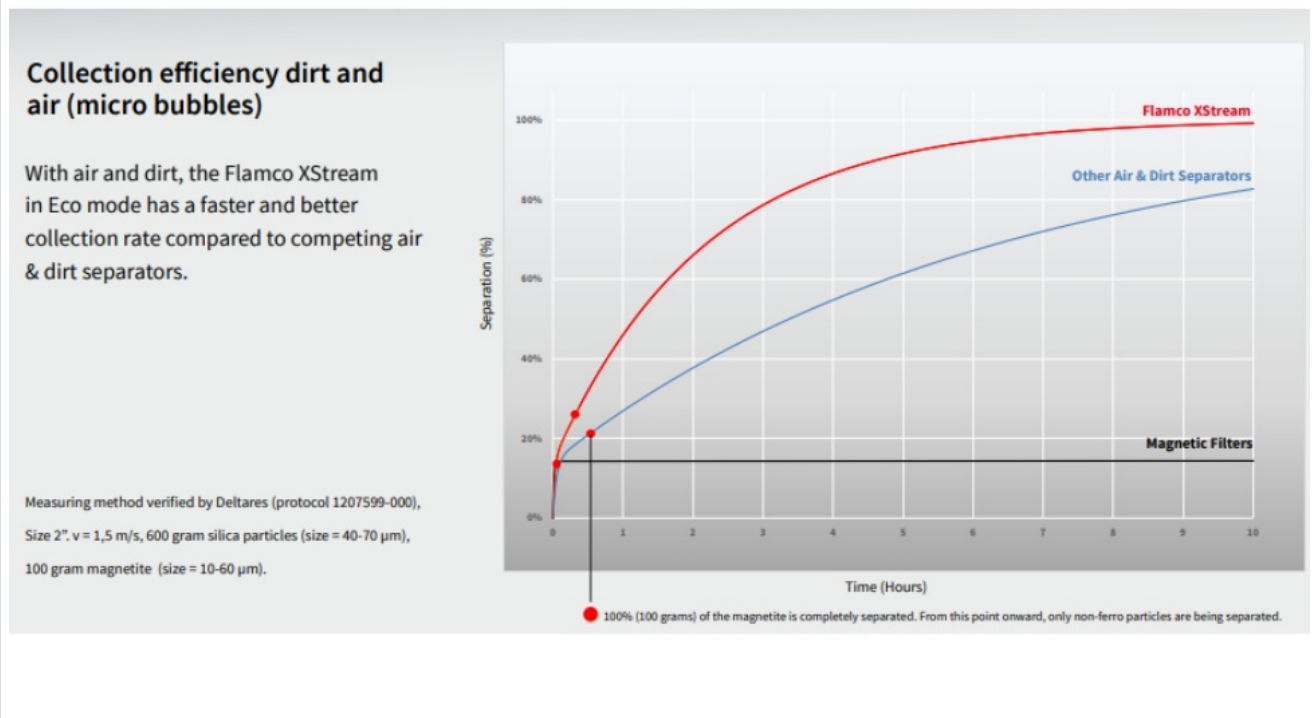
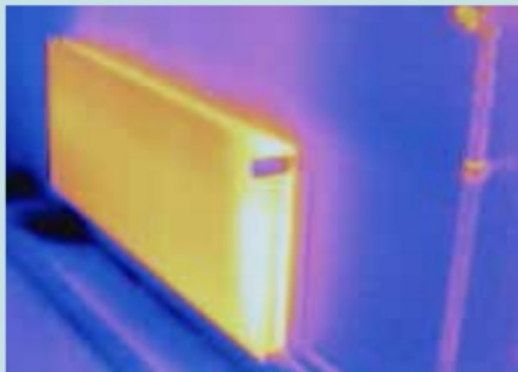


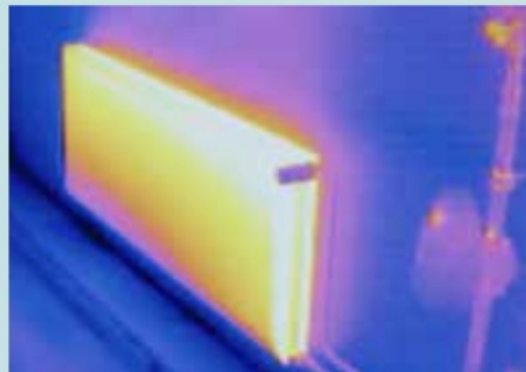
Figure 4: Graph illustrating the collection efficiency of dirt and air (microbubbles). The graph compares Flamco XStream's separation rate (red line) against other air and dirt separators (blue line), showing superior performance, especially for magnetite collection over time.



## Up to 60% more efficient heat release.



Without XStream



With XStream

Figure 5: Thermal images comparing heat release efficiency. The image on the left shows a radiator "Without XStream" with cooler areas, while the image on the right shows a radiator "With XStream" with more uniform and efficient heat distribution, indicating up to 60% more efficient heat release.

## MAINTENANCE

Regular maintenance ensures the continued efficiency and longevity of your Flamco XStream Vent-Clean.

### Cleaning the Dirt Separator:

1. **Frequency:** The dirt chamber should be flushed periodically, depending on the system's condition and the amount of dirt collected. Initially, it may require more frequent flushing.
2. **Procedure:**
  - Ensure the system is operating under normal pressure.
  - Locate the drain valve at the bottom of the separator.
  - Place a suitable container under the drain valve.
  - Slowly open the drain valve to flush out accumulated dirt and sludge.
  - Close the drain valve once the water runs clear.
3. **Magnetic Rod (if applicable):** If your model includes a removable magnetic rod, it can be extracted and cleaned separately to remove ferrous particles. Ensure the system is depressurized before removing the magnetic rod.

### Air Vent Check:

The automatic air vent typically requires no maintenance. However, ensure it is not obstructed and can freely discharge air. If persistent air issues occur, check for blockages.

## TROUBLESHOOTING

Problem	Possible Cause	Solution
Persistent Air in System	Air vent blocked or faulty.	Check if the automatic air vent is clear. Gently tap the vent to dislodge any debris. If problem persists, inspect or replace the air vent.
Poor Dirt Separation	Dirt chamber full or drain valve blocked.	Flush the dirt chamber more frequently. Ensure the drain valve is fully operational and not clogged.
Leaks at Connections	Improperly tightened connections or damaged seals.	Ensure all connections are tightened correctly. Check and replace any damaged seals or gaskets.
Reduced System Efficiency	Accumulation of air or dirt in the system.	Perform air venting and dirt flushing procedures. Ensure the separator is correctly sized and installed for the system.

## SPECIFICATIONS






Feature	Detail
Manufacturer	Flamco
Model Number	11082
Product Dimensions (L x W x H)	130 x 219 x 362 cm
Weight	2 Kilograms
Size	1¼ M (DN25 G 1 1/4")
Material	Metal, Plastic
Compatible Devices	Heat pump, Heating system, Boiler
Number of Items	1
ASIN	B0977GFB1H

## WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official Flamco website or contact your local Flamco distributor. Keep your purchase receipt as proof of purchase.

**Manufacturer:** Flamco

**Website:** [www.flamco.com](http://www.flamco.com) (Note: This is a generic placeholder for the manufacturer's website, please verify the actual URL.)

	<p><a href="#">Flamco XStream Air and Dirt Separator Technical Manual</a></p> <p>A comprehensive technical manual for the Flamco XStream air and dirt separator, detailing its features, installation, operation, and technical specifications for heating and cooling systems.</p>
	<p><a href="#">Flexvent Top / Pro / Super / MAX Automatic Air Vent Installation and Maintenance Guide</a></p> <p>This guide provides detailed instructions for the installation, maintenance, and dismantling of Flamco's Flexvent Top, Pro, Super, and MAX automatic air vents. It covers system compatibility, safety precautions, technical specifications, and environmental disposal guidelines for heating and cooling systems using glycol additives.</p>
	<p><a href="#">Flamco Contraflex Expansion Vessel Installation and Operating Instructions</a></p> <p>Comprehensive guide for installing, operating, and maintaining Flamco Contraflex expansion vessels. Covers safety, commissioning, and de-installation procedures for models ranging from 2 to 1000 liters.</p>
	<p><a href="#">Flamco Pro PDD Pressurisation Equipment: Operation &amp; Maintenance Manual</a></p> <p>This comprehensive manual details the installation, commissioning, operation, and maintenance of the Flamco Pro PDD, a sophisticated top-up unit featuring degassing and dosing capabilities for sealed heating and cooling systems. It is designed to automate water top-up, compensating for minor pressure losses and ensuring system efficiency.</p>
	<p><a href="#">Flamcomat MP G4 Installation and Operating Manual</a></p> <p>Comprehensive installation and operating instructions for the Flamco Flamcomat MP G4 expansion automat. Covers safety, product description, assembly, commissioning, maintenance, and technical data.</p>





**Flextherm PS-H(+)**  
Buffer-/ intermediate vessels



000 Installation and operating manual



## [Flamco Flextherm PS-H\(+\) Buffer Vessels: Installation and Operation Guide](#)

This guide provides essential technical data, safety instructions, installation procedures, and maintenance guidelines for Flamco Flextherm PS-H(+) buffer and intermediate vessels, designed to optimize heat pump performance and heating system efficiency.