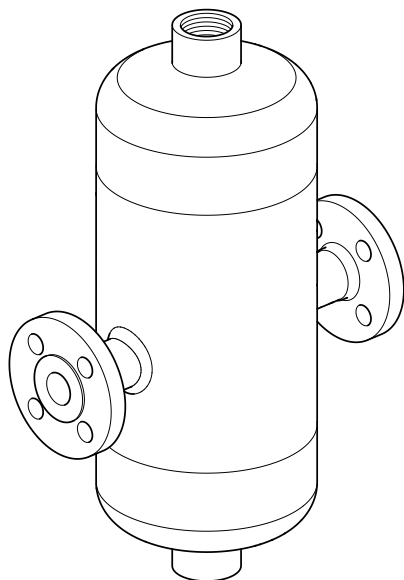


S8F Separators Food+

Installation and Maintenance Instructions



- 1. Safety information
- 2. General product information
- 3. Installation
- 4. Commissioning
- 5. Operation
- 6. Maintenance
- 7. Spare parts

1. Safety information

Safe operation of these products can only be guaranteed if they are properly installed, commissioned, used and maintained by qualified personnel (see Section 1.11) in compliance with the operating instructions. General installation and safety instructions for pipeline and plant construction, as well as the proper use of tools and safety equipment must also be complied with.

S8F Food+ DN15 to DN100, EC1935/2004 version, safety instructions:


S8F Food+ DN15 to DN50, EC1935/2004 version is intended to be connected into a system that can operate an EC1935 compliant process.

To minimise the risk of non-intentionally added substances in the system, it is essential that an appropriate CIP (cleaning in place) cycle is carried out by the end user prior to first use in a food contact application.

A list of the materials that could come directly or indirectly into contact with foodstuffs can be found in the declaration of conformity supplied with this product.

1.1 Intended use

Referring to the Installation and Maintenance Instructions, name-plate and Technical Information Sheet, check that the product is suitable for the intended use/application.

The products listed below comply with the requirements of the EU Pressure Equipment Directive and carry the  mark when so required.

The products fall within the following Pressure Equipment Directive categories:

Product		Group 2 Gases	Group 2 Liquids
S8F	16 bar g	SEP	SEP
		1	1

- i) The product has been specifically designed for use on steam and compressed air which are in Group 2 of the previously mentioned Pressure Equipment Directive.
- ii) Check material suitability, pressure and temperature and their maximum and minimum values. If the maximum operating limits of the product are lower than those of the system in which it is being fitted, or if malfunction of the product could result in a dangerous overpressure or overtemperature occurrence, ensure a safety device is included in the system to prevent such over-limit situations.
- iii) A number of products are supplied for the intention of the end user (or agent thereof) modifying the flange configuration from that supplied. It is the responsibility of the organisation carrying out the modification to do so in accordance with the internationally recognised flange standards and to ensure that the design rating and operation of the product are not compromised. Spirax Sarco will not be held responsible for any unapproved modification or consequential liability resulting in failure to observe these requirements.
- iv) Determine the correct installation situation and direction of fluid flow.
- v) Spirax Sarco products are not intended to withstand external stresses that may be induced by any system to which they are fitted. It is the responsibility of the installer to consider these stresses and take adequate precautions to minimise them.
- vi) Remove protection covers from all connections and protective film from all nameplates, where appropriate, before installation on steam or other high temperature applications.
- vii) Prior to use, the user shall ensure the fluid compatibility with the equipment material.

1.2 Access

Ensure safe access and if necessary, a safe working platform (suitably guarded) before attempting to work on the product. Arrange suitable lifting gear if required.

1.3 Lighting

Ensure adequate lighting, particularly where detailed or intricate work is required.

1.4 Hazardous liquids or gases in the pipeline

Consider what is in the pipeline or what may have been in the pipeline at some previous time. Consider: flammable materials, substances hazardous to health, extremes of temperature.

1.5 Hazardous environment around the product

Consider: explosion risk areas, lack of oxygen (e.g. tanks, pits), dangerous gases, extremes of temperature, hot surfaces, fire hazard (e.g. during welding), excessive noise, moving machinery.

1.6 The system

Consider the effect on the complete system of the work proposed. Will any proposed action (e.g. closing isolation valves, electrical isolation) put any other part of the system or any personnel at risk?

Dangers might include isolation of vents or protective devices or the rendering ineffective of controls or alarms. Ensure isolation valves are turned on and off in a gradual way to avoid system shocks.

1.7 Pressure systems

Ensure that any pressure is isolated and safely vented to atmospheric pressure. Consider double isolation (double block and bleed) and the locking or labelling of closed valves. Do not assume that the system has depressurised even when the pressure gauge indicates zero.

1.8 Temperature

Allow time for temperature to normalise after isolation to avoid danger of burns.

1.9 Tools and consumables

Before starting work ensure that you have suitable tools and/or consumables available. Use only genuine Spirax Sarco replacement parts.

1.10 Protective clothing

Consider whether you and/or others in the vicinity require any protective clothing to protect against the hazards of, for example, chemicals, high/low temperature, radiation, noise, falling objects, and dangers to eyes and face.

1.11 Permits to work

All work must be carried out or be supervised by a suitably competent person.

Installation and operating personnel should be trained in the correct use of the product according to the Installation and Maintenance Instructions.

Where a formal 'permit to work' system is in force it must be complied with. Where there is no such system, it is recommended that a responsible person should know what work is going on and, where necessary, arrange to have an assistant whose primary responsibility is safety. Post 'warning notices' if necessary.

1.12 Handling

Manual handling of large and/or heavy products may present a risk of injury. Lifting, pushing, pulling, carrying, or supporting a load by bodily force can cause injury particularly to the back. You are advised to assess the risks considering the task, the individual, the load, and the working environment and use the appropriate handling method depending on the circumstances of the work being done.

1.13 Residual hazards

In normal use the external surface of the product may be very hot. If used at the maximum permitted operating conditions the surface temperature of some products may reach temperatures of 300 °C (572 °F).

Many products are not self- draining. Take due care when dismantling or removing the product from an installation (refer to Section 6 'Maintenance instructions').

1.14 Freezing

Provision must be made to protect products which are not self- draining against frost damage in environments where they may be exposed to temperatures below freezing point.

1.15 Disposal

Unless otherwise stated in the Installation and Maintenance Instructions, this product is recyclable, and no ecological hazard is anticipated with its disposal providing due care is taken.

Please visit the Spirax Sarco product compliance web pages

<https://www.spiraxsarco.com/product-compliance>

for up to date information on any substances of concern that may be contained within this product. Where no additional information is provided on the Spirax Sarco product compliance web page, this product may be safely recycled and/or disposed providing due care is taken. Always check your local recycling and disposal regulations.

1.16 Returning products

Customers and Stuckists are reminded that under EC Health, Safety and Environment Law, when returning products to Spirax Sarco they must provide information on any hazards and the precautions to be taken due to contamination residues or mechanical damage which may present a health, safety or environmental risk. This information must be provided in writing including Health and Safety data sheets relating to any substances identified as hazardous or potentially hazardous.

1.17 S8F Food+ version, safety instructions

This product is intended to be connected into a system that can operate an EC1935 compliant process. To minimise the risk of non-intentionally added substances in the system, it is essential that an appropriate CIP (cleaning in place) cycle is carried out by the end user prior to first use in a food contact application. A list of the materials that could come directly or indirectly into contact with foodstuffs can be found in the Declaration of Compliance available for this product.

2. General product information

2.1 Description

The products detailed are all baffle type separators used for the removal of entrained liquids in steam, compressed air and gas systems. We recommend the fitting of insulating jackets to improve the performance of the separator.

Note: For additional product data see the following Technical Information Sheets.

Type	Material	Pressure rating	Sizes	Connections	TI reference
S8F	Austenitic stainless steel 304L	PN16	DN15 – DN100	Flanged	TI-P750-01

3. Installation

Note: Before actioning any installation observe the 'Safety Information' in Section 1.

Referring to the Installation and Maintenance Instructions, body markings, nameplate (if fitted) and Technical Information Sheet, check that the product is suitable for the intended installation.

- 3.1** Check materials, pressure and temperature and their maximum values. If the maximum operating limit of the product is lower than that of the system in which it is being fitted, ensure a safety device is included in the system to prevent over pressurisation.
- 3.2** Determine the correct installation situation and the direction of fluid flow.
- 3.3** Remove protective covers from all connections and the protective film from all nameplates, where appropriate, before installation on steam or other high temperature applications.
- 3.4** The separators may be lagged if required.

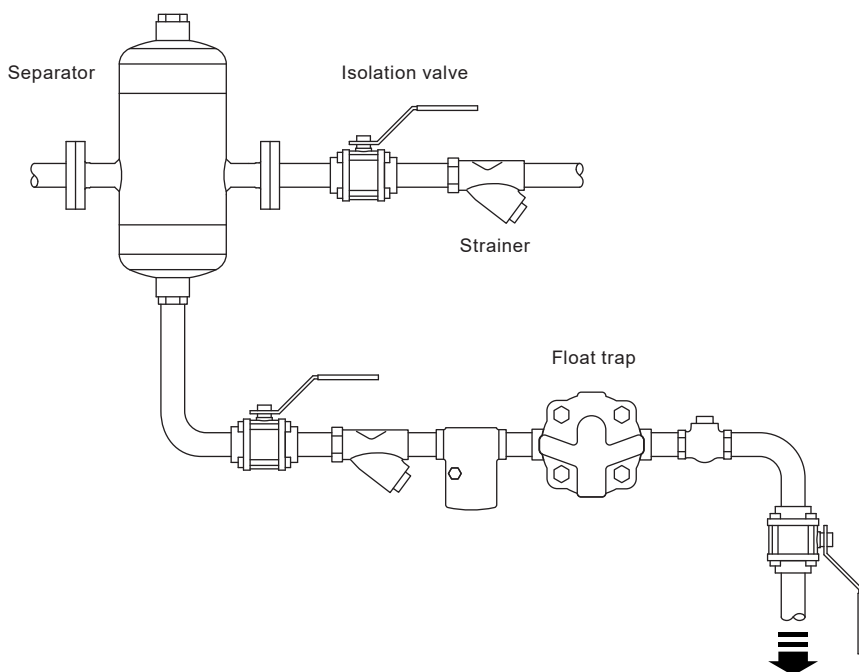
3.5 Installation for the S8F Food+

Install in a horizontal pipeline with the drain directly below.

To ensure that any separated liquid is drained quickly, a suitable liquid drainer or steam trap must be connected to the drain connection. A float type trap is recommended.

For those steam systems where air can be present, air can collect in the upper portion of the separator. In this situation a suitable air vent should be connected to the air vent connection.

If an air vent is not being fitted, then the connection must have the plastic transit protection plug removed and must have a stainless-steel class 3000 lb plug fitted.



Equipment shown is for illustration purposes only. All items selected must be suitable for use in food contact applications. Please contact Spirax Sarco for further information.

4. Commissioning

After installation or maintenance, ensure that the system is fully functioning. Carry out tests on any alarms or protective devices.

5. Operation

Separators are designed to gather small droplets of entrained liquids and then separate them from the gas/vapour flow. The relatively heavy droplets impinge on the internal baffles and are then directed to the separator drain connection and removed from the system using a steam trap, or when used on air or gas distribution system, a liquid drainer.

6. Maintenance

Note: Before actioning any maintenance program observe the 'Safety information' in Section 1.

7. Spare parts

There are no spare parts required or available for this component.