



SartoJet Pump

Four-piston Diaphragm Pump for Sartoco[®] Slice Crossflow Filtration System

Crossflow Systems



The SartoJet is a powerful 4-piston diaphragm pump for all biopharmaceutical down stream applications from the laboratory right up to pilot scale production. Optimal for shear sensitive products.

Sartocon[®] Slice microfiltration or ultrafiltration Sets supply up to five Slice Cassettes with 0.1m² filter area each. All pressurized parts of the system are hard piped and can be connected directly to the SartoJet pump head.

Applications

- Transfer of biopharmaceutical solutions and suspensions
- Feedpump for crossflow and cartridge filtration applications
- Dosing and mixing pump for chromatography systems
- Feedpump for centrifuges, separators and homogenizers



SartoJet four piston diaphragm pump

The pump design is especially suited for:

- Protein solutions
- Polymer solutions
- Cell and cell debris suspensions
- Mammalian and insect cell suspensions
- Vaccines
- Monoclonal antibodies

The unique pump technology ensures high reliability and very low energy uptake even at high flow rates with shear sensitive cell suspensions. Therefore, in cell harvest crossflow applications no cooling of the suspension is necessary. The pump is self priming and can be combined with several different accessories.

The pump is easy to operate. Pump and control pad are mounted in an easy-to-clean stainless steel cabinet.

A special designed Sartoco[®] Slice crossflow set fits directly to the feed adapter of the pump. All pressurized parts of the system are hard piped and connected via sanitary Tri Clamp adapters. This system supplies up to five Sartoco[®] Slice Cassettes with 0.1 m² filter area each.

An optional pressure switch with local digital pressure read out shuts the pump down when a predefined pressure is triggered. This accessory protects the user and the process by shutting down the pump automatically when the maximum operation pressure of a cartridge or a crossflow system is obtained. The pressure switch is easily programmed by the user.

Additional control is achieved by using an inductive level sensor. This small sensor is placed outside of a glass or plastic vessel and is not in contact with the product. It switches the pump off when a predefined level of liquid in the vessel is detected.

Features

- Easy to clean, no shaft seals
- Can run dry, self priming
- Low noise, constant flow
- Compact
- Adjustable flow up to 1,380 l/h
- Pressure up to 6.0 bar | 90 psi, 5.0 bar | 75 psi in permanent use
- Temperature up to 60°C, CIP up to 90°C (short time), SIP up to 135°C



Sartoco[®] Slice Filter holder

Specifications

Product Wetted Components

Pump head	AISI 316L stainless steel
Surface finish	Ra < 0.8 µm
Diaphragm	Santoprene®
Valves & O-Ring	EPDM & BUNA
Valve chamber & pistons	Polypropylene
Ports	Tri-Clamp 3/4"

Documents

3.1B material certificates, surface finish protocol, pump performance chart and FDA conformity documents are supplied with the pump.

Electrical details

Power supply	intelligent controls enable operation at most single phase supplies 115–240 V AC 50 Hz or 60 Hz
Controls voltage	24 V, DC
Controls (ON/OFF)	Touch Pad 0–100 %
External Control	0...10 V DC is possible

Dimension

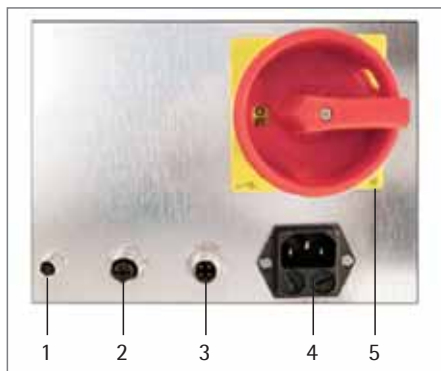
L × W × H 415 × 300 × 385 mm

Drive

Motor	24 V DC
Variable speed	0–3,000 rpm
Torque	0.59 Nm at 3,000 rpm
Motor power	185 Watt, 8.7 Amp.

Ordering Informations

SartoJet four piston diaphragm pump	17521---110
Sartocon® Slice Microfiltration Set for the SartoJet Pump	17521---105
Sartocon® Slice Ultrafiltration Set for SartoJet Pump	17521---106
Pressure switch with local display mounted on a DN10 Tee with 3/4"	17521---111
TC connectors for use with Sartorius SartoJet pump (17521---110).	
Level Switch for use with Sartorius SartoJet pump	17521---112
Drain Valve - T-piece with membrane valve set for use with Sartorius SartoJet pump	17521---113
Sartocon® Slice Flush Plate PP-DWST	305030C

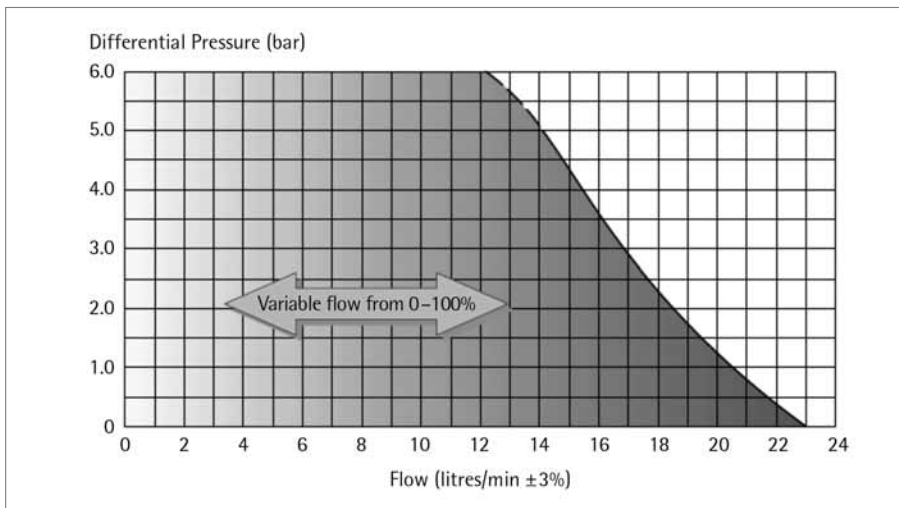


1. Liquid level in storage tank, M8 socket
2. Pressure, M12 socket
3. External signal, M12 connector
4. Power input
5. Switch ON | OFF

Accessories

Pressure gauge 0-4 bar oil damped DN10	17521---033
Diaphragm valve with Tri-clamp adapter DN10	17521---032
Permeate manifold with Tri-clamp adapter DN10	17521---034
Hose barb adapters DN10 Suitable for hoses with 13 mm innerdiameter	17521---035
Clamp for 25 mm Tri-clamp adapters	17521---010
EPDM Gaskets (5 pieces)	17521---036

Max. Flow at 100% (1 cP)



Ultrafilter Membrane	Area	MWCO	Part Number
Hydrosart UF	0.1 m ²	2 kD	305 144 19 01 E--SW
Hydrosart UF	0.1 m ²	5 kD	305 144 29 01 E--SW
Hydrosart UF	0.1 m ²	10 kD	305 144 39 01 E--SW
Hydrosart UF	0.1 m ²	30 kD	305 144 59 01 E--SW
Hydrosart UF	0.1 m ²	100 kD	305 144 68 01 E--SW
PESU UF	0.1 m ²	1 kD	305 146 09 01 E--SW
PESU UF	0.1 m ²	5 kD	305 146 29 01 E--SW
PESU UF	0.1 m ²	8 kD	305 146 34 01 E--SW
PESU UF	0.1 m ²	10 kD	305 146 39 01 E--SW
PESU UF	0.1 m ²	30 kD	305 146 59 01 E--SW
PESU UF	0.1 m ²	Albumin	305 146 A1 01 K--SW
PESU UF	0.1 m ²	50 kD	305 146 50 01 E--SW
PESU UF	0.1 m ²	100 kD	305 146 68 01 E--SW
PESU UF	0.1 m ²	300 kD	305 146 79 01 E--SW
Microfilter Membrane	Area	Pore size	Part Number
Hydrosart UF	0.1 m ²	0.2 µm	305 186 07 01 W--SW
Hydrosart UF	0.1 m ²	0.45 µm	305 186 06 01 W--SW
PESU MF	0.1 m ²	0.1 µm	305 154 58 01 W--SW

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