

Industries and application areas

VERDERAIR HC-PURE hygienic double diaphragm pumps are designed for hygienic applications in various industries. They can handle a wide range of low and highly viscous fluids which makes them ideal for numerous applications.



FD SB

Beverage

Fruit juice, flavours, colouring.



SB

Pharmaceutical

Ingredients, alcohol, chemicals.



SB

Cosmetics

Shampoo, creme, lotion, soap, toothpaste, perfume.



FD SB

Dairy

Milk, cream, yoghurt, cheese, butter, ice cream.



FD SB

Food

Soup, starch, sauce, paste, jam, pie filling, dough, oil, bakery ingredients.



FD SB

Brewery/winery

Beer, wine, wort, yeast, flavouring.

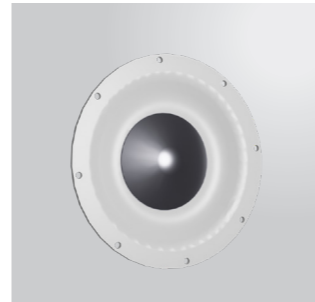
HC-PURE highlights



- ✓ **Electropolished:**
 - Avoids bacterial traps
 - Increases cleanability



- ✓ **Rotatable stand:**
 - Easy drainable
 - Quick cleaning



- ✓ **Overmolded diaphragms:**
 - Easy servicing
 - Longer lifetime



- ✓ **Maintenance free air valve:**
 - 100% self-lubricating
 - No contamination

HC-PURE range overview

The Verderair HC-PURE hygienic double diaphragm pump is available in two designs: the FD series for hygienic applications at the beginning of the production process, and the SB series for hygienic applications at the final stage of the production process.



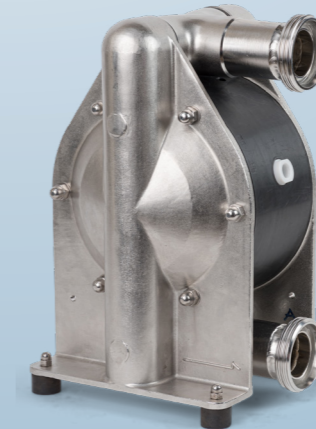
| | Material centre section | FD | SB |
|---------------------------------|-------------------------|-----------------|------------------------|
| Concept | | Hygienic series | Highly hygienic series |
| Max. flow [gpm] | | 158.5 | 171.71 |
| Max. discharge pressure [psi] | | 101.52 | 101.52 |
| Max. viscosity [cP] | | 20 | 20 |
| Max. operating temperature [°F] | PE PA | 158 194 | 158 194 |
| Max. solid particles [inch] | | 0,47 | 0,47 |
| Internal surface roughness [µm] | | < 3,2 µm | < 0,8 µm |
| Certifications | | | |

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HYGIENIC DOUBLE DIAPHRAGM PUMPS

VERDERAIR HC-PURE

Hygienic durability due to perfect cleanability



Your benefits

- ✓ **Best cleanability**
- ✓ **Easy to maintain**
- ✓ **Highest hygienic design principles**



Verderair HC-PURE: Hygienic durability due to perfect cleanability

The Verderair HC-PURE series of hygienic double diaphragm pumps is designed for various hygienic applications. The electropolished surfaces reduce the risk of bacteria traps and contamination. The pumps are manufactured from SS 316L according to the highest hygienic design standards. Easy maintenance and a long lifetime results in less downtime for your production process.

Best cleanability

Verderair HC-PURE pumps are engineered for optimal cleanability, thanks to their **electropolished surface**. This process reduces the average roughness of the pump, making it more difficult for products to adhere and minimizing the risk of bacterial build-up. Additionally, the electropolishing enhances its resistance to corrosion and improves the overall cleanliness of the pump. These pumps are designed to be easily cleaned using either strip cleaning or CIP/SIP cleaning methods. **The rotatable stand** allows for convenient draining of the pump, making the cleaning process even more streamlined and efficient.



Easy to maintain

The housing screws and **manifold clamps** can be effortlessly removed for comprehensive disassembly and cleaning, making maintenance simple. The combination of **PTFE/EPDM overmolded diaphragms** and a self-lubricated, maintenance-free air valve ensures a long product lifespan with minimal maintenance requirements and downtime. Furthermore, the use of an **oil-free air valve** eliminates the risk of contamination in the event of a diaphragm rupture.



Highest hygienic design principles

HC-PURE pumps are designed and manufactured with the utmost attention to hygiene. These pumps comply with the stringent requirements of **EC-1935/2004** and **FDA**, ensuring that they meet the highest standards for hygiene and safety. To prevent the build-up of bacteria, HC-PURE pumps feature a **single piece manifold with smooth corners and bends** that eliminate crevices where germs can grow. In addition, these pumps can be equipped with either **hygienic DIN 11851** or **Tri-Clamp connections**, further enhancing their hygiene and ease of cleaning.



- #### Options
- Leak detection
 - Stroke sensor
 - Barrier system



Key features

- 1 Electropolished SS 316L
- 2 Solid machined centre block made from PE/Polyamide
- 3 Rotatable stand for quick draining & servicing
- 4 Single piece manifolds
- 5 PTFE/EPDM overmolded diaphragms
- 6 Manifold clamps for easy disassembly
- 7 Maintenance free air valve



Exploded view of a HC-PURE SB model