

## The most efficient diaphragm pump series now complete!



- DIN 11851 or Tri-Clamp
- According to EC 1935/2004 & FDA
- → CIP/SIP
- -> Strip Cleaning: Fast disassemble





We put our heart into pumps



## Key facts of th

The Verderair HI-CLEAN is a new series of hygienic and food grade diaphragm pumps, completing the Verderair VA and the Verderair Pure double diaphragm pumps. The HI-CLEAN pumps are designed for operation in hygienic and food processing applications, such as pumping dairy (milk, cream cheese and yoghurt) and basic ingredients for fruit syrops or concentrates for the manufacturing of fruit juices & personal care.

In addition, the Verderair HI-CLEAN pumps handle a huge diversity of fluids, whether they are high or low viscosity, quick or low floating or to pump media with large solids. The HI-CLEAN pumps can pump fluids at temperatures up to +135 °C.



#### DIN connection 11851 or Tri-Clamp

- Connections used in the food, chemical and pharmaceutical sector to connect rubber or metal hoses

#### Pump can be jet cleaned

- Air valve is completely encapsulated

#### Strip Cleaning: Fast disassemble

- For quick maintenance and inspection and for strip cleaning

## e VERDERAIR® HI-CLEAN

#### Food grade according to EC 1935/2004 & FDA

- For FCM (Food Contact Materials) to ensure safety standard for the health of consumers
- Traceability of the used materials

#### Temperatures -40 up to +135°C

- Operating and cleaning temperatures up to +135°C

#### CIP/SIP

- High grade surface finish and special design are giving the benefit of CIP/SIP cleanability

#### True self priming

- Pumps are dry self priming
- No flooded installation required

#### **Overmolded diaphragms**

- No diaphragm plate at the liquid site, no extra sealing
- Longest diaphragm life in the market





### Series HI-CLEAN 3A, SB and SF

#### Benefits and features 3A, SB and SF series

- → 63.5 mm pass large solids/chuncks
- Surface finish meets or exceeds 0.8  $\mu m$  Ra finish
- Connections disassembled in less than 5 minutes
- → EPDM (3A), Santoprene, Viton and PTFE food grade elastomers

#### **3A Series**

Have the highest flow capacity of any air-operated double diaphragm pump certified by 3A, offers flow rates up to 565 l/min and meets the requirements of the milk/dairy industry. Solids handling up to 25 mm. The pump is mounted on a floor stand and equipped with a leak detector.

#### **SB** Series

If a high grade finish is needed but not requires leak detection, the SB series of pumps is the excellent choice. The ball valve design passes solids up to 25 mm. The ease of disassembly of the fluid ends, large porting, and high flow capacity makes the SB the perfect pump for your high volume application needs.



#### SF Series

For materials and fluid streams containing large solids or chuncks, which clog a ball-designed pump or are damaged by the pumping action Verderair offers the HI-CLEAN pumps with a flap valve design. The SF pumps easily pump larger solids and will pass up to 63.5 mm solids without rushing or damaging the product.

Flow rates 568 l/min Viscosity 20,000 mPas Solids max 63.5 mm All pumps can be rotated to drain rest liquid

### Series HI-CLEAN SP Piston pumps

The HI-CLEAN SP series of air operated Piston pumps are ideal to transfer viscous media from 200 or 2,000 liter drums into the production line. They are delivered with a FDA approved bung adaptor to connect on the standard drum connection.

Flow rates 9.5 l/min Viscosity 75,000 mPas Max. pressure 17 bar

## Series HI-CLEAN FD Food grade pumps

#### **Benefits and features FD series**

- All fluid contact materials are food grade (EC 1935/2004 & FDA) compliant
- All Santoprene<sup>®</sup>, Viton<sup>®</sup> and Teflon elastomers are food grade





#### HI-CLEAN series food grade pumps

Verderair food grade diaphragm pumps are specially constructed for use in the food processing industry. Wetted materials are made of SS 316 Ra polish of 3.2 µm (standard for food grade applications). Moreover, the pumps are standard executed with DIN 11851 connections. Tri-Clamp is the second standard connection. The center section is available in coated Alum or in SS316. Seats, balls and diaphragms are in Teflon, Buna-N, Santoprene or Viton. All wetted parts are therefore food grade compliant.

### Solids max 63.5 mm

Viscosity 20,000 mPas

#### Spare kits

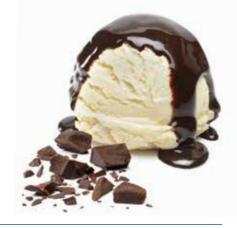
Verderair HI-CLEAN series offer spare kits for parts that are exposed to normal wear.

#### **Application areas**

- -> Milk & Dairy (yoghurt, cream cheese, milk)
- → Beverage (fruit juice, wine, beer)
- Food (high viscous pastes such as tomato paste, jams & jellies)
- -> Personal Care (shampoo, hand & facial creme)

#### Applications

- Evacuation of food process mixing kettles
- -> High volume evacuation of liquid concentrates
- Pumping fruit pastes
- Starch, corn syrup
- Mineral oils, lanolin alcohol, glycol



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