

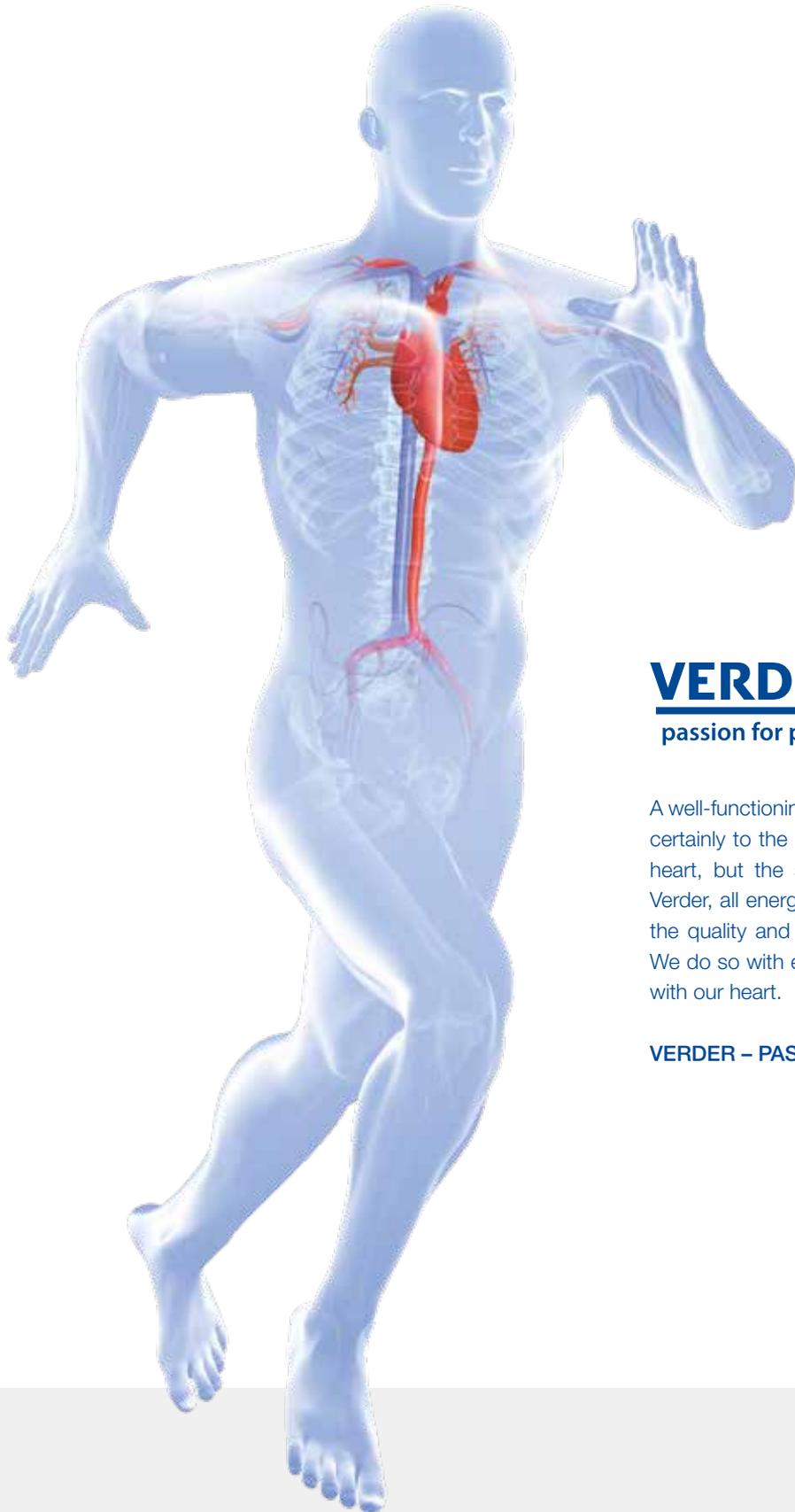
## VERDERAIR **HI-CLEAN**

Hygienic double diaphragm pumps

### Benefits of the Verderair Hi-CLEAN

- Highest hygienic design principles
- Easy to use
- Plug and play





**VERDER**  
passion for pumps

A well-functioning pump helps you succeed. That applies certainly to the most important pump in life, the human heart, but the same goes for pumps in business. At Verder, all energy and attention is focused on improving the quality and performance of our pump and service. We do so with energy, dedication and most importantly, with our heart.

**VERDER – PASSION FOR PUMPS**

# Redesigned and completed

*The Verderair HI-CLEAN fully redesigned series of hygienic double diaphragm pumps are available in both electrical driven and air operated models. The number of seals in the pump has been dramatically reduced which highly reduces the risk of contamination. The pumps are manufactured according to the highest hygienic design standards for food and pharma applications, making them ideal for numerous hygienic applications. Verderair HI-CLEAN is an efficiently engineered high quality product with best price-performance ratio. The HI-CLEAN VA-2H is a reliable, easy to operate pump with a wide range of available materials for the valve seats, ball valves and diaphragms.*

## Advantages of the new Verderair HI-CLEAN

- ✓ Highest hygienic design principles
- ✓ Plug and play
- ✓ Ease of use

### Key features:

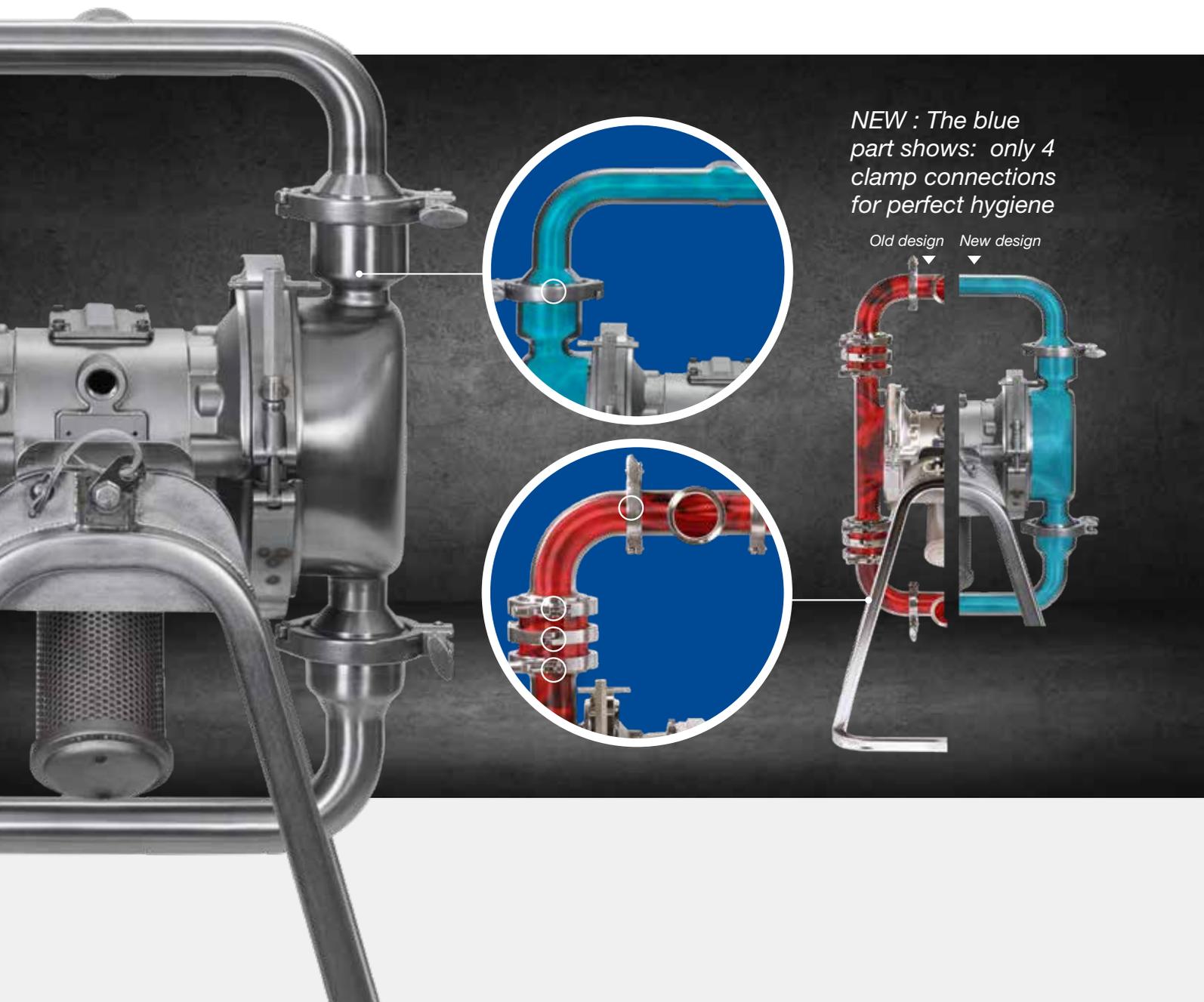
- Can run against a closed discharge
- Self-priming
- Can pump solids up to 97 mm
- Dry run start up
- Quick, easy and safe to disassemble and maintain





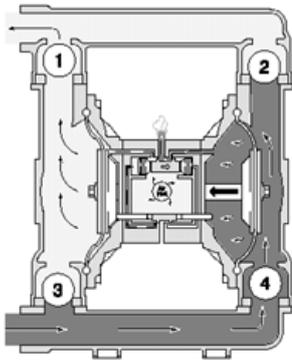
# - Verderair HI-CLEAN

Redesigned: less parts, perfect hygiene





## Working principle of a double diaphragm pump



An air operated double diaphragm pump has two diaphragms. These diaphragms are connected by a shaft in the center section. The diaphragms are working as a separation wall between the air and the liquid. The air valve is located in the center section of the diaphragm pump. The air valve directs the compressed air to the back of diaphragm number one. In this way diaphragm number one moves away from the center section. This diaphragm causes a press stroke moving liquid out of the pump. At the same time diaphragm number two is performing a suction stroke.

Example picture: The pump direction is left. Ball 1 is lifted from its seat and the product flushes to the discharge. This is pushing ball 3 into its seat. Ball 2 is sucked into its seat and ball 4 is lifted from its seat and the product can flow into the chamber. The next stroke will be the other way around.

## Overview of the completed HI-CLEAN pump program

AODD HI-CLEAN pump series					
FD	SB	PH	3A	SF	FH/FP
					
<i>FDA</i>	<i>Sanitary Ball</i>	<i>Pharma</i>	<i>3A certified</i>	<i>Sanitary Flapper</i>	<i>Flapper Horizontal / Flapper Poultry</i>
VA H20 FD	VA 2H25 SB	VA 2H25 PH	VA 2H40 3A	VA 2H40 SF	VA 2H53 FH
VA H25 FD	VA 2H40 SB	VA 2H40 PH	VA 2H52 3A	VA 2H53 SF	VA 2H53 FP
VA H40 FD	VA 2H52 SB	VA 2H52 PH		VA 2H54 SF	VA 2H54 FH
VA H50 FD	VA 2H80 SB	VA 2H80 PH			VA 2H54 FP

EODD HI-CLEAN pump series					Piston plunger
FD	SB	PH	3A	SF	SP
					
<i>FDA</i>	<i>Sanitary Ball</i>	<i>Pharma</i>	<i>3A certified</i>	<i>Sanitary Flapper</i>	<i>Sanitary Piston</i>
VA E2H25 FD	VA E2H25 SB	VA E2H25 PH	VA E2H52 2A	VA E2H53 SF	VA H25 SP
VA E2H50 FD	VA E2H52 SB	VA E2H52 PH		VA E2H54 SF	



### Features

- Full range of hygienic pumps for food and pharma applications
- Suitable for a wide range of low and high viscous products
- Automatic stalling of the pump when pumping against a closed valve without the need of over pressure equipment.
- EODD pumps can run in low pulsation mode

### Options

- Special version for poultry applications
- Flapper valves for fluids containing big particles
- Fully rotational stand for draining
- Horizontal pump with Y manifold or no manifold option
- Leak detection

### Accessories

- Pulsation dampener
- Modular air control pro (for easy controlling of the pump)

### Technical details

	2H25	2H40	2H52	2H53	2H54	2H80
Max. flow (l/min)	155	400	700	500	340	870
Max. pressure (bar)	8	8	8	8	8	7
Max. particle size with ball valve (mm)	10.7	12.7	12.7	na	na	19
Max. particle size with flapper valve (mm)	na	30.5	na	62.5	96.5	na
Pump size / connection size (mm)	25 - 25	40 - 40	50 - 50	50 - 80	50 - 100	80 - 80
Certification						

### Highlights



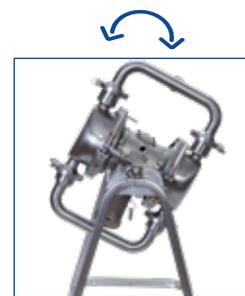
Can handle solids up to 97 mm



Externally serviceable air valve



Overmolded diaphragm easy servicing



Rotatable frame: easy drainable quick cleaning

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