

## NOVALobe



GRA2393A

### Technical data

Max. differential pressure	16 bar
Displacement	0.06 to 1.29 l/rev
Max. operating temperature	95°C
Sterilisation temperature	150°C
Max. viscosity	1 to 1,000,000 cP (mPas)

### Applications

The NOVALobe range of rotary lobe, positive displacement pumps offers reliable, efficient and hygienic operation even under the most demanding conditions.

The NOVALobe is designed for both directions of rotation. The pumps are ideal for gentle handling of high-viscosity media, but suitable for a wide range of hygienic and sanitary applications within industries such as:

#### Food and beverage

- Dairy (fruit yoghurt, butter, cheese curd, etc.)
- Food processing (sauces, dressing, baby food, etc.)
- Soft drink (syrup, juice, etc.)
- Confectionary and sugar (caramel, chocolate, etc.)
- Meat (sausage meat, pet food, etc.)
- Brewery (yeast).

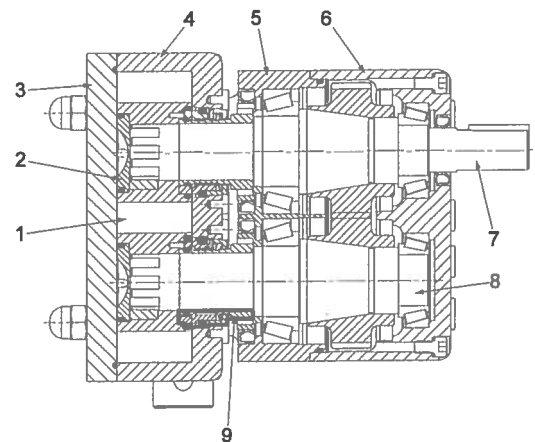
#### Pharmaceutical, biotechnology and personal care

- Vaccine
- Fermentation broth
- Blood products
- Shampoo, lotions, toothpaste and similar products.

#### Other industries

- Pulp and paper (coating, polymer-dosing, etc.)
- Textile (textile dye, etc.)
- Chemical (oil, etc.)
- Paint/adhesives.

## Construction



TM03 1945 3405

Fig. 1 Sectional view

### Hygienic design

The NOVALobe pumps comply with the recommendations of the EHEDG recommendations and the QHD criteria:



Fig. 2 Certification

The pumps are CIP and SIP capable in compliance with DIN EN 12462. In addition, the pumps also meet the GMP requirements according to the FDA. See page 13 for further information.

### Surface finish

As standard, all wetted parts have the following properties:

- Surface finish Ra = 0.8 µm
- Electro-polished surface finish.

Low ferrite pumps are available on request.

## Material specification

Pos.	Component	Material	Spec.
1	Rotor	CrNiMo stainless steel	1.4404
2	Rotor retainer	CrNiMo stainless steel	1.4404
3	Front cover	CrNiMo stainless steel	1.4404
4	Rotor case	CrNiMo stainless steel	1.4404
5	Gearbox, front	Carbon steel	
6	Gearbox, rear	Carbon steel	
7	Drive shaft	Stainless steel	1.4571
8	Layshaft	Stainless steel	1.4571
9	Shaft seal	Carbon/Silicon carbide	

## Design variations

Standard variation	Description
NOVALobe bare shaft	Pump without motor. Horizontal/vertical suction and discharge ports.
NOVALobe complete	Pump with coupling, coupling guard and geared motor. Horizontal/vertical suction and discharge ports stainless steel baseplate.
Variations on request	Description
NOVALobe SUPER	Stainless steel pump with shrouded coupling and geared motor.
NOVALobe trolley	Portable pump with coupling and geared motor mounted on stainless steel trolley

See page 16.

## Rotors

The NOVALobe can be equipped with rotary lobes in various forms for different characteristics. The flexibility to employ different rotary lobes gives you the freedom to optimise the flow rates. See page 9.

## Shaft seals

For the NOVALobe pump range Grundfos offers the following shaft seal arrangements:

- single mechanical seal
- single quenched mechanical seal
- double mechanical seal
- single O-ring seal
- double O-ring seal.

See page 10.

## Connections

As standard many connection types including sterile threads to DIN 11864-1 PN 16 and sterile flange to DIN 11864-2 PN 16 are available.

Other connections such as SMS, RJT, clamp connections to DIN and Tri-Clover® are available on request.

SMS, RJT, NPT and ANSI 150 lb flanges are available on request.

See page 28.

## Features and benefits

### Hygienic/sterile design

- complies with the recommendations of the EHEDG recommendations and the QHD criteria
- easy cleanability.

### Robust construction

- long life and minimum risk of galling
- prevent axial displacement between the housing and gears.
- rigid shaft geometry

### Unique rotor location and drive

- elimination of slippage.

### Service-friendly design

- front-loaded shaft seal
- unique rotor design
- reduced downtime
- easy maintenance
- minimum life-cycle costs.

### High flexibility

- customer-specific solutions
- rotor profile options
- single and quenched mechanical shaft seals
- large selection of connections.

## Options

Grundfos offers the following optional features:

- integrated pressure-relief valve
- thermal jackets
- aseptic front cover.

See page 19.