**I Application**

The RF pump is a flexible impeller pump. Due to the design, these pumps are reversible, self-priming and can suck from a maximum height of 5 meters. This type of pump is designed to pump products of both low and high viscosity as well as products containing particles or gases.

The main applications are transfer of dairy products, edible oils, wine and beverages in general.

**I Operating principle**

Due to the eccentric shape of the pump housing, a vacuum is created in the suction side that enlarges the volume between the blades and this causes the product suction.

The rotor is spinning and the product is carried from the suction side to the discharge outlet. Due to the eccentric shape of the pump housing, at the discharge side the blades bend, reducing the volume between them and causing the discharge of the product.

**I Design and features**

- Bare shaft or close-coupled construction.
- Reversible and self-priming pump.
- Machined investment casting casing.
- Double flat drive of the impeller.
- External single mechanical seal.
- Easy maintenance.

**I Technical specifications**

Materials:
- Steel parts in contact with the product: Stainless steel AISI 316L (1.4404)
- Other steel parts: Stainless steel AISI 304 (1.4301)
- Lantern and bearing support: GG-22
- Impeller: CR (Neoprene)
- Gaskets in contact with the product: NBR
Flexible Impeller Pump

I Technical specifications

Mechanical seal:
Rotary part   Carbon (C)
Stationary part    Ceramic (Cer)
Gasket NBR

Surface finish:
Internal  Bright polish Ra<0,8 μm
External Matt

Connections:   DIN 11851
CLAMP
SMS
(other connections available on request)

Operating limits:
Maximum flow   28 m³/h   132 US GPM
Maximum working pressure*  2 - 4 bar     29 - 58 PSI
Maximum working temperature +80°C   176°F
Maximum speed    1450 rpm
*depending on the model

Motor
3 phase induction motor with B14 flange and B3 legs, in compliance with the IEC standard,
4 poles = 1500/1800 rpm, efficiency class according to EC regulation, IP 55 protection and F-class insulation.

3 phases, 50 Hz, 230 V Δ / 400 V Y, ≤ 4 kW
3 phases, 50 Hz, 400 V Δ / 690 V Y, ≥ 5,5 kW

Options
SiC/SiC or SiC/C mechanical seals.
Food-grade neoprene impeller (BfR).
Other types of connections.
Motors with other protections.
1000 rpm motors.
Electric panel with 10 m cable.
Stainless steel trolley.

---

(1) Maximum flow for clean non-viscous liquids.
(2) The use of a frequency drive can cause a decrease of the motor starting torque.
**Flexible Impeller Pump**

### I Dimensions

<table>
<thead>
<tr>
<th>Pump</th>
<th>Motor 1500</th>
<th>Size</th>
<th>kW</th>
<th>DN</th>
<th>φd</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
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<th>J</th>
<th>K</th>
<th>L</th>
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**Bare shaft pump**

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<th>B</th>
<th>C</th>
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**Performance charts**

**1450 rpm**

![Graph for 1450 rpm performance charts]

**900 rpm**

![Graph for 900 rpm performance charts]