GEA HILGE POSITIVE DISPLACEMENT PUMPS

GEA Hilge NOVALOBE
GEA Hilge NOVATWIN
GEA Hilge positive displacement pumps

YOUR ADVANTAGES AT A GLANCE

GEA Hilge Positive Displacement Pumps
- Always the best pump for your application
- Global GEA network
- Professional support throughout the whole life cycle

Hygienic Design
- All product-wetted materials are approved for food, beverage and pharmaceutical applications
- Proven cleanability ensures reliable and fast CIP, saving time and resources

Long-time Reliability
- Robust design prevents galling and wear and allows high differential pressures
- No metal-to-metal contact, which secures smooth transport even for abrasive media

High Versatility
- Flexible pump configuration depending on application requirements
- Pump variants for demanding applications available
- Pump can easily be retrofitted to cover a different application
GEA Hilge NOVALOBE

GEA Hilge NOVALOBE is an extremely reliable rotary lobe pump series that fulfills highest hygienic requirements, based on the proven GEA design.

**Robust Construction**
The GEA Hilge NOVALOBE’s compact design and the rigid shaft geometry prevent galling and wear and allow high differential pressure.

**Flexible Rotor Profiles**
The rotor housing can be equipped with various rotor profiles. Making it easy to adapt the GEA Hilge NOVALOBE to specific applications for an optimum performance in different conditions.

**Service-friendly**
The front-loaded mechanical seals can be quickly replaced while the pump and pipe connections remain in place.

**PROGRAM OVERVIEW**

<table>
<thead>
<tr>
<th>Pump model</th>
<th>NOVALOBE 10/0.06</th>
<th>NOVALOBE 20/0.12</th>
<th>NOVALOBE 30/0.33</th>
<th>NOVALOBE 40/0.65</th>
<th>NOVALOBE 50/1.29</th>
<th>NOVALOBE 60/2.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Displacement (l/rev)</td>
<td>0.06</td>
<td>0.12</td>
<td>0.33</td>
<td>0.65</td>
<td>1.29</td>
<td>2.1</td>
</tr>
<tr>
<td>Max. differential pressure (bar)</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Max. liquid temperature</td>
<td>up to 95 °C, 150 °C (SIP)</td>
<td>up to 95 °C, 150 °C (SIP)</td>
<td>up to 95 °C, 150 °C (SIP)</td>
<td>up to 95 °C, 150 °C (SIP)</td>
<td>up to 95 °C, 150 °C (SIP)</td>
<td>up to 95 °C, 150 °C (SIP)</td>
</tr>
<tr>
<td>Surface roughness Rₐ (μm)</td>
<td>≤ 0.8 / ≤ 0.4’</td>
<td>≤ 0.8 / ≤ 0.4’</td>
<td>≤ 0.8 / ≤ 0.4’</td>
<td>≤ 0.8 / ≤ 0.4’</td>
<td>≤ 0.8 / ≤ 0.4’</td>
<td>≤ 0.8</td>
</tr>
<tr>
<td>Connection size (mm)</td>
<td>25</td>
<td>40</td>
<td>50</td>
<td>65</td>
<td>80</td>
<td>100</td>
</tr>
<tr>
<td>Max. particle size (mm) (non-abrasive)</td>
<td>12</td>
<td>16</td>
<td>23</td>
<td>29</td>
<td>35</td>
<td>41</td>
</tr>
</tbody>
</table>

*optional
GEA Hilge NOVATWIN is the new flexible twin screw pump series in the GEA VARIPUMP line.

One pump for product and CIP
Variable speeds up to 3,000 rpm allow production and cleaning with only one pump.

Variable screw combinations
Over 40 different combinations of screw diameters and pitches allow the pumps to operate at different operating points.

Gentle product handling
The pump design ensures a low-pulsation flow, which makes the pump especially suitable for large and delicate particles.

PROGRAM OVERVIEW

<table>
<thead>
<tr>
<th>Pump model</th>
<th>NOVATWIN 10</th>
<th>NOVATWIN 20</th>
<th>NOVATWIN 30</th>
<th>NOVATWIN 40</th>
<th>NOVATWIN 50</th>
<th>NOVATWIN 60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. flow rate (m³/h)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product</td>
<td>12</td>
<td>30</td>
<td>65</td>
<td>125</td>
<td>215</td>
<td>310</td>
</tr>
<tr>
<td>CIP</td>
<td>20</td>
<td>50</td>
<td>115</td>
<td>160</td>
<td>215</td>
<td>310</td>
</tr>
<tr>
<td>Max. differential pressure (bar)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product</td>
<td>16</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>CIP</td>
<td>20</td>
<td>50</td>
<td>115</td>
<td>160</td>
<td>215</td>
<td>310</td>
</tr>
<tr>
<td>Max. speed (rpm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product</td>
<td>1,760</td>
<td>1,760</td>
<td>1,760</td>
<td>1,760</td>
<td>1,760</td>
<td>1,760</td>
</tr>
<tr>
<td>CIP</td>
<td>3,000</td>
<td>3,000</td>
<td>3,000</td>
<td>3,000</td>
<td>2,400</td>
<td>2,000</td>
</tr>
<tr>
<td>Standard connection size (mm)</td>
<td>50</td>
<td>65</td>
<td>80</td>
<td>100</td>
<td>125</td>
<td>150</td>
</tr>
<tr>
<td>Max. particle size (mm)</td>
<td>14</td>
<td>20</td>
<td>25</td>
<td>31</td>
<td>37</td>
<td>44</td>
</tr>
</tbody>
</table>
GEA HILGE NOVALOBE AND GEA HILGE NOVATWIN APPLICATIONS

A Variety of Applications
GEA Hilge positive displacement pumps offer extremely reliable operation and gentle product handling to ensure product safety and high plant availability. The hygienic design makes the pumps suitable for a variety of applications, such as:

Dairy
- Cream Cheese
- Butter
- Yoghurt
- Sour Cream
- Ice Cream

Food
- Sugar solution
- Chocolate
- Sauces & Soups
- Mayonnaise
- Pastes
- Oils & Fats
- Prepared Salads
- Pet Food

Pharma & Biopharma
- Neutraceuticals
- Blood Products
- Vaccines
- Enzymes
- Cell cultures

Beverage
- Smoothies
- Juice Concentrate
- Pre-mixes
- Brewing Yeast

Personal Care & Home Care
- Cosmetics
- Body & Skincare
- Fabric care
- Household Cleaners
We live our values.
Excellence • Passion • Integrity • Responsibility • GEA-versity

GEA is one of the largest technology suppliers for food processing and a wide range of other industries. The global group specializes in machinery, plants, as well as process technology and components. GEA provides sustainable solutions for sophisticated production processes in diverse end-user markets and offers a comprehensive service portfolio.

The company is listed on the German MDAX (GiA, WKN 660 200), the STOXX® Europe 600 Index and selected MSCI Global Sustainability Indexes.