GEA Hilge TP
Single-Stage Normal-Priming Centrifugal Pumps for Standard Applications
Sustainable and Economical Application under Hygienic Conditions

The energy-efficient and hygienic GEA Hilge TP centrifugal pumps in the GEA SMARTPUMP line are available in a variety of model sizes, optimally configured for different applications.

The centrifugal pump GEA Hilge TP is designed for the hygienic pumping of biologically demanding media. Low flow velocities and gentle discharge of media through the spiral housing enables extremely gentle product handling. 11 different pump types are available covering a capacity range up to 210 m³/h and flow heads up to approx. 90 m w.c., fine tuned for each task.

The spiral housing for the GEA Hilge TP series is made of cold-rolled steel. This material has an excellent surface quality, which is essential for optimum cleaning in CIP/SIP processes. The GEA Hilge TP pump series is EHEDG certified. Typical wall thicknesses of 8 mm (TP 1020 6 mm) provide high strength.
TECHNICAL DATA

<table>
<thead>
<tr>
<th>GEA Hilge TP</th>
<th>50 Hz</th>
<th>60 Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow</td>
<td>220 m³/h</td>
<td>240 m³/h</td>
</tr>
<tr>
<td>Head</td>
<td>90 m</td>
<td>130 m</td>
</tr>
<tr>
<td>Media temperature</td>
<td>140°C</td>
<td></td>
</tr>
<tr>
<td>Operating pressure</td>
<td>16 bar</td>
<td></td>
</tr>
</tbody>
</table>

PERFORMANCE CURVE

50 HZ
FEATURES AND BENEFITS

Applications
The GEA Hilge TP series has been designed for a variety of applications within:

Breweries
- Beer
- Wort
- Yeast
- Water
- CIP Solutions

Dairy
- Milk
- Cream
- Yoghurt
- Whey
- Brine
- CIP Solutions

Cosmetic
- Extracts
- Emulsions
- Distillates

Application Options GEA Hilge TP
- Conveying
- Circulation
- Pressure boosting
- Filling lines
- Filling
- Emptying
- Filtration
- Evaporation
- Cleaning

1 Gapless sealing
2 Sterile mechanical seal
Technical Benefits
• Operating pressure max. 16 bar
• Low NPSH value avoids early cavitation to the pump
• Energy-efficient operation thanks to optimized speed control
  and/or impeller trimming

Constructive Characteristics
• Open impeller design optimized for gentle product handling
• All parts stainless steel, wetted components made of 1.4404 or 1.4409 (AISI 316L)
• Surface roughnesses of $R_s \leq 0.8 \mu m$ can be achieved by mechanical treatment of the surface (higher surface qualities on request)
• High-efficiency IE3 motors

Special Characteristics
• Gentle product handling
• Low wear part stock requirement thanks to modular concept
• Acceptance test certification 3.1 (optional)
• EHEDG certified
• Sealings comply to FDA and USP Class VI

Mechanical seal optimized for hygienic applications
• Mechanical seal unit can be removed from the front
• Flushing unit easy to retrofit
• Pump shaft protected by wear sleeve
• Only two mechanical seal sizes for the entire pump series
• Seal face material options: carbon/silicon carbide (standard),
  silicon carbide/silicon carbide
• Various elastomers with FDA approval (EPDM, FKM)

Sealing of GEA Hilge TP centrifugal pumps according to EHEDG standards
The elastomer sealing is executed according to EHEDG standards. The special groove enables the seal is kept reliably in place at all times.
The shape of the groove is based on FEM analyses. The metallic stop allows a defined compression of the seal, ensuring gap-free sealing against the product chamber without dead corners.
We live our values.
Excellence • Passion • Integrity • Responsibility • GEA-versity

GEA Group is a global engineering company with multi-billion euro sales and operations in more than 50 countries. Founded in 1881, the company is one of the largest providers of innovative equipment and process technology. GEA Group is listed in the STOXX® Europe 600 Index.