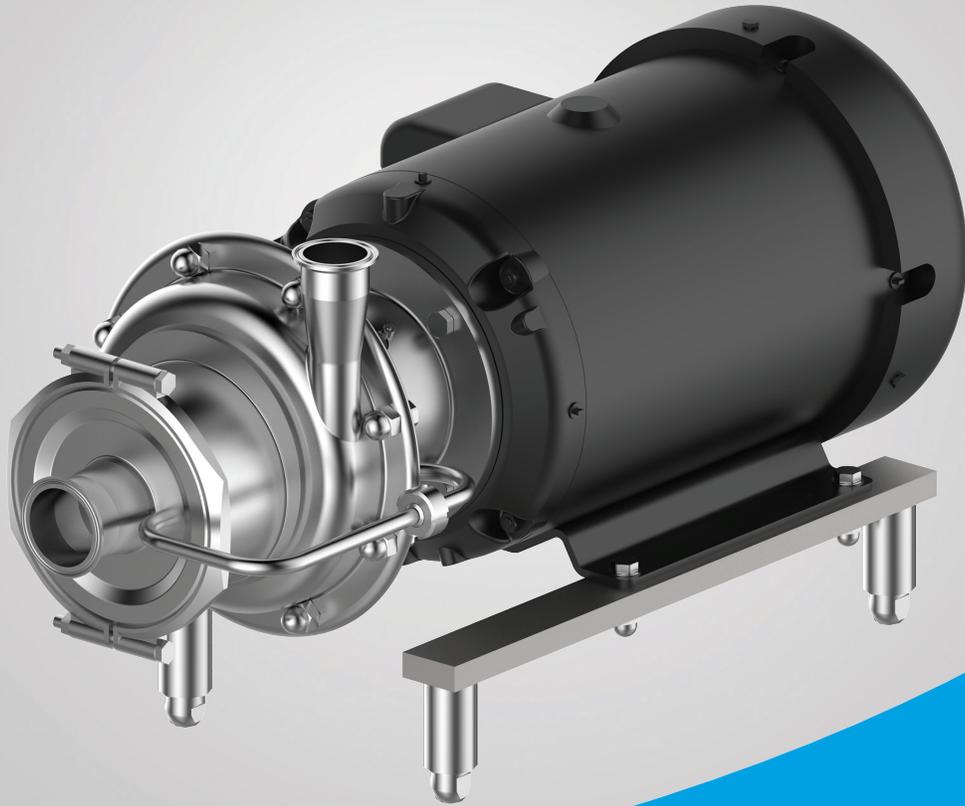


GEA SMARTPUMP



# GEA Hilge TPS

Single-stage, Self-priming Centrifugal  
Pumps for Standard Applications

# Sustainable and Economical Application Under Hygienic Conditions

The self-priming, hygienic GEA Hilge TPS centrifugal pumps in the GEA SMARTPUMP line are available in three model sizes and are optimized for a variety of applications.

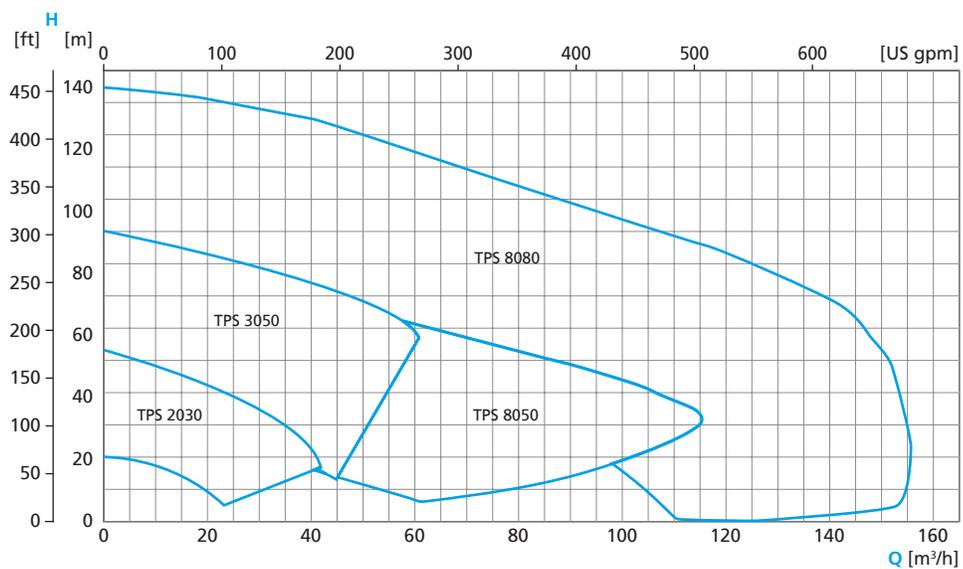
By combining the existing centrifugal pumps series GEA Hilge TP with a front rotor, a new generation of hygienic self-priming centrifugal pumps has been created.

The centrifugal pump GEA Hilge TPS is a self-priming pump for viscosities of up to 500 centipoise. The TPS is characterized by its low sound level, high efficiency and excellent cleaning properties. The GEA Hilge TPS series also permits evacuation of pipes on the suction side – so that just one pump is required for CIP return and product conveying!

## TECHNICAL DATA

GEA Hilge TPS	60 Hz
Flow	680 gpm (155 m <sup>3</sup> /h)
Head	460 ft (140 m)
Media temperature	284°F (140°C)
Operating pressure	232 psi (16 bar)

## GEA TPS PERFORMANCE CURVE 60 HZ, 3500 RPM





### Applications

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

#### Breweries

- Beer
- Wort
- Yeast
- Water
- CIP Solutions

#### Dairies

- Milk
- Cream
- Yogurt
- Whey
- Brine
- CIP Solutions

#### Foods

- Oils
- Sauces
- Stock
- Brine
- Flavors
- Ice-cream mix
- CIP Solutions

#### Application options GEA Hilge TPS

- CIP solutions
- Tank emptying
- Gas conveying

### Technical benefits

- Operating pressure max. 230 psi
- 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
- Wetted components made of AISI 316L
- Surface roughnesses of  $R_a \leq 31.5 \mu\text{in}$  ( $0.8 \mu\text{m}$ ) can be achieved by mechanical treatment of the surface (higher surface qualities on request)
- Premium efficient and washdown motors

### Special characteristics

- Gentle product handling
- Standard connection: 3A Triclamp
- Low wear part stock requirement thanks to modular concept
- Acceptance test certification 3.1 (optional)
- 3A and EHEDG certified
- Sealings comply to FDA and USP Class IV

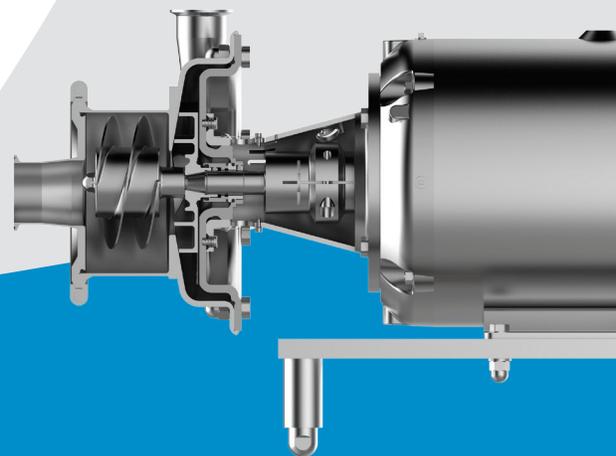
### Mechanical seal optimized for hygienic applications

- Front-loaded mechanical seal
- Flushing unit easily retrofitable
- 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 TPS centrifugal pumps according to EHEDG standards

The elastomer sealing is executed according to EHEDG standards. The special groove enables the seal to be 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 is a global technology company with multi-billion euro sales operations in more than 50 countries. Founded in 1881 the company is one of the largest providers of innovative equipment and process technology. GEA is listed in the STOXX® Europe 600 Index. In addition, the company is included in selected MSCI Global Sustainability Indexes.

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