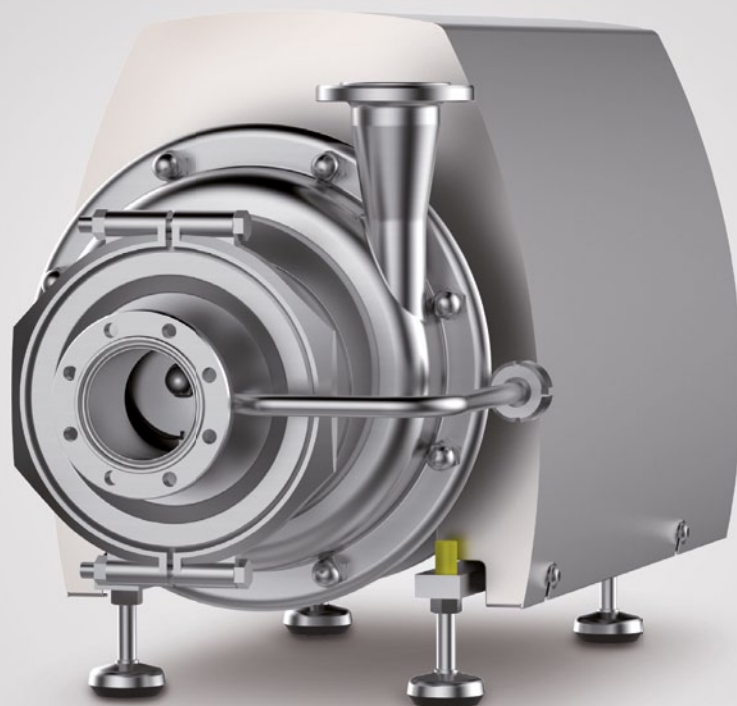


GEA SMARTPUMP



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.

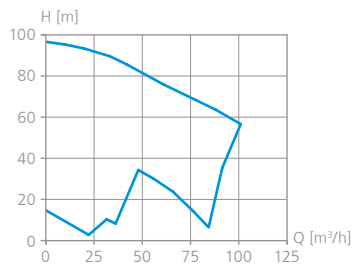
By combining the existing centrifugal pumps series GEA Hilge TP with a front rotor, a new generation of hygienic self-priming centrifugal pumps has been created.

The centrifugal pump GEA Hilge TPS is a self-priming pump for viscosities of up to 500 mPas. The TPS is characterized by a low sound level, highest 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	50 Hz	60 Hz
Flow	100 m ³ /h	120 m ³ /h
Head	90 m	100 m
Media temperature	140 °C	
Operating pressure	16 bar	

PERFORMANCE CURVE 50 HZ





Applications

The GEA Hilge TPS 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

Food

- 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. 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
- Wetted components made of 1.4404 or 1.4409 (AISI 316L)
- Surface roughnesses of $R_a \leq 0.8 \mu\text{m}$ can be achieved by mechanical treatment of the surface (higher surface qualities on request)
- High-efficiency IE3 motors

Special Characteristics

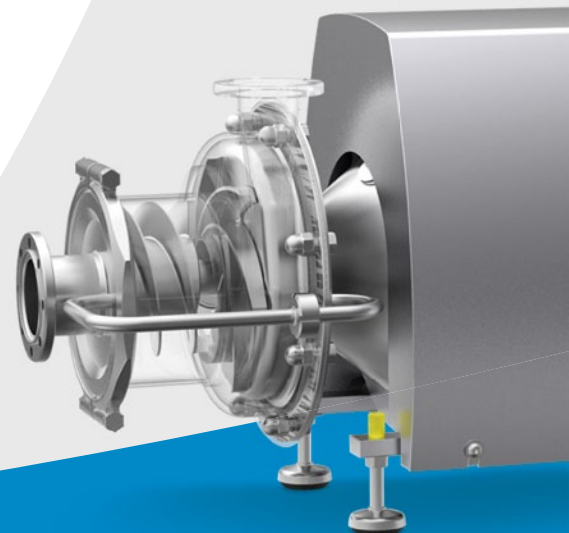
- Gentle product handling
- Standard connection: DIN 11853-2 Hygienic groove flange
- Low wear part stock requirement thanks to modular concept
- Acceptance test certification 3.1 (optional)
- EHEDG certified
- Sealings comply to FDA and USP Class IV

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 TPS 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.

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