



# **EURO-HYGIA<sup>®</sup>**

**SINGLE-STAGE  
SANITARY PUMPS**



# DESIGNED FOR STERILE AND HYGIENIC PROCESSES

## A variety of applications

The Euro-HYGIA® range of single-stage, end-suction centrifugal pumps offers extremely reliable operation under all working conditions. These highly reliable pumps are suitable for applications in various applications, such as:

### Food & Beverage

- Breweries
- Dairy
- Food processing plants

### Pharmaceutical industry

- Pure water systems (WFI)
- Biotechnology
- Cosmetic industry

### Industrial applications

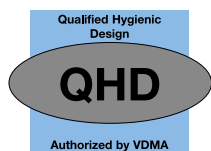
- Semi-conductor manufacturing
- CIP systems

## High quality throughout

The unique Euro-HYGIA® pumps are designed to meet the hygienic requirements of sterile process technology. The pumps are CIP and SIP capable in compliance with the DIN EN 12462 performance criteria.

The design of the wet-end parts meets the Qualified Hygienic Design (QHD) standards with EHEDG test certificate for CIP cleanability (TNO), 3A Sanitary Standard (USA), GOST (Russia). The Euro-HYGIA® pumps feature deep-drawn, heavy-duty casing made of CrNiMo stainless steel 1.4404, equivalent to AISI 316L.

Four impeller designs are available depending on the application: semi-open, closed, two-channel impeller (optimum gentle pumping action), and free-flow impeller.



### **Euro-HYGIA® Bloc**

Stationary on pump foot, motor with extended stainless steel shaft.  
Casing closure with massive clamp ring (type KLM).

**Options** On stainless steel foot.  
With stainless steel lantern.



### **Euro-HYGIA® Bloc-V**

Pump in vertical execution on space-saving stainless steel stand (drainable through suction port).



### **Euro-HYGIA® Bloc-SUPER**

Stationary mounted on stainless steel combi-foot with machine pads.  
Motor with stainless steel shroud and stainless steel extended shaft.

**Options** Stainless steel foot.  
Stainless steel lantern.

### **Euro-HYGIA® Adapta®**

Stationary on cast iron foot for fixed installation. IEC standard motors or NEMA motors can be fitted, using a standard flexible coupling, directly to the pump shaft. The motor is bolted onto the lantern flange or the intermediate Adapta® lantern. The pump can remain in the pipeline when the motor is serviced or replaced.

**Options** With complete coupling but without motor.  
Stationary on stainless steel foot.  
Stationary mounted on stainless steel combi-foot with machine pads.  
Adapta® SUPER stationary mounted on stainless steel combi-foot with machine pads and shrouded motor.



## Euro-HYGIA® Adapta®-V

Vertically mounted on space-saving stainless steel stand. Fully drainable through suction port. IEC standard motors or NEMA motors can be fitted directly to the pump shaft. The motor is bolted onto the lantern flange or the intermediate Adapta lantern. The pump can remain in the pipeline when the motor is serviced or replaced.

**Options** With complete coupling but without motor.

## Euro-HYGIA® CN

Stationary long-coupled on base plate, complete with flexible coupling, guard and IEC standard motor with IP 55 enclosure.

**Options** With bare shaft end only. With base plate, without motor, with spacer coupling or without coupling.

## Euro-HYGIA® tronic

Pump with integral frequency converter for speed and performance variation. Suitable for all motor sizes up to 7.5 kW/50 Hz.

**Option** Mobile unit mounted on stainless steel trolley complete with motor starter and cable.



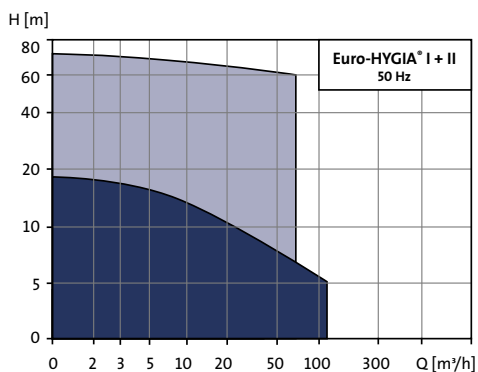
## Technical Data

### Euro-HYGIA® I + II

Flow: up to 130 m³/h  
 Differential pressure: up to 7 bar at 50 Hz and 9.5 bar at 60 Hz  
 Operating pressure: up to 16 bar  
 Operating temperature: 95°C (up to 150°C on request)

### Euro-HYGIA® III

Flow: up to 250 m³/h  
 Differential pressure: up to 7 bar at 50 Hz and 9.5 bar at 60 Hz  
 Operating pressure: up to 16 bar  
 Operating temperature: 95°C (up to 150°C on request)





## GRUNDFOS SANITARY RANGE



### Shaft seals

Depending on application and media, single or double mechanical shaft seals are available. Tandem or back-to-back with sealing or flushing water connection are also available.

### Elastomers

EPDM, Viton, other materials on request.

The mechanical seals used for the 3A2/3A3 sterile standard pumps, are single inboard mechanical seals with an optimum position in the liquid. This ensures cooling as well as CIP cleaning and sterilisation according to the criteria of hygienic design.

Seal face materials selected to suit pumped media. Standard materials SiC/SiC/EPDM (FDA conform).

**Option** Material pairing SiC/SiC/Kalrez white or Viton.

### Connections

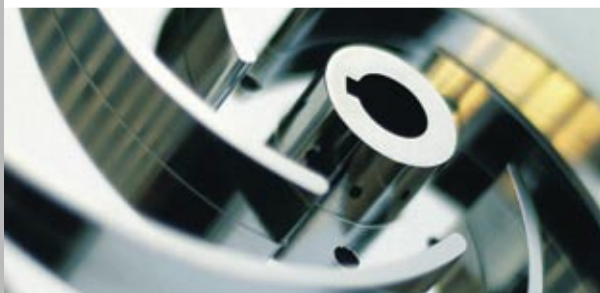
- Threads to DIN 11851 PN 25-40 (depending on nominal diameter)

### Connection options

- Flanges to DIN 2642 PN 10 (industrial applications only)
- Pipe threads to DIN ISO 228 PN 10 (max.)
- Sterile threads to DIN 11864-1 PN 16
- Sterile flanges to DIN 11864-2 PN 16
- Other connections available on request, for instance SMS, RJT, clamp connections to DIN, ISO, Tri-Clover etc., special sterile threaded fittings and flanges

### Additional options

- Pumps on stainless steel trolley with motor on/off switch and electric cable
- DN 15 diaphragm valve drain for sterile processes
- DN 15 drain connection
- Heating jacket for pump casing
- MultiFunction inducer for NPSH reduction or pumping of media containing gas (Euro-HYGIA II)
- Integral flange ring for bolted casing closure (HPM)
- Special paint finish for drive and cast or steel parts
- Euro-HYGIA® Adapta® and Euro-HYGIA® CN with explosion or flameproof three phase motors EEx e IIT3/EEx de IICT4
- Motors with special voltages and frequencies
- Tronic module: Pumps with integrated frequency converters, Euro-HYGIA® tronic up to 7.5 kW, available in all sizes



### **The Grundfos sanitary range**

Grundfos has developed and produced high-quality industrial pumps for more than half a century. Throughout our long history, our focus has always been on product performance and reliability. We strive to provide our customers with the best possible solution, regardless of application. This dedication to customer needs makes us the ideal pump partner for industry.

Grundfos' worldwide leading position now also includes Hilge's variety of hygienic and sanitary pump solutions. Hilge brings more than a century of great experience within food, beverage, pharmaceutical and chemical industries.

Contact the Grundfos dealer nearest you for further information on the Grundfos sanitary range, or via [www.grundfos.com](http://www.grundfos.com)