

# **EUro-HYGIA®**SINGLE-STAGE SANITARY PUMPS



# FOR THE STRICTEST HYGIENIC REQUIREMENTS IN THE WORLD

## Where hygiene really matters

The premium Euro-HYGIA® range of single-stage, end-suction centrifugal pumps is designed for use in industries where hygiene and flexibility are top priorities. They are made from high quality materials to meet some of the world's strictest hygiene standards, but their true distinguishing feature is their flexibility. Your Euro-HYGIA® pump can be adapted to suit any task where reliable, hygienic pumping is required — e.g. within the following areas:

## Life science/Pharmaceuticals

- Pure water systems (WFI)
- Biotechnology
- Infusion
- Nutrient and alcohol infusions
- Filling/bottling systems

## **Personal care**

- Pure water
- Lotions
- Perfumes







# Food & Beverage

- Beer/breweries
- Dairies
- · Soft drink mixing
- Yeast processes

#### Other

- · Cleaning solutions (CIP systems)
- Water treatment
- Semi-conductor rinsing
- Metal surface treatment

## Designed to the highest of standards

Designing pumps for sanitary processes means that strict standards must be observed. Hence, the materials used in the Euro-HYGIA® pumps were chosen for their hygienic properties. For example, their casings are made from CrNiMo stainless steel 1.4404 (equivalent to AISI 316L) for a smooth, porefree finish. This and other design features let the Euro-HYGIA® range meet some of the strictest standards in the world.

## **Certification compliance**

Euro-HYGIA® pumps are CIP and SIP-capable in accordance with the DIN EN 12462 performance criteria. The wet-end parts meet the Qualified Hygienic Design (QHD) standards and hold an EHEDG test certificate for CIP cleanability (TNO). They also meet the 3A Sanitary Standard (USA) as well as GOST standard (Russia).



# **DEVELOPED FOR REAL FLEXIBILITY**

Flexibility is one of the highlights of the Euro-HYGIA® pump range. For example, the pumps are highly mobile, and a choice of three impeller designs – semi-open, closed and free-flow – lets you optimise pump performance for any application. Very importantly, the range lets you choose between several variants to suit your task.

# **Euro-HYGIA® Bloc** - compact

For stationary use; mounted on a stainless steel or cast iron foot. Extended stainless steel shaft in motor.

Stainless steel lantern.

# Euro-HYGIA® Bloc-V - drainable

Vertical pump on space-saving stainless steel stand (drainable through suction port).



## **Euro-HYGIA® Bloc-SUPER** - compact

For stationary use; mounted on stainless steel combi-foot with machine pads.

Motor with stainless steel shroud and extended shaft.

**Options** Stainless steel foot.

Stainless steel lantern.

## **Euro-HYGIA® Adapta®** - optimal installation

For stationary use in fixed installation; mounted on cast iron foot. Can be fitted with IEC standard motors or NEMA motors by means of a standard flexible coupling connected directly onto the pump shaft. The motor is bolted onto the lantern flange or the Adapta® lantern.

The pump can remain in the pipeline while the motor is serviced or replaced.

**Options** With complete coupling, without motor. For stationary use, mounted on stainless steel combi-foot with machine pads. Adapta® SUPER for stationary use, mounted on stain less steel combi-foot with machine pads and shrouded motor.





# **GRUNDFOS SANITARY RANGE**

## Euro-HYGIA® Adapta®-V - drainable

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

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

## Euro-HYGIA° CN - industrialised

For stationary use; long-coupled pump mounted on base plate. Complete with flexible coupling, guard and IEC standard or Nema motor with IP55 enclosure.

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

## **Euro-HYGIA®** tronic - <u>flexible</u>

With integrated frequency converter to adapt speed and performance to demand. Suitable for all motor sizes up to 7.5 kW/50 Hz.

Available as mobile unit mounted on a stainless steel trolley complete with motor starter and cable.



## Technical data Euro-HYGIA® I + II

Flow: up to 108 m³/h

Head: up to 70 m at 50 Hz and 100 m at 60 Hz

Operating pressure: up to 16 bar

Operating temperature: 95°C (up to 150°C on request)

Sterilisation temperature: 140°C (SIP)

## Euro-HYGIA® III

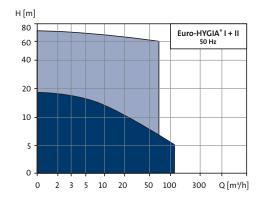
Flow: up to 250 m³/h

Head: up to 75 m at 50 Hz and 100 m at 60 Hz

Operating pressure: up to 16 bar

Operating temperature: 95°C (up to 150°C on request)

Sterilisation temperature: 140°C (SIP)



# **GRUNDFOS SANITARY RANGE**



## Shaft seals - choose the one to suit you

A range of shaft seal options is available to suit different media and applications. Choose single or double mechanical shaft seals, mounted in tandem or back-to-back with flushing water connection or water sealing.

The mechanical seals used in Euro-HYGIA® pumps are single inboard seals that maintain the optimum position in the liquid. This ensures lubrication, cooling, and CIP and SIP in full accordance with the criteria of hygienic design.

Different seal face materials are available to suit the media. Unless otherwise specified, the pumps are delivered with seal faces made from carbon/stainless steel and O-rings made from EPDM (comply with FDA), but other seal designs are available upon request.

## **Optional seal materials**

Seal face/O-ring pairing: SiC/SiC/ Kalrez white, EPDM or Viton.

### **Connections**

 Threads to DIN 11851 PN25-40 (depending on nominal diameter)



## **Connection options**

- Flanges to DIN EN 1092-1 (DIN 2642 PN10) (industrial applications only)
- Pipe threads to DIN ISO 228 PN10 (max.)
- Sterile threads to DIN 11864-1 PN16
- Sterile flanges to DIN 11864-2 PN16
- Other connections available on request, e.g. 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
- DN15 diaphragm valve drain for sterile processes
- DN15 drain connection
- · Heating jacket for pump casing
- MultiFunction inducer for NPSH reduction or for media containing gas (Euro-HYGIA® II)
- Integral flange ring for bolted casing closure (high pressure)
- Special paint finish for drive and cast iron or steel parts
- Euro-HYGIA® Adapta® I and II and Euro-HYGIA® CN I and II are available with explosion or flameproof three-phase motors EEx e IIT3/EEx de IICT4. ATEX certificates available on request
- Motors with special voltages and frequencies
- Tronic module: Pumps with integrated frequency converters, Euro-HYGIA® tronic up to 7.5 kW.

# 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 sanitary pumps. Hilge was founded in 1862 and is famous for its customised and high-grade stainless steel sanitary pumps for the food, beverage and pharmaceutical industries.

Throughout history innovation and the desire to provide competitive pump solutions have been the driving force of Hilge. This is no different from Grundfos. Our history and tradition are built on that very same ambition. So, adding Hilge to Grundfos only means an even stronger desire to make state-of-the-art sanitary pumps. Given the vast development resources of Grundfos we are confident that the combination of two so similar traditions will only amplify our common effort to produce even better solutions for our customers.

Contact the Grundfos dealer closest to you for further information on the Grundfos sanitary range, or via www.grundfos.com

