

Contra

MULTISTAGE SANITARY PUMPS



STATE-OF-THE-ART HYGIENIC DESIGN

Certified performance

The Contra is a range of multistage, end-suction centrifugal pumps designed in accordance with the Qualified Hygienic Design (QHD) criteria with EHEDG certification. The pumps are CIP and SIP capable according to DIN EN 12462. The pumps, furthermore, meet GMP requirements and use FDA approved materials.

High quality throughout

The pumps are constructed with the use of deep-drawn and/or forged stainless steel materials in quality 1.4404 and 1.4435 (equivalent to AISI 316 L), which guarantees a pore and blowhole-free surface, as opposed to cast material.

The multistage pumps have open diffusers. The O-ring seal locations for the casing and impellers are designed to meet the criteria of hygienic design with metal-to-metal contact seal areas, and no pump casing dead-ends.

The vertical versions of the Contra pumps are fully self-draining through the suction port of the pumps.

A variety of applications

The Contra pumps offer extremely reliable operation under tough operating conditions. Due to the hygienic design and the use of pore-free materials, the pumps are suitable for most plant and process applications in:

Food & Beverage

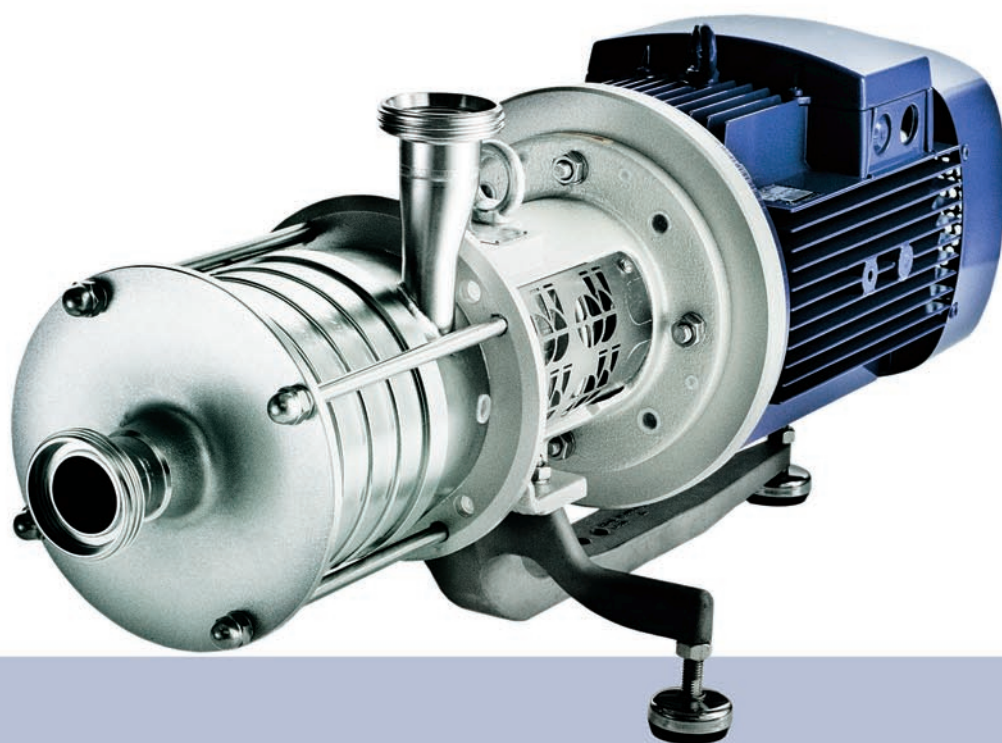
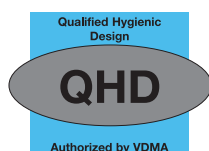
- Dairy
- Carbonising in breweries
- CIP feeding

Pharmaceutical industry

- Purification systems
- Pumping of pure water (WFI)

Industry

- Textile surface treatment
- Water technology processes



CUSTOMISED SOLUTIONS

Contra Bloc

Stationary on motor foot. Motor with extended stainless steel shaft, unshrouded.

Contra Bloc-V

Vertically mounted on space-saving stainless steel stand. Fully drainable through suction port.

Options Stainless steel foot.
Stainless steel lantern.



Contra Bloc-SUPER

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

Contra CN

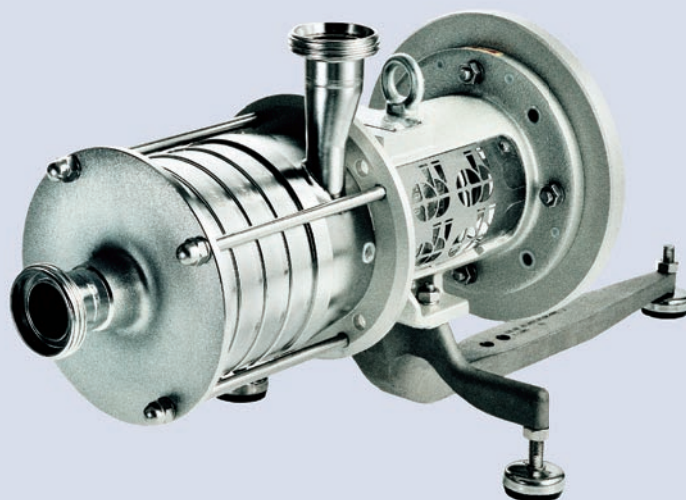
Stationary mounted on base plate with coupling and coupling guard.
Standard IEC motors or NEMA motors can be fitted using standard flexible couplings.

Options Free shaft end.
With base plate but without motor.
With stainless steel base plate.

Contra Adapta®

Stationary on pump 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.



Contra Adapta®-V

Vertically mounted on space-saving stainless steel stand. Fully drainable through suction port. 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.

Option With complete coupling but without motor.

Contra Adapta® tronic

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

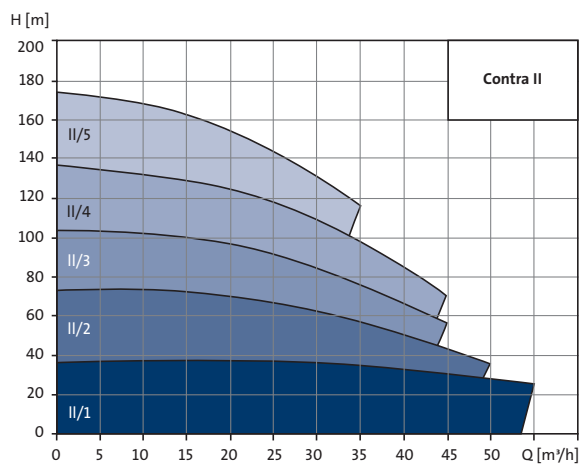
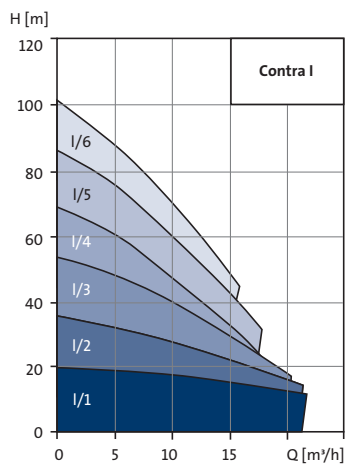
Mobile unit mounted on stainless steel trolley complete with motor starter and cable are available.



Technical data

Depending on pump size and speed

Flow: up to 55 m³/h
 Head: up to 170 m
 Operating pressure: up to 25 bar
 Operating temperature: 95°C (up to 150°C on request)
 Sterilisation temperature: 140°C (SIP)



GRUNDFOS SANITARY RANGE



Shaft seals

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

The mechanical seals used are single inboard seals with an optimum position in the liquid. This ensures lubrication, cooling as well as CIP and SIP according to the criteria of hygienic design.

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

Option Material pairing SiC/SiC/Kalrez white, EPDM or Viton.

Connections

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

Connection options

- Flanges to DIN EN 1092-1 (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

- Special paint for electric motor, cast iron and carbon steel parts (except for Adapta®-Bloc)
- Contra Adapta® and CN with hazardous area motors EEx e IIT3/EEx de IIC4, etc. ATEX certificates available on request.
- Motors with special voltages and frequencies, IEC and NEMA
- Pump with water-cooled motor for clean room applications
- Motors for variable speed drive with integral frequency converter in the terminal box as “tronic” unit up to 7.5 kW
- Flush or barrier fluid systems for tandem or back-to-back double mechanical seals
- Mobile pumps mounted on two-wheel trolley with on/off switch

