

CPC-ZA-*line*

Self-priming stainless steel centrifugal pumps
for hygienic process applications



Pomac Pumps

The **CPC-ZA-*line*** is a self-priming pump, designed for applications in the food industry, with a strong focus on optimal cleanability, efficiency, low maintenance costs and a simple (dis)assembly.

The **CPC-ZA-*line*** is mounted with a highly efficient cast stainless steel half-open impeller, which guarantees a favourable efficiency.

Upon demand, the **CPC-ZA-*line*** can be supplied with a star impeller, which permits pumping liquids containing solids.

The **CPC-ZA-*line*** can be applied a.o. as cleaning return pump (CIP-) or as discharge pump for tank lorries and milk collection trucks.

Clean

All liquid contact parts of the CPC-ZA pumps are compliant with the relevant standards. The open impellers are provided with pressure relieve holes, which at the same time ensure an optimal cleaning of the shaft seal and of the seal chamber. The impeller is 'dry' mounted to the shaft by means of "O"-rings. The applied "O"-ring constructions are designed to minimise the liquid contact and at the same time to provide an optimal cleaning of the contact faces.

Efficiency

The **CPC-ZA-*line*** is designed with narrow gaps, whereas the eminently manufactured impellers ensure very favourable efficiencies.

Depending on the application range but always compliant with the applicable hygienic standards the **CPC-ZA-*line*** can be executed with several options:

- Mechanical seal types and materials
- "O"-ring materials
- Drain constructions
- Heating jacket

Materials

All parts that come into contact with the pumped liquid are made of stainless steel, Materials nr. 1.4404. At request these parts can also be made of Materials nr. 1.4435.

Drives

KAM and KAV are supplied with B3/B5 foot and flange mounted motors according to IEC, with balanced stainless steel stub shaft.

KAC is supplied with B5 flange mounted motors according to IEC with balanced stainless steel stub shaft (only available upto motor size IEC 132).

Motors can be supplied in all available efficiency, isolation, protection and voltage classes. Also available in ATEX compliant version and in noise-reduced execution.

IG can be supplied with either electric, pneumatic or combustion motors.

IGH is equipped with hydraulic motor.



Applications

Food Industry

- CIP & SIP cleaning processes**
 Sodium hydroxide, nitric acid, hot and cold water, other specific cleaning liquids
- Dairies**
 Milk, skimmed milk, butter milk, cheese milk, raw milk, cream, animal fats
- Beverages**
 Fruit juices, soft drinks, beer, wine, spirits, liqueur, sugar solutions, syrups, water, concentrates, yeast
- Foodstuffs**
 Animal and vegetable oils and fats, soups, sauces, spices, brine, water
- Chocolate and sweets**
 Milk products, oils and fats, sugar solutions, syrups, flavouring, liqueur, spirits
- Sugar**
 Syrups, sugar solutions, invert sugar



Shaft sealing systems

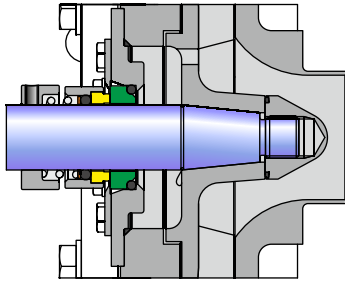
The pumps can be supplied with several types of shaft sealing, including the specially developed sanitary EHP seal.

The mechanical seals are available in the following materials combinations:

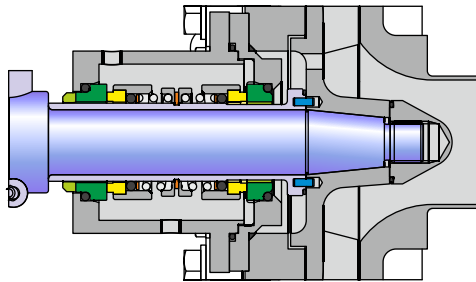
- carbon to CrMo-steel
- carbon to silicon carbide
- carbon to ceramic
- hard metal to hard metal
- silicon carbide top silicon carbide
- Tungsten carbide to Tungsten carbide

The mechanical seals are available with EPDM, Viton, Perbunan and Teflon "O"-rings.

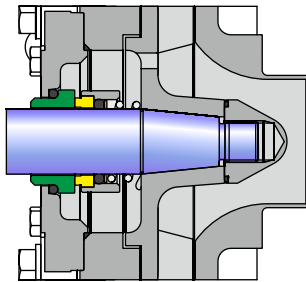
All materials comply with FDA - CFR 21 or the equivalent european standards.



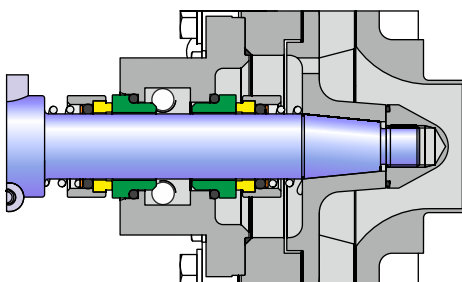
1. Outer mechanical seal - Class I



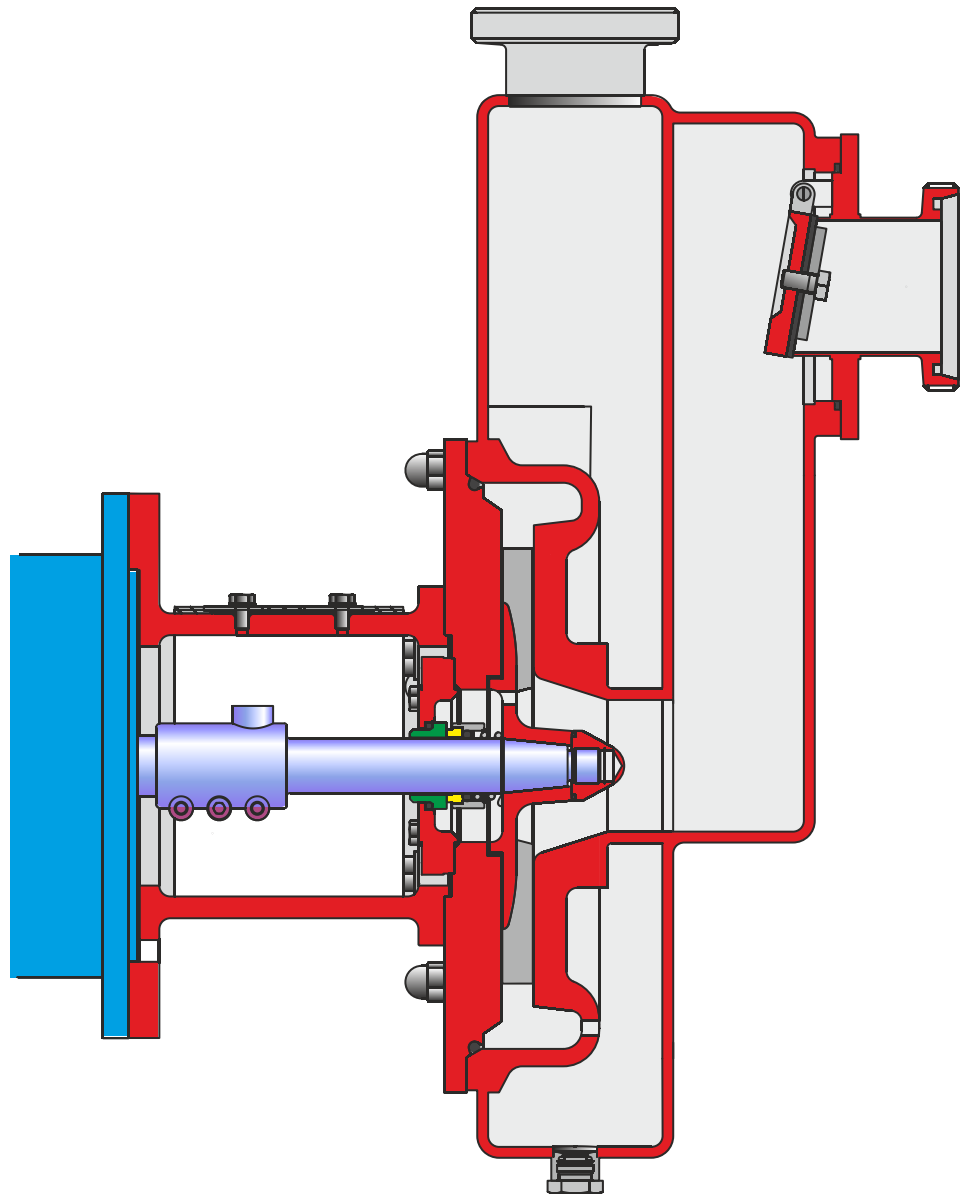
2. Inner mechanical seal with flush - Class I



3. Inner mechanical seal - Class II

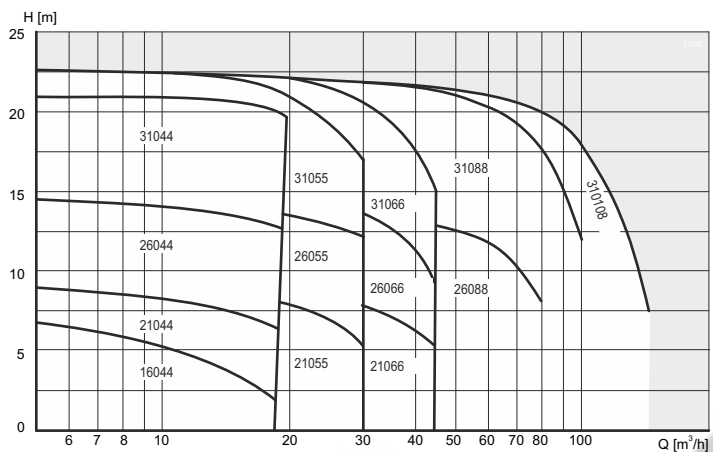


4. Inner mechanical seal with quench - Class II

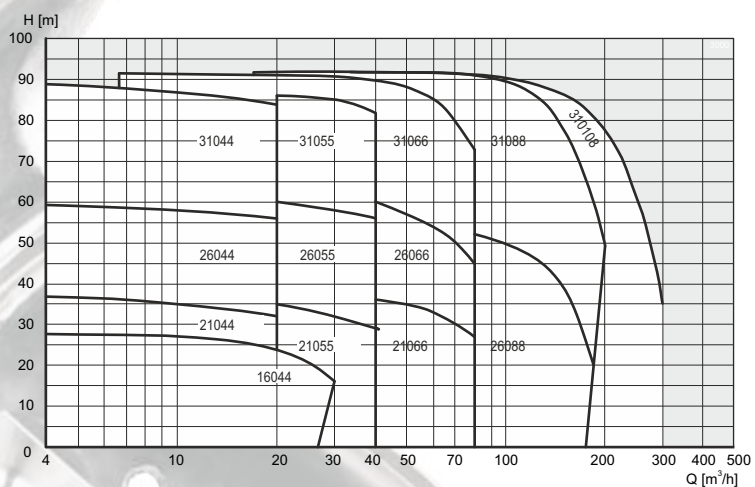


Curves

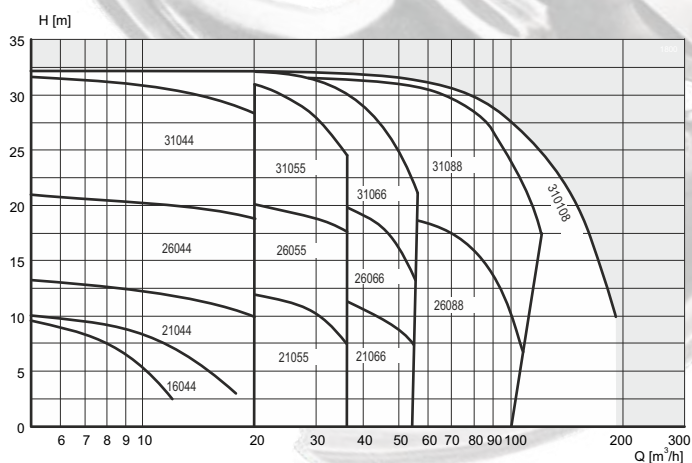
1500 min⁻¹



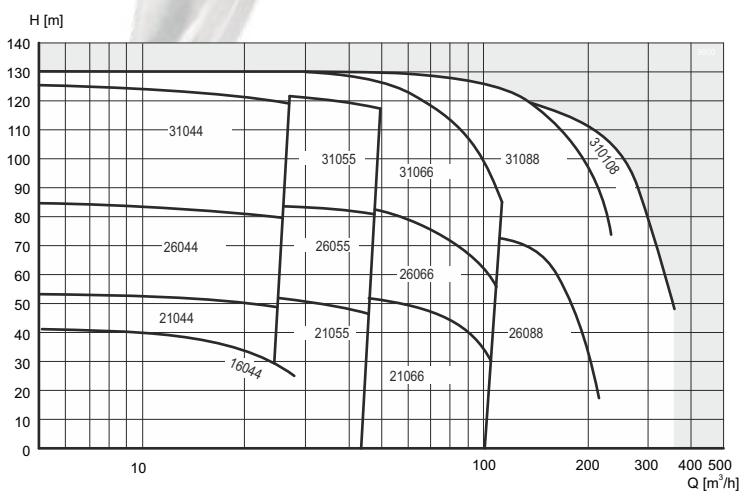
3000 min⁻¹



1800 min⁻¹



3600 min⁻¹



Dimensions

Pump

| Size | d1 | d2 | d2 alt. | b | e | f | y | L1 |
|--------|------|------|----------|-----|-----|-----|-----|-----|
| 16044 | 2" | 2" | 1,5" | 77 | 224 | 153 | 115 | 208 |
| 21044 | 2" | 2" | | 92 | 254 | 153 | 145 | 208 |
| 21055 | 2,5" | 2,5" | 2" | 92 | 258 | 176 | 145 | 236 |
| 21066 | 3" | 3" | 2", 2,5" | 87 | 258 | 191 | 145 | 256 |
| 26044 | 2" | 2" | | 113 | 334 | 153 | 220 | 208 |
| 26055 | 2,5" | 2,5" | 2" | 113 | 338 | 176 | 220 | 236 |
| 26066 | 3" | 3" | 2", 2,5" | 113 | 339 | 191 | 220 | 256 |
| 26088 | 4" | 4" | 3" | 98 | 353 | 233 | 195 | 313 |
| 31044 | 2" | 2" | | 138 | 334 | 153 | 220 | 208 |
| 31055 | 2,5" | 2,5" | 2" | 138 | 338 | 176 | 220 | 236 |
| 31066 | 3" | 3" | 2", 2,5" | 133 | 339 | 191 | 220 | 256 |
| 31088 | 4" | 4" | 3" | 118 | 353 | 233 | 195 | 313 |
| 310108 | 5" | 4" | 3" | 118 | 353 | 243 | 195 | 323 |

Connections

All pump types can be supplied with:

- Couplings acc. to DIN 11851, DIN 11864-1, SMS, etc.
- Tube connections acc. to NEN 1472 and DIN 1850
- Flange connections acc. to EN 1092-1, DIN 11864-2
- Tri-clamp acc. to ISO 2852, DIN 32676 and DIN 11864-3
- Connections according to client specifications.

Configurations

The pumps can be supplied with the following, entirely interchangeable, options:

CPC-ZA-line KAM Pump with close coupled stainless steel encased motor and fitted with adjustable stainless steel legs.

CPC-ZA-line KAC Pump with close coupled motor, mounted on a stainless steel bracket.

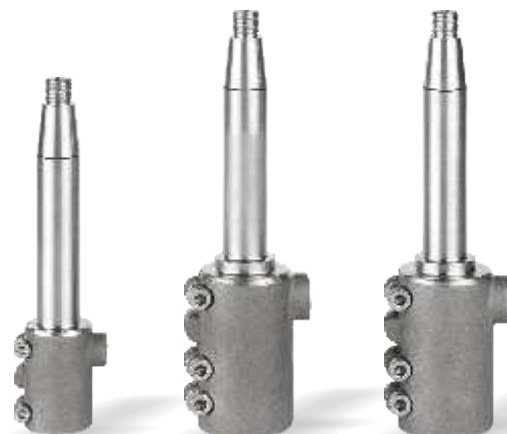
CPC-ZA-line KAV Pump with close coupled motor, mounted on the motor feet.

CPC-ZA-line IG Pump fitted to a bearing housing.

CPC-ZA-line IGH Pump fitted to a stainless steel bearing housing, especially suited for a direct coupled hydraulic drive.

Bearing bracket IG

| c2 | d3 | o | n | L5 | m7 | m8 | m9 | m10 | m11 | m12 | m13 | m14 |
|-----|----|----|-----|-----|-----|------|------|-----|-----|------|-----|-----|
| 100 | 24 | 30 | 168 | 295 | 135 | 0 | 266 | 50 | | 19j6 | 40 | 130 |
| | | | | | | | 278 | | | | | |
| 100 | 24 | 30 | 168 | 295 | 135 | 0 | 330 | 56 | | 24j6 | 50 | 153 |
| | | | | | | | 330 | | | | | |
| | | | | | | | 355 | | | | | |
| 100 | 24 | 30 | 168 | 295 | 145 | 0 | 420 | 63 | | 28j6 | 60 | 172 |
| | | | | | | | 440 | | | | | |
| | | | | | | | 376 | | | | | |
| | | | | | | | | | | | | |
| 112 | 24 | 30 | 168 | 295 | 145 | 0 | 384 | 70 | | 28j6 | 70 | 174 |
| | | | | | | | 411 | | | | | |
| 132 | 24 | 30 | 168 | 295 | 145 | 20 | 463 | 89 | | 38k6 | 80 | 182 |
| | | | | | | | 501 | | | | | 220 |
| | | | | | | | | | | | | |
| 160 | 38 | 50 | 258 | 399 | 145 | 55 | 612 | 108 | | 42k6 | 110 | 256 |
| | | | | | | | 656 | | | | | 300 |
| 180 | 38 | 50 | 258 | 399 | 145 | 55 | 705 | 121 | | 48k6 | 110 | 320 |
| | | | | | | | | | | | | |
| 200 | 38 | 50 | 258 | 399 | 145 | 65 | 850 | 133 | | 55m6 | 110 | 380 |
| | | | | | | | 825 | | | | | |
| 225 | 38 | 50 | 258 | 399 | 145 | 65 | 930 | 149 | 345 | 55m6 | 110 | 380 |
| | | | | | | | 95 | 960 | | 60m6 | 140 | |
| | | | | | | | 95 | 960 | | | 140 | |
| | | | | | | | 865 | | 310 | | | 355 |
| | | | | | | | 890 | | | | | 380 |
| | | | | 145 | 95 | 1010 | 168 | | | 60m6 | 140 | 446 |
| | | | | | | | 1040 | | | 65m6 | | |
| | | | | | | | 1040 | | | | | |
| | | | | | | | 965 | | | | | |
| | | | | 145 | 95 | 1135 | 190 | | | 65m6 | 140 | 520 |
| | | | | | | | 1135 | | | 75m6 | | |
| | | | | | | | 1040 | | | | | |
| | | | | | | | 1135 | | | 65m6 | | |
| | | | | | | | 1135 | | | 75m6 | | |
| | | | | | | | 1040 | | | | | |



Besides the CPC-ZA-line pump assortment in this brochure the Pomac delivery program comprises an extensive choice of hygienic pumps.

More detailed information on these pump types is available and will be sent to you on request.

**CPC
Stainless steel
centrifugal pump**

Q max = 600 m³/h
H max = 160 m



**SP-LR
Self-priming liquid
ring pump**

Q max = 60 m³/h
H max = 50 m



**PLP
Lobe pump**

Q max = 110 m³/h
P max = 25 bar



**PDSP
Double screw pump**

Q max = 90 m³/h
P max = 16 bar



**CP-AGF
Pump with channel
impeller**

Q max = 1000 m³/h
H max = 25 m



Pomac Pumps

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