

# 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

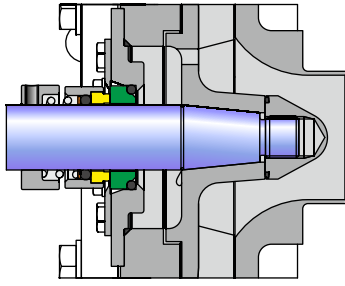
The pumps can be supplied with several types of shaft sealing, including the specially developed sanitary EHP seal.

The mechanical seals are available in the following materials combinations:

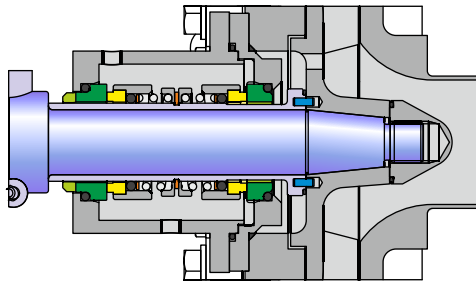
- carbon to CrMo-steel
- carbon to silicon carbide
- carbon to ceramic
- hard metal to hard metal
- silicon carbide top silicon carbide
- Tungsten carbide to Tungsten carbide

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

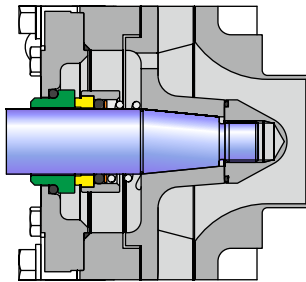
All materials comply with FDA - CFR 21 or the equivalent european standards.



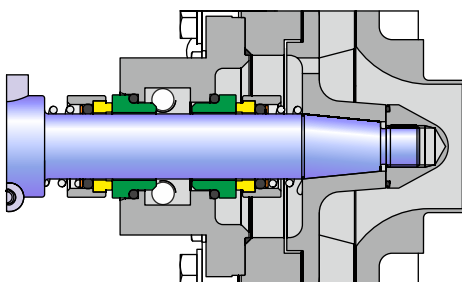
1. Outer mechanical seal - Class I



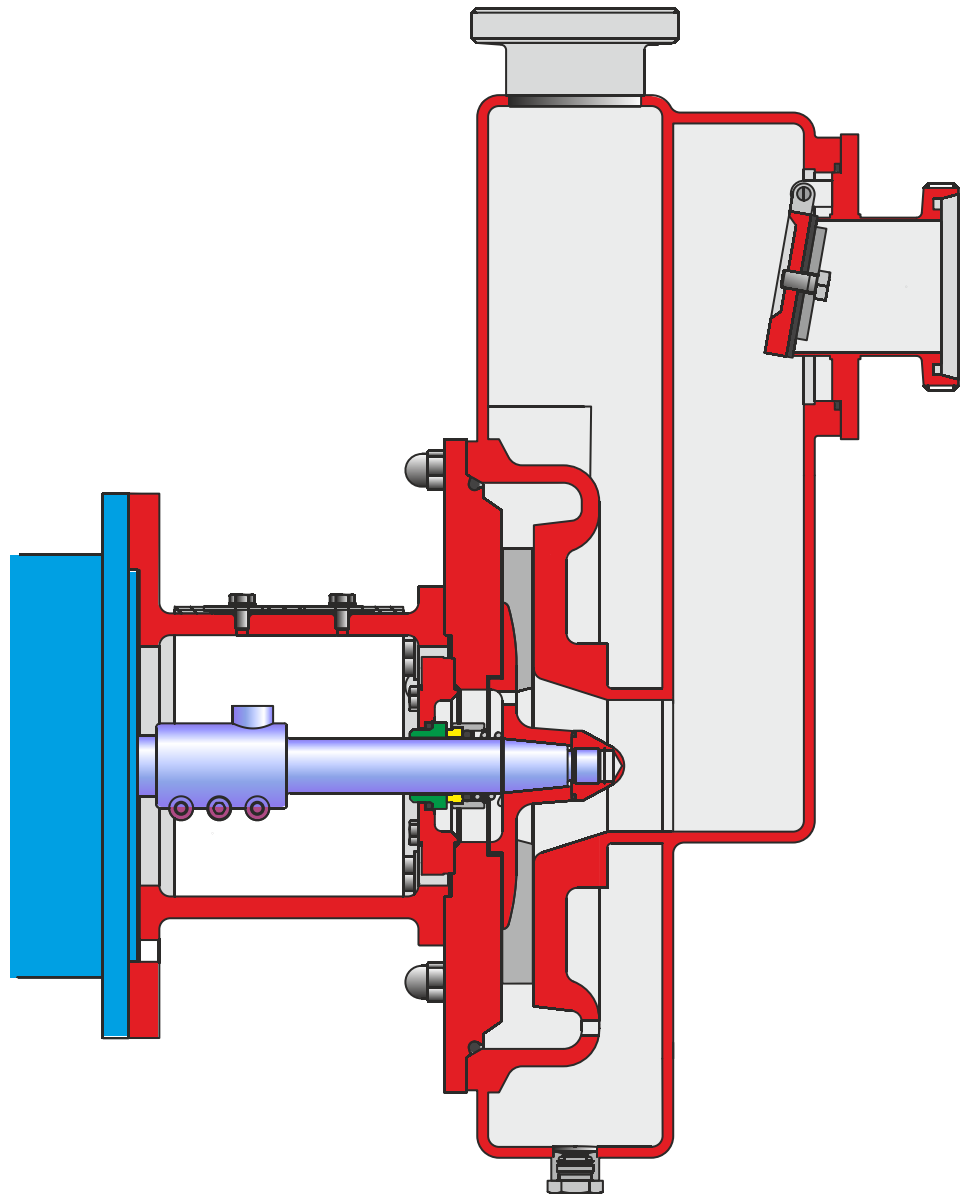
2. Inner mechanical seal with flush - Class I



3. Inner mechanical seal - Class II

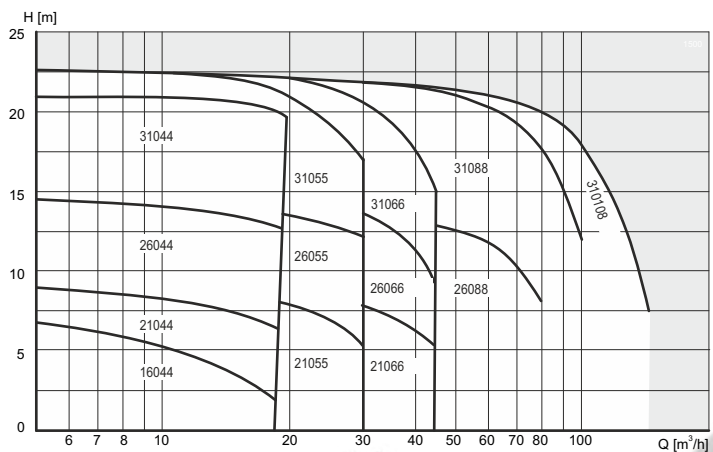


4. Inner mechanical seal with quench - Class II

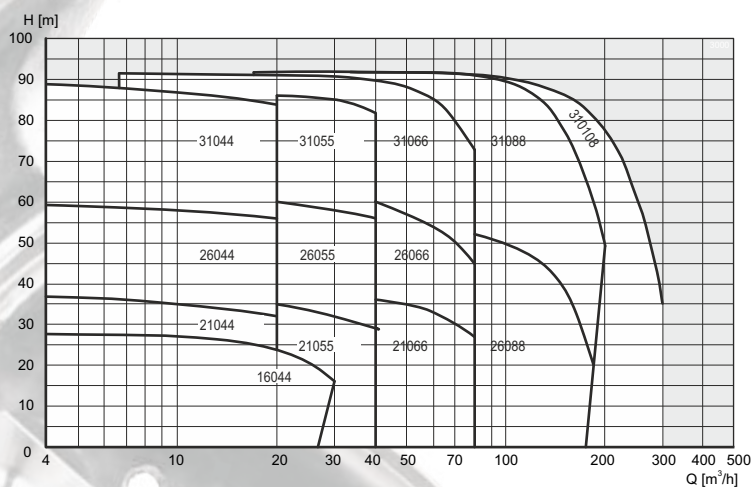


# Curves

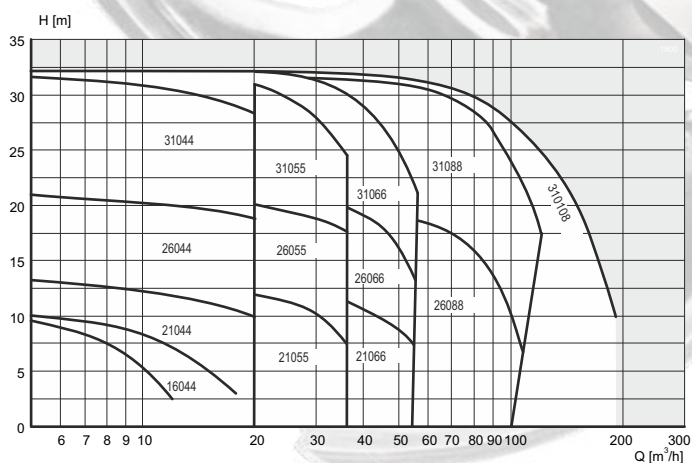
## 1500 min<sup>-1</sup>



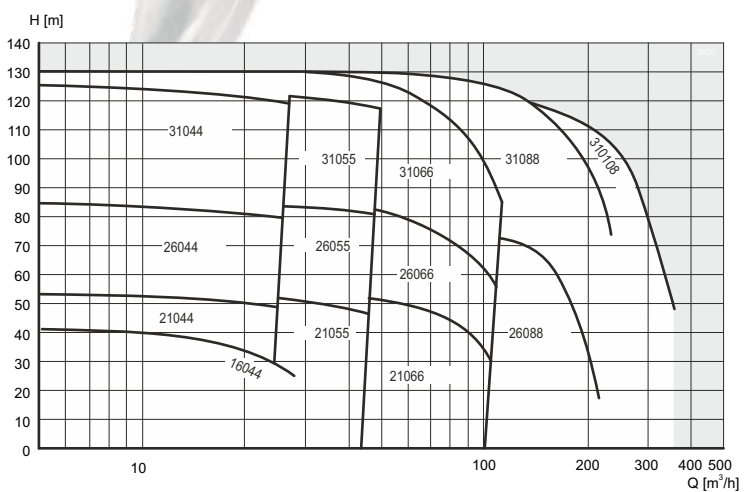
## 3000 min<sup>-1</sup>



## 1800 min<sup>-1</sup>



## 3600 min<sup>-1</sup>





## 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.

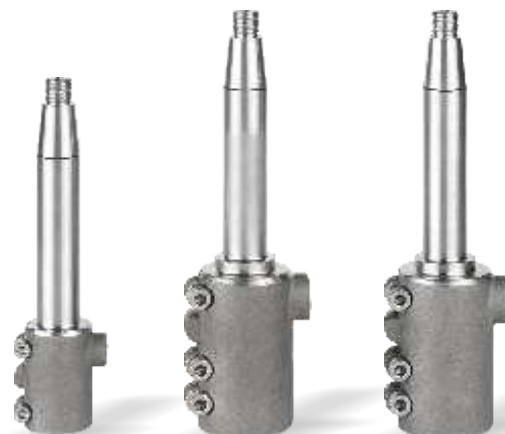
**CPC-ZA-line KAV** Pump with close coupled motor, mounted on the motor feet.

**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 m<sup>3</sup>/h  
H max = 160 m



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

Q max = 60 m<sup>3</sup>/h  
H max = 50 m



**PLP  
Lobe pump**

Q max = 110 m<sup>3</sup>/h  
P max = 25 bar



**PDSP  
Double screw pump**

Q max = 90 m<sup>3</sup>/h  
P max = 16 bar



**CP-AGF  
Pump with channel  
impeller**

Q max = 1000 m<sup>3</sup>/h  
H max = 25 m



## Pomac Pumps

**Pomac b.v**

Feithspark 13 - 9356 BX Tolbert  
P.O. Box 32 - 9356 ZG Tolbert  
Holland

tel +31 (0)594 512877  
fax +31 (0)594 517002

E-mail: [info@pomacpumps.com](mailto:info@pomacpumps.com)  
[www.pomacpumps.com](http://www.pomacpumps.com)