

# CPC-*line*

Stainless steel centrifugal pumps  
for hygienic process applications, according to EHEDG



**Pomac Pumps**

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

The **CPC-line** is characterised by its elegant but robust and stable build, which makes the **CPC-line** extremely suited for all occurring production processes in the pharmaceutical and food processing industry.

## Ultra clean

All liquid contact parts of the CPC pumps are compliant with the relevant standards. The open impellers are provided with pressure relief 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-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 hygienic standards the **CPC-line** can be executed with several options:

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

## CPC-line HD

This is the high pressure version of the **CPC-line**. This pump has been developed as a booster pump for high pressure systems to 40 bars. Its external dimensions are equal to the **CPC-line**.

## 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 or Materials nr. 2.4602 (Hastelloy C22).

## 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

- **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
- **CIP & SIP cleaning processes**  
Sodium hydroxide, nitric acid, hot and cold water, other specific cleaning liquids



### Pharmaceutical Industry and Biotechnology

- Ultra filtration
- Reactors
- Tablets and coating
- Process filtration

### Typical pharmaceutical applications

- Sugar solutions, syrups
- Alcohols, solvents, acids
- Distilled water, emulsions
- Nutrient solutions, suspensions





## Shaft sealing systems

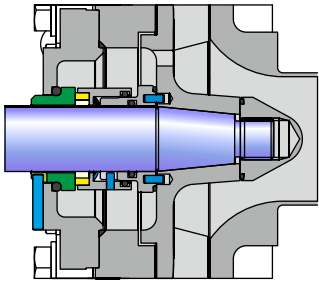
According to the hygienic standards of EHEDG the pumps can be supplied with several types of shaft sealing.

The mechanical seals are available in the following materials combinations:

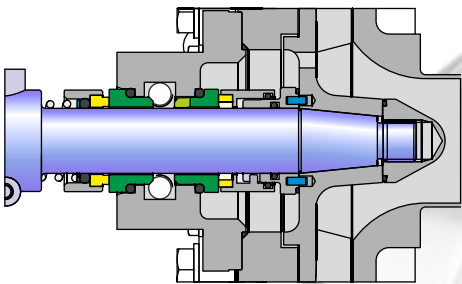
- carbon to CrMo-steel
- carbon to silicon carbide
- carbon to ceramic
- hard metal to hard metal
- silicon carbide top silicon carbide
- Tungsten carbide to tungsten carbide

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

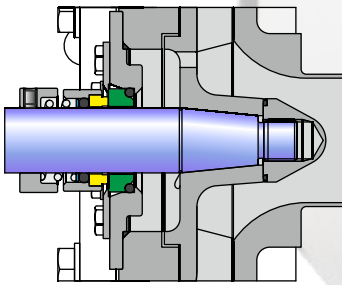
All materials comply with FDA - CFR 21 or the equivalent european standards.



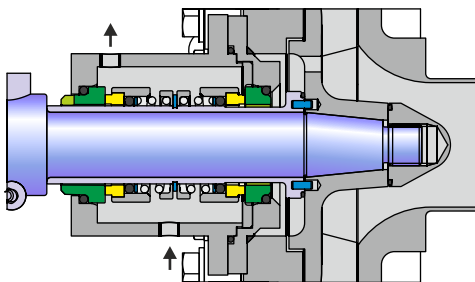
1. Internal mechanical seal



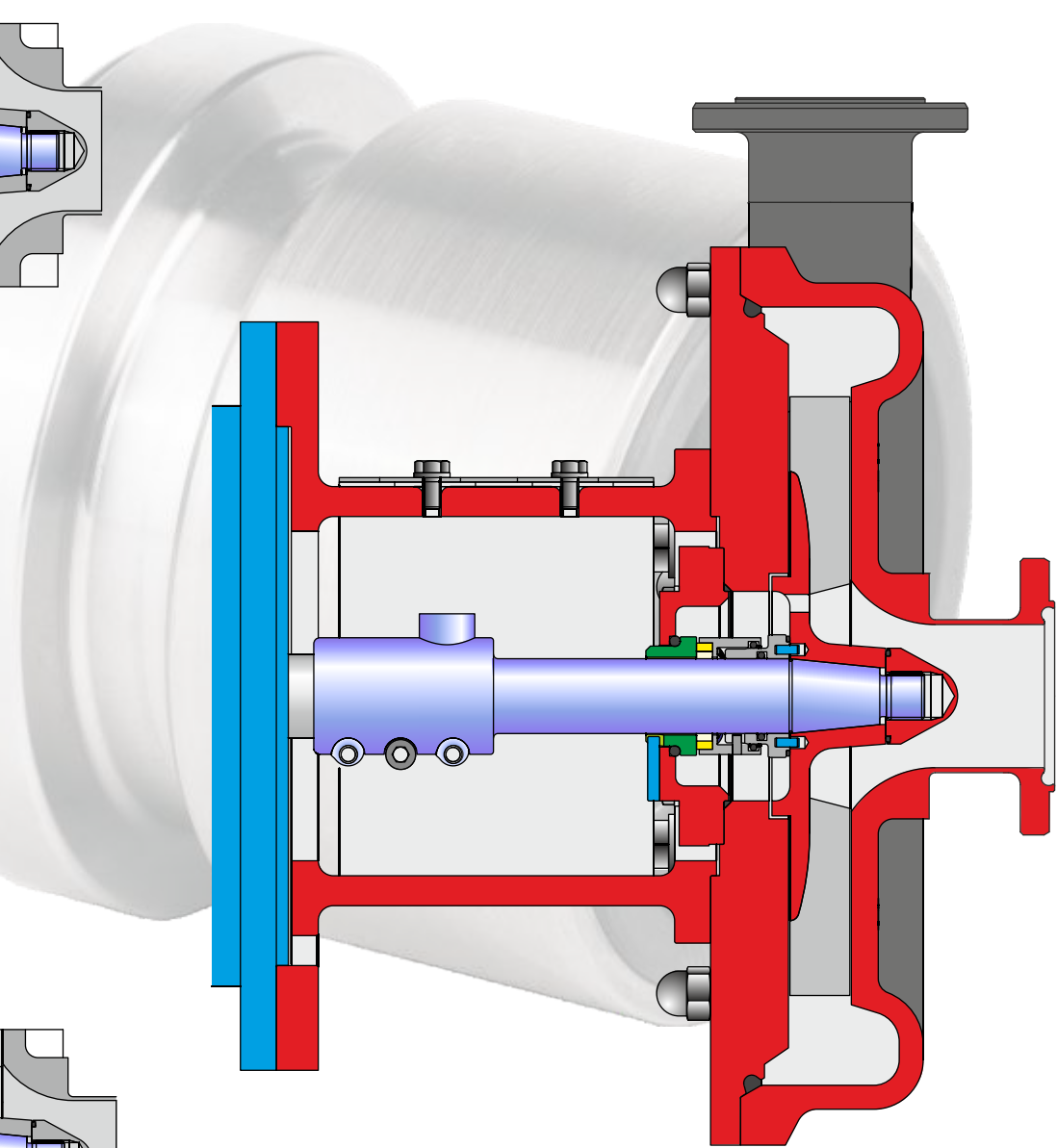
2. Internal mechanical seal with quench



3. External mechanical seal



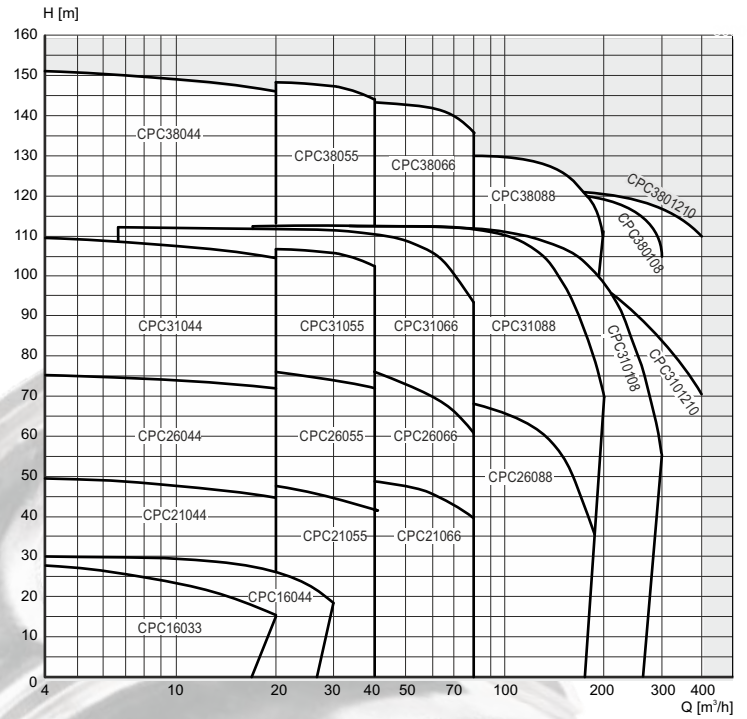
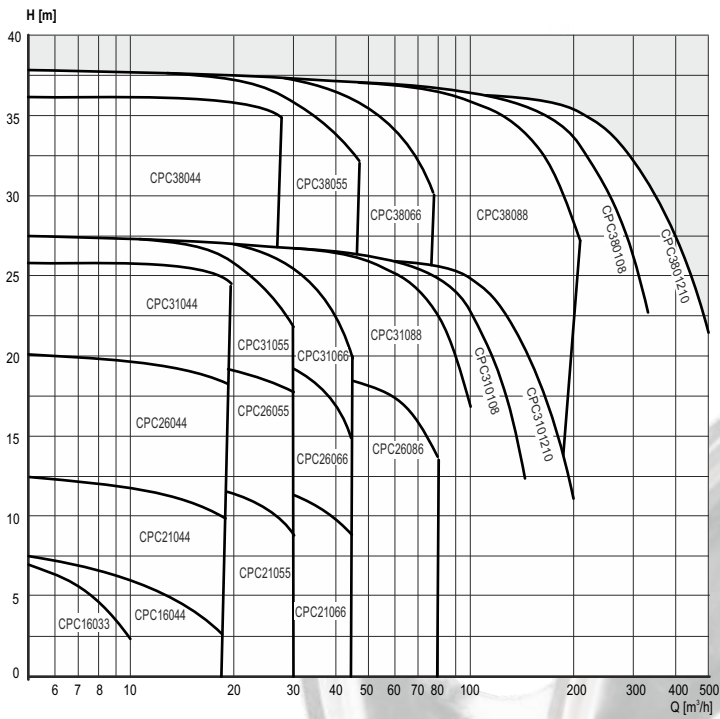
4. External mechanical seal with flush



# Curves

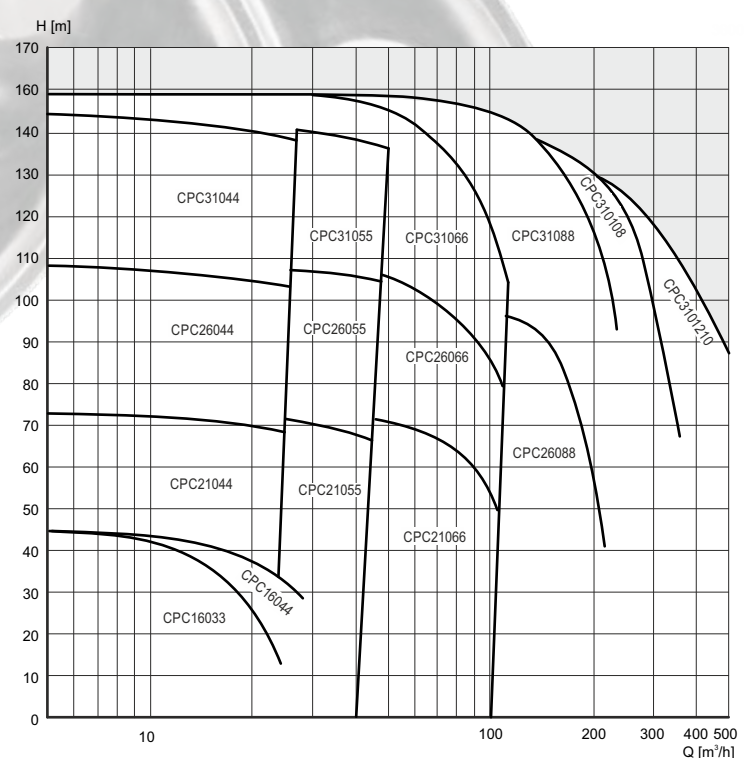
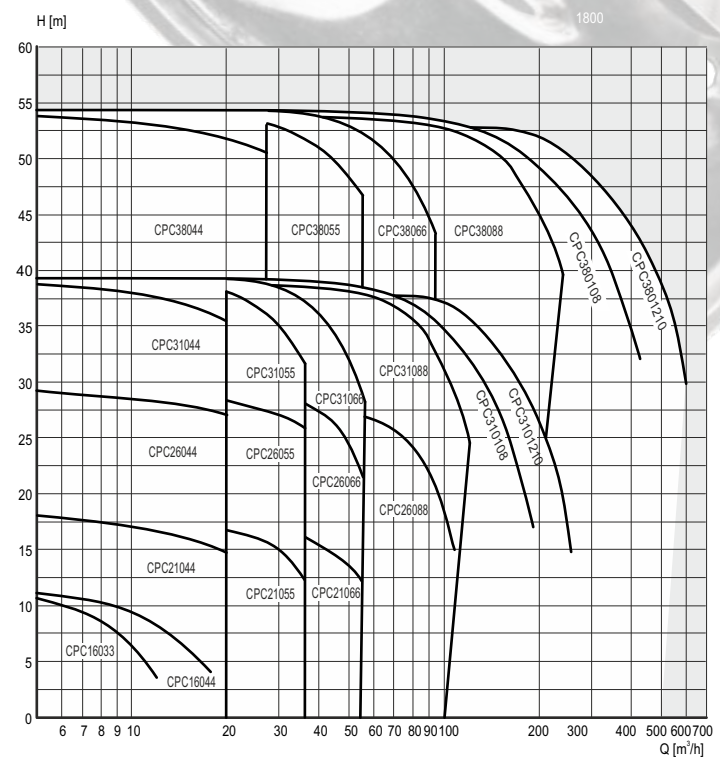
1500 min<sup>-1</sup>

3000 min<sup>-1</sup>



1800 min<sup>-1</sup>

3600 min<sup>-1</sup>







## Dimensions

### Pump

Size	d1	d2	d alt.	d4	NW1	NW2	b	e	f	L1
16033	1,5"	1,5"		200	40	40	68	148	67	98
16044	2"	2"	1,5"	200	50	50	68	148	69	100
21044	2"	2"		250	50	50	82	168	75	115
21055	2,5"	2,5"	2"	250	65	65	82	170	80	120
21066	3"	3"	2",2,5"	250	80	80	82	170	80	120
26044	2"	2"		300	50	50	107	198	75	115
26055	2,5"	2,5"	2"	300	65	65	107	200	80	120
26066	3"	3"	2",2,5"	300	80	80	107	200	80	120
26086	4"	4"	3"	300	100	80	100	200	106	161
31044	2"	2"		350	50	50	133	222	75	115
31055	2,5"	2,5"	2"	350	65	65	133	225	80	120
31066	3"	3"	2",2,5"	350	80	80	133	225	80	120
31088	4"	4"	3"	350	100	100	120	225	106	161
310108	5"	4"	3"	350	125	100	120	225	98	153
3101210	6"	5"	3"	350	150	125	120	225	95	157
38044	2"	2"		425	50	50	168	275	75	117
38055	2,5"	2,5"		425	65	65	168	275	80	122
38066	3"	3"		425	80	80	168	275	80	122
38088	4"	4"		425	100	100	151	275	101	162
380108	5"	4"		425	125	100	151	275	101	162
3801210	6"	5"		425	150	125	151	275	101	162

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					

## Connections

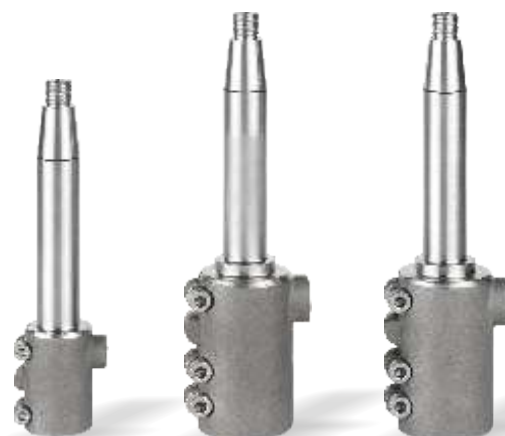
All pump types can be supplied with:

- 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-line KAM** Pump with close coupled stainless steel encased motor and fitted with adjustable stainless steel legs.
- CPC-line KAC** Pump with close coupled motor, mounted on a stainless steel bracket.
- CPC-line KAV** Pump with close coupled motor, mounted on the motor feet.
- CPC-line IG** Pump fitted to a bearing housing.
- CPC-line IGH** Pump fitted to a stainless steel bearing housing, especially suited for a direct coupled hydraulic drive.



Besides the CPC-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-ZA**  
**Self-priming stainless steel centrifugal pump**

Q max = 200 m<sup>3</sup>/h  
H max = 90 m



**SPLR**  
**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



**AGF**  
**Pump with channel impeller**

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



## Pomac Pumps

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