

# Pomac Pumps

**Stainless steel pumps**  
*for industrial and hygienic process-applications*



**CP - CPIZA - ZA**



## CP - CP/ZA - ZA

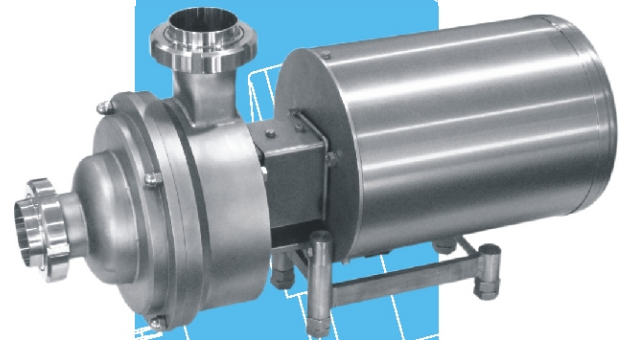
### Stainless steel centrifugal pumps

Stainless steel Pomac pumps: the complete pump program for food and beverages, pharmaceutical and chemical industries

Stainless steel Pomac pumps are characterised by an optimal hydraulic performance, a unique modular designed construction and an ample choice of possible shaft sealings.

The construction of the pumps is in accordance with EHEDG standards. This makes the pumps meeting even the severest hygienic requirements of the food industry.

The pumps are available in self-priming as well as in non self-priming execution.



# Assembly

## CP Sanitary stainless steel centrifugal pump



The sanitary pump is designed to handle liquids with viscosities up to 500 cP with the liquid producing either positive or negative suction on the pump inlet and has flow rates up to 300 m<sup>3</sup>/h with manometric head up to 13 bar. Our sanitary CP unit has been built and tested in accordance with **EHEDG** Standards. Depending on the product to be pumped, the pumps can be supplied with:

- closed impeller
- half open impeller
- open impeller

The pumps are available in the following executions:

- standard execution with tangential exhaust for pressures up to 16 bar
- a high-pressure execution for pressures up to 50 bar
- with in-line suction and delivery ports, to be fitted directly into the pipeline
- a curdled milk pump (WW), this pump model has been specifically designed to pump curdled milk and other similar products that have soft and delicate particles
- an execution with radial exhaust, situated directly above the centerline of the pump.

## CP/ZA Stainless steel self priming centrifugal pump



This pump type is an extension of the CP-program. It is characterised by its self priming capacities, which makes this pump type ideally suited for pumping liquids with enclosed air or gasses. By using the open impeller it is also possible to pump liquids containing solids. Flow rates up to 200 m<sup>3</sup>/h with manometric heads up to 9 bar. These pump types have a high degree of interchangeability with CP pumps.

## ZA Stainless steel side channel pump

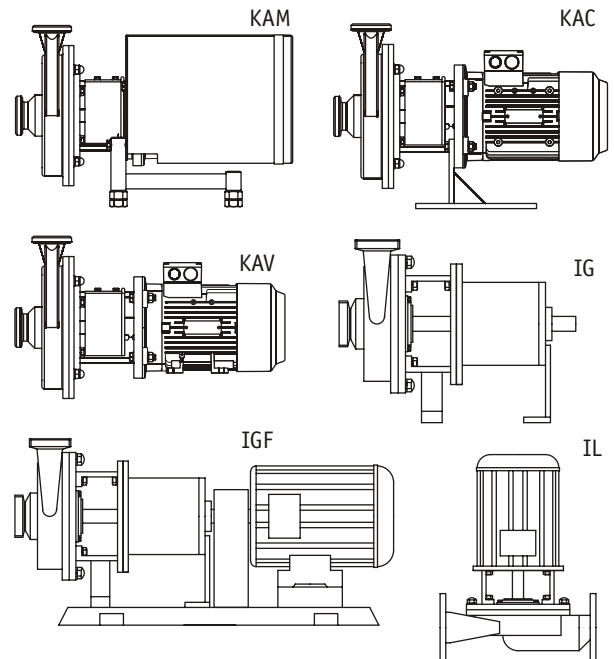


These self priming pumps are functioning according to the liquid ring-principle which enables them to pump liquids with enclosed air or gasses. Flow rates up to 60 m<sup>3</sup>/h with manometric heads up to 5 bar.

## Constructive options

The centrifugal and the self priming pumps can be supplied with the following, entirely interchangeable, options:

- KAM** Pump with close coupled stainless steel encased motor and fitted with adjustable stainless steel legs.
- KAC** Pump with close coupled motor, mounted on a steel bracket.
- KAV** Pump with close coupled motor, mounted on the motor feet.
- IG** Pump fitted to a bearing housing.
- IGF** Pump fitted to a bearing housing, coupled to motor drive by means of a flexible coupling and mounted on a base plate.
- IL** Pump with in-line connections.



## Connections

All pump types can be supplied with:

- Couplings to DIN 11851, DIN 11864-1, SMS, etc.
- Pipe connections to NEN 1472 and DIN 1850
- Flange connections to DIN 2633, DIN 11864-2
- Tri-clamps
- Connections acc. to client specifications

## Materials

All parts that come into contact with the pumped liquid are made of stainless steel AISI 316L or a higher degree.



## Drives

KAM, KAC and IL are supplied with B5 flange mounted motors according to IEC with balanced stainless steel stub shaft. KAV is supplied with B3 or B5 foot mounted motor according to IEC with balanced stainless steel stub shaft. Motors can be supplied in all available isolation-, protection and voltage classes. Also available in ATEX compliant version and in noise-reduced execution. IG and IGF can be supplied with either electric, hydraulic, pneumatic and combustion motors.

# Shaft sealing

## Shaft sealing options

### Unbalanced shaft seals

Depending on make and execution applicable upto:

Max pressure: 10 bar  
Max temp.: 200 °C

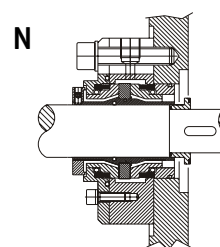
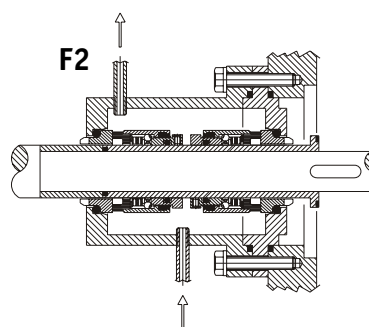
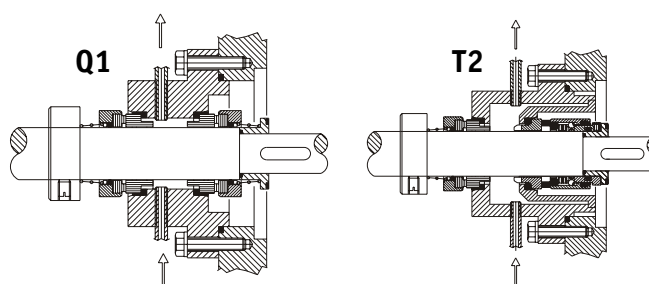
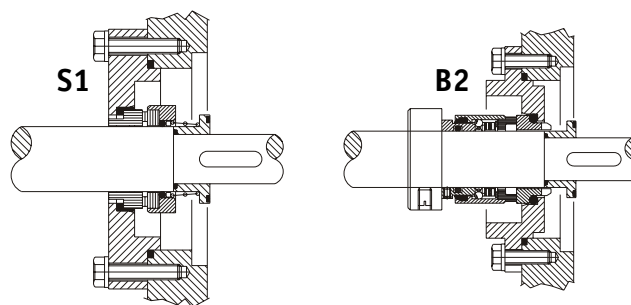
### Balanced shaft seals

Depending on make and execution applicable upto:

Max pressure: 25 bar  
Max temp.: 220 °C

## Type designation

- S1** Internal unbalanced shaft seal
- B1** Internal balanced shaft seal
- S2** External unbalanced shaft seal
- B2** External balanced shaft seal
- Q1** Double mechanical seal with quench (face to face) - unbalanced.
- Q2** Double mechanical seal with quench (face to face) - balanced at product side.
- T1** Double mechanical seal with high temperature quench (face to face) - unbalanced.
- T2** Double mechanical seal with high temperature quench (face to face) - balanced.
- F1** Double mechanical seal with flush (back to back)-unbalanced.
- F2** Double mechanical seal with flush (back to back)-2 sides balanced.
- N** Double gas seal.



## Materials

The slide ring seals can be provided in the following material combinations:

- Carbon on CrMo-steel
- Carbon on silicon carbide
- Carbon on ceramic
- Tungsten carbide on Tungsten carbide
- Silicon carbide on silicon carbide
- Carbon on Tungsten carbide
- According to client specifications

The required O-rings can be provided in:

- EPDM
- Viton
- Perbunan
- Teflon
- According to client specifications

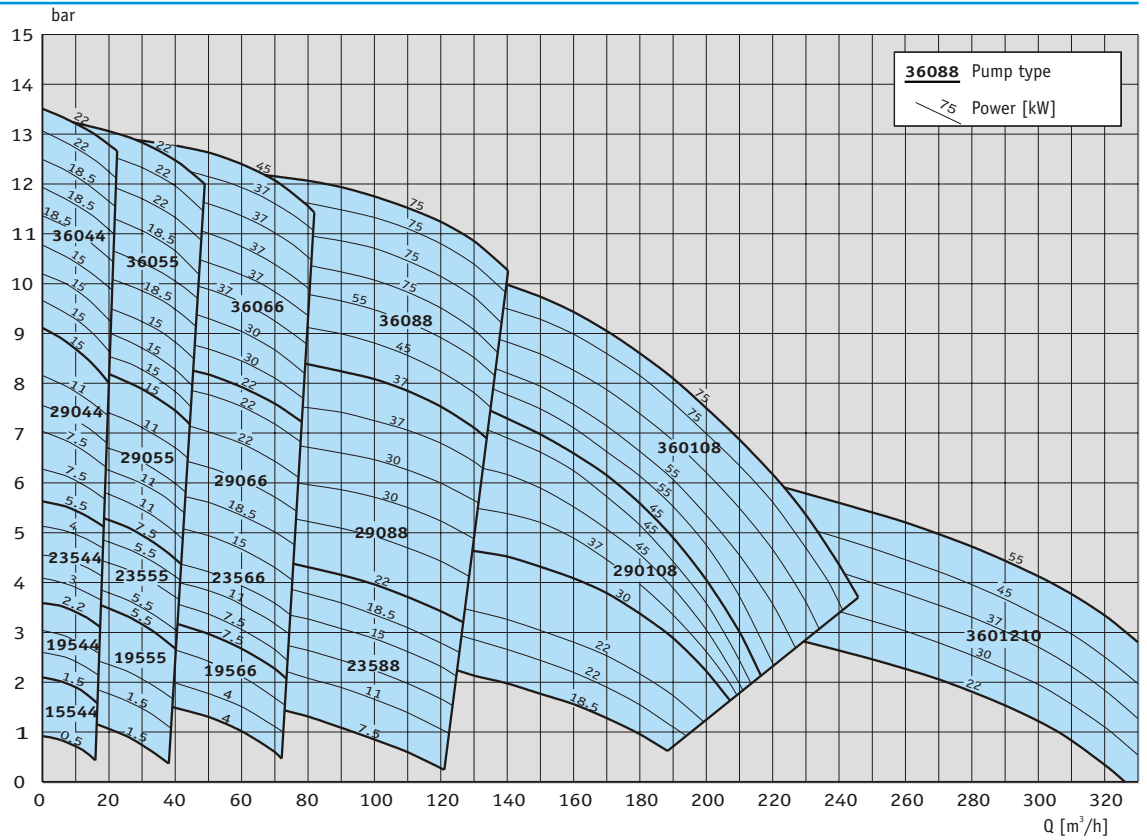
For standard all pumps are provided with internal unbalanced mechanical seal according to DIN 24960, with Carbon on Silicon carbide glide rings and EPDM O-rings.

## Options

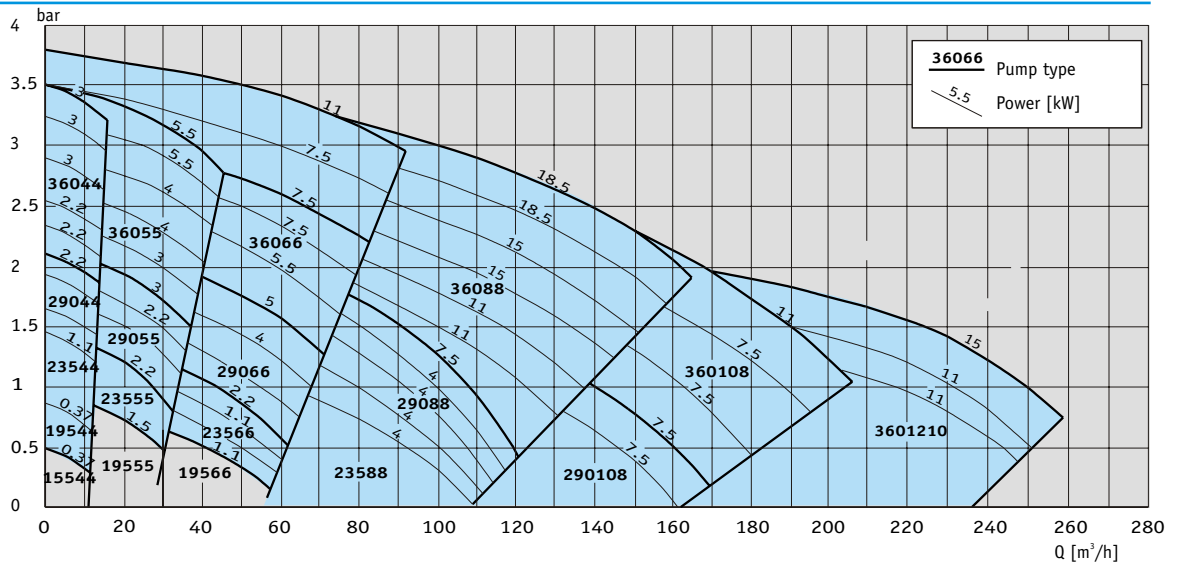
- All CP pump casings can be provided with a heating jacket.
- The position of the pump casing can be rotated in steps of 90°.

# Pump curves

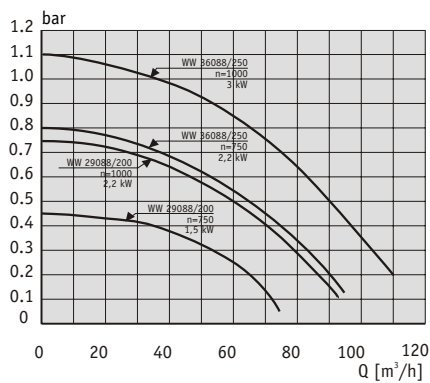
## CP - CP/ZA 3000 min<sup>-1</sup>



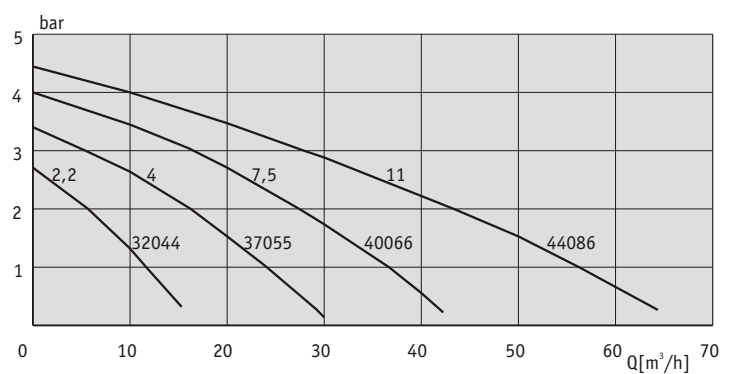
## CP - CP/ZA 1500 min<sup>-1</sup>



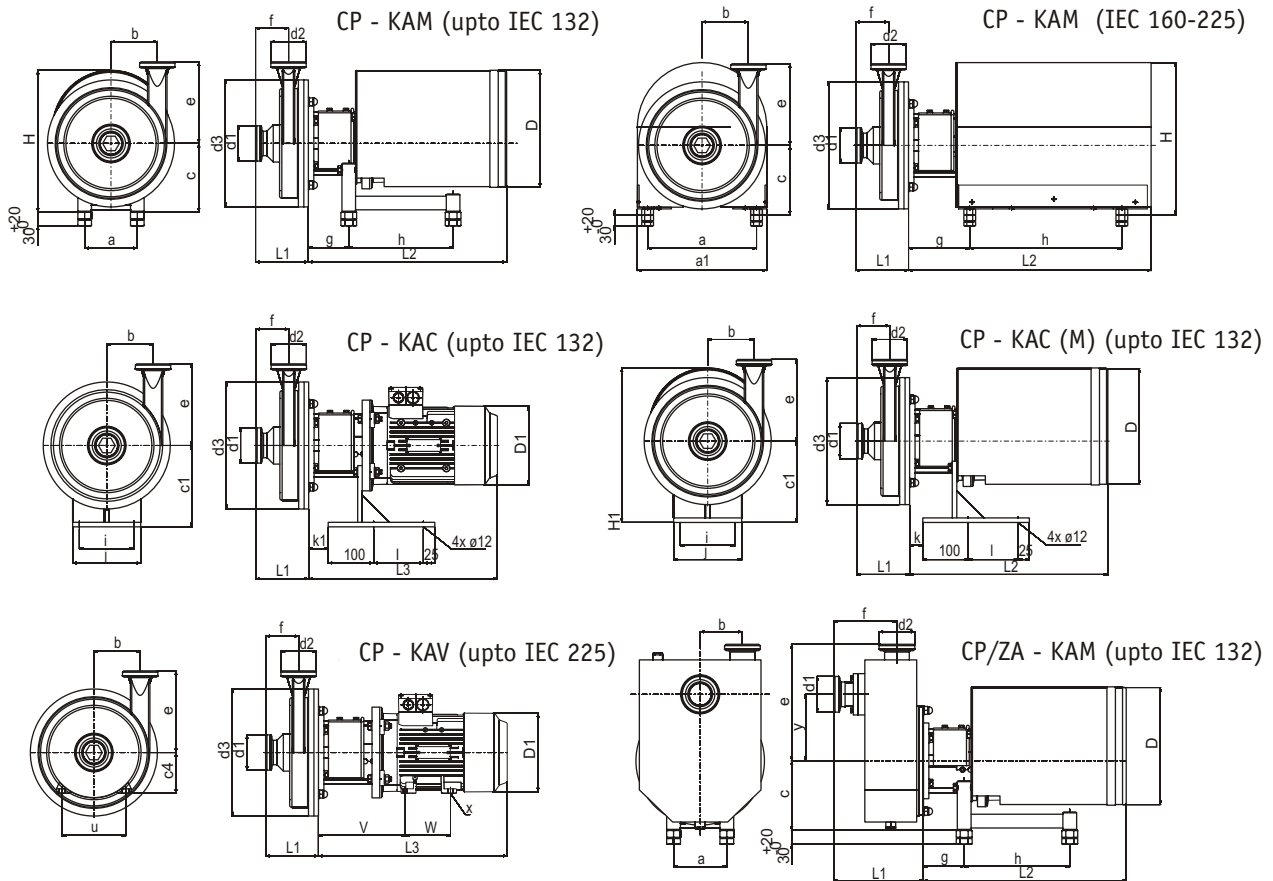
## WW 1000/750 min<sup>-1</sup>



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



# Dimensions



## CP

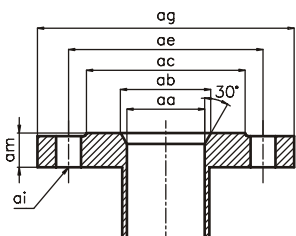
Size	d1	d2	d3	NW	b	b1	e	e2	f	f2	f3	L1	L7
15533	1,5"	1,5"	200	0	63	0	120	0	69	0	0	115	0
15544	2"	2"	200	50	63	34	140	180	69	98	49	115	132
19544	2"	2"	239	50	80	34	160	190	69	98	49	115	132
19555	2,5"	2,5"	239	65	80	41	160	190	74	98	52	120	139
19566	3"	3"	239	65	70	38	160	200	81	98	55	129	136
23544	2"	2"	280	50	102	34	180	220	69	98	49	115	132
23555	2,5"	2,5"	280	65	103	41	180	220	74	98	52	120	139
23566	3"	3"	280	80	90	45	180	225	81	98	55	129	143
23588	4"	4"	280	100	86	49	200	240	92	98	61	147	147
29044	2"	2"	339		132		200		69			119	
29055	2,5"	2,5"	339		123		200		74			124	
29066	3"	3"	339		113		200		81			133	
29088	4"	4"	339		115		215		92			147	
290108	5"	4"	339		115		215		92			159	
36044	2"	2"	410		159		230		85			138	
36055	2,5"	2,5"	410		156		230		87			143	
36066	3"	3"	410		147		250		94			152	
36088	4"	4"	410		144		245		105			167	
360108	5"	4"	410		144		245		113			179	
3601210	6"	5"	410		120		320		125			191	

## CP/ZA

Size	d1	d2	b	e	f	y	L1
15533	1,5"	1,5"	77	224	153	115	189
15544	2"	2"	77	224	153	115	189
19544	2"	2"	92	254	153	145	189
19555	2,5"	2,5"	92	258	176	145	237
19566	3"	3"	87	258	191	145	257
23544	2"	2"	113	334	153	220	204
23555	2,5"	2,5"	113	338	176	220	237
23566	3"	3"	113	339	191	220	257
23588	4"	4"	98	353	233	195	314
29044	2"	2"	138	334	153	220	204
29055	2,5"	2,5"	138	338	176	220	237
29066	3"	3"	133	339	191	220	257
29088	4"	4"	118	353	223	195	304
290108	5"	4"	118	353	223	195	304
36044	2"	2"	181	479	153	330	204
36055	2,5"	2,5"	176	483	176	330	237
36066	3"	3"	176	484	191	330	257
36088	4"	4"	161	498	233	330	257
360108	5"	4"	161	498	223	330	294

Dimensional details of Curdled milk pumps can be taken from standard build sizes 29088/36088

## DIN-flange

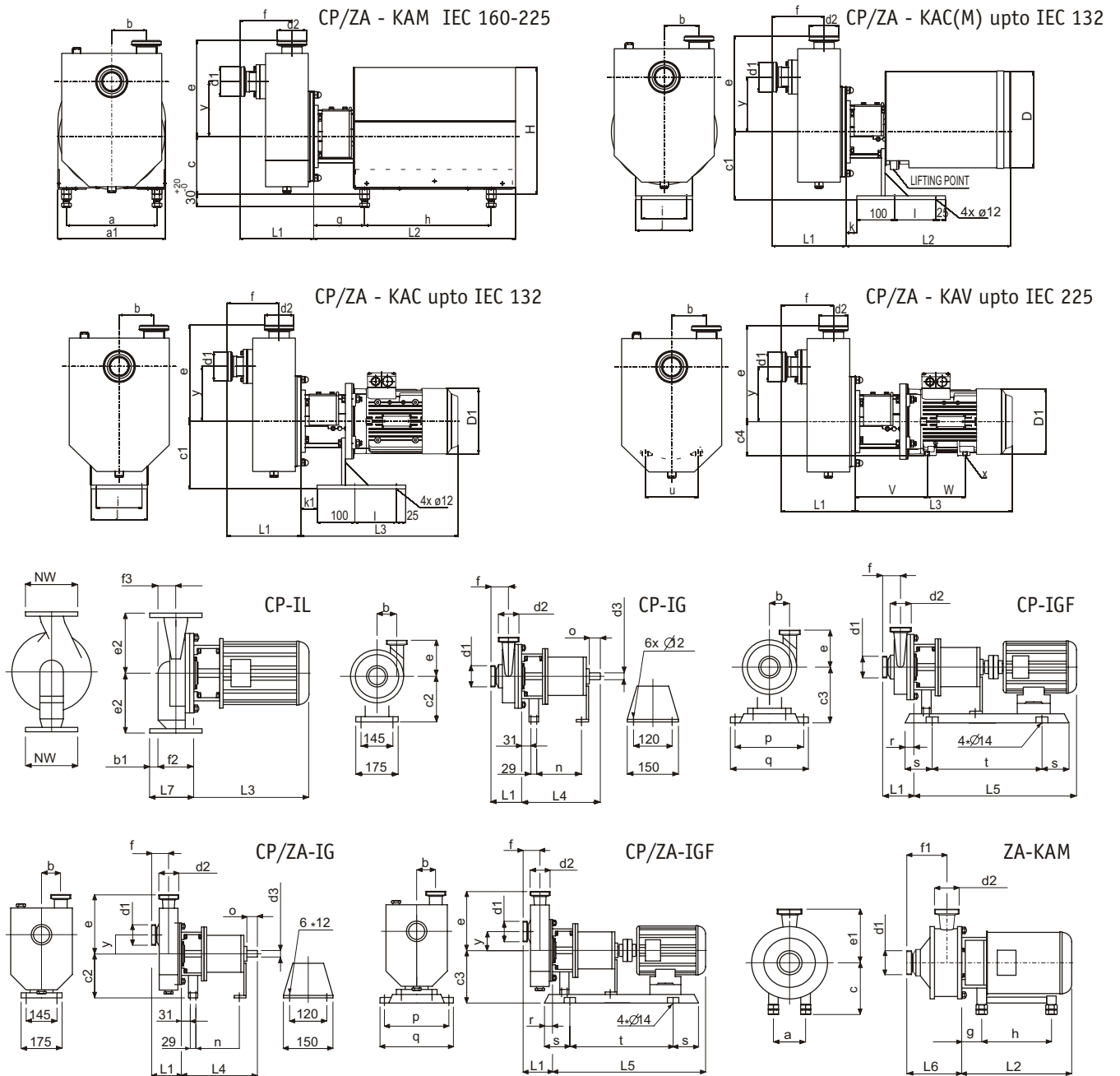


DIN 2576 ND16							
Conn.	aa	ab	ac	ae	ag	ai	am
DN25 /1"	25	25	68	85	115	4x14	16
DN32 /1 1/4"	29.3	32	78	100	140	4x18	16
DN40 /1 1/2"	35.1	40	88	110	150	4x18	16
DN50 /2"	47.8	50	102	125	165	4x18	18
DN65 /2.5"	60.5	65	122	145	185	4x18	18
DN80 /3"	73.1	80	138	160	200	8x18	20
DN100 /4"	98.6	100	158	180	220	8x18	20
DN125 /5"	125	--	188	210	250	8x18	22
DN150 /6"	150	--	212	240	285	8x22	22

## ZA

Size	d1	d2	e1	f1	L6
32044	2"	2"	156	156	179
37055	2,5"	2,5"	178	172	200
40066	3"	3"	198	191	223
44086	4"	4"	211	207	239

# Dimensions



All pump and electric motor dimensions are stated separately.  
 With these data the dimensions of the entire pump unit can be determined  
 once the desired combination of pump and electric motor is known.

## Electric motor dimensions

Motor size IEC	Power [kW]				a	a1	c	c1	c4	D	D1	g	g1	h	H	H1	i	j	k	k1	l	u	V	W	x	L2	L3
	3000	1500	1000	750																							
80M	0,75	0,55	0,37	0,18	116		151	180	80	255	156	92	106	230	279	307	120	150	29	43	110	125	185	100	10	427	368
80M	1,1	0,75	0,55	0,25	116		151	180	80	255	156	92	106	230	279	307	120	150	29	43	110	125	185	100	10	427	368
90S	1,5	1,1	0,75	0,37	116		151	180	90	255	174	92	106	230	279	307	120	150	29	43	110	140	191	100	10	427	416
90L	2,2	1,5	1,1	0,55	116		151	180	90	255	174	92	106	230	279	307	120	150	29	43	110	140	191	125	10	427	416
100L		2,2		0,75	152		164	194	100	305	195	102	116	300	317	347	140	180	39	53	135	160	208	140	12	497	458
100L	3	3	1,5	1,1	152		164	194	100	305	195	102	116	300	317	347	140	180	39	53	135	160	208	140	12	497	458
112M	4	4	2,2	1,5	152		164	194	112	305	220	102	116	300	317	347	140	180	39	53	135	190	215	140	12	497	479
132S	5,5	5,5	3	2,2	186		187	219	132	355	259	122	136	360	365	394	160	230	59	73	165	216	254	140	12	567	539
132S		7,5			186		187	219	132	355	259	122	136	360	365	394	160	230	59	73	165	216	254	140	12	567	539
132M		7,5	5,5	3	186		187	219	132	355	259	122	136	360	365	394	160	230	59	73	165	216	254	178	12	567	539
160M	11	11	7,5	4	320	390	183		160	310	196			447	443						254	308	210	14	730	679	
160M		15		5,5	320	390	183		160	310	196			447	443						254	308	210	14	730	679	
160L	18,5	15	11	7,5	320	390	183		160	310	196			447	443						254	308	254	14	730	679	
180M	22	18,5			320	390	203		180	364	196			447	520						279	321	241	14	860	759	
180L		22	15	11	320	390	203		180	364	196			447	520						279	321	241	14	860	759	
200L	30	30	18,5	15	370	445	223		200	402	198			520	570						318	343	305	18	865	820	
200L		37		22	370	445	223		200	402	198			520	570						318	343	305	18	865	820	
225M	45				416	490	248		225	445	213			521	615						356	357	311	18	900	856	

# Applications

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## Food Industry

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- **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

The Pomac delivery program - besides the pump assortment in this brochure - comprises an extensive choice of:

- lobe pumps
- screw pumps
- impeller pumps
- magnet driven pumps

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

Pomac Pumps produces and supplies a complete range of stainless steel centrifugal and positive displacement pumps for the international market. These pumps are used in food and drug industries as well as in pharmaceutical and chemical industries.

The Pomac organisation is characterised by a high degree of customer focussing, flexibility, good service and fast deliveries.

Pomac guarantees high quality and reliability in every detail!

## Pharmaceutical Industry and Biotechnology

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

### Typical pharmaceutical applications

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

The logo for Pomac Pumps features the company name in a bold, blue, sans-serif font. A thick, blue, curved underline is positioned beneath the text, starting under 'Pomac' and extending to the right under 'Pumps'.

#### **Pomac b.v**

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