

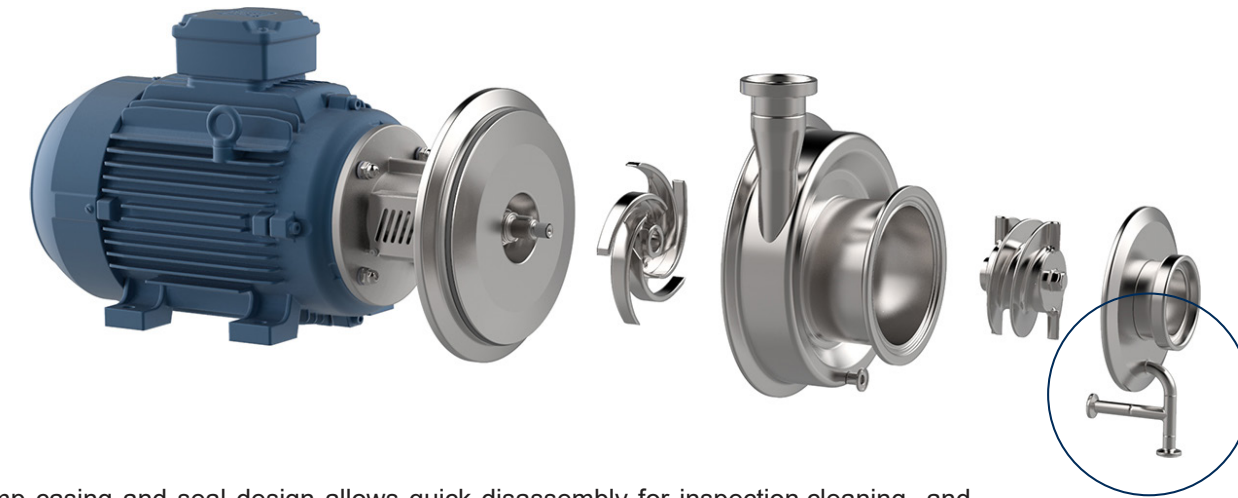
# CNH series

Close-coupled construction made entirely from stainless steel with standard motor, shaft with compression locking, internal seal and open impeller based on CN series pumps.

Series of pumps available in two different versions of liquid recirculation:

Version with drainage feature guarantees complete emptying of the pump.

Version without drainage.



The clamp casing and seal design allows quick disassembly for inspection, cleaning and maintenance. Protective motor shroud.



Investment cast double vane rotor for creating the liquid ring inside the front section of the pump body.



Open reverse vane impeller with increased dimensions, designed in accordance with performance optimization criteria.

## TECHNICAL DATA CNH series

Flow rate up to 65 m<sup>3</sup>/h  
Head values up to 55 m  
Maximum operating pressure 10 bar up to 100°C  
Temperature range -10°C + 121°C

### Seals:

Hygienic mechanical seals with seat standardized to EN 12756, ISO 3069 standards

### Seal materials (FDA, Regulation (EC) No. 1935/2004):

Ethylene propylene (EPDM)  
Special fluorocarbon seal  
Fluorocarbon seal (FPM - FKM)  
FFPM - FFKM

### Connections:

DIN - SMS - IDF - BS / RJT - DS - CLAMP and EN 1092-1 PN 16 flanges and, on request, available in compliance with international standards.



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DCATLONCHGB 28/02/2023



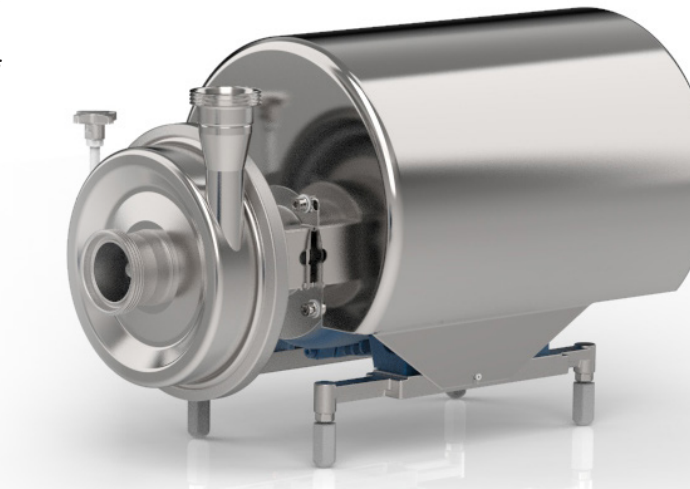
## CENTRIFUGAL PUMPS CN series

Closed coupled single-stage centrifugal pumps. A range of 6 models with open impellers, independent shafts and IEC standard motors. Optimised design to ensure high levels of hygiene - The absence of product hold-up and no dead-legs ensures efficient cleaning by standard CIP methods and effective sterilisation by SIP. Wetted parts are in pressed polished plate and investment cast electropolished CF3M 1.4409 / AISI 316L (1.4404) stainless steel. Investment cast and electro-chemical polishing. Internal finishes of 0,5 micron Ra are available on request.

**ATEX-compliant versions also available on request.**

### Applications

Food processing, dairy, beverage, chemical, cosmetics and pharmaceutical industries. The open impeller allows a large range of products such as purified water, juices, creams, ice-cream mix, milk, wine, spirits, whey and WFI to be safely transferred.



## SELF-PRIMING CENTRIFUGAL PUMPS CNH series

The CNH series is made up of single-stage centrifugal pumps with self-priming device, axial suction port, open centrifugal impeller and independent shaft.

The self-priming device is made up of a helical rotor installed in front of the impeller and a rotor chamber which is off-centre in relation to the axis of the centrifugal stage.

The series is made up of range of 2 models with open impeller, independent shaft and standard IEC motor.

Mixed construction: pressed/cast stainless steel - AISI 316L (1.4404) - CF3M (1.4409).

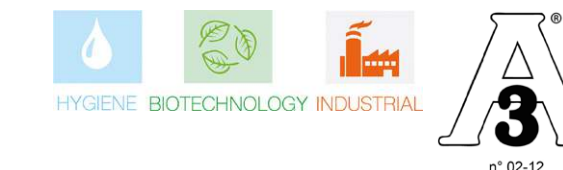
Investment casting and electrochemical polishing treatment guarantee excellent levels of surface finish.

The pump incorporates a self-priming device which gives the centrifugal pump its suction capacity; this component guarantees continuous pump operation in applications handling biphasic fluids.

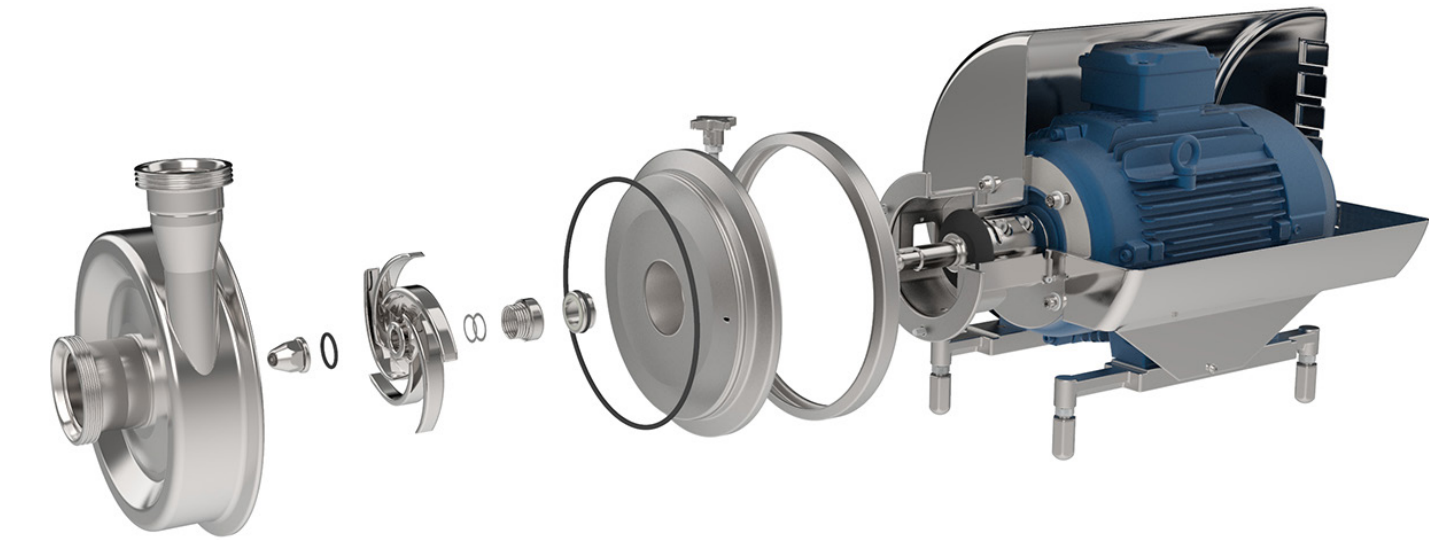
**ATEX-compliant versions also available on request.**

### Applications

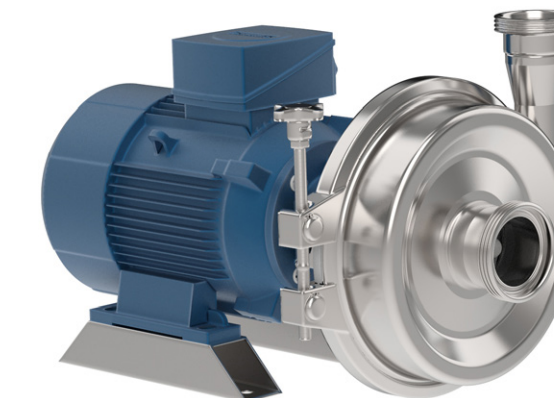
CNH self-priming centrifugal pumps can be used in industrial applications, for example in the food, dairy and beverage sectors, for tank emptying operations, CIP solution recirculation and for handling liquids with a high air content.



# CN series



All stainless construction, with standard motor, separate pump shaft with clamp coupling, internal product seal and an open impeller. The clamp casing and seal design allow quick disassembly for inspection, cleaning and maintenance. It also enables the delivery port to be rotated to any position for easy installation and drainage. Motor shroud.



Pump without shroud and stainless steel motor shims.



Open impeller with reversed blades with vast expansion designed to optimize the hydraulic efficiency.

## TECHNICAL DATA CN series

Flow rates up to 110 m<sup>3</sup>/h  
Heads up to 60 m  
Maximum operating pressure 10 bar up to 100°C  
Temperature range -10°C + 121°C  
High performance, with low NPSH values.

### Mechanical seals:

With seats to EN 12756, ISO 3069 standards.

### Connections:

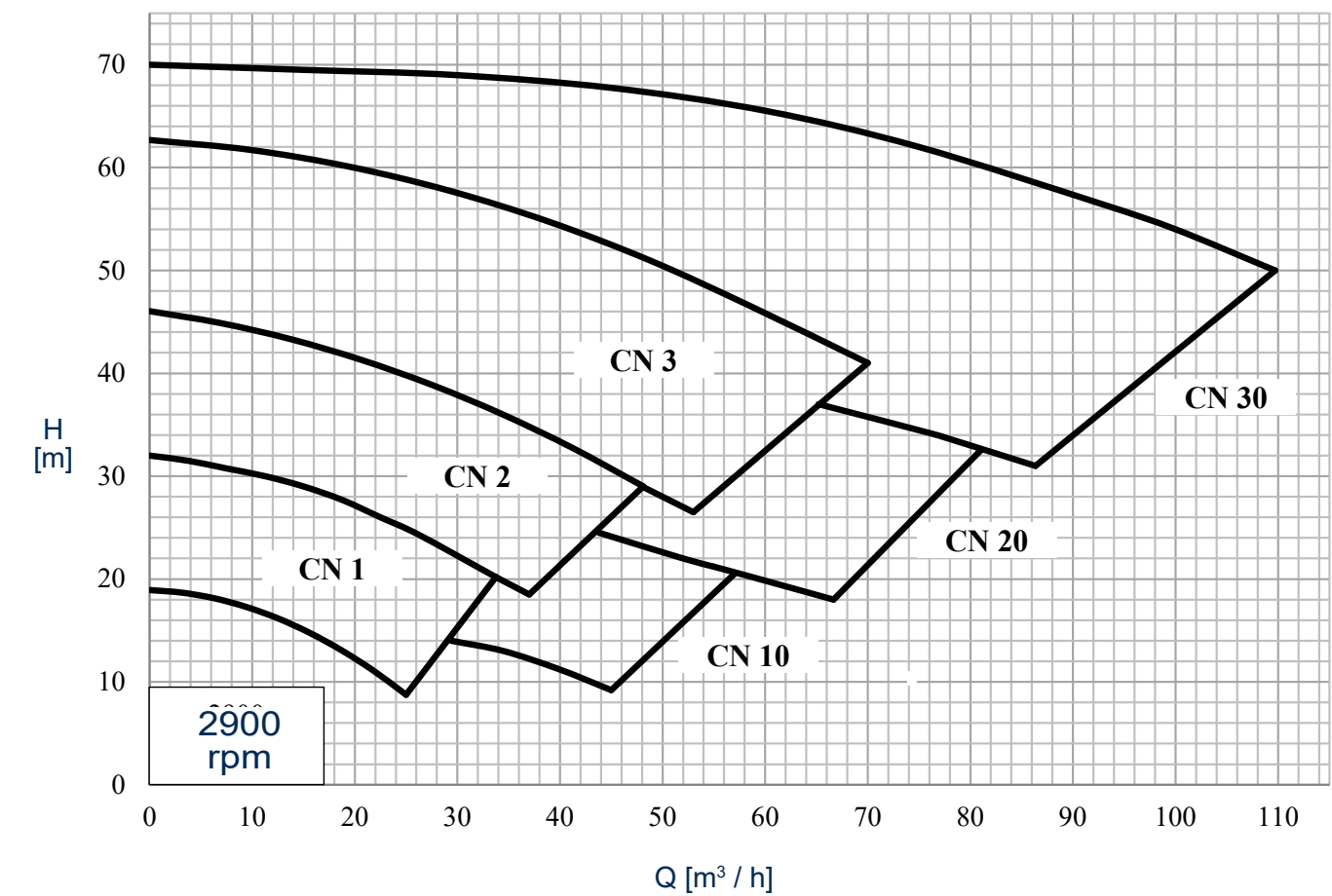
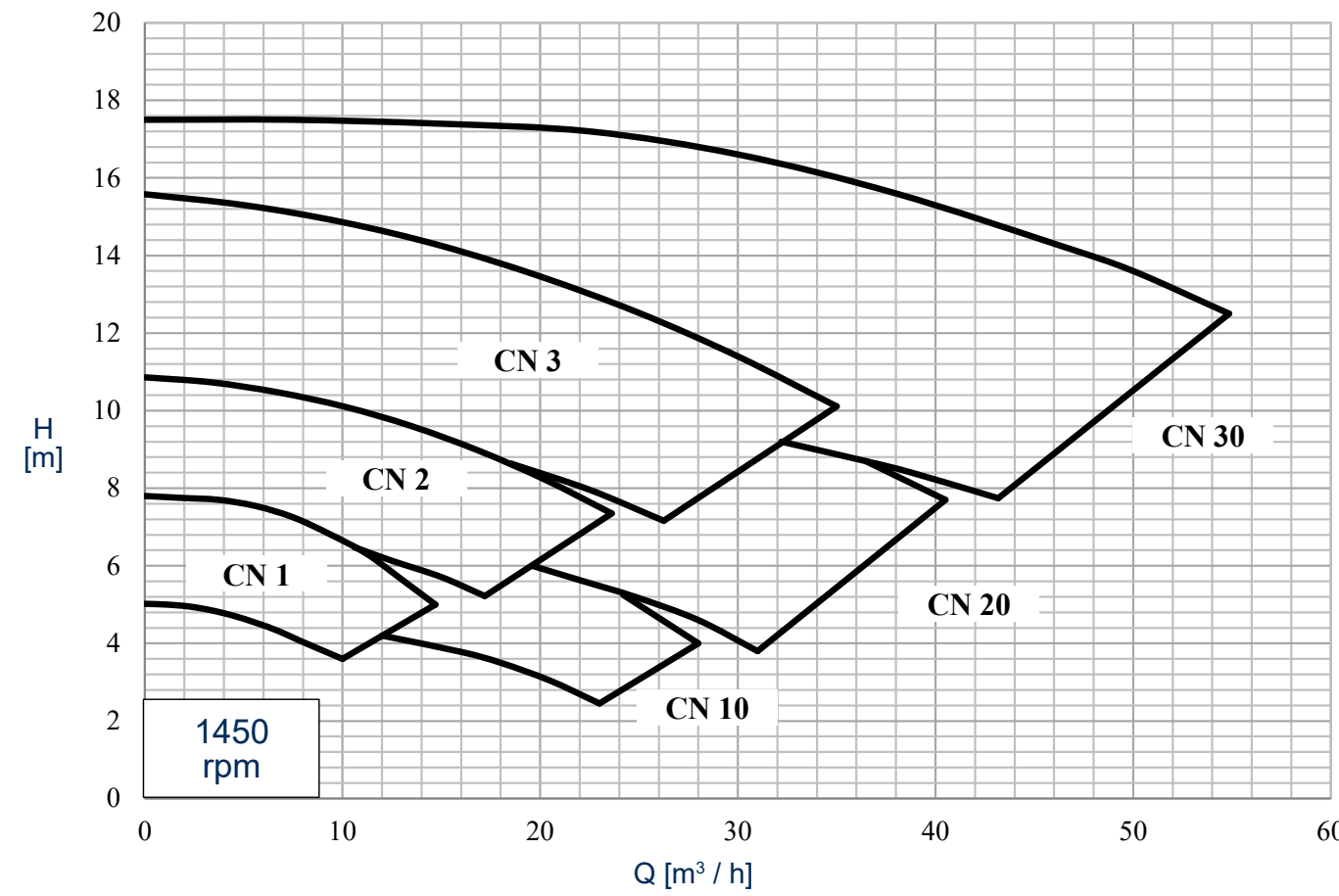
DIN - SMS - IDF - BS / RJT - DS - CLAMP and EN1092-1 PN16 flanges suitable for all international standards.

### Elastomers (FDA Regulation (EC) No. 1935/2004):

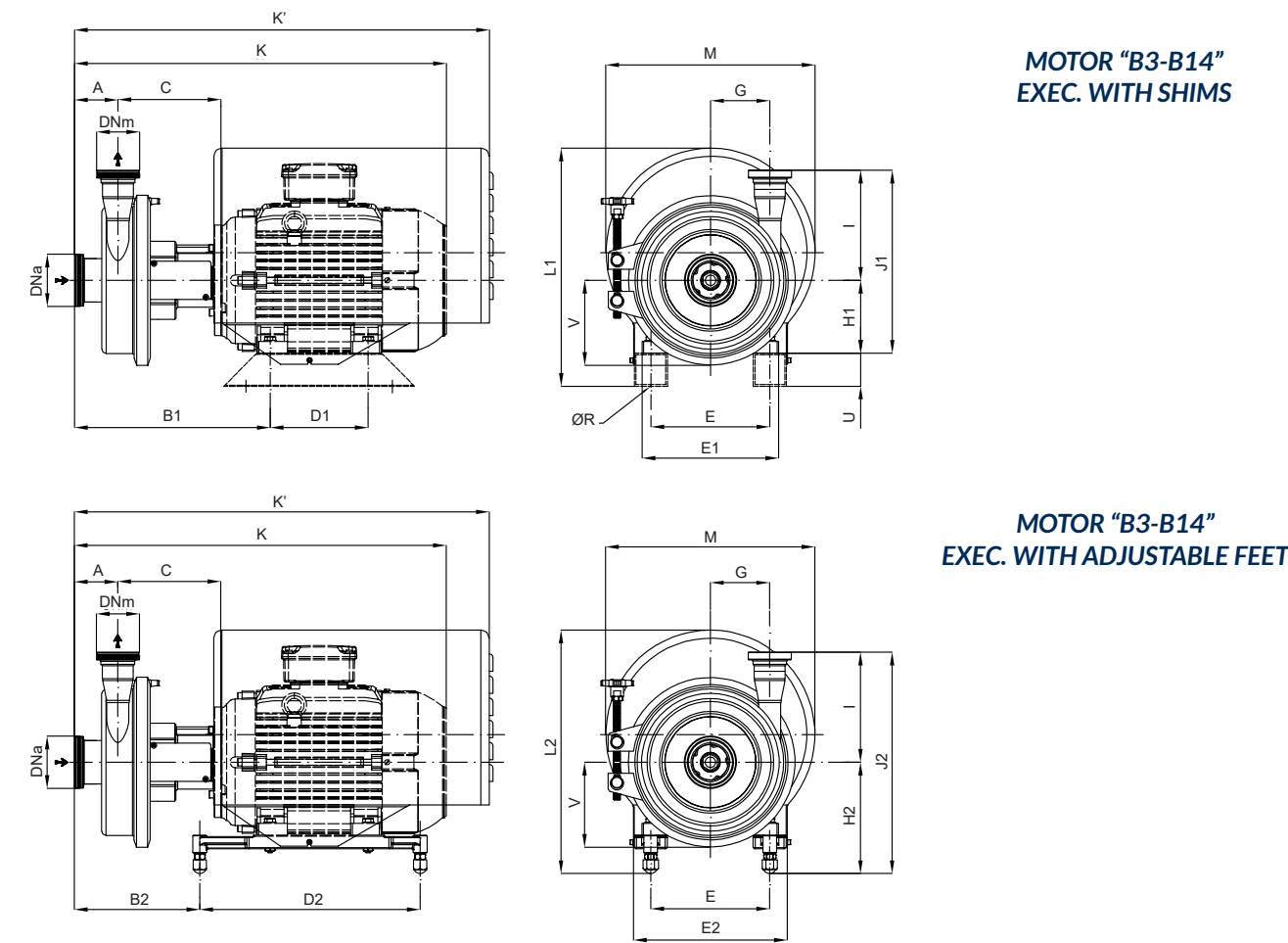
Ethylene propylene (EPDM)  
Special fluorocarbon seal  
Fluorocarbon seal (FPM - FKM)  
FFPM - FFKM



**GENERAL DIAGRAMS CN series**  
(Performance applies to H<sub>2</sub>O at 20 °C, 1013 mbar, Data not binding)

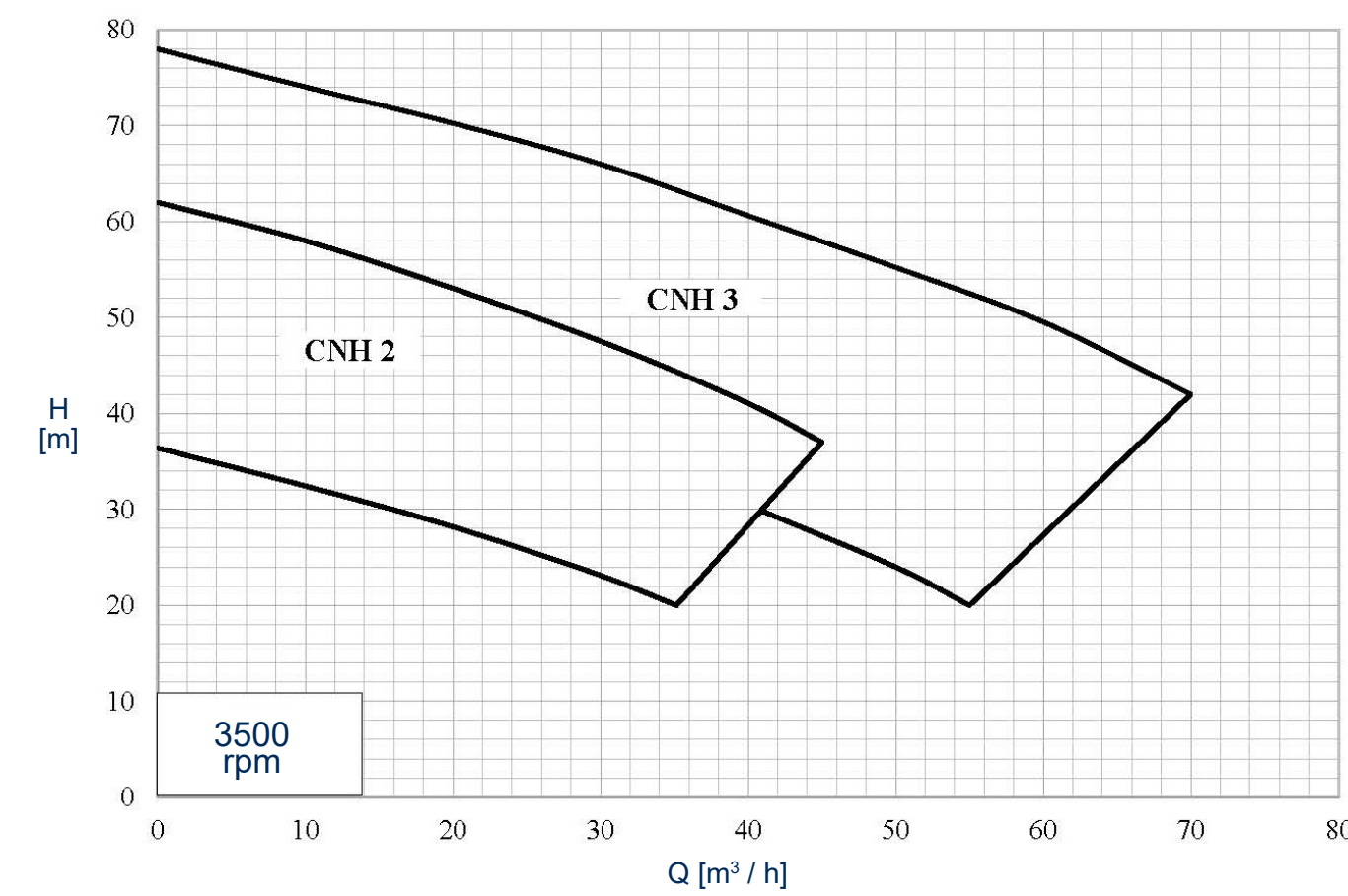
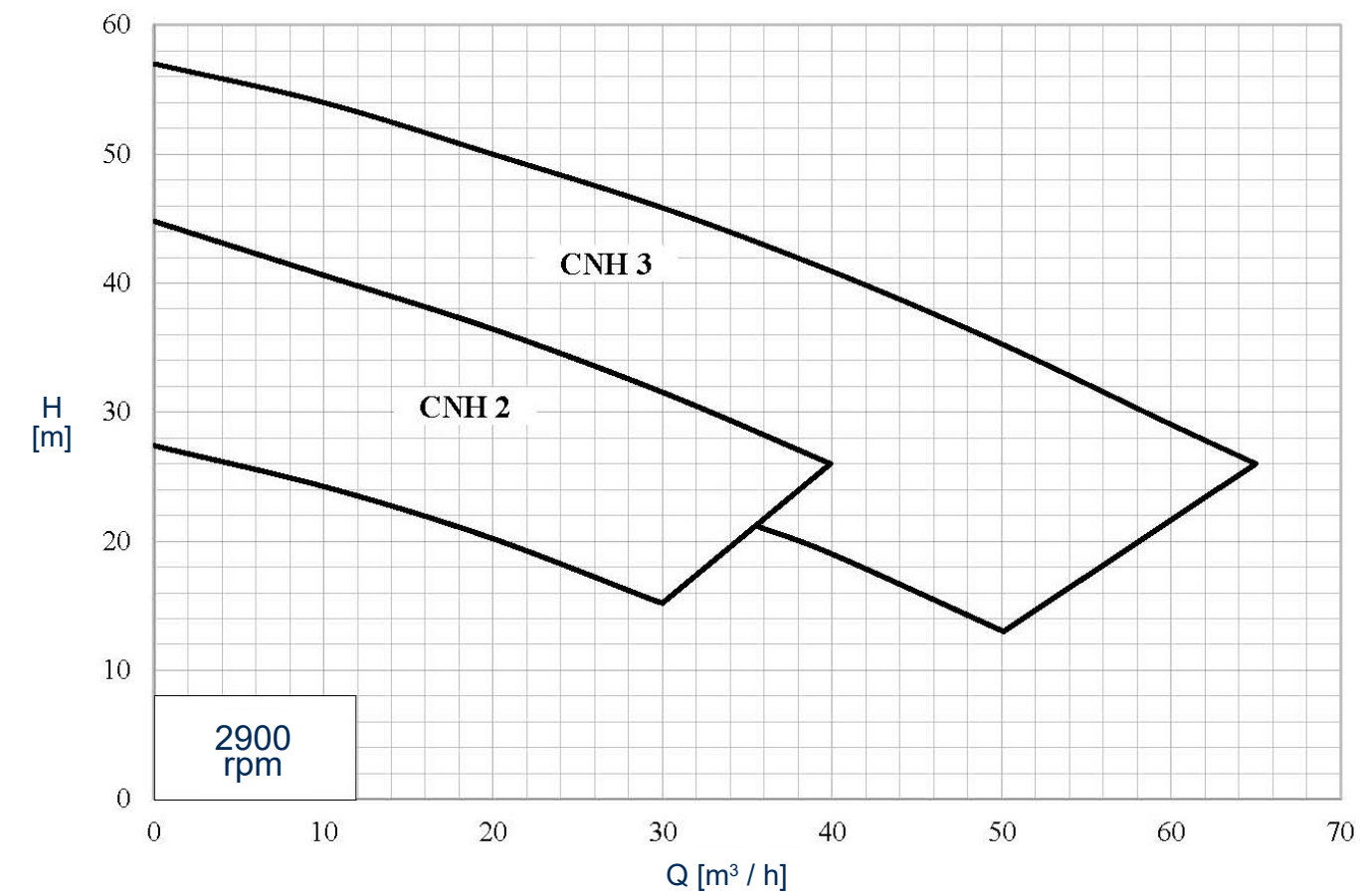


**OVERALL DIMENSIONS CN series**  
Dimensions not binding - DN = DIN 11851 male threaded connections with standard IEC/EN motors

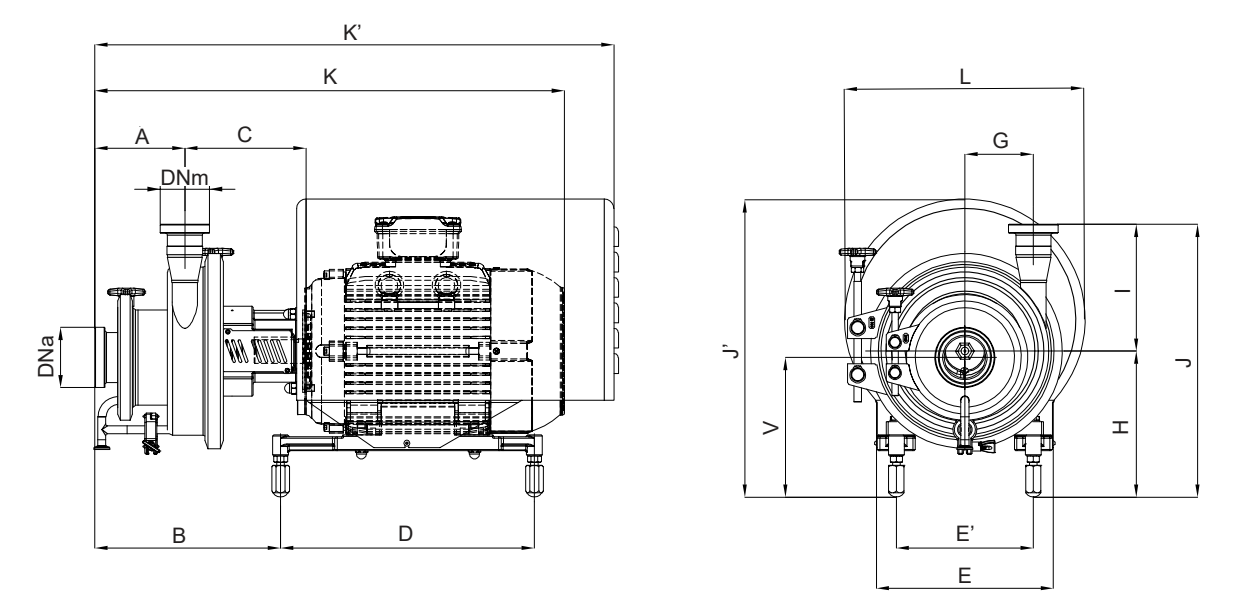


Pumps	IEC motors size:	DNa	DNm	A	B1	B2	C	D1	D2	E	E1	E2	G	H1	H2	K	K'	ØR	I	J1	J2	L1	L2	M	U	V						
CN 1	80	50	40	73	276	186	155	100	220	125	155	160	86	80	158	462	-	10	183	263	341	-	-	-	40	127						
	90				282	210	125	270	140	165	210	90		160	505,5	597	100	170		572	674	112	182	592	295		365	401,5	421,5	369	50	
	100				319	247	140	285	160	196	240	112		182	592	240	112	182		592	744	12	200	300	370		389,5	432,5	369	50	154	
	112				326	239	185	315	190	226	240	132		202	666	744	12	200		312	382	600	12	255	332		402	432	442	380	60	179
	132				345	218	178	400	216	256	276	160		210	821	912	14	255		360	410	821	14	255	360		410	536,5	526,5	473	70	179
CN 2	80	65	50	79	286	196	159	100	220	125	155	160	108	80	158	478	-	10	183	280	358	-	-	-	40	154						
	90				292	219	125	270	140	165	210	90		160	515	607	100	170		582	684	12	200	300	370		389,5	432,5	369	50	154	
	100				326	249	140	285	160	196	240	112		182	600	744	12	200		312	382	600	12	255	332		402	432	442	380	60	179
	112				336	249	189	315	190	226	240	132		202	675	754	14	255		360	410	821	14	255	360		410	536,5	526,5	473	70	179
	132				404	251	219	254	475	254	300	326		160	210	821	912	14		255	360	410	821	14	255		360	410	536,5	526,5	473	70
CN 3	80	80	65	81	295	223	159	125	270	140	165	210	129	90	160	521	611	10	183	315	415	317,5	378,5	303	40	179						
	90				332	260	178	400	216	256	276	112		182	606	688	12	200		355	425	389,5	440,5	369	50		154					
	100				339	252	189	315	190	226	240	132		202	675	754	14	255		360	410	821	14	255	360		410	536,5	526,5	473	70	179
	112				358	231	178	400	216	256	276	132		202	678	758	14	255		387	457	432	473	380	60		179					
	132				407	217,5	219	254	475	254	300	326		160	210	823	793	15		255	415	465	536,5	536,5	473		70	179				
CN 10	80	65	50	79	287	197	155	100	220	125	155	160	80	80	158	474	-	10	183	280	338	-	-	-	40	127						
	90				286	215	125	270	140	165	210	90		160	517	608	100	170		583	686	12	200	270	340		317,5	347,5	303	40	127	
	100				320	252	140	285	160	196	240	112		182	601	686	12	200		280	350	389,5	409,5	369	50		154					
	112				237	244	185	315	190	226	240	132		202	676	756	14	255		312	382	432	442	380	60		179					
	132				346	224	178	400	216	256	276	160		210	821	912	14	255		340	390	536,5	340	473	70		179					
CN 20	80	80	65	84	299	299	145	100	220	125	155	160	98	80	158	485	606	10	183	298	376	-	-	-	40	179						
	90				305	305	125	270	140	165	210	90		160	521	619	100	170		594	695	12	218	308	378		317,5	347,5	303	40	179	
	100				341	269	140	285	160	196	240	112		182	612	705	12	200		318	388	355	432,5	369	50		154					
	112				348	261	175	315	190	226	240	132		202	687	765	14	255		330	420	432	442	380	60		179					
	132				416	263	205	254	475	254	300	326		160	210	832	923	14		255	378	428	546,5	526,5	473		70	179				
CN 30	80	100	80	88	449	198	225	279	600	282,5	350	354,5	127	80	160	534	624	10	183	398	458	-	-	-	60	179						
	90				310	238	147	125	270	140	165	210		90	160	534	624	10		200	363	433	317,5	378,5	303		40	179				
	100				347	275	140	285	160	196	240	112		182	618	701	12	200		373	443	389,5	440,5	369	50		154					
	112				354	267	177	315	190	226	240	132		202	693	771	14	255		385	455	401,5	452,5	369	50		154					
	132				423	269	207	254	475	254	300	326		160	210	800	929	14		255	405	475	432	473	380		60	179				
160	423	269	207	254	475	254	300	326	160	210	800	929	14	255	433	483	546,5	536,5	473	70	179											
180	452	201	227	279	600	282,5	350	354,5	180	240	918	-	15	255	453	513	-	-	-	60	179											

**GENERAL DIAGRAMS CNH series**  
(Performance applies to H<sub>2</sub>O at 20 °C, 1013 mbar, Data not binding)



**OVERALL DIMENSIONS CNH series**  
Dimensions not binding - DN = DIN 11851 female connection with standard IEC/EN motors



Pump type	IEC motor dimensions:	DNa	DNm	A	B	C	D	E	E'	G	H	K	K'	I	J	J'	L	V						
CNH 2	112	65	50	142	293	189	400	279	279	108	205	666	749	200	405	445	369	195						
	132 S																		702	818	430	470	380	220
	132 M																		740	818	430	470	380	220
CNH 3	112	80	65	164,5	314	188	400	216	216	129	230	723	840	255	455	470	380	217						
	132 S																		761	840	485	597	473	267
	160																		800	929	485	597	473	267