

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.



HYGIENE



BIOTECHNOLOGY



INDUSTRIAL



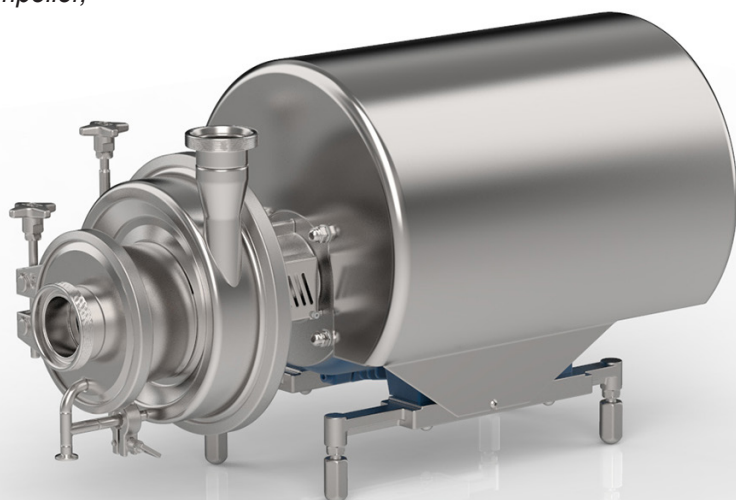
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Mixed construction: pressed/cast stainless steel - AISI 316L (1.4404) - CF3M (1.4409).

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.



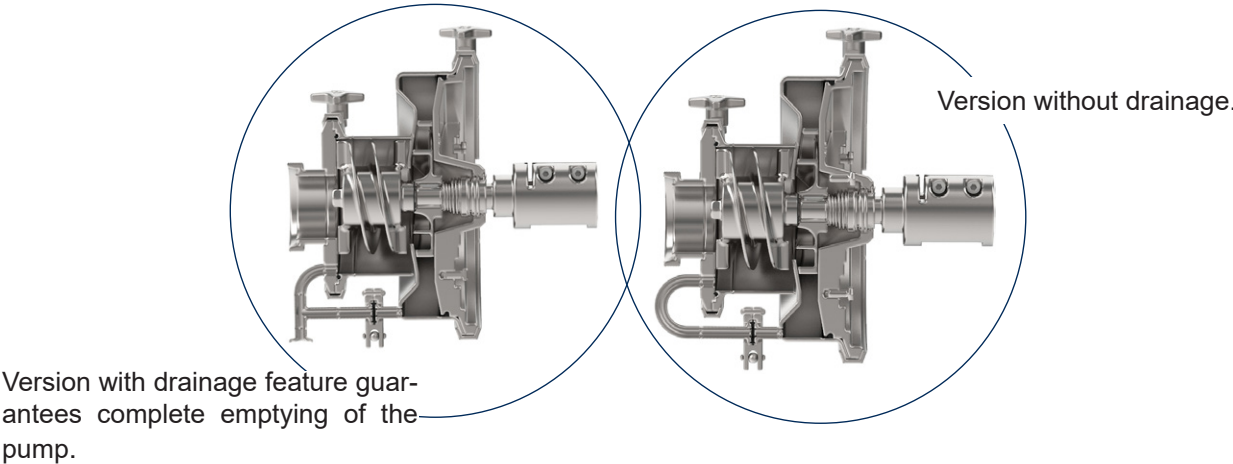
Applications

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.

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



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



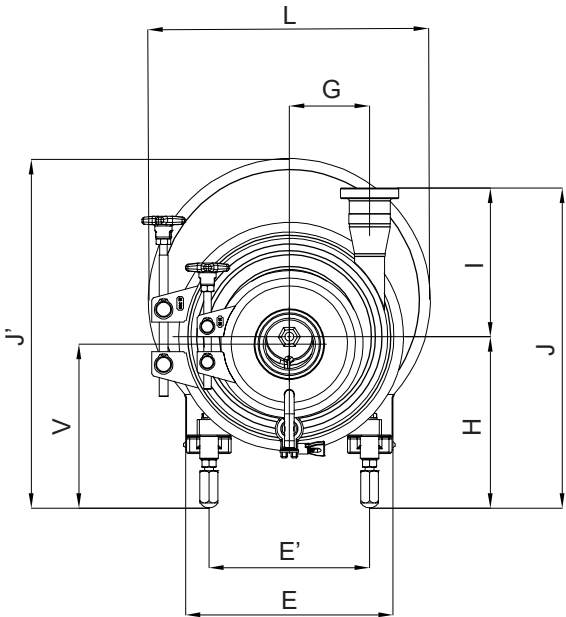
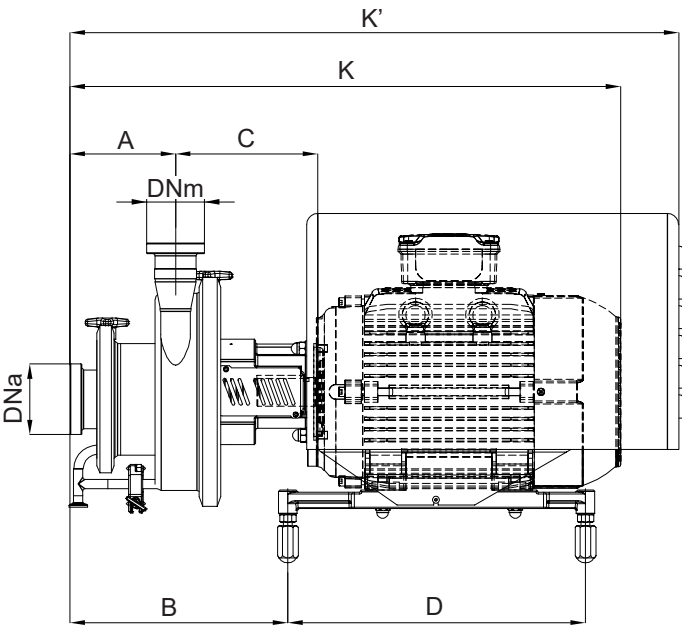
Investment cast double vane rotor for creating the liquid ring inside the front section of the pump body.



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

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	314	189	315	230	180	108	205	666	749	200	405	445	369	195
	132 S				293		400	279	279		230	702	818		430	470	380	220
	132 M											740						
CNH 3	132 S	80	65	164,5	314	188	400	216	216	129	230	723	840	255	455	470	380	217
	132 M				301	218	475	270	333		280	761			485	597	473	267
	160											867	998					

TECHNICAL DATA CNH series

Flow rate up to 65 m³/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

Connections:

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

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

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

AUTOMATION ACCESSORIES



Pump with integrated inverter and pressure sensor

Compact and functional application which includes a pressure sensor installed on the pump delivery so as to modulate its speed according to the pressure value detected.

The sensor is powered directly by the inverter and communicates with it via an analog signal. This allows a continuous modulation of the pump speed when the pressure detected at the delivery is within the range set on the sensor. Below the minimum pressure, the pump speed is not modulated, while once the maximum pressure is reached, the pump stops.

The pressure sensor can be parameterized through the IO-LINK® communication protocol with a specific interface and a dedicated software. The interface is available upon specific request.

Pump with integrated inverter and flow meter

Electromagnetic flow meter for conductive liquids. It is able to measure the instantaneous flow rate and temperature of the fluid and also acts as a liter counter (totalizer).

Thanks to the instrument's ability to generate digital, analog and pulse output signals, it allows integration into a wide variety of automations. It is possible to modulate the pump speed according to the set flow rate value, program automated filling cycles and communicate with PLC or inverter.

The flow meter features an IO-LINK® communication interface for direct access to process and diagnostic data and Bluetooth® connection via App.



GENERAL DIAGRAMS CNH series
(Performance applies to H₂O at 20 °C, 1013 mbar, Data not binding)

