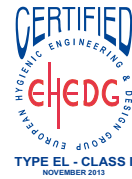




Hygienic Centrifugal pumps



CSA Series

CSA series pumps are designed, tested and approved to EHEDG (European Hygienic Engineering & Design Group) hygiene protocols and to US 3A standards. Used mainly in the foodstuffs and pharmaceutical industries, they fulfil the highest sanitary requirements.

The modular construction enables CSF to provide the most suitable pump. Optimised performance and low NPSH requirements are integral to the design of CSA Series pumps.

Standard design

Open impeller.

Wetted parts in CF-3M 1.4404 / AISI 316L stainless steel, investment cast and electro-chemically polished.

Special internal finish to 0,8 micron Ra.

Adjustable stainless steel feet.

Flow rates up to 300 m³/h, heads up to 100 m (10 bar); low NPSH requirements.



Sanitary Self-Priming Pumps



n° 02 - 11 739

ASH series

ASH Series pumps are approved to the latest US 3A sanitary standards; ideal for systems where compliance to the most strict hygiene regulations is essential.

The ability of ASH pumps to repeatedly create a vacuum makes them ideal for applications where air or gas is entrained in the pumped liquid – Perfect for CIP scavenge and duties where the inlet pipework is only partially filled with fluid, including foaming products.

Manufactured for a wide range of requirements in the food, beverage and pharmaceutical process sector. This market leading design includes the latest technologies and construction materials.

Standard design

Wetted parts in CF-3M 1.4404 / AISI 316L stainless steel. Investment cast and electro-chemically polished.

Special internal finish 0,8 micron Ra.

Adjustable stainless steel feet.

Flow rates up to 40 m³/h, heads up max. 35 m (3,5 bar) (50 Hz).



CSA series

Closed coupled sanitary centrifugal pumps with open impeller and independent shaft support.

Suitable for motors in compliance with the following standards:
 IEC 34-1
 VDE 0530T1
 NF C51-111
 BS5000 PART 99
 NEMA NG1 PART. I

Greased lubricated bearings.
 Clamp design casing and seal. Easy disassembly, quick inspection, cleaning and maintenance. Rotation of the delivery port for optimised installation.



TYPE EL - CLASS I
 NOVEMBER 2013



CSA SERIES CERTIFIED TO EHEDG / 3A

Seals:

Single external mechanical seal
 Double flushed (axial + radial) mechanical seal

CSA SERIES CERTIFIED TO 3A

Seals:

Protected, balanced and bi-directional internal mechanical seal with seats according to EN 12756, ISO 3069 standards.

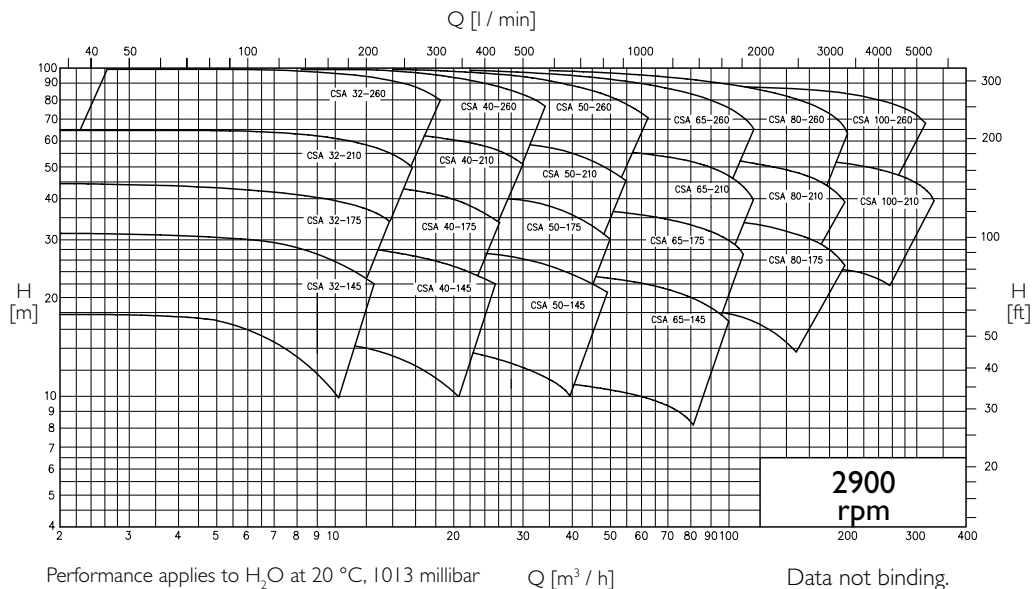
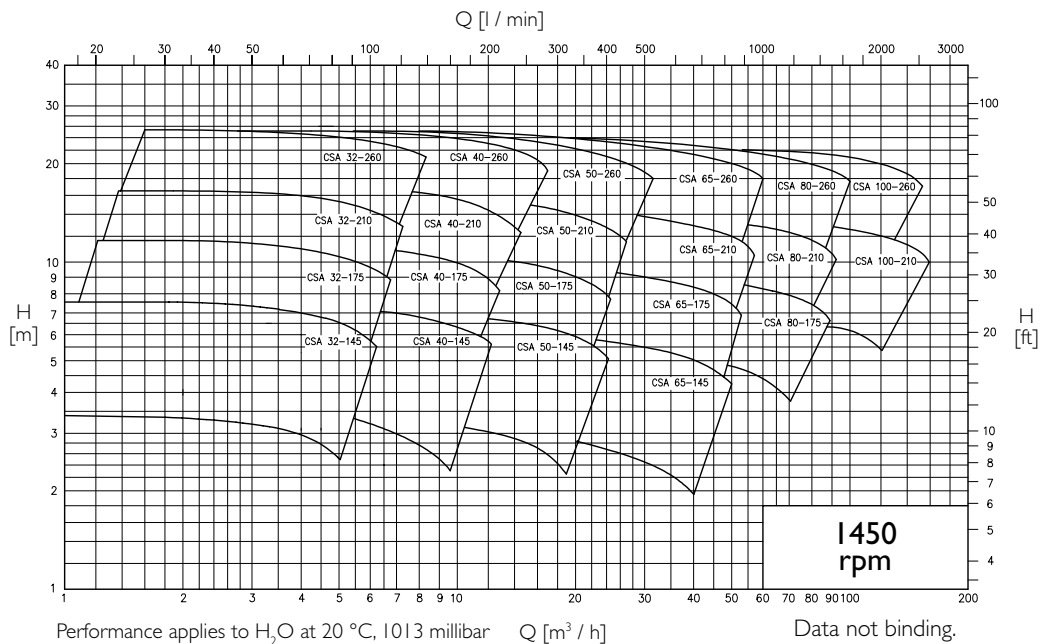
Elastomers (certified to FDA - 3A - USPVI):

EPDM
 FLUOROCARBON - (FPM *DIN/ISO*), (FKM *ASTM*)
 P.T.F.E. (FEP)

Connections:

CLAMP
 DIN 11864
 Others on request

GENERAL DIAGRAMS



ASH series

Close coupled sanitary self-priming pumps with independent shaft support.

Suitable for motors in compliance with the following standards:
 IEC 34-1
 VDE 0530T1
 NF C51-111
 BS5000 PART 99
 NEMA NG1 PART. I



Greased lubricated bearings.
 Clamp design casing and seal. Easy disassembly, quick inspection, cleaning and maintenance.

Seals:

Single internal mechanical seal, protected, balanced and bi-directional, with seats according to EN 12756, ISO 3069.

Elastomers (certified to FDA - 3A - USP VI):

EPDM
 FLUOROCARBON - (FPM *DIN/ISO*), (FKM *ASTM*)
 P.T.F.E. (FEP)

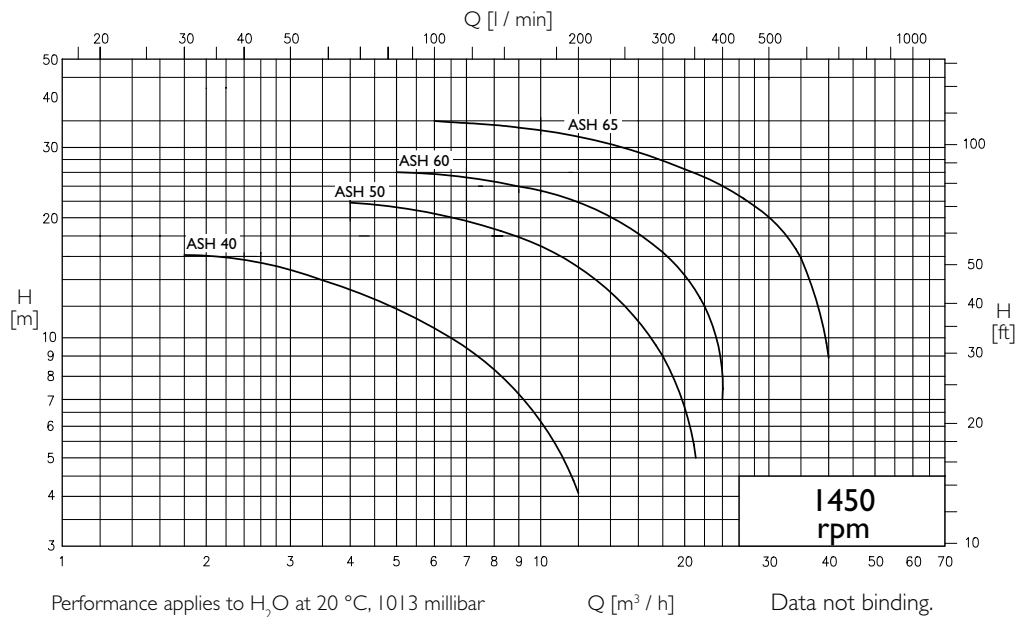
Connections:

CLAMP
 DIN 11864
 Others on request

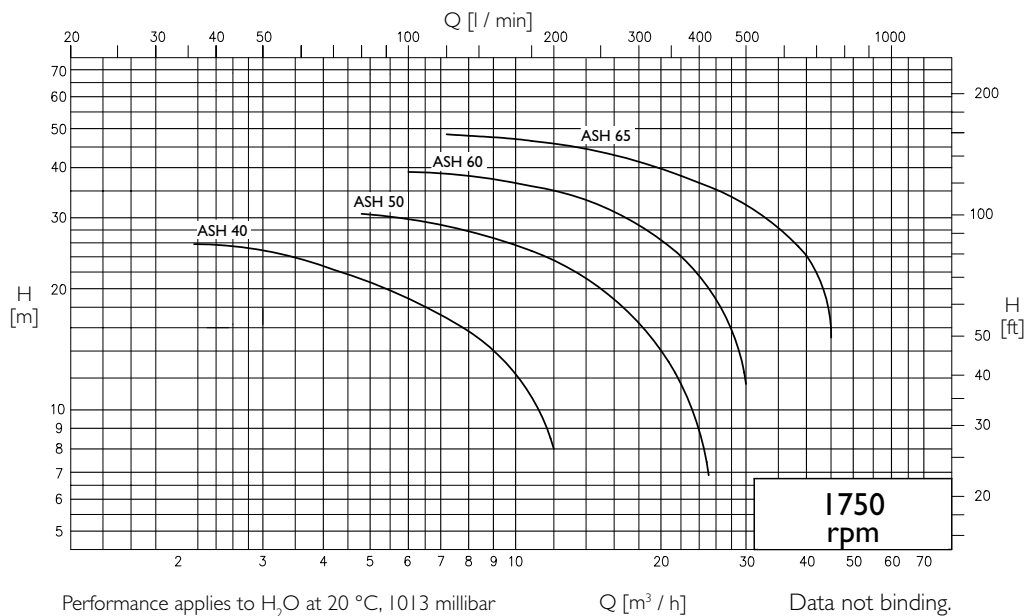


GENERAL DIAGRAMS

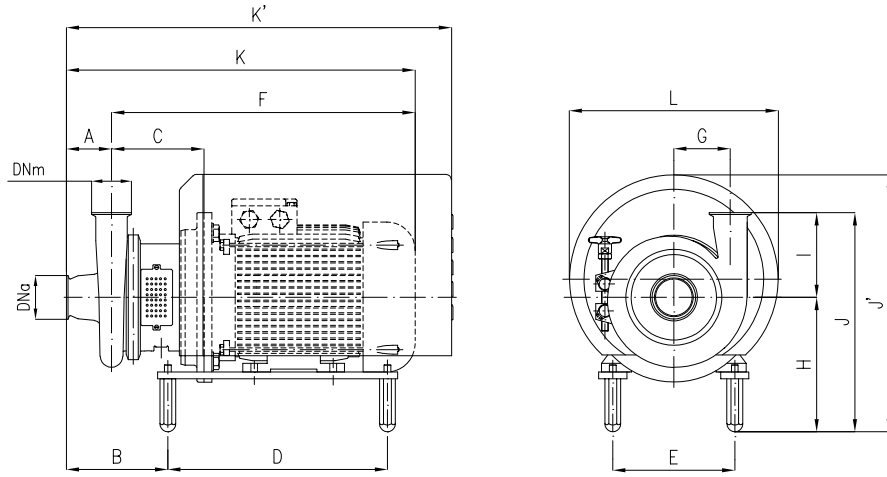
A 50 Hz



A 60 Hz



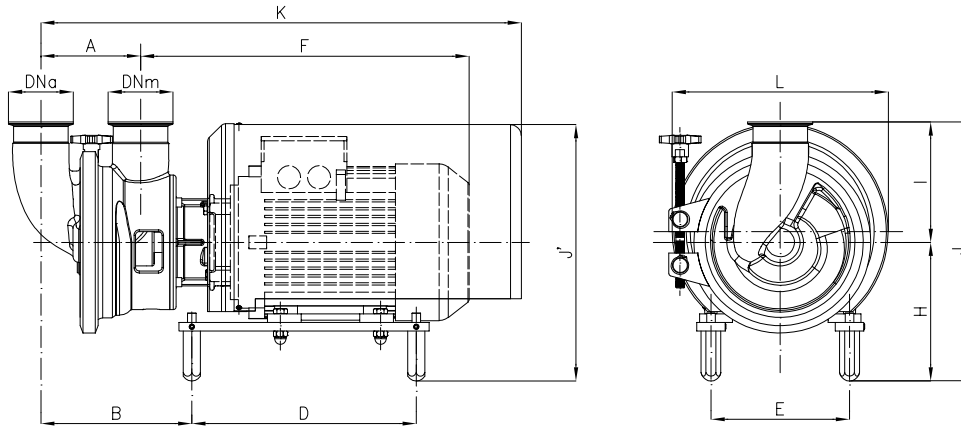
CSA OVERALL DIMENSIONS



Dimensions not binding - DN = "Clamp" ISO 2852 connections, with standard IEC/EN motors

Pumps	IEC motors size:	DNa	DNm	A	B	C	D	E	F	G	H	K	K'	I	J	J'	L						
CSA 32-145	80	1 1/2"	1 1/2"	80	166	138	254	125	372	85	220	452	566	148	368	384	298						
	90				172			140	419		230	499			378	394							
	100				165	139	314	160	451		240	531	637		388	445	330						
	112							190	473		230	553			378	435							
CSA 32-175	80	1 1/2"	1 1/2"	80	167	139	254	125	373	95	220	453	567	148	368	384	298						
	90				173			140	420		230	500			378	394							
	100				159	140	314	160	452		240	532	637		388	445	330						
	112							190	473		230	553			378	435							
CSA 32-210	80	1 1/2"	1 1/2"	80	167	139	254	125	373	110	230	453	567	168	398	402	298						
	90				173			140	420		240	532			398	435							
	100				159	140	314	160	452		240	532	637		408	445	330						
	112							190	473		230	553			398	435							
	132 S				177	161	389	216	534		255	614	680		423	477	370						
	132 M							578	280		764	935			448	543		430					
CSA 32-260	160	2"	1 1/2"	90	241	206	460	254	684	140	260	534	601	168	428	465	330						
	90				207	163	254	140	444									566	671	482	370		
	100				193	164	314	160	476													648	714
	112				200	185	389	216	558									693	769	448	543		
	132 S				211	185	389	216	602													793	967
	132 M				270	225	460	254	703									220	453	567	353		
160	167	139	254	125	373	230	501	363	394														
CSA 40-145	80	2"	2"	80	173	140	314	160	452	90	240	532	637	133	373	445	330						
	90				159			140	420		230	553			363	435							
	100				166	141	254	125	375		220	455	569		370	384	298						
	112							140	422		230	502			380	394							
CSA 40-175	80	2"	2"	80	161	142	314	160	454	95	240	534	639	150	390	445	330						
	90				168			140	422		230	555			380	435							
	100				180	164	389	216	537		255	617	682		405	477	370						
	112							581	280		766	937			430	543		430					
	132 S				243	208	460	254	686		280	766	937		430	543	430						
	132 M				168	141	254	125	375		235	455	569		395	399	298						
160	175	140	422	240	534	235	555	639	400	445	330												
CSA 40-210	80	2"	2"	80	161	142	314		160	454		115	240	534	639	160	395	440	330				
	90				168			140	422	235	555		395	440									
	100				180	164	389	216	537	250	617		682	410	472		370						
	112							581	280	766	937			440	543			430					
	132 S				243	208	460	254	686	280	766		937	440	543		430						
	132 M				168	141	254	125	375	235	455		569	395	399		298						
160	175	140	422	240	534	235	555	639	400	445	330												
CSA 40-260	80	2"	2"	100	161	142	314		160	454		145	260	544	611	172	432	465	330				
	90				168			140	422	235	555									681	482	370	
	100				221	185	389	216	558	250	617												682
	112							581	280	766	937									440	543	430	
	132 S				243	208	460	254	686	280	766									937	440	543	430
	132 M				195	225	600	279	785	305	885									1094	477	637	420
CSA 50-145	80	2 1/2"	2"	80	169	141	254	125	374	95	220	454	569	139	359	384	298						
	90				175			140	422		230	502			369	394							
	100				161	142	314	160	454		240	534	639		379	445	330						
	112							190	475		230	555			369	435							
	132 S				180	164	389	216	537		255	617	682		394	477	370						
	CSA 50-175				80	2 1/2"	2"	80	169		141	254	125		374	100	230	454	569	154	384	394	298
90		175	140	422	240				534	639			409	477	370								
100		161	142	314	160				454		230	555											
112					190				475	230	555	384	435										
132 S		180	164	389	216				537	255	616	682	409	477	370								
132 M		243	208	460	254				686	280	766	937	434	543	430								
160	169	141	254	125	374	230	502	569	384	394	298												

ASH OVERALL DIMENSIONS



Dimensions not binding - DN = "Clamp" ISO 2852 connections, with standard IEC/EN motors

Pumps	1450 r.p.m.	kW	DNa	DNm	A	B	D	E	F	H	K	I	J	J'	L
ASH 40		1,1	1" 1/2	1" 1/2	90,5	183	245	140	410	207	551	139	346	354	239
	1,5	148,5				314	160	433	217	617	356		422	330	
	2,2	176,5				314	160	432	217	645	366		422	330	
ASH 50	2,2	2"	2"	118	183,5		190	453	230		378	435			
ASH 60	4	3"	3"	139	211	314	190	460	229	672	169	398	434	330	
	5,5				215	390	216	512	249	749		418	472	372	
ASH 65	5,5	3"	3"	139	215	390	216	512	249	749	169	418	472	372	
	7,5				266	460	254	650	280	914		449	544	432	
	15														



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