



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 C.S.F. 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 0,5 micron Ra (for Superduplex 0,8 micron).

Adjustable stainless steel feet.

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



HYGIENE



BIOTECHNOLOGY



Sanitary Self-Priming Pumps

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.

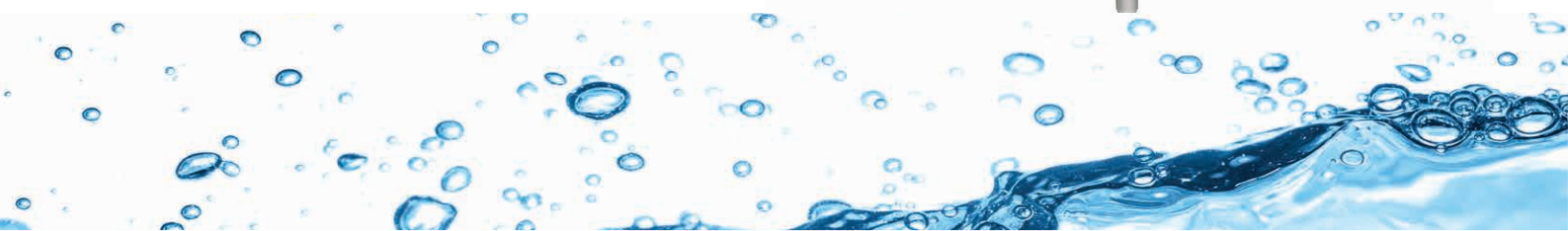
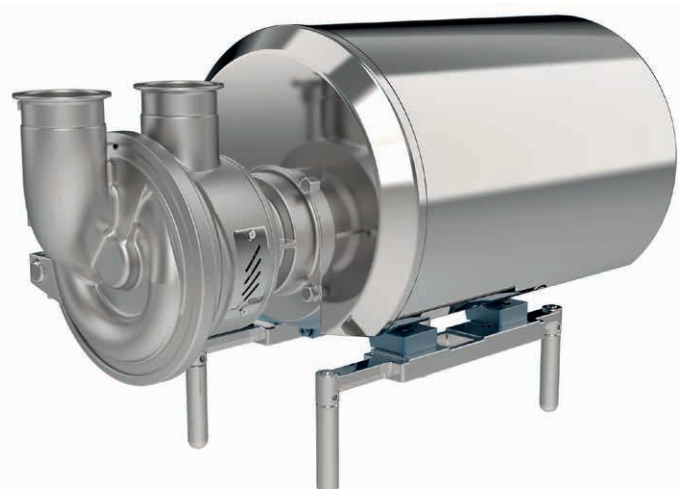
Flow rates up to 40 m³/h, heads up max. 35 m (3,5 bar) (50 Hz).



HYGIENE



BIOTECHNOLOGY



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. 1

Greased lubricated bearings.

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

CSA SERIES CERTIFIED TO EHEDG / 3A

Seals:

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

Single external mechanical seal

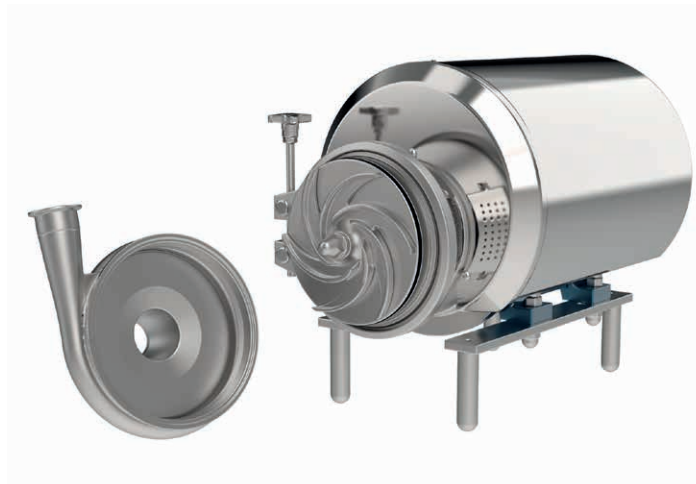
Double flushed (axial + radial) mechanical seal

Elastomers (FDA - 3A - USP VI):

EPDM

FLUOROCARBON - (FPM DIN/ISO), (FKM ASTM)

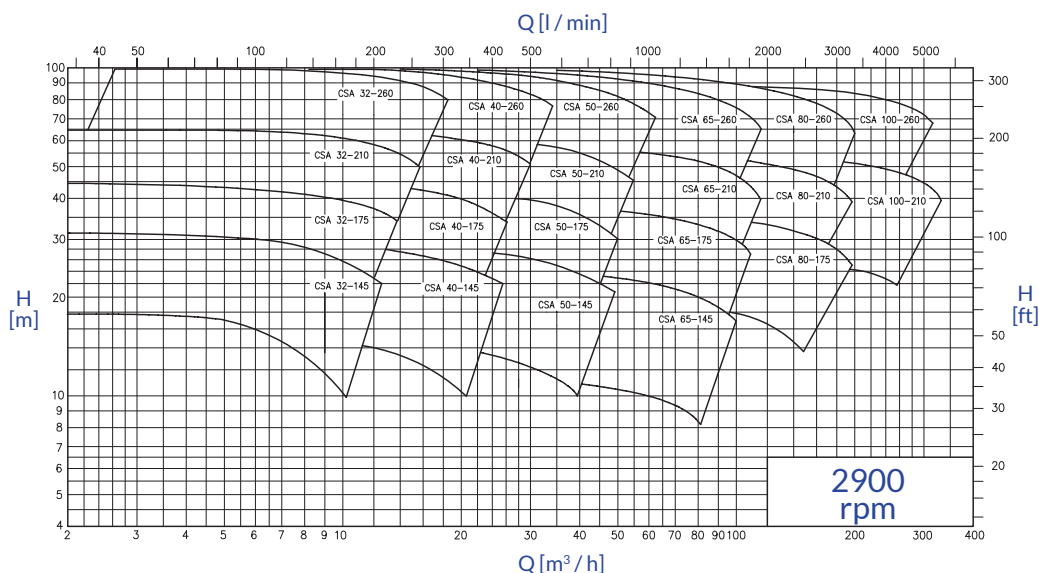
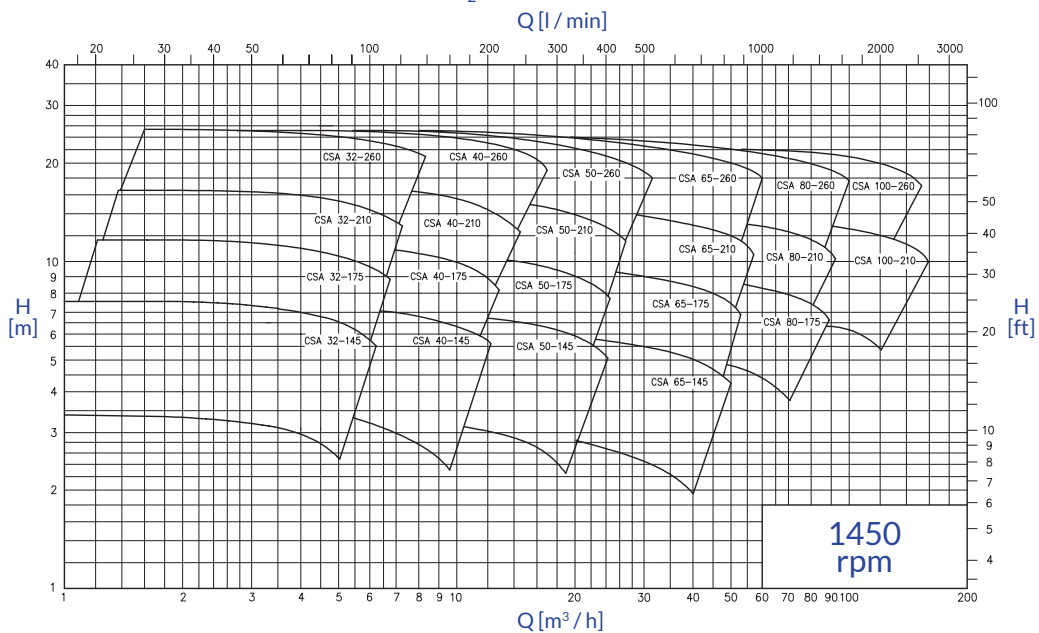
PFFPM



Connections:
CLAMP DIN 32676-C
DIN 11864

GENERAL DIAGRAMS

Performance applies to H₂O at 20 °C, 1013 mbar, Data not binding.



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. 1

Greased lubricated bearings.

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

Seals:

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

Elastomers (FDA - 3A - USP VI):

EPDM

FLUOROCARBON - (FPM DIN/ISO), (FKM ASTM)

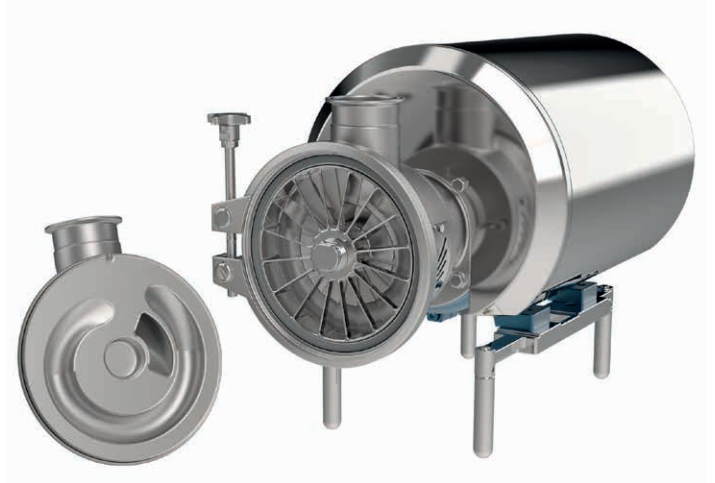
P.T.F.E. (FEP)

FFPM

Connections:

CLAMP DIN 32676-C

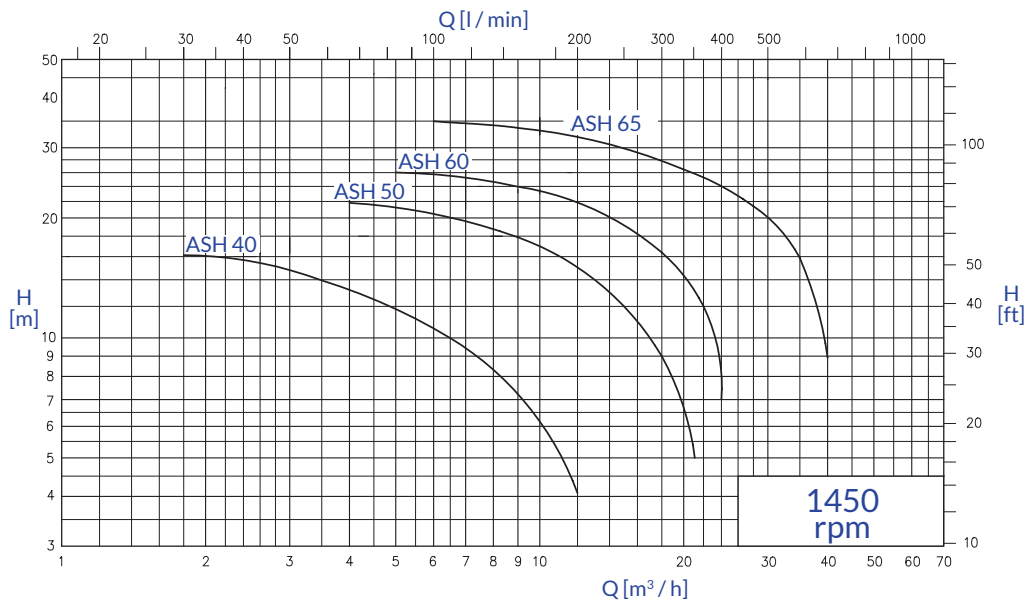
DIN 11864



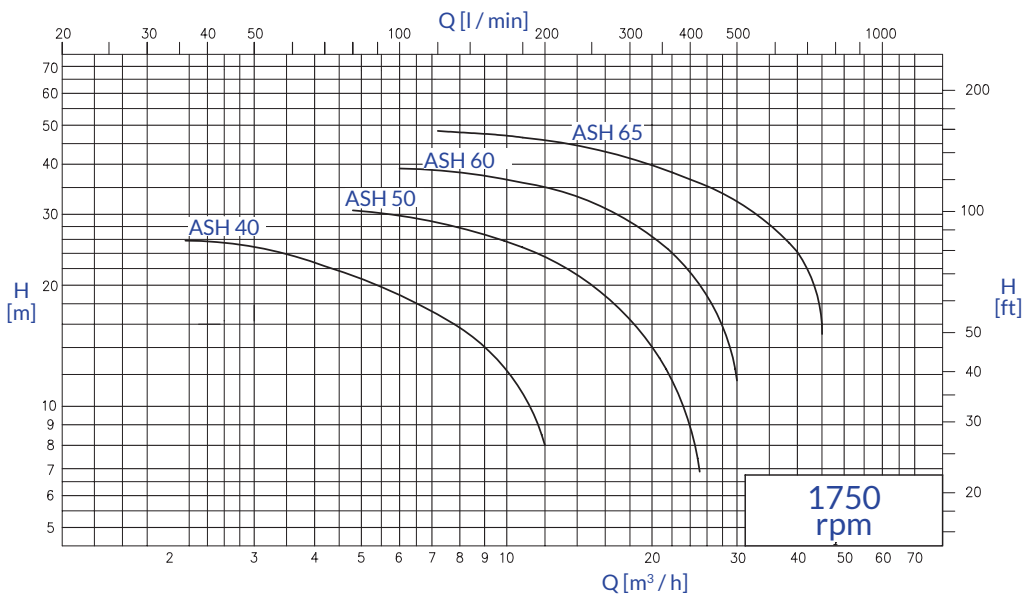
GENERAL DIAGRAMS

Performance applies to H₂O at 20 °C, 1013 mbar, Data not binding.

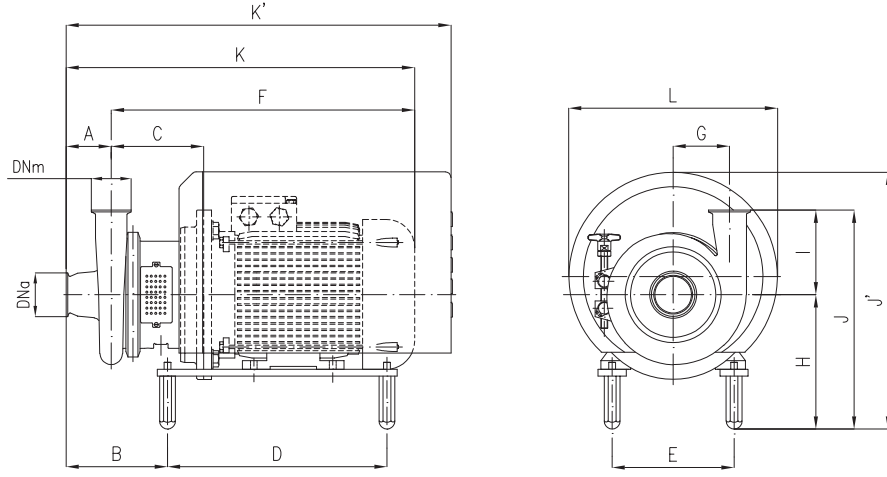
A 50 Hz



A 60 Hz



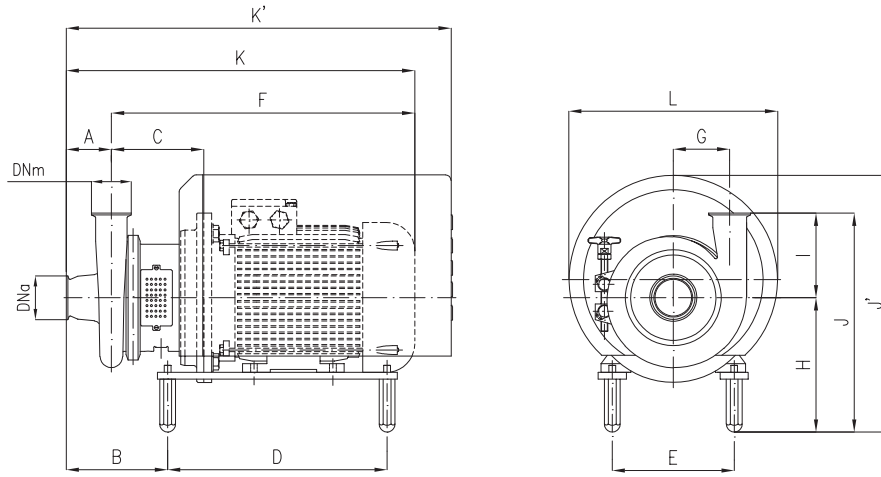
CSA OVERALL DIMENSIONS



Dimensions not binding - DN = "Clamp" DIN 32676-C 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				158	139	314	160	451		240	531	388		445					
	112				165			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	388		445					
	112				166			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	445				
	100				159	140	314	160	452		230	553	398		435					
	112				166			190	473		255	614	680		423	477				
	132 S				177	161	389	216	534		578	735	448		543					
	132 M				241	206	460	254	684		280	764	935		424	298				
CSA 32-260	90	2"	1"1/2	90	207	163	254	140	444	140	260	534	601	168	428	465	330			
	100				193	164	314	160	476			566	671							
	112				200	185	389	216	558			587	714							
	132 S				211	185	389	216	602			648	714							
	132 M				270	225	460	254	703			693	769							
	160				280	225	460	254	703			793	967							
CSA 40-145	80	2"	2"	80	167	139	254	125	373	90	220	453	567	133	353	384	298			
	90				173			140	420		230	501			363	394				
	100				159	140	314	160	452		240	532	373		445					
	112				166			190	473		230	553	363		435					
CSA 40-175	80	2"	2"	80	168	141	254	125	375	95	220	455	569	150	370	384	298			
	90				175			140	422		230	502			380	394				
	100				161	142	314	160	454		240	534	390		445					
	112				168			190	475		230	555	380		435					
	132 S				180	164	389	216	537		255	617	682		405	477				
	132 M				243	208	460	254	686		280	766	937		430	543				
CSA 40-210	80	2"	2"	80	168	141	254	125	375	115	235	455	569	160	395	399	298			
	90				175			140	422		240	534			400	445				
	100				161	142	314	160	454		235	555	395		440					
	112				168			190	475		250	617	682		410	472				
	132 S				180	164	389	216	537		280	766	937		440	543				
	132 M				243	208	460	254	686		280	766	937		440	543				
CSA 40-260	80	2"	2"	100	168	141	254	125	375	145	260	455	569	172	432	465	330			
	90				175			140	422			235						502	440	298
	100				161	142	314	160	454			240	534					395	399	
	112				168			190	475			250	617					682	410	472
	132 S				180	164	389	216	537			280	766					937	440	543
	132 M				243	208	460	254	686			280	766					937	440	543
CSA 50-145	80	2"1/2	2"	80	169	141	254	125	374	95	260	454	569	139	359	384	298			
	90				175			140	422			230			502	369		394		
	100				161	142	314	160	454			240	534		379	445				
	112				168			190	475			230	555		369	435				
	132 S				180	164	389	216	537			255	617		682	394		477		
	132 M				243	208	460	254	686			280	766		937	434		543		
CSA 50-175	80	2"1/2	2"	80	169	141	254	125	374	100	260	454	569	154	384	394	298			
	90				175			140	422			230			502	394		435		
	100				161	142	314	160	454			240	534		394	445				
	112				168			190	475			230	555		384	435				
	132 S				180	164	389	216	537			255	616		682	409		477		
	132 M				243	208	460	254	686			280	766		937	434		543		
160	280	208	460	254	686	280	766	937	434	543										

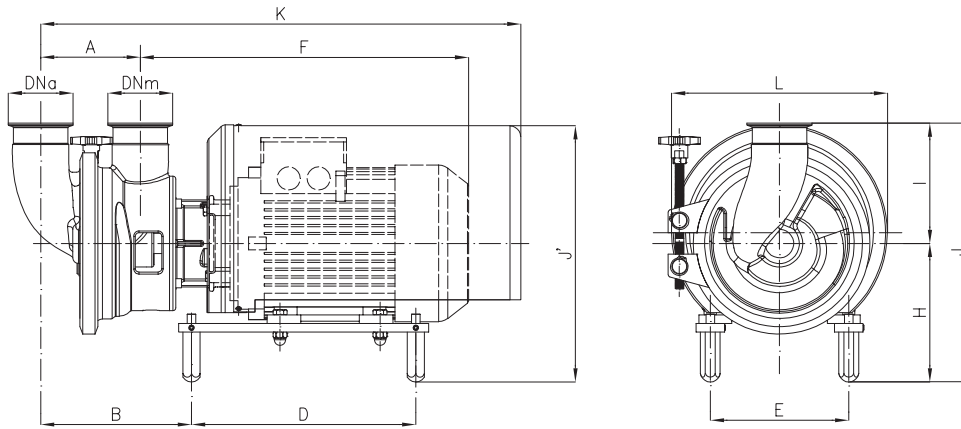
CSA OVERALL DIMENSIONS



Dimensions not binding - DN = "Clamp" DIN 32676-C 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 50-210	90	2 1/2"	2"	80	175	141	254	140	422	120	240	502	569	168	408	412	298							
	100				161	142	314	160	454			534	639			445	330							
	112				168		190	475	555															
	132 S				180	164	389	216	537			682	250			617	737	418	472	370				
	132 M								581															
	160				243	208	460	254	686			766	937			280	766	937	448	543	430			
180	173	223	600	279	783	863	1072	305	863	1072	473	637	420											
CSA 50-260	100	2 1/2"	2"	90	194	165	314	160	477	145	270	567	672	179	449	475	330							
	112				201		190	498	588															
	160				273	228	460	254	706			796	970					280	796	970	459	543	430	
	180				188		600	279	788			878	1087					305	878	1087	484	637	420	
CSA 65-145	80	3"	3"	79	172	145	254	125	379	112	245	458	572	138	383	409	298							
	90				178		140	426	505															
	100				164	146	314	160	458			537	642					255	620	685	393	477	370	
	112				171		190	479	558															
	132 S				183	168	389	216	541			685	280					769	940	418	543	430		
	132 M								585															
160	246	212	460	254	690	769	940	280	769	940	418	543	430											
CSA 65-175	90	3"	3"	80	178	144	254	140	425	120	255	505	572	138	393	409	298							
	100				164	145	314	160	457			537	642					255	620	685	393	477	370	
	112				171		190	478	558															
	132 S				183	167	389	216	540			685	280					769	940	418	543	430		
	132 M								584															
	160				246	211	460	254	689			769	940					280	769	940	418	543	430	
180	174	224	600	279	784	864	1073	305	864	1073	443	637	420											
CSA 65-210	90	3"	3"	90	212	168	254	140	449	135	265	539	605	158	423	470	330							
	100				198	169	314	160	481			571	676					280	799	974	438	543	430	
	112				205		190	502	592															
	160				276	231	460	254	709			799	974					305	881	1090	463	637	420	
180	191		600	279	791	881	1090	305	881	1090	463	637	420											
CSA 65-260	100	3"	3"	100	207	168	314	160	480	155	285	580	685	193	478	490	330							
	112				214		190	501	601															
	132 S				226	190	389	216	563			728	285					663	728	478	507	370		
	132 M								607															
	160				285	230	460	254	708			808	983					305	890	1099	498	637	420	
	180				200		600	279	790			890	1099					305	890	1099	498	637	420	
CSA 80-175	100	4"	3"	100	231	174	315	160	486	139	275	586	691	164	439	480	330							
	112				220		190	507	607															
	132 S				231	195	389	216	568			668	734					280	814	989	444	543	430	
	160				291	236	460	254	714			814	989					305	896	1105	469	637	420	
	180				206		600	279	796			896	1105					305	896	1105	469	637	420	
CSA 80-210	100	4"	3"	100	210	171	314	160	483	145	285	583	688	164	449	490	330							
	112				217		190	504	604															
	132 S				229	193	389	216	566			666	731					285	666	731	449	507	370	
	160				288	233	460	254	711			811	986					305	893	1102	469	637	420	
	180				203		600	279	793			893	1102					305	893	1102	469	637	420	
CSA 80-260	100	4"	3"	100	210	171	314	160	483	165	300	583	688	209	509	505	330							
	112				217		190	504	604															
	132 S				229	193	389	216	566			666	731					300	666	731	509	522	370	
	132 M								610															
160	288	233	460	254	711	811	986	300	893	1102	469	637	420											
CSA 100-210	132 S	5"	4"	111	246	200	389	216	573	161	305	683	750	214	519	527	370							
	180				221	240	600	279	800			911	1120					444	634	420				
CSA 100-260	132 M	5"	4"	115	246	195	389	216	612	186	325	727	803	216	541	547	370							
	160				305	235	460	254	713			828	1004					444	634	420				
	180				220		600	279	795			910	1118					444	634	420				

ASH OVERALL DIMENSIONS



Dimensions not binding - DN = "Clamp" DIN 32676-C connections, with standard IEC/EN motors

Pumps	1450 rpm	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	228	551	139	376	376	239					
	1,5	148,5				314	160	433	238	617	386,5		403	330						
	2,2	176,5				314	160	432	238	645	386,5		403	330						
ASH 50	2,2	2"	2"	118	183,5	314	190	453	250	645	149	398,5	415	330						
	4				211							314	190		460	250	672	418,5	415	330
ASH 60	4	3"	3"	139	215	390	216	512	270	749	169	438,5	489	372						
	5,5				215							390	216		512	270	749	438,5	489	372
ASH 65	5,5	3"	3"	139	215	390	216	512	270	749	169	438,5	489	372						
	7,5				266							460	254		650	280	914	448,5	536	432
	15																			



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