



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.

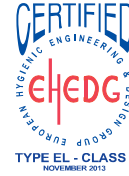
Flow rates up to 300 m³/h, heads up to 100 m (10 bar); low NPSH requirements.



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



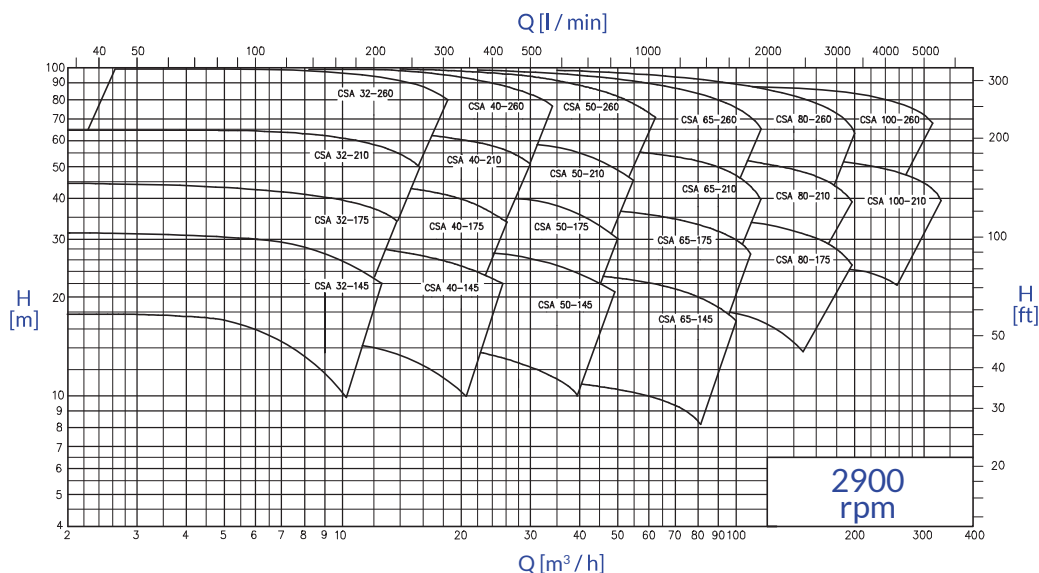
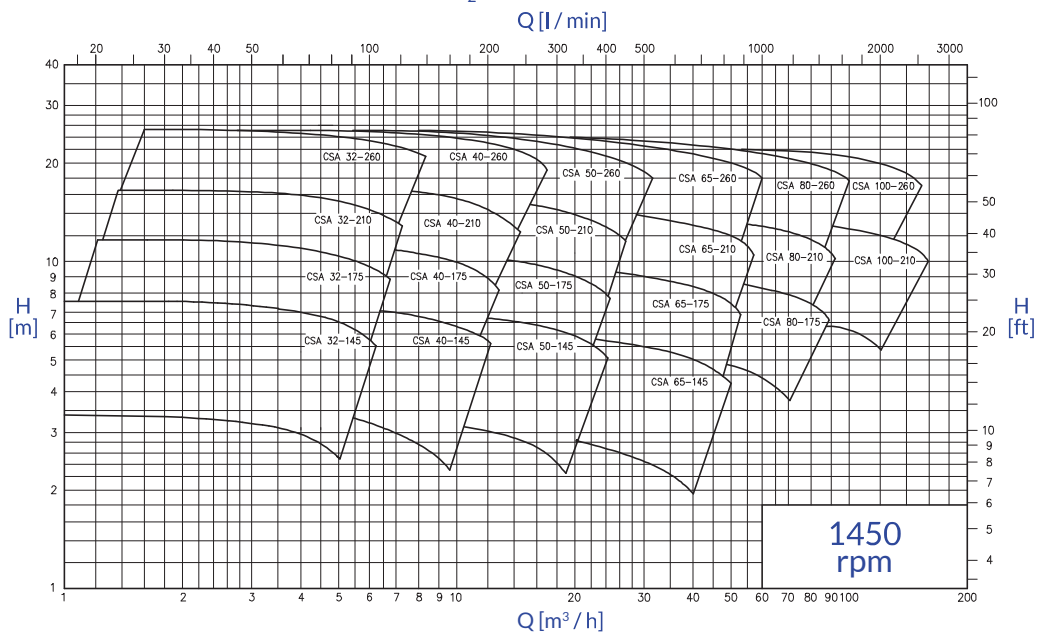
Connections:

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:

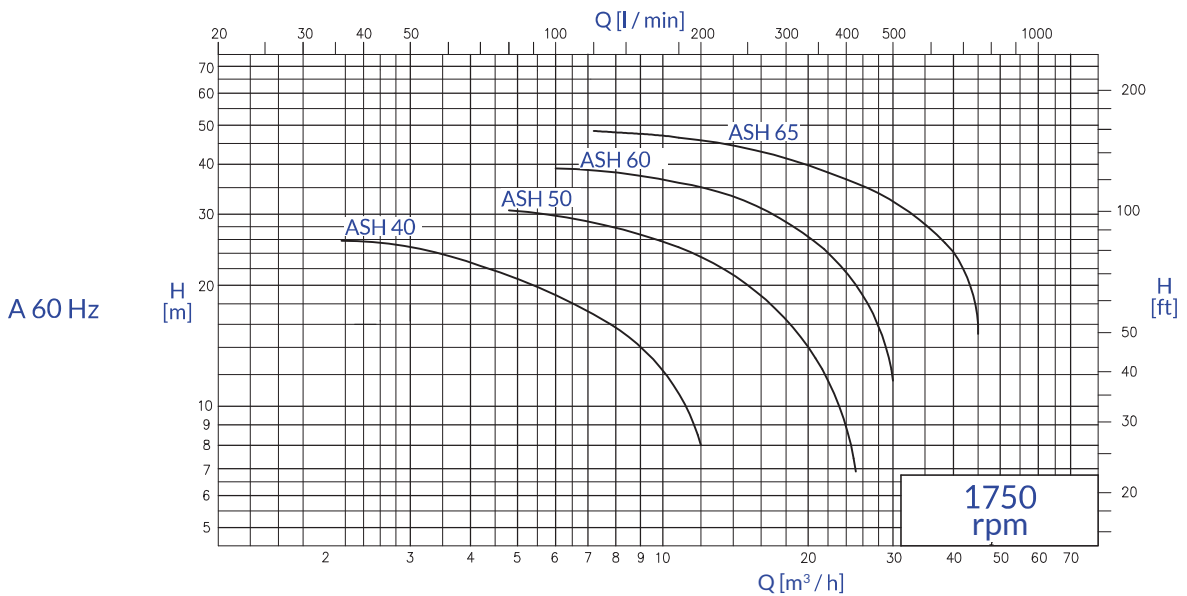
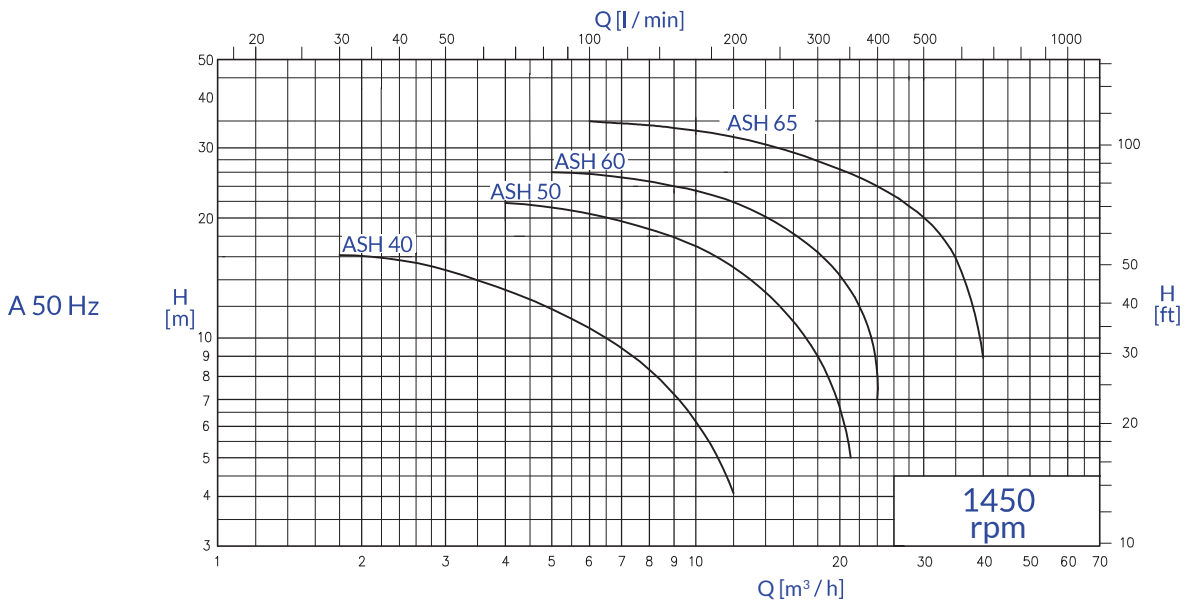
CLAMP DIN 32676-C

DIN 11864

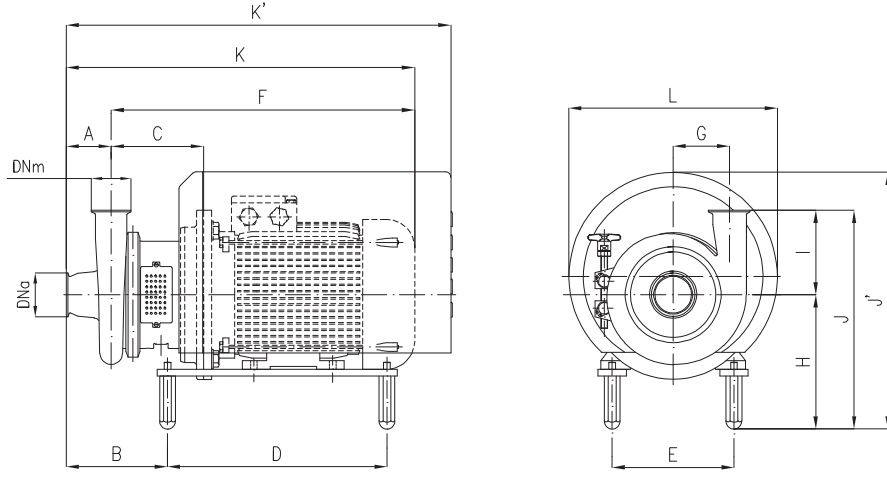


GENERAL DIAGRAMS

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



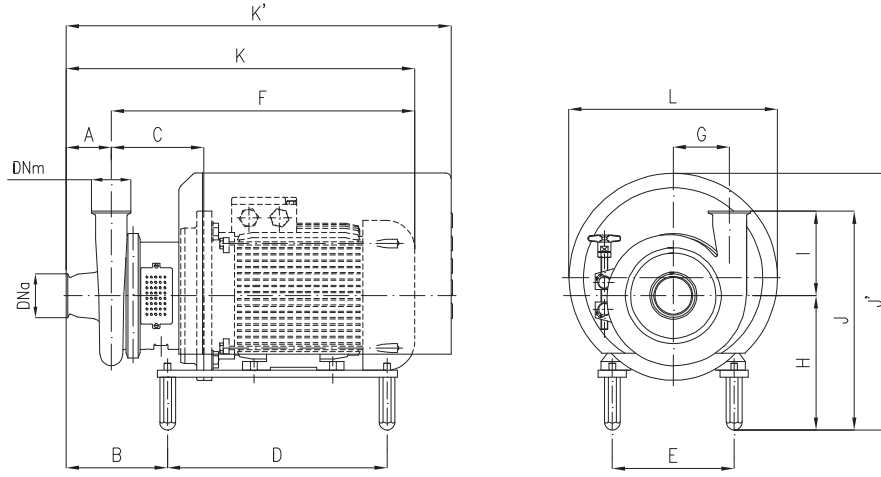
CSA OVERALL DIMENSIONS



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	408		445				
	112				166			190	473		230	553	398		435				
	132 S				177	161	389	216	534		680	423	477						
	132 M				578				735		423	477							
CSA 32-260	160	2"	1"1/2	90	241	206	460	254	684	140	280	764	935	168	448	543	430		
	90				207	163	254	140	444		534	601	424		298				
	100				193	164	314	160	476		260	566	671		428	465	330		
	112				200			190	497		260	587	671		428	465			
	132 S				211	185	389	216	558		602	648	714		482	370			
	132 M				270	225	460	254	703		280	793	967		448	543	430		
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
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	581	255	617	682	405	477		370		
132 M		581							737	405	477								
CSA 40-210	160	2"	2"	80	243	208	460	254	686	115	280	766	937	160	430	543	430		
	80				168	141	254	125	375		235	455	569		395	399	298		
	90				175			140	422		240	534	400		445				
	100				161	142	314	160	454		235	555	639		395	440	330		
	112				168			190	475		235	555	395		440				
	132 S				180	164	389	216	537		581	250	617		682	410	472	370	
132 M	581	737	410	472															
CSA 40-260	160	2"	2"	100	243	208	460	254	686	145	280	766	937	172	440	543	430		
	90				217	163	254	140	444		235	455	569		395	399	298		
	100				203	164	314	160	476		240	534	639		400	445	330		
	112				210			190	497		235	555	395		440				
	132 S				221	185	389	216	558		602	250	617		682	410	472	370	
	132 M				602				779		410	472							
160	280	225	460	254	703	280	803	978	452	502	430								
180	195				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	379		445				
	112				168			190	475		230	555	369		435				
	132 S				180	164	389	216	537		577	255	617		682	394		477	370
	132 M				577				737		394	477							
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			394	445			
	100				161	142	314	160	454		230	555	384		435				
	112				168			190	475		230	555	384		435				
	132 S				180	164	389	216	537		581	255	616		682	409		477	370
	132 M				581				737		409	477							
160	243	208	460	254	686	280	766	937	434	543	430								

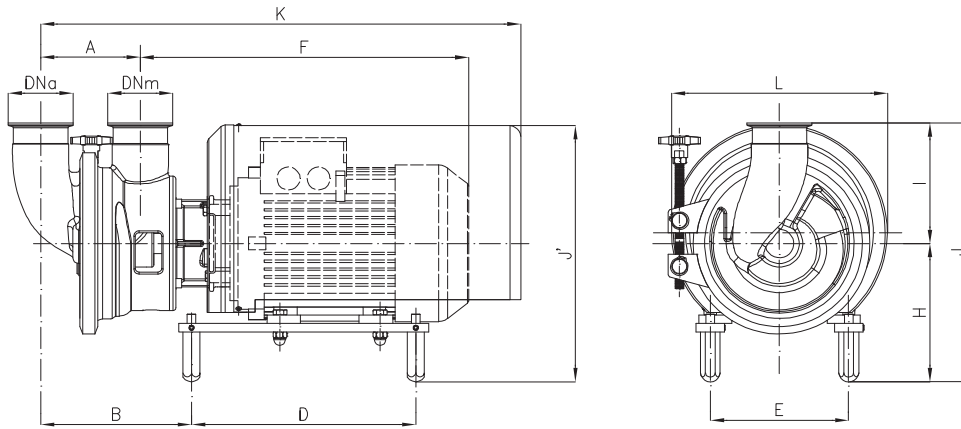
CSA OVERALL DIMENSIONS



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			617	682			418	472	370			
	132 M								581			661	737								
	160				243	208	460	254	686			280	766			937	448	543	430		
180	173	223	600	279	783	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			280	796					970	459	543	430
	180				188			600	279			788	305					878	1087	484	637
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					450	330		
	112				171			190	479			558									
	132 S				183	168	389	216	541			620	685					393	477	370	
	132 M								585			664	740								
160	246	212	460	254	690	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					460	330		
	112				171			190	478			558									
	132 S				183	167	389	216	540			620	685					477	370		
	132 M								584			664	740								
	160				246	211	460	254	689			280	769					940	418	543	430
180	174	224	600	279	784	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					429	298		
	112				205			190	502			592									
	160				276	231	460	254	709			280	799					974	438	543	430
180	191			600	279	791	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			663	728					507	370		
	132 M								607			707	783					548	430		
	160				285	230	460	254	708			305	808					983	498	637	420
	180				200			600	279			790	305					890	1099		
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					497	370		
	160				291	236	460	254	714			280	814					989	444	543	430
	180				206			600	279			796	305					896	1105	469	637
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					507	370		
	160				288	233	460	254	711			811	986					548	430		
	180				203			600	279			793	305					893	1102	469	637
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					522	370		
	132 M								610			710	786					563	430		
160	288	233	460	254	711	811	986														
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					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					588	430		
	180				220			600	279			795	910					1118	657	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	672	149	398,5	415	330					
	4				211							314	190		460	250	418,5	415	
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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