

## Centrifugal Sanitary Pumps

### CS - CSX series

#### Standard design

Closed coupled hygienic centrifugal pumps with open impellers. CS Series pumps meet the highest requirements of the food, pharmaceutical, chemical and water treatment industries.

The pumps are designed to a modular concept, resulting in a large number of models and a massive performance range. When combined with the extremely robust construction, these highly efficient pumps become ideal for any hygienic process system.

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

Special internal finishes to 0,5 micron Ra are available on request (not on sizes 125 to 150).

Separate IEC standard motor.

Flow rates up to 500 m<sup>3</sup>/h, heads up to 100 m (10 bar); high performance, with low NPSH values.

The clamp casing and seal design allows quick disassembly for inspection, cleaning and maintenance. It also enables the delivery port to be rotated to any position for easy installation (not on sizes 125 to 150).

For aggressive products and environments, CS pumps can on special request, be manufactured in the following materials:

- Sanicro 28 (1.4563)
- Duplex SAF 2507 (1.4410)
- Hastalloy C276

#### Seals:

Mechanical seals with seats to EN 12756, ISO 3069 standards.

Single internal mechanical seal  
Single external mechanical seal  
Double flushed mechanical seal

#### Elastomers (certified to FDA):

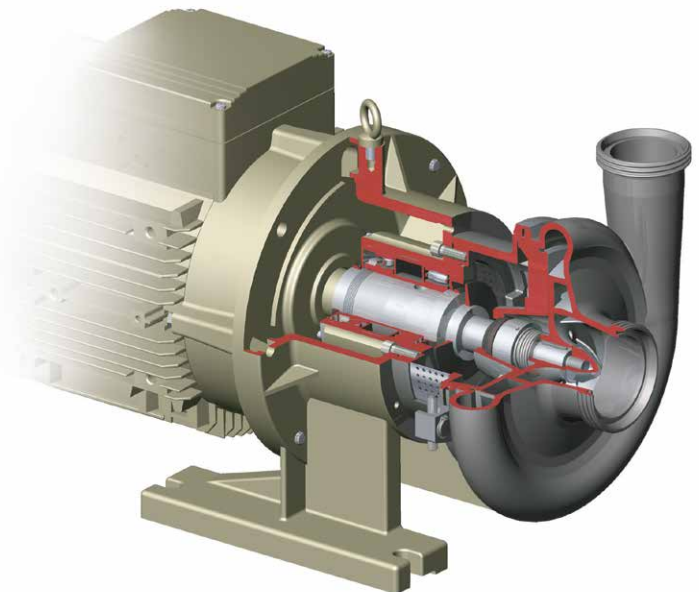
EPDM  
Fluorocarbon (Viton)  
Silicone  
P.T.F.E. (Fep)

Special version equipped with an inducer in the suction port.

This device is fitted immediately upstream of the impeller to reduce the NPSH required by the pump.



CS pump with shroud and adjustable feet.



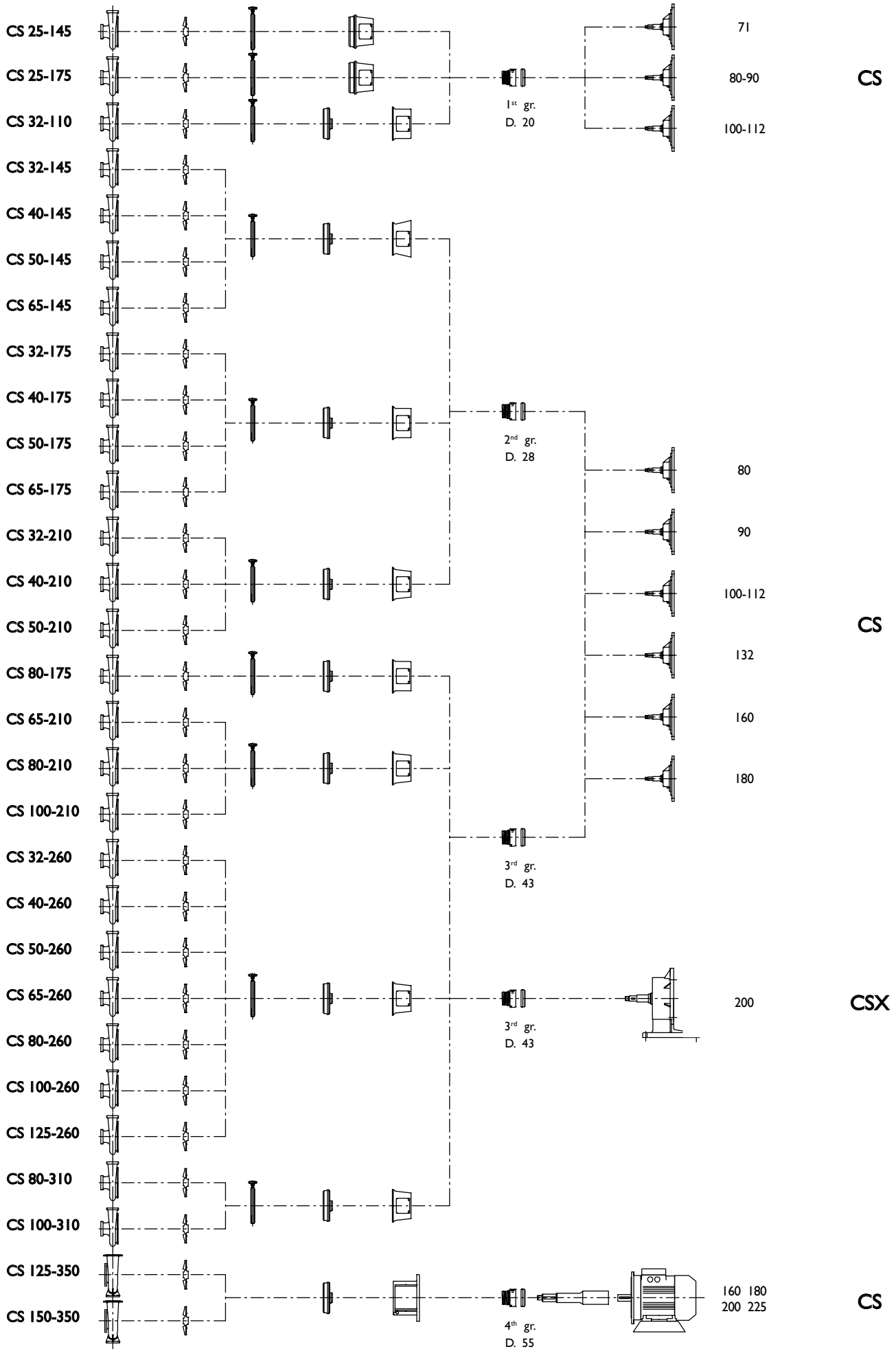
#### CS pump X execution

Close coupled centrifugal pumps with separate support frame and grease lubricated bearings, for extremely arduous applications.

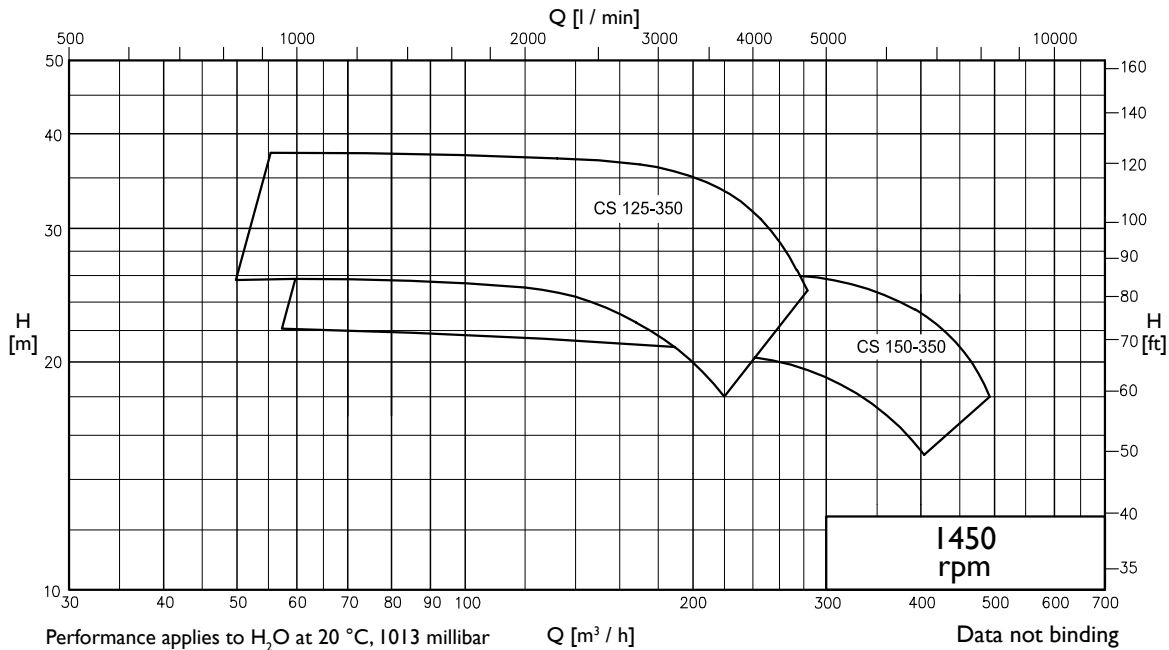
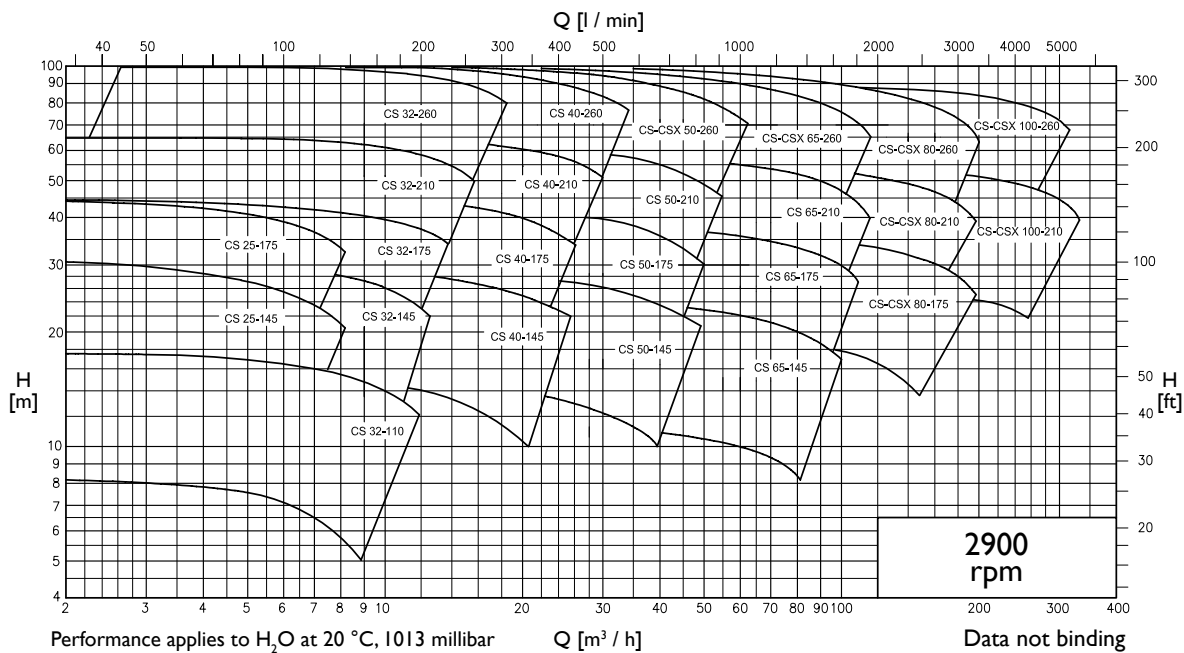
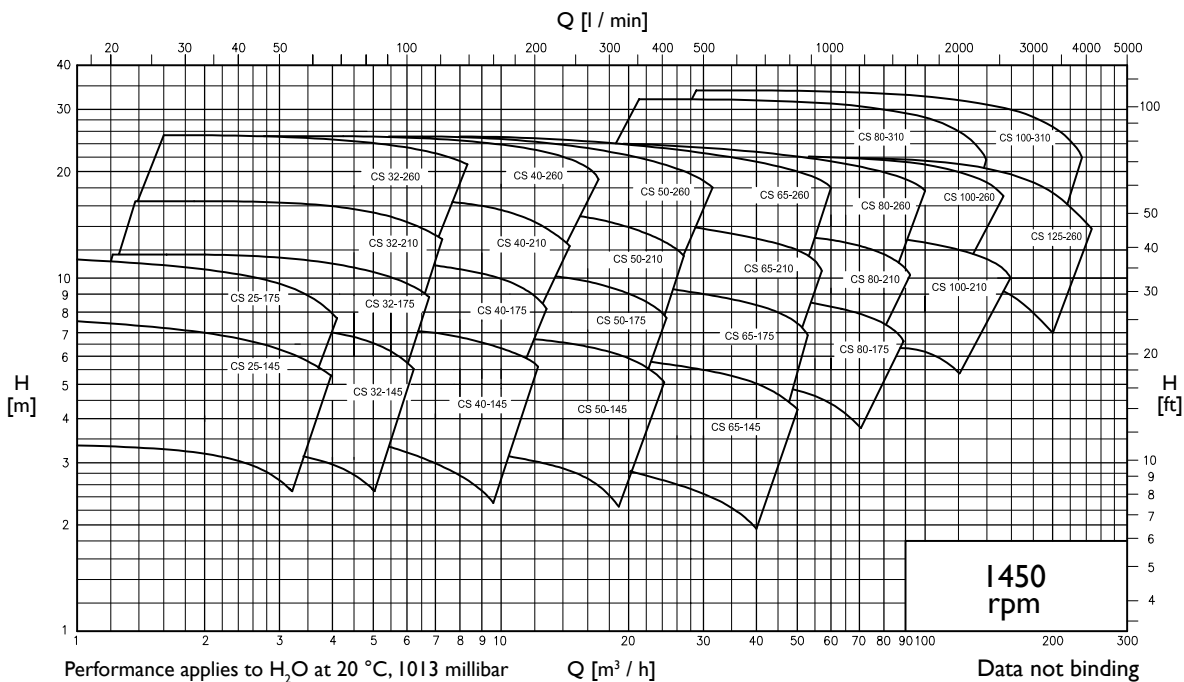
#### Connections:

DIN - SMS - IDF - BS /  
RJT - DS - CLAMP and  
EN 1092-1 PN 16 flanges suitable  
for all international standards.

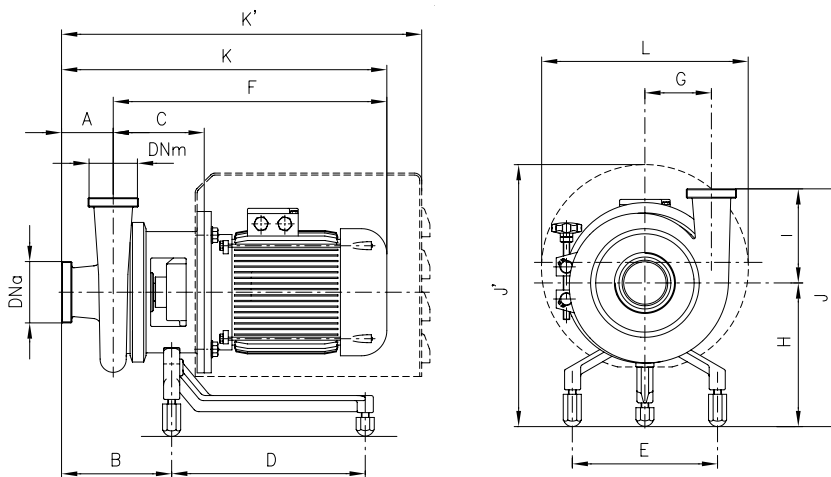
A wide range of 29 models divided into 4 groups.



# GENERAL DIAGRAMS



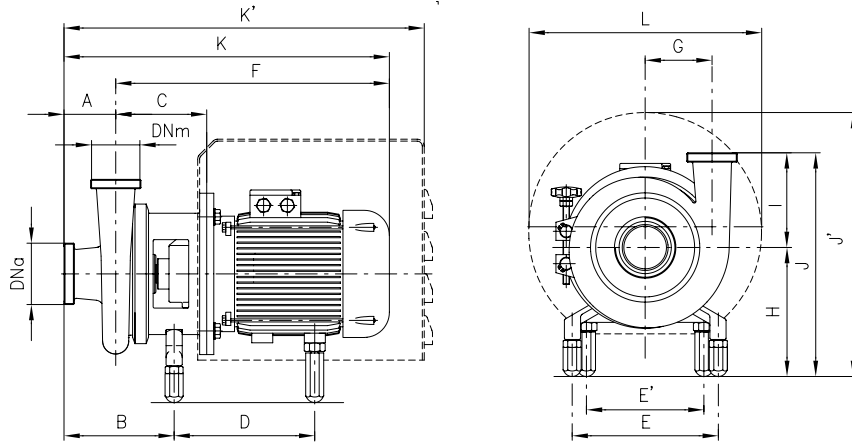
## OVERALL DIMENSIONS



Dimensions not binding - DN = DIN 11851 male threaded 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								
CS 25-145	71	32	25	75	144	117	190	178	335	81	158	410	532	145	303	300	239								
	80					123			359			434	541			340	298								
	90					403			478																
CS 25-175	71	32	25	65	134	117	190	178	335	96	164	400	522	149	313	306	239								
	80					123			359			424	531			346	298								
	90					403			468																
	100					138	301	225	454		519	619	359		353	330									
	112					466																			
CS 32-110	71	40	32	70	137	117	190	178	335	65	149	405	527	110	259	291	239								
	80					123			359			429	536			331	298								
	90					403			473																
CS 32-145	80	40	32	80	167	138	231	225	374	85	208	454	566	145	353	372	298								
	90					139			301			418						498	370	430	330				
	100							455	535																
	112					140	301	225	467		547														
CS 32-175	80	40	32	80	167	139	231	225	375	95	213	455	567	150	363	385	298								
	90					140			301			419						499	380	435	330				
	100							456	536																
	112					140	301	225	468		548														
CS 32-210	80	40	32	80	158	139	231	225	375	110	221	455	567	165	386	385	298								
	90					140			301			419						499	403	443	330				
	100							456	536																
	112					140	301	225	468		548														
CS 32-260	90	50	32	90	184	163	231	225	443	140	221	533	601	172	393	385	298								
	100					164			301			480						570	410	443	330				
	112							492	582																
CS 40-145	80	50	40	80	168	139	231	225	375	90	208	455	567	133	341	372	298								
	90					140			301			418						498	358	430	330				
	100							455	535																
	112					140	301	225	467		547														
CS 40-175	80	50	40	80	169	141	231	225	377	95	213	457	569	150	363	377	298								
	90					142			301			421						501	380	435	330				
	100							458	538																
	112					142	301	225	470		550														
CS 40-210	80	50	40	80	161	141	231	225	377	115	221	457	569	165	386	385	298								
	90					142			301			421						501	403	443	330				
	100							458	538																
	112					142	301	225	470		550														
CS 40-260	90	50	40	100	194	163	231	225	443	145	221	543	611	172	393	385	298								
	100					164			301			480						580	410	443	330				
	112							492	592																
						141	231	225	377		457	569													
CS 50-145	80	65	50	80	170	141	231	225	377	95	208	457	569	145	353	372	298								
	90					142			301			421						501	370	430	330				
	100							458	538																
	112					142	301	225	470		550														
CS 50-175	80	65	50	80	169	141	231	225	377	100	213	457	569	150	363	377	298								
	90					142			301			421						501	380	435	330				
	100							458	538																
	112					142	301	225	470		550														
CS 50-210	90	65	50	80	161	141	231	225	421	120	221	501	569	165	386	385	298								
	100					142			301			458						538	402	443	330				
	112							470	550																
						141	231	225	377		457	569													
CS 50-260	100	65	50	90	185	165	301	225	481	145	238	571	671	175	413	443	330								
	112								493			583													
									381			460						572	145	353	372	298			
CS 65-145	80	80	65	79	173	145	231	225	381	112	208	460	572	145	370	430	330								
	90								425			504													
	100								146			301						225	462	541	642	145	370	430	330
	112								146			301						225	474	553					
CS 65-175	90	80	65	80	172	144	231	225	424	120	213	504	572	150	363	377	298								
	100					145			301			225						461	541	641	380	435	330		
	112							473	553																
						168	231	225	448		538	605													
CS 65-210	90	80	65	90	189	169	301	225	485	135	238	575	675	165	403	443	330								
	100								497			587													
	112																	484	584						
									168			301						225	496	596					

CS 80-175	100	100	80	100	204	174	301	225	490	139	230	590	690	164	394	435	330
	112								502			602					
CS 80-210	100	100	80	100	201	171	301	225	487	145	238	587	687	165	403	443	330
	112								499			599					
CS 80-260	100	100	80	100	201	171	301	225	487	165	238	587	687	209	447	443	330
	112								499			599					

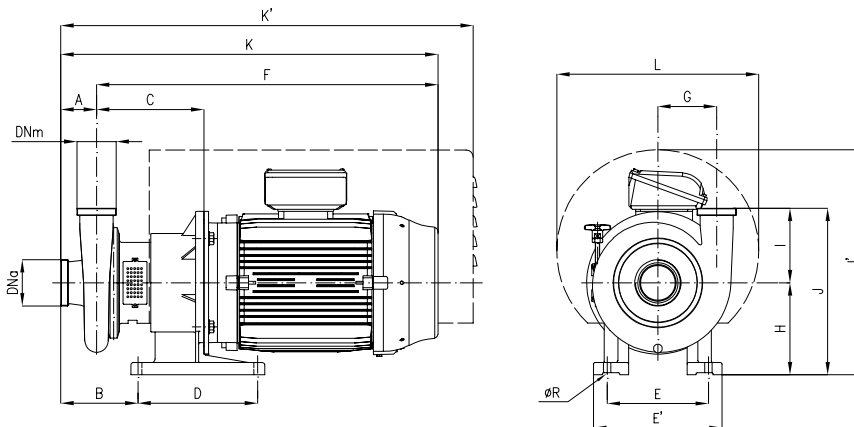


Dimensions not binding - DN = DIN 11851 male threaded connections with standard IEC/EN motors

Pumps	IEC motors size:	DNa	DNm	A	B	C	D	E	E'	F	G	H	K	K'	I	J	J'	L						
CS 32-210	132 S	40	32	80	158	161	309	225	198	571	110	238	651	735	165	403	460	370						
	132 M												813	907			546	478						
	160																							
CS 32-260	132 S	50	32	90	184	185	318	225	198	595	140	238	685	769	172	410	460	370						
	132 M												247	842			940	419	555	478				
	160																							
CS 40-175	132 S	50	40	80	169	164	301	225	198	574	95	230	654	738	150	380	460	370						
	132 M												254	735			115	238	815	909	165	403	546	478
	160																							
CS 40-210	132 S	50	40	80	161	164	309	225	198	574	115	238	654	738	165	403	460	370						
	132 M												254	735			115	238	815	909	165	403	546	478
	160																							
CS 40-260	132 S	50	40	100	194	185	318	225	198	595	145	238	695	779	172	410	460	370						
	132 M												254	752			145	238	852	950	172	410	460	370
	160												279	779			145	247	879	950	172	419	555	478
180																								
CS 50-145	132	65	50	80	170	164	300	225	198	574	95	225	654	738	145	370	447	370						
CS 50-175	132 S	65	50	80	169	164	301	225	198	574	100	230	654	738	150	380	452	370						
	132 M												254	735			100	230	815	909	150	380	538	478
	160																							
CS 50-210	132 S	65	50	80	161	164	309	225	198	574	120	238	654	738	165	403	460	370						
	132 M												254	735			120	238	815	909	165	403	546	478
	160												279	777			120	248	857	928	165	413	556	478
	180																							
CS 50-260	160	65	50	90	186	228	450	225	254	755	145	247	845	943	175	422	555	478						
	180												279	782			145	247	872	943	175	422	555	478
CS 65-145	132 S	80	65	79	173	168	300	225	198	578	112	225	657	741	145	370	447	370						
	132 M												254	739			112	225	818	912	145	370	533	478
	160																							
CS 65-175	132 S	80	65	80	172	167	301	225	198	577	120	230	657	741	150	380	452	370						
	132 M												254	738			120	230	818	912	150	380	538	478
	160												279	778			120	241	858	929	150	391	538	478
	180																							
CS 65-210	160	80	65	90	189	231	450	225	254	758	135	247	848	946	165	412	555	478						
	180												279	785			135	247	875	946	165	412	555	478
CS 65-260	132 S	80	65	100	198	190	318	225	198	600	155	238	700	784	205	443	460	370						
	132 M												254	757			155	238	857	955	205	452	555	478
	160												279	784			155	247	884	955	205	452	555	478
	180																							
CS 80-175	132 S	100	80	100	204	195	316	225	198	603	139	230	703	787	164	405	549	478						
	160												254	763			139	230	863	961	164	405	549	478
	180												279	790			139	241	890	961	164	405	549	478
CS 80-210	132 S	100	80	100	201	193	318	225	198	603	145	238	703	787	165	403	460	370						
	160												254	760			145	238	860	958	164	411	555	478
	180												279	787			145	247	887	958	164	411	555	478
CS 80-260	132 S	100	80	100	201	193	318	225	198	603	165	238	703	787	209	447	460	370						
	132 M												254	760			165	238	860	958	209	447	460	370
	160												279	787			165	247	887	958	209	447	460	370
	180																							
CS 80-310	160	100	80	100	202	235	495	225	254	767	200	250	867	994	250	500	560	480						
	180												279	827			200	250	927	994	250	500	560	480
CS 100-210	132	125	100	111	219	200	318	225	198	610	161	238	721	805	214	452	460	370						
	180												279	794			161	238	905	976	214	452	460	370
CS 100-260	132 M	125	100	115	218	235	454	225	198	605	186	238	720	804	216	454	460	370						
	160												254	762			186	238	877	975	216	463	555	478
	180												279	789			186	247	904	975	216	463	555	478
CS 100-310	160	125	100	115	221	239	495	225	254	771	214	250	886	1013	259	509	560	480						
	180												279	831			214	250	946	1013	259	509	560	480
CS 125-260	132 M	150	125	110	223	203	318	225	198	613	206	238	723	821	216	454	460	370						
	160												254	771			206	238	881	979	216	463	555	478
	180												279	798			206	247	908	979	216	463	555	478

# OVERALL DIMENSIONS

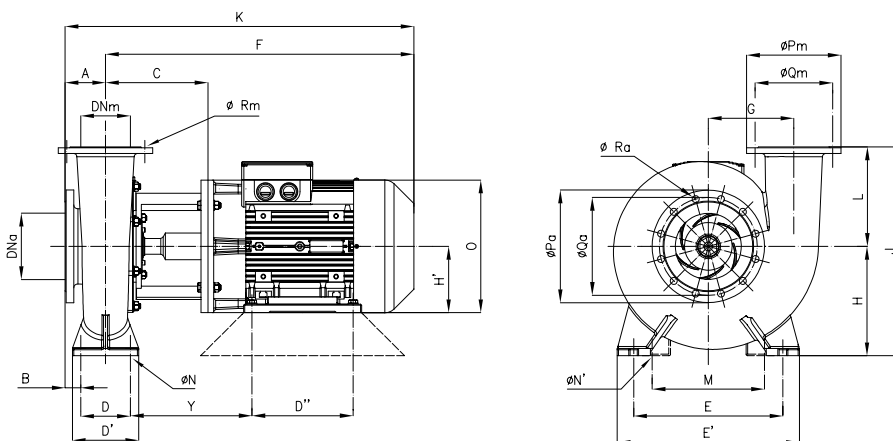
**PUMPS CSX SERIES  
FOR POWER OF 30 kW  
(MOTOR SIZE IEC 200)**



Dimensions not binding - DN = DIN 11851 male threaded connections with standard IEC/EN motors

Pumps	IEC motor size	DNa	DNm	A	B	C	D	E	E'	F	G	H	K	K'	ØR	I	J	J'	L
CSX 50-260	200	65	50	90	201	296	335	284	360	915	145	258	1005	1141	21	175	433	613	530
CSX 65-260		80	65	100	213	298				917	155		1017	1153		205	463		
CSX 80-175		100	80	100	219	304				923	139		1023	1159		164	422		
CSX 80-210		100	80	100	216	301				920	145		1020	1156		164	422		
CSX 80-260		100	80	100	216	301				920	165		1020	1156		209	467		
CSX 80-310		100	80	100	218	303				964	200		1064	1154		250	508		
CSX 100-210		125	100	111	234	308				927	161		1038	1174		214	472		
CSX 100-260		125	100	115	233	303				922	186		1037	1173		216	474		
CSX 100-310		125	100	115	237	307				968	215		1083	1172		259	517		
CSX 125-260		150	125	110	237	312				931	206		1041	1177		216	474		

**"CS" PUMP  
4<sup>th</sup> GROUP  
CLOSE COUPLED  
VERSION**



Dimensions not binding - DN = Flanges EN 1092-1 PN 16

Pumps	IEC motors size:	DNa	DNm	A	B	C	D	D'	D''	E	E'	F	G	H	H'	K	J	Y	L	M	N	N'	O	Ø Pa	Ø Pm	Ø Qa	Ø Qm	Ø Ra	Ø Rm	no. holes a	no. holes m					
CS 125-350	132	150	125	122	47	286	150	200	279	400	500	846	232	280	132	825	300	300	216	12	300	17	350	285	250	240	210	22	18	8	8					
	160																															764	160	886	319	254
	180																															913	200	1035	361	318
	200																															983	225	1105	407	356
	225																															1041	254	1111	413	356
CS 150-350	132	200	150	122	47	292	150	200	279	450	550	852	258	330	160	892	630	338	300	279	22	17	350	340	285	295	240	22	22	12	8					
	160																															770	160	892	325	254
	180																															919	200	1041	367	318
	200																															989	225	1111	413	356
	225																															1041	254	1111	413	356



Distributed in the UK by....  
**Pump Engineering Limited.** Unit B1, Riverside Industrial Estate,  
 Littlehampton, West Sussex, BN17 5DF, United Kingdom  
 Tel: 01903 730900 Fax: 01903 730234  
 email: sales@pumpeng.co.uk Web: www.pumpeng.co.uk

All the instructions, data and representations (in whatever way executed) listed in this publication are indicative and do not binding. C.S.F. does not stand surety or undertake any obligation for the utilisation of this document and for the information contained. In particular, it does not guarantee against omissions or errors of the data and drawings here indicated. Notice that the technical specifications, information and representations in this document are merely indicative and approximate. C.S.F. INOX reserves the right at any moment and without notice to modify the data, drawings and information indicated in this document.