



# Aseptic Centrifugal Sanitary Pumps

## CSD series

### Standard design

Closed coupled hygienic and aseptic centrifugal pumps with open impellers.

For optimal product security, the CSD aseptic series incorporates a steam protection barrier between the pumped product and the external environment.

It is composed of two different flushing systems: one with very high temperature water for the mechanical seal and the second is steam on the product pump connections.

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.

Separate IEC standard motor:

Flow rates up to 300 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.

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

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

### Seals:

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

Single internal with protection barrier.

### Elastomers (certified to FDA):

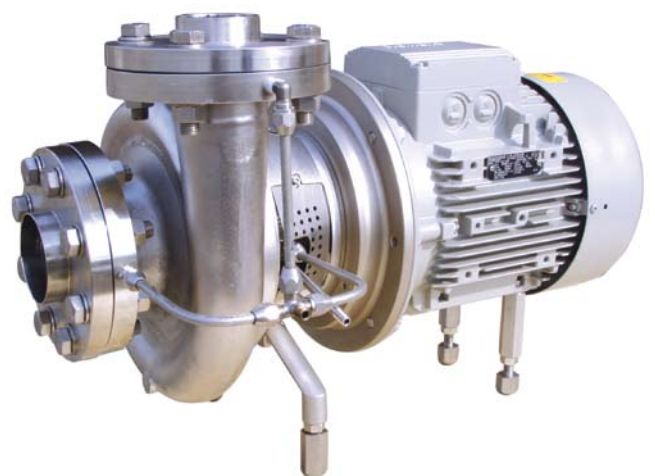
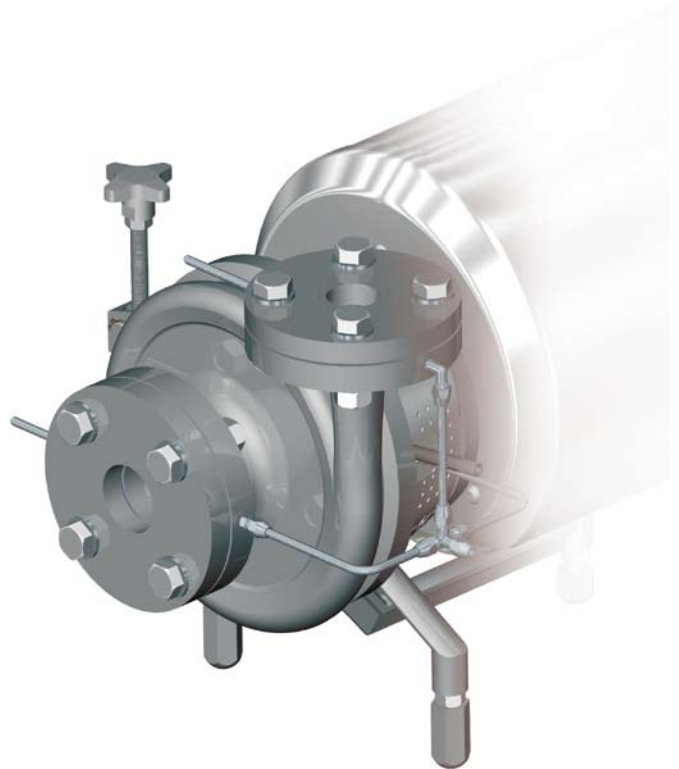
EPDM

Fluorocarbon (Viton)

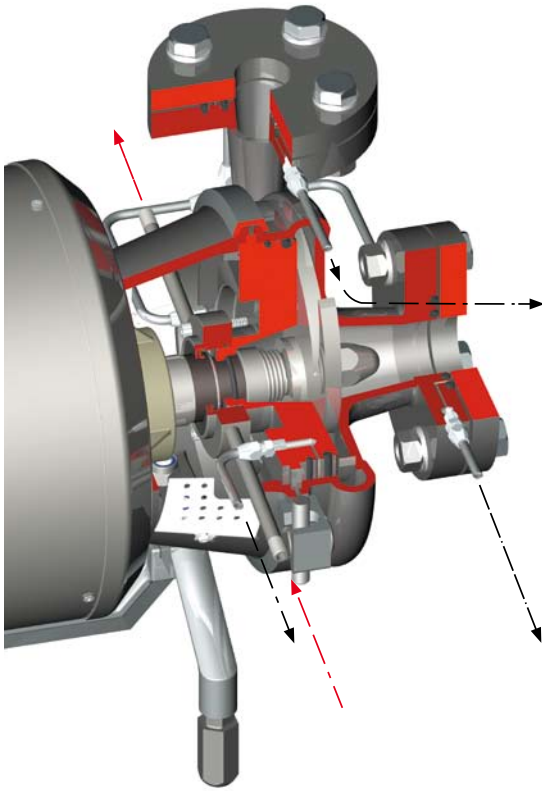
P.T.F.E. (Fep)

### Connections:

EN 1092-1 PN 16 flanges.



CSD aseptic pump  
Ideal for sterile products.



**- STEAM PROTECTION BARRIER**

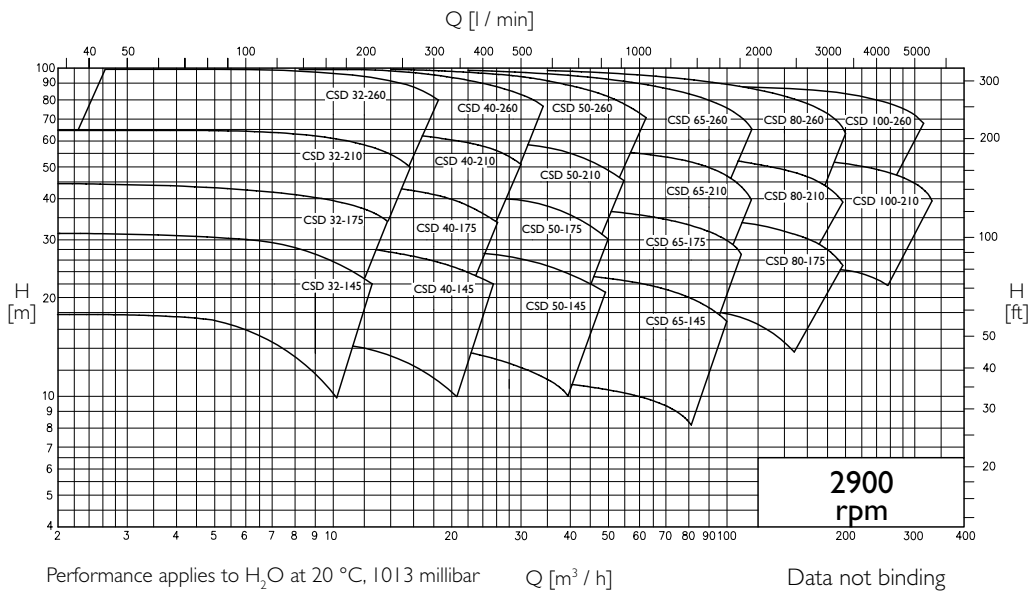
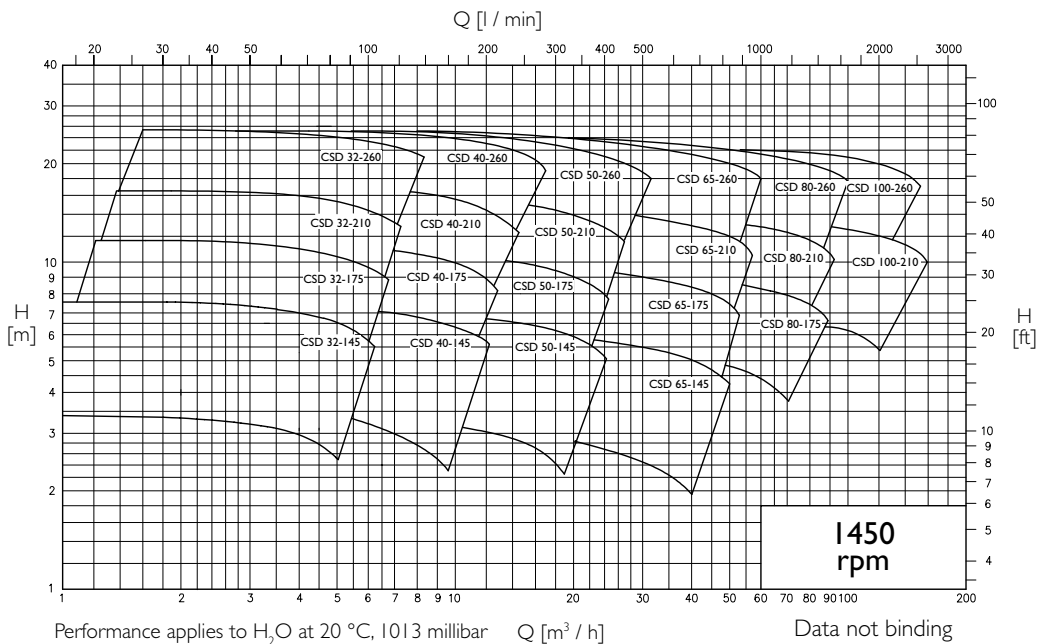
The CSD system creates a protective sterile barrier for the pumped product, by allowing steam to circulate between the pump casing / cover and the inlet and outlet flanges. As a result, all points of potential microbial ingress are securely defended.

**- SEALS**

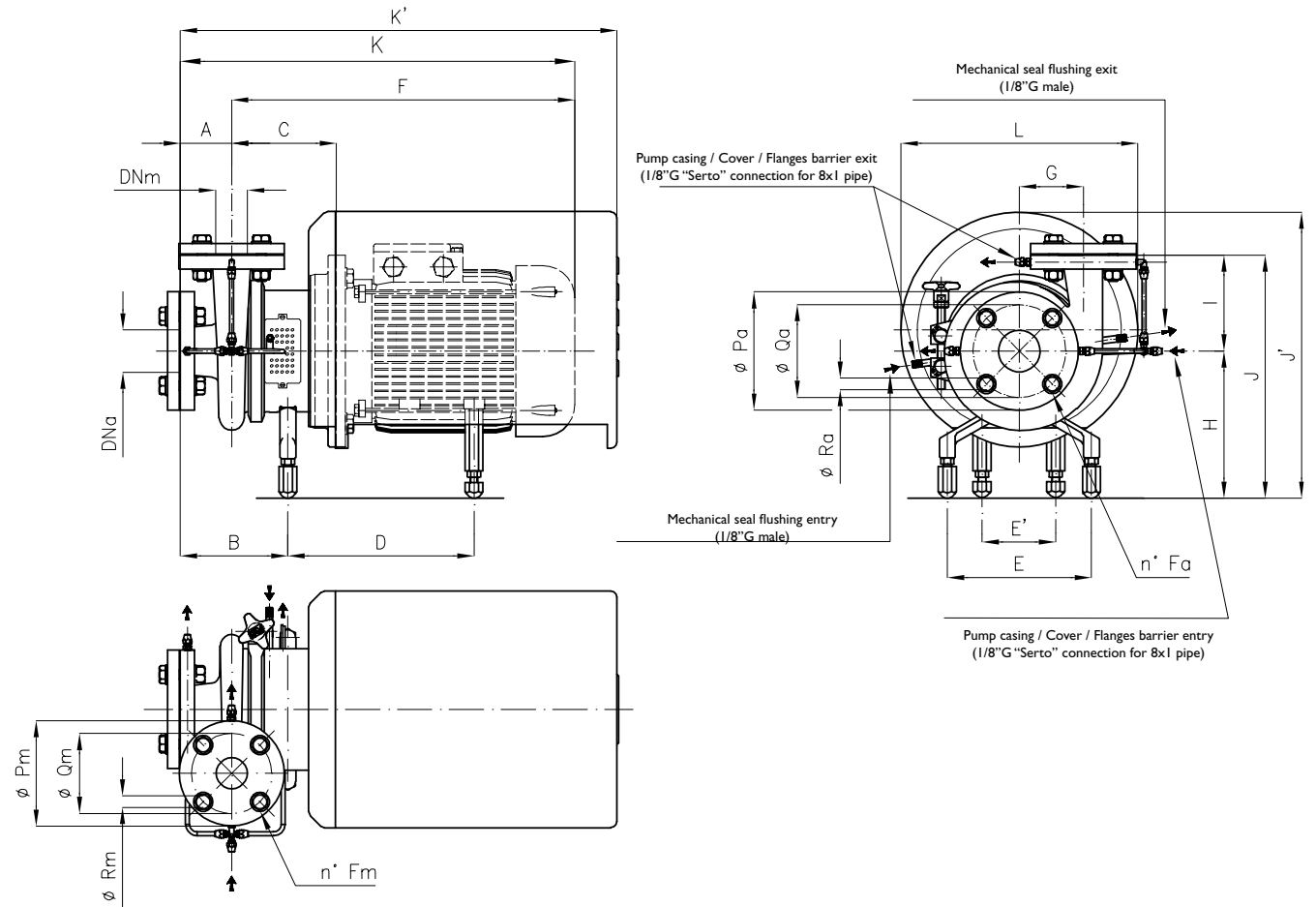
The "V execution" seal system is composed of an internal, protected, balanced and bi-directional mechanical seal with seats according to EN 12756 - ISO 3069 standards in direct contact with the product and of an external radial seal for the high temperature flushing liquid

In order to provide full protection, CSD pumps require reliable external supplies of both clean high temperature water and steam in appropriate quantities.

**GENERAL DIAGRAMS**



# OVERALL DIMENSIONS



Dimensions not binding - DN = EN 1092-1 PN 16 flanges, 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	Ø Pa	Ø Qa	Ø Ra	Ø fa	Ø Rm	Ø Qm	Ø Rm	Ø fm
CSD 32-145	80	40	32	80	167	138	231	225	-	372	85	208	452	566	135	343	372	298	150	110	18	4	140	100	18	4
	90					419	499			430																
	100					475	555			360																
	112					468	548			330																
CSD 32-175	80	40	32	80	167	139	231	225	-	373	95	213	453	567	135	348	377	298	150	110	18	4	140	100	18	4
	90					420	500			377																
	100					476	556			365																
	112					469	549			330																
CSD 32-210	80	40	32	88	166	139	231	225	-	373	110	221	461	575	155	376	385	298	150	110	18	4	140	100	18	4
	90					420	508			385																
	100					476	564			443																
	112					469	564			330																
CSD 32-260	132 M-S	50	32	90	184	161	283	225	-	180	140	238	634	688	177	393	460	370	165	125	18	4	140	100	18	4
	132 MB					281	185			584			672	743		443										
	160					206	230			700			788	943		501										
	90					163	231			444			534	601		398										
CSD 32-260	90	50	32	90	184	164	301	225	-	500	140	221	590	649	177	398	385	298	165	125	18	4	140	100	18	4
	100					493	583			443																
	112					500	583			330																
	132 M-S					185	292			180			570	660		714	415									
CSD 32-260	132 MB	50	32	90	184	185	290	225	-	185	140	238	608	714	177	415	460	370	165	125	18	4	140	100	18	4
	160					225	230			719			698	769		424										
	80					139	231			373			453	567		341										
	90					139	231			420			501	567		372										
CSD 40-145	100	50	40	80	168	140	301	225	-	476	90	208	556	636	133	358	430	330	165	125	18	4	150	110	18	4
	112					469	549			430																
	80					141	231			375			455	569		353										
	90					141	231			422			502	569		377										
CSD 40-175	100	50	40	80	169	142	301	225	-	478	95	213	551	638	140	370	435	330	165	125	18	4	150	110	18	4
	112					471	558			435																
	132 M-S					180	549			629			683	452												
	132 MB					164	273			667			738	378												
CSD 40-175	160	50	40	80	169	208	400	225	-	702	95	238	782	937	140	378	493	430	165	125	18	4	150	110	18	4
	80					141	231			375			455	569		386										
	90					141	231			422			502	569		385										
	100					142	301			478			551	638		443										
CSD 40-210	112	50	40	80	161	142	301	225	-	471	115	221	558	638	165	386	385	298	165	125	18	4	150	110	18	4
	132 M-S					180	549			629			683	403												
	132 MB					164	283			667			738	460												
	160					208	408			782			937	501												
CSD 40-260	90	50	40	100	194	163	231	225	-	444	145	221	544	611	167	388	385	298	165	125	18	4	150	110	18	4
	100					444	500			600			681	443												
	112					164	301			493			593	681		443										
	132 M-S					185	292			180			570	670		724	460									
CSD 40-260	132 MB	50	40	100	194	185	290	225	-	185	145	238	608	779	167	405	460	370	165	125	18	4	150	110	18	4
	160					225	230			719			708	779		460										
	180					225	230			719			819	978		510										
	80					163	231			279			785	885		1094	579									
CSD 50-145	90	65	50	86	170	141	231	225	-	374	95	208	462	577	145	353	372	298	185	145	18	4	165	125	18	4
	100					422	510			430																
	112					478	559			447																
	132					164	274			637			691	447												
CSD 50-175	80	65	50	80	169	141	231	225	-	374	100	213	454	569	150	363	377	298	185	145	18	4	165	125	18	4
	90					422	502			435																
	100					478	551			435																
	112					142	301			558			638	435												
CSD 50-175	132 M-S	65	50	80	169	164	275	225	-	180	100	230	549	683	150	380	452	370	185	145	18	4	165	125	18	4
	132 MB					273	185			587			667	738		452										
	160					208	400			782			937	493												
	90					141	231			422			502	569		391										
CSD 50-210	100	65	50	80	161	142	301	225	-	478	120	221	502	569	170	391	385	298	185	145	18	4	165	125	18	4
	112					478	551			443																
	132 M-S					164	283			180			549	629		683	460									
	132 MB					164	281			185			587	667		738	501									
CSD 50-210	160	65	50	80	161	208	408	225	-	230	120	238	782	937	170	408	460	370	185	145	18	4	165	125	18	4
	180					223	230			702			782	937		501										
	80					141	231			422			502	569		385										
	90					142	301			478			551	638		443										
CSD 50-210	100	65	50	80	171	223	532	225	-	279	120	248	863	1072	170	418	580	420	185	145	18	4	165	125	18	4

# OVERALL DIMENSIONS

Dimensions not binding - DN = EN 1092-1 PN 16 flanges, 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	Ø Pa	Ø Qa	Ø Ra	Ø fa	Ø Rm	Ø Qm	Ø Rm	Ø fm	
CSD 50-260	100	65	50	90	186	165	301	225	-	501	145	238	591	671	175	413	443	330	185	145	18	4	165	125	18	4	
	112						494			584			247	812		971	422	510									430
	160						722			878		1087		579		420											
	180						788																				
CSD 65-145	80	80	65	79	173	145	231	225	-	379	112	208	458	572	145	353	372	298	200	160	18	8	185	145	18	4	
	90						426			505			370	430		330											
	100						482			562				447		370											
	112						475			555				488		430											
	132 M-S						553			632		686		493		430											
	132 MB						670		741					488		430											
	160						785		940					377		298											
	180						825																				
CSD 65-175	90	80	65	80	172	145	301	225	-	481	120	213	505	572	150	363	377	298	200	160	18	8	185	145	18	4	
	100						474			561			380	435		330											
	112						554			641				452		370											
	132 M-S						632		686				493	430													
	132 MB						670		741					391		573	420										
	160						785		940					396		385	298										
	180						825							413		443	330										
	90						449			539		605															
CSD 65-210	100	80	65	90	189	168	231	225	-	505	135	238	595	675	175	413	443	330	200	160	18	8	185	145	18	4	
	112						498			588			422	510		430											
	160						725			881		1090		579		420											
	180						791																				
CSD 65-260	100	80	65	100	198	168	301	225	-	504	155	238	604	684	205	443	443	330	200	160	18	8	185	145	18	4	
	112						497			597			443	330													
	132 M-S						575			675		729		460		370											
	132 MB						613			713		785		510		430											
CSD 80-175	100	100	80	100	205	174	301	225	-	510	139	230	610	690	164	394	435	330	220	180	18	8	200	160	18	8	
	112						503			603			452	370													
	132 M-S						580			680		734		504		430											
	160						613			713		785		573		420											
CSD 80-210	100	100	80	100	201	171	301	225	-	507	145	238	607	687	185	423	443	330	220	180	18	8	200	160	18	8	
	112						500			600			460	370													
	132 M-S						578			678		732		510		430											
	160						613			713		786		579		420											
CSD 80-260	100	100	80	100	201	171	301	225	-	507	165	238	607	687	209	447	443	330	220	180	18	8	200	160	18	8	
	112						500			600			461	370													
	132						585			696		750		510		430											
	180						800			911		1120		579		420											
CSD 100-210	100	125	100	111	219	200	292	225	-	585	161	238	696	750	214	452	460	370	250	210	18	8	220	180	18	8	
	112						532			632			461	370													
	160						727			827		986		510		430											
	180						793			893		1102		579		420											
CSD 100-260	100	125	100	115	218	195	290	225	-	618	186	238	733	804	216	454	460	370	250	210	18	8	220	180	18	8	
	112						532			632			461	370													
	160						729			844		1003		510		430											
	180						795			910		1118		579		420											



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