



# 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):

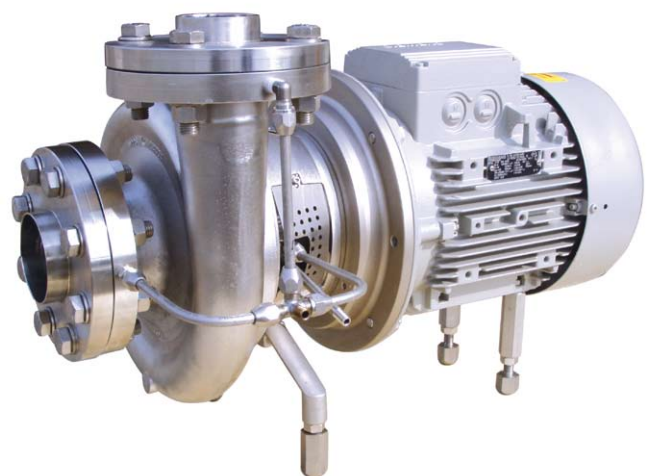
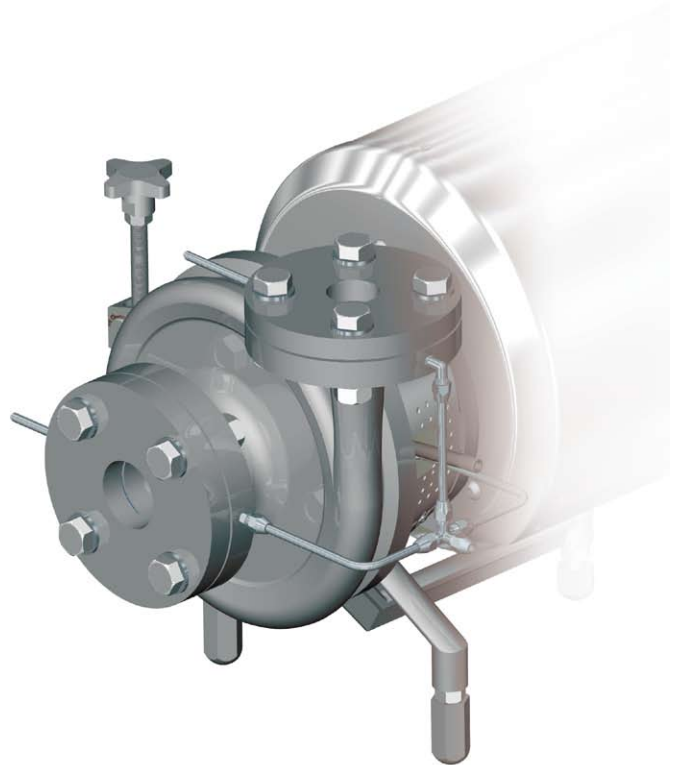
EPDM

Fluorocarbon (Viton)

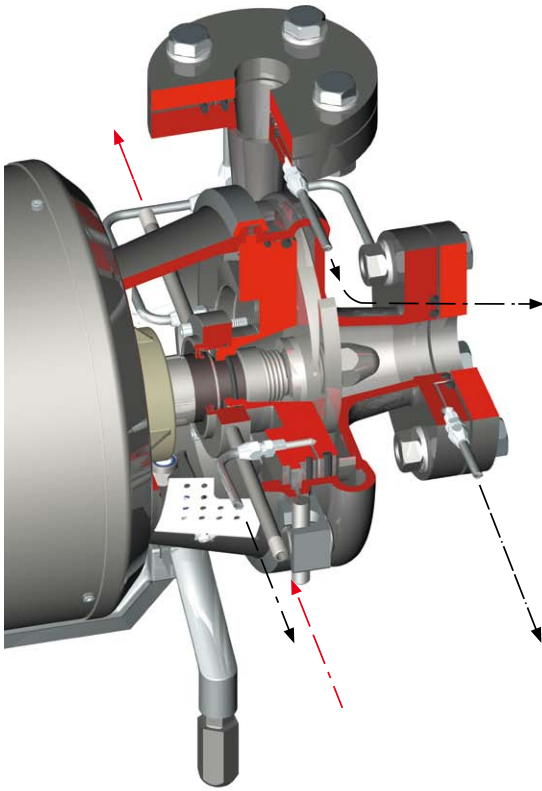
P.T.F.E. (Fep)

### Connections:

EN 1092-1 PN 16 flanges.



CSD aseptic pump  
Ideal for sterile products.



**- STEAM PROTECTION BARRIER**

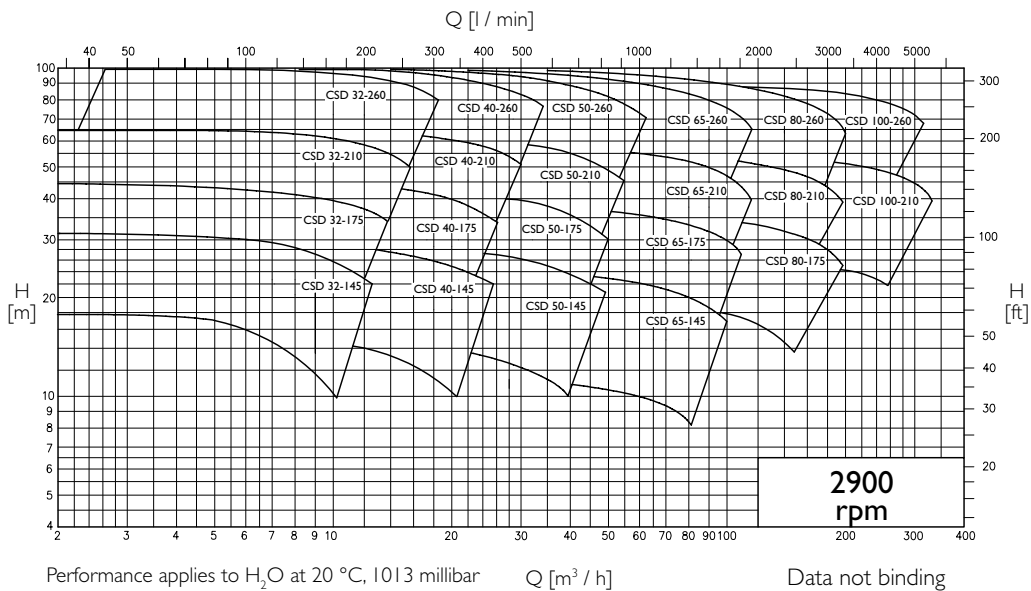
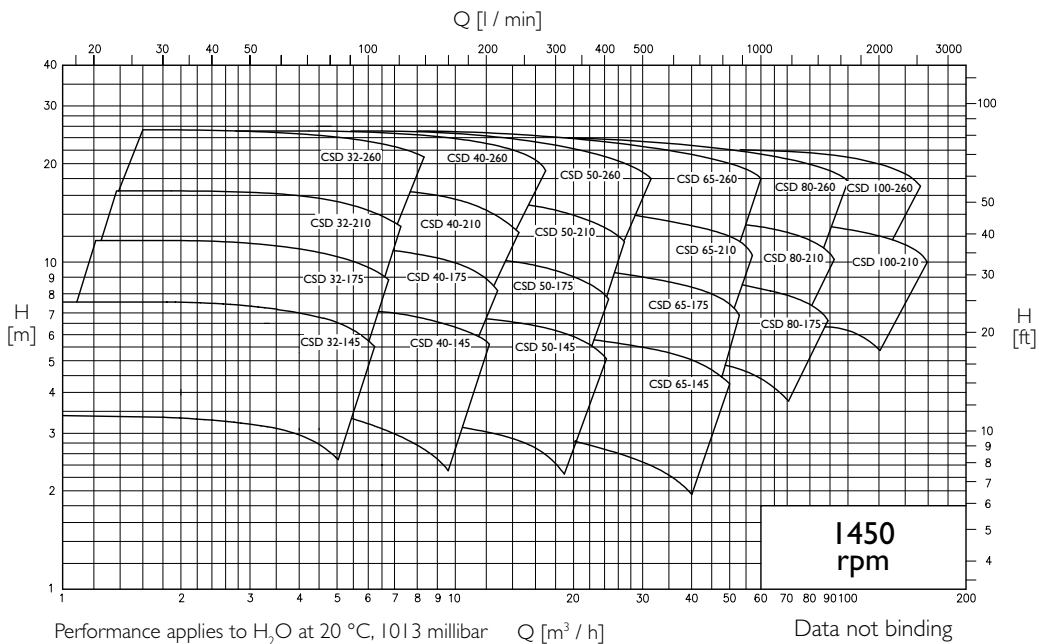
The CSD system creates a protective sterile barrier for the pumped product, by allowing steam to circulate between the pump casing / cover and the inlet and outlet flanges. As a result, all points of potential microbial ingress are securely defended.

**- SEALS**

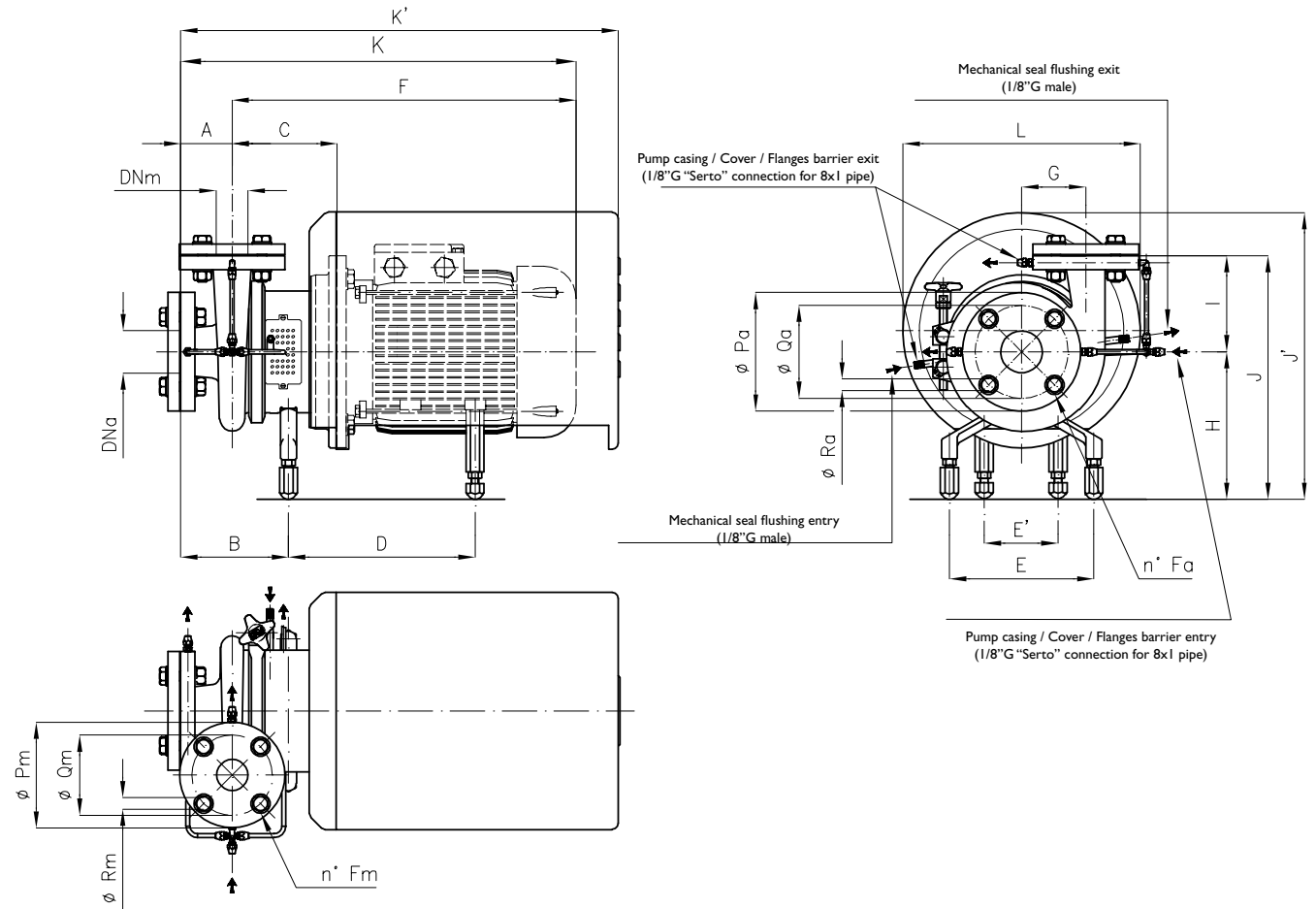
The "V execution" seal system is composed of an internal, protected, balanced and bi-directional mechanical seal with seats according to EN 12756 - ISO 3069 standards in direct contact with the product and of an external radial seal for the high temperature flushing liquid

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			330																
	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			330																
	100					476	556			330																
	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			330																
	100					476	564			330																
	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			743													
	160					206	230			700			943													
	90					163	231			444			601													
CSD 32-260	90	50	32	90	184	164	301	225	-	500	140	221	534	601	177	398	385	298	165	125	18	4	140	100	18	4
	100					493	583			649			443													
	112					185	292			180			570	714												
	132 M-S					290	185			608			698	769												
CSD 32-260	132 MB	50	32	90	184	225	412	225	-	230	140	247	809	968	177	424	510	430	165	125	18	4	140	100	18	4
	160					139	231			373			453	567												
	90					139	231			420			501	567												
	80					140	301			476			556	636												
CSD 40-145	100	50	40	80	168	140	301	225	-	469	90	225	549	636	133	358	430	330	165	125	18	4	150	110	18	4
	112					375	455			569			353													
	80					141	231			422			502	569												
	90					142	301			478			551	638												
CSD 40-175	100	50	40	80	169	142	301	225	-	471	95	230	551	638	140	370	435	330	165	125	18	4	150	110	18	4
	112					180	549			629			683	452												
	132 M-S					164	275			185			587	738												
	132 MB					208	400			230			702	937												
CSD 40-210	160	50	40	80	161	141	231	225	-	375	115	221	455	569	165	386	385	298	165	125	18	4	150	110	18	4
	90					422	502			569			386													
	100					142	301			478			551	638												
	112					164	283			180			549	683												
CSD 40-210	132 M-S	50	40	80	161	164	283	225	-	471	115	238	551	638	165	403	460	370	165	125	18	4	150	110	18	4
	132 MB					281	185			587			738													
	160					208	408			230			702	937												
	90					163	231			444			544	611												
CSD 40-260	100	50	40	100	194	164	301	225	-	500	145	221	600	681	167	388	385	298	165	125	18	4	150	110	18	4
	112					493	593			681			443													
	132 M-S					185	292			180			570	724												
	132 MB					290	185			608			708	779												
CSD 40-260	160	50	40	100	194	225	412	225	-	230	145	247	819	978	167	414	510	430	165	125	18	4	150	110	18	4
	180					279	785			885			1094													
	80					141	231			374			462	577												
	90					142	301			422			510	577												
CSD 50-145	100	65	50	86	170	142	301	225	-	471	95	208	566	646	145	370	430	330	185	145	18	4	165	125	18	4
	112					180	549			637			691	447												
	132					141	231			374			454	569												
	80					141	231			422			502	569												
CSD 50-175	90	65	50	80	169	142	301	225	-	478	100	213	558	638	150	363	377	298	185	145	18	4	165	125	18	4
	100					180	549			629			683	435												
	112					164	275			185			587	738												
	132 M-S					208	400			230			702	937												
CSD 50-175	132 MB	65	50	80	169	208	400	225	-	230	100	230	782	937	150	380	452	370	185	145	18	4	165	125	18	4
	160					141	231			422			502	569												
	90					142	301			478			551	638												
	100					164	275			185			587	738												
CSD 50-210	132 M-S	65	50	80	161	208	408	225	-	230	120	238	629	683	170	408	460	370	185	145	18	4	165	125	18	4
	132 MB					281	185			587			738													
	160					208	408			230			702	937												
	180					171	223			532			279	783												

# 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			422	510		430											
	160						230		722			812	971			579	420										
	180						279		788			878	1087														
CSD 65-145	80	80	65	79	173	145	231	225	-	379	112	208	458	572	145	370	353	372	298	200	160	18	8	185	145	18	4
	100						426			562			430	330													
	112						180		553			632	686				447	370									
	132 M-S						185		591			670	741				488	430									
	132 MB						212		399			230	706			377	298										
	160						144		231			481															
	180						145		301			474															
	100						167		275			180	552			230	730										
CSD 65-175	100	80	65	80	172	167	273	225	-	482	120	230	632	686	150	380	363	377	298	200	160	18	8	185	145	18	4
	112						475			555			435	330													
	132 M-S						185		590			670	741				493	430									
	132 MB						211		400			230	705				391	573									
	160						168		231			449															
	180						169		301			505															
	100						231		412			230	725			238	595										
	CSD 65-210					100	80		65	90		189	231	532		225	-	498	135								
112			279	791		881		1090					396	385	298												
160			168	301		504																					
180			190	292		497																					
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			460	370													
	132 M-S						180		575			675	729				510	430									
	132 MB						185		613			713	785				579	420									
	160						230		412			230	724			247	824										
	180						230		532			279	790			890	1099										
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						180		580			680	734				504	430									
	132 MB						185		613			713	785				573	420									
	160						236		411			230	730			241	896										
	180						236		531			279	796			896	1105										
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						180		578			678	732				510	430									
	132 MB						185		618			713	786				579	420									
	160						233		412			230	727			247	827										
	180						233		532			279	793			893	1102										
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													
CSD 100-210	132	125	100	111	219	200	292	225	-	585	161	238	696	750	214	452	460	370	250	210	18	8	220	180	18	8	
	160						279		800			247	911	1120				461									370
	180						185		618			238	733	804				454									460
CSD 100-260	132 MB	125	100	115	218	195	290	225	-	618	186	238	733	804	216	463	460	370	250	210	18	8	220	180	18	8	
	160						235		412			247	844	1003				510									430
	180						235		532			279	795				910	1118									



**C.S.F. Inox S.p.A.** Strada per Bibbiano, 7 - 42027 Montecchio E. (RE) - ITALY EU  
 Ph +39.0522.869911 ra. - Fx +39.0522.865454 / 866758 - csfitalia@csf.it - www.csf.it

**Export Department • Commercial Étranger • Comercial Extranjero**  
 Ph +39.0522.869922 - Fx +39.0522.869841 - csfexport@csf.it - www.csf.it

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.