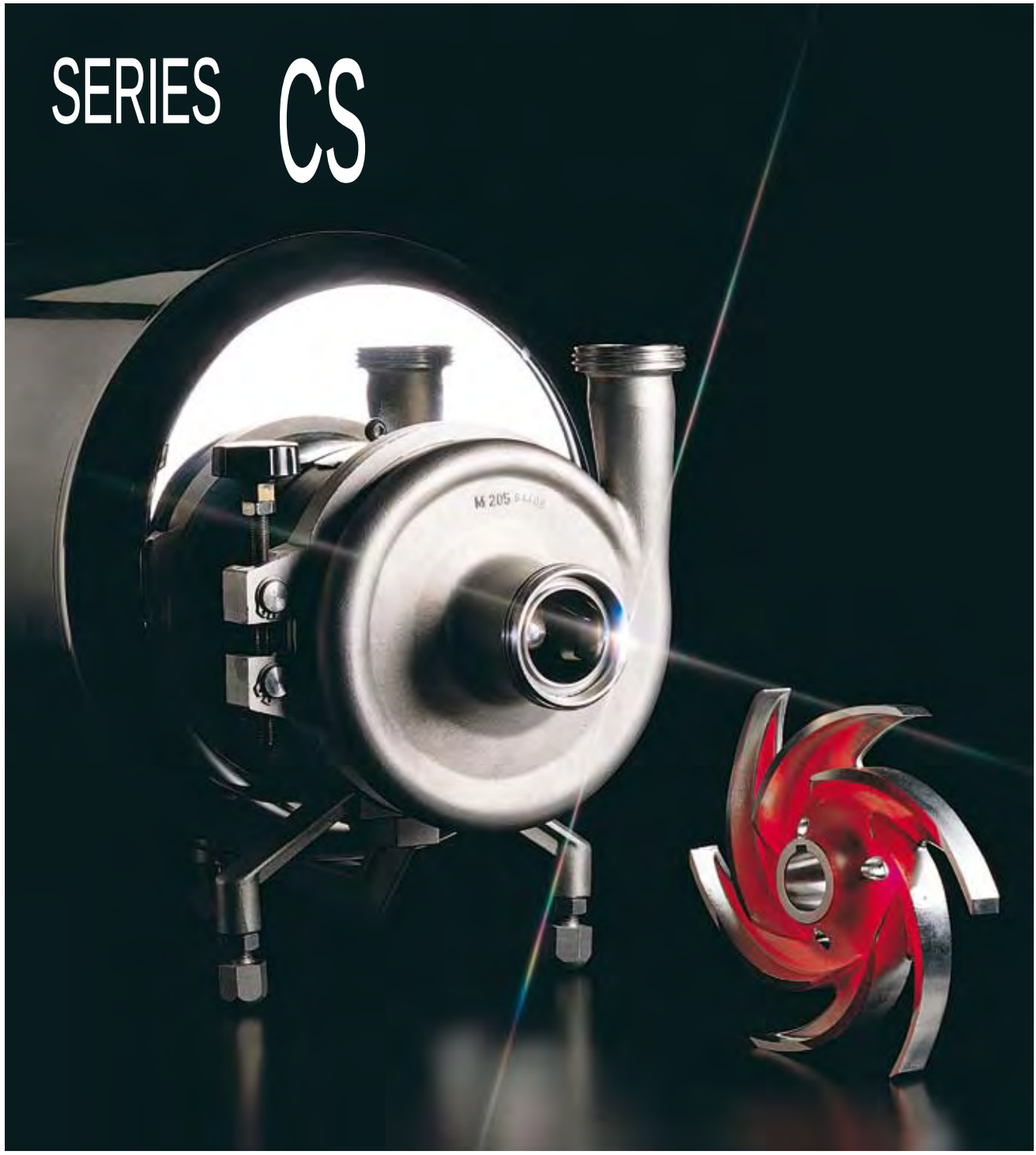
SANITARY CENTRIFUGAL PUMPS

CLOSED COUPLED WITH STANDARD MOTOR



CSF inox

C.S.F. INOX SPA

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CENTRIFUGAL PUMPS
CS - CSX - CSK SERIES

Standard design

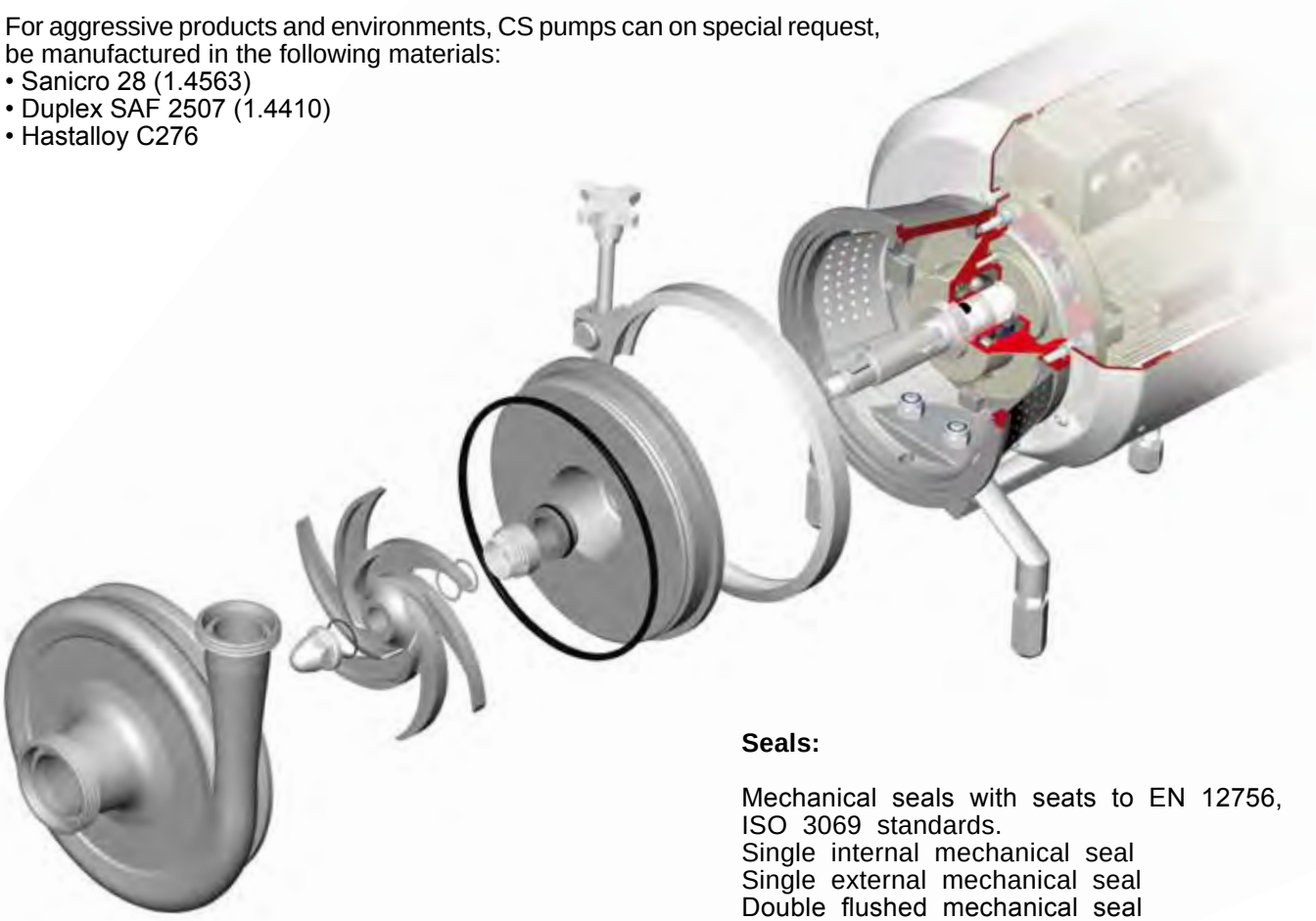
Closed coupled hygienic centrifugal pumps with open impellers. CS Series pumps meet the highest requirements of the food, pharmaceutical, chemical and water treatment industries.
The pumps are designed to a modular concept, resulting in a large number of models and a massive performance range. When combined 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^3/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 to150).

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
Silicone
P.T.F.E. (Fep)

Connections:

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

INDEPENDENT SUPPORT
Sturdy and modular support to be integrated in the various solutions.

SEPARATE MOTOR
For a self-sufficient choice in compliance with the following standards:
- IEC 34 - 1
- VDE 0530T1
- NF C51 - 111
- BS 5000 PART. 99
- NEMA MG1 PART. 1

REAR CASING COVER
Achieved by investment casting, structured and machined according to the various mechanical seals and application requirements.

IMPELLER
Each pump model has its own impeller that is manufactured with perfect shapes, thickness and materials and balanced thanks to the investment casting procedure. This means that they are perfectly efficient and reliable.

CASING
Volute casing with variable circular cross section, minimum thickness 6 mm, with perfect development of the shapes ensured by the investment casting procedure.

APPLICATIONS

The CS series has been designed to be used mainly in foodstuff, pharmaceutical, chemical and water treatment industries. The high quality standard does however mean that these pumps can also be used in all sectors where liquids are to be pumped.
Thus modular construc-tional concepts have been achieved with solutions suitable for all sectors.
The choice of the type of open impeller with 6 blades but with minimum assembly clearances means that these pumps can be used with perfectly clean and clear liquids but also with denser liquids or those with suspended particles. Ideal performance and low NPSH values mean that they can be used even in plants with particularly tricky problems.

PRODUCTS AND PROCESSES

DAIRY PRODUCTS
Unpasturised milk, whey, cream, skimmed milk, concentrated milk, concentrated whey.

FOODSTUFFS
Animal and vegetable oils and fats, vinegar, sauces, flavourings, egg products.

NON ALCOHOLIC BEVERAGES
Syrups, concentrates, must, fruits juice.

ALCOHOLIC BEVERAGES
Liqueurs, wine, sparkling wine, beer.

PHARMACEUTICAL/COSMETICS
Superpure water, WFI, hydro-alcoholic solutions, infusion solutions, lotions, plant extracts, perfumes.

PAPER/PULP
Glues, starch solutions, resin solutions, kaolin solutions.

BIOTECHNOLOGY
Cellular suspensions, nutrients solutions, enzymes.

SUGARY PRODUCTS
Liquid sugar, treacle, starch solution, glucose.

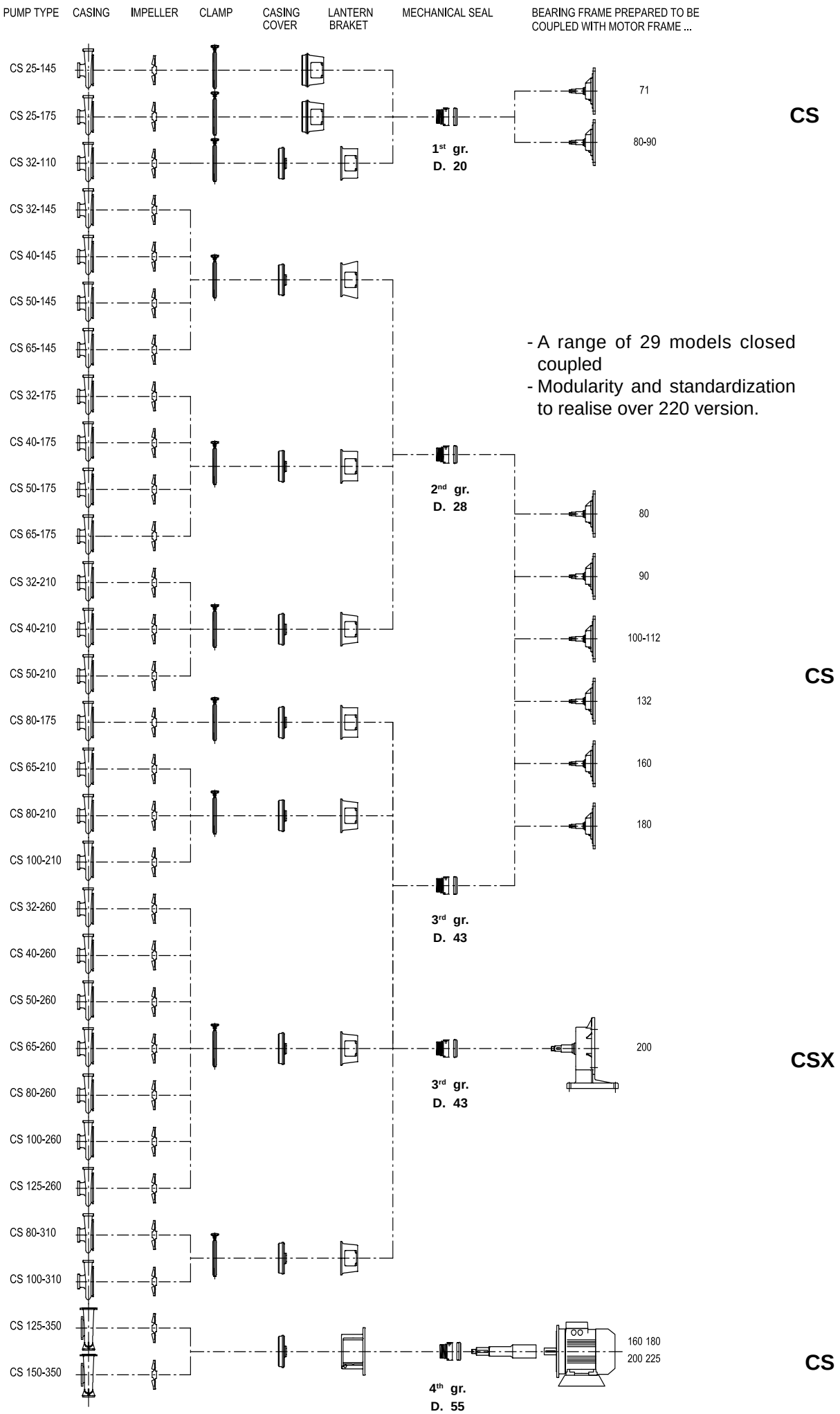
MEAT APPLICATIONS
Brine, meat broth, blood

BREWING
Malt and water mixing, malt must, yeast.

CHEMICALS
Photographic solutions, acid solutions, basic solutions, alkaline solutions, waste water containing crystals, detergents, solvents.

Water conditioning, Evaporation, Distillation, Reverse osmosis, Filtration, Extraction, Carbonation, Heating/pressure increase, Fermentation, Emulsifying, Homogenised re-processing, Mechanical separation, Bottling, Dosing, Degassing, Transfer, Cleaning applications / CIP, In-line mixing.

CS - CSX SERIES



- A range of 29 models closed coupled
- Modularity and standardization to realise over 220 version.

VARIOUS EXECUTIONS

CS

Close coupled centrifugal pump with open impeller, adjustable feet and shroud.

CS

Execution with B3B5 motor without shroud

CSX

CS pump X execution.
Close coupled execution with an indipendent support composed of two grease lubricated bearings.

CSK

Execution with double separate support with oil lubricated bearings.

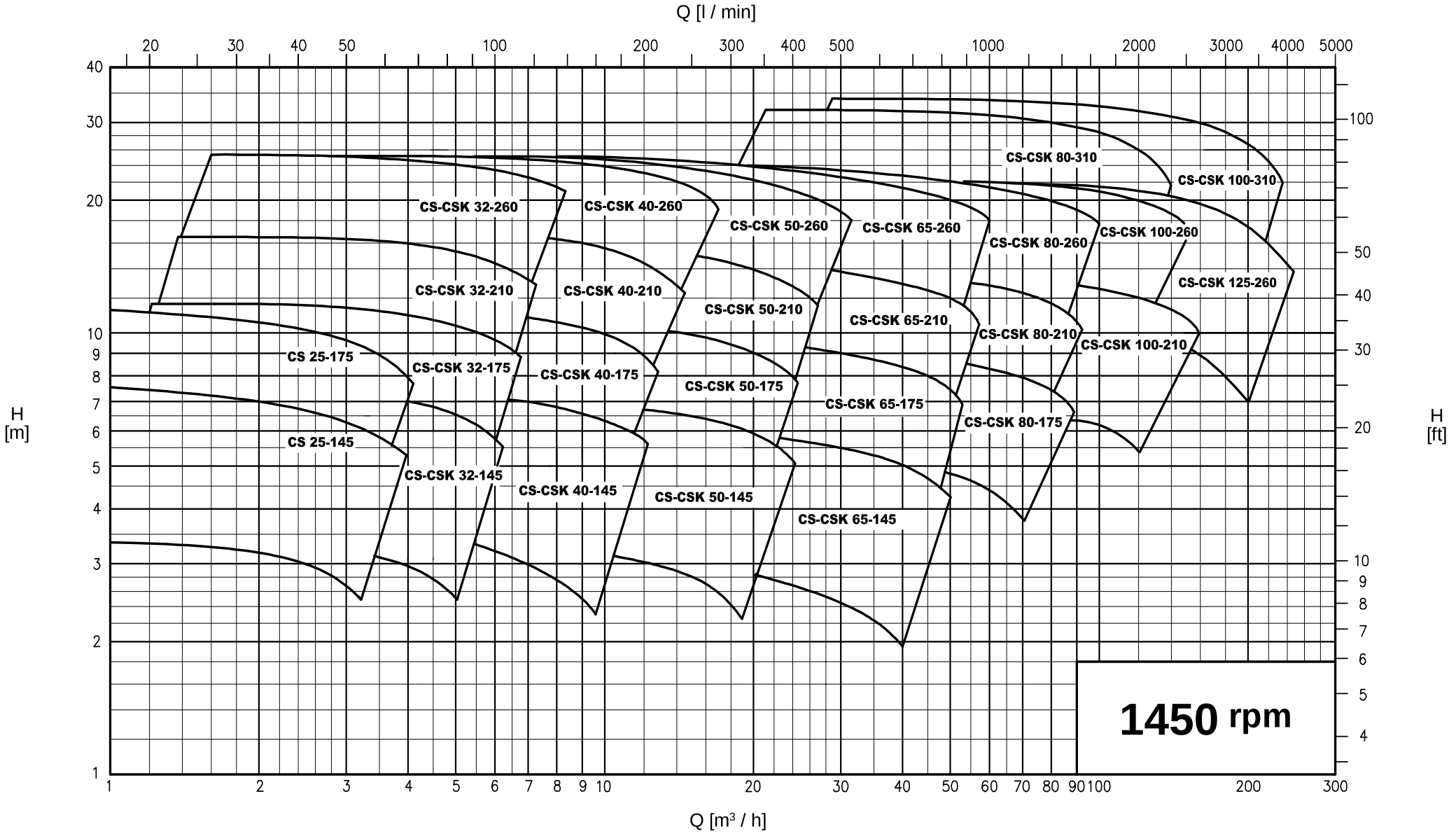
Pump **CS** 4th group
closed coupled

CSD

Aseptic execution with steam barrier.

GENERAL DIAGRAM CS - CSK

1450 rpm



Performance applies to H_2O at 20 °C, 1013 millibar

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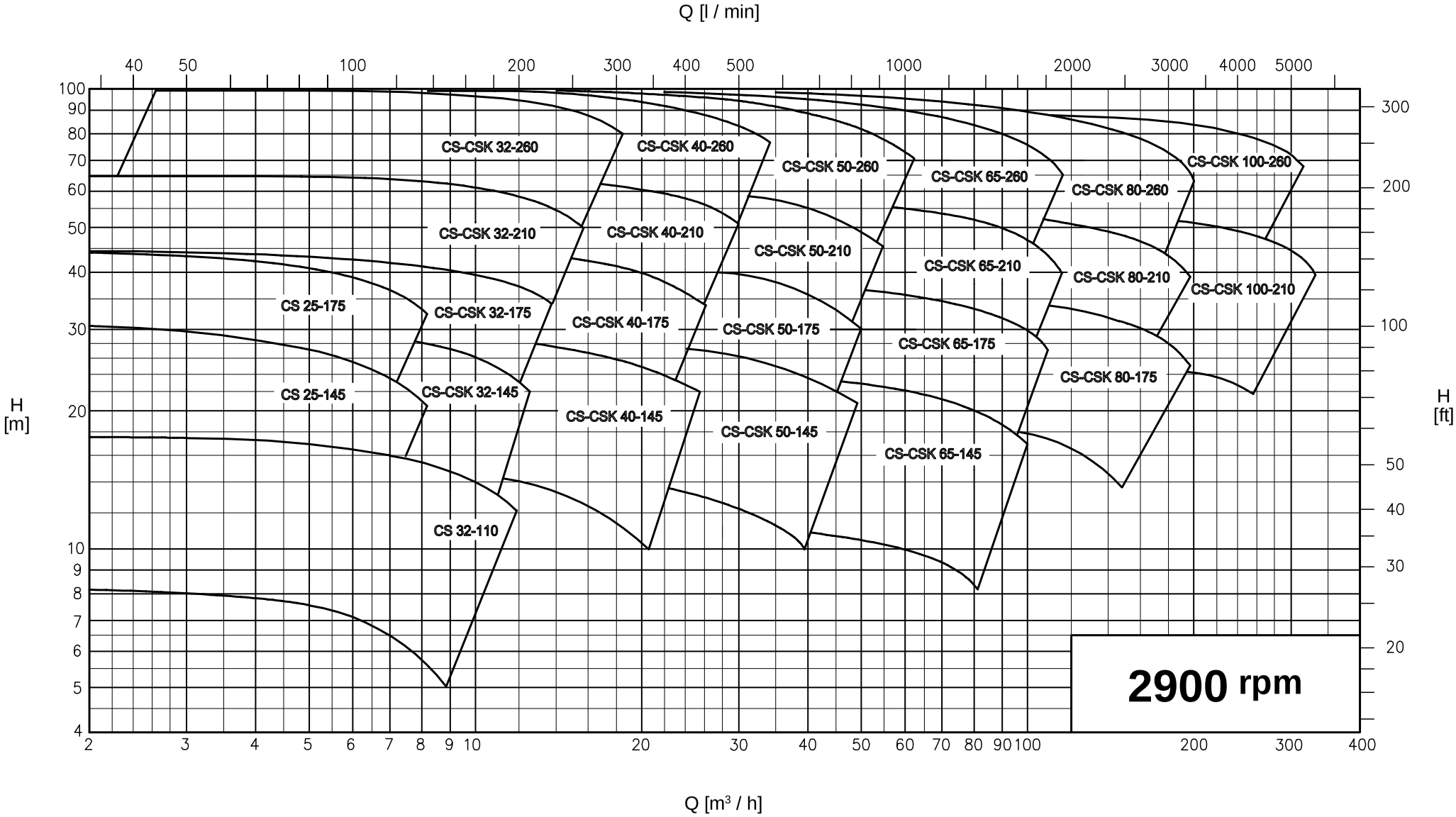
Rev. 01

Rev. 00

GENERAL DIAGRAM CS - CSK

2900 rpm



Performance applies to H_2O at 20 °C, 1013 millibar

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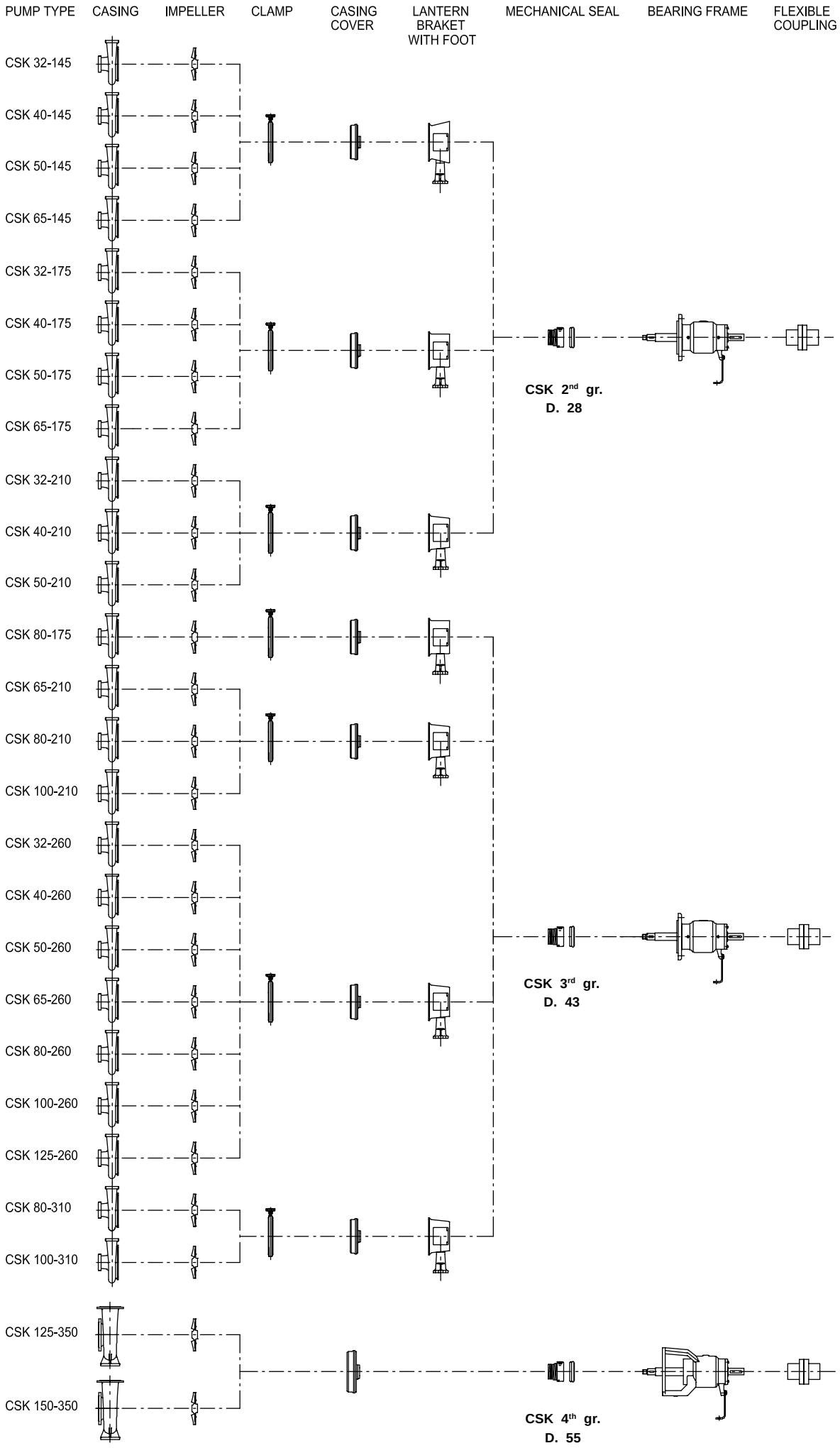
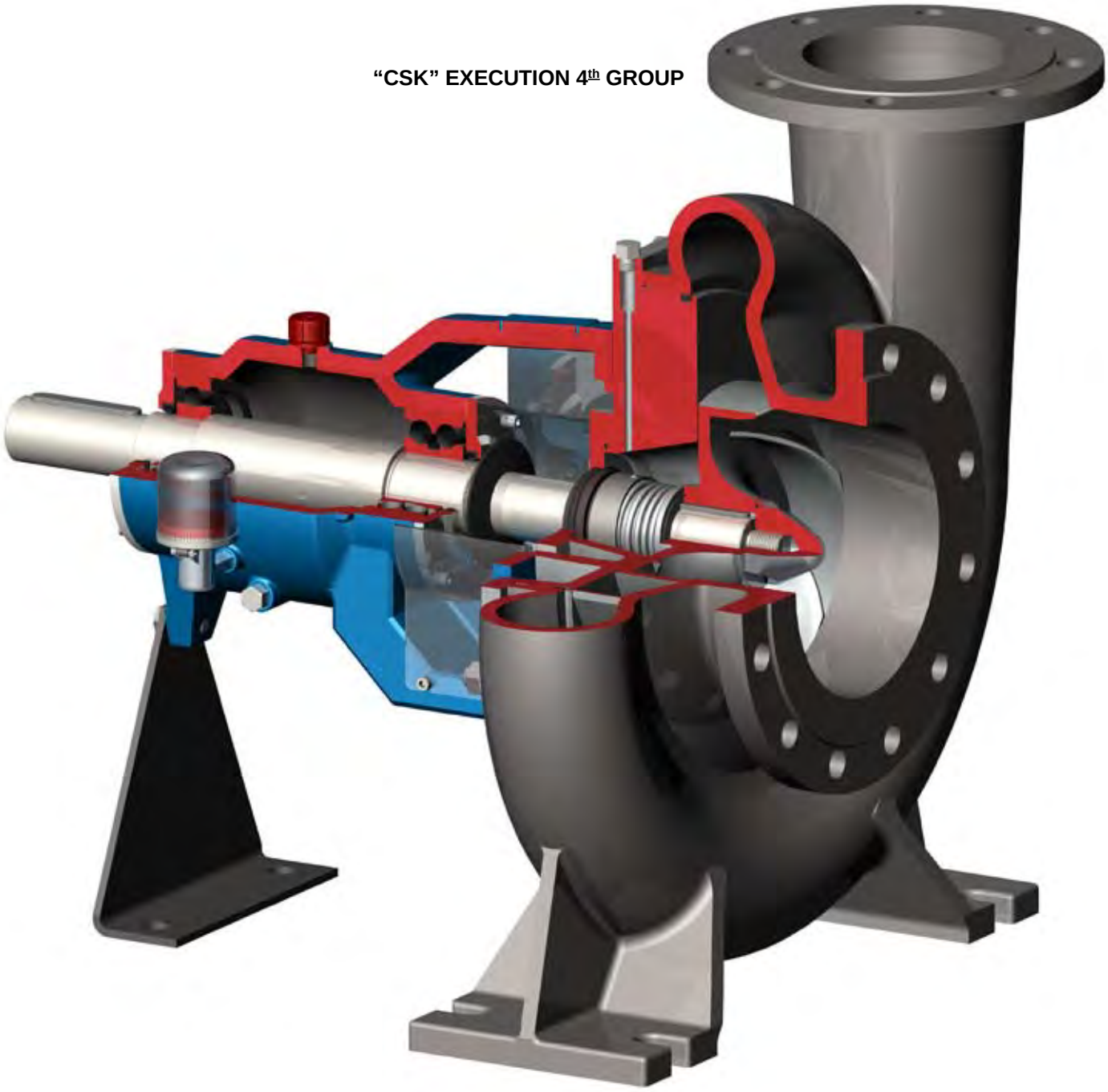
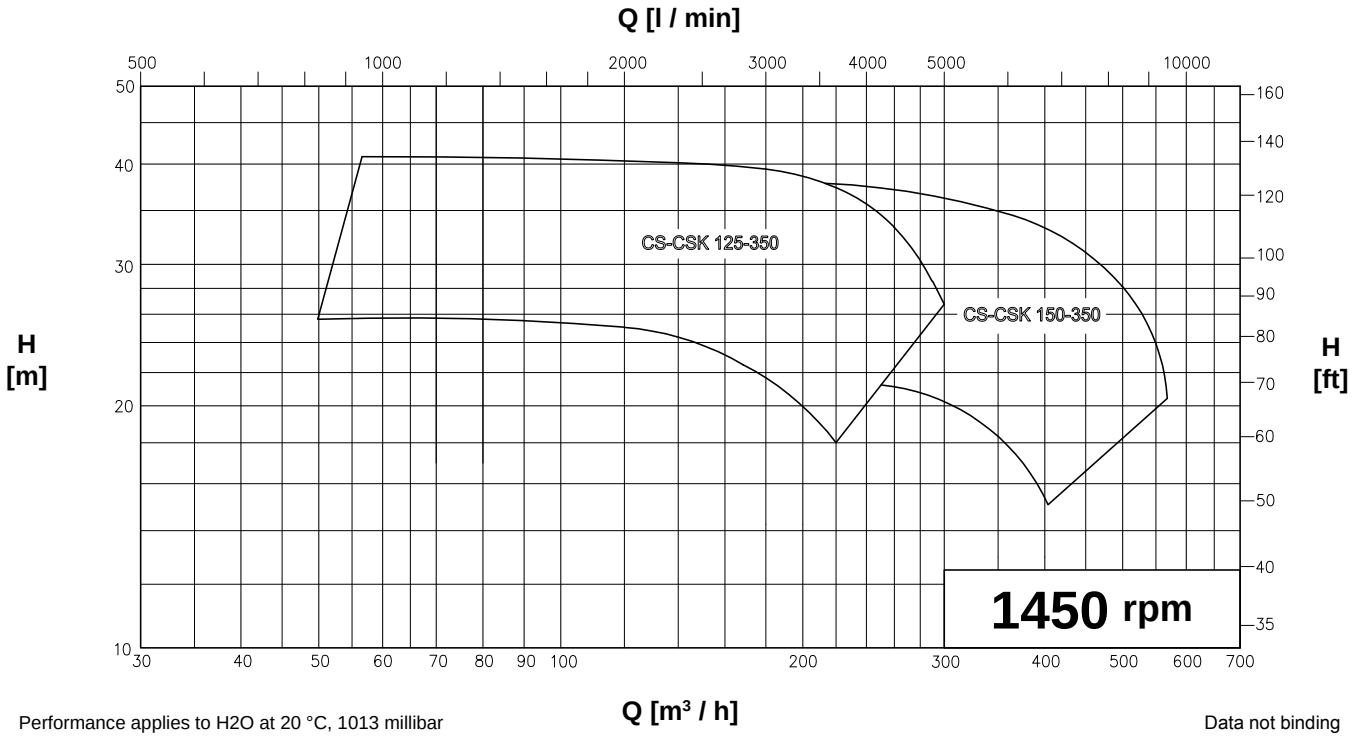
CSK SERIES


PUMP TYPE
CASING
IMPELLER
CLAMP
CASING COVER
LANTERN BRAKET WITH FOOT
MECHANICAL SEAL
BEARING FRAME
FLEXIBLE COUPLING
CSK 32-145
CSK 40-145
CSK 50-145
CSK 65-145
CSK 32-175
CSK 40-175
CSK 50-175
CSK 65-175
CSK 32-210
CSK 40-210
CSK 50-210
CSK 80-175
CSK 65-210
CSK 80-210
CSK 100-210
CSK 32-260
CSK 40-260
CSK 50-260
CSK 65-260
CSK 80-260
CSK 100-260
CSK 125-260
CSK 80-310
CSK 100-310
CSK 125-350
CSK 150-350
CSK 2nd gr.
D. 28
CSK 3rd gr.
D. 43
CSK 4th gr.
D. 55

“CSK” EXECUTION 4th GROUP





Performance applies to H2O at 20 °C, 1013 millibar

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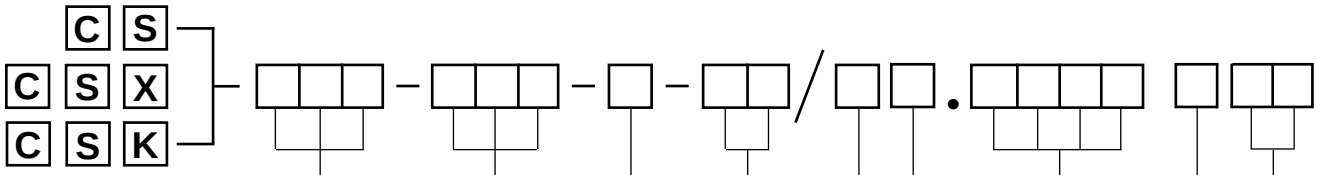
PUMP CODES GUIDE



25
32
40
50
65
80
100
125
150
— **PUMP SIZE**

110
145
175
210
260
310
350
— **IMPELLER DIAMETER**

2 (2900/3500 [rpm])
4 (1450/1750 [rpm])
6 (960/1150 [rpm])
— **NO. OF POLES**

HP — **BRAKE HORSEPOWER**

B : **Stainless steel**

UNI EN 10283	**- 1.4409**
ACI-ASTM 743-98	**- CF3M**
UNI EN 10088	**- 1.4404**
AISI	**- 316L**

— **PUMP MATERIAL** (Product wetted steel parts)

D - Fluorocarbon (FPM)
M - EPDM
S - Silicon
T - P.T.F.E. (Fep)
— **PUMP SEALS** (Product wetted seals)

A - Inducer
C - Casing drainage
D - “DS” connections
I - Heated casing
K - Heated casing cover
L - Flanged connections
M - "SMS" connections
N - "Clamp" connections
O - "IDF" connections
P - Motor shroud
S - Welding connections
J - "RJT" connections
Z - Ex-Proof motor
— **SPECIAL EXECUTIONS**

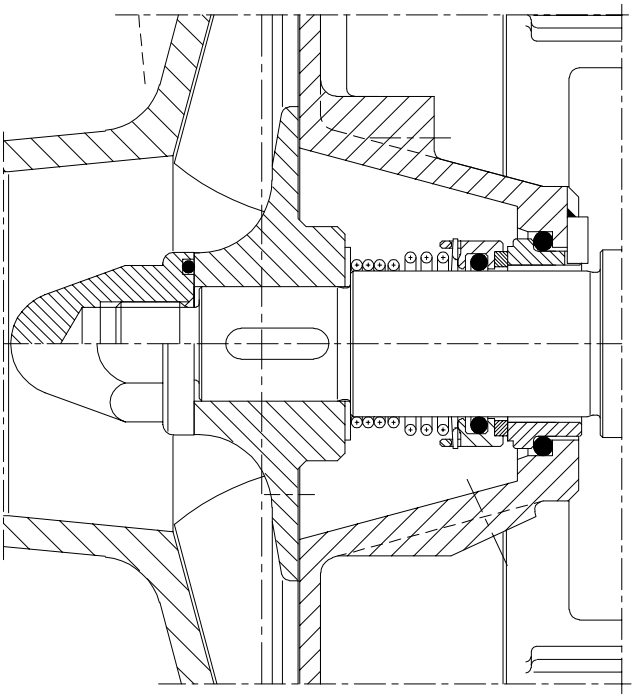
Q - Double flushed mechanical seal
T - Internal mechanical seal
U - External mechanical seal + TMR
V - Internal mechanical seal + TMR
Y - External mechanical seal
W - Internal mechanical seal + Forced product circulation
WH - Protected mechanical seal + Forced product circulation
— **MECHANICAL SEALS**

□ □ Material code (ref. tab. CD004)

Example: CS 80-175-2-20/BM.LPT31

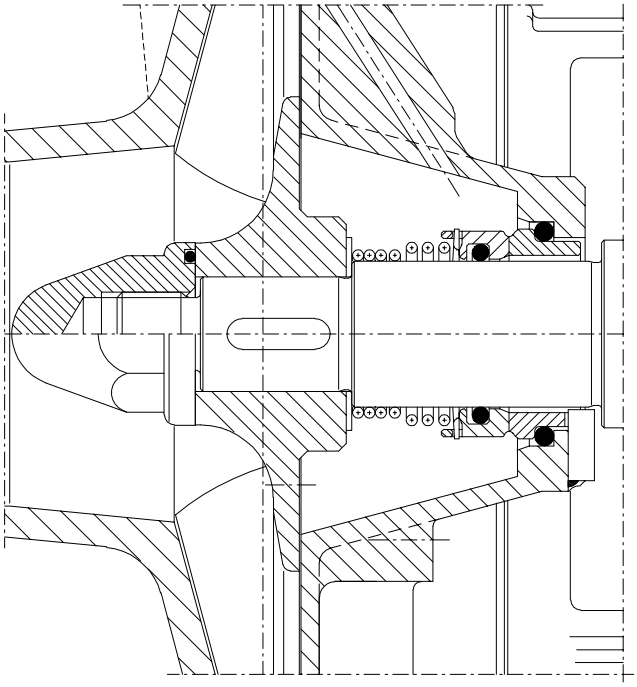
MECHANICAL SEALS

Mechanical seals with standardized seats according to the following standards are fitted on CS pumps:
EN 12756, ISO 3069.
Thanks to the different materials available the customer can choose the most suitable versions among the many available, depending on the product to be pumped, the temperatures and working performance.The various applications meet and resolve the widest variety of installation and operational conditions.



EXECUTIONS T

STANDARD MECHANICAL SEAL "T"
The standard version entails the installation of an internal mechanical seal, dipped in the product and fitted behind the impeller in a suitable conic chamber in order to ensure correct lubrication conditions.



EXECUTION W

MECHANICAL SEAL WITH "W" CIRCULATION
Internal mechanical seal with forced circulation of the pumped liquid to restrict the working temperature, to eliminate air and steam bubbles, to improve lubrication and avoid residues or deposits on the seal.

MECHANICAL SEALS

MATERIAL CODES

METALS
H - Nickel-plated stainless steel AISI 304
X - Stainless steel AISI 316L
L - Hastelloy (Ni alloy)

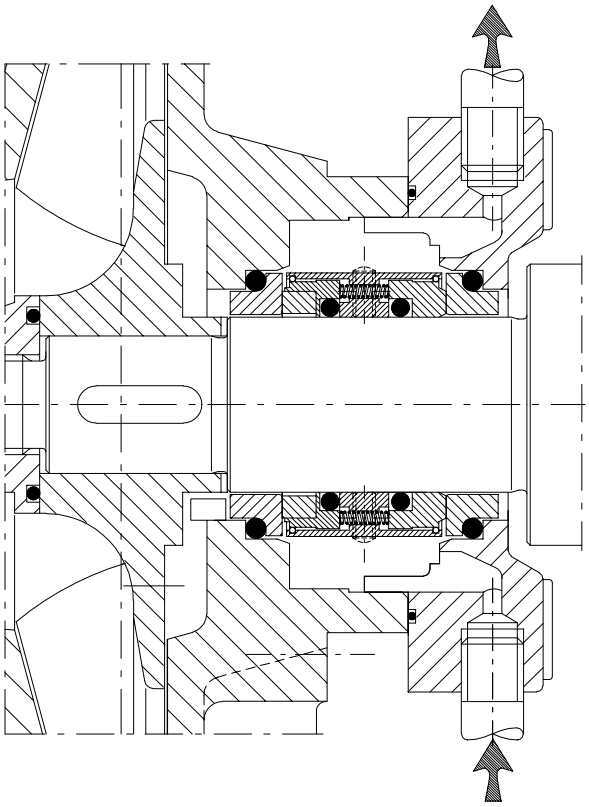
CARBONS
V - Normal carbon
Z - Special carbon

RESINS
5 - Normal PTFE
4 - Loaded PTFE
F - O-Ring FEP

METAL OXIDES
2 - Alumina ceramic

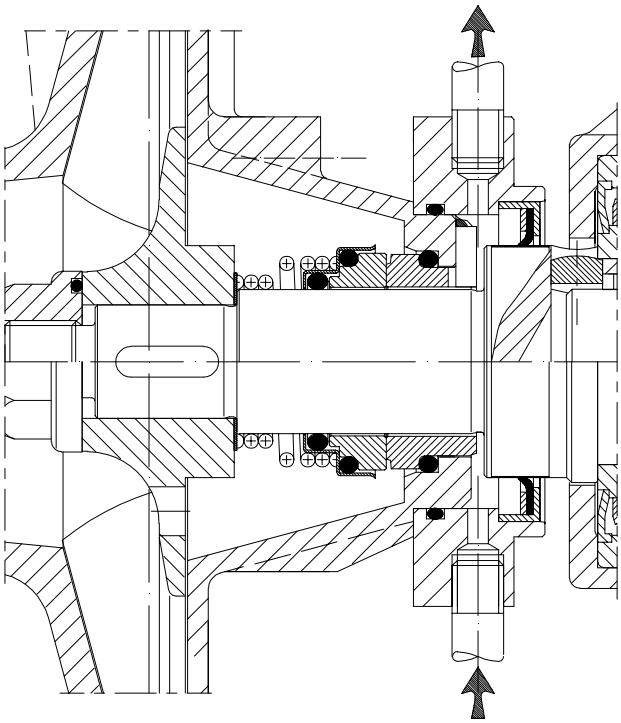
METAL CARBONS
3 - Hard metal welded on stainless steel (TUC)
R - Integral anti-corrosion hard metal (TUC)
K - Integral silicate carbon (SIC)

ELASTOMERS
6 - Nitrile (NBR)
7 - Ethylene propylene (EPDM)
W - FPM for high T
Y - Fluorocarbon (FPM)
B - Silicone
Q - Chemraz
U - Kalrez



EXECUTION Q

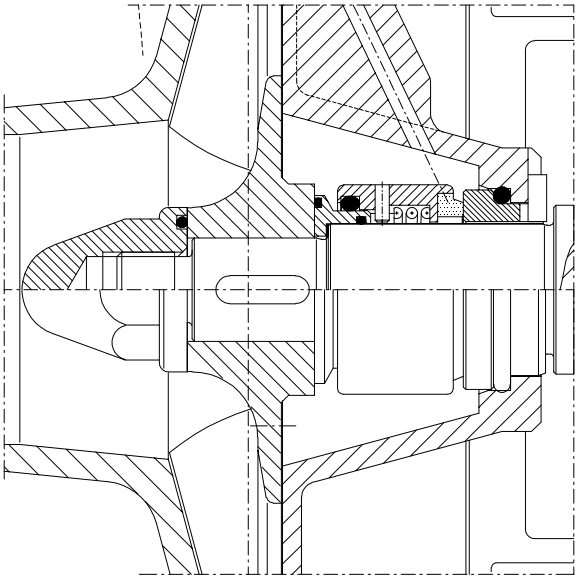
COMPACT DOUBLE MECHANICAL SEAL "Q"
Double mechanical seal with circulation of the cleaning and cooling liquid.
It is used with products that tend to crystallise, to glue, to harden, to be abrasive and corrosive, to reach high temperatures and whenever the internal single seal life is limited.
The function of the fluxing is to clean, lubricate and cool the seal; the circulating liquid must be clean.
If the seal is leaking the fluxing liquid will point out this fault.



EXECUTION V

INTERNAL MECHANICAL SEAL ASSEMBLY "V"
The external liquid circulation chamber creates a protective barrier and prevents any damages to the electric motor and contamination of the environment, due to the possible leakage of the internal mechanical seal with aggressive or toxic liquids.
The function of the flushing is to clean the seal surfaces in order to limit the wear.

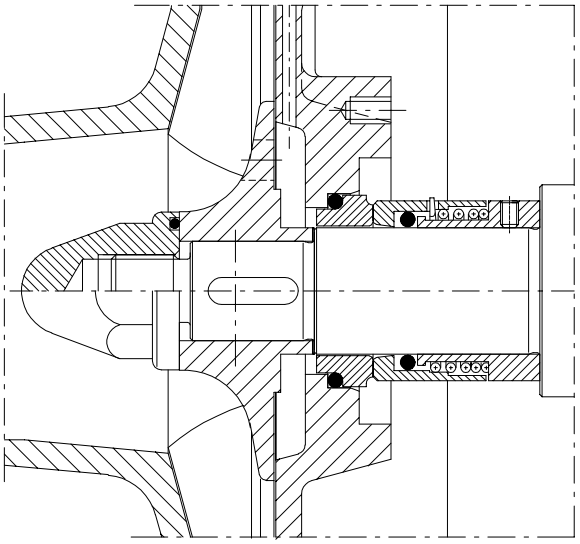
MECHANICAL SEALS



EXECUTION WH

INTERNAL MECHANICAL SEAL "WH"

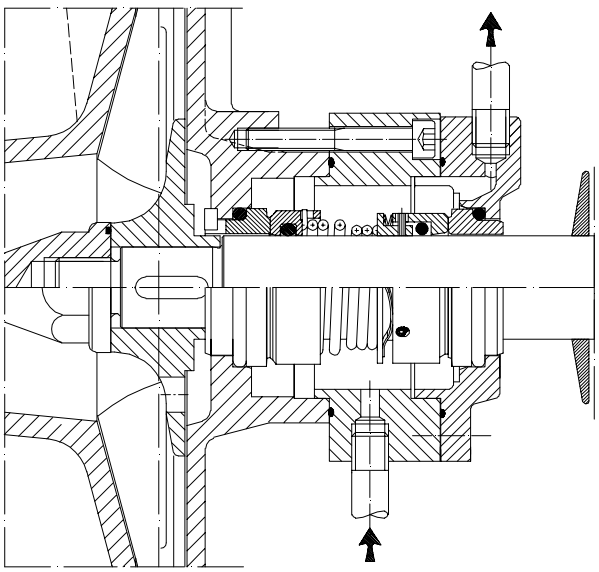
Protected and balanced execution with forced circulation of the liquid pumped. It is suitable for viscous and dirty products, for vacuum applications or those subject to differences in pressure. It is easily cleaned and therefore ideal for sanitary and pharmaceutical applications etc.



EXECUTION Y

EXTERNAL MECHANICAL SEAL "Y"

For all cases where the mechanical seal must not touch the pumped product, in order to avoid sanitary problems, corrosion and conditioning of its running.

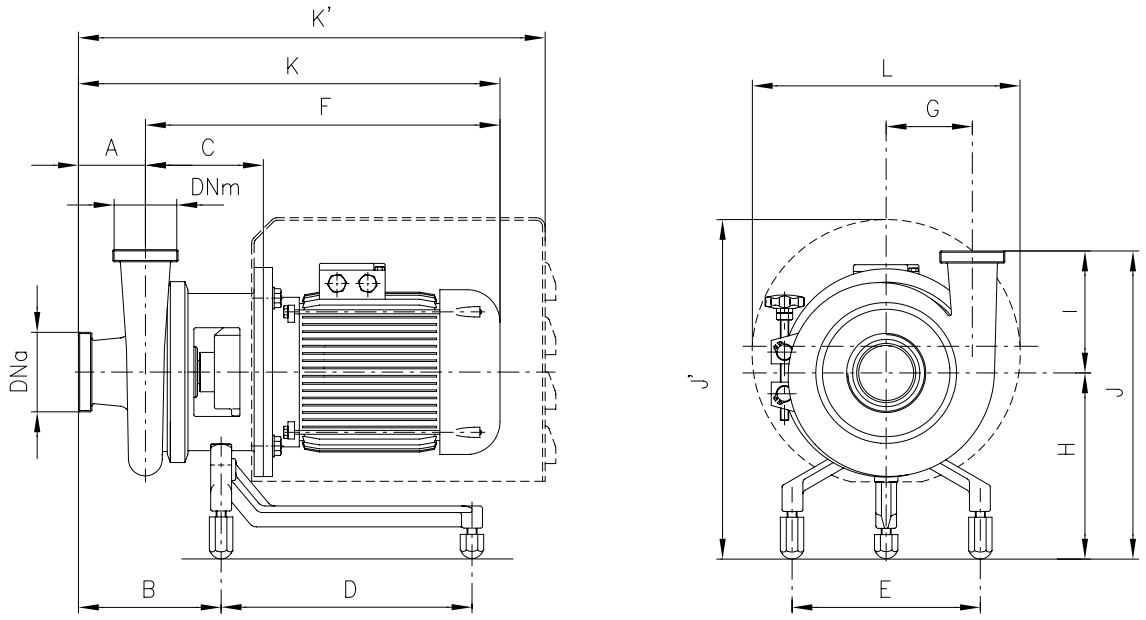


EXECUTION Q FOR CSK SERIES

DOUBLE MECHANICAL SEAL "Q"

Double mechanical seal (back-to-back) with liquid circulation. The function of the fluxing is to clean, lubricate and cool the seal; the circulating liquid must be clean. If the seal is leaking the fluxing liquid will point out this fault. It is used with products that tend to crystallise, to glue, to harden, to be highly abrasive, to reach high temperatures and whenever the seal life is limited.

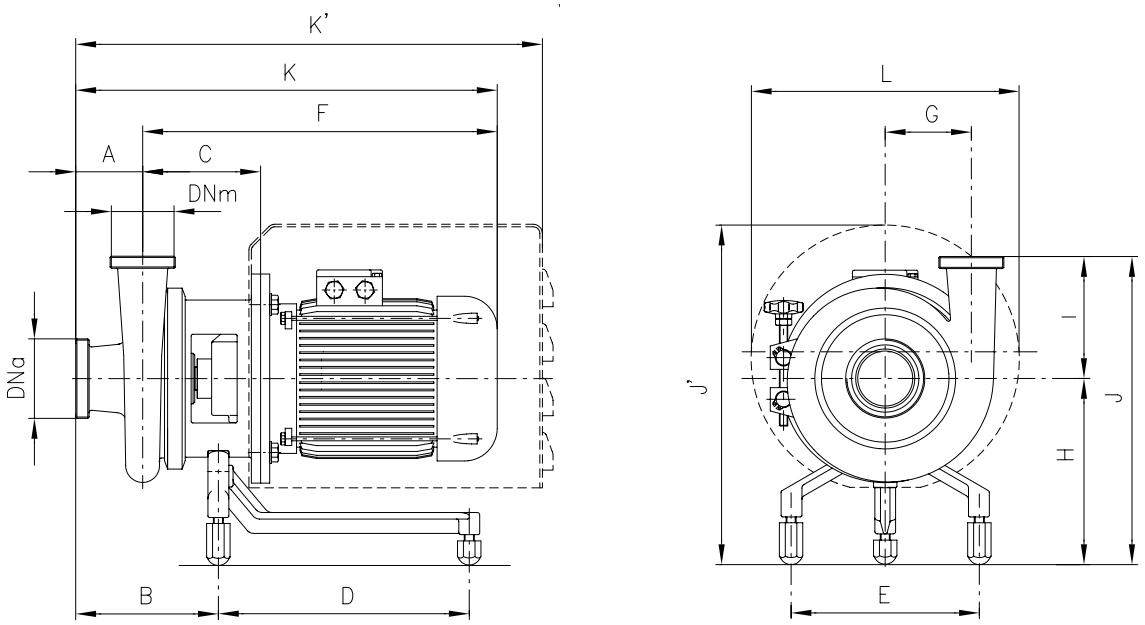
MOTOR POWER FROM 0,37 kW TO 4 kW (SIZE IEC 71-112)



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

Pumps		kW	DNa	DNm	A	B	C	D	E	F	G	H	K	K'	I	J	J'	L	Weight kg
CS 25-145	**1450 rpm**	0,37 0,55 0,75	32	25	75	144	117 123	190	178	335 359	81	158	410 434	532 541	145	303	300 340	239 298	21,5
CS 25-175		0,37 0,55 0,75	32	25	65	134	117 123	190	178	335 359	96	164	400 424	522 531	149	313	306 346	239 298	
CS 32-110		0,37 0,55 0,75	40	32	70	137	117 123	190	178	335 359	65	149	405 429	527 536	110	259	291 331	239 298	
CS 32-145		0,55 0,75	40	32	80	167	138	231	225	374	85	208	454	566	145	353	372	298	
CS 32-175		0,55 0,75 1,1	40	32	80	167	139	231	225	375 419	95	213	455 499	567	150	363	377	298	
CS 32-210		0,75 1,1 1,5 2,2 3	40	32	80	158	139 140	231 301	225	375 419 456	110	221 238	455 499 536	567 636	165	386 403	385 443	298 330	36 53
CS 32-260		1,1 1,5 2,2 3 4	50	32	90	184	163 164	231 301	225	443 480 492	140	221 238	533 570 582	601 670	172	393 410	385 443	298 330	
CS 40-145		0,55 0,75	50	40	80	168	139	231	225	375	90	208	455	567	133	341	372	298	
CS 40-175		0,75 1,1 1,5	50	40	80	169	141	231	225	377 421	95	213	457 501	569	150	363	377	298	
CS 40-210		0,75 1,1 1,5 2,2	50	40	80	161	141 142	231 301	225	377 421 458	115	221 238	457 501 538	569 638	165	386 403	385 443	298 330	42,5 40 53
CS 40-260		1,5 2,2 3 4	50	40	100	194	163 164	231 301	225	443 480 492	145	221 238	543 580 592	611 680	172	393 410	385 443	298 330	63
CS 50-145		0,75 1,1 1,5	65	50	80	170	141	231	225	377 421	95	208	457 501	569	145	353	372	298	

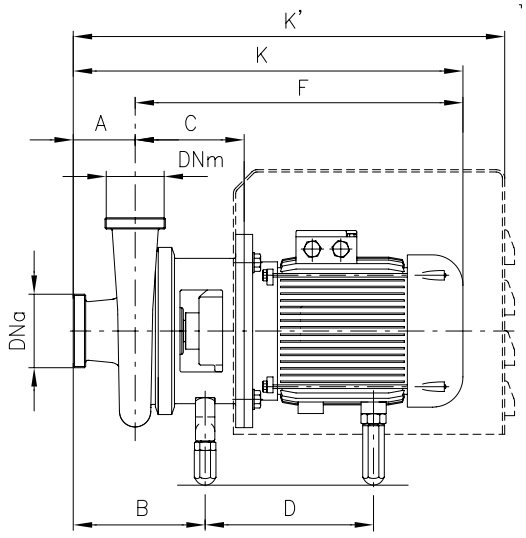
MOTOR POWER FROM 0,55 kW TO 4 kW (SIZE IEC 80-112)

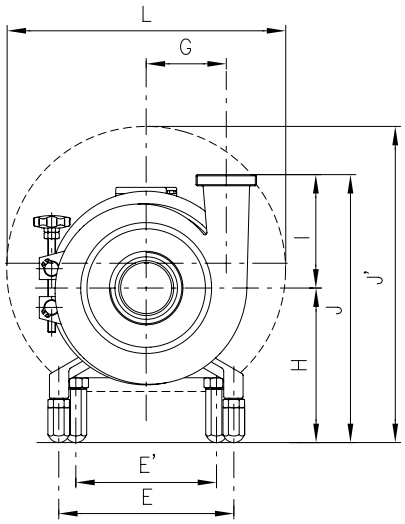


Dimensions not binding - DN = DIN 11851 male threaded connections with standard IEC/EN motors

Pumps		kW	DNa	DNm	A	B	C	D	E	F	G	H	K	K'	I	J	J'	L	Weight kg
CS 50-175	**1450 rpm**	0,55 0,75 1,1 1,5	65	50	80	169	141	231	225	377	100	213	457	569	150	363	377	298	
										421			501						
		2,2 3					142	301		458		230	538	638		380	435	330	
		4								470			550						
CS 50-210		1,1 1,5 2,2 3	65	50	80	161	141	231	225	421	120	221	501	569	165	386	385	298	
							142	301		458		238	538	638		402	443	330	54
		4								470			550						
CS 50-260		2,2 3	65	50	90	185	165	301	225	481	145	238	571	671	175	413	443	330	68
		4								493			583						75
CS 65-145		0,55 0,75 1,1 1,5	80	65	79	173	145	231	225	381	112	208	460	572	145	353	372	298	
										425			504						
CS 65-175		1,1 1,5 2,2 3	80	65	80	172	144	231	225	424	120	213	504	572	150	363	377	298	
							145	301		461		230	541	641		380	435	330	
		4								473			553						
CS 65-210		1,1 1,5 2,2 3	80	65	90	189	168	231	225	448	135	221	538	605	165	386	385	298	
							169	301		485		238	575	675		403	443	330	
		4								497			587						
CS 65-260		2,2 3	80	65	100	198	168	301	225	484	155	238	584	684	205	443	443	330	
		4								496			596						
CS 80-175		2,2 3	100	80	100	204	174	301	225	490	139	230	590	690	164	394	435	330	
		4								502			602						
CS 80-210		2,2 3	100	80	100	201	171	301	225	487	145	238	587	687	165	403	443	330	66,5
		4								499			599						
CS 80-260		3	100	80	100	201	171	301	225	487	165	238	587	687	209	447	443	330	
		4								499			599						

MOTOR POWER FROM 5,5 kW TO 18,5 kW (SIZE IEC 132-160)





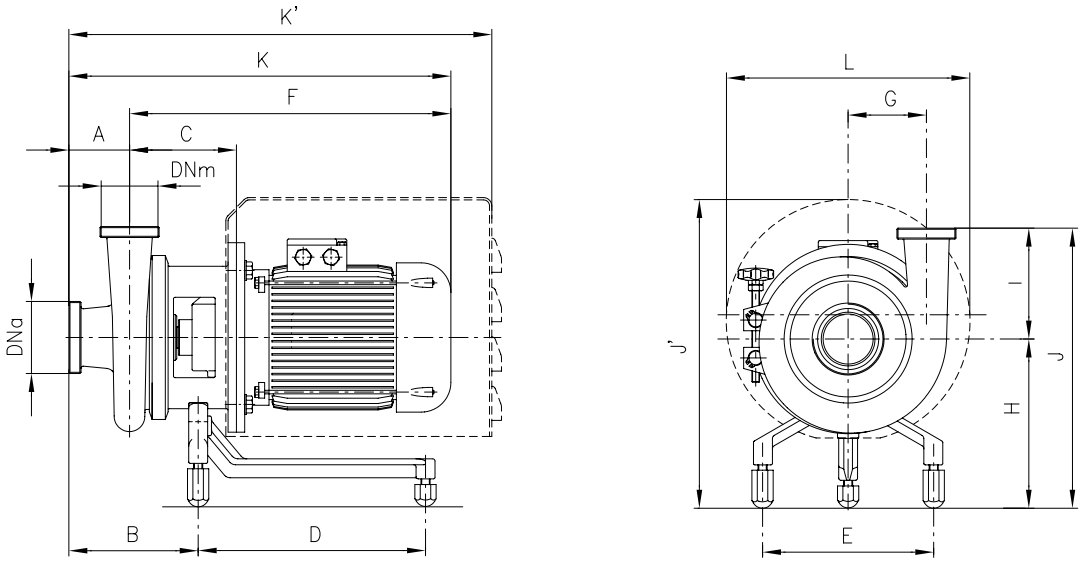
Dimensions not binding - DN = DIN 11851 male threaded connections with standard IEC/EN motors

Pumps		kW	DNa	DNm	A	B	C	D	E	E'	F	G	H	K	K'	I	J	J'	L	Weight kg
CS 65-260	1450 rpm	5,5 7,5 9,2	80	65	100	198	190	318	225	198	600	155	238	700	784	205	443	460	370	
		11					230	450		254	757		247	857	955		452	555	478	
CS 80-175		5,5 7,5	100	80	100	204	195	316	225	198	603	139	230	703	787	164	394	452	370	
CS 80-210		5,5 7,5	100	80	100	201	193	318	225	198	603	145	238	703	787	165	403	460	370	
CS 80-260		5,5 7,5 9,2	100	80	100	201	193	318	225	198	603	165	238	703	787	209	447	460	370	
		11 15					233	450 494		254	760		247	860	958		456	555	478	
CS 80-310		11 15 18,5 22	100	80	100	202	235	495 533	225	254 279	767 827	200	250	867 927	994	250	500	560	480	
CS 100-210		5,5 7,5	125	100	111	219	200	318	225	198	610	161	238	721	805	214	452	460	370	
CS 100-260		9,2 11 15 18,5	125	100	115	218	195 235	318 454 494	225	198 254 279	605 762 789	186	238 247	720 877 904	804 975	216	454 463	460 555	370 478	
CS 100-310		11 15 18,5 22	125	100	115	221	239	495 533	225	254 279	771 831	214	250	886 946	1013	259	509	560	480	
CS 125-260		9,2 11 15 18,5	150	125	110	223	203 244	318 450 494	225	198 254 279	613 771 798	206	238 247	723 881 908	621 979	216	454 463	460 555	370 478	

PUMP SERIES "CS" WITH TROLLEY

PUMPS SERIES "CS" WITHOUT SHROUD

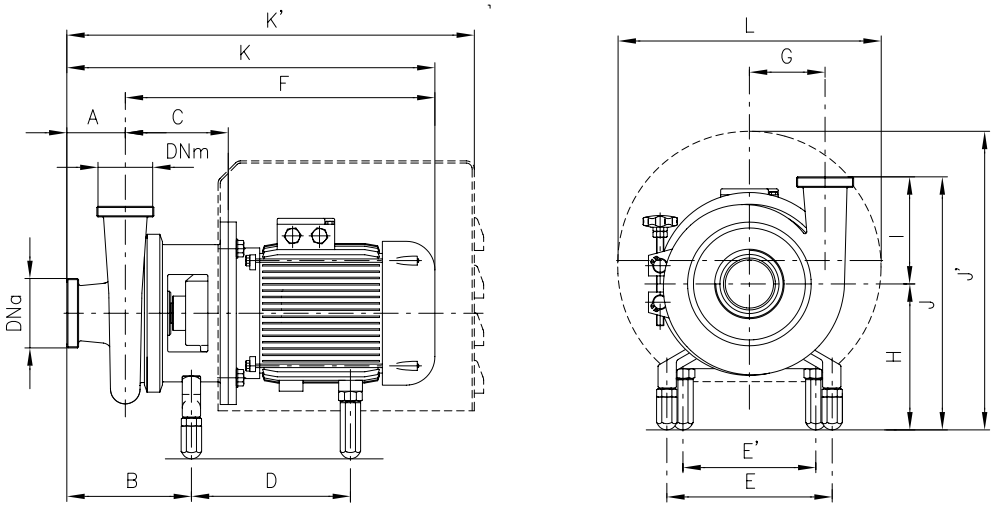
MOTOR POWER FROM 0,55 kW TO 4 kW (SIZE IEC 71-112)



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

Pumps		kW	DNa	DNm	A	B	C	D	E	F	G	H	K	K'	I	J	J'	L	Weight kg
CS 25-145	**2900 rpm**	0,55	32	25	75	144	117	190	178	335	81	158	410	532	145	303	300	239	
		0,75 1,1 1,5					123			359			434	541			340	298	29,5
		2,2								403			478						32
CS 25-175		0,75 1,1 1,5 2,2	32	25	65	134	123	190	178	359	96	164	424	531	149	313	346	298	
										403			468						
		3					138	301	225	454		210	519	619		359	353	330	
		4								466			531						
CS 32-110		0,55	40	32	70	137	117	190	178	335	65	149	405	527	110	259	291	239	
		0,75 1,1 1,5					123			359			429	536			331	298	24,5
										403			473						
CS 32-145		0,75 1,1 1,5 2,2	40	32	80	167	138	231	225	374	85	208	454	566	145	353	372	298	34
										418			498						40
		3					139	301		455		225	535	635		370	430	330	47,5
		4								467			547						
CS 32-175		1,5 2,2	40	32	80	167	139	231	225	419	95	213	499	567	150	363	377	298	41,5
		3					140	301		456		230	536	636		380	435	330	49
		4								468			548						53,5
CS 32-210		3	40	32	80	158	140	301	225	456	110	238	536	636	165	403	443	330	
		4								468			548						57,5
CS 40-145		1,5 2,2	50	40	80	168	139	231	225	418	90	208	498	567	133	341	372	298	40
		3					140	301		455		225	535	636		358	430	330	45
		4								467			547						55,5
CS 40-175		2,2	50	40	80	169	141	231	225	421	95	213	501	569	150	363	377	298	
		3					142	301		458		230	538	638		380	435	330	
		4								470			550						55,5
CS 40-210		3	50	40	80	161	142	301	225	458	115	238	538	638	165	403	443	330	
		4								470			550						
CS 50-145		1,5 2,2	65	50	80	170	141	231	225	421	95	208	501	569	145	353	372	298	
		3					142	301		458		225	538	638		370	430	330	49,5
		4								470			550						55,5
CS 50-175		3	65	50	80	169	142	301	225	458	100	230	538	638	150	380	435	330	
		4								470			550						
CS 65-145		3	80	65	79	173	146	301	225	462	112	225	541	642	145	370	430	330	
		4								474			553						

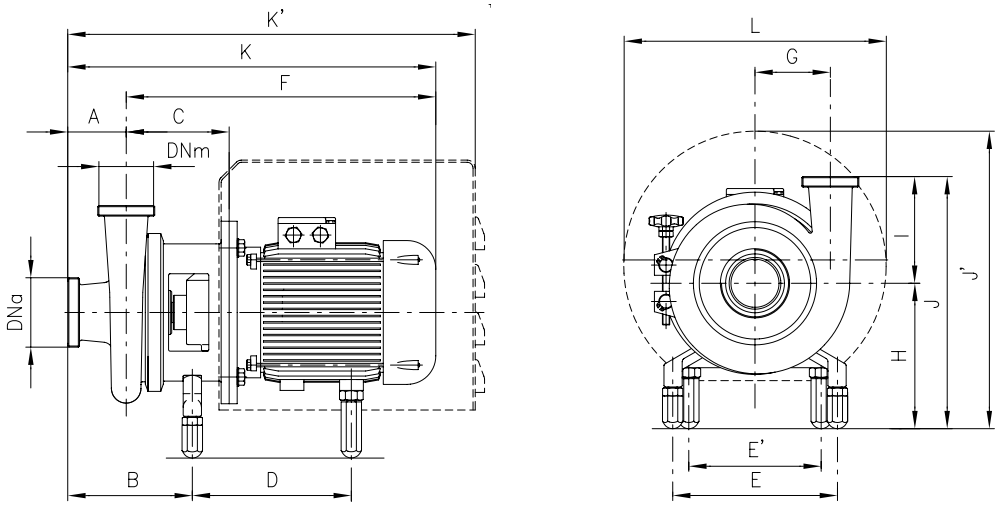
MOTOR POWER FROM 5,5 kW TO 22 kW (SIZE IEC 132-180)



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

Pumps		kW	DNa	DNm	A	B	C	D	E	E'	F	G	H	K	K'	I	J	J'	L	Weight kg
CS 32-210	**2900 rpm**	5,5 7,5 9,2	40	32	80	158	161	309	225	198	571	110	238	651	735	165	403	460	370	81
		11					206	446		254	733			813	907			546	478	
CS 32-260		5,5 7,5 9,2 11 15	50	32	90	184	185 225	318 450	225	198 254	595 752	140	238 247	685 842	769 940	172	410 419	460 555	370 478	 105 139
CS 40-175		5,5 7,5 9,2	50	40	80	169	164	301	225	198	574	95	230	654	738	150	380	452	370	74
		11				161	208	438		254	735	115	238	815	909	165	403	546	478	
CS 40-210		5,5 7,5 9,2 11 15	50	40	80	161	164 208	309 446	225	198 254	574 735	115	238	654 815	738 909	165	403	460 546	370 478	82,5 93
CS 40-260		7,5 9,2 11 15 18,5 22	50	40	100	194	185 225	318 450 494 532	225	198 254 279	595 752 779	145	238 247	695 852 879	779 950 950	172	410 419	460 555	370 478	101,5 146,5
CS 50-145		5,5 7,5	65	50	80	170	164	300	225	198	574	95	225	654	738	145	370	447	370	72,5 80
CS 50-175		5,5 7,5 9,2 11 15	65	50	80	169	164 208	301 438	225	198 254	574 735	100	230	654 815	738 909	150	380	452 538	370 478	75 80 90
CS 50-210		5,5 7,5 9,2 11 15 18,5 22	65	50	80	161 171	164 208 223	309 446 494	225	198 254 279	574 735 777	120	238 248	654 815 857	738 909 928	165	403 413	460 546 556	370 478	85 121,5
CS 50-260		15 18,5 22	65	50	90	186	228	450 494	225	254 279	755 782	145	247	845 872	943	175	422	555	478	
CS 65-145		5,5 7,5 9,2 11	80	65	79	173	168 212	300 437	225	198 254	578 739	112	225	657 818	741 912	145	370	447 533	370 478	82
CS 65-175		5,5 7,5 9,2 11 15 18,5 22	80	65	80	172 173	167 211 224	301 438 482 493	225	198 254 279	577 738 778	120	230 241	657 818 858	741 912 929	150	380 391	452 538 538	370 478	120

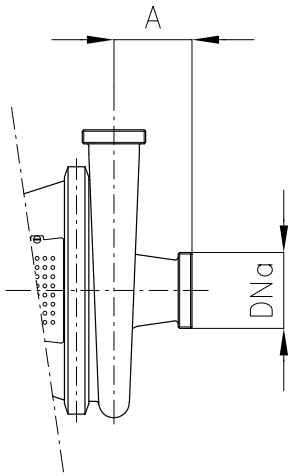
MOTOR POWER FROM 11 kW TO 22 kW (SIZE IEC 160-180)



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

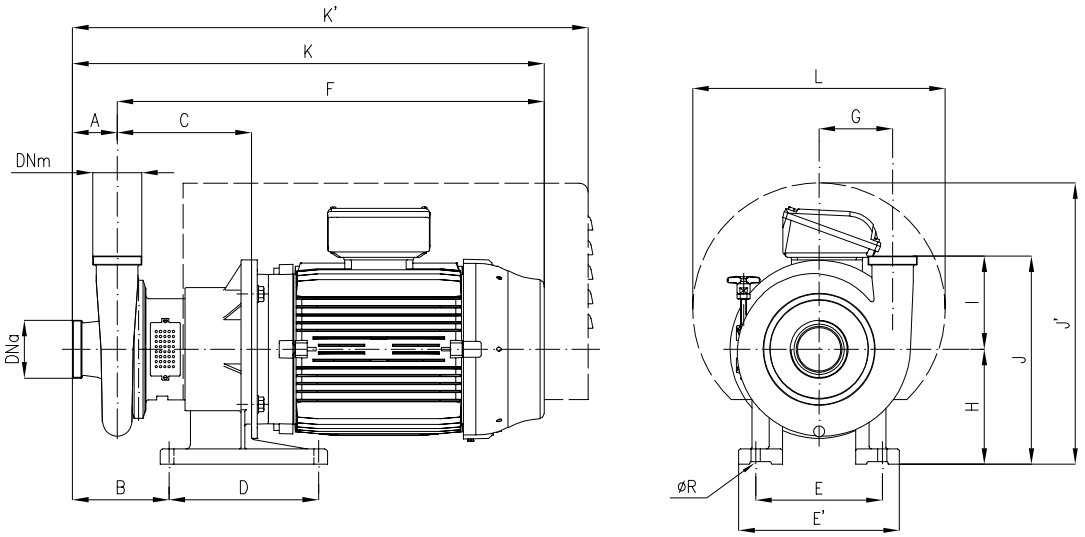
Pumps		kW	DNa	DNm	A	B	C	D	E	E'	F	G	H	K	K'	I	J	J'	L	Weight kg
CS 65-210	**2900 rpm**	11	80	65	90	189	231	450	225	254	758	135	247	848	946	165	412	555	478	134
		15																		143
		18,5						494												
		22								279	785			875						211
CS 65-260		15	80	65	100	198	230	450	225	254	757	155	247	857	955	205	452	555	478	
		18,5						494												
		22								279	784			884						
CS 80-175		11	100	80	100	205	236	449	225	254	763	139	241	863	961	164	405	549	478	140,5
		15																		
		18,5						493												
		22								279	790			890						
CS 80-210		15	100	80	100	201	233	450	225	254	760	145	247	860	958	164	411	555	478	
		18,5						494												
		22								279	787			887						
CS 100-210		22	125	100	111	219	240	494	225	279	794	161	247	905	976	214	461	555	478	

Pumps	DNa	A
CS 32-145	65	80
CS 32-175	65	85
CS 32-210	65	85
CS 32-260	65	98
CS 40-145	65	85
CS 40-175	65	89,5
CS 40-210	80	75,5
CS 40-260	80	106
CS 50-145	80	85
CS 50-175	80	85
CS 50-210	80	85
CS 50-260	80	90
CS 65-145	100	88
CS 65-175	100	105
CS 65-210	100	107
CS 65-260	100	108
CS 80-145	-	-
CS 80-175	125	135
CS 80-210	125	127,5
CS 80-260	125	135
CS 80-310	125	135
CS 100-210	150	100
CS 100-260	150	100
CS 100-310	150	100
CS 125-260	-	-



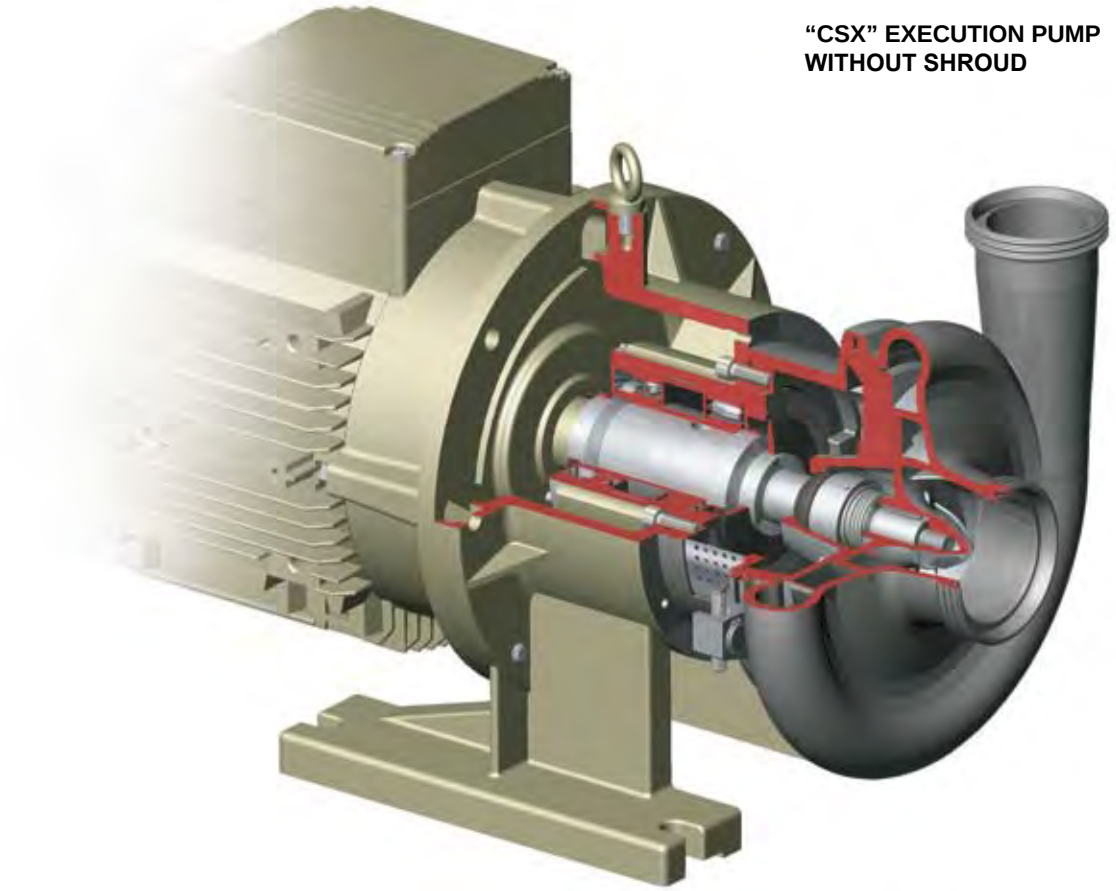
In particularly critical inlet suction conditions with low available NPSH values, which are encountered for example in high vacuum extraction applications, liquids near to boiling point and limited available head, the special version equipped with inducer on the in-take port can be used.
This device is arranged immediately upstream of the impeller to reduce the NPSH value requested by the pump. It is advisable to always contact CSF INOX engineers for this type of application.

"X" EXECUTION FOR POWER OF 30 KW (SIZE IEC 200)

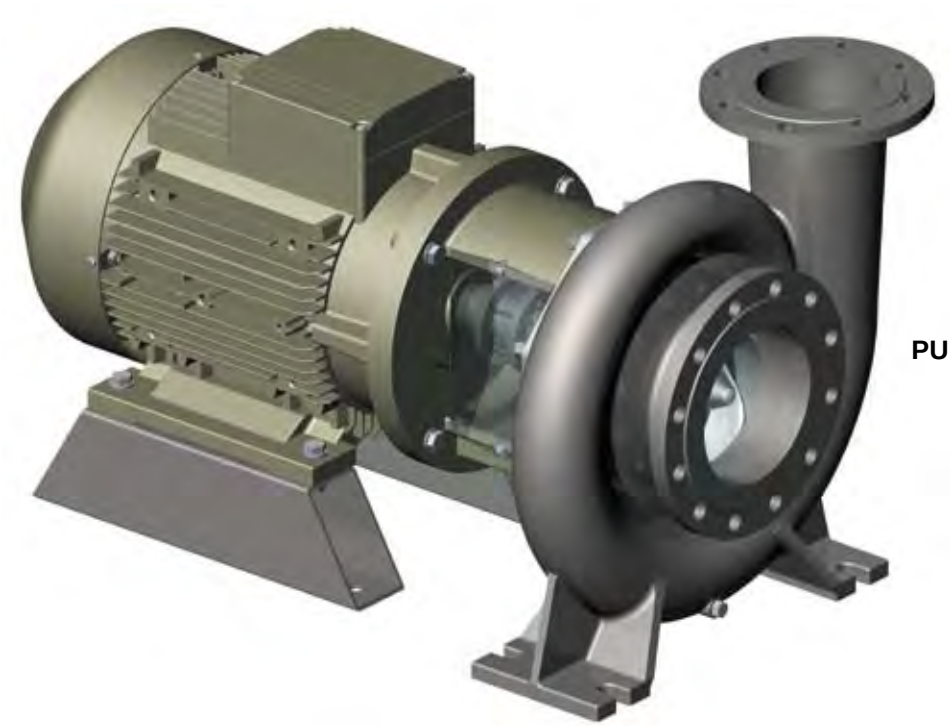


Dimensions not binding - DN = DIN 11851 male threaded connections with standard IEC/EN motors

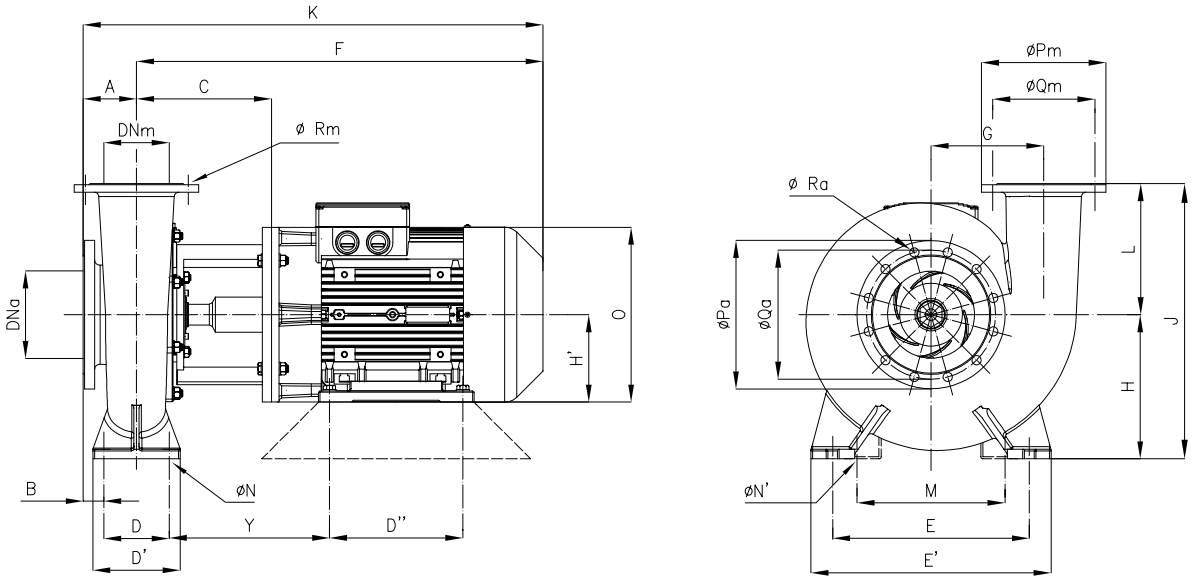
Pumps	rpm	kW	DNa	DNm	A	B	C	D	E	E'	F	G	H	K	K'	ØR	I	J	J'	L	Weight kg
CSX 50-260	**2-4 poles**	30	65	50	90	201	296	335	284	360	915	145	258	1005	1141	21	175	433	613	530	
CSX 65-260			80	65	100	213	298				917	155		1017	1153		205	463			
CSX 80-175			100	80	100	219	304				923	139		1023	1159		164	422			
CSX 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			



"CSX" EXECUTION PUMP WITHOUT SHROUD



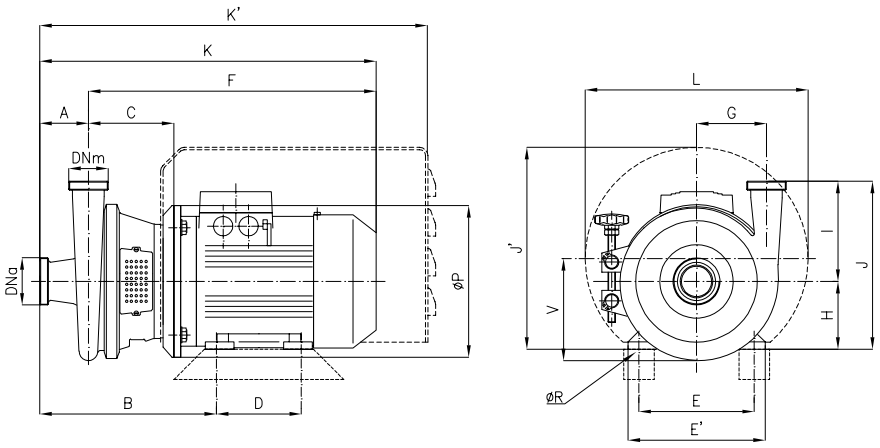
PUMP SERIES "CS" 4th GROUP
CLOSED COUPLED



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

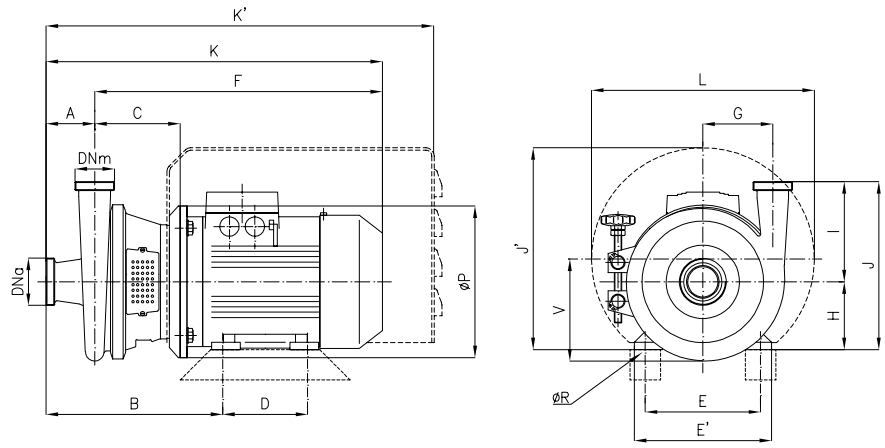
Pumps		kW	DNa	DNm	A	B	C	D	D'	D''	E	E'	F	G	H	H'	K	J	Y	L	M	N	N'	O	Ø Pa	Ø Pm	Ø Qa	Ø Qm	Ø Ra	Ø Rm	no. holes a	no. holes m	Weight kg
CS 125-350	970 rpm	5,5	150	125	122	47	286	150	200	178	400	500	703	232	280	132	825	580	300	300	216	22	12	300	285	250	240	210	22	18	8	8	
		7,5								210			764			160	886		319		254		17	350									
		9,2																															
		11								254																							
		15								279			846			180	968		332		279												
		18,5					303			305			913			200	1035		361		318		19	400									
CS 150-350		7,5	200	150	122	47	292	150	200	210	450	550	770	258	330	160	892	630	325	300	254	22	17	350	340	285	295	240	22	22	12	8	
		9,2																															
		11								254																							
		15								279			852			180	974		338		279												
		18,5					309			305			919			200	1041		367		318		19	400									

Pumps		kW	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	Weight kg
CS 125-350	1450 rpm	9,2	150	125	122	47	286	150	200	178	400	500	703	232	280	132	825	580	300	300	216	22	12	300	285	250	240	210	22	18	8	8	
		11								210			764			160	886		319		254		17	350									
		15								254																							
		18,5								241			846			180	968		332		279												
		22								279																							
		30					303			305			913			200	1035		361		318		19	400									
		37					333			286			983			225	1105		407		356			450									
CS 150-350		18,5	200	150	122	47	292	150	200	241	450	550	852	258	330	180	974	630	338	300	279	22	17	350	340	285	295	240	22	22	12	8	
		22								279																							
		30					309			305			919			200	1041		367		318		19	400									
		37					339			286			989			225	1111		413		356			450									



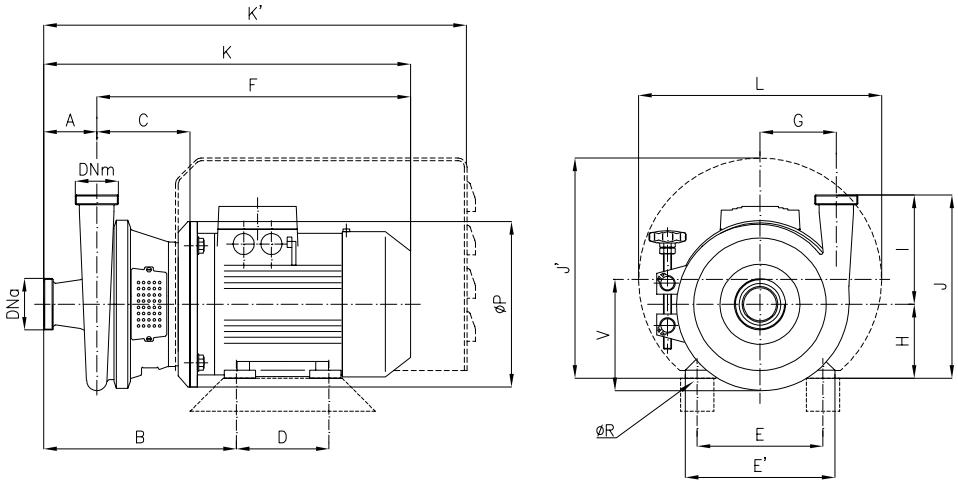
Dimensions not binding - DN = DIN 11851 male threaded connections with standard IEC/EN motors

Pumps		kW	DNa	DNm	A	B	C	D	E	E'	F	G	H	K	K'	ØP	ØR	I	J	J'	L	V	Weight kg
CS 25-145	**1450 rpm**	0,37 0,55 0,75	32	25	75	237 248	117 123	90 100	112 125	132 150	335 359	81	71 80	410 434	532 541	160 200	7 9	145	216 225	213 262	239 298	91	
CS 25-175		0,37 0,55 0,75	32	25	65	227 238	117 123	90 100	112 125	132 150	335 359	96	71 80	400 424	522 531	160 200	7 9	149	220 229	213 262	239 298	105	
CS 32-110		0,37 0,55 0,75	40	32	70	232 243	117 123	90 100	112 125	132 150	335 359	65	71 80	405 429	527 536	160 200	7 9	110	181 190	213 262	239 298	78	
CS 32-145		0,55 0,75	40	32	80	268	138	100	125	150	374	85	80	454	566	220	9	145	225	244	298	95	
CS 32-175		0,55 0,75 1,1	40	32	80	269 275	139	100	125 140	150 165	375 419	95	80 90	455 499	567	220	9 10	150	230 240	244 254	298	109	
CS 32-210		0,75 1,1 1,5 2,2 3	40	32	80	269 275 283	139 140	100 125 140	125 140 160	150 165 196	375 419 456	110	80 90 100	455 499 536	567 636	220 250	9 10 12	165	245 255 265	244 254 305	298 330	126	
CS 32-260		1,1 1,5 2,2 3 4	50	32	90	309 317 324	163 164	100 125 140	140 160 190	165 196 226	443 480 492	140	90 100 112	533 570 582	601 670	200 250	10 12	172	262 272 284	254 305 317	298 330	153	
CS 40-145		0,55 0,75	50	40	80	269	139	100	125	150	375	90	80	455	567	220	9	133	213	244	298	103	
CS 40-175		0,75 1,1 1,5	50	40	80	271 277	141	100 125	125 140	150 165	377 421	95	80 90	457 501	569	220	9 10	150	230 240	244 254	298	113	
CS 40-210		0,75 1,1 1,5 2,2	50	40	80	271 277 285	141 142	100 125 140	125 140 160	150 165 196	377 421 458	115	80 90 100	457 501 538	569 638	220 250	9 10 12	165	245 255 265	244 254 305	298 330	131	
CS 40-260		1,5 2,2 3 4	50	40	100	319 327 334	163 164	125 140	140 160 190	165 196 226	443 480 492	145	90 100 112	543 580 592	611 680	220 250	10 12	172	262 272 284	254 305 317	298 330	157	
CS 50-145		0,75 1,1 1,5	65	50	80	271 277	141	100 125	125 140	150 165	377 421	95	80 90	457 501	569	220	9 10	145	225 235	244 254	298	118	
CS 50-175		0,55 0,75 1,1 1,5 2,2 3 4	65	50	80	271 277 285 292	141 142	100 125 140	125 140 160 190	150 165 196 226	377 421 458 470	100	80 90 100 112	457 501 538 550	569 639	220 250	9 10 12	150	230 240 250 262	244 254 305 317	298 330	124	
CS 50-210		1,1 1,5 2,2 3 4	65	50	80	277 285 292	141 142	100 125 140	140 160 190	165 196 226	421 458 470	120	90 100 112	501 538 550	569 638	220 250	10 12	165	255 265 277	254 305 317	298 330	140	
CS 50-260		2,2 3 4	65	50	90	319 324	165	140	160 190	196 226	481 493	145	100 112	571 583	671	250	12	175	275 287	305 317	330	165	



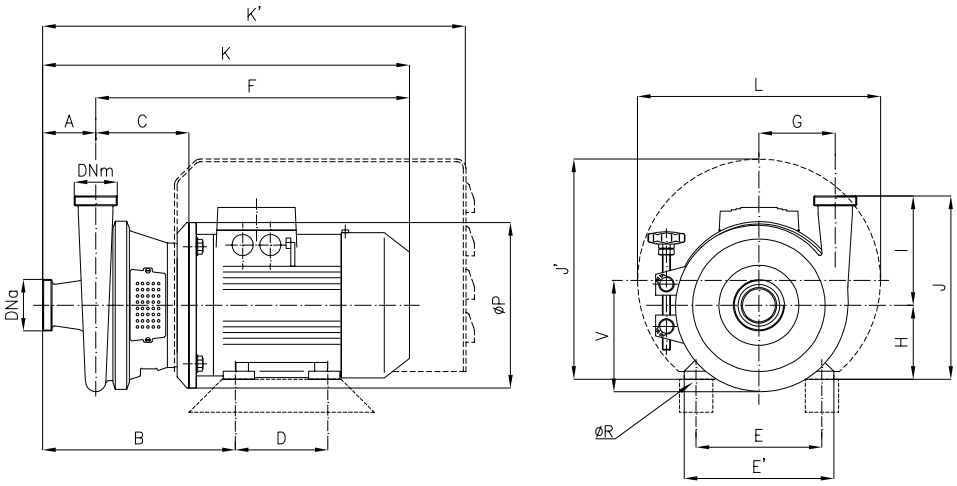
Dimensions not binding - DN = DIN 11851 male threaded connections with standard IEC/EN motors

Pumps		kW	DNa	DNm	A	B	C	D	E	E'	F	G	H	K	K'	ØP	ØR	I	J	J'	L	V	Weight kg
CS 65-145	**1450 rpm**	0,55 0,75 1,1 1,5	80	65	79	274 280	145	100 125	125 140	150 165	381 425	112	80 90	460 504	572	220	9 10	145	225 235	244 254	298	140	
CS 65-175		1,1 1,5 2,2 3 4	80	65	80	280 288 295	144 145	100 125 140	140 160 190	165 196 226	424 461 473	120	90 100 112	504 541 553	572 641	220 250	10 12	150	240 250 262	254 305 317	298 330	148	
CS 65-210		1,1 1,5 2,2 3 4	80	65	90	314 322 329	168 169	100 125 140	140 160 190	165 196 226	448 485 497	135	90 100 112	538 575 587	605 675	220 250	10 12	165	255 265 277	254 305 317	298 330	160	59
CS 65-260		2,2 3 4 5,5 7,5 9,2 11	80	65	100	331 338 379 438	168 190 230	140 178 210	160 190 216 254	196 226 256 300	484 496 198 254	155	100 112 132 160	584 596 700 857	684 784 955	250 300 350	12 15	205	305 317 337 365	305 317 354 468	330 370 478	182	
CS 80-175		2,2 3 4 5,5 7,5	100	80	100	335 343 384	174 195	140 178	160 190 216	196 226 256	490 502 603	139	100 112 132	584 596 703	690 787	250 300	12	164	264 276 296	305 317 354	330 370	169	
CS 80-210		2,2 3 4 5,5 7,5	100	80	100	334 341 382	171 193	140 178	160 190 216	196 226 256	487 499 603	145	100 112 132	587 599 703	687 787	250 300	12	165	265 277 297	305 317 354	330 370	179	
CS 80-260		3 4 5,5 7,5 9,2 11 15	100	80	100	334 341 382 441	171 193 233	140 178 210 254	160 190 216 254	196 226 256 300	487 499 603 760	165	100 112 132 160	587 599 703 860	687 787 958	250 300 350	12 15	209	309 321 341 369	305 317 354 468	330 370 478	196	
CS 80-310		11 15 18,5 22	100	80	100	443 456	235	254 279	254 279	314 350	767 827	200	160 180	867 927	994	350	14	250	410 430	470 490	480	226	
CS 100-210		5,5 7,5	125	100	111	399	200	140 178	216	256	610	161	132	721	805	300	12	214	346	354	370	200	
CS 100-260		9,2 11 15 18,5 22	125	100	115	399 458 471	195 235	178 210 254 241 279	216 254 279	256 300 340	605 762 789	186	132 160 180	720 877 904	804 975	300 350	12 15	216	348 376 396	354 468 488	370 478	218	68
CS 100-310		11 15 18,5 22	125	100	115	462 475	239	254 279	254 279	314 350	771 831	214	160 180	886 946	1013	350	14	259	419 439	470 490	480	245	
CS 125-260		9,2 11 15 18,5	150	125	110	402 462 475	203 244	178 210 254 241	216 254 279	276 300 340	613 771 798	206	132 160 180	723 881 908	621 979	300 350	12 15	216	348 376 396	354 468 488	370 478	242	



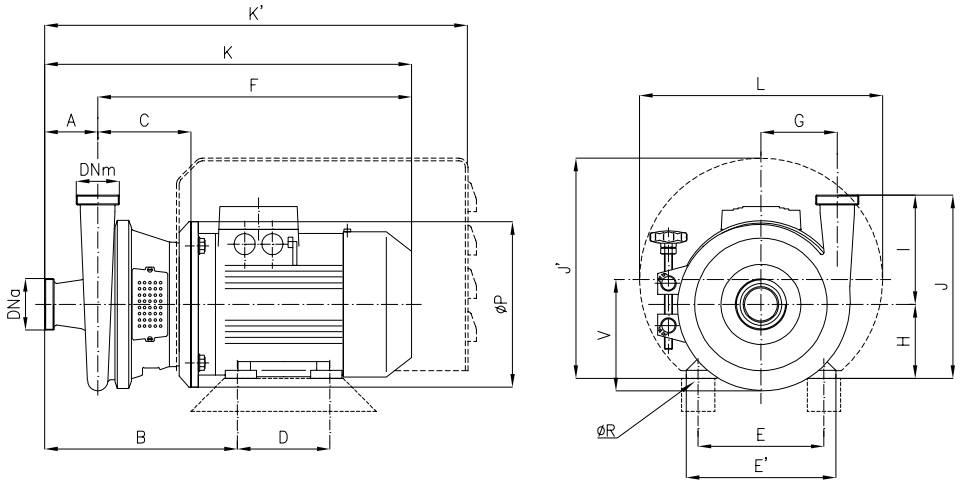
Dimensions not binding - DN = DIN 11851 male threaded connections with standard IEC/EN motors

Pumps		kW	DNa	DNm	A	B	C	D	E	E'	F	G	H	K	K'	ØP	ØR	I	J	J'	L	V	Weight kg
CS 25-145	**2900 rpm**	0,55 0,75 1,1 1,5 2,2	32	25	75	237 248 254	117 123	90 100 125	112 125 140	132 150 165	335 359 403	81	71 80 90	410 434 478	532 541	160 200	7 9 10	145	216 225 235	213 262 272	239 298	91	
CS 25-175		0,75 1,1 1,5 2,2 3 4	32	25	65	238 244 266 273	123 138	100 125 140	125 140 160 190	150 165 196 226	359 403 439 451	96	80 90 100 112	424 468 504 516	531 516	200 250	9 10 12	149	229 239 249 261	262 272 243 255	298 330	105	
CS 32-110		0,55 0,75 1,1 1,5	40	32	70	232 243 249	117 123	90 100	112 125 140	132 150 165	335 359 403	65	71 80 90	405 429 473	527 536	160 200	7 9 10	110	181 190 200	213 262 272	239 298	78	
CS 32-145		0,75 1,1 1,5 2,2 3 4	40	32	80	268 274 282 289	138 139	100 125 140	125 140 160 190	150 165 196 226	374 418 455 467	85	80 90 100 112	454 498 535 547	566 635	220 250	9 10 12	145	225 235 245 257	244 254 305 317	298 330	95	
CS 32-175		1,5 2,2 3 4	40	32	80	275 282 290	139 140	100 125 140	140 160 190	165 196 226	419 456 468	95	90 100 112	499 536 548	567 636	220 250	10 12	150	240 250 262	254 305 317	298 330	109	
CS 32-210		3 4 5,5 7,5 9,2 11	40	32	80	283 290 330 394	140 161 206	140 178 210	160 190 216 254	196 226 256 300	456 468 571 733	110	100 112 132 160	536 548 651 813	636 735 907	250 300 350	12 15	165	265 277 297 325	305 317 354 468	330 370 478	126	
CS 32-260		5,5 7,5 9,2 11 15	50	32	90	364 423	185 225	140 178 210	216 254	256 300	595 752	140	132 160	685 842	769 940	300 350	12 15	172	304 332	354 468	370 478	153	
CS 40-145		1,5 2,2 3 4	50	40	80	275 283 289	139 140	100 125 140	140 160 190	165 196 226	418 455 467	90	90 100 112	498 535 547	567 636	220 250	10 12	133	223 233 245	254 305 317	298 330	103	
CS 40-175		2,2 3 4 5,5 7,5 9,2 11	50	40	80	277 284 291 333 396	141 142 164 208	125 140 178 210	140 160 190 216 254	165 196 226 256 300	421 458 470 574 735	95	90 100 112 132 160	501 538 550 654 815	569 638 738 909	220 250 300 350	10 12 15	150	240 250 262 282 310	254 305 317 354 468	298 330 370 478	113	



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

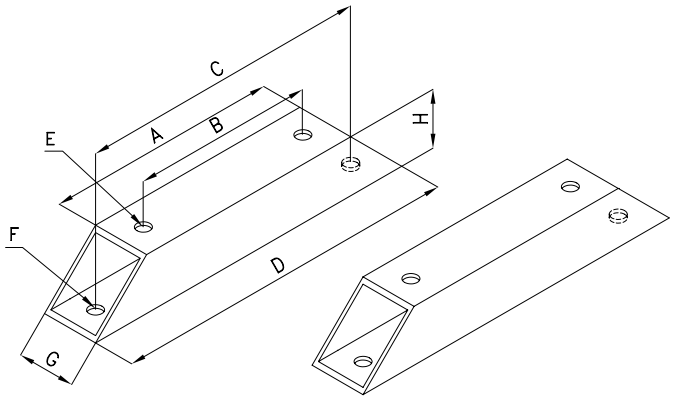
Pumps		kW	DNa	DNm	A	B	C	D	E	E'	F	G	H	K	K'	ØP	ØR	I	J	J'	L	V	Weight kg
CS 40-210	**2900 rpm**	3	50	40	80	285	142	140	160	196	458	115	100	538	638	250	12	165	265	305	330	131	
		4				292			190	226	470		112	550					277	317			
		5,5				333	164		216	256	574		132	654	738	300			297	354	370		
		7,5																					
		9,2						178															
		11				396	208	210	254	300	735		160	815	909	350	15		325	468	478		
		15						254															
CS 40-260		7,5	50	40	100	374	185	178	216	256	198	145	132	695	779	300	12	172	304	354	370	157	
		9,2																					
		11				434	226	210	254	300	254		160	852	950	350	15		332	468	478		
		15																					
		18,5						254															
		22				447		241	279	340	279		180	879					352	488			
CS 50-145		1,5	65	50	80	277	141	100	140	165	421	95	90	501	569	220	10	145	235	254	298	118	
		2,2						125															
		3				285	142	140	160	196	458		100	538	638	250	12		245	305	330		
		4				292			190	226	470		112	550					257	317			
		5,5				333	164		216	256	574		132	654	738	300			277	354	370		
		7,5																					
CS 50-175		3	65	50	80	285	142	140	160	196	458	100	100	538	638	250	12	150	250	305	330	124	
		4				292			190	226	470		112	550					262	217			
		5,5				333	164		216	256	574		132	654	738	300			282	354	370		
		7,5																					
		9,2						178															
		11				396	208	210	254	300	735		160	815	909	350	15		310	468	478		
		15						254															
CS 50-210		5,5	65	50	80	333	164	140	216	256	574	120	132	654	738	300	12	165	297	354	370	140	
		7,5																					
		9,2						178															
		11				396	208	210	254	300	735		160	815	909	350	15		325	468	478		
		15																					
		18,5						254															
		22				424	223	241	279	340	777		180	857	928				345	488			
CS 50-260		15	65	50	90	426	228	210	254	300	755	145	160	845	943	350	15	175	335	468	478	165	
		18,5						254															
		22				439		241	279	340	782		180	872					355	488			
CS 65-145		3	80	65	79	288	146	140	160	196	462	112	100	541	642	250	12	145	245	305	330	140	
		4				295			190	226	474		112	553					257	317			
		5,5				336	168		216	256	578		132	657	741	300			277	354	370		
		7,5																					
		9,2						178															
		11				399	212	210	254	300	739		160	818	912	350	15		305	468	478		
CS 65-175		5,5	80	65	80	336	167	140	216	256	577	120	132	657	741	300	12	150	282	354	370	148	
		7,5																					
		9,2						178															
		11				399	211	210	254	300	738		160	818	912	350	15		310	468	478		
		15																					
		18,5						254															
		22				425	224	241	279	340	778		180	858	929				330	488			



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

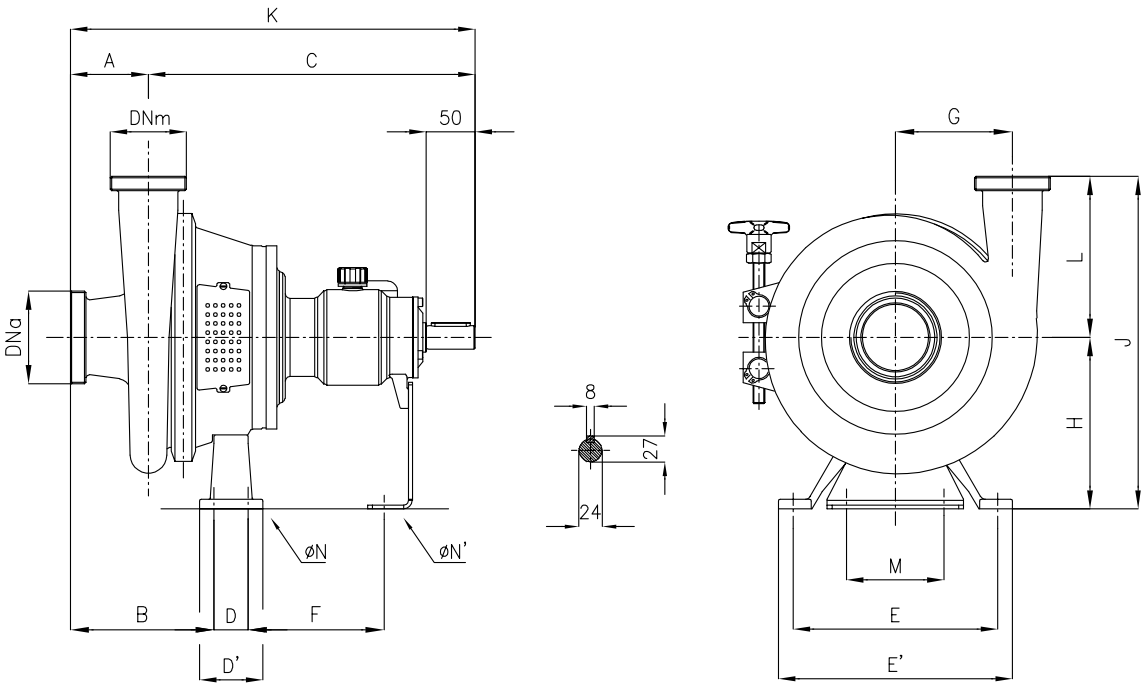
Pumps		kW	DNa	DNm	A	B	C	D	E	E'	F	G	H	K	K'	ØP	ØR	I	J	J'	L	V	Weight kg
CS 65-210	**2900 rpm**	11	80	65	90	429	231	210	254	300	758	135	160	848	946	350	14	165	325	468	478	160	
		15																					
		18,5						254															
		22				442		241	279	340	785		180	875			15		345	488			200
CS 65-260		15	80	65	100	438	230	210	254	300	757	155	160	857	955	350	14	205	365	468	478	182	
		18,5						254															
		22				451		241	279	340	784		180	884			15		385	488			
CS 80-175		11	100	80	100	444	235	210	254	300	763	139	160	863	961	350	14	164	324	468	478	169	
		15																					
		18,5						254															
		22				457		241	279	340	790		180	890			15		344	488			
CS 80-210		15	100	80	100	441	233	210	254	300	760	145	160	860	958	350	14	164	324	468	478	179	
		18,5						254															
		22				454		241	279	340	787		180	887			15		344	488			
CS 100-210		22	125	100	110	471	240	241	279	340	794	161	180	905	976	350	15	214	394	488	478	200	

ADDITIONAL MOTOR SHIMS



Frame (IEC - DIN)	A	B	C	D	E	F	G	H
71	110	90	150	190	10	10	40	40
80	130	100	170	210	10	10	40	40
90 S	160	100	200	240	10	10	40	40
90 L		125	200	240	10	10	40	40
100 L	180	140	230	280	12	12	50	50
112 M	180	140	230	280	12	12	50	50
132 M	226	140	266	346	12	12	60	60
132 L	226	178	266	346	12	12	60	60
160 M	310	210	330	400	14	14	50	60
160 L	310	254	330	400	14	14	50	60
180 M/L	328	241/279	387	448	15	15	60	60

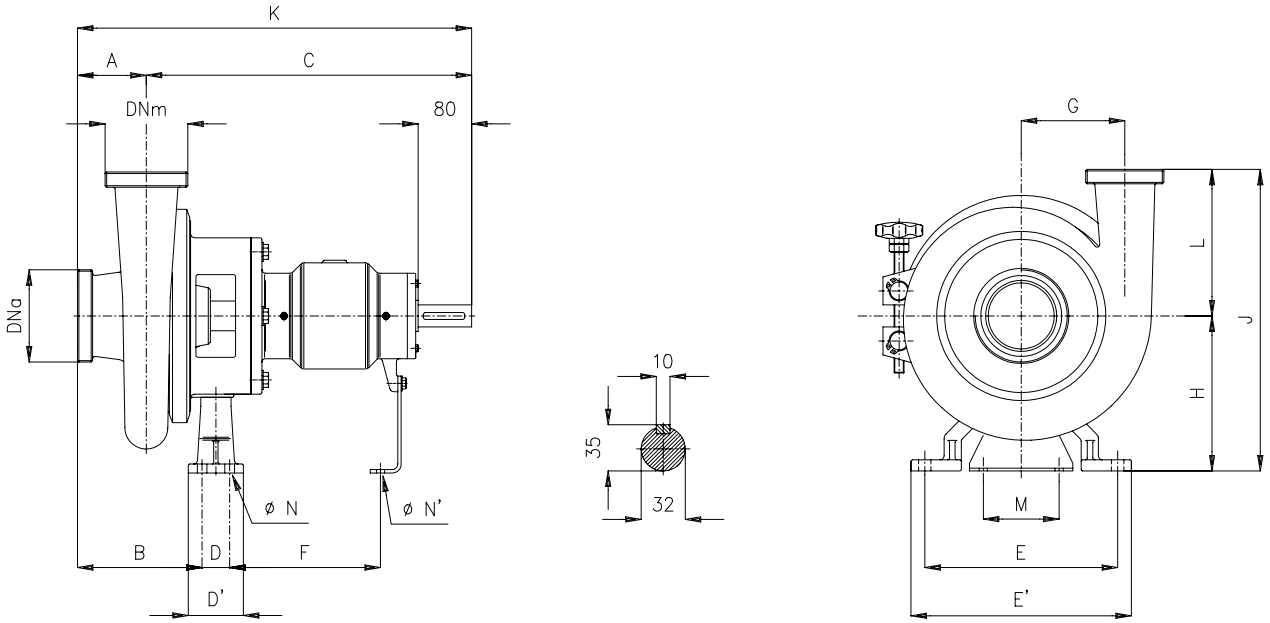
Upon request, they are available where the pump projects beyond the motor feet.



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

Pumps	DNa	DNm	A	B	C	D	D'	E	E'	F	G	H	K	J	L	M	N	N'	Weight kg
CSK 32-145	40	32	80	135	335	60	85	208	240	128	85	176	415	321	145	100	11	10	
CSK 32-175	40	32	80	136	334	60	85	208	240	127	95	176	414	326	150	100	11	10	
CSK 32-210	40	32	80	136	335	60	85	208	240	127	110	176	415	341	165	100	11	10	
CSK 40-145	50	40	80	136	335	60	85	208	240	128	90	176	415	309	133	100	11	10	
CSK 40-175	50	40	80	138	337	60	85	208	240	126	95	176	417	326	150	100	11	10	
CSK 40-210	50	40	80	138	337	60	85	208	240	126	115	176	417	341	165	100	11	10	
CSK 50-145	65	50	80	138	337	60	85	208	240	127	95	176	417	321	145	100	11	10	
CSK 50-175	65	50	80	139	337	60	85	208	240	126	100	176	417	326	150	100	11	10	
CSK 50-210	65	50	80	138	337	60	85	208	240	126	120	176	417	341	165	100	11	10	
CSK 65-145	80	65	79	141	341	60	85	208	240	128	112	176	420	321	145	100	11	10	
CSK 65-175	80	65	80	142	340	60	85	208	240	127	120	176	420	326	150	100	11	10	

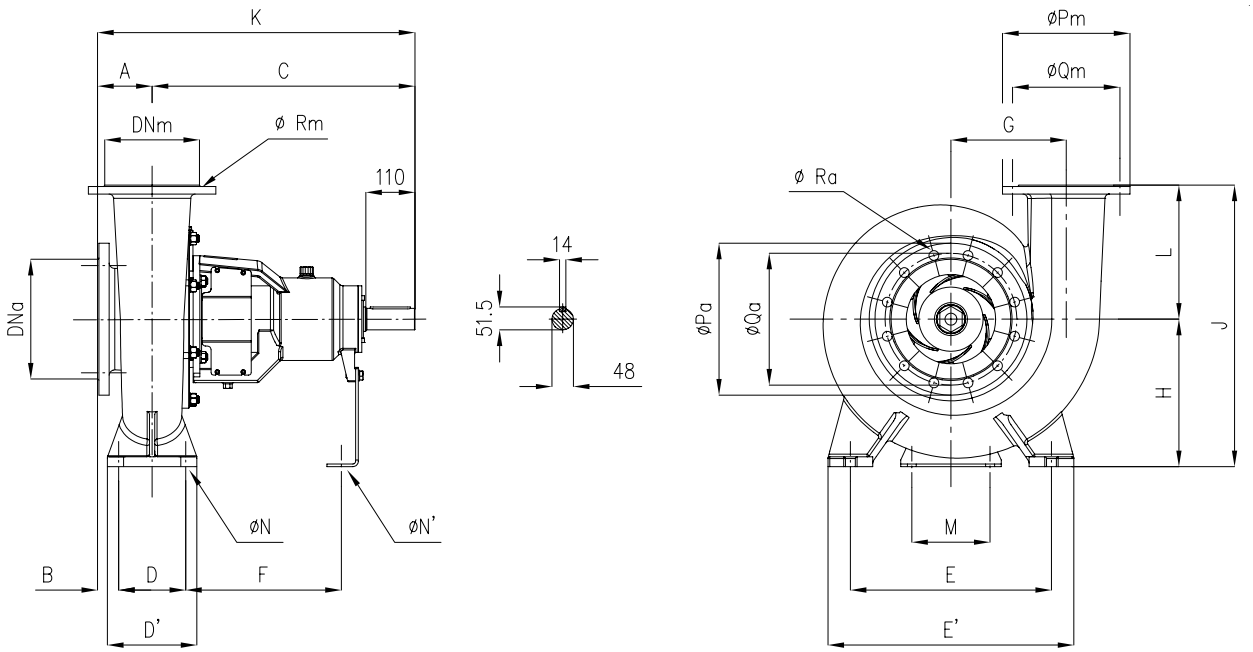
SERIES CSK — 3rd GROUP — OVERALL DIMENSIONS



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

Pumps	DNa	DNm	A	B	C	D	D'	E	E'	F	G	H	K	J	L	M	N	N'	Weight kg
CSK 65-210	80	65	90	149	474	80	106	300	340	202	135	225	564	390	165	110	14	12	
CSK 65-260	80	65	100	158	473	80	106	300	340	202	155	225	573	430	205	110	14	12	
CSK 80-175	100	80	100	166	479	80	106	300	340	200	139	217	579	381	164	110	14	12	
CSK 80-210	100	80	100	161	476	80	106	300	340	202	145	225	576	389	164	110	14	12	
CSK 80-260	100	80	100	161	476	80	106	300	340	202	165	225	576	424	209	110	14	12	
CSK 80-310	100	80	100	163	478	80	106	300	340	202	200	238	578	488	250	110	14	12	
CSK 100-210	125	100	111	178	483	80	106	300	340	202	161	225	593	439	214	110	14	12	
CSK 100-260	125	100	115	178	478	80	106	300	340	202	186	225	593	441	216	110	14	12	
CSK 100-310	125	100	115	181	482	80	106	300	340	202	215	238	597	497	259	110	14	12	
CSK 125-260	150	125	110	182	487	80	106	300	340	202	206	225	597	441	216	110	14	12	

SERIES CSK — 4th GROUP — OVERALL DIMENSIONS

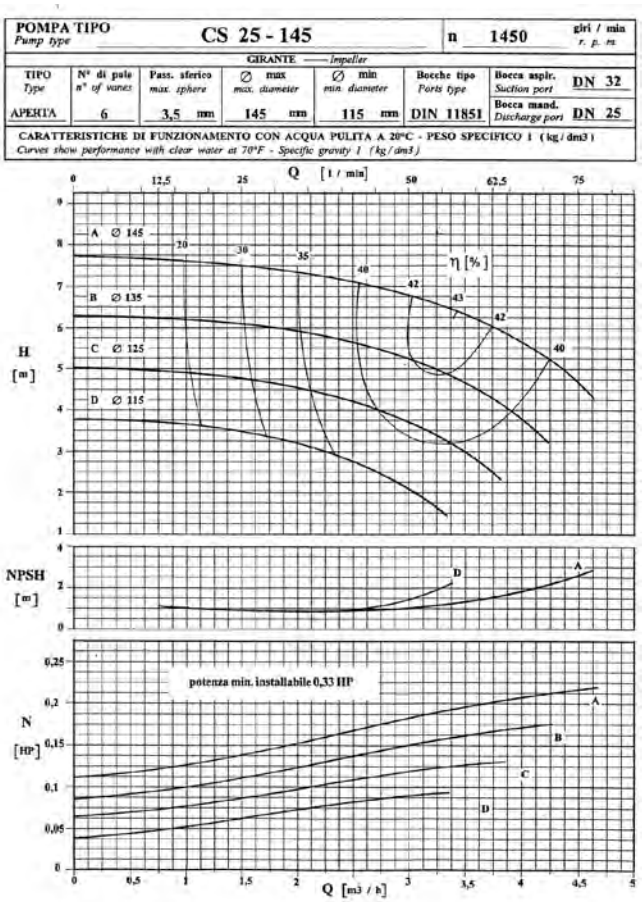


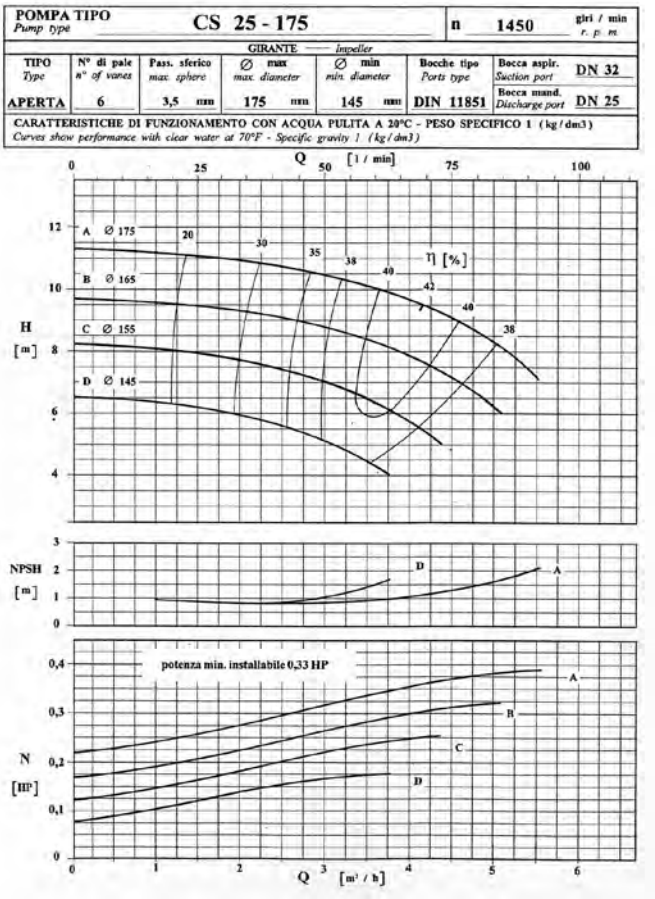
Dimensions not binding - DN = Flanges EN 1092-1 PN 16

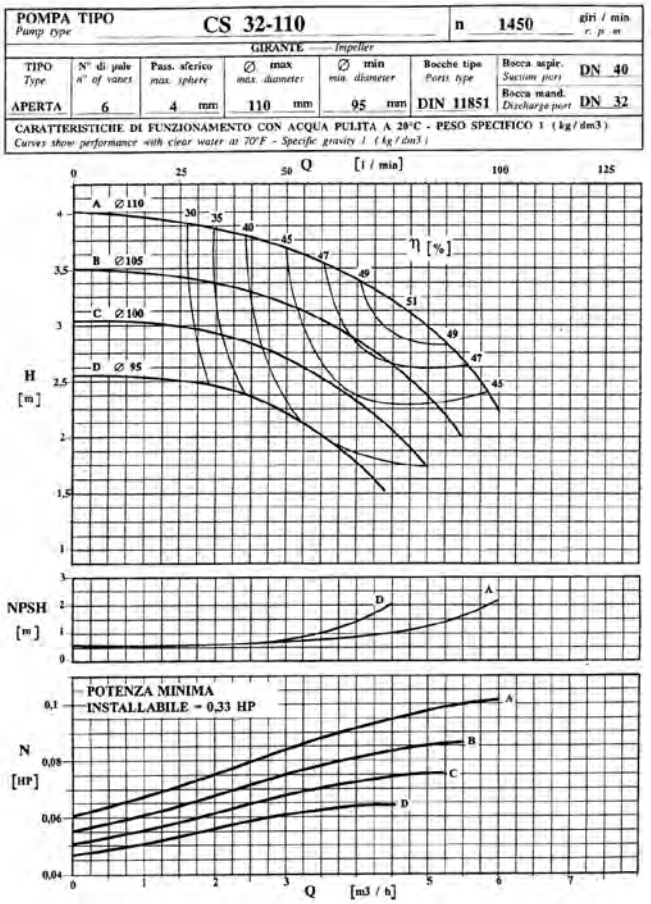
Pumps	DNa	DNm	A	B	C	D	D'	E	E'	F	G	H	K	J	L	M	N	N'	Ø Pm	Ø Pa	Ø Qm	Ø Qa	Ø Ra	Ø Rm	no. holes a	no. holes m	Weight kg
CSK 125-350	150	125	122	47	586	150	200	400	500	346	232	280	708	580	300	110	22	14	250	285	210	240	22	18	8	8	
CSK 150-350	200	150	122	47	580	150	200	450	550	348	258	330	702	630	300	175	22	20	285	340	240	295	22	22	12	8	

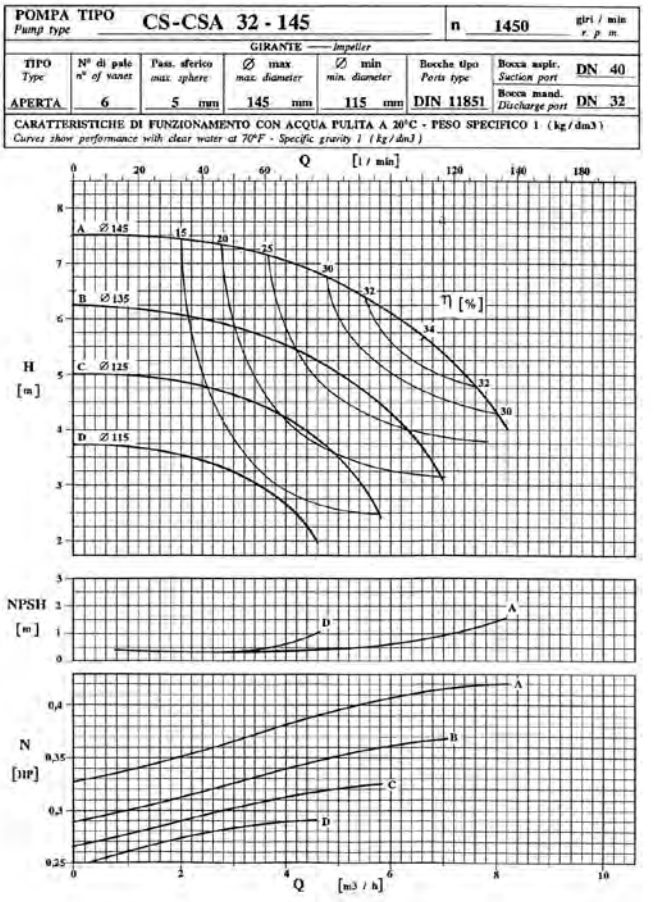
CURVE CARATTERISTICHE — Serie CS-CSA
PERFORMANCE CURVES — *CS-CSA Series*

1450 giri/min - ***1450 rpm***









CURVE CARATTERISTICHE — Serie CS-CSA
PERFORMANCE CURVES — *CS-CSA Series*

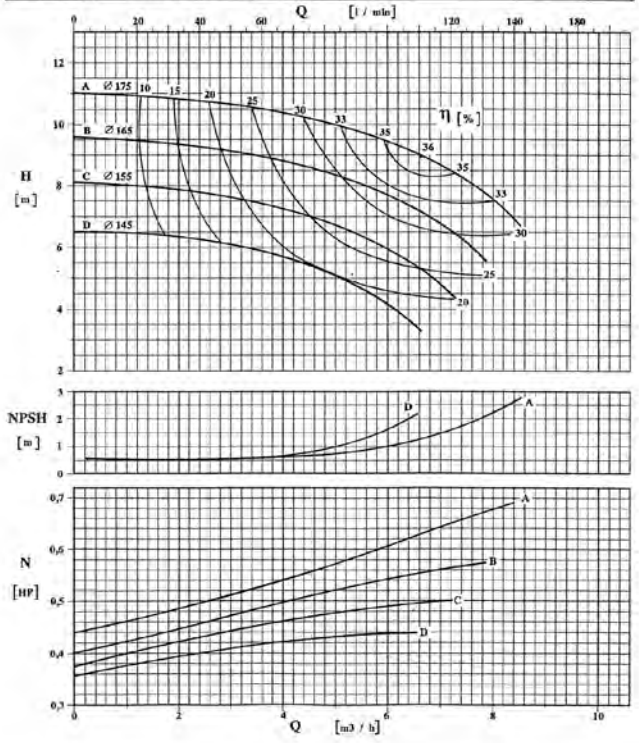
1450 giri/min - ***1450 rpm***

POMPA TIPO *Pump type* **CS-CSA 32 - 175** — n **1450** giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 40
APERTA	6	4 mm	175 mm	145 mm	DIN 11851	Bocca mand. *Discharge port*	DN 32

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

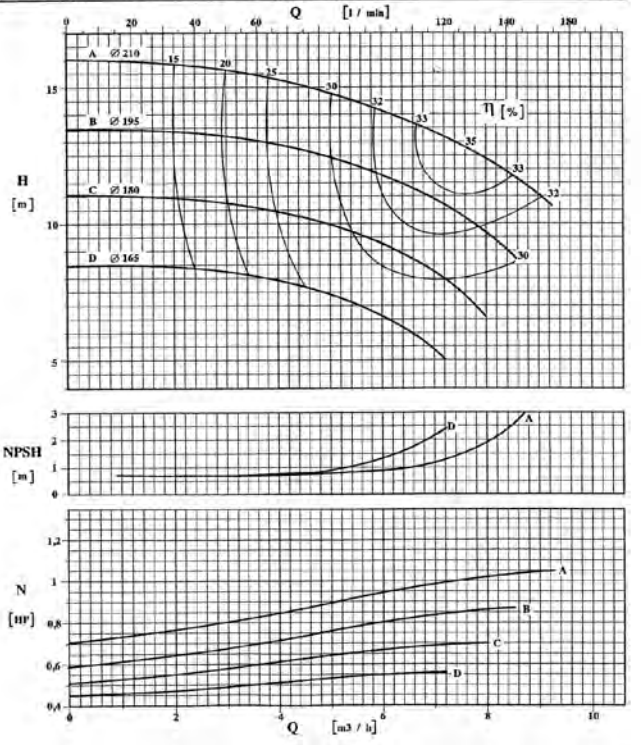


POMPA TIPO *Pump type* **CS-CSA 32 - 210** — n **1450** giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 40
APERTA	6	4 mm	210 mm	165 mm	DIN 11851	Bocca mand. *Discharge port*	DN 32

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

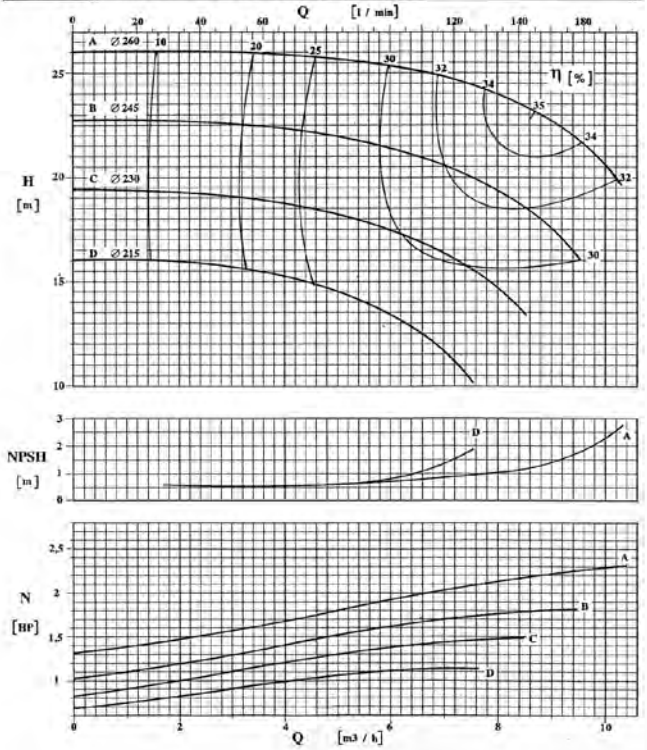


POMPA TIPO *Pump type* **CS-CSA 32 - 260** — n **1450** giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 50
APERTA	6	3.5 mm	260 mm	210 mm	DIN 11851	Bocca mand. *Discharge port*	DN 32

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

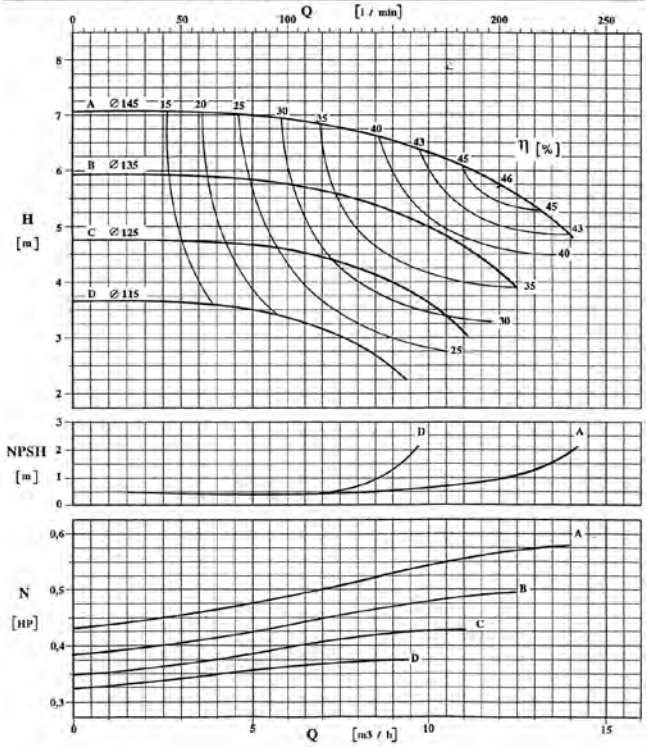


POMPA TIPO *Pump type* **CS-CSA 40 - 145** — n **1450** giri / min *r. p. m.*

GIRANTE — *Impeller*

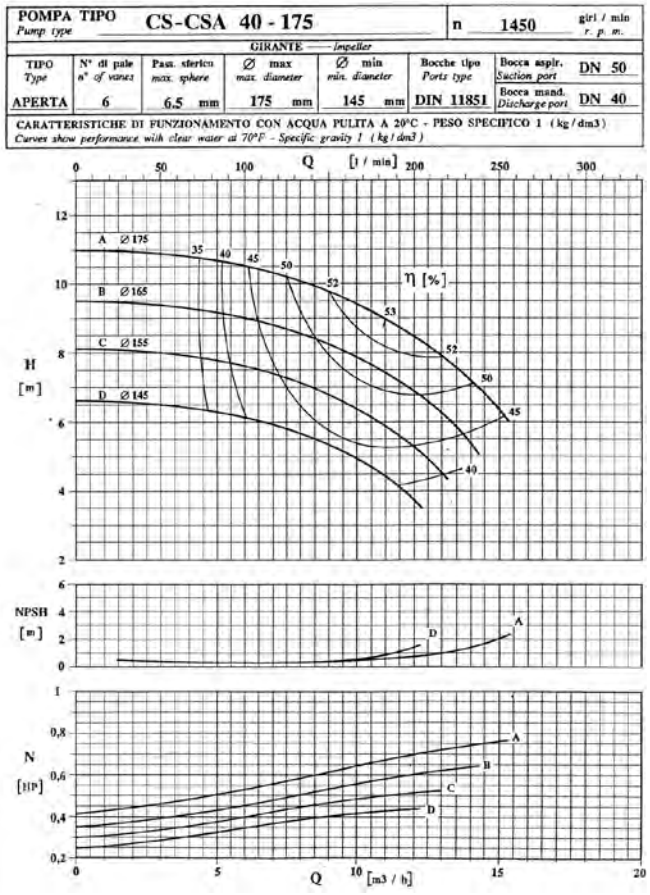
TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 50
APERTA	6	6 mm	145 mm	115 mm	DIN 11851	Bocca mand. *Discharge port*	DN 40

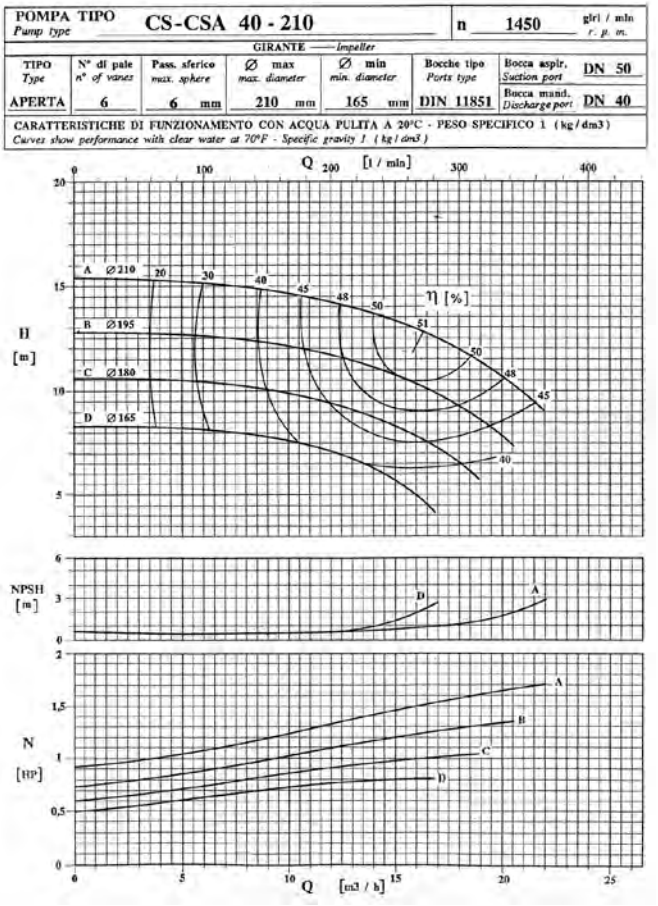
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

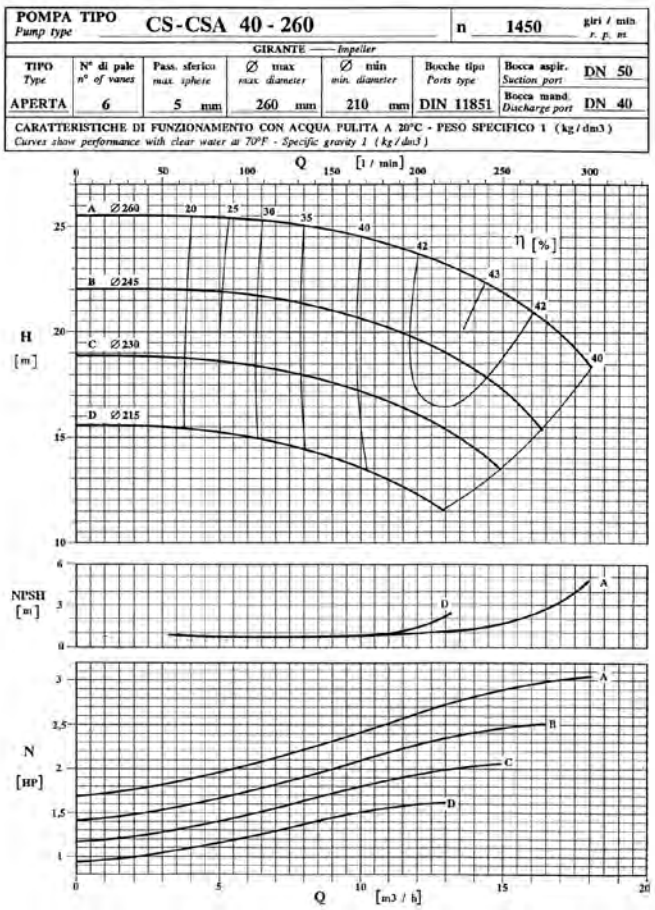


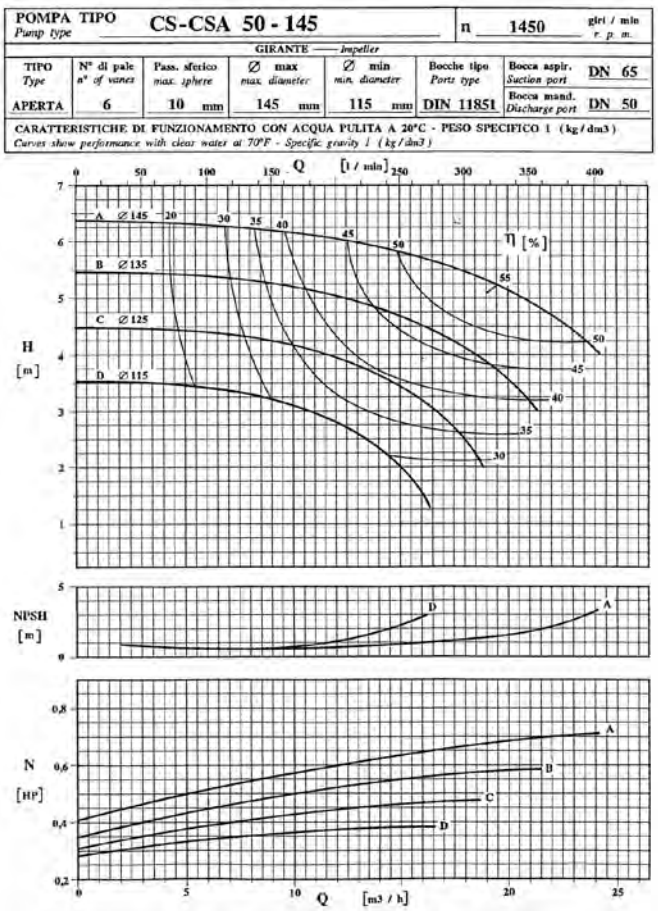
CURVE CARATTERISTICHE — Serie CS-CSA
PERFORMANCE CURVES — *CS-CSA Series*

1450 giri/min - ***1450 rpm***









CURVE CARATTERISTICHE Serie CS-CSA
PERFORMANCE CURVES *CS-CSA Series*

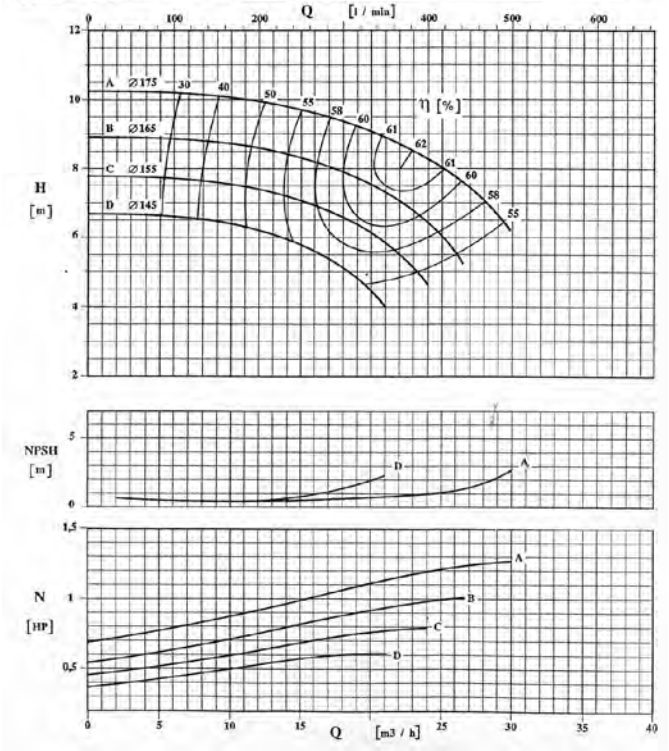
1450 giri/min - ***1450 rpm***

POMPA TIPO *Pump type* **CS-CSA 50 - 175** n 1450 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 65
APERTA	6	8 mm	175 mm	145 mm	DIN 11851	Bocca mand. *Discharge port*	DN 50

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

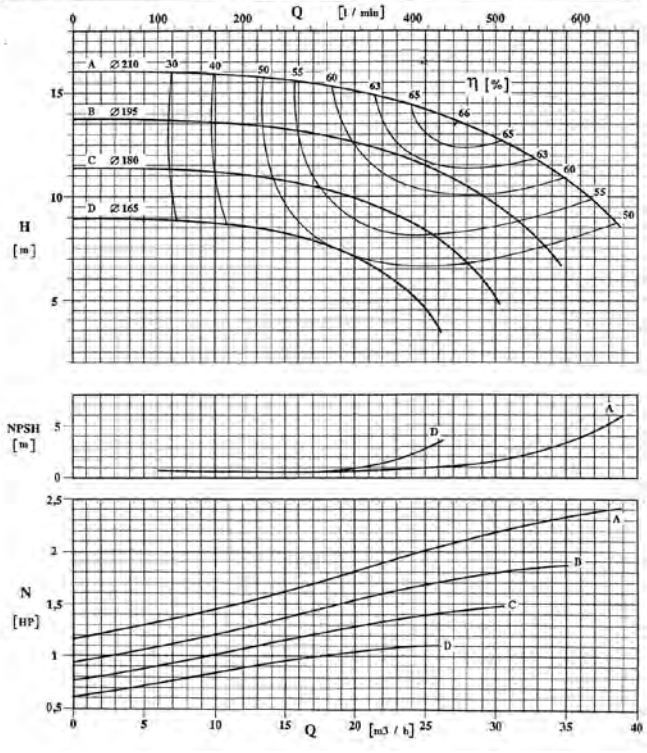


POMPA TIPO *Pump type* **CS-CSA 50 - 210** n 1450 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 65
APERTA	6	8 mm	210 mm	165 mm	DIN 11851	Bocca mand. *Discharge port*	DN 50

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

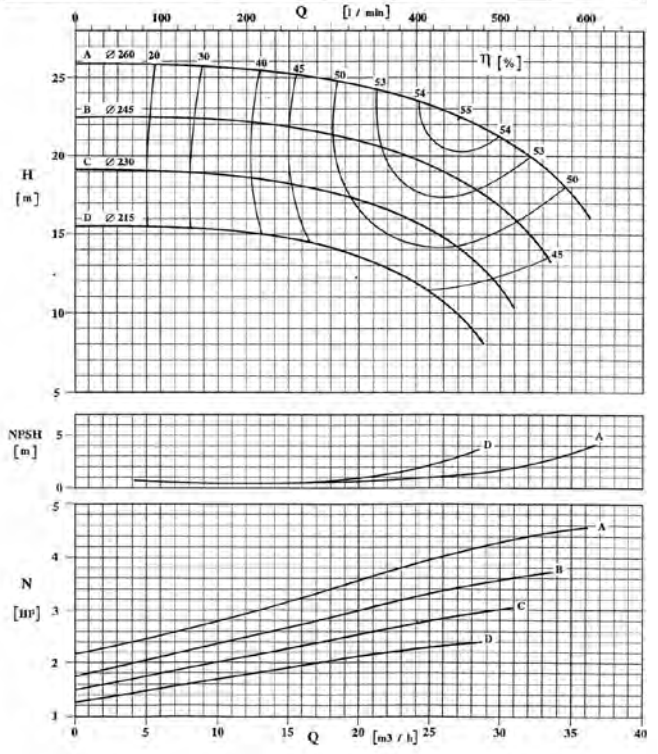


POMPA TIPO *Pump type* **CS-CSA 50 - 260** n 1450 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 65
APERTA	6	6 mm	260 mm	210 mm	DIN 11851	Bocca mand. *Discharge port*	DN 50

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

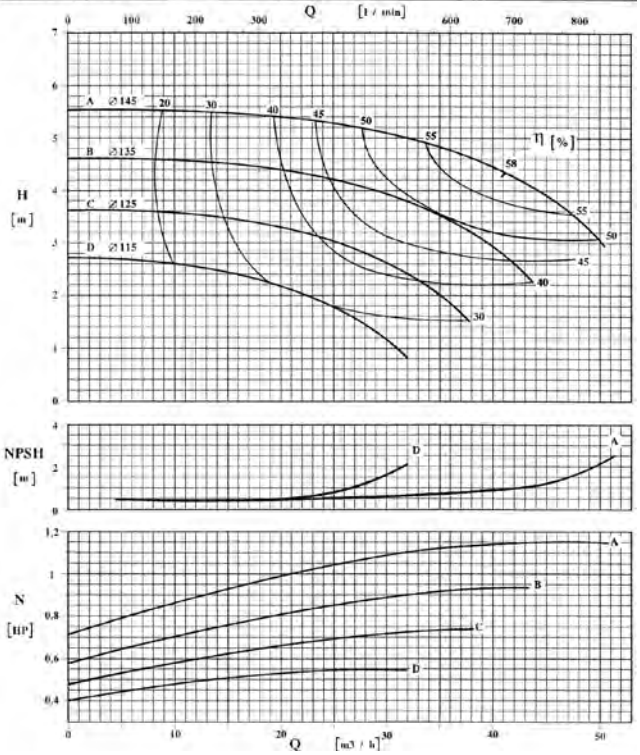


POMPA TIPO *Pump type* **CS-CSA 65 - 145** n 1450 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 80
APERTA	6	18 mm	145 mm	115 mm	DIN 11851	Bocca mand. *Discharge port*	DN 65

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)



CURVE CARATTERISTICHE — Serie CS-CSA
PERFORMANCE CURVES — *CS-CSA Series*

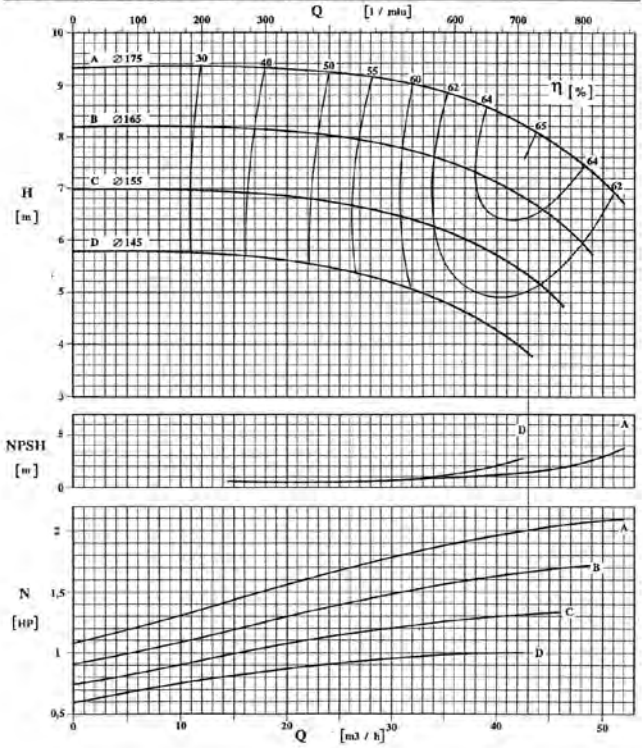
1450 giri/min - ***1450 rpm***

POMPA TIPO *Pump type* **CS-CSA 65 - 175** | n 1450 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 80
APERTA	6	16 mm	175 mm	145 mm	DIN 11851	Bocca mand. *Discharge port*	DN 65

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

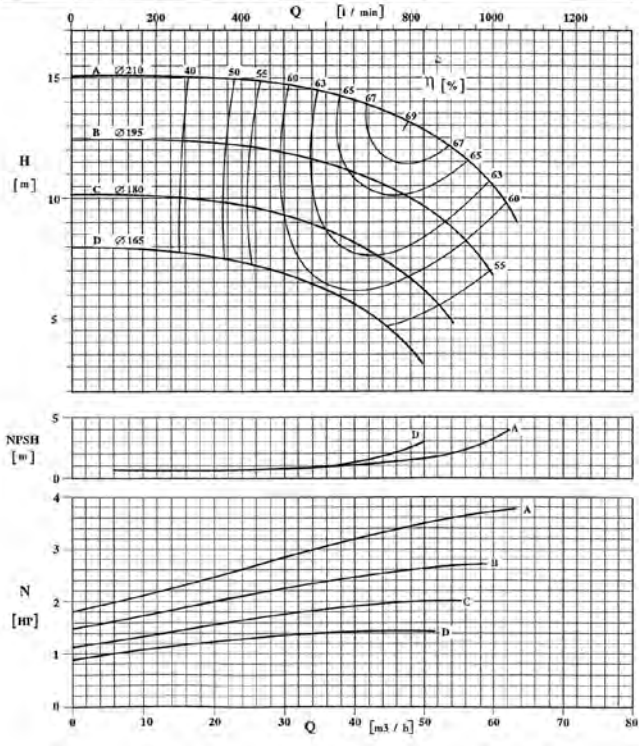


POMPA TIPO *Pump type* **CS-CSA 65 - 210** | n 1450 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 80
APERTA	6	12 mm	210 mm	165 mm	DIN 11851	Bocca mand. *Discharge port*	DN 65

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

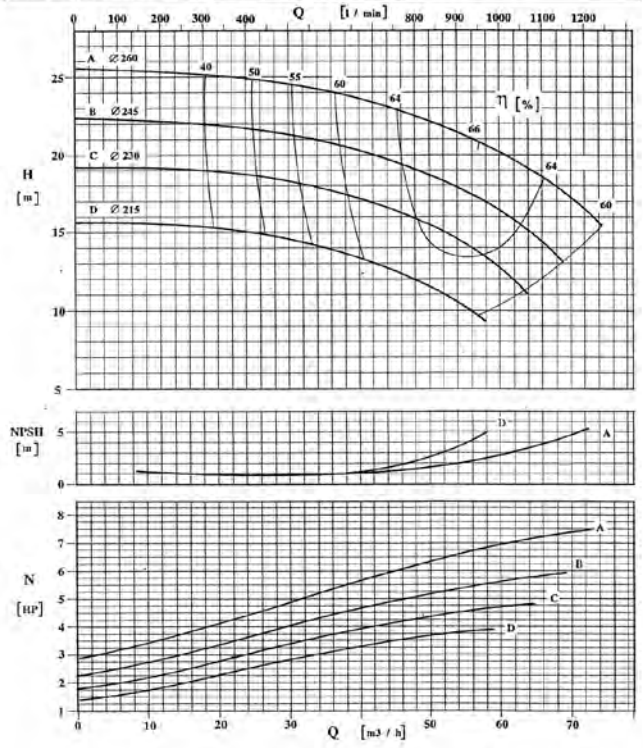


POMPA TIPO *Pump type* **CS-CSA 65 - 260** | n 1450 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 80
APERTA	6	10,5 mm	260 mm	210 mm	DIN 11851	Bocca mand. *Discharge port*	DN 65

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

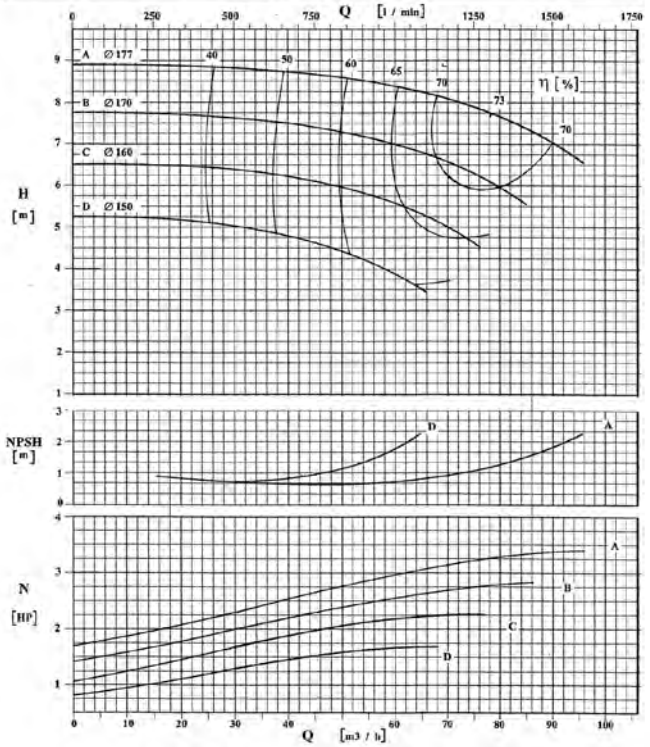


POMPA TIPO *Pump type* **CS-CSA 80 - 175** | n 1450 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 100
APERTA	6	22 mm	177 mm	150 mm	DIN 11851	Bocca mand. *Discharge port*	DN 80

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)



CURVE CARATTERISTICHE — Serie CS-CSA
PERFORMANCE CURVES — *CS-CSA Series*

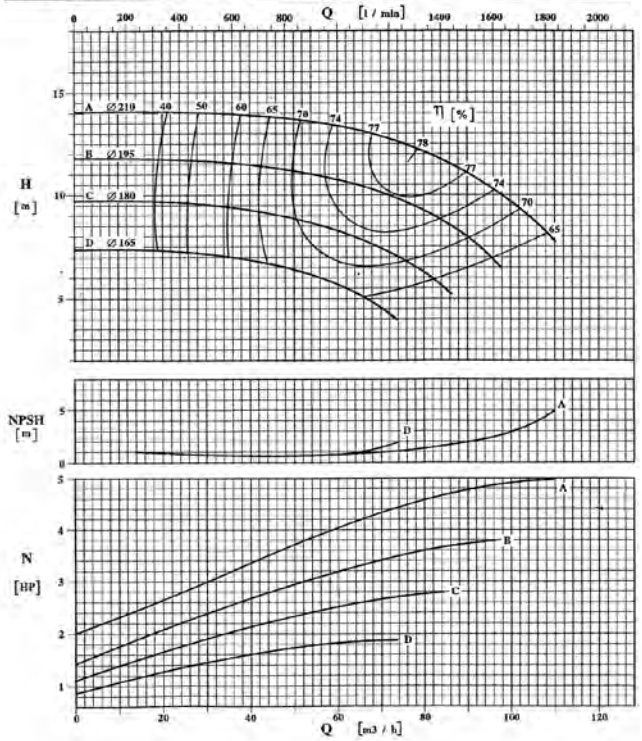
1450 giri/min - ***1450 rpm***

POMPA TIPO *Pump type*	CS-CSA 80 - 210	n	1450 giri/min *r.p.m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 100
APERTA	6	18 mm	210 mm	165 mm	DIN 11851	Bocca mand. *Discharge port*	DN 80

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg / dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg / dm3)

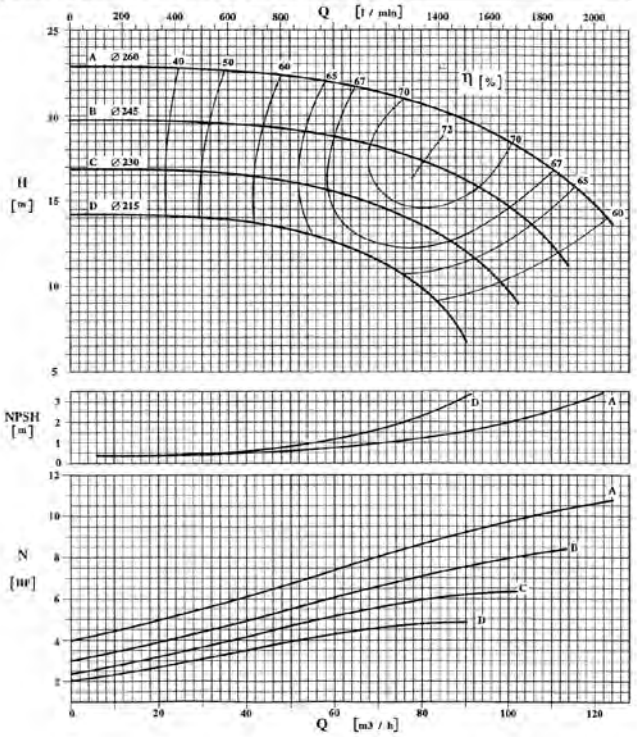


POMPA TIPO *Pump type*	CS-CSA 80 - 260	n	1450 giri/min *r.p.m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 100
APERTA	6	14 mm	260 mm	200 mm	DIN 11851	Bocca mand. *Discharge port*	DN 80

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg / dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg / dm3)

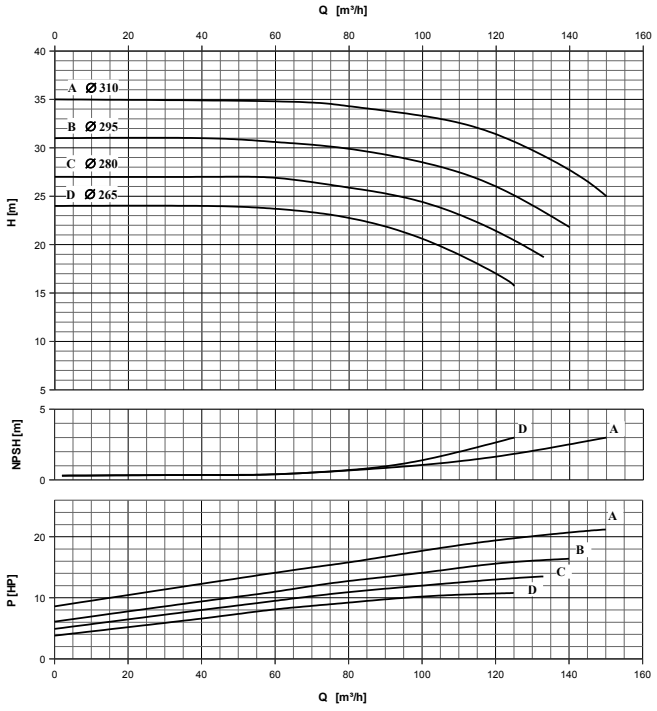


POMPA TIPO *Pump type*	CS 80 - 310	n	1450 giri/min *r.p.m.*

GIRANTE --------- *Impeller*

TIPO *Type*	N° di pale *n° of blades*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 100
APERTA	6	23 mm	310 mm	265 mm	DIN 11851	Bocca mand. *Discharge port*	DN 80

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20 °C – PESO SPECIFICO 1 Kg/dm³
Curves show performance with clear water at 70 °F – Specific gravity 1 Kg/dm³

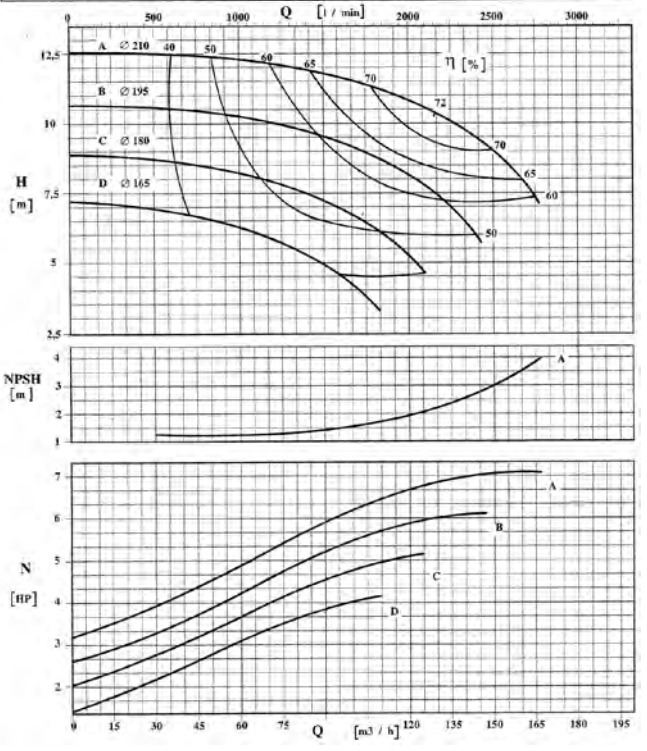


POMPA TIPO *Pump type*	CS - CSA 100 - 210	n	1450 giri / min *r.p.m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 125
APERTA	6	15 mm	210 mm	165 mm	DIN 11851	Bocca mand. *Discharge port*	DN 100

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg / dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg / dm3)



CURVE CARATTERISTICHE Serie CS-CSA
PERFORMANCE CURVES *CS-CSA Series*

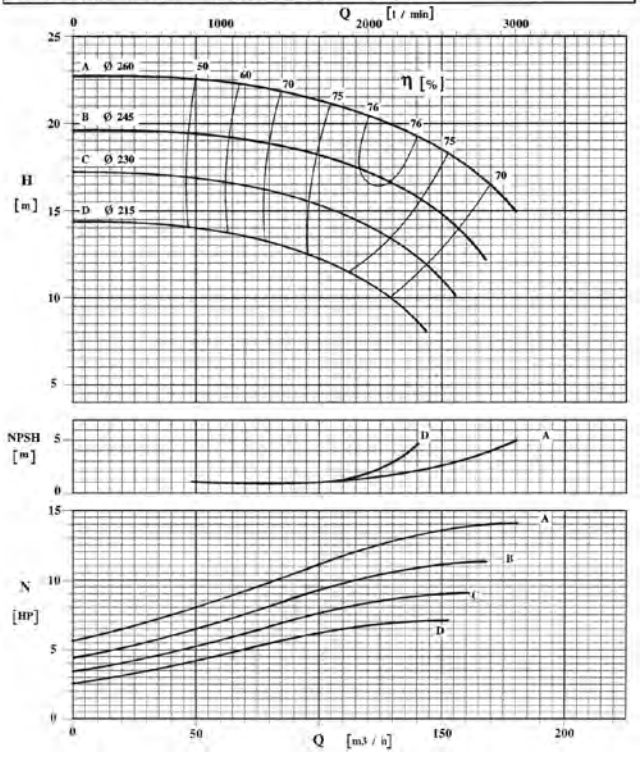
1450 giri/min - ***1450 rpm***

POMPA TIPO *Pump type*	CS-CSA 100 - 260	n 1450 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 125
APERTA	6	25 mm	260 mm	210 mm	DIN 11851	Bocca mand. *Discharge port*	DN 100

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C – PESO SPECIFICO 1 (kg / dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg / dm3)

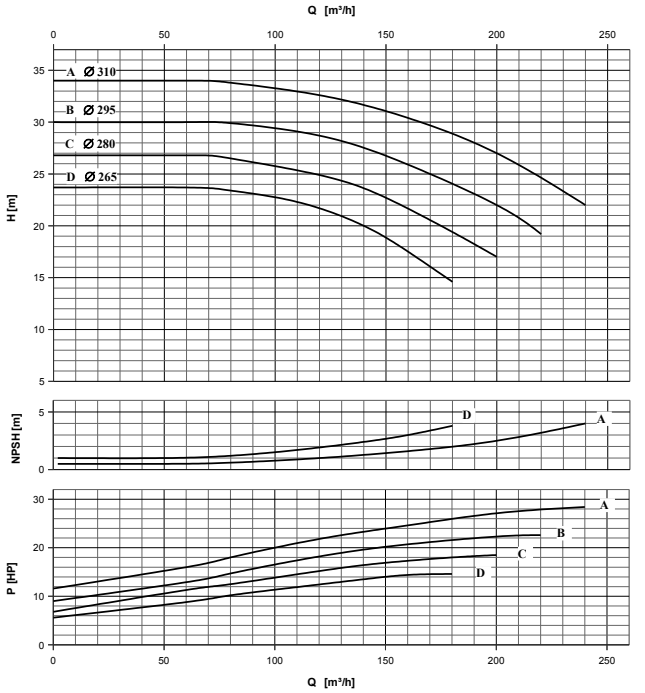


POMPA TIPO *Pump type*	CS 100 - 310	n 1450 giri/min *r.p.m.*

GIRANTE --------- *Impeller*

TIPO *Type*	N° di pale *n° of blades*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 125
APERTA	6	30 mm	310 mm	265 mm	DIN 11851	Bocca mand. *Discharge port*	DN 100

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20 °C – PESO SPECIFICO 1 Kg/dm³
Curves show performance with clear water at 70 °F – Specific gravity 1 Kg/dm³

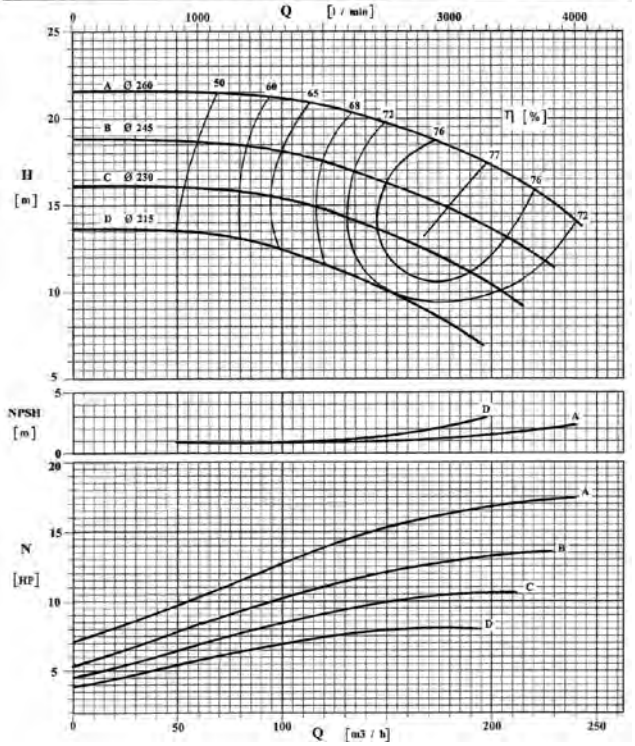


POMPA TIPO *Pump type*	CS 125 - 260	n 1470 giri / min *r. p. m.*

GIRANTE — *Impeller*

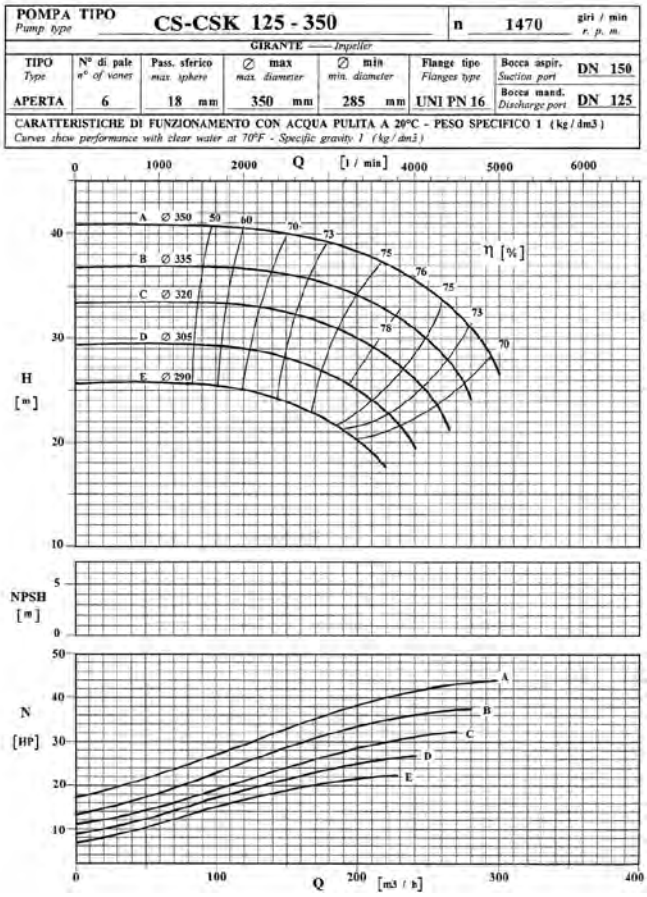
TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 150
APERTA	6	32 mm	260 mm	210 mm	DIN 11851	Bocca mand. *Discharge port*	DN 125

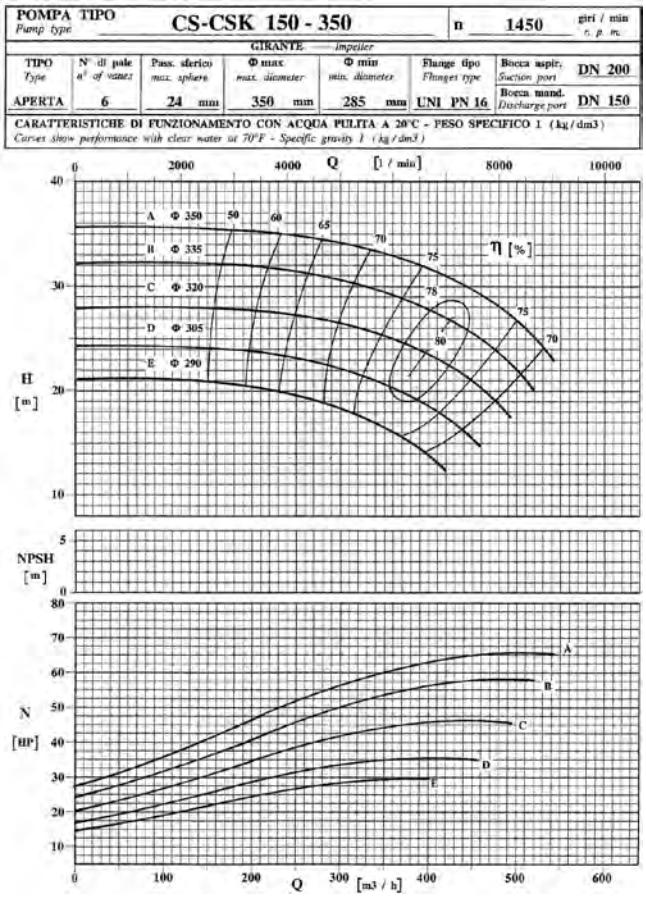
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C – PESO SPECIFICO 1 (kg / dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg / dm3)



CURVE CARATTERISTICHE — Serie CS-CSK
PERFORMANCE CURVES — *CS-CSK Series*

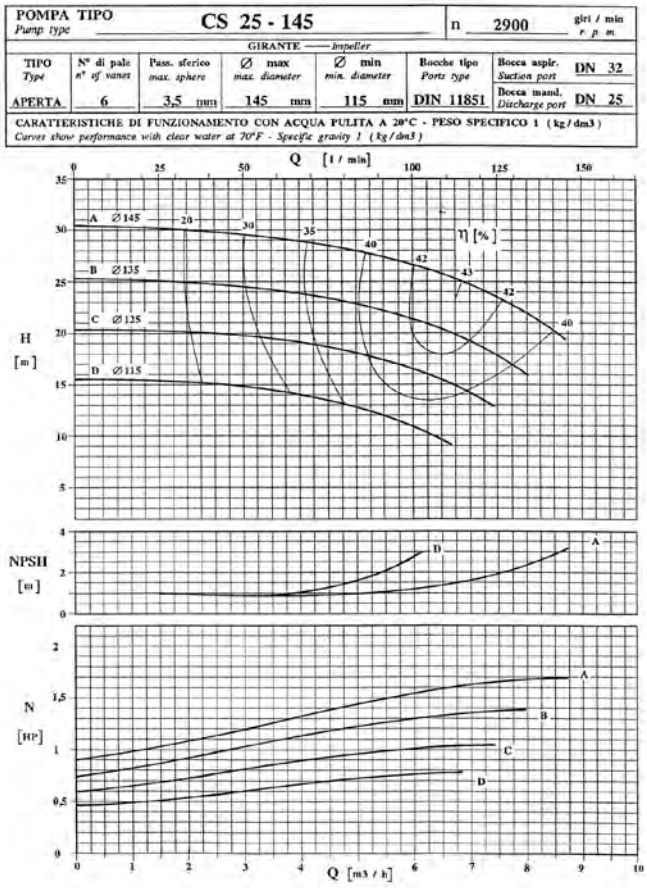
1450 giri/min - ***1450 rpm***

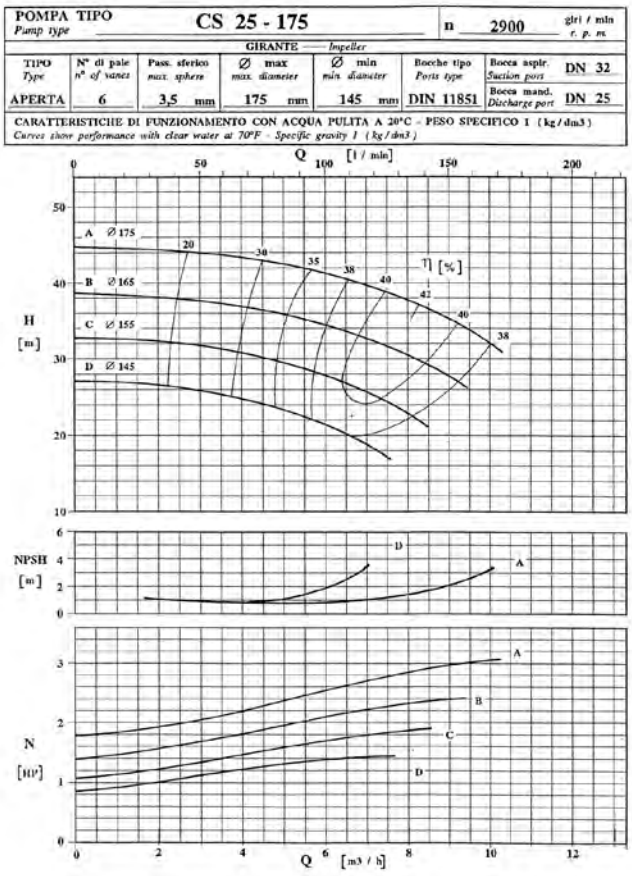


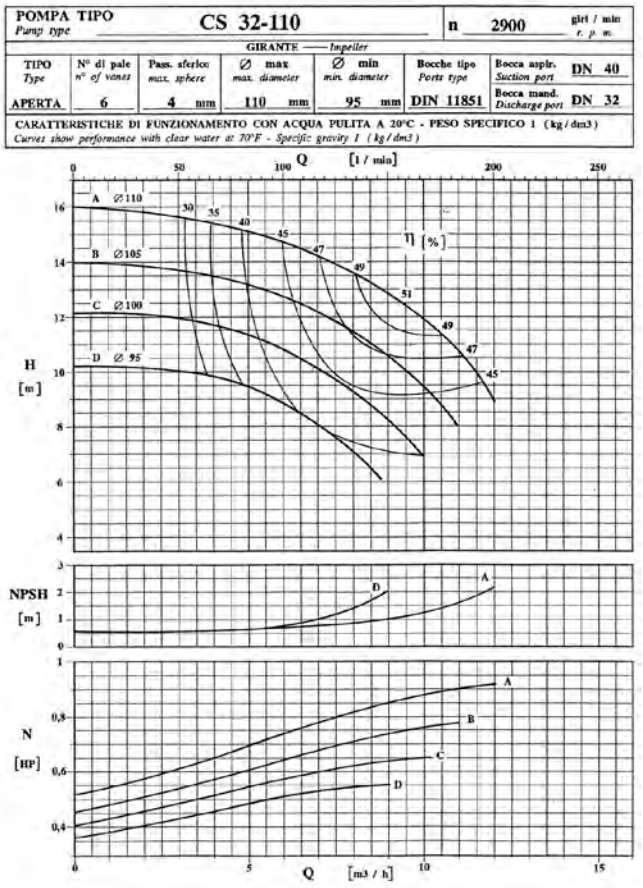


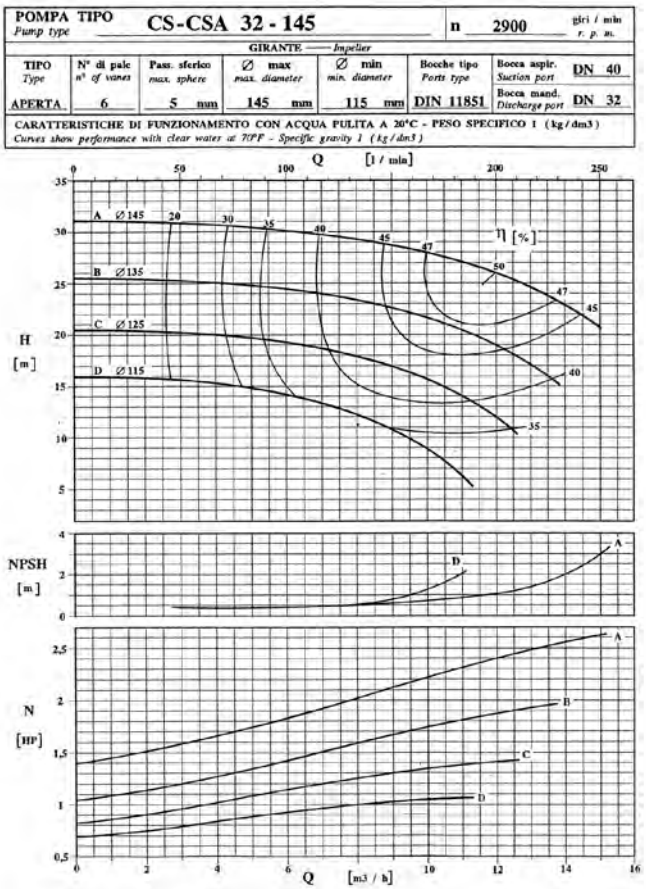
CURVE CARATTERISTICHE — Serie CS-CSA
PERFORMANCE CURVES — *CS-CSA Series*

2900 giri/min - ***2900 rpm***









CURVE CARATTERISTICHE — Serie CS-CSA
PERFORMANCE CURVES — *CS-CSA Series*

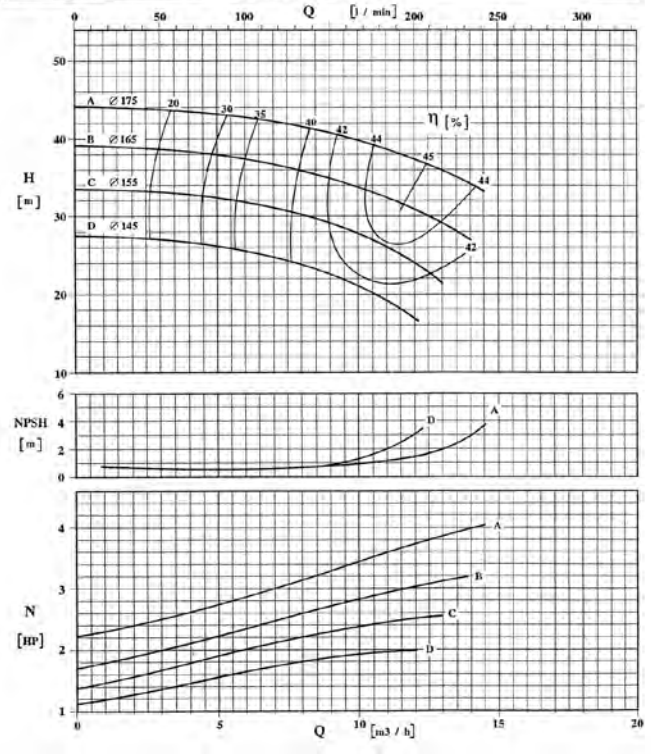
2900 giri/min - ***2900 rpm***

POMPA TIPO *Pump type* **CS-CSA 32 - 175** — n 2900 giri/min *r. p. m.*

GIRANTE *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 40
APERTA	6	4 mm	175 mm	145 mm	DIN 11851	Bocca mand. *Discharge port*	DN 32

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

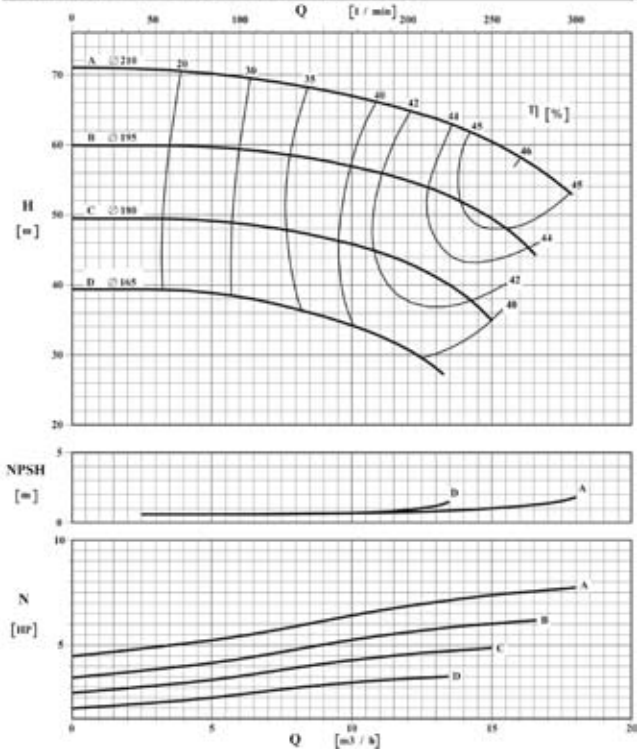


POMPA TIPO *Pump type* **CS - CSA 32 - 210** — n 2900 giri/min *r. p. m.*

GIRANTE *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 40
APERTA	6	4 mm	210 mm	165 mm	DIN 11851	Bocca mand. *Discharge port*	DN 32

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

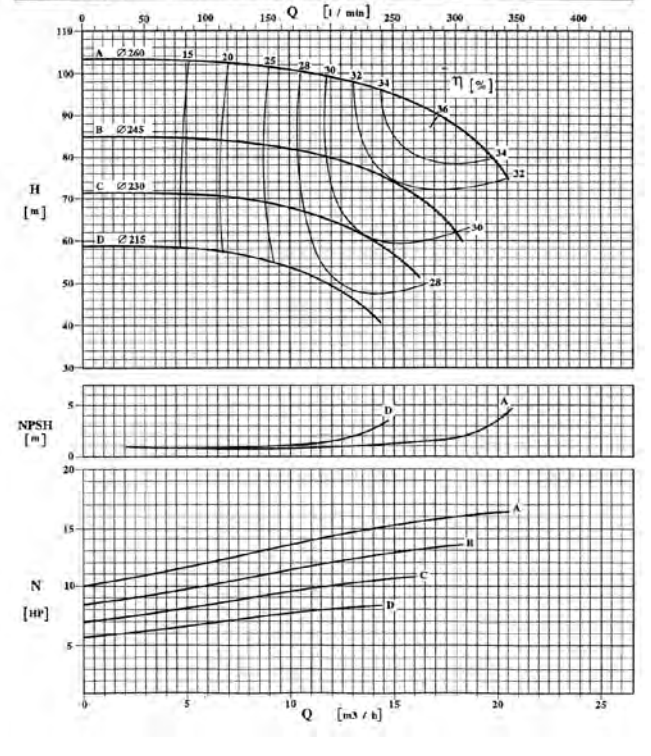


POMPA TIPO *Pump type* **CS-CSA 32 - 260** — n 2950 giri/min *r. p. m.*

GIRANTE *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 50
APERTA	6	3,5 mm	260 mm	200 mm	DIN 11851	Bocca mand. *Discharge port*	DN 32

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

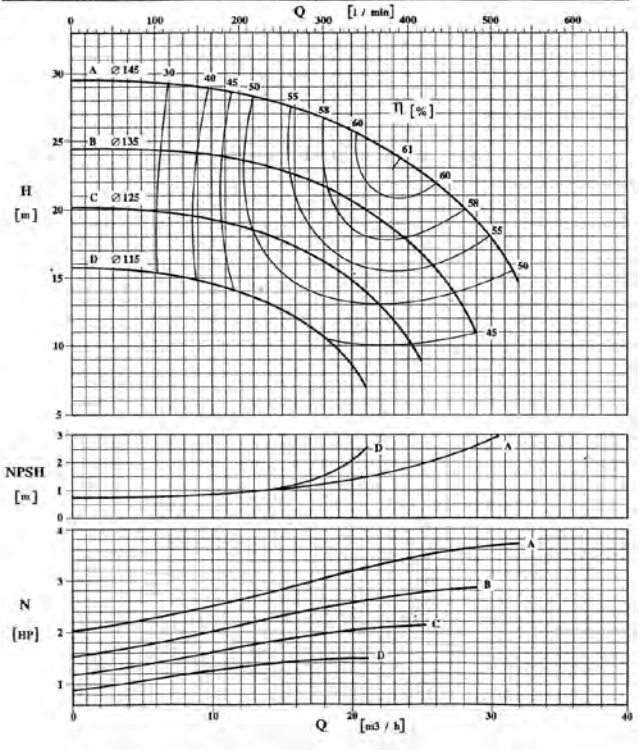


POMPA TIPO *Pump type* **CS-CSA 40 - 145** — n 2900 giri/min *r. p. m.*

GIRANTE *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 50
APERTA	6	11 mm	145 mm	115 mm	DIN 11851	Bocca mand. *Discharge port*	DN 40

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)



CURVE CARATTERISTICHE — Serie CS-CSA
PERFORMANCE CURVES — *CS-CSA Series*

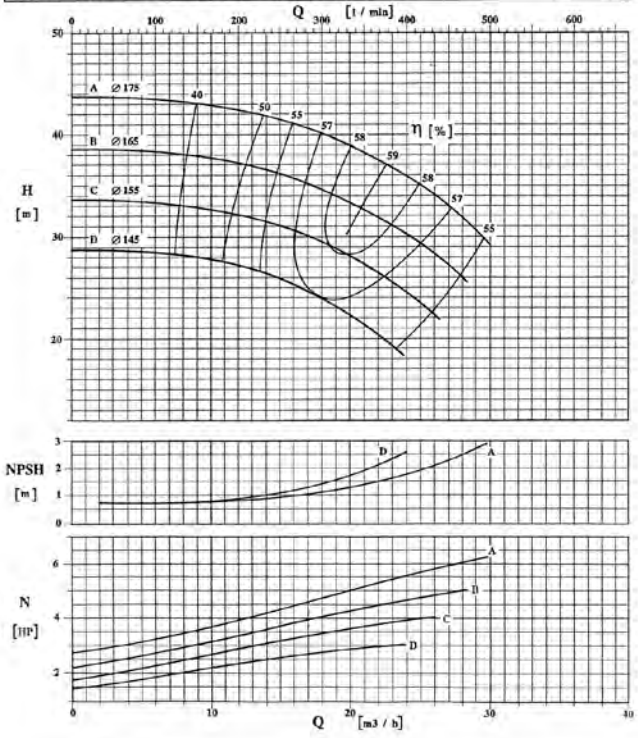
2900 giri/min - *2900 rpm*

POMPA TIPO *Pump type* **CS-CSA 40 - 175** | n 2900 giri/min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 50
APERTA	6	11 mm	175 mm	145 mm	DIN 11851	Bocca mand. *Discharge port*	DN 40

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

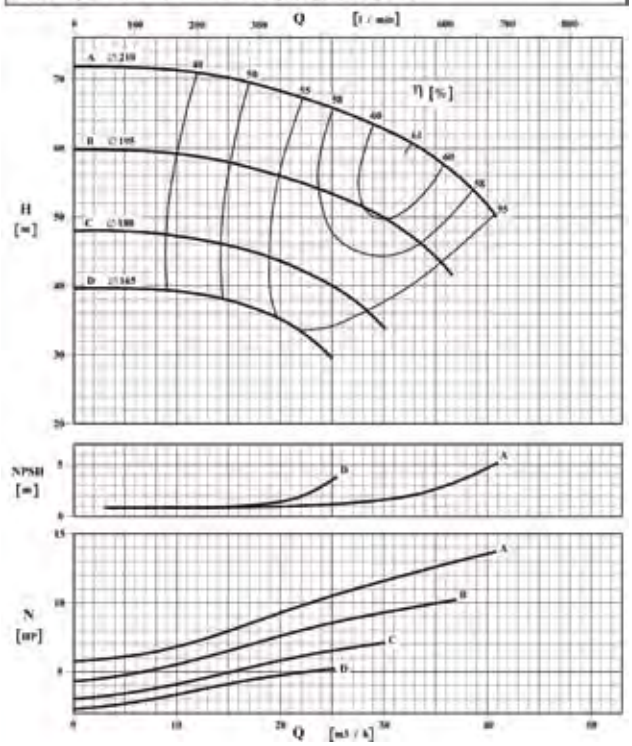


POMPA TIPO *Pump type* **CS - CSA 40 - 210** | n 2950 giri/min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 50
APERTA	6	6 mm	210 mm	165 mm	DIN 11851	Bocca mand. *Discharge port*	DN 40

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

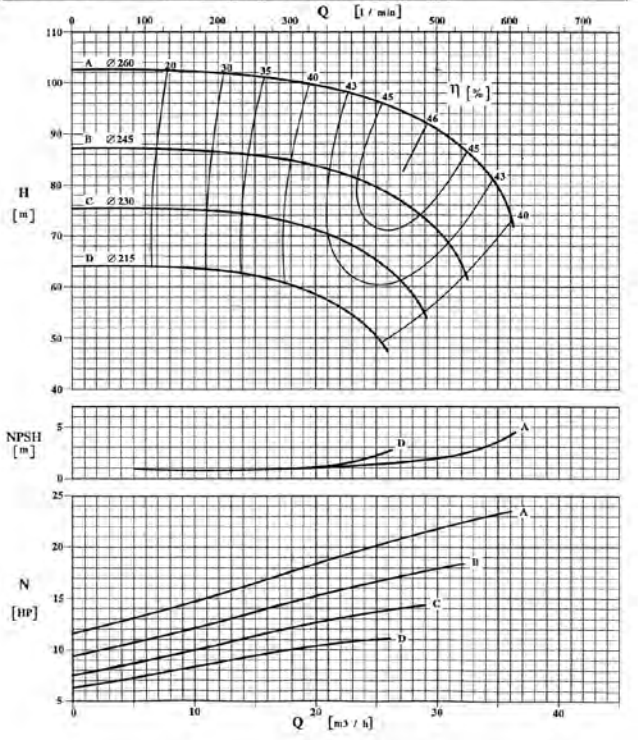


POMPA TIPO *Pump type* **CS-CSA 40 - 260** | n 2950 giri/min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 50
APERTA	6	5 mm	260 mm	200 mm	DIN 11851	Bocca mand. *Discharge port*	DN 40

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

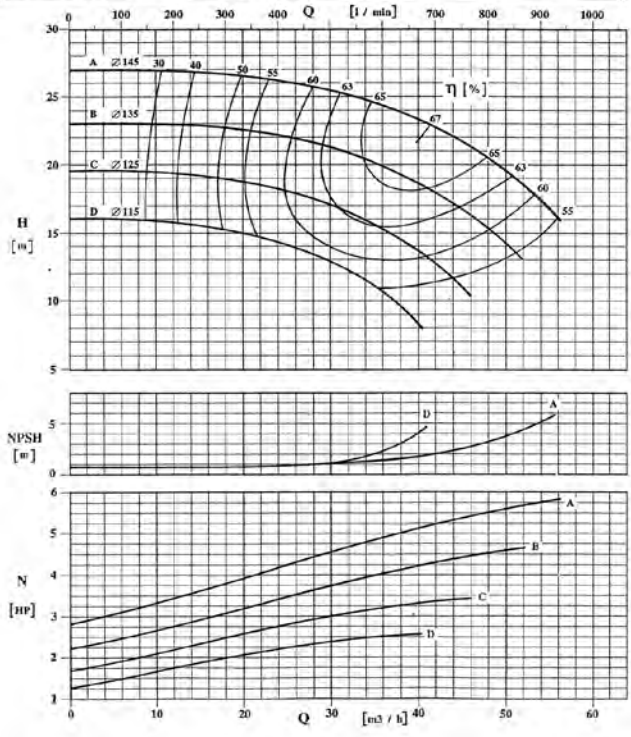


POMPA TIPO *Pump type* **CS-CSA 50 - 145** | n 2900 giri/min *r. p. m.*

GIRANTE — *Impeller*

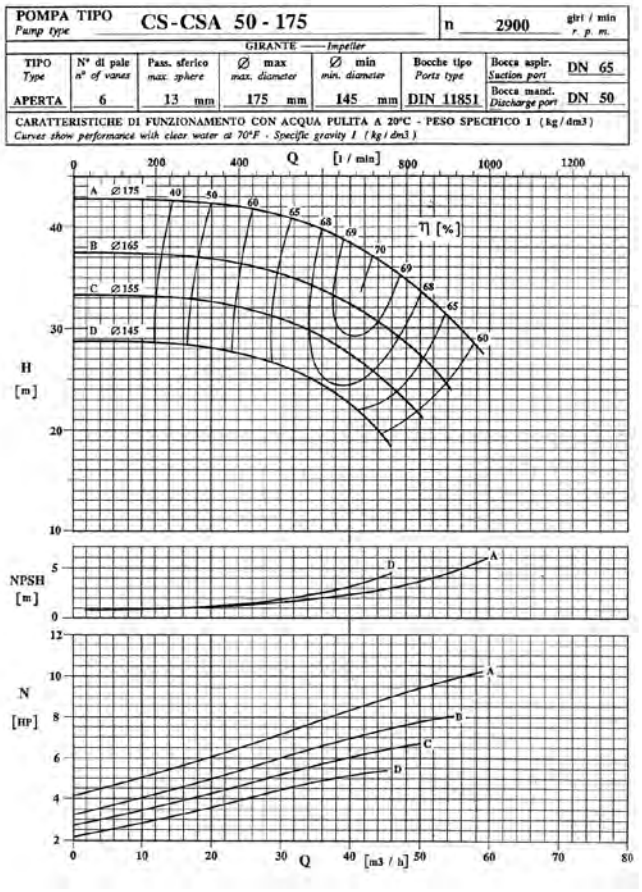
TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 65
APERTA	6	16 mm	145 mm	115 mm	DIN 11851	Bocca mand. *Discharge port*	DN 50

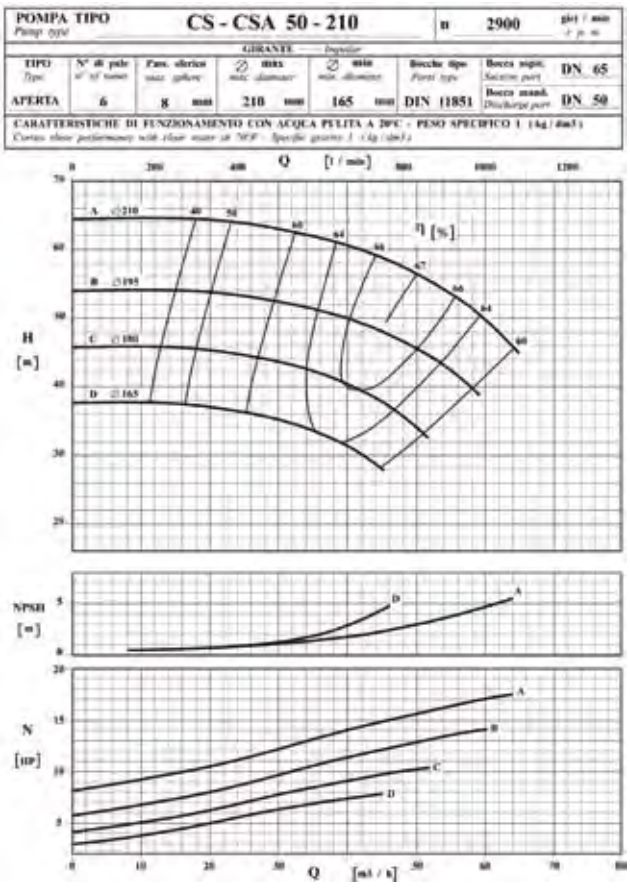
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

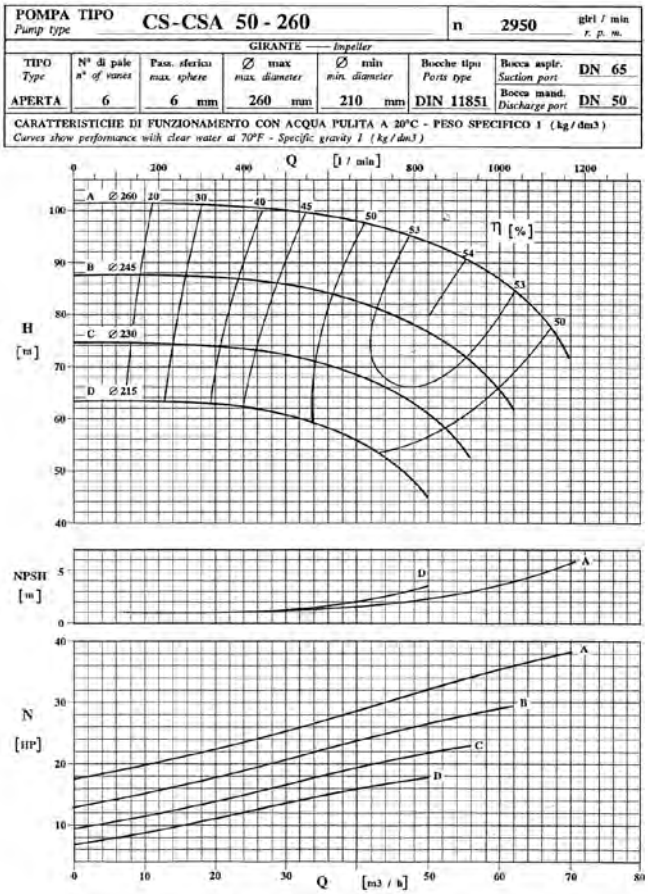


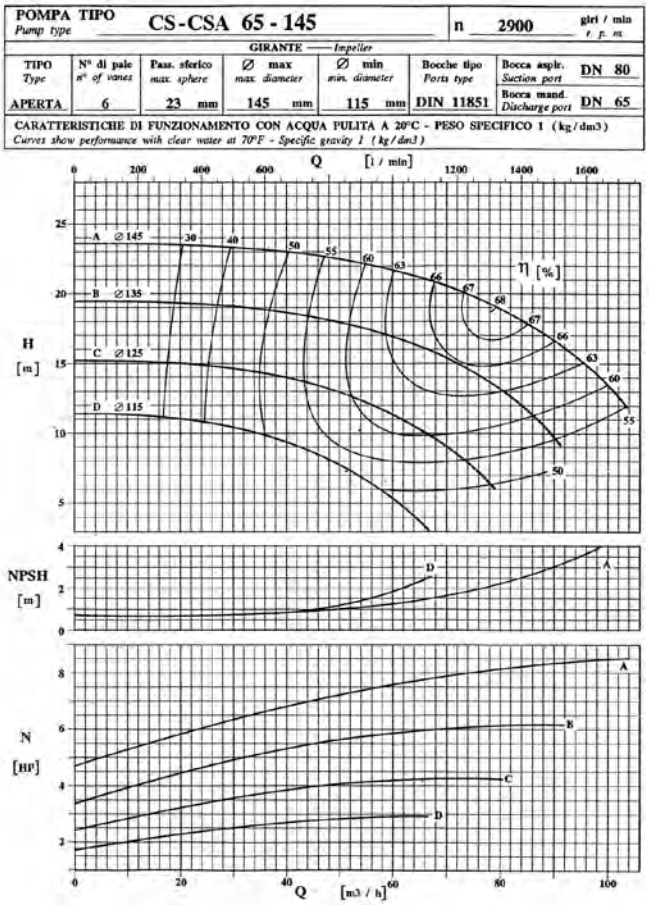
CURVE CARATTERISTICHE Serie CS-CSA
PERFORMANCE CURVES *CS-CSA Series*

2900 giri/min - ***2900 rpm***









CURVE CARATTERISTICHE — Serie CS-CSA
PERFORMANCE CURVES — *CS-CSA Series*

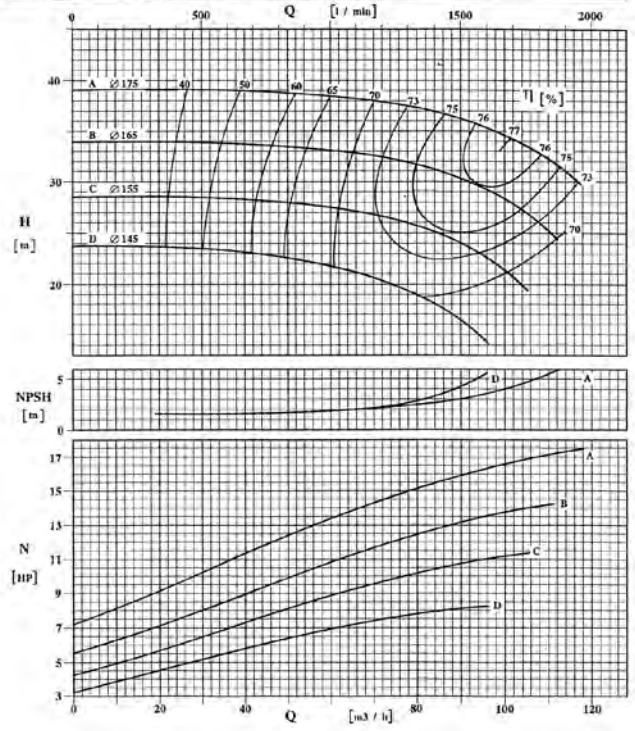
2900 giri/min - ***2900 rpm***

POMPA TIPO *Pump type* **CS-CSA 65 - 175** | n **2900** giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 80
APERTA	6	16 mm	175 mm	145 mm	DIN 11851	Bocca mand. *Discharge port*	DN 65

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

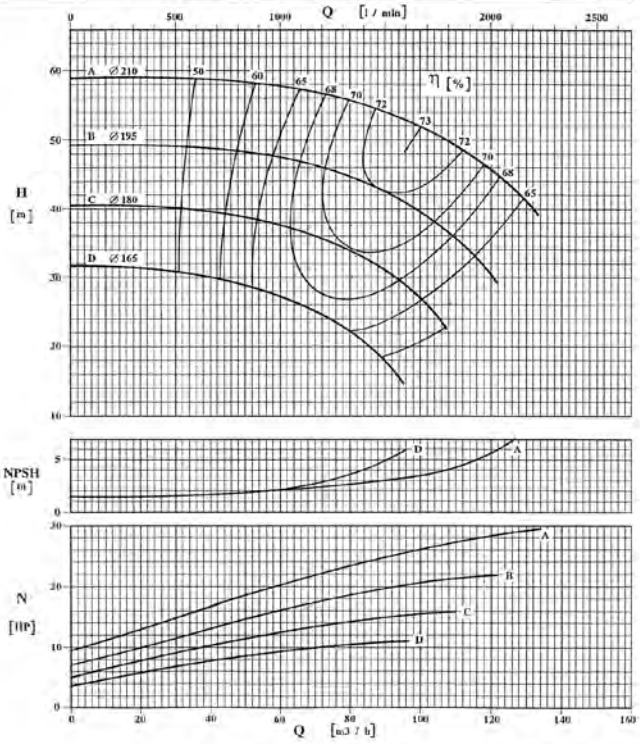


POMPA TIPO *Pump type* **CS-CSA 65 - 210** | n **2900** giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 80
APERTA	6	12 mm	210 mm	165 mm	DIN 11851	Bocca mand. *Discharge port*	DN 65

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

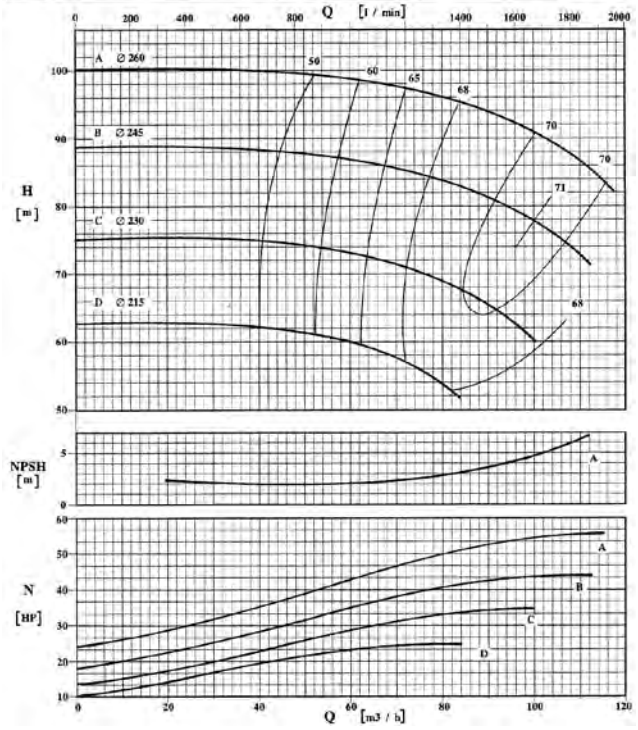


POMPA TIPO *Pump type* **CS-CSA 65 - 260** | n **2900** giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 80
APERTA	6	10.5 mm	260 mm	215 mm	DIN 11851	Bocca mand. *Discharge port*	DN 65

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

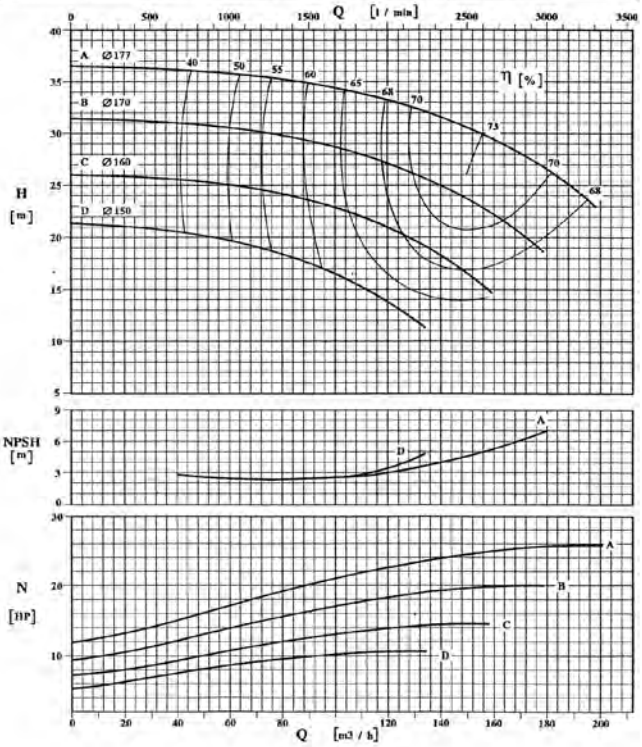


POMPA TIPO *Pump type* **CS-CSA 80 - 175** | n **2900** giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 100
APERTA	6	22 mm	177 mm	150 mm	DIN 11851	Bocca mand. *Discharge port*	DN 80

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)



CURVE CARATTERISTICHE Serie CS-CSA
PERFORMANCE CURVES *CS-CSA Series*

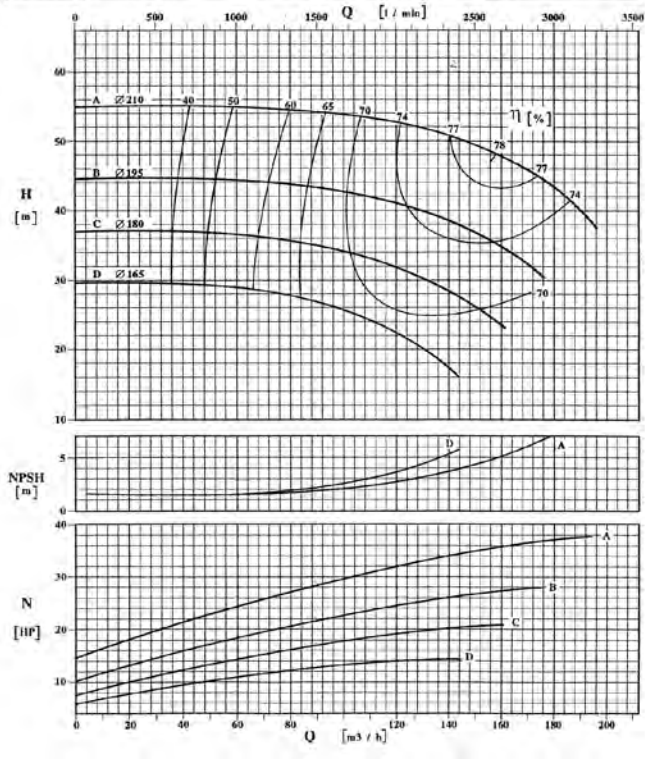
2900 giri/min - ***2900 rpm***

POMPA TIPO *Pump type* **CS-CSA 80 - 210** | n 2900 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 100
APERTA	6	15 mm	210 mm	165 mm	DIN 11851	Bocca mand. *Discharge port*	DN 80

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

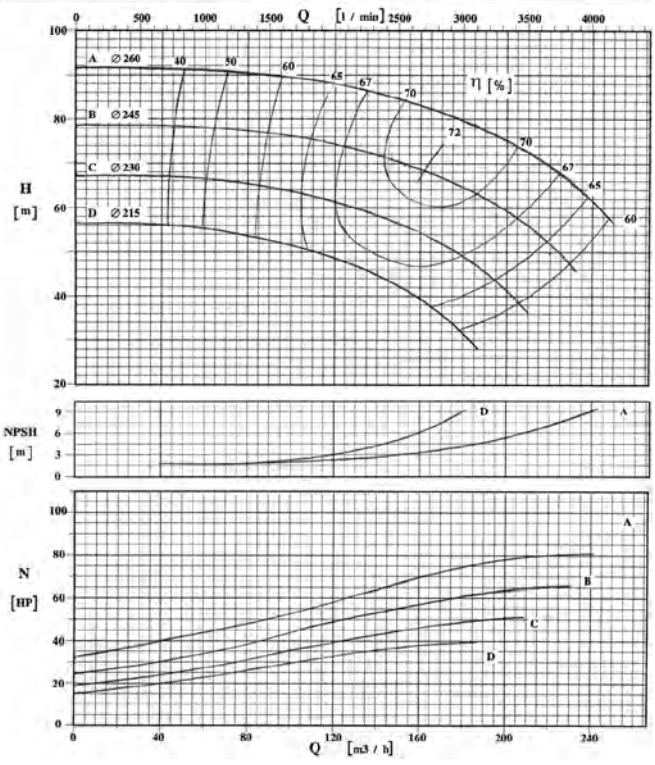


POMPA TIPO *Pump type* **CS 80 - 260** | n 2950 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 100
APERTA	6	14 mm	260 mm	200 mm	DIN 11851	Bocca mand. *Discharge port*	DN 80

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

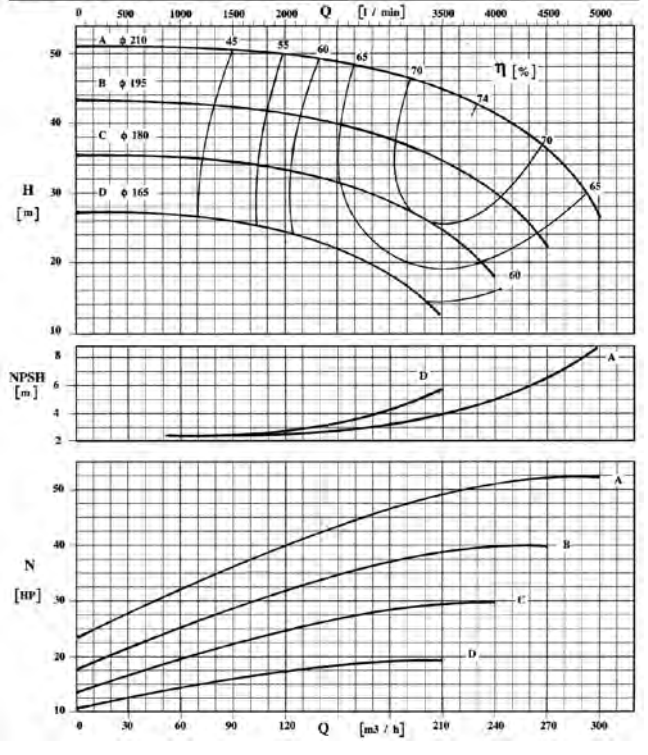


POMPA TIPO *Pump type* **CS - CSA 100 - 210** | n 2950 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	ϕ max *max. diameter*	ϕmin *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN125
APERTA	6	28 mm	210 mm	165 mm	DIN 11851	Bocca mand. *Discharge port*	DN100

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

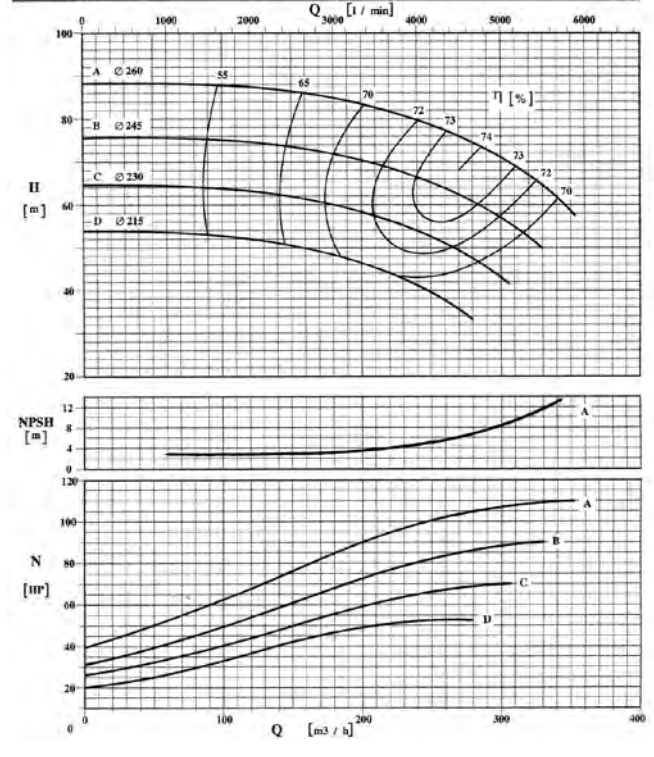


POMPA TIPO *Pump type* **CS - CSA 100 - 260** | n 2950 giri / min *r. p. m.*

GIRANTE — *Impeller*

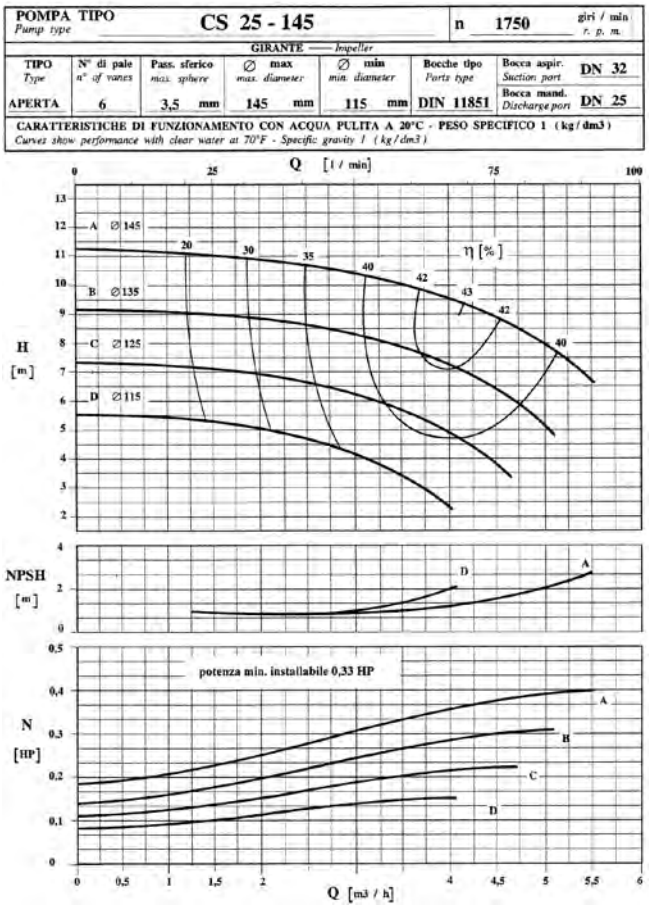
TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 125
APERTA	6	25 mm	260 mm	200 mm	DIN 11851	Bocca mand. *Discharge port*	DN 100

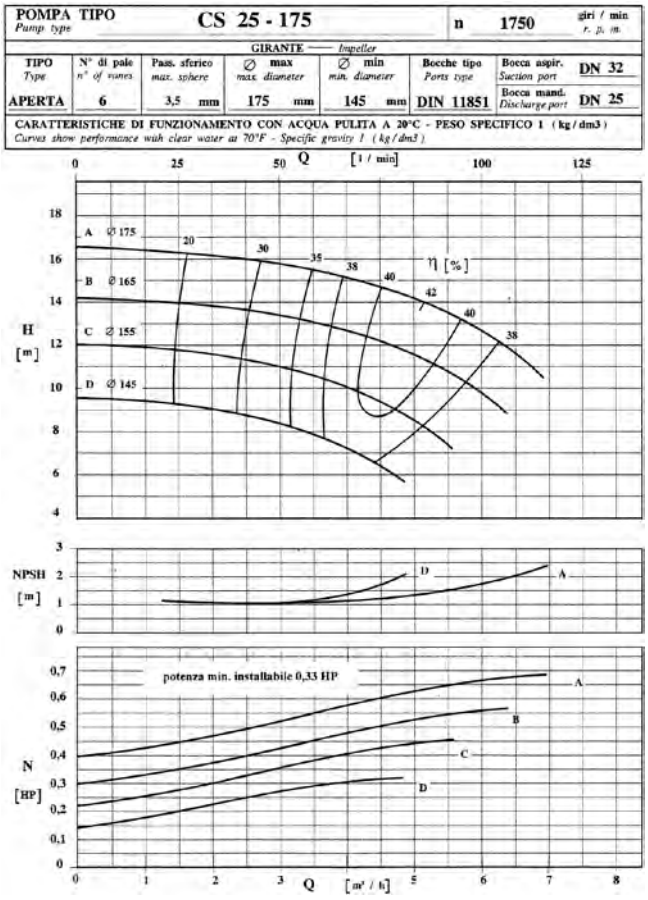
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

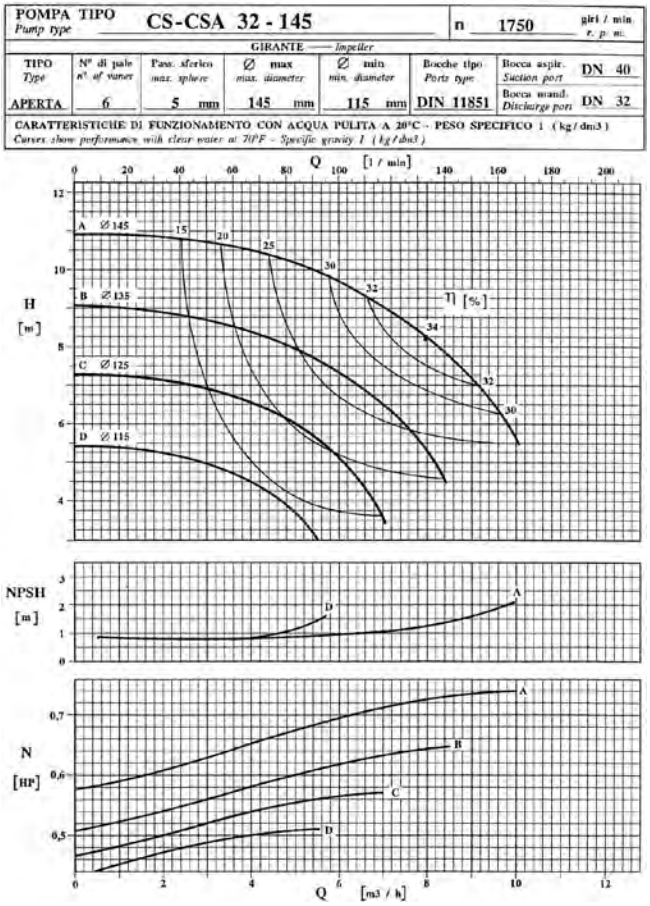


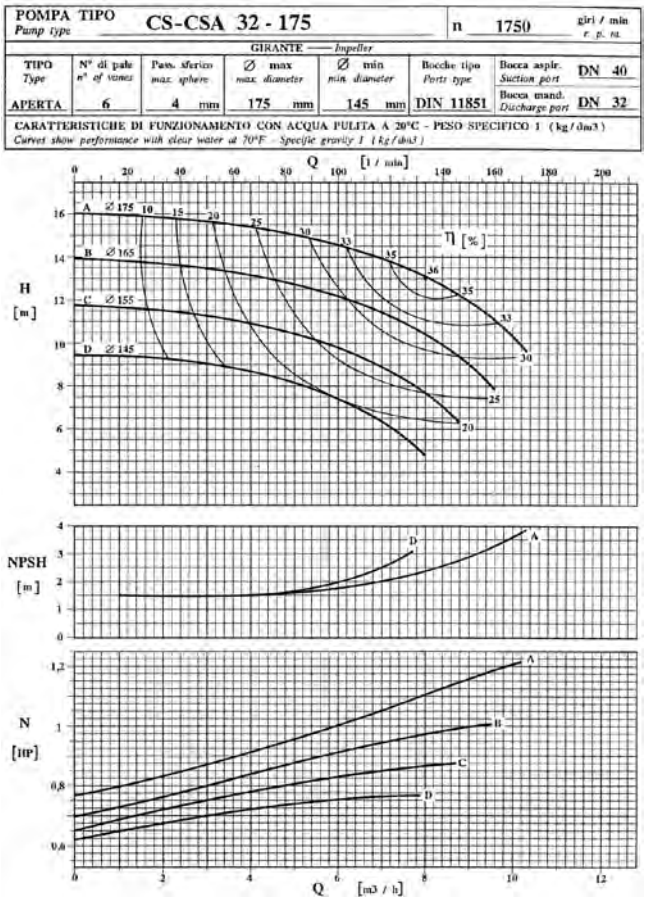
CURVE CARATTERISTICHE — Serie CS-CSA
PERFORMANCE CURVES — *CS-CSA Series*

1750 giri/min - ***1750 rpm***









CURVE CARATTERISTICHE — Serie CS-CSA
PERFORMANCE CURVES — *CS-CSA Series*

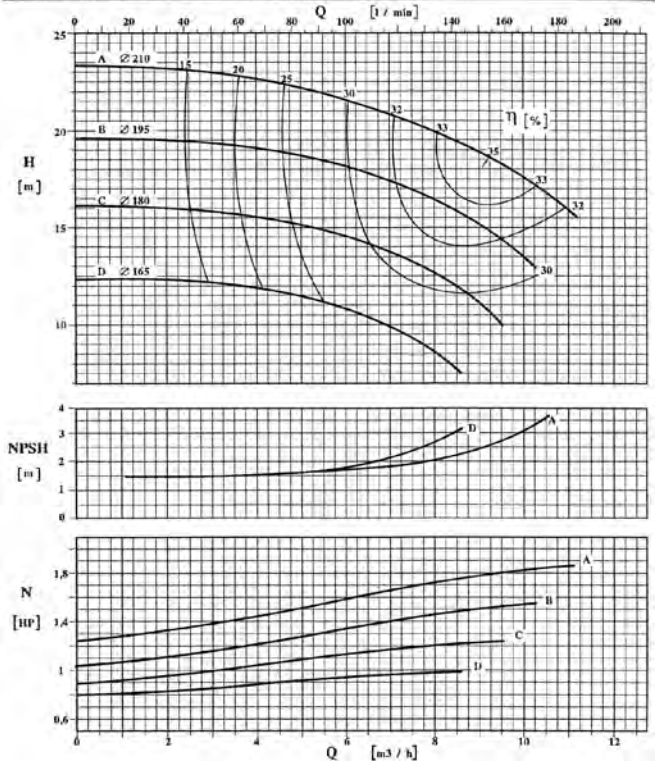
1750 giri/min - ***1750 rpm***

POMPA TIPO *Pump type* **CS-CSA 32 - 210** — n 1750 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 40
APERTA	6	4 mm	210 mm	165 mm	DIN 11851	Bocca mand. *Discharge port*	DN 32

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

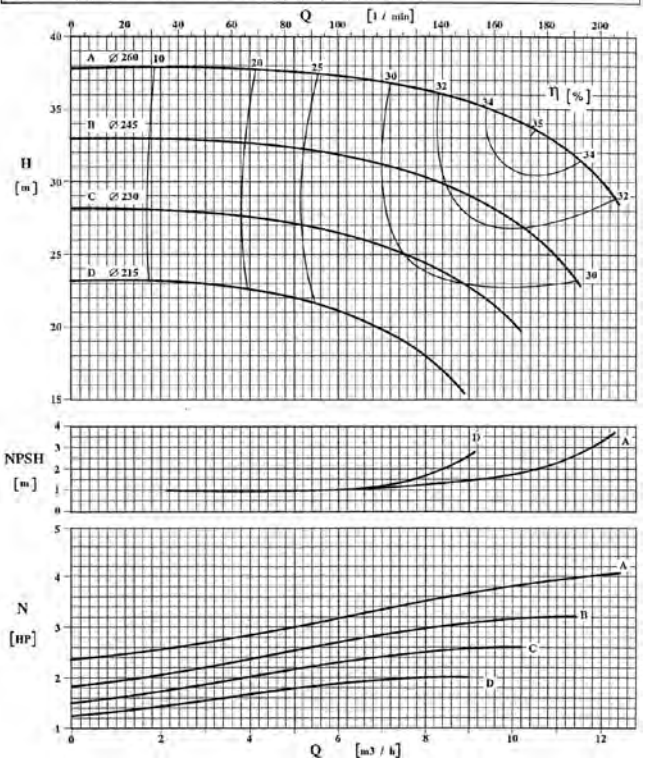


POMPA TIPO *Pump type* **CS-CSA 32 - 260** — n 1750 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 50
APERTA	6	5 mm	260 mm	210 mm	DIN 11851	Bocca mand. *Discharge port*	DN 32

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

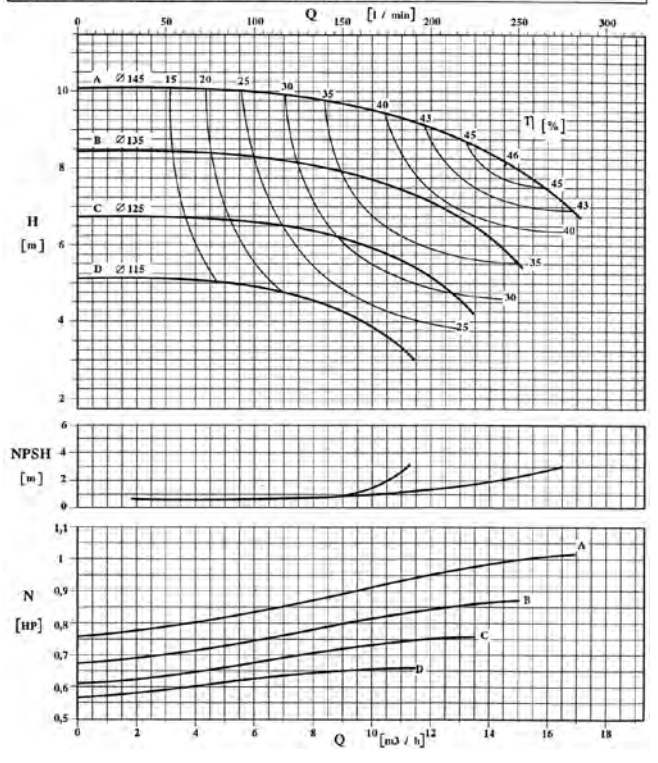


POMPA TIPO *Pump type* **CS-CSA 40 - 145** — n 1750 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 50
APERTA	6	6 mm	145 mm	115 mm	DIN 11851	Bocca mand. *Discharge port*	DN 40

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

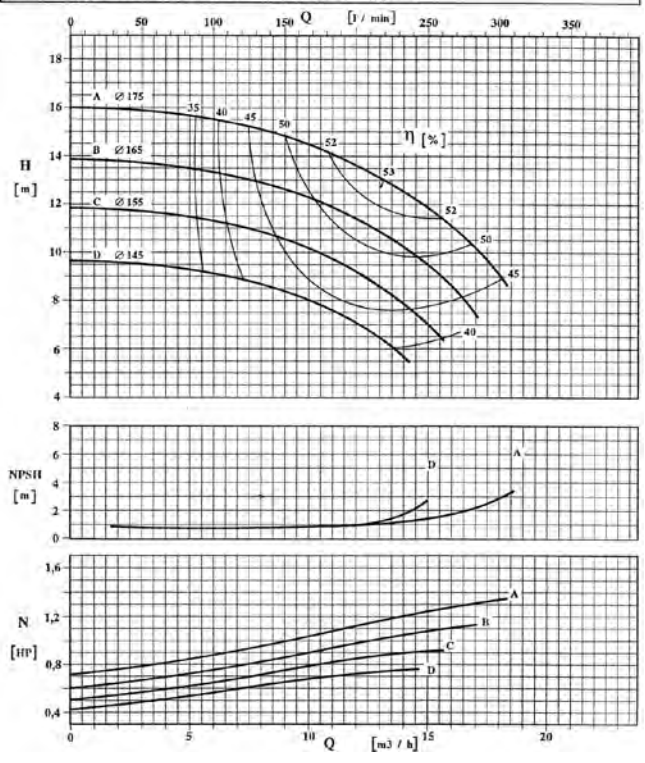


POMPA TIPO *Pump type* **CS-CSA 40 - 175** — n 1750 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 50
APERTA	6	5,5 mm	175 mm	145 mm	DIN 11851	Bocca mand. *Discharge port*	DN 40

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)



CURVE CARATTERISTICHE — Serie CS-CSA
PERFORMANCE CURVES — *CS-CSA Series*

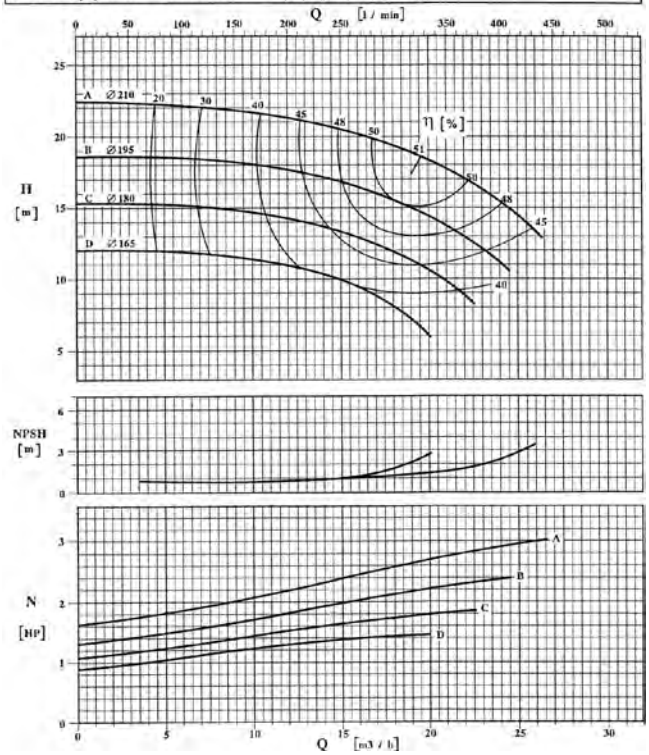
1750 giri/min - ***1750 rpm***

POMPA TIPO *Pump type* **CS-CSA 40 - 210** — n 1750 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 50
APERTA	6	6 mm	210 mm	165 mm	DIN 11851	Bocca mand. *Discharge port*	DN 40

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

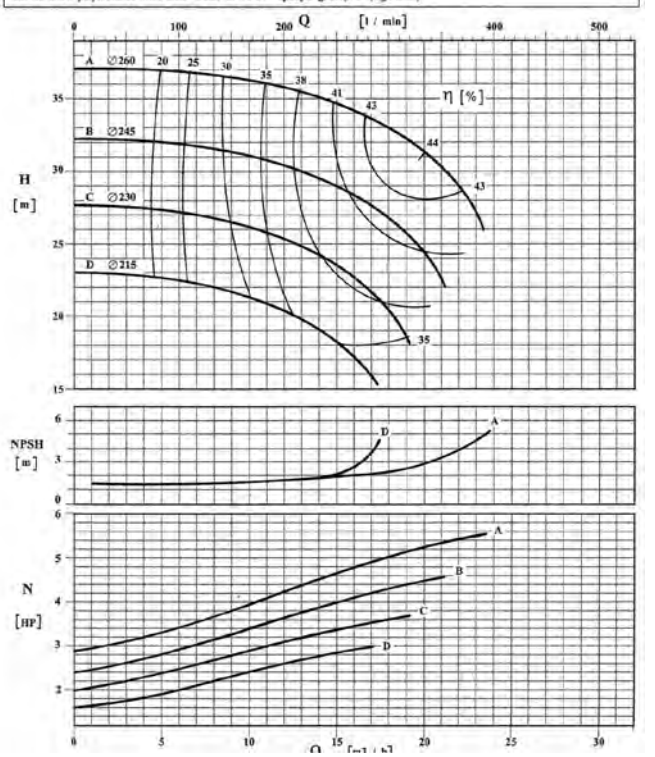


POMPA TIPO *Pump type* **CS - CSA 40 - 260** — n 1750 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 50
APERTA	6	7 mm	260 mm	210 mm	DIN 11851	Bocca mand. *Discharge port*	DN 40

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

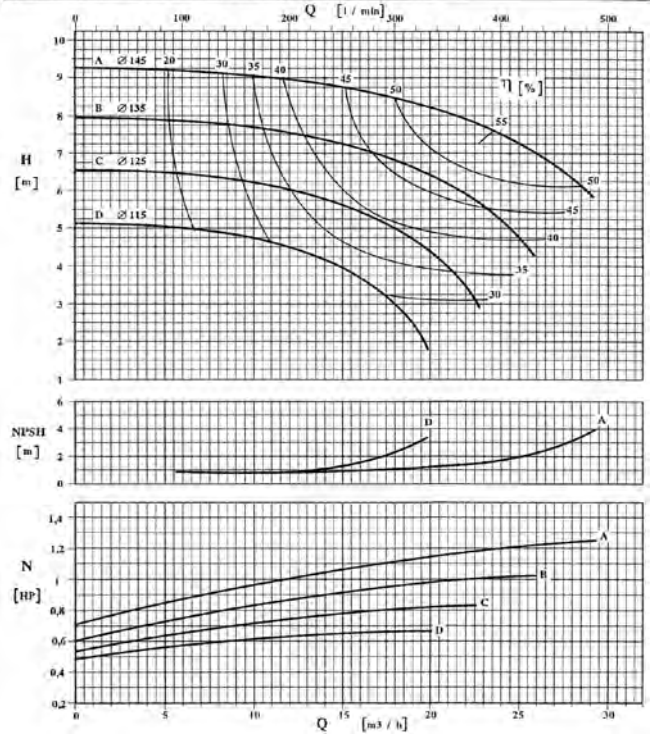


POMPA TIPO *Pump type* **CS-CSA 50 - 145** — n 1750 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 65
APERTA	6	10 mm	145 mm	115 mm	DIN 11851	Bocca mand. *Discharge port*	DN 50

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

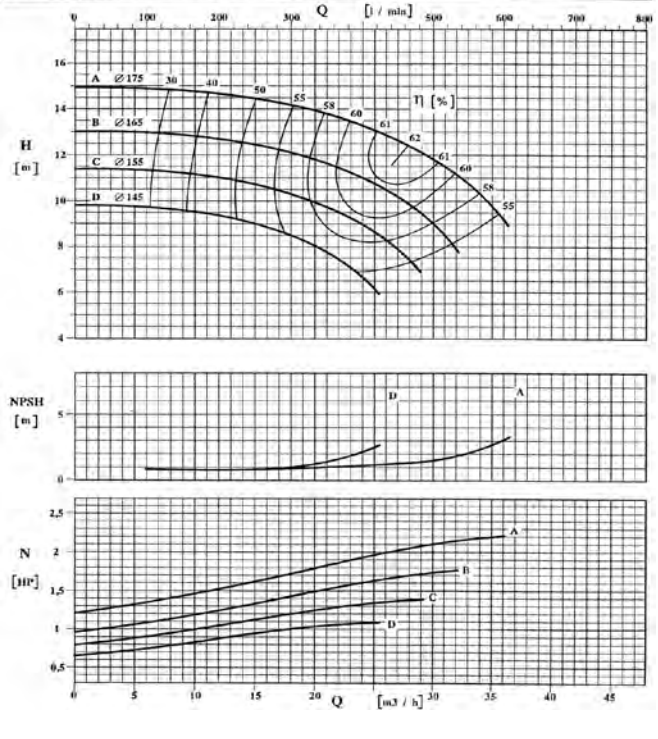


POMPA TIPO *Pump type* **CS-CSA 50 - 175** — n 1750 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 65
APERTA	6	8 mm	175 mm	145 mm	DIN 11851	Bocca mand. *Discharge port*	DN 50

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)



CURVE CARATTERISTICHE Serie CS-CSA
PERFORMANCE CURVES *CS-CSA Series*

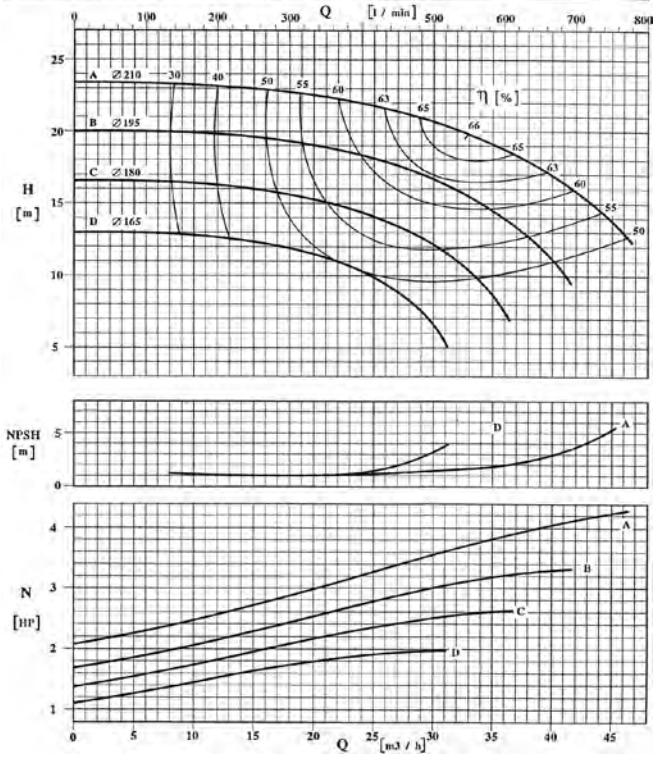
1750 giri/min - ***1750 rpm***

POMPA TIPO *Pump type* **CS-CSA 50 - 210** n 1750 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 65
APERTA	6	8 mm	210 mm	165 mm	DIN 11851	Bocca mand. *Discharge port*	DN 50

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

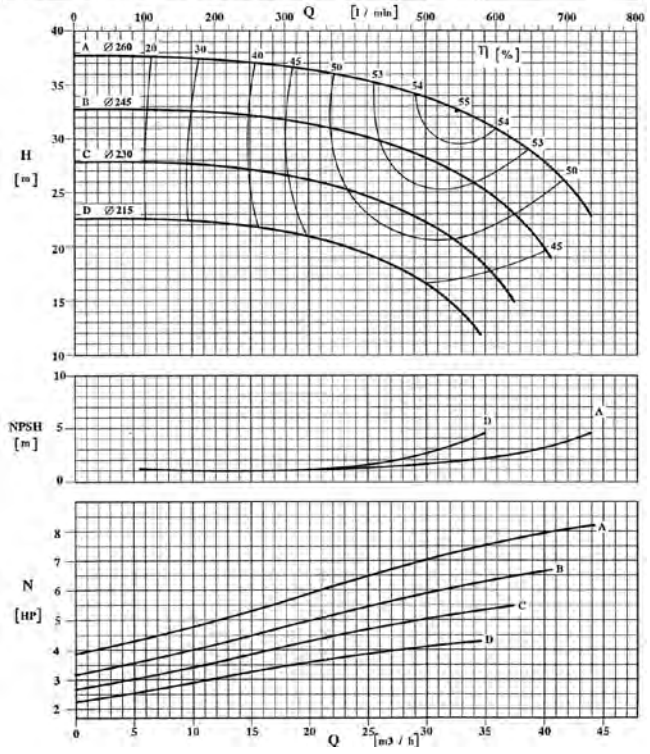


POMPA TIPO *Pump type* **CS-CSA 50 - 260** n 1750 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 65
APERTA	6	6 mm	260 mm	210 mm	DIN 11851	Bocca mand. *Discharge port*	DN 50

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

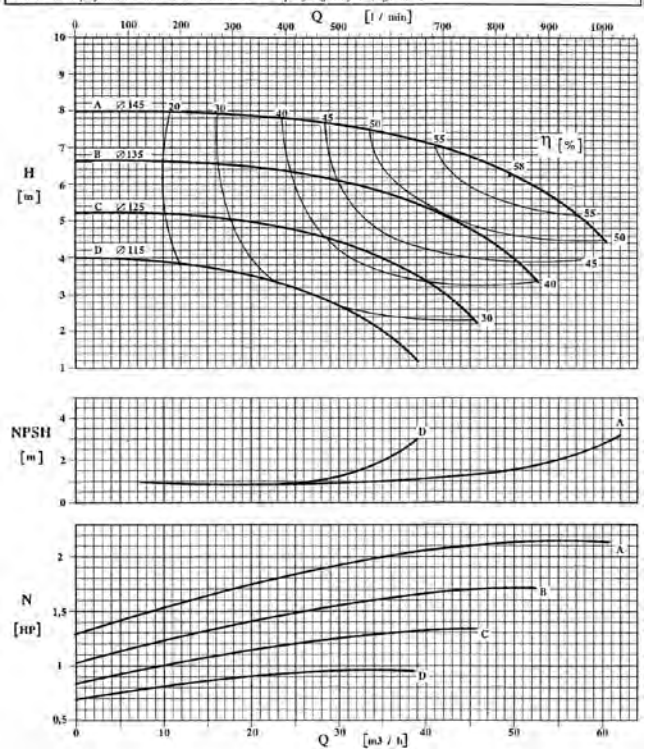


POMPA TIPO *Pump type* **CS-CSA 65 - 145** n 1750 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 80
APERTA	6	17 mm	145 mm	115 mm	DIN 11851	Bocca mand. *Discharge port*	DN 65

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

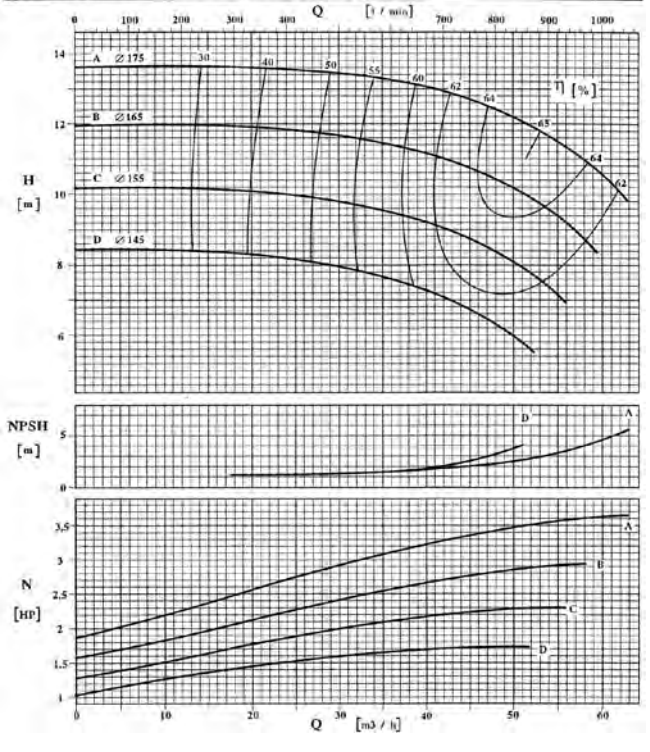


POMPA TIPO *Pump type* **CS-CSA 65 - 175** n 1750 giri / min *r. p. m.*

GIRANTE — *Impeller*

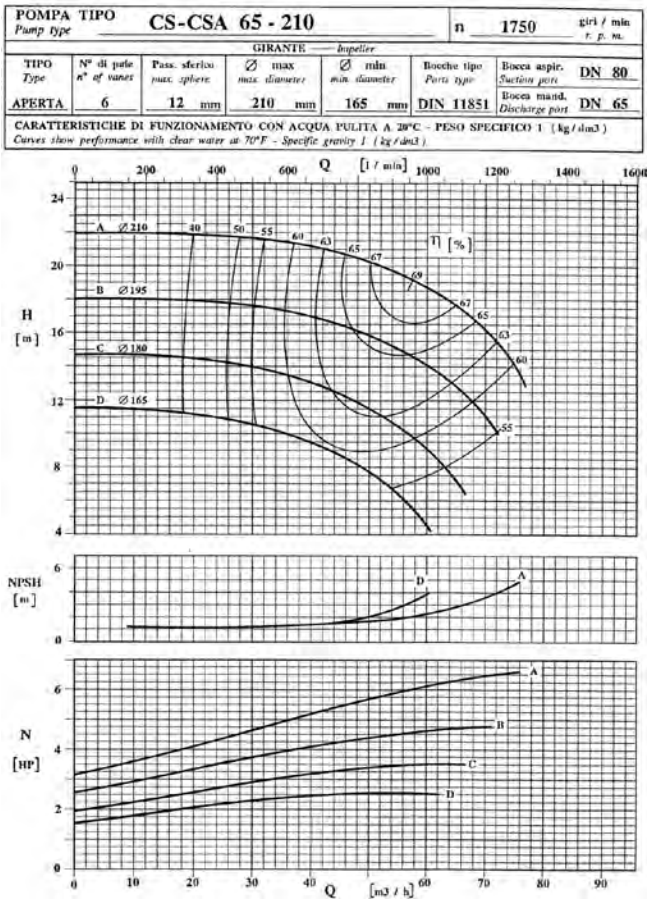
TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 80
APERTA	6	16 mm	175 mm	145 mm	DIN 11851	Bocca mand. *Discharge port*	DN 65

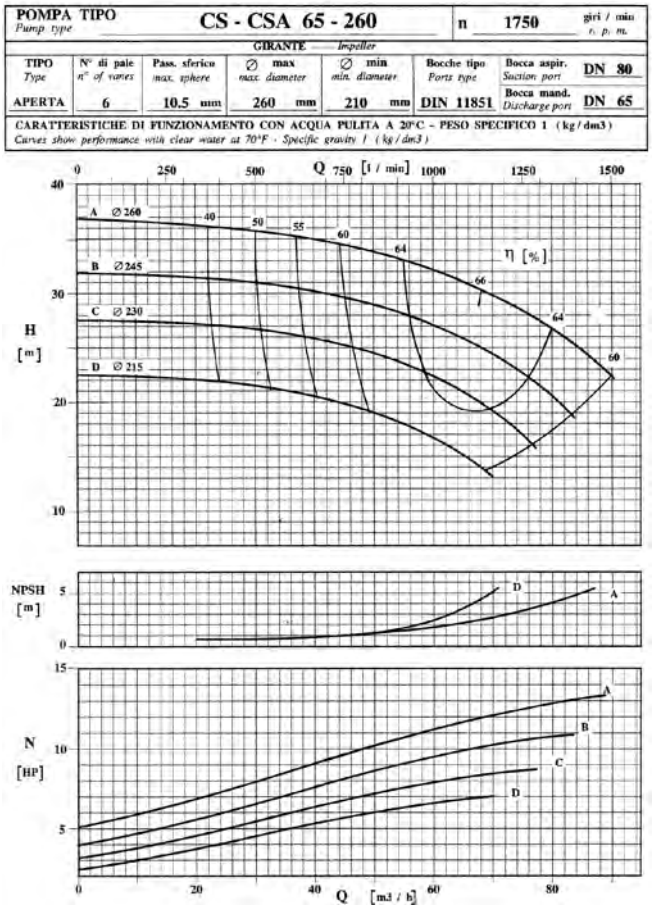
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

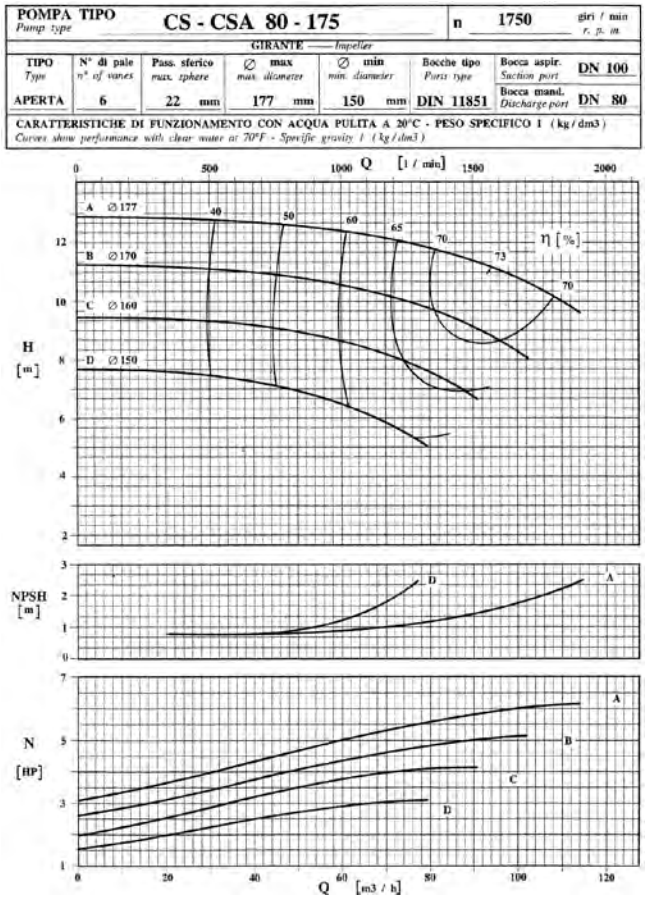


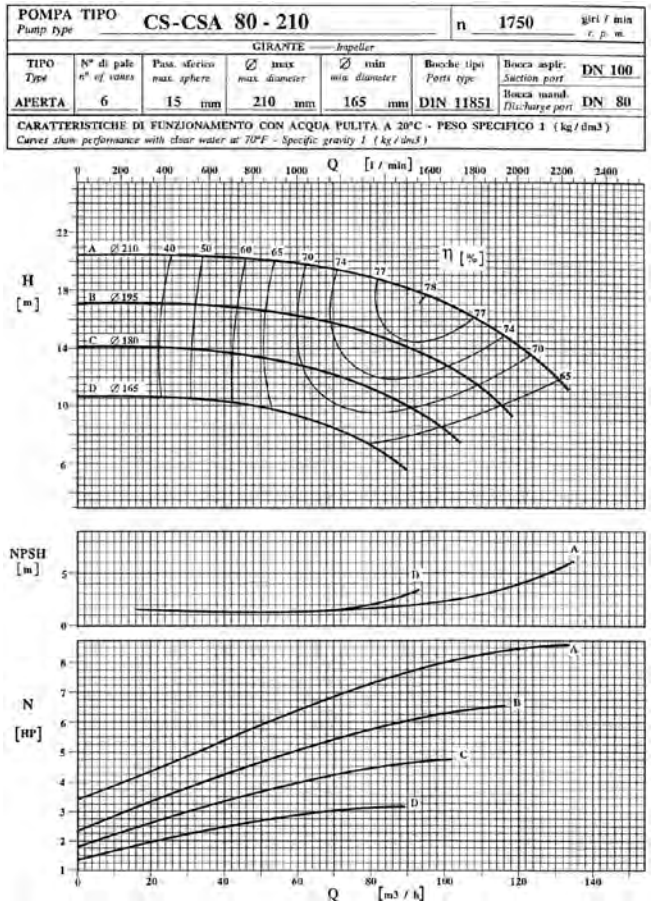
CURVE CARATTERISTICHE — Serie CS-CSA
PERFORMANCE CURVES — *CS-CSA Series*

1750 giri/min - ***1750 rpm***









CURVE CARATTERISTICHE — Serie CS-CSA
PERFORMANCE CURVES — *CS-CSA Series*

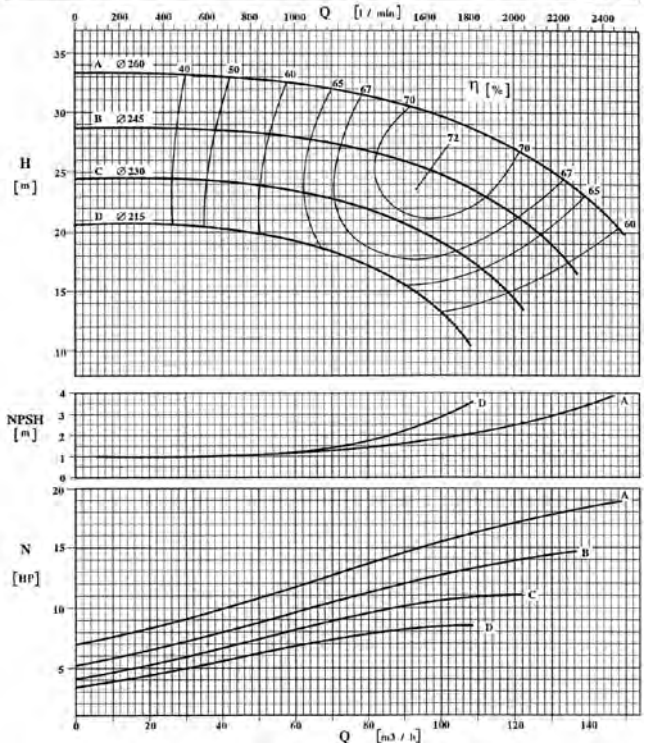
1750 giri/min - ***1750 rpm***

POMPA TIPO *Pump type*	CS-CSA 80 - 260	n	1750 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 100
APERTA	6	14 mm	260 mm	200 mm	DIN 11851	Bocca mand. *Discharge port*	DN 80

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg / dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg / dm3)

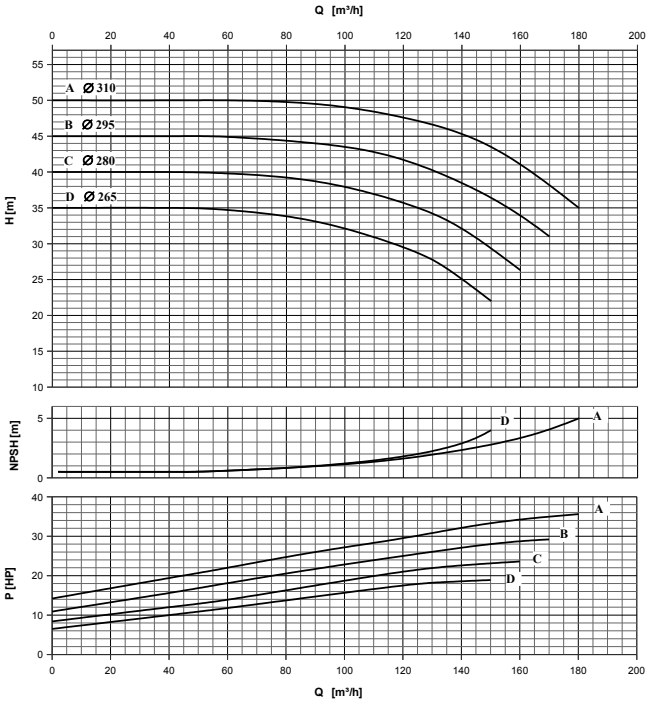


POMPA TIPO *Pump type*	CS 80 - 310	n	1750 giri/min *r.p.m.*

GIRANTE --------- *Impeller*

TIPO *Type*	N° di pale *n° of blades*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 100
APERTA	6	23 mm	310 mm	265 mm	DIN 11851	Bocca mand. *Discharge port*	DN 80

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20 °C – PESO SPECIFICO 1 Kg/dm³
Curves show performance with clear water at 70 °F – Specific gravity 1 Kg/dm³

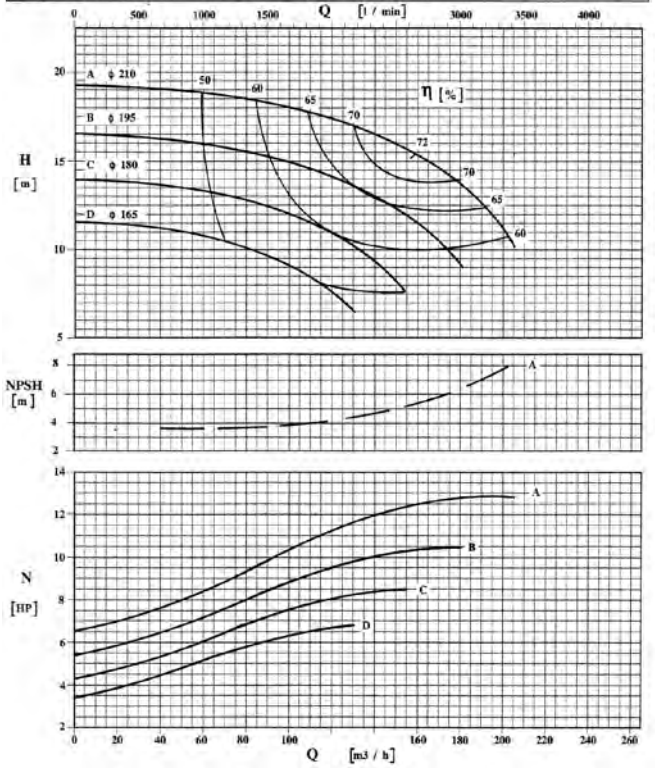


POMPA TIPO *Pump type*	CS - CSA 100 - 210	n	1750 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	ϕ max *max. diameter*	ϕmin *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 125
APERTA	6	28 mm	210 mm	165 mm	DIN 11851	Bocca mand. *Discharge port*	DN 100

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg / dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg / dm3)

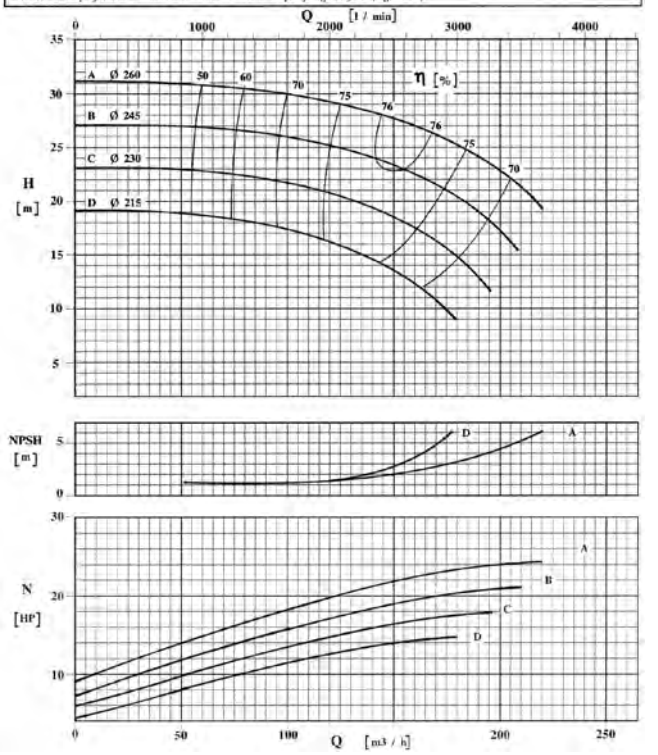


POMPA TIPO *Pump type*	CS-CSA 100 - 260	n	1750 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 125
APERTA	6	25 mm	260 mm	210 mm	DIN 11851	Bocca mand. *Discharge port*	DN 100

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg / dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg / dm3)



CURVE CARATTERISTICHE Serie CS-CSA
PERFORMANCE CURVES *CS-CSA Series*

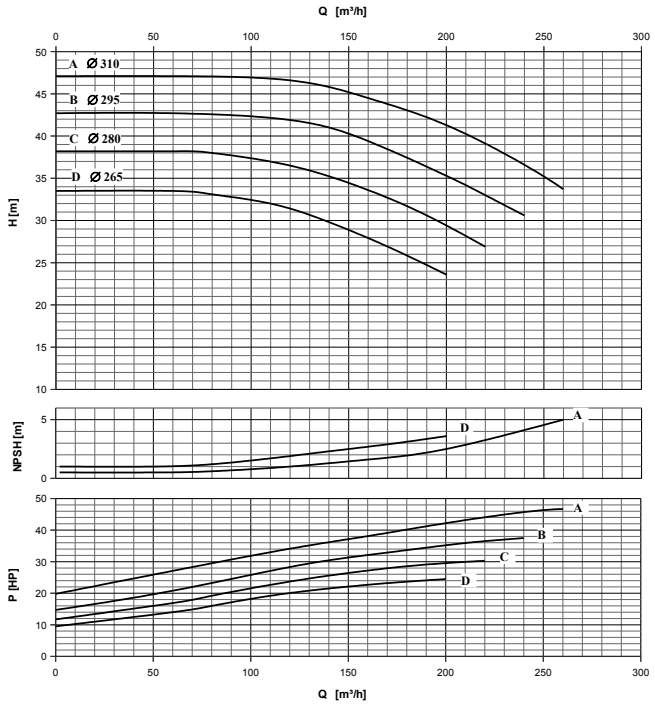
1750 giri/min - ***1750 rpm***

POMPA TIPO *Pump type*	CS 100 - 310	n	1750	giri/min *r.p.m.*

GIRANTE --------- *Impeller*

TIPO *Type*	N° di pale *n° of blades*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 125
APERTA	6	30 mm	310 mm	265 mm	DIN 11851	Bocca mand. *Discharge port*	DN 100

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20 °C – PESO SPECIFICO 1 Kg/dm³
Curves show performance with clear water at 70 °F – Specific gravity 1 Kg/dm³

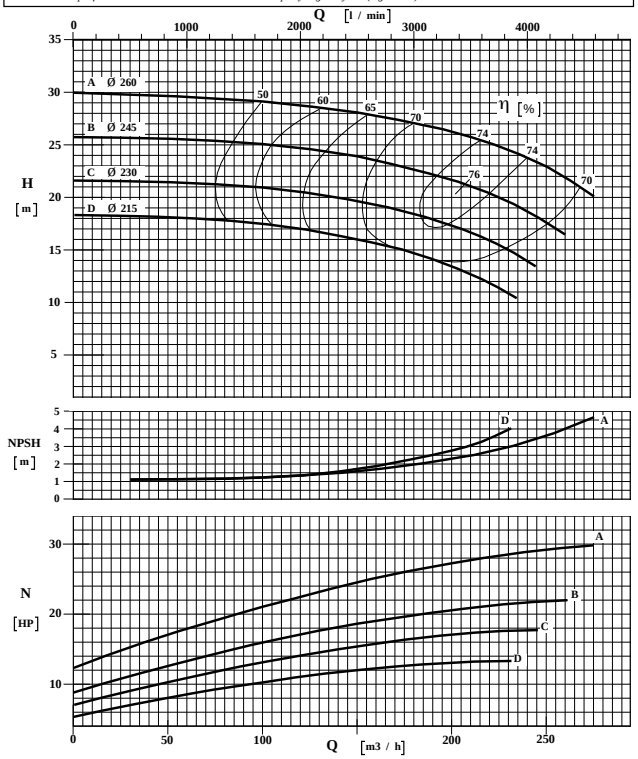


POMPA TIPO *Pump type*	CS 125 - 260	n	1750	giri / min *r. p. m.*

GIRANTE —— *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 150
APERTA	6	32 mm	260 mm	210 mm	DIN 11851	Bocca mand. *Discharge port*	DN 125

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg / dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg / dm3)



CURVE CARATTERISTICHE — Serie CS-CSK
PERFORMANCE CURVES — *CS-CSK Series*

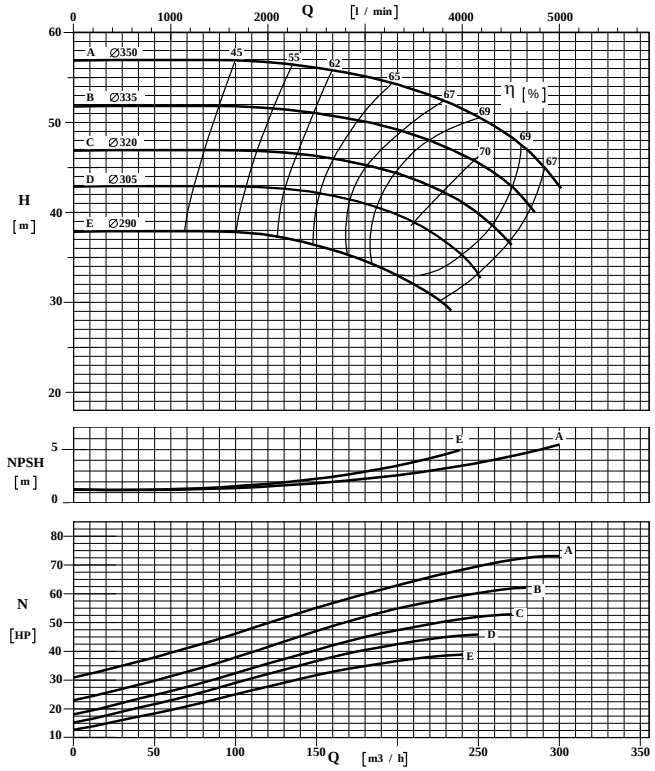
1750 giri/min - ***1750 rpm***

POMPA TIPO *Pump type*	CSK 125 - 350	n	1760 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	∅ max *max. diameter*	∅ min *min. diameter*	Flange tipo *Flanges type*	Bocca aspir. *Suction port*	DN 150
APERTA	6	18 mm	350 mm	285 mm	UNI PN 16	Bocca mand. *Discharge port*	DN 125

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg / dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg / dm3)

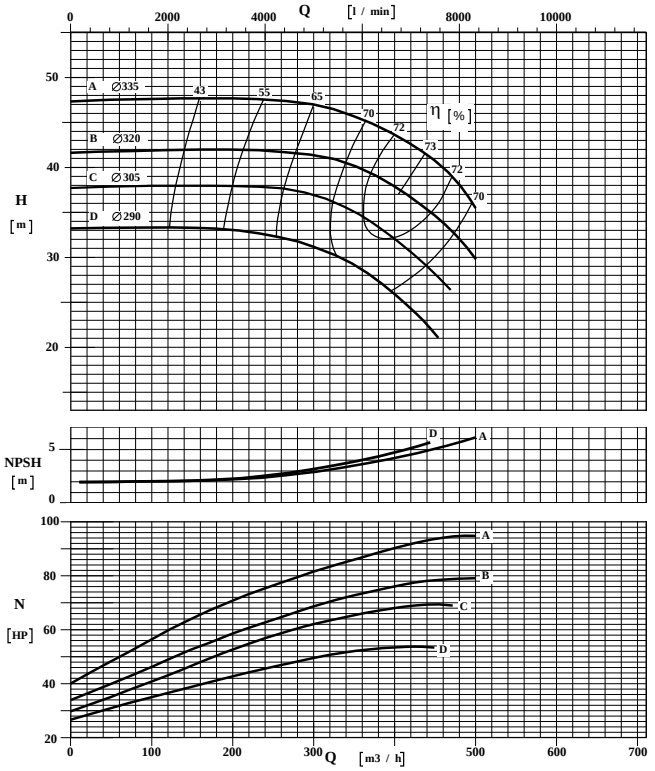


POMPA TIPO *Pump type*	CSK 150- 350	n	1760 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	∅ max *max. diameter*	∅ min *min. diameter*	Flange tipo *Flanges type*	Bocca aspir. *Suction port*	DN 200
APERTA	6	24 mm	335 mm	285 mm	UNI PN 16	Bocca mand. *Discharge port*	DN 150

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg / dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg / dm3)



CURVE CARATTERISTICHE — Serie CS-CSA
PERFORMANCE CURVES — *CS-CSA Series*

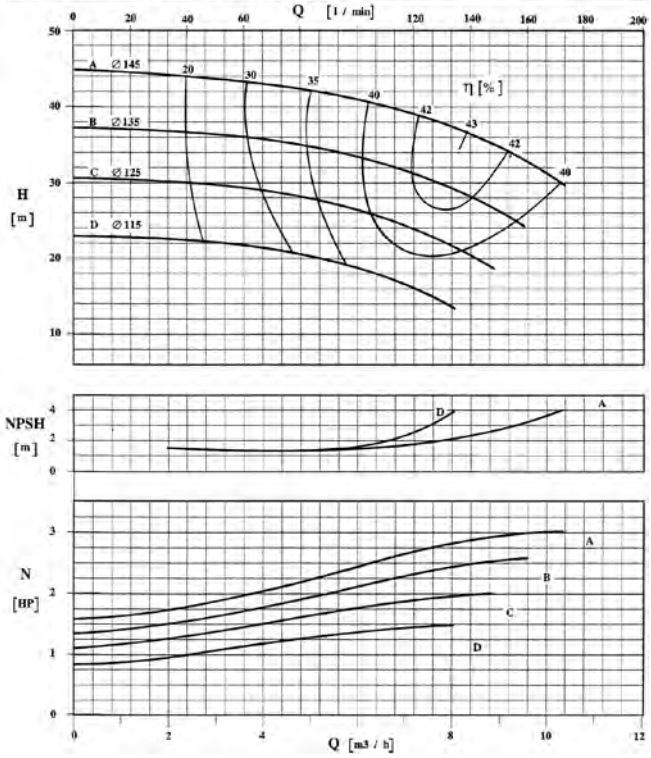
3500 giri/min - ***3500 rpm***

POMPA TIPO / *Pump type* — **CS 25 - 145** — n 3500 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	∅ max *max. diameter*	∅ min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 32
APERTA	6	3,5 mm	145 mm	115 mm	DIN 11851	Bocca mand. *Discharge port*	DN 25

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

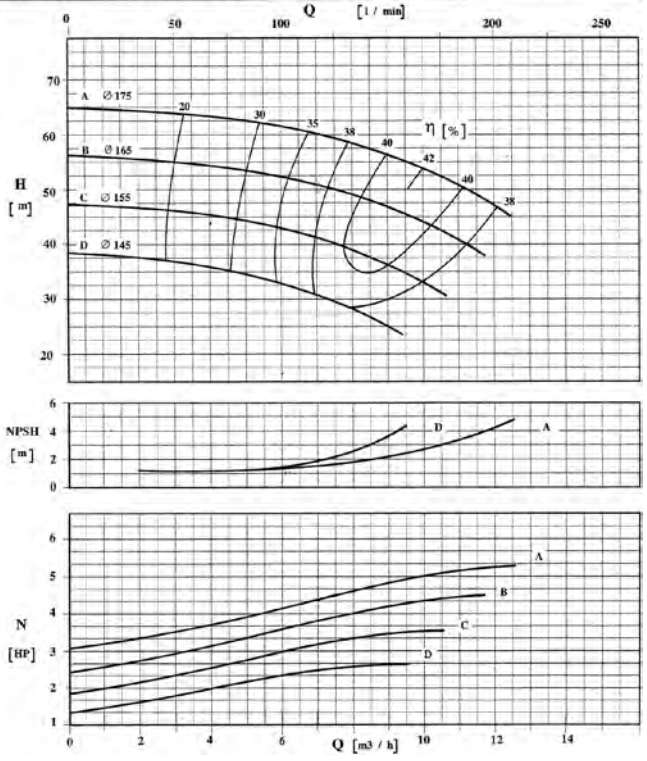


POMPA TIPO / *Pump type* — **CS 25 - 175** — n 3500 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	∅ max *max. diameter*	∅ min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 32
APERTA	6	3,5 mm	175 mm	145 mm	DIN 11851	Bocca mand. *Discharge port*	DN 25

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

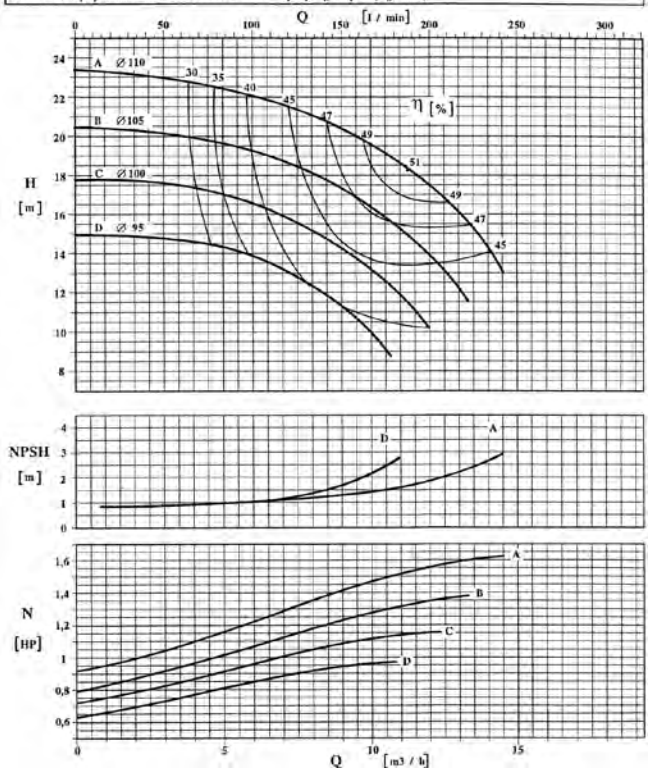


POMPA TIPO / *Pump type* — **CS 32-110** — n 3500 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	∅ max *max. diameter*	∅ min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 40
APERTA	6	4 mm	110 mm	95 mm	DIN 11851	Bocca mand. *Discharge port*	DN 32

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

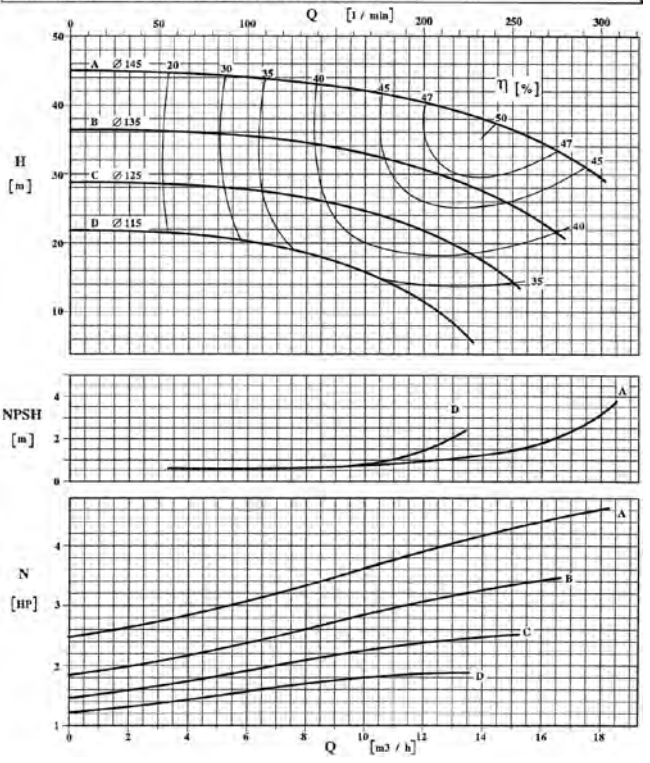


POMPA TIPO / *Pump type* — **CS-CSA 32 - 145** — n 3500 giri / min *r. p. m.*

GIRANTE — *Impeller*

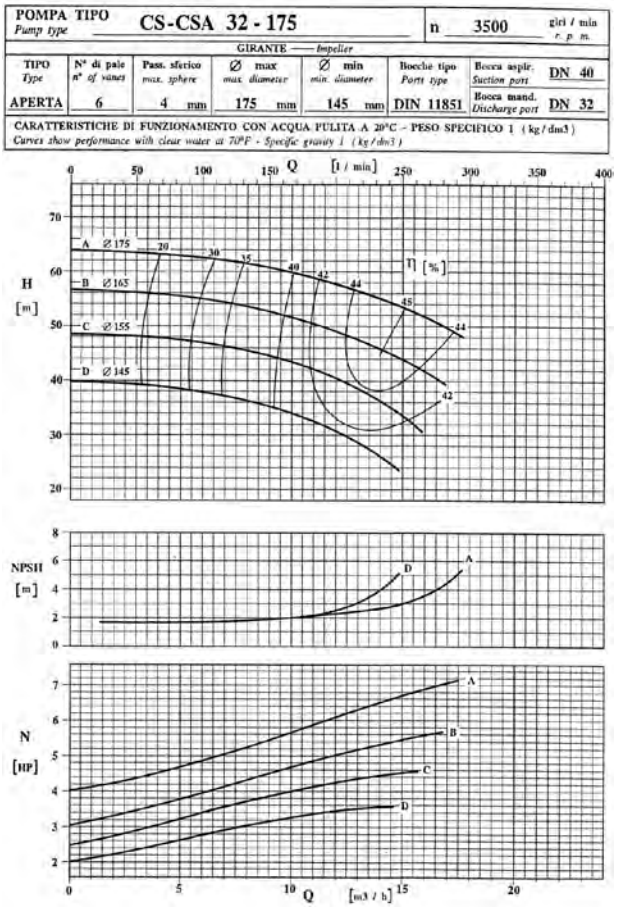
TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	∅ max *max. diameter*	∅ min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 40
APERTA	6	5 mm	145 mm	115 mm	DIN 11851	Bocca mand. *Discharge port*	DN 32

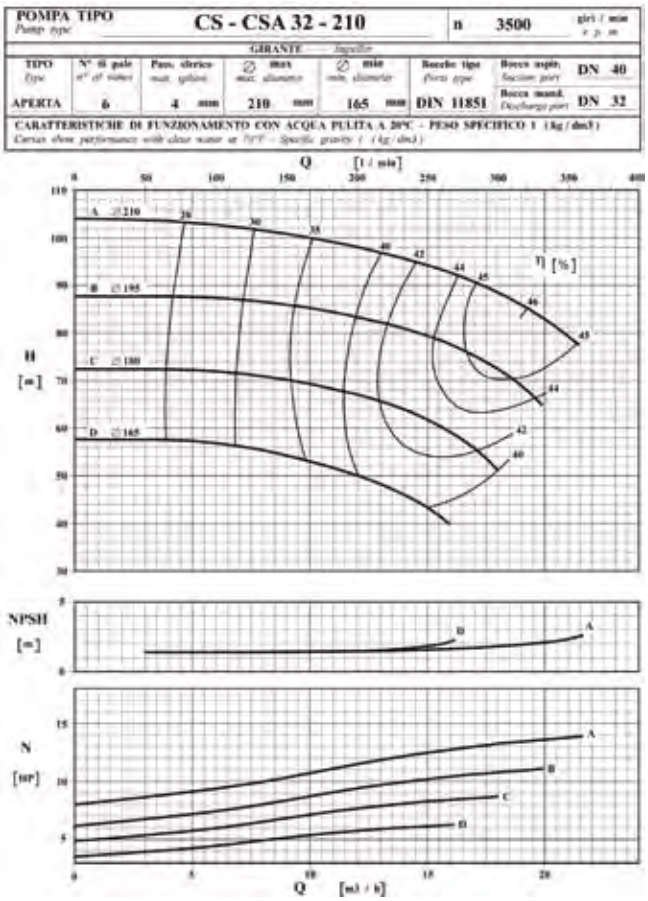
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

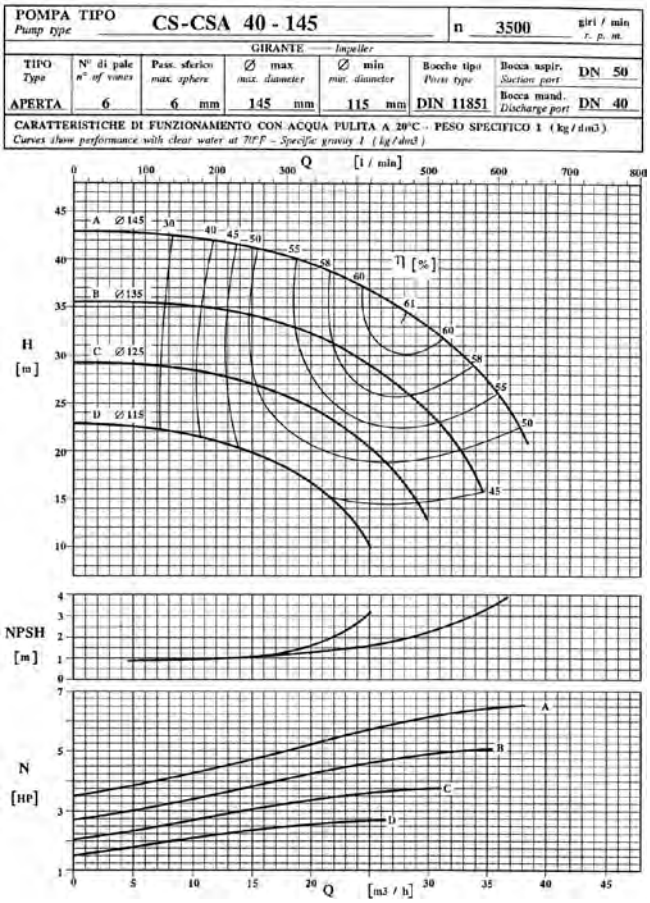


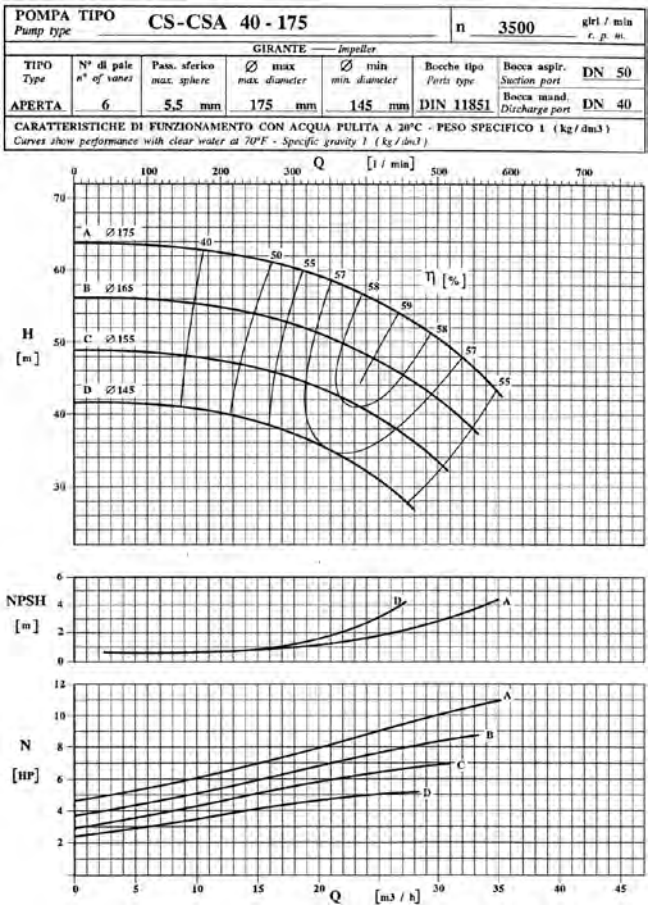
CURVE CARATTERISTICHE — Serie CS-CSA
PERFORMANCE CURVES — *CS-CSA Series*

3500 giri/min - ***3500 rpm***



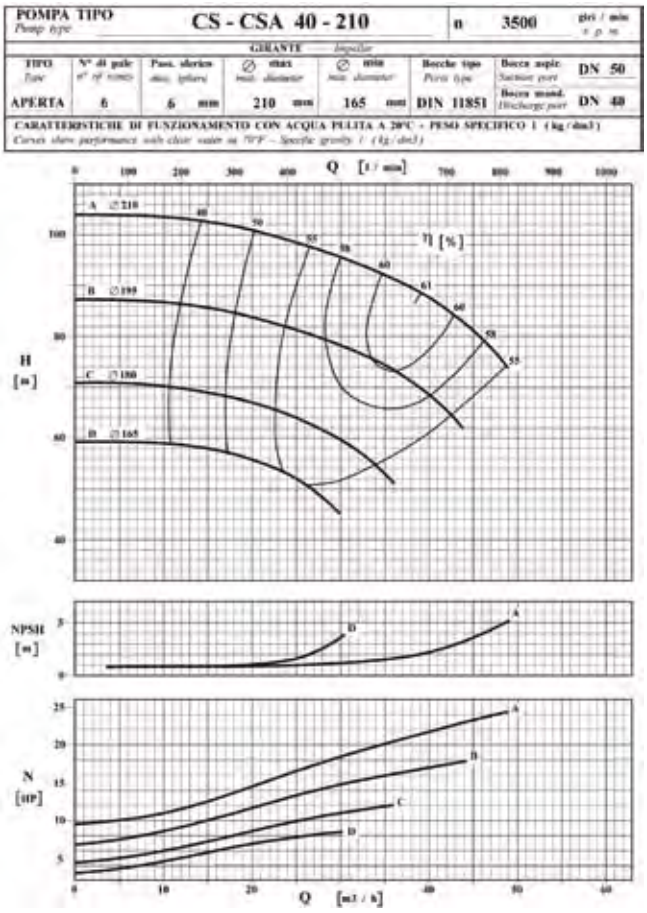


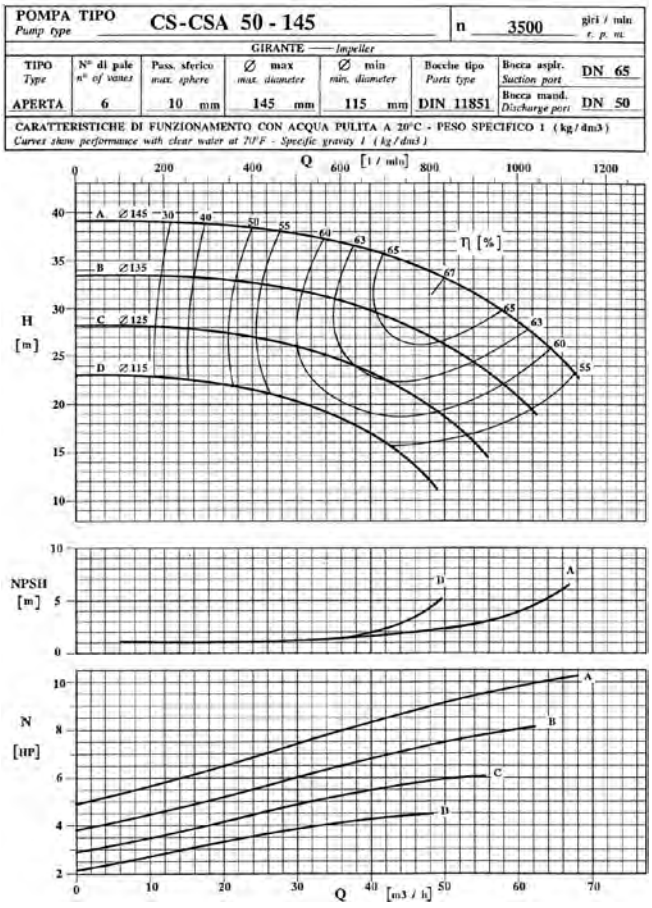


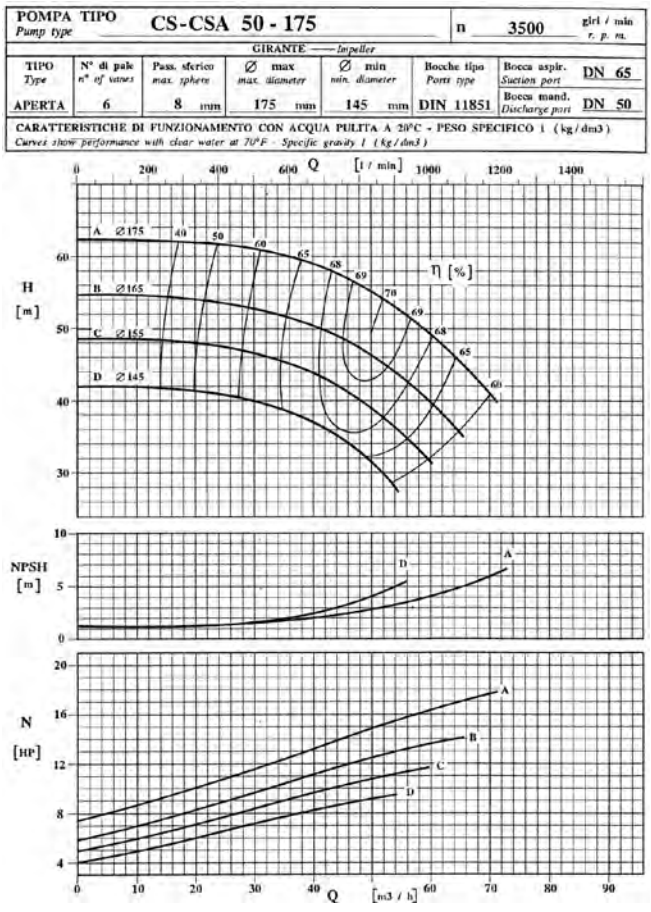


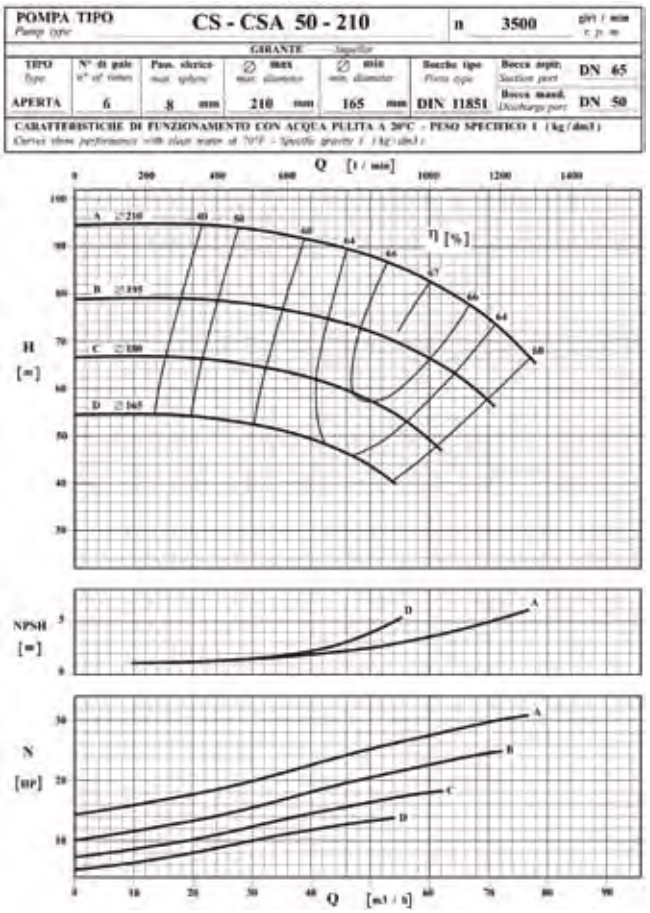
CURVE CARATTERISTICHE — Serie CS-CSA
PERFORMANCE CURVES — *CS-CSA Series*

3500 giri/min - ***3500 rpm***









CURVE CARATTERISTICHE — Serie CS-CSA
PERFORMANCE CURVES — *CS-CSA Series*

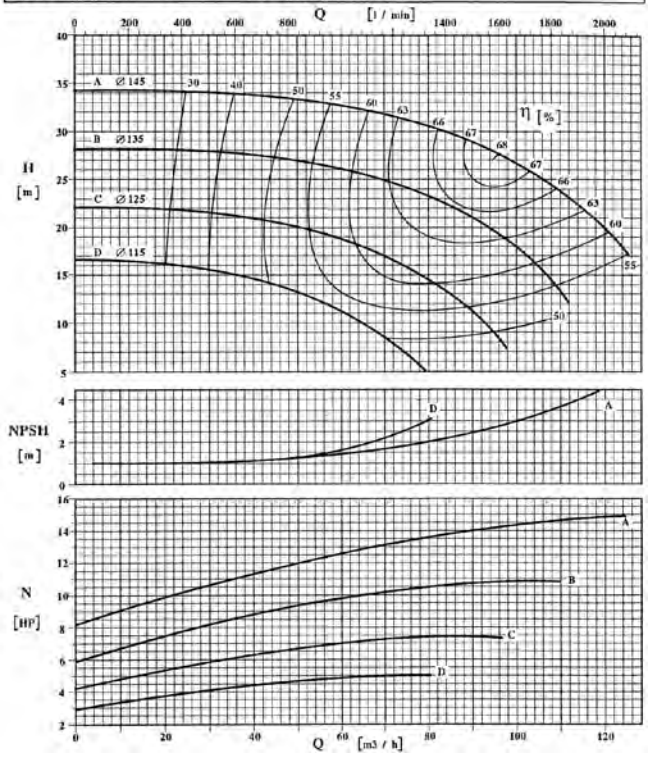
3500 giri/min - ***3500 rpm***

POMPA TIPO / *Pump type* — **CS-CSA 65 - 145** — n 3500 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 80
APERTA	6	18 mm	145 mm	115 mm	DIN 11851	Bocca mand. *Discharge port*	DN 65

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

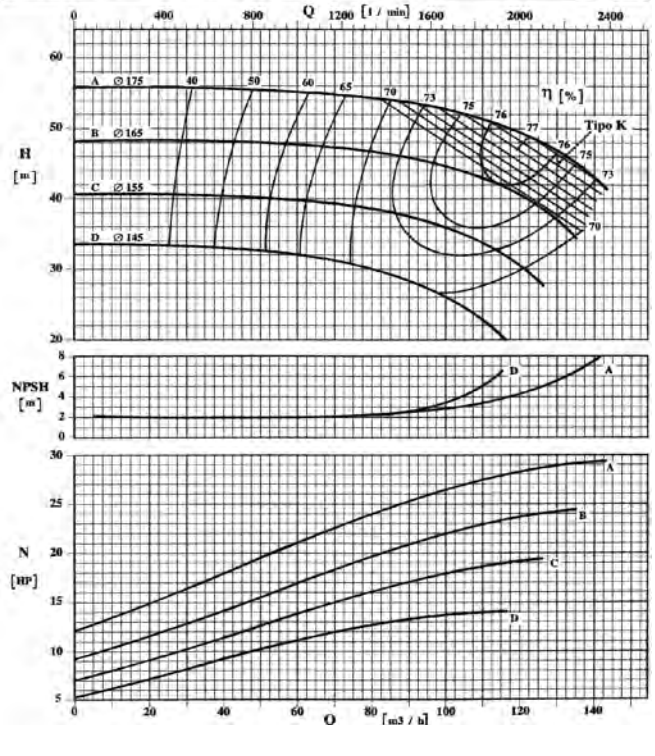


POMPA TIPO / *Pump type* — **CS - CSA 65 - 175** — n 3500 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 80
APERTA	6	16 mm	175 mm	145 mm	DIN 11851	Bocca mand. *Discharge port*	DN 65

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

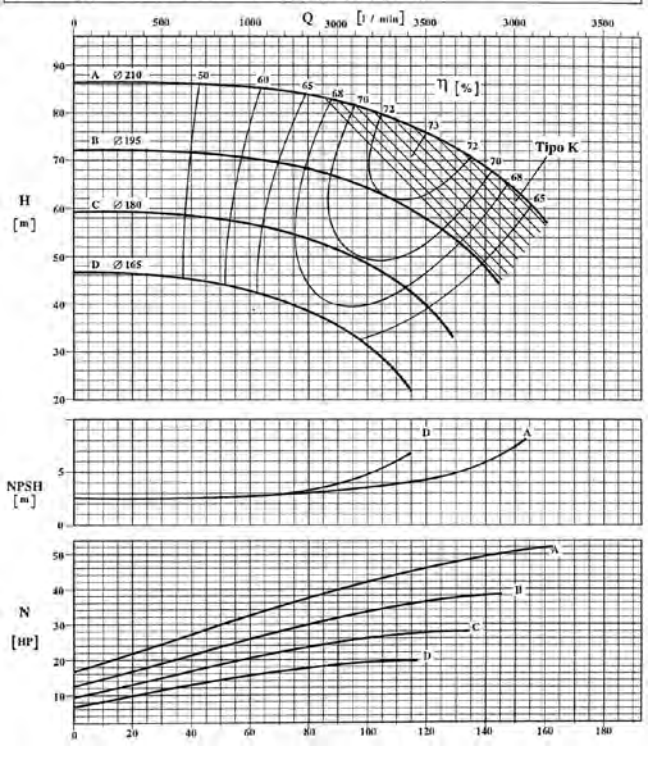


POMPA TIPO / *Pump type* — **CS-CSA 65 - 210** — n 3500 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 80
APERTA	6	12 mm	210 mm	165 mm	DIN 11851	Bocca mand. *Discharge port*	DN 65

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)

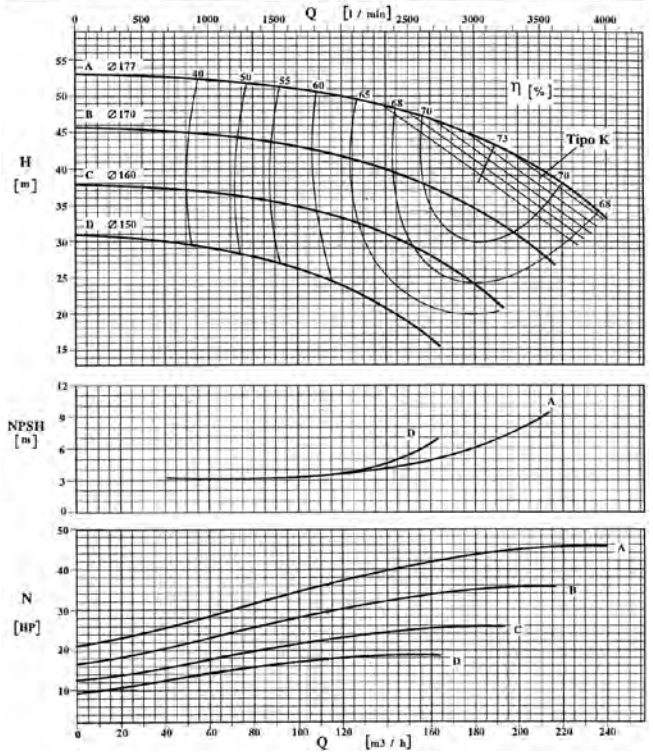


POMPA TIPO / *Pump type* — **CS-CSA 80 - 175** — n 3500 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	Ø max *max. diameter*	Ø min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 100
APERTA	6	22 mm	177 mm	150 mm	DIN 11851	Bocca mand. *Discharge port*	DN 80

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm3)
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm3)



CURVE CARATTERISTICHE — Serie CS-CSA
PERFORMANCE CURVES — *CS-CSA Series*

3500 giri/min - ***3500 rpm***