

SANITARY CENTRIFUGAL PUMPS



SERIES CN

SERIES CL - CLC

CENTRIFUGAL
PUMPS
Series CN-CL-CLC

C.S.F. INOX SPA

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CENTRIFUGAL PUMPS CN SERIES

Standard design

Closed coupled single-stage centrifugal pumps. A range of 3 models with open impellers, independent shafts and IEC standard motors.

Optimised design to ensure high levels of hygiene - The absence of product hold-up and no dead-legs ensures efficient cleaning by standard CIP methods and effective sterilisation by SIP.

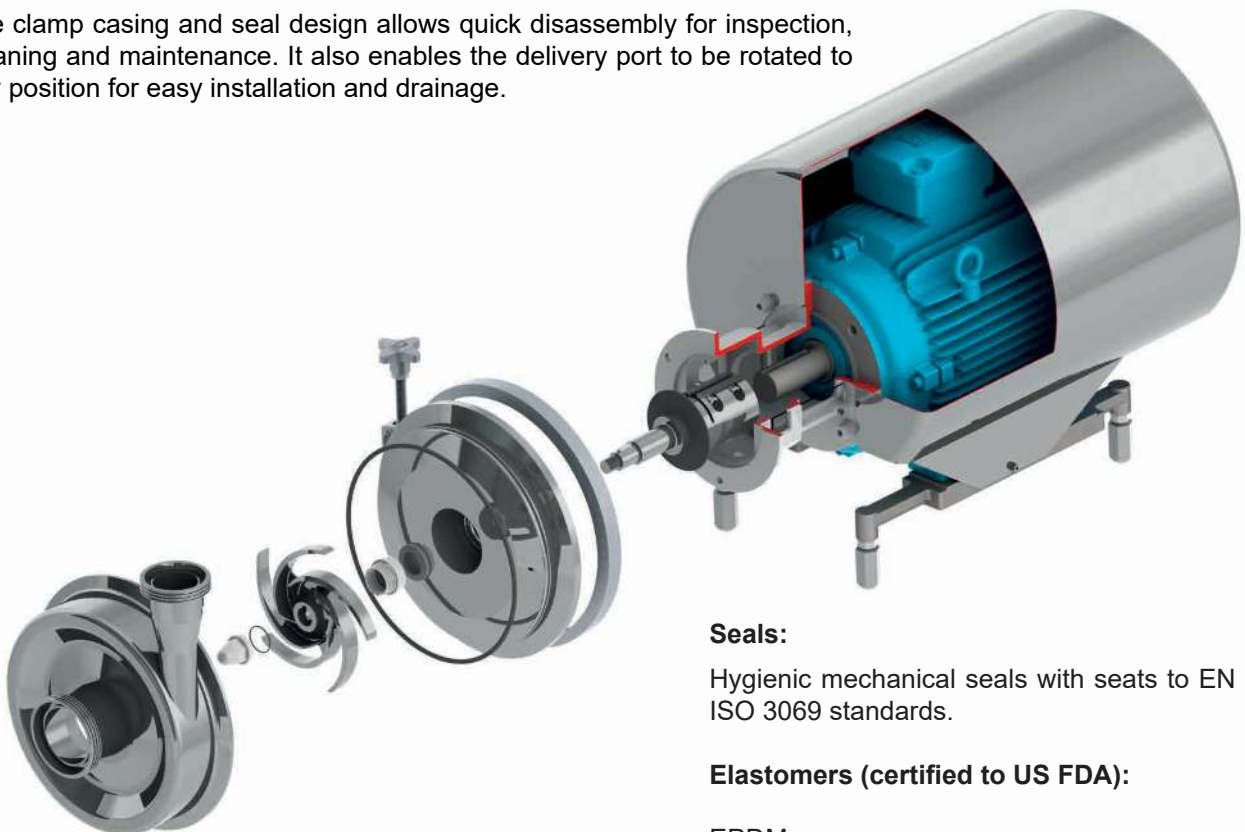
Wetted parts are in forged polished plate and investment cast electropolished CF3M 1.4409 / AISI 316L (1.4404) stainless steel.

Centrifugal pumps with special finishes to 0,8 micron Ra, tested and approved to US 3A standards.

Investment cast and electro-chemical polishing. Internal finishes of 0,5 micron Ra are available on request.

Flow rates up to 75 m³/h, heads of more than 60 m.
Maximum inlet pressure: 4 bar.
Temperature range: -10°C to 120°C.

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 and drainage.



Seals:

Hygienic mechanical seals with seats to EN 12756, ISO 3069 standards.

Elastomers (certified to US FDA):

EPDM
Fluorocarbon
Silicone
P.T.F.E. (FEP)

Connections:

DIN - SMS - IDF - BS / RJT - DS - CLAMP and EN 1092-1 PN16 flanges and on request available for other international standards.

Applications

Food processing, dairy, beverage, chemical, cosmetics and pharmaceutical industries. The open impeller allows a large range of products such as purified water, juices, creams, ice-cream mix, milk, wine, spirits, whey and WFI to be safely transferred.

ISSUE DATE: June 25, 1993

CERTIFICATE AUTHORIZATION NUMBER: 739



THIS IS TO CERTIFY THAT

CSF INOX SPA

Strada per Bibbiano 7, 42027 Montecchio, Italy

is hereby authorized to continue to apply the

3-A Symbol to the models of equipment, conforming to 3-A Sanitary Standards for:

Number 02-11

02-11 (Centrifugal and Positive Rotary Pumps)

set forth below

CIP Models: Centrifugal pumps CN1, CN2, and CN3, with type TH mechanical seal; CSA, all sizes, with type Y, TH or U mechanical seals; CSAD, all sizes, with type U mechanical seals; ASH, all sizes, with type TH mechanical seals.
Twin-Screw pumps TS65, TS80 with dual balanced mechanical seals

VALID THROUGH: December 31, 2019

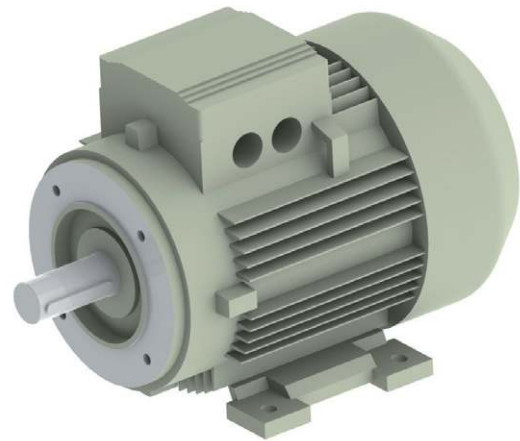
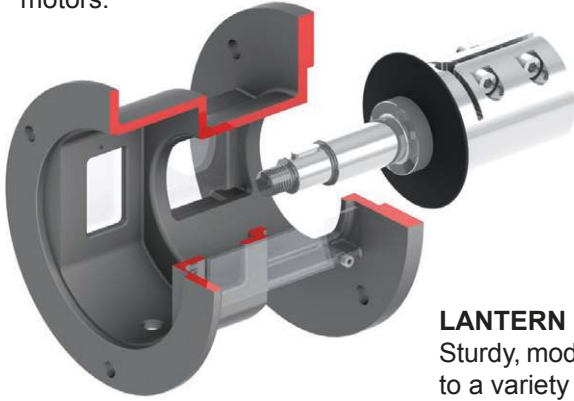
Timothy R. Rugh
Executive Director
3-A Sanitary Standards, Inc.

The issuance of this authorization for the use of the 3-A Symbol is based upon the voluntary certification, by the applicant for it, that the equipment listed above complies fully with the 3-A Sanitary Standard(s) designated. Legal responsibility for compliance is solely that of the holder of this Certificate of Authorization, and 3-A Sanitary Standards, Inc. does not warrant that the holder of an authorization at all times complies with the provisions of the said 3-A Sanitary Standards. This in no way affects the responsibility of 3-A Sanitary Standards, Inc. to take appropriate action in such cases in which evidence of nonconformance has been established.

NEXT TPV INSPECTION/REPORT DUE: September 2021

SHAFT

Independent shaft for compression coupling to IEC standard motors.



LANTERN BRACKET

Sturdy, modular design for flange mounting to a variety of different motors.

SEPARATE MOTOR

A choice of industry standard electric motors to the following international norms:

- IEC 34 - 1
- IEC 72
- EN 60034



REAR CASING COVER

Investment cast and precision machined in a wide variety of different executions according to the application and duty requirements.



IMPELLER

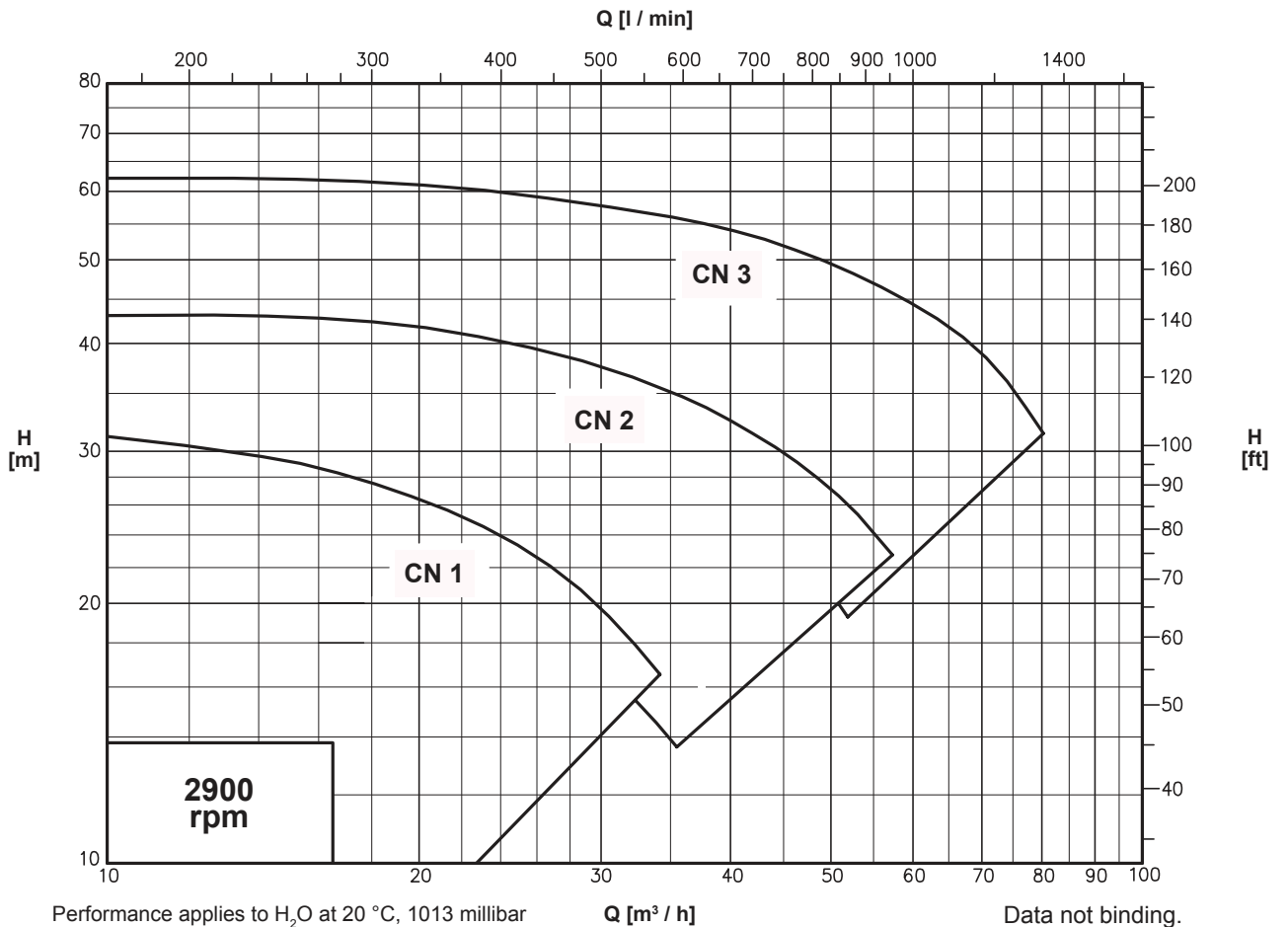
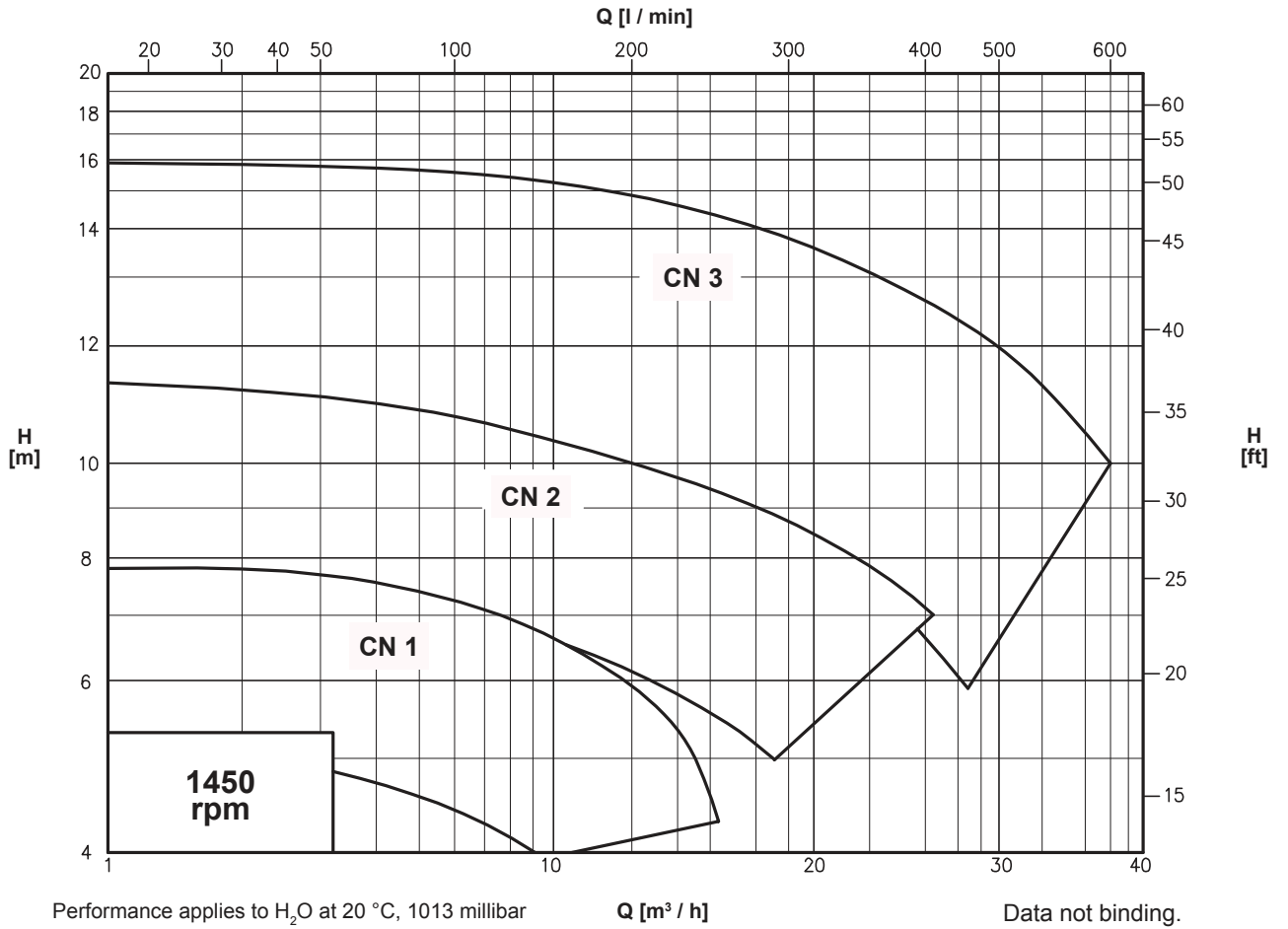
The open, reverse blade impeller is manufactured in high grade materials. The optimised profile, delivers the perfect combination of high efficiency and safe product handling. Thanks to the dynamic balancing method and investment cast impeller design, reliability is a key benefit.

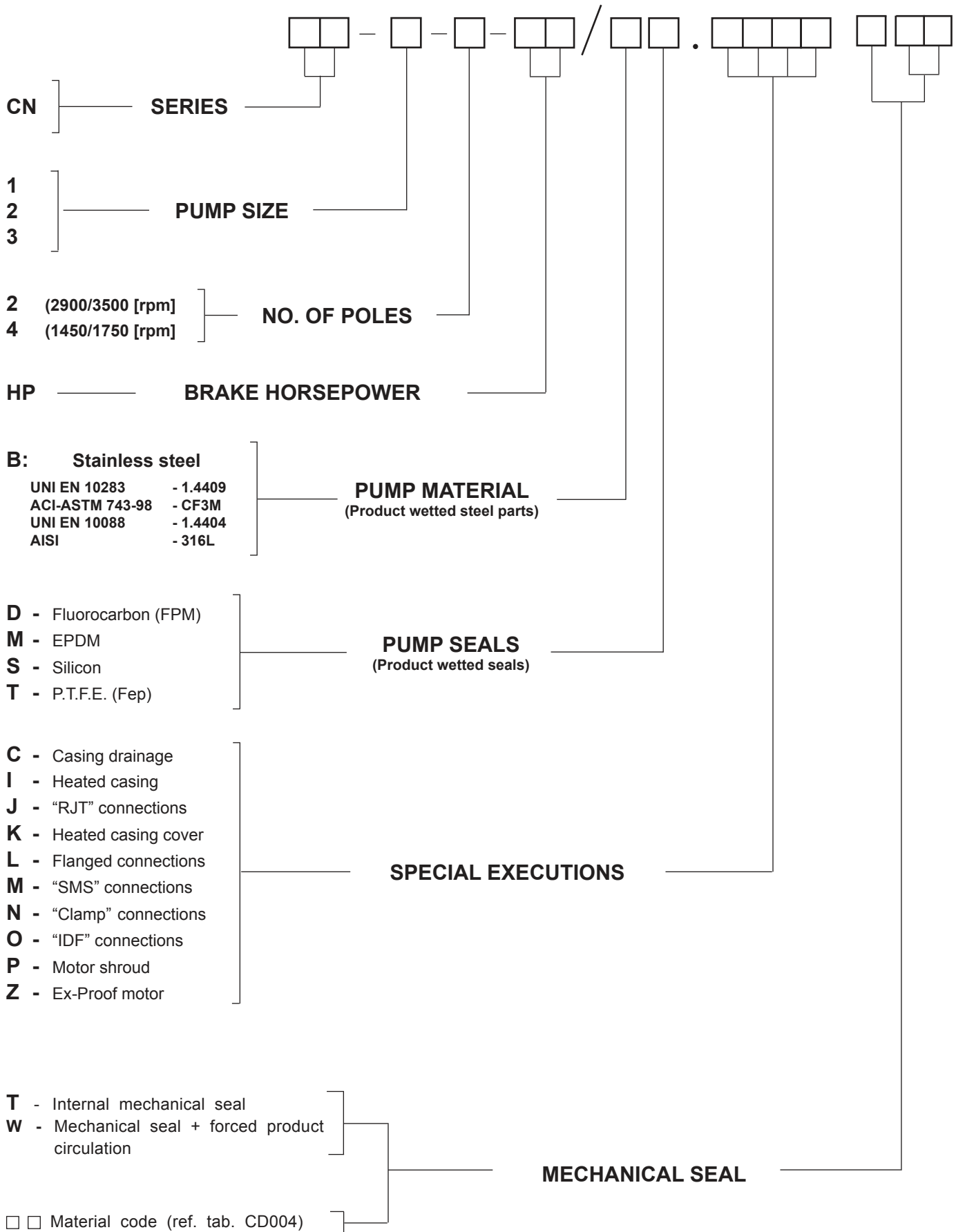


PUMP CASING

The press-forged casing, with its enhanced hydraulic design delivers high performance, low noise and most importantly excellent hygiene for fast and effective cleaning. The clamp fixing allows the discharge port to be positioned to suit virtually any installation position.

GENERAL DIAGRAMS CN





Example: **CN 3-2-20/BM.PTH1**

MECHANICAL SEALS

MATERIAL CODES

METALS

H - Nickel-plated stainless steel AISI 304
X - Stainless steel AISI 316L

CARBONS

V - Normal carbon
Z - Special carbon

RESINS

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

METAL OXIDES

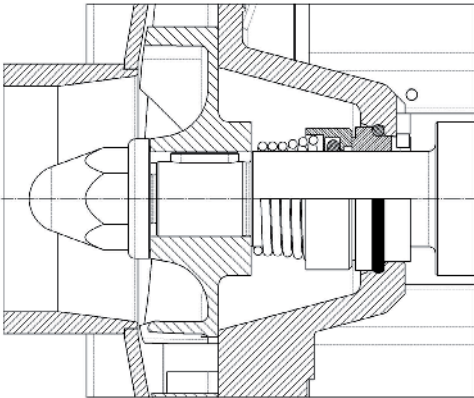
2 - Alumina ceramic

METAL CARBONS

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

ELASTOMERS

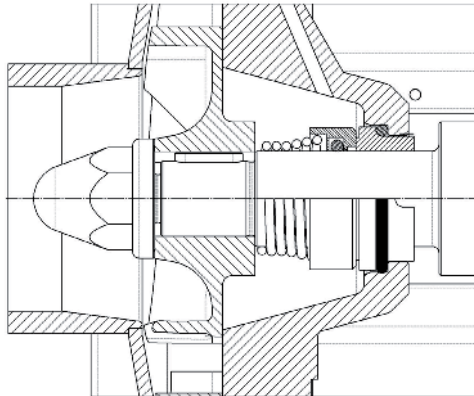
6 - Nitrile (NBR)
7 - Ethylene propylene (EPDM)
W - FPM for high T
Y - Fluorocarbon (FPM)
B - Silicone
Q - Chemraz
U - Kalrez



EXECUTION T

INTERNAL MECHANICAL SEAL

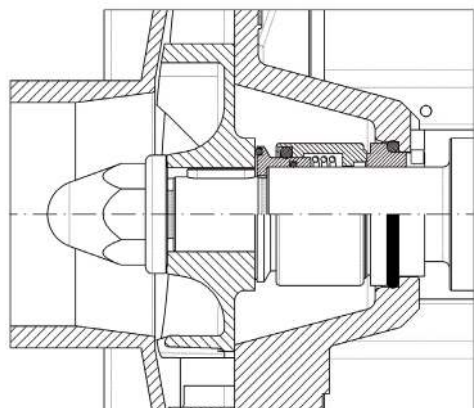
The rotary mechanical seal is internally mounted to ensure effective lubrication, cooling and consequently minimised wear. The seal type, face materials and elastomers are chosen from a range of several options, to suit the nature of the product being handled and the specific application requirements.



EXECUTION W

MECHANICAL SEAL WITH "W" CIRCULATION

This internally mounted mechanical seal has a forced re-circulation of pumped liquid. This feature is beneficial for some applications and products; it improves face lubrication and helps to restrict a rise in temperature, reduces product residues or deposits and eliminates gas bubbles local to the seal.

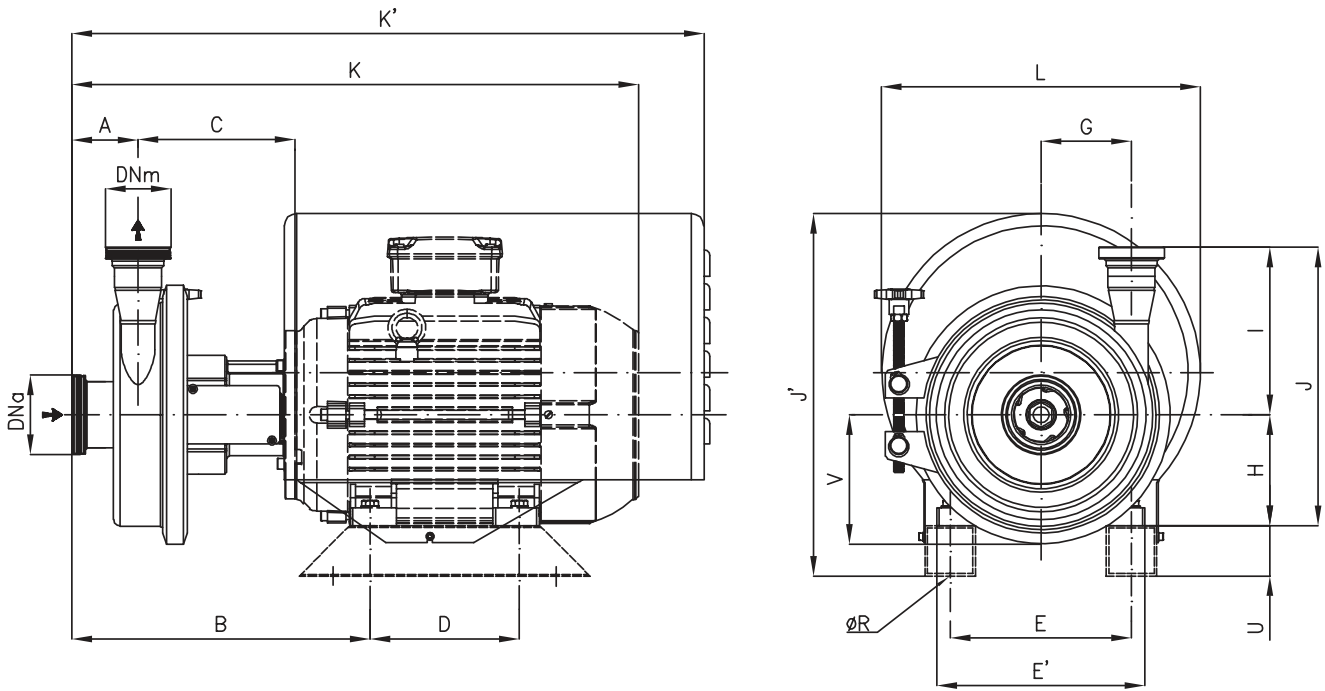


EXECUTION TH.

INTERNAL MECHANICAL SEAL "H"

Protected spring and hydraulically balanced; especially suited for high cleanliness, vacuum and semi-viscous product applications. Easy to clean with CIP, it is perfect for use with foodstuffs, sanitary products, pharmaceuticals and wherever process sterilisation is a requirement.



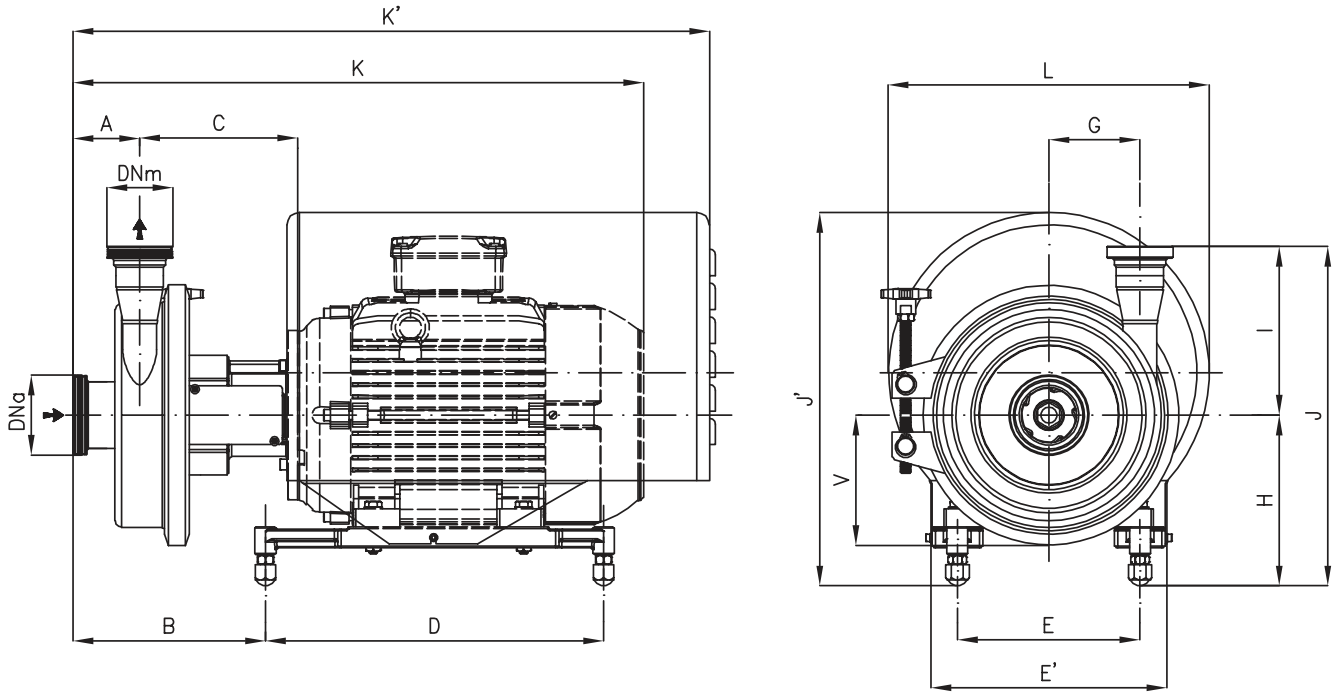


Dimensions not binding - DN = DIN 11851 male threaded connections with standard IEC/EN motors

Pumps		kW	DNa	DNm	A	B	C	D	E	E'	G	H	K	K'	ØR	I	J	J'	L	U	V	Weight kg	
CN 1	1450 rpm	0,55 0,75	50	40	73	277	153,5	100	125	155	86	80	463	584	10	183	263	286	303	40	127		
CN 1		1,1				282,5	153,5	100	140	165		90	501	597			10	273	318	303		40	
CN 2		0,55 0,75	65	50	79	286	157	100	125	155	108	80	472	593	10	200	280	286	303	40	154		
CN 2		1,1 1,5				292	157	100 125	140	165		90	508	606			10	290	317	303		40	
CN 2		2,2				329	187	140	160	196		100	580	683			12	300	388	269		50	
CN 3		1,1 1,5	80	65	81	296	159	100 125	140	164	129	90	519	609	10	255	345	318	303	40	179		
CN 3		2,2 3				189	140	160	100	585		687	100	585			687	369	50				
CN 3		4				189	140	190	112	604		687	112	604			687	369					



Pump with B34-B35 motor and stainless steel feet.

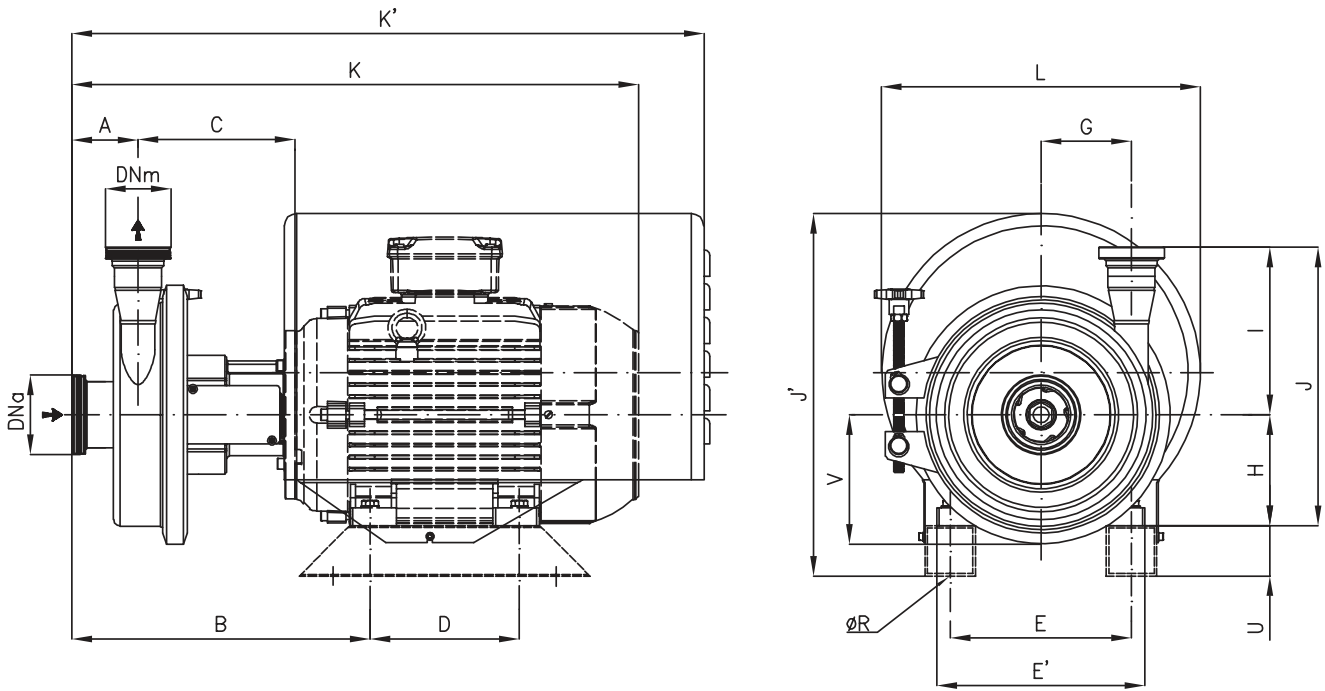


Dimensions not binding - DN = DIN 11851 male threaded connections with standard IEC/EN motors

Pumps	kW	DNa	DNm	A	B	C	D	E	E'	G	H	K	K'	I	J	J'	L	V	Weight kg	
CN 1	0,55	50	40	73	153,5	270	138	213	86	160	463	584	183	350	333	303	127			
	0,75																			
	1,1																			
CN 2	0,55	65	50	79	157	219	157	270	140	213	108	185	472	593	367	333	303	154		
	0,75																			
	1,1																			
CN 2	1,5																			
CN 2	2,2																			
CN 3	1,1	80	65	81	223	159	270	140	213	129	185	519	609	438	372	303	179			
	1,5																			
	2,2																			
CN 3	3																			
CN 3	4																			

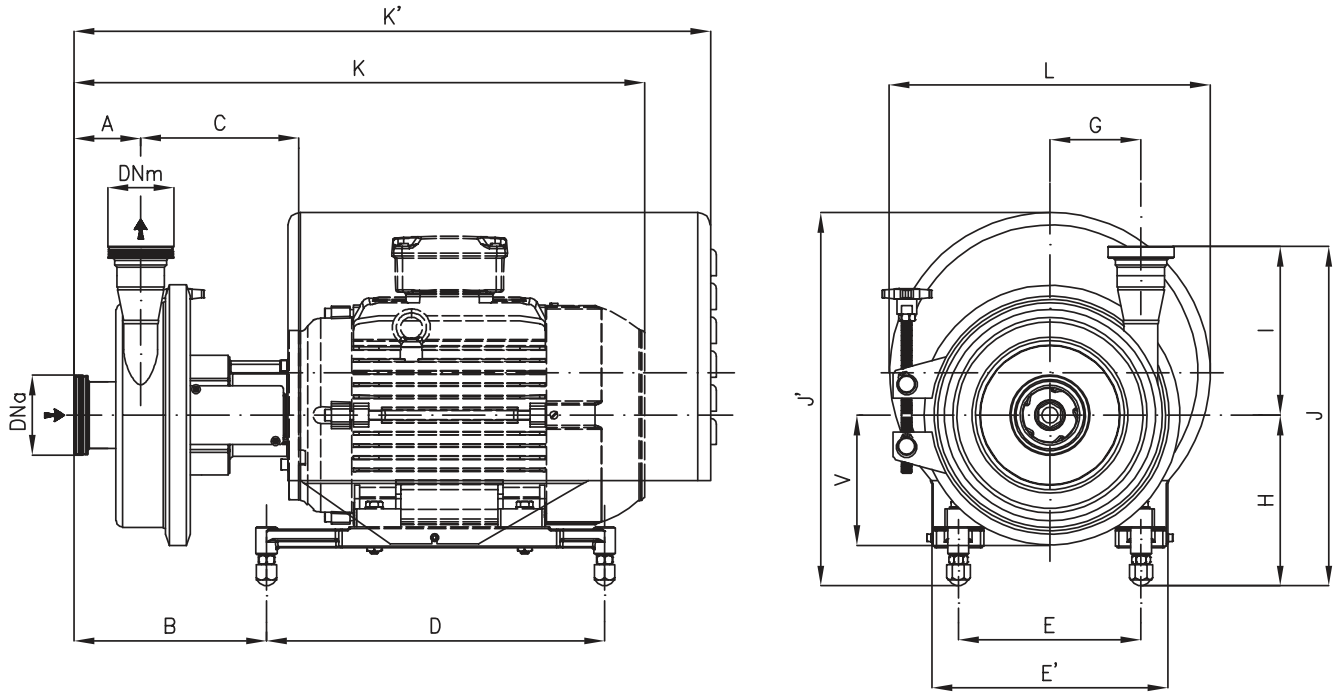
Pump with stainless steel shroud and adjustable feet.





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

Pumps	kW	DNa	DNm	A	B	C	D	E	E'	G	H	K	K'	ØR	I	J	J'	L	U	V	Weight kg
CN 1	1,5 2,2				282,5	153,5	100	140	165		90	501	597	10		273	318	303	40		
CN 1	3 4	50	40	73	319,5	183,5	140	160 190	196 226	86	100 112	572 591	673	12	183	283 295	389 402	369	50	127	
CN 1	5,5 7,5				357,5	183,5	178	216	256		132	627	744	12		315	412	380	60		
CN 2	1,5 2,2				292	157	100	140	165		90	508	606	10		290	317	303	40		
CN 2	3 4				329	187	140	160 190	196 226		100 112	580 598	683	12		300 312	388 400	369	50		
CN 2	5,5 7,5 9,2	65	50	79	355	187	140 178	216	256	108	132	635 673	753	12	200	332	432	380	60	154	
CN2	11 15 18,5				404	217	254	254	300		160	778 818	911	15		360	528	473	50		
CN 3	5,5 7,5 9,2				358,5	188,5	140 178	216	256		132	640 678	757	12		387	432	380	60		
CN 3	11 15 18,5	80	65	81	407,5	218,5	254	254	300	129	160	784 824	915	15	255	415	588	473	50	179	



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

Pumps	kW	DNa	DNm	A	B	C	D	E	E'	G	H	K	K'	I	J	J'	L	V	Weight kg											
2900 rpm	1,5 2,2	50	40	73	210	153,5	270	138	213	86	160	501	597	183	343	348	303	127												
					247	183,5	285	150	243						170	572	673			353	409	369								
	4				239	315	180	202	627						744	385	425			380										
	5,5 7,5				218	183,5	400	216	279						202	627	744			385	425	380								
					219	157	270	140	213						185	508	606			385	372	303								
	3 4				257	187	285	150	243						194	580	683			394	433	369								
					249	315	180	206	598						673	406	445			369										
	5,5 7,5 9,2				228	187	400	216	279						202	635 673	753			402	442	380								
					249	217	475	270	333						211	778 818	911			411	528	473								
	11 15 18,5				231	188,5	400	216	279						227	640 678	757			482	467	380								
					217,5	218,5	475	270	333						211	784 824	915			466	528	473								
	5,5 7,5 9,2				80	65	81	81	231						188,5	400	216			279	129	227	640 678	757	255	482	467	380	179	
217,5		218,5	475	270						333	211	784 824	915	466				528	473											
11 15 18,5	217,5	218,5	475	270						333	211	784 824	915	466				528	473											

CURVE CARATTERISTICHE

PERFORMANCE CURVES

Serie CN

CN Series

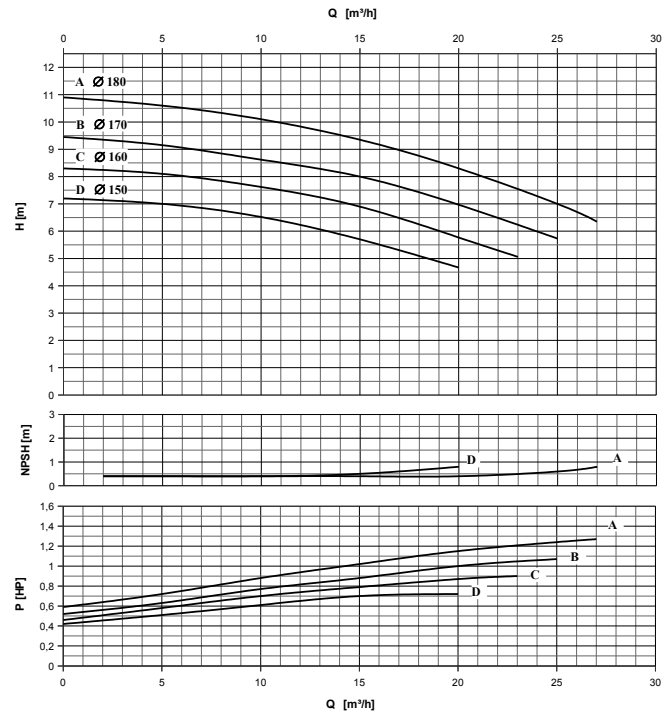
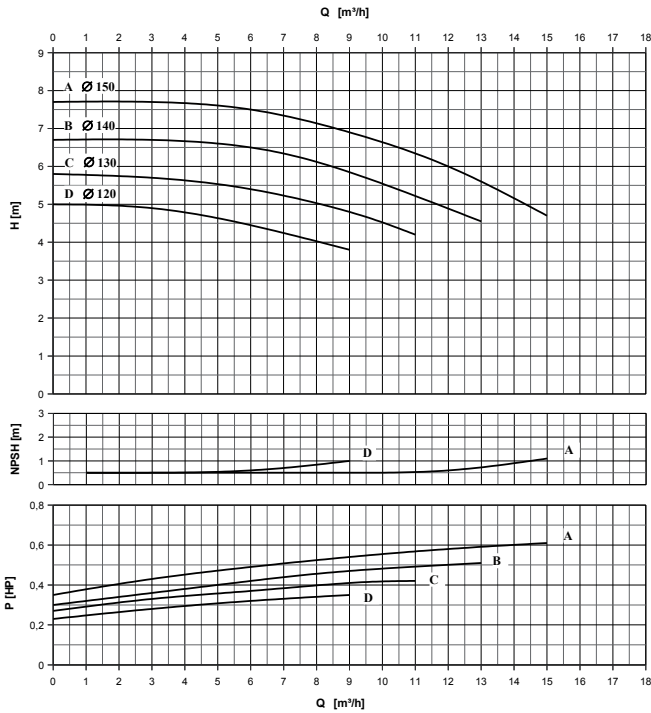
1450 giri/min - GIRANTE APERTA - 1450 rev/min - OPEN IMPELLER

POMPA TIPO Pump type		CN 1			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 50
APERTA	5	12,5 mm	150 mm	120 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

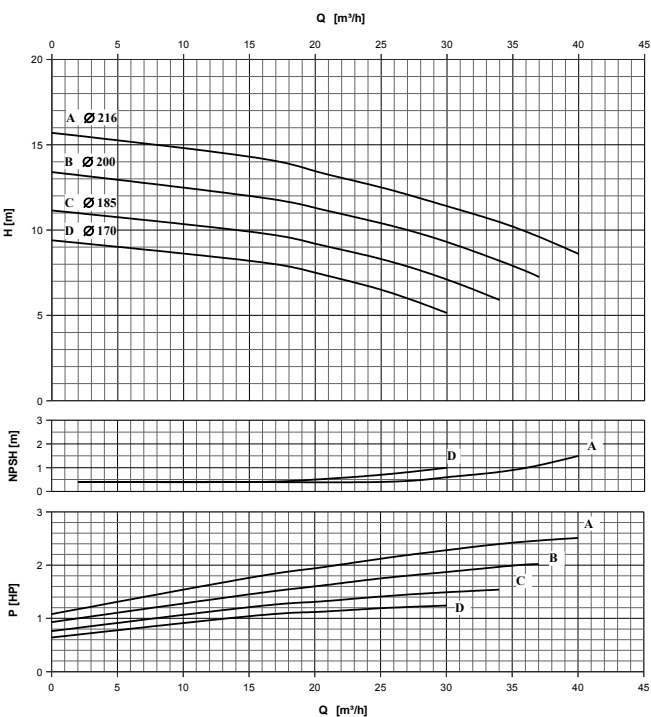
POMPA TIPO Pump type		CN 2			n	1450	giri/min r.p.m.
		GIRANTE		Impeller			
TIPO Type	N° di pale n° of blades	Pass. sferico max. sphere	Ø max max. diameter	Ø min min. diameter	Bocche tipo Ports type	Bocca aspir. Suction port	DN 65
APERTA	5	15 mm	180 mm	150 mm	DIN 11851	Bocca mand. Discharge port	DN 50

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		CN 3			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 80
APERTA	5	15,5 mm	216 mm	170 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



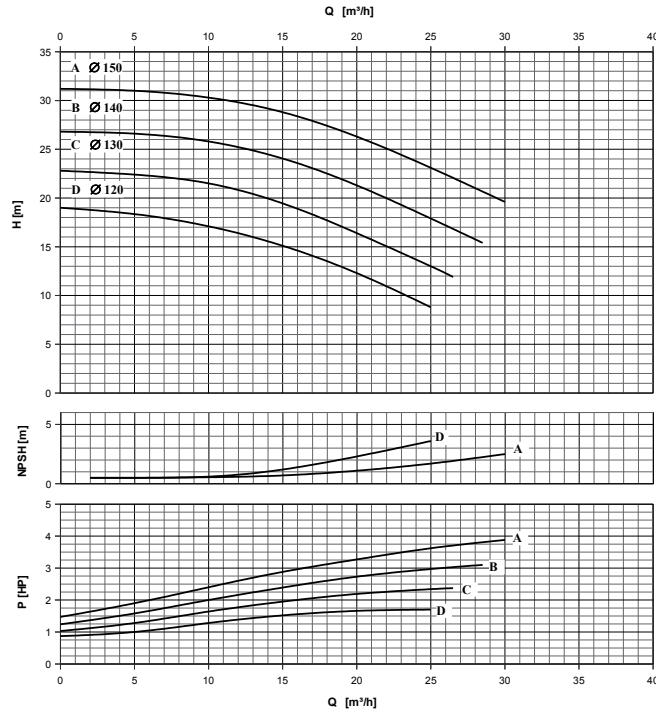
CURVE CARATTERISTICHE PERFORMANCE CURVES

Serie CN CN Series

2900 giri/min - GIRANTE APERTA - 2900 rev/min - OPEN IMPELLER

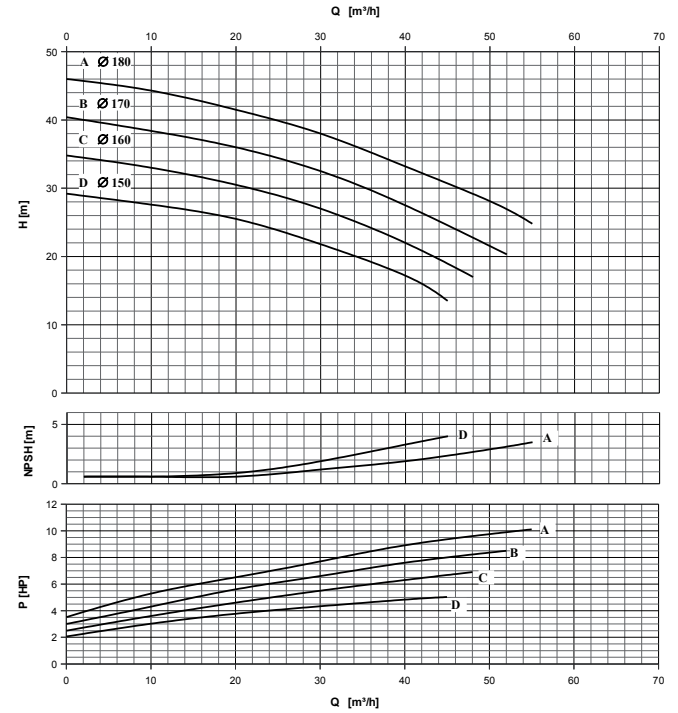
POMPA TIPO Pump type		CN 1				n	2900	giri/min r.p.m.
TIPO Type	N° di pale n° of blades	Pass. sferico max. sphere	GIRANTE ----- Impeller		Bocche tipo Ports type	Bocca aspir. Suction port	DN 50	
			Ø max max. diameter	Ø min min. diameter		Bocca mand. Discharge port	DN 40	
APERTA	5	12,5 mm	150 mm	120 mm	DIN 11851			

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



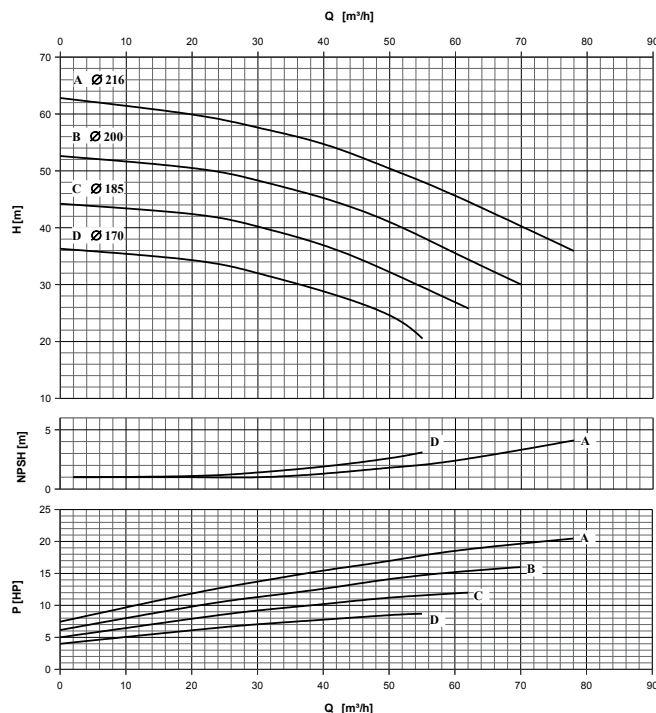
POMPA TIPO Pump type		CN 2				n	2900	giri/min r.p.m.
TIPO Type	N° di pale n° of blades	Pass. sferico max. sphere	GIRANTE ----- Impeller		Bocche tipo Ports type	Bocca aspir. Suction port	DN 65	
			Ø max max. diameter	Ø min min. diameter		Bocca mand. Discharge port	DN 50	
APERTA	5	15 mm	180 mm	150 mm	DIN 11851			

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		CN 3				n	2900	giri/min r.p.m.
TIPO Type	N° di pale n° of blades	Pass. sferico max. sphere	GIRANTE ----- Impeller		Bocche tipo Ports type	Bocca aspir. Suction port	DN 80	
			Ø max max. diameter	Ø min min. diameter		Bocca mand. Discharge port	DN 65	
APERTA	5	15,5 mm	216 mm	170 mm	DIN 11851			

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

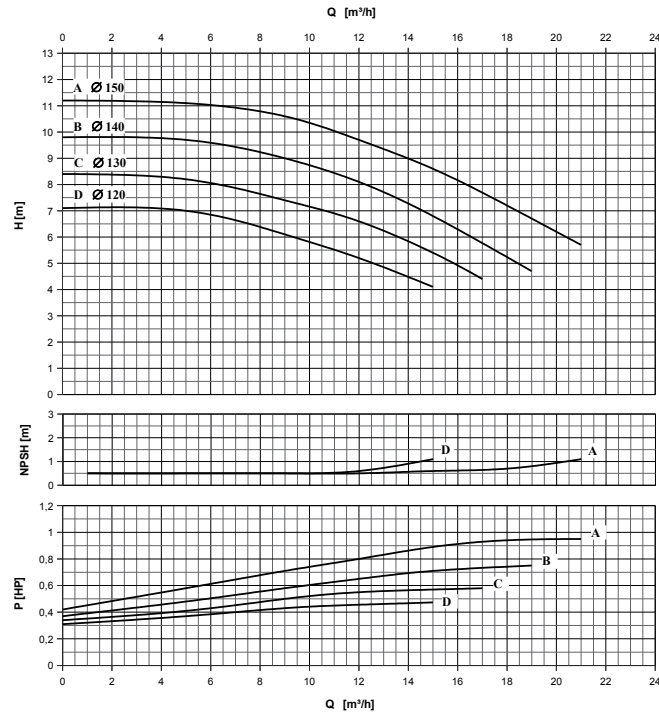
PERFORMANCE CURVES

Serie CN

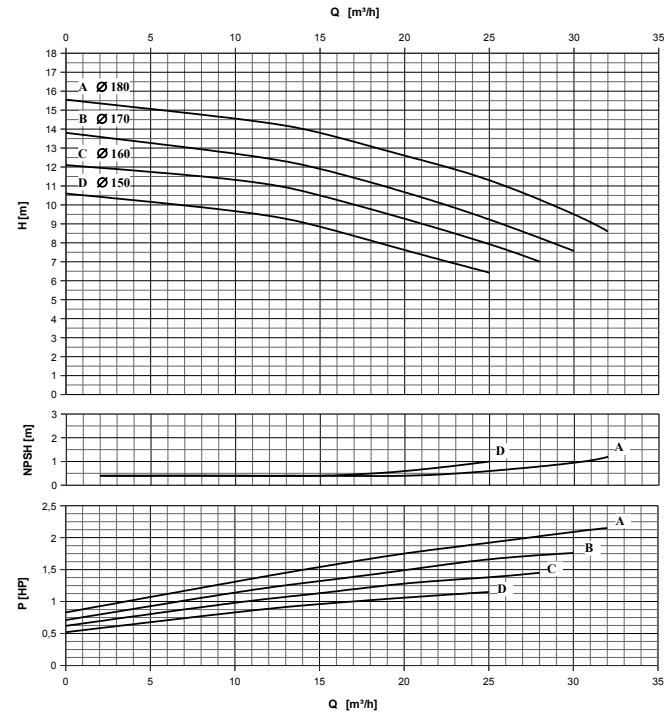
CN Series

1750 giri/min - GIRANTE APERTA - 1750 rev/min - OPEN IMPELLER

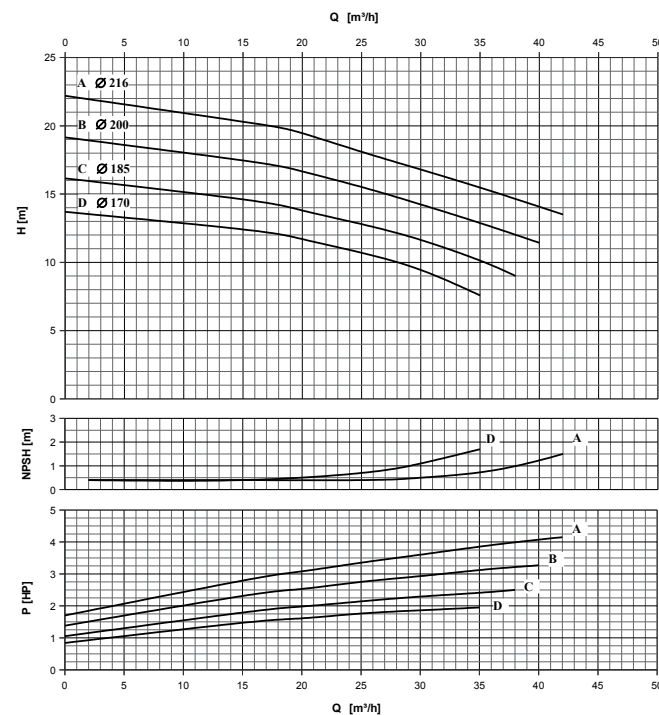
POMPA TIPO Pump type		CN 1			n 1750	giri/min r.p.m.
GIRANTE ----- Impeller						
TIPO Type	N° di pale n° of blades	Pass. sferico max. sphere	Ø max max. diameter	Ø min min. diameter	Bocche tipo Ports type	Bocca aspir. Suction port DN 50
APERTA	5	12,5 mm	150 mm	120 mm	DIN 11851	Bocca mand. Discharge port DN 40
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20 °C - PESO SPECIFICO 1 Kg/dm ³ Curves show performance with clear water at 70 °F - Specific gravity 1 Kg/dm ³						



POMPA TIPO Pump type		CN 2			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 65
APERTA	5	15 mm	180 mm	150 mm	DIN 11851	Bocca mand. Discharge port DN 50
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POMPA TIPO Pump type		CN 3			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 80
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CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20 °C - PESO SPECIFICO 1 Kg/dm ³ Curves show performance with clear water at 70 °F - Specific gravity 1 Kg/dm ³						



CURVE CARATTERISTICHE

PERFORMANCE CURVES

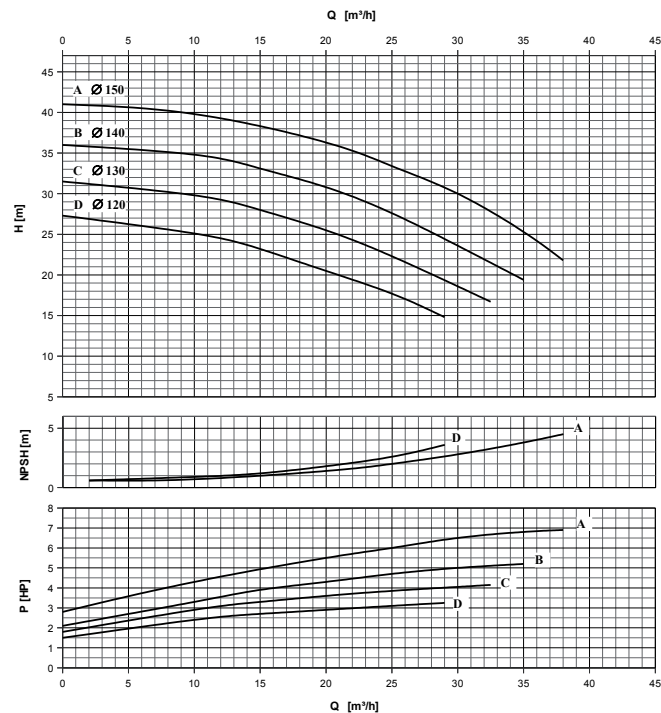
Serie CN

CN Series

3500 giri/min - GIRANTE APERTA - 3500 rev/min - OPEN IMPELLER

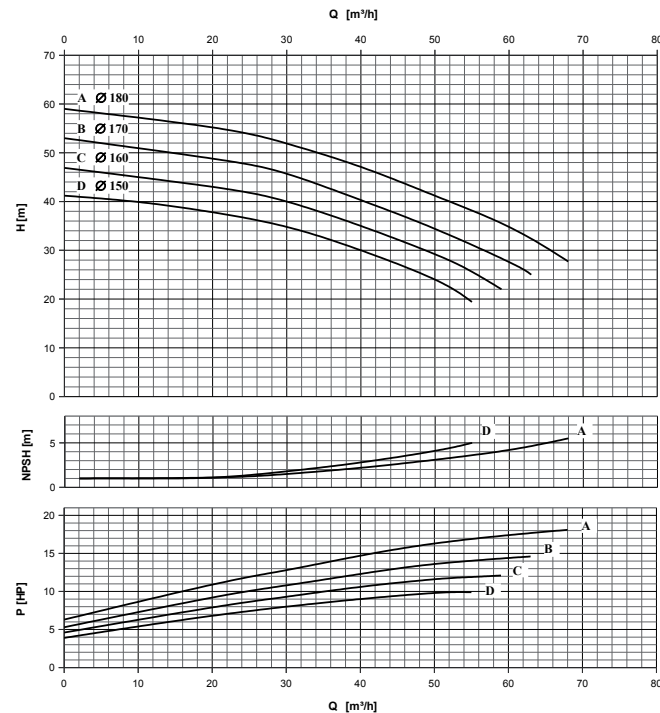
POMPA TIPO Pump type		CN 1				n	3500	giri/min r.p.m.
		GIRANTE ----- Impeller						
TIPO Type	N° di pale n° of blades	Pass. sferico max. sphere	Ø max max. diameter	Ø min min. diameter	Bocche tipo Ports type	Bocca aspir. Suction port	DN 50	
APERTA	5	12,5 mm	150 mm	120 mm	DIN 11851	Bocca mand. Discharge 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



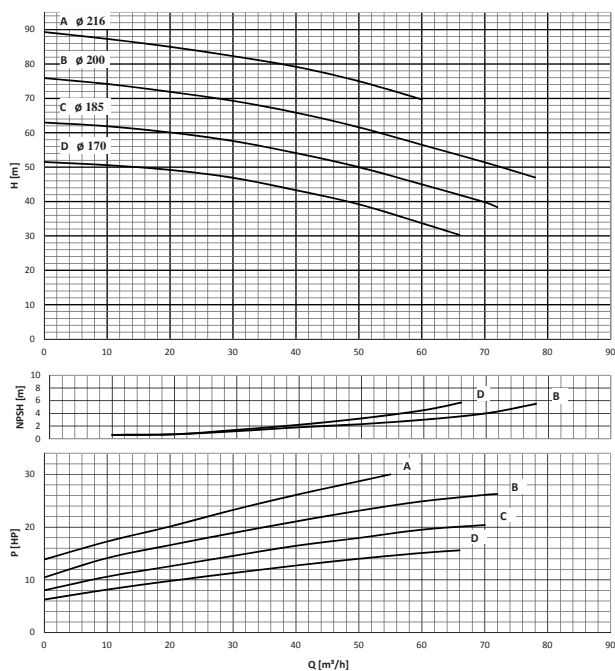
POMPA TIPO Pump type		CN 2				n	3500	giri/min r.p.m.
		GIRANTE ----- Impeller						
TIPO Type	N° di pale n° of blades	Pass. sferico max. sphere	Ø max max. diameter	Ø min min. diameter	Bocche tipo Ports type	Bocca aspir. Suction port	DN 65	
APERTA	5	15 mm	180 mm	150 mm	DIN 11851	Bocca mand. Discharge 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		CN 3				n	3500	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 80	
APERTA	5	15,5 mm	216 mm	170 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



CENTRIFUGAL PUMPS

CL - CLC SERIES

Standard design

Closed coupled single-stage centrifugal pumps. Available in a wide range of models with closed or open impellers and 2 or 4 pole motors.

Wetted parts are in forged polished plate and investment cast electropolished CF8M 1.4408 / AISI 316 stainless steel.

Investment cast and electro-chemical polishing. Special internal finishes to 0,5 micron Ra are available on request.

Special motor shaft supporting the impeller.
Flow rates up to 90 m³/h, heads up to max. 50 m. (7 bar).

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.



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 PN16 flanges suitable for most international standards.

Applications

Food processing, dairy, beverage, chemical, cosmetics and pharmaceutical industries. With an open impeller, juices, creams, ice-cream mix, milk, wine, spirits and whey, can be safely transferred at low pressure. While with a higher efficiency closed impeller, clean liquids without solids can be pumped at medium-high heads (max. 40-50 m) to feed pasteurizers and coolers, concentrators, filters, CIP systems, etc.



MOTOR FLANGE
Sturdy and modular in order to couple with different motor sizes.



SINGLE-SHAFT MOTOR
Personalised for each pump.



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, both open and closed, manufactured with perfect shapes, thickness and materials and balanced thanks to the investment casting procedure. This means that they are perfectly efficient and reliable.

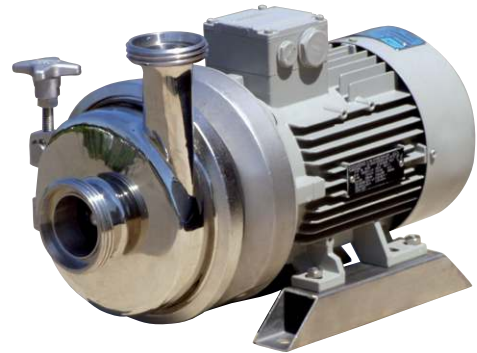


CASING
Press-forged plate circular pump body.

VERSIONS

CL SERIES

Pumps with open impeller with reversed blades, to minimize the shaking of the product. They are therefore especially fitted to transfer creams, ice-creams, milk, wine. The wide ports allow the through flow of muddy products with suspended particles. In polished AISI 316 stainless steel, they have no recessed cavities, which are difficult to reach when cleaning. After having disconnected the inlet and outlet pipes, the front casing can be disassembled by manually loosening the locking clamp.



CL-CLC pump: electric motor with feet supported by stainless steel tubulars.



CL-CLC pump: electric motor with stainless steel shroud and pump supported by 3 or 4 stainless steel feet.

CLC SERIES

Pump with closed impeller with six reversed blades, able to optimize the hydraulic efficiency. They are therefore especially fitted to transfer liquids at medium-high pressures for feeding filters; pasteurizers, coolers, C.I.P. systems. In polished AISI 316 stainless steel, they have no recessed cavities, which are difficult to reach when cleaning. After disconnecting the inlet and outlet pipes, the front casing can be disassembled by manually loosening the locking clamp.

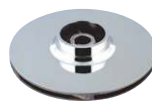
Pumps in industrial version with uncovered motor. The simplified manufacture is offered in the same models of the version with shroud. Speed of 1450 - 1750 - 2850 - 3500 rpm both fix and variable with inverter incorporated.



Open



Closed in 2 pieces

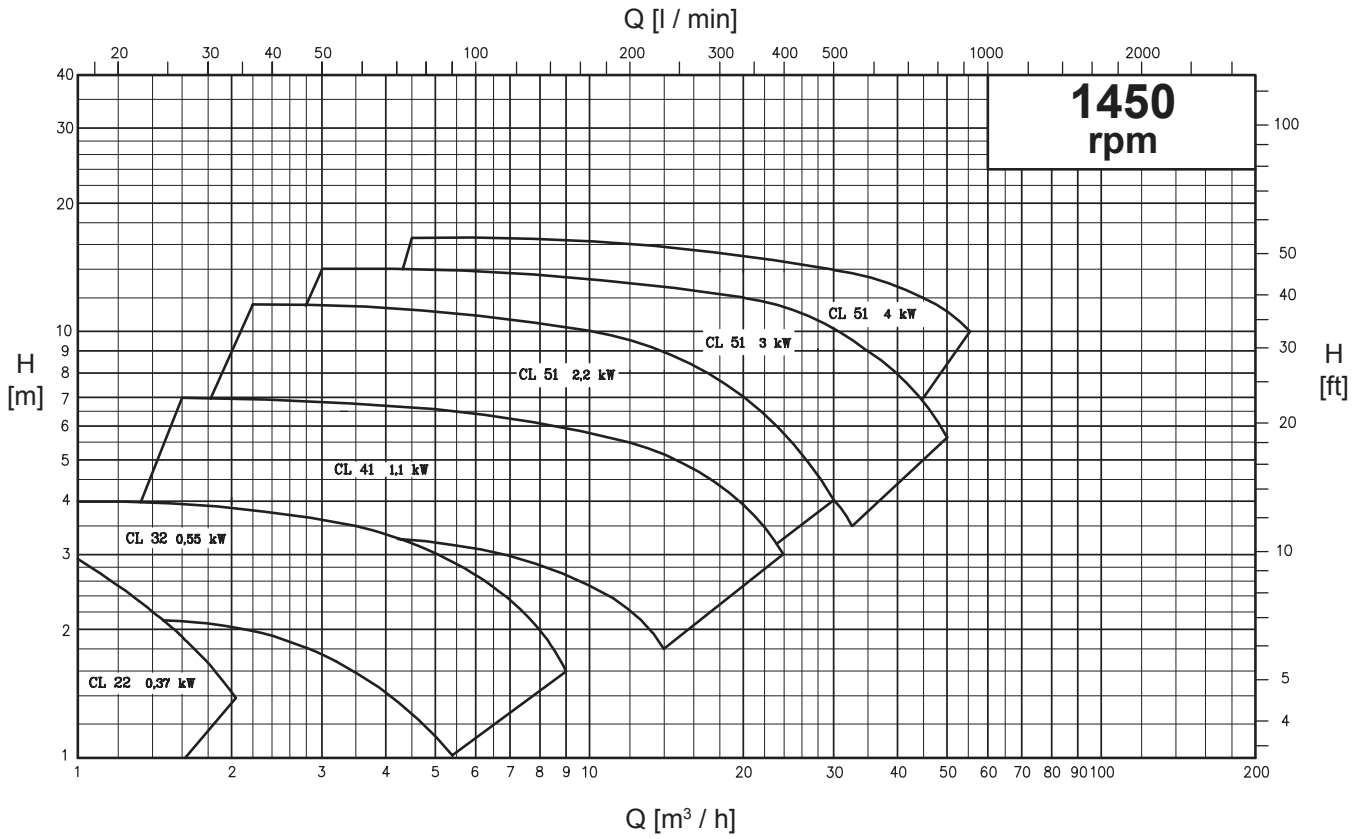


Closed

Rev.00 All impellers, both closed and open, have reversed blades, designed to optimize the hydraulic efficiency.

GENERAL DIAGRAM CL

OPEN IMPELLER

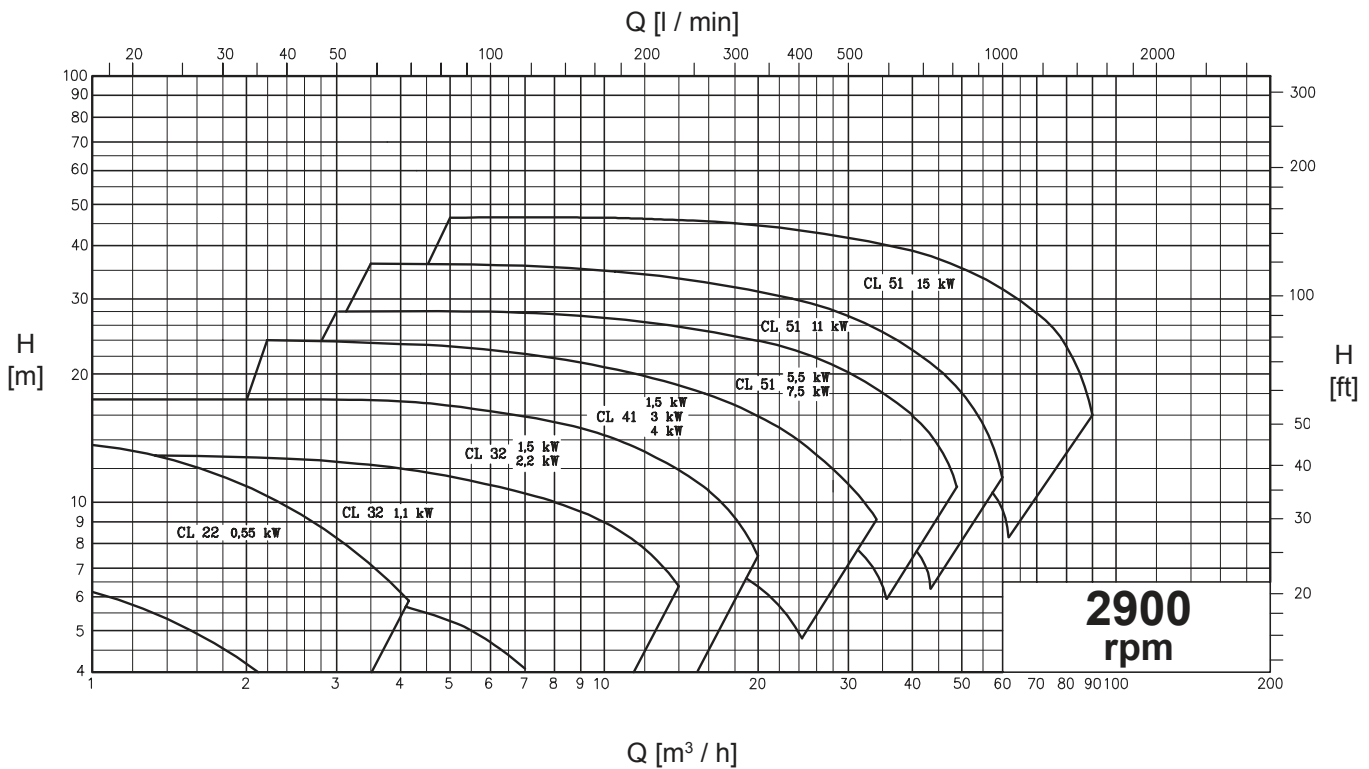


Performance applies to H₂O at 20 °C, 1013 millibar

Data not binding

GENERAL DIAGRAM CL

OPEN IMPELLER



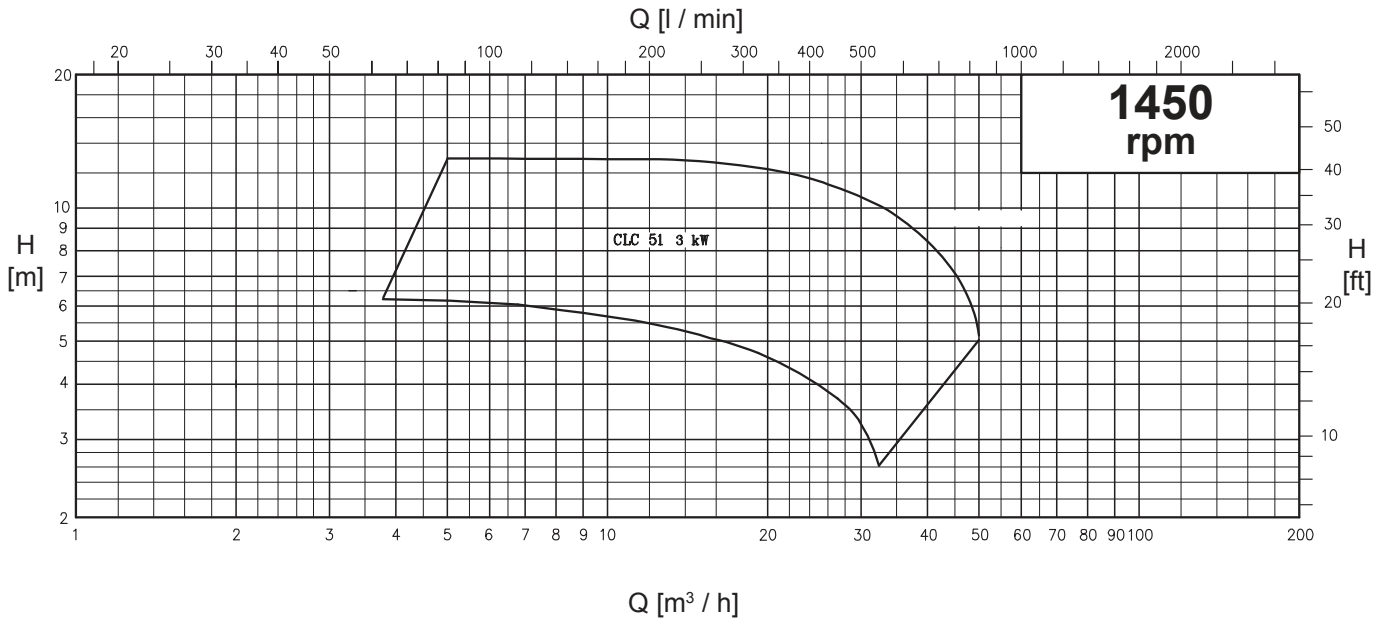
Performance applies to H₂O at 20 °C, 1013 millibar

Data not binding

GENERAL DIAGRAM

CLC

CLOSED IMPELLER



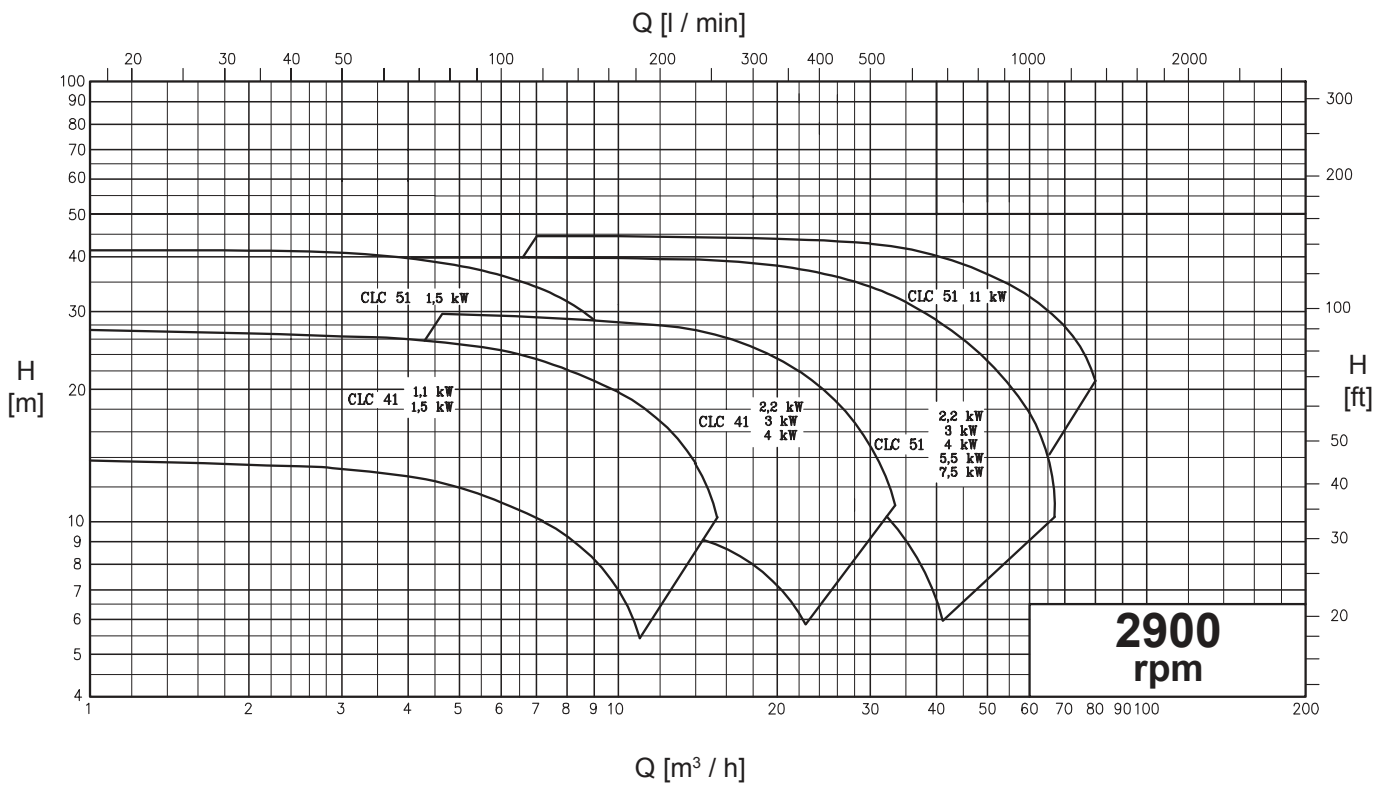
Performance applies to H₂O at 20 °C, 1013 millibar

Data not binding

GENERAL DIAGRAM

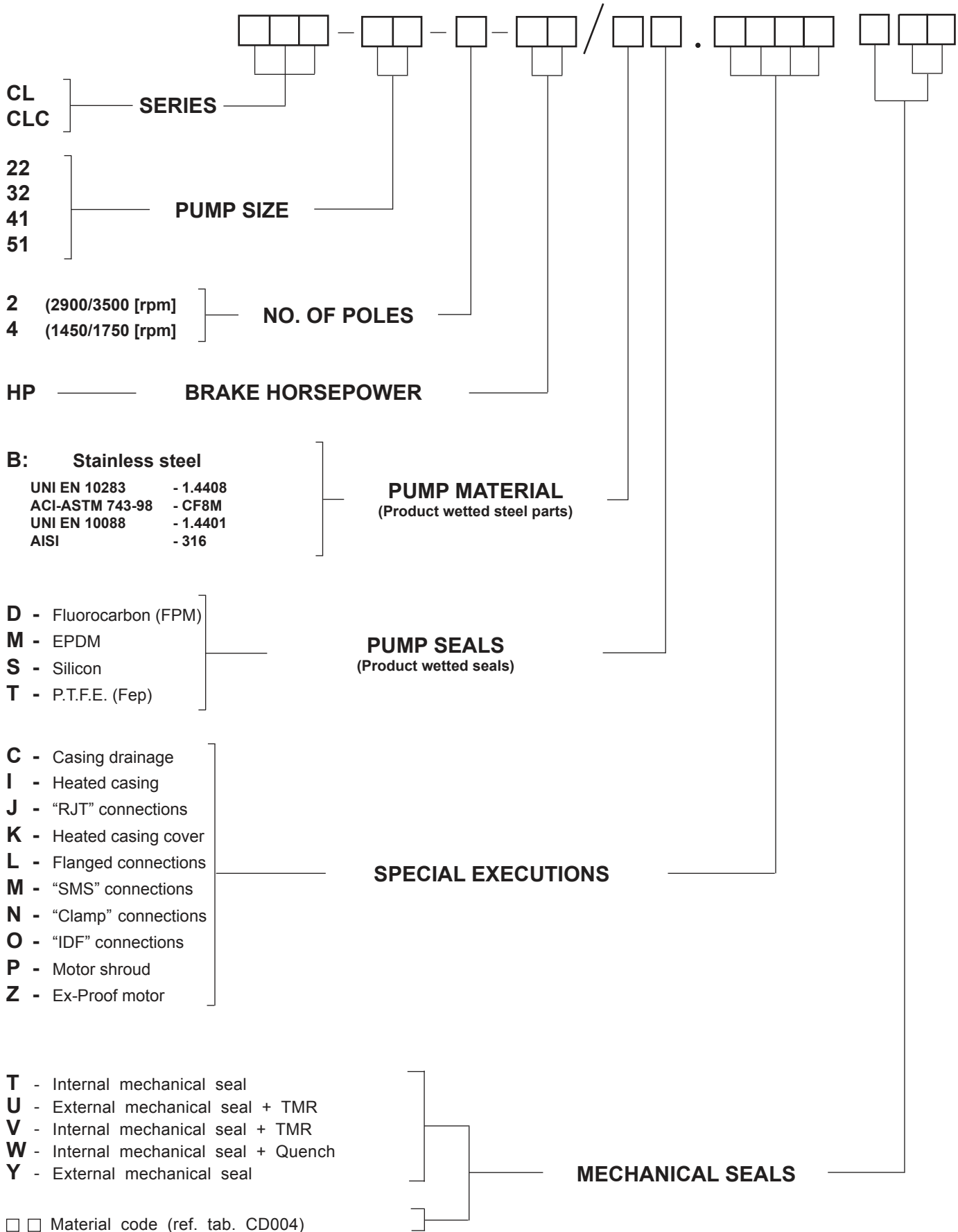
CLC

CLOSED IMPELLER



Performance applies to H₂O at 20 °C, 1013 millibar

Data not binding

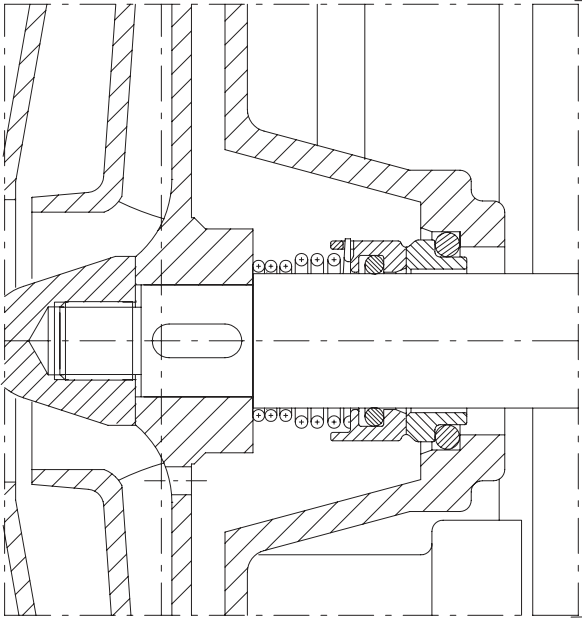


Example: **CLC 51-2-10/BM.LPT31**

MECHANICAL SEALS

CL - CLC pumps are fitted with standard seal seats according to:
EN 12756, ISO 3069.

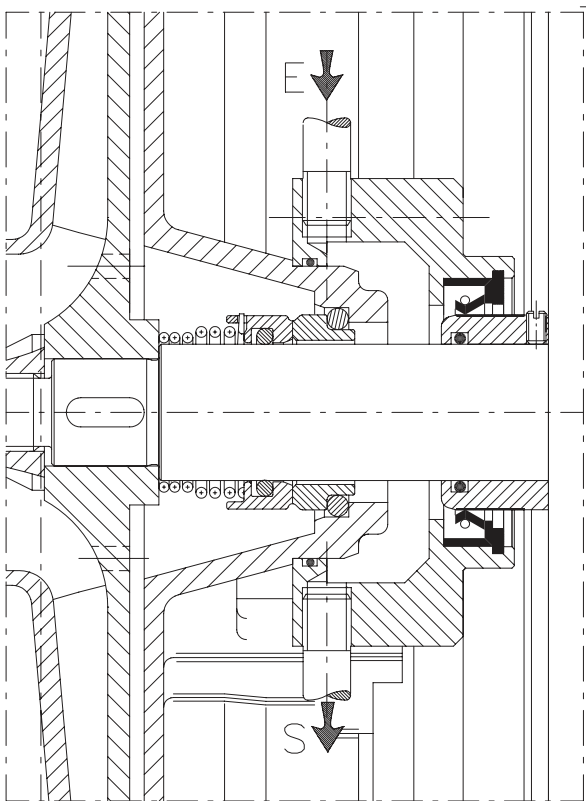
The seal components are available in a wide range of materials, to be selected according to handled product features and the operating conditions.



EXEC. T

Internal mechanical seal

The rotary mechanical seal is internal in order to ensure improved cooling and consequently to reduce its wear. The type of mechanical seal and the materials of the rotating surfaces and of the elastomers are chosen each time, among the several types available, according to the nature of the handled product.



EXEC. V

Flushed internal mechanical seal

The external chamber, by means of the flushing liquid circulation, avoids any damages to the electric motor and contamination of the environment, due to the possible leakages of the internal mechanical seal.

The function of the flushing is to cool, lubricate and clean the seal surfaces.

Radial mech. seal



Mechanical seal

MECHANICAL SEALS

MATERIAL CODES

METALS

H - Nickel-plated stainless steel AISI 304

X - Stainless steel AISI 316L

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)

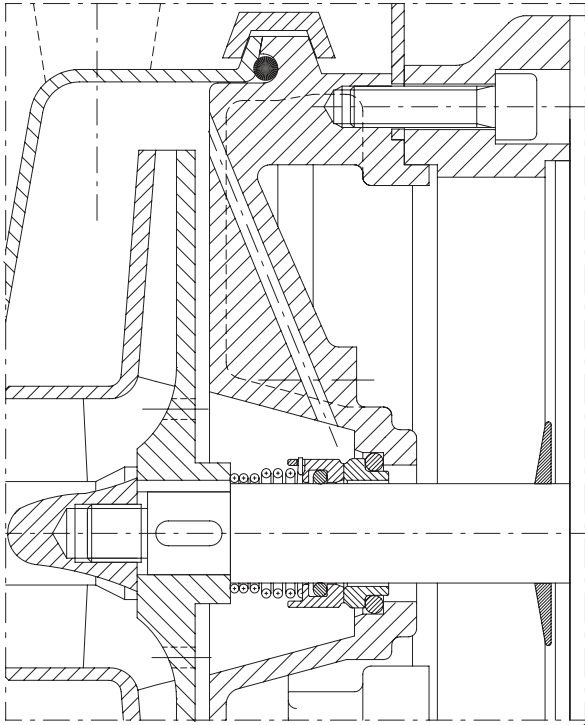
W - FPM for high T

Y - Fluorocarbon (FPM)

B - Silicone

Q - Chemraz

U - Kalrez

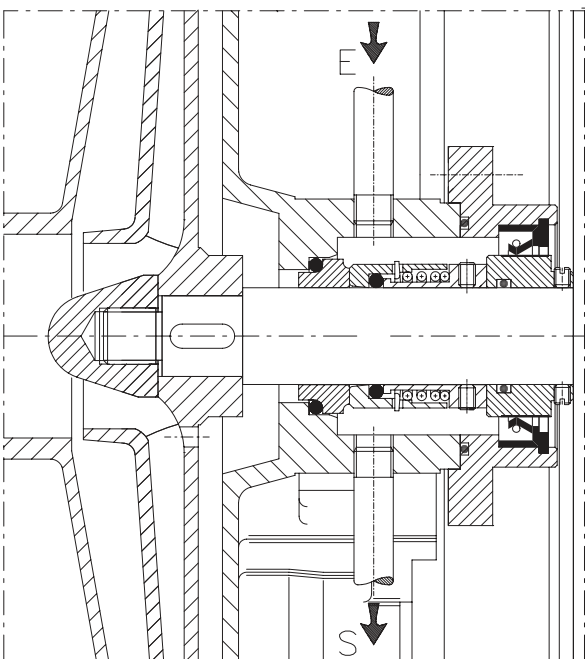


EXEC. W

Internal mechanical seal with liquid circulation

In pumping heated liquid, it induces a forced liquid circulation in the area around the seal, in order to avoid whichever steam formation, which may damage the seal itself.

It removes deposits by limiting sedimentation.



EXEC. U

Double mechanical seal

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, to reach high temperatures and whenever the 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.

Mechanical seal



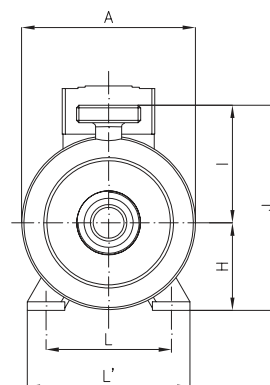
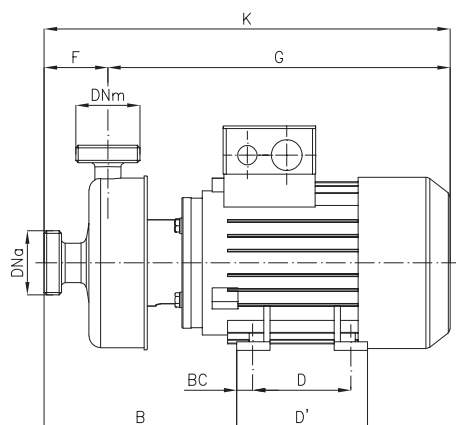
Radial mech. seal

SERIES CL 22

WITHOUT SHROUD

**EXEC. WITH MOTOR
"B3-B14"**

OVERALL DIMENSIONS



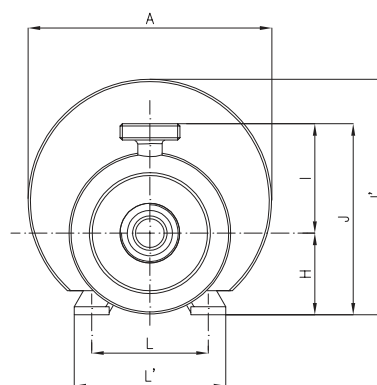
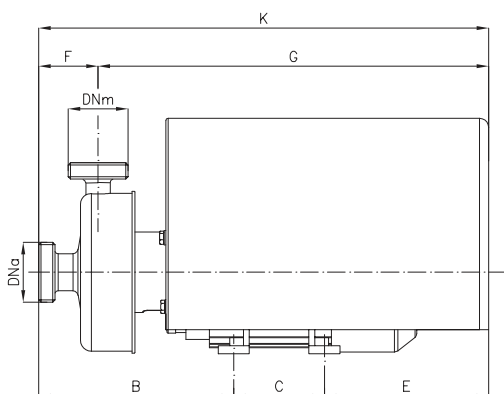
Dimensions not binding - DN = DIN 11851 male threaded connection

Pumps	rpm	kW	DNa	DNm	Ø A	B	BC	D	D'	F	G	K	H	I	J	L	L'	Weight kg
CL 22	1450	0,37	25	25	141	155	10	90	110	52	278	330	71	95	166	112	136	8,5
CL 22	2900	0,55	25	25	141	155	10	90	110	52	278	330	71	95	166	112	136	8,5
CL 22	2900	0,75	25	25	141	160	12,5	110	125	52	298	350	80	95	175	125	155	8,5

SERIES CL 22

WITH SHROUD

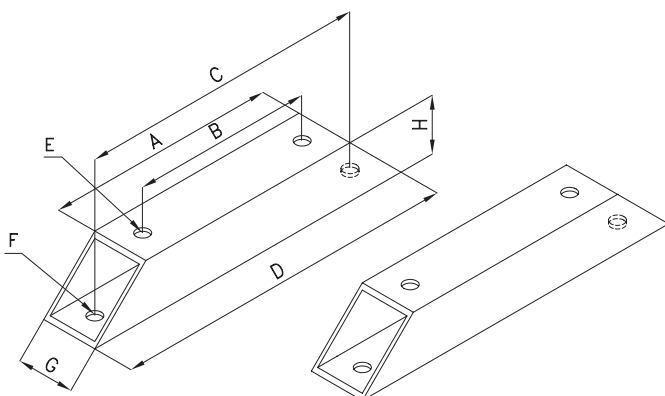
OVERALL DIMENSIONS



Dimensions not binding - DN = DIN 11851 male threaded connections

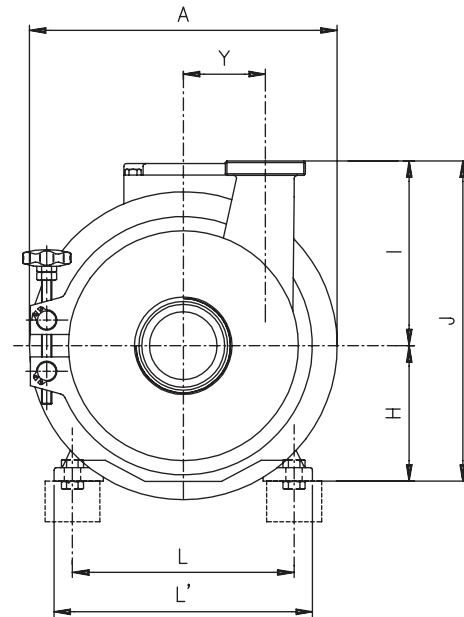
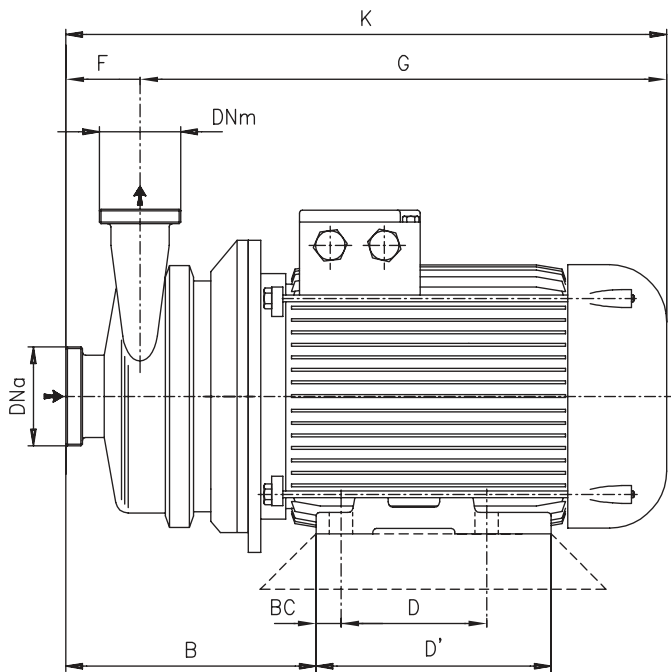
Pumps	rpm	kW	DNa	DNm	A	B	C	E	F	G	K	H	I	J	J'	L	L'	Weight kg
CL 22../P	1450	0,37	25	25	212	165	90	138	52	340	392	71	95	166	205	112	136	9
CL 22../P	2900	0,55	25	25	212	165	90	138	52	340	392	71	95	166	205	112	136	9
CL 22../P	2900	0,75	25	25	212	172,5	100	122,5	45	340	392	80	95	175	214	125	155	9

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	340	410	15	15	50	50
160 L	310	254	340	410	15	15	50	50
180 M/L	328	241/279	387	448	15	15	60	60

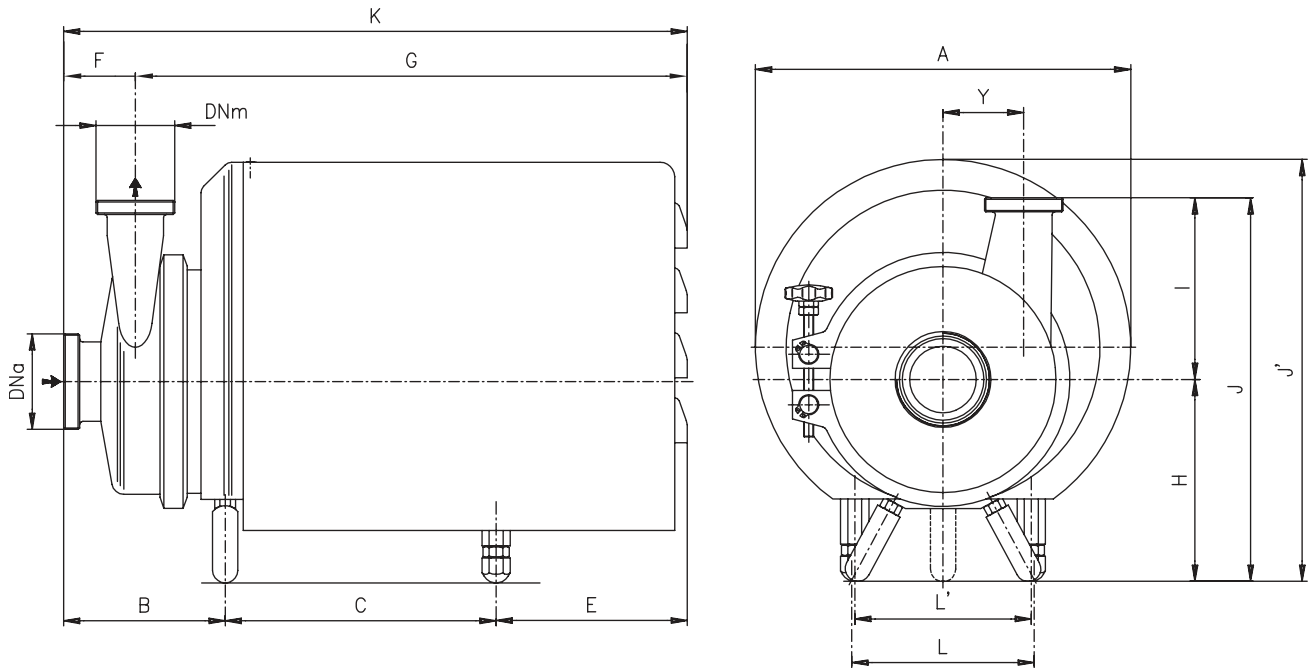
Rev.01 Upon request, they are available in the sizes of the CL-CLC series where the front cover projects beyond the motor feet.



Dimensions not binding - DN = DIN 11851 male threaded connections

Pumps		kW	DNa	DNm	Ø A	B	BC	D	D'	F	G	K	H	I	J	L	L'	Y	Weight kg
CL 32	1450 rpm	0,55	40	40	155	168	12,5	100	118	51	314	365	80	125	205	125	150	40	17
CL 41		1,1	50	40	200	212	15	100	143	62	391	453	90	150	240	140	165	60	22
CL 51		2,2	65	50	254	211	20	140	176	66	415	481	100	180	280	160	196	80	44
		3	65	50	254	230	20	140	176	72	428	500	100	180	280	160	196	80	49
		4	80	65	254	241	20	140	176	76	449	525	112	200	312	190	226	70	51
CLC 51		3	80	65	254	241	18	140	176	76	428	504	100	200	300	160	196	70	52
		4	80	65	254	243	18	140	176	76	449	525	112	200	312	190	226	70	57

CL 32	2900 rpm	1,1	32	32	155	168	12,5	100	118	51	314	365	80	125	205	125	150	40	20
		1,5	32	32	155	172	15	100	143	51	362	413	90	125	215	140	165	40	21
		2,2	40	40	155	172	15	125	143	51	362	413	90	125	215	140	165	40	25
CL 41		1,5	40	32	200	195	15	100	143	56	380	436	90	150	240	140	165	60	23
		3	50	40	250	199	20	140	176	56	413	469	100	150	250	160	196	60	29
		4	50	40	250	206	20	140	176	56	434	490	112	150	262	190	226	60	38
CL 51		5,5	65	50	300	230	24	140	176	68	472	540	132	180	312	216	256	80	52
		7,5	65	50	300	230	24	140	176	68	472	540	132	180	312	216	256	80	84
		11	65	50	300	241	20	178	220	66	536	602	132	180	312	216	260	80	115
		15	80	65	300	249	20	178	220	74	536	610	132	200	432	216	260	70	121
CLC 41	1,1	40	32	200	191	12,5	100	118	56	332	388	80	150	230	125	150	60	19	
	1,5	40	32	200	195	15	100	143	56	380	436	90	150	240	140	165	60	21	
	2,2	50	40	200	195	15	125	143	62	380	436	90	150	240	140	165	60	25	
	3	50	40	250	207	20	140	176	62	415	477	100	150	250	160	196	60	32	
CLC 51	4	50	40	250	214	20	140	176	62	436	498	112	150	262	190	226	60	40	
	1,5	25	25	254	181	15	100	143	52	370	422	90	160	250	140	165	80	33	
	2,2	32	32	254	191	15	125	143	61	370	431	90	160	250	140	165	80	36	
	3	50	40	254	207	20	140	176	63	415	478	100	160	260	160	196	80	43	
	4	50	50	254	224	20	140	176	66	442	508	112	180	272	190	226	80	52	
	5,5	65	50	300	241	24	140	180	72	478	550	132	180	312	216	256	80	81	
	7,5	65	50	300	241	24	140	180	72	478	550	132	180	312	216	256	80	86	
11	65	65	300	249	20	178	220	74	536	610	132	200	332	216	260	70	116		



Dimensions not binding - DN = DIN 11851 male threaded connections

Pumps	kW	DNa	DNm	A	B	C	E	F	G	K	H	I	J	J'	L	L'	Y	Weight kg
CL 32../.P	0,55	40	40	239	120	195	177	51	437,5	479,5	155	125	280	305,8	200	-	40	21,5
CL 41../.P	1,1	50	40	298	159	168	180	62	445	507	160	150	310	324	190	-	60	28
CL 51../.P	2,2	65	50	298	154	188	219	66	495	561	165	180	375	359	180	-	80	52
	3	65	50	298	173	188	219	72	508	580	195	180	375	359	180	-	80	57
	4	80	65	298	177	195	212	76	508	584	195	200	395	359	180	-	70	61
CLC 51../.P	3	80	65	298	177	188	219	76	508	584	195	200	395	359	180	-	70	52
	4	80	65	298	177	188	219	76	508	584	195	200	395	359	180	-	70	57

CL 32../.P	1,1	32	32	239		205	177	51			155	125	280		200	-	40	24
	1,5	32	32	239	120	205	177	51	437,5	479,6	155	125	280	305,8	200	-	40	26
	2,2	40	40	239		235	133	51			155	125	280		200	-	40	29
CL 41../.P	1,5	40	32	298	143	192	152	56	431	487	160	150	310	330	190	-	60	28
	3	50	40	298	143	217	192	56	496	552	160	150	310	324	168	-	60	38
CL 51../.P	4	50	40	298	143	224	185	56	496	552	160	150	310	324	168	-	60	46
	5,5	65	50	368	147	228	232	66	541	607	200	180	380	416	178	115	80	85
	7,5	65	50	368	147	228	232	66	541	607	200	180	380	416	178	115	80	92
CLC 41../.P	11	65	50	368	147	211	249	66	541	607	200	180	380	416	178	185	80	96
	15	80	65	368	170	211	249	74	541	615	200	200	400	416	178	185	70	98
	1,1	40	32	298	142	162	186	56	434	490	160	150	310	324	190	-	60	27
	1,5	40	32	298	142	168	180	56	434	490	160	150	310	324	190	-	60	30
CLC 51../.P	2,2	50	40	298	142	193	155	62	434	490	160	150	310	324	190	-	60	33
	3	50	40	298	151	217	192	62	498	560	160	150	310	324	168	-	60	40
	4	50	40	298	151	224	185	62	498	560	160	150	310	324	168	-	60	47
CLC 51../.P	1,5	25	25	298	127	165	180	52	420	472	165	160	325	329	152	-	80	34
	2,2	32	32	298	137	165	180	61	420	481	165	160	325	329	152	-	80	39
	3	50	40	298	150	188	220	63	495	558	195	160	355	359	180	-	80	46
	4	50	50	298	161	195	212	66	501	567	195	180	375	359	180	-	80	56
	5,5	65	50	368	157	228	231	69	547	616	200	180	380	416	178	115	80	88
7,5	65	50	368	157	228	231	69	547	616	200	180	380	416	178	115	80	94	
11	65	65	368	162	211	253	74	552	626	200	200	400	416	178	185	70	96	

CURVE CARATTERISTICHE

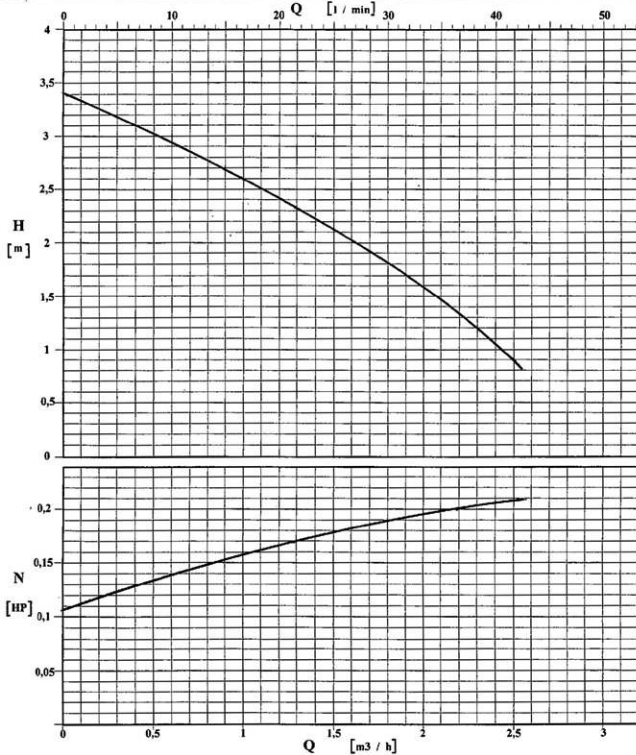
PERFORMANCE CURVES

Serie CL

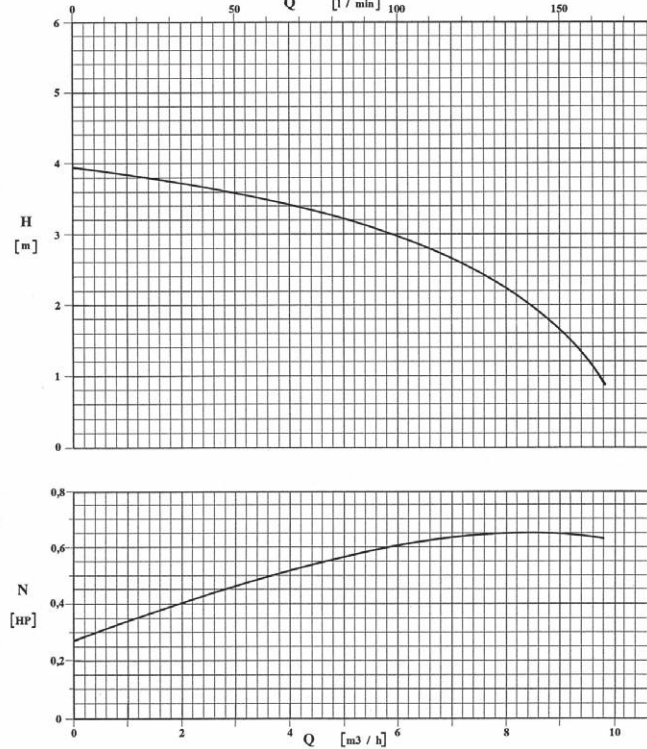
CL Series

1450 giri/min - GIRANTE APERTA - 1450 rev/min - OPEN IMPELLER

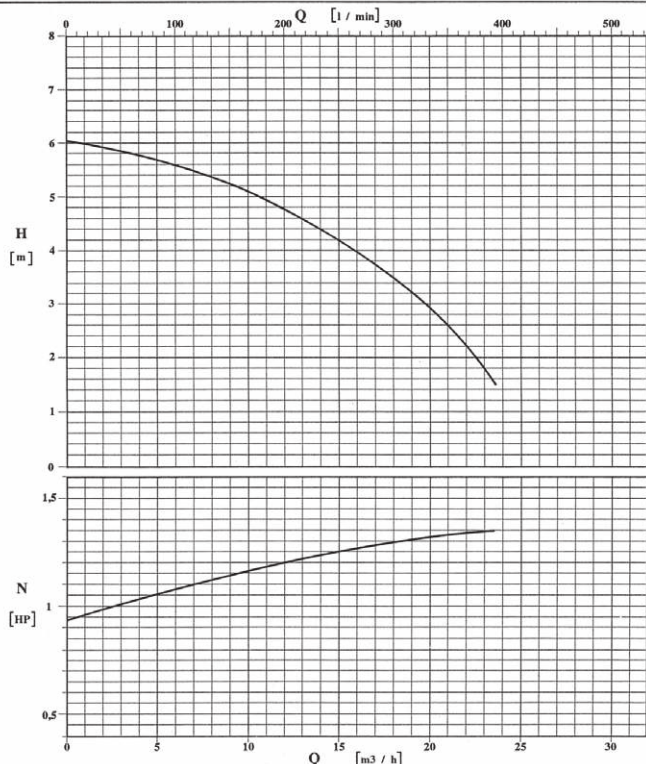
POMPA TIPO Pump type		CL 22 - 4 - 0,5			n	1400	giri / min r. p. m.
GIRANTE — Impeller							
TIPO Type	N° di pale n° of vanes	Pass. sferico max. sphere	∅ max max. diameter	∅ min min. diameter	Bocche tipo Ports type	Bocca aspir. Suction port	DN 25
APERTA	3	5 mm	110 mm	88 mm	DIN 11851	Bocca mand. Discharge port	DN 25
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³) Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³)							



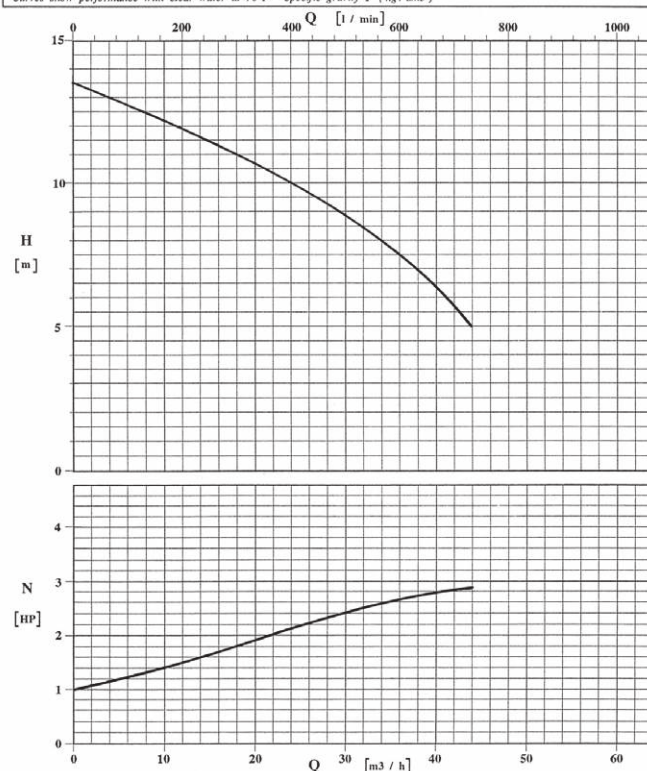
POMPA TIPO Pump type		CL 32 - 4 - 0,75			n	1450	giri / min r. p. m.
GIRANTE — Impeller							
TIPO Type	N° di pale n° of vanes	Pass. sferico max. sphere	∅ max max. diameter	∅ min min. diameter	Bocche tipo Ports type	Bocca aspir. Suction port	DN 40
APERTA	3	18 mm	119 mm	mm	DIN 11851	Bocca mand. Discharge port	DN 40
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³) Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³)							



POMPA TIPO Pump type		CL 41 - 4 - 1,5			n	1400	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 50
APERTA	3	32 mm	150 mm	120 mm	DIN 11851	Bocca mand. Discharge port	DN 40
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³) Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³)							



POMPA TIPO Pump type		CL 51 - 4 - 3			n	1450	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 65
APERTA	3	26 mm	200 mm	mm	DIN 11851	Bocca mand. Suction port	DN 50
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³) Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³)							



CURVE CARATTERISTICHE

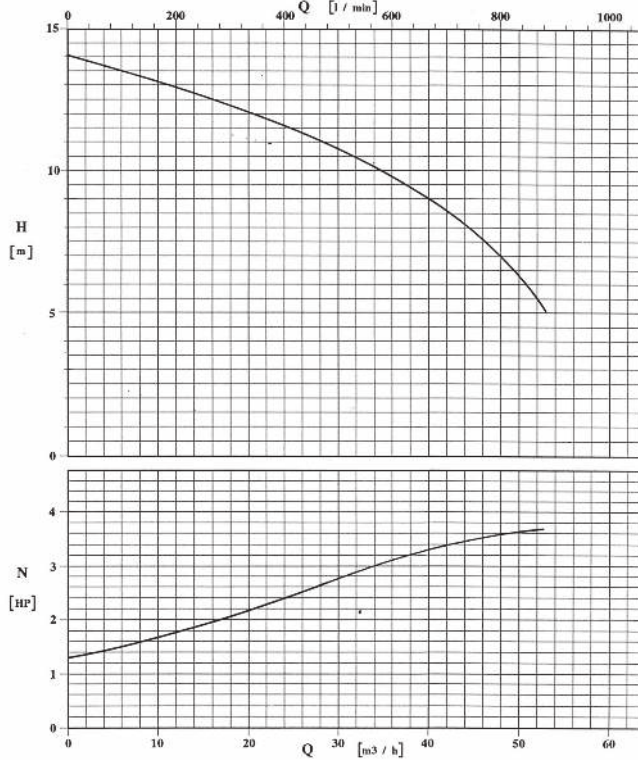
PERFORMANCE CURVES

Serie CL

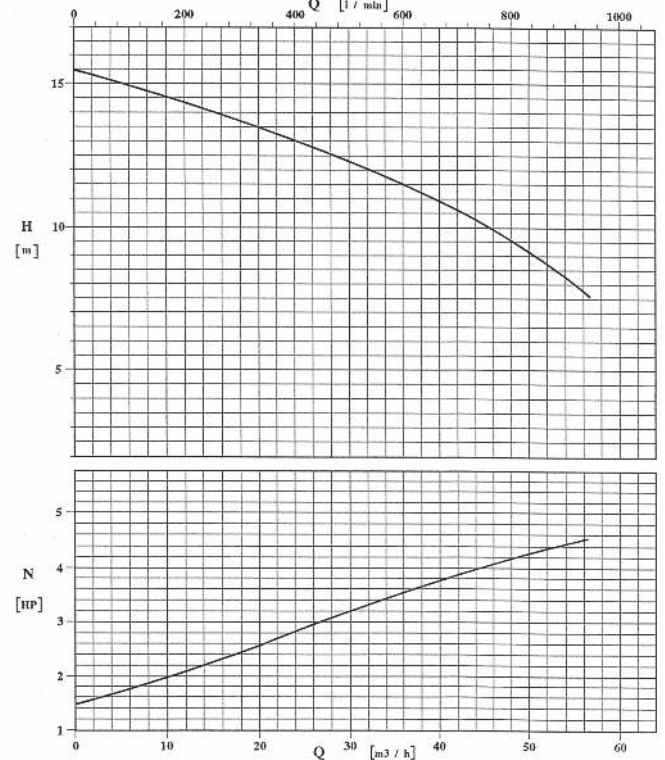
CL Series

1450 giri/min - GIRANTE APERTA - 1450 rev/min - OPEN IMPELLER

POMPA TIPO Pump type		CL 51 - 4 - 4			n	1450	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 65
APERTA	3	28 mm	198 mm	mm	DIN 11851	Bocca mand. Discharge port	DN 50
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³) : Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³) :							



POMPA TIPO Pump type		CL 51 - 4 - 5,5			n	1450	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 80
APERTA	6	32 mm	200 mm	mm	DIN 11851	Bocca mand. Discharge port	DN 65
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³) : Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³) :							



CURVE CARATTERISTICHE

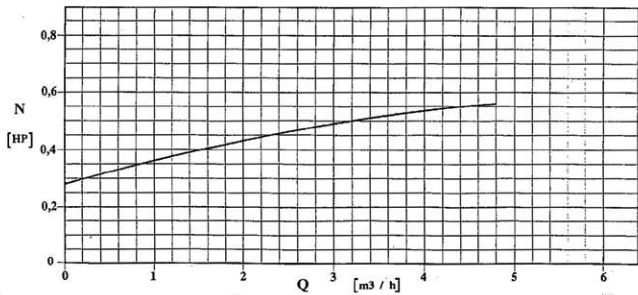
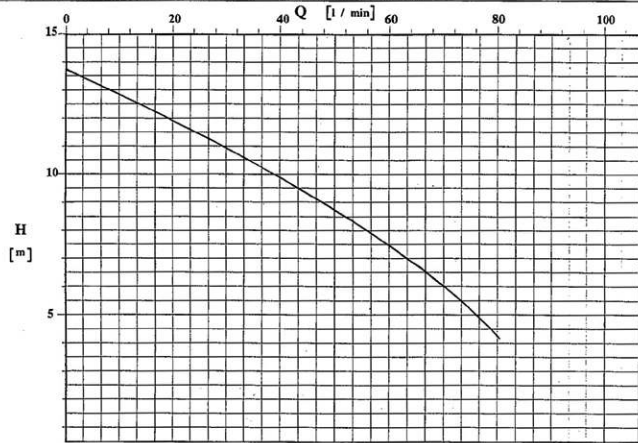
PERFORMANCE CURVES

Serie CL

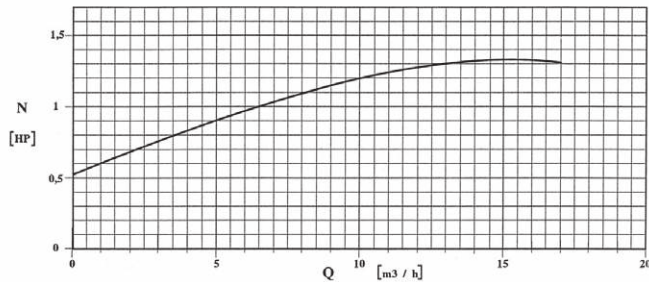
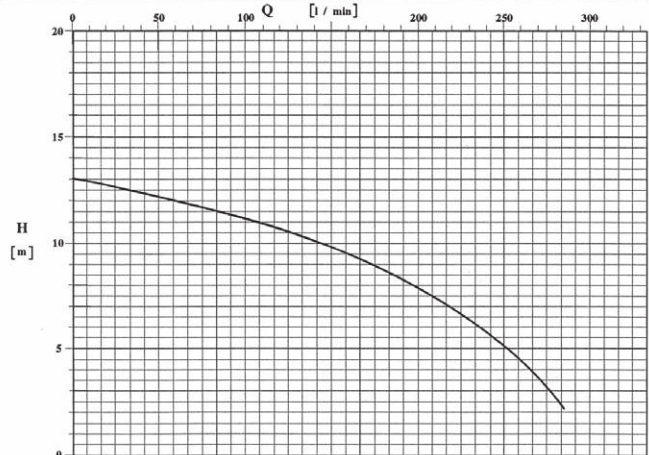
CL Series

2900 giri/min - GIRANTE APERTA - 2900 rev/min - OPEN IMPELLER

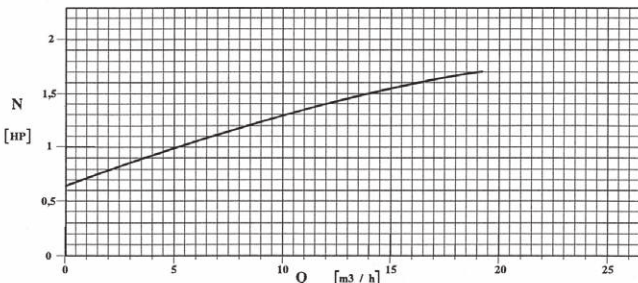
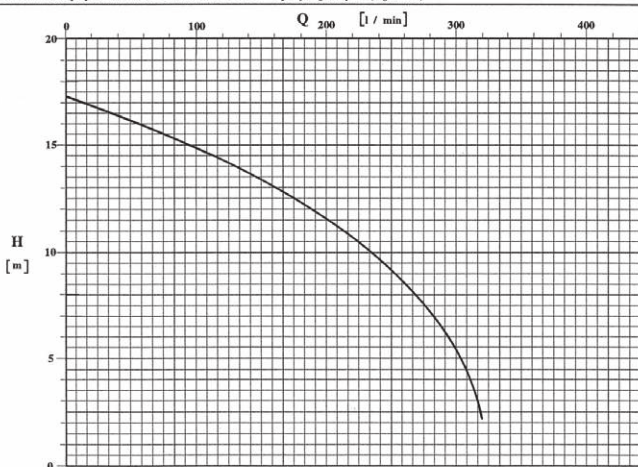
POMPA TIPO Pump type		CL 22 - 2 - 0,75			n	2800	giri / min r. p. m.
GIRANTE — Impeller							
TIPO Type	N° di pale n° of vanes	Pass. sferico max. sphere	∅ max max. diameter	∅ min min. diameter	Bocche tipo Ports type	Bocca aspir. Suction port	DN 25
APERTA	3	5 mm	110 mm	88 mm	DIN 11851	Bocca mand. Discharge port	DN 25
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³) Curves show performance with clear water at 20°F - Specific gravity 1 (kg/dm ³)							



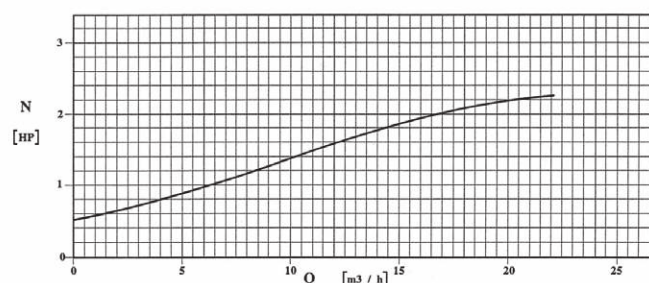
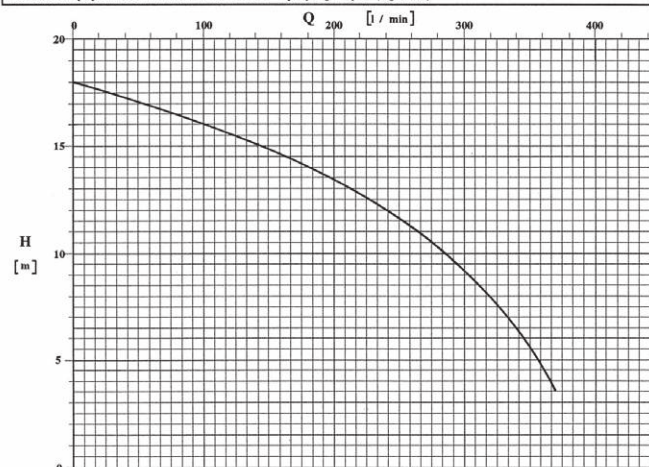
POMPA TIPO Pump type		CL 32 - 2 - 1,5			n	2900	giri / min r. p. m.
GIRANTE — Impeller							
TIPO Type	N° di pale n° of vanes	Pass. sferico max. sphere	∅ max max. diameter	∅ min min. diameter	Bocche tipo Ports type	Bocca aspir. Suction port	DN 32
APERTA	3	17 mm	102 mm	mm	DIN 11851	Bocca mand. Discharge port	DN 32
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³) Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³)							



POMPA TIPO Pump type		CL 32 - 2 - 2			n	2900	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	3	17 mm	119 mm	mm	DIN 11851	Bocca mand. Discharge port	DN 32
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³) Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³)							



POMPA TIPO Pump type		CL 32 - 2 - 3			n	2900	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	3	18 mm	119 mm	mm	DIN 11851	Bocca mand. Discharge port	DN 40
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³) Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³)							

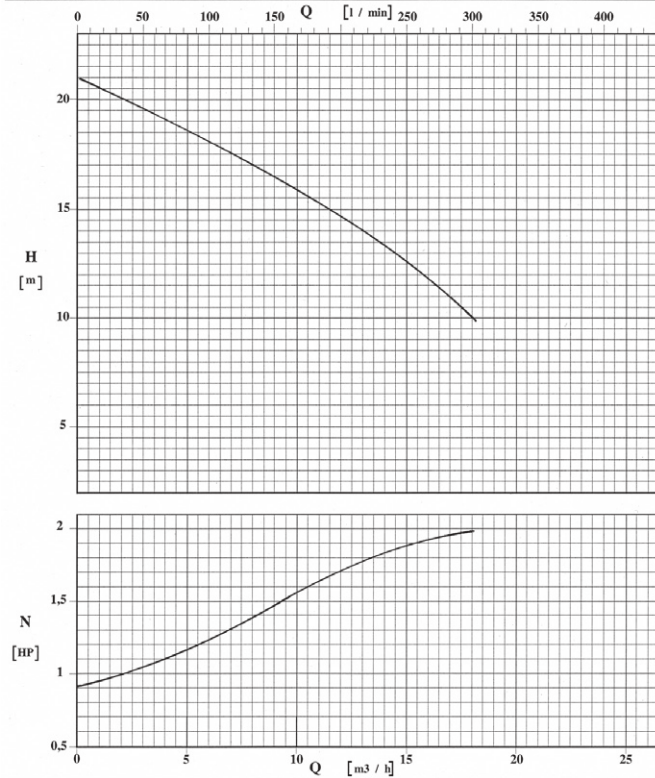


CURVE CARATTERISTICHE PERFORMANCE CURVES

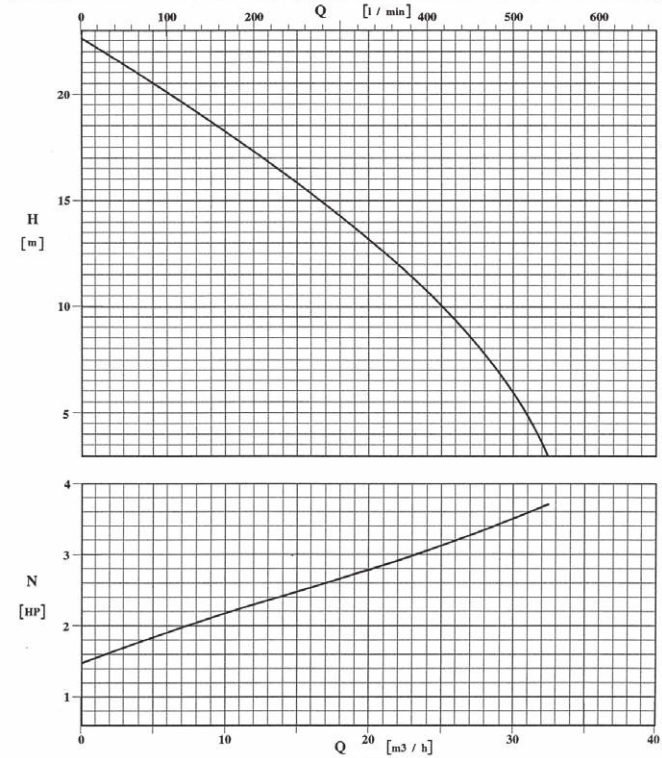
Serie CL CL Series

2900 giri/min - GIRANTE APERTA - 2900 rev/min - OPEN IMPELLER

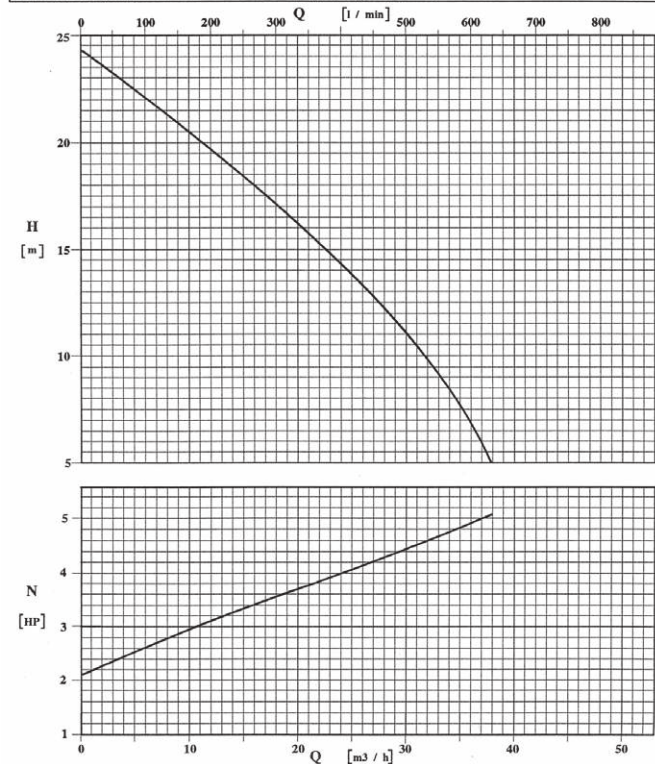
POMPA TIPO Pump type		CL 41 - 2 - 2				n	2900	giri / min r. p. m.
GIRANTE - Impeller								
TIPO Type	N° di pale n° of vanes	Pass. sferico max. sphere	Ø max max. diameter	Ø min min. diameter	Bocche tipo Ports type	Bocca aspir. Suction port	DN	40
APERTA	3	15 mm	140 mm	110 mm	DIN 11851	Bocca mand. Discharge port	DN	32
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³) Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³)								



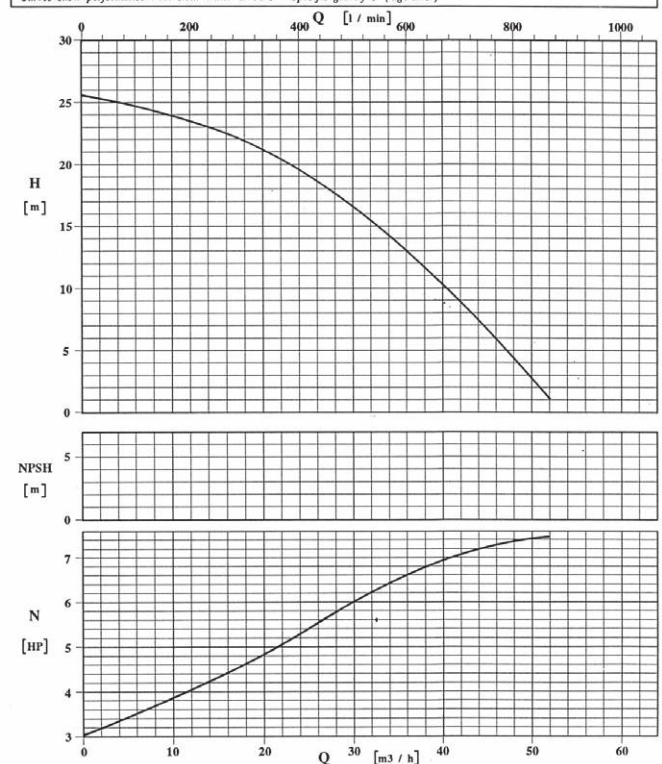
POMPA TIPO Pump type		CL 41 - 2 - 4				n	2900	giri / min r. p. m.
GIRANTE - Impeller								
TIPO Type	N° di pale n° of vanes	Pass. sferico max. sphere	Ø max max. diameter	Ø min min. diameter	Bocche tipo Ports type	Bocca aspir. Suction port	DN	50
APERTA	3	20 mm	137 mm	mm	DIN 11851	Bocca mand. Discharge port	DN	40
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³) Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³)								



POMPA TIPO Pump type		CL 41 - 2 - 5,5				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	3	20 mm	150 mm	mm	DIN 11851	Bocca mand. Discharge port	DN	40
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³) Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³)								



POMPA TIPO Pump type		CL 51 - 2 - 7,5				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	3	24 mm	150 mm	mm	DIN 11851	Bocca mand. Discharge port	DN	50
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³) Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³)								



CURVE CARATTERISTICHE

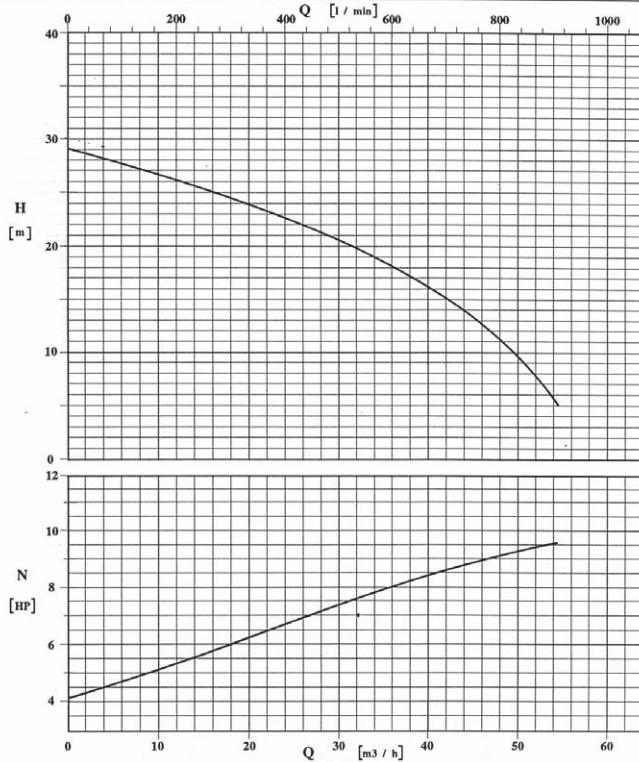
PERFORMANCE CURVES

Serie CL

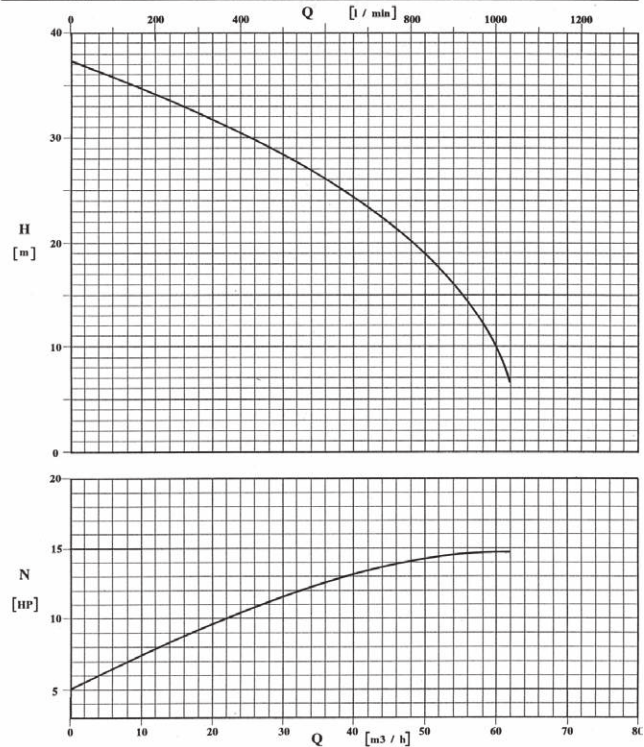
CL Series

2900 giri/min - GIRANTE APERTA - 2900 rev/min - OPEN IMPELLER

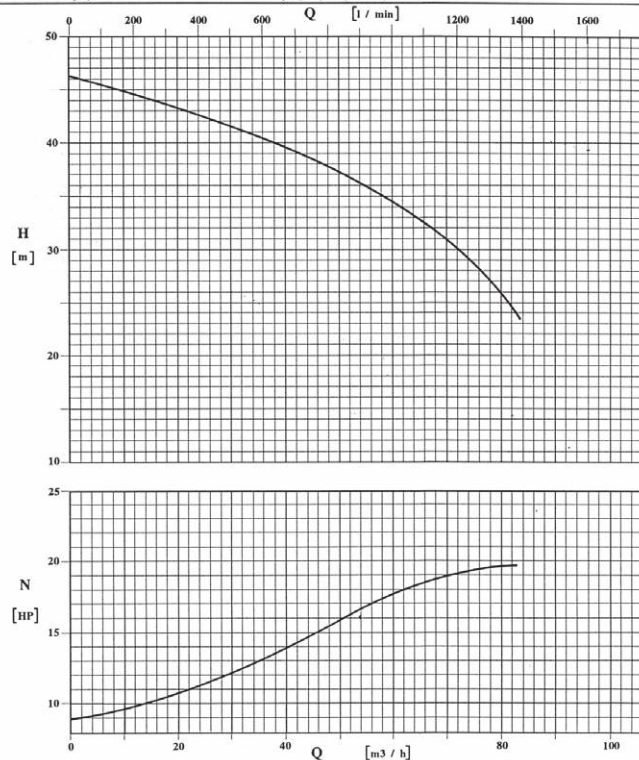
POMPA TIPO Pump type		CL 51-2-10			n	2900	giri / min r. p. m.
GIRANTE — Impeller							
TIPO Type	N° di pale n° of vanes	Pass. sferico max. sphere	∅ max max. diameter	∅ min min. diameter	Bocche tipo Ports type	Bocca aspir. Suction port	DN 65
APERTA	3	24 mm	165 mm	mm	DIN 11851	Bocca mand. Discharge port	DN 50
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³) Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³)							



POMPA TIPO Pump type		CI-CL 51-2-15			n	2900	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 65
APERTA	3	24 mm	180 mm	mm	DIN 11851	Bocca mand. Discharge port	DN 50
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³) Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³)							



POMPA TIPO Pump type		CL 51-2-20			n	2900	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 80
APERTA	6	24 mm	185 mm	mm	DIN 11851	Bocca mand. Discharge port	DN 65
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³) Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³)							



CURVE CARATTERISTICHE

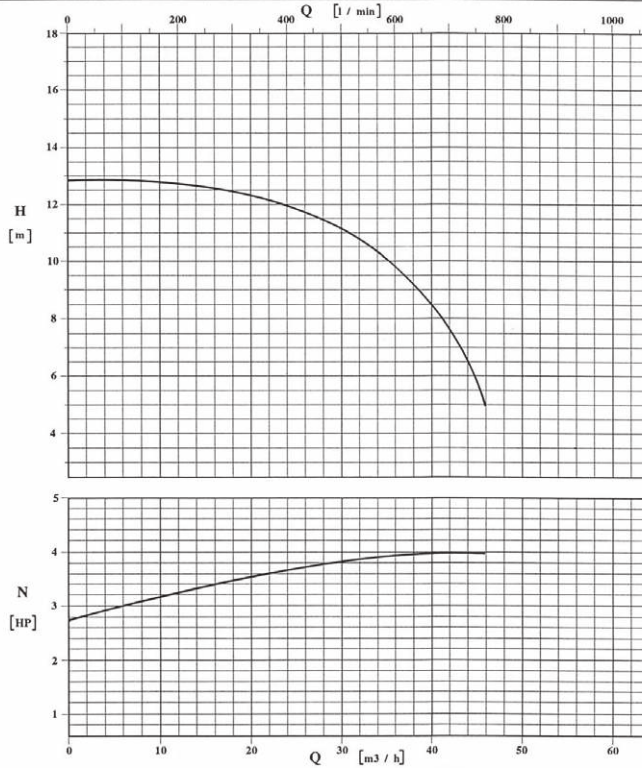
PERFORMANCE CURVES

Serie CLC

CLC Series

1450 giri/min - GIRANTE CHIUSA - 1450 rev/min - CLOSED IMPELLER

POMPA TIPO Pump type		CLC 51 - 4 - 4			n	1450	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 80
CHIUSA	6	34 mm	200 mm	160 mm	DIN 11851	Bocca mand. Discharge port	DN 65
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³) Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³)							



CURVE CARATTERISTICHE

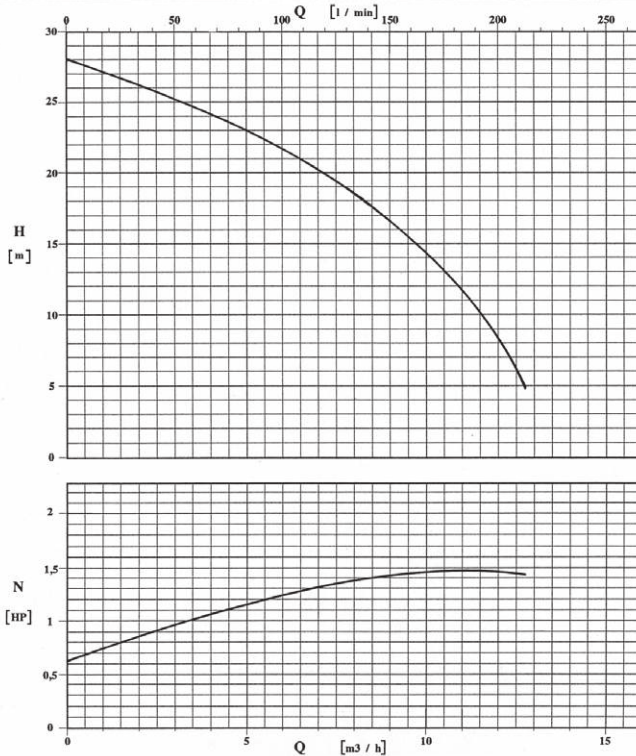
PERFORMANCE CURVES

Serie CLC

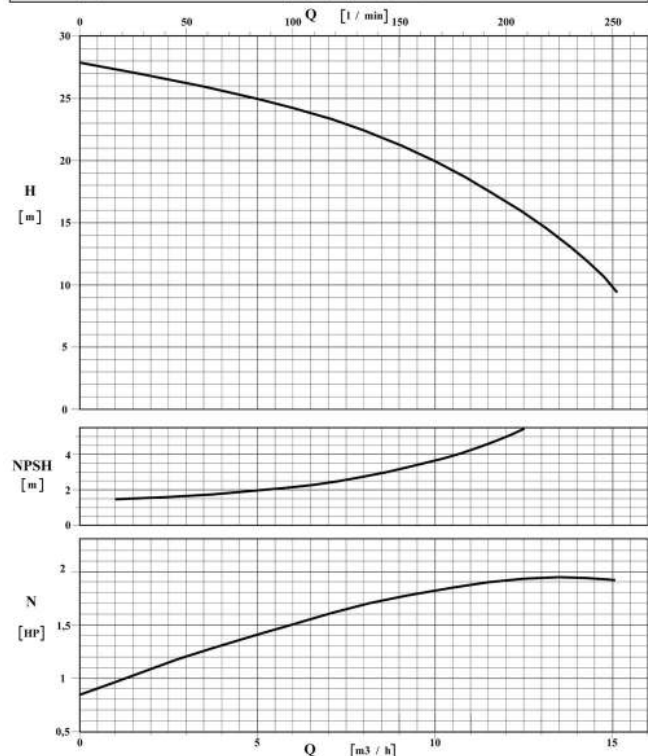
CLC Series

2900 giri/min - GIRANTE CHIUSA - 2900 rev/min - CLOSED IMPELLER

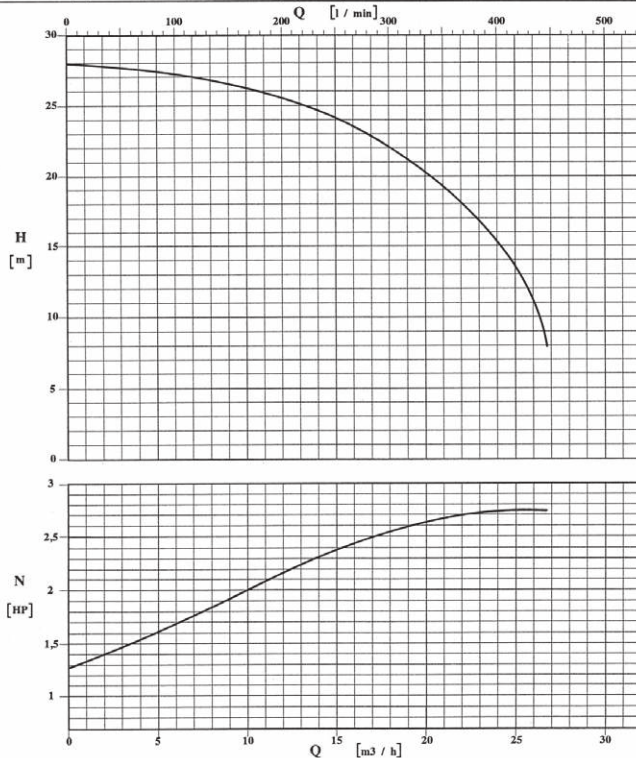
POMPA TIPO Pump type		CLC 41-2-1,5			n	2900	giri / min r. p. m.
GIRANTE — Impeller							
TIPO Type	N° di pale n° of vanes	Pass. sferico max. sphere	∅ max max. diameter	∅ min min. diameter	Bocche tipo Ports type	Bocca aspir. Suction port	DN 40
CHIUSA	6	1,5 mm	156 mm	mm	DIN 11851	Bocca mand. Discharge port	DN 32
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³) Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³)							



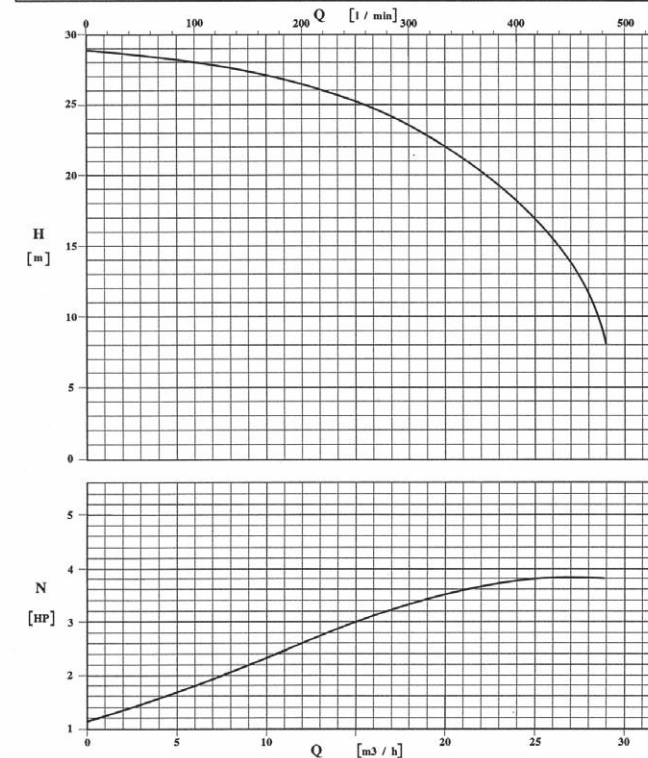
POMPA TIPO Pump type		CLC 41-2-2			n	2900	giri / min r. p. m.
GIRANTE — Impeller							
TIPO Type	N° di pale n° of vanes	Pass. sferico max. sphere	∅ max max. diameter	∅ min min. diameter	Bocche tipo Ports type	Bocca aspir. Suction port	DN 40
CHIUSA	6	2,5 mm	158 mm	mm	DIN 11851	Bocca mand. Discharge port	DN 32
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³) Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³)							



POMPA TIPO Pump type		CLC 41-2-3			n	2900	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 50
CHIUSA	6	3,7 mm	156 mm	120 mm	DIN 11851	Bocca mand. Discharge port	DN 40
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³) Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³)							



POMPA TIPO Pump type		CLC 41-2-4			n	2900	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 50
CHIUSA	6	7,3 mm	153 mm	mm	DIN 11851	Bocca mand. Discharge port	DN 40
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³) Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³)							



CURVE CARATTERISTICHE

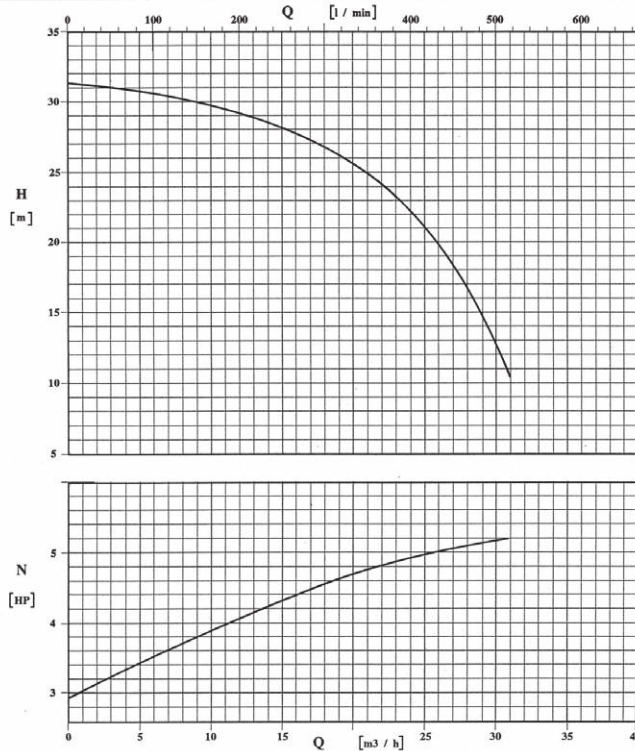
PERFORMANCE CURVES

Serie CLC

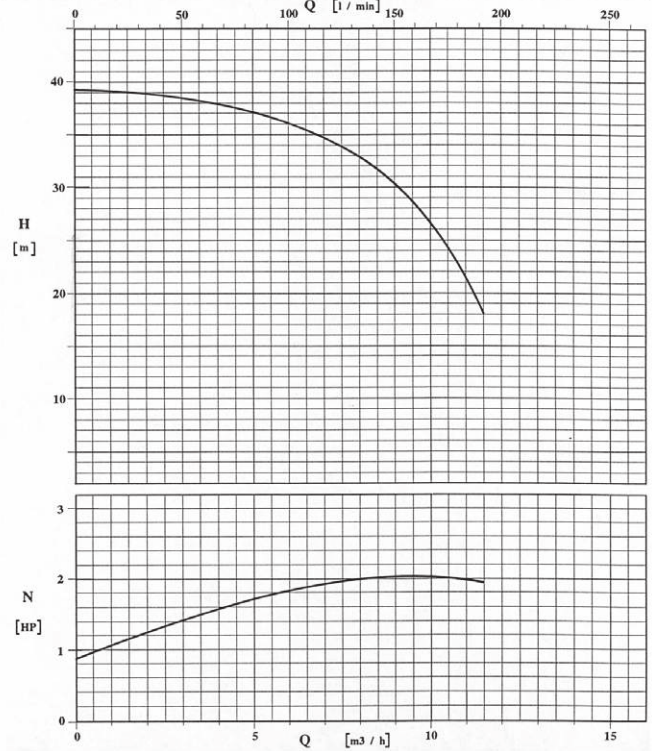
CLC Series

2900 giri/min - GIRANTE CHIUSA - 2900 rev/min - CLOSED IMPELLER

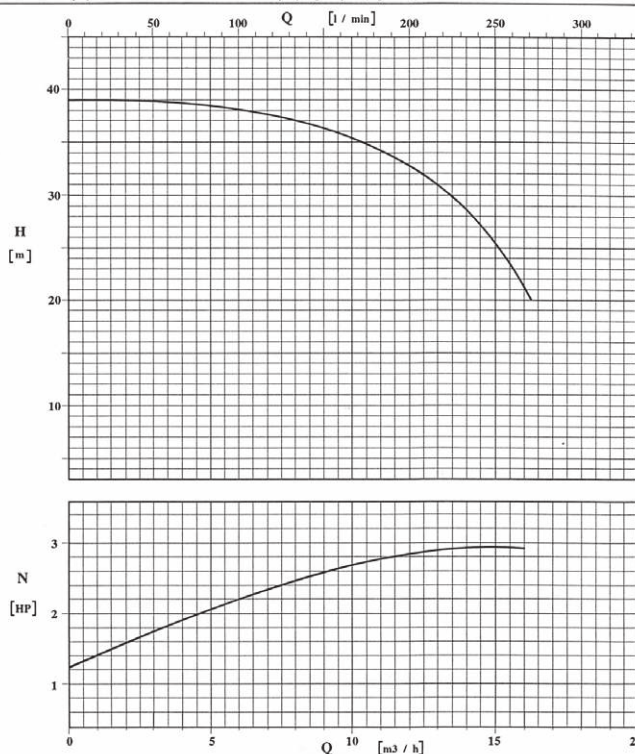
POMPA TIPO		CLC 41 - 2 - 5,5				n	2900	giri / min
Pump type		GIRANTE - Impeller				r. p. m.		
TIPO	N° di pale	Pass. sferico	Ø max	Ø min	Bocche tipo	Bocca aspir.		
Type	n° of vanes	max. sphere	max. diameter	min. diameter	Ports type	Suction port	DN 50	
CHIUSA	6	10 mm	153 mm	mm	DIN 11851	Bocca mand.	DN 40	
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³)								
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³)								



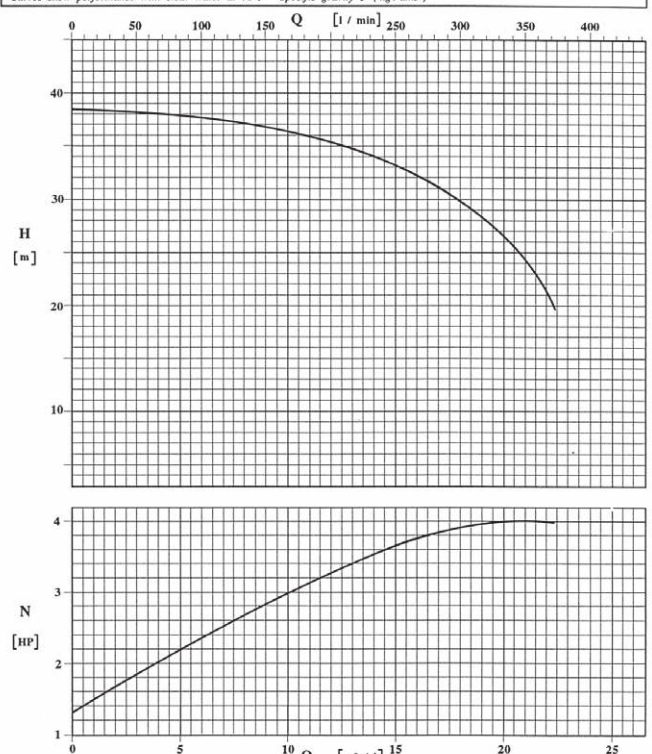
POMPA TIPO		CLC 51 - 2 - 2				n	2900	giri / min
Pump type		GIRANTE - Impeller				r. p. m.		
TIPO	N° di pale	Pass. sferico	Ø max	Ø min	Bocche tipo	Bocca aspir.		
Type	n° of vanes	max. sphere	max. diameter	min. diameter	Ports type	Suction port	DN 25	
CHIUSA	6	2,6 mm	178 mm	mm	DIN 11851	Bocca mand.	DN 25	
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³)								
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³)								



POMPA TIPO		CLC 51 - 2 - 3				n	2900	giri / min
Pump type		GIRANTE - Impeller				r. p. m.		
TIPO	N° di pale	Pass. sferico	Ø max	Ø min	Bocche tipo	Bocca aspir.		
Type	n° of vanes	max. sphere	max. diameter	min. diameter	Ports type	Suction port	DN 32	
CHIUSA	6	3,5 mm	175 mm	mm	DIN 11851	Bocca mand.	DN 32	
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³)								
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³)								



POMPA TIPO		CLC 51 - 2 - 4				n	2900	giri / min
Pump type		GIRANTE - Impeller				r. p. m.		
TIPO	N° di pale	Pass. sferico	Ø max	Ø min	Bocche tipo	Bocca aspir.		
Type	n° of vanes	max. sphere	max. diameter	min. diameter	Ports type	Suction port	DN 50	
CHIUSA	6	4,5 mm	179 mm	mm	DIN 11851	Bocca mand.	DN 40	
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³)								
Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³)								



CURVE CARATTERISTICHE

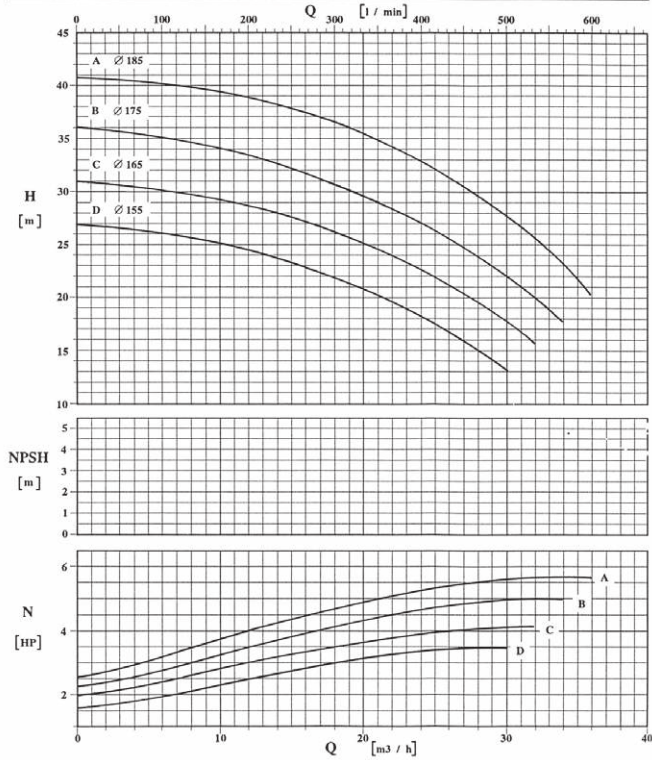
PERFORMANCE CURVES

Serie CLC

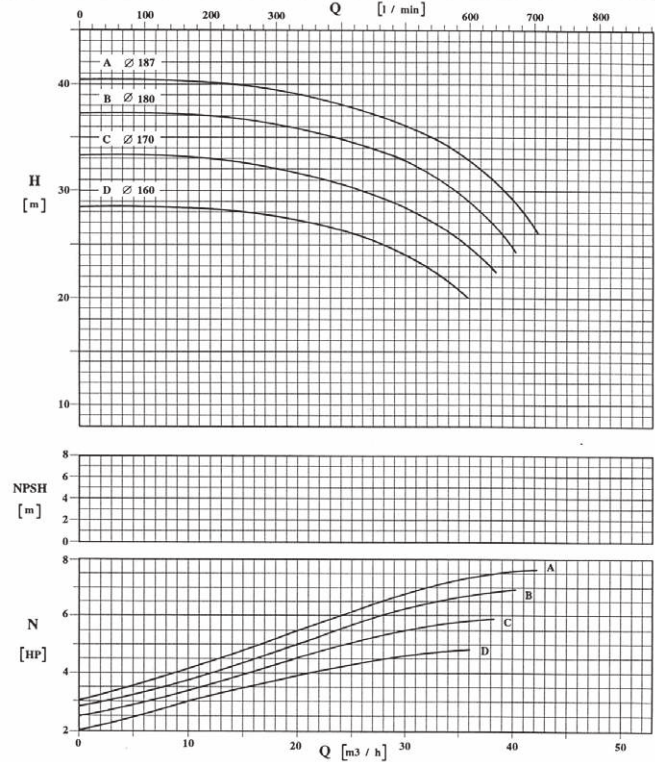
CLC Series

2900 giri/min - GIRANTE CHIUSA - 2900 rev/min - CLOSED IMPELLER

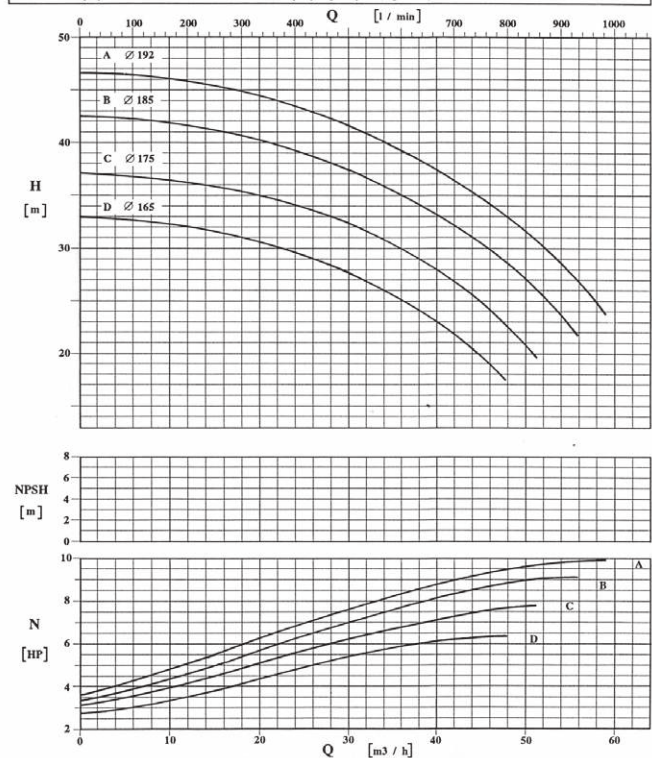
POMPA TIPO		CLC 51 - 2 - 5,5				n	2900	giri / min
Pump type						r. p. m.		
GIRANTE - Impeller								
TIPO	N° di pale	Pass. sferico	Ø max	Ø min	Bocche tipo	Bocca aspir.	DN 50	
Type	n° of vanes	max. sphere	max. diameter	min. diameter	Ports type	Suction port		
CHIUSA	6	5 mm	185 mm	140 mm	DIN 11851	Bocca mand.	DN 50	
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³) Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³)								



POMPA TIPO		CLC 51 - 2 - 7,5				n	2900	giri / min
Pump type						r. p. m.		
GIRANTE - Impeller								
TIPO	N° di pale	Pass. sferico	Ø max	Ø min	Bocche tipo	Bocca aspir.	DN 65	
Type	n° of vanes	max. sphere	max. diameter	min. diameter	Ports type	Suction port		
CHIUSA	6	6,5 mm	187 mm	145 mm	DIN 11851	Bocca mand.	DN 50	
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³) Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³)								



POMPA TIPO		CLC 51 - 2 - 10				n	2900	giri / min
Pump type						r. p. m.		
GIRANTE - Impeller								
TIPO	N° di pale	Pass. sferico	Ø max	Ø min	Bocche tipo	Bocca aspir.	DN 65	
Type	n° of vanes	max. sphere	max. diameter	min. diameter	Ports type	Suction port		
CHIUSA	6	6,5 mm	192 mm	155 mm	DIN 11851	Bocca mand.	DN 50	
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³) Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³)								



POMPA TIPO		CLC 51 - 2 - 15				n	2900	giri / min
Pump type						r. p. m.		
GIRANTE - Impeller								
TIPO	N° di pale	Pass. sferico	Ø max	Ø min	Bocche tipo	Bocca aspir.	DN 65	
Type	n° of vanes	max. sphere	max. diameter	min. diameter	Ports type	Suction port		
CHIUSA	6	11,5 mm	195 mm	155 mm	DIN 11851	Bocca mand.	DN 65	
CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg/dm ³) Curves show performance with clear water at 70°F - Specific gravity 1 (kg/dm ³)								

