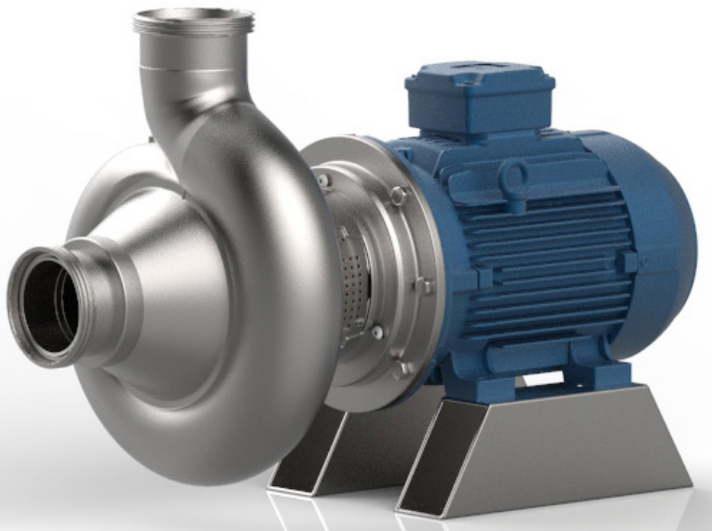
CSF csfinoxGroup
FLOW TECHNOLOGY COMPONENTS

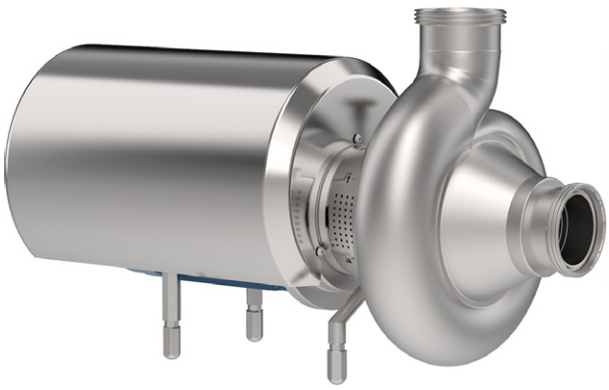
SANITARY CENTRIFUGAL PUMPS
CR series

HYGIENE BIOTECHNOLOGY INDUSTRIAL

Centrifugal pumps incorporating a special auger type screw shaped impeller, which is ideal for the gentle handling of very delicate fluids and large soft solids in suspension. Wetted parts in investment cast CF-3M 1.4404 / AISI 316L stainless steel, electro-chemically polished to ensure the perfect surface finish. Separate IEC standard motor. Stainless steel shroud and adjustable feet on request.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.

Delicate handling without clogging.
The CR Series has been designed for very gentle handling of sensitive media at extremely low flow velocities.





CR pump with shroud

The screw shape impeller combines the properties of a centrifugal pump with the delicate characteristics of a positive displacement pump. The ability to handle high solids products in an extremely gentle way makes CR Series pumps ideal for food processing:
Fruit and vegetable handling, soups and sauces, cereals, fish transportation, food pastes, oil, wine recirculation.

TECHNICAL DATA

Flow rates up to 150 m3/h
Heads up to 20 m
Maximum operating pressure 10 bar up to 100°C
Temperature range -10°÷ +100°

Mechanical seals:

With seats to EN 12756, ISO 3069 standards.
Single internal mechanical seal
Single external mechanical seal
Double flushed mechanical seal

Elastomers (FDA Regulation (EC) No. 1935/2004):

Nitrile (NBR)
Ethylene propylene (EPDM)
Fluorocarbon seal (FPM - FKM)
FEP
FFPM - FFKM
Silicone

Connections:

DIN - SMS - IDF - BS / RJT - DS - CLAMP and EN1092-1 PN16 flanges suitable for all international standards.

GENERAL DIAGRAMS

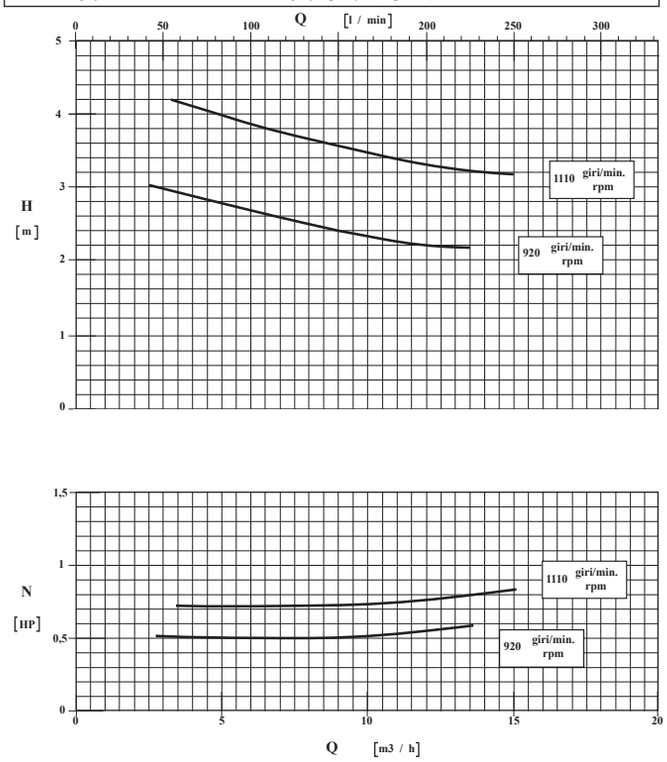
(Performance applies to H_2O at 20 °C, 1013 mbar, Data not binding)

POMPA TIPO *Pump type* **CR 65** | **n** 920/1110 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	1 Elica	33 mm	156 mm	---- 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)

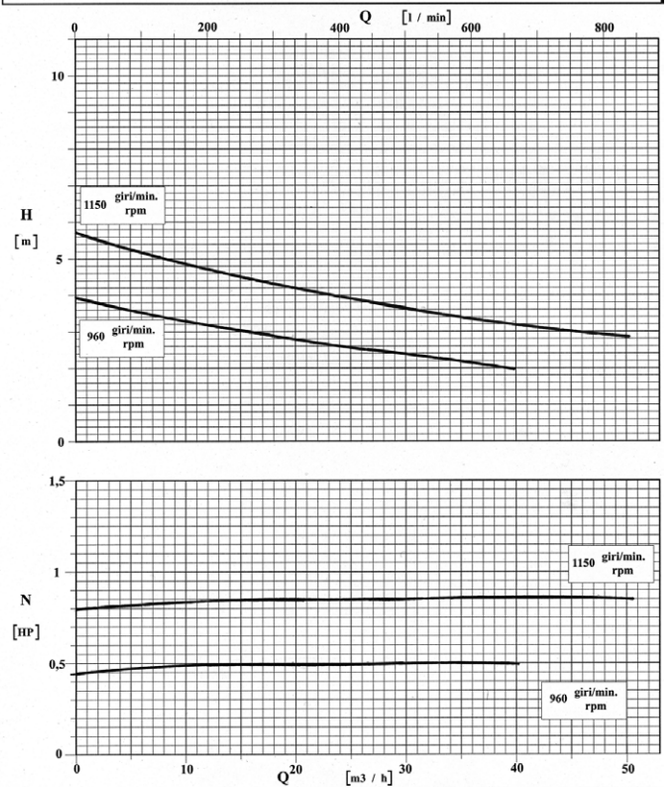


POMPA TIPO *Pump type* **CR 80** | **n** 960/1150 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	ϕ max *max. diameter*	ϕ min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 80
APERTA	1 Elica	45 mm	178 mm	---- 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)

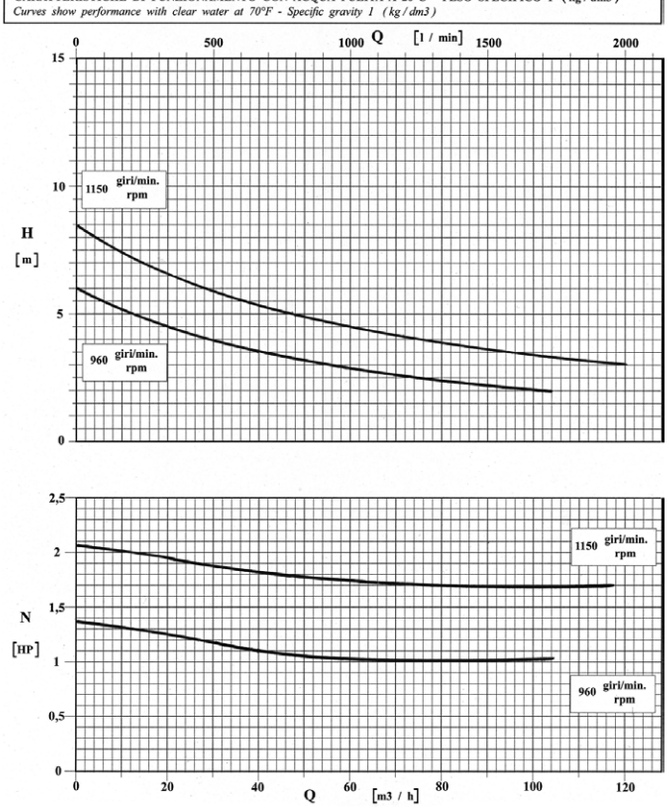


POMPA TIPO *Pump type* **CR 100** | **n** 960/1150 giri / min *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	ϕ max *max. diameter*	ϕ min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 100
APERTA	1 Elica	58 mm	210 mm	---- 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)

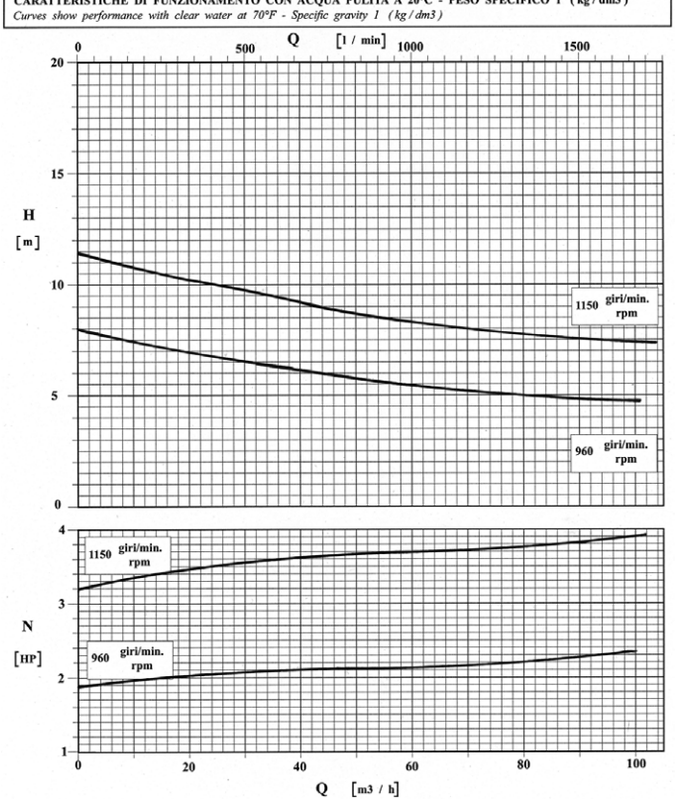


POMPA TIPO *Pump type* **CR 125** | **n** 960/1150 giri / min *r. p. m.*

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	1 Elica	63 mm	260 mm	---- 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)



POMPA TIPO — CR 65

Pump type

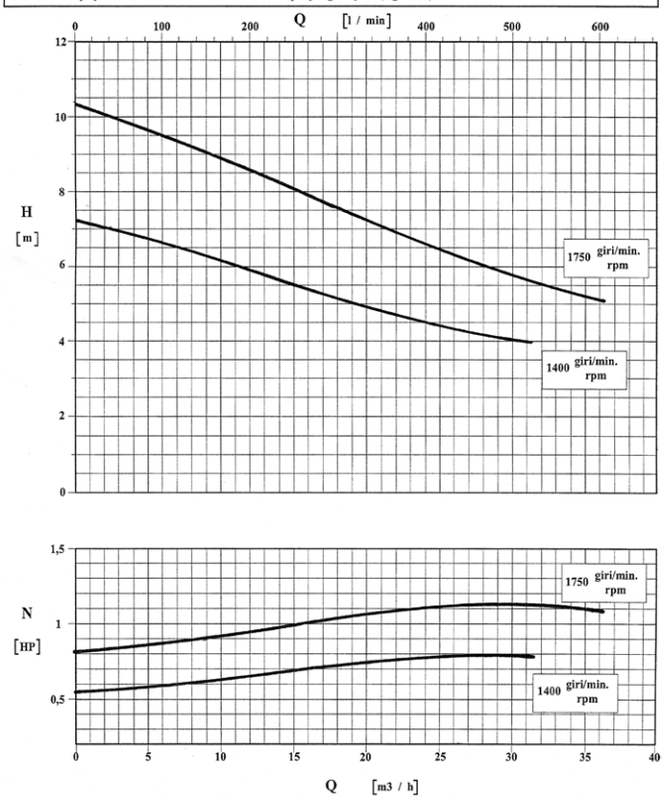
n 1400/1750 giri / min — *r. p. m.*

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	1 Elica	33 mm	156 mm	---- 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 — CR 80

Pump type

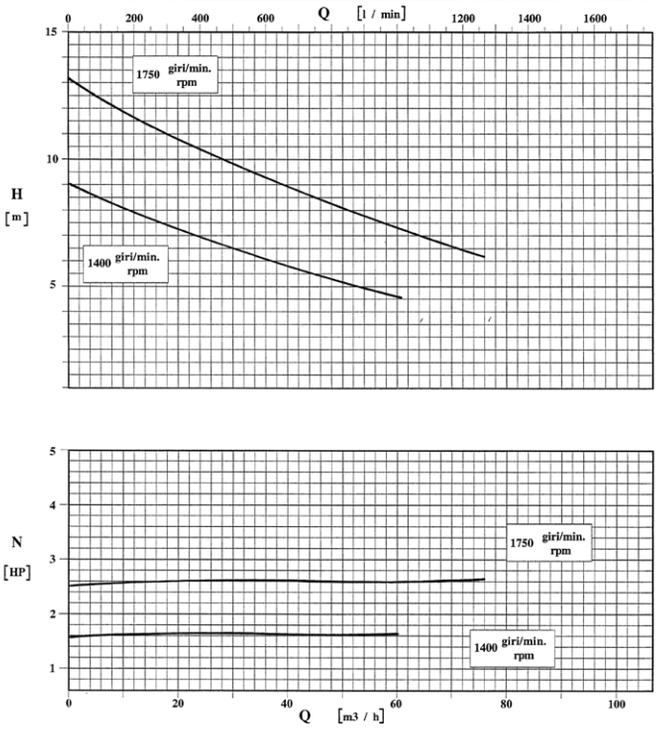
n 1450/1750 giri / min — *r. p. m.*

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	1 Elica	45 mm	178 mm	--- 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 — CR 100

Pump type

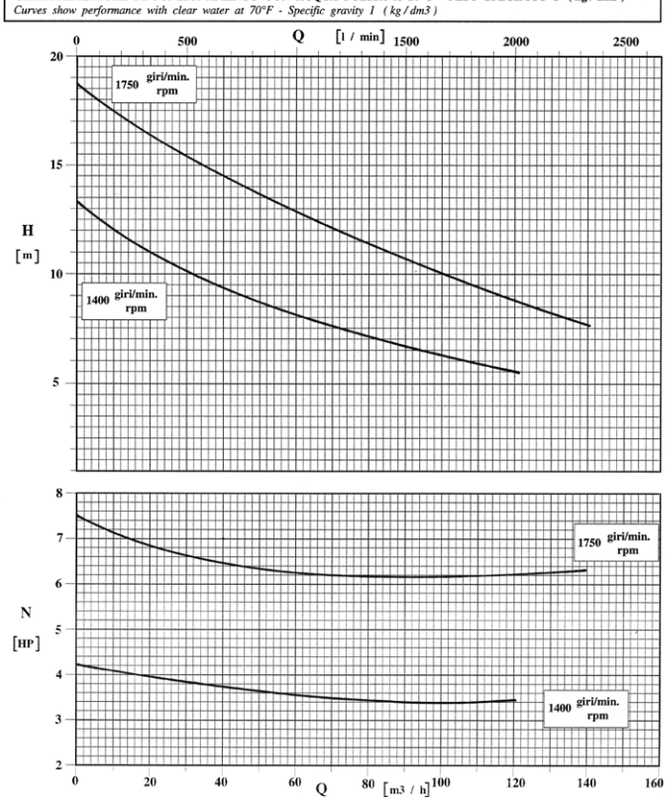
n 1450/1750 giri / min — *r. p. m.*

GIRANTE — *Impeller*

TIPO *Type*	N° di pale *n° of vanes*	Pass. sferico *max. sphere*	ϕ max *max. diameter*	ϕ min *min. diameter*	Bocche tipo *Ports type*	Bocca aspir. *Suction port*	DN 100
APERTA	1 Elica	58 mm	210 mm	---- 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 — CR 125

Pump type

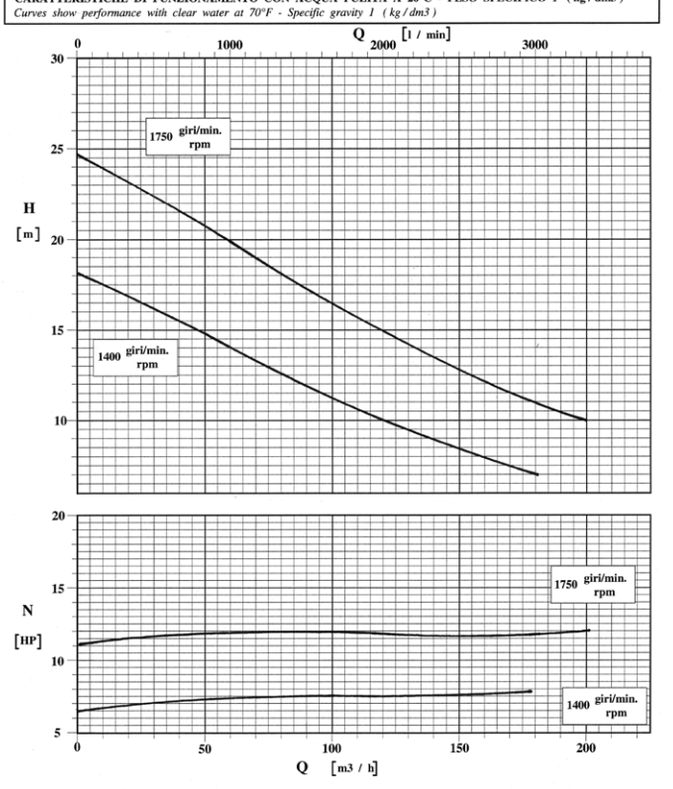
n 1450/1750 giri / min — *r. p. m.*

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	1 Elica	63 mm	260 mm	--- mm	DIN 11851	Bocca mand. *Discharge port*	DN 125

CARATTERISTICHE DI FUNZIONAMENTO CON ACQUA PULITA A 20°C - PESO SPECIFICO 1 (kg / dm3)

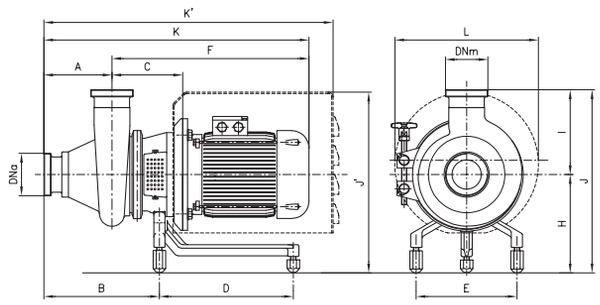
Curves show performance with clear water at 70°F - Specific gravity 1 (kg / dm3)



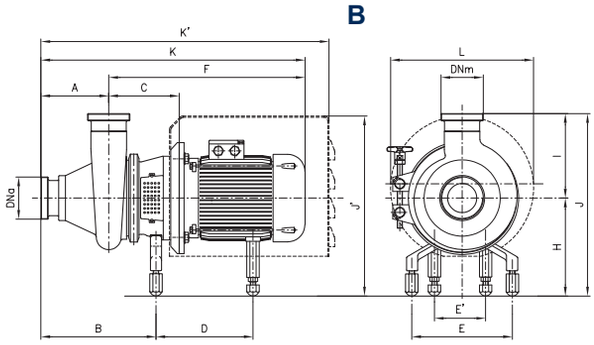
OVERALL DIMENSIONS

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

A



B

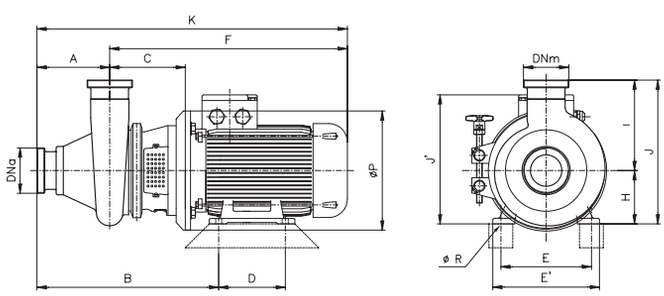


A = motors from 0,55 kW to 4 kW

Pump type		kW	DNa	DNm	A	B	C	D	E	E'	F	H	K	K'	I	J	J'	L
CR 65	1450 rpm	0,55 0,75 1,1 1,5	65	65	151	257	158	230	225	-	392 437	208	543 588	657	190	398	374	302
CR 80	1450 rpm	1,1 1,5 2,2 3 4	80	80	181	297	168	300	225	-	452 508	213 230	632 690	699 767	245	458 475	379 435	302 330
CR 100	1450 rpm	2,2 3 4	100	100	205	337	202	300	225	-	536	238	741	824	296	534	443	330

B = motors from 5,5 kW to 15 kW

Pump type		kW	DNa	DNm	A	B	C	D	E	E'	F	H	K	K'	I	J	J'	L
CR 100	1450 rpm	5,5 7,5 11 15	100	100	205	325 326	204 249	281,7 319,7 408	225	180 230	576 727	238 247	784 932	848 1105	294	526 532	460 510	370 370
CR 125	1450 rpm	5,5 7,5 11 15	125	125	232	370	230 270	281,7 319,7 412	225	180 230	604 748	238 247	836 980	900 1035	346	584 593	501 510	430



Pump type		kW	DNa	DNm	A	B	C	D	E	E'	F	H	K	I	J	J'	ØP	ØR
CR 65	1450 rpm	0,55 0,75 1,1 1,5	65	65	151	360 362	158	100	125 140	150 165	392 437	80 90	543 588	190	270 280	200 218	200	10
CR 80	1450 rpm	1,1 1,5 2,2 3 4	80	80	181	406 413	168	125 140	140 160 190	165 196 226	452 481 502	90 100 112	632 663 684	245	335 345 357	218 235 260	200 250	10 12
CR 100	1450 rpm	2,2 3 4 5,5 7,5 11 15	100	100	205	477 497 570	202 257	140 178 210	190 216 190	240 256 240	515 542 576 734	112 132 160	720 747 781 937	294	406 426 454	331 367 299 357	250 300 350	12 12 15
CR 125	1450 rpm	5,5 7,5 11 15	125	125	232	550 610	230 270	140 178 210	216 254	256 300	604 748	132 160	836 980	346	478 506	404 432	300 350	12 15

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