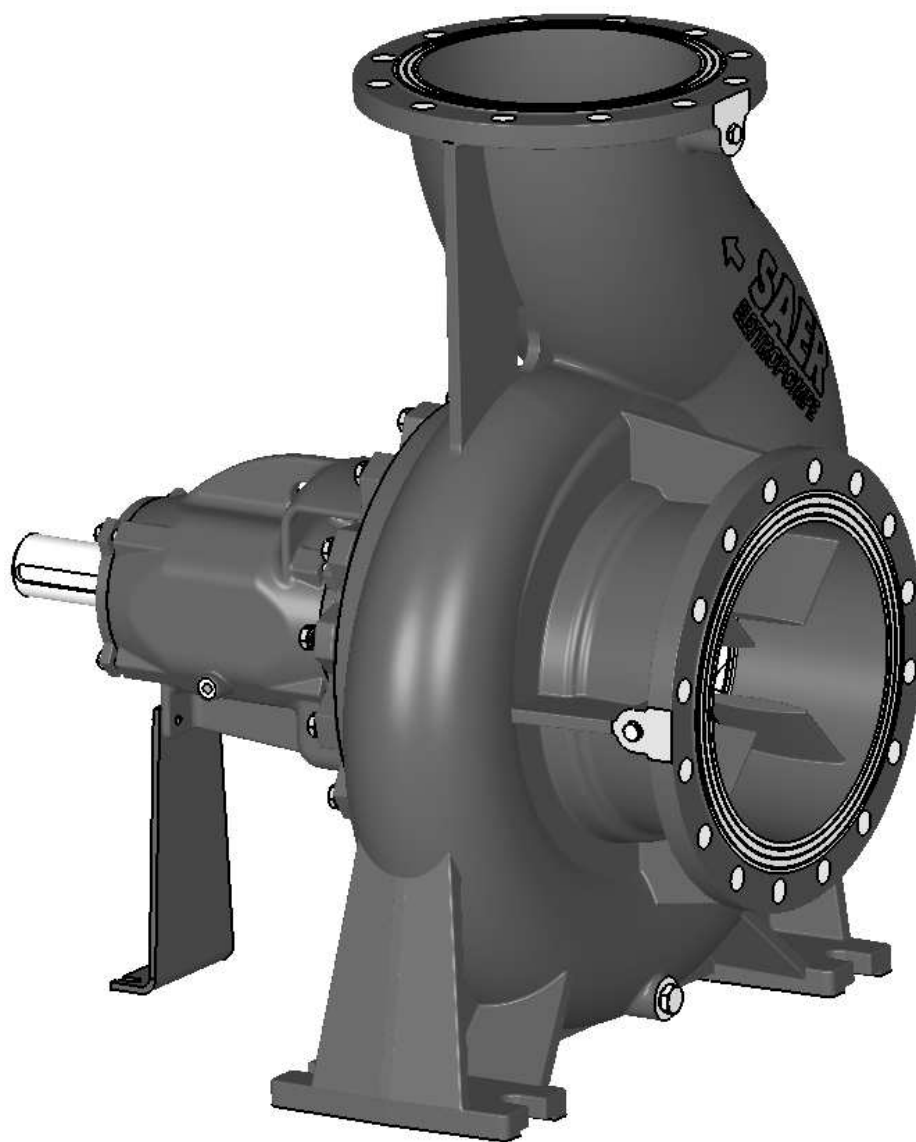


SAER[®]
ELETTROPOMPE

NCBK
POMPE CENTRIFUGHE
END-SUCTION CENTRIFUGAL PUMP



NCBK – NCBKZ

POMPE ED ELETTROPOMPE CENTRIFUGHE CON DIMENSIONI ECCEDENTI LA NORMA EN733 END-SUCTION CENTRIFUGAL PUMPS AND ELECTRIC PUMPS WITH DIMENSIONS EXCEEDING EN733 STANDARD;

IMPIEGHI

Impianti di ricircolo, di riscaldamento, di condizionamento, di recupero calore, impianti di approvvigionamento idrico, gruppi di pressurizzazione e gruppi antincendio.

CARATTERISTICHE COSTRUTTIVE

NCBK: pompe centrifughe ad asse nudo;

NCBKZ: elettropompe centrifughe su base;

Il gruppo motore e la parte rotante della pompa, sono estraibili senza dovere rimuovere il corpo pompa dalle tubazioni dell'impianto.

Idraulica: corpo pompa con dimensioni e prestazioni eccedenti la norma EN 733, girante chiusa equilibrata dinamicamente e con fori di equilibrio per il bilanciamento della spinta assiale. Albero interamente in acciaio inox, cuscinetti a sfera lubrificati a grasso (su richiesta lubrificati ad olio), flangie (UNI EN 1092-2): PN16

Dimensioni disponibili: 250-315 / 250-400 / 250-500 (a partire da primavera 2011 disponibili anche taglie: 150-500 / 200-315 / 200-400 / 200-500 / 300-500)

Tenuta a baderna di serie, tenuta meccanica fornibile a richiesta.

DATI CARATTERISTICI

DN aspirazione: da DN200 a DN350 – DN mandata: da DN150 a DN300;

Temperatura del liquido pompato: da -15°C a +90°C (a richiesta +120°C)

Pressione massima d'esercizio (massima pressione ammissibile considerando la somma della pressione massima in aspirazione e della prevalenza a portata nulla):

Tipo	Corpo pompa	Temperatura del liquido pompato	PN max standard	PN max a richiesta
NCBK	Ghisa	-15°C / +90°C	10	16
NCBKX	Acciaio inossidabile	-15°C / +50°C	10	16
		+50°C / +90°C		14

Temperatura max ambiente: 40° C (oltre chiedere informazioni).

TOLLERANZE PRESTAZIONI

Pompe: UNI-EN-ISO 9906 Appendice A – a richiesta livello 1

Motore: norme IEC 60034-1.

INSTALLAZIONE E CARATTERISTICHE DI FUNZIONAMENTO

Le pompe serie NCBK possono essere posizionate con l'asse orizzontale, inclinato o verticale sempre con il motore verso l'alto (chiedere informazioni al servizio tecnico). Le caratteristiche di funzionamento di catalogo e di targhetta si intendono per servizio continuo ed acqua pulita. (peso specifico = 1000 kg/m³) con altezza manometrica massima di aspirazione di 1,5 m c.a. Per altezze manometriche superiori e fino ad un massimo di 6 m. c.a., le caratteristiche si riducono nei vari valori di portata. La tubazione aspirante deve essere assolutamente stagna e per i dati di catalogo deve avere i seguenti diametri minimi (Tubazioni di diametro inferiore riducono i valori di portata):

DN (aspirazione pompa) - mm	DN (tubo aspirazione) - mm
200	350
250	400
300	500
350	600

VERSIONI SPECIALI

Versione con cuscinetti lubrificati ad olio

Materiali di costruzione

Tenute meccaniche diverse

Tensioni speciali

ACCESSORI A RICHIESTA

Kit controflangie

Motore con protezione PTC

USES

Recirculating plants, heating, air conditioning, heat recovery, plants of water supply procurement, pressurising units and fire-fighting systems.

CONSTRUCTIVE CHARACTERISTICS

NCBK: bareshaft end-suction centrifugal pumps,

NCBKZ: bareshaft end-suction centrifugal pumps with electric motor, on a base.

The motor unit and the rotating part of the pump can be taken away without removing the pump body from the system piping.

Hydraulics: pump body with dimension and performances exceeding EN 733 rules, closed impeller dynamically balanced and with balance holes for the balancing of the axial thrust. Shaft completely in stainless steel, greased ball bearings (oil lubricated on request), flanges (UNI EN 1092-2): PN16

Available sizes: 250-315 / 250-400 / 250-500 (starting from Spring 2011 other sizes available: 150-500 / 200-315 / 200-400 / 200-500 / 300-500)

Shaft seal: stuffing box seal, mechanical seal on request.

FEATURES

DN aspiration: from DN200 to DN350 – DN delivery: from DN150 to

DN300;

Temperature of the pumped liquid: from -15°C up to 90°C (on request up to +120°C)

Max operation pressure (max allowed pressure in consideration of the sum of max. suction pressure and of the head with null flow rate):

Version	Pump body	Temperature of the pumped liquid	PN max standard	PN max on request
NCBK	Cast Iron	-15°C / +90°C	10	16
NCBKX	Stainless steel	-15°C / +50°C	10	16
		+50°C / +90°C		14

Max environment temperature: 40°C (for higher temperature, please, verify).

PERFORMANCE TOLERANCES

Pumps: UNI EN ISO 9906 Appendix A, level 1 on request.

Motor: IEC 60034-1 rules.

INSTALLATION AND OPERATION CHARACTERISTICS

The NCBK pumps can be positioned with horizontal, sloping or vertical axis always with the motor upwards (please, verify with our technical dep.). The operating characteristics of the catalogue and label are to be understood for continuous service and with clear water (specific weight = 1000 kg/m³) with a max manometric suction height of approximately 1,5 m. For higher manometric heights and up to a max of approximately 6 m, the characteristics decrease in the various delivery data. The suction piping must be absolutely hermetic and for the catalogue data it must have the following minimum diameters (pipes of smaller diameters reduce the delivery values):

DN (pump suction) - mm	DN (suction pipe) - mm
200	350
250	400
300	500
350	600

SPECIAL VERSIONS

Version with oil lubricated bearing

Constructive materials

Different mechanical seals

Special tensions

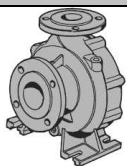


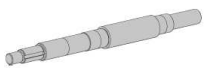


ACCESSORIES ON REQUEST

Kit counterflanges

Motors with PTC protection

Serie NCBK – Materiali componenti a contatto con il liquido

NCBK Series – Materials of the components in contact with the liquid

Componente Component		Versione Version	
		Standard	NCBKX
Corpo pompa Pump body		Ghisa Cast iron EN-GJL-250	Acciaio Stainless steel AISI 316
Girante Impeller		Ghisa Cast iron EN-GJL-250	Acciaio al carbonio Carbon steel G20Mn5
Disco/coperchio porta tenuta Seal holding cover/disc		Ghisa Cast iron EN-GJL-250	Acciaio Stainless steel AISI 316
Albero Shaft		Acciaio Stainless steel AISI 431	Acciaio Stainless steel Duplex 1.4362
Tenuta sull'albero Shaft seal		Baderna Stuffing box (a richiesta tenute meccaniche / mec. Seal on request: Q ₁ U ₃ VG, Q ₁ U ₃ EG)	
Guarnizione Gasket		Fibra naturale Natural fibre	Fibra naturale antiacido Anti-icer natural fibre

Altre versioni speciali a richiesta / Other special versions on request

Materiali tenute meccaniche – codifica secondo UNI EN 12756

Materials of mechanical seals – coding according to UNI EN 12756

Pos.	Componente Component	Tenuta meccanica tipo Mechanical seal type		
		↓	↓	↓
1	Anello rotante / Seal face /	B	Q ₁	Q ₁
2	Anello fisso / Seat	E	U ₃	U ₃
3	Elastomeri / Flexibile elements	E	E	V
4 / 5	Molla e Componenti metallici / Spring and metal bellows	G	G	G

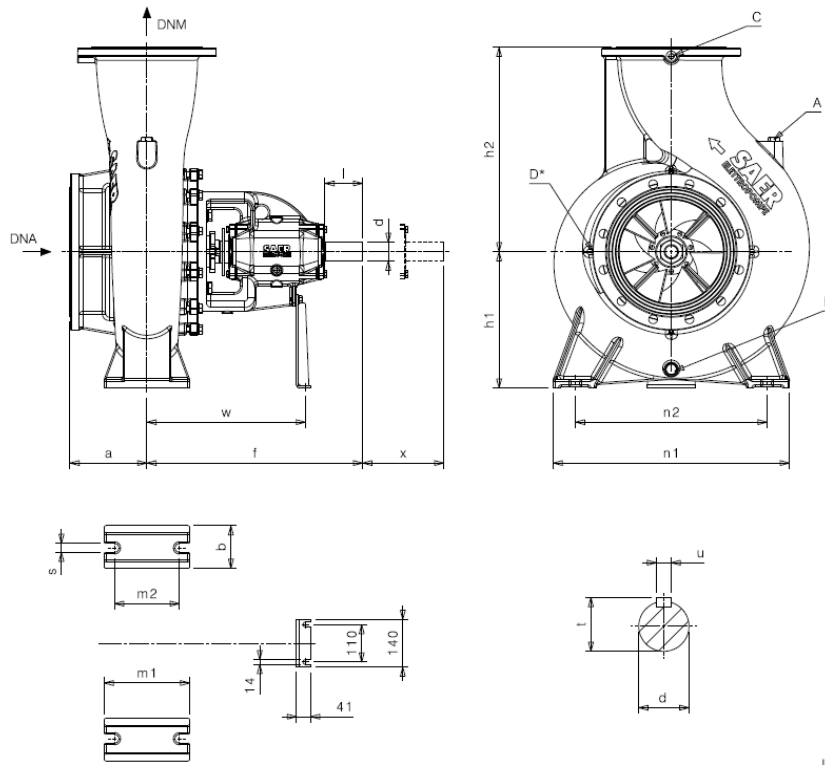
Tab. 2

Pos.	Materiali costruttivi / Constructive materials
1 / 2	U ₃ = Carburo di tungsteno impregnato al CrNiMo / Tungsten carbide impregnated with CrNiMo
	B = Carbonio impregnato di resina / Carbon impregnated with resin
	Q ₁ = SiC Carburo di silicio / Silicon carbide
	V = Ossido di allumina / Alumina oxide
3	E = EPDM Gomma Etilenpropilenica / Ethylene-propylene rubber
	V = Gomma al fluoro FPM-Viton / Fluorine rubber FPM-Viton
4 / 5	G = Acciaio al CrNiMo / Steel with CrNiMo

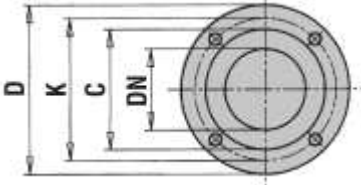
NCBK

DIMENSIONI E PESI

DIMENSIONS AND WEIGHT

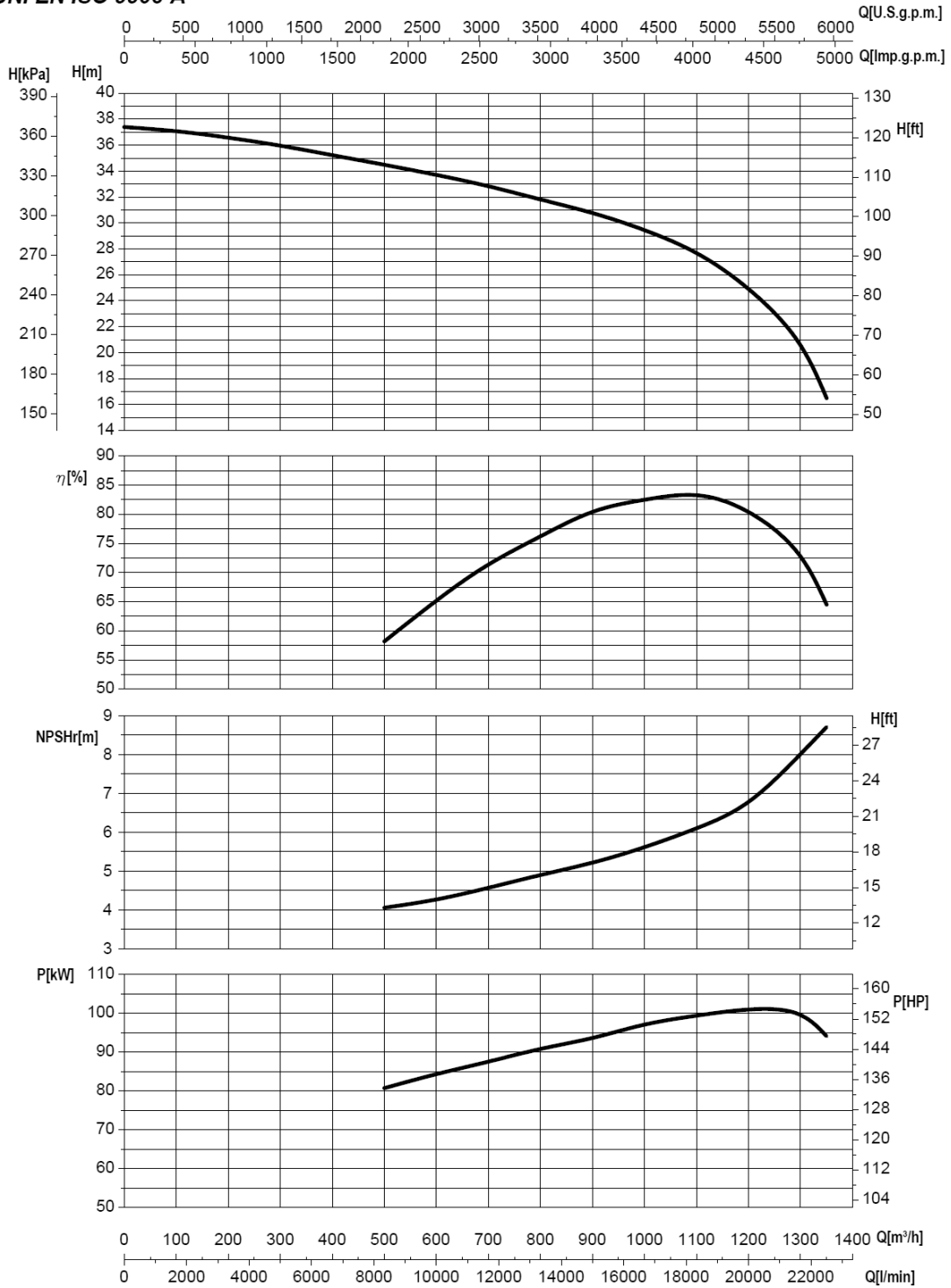


Tipo Type	DNA	DNM	a	b	d k6	f	h1	h2	l	m1	m2	n1	n2	s	t	u	w	x	A	B	C	D*	Kg
NCBK 250-315	300	250	225	130	55	630	400	560	110	250	190	690	560	27	59	16	463	220	G1/2"	G1/2"	G3/8"	G3/8"	345
NCBK 250-400	300	250	225	125	55	630	400	600	110	250	190	690	560	27	59	16	463	230	G1/2"	G1/2"	G3/8"	G3/8"	370
NCBK 250-500	300	250	225	130	70	720	450	670	140	250	190	800	670	30	75	20	550	240	G1/2"	G1/2"	G3/8"	G3/8"	565

	DN	C (mm)	D (mm)	K (mm)	Fori - Holes	
					Φ (mm)	N°
	250	319	405	355	28	12
	300	370	460	410	28	12

Tipo Type	Taglia Size	n	
NCBK	250-315 A	1450	
TAB.03512		1/min	rpm

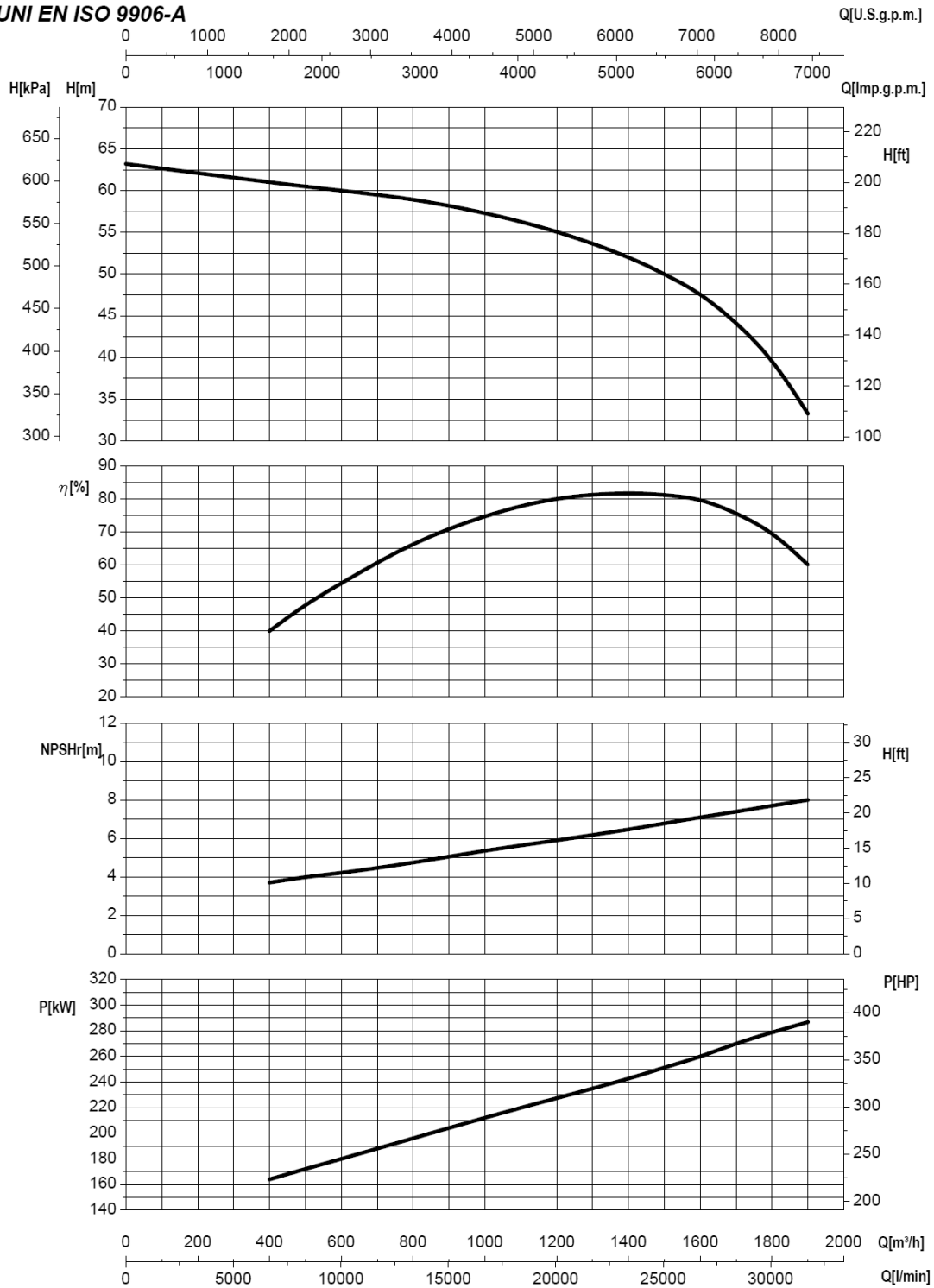
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Girante / Impeller $\Phi = 339$ mm

Tipo Type	Taglia Size	n	
NCBK	250-400 A	1450	
TAB.03506		1/min	rpm

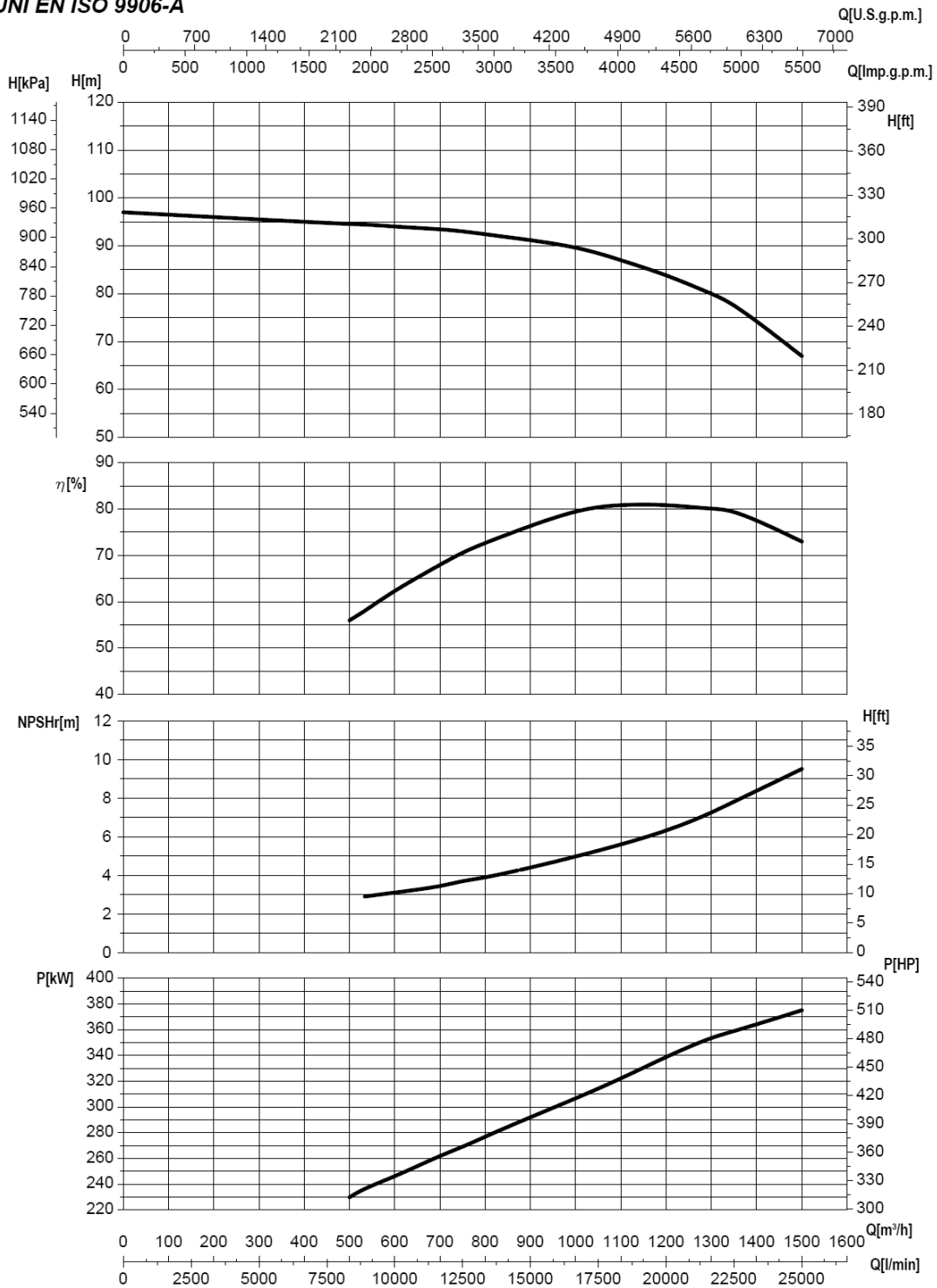
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Girante / Impeller $\Phi = 419$ mm

Tipo Type	Taglia Size	n	
NCBK	250-500 A	1450	
TAB.03503		1/min	rpm

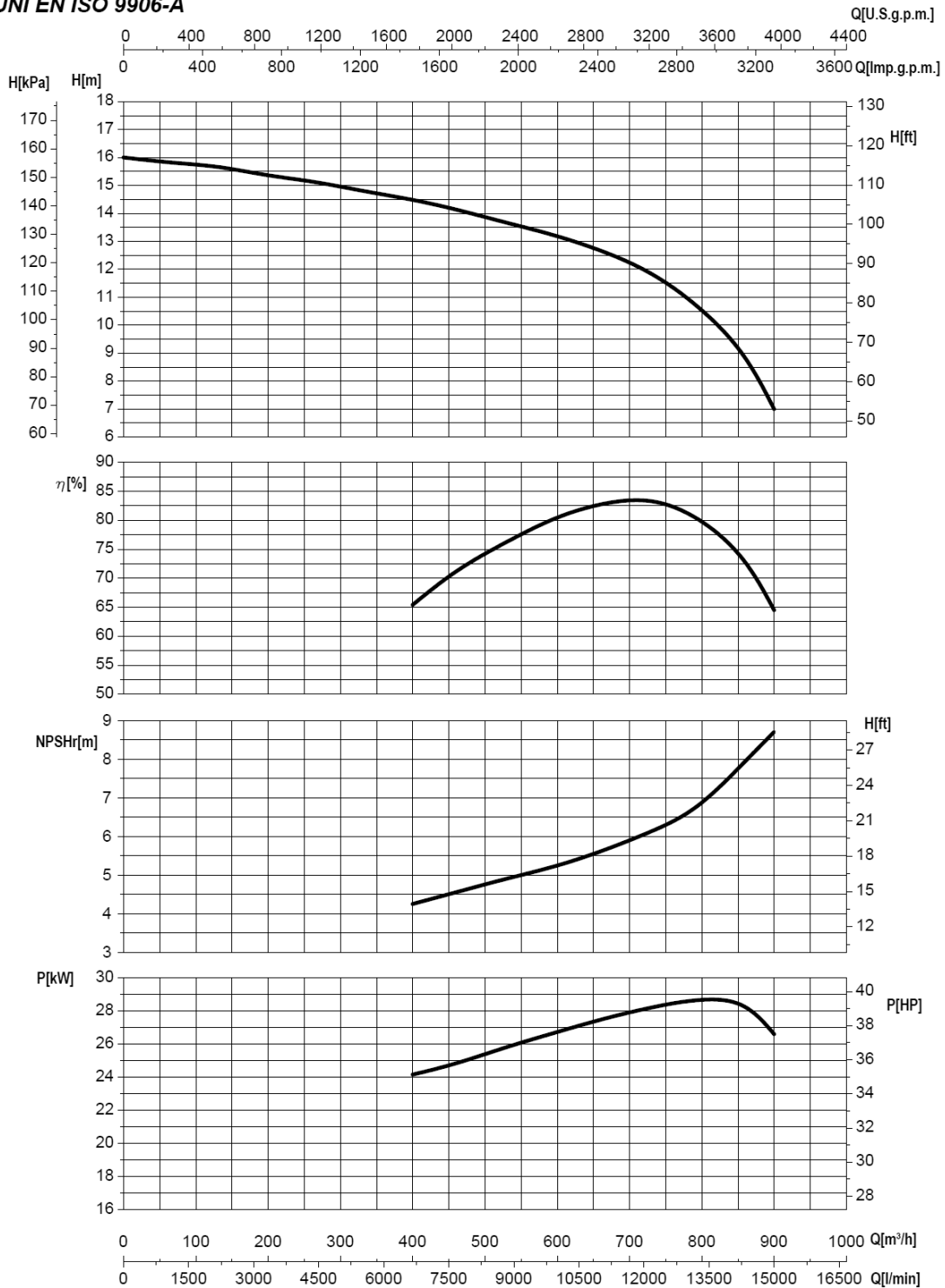
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Girante / Impeller $\Phi = 519$ mm

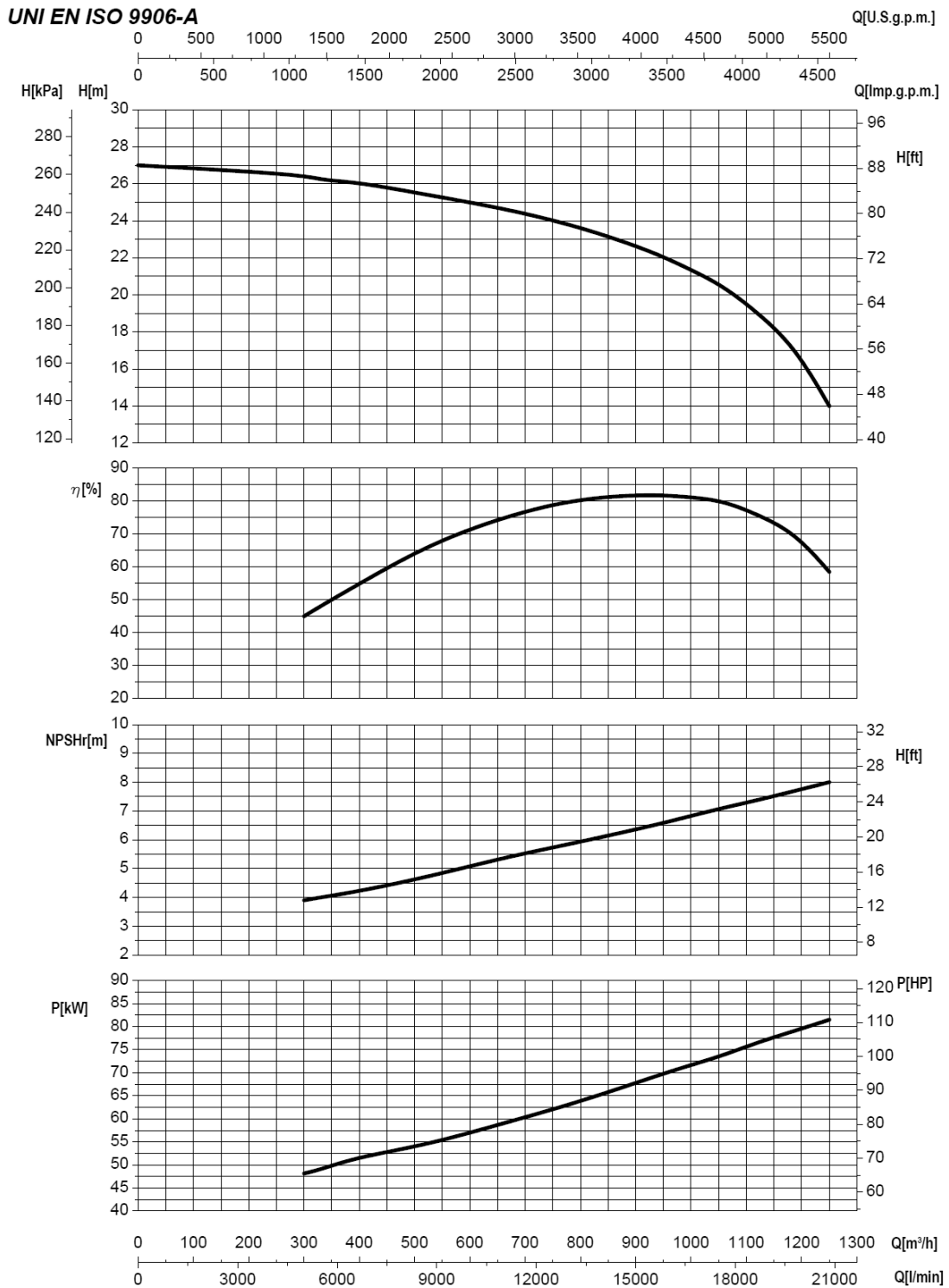
Tipo Type	Taglia Size	n	
NCBK	250-315 A	960	
TAB. 03515		1/min	rpm

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Girante / Impeller $\Phi = 339$ mm

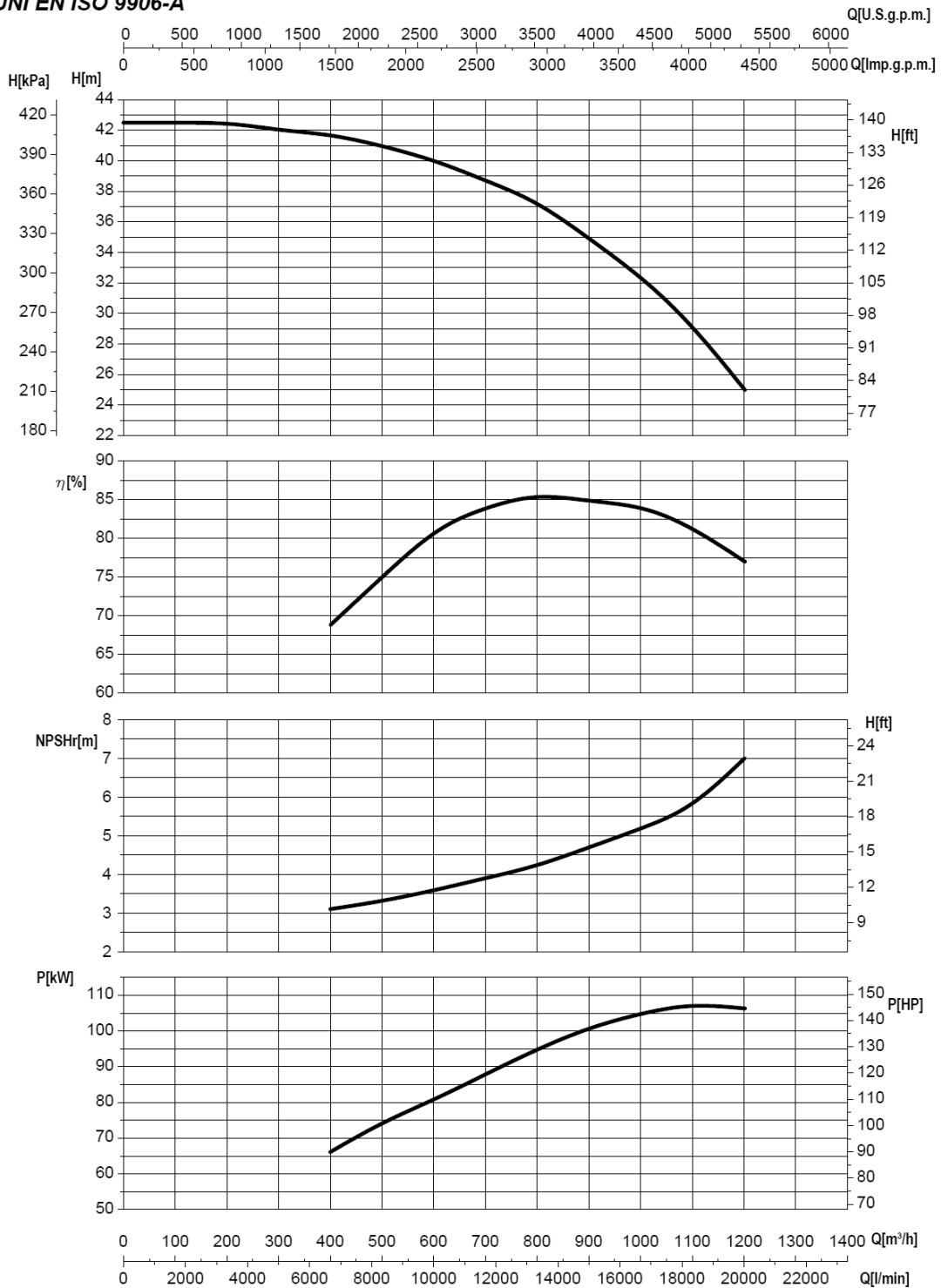
Tipo Type	Taglia Size	n	
NCBK	250-400 A	960	
TAB. 03516		1/min	rpm



Girante / Impeller $\Phi = 419$ mm

Tipo Type	Taglia Size	n	
NCBK	250-500 A	960	
TAB. 03513		1/min	rpm

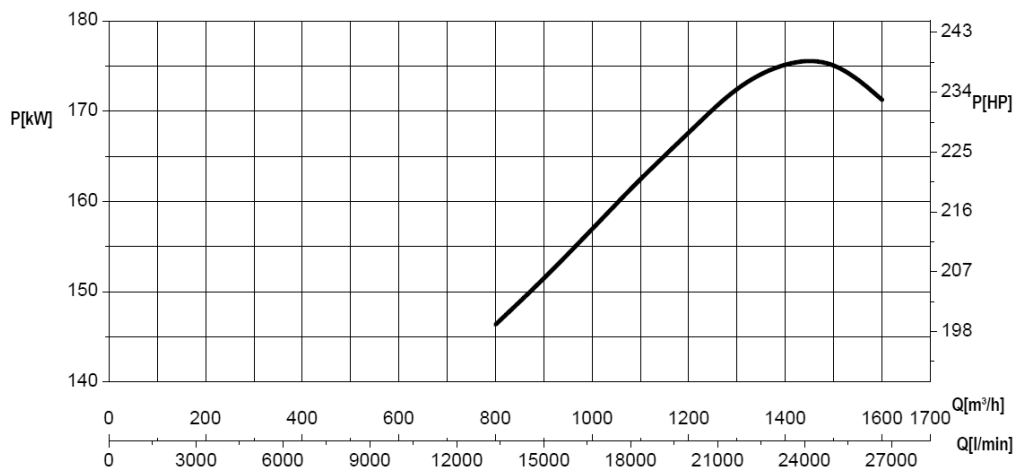
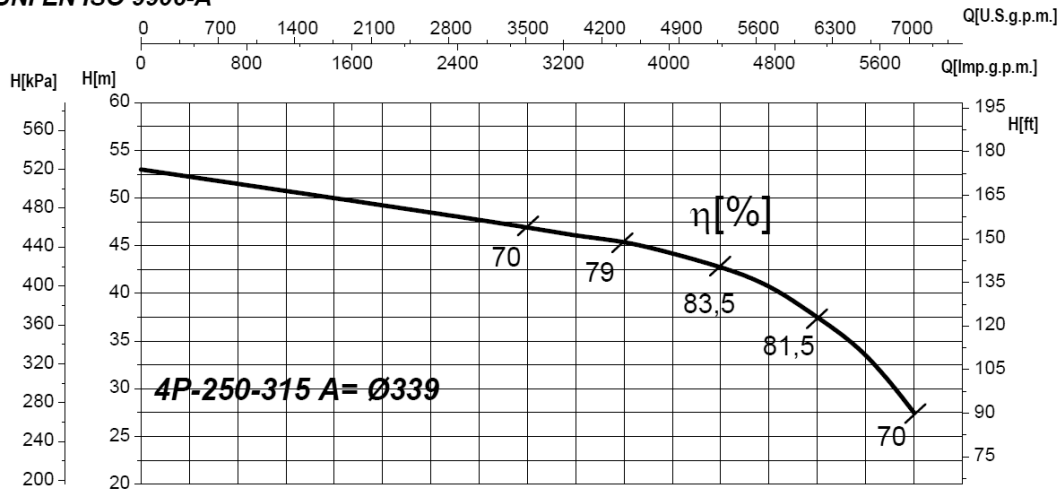
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Girante / Impeller $\Phi = 519$ mm

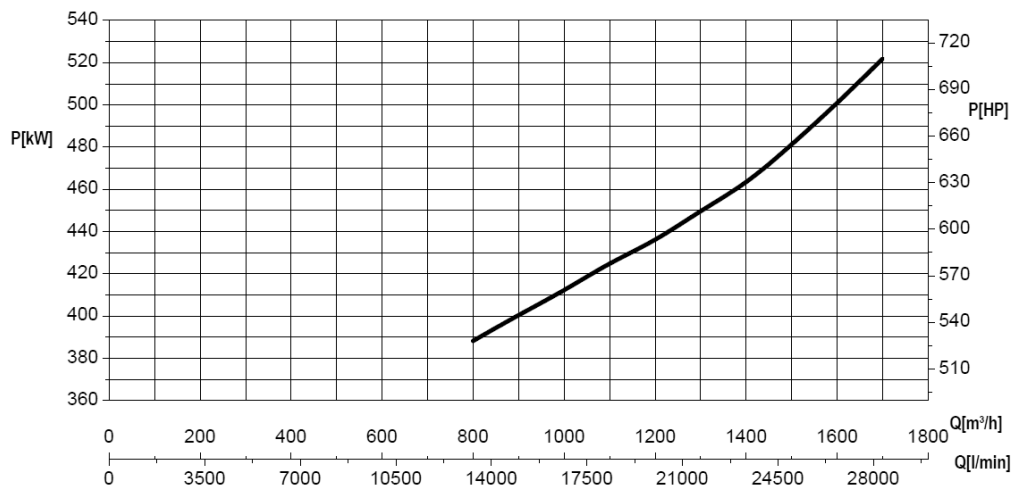
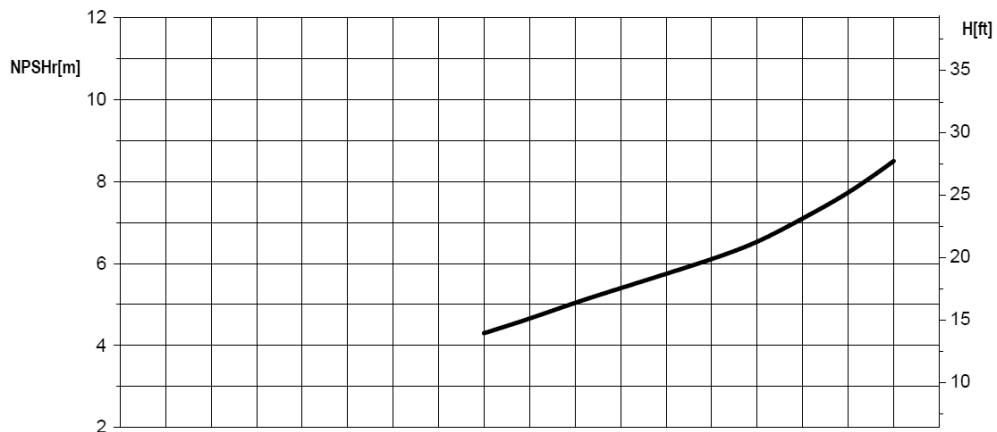
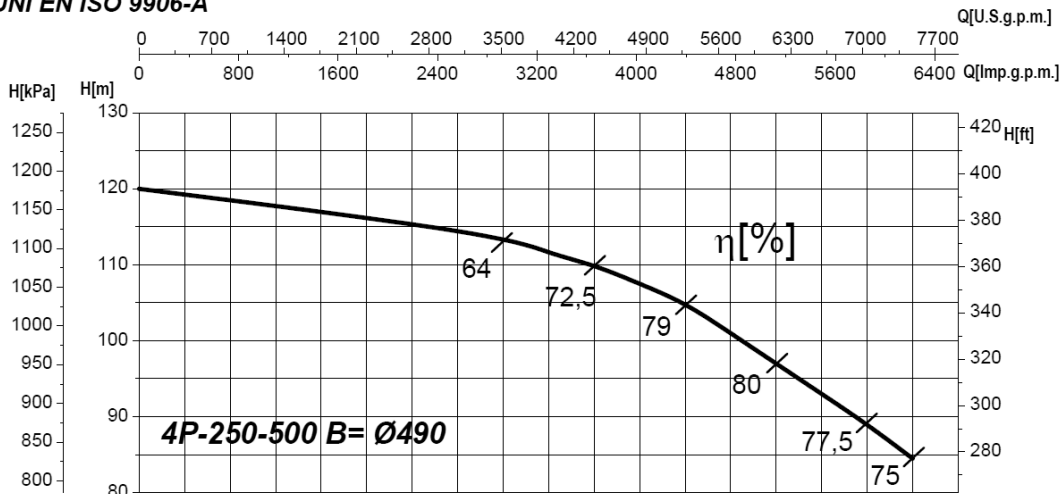
Tipo Type	Taglia Size	n	
NCBK	250-315 A	1800	
TAB . 03491		1/min	rpm

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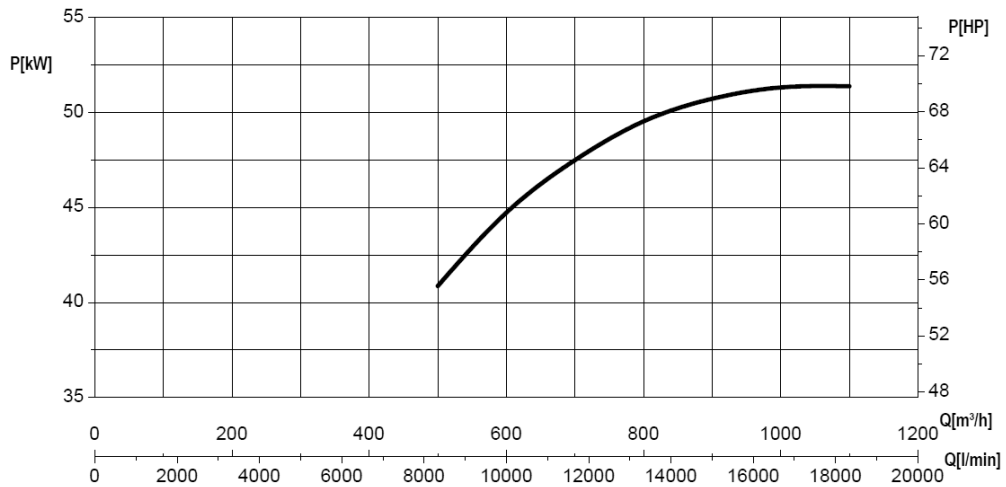
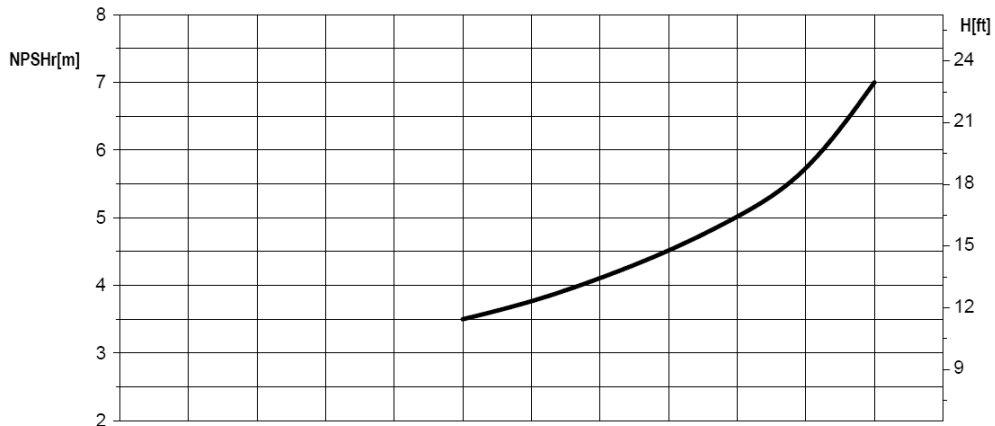
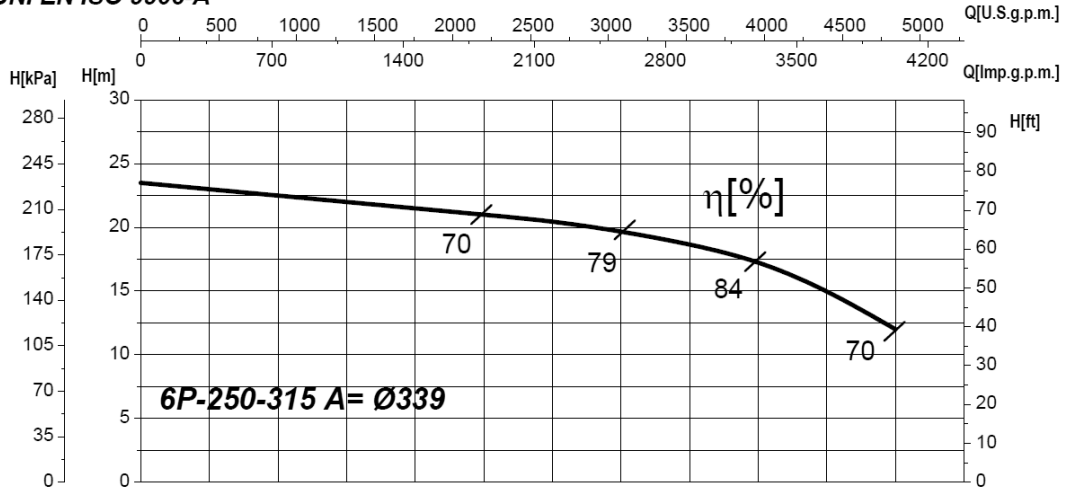
Tipo Type	Taglia Size	n	
NCBK	250-500 B	1800	
TAB . 03495		1/min	rpm

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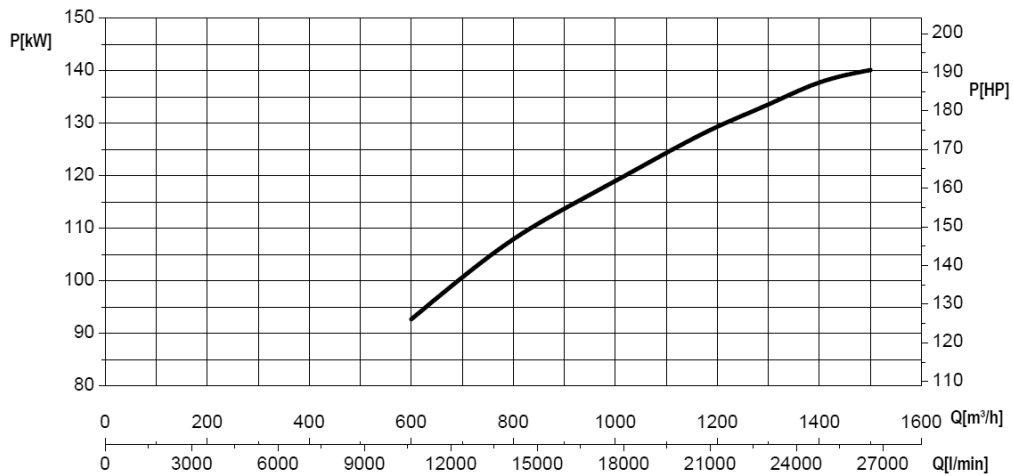
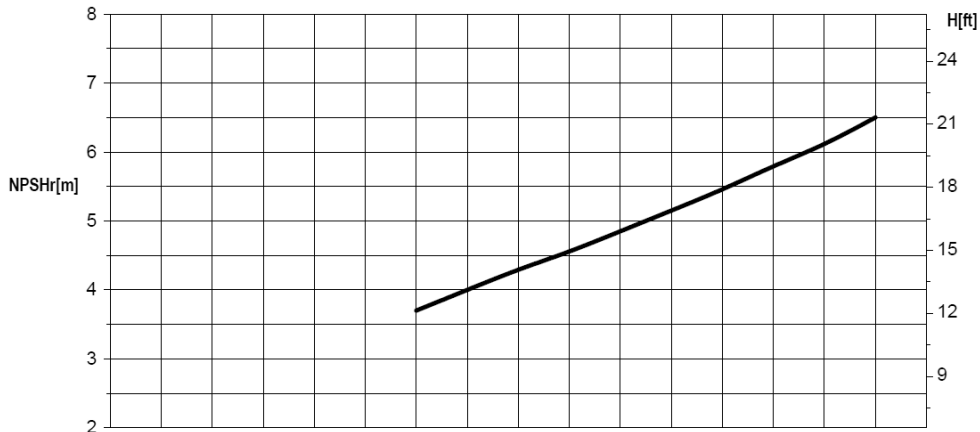
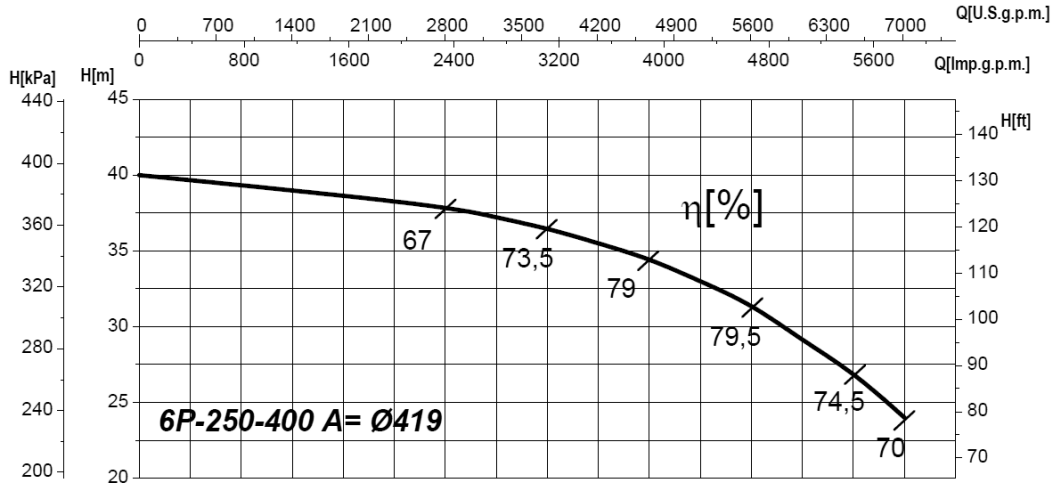
Tipo Type	Taglia Size	n
NCBK	250-315 A	1200
TAB . 03492		1/min rpm

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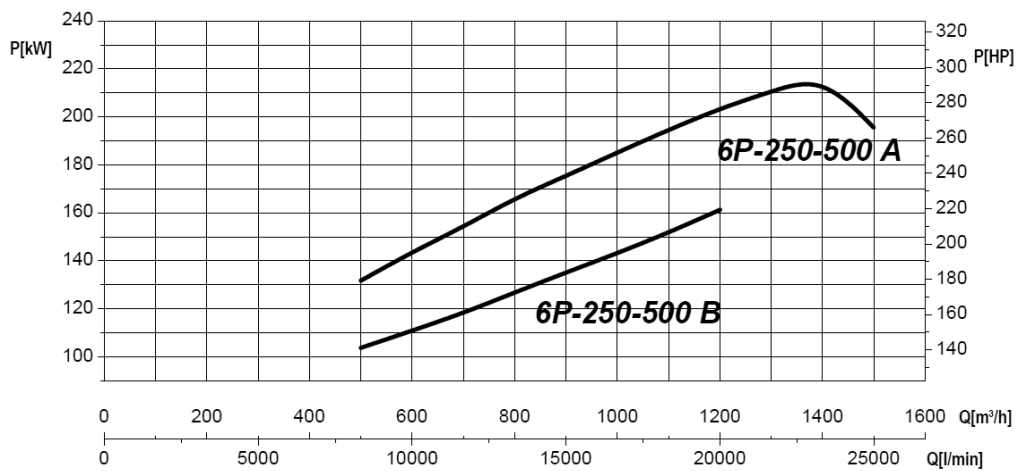
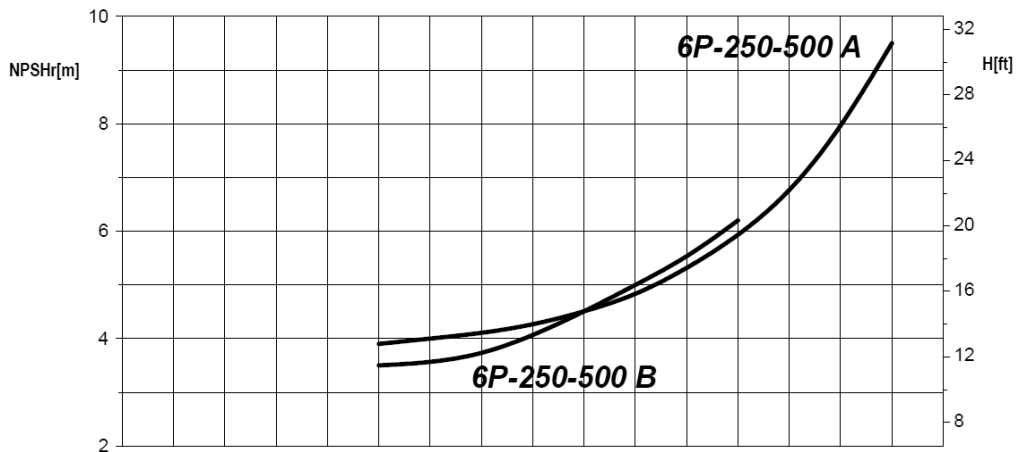
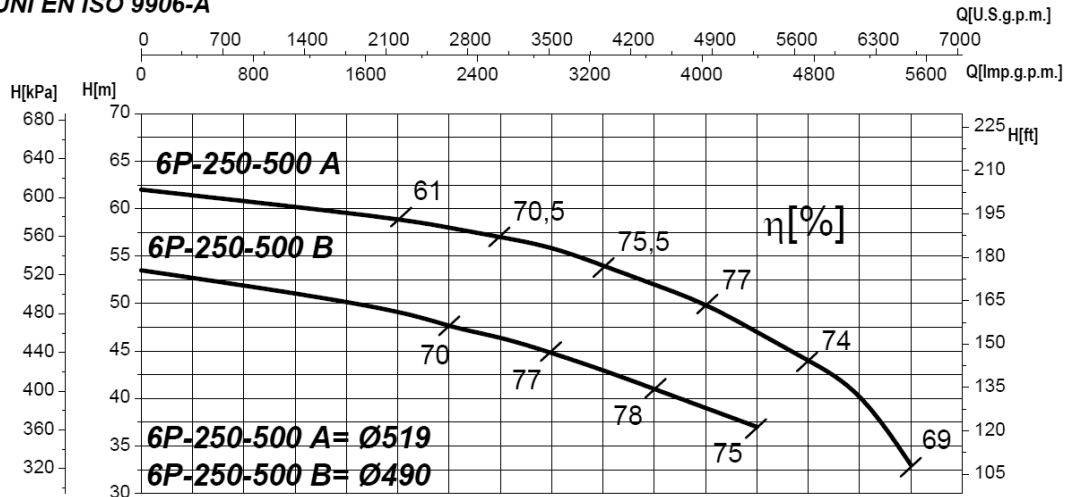
Tipo Type	Taglia Size	n
NCBK	250-400 A	1200
TAB . 03493		1/min rpm

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Tipo Type	Taglia Size	n	
NCBK	250-500	1200	
TAB . 03494		1/min	rpm

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Prestazioni e tolleranze secondo UNI EN ISO 9906 - Appendice A
Performances and tolerances according to UNI EN ISO 9906 - Attachment A
Prestaciones y tolerancias de acuerdo con UNI EN ISO 9906 - Parrafo A
Performances et tolérances conformes aux normes UNI EN ISO 9906 - Annexe A
Leistungen und Abweichungen gemäß UNI EN ISO 9906 - Anhang A
Dados de rendiçao e tolerâncias de acordo com UNI EN ISO 9906 - Parágrafo A

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SAER ELETTROPOMPE S.p.A.

Via Circonvallazione, 22 • 42016 Guastalla (RE) Italy
Tel. 0522.83.09.41 r. a. • Fax 0522.82.69.48
e-mail: info@saer.it - <http://www.saerelettropompe.com>

