

Описание на насосы с периферическими каналами. Серия KF

По вопросам продаж и поддержки обращайтесь: sra@nt-rt.ru www.saer.nt-rt.ru

Архангельск (8182)63-90-72,
Астана+7(7172)727-132,
Белгород(4722)40-23-64,
Брянск(4832)59-03-52,
Владивосток(423)249-28-31,
Волгоград(844)278-03-48,
Вологда(8172)26-41-59,
Воронеж(473)204-51-73,
Екатеринбург(343)384-55-89,
Иваново(4932)77-34-06,
Ижевск(3412)26-03-58,
Казань(843)206-01-48,
Калининград(4012)72-03-81,
Калуга(4842)92-23-67,
Кемерово(3842)65-04-62,
Киров(8332)68-02-04,

Краснодар(861)203-40-90,
Красноярск(391)204-63-61,
Курск(4712)77-13-04,
Липецк(4742)52-20-81,
Магнитогорск(3519)55-03-13,
Москва(495)268-04-70,
Мурманск(8152)59-64-93,
Набережные Челны(8552)20-53-41,
Нижний Новгород(831)429-08-12,
Новокузнецк(3843)20-46-81,
Новосибирск(383)227-86-73,
Орел(4862)44-53-42,
Оренбург(3532)37-68-04,
Пенза(8412)22-31-16,
Пермь(342)205-81-47,
Ростов-на-Дону(863)308-18-15,

Рязань(4912)46-61-64,
Самара(846)206-03-16,
Санкт-Петербург(812)309-46-40,
Саратов(845)249-38-78,
Смоленск(4812)29-41-54,
Сочи(862)225-72-31,
Ставрополь(8652)20-65-13,
Тверь(4822)63-31-35,
Томск(3822)98-41-53,
Тула(4872)74-02-29,
Тюмень(3452)66-21-18,
Ульяновск(8422)24-23-59,
Уфа(347)229-48-12,
Челябинск(351)202-03-61,
Череповец(8202)49-02-64,
Ярославль(4852)69-52-93

KF

0-3-4-5-6-1-2

ELETTROPOMPE A CANALI PERIFERICI

PERIPHERAL ELECTRIC PUMPS

ELECTROBOMBAS CON CONDUCTOS PERIFERICOS

ELECTROPOMPES VOLUMETRIQUES A CANAL PERIPHERIQUE

PERIPHERISCHE ELEKTROPUMPEN



PRINCIPIO DI FUNZIONAMENTO

Le elettropompe della serie KF aventi giranti di tipo periferico, vengono così definite perché sulla periferia della girante vengono ricavate numerose palette radiali, che provvedono ad incrementare energia al fluido pompato. La particolare sagomatura delle palette, conferisce al fluido in aspirazione un rapido moto di ricircolazione radiale tra le pale della girante ed il corpo pompa.

Questa peculiarità consente al fluido di accrescere progressivamente la pressione durante il suo percorso dalla bocca di aspirazione a quella premente, ottenendo così un flusso regolare e non pulsante ed elevate pressioni con curve particolarmente pendenti.

IMPIEGHI

Queste elettropompe trovano impiego in impianti domestici, alimentazione idrica, piccolo giardinaggio, svuotamento e riempimento di cisterne, incremento di pressione in rete degli acquedotti.

Funzionano solamente con fluidi puliti.

CARATTERISTICHE COSTRUTTIVE

Corpo pompa e supporto motore in ghisa, girante in ottone stampato, albero in acciaio inox.

Tenuta meccanica in carbone/ceramica, motore elettrico del tipo chiuso e ventilazione esterna, rotore montato su cuscinetti a sfere prelubrificati.

Protezione termoamperometrica incorporata mentre il condensatore è permanentemente inserito nella versione monofase.

Protezione a cura dell'utente per la versione trifase.

Grado di protezione del motore: IP 44.

Classe di isolamento: B (per motori grandezza 63), F per le altre grandezze.

Tensioni di serie: monofase 230V/50Hz
trifase 230-400V/50Hz

Esecuzioni speciali a richiesta.

DATI CARATTERISTICI

- Portate fino a 4,2 m³/h
- Prevalenze fino a 88 m
- Temperatura liquido pompato da -15°C a +70°C
- Pressione massima di esercizio: 9 bar
- Temperatura massima ambiente: 40°C (oltre chiedere verifica)

Le caratteristiche di funzionamento e di catalogo si intendono per servizio continuo ed acqua pulita (peso specifico 1 000 Kg/m³).

Aspirazione manometrica fino ad un massimo di 8 m con valvola di fondo, oltre i 5 m si consiglia l'installazione di un tubo aspirante di diametro interno maggiore della bocca di aspirazione.

Per le tolleranze delle caratteristiche idrauliche valgono le norme UNI/ISO 2548-Classe C-Appendice B, mentre per le caratteristiche elettriche valgono le norme C.E.I.

INSTALLAZIONE

Le elettropompe serie KF dovranno sempre essere installate con l'albero motore in posizione orizzontale.



FUNCTIONING

This series of electric KF pumps has a peripheral type impeller. These pumps are made in this way because on the extremities of the impeller there are several radial paddles which give more energy to the pumped liquid.

The special shaping of the paddles gives the fluid a fast radial recycling motion between the paddles of the impeller and the pump body.

This characteristic enables the fluid to encrease progressively the pressure during its way from the inlet to the outlet, obtaining a regular and not pulsating flow and high pressures with quite slopping curves.

APPLICATIONS

General water supply, pressurized water using pressure vessels (autoclaves), horticultural irrigation, mist irrigation, boosting showers, dairy and farm applications, garden watering applications, to empty and fill cisterns for clean liquids only.

PUMP CONSTRUCTION

Pump body and motor support in cast iron, pressed brass impeller. Mechanical seal in carbon/ceramic, rotor shaft in stainless steel with seal for life bearings.

Totally enclosed fan cooled motor (TEFC)

Single phase motors with a built in thermal overload protection on request, the capacitor is permanently in circuit. Motor protection to IP44

Winding insulation to class B (for motors of size 63), F (for other sizes).

Standard voltage: 230V- 50Hz single phase,
230V/400V- 50Hz three phase.

Other voltages and frequencies available upon request.

PUMP PERFORMANCE DATA

- Capacities up to 4.2 m³ / hr
- Heads up to 88 meters
- Liquid quality requirement is clean and free from solids or abrasive substances and non aggressive
- Maximum temperature of pumped liquid - 15°C to +70°C
- Maximum ambient temperature 40°C.

For higher temperatures please contact the sales office.

Maximum working pressure 9 bar.

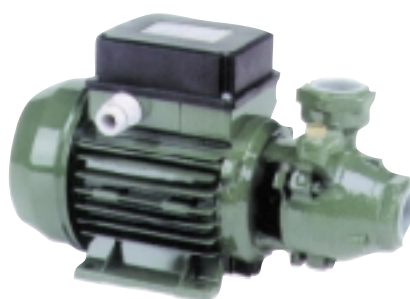
The tolerances of the hydraulic features are according to UNI / ISO 2548-Class C Appendix B electric features according to C.E.I.

The working features listed in the catalogue are based on continuous service for clear water with a specific weight of 1000 kg/m³.

Manometric suction lift of 8 meters with a foot valve fitted, for a suction lift of above 5 meters it is advisable to install the suction pipe with a internal diameter larger than the pump inlet.

INSTALLATION

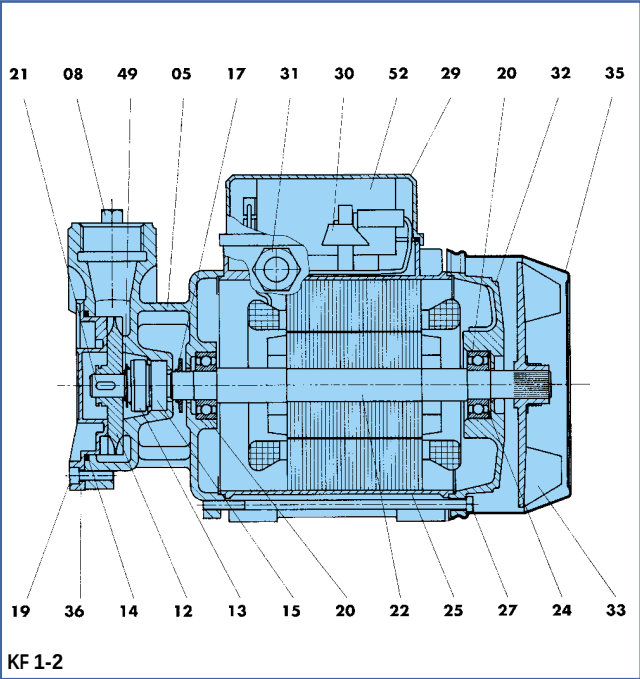
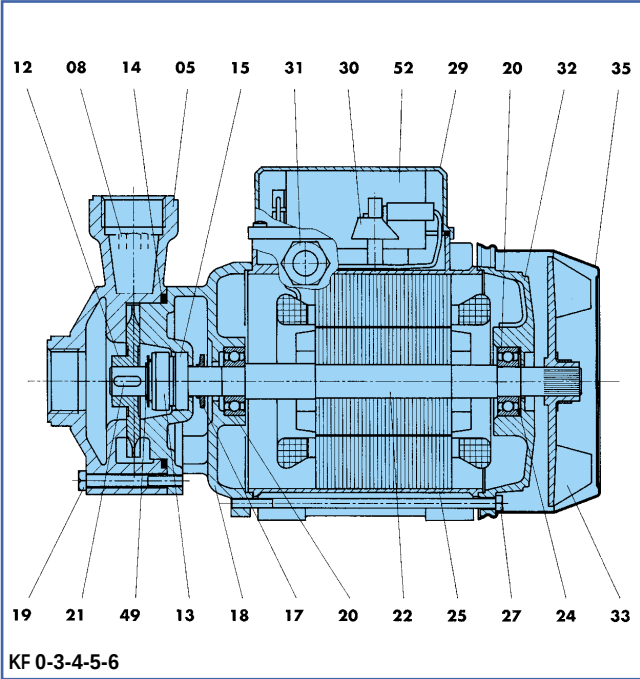
Pump must be installed with the motor shaft in the horizontal position.



KF 0



KF 1



COMPONENT		MATERIAL	
		STANDARD	ON REQUEST
05	Pump body	Cast iron G20	Bronze G-CuSn10
08	Plug	Brass	Brass
12	Impeller	Brass	Brass
13	Rolling seal member	Graphite	Graphite
14	OR	Rubber NBR	Rubber EPDM
15	Fixed seal member	Ceramic	Ceramic
17	Drop guard	Rubber	Rubber
18	Support (only KF 0-3-4-5-6)	Cast iron G20	Bronze G-CuSn10
19	Screw	Galvanized steel	Galvanized steel
20	Bearing	Commercial	Commercial
21	Key	Stainless steel, AISI 304	Stainless steel, AISI 304
22	Rotating shaft	Stainless steel, AISI 431	Stainless steel, AISI 431
24	Circlip	Steel	Steel
25	Casing with wound stator	Aluminium	Aluminium
27	Tie-rod	Galvanized steel	Galvanized steel
29	Terminal block cover	Thermoplastic resin	Thermoplastic resin
30	Terminal block	Thermosetting resin	Thermosetting resin
31	Fairlead	Thermoplastic resin	Thermoplastic resin
32	Driving cap	Aluminium	Aluminium
33	Fan	Thermoplastic resin	Thermoplastic resin
35	Fan cover	Steel	Steel
49	Snap ring	Stainless steel, AISI 304	Stainless steel, AISI 304
52	Capacitor	Commercial	Commercial



COMPONENTE		MATERIAL	
		ESTÁNDAR	PETICIÓN
05	Cuerpo de bomba	Fundición gris G20	Bronce G-CuSn10
08	Tapon	Latón	Latón
12	Impulsor	Latón	Latón
13	Reten rodante	Grafito	Grafito
14	Anillo OR	Goma NBR	Goma EPDM
15	Reten fijo	Cerámica	Cerámica
17	Paragotas	Goma	Goma
18	Soporte (solo KF 0-3-4-5-6)	Fundición gris G20	Bronce G-CuSn10
19	Tornillo	Acero cincado	Acero cincado
20	Cojinete	Comercial	Comercial
21	Chaveta	Acero inox, AISI 304	Acero inox, AISI 304
22	Eje rodante	Acero inox, AISI 431	Acero inox, AISI 431
24	Anillo elastico	Acero	Acero
25	Armazon estator	Aluminio	Aluminio
27	Tirante	Acero cincado	Acero cincado
29	Tapa de bornes	Resina termoplastica	Resina termoplastica
30	Bornes	Resina de endurecimiento termico	Resina de endurecimiento termico
31	Prensacable	Resina termoplastica	Resina termoplastica
32	Tapa motor	Aluminio	Aluminio
33	Ventilador	Resina termoplastica	Resina termoplastica
35	Tapa ventilador	Acero	Acero
49	Anillo seeger	Acero inox, AISI 304	Acero inox, AISI 304
52	Condensador	Comercial	Comercial

KF

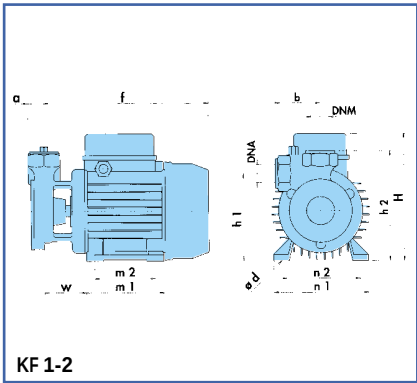
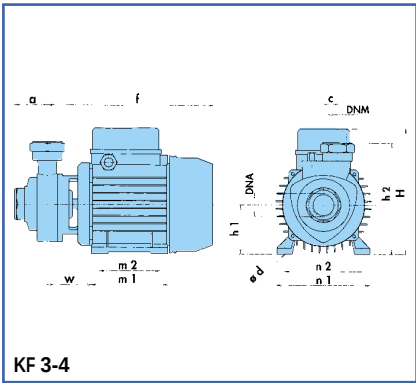
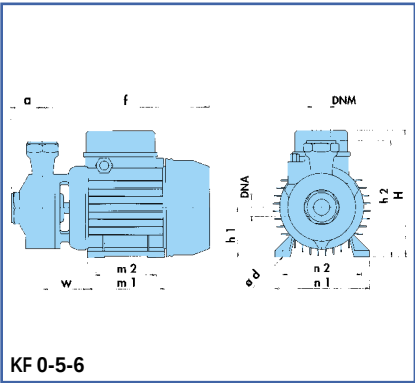
≅ 2850 1/min

0-3-4-5-6-1-2

CARATTERISTICHE IDRAULICHE

HYDRAULIC FEATURES / CARACTERISTICAS HIDRAULICAS / CARACTERISTIQUES HYDRAULIQUES / HYDRAULISCHE EIGENSCHAFTEN

Tipo Type Typ	Alimentazione Feeding - Alimentacion Alimentation - Speisung 50 Hz	P1 Max kW	P2 Nominale P2 Nominal kW HP		Corrente assorbita - A Absorbed current - A Corriente absorbida - A Courant absorbe - A Abgenommener Strom - A	 μF V		U.S. g.p.m.	0	2,6	5,3	7,9	10,5	13,2	15,8	18,5
								m³/h	0	0,6	1,2	1,8	2,4	3	3,6	4,2
								l/min	0	10	20	30	40	50	60	70
KF 0	1 x 230 V	0,51	0,37	0,5	2,3	10	450	H (m)	30	24	18	11	4			
KF 0	3 x 230-400 V	0,51	0,37	0,5	1,7/1				30	24	18	11	4			
KF 3	1 x 230 V	1,2	0,55	0,75	5,5	16	450		62	50	36	26	17	6		
KF 3	3 x 230-400 V	0,9	0,55	0,75	4,2/2,4				62	50	36	26	17	6		
KF 4	1 x 230 V	1,43	0,75	1	6,8	20	450		76	63	46	33	22	11		
KF 4	3 x 230-400 V	1,1	0,75	1	4,8/2,8				76	63	46	33	22	11		
KF 5	1 x 230 V	1,9	1,1	1,5	9	31,5	450		73	68	61	52	43	33	23	13
KF 5	3 x 230-400 V	1,8	1,1	1,5	6/3,5				73	68	61	52	43	33	23	13
KF 6	1 x 230 V	2,3	1,5	2	11,5	40	450		88	82	73	63	52	41	29	18
KF 6	3 X 230-400 V	2,1	1,5	2	11				88	82	73	63	52	41	29	18
KF 1	1 x 230 V	0,51	0,37	0,5	2,3	10	450		40	32	25	17	9			
KF 1	3 X 230-400 V	0,51	0,37	0,5	1,7/1				40	32	25	17	9			
KF 2	1 x 230 V	1,2	0,55	0,75	5,5	16	450		54	49	42,5	37	29	21	13	
KF 2	3 X 230-400 V	0,9	0,55	0,75	4,2/2,4				54	49	42,5	37	29	21	13	



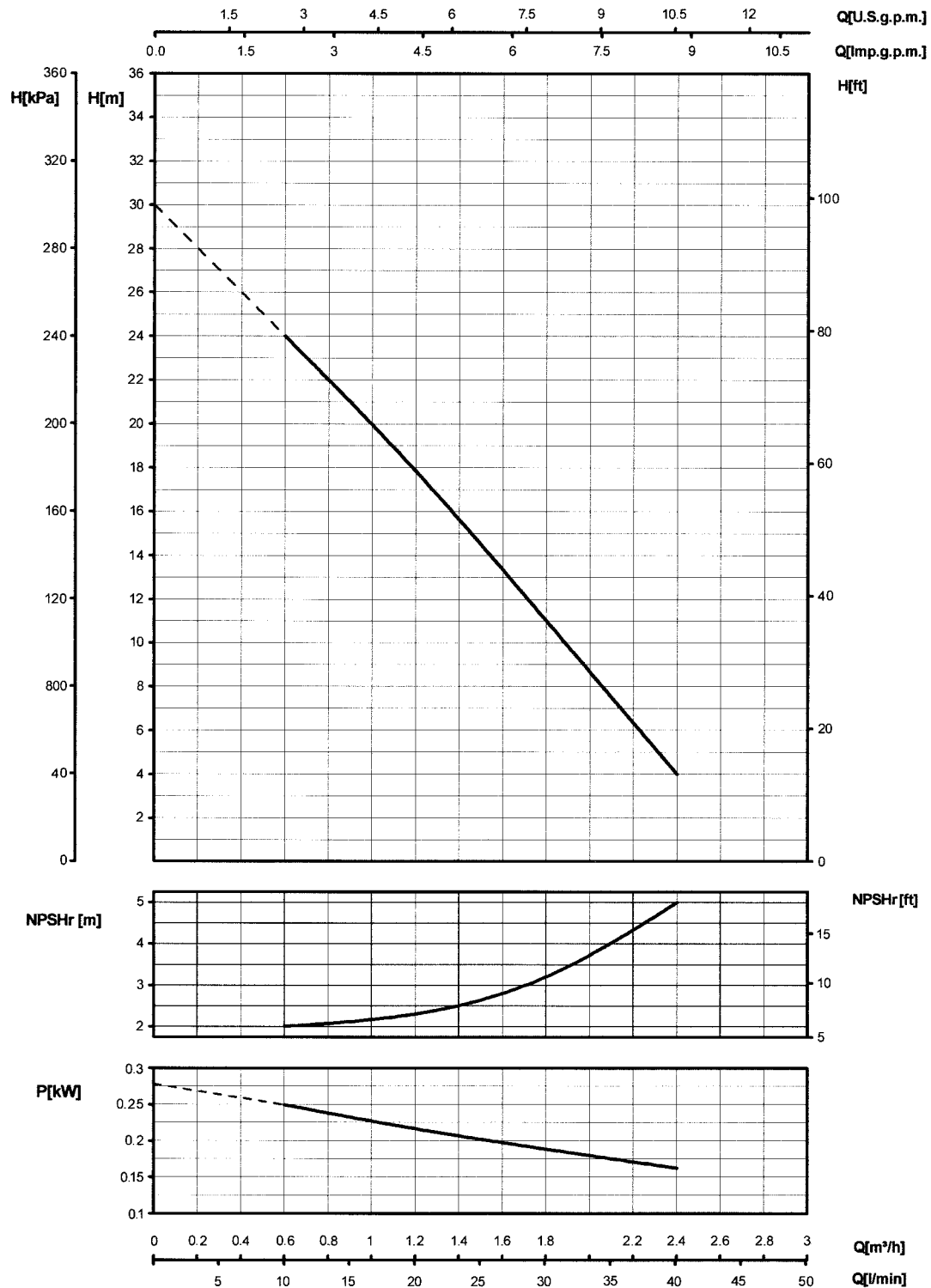
DIMENSIONI E PESI

DIMENSIONS AND WEIGHTS / DIMENSIONES Y PESOS / DIMENSIONS ET POIDS / ABMESSUNGEN UND GEWICHTE

TIPO TYPE TYP	DNA	DNM	f	a	m1	m2	n1	n2	H	h1	h2	w	Ø d	Kg
KF 0	G 1"	G 1"	215	35	100	80	120	100	166	63	143	60	7	5,2
KF 3	G 1"	G 1"	240,5	45	112	90	135	112	180	71	161	64,5	7	8,2
KF 4	G 1"	G 1"	240,5	45	112	90	135	112	180	71	161	64,5	7	9,3
KF 5	G 1"	G 1"	274	45	124	100	152	125	200	80	175	69	9	14,5
KF 6	G 1"	G 1"	274	45	124	100	152	125	200	80	175	69	9	15,5
KF 1	G 1"	G 1"	225	23	100	80	120	100	166	109	143	68	7	5,5
KF 2	G 1"	G 1"	237	23	112	90	135	112	180	124	156	64	7	9,3

KF0

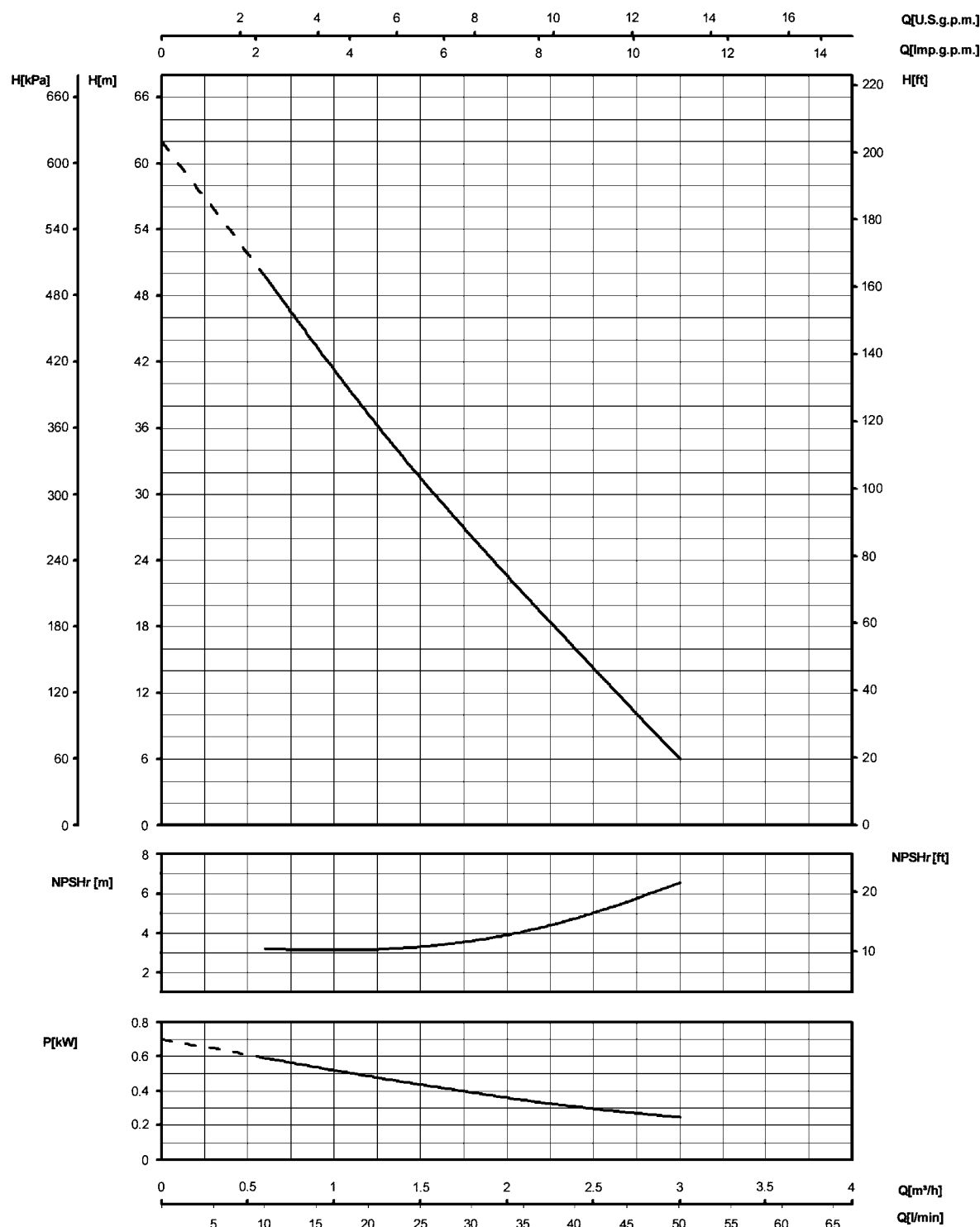
≅ 2850 1/min



Le curve di prestazione sono basate su valori di viscosità cinematica = 1 mm²/s e densità pari a 1000 kg/m³. Tolleranza e curve secondo UNI/ISO 2548 - Classe C - Appendice B • The performance curves are based on the kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Tolerance and curves according to UNI/ISO 2548 - Class C - Appendix B • Las curvas de rendimiento se refieren a valores de viscosidad cinemática = 1 mm²/s y densidad de 1000 Kg/m³. Tolerancia de las curvas de acuerdo con UNI/ISO 2548 - Clase C - Parrafo B • Les courbes de performances sont basées sur des valeurs de viscosité cinématique égale à 1 mm²/s et une densité égale à 1000 kg/m³. Tolérance et courbes conformes aux normes UNI/ISO 2548 - Classe C - Appendice B. • Die Leistungskurven beruhen auf einer kinematischen Zähflüssigkeit von 1 mm²/s und einer Dichte von 1000 kg/m³. Abweichung und Kurven gemäß UNI/ISO 2548 - Klasse C - Anhang B.

KF3

≅ 2850 1/min

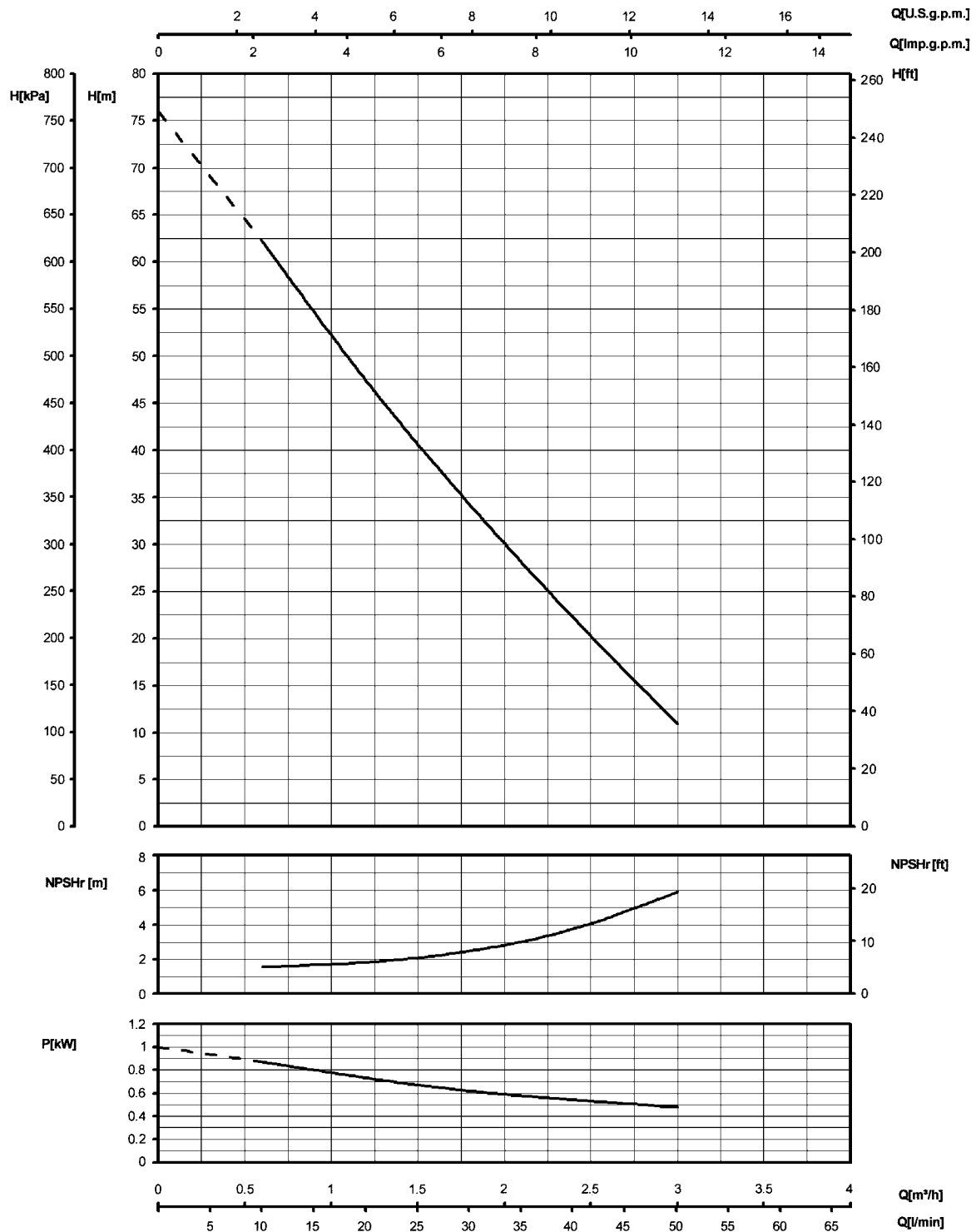


La potenza nominale ha un coefficiente di sovraccarico del 30%
• The nominal power has an overload coefficient of 30% • La potencia nominal tiene un coeficiente de sobrecarga de 30%
• La puissance nominale a un coefficient de surcharge de 30% • Die Nennungsleistung hat einen Überlastkoeffizient von 30%

Le curve di prestazione sono basate su valori di viscosità cinematica = 1 mm²/s e densità pari a 1000 kg/m³. Tolleranza e curve secondo UNI/ISO 2548 - Classe C - Appendice B • The performance curves are based on the kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to UNI/ISO 2548 - Class C - Appendix B • Las curvas de rendimiento se refieren a valores de viscosidad cinemática = 1 mm²/s y densidad de 1000 Kg/m³. Tolerancia de las curvas de acuerdo con UNI/ISO 2548 - Clase C - Apéndice B • Les courbes de performances sont basées sur des valeurs de viscosité cinématique égale à 1 mm²/s et une densité égale à 1000 kg/m³. Tolérance et courbes conformes aux normes UNI/ISO 2548 - Classe C - Appendice B. • Die Leistungskurven beruhen auf einer kinematischen Zähflüssigkeit von 1 mm²/s und einer Dichte von 1000 kg/m³. Abweichung und Kurven gemäß UNI/ISO 2548 - Klasse C - Anhang B.

KF4

≈ 2850 1/min

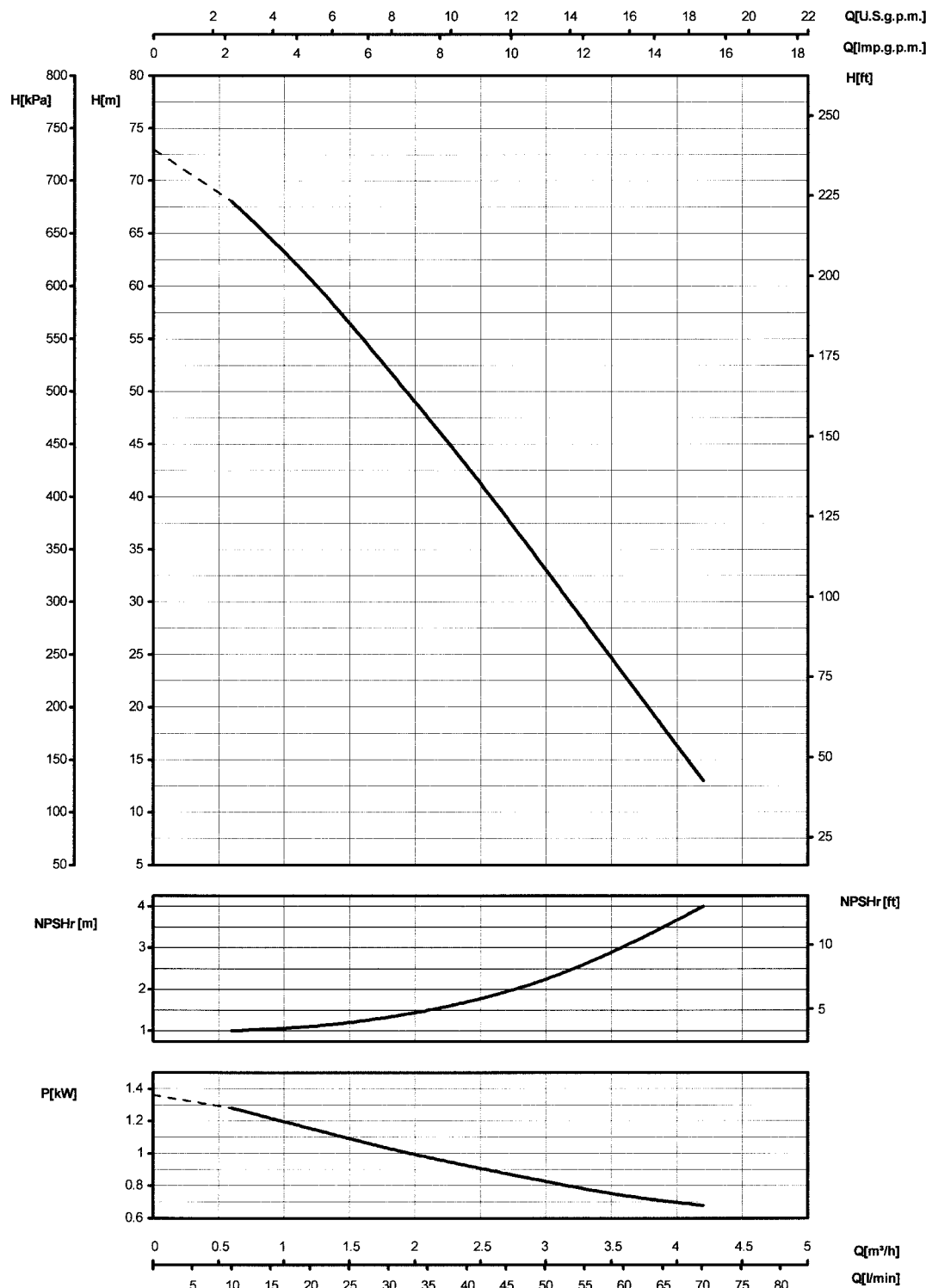


La potenza nominale ha un coefficiente di sovraccarico del 40%
 • The nominal power has an overload coefficient of 40% • La potencia nominal tiene un coeficiente de sobrecarga de 40%
 • La puissance nominale a un coefficient de surcharge de 40% • Die Nennungsleistung hat einen Überlastskoeffizient von 40%

Le curve di prestazione sono basate su valori di viscosità cinematica = 1 mm²/s e densità pari a 1000 kg/m³. Tolleranza e curve secondo UNI/ISO 2548 - Classe C - Appendice B • The performance curves are based on the kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to UNI/ISO 2548 - Class C - Appendix B • Las curvas de rendimiento se refieren a valores de viscosidad cinemática = 1 mm²/s y densidad de 1000 Kg/m³. Tolerancia de las curvas de acuerdo con UNI/ISO 2548 - Clase C - Apéndice B • Les courbes de performances sont basées sur des valeurs de viscosité cinématique égale à 1 mm²/s et une densité égale à 1000 kg/m³. Tolérance et courbes conformes aux normes UNI/ISO 2548 - Classe C - Appendice B • Die Leistungskurven beruhen auf einer kinematischen Zähflüssigkeit von 1 mm²/s und einer Dichte von 1000 kg/m³. Abweichung und Kurven gemäß UNI/ISO 2548 - Klasse C - Anhang B.

KF5

≅ 2850 1/min

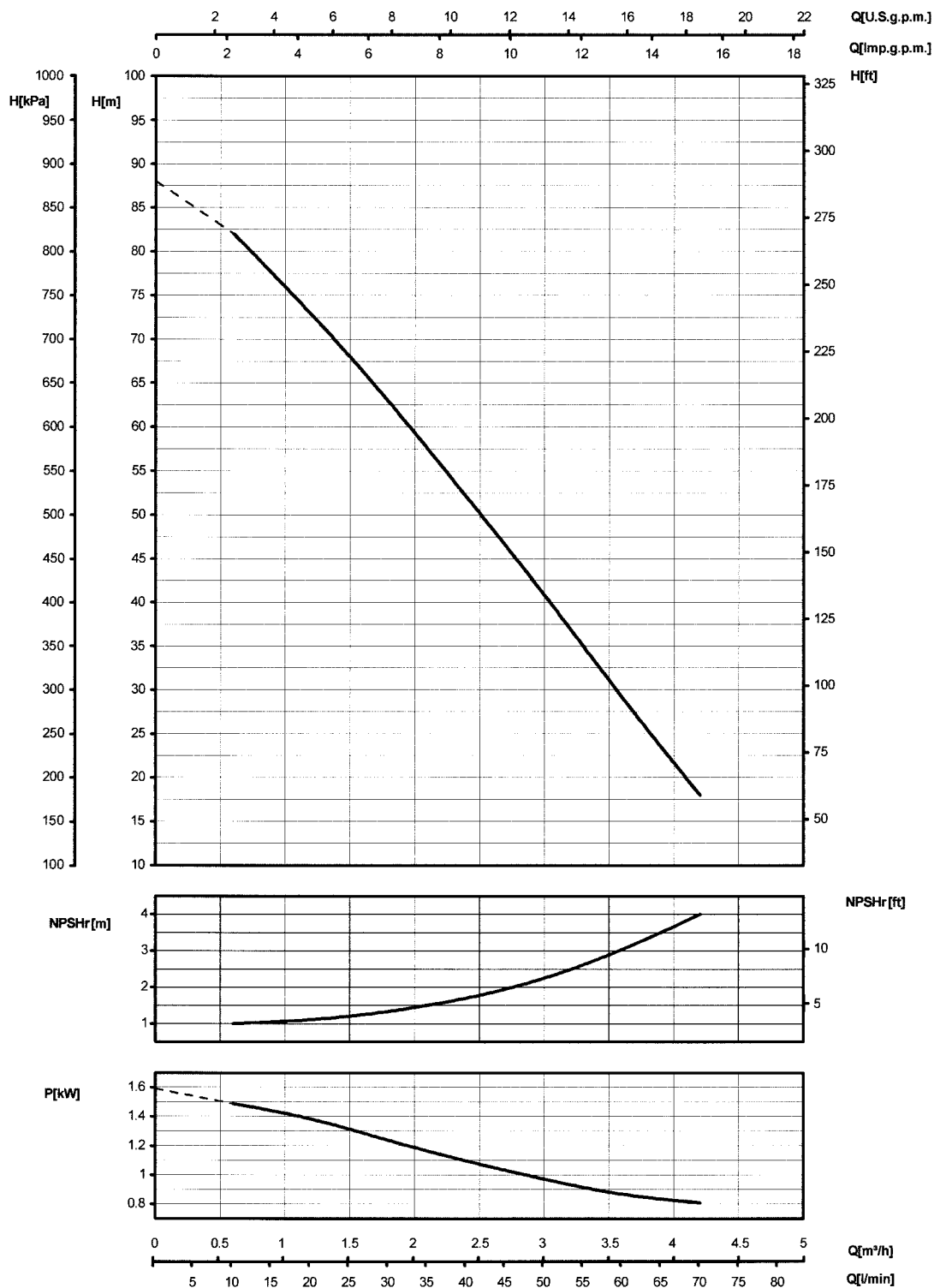


La potenza nominale ha un coefficiente di sovraccarico del 25%
• The nominal power has an overload coefficient of 25% • La potencia nominal tiene un coeficiente de sobrecarga de 25%
• La puissance nominale a un coefficient de surcharge de 25% • Die Nennungsleistung hat einen Überlastkoeffizient von 25%

Le curve di prestazione sono basate su valori di viscosità cinematica = 1 mm²/s e densità pari a 1000 kg/m³. Tolleranza e curve secondo UNI/ISO 2548 - Classe C - Appendice B • The performance curves are based on the kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to UNI/ISO 2548 - Class C - Appendix B • Las curvas de rendimiento se refieren a valores de viscosidad cinemática = 1 mm²/s y densidad de 1000 Kg/m³. Tolerancia de las curvas de acuerdo con UNI/ISO 2548 - Clase C - Apéndice B • Les courbes de performances sont basées sur des valeurs de viscosité cinématique égale à 1 mm²/s et une densité égale à 1000 kg/m³. Tolérance et courbes conformes aux normes UNI/ISO 2548 - Classe C - Appendice B. • Die Leistungskurven beruhen auf einer kinematischen Zähflüssigkeit von 1 mm²/s und einer Dichte von 1000 kg/m³. Abweichung und Kurven gemäß UNI/ISO 2548 - Klasse C - Anhang B.

KF6

≈ 2850 1/min

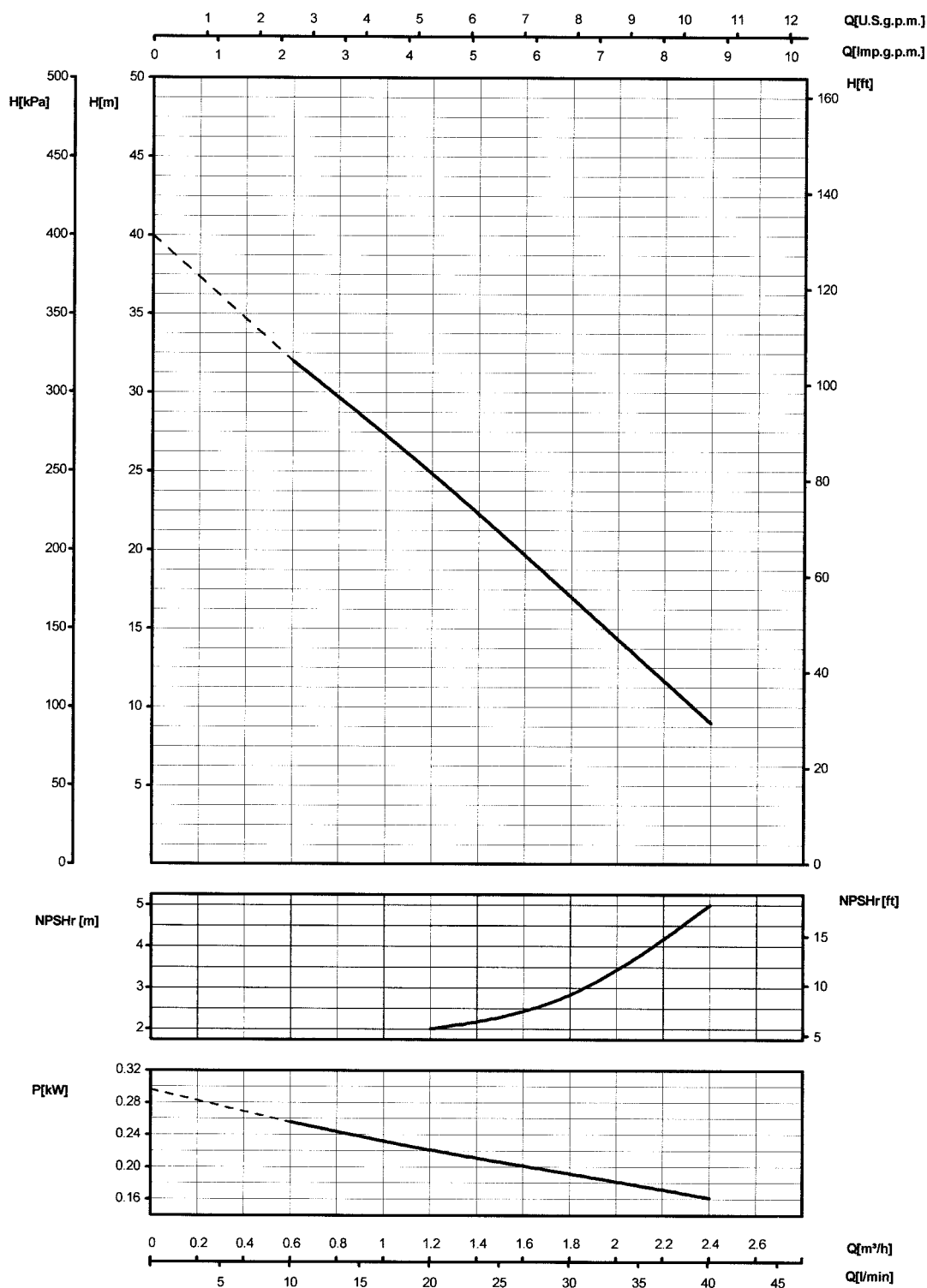


La potenza nominale ha un coefficiente di sovraccarico del 10%
 • The nominal power has an overload coefficient of 10% • La potencia nominal tiene un coeficiente de sobrecarga de 10%
 • La puissance nominale a un coefficient de surcharge de 10% • Die Nennungsleistung hat einen Überlastkoeffizient von 10%

Le curve di prestazione sono basate su valori di viscosità cinematica = 1 mm²/s e densità pari a 1000 kg/m³. Tolleranza e curve secondo UNI/ISO 2548 - Classe C - Appendice B • The performance curves are based on the kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to UNI/ISO 2548 - Class C - Appendix B • Las curvas de rendimiento se refieren a valores de viscosidad cinemática = 1 mm²/s y densidad de 1000 Kg/m³. Tolerancia de las curvas de acuerdo con UNI/ISO 2548 - Clase C - Apéndice B • Les courbes de performances sont basées sur des valeurs de viscosité cinématique égale à 1 mm²/s et une densité égale à 1000 kg/m³. Tolérance et courbes conformes aux normes UNI/ISO 2548 - Classe C - Appendice B. • Die Leistungskurven beruhen auf einer kinematischen Zähflüssigkeit von 1 mm²/s und einer Dichte von 1000 kg/m³. Abweichung und Kurven gemäß UNI/ISO 2548 - Klasse C - Anhang B.

KF1

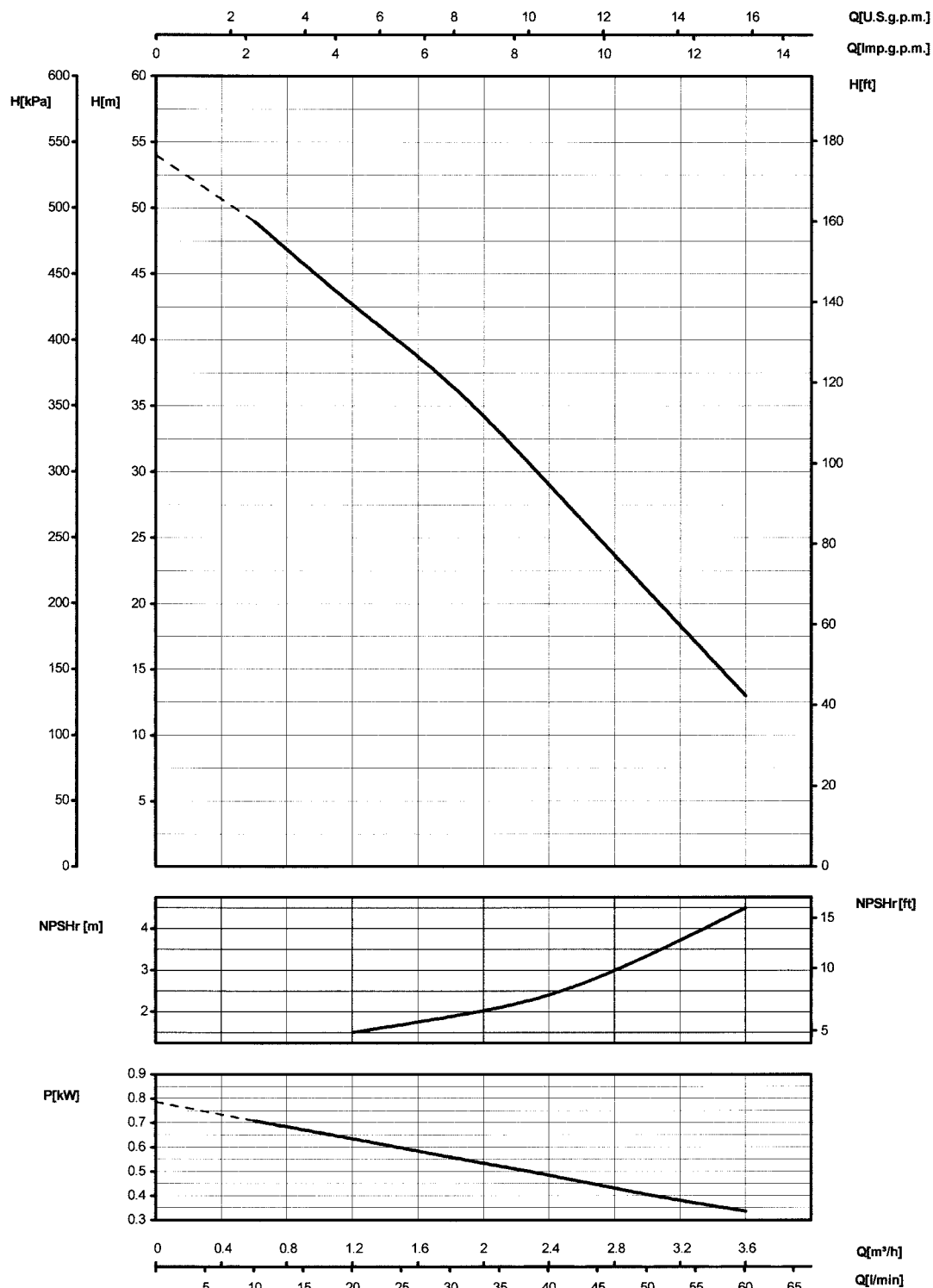
≅ 2850 1/min



Le curve di prestazione sono basate su valori di viscosità cinematica = 1 mm²/s e densità pari a 1000 kg/m³. Tolleranza e curve secondo UNI/ISO 2548 - Classe C - Appendice B • The performance curves are based on the kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Tolerance and curves according to UNI/ISO 2548 - Class C - Appendix B • Las curvas de rendimiento se refieren a valores de viscosidad cinemática = 1 mm²/s y densidad de 1000 Kg/m³. Tolerancia de las curvas de acuerdo con UNI/ISO 2548 - Clase C - Parrafo B • Les courbes de performances sont basées sur des valeurs de viscosité cinématique égale à 1 mm²/s et une densité égale à 1000 kg/m³. Tolérance et courbes conformes aux normes UNI/ISO 2548 - Classe C - Appendice B. • Die Leistungskurven beruhen auf einer kinematischen Zähflüssigkeit von 1 mm²/s und einer Dichte von 1000 kg/m³. Abweichung und Kurven gemäß UNI/ISO 2548 - Klasse C - Anhang B.

KF2

≈ 2850 1/min



La potenza nominale ha un coefficiente di sovraccarico del 10%
 • The nominal power has an overload coefficient of 10% • La potencia nominal tiene un coeficiente de sobrecarga de 10%
 • La puissance nominale a un coefficient de surcharge de 10% • Die Nennungsleistung hat einen Überlastkoeffizient von 10%

P= Potenza assorbita per singolo stadio • P= Rated power for each stage • P= Potencia absorbida por cada etapa • P= Puissance absorbée par étage • P= Leistungsaufnahme in jeder Stufe

Le curve di prestazione sono basate su valori di viscosità cinematica = 1 mm²/s e densità pari a 1000 kg/m³. Tolleranza e curve secondo UNI/ISO 2548 - Classe C - Appendice B • The performance curves are based on the kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to UNI/ISO 2548 - Class C - Appendix B • Las curvas de rendimiento se refieren a valores de viscosidad cinemática = 1 mm²/s y densidad de 1000 Kg/m³. Tolerancia de las curvas de acuerdo con UNI/ISO 2548 - Clase C - Apéndice B • Les courbes de performances sont basées sur des valeurs de viscosité cinématique égale à 1 mm²/s et une densité égale à 1000 kg/m³. Tolérance et courbes conformes aux normes UNI/ISO 2548 - Classe C - Appendice B. • Die Leistungskurven beruhen auf einer kinematischen Zähflüssigkeit von 1 mm²/s und einer Dichte von 1000 kg/m³. Abweichung und Kurven gemäß UNI/ISO 2548 - Klasse C - Anhang B.

По вопросам продаж и поддержки обращайтесь: sra@nt-rt.ru www.saer.nt-rt.ru

Архангельск (8182)63-90-72,
Астана+7(7172)727-132,
Белгород(4722)40-23-64,
Брянск(4832)59-03-52,
Владивосток(423)249-28-31,
Волгоград(844)278-03-48,
Вологда(8172)26-41-59,
Воронеж(473)204-51-73,
Екатеринбург(343)384-55-89,
Иваново(4932)77-34-06,
Ижевск(3412)26-03-58,
Казань(843)206-01-48,
Калининград(4012)72-03-81,
Калуга(4842)92-23-67,
Кемерово(3842)65-04-62,
Киров(8332)68-02-04,

Краснодар(861)203-40-90,
Красноярск(391)204-63-61,
Курск(4712)77-13-04,
Липецк(4742)52-20-81,
Магнитогорск(3519)55-03-13,
Москва(495)268-04-70,
Мурманск(8152)59-64-93,
Набережные Челны(8552)20-53-41,
Нижний Новгород(831)429-08-12,
Новокузнецк(3843)20-46-81,
Новосибирск(383)227-86-73,
Орел(4862)44-53-42,
Оренбург(3532)37-68-04,
Пенза(8412)22-31-16,
Пермь(342)205-81-47,
Ростов-на-Дону(863)308-18-15,

Рязань(4912)46-61-64,
Самара(846)206-03-16,
Санкт-Петербург(812)309-46-40,
Саратов(845)249-38-78,
Смоленск(4812)29-41-54,
Сочи(862)225-72-31,
Ставрополь(8652)20-65-13,
Тверь(4822)63-31-35,
Томск(3822)98-41-53,
Тула(4872)74-02-29,
Тюмень(3452)66-21-18,
Ульяновск(8422)24-23-59,
Уфа(347)229-48-12,
Челябинск(351)202-03-61,
Череповец(8202)49-02-64,
Ярославль(4852)69-52-93