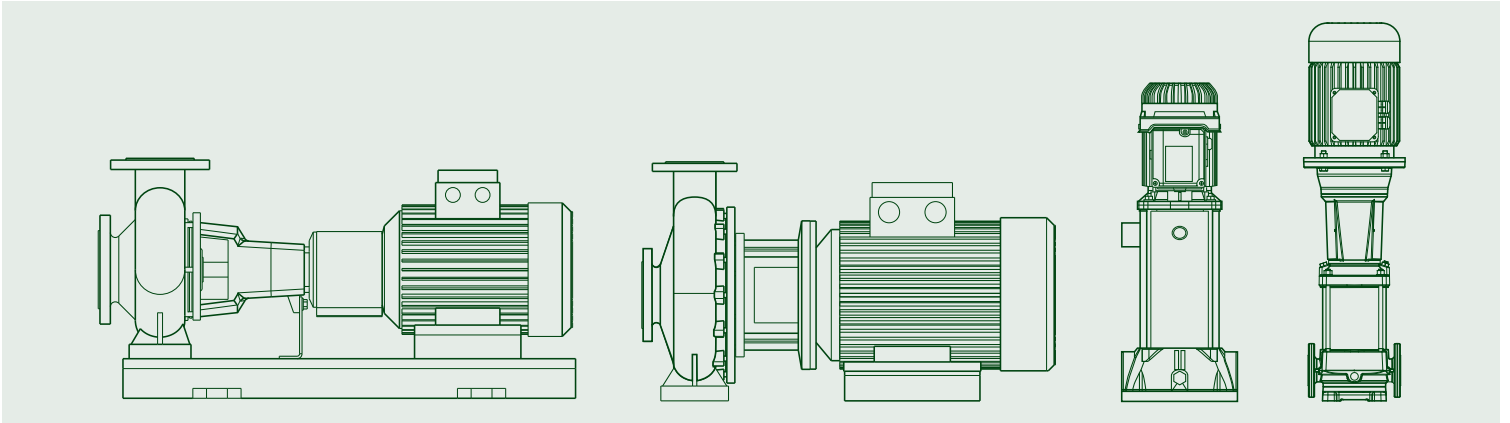


CENTRIFUGAL PUMPS



**TECHNICAL
CATALOGUE**



CERTIFICATE

CISQ/IMQ has issued an IQNet recognized certificate that the organization:

DWT HOLDING SPA
 VIA MARCO POLO 14 - 35035 MESTRINO (PD)
 BRENDOLA (VI) - CASTELLO DI GODEGO (TV) - BIENTINA (PI) -
 VAL LIONA (VI) - PRC CHINA - HUNGARY

has implemented and maintains a

Quality Management System

for the following scope:

Design, production, sale and assistance of components and electronic controls for pumps, electropumps and pump sets for cold and hot water for civil, industrial and agricultural use

Further clarifications regarding the applicability of ISO 9001:2015 requirements may be obtained by consulting the organization

which fulfills the requirements of the following standard:
ISO 9001:2015

Issued on: **2018 - 05 - 21**

Expires on: **2021 - 05 - 27**

This attestation is directly linked to the IQNet Partner's original certificate and shall not be used as a stand-alone document

Registration Number: IT - 824



Alex Stoichitov
 Alex Stoichitov
 President of IQNET



Ing. Claudio Provetti
 Ing. Claudio Provetti
 President of CISQ

IQNet Partners:

AENOR Spain AFNOR Certification France APCER Portugal CCC Cyprus CISQ Italy
 CCC China COMI China CQS Czech Republic Cex Cert Croatia DQS Holding GmbH Germany FCAN Brazil
 FONDONORMA Venezuela IONTEC Colombia Impasa Sertificat Oy Finland INTECO Costa Rica
 IRAM Argentina JQA Japan KIPQ Korea MIRTEC Greece MSZI Hungary Nemko AS Norway NSAI Ireland
 NYCE-SIGE Mexico PCBQ Poland Quality Austria Austria SR Russia SII Israel SIQ Slovenia
 SIRIM QAS International Malaysia SQS Switzerland SRAC Romania TEST St Petersburg Russia TSE Turkey YUQS Serbia
 IQNet is represented in the USA by: AFNOR Certification, CISQ, DQS Holding GmbH and NSAI Inc.

* The list of IQNet partners is valid at the time of issue of this certificate. Updated information is available under www.iqnet-certification.com

Al. 1 di 1
 Ann. 1 of 1



ALLEGATO CERTIFICATO n. **9101.COGE**
 ANNEX CERTIFICATE

(*) Unità Operative:
 (*) Operative Units:

DAB PUMPS SPA
 VIA BONANNO PISANO 1 - 56031 BIENTINA (PI)

DAB PUMPS SPA
 VIA DEL LAVORO 3 - 36040 VAL LIONA (VI)

DAB PUMPS QINGDAO CO. LTD
 40 KAITUO ROAD, QINGDAO DEVELOPMENT ZONE - SHANGDONG PROVINCE, PRC CHINA

DAB PUMPS HUNGARY KFT
 BUDA ERNO H - 8800 NAGYKANISZA HUNGARY

DATE:	PRIMA CERTIFICAZIONE FIRST CERTIFICATION	EMISSIONE CORRENTE CURRENT ISSUE	SCADENZA EXPIRY
	1995-07-17	2018-05-21	2021-05-27

Ing. Claudio Provetti
 IMQ S.p.A. - VIA QUINTILIANO, 43 - 20138 MILANO ITALY
 Management Systems Division - Flavio Onago



SGQ N° 005 A

IAF: 18, 19, 29



Organismo di Certificazione Federato CISQ
www.imq.it

CISQ è un'Associazione Italiana di Organismi di Certificazione dei sistemi di gestione applicativi. CISQ è la Italian Federation of management system Certification Bodies.



CERTIFICATO N.
 CERTIFICATE N. **9101.COGE**

SI CERTIFICA CHE IL SISTEMA QUALITÀ DI
 WE HEREBY CERTIFY THAT THE QUALITY SYSTEM OPERATED BY

DWT HOLDING SPA
 VIA MARCO POLO 14 - 35035 MESTRINO (PD)

UNITÀ OPERATIVE / OPERATIVE UNITS

DAB PUMPS SPA
 VIA MARCO POLO 14 - 35035 MESTRINO (PD)
DAB PUMPS SPA
 VIA EINAUDI 2 - 36040 BRENDOLA (VI)
DAB PUMPS SPA
 VIA E. FERMI 6-B-10 - 31030 CASTELLO DI GODEGO (TV)

Vedere gli Allegati per le altre Unità Operative (n° 1 pagina)
 View the Annexes for the other Operative Units (n° 1 page)

E' CONFORME ALLA NORMA / IS IN COMPLIANCE WITH THE STANDARD
ISO 9001:2015

PER LE SEGUENTI ATTIVITÀ / FOR THE FOLLOWING ACTIVITIES

Progettazione, produzione, commercializzazioni e assistenza di componenti e controlli elettronici per pompe, elettropompe e gruppi di pompaggio per acqua fredda e calda ad uso civile, industriale ed agricolo
 Design, production, sale and assistance of components and electronic controls for pumps, electropumps and pump sets for cold and hot water for civil, industrial and agricultural use

IL PRESENTE CERTIFICATO E' SOGGETTO AL RISPETTO DEL
 REGOLAMENTO PER LA CERTIFICAZIONE DEI SISTEMI DI GESTIONE
 THE USE AND THE VALIDITY OF THE CERTIFICATE SHALL SATISFY THE
 REQUIREMENTS OF THE RULES FOR CERTIFICATION OF MANAGEMENT SYSTEMS

DATE:	PRIMA CERTIFICAZIONE FIRST CERTIFICATION	EMISSIONE CORRENTE CURRENT ISSUE	SCADENZA EXPIRY
	1995-07-17	2018-05-21	2021-05-27

IMQ S.p.A. - VIA QUINTILIANO, 43 - 20138 MILANO ITALY
 Management Systems Division - Flavio Onago



IAF: 18, 19, 29

SGQ N° 005 A

La validità del certificato è subordinata a verifiche periodiche e a nuove verifiche
 The validity of the certificate is conditional on periodic checks and on new checks
 if the requirements specified in the standard are not met

Organismo di Certificazione Federato CISQ
www.imq.it

CISQ è un'Associazione Italiana di Organismi di Certificazione dei sistemi di gestione applicativi. CISQ è la Italian Federation of management system Certification Bodies.

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TECHNICAL DATA

Operating range:

from 8 to 45 l/m with head up to 53 metres

Pumped liquid:

clean, free of solids and abrasives, non-viscous, non-crystallised and chemically neutral, with properties similar to water

Liquid temperature range:

from 0 °C to +35 °C for domestic use (EN 60335-2-41)

from -10°C to +80°C for other uses

Maximum ambient temperature: +40°C

Maximum operating pressure: 10 bar (1000 kPa)

Protection class: IP 44

Protection class at the terminal board: IP 55

Insulation class: F

Standard voltage: single-phase 220-240 V / 50 Hz

three-phase 230-400 V / 50 Hz.

Installation: fixed, horizontal position

APPLICATIONS

Self-priming pump with side liquid channel and star-shaped impeller; excellent suction capabilities even in unfavourable operating conditions, such as the presence of air bubbles, or lack of continuity of the liquid at the suction.

Used in domestic, agricultural civil and industrial installations.

CONSTRUCTION FEATURES OF THE PUMP

Cast iron pump body with brass wear disk.

Motor support and impeller fully made of brass to avoid the risk of blockage.

Carbon/ceramic mechanical seal.

Stainless steel motor shaft.

CONSTRUCTION FEATURES OF THE MOTOR

Closed asynchronous type, external ventilation cooling.

Rotor running on permanently lubricated ball bearings, oversized to ensure low noise and durability.

Built-in thermal and current overload protection in the single-phase version.

For the protection of the three-phase motor, we recommend the use of remote overload cut-outs, in compliance with current local regulations.

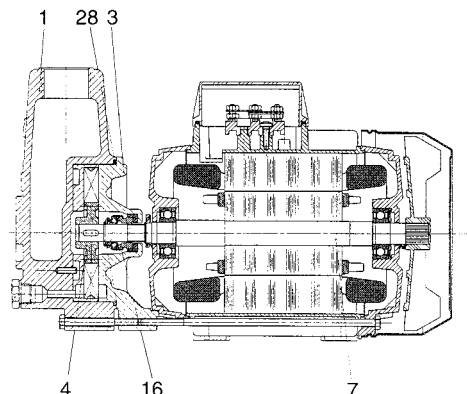
Permanently connected capacitor in the single-phase version.

Construction according to CEI 2-3 and CEI 61-69 (EN 60335-2-41).

MATERIALS

No.	PARTS*	MATERIALS
1	PUMP BODY	CAST IRON 250 ISO UNI 185 WITH BRASS PRESSURE RING PCU ZN 40 PB2 UNI 5705/65
3	SUPPORT	BRASS PCu Zn 40 Pb2 UNI 5705/65
4	IMPELLER	BRASS PCu Zn 40 Pb2 UNI 5705/65
7	SHAFT WITH ROTOR	AISI 303 STAINLESS STEEL X12 CrNiS 13 UNI 6900/71
16	MECHANICAL SEAL	CARBON / CERAMIC
28	OR RING	VITON

* In contact with the liquid



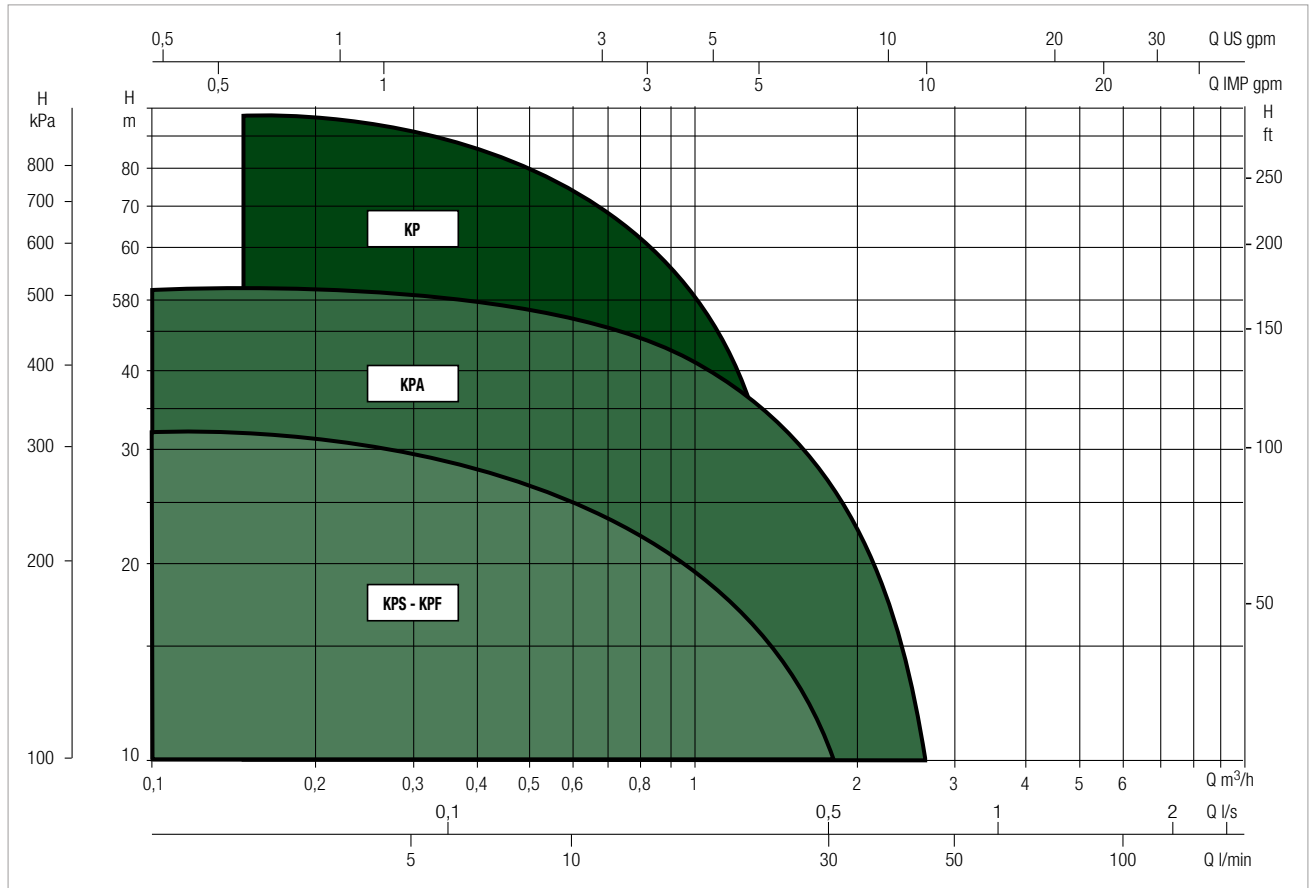
KPA / KPS / KPF / KP RANGE

PERIPHERAL ELECTRIC PUMPS

PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

GRAPHIC SELECTION TABLE



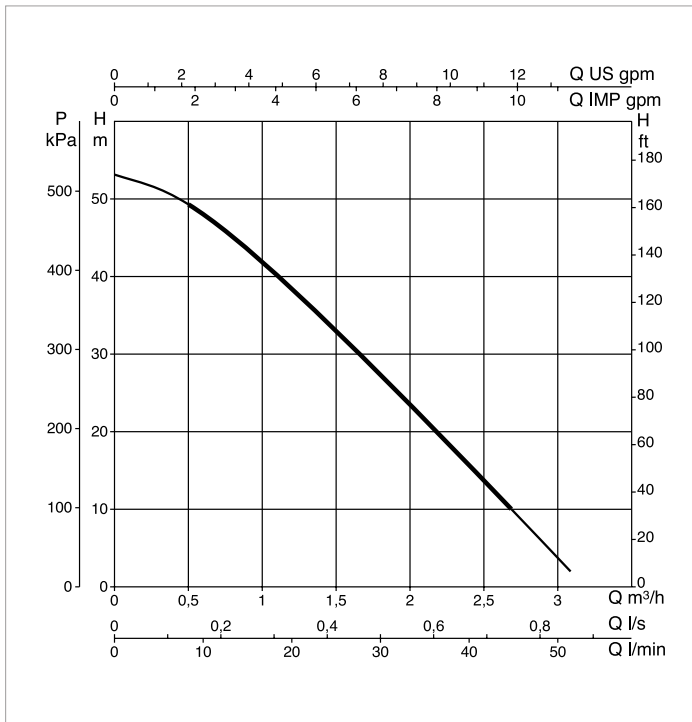
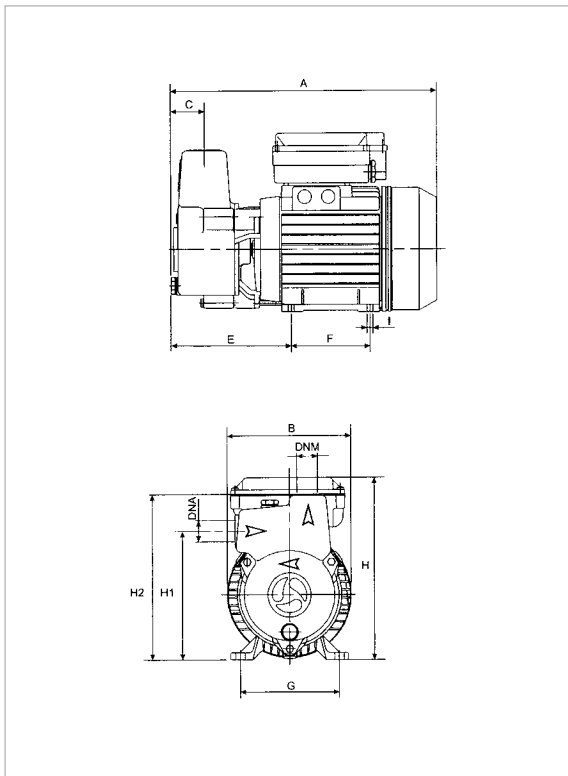
SELECTION TABLE

MODEL	Q=m ³ /h	0	0,3	0,6	0,9	1,2	1,8	2,4
	Q=l/min	0	5	10	15	20	30	40
KPA 40/20 M - T	H (m)	53	51	48	43	38	27	16

KPA - SELF-PRIMING PERIPHERAL PUMPS

Pumped liquid temperature range: from 0 °C to +35 °C for domestic use (EN 60335-2-41). From -10 °C to +80 °C for other uses.

Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	ELECTRICAL DATA									
	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		I _n A	I _{st} A	1/min	CAPACITOR		MOTOR TYPE
			kW	HP				μF	Vc	
KPA 40/20 M	1 x 230V ~	1,1	0,75	1	5,1	17,3	2800	20	450	-
KPA 40/20 T	3 x 230 - 400V ~	1,3	0,75	1	4/2,3	27 - 15,4	2800	-	-	IE3
KPA 40/20 T	3 x 230 - 400V ~	1	0,75	1	3,6/2,1	24,3 - 14,07	2860	-	-	IE2

MODEL	A	B	C	E	F	G	I Ø	H	H1	H2	DNA GAS	DNM GAS	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
													L/A	L/B	H		
KPA 40/20 M - T	301	142	38	136	90	112	7	206	146	187	1" G	1" G	406	267	402	0,044	12,4



TECHNICAL DATA

Operating range:

from 5 to 50 l/m with head up to 84 metres

Pumped liquid: clean, free of solids and abrasives, non-viscous, non-aggressive, non-crystallised and chemically neutral

Liquid temperature range:

from 0 °C to +35 °C for domestic use

from -10°C to +50°C for other uses

Maximum ambient temperature: +40°C

Maximum operating pressure: 10 bar (6 bar for KPS-KPF 30/16)

Installation: fixed, horizontal position

Motor protection class: IP 44

Protection class at the terminal board:

IP 55 for KP38/18 and for KPF 45/20;

IP44 for KPF/S 30/16

Insulation class: F

Standard voltage: single-phase 1 x 230 V / 50 Hz

three-phase: 3 x 230-400 V / 50 Hz

Special executions on requests: alternative voltages and frequencies

APPLICATIONS

Peripheral centrifugal pump with compact dimensions. Capable of generating high heads and suitable for domestic installations, water supply systems, small gardening applications, draining and filling cisterns, and for light industrial uses, such as feeding pressurized boilers (anti-condensation).

CONSTRUCTION FEATURES OF THE PUMP

Brass pump body and motor support for KP 60/6 and KP 60/12. Pump body with radial suction for KP and KPS; front suction for KPF. Cast iron support with brass wear disc for KPS 30/16 and KP 38/18. KPS 30/16 is available on request with bronze pump body and support. Brass impeller. Carbon/ceramic mechanical seal.

CONSTRUCTION FEATURES OF THE MOTOR

Closed asynchronous type, external ventilation cooling. Rotor running on permanently lubricated ball bearings, oversized to ensure low noise and durability. Standard built-in thermo-amperometric protection. Capacitor permanently fitted on single phase versions. For the protection of the three-phase motor, we recommend the use of remote overload cut-outs, in compliance with current local regulations. Construction according to CEI 2-3 and CEI 61-69 (EN 60335-2-41).

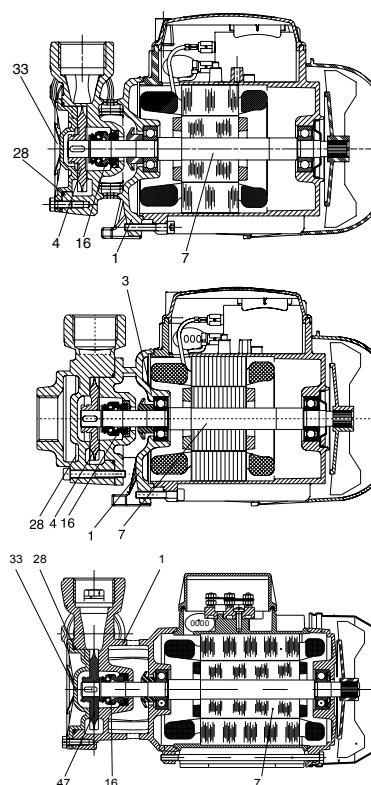
MATERIALS

No.	PARTS* KPS	MATERIALS
1	PUMP BODY	CAST IRON 200 UNI ISO 185
4	IMPELLER	BRASS PCU ZN 40 PB2 UNI 5705/65
7	SHAFT WITH ROTOR	AISI 416 STAINLESS STEEL X12 CRS 13 UNI 6900/71
16	MECHANICAL SEAL	CARBON / CERAMIC
28	OR RING	NBR
33	COVER	BRASS PCU ZN 40 PB2 UNI 5705/65

No.	PARTS* KPF	MATERIALS
1	PUMP BODY	G20 EN-GJL-250 UNI EN 1561
3	MOT. SUPP. PUMP	G20 EN-GJL-250 UNI EN 1561
4	IMPELLER	BRASS PCU ZN 40 PB2 UNI 5705/65
7	SHAFT WITH ROTOR	AISI 416 STAINLESS STEEL X12 CRS 13 UNI 6900/71
16	MECHANICAL SEAL	CARBON / CERAMIC
28	OR RING	NBR

No.	PARTS* KP 38	MATERIALS
1	PUMP BODY	CAST IRON 200 UNI ISO 185
4	IMPELLER	BRASS PCU ZN 40 PB2 UNI 5705/65
7	SHAFT WITH ROTOR	AISI 416 STAINLESS STEEL X12 CRS 13 UNI 6900/71
16	MECHANICAL SEAL	CARBON / CERAMIC
28	OR RING	NBR
33	COVER	BRASS PCu Zn 40 Pb2 UNI 5705/65

* In contact with the liquid



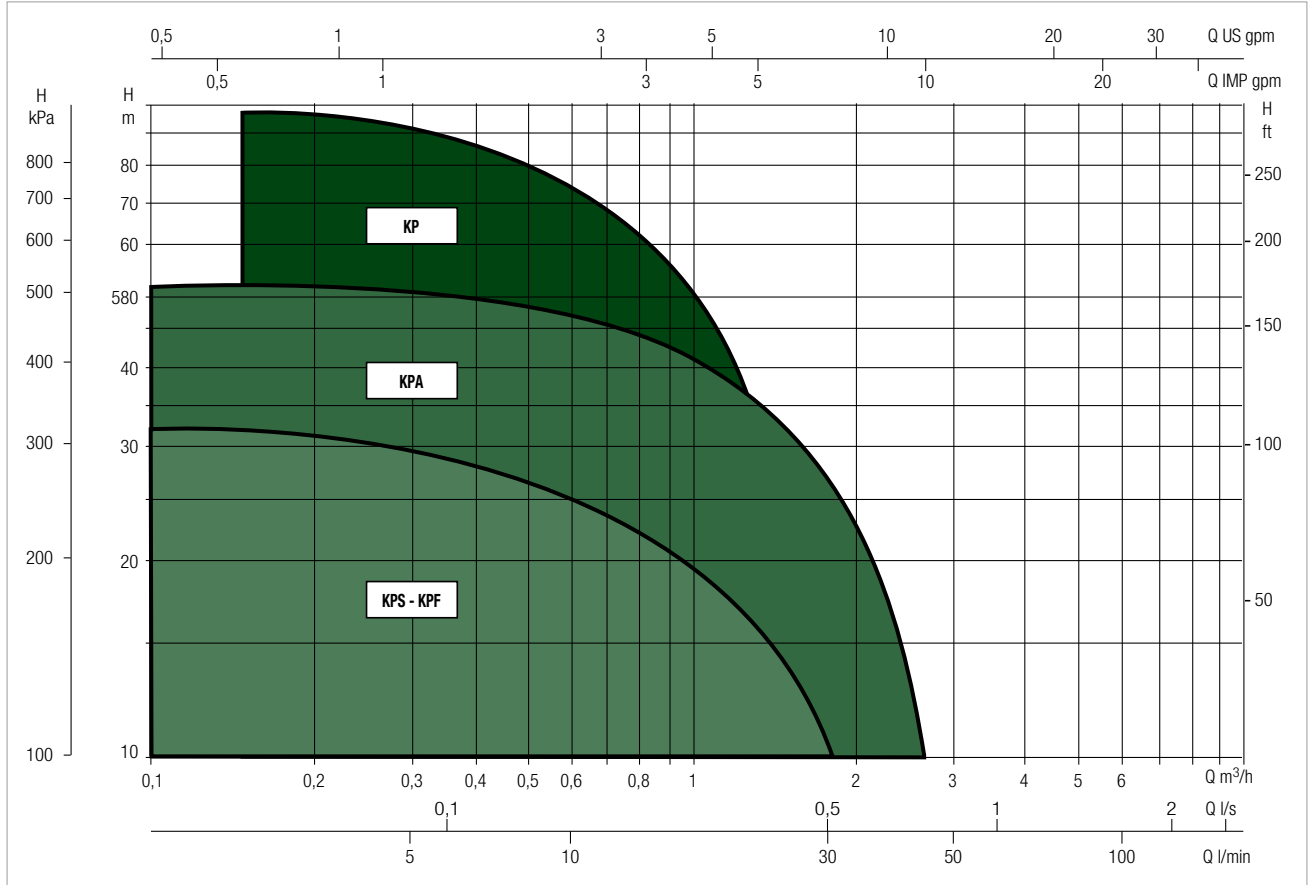
KPA / KPS / KPF / KP RANGE

PERIPHERAL PUMPS

PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

GRAPHIC SELECTION TABLE



SELECTION TABLE

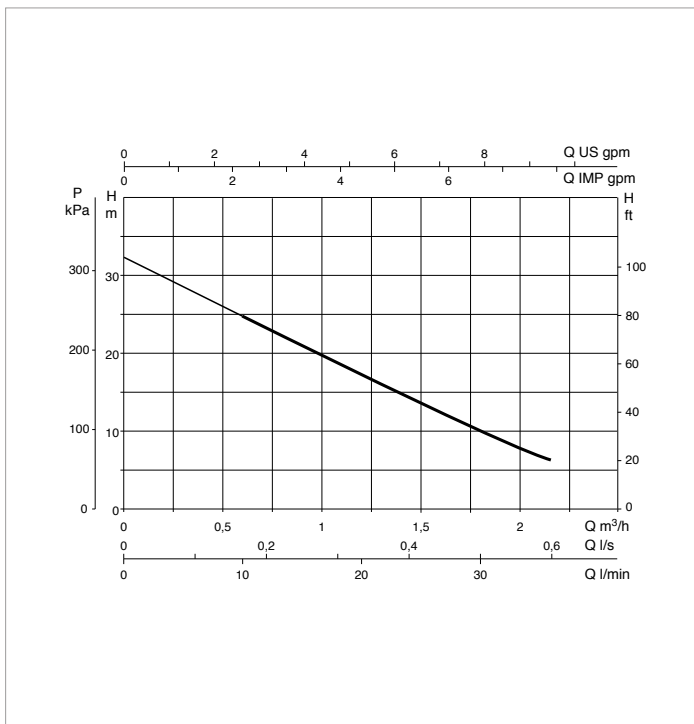
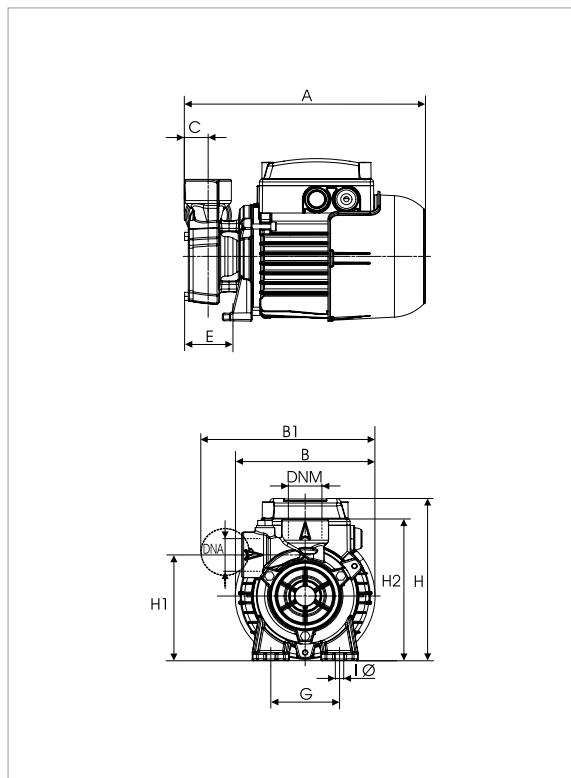
MODEL	Q=m ³ /h	0	0,3	0,6	0,9	1,2	1,8	2,4
	Q=l/min	0	5	10	15	20	30	40
KPF 30/16 M - T	H (m)	32,5	31	25	22	17,5	10	
KPS 30/16 M - T		32,5	31	25	22	17,5	10	
KPS 30/16 M-P*		32,5	31	25	22	17,5	10	
KP 38/18 M - T		54	50	46	41	36	27,5	17,5
KPF 45/20 M - T		84	76	68	62	56	38	24

* KPS-fitted - pump with a pressure gauge, pressure switch, power supply cable with plug and five-way fitting for connection to a tank.

KPS - PERIPHERAL PUMPS

Pumped liquid temperature range: from 0 °C to +35 °C for domestic use. From -10 °C to +50°C for other uses.

Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	ELECTRICAL DATA						
	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		I _n A	CAPACITOR	
			kW	HP		μF	V _c
KPS 30/16 M	1 x 230 V ~	0,47	0,37	0,5	2	8	450
KPS 30/16 T	3 x 230 - 400 V ~	0,45	0,37	0,5	1,4/0,8	-	-
KPS 30/16 M-P*	1 x 230 V ~	0,47	0,37	0,5	2	8	450

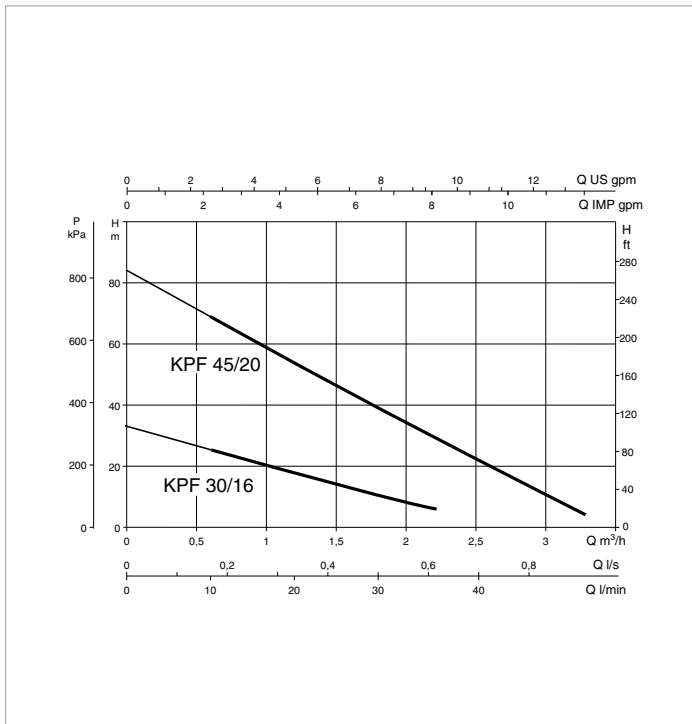
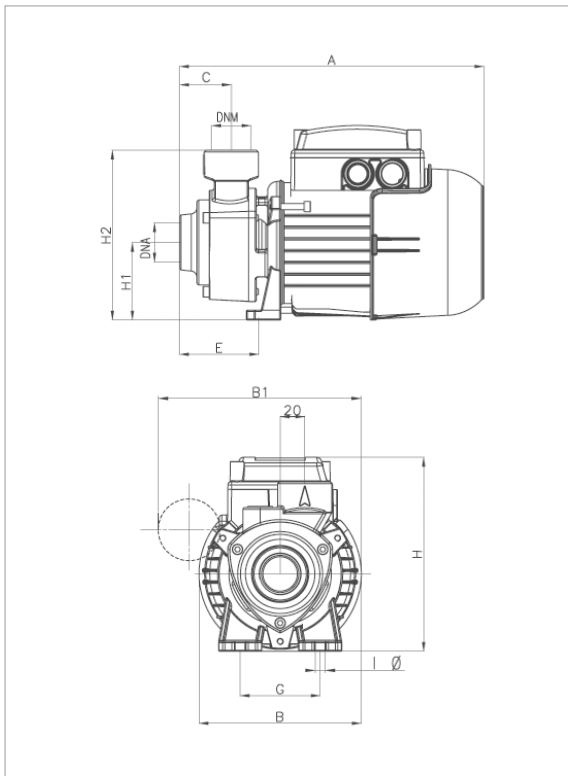
MODEL	A	B	B1	C	E	F	G	I Ø	H	H1	H2	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
														L/A	L/B	H		
KPS 30/16 M - T	228	132	165	22	46	-	65	8	158	103	138	1" G	1" G	259	164	197	0,0084	5,4
KPS 30/16 M-P*	228	132	165	22	46	-	65	8	158	103	138	1" G	1" G	259	164	197	0,0084	5,4

* KPS-fitted - pump with a pressure gauge, pressure switch, power supply cable with plug and five-way fitting for connection to a tank.

KPF - PERIPHERAL PUMPS

Pumped liquid temperature range: from 0 °C to +35 °C for domestic use. From -10 °C to +50°C for other uses.

Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

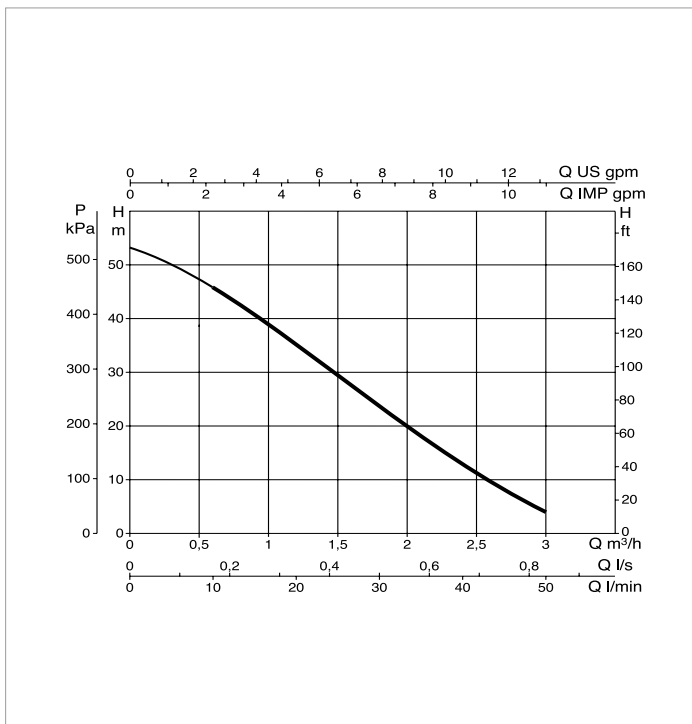
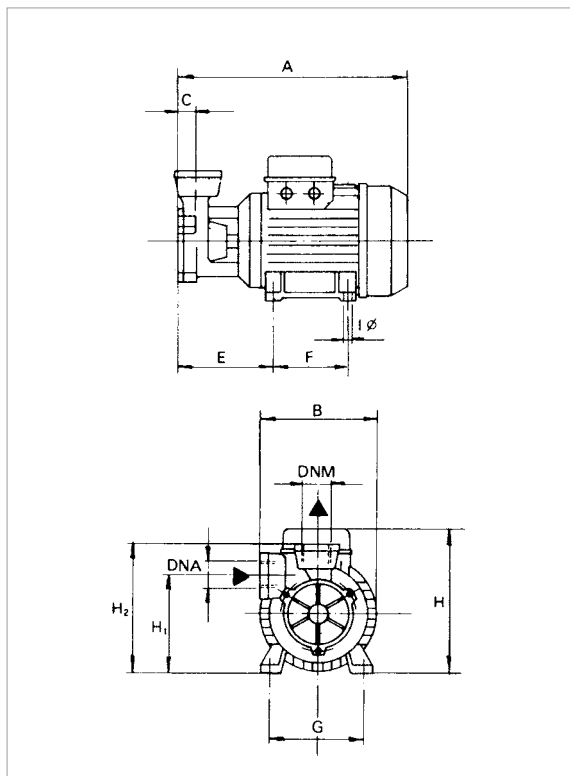
MODEL	ELECTRICAL DATA							MOTOR TYPE
	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	CAPACITOR		
			kW	HP		µF	Vc	
KPF 30/16 M	1 x 230V ~	0.53	0.37	0.5	2.37	8	450	-
KPF 30/16 T	3 x 230 - 400V ~	0.47	0.37	0.5	1,45 - 0.82	-	-	-
KPF 45/20 M	1 x 230V ~	1.5	1	1.34	5.9	25	450	-
KPF 45/20 T	3 x 230 - 400V ~	1,2	1	1,34	4/2,3	-	-	IE3
KPF 45/20 T	3 x 230 - 400V ~	1,4	1	1,34	4,5/2,6	-	-	IE2

MODEL	A	B	B1	C	E	F	G	I Ø	H	H1	H2	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg	MOTOR TYPE
														L/A	L/B	H			
KPF 30/16 M - T	247	132	165	42	64	-	65	8	158	63	138	1" G	1" G	262	140	180	0,0066	5,3	-
KPF 45/20 M	315	155	-	55	95	-	112	7	188	78	163	1" G	1" G	325	165	198	0,0106	9	-
KPF 45/20 T	315	155	-	55	95	-	112	7	188	78	163	1" G	1" G	325	165	198	0,0106	9	IE3
KPF 45/20 T	315	155	-	55	95	-	112	7	188	78	163	1" G	1" G	325	165	198	0,0106	9	IE2

KP 38/18 - PERIPHERAL PUMPS

Pumped liquid temperature range: from 0 °C to +35 °C for domestic use. From -10 °C to +50°C for other uses.

Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	ELECTRICAL DATA						
	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	CAPACITOR	
			kW	HP		μF	Vc
KP 38/18 M	1 x 230V ~	0,89	0,6	0,8	4	12,5	450
KP 38/18 T	3 x 230 - 400V ~	0,86	0,6	0,8	2,9-1,7	-	-

MODEL	A	B	B1	C	E	F	G	I Ø	H	H1	H2	DNA	DNM	PACKING DIMENSIONS			VOLUME (mc)	WEIGHT Kg
														L/A	L/B	H		
KP 38/18 M - T	255	130	-	26	106	80	100	7	186	108	153	1" G	1" G	271	176	209	0,01	7,5



TECHNICAL DATA

Operating range:

from 1 to 35 l/m with head up to 107 metres

Pumped liquid: clean, free of solids and abrasives, non-viscous, non-aggressive, non-crystallised and chemically neutral, with properties similar to water

Liquid temperature range:

from 0 °C to +35 °C for domestic use (EN 60335-2-41)

from -10 °C to +80 °C for other uses

Maximum ambient temperature: +40°C

Maximum operating pressure: 12 bar (1200 kPa)

Installation: fixed, horizontal position

Motor protection class: IP 44

Protection class at the terminal board: IP 55

Insulation class: F

Standard voltage: single-phase 1 x 230 V / 50 Hz

three-phase: 3 x 230-400 V / 50 Hz

Special executions on requests: alternative voltages and frequencies

APPLICATIONS

Peripheral centrifugal pump with compact dimensions. Capable of generating high heads and suitable for domestic installations, water supply systems, small gardening applications, draining and filling cisterns, and for light industrial uses, such as feeding pressurized boilers (anti-condensation).

CONSTRUCTION FEATURES OF THE PUMP

Brass pump body and motor support for KP 60/6 and KP 60/12.

Side suction pump body.

Brass impeller.

Carbon/ceramic mechanical seal.

CONSTRUCTION FEATURES OF THE MOTOR

Closed asynchronous type, external ventilation cooling.

Rotor running on permanently lubricated ball bearings, oversized to ensure low noise and durability.

Standard built-in thermo-amperometric protection. Capacitor permanently fitted on single phase versions.

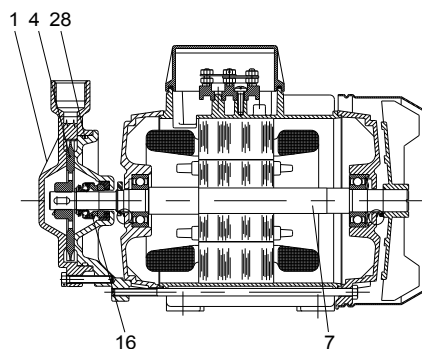
For the protection of the three-phase motor, we recommend the use of remote overload cut-outs, in compliance with current local regulations.

Construction according to CEI 2-3 and CEI 61-69 (EN 60335-2-41).

MATERIALS

No.	PARTS*	MATERIALS
1	PUMP BODY	BRASS PCU ZN 40 PB2 UNI 5705/65
3	SUPPORT	BRASS PCU ZN 40 PB2 UNI 5705/65
4	IMPELLER	BRASS PCU ZN 40 PB2 UNI 5705/65
7	SHAFT WITH ROTOR	AISI 416 STAINLESS STEEL X12 CRS 13 UNI 6900/71
16	MECHANICAL SEAL	CARBON / CERAMIC
28	OR RING	VITON

* In contact with the liquid



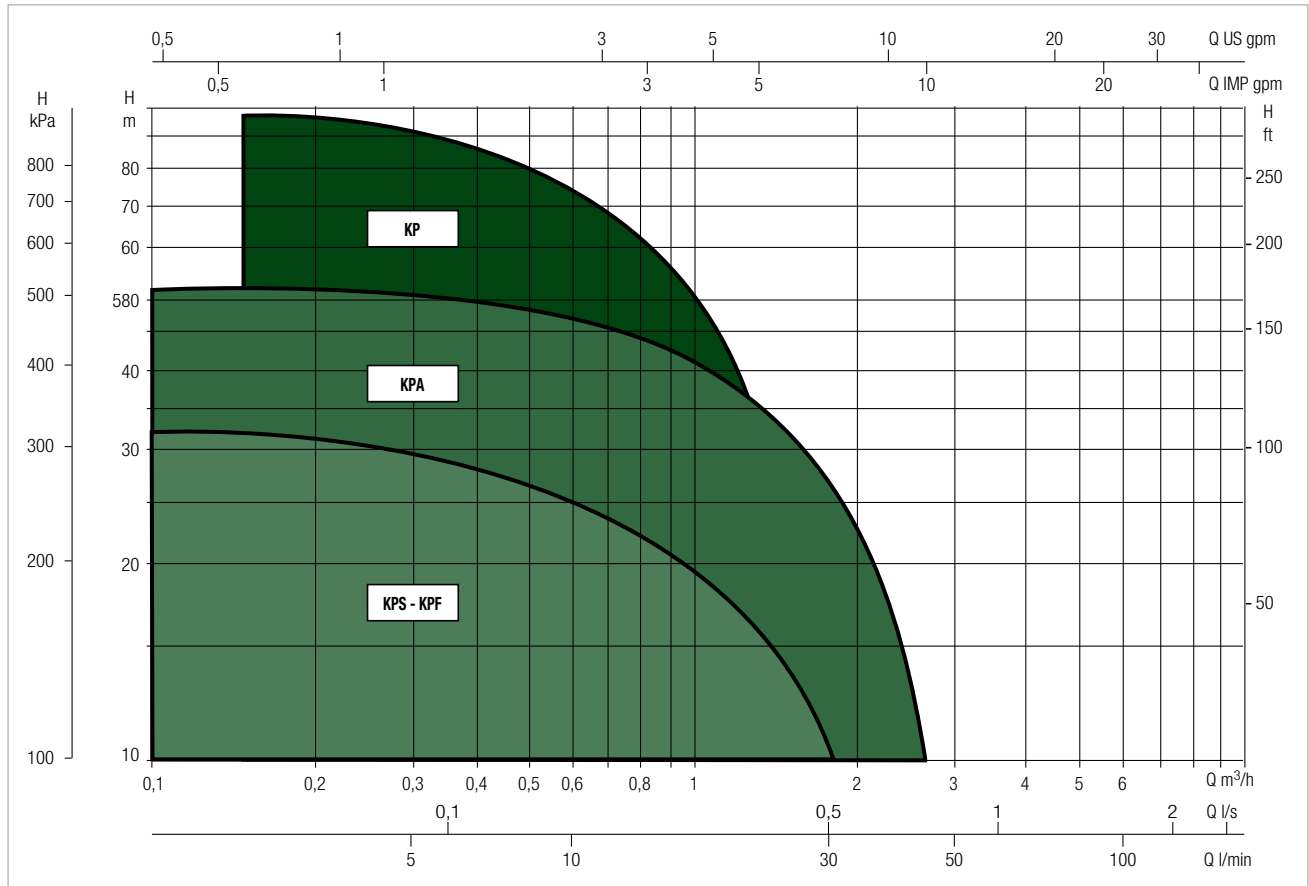
KPA / KPS / KPF / KP RANGE

PERIPHERAL PUMPS

PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

GRAPHIC SELECTION TABLE



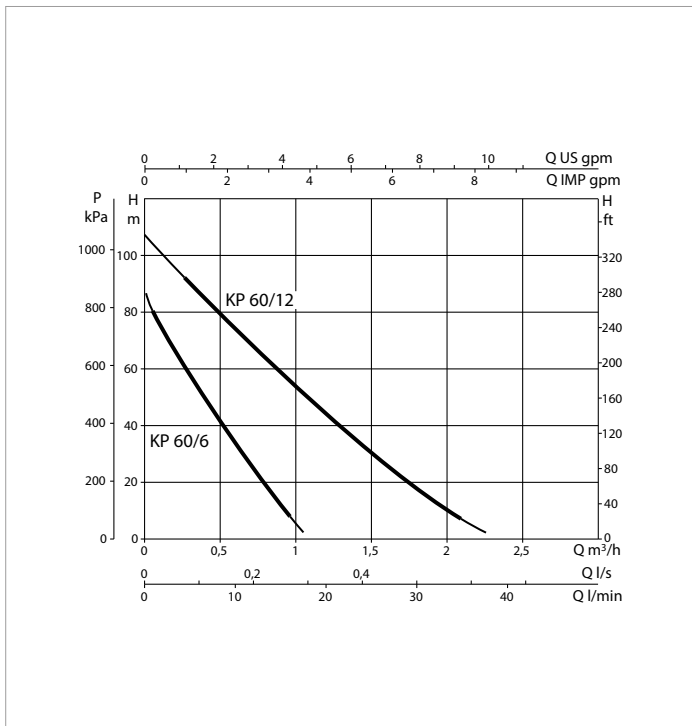
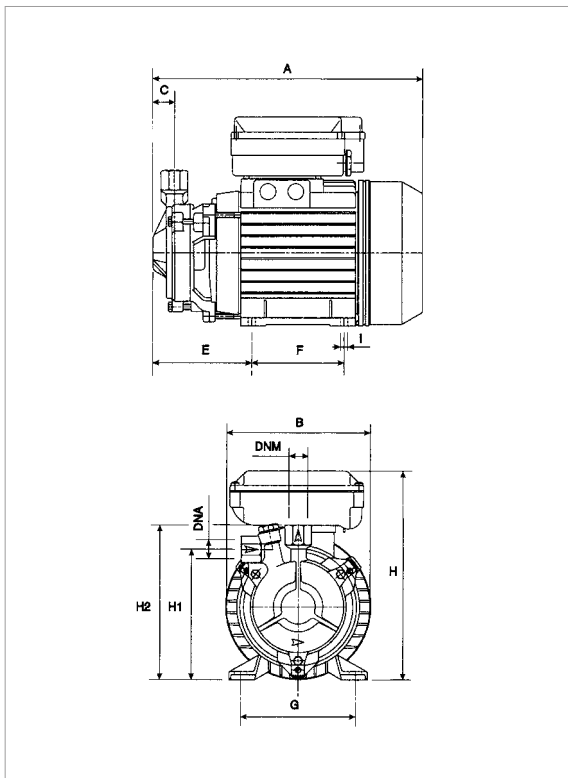
SELECTION TABLE

MODEL	Q=m ³ /h	0	0,3	0,6	0,9	1,2	1,8
	Q=l/min	0	5	10	15	20	30
KP 60/6 M	H (m)	87	57	33	13		
KP 60/6 T		87	57	33	13		
KP 60/12 M		107	91	74	58	43	17
KP 60/12 T		107	91	74	58	43	17

KP 60 - PERIPHERAL PUMPS

Liquid temperature range: from 0 °C to +35 °C for domestic use (EN 60335-2-41). From -10 °C to +80 °C for other uses.

Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	ELECTRICAL DATA							MOTOR TYPE
	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		I _n A	CAPACITOR		
			kW	HP		μF	Vc	
KP 60/6 M	1 x 230 V ~	0,54	0,37	0,5	2,4	10	450	
KP 60/6 T	3 x 230 - 400 V ~	0,52	0,37	0,5	1,8-1	-	-	
KP 60/12 M	1 x 230 V ~	1,15	0,75	1	5,2	20	450	
KP 60/12 T	3 x 230 - 400 V ~	1,1	0,75	1	3,6-2,1	-	-	IE3
KP 60/12 T	3 x 230 - 400 V ~	1	0,75	1	3,8-2,2	-	-	IE2

MODEL	A	B	C	E	F	G	I Ø	H	H1	H2	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
													L/A	L/B	H		
KP 60/6 M	262	142	21	96	90	112	7	204	127	151	½" G	½" G	406	267	402	0,043	8,2
KP 60/6 T	262	142	21	96	90	112	7	173	127	151	½" G	½" G	406	267	402	0,043	7,9
KP 60/12 M	262	142	20	96	90	112	7	204	126	161	¾" G	¾" G	406	267	402	0,043	10,1
KP 60/12 T	262	142	20	96	90	112	7	173	126	161	¾" G	¾" G	406	267	402	0,043	9,9



TECHNICAL DATA

Operating range: flow rate up to 11 m³/h, with head up to 40 meters

Pumped liquid: clean, free of solids and abrasives, non-viscous, non-aggressive, non-crystallised and chemically neutral, with properties similar to water

Liquid temperature range: from -10°C to +90°C

Maximum ambient temperature: +40°C

Maximum operating pressure: 8 bar

Protection class: IP 55

Insulation class: F

Standard Voltage:

single-phase 220-230 V 50 Hz

three-phase 230 / 400 V 50Hz

Installation: horizontal or vertical position, provided that the motor is always above the pump

Special executions on requests:

V version: Alox Ceramic/Carbon/FKM: for oily liquids (up to 110°C) and propylene glycol

VS version: SiC/SiC/FKM: for oily liquids (up to 110°C) and fluids with abrasive particles

E version: SiC/Carbon/EPDM: high temperature water up to 120 °C and ethylene glycol

APPLICATIONS

Single-impeller stainless steel end suction centrifugal pump, suitable for thermal waters, industrial washing, civil and industrial pressure boosting (cold, hot, refrigerated liquid).

CONSTRUCTION FEATURES OF THE PUMP

The Pump body and impeller in stainless steel AISI 304 make the pump more resistant to the corrosion, reliable and compact.

The support in aluminium and the mechanical seal in Carbon Ceramic and NBR complete the hydraulic part of the pump.

The pump is MEI comply.

CONSTRUCTION FEATURES OF THE MOTOR

Closed asynchronous type, external ventilation cooling.

Rotor running on ball bearings, oversized to ensure low noise and durability.

Standard built-in thermo-amperometric protection. Capacitor permanently fitted on single phase versions.

For the protection of the three-phase motor, we recommend the use of remote overload cut-outs, in compliance with current local regulations.

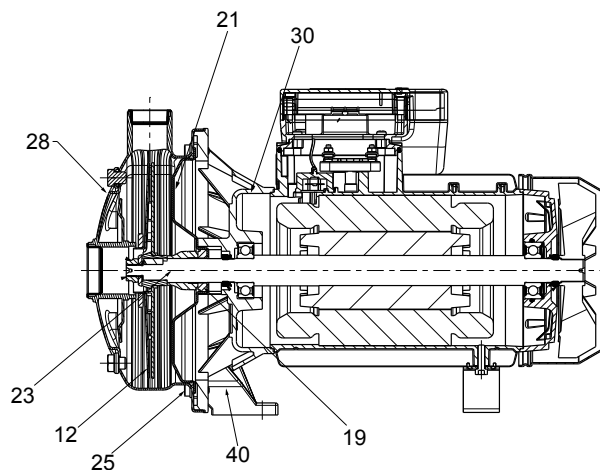
Construction according to CEI 2-3.

Three-phase IE2 motors as standard.

MATERIALS

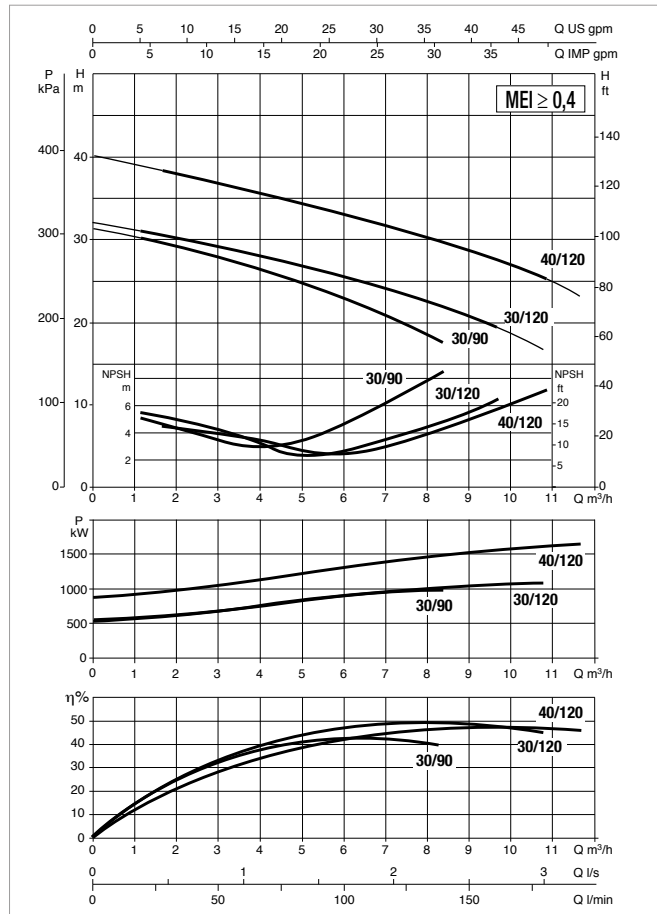
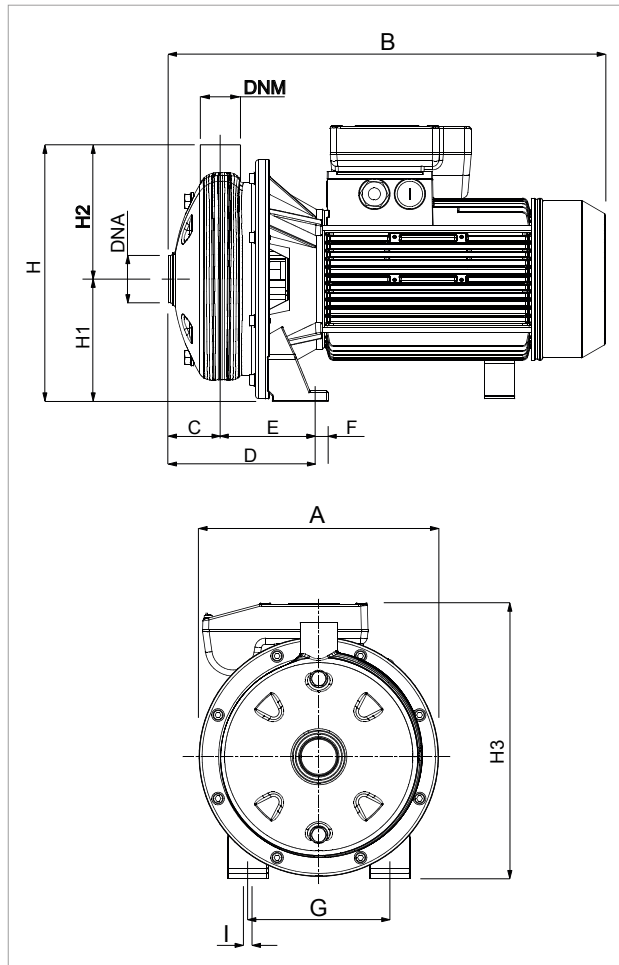
N°	PART	MATERIALS
28	PUMP BODY	STAINLESS STEEL AISI 304 X5CRNI 1810 UNI 6900/71
12	IMPELLER	STAINLESS STEEL AISI 304 X5CRNI 1810 UNI 6900/71
19	MECHANICAL SEAL (*)	CARBON/CERAMIC/NBR/AISI316
21	MECHANICAL SEAL DISC	STAINLESS STEEL AISI 304
25	O-RING	NBR RUBBER
23	PUMP SHAFT	STAINLESS STEEL AISI 303 X10CRNIS 1089 UNI 6900/71
30	MOTOR CASE	ALUMINIUM
40	MOTOR SUPPORT	ALUMINIUM

(*) Special mechanical seal: Alox Ceramic/Carbon/FKM - SiC/SiC/FKM - SiC/Carbon/EPDM



KI - SINGLE IMPELLER PUMP

Liquid temperature range: from -10°C to +90°C - Maximum operating pressure: 8 bar



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	Q=m³/h	0	1,2	3	4,8	5,4	6,6	7,8	8,4	9,6	10,8	11,7
	Q=l/min	0	20	50	80	90	110	130	140	160	180	195
KI 30/90 M - T	H (m)	31,4	30,1	27,8	25,1	24	21,7	19	17,5			
KI 30/120 M - T		32	30,7	28,9	27	26,3	24,8	22,8	21,6	19,2	16,5	
KI 40/120 M* - T*		40,3	39,1	37,2	35,2	34,5	33	31,3	30,4	28,5	26,4	23

MODEL	POWER INPUT 50 Hz	P1 max kW	POWER P2		In A	MOTOR TYPE	CAPACITOR		MEI
			kW	Hp			uF	Vc	
KI 30/90 M	1x220-230 V	1,4	0,75	1	6,5	-	25	450	≥ 0,4
KI 30/90 T	3x230/400 V	1,25	0,75	1	4 / 2,3	IE3	-	-	≥ 0,4
KI 30/120 M	1x220-230 V	1,55	1	1,36	7	-	25	450	≥ 0,4
KI 30/120 T	3x230/400 V	1,4	1	1,36	4,7 / 2,7	IE3	-	-	≥ 0,4
KI 40/120 M*	1x220-230 V	2,2	1,5	2	9,7	-	40	450	-
KI 40/120 T*	3x230/400 V	2,1	1,5	2	7 / 4,1	IE3	-	-	-
KI 30/90 T	3x230/400 V	1,29	0,75	1	4,5 / 2,6	IE2	-	-	≥ 0,4
KI 30/120 T	3x230/400 V	1,45	1	1,36	5 / 2,9	IE2	-	-	≥ 0,4
KI 40/120 T*	3x230/400 V	2,2	1,5	2	7,5 / 4,3	IE2	-	-	-

MODEL	A	B	C	D	E	F	G	H	H1	H2	H3	ø I	DNA	DNM	PACKING DIMENSIONS			WEIGHT Kg	Q.TY X PALLET
															L/A	L/B	H		
KI 30/90 M	214	337	53	143,5	90,5	13	130	232	108	124	-	9	1"1/4 G	1" G	400	240	275	13,4	27
KI 30/90 T	214	354	53	144	91	13	130	232	108	124	-	9	1"1/4 G	1" G	400	240	275	12,2	27
KI 30/120 M	214	337	53	143,5	90,5	13	130	232	108	124	-	9	1"1/4 G	1" G	400	240	275	13,4	27
KI 30/120 T	214	354	53	143,5	90,5	13	130	232	108	124	-	9	1"1/4 G	1" G	400	240	275	12,3	27
KI 40/120 M*	236	432	53	146,5	93,5	13	140	252	120	132	272	9	1"1/4 G	1" G	500	300	315	19,6	18
KI 40/120 T*	236	432	53	159	94	13	140	252	120	132	272	9	1"1/4 G	1" G	500	300	315	19,3	27
KI 30/90 T	214	354	53	144	91	13	130	232	108	124	-	9	1"1/4 G	1" G	400	240	275	12,2	27
KI 30/120 T	214	354	53	143,5	90,5	13	130	232	108	124	-	9	1"1/4 G	1" G	400	240	275	13,8	27
KI 40/120 T*	236	432	53	159	94	13	140	252	120	132	272	9	1"1/4 G	1" G	500	300	315	19,3	27

K SINGLE-IMPELLER

SINGLE-IMPELLER PUMPS



TECHNICAL DATA

Operating range:

from 1,8 to 96 m³/h, with head up to 62 metres

Pumped liquid: clean, free of solids and abrasives, non-viscous, non-aggressive, non-crystallised and chemically neutral, with properties similar to water

Liquid temperature range:

K 20/41, K 30/70, K 30/100, K 36/100

K 12/200, K 36/200, K 40/200: from -10 °C to +50 °C

Rest of the range: from -15 °C to +110 °C

Maximum ambient temperature: +40°C

Maximum operating pressure:

K 20/41, K 30/70, K 30/100, K 36/100, K 12/200, K 14/400 : 6 bar (600 kPa)

K 36/200, K 40/200, K 55/200, K 11/500, K 18/500, K 28/500 : 8 bar (800 kPa)

K 40/400, K 50/400, K 30/800, K 40/800, K 50/800,

K 20/1200, K 25/1200, K 35/1200 : 10 bar (1000 kPa)

Protection class:

IP 44 (IP 55 for 2,2 - 3 - 4 - 5,5 - 7,5 - 9,2 - 11 kW motors)

Protection class at the terminal board: IP 55

Insulation class: F

Standard voltage:

single-phase 220-240 V / 50 Hz

three-phase 230-400 V / 50 Hz up to 4 kW included - 400 V Δ 50 Hz from 5,5 kW

Installation: horizontal or vertical position, provided that the motor is always above the pump.

Special executions on requests: alternative voltages and frequencies

APPLICATIONS

Single-impeller centrifugal pump suitable for domestic, civil, industrial and agricultural systems, and for decanting, mixing and irrigation uses.

CONSTRUCTION FEATURES OF THE PUMP

Pump body and motor support in cast iron.

Technopolymer or cast iron impeller, as per the TECHNICAL DATA table.

Carbon/ceramic mechanical seal.

CONSTRUCTION FEATURES OF THE MOTOR

Closed asynchronous type, external ventilation cooling.

Rotor running on ball bearings, oversized to ensure low noise and durability.

Standard built-in thermo-amperometric protection. Capacitor permanently fitted on single phase versions.

For the protection of the three-phase motor, we recommend the use of remote overload cut-outs, in compliance with current local regulations.

Construction according to CEI 2-3.

IE2 motors as standard, from 0,75 kW to 5,5 kW - IE3 ≥ 7,5 kW.

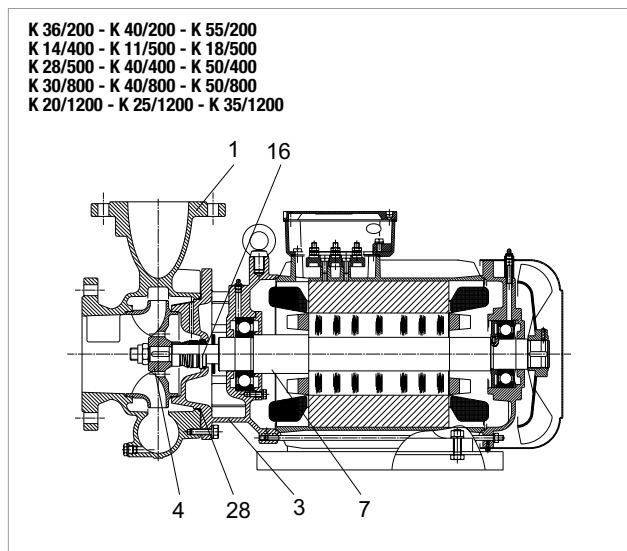
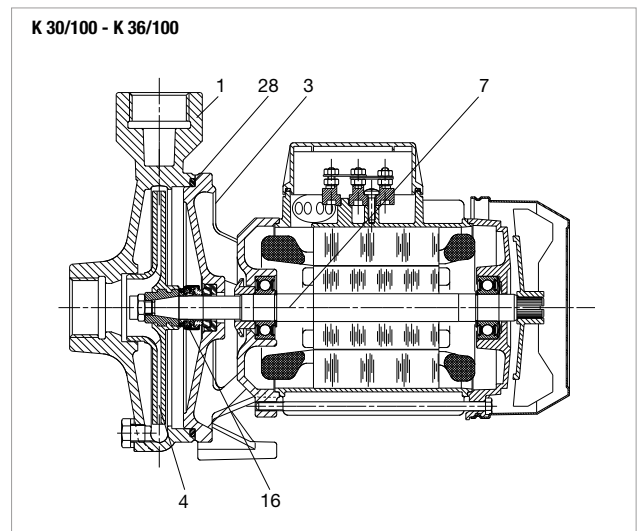
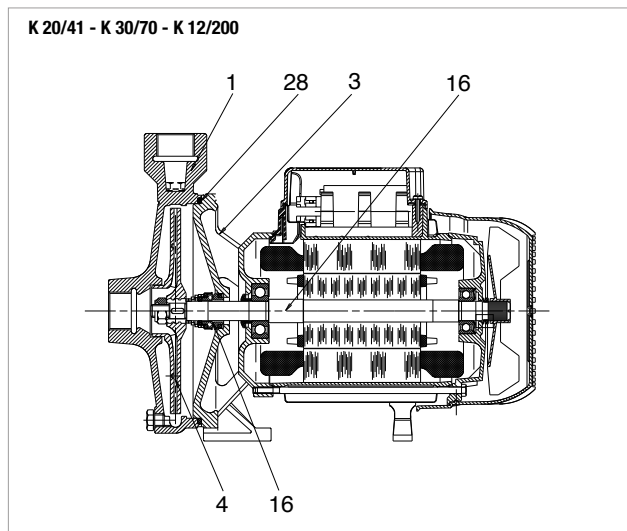
K SINGLE-IMPELLER

SINGLE-IMPELLER PUMPS

MATERIALS

No.	PARTS*	MATERIALS	MODELS
1	PUMP BODY	CAST IRON 200 UNI ISO 185	
3	SUPPORT	CAST IRON 200 UNI ISO 185	
4	IMPELLER	TECHNOPOLYMER A	20/41; K 30/70; K 30/100; K 36/100; K 12/200; K 36/200; K 40/200;
		TECHNOPOLYMER B	K 55/200
		CAST IRON 200 UNI ISO 185	K 14/400; K 11/500; K 18/500; K 28/500; K 40/400; K 50/400; K 30/800; K 40/800; K 50/800; K 20/1200; K 25/1200; K 35/1200;
7	SHAFT WITH ROTOR	AISI 416 STAINLESS STEEL X12CRS13 UNI 6900/71	K 20/41; K 30/70; K 12/200
		AISI 303 STAINLESS STEEL X10CRN15 UNI 6900/71	K 30/100; K 36/100; K 36/200; K 40/200; K 55/200; K14/400; K 11/500; K 18/500; K 28/500
		AISI 304 STAINLESS STEEL X5CRNI 1810 UNI 6900/71	K 40/400; K 50/400; K 30/800; K 40/800; K 50/800; K 20/1200; K 25/1200; K 35/1200;
16	MECHANICAL SEAL	CARBON / CERAMIC	
28	OR RING	NBR RUBBER	
		EPDM RUBBER	K 36/200; K 40/200; K 55/200; K 14/400; K 11/500; K 18/500; K 28/500; K 30/800; K 40/800; K 50/800; K 20/1200; K 25/1200; K 35/1200;

* In contact with the liquid



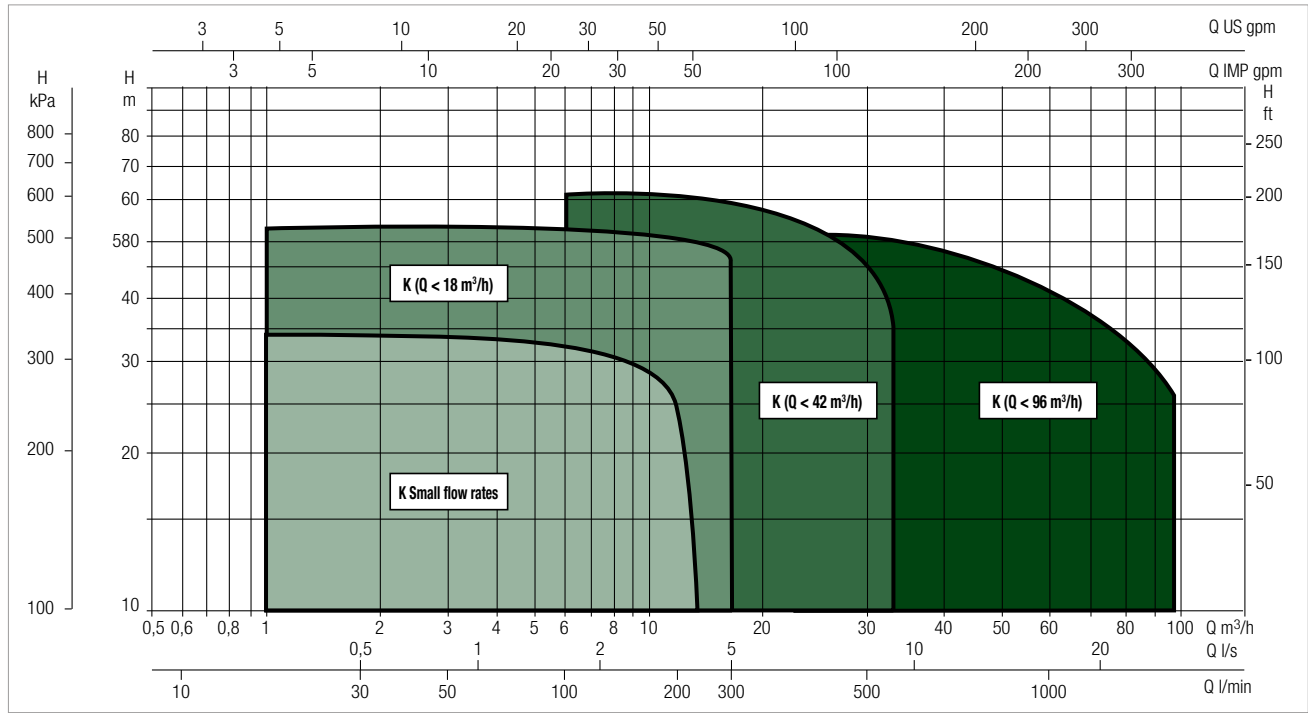
K SINGLE-IMPELLER RANGE

ELECTRIC PUMPS

PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

GRAPHIC SELECTION TABLE

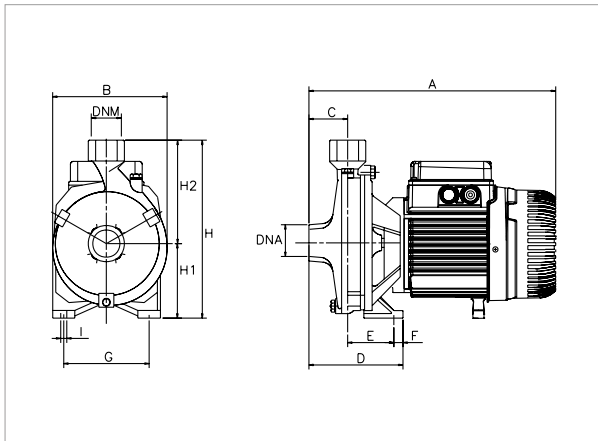


SELECTION TABLE

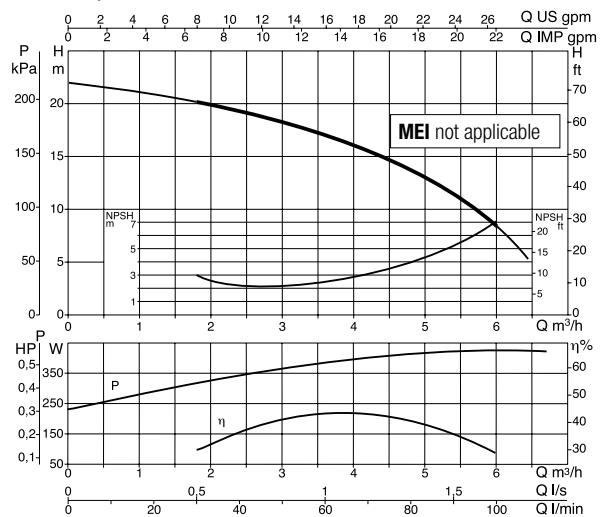
MODEL	Q=	0	1,8	2,4	3,6	4,8	6	7,2	9	9,6	10,8	12	15	18	24	30	36	42	60	72	84	96		
	m ³ /h	0	30	40	60	80	100	120	150	160	180	200	250	300	400	500	600	700	1000	1200	1400	1600		
K 20/41 M - T	H (m)		20,3	19,4	16,9	13,6	8,3																	
K 30/70 M - T		31,8	29,5	28,9	27	24,2	19,8	13,5																
K 30/100 M - T		29,2		29	28,8	28	26,8	25,3	22,5	21,5	18,5													
K 36/100 M - T		34,9		34,8	34,6	34	33	32	29,8	29	26,5													
K 12/200 M - T		18,4		17,2	16,5	16	15,3	14,7	13,5	13,1	12,3	11,4	8,9	5,5										
K 36/200 M - T		36,6				36	35,5	35	34	33,3	32,5	31,5	28	23,5										
K 40/200 M - T		41,3				41	40,5	40	39	38,8	38	37	33,5	29										
K 55/200 M - T		54					54	53,9	53,2	53	52	51,5	48,5	45										
K 14/400 M - T		19										18,8	18,5	18	16,3	13,8	10							
K 11/500 M - T		24,5										22,5	21,5	20	16,5	11,5	6,5							
K 18/500 M - T		31							30,9			30,7	30,4	30	28	24	17,9							
K 28/500 M - T		35										34,5	34	32,8	29,3	25,2	20							
K 40/400 T		50,5										49	48	45	37	24								
K 50/400 T		62										61	60	59	54,5	46								
K 30/800 T		44													42	40	38	35	21,5					
K 40/800 T		51,5													50	48	47	43,5	32,5	21				
K 50/800 T		58													56,5	55	53,5	51	41	31				
K 20/1200 T		37,5														36,5	36	35	34	30	26	21	15	
K 25/1200 T		40,7														39	38,5	38	37	33,5	30	25	18	
K 35/1200 T		45															43	42,5	38,5	35	31,5	27		

K 20/41 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +50°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

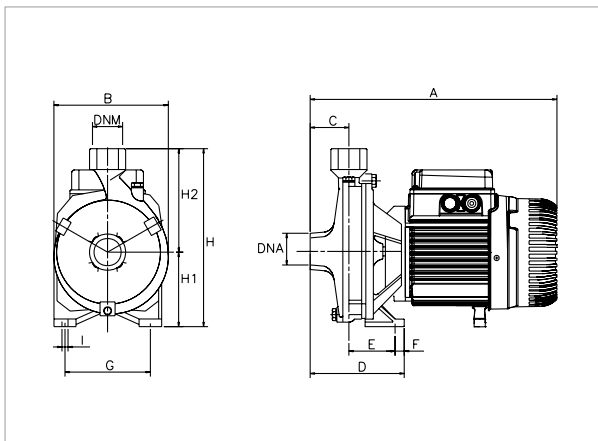


MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		ELECTRICAL DATA				CAPACITOR	
			kW	HP	In A	MOTOR TYPE	I st. A	rpm n. 1/min.	μF	Vc
K 20/41 M	1 x 220 - 240 V ~	0,65	0,37	0,5	3	-	8,5	2800	10	450
K 20/41 T	3 x 230 - 400 V ~	0,64	0,37	0,5	2,3/1,3	-	8,6-5	2800	-	-

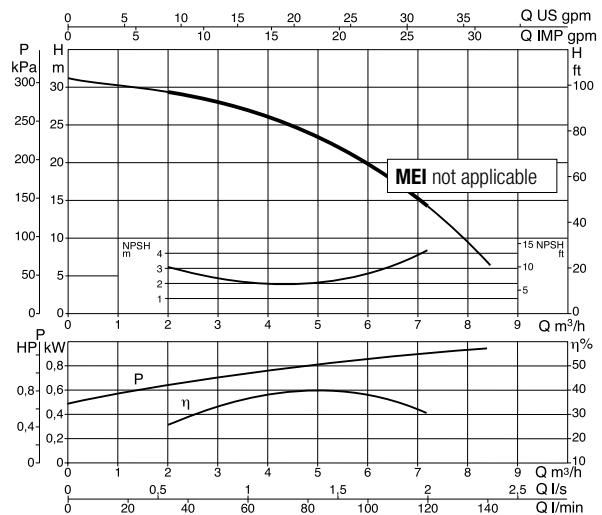
MODEL	MOTOR TYPE	A	B	C	D	E	F	G	ØI	H	H1	H2	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT kg
															L/A	L/B	H		
K 20/41 M	-	275	160	50	100	50	15	110	9	205	85	120	1" G	1" G	332	202	257	0,024	10
K 20/41 T	-	275	160	50	100	50	15	110	9	205	85	120	1" G	1" G	332	202	257	0,024	10

K 30/70 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +50°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

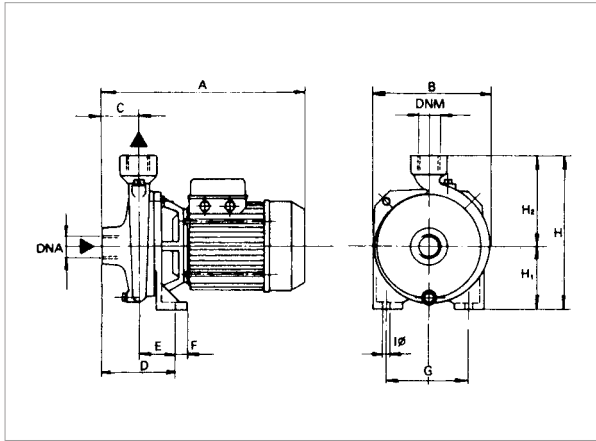


MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		ELECTRICAL DATA				CAPACITOR	
			kW	HP	In A	MOTOR TYPE	I st. A	rpm n. 1/min.	μF	Vc
K 30/70 M	1 x 220 - 240 V ~	1,3	0,75	1	6	-	15,8	2800	20	450
K 30/70 T	3 x 230 - 400 V ~	1,2	0,75	1	4/2,3	IE3	18	2820	-	-
K 30/70 T	3 x 230 - 400 V ~	1,2	0,75	1	4,3/2,5	IE2	22,1-12,8	2820	-	-

MODEL	MOTOR TYPE	A	B	C	D	E	F	G	ØI	H	H1	H2	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT kg
															L/A	L/B	H		
K 30/70 M	-	330	185	50	108	58	15	140	9	235	100	135	1" G	1" G	386	226	272	0,024	13,9
K 30/70 T	IE3	330	185	50	108	58	15	140	9	235	100	135	1" G	1" G	386	226	272	0,024	13,7
K 30/70 T	IE2	330	185	50	108	58	15	140	9	235	100	135	1" G	1" G	386	226	272	0,024	13,7

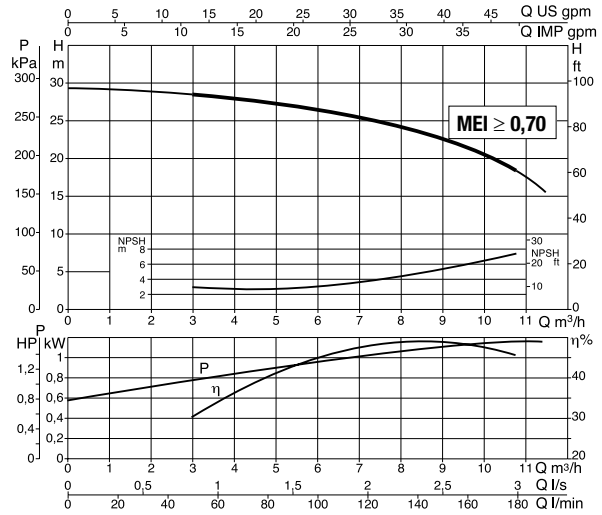
K 30/100 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +50°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

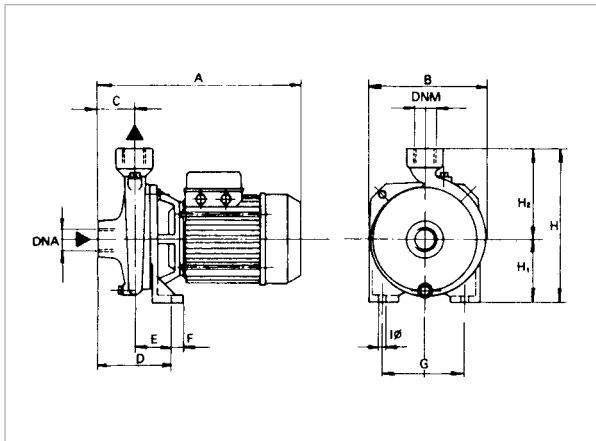


MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	I st. A	rpm n. 1/min.	CAPACITOR	
			kW	HP					μF	Vc
K 30/100 M	1 x 220 - 240 V ~	1,6	1,1	1,5	7,1	-	33	2800	31,5	450
K 30/100 T	3 x 230 - 400 V ~	1,6	1,1	1,5	5,4/3,1	IE3	26,4	2860	-	-
K 30/100 T	3 x 230 - 400 V ~	1,63	1,1	1,5	6,9/3,9	IE2	21	2860	-	-

MODEL	MOTOR TYPE	A	B	C	D	E	F	G	ØI	H	H1	H2	DNa	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT kg
															L/A	L/B	H		
K 30/100 M	-	333	200	50	114	64	15	140	9	255	105	150	1 1/2" G	1" G	427	246	307	0,032	18,5
K 30/100 T	IE3	333	200	50	114	64	15	140	9	255	105	150	1 1/2" G	1" G	427	246	307	0,032	18,2
K 30/100 T	IE2	333	200	50	114	64	15	140	9	255	105	150	1 1/2" G	1" G	427	246	307	0,032	18,2

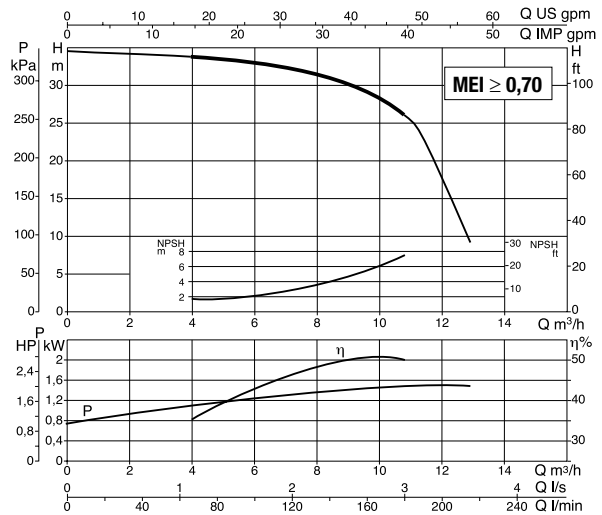
K 36/100 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +50°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

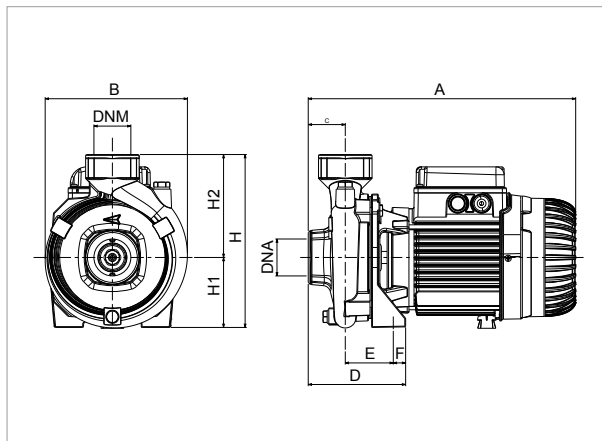


MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	I st. A	rpm n. 1/min.	CAPACITOR	
			kW	HP					μF	Vc
K 36/100 M	1 x 220 - 240 V ~	2,1	1,85	2,5	8,8	-	45	2850	40	450
K 36/100 T	3 x 230 - 400 V ~	1,9	1,85	2,5	6/3,5	IE3	26,4	2870	-	-
K 36/100 T	3 x 230 - 400 V ~	2	1,85	2,5	6,9/4	IE2	22	2870	-	-

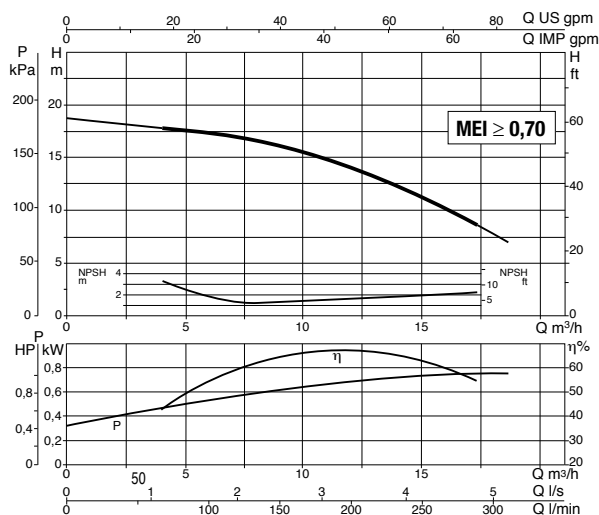
MODEL	MOTOR TYPE	A	B	C	D	E	F	G	ØI	H	H1	H2	DNa	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT kg
															L/A	L/B	H		
K 36/100 M	-	333	200	50	114	64	15	140	9	255	105	150	1 1/2" G	1" G	427	246	307	0,032	23,3
K 36/100 T	IE3	333	200	50	114	64	15	140	9	255	105	150	1 1/2" G	1" G	427	246	307	0,032	19,7
K 36/100 T	IE2	333	200	50	114	64	15	140	9	255	105	150	1 1/2" G	1" G	427	246	307	0,032	19,7

K 12/200 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +50°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

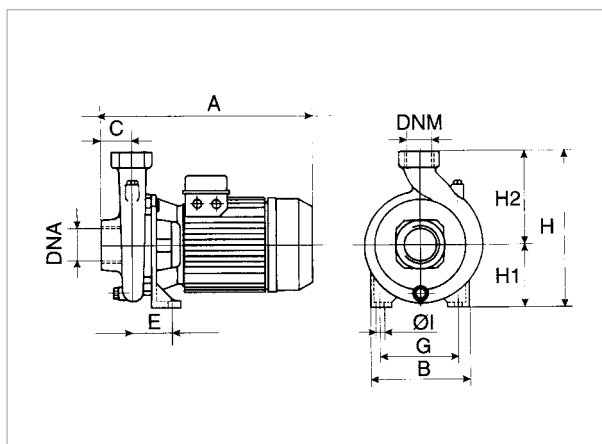


MODEL	ELECTRICAL DATA									
	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	I st. A	rpm n. 1/min.	CAPACITOR	
			kW	HP					μF	Vc
K 12/200 M	1 x 220 - 240 V ~	1,1	0,75	1	5,2	-	18,5	2940	25	450
K 12/200 T	3 x 230 - 400 V ~	0,97	0,75	1	3,5/2	IE3	18	2940	-	-
K 12/200 T	3 x 230 - 400 V ~	0,97	0,75	1	4/2,3	IE2	22,1-12,8	2940	-	-

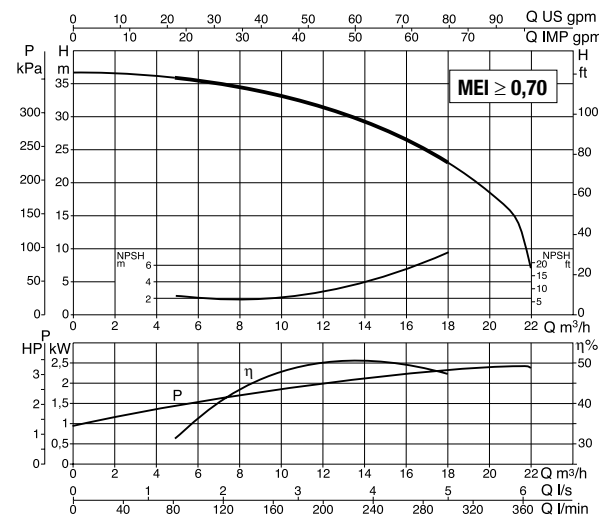
MODEL	MOTOR TYPE	A	B	C	D	E	F	G	ØI	H	H1	H2	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT kg
															L/A	L/B	H		
K 12/200 M	-	325	173	45	118	58	15	110	9,5	218	85	125	1 1/2" G	1 1/2" G	392	232	280	0,026	13,7
K 12/200 T	IE3	325	173	45	118	58	15	110	9,5	218	85	125	1 1/2" G	1 1/2" G	392	232	280	0,026	13,8
K 12/200 T	IE2	325	173	45	118	58	15	110	9,5	218	85	125	1 1/2" G	1 1/2" G	392	232	280	0,026	13,8

K 36/200 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +50°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

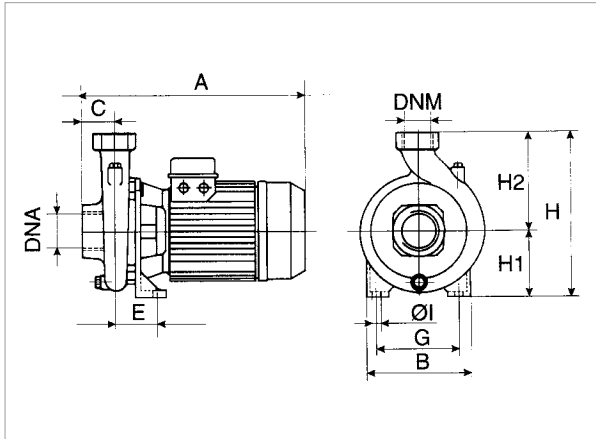


MODEL	ELECTRICAL DATA									
	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	I st. A	rpm n. 1/min.	CAPACITOR	
			kW	HP					μF	Vc
K 36/200 M	1 x 220 - 240 V ~	3	2,2	3	13,5	-	50	2900	80	450
K 36/200 T	3 x 230 - 400 V ~	3,1	2,2	3	9,7/5,6	IE3	33,5	2860	-	-
K 36/200 T	3 x 230 - 400 V ~	3	2,2	3	9/5,2	IE2	45-26	2860	-	-

MODEL	MOTOR TYPE	A	B	C	E	G	ØI	H	H1	H2	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT kg
													L/A	L/B	H		
K 36/200 M	-	425	250	55	86	175	14	320	135	185	2" G	1 1/4" G	512	276	345	0,049	35,5
K 36/200 T	IE3	425	250	55	86	175	14	320	135	185	2" G	1 1/4" G	512	276	345	0,049	21
K 36/200 T	IE2	425	250	55	86	175	14	320	135	185	2" G	1 1/4" G	512	276	345	0,049	33,1

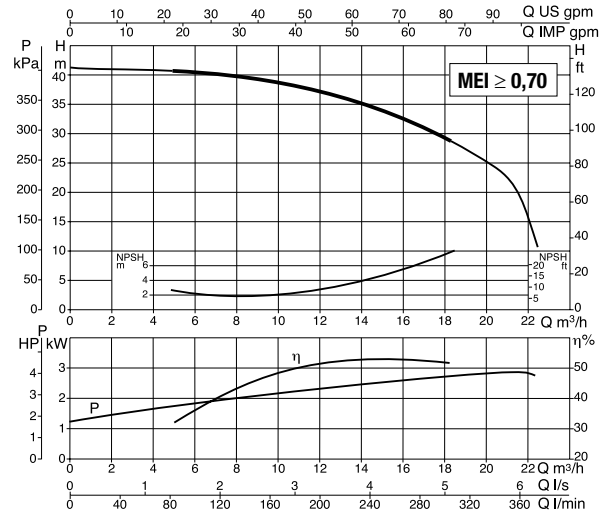
K 40/200 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +50°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

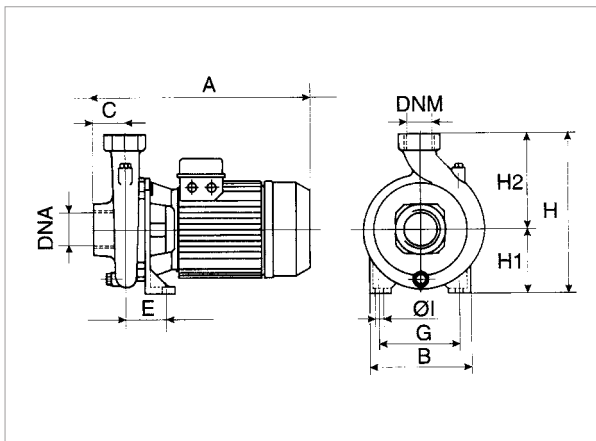


MODEL	ELECTRICAL DATA									
	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	I st. A	rpm n. 1/min.	CAPACITOR	
			kW	HP					µF	Vc
K 40/200 M	1 x 220 - 240 V ~	3,9	3	4	17,5	-	80	2900	160	450
K 40/200 T	3 x 230 - 400 V ~	3,6	3	4	10,9/6,3	IE3	44,2	2830	-	-
K 40/200 T	3 x 230 - 400 V ~	4	3	4	13,3/7,5	IE2	67,5-39	2830	-	-

MODEL	MOTOR TYPE	A	B	C	E	G	ØI	H	H1	H2	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT kg
													L/A	L/B	H		
K 40/200 M	-	425	250	55	86	175	14	320	135	185	2" G	1 1/4" G	512	276	345	0,049	37,8
K 40/200 T	IE3	425	250	55	86	175	14	320	135	185	2" G	1 1/4" G	512	276	345	0,049	19
K 40/200 T	IE2	425	250	55	86	175	14	320	135	185	2" G	1 1/4" G	512	276	345	0,049	34,9

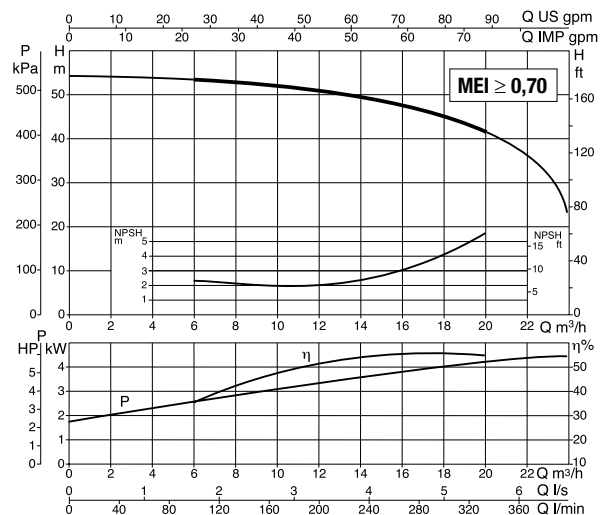
K 55/200 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +110°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

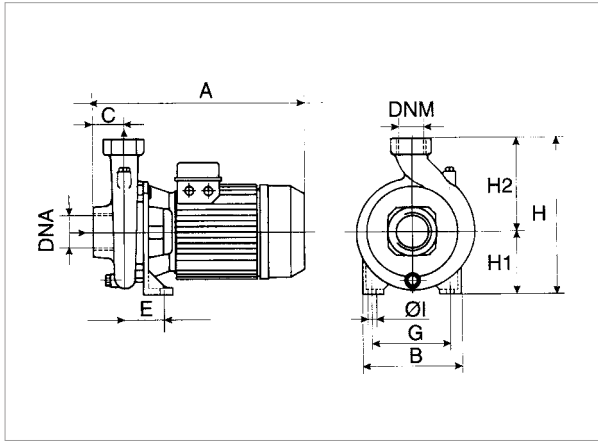


MODEL	ELECTRICAL DATA									
	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	I st. A	rpm n. 1/min.	CAPACITOR	
			kW	HP					µF	Vc
K 55/200 M	1 x 220 - 240 V ~	5	4	5,5	21,8	-	110	2900	160	450
K 55/200 T	3 x 230 - 400 V ~	5,1	3,7	5	15,9/6,2	IE3	51,6	2880	-	-
K 55/200 T	3 x 230 - 400 V ~	5,1	4	5,5	16,3/9,4	IE2	104-60	2900	-	-

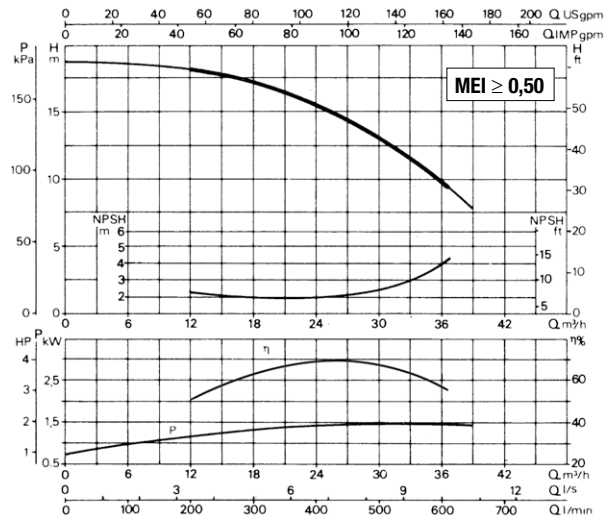
MODEL	MOTOR TYPE	A	B	C	E	G	ØI	H	H1	H2	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT kg
													L/A	L/B	H		
K 55/200 M	-	425	250	55	86	175	14	320	135	185	2" G	1 1/4" G	512	276	345	0,049	40,2
K 55/200 T	IE3	425	250	55	86	175	14	320	135	185	2" G	1 1/4" G	512	276	345	0,049	39
K 55/200 T	IE2	425	250	55	86	175	14	320	135	185	2" G	1 1/4" G	512	276	345	0,049	39

K 14/400 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +110°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

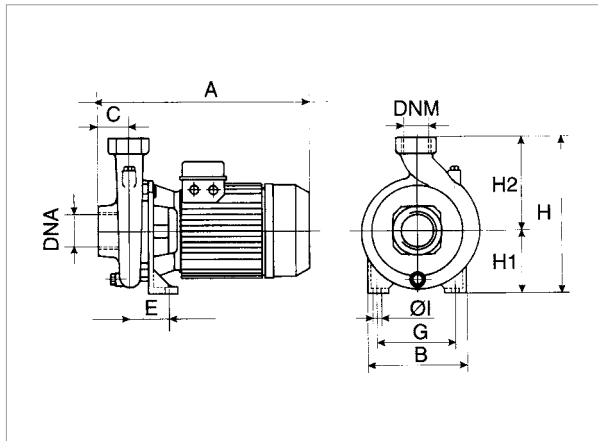


MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	I st. A	rpm n. 1/min.	CAPACITOR	
			kW	HP					μF	Vc
K 14/400 M	1 x 220 - 240 V ~	2,1	1,85	2,5	9,5	-	38	2850	40	450
K 14/400 T	3 x 230 - 400 V ~	1,9	1,85	2,5	6/3,5	IE3	26,4	2850	-	-
K 14/400 T	3 x 230 - 400 V ~	2,1	1,85	2,5	7/4	IE2	37,5-21,7	2850	-	-

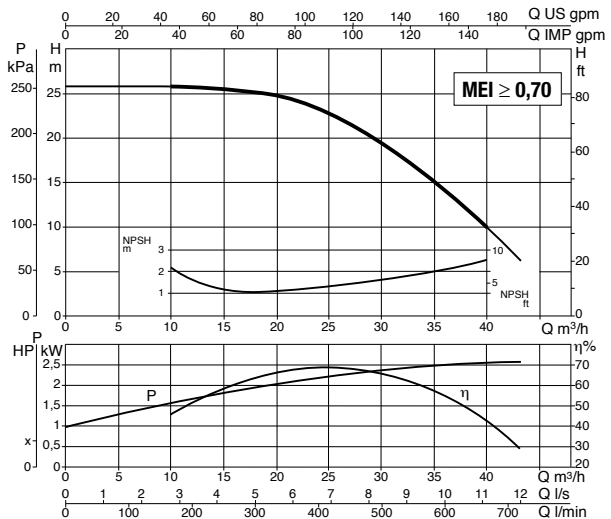
MODEL	MOTOR TYPE	A	B	C	E	G	ØI	H	H1	H2	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT kg
													L/A	L/B	H		
K 14/400 M	-	430	200	62	74	120	11	270	105	165	2" G	2" G	427	246	307	0,032	24,5
K 14/400 T	IE3	358	200	62	74	120	11	270	105	165	2" G	2" G	427	246	307	0,032	22
K 14/400 T	IE2	358	200	62	74	120	11	270	105	165	2" G	2" G	427	246	307	0,032	22

K 11/500 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +110°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

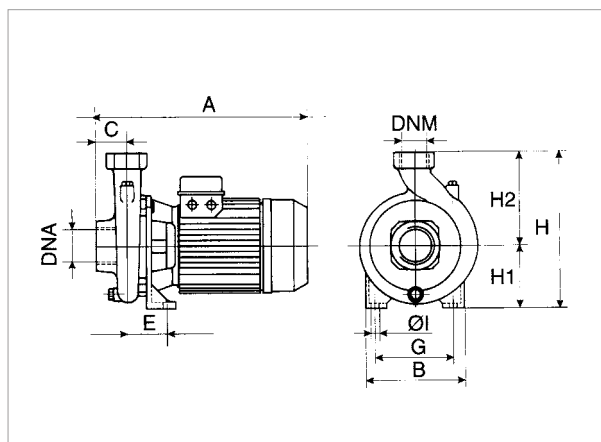


MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	I st. A	rpm n. 1/min.	CAPACITOR	
			kW	HP					μF	Vc
K 11/500 M	1 x 220 - 240 V ~	2,8	2,2	3	12,5	-	50	2900	80	450
K 11/500 T	3 x 230 - 400 V ~	2,9	2,2	3	9,3/5,4	IE3	33,5	2950	-	-
K 11/500 T	3 x 230 - 400 V ~	2,9	2,2	3	9,3/5,4	IE2	45-26	2900	-	-

MODEL	MOTOR TYPE	A	B	C	E	G	ØI	H	H1	H2	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT kg
													L/A	L/B	H		
K 11/500 M	-	440	240	62	100	155	14	312	132	180	2 1/2" G	2" G	512	286	345	0,049	35,6
K 11/500 T	IE3	440	240	62	100	155	14	312	132	180	2 1/2" G	2" G	512	286	345	0,049	21
K 11/500 T	IE2	440	240	62	100	155	14	312	132	180	2 1/2" G	2" G	512	286	345	0,049	34,2

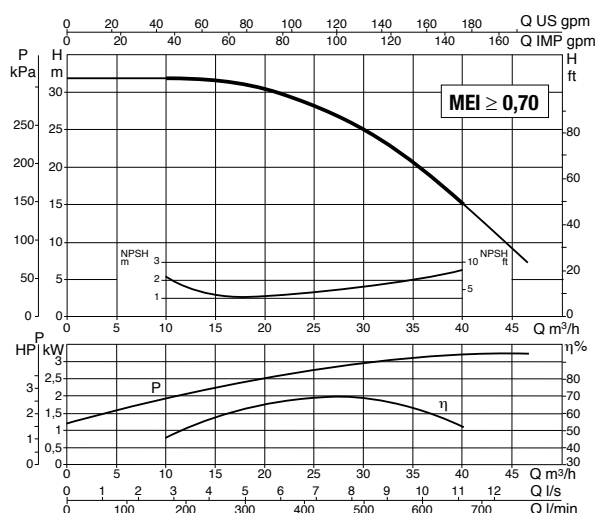
K 18/500 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +110°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

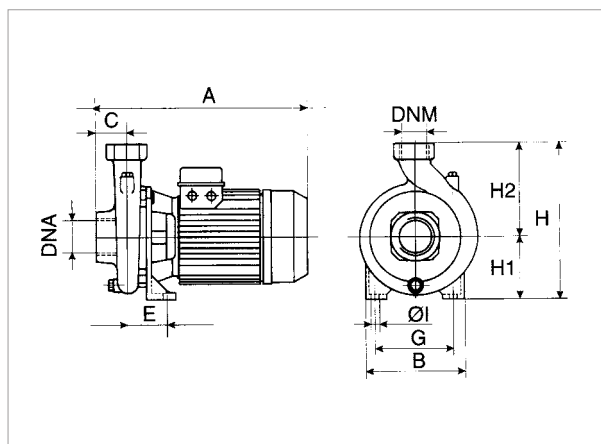


MODEL	ELECTRICAL DATA									
	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		I _n A	MOTOR TYPE	I st. A	rpm n. 1/min.	CAPACITOR	
			kW	HP					μF	Vc
K 18/500 M	1 x 220 - 240 V ~	3,9	3	4	18	-	80	2900	160	450
K 18/500 T	3 x 230 - 400 V ~	3,7	3	4	11,4/6,6	IE3	44,2	2950	-	-
K 18/500 T	3 x 230 - 400 V ~	3,8	3	4	13/7,5	IE2	67,5-39	2900	-	-

MODEL	MOTOR TYPE	A	B	C	E	G	ØI	H	H1	H2	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT kg
													L/A	L/B	H		
K 18/500 M	-	440	240	62	100	155	14	312	132	180	2 1/2" G	2" G	512	286	345	0,049	39,4
K 18/500 T	IE3	440	240	62	100	155	14	312	132	180	2 1/2" G	2" G	512	286	345	0,049	19
K 18/500 T	IE2	440	240	62	100	155	14	312	132	180	2 1/2" G	2" G	512	286	345	0,049	36,6

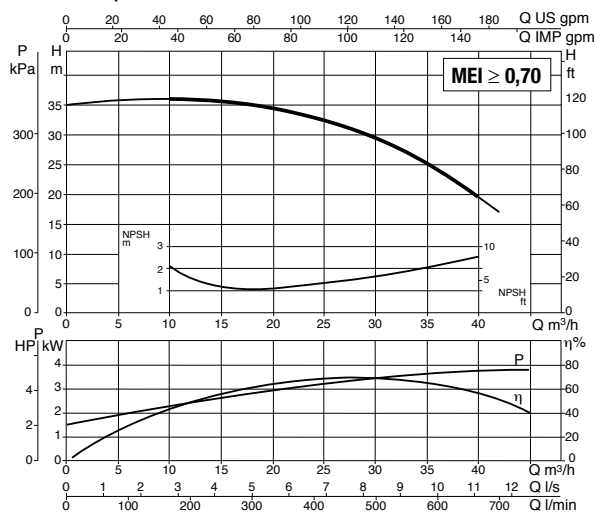
K 28/500 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +110°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

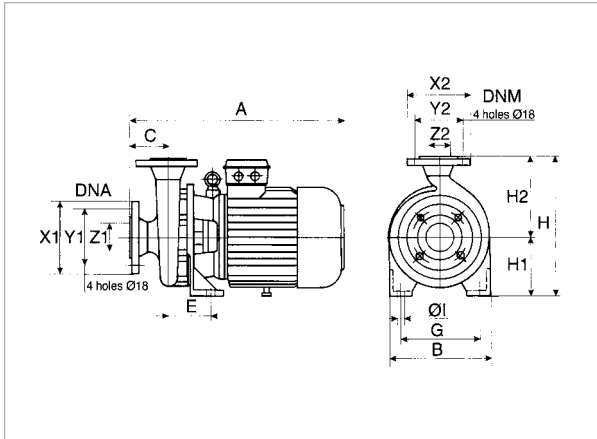


MODEL	ELECTRICAL DATA									
	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		I _n A	MOTOR TYPE	I st. A	rpm n. 1/min.	CAPACITOR	
			kW	HP					μF	Vc
K 28/500 M	1 x 220 - 240 V ~	4,7	4	5,5	21,4	-	110	2900	160	450
K 28/500 T	3 x 230 - 400 V ~	4,6	3,7	5	14,2/8,2	IE3	51,6	2950	-	-
K 28/500 T	3 x 230 - 400 V ~	4,55	4	5,5	13,7/8	IE2	104-60	2900	-	-

MODEL	MOTOR TYPE	A	B	C	E	G	ØI	H	H1	H2	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT kg
													L/A	L/B	H		
K 28/500 M	-	440	240	62	100	155	14	312	132	180	2 1/2" G	2" G	512	286	345	0,049	42
K 28/500 T	IE3	440	240	62	100	155	14	312	132	180	2 1/2" G	2" G	512	286	345	0,049	40,6
K 28/500 T	IE2	440	240	62	100	155	14	312	132	180	2 1/2" G	2" G	512	286	345	0,049	40,6

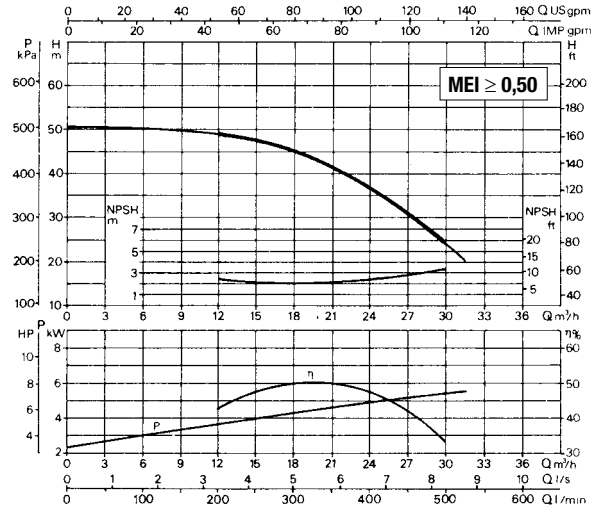
K 40/400 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +110°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.



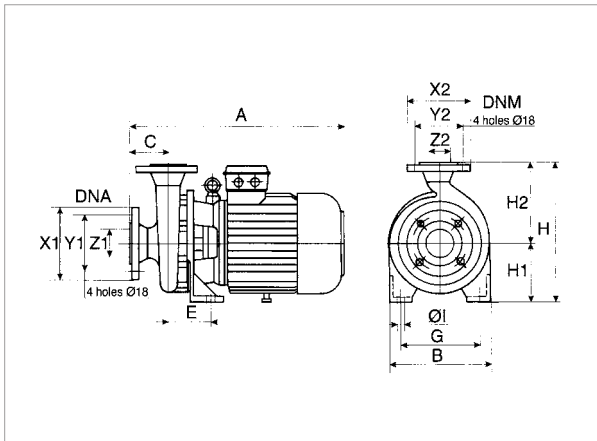
MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	Ist A	rpm n. 1/min.
			kW	HP				
K 40/400 T	3 x 400 V ~ 1	6,7	5,5	7,5	11,7	IE3	76	2900

MODEL	A	B	C	E	G	I Ø	H	H1	H2	DNA	DNA			DNM	DNM			PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
											x1	y1	z1		x2	y2	z2	L/A	L/B	H		
K 40/400 T	560	273	100	110	212	14	360	160	200	65	185	145	65	50	165	125	50	680	330	572	0,128	79

¹ star starting is possible (A)

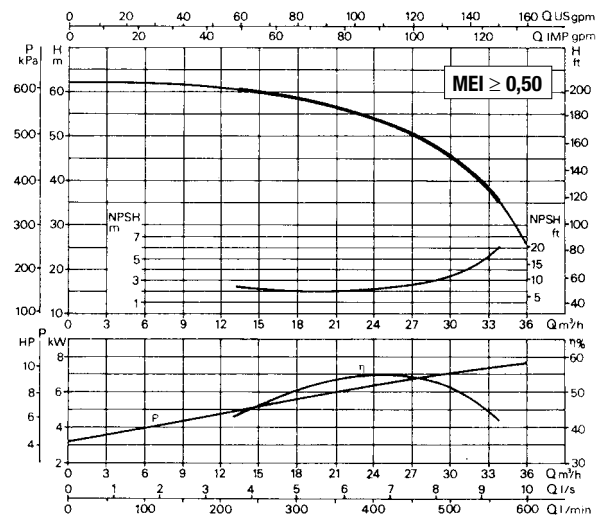
K 50/400 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +110°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.



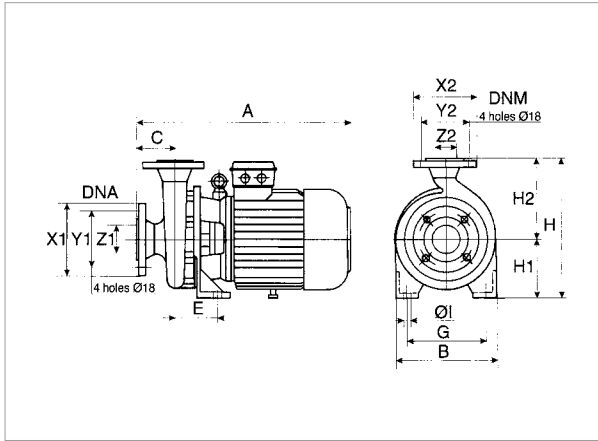
MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	Ist A	rpm n. 1/min.
			kW	HP				
K 50/400 T	3 x 400 V ~ 1	8,5	7,5	10	14,5	IE3	112	2910

MODEL	A	B	C	E	G	I Ø	H	H1	H2	DNA	DNA			DNM	DNM			PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
											x1	y1	z1		x2	y2	z2	L/A	L/B	H		
K 50/400 T	560	273	100	110	212	14	360	160	200	65	185	145	65	50	165	125	50	680	330	572	0,128	78,8

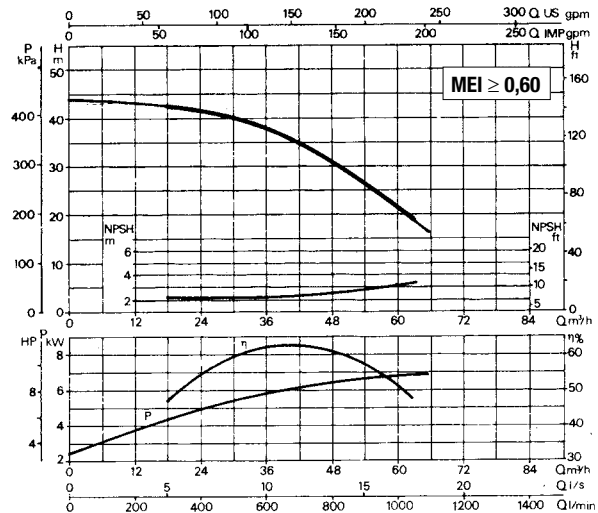
¹ star starting is possible (A)

K 30/800 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +110°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.



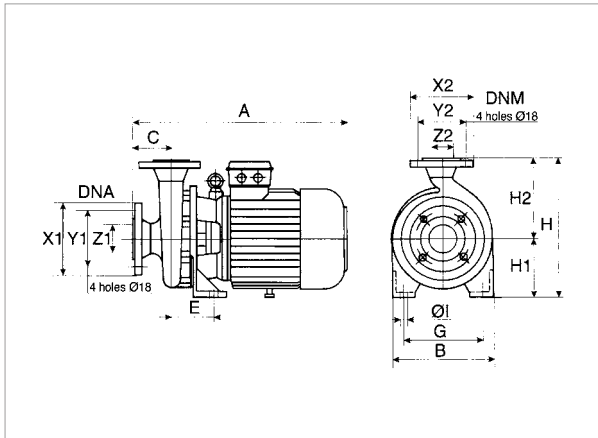
MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	Ist A	rpm n. 1/min.
			kW	HP				
K 30/800 T	3 x 400 V ~ 1	8,2	7,5	10	14,4	IE3	112	2920

MODEL	A	B	C	E	G	I Ø	H	H1	H2	DNA	DNA			DNM	DNM			PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
											x1	y1	z1		x2	y2	z2	L/A	L/B	H		
K 30/800 T	600	273	100	110	212	14	385	160	225	80	200	160	80	65	185	145	65	680	330	572	0,128	90,2

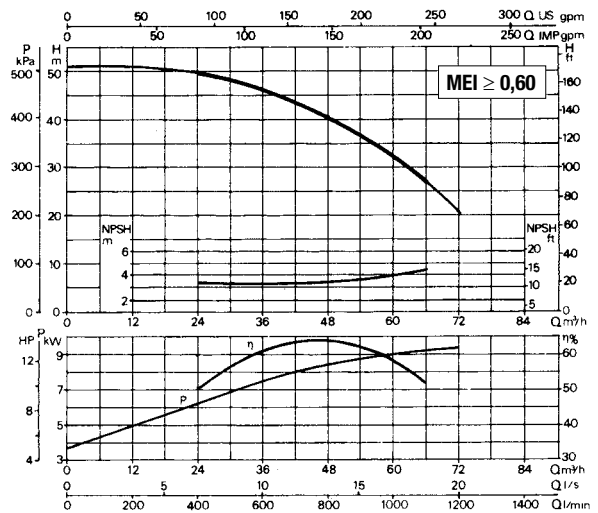
¹ star starting is possible (A)

K 40/800 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +110°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.



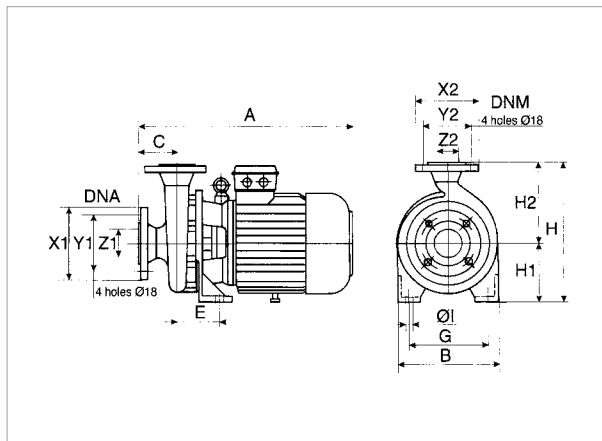
MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	Ist A	rpm n. 1/min.
			kW	HP				
K 40/800 T	3 x 400 V ~ 1	10,2	9,2	12,5	17,1	IE3	135	2920

MODEL	A	B	C	E	G	I Ø	H	H1	H2	DNA	DNA			DNM	DNM			PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
											x1	y1	z1		x2	y2	z2	L/A	L/B	H		
K 40/800 T	600	273	100	110	212	14	385	160	225	80	200	160	80	65	185	145	65	680	330	572	0,128	95

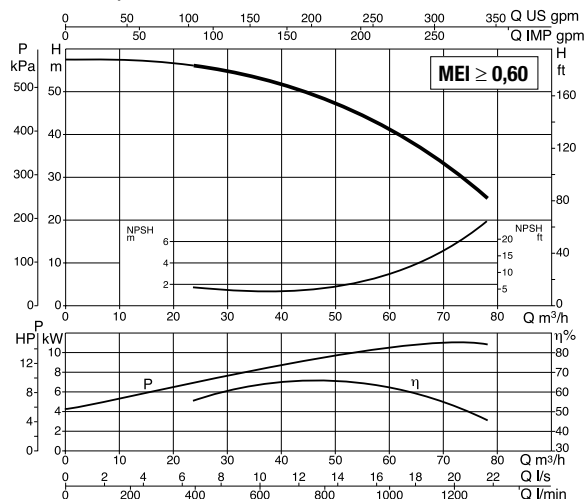
¹ star starting is possible (A)

K 50/800 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +110°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.



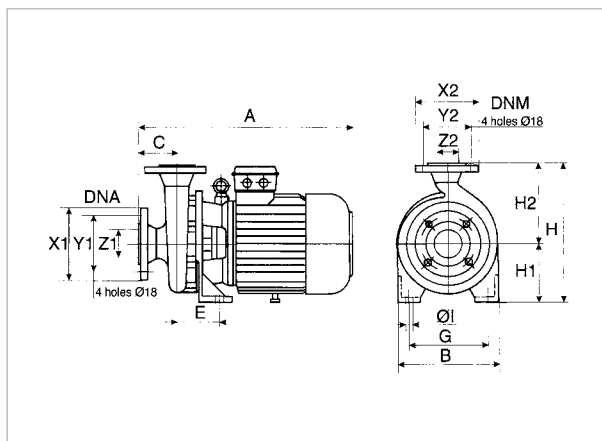
MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	Ist A	rpm n. 1/min.
			kW	HP				
K 50/800 T	3 x 400 V ~ 1	12,7	11	15	21	IE3	193	2900

MODEL	A	B	C	E	G	I Ø	H	H1	H2	DNA	DNA			DNM	DNM			PACKING DIMENSIONS			VOLUME (mc)	WEIGHT Kg
											x1	y1	z1		x2	y2	z2	L/A	L/B	H		
K 50/800 T	600	273	100	110	212	14	385	160	225	80	200	160	80	65	185	145	65	680	330	572	0,128	104,3

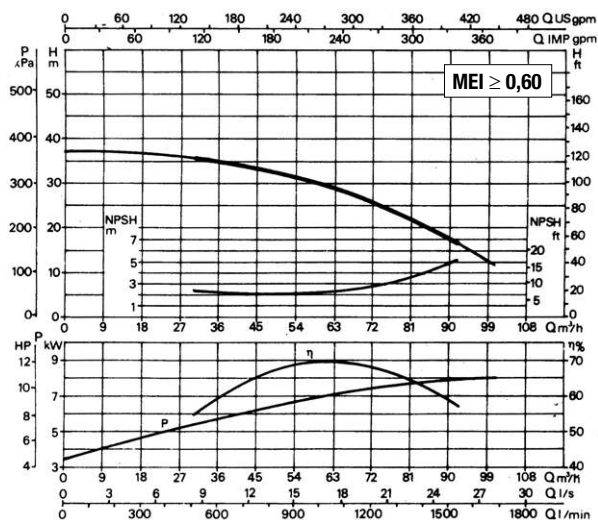
¹ star starting is possible (A)

K 20/1200 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +110°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.



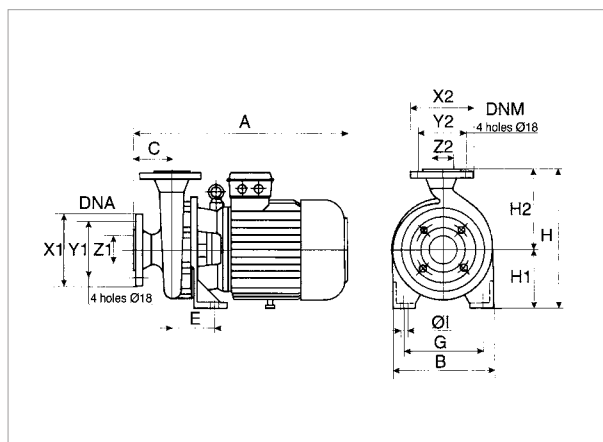
MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	Ist A	rpm n. 1/min.
			kW	HP				
K 20/1200 T	3 x 400 V ~ 1	8,3	7,5	10	14,3	IE3	112	2920

MODEL	A	B	C	E	G	I Ø	H	H1	H2	DNA	DNA			DNM	DNM			PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
											x1	y1	z1		x2	y2	z2	L/A	L/B	H		
K 20/1200 T	600	273	100	110	212	14	385	160	225	80	200	160	80	65	185	145	65	680	330	572	0,128	88

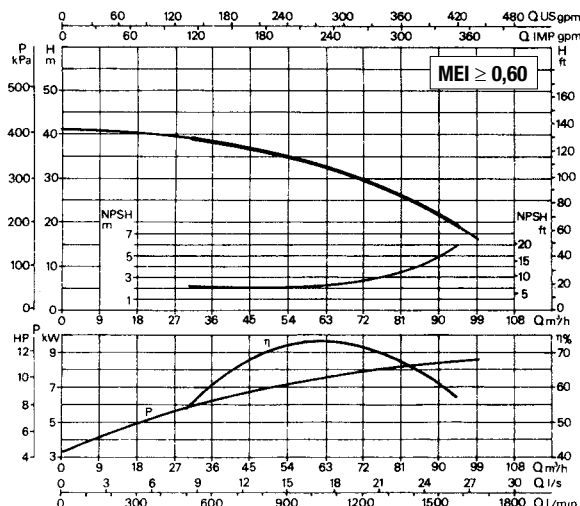
¹ star starting is possible (A)

K 25/1200 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +110°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.



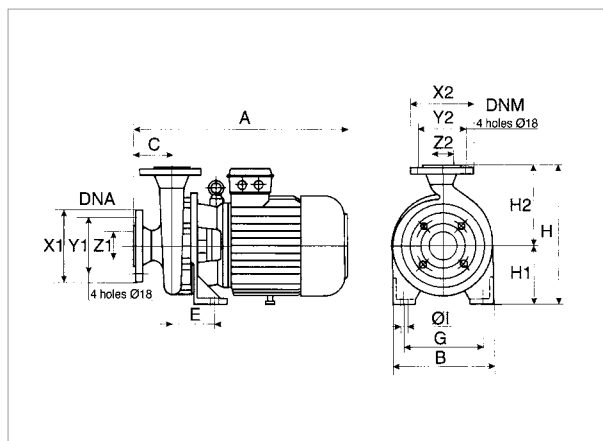
MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	Ist A	rpm n. 1/min.
			kW	HP				
K 25/1200 T	3 x 400 V ~ 1	9,4	9,2	12,5	16,2	IE3	135	2910

MODEL	A	B	C	E	G	IØ	H	H1	H2	DNA	DNA			DNM	DNM			PACKING DIMENSIONS			VOLUME (mc)	WEIGHT Kg
											x1	y1	z1		x2	y2	z2	L/A	L/B	H		
K 25/1200 T	600	273	100	110	212	14	385	160	225	80	200	160	80	65	185	145	65	680	330	572	0,128	94

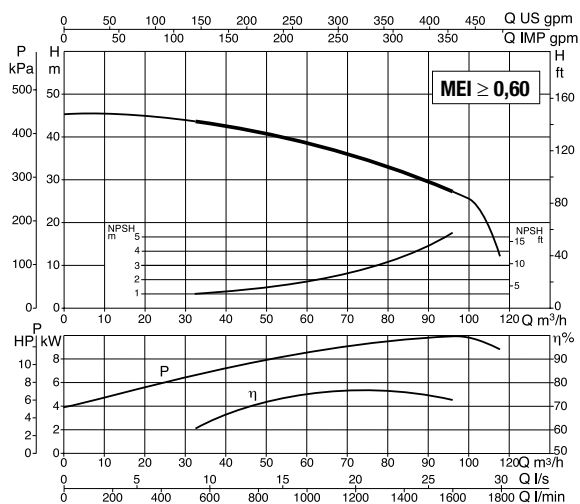
¹ star starting is possible (λ)

K 35/1200 - SINGLE-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +110°C - Maximum ambient temperature: +40°C



For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.



MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	Ist A	rpm n. 1/min.
			kW	HP				
K 35/1200 T	3 x 400 V ~ 1	11,8	11	15	20	IE3	193	2900

MODEL	A	B	C	E	G	IØ	H	H1	H2	DNA	DNA			DNM	DNM			PACKING DIMENSIONS			VOLUME (mc)	WEIGHT Kg
											x1	y1	z1		x2	y2	z2	L/A	L/B	H		
K 35/1200 T	600	273	100	110	212	14	385	160	225	80	200	160	80	65	185	145	65	680	330	572	0,128	100

¹ star starting is possible (λ)

K TWIN-IMPELLER

TWIN-IMPELLER PUMPS



TECHNICAL DATA

Operating range:

from 1,2 to 30 m³/h with head up to 97 metres

Pumped liquid: clean, free of solids and abrasives, non-viscous, non-aggressive, non-crystallised and chemically neutral, with properties similar to water

Liquid temperature range:

K 35/40, K 45/50,

K 35/100, K 40/100, K 55/100 :from -10 °C to +50 °C

K 55/50, K 66/100, K 90/100

K 70/300, K 80/300, K 70/400, K 80/400 :from -15 °C to +110 °C

Maximum ambient temperature: +40°C

Maximum operating pressure:

K 35/40, K 35/100, K 40/100 :6 bar (600 kPa)

K 45/50, K 55/50 :8 bar (800 kPa)

K 55/100, K 66/100 :10 bar (1000 kPa)

K 90/100, K 70/300, K 80/300, K 70/400, K 80/400 :12 bar (1200 kPa)

Protection class:

IP 55, IP 44 per K 35/40, K 45/50, K 55/50, K 35/100, K 40/100

Protection class at the terminal board: IP 55

Insulation class: F**Standard voltage:**

single-phase 220-240 V / 50 Hz

three-phase 230-400 V / 50 Hz up to 4 kW included - 400 V 50 Hz from 5,5 kW

Installation: fixed, horizontal or vertical position, provided that the motor is always above the pump.

Special executions on requests: alternative voltages and frequencies.

APPLICATIONS

Twin-impeller centrifugal pump designed for the realisation of pressurization units in water systems and filling of pressure vessels.

Suitable for sprinkler systems and other general water supply uses.

CONSTRUCTION FEATURES OF THE PUMP

Pump body and motor support in cast iron.

Technopolymer impeller.

Carbon/ceramic mechanical seal.

CONSTRUCTION FEATURES OF THE MOTOR

Closed asynchronous type, external ventilation cooling.

Rotor running on permanently lubricated ball bearings, oversized to ensure low noise and durability.

Standard built-in thermo-amperometric protection. Capacitor permanently fitted on single phase versions.

For the protection of the three-phase motor, we recommend the use of remote overload cut-outs, in compliance with current local regulations.

Construction according to CEI 2-3.

IE2 motors as standard, from 0,75 kW to 5,5 kW - IE3 \geq 7,5 kW.

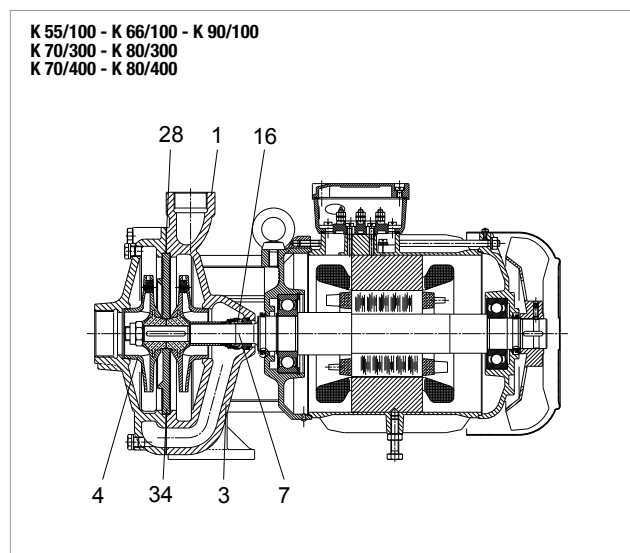
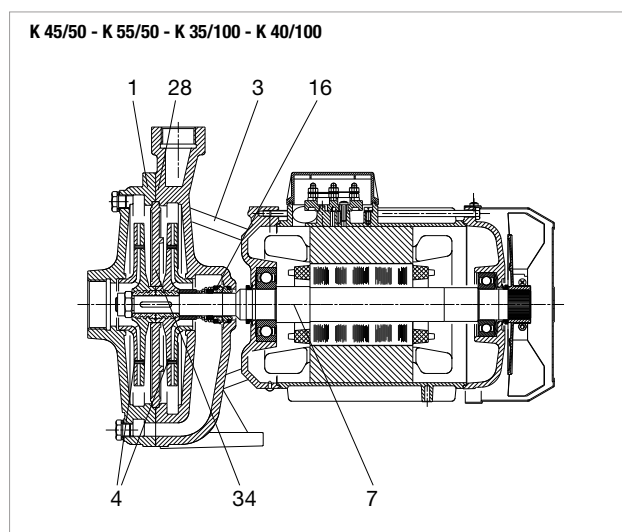
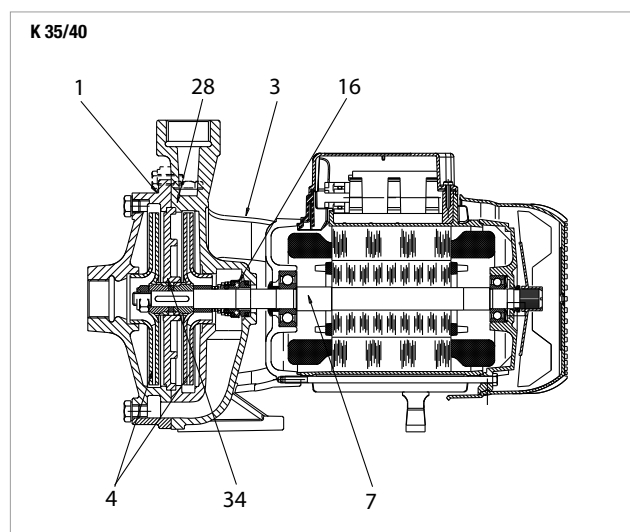
K TWIN-IMPELLER

TWIN-IMPELLER PUMPS

MATERIALS

No.	PARTS*	MATERIALS	MODELS
1	PUMP BODY	CAST IRON 200 UNI ISO 185	
3	SUPPORT	CAST IRON 200 UNI ISO 185	
4	IMPELLER	TECHNOPOLYMER A	K 35/40; K 45/50; K 35/100; K 40/100; K 55/100
		TECHNOPOLYMER B	K 55/50; K 66/100; K 90/100; K 70/300; K 80/300; K 70/400; K 80/400
7	SHAFT WITH ROTOR	AISI 416 STAINLESS STEEL X12CRS13 UNI 6900/71	K 35/40
		AISI 303 STAINLESS STEEL X10CRNIS 1089 UNI 6900/71	K 45/50; K 55/50; K 35/100; K 40/100; K 55/100; K 66/100; K 90/100
		AISI 304 STAINLESS STEEL X5 1810 UNI 6900/71	K 70/300; K 80/300; K 70/400; K 80/400
16	MECHANICAL SEAL	CARBON / CERAMIC	
28	GASKET	NBR RUBBER	K 35/40; K 45/50; K 55/50; K 55/100; K 35/100; K 40/100
		GUARNITAL	K 66/100; K 90/100; K 70/300; K 80/300; K 70/400; K 80/400
34	INTERMEDIATE DISC	CAST IRON 200 UNI ISO 185	K 35/40; K 45/50; K 55/50; K 55/100; K 66/100; K 90/100; K 70/300; K 70/400; K 80/300; K 80/400

* In contact with the liquid



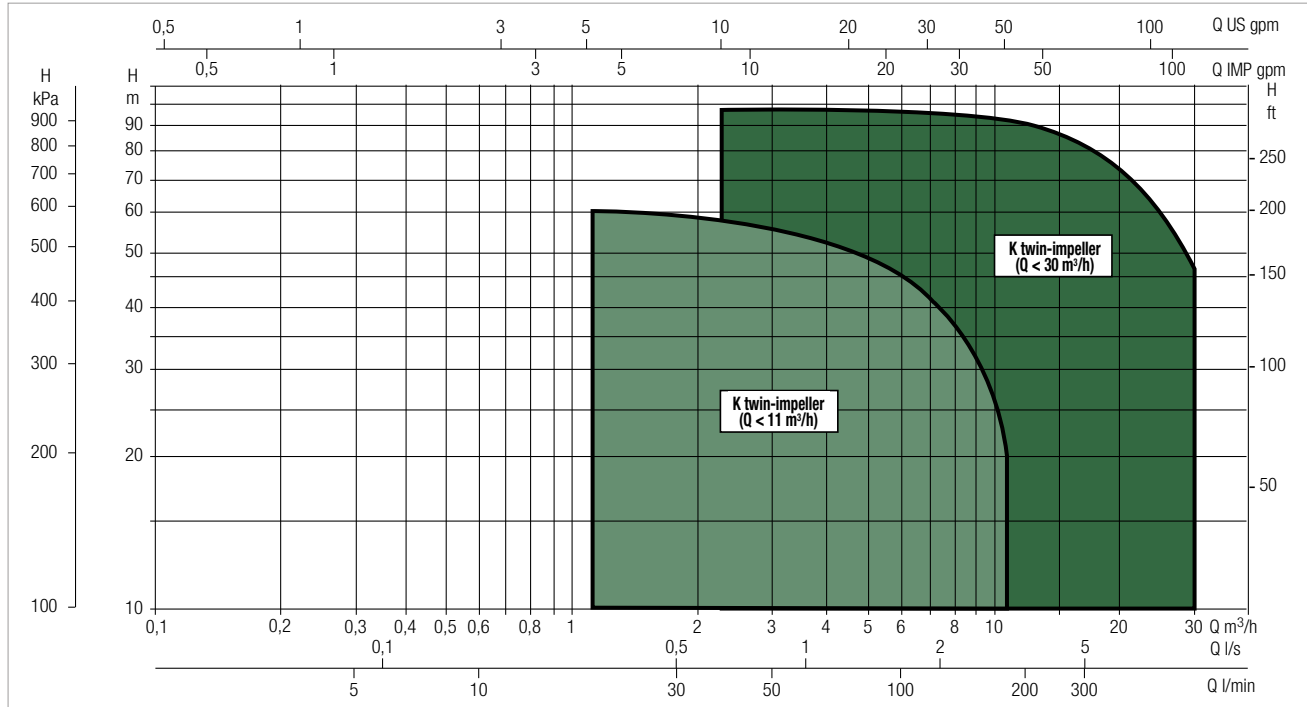
K TWIN-IMPELLER RANGE

ELECTRIC PUMPS

PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

GRAPHIC SELECTION TABLE

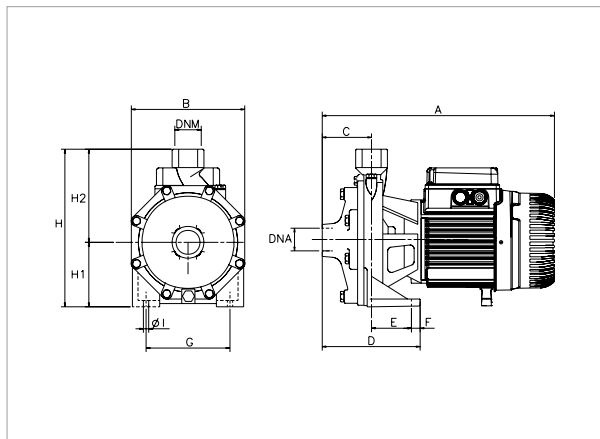


SELECTION TABLE

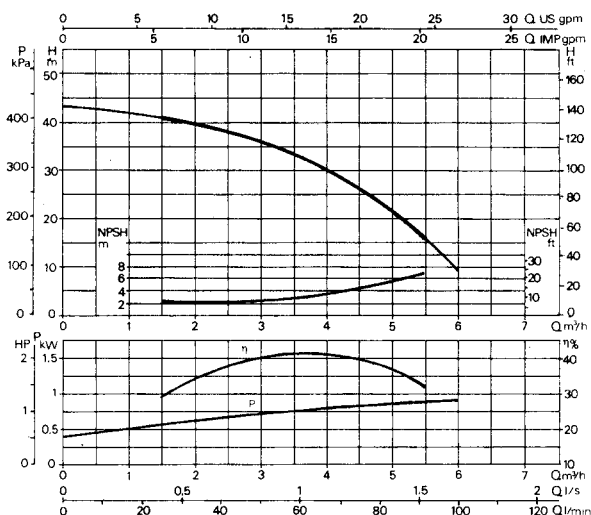
MODEL	Q=	0	1,2	1,8	2,4	3,6	4,8	6	7,2	9	9,6	10,8	12	15	18	24	30	
	m ³ /h	0	20	30	40	60	80	100	120	150	160	180	200	250	300	400	500	
	Q=																	
	l/min																	
K 35/40 M - T	H (m)	43,5	41,5	40	38	33	23,5											
K 45/50 M - T		51	49	47,5	46	42	37	30										
K 55/50 M - T		62	60	58	57	52	45	34										
K 35/100 M - T		38,5			37,5	36,5	35	32	28,5	18,5	17,5							
K 40/100 M - T		44			43,4	42,5	41	39	35,7	29	26	18,5						
K 55/100 M - T		62			59,5	57	54,5	51	47	39	36							
K 66/100 M - T		73			70	67,5	64	60,5	57	49	47							
K 90/100 M - T		83,5			82	79,5	76,5	72,5	68	61	58							
K 70/300 T		76						74	73	72	71,5	70	69	65	60,5	43,5		
K 80/300 T		95						93	92,2	91	90,5	90	89,5	87	82	68		
K 70/400 T		86								84	83,2	82,5	82	79	76	65	47	
K 80/400 T		97									95	94,5	94	92	89	80	64	

K 35/40 - TWIN-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +50°C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

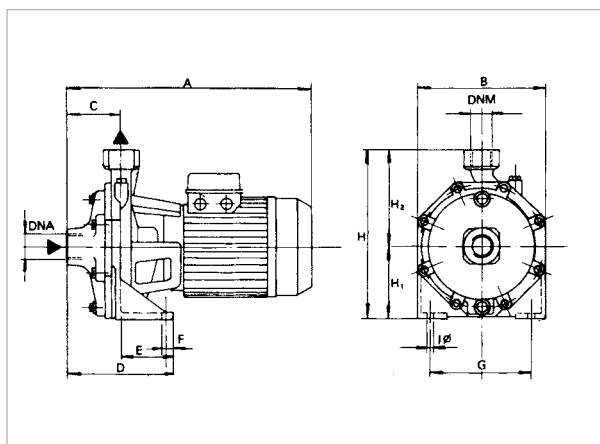


MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	Ist A	rpm n. 1/min.	CAPACITOR	
			kW	HP					μF	Vc
K 35/40 M	1 x 220 - 240 V ~	1,2	0,75	1	5,5	-	20	2800	20	450
K 35/40 T	3 x 230 - 400 V ~	1,1	0,75	1	3,6/2,1	IE3	15,2	2850	-	-
K 35/40 T	3 x 230 - 400 V ~	1,2	0,75	1	3,8/2,2	IE2	22,14-12,8	2850	-	-

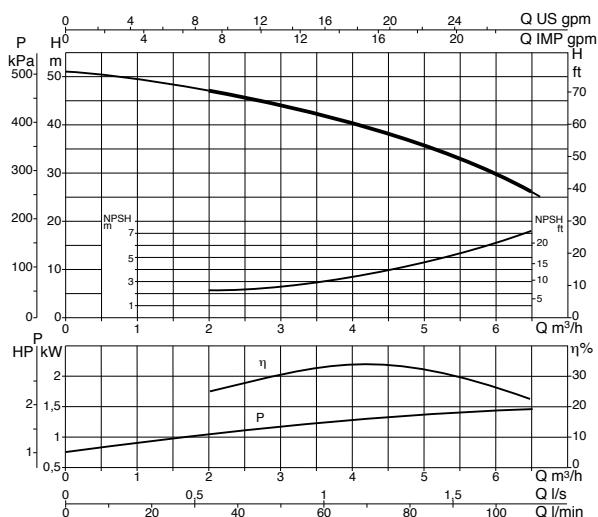
MODEL	MOTOR TYPE	PACKING DIMENSIONS											VOLUME (m ³)	WEIGHT kg					
		A	B	C	D	E	F	G	ØI	H	H1	H2			DNA	DNM	L/A	L/B	H
K 35/40 M	-	342	180	76	148	72	15	148	9,5	235	100	135	1" G	1" G	392	232	262	0,024	15,9
K 35/40 T	IE3	342	180	76	148	72	15	148	9,5	235	100	135	1" G	1" G	392	232	262	0,024	15
K 35/40 T	IE2	342	180	76	148	72	15	148	9,5	235	100	135	1" G	1" G	392	232	262	0,024	15

K 45/50 - TWIN-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +50°C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

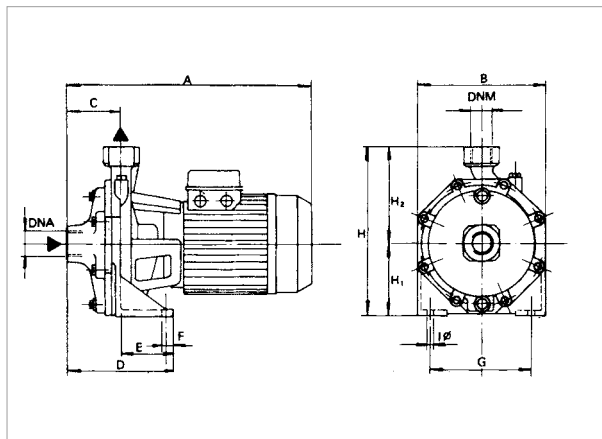


MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	Ist A	rpm n. 1/min.	CAPACITOR	
			kW	HP					μF	Vc
K 45/50 M	1 x 220 - 240 V ~	1,86	1,1	1,5	8,3	-	29	2800	31,5	450
K 45/50 T	3 x 230 - 400 V ~	1,8	1,1	1,5	5,9/3,4	IE3	26,9	2850	-	-
K 45/50 T	3 x 230 - 400 V ~	2	1,1	1,5	7,2/4	IE2	31,1-18	2850	-	-

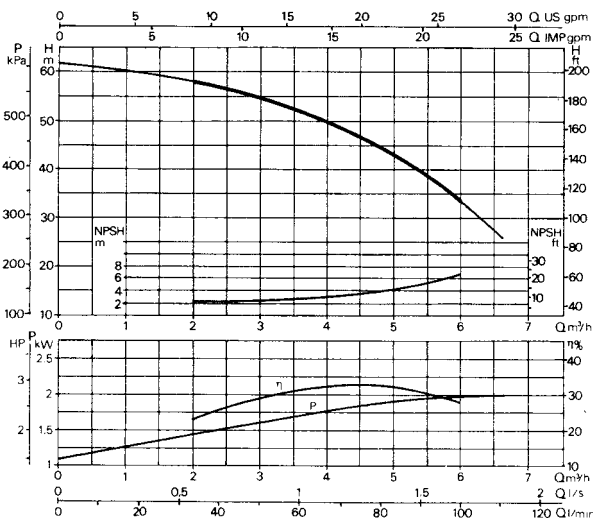
MODEL	MOTOR TYPE	PACKING DIMENSIONS											VOLUME (m ³)	WEIGHT kg					
		A	B	C	D	E	F	G	ØI	H	H1	H2			DNA	DNM	L/A	L/B	H
K 45/50 M	-	370	210	75	144	69	15	165	11,5	268	118	150	1 1/4" G	1" G	415	234	295	0,028	23,3
K 45/50 T	IE3	370	210	75	144	69	15	165	11,5	268	118	150	1 1/4" G	1" G	415	234	295	0,028	22,5
K 45/50 T	IE2	370	210	75	144	69	15	165	11,5	268	118	150	1 1/4" G	1" G	415	234	295	0,028	22,5

K 55/50 - TWIN-IMPELLER PUMPS

Pumped liquid temperature range: from -15 °C to +110 °C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

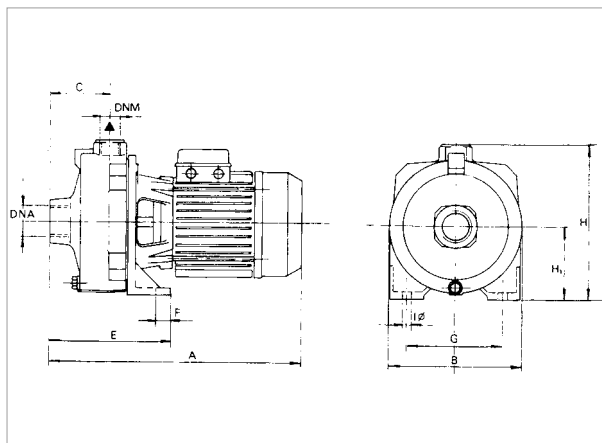


MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	Ist A	rpm n. 1/min.	CAPACITOR	
			kW	HP					μF	Vc
K 55/50 M	1 x 220 - 240 V ~	2,7	1,85	2,5	12,8	-	48	2850	40	450
K 55/50 T	3 x 220 - 400 V ~	2,4	1,85	2,5	7,4/4,3	IE3	26,4	2850	-	-
K 55/50 T	3 x 230 - 400 V ~	2,5	1,85	2,5	8,4-4,8	IE2	37,6-21,7	2850	-	-

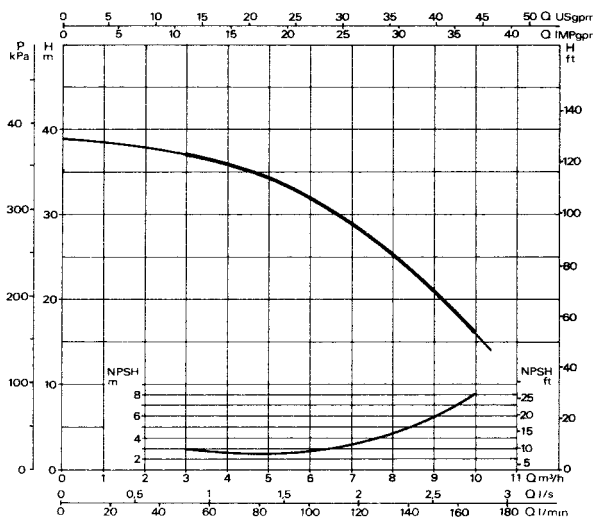
MODEL	MOTOR TYPE	PACKING DIMENSIONS											VOLUME (m ³)	WEIGHT kg					
		A	B	C	D	E	F	G	ØI	H	H1	H2			DNA	DNM	L/A	L/B	H
K 55/50 M	-	370	210	75	144	69	15	165	11,5	268	118	150	1 1/2" G	1" G	415	234	295	0,032	27,2
K 55/50 T	IE3	370	210	75	144	69	15	165	11,5	268	118	150	1 1/2" G	1" G	415	234	295	0,032	23,9
K 55/50 T	IE2	370	210	75	144	69	15	165	11,5	268	118	150	1 1/2" G	1" G	415	234	295	0,032	23,9

K 35/100 - TWIN-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +50°C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

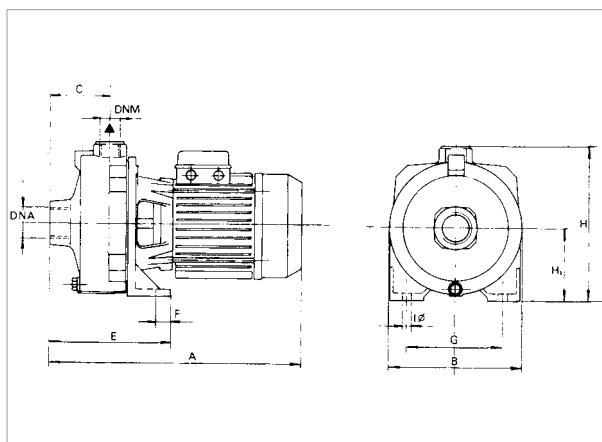


MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	Ist A	rpm n. 1/min.	CAPACITOR	
			kW	HP					μF	Vc
K 35/100 M	1 x 220 - 240 V ~	1,56	1,1	1,5	7,1	-	33	2780	25	450
K 35/100 T	3 x 230 - 400 V ~	1,6	1,1	1,5	5,5/3,2	IE3	26,4	2850	-	-
K 35/100 T	3 x 230 - 400 V ~	1,65	1,1	1,5	6,5-3,5	IE2	28,9	2850	-	-

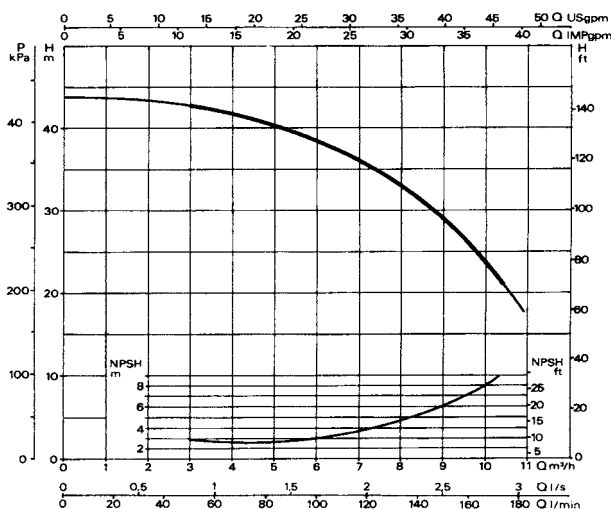
MODEL	MOTOR TYPE	PACKING DIMENSIONS											VOLUME (m ³)	WEIGHT kg				
		A	B	C	E	F	G	ØI	H	H1	DNA	DNM			L/A	L/B	H	
K 35/100 M	-	387	205	88	169	20	145	11	233	108	108	1 1/2" G	1" G	415	234	295	0,028	22
K 35/100 T	IE3	387	205	88	169	20	145	11	233	108	108	1 1/2" G	1" G	415	234	295	0,028	21
K 35/100 T	IE2	387	205	88	169	20	145	11	233	108	108	1 1/2" G	1" G	415	234	295	0,028	21

K 40/100 - TWIN-IMPELLER PUMPS

Pumped liquid temperature range: from -10°C to 50°C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

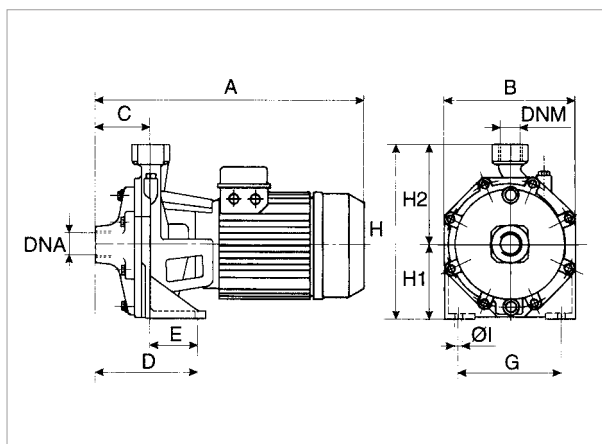


MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	Ist A	rpm n. 1/min.	CAPACITOR	
			kW	HP					μF	Vc
K 40/100 M	1 x 220 - 240 V ~	2	1,85	2,5	9	-	45	2850	40	450
K 40/100 T	3 x 230 - 400 V ~	1,8	1,85	2,5	6/3,5	IE3	26,4	2850	-	-
K 40/100 T	3 x 230 - 400 V ~	2	1,85	2,5	7/4	IE2	28,9	2850	-	-

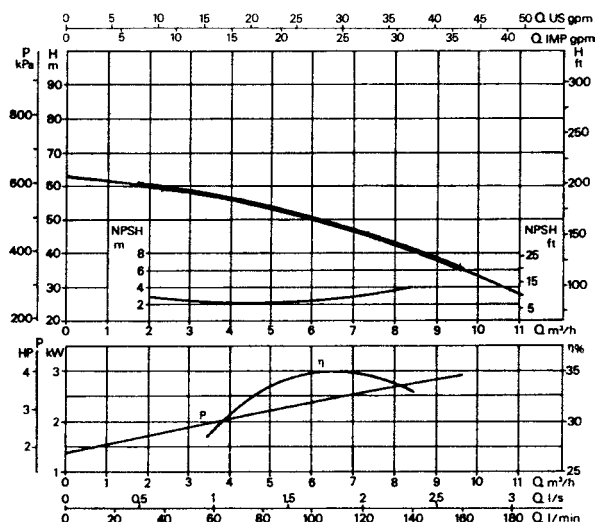
MODEL	MOTOR TYPE	A	B	C	D	E	F	G	ØI	H	H1	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT kg
														L/A	L/B	H		
K 40/100 M	-	461	205	88	179	20	20	145	11	233	108	1 1/2" G	1" G	510	234	285	0,034	25,9
K 40/100 T	IE3	387	205	88	179	20	20	145	11	233	108	1 1/2" G	1" G	415	234	285	0,028	22
K 40/100 T	IE2	387	205	88	179	20	20	145	11	233	108	1 1/2" G	1" G	415	234	295	0,028	22

K 55/100 - TWIN-IMPELLER PUMPS

Pumped liquid temperature range: from -10 °C to +50°C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

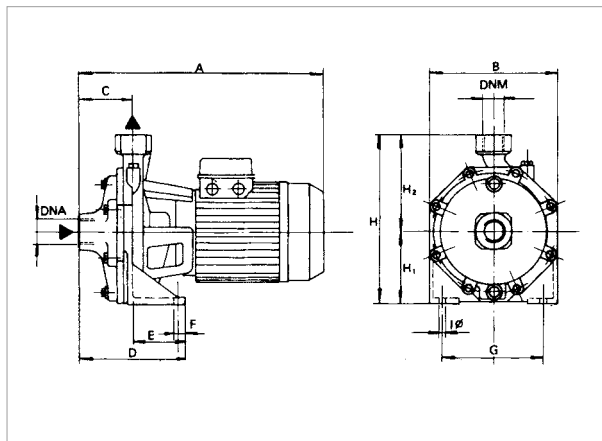


MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	Ist A	rpm n. 1/min.	CAPACITOR	
			kW	HP					μF	Vc
K 55/100 M	1 x 220 - 240 V ~	3,4	2,2	3	14,9	-	50	2900	80	450
K 55/100 T	3 x 230 - 400 V ~	3,7	2,2	3	11,4/6,6	IE3	44,2	2850	-	-
K 55/100 T	3 x 230 - 400 V ~	3,9	2,2	3	13,7/7,9	IE2	67,5-39	2850	-	-

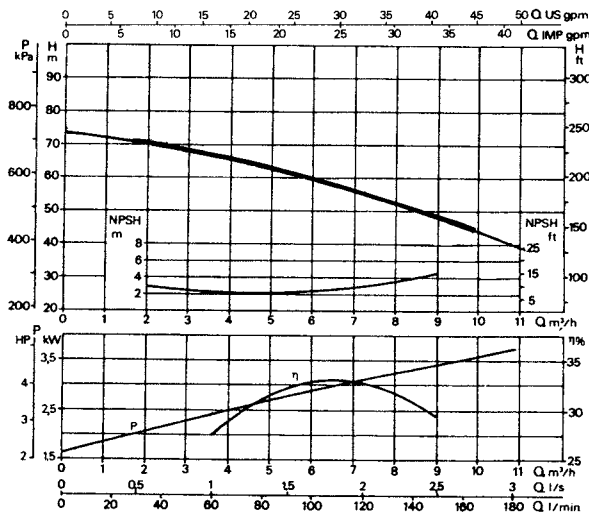
MODEL	MOTOR TYPE	A	B	C	D	E	F	G	ØI	H	H1	H2	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT kg
															L/A	L/B	H		
K 55/100 M	-	450	256	88	160	72	18	200	14	312,5	140	172,5	1 1/2" G	1" G	500	274	333	0,045	40
K 55/100 T	IE3	450	256	88	160	72	18	200	14	312,5	140	172,5	1 1/2" G	1" G	500	274	333	0,045	19
K 55/100 T	IE2	450	256	88	160	72	18	200	14	312,5	140	172,5	1 1/2" G	1" G	500	274	333	0,045	38,1

K 66/100 - TWIN-IMPELLER PUMPS

Pumped liquid temperature range: from -15 °C to +110 °C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

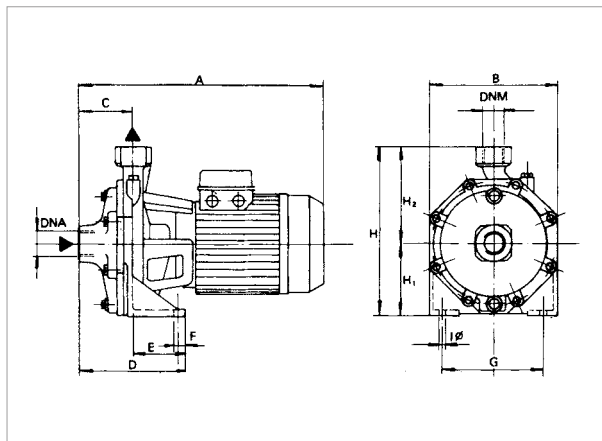


MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	Ist A	rpm n. 1/min.	CAPACITOR	
			kW	HP					μF	Vc
K 66/100 M	1 x 220 - 240 V ~	4,4	3	4	19,5	-	80	2900	160	450
K 66/100 T	3 x 230 - 400 V ~	4,7	3,7	5	14,7/8,5	IE3	51,6	2850	-	-
K 66/100 T	3 x 230 - 400 V ~	4,7	3	4	14,6/8,4	IE2	103,8-60	2850	-	-

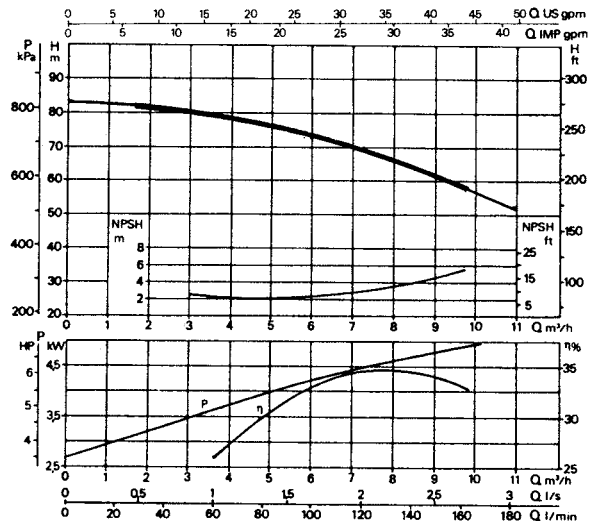
MODEL	MOTOR TYPE	A	B	C	D	E	F	G	ØI	H	H1	H2	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
															L/A	L/B	H		
K 66/100 M	-	450	256	88	160	72	18	200	14	312,5	140	172,5	1½" G	1" G	500	274	333	0,045	44
K 66/100 T	IE3	450	256	88	160	72	18	200	14	312,5	140	172,5	1½" G	1" G	500	274	333	0,045	40,7
K 66/100 T	IE2	450	256	88	160	72	18	200	14	312,5	140	172,5	1½" G	1" G	500	274	333	0,045	40,7

K 90/100 - TWIN-IMPELLER PUMPS

Pumped liquid temperature range: from -15°C to +110°C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

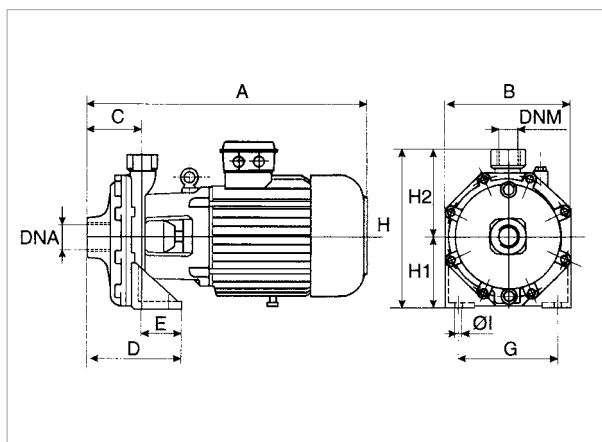


MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	Ist A	rpm n. 1/min.	CAPACITOR	
			kW	HP					μF	Vc
K 90/100 M	1 x 220 - 240 V ~	5	4	5,5	21,9	-	110	2900	160	450
K 90/100 T	3 x 230 - 400 V ~	5,6	3,7	5	16,8/9,7	IE3	51,6	2850	-	-
K 90/100 T	3 x 230 - 400 V ~	5,4	4	5,5	16,5/9,5	IE2	103,8-60	2850	-	-

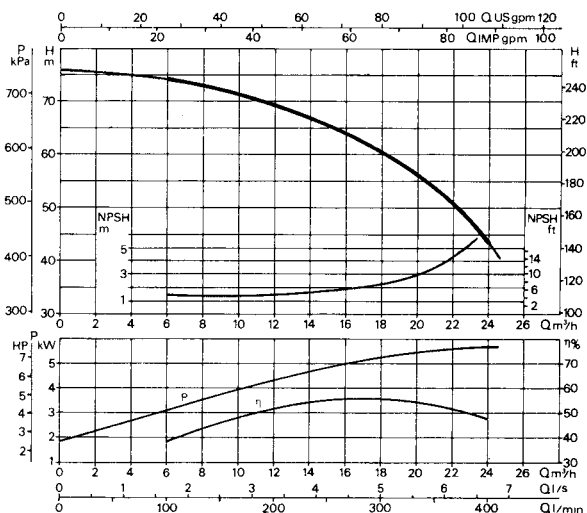
MODEL	MOTOR TYPE	A	B	C	D	E	F	G	ØI	H	H1	H2	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
															L/A	L/B	H		
K 90/100 M	-	450	256	88	160	72	18	200	14	312,5	140	172,5	1½" G	1" G	500	274	333	0,045	46
K 90/100 T	IE3	450	256	88	160	72	18	200	14	312,5	140	172,5	1½" G	1" G	500	274	333	0,045	44
K 90/100 T	IE2	450	256	88	160	72	18	200	14	312,5	140	172,5	1½" G	1" G	500	274	333	0,045	44

K 70/300 - TWIN-IMPELLER PUMPS

Pumped liquid temperature range: from -15 °C to +110 °C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.



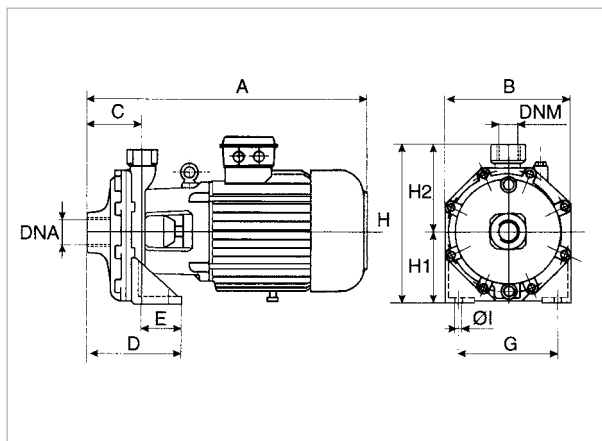
MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	Ist A	rpm n. 1/min.
			kW	HP				
K 70/300 T	3 x 400 V ~ 1	6,9	5,5	7,5	11,6	IE3	77,9	2900

MODEL	A	B	C	D	E	F	G	ØI	H	H1	H2	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
														L/A	L/B	H		
K 70/300 T	595	270	122	182	60	20	210	14	340	160	180	2" G	1¼" G	680	330	470	0,106	72

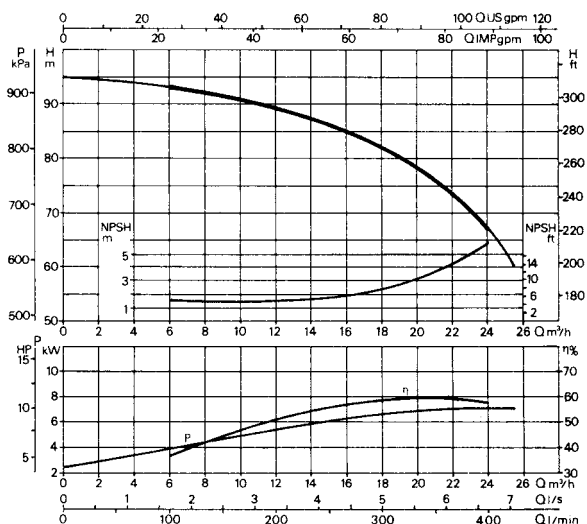
¹ star starting is possible (A)

K 80/300 - TWIN-IMPELLER PUMPS

Pumped liquid temperature range: from -15 °C to +110 °C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.



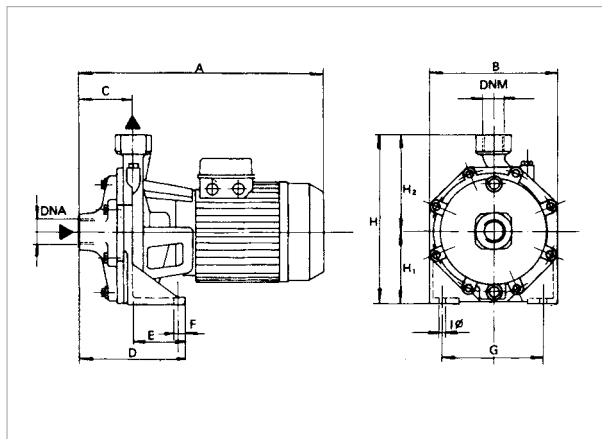
MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	Ist A	rpm n. 1/min.
			kW	HP				
K 80/300 T	3 x 400 V ~ 1	9,1	7,5	10	15,2	IE3	112	2910

MODEL	A	B	C	D	E	F	G	ØI	H	H1	H2	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
														L/A	L/B	H		
K 80/300 T	595	270	122	182	60	20	210	14	340	160	180	2" G	1¼" G	680	330	470	0,106	78,5

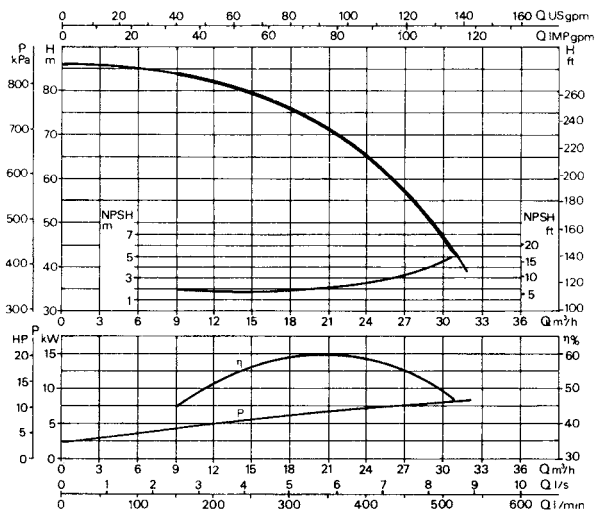
¹ star starting is possible (A)

K 70/400 - TWIN-IMPELLER PUMPS

Pumped liquid temperature range: from -15 °C to +110 °C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.



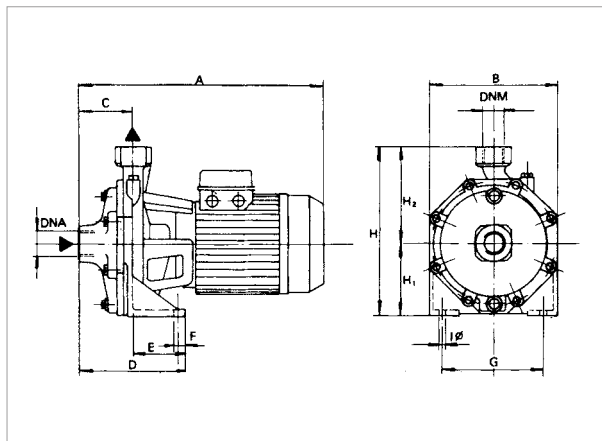
MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	Ist A	rpm n. 1/min.
			kW	HP				
K 70/400 T	3 x 400 V ~ 1	9,2	9,2	12,5	15,5	IE3	135	2930

MODEL	A	B	C	D	E	F	G	Ø	H	H1	H2	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
														L/A	L/B	H		
K 70/400 T	635	270	122	182	60	20	210	14	340	160	180	2" G	1¼" G	680	330	470	0,106	74

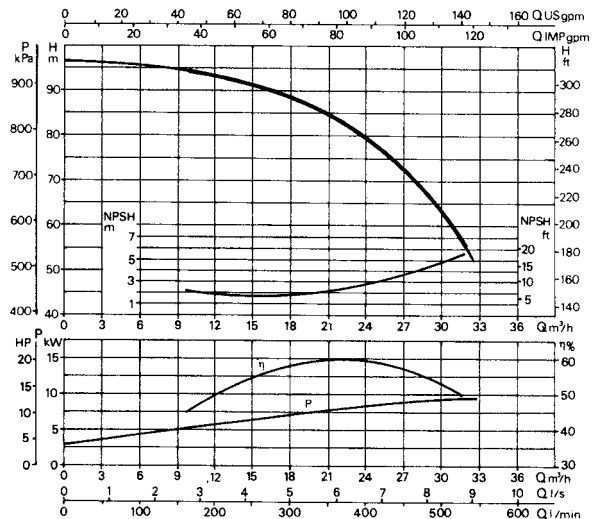
¹ star starting is possible (A)

K 80/400 - TWIN-IMPELLER PUMPS

Pumped liquid temperature range: from -15°C to +110°C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.



MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	Ist A	rpm n. 1/min.
			kW	HP				
K 80/400 T	3 x 400 V ~ 1	10,8	11	15	18,5	IE3	193	2940

MODEL	A	B	C	D	E	F	G	Ø	H	H1	H2	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
														L/A	L/B	H		
K 80/400 T	635	270	122	182	60	20	210	14	340	160	180	2" G	1¼" G	680	330	470	0,106	79

¹ star starting is possible (A)



KC



KCV

TECHNICAL DATA

Operating range: from 3 to 45 m³/h
Maximum head: 24 m
Maximum operating pressure: 6.5 bar
Pumped liquid temperature range: from -10 to +55 °C
Maximum glycol percentage: up to 40 %
Maximum ambient temperature: 65 °C
Motor protection: IP55
Insulation class: F (copper wire with H class insulation)
Standard voltage: three-phase 230-400 V / 50 Hz
Installation: fixed or portable, horizontal position
Special versions on request:
 other power input voltages and/or frequencies

APPLICATIONS

Pumping of water or other non-aggressive, non-explosive liquids, free from solid particles or fibres.
 Particularly suited for pumping water containing glycol for air conditioning systems.

PLUS

Versatile: thanks to the high quality construction materials used and the oversized motors, the KC and KCV range can be used in environments with temperatures up to 65 °C, and glycol percentages of up to 40% of the pumped liquid.

Reliable: all the components have been sized to guarantee a minimum life time of at least 50,000 hours of operation (with the exception of the bearings and the mechanical seals, for which the average life guaranteed is 25,000 hours in the most demanding conditions).

Rust-proof: all the components in contact with the liquid are made of thermoplastic material (polypropylene or noryl reinforced), and the pump shaft is made of stainless steel (AISI 304).

Flexible: possibility of rotating the pump body at 90 °C for better installation flexibility. Complete hydraulics (pump body, seal holder flange, impeller, diffuser) made of fibreglass reinforced technopolymer, shaft extension in contact with the liquid made of AISI 304 stainless steel.

CONSTRUCTION FEATURES OF THE PUMP

Silicon carbide/graphite mechanical seal, EPDM O rings

CONSTRUCTION FEATURES OF THE MOTOR

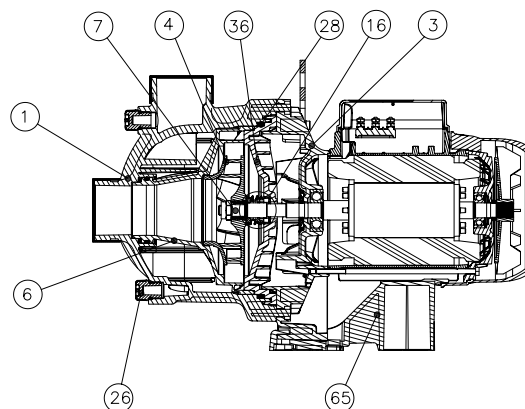
- Continuous service external ventilation asynchronous motor (S1), 2 poles
 - Maximum ambient temperature: 65 °C

- Sealed ball bearings, resistant to water and humidity
 - Motor construction in accordance with EN 60335-2-41.

MATERIALS

N.	PARTS*	MATERIALS
1	PUMP BODY	FIBREGLASS REINFORCED TECHNOPOLYMER
3	SUPPORT	DIE-CAST ALUMINIUM ALLOY
4	IMPELLER	FIBREGLASS REINFORCED TECHNOPOLYMER
6	DIFFUSER	FIBREGLASS REINFORCED TECHNOPOLYMER
7	SHAFT	AISI 304 STAINLESS STEEL
16	MECHANICAL SEAL	SILICON CARBIDE/GRAPHITE
26	CAP	FIBREGLASS REINFORCED TECHNOPOLYMER
28	O-RING	EPDM
36	SEAL HOLDING DISC	FIBREGLASS REINFORCED TECHNOPOLYMER
65	BASE	FIBREGLASS REINFORCED TECHNOPOLYMER

* In contact with the liquid



– Denomination index:
 (example)

KCV 300 T

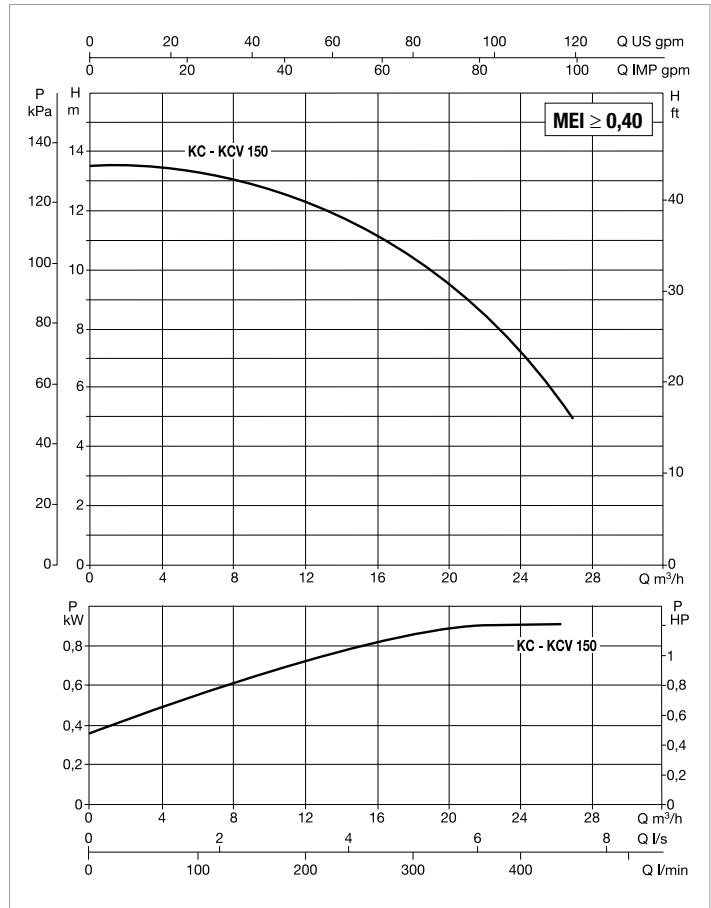
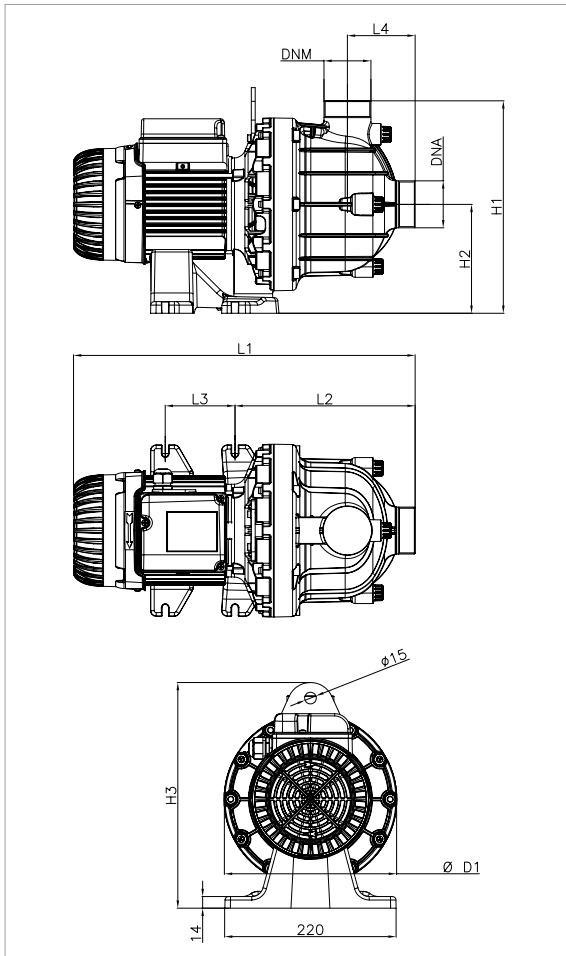
KC = 2" M-GAS threaded ports
 KCV = 2" Victaulic threaded ports

Nominal power in hp x 100

Three-phase motor

KC / KCV 150 - COMPOSITE MATERIAL PUMPS

Pumped liquid temperature range: from -10 °C to +55 °C - Maximum ambient temperature: +65 °C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

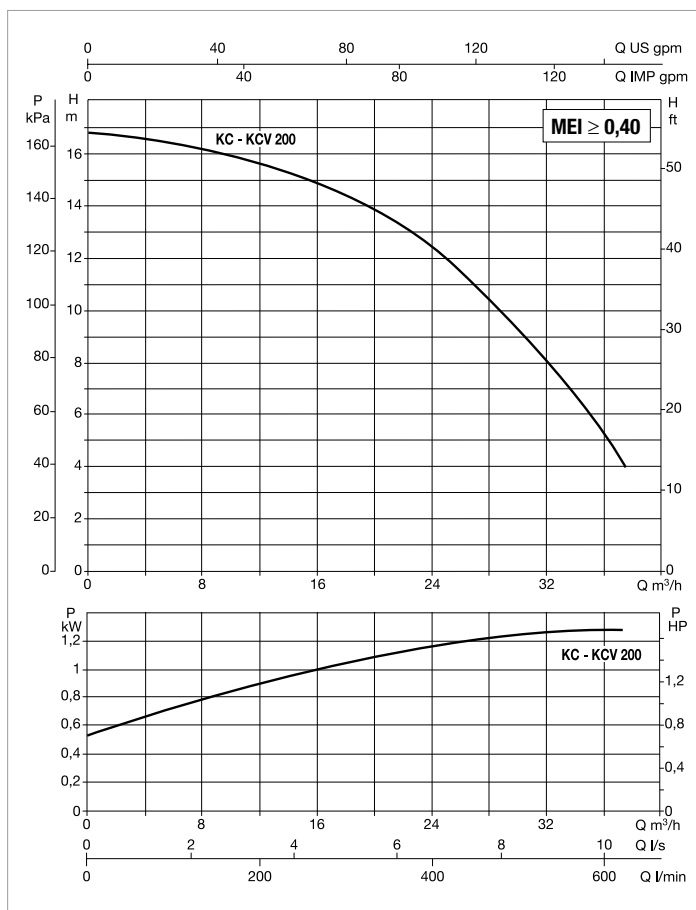
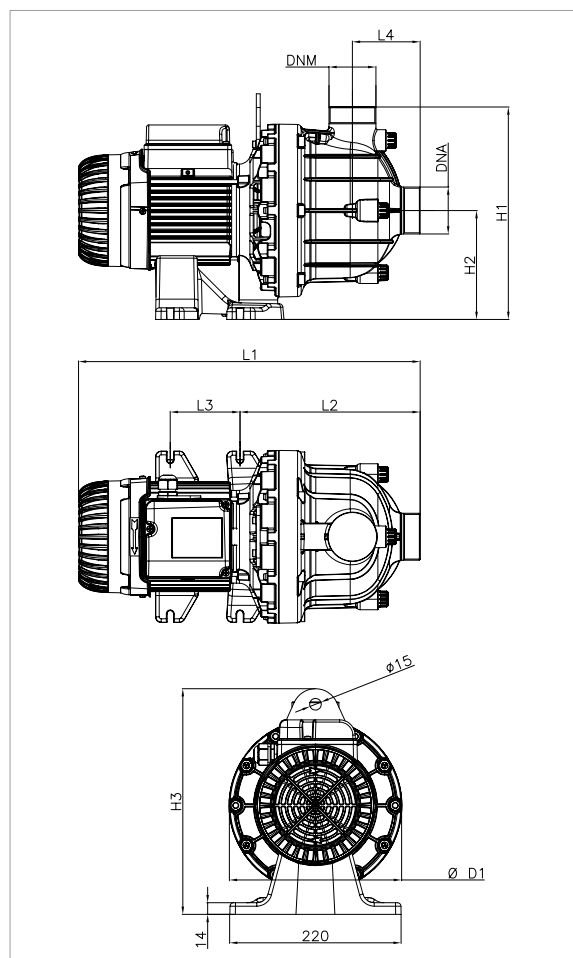
MODEL	Q=m³h	0	10	15	20	25
	Q=l/min	0	167	250	333	417
KC / KCV 150 T	H (m)	13,6	12,8	11,5	9,5	6,5

MODEL	ELECTRICAL DATA				
	POWER INPUT 50 Hz	P1 MAX W	P2 NOMINAL kW	In A	MOTOR STARTER RESISTANCE (Ohm)
KC 150 T	3 x 230 - 400 V ~	1,06	0,87	3,5/2	6,28
KCV 150 T	3 x 230 - 400 V ~	1,06	0,87	3,5/2	6,28

MODEL	L1	L2	L3	L4	H1	H2	H3	D1	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
											L/A	L/B	H		
KC 150 T	439	231	90	87	273	140	290	222	2" M-GAS	2" M-GAS	510	300	320	0,049	14
KCV 150 T	439	231	90	87	273	140	290	222	2" Victaulic	2" Victaulic	510	300	320	0,049	14

KC / KCV 200 - COMPOSITE MATERIAL PUMPS

Pumped liquid temperature range: from -10 °C to +55 °C - Maximum ambient temperature: +65 °C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

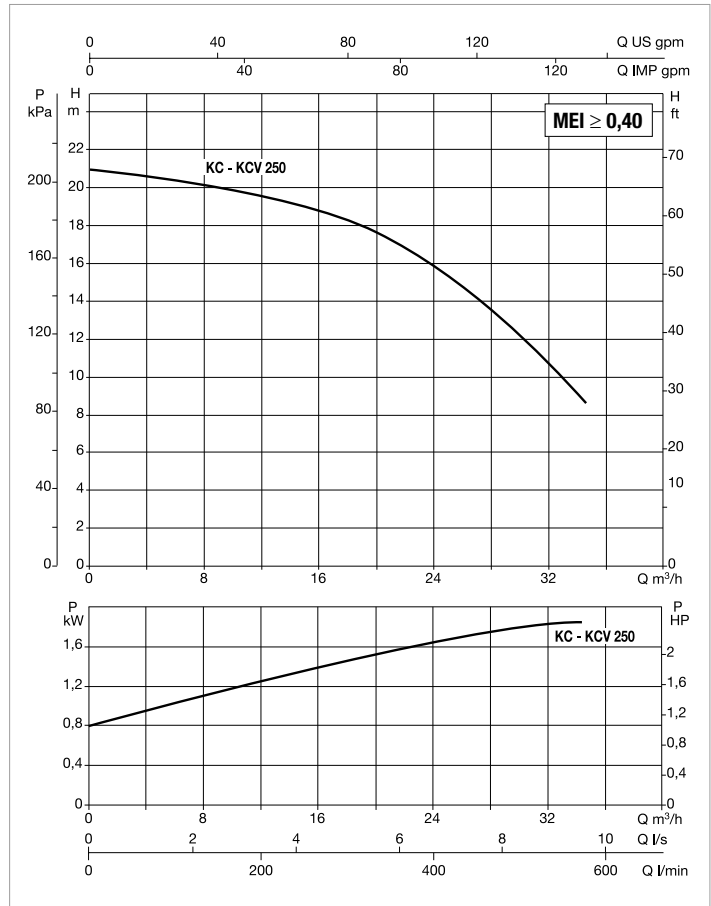
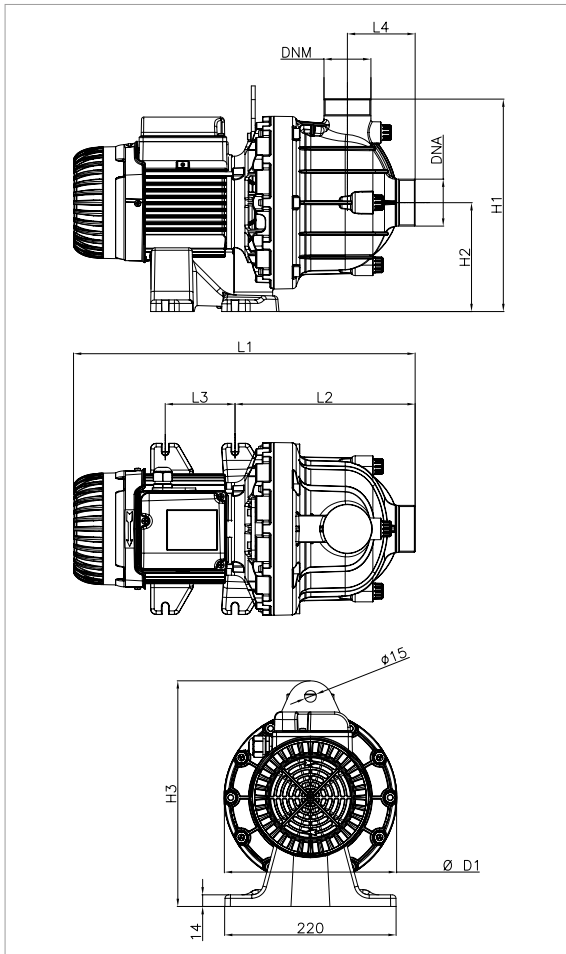
MODEL	Q=m ³ h	0	10	15	20	25	30
	Q=l/min	0	167	250	333	417	500
KC / KCV 200 T	H (m)	16,8	15,7	15	14	11,8	9

MODEL	ELECTRICAL DATA				
	POWER INPUT 50 Hz	P1 MAX W	P2 NOMINAL		MOTOR STARTER RESISTANCE (Ohm)
			W		
KC 200 T	3 x 230 - 400 V ~	1,6	1,26		5,3/3,1
KCV 200 T	3 x 230 - 400 V ~	1,6	1,26		5,3/3,1

MODEL	L1	L2	L3	L4	H1	H2	H3	D1	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
											L/A	L/B	H		
KC 200 T	439	231	74	87	273	140	290	222	2" M-GAS	2" M-GAS	510	300	320	0,049	16
KCV 200 T	439	231	74	87	273	140	290	222	2" Victaulic	2" Victaulic	510	300	320	0,049	16

KC / KCV 250 - COMPOSITE MATERIAL PUMPS

Pumped liquid temperature range: from -10 °C to +55 °C - Maximum ambient temperature: +65 °C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

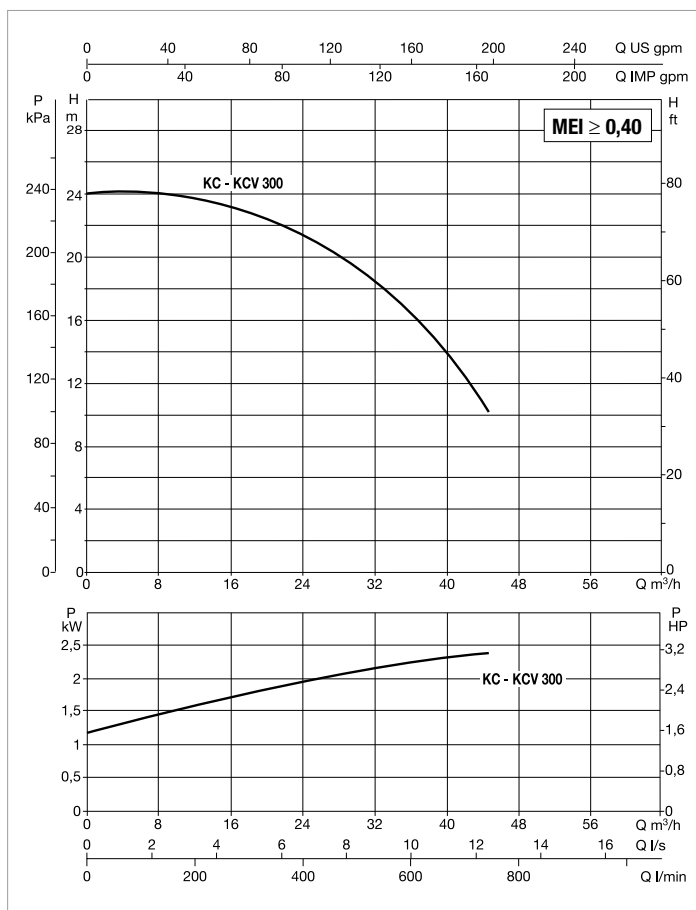
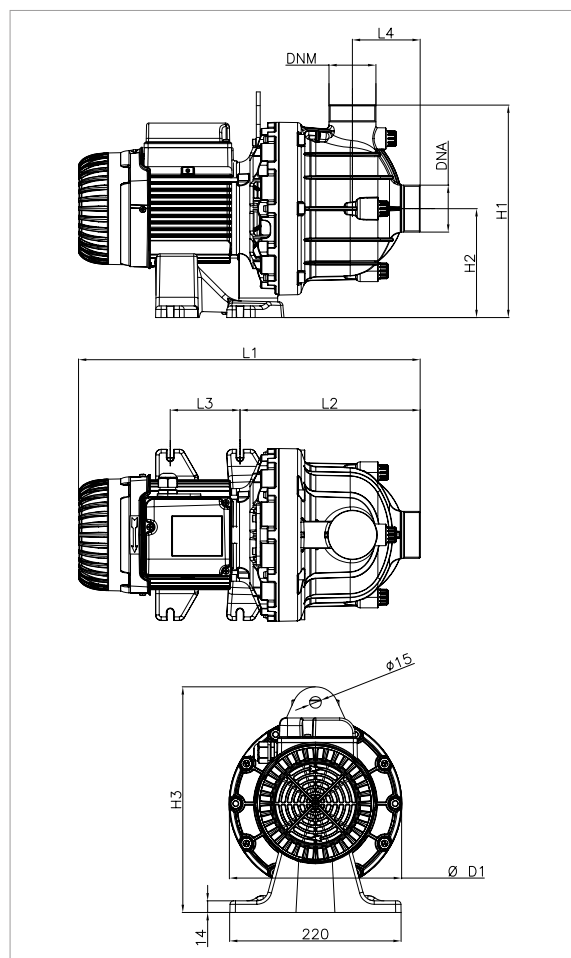
MODEL	Q=m³h	0	10	15	20	25	30
	Q=l/min	0	167	250	333	417	500
KC / KCV 250 T	H (m)	21	20	19,1	17,7	15,5	12

MODEL	ELECTRICAL DATA					
	POWER INPUT 50 Hz	P1 MAX W	P2 NOMINAL		In A	MOTOR STARTER RESISTANCE (Ohm)
			W			
KC 250 T	3 x 230 - 400 V ~	2,4	1,9		7,3/4,2	2,55
KCV 250 T	3 x 230 - 400 V ~	2,4	1,9		7,3/4,2	2,55

MODEL	L1	L2	L3	L4	H1	H2	H3	D1	DNA	DNM	PACKING DIMENSIONS			VOLUME (mc)	WEIGHT Kg
											L/A	L/B	H		
KC 250 T	513	231	74	87	273	140	290	222	2" M-GAS	2" M-GAS	600	300	450	0,08	19
KCV 250 T	513	231	74	87	273	140	290	222	2" Victaulic	2" Victaulic	600	300	450	0,08	19

KC / KCV 300 - COMPOSITE MATERIAL PUMPS

Pumped liquid temperature range: from -10 °C to +55 °C - Maximum ambient temperature: +65 °C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	Q=m ³ h	0	15	20	25	30	40
	Q=l/min	0	250	333	417	500	667
KC / KCV 300 T	H (m)	24,3	23,4	22,5	21,3	19,5	13,9

MODEL	ELECTRICAL DATA				
	POWER INPUT 50 Hz	P1 MAX W	P2 NOMINAL W	I _n A	MOTOR STARTER RESISTANCE (Ohm)
KC 300 T	3 x 230 - 400 V ~	2,9	2,56	8,6/5	1,72
KCV 300 T	3 x 230 - 400 V ~	2,9	2,56	8,6/5	1,72

MODEL	L1	L2	L3	L4	H1	H2	H3	D1	DNA	DNM	PACKING DIMENSIONS			VOLUME (mc)	WEIGHT Kg
											L/A	L/B	H		
KC 300 T	563	282	177	114	355	170	320	300	2" M-GAS	2" M-GAS	700	400	520	0,15	23
KCV 300 T	563	282	177	114	355	170	320	300	2" Victaulic	2" Victaulic	700	400	520	0,15	23

NKP-G / NKM-G

STANDARDISED MONOBLOC PUMPS



IE3 ≥ 0,75 kW

TECHNICAL DATA

Rotation speed: 1450 - 2900 1/min

Operating range: from 1 to 460 m³/h with head of up to 96 metres

Pumped liquid: clean, free of solids and abrasives, non-viscous, non-aggressive, non-crystallised and chemically neutral, with properties similar to water

Pumped liquid temperature range: from -10°C to +140°C

Maximum ambient temperature: +40 °C

Maximum operating pressure: 16 bar - 1600 kPa (for DN 200 max 10 bar)

Flanging: PN 16 DIN 2533 - PN 10 DIN 2532 for DN 200

Protection class: IP55

Insulation class: F

Standard voltage: 230/400 V 50 Hz up to 2,2 kW included
400 V Δ 50 Hz above 2,2 kW

Installation: normally in horizontal or vertical position, provided that the motor is always above the pump

Special executions on requests: pumps for liquids other than water
Other voltages and/or frequencies

APPLICATIONS

Standardised centrifugal monobloc electric pumps with coupling, designed for a wide range of applications, such as:

- Water supply.
- Hot water circulation for the heating system.
- Circulation of cold water for air conditioning and refrigeration systems.
- Transfer of liquids in agricultural, horticultural, and industrial environments.
- Installation of pumping assemblies.

CONSTRUCTION FEATURES OF THE PUMP

Cast iron single stage spiral body complying with DIN-EN 733 (formerly DIN 24255), cast iron support, flanges complying with DIN 2533, and DIN 2532 for DN 200. Cast iron impeller, closed and dynamically balanced, with compensation of the axial thrust through balancing holes, operation on interchangeable wear rings (on request). AISI 304 stainless steel pump shaft.

Seal device: standardised mechanical seal according to DIN 24960 in carbon/silicon carbide with EPDM OR rings.

CONSTRUCTION FEATURES OF THE MOTOR

Closed asynchronous type motor with external ventilation, B3/B5 construction, two poles for NKP and four poles for NKM. Rotor running on ball bearings, largely oversized to ensure low noise and durability. For the protection of the motor, we recommend the use of remote overload cut-outs, in compliance with current local regulations. For liquids with densities higher than water, motors with proportionally higher powers are required.

Construction according to the standard: CEI 2-3.

IE2 motors as standard from 0,75 kW - IE3 ≥ 7,5 kW (IE2 ≥ 7,5 kW only outside the EU)

NKP-G / NKM-G

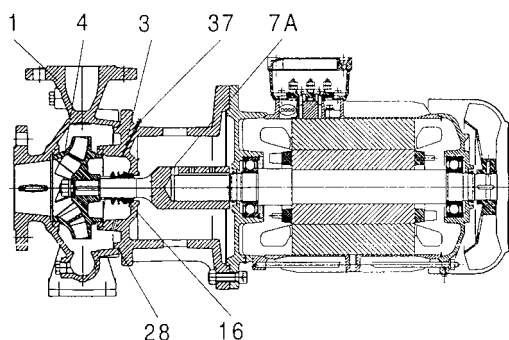
STANDARDISED MONOBLOC PUMPS

MATERIALS

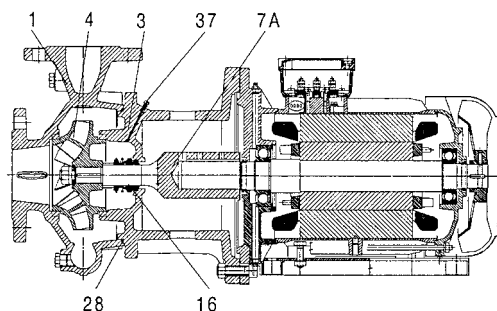
No.	PARTS	MATERIALS (standard version)
1	PUMP BODY	CAST IRON 250 UNI ISO 185
3	SUPPORT	CAST IRON 250 UNI ISO 185
4	IMPELLER	CAST IRON 250 UNI ISO 185
7A	PUMP SHAFT	AISI 304 STAINLESS STEEL - UNI 6900/71
16	MECHANICAL SEAL	CARBON/SILICON CARBIDE - EPDM
28	OR RING	EPDM
31	SEAL SPACER	AISI 304 STAINLESS STEEL - UNI 6900/71
36	SEAL HOLDING DISC	CAST IRON 250 UNI ISO 185
37	BLEED COCK	AISI 304 STAINLESS STEEL - UNI 6900/71

No.	PARTS	MATERIALS (version on request)
4	IMPELLER	BRONZE GCuSn5Zn5Pb5 UNI 7013/8a-72
16	MECHANICAL SEAL	SILICON CARBIDE/SILICON CARBIDE - EPDM SILICON CARBIDE/SILICON CARBIDE - VITON CARBON/SILICON CARBIDE - VITON

VERSION WITH MOTOR UP TO 7,5 KW INCLUDED

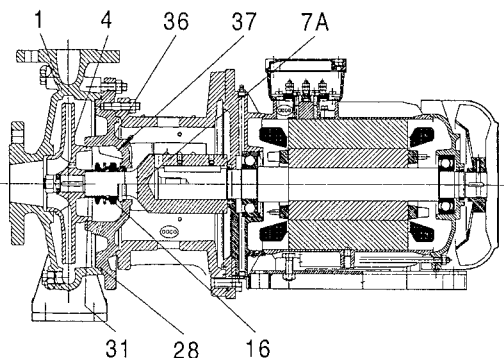


VERSION WITH MOTOR OVER 7,5 KW



VERSION FOR MODELS:

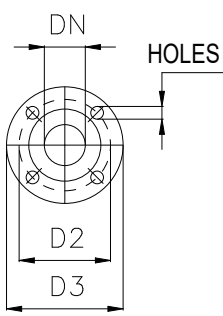
NKM-G 65-315/309/11 /4
 NKM-G 100-315/316/22 /4, NKM-G125-250/243/15 /4,
 NKM-G 80-200/200/4 /4,
 NKM-G 80-250/270/11 /4, NKM-G 80-315/305/15 /4,
 NKM-G 80-315/320/18.5 /4, NKM-G 80-315/334/22 /4,
 NKM-G 100-250/250/11 /4, NKM-G 150-200/218/11 /4



NKP-G / NKM-G

STANDARDISED MONOBLOC PUMPS

FLANGE SIZES (mm)

		Nominal diameter (DN)						Nominal diameter (DN)			
		DIN 2533 PN 16						DIN 2533 PN 16			DIN 2533 PN 16
	DN	32	40	50	65	80	100	125	150	200	
	D2	100	110	125	145	160	180	210	240	295	
	D3	140	150	165	185	200	220	250	285	340	
HOLES	Ø	18				18				22	
	No.	4				8				8	

- Denomination index: (example)

	NKM	-	G	100	-	200	/	198	/	A	W	/	BAQE	/	5.5	/	4
NKM = 4 poles NKP = 2 poles																	
G = with coupling																	
Nominal diameter of the delivery port:																	
Nominal diameter of the impeller:																	
Actual diameter of the impeller:																	
Material codes: A = Cast iron B = Cast iron with bronze impeller																	
Wear rings (only if present)																	
Seal description																	
Motor power in kW																	
Number of poles 4 = 4 poles 2 = 2 poles																	

DESCRIPTION OF THE MECHANICAL SEAL

Position	Code	Description of the seal
1	A	O-ring seal with fixed guide
	B	Rubber bellows seal
	C	O-ring seal with spring guide
	D	O-ring seal balanced
	M	Rubber bellows seal
	X	Metal bellows seal
Position	Code	Materials
2 & 3	A	Impregnated carbon/metal
	B	Impregnated carbon/resin
	C	Other carbon types
	S	Chromium steel
	U	Tungsten carbide
	Q	Silicon carbide
	V	Aluminium oxide (ceramic)
	X	Other ceramic types
Position	Code	Materials
4	P	Nitrile rubber (NBR)
	S	Silicon rubber
	T	Teflon (PTFE)
	E	EPDM
	V	Viton
	M	PTFE coated O-ring
Position	Code	Materials
5	V	Reinforced

NKP-G / NKM-G

STANDARDISED MONOBLOC PUMPS

PRODUCT CODE DESCRIPTION

NOMINAL DIAMETER OF THE IMPELLER	Cod.
125	1
160	2
200	3
250	4
315	5
125.1	K
160.1	L
200.1	M

PUMP TYPE	Cod.
32	1
40	2
50	3
65	4
80	5
100	6
125	7
150	8

IDENTIFICATION	Cod.
DAB PUMPS S.p.A.	D

IDENTIFICATION	Cod.
DAB PUMPS S.p.A.	1

Cod.	PUMP/IMPELLER MATERIALS
1	A (01) = cast iron/cast iron
2	B (03) = cast iron/bronze
5	A (01) + Wr*
6	B (03) + Wr*

* With wear rings

Cod.	SEAL DEVICE
1	BAQE
5	BQQV*
7	BAQV*
G	BQQE*

* On request

Cod.	CODE PUMP TYPE
B	NKM-G / NKP-G 50 Hz
C	NKM-G / NKP-G 60 Hz

Cod.	P2 NOMINAL KW
1	0.37
2	0.55
3	0.75
4	1.1
5	1.5
6	2.2
7	3
8	4
9	5.5
A	7.5
B	11
C	15
D	18.5
E	22
F	30

Cod.	VOLTAGE	Poles
0	Without motor	
1	3 x 220-240/380-415 V 50 Hz (<0,75 kW) 3 x 220-277/380-480 V 60 Hz	2
2	3 x 380-480 V 60 Hz	2
3	3 x 220-240/380-415 V 50 Hz (<0,75 kW) 3 x 220-277/380-480 V 60 Hz	4
4	3 x 380-480 V 60 Hz	4
A	3 x 220-240/380-415 V 50 Hz - IE2	2
B	3 x 380-415 V 50 Hz - IE2	2
C	3 x 220-240/380-415 V 50 Hz - IE2	4
D	3 x 380-415 V 50 Hz - IE2	4
U	3 x 220-240/380-415 V 50 Hz - IE3	2
V	3 x 380-415 V 50 Hz - IE3	2
W	3 x 220-240/380-415 V 50 Hz - IE3	4
X	3 x 380-415 V 50 Hz - IE3	4

Product code

1	D	1	1	1	1	B	1	1
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NKP-G RANGE - 2 POLES

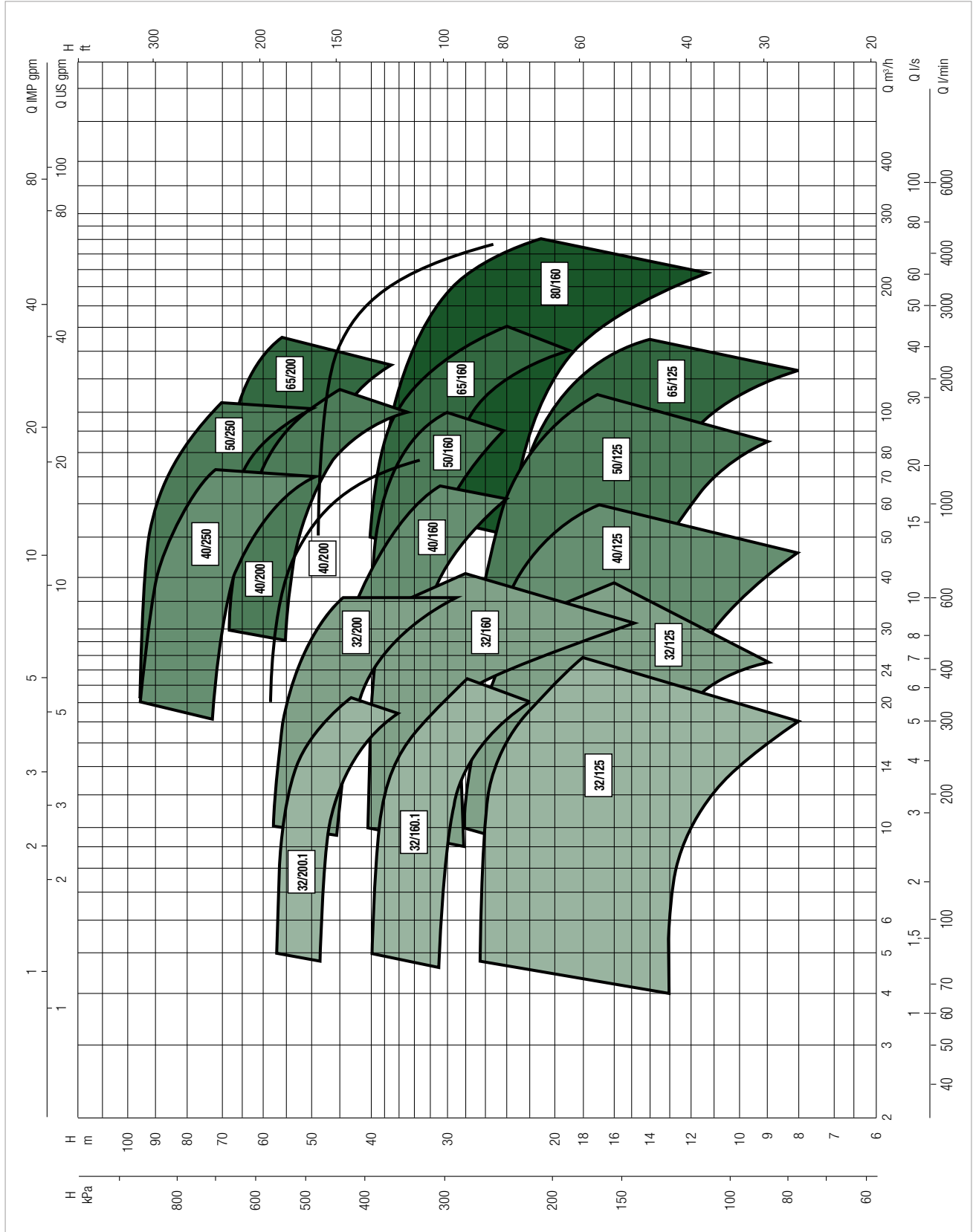
STANDARDISED MONOBLOC PUMPS

PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

GRAPHIC SELECTION TABLE

≈ 2900 1/min



NKP-G - 2 POLES

STANDARDISED MONOBLOC PUMPS

SELECTION TABLE - NKP-G 32

MODEL	Q=m ³ /h	0	6	12	18	24	30	36	42
	Q=l/min	0	100	200	300	400	500	600	700
NKP-G 32-125.1/102/0,75/2	H (m)	13	12,5	11	8				
NKP-G 32-125.1/115/1,1/2		17,2	17	15	12,5				
NKP-G 32-125.1/125/1,5/2		21	20,8	19	16,8				
NKP-G 32-125.1/140/2,2/2		27	26,9	25,9	23	19,5			
NKP-G 32-125/110/1,1/2		15,8	15,2	14,5	12,9	9,9			
NKP-G 32-125/120/1,5/2		19,3	18,9	18,2	16,8	14,5			
NKP-G 32-125/130/2,2/2		23,6	23,1	23	21,6	19,6	16,8		
NKP-G 32-125/142/3/2		28,6	28	27,6	26,5	24,6	21,8	17,9	
NKP-G 32-160.1/155/2,2/2		31,7	32,4	31	26,7				
NKP-G 32-160.1/166/3/2		36,7	37,3	36,3	32,8	27			
NKP-G 32-160.1/177/4/2		42,7	43,4	42,6	38,5	33,9			
NKP-G 32-160/151/3/2		30,5	30	29	27	24	19,5		
NKP-G 32-160/163/4/2		36,2	36	35	33,5	30,5	27	22	
NKP-G 32-160/177/5,5/2		43,5	43,2	42,6	41,5	39	36	31,5	25,5
NKP-G 32-200.1/188/4/2		45,3	44,4	40,8	34,4	26,8			
NKP-G 32-200.1/205/5,5/2		56,6	55,7	52	45,8	36,2			
NKP-G 32-200/190/5,5/2		46,9	46,5	45	43	40	35	29	
NKP-G 32-200/210/7,5/2		58,8	58	57	56	53	49	44	

SELECTION TABLE - NKP-G 40

MODEL	Q=m ³ /h	0	6	12	18	24	30	36	42	48	54	60	66	72
	Q=l/min	0	100	200	300	400	500	600	700	800	900	1000	1100	1200
NKP-G 40-125/107/1,5/2	H (m)	14,7	14,5	14,3	13,8	13	11,8	10,5	8,6	7				
NKP-G 40-125/120/2,2/2		19	18,7	18,4	17,8	17	15,9	14,6	13	11				
NKP-G 40-125/130/3/2		22,8	22,5	22,3	22	21,2	20,2	19	17,4	15,5	13,5			
NKP-G 40-125/139/4/2		26,4	26,2	26	25,6	25	24	23	21,5	19,5	17,5	15		
NKP-G 40-160/158/5,5/2		33,7			34	33,4	32,4	31	29,5	27	24			
NKP-G 40-160/172/7,5/2		40,7			40,2	40,1	39,8	38,5	37,5	35,5	33	30	26,5	
NKP-G 40-200/210/11/2		57,1	57	57	56,8	56,5	56	55	53	50	47	43,5	39	
NKP-G 40-250/230/15/2		72,5			72,5	72	70	68	66	62,5	60	56	51,5	
NKP-G 40-250/245/18,5/2		83			83	82,5	81,5	80	77	74	71,5	67,5	63,5	58,5
NKP-G 40-250/260/22/2		96			95	94,5	93,5	92	90	87,5	84	81	76,5	71,5

NKP-G - 2 POLES

STANDARDISED MONOBLOC PUMPS

SELECTION TABLE - NKP-G 50

MODEL	Q=m³/h	0	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	102	114
	Q=l/min	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1700	1900
NKP-G 50-125/115/3/2	H (m)	17				16,5	16	15,5	15	14,5	13,7	13	12	11	10	9			
NKP-G 50-125/125/4/2		20,5				20	19,5	19,1	18,5	18	17,5	16,5	15,8	14,8	14	12,5	11,5		
NKP-G 50-125/135/5,5/2		24				23,6	23,5	23,2	22,8	22,2	21,5	21	20	19,1	18,5	17,5	16,5	13,4	
NKP-G 50-125/144/7,5/2		28				27,8	27,5	27,3	27	26,5	25,8	25,3	24,5	23,5	23	21,5	20,5	18	15,5
NKP-G 50-160/153/7,5/2		31,9				31,5	31,5	31,5	31,2	31	30,5	29,5	28,5	27,5	26	25	23,5		
NKP-G 50-160/169/11/2		39,6					39,5	39,3	39,1	39	38,5	38	37,2	36,5	35	34	32,5		
NKP-G 50-200/200/15/2		55,1					54,7	54,6	54	53,5	52	51	49	47,5	45,5	43	41		
NKP-G 50-200/210/18,5/2		61,7					61,7	61,6	61,5	60,5	59	58	56,5	55	53	51	48,5	43	
NKP-G 50-200/219/22/2		67,7					67,5	67,4	66,5	66	65,5	64	62,5	61	59,5	57	55	50	
NKP-G 50-250/230/22/2		73,6					73,2	73,1	72,8	72	71	68,5	67	65	62,5	60	57	49	
NKP-G 50-250/257/30/2		93					92,5	92,3	92	91,5	91	89	87,5	86	83	81	78	72	

SELECTION TABLE - NKP-G 65

MODEL	Q=m³/h	0	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	102	114	120	150
	Q=l/min	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1700	1900	2200	2500
NKP-G 65-125/120-110/4/2	H (m)	16						15	14,6	14,2	13,7	13,3	12,8	12,3	12	11,4	10	8,5	8		
NKP-G 65-125/127/5,5/2		19,5						19	18,9	18,7	18,4	18,1	17,5	17,2	16,9	16,5	15,8	14,5	13	12	
NKP-G 65-125/137/7,5/2		23,5						23,1	23	22,8	22,6	22,5	22	21,6	21,1	20,7	20,2	19	17,5	14,8	12
NKP-G 65-160/157/11/2		32,5								32,3	32	31,9	31,3	30,2	30	29,2	28,7	27	24,8	23,6	
NKP-G 65-160/173/15/2		40,1								39,7	39,6	39,5	39,5	39	38,5	38,2	37,5	36	34,5	33,5	26,9
NKP-G 65-200/190/18,5/2		51,1								51	50,8	50,5	50	49	48,5	48	47,5	45	42,5	41	
NKP-G 65-200/200/22/2		56,4								56,1	56,1	56	55,8	55,5	55	54,8	54,5	53	51	49	
NKP-G 65-200/219/30/2		68,9								68,8	68,8	68,7	68,7	68,6	68,5	68,4	67,5	66	64	63,1	57

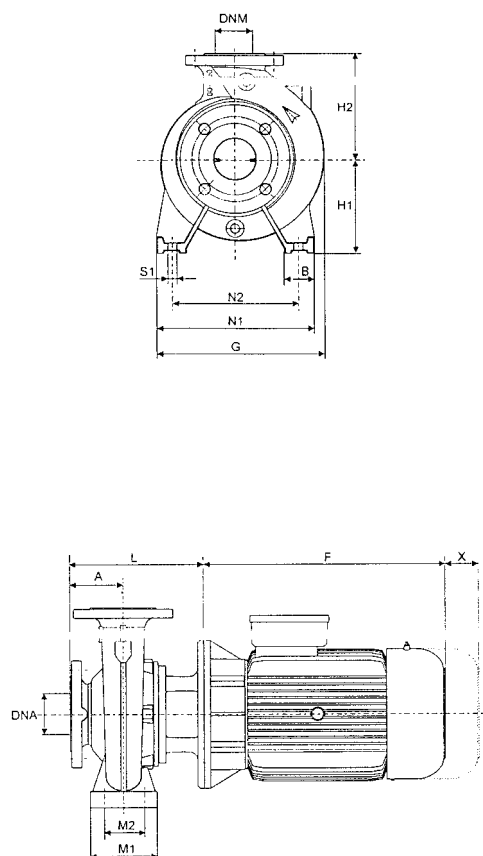
SELECTION TABLE - NKP-G 80

MODEL	Q=m³/h	0	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	102	114	120	150	180	210	240	
	Q=l/min	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1700	1900	2200	2500	3000	3500	4000	
NKP-G 80-160/147-127/11/2	H (m)	24															22	21,4	20,4	20	17,4	16,8	12		
NKP-G 80-160/153/15/2		30,5																29	28,4	27,5	27	24,5	21,3	18,3	
NKP-G 80-160/163/18,5/2		35,5																34,3	33,6	32,6	32,3	29,8	26,8	23,6	20
NKP-G 80-160/169/22/2		38,5																37,2	36,8	36	35,8	33,5	30,8	27,5	24
NKP-G 80-200/190/30/2		48,3																47,9	47,6	47,5	47,3	44,7	41	36	29

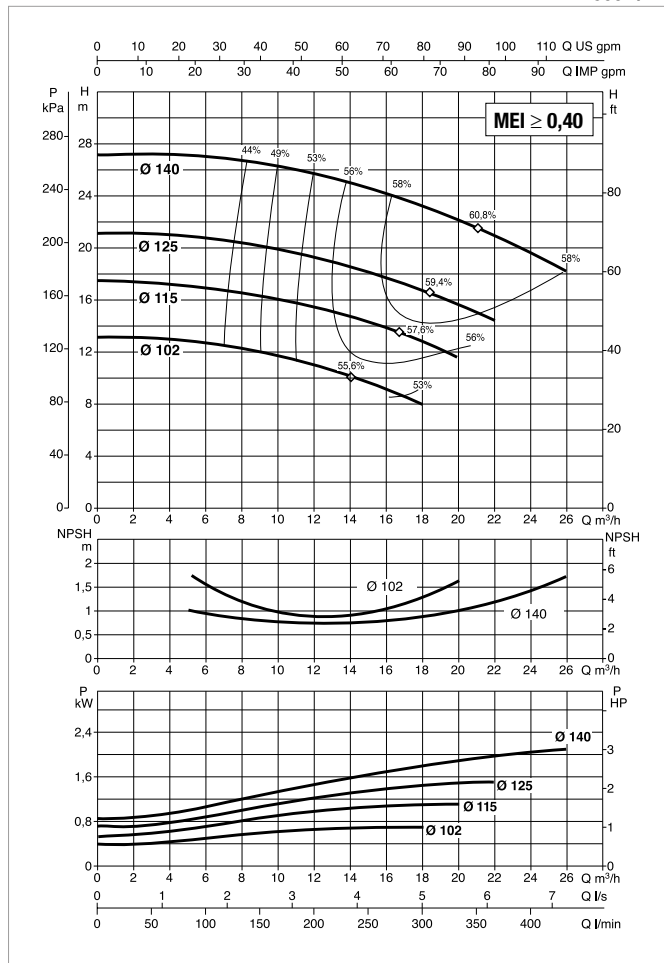
NKP-G 32-125.1 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 2900 1/min



Construction features of the motor: B5



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

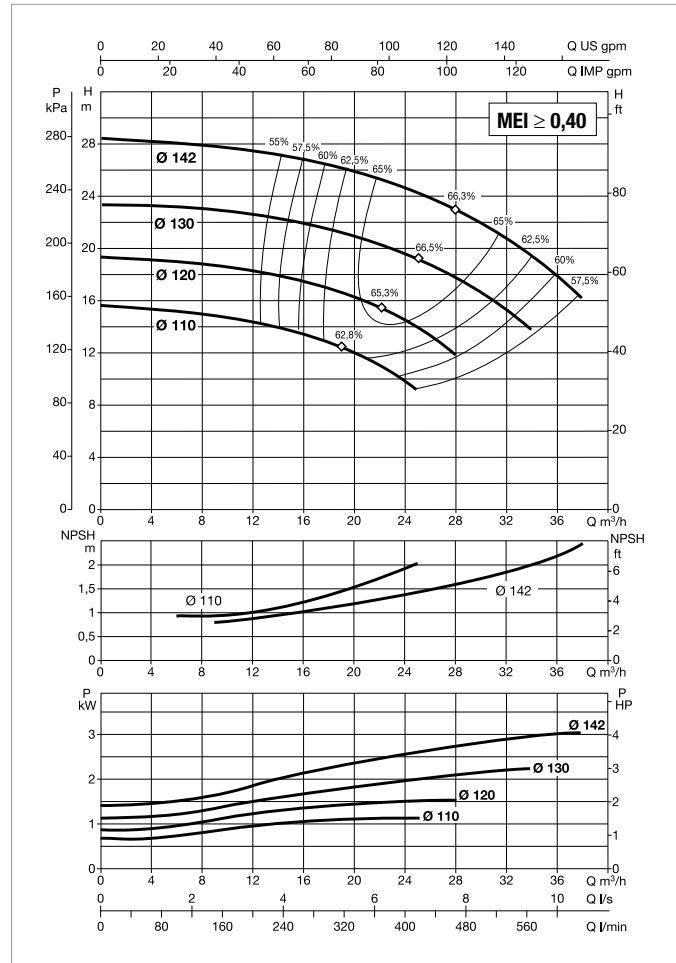
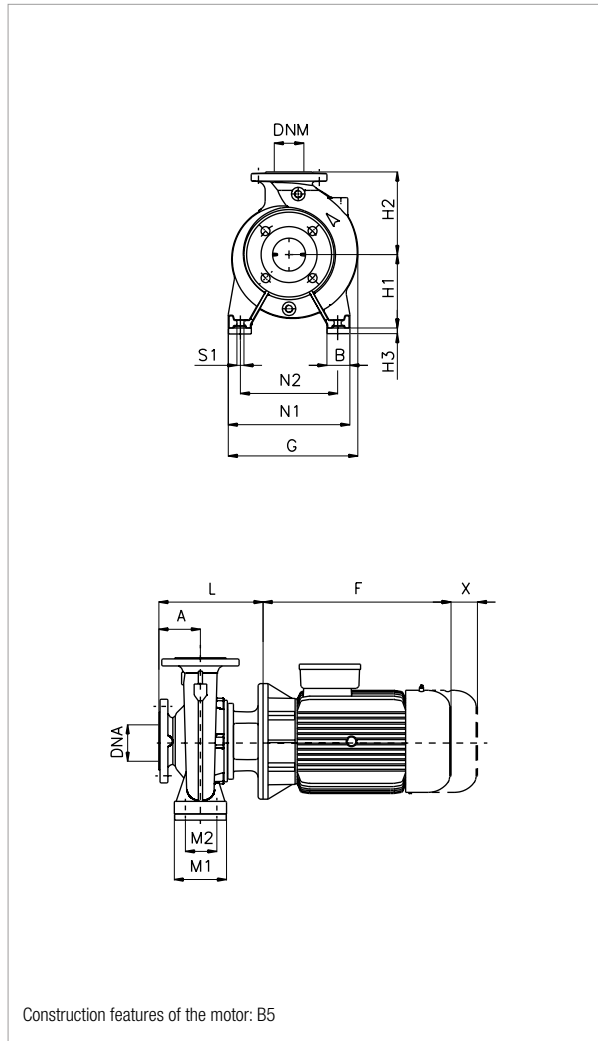
MODEL	ELECTRICAL DATA							MOTOR TYPE
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A			
			kW	HP	230 V	400 V		
NKP-G 32-125.1/102/0,75/2	MEC 80	3 x 230 - 400 V ~	0,75	1	2,9	1,7	IE3	
NKP-G 32-125.1/115/1,1/2	MEC 80	3 x 230 - 400 V ~	1,1	1,5	4,2	2,4	IE3	
NKP-G 32-125.1/125/1,5/2	MEC 90 S	3 x 230 - 400 V ~	1,5	2	5,2	3	IE3	
NKP-G 32-125.1/140/2,2/2	MEC 90 L	3 x 230 - 400 V ~	2,2	3	7,97	4,6	IE3	

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
																							L/A	L/B	H		
NKP-G 32-125.1/102/0,75/2	80	50	-	232	234	112	140	226	100	70	190	140	-	M10	-	-	100	-	-	28	50	32	620	370	480	0,11	30
NKP-G 32-125.1/115/1,1/2	80	50	-	232	234	112	140	226	100	70	190	140	-	M10	-	-	100	-	-	28	50	32	620	370	480	0,11	31
NKP-G 32-125.1/125/1,5/2	80	50	-	287,5	234	112	140	226	100	70	190	140	-	M10	-	-	100	-	-	28	50	32	620	370	480	0,11	33
NKP-G 32-125.1/140/2,2/2	80	50	-	287,5	234	112	140	226	100	70	190	140	-	M10	-	-	100	-	-	28	50	32	620	370	480	0,11	34

NKP-G 32-125 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

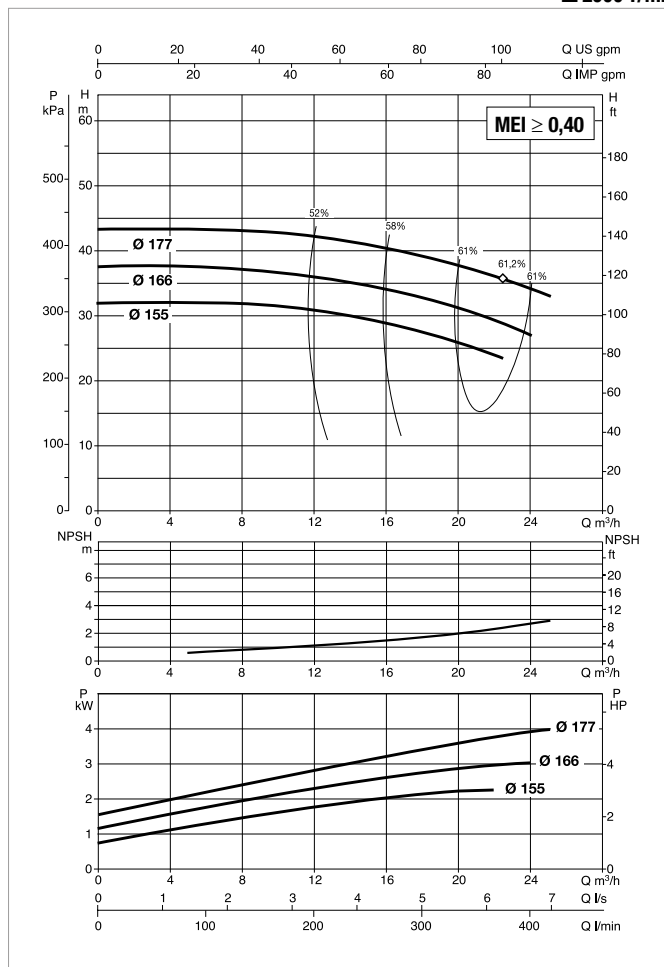
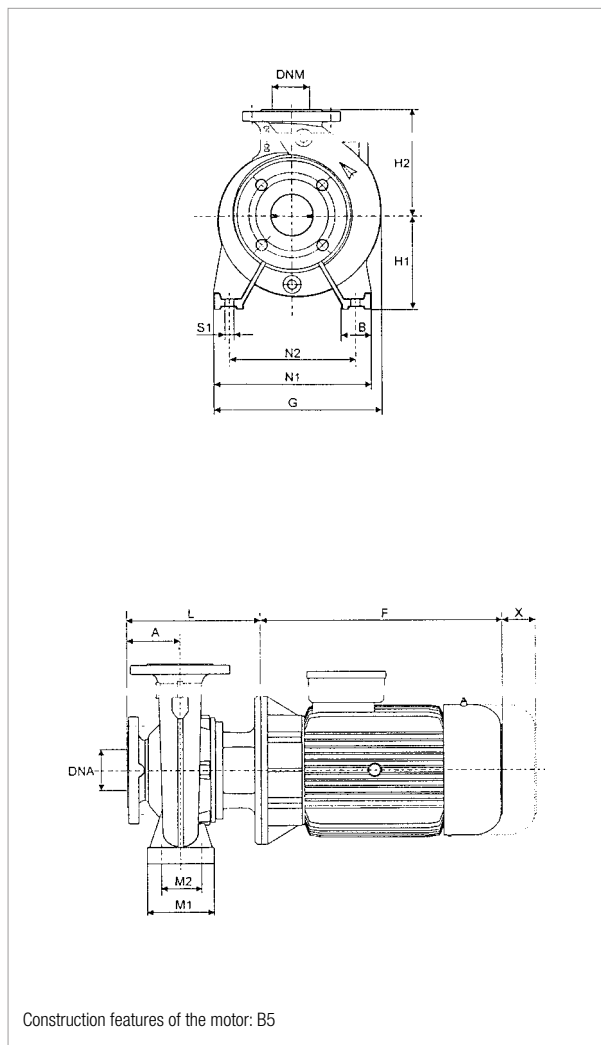
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKP-G 32-125/110/1,1/2	MEC 80	3 x 230 - 400 V ~	1,1	1,5	4,2	2,4	IE3
NKP-G 32-125/120/1,5/2	MEC 90 S	3 x 230 - 400 V ~	1,5	2	5,2	3	IE3
NKP-G 32-125/130/2,2/2	MEC 90 L	3 x 230 - 400 V ~	2,2	3	7,97	4,6	IE3
NKP-G 32-125/142/3/2	MEC 100 L	3 x 400 V ~	3	4	-	5,6	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKP-G 32-125/110/1,1/2	80	50	-	232	234	112	140	226	100	70	190	140	-	M10	-	-	100	-	-	28	50	32	620	370	480	0,11	28
NKP-G 32-125/120/1,5/2	80	50	-	287,5	234	112	140	226	100	70	190	140	-	M10	-	-	100	-	-	28	50	32	620	370	480	0,11	32
NKP-G 32-125/130/2,2/2	80	50	-	287,5	234	112	140	226	100	70	190	140	-	M10	-	-	100	-	-	28	50	32	620	370	480	0,11	34
NKP-G 32-125/142/3/2	80	50	-	319	250	112	140	254	100	70	190	140	-	M10	-	-	100	20	-	28	50	32	670	420	540	0,152	48

NKP-G 32-160.1 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

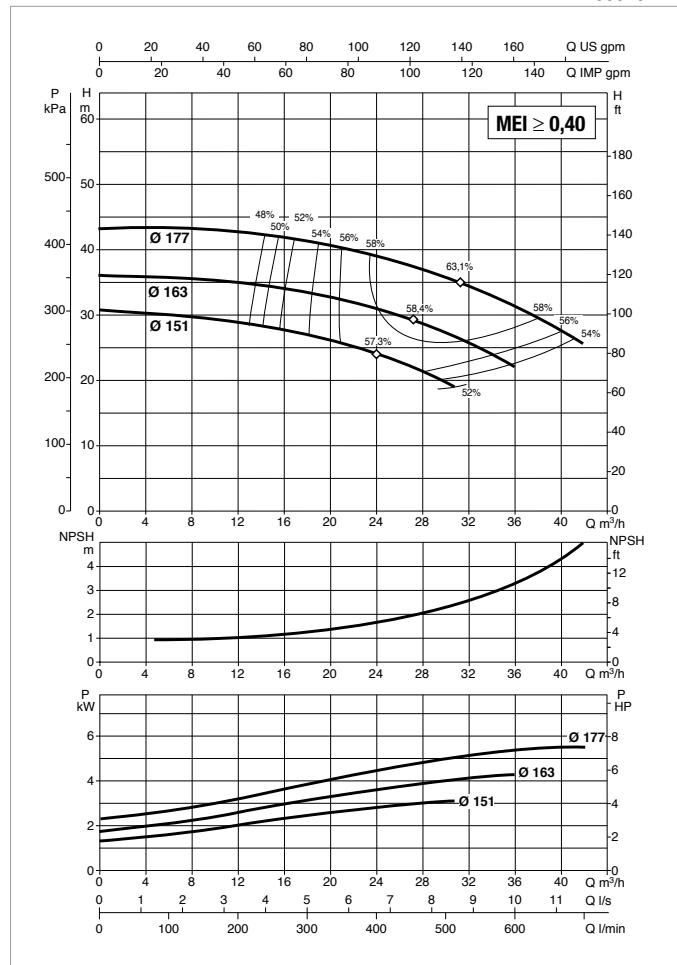
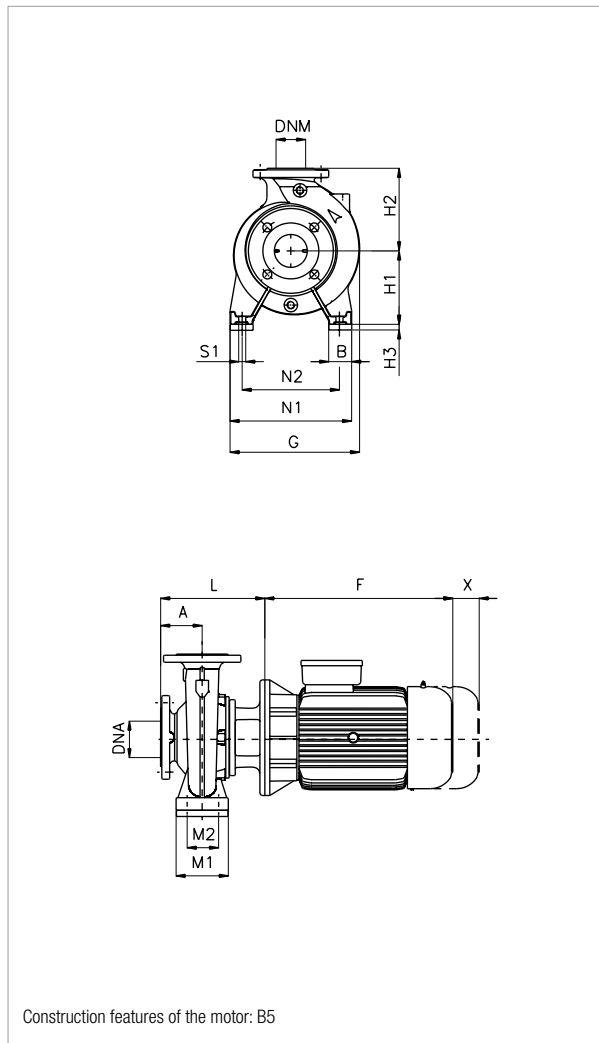
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKP-G 32-160.1/155/2,2/2	MEC 90 L	3 x 230 - 400 V ~	2,2	3	7,97	4,6	IE3
NKP-G 32-160.1/166/3/2	MEC 100 L	3 x 400 V ~	3	4	-	5,6	IE3
NKP-G 32-160.1/177/4/2	MEC 112 M	3 x 400 V ~	4	5,5	-	8,2	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
																							L/A	L/B	H		
NKP-G 32-160.1/155/2,2/2	80	50	-	287,5	245	132	160	226	100	70	240	190	-	M10	-	-	100	-	-	28	50	32	620	370	480	0,11	35
NKP-G 32-160.1/166/3/2	80	50	-	319	250	132	160	254	100	70	240	190	-	M10	-	-	100	-	-	28	50	32	670	420	540	0,152	42
NKP-G 32-160.1/177/4/2	80	50	-	306	250	132	160	254	100	70	240	190	-	M10	-	-	100	-	-	28	50	32	670	420	540	0,152	59

NKP-G 32-160 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

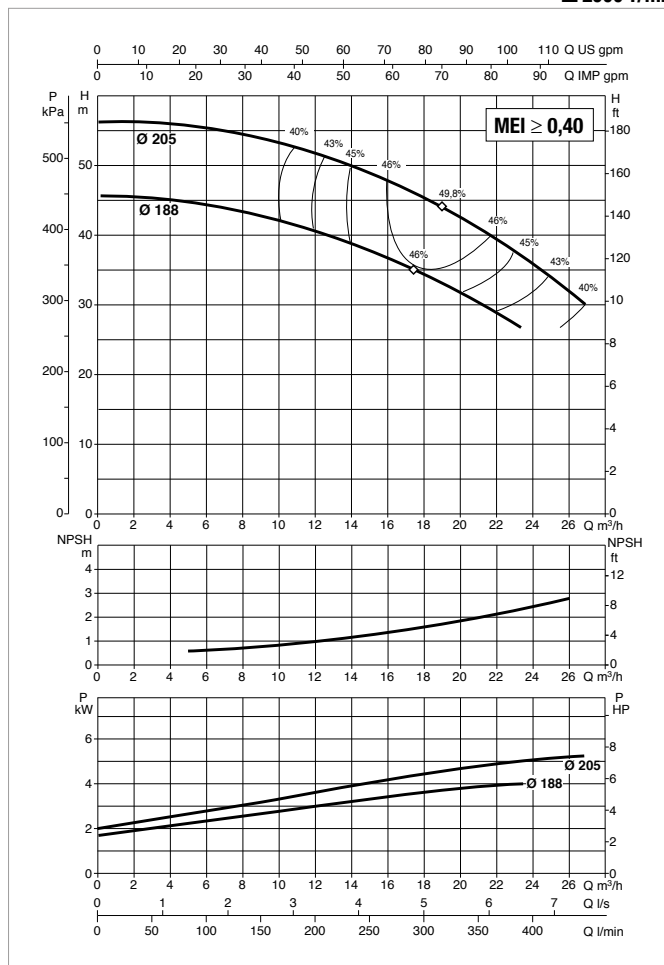
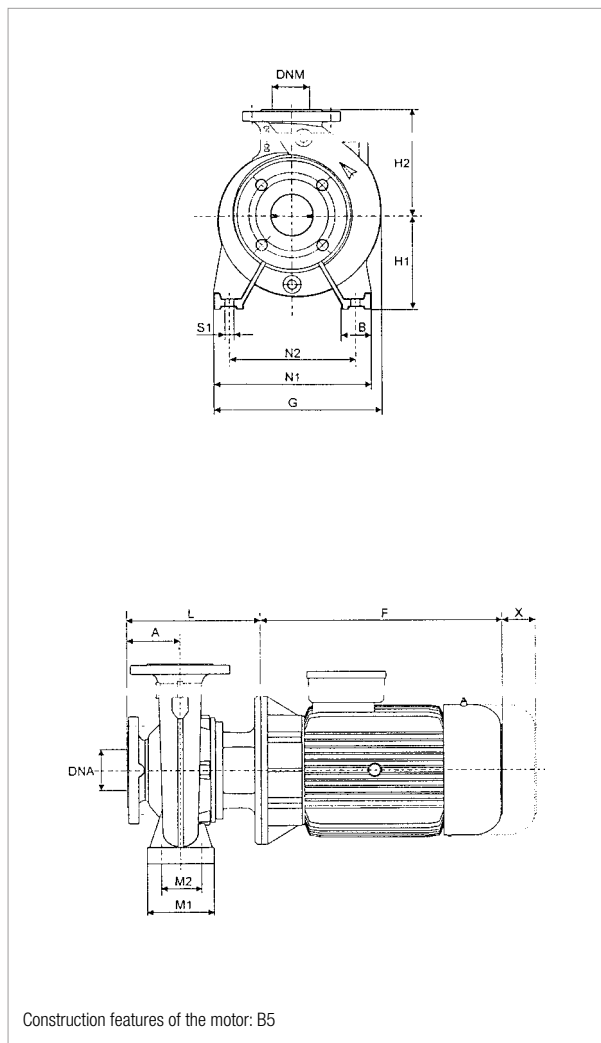
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKP-G 32-160/151/3/2	MEC 100 L	3 x 400 V ~	3	4	-	5,6	IE3
NKP-G 32-160/163/4/2	MEC 112 M	3 x 400 V ~	4	5,5	-	8,2	IE3
NKP-G 32-160/177/5,5/2	MEC 132 S	3 x 400 V ~	5,5	7,5	-	10,2	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKP-G 32-160/151/3/2	80	50	-	319	250	132	160	254	100	70	240	190	-	M10	-	-	100	-	-	28	50	32	670	420	540	0,152	45
NKP-G 32-160/163/4/2	80	50	-	306	250	132	160	254	100	70	240	190	-	M10	-	-	100	-	-	28	50	32	670	420	540	0,152	32
NKP-G 32-160/177/5,5/2	80	50	-	328	300	132	160	293	100	70	240	190	-	M10	-	-	100	20	-	28	50	32	830	430	520	0,186	51

NKP-G 32-200.1- 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

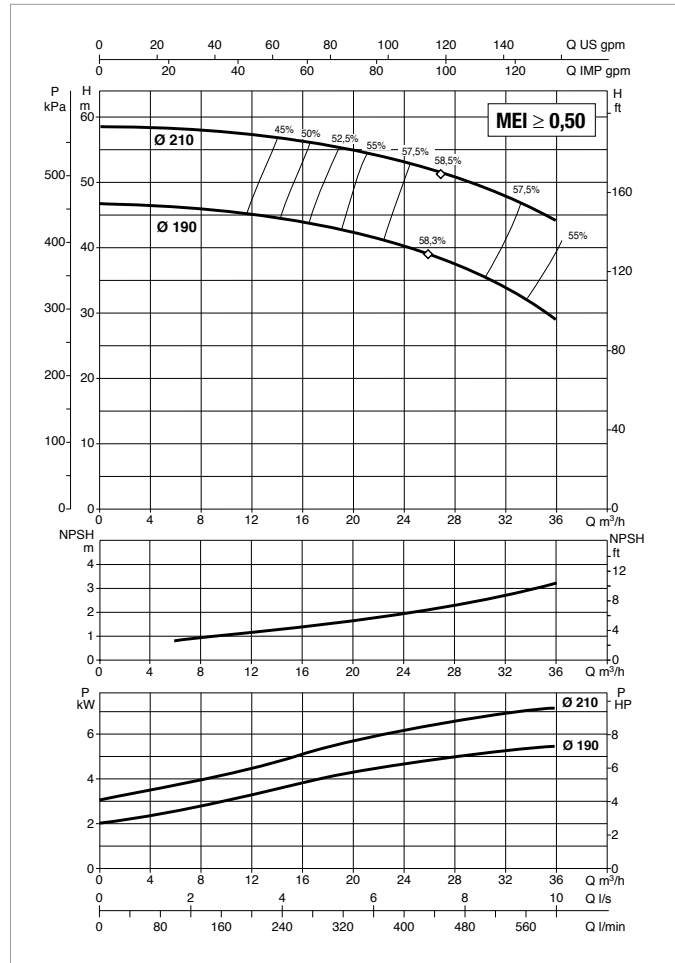
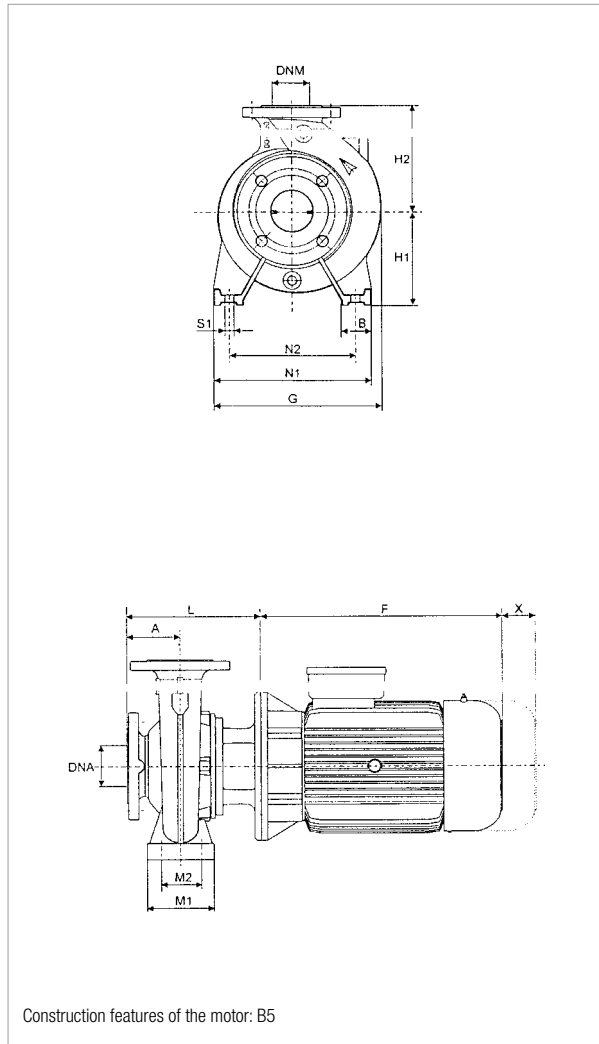
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKP-G 32-200.1/188/4/2	MEC 112 M	3 x 400 V ~	4	5,5	-	8,2	IE3
NKP-G 32-200.1/205/5,5/2	MEC 132 S	3 x 400 V ~	5,5	7,5	-	10,2	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKP-G 32-200.1/188/4/2	80	50	-	306	279	160	180	254	100	70	240	190	-	M10	-	-	100	-	-	28	50	32	670	420	540	0,152	38
NKP-G 32-200.1/205/5,5/2	80	50	-	328	300	160	180	293	100	70	240	190	-	M10	-	-	100	-	-	28	50	32	830	430	520	0,186	54

NKP-G 32-200 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

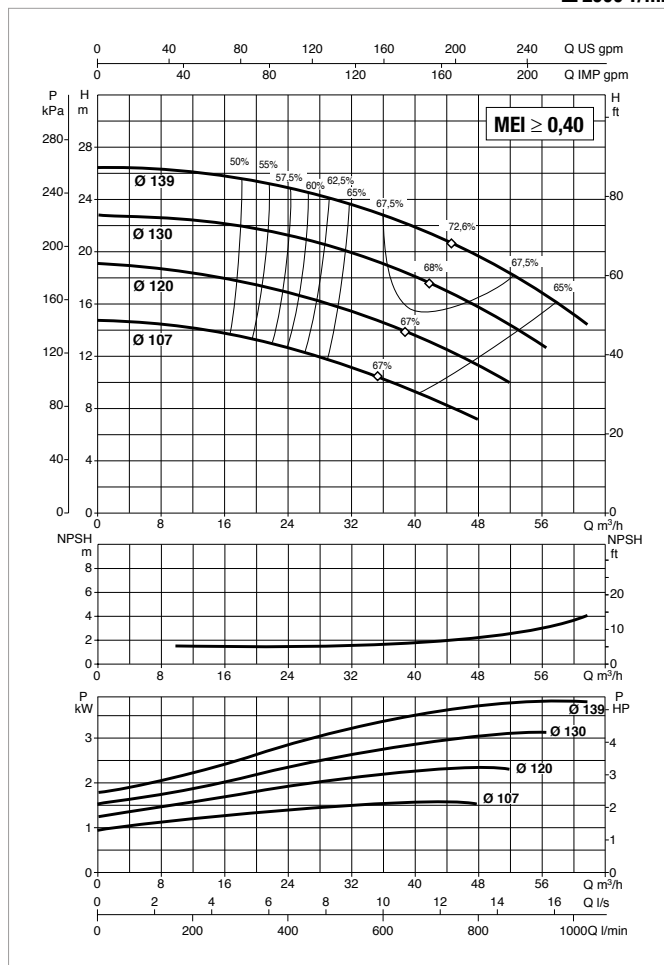
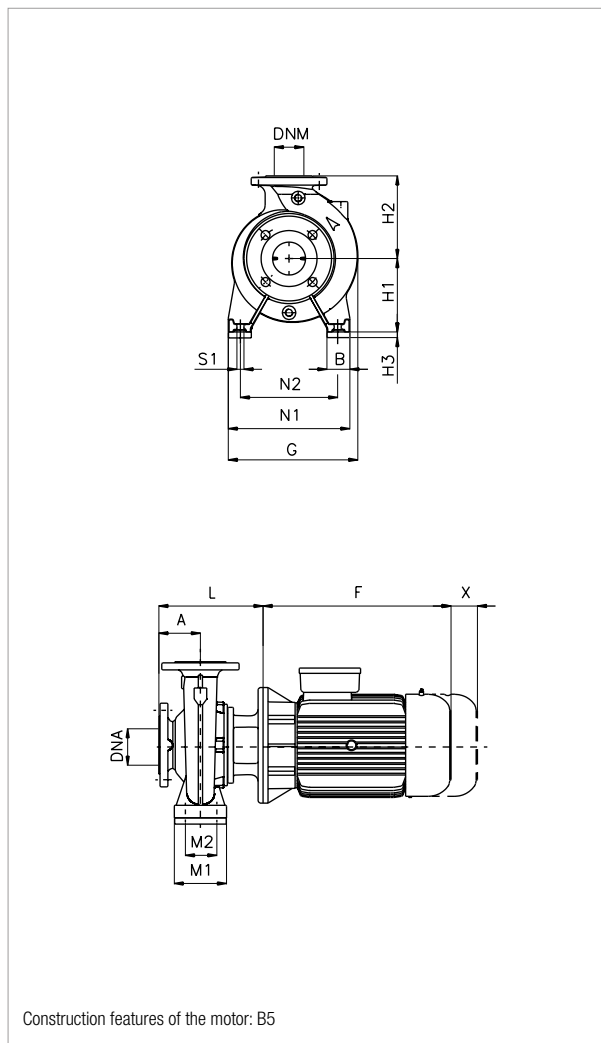
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKP-G 32-200/190/5,5/2	MEC 132 S	3 x 400 V ~	5,5	7,5	-	10,2	IE3
NKP-G 32-200/210/7,5/2	MEC 132 S	3 x 400 V ~	7,5	10	-	14,4	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKP-G 32-200/190/5,5/2	80	50	-	328	300	160	180	293	100	70	240	190	-	M10	-	-	100	-	-	28	50	32	830	430	520	0,186	57
NKP-G 32-200/210/7,5/2	80	50	-	350	300	160	180	293	100	70	240	190	-	M10	-	-	100	-	-	28	50	32	830	430	520	0,186	96

NKP-G 40-125 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

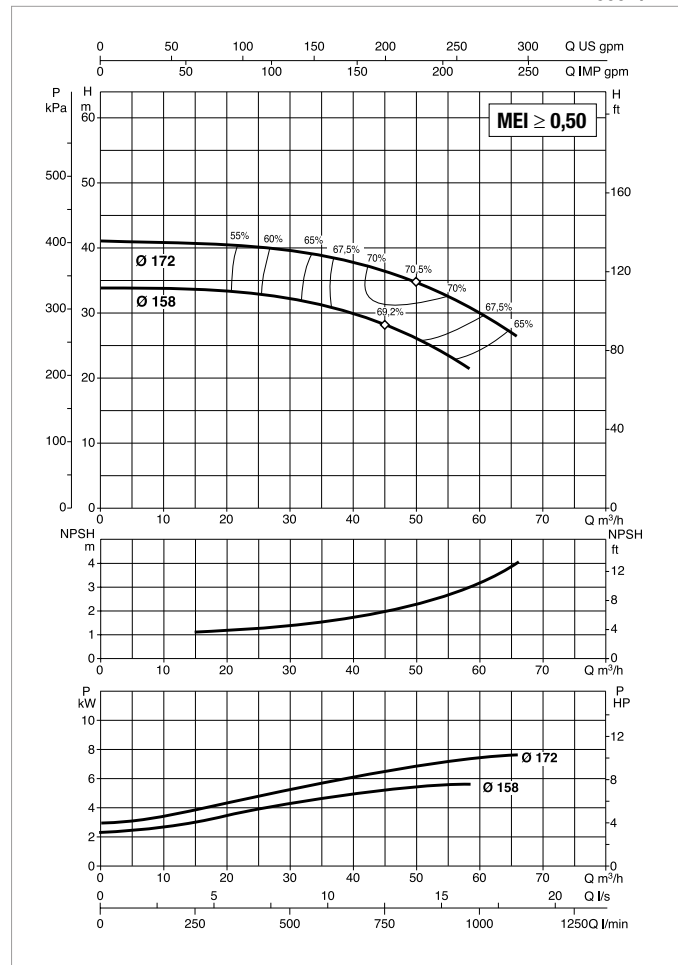
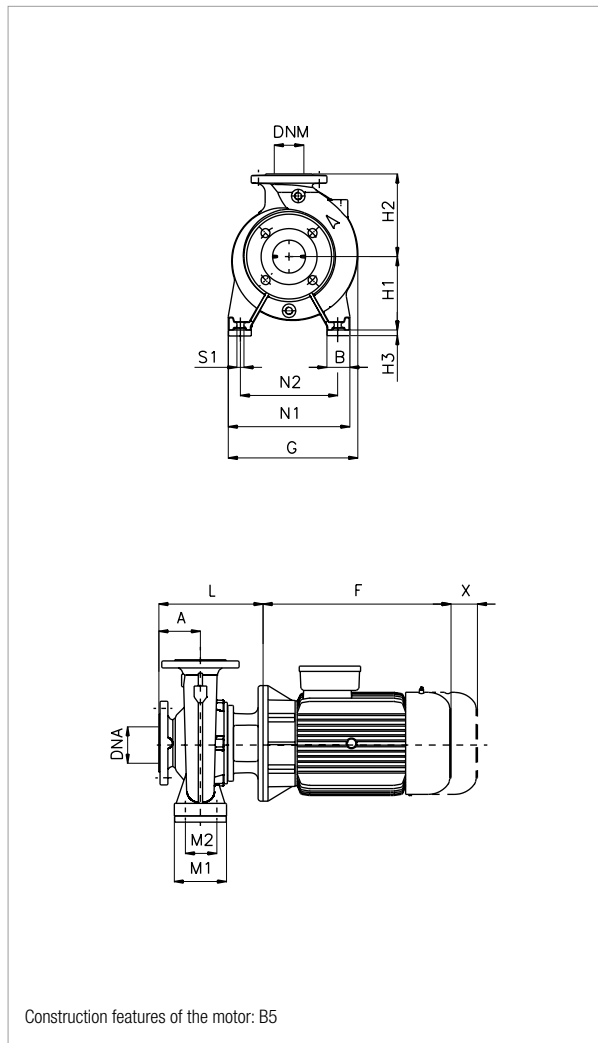
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKP-G 40-125/107/1,5/2	MEC 90 S	3 x 230 - 400 V ~	1,5	2	5,2	3	IE3
NKP-G 40-125/120/2,2/2	MEC 90 L	3 x 230 - 400 V ~	2,2	3	7,97	4,6	IE3
NKP-G 40-125/130/3/2	MEC 100 L	3 x 400 V ~	3	4	-	5,6	IE3
NKP-G 40-125/139/4/2	MEC 112	3 x 400 V ~	4	5,5	-	8,2	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKP-G 40-125/107/1,5/2	80	50	-	287,5	234	112	140	226	100	70	210	160	-	M10	-	-	100	-	-	28	65	40	620	370	480	0,11	34
NKP-G 40-125/120/2,2/2	80	50	-	287,5	234	112	140	226	100	70	210	160	-	M10	-	-	100	-	-	28	65	40	620	370	480	0,11	36
NKP-G 40-125/130/3/2	80	50	-	319	300	112	140	254	100	70	210	160	-	M10	-	-	100	20	-	28	65	40	670	420	540	0,152	47
NKP-G 40-125/139/4/2	80	50	-	306	300	112	140	254	100	70	210	160	-	M10	-	-	100	20	-	28	65	40	670	420	540	0,152	35

NKP-G 40-160 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

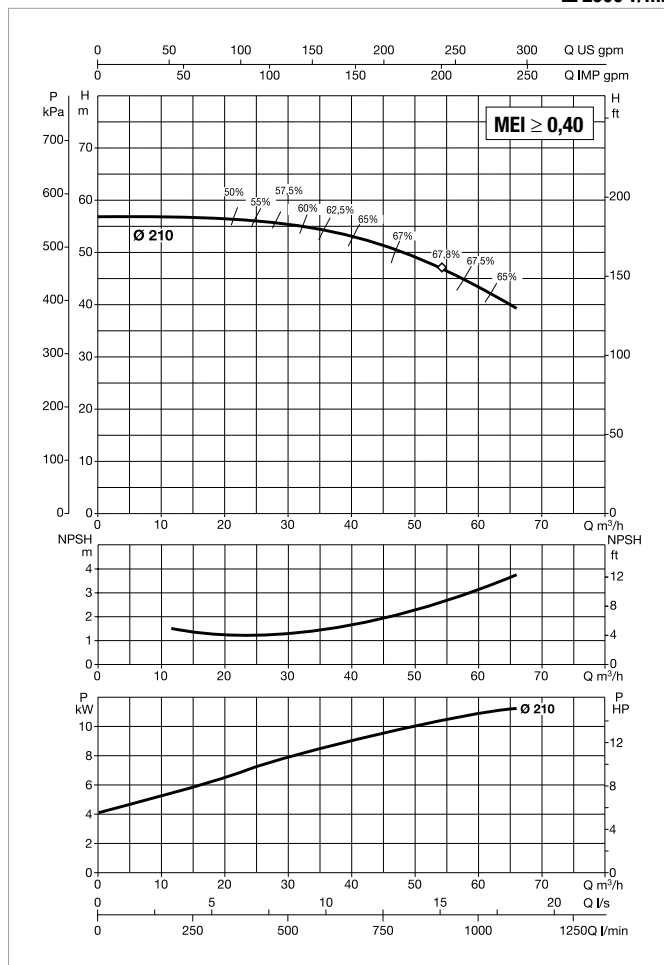
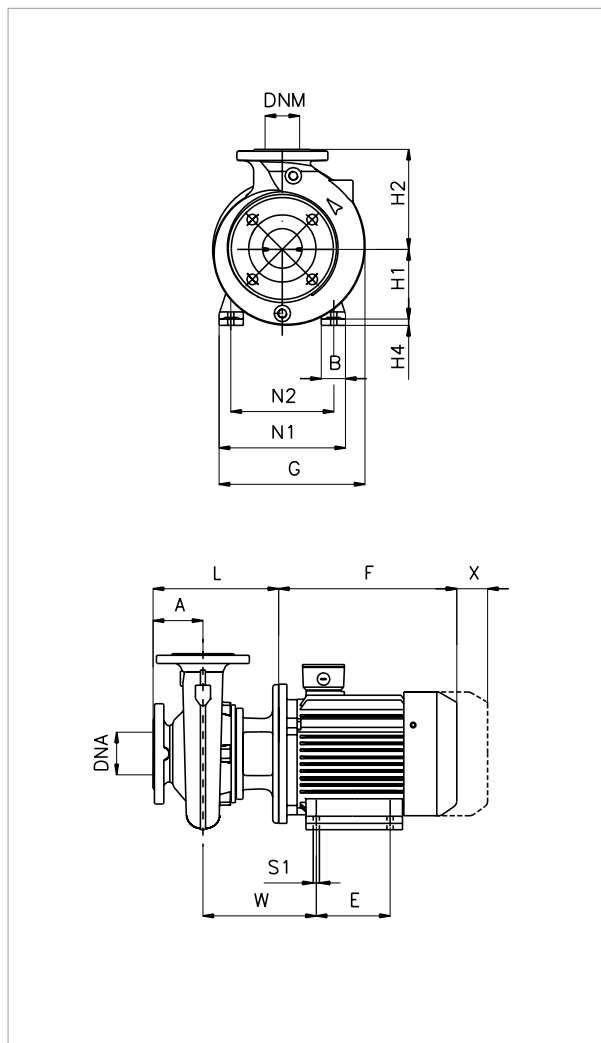
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKP-G 40-160/158/5,5/2	MEC 132 S	3 x 400 V ~	5,5	7,5	-	10,2	IE3
NKP-G 40-160/172/7,5/2	MEC 132 S	3 x 400 V ~	7,5	10	-	14,4	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKP-G 40-160/158/5,5/2	80	50	-	328	300	132	160	293	100	70	240	190	-	M10	-	-	100	20	-	28	65	40	830	430	520	0,186	51
NKP-G 40-160/172/7,5/2	80	50	-	350	300	132	160	293	100	70	240	190	-	M10	-	-	100	20	-	28	65	40	830	430	520	0,186	90

NKP-G 40-200 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

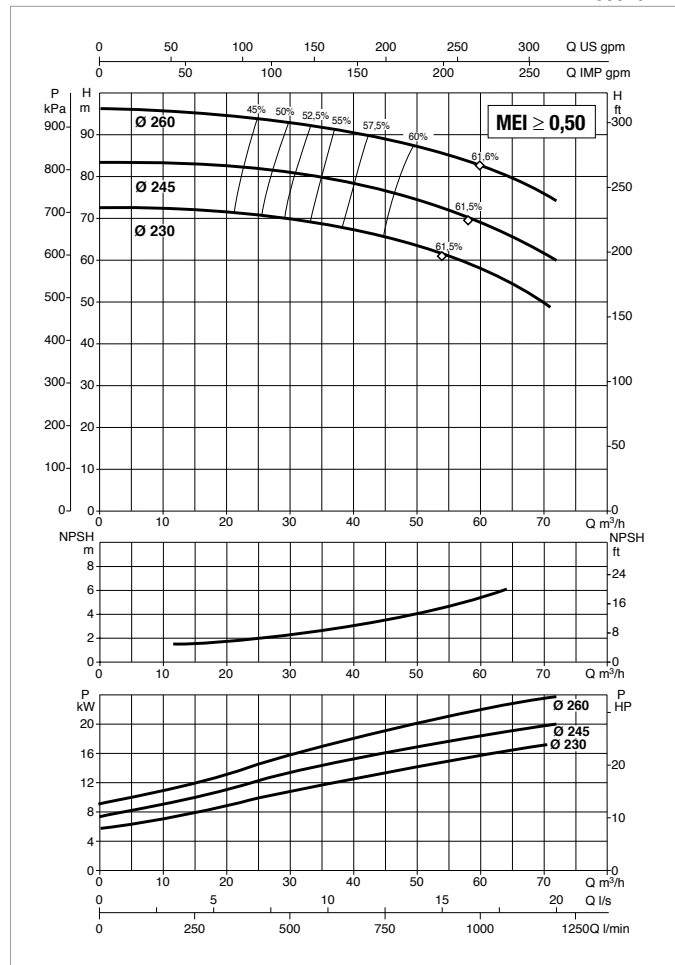
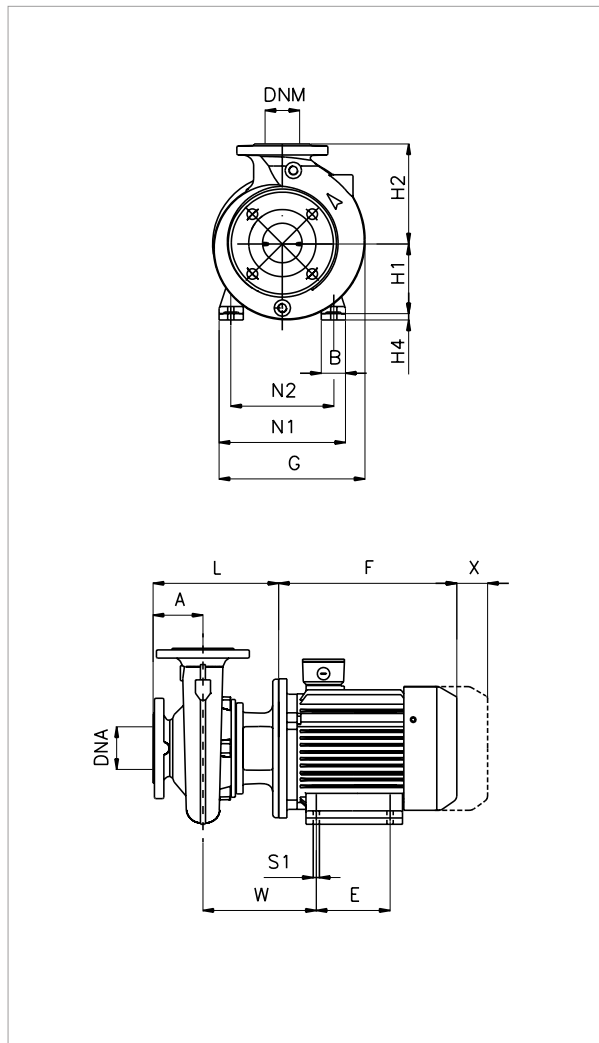
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKP-G 40-200/210/11/2	MEC 160 M	3 x 400 V ~	11	15	-	19,7	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
	L/A	L/B	H																								
NKP-G 40-200/210/11/2	100	67	210	498	350	160	180	343	-	-	314	254	-	M12	-	351	100	-	20	28	65	40	1030	530	640	0,349	170

NKP-G 40-250 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

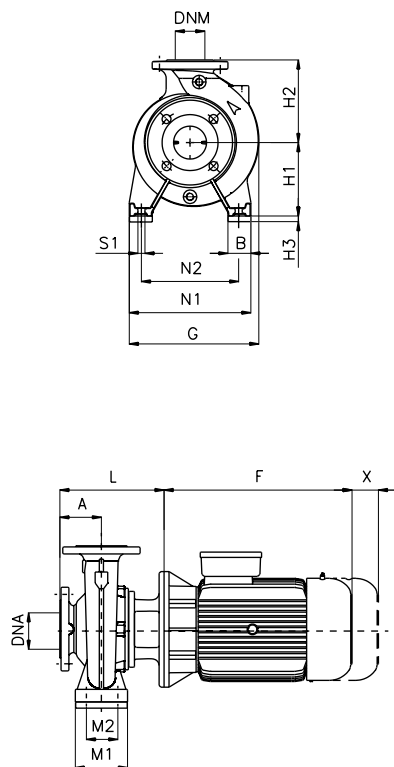
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKP-G 40-250/230/15/2	MEC 160 M	3 x 400 V ~	15	20	-	26,7	IE3
NKP-G 40-250/245/18,5/2	MEC 160 L	3 x 400 V ~	18,5	25	-	33	IE3
NKP-G 40-250/260/22/2	MEC 180 M	3 x 400 V ~	22	30	-	38,1	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKP-G 40-250/230/15/2	100	67	210	498	350	160	225	343	-	-	314	254	-	M12	-	351	100	-	20	28	65	40	1030	530	640	0,349	180
NKP-G 40-250/245/18,5/2	100	67	254	542	350	160	225	343	-	-	314	254	-	M12	-	351	100	-	20	28	65	40	1030	530	640	0,349	192
NKP-G 40-250/260/22/2	100	74	241	577	350	180	225	343	-	-	345	279	-	M12	-	364	100	-	-	28	65	40	1030	530	640	0,349	223

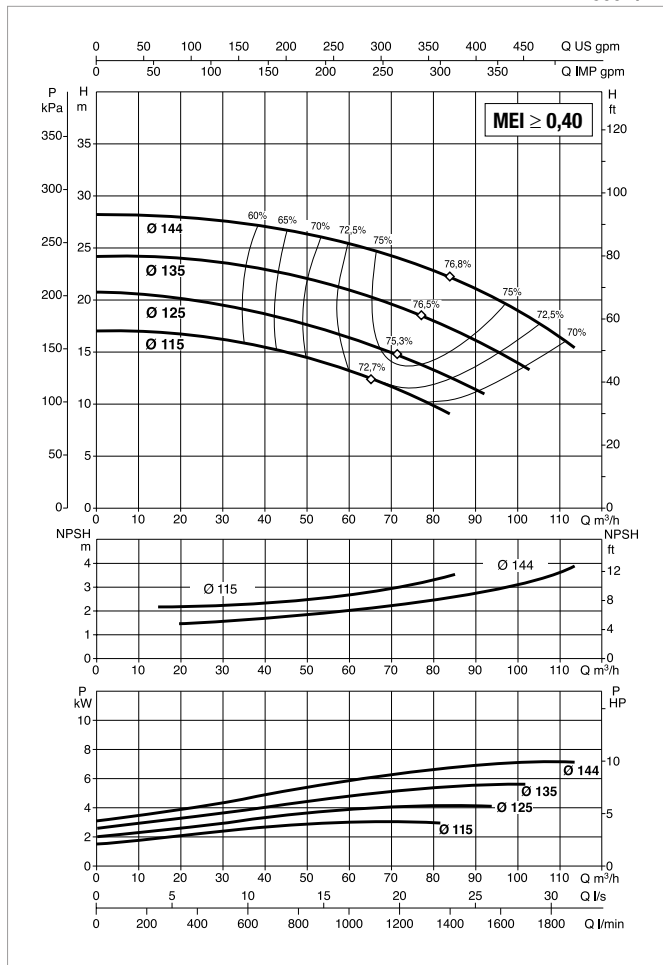
NKP-G 50-125 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 2900 1/min



Construction features of the motor: B5



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

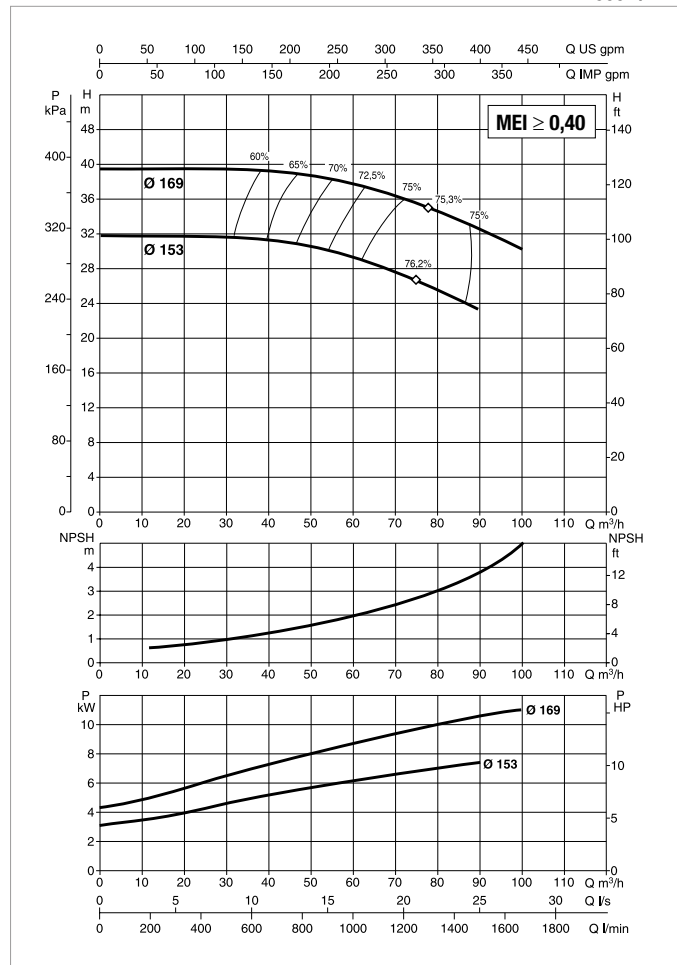
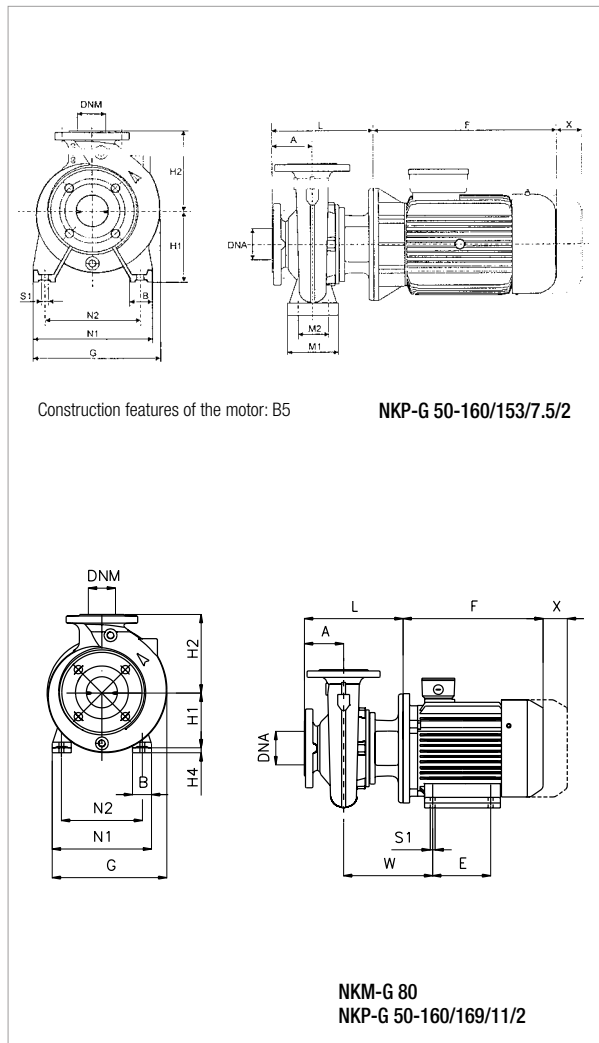
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKP-G 50-125/115/3/2	MEC 100 L	3 x 400 V ~	3	4	-	5,6	IE3
NKP-G 50-125/125/4/2	MEC 112 M	3 x 400 V ~	4	5,5	-	8,2	IE3
NKP-G 50-125/135/5,5/2	MEC 132 S	3 x 400 V ~	5,5	7,5	-	10,2	IE3
NKP-G 50-125/144/7,5/2	MEC 132 S	3 x 400 V ~	7,5	10	-	14,4	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKP-G 50-125/115/3/2	100	50	-	319	251	132	160	274	100	70	240	190	-	M10	-	-	100	-	-	28	65	50	670	420	540	0,152	48
NKP-G 50-125/125/4/2	100	50	-	306	251	132	160	274	100	70	240	190	-	M10	-	-	100	-	-	28	65	50	670	420	540	0,152	42
NKP-G 50-125/135/5,5/2	100	50	-	328	300	132	160	313	100	70	240	190	-	M10	-	-	100	20	-	28	65	50	830	430	520	0,186	53
NKP-G 50-125/144/7,5/2	100	50	-	350	300	132	160	313	100	70	240	190	-	M10	-	-	100	20	-	28	65	50	830	430	520	0,186	87

NKP-G 50-160 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 2900 1/min



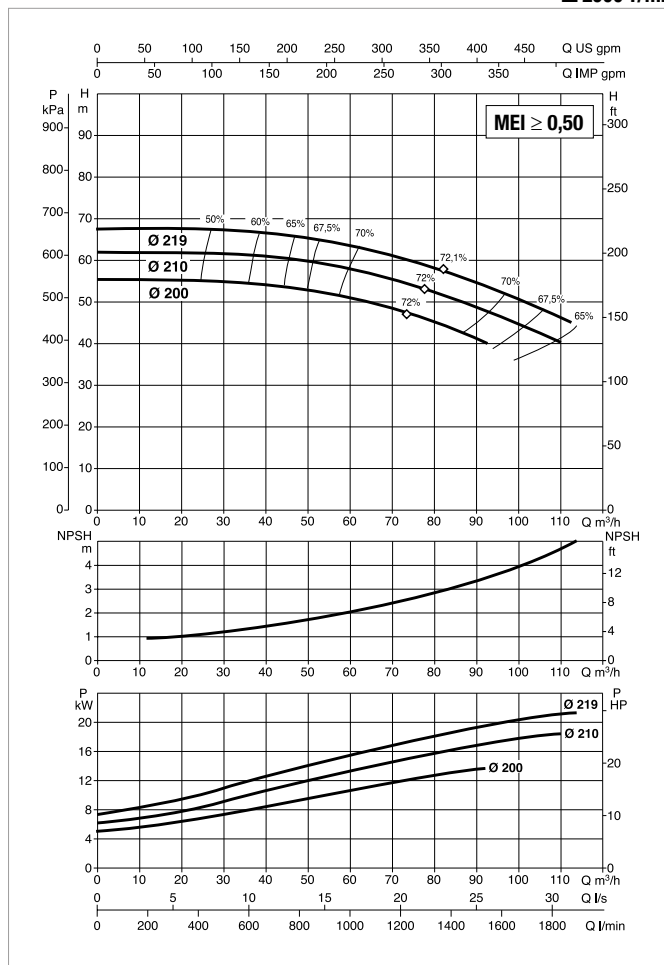
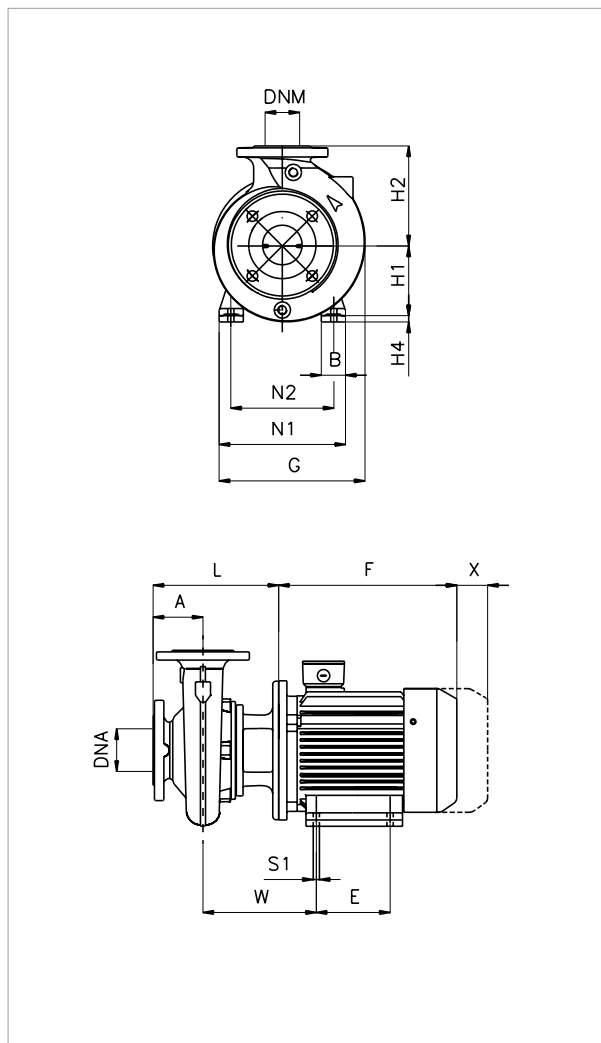
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKP-G 50-160/153/7,5/2	MEC 132 S	3 x 400 V ~	7,5	10	-	14,4	IE3
NKP-G 50-160/169/11/2	MEC 160 M	3 x 400 V ~	11	15	-	19,7	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKP-G 50-160/153/7,5/2	100	50	-	350	300	160	180	313	100	70	265	212	-	M10	-	-	100	-	-	28	65	50	1030	530	640	0,349	64
NKP-G 50-160/169/11/2	100	67	210	498	350	160	180	343	-	-	314	254	-	M12	-	351	100	-	20	28	65	50	1030	530	640	0,349	96

NKP-G 50-200 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 2900 1/min



For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

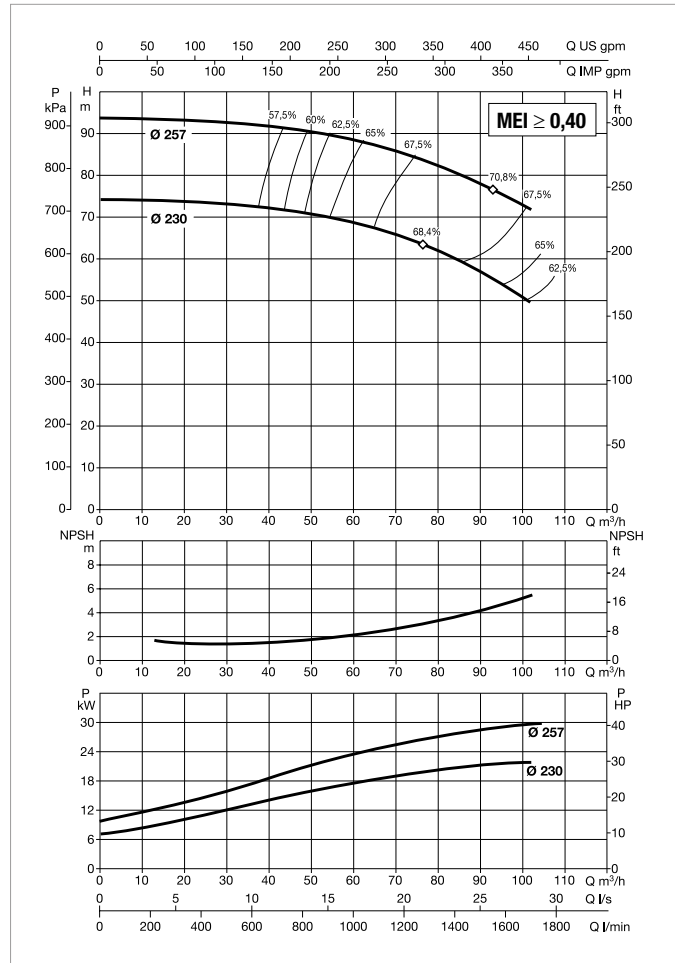
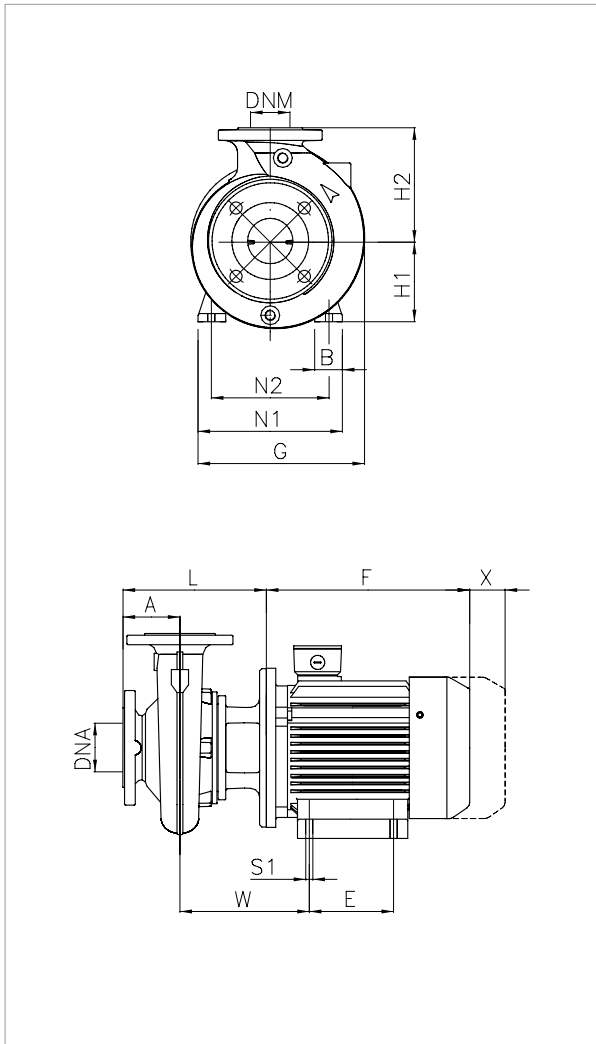
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKP-G 50-200/200/15/2	MEC 160 M	3 x 400 V ~	15	20	-	26,7	IE3
NKP-G 50-200/210/18,5/2	MEC 160 L	3 x 400 V ~	18,5	25	-	33	IE3
NKP-G 50-200/219/22/2	MEC 180 M	3 x 400 V ~	22	30	-	38,1	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKP-G 50-200/200/15/2	100	67	210	498	350	160	200	343	-	-	314	254	-	M12	-	351	100	-	20	28	65	50	1030	530	640	0,349	176
NKP-G 50-200/210/18,5/2	100	67	254	542	350	160	200	343	-	-	314	254	-	M12	-	351	100	-	20	28	65	50	1030	530	640	0,349	187
NKP-G 50-200/219/22/2	100	74	241	577	350	160	200	343	-	-	345	279	-	M12	-	364	100	-	-	28	65	50	1030	530	640	0,349	218

NKP-G 50-250 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

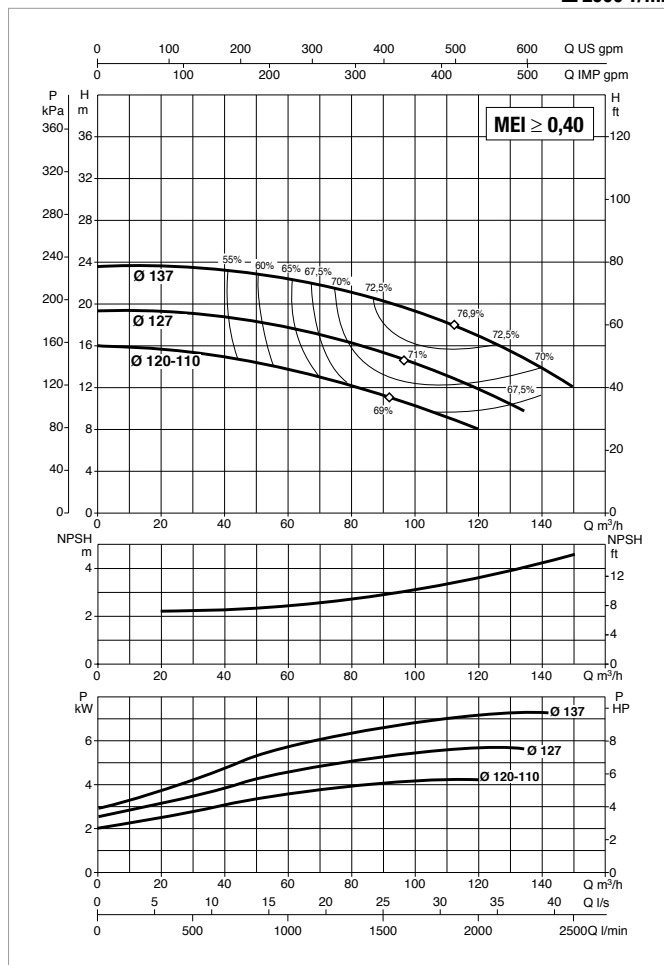
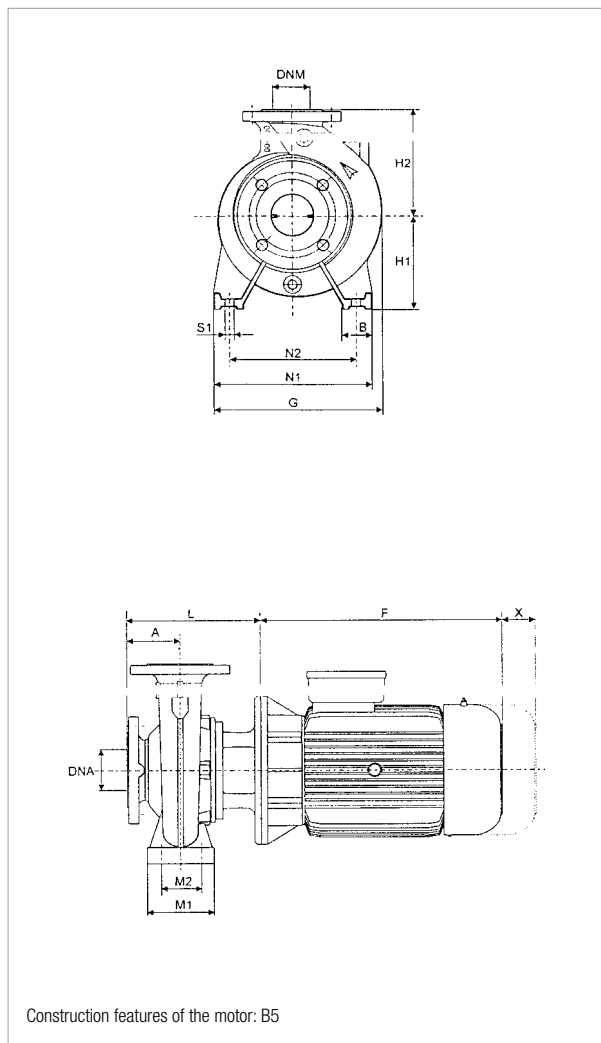
MODEL	MOTOR SIZE	POWER INPUT 50 Hz	ELECTRICAL DATA				MOTOR TYPE
			P2 NOMINAL		In A		
			kW	HP	230 V	400 V	
NKP-G 50-250/230/22/2	MEC 180 M	3 x 400 V ~	22	30	-	38,1	IE3
NKP-G 50-250/257/30/2	MEC 200 L	3 x 400 V ~	30	40	-	52,1	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKP-G 50-250/230/22/2	100	74	241	577	350	180	225	343	-	-	345	279	-	M12	-	364	100	-	-	28	65	50	1030	530	640	0,349	223
NKP-G 50-250/257/30/2	100	85	305	658,5	400	200	225	343	-	-	388	318	-	M14	-	376	100	-	-	28	65	50	1130	580	740	0,485	351

NKP-G 65-125 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

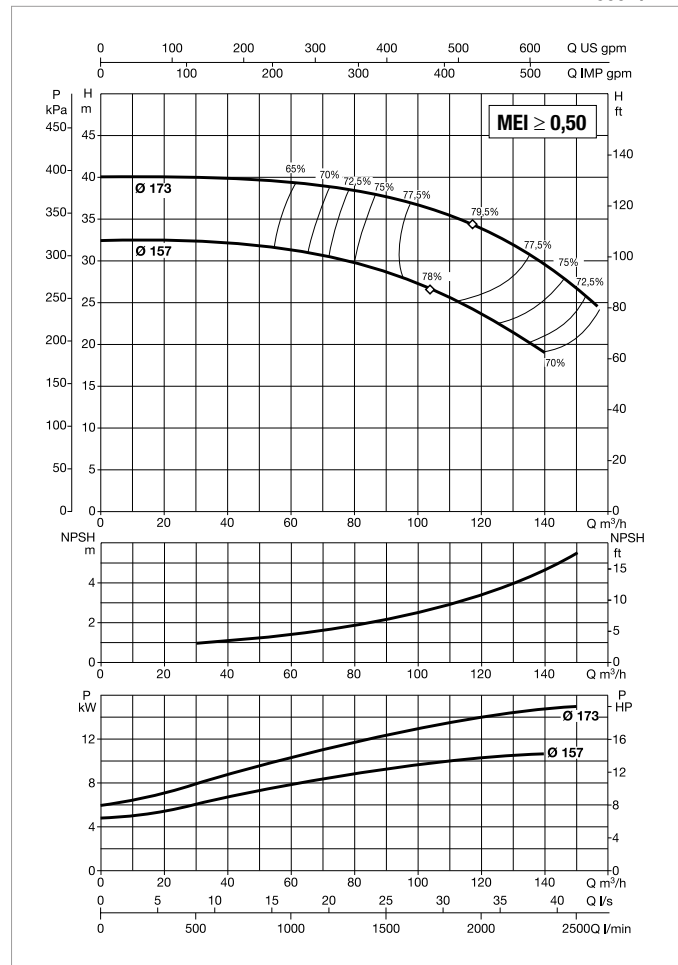
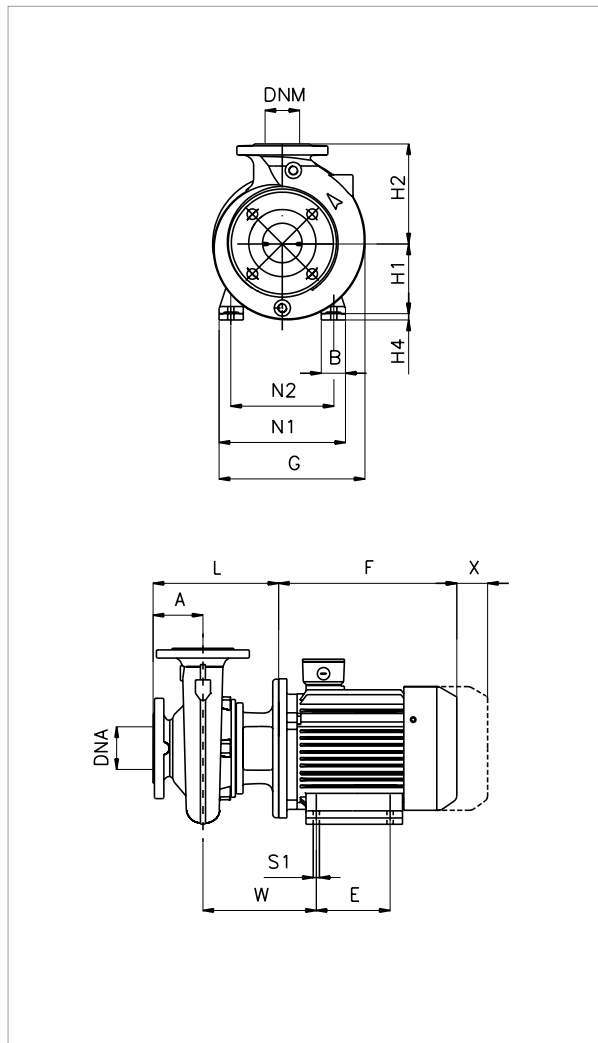
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKP-G 65-125/120-110/4/2	MEC 112	3 x 400 V ~	4	5,5	-	8,2	IE3
NKP-G 65-125/127/5,5/2	MEC 132 S	3 x 400 V ~	5,5	7,5	-	10,2	IE3
NKP-G 65-125/137/7,5/2	MEC 132 S	3 x 400 V ~	7,5	10	-	14,4	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKP-G 65-125/120-110/4/2	100	65	-	306	286	160	180	274	125	95	280	212	-	M10	-	-	100	-	-	28	80	65	670	420	540	0,152	40
NKP-G 65-125/127/5,5/2	100	65	-	328	300	160	180	313	125	95	280	212	-	M10	-	-	100	-	-	28	80	65	830	430	520	0,186	55
NKP-G 65-125/137/7,5/2	100	65	-	350	300	160	180	313	125	95	280	212	-	M10	-	-	100	-	-	28	80	65	830	430	520	0,186	94

NKP-G 65-160 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

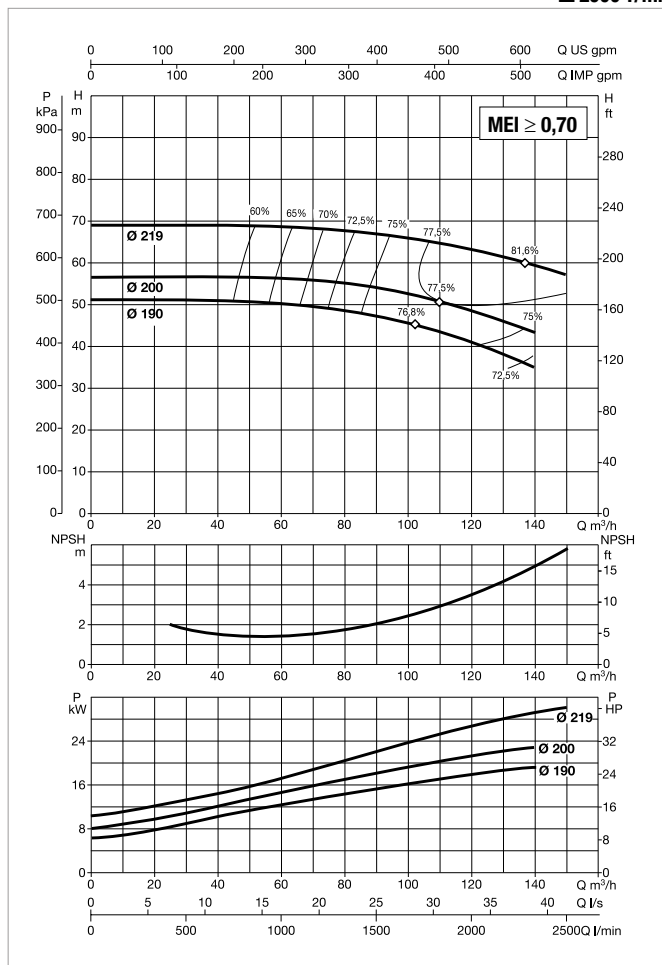
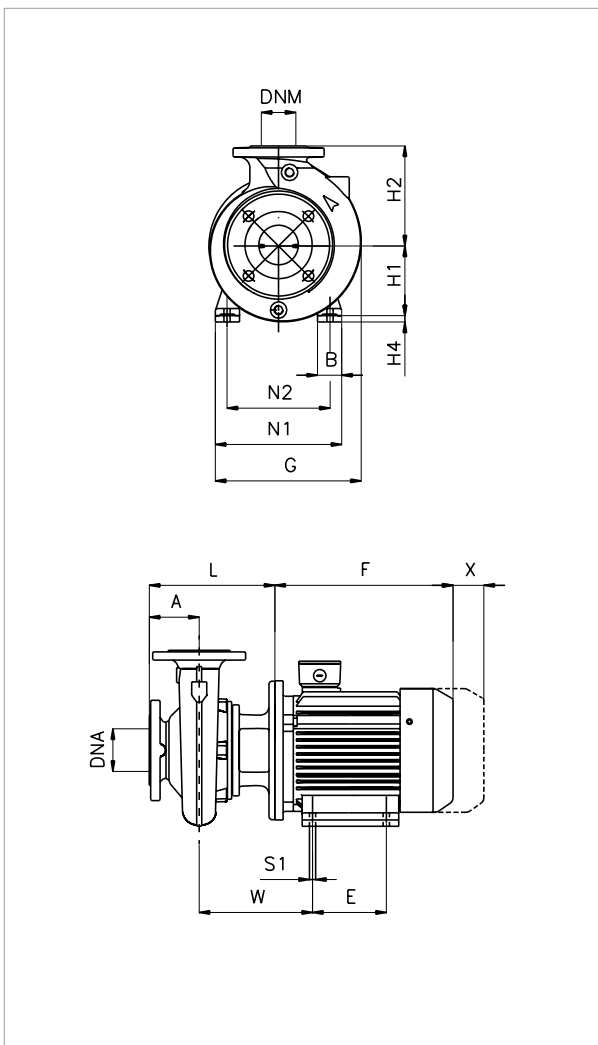
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKP-G 65-160/157/11/2	MEC 160 M	3 x 400 V ~	11	15	-	19,7	IE3
NKP-G 65-160/173/15/2	MEC 160 M	3 x 400 V ~	15	20	-	26,7	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKP-G 65-160/157/11/2	100	67	210	498	350	160	200	343	-	-	314	254	-	M12	-	351	100	-	20	28	80	65	1030	530	640	0,349	166
NKP-G 65-160/173/15/2	100	67	210	498	350	160	200	343	-	-	314	254	-	M12	-	351	100	-	20	28	80	65	1030	530	640	0,349	172

NKP-G 65-200 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

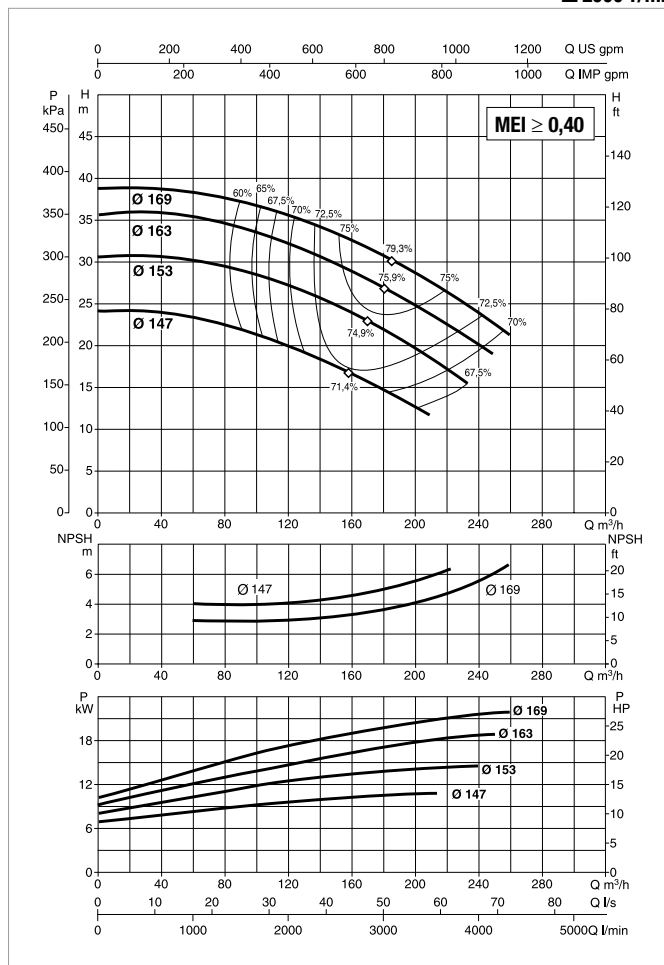
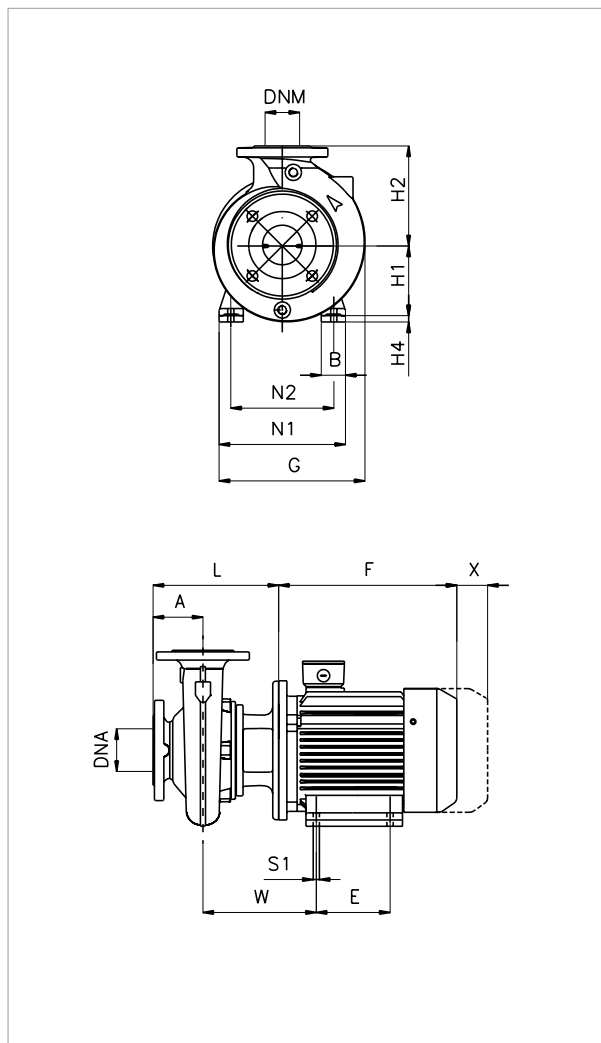
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKP-G 65-200/190/18,5/2	MEC 160 L	3 x 400 V ~	18,5	25	-	33	IE3
NKP-G 65-200/200/22/2	MEC 180 M	3 x 400 V ~	22	30	-	38,1	IE3
NKP-G 65-200/219/30/2	MEC 200 L	3 x 400 V ~	30	40	-	52,1	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKP-G 65-200/190/18,5/2	100	67	254	542	350	160	225	343	-	-	314	254	-	M12	-	351	100	-	20	28	80	65	1030	530	640	0,349	192
NKP-G 65-200/200/22/2	100	74	241	577	350	180	225	343	-	-	345	279	-	M12	-	364	100	-	-	28	80	65	1030	530	640	0,349	223
NKP-G 65-200/219/30/2	100	85	305	658,5	400	200	225	343	-	-	388	318	-	M14	-	376	100	-	-	28	80	65	1130	580	740	0,485	351

NKP-G 80-160 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

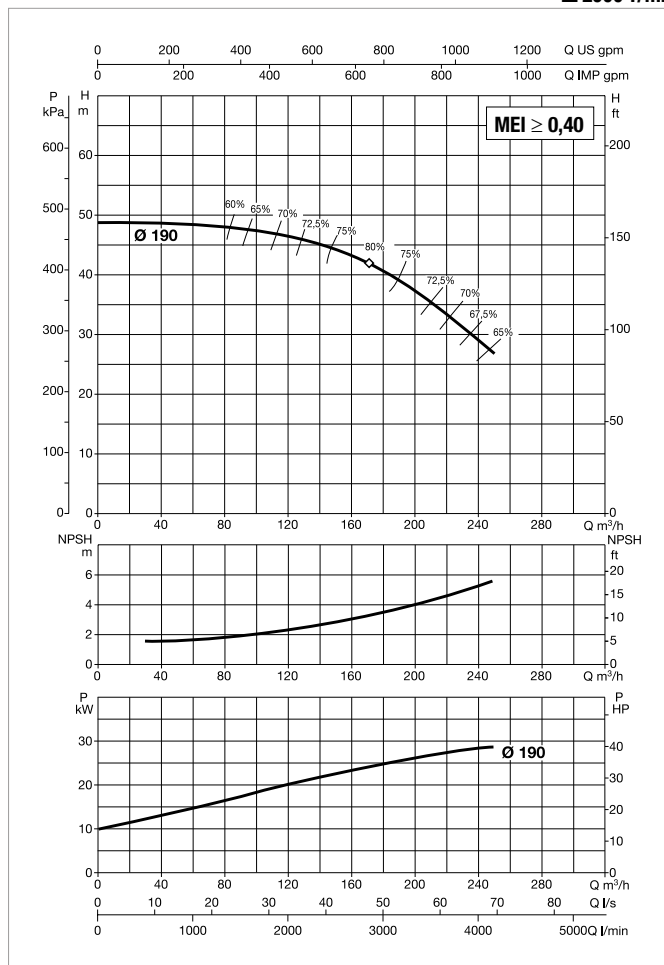
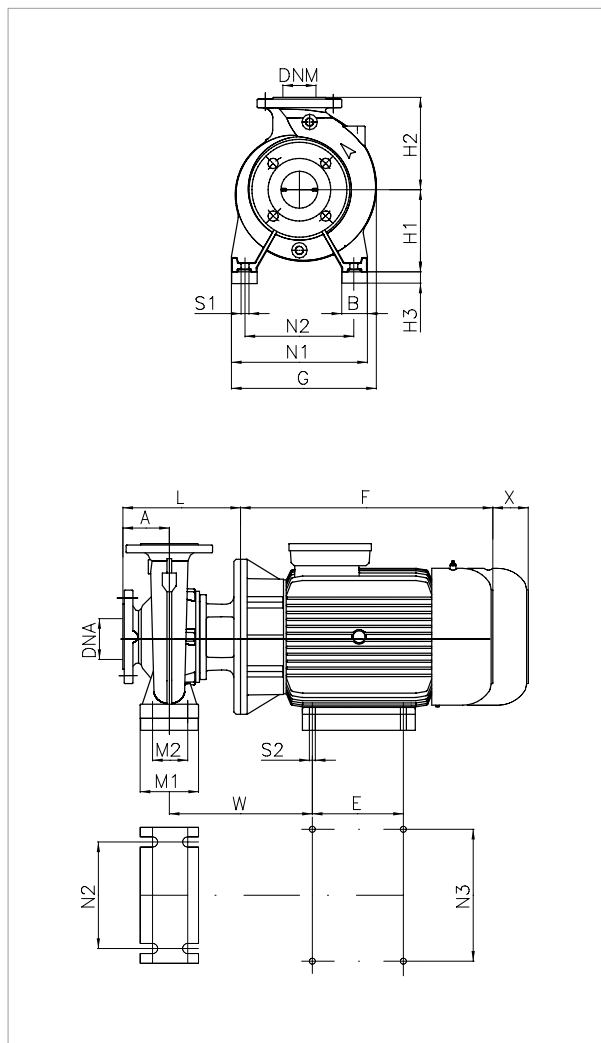
MODEL	ELECTRICAL DATA						MOTOR TYPE
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		
			kW	HP	230 V	400 V	
NKP-G 80-160/147-127/11/2	MEC 160 M	3 x 400 V ~	11	15	-	19,7	IE3
NKP-G 80-160/153/15/2	MEC 160 M	3 x 400 V ~	15	20	-	26,7	IE3
NKP-G 80-160/163/18,5/2	MEC 160 L	3 x 400 V ~	18,5	25	-	33	IE3
NKP-G 80-160/169/22/2	MEC 180 M	3 x 400 V ~	22	30	-	38,1	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNa	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKP-G 80-160/147-127/11/2	125	67	210	498	350	160	225	368	-	-	314	254	-	M12	-	351	140	-	20	28	100	80	1030	530	640	0,349	179
NKP-G 80-160/153/15/2	125	67	210	498	350	160	225	368	-	-	314	254	-	M12	-	351	140	-	20	28	100	80	1030	530	640	0,349	181
NKP-G 80-160/163/18,5/2	125	67	254	542	350	160	225	368	-	-	314	254	-	M12	-	351	140	-	20	28	100	80	1030	530	640	0,349	192
NKP-G 80-160/169/22/2	125	74	241	577	350	180	225	368	-	-	345	279	-	M12	-	364	140	-	-	28	100	80	1130	580	740	0,485	221

NKP-G 80-200 - 2 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKP-G 80-200/190/30/2	MEC 200 L	3 x 400 V ~	30	40	-	52,1	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
	L/A	L/B	H																								
NKP-G 80-200/190/30/2	125	65	305	658,5	400	180	250	398	125	95	345	280	318	M10	M16	406	140	20	-	28	100	80	1130	580	740	0,485	374

NKP-G - 2 POLES

STANDARDISED MONOBLOC PUMPS

IE3 STANDARD MOTOR ELECTRIC DATA

=2900 1/min

MOTOR TYPE	P2 NOMINAL kW	SPEED rpm	YIELD %	POWER FACTOR COS φ	POWER INPUT 50 Hz	In A			Start-up current Ia/In	Start-up torque Ma/Mn	Maximum torque M/k/Mn	POLES
						230V	400V	690V				
MEC 71	0,25	2790	69,81	0,778	3x230/400	1,16	0,67		5,06	2,90	3,01	2
MEC 71	0,37	2820	72,79	0,783	3x230/400	1,61	0,93		5,40	2,69	2,99	2
MEC 80	0,55	2810	76,97	0,800	3x230/400	2,23	1,29		6,41	3,43	3,13	2
MEC 80Z	0,75	2910	82,00	0,780	3x230/400	2,94	1,70		8,90	4,70	4,80	2
MEC 80Z	1,1	2870	82,70	0,760	3x230/400	4,16	2,40		9,30	5,00	5,30	2
MEC 90S	1,5	2875	84,20	0,850	3x230/400	5,20	3,00		8,40	3,60	3,80	2
MEC 90L	2,2	2880	86,50	0,820	3x230/400	7,97	4,60		9,20	4,00	4,20	2
MEC 100L	3	2900	87,10	0,890	3x400 Δ		5,60	3,23	8,80	5,50	4,50	2
MEC 112M	4	2920	88,10	0,810	3x400 Δ		8,20	4,73	10,90	6,10	5,70	2
MEC 132S	5,5	2935	89,20	0,870	3x400 Δ		10,20	5,89	11,20	4,20	4,30	2
MEC 132S	7,5	2930	90,10	0,840	3x400 Δ		14,40	8,31	10,40	4,50	4,60	2
MEC 160M	11	2950	91,20	0,890	3x400 Δ		19,70	11,37	9,10	4,00	4,20	2
MEC 160M	15	2940	91,90	0,890	3x400 Δ		26,70	15,42	9,70	4,70	4,80	2
MEC 160L	18,5	2950	92,40	0,880	3x400 Δ		33,00	19,05	10,70	4,60	4,70	2
MEC 180M	22	2955	92,70	0,900	3x400 Δ		38,10	22,00	8,20	2,20	2,30	2
MEC 200L	30	2960	93,30	0,890	3x400 Δ		52,10	30,08	7,50	2,20	2,30	2
MEC 200L	37	2960	93,70	0,910	3x400 Δ		62,60	36,14	7,50	2,20	2,30	2

NKM-G RANGE - 4 POLES

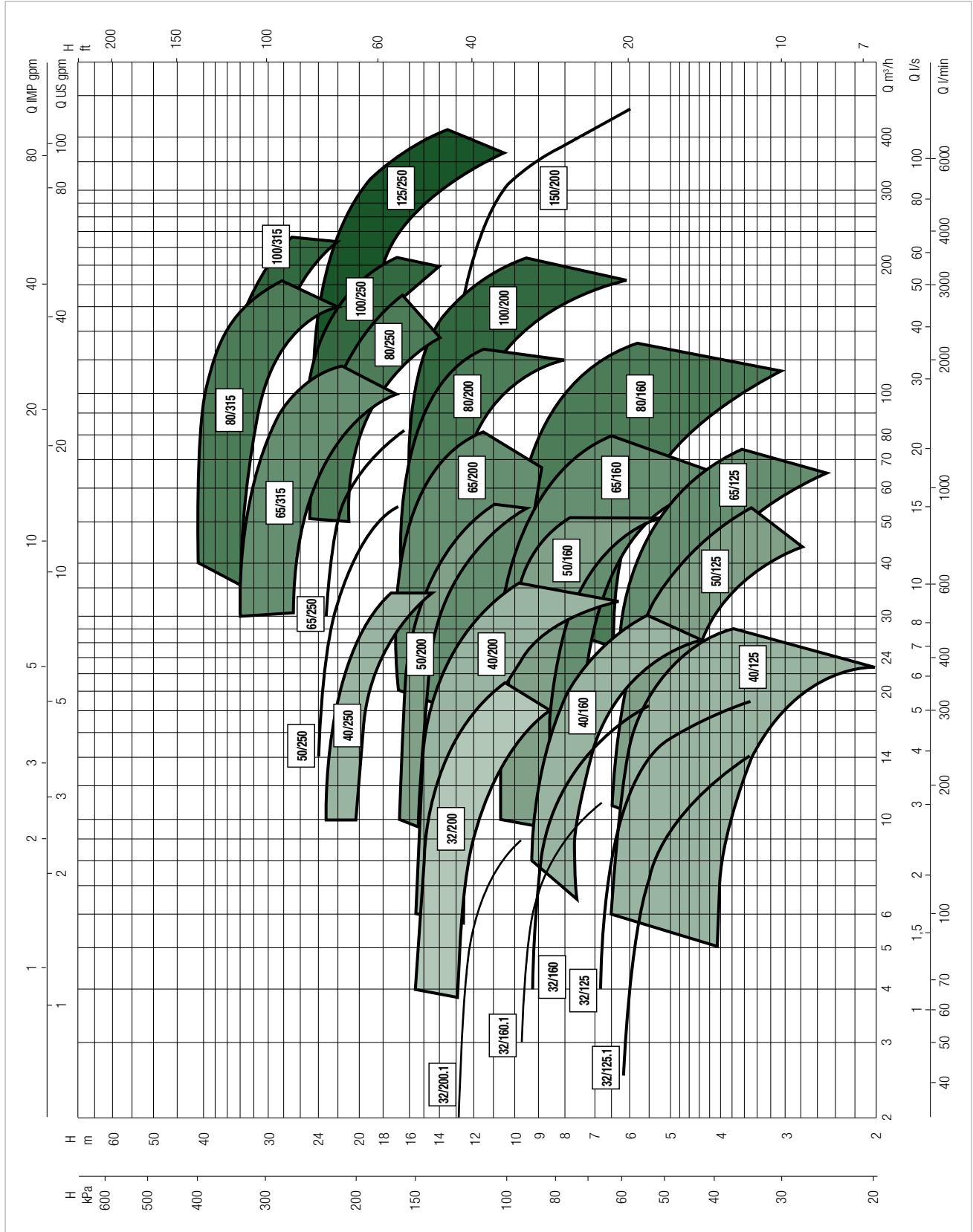
STANDARDISED MONOBLOC PUMPS

PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

GRAPHIC SELECTION TABLE

≈ 1450 1/min



NKM-G - 4 POLES

STANDARDISED MONOBLOC PUMPS

SELECTION TABLE - NKM-G

MODEL	Q=	0	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	102	114	
	m ³ /h	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1700	1900	
NKM-G 32-125.1/140/0,25/4	H (m)	6,2	5,8	4,2																
NKM-G 32-125/142/0,37/4		7	6,75	5,85	4,2															
NKM-G 32-160.1/169/0,37/4		8,9	8,2	4,6																
NKM-G 32-160/169/0,55/4		9,4	9	7,9	5,6															
NKM-G 32-200.1/200/0,55/4		12,7	11,2	7,2																
NKM-G 32-200/200/0,75/4		13	12,5	11,1	8,45															
NKM-G 32-200/219/1,1/4		16	15,4	14,3	12,2															
NKM-G 40-125/115/0,25/4		4,2	4,1	3,7	3	2,1														
NKM-G 40-125/130/0,37/4		5,4	5,3	5	4,4	3,5														
NKM-G 40-125/142/0,55/4		6,6	6,5	6,2	5,7	4,8														
NKM-G 40-160/153/0,55/4		7,6	7,6	7,5	6,7	5,5														
NKM-G 40-160/166/0,75/4		9,2	9,2	9	8,4	7,4	5,7													
NKM-G 40-200/200/1,1/4		12,5	12,5	12,3	11,2	9,7	7,7													
NKM-G 40-200/219/1,5/4		15,6	15,6	15,3	14,7	13,4	11,8	9,8												
NKM-G 40-250/245/2,2/4		20,6	20,5	20,1	19,2	17,8	16													
NKM-G 40-250/260/3/4		23,3	23,1	22,8	22,2	20,8	19													
NKM-G 50-125/130/0,55/4		5,5		5,2	5	4,7	4,3	3,9	3,3	2,6										
NKM-G 50-125/141/0,75/4		6,5		6,3	6,1	5,8	5,5	5	4,5	3,9										
NKM-G 50-160/161/1,1/4		8,6		8,6	8,5	8,2	7,8	7,3	6,7	5,7										
NKM-G 50-160/177/1,5/4		10,7		10,7	10,7	10,5	10,2	9,8	9,2	8,3										
NKM-G 50-200/210/2,2/4		15,3		15,3	15,2	14,8	14	13,3	12,1	10,8	9,4									
NKM-G 50-200/219/3/4		16,8		16,8	16,5	16,1	15,5	14,6	13,6	12,4	10,9									
NKM-G 50-250/263/4/4		23,8		23,8	23,8	23,4	22,7	21,6	20,4	19	17,1									
NKM-G 65-125/130/0,75/4		5,1		4,9	4,8	4,75	4,7	4,4	4,2	3,8	3,4	3	2,5							
NKM-G 65-125/144/1,1/4		6,5		6,4	6,4	6,3	6,2	6	5,75	5,5	5,1	4,65	4,2	3,75						
NKM-G 65-160/153/1,1/4		7,4		7,4	7,3	7,15	6,9	6,65	6,25	5,8	5,3	4,4								
NKM-G 65-160/165/1,5/4		8,9			8,8	8,7	8,6	8,3	8	7,6	7,15	6,6	6							
NKM-G 65-160/177/2,2/4		10,5				10,4	10,3	10,2	9,9	9,6	9,2	8,75	8,2	7,4	6,6					
NKM-G 65-200/210/3/4		15,3				15,2	15,2	15,1	14,6	14,1	13,5	12,9	12,2	11,3						
NKM-G 65-200/219/4/4		17				17	16,9	16,8	16,4	16,2	15,8	15,2	14,3	13,8	12,6					
NKM-G 65-250/263/5,5/4		24,1				23,8	23,6	23,3	22,8	22,3	21,5	20,8	19,7	18,6	17,3					
NKM-G 65-315/279/7,5/4		27							26	25,5	25	24,5	23,6	22,7	21,5	20,2	19			
NKM-G 65-315/309/11/4		34,2								33,2	33	32,5	32	31,5	30,7	29,8	29	28	25	21,7

CENTRIFUGAL PUMPS

NKM-G - 4 POLES

STANDARDISED MONOBLOC PUMPS

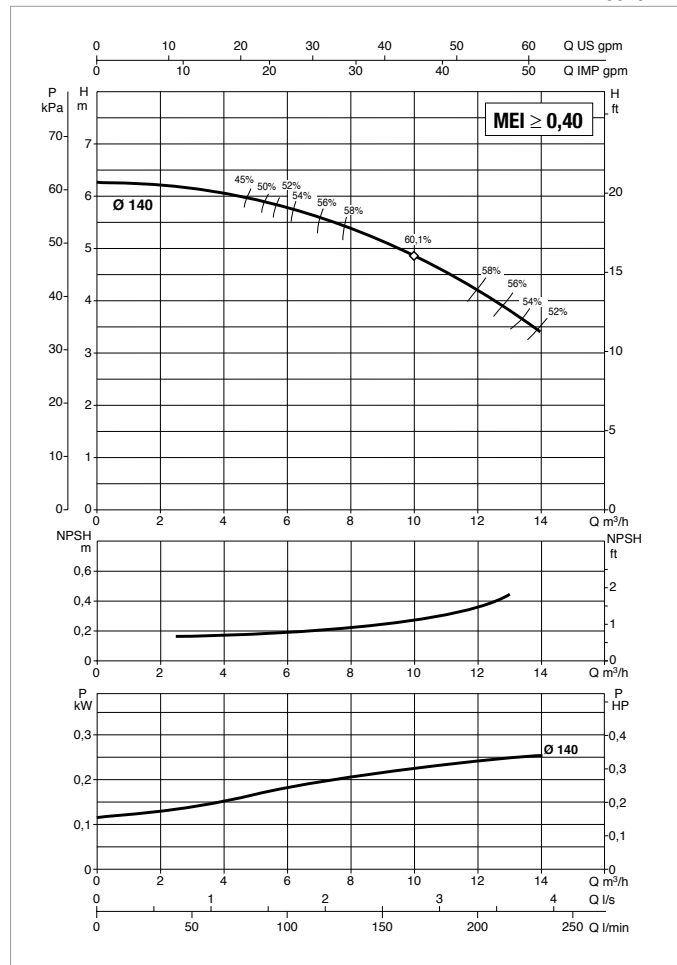
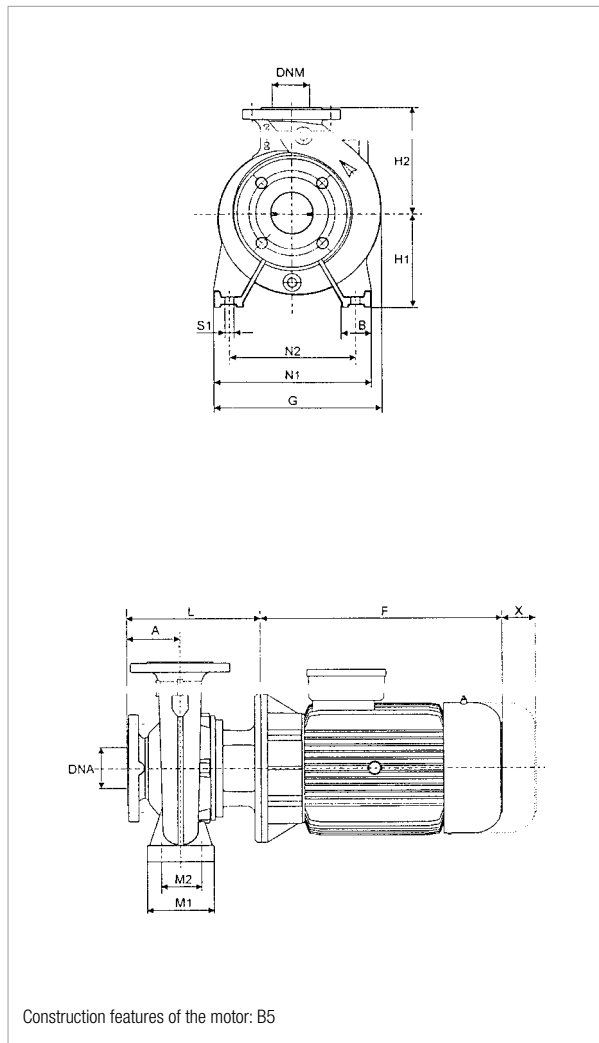
SELECTION TABLE - NKM-G

MODEL	Q=	0	30	36	42	48	54	60	66	72	78	84	90	102	114	120	150	180	210	240	270	300	330	360	390	420		
	m ³ /h	0	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1700	1900	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000		
	Q=	H (m)																										
	l/min																											
NKM-G 80-160/153-136/1,5/4		6,5	6,35	6,3	6,2	5,95	5,75	5,55	5,3	5	4,7	4,5	4,25	3,65	3													
NKM-G 80-160/163/2,2/4		8,65	8,5	8,45	8,3	8,15	7,9	7,7	7,4	7,2	6,9	6,65	6,3	5,7	4,9	4,6												
NKM-G 80-160/177/3/4		10,2	10,2	10,1	10	9,9	9,75	9,65	9,5	9,25	9	8,8	8,6	7,9	7,2	6,7												
NKM-G 80-200/200/4/4		13,2			13,1	13	12,9	12,8	12,7	12,4	12	11,7	11,3	10,4	9,3	8,7												
NKM-G 80-200/222/5,5/4		16,6			16,5	16,5	16,4	16,2	16,1	16	15,7	15,4	15	14,3	13,3	12,7												
NKM-G 80-250/240/7,5/4		20,4			20,3	20,3	20,2	20,1	20	19,9	19,8	19,5	19	18	16,7	16												
NKM-G 80-250/270/11/4		25,6			25,5	25,5	25,4	25,1	25	24,8	24,6	24,2	24	23	21,5	21												
NKM-G 80-315/305/15/4		32,9					32,7	32,6	32,6	32,5	32,4	32	31,6	30,5	29,5	28,9	24											
NKM-G 80-315/320/18,5/4		36,8					36,7	36,7	36,6	36,5	36,5	36,5	36,1	35,5	34,5	34	29,5											
NKM-G 80-315/334/22/4		41					40,8	40,8	40,7	40,6	40,6	40,4	40,2	39,8	39	38,5	34,8	29										
NKM-G 100-200/200/5,5/4		12,7						12,6	12,6	12,5	12,5	12,4	12,3	12	11,5	11,4	10,1	8,5										
NKM-G 100-200/214/7,5/4		15,6						15,4	15,4	15,3	15,2	15,1	15	14,7	14,5	14,3	13,3	11,6	9,8									
NKM-G 100-250/250/11/4		21,1						21	21	21	21	21	21	20,9	20	19,8	18	16										
NKM-G 100-250/270/15/4		25,5						25,5	25,5	25,5	25,3	25,1	25,1	25	24,5	24	22,5	20,5	17,5									
NKM-G 100-315/300/18,5/4		32											31,5	31,4	31	30,5	28,8	26	23									
NKM-G 100-315/316/22/4		36											35,5	35,2	35	34,6	33,2	31	28	24								
NKM-G 125-250/243/15/4		19,5												19,3	19,3	19,2	19,2	18,7	17,8	16,8	15,5	14,1	12,5	10,9				
NKM-G 125-250/256/18,5/4		21,9												21,8	21,8	21,7	21,6	21,3	20,5	19,5	18,5	17,2	15,6	14	12			
NKM-G 125-250/266/22/4		24,6												24,4	24,2	24,1	24	23,5	22,9	22	21	19,8	18,5	16,7	15			
NKM-G 150-200/218/11/4		13,2												13,1	13	13	12,8	12,5	12,1	11,5	11	10,4	9,7	9	8	7		

NKM-G 32-125.1 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

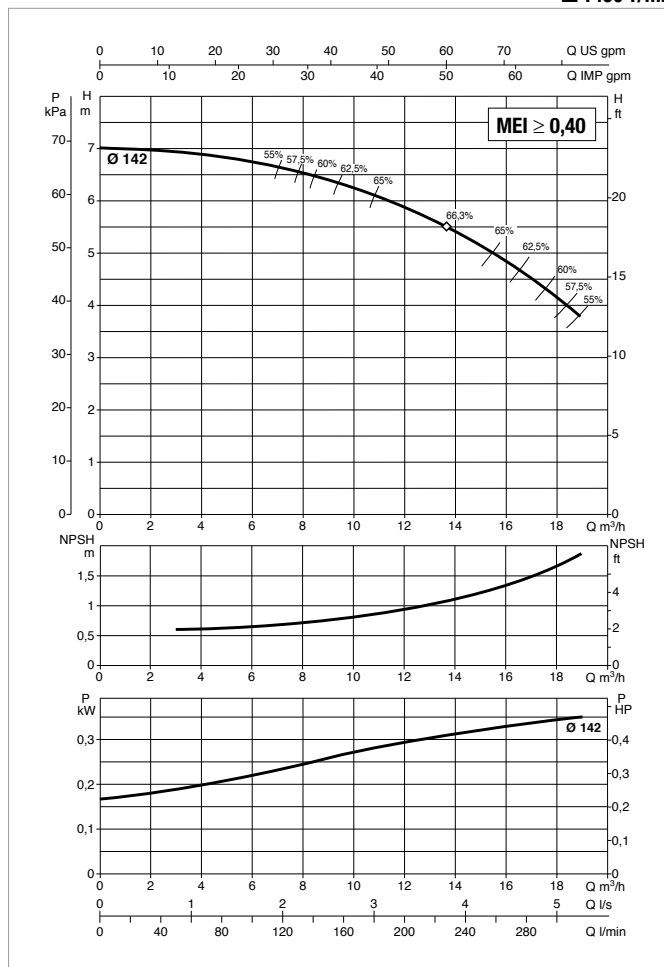
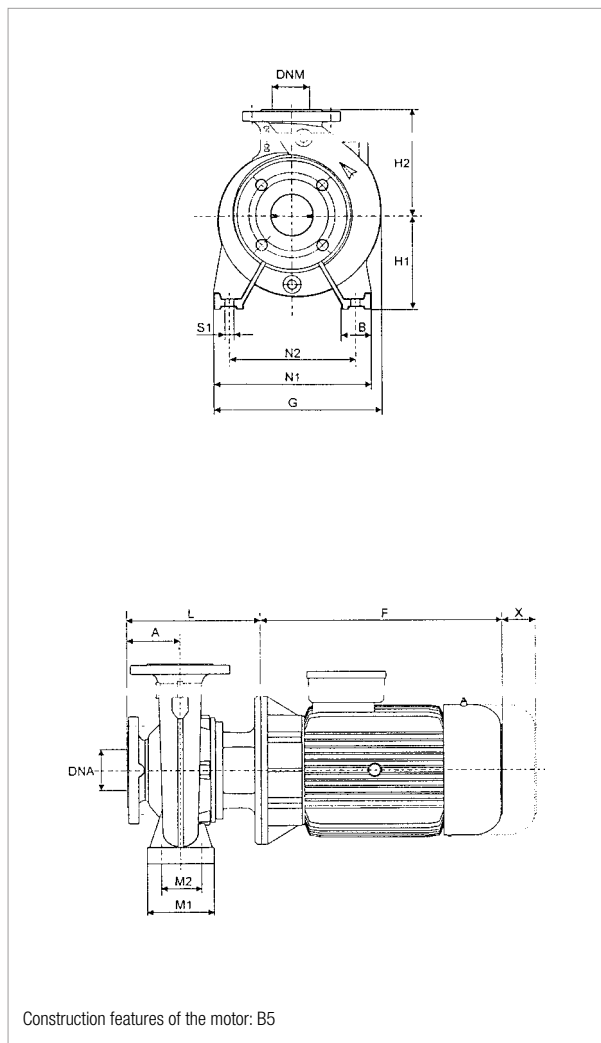
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		TYPE MOTOR
			kW	HP	230 V	400 V	
NKM-G 32-125.1/140/0,25/4	MEC 71	3 x 230 - 400 V ~	0,25	0,33	1,56	0,9	-

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
	L/A	L/B	H																								
NKM-G 32-125.1/140/0,25/4	80	50	-	208	234	112	140	201	100	70	190	140	-	M10	-	-	100	-	-	28	50	32	620	370	480	0,11	32,8

NKM-G 32-125 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

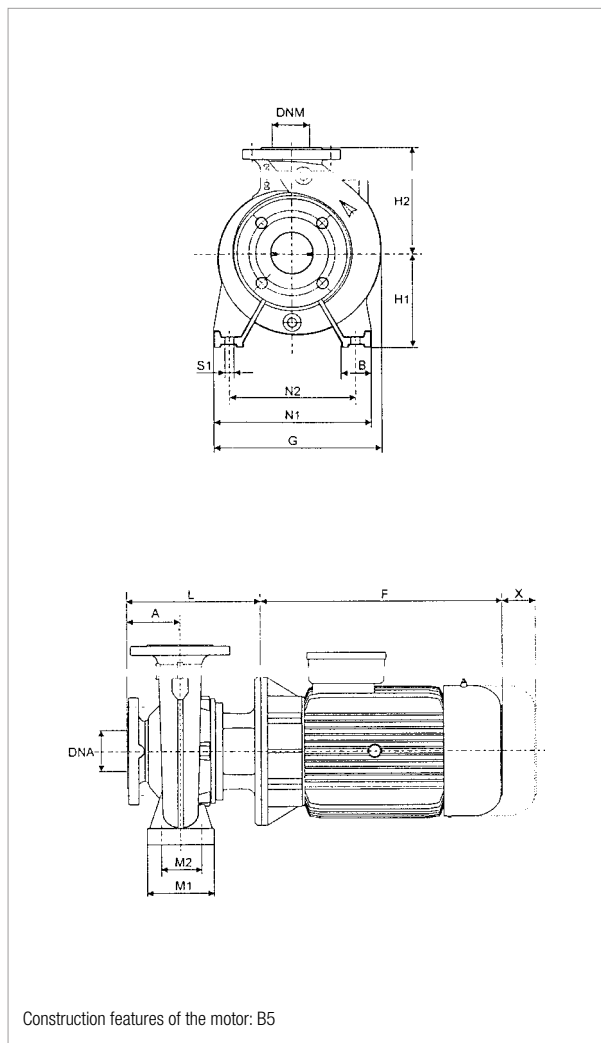
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKM-G 32-125/142/0,37/4	MEC 71	3 x 230 - 400 V ~	0,37	0,5	1,69	1	-

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
																							L/A	L/B	H		
NKM-G 32-125/142/0,37/4	80	50	-	208	234	112	140	201	100	70	190	140	-	M10	-	-	100	-	-	28	50	32	620	370	480	0,11	33,5

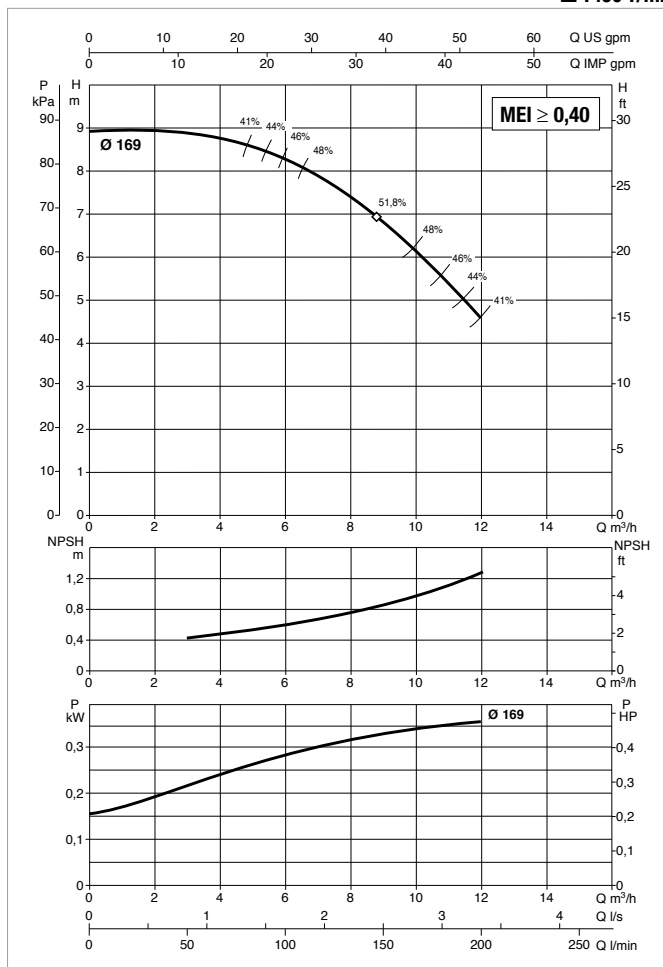
NKM-G 32-160.1 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 1450 1/min



Construction features of the motor: B5



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

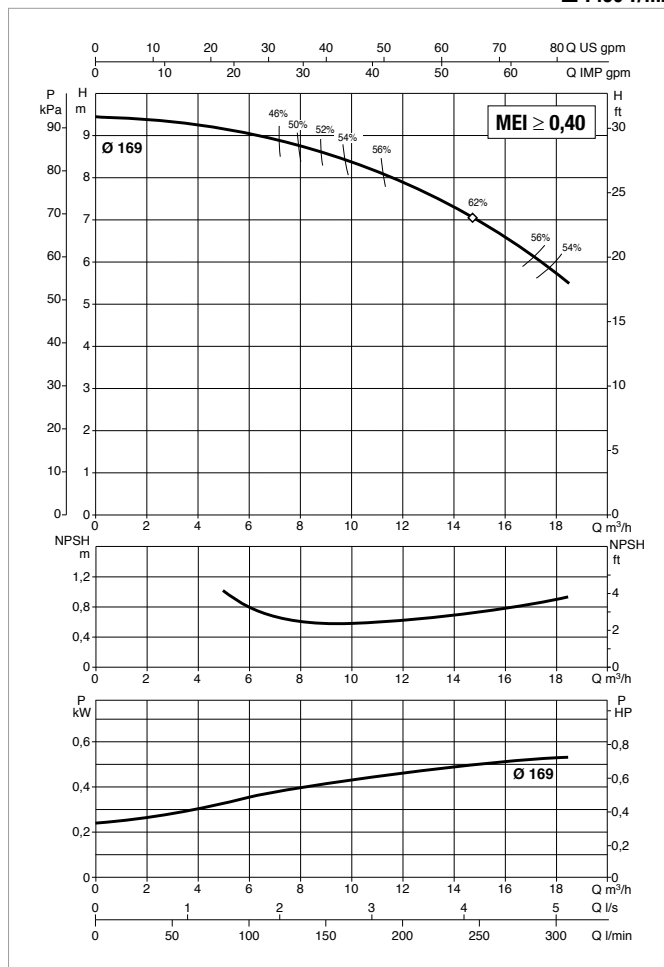
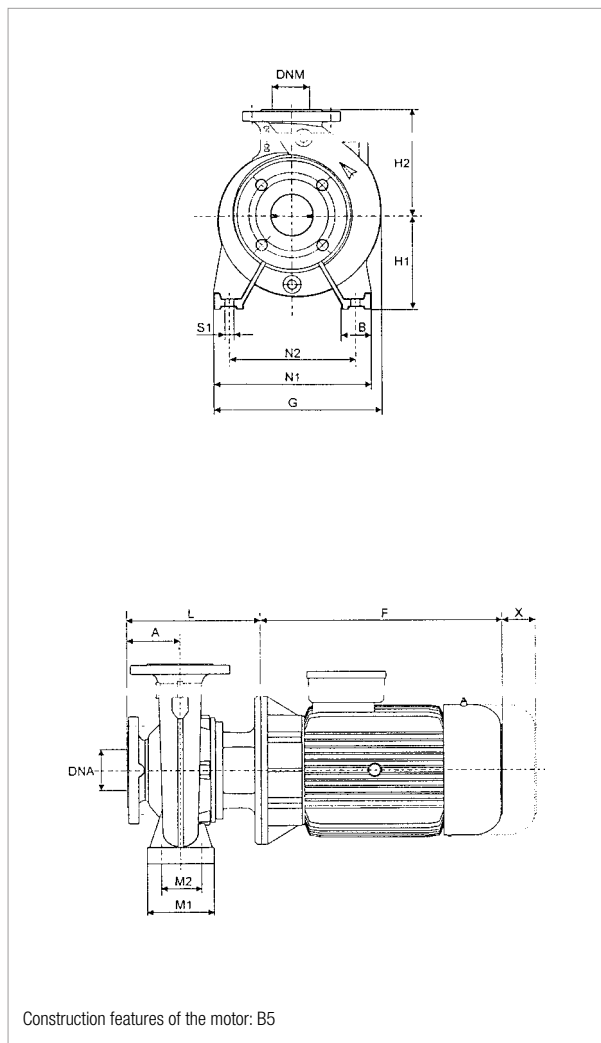
MODEL	MOTOR SIZE	POWER INPUT 50 Hz	ELECTRICAL DATA				TYPE MOTOR
			P2 NOMINAL		In A		
			kW	HP	230 V	400 V	
NKM-G 32-160.1/169/0,37/4	MEC 71	3 x 230 - 400 V ~	0,37	0,5	1,69	1	-

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
																							L/A	L/B	H		
NKM-G 32-160.1/169/0,37/4	80	50	-	208	245	132	160	201	100	70	240	190	-	M10	-	-	100	-	-	28	50	32	620	370	480	0,11	35,6

NKM-G 32-160 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

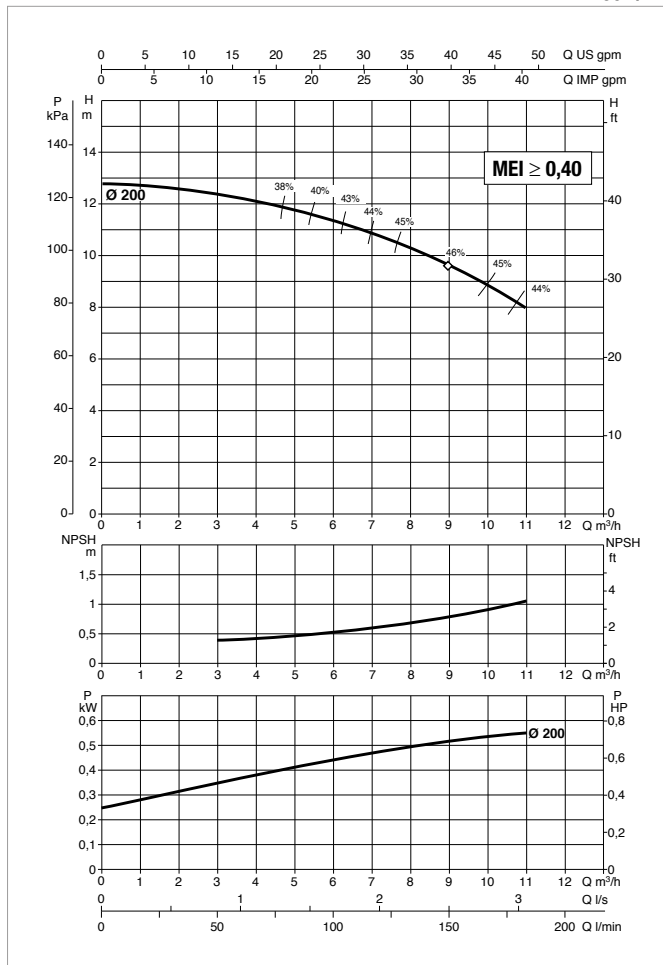
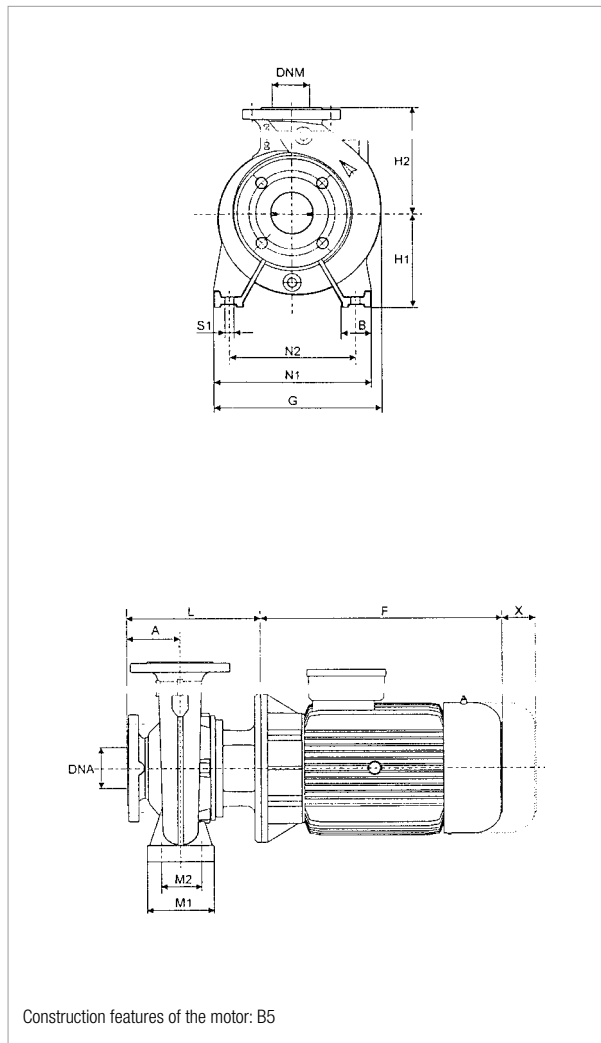
MODEL	MOTOR SIZE	POWER INPUT 50 Hz	ELECTRICAL DATA				MOTOR TYPE
			P2 NOMINAL		In A		
			kW	HP	230 V	400 V	
NKM-G 32-160/169/0,55/4	MEC 80	3 x 230 - 400 V ~	0,55	0,75	2,6	1,5	-

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
																							L/A	L/B	H		
NKM-G 32-160/169/0,55/4	80	50	-	234	245	132	160	226	100	70	240	190	-	M10	-	-	100	-	-	28	50	32	620	370	480	0,11	39,8

NKM-G 32-200.1 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

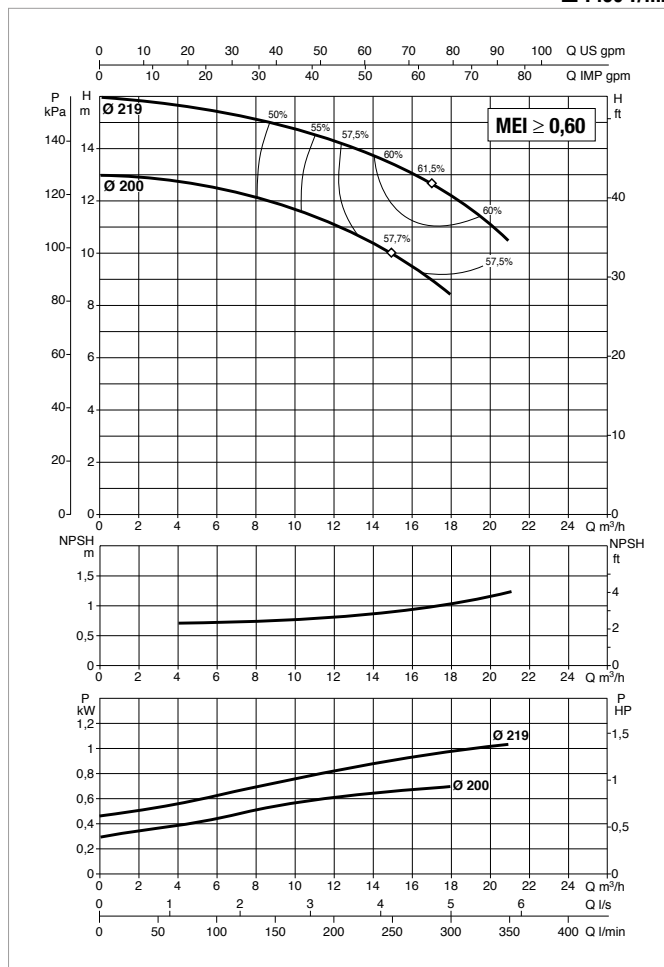
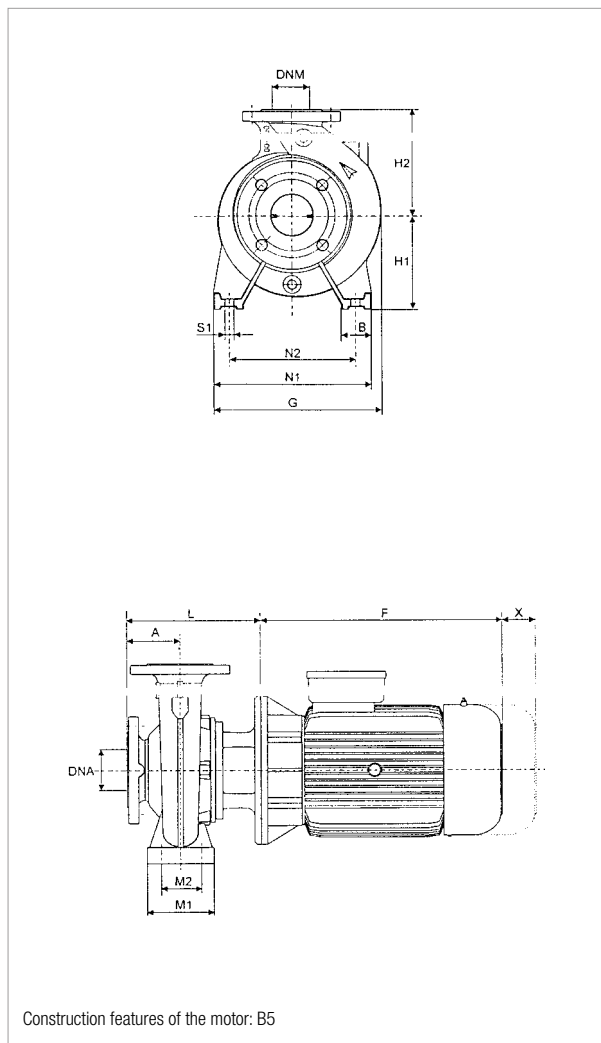
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKM-G 32-200.1/200/0,55/4	MEC 80	3 x 230 - 400 V ~	0,55	0,75	2,6	1,5	-

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
																							L/A	L/B	H		
NKM-G 32-200.1/200/0,55/4	80	50	-	234	279	160	180	226	100	70	240	190	-	M10	-	-	100	-	-	28	50	32	620	370	480	0,11	45

NKM-G 32-200 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.
 The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

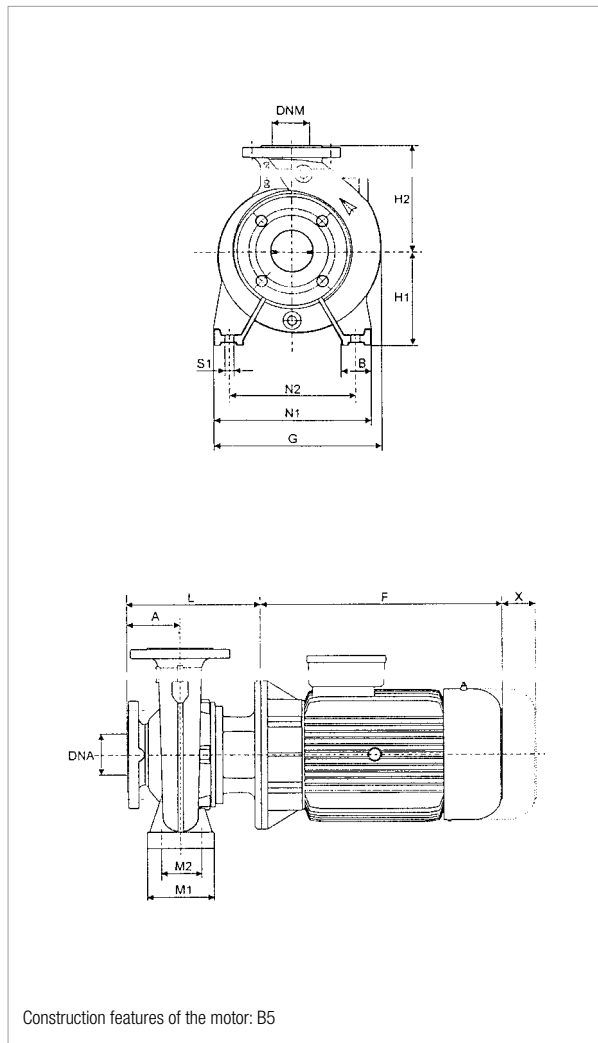
MODEL	ELECTRICAL DATA						MOTOR TYPE
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		
			kW	HP	230 V	400 V	
NKM-G 32-200/200/0,75/4	MEC 80	3 x 230 - 400 V ~	0,75	1	3,1	1,8	IE3
NKM-G 32-200/219/1,1/4	MEC 90 S	3 x 230 - 400 V ~	1,1	1,5	4,3	2,5	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKM-G 32-200/200/0,75/4	80	50	-	232	279	160	180	226	100	70	240	190	-	M10	-	-	100	-	-	28	50	32	620	370	480	0,11	42
NKM-G 32-200/219/1,1/4	80	50	-	287,5	279	160	180	226	100	70	240	190	-	M10	-	-	100	-	-	28	50	32	620	370	480	0,11	41

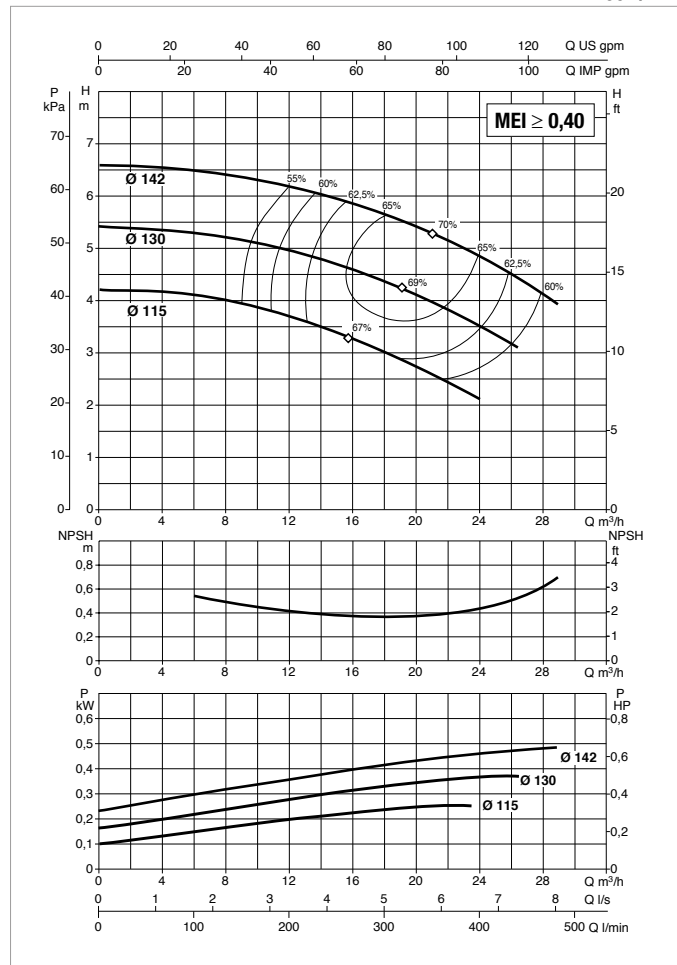
NKM-G 40-125 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



Construction features of the motor: B5



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

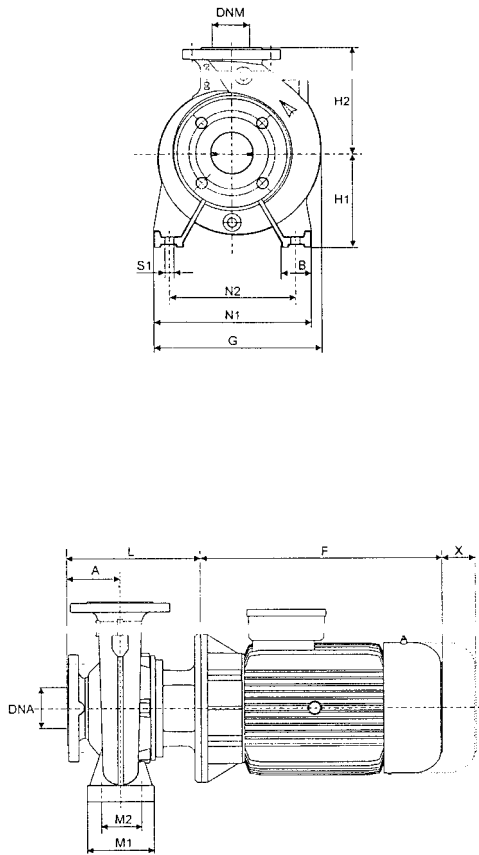
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKM-G 40-125/115/0,25/4	MEC 71	3 x 230 - 400 V ~	0,25	0,33	1,56	0,9	-
NKM-G 40-125/130/0,37/4	MEC 71	3 x 230 - 400 V ~	0,37	0,5	1,69	1	-
NKM-G 40-125/142/0,55/4	MEC 80	3 x 230 - 400 V ~	0,55	0,75	2,6	1,5	-

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKM-G 40-125/115/0,25/4	80	50	-	208	235	112	140	201	100	70	210	160	-	M10	-	-	100	-	-	28	65	40	620	370	480	0,11	34,2
NKM-G 40-125/130/0,37/4	80	50	-	208	235	112	140	201	100	70	210	160	-	M10	-	-	100	-	-	28	65	40	620	370	480	0,11	35,3
NKM-G 40-125/142/0,55/4	80	50	-	234	235	112	140	201	100	70	210	160	-	M10	-	-	100	-	-	28	65	40	620	370	480	0,11	39,4

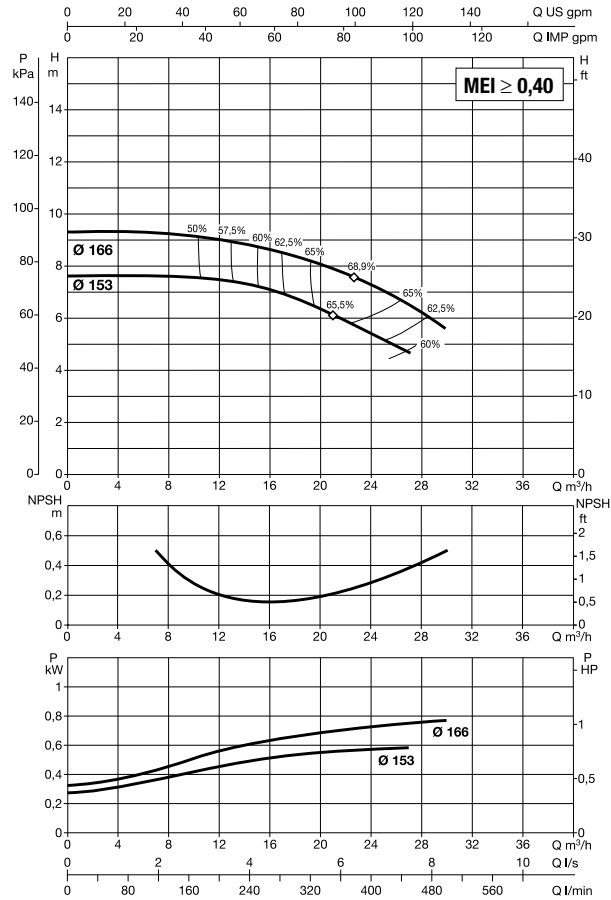
NKM-G 40-160 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



Construction features of the motor: B5



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

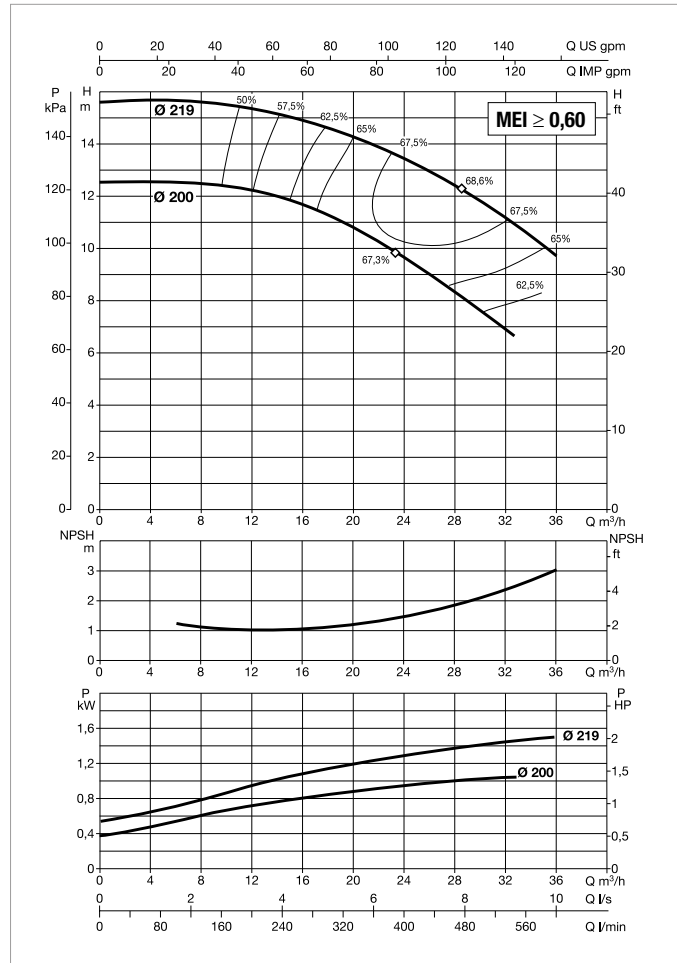
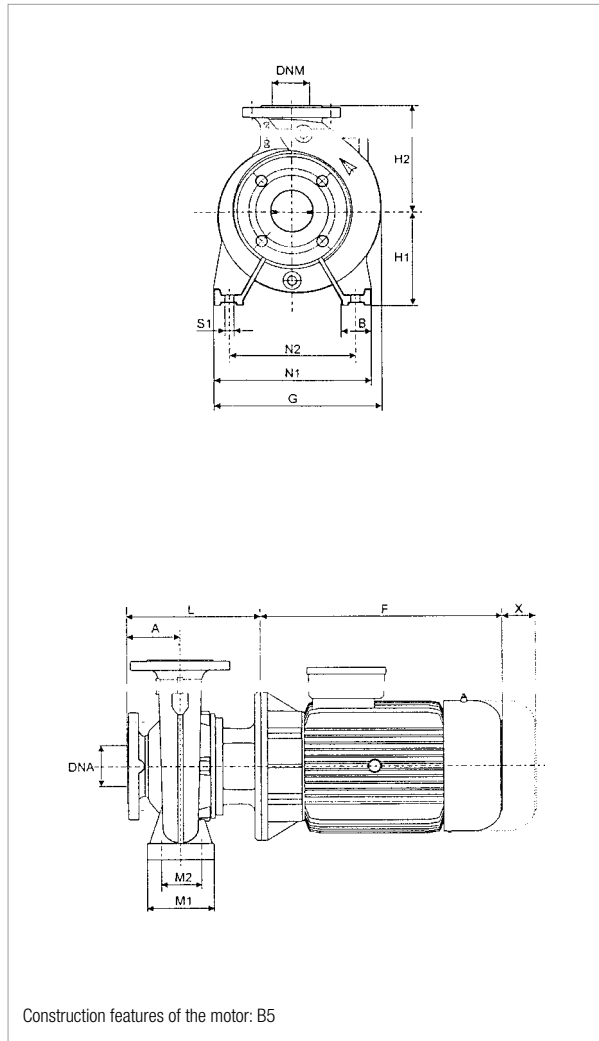
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKM-G 40-160/153/0,55/4	MEC 80	3 x 230 - 400 V ~	0,55	0,75	2,6	1,5	-
NKM-G 40-160/166/0,75/4	MEC 80	3 x 230 - 400 V ~	0,75	1	3,1	1,8	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKM-G 40-160/153/0,55/4	80	50	-	234	253	132	160	226	100	70	240	190	-	M10	-	-	100	-	-	28	65	40	620	370	480	0,11	40
NKM-G 40-160/166/0,75/4	80	50	-	232	253	132	160	226	100	70	240	190	-	M10	-	-	100	-	-	28	65	40	620	370	480	0,11	35

NKM-G 40-200 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

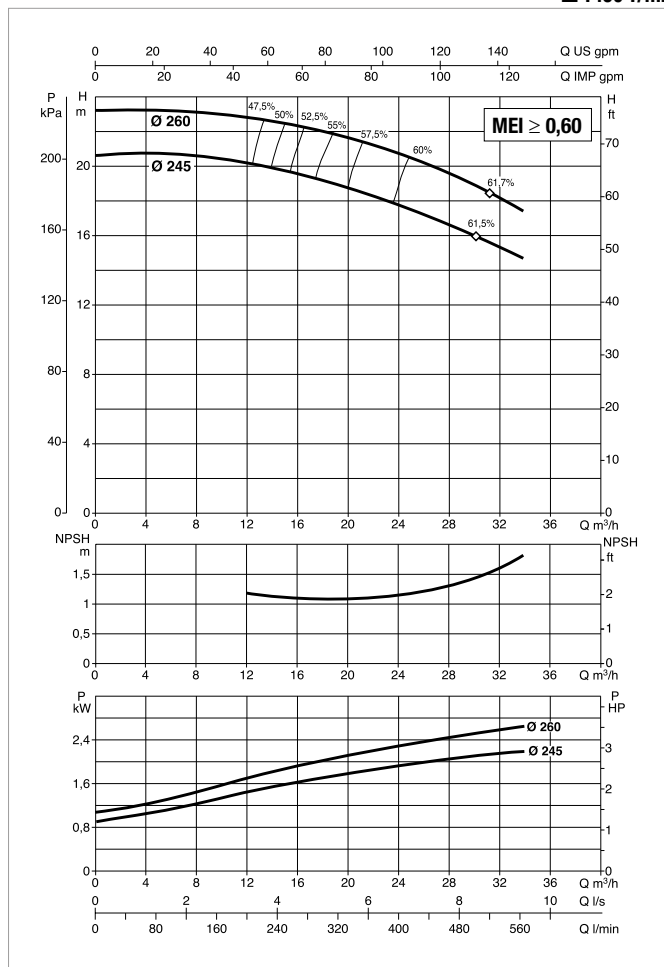
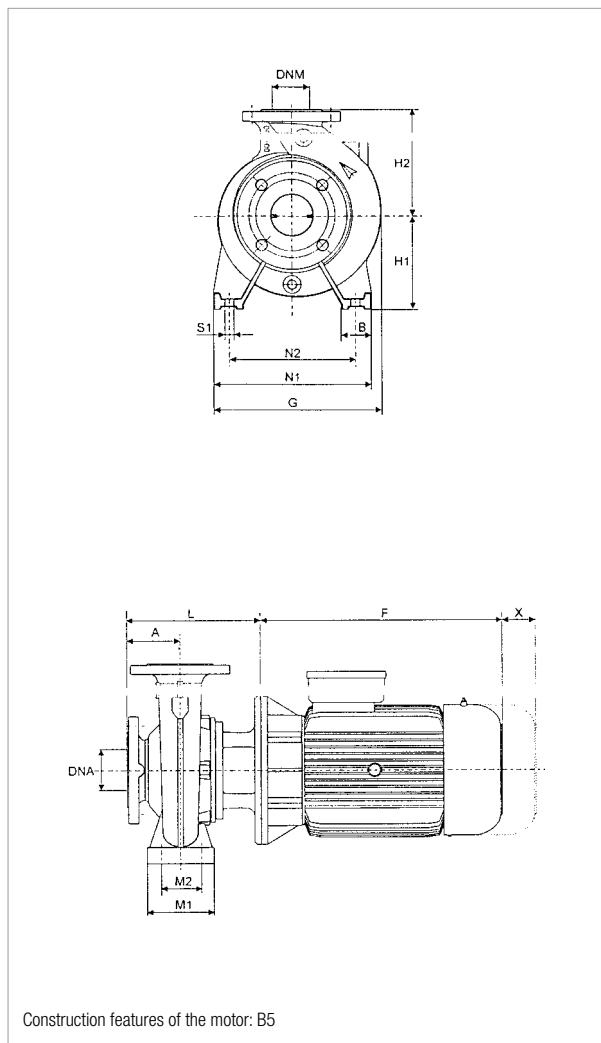
MODEL	MOTOR SIZE	POWER INPUT 50 Hz	ELECTRICAL DATA				MOTOR TYPE
			P2 NOMINAL		In A		
			kW	HP	230 V	400 V	
NKM-G 40-200/200/1,1/4	MEC 90 S	3 x 230 - 400 V ~	1,1	1,5	4,3	2,5	IE3
NKM-G 40-200/219/1,5/4	MEC 90 L	3 x 230 - 400 V ~	1,5	2	6,2	3,6	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKM-G 40-200/200/1,1/4	100	50	-	287,5	296	160	180	246	100	70	265	212	-	M10	-	-	100	-	-	28	65	40	620	370	480	0,11	41
NKM-G 40-200/219/1,5/4	100	50	-	287,5	296	160	180	246	100	70	265	212	-	M10	-	-	100	-	-	28	65	40	620	370	480	0,11	42

NKM-G 40-250 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

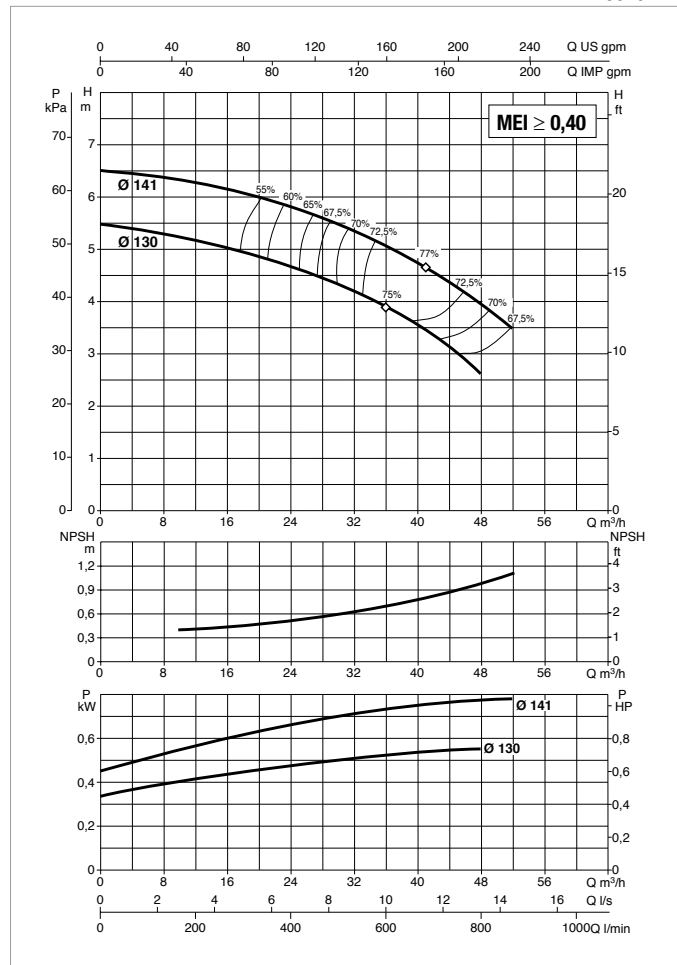
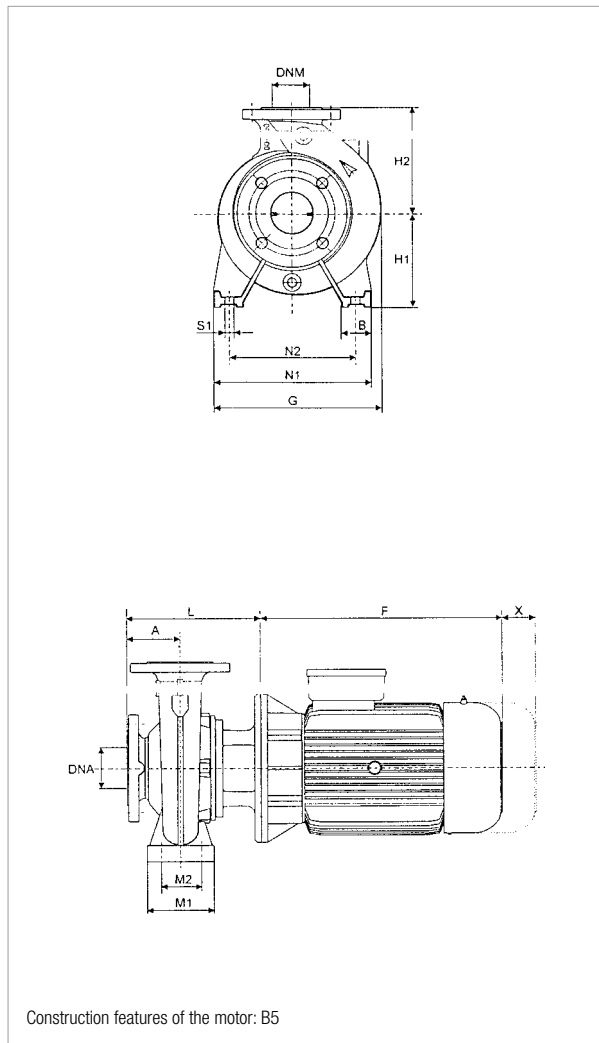
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKM-G 40-250/245/2,2/4	MEC 100 L	3 x 230 - 400 V ~	2,2	3	10,2	5,9	IE3
NKM-G 40-250/260/3/4	MEC 100 L	3 x 400 V ~	3	4	-	6,8	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKM-G 40-250/245/2,2/4	100	65	-	319	336	180	225	274	125	95	320	250	-	M10	-	-	100	-	-	28	65	40	670	420	540	0,152	63
NKM-G 40-250/260/3/4	100	65	-	321	336	180	225	274	125	95	320	250	-	M10	-	-	100	-	-	28	65	40	670	420	540	0,152	59

NKM-G 50-125 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

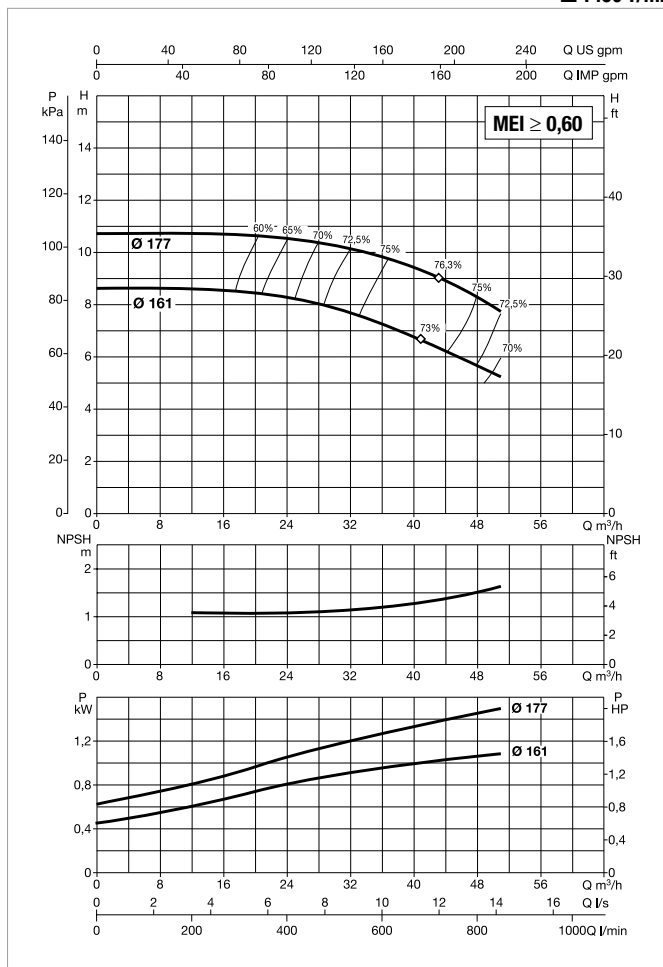
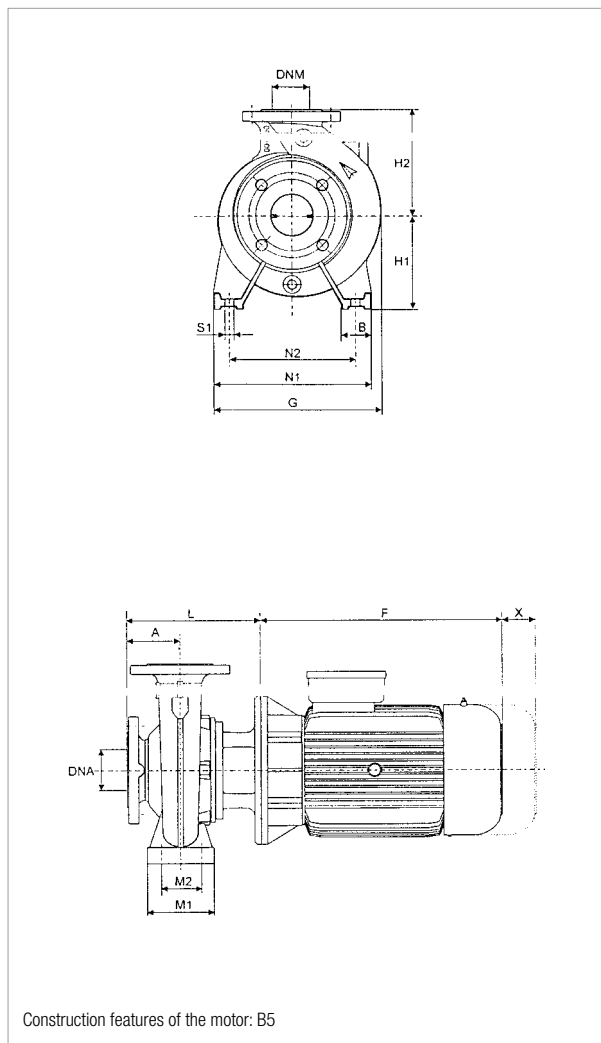
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKM-G 50-125/130/0,55/4	MEC 71	3 x 230 - 400 V ~	0,55	0,75	2,6	1,5	-
NKM-G 50-125/141/0,75/4	MEC 80	3 x 230 - 400 V ~	0,75	1	3,1	1,8	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKM-G 50-125/130/0,55/4	100	50	-	234	250	132	160	246	100	70	240	190	-	M10	-	-	100	-	-	28	65	50	620	370	480	0,11	43
NKM-G 50-125/141/0,75/4	100	50	-	232	250	132	160	246	100	70	240	190	-	M10	-	-	100	-	-	28	65	50	620	370	480	0,11	38

NKM-G 50-160 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.
 The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

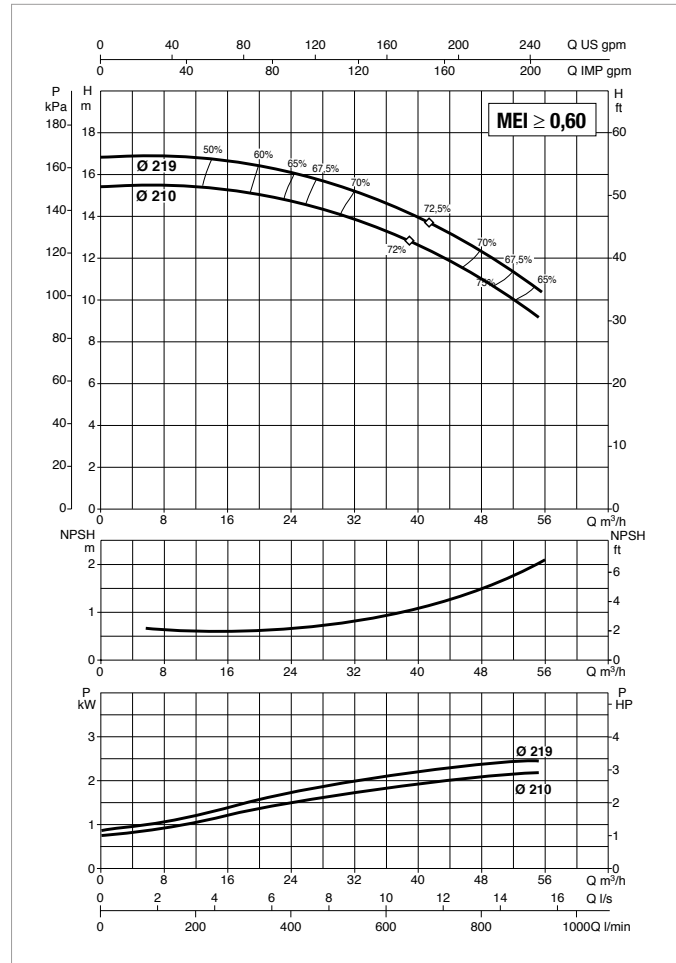
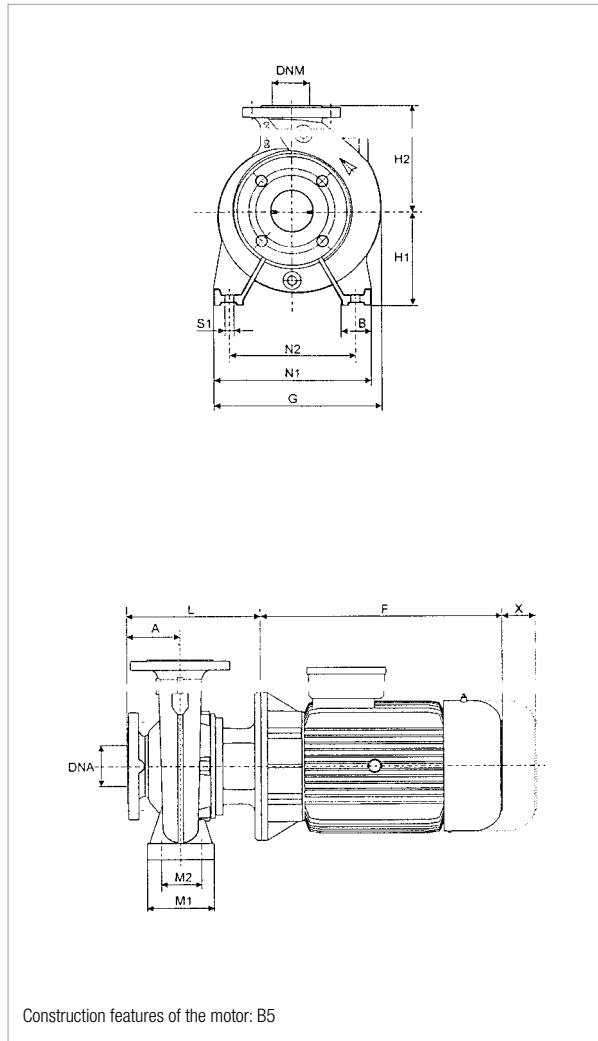
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKM-G 50-160/161/1,1/4	MEC 90 S	3 x 230 - 400 V ~	1,1	1,5	4,3	2,5	IE3
NKM-G 50-160/177/1,5/4	MEC 90 L	3 x 230 - 400 V ~	1,5	2	6,2	3,6	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
																							L/A	L/B	H		
NKM-G 50-160/161/1,1/4	100	50	-	287,5	282	160	180	274	100	70	265	212	-	M10	-	-	100	-	-	28	65	50	620	370	480	0,11	37
NKM-G 50-160/177/1,5/4	100	50	-	287,5	282	160	180	274	100	70	265	212	-	M10	-	-	100	-	-	28	65	50	620	370	480	0,11	35

NKM-G 50-200 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

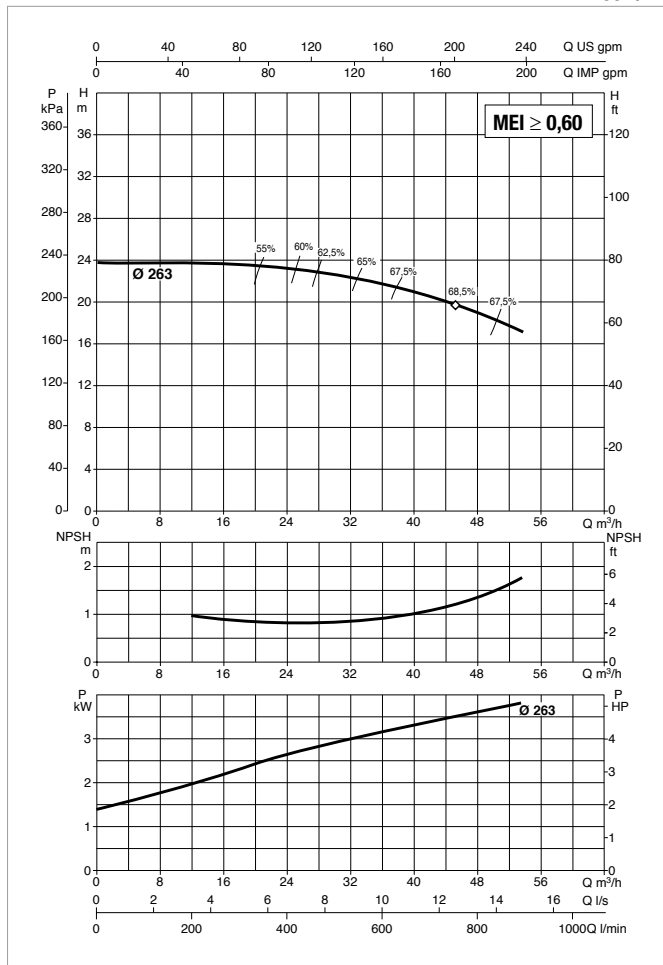
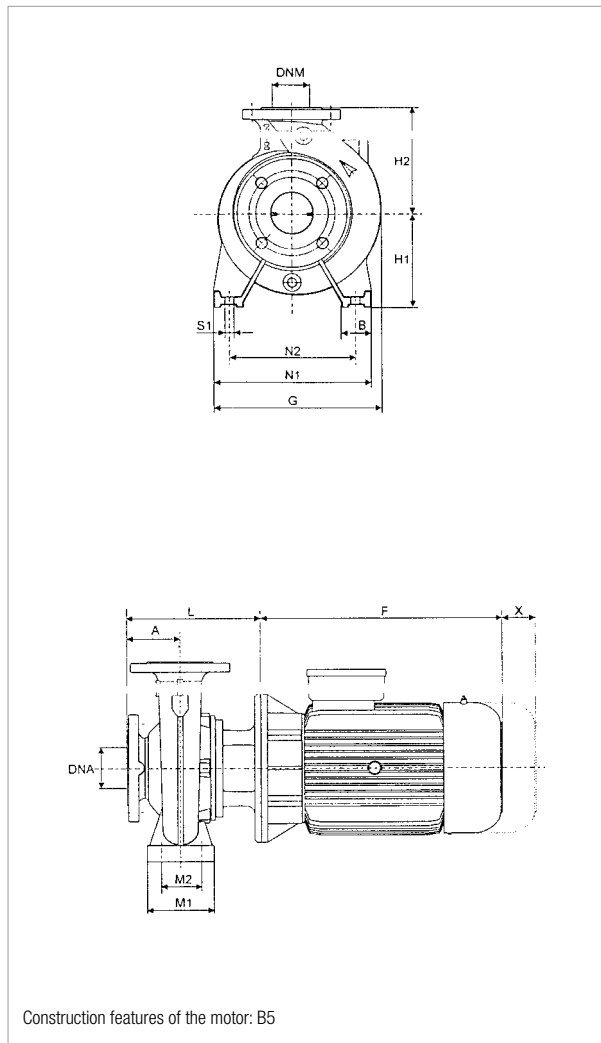
MODEL	MOTOR SIZE	POWER INPUT 50 Hz	ELECTRICAL DATA				MOTOR TYPE
			P2 NOMINAL		In A		
			kW	HP	230 V	400 V	
NKM-G 50-200/210/2,2/4	MEC 100 L	3 x 230 - 400 V ~	2,2	3	10,2	5,9	IE3
NKM-G 50-200/219/3/4	MEC 100 L	3 x 400 V ~	3	4	-	6,8	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKM-G 50-200/210/2,2/4	100	50	-	319	302	160	200	274	100	70	265	212	-	M10	-	-	100	-	-	28	65	50	670	420	540	0,152	55
NKM-G 50-200/219/3/4	100	50	-	321	302	160	200	274	100	70	265	212	-	M10	-	-	100	-	-	28	65	50	670	420	540	0,152	52

NKM-G 50-250 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

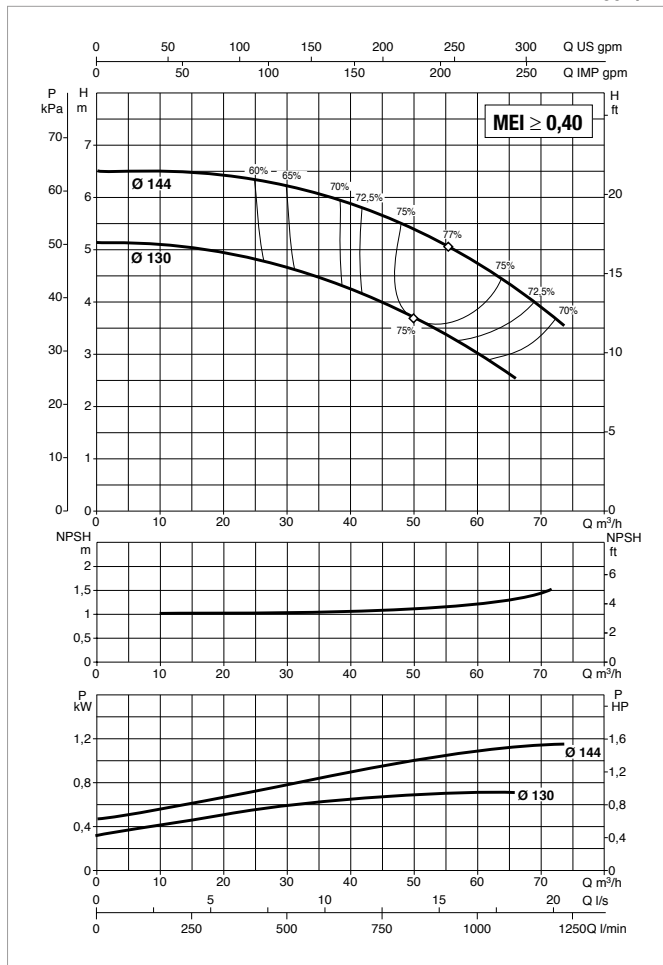
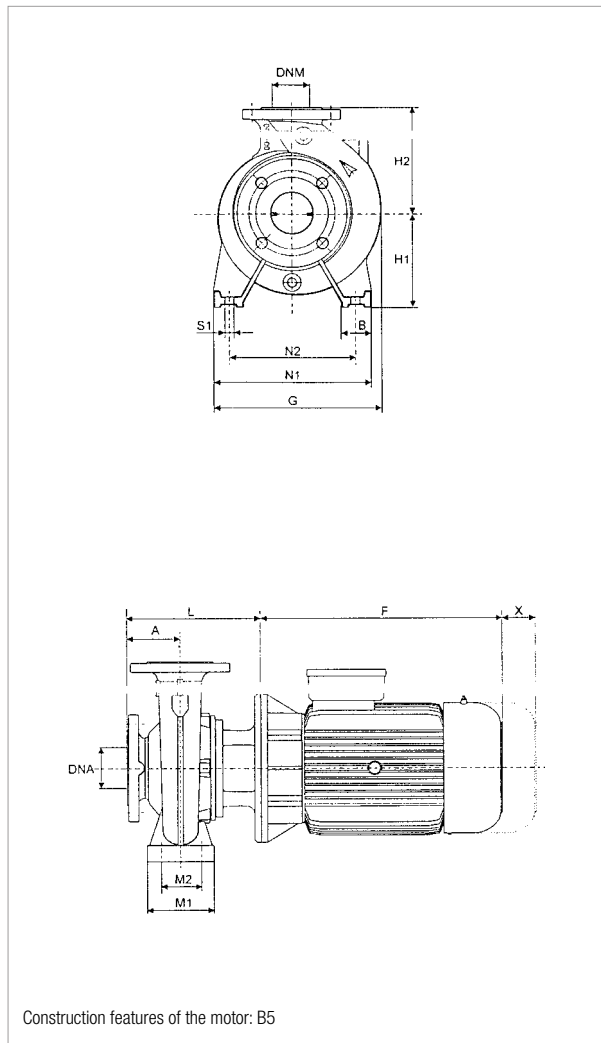
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKM-G 50-250/263/4/4	MEC 112 M	3 x 400 V ~	4	5,5	-	8,2	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNa	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
	L/A	L/B	H																								
NKM-G 50-250/263/4/4	100	65	-	328	343	180	225	274	125	95	320	250	-	M10	-	-	100	-	-	28	65	50	670	420	540	0,152	56

NKM-G 65-125 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

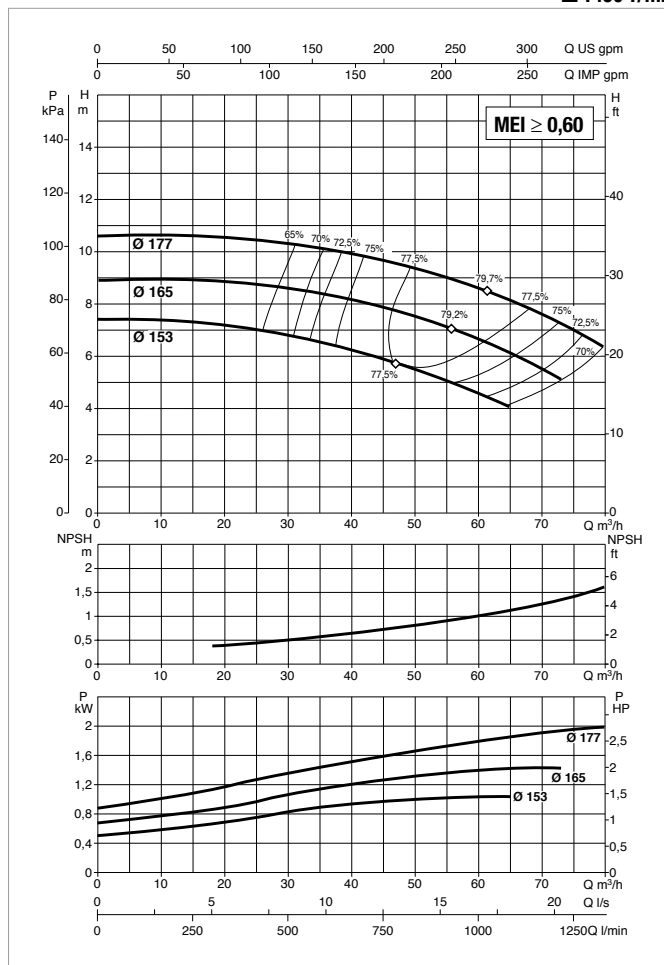
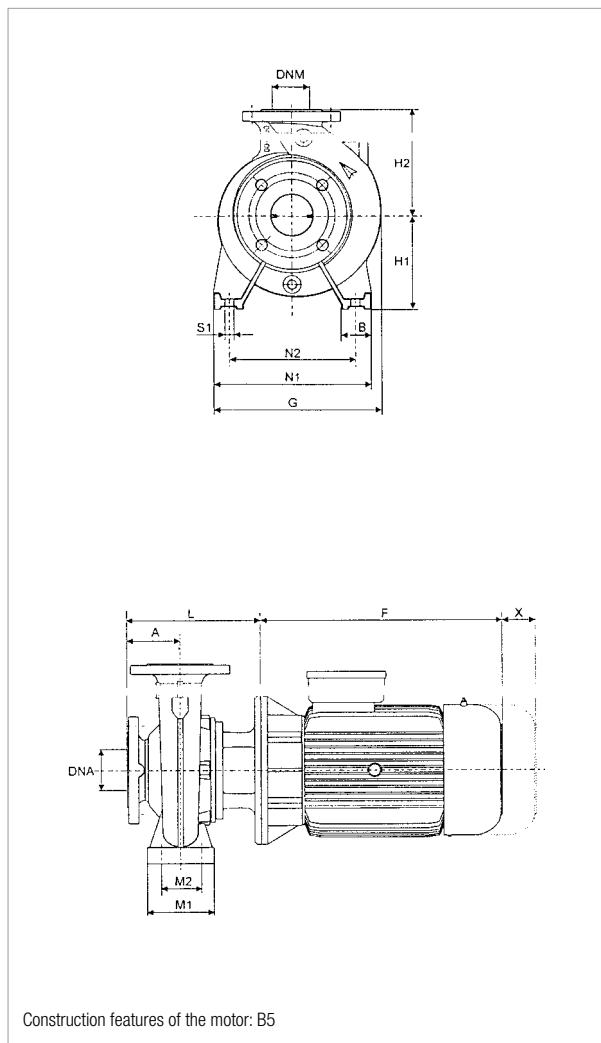
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKM-G 65-125/130/0,75/4	MEC 80	3 x 230 - 400 V ~	0,75	1	3,1	1,8	IE3
NKM-G 65-125/144/1,1/4	MEC 90 S	3 x 230 - 400 V ~	1,1	1,5	4,3	2,5	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKM-G 65-125/130/0,75/4	100	65	-	232	286	160	180	246	125	95	280	212	-	M10	-	-	100	-	-	28	80	65	620	370	480	0,11	52
NKM-G 65-125/144/1,1/4	100	65	-	287,5	286	160	180	246	125	95	280	212	-	M10	-	-	100	-	-	28	80	65	620	370	480	0,11	39

NKM-G 65-160 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

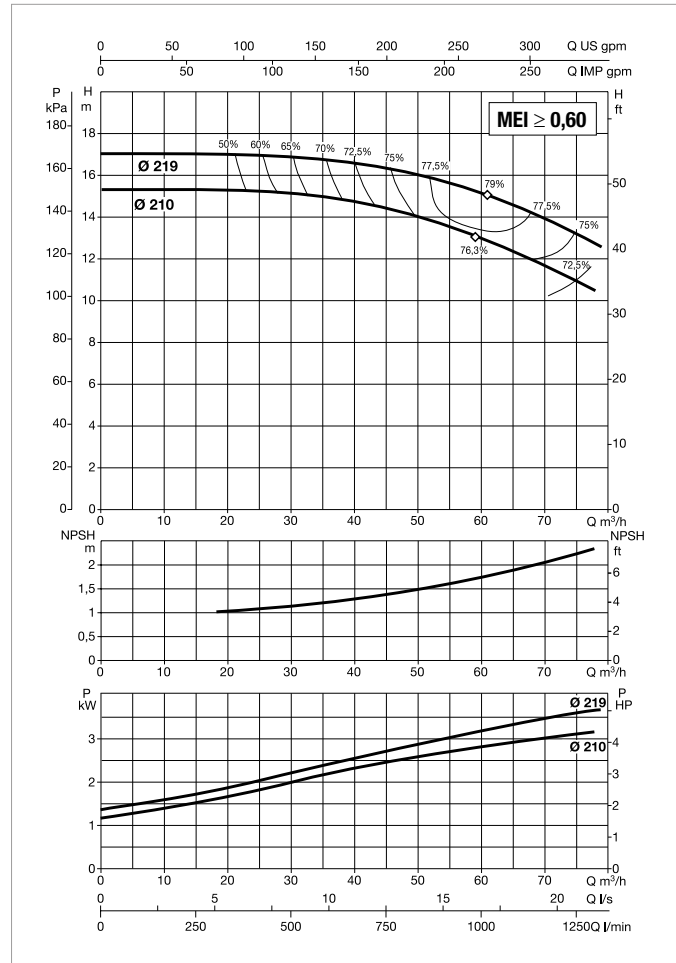
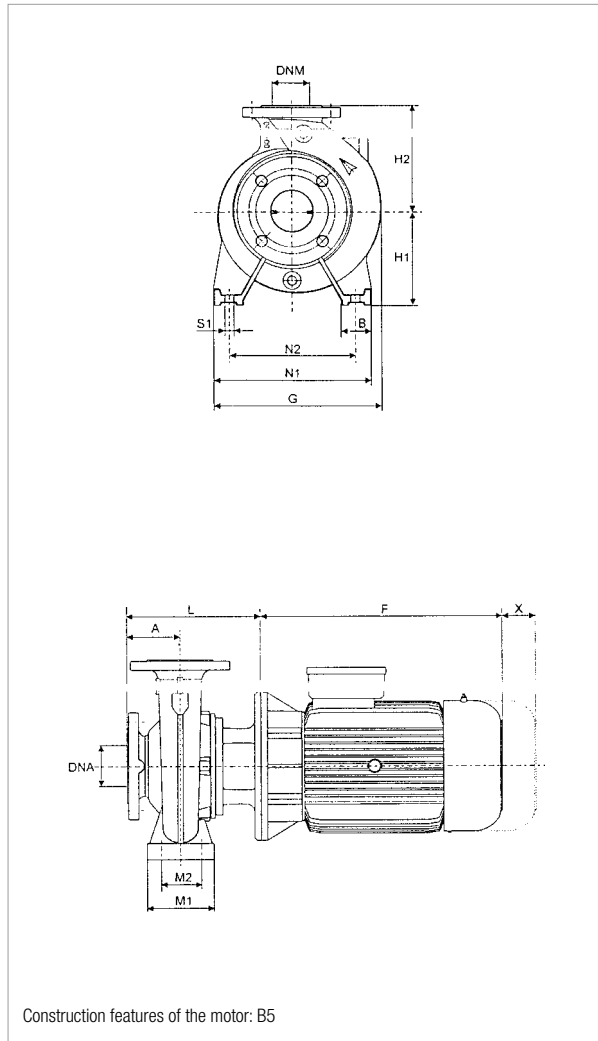
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKM-G 65-160/153/1,1/4	MEC 90 S	3 x 230 - 400 V ~	1,1	1,5	4,3	2,5	IE3
NKM-G 65-160/165/1,5/4	MEC 90 L	3 x 230 - 400 V ~	1,5	2	6,2	3,6	IE3
NKM-G 65-160/177/2,2/4	MEC 100 L	3 x 230 - 400 V ~	2,2	3	10,2	5,9	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNa	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKM-G 65-160/153/1,1/4	100	65	-	287,5	302	160	200	246	125	95	280	212	-	M10	-	-	100	-	-	28	80	65	670	420	540	0,152	42
NKM-G 65-160/165/1,5/4	100	65	-	287,5	302	160	200	246	125	95	280	212	-	M10	-	-	100	-	-	28	80	65	670	420	540	0,152	40
NKM-G 65-160/177/2,2/4	100	65	-	319	302	160	200	274	125	95	280	212	-	M10	-	-	100	-	-	28	80	65	670	420	540	0,152	52

NKM-G 65-200 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

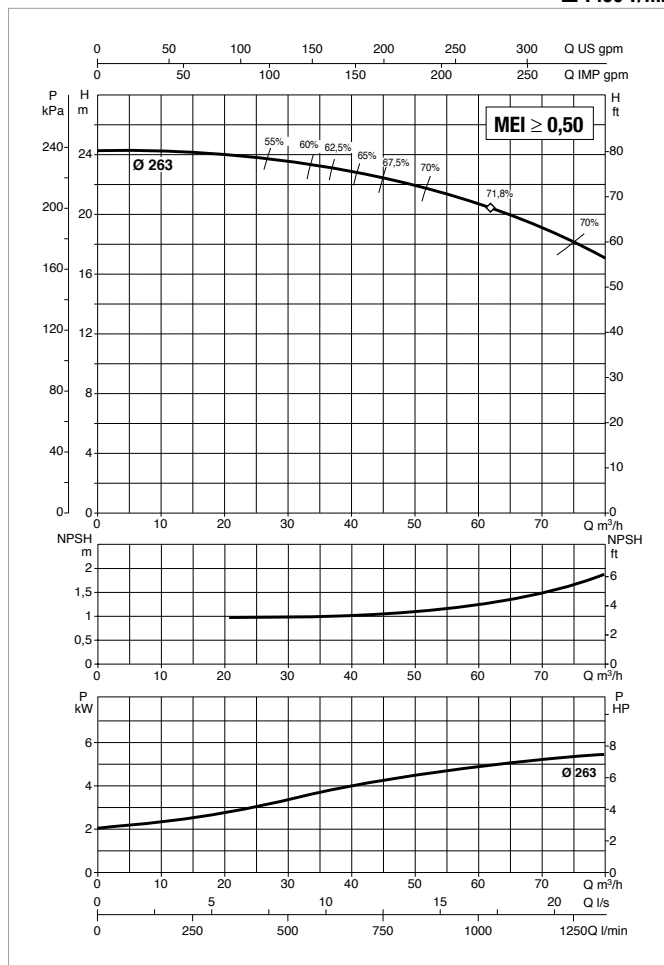
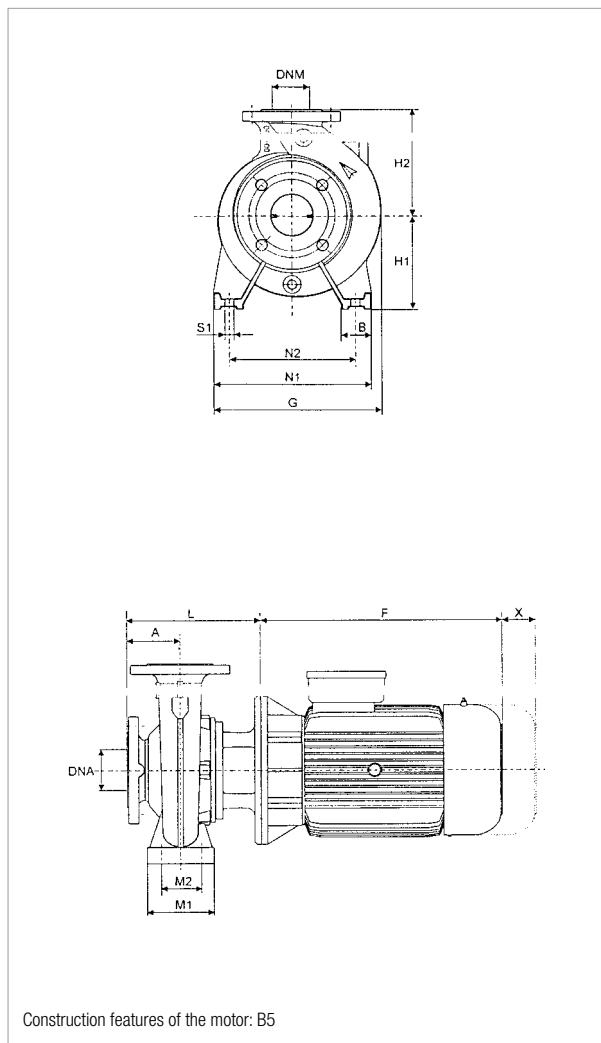
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKM-G 65-200/210/3/4	MEC 100 L	3 x 400 V ~	3	4	-	6,8	IE3
NKM-G 65-200/219/4/4	MEC 112 M	3 x 400 V ~	4	5,5	-	8,2	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKM-G 65-200/210/3/4	100	65	-	321	333	180	225	274	125	95	320	250	-	M10	-	-	140	-	-	28	80	65	670	420	540	0,152	56
NKM-G 65-200/219/4/4	100	65	-	328	333	180	225	274	125	95	320	250	-	M10	-	-	140	-	-	28	80	65	670	420	540	0,152	58

NKM-G 65-250 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

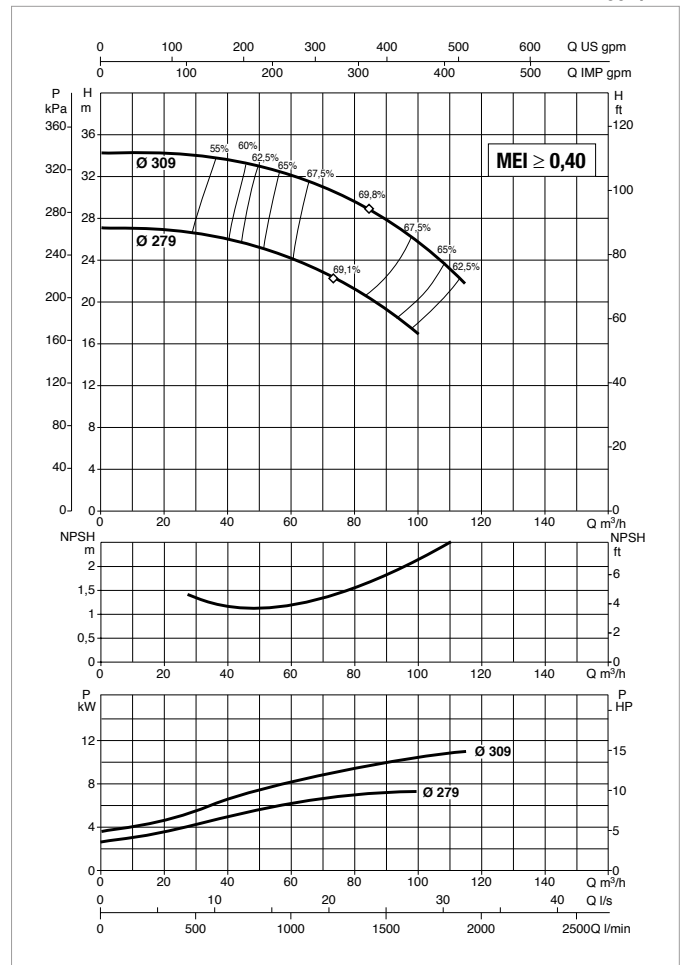
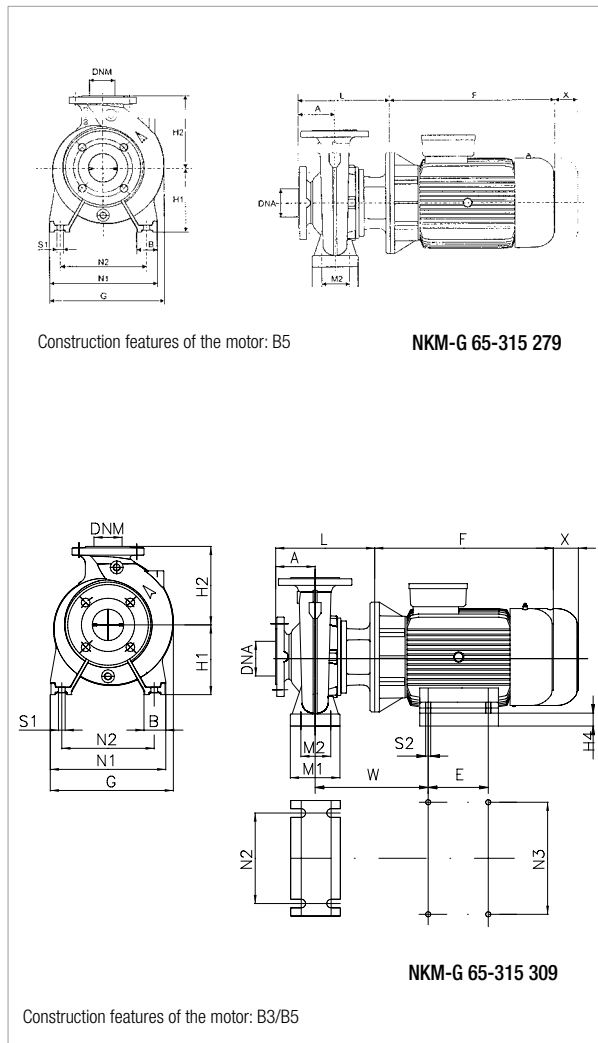
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKM-G 65-250/263/5,5/4	MEC 132 S	3 x 400 V ~	5,5	7,5	-	10,6	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
	L/A	L/B	H																								
NKM-G 65-250/263/5,5/4	100	80	-	365	370	200	250	343	160	120	360	280	-	M14	-	-	140	-	-	38	80	65	1030	530	640	0,349	142

NKM-G 65-315 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

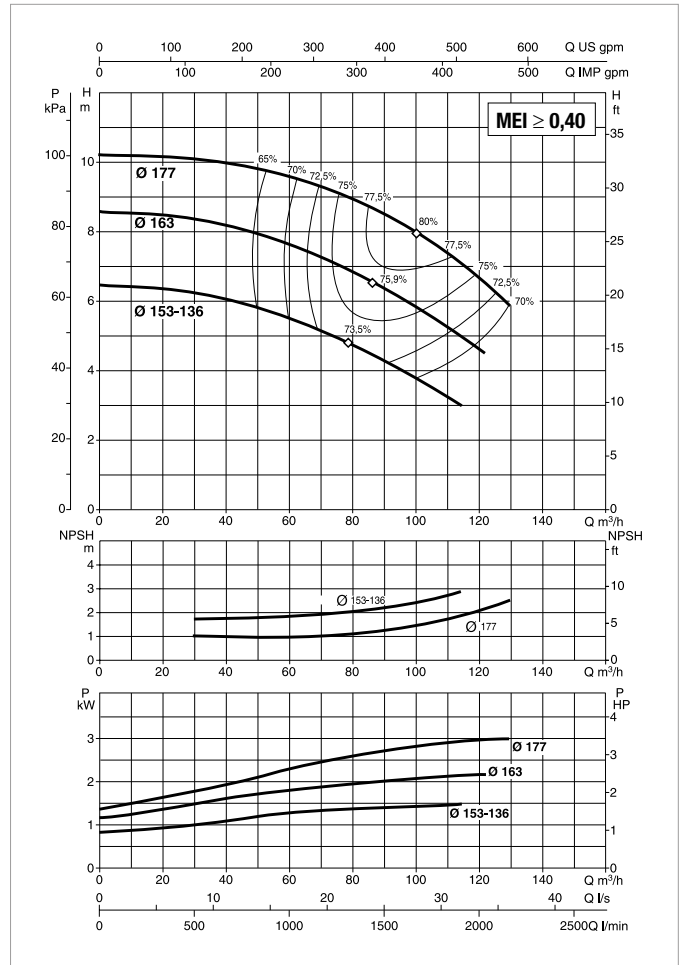
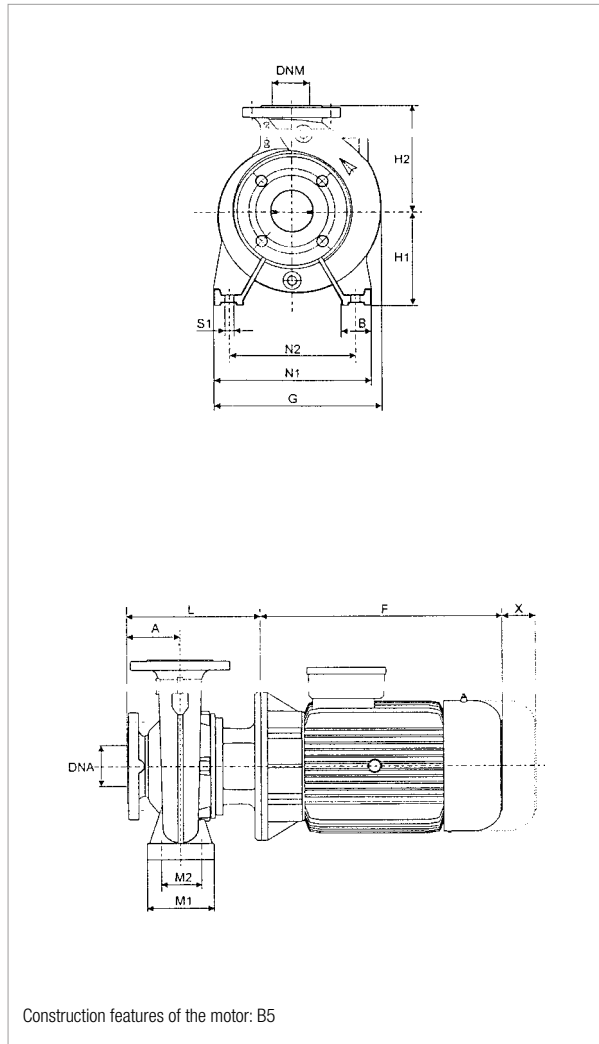
MODEL	ELECTRICAL DATA						MOTOR TYPE
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		
			kW	HP	230 V	400 V	
NKM-G 65-315/279/7,5/4	MEC 132 M	3 x 400 V ~	7,5	10	-	14,4	IE3
NKM-G 65-315/309/11/4	MEC 160 M	3 x 400 V ~	11	15	-	22,4	IE3

MODEL	DIMENSIONS																			PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg			
	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM			L/A	L/B	H
	NKM-G 65-315/279/7,5/4	125	80	-	350	429	225	280	368	160	120	400	315	-	M14	-	-	140	-						-	38	80
NKM-G 65-315/309/11/4	125	80	210	498	429	225	280	398	160	120	400	315	254	M14	M12	402	140	-	65	38	80	65	1030	530	640	0,349	231

NKM-G 80-160 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.
 The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

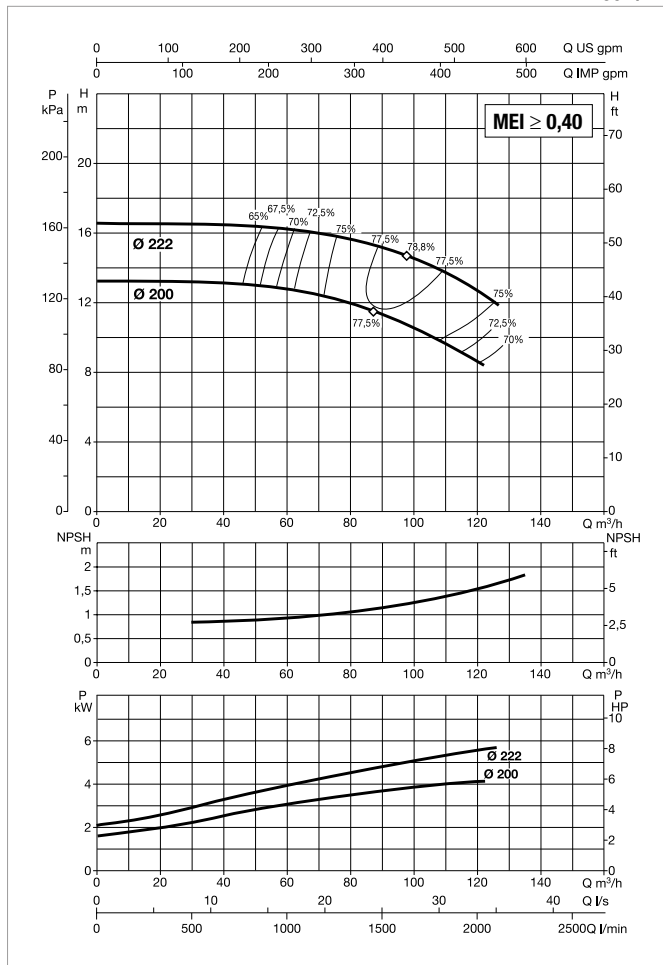
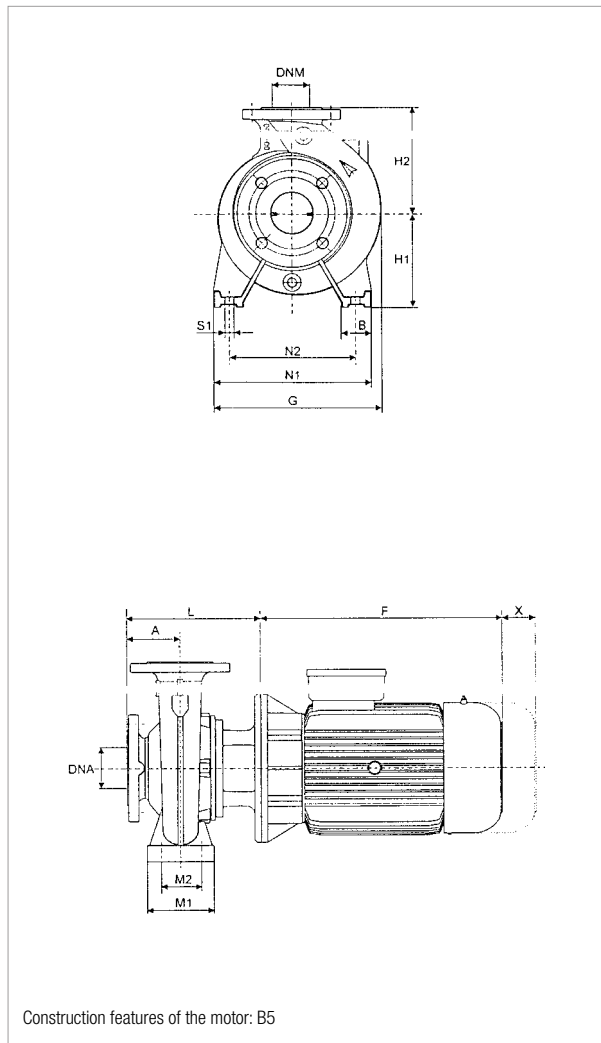
MODEL	MOTOR SIZE	POWER INPUT 50 Hz	ELECTRICAL DATA				MOTOR TYPE
			P2 NOMINAL		In A		
			kW	HP	230 V	400 V	
NKM-G 80-160/153-136/1,5/4	MEC 90 L	3 x 230 - 400 V ~	1,5	2	6,2	3,6	IE3
NKM-G 80-160/163/2,2/4	MEC 100 L	3 x 230 - 400 V ~	2,2	3	10,2	5,9	IE3
NKM-G 80-160/177/3/4	MEC 100 L	3 x 400 V ~	3	4	-	6,8	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNa	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
																							L/A	L/B	H		
NKM-G 80-160/153-136/1,5/4	125	65	-	287,5	342	180	225	299	125	95	320	250	-	M10	-	-	140	-	-	28	100	80	670	420	540	0,152	46
NKM-G 80-160/163/2,2/4	125	65	-	319	342	180	225	299	125	95	320	250	-	M10	-	-	140	-	-	28	100	80	670	420	540	0,152	61
NKM-G 80-160/177/3/4	125	65	-	321	342	180	225	299	125	95	320	250	-	M10	-	-	140	-	-	28	100	80	670	420	540	0,152	58

NKM-G 80-200 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

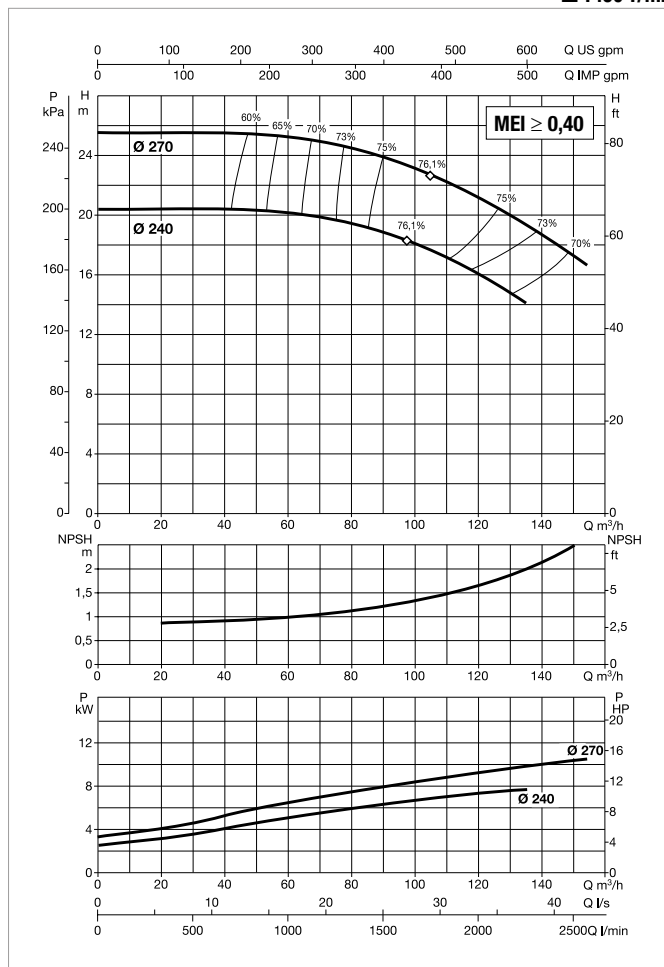
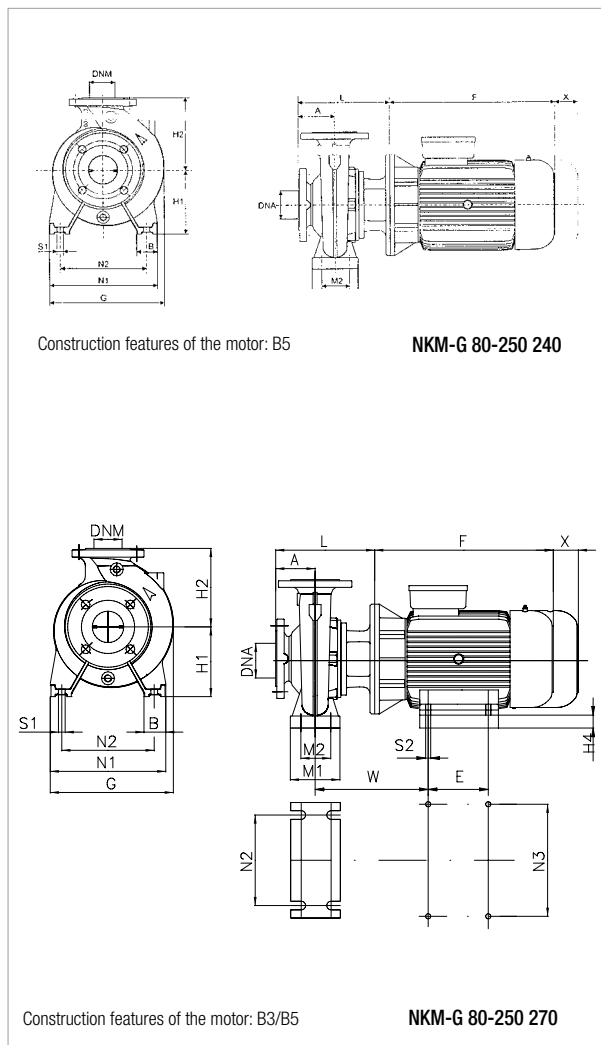
MODEL	MOTOR SIZE	POWER INPUT 50 Hz	ELECTRICAL DATA				MOTOR TYPE
			P2 NOMINAL		In A		
			kW	HP	230 V	400 V	
NKM-G 80-200/200/4/4	MEC 112 M	3 x 400 V ~	4	5,5	-	8,2	IE3
NKM-G 80-200/222/5,5/4	MEC 132 S	3 x 400 V ~	5,5	7,5	-	10,6	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKM-G 80-200/200/4/4	125	65	-	328	365	180	250	368	125	95	345	280	-	M10	-	-	140	-	-	38	100	80	1030	530	640	0,349	84
NKM-G 80-200/222/5,5/4	125	65	-	365	365	180	250	368	125	95	345	280	-	M10	-	-	140	-	-	38	100	80	1030	530	640	0,349	130

NKM-G 80-250 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

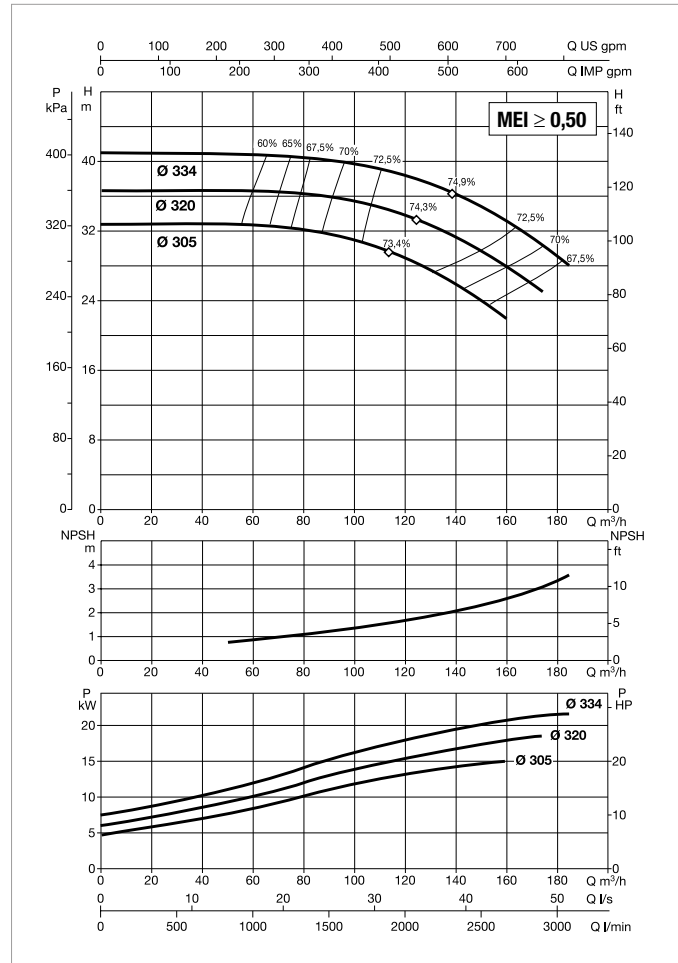
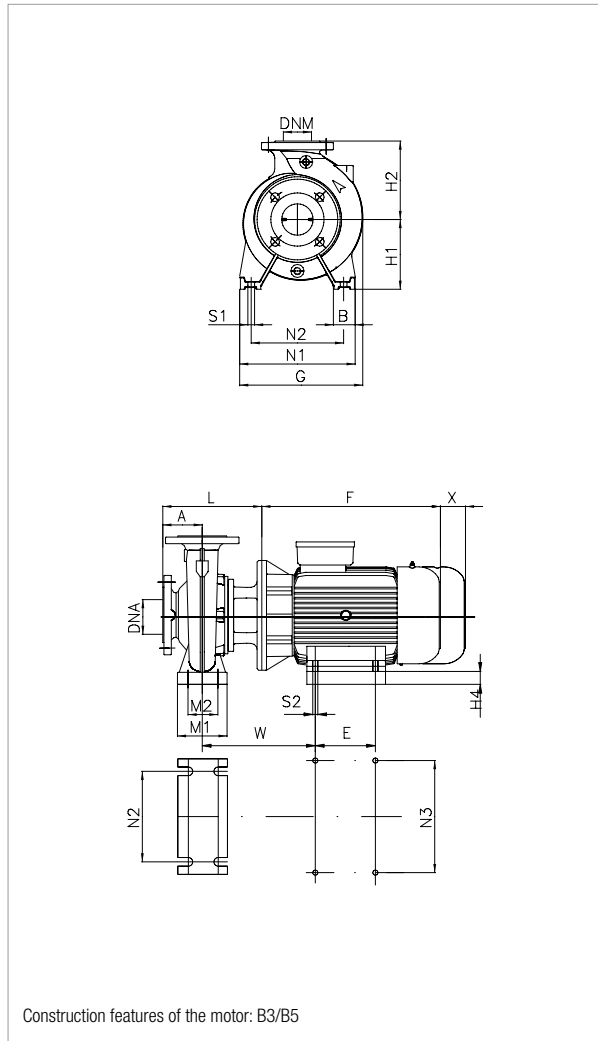
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKM-G 80-250/240/7,5/4	MEC 132 M	3 x 400 V ~	7,5	10	-	14,4	IE3
NKM-G 80-250/270/11/4	MEC 160 M	3 x 400 V ~	11	15	-	22,4	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
																							L/A	L/B	H		
NKM-G 80-250/240/7,5/4	125	80	-	350	410	200	280	368	160	120	400	315	-	M14	-	-	140	-	-	38	100	80	1030	530	640	0,349	153
NKM-G 80-250/270/11/4	125	80	210	498	410	200	280	398	160	120	400	315	254	M14	M12	381	140	-	40	38	100	80	1030	530	640	0,349	205

NKM-G 80-315 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

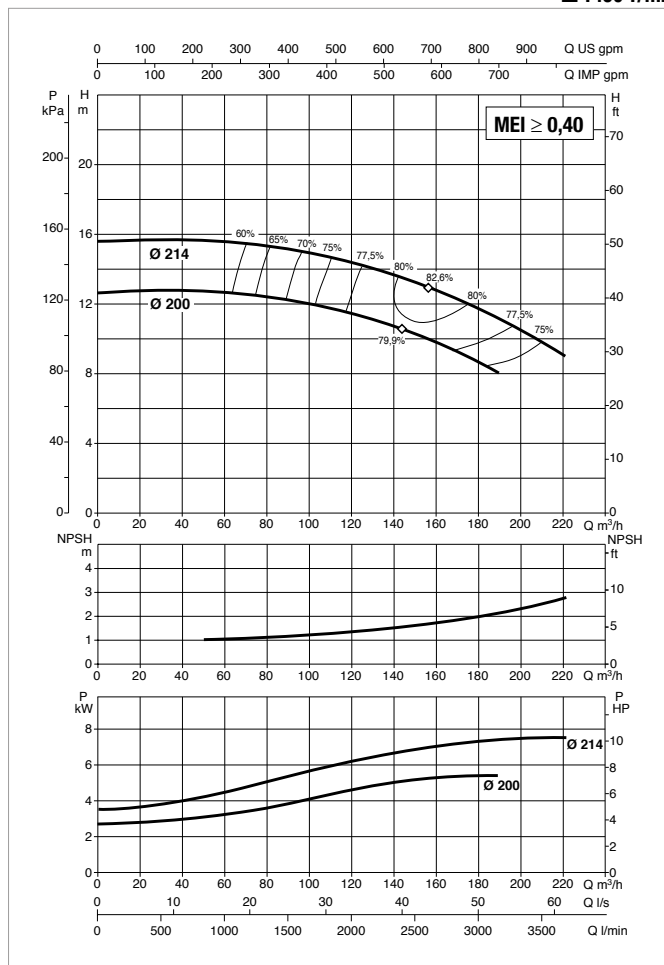
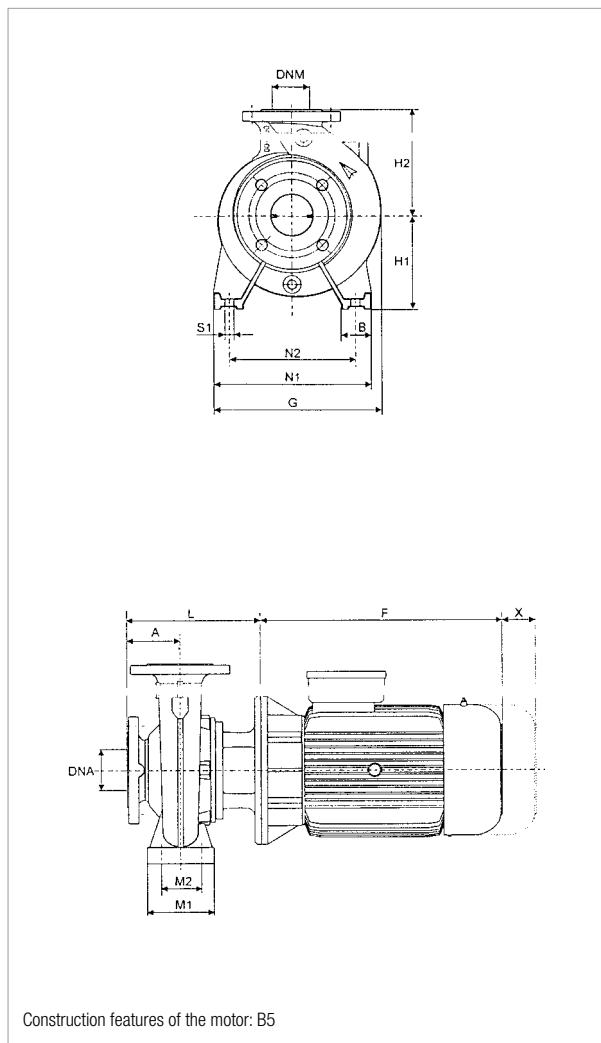
MODEL	MOTOR SIZE	POWER INPUT 50 Hz	ELECTRICAL DATA				MOTOR TYPE
			P2 NOMINAL		In A		
			kW	HP	230 V	400 V	
NKM-G 80-315/305/15/4	MEC 160 L	3 x 400 V ~	15	20	-	30,5	IE3
NKM-G 80-315/320/18,5/4	MEC 180 M	3 x 400 V ~	18,5	25	-	34,3	IE3
NKM-G 80-315/334/22/4	MEC 180 L	3 x 400 V ~	22	30	-	40,2	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKM-G 80-315/305/15/4	125	80	254	542	460	250	315	398	160	120	400	315	254	M14	M12	402	140	-	90	38	100	80	1130	580	740	0,485	263
NKM-G 80-315/320/18,5/4	125	80	241	577	460	250	315	398	160	120	400	315	279	M14	M12	429	140	-	70	38	100	80	1130	580	740	0,485	275
NKM-G 80-315/334/22/4	125	80	279	615	460	250	315	398	160	120	400	315	279	M14	M12	415	140	-	70	38	100	80	1130	580	740	0,485	298

NKM-G 100-200 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

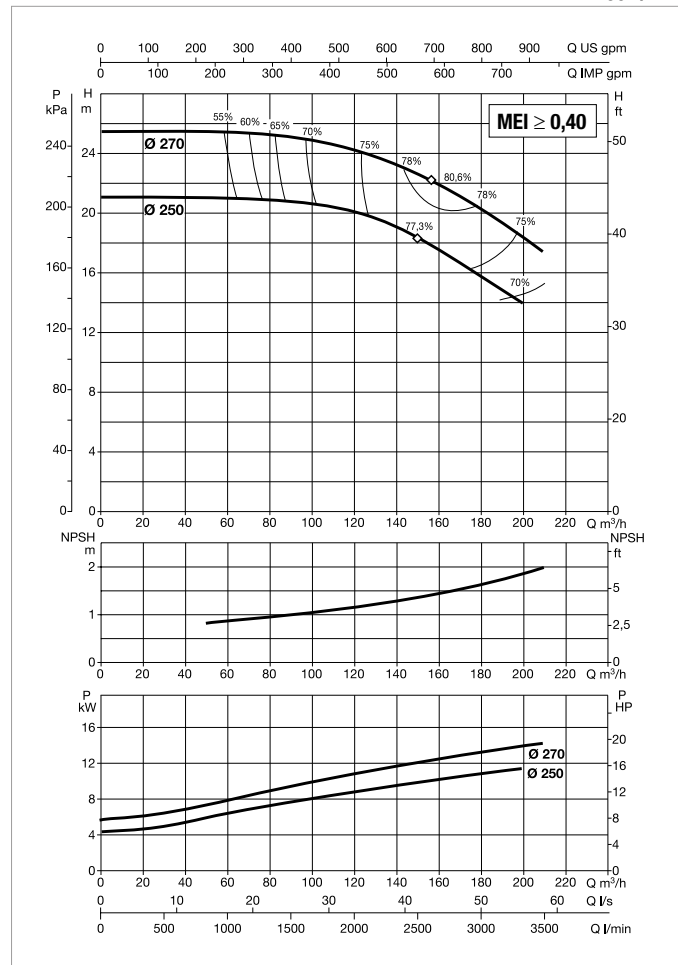
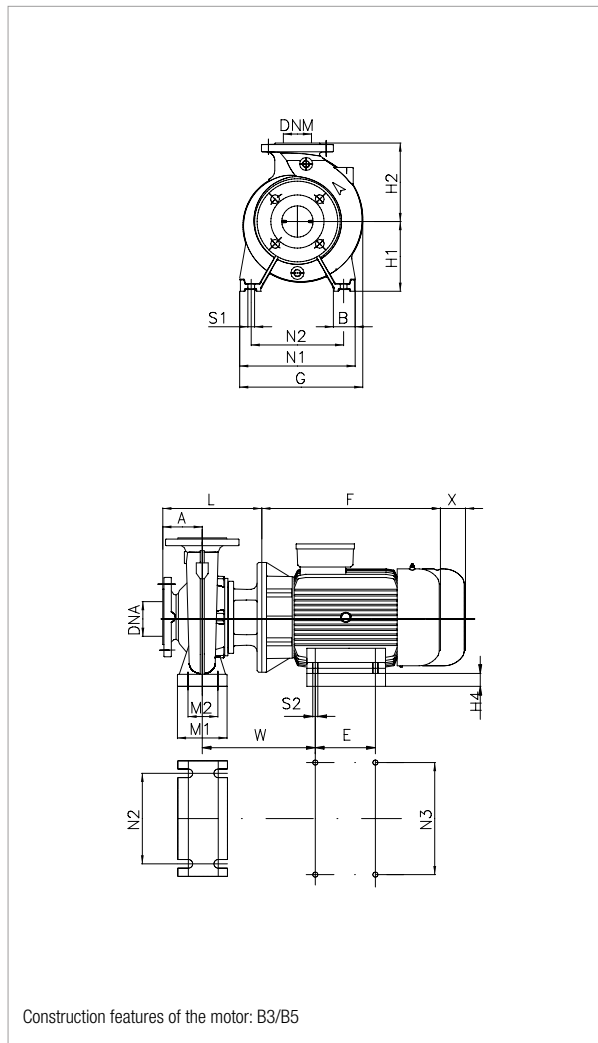
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKM-G 100-200/200/5,5/4	MEC 132 S	3 x 400 V ~	5,5	7,5	-	10,6	IE3
NKM-G 100-200/214/7,5/4	MEC 132 M	3 x 400 V ~	7,5	10	-	14,4	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKM-G 100-200/200/5,5/4	125	80	-	365	392	200	280	368	160	120	360	280	-	M14	-	-	140	-	-	38	125	100	1030	530	640	0,349	142
NKM-G 100-200/214/7,5/4	125	80	-	350	392	200	280	368	160	120	360	280	-	M14	-	-	140	-	-	38	125	100	1030	530	640	0,349	149

NKM-G 100-250 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

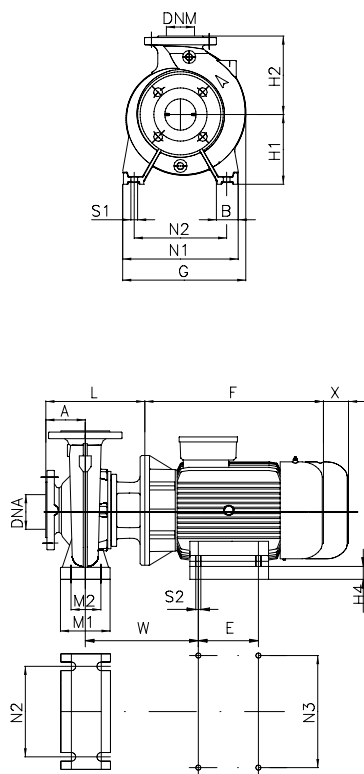
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKM-G 100-250/250/11/4	MEC 160 M	3 x 400 V ~	11	15	-	22,4	IE3
NKM-G 100-250/270/15/4	MEC 160 L	3 x 400 V ~	15	20	-	30,5	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKM-G 100-250/250/11/4	140	80	210	498	424	225	280	413	160	120	400	315	254	M14	M12	381	140	-	65	38	125	100	1030	530	640	0,349	213
NKM-G 100-250/270/15/4	140	80	254	542	424	225	280	413	160	120	400	315	254	M14	M12	381	140	-	65	38	125	100	1030	530	640	0,485	237

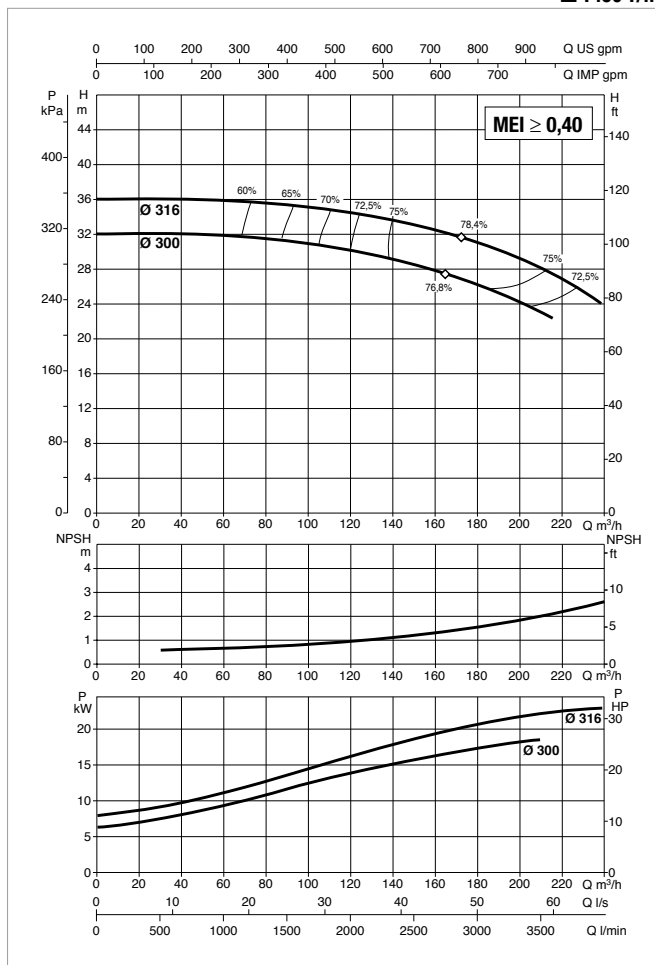
NKM-G 100-315 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 1450 1/min



Construction features of the motor: B3/B5



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

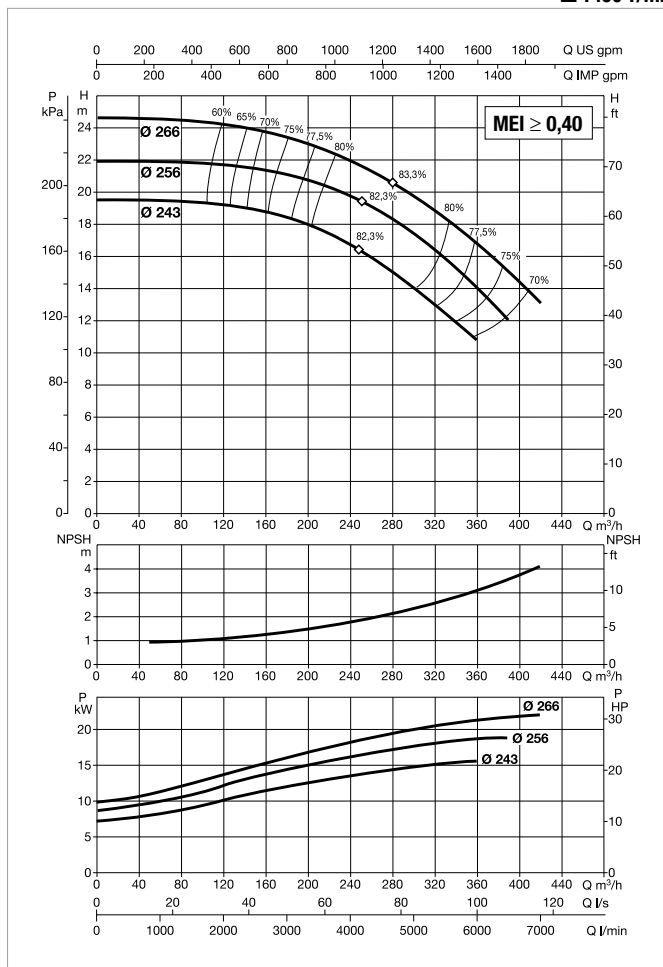
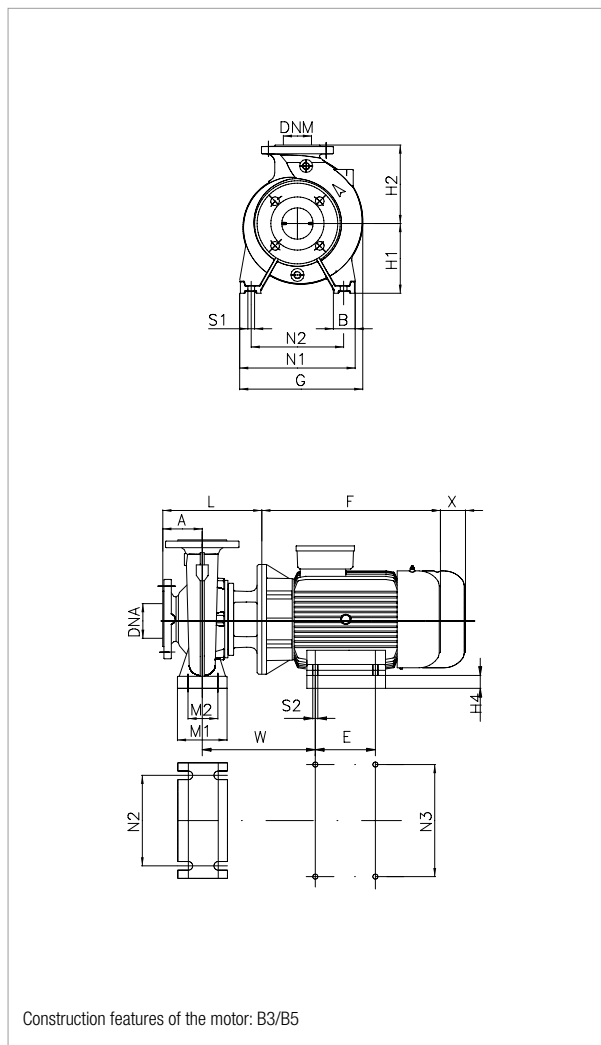
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKM-G 100-315/300/18,5/4	MEC 180 M	3 x 400 V ~	18,5	25	-	34,3	IE3
NKM-G 100-315/316/22/4	MEC 180 L	3 x 400 V ~	22	30	-	40,2	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
																							L/A	L/B	H		
NKM-G 100-315/300/18,5/4	140	80	241	577	478	250	315	413	160	120	400	315	279	M14	M12	529	140	-	70	38	125	100	1030	530	640	0,485	257
NKM-G 100-315/316/22/4	140	80	279	615	478	250	315	413	160	120	400	315	279	M14	M12	415	140	-	70	38	125	100	1030	530	640	0,485	272

NKM-G 125-250 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≈ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

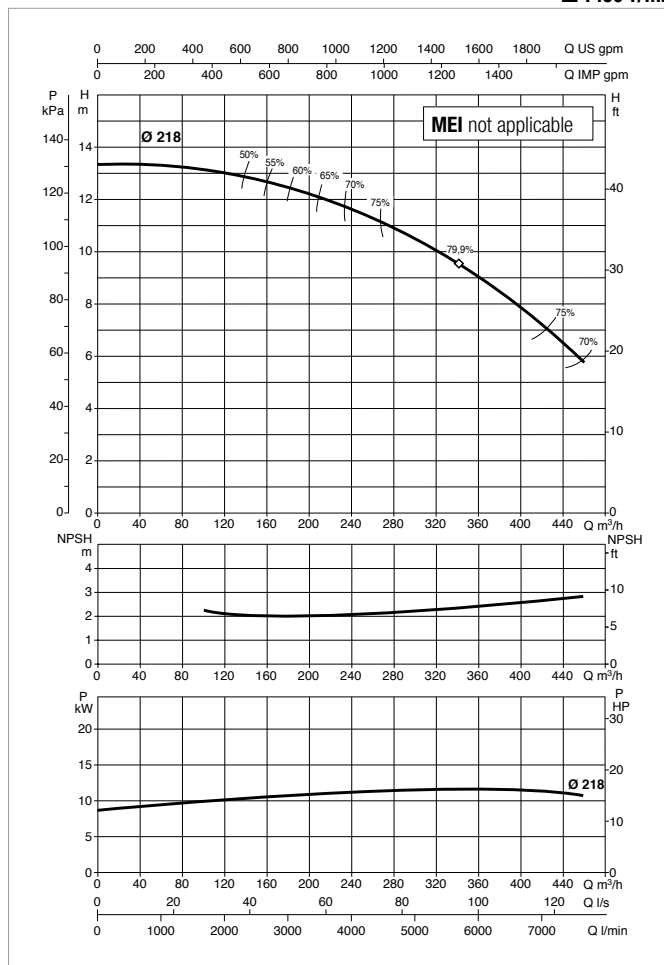
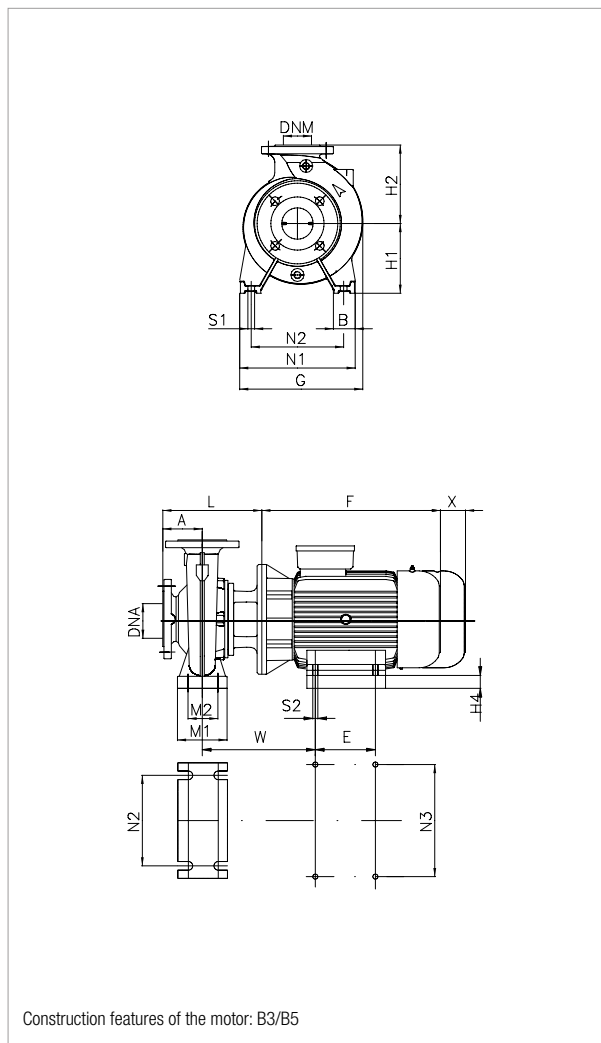
MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKM-G 125-250/243/15/4	MEC 160 L	3 x 400 V ~	15	20	-	30,5	IE3
NKM-G 125-250/256/18,5/4	MEC 180 M	3 x 400 V ~	18,5	25	-	34,3	IE3
NKM-G 125-250/266/22/4	MEC 180 L	3 x 400 V ~	22	30	-	40,2	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
																							L/A	L/B	H		
NKM-G 125-250/243/15/4	140	80	254	542	472	250	355	413	160	120	400	315	254	M14	M12	381	140	-	90	38	150	125	1130	580	740	0,485	274
NKM-G 125-250/256/18,5/4	140	80	241	577	472	250	355	413	160	120	400	315	279	M14	M12	394	140	-	70	38	150	125	1130	580	740	0,485	290
NKM-G 125-250/266/22/4	140	80	279	615	472	250	355	413	160	120	400	315	279	M14	M12	394	140	-	70	38	150	125	1130	580	740	0,485	309

NKM-G 150-200 - 4 POLES - STANDARDISED MONOBLOC PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

≅ 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	ELECTRICAL DATA						
	MOTOR SIZE	POWER INPUT 50 Hz	P2 NOMINAL		In A		MOTOR TYPE
			kW	HP	230 V	400 V	
NKM-G 150-200/218/11/4	MEC 160 M	3 x 400 V ~	11	15	-	22,4	IE3

MODEL	A	B	E	F	G	H1	H2	L	M1	M2	N1	N2	N3	S1	S2	W	X	H3	H4	Ø (mm) Mech. seal	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
	L/A	L/B	H																								
NKM-G 150-200/218/11/4	160	100	210	498	593	280	400	433	200	150	550	450	254	M20	-	381	140	-	120	38	200	150	1130	650	900	0,661	280

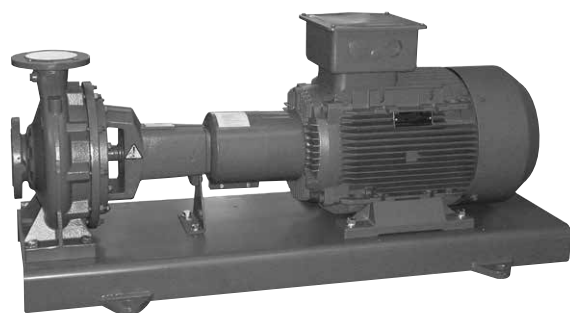
NKM-G - 4 POLES

STANDARDISED MONOBLOC PUMPS

IE3 STANDARD MOTOR ELECTRIC DATA

=1450 1/min

MOTOR TYPE	P2 NOMINAL kW	SPEED rpm	YIELD %	POWER FACTOR COS φ	POWER INPUT 50 Hz	In A			Start-up current Ia/In	Start-up torque Ma/Mn	Maximum torque M/k/Mn	POLES
						230V	400V	690V				
MEC 71	0,25	1400	60,00	0,710	3x230/400	1,56	0,90		2,88	2,15	2,26	4
MEC 71	0,37	1340	67,00	0,780	3x230/400	1,70	0,98		4,75	2,84	2,64	4
MEC 80	0,55	1410	71,00	0,720	3x230/400	2,60	1,50		5,33	2,78	2,89	4
MEC 80Z	0,75	1435	82,50	0,740	3x230/400	3,12	1,80		5,50	2,70	2,80	4
MEC 90S	1,1	1440	84,10	0,750	3x230/400	4,33	2,50		7,10	4,30	4,30	4
MEC 90L	1,5	1430	85,30	0,720	3x230/400	6,24	3,60		6,60	4,30	4,40	4
MEC 100L	2,2	1455	86,70	0,630	3x230/400	10,22	5,90		5,90	3,70	3,90	4
MEC 100L	3	1440	87,70	0,730	3x400 Δ		6,80	3,93	8,10	4,10	4,10	4
MEC 112M	4	1450	88,60	0,800	3x400 Δ		8,20	4,73	8,50	2,70	3,50	4
MEC 132S	5,5	1450	89,60	0,840	3x400 Δ		10,60	6,12	8,70	3,70	4,30	4
MEC 132S	7,5	2930	90,10	0,840	3x400 Δ		14,40	8,31	10,40	4,50	4,60	4
MEC 160M	11	1465	91,40	0,770	3x400 Δ		22,40	12,93	10,10	2,50	3,10	4
MEC 160L	15	1465	92,10	0,780	3x400 Δ		30,50	17,61	8,90	3,20	2,80	4
MEC 180M	18,5	1470	92,60	0,840	3x400 Δ		34,30	19,80	7,50	2,20	2,30	4
MEC 180L	22	1470	93,00	0,850	3x400 Δ		40,20	23,21	7,70	2,20	2,30	4
MEC 200L	30	1475	93,60	0,860	3x400 Δ		53,70	31,00	7,80	2,20	2,30	4



IE3 ≥ 0,75 kW

TECHNICAL DATA

Rotation speed: 1450 - 2900 1/min

Operating range:

from 1 to 470 m³/h with head up to 143 metres

Pumped liquid: clean, free of solids and abrasives, non-viscous, non-aggressive, non-crystallised and chemically neutral, with properties similar to water

Pumped liquid temperature range: from -10°C to +140°C

Maximum ambient temperature: +40 °C

Maximum operating pressure:

16 bar - 1600 kPa (for DN 200 max 10 bar)

Flanging: PN 16 DIN 2533

PN 10 DIN 2532 for DN 200

Installation: normally in the horizontal position

Special executions on requests: pumps for liquids other than water

Packing (also externally powered)

Other voltages and/or frequencies

APPLICATIONS

Standardised centrifugal single-stage pumps, designed for a wide range of applications, such as:

Water supply.

Hot water circulation for the heating system.

Circulation of cold water for air conditioning and refrigeration systems.

Transfer of liquids in agricultural, horticultural, and industrial environments.

Installation of pumping assemblies.

They can be coupled, using an elastic joint (standard or spacer), to a 2-pole or 4-pole electric motor, and installed on a formed metal sheet base in accordance with UNI EN 23661.

CONSTRUCTION FEATURES OF THE PUMP

Cast iron single stage spiral body complying with DIN-EN 733 (formerly DIN 24255), seal holder cover and cast iron motor support, flanges complying with DIN 2533 (DIN 2532 for DN 200). Cast iron impeller, closed and dynamically balanced, with compensation of the axial thrust through balancing holes, operation on interchangeable wear rings (on request). Stainless steel pump shaft supported by two permanently lubricated oversized ball bearings, housed inside an appropriate chamber in the support.

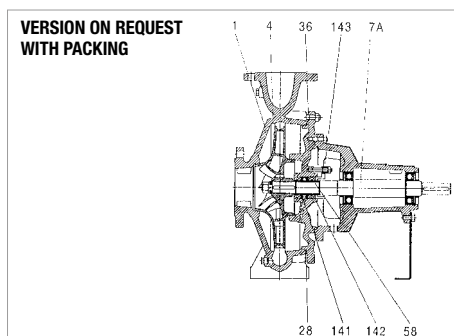
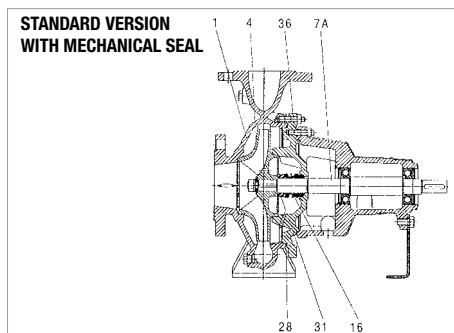
Standard seal device: standardised mechanical seal according to DIN 24960 in carbon/silicon carbide with EPDM OR rings.

Packing with lubricating hydraulic ring and stuffing box in two easily removable parts available on request.

MATERIALS

No.	PARTS	MATERIALS
1	PUMP BODY	CAST IRON 250 UNI ISO 185
4	IMPELLER	CAST IRON 200 UNI ISO 185
7A	PUMP SHAFT	AISI 420 STAINLESS STEEL UNI 6900/71
28	OR RING	VITON
36	SEAL HOLDING DISC	CAST IRON 250 UNI ISO 185
16	MECHANICAL SEAL	CARBON/SILICON CARBIDE
31	SEAL SPACER	AISI 304 STAINLESS STEEL UNI 6900/71

No.	PARTS	MATERIALS
58	SEAL BUSHING	AISI 420 STAINLESS STEEL UNI 6900/71
141	HYDRAULIC RING	AISI 304 STAINLESS STEEL UNI 6900/71
142	STUFFING BOX	RAMIE IMPREGNATED PTFE

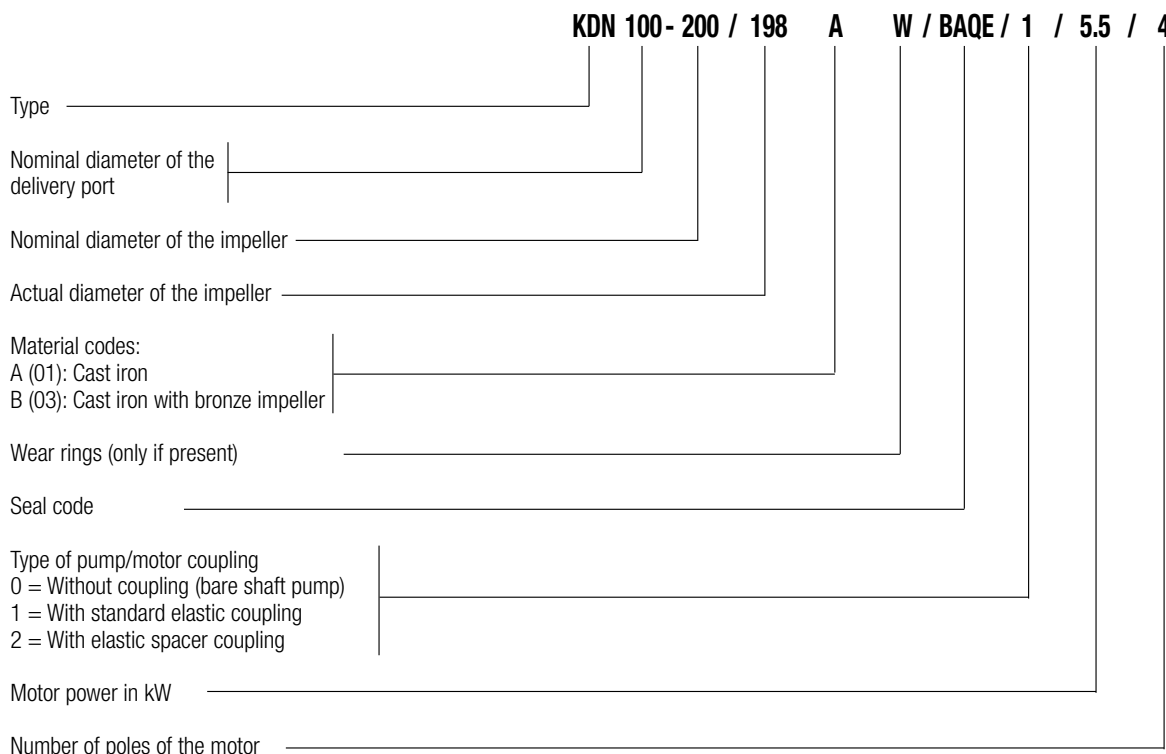


DENOMINATION INDEX

In the description of the bare shaft pump no mention is made of the coupling or motor data.

In the description of the pumps mounted on a base without a motor, the motor data are not mentioned.

The example given describes an NK 100-200 type pump with a cast iron 198 Ø impeller, with BAQE type mechanics, standard coupling and 4-poles 5,5 kW motor running on 380-415 V 50 Hz.



PUMP MATERIAL CODES

Component	VERSION	
	A (01) cast iron	B (03) cast iron with bronze impeller
Pump body	GG25	GG25
SEAL HOLDER DISC	GG25	GG25
Stuffing box	OT Cu 62 Si1	OT Cu 62 Si1
Impeller	GG25	GCuSn5Zn5Pb5 UNI 7013/8a-72
Wear rings*	GG20	GG20
Pump shaft	AISI 420 UNI 6900/71	
Shaft sleeve*	AISI 420 UNI 6900/71	

PACKING CODES

Position	Code	Description of the packing
1	S	Stuffing box type
Position	Code	Cooling
2	N	Stuffing box not cooled
	K	Stuffing box cooled
Position	Code	Sealing liquid
3	E	With internal liquid
	F	With external liquid
	O	Without hydraulic ring

* On request

** Only for packing or balanced mechanical seal.

DESCRIPTION OF THE MECHANICAL SEAL

Position	Code	Description of the seal
1	A	O-ring seal with fixed guide
	B	Rubber bellows seal
	C	O-ring seal with spring guide
	D	O-ring seal balanced
	M	Rubber bellows seal
	X	Metal bellows seal
Position	Code	Materials
2 & 3	A	Impregnated carbon/metal
	B	Impregnated carbon/resin
	C	Other carbon types
	S	Chromium steel
	U	Tungsten carbide
	Q	Silicon carbide
	V	Aluminium oxide (ceramic)
	X	Other ceramic types
Position	Code	Materials
4	P	Nitrile rubber (NBR)
	S	Silicon rubber
	T	Teflon (PTFE)
	E	EPDM
	V	Viton
	M	PTFE coated O-ring
Position	Code	Materials
5	v	Reinforced

PRODUCT CODE DESCRIPTION

NOMINAL DIAMETER OF THE IMPELLER	Cod.
125	1
160	2
200	3
250	4
315	5
125.1	K
160.1	L
200.1	M

PUMP TYPE	Cod.
KDN 32	1
KDN 40	2
KDN 50	3
KDN 65	4
KDN 80	5
KDN 100	6
KDN 125	7
KDN 150	8

IDENTIFICATION	Cod.
DAB PUMPS S.p.A.	D

	Cod.
DAB PUMPS S.p.A.	1

Cod.	PUMP/IMPELLER MATERIALS
1	A (01) = cast iron/cast iron
2	B (03) = cast iron/bronze
3	
4	
5	A (01) + Wr*
6	B (03) + Wr*
7	
8	

Cod.	SEAL DEVICE
1	BAQE
2	BAQE-RMG12
5	BQQV*
7	BAQV*
A	SNE*
B	SNO*
C	SNF*
G	BQQE*

* On request

Cod.	JOINT
0	Without joint
1	With standard elastic coupling
2	With elastic spacer coupling

* Bare shaft pump

Cod.	P2 NOMINAL
0	bare shaft
1	0.37
2	0.55
3	0.75
4	1.1
5	1.5
6	2.2
7	3
8	4
9	5.5
A	7.5
B	11
C	15
D	18.5
E	22
F	30
G	37
H	45
K	55
L	75
M	90
N	110
P	132

Cod.	VOLTAGE	PO-LES
0	Without motor	
1	3 x 220-240/380-415 V 50 Hz(<0,75 kW) 3 x 220-277/380-480 V 60 Hz	2
2	3 x 380-480 V 60 Hz	2
3	3 x 220-240/380-415 V 50 Hz(<0,75 kW) 3 x 220-277/380-480 V 60 Hz	4
4	3 x 380-480 V 60 Hz	4
A	3 x 220-240/380-415 V 50 Hz - IE2	2
B	3 x 380-415 V 50 Hz - IE2	2
C	3 x 220-240/380-415 V 50 Hz - IE2	4
D	3 x 380-415 V 50 Hz - IE2	4
U	3 x 220-240/380-415 V 50 Hz - IE3	2
V	3 x 380-415 V 50 Hz - IE3	2
W	3 x 220-240/380-415 V 50 Hz - IE3	4
X	3 x 380-415 V 50 Hz - IE3	4

Product code

1	D	1	1	1	1	1	1	1
---	---	---	---	---	---	---	---	---

← Bare shaft pump → 0 0 0
 ← Pump with base without motor → 0
 ← Complete electric pump with base →

GENERAL DATA

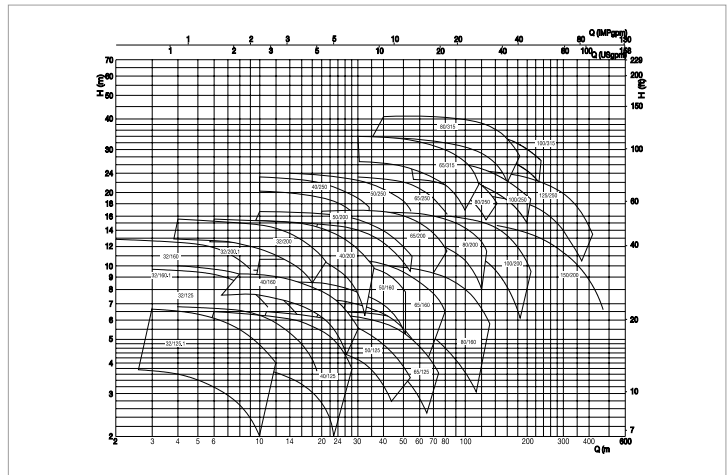
Supplied with closed asynchronous type motor, external ventilation cooling, 2 or 4 poles.

Rotor running on ball bearings, largely oversized to ensure low noise and durability.

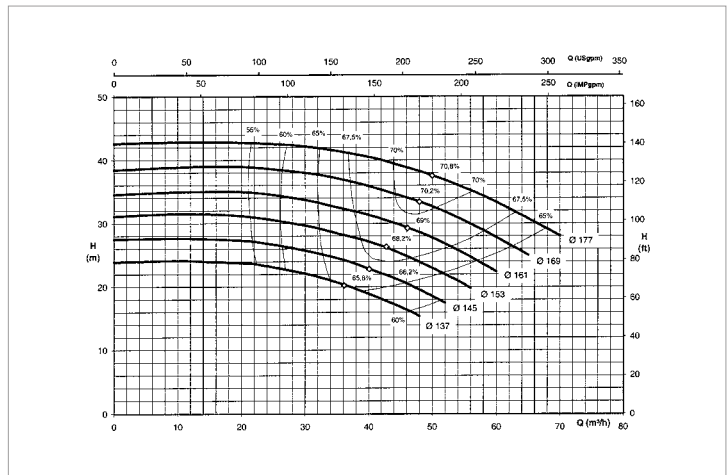
Electrical protection: in compliance with the EEC 89/336 ELECTROMAGNETIC COMPATIBILITY DIRECTIVE and subsequent amendments, the EEC 73/23 LOW VOLTAGE DIRECTIVE and subsequent amendments, as well as CEI 2-3 standards.

INSTRUCTIONS FOR THE IDENTIFICATION OF THE PUMP AND MOTOR REQUIRED.

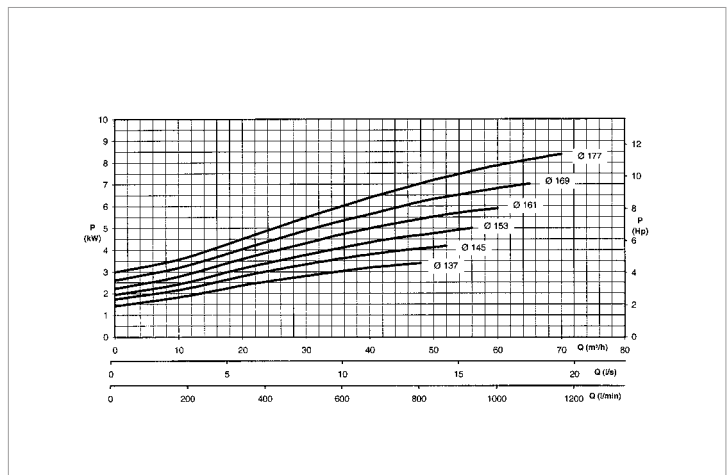
1. On the general chart supplied, find the family pump that indicatively offers the required flow rate and head characteristics.



2. Look for the most appropriate characteristic on the characteristic curves for each family.



3. On the power chart, identify the power required by the pump in order to operate at the required level.



4. Due to the possibility of variations in the pumped liquid flow rate, which can cause an oscillation of the point of operation, a higher power absorption may occur. When selecting the motor, allow for the following safety margins:

Safety margin according to ISO 5199

REQUIRED PUMP SHAFT POWER (kW)	POWER OF THE MOTOR TO USE P2 (kW)
322	355
286	315
227	250
181	200
145	160
120	132
100	110
81	90
68	75
49	55
40	45
32.5	37
26	30
19	22
15.9	18.5
12.8	15
9.1	11
6.1	7.5
4.3	5.5
3.2	4
2.3	3
1.7	2.2
1.1	1.5
0.81	1.1
0.55	0.75
0.40	0.55
0.27	0.37
0.18	0.25

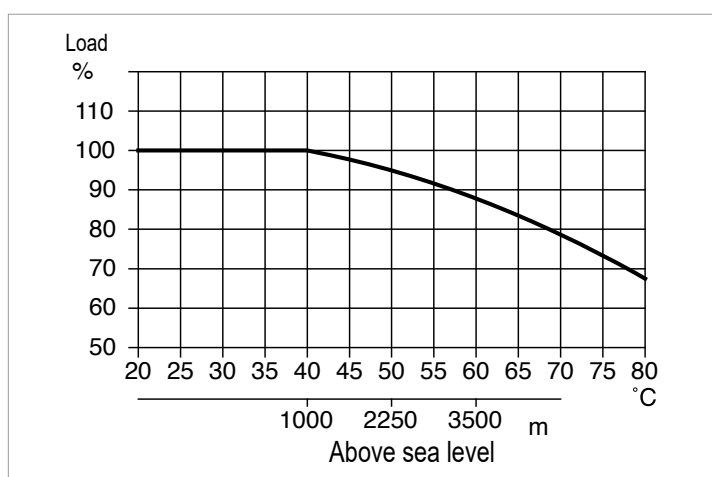
If the pump is to be used with liquids with fairly high specific weight and viscosity values, apply any required corrections to the power of the motor to be installed (check the suitability of the construction materials in contact with the liquid).

5. With the name of the pump and the power of the motor, look through the following technical data to find the name of the most suitable base (complete with motor, spacer coupling, and coupling cover).
6. The pump and base required will be delivered already assembled and aligned, although an alignment check is always required after installation (see INSTRUCTION MANUAL).

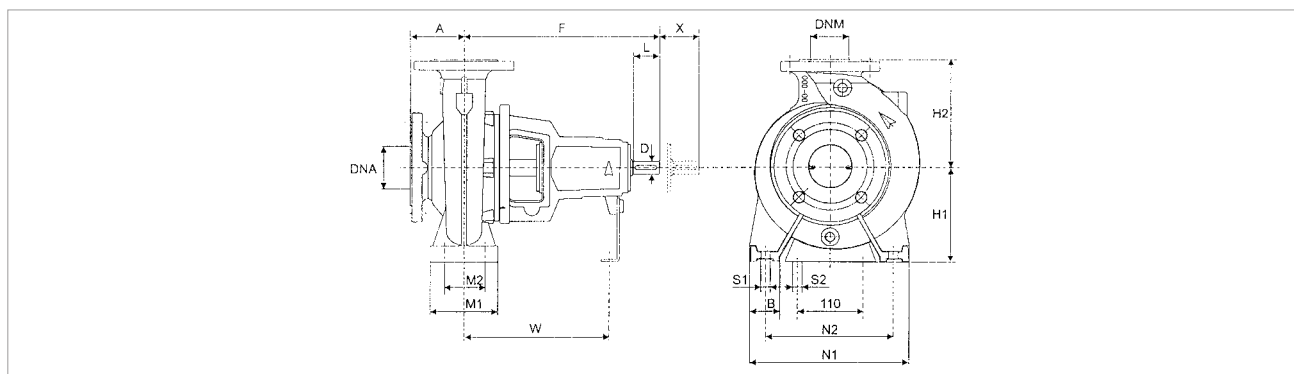
Ambient temperature

From -30 °C to +40 °C

Due to the low density, and therefore low cooling effect of the air, operation at an ambient temperature above 40 °C, or at an altitude exceeding 1000 m above sea level, requires a reduction of the rated motor load in accordance with this table.



DIMENSIONS OF BARE SHAFT PUMPS



MODEL	η MAX 1450 min ⁻¹		η MAX 2900 min ⁻¹		FLANGE DIMENSIONS		PUMP DIMENSIONS				BASE DIMENSIONS					BOLT HOLES		SHAFT END		X	WEIGHT kg	
	Q m ³ /h	H m	Q m ³ /h	H m	DNA	DNM	A	F	H1	H2	B	M1	M2	N1	N2	W	S1	S2	D			L
KDN 32-125.1	10.5	5.5	20.9	22	50	32	80	360	112	140	50	100	70	190	140	260	M12	M12	24	50	100	37
KDN 32-125	13.6	5.8	28	22.8	50	32	80	360	112	140	50	100	70	190	140	260	M12	M12	24	50	100	36
KDN 32-160.1	8.7	8.3	17.5	33	50	32	80	360	132	160	50	100	70	240	190	260	M12	M12	24	50	100	38
KDN 32-160	15.9	8.6	31	34	50	32	80	360	132	160	50	100	70	240	190	260	M12	M12	24	50	100	38
KDN 32-200.1	8.5	11.4	18	45	50	32	80	360	160	180	50	100	70	240	190	260	M12	M12	24	50	100	46
KDN 32-200	17.7	13.2	35.5	52.5	50	32	80	360	160	180	50	100	70	240	190	260	M12	M12	24	50	100	46
KDN 40-125	21.8	5.6	46	21.5	65	40	80	360	112	140	50	100	70	210	160	260	M12	M12	24	50	100	39
KDN 40-160	25.8	9.2	50	37.2	65	40	80	360	132	160	50	100	70	240	190	260	M12	M12	24	50	100	41
KDN 40-200	29	12.6	57	51	65	40	100	360	160	180	50	100	70	265	212	260	M12	M12	24	50	100	49
KDN 40-250	31	19.1	62	77	65	40	100	360	180	225	65	125	95	320	250	260	M12	M12	24	50	100	57
KDN 50-125	41	5.4	83	21.5	65	50	100	360	132	160	50	100	70	240	190	260	M12	M12	24	50	100	42
KDN 50-160	43.3	9.3	87.5	37	65	50	100	360	160	180	50	100	70	265	212	260	M12	M12	24	50	100	44
KDN 50-200	41	14	81	56	65	50	100	360	160	200	50	100	70	265	212	260	M12	M12	24	50	100	51
KDN 50-250	49	19.1	100	76	65	50	100	360	180	225	65	125	95	320	250	260	M12	M12	24	50	100	59
KDN 65-125	57	5.2	114	21	80	65	100	360	160	180	65	125	95	280	212	260	M12	M12	24	50	100	46
KDN 65-160	61	8.6	121	34.5	80	65	100	360	160	200	65	125	95	280	212	260	M12	M12	24	50	100	47
KDN 65-200	62	14.8	123	59	80	65	100	360	180	225	65	125	95	320	250	260	M12	M12	24	50	140	66
KDN 65-250	65.4	20	129	81	80	65	100	470	200	250	80	160	120	360	280	340	M16	M12	32	80	140	93
KDN 65-315	84	31.5	-	-	80	65	125	470	225	280	80	160	120	400	315	340	M16	M12	32	80	140	112
KDN 80-160	101	8.1	195	33.5	100	80	125	360	180	225	65	125	95	320	250	260	M12	M12	24	50	140	55
KDN 80-200	101	14.4	200	57.5	100	80	125	470	180	250	65	125	95	345	280	340	M12	M12	32	80	140	84
KDN 80-250	103	23	215	88	100	80	125	470	200	280	80	160	120	400	315	340	M16	M12	32	80	140	104
KDN 80-315	136	35	-	-	100	80	125	470	250	315	80	160	120	400	315	340	M16	M12	32	80	140	122
KDN 100-200	163	13.4	315	53	125	100	125	470	200	280	80	160	120	360	280	340	M16	M12	32	80	140	96
KDN 100-250	159	21.8	313	87	125	100	140	470	225	280	80	160	120	400	315	340	M16	M12	32	80	140	111
KDN 100-315	187	34.1	-	-	125	100	140	470	250	315	80	160	120	400	315	340	M16	M12	32	80	140	126
KDN 125-250	289	20.5	-	-	150	125	140	470	250	355	80	160	120	400	315	340	M16	M12	32	80	140	135
KDN 150-200	378	10	-	-	200	150	160	470	280	400	100	200	150	550	450	340	M20	M12	32	80	140	178

FLANGE DIMENSIONS (mm)

	Nominal diameter (DN)								
	DIN 2533 PN 16								DIN 2533 PN 10
	32	40	50	65	80	100	125	150	200
D(32	40	50	65	80	100	125	150	200
D)	100	110	125	145	160	180	210	240	295
D[140	150	165	185	200	220	250	285	340
S	18	18	18	18	18	18	18	22	22
NO. OF HOLES	4	4	4	4	8	8	8	8	8

KDN - 2 POLE RANGE

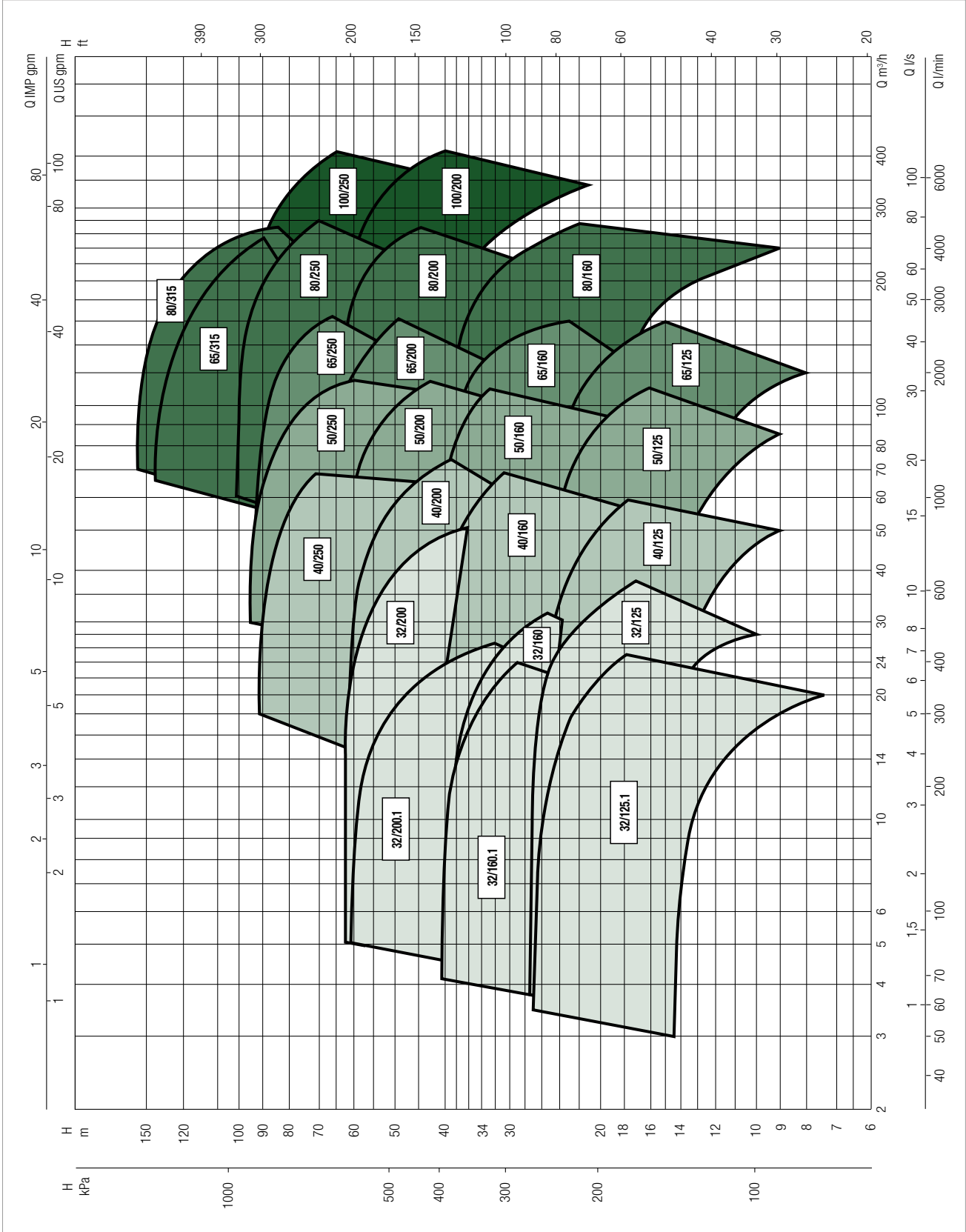
STANDARDISED PUMPS

PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

GRAPHIC SELECTION TABLE

= 2900 1/min



KDN - 2 POLES

STANDARDISED PUMPS

SELECTION TABLE - KDN 32

MODEL	Q=m ³ /h	0	6	12	18	24	30	36	42	48
	Q=l/min	0	100	200	300	400	500	600	700	800
KDN 32-125.1/105	H (m)	13,8	13,6	12,3	9,7					
KDN 32-125.1/110		15,5	15,2	13,9	11,5					
KDN 32-125.1/115		17,1	16,8	15,5	13,2					
KDN 32-125.1/120		18,8	18,5	17,3	15,1					
KDN 32-125.1/125		20,5	20,3	19,1	17					
KDN 32-125.1/130		22,3	22,2	21,3	19					
KDN 32-125.1/135		24,4	24,1	23,3	21,1	17,8				
KDN 32-125.1/140		26,5	26,4	25,6	23,4	20,1				
KDN 32-125/115		17,3		16,5	15,1	12,9				
KDN 32-125/120		19		18,2	17	14,9	11,1			
KDN 32-125/125		20,9		20,1	18,9	16,9	13,5			
KDN 32-125/130		22,9		22	21	19,1	16,2			
KDN 32-125/135		24,9		24	22,1	21,5	18,5	14,7		
KDN 32-125/142		27,8		27	26,1	24,5	21,7	18		
KDN 32-160.1/137		21,5	21,2	19,3						
KDN 32-160.1/145		24,7	24,5	22,3	16,5					
KDN 32-160.1/153		28,3	28	26	20,5					
KDN 32-160.1/161		32	31,8	30	25					
KDN 32-160.1/169		36	35,7	34,4	29,5					
KDN 32-160.1/177		39,5	39,3	38,2	34,5	26				
KDN 32-160/137		23,7		22,6	20,7	17,6				
KDN 32-160/145		27		25,8	23,9	21,2	16,9			
KDN 32-160/153		30,4		29,5	27,7	25,8	21,2			
KDN 32-160/161		34		33	31,7	29,1	25,5			
KDN 32-160/169		38		37,3	36	33,6	35,7	26,5		
KDN 32-160/177		41,8		41,5	40,5	38,4	35,3	31,4		
KDN 32-200.1/170		34,3	34,2	31,9	23,5					
KDN 32-200.1/180		39,4	39,2	36,7	30					
KDN 32-200.1/190		45,3	44,7	41,5	35,5					
KDN 32-200.1/200		51,5	51	47,3	41	35				
KDN 32-200.1/207		55,3	55	51,8	46,4	37				
KDN 32-200/170		34		33	31	27	21			
KDN 32-200/180	39		38,5	36,5	32,5	28				
KDN 32-200/190	45		43,5	42	39	34	28,5			
KDN 32-200/200	51		49	48	45	40,5	35			
KDN 32-200/210	57		56	55	52,5	48,5	43	36		
KDN 32-200/219	63		62	61	59	56,5	52,5	46,5	39,5	

CENTRIFUGAL PUMPS

SELECTION TABLE - KDN 40

MODEL	Q=m ³ /h	0	6	12	18	24	30	36	42	48	54	60	66	72
	Q=l/min	0	100	200	300	400	500	600	700	800	900	1000	1100	1200
KDN 40-125/115	H (m)	16,8		13,3	15,6	15	14,3	13,2	12,6	9,8				
KDN 40-125/120		18,5		18	17,5	17	16	15	13,5	11,8				
KDN 40-125/125		20,4		20	19,5	19	18	16,7	15,3	13,5				
KDN 40-125/130		22		21,8	21,5	21	20	19	17,5	15,7	14			
KDN 40-125/135		24,1		24	23,9	23,4	22,5	21,5	20	18,3	16,4			
KDN 40-125/142		26,8		26,6	26,4	26	25,3	24,4	23	21,4	19,4	17		
KDN 40-160/137		23,9			23,8	23	22	20,5	18	15				
KDN 40-160/145		27,5			27,4	27	25,7	24,2	22,1	19,5				
KDN 40-160/153		31,1			31	30,5	29,5	28	26,5	24	21			
KDN 40-160/161		34,5			34,5	34,4	33,7	32,3	30,5	28,5	25,8	22,5		
KDN 40-160/169		38,4			38,4	38,2	38	37	35	33,5	31	28		
KDN 40-160/177		42,6			42,5	42,4	42	41,5	40	38,5	35	33	30	
KDN 40-200/170		33,6			33	32,6	32	30	26,5	22,5				
KDN 40-200/180		38,8			38,5	38	37	35	32,5	29	25			
KDN 40-200/190		43,4			43,1	43	42,7	41	38	35	31,5	27		
KDN 40-200/200		48,7			48,4	48,2	47,5	46,5	44	41,5	38,5	34,5		
KDN 40-200/210		54,3			54,1	54	53,6	53	51	48,5	46	42,5	38	
KDN 40-200/219		60			59,8	59,7	59,4	59	57	55	52,5	49,5	46	40
KDN 40-250/220		63,1			62,8	62,5	61	59	57	55	52	48		
KDN 40-250/230		69,5			69,3	68,5	67,8	66	63,5	61	58	55	51	
KDN 40-250/240		76,3			76	75,8	75	73	70,5	68	65	62	58,5	
KDN 40-250/250		82,8			82,5	82	81,8	80	78	75,5	72,5	69	66	
KDN 40-250/260		91			90,5	90	89,5	88,5	86,5	84	81	78	74	

KDN - 2 POLES

STANDARDISED PUMPS

SELECTION TABLE - KDN 50

MODEL	Q=m ³ /h	0	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	102	114	
	Q=l/min	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1700	1900	
KDN 50-125/115	H (m)	17,1					15,9	15,5	15	14,3	13,6	13	12,2	11,5	10,4	9				
KDN 50-125/120		18,2						17,5	17	16,5	16	15,3	14,7	14	13,2	12	11,2	10		
KDN 50-125/125		19,8						19,4	19	18,5	17,9	17,4	16,6	16	15,1	14	13	11,8		
KDN 50-125/130		21,5						21,1	20,8	20,5	19,8	19,2	18,5	17,8	17	16,5	15,2	14		
KDN 50-125/135		23,2						23	22,6	22,3	21,8	21,2	20,6	19,9	19,3	18,4	17,5	16,3	13,7	
KDN 50-125/139		24,7						24,5	24,3	24	23,5	23	22,4	21,6	20,8	20	19,2	18	15,5	
KDN 50-125/144		25,9						26,5	26,4	26,1	25,6	25,1	24,5	24	23,2	22,3	21,5	20,5	17,8	15
KDN 50-160/137		24,2						23,8	23,7	23,5	22,5	22	21	20,3	19	18	16,8	15		
KDN 50-160/145		27,2						27	26,9	26,6	26,4	25,5	25	23,8	23	21,5	20,5	19		
KDN 50-160/153		30,3						30,3	30,2	30	29,9	29,5	28,5	27,7	26,5	25,5	24,5	23		
KDN 50-160/161		33,8						33,7	33,7	33,6	33,6	33,3	32,5	31,8	31	29,8	28,5	27,5		
KDN 50-160/169		37,7						37,7	37,5	37,5	37,4	37	36,2	35,7	35,5	34,2	33	31,5	29	
KDN 50-160/177		41,6						41,5	41,5	41,3	41,2	41	40,6	40,5	39,5	38,8	38	36,7	33,5	
KDN 50-200/170		37,9						37	36,8	36,4	35	34	32	30	27	25				
KDN 50-200/180		42,5						42	41,7	41,4	40,5	39,5	38	36	34	32	29			
KDN 50-200/190		47,2						46,8	46,6	46	45,7	44,5	43,5	42	40	38	35,5	33		
KDN 50-200/200		52,4						52,2	52	18	51,5	50,5	49	47,5	46	44,5	42	40		
KDN 50-200/210		58,4						58,4	58,2	58	57,5	56,5	55,5	54	52,5	51	49	46,5	41,5	
KDN 50-200/219		64						64	64	64	63,5	62,5	61,5	60	58,5	57	55	53	48,5	
KDN 50-250/220		63,7						63,3	63,1	63	62	61	59	57,5	55	53	50	46,5	36	
KDN 50-250/230		69,6						69,3	69	68,8	68,5	68	66	64	62	60	57	54	45	
KDN 50-250/240		76						75,8	75,5	75,3	75	74,5	73	71,5	69	67	65	62	55	
KDN 50-250/250		83,2						83	82,9	82,8	83,5	82	80,5	78,5	77	75	72,5	70	64	
KDN 50-250/263		92,1						92	91,8	91,6	91,5	91,3	89,9	88,5	86,5	84,5	82,5	80	75	61

KDN - 2 POLES

STANDARDISED PUMPS

SELECTION TABLE - KDN 65

MODEL	Q=m ³ /h	0	48	54	60	66	72	78	84	90	102	114	120	150	180	210	240
	Q=l/min	0	800	900	1000	1100	1200	1300	1400	1500	1700	1900	2000	2500	3000	3500	4000
KDN 65-125/120/110	H (m)	16	14,4	14	13,6	13,1	12,8	12,2	11,9	11,4	10,2	8,7	8				
KDN 65-125/120		17,8	16	15,8	15,3	17,9	14,4	13,9	13,4	13	11,5	10,3	9,4				
KDN 65-125/125		19,4	17,8	17,5	17,1	16,8	16,4	16	15,4	15	13,5	12,2	11,4				
KDN 65-125/130		21	19,6	19,5	19,1	18,9	18,5	18	17,5	17	15,7	14,2	13,2				
KDN 65-125/135		22,6	21,8	21,5	21,3	21	20,5	20,1	19,6	19,2	18	16,5	15,6				
KDN 65-125/140		24	23,6	23,6	23,4	23	22,8	22,3	22	21,4	20,3	18,9	18	13,8			
KDN 65-125/144		25,6	25,5	25,4	25,2	25	24,6	24,3	24	23,4	22,5	21,1	20,2	16			
KDN 65-160/137		23,1	22,4	22	21,7	21,3	20,5	19,7	19	18	16						
KDN 65-160/145		26,2	25,7	25,5	25	24,6	24	23,5	22,7	22	20	17,8	16,5				
KDN 65-160/153		29,1	28,8	28,5	28,6	28,5	28	27,5	26,6	26	24	22	21				
KDN 65-160/161		32,6	32,5	32,4	32,3	32	31,7	31,3	30,5	30	28,5	26,5	25,5				
KDN 65-160/169		36,4	36,3	36,2	36,1	36	35,7	35,3	34,7	34	32,7	31	30				
KDN 65-160/177		40,1	39,9	39,8	39,7	40	39,8	39,5	39	38,5	37,2	35,5	34,7	28,5			
KDN 65-200/170		37,2	36,8	36,7	36,6	36,5	36	35	34	32,5	30	27	25				
KDN 65-200/180		41,7	41,4	41,3	41,2	41,1	41	40,5	40	39	36,5	34	32				
KDN 65-200/190		48,3	48,2	48,1	48	47,9	47,5	47	41	45	43	40,5	39				
KDN 65-200/200		53,2	53,1	52,9	52,8	52,7	52,5	52,3	52	51,8	50	48	46,5				
KDN 65-200/210		59,2	59,1	59	58,9	58,8	58,7	58,5	58,2	58	56,5	54,5	53,5				
KDN 65-200/219		64,9	64,9	64,8	64,5	64,3	64,1	64	63,8	62,5	62,4	61	60	52,5			
KDN 65-250/220		63,2	62,8	62,5	62	61	60	59,5	58	57	54	50,5	48				
KDN 65-250/230		69,5	69,5	69	68,5	68	67	66	65	64	63	58,5	56,5				
KDN 65-250/240		76	75,7	75,5	75	75	74	73	72	71	69	66	64				
KDN 65-250/250		83	82,3	82,3	82,2	82	81,5	81	80	79	76,5	73,5	72	60			
KDN 65-250/263		92,6	91,8	91,8	91,7	91,5	91,5	91	90	89,5	87,5	85	83	72,5			
KDN 65-315/260		92,8				92,7	91,9	90,9	89,7	88,5	85,5	81,9	79,9	67,8			
KDN 65-315/275		105				104,5	103,9	103,1	102,1	101,1	98,5	95,5	93,8	83,3	69,5		
KDN 65-315/290		117,1				117	116,5	115,9	115,1	114,3	112,2	109,7	108,3	99,4	87,6		
KDN 65-315/305		130				129,5	129,2	128,7	128	127,3	125,5	123,2	121,9	113,8	103	89,6	
KDN 65-315/320		143				142,9	142,6	142,1	171,6	140,9	139,3	137,3	136,2	128,9	119,1	106,8	92

SELECTION TABLE - KDN 80

MODEL	Q=m ³ /h	0	90	102	114	120	150	180	210	240	270	300
	Q=l/min	0	1500	1700	1900	2000	2500	3000	3500	4000	4500	5000
KDN 80-160/147/127	H (m)	23	21,5	20,7	20	19,5	17	14,5	11,8	8,8		
KDN 80-160/153/136		25,6	24,5	23,8	23	22,5	20,2	17,5	15	11,8		
KDN 80-160/153		29,3	28	27,3	26,5	26	23,5	20,7	16,5	14,5		
KDN 80-160/161		32,8	32	31,5	30,5	30	27,8	25	21,5	18,5		
KDN 80-160/169		36,5	35,7	35,2	34,5	34,2	32	29,5	26,5	22,6	18,5	
KDN 80-160/177		40	39,5	39,2	38,7	38,5	37	34,8	31,8	27,8	23	
KDN 80-200/170		36,6	35,7	35,5	34,5	34	31	27	21,5			
KDN 80-200/180		41	40,6	40,5	40	39,5	37	33	27,5			
KDN 80-200/190		45,7	45,4	45	44,5	44	42	29	34			
KDN 80-200/200		50,8	50,4	50,2	50	49,6	49	46,5	41	35		
KDN 80-200/210		56,3	55,9	55,8	55,7	55,6	54,8	52	48	43		
KDN 80-200/222		63,6	63,4	63,3	63,2	63,1	63	60	56,5	51,5	45	
KDN 80-250/220		62,6	62,5	62,4	62	61,8	60	55,5	49			
KDN 80-250/230		68,3	68,2	68,1	67,9	67,9	67	63	57	50		
KDN 80-250/240		75,5	75,4	75,3	75,2	75	74,5	71	66,5	58,5		
KDN 80-250/250		82,5	82,3	82	81,9	81,7	82	78,5	74	67,5	60,5	
KDN 80-250/260		90	89,7	89,6	86,5	89,3	89	86,5	82	77	70	61,5
KDN 80-250/270		97,9	97,8	97,5	91,3	97	96,3	94	89	84	77	69
KDN 80-315/275		106	106,1	105,3	104,3	103,7	99,4	93,4	85,6	76		
KDN 80-315/290		118	118,4	117,8	117,1	116,6	113,2	108,2	101,5	93,2	83,4	

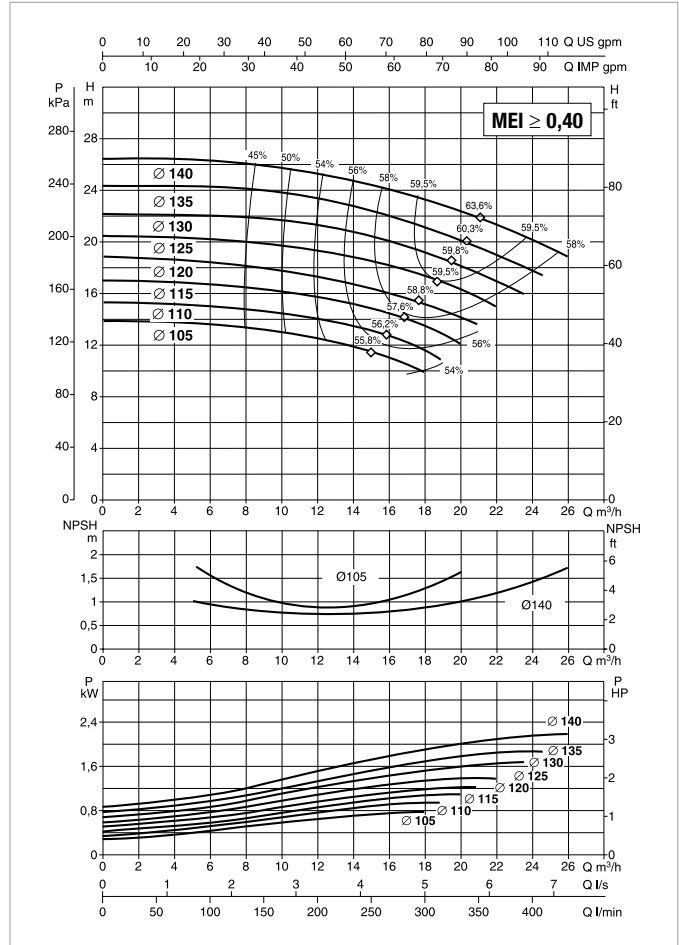
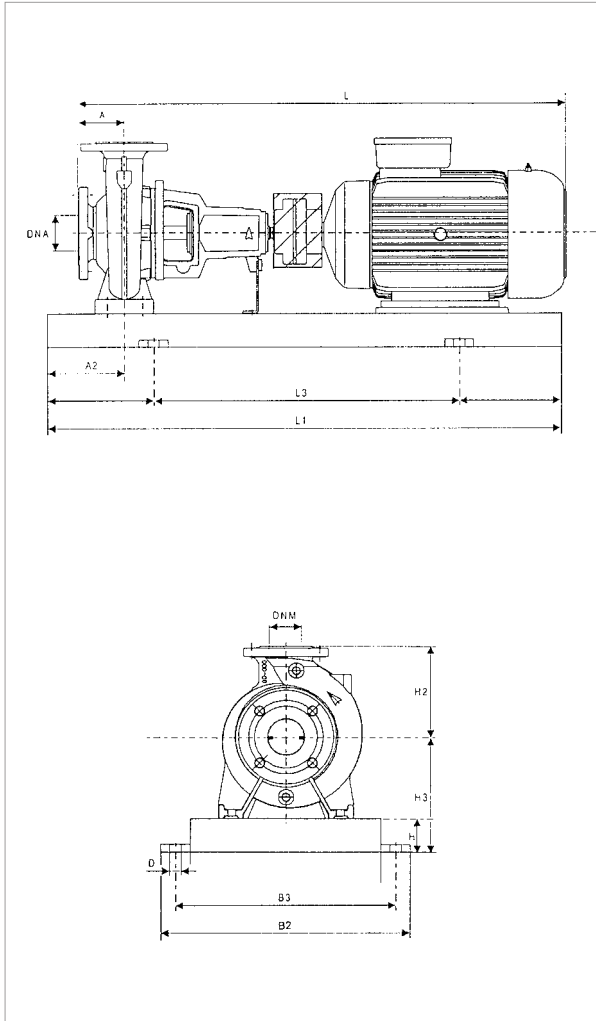
SELECTION TABLE - KDN 100

MODEL	Q=m ³ /h	0	150	180	210	240	270	300	330	360	390	420
	Q=l/min	0	2500	3000	3500	4000	4500	4500	5500	6000	6500	7000
KDN 100-200/180	H (m)	40,4	40	38	36	33	30,5	28	25			
KDN 100-200/190		46,5	45	44	42	39	37	34,5	31	28		
KDN 100-200/200		51,5	51	50	48,5	46	44	42	39	35	31,5	
KDN 100-200/210		57,5	57	56	55	53	51	49	46	43	39	36
KDN 100-200/219		64	62,5	62	61	60	58	56	53	50	47	43
KDN 100-250/220		61,1	60	59,5	57	54	50,5	46,5	42			
KDN 100-250/230		67,4	66,9	66,5	64	61	58	54	49	44		
KDN 100-250/240		73,5	72,9	71	70,5	69	66	63	58,5	53		
KDN 100-250/250		79,7	79,5	79	78,8	77	74	71	67	62,5		
KDN 100-250/260		88,6	88,2	88,1	88	86	83	79,5	76	71,5	66	

KDN 32-125.1 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 32-125.1	0,75	MEC 80	3 x 230 - 400 V ~	2,9/1,7	IE3
	1,1	MEC 80	3 x 230 - 400 V ~	4,2/2,4	IE3
	1,5	MEC 90S	3 x 230 - 400 V ~	5,2/3	IE3
	2,2	MEC 90L	3 x 230 - 400 V ~	8/4,6	IE3
	3	MEC 100L	3 x 400 V ~ ¹	5,6	IE3
	4	MEC 112M	3 x 400 V ~ ¹	7	IE3

¹ Star start-up possible (A)

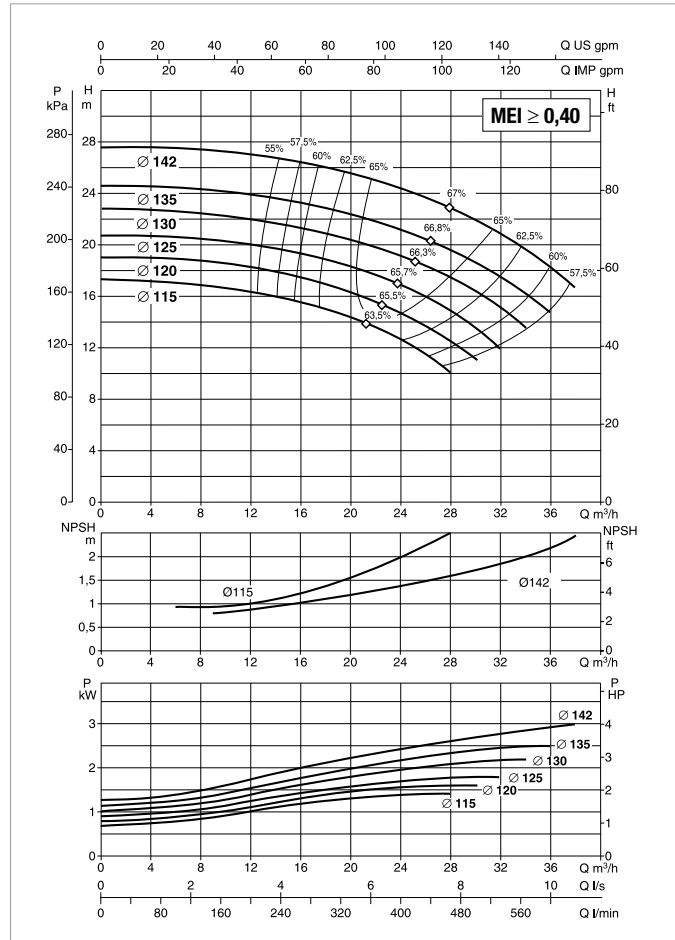
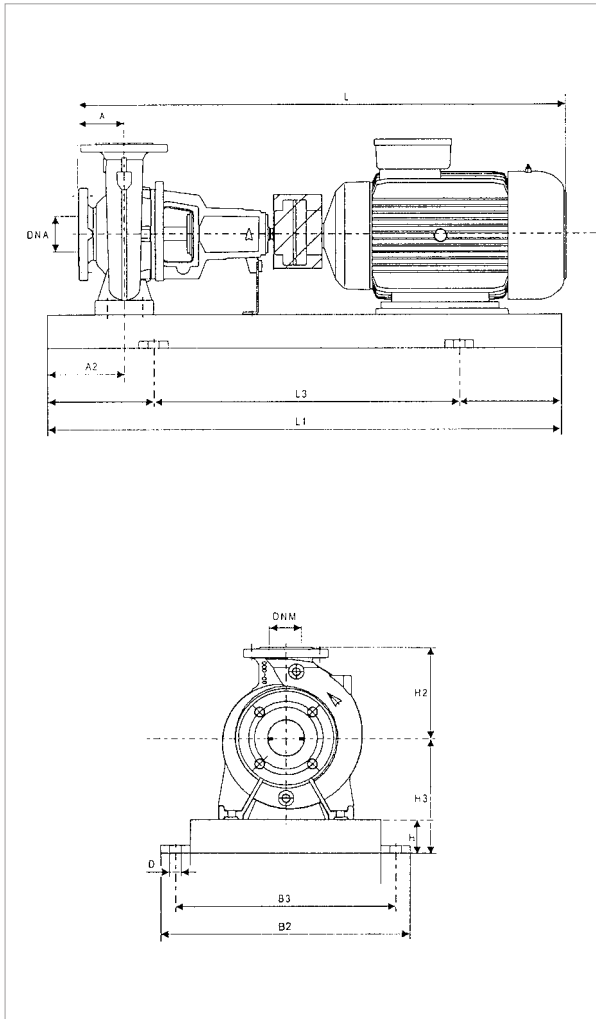
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 32-125.1	0,75	80	60	140	65	177	800	540	360	320	19	50	32	717	79	817	84
	1,1	80	60	140	65	177	800	540	360	320	19	50	32	717	79	817	84
	1,5	80	60	140	65	177	800	540	360	320	19	50	32	762	87	862	92
	2,2	80	60	140	65	177	900	600	390	350	19	50	32	762	92	862	97
	3	80	60	140	65	177	900	600	390	350	19	50	32	811	91	911	96
	4	80	60	140	65	177	900	600	390	350	19	50	32	833	84	933	89

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 32-125 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 32-125	1,1	MEC 80	3 x 230 - 400 V ~	4,2/2,4	IE3
	1,5	MEC 90S	3 x 230 - 400 V ~	5,2/3	IE3
	2,2	MEC 90L	3 x 230 - 400 V ~	8/4,6	IE3
	3	MEC 100L	3 x 400 V ~ ¹	5,6	IE3
	4	MEC 112M	3 x 400 V ~ ¹	7	IE3

¹ Star start-up possible (Δ)

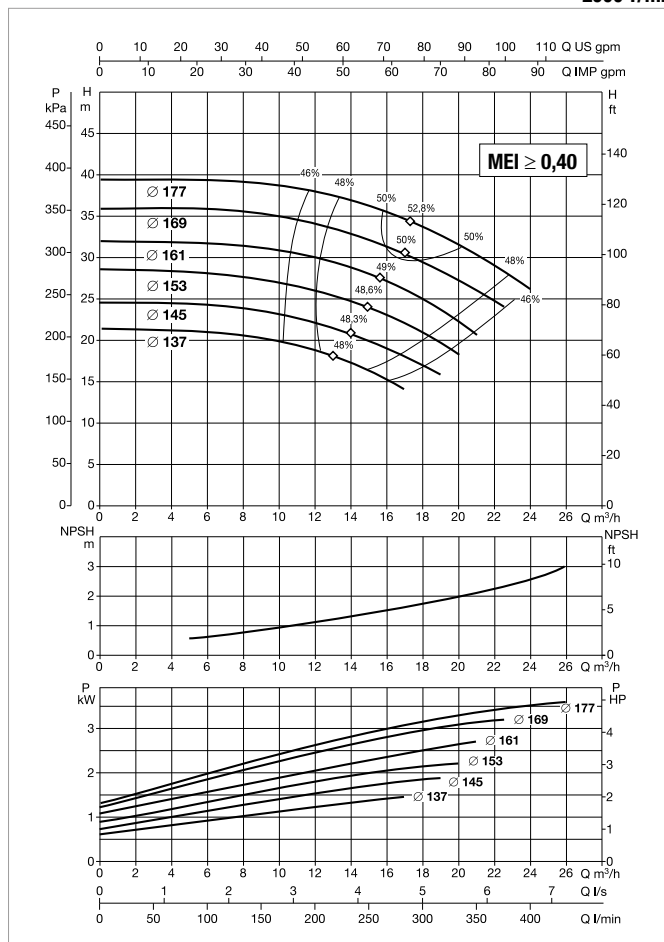
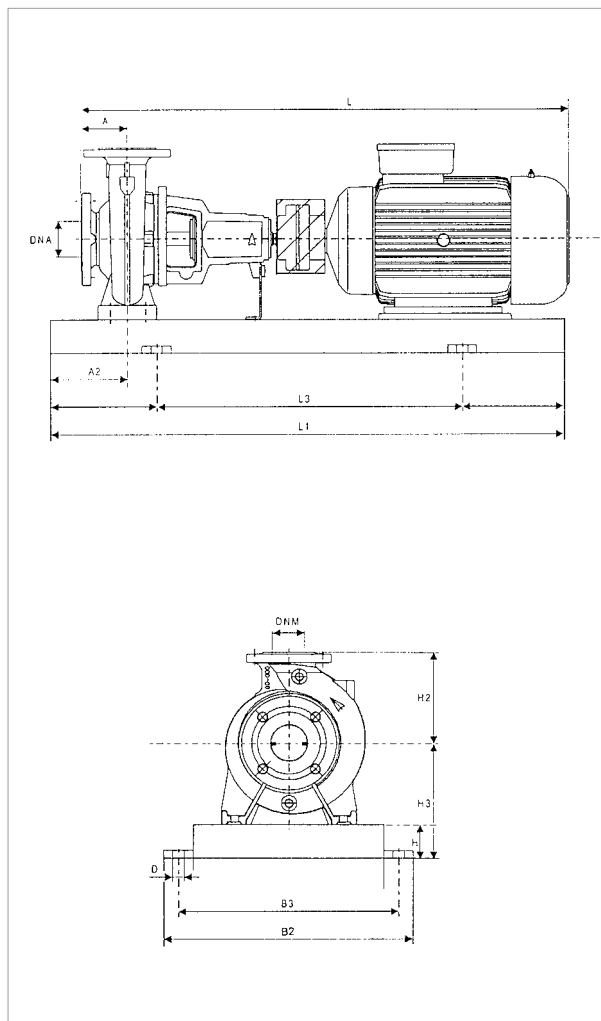
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 32-125	1,1	80	60	140	65	177	800	540	360	320	19	50	32	717	78	817	83
	1,5	80	60	140	65	177	800	540	360	320	19	50	32	762	80	862	85
	2,2	80	60	140	65	177	900	600	390	350	19	50	32	762	85	862	90
	3	80	60	140	65	177	900	600	390	350	19	50	32	811	85	911	90
	4	80	60	140	65	177	900	600	390	350	19	50	32	833	99	933	104

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 32-160.1 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 32-160.1	1,1	MEC 80	3 x 230 - 400 V ~	4,2/2,4	IE3
	1,5	MEC 90S	3 x 230 - 400 V ~	5,2/3	IE3
	2,2	MEC 90L	3 x 230 - 400 V ~	8/4,6	IE3
	3	MEC 100L	3 x 400 V ~ ¹	5,6	IE3
	4	MEC 112M	3 x 400 V ~ ¹	7	IE3
	5,5	MEC 132S	3 x 400 V ~ ¹	10	IE3

¹ Star start-up possible (A)

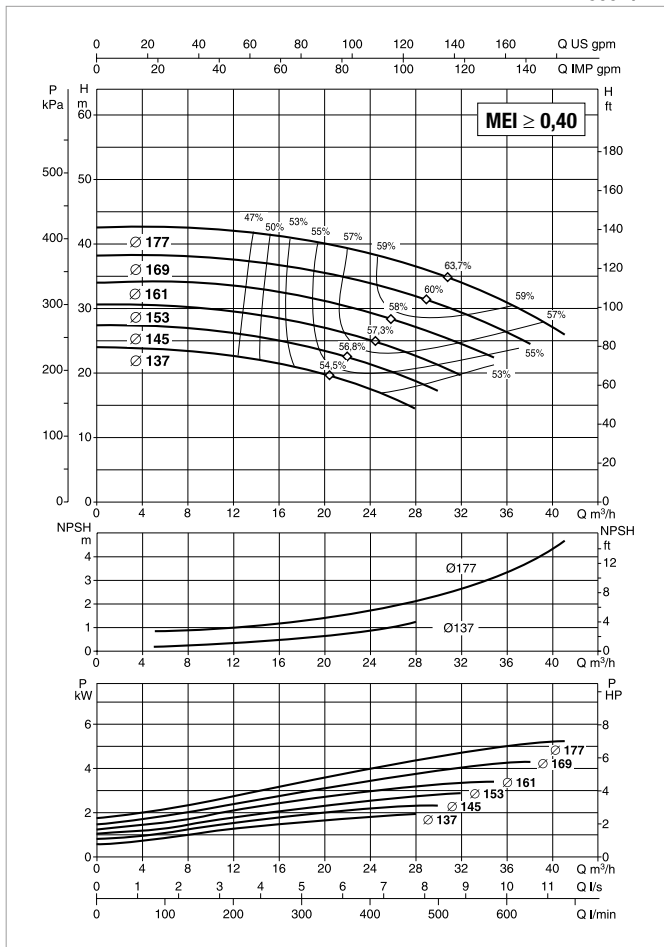
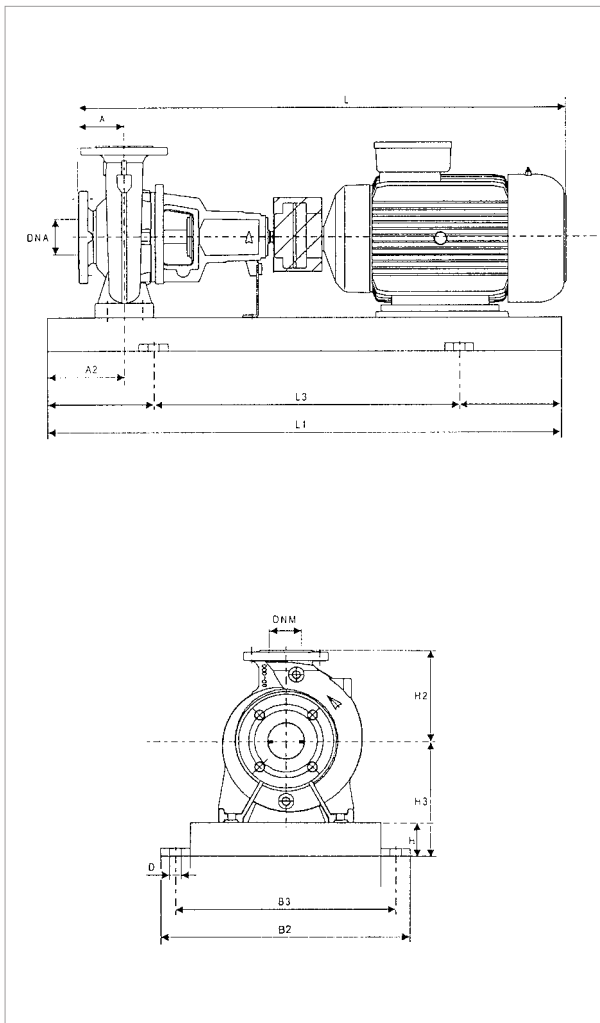
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 32-160.1	1,1	80	60	160	65	197	800	540	360	320	19	50	32	717	81	817	86
	1,5	80	60	160	65	197	800	540	360	320	19	50	32	762	88	862	93
	2,2	80	60	160	65	197	900	600	390	350	19	50	32	762	94	862	99
	3	80	60	160	65	197	900	600	390	350	19	50	32	811	91	911	96
	4	80	60	160	65	197	900	600	390	350	19	50	32	833	86	933	91
	5,5	80	60	160	80	212	1000	660	450	400	24	50	32	890	117	990	122

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 32-160 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 32-160	2,2	MEC 90L	3 x 230 - 400 V ~	8/4,6	IE3
	3	MEC 100L	3 x 400 V ~ ¹	5,6	IE3
	4	MEC 112M	3 x 400 V ~ ¹	7	IE3
	5,5	MEC 132S	3 x 400 V ~ ¹	10	IE3
	7,5	MEC 132S	3 x 400 V ~ ¹	13,1	IE3

¹ Star start-up possible (Δ)

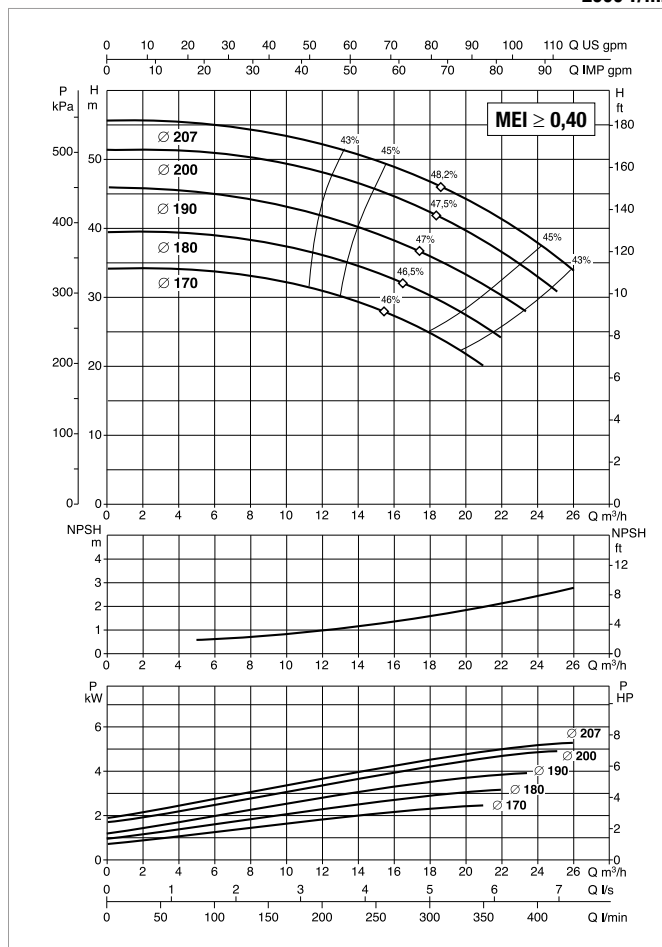
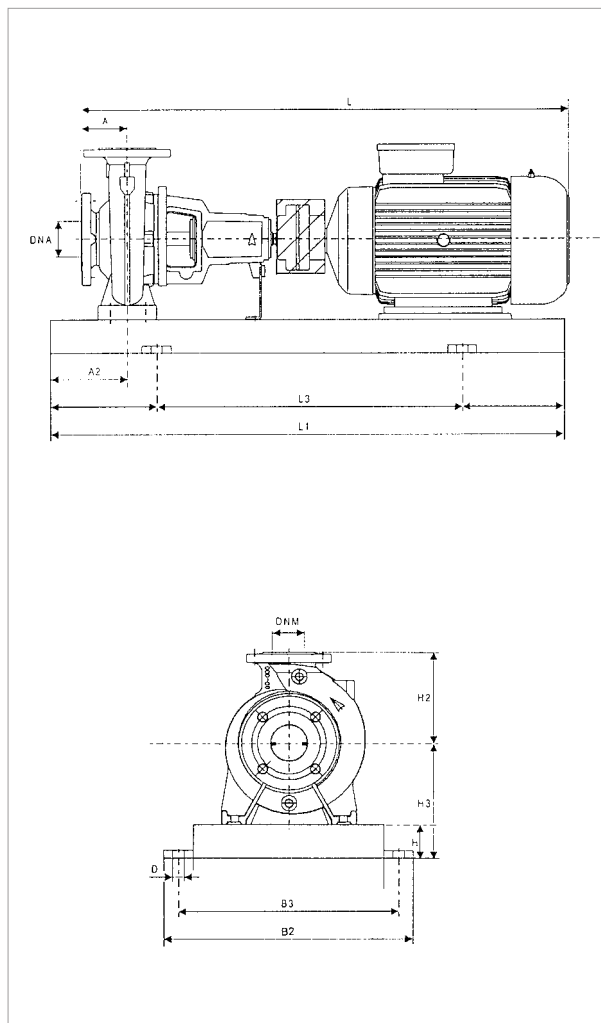
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 32-160	2,2	80	60	160	65	197	900	600	390	350	19	50	32	762	84	862	92
	3	80	60	160	65	197	900	600	390	350	19	50	32	811	91	911	96
	4	80	60	160	65	197	900	600	390	350	19	50	32	833	86	933	91
	5,5	80	60	160	80	212	1000	660	450	400	24	50	32	890	117	990	122
	7,5	80	60	160	80	212	1000	660	450	400	24	50	32	910	140	1010	118

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 32-200.1 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 32-200.1	2,2	MEC 90L	3 x 230 - 400 V ~	8/4,6	IE3
	3	MEC 100L	3 x 400 V ~ ¹	5,6	IE3
	4	MEC 112M	3 x 400 V ~ ¹	7	IE3
	5,5	MEC 132S	3 x 400 V ~ ¹	10	IE3
	7,5	MEC 132S	3 x 400 V ~ ¹	13,1	IE3

¹ Star start-up possible (Δ)

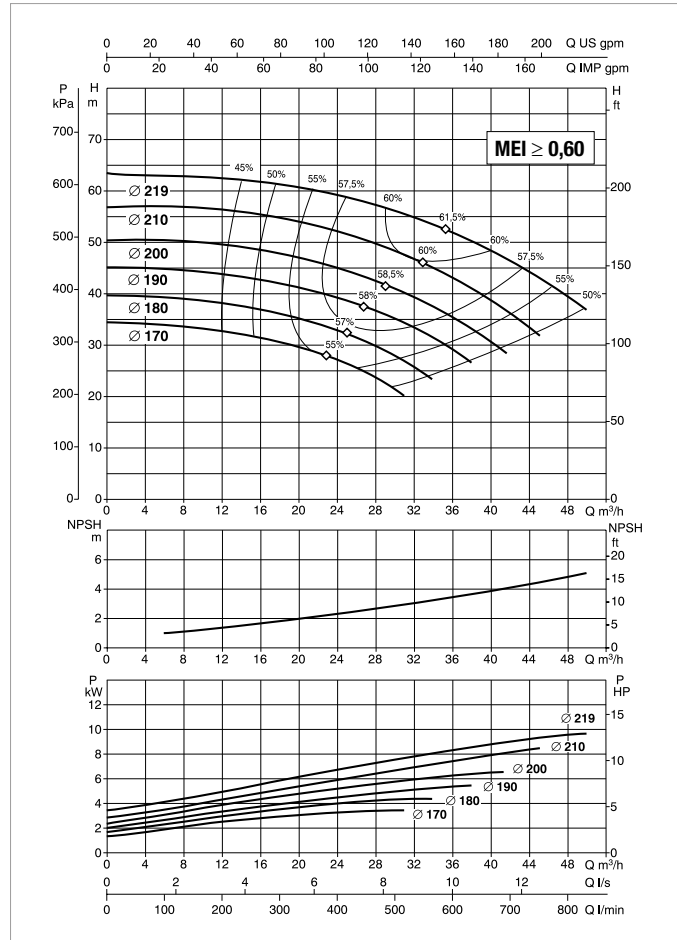
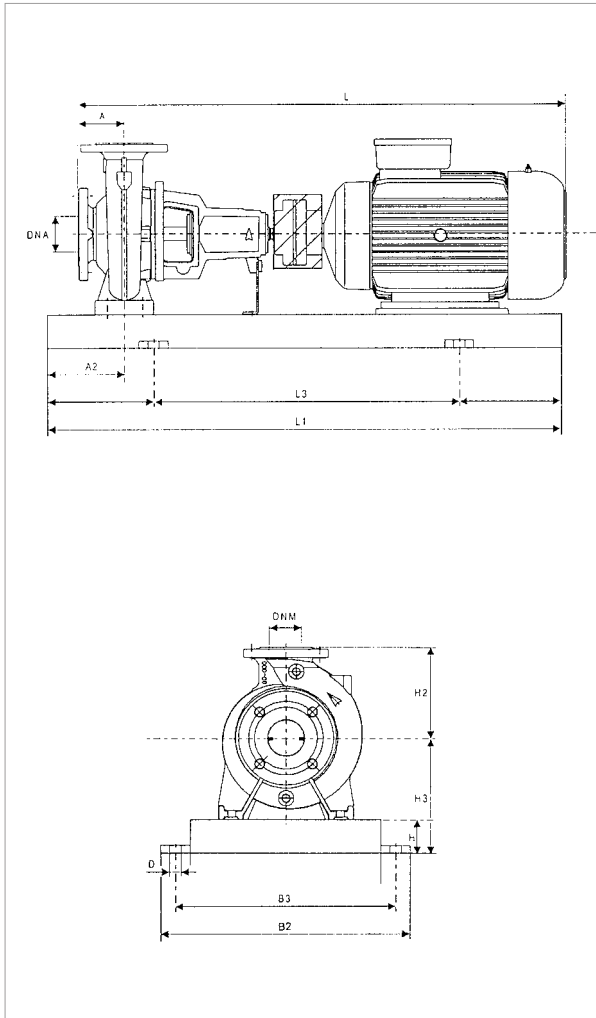
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 32-200.1	2,2	80	60	180	65	225	900	600	390	350	19	50	32	762	98	862	103
	3	80	60	180	65	225	900	600	390	350	19	50	32	811	129	911	134
	4	80	60	180	65	225	900	600	390	350	19	50	32	833	125	933	130
	5,5	80	60	180	80	240	1000	660	450	400	24	50	32	890	124	990	129
	7,5	80	60	180	80	240	1000	660	450	400	24	50	32	910	925 140	1010 1010	145 145

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 32-200 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 32-200	3	MEC 100L	3 x 400 V ~ ¹	5,6	IE3
	4	MEC 112M	3 x 400 V ~ ¹	7	IE3
	5,5	MEC 132S	3 x 400 V ~ ¹	10	IE3
	7,5	MEC 132S	3 x 400 V ~ ¹	13,1	IE3
	11	MEC 160M	3 x 400 V ~ ¹	19,7	IE3
	15	MEC 160M	3 x 400 V ~ ¹	26,7	IE3

¹ Star start-up possible (Δ)

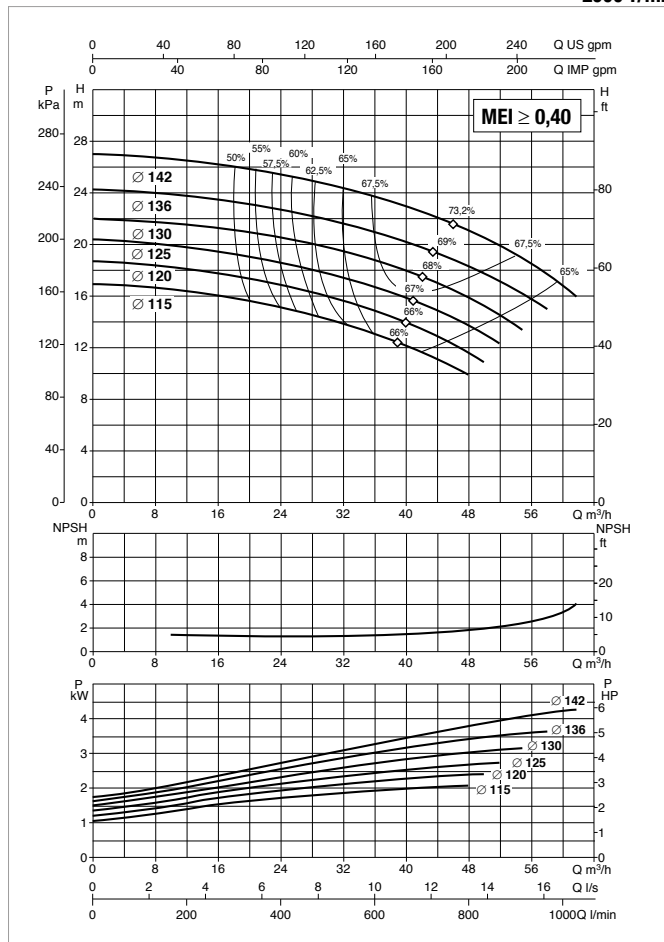
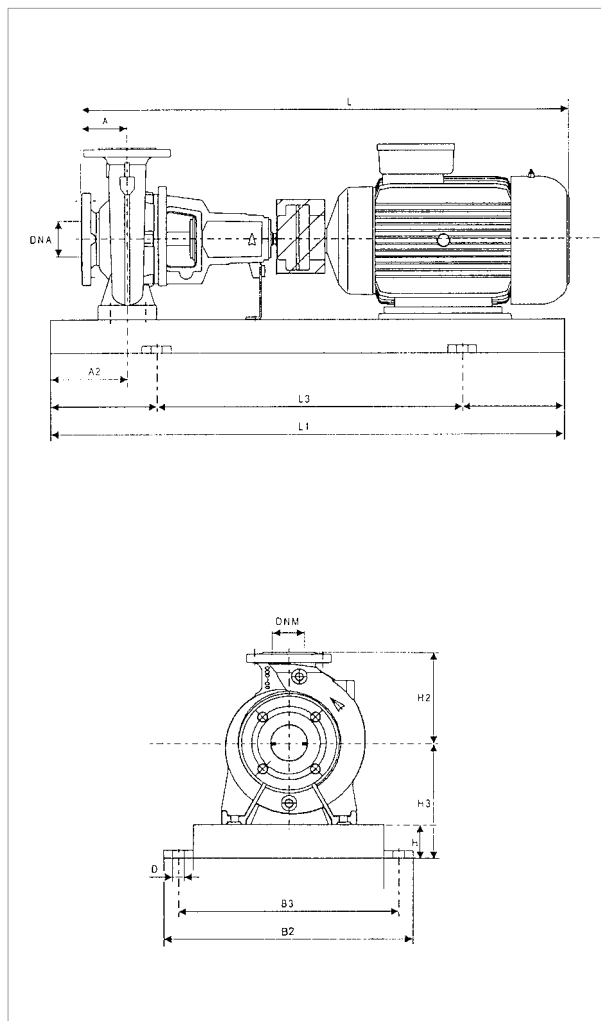
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 32-200	3	80	60	180	65	225	900	600	390	350	19	50	32	811	92	911	97
	4	80	60	180	65	225	900	600	390	350	19	50	32	833	86	933	91
	5,5	80	60	180	80	240	1000	660	450	400	24	50	32	890	124	990	129
	7,5	80	60	180	80	240	1000	660	450	400	24	50	32	910	151	1010	156
	11	80	60	180	80	240	1120	740	490	440	24	50	32	1053	214	1153	219
	15	80	60	180	80	240	1120	740	490	440	24	50	32	1053	221	1153	226

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 40-125 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 40-125	1,5	MEC 90S	3 x 230 - 400 V ~	5,2/3	IE3
	2,2	MEC 90L	3 x 230 - 400 V ~	8/4,6	IE3
	3	MEC 100L	3 x 400 V ~ ¹	5,6	IE3
	4	MEC 112M	3 x 400 V ~ ¹	7	IE3
	5,5	MEC 132S	3 x 400 V ~ ¹	10	IE3
	7,5	MEC 132S	3 x 400 V ~ ¹	13,1	IE3

¹ Star start-up possible (Δ)

MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 40-125	1,5	80	60	140	65	177	800	540	360	320	19	65	40	762	80	862	85
	2,2	80	60	140	65	177	900	600	390	350	19	65	40	762	83	862	88
	3	80	60	140	65	177	900	600	390	350	19	65	40	811	80	911	85
	4	80	60	140	65	177	900	600	390	350	19	65	40	833	84	933	89
	5,5	80	60	140	80	212	1000	660	450	400	24	65	40	890	115	990	120
	7,5	80	60	140	80	212	1000	600	450	400	24	65	40	910	925 111	1010 1010	116 116

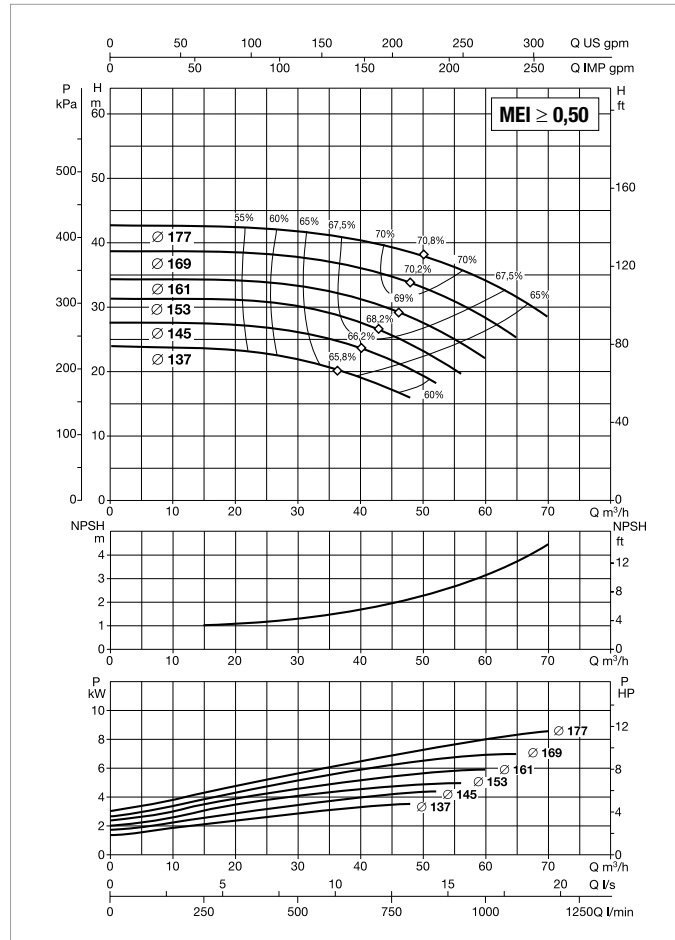
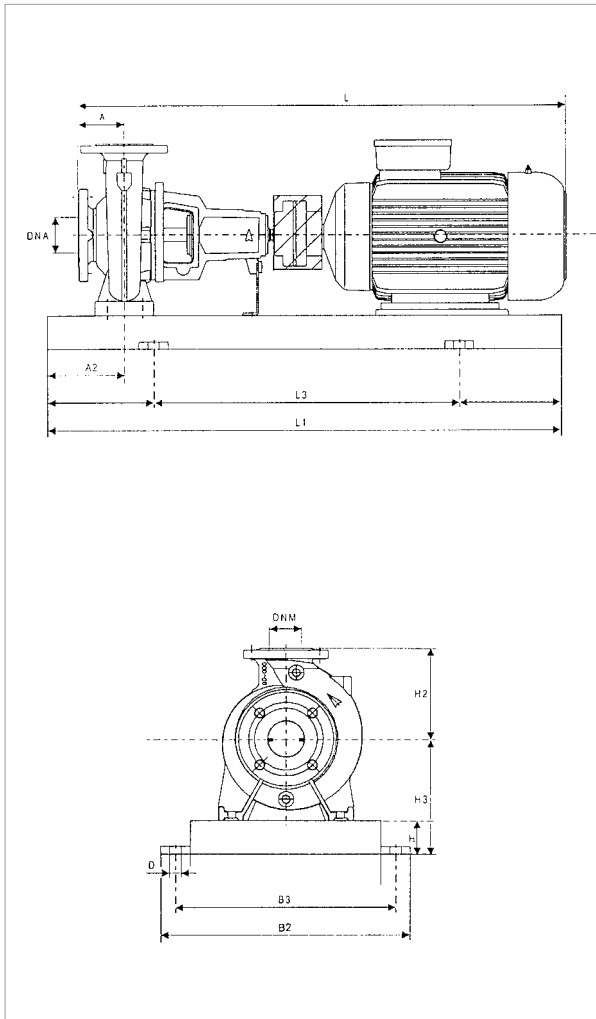
Dimension and electrical data based on sizing definition following the instructions on page 105.



KDN 40-160 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 40-160	3	MEC 100L	3 x 400 V ~ ¹	5,6	IE3
	4	MEC 112M	3 x 400 V ~ ¹	7	IE3
	5,5	MEC 132S	3 x 400 V ~ ¹	10	IE3
	7,5	MEC 132S	3 x 400 V ~ ¹	13,1	IE3
	11	MEC 160M	3 x 400 V ~ ¹	19,7	IE3
	15	MEC 160M	3 x 400 V ~ ¹	26,7	IE3

¹ Star start-up possible (A)

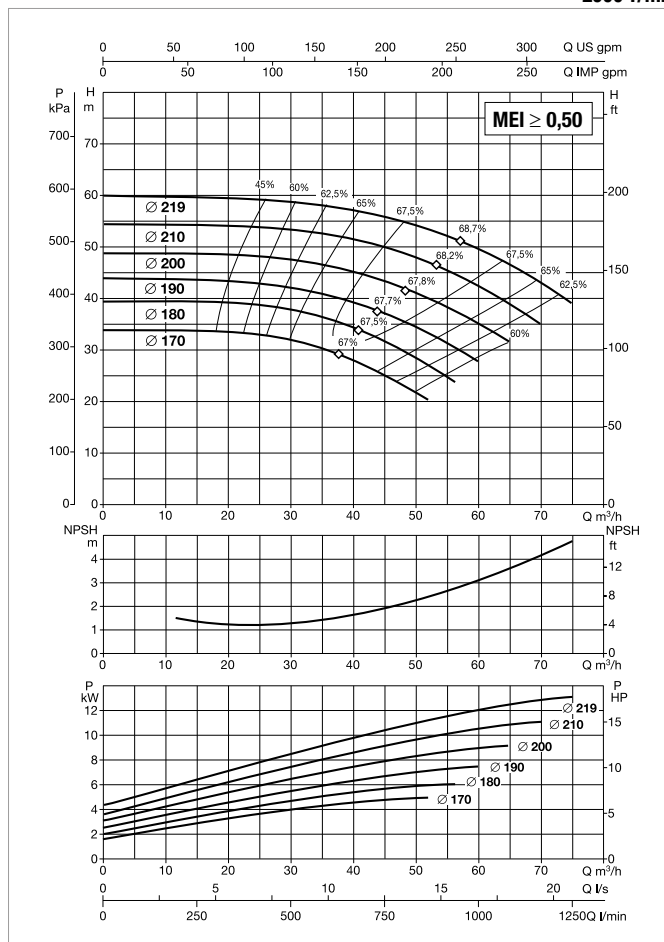
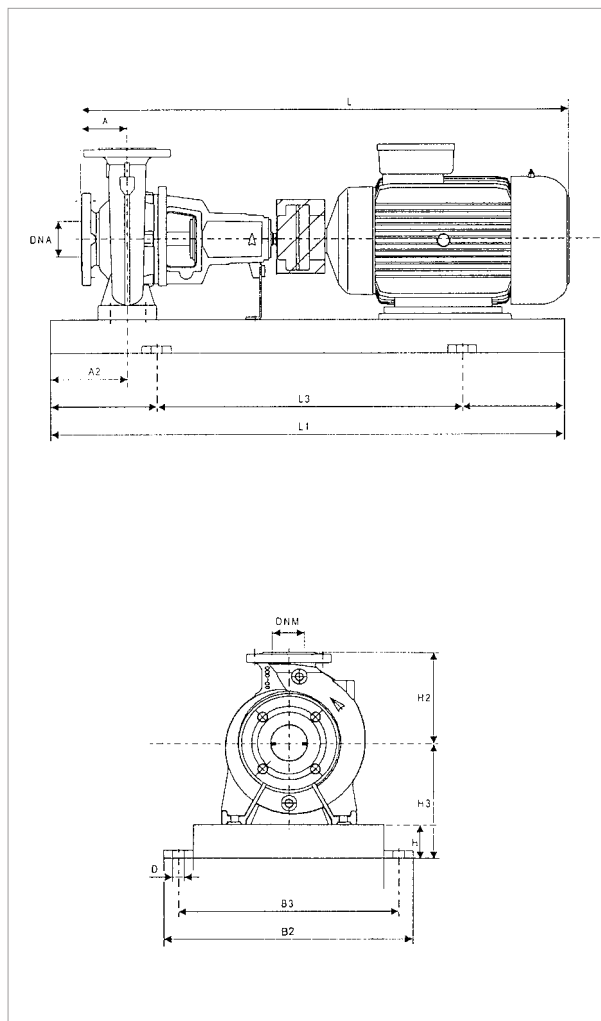
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 40-160	3	80	60	160	65	197	900	600	390	350	19	65	40	811	91	911	96
	4	80	60	160	65	197	900	600	390	350	19	65	40	833	86	933	91
	5,5	80	60	160	80	212	1000	660	450	400	24	65	40	890	141	990	146
	7,5	80	60	160	80	212	1000	660	450	400	24	65	40	910	139	1010	144
	11	80	60	160	80	240	1120	740	490	440	24	65	40	1053	150	1153	155
	15	80	60	160	80	240	1120	740	490	440	24	65	40	1053	146	1153	151

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 40-200 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 40-200	4	MEC 112M	3 x 400 V ~ ¹	7	IE3
	5,5	MEC 132S	3 x 400 V ~ ¹	10	IE3
	7,5	MEC 132S	3 x 400 V ~ ¹	13,1	IE3
	11	MEC 160M	3 x 400 V ~ ¹	19,7	IE3
	15	MEC 160M	3 x 400 V ~ ¹	26,7	IE3
	18,5	MEC 160L	3 x 400 V ~ ¹	33	IE3

¹ Star start-up possible (A)

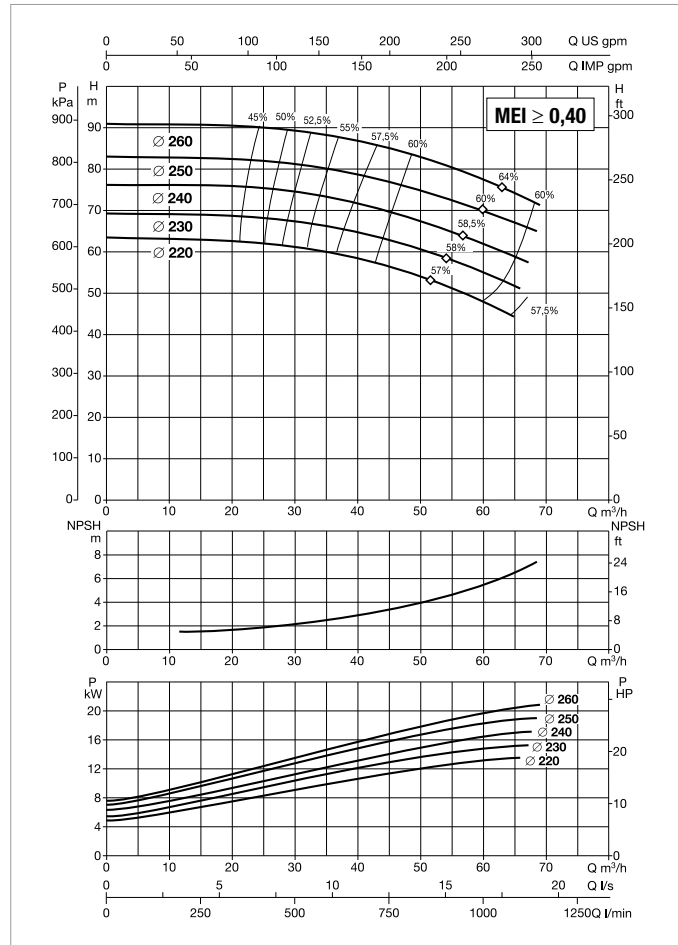
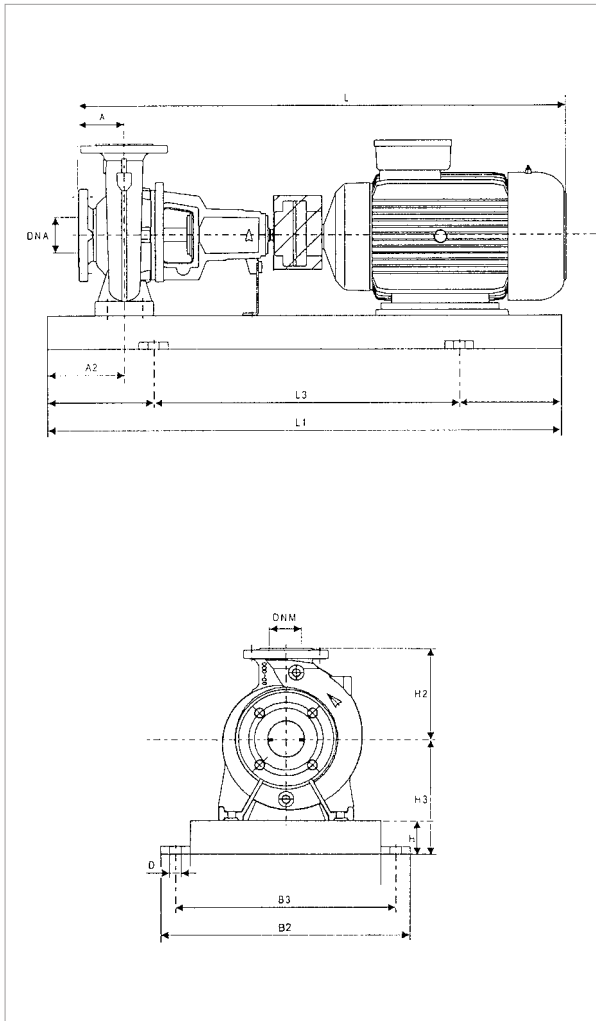
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 40-200	4	100	60	180	65	225	900	600	390	350	19	65	40	853	117	953	122
	5,5	100	60	180	80	240	1000	660	450	400	24	65	40	910	127	1010	132
	7,5	100	60	180	80	240	1000	660	450	400	24	65	40	930	121	1030	126
	11	100	60	180	80	240	1120	740	490	440	24	65	40	1073	198	1173	203
	15	100	60	180	80	240	1120	740	490	440	24	65	40	1073	204	1173	209
	18,5	100	60	180	80	240	1120	740	490	440	24	65	40	1117	199	1217	204

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 40-250 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 40-250	11	MEC 160M	3 x 400 V ~ ¹	19,7	IE3
	15	MEC 160M	3 x 400 V ~ ¹	26,7	IE3
	18,5	MEC 160L	3 x 400 V ~ ¹	33	IE3
	22	MEC 180M	3 x 400 V ~ ¹	38,1	IE3
	30	MEC 200L	3 x 400 V ~ ¹	52,1	IE3

¹ Star start-up possible (Δ)

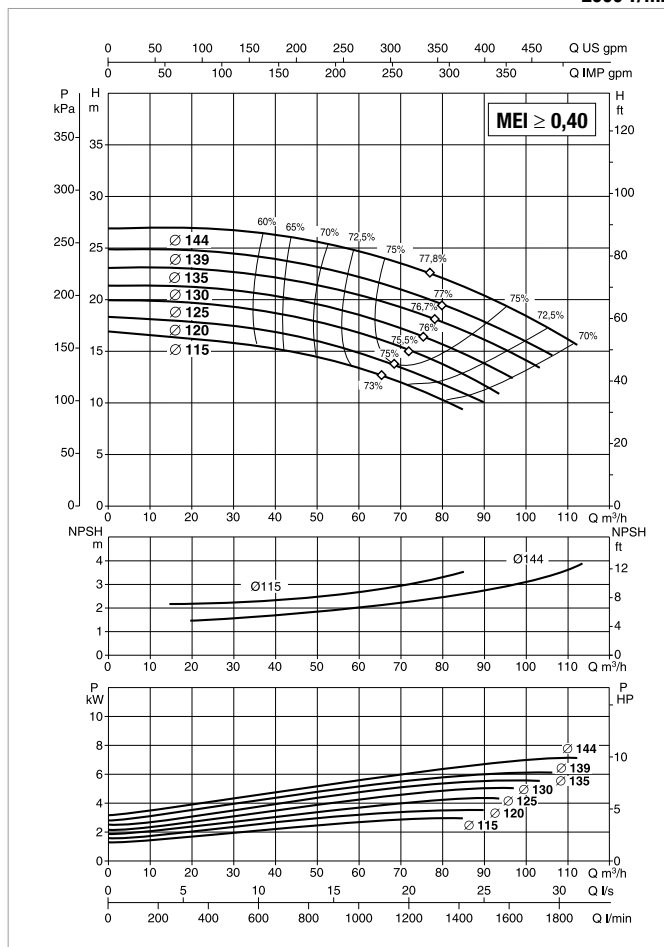
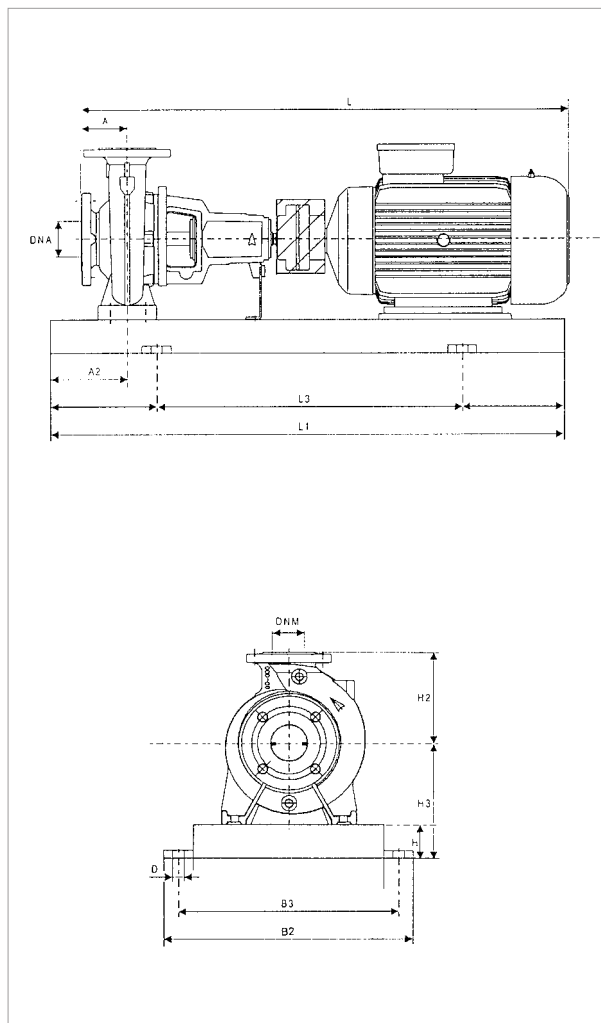
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 40-250	11	100	75	225	80	260	1250	840	540	490	24	65	40	1073	213	1173	218
	15	100	75	225	80	260	1250	840	540	490	24	65	40	1073	251	1173	256
	18,5	100	75	225	80	260	1250	840	540	490	24	65	40	1117	266	1217	271
	22	100	75	225	80	260	1250	840	540	490	24	65	40	1152	278	1252	283
	30	100	75	225	100	300	1400	940	610	550	28	65	40	1234	332	1334	337

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 50-125 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	I _n A	
KDN 50-125	3	MEC 100L	3 x 400 V ~ ¹	5,6	IE3
	4	MEC 112M	3 x 400 V ~ ¹	7	IE3
	5,5	MEC 132S	3 x 400 V ~ ¹	10	IE3
	7,5	MEC 132S	3 x 400 V ~ ¹	13,1	IE3
	11	MEC 160M	3 x 400 V ~ ¹	19,7	IE3

¹ Star start-up possible (A)

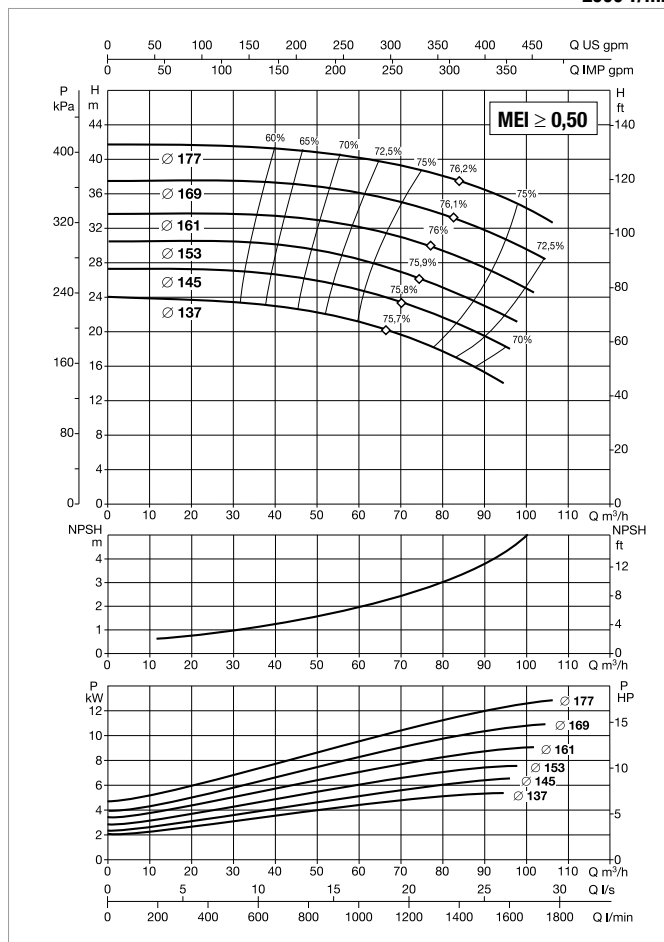
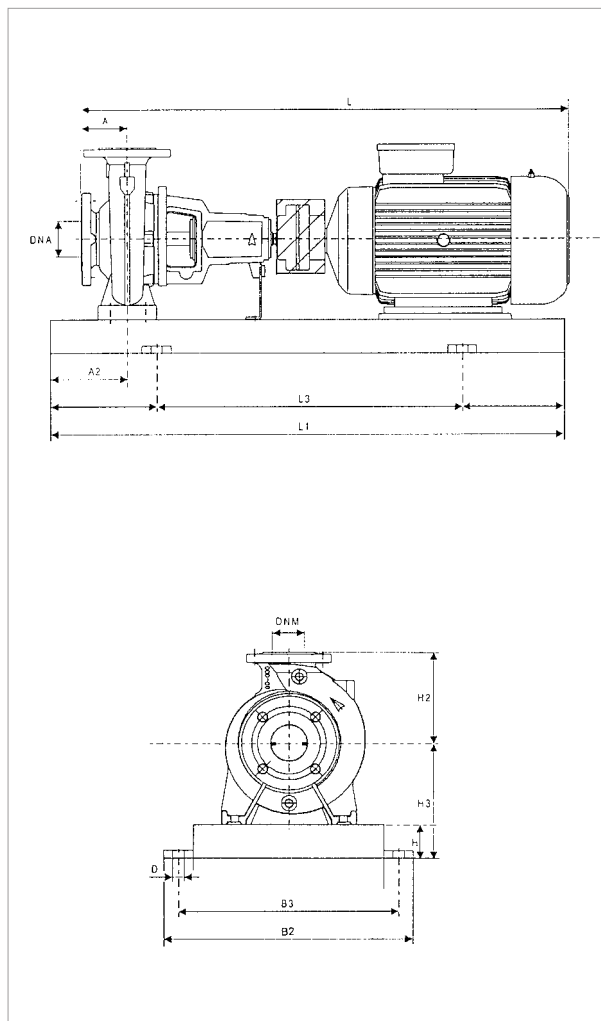
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 50-125	3	100	60	160	65	197	900	600	390	350	19	65	50	831	94	931	99
	4	100	60	160	65	197	900	600	390	350	19	65	50	853	91	953	96
	5,5	100	60	160	80	212	1000	660	450	400	24	65	50	910	143	1010	148
	7,5	100	60	160	80	212	1000	660	450	400	24	65	50	930	117	1030	122
	11	100	60	160	80	240	1120	740	490	400	24	65	50	1073	120	1173	125

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 50-160 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 50-160	4	MEC 112M	3 x 400 V ~ ¹	7	IE3
	5,5	MEC 132S	3 x 400 V ~ ¹	10	IE3
	7,5	MEC 132S	3 x 400 V ~ ¹	13,1	IE3
	11	MEC 160M	3 x 400 V ~ ¹	19,7	IE3
	15	MEC 160M	3 x 400 V ~ ¹	26,7	IE3
	18,5	MEC 160L	3 x 400 V ~ ¹	33	IE3

¹ Star start-up possible (A)

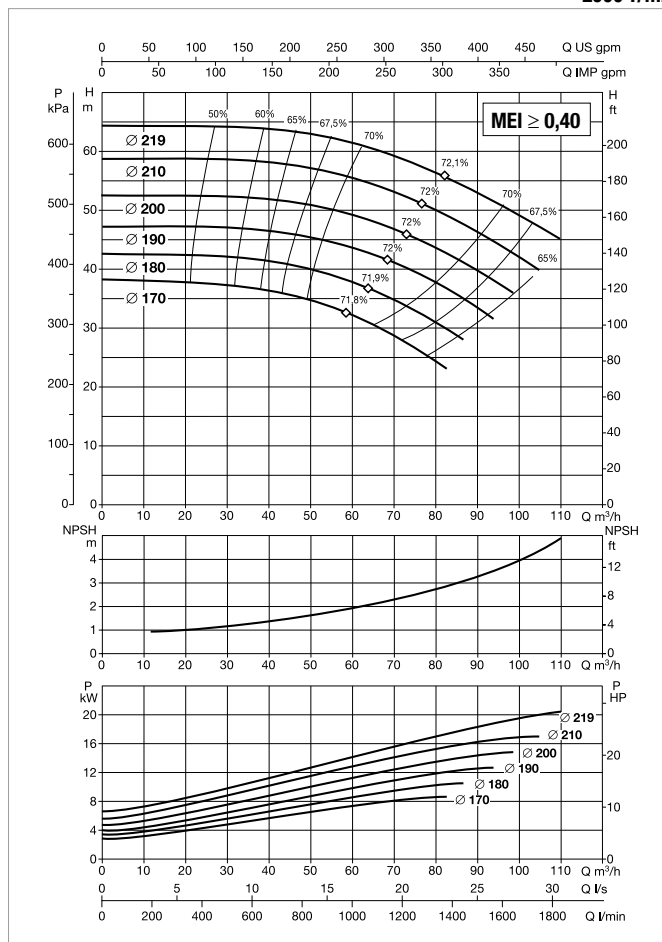
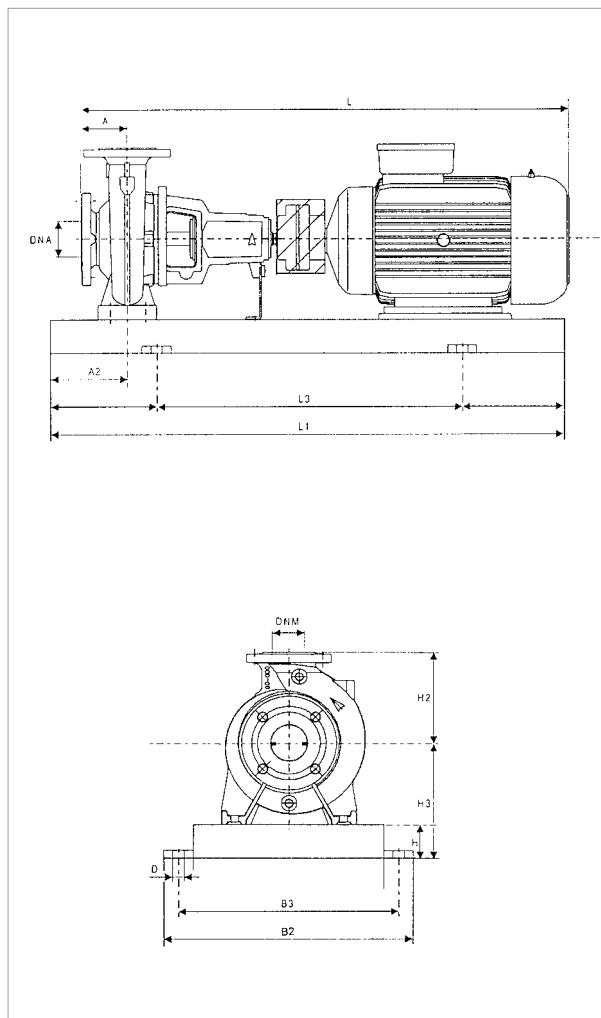
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 50-160	4	100	60	180	65	225	900	600	390	350	19	65	50	853	114	953	119
	5,5	100	60	180	80	240	1000	660	450	400	24	65	50	910	124	1010	129
	7,5	100	60	180	80	240	1000	660	450	400	24	65	50	930	151	1030	156
	11	100	60	180	80	240	1120	740	490	440	24	65	50	1073	165	1173	170
	15	100	60	180	80	240	1120	740	490	440	24	65	50	1073	173	1173	178
	18,5	100	60	180	80	240	1120	740	490	440	24	65	50	1117	170	1217	175

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 50-200 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 50-200	7,5	MEC 132S	3 x 400 V ~ ¹	13,1	IE3
	11	MEC 160M	3 x 400 V ~ ¹	19,7	IE3
	15	MEC 160M	3 x 400 V ~ ¹	26,7	IE3
	18,5	MEC 160L	3 x 400 V ~ ¹	33	IE3
	22	MEC 180M	3 x 400 V ~ ¹	38,1	IE3
	30	MEC 200L	3 x 400 V ~ ¹	52,1	IE3

¹ Star start-up possible (A)

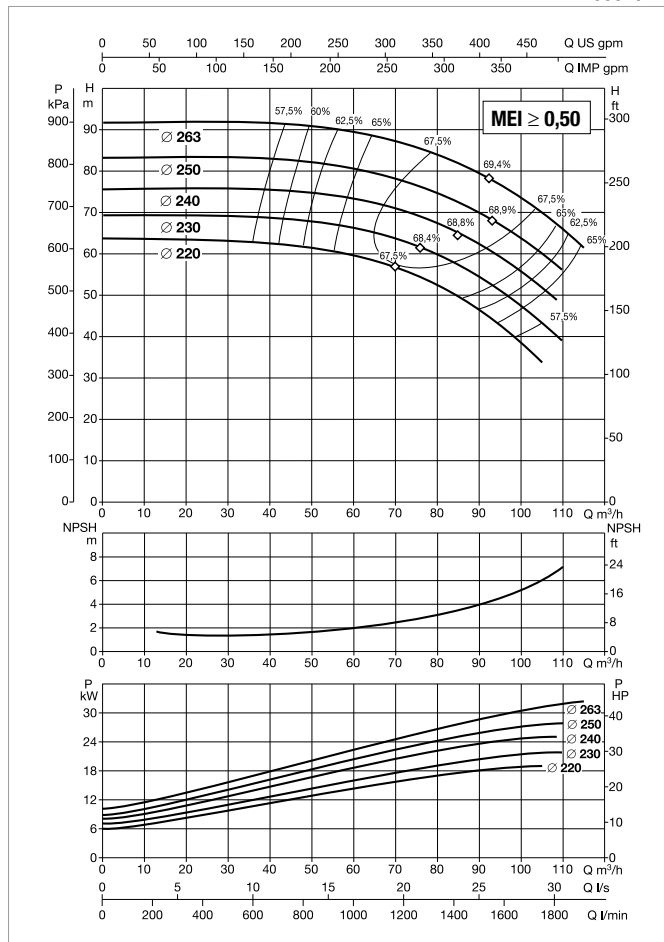
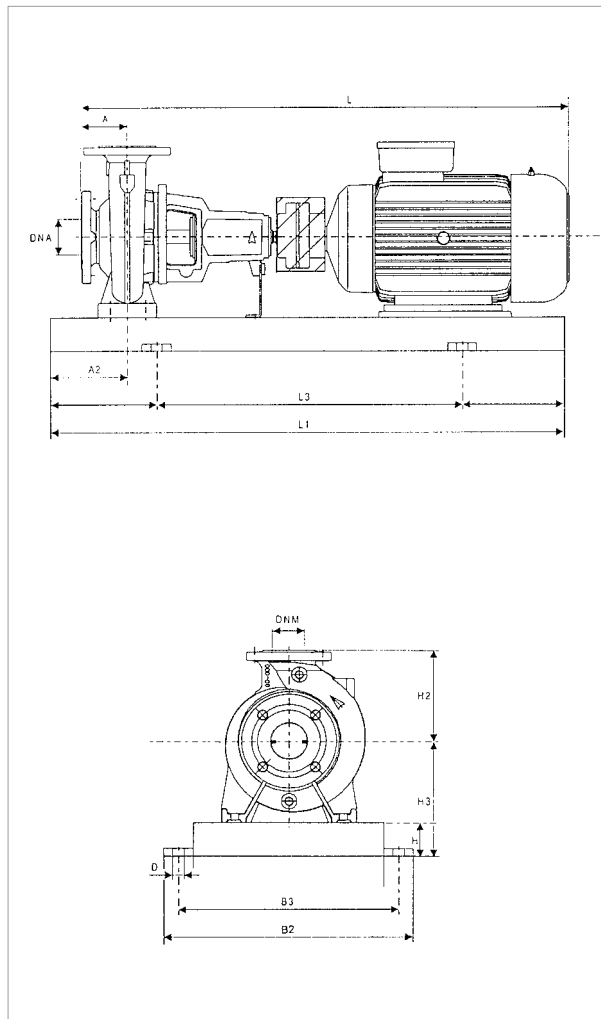
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 50-200	7,5	100	60	200	80	240	1000	600	450	400	24	65	50	930	150	1030	155
	11	100	60	200	80	240	1120	740	490	440	24	65	50	1073	163	1173	168
	15	100	60	200	80	240	1120	740	490	400	24	65	50	1073	253	1173	258
	18,5	100	60	200	80	240	1120	740	490	440	24	65	50	1117	251	1217	256
	22	100	60	200	80	260	1120	740	490	440	24	65	50	1152	248	1252	253
	30	100	60	200	80	280	1250	840	540	490	24	65	50	1234	302	1334	307

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 50-250 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 50-250	15	MEC 160M	3 x 400 V ~ ¹	26,7	IE3
	18,5	MEC 160L	3 x 400 V ~ ¹	33	IE3
	22	MEC 180M	3 x 400 V ~ ¹	38,1	IE3
	30	MEC 200L	3 x 400 V ~ ¹	52,1	IE3
	37	MEC 200L	3 x 400 V ~ ¹	62,6	IE3
	45	MEC 225M	3 x 400 V ~ ¹	78,4	IE3

¹ Star start-up possible (A)

MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 50-250	15	100	75	225	80	260	1250	840	540	490	24	65	50	1073	233	1173	238
	18,5	100	75	225	80	260	1250	840	540	490	24	65	50	1117	257	1217	262
	22	100	75	225	80	260	1250	840	540	490	24	65	50	1152	277	1252	282
	30	100	75	225	100	300	1400	940	610	550	28	65	50	1234	419	1334	424
	37	100	75	225	100	300	1400	940	610	550	28	65	50	1234	358	1334	363
	45	100	75	225	100	325	1400	940	610	550	28	65	50	1270	413	1370	418

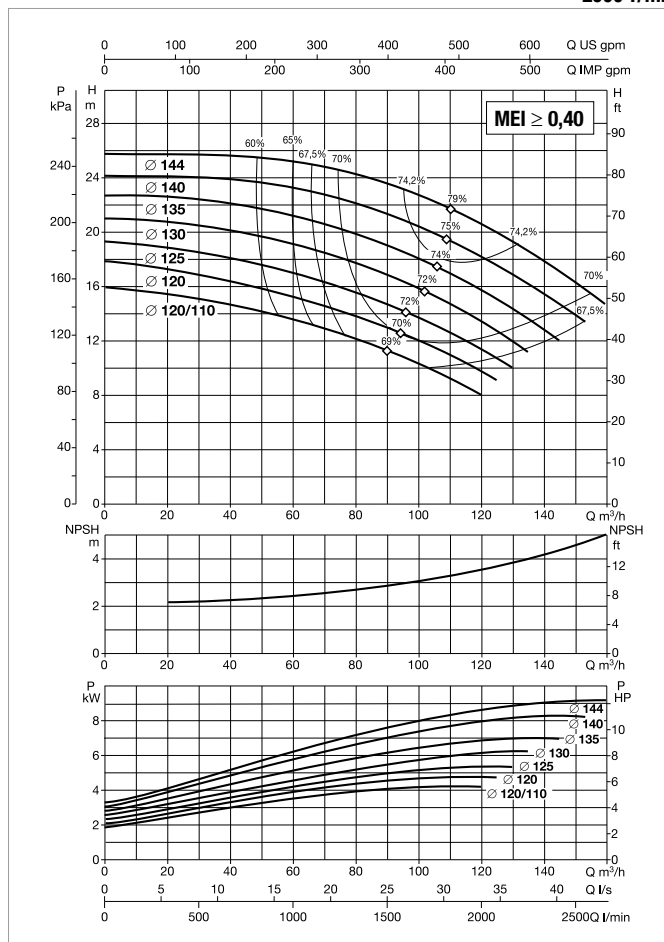
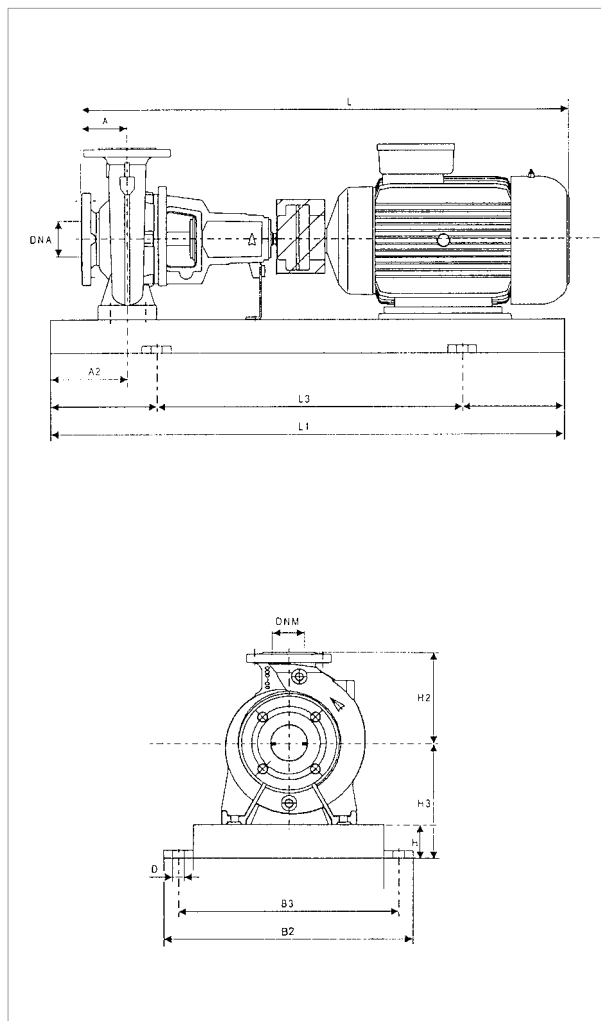
Dimension and electrical data based on sizing definition following the instructions on page 105.



KDN 65-125 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.
 The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 65-125	4	MEC 112M	3 x 400 V ~ 1	7	IE3
	5,5	MEC 132S	3 x 400 V ~ 1	10	IE3
	7,5	MEC 132S	3 x 400 V ~ 1	13,1	IE3
	11	MEC 160M	3 x 400 V ~ 1	19,7	IE3
	15	MEC 160M	3 x 400 V ~ 1	26,7	IE3

¹ Star start-up possible (Δ)

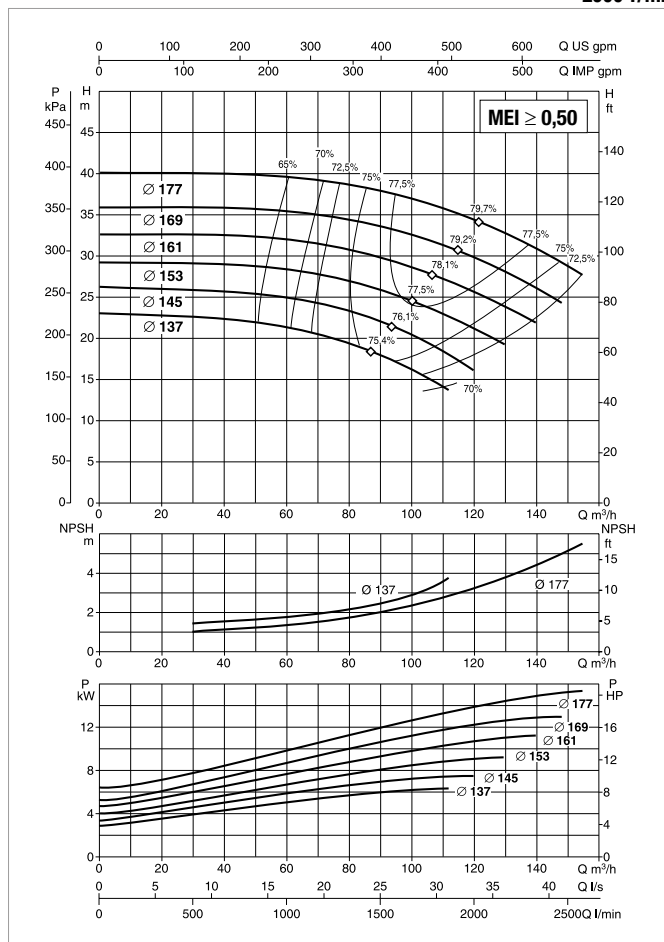
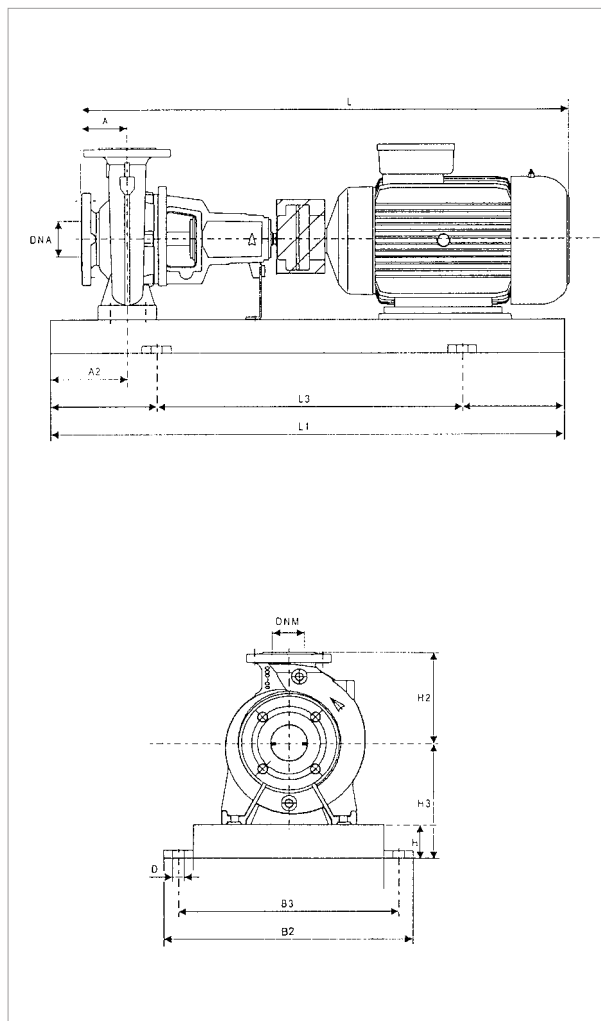
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 65-125	4	100	60	180	65	225	900	600	390	350	19	80	65	853	114	953	119
	5,5	100	60	180	80	240	1000	660	450	400	24	80	65	910	124	1010	129
	7,5	100	60	180	80	240	1000	660	450	400	24	80	65	930	120	1030	125
	11	100	60	180	80	240	1120	740	490	440	24	80	65	1073	152	1173	157
	15	100	60	180	80	240	1120	740	490	440	24	80	65	1073	153	1173	158

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 65-160 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 65-160	5,5	MEC 132S	3 x 400 V ~ ¹	10	IE3
	7,5	MEC 132S	3 x 400 V ~ ¹	13,1	IE3
	11	MEC 160M	3 x 400 V ~ ¹	19,7	IE3
	15	MEC 160M	3 x 400 V ~ ¹	26,7	IE3
	18,5	MEC 160L	3 x 400 V ~ ¹	33	IE3
	22	MEC 180M	3 x 400 V ~ ¹	38,1	IE3

¹ Star start-up possible (Δ)

MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 65-160	5,5	100	60	200	80	240	1000	660	450	400	24	80	65	910	130	1010	135
	7,5	100	60	200	80	240	1000	660	450	400	24	80	65	930	147	1030	152
	11	100	60	200	80	240	1120	740	490	440	24	80	65	1073	160	1173	165
	15	100	60	200	80	240	1120	740	490	440	24	80	65	1073	193	1173	198
	18,5	100	60	200	80	240	1120	740	490	440	24	80	65	1117	188	1217	193
	22	100	60	200	80	260	1120	740	490	440	24	80	65	1152	178	1252	183

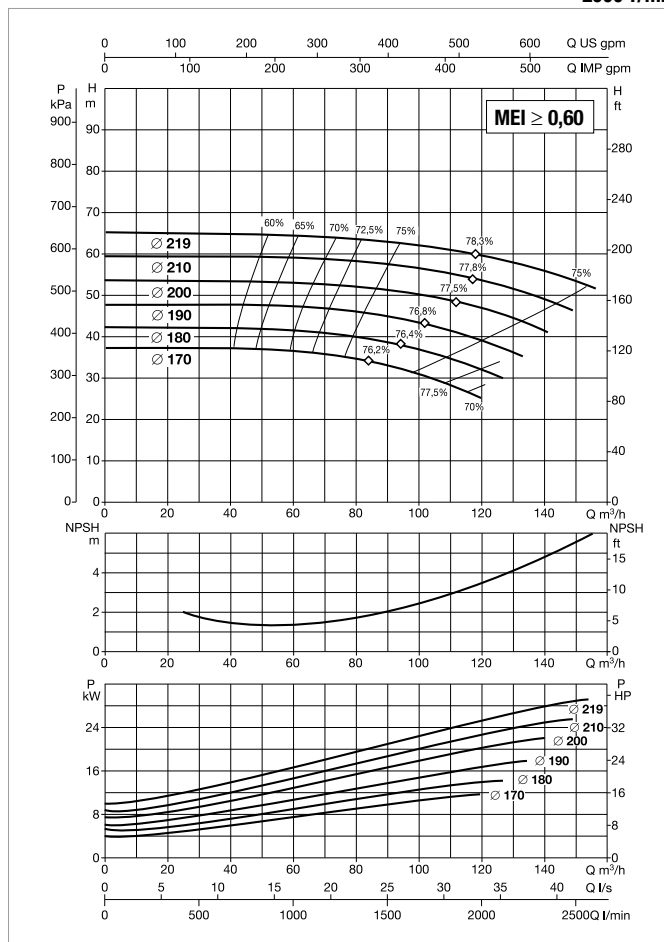
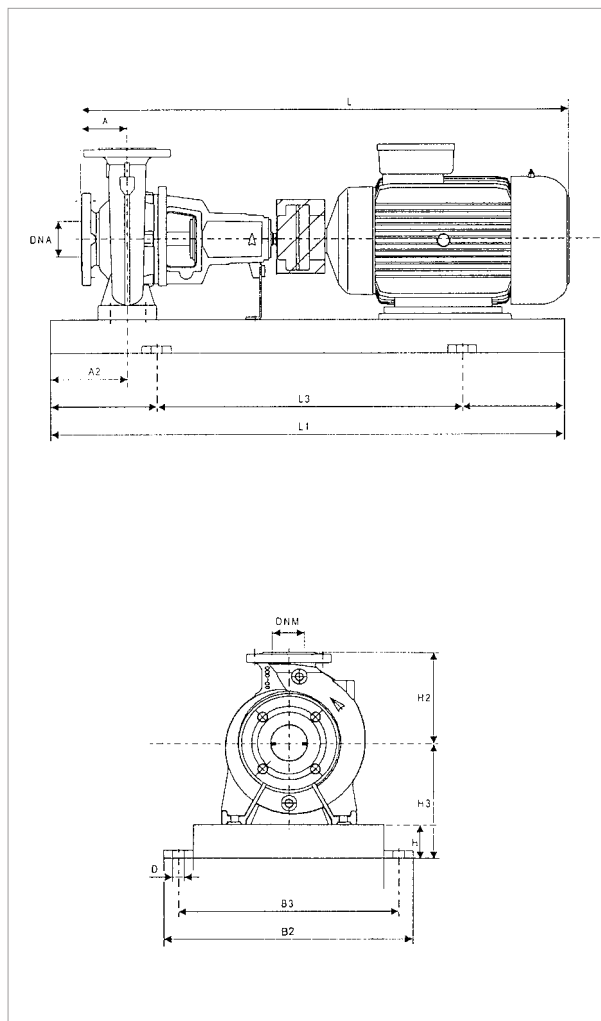
Dimension and electrical data based on sizing definition following the instructions on page 105.



KDN 65-200 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 65-200	11	MEC 160M	3 x 400 V ~ ¹	19,7	IE3
	15	MEC 160M	3 x 400 V ~ ¹	26,7	IE3
	18,5	MEC 160L	3 x 400 V ~ ¹	33	IE3
	22	MEC 180M	3 x 400 V ~ ¹	38,1	IE3
	30	MEC 200L	3 x 400 V ~ ¹	52,1	IE3
	37	MEC 200L	3 x 400 V ~ ¹	62,6	IE3

¹ Star start-up possible (Δ)

MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 65-200	11	100	75	225	80	260	1250	840	540	490	24	80	65	1073	244	1213	249
	15	100	75	225	80	260	1250	840	540	490	24	80	65	1073	252	1213	257
	18,5	100	75	225	80	260	1250	840	540	490	24	80	65	1117	257	1257	262
	22	100	75	225	80	260	1250	840	540	490	24	80	65	1152	290	1292	295
	30	100	75	225	100	300	1400	940	610	550	28	80	65	1234	418	1374	423
	37	100	75	225	100	300	1400	940	610	550	28	80	65	1234	431	1374	436

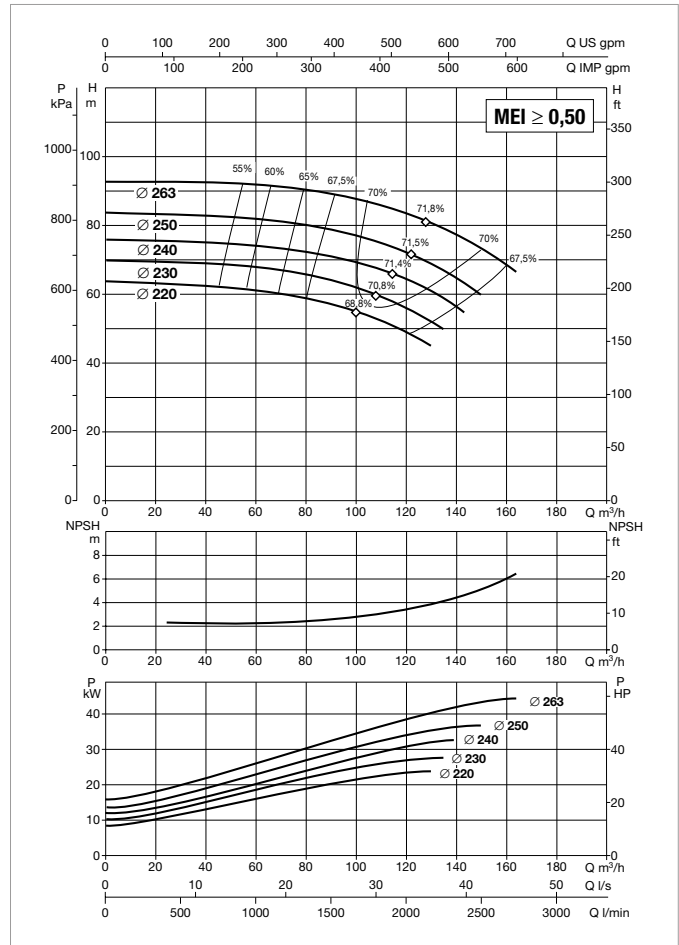
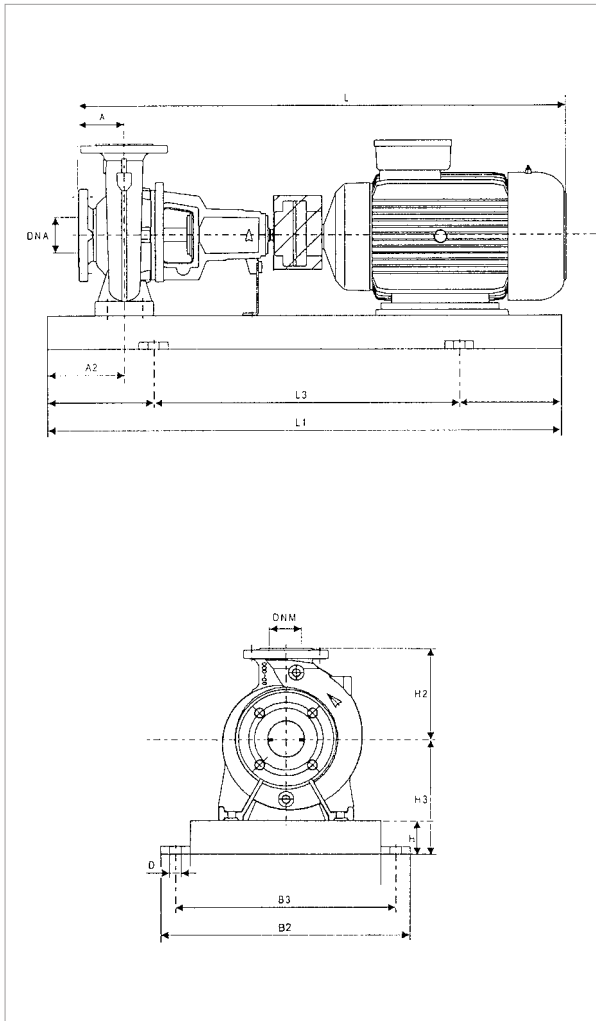
Dimension and electrical data based on sizing definition following the instructions on page 105.



KDN 65-250 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 65-250	22	MEC 180M	3 x 400 V ~ 1	38,1	IE3
	30	MEC 200L	3 x 400 V ~ 1	52,1	IE3
	37	MEC 200L	3 x 400 V ~ 1	62,6	IE3
	45	MEC 225M	3 x 400 V ~ 1	78,4	IE3
	55	MEC 250M	3 x 400 V ~ 1	94,6	IE3

* Star start-up possible (A)

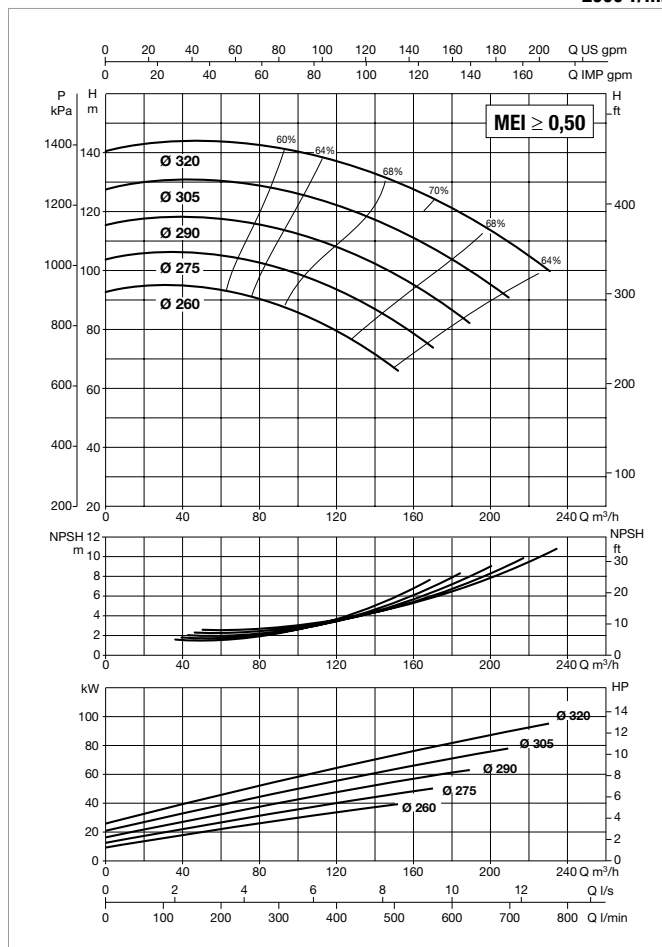
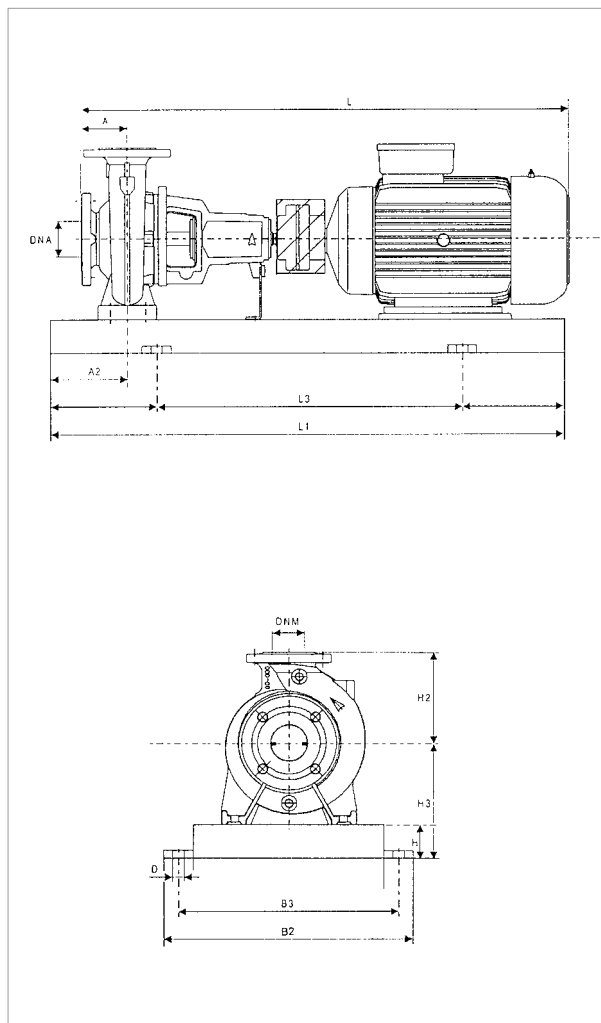
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 65-250	22	100	90	250	80	280	1250	840	540	490	24	80	65	1262	277	1402	285
	30	100	90	250	80	300	1400	940	610	550	28	80	65	1344	472	1484	480
	37	100	90	250	80	300	1400	940	610	550	28	80	65	1344	502	1484	510
	45	100	90	250	80	325	1400	940	610	550	28	80	65	1380	589	1520	597
	55	100	90	250	80	350	1600	1060	660	600	24	80	65	1493	717	1633	725

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 65-315 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 65-315	45	MEC 225M	3 x 400 V ~ ¹	78,4	IE3
	55	MEC 250M	3 x 400 V ~ ¹	94,6	IE3
	75	MEC 280S	3 x 400 V ~ ¹	127	IE3
	90	MEC 280M	3 x 400 V ~ ¹	153	IE3
	110	MEC 315S	3 x 400 V ~ ¹	185	IE3

¹ Star start-up possible (Δ)

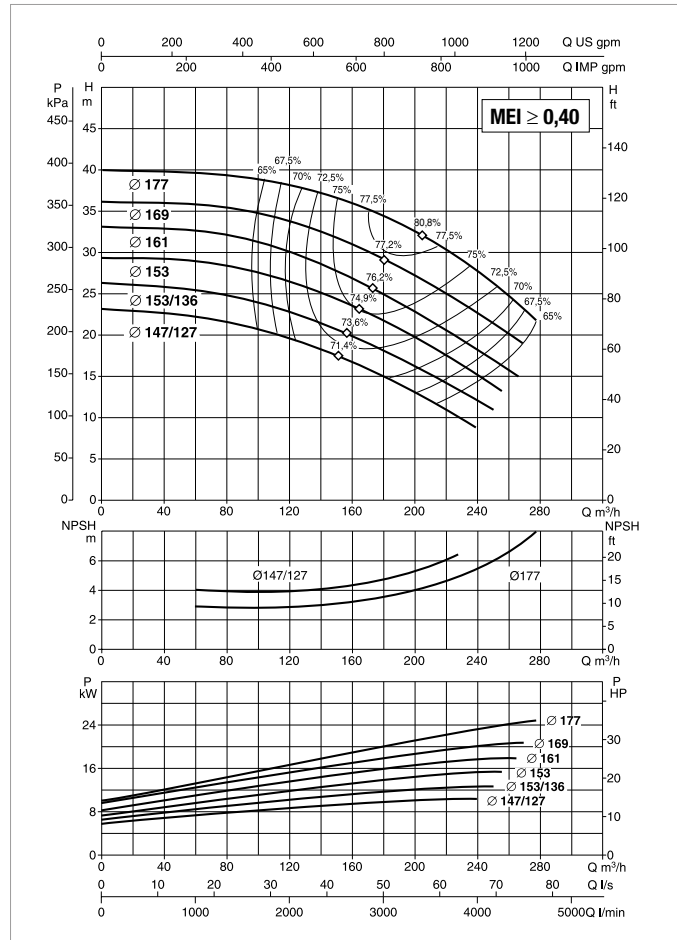
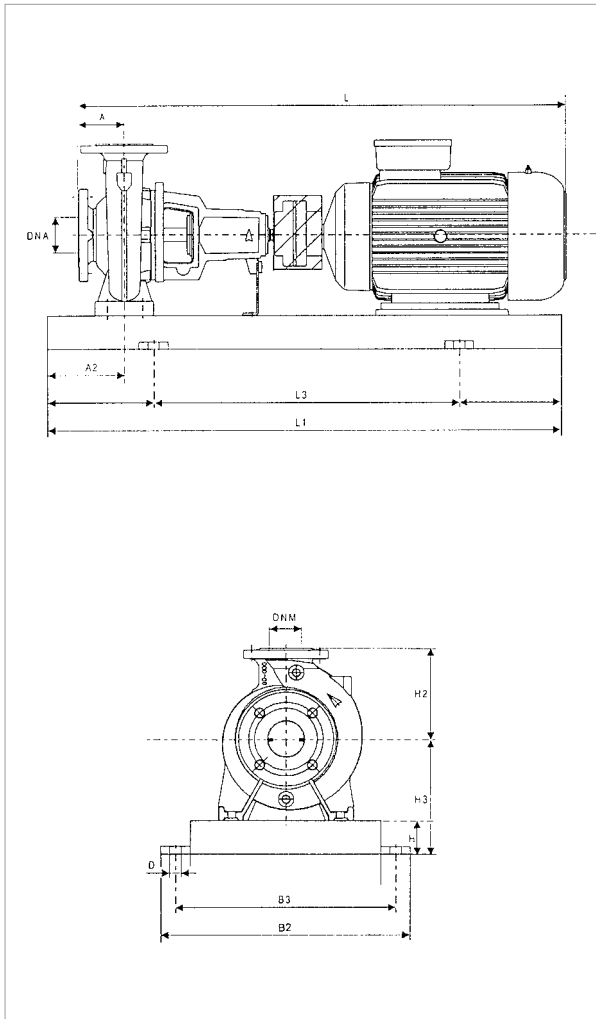
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 65-315	45	125	90	280	100	325	1600	1060	660	600	28	80	65	1405	734	1545	742
	55	125	90	280	100	325	1600	1060	660	600	28	80	65	1518	740	1658	748
	75	125	90	280	100	325	1800	1200	730	670	28	80	65	1584	849	1724	857
	90	125	90	280	100	325	1800	1200	730	670	28	80	65	1632	651	1772	659
	110	125	90	280	100	325	2000	1340	910	830	28	80	65	1955	1219	2095	1227

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 80-160 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 80-160	7,5	MEC 132S	3 x 400 V ~ 1	13,1	IE3
	11	MEC 160M	3 x 400 V ~ 1	19,7	IE3
	15	MEC 160M	3 x 400 V ~ 1	26,7	IE3
	18,5	MEC 160L	3 x 400 V ~ 1	33	IE3
	22	MEC 180M	3 x 400 V ~ 1	38,1	IE3
	30	MEC 200L	3 x 400 V ~ 1	52,1	IE3
	37	MEC 200L	3 x 400 V ~ 1	62,6	IE3

1 Star start-up possible (A)

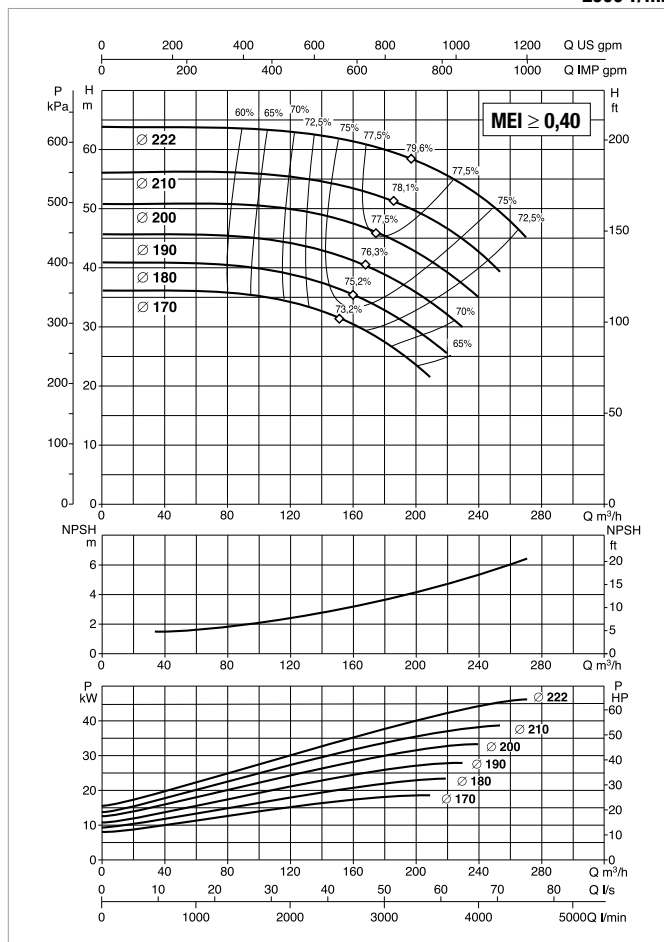
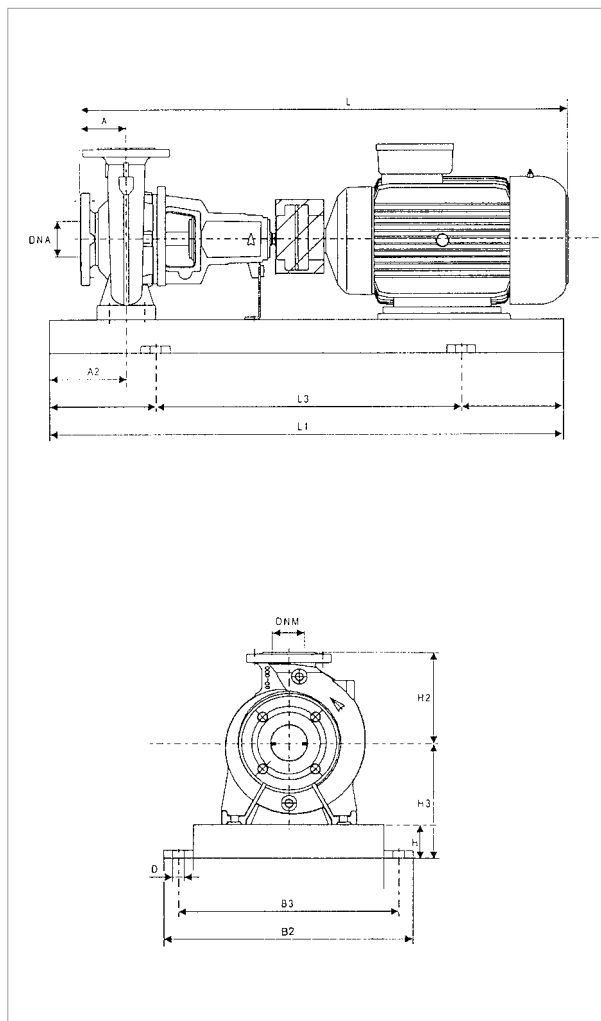
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 80-160	7,5	125	75	225	80	260	1120	740	490	440	24	100	80	955	163	1095	171
	11	125	75	225	80	260	1250	840	540	490	24	100	80	1098	275	1238	283
	15	125	75	225	80	260	1250	840	540	490	24	100	80	1098	271	1238	279
	18,5	125	75	225	80	260	1250	840	540	490	24	100	80	1142	266	1282	274
	22	125	75	225	80	260	1250	840	540	490	24	100	80	1177	211	1317	219
	30	125	75	225	80	260	1400	940	610	550	28	100	80	1259	316	1399	324
	37	125	75	225	80	260	1400	940	610	550	28	100	80	1259	408	1399	416

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 80-200 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 80-200	18,5	MEC 160L	3 x 400 V ~ ¹	33	IE3
	22	MEC 180M	3 x 400 V ~ ¹	38,1	IE3
	30	MEC 200L	3 x 400 V ~ ¹	52,1	IE3
	37	MEC 200L	3 x 400 V ~ ¹	62,6	IE3
	45	MEC 225M	3 x 400 V ~ ¹	78,4	IE3
	55	MEC 250M	3 x 400 V ~ ¹	94,6	IE3
	75	MEC 280S	3 x 400 V ~ ¹	127	IE3

¹ Star start-up possible (A)

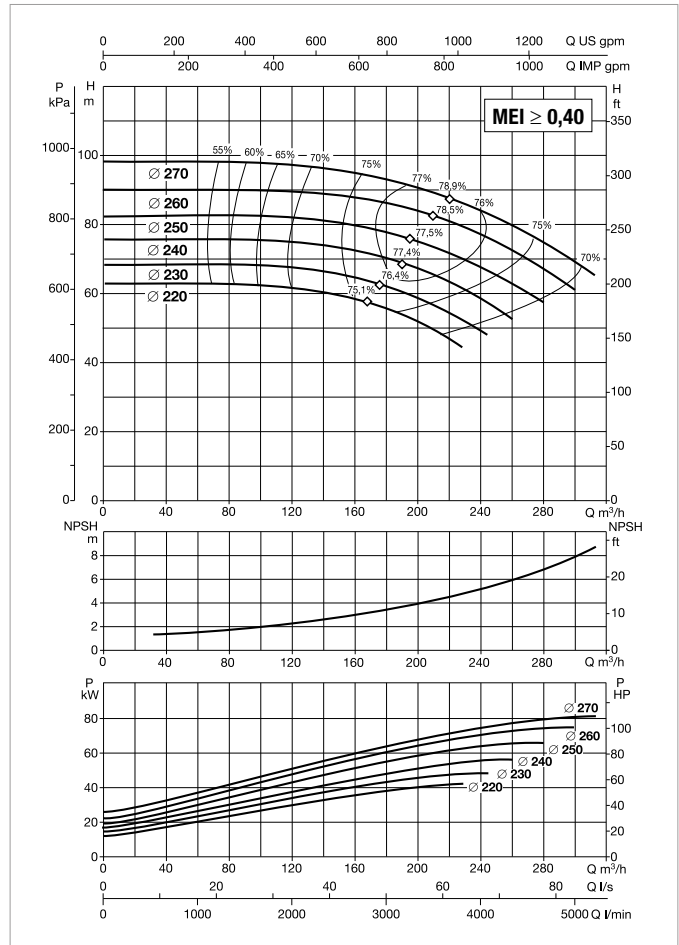
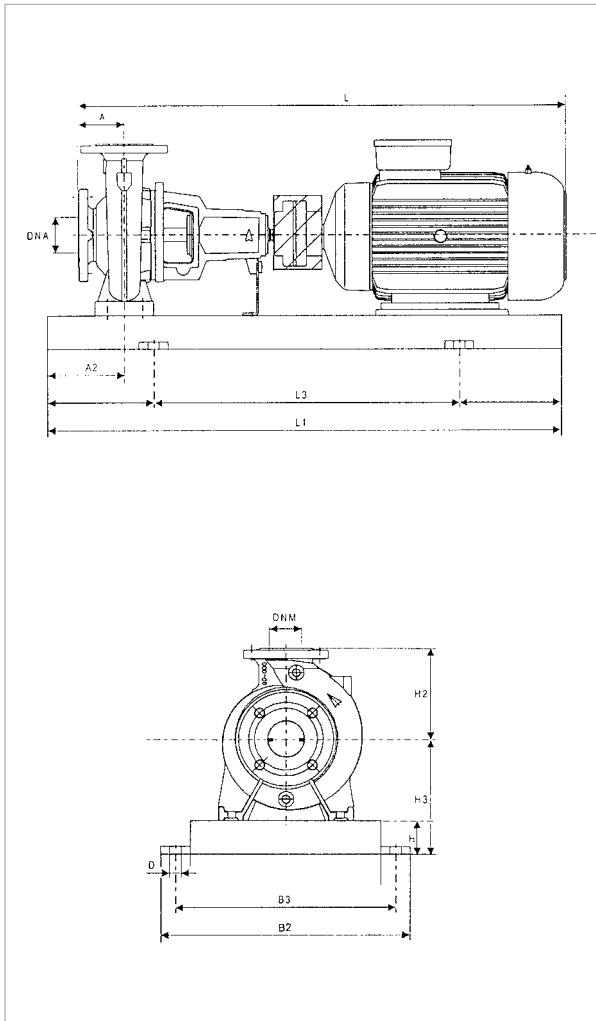
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 80-200	18,5	125	75	250	80	260	1250	840	540	490	24	100	80	1252	207	1392	215
	22	125	75	250	80	260	1250	840	540	490	24	100	80	1287	233	1427	241
	30	125	75	250	100	300	1400	940	610	550	28	100	80	1369	444	1509	452
	37	125	75	250	100	300	1400	940	610	550	28	100	80	1369	480	1509	488
	45	125	75	250	100	325	1400	940	610	550	28	100	80	1405	587	1545	595
	55	125	75	250	100	350	1600	1060	660	600	28	100	80	1518	539	1658	547
	75	125	75	250	100	380	1800	1200	730	670	28	100	80	1584	609	1724	617

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 80-250 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 80-250	37	MEC 200L	3 x 400 V ~ ¹	62,6	IE3
	45	MEC 225M	3 x 400 V ~ ¹	78,4	IE3
	55	MEC 250M	3 x 400 V ~ ¹	94,6	IE3
	75	MEC 280S	3 x 400 V ~ ¹	127	IE3
	90	MEC 280M	3 x 400 V ~ ¹	153	IE3

¹ Star start-up possible (Δ)

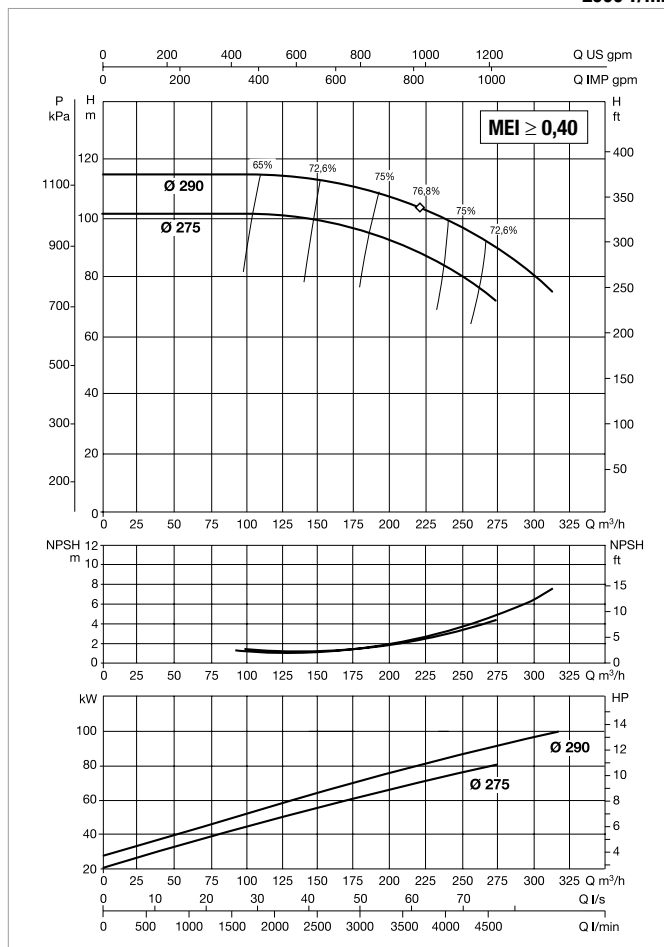
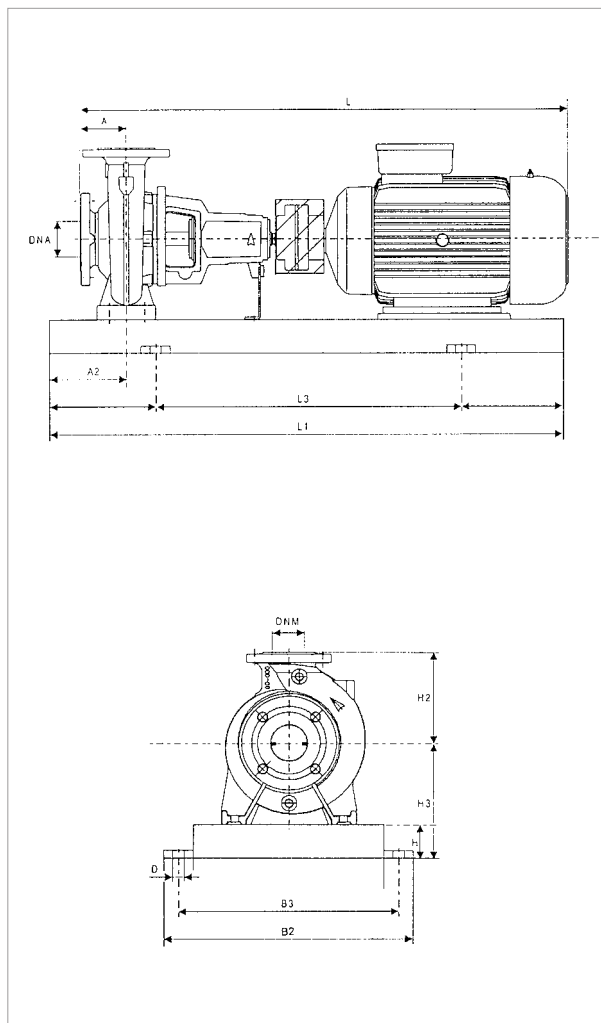
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 80-250	37	125	90	280	100	300	1400	940	610	550	28	100	80	1369	496	1509	504
	45	125	90	280	100	300	1400	940	610	550	28	100	80	1405	584	1545	592
	55	125	90	280	100	300	1600	1060	660	600	28	100	80	1518	695	1658	703
	75	125	90	280	100	300	1800	1200	730	670	28	100	80	1584	641	1724	649
	90	125	90	280	100	300	1800	1200	730	670	28	100	80	1632	891	1772	899

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 80-315 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 80-315	55	MEC 250M	3 x 400 V ~ ¹	94,6	IE3
	75	MEC 280S	3 x 400 V ~ ¹	127	IE3
	90	MEC 280M	3 x 400 V ~ ¹	153	IE3
	110	MEC 315S	3 x 400 V ~ ¹	185	IE3

¹ Star start-up possible (Δ)

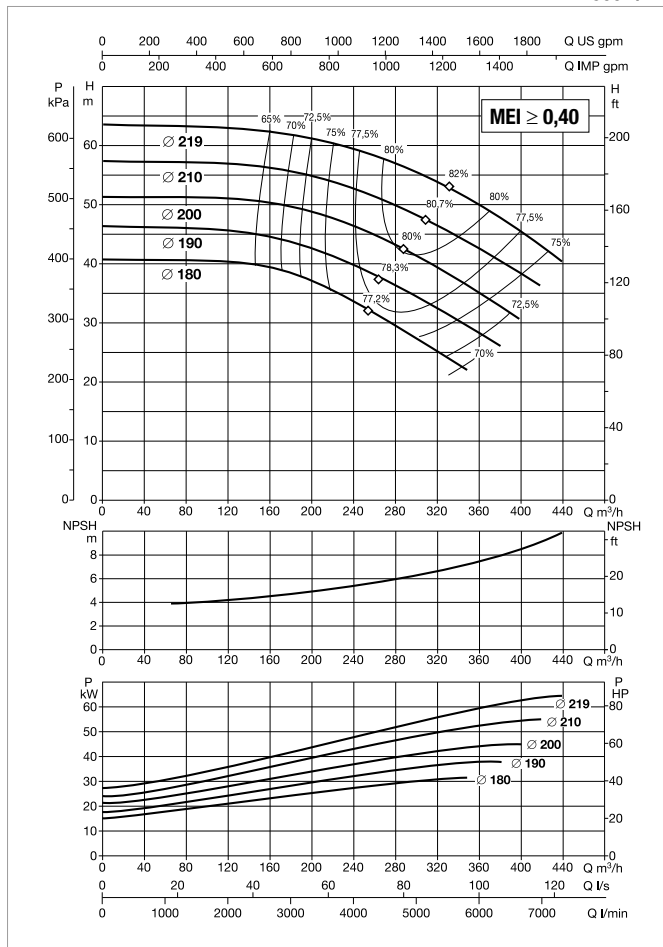
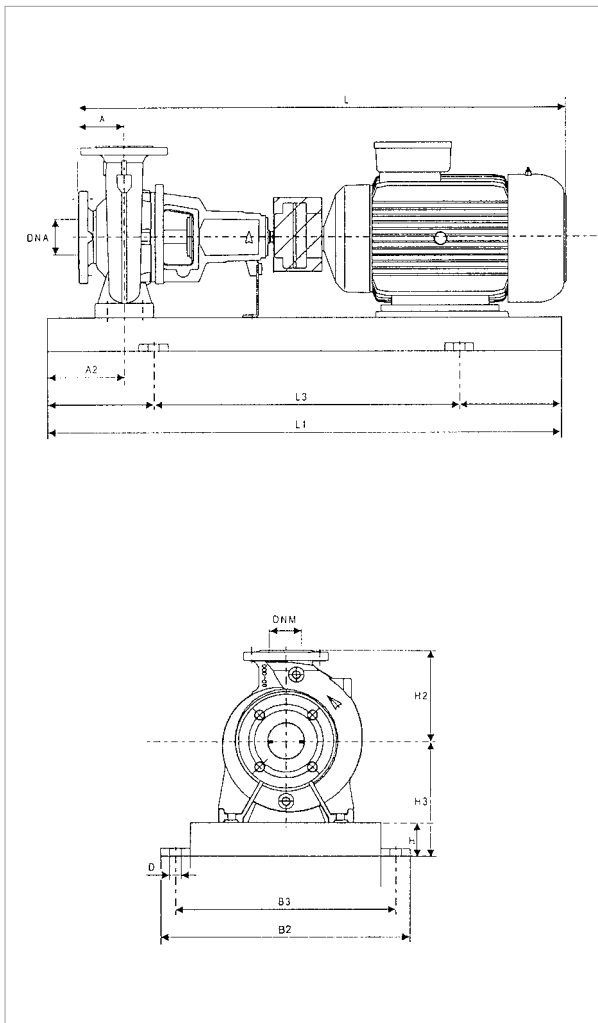
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 80-315	55	125	90	315	100	350	1600	1060	660	600	28	100	80	1518	720	1658	728
	75	125	90	315	100	350	1800	1200	730	670	28	100	80	1584	840	1724	848
	90	125	90	315	100	350	1800	1200	730	670	28	100	80	1632	663	1772	671
	110	125	90	315	120	370	2000	1340	910	830	28	100	80	1955	1231	2095	1239

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 100-200 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 100-200	30	MEC 200L	3 x 400 V ~ ¹	52,1	IE3
	37	MEC 200L	3 x 400 V ~ ¹	62,6	IE3
	45	MEC 225M	3 x 400 V ~ ¹	78,4	IE3
	55	MEC 250M	3 x 400 V ~ ¹	94,6	IE3
	75	MEC 280S	3 x 400 V ~ ¹	127	IE3
	90	MEC 280M	3 x 400 V ~ ¹	153	IE3

¹ Star start-up possible (A)

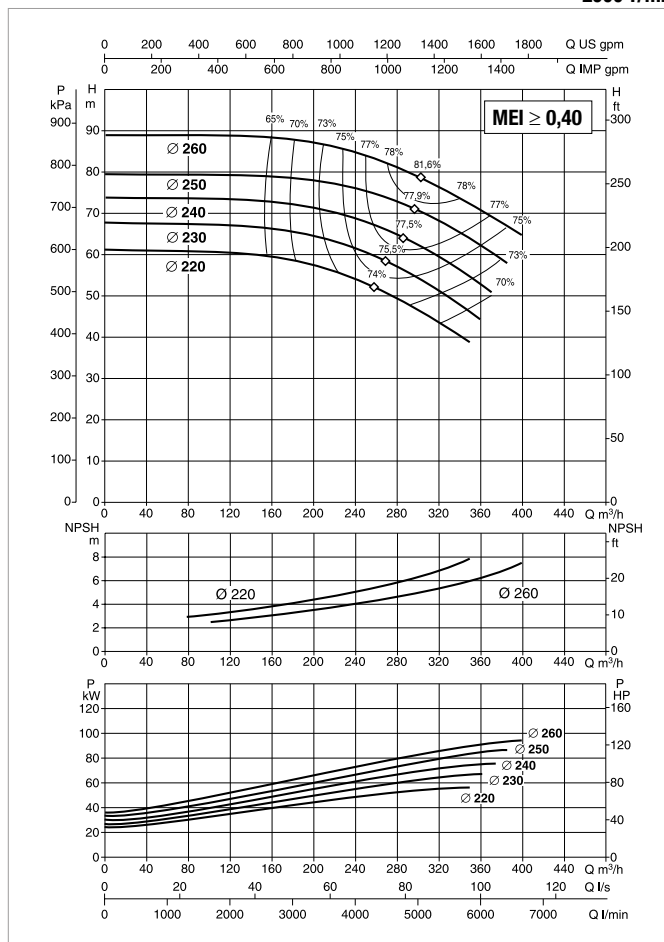
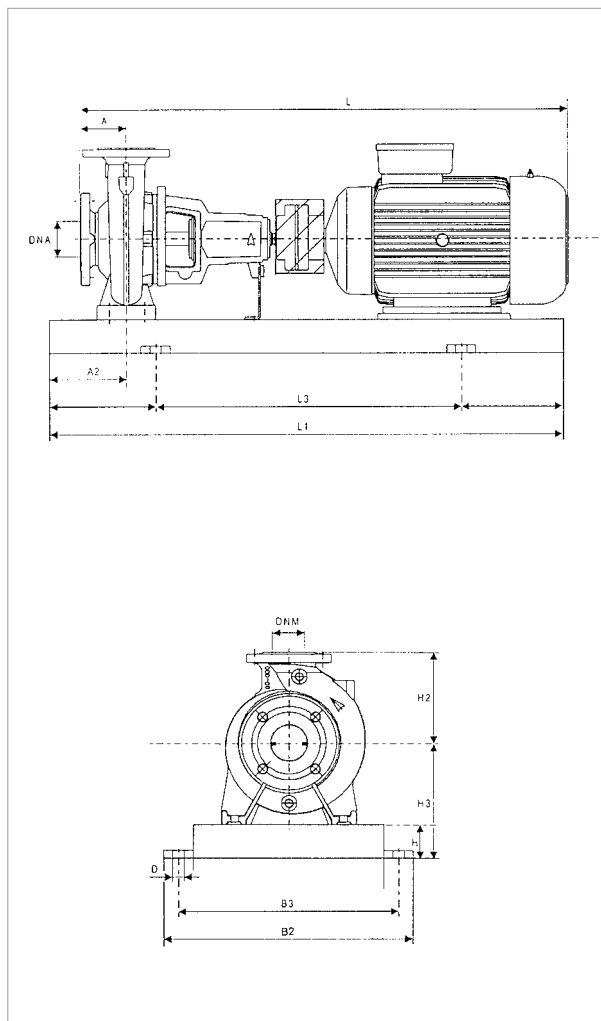
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 100-200	30	125	90	280	100	300	1400	940	610	550	28	125	100	1369	466	1509	474
	37	125	90	280	100	300	1400	940	610	550	28	125	100	1369	427	1509	435
	45	125	90	280	100	325	1400	940	610	550	28	125	100	1405	588	1545	596
	55	125	90	280	100	350	1600	1060	660	600	28	125	100	1518	668	1658	676
	75	125	90	280	100	380	1800	1200	730	670	28	125	100	1584	621	1724	629
	90	125	90	280	100	380	1800	1200	730	670	28	125	100	1632	603	1772	611

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 100-250 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 100-250	45	MEC 225M	3 x 400 V ~ ¹	78,4	IE3
	55	MEC 250M	3 x 400 V ~ ¹	94,6	IE3
	75	MEC 280S	3 x 400 V ~ ¹	127	IE3
	90	MEC 280M	3 x 400 V ~ ¹	153	IE3
	110	MEC 315S	3 x 400 V ~ ¹	185	IE3

¹ Star start-up possible (Δ)

MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 100-250	45	125	90	280	100	325	1600	1060	660	600	28	125	100	1405	735	1545	743
	55	125	90	280	100	325	1600	1060	600	600	28	125	100	1518	741	1658	749
	75	125	90	280	100	380	1800	1200	730	670	28	125	100	1584	850	1724	858
	90	125	90	280	100	380	1800	1200	730	670	28	125	100	1632	652	1772	660
	110	125	90	280	100	435	2000	1340	910	830	28	125	100	1955	1220	2095	1128 1228

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN - 2 POLES

STANDARDISED PUMPS

IE3 STANDARD MOTOR ELECTRIC DATA

=2900 1/min

MOTOR TYPE	P2 NOMINAL kW	SPEED rpm	YIELD %	POWER FACTOR COS φ	POWER INPUT 50 Hz	In A			Start-up current Ia/In	Start-up torque Ma/Mn	Maximum torque M/k/Mn	POLES
						230V	400V	690V				
MEC 71	0,25	2790	69,81	0,778	3x230/400	1,16	0,67		5,06	2,90	3,01	2
MEC 71	0,37	2820	72,79	0,783	3x230/400	1,61	0,93		5,40	2,69	2,99	2
MEC 80	0,55	2810	76,97	0,800	3x230/400	2,23	1,29		6,41	3,43	3,13	2
MEC 80	0,75	2910	82,00	0,780	3x230/400	2,94	1,70		8,90	4,70	4,80	2
MEC 80	1,1	2870	82,70	0,760	3x230/400	4,16	2,40		9,30	5,00	5,30	2
MEC 90S	1,5	2875	84,20	0,850	3x230/400	5,20	3,00		8,40	3,60	3,80	2
MEC 90L	2,2	2880	86,50	0,820	3x230/400	7,97	4,60		9,20	4,00	4,20	2
MEC 100L	3	2900	87,10	0,890	3x400 Δ		5,60	3,23	8,80	5,50	4,50	2
MEC 112M	4	2910	88,10	0,930	3x400 Δ		7,00	4,04	9,60	3,60	4,00	2
MEC 132S	5,5	2920	89,20	0,900	3x400 Δ		10,00	5,77	8,90	3,00	3,60	2
MEC 132S	7,5	2910	90,10	0,920	3x400 Δ		13,10	7,56	8,90	3,00	3,60	2
MEC 160M	11	2950	91,20	0,890	3x400 Δ		19,70	11,37	9,10	4,00	4,20	2
MEC 160M	15	2940	91,90	0,890	3x400 Δ		26,70	15,42	9,70	4,70	4,80	2
MEC 160L	18,5	2950	92,40	0,880	3x400 Δ		33,00	19,05	10,70	4,60	4,70	2
MEC 180M	22	2955	92,70	0,900	3x400 Δ		38,10	22,00	8,20	2,20	2,30	2
MEC 200L	30	2960	93,30	0,890	3x400 Δ		52,10	30,08	7,50	2,20	2,30	2
MEC 200L	37	2960	93,70	0,910	3x400 Δ		62,60	36,14	7,50	2,20	2,30	2
MEC 225M	45	2965	94,00	0,880	3x400 Δ		78,40	45,26	7,60	2,20	2,30	2
MEC 250M	55	2970	94,30	0,890	3x400 Δ		94,60	54,62	7,60	2,20	2,30	2
MEC 280S	75	2975	94,70	0,900	3x400 Δ		127,00	73,32	6,90	2,00	2,30	2
MEC 280M	90	2975	95,00	0,890	3x400 Δ		153,00	88,33	7,00	2,00	2,30	2
MEC 315S	110	2978	95,20	0,900	3x400 Δ		185,00	106,81	7,10	2,00	2,20	2
MEC 315M	132	2978	95,40	0,900	3x400 Δ		222,00	128,17	7,10	2,00	2,20	2
MEC 315L	160	2980	95,60	0,900	3x400 Δ		268,00	154,73	7,10	2,00	2,20	2
MEC 315L	200	2980	95,80	0,920	3x400 Δ		330,00	190,75	6,10	1,80	2,60	2
MEC 355M	250	2980	95,80	0,920	3x400 Δ		410,00	236,99	6,90	2,00	2,90	2
MEC 355L	315	2980	95,80	0,920	3x400 Δ		520,00	300,58	5,70	1,70	2,40	2

CENTRIFUGAL PUMPS

KDN - 4 POLE RANGE

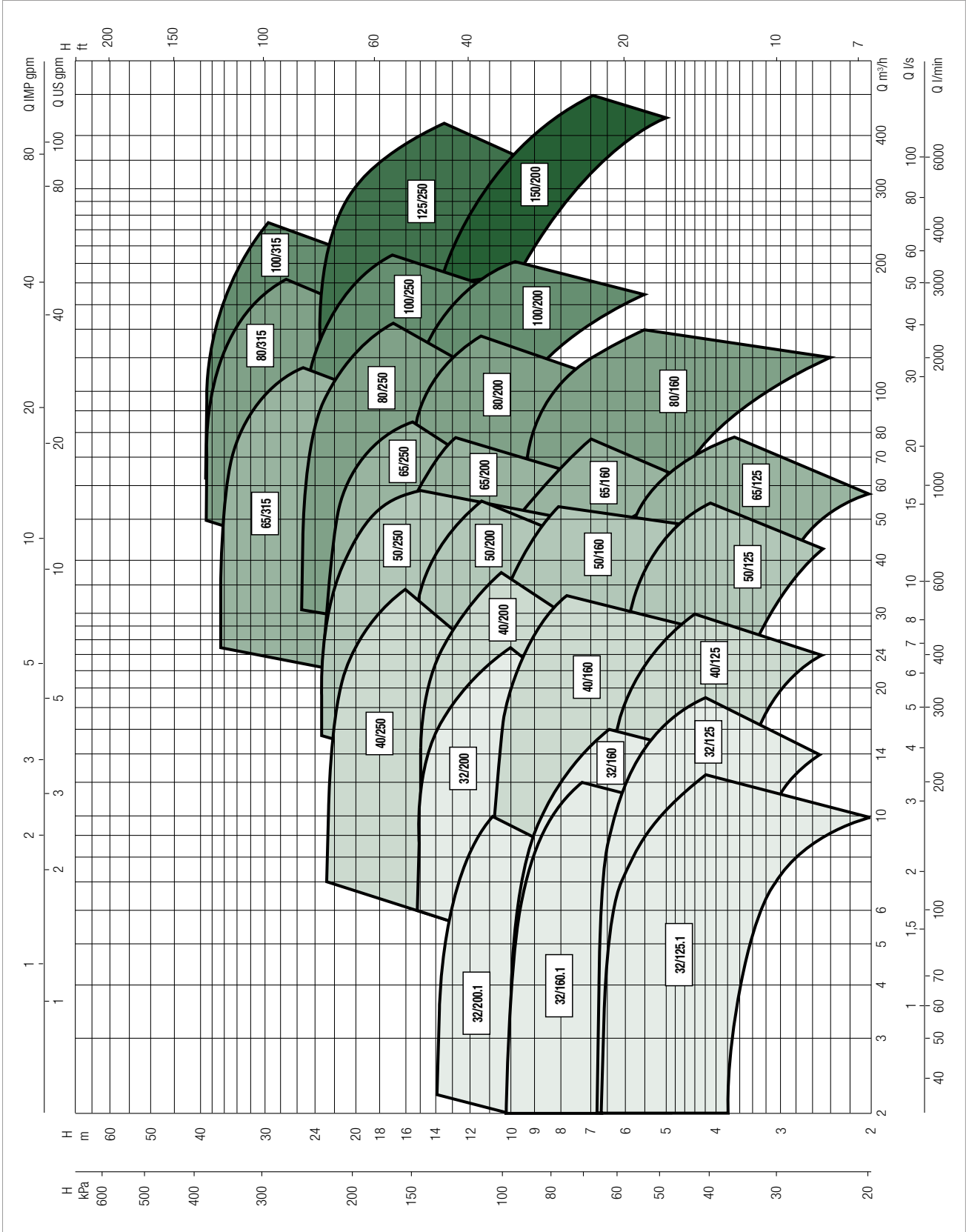
STANDARDISED PUMPS

PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

GRAPHIC SELECTION TABLE

= 1450 1/min



SELECTION TABLE - KDN 32

MODEL	Q=m ³ /h	0	3	6	12	18	24
	Q=l/min	0	50	100	200	300	400
KDN 32-125.1/105	H (m)	3,5	3,4	3,1			
KDN 32-125.1/110		3,9	3,8	3,5			
KDN 32-125.1/115		4,25	4,2	3,9			
KDN 32-125.1/120		4,7	4,6	4,3			
KDN 32-125.1/125		5,1	5,1	4,8			
KDN 32-125.1/130		5,6	5,6	5,3			
KDN 32-125.1/135		6,1	6	5,8	4,4		
KDN 32-125.1/140		6,6	6,6	6,4	5,1		
KDN 32-125/115		4,3		4,1	3,2		
KDN 32-125/120		4,75		4,6	3,75		
KDN 32-125/125		5,2		5,05	4,2		
KDN 32-125/130		5,7		5,5	4,8		
KDN 32-125/135		6,2		6	5,3	3,65	
KDN 32-125/142		6,9		6,75	6,15	4,5	
KDN 32-160.1/137		5,3	5,3	4,7			
KDN 32-160.1/145		6,2	6,1	5			
KDN 32-160.1/153		7	7	6,6			
KDN 32-160.1/161		8	7,9	7,6			
KDN 32-160.1/169		8,9	8,9	8,6	5,5		
KDN 32-160.1/177		9	9,8	9,5	6,6		
KDN 32-160/137		5,9		5,6	4,4		
KDN 32-160/145		6,7		6,5	5,3		
KDN 32-160/153		7,6		7,4	6,25		
KDN 32-160/161		8,5		8,25	7,25		
KDN 32-160/169		9,5		9,3	8,4	6,6	
KDN 32-160/177		10,5		10,4	9,6	7,8	
KDN 32-200.1/170		8,6	8,5	7,2			
KDN 32-200.1/180		9,8	9,8	9			
KDN 32-200.1/190		11,3	11,1	10,5			
KDN 32-200.1/200		12,8	12,7	11,7	8,3		
KDN 32-200.1/207		13,8	13,8	13	8,9		
KDN 32-200/170		8,6		8,2	6,7		
KDN 32-200/180		9,9		9,6	8,2		
KDN 32-200/190		11,2		10,9	9,7	7	
KDN 32-200/200		12,6		12,3	11,1	8,7	
KDN 32-200/210		14,3		14	13,1	10,7	
KDN 32-200/219		15,7		15,4	14,8	13	9,8

SELECTION TABLE - KDN 40

MODEL	Q=m ³ /h	0	6	12	18	24	30	36
	Q=l/min	0	100	200	300	400	500	600
KDN 40-125/115	H (m)	4,2	4,1	3,8	3,2	2,4		
KDN 40-125/120		4,6	4,5	4,2	3,7	2,9		
KDN 40-125/125		5,1	4,9	4,7	4,1	3,3		
KDN 40-125/130		5,5	5,4	5,2	4,7	3,9		
KDN 40-125/135		6	5,9	5,8	5,3	4,6		
KDN 40-125/142		6,7	6,6	6,5	6	5,3	4,1	
KDN 40-160/137		5,9	5,8	5,8	5	3,7		
KDN 40-160/145		6,7	6,6	6,5	6	4,8		
KDN 40-160/153		7,6	7,6	7,5	7	6,8		
KDN 40-160/161		8,6	8,5	8,4	8	7,1	5,6	
KDN 40-160/169		9,6	9,5	9,5	9,1	8,3	7	
KDN 40-160/177		10,7	10,7	10,6	10,2	9,5	8,3	
KDN 40-200/170		8,4	8,4	8,2	7,4	5,7		
KDN 40-200/180		9,7	9,7	9,4	8,8	7,2		
KDN 40-200/190		10,9	10,8	10,7	10,2	8,8	6,8	
KDN 40-200/200		12,2	12,1	12	11,7	10,4	8,6	
KDN 40-200/210		13,6	13,5	13,5	13,2	12,1	10,6	
KDN 40-200/219		15	15	15	14,7	13,8	12,4	10,4
KDN 40-250/220		15,8		15,6	14,8	13,6	12	
KDN 40-250/230		17,4		17,2	16,5	15,3	13,7	
KDN 40-250/240	19,1		19	18,2	17	15,5		
KDN 40-250/250	20,7		20,6	20	18,9	17,5		
KDN 40-250/260	22,7		22,6	22,1	21	19,5		

KDN - 4 POLES

STANDARDISED PUMPS

SELECTION TABLE - KDN 50

MODEL	Q=m ³ /h	0	12	18	24	30	36	42	48	54
	Q=l/min	0	200	300	400	500	600	700	800	900
KDN 50-125/115	H (m)	4,2	4,1	3,9	3,6	3,3	2,9	2,3		
KDN 50-125/120		4,6	4,4	4,3	4	3,7	3,3	2,8		
KDN 50-125/125		5	4,9	4,7	4,5	4,2	3,7	3,3		
KDN 50-125/130		5,6	5,4	5,2	5	4,7	4,2	3,8	3,2	
KDN 50-125/135		6	5,8	5,7	5,5	5,2	4,8	4,3	3,8	
KDN 50-125/139		6,3	6,2	6,1	5,9	5,6	5,2	4,8	4,2	
KDN 50-125/144		6,7	6,7	6,6	6,4	6,2	5,8	5,3	4,8	4,1
KDN 50-160/137		6	6	5,9	5,6	5,2	4,8			
KDN 50-160/145		6,8	6,7	6,7	6,5	6,2	5,8			
KDN 50-160/153		7,6	7,6	7,5	7,4	7,2	6,7			
KDN 50-160/161		8,4	8,4	8,3	8,2	8,1	7,7			
KDN 50-160/169		9,4	9,3	9,2	9,2	9,1	8,8			
KDN 50-160/177		10,4	10,3	10,3	10,2	10,1	9,95			
KDN 50-200/170		9,5	9,3	9,2	8,8	8	6,85			
KDN 50-200/180		10,6	10,6	10,5	10,1	9,5	8,6	7,3		
KDN 50-200/190		11,8	11,7	11,6	11,4	10,8	10,1	8,9		
KDN 50-200/200		13,1	13	13	12,8	12,3	11,6	10,6	9,4	
KDN 50-200/210		14,6	14,6	14,5	14,4	13,9	13,2	12,2	11	
KDN 50-200/219		16	16	16	15,9	15,4	14,2	13,8	12,7	11,4
KDN 50-250/220		15,9	15,7	15,6	15,4	14,9	13,8	12,4	10,5	
KDN 50-250/230		17,4	17,3	17,2	17	16,5	15,5	14,2	12,6	10,3
KDN 50-250/240		19	19	19	18,8	18,2	17,4	16,2	14,7	12,4
KDN 50-250/250		20,8	20,8	20,7	20,6	20,1	19,2	18,1	17	14,8
KDN 50-250/263	23	23	22,9	22,8	22,5	21,7	20,6	19,4	17,5	

SELECTION TABLE - KDN 65

MODEL	Q=m ³ /h	0	18	24	30	36	42	48	54	60	66	72	78	84	90	102	114	
	Q=l/min	0	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1700	1900	
KDN 65-125/120/110	H (m)	3,75		3,5	3,3	3,2	2,9	2,7	2,3	1,9								
KDN 65-125/120		4,25		3,9	3,8	3,6	3,3	3,1	2,7	2,3								
KDN 65-125/125		4,7		4,4	4,25	4,1	3,8	3,6	3,25	2,8								
KDN 65-125/130		5,1		4,9	4,75	4,6	4,3	4,1	3,8	3,3	2,8							
KDN 65-125/135		5,6		5,4	5,3	5,2	4,9	4,7	4,3	3,9	3,5	3						
KDN 65-125/140		6		5,9	5,8	5,7	5,5	5,2	4,9	4,5	4,1	3,6						
KDN 65-125/144		6,4		6,35	6,25	6,2	5,9	5,7	5,4	5	4,65	4,2	3,7					
KDN 65-160/137		5,8		5,7	5,4	5,2	4,75	4,3	3,7									
KDN 65-160/145		6,5		6,5	6,3	6	5,7	5,3	4,75	4,1								
KDN 65-160/153		7,3		7,2	7,2	6,9	6,7	6,3	5,8	5,25								
KDN 65-160/161		8,2		8,1	8,1	7,9	7,7	7,3	6,85	6,3	5,8							
KDN 65-160/169		9,1		9,1	9	8,9	8,7	8,4	8	7,6	7,1	6,4						
KDN 65-160/177		10		10	9,9	9,8	9,7	9,45	9,1	8,7	8,2	7,5						
KDN 65-200/170		9,3	9,3	9,2	9,2	9	8,5	7,9	7,1	6,3								
KDN 65-200/180		10,4	10,4	10,4	10,3	10,2	10	9,5	8,8	8,1								
KDN 65-200/190		12,1	12	12	12	11,9	11,5	11,1	10,5	9,8	8,8							
KDN 65-200/200		13,3	13,3	13,3	13,2	13,1	13	12,8	12,3	11,6	10,8							
KDN 65-200/210		14,8	14,7	14,7	14,7	14,6	14,6	14,3	13,8	13,4	12,7	12						
KDN 65-200/219		16,2	16,2	16,2	16,1	16	15,9	15,8	15,4	15	14,4	13,5	12,7					
KDN 65-250/220		15,8		15,8	15,5	15,1	14,5	14	13,2	12	10,7							
KDN 65-250/230		17,4		17,4	17,2	16,8	16,3	15,7	15	14,1	12,7	11,4						
KDN 65-250/240		19		19	18,9	18,5	18,1	17,5	16,8	16	14,7	13,6						
KDN 65-250/250		20,7		20,7	20,6	20,4	20	19,5	18,8	18	17	15,9	14,5					
KDN 65-250/263		23,2		23	23	22,9	22,5	22,2	21,6	20,8	19,8	18,6	17,4	16				
KDN 65-315/260		22,3		22,2	22,1	22	21,5	21	20,5	20	19,2	18,4	17	16	15			
KDN 65-315/275		25,1		25,1	25	24,8	24,6	24,1	23,5	23	22,5	21,5	20,5	19,4	18,1			
KDN 65-315/290		28,2		28,2	28,1	28	27,8	27,3	27	26,5	25,5	25	24	23,1	22	19,5		
KDN 65-315/305		31,7		31,5	31,4	31,4	31,3	31,2	30,8	30,4	29,6	29	28	27,2	26,1	23,5		
KDN 65-315/320		35,7		35,4	35,3	35,2	35,1	35	34,8	34,5	33,8	33,5	32,5	31,5	30,8	28	24,8	

KDN - 4 POLES

STANDARDISED PUMPS

SELECTION TABLE - KDN 80

MODEL	Q=m ³ /h	0	42	48	54	60	66	72	78	84	90	102	114	120	150	180
	Q=l/min	0	700	800	900	1000	1100	1200	1300	1400	1500	1700	1900	2000	2500	3000
KDN 80-160/147/127	H (m)	5,7	5,4	5,25	5,05	4,8	4,6	4,35	4,15	3,85	3,6	3,1	2,5	2,2		
KDN 80-160/153/136		6,4	6,2	6,05	5,85	5,7	5,4	5,15	4,8	4,65	4,4	3,85	3,3	3		
KDN 80-160/153		7,3	7,1	6,9	6,7	6,5	6,3	6	5,75	5,4	5,2	4,55	3,9	3,6		
KDN 80-160/161		8,2	8	7,9	7,75	7,5	7,3	7,05	6,8	6,5	6,25	5,6	4,9	4,6		
KDN 80-160/169		9,1	9	8,85	8,7	8,6	8,35	8,1	7,85	7,6	7,3	6,75	6	5,7		
KDN 80-160/177		10	9,9	9,85	9,8	9,7	9,5	9,3	9,1	8,85	8,7	8,1	7,25	6,9		
KDN 80-200/170		9,2	9,1	9	8,7	8,5	8,2	7,8	7,5	7,1	6,7	5,6				
KDN 80-200/180		10,3	10,2	10,2	10	9,9	9,6	9,2	9	8,6	8,2	7,2				
KDN 80-200/190		11,4	11,4	11,3	11,2	11,1	11	10,7	10,5	10,1	9,8	8,7	6,8			
KDN 80-200/200		12,7	12,6	12,6	12,6	12,5	12,4	12,3	12	11,6	11,4	10,5	9,4	8,8		
KDN 80-200/210		14,1	14	14	14	13,9	13,8	13,7	13,6	13,3	13,1	12,1	11,2	10,6		
KDN 80-200/222		15,9	15,9	15,8	15,7	15,6	15,6	15,5	15,4	15,3	15	14,3	13,4	12,8		
KDN 80-250/220		16	15,9	15,8	15,7	15,6	15,5	15,2	14,9	14,5	13,9	12,8				
KDN 80-250/230		17,3	17,3	17,2	17,1	17	16,9	16,8	16,5	16	15,5	14,3	12,4			
KDN 80-250/240		19	19	19	18,9	18,8	18,7	18,6	18,4	18	17,6	16,6	15,3	14,6		
KDN 80-250/250		20,8	20,7	20,7	20,7	20,6	20,5	20,4	20,3	19,9	19,6	18,6	17,4	16,8		
KDN 80-250/260		22,6	22,5	22,5	22,4	22,3	22,2	22,1	22	21,8	21,4	20,6	19,6	19	15,1	
KDN 80-250/270		24,5	24,4	24,4	24,4	24,3	24,2	24,1	24	23,7	23,3	22,4	21,4	20,7	16,3	
KDN 80-315/275		24,8		24,8	24,8	24,7	24,6	24,5	24,4	24,3	24	23	21,4	20,5		
KDN 80-315/290		27,8		27,8	27,8	27,7	27,7	27,6	27,6	27,5	27,4	26,5	25	24,6	19,1	
KDN 80-315/305	31,4		31,4	31,3	31,2	31,2	31,2	31,2	31,2	30,9	30	29	28,5	24		
KDN 80-315/320	34,8		34,7	34,6	34,6	34,5	34,4	34,3	34	33,9	33,8	33,2	32,8	28,8		
KDN 80-315/334	38,3		38,2	38,2	38,2	38,2	38,2	38,1	38	37,9	37,6	37	36,9	33,1	28	

CENTRIFUGAL PUMPS

SELECTION TABLE - KDN 100

MODEL	Q=m ³ /h	0	60	66	72	78	84	90	102	114	120	150	180	210	240
	Q=l/min	0	1000	1100	1200	1300	1400	1500	1700	1900	2000	2500	3000	3500	4000
KDN 100-200/180	H (m)	10.1	10.1	10.1	10	9.9	9.7	9.5	9.1	8.5	8.3	7	5.4		
KDN 100-200/190		11.6	11.5	11.4	11.3	11.2	11.1	11	10.5	10.1	10	8.6	7		
KDN 100-200/200		12.9	12.8	12.8	12.8	12.7	12.6	12.5	12.2	11.8	11.6	10.4	8.8		
KDN 100-200/210		14.3	14.2	14.2	14.2	14.2	14.1	14	13.8	13.5	13.3	12.3	10.7	9	
KDN 100-200/219		16	15.7	15.7	15.6	15.6	15.5	15.5	15.3	15.1	15	14	12.5	10.8	
KDN 100-250/220		15.2	14.9	14.9	14.9	14.8	14.7	14.6	14.3	13.7	13.4	11.4			
KDN 100-250/230		16.9	16.7	16.7	16.6	16.5	16.4	16.3	16.1	15.7	15.3	13.6	11.1		
KDN 100-250/240		18.5	18.3	18.3	18.3	18.2	18.1	18	17.9	17.6	17.4	15.7	13.3		
KDN 100-250/250		20.1	20	20	19.9	19.8	19.7	19.6	19.5	19.4	19.2	17.6	15.4		
KDN 100-250/260		22.3	22.1	22.1	22.1	22	21.9	21.8	21.7	21.5	21.4	19.8	17.7	15.1	
KDN 100-250/270		24.3	24.3	24.3	24.3	24.3	24.3	24.2	24.1	23.7	23.5	22.1	20.1	17.3	
KDN 100-315/275		25.1	25	25	25	24.9	24.8	24.7	24.6	24.4	24	22	19		
KDN 100-315/290		28	27.9	27.9	27.9	27.9	27.8	27.7	27.6	27.5	27	25.5	23		
KDN 100-315/305		31.3	31.1	31.1	31.1	31	30.9	30.8	30.7	30.6	30.5	29	27	24	
KDN 100-315/320		34.5	34.4	34.4	34.4	34.4	34.4	34.3	34.2	34.1	34	33	31	28.1	
KDN 100-315/334		38.2	38.2	38.1	38.1	38.1	38	38	37.7	37.5	37.3	36.5	34.8	32	28.8

SELECTION TABLE - KDN 125

MODEL	Q=m ³ /h	0	102	114	120	150	180	210	240	270	300	330	360	390	420
	Q=l/min	0	1700	1900	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000
KDN 125-250/220	H (m)	15	14.9	14.9	14.8	14.5	14	13	11.8	10.5	9.2				
KDN 125-250/230		16.6	16.6	16.6	16.5	16.3	15.6	14.8	13.8	12.5	12.3	9.5			
KDN 125-250/240		18.2	18.1	18.1	18.1	18	17.7	16.8	15.8	14.5	13.3	11.6	10.1		
KDN 125-250/250		19.9	19.8	19.8	19.7	19.6	19.4	18.7	17.8	16.6	15.5	14	12.3		
KDN 125-250/260		21.7	21.7	21.6	21.5	21.4	21.3	20.6	19.9	18	17.7	16.3	14.6	13	
KDN 125-250/269		23.9	23.9	23.9	23.8	23.6	23.2	22.7	22.1	22.2	20.2	19	17.5	15.6	14

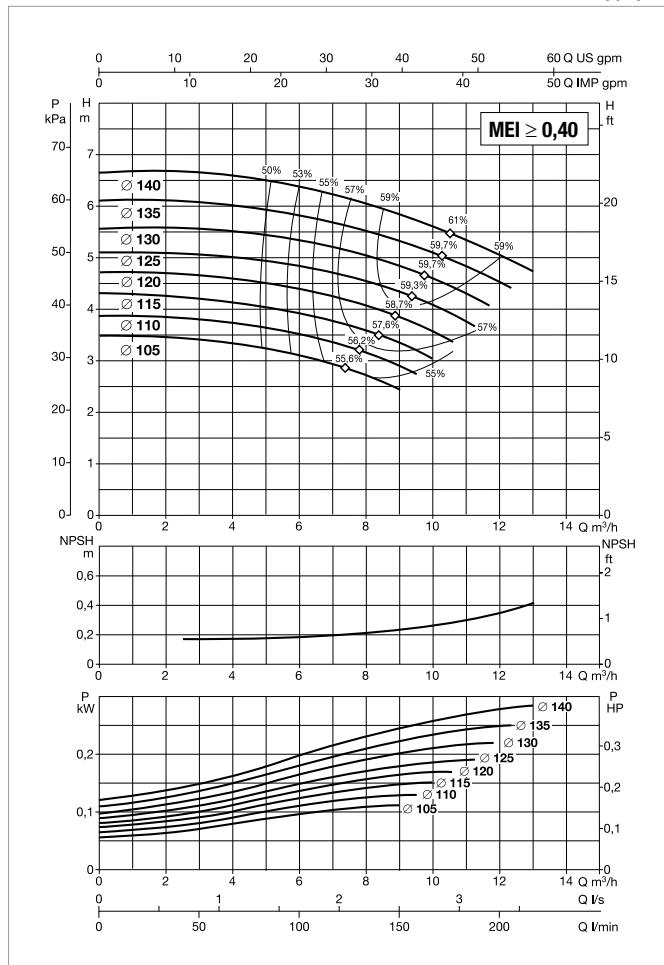
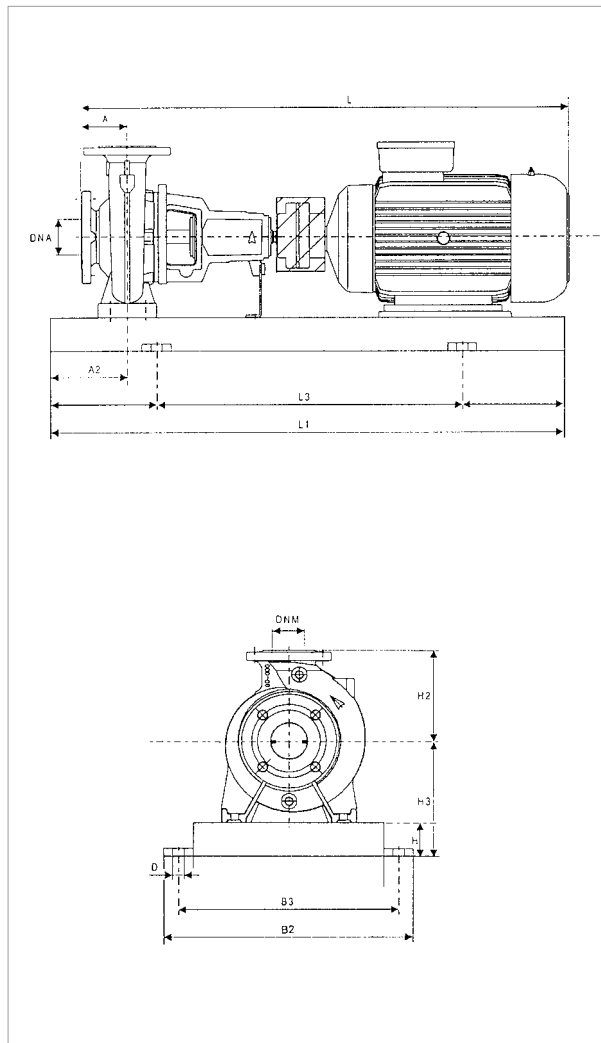
SELECTION TABLE - KDN 150

MODEL	Q=m ³ /h	0	102	114	120	150	180	210	240	270	300	330	360	390	420
	Q=l/min	0	1700	1900	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000
KDN 150-200/210/170	H (m)	8.9	8.9	8.9	8.8	8.7	8.6	8.3	7.9	7.4	6.8	6.2	5.4	4.5	
KDN 150-200/218/182		10.4	10.4	10.4	10.3	10.2	9.9	9.5	9.1	8.6	8.1	7.4	6.6	5.8	
KDN 150-200/218/200		11.4	11.4	11.4	11.4	11.2	10.9	10.6	10.1	9.7	9.2	8.5	7.8	6.9	5.9
KDN 150-200/218		12.9	12.7	12.7	12.6	12.4	12.1	11.7	11.2	10.7	10.2	9.6	8.8	8	7.1
KDN 150-200/224		13.8	13.6	13.6	13.5	13.3	13	12.6	12.2	11.7	11.2	10.6	9.9	9.2	8.2

KDN 32-125.1 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 32-125.1	0,37	MEC 71	3 x 230 - 400 V ~	1,7/0,975	-
	0,55	MEC 80	3 x 230 - 400 V ~	2,6/1,5	-

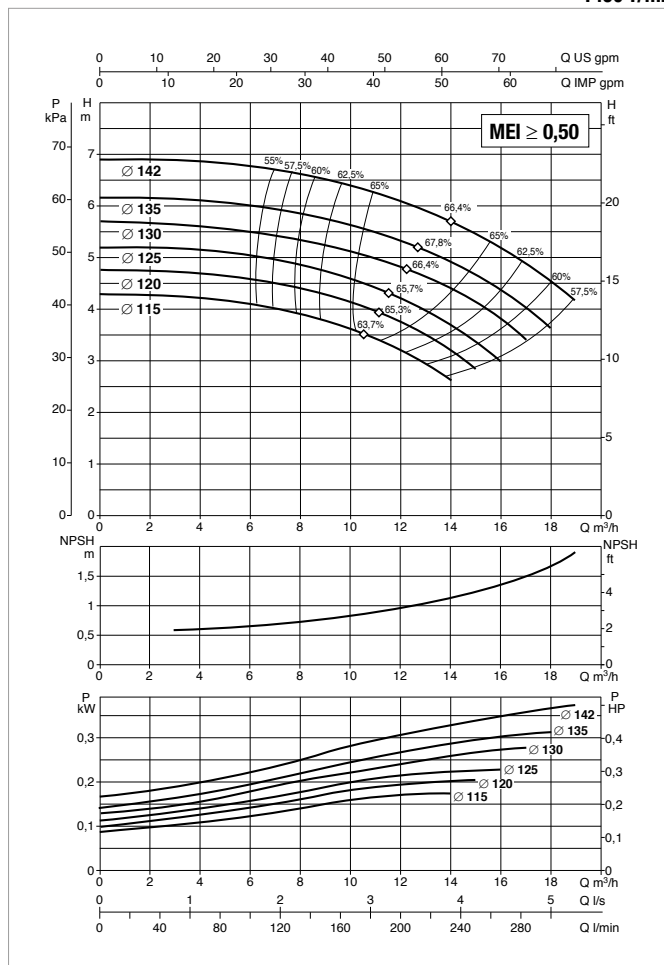
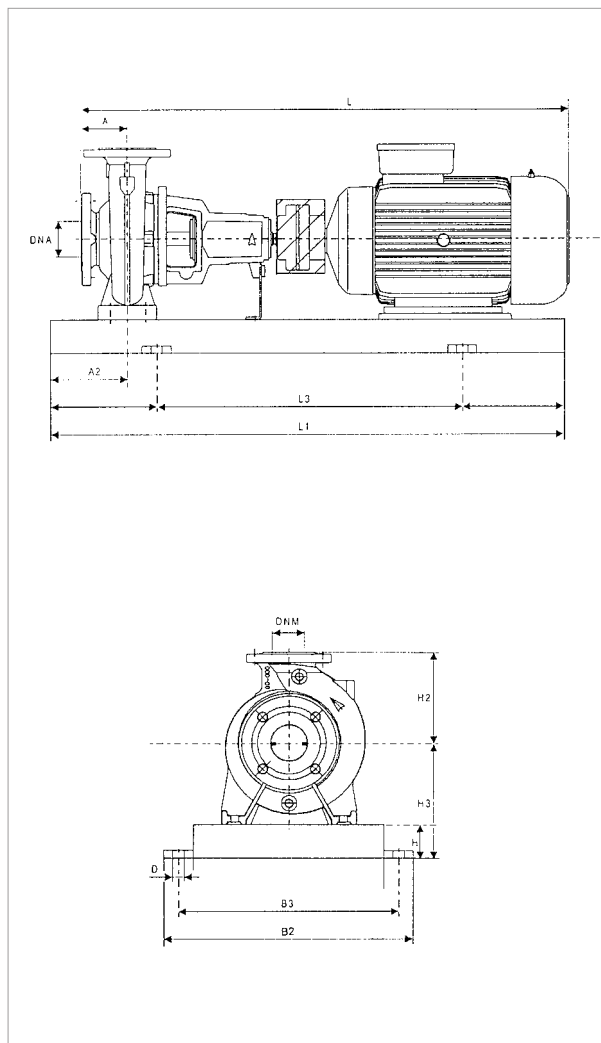
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 32-125.1	0,37	80	60	140	65	177	800	540	360	320	19	50	32	730	81	830	86
	0,55	80	60	140	65	177	800	540	360	320	19	50	32	730	83	830	88

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 32-125 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 32-125	0,37	MEC 71	3 x 230 - 400 V ~	1,7/0,975	-
	0,55	MEC 80	3 x 230 - 400 V ~	2,6/1,5	-
	0,75	MEC 80	3 x 230 - 400 V ~	3,1/1,8	IE3

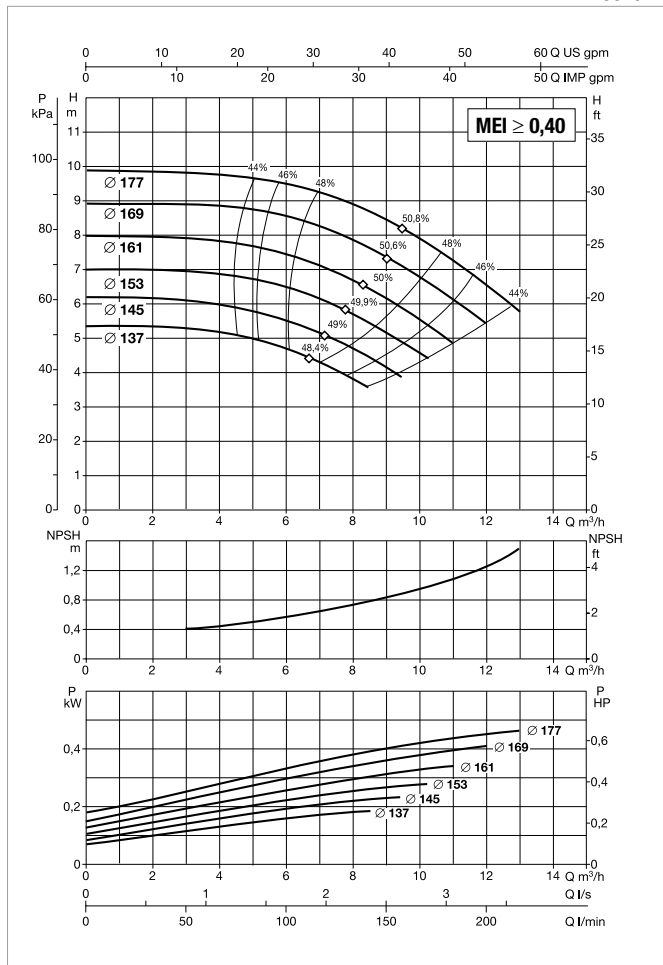
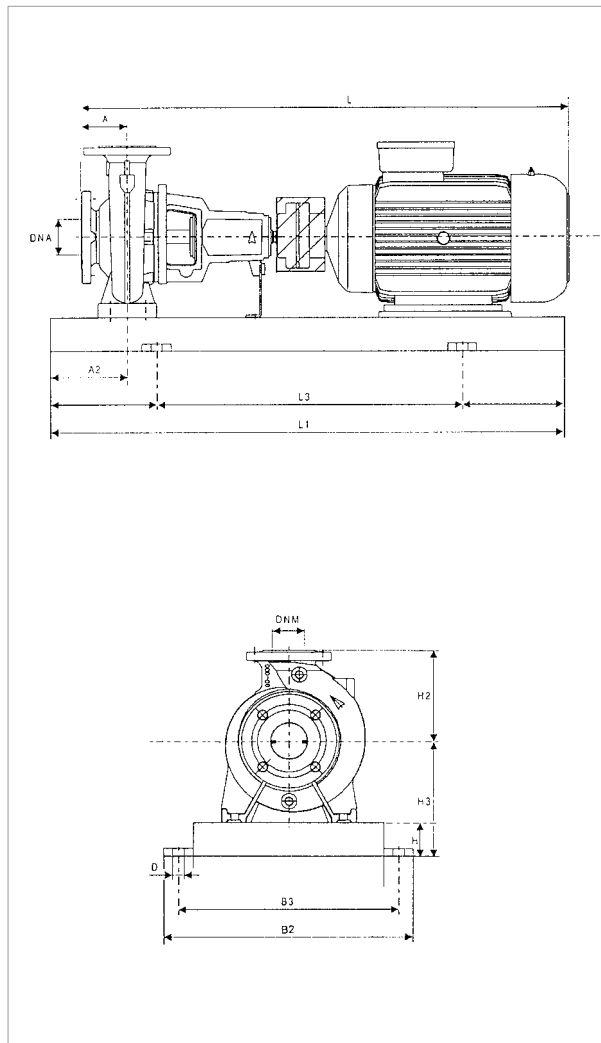
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 32-125	0,37	80	60	140	65	177	800	540	360	320	19	50	32	730	81	830	86
	0,55	80	60	140	65	177	800	540	360	320	19	50	32	730	83	830	88
	0,75	80	60	140	65	177	800	540	360	320	19	50	32	717	78	817	83

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 32-160.1 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 32-160.1	0,37	MEC 71	3 x 230 - 400 V ~	1,7/0,975	-
	0,55	MEC 80	3 x 230 - 400 V ~	2,6/1,5	-
	0,75	MEC 80	3 x 230 - 400 V ~	3,1/1,8	IE3

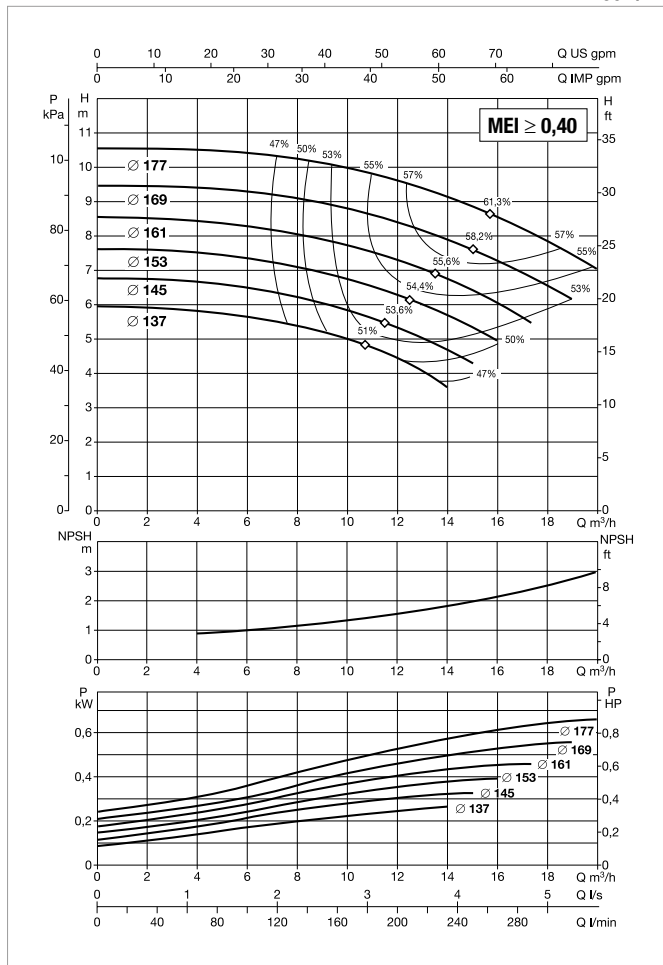
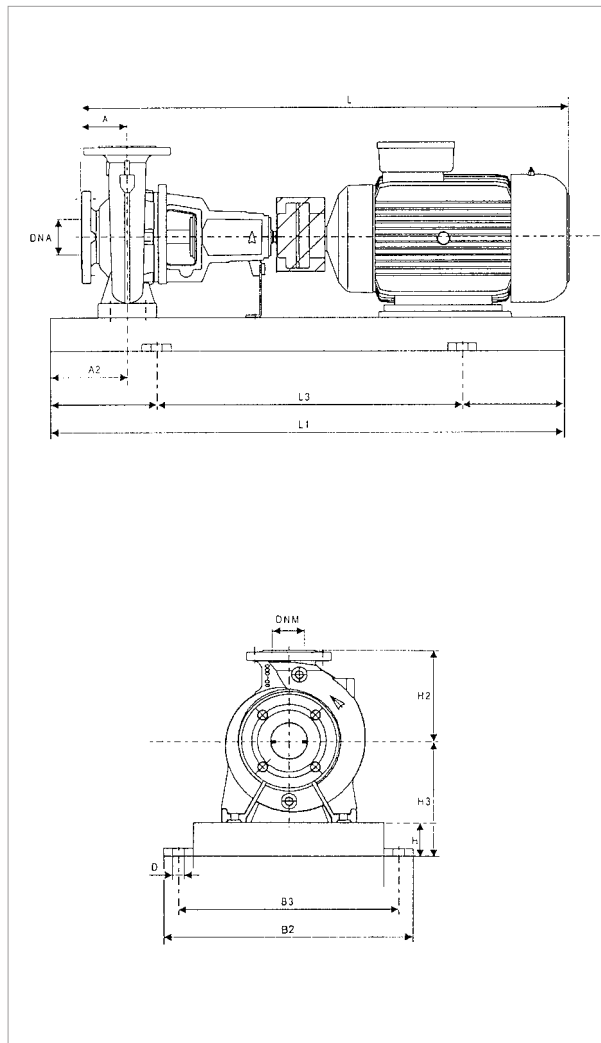
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 32-160.1	0,37	80	60	160	65	197	800	540	360	320	19	50	32	730	83	830	88
	0,55	80	60	160	65	197	800	540	360	320	19	50	32	730	86	830	91
	0,75	80	60	160	65	197	800	540	360	320	19	50	32	717	80	817	85

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 32-160 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 32-160	0,37	MEC 71	3 x 230 - 400 V ~	1,7/0,975	-
	0,55	MEC 80	3 x 230 - 400 V ~	2,6/1,5	-
	0,75	MEC 80	3 x 230 - 400 V ~	3,1/1,8	IE3
	1,1	MEC 90S	3 x 230 - 400 V ~	4,3/2,5	IE3

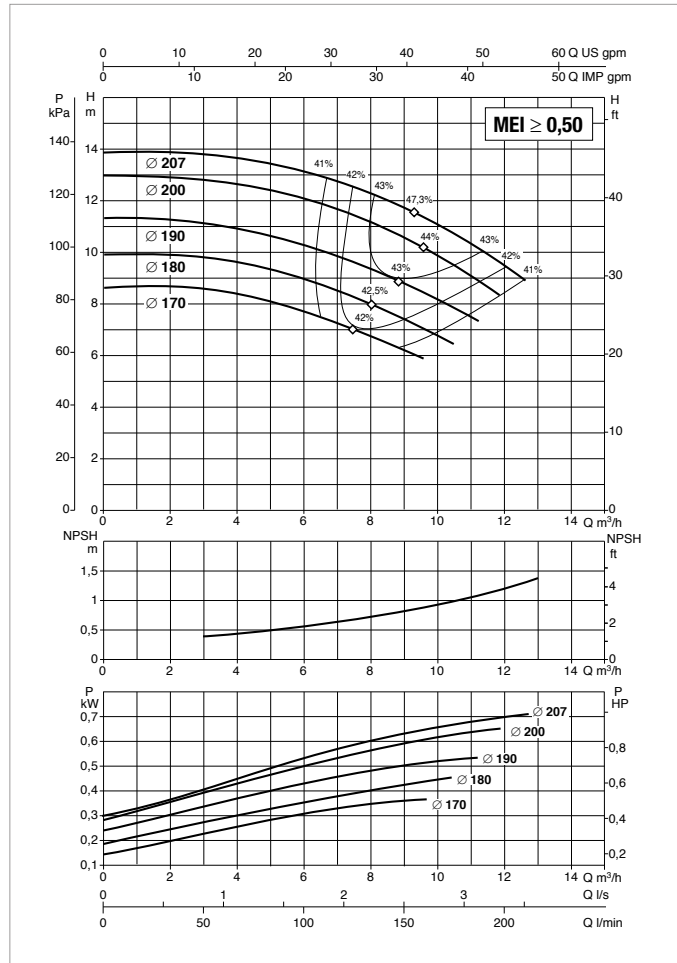
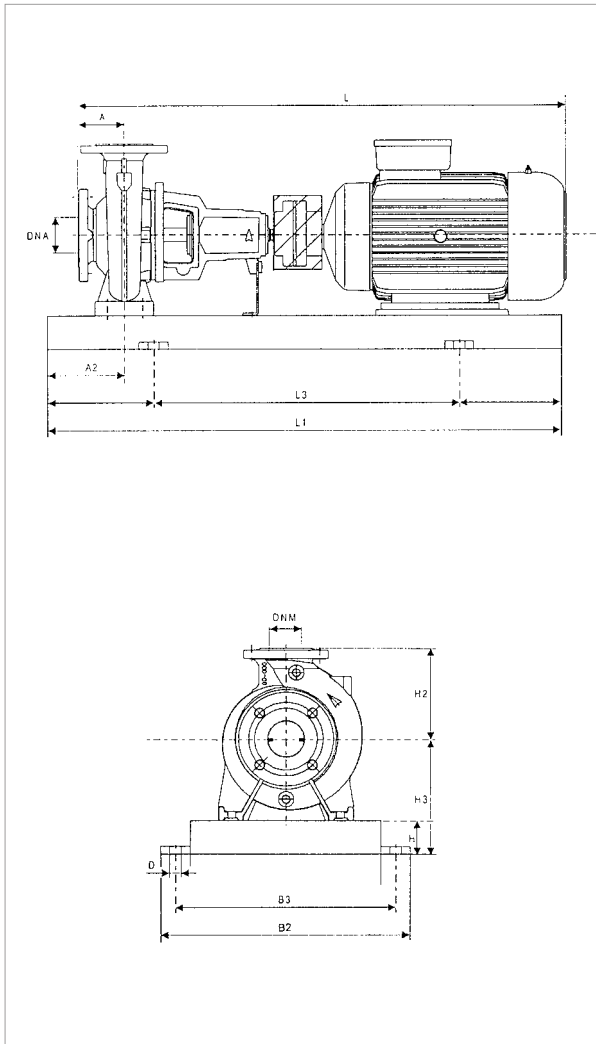
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 32-160	0,37	80	60	160	65	197	800	540	360	320	19	50	32	730	83	830	88
	0,55	80	60	160	65	197	800	540	360	320	19	50	32	730	85	830	90
	0,75	80	60	160	65	197	800	540	360	320	19	50	32	717	80	817	85
	1,1	80	60	160	65	197	800	540	360	320	19	50	32	762	78	862	83

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 32-200.1 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 32-200.1	0,37	MEC 71	3 x 230 - 400 V ~	1,7/0,975	-
	0,55	MEC 80	3 x 230 - 400 V ~	2,6/1,5	-
	0,75	MEC 80	3 x 230 - 400 V ~	3,1/1,8	IE3
	1,1	MEC 90S	3 x 230 - 400 V ~	4,3/2,5	IE3

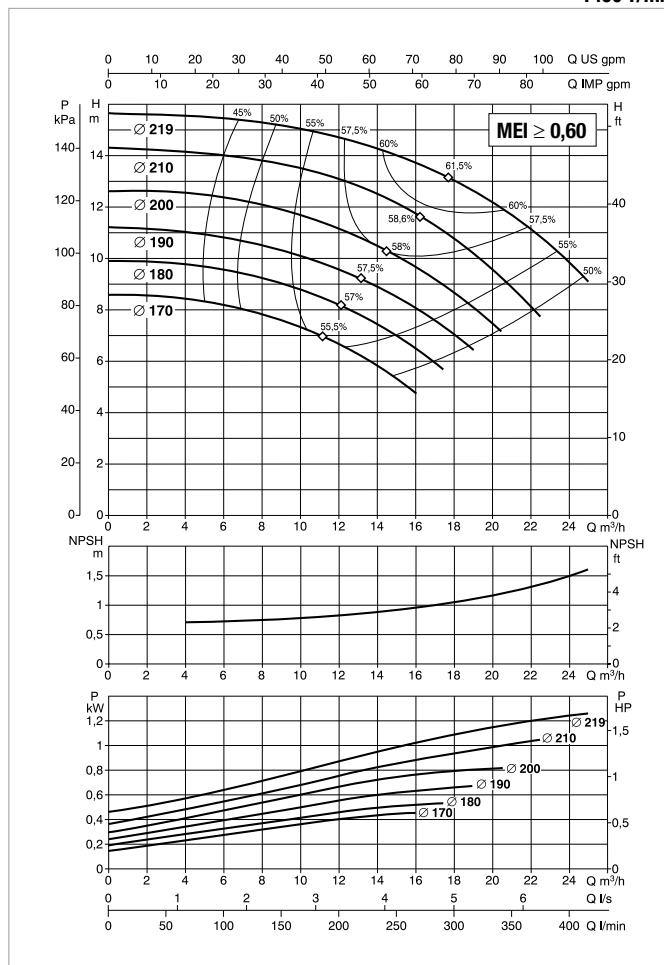
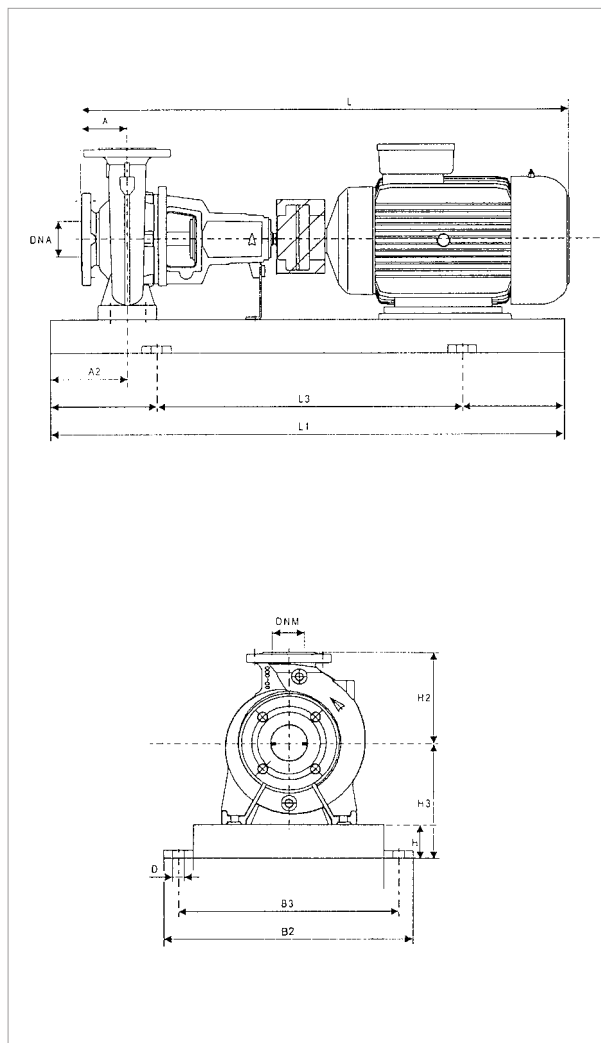
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 32-200.1	0,37	80	60	180	65	225	800	540	360	320	19	50	32	730	87	830	92
	0,55	80	60	180	65	225	800	540	360	320	19	50	32	730	89	830	94
	0,75	80	60	180	65	225	800	540	360	320	19	50	32	717	95	817	100
	1,1	80	60	180	65	225	800	540	360	320	19	50	32	762	96	862	101

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 32-200 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 32-200	0,37	MEC 71	3 x 230 - 400 V ~	1,7/0,975	-
	0,55	MEC 80	3 x 230 - 400 V ~	2,6/1,5	-
	0,75	MEC 80	3 x 230 - 400 V ~	3,1/1,8	IE3
	1,1	MEC 90S	3 x 230 - 400 V ~	4,3/2,5	IE3
	1,5	MEC 90L	3 x 230 - 400 V ~	6,2/3,6	IE3
	2,2	MEC 100L	3 x 230 - 400 V ~	10,2/5,9	IE3

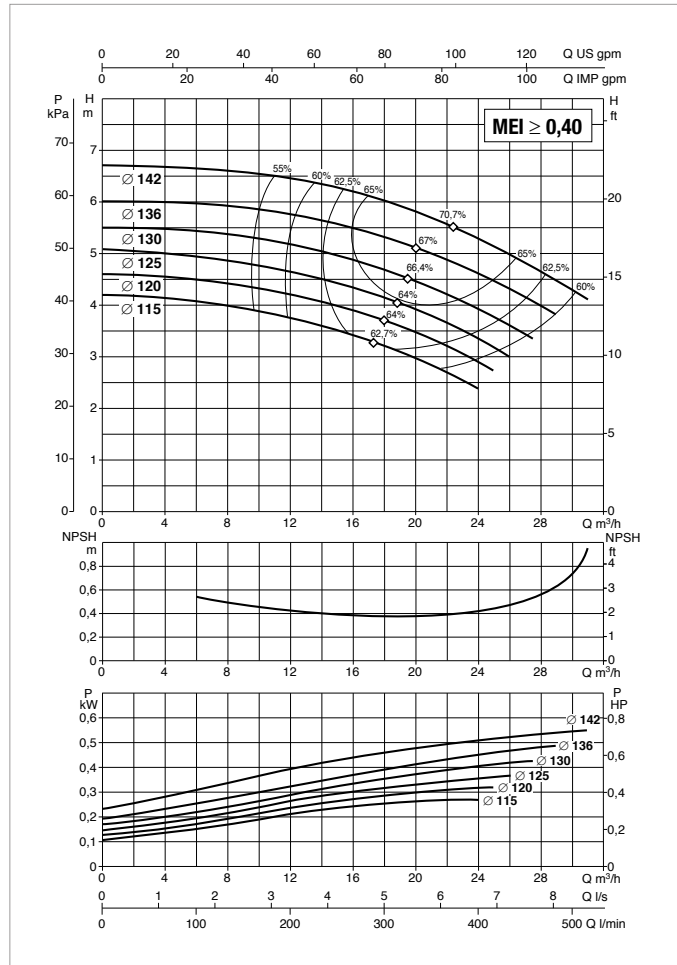
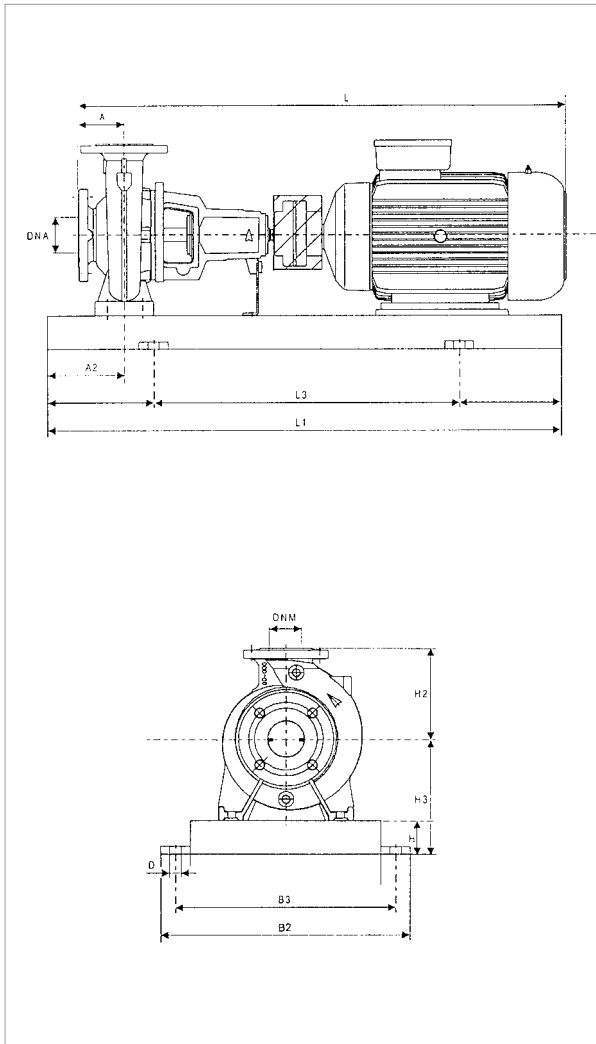
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 32-200	0,37	80	60	180	65	225	800	540	360	320	19	50	32	730	87	830	92
	0,55	80	60	180	65	225	800	540	360	320	19	50	32	730	89	830	94
	0,75	80	60	180	65	225	800	540	360	320	19	50	32	717	84	817	89
	1,1	80	60	180	65	225	800	540	360	320	19	50	32	762	91	862	96
	1,5	80	60	180	65	225	900	600	390	350	19	50	32	762	87	862	92
	2,2	80	60	180	65	225	900	600	390	350	19	50	32	811	92	911	97

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 40-125 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 40-125	0,37	MEC 71	3 x 230 - 400 V ~	1,7/0,975	-
	0,55	MEC 80	3 x 230 - 400 V ~	2,6/1,5	-
	0,75	MEC 80	3 x 230 - 400 V ~	3,1/1,8	IE3
	1,1	MEC 90S	3 x 230 - 400 V ~	4,3/2,5	IE3

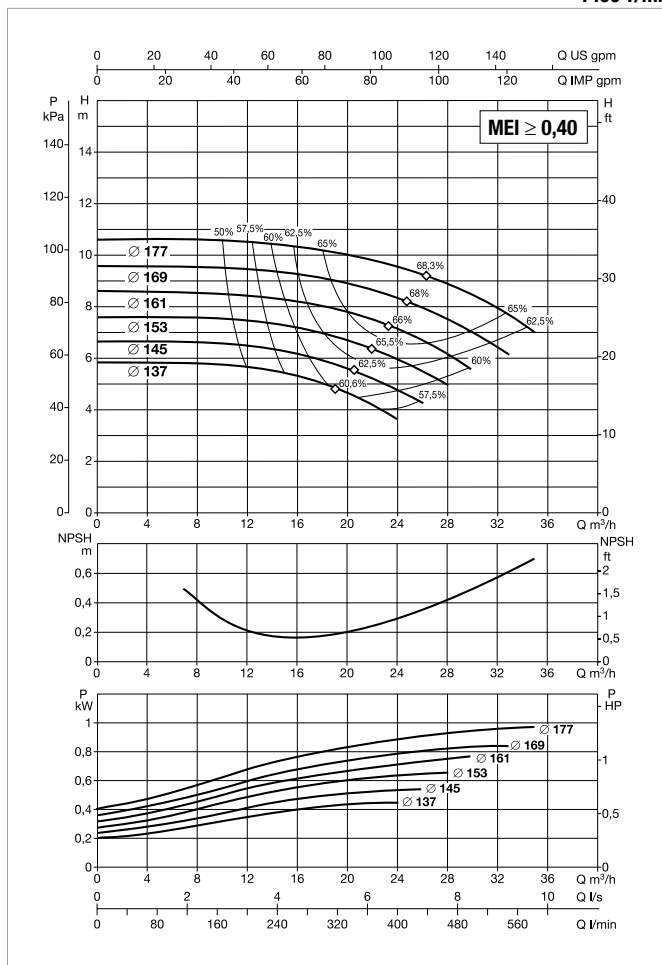
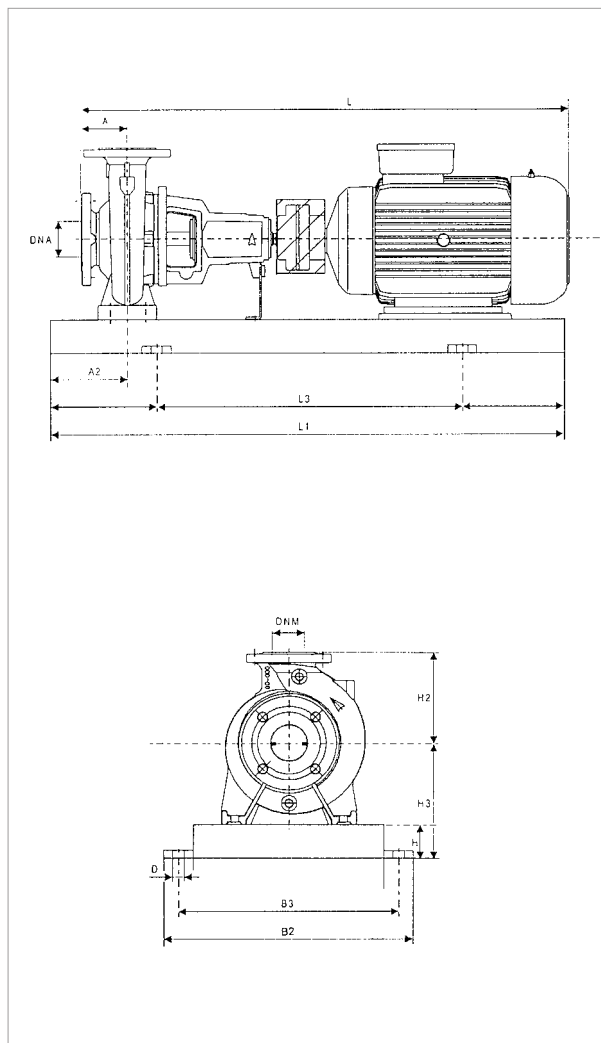
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 40-125	0,37	80	60	140	65	177	800	540	360	320	19	65	40	730	81	830	86
	0,55	80	60	140	65	177	800	540	360	320	19	65	40	730	83	830	88
	0,75	80	60	140	65	177	800	540	360	320	19	65	40	717	78	817	83
	1,1	80	60	140	65	177	800	540	360	320	19	65	40	762	76	862	71

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 40-160 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 40-160	0,37	MEC 71	3 x 230 - 400 V ~	1,7/0,975	-
	0,55	MEC 80	3 x 230 - 400 V ~	2,6/1,5	-
	0,75	MEC 80	3 x 230 - 400 V ~	3,1/1,8	IE3
	1,1	MEC 90S	3 x 230 - 400 V ~	4,3/2,5	IE3
	1,5	MEC 90L	3 x 230 - 400 V ~	6,2/3,6	IE3

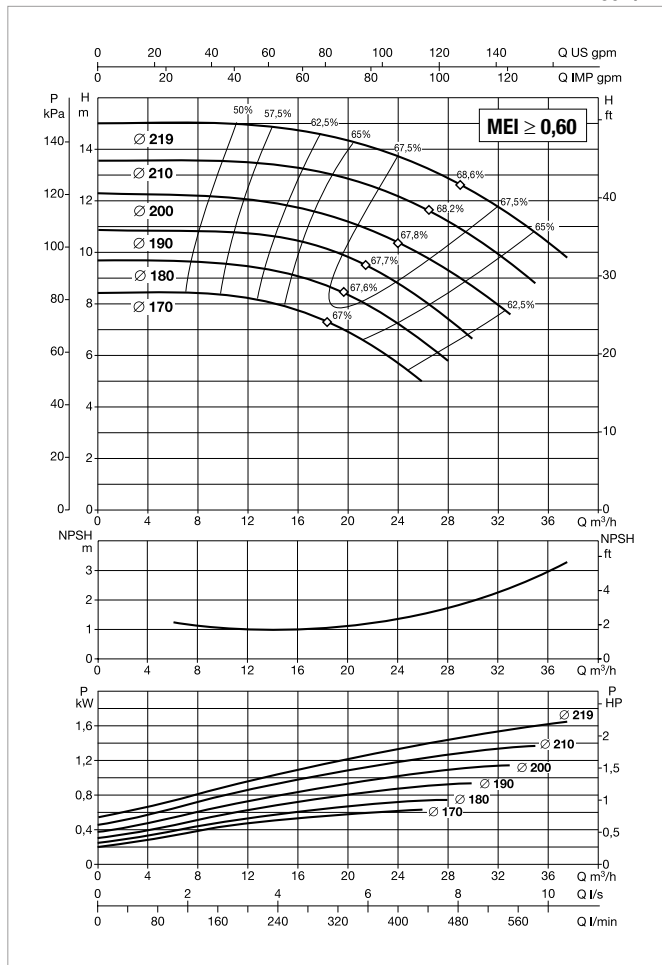
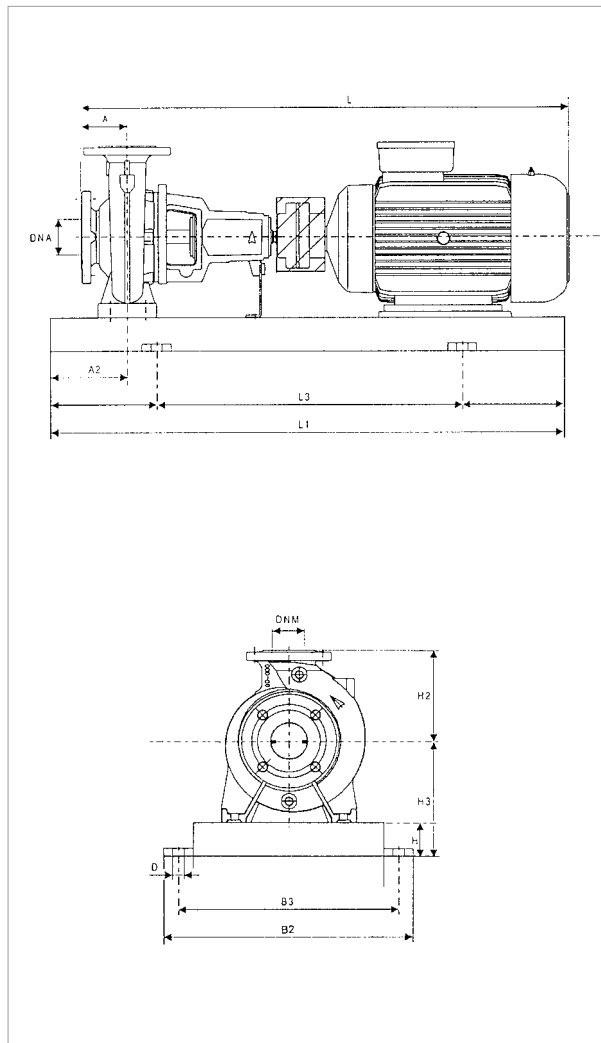
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 40-160	0,37	80	60	160	65	197	800	540	360	320	19	65	40	730	85	830	90
	0,55	80	60	160	65	197	800	540	360	320	19	65	40	730	89	830	94
	0,75	80	60	160	65	197	800	540	360	320	19	65	40	717	83	817	88
	1,1	80	60	160	65	197	800	540	360	320	19	65	40	762	81	862	86
	1,5	80	60	160	65	197	900	600	390	350	19	65	40	762	87	862	92

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 40-200 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 40-200	0,55	MEC 80	3 x 230 - 400 V ~	2,6/1,5	-
	0,75	MEC 80	3 x 230 - 400 V ~	3,1/1,8	IE3
	1,1	MEC 90S	3 x 230 - 400 V ~	4,3/2,5	IE3
	1,5	MEC 90L	3 x 230 - 400 V ~	6,2/3,6	IE3
	2,2	MEC 100L	3 x 230 - 400 V ~	10,2/5,9	IE3
	3	MEC 100L	3 x 400 V ~ ¹	6,8	IE3

¹ Star start-up possible (Δ)

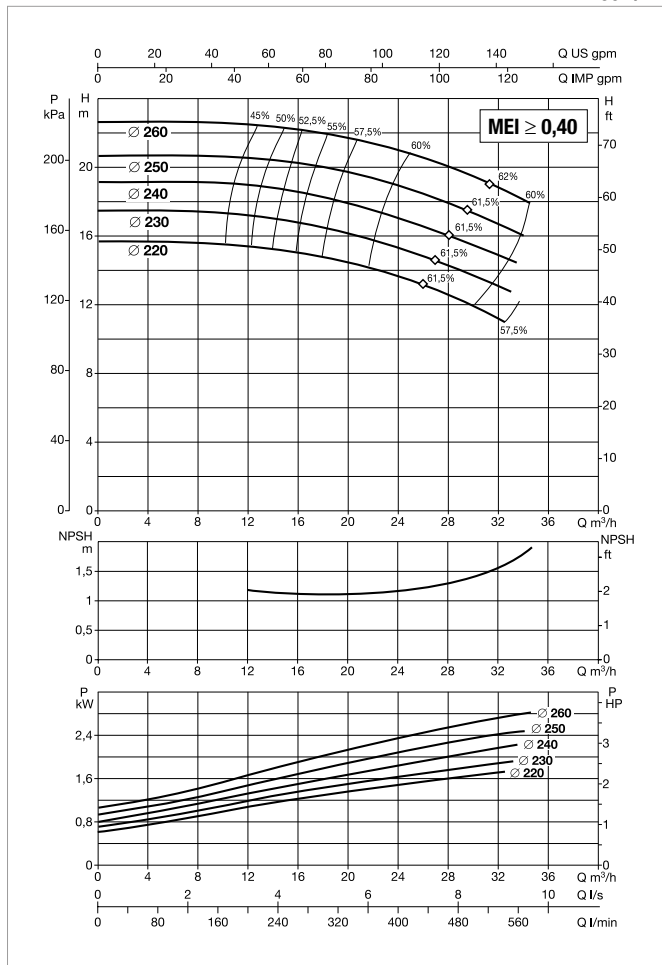
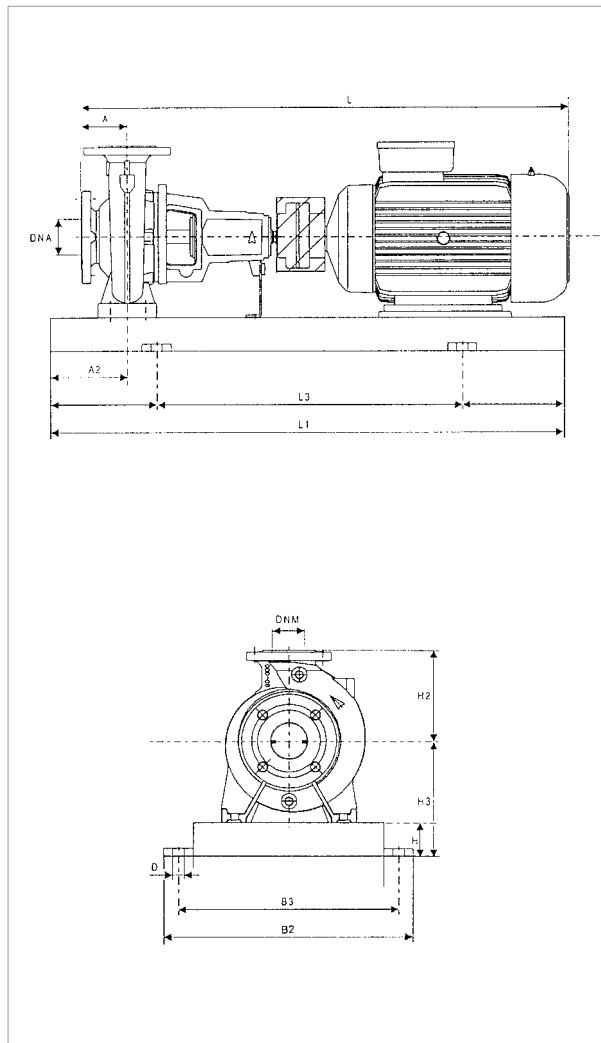
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 40-200	0,55	100	60	180	65	225	900	600	390	350	19	65	40	750	98	850	103
	0,75	100	60	180	65	225	900	600	390	350	19	65	40	737	92	837	97
	1,1	100	60	180	65	225	900	600	390	350	19	65	40	782	91	882	96
	1,5	100	60	180	65	225	900	600	390	350	19	65	40	782	91	882	96
	2,2	100	60	180	65	225	900	600	390	350	19	65	40	831	101	931	106
	3	100	60	180	65	225	900	600	390	350	19	65	40	846	104	946	109

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 40-250 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.
 The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 40-250	1,5	MEC 90L	3 x 230 - 400 V ~	6,2/3,6	IE3
	2,2	MEC 100L	3 x 230 - 400 V ~	10,2/5,9	IE3
	3	MEC 100L	3 x 400 V ~ ¹	6,8	IE3
	4	MEC 112M	3 x 400 V ~ ¹	8,2	IE3

¹ Star start-up possible (A)

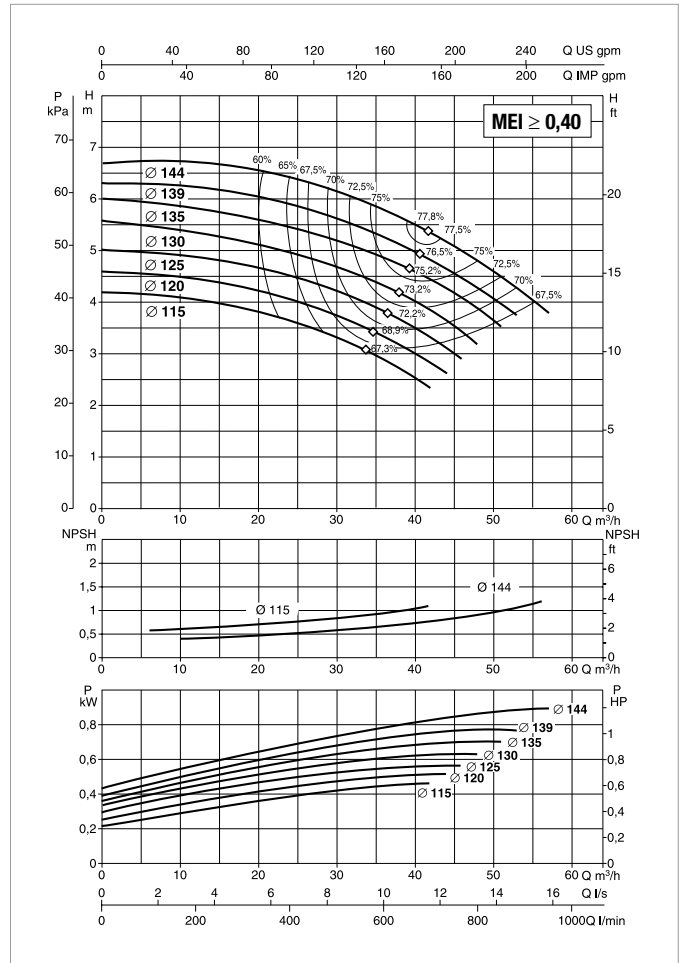
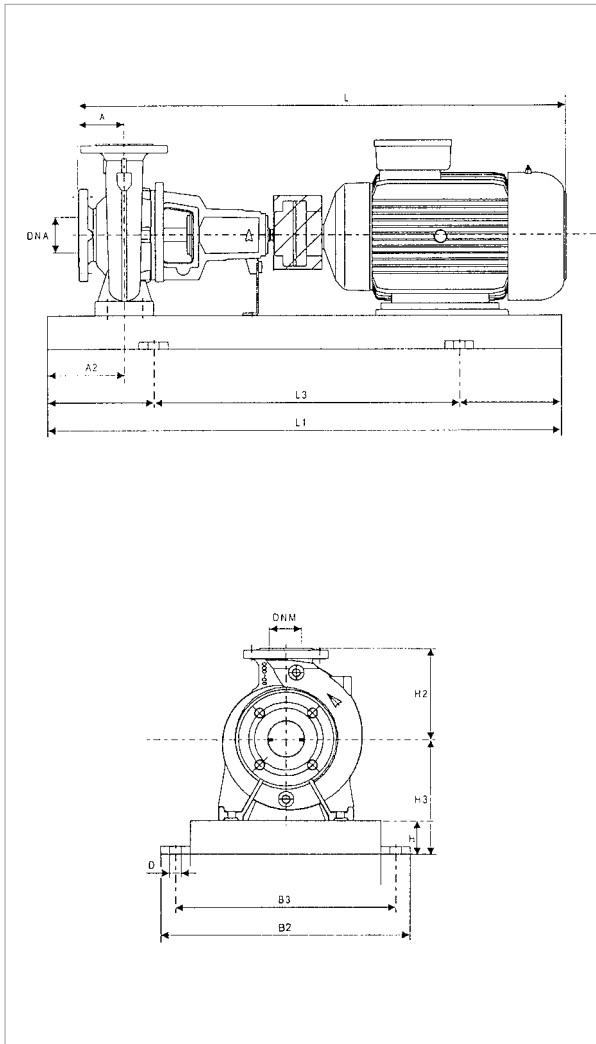
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 40-250	1,5	100	75	225	80	260	1000	660	450	400	24	65	40	782	111	882	116
	2,2	100	75	225	80	260	1000	660	450	400	24	65	40	831	119	931	124
	3	100	75	225	80	260	1000	660	450	400	24	65	40	846	135	946	140
	4	100	75	225	80	260	1000	660	450	400	24	65	40	853	179	953	184

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 50-125 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 50-125	0,37	MEC 71	3 x 230 - 400 V ~	1,7/0,975	-
	0,55	MEC 80	3 x 230 - 400 V ~	2,6/1,5	-
	0,75	MEC 80	3 x 230 - 400 V ~	3,1/1,8	IE3
	1,1	MEC 90S	3 x 230 - 400 V ~	4,3/2,5	IE3
	1,5	MEC 90L	3 x 230 - 400 V ~	6,2/3,6	IE3

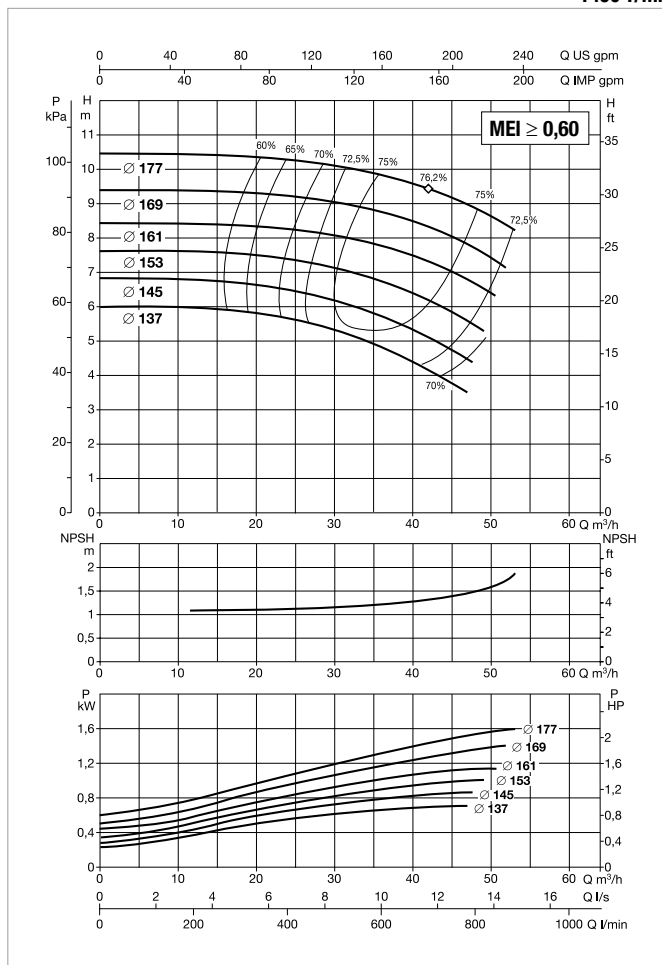
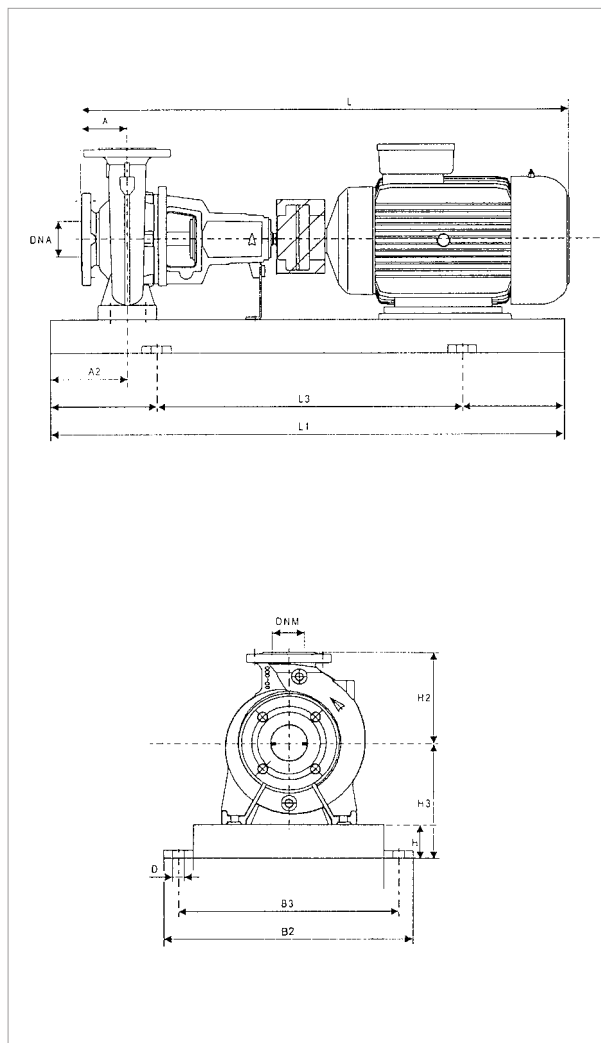
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 50-125	0,37	100	60	160	65	197	800	540	360	320	19	65	50	750	87	850	92
	0,55	100	60	160	65	197	800	540	360	320	19	65	50	750	90	850	95
	0,75	100	60	160	65	197	800	540	360	320	19	65	50	737	85	837	90
	1,1	100	60	160	65	197	800	540	360	320	19	65	50	782	83	882	88
	1,5	100	60	160	65	197	900	600	390	350	19	65	50	782	87	882	92

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 50-160 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 50-160	0,55	MEC 80	3 x 230 - 400 V ~	2,6/1,5	-
	0,75	MEC 80	3 x 230 - 400 V ~	3,1/1,8	IE3
	1,1	MEC 90S	3 x 230 - 400 V ~	4,3/2,5	IE3
	1,5	MEC 90L	3 x 230 - 400 V ~	6,2/3,6	IE3
	2,2	MEC 100L	3 x 230 - 400 V ~	10,2/5,9	IE3
	3	MEC 100L	3 x 400 V ~ ¹	6,8	IE3

¹ Star start-up possible (A)

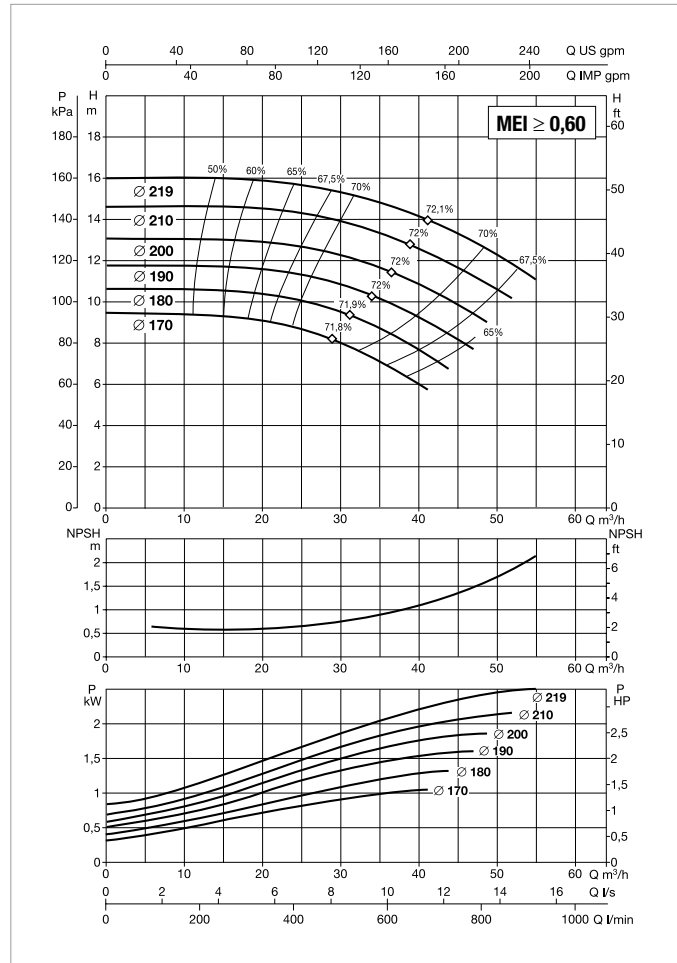
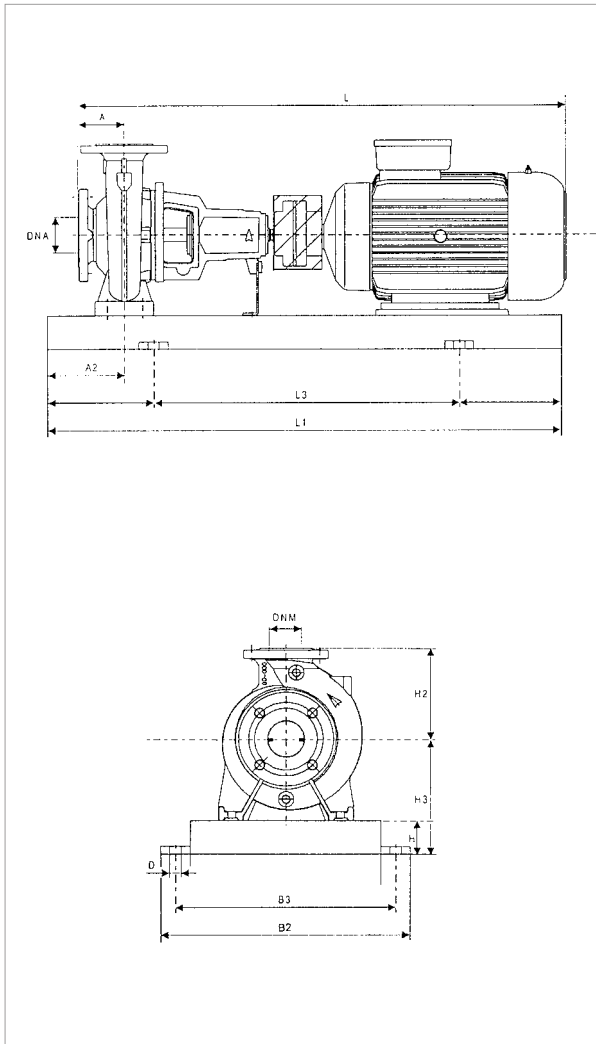
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 50-160	0,55	100	60	180	65	225	900	600	390	350	19	65	50	750	97	850	102
	0,75	100	60	180	65	225	900	600	390	350	19	65	50	737	92	837	97
	1,1	100	60	180	65	225	900	600	390	350	19	65	50	782	90	882	95
	1,5	100	60	180	65	225	900	600	390	350	19	65	50	782	89	882	94
	2,2	100	60	180	65	225	900	600	390	350	19	65	50	831	97	931	102
	3	100	60	180	65	225	900	600	390	350	19	65	50	846	96	946	101

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 50-200 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 50-200	0,75	MEC 80	3 x 230 - 400 V ~	3,1/1,8	IE3
	1,1	MEC 90S	3 x 230 - 400 V ~	4,3/2,5	IE3
	1,5	MEC 90L	3 x 230 - 400 V ~	6,2/3,6	IE3
	2,2	MEC 100L	3 x 230 - 400 V ~	10,2/5,9	IE3
	3	MEC 100L	3 x 400 V ~ ¹	6,8	IE3
	4	MEC 112M	3 x 400 V ~ ¹	8,2	IE3

¹ Star start-up possible (A)

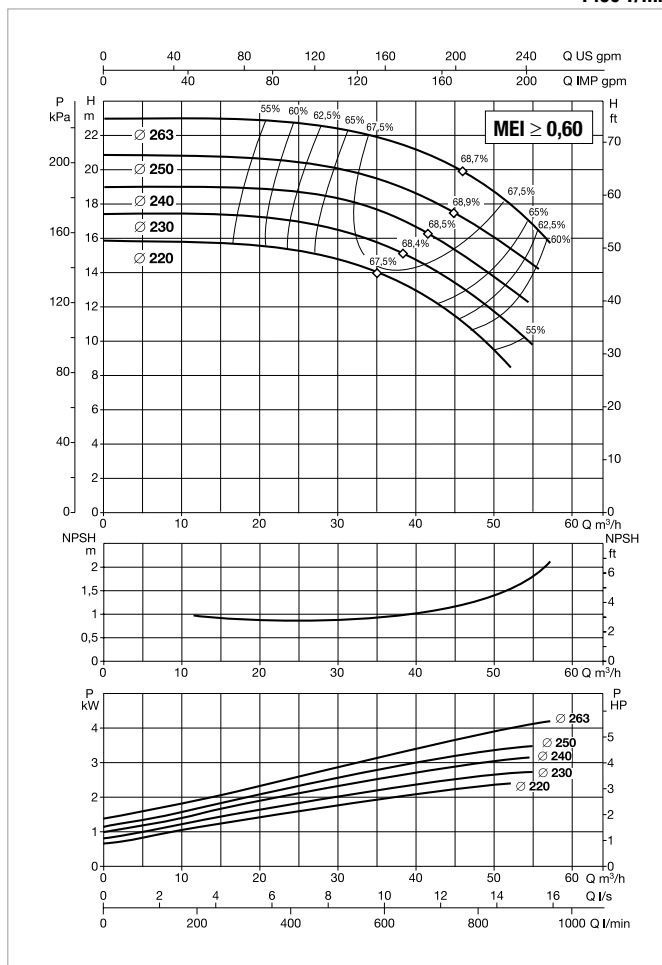
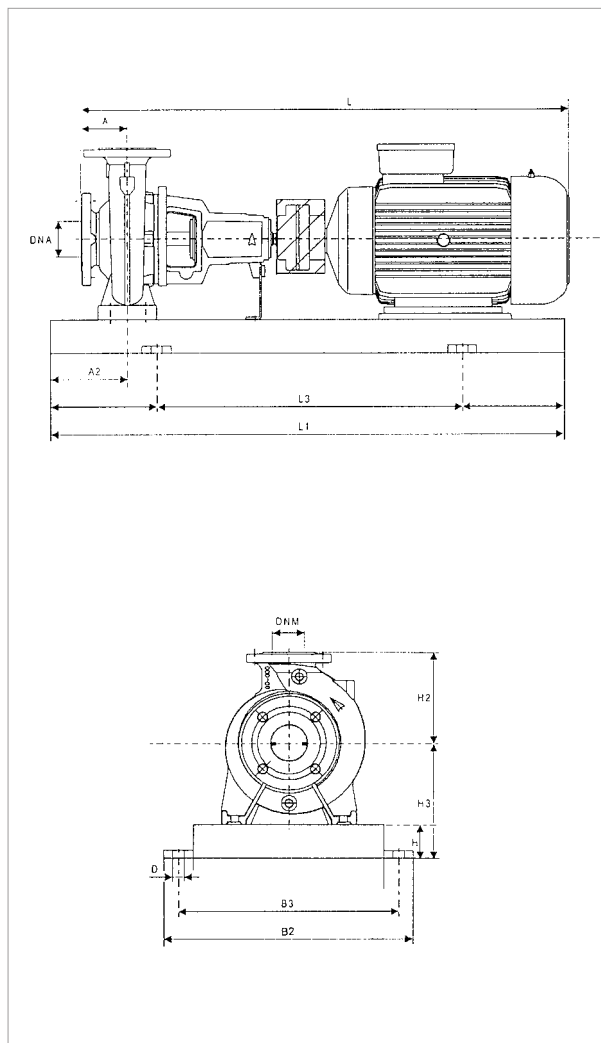
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 50-200	0,75	100	60	200	65	225	900	600	390	350	19	65	50	737	98	837	103
	1,1	100	60	200	65	225	900	600	390	350	19	65	50	782	97	882	102
	1,5	100	60	200	65	225	900	600	390	350	19	65	50	782	100	882	105
	2,2	100	60	200	65	225	900	600	390	350	19	65	50	831	113	931	118
	3	100	60	200	65	225	900	600	390	350	19	65	50	846	108	946	113
	4	100	60	200	65	225	900	600	390	350	19	65	50	853	101	953	106

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 50-250 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 50-250	2,2	MEC 100L	3 x 230 - 400 V ~	10,2/5,9	IE3
	3	MEC 100L	3 x 400 V ~ ¹	6,8	IE3
	4	MEC 112M	3 x 400 V ~ ¹	8,2	IE3
	5,5	MEC 132S	3 x 400 V ~ ¹	10,6	IE3

¹ Star start-up possible (Δ)

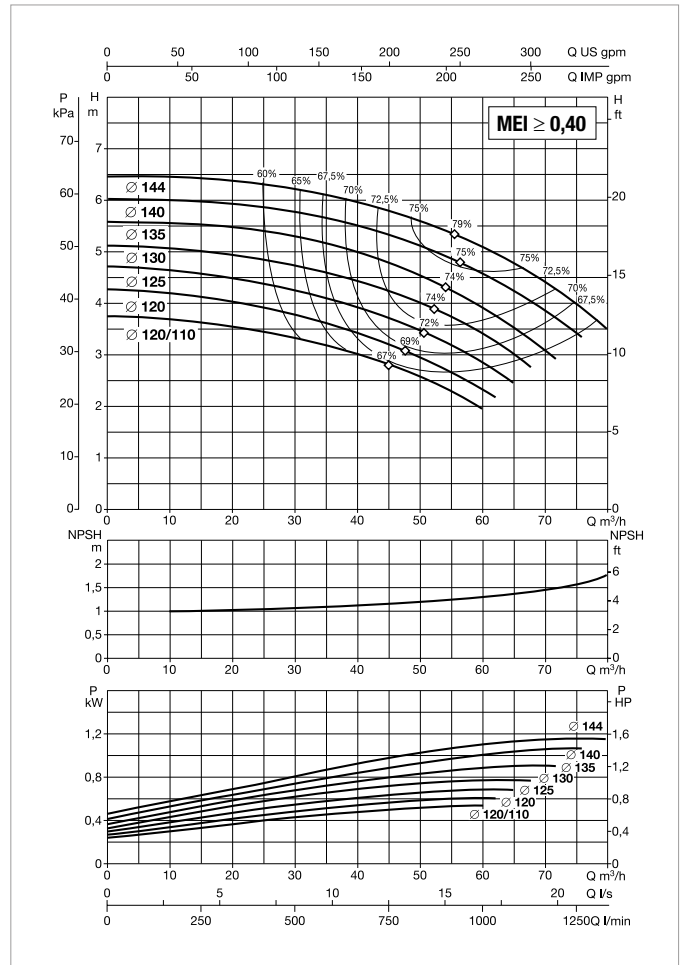
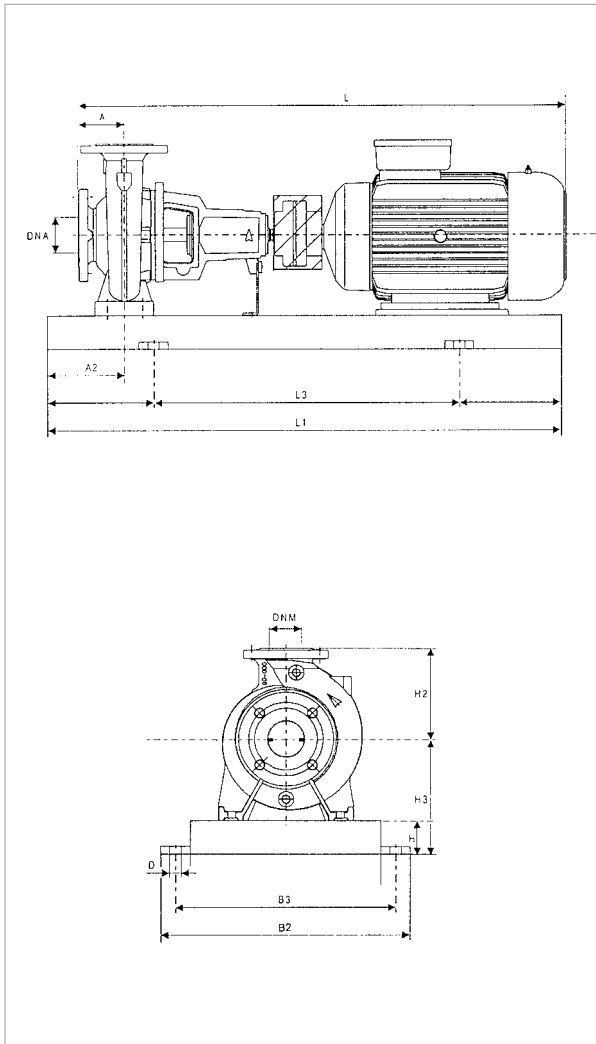
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 50-250	2,2	100	75	225	80	260	1000	660	450	400	24	65	50	831	125	931	130
	3	100	75	225	80	260	1000	660	450	400	24	65	50	846	124	946	129
	4	100	75	225	80	260	1000	660	450	400	24	65	50	853	144	953	149
	5,5	100	75	225	80	260	1120	740	490	440	24	65	50	910	165	1010	170

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 65-125 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 65-125	0,37	MEC 71	3 x 230 - 400 V ~	1,7/0,975	-
	0,55	MEC 80	3 x 230 - 400 V ~	2,6/1,5	-
	0,75	MEC 80	3 x 230 - 400 V ~	3,1/1,8	IE3
	1,1	MEC 90S	3 x 230 - 400 V ~	4,3/2,5	IE3
	1,5	MEC 90L	3 x 230 - 400 V ~	6,2/3,6	IE3
	2,2	MEC 100L	3 x 230 - 400 V ~	10,2/5,9	IE3

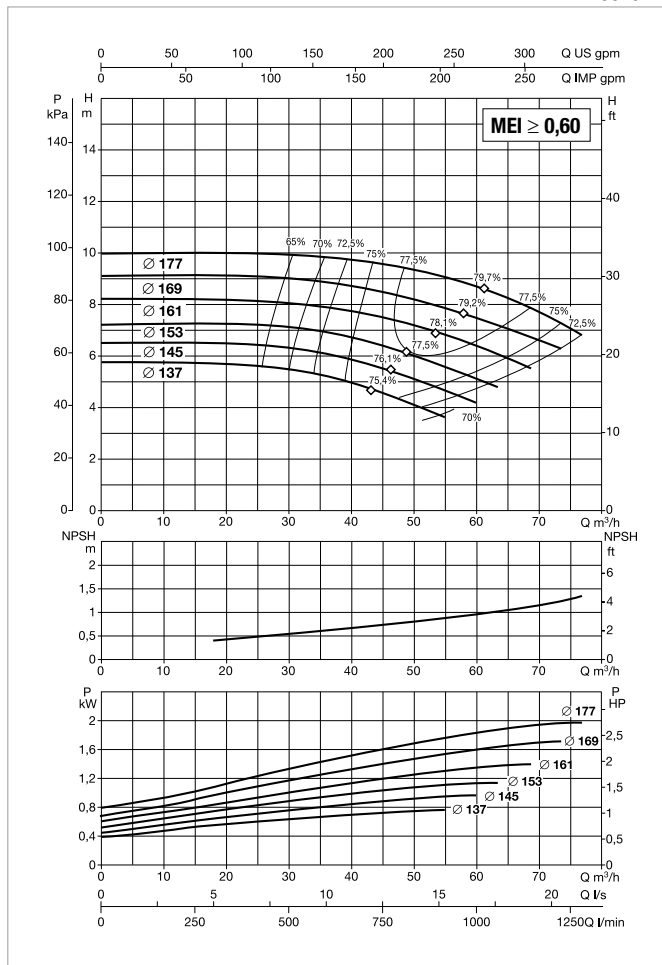
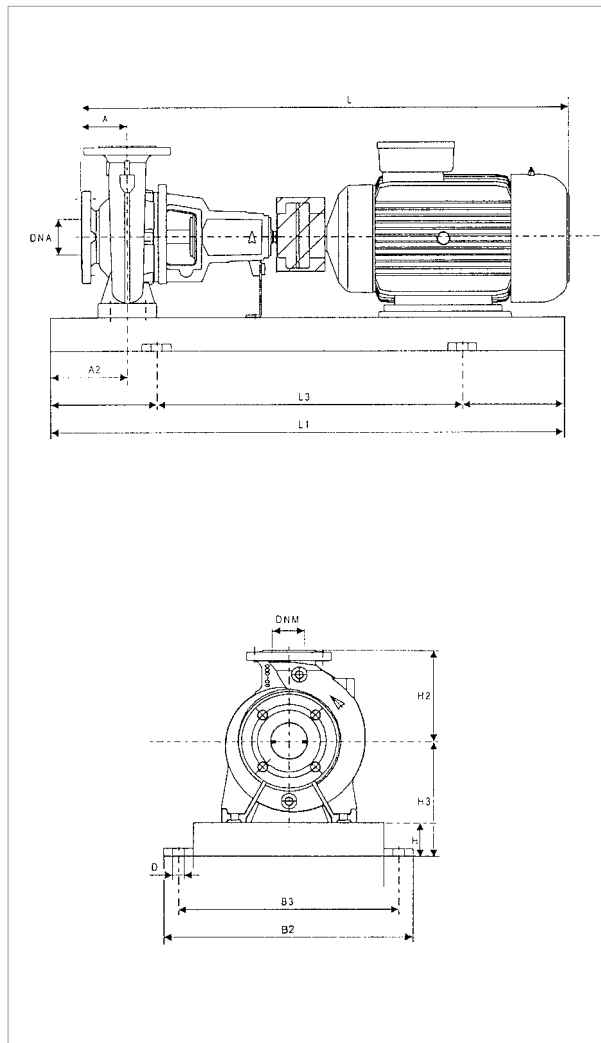
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 65-125	0,37	100	60	180	65	225	900	600	390	350	19	80	65	714	94	814	99
	0,55	100	60	180	65	225	900	600	390	350	19	80	65	757	97	857	102
	0,75	100	60	180	65	225	900	600	390	350	19	80	65	737	92	837	97
	1,1	100	60	180	65	225	900	600	390	350	19	80	65	782	90	882	95
	1,5	100	60	180	65	225	900	600	390	350	19	80	65	782	89	882	94
	2,2	100	60	180	65	225	900	600	390	350	19	80	65	831	97	931	102

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 65-160 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 65-160	0,75	MEC 80	3 x 230 - 400 V ~	3,1/1,8	IE3
	1,1	MEC 90S	3 x 230 - 400 V ~	4,3/2,5	IE3
	1,5	MEC 90L	3 x 230 - 400 V ~	6,2/3,6	IE3
	2,2	MEC 100L	3 x 230 - 400 V ~	10,2/5,9	IE3
	3	MEC 100L	3 x 400 V ~ ¹	6,8	IE3

¹ Star start-up possible (A)

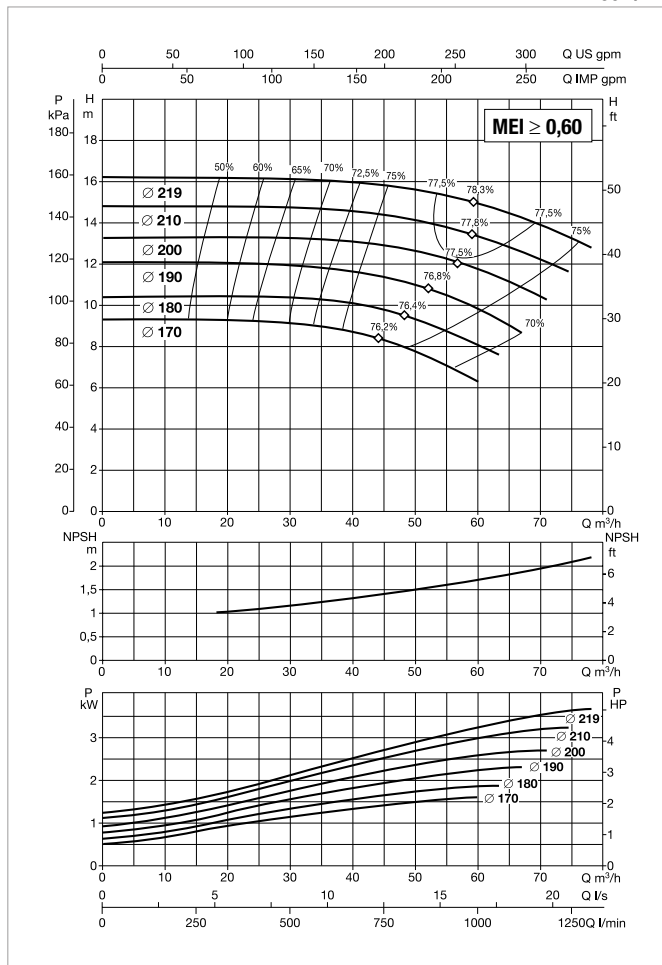
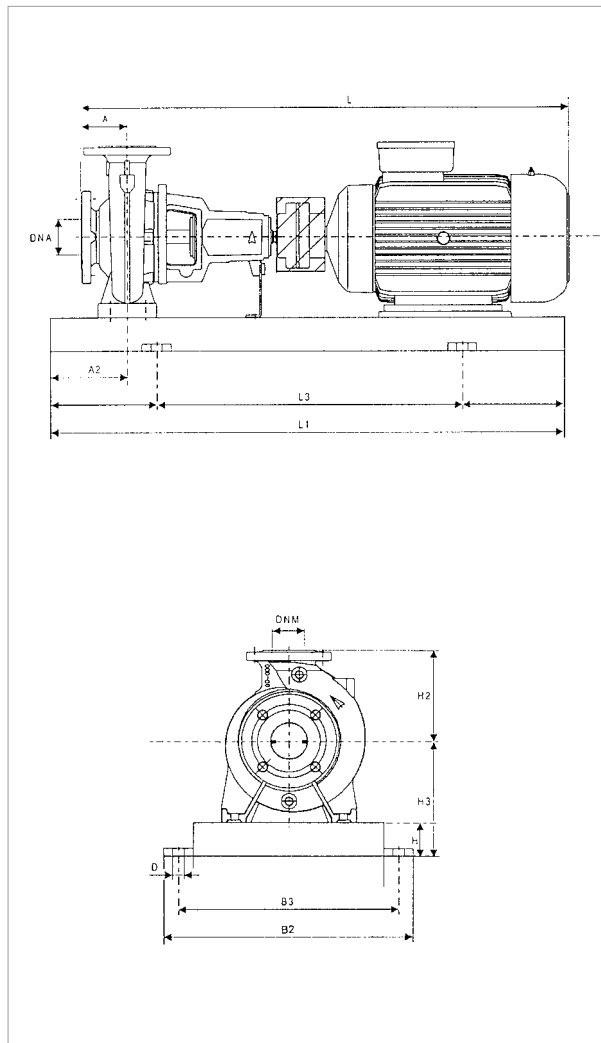
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 65-160	0,75	100	60	200	65	225	900	600	390	350	19	80	65	737	95	837	100
	1,1	100	60	200	65	225	900	600	390	350	19	80	65	782	93	882	98
	1,5	100	60	200	65	225	900	600	390	350	19	80	65	782	100	882	105
	2,2	100	60	200	65	225	900	600	390	350	19	80	65	831	104	931	109
	3	100	60	200	65	225	900	600	390	350	19	80	65	846	134	946	139

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 65-200 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 65-200	1,1	MEC 90S	3 x 230 - 400 V ~	4,3/2,5	IE3
	1,5	MEC 90L	3 x 230 - 400 V ~	6,2/3,6	IE3
	2,2	MEC 100L	3 x 230 - 400 V ~	10,2/5,9	IE3
	3	MEC 100L	3 x 400 V ~ ¹	6,8	IE3
	4	MEC 112M	3 x 400 V ~ ¹	8,2	IE3
	5,5	MEC 132S	3 x 400 V ~ ¹	10,6	IE3

¹ Star start-up possible (A)

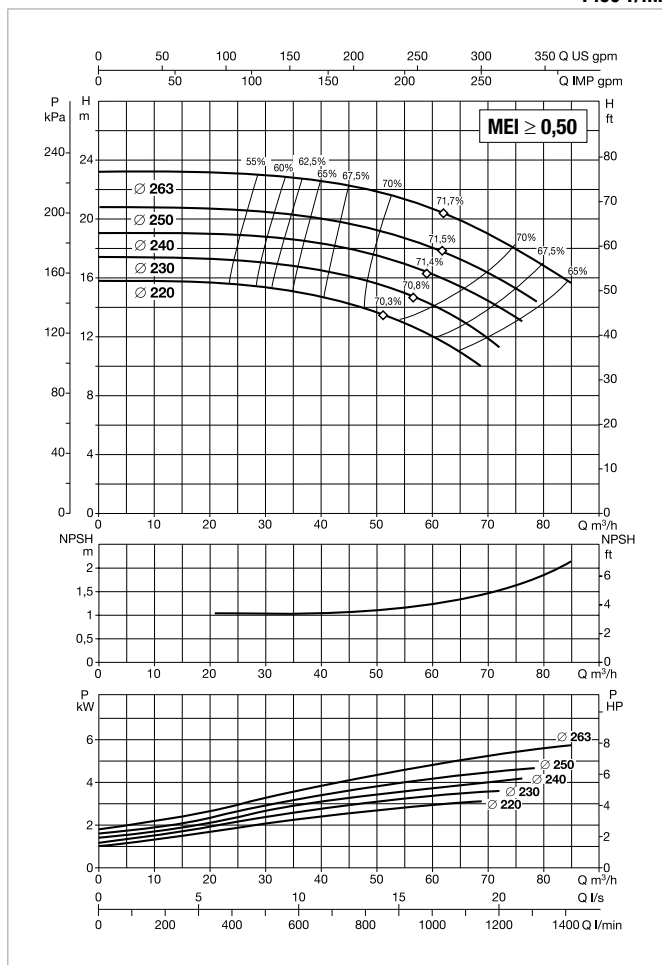
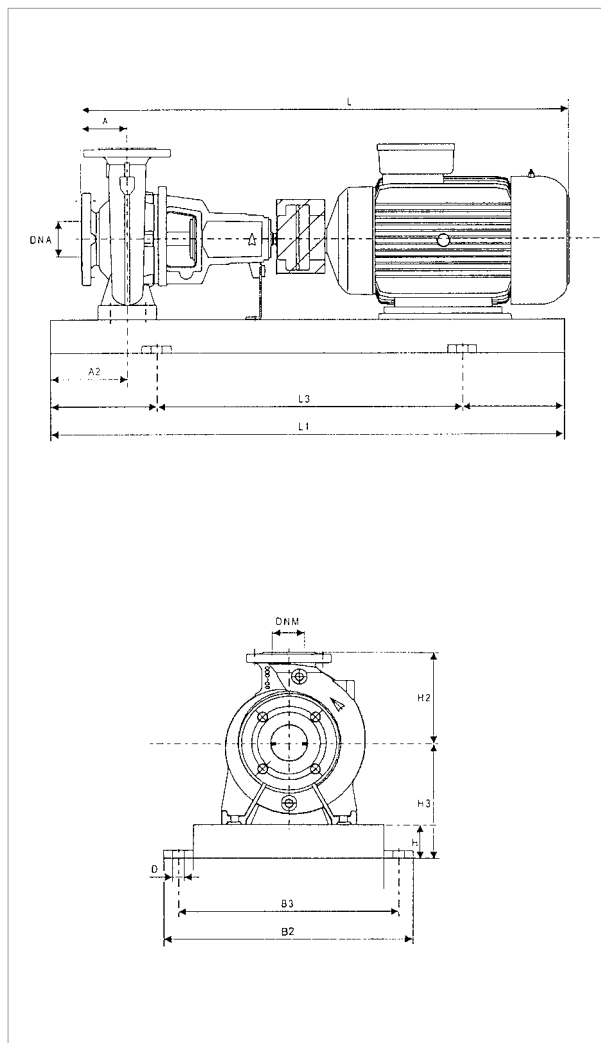
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 65-200	1,1	100	75	225	80	260	1000	660	450	400	24	80	65	782	131	922	136
	1,5	100	75	225	80	260	1000	660	450	400	24	80	65	782	129	922	134
	2,2	100	75	225	80	260	1120	740	490	440	24	80	65	831	137	971	142
	3	100	75	225	80	260	1120	740	490	440	24	80	65	846	136	986	141
	4	100	75	225	80	260	1120	740	490	440	24	80	65	853	129	993	134
	5,5	100	75	225	80	260	1120	740	490	440	24	80	65	910	192	1050	197

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 65-250 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 65-250	3	MEC 100L	3 x 400 V ~ ¹	6,8	IE3
	4	MEC 112M	3 x 400 V ~ ¹	8,2	IE3
	5,5	MEC 132S	3 x 400 V ~ ¹	10,6	IE3
	7,5	MEC 132M	3 x 400 V ~ ¹	15,3	IE3
	11	MEC 160M	3 x 400 V ~ ¹	22,4	IE3

¹ Star start-up possible (A)

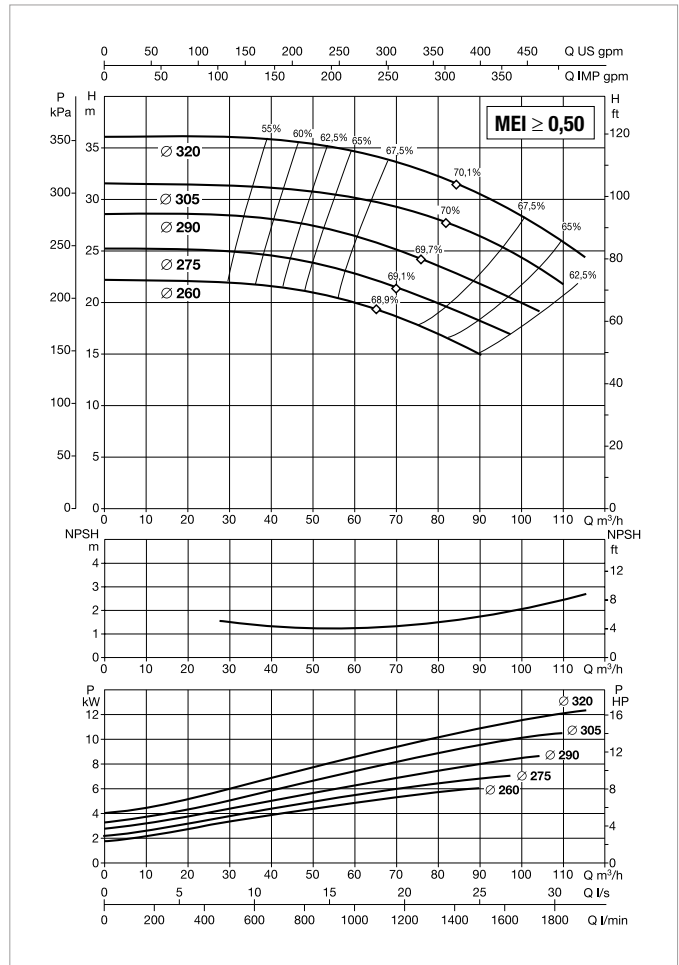
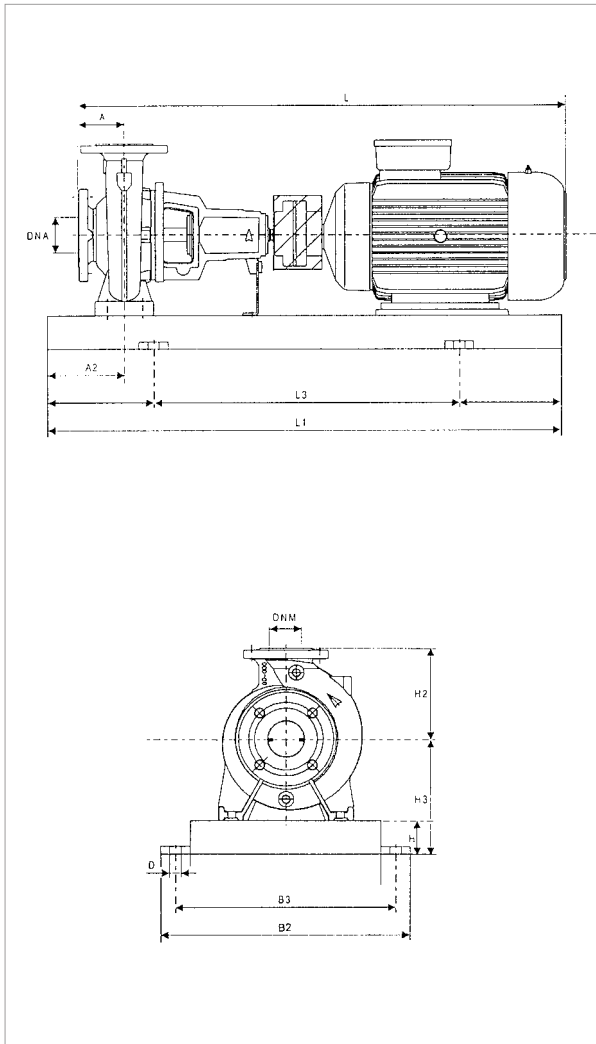
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 65-250	3	100	90	250	80	280	1120	740	490	440	24	80	65	956	164	1096	172
	4	100	90	250	80	280	1120	740	490	440	24	80	65	963	164	1103	172
	5,5	100	90	250	80	280	1120	740	490	440	24	80	65	1020	193	1160	201
	7,5	100	90	250	80	280	1120	740	490	440	24	80	65	1020	238	1160	246
	11	100	90	250	80	280	1250	840	540	490	24	80	65	1183	277	1323	285

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 65-315 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 65-315	5,5	MEC 132S	3 x 400 V ~ ¹	10,6	IE3
	7,5	MEC 132M	3 x 400 V ~ ¹	15,3	IE3
	11	MEC 160M	3 x 400 V ~ ¹	22,4	IE3
	15	MEC 160L	3 x 400 V ~ ¹	30,5	IE3
	18,5	MEC 180M	3 x 400 V ~ ¹	34,3	IE3

¹ Star start-up possible (A)

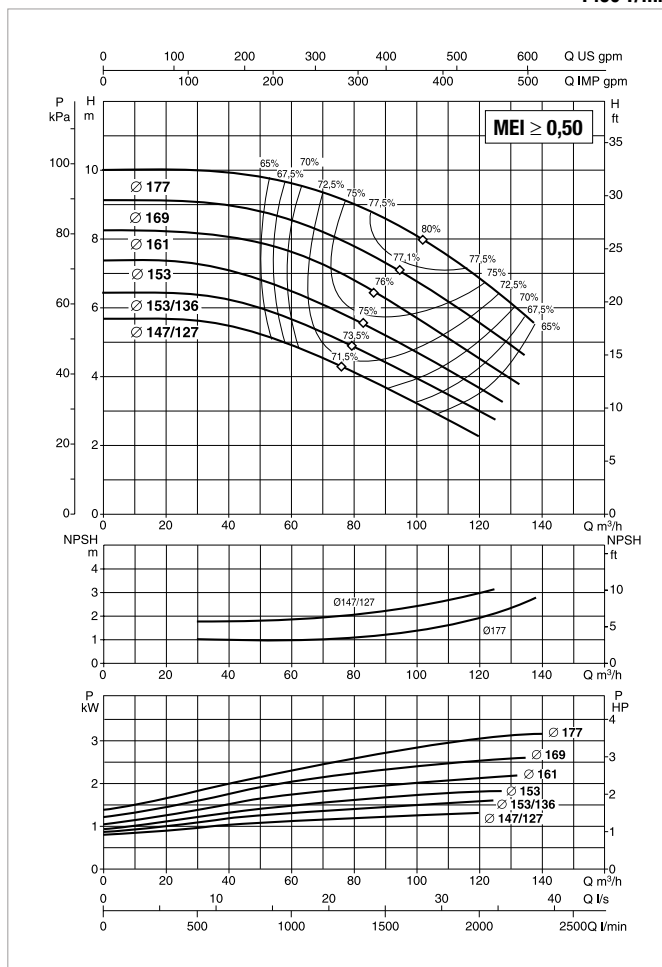
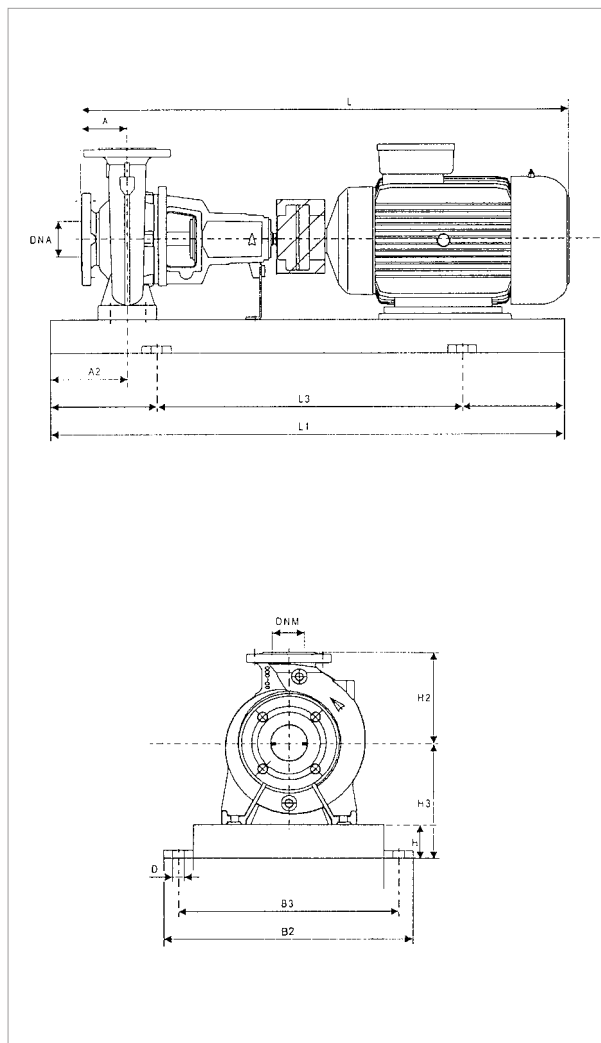
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNa	DNm	L	WEIGHT Kg	L	WEIGHT Kg
KDN 65-315	5,5	125	90	280	80	305	1250	840	540	490	24	80	65	1045	251	1185	259
	7,5	125	90	280	80	305	1250	840	540	490	24	80	65	1045	273	1185	281
	11	125	90	280	80	305	1250	840	540	490	24	80	65	1208	271	1348	279
	15	125	90	280	100	325	1400	940	610	550	28	80	65	1252	272	1392	280
	18,5	125	90	280	100	325	1400	940	610	550	28	80	65	1287	291	1427	299

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 80-160 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 80-160	1,1	MEC 90S	3 x 230 - 400 V ~	4,3/2,5	IE3
	1,5	MEC 90L	3 x 230 - 400 V ~	6,2/3,6	IE3
	2,2	MEC 100L	3 x 230 - 400 V ~	10,2/5,9	IE3
	3	MEC 100L	3 x 400 V ~ ¹	6,8	IE3
	4	MEC 112M	3 x 400 V ~ ¹	8,2	IE3
	5,5	MEC 132S	3 x 400 V ~ ¹	10,6	IE3

¹ Star start-up possible (A)

MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 80-160	1,1	125	75	225	80	260	1000	660	450	400	24	100	80	807	115	947	123
	1,5	125	75	225	80	260	1000	660	450	400	24	100	80	807	113	947	121
	2,2	125	75	225	80	260	1000	660	450	400	24	100	80	856	129	996	137
	3	125	75	225	80	260	1000	660	450	400	24	100	80	871	124	1011	132
	4	125	75	225	80	260	1000	660	450	400	24	100	80	878	117	1018	125
	5,5	125	75	225	80	260	1120	740	490	440	24	100	80	935	155	1075	163

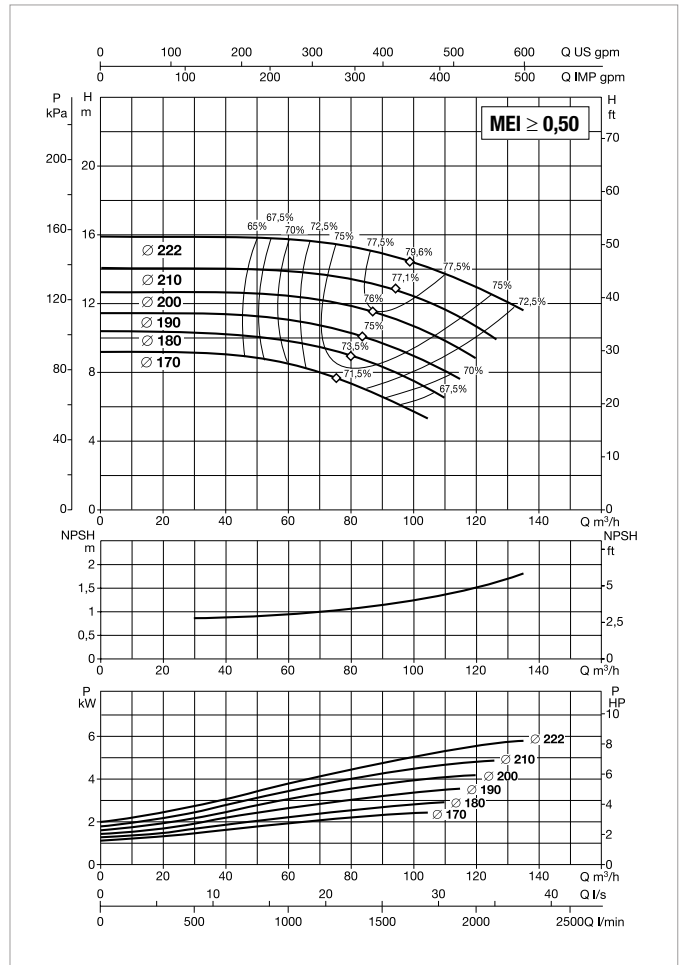
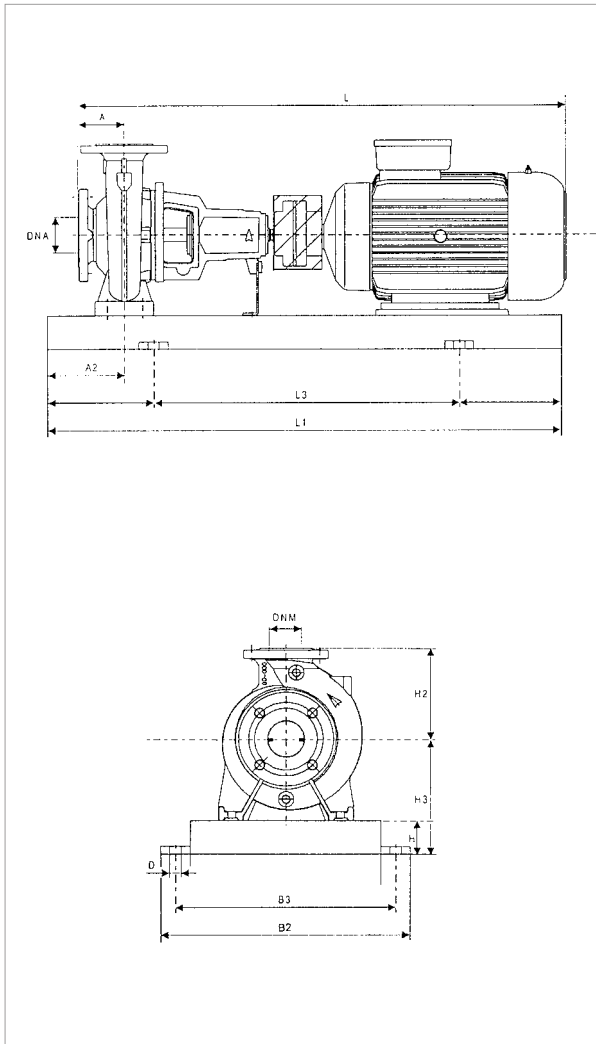
Dimension and electrical data based on sizing definition following the instructions on page 105.



KDN 80-200 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 80-200	1,5	MEC 90L	3 x 230 - 400 V ~	6,2/3,6	IE3
	2,2	MEC 100L	3 x 230 - 400 V ~	10,2/5,9	IE3
	3	MEC 100L	3 x 400 V ~ ¹	6,8	IE3
	4	MEC 112M	3 x 400 V ~ ¹	8,2	IE3
	5,5	MEC 132S	3 x 400 V ~ ¹	10,6	IE3
	7,5	MEC 132M	3 x 400 V ~ ¹	15,3	IE3
	11	MEC 160M	3 x 400 V ~ ¹	22,4	IE3

¹ Star start-up possible (Δ)

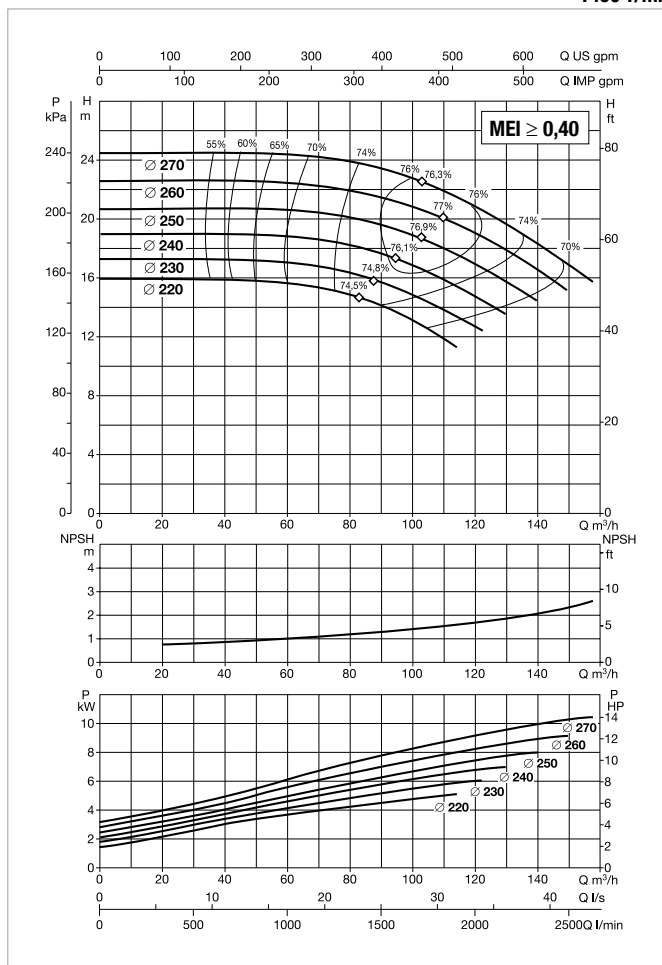
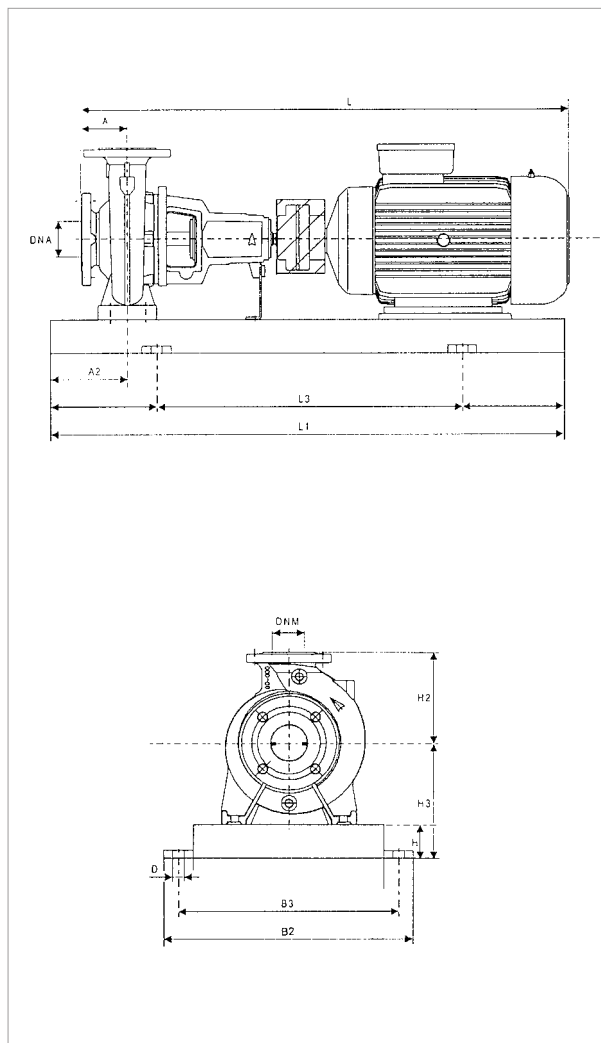
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 80-200	1,5	125	75	250	80	260	1120	740	490	440	24	100	80	917	147	1057	155
	2,2	125	75	250	80	260	1120	740	490	440	24	100	80	966	156	1106	164
	3	125	75	250	80	260	1120	740	490	440	24	100	80	981	154	1121	162
	4	125	75	250	80	260	1120	740	490	440	24	100	80	988	167	1128	175
	5,5	125	75	250	80	260	1120	740	490	440	24	100	80	1045	180	1185	188
	7,5	125	75	250	80	260	1120	740	490	440	24	100	80	1045	169	1185	177
	11	125	75	250	80	260	1250	840	540	490	24	100	80	1208	171	1348	179

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 80-250 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 80-250	4	MEC 112M	3 x 400 V ~ ¹	8,2	IE3
	5,5	MEC 132S	3 x 400 V ~ ¹	10,6	IE3
	7,5	MEC 132M	3 x 400 V ~ ¹	15,3	IE3
	11	MEC 160M	3 x 400 V ~ ¹	22,4	IE3
	15	MEC 160L	3 x 400 V ~ ¹	30,5	IE3

¹ Star start-up possible (A)

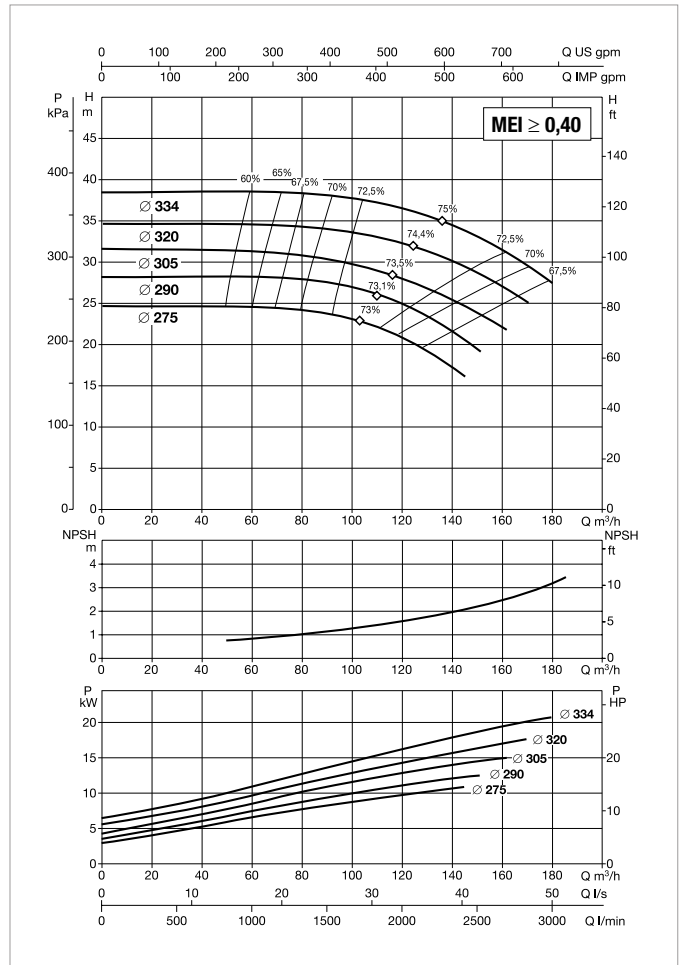
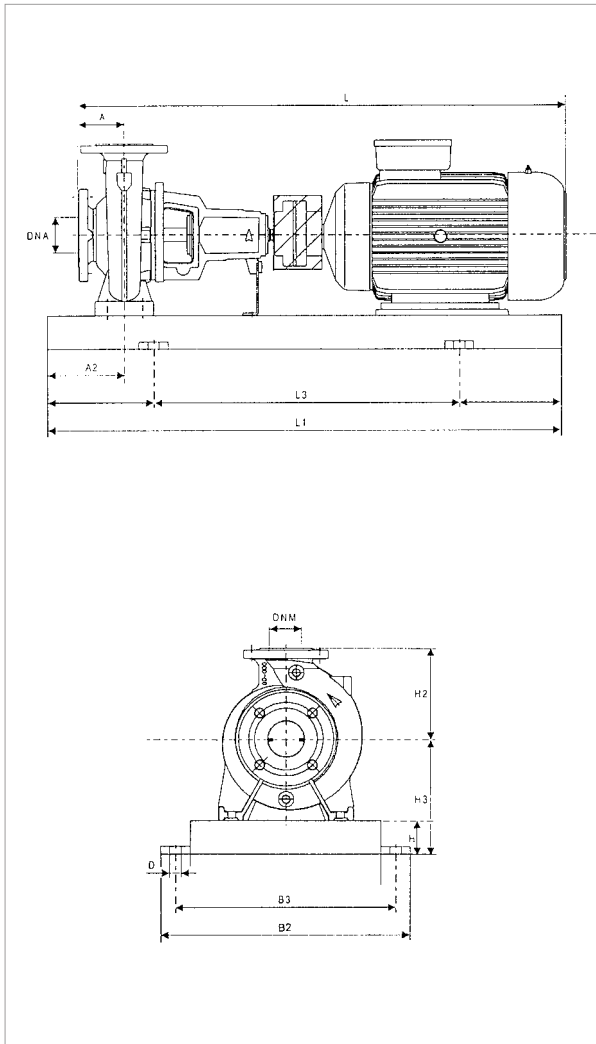
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 80-250	4	125	90	280	80	280	1250	840	540	490	24	100	80	988	198	1128	206
	5,5	125	90	280	80	280	1250	840	540	490	24	100	80	1045	211	1185	219
	7,5	125	90	280	80	280	1250	840	540	490	24	100	80	1045	200	1185	208
	11	125	90	280	80	280	1250	840	540	490	24	100	80	1208	232	1348	240
	15	125	90	280	80	280	1250	840	540	490	24	100	80	1252	252	1392	260

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 80-315 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 80-315	7,5	MEC 132M	3 x 400 V ~ ¹	15,3	IE3
	11	MEC 160M	3 x 400 V ~ ¹	22,4	IE3
	15	MEC 160L	3 x 400 V ~ ¹	30,5	IE3
	18,5	MEC 180M	3 x 400 V ~ ¹	34,3	IE3
	22	MEC 180L	3 x 400 V ~ ¹	40,2	IE3
	30	MEC 200L	3 x 400 V ~ ¹	53,7	IE3

¹ Star start-up possible (A)

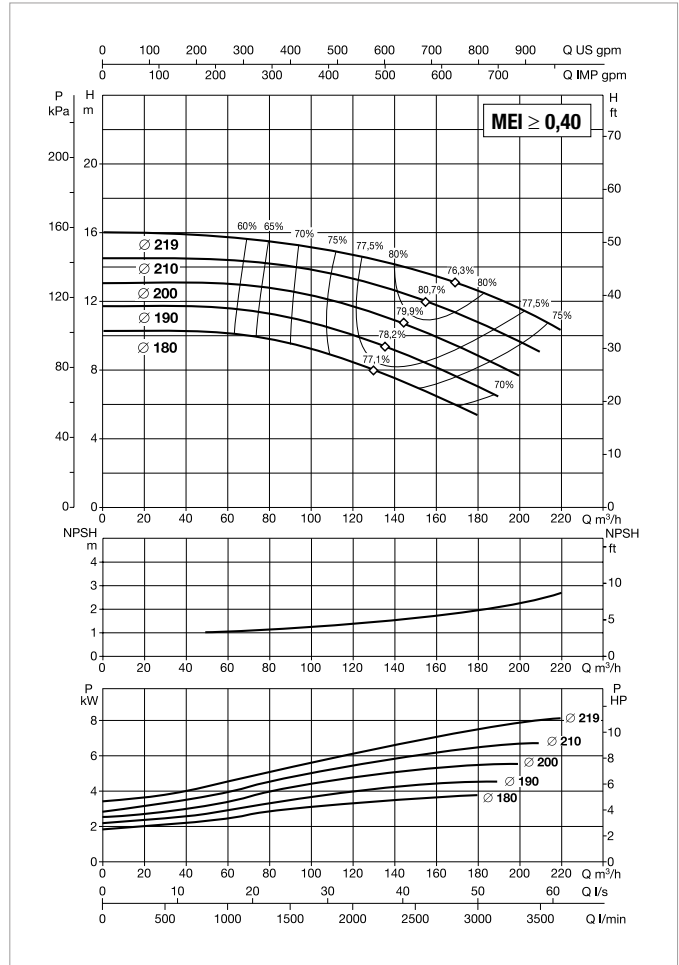
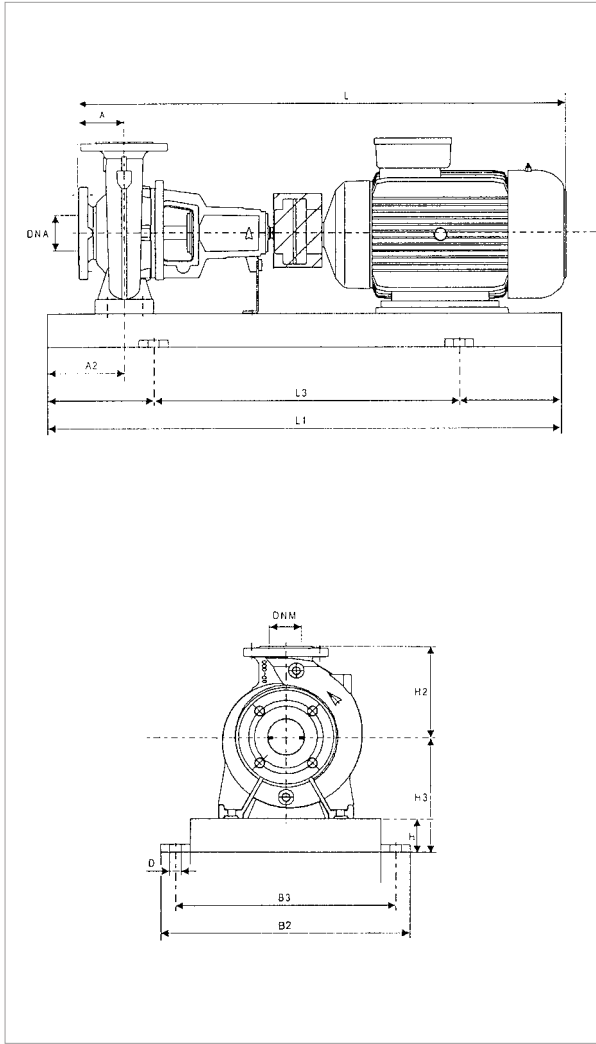
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 80-315	7,5	125	90	315	80	330	1250	840	540	490	24	100	80	1045	371	1185	379
	11	125	90	315	80	330	1250	840	540	490	24	100	80	1208	364	1348	372
	15	125	90	315	100	350	1400	940	610	550	28	100	80	1252	365	1392	373
	18,5	125	90	315	100	350	1400	940	610	550	28	100	80	1287	378	1427	386
	22	125	90	315	100	350	1400	940	610	550	28	100	80	1325	318	1465	326
	30	125	90	315	100	350	1400	940	610	550	28	100	80	1369	384	1509	392

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 100-200 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 100-200	3	MEC 100L	3 x 400 V ~ 1	6,8	IE3
	4	MEC 112M	3 x 400 V ~ 1	8,2	IE3
	5,5	MEC 132S	3 x 400 V ~ 1	10,6	IE3
	7,5	MEC 132M	3 x 400 V ~ 1	15,3	IE3
	11	MEC 160M	3 x 400 V ~ 1	22,4	IE3
	15	MEC 160L	3 x 400 V ~ 1	30,5	IE3

¹ Star start-up possible (A)

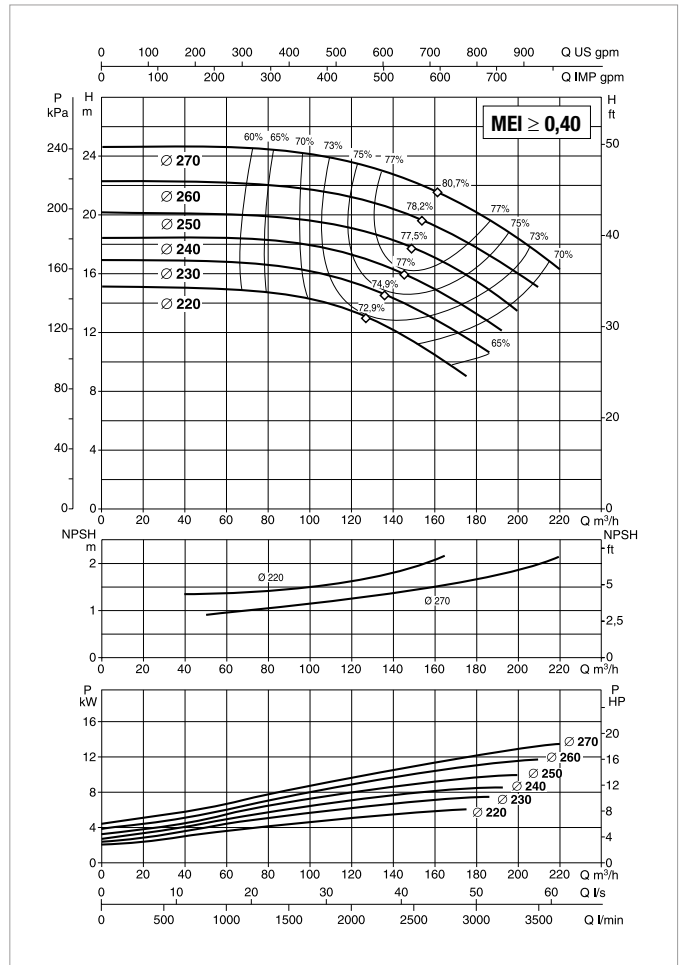
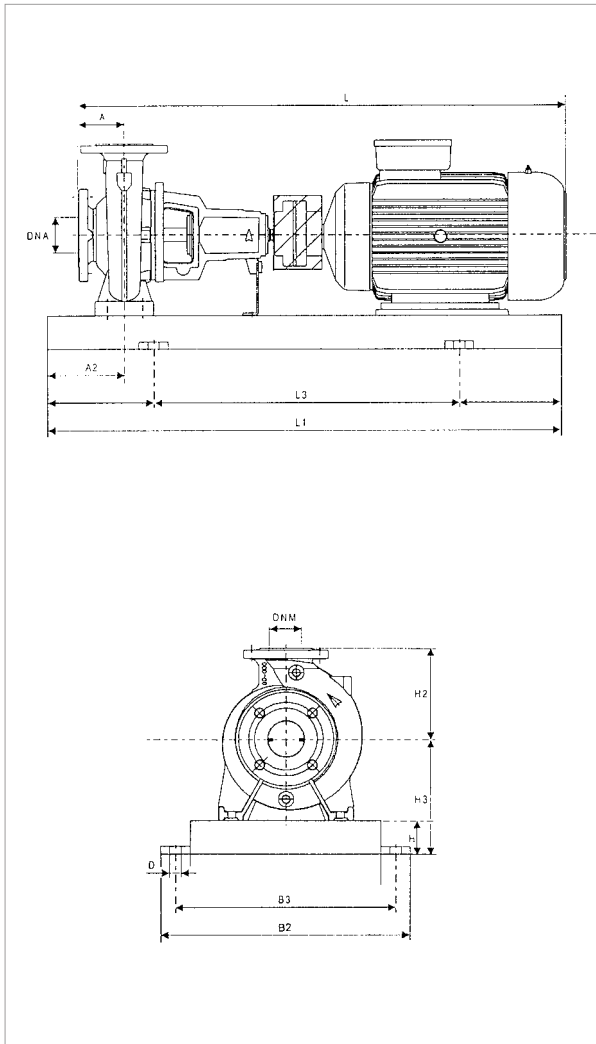
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 100-200	3	125	90	280	80	280	1120	740	490	440	24	125	100	981	167	1121	175
	4	100	90	280	80	280	1120	740	490	440	24	125	100	963	167	1103	175
	5,5	100	90	280	80	280	1120	740	490	440	24	125	100	1020	206	1160	214
	7,5	100	90	280	80	280	1120	740	490	440	24	125	100	1020	190	1160	198
	11	100	90	280	80	280	1250	840	540	490	24	125	100	1183	281	1323	289
	15	100	90	280	80	280	1250	840	540	490	24	125	100	1227	355	1367	363

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 100-250 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 100-250	5,5	MEC 132S	3 x 400 V ~ ¹	10,6	IE3
	7,5	MEC 132M	3 x 400 V ~ ¹	15,3	IE3
	11	MEC 160M	3 x 400 V ~ ¹	22,4	IE3
	15	MEC 160L	3 x 400 V ~ ¹	30,5	IE3
	18,5	MEC 180M	3 x 400 V ~ ¹	34,3	IE3

¹ Star start-up possible (Δ)

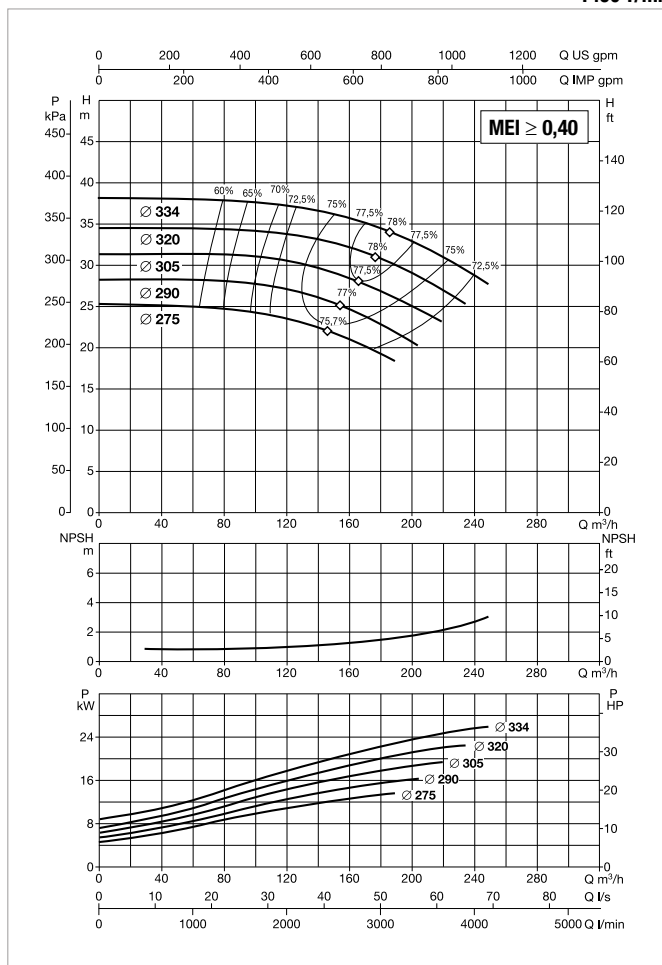
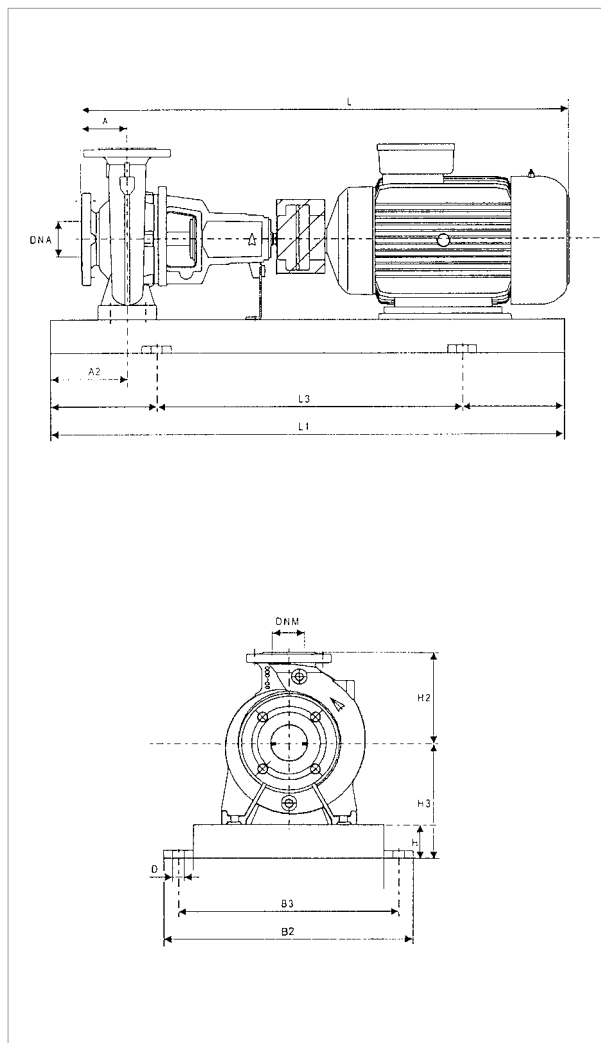
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 100-250	5,5	140	90	280	80	305	1250	840	540	490	24	125	100	1060	233	1200	241
	7,5	140	90	280	80	305	1250	840	540	490	24	125	100	1060	231	1200	239
	11	140	90	280	80	305	1250	840	540	490	24	125	100	1223	266	1363	274
	15	140	90	280	100	325	1400	940	610	550	28	125	100	1267	275	1407	283
	18,5	140	90	280	100	325	1400	940	610	550	28	125	100	1302	547	1442	555

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 100-315 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 100-315	11	MEC 160M	3 x 400 V ~ ¹	22,4	IE3
	15	MEC 160L	3 x 400 V ~ ¹	30,5	IE3
	18,5	MEC 180M	3 x 400 V ~ ¹	34,3	IE3
	22	MEC 180L	3 x 400 V ~ ¹	40,2	IE3
	30	MEC 200L	3 x 400 V ~ ¹	53,7	IE3
	37	MEC 225S	3 x 400 V ~ ¹	66,1	IE3

¹ Star start-up possible (A)

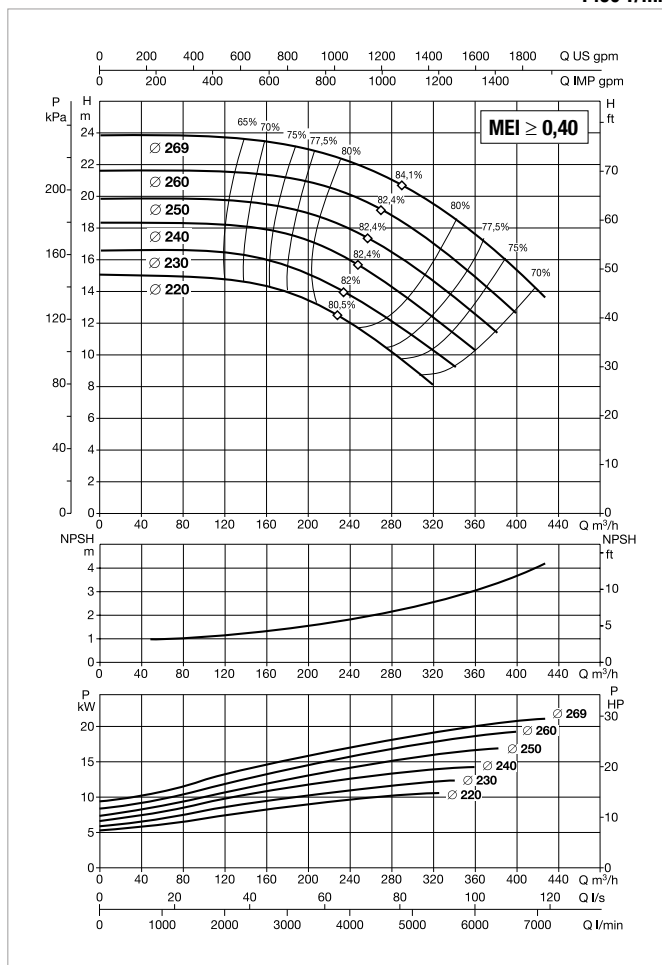
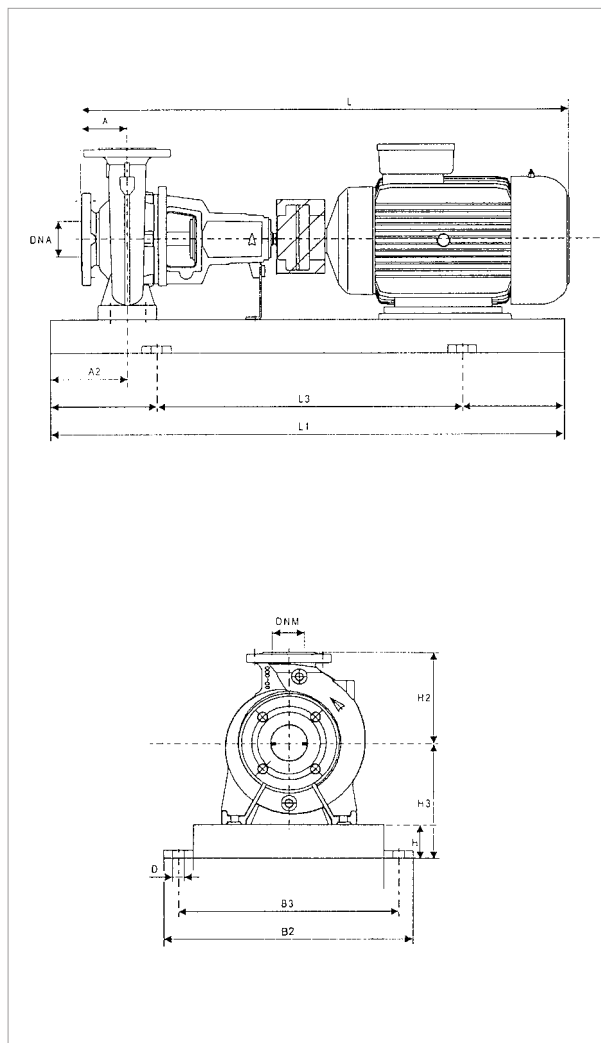
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 100-315	11	140	90	315	80	330	1250	840	540	490	24	125	100	1223	287	1363	295
	15	140	90	315	100	350	1400	940	610	550	28	125	100	1267	275	1407	283
	18,5	140	90	315	100	350	1400	940	610	550	28	125	100	1302	315	1442	323
	22	140	90	315	100	350	1400	940	610	550	28	125	100	1340	342	1480	250 350
	30	140	90	315	100	350	1400	940	610	550	28	125	100	1384	458	1524	466
	37	140	90	315	100	350	1400	940	610	550	28	125	100	1429	524	1569	532

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 125-250 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 125-250	7,5	MEC 132M	3 x 400 V ~ ¹	15,3	IE3
	11	MEC 160M	3 x 400 V ~ ¹	22,4	IE3
	15	MEC 160L	3 x 400 V ~ ¹	30,5	IE3
	18,5	MEC 180M	3 x 400 V ~ ¹	34,3	IE3
	22	MEC 180L	3 x 400 V ~ ¹	40,2	IE3
	30	MEC 200L	3 x 400 V ~ ¹	53,7	IE3

¹ Star start-up possible (A)

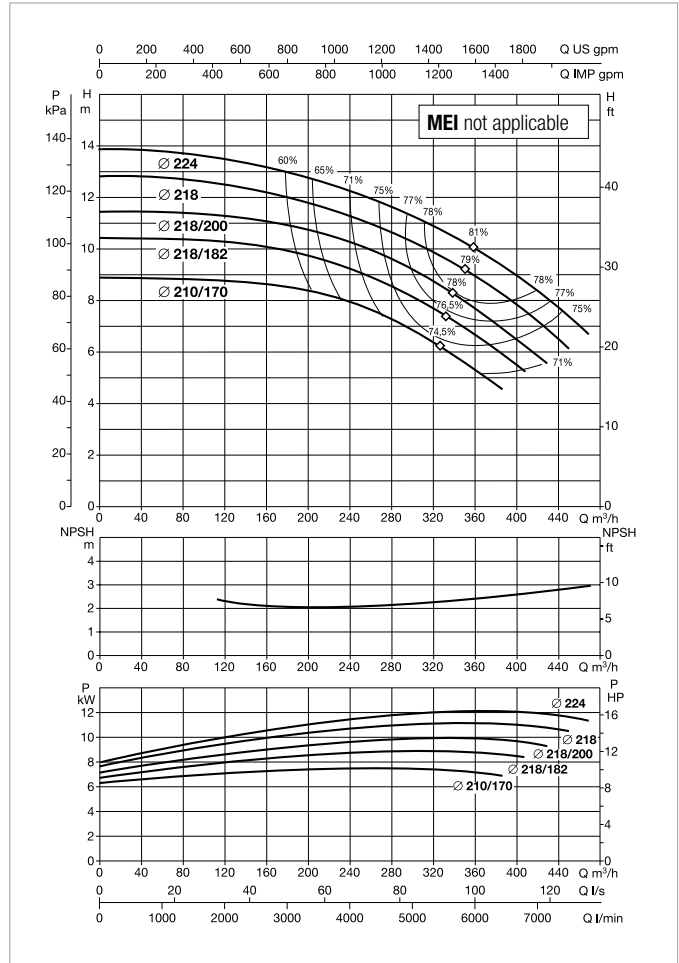
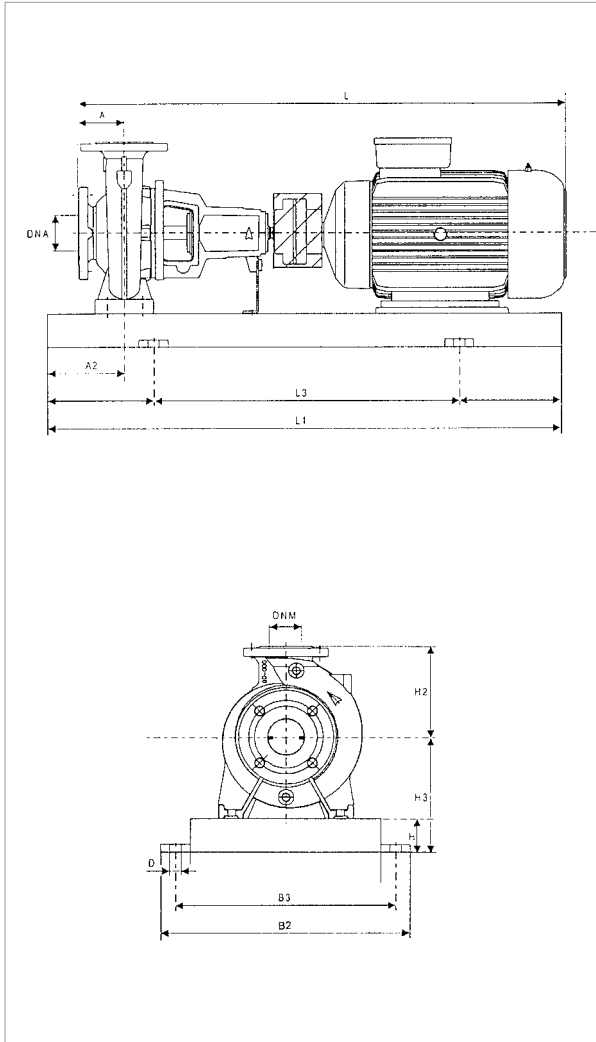
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 125-250	7,5	140	90	355	80	330	1250	840	540	490	24	150	125	1060	291	1200	299
	11	140	90	355	80	330	1250	840	540	490	24	150	125	1223	302	1363	310
	15	140	90	355	100	350	1400	940	610	550	28	150	125	1267	391	1407	399
	18,5	140	90	355	100	350	1400	940	610	550	28	150	125	1302	391	1442	399
	22	140	90	355	100	350	1400	940	610	550	28	150	125	1340	433	1480	441
	30	140	90	355	100	350	1400	940	610	550	28	150	125	1384	511	1524	519

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN 150-200 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +140 °C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 150-200	5,5	MEC 132S	3 x 400 V ~ ¹	10,6	IE3
	7,5	MEC 132M	3 x 400 V ~ ¹	15,3	IE3
	11	MEC 160M	3 x 400 V ~ ¹	22,4	IE3
	15	MEC 160L	3 x 400 V ~ ¹	30,5	IE3
	18,5	MEC 180M	3 x 400 V ~ ¹	34,3	IE3

¹ Star start-up possible (A)

MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H2	H	H3	L1	L3	B2	B3	D	DNA	DNM	L	WEIGHT Kg	L	WEIGHT Kg
KDN 150-200	5,5	160	110	400	100	380	1800	1200	730	670	28	200	150	1080	446	1220	454
	7,5	160	110	400	100	380	1800	1200	730	670	28	200	150	1080	451	1220	459
	11	160	110	400	100	380	1800	1200	730	670	28	200	150	1243	455	1383	463
	15	160	110	400	100	380	1800	1200	730	670	28	200	150	1287	476	1427	484
	18,5	160	110	400	100	380	1800	1200	730	670	28	200	150	1322	504	1462	512

Dimension and electrical data based on sizing definition following the instructions on page 105.

KDN - 4 POLES

STANDARDISED PUMPS

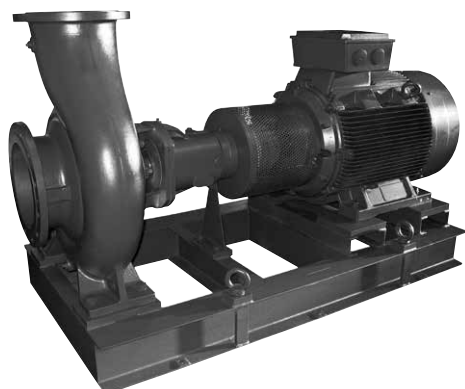
IE3 STANDARD MOTOR ELECTRIC DATA

=1450 1/min

MOTOR TYPE	P2 NOMINAL kW	SPEED rpm	YELD %	POWER FACTOR COS ϕ	POWER INPUT 50 Hz	In A			Start-up current Ia/In	Start-up torque Ma/Mn	Maximum torque M/k/Mn	POLES
						230V	400V	690V				
MEC 71	0,25	1400	60,00	0,710	3x230/400	1,56	0,90		2,88	2,15	2,26	4
MEC 71	0,37	1340	67,00	0,780	3x230/400	1,70	0,98		4,75	2,84	2,64	4
MEC 80	0,55	1410	71,00	0,720	3x230/400	2,60	1,50		5,33	2,78	2,89	4
MEC 80	0,75	1435	82,50	0,740	3x230/400	3,12	1,80		5,50	2,70	2,80	4
MEC 90S	1,1	1440	84,10	0,750	3x230/400	4,33	2,50		7,10	4,30	4,30	4
MEC 90L	1,5	1430	85,30	0,720	3x230/400	6,24	3,60		6,60	4,30	4,40	4
MEC 100L	2,2	1455	86,70	0,630	3x230/400	24,94	14,40		5,90	3,70	3,90	4
MEC 100L	3	1440	87,70	0,730	3x400 Δ		6,80	3,93	8,10	4,10	4,10	4
MEC 112M	4	1450	88,60	0,800	3x400 Δ		8,20	4,73	8,50	2,70	3,50	4
MEC 132S	5,5	1450	89,60	0,840	3x400 Δ		10,60	6,12	8,70	3,70	4,30	4
MEC 132M	7,5	1465	90,40	0,780	3x400 Δ		15,30	8,83	8,20	4,40	5,10	4
MEC 160M	11	1465	91,40	0,770	3x400 Δ		22,40	12,93	10,10	2,50	3,10	4
MEC 160L	15	1465	92,10	0,780	3x400 Δ		30,50	17,61	8,90	3,20	2,80	4
MEC 180M	18,5	1470	92,60	0,840	3x400 Δ		34,30	19,80	7,50	2,20	2,30	4
MEC 180L	22	1470	93,00	0,850	3x400 Δ		40,20	23,21	7,70	2,20	2,30	4
MEC 200L	30	1475	93,60	0,860	3x400 Δ		53,70	31,00	7,80	2,20	2,30	4
MEC 225S	37	1485	93,90	0,860	3x400 Δ		66,10	38,16	7,20	2,20	2,30	4
MEC 225M	45	1485	94,20	0,870	3x400 Δ		79,10	45,67	7,30	2,20	2,30	4
MEC 250M	55	1485	94,60	0,870	3x400 Δ		96,20	55,54	7,40	2,20	2,30	4
MEC 280S	75	1486	95,00	0,870	3x400 Δ		131,00	75,63	7,40	2,00	2,30	4
MEC 280M	90	1486	95,20	0,870	3x400 Δ		157,00	90,64	6,70	2,00	2,30	4
MEC 315S	110	1488	95,40	0,880	3x400 Δ		189,00	109,12	6,90	2,20	2,20	4
MEC 315M	132	1488	95,60	0,880	3x400 Δ		226,00	130,48	6,90	2,20	2,20	4
MEC 315L	160	1488	95,80	0,880	3x400 Δ		274,00	158,19	6,90	2,20	2,20	4
MEC 315L	200	1490	96,00	0,880	3x400 Δ		342,00	197,45	6,90	2,20	2,20	4
MEC 355M	250	1490	96,00	0,890	3x400 Δ		420,00	242,77	7,70	2,60	2,70	4
MEC 355L	315	1490	96,00	0,890	3x400 Δ		530,00	306,36	7,80	2,80	2,70	4

KDN OVERSIZE

STANDARDISED PUMPS



IE3 ≥ 0,75 kW

TECHNICAL DATA

Rotation speed: 970 - 1450 - 2900 1/min

Operating range:

from 4 to 3200 m³/h with head up to 158 metres

Pumped liquid: clean, free of solids and abrasives, non-viscous, non-aggressive, non-crystallised and chemically neutral, with properties similar to water

Pumped liquid temperature range: from -20°C to +120°C

Maximum ambient temperature: +40 °C

Maximum operating pressure:

16 bar as standard up to DN 200, 10 bar for KDN 250 - 300 - 350

Optional PN 16 for KDN 250 - 300 - 350 in the spheroidal cast iron version (H)

Installation: normally in the horizontal position

Special executions on requests: pumps for liquids other than water
Special materials and other voltages and/or frequencies

APPLICATIONS

Standardised centrifugal monobloc electric pumps with coupling, designed for a wide range of applications, such as:

- Central heating
- Water supply
- Air conditioning
- Refrigeration
- Industry
- Fire fighting
- Environmental engineering

CONSTRUCTION FEATURES OF THE PUMP

Non self-priming single stage spiral body centrifugal pump with axial suction port, radial delivery port and horizontal axis components, in compliance with ISO 2858/DIN 24256.

KDN pumps have PN 16 nominal sizes and performances.

The suction and delivery flanges are in compliance with EN 7005 PN 10 or 16. All the pumps are dynamically balanced according to ISO 1940 class 6.3; the impellers are hydraulically balanced.

Pump and motor are installed on a single base according to EN 23 661, made of fully welded steel.

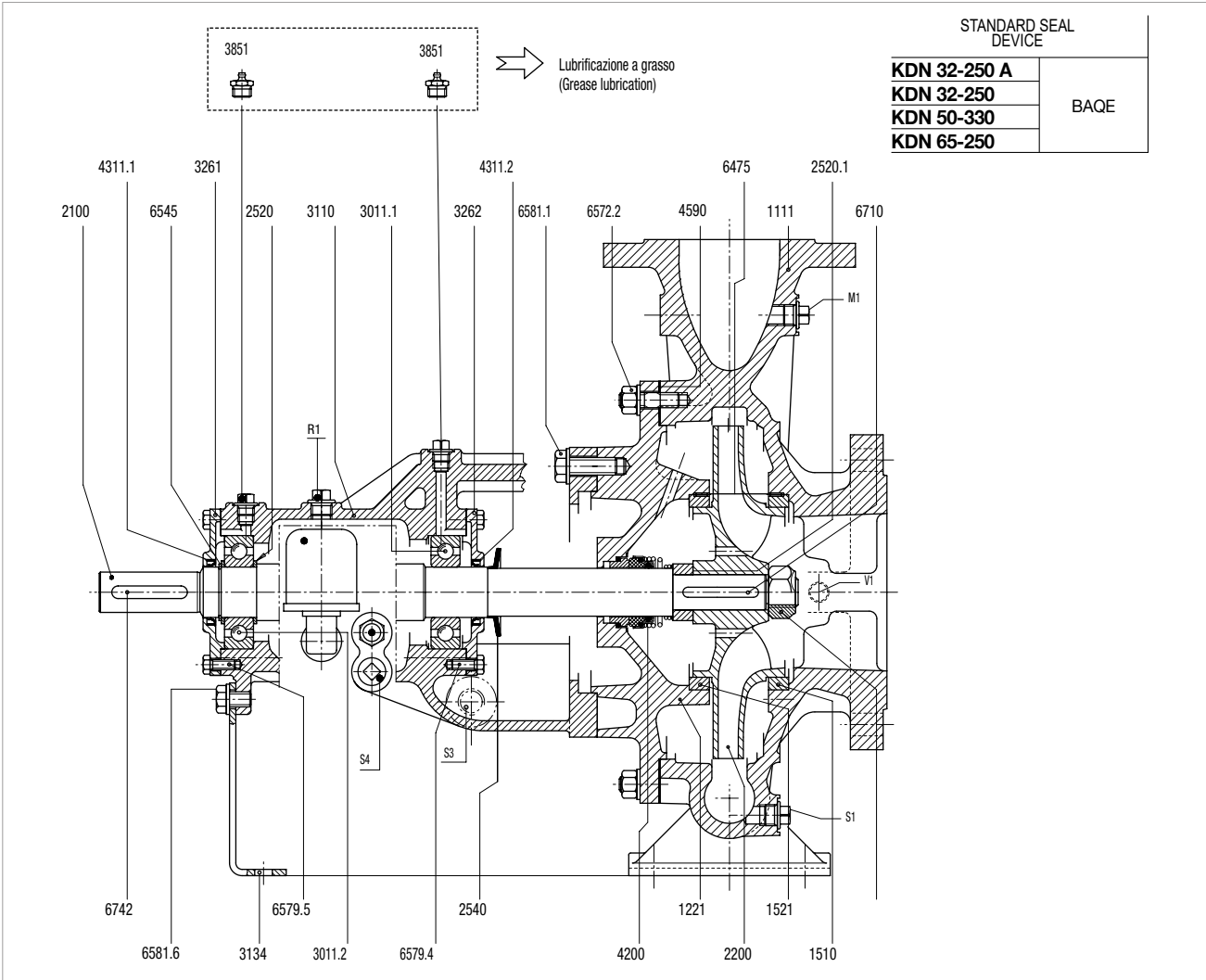
Oversize pumps have a base with welded steel profiles.

Thanks to the particular pump design, the bearings, the impeller, and the seal can be removed without detaching the pump body from the piping (back-pull-out design).

KDN OVERSIZE

STANDARDISED PUMPS

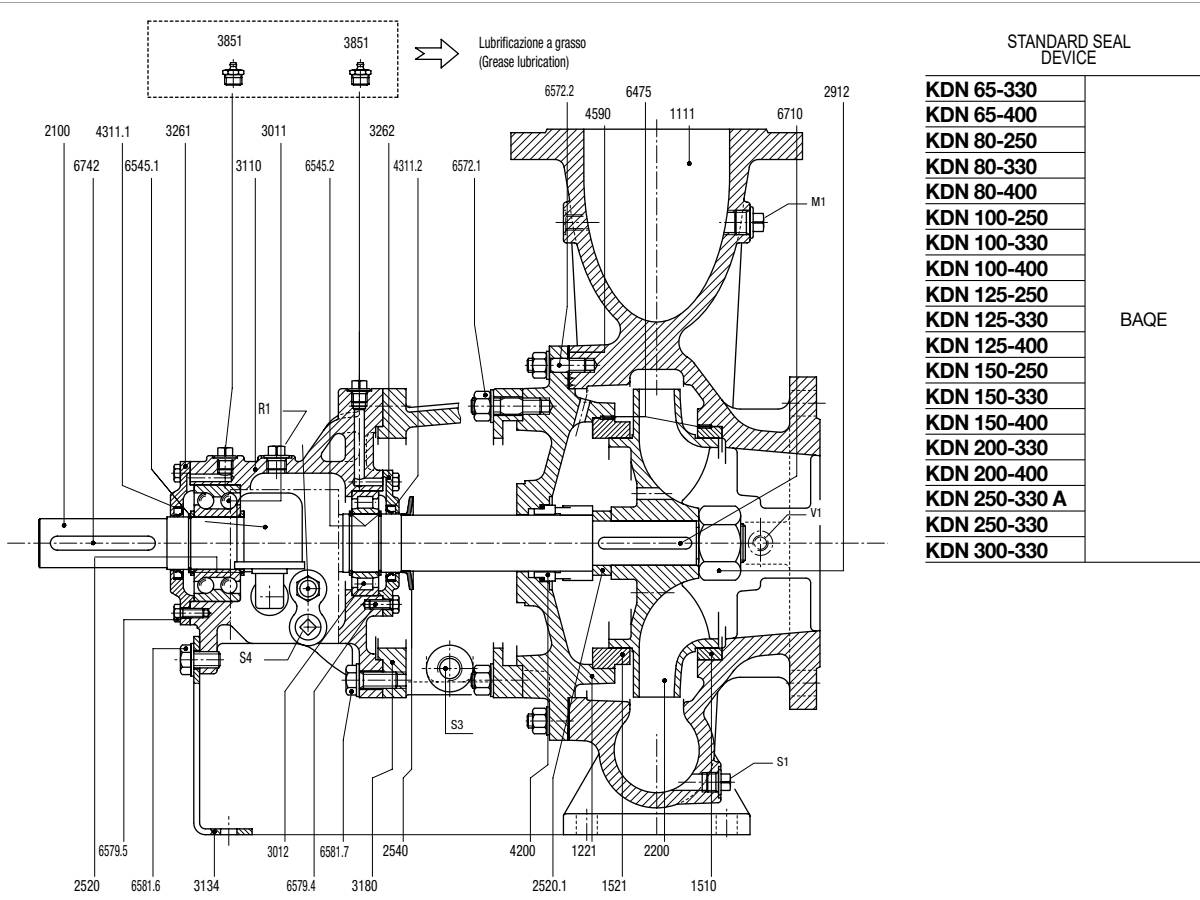
MATERIALS



No.	PARTS	MATERIALS
1111	PUMP BODY	CAST IRON GG25
1221	COVER	CAST IRON GG25
1510	FRONT END WEAR RING	CAST IRON GG25
1521	REAR END WEAR RING	CAST IRON GG25
2100	SHAFT	AISI 420
2200	IMPELLER	CAST IRON GG25 CAST IRON GS400 CAST IRON GS400 CF8M STEEL
2520	SHOULDER RING	STEEL
2520.1	SHOULDER RING	STEEL
2540	THROWER	RUBBER
2912	IMPELLER NUT	CAST IRON GG25
3011.1	BALL BEARING	NA
3011.2	BALL BEARING	NA
3110	SUPPORT	CAST IRON GG25
3134	SUPPORT FOOT	STEEL
3261	BEARING COVER, DRIVE SIDE	CAST IRON GG25
3262	BEARING COVER, PUMP SIDE	CAST IRON GG25
4200	MECHANICAL SEAL	CARBON/SILICON CARBIDE
4311.1	SEAL RING	NBR
4311.2	SEAL RING	NBR

No.	PARTS	MATERIALS
4590	GASKET	NONAM
6475	DOWEL	STEEL 8.8
6545	SHAFT CIRCLIP	STEEL
6572.2	STUD BOLT + WASHER + NUT	STEEL
6579.4	SCREW	STEEL 8.8
6579.5	SCREW	STEEL 8.8
6581.1	SCREW + WASHER	STEEL 8.8
6581.6	SCREW + WASHER	STEEL 8.8
6710	IMPELLER KEY	STEEL
6742	COUPLING KEY	STEEL
M1	PRESSURE GAUGE CONNECTION	
R1	OIL FILLING	
S1	PUMP DRAIN PLUG	
S3	MECH. SEAL /PACKING DRAIN CONNECTION	
S4	OIL DRAIN PLUG	
V1	VACUUM GAUGE CONNECTION	
	GREASE LUBRICATION	
3851	GREASER	

MATERIALS



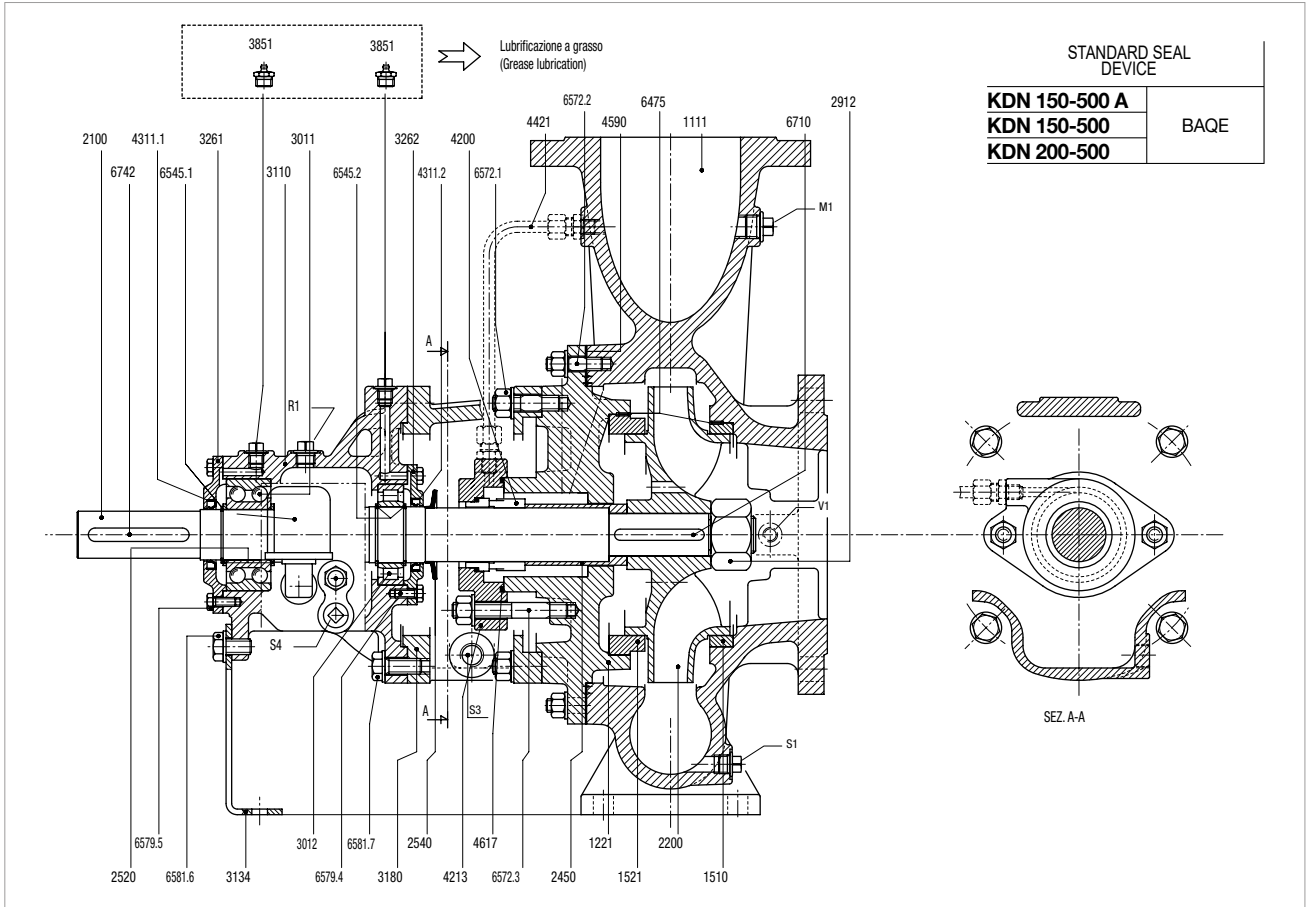
No.	PARTS	MATERIALS
1111	PUMP BODY	CAST IRON GG25
1221	COVER	CAST IRON GG25
1510	FRONT END WEAR RING	CAST IRON GG25
1521	REAR END WEAR RING	CAST IRON GG25
2100	SHAFT	AISI 420
2200	IMPELLER	CAST IRON GG25 CAST IRON GS400 CAST IRON GS400 CF8M STEEL CAST IRON GG25
2520	SHOULDER RING	STEEL
2520.1	SHOULDER RING	STEEL
2540	THROWER	RUBBER
2912	IMPELLER NUT	CAST IRON GG25
3011	BALL BEARING	NA
3012	ROLLER BEARING	NA
3110	SUPPORT	CAST IRON GG25
3134	SUPPORT FOOT	STEEL
3180	SUPPORT	CAST IRON GG25
3261	BEARING COVER, DRIVE SIDE	CAST IRON GG25
3262	BEARING COVER, PUMP SIDE	CAST IRON GG25
4200	MECHANICAL SEAL	TUNGSTEN CARBIDE/CARBON
4311.1	SEAL RING	NBR
4311.2	SEAL RING	NBR

No.	PARTS	MATERIALS
4590	GASKET	NONAM
6475	DOWEL	STEEL 8.8
6545.1	SHAFT CIRCLIP	STEEL
6545.2	SHAFT CIRCLIP	STEEL
6572.1	STUD BOLT + WASHER + NUT	STEEL
6572.2	STUD BOLT + WASHER + NUT	STEEL
6579.4	SCREW	STEEL 8.8
6579.5	SCREW	STEEL 8.8
6581.6	SCREW + WASHER	STEEL 8.8
6581.7	SCREW + WASHER	STEEL 8.8
6710	IMPELLER KEY	STEEL
6742	COUPLING KEY	STEEL
M1	PRESSURE GAUGE CONNECTION	
R1	OIL FILLING	
S1	PUMP DRAIN PLUG	
S3	MECH. SEAL/PACKING DRAIN CONNECTION	
V1	VACUUM GAUGE CONNECTION	
	GREASE LUBRICATION	
3851	GREASER	

KDN OVERSIZE

STANDARDISED PUMPS

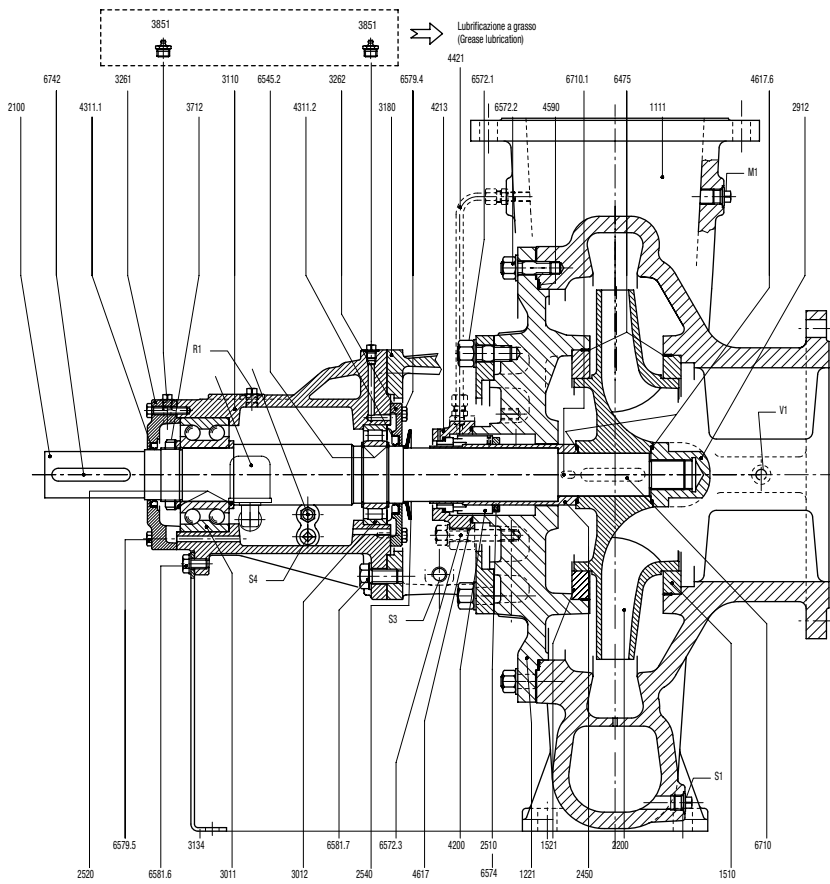
MATERIALS



No.	PARTS	MATERIALS
1111	PUMP BODY	CAST IRON GG25
1221	COVER	CAST IRON GG25
1510	FRONT END WEAR RING	CAST IRON GG25
1521	REAR END WEAR RING	CAST IRON GG25
2100	SHAFT	AISI 420
2200	IMPELLER	CAST IRON GG25
2450	SHAFT SLEEVE	AISI 303
2520	SHOULDER RING	STEEL
2540	THROWER	RUBBER
2912	IMPELLER NUT	CAST IRON GG25
3011	BALL BEARING	NA
3012	ROLLER BEARING	NA
3110	SUPPORT	CAST IRON GG25
3134	SUPPORT FOOT	STEEL
3180	SUPPORT	CAST IRON GG25
3261	BEARING COVER, DRIVE SIDE	CAST IRON GG25
3262	BEARING COVER, PUMP SIDE	CAST IRON GG25
4200	MECHANICAL SEAL	CARBON/SILICON CARBIDE
4213	CARRIER FOR MECHANICAL SEAL	CAST IRON GS400
4311.1	SEAL RING	NBR
4311.2	SEAL RING	NBR

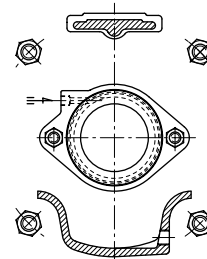
No.	PARTS	MATERIALS
4421	PIPE	AISI 316
4590	GASKET	NONAM
4617	O-RING	NBR
6475	DOWEL	STEEL 8.8
6545.1	SHAFT CIRCLIP	STEEL
6545.2	SHAFT CIRCLIP	STEEL
6572.1	STUD BOLT + WASHER + NUT	STEEL
6572.2	STUD BOLT + WASHER + NUT	STEEL
6572.3	STUD BOLT + WASHER + NUT	STEEL
6579.4	SCREW	STEEL 8.8
6579.5	SCREW	STEEL 8.8
6581.6	SCREW + WASHER	STEEL 8.8
6710	IMPELLER KEY	STEEL
6742	COUPLING KEY	STEEL
M1	PRESSURE GAUGE CONNECTION	
R1	OIL FILLING	
S1	PUMP DRAIN PLUG	
S3	MECH. SEAL /PACKING DRAIN CONNECTION	
V1	VACUUM GAUGE CONNECTION	
	GREASE LUBRICATION	
3851	GREASER	

MATERIALS



STANDARD SEAL DEVICE

KDN 250-400	CUCE
KDN 250-500 A	DUCE
KDN 250-500	DUCE
KDN 300-400 A	CUCE
KDN 300-400 M	CUCE
KDN 300-400	CUCE
KDN 350-500 A	DUCE
KDN 350-500	DUCE



No.	PARTS	MATERIALS	
1111	PUMP BODY	CAST IRON GG25	CAST IRON GS400
1221	COVER	CAST IRON GG25	CAST IRON GS400
1510	FRONT END WEAR RING	CAST IRON GG25	
1521	REAR END WEAR RING	CAST IRON GG25	
2100	SHAFT	AISI 420	
2200	IMPELLER	CAST IRON GG25	
2450	SHAFT SLEEVE	AISI 303	
2510	SPACER RING	CAST IRON GG25	
2520	SHOULDER RING	STEEL	
2540	THROWER	RUBBER	
2912	IMPELLER NUT	CAST IRON GG25	
3011	BALL BEARING	NA	
3012	ROLLER BEARING	NA	
3110	SUPPORT	CAST IRON GG25	
3134	SUPPORT FOOT	STEEL	
3180	SUPPORT	CAST IRON GG25	
3261	BEARING COVER, DRIVE SIDE	CAST IRON GG25	
3262	BEARING COVER, PUMP SIDE	CAST IRON GG25	
3712	BEARING NUT	STEEL	
4200	MECHANICAL SEAL	TUNGSTEN CARBIDE/CARBON	
4213	CARRIER FOR MECHANICAL SEAL	CAST IRON GS400	
4311.1	SEAL RING	NBR	
4311.2	SEAL RING	NBR	
4421	PIPE	AISI 316	
4590	GASKET	NONAM	GRAPHITE

No.	PARTS	MATERIALS
4617	O-RING	NBR
4617.6	O-RING	NBR
6475	DOWEL	STEEL 8.8
6545.2	SHAFT CIRCLIP	STEEL
6572.1	STUD BOLT + WASHER + NUT	STEEL
6572.2	STUD BOLT + WASHER + NUT	STEEL
6572.3	STUD BOLT + WASHER + NUT	STEEL
6574	SCREW	STEEL 8.8
6579.4	SCREW	STEEL 8.8
6579.5	SCREW	STEEL 8.8
6581.6	SCREW + WASHER	STEEL 8.8
6581.7	SCREW + WASHER	STEEL 8.8
6710	IMPELLER KEY	STEEL
6710.1	IMPELLER KEY	STEEL
6742	COUPLING KEY	STEEL
M1	PRESSURE GAUGE CONNECTION	
R1	OIL FILLING	
S1	PUMP DRAIN PLUG	
S3	MECH. SEAL /PACKING DRAIN CONNECTION	
S4	OIL DRAIN PLUG	
V1	VACUUM GAUGE CONNECTION	
	GREASE LUBRICATION	
3851	GREASER	

KDN OVERSIZE

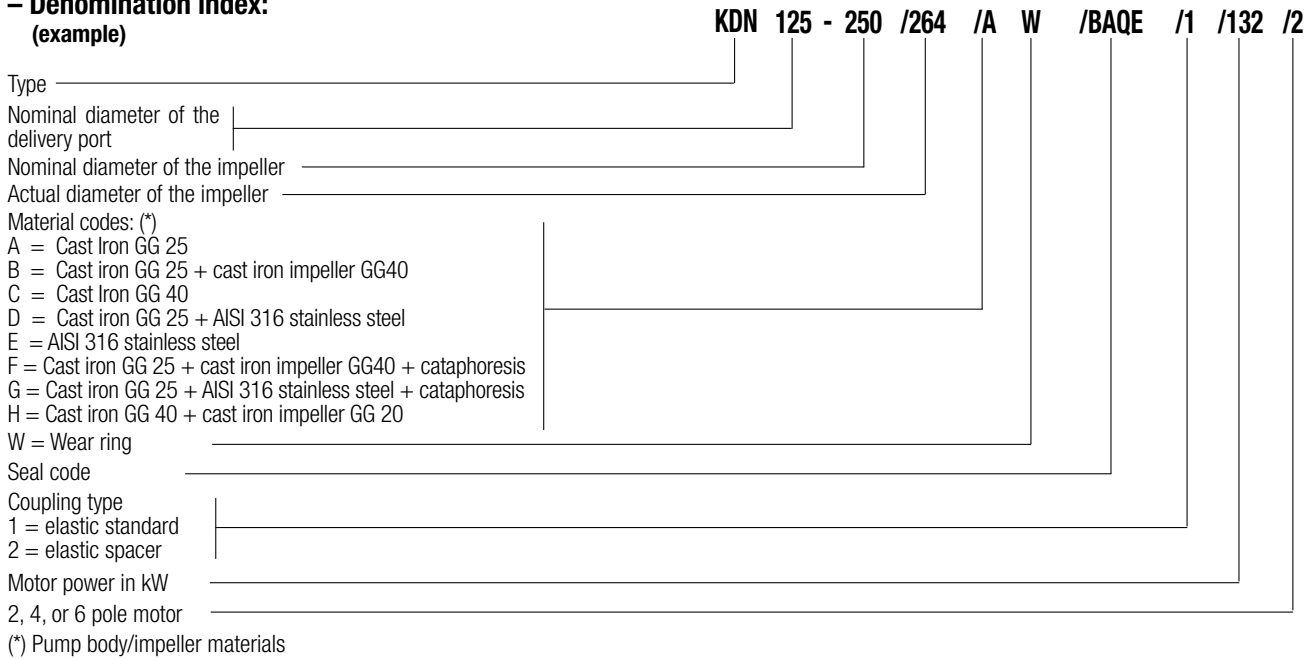
STANDARDISED PUMPS

PRODUCT DESCRIPTION

In the description of the pumps without a motor, the motor data are not mentioned. In the description of the bare shaft pump no mention is made of the coupling or motor data.

The example describes an KDN 125-250 with 264 mm. impeller, in cast iron with wear rings, with BAQE type mechanics, standard coupling, and a 132 kW 2-pole motor.

– Denomination index: (example)



PACKING CODES

Position	Code	Description of the seal
1	S	Stuffing box type
Cooling		
2	N	Stuffing box not cooled
	K	Stuffing box cooled
Sealing liquid		
	E	With internal liquid
3	F	With external liquid
	O	Without sealing liquid

DESCRIPTION OF THE MECHANICAL SEAL

Position	Code	Description of the seal
1	A	O-ring seal with fixed guide
	B	Rubber bellows seal
	C	O-ring seal with spring guide
	D	O-ring seal balanced
	G	Rubber bellows seal with reduced seal faces
	M	Rubber bellows seal
	X	Metal bellows seal
Materials		
2 & 3	A	Impregnated carbon/metal
	B	Impregnated carbon/synthetic resin
	C	Other carbon types
	S	Chromium steel
	U	Tungsten carbide
	Q	Silicon carbide
	V	Aluminium oxide (ceramic)
X	Other types of ceramic/carbide	
Materials		
4	P	Nitrile rubber (NBR)
	S	Silicon rubber
	T	Teflon (PTFE)
	E	EPDM
	V	FKM
	M	PTFE coated O-ring

- Flow rate: max 3200 m³/h

- Head: max 157 m3/h

Pumped liquid temperature range: from -10 °C to +120 °C (other temperatures available on request)

- Operating pressure: 16 bar as standard up to DN 200, 10 bar for KDN 250 - 300 - 350

Optional PN 16 for KDN 250 - 300 - 350 in the spheroidal cast iron version (H).

PRODUCT CODE DESCRIPTION

NOMINAL DIAMETER OF THE IMPELLER	Cod.
250	4
400	8
500	9
330A	A
330	B
500A	D
400M	E
400A	F
250A	G

Cod.	PUMP/IMPELLER MATERIALS
A	Spheroidal cast iron + cast iron impeller + W*
5	Cast iron/cast iron + W*
6	Cast iron/spheroidal cast iron + W*
7	Full spheroidal cast iron + W*
8	Cast iron/AISI 316 impeller + W*
9	Full AISI 316 + W*
P	6 + Cataphoresis
R	8 + Cataphoresis

* With wear rings

Cod.	JOINT
0	Without coupling *)
1	With standard coupling
2	With spacer coupling

Cod.	P2 NOMINAL
0	bare shaft
1	0.37
2	0.55
3	0.75
4	1.1
5	1.5
6	2.2
7	3
8	4
9	5.5
A	7.5
B	11
C	15
D	18.5
E	22
F	30
G	37
H	45
K	55
L	75
M	90
N	110
P	132
Q	160
R	200
S	250
T	315
U	355
V	400
W	450
Z	500

PUMP TYPE	Cod.
32 oversize	L
65 oversize	A
80 oversize	B
100 oversize	C
125 oversize	D
150 oversize	H
200 oversize	E
250 oversize	F
300 oversize	G
350 oversize	I

Cod.	SEAL (1)
1	BAQE
2	BAQE (RMG12)
5	BQQV
7	BAQV
A	SNE
B	SNO
C	SNF
D	SKO
E	GQQE
F	GQQV
G	BQQE
S	DUCE
T	CUCE

(1) For standard seals see the Technical Data section

Cod.	VOLTAGE	PO-LES
0	Without motor	
1	3 x 220-240/380-415 V 50 Hz (<0,75 kW) 3 x 220-277/380-480 V 60 Hz	2
2	3 x 380-480 V 60 Hz	2
3	3 x 220-240/380-415 V 50 Hz (<0,75 kW) 3 x 220-277/380-480 V 60 Hz	4
4	3 x 380-480 V 60 Hz	4
7	3 x 220-240/380-415 V 50 Hz (<0,75 kW) 3 x 220-277/380-480 V 60 Hz	6
8	3 x 380-480 V 60 Hz	6
A	3 x 220-240/380-415 V 50 Hz - IE2	2
B	3 x 380-415 V 50 Hz - IE2	2
C	3 x 220-240/380-415 V 50 Hz - IE2	4
D	3 x 380-415 V 50 Hz - IE2	4
E	3 x 220-240/380-415 V 50 Hz - IE2	6
F	3 x 380-415 V; 50 Hz; e45; IE2	6
U	3 x 220-240/380-415 V 50 Hz - IE3	2
V	3 x 380-415 V 50 Hz - IE3	2
W	3 x 220-240/380-415 V 50 Hz - IE3	4
X	3 x 380-415 V 50 Hz - IE3	4
Y	3 x 220-240/380-415 V 50 Hz - IE3	6
Z	3 x 380-415 V 50 Hz - IE3	6

Product code

1 F 1 K 1 1 B X 3

— Bare shaft pump — 0 0 0
 — Pump with base without motor — 0
 — Complete electric pump with base —

KDN OVERSIZE

STANDARDISED PUMPS

GENERAL DATA

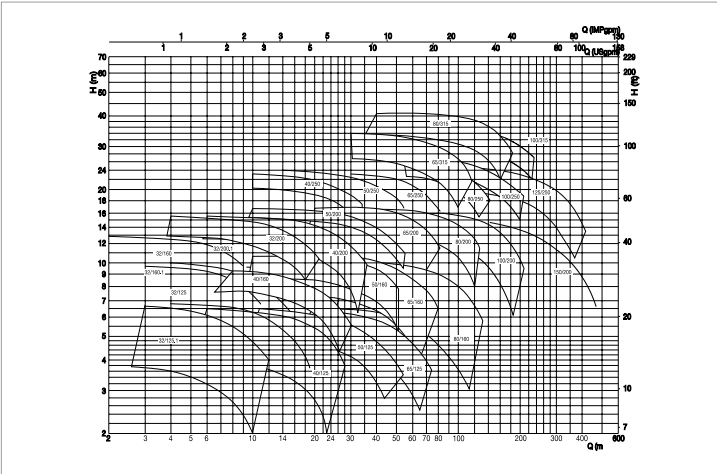
Supplied with closed asynchronous type motor, external ventilation cooling, 2 or 4 poles.

Rotor running on ball bearings, largely oversized to ensure low noise and durability.

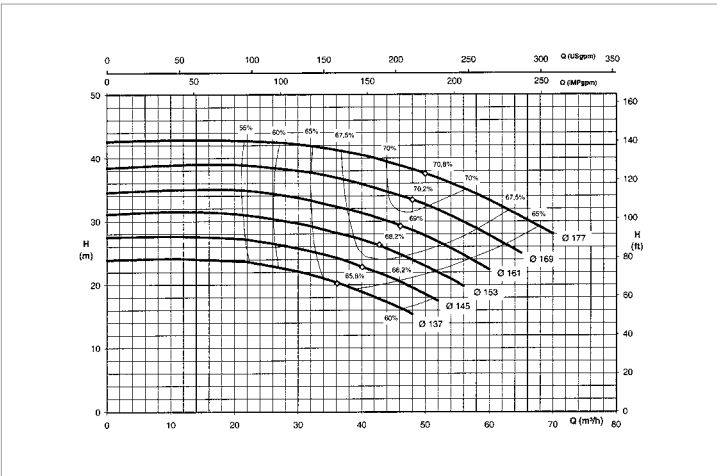
Electrical protection: in compliance with the EEC 89/336 ELECTROMAGNETIC COMPATIBILITY DIRECTIVE and subsequent amendments, the EEC 73/23 LOW VOLTAGE DIRECTIVE and subsequent amendments, as well as CEI 2-3 standards.

INSTRUCTIONS FOR THE IDENTIFICATION OF THE PUMP AND MOTOR REQUIRED.

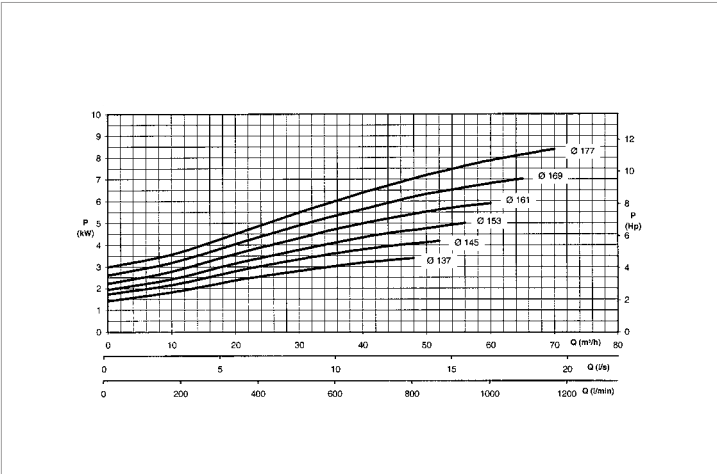
1. On the general chart supplied, find the family pump that indicatively offers the required flow rate and head characteristics.



2. Look for the most appropriate characteristic on the characteristic curves for each family.



3. On the power chart, identify the power required by the pump in order to operate at the required level.



4. Due to the possibility of variations in the pumped liquid flow rate, which can cause an oscillation of the point of operation, a higher power absorption may occur. When selecting the motor, allow for the following safety margins:

Safety margin according to ISO 5199

REQUIRED PUMP SHAFT POWER (kW)	POWER OF THE MOTOR TO USE P2 (kW)
322	355
286	315
227	250
181	200
145	160
120	132
100	110
81	90
68	75
49	55
40	45
32.5	37
26	30
19	22
15.9	18.5
12.8	15
9.1	11
6.1	7.5
4.3	5.5
3.2	4
2.3	3
1.7	2.2
1.1	1.5
0.81	1.1
0.55	0.75
0.40	0.55
0.27	0.37
0.18	0.25

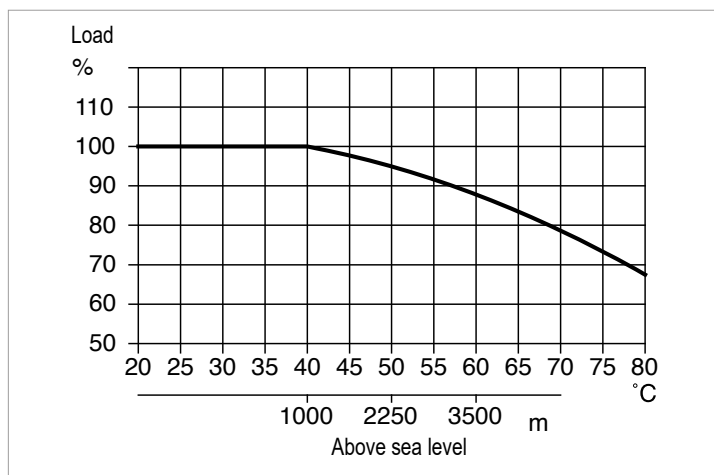
If the pump is to be used with liquids with fairly high specific weight and viscosity values, apply any required corrections to the power of the motor to be installed (check the suitability of the construction materials in contact with the liquid).

5. With the name of the pump and the power of the motor, look through the following technical data to find the name of the most suitable base (complete with motor, spacer coupling, and coupling cover).
6. The pump and base required will be delivered already assembled and aligned, although an alignment check is always required after installation (see INSTRUCTION MANUAL).

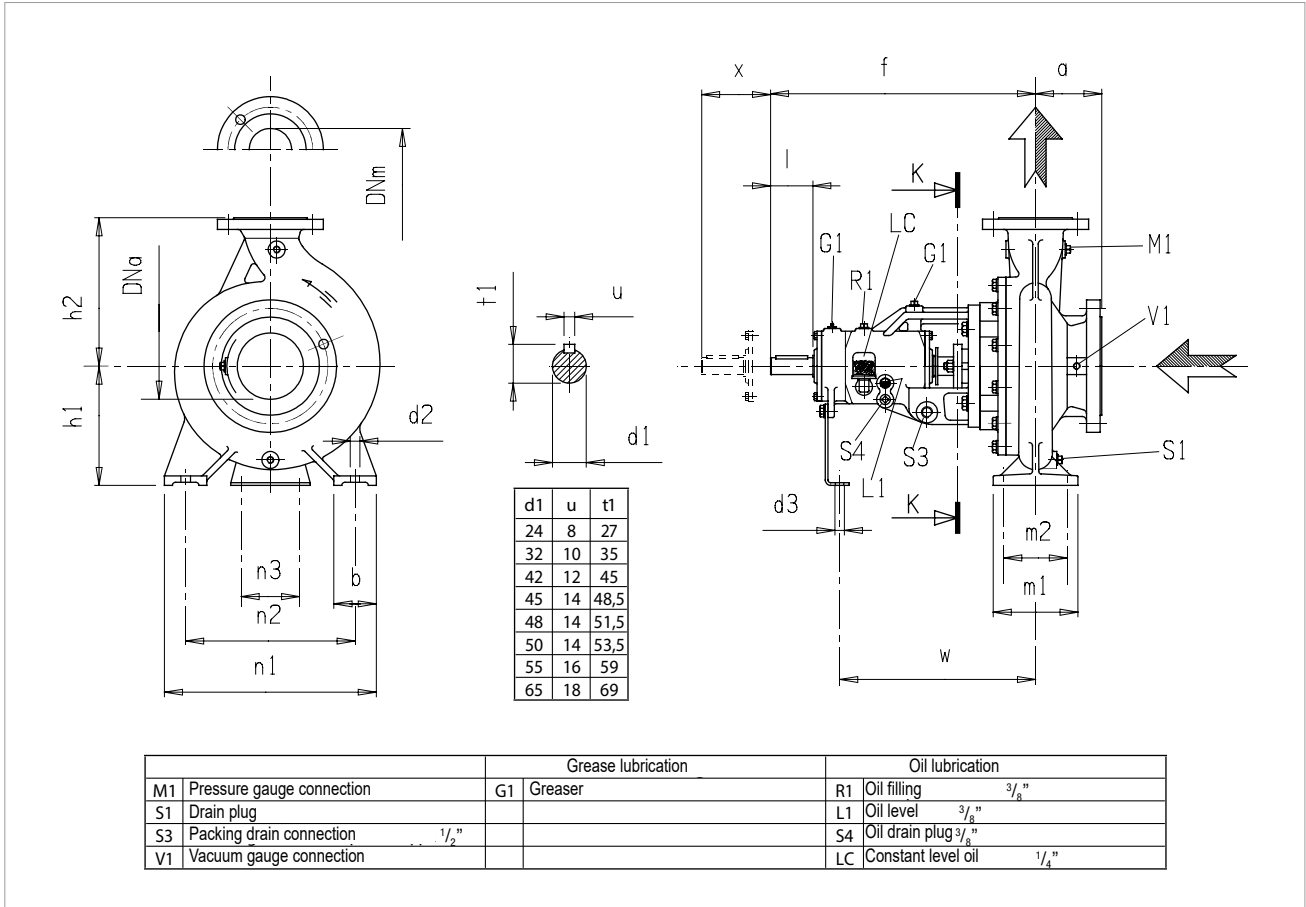
Ambient temperature

From -30 °C to +40 °C

Due to the low density, and therefore low cooling effect of the air, operation at an ambient temperature above 40 °C, or at an altitude exceeding 1000 m above sea level, requires a reduction of the rated motor load in accordance with this table.



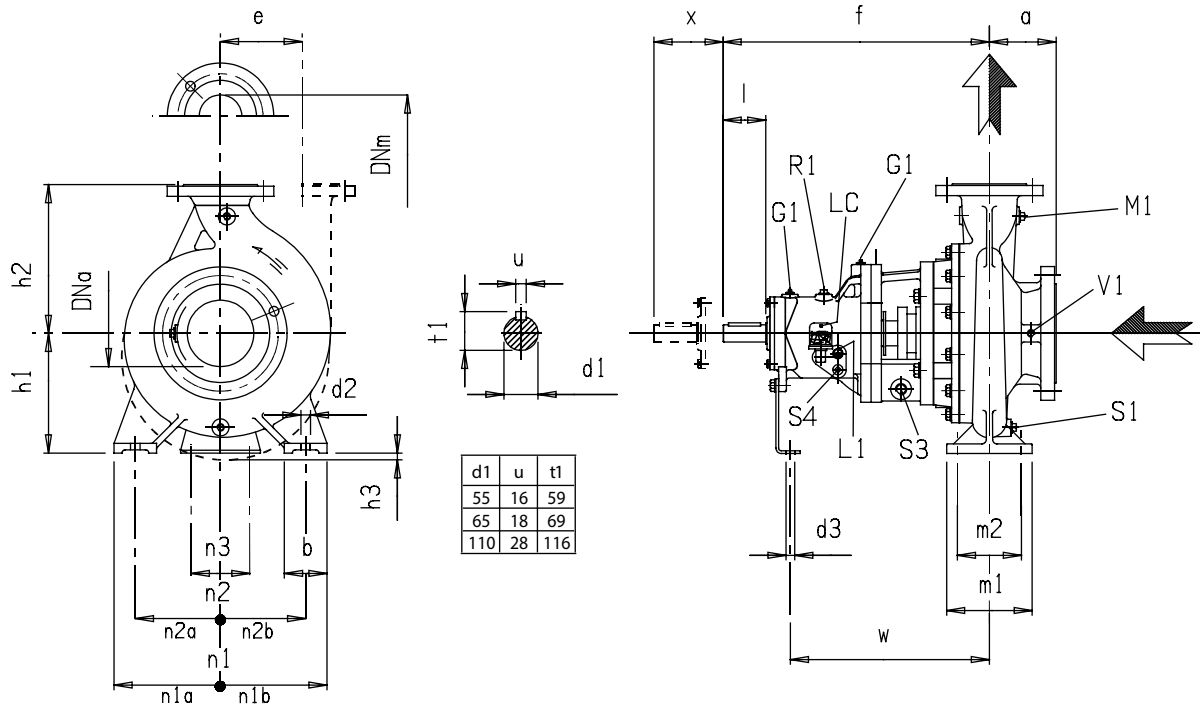
DIMENSIONS OF BARE SHAFT PUMPS



TYPE	Supp	DNA	DNM	a	f	h1	h2	b	m1	m2	n1	n2	d2	n3	d3	w	x	d1	l	M1	S1	V1	kg
KDN 32-250A	2	50	32	100	500	180	225	65	125	95	320	250	14	110	14	370	100	32	80	3/8"	1/4"	1/4"	78
KDN 32-250	2	50	32	100	500	180	225	65	125	95	320	250	14	110	14	370	100	32	80	3/8"	1/4"	1/4"	78
KDN 50-330	2	80	50	125	500	225	280	65	125	95	345	280	14	110	14	370	100	32	80	3/8"	1/4"	1/4"	116
KDN 65-250	2	100	65	125	500	200	250	80	160	120	360	280	18	110	14	370	140	32	80	3/8"	1/4"	1/4"	88
KDN 65-330	3	100	65	125	530	225	280	80	160	120	400	315	18	110	14	370	140	42	110	3/8"	1/4"	1/4"	152
KDN 65-400	3	100	65	125	530	280	355	80	160	120	435	355	18	110	14	370	140	42	110	3/8"	1/4"	1/4"	180
KDN 80-250	2	125	80	125	500	225	280	80	160	120	400	315	18	110	14	370	140	32	80	3/8"	3/8"	3/8"	100
KDN 80-330	3	125	80	125	530	250	315	80	160	120	400	315	18	110	14	370	140	42	110	3/8"	3/8"	3/8"	155
KDN 80-400	3	125	80	125	530	280	355	80	160	120	435	355	18	110	14	370	140	42	110	3/8"	3/8"	3/8"	185
KDN 100-250	3	125	100	140	530	225	280	80	160	120	400	315	18	110	14	370	140	42	110	3/8"	3/8"	3/8"	130
KDN 100-330	3	125	100	140	530	250	315	80	160	120	400	315	18	110	14	370	140	42	110	3/8"	3/8"	3/8"	170
KDN 100-400	3	125	100	140	530	280	355	100	200	150	500	400	23	110	14	370	140	42	110	3/8"	3/8"	3/8"	200
KDN 125-250	3	150	125	140	530	250	355	80	160	120	400	315	18	110	14	370	140	42	110	1/2"	3/8"	3/8"	140
KDN 125-330	3	150	125	140	530	280	355	100	200	150	500	400	23	110	14	370	140	42	110	1/2"	3/8"	3/8"	190
KDN 125-400	3	150	125	140	530	315	400	100	200	150	500	400	23	110	14	370	140	42	110	1/2"	3/8"	3/8"	220
KDN 150-250	3	200	150	160	530	280	375	100	200	150	500	400	23	110	14	370	180	42	110	1/2"	1/2"	3/8"	180
KDN 150-330	4	200	150	160	670	315	400	100	200	150	550	450	22	140	18	500	180	55*	110	1/2"	1/2"	3/8"	255
KDN 150-400	4	200	150	160	670	315	450	100	200	150	550	450	22	140	18	500	180	55*	110	1/2"	1/2"	3/8"	298
KDN 150-500A	4	200	150	180	670	355	500	100	200	150	550	450	22	140	18	500	180	55	110	1/2"	1/2"	3/8"	410
KDN 150-500	4	200	150	180	670	355	500	100	200	150	550	450	22	140	18	500	180	55	110	1/2"	1/2"	3/8"	410

¹⁾ Size d1 Ø 48 on request for pumps according to DIN 24256 - ISO 2858

DIMENSIONS OF BARE SHAFT PUMPS



		Grease lubrication		Oil lubrication	
M1	Pressure gauge connection	G1	Greaser	R1	Oil filling $\frac{3}{8}$ "
S1	Drain plug			L1	Oil level $\frac{3}{8}$ "
S3	Packing drain connection $\frac{1}{2}$ "			S4	Oil drain plug $\frac{3}{8}$ "
V1	Vacuum gauge connection			LC	Constant level oil $\frac{1}{4}$ "

TYPE	Supp	DNA	DNM	a	f	h1	h2	b	m1	m2	n1	n1a	n1b	n2	n2a	n2b	d2	n3	d3	h3	e	w	x	d1	l	M1	S1	V1	kg
KDN 200-330	4	250	200	200	670	355	450	100	200	150	550	275	275	450	225	225	22	140	18			500	180	55	110	1/2"	1/2"	3/8"	360
KDN 200-400	4	250	200	185	670	355	500	100	200	150	550	275	275	450	225	225	22	140	18			500	180	55	110	1/2"	1/2"	3/8"	390
KDN 200-500	4	250	200	185	670	400	580	140	250	190	800	400	400	660	330	330	27	140	18	15		500	180	55	110	1/2"	1/2"	3/8"	400
KDN 250-330A	4	300	250	250	670	400	525	140	250	190	700	350	350	560	280	280	27	140	18			500	240	55	110	1/2"	1/2"	3/8"	410
KDN 250-330	4	300	250	250	670	400	525	140	250	190	700	350	350	560	280	280	27	140	18			500	240	55	110	1/2"	1/2"	3/8"	410
KDN 250-400	5	300	250	225	780	400	600	125	250	190	690	345	345	560	280	280	27	140	18			545	180	65	140	1/2"	1/2"	3/8"	650
KDN 250-500A	5	300	250	300	800	500	500	130	260	190	830	380	450	710	320	390	27	140	18		425	565	250	65	140	1/2"	1/2"	3/8"	700
KDN 250-500	5	300	250	300	800	500	500	130	260	190	830	380	450	710	320	390	27	140	18		425	565	250	65	140	1/2"	1/2"	3/8"	700
KDN 300-330	4	350	300	300	720	500	670	150	360	280	900	450	450	750	375	375	27	140	18			550	240	55	110	1/2"	1/2"	3/8"	780
KDN 300-400M	5	350	300	300	845	500	670	150	360	280	900	450	450	750	375	375	27	140	18			610	240	65	140	1/2"	1/2"	3/8"	900
KDN 300-400A	5	350	300	325	790	400	640	125	250	190	690	345	345	560	280	280	27	140	18			555	240	65	140	1/2"	1/2"	3/8"	800
KDN 300-400	5	350	300	325	790	400	640	125	250	190	690	345	345	560	280	280	27	140	18			555	240	65	140	1/2"	1/2"	3/8"	800
KDN 350-500A	6	400	350	380	1150	600	600	150	400	300	1000	450	550	850	375	475	27	140	18		450	800	380	110	210	1/2"	1/2"	3/8"	1080
KDN 350-500	6	400	350	380	1150	600	600	150	400	300	1000	450	550	850	375	475	27	140	18		450	800	380	110	210	1/2"	1/2"	3/8"	1080

KDN OVERSIZE - 2 POLE RANGE

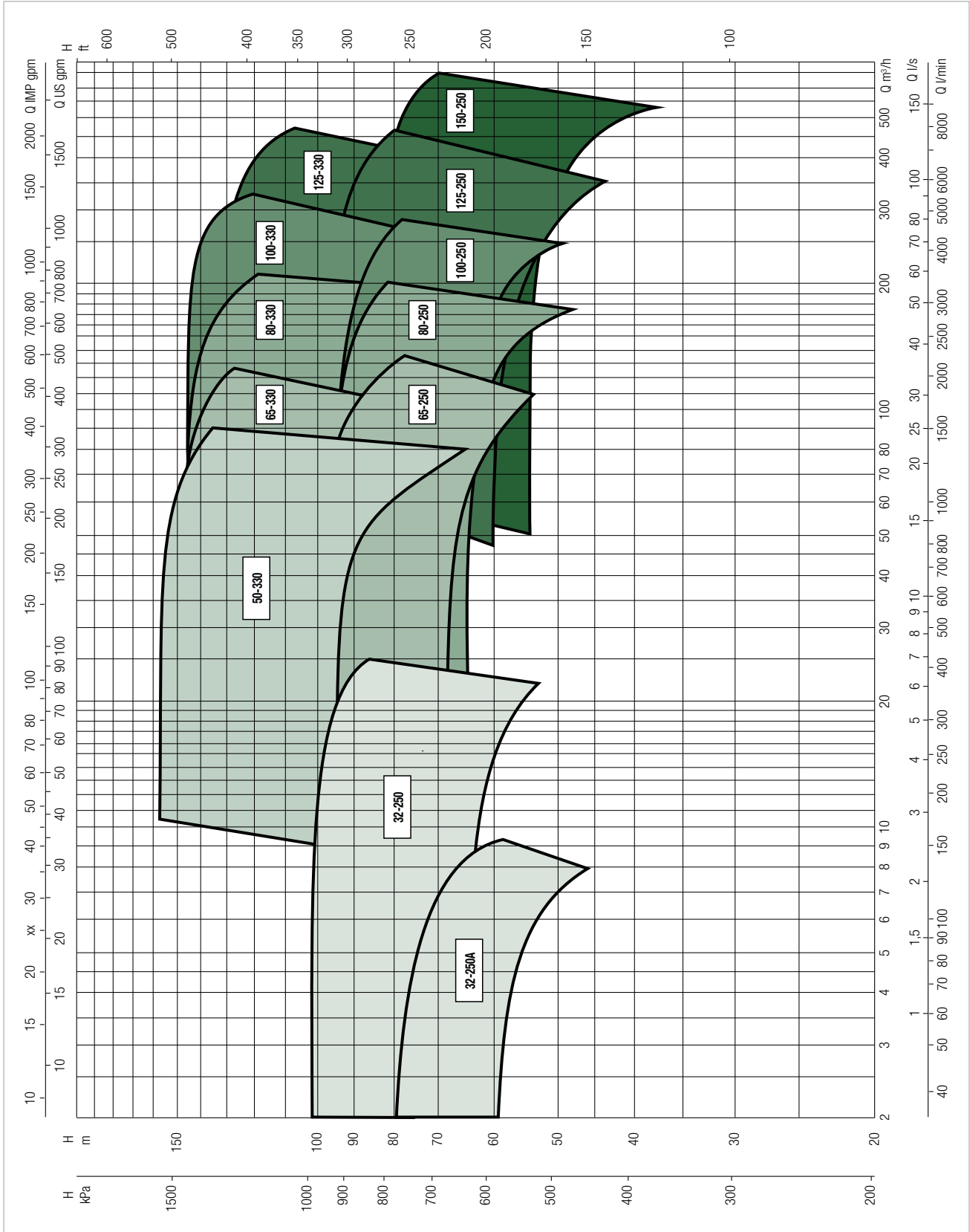
STANDARDISED PUMPS

PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

GRAPHIC SELECTION TABLE

= 2900 1/min



KDN OVERSIZE - 2 POLES

STANDARDISED PUMPS

SELECTION TABLE - KDN 32

MODEL	Q=m ³ /h	0	2	4	6	8	10	12	16	20	24
	Q=l/min	0	33	67	100	133	167	200	267	333	400
KDN 32-250 A / 244	H (m)	61	59	57	53	46					
KDN 32-250 A / 254		68	66	63	59	53					
KDN 32-250 A / 259		75	73	69	65	60	52				
KDN 32-250 A / 264		81	79	76	72	68	60				
KDN 32-250 / 224		63		63	63	63	62	62	59	55	
KDN 32-250 / 234		71		71	71	71	70	70	68	64	
KDN 32-250 / 244		81		81	81	80	80	80	79	76	68
KDN 32-250 / 254		91		91	91	91	90	90	89	85	78
KDN 32-250 / 264		100		100	100	100	100	100	98	95	87

SELECTION TABLE - KDN 50

MODEL	Q=m ³ /h	0	2	4	6	8	10	12	16	20	24	40	60	80	100
	Q=l/min	0	33	67	100	133	167	200	267	333	400	667	1000	1333	1667
KDN 50-330 / 270	H (m)	95								95	94	93	85	64	
KDN 50-330 / 290		115								115	114	113	106	88	
KDN 50-330 / 310		132								132	132	132	128	114	100
KDN 50-330 / 328		157								157	156	156	154	145	137

SELECTION TABLE - KDN 65

MODEL	Q=m ³ /h	0	2	4	6	8	10	12	16	20	24	40	60	80	100	120	130
	Q=l/min	0	33	67	100	133	167	200	267	333	400	667	1000	1333	1667	2000	2167
KDN 65-250 / 224	H (m)	67								66	66	66	64	61	56		
KDN 65-250 / 234		74								73	73	73	71	67	62	55	
KDN 65-250 / 244		81								81	80	80	79	76	71	65	
KDN 65-250 / 254		89								89	89	89	88	85	81	75	71
KDN 65-250 / 264		100								100	99	99	98	95	91	85	80
KDN 65-330 / 270		92								92	91	91	89	83	74		
KDN 65-330 / 290		110								110	109	108	105	100	92		
KDN 65-330 / 310		128								128	128	128	125	122	116	105	
KDN 65-330 / 328		150								150	149	149	148	144	139	128	

SELECTION TABLE - KDN 80

MODEL	Q=m ³ /h	0	2	4	6	8	10	12	16	20	24	40	60	80	100	120	130	150	180	200	
	Q=l/min	0	33	67	100	133	167	200	267	333	400	667	1000	1333	1667	2000	2167	2500	3000	3333	
KDN 80-250 / 224	H (m)	65										64	64	64	62	60	58	54			
KDN 80-250 / 234		71											71	71	71	69	67	65	61	55	
KDN 80-250 / 244		79											79	78	78	77	74	72	69	62	
KDN 80-250 / 254		87											87	86	86	85	83	80	78	72	
KDN 80-250 / 264		98											97	97	96	95	94	92	90	86	81
KDN 80-330 / 270		93											92	92	90	89	86	84	80	68	
KDN 80-330 / 290		108											107	107	106	105	102	100	96	85	
KDN 80-330 / 310		127											126	126	125	125	123	122	120	111	
KDN 80-330 / 328		148											147	147	146	146	143	142	139	130	123

KDN OVERSIZE - 2 POLES

STANDARDISED PUMPS

SELECTION TABLE - KDN 100

MODEL	Q=m ³ /h	0	2	4	6	8	10	12	16	20	24	40	60	80	100	120	130	150	180	200	260	280	300	
	Q=l/min	0	33	67	100	133	167	200	267	333	400	667	1000	1333	1667	2000	2167	2500	3000	3333	4333	4667	5000	
KDN 100-250 / 224	H (m)	63										63	63	63	62	62	61	61	59	57				
KDN 100-250 / 234		71											71	71	71	70	70	70	69	68	65	55		
KDN 100-250 / 244		77											77	77	77	77	77	76	76	75	72	63		
KDN 100-250 / 254		86											86	86	86	86	85	85	84	83	81	74	70	
KDN 100-250 / 264		94											94	94	93	93	93	92	92	91	89	84	80	
KDN 100-330 / 270		93														92	92	91	90	88	85	70		
KDN 100-330 / 290		110														109	109	108	107	105	102	90	85	
KDN 100-330 / 310		129														128	128	127	127	125	123	112	107	102
KDN 100-330 / 328		148														148	148	147	147	146	145	137	135	120

SELECTION TABLE - KDN 125

MODEL	Q=m ³ /h	0	2	4	6	8	10	12	16	20	24	40	60	80	100	120	130	150	180	200	260	280	300	400	450
	Q=l/min	0	33	67	100	133	167	200	267	333	400	667	1000	1333	1667	2000	2167	2500	3000	3333	4333	4667	5000	6667	7500
KDN 125-250 / 220	H (m)	60													59	59	59	58	57	56	55	53	49		
KDN 125-250 / 235		72													71	71	71	70	70	69	68	66	62		
KDN 125-250 / 250		83													82	82	82	82	82	81	80	79	77	68	
KDN 125-250 / 264		97													97	97	97	97	97	96	95	94	93	86	
KDN 125-330 / 270		96													96	96	96	96	95	94	93	90	87	68	
KDN 125-330 / 290		112													112	112	111	111	110	110	109	107	104	92	
KDN 125-330 / 300		122													122	122	121	121	121	120	119	118	117	106	98
KDN 125-330 / 310		132													132	132	132	132	131	131	130	130	128	120	110

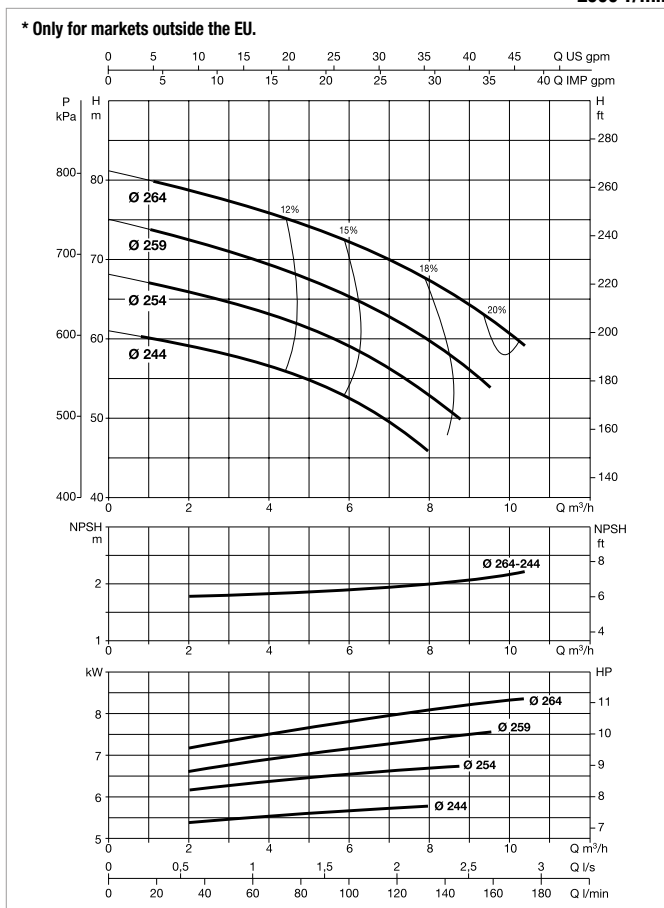
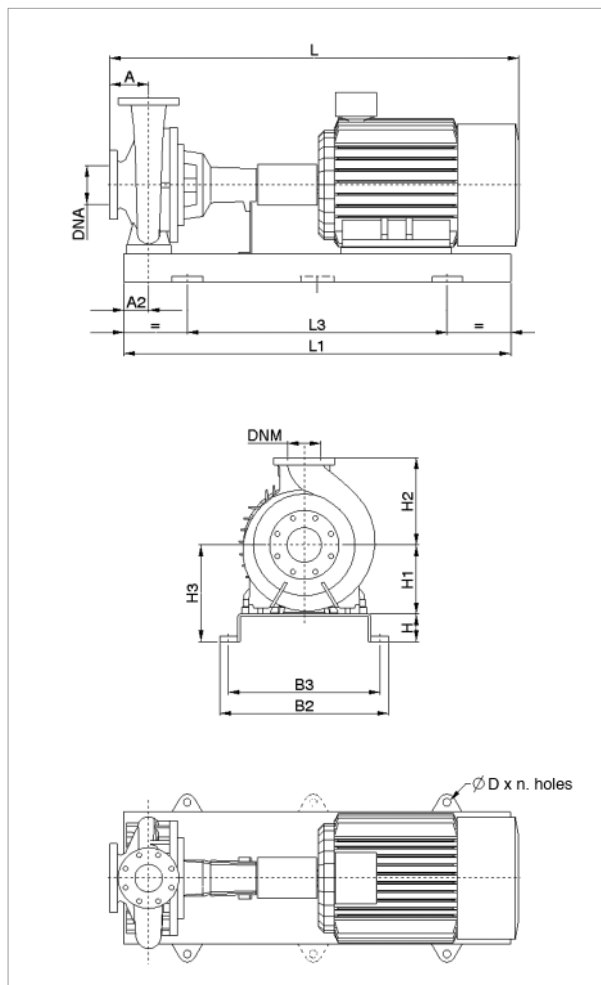
SELECTION TABLE - KDN 150

MODEL	Q=m ³ /h	0	2	4	6	8	10	12	16	20	24	40	60	80	100	120	130	150	180	200	260	280	300	400	450	500	600
	Q=l/min	0	33	67	100	133	167	200	267	333	400	667	1000	1333	1667	2000	2167	2500	3000	3333	4333	4667	5000	6667	7500	8334	10000
KDN 150-250 / 220	H (m)	54													54	53	53	53	53	53	53	52	51	47	45	43	
KDN 150-250 / 235		62													62	62	61	61	61	61	61	60	59	56	54	51	
KDN 150-250 / 250		72													72	72	72	72	72	72	72	71	71	68	67	64	56
KDN 150-250 / 264		87													87	87	86	86	86	86	86	85	85	83	81	79	74

KDN 32-250A - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 32-250A	1,5	90S	3 x 230 - 400 V ~	5,80 - 3,35	IE3
	2,2	90L	3 x 230 - 400 V ~	8,23 - 4,75	IE3
	3	100L	3 x 400 V ~ Δ	5,85	IE3
	5,5	132S	3 x 400 V ~ Δ	10,4	IE3
	7,5	132S	3 x 400 V ~ Δ	13,4	IE3
	11	160M	3 x 400 V ~ Δ	19,4	IE3

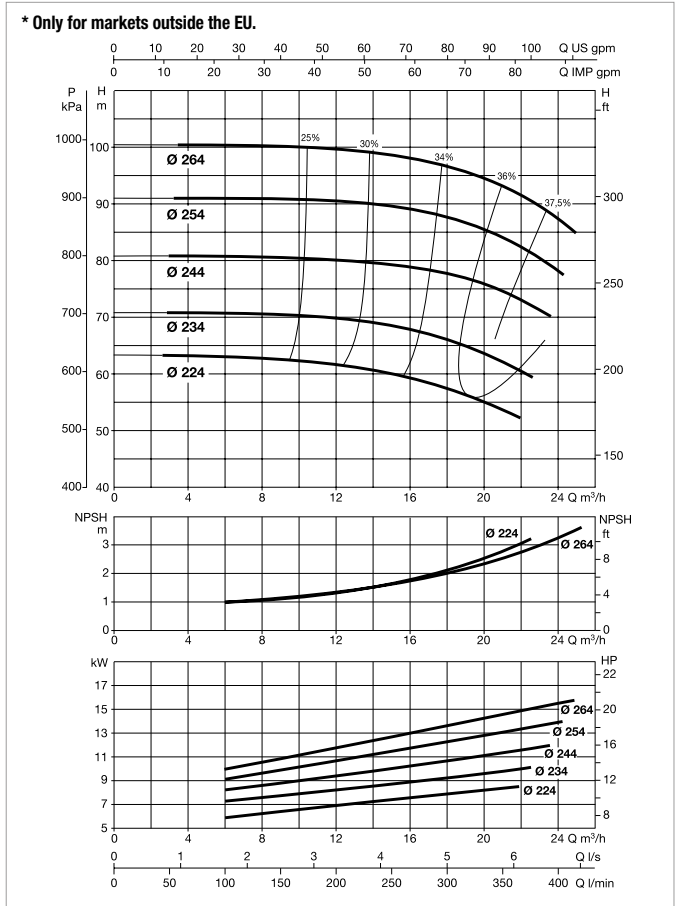
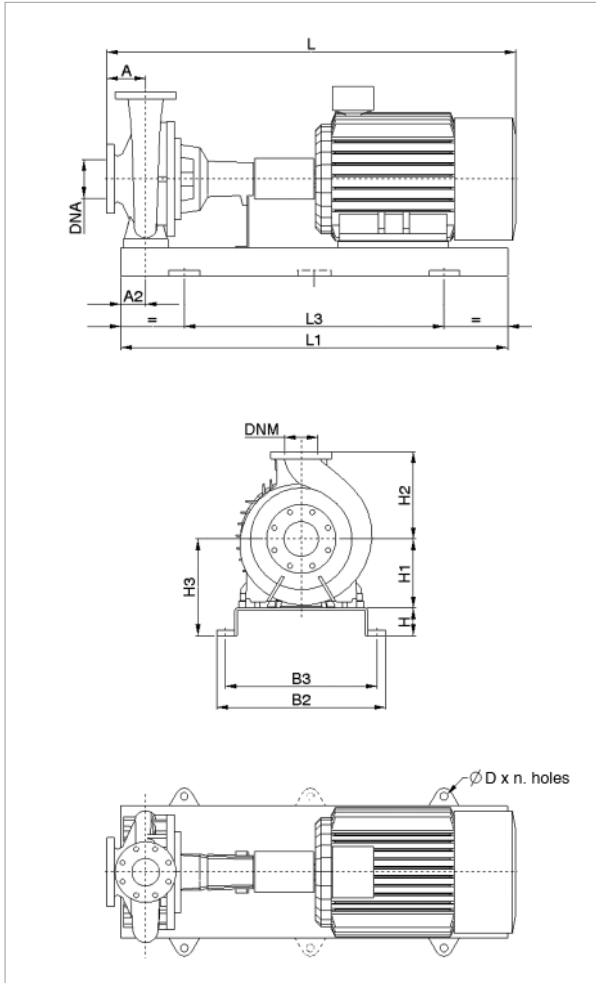
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 32-250A	1,5	100	75	80	180	225	260	1000	660	450	400	24x4	50	32	924	140	1025	142
	2,2	100	75	80	180	225	260	1000	660	450	400	24x4	50	32	949	144	1050	146
	3	100	75	80	180	225	260	1000	660	450	400	24x4	50	32	989	154	1090	156
	5,5	100	75	80	180	225	260	1120	740	490	440	24x4	50	32	1074	194	1175	196
	7,5	100	75	80	180	225	260	1120	740	490	440	24x4	50	32	1124	174	1225	193
	11	100	75	80	180	225	260	1250	840	540	490	24x4	50	32	1269	236	1370	251

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 32-250 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 32-250	1,5	90S	3 x 230 - 400 V ~	5,80 - 3,35	IE3
	2,2	90L	3 x 230 - 400 V ~	8,23 - 4,75	IE3
	3	100L	3 x 400 V ~ Δ	5,85	IE3
	5,5	132S	3 x 400 V ~ Δ	10,4	IE3
	7,5	132S	3 x 400 V ~ Δ	13,4	IE3
	11	160M	3 x 400 V ~ Δ	19,4	IE3
	15	160M	3 x 400 V ~ Δ	26,5	IE3
18,5	160L	3 x 400 V ~ Δ	32	IE3	

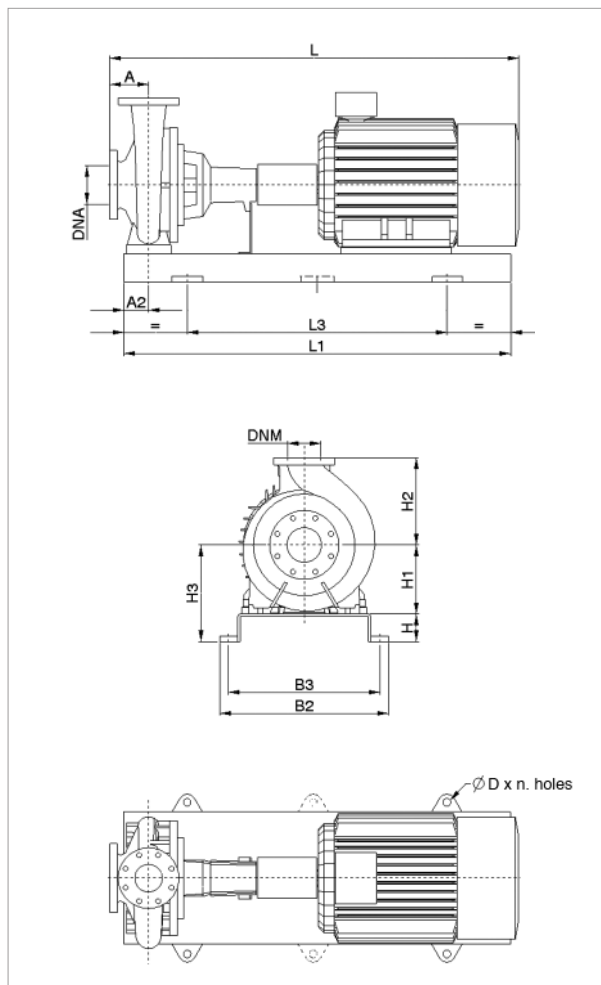
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 32-250	1,5	100	75	80	180	225	260	1000	660	450	400	24x4	50	32	924	140	1025	142
	2,2	100	75	80	180	225	260	1000	660	450	400	24x4	50	32	949	144	1050	146
	3	100	75	80	180	225	260	1000	660	450	400	24x4	50	32	989	154	1090	156
	5,5	100	75	80	180	225	260	1120	740	490	440	24x4	50	32	1074	191	1175	191
	7,5	100	75	80	180	225	260	1120	740	490	440	24x4	50	32	1124	174	1225	193
	11	100	75	80	180	225	260	1250	840	540	490	24x4	50	32	1269	236	1370	251
	15	100	75	80	180	225	260	1250	840	540	490	24x4	50	32	1269	246	1370	261
18,5	100	75	80	180	225	260	1250	840	540	490	24x4	50	32	1324	263	1425	278	

Dimension and electrical data based on sizing definition following the instructions on page 183.

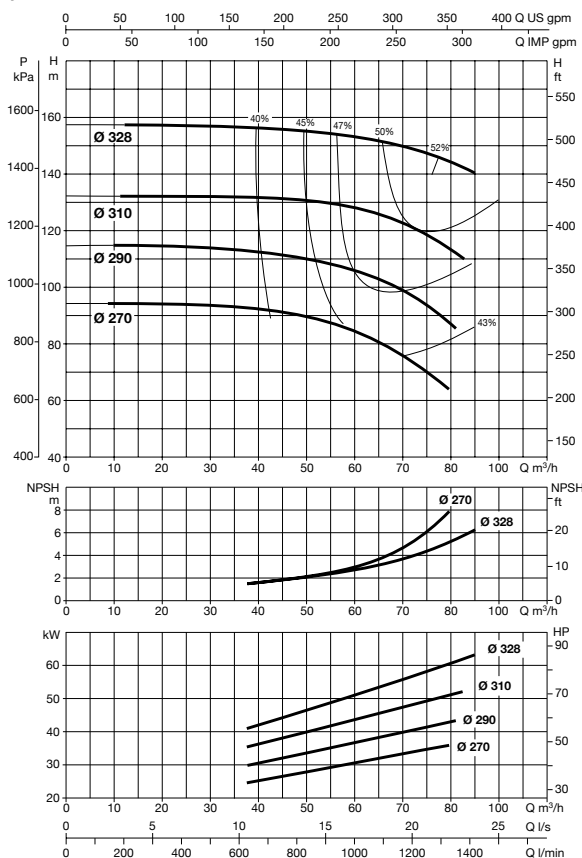
KDN 50-330 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 2900 1/min



* Only for markets outside the EU.



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT. 50 Hz	In A	
KDN 50-330	22	180M	3 x 400 V ~ Δ	38	IE3
	30	200L	3 x 400 V ~ Δ	52	IE3
	37	200L	3 x 400 V ~ Δ	63	IE3
	45	225M	3 x 400 V ~ Δ	76	IE3
	55	250M	3 x 400 V ~ Δ	95	IE3
	75	280S	3 x 400 V ~ Δ	124	IE3
	90	280M	3 x 400 V ~ Δ	148	IE3

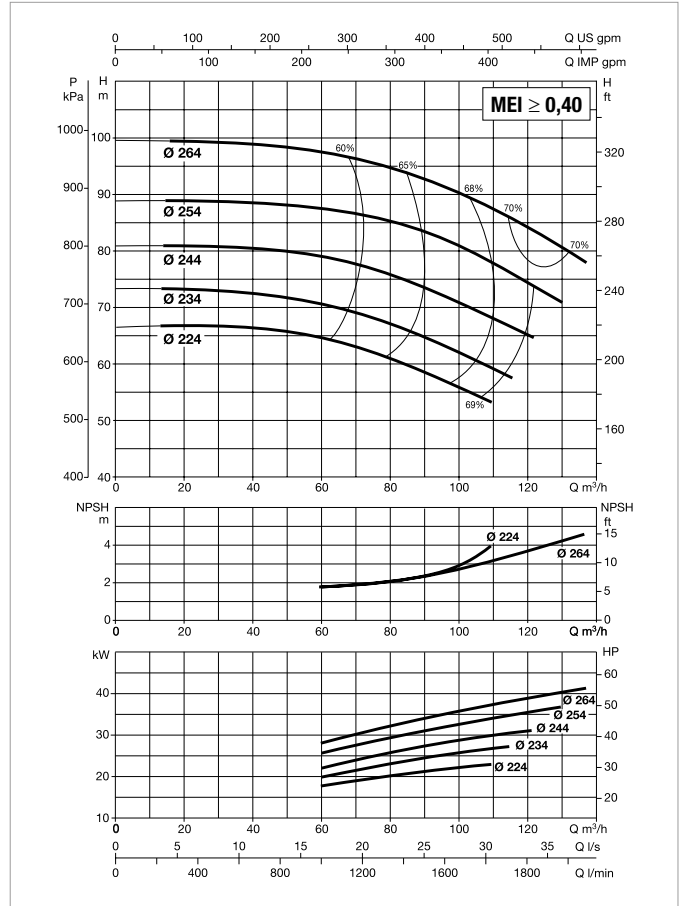
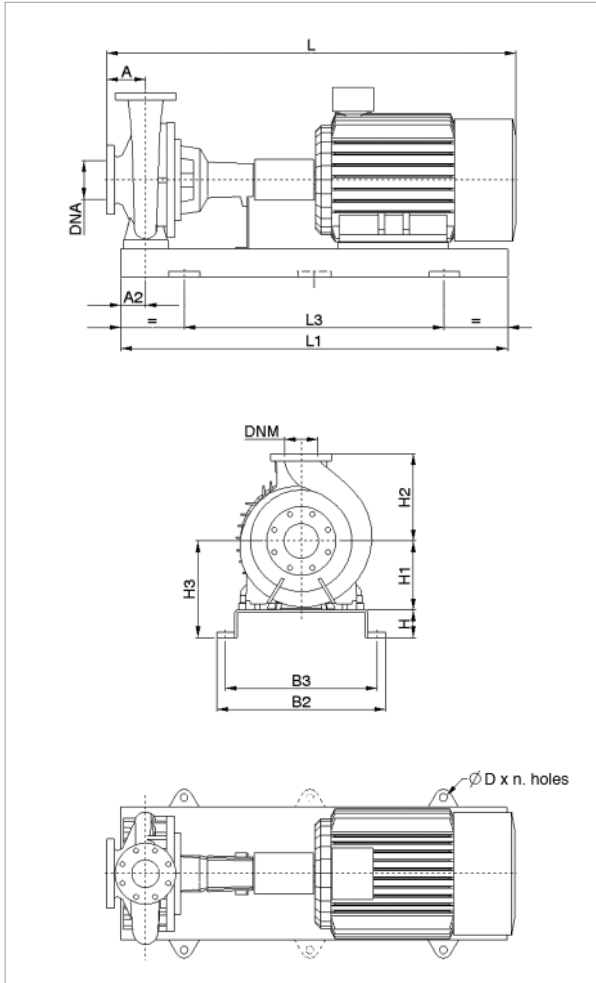
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 50-330	22	125	75	80	225	280	305	1250	840	540	190	24x4	80	50	1369	322	1470	337
	30	125	75	100	225	280	325	1400	940	610	550	28x4	80	50	1449	441	1550	456
	37	125	75	100	225	280	325	1400	940	610	550	28x4	80	50	1449	471	1550	486
	45	125	75	100	225	280	325	1400	940	610	550	28x4	80	50	1545	541	1646	556
	55	125	75	100	250	280	350	1600	1060	660	600	28x4	80	50	1475	663	1576	678
	75	125	75	100	280	280	380	1800	1200	730	670	28x4	80	50	1670	839	1771	854
	90	125	75	100	280	280	380	1800	1200	730	670	28x4	80	50	1720	874	1821	889

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 65-250 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 65-250	22	180M	3 x 400 V ~ Δ	38	IE3
	30	200L	3 x 400 V ~ Δ	52	IE3
	37	200L	3 x 400 V ~ Δ	63	IE3
	45	225M	3 x 400 V ~ Δ	76	IE3
	55	250M	3 x 400 V ~ Δ	95	IE3

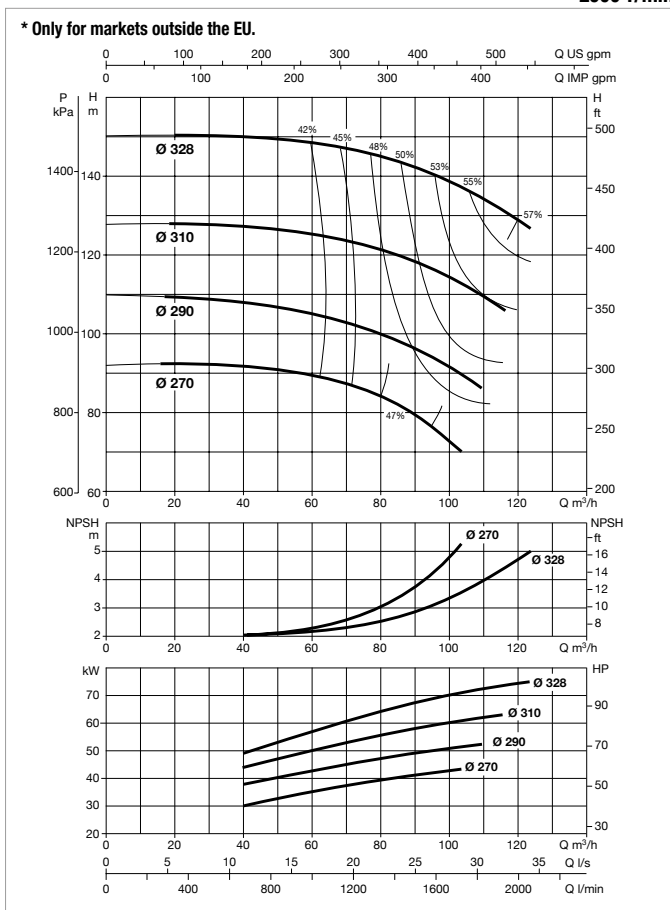
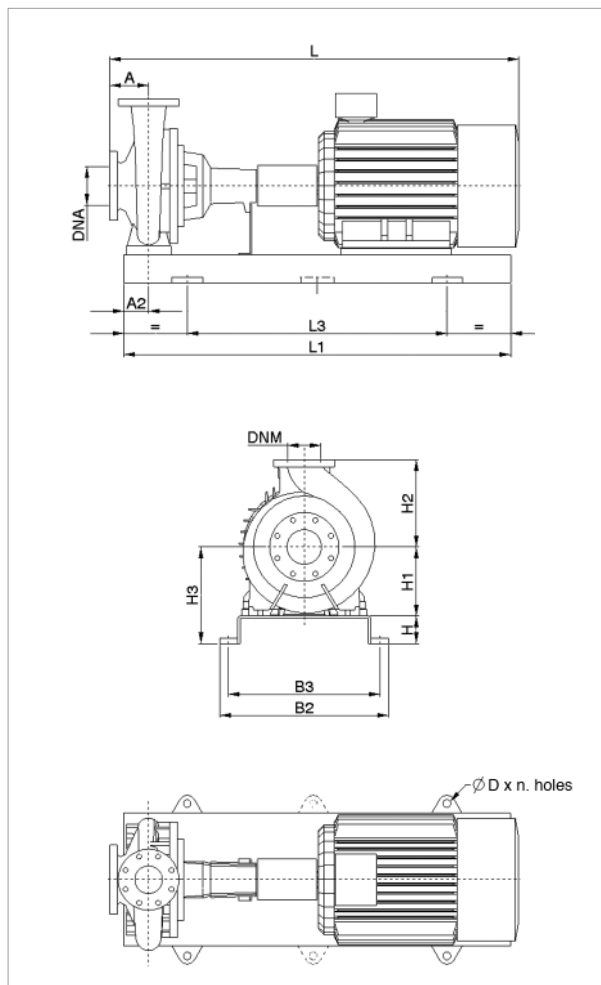
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 65-250	22	125	90	80	200	250	280	1250	840	540	490	24x4	100	65	1369	294	1510	309
	30	125	90	100	200	250	300	1400	940	610	550	28x4	100	65	1449	413	1590	428
	37	125	90	100	200	250	300	1400	940	610	550	28x4	100	65	1449	443	1590	458
	45	125	90	100	225	250	325	1400	940	610	550	28x4	100	65	1545	513	1686	528
	55	125	90	100	250	250	350	1600	1060	660	600	28x4	100	65	1475	635	1616	650

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 65-330 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 65-330	22	180M	3 x 400 V ~ Δ	38	IE3
	30	200L	3 x 400 V ~ Δ	52	IE3
	37	200L	3 x 400 V ~ Δ	63	IE3
	45	225M	3 x 400 V ~ Δ	76	IE3
	55	250M	3 x 400 V ~ Δ	95	IE3
	75	280S	3 x 400 V ~ Δ	124	IE3
	90	280M	3 x 400 V ~ Δ	148	IE3
	110	315S	3 x 400 V ~ Δ	184	IE3

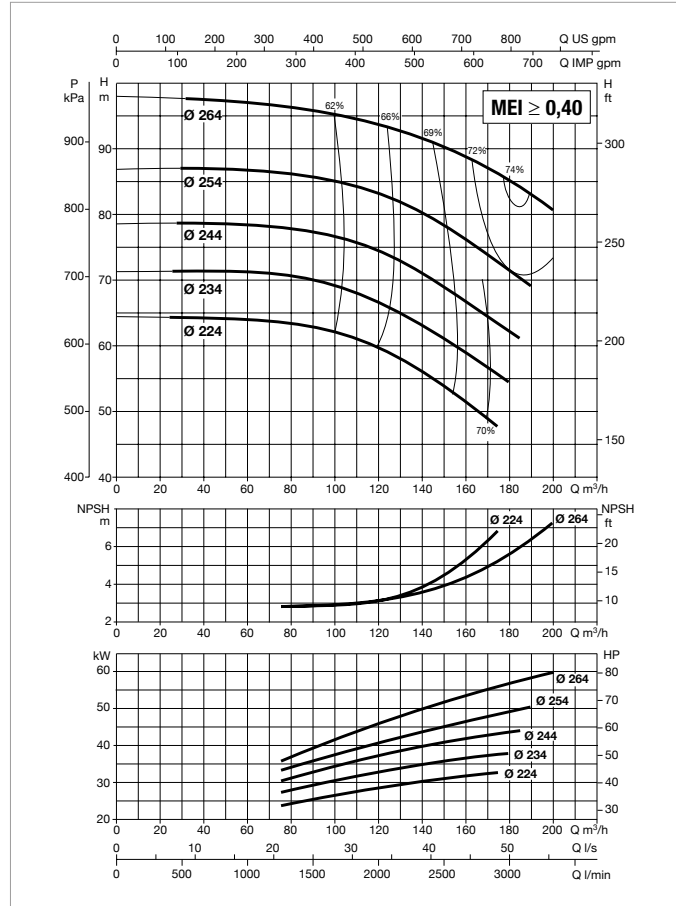
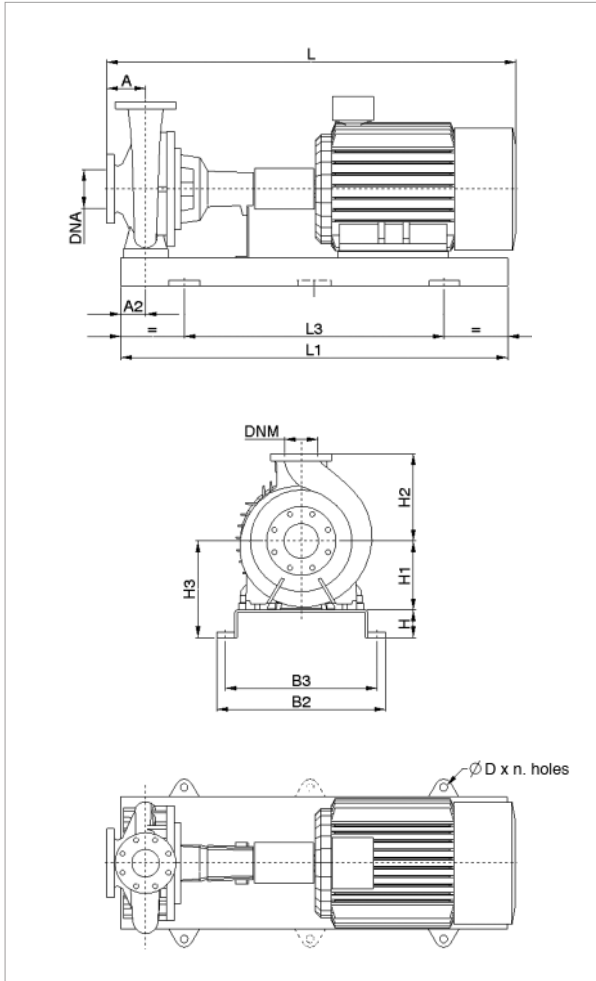
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)											FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 65-330	22	125	90	100	225	280	325	1400	940	610	550	28x4	100	65	1399	377	1540	392
	30	125	90	100	225	280	325	1400	940	610	550	28x4	100	65	1479	477	1620	492
	37	125	90	100	225	280	325	1400	940	610	550	28x4	100	65	1479	507	1620	522
	45	125	90	100	225	280	325	1600	1060	660	600	28x4	100	65	1575	594	1716	609
	55	125	90	100	250	280	350	1600	1060	660	600	28x4	100	65	1505	699	1646	714
	75	125	90	100	280	280	380	1800	1200	730	670	28x4	100	65	1700	892	1841	907
	90	125	90	100	280	280	380	1800	1200	730	670	28x4	100	65	1750	996	1891	1011
110	125	90	120	315	280	435	2000	1340	910	830	28x4	100	65	1987	1419	2128	1434	

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 80-250 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 80-250	30	200L	3 x 400 V ~ Δ	52	IE3
	37	200L	3 x 400 V ~ Δ	63	IE3
	45	225M	3 x 400 V ~ Δ	76	IE3
	55	250M	3 x 400 V ~ Δ	95	IE3
	75	280S	3 x 400 V ~ Δ	124	IE3
	90	280M	3 x 400 V ~ Δ	148	IE3

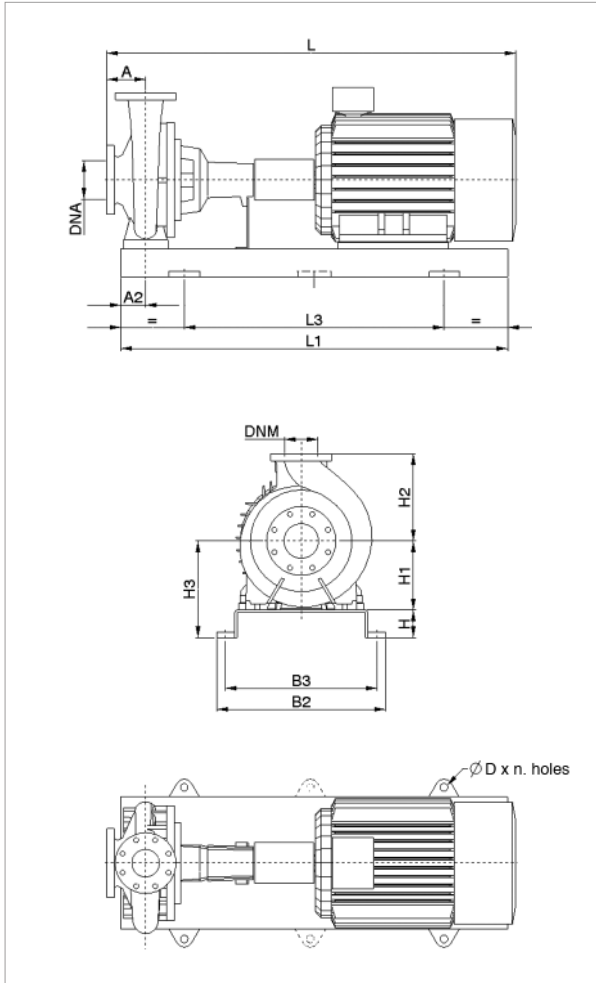
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 80-250	30	125	90	100	225	280	325	1400	940	610	550	28x4	125	80	1449	425	1590	440
	37	125	90	100	225	280	325	1400	940	610	550	28x4	125	80	1470	455	1611	470
	45	125	90	100	225	280	325	1400	940	610	550	28x4	125	80	1545	525	1686	540
	55	125	90	100	250	280	350	1600	1060	660	600	28x4	125	80	1475	647	1616	662
	75	125	90	100	280	280	380	1800	1200	730	670	28x4	125	80	1670	840	1811	855
	90	125	90	100	280	280	380	1800	1200	730	670	28x4	125	80	1720	944	1861	959

Dimension and electrical data based on sizing definition following the instructions on page 183.

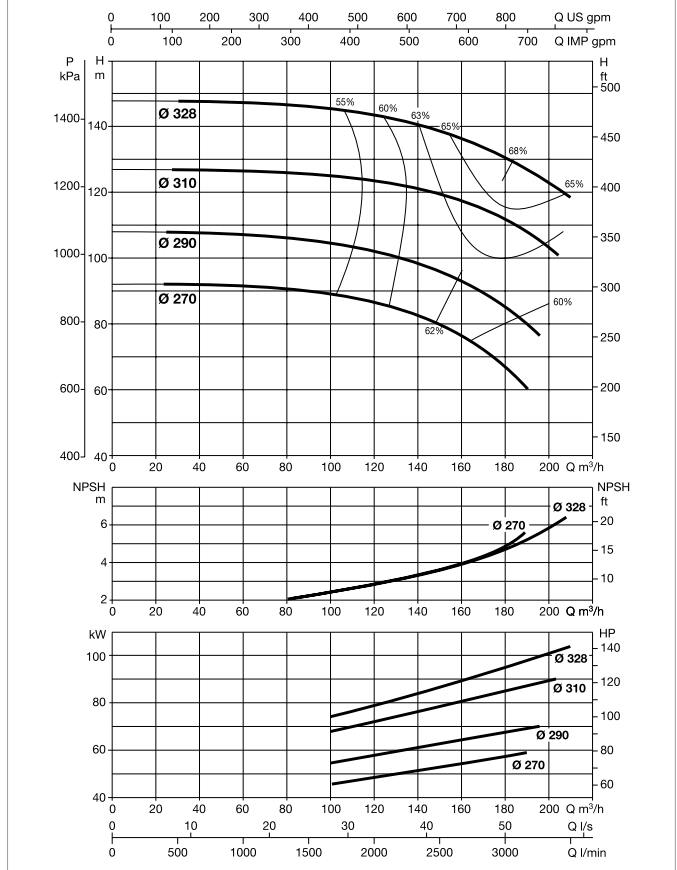
KDN 80-330 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 2900 1/min



* Only for markets outside the EU.



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 80-330	30	200L	3 x 400 V ~ Δ	52	IE3
	37	200L	3 x 400 V ~ Δ	63	IE3
	45	225M	3 x 400 V ~ Δ	76	IE3
	55	250M	3 x 400 V ~ Δ	95	IE3
	75	280S	3 x 400 V ~ Δ	124	IE3
	90	280M	3 x 400 V ~ Δ	148	IE3
	110	315S	3 x 400 V ~ Δ	184	IE3
	132	315M	3 x 400 V ~ Δ	220	IE3
	160	315L	3 x 400 V ~ Δ	265	IE3

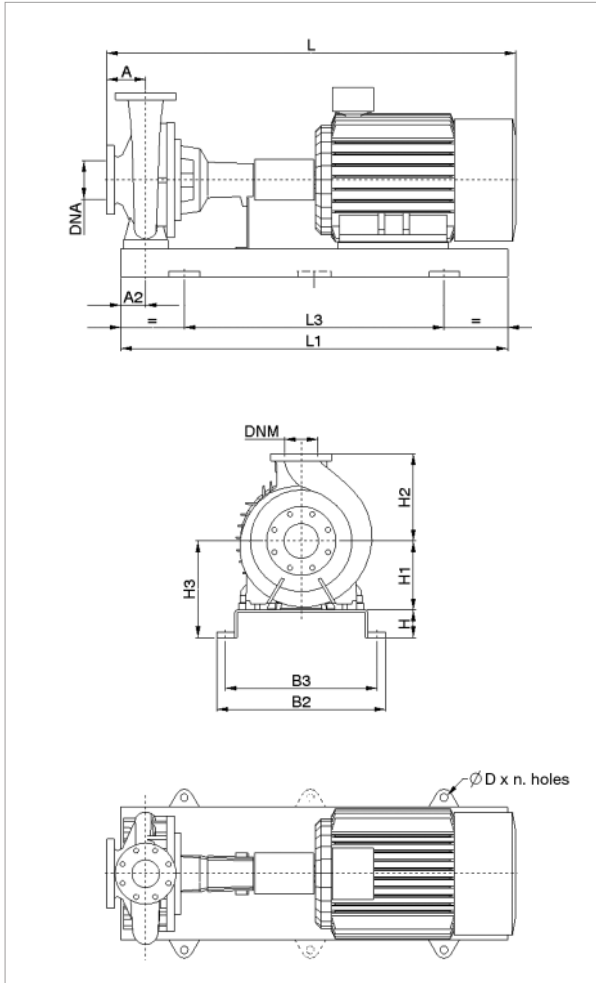
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 80-330	30	125	90	100	250	315	350	1400	940	610	550	28x4	125	80	1479	480	1620	495
	37	125	90	100	250	315	350	1400	940	610	550	28x4	125	80	1500	510	1641	525
	45	125	90	100	250	315	350	1600	1600	660	600	28x4	125	80	1575	597	1716	612
	55	125	90	100	250	315	350	1600	1600	660	600	28x4	125	80	1505	702	1646	717
	75	125	90	100	280	315	380	1800	1800	730	670	28x4	125	80	1700	895	1841	910
	90	125	90	100	280	315	380	1800	1800	730	670	28x4	125	80	1750	999	1891	1014
	110	125	90	120	315	315	435	2000	2000	910	830	28x4	125	80	1987	1422	2128	1437
	132	125	95	190	315	315	505	1550	1550	680	635	20x4	125	80	2127	1405	2268	1420
160	125	95	190	315	315	505	1550	1550	680	635	20x4	125	80	2127	1545	2268	1560	

Dimension and electrical data based on sizing definition following the instructions on page 183.

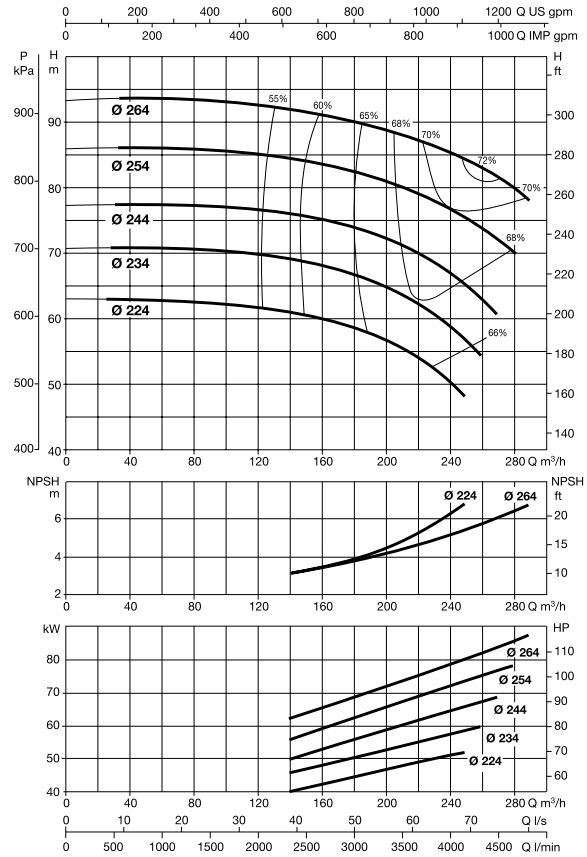
KDN 100-250 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 2900 1/min



* Only for markets outside the EU.



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 100-250	30	200L	3 x 400 V ~ Δ	52	IE3
	37	200L	3 x 400 V ~ Δ	63	IE3
	45	225M	3 x 400 V ~ Δ	76	IE3
	55	250M	3 x 400 V ~ Δ	95	IE3
	75	280S	3 x 400 V ~ Δ	124	IE3
	90	280M	3 x 400 V ~ Δ	148	IE3
	110	315S	3 x 400 V ~ Δ	184	IE3
	132	315M	3 x 400 V ~ Δ	220	IE3

MODEL	POWER (kW)	UNIT DIMENSIONS (mm)											FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 100-250	30	140	90	100	225	280	325	1400	940	610	550	28x4	125	100	1494	455	1635	470
	37	140	90	100	225	280	325	1400	940	610	550	28x4	125	100	1515	485	1656	500
	45	140	90	100	225	280	325	1600	1060	660	600	28x4	125	100	1590	572	1731	587
	55	140	90	100	250	280	350	1600	1060	660	600	28x4	125	100	1520	677	1661	692
	75	140	90	100	280	280	380	1800	1200	730	670	28x4	125	100	1715	870	1856	885
	90	140	90	100	280	280	380	1800	1200	730	670	28x4	125	100	1765	974	1906	989
	110	140	90	120	315	280	435	2000	1340	910	830	28x4	125	100	2002	1397	2143	1412
	132	140	110	165	315	280	480	1550	1250	680	635	20x4	125	100	2142	1380	2283	1395

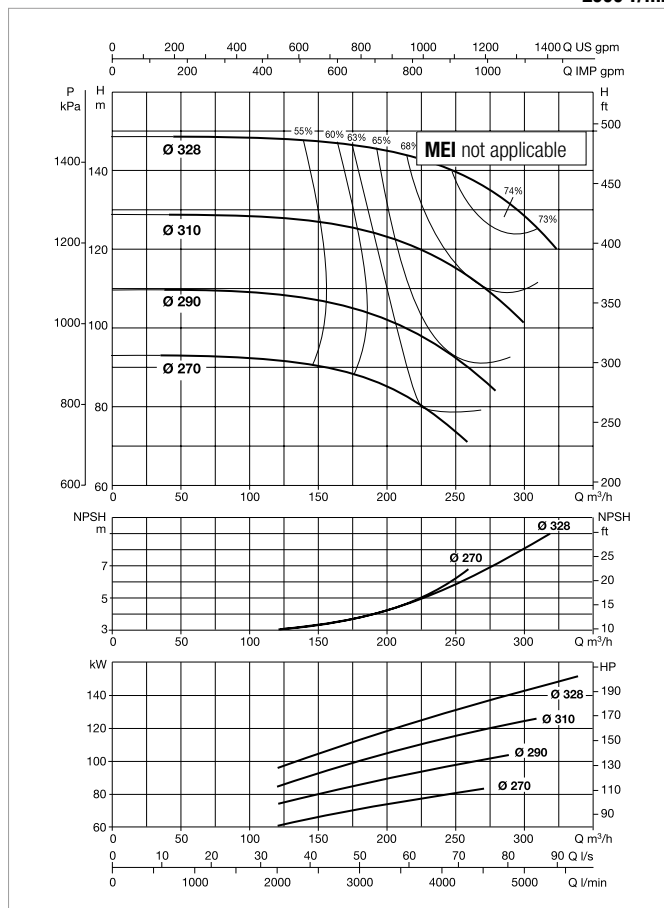
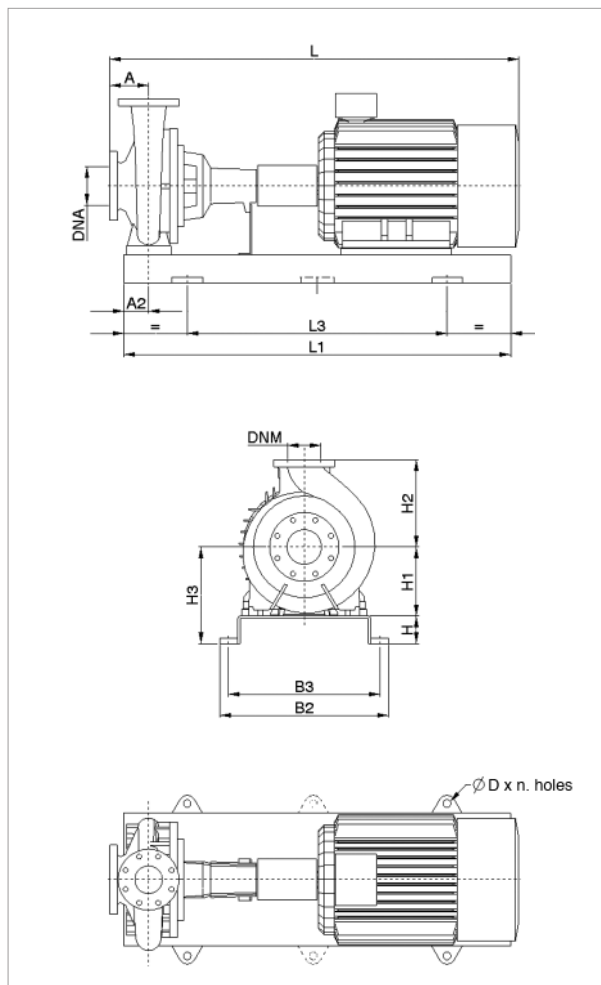
Dimension and electrical data based on sizing definition following the instructions on page 183.



KDN 100-330 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 100-330	45	225M	3 x 400 V ~ Δ	76	IE3
	55	250M	3 x 400 V ~ Δ	95	IE3
	75	280S	3 x 400 V ~ Δ	124	IE3
	90	280M	3 x 400 V ~ Δ	148	IE3
	110	315S	3 x 400 V ~ Δ	184	IE3
	132	315M	3 x 400 V ~ Δ	220	IE3
	160	315L	3 x 400 V ~ Δ	265	IE3
	200	315L	3 x 400 V ~ Δ	330	IE3

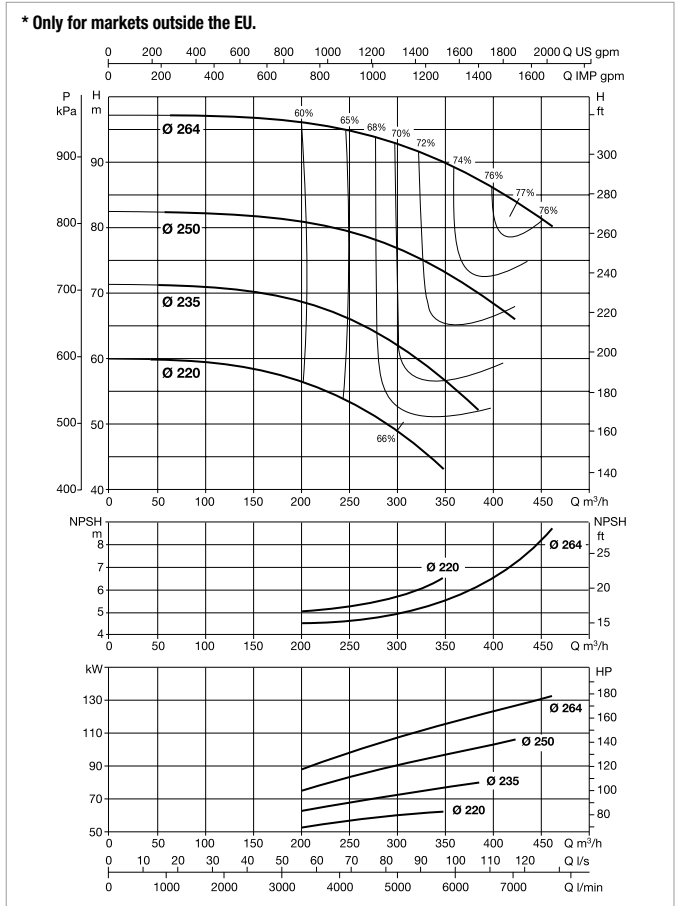
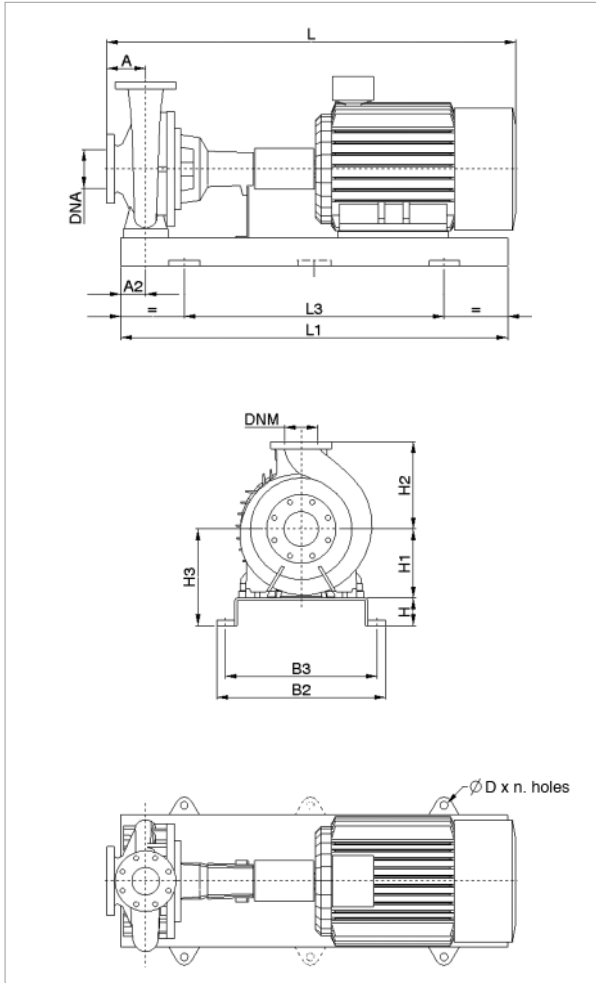
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 100-330	45	140	90	100	250	315	350	1600	1060	660	600	28x4	125	100	1590	612	1731	627
	55	140	90	100	250	315	350	1600	1060	660	600	28x4	125	100	1520	717	1661	732
	75	140	90	100	280	315	380	1800	1200	730	670	28x4	125	100	1715	910	1856	925
	90	140	90	100	280	315	380	1800	1200	730	670	28x4	125	100	1765	1014	1906	1029
	110	140	90	120	315	315	435	2000	1340	910	830	28x4	125	100	2002	1437	2143	1452
	132	140	95	190	315	315	505	1550	1250	680	635	20x4	125	100	2142	1420	2283	1435
	160	140	95	190	315	315	505	1550	1250	680	635	20x4	125	100	2142	1560	2283	1575
	200	140	95	190	315	315	505	1550	1250	680	635	20x4	125	100	2142	1600	2283	1615

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 125-250 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 125-250	55	250M	3 x 400 V ~ Δ	95	IE3
	75	280S	3 x 400 V ~ Δ	124	IE3
	90	280M	3 x 400 V ~ Δ	148	IE3
	110	315S	3 x 400 V ~ Δ	184	IE3
	132	315M	3 x 400 V ~ Δ	220	IE3
	160	315L	3 x 400 V ~ Δ	265	IE3

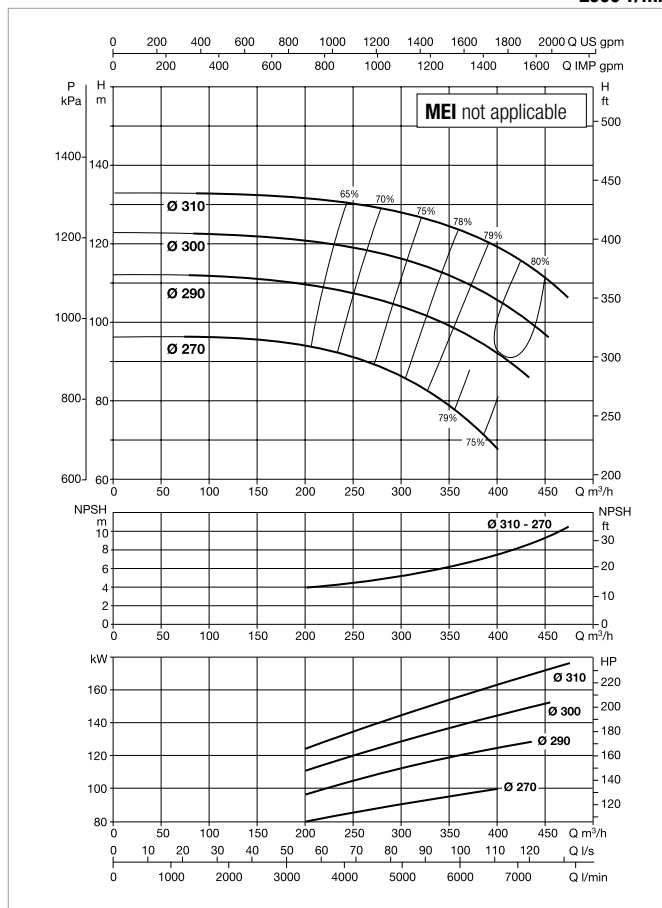
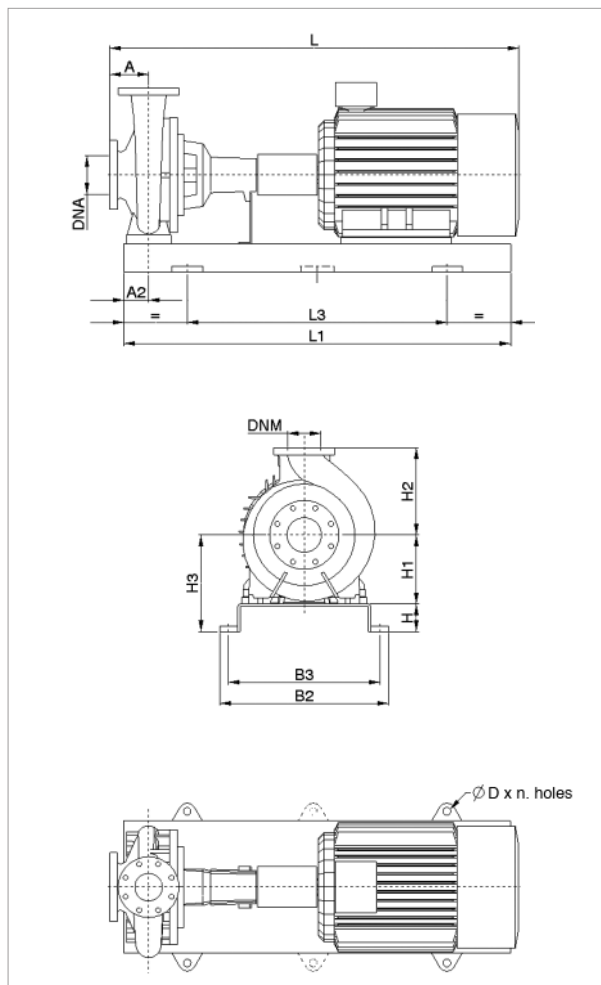
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 125-250	55	140	90	100	250	355	350	1600	1060	660	600	28x4	150	125	1520	687	1661	702
	75	140	90	100	280	355	380	1800	1200	730	670	28x4	150	125	1715	880	1856	895
	90	140	90	100	280	355	380	1800	1200	730	670	28x4	150	125	1765	984	1906	999
	110	140	90	120	315	355	435	2000	1340	910	830	28x4	150	125	2002	1407	2143	1422
	132	140	95	190	315	355	505	1550	1250	680	635	20x4	150	125	2142	1390	2283	1405
	160	140	95	190	315	355	505	1550	1250	680	635	20x4	150	125	2142	1530	2283	1545

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 125-330 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 125-330	75	280S	3 x 400 V ~ Δ	124	IE3
	90	280M	3 x 400 V ~ Δ	148	IE3
	110	315S	3 x 400 V ~ Δ	184	IE3
	132	315M	3 x 400 V ~ Δ	220	IE3
	160	315L	3 x 400 V ~ Δ	265	IE3
	200	315L	3 x 400 V ~ Δ	330	IE3

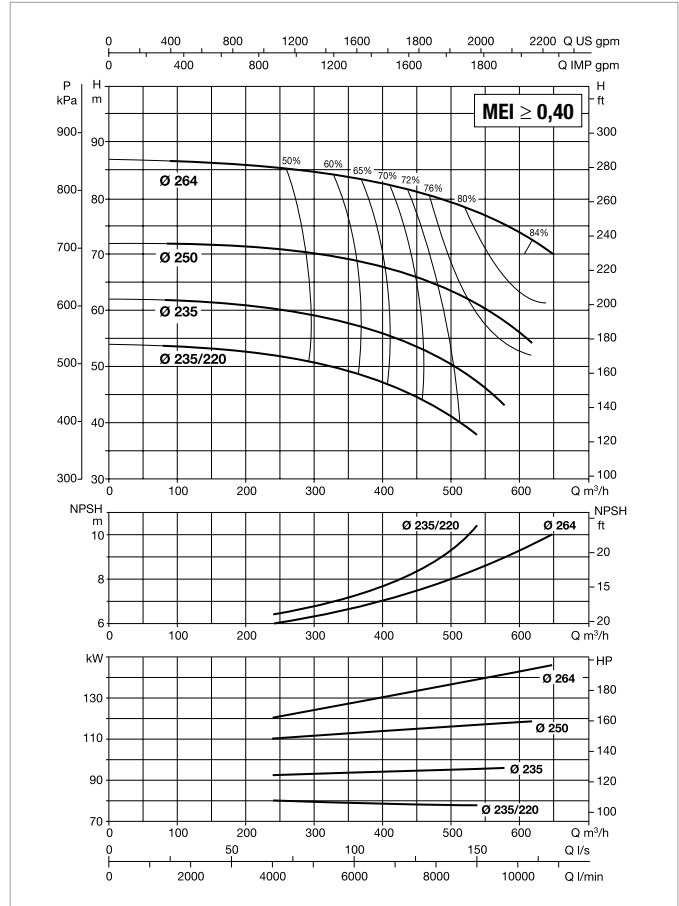
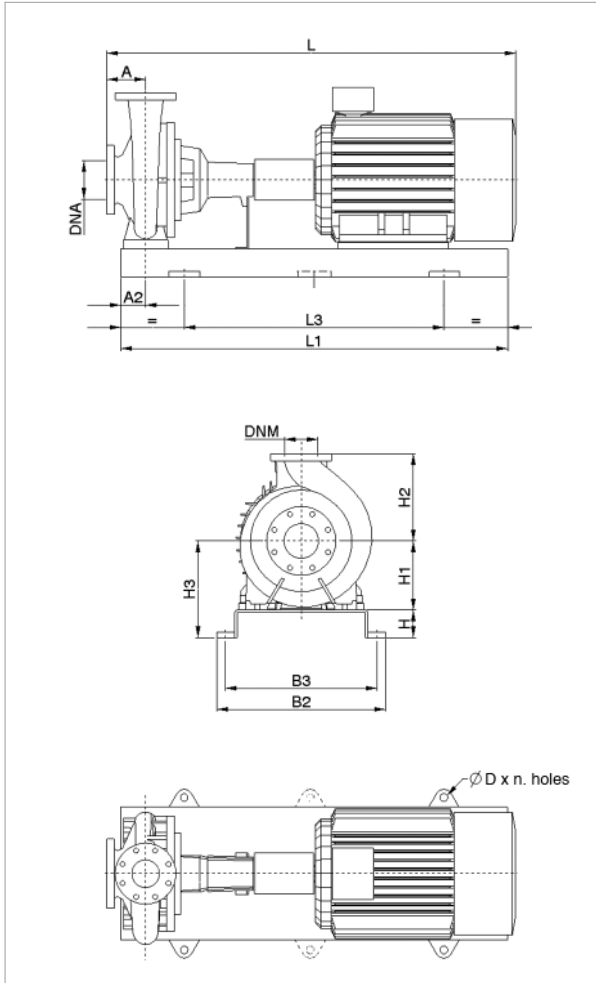
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)											FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 125-330	75	140	110	100	280	355	380	1800	1200	730	670	28x4	150	125	1715	930	1856	945
	90	140	110	100	280	355	380	1800	1200	730	670	28x4	150	125	1765	1034	1906	1049
	110	140	110	120	315	355	435	2000	1340	910	830	28x4	150	125	2002	1457	2143	1472
	132	140	115	220	315	355	535	1570	1270	680	635	20x4	150	125	2142	1480	2283	1495
	160	140	115	220	315	355	535	1570	1270	680	635	20x4	150	125	2142	1620	2283	1635
	200	140	115	220	315	355	535	1570	1270	680	635	20x4	150	125	2142	1660	2283	1675

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 150-250 - 2 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 2900 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 150-250	75	280S	3 x 400 V ~ Δ	124	IE3
	90	280M	3 x 400 V ~ Δ	148	IE3
	110	315S	3 x 400 V ~ Δ	184	IE3
	132	315M	3 x 400 V ~ Δ	220	IE3
	160	315L	3 x 400 V ~ Δ	265	IE3
	200	315L	3 x 400 V ~ Δ	330	IE3

MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 150-250	75	160	110	100	280	375	380	1800	1200	730	670	28x4	200	150	1735	920	1916	935
	90	160	110	100	280	375	380	1800	1200	730	670	28x4	200	150	1785	1024	1966	1039
	110	160	110	120	315	375	435	2000	1340	910	830	28x4	200	150	2022	1447	2203	1462
	132	160	115	220	315	375	535	1570	1270	680	635	20x4	200	150	2162	1470	2343	1485
	160	160	115	220	315	375	535	1570	1270	680	635	20x4	200	150	2162	1610	2343	1625
	200	160	115	220	315	375	535	1570	1270	680	635	20x4	200	150	2162	1650	2343	1665

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN OVERSIZE - 2 POLES

STANDARDISED PUMPS

IE3 STANDARD MOTOR ELECTRIC DATA

=2900 1/min

MOTOR TYPE	P2 NOMINAL kW	SPEED rpm	YIELD %	POWER FACTOR COS ϕ	POWER INPUT 50 Hz	In A			Start-up current Ia/In	Start-up torque Ma/Mn	Maximum torque M/k/Mn	POLES
						230V	400V	690V				
MEC 71	0,25	2790	69,81	0,778	3x230/400	1,16	0,67		5,06	2,90	3,01	2
MEC 71	0,37	2820	72,79	0,783	3x230/400	1,61	0,93		5,40	2,69	2,99	2
MEC 80	0,55	2810	76,97	0,800	3x230/400	2,23	1,29		6,41	3,43	3,13	2
MEC 80	0,75	2910	82,00	0,780	3x230/400	2,94	1,70		8,90	4,70	4,80	2
MEC 80	1,1	2870	82,70	0,760	3x230/400	4,16	2,40		9,30	5,00	5,30	2
MEC 90S	1,5	2875	84,20	0,850	3x230/400	5,20	3,00		8,40	3,60	3,80	2
MEC 90L	2,2	2880	86,50	0,820	3x230/400	7,97	4,60		9,20	4,00	4,20	2
MEC 100L	3	2900	87,10	0,890	3x400 Δ		5,60	3,23	8,80	5,50	4,50	2
MEC 112M	4	2910	88,10	0,930	3x400 Δ		7,00	4,04	9,60	3,60	4,00	2
MEC 132S	5,5	2920	89,20	0,900	3x400 Δ		10,00	5,77	8,90	3,00	3,60	2
MEC 132S	7,5	2910	90,10	0,920	3x400 Δ		13,10	7,56	8,90	3,00	3,60	2
MEC 160M	11	2950	91,20	0,890	3x400 Δ		19,70	11,37	9,10	4,00	4,20	2
MEC 160M	15	2940	91,90	0,890	3x400 Δ		26,70	15,42	9,70	4,70	4,80	2
MEC 160L	18,5	2950	92,40	0,880	3x400 Δ		33,00	19,05	10,70	4,60	4,70	2
MEC 180M	22	2955	92,70	0,900	3x400 Δ		38,10	22,00	8,20	2,20	2,30	2
MEC 200L	30	2960	93,30	0,890	3x400 Δ		52,10	30,08	7,50	2,20	2,30	2
MEC 200L	37	2960	93,70	0,910	3x400 Δ		62,60	36,14	7,50	2,20	2,30	2
MEC 225M	45	2965	94,00	0,880	3x400 Δ		78,40	45,26	7,60	2,20	2,30	2
MEC 250M	55	2970	94,30	0,890	3x400 Δ		94,60	54,62	7,60	2,20	2,30	2
MEC 280S	75	2975	94,70	0,900	3x400 Δ		127,00	73,32	6,90	2,00	2,30	2
MEC 280M	90	2975	95,00	0,890	3x400 Δ		153,00	88,33	7,00	2,00	2,30	2
MEC 315S	110	2978	95,20	0,900	3x400 Δ		185,00	106,81	7,10	2,00	2,20	2
MEC 315M	132	2978	95,40	0,900	3x400 Δ		222,00	128,17	7,10	2,00	2,20	2
MEC 315L	160	2980	95,60	0,900	3x400 Δ		268,00	154,73	7,10	2,00	2,20	2
MEC 315L	200	2980	95,80	0,920	3x400 Δ		330,00	190,75	6,10	1,80	2,60	2
MEC 355M	250	2980	95,80	0,920	3x400 Δ		410,00	236,99	6,90	2,00	2,90	2
MEC 355L	315	2980	95,80	0,920	3x400 Δ		520,00	300,58	5,70	1,70	2,40	2

KDN OVERSIZE - 4 POLE RANGE

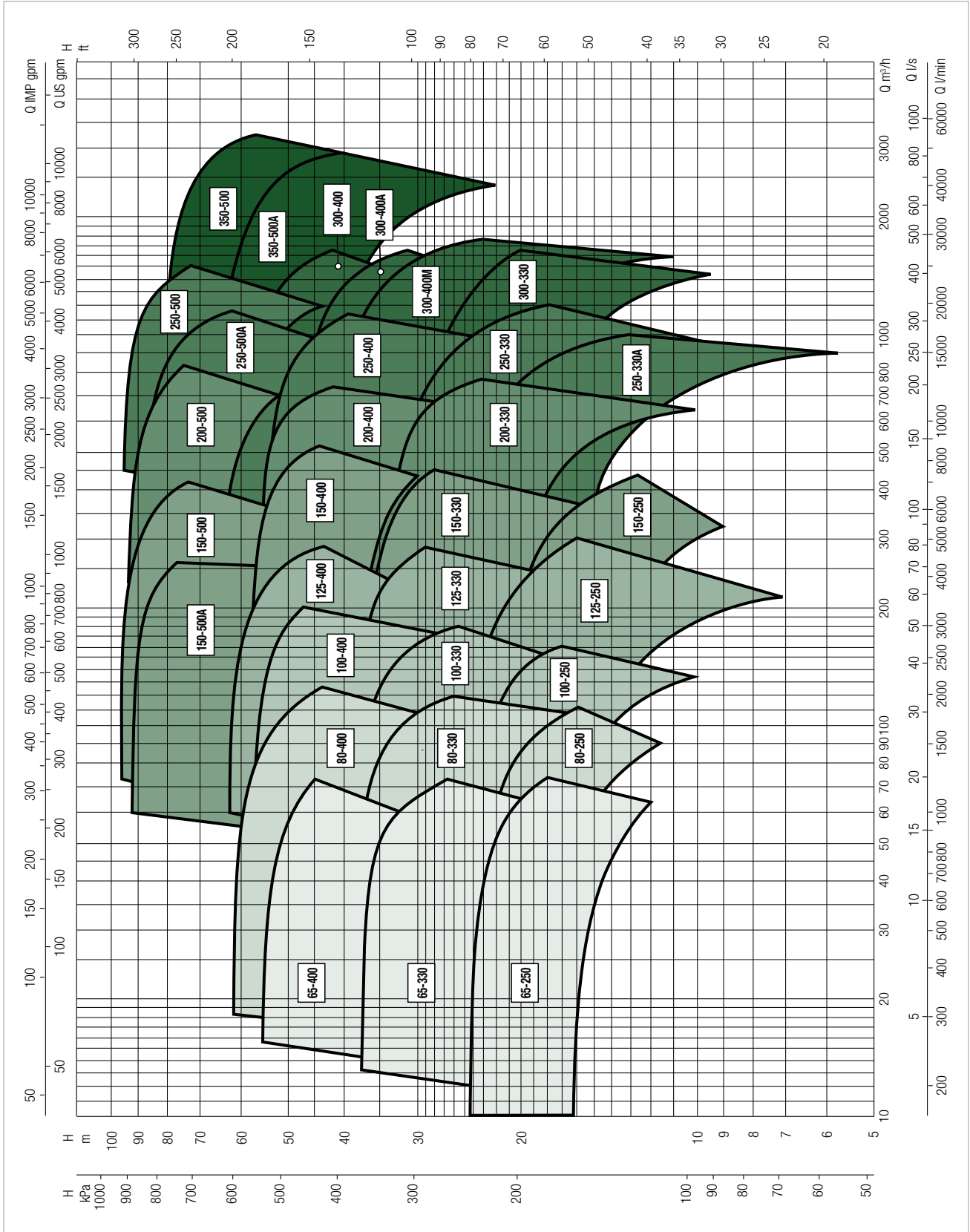
STANDARDISED PUMPS

PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

GRAPHIC SELECTION TABLE

= 1450 1/min



KDN OVERSIZE - 4 POLES

STANDARDISED PUMPS

SELECTION TABLE - KDN 65

MODEL	Q=m ³ /h	0	10	20	30	40	50	60	70	80
	Q=l/min	0	167	333	500	667	833	1000	1167	1333
KDN 65-250 / 224	H (m)	16	16	16	15	15	14			
KDN 65-250 / 244		21	21	20	20	19	18	16		
KDN 65-250 / 264		25	25	25	24	24	23	21	19	17
KDN 65-330 / 270		23	23	23	22	21	19	15		
KDN 65-330 / 290		28	27	27	26	25	23	20		
KDN 65-330 / 310		32	32	32	32	31	29	26	22	
KDN 65-330 / 328		38	38	38	37	36	35	33	29	
KDN 65-400 / 350		38	38	38	37	36	34	31		
KDN 65-400 / 370		44	43	43	43	42	40	38		
KDN 65-400 / 390		50	50	50	49	48	46	44	42	
KDN 65-400 / 408		55	55	54	54	53	51	49	46	

SELECTION TABLE - KDN 80

MODEL	Q=m ³ /h	0	10	20	30	40	50	60	70	80	100	120
	Q=l/min	0	167	333	500	667	833	1000	1167	1333	1667	2000
KDN 80-250 / 224	H (m)	16		16	16	16	16	15	14	13		
KDN 80-250 / 244		19		19	19	19	19	18	17	17	14	
KDN 80-250 / 264		23		23	23	23	22	22	21	21	18	
KDN 80-330 / 270		24		24	24	24	23	23	21	19	15	
KDN 80-330 / 290		28		28	28	28	27	26	25	24	19	
KDN 80-330 / 310		33		33	33	33	33	33	32	31	27	
KDN 80-330 / 328		38		38	38	38	38	38	37	36	32	26
KDN 80-400 / 330		37		37	37	37	37	36	35	33	28	
KDN 80-400 / 350		43		43	43	43	43	42	41	39	34	
KDN 80-400 / 370		48		49	49	48	48	47	46	44	39	
KDN 80-400 / 390		55		54	54	54	54	53	52	51	47	41
KDN 80-400 / 408		62		61	61	61	61	60	59	57	52	46

SELECTION TABLE - KDN 100

MODEL	Q=m ³ /h	0	10	20	30	40	50	60	70	80	100	120	150	180	200
	Q=l/min	0	167	333	500	667	833	1000	1167	1333	1667	2000	2500	3000	3333
KDN 100-250 / 224	H (m)	16			16	16	16	15	15	15	14	13			
KDN 100-250 / 244		19			19	19	19	19	19	19	19	18	17		
KDN 100-250 / 264		23			23	23	23	23	23	23	23	22	21	19	
KDN 100-330 / 270		23			23	23	23	23	23	23	23	21	19		
KDN 100-330 / 290		27			27	27	27	27	27	27	27	26	24	19	
KDN 100-330 / 310		32			32	32	32	32	32	32	32	31	30	25	
KDN 100-330 / 328		37			37	37	37	37	37	37	37	36	35	32	26
KDN 100-400 / 330		37			37	36	36	36	36	35	35	34	32	28	
KDN 100-400 / 350		41			41	41	41	41	41	40	40	39	37	33	
KDN 100-400 / 370		47			47	47	47	47	47	46	46	45	43	40	36
KDN 100-400 / 390		53			53	53	53	53	53	52	52	51	50	47	44
KDN 100-400 / 408		59			59	59	59	59	58	58	58	57	57	54	51

KDN OVERSIZE - 4 POLES

STANDARDISED PUMPS

SELECTION TABLE - KDN 125

MODEL	Q=m ³ /h	0	10	20	30	40	50	60	70	80	100	120	150	180	200	250	300	
	Q=l/min	0	167	333	500	667	833	1000	1167	1333	1667	2000	2500	3000	3333	4167	5000	
KDN 125-250 / 220	H (m)	15				15	15	14	14	14	14	13	12	11	9			
KDN 125-250 / 235		18				18	18	18	17	17	17	17	16	14	13	10		
KDN 125-250 / 250		21				21	21	21	21	21	21	20	20	19	18	17	14	
KDN 125-250 / 264		24				24	24	24	24	24	24	24	24	23	23	22	19	16
KDN 125-330 / 270		25				24	24	24	24	24	24	24	23	22	19	17		
KDN 125-330 / 290		28				28	28	28	28	28	28	28	27	26	25	23		
KDN 125-330 / 310		34				33	33	33	33	33	33	33	33	32	31	30	25	
KDN 125-330 / 328		38				38	38	38	38	38	38	38	38	38	37	36	33	
KDN 125-400 / 330		40				40	40	40	40	40	40	39	39	37	34	31		
KDN 125-400 / 350		44				44	44	44	44	44	44	44	44	42	39	37		
KDN 125-400 / 370		50				50	50	50	49	49	49	49	49	48	45	43	33	
KDN 125-400 / 390		55				55	55	55	55	55	55	55	55	54	52	51	42	
KDN 125-400 / 408		61				61	61	61	61	61	61	61	61	60	59	57	51	41

SELECTION TABLE - KDN 150

MODEL	Q=m ³ /h	0	10	20	30	40	50	60	70	80	100	120	150	180	200	250	300	350	400	450	500	
	Q=l/min	0	167	333	500	667	833	1000	1167	1333	1667	2000	2500	3000	3333	4167	5000	5833	6667	7500	8334	
KDN 150-250 / 220	H (m)	14					14	14	14	13	13	13	13	13	11	10						
KDN 150-250 / 235		16					16	16	16	16	16	16	15	15	15	13	12	10				
KDN 150-250 / 250		19					18	18	18	18	18	18	18	18	17	16	15	13				
KDN 150-250 / 264		22					21	21	21	21	21	21	21	20	20	19	18	17	14			
KDN 150-330 / 260		22					22	22	22	21	21	21	21	21	21	20	18	15				
KDN 150-330 / 280		26					26	26	26	26	26	26	25	25	25	24	23	21				
KDN 150-330 / 300		30					30	30	30	30	30	30	30	29	29	28	27	25	23			
KDN 150-330 / 315		34					34	33	33	33	33	33	33	33	33	32	31	29	27			
KDN 150-330 / 328		37					37	37	37	37	37	37	36	36	36	35	35	33	31	28		
KDN 150-400 / 330		37					37	37	37	37	37	37	37	37	37	36	35	34	31			
KDN 150-400 / 350		42					42	42	42	42	42	42	42	42	42	42	41	39	37	33		
KDN 150-400 / 370		47					47	47	47	47	47	47	47	47	47	46	45	44	41	38		
KDN 150-400 / 390		54					53	53	53	53	53	53	53	53	53	52	51	50	47	44		
KDN 150-400 / 408		60					60	60	60	60	60	60	60	60	59	59	58	56	53	49	44	
KDN 150-500A / 440		65					65	64	64	64	63	62	60	58	51							
KDN 150-500A / 460		72					71	71	71	71	70	69	68	65	57							
KDN 150-500A / 480		78					78	77	77	77	76	75	73	71	63							
KDN 150-500A / 500		85					84	84	84	84	83	82	81	79	70							
KDN 150-500A / 518		91					91	91	91	91	91	90	88	86	79							
KDN 150-500 / 440		68									68	68	68	67	66	63	57	48				
KDN 150-500 / 460		74									74	74	73	72	69	64	56					
KDN 150-500 / 480		82									81	81	81	80	79	72	66	58				
KDN 150-500 / 500		89									89	89	88	88	87	85	81	76	68			
KDN 150-500 / 518		96									96	96	96	95	95	93	89	84	75			

KDN OVERSIZE - 4 POLES

STANDARDISED PUMPS

SELECTION TABLE - KDN 200

MODEL	Q=m ³ /h	0	10	20	30	40	50	60	70	80	100	120	150	180	200	250	300	350	400	450	500	600	700	800	
	Q=l/min	0	167	333	500	667	833	1000	1167	1333	1667	2000	2500	3000	3333	4167	5000	5833	6667	7500	8334	10000	11667	13334	
KDN 200-330 / 270	H (m)	20									20	20	20	20	20	20	19	19	18	17	16	12			
KDN 200-330 / 290		24										24	24	24	24	24	24	24	23	23	22	22	19		
KDN 200-330 / 310		29										29	29	29	29	29	29	29	29	28	28	27	25	21	
KDN 200-330 / 328		34										34	34	33	33	33	33	33	33	33	33	32	31	27	
KDN 200-400 / 330		32										32	32	32	32	32	31	31	31	30	29	28	23		
KDN 200-400 / 350		38										38	38	38	38	38	38	37	37	37	36	35	31		
KDN 200-400 / 370		43										43	43	43	43	43	43	43	42	42	42	41	37		
KDN 200-400 / 390		48										48	48	48	48	48	48	48	48	48	48	47	45	37	
KDN 200-400 / 408		54										54	54	54	54	54	54	54	54	53	53	53	51	46	
KDN 200-500 / 430		65										65	65	65	65	65	65	65	64	64	63	62	60	56	51
KDN 200-500 / 450		72										72	72	72	72	71	71	71	71	70	69	67	62	58	
KDN 200-500 / 470		76										76	77	77	77	76	76	76	76	75	74	72	68	63	
KDN 200-500 / 490		82										82	83	82	82	82	82	82	82	81	80	79	76	71	65
KDN 200-500 / 508		94										94	94	94	94	94	93	93	92	92	91	89	86	81	75

SELECTION TABLE - KDN 250

MODEL	Q=m ³ /h	0	250	300	350	400	450	500	600	700	800	900	1000	1100	1200	1400	1500	
	Q=l/min	0	4167	5000	5833	6667	7500	8334	10000	11667	13334	15000	16667	18334	20000	23334	25001	
KDN 250-330A / 275/32°	H (m)	17	16	15	15	15	14	14	12	11	8	6						
KDN 250-330A / 275/16°		20	19	18	18	18	17	17	16	14	11	8						
KDN 250-330A / 275		23	22	21	21	21	20	20	18	17	14	11						
KDN 250-330A / 285		26	24	24	23	23	23	22	21	19	17	14						
KDN 250-330A / 295		28		26	26	25	25	24	23	22	20	17	13					
KDN 250-330 / 310/16°		23		20	19	19	18	18	17	15	13	11						
KDN 250-330 / 310/290		26		24	24	23	23	22	20	18	17	14	12					
KDN 250-330 / 310/300		28		26	25	25	24	24	23	21	18	17	13					
KDN 250-330 / 310		30		28	27	27	26	26	25	23	22	19	17					
KDN 250-330 / 320		32		30	30	30	29	29	28	26	25	23	21					
KDN 250-330 / 328		35		33	33	33	32	32	30	29	28	26	24					
KDN 250-400 / 330		33		33	32	32	31	31	29	27	25	22						
KDN 250-400 / 350		39		38	38	37	37	36	35	33	31	29	26					
KDN 250-400 / 370		44		43	43	43	43	42	41	40	38	35	32					
KDN 250-400 / 390		50		50	50	50	49	49	48	47	45	43	40	36				
KDN 250-400 / 408		54		54	54	54	54	54	53	52	50	48	45	41				
KDN 250-500A / 440		61		61	61	61	61	60	58	55	51	45						
KDN 250-500A / 460		68		68	68	68	67	67	65	62	58	53	46					
KDN 250-500A / 480		76		75	75	75	75	74	73	70	67	62	57					
KDN 250-500A / 500		82		82	82	82	82	82	81	79	76	72	67	60				
KDN 250-500A / 518		89		89	89	89	89	88	87	85	82	78	74	68				
KDN 250-500 / 440		60						60	59	57	56	55	54	50	44			
KDN 250-500 / 460		66						66	66	66	65	64	61	58	53			
KDN 250-500 / 480		75						75	75	75	74	73	72	69	65			
KDN 250-500 / 500		84						84	84	84	83	83	82	80	76	66		
KDN 250-500 / 518		94						94	94	94	94	93	92	90	87	79	72	

KDN OVERSIZE - 4 POLES

STANDARDISED PUMPS

SELECTION TABLE - KDN 300

MODEL	Q=m ³ /h	0	250	300	350	400	450	500	600	700	800	900	1000	1100	1200	1400	1500	1600		
	Q=l/min	0	4167	5000	5833	6667	7500	8334	10000	11667	13334	15000	16667	18334	20000	23334	25001	26667		
KDN 300-330 / 325/36°	H (m)	19						18	18	17	16	16	15	14	13	10				
KDN 300-330 / 325/24°		22							21	20	20	19	18	17	16	15	13	11		
KDN 300-330 / 325/12°		24							23	23	22	21	20	20	19	17	15	13		
KDN 300-330 / 325		28							26	25	25	24	23	22	21	20	18	16		
KDN 300-330 / 335		30							28	27	27	26	25	25	24	23	21	19	17	
KDN 300-330 / 345		32							30	30	29	29	28	27	27	26	23	22	21	
KDN 300-400M / 350		25							24	23	23	22	21	20	19	18	16	14	11	
KDN 300-400M / 380		32							31	31	31	30	29	29	28	27	25	22	20	
KDN 300-400M / 395		37							36	36	35	35	34	34	33	32	29	27	25	
KDN 300-400M / 408		41							40	40	40	39	38	37	37	36	34	31	29	
KDN 300-400A / 330/7°		33					33	32	32	32	31	31	30	29	28	26	21			
KDN 300-400A / 370/340		39					38	38	38	38	38	37	36	35	34	33	29	27		
KDN 300-400A / 370/355		43						43	43	42	42	41	41	40	39	38	34	32	28	
KDN 300-400A / 370		47					47	47	47	47	47	46	46	45	44	42	39	36	33	
KDN 300-400 / 340		40			40	39	39	39	39	38	37	36	35	33	32	28				
KDN 300-400 / 370		49			48	48	47	47	46	46	45	44	42	41	38					
KDN 300-400 / 390		54			53	53	53	53	52	51	51	50	49	48	46	42	39			
KDN 300-400 / 408		59			59	59	59	58	58	57	57	56	55	54	53	50	48	45		

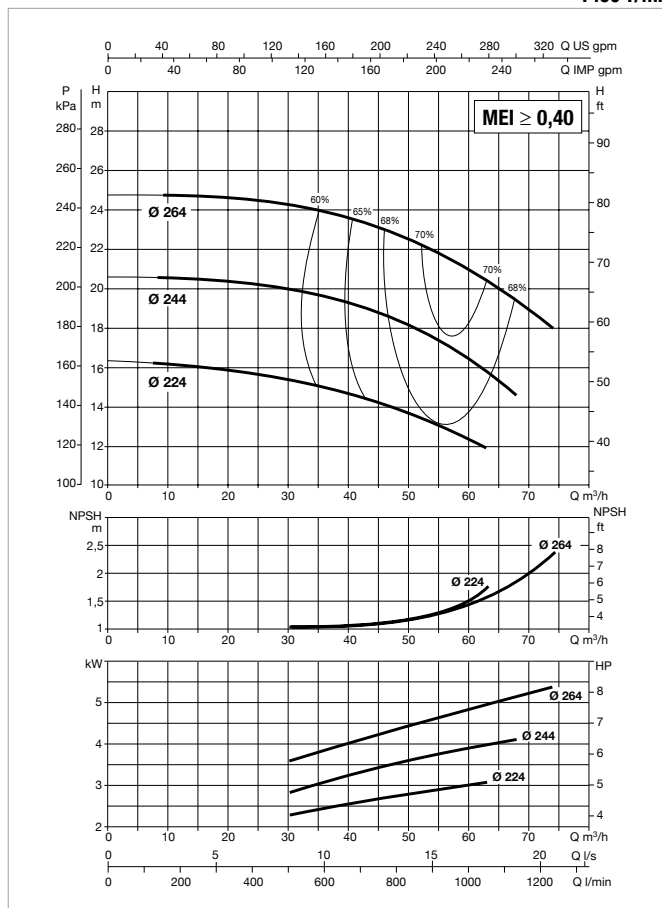
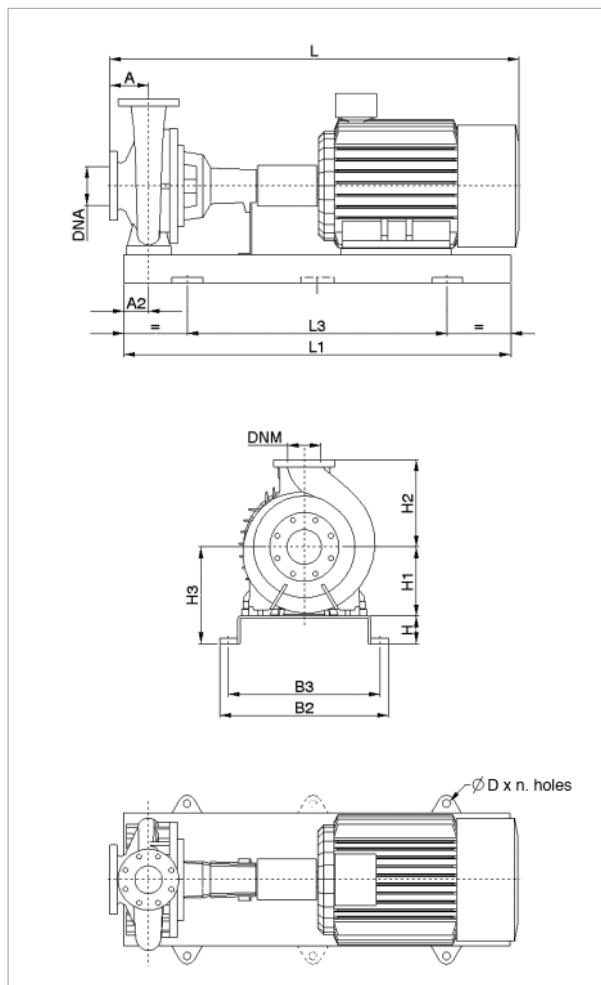
SELECTION TABLE - KDN 350

MODEL	Q=m ³ /h	0	250	300	350	400	450	500	600	700	800	900	1000	1100	1200	1400	1500	1600	2000	2500	1600	3000		
	Q=l/min	0	4167	5000	5833	6667	7500	8334	10000	11667	13334	15000	16667	18334	20000	23334	25001	26667	33334	41668	46668	50001		
KDN 350-500A / 405/16°	H (m)	41					41	41	40	40	40	40	40	40	39	38	38	37	32					
KDN 350-500A / 405		50					50	50	50	50	50	50	49	49	49	49	48	47	43	33				
KDN 350-500A / 435		57					57	57	57	57	57	57	57	57	56	56	55	55	51	42	34			
KDN 350-500A / 465		65					64	64	64	64	64	64	64	64	64	63	63	62	59	51	44			
KDN 350-500 / 430		49					48	48	48	48	48	47	47	47	47	46	46	45	42	36				
KDN 350-500 / 460		61					61	61	60	60	60	59	59	59	58	58	57	56	54	47	40			
KDN 350-500 / 490		70					70	70	69	69	69	69	69	69	68	67	67	66	63	58	52	48		
KDN 350-500 / 518		81					81	81	81	80	80	80	80	80	80	80	79	78	76	71	66	63		

KDN 65-250 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 65-250	2,2	100L	3 x 230 - 400 V ~	8,75 - 5,05	IE3
	3	100L	3 x 400 V ~ Δ	6,25	IE3
	4	112M	3 x 400 V ~ Δ	7,95	IE3
	5,5	132S	3 x 400 V ~ Δ	10,6	IE3
	7,5	132M	3 x 400 V ~ Δ	14,6	IE3

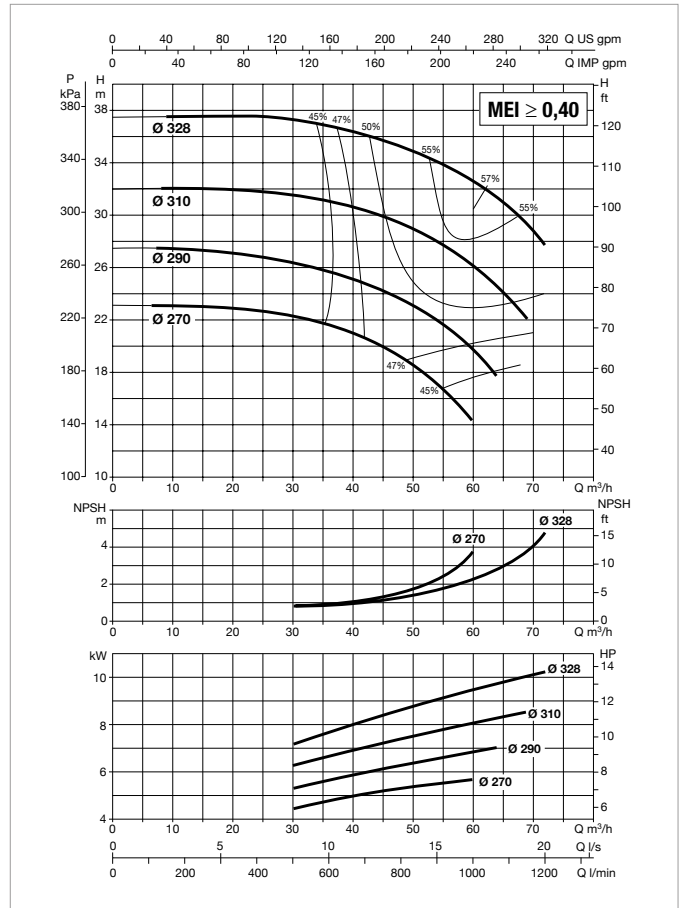
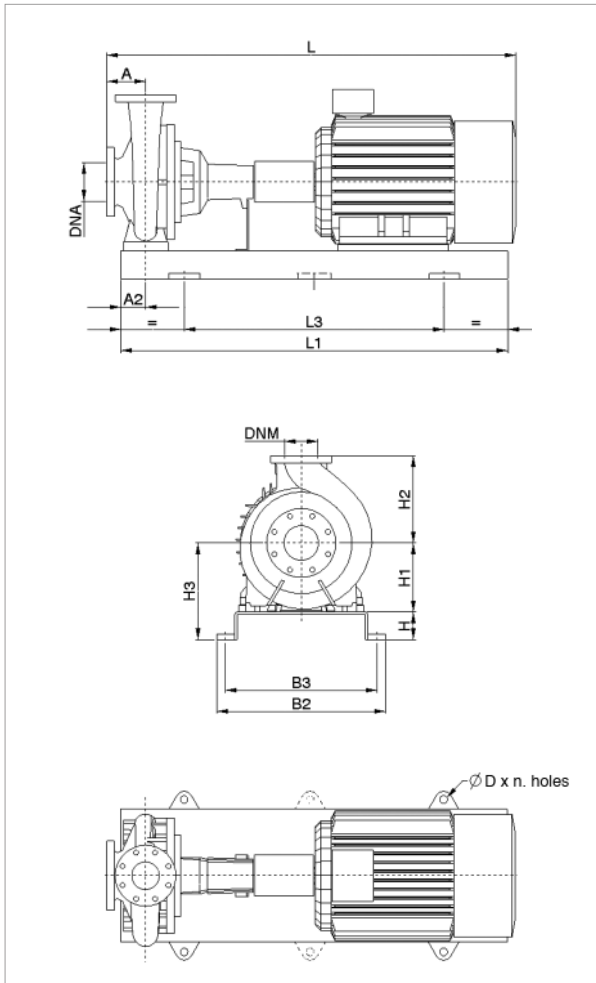
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 65-250	2,2	125	90	80	200	250	280	1120	740	490	440	24x4	100	65	1014	169	1155	169
	3	125	90	80	200	250	280	1120	740	490	440	24x4	100	65	1014	177	1155	177
	4	125	90	80	200	250	280	1120	740	490	440	24x4	100	65	1029	193	1170	193
	5,5	125	90	80	200	250	280	1120	740	490	440	24x4	100	65	1099	209	1240	209
	7,5	125	90	80	200	250	280	1120	740	490	440	24x4	100	65	1149	199	1290	214

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 65-330 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 65-330	5,5	132S	3 x 400 V ~ Δ	10,6	IE3
	7,5	132M	3 x 400 V ~ Δ	14,6	IE3
	11	160M	3 x 400 V ~ Δ	20,5	IE3
	15	160L	3 x 400 V ~ Δ	28	IE3

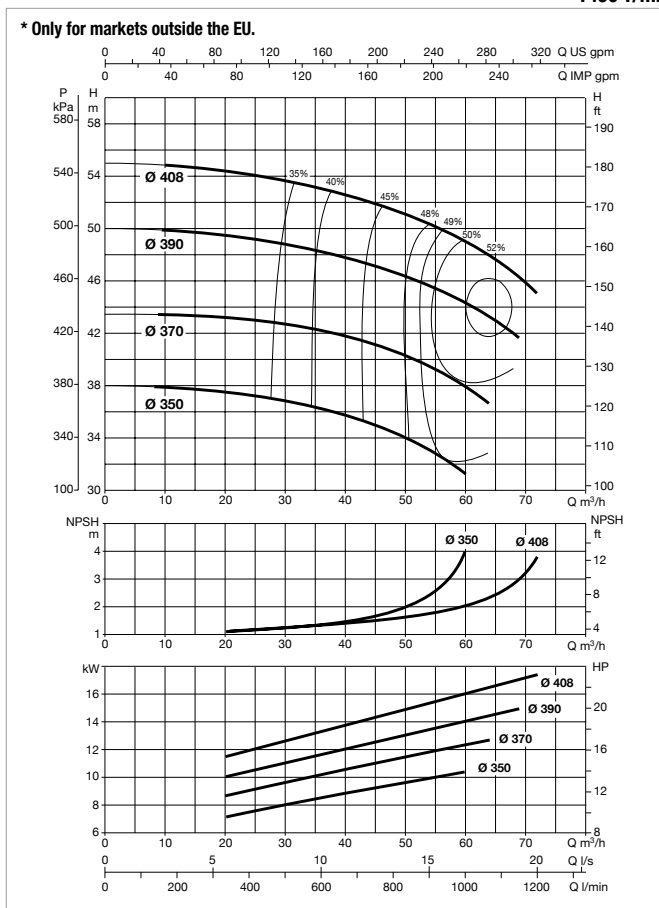
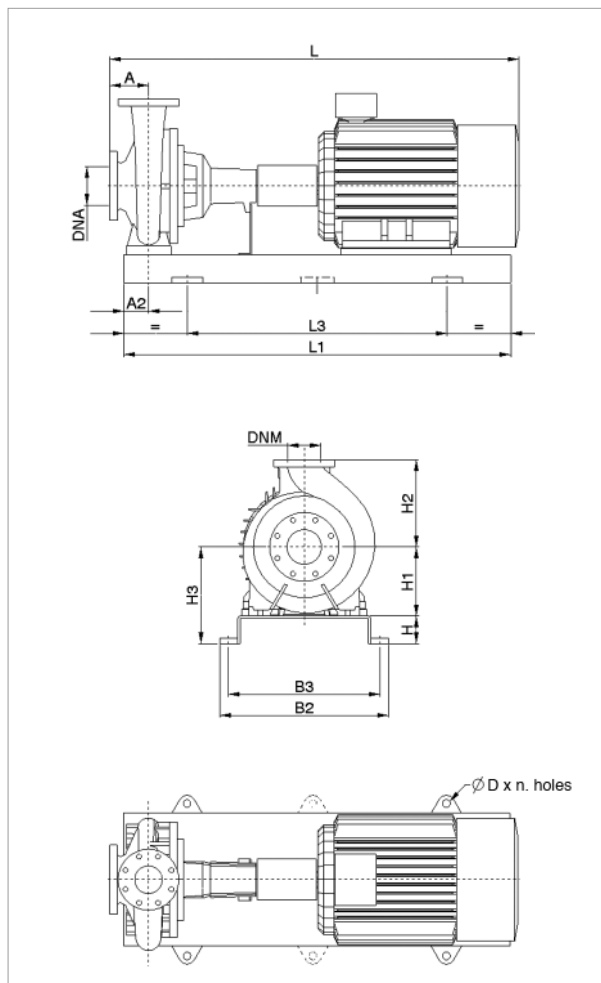
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)											FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 65-330	5,5	125	90	80	225	280	305	1250	840	540	490	24x4	100	65	1129	286	1270	286
	7,5	125	90	80	225	280	305	1250	840	540	490	24x4	100	65	1179	276	1320	291
	11	125	90	80	225	280	305	1250	840	540	490	24x4	100	65	1324	313	1465	328
	15	125	90	100	225	280	325	1400	940	610	550	28x4	100	65	1379	349	1520	364

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 65-400 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.
 The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 65-400	11	160M	3 x 400 V ~ Δ	20,5	IE3
	15	160L	3 x 400 V ~ Δ	28	IE3
	18,5	180M	3 x 400 V ~ Δ	34	IE3
	22	180L	3 x 400 V ~ Δ	40,5	IE3

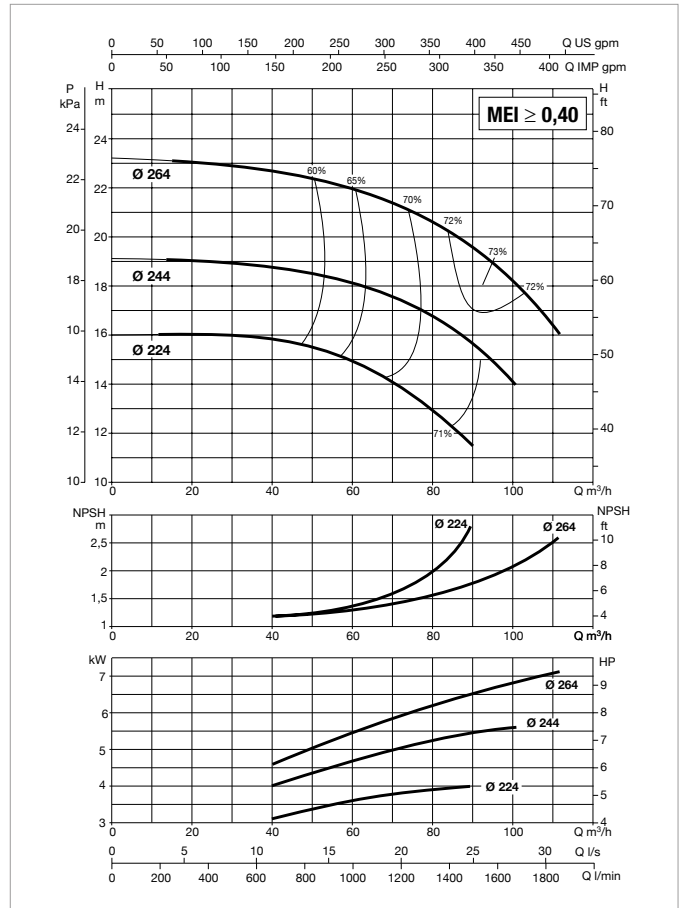
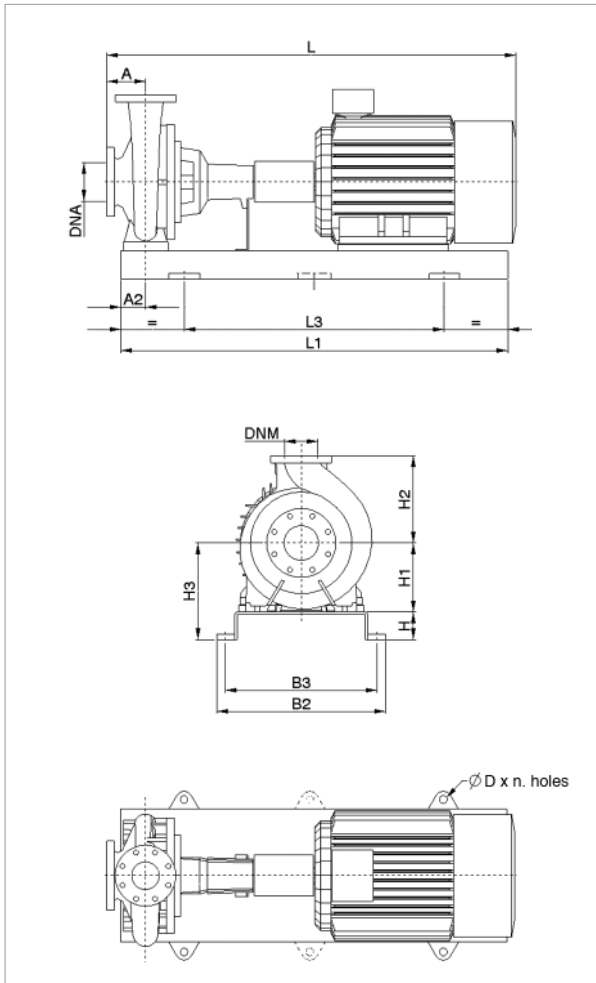
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 65-400	11	125	90	100	280	355	380	1400	940	610	550	28x4	100	65	1324	360	1465	375
	15	125	90	100	280	355	380	1400	940	610	550	28x4	100	65	1379	377	1520	392
	18,5	125	90	100	280	355	380	1400	940	610	550	28x4	100	65	1399	412	1540	427
	22	125	90	100	280	355	380	1400	940	610	550	28x4	100	65	1437	431	1578	446

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 80-250 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 80-250	4	112M	3 x 400 V ~ Δ	7,95	IE3
	5,5	132S	3 x 400 V ~ Δ	10,6	IE3
	7,5	132M	3 x 400 V ~ Δ	14,6	IE3
	11	160M	3 x 400 V ~ Δ	20,5	IE3
	15	160L	3 x 400 V ~ Δ	28	IE3

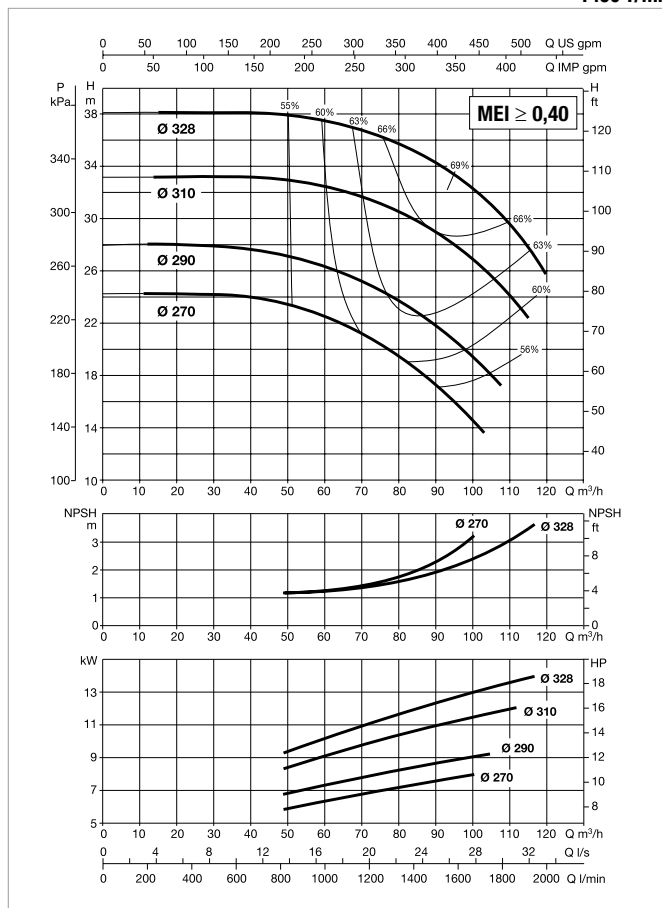
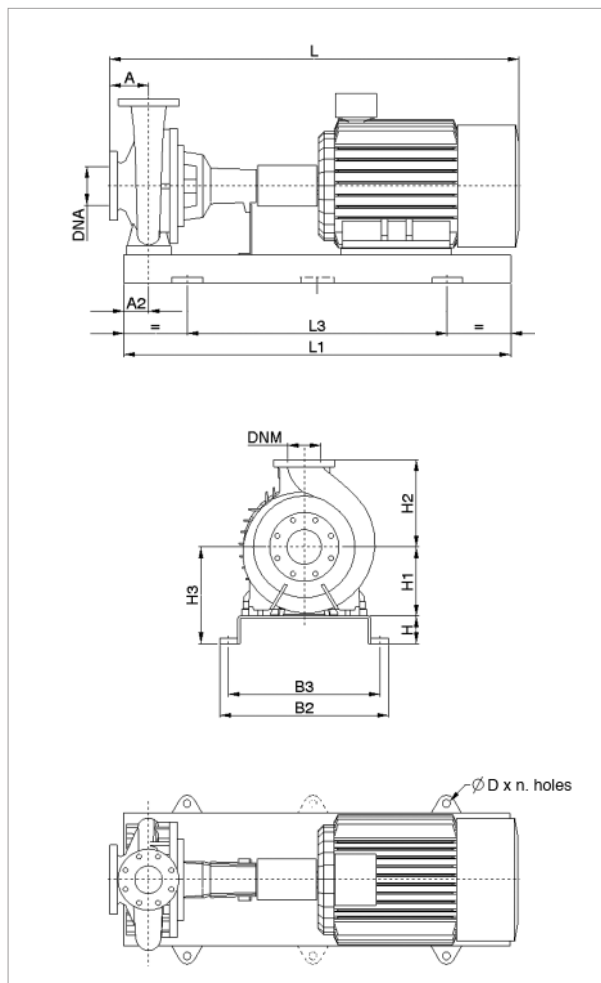
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)											FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 80-250	4	125	90	80	225	280	305	1250	840	540	490	24x4	125	80	1029	218	1170	218
	5,5	125	90	80	225	280	305	1250	840	540	490	24x4	125	80	1099	234	1240	234
	7,5	125	90	80	225	280	305	1250	840	540	490	24x4	125	80	1149	224	1290	239
	11	125	90	80	225	280	305	1250	840	540	490	24x4	125	80	1294	261	1435	276
	15	125	90	80	225	280	305	1250	840	540	490	24x4	125	80	1349	278	1490	293

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 80-330 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 80-330	5,5	132S	3 x 400 V ~ Δ	10,6	IE3
	7,5	132M	3 x 400 V ~ Δ	14,6	IE3
	11	160M	3 x 400 V ~ Δ	20,5	IE3
	15	160L	3 x 400 V ~ Δ	28	IE3
	18,5	180M	3 x 400 V ~ Δ	34	IE3

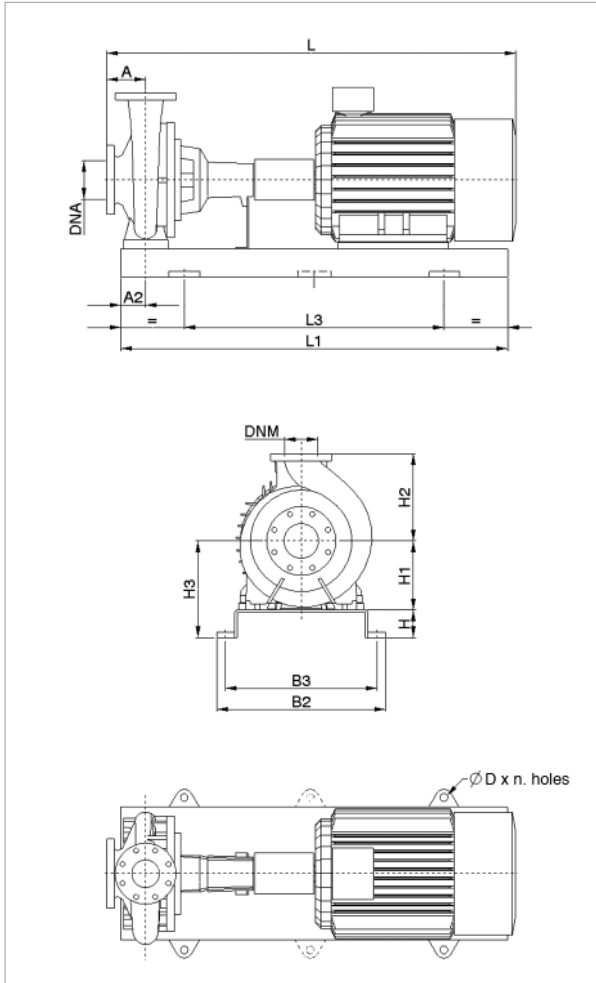
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 80-330	5,5	125	90	80	250	315	330	1250	840	540	490	24x4	125	80	1129	289	1270	289
	7,5	125	90	80	250	315	330	1250	840	540	490	24x4	125	80	1179	279	1320	294
	11	125	90	80	250	315	330	1250	840	540	490	24x4	125	80	1324	316	1465	331
	15	125	90	100	250	315	350	1400	940	610	550	28x4	125	80	1379	352	1520	367
	18,5	125	90	100	250	315	350	1400	940	610	550	28x4	125	80	1399	387	1540	402

Dimension and electrical data based on sizing definition following the instructions on page 183.

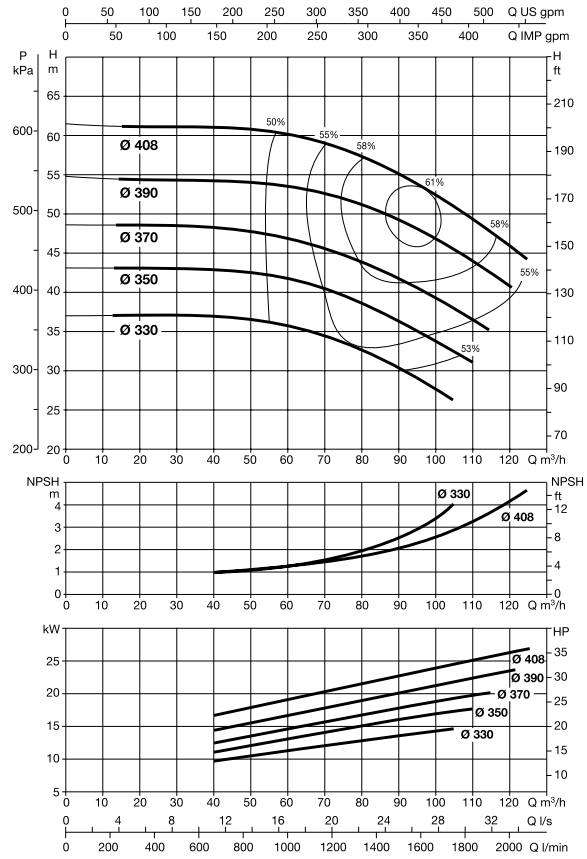
KDN 80-400 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



* Only for markets outside the EU.



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 80-400	11	160M	3 x 400 V ~ Δ	20,5	IE3
	15	160L	3 x 400 V ~ Δ	28	IE3
	18,5	180M	3 x 400 V ~ Δ	34	IE3
	22	180L	3 x 400 V ~ Δ	40,5	IE3
	30	200L	3 x 400 V ~ Δ	53,5	IE3
	37	225S	3 x 400 V ~ Δ	65	IE3

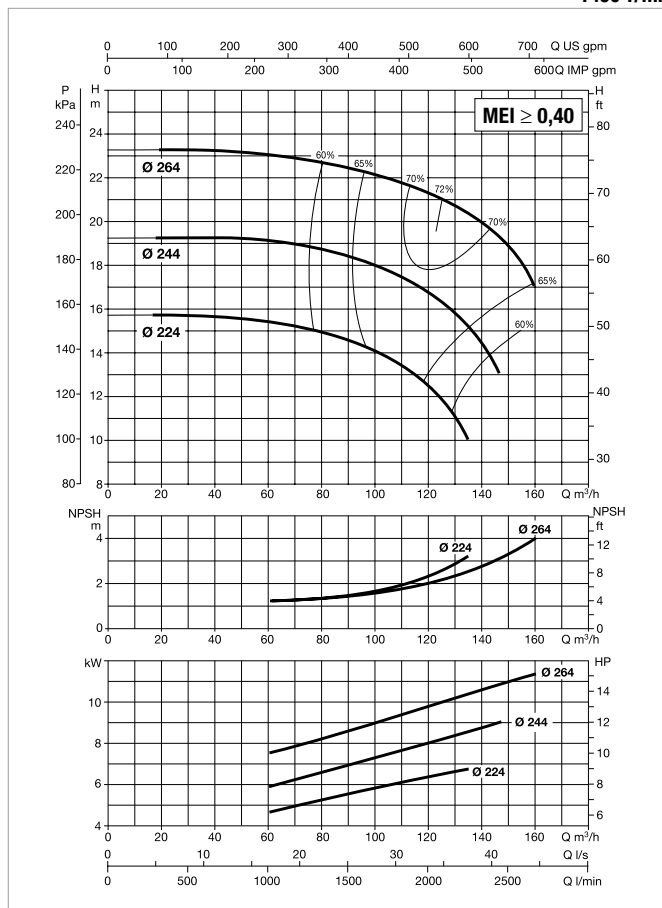
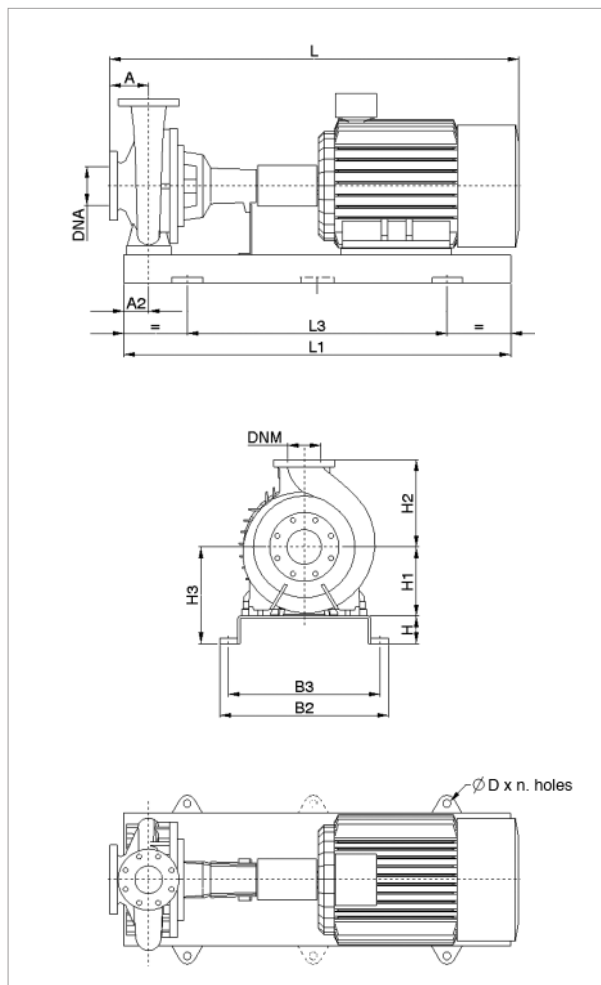
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 80-400	11	125	90	100	280	355	380	1400	940	610	550	28x4	125	80	1324	365	1465	380
	15	125	90	100	280	355	380	1400	940	610	550	28x4	125	80	1379	382	1520	397
	18,5	125	90	100	280	355	380	1400	940	610	550	28x4	125	80	1399	417	1540	432
	22	125	90	100	280	355	380	1400	940	610	550	28x4	125	80	1437	436	1578	451
	30	125	90	100	280	355	380	1400	940	610	550	28x4	125	80	1479	530	1620	545
	37	125	90	100	280	355	380	1400	940	610	550	28x4	125	80	1545	585	1686	600

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 100-250 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 100-250	5,5	132S	3 x 400 V ~ Δ	10,6	IE3
	7,5	132M	3 x 400 V ~ Δ	14,6	IE3
	11	160M	3 x 400 V ~ Δ	20,5	IE3
	15	160L	3 x 400 V ~ Δ	28	IE3
	18,5	180M	3 x 400 V ~ Δ	34	IE3

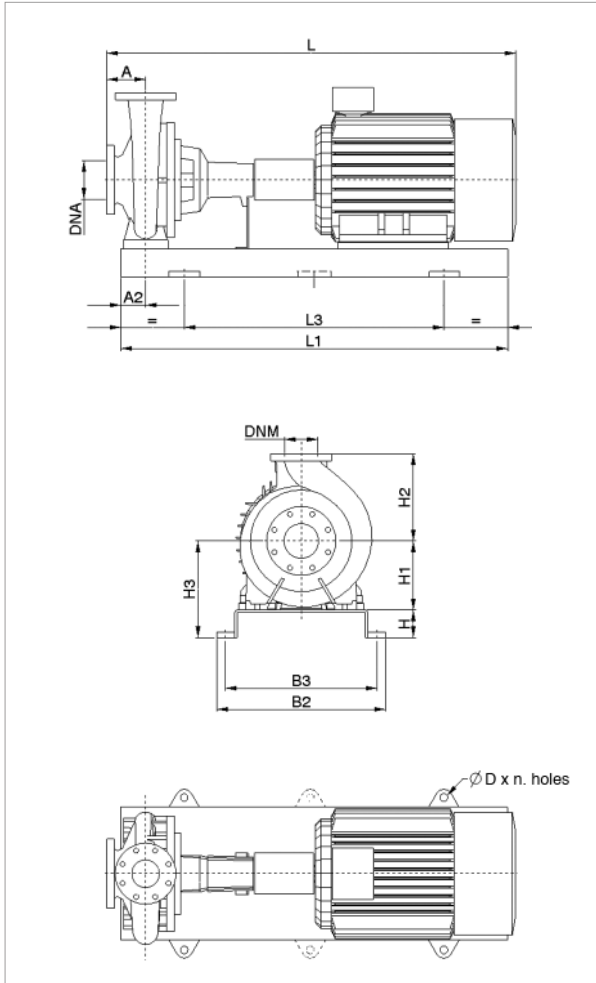
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 100-250	5,5	140	90	80	225	280	305	1250	840	540	490	24x4	125	100	1144	264	1285	264
	7,5	140	90	80	225	280	305	1250	840	540	490	24x4	125	100	1194	254	1335	269
	11	140	90	80	225	280	305	1250	840	540	490	24x4	125	100	1339	291	1480	306
	15	140	90	100	225	280	325	1400	940	610	550	28x4	125	100	1394	327	1535	342
	18,5	140	90	100	225	280	325	1400	940	610	550	28x4	125	100	1414	362	1555	377

Dimension and electrical data based on sizing definition following the instructions on page 183.

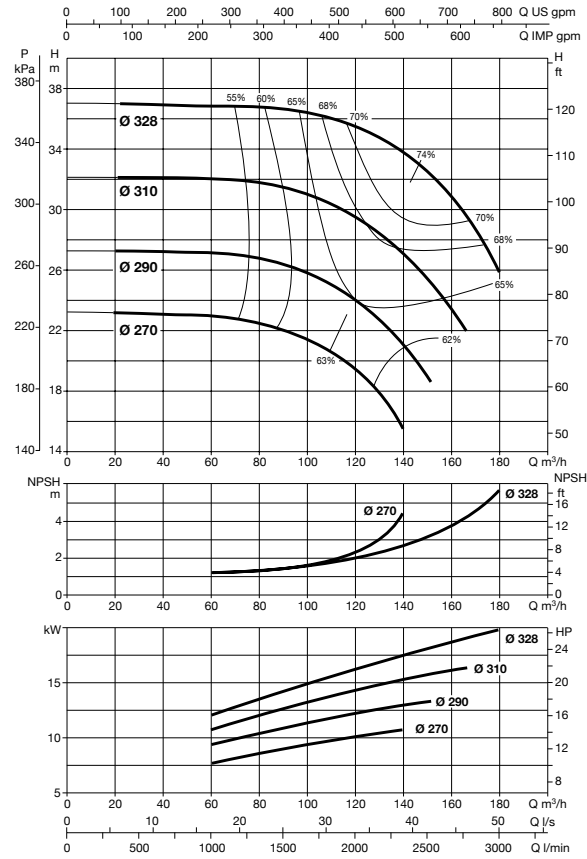
KDN 100-330 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 /min



* Only for markets outside the EU.



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 100-330	5,5	132S	3 x 400 V ~ Δ	10,6	IE3
	7,5	132M	3 x 400 V ~ Δ	14,6	IE3
	11	160M	3 x 400 V ~ Δ	20,5	IE3
	15	160L	3 x 400 V ~ Δ	28	IE3
	18,5	180M	3 x 400 V ~ Δ	34	IE3
	22	180L	3 x 400 V ~ Δ	40,5	IE3
	30	200L	3 x 400 V ~ Δ	53,5	IE3

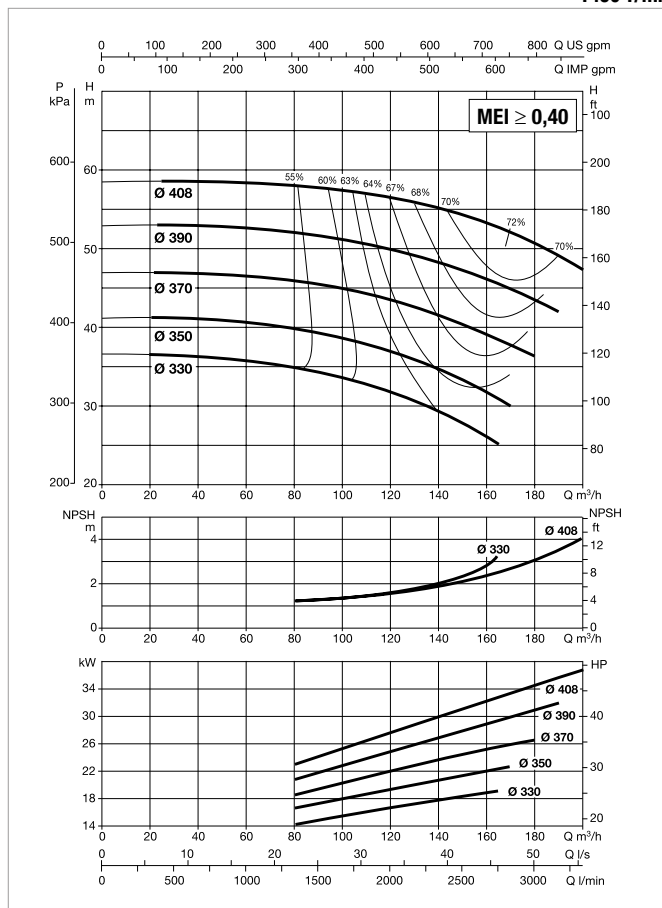
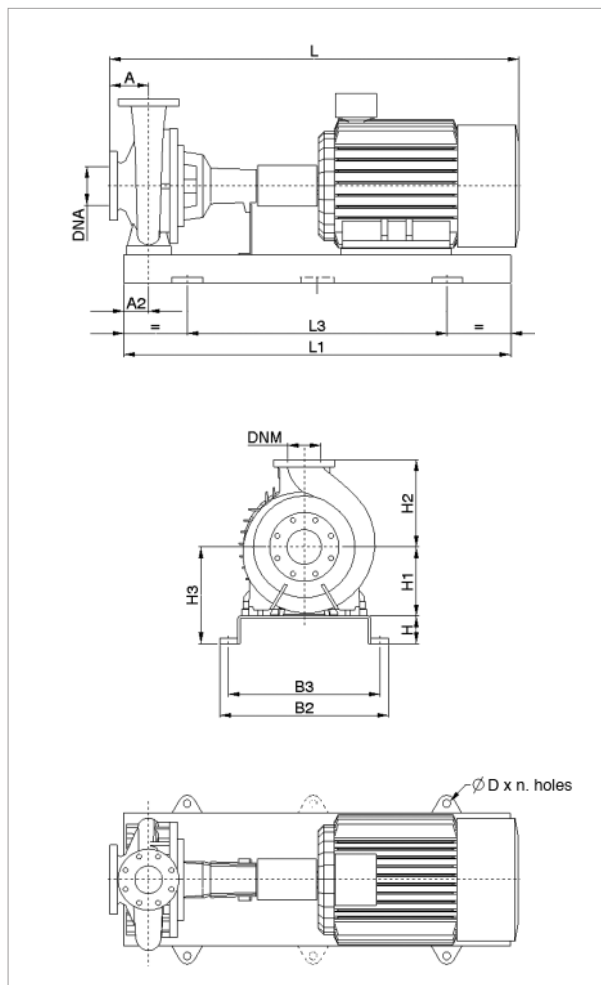
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 100-330	5,5	140	90	80	250	315	330	1250	840	540	490	24x4	125	100	1144	304	1285	304
	7,5	140	90	80	250	315	330	1250	840	540	490	24x4	125	100	1194	294	1335	309
	11	140	90	80	250	315	330	1250	840	540	490	24x4	125	100	1339	331	1480	346
	15	140	90	100	250	315	350	1400	940	610	550	28x4	125	100	1394	367	1535	382
	18,5	140	90	100	250	315	350	1400	940	610	550	28x4	125	100	1414	402	1555	417
	22	140	90	100	250	315	350	1400	940	610	550	28x4	125	100	1452	421	1593	436
	30	140	90	100	250	315	350	1400	940	610	550	28x4	125	100	1494	515	1635	530

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 100-400 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 100-400	11	160M	3 x 400 V ~ Δ	20,5	IE3
	15	160L	3 x 400 V ~ Δ	28	IE3
	18,5	180M	3 x 400 V ~ Δ	34	IE3
	22	180L	3 x 400 V ~ Δ	40,5	IE3
	30	200L	3 x 400 V ~ Δ	53,5	IE3
	37	225S	3 x 400 V ~ Δ	65	IE3
	45	225M	3 x 400 V ~ Δ	68,5	IE3

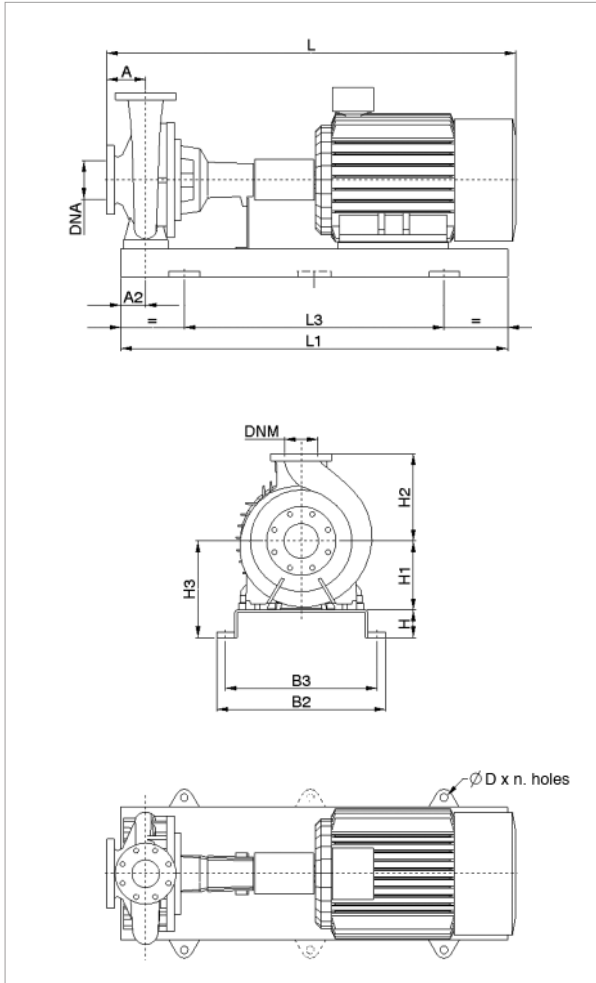
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 100-400	11	140	110	100	280	355	380	1600	1060	660	600	28x4	125	100	1339	397	1480	412
	15	140	110	100	280	355	380	1600	1060	660	600	28x4	125	100	1394	414	1535	429
	18,5	140	110	100	280	355	380	1600	1060	660	600	28x4	125	100	1414	449	1555	464
	22	140	110	100	280	355	380	1600	1060	660	600	28x4	125	100	1452	468	1593	483
	30	140	110	100	280	355	380	1600	1060	660	600	28x4	125	100	1494	562	1635	577
	37	140	110	100	280	355	380	1600	1060	660	600	28x4	125	100	1560	617	1701	632
	45	140	110	100	280	355	380	1600	1060	660	600	28x4	125	100	1590	647	1731	662

Dimension and electrical data based on sizing definition following the instructions on page 183.

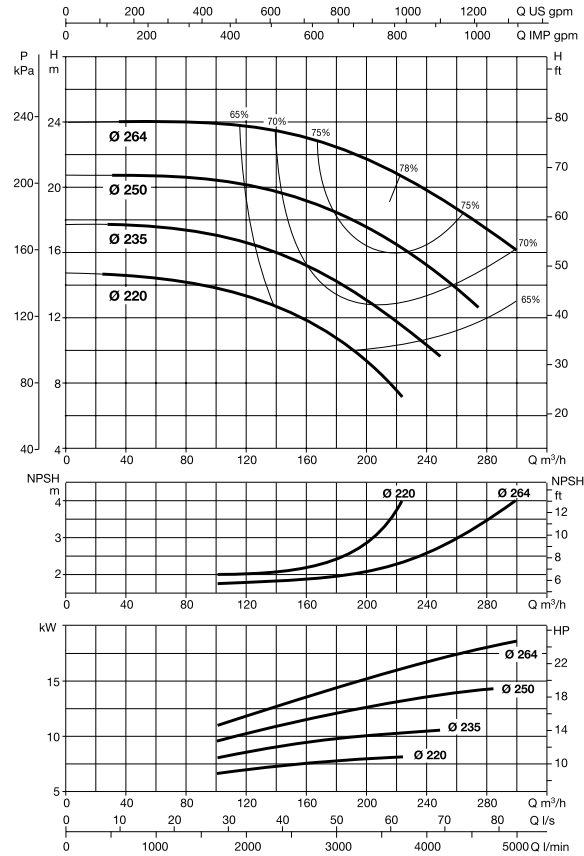
KDN 125-250 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



* Only for markets outside the EU.



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 125-250	5,5	132S	3 x 400 V ~ Δ	10,6	IE3
	7,5	132M	3 x 400 V ~ Δ	14,6	IE3
	11	160M	3 x 400 V ~ Δ	20,5	IE3
	15	160L	3 x 400 V ~ Δ	28	IE3
	18,5	180M	3 x 400 V ~ Δ	34	IE3
	22	180L	3 x 400 V ~ Δ	40,5	IE3

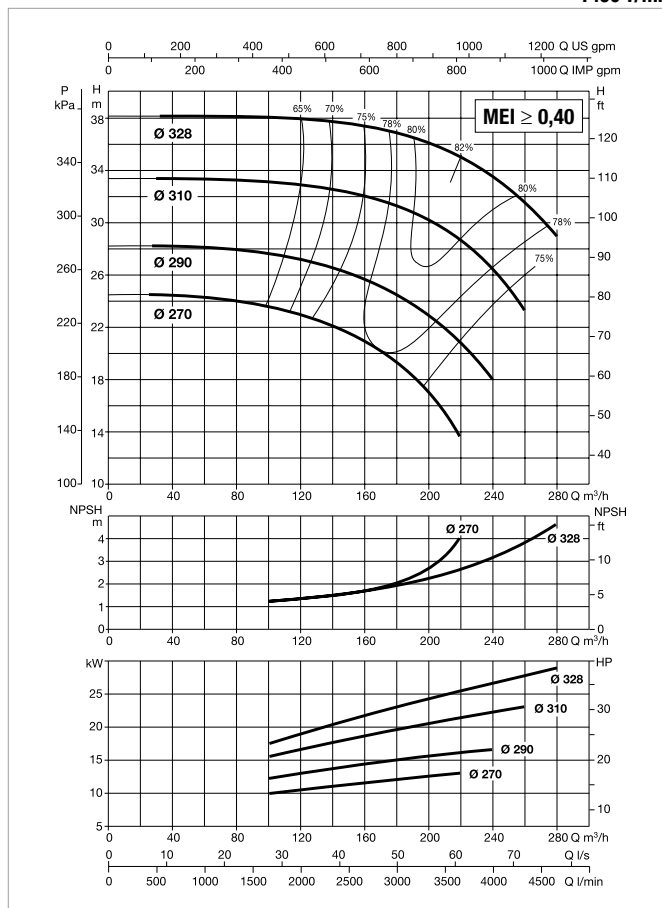
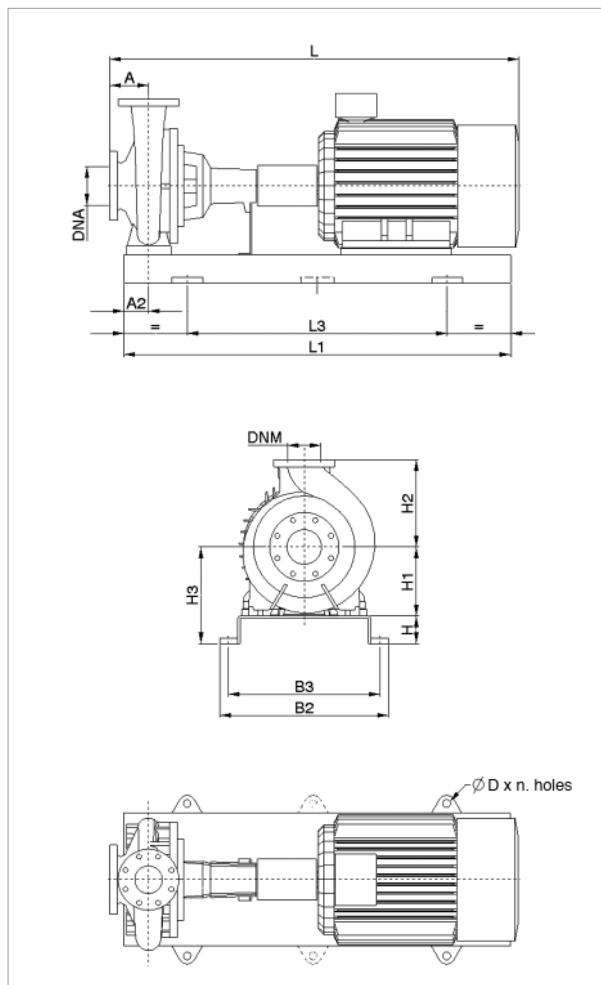
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)											FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 125-250	5,5	140	90	80	250	355	330	1250	840	540	490	24x4	150	125	1144	274	1285	274
	7,5	140	90	80	250	355	330	1250	840	540	490	24x4	150	125	1194	264	1335	279
	11	140	90	80	250	355	330	1250	840	540	490	24x4	150	125	1339	301	1480	316
	15	140	90	100	250	355	350	1400	940	610	550	28x4	150	125	1394	337	1535	352
	18,5	140	90	100	250	355	350	1400	940	610	550	28x4	150	125	1414	372	1555	387
	22	140	90	100	250	355	350	1400	940	610	550	28x4	150	125	1452	391	1593	406

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 125-330 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 125-330	11	160M	3 x 400 V ~ Δ	20,5	IE3
	15	160L	3 x 400 V ~ Δ	28	IE3
	18,5	180M	3 x 400 V ~ Δ	34	IE3
	22	180L	3 x 400 V ~ Δ	40,5	IE3
	30	200L	3 x 400 V ~ Δ	53,5	IE3
	37	225S	3 x 400 V ~ Δ	65	IE3

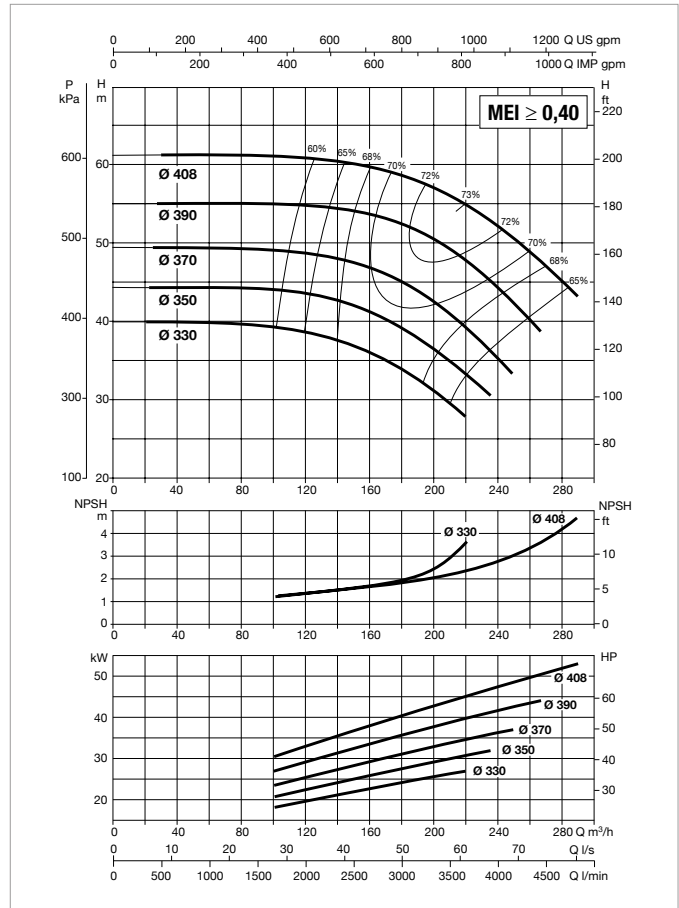
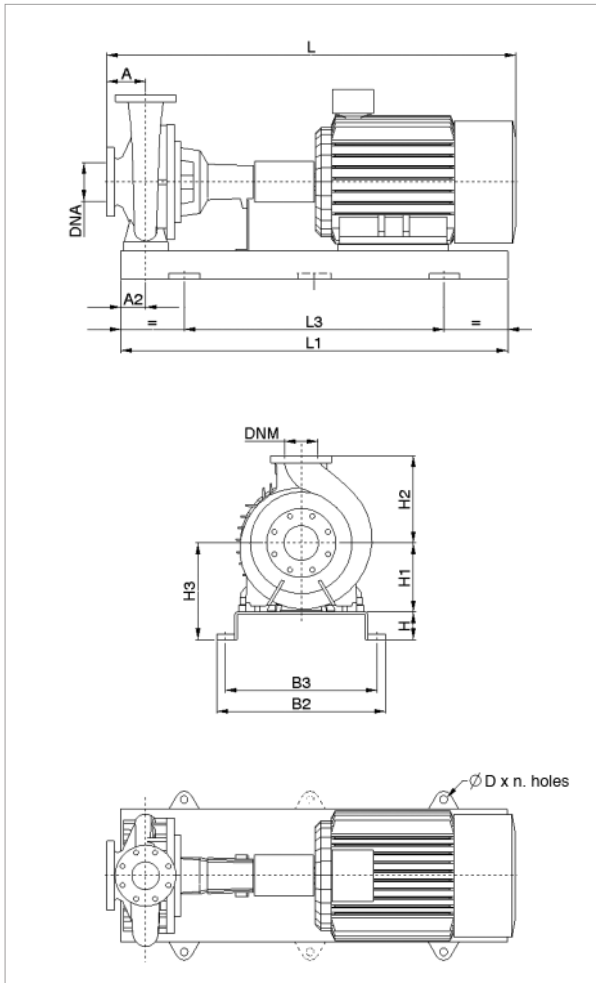
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 125-330	11	140	110	100	280	355	380	1600	1060	660	600	28x4	150	125	1339	387	1480	402
	15	140	110	100	280	355	380	1600	1060	660	600	28x4	150	125	1394	404	1535	419
	18,5	140	110	100	280	355	380	1600	1060	660	600	28x4	150	125	1414	439	1555	454
	22	140	110	100	280	355	380	1600	1060	660	600	28x4	150	125	1452	458	1593	473
	30	140	110	100	280	355	380	1600	1060	660	600	28x4	150	125	1494	552	1635	567
	37	140	110	100	280	355	380	1600	1060	660	600	28x4	150	125	1560	607	1701	622

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 125-400 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 125-400	18,5	180M	3 x 400 V ~ Δ	34	IE3
	22	180L	3 x 400 V ~ Δ	40,5	IE3
	30	200L	3 x 400 V ~ Δ	53,5	IE3
	37	225S	3 x 400 V ~ Δ	65	IE3
	45	225M	3 x 400 V ~ Δ	78,5	IE3
	55	250M	3 x 400 V ~ Δ	96	IE3
	75	280S	3 x 400 V ~ Δ	130	IE3

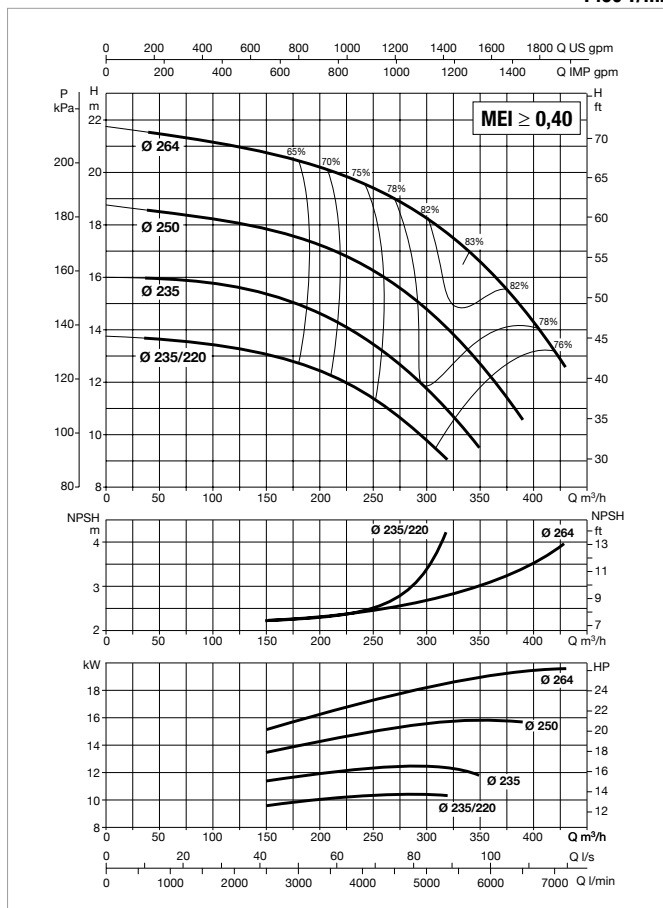
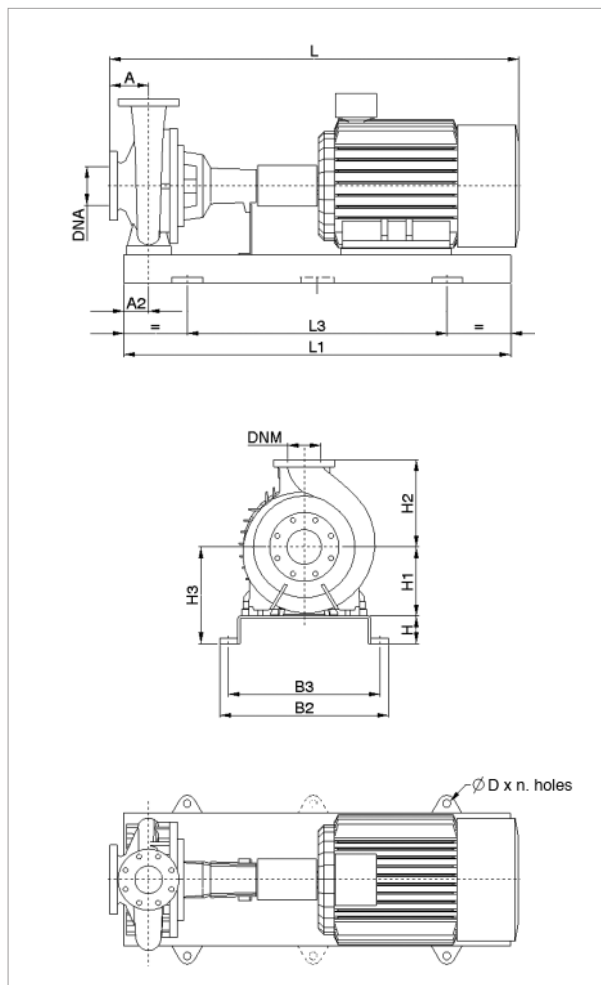
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 125-400	18,5	140	110	100	315	400	415	1600	1060	660	600	28x4	150	125	1414	469	1555	484
	22	140	110	100	315	400	415	1600	1060	660	600	28x4	150	125	1452	488	1593	503
	30	140	110	100	315	400	415	1600	1060	660	600	28x4	150	125	1494	582	1635	597
	37	140	110	100	315	400	415	1600	1060	660	600	28x4	150	125	1560	637	1701	652
	45	140	110	100	315	400	415	1600	1060	660	600	28x4	150	125	1590	667	1731	682
	55	140	110	100	315	400	415	1600	1060	660	600	28x4	150	125	1660	774	1801	789
	75	140	110	100	315	400	415	1800	1200	730	670	28x4	150	125	1715	962	1856	977

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 150-250 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 150-250	11	160M	3 x 400 V ~ Δ	20,5	IE3
	15	160L	3 x 400 V ~ Δ	28	IE3
	18,5	180M	3 x 400 V ~ Δ	34	IE3
	22	180L	3 x 400 V ~ Δ	40,5	IE3
	30	200L	3 x 400 V ~ Δ	53,5	IE3

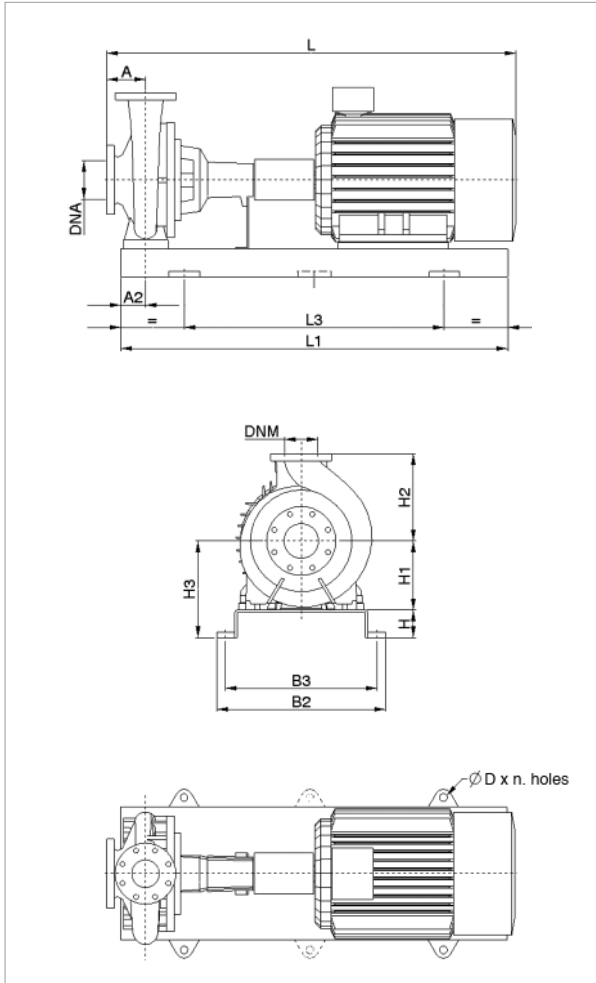
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 150-250	11	160	110	100	280	375	380	1600	1060	660	600	28x4	200	150	1359	377	1540	392
	15	160	110	100	280	375	380	1600	1060	660	600	28x4	200	150	1414	394	1595	409
	18,5	160	110	100	280	375	380	1600	1060	660	600	28x4	200	150	1434	429	1615	444
	22	160	110	100	280	375	380	1600	1060	660	600	28x4	200	150	1472	448	1653	463
	30	160	110	100	280	375	380	1600	1060	660	600	28x4	200	150	1514	542	1695	557

Dimension and electrical data based on sizing definition following the instructions on page 183.

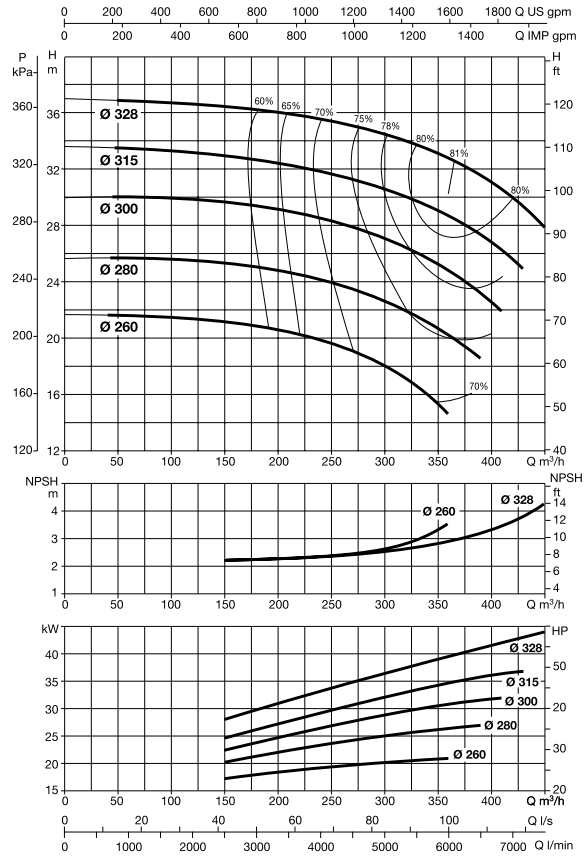
KDN 150-330 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



* Only for markets outside the EU.



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 150-330	18,5	180M	3 x 400 V ~ Δ	34	IE3
	22	180L	3 x 400 V ~ Δ	40,5	IE3
	30	200L	3 x 400 V ~ Δ	53,5	IE3
	37	225S	3 x 400 V ~ Δ	65	IE3
	45	225M	3 x 400 V ~ Δ	78,5	IE3
	55	250M	3 x 400 V ~ Δ	96	IE3

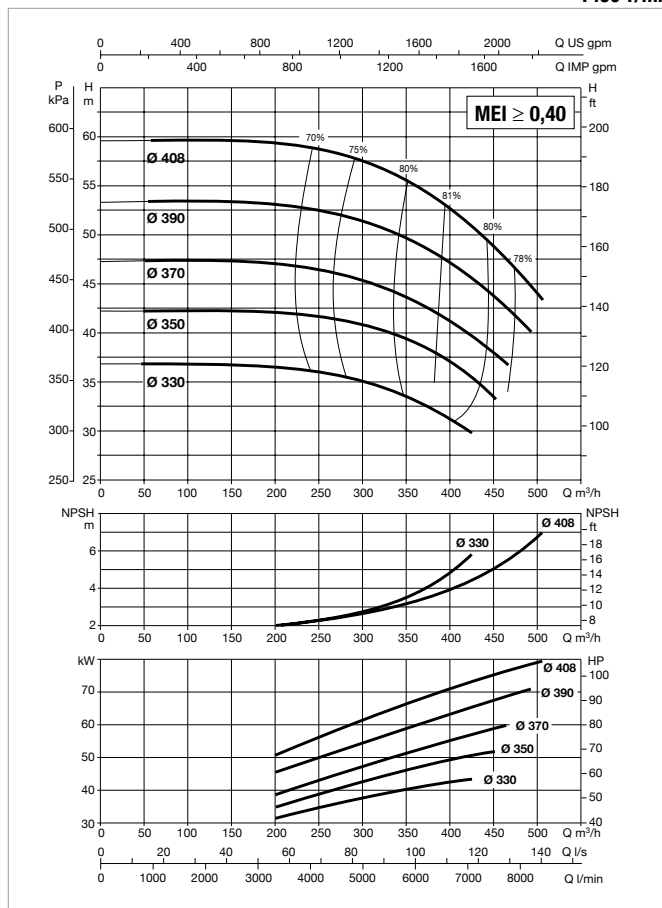
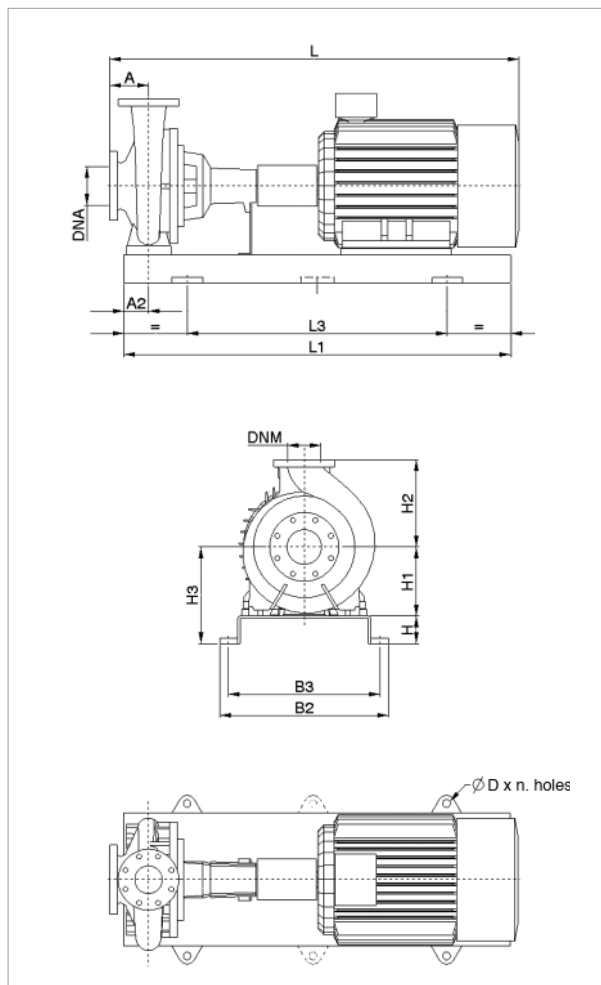
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 150-330	18,5	160	110	100	315	400	415	1800	1200	730	670	28x4	200	150	1574	590	1755	605
	22	160	110	100	315	400	415	1800	1200	730	670	28x4	200	150	1612	609	1793	624
	30	160	110	100	315	400	415	1800	1200	730	670	28x4	200	150	1654	703	1835	718
	37	160	110	100	315	400	415	1800	1200	730	670	28x4	200	150	1720	758	1901	773
	45	160	110	100	315	400	415	1800	1200	730	670	28x4	200	150	1750	788	1931	803
	55	160	110	100	315	400	415	1800	1200	730	670	28x4	200	150	1820	895	2001	910

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 150-400 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 150-400	37	225S	3 x 400 V ~ Δ	65	IE3
	45	225M	3 x 400 V ~ Δ	78,5	IE3
	55	250M	3 x 400 V ~ Δ	96	IE3
	75	280S	3 x 400 V ~ Δ	130	IE3
	90	280M	3 x 400 V ~ Δ	156	IE3
	110	315S	3 x 400 V ~ Δ	190	IE3

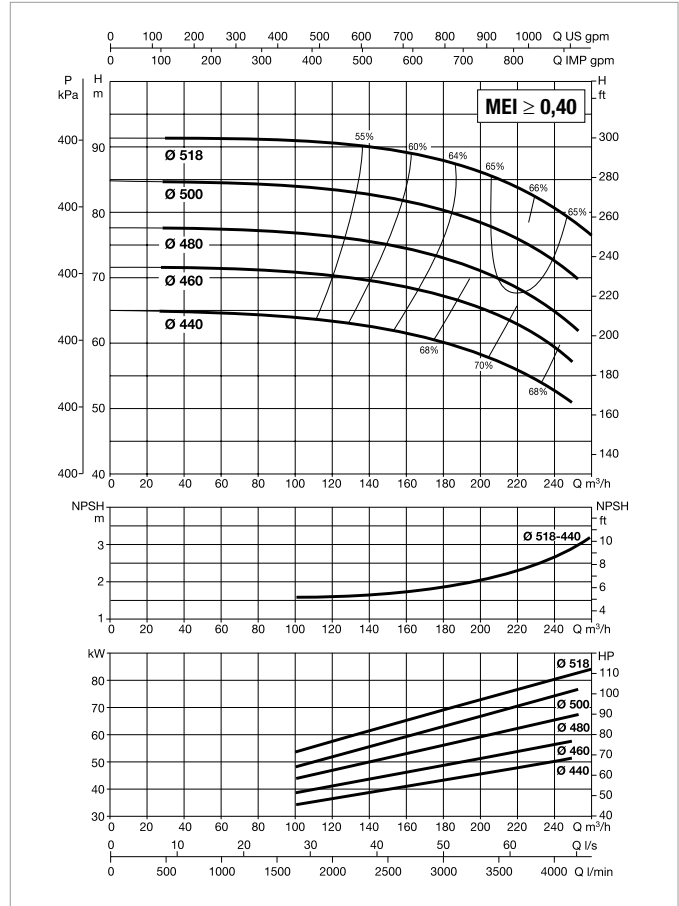
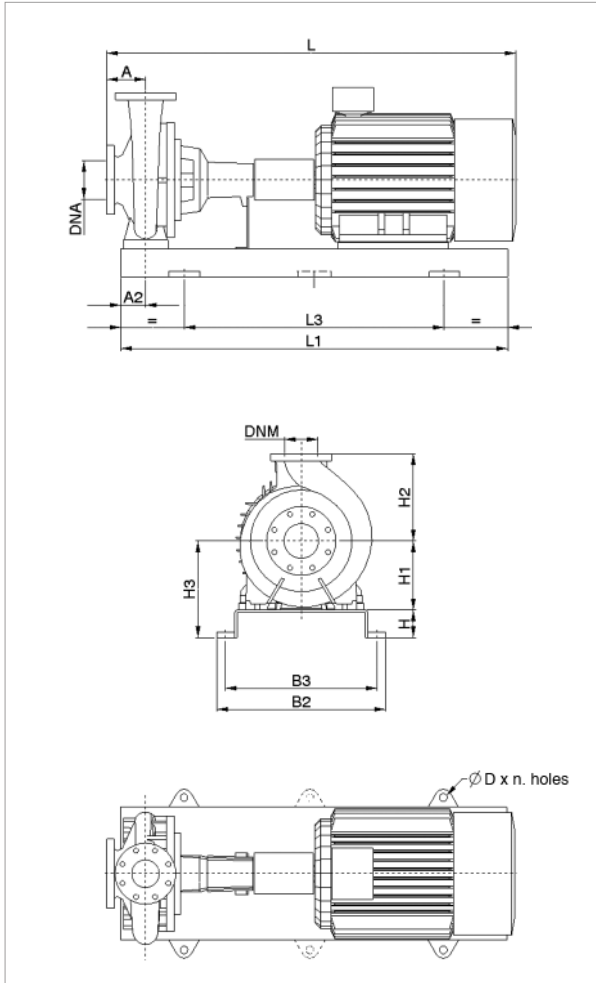
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		STANDARD COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 150-400	37	160	110	100	315	450	415	1800	1200	730	670	28x4	200	150	1720	801	1901	816
	45	160	110	100	315	450	415	1800	1200	730	670	28x4	200	150	1750	831	1931	846
	55	160	110	100	315	450	415	1800	1200	730	670	28x4	200	150	1820	938	2001	953
	75	160	110	100	315	450	415	1800	1200	730	670	28x4	200	150	1875	1040	2056	1055
	90	160	110	100	315	450	415	1800	1200	730	670	28x4	200	150	1925	1145	2106	1160
	110	160	110	120	315	450	435	2000	1340	910	830	28x4	200	150	2175	1595	2356	1610

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 150-550A - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 /min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 150-500A	37	225S	3 x 400 V ~ Δ	65	IE3
	45	225M	3 x 400 V ~ Δ	78,5	IE3
	55	250M	3 x 400 V ~ Δ	96	IE3
	75	280S	3 x 400 V ~ Δ	130	IE3
	90	280M	3 x 400 V ~ Δ	156	IE3
	110	315S	3 x 400 V ~ Δ	190	IE3

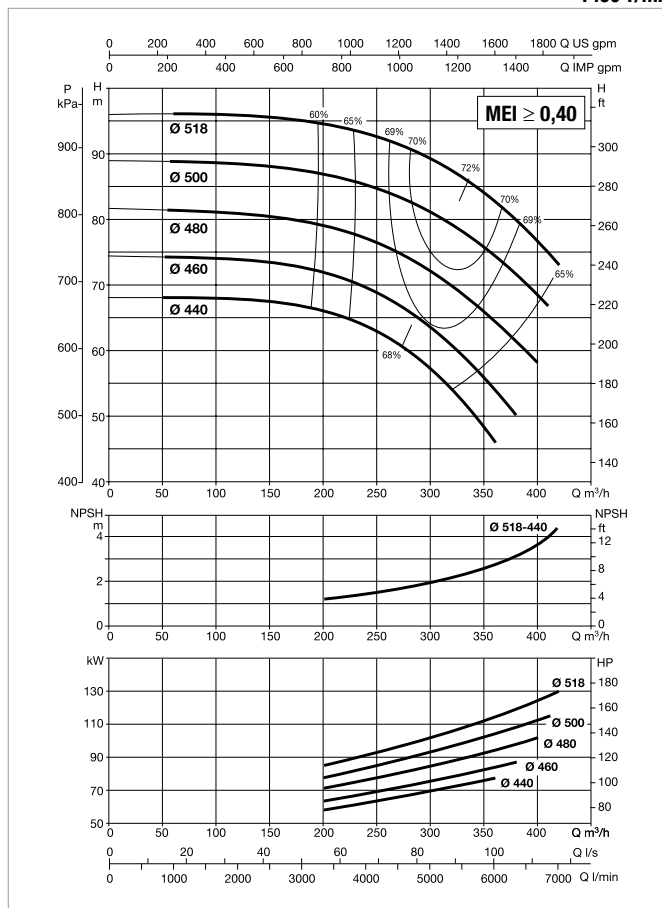
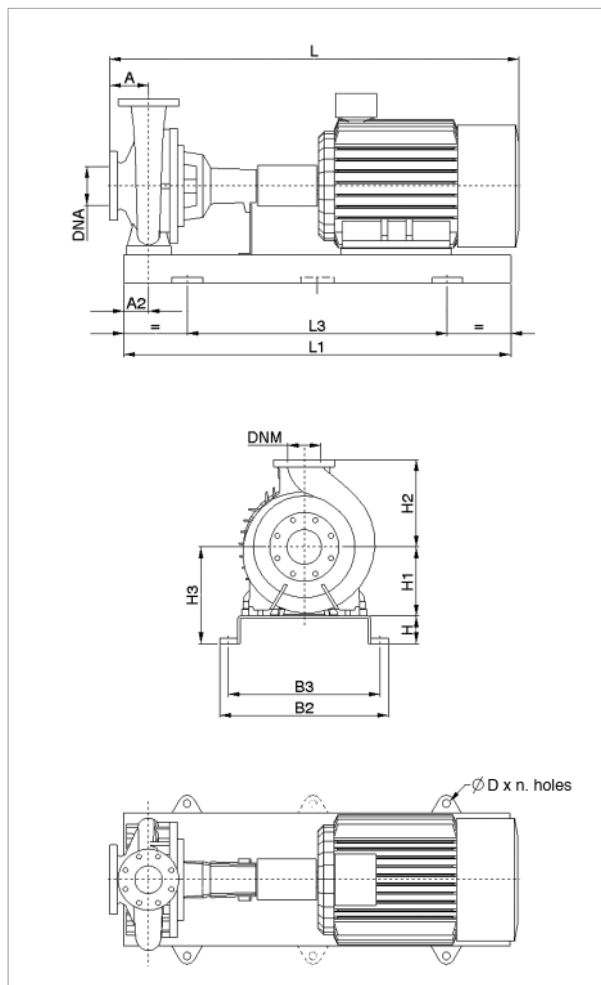
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 150-500A	37	180	110	100	355	500	455	1800	1200	730	670	28x4	200	150	1740	913	1921	928
	45	180	110	100	355	500	455	1800	1200	730	670	28x4	200	150	1770	943	1951	958
	55	180	110	100	355	500	455	1800	1200	730	670	28x4	200	150	1840	1050	2021	1065
	75	180	110	100	355	500	455	1800	1200	730	670	28x4	200	150	1895	1152	2076	1167
	90	180	110	100	355	500	455	1800	1200	730	670	28x4	200	150	1945	1257	2126	1272
	110	180	110	120	355	500	475	2000	1340	910	830	28x4	200	150	2195	1707	2376	1722

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 150-500 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 150-500	75	280S	3 x 400 V ~ Δ	130	IE3
	90	280M	3 x 400 V ~ Δ	156	IE3
	110	315S	3 x 400 V ~ Δ	190	IE3
	132	315M	3 x 400 V ~ Δ	230	IE3
	160	315L	3 x 400 V ~ Δ	275	IE3
	200	315L	3 x 400 V ~ Δ	340	IE3
	250	355	3 x 400 V ~ Δ	420	IE3

MODEL	POWER (kW)	UNIT DIMENSION (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 150-500	75	180	110	100	355	500	455	1800	1200	730	670	28x4	200	150	1895	1152	2076	1167
	90	180	110	100	355	500	455	1800	1200	730	670	28x4	200	150	1945	1257	2126	1272
	110	180	110	120	355	500	475	2000	1340	910	830	28x4	200	150	2212	1707	2393	1722
	132	180	120	205	355	500	560	1770	1170	715	670	20x4	200	150	2322	1780	2503	1795
	160	180	120	205	355	500	560	1770	1170	715	670	20x4	200	150	2322	1860	2503	1875
	200	180	120	205	355	500	560	1770	1170	715	670	20x4	200	150	2322	1955	2503	1970
	250	180	120	205	355	500	560	2000	1400	960	915	20x4	200	150	2442	(*)	2623	(*)

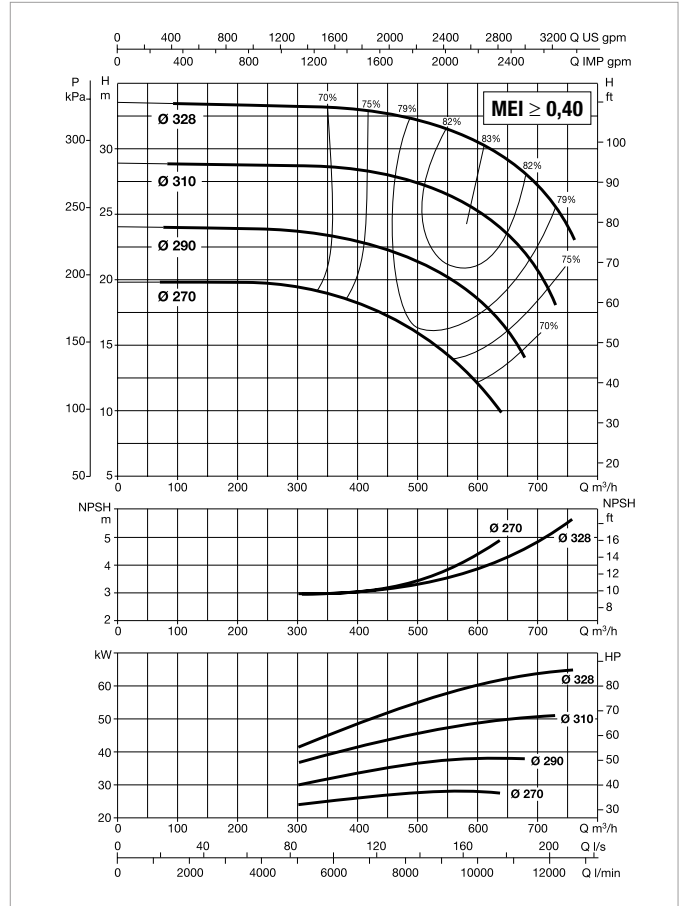
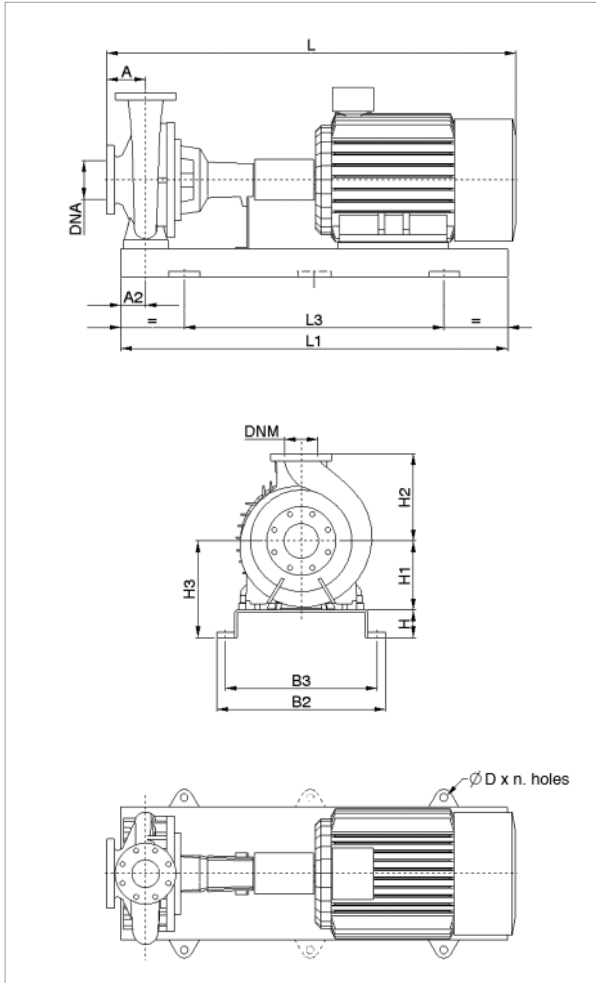
Dimension and electrical data based on sizing definition following the instructions on page 183.

(*) Data on request.

KDN 200-330 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 /min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 200-330	30	200L	3 x 400 V ~ Δ	53,5	IE3
	37	225S	3 x 400 V ~ Δ	65	IE3
	45	225M	3 x 400 V ~ Δ	78,5	IE3
	55	250M	3 x 400 V ~ Δ	96	IE3
	75	280S	3 x 400 V ~ Δ	130	IE3
	90	280M	3 x 400 V ~ Δ	156	IE3

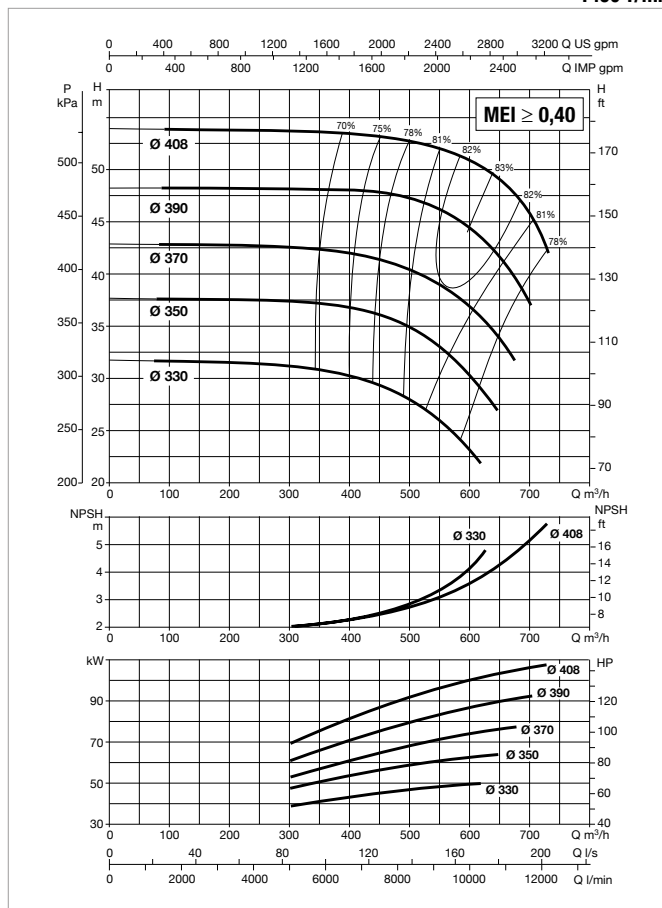
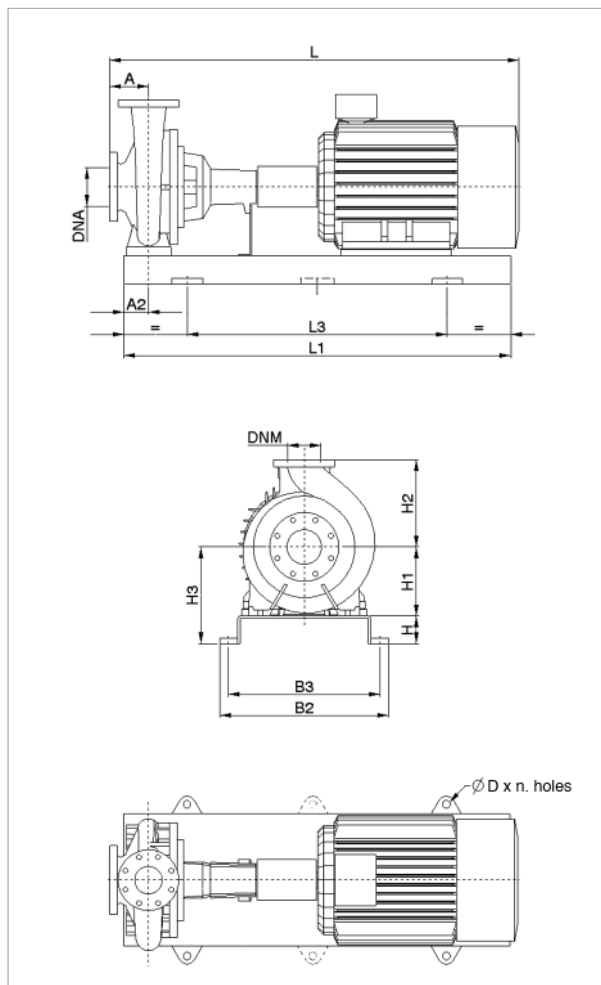
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 200-330	30	200	110	100	355	450	455	1800	1200	730	670	28x4	250	200	1694	808	1875	823
	37	200	110	100	355	450	455	1800	1200	730	670	28x4	250	200	1760	814	1941	829
	45	200	110	100	355	450	455	1800	1200	730	670	28x4	250	200	1790	877	1971	892
	55	200	110	100	355	450	455	1800	1200	730	670	28x4	250	200	1860	888	2041	903
	75	200	110	100	355	450	455	1800	1200	730	670	28x4	250	200	1915	985	2096	1000
	90	200	110	100	355	450	455	1800	1200	730	670	28x4	250	200	1965	1087	2146	1102

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 200-400 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 200-400	37	225S	3 x 400 V ~ Δ	66	IE3
	45	225M	3 x 400 V ~ Δ	78,5	IE3
	55	250M	3 x 400 V ~ Δ	96	IE3
	75	280S	3 x 400 V ~ Δ	130	IE3
	90	280M	3 x 400 V ~ Δ	156	IE3
	110	315S	3 x 400 V ~ Δ	190	IE3
	132	315M	3 x 400 V ~ Δ	230	IE3

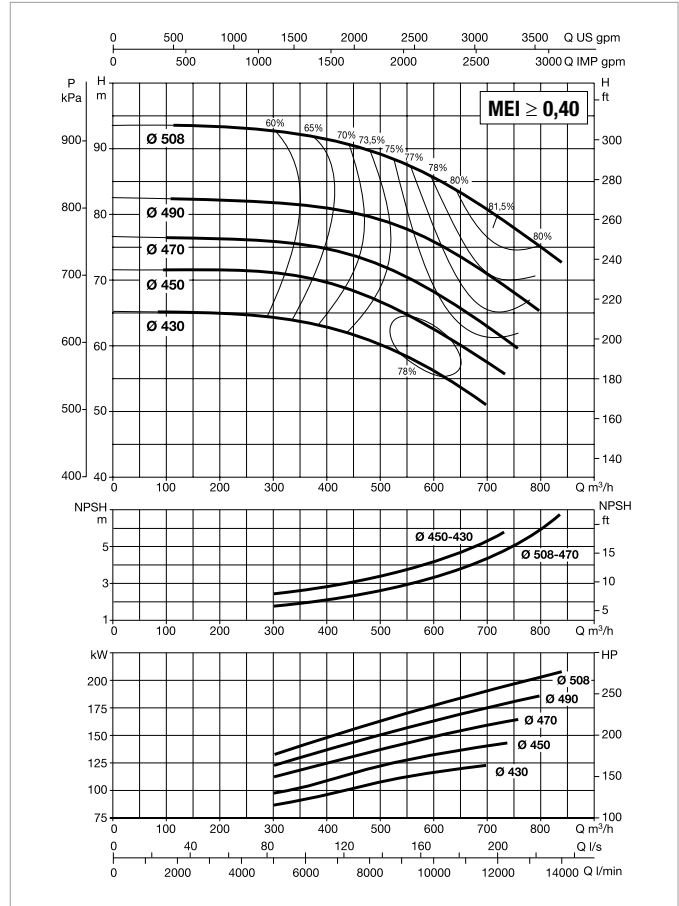
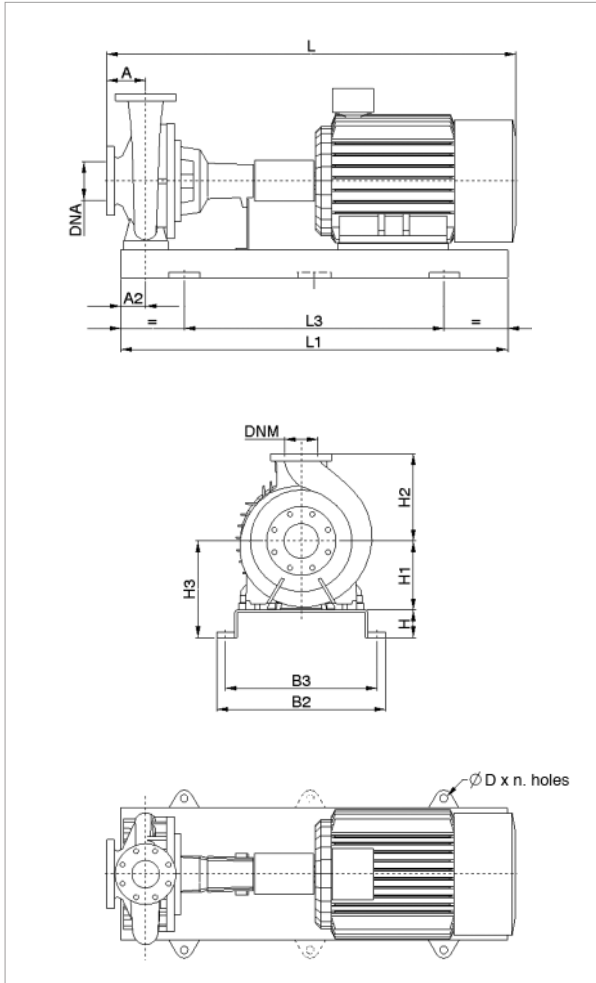
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 200-400	37	185	110	100	355	500	455	1800	1200	730	670	28x4	250	200	1745	893	1926	908
	45	185	110	100	355	500	455	1800	1200	730	670	28x4	250	200	1775	923	1956	938
	55	185	110	100	355	500	455	1800	1200	730	670	28x4	250	200	1845	1030	2026	1045
	75	185	110	100	355	500	455	1800	1200	730	670	28x4	250	200	1900	1132	2081	1147
	90	185	110	100	355	500	455	1800	1200	730	670	28x4	250	200	1950	1237	2131	1252
	110	185	110	120	355	500	475	2000	1340	910	830	28x4	250	200	2217	1687	2398	1702
	132	185	125	205	355	500	560	1770	1170	715	670	20x4	250	200	2327	1510	2508	1525

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 200-500 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 200-500	75	280S	3 x 400 V ~ Δ	130	IE3
	90	280M	3 x 400 V ~ Δ	156	IE3
	110	315S	3 x 400 V ~ Δ	190	IE3
	132	315M	3 x 400 V ~ Δ	230	IE3
	160	315L	3 x 400 V ~ Δ	175	IE3
	200	315L	3 x 400 V ~ Δ	340	IE3
	250	355	3 x 400 V ~ Δ	420	IE3

MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 200-500	75	185	145	185	400	580	585	1650	1050	960	915	20x4	250	200	2006	1120	2186	1135
	90	185	145	185	400	580	585	1650	1050	960	915	20x4	250	200	2006	1105	2186	1120
	110	185	145	205	400	580	605	1800	1200	960	915	20x4	250	200	2113	1735	2293	1750
	132	185	145	205	400	580	605	1800	1200	960	915	20x4	250	200	2113	1675	2293	1690
	160	185	145	205	400	580	605	1800	1200	960	915	20x4	250	200	2113	1665	2293	1680
	200	185	145	205	400	580	605	1800	1200	960	915	20x4	250	200	2113	1600	2293	1615
	250	185	145	205	400	580	605	2050	1450	960	915	20x4	250	200	(*)	(*)	(*)	(*)

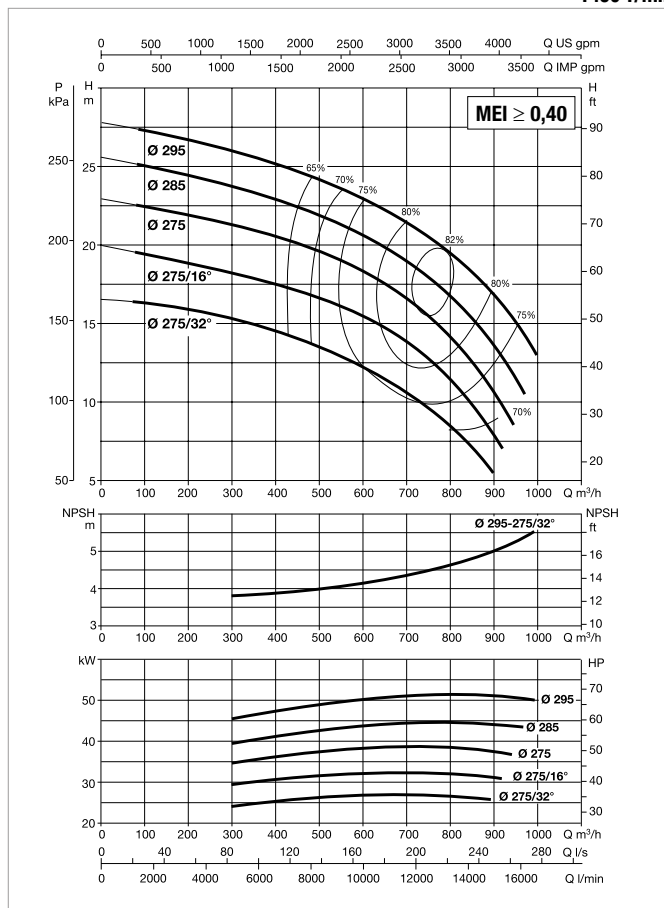
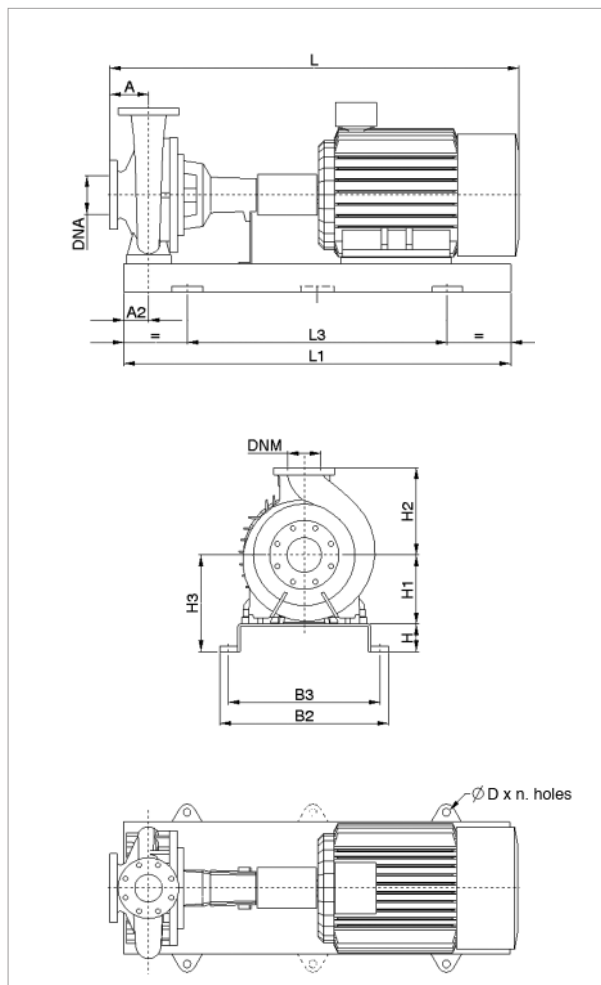
Dimension and electrical data based on sizing definition following the instructions on page 183.

(*) Data on request.

KDN 250-330A - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 250-330A	30	200L	3 x 400 V ~ Δ	53,5	IE3
	37	225S	3 x 400 V ~ Δ	65	IE3
	45	225M	3 x 400 V ~ Δ	78,5	IE3
	55	250M	3 x 400 V ~ Δ	96	IE3
	75	280S	3 x 400 V ~ Δ	130	IE3

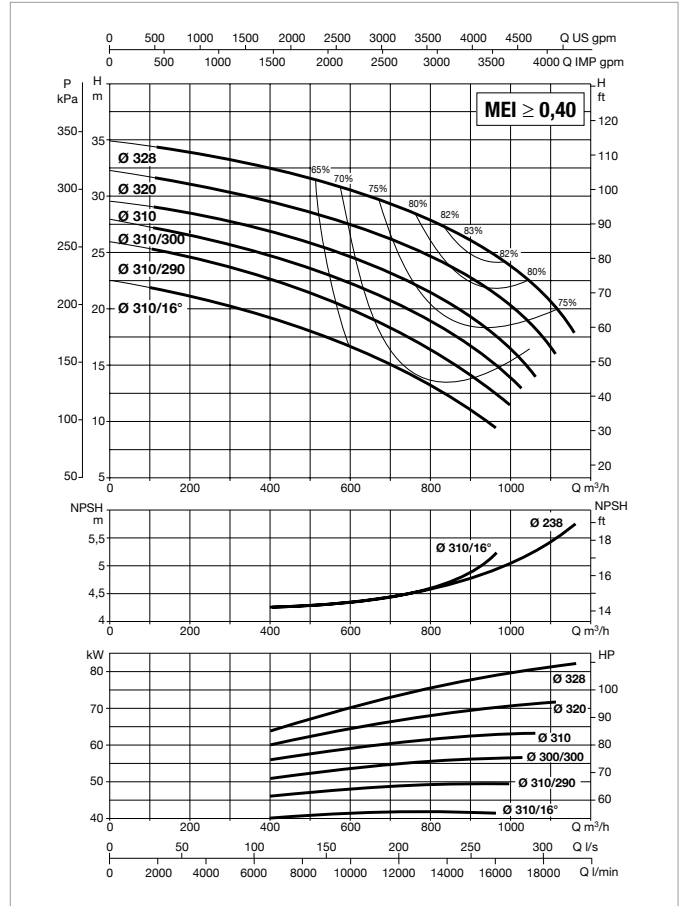
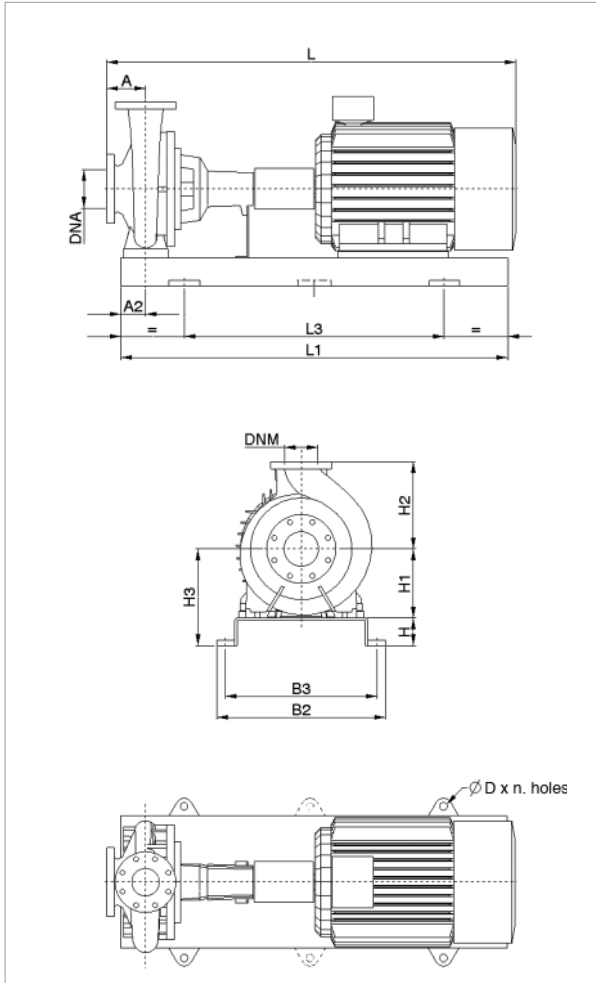
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)											FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 250-330A	30	250	135	120	400	525	520	2000	1340	910	830	28x4	300	250	1744	912	1985	927
	37	250	135	120	400	525	520	2000	1340	910	830	28x4	300	250	1810	918	2051	933
	45	250	135	120	400	525	520	2000	1340	910	830	28x4	300	250	1840	981	2081	996
	55	250	135	120	400	525	520	2000	1340	910	830	28x4	300	250	1910	992	2151	1007
	75	250	135	120	400	525	520	2000	1340	910	830	28x4	300	250	1965	1089	2206	1104

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 250-330 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 /min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 250-330	30	200L	3 x 400 V ~ Δ	53,5	IE3
	37	225S	3 x 400 V ~ Δ	65	IE3
	45	225M	3 x 400 V ~ Δ	78,5	IE3
	55	250M	3 x 400 V ~ Δ	96	IE3
	75	280S	3 x 400 V ~ Δ	130	IE3
	90	280M	3 x 400 V ~ Δ	156	IE3
	110	315S	3 x 400 V ~ Δ	190	IE3

MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 250-330	30	250	135	120	400	525	520	2000	1340	910	830	28x4	300	250	1744	912	1985	927
	37	250	135	120	400	525	520	2000	1340	910	830	28x4	300	250	1810	967	2051	982
	45	250	135	120	400	525	520	2000	1340	910	830	28x4	300	250	1840	997	2081	1012
	55	250	135	120	400	525	520	2000	1340	910	830	28x4	300	250	1910	1104	2151	1119
	75	250	135	120	400	525	520	2000	1340	910	830	28x4	300	250	1965	1206	2206	1221
	90	250	135	120	400	525	520	2000	1340	910	830	28x4	300	250	2015	1311	2256	1326
	110	250	135	120	400	525	520	2000	1340	910	830	28x4	300	250	2282	1707	2523	1722

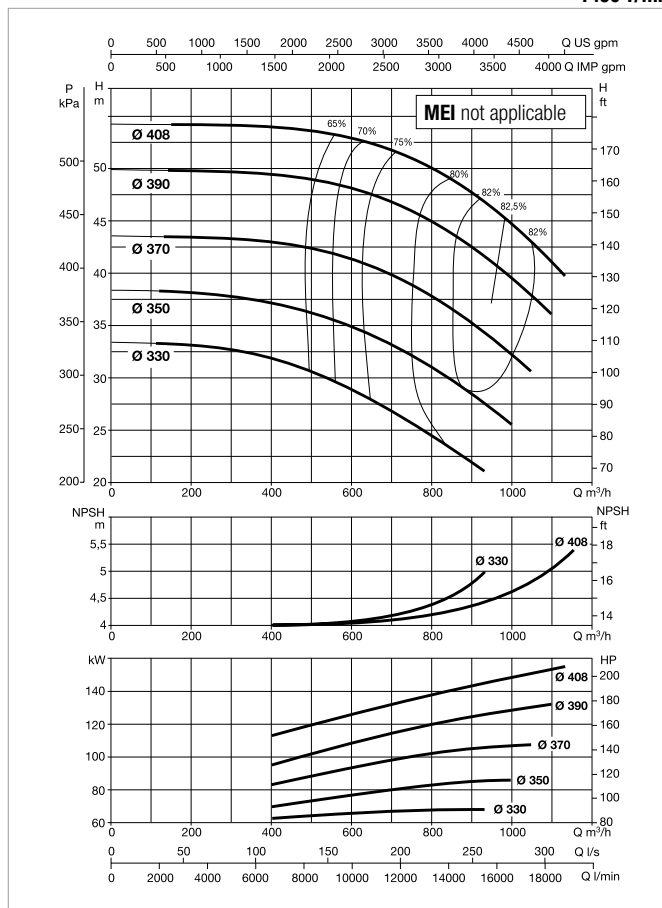
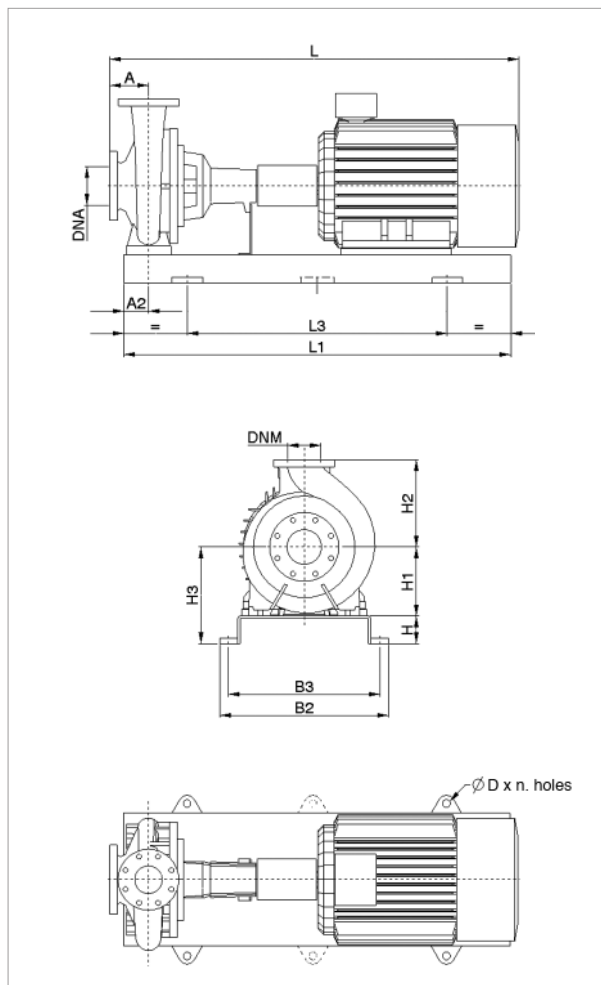
Dimension and electrical data based on sizing definition following the instructions on page 183.



KDN 250-400 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 250-400	75	280S	3 x 400 V ~ Δ	130	IE3
	90	280M	3 x 400 V ~ Δ	156	IE3
	110	315S	3 x 400 V ~ Δ	190	IE3
	132	315M	3 x 400 V ~ Δ	230	IE3
	160	315L	3 x 400 V ~ Δ	275	IE3

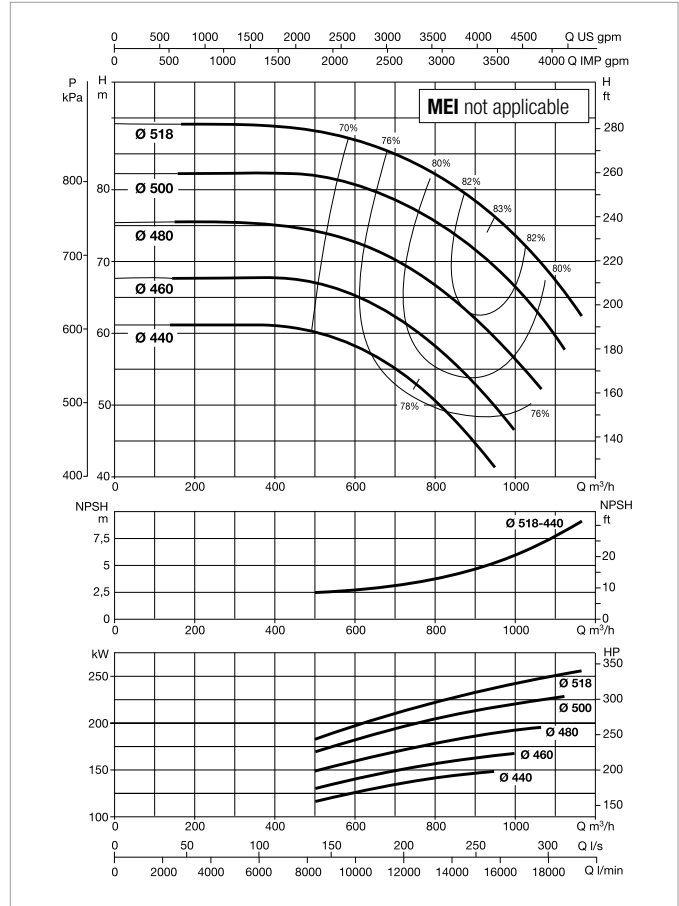
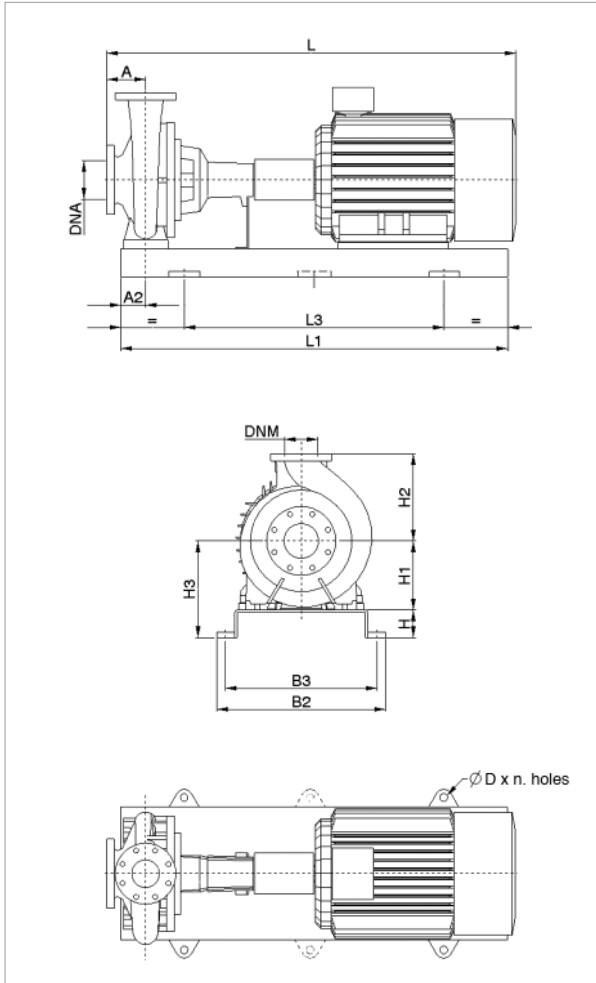
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)											FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 250-400	75	225	135	120	400	600	520	2000	1340	910	830	28x4	300	250	2050	1446	2231	1461
	90	225	135	120	400	600	520	2000	1340	910	830	28x4	300	250	2100	1551	2281	1566
	110	225	135	120	400	600	520	2000	1340	910	830	28x4	300	250	2367	1947	2548	1962
	132	225	155	210	400	600	610	1880	1280	995	950	20x6	300	250	2477	1770	2658	1785
	160	225	155	210	400	600	610	1880	1280	995	950	20x6	300	250	2477	1850	2658	1865

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 250-500A - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 250-500A	132	315M	3 x 400 V ~ Δ	230	IE3
	160	315L	3 x 400 V ~ Δ	275	IE3
	200	315L	3 x 400 V ~ Δ	340	IE3
	250	355	3 x 400 V ~ Δ	420	IE3
	315	355	3 x 400 V ~ Δ	530	IE3

MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 250-500A	132	300	155	210	500	500	710	2250	1650	995	950	20x6	300	250	2572	1820	2823	1835
	160	300	155	210	500	500	710	2250	1650	995	950	20x6	300	250	2572	1900	2823	1915
	200	300	155	210	500	500	710	2250	1650	955	950	20x6	300	250	2572	1995	2823	2010
	250	300	155	210	500	500	(*)	(*)	(*)	(*)	(*)	(*)	300	250	(*)	(*)	(*)	(*)
	315	300	155	210	500	500	710	2500	1900	1095	1050	20x6	300	250	(*)	(*)	(*)	(*)

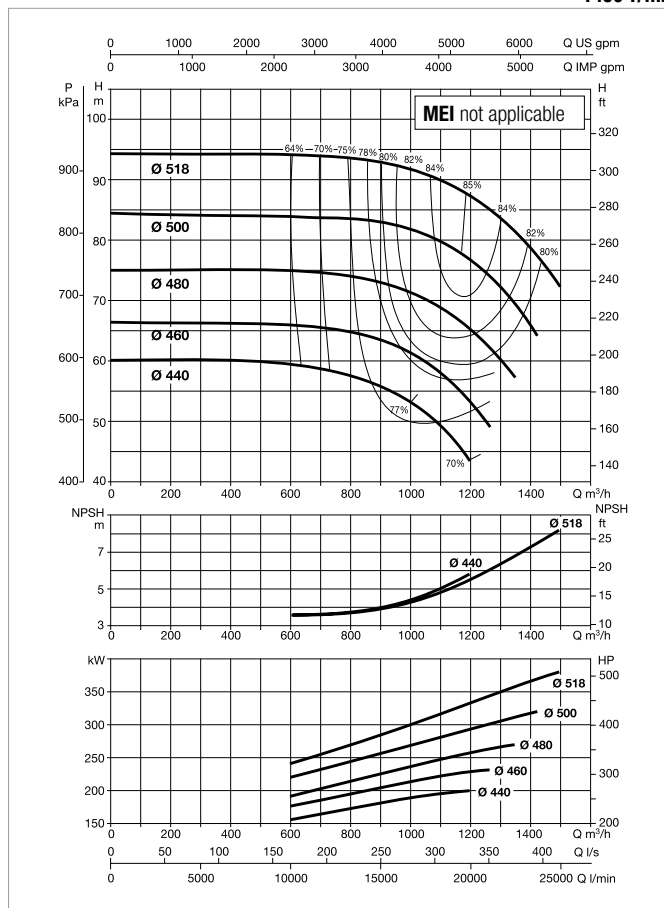
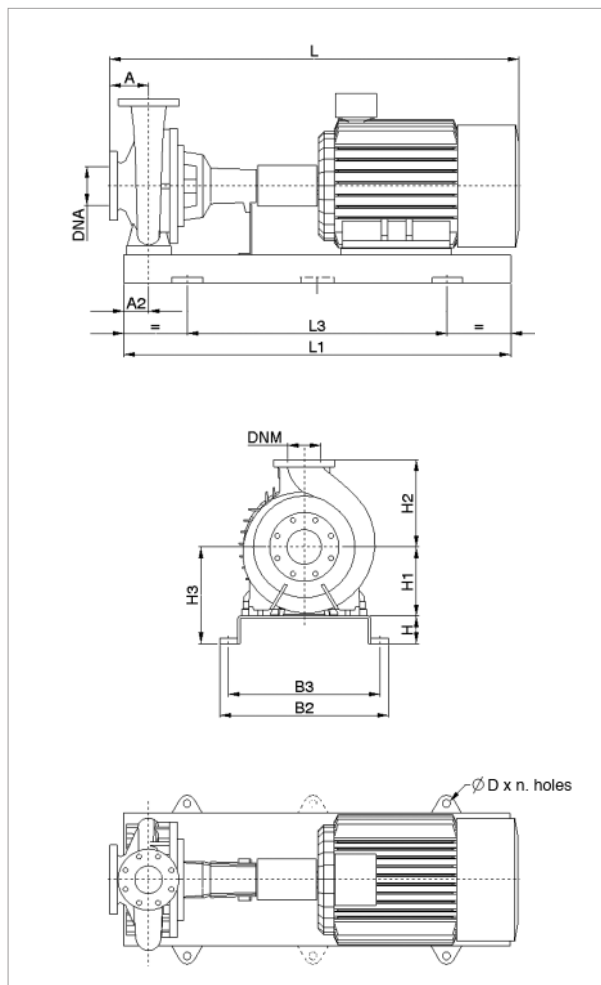
Dimension and electrical data based on sizing definition following the instructions on page 183.

(*) Data on request.

KDN 250-500 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 250-500	110	315S	3 x 400 V ~ Δ	190	IE3
	132	315M	3 x 400 V ~ Δ	230	IE3
	160	315L	3 x 400 V ~ Δ	275	IE3
	200	315L	3 x 400 V ~ Δ	340	IE3
	250	355	3 x 400 V ~ Δ	420	IE3
	315	355	3 x 400 V ~ Δ	530	IE3
	355	355	3 x 400 V ~ Δ	(*)	IE3
	400	400	3 x 400 V ~ Δ	(*)	IE3

MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 250-500	110	300	155	210	500	500	710	2250	1650	995	950	20x6	300	250	2462	1760	2713	1775
	132	300	155	210	500	500	710	2250	1650	995	950	20x6	300	250	2572	1820	2823	1835
	160	300	155	210	500	500	710	2250	1650	995	950	20x6	300	250	2572	1900	2823	1915
	200	300	155	210	500	500	710	2250	1650	995	950	20x6	300	250	(*)	1995	(*)	2010
	250	300	155	210	500	500	710	2500	1900	1095	1050	20x5	300	250	(*)	(*)	(*)	(*)
	315	300	155	210	500	500	710	2500	1900	1095	1050	20x6	300	250	(*)	(*)	(*)	(*)
	355	300	155	210	500	500	710	2500	1900	1095	1050	20x6	300	250	(*)	(*)	(*)	(*)
400	300	155	210	500	500	710	2650	2050	1200	1155	20x6	300	250	(*)	(*)	(*)	(*)	

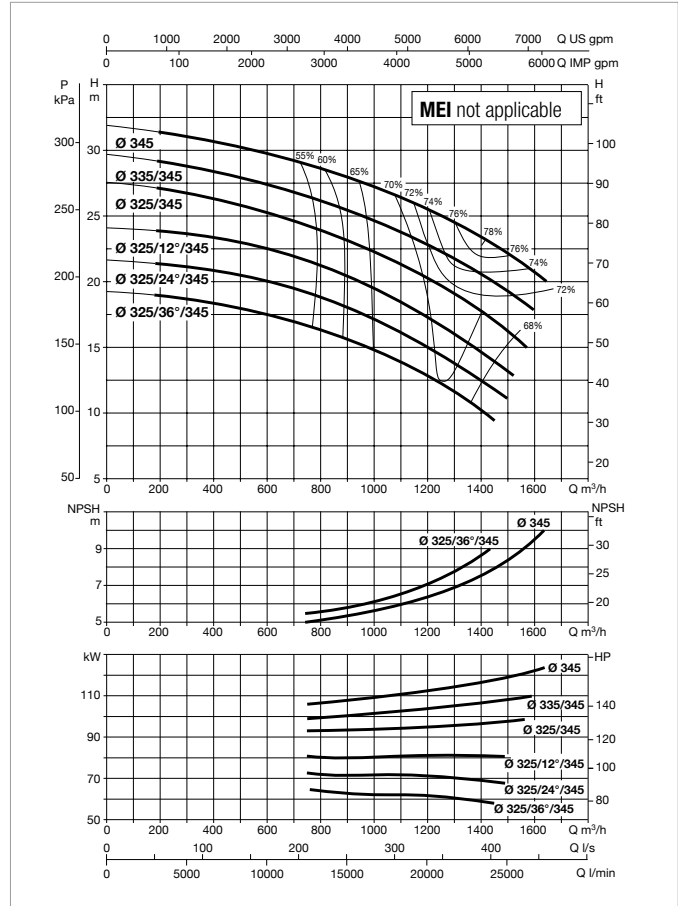
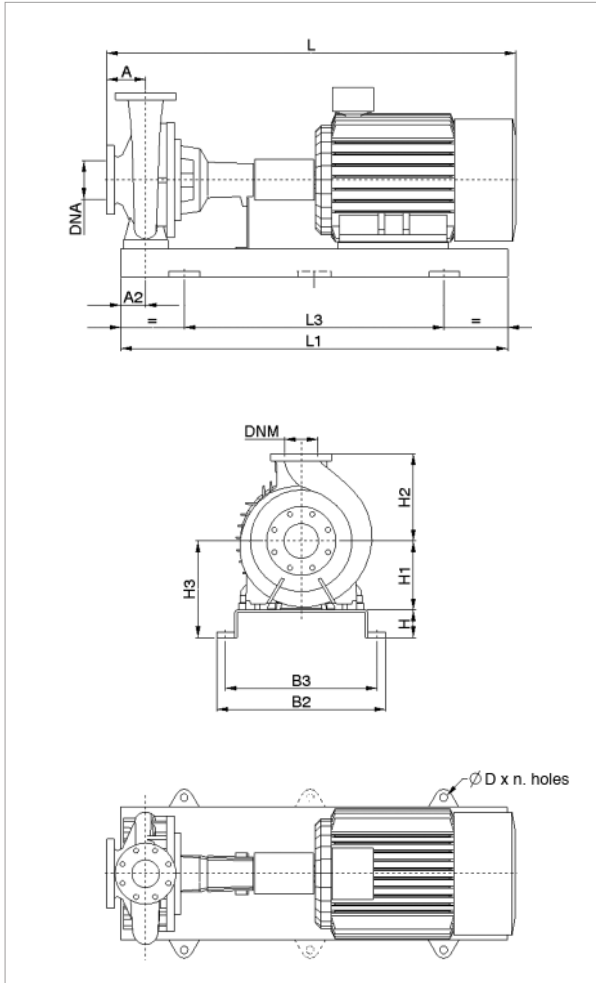
Dimension and electrical data based on sizing definition following the instructions on page 183.

(*) Data on request.

KDN 300-330 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 300-330	37	225S	3 x 400 V ~ Δ	65	IE3
	45	225M	3 x 400 V ~ Δ	78,5	IE3
	55	250M	3 x 400 V ~ Δ	96	IE3
	75	280S	3 x 400 V ~ Δ	130	IE3
	90	280M	3 x 400 V ~ Δ	156	IE3
	110	315S	3 x 400 V ~ Δ	190	IE3
	132	315M	3 x 400 V ~ Δ	230	IE3

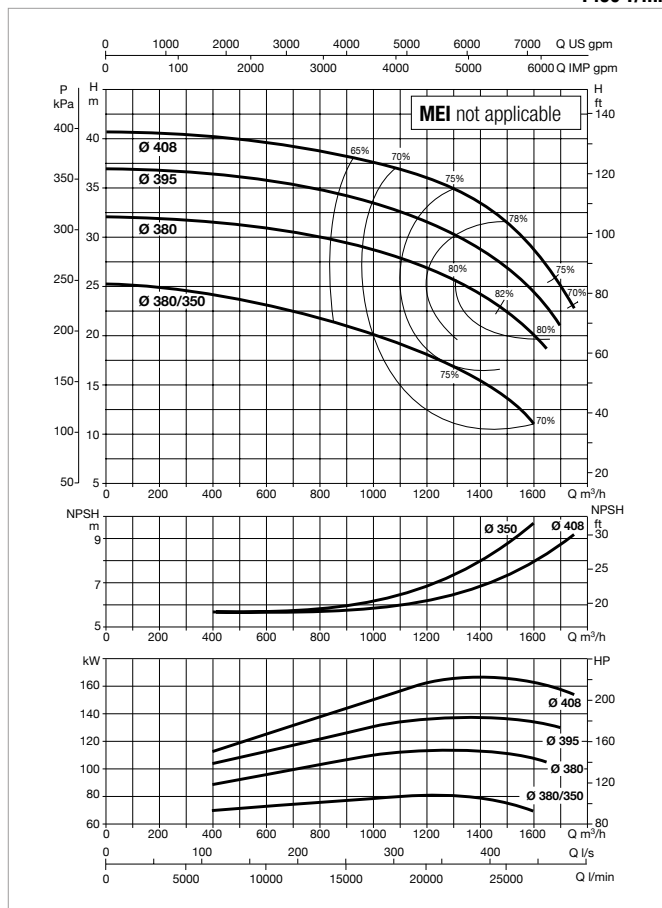
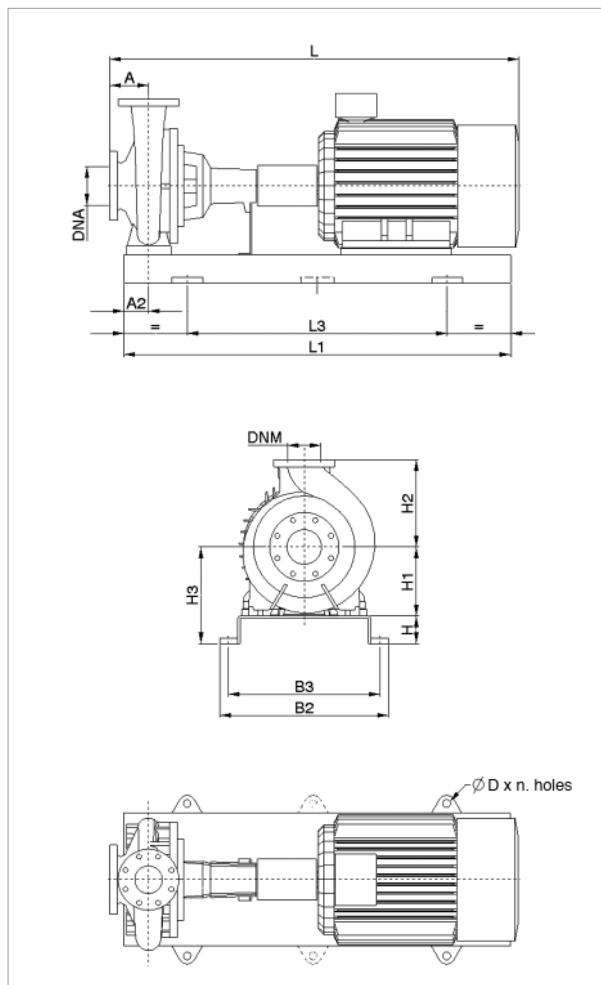
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 300-330	37	300	230	185	500	670	685	1650	1050	960	915	16x4	350	300	1910	1100	2151	1115
	45	300	230	185	500	670	685	1650	1050	960	915	16x4	350	300	1940	1130	2181	1145
	55	300	230	185	500	670	685	1700	1100	960	915	16x4	350	300	2010	1237	2251	1252
	75	300	230	185	500	670	685	1800	1200	960	915	20x4	350	300	2065	1339	2306	1354
	90	300	230	185	500	670	685	1800	1200	960	915	20x4	350	300	2115	1444	2356	1459
	110	300	230	205	500	670	705	1930	1330	960	915	20x4	350	300	2382	1840	2623	1855
	132	300	230	205	500	670	705	1930	1330	960	915	20x4	350	300	2492	1900	2733	1915

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 300-400M - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 300-400M	110	315S	3 x 400 V ~ Δ	190	IE3
	132	315M	3 x 400 V ~ Δ	230	IE3
	160	315L	3 x 400 V ~ Δ	275	IE3
	200	315L	3 x 400 V ~ Δ	340	IE3

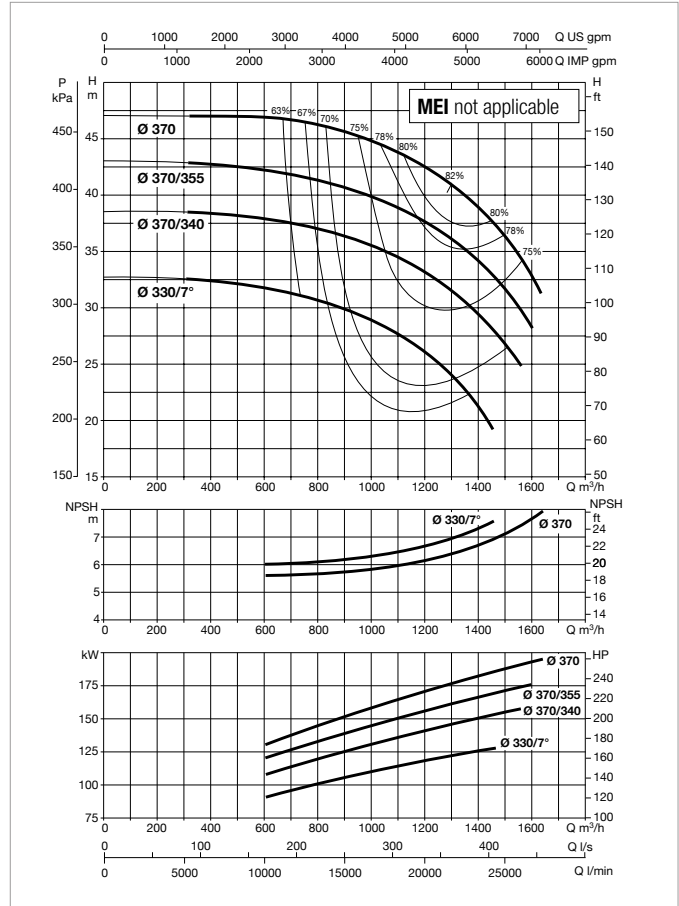
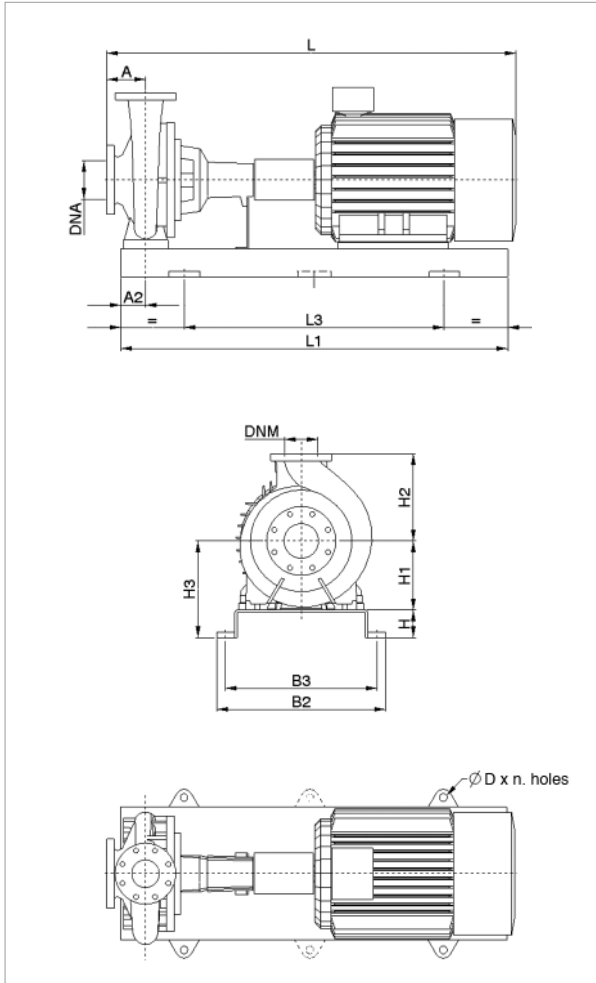
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 300-400M	110	325	135	120	400	640	520	2000	1340	910	830	28x4	350	300	2477	1860	2718	1875
	132	325	145	210	400	640	610	1880	1280	995	950	20x6	350	300	2587	1920	2828	1935
	160	325	145	210	400	640	610	1880	1280	995	950	20x6	350	300	2587	2000	2828	2015
	200	325	145	210	400	640	610	1880	1280	995	950	20x6	350	300	2587	2095	2828	2110

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 300-400A - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 /min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 300-400A	110	315S	3 x 400 V ~ Δ	190	IE3
	132	315M	3 x 400 V ~ Δ	230	IE3
	160	315L	3 x 400 V ~ Δ	275	IE3
	200	315L	3 x 400 V ~ Δ	340	IE3
	250	355	3 x 400 V ~ Δ	420	IE3

MODEL	POWER (kW)	UNIT DIMENSIONS (mm)											FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 300-400A	110	325	135	120	400	640	520	2000	1340	910	830	28x4	350	300	2477	1860	2718	1875
	132	325	145	210	400	640	610	1880	1280	995	950	20x6	350	300	2587	1920	2828	1935
	160	325	145	210	400	640	610	1880	1280	995	950	20x6	350	300	2587	2000	2828	2015
	200	325	145	210	400	640	610	1880	1280	995	950	20x6	350	300	2587	2095	2828	2110
	250	325	145	210	400	640	610	2250	1650	1095	1050	20x6	350	300	(*)	(*)	(*)	(*)

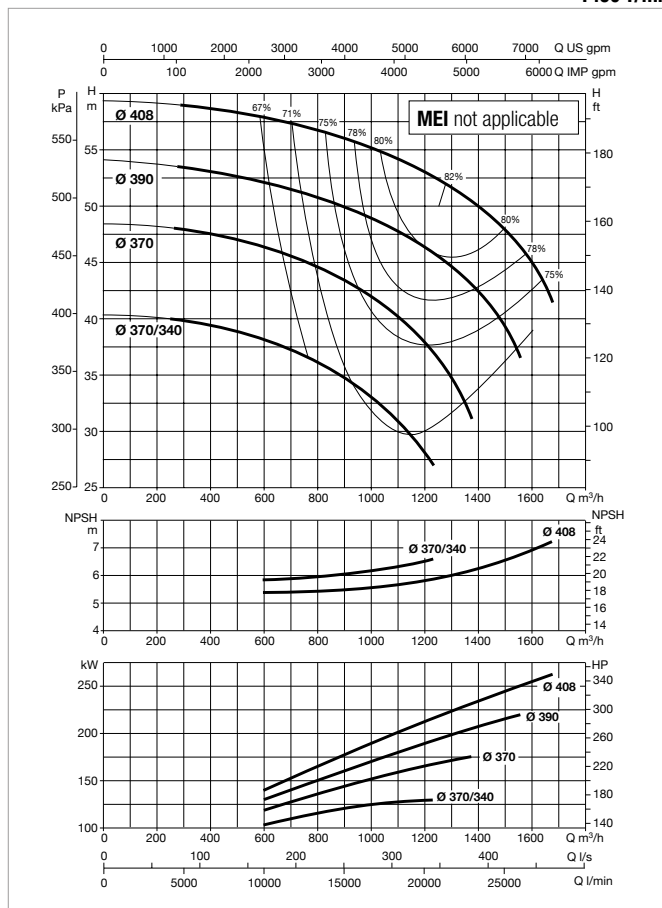
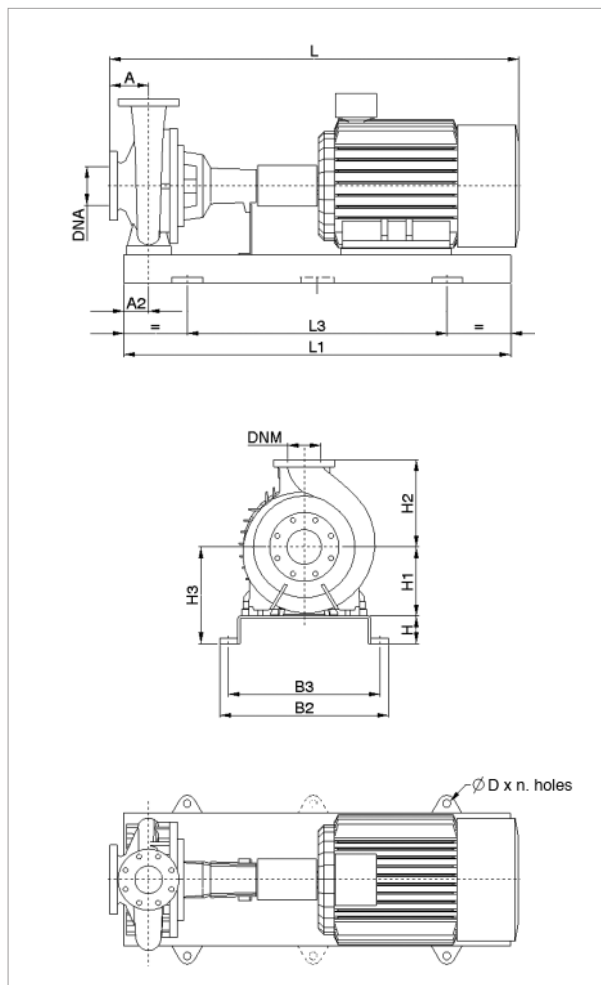
Dimension and electrical data based on sizing definition following the instructions on page 183.

(*) Data on request.

KDN 300-400 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 300-400	110	315S	3 x 400 V ~ Δ	190	IE3
	132	315M	3 x 400 V ~ Δ	230	IE3
	160	315L	3 x 400 V ~ Δ	275	IE3
	200	315L	3 x 400 V ~ Δ	340	IE3
	250	355	3 x 400 V ~ Δ	420	IE3
	315	355	3 x 400 V ~ Δ	530	IE3

MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 300-400	110	325	135	120	400	640	520	2000	1340	910	830	28x6	350	300	2477	1860	2718	1875
	132	325	145	210	400	640	610	1880	1280	995	950	20x6	350	300	2587	1920	2828	1935
	160	325	145	210	400	640	610	1880	1280	995	950	20x6	350	300	2587	2000	2828	2015
	200	325	145	210	400	640	610	1880	1280	995	950	20x6	350	300	2587	2095	2828	2110
	250	325	145	210	400	640	610	2250	1650	1095	1050	20x6	350	300	(*)	(*)	(*)	(*)
	315	325	145	210	400	640	610	2250	1650	1095	1050	20x6	350	300	(*)	(*)	(*)	(*)

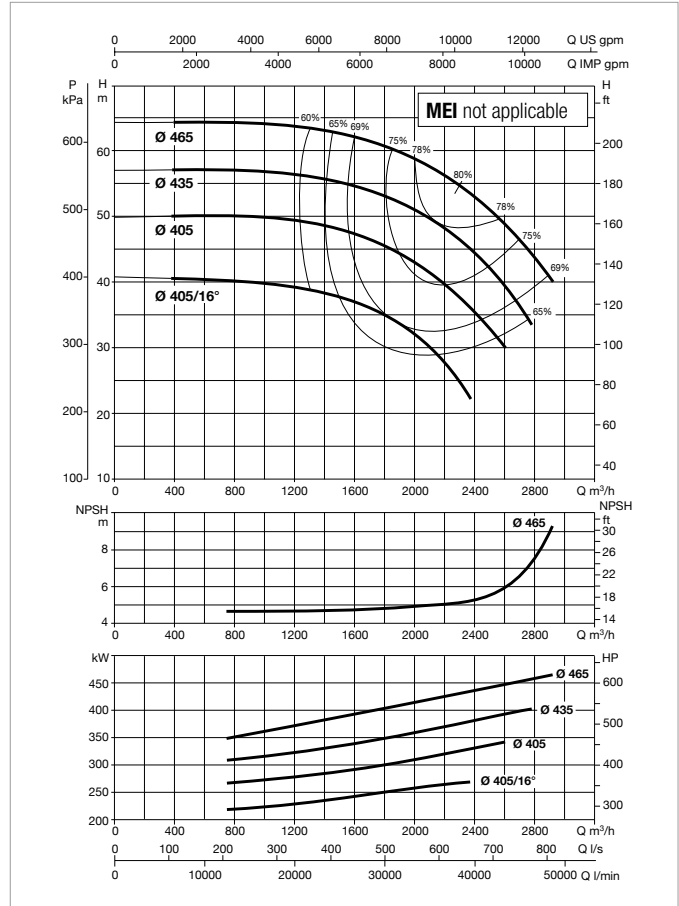
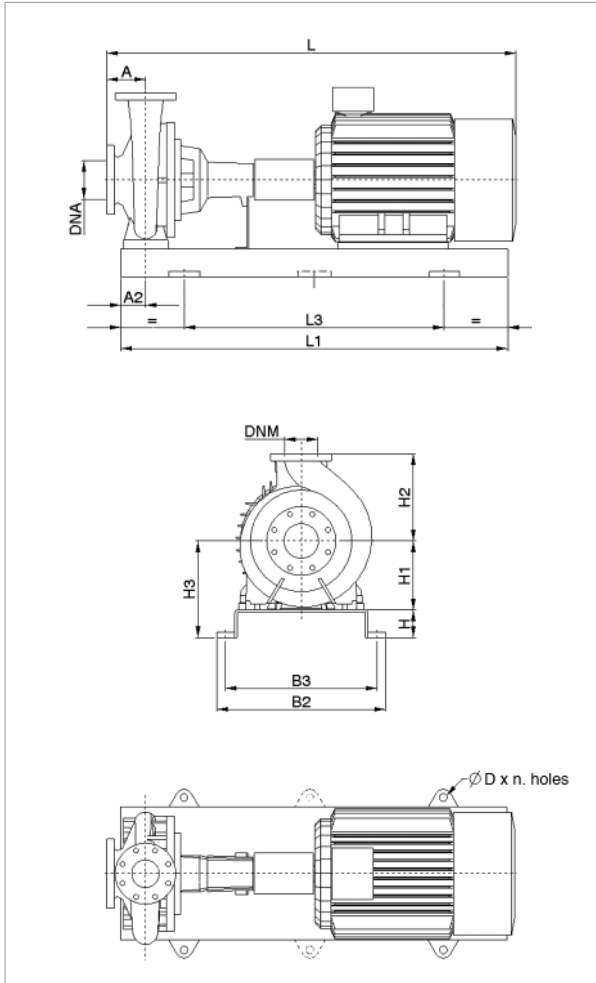
Dimension and electrical data based on sizing definition following the instructions on page 183.

(*) Data on request.

KDN 350-500A - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 350-500A	315	355	3 x 400 V ~ Δ	530	IE3
	355	355	3 x 400 V ~ Δ	(*)	IE3
	400	355	3 x 400 V ~ Δ	(*)	IE3
	500	355	3 x 400 V ~ Δ	(*)	IE3

MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 350-500A	315	380	295	240	600	600	840	2700	2100	1305	1260	20x6	400	350	(*)	1080	(*)	1095
	355	385	300	240	600	615	840	3000	2100	1305	1260	(*)	400	350	(*)	4250	(*)	4250
	400	380	(*)	(*)	600	600	600	(*)	(*)	(*)	(*)	(*)	400	350	(*)	(*)	(*)	(*)
	500	380	(*)	(*)	600	600	600	(*)	(*)	(*)	(*)	(*)	400	350	(*)	(*)	(*)	(*)

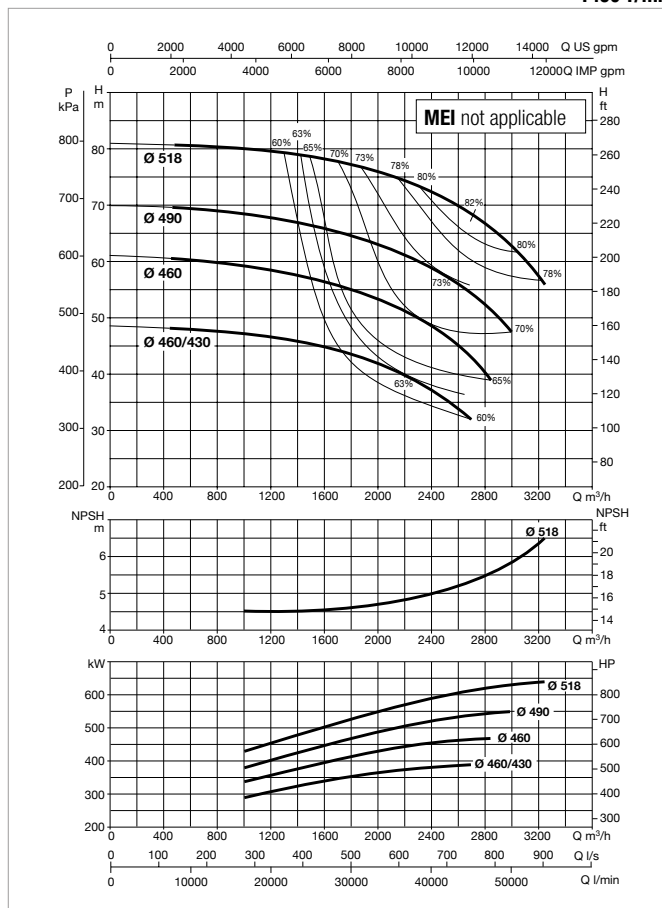
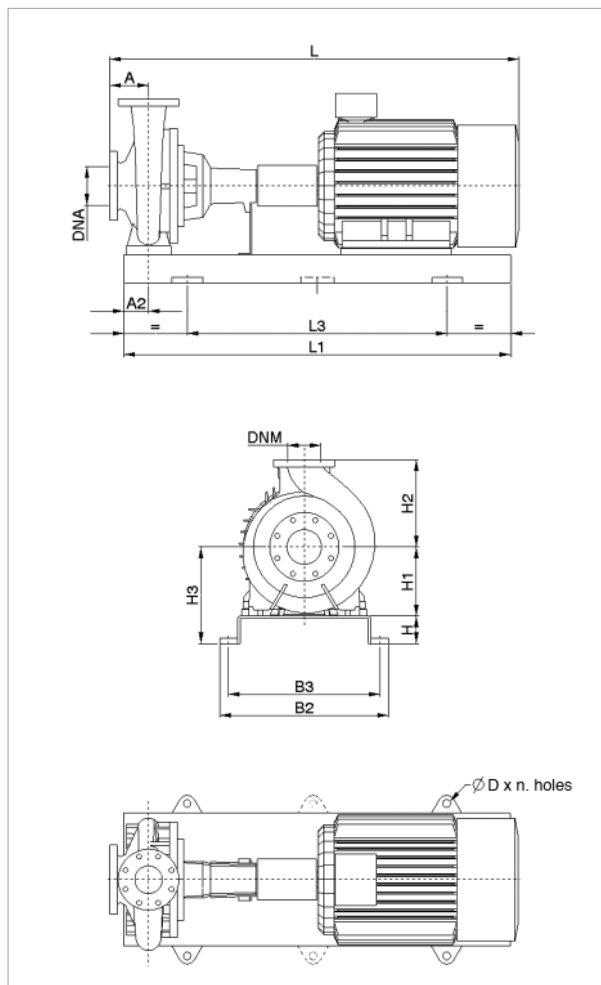
Dimension and electrical data based on sizing definition following the instructions on page 183.

(*) Data on request.

KDN 350-500 - 4 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 1450 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 350-500	355	355	3 x 400 V ~ Δ	(*)	IE3
	400	355	3 x 400 V ~ Δ	(*)	IE3
	500	355	3 x 400 V ~ Δ	(*)	IE3

MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 350-500	355	380	(*)	(*)	600	600	600	(*)	(*)	(*)	(*)	(*)	400	350	(*)	(*)	(*)	(*)
	400	380	(*)	(*)	600	600	600	(*)	(*)	(*)	(*)	(*)	400	350	(*)	(*)	(*)	(*)
	500	380	(*)	(*)	600	600	600	(*)	(*)	(*)	(*)	(*)	400	350	(*)	(*)	(*)	(*)

Dimension and electrical data based on sizing definition following the instructions on page 183.

(*) Data on request.

KDN OVERSIZE - 4 POLES

STANDARDISED PUMPS

IE3 STANDARD MOTOR ELECTRIC DATA

=1450 1/min

MOTOR TYPE	P2 NOMINAL kW	SPEED rpm	YELD %	POWER FACTOR COS φ	POWER INPUT 50 Hz	In A			Start-up current Ia/In	Start-up torque Ma/Mn	Maximum torque M/k/Mn	POLES
						230V	400V	690V				
MEC 71	0,25	1400	60,00	0,710	3x230/400	1,56	0,90		2,88	2,15	2,26	4
MEC 71	0,37	1340	67,00	0,780	3x230/400	1,70	0,98		4,75	2,84	2,64	4
MEC 80	0,55	1410	71,00	0,720	3x230/400	2,60	1,50		5,33	2,78	2,89	4
MEC 80	0,75	1435	82,50	0,740	3x230/400	3,12	1,80		5,50	2,70	2,80	4
MEC 90S	1,1	1440	84,10	0,750	3x230/400	4,33	2,50		7,10	4,30	4,30	4
MEC 90L	1,5	1430	85,30	0,720	3x230/400	6,24	3,60		6,60	4,30	4,40	4
MEC 100L	2,2	1455	86,70	0,630	3x230/400	24,94	14,40		5,90	3,70	3,90	4
MEC 100L	3	1440	87,70	0,730	3x400 Δ		6,80	3,93	8,10	4,10	4,10	4
MEC 112M	4	1450	88,60	0,800	3x400 Δ		8,20	4,73	8,50	2,70	3,50	4
MEC 132S	5,5	1450	89,60	0,840	3x400 Δ		10,60	6,12	8,70	3,70	4,30	4
MEC 132M	7,5	1465	90,40	0,780	3x400 Δ		15,30	8,83	8,20	4,40	5,10	4
MEC 160M	11	1465	91,40	0,770	3x400 Δ		22,40	12,93	10,10	2,50	3,10	4
MEC 160L	15	1465	92,10	0,780	3x400 Δ		30,50	17,61	8,90	3,20	2,80	4
MEC 180M	18,5	1470	92,60	0,840	3x400 Δ		34,30	19,80	7,50	2,20	2,30	4
MEC 180L	22	1470	93,00	0,850	3x400 Δ		40,20	23,21	7,70	2,20	2,30	4
MEC 200L	30	1475	93,60	0,860	3x400 Δ		53,70	31,00	7,80	2,20	2,30	4
MEC 225S	37	1485	93,90	0,860	3x400 Δ		66,10	38,16	7,20	2,20	2,30	4
MEC 225M	45	1485	94,20	0,870	3x400 Δ		79,10	45,67	7,30	2,20	2,30	4
MEC 250M	55	1485	94,60	0,870	3x400 Δ		96,20	55,54	7,40	2,20	2,30	4
MEC 280S	75	1486	95,00	0,870	3x400 Δ		131,00	75,63	7,40	2,00	2,30	4
MEC 280M	90	1486	95,20	0,870	3x400 Δ		157,00	90,64	6,70	2,00	2,30	4
MEC 315S	110	1488	95,40	0,880	3x400 Δ		189,00	109,12	6,90	2,20	2,20	4
MEC 315M	132	1488	95,60	0,880	3x400 Δ		226,00	130,48	6,90	2,20	2,20	4
MEC 315L	160	1488	95,80	0,880	3x400 Δ		274,00	158,19	6,90	2,20	2,20	4
MEC 315L	200	1490	96,00	0,880	3x400 Δ		342,00	197,45	6,90	2,20	2,20	4
MEC 355M	250	1490	96,00	0,890	3x400 Δ		420,00	242,77	7,70	2,60	2,70	4
MEC 355L	315	1490	96,00	0,890	3x400 Δ		530,00	306,36	7,80	2,80	2,70	4

KDN OVERSIZE - 6 POLES RANGE

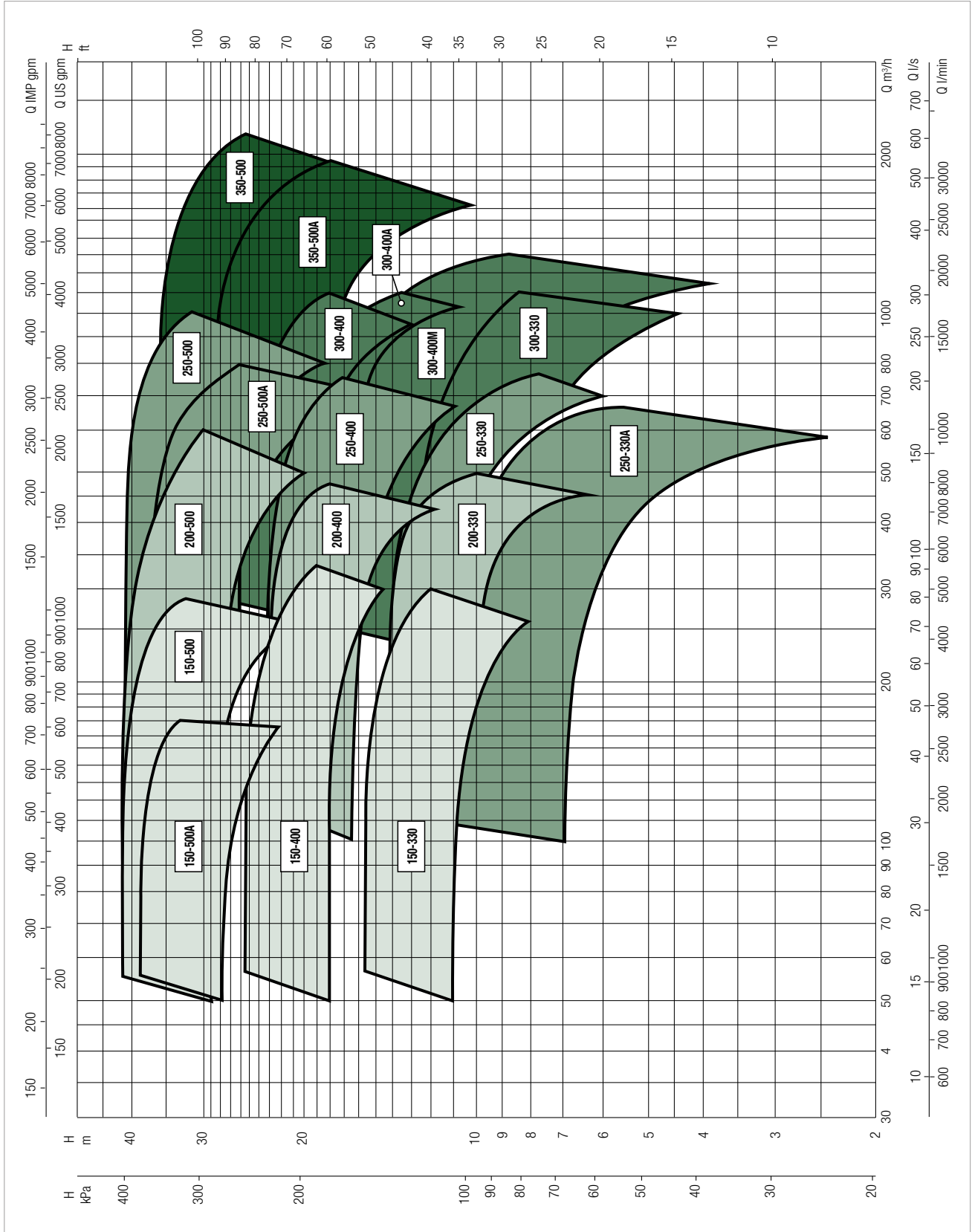
STANDARDISED PUMPS

PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

GRAPHIC SELECTION TABLE

= 970 1/min



KDN OVERSIZE - 6 POLES

STANDARDISED PUMPS

SELECTION TABLE - KDN 150

MODEL	Q=m ³ /h	0	50	100	150	200	250	300
	Q=l/min	0	833	1667	2500	3333	4167	5000
KDN 150-330 / 280	H (m)	11	11	11	11	10	8	
KDN 150-330 / 300		13	13	13	12	12	10	
KDN 150-330 / 315		14	14	14	14	13	12	
KDN 150-330 / 328		16	16	16	15	15	14	12
KDN 150-400 / 350		18	18	18	18	17	16	14
KDN 150-400 / 370		20	20	20	20	19	18	16
KDN 150-400 / 390		23	23	23	23	22	21	18
KDN 150-400 / 408		25	25	25	25	25	23	21
KDN 150-500 / 440		29	29	29	28	24		
KDN 150-500 / 480		35	35	35	33	31	27	
KDN 150-500 / 518		41	41	41	40	39	35	
KDN 150-500A / 440		28	28	27	24			
KDN 150-500A / 480		33	33	32	29			
KDN 150-500A / 518		39	39	39	36			

SELECTION TABLE - KDN 200

MODEL	Q=m ³ /h	0	50	100	150	200	250	300	400	450	500	600
	Q=l/min	0	833	1667	2500	3333	4167	5000	6667	7500	8334	10000
KDN 200-330 / 290	H (m)	10		10	10	10	10	10	8	6		
KDN 200-330 / 310		12		12	12	12	12	12	11	8		
KDN 200-330 / 328		14		14	14	14	14	14	13	12	10	
KDN 200-400 / 350		16		16	16	16	16	16	13			
KDN 200-400 / 370		18		18	18	18	18	18	16			
KDN 200-400 / 390		21		21	21	21	20	20	19	17		
KDN 200-400 / 408		23		23	23	23	23	23	22	20		
KDN 200-500 / 430		28		28	28	28	27	27	24	22	20	
KDN 200-500 / 470		34		34	34	34	33	33	30	28	26	
KDN 200-500 / 508		41		41	41	41	40	40	37	36	34	30

SELECTION TABLE - KDN 250

MODEL	Q=m ³ /h	0	50	100	150	200	250	300	400	450	500	600	700	800	1000
	Q=l/min	0	833	1667	2500	3333	4167	5000	6667	7500	8334	10000	11667	13334	16667
KDN 250-330 / 310	H (m)	13		12	12	12	12	11	11	10	10	8	6		
KDN 250-330 / 320		14		13	13	13	13	13	12	12	11	10	8		
KDN 250-330 / 328		15		15	15	14	14	14	13	13	13	11	10		
KDN 250-330 / 275/32°		7		7	7	7	6	6	5	5	4	2			
KDN 250-330 / 275		10		10	9	9	9	9	8	7	7				
KDN 250-330 / 295		12		12	12	11	11	11	10	9	9	7			
KDN 250-400 / 350		16		16	16	16	16	16	15	15	14	12			
KDN 250-400 / 370		19		19	19	19	18	18	18	18	17	15	13		
KDN 250-400 / 390		22		22	22	21	21	21	21	21	20	18			
KDN 250-400 / 408		23		23	23	23	23	23	23	23	22	21	18		
KDN 250-500 / 440		26				26	26	26	25	25	25	24	22	19	
KDN 250-500 / 480		32				32	32	32	32	32	32	31	30	28	
KDN 250-500 / 518		40				40	40	40	40	40	40	40	39	38	31
KDN 250-500A / 440		27				27	27	26	25	24	23	20			
KDN 250-500A / 480		33				33	33	33	32	31	30	27	23		
KDN 250-500A / 518		39				39	39	38	38	37	36	34	31	26	

KDN OVERSIZE - 6 POLES

STANDARDISED PUMPS

SELECTION TABLE - KDN 300

MODEL	Q=m ³ /h	0	50	100	150	200	250	300	400	450	500	600	700	800	1000	1200	
	Q=l/min	0	833	1667	2500	3333	4167	5000	6667	7500	8334	10000	11667	13334	16667	20000	
KDN 300-330 / 325/24°	H (m)	9				9	9	9	9	9	8	8	7	6	5		
KDN 300-330 / 325		12					11	11	11	11	11	10	10	9	9	7	
KDN 300-330 / 345		14					13	13	13	13	13	12	12	12	11	9	
KDN 300-400 / 370		20					20	20	20	20	20	20	19	18	16		
KDN 300-400 / 390		23					23	23	23	22	22	22	21	21	20	17	
KDN 300-400 / 408		26					25	25	25	25	25	25	24	24	23	20	
KDN 300-400A / 340		17						17	16	16	16	16	16	15	14	11	
KDN 300-400A / 355		18					x	18	18	18	18	18	18	17	16	13	
KDN 300-400A / 370		20					x	20	20	20	20	20	20	19	18	16	
KDN 300-400M / 380/350		10					x	10	10	10	10	10	9	9	8	6	
KDN 300-400M / 380		14					x	14	14	14	14	14	13	13	12	10	6
KDN 300-400M / 395		16					x	16	16	16	16	16	15	15	14	12	9
KDN 300-400M / 408		18					x	18	18	18	18	18	17	17	16	15	11

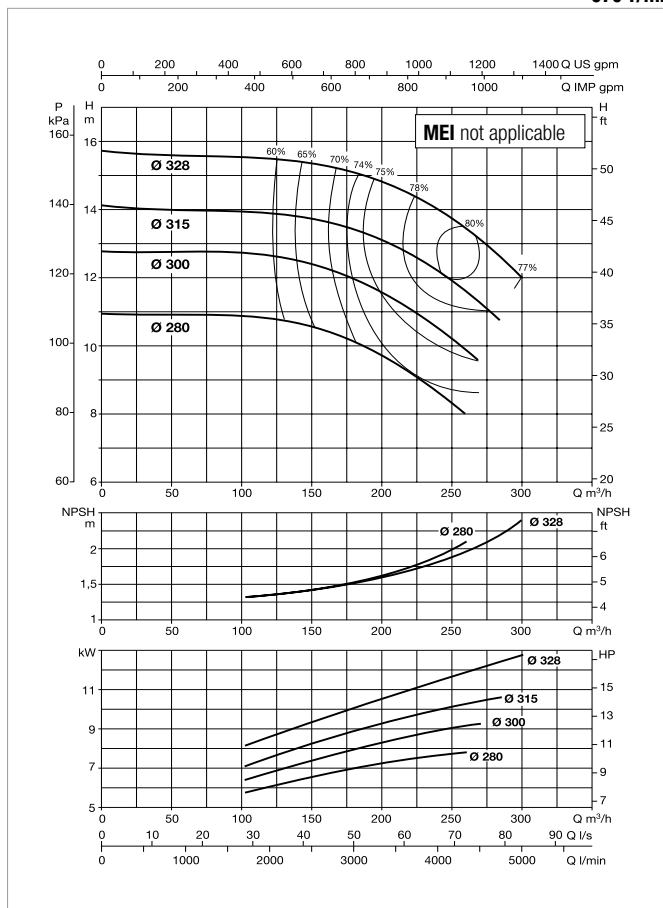
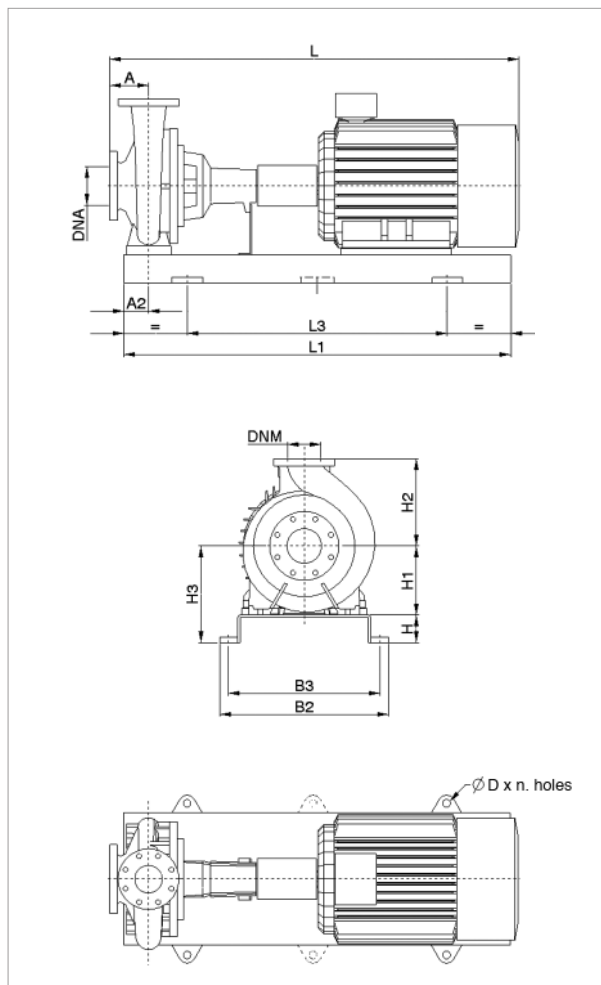
SELECTION TABLE - KDN 350

MODEL	Q=m ³ /h	0	50	100	150	200	250	300	400	450	500	600	700	800	1000	1200	1600	1700	1800	1900	2000		
	Q=l/min	0	833	1667	2500	3333	4167	5000	6667	7500	8334	10000	11667	13334	16667	20000	26667	28334	30001	31667	33334		
KDN 350-500 / 460/430	H (m)	22							22	22	21	21	21	21	20	20	17	16	14				
KDN 350-500 / 460		27								27	27	27	27	26	26	26	25	22	21	19			
KDN 350-500 / 490		31								31	31	31	31	31	30	30	29	26	26	24	23	21	
KDN 350-500 / 518		36								36	36	36	36	36	36	35	35	33	32	31	30	28	
KDN 350-500A / 405/16°		18								18	18	18	18	18	18	17	16	9					
KDN 350-500A / 405/435		22								22	22	22	22	22	22	22	20	16	14				
KDN 350-500A / 435		26								26	26	26	26	25	25	25	24	20	18	16			
KDN 350-500A / 465		29								29	29	29	29	29	29	28	27	24	23	21	19		

KDN 150-330 - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 150-330	7,5	160M	3 x 400 V ~ Δ	15,8	IE3
	11	160L	3 x 400 V ~ Δ	23,1	IE3
	15	180M	3 x 400 V ~ Δ	29,7	IE3

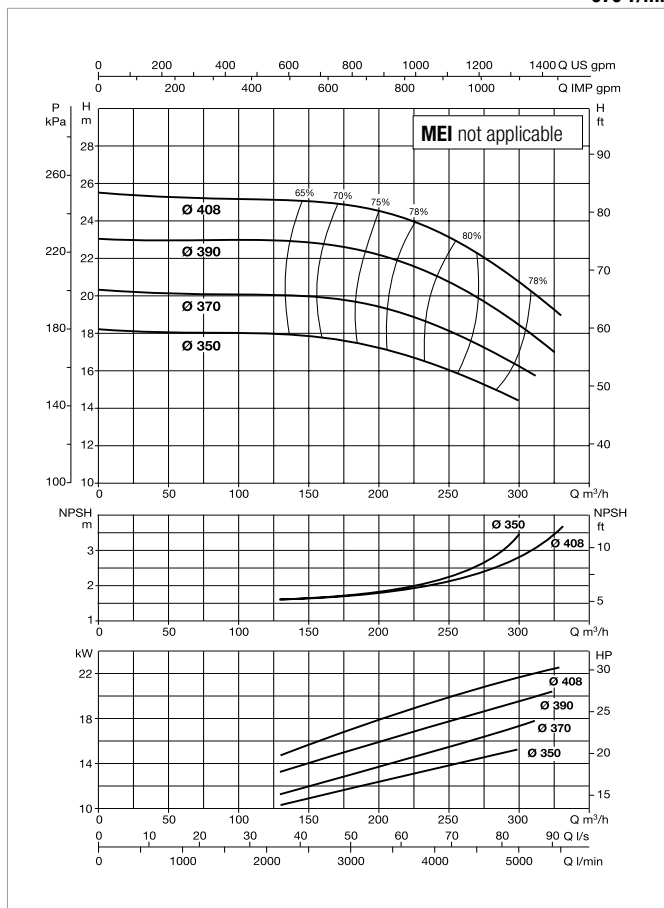
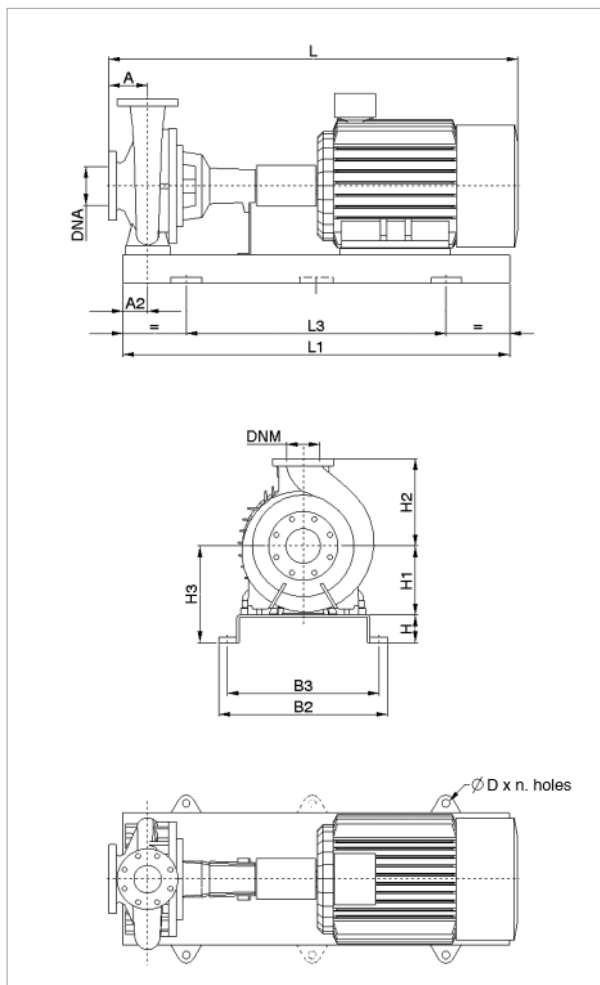
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 150-330	7,5	160	110	100	315	400	415	1800	1200	730	670	28x4	200	150	1554	438	1735	453
	11	160	110	100	315	400	415	1800	1200	730	670	28x4	200	150	1554	438	1735	453
	15	160	110	100	315	400	415	1800	1200	730	670	28x4	200	150	1612	438	1793	453

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 150-400 - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 150-400	18,5	200L	3 x 400 V ~ Δ	36	IE3
	22	200L	3 x 400 V ~ Δ	42,5	IE3
	30	225M	3 x 400 V ~ Δ	54,8	IE3

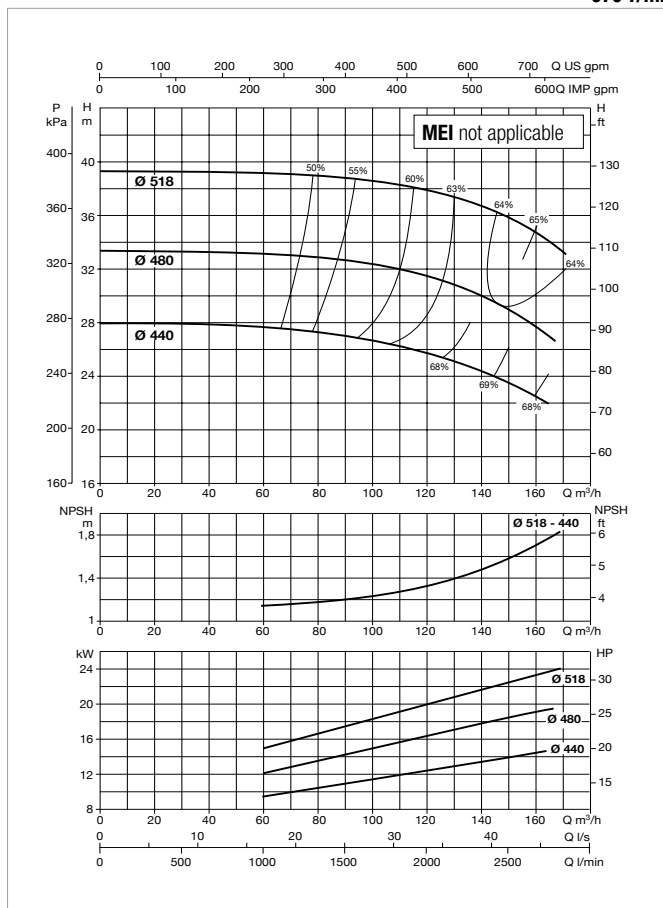
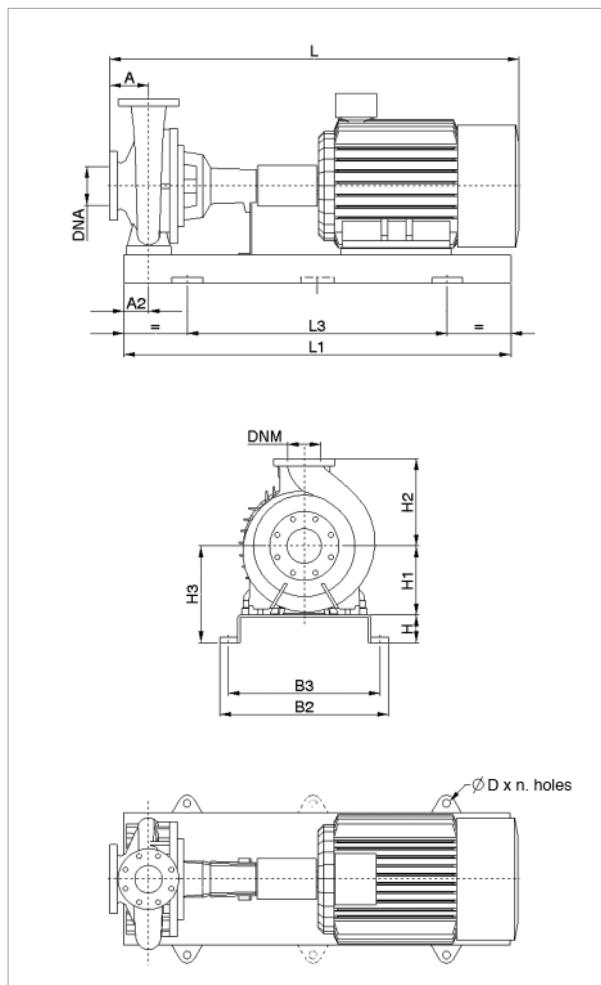
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 150-400	18,5	160	110	100	315	450	415	1800	1200	730	670	28x4	200	150	1654	481	1835	496
	22	160	110	100	315	450	415	1800	1200	730	670	28x4	200	150	1654	481	1835	496
	30	160	110	100	315	450	415	1800	1200	730	670	28x4	200	150	1729	481	1910	496

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 150-500A - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 150-500A	11	160L	3 x 400 V ~ Δ	23,1	IE3
	15	180L	3 x 400 V ~ Δ	29,7	IE3
	18,5	200L	3 x 400 V ~ Δ	36	IE3
	22	200L	3 x 400 V ~ Δ	42,5	IE3
	30	225M	3 x 400 V ~ Δ	54,8	IE3

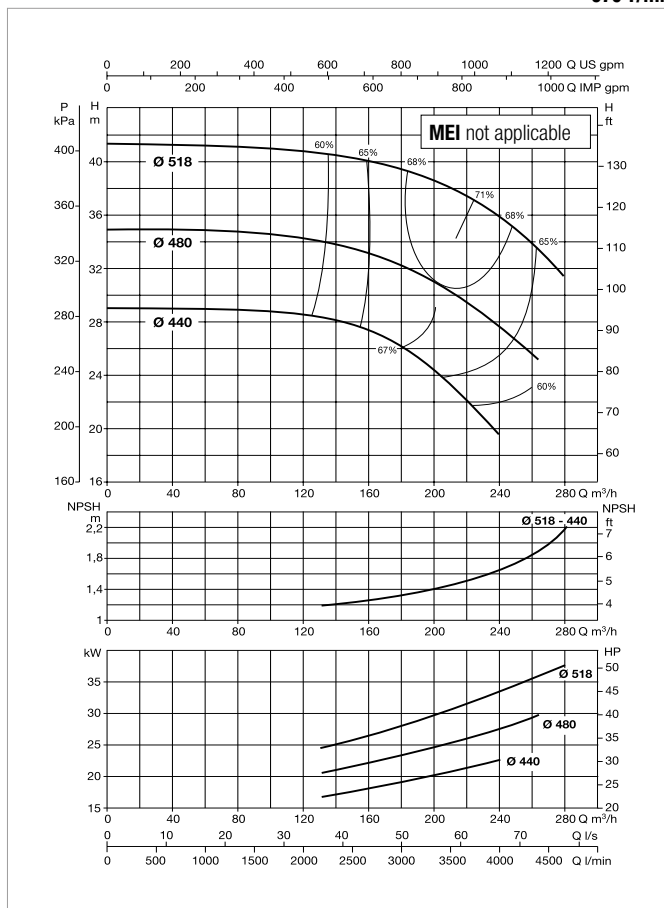
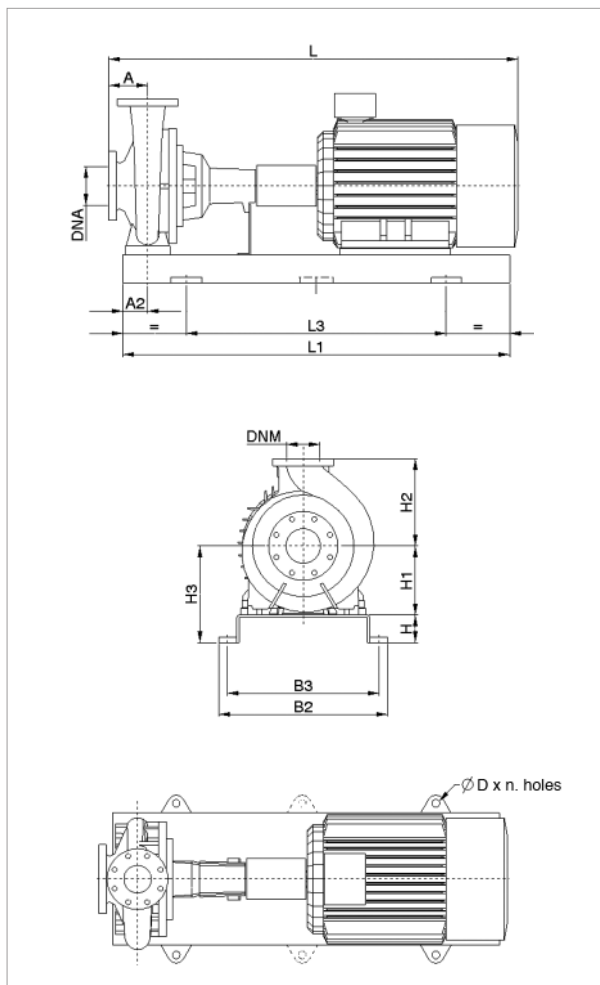
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 150-500A	11	180	110	100	355	500	455	1800	1200	730	670	28x4	200	150	1574	593	1755	608
	15	180	110	100	355	500	455	1800	1200	730	670	28x4	200	150	1632	593	1813	608
	18,5	180	110	100	355	500	455	1800	1200	730	670	28x4	200	150	1674	593	1855	608
	22	180	110	100	355	500	455	1800	1200	730	670	28x4	200	150	1674	593	1855	608
	30	180	110	100	355	500	455	1800	1200	730	670	28x4	200	150	1749	593	1930	608

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 150-500 - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 150-500	22	200L	3 x 400 V ~ Δ	42,5	IE3
	30	225M	3 x 400 V ~ Δ	54,8	IE3
	37	250M	3 x 400 V ~ Δ	66,6	IE3
	45	280S	3 x 400 V ~ Δ	80,6	IE3

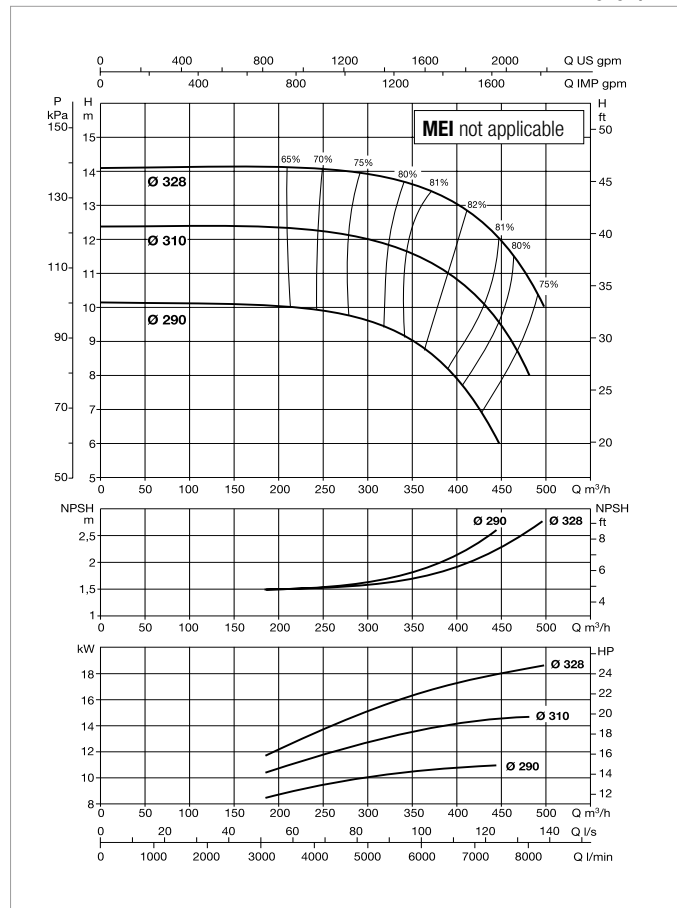
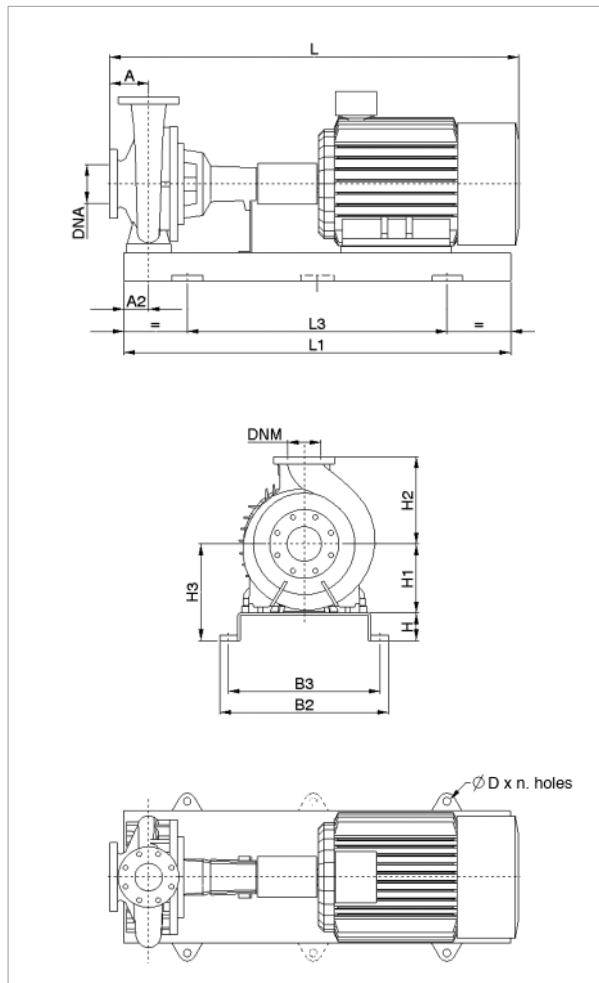
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 150-500	22	180	110	100	355	500	455	1800	1200	730	670	28x4	200	150	1674	593	1855	608
	30	180	110	100	355	500	455	1800	1200	730	670	28x4	200	150	1749	593	1930	608
	37	180	110	100	355	500	455	1800	1200	730	670	28x4	200	150	1840	593	2021	608
	45	180	110	100	355	500	455	1800	1200	730	670	28x4	200	150	1895	593	2076	608

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 200-330 - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 200-330	11	160L	3 x 400 V ~ Δ	23,1	IE3
	15	180L	3 x 400 V ~ Δ	29,7	IE3
	18,5	200L	3 x 400 V ~ Δ	36	IE3
	22	200L	3 x 400 V ~ Δ	42,5	IE3
	30	225M	3 x 400 V ~ Δ	54,8	IE3

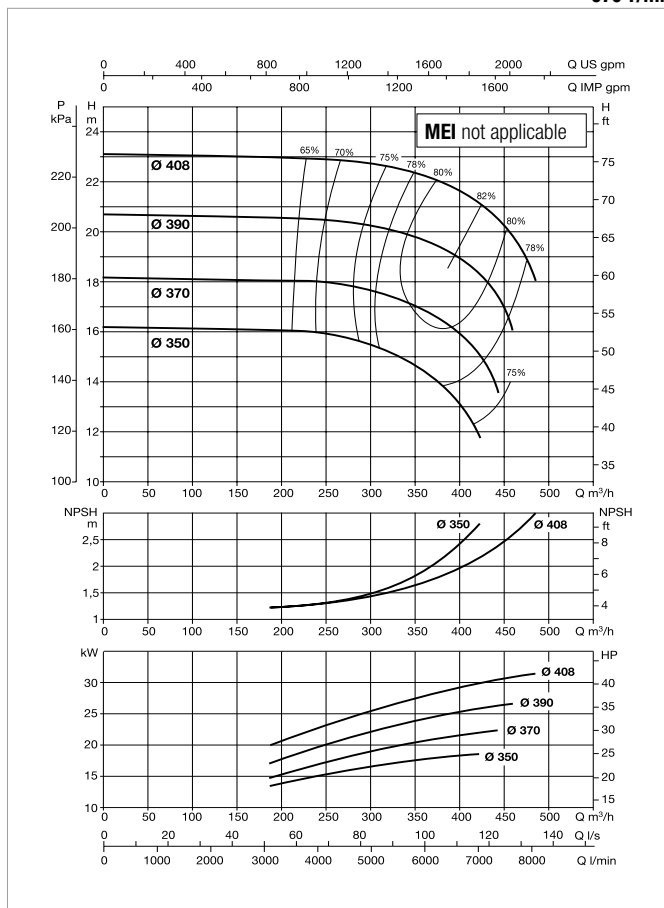
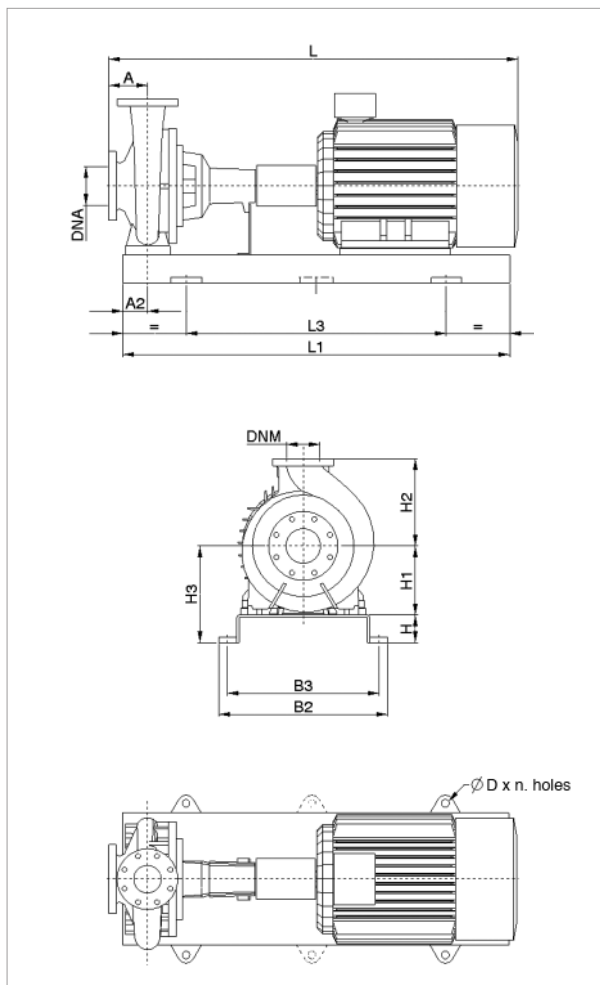
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 200-330	11	200	110	100	355	450	455	1800	1200	730	670	28x4	250	200	1594	543	1775	558
	15	200	110	100	355	450	455	1800	1200	730	670	28x4	250	200	1652	543	1833	558
	18,5	200	110	100	355	450	455	1800	1200	730	670	28x4	250	200	1694	543	1875	558
	22	200	110	100	355	450	455	1800	1200	730	670	28x4	250	200	1694	543	1875	558
	30	200	110	100	355	450	455	1800	1200	730	670	28x4	250	200	1769	543	1950	558

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 200-400 - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 200-400	15	180L	3 x 400 V ~ Δ	29,7	IE3
	18,5	200L	3 x 400 V ~ Δ	36	IE3
	22	200L	3 x 400 V ~ Δ	42,5	IE3
	30	225M	3 x 400 V ~ Δ	54,8	IE3
	37	250M	3 x 400 V ~ Δ	66,6	IE3

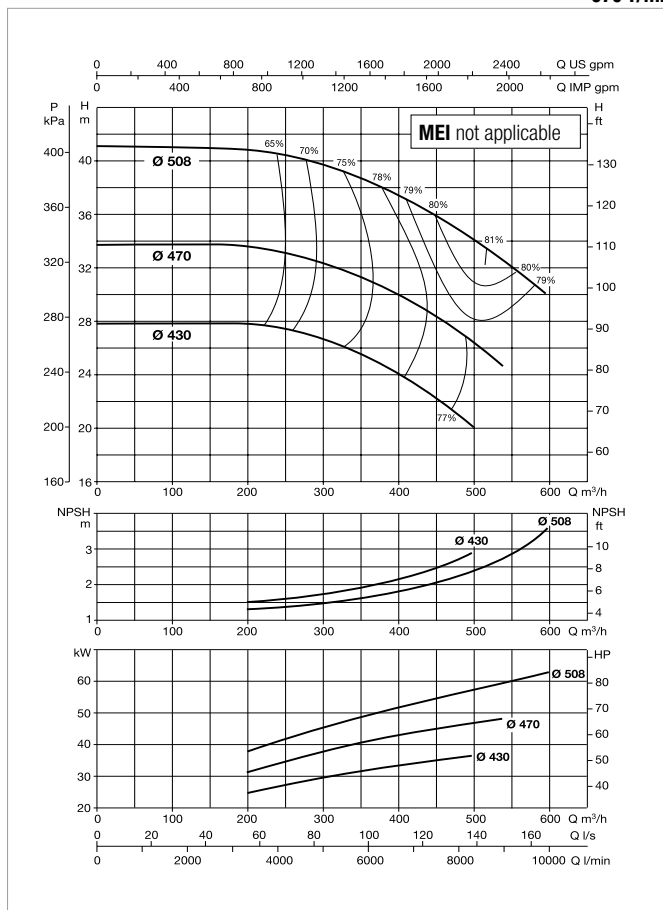
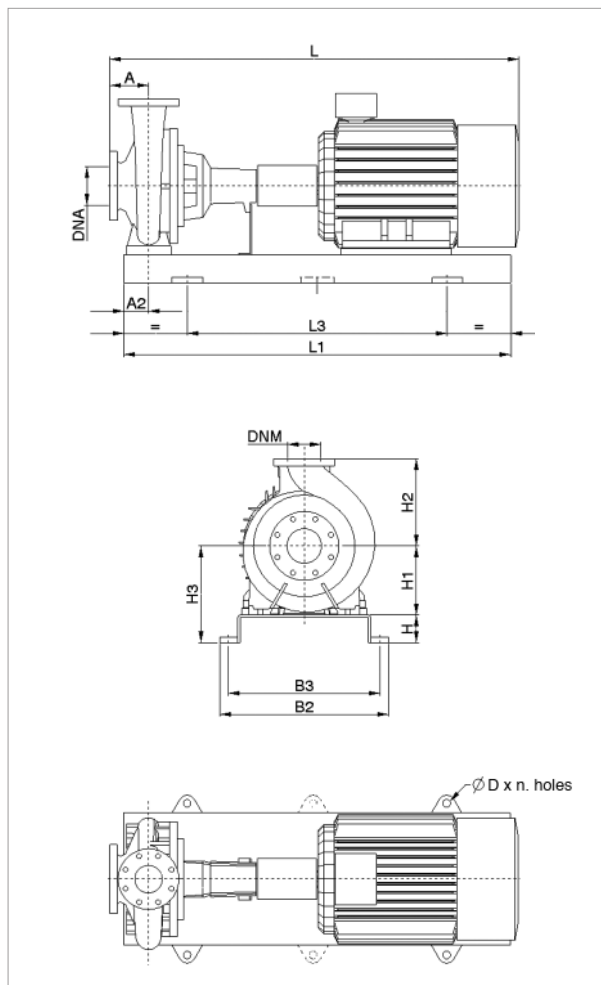
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 200-400	15	185	110	100	355	500	455	1800	1200	730	670	28x4	250	200	1637	573	1818	588
	18,5	185	110	100	355	500	455	1800	1200	730	670	28x4	250	200	1679	573	1860	588
	22	185	110	100	355	500	455	1800	1200	730	670	28x4	250	200	1679	573	1860	588
	30	185	110	100	355	500	455	1800	1200	730	670	28x4	250	200	1754	573	1935	588
	37	185	110	100	355	500	455	1800	1200	730	670	28x4	250	200	1845	573	2026	588

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 200-500 - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 200-500	22	200L	3 x 400 V ~ Δ	42,5	IE3
	30	225M	3 x 400 V ~ Δ	54,8	IE3
	37	250M	3 x 400 V ~ Δ	66,6	IE3
	45	280S	3 x 400 V ~ Δ	80,6	IE3
	55	280M	3 x 400 V ~ Δ	98,1	IE3
	75	315S	3 x 400 V ~ Δ	135	IE3

MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 200-500	22	185	145	185	400	580	(*)	(*)	(*)	(*)	(*)	(*)	250	200	1985	1010	2165	1037
	30	185	145	185	400	580	(*)	(*)	(*)	(*)	(*)	(*)	250	200	1985	1070	2165	1097
	37	185	145	185	400	580	(*)	(*)	(*)	(*)	(*)	(*)	250	200	2006	1105	2186	1132
	45	185	145	185	400	580	585	1650	1050	960	915	20x4	250	200	2006	1120	2186	1135
	55	185	145	185	400	580	585	1650	1050	960	915	20x4	250	200	2006	1120	2186	1135
	75	185	145	205	400	580	605	1800	1200	960	915	20x4	250	200	2096	1600	2276	1615

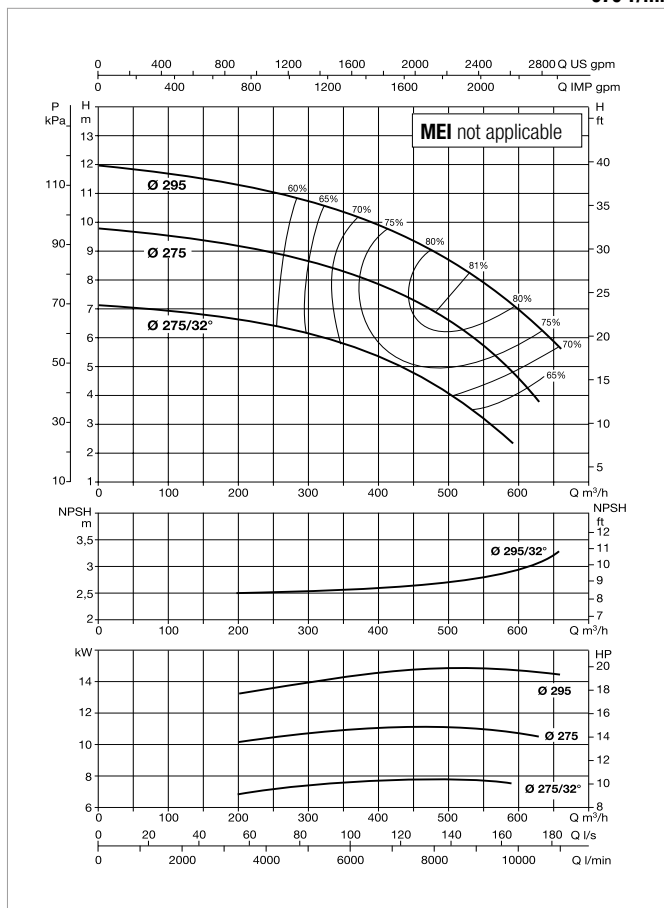
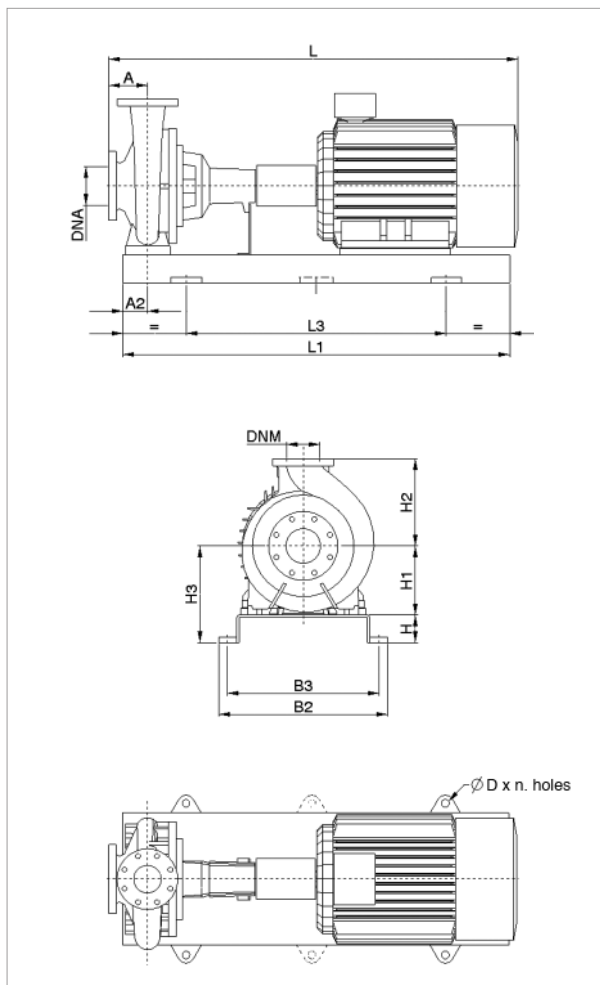
Dimension and electrical data based on sizing definition following the instructions on page 183.

(*) Data on request.

KDN 250-330A - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 250-330A	7,5	160M	3 x 400 V ~ Δ	15,8	IE3
	11	160L	3 x 400 V ~ Δ	23,1	IE3
	15	180L	3 x 400 V ~ Δ	29,7	IE3

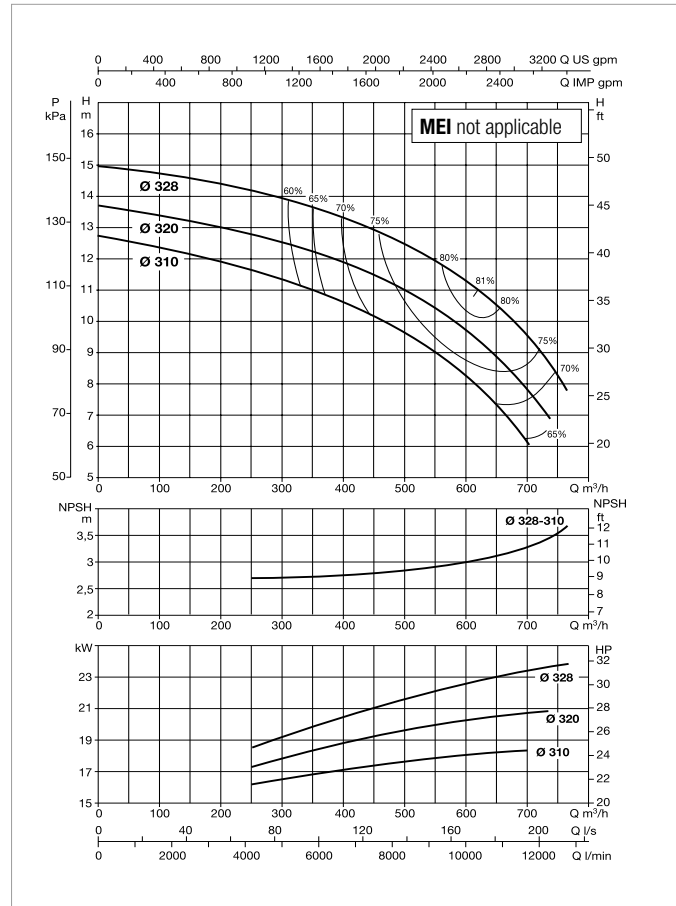
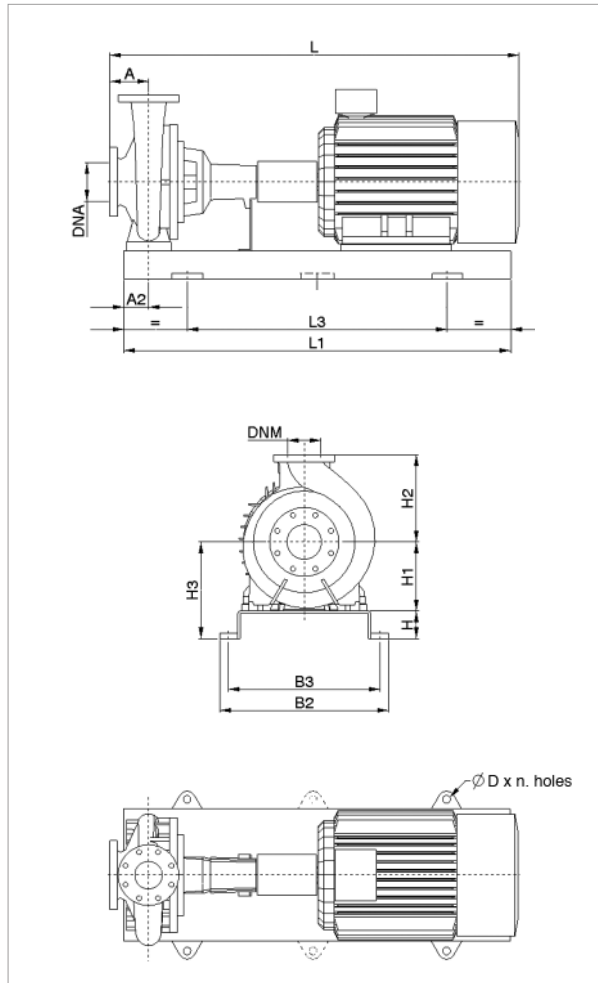
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)											FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 250-330A	7,5	250	135	120	400	525	520	2000	1340	910	830	28x4	300	250	974	647	1215	662
	11	250	135	120	400	525	520	2000	1340	910	830	28x4	300	250	974	647	1215	662
	15	250	135	120	400	525	520	2000	1340	910	830	28x4	300	250	974	647	1215	662

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 250-330 - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 250-330	15	180L	3 x 400 V ~ Δ	29,7	IE3
	18,5	200L	3 x 400 V ~ Δ	36	IE3
	22	200L	3 x 400 V ~ Δ	42,5	IE3
	30	225M	3 x 400 V ~ Δ	54,8	IE3

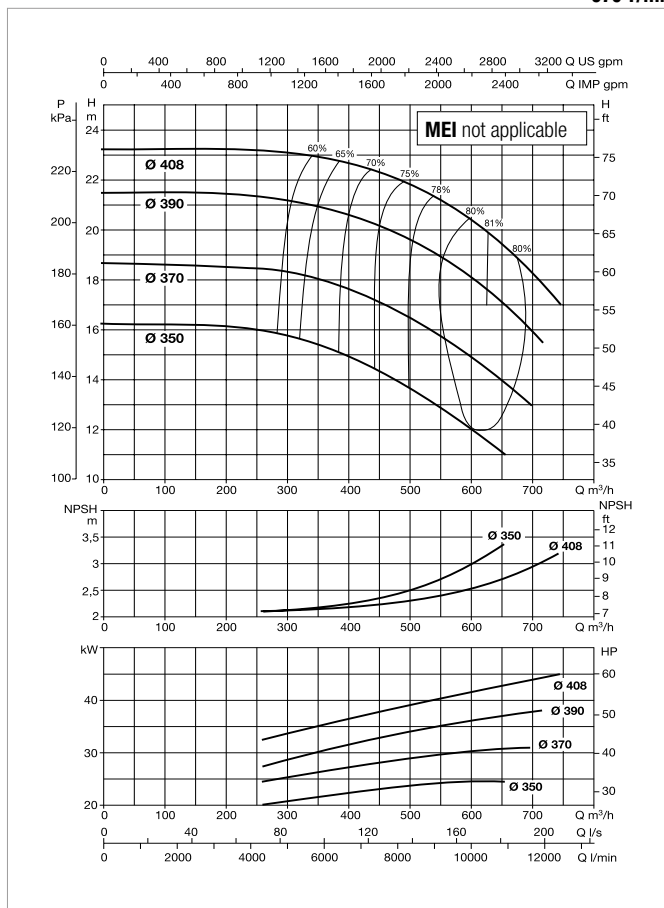
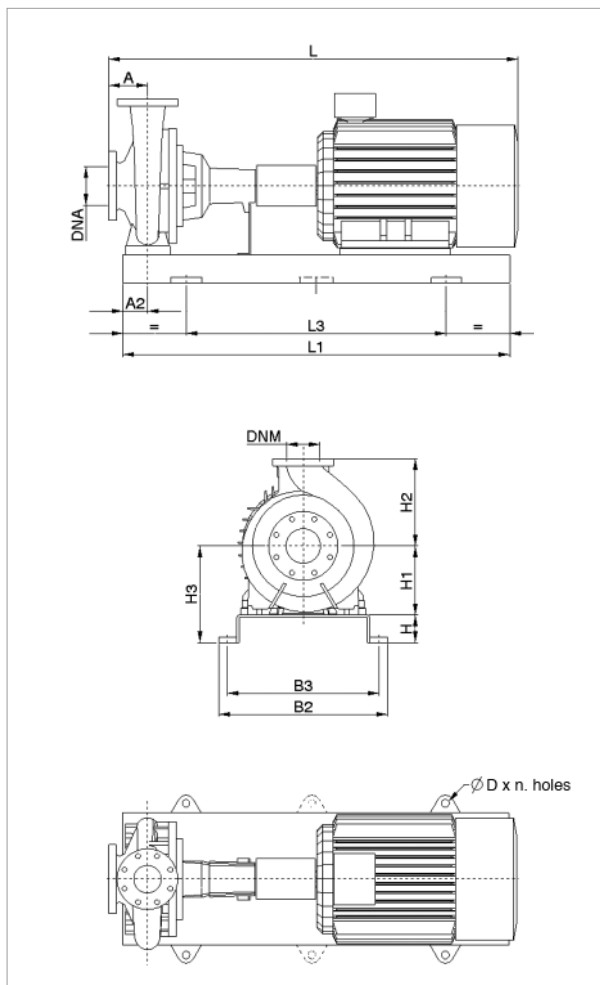
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)											FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 250-330	15	250	135	120	400	525	520	2000	1340	910	830	28x4	300	250	974	647	1215	662
	18,5	250	135	120	400	525	520	2000	1340	910	830	28x4	300	250	974	647	1215	662
	22	250	135	120	400	525	520	2000	1340	910	830	28x4	300	250	974	647	1215	662
	30	250	135	120	400	525	520	2000	1340	910	830	28x4	300	250	974	647	1215	662

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 250-400 - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 250-400	37	250M	3 x 400 V ~ Δ	66,6	IE3
	45	280S	3 x 400 V ~ Δ	80,6	IE3
	55	280M	3 x 400 V ~ Δ	98,1	IE3
	75	315S	3 x 400 V ~ Δ	135	IE3

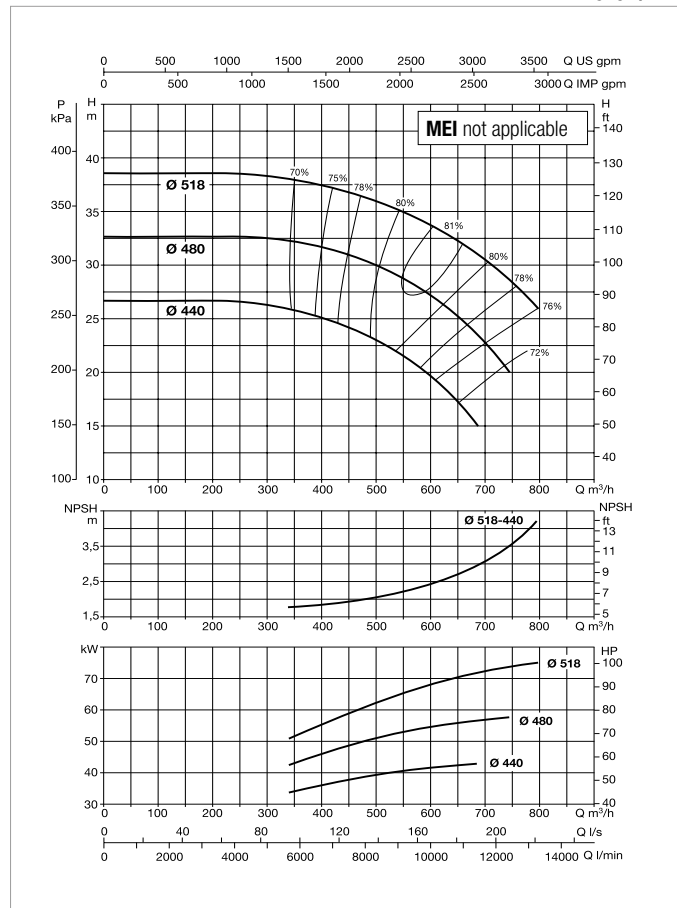
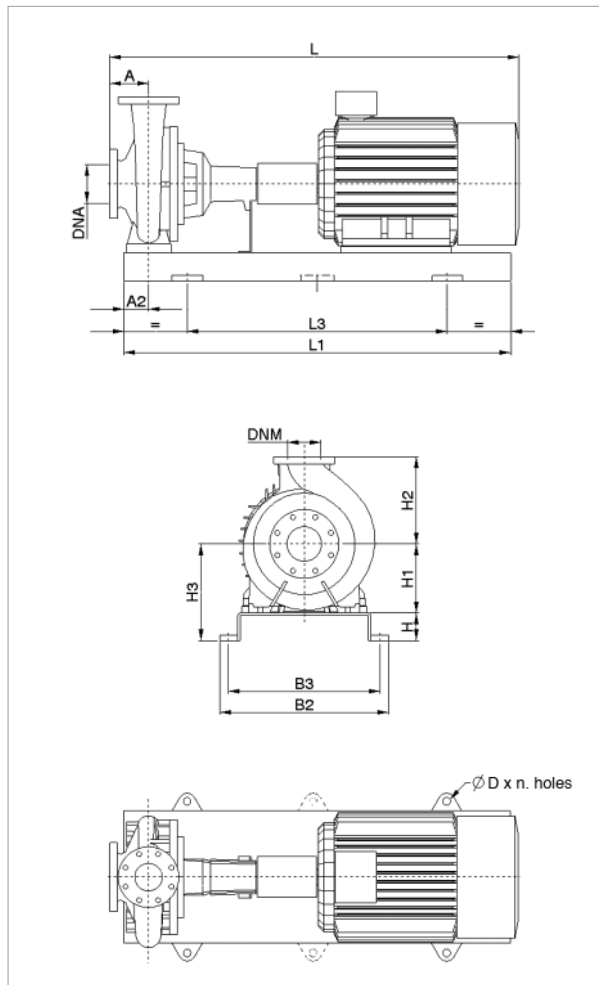
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 250-400	37	225	135	120	400	600	520	2000	1340	910	830	28x4	300	250	1080	887	1261	902
	45	225	135	120	400	600	520	2000	1340	910	830	28x4	300	250	1080	887	1261	902
	55	225	135	120	400	600	520	2000	1340	910	830	28x4	300	250	1080	887	1261	902
	75	225	135	120	400	600	520	2000	1340	910	830	28x4	300	250	1080	887	1261	902

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 250-500A - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 250-500A	37	250M	3 x 400 V ~ Δ	66,6	IE3
	45	280S	3 x 400 V ~ Δ	80,6	IE3
	55	280M	3 x 400 V ~ Δ	98,1	IE3
	75	315S	3 x 400 V ~ Δ	135	IE3
	90	315M	3 x 400 V ~ Δ	159	IE3

MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)
KDN 250-500A	37	300	155	210	500	500	(*)	(*)	(*)	(*)	(*)	300	250	(*)	(*)	(*)	(*)
	45	300	155	210	500	500	(*)	(*)	(*)	(*)	(*)	300	250	(*)	(*)	(*)	(*)
	55	300	155	210	500	500	(*)	(*)	(*)	(*)	(*)	300	250	(*)	(*)	(*)	(*)
	75	300	155	210	500	500	(*)	(*)	(*)	(*)	(*)	300	250	(*)	(*)	(*)	(*)
	90	300	155	210	500	500	(*)	(*)	(*)	(*)	(*)	300	250	(*)	(*)	(*)	(*)

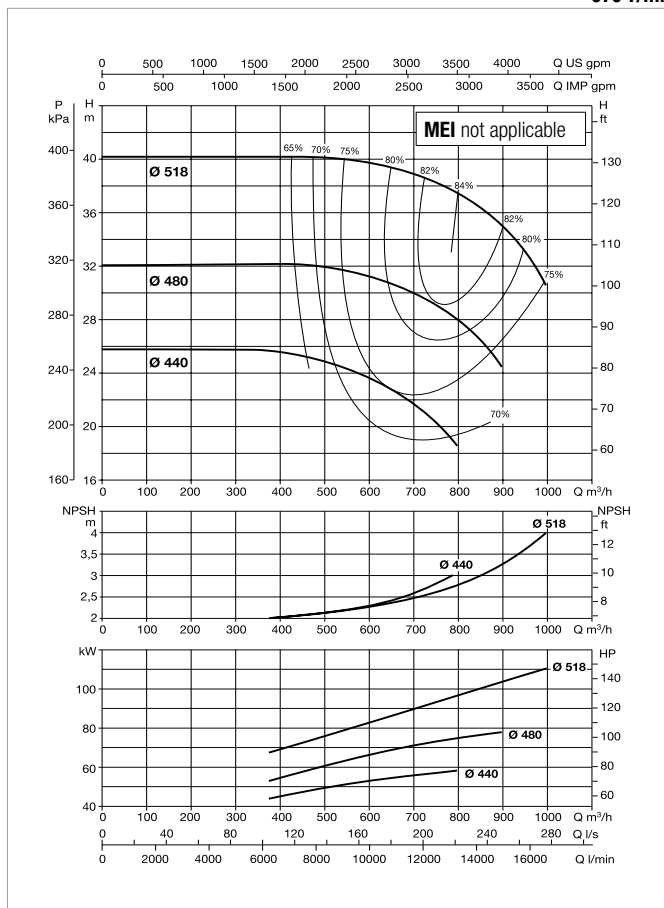
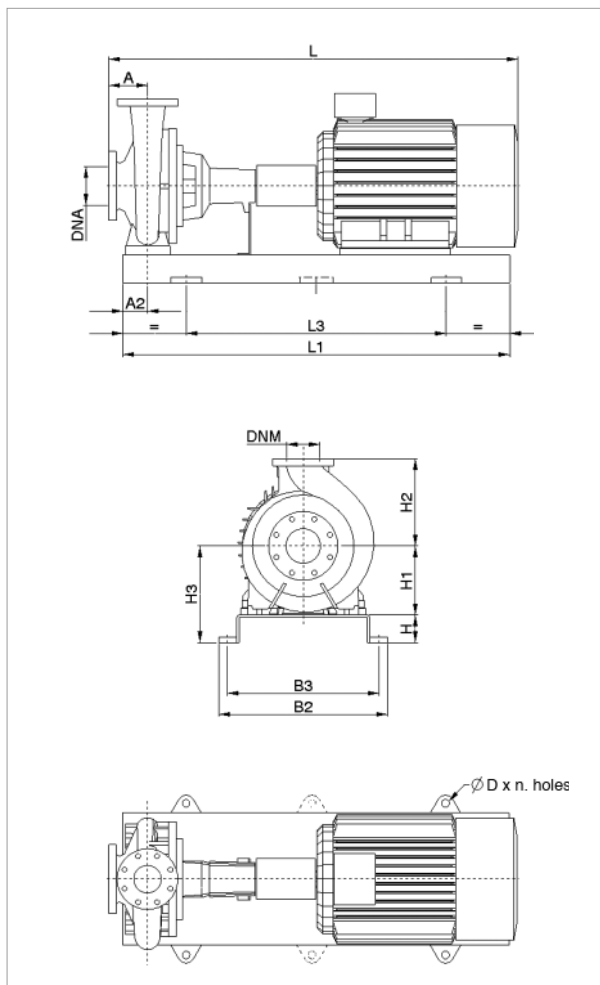
Dimension and electrical data based on sizing definition following the instructions on page 183.

(*) Data on request.

KDN 250-500 - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 250-500	45	280S	3 x 400 V ~ Δ	80,6	IE3
	55	280M	3 x 400 V ~ Δ	98,1	IE3
	75	315S	3 x 400 V ~ Δ	135	IE3
	90	315M	3 x 400 V ~ Δ	159	IE3
	110	315M	3 x 400 V ~ Δ	192	IE3
	132	315L	3 x 400 V ~ Δ	(*)	IE3

MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 250-500	45	300	155	210	500	500	(*)	(*)	(*)	(*)	(*)	(*)	300	250	(*)	(*)	(*)	(*)
	55	300	155	210	500	500	(*)	(*)	(*)	(*)	(*)	(*)	300	250	(*)	(*)	(*)	(*)
	75	300	155	210	500	500	(*)	(*)	(*)	(*)	(*)	(*)	300	250	(*)	(*)	(*)	(*)
	90	300	155	210	500	500	(*)	(*)	(*)	(*)	(*)	(*)	300	250	(*)	(*)	(*)	(*)
	110	300	155	210	500	500	710	2250	825	995	950	20x4	300	250	2368	(*)	2618	(*)
	132	300	155	210	500	500	(*)	(*)	(*)	(*)	(*)	(*)	300	250	(*)	(*)	(*)	(*)

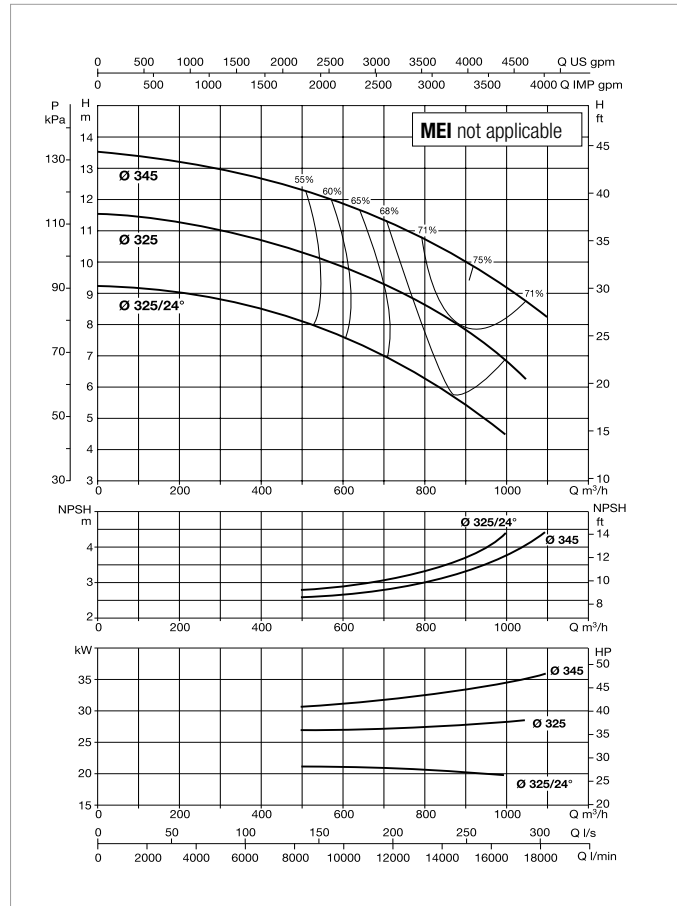
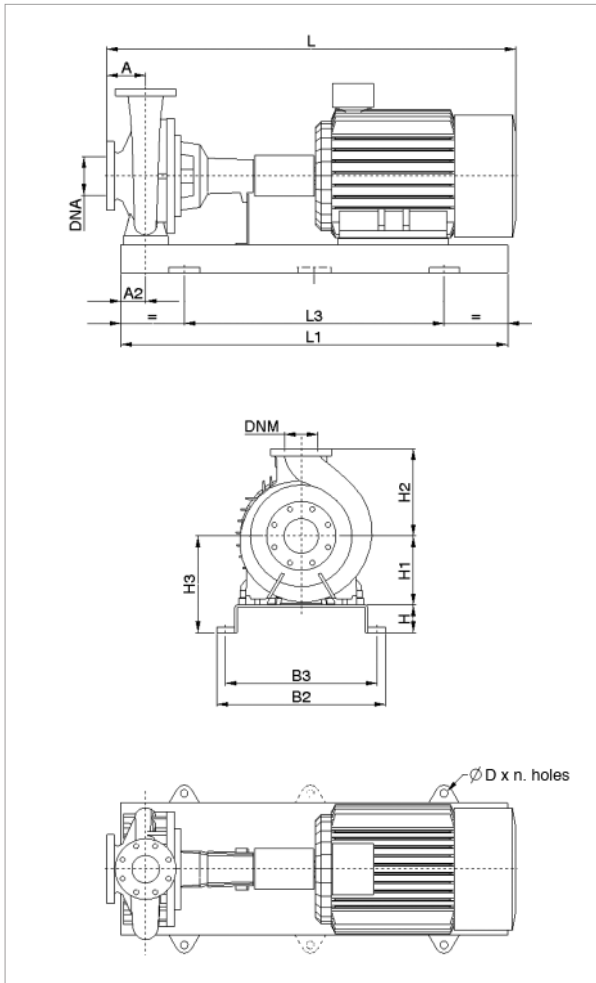
Dimension and electrical data based on sizing definition following the instructions on page 183.

(*) Data on request.

KDN 300-330 - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 300-330	22	200L	3 x 400 V ~ Δ	42,5	IE3
	30	225M	3 x 400 V ~ Δ	54,8	IE3
	37	250M	3 x 400 V ~ Δ	66,6	IE3

MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 300-330	22	300	230	185	500	670	(*)	(*)	(*)	(*)	(*)	(*)	350	300	(*)	(*)	(*)	(*)
	30	300	230	185	500	670	(*)	(*)	(*)	(*)	(*)	(*)	350	300	(*)	(*)	(*)	(*)
	37	300	230	185	500	670	(*)	(*)	(*)	(*)	(*)	(*)	350	300	(*)	(*)	(*)	(*)

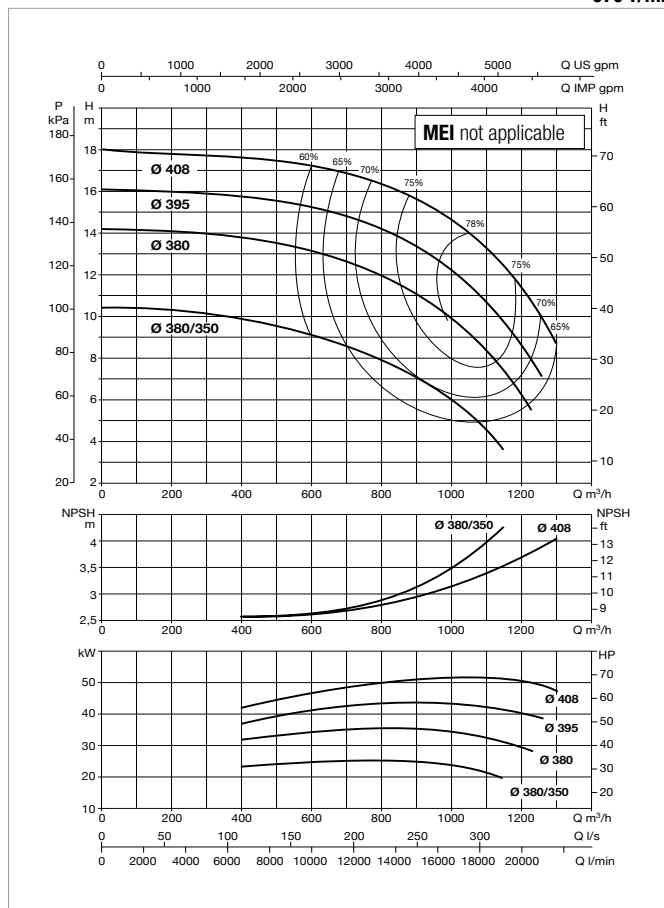
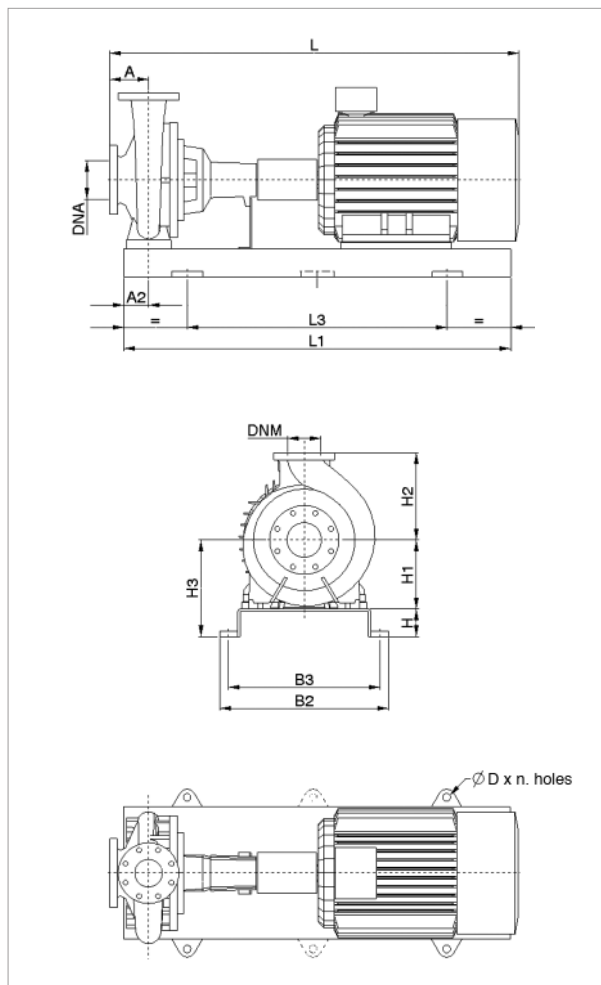
Dimension and electrical data based on sizing definition following the instructions on page 183.

(*) Data on request.

KDN 300-400M - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 300-400M	45	280S	3 x 400 V ~ Δ	80,6	IE3
	55	280M	3 x 400 V ~ Δ	98,1	IE3
	75	315S	3 x 400 V ~ Δ	135	IE3
	90	315M	3 x 400 V ~ Δ	159	IE3

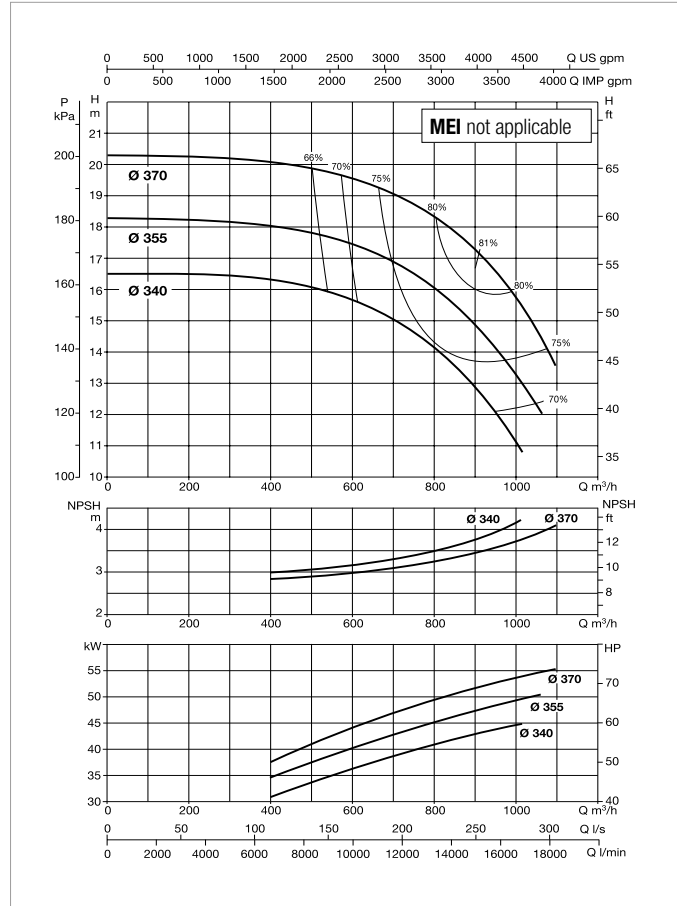
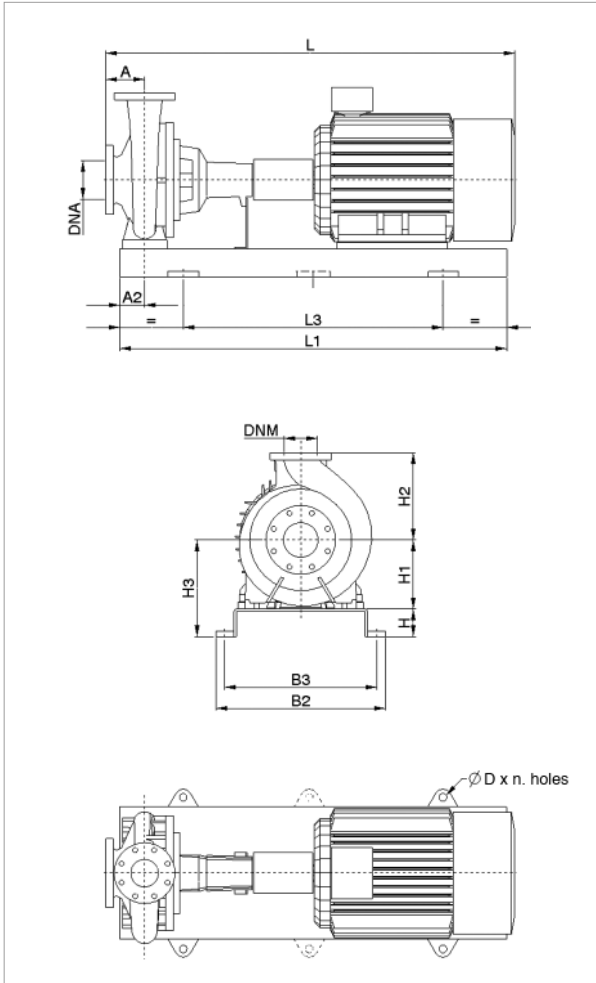
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)											FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING	
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNa	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 300-400M	45	325	135	120	400	640	520	2000	1340	910	830	28x4	350	300	1190	800	1431	815
	55	325	135	120	400	640	520	2000	1340	910	830	28x4	350	300	1190	800	1431	815
	75	325	135	120	400	640	520	2000	1340	910	830	28x4	350	300	1190	800	1431	815
	90	325	135	120	400	640	520	2000	1340	910	830	28x4	350	300	1190	800	1431	815

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 300-400A - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 300-400A	45	280S	3 x 400 V ~ Δ	80,6	IE3
	55	280M	3 x 400 V ~ Δ	98,1	IE3
	75	315S	3 x 400 V ~ Δ	135	IE3
	90	315M	3 x 400 V ~ Δ	159	IE3

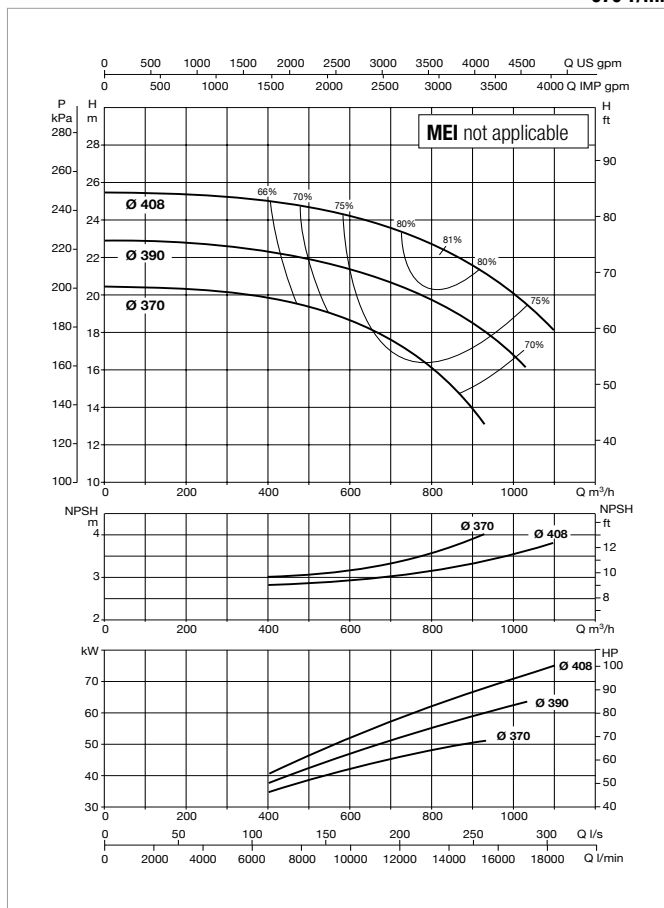
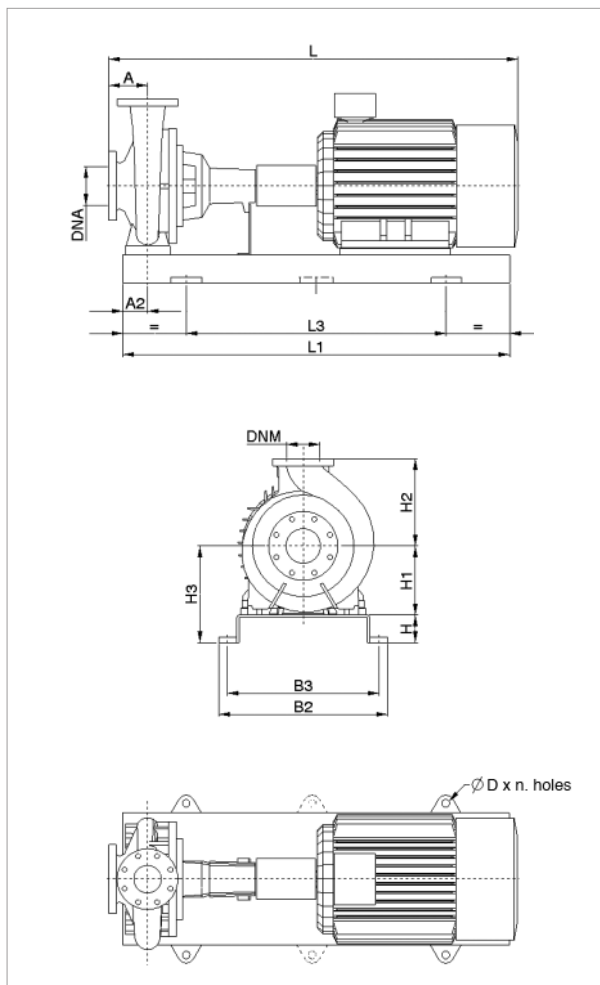
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 300-400A	45	325	135	120	400	640	520	2000	1340	910	830	28x4	350	300	1190	800	1431	815
	55	325	135	120	400	640	520	2000	1340	910	830	28x4	350	300	1190	800	1431	815
	75	325	135	120	400	640	520	2000	1340	910	830	28x4	350	300	1190	800	1431	815
	90	325	135	120	400	640	520	2000	1340	910	830	28x4	350	300	1190	800	1431	815

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 300-400 - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 300-400	45	280S	3 x 400 V ~ Δ	80,6	IE3
	55	280M	3 x 400 V ~ Δ	98,1	IE3
	75	315S	3 x 400 V ~ Δ	135	IE3
	90	315M	3 x 400 V ~ Δ	159	IE3
	110	315M	3 x 400 V ~ Δ	192	IE3

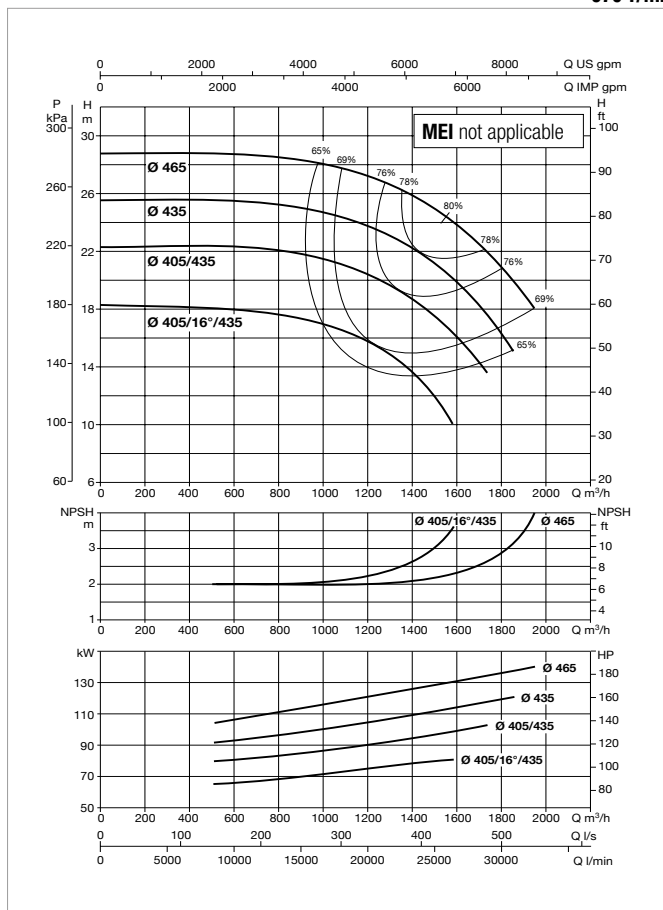
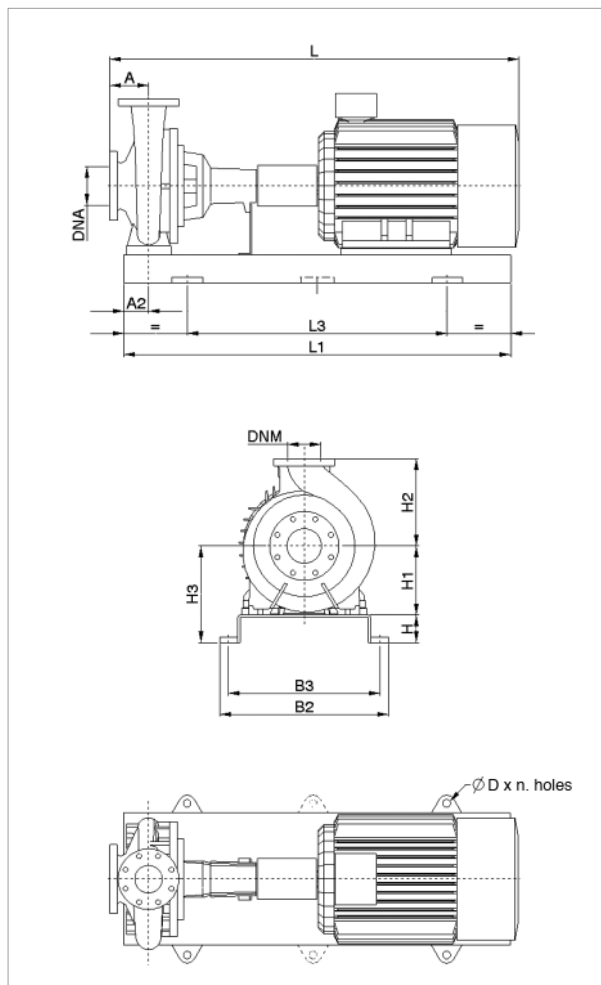
MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 300-400	45	325	135	120	400	640	520	2000	1340	910	830	28x4	350	300	1190	800	1431	815
	55	325	135	120	400	640	520	2000	1340	910	830	28x4	350	300	1190	800	1431	815
	75	325	135	120	400	640	520	2000	1340	910	830	28x4	350	300	1190	800	1431	815
	90	325	135	120	400	640	520	2000	1340	910	830	28x4	350	300	1190	800	1431	815
	110	325	135	120	400	640	520	2000	1340	910	830	28x4	350	300	1207	800	1448	815

Dimension and electrical data based on sizing definition following the instructions on page 183.

KDN 350-500A - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 350-500A	90	315M	3 x 400 V ~ Δ	159	IE3
	110	315M	3 x 400 V ~ Δ	192	IE3
	132	315L	3 x 400 V ~ Δ	(*)	IE3
	160	315L	3 x 400 V ~ Δ	(*)	IE3

MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 350-500A	90	380	295	240	600	600	840	2490	1890	1305	1260	20x6	400	350	2658	1080	2659	1095
	110	380	295	240	600	600	840	2490	1890	1305	1260	20x6	400	350	2675	1080	2676	1095
	132	380	295	240	600	600	840	2490	1890	1305	1260	20x6	400	350	2675	1080	2676	1095
	160	380	295	240	600	600	840	2700	2100	1305	1260	20x6	400	350	3202	1080	3203	1095

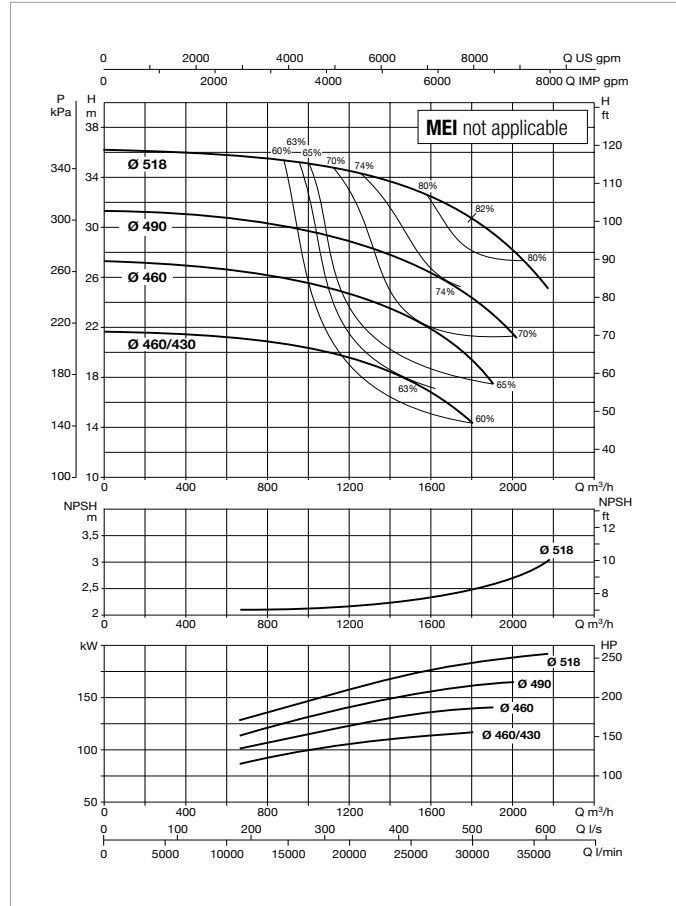
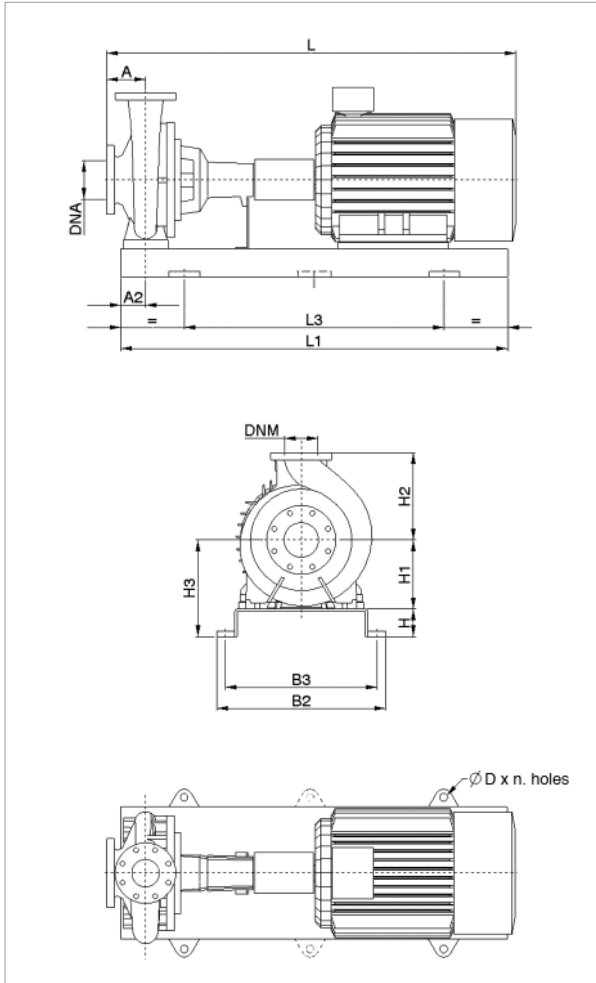
Dimension and electrical data based on sizing definition following the instructions on page 183.

(*) Data on request.

KDN 350-500 - 6 POLES - STANDARDISED PUMPS

Pumped liquid temperature range: from -10 °C to +120°C - Maximum ambient temperature: +40°C

= 970 1/min



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	POWER (kW)	MOTOR SIZE	ELECTRICAL DATA		MOTOR TYPE
			POWER INPUT 50 Hz	In A	
KDN 350-500	110	315M	3 x 400 V ~ Δ	192	IE3
	132	315L	3 x 400 V ~ Δ	(*)	IE3
	160	315L	3 x 400 V ~ Δ	(*)	IE3
	200	355L	3 x 400 V ~ Δ	(*)	IE3
	250	355L	3 x 400 V ~ Δ	(*)	IE3

MODEL	POWER (kW)	UNIT DIMENSIONS (mm)										FLANGE DIMENSIONS (mm)		STANDARD COUPLING		SPACER COUPLING		
		A	A2	H	H1	H2	H3	L1	L3	B2	B3	D	DNA	DNM	L (mm)	WEIGHT Kg	L (mm)	WEIGHT Kg
KDN 350-500	110	380	295	240	600	600	840	2490	1890	1305	1260	20x6	400	350	2675	1080	2676	1095
	132	380	295	240	600	600	840	2490	1890	1305	1260	20x6	400	350	2675	1080	2676	1095
	160	380	295	240	600	600	840	2490	1890	1305	1260	20x6	400	350	2675	1080	2676	1095
	200	380	(*)	(*)	600	600	600	(*)	(*)	(*)	(*)	(*)	400	350	(*)	(*)	(*)	(*)
	250	380	(*)	(*)	600	600	600	(*)	(*)	(*)	(*)	(*)	400	350	(*)	(*)	(*)	(*)

Dimension and electrical data based on sizing definition following the instructions on page 183.

(*) Data on request.

KDN OVERSIZE - 6 POLES

STANDARDISED PUMPS

IE3 STANDARD MOTOR ELECTRIC DATA

=970 1/min

MOTOR TYPE	P2 NOMINAL kW	SPEED rpm	YIELD %	POWER FACTOR COS ϕ	POWER INPUT 50 Hz	In A		Start-up current Ia/In	Start-up torque Ma/Mn	Maximum torque M/k/Mn	POLES
						400	690				
MEC 132M	5,50	975	88,00	0,640	3x400 Δ	14,2	8,19	5,40	2,10	2,90	6
MEC 160M	7,50	970	89,10	0,770	3x400 Δ	15,80	9,13	6,00	2,40	2,40	6
MEC 160L	11,00	975	90,30	0,760	3x400 Δ	23,10	13,35	6,80	2,90	2,60	6
MEC 180L	15,00	980	91,20	0,800	3x400 Δ	29,70	17,17	7,80	2,90	3,30	6
MEC 200L	18,50	980	91,70	0,810	3x400 Δ	36,00	20,81	7,30	2,80	2,80	6
MEC 200L	22,00	980	92,20	0,810	3x400 Δ	42,50	24,57	7,70	3,00	2,90	6
MEC 225M	30,00	985	92,90	0,850	3x400 Δ	54,80	31,68	6,20	2,10	2,20	6
MEC 250M	37,00	985	93,30	0,860	3x400 Δ	66,60	38,50	8,30	2,90	3,40	6
MEC 280S	45,00	990	93,70	0,860	3x400 Δ	80,60	46,59	7,80	2,70	3,10	6
MEC 280M	55,00	990	94,10	0,860	3x400 Δ	98,10	56,71	8,20	2,90	3,20	6
MEC 315S	75,00	990	94,60	0,850	3x400 Δ	135,00	78,03	7,70	2,40	3,10	6
MEC 315M	90,00	990	94,90	0,860	3x400 Δ	159,00	91,91	7,40	2,30	3,00	6
MEC 315L	110,00	990	95,10	0,870	3x400 Δ	192,00	110,98	6,50	2,00	2,60	6

KVC - KVCX

INTEGRAL SHAFT MULTISTAGE VERTICAL CENTRIFUGAL ELECTRIC PUMPS



KVC

KVCX

TECHNICAL DATA

Operating range:

from 50 to 200 l/min with head up to 113 m

Pumped liquid: clean, free of solids and abrasives, non-viscous, non-aggressive, non-crystallised and chemically neutral, with properties similar to water

Pumped liquid temperature range: from 0 °C to +35 °C for domestic use (EN 60335-2-41 safety standards)

From 0°C to +40°C for other uses

Maximum ambient temperature: +40 °C

Maximum operating pressure: 12 bar (1200 kPa)

Protection class: IP 55

Insulation class: F

Standard voltage: single-phase 220-240 V / 50 Hz

three-phase 230-400 V / 50 Hz IE3 ≥ 0.75 kW for EU countries

IE2 ≥ 0.75 kW for extre EU countries

Installation: fixed, vertical or horizontal position, provided that the motor is always above the pump

Special executions on requests: alternative voltages and frequencies

APPLICATIONS

Vertical multistage centrifugal pump suitable for small to medium user water systems. Suitable for pressurization units, filling of pressure vessels, sprinkler and watering systems, fire-fighting and washing systems, channelling of condensate and cooling water. Innovative and robust design.

CONSTRUCTION FEATURES OF THE PUMP

KVC: Technopolymer delivery and suction bodies, and in-line suction and delivery ports with threaded metal insert.

KVCX: technopolymer suction body with threaded metal insert; stainless steel threaded delivery port on pump liner.

Impellers, diffuser bodies and diffusers in technopolymer, fully rust-proof. AISI 304 stainless steel pump liner, adjustment rings and seal disc. Silicon Carbide / Silicon mechanical seal, fitted on the AISI 303 stainless-steel drive shaft extension.

CONSTRUCTION FEATURES OF THE MOTOR

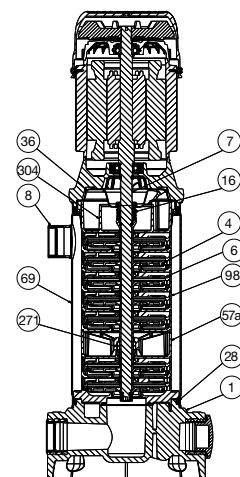
Closed asynchronous type, external ventilation cooling. Rotor running on permanently lubricated ball bearings, oversized to ensure low noise and durability. Standard built-in thermo-amperometric protection. Capacitor permanently fitted on single phase versions.

Overload protection to be provided by the user for the three-phase version. Construction according to CEI 2-3 / CEI 61-69 (EN 60335-2-41).

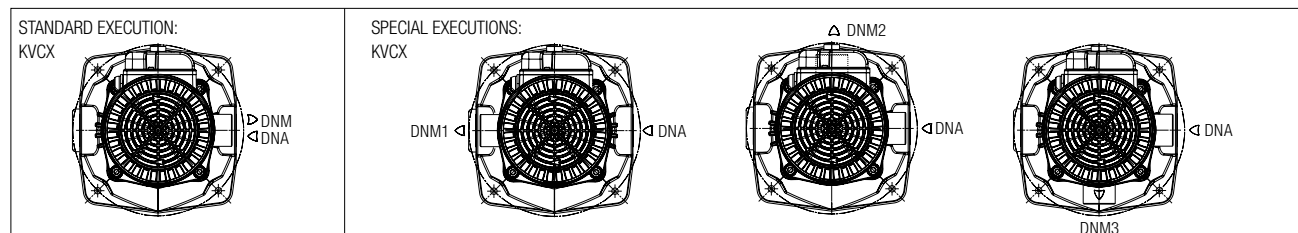
MATERIALS

No.	PARTS*	MATERIALS
1	PUMP BODY	TECHNOPOLYMER A
4	IMPELLER	TECHNOPOLYMER B
6	DIFFUSER	TECHNOPOLYMER B
7	SHAFT WITH ROTOR	AISI 303 STAINLESS STEEL X10 CrNi S 1089 UNI 6900/71
16	MECHANICAL SEAL	SILICON CARBIDE/SILICON
28	OR RING	EPDM RUBBER
36	SEAL HOLDING DISC	AISI 304 STAINLESS STEEL X5 CrNi 1810 UNI 6900/71
57a	INTERMEDIATE STAGE	TECHNOPOLYMER B
69	LINER	AISI 304 STAINLESS STEEL X5 CrNi 1810 UNI 6900/71
98	DIFFUSER BODY	TECHNOPOLYMER B
271	CENTERING BUSHING	BRONZE B14
304	CONVEYOR	TECHNOPOLYMER B
8	DNM (standard for KVCX only)	

* In contact with the liquid.



KVCX SUCTION AND DELIVERY PORT ORIENTATION



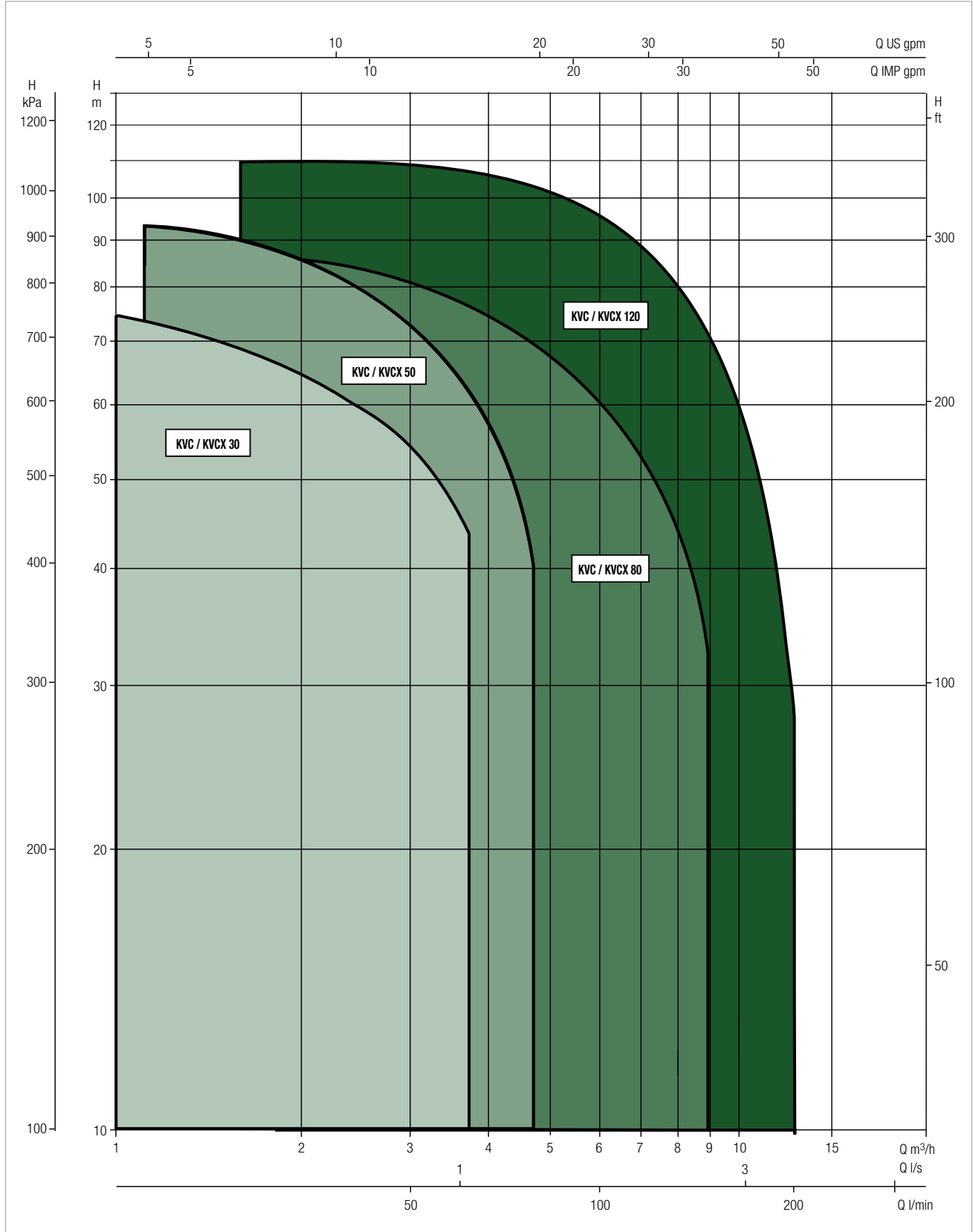
KVC - KVCX RANGE

INTEGRAL SHAFT MULTISTAGE VERTICAL CENTRIFUGAL ELECTRIC PUMPS

PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

GRAPHIC SELECTION TABLE



SELECTION TABLE - KVC / KVCX 30

MODEL	Q=m ³ /h	0	0,6	1,2	1,8	2,4	3,0	3,3	3,6	3,9
	Q=l/min	0	10	20	30	40	50	55	60	65
KVC/KVCX 15/30 M / T	H (m)	21,5	21,3	20,5	19	16,9	14,2	12,6	10,8	8,9
KVC/KVCX 25/30 M / T		29	28,6	27,4	25,3	22,4	18,5	16,3	13,6	10,7
KVC/KVCX 35/30 M / T		40,2	39,3	37,3	34,1	29,8	24,3	21	17,4	13,5
KVC/KVCX 45/30 M		49,7	48,7	46,5	43,1	38,4	32,1	28,5	24,2	19,6
KVC/KVCX 45/30 T		47,1	45,9	43,5	39,8	34,7	28	24	19,6	14,7
KVC/KVCX 50/30 M / T		61,5	59,9	56,8	52,2	46	38	33,5	28,3	22,7
KVC/KVCX 60/30 M / T		69,6	67,6	64	58,5	51,1	41,8	36,2	30,3	23,8
KVC/KVCX 65/30 M / T		78,4	76,8	73,5	68,4	61,2	51,9	46	40,1	33,3

SELECTION TABLE - KVC / KVCX 50

MODEL	Q=m ³ /h	0	0,6	1,2	1,8	2,4	3,0	3,3	3,6	3,9	4,2	4,8
	Q=l/min	0	10	20	30	40	50	55	60	65	70	80
KVC/KVCX 20/50 M / T	H (m)	27,4	26,9	26,0	24,9	23,1	21,1	19,8	-	16,9	-	11,4
KVC/KVCX 30/50 M / T		41,1	40,3	39,0	37,3	34,7	31,6	29,7	-	25,3	-	17,1
KVC/KVCX 40/50 M / T		54,9	53,7	52,0	49,7	46,3	42,1	39,6	-	33,7	-	22,9
KVC/KVCX 55/50 M / T		68,6	67,1	65,0	62,1	57,9	52,7	49,5	-	42,1	-	28,6
KVC/KVCX 65/50 M / T		82,3	80,6	78,0	74,6	69,4	63,2	59,4	-	50,6	-	34,3
KVC/KVCX 75/50 M / T		96,0	94,0	91,0	87,0	81,0	73,8	69,3	-	59,0	-	40

SELECTION TABLE - KVC / KVCX 80

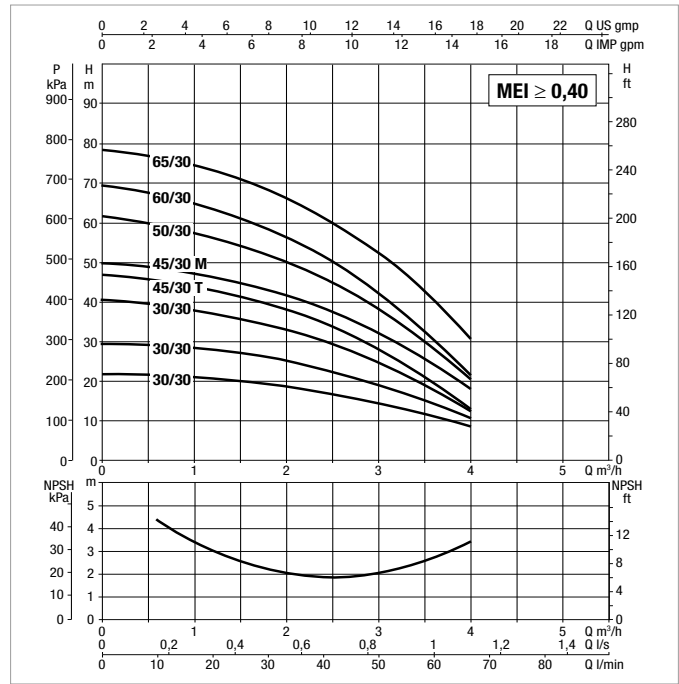
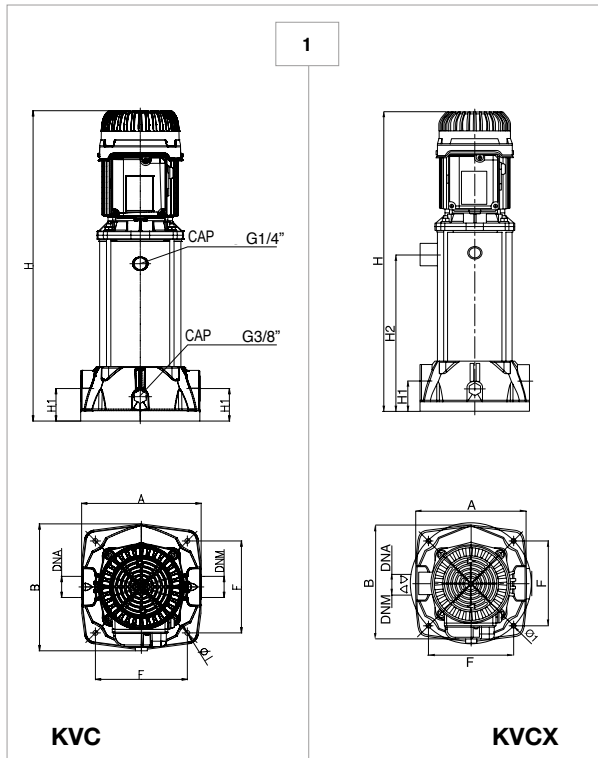
MODEL	Q=m ³ /h	0	0,6	1,2	1,8	2,4	3,0	3,3	3,6	3,9	4,2	4,8	5,4	6	7,2	8,4	9,0
	Q=l/min	0	10	20	30	40	50	55	60	65	70	80	90	100	120	140	150
KVC 20/80 M / T	H (m)	25,0	24,8	24,4	23,8	23,1	22,3	21,5	21,3	20,5	20,1	19	17,3	16	11,9	7,4	4,8
KVC 30/80 M / T		36,9	36,9	36,6	36,1	35,3	34,3	33,6	33,1	32,2	31,6	29,5	27,8	25,5	20,3	14,2	10,7
KVC 40/80 M / T		50,1	49,7	49,0	48,0	46,7	45,1	44,2	43,2	42,0	41	38,5	35,7	32,5	25,5	17,1	12,5
KVC 45/80 M / T		64,6	64,5	63,9	63,0	61,7	60,0	59,0	57,9	56,7	55,5	52,5	49,3	45	37,1	26,8	21,1
KVC 55/80 M / T		76,1	75,8	75,1	73,9	72,2	70,0	68,5	67,4	66,0	64,3	60,5	56,7	52	41,8	29,5	22,7
KVC 65/80 T		88,6	88,0	86,9	85,5	83,5	81,2	80,0	78,3	76,5	75	71	67	62	51,1	37,9	30,5

SELECTION TABLE - KVC / KVCX 120

MODEL	Q=m ³ /h	0	0,6	1,2	1,8	2,4	3,0	3,3	3,9	4,8	5,4	6	7,2	8,4	9,0	9,6	10,8	12
	Q=l/min	0	10	20	30	40	50	55	65	80	90	100	120	140	150	160	180	200
KVC/KVCX 25/120 M / T	H (m)	30,4	30,3	30,2	30,0	29,9	29,6	29,3	28,7	27,7	26,9	25,9	23,2	19,9	18,2	16,4	12	7
KVC/KVCX 35/120 M / T		46,2	46,1	45,7	45,3	44,8	44,0	43,7	42,7	40,9	39,3	37,4	33,7	29,4	26,8	24,2	18	11
KVC/KVCX 45/120 M / T		62,4	62,0	61,4	60,8	60,1	59,1	58,6	57,5	55,3	53,4	51,4	46,2	40,6	37,5	34	26,3	17
KVC/KVCX 60/120 T		78,0	77,5	76,7	75,9	75,1	73,9	73,3	71,5	68,3	65,9	63,2	58	51	47	43,4	35	24,5
KVC/KVCX 70/120 T		95,0	94,3	93,4	92,5	91,4	89,8	88,9	86,8	83,2	80,5	77,9	71,7	63,9	59,2	54,7	44	31
KVC/KVCX 85/120 T		112,7	111,6	110,3	109,0	107,6	105,7	104,5	101,9	97,5	94,1	89,9	81,6	72,1	66,7	61,2	48,9	34

KVC / KVCX 30 - INTEGRAL SHAFT MULTISTAGE VERTICAL CENTRIFUGAL ELECTRIC PUMPS

Pumped liquid temperature range: from 0 °C to +35 °C for domestic use - from 0 °C to +40 °C for the other uses



For MEI index refer to the hydraulic efficiency section.

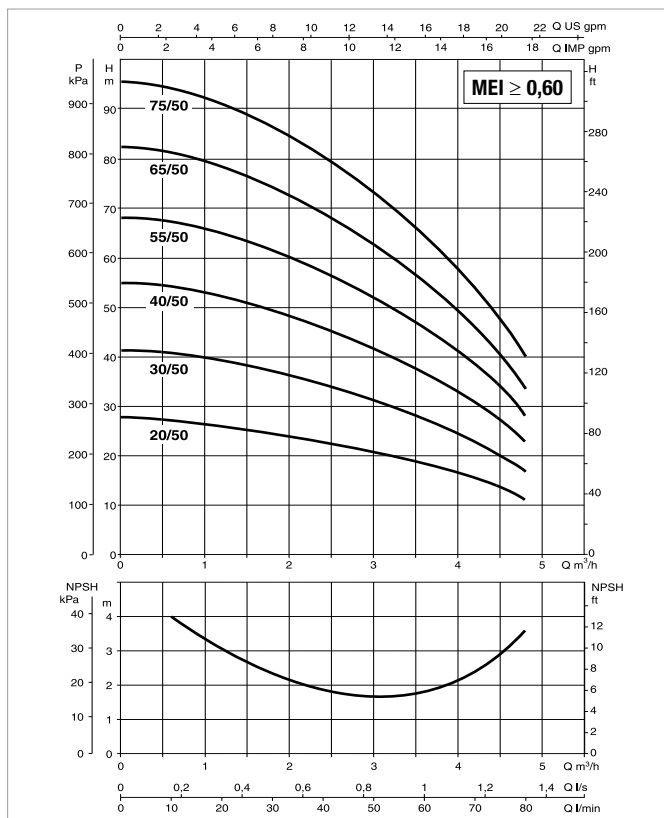
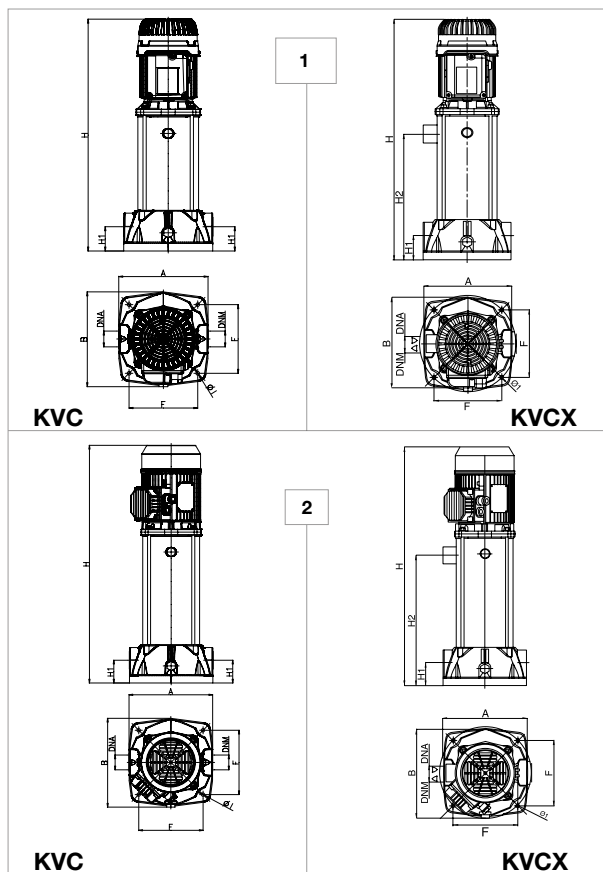
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	NO OF IMPELLERS	ELECTRICAL DATA									
		POWER INPUT 50 Hz	P1 MAX KW	P2 NOMINAL		In A	MOTOR TYPE	I st. A	1/min.	CAPACITOR	
				kW	HP					µF	Vc
KVC-KVCX 15-30 M	2	1 x 220 - 240V ~	0,56	0,25	0,34	2,8	-	11,7	2800	14	450
KVC-KVCX 15-30 T		3 x 230 / 400V ~	0,52	0,25	0,34	2,2 - 1,2	-	3,1 - 1,8	2800	-	-
KVC-KVCX 25-30 M	3	1 x 220 - 240V ~	0,73	0,37	0,5	3,4	-	11,8	2800	14	450
KVC-KVCX 25-30 T		3 x 230 / 400V ~	0,67	0,37	0,5	2,4 - 1,4	-	3,3 - 1,9	2800	-	-
KVC-KVCX 35-30 M	4	1 x 220 - 240V ~	0,89	0,45	0,6	4,1	-	12,5	2800	14	450
KVC-KVCX 35-30 T		3 x 230 / 400V ~	0,85	0,45	0,6	2,8 - 1,6	-	3,6 - 2,1	2800	-	-
KVC-KVCX 45-30 M	5	1 x 220 - 240V ~	1,11	0,65	0,88	5,2	-	19,3	2800	20	450
KVC-KVCX 45-30 T		3 x 230 / 400V ~	0,97	0,65	0,88	3 - 1,7	-	3,5 - 1,9	2800	-	-
KVC-KVCX 50-30 M	6	1 x 220 - 240V ~	1,29	0,75	1	5,9	-	20,8	2800	20	450
KVC-KVCX 50-30 T		3 x 230 / 400V ~	1,08	0,75	1	3,5 - 2	IE3	5,2 - 3	2800	-	-
KVC-KVCX 60-30 M	7	1 x 220 - 240V ~	1,45	0,9	1,2	6,7	-	24,3	2800	25	450
KVC-KVCX 60-30 T		3 x 230 / 400V ~	1,22	0,9	1,2	3,8 - 2,2	IE3	4,7 - 2,7	2800	-	-
KVC-KVCX 65-30 M	8	1 x 220 - 240V ~	1,56	1	1,36	7	-	24,3	2800	25	450
KVC-KVCX 65-30 T		3 x 230 / 400V ~	1,38	1	1,36	4,3 - 2,5	IE3	4,5 - 2,6	2800	-	-

MODEL	EXTERNAL DESIGN	A	B	F	H	H1	H2	Ø I	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
											L/A	L/B	H		
KVC 15-30 M - T	1	221	250	170	505	60	-	9	G 1" ¼	G 1" ¼	300	360	600	0,065	14,7
KVC 25-30 M - T	1	221	250	170	505	60	-	9	G 1" ¼	G 1" ¼	300	360	600	0,065	14,7
KVC 35-30 M - T	1	221	250	170	560	60	-	9	G 1" ¼	G 1" ¼	300	360	600	0,065	14,5
KVC 45-30 M - T	1	221	250	170	560	60	-	9	G 1" ¼	G 1" ¼	300	360	600	0,065	14,9
KVC 50-30 M - T	1	221	250	170	652	60	-	9	G 1" ¼	G 1" ¼	300	360	745	0,08	17,5
KVC 60-30 M - T	1	221	250	170	652	60	-	9	G 1" ¼	G 1" ¼	300	360	745	0,08	17,3
KVC 65-30 M	1	221	250	170	679	60	-	9	G 1" ¼	G 1" ¼	300	360	745	0,08	18,9
KVC 65-30 T	1	221	250	170	679	60	-	9	G 1" ¼	G 1" ¼	300	360	745	0,08	18,5
KVCX 15-30 M - T	1	235	250	170	505	60	184	9	G 1" ¼	G 1" ¼	300	360	745	0,08	14,7
KVCX 25-30 M - T	1	235	250	170	505	60	184	9	G 1" ¼	G 1" ¼	300	360	745	0,08	14,7
KVCX 35-30 M - T	1	235	250	170	560	60	239	9	G 1" ¼	G 1" ¼	300	360	745	0,08	14,5
KVCX 45-30 M - T	1	235	250	170	560	60	239	9	G 1" ¼	G 1" ¼	300	360	745	0,08	14,9
KVCX 50-30 M - T	1	235	250	170	652	60	332	9	G 1" ¼	G 1" ¼	300	360	745	0,08	17,5
KVCX 60-30 M - T	1	235	250	170	652	60	332	9	G 1" ¼	G 1" ¼	300	360	745	0,08	17,3
KVCX 65-30 M	1	235	250	170	679	60	358	9	G 1" ¼	G 1" ¼	300	360	745	0,08	18,9
KVCX 65-30 T	1	235	250	170	679	60	358	9	G 1" ¼	G 1" ¼	300	360	745	0,08	18,5

KVC / KVCX 50 - INTEGRAL SHAFT MULTISTAGE VERTICAL CENTRIFUGAL ELECTRIC PUMPS

Pumped liquid temperature range: from 0 °C to +35 °C for domestic use - from 0 °C to +40 °C for the other uses



For MEI index refer to the hydraulic efficiency section.

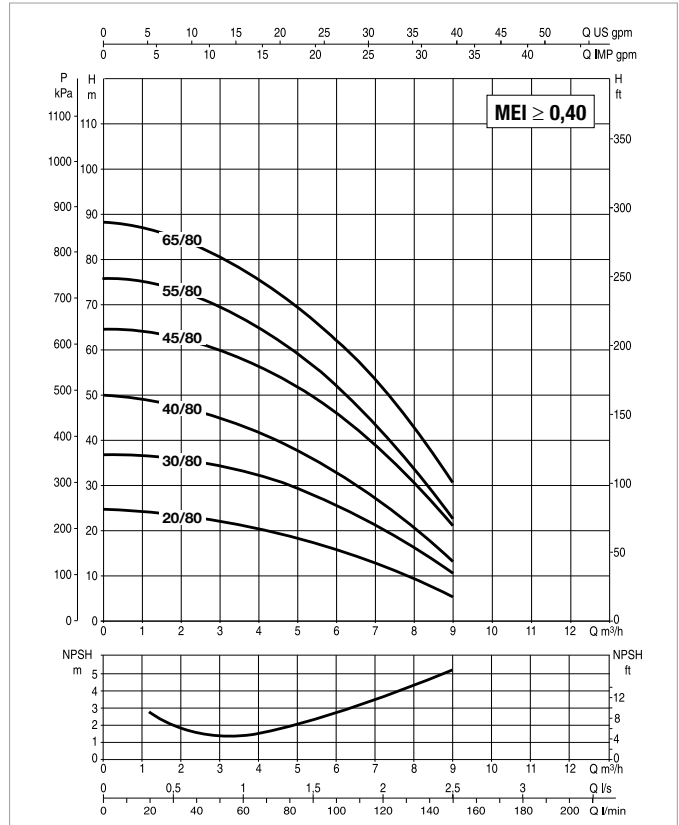
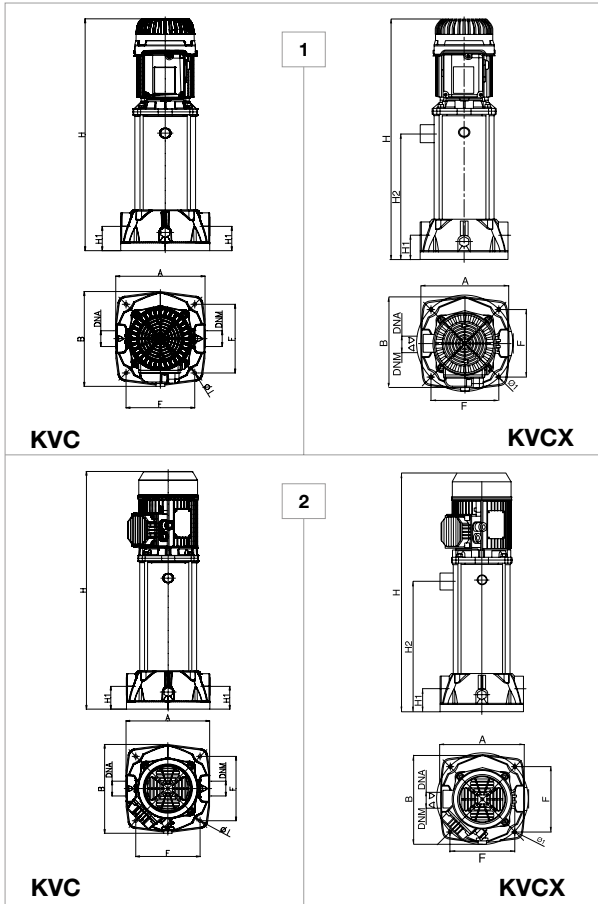
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	ELECTRICAL DATA										
	NO. OF IMPELLERS	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	I st. A	1/min.	CAPACITOR	
				kW	HP					µF	Vc
KVC-KVCX 20-50 M	2	1 x 220 - 240 V ~	0,55	0,37	0,5	2,5	-	13,7	2800	14	450
KVC-KVCX 20-50 T		3 x 230 / 400 V ~	0,54	0,37	0,5	1,7 - 1	-	15,9 - 9,2	2800	-	-
KVC-KVCX 30-50 M	3	1 x 220 - 240 V ~	0,9	0,55	0,75	4	-	13,7	2800	14	450
KVC-KVCX 30-50 T		3 x 230 / 400 V ~	0,75	0,55	0,75	2,4/1,4	-	15,9 - 9,2	2800	-	-
KVC-KVCX 40-50 M	4	1 x 220 - 240 V ~	1,2	0,8	1,1	5,6	-	28	2800	20	450
KVC-KVCX 40-50 T		3 x 230 / 400 V ~	1,2	0,8	1,1	4,1 - 2,4	IE3	23,1 - 13,5	2800	-	-
KVC-KVCX 55-50 M	5	1 x 220 - 240 V ~	1,4	1	1,36	6,4	-	30	2800	25	450
KVC-KVCX 55-50 T		3 x 230 / 400 V ~	1,5	1	1,36	4,7 - 2,7	IE3	23,6 - 13,3	2800	-	-
KVC-KVCX 65-50 M	6	1 x 220 - 240 V ~	1,7	1,1	1,5	7,4	-	29,2	2800	31,5	450
KVC-KVCX 65-50 T		3 x 230 / 400 V ~	1,9	1,1	1,5	5,9 - 3,4	IE3	30,9 - 17,8	2800	-	-
KVC-KVCX 75-50 M	7	1 x 220 - 240 V ~	2	1,5	2	9	-	38	2800	31,5	450
KVC-KVCX 75-50 T		3 x 230 / 400 V ~	2,1	1,5	2	6,6 - 3,8	IE3	33,7 - 19,4	2800	-	-

MODEL	EXTERNAL DESIGN	A	B	F	H	H1	H2	Ø I	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
											L/A	L/B	H		
KVC 20-50 M - T	1	221	235	170	450	60	-	9	G 1" ¼	G 1" ¼	300	360	600	0,065	13,5
KVC 30-50 M - T	1	221	235	170	478	60	-	9	G 1" ¼	G 1" ¼	300	360	600	0,065	13,7
KVC 40-50 M - T	1	221	235	170	505	60	-	9	G 1" ¼	G 1" ¼	300	360	656	0,071	15,8
KVC 55-50 M - T	1	221	235	170	533	60	-	9	G 1" ¼	G 1" ¼	300	360	656	0,071	17
KVC 65-50 M	2	221	235	170	600	60	-	9	G 1" ¼	G 1" ¼	300	360	735	0,079	20,2
KVC 65-50 T	2	221	235	170	600	60	-	9	G 1" ¼	G 1" ¼	300	360	735	0,079	19,8
KVC 75-50 M	2	221	235	170	627	60	-	9	G 1" ¼	G 1" ¼	300	360	735	0,079	21,2
KVC 75-50 T	2	221	235	170	627	60	-	9	G 1" ¼	G 1" ¼	300	360	735	0,079	20,6
KVCX 20-50 M - T	1	221	235	170	450	60	-	9	G 1" ¼	G 1" ¼	300	360	600	0,065	13,5
KVCX 30-50 M - T	1	221	235	170	478	60	184	9	G 1" ¼	G 1" ¼	300	360	600	0,065	13,7
KVCX 40-50 M - T	1	221	235	170	505	60	184	9	G 1" ¼	G 1" ¼	300	360	656	0,071	15,8
KVCX 55-50 M - T	1	221	235	170	533	60	239	9	G 1" ¼	G 1" ¼	300	360	656	0,071	17
KVCX 65-50 M	2	221	235	170	600	60	239	9	G 1" ¼	G 1" ¼	300	360	735	0,079	20,2
KVCX 65-50 T	2	221	235	170	600	60	239	9	G 1" ¼	G 1" ¼	300	360	735	0,079	19,8
KVCX 75-50 M	2	221	235	170	627	60	332	9	G 1" ¼	G 1" ¼	300	360	735	0,079	21,2
KVCX 75-50 T	2	221	235	170	627	60	332	9	G 1" ¼	G 1" ¼	300	360	735	0,079	20,6

KVC / KVCX 80 - INTEGRAL SHAFT MULTISTAGE VERTICAL CENTRIFUGAL ELECTRIC PUMPS

Pumped liquid temperature range: from 0 °C to +35 °C for domestic use - from 0 °C to +40 °C for the other uses



For MEI index refer to the hydraulic efficiency section.

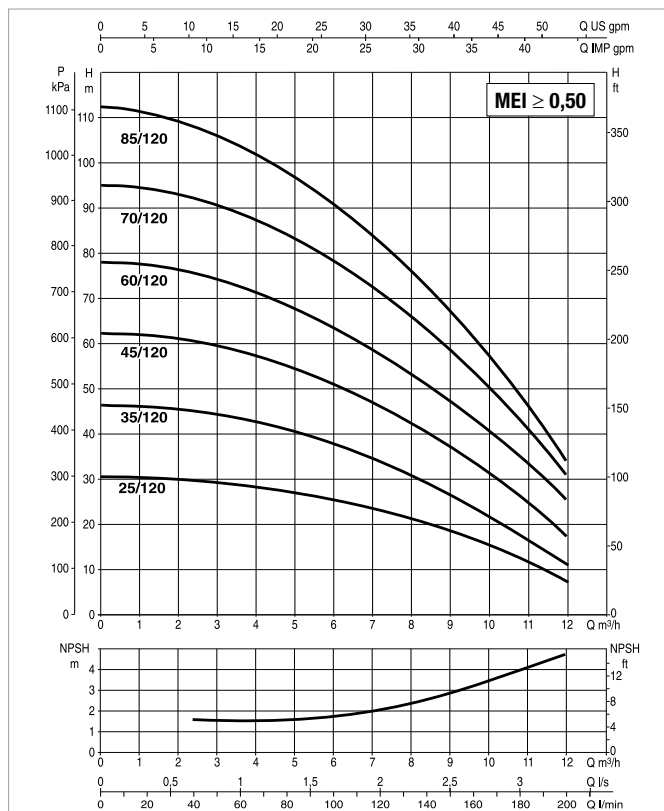
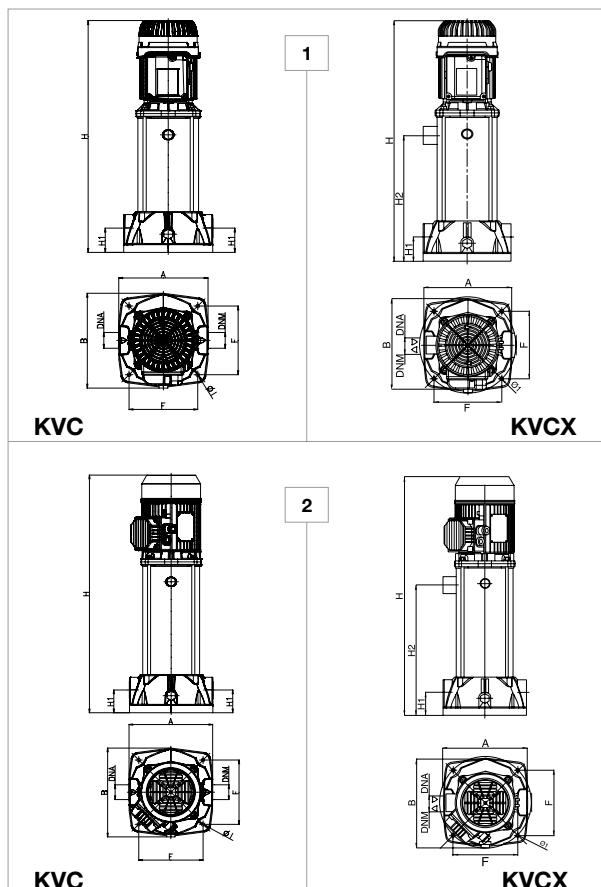
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	ELECTRICAL DATA										
	NO. OF IMPELLERS	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	I st. A	1/min.	CAPACITOR	
				kW	HP					µF	Vc
KVC-KVCX 20-80 M	2	1 x 220 - 240V ~	0,93	0,55	0,75	4,2	-	15,3	2800	14	450
KVC-KVCX 20-80 T		3 x 230 / 400V ~	0,89	0,55	0,75	2,8 - 1,6	-	3,8 - 2,2	2800	-	-
KVC-KVCX 30-80 M	3	1 x 220 - 240V ~	1,4	0,9	1,2	6,5	-	23,7	2800	25	450
KVC-KVCX 30-80 T		3 x 230 / 400V ~	1,17	0,9	1,2	3,8 - 2,2	IE3	5,1 - 3	2800	-	-
KVC-KVCX 40-80 M	4	1 x 220 - 240V ~	1,63	1,1	1,5	7,4	-	23,7	2800	31,5	450
KVC-KVCX 40-80 T		3 x 230 / 400V ~	1,49	1	1,36	4,5 - 2,6	IE3	6 - 3,5	2800	-	-
KVC-KVCX 45-80 M	5	1 x 220 - 240V ~	2,1	1,5	2	9,6	-	38,3	2800	40	450
KVC-KVCX 45-80 T		3 x 230 / 400V ~	1,93	1,5	2	6 - 3,4	IE3	9,3 - 5,4	2800	-	-
KVC-KVCX 55-80 M	6	1 x 220 - 240V ~	2,46	1,85	2,5	11,2	-	37,7	2800	40	450
KVC-KVCX 55-80 T		3 x 230 / 400V ~	2,28	1,85	2,5	6,8 - 3,9	IE3	10,4 - 6	2800	-	-
KVC-KVCX 65-80 T	7	3 x 230 / 400V ~	2,66	2,2	3	7,7 - 4,4	IE3	12,3 - 7,1	2800	-	-

MODEL	EXTERNAL DESIGN	A	B	F	H	H1	H2	Ø I	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT Kg
											L/A	L/B	H		
KVC 20-80 M - T	1	221	250	170	505	60	-	9	G 1" ¼	G 1" ¼	300	360	600	0,065	14,7
KVC 30-80 M - T	1	221	250	170	505	60	-	9	G 1" ¼	G 1" ¼	300	360	656	0,071	13,7
KVC 40-80 M	2	221	250	170	560	60	-	9	G 1" ¼	G 1" ¼	300	360	656	0,071	18
KVC 40-80 T	2	221	250	170	560	60	-	9	G 1" ¼	G 1" ¼	300	360	656	0,071	17,6
KVC 45-80 M	2	221	250	170	634	60	-	9	G 1" ¼	G 1" ¼	300	360	735	0,079	18
KVC 45-80 T	2	221	250	170	634	60	-	9	G 1" ¼	G 1" ¼	300	360	735	0,079	17,6
KVC 55-80 M - T	2	221	250	170	727	60	-	9	G 1" ¼	G 1" ¼	300	360	735	0,079	22
KVC 65-80 T	2	221	250	170	727	60	-	9	G 1" ¼	G 1" ¼	300	360	760	0,082	22,1
KVCX 20-80 M - T	1	221	250	170	505	60	184	9	G 1" ¼	G 1" ¼	300	360	600	0,065	14,7
KVCX 30-80 M - T	1	221	250	170	505	60	184	9	G 1" ¼	G 1" ¼	300	360	656	0,071	13,7
KVCX 40-80 M	2	221	250	170	560	60	239	9	G 1" ¼	G 1" ¼	300	360	656	0,071	18
KVCX 40-80 T	2	221	250	170	560	60	239	9	G 1" ¼	G 1" ¼	300	360	656	0,071	17,6
KVCX 45-80 M	2	221	250	170	634	60	239	9	G 1" ¼	G 1" ¼	300	360	735	0,079	18
KVCX 45-80 T	2	221	250	170	634	60	239	9	G 1" ¼	G 1" ¼	300	360	735	0,079	17,6
KVCX 55-80 M	2	221	250	170	727	60	332	9	G 1" ¼	G 1" ¼	300	360	735	0,079	22
KVCX 55-80 T	2	221	250	170	727	60	332	9	G 1" ¼	G 1" ¼	300	360	735	0,079	22,1
KVCX 65-80 T	2	221	250	170	727	60	332	9	G 1" ¼	G 1" ¼	300	360	760	0,082	22,1

KVC / KVCX 120 - INTEGRAL SHAFT MULTISTAGE VERTICAL CENTRIFUGAL ELECTRIC PUMPS

Pumped liquid temperature range: from 0 °C to +35 °C for domestic use - from 0 °C to +40 °C for the other uses



For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	NO. OF IMPELLERS	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	I st. A	1/min.	CAPACITOR	
				kW	HP					μF	Vc
KVC-KVCX 25-120 M	2	1 x 220 - 240 V ~	1,5	1	1,36	6,5	-	30	2800	25	450
KVC-KVCX 25-120 T		3 x 230 / 400 V ~	1,4	1	1,36	5 - 2,9	IE3	22,1 - 12,8	2800	-	-
KVC-KVCX 35-120 M	3	1 x 220 - 240 V ~	1,9	1,1	1,5	7,4	-	30	2800	31,5	450
KVC-KVCX 35-120 T		3 x 230 / 400 V ~	2	1,1	1,5	6,4 - 3,7	IE3	32,6 - 18,8	2800	-	-
KVC-KVCX 45-120 M	4	1 x 220 - 240 V ~	2,6	1,85	2,5	12	-	54	2800	40	450
KVC-KVCX 45-120 T		3 x 230 / 400 V ~	2,6	1,85	2,5	7,6 - 4,4	IE3	46,3 - 26,8	2800	-	-
KVC-KVCX 60-120 T	5	3 x 230 / 400 V ~	3,1	2,2	3	9 - 5,2	IE3	51,2 - 29,58	2800	-	-
KVC-KVCX 70-120 T	6	3 x 230 / 400 V ~	3,8	3	4	10,9 - 6,3	IE3	71,9 - 41,5	2800	-	-
KVC-KVCX 85-120 T	7	3 x 230 / 400 V ~	4,2	3	4	12,3 - 7,1	IE3	81,1 - 46,8	2800	-	-

MODEL	EXTERNAL DESIGN	A	B	F	H	H1	H2	Ø I	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT Kg
											L/A	L/B	H		
KVC 25-120 M - T *	1	221	235	170	450	60	-	9	G 1" ¼	G 1" ¼	300	360	585	0,063	17
KVC 35-120 M *	2	221	235	170	480	60	-	9	G 1" ¼	G 1" ¼	300	360	585	0,063	20,1
KVC 35-120 T *	2	221	235	170	480	60	-	9	G 1" ¼	G 1" ¼	300	360	585	0,063	20,2
KVC 45-120 M *	2	221	235	170	507	60	-	9	G 1" ¼	G 1" ¼	300	360	715	0,077	20,2
KVC 45-120 T *	2	221	235	170	507	60	-	9	G 1" ¼	G 1" ¼	300	360	715	0,077	21,9
KVC 60-120 T	2	221	235	170	610	60	-	9	G 1" ¼	G 1" ¼	300	360	715	0,077	21,6
KVC 70-120 T	2	221	235	170	675	60	-	9	G 1" ¼	G 1" ¼	300	360	810	0,087	24
KVC 85-120 T	2	221	235	170	702	60	-	9	G 1" ¼	G 1" ¼	300	360	810	0,087	25
KVCX 25-120 M - T *	1	221	235	170	450	60	184	9	G 1" ¼	G 1" ¼	300	360	585	0,063	17
KVCX 35-120 M - T *	2	221	235	170	480	60	184	9	G 1" ¼	G 1" ¼	300	360	585	0,063	20,1
KVCX 45-120 M *	2	221	235	170	507	60	239	9	G 1" ¼	G 1" ¼	300	360	715	0,077	20,2
KVCX 45-120 T *	2	221	235	170	507	60	239	9	G 1" ¼	G 1" ¼	300	360	715	0,077	21,9
KVCX 60-120 T	2	221	235	170	610	60	239	9	G 1" ¼	G 1" ¼	300	360	715	0,077	21,6
KVCX 70-120 T	2	221	235	170	675	60	332	9	G 1" ¼	G 1" ¼	300	360	810	0,087	24
KVCX 85-120 T	2	221	235	170	702	60	332	9	G 1" ¼	G 1" ¼	300	360	810	0,087	25

* H only valid for the three-phase version



TECHNICAL DATA

Operating range:

NNKV 1, 3, 6, 10, 15, 20 S: from 1 m³/h to 30 m³/h with head up to 320 m

NKV 32, 45, 65, 95: from 1 m³/h to 120 m³/h with head up to 320 m

Type of pumped liquid: Clean, free from solid or abrasive substances, non-viscous, non-aggressive, non-crystallized and chemically neutral

Maximum percentage of glycol: 30%

Supported liquid temperature min. and max.: From -30 to +120°C (EPDM)
From -15°C to +120°C (Viton/FKM)

Maximum ambient temperature: +50° C

Maximum operating pressure bar / kPa:

NKV from 1 S to 20 S: 25 bar / 2500 kPa

NKV 32, 45: 32 bar / 3200 kPa

NKV 65, 95: 25 bar / 2500 kPa

Degree of protection of the engine: IP 55

Engine insulation class: F

Impellers construction material: AISI 304 stainless steel

On request X version with AISI 316 stainless steel

Single phase power supply (on request):

220 - 240 / 380 - 415 V at 50 Hz up to 2,2 kW

Three-phase power supply:

220 - 240 / 380 - 415 V at 50 Hz up to 2,2 kW

380 - 415 V at 50 Hz from 3 kW

Power cord (m) and plug: Not provided

Type of installation possible: Vertical position

Special versions available on request:

- different types of mechanical seals (for example for aggressive liquids)
- connections (round flanges, oval, Victaulic, clamp)
- parts in contact with the liquid in stainless steel AISI 316 (versions X)
- different voltages and frequencies
- ATEX version

Certifications: NKV from 1 S to 20 S or X: WRAS, ACS

NKV from 32 to 95 X version: WRAS, ACS

IE3 ≥ 0,75 kW

APPLICATIONS

NKV are AISI 304 stainless steel multi-impeller vertical centrifugal pumps with coupling; designed for pressurization, conditioning and heating in civil and commercial environments, they can also be used in agriculture and in watering systems. The pumps can be used for the recirculation of water in heating and air conditioning systems.

CONSTRUCTION FEATURES OF THE PUMP - NKV 1-3-6-10-15-20 S

The use of advanced stainless steel processing technologies for the main hydraulic components helps to achieve very high performance levels. The pumps are also extremely versatile, thanks to the center distance of the in-line ports, designed to maximize interchangeability. The parts in contact with the liquid are made of AISI 304 stainless steel for NKV S models, or AISI 316 stainless steel for NKV X models (only available to special order). Round flanges as standard (oval, loose, virtual, clamp available on request). The mechanical seal is made of standard E1 = Graphite/Silicon Carbide/AISI 316/EPDM = BQGE. FKM/Viton available on request. Starting from 5.5 kW models, the seal can be removed without removing the motor. Rigid coupling

CONSTRUCTION FEATURES OF THE PUMP - NKV 32-45-65-95

The use of advanced stainless steel processing technologies for the main hydraulic components helps to achieve very high performance levels. They are extremely versatile, thanks to the center distance of the in-line ports, designed to maximize interchangeability. Their pump body and upper flange are in cataphoretic paint coated cast iron; impellers, diffusers and pump liner made of AISI 304 stainless steel (AISI 316 stainless steel available on request - X version). Round flanges as standard (oval, loose, virtual, clamp available on request). The mechanical seal is made of standard E1 = Graphite/Silicon Carbide/AISI 316/EPDM = BQGE. FKM/Viton available on request. Starting from 5.5 kW models, the seal can be removed without removing the motor. Rigid coupling.

CONSTRUCTION FEATURES OF THE MOTOR

Standard mechanical seal E1 (= Graphite/ Silicon Carbide/AISI 316/EPDM) and on request among the various custom seals there are also with FKM/Viton. The seal can be dismantled without removing the motor from 5.5 kW. Rigid coupling. Motor frame B14 up to 4 kW motor size and B5 from 5,5 kW motor size.

- Denomination index:

(example) **NKV 32 / 13 - 2 X 300 E1 IE3**

NOMINAL FLOW RATE (m³/h) _____

NUMBER OF STAGES/IMPELLERS _____

NUMBER AND TYPE OF TURNED IMPELLER _____

MATERIALS*: " =CAST IRON/AISI 304; X=AISI 316

MOTOR POWER P2 KW X 10 (300 = 30KW)

Type of mechanical seal (E1=STANDARD)

E1=BQGE=Carbon/Silicon carbide/AISI 316/EPDM STD

E2=QQGE=Silicon Carbide/Silicon Carbide/AISI 316/EPDM

V3=QQGV=Silicon Carbide/Silicon Carbide/AISI 316/FKM-Viton

V4=BQGV= Carbon/Silicon carbide /AISI 316/ FKM-Viton

E5=UUGE=Tungsten carbide/Tungsten carbide/AISI 316/EPDM

Motor efficiency _____

*MATERIALS:

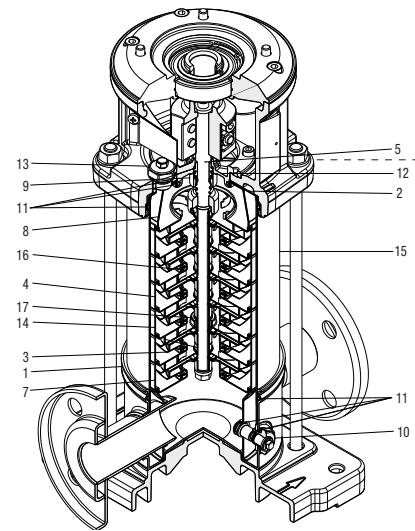
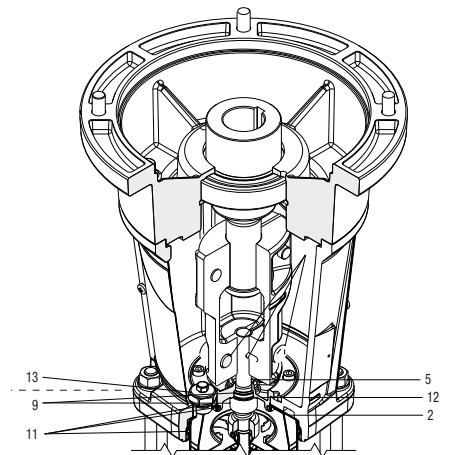
"S" version with pump body/impellers/diffusers in AISI 304 stainless steel - "X" version with pump body/impellers/diffusers in AISI 316 stainless steel

" " standard version with pump body in cast iron and impellers in AISI 304 stainless steel (for NKV 32-45-65-95)

NKV 1-3-6-10-15-20 MATERIAL

N°	PART	MATERIAL* (S VERSION - AISI 304)	MATERIAL* (X VERSION - AISI 316)
1	Pump body	Stainless Steel AISI 304	Stainless Steel AISI 316
2	Upper flange	Stainless Steel AISI 304	Stainless Steel AISI 316
3	Impeller	Stainless Steel AISI 304	Stainless Steel AISI 316
4	Diffuser body and diffuser	Stainless Steel AISI 304	Stainless Steel AISI 316
5	Pump shaft	Stainless Steel AISI 304	Stainless Steel AISI 316
7	Initial stage housing	Stainless Steel AISI 304	Stainless Steel AISI 316
8	Stage centering outlet	Stainless Steel AISI 304	Stainless Steel AISI 316
9	Mechanical seal	Carbon/Silicon carbide/AISI 316/ EPDM	Carbon/Silicon carbide/AISI 316/ EPDM
10	Discharge plug	Stainless Steel AISI 304	Stainless Steel AISI 316
11	O-ring	EPDM	EPDM
12	Seal disk	Stainless Steel AISI 304	Stainless Steel AISI 316
13	Filling plug	Stainless Steel AISI 304	Stainless Steel AISI 316
14	Stage housing and diffuser with bearing	Stainless Steel AISI 304/Tungsten carbide	Stainless Steel AISI 316/Tungsten carbide
15	External sleeve	Stainless Steel AISI 304	Stainless Steel AISI 316
16	Floating wear ring	PPS	PPS
17	Intermediate bushing	Tungsten carbide	Tungsten carbide

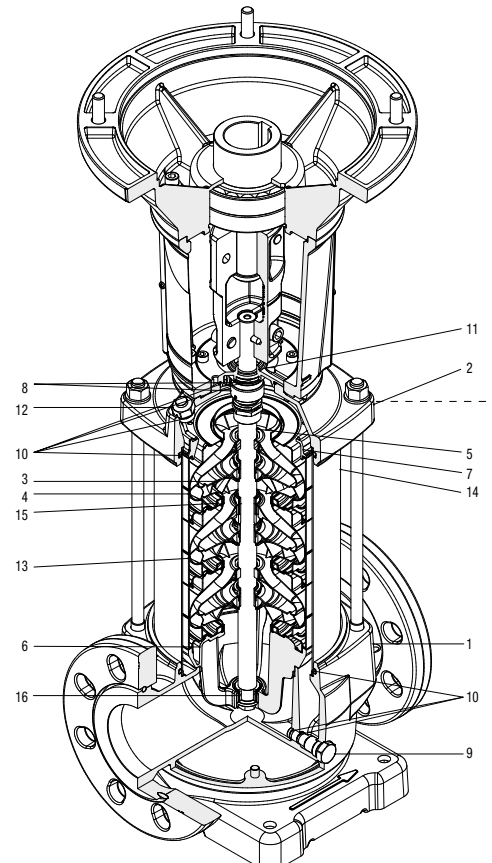
* In contact with the liquid.



NKV 32-45-65-95 MATERIAL

N°	PART	MATERIAL* (STANDARD VERSION)	MATERIAL* (X VERSION - AISI 316)
1	Pump body	Cast iron with cataphoresis	Stainless Steel AISI 316
2	Upper flange	Stainless Steel AISI 304	Stainless Steel AISI 316
3	Impeller	Stainless Steel AISI 304	Stainless Steel AISI 316
4	Diffuser body and diffuser	Stainless Steel AISI 304/Carbon	Stainless Steel AISI 316/Carbon
5	Pump shaft	Stainless Steel AISI 431	Stainless Steel AISI 329
6	Stage centering inlet	Stainless Steel AISI 316	Stainless Steel AISI 316
7	Stage centering outlet	Stainless Steel AISI 304	Stainless Steel AISI 316
8	Mechanical seal	Carbon/Silicon carbide/AISI 316/ EPDM	Carbon/Silicon carbide/AISI 316/ EPDM
9	Discharge plug	Stainless Steel AISI 304	Stainless Steel AISI 316
10	O-ring	EPDM	EPDM
11	Seal disk	Stainless Steel AISI 304	Stainless Steel AISI 316
12	Filling plug	Stainless Steel AISI 304	Stainless Steel AISI 316
13	Stage housing and diffuser with bearing	Stainless Steel AISI 304	Stainless Steel AISI 316
14	External sleeve	Stainless Steel AISI 304	Stainless Steel AISI 316
15	Floating wear ring	PTFE	PTFE
16	Intermediate bushing	Stainless Steel AISI 316/Tungsten carbide	Stainless Steel AISI 316/Tungsten carbide

* In contact with the liquid.



MATERIAL TABLE SELECTION

PUMP MODEL	IMPELLER / DIFFUSER	BASE	FLANGES
NKV 32, 45, 65, 95	Inox 304	Cast iron	Cast iron
NKV 1, 3, 6, 10, 15, 20 S	Inox 304	Inox 304	Inox 304
NKV 1, 3, 6, 10, 15, 20, 32, 45, 65, 95 X	Inox 316	Inox 316	Inox 316

LIQUID TABLE SELECTION

Type of mechanical seal (E1=STANDARD)

E1=BQGE=Carbon/Silicon carbide/AISI 316/EPDM STD

E2=QQGE=Silicon Carbide/Silicon Carbide/AISI 316/EPDM

V3=QQGV=Silicon Carbide/Silicon Carbide/AISI 316/FKM-Viton

V4=BQGV= Carbon/Silicon carbide /AISI 316/ FKM-Viton

E5=UUGE=Tungsten carbide/Tungsten carbide/AISI 316/EPDM

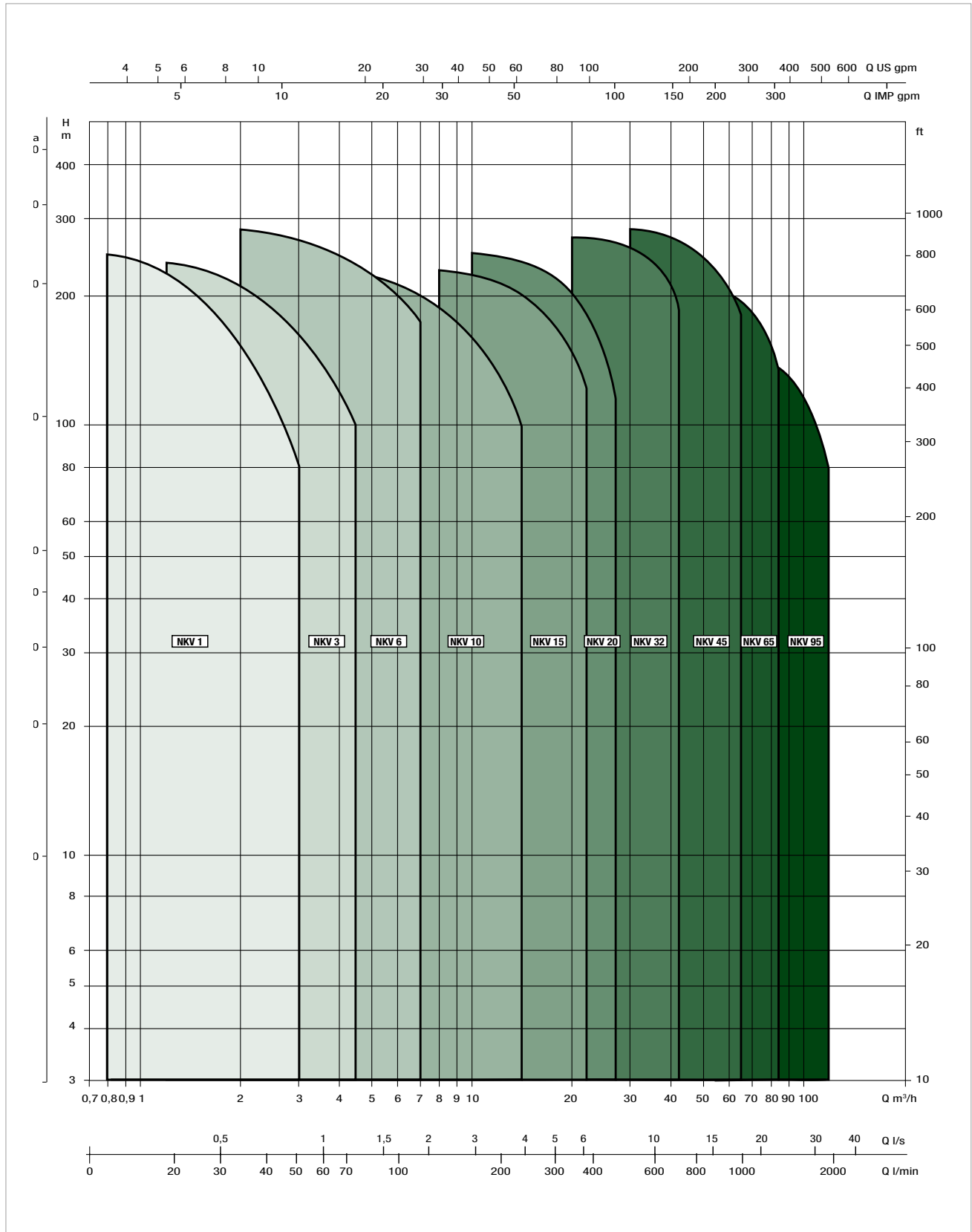
LIQUID (WATER SOLUTION)	CONCENTRATION [%]	MIN/MAX TEMPERATURE [°C]	NKV MODEL		
			STANDARD (NKV 32-95)	S (NKV 1-20)	X (NKV 1-95)
Acetic acid	10 ÷ 40	+0/+70	-	-	E1
Citric Acid	5	+5/+70	-	E1	E1
Hydrochloric Acid	2	+5/+25	-	-	V3
Formic Acid	5	+5/+25	-	E1	E1
Phosphoric Acid	10	+5/+30	-	-	E1
Nitric Acid	40	+5/+30	-	V3	V3
Sulfuric Acid	2	+5/+25	-	-	V4
Tannic Acid	20	+5/+50	-	-	E1
Tartaric Acid	50	+5/+25	-	V3	V3
Deionized Water, Demineralized	100	+5/+110	E1	E1	E1
Sodium Bicarbonate	6	+5/+60	-	-	E1
Chloroform	100	-10/+30	V4	V4	V4
Oil In Water Emulsion	100	+15/+90	V4	V4	V4
Phosphates, Polyphosphates	10	+5/+90	-	V3	V3
Ethylene Glycol	10 ÷ 30	-15/+120	-	E1	E1
Propylene Glycol	30	-10/+100	V3	V3	V3
Sodium Hypochlorite	1	+5/+25	-	-	V3
Sodium Nitrate	10	+5/+60	-	V3	V3
Diathermic Oil	100	+90/+120	V4	V4	V4
Mineral Oil	100	+90/+120	V4	V4	V4
Vegetable Oil	100	+70/+100	E1	E1	E1
Perchloroethylene	100	-10/+30	V4	V4	V4
Sodium Hydroxide	25	+5/+70	E2	E2	E2
Aluminium Sulphate	10 ÷ 25	+5/+50	-	-	E2
Ammonium Sulphate	10	-10/+60	-	-	E2
Ferric Sulphate	10	+5/+30	-	-	E1
Trichloroethylene	100	-10/+40	V4	V4	V4

For use with sea water, please consult the technical office. This table should be considered a general guide. It is important to consider the specific operating conditions, in particular the concentration in the pumped liquid, the specific weight and/or the viscosity, the temperature of the liquid and its pressure. All these conditions are essential for engine and pump performance. When pumping hazardous liquids, it is recommended to take safety precautions. You can contact us for more information.

PERFORMANCE RANGE

The performance curves are based on the kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

GRAPHIC SELECTION TABLE



SELECTION TABLE - NKV 1

MODEL	Q=m³/h	0	0.5	1	1.5	2	2.5
	Q=l/min	0	8.3	16.7	25.0	33.3	42
NKV 1/2 T IE3	H (m)	14.5	13.5	12.5	11.5	9.5	7.5
NKV 1/3 T IE3		21.5	20	19	17	14	11
NKV 1/4 T IE3		28	26.5	24.5	22	18.5	14
NKV 1/5 T IE3		35	33	30.5	27	22.5	17
NKV 1/6 T IE3		41.5	39	36	32	26.5	19.5
NKV 1/7 T IE3		48	45	41.5	36.5	30	22
NKV 1/8 T IE3		55	52	48	42.5	35	26
NKV 1/9 T IE3		61.5	58	53	47	39	28.5
NKV 1/10 T IE3		68	64	58.5	51.5	43	31.5
NKV 1/11 T IE3		74.5	69.5	64	56.5	46.5	34
NKV 1/12 T IE3		83	78.5	72	64	53	39.5
NKV 1/13 T IE3		89.5	84.5	77.5	68.5	57	42
NKV 1/14 T IE3		96	90.5	83	73	60.5	44.5
NKV 1/15 T IE3		102.5	96	88	78	64	47
NKV 1/17 T IE3		118	111.5	103	91.5	76	56.5
NKV 1/19 T IE3		131	123.5	114	101	84	62
NKV 1/22 T IE3		150.5	141.5	130	115	95	69.5
NKV 1/23 T IE3		160.5	152	140	124.5	104	77.5
NKV 1/25 T IE3		174	164	151.5	134.5	112	83.5
NKV 1/27 T IE3		187	176.5	162.5	144	120	88.5
NKV 1/30 T IE3		206.5	194.5	179	158	131	96.5
NKV 1/32 T IE3		224.5	213	197	175.5	147.5	110.5
NKV 1/34 T IE3		238	225.5	208.5	185.5	155.5	116.5
NKV 1/37 T IE3		258	244	225.5	200.5	167.5	125

SELECTION TABLE - NKV 3

MODEL	Q=m³/h	0	1	1.5	2	2.5	3	3.5	4	4.5
	Q=l/min	0	16.7	25.0	33.3	42	50.0	58.3	67	75.0
NKV 3/2 T IE3	H (m)	15	15	14.5	13.5	12.5	11.5	10	8	6
NKV 3/3 T IE3		22.5	22	21	20	18.5	17	14.5	12	8.5
NKV 3/4 T IE3		30	28.5	27.5	26	24	21.5	18.5	15	10.5
NKV 3/5 T IE3		37.5	36	34.5	32.5	30	27	23.5	18.5	13
NKV 3/6 T IE3		44.5	42.5	40.5	38.5	35.5	32	27	21.5	15
NKV 3/7 T IE3		52.5	50.5	48.5	46	43	38.5	33	26.5	19
NKV 3/8 T IE3		59.5	57.5	55	52	48	43.5	37	29.5	21
NKV 3/9 T IE3		67	64	61.5	58	53.5	48	41	32.5	22.5
NKV 3/10 T IE3		75	72.5	70	66.5	61.5	55.5	48	38.5	27.5
NKV 3/11 T IE3		82.5	79.5	76.5	72.5	67	60.5	52	42	29.5
NKV 3/12 T IE3		89.5	86	83	78.5	72.5	65	56	45	31.5
NKV 3/13 T IE3		96.5	93	89	84.5	78	70	60	47.5	33.5
NKV 3/14 T IE3		105.5	102	98.5	93.5	86.5	78	67.5	54.5	39.5
NKV 3/15 T IE3		112.5	109	105	99.5	92.5	83	71.5	58	41.5
NKV 3/16 T IE3		120	115.5	111.5	105.5	98	88	76	61	43.5
NKV 3/17 T IE3		127	122.5	118	111.5	103.5	93	80	64	45.5
NKV 3/18 T IE3		136.5	132.5	128	121.5	113.5	102.5	89	72.5	53
NKV 3/19 T IE3		144	139.5	134.5	128	119	107.5	93.5	76	55.5
NKV 3/21 T IE3		158.5	153.5	148	140.5	130.5	118	102	83	60
NKV 3/23 T IE3		173	167.5	161.5	153	142	128	110.5	89.5	64.5
NKV 3/25 T IE3		187.5	181	174.5	165.5	153.5	138	119	96	68.5
NKV 3/27 T IE3		205.5	199.5	193	184	171.5	155	135	110.5	81
NKV 3/29 T IE3		220	213.5	206.5	196.5	183.5	166	144	117.5	86
NKV 3/31 T IE3		235	228	220.5	209.5	195	176.5	153	124.5	91
NKV 3/33 T IE3		249.5	242	234	222	206.5	187	162	131.5	95.5

SELECTION TABLE - NKV 6

MODEL	Q=m³/h	0	2.5	3	3.5	4	4.5	5	5.4	6	7
	Q=l/min	0	42	50.0	58.3	67	75.0	83.3	90	100.0	116.7
NKV 6/2 T IE3	H (m)	15	14	13.5	13	12.5	12	11.5	11	10	8
NKV 6/3 T IE3		22.5	20.5	19.5	19	18	17	16	15.5	14	11
NKV 6/4 T IE3		29.5	27	26	25	24	22.5	21.5	20.5	18.5	14.5
NKV 6/5 T IE3		37.5	34.5	33.5	32	30.5	29	27.5	26	24	19
NKV 6/6 T IE3		44.5	41	39.5	37.5	36	34	32.5	30.5	28	22
NKV 6/7 T IE3		52.5	49	47	45	43	41	39	37	34	27
NKV 6/8 T IE3		59.5	55	53.5	51	48.5	46.5	44	42	38.5	30.5
NKV 6/9 T IE3		67	61.5	59	56.5	54	51.5	48.5	46	42.5	33.5
NKV 6/10 T IE3		75	70	67.5	65	62	59	56	53.5	49	39
NKV 6/11 T IE3		82.5	76.5	73.5	71	67.5	64.5	61	58	53.5	42.5
NKV 6/12 T IE3		89.5	83	80	76.5	73	69.5	65.5	62.5	57.5	45.5
NKV 6/13 T IE3		97	89	86	82	78.5	74.5	70.5	67	61.5	48.5
NKV 6/14 T IE3		105.5	99	95.5	92	88	83.5	79.5	76	70	56
NKV 6/15 T IE3		113	105.5	102	98	93.5	89	84.5	80.5	74	59.5
NKV 6/16 T IE3		120.5	112	108	104	99	94.5	89.5	85.5	78.5	62.5
NKV 6/17 T IE3		127.5	118.5	114.5	109.5	105	99.5	94.5	90	83	66
NKV 6/18 T IE3		135	125	120.5	115.5	110.5	105	99.5	94.5	87	69
NKV 6/19 T IE3		142	131.5	126.5	121.5	115.5	110	104	99	91	72
NKV 6/20 T IE3		152	142.5	138	133	127	121	115	110	101.5	82
NKV 6/21 T IE3		159	149.5	144.5	139	133	127	120.5	115	106	85.5
NKV 6/23 T IE3		174	163	157.5	151.5	144.5	138	131	125	115	92.5
NKV 6/25 T IE3		189	175.5	170	164	157.5	150.5	142.5	135.5	123.5	98.5
NKV 6/28 T IE3		214	200.5	194.5	188	181	173.5	164.5	156.5	143	115.5
NKV 6/30 T IE3		229	214	207.5	200.5	193	184.5	175.5	167	152.5	122.5
NKV 6/33 T IE3		251.5	234.5	227	219.5	211	201.5	191	182	166	133.5
NKV 6/36 T IE3		275	257.5	249.5	241.5	232.5	222.5	211.5	201.5	184	148.5

SELECTION TABLE - NKV 10

MODEL	Q=m³/h	0	6	7	8	9	10	11	14
	Q=l/min	0	100.0	116.7	133	150.0	166.7	183	233.3
NKV 10/2 T IE3	H (m)	20	18.5	17.5	17	16	15	13.5	9
NKV 10/3 T IE3		30	27.5	26.5	25.5	24	22.5	20.5	13.5
NKV 10/4 T IE3		40.5	37	35.5	34	32.5	30.5	28	18
NKV 10/5 T IE3		50.5	45.5	43.5	41.5	39.5	37	33.5	21.5
NKV 10/6 T IE3		61	56	54	51.5	49	46	42	27.5
NKV 10/7 T IE3		70.5	64.5	62	59.5	56	52.5	48	31
NKV 10/8 T IE3		81.5	75.5	73	70	66.5	62.5	57.5	38
NKV 10/9 T IE3		91.5	84.5	81.5	78	74	69.5	64	42
NKV 10/10 T IE3		102.5	96	93	89	84.5	79.5	73.5	49
NKV 10/11 T IE3		113	105	101.5	97.5	92.5	87	80.5	53.5
NKV 10/12 T IE3		123	114	110	105.5	100.5	94	87	57.5
NKV 10/13 T IE3		133	123	118.5	113.5	108	101	93.5	61.5
NKV 10/15 T IE3		153.5	142.5	138	132	125.5	118	109	72
NKV 10/17 T IE3		173.5	160.5	155	148.5	141	132.5	122	80.5
NKV 10/19 T IE3		195	182	176	169	160.5	151	139.5	93
NKV 10/21 T IE3		215.5	200	193.5	185.5	176.5	166	153	101.5
NKV 10/23 T IE3		235.5	218.5	211	202	192	180.5	166.5	110
NKV 10/24 T IE3		248	234	227	218	208	196	182	122.5

SELECTION TABLE - NKV 15

MODEL	Q=m³/h	0	8	10	12	14	16	18	20	22	24
	Q=l/min	0	133	167	200	233	266	300	333	367	400
NKV 15/1 T IE3	H (m)	14.5	13	12.5	12	11.5	10.5	9.5	8.5	7	5.5
NKV 15/2 T IE3		29	26	25	24	23	21.5	19.5	17	14	11
NKV 15/3 T IE3		43.5	39	38	36.5	34.5	32.5	29.5	26	21.5	17
NKV 15/4 T IE3		58	52.5	51	49	46.5	44	40.5	35.5	29.5	23.5
NKV 15/5 T IE3		72.5	65.5	63.5	60.5	57.5	54.5	49.5	43	36	28.5
NKV 15/6 T IE3		87.5	79.5	77	74	71	67	61.5	54	46	36.5
NKV 15/7 T IE3		102	92	89	86	82	77.5	70.5	62	52.5	41.5
NKV 15/8 T IE3		117	106.5	103	99.5	95	90	82.5	72.5	62	49
NKV 15/9 T IE3		131.5	119	115.5	111	106	100.5	92	81	69	54.5
NKV 15/10 T IE3		147.5	134.5	131	126.5	121	115	106	94	80.5	65
NKV 15/11 T IE3		162	148	143.5	139	133	126.5	116.5	103	88.5	71
NKV 15/12 T IE3		176.5	161	156.5	151	144.5	137.5	126.5	112	96	77
NKV 15/13 T IE3		191	174.5	169	163.5	156.5	148.5	136.5	120.5	103	82.5
NKV 15/14 T IE3		205.5	187.5	182	175.5	168	159	146	129	110.5	88
NKV 15/15 T IE3		221	201	195.5	188.5	180.5	171.5	157.5	139.5	119.5	95.5
NKV 15/16 T IE3		235.5	214	208	200.5	192	182.5	167.5	148	126.5	101.5
NKV 15/17 T IE3		249.5	227.5	220.5	213	203.5	193	177.5	156.5	134	107

SELECTION TABLE - NKV 20

MODEL	Q=m³/h	0	10	12	14	16	18	20	22	24	26	28
	Q=l/min	0	167	200	233	266	300	333	367	400	433.5	466.5
NKV 20/1 T IE3	H (m)	15.5	13.5	13	13	12.5	12	11	10	8.5	7.5	6
NKV 20/2 T IE3		31	27.5	27	26	25	24	22.5	20.5	18	15	12
NKV 20/3 T IE3		46.5	41.5	40.5	39.5	38	36.5	34.5	31	27.5	23	18.5
NKV 20/4 T IE3		62.5	56	55	53.5	51.5	49.5	46.5	42.5	37	31.5	25.5
NKV 20/5 T IE3		78	70	68.5	66.5	64.5	62	58	53	47	40	32.5
NKV 20/6 T IE3		94.5	86.5	84.5	82.5	80	77.5	73.5	67.5	60	52	42.5
NKV 20/7 T IE3		110	100.5	98	95.5	93	90	85	77.5	69	59.5	48.5
NKV 20/8 T IE3		126.5	117	114	112	109	106	100.5	92.5	82.5	72	59.5
NKV 20/9 T IE3		142.5	131	128	125.5	122	118.5	112.5	103.5	92.5	80.5	66.5
NKV 20/10 T IE3		158	145.5	142	139	135	131.5	124.5	114	102	88.5	73
NKV 20/11 T IE3		174	160	156.5	153	149	144.5	137	126	113	98	81
NKV 20/12 T IE3		189.5	174.5	170.5	167	162	157.5	149	137	122.5	106.5	87.5
NKV 20/13 T IE3		205	188.5	184	180	175	170	161	147.5	132	114.5	94
NKV 20/14 T IE3		220.5	202.5	198	193.5	188	182.5	172.5	158	141	122	100.5
NKV 20/15 T IE3		237	217.5	212.5	208	202	196	185.5	170.5	152	132	108.5
NKV 20/16 T IE3		252.5	231.5	226	221	215	208.5	197	181	161.5	140	115
NKV 20/17 T IE3		268	245.5	240	234.5	227.5	221	209	191.5	171	148	121.5

SELECTION TABLE - NKV 32

MODEL	Q=m³/h	0	15	18	22	25	30	35	40	45
	Q=l/min	0	250	300	367	417	500	583	667	750
NKV 32/2-2 T IE3	H (m)	36	33,5	32,5	30,5	29,5	26,5	22,5	18	12,5
NKV 32/2 T IE3		48,5	43,5	42,5	41	39,5	36,5	33,5	29	23,5
NKV 32/3-2 T IE3		60	54,5	53	50,5	48	44	38	31,5	23,5
NKV 32/3 T IE3		73	65	63,5	61	59	55	50	43,5	35,5
NKV 32/4-2 T IE3		84,5	76,5	74	70,5	68	62	55	46	35
NKV 32/4 T IE3		98	88	86	83	80,5	75	69	60	49,5
NKV 32/5-2 T IE3		109,5	99,5	97	93	89,5	83	74	63	49,5
NKV 32/5 T IE3		122,5	109,5	107	103,5	100	93,5	85,5	75	61,5
NKV 32/6-2 T IE3		134	121,5	118,5	113,5	109,5	101,5	91	78	61,5
NKV 32/6 T IE3		146,5	131	128	123,5	119,5	111,5	102	89	73
NKV 32/7-2 T IE3		158	142,5	139	133,5	128,5	119	107	91,5	72,5
NKV 32/7 T IE3		171	152,5	149	144	139,5	130	119	103,5	85
NKV 32/8-2 T IE3		182,5	164,5	160	154	148,5	137,5	124	106	84,5
NKV 32/8 T IE3		194,5	174	169,5	164	158,5	147,5	134,5	117	95,5
NKV 32/9-2 T IE3		208,5	188,5	184	177	171	159	144	124,5	100,5
NKV 32/9 T IE3		221	198	194	187,5	181,5	169,5	155,5	136	112
NKV 32/10-2 T IE3		233	210	205	197,5	191	177,5	161	139	112
NKV 32/10 T IE3		246,5	221,5	217	210	203,5	190,5	175	153,5	126,5
NKV 32/11-2 T IE3		258	233,5	228,5	220,5	213	198,5	180,5	156,5	127
NKV 32/11 T IE3		271	243,5	238	230,5	223,5	209	192	168	138,5
NKV 32/12-2 T IE3	282,5	255,5	249,5	241	233	217	197,5	171	139	
NKV 32/12 T IE3	295	265,5	259,5	251	243	227,5	208,5	182,5	150,5	
NKV 32/13-2 T IE3	307	277,5	271	261,5	252,5	235,5	214	185,5	151	
NKV 32/13 T IE3	319,5	287	280,5	271,5	263	246	225,5	197	162,5	

SELECTION TABLE - NKV 45

MODEL	Q=m³/h	0	15	18	22	25	30	35	40	45	54	60	65	70
	Q=l/min	0	250	300	367	417	500	583	667	750	900	1000	1083	1166
NKV 45/2-2 T IE3	H (m)	38,5	37,5	37	36,5	35,5	34,5	33	31	28,5	23	18,5	14,5	10
NKV 45/2 T IE3		48,5	47,5	47	46	45,5	44	43	41,5	39	34	30,5	26,5	23
NKV 45/3-2 T IE3		63	62	61,5	60,5	59,5	58	56	53,5	50	42	36	30	24
NKV 45/3 T IE3		73,5	72	71	70	69	67	65,5	63	60	52,5	47	41	34
NKV 45/4-2 T IE3		87,5	86	85	83,5	82	80	77,5	74	69,5	59,5	51	43	34
NKV 45/4 T IE3		97,5	96	94,5	93	91,5	89	86,5	84	79,5	69,5	62	54,5	45
NKV 45/5-2 T IE3		112	109,5	108,5	106,5	105	102	99	94,5	89	76,5	66	56	45
NKV 45/5 T IE3		122	119,5	118	115,5	114	111	108	104,5	99	86,5	77	67,5	56
NKV 45/6-2 T IE3		137,5	135	133,5	131	129	126	122	117,5	110,5	95,5	83,5	72	58
NKV 45/6 T IE3		147,5	145	143,5	140,5	138,5	135	131,5	127	121	106	95	83,5	71
NKV 45/7-2 T IE3		162,5	160	158	155,5	153	149,5	145	139,5	132	115	101	87,5	73
NKV 45/7 T IE3		172,5	170	168	165	162,5	158,5	154,5	149,5	142,5	125,5	112	99	83
NKV 45/8-2 T IE3		187	184	182	178,5	176	171,5	167	160,5	152	132	116,5	101	83
NKV 45/8 T IE3		197	194	191,5	188	185,5	181	176,5	170,5	162,5	142,5	127,5	112,5	94
NKV 45/9-2 T IE3		211,5	208	205,5	202	199	194	188,5	181,5	172	149,5	132	114,5	94
NKV 45/9 T IE3		221,5	218	215,5	211,5	208	203	198	191,5	182	160	143	126	106
NKV 45/10-2 T IE3		235,5	231,5	229	225	221,5	216	210	202	191,5	166,5	147	127,5	106
NKV 45/10 T IE3		246	242	239	234	230,5	225	219	212	201,5	177	158	139	117
NKV 45/11-2 T IE3		261	256,5	254	249	245,5	239,5	233	224,5	213	186	164,5	143,5	119
NKV 45/11 T IE3		271	267	263,5	258,5	255	249	242,5	234,5	223,5	196,5	175,5	155	130
NKV 45/12-2 T IE3	285,5	280,5	277,5	272,5	268,5	261,5	254,5	245,5	232,5	203	179,5	156,5	130	
NKV 45/12 T IE3	295,5	290,5	287,5	282	277,5	271	264	255,5	243	213,5	191	168,5	142	
NKV 45/13-2 T IE3	309,5	304,5	301	295,5	291	284	276	266	252,5	220,5	195	170	142	

SELECTION TABLE - NKV 65

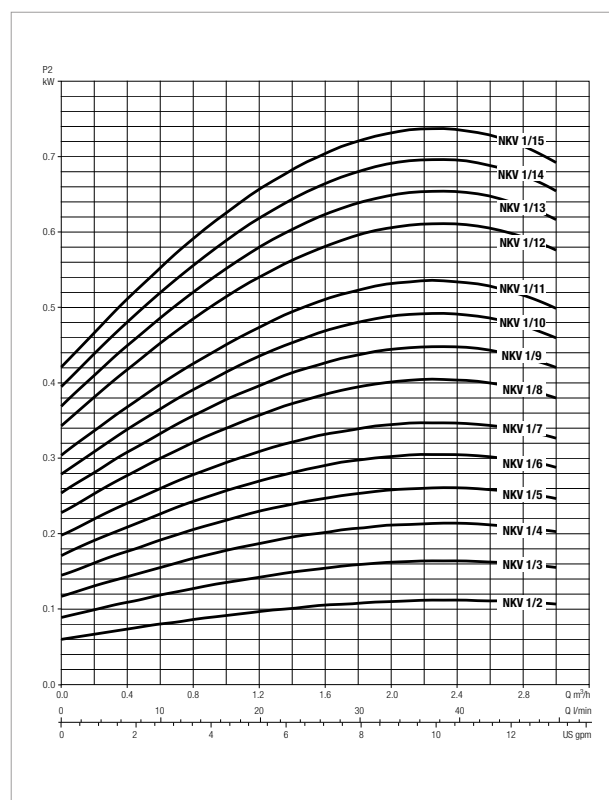
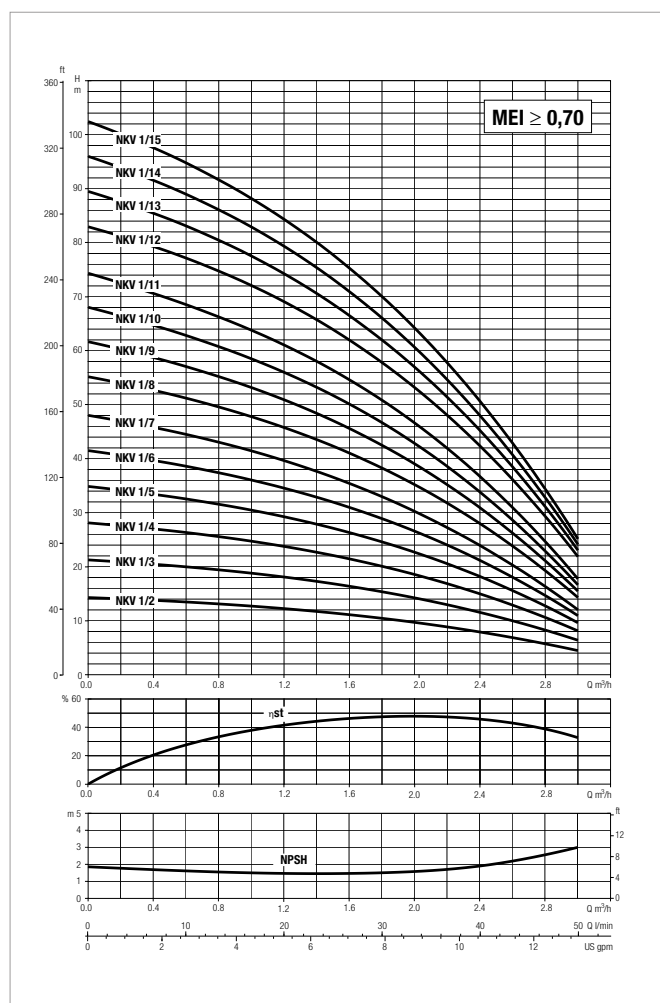
MODEL	Q=m ³ /h	0	30	36	42	45	54	60	72	78	85
	Q=l/min	0	500	600	700	750	900	1000	1200	1300	1417
NKV 65/2-2 T IE3	H (m)	39	37,5	36,5	35,5	35	33	31	25	22	17,5
NKV 65/2 T IE3		56,5	51	49,5	48,5	48	46	45	41	38,5	34,5
NKV 65/3-2 T IE3		67,5	63,5	62	60,5	59,5	56,5	54	46,5	42	35,5
NKV 65/3 T IE3		84,5	76	74	72,5	71,5	69	67	61,5	57,5	51,5
NKV 65/4-2 T IE3		95,5	88,5	86	84	83	79	75,5	66	60,5	52
NKV 65/4 T IE3		113,5	102,5	100	97,5	96,5	92,5	90,5	83	78	70
NKV 65/5-2 T IE3		125	116	113	110,5	109	104,5	101	90	83	72,5
NKV 65/5 T IE3		142	129	125,5	122,5	121	116,5	114	105	98,5	88,5
NKV 65/6-2 T IE3		153	141,5	137,5	134,5	133	127,5	123	110	102	89,5
NKV 65/6 T IE3		170	154	150	147	145	139,5	136	125	117,5	105,5
NKV 65/7-2 T IE3		181,5	166,5	162,5	158,5	156,5	150	145	130,5	120,5	106,5
NKV 65/7 T IE3		199	180,5	175,5	172	169,5	163,5	159,5	147	138	124
NKV 65/8-2 T IE3		210	193	188	184	181,5	174	168,5	152	141,5	125
NKV 65/8 T IE3		227	206	200	196	193,5	186	181,5	167	157	141

SELECTION TABLE - NKV 95

MODEL	Q=m ³ /h	0	45	54	60	72	78	85	96	108	118
	Q=l/min	0	750	900	1000	1200	1300	1417	1600	1800	1967
NKV 95/2-2 T IE3	H (m)	44,5	43	42	41	38,5	36,5	34	28,5	21,5	15
NKV 95/2 T IE3		62	55,5	53	51,5	49	47,5	45	41	35	28,5
NKV 95/3-2 T IE3		75,5	70,5	68	66,5	62,5	59,5	56	48,5	38,5	28,5
NKV 95/3 T IE3		93,5	84	80,5	78	74	72	69	62,5	53,5	44
NKV 95/4-2 T IE3		108	100	97	94,5	89	85,5	81	71,5	59	46
NKV 95/4 T IE3		125,5	112,5	108	105	99,5	96,5	92,5	84	72	60
NKV 95/5-2 T IE3		139	127,5	123,5	120	113,5	109	103,5	92	76	60
NKV 95/5 T IE3		156	140	134,5	130,5	123,5	120	114,5	104,5	89	74
NKV 95/6-2 T IE3		170,5	156	150,5	146,5	138,5	134	127	113,5	94,5	75,5
NKV 95/6 T IE3		188	169	161,5	157	149	144,5	138,5	126	108	89,5

NKV 1 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)



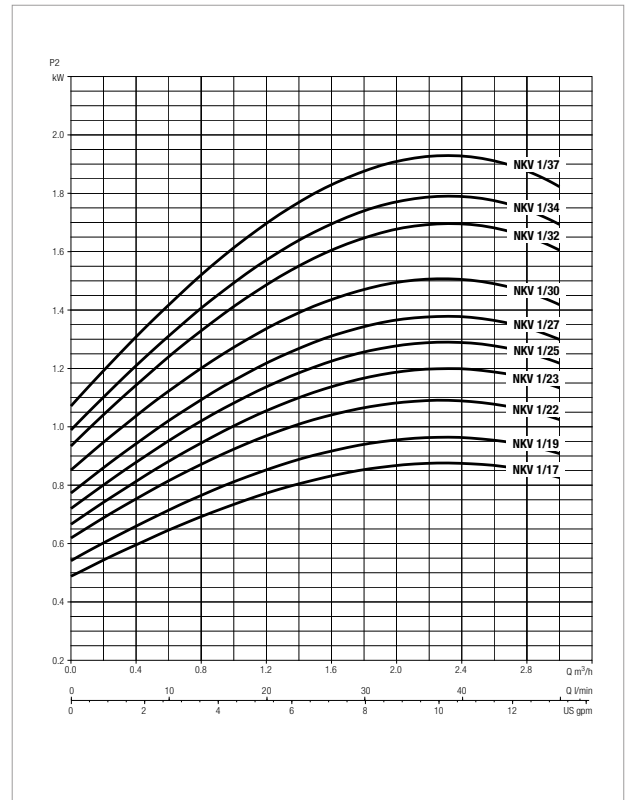
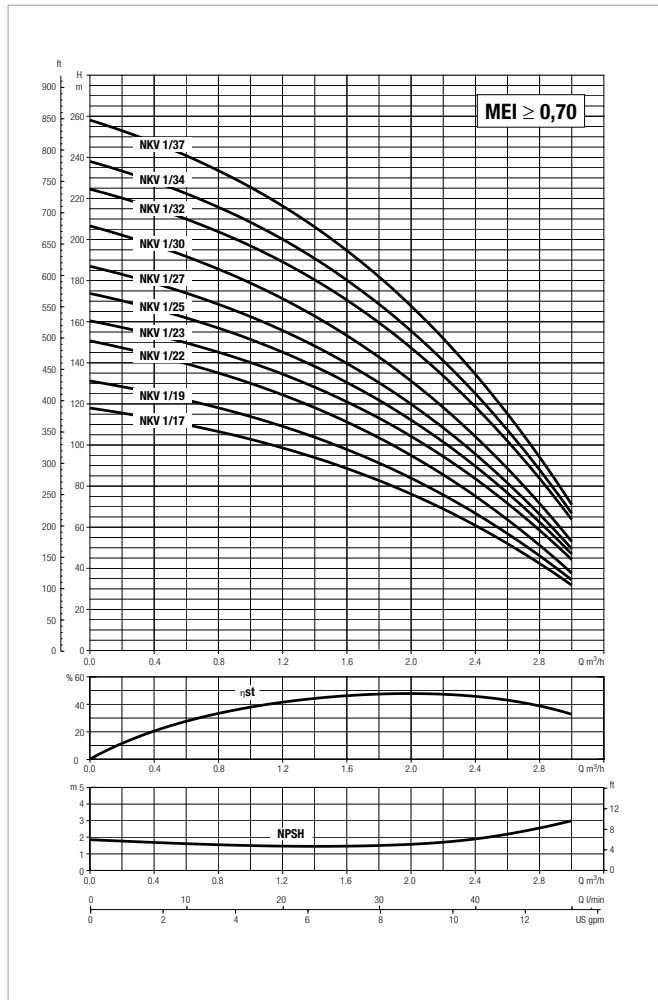
For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equivalent to 1000 kg/m³. Tolerance of curves to ISO 9906.

MODEL	VOLTAGE 50 Hz	P2 NOMINAL		In A	Ist A	Motor Frame	MEC Motor	1/min	η max Motor %	cos φ
		kW	HP							
NKV 1/2 T IE3	3 x 220-240Δ /380-415Y	0,37	0,50	1,7/1,0	8,5-9,2/4,9-5,3	B14	71	2800	78,5	0,80-0,70
NKV 1/3 T IE3	3 x 220-240Δ /380-415Y	0,37	0,50	1,7/1,0	8,5-9,2/4,9-5,3	B14	71	2800	78,5	0,80-0,70
NKV 1/4 T IE3	3 x 220-240Δ /380-415Y	0,37	0,50	1,7/1,0	8,5-9,2/4,9-5,3	B14	71	2800	78,5	0,80-0,70
NKV 1/5 T IE3	3 x 220-240Δ /380-415Y	0,37	0,50	1,7/1,0	8,5-9,2/4,9-5,3	B14	71	2800	78,5	0,80-0,70
NKV 1/6 T IE3	3 x 220-240Δ /380-415Y	0,37	0,50	1,7/1,0	8,5-9,2/4,9-5,3	B14	71	2800	78,5	0,80-0,70
NKV 1/7 T IE3	3 x 220-240Δ /380-415Y	0,37	0,50	1,7/1,0	8,5-9,2/4,9-5,3	B14	71	2800	78,5	0,80-0,70
NKV 1/8 T IE3	3 x 220-240Δ /380-415Y	0,55	0,75	2,7/1,6	12-13/6,9-7,5	B14	71	2830	80	0,80-0,70
NKV 1/9 T IE3	3 x 220-240Δ /380-415Y	0,55	0,75	2,7/1,6	12-13/6,9-7,5	B14	71	2830	80	0,80-0,70
NKV 1/10 T IE3	3 x 220-240Δ /380-415Y	0,55	0,75	2,7/1,6	12-13/6,9-7,5	B14	71	2830	80	0,80-0,70
NKV 1/11 T IE3	3 x 220-240Δ /380-415Y	0,55	0,75	2,7/1,6	12-13/6,9-7,5	B14	71	2830	80	0,80-0,70
NKV 1/12 T IE3	3 x 220-240Δ /380-415Y	0,75	1,00	3,9/1,7	19,1-20,5/11,0-11,8	B14	80S	2910	81	0,81-0,71
NKV 1/13 T IE3	3 x 220-240Δ /380-415Y	0,75	1,00	3,9/1,7	19,1-20,5/11,0-11,8	B14	80S	2910	81	0,81-0,71
NKV 1/14 T IE3	3 x 220-240Δ /380-415Y	0,75	1,00	3,9/1,7	19,1-20,5/11,0-11,8	B14	80S	2910	81	0,81-0,71
NKV 1/15 T IE3	3 x 220-240Δ /380-415Y	0,75	1,00	3,9/1,7	19,1-20,5/11,0-11,8	B14	80S	2910	81	0,81-0,71

NKV 1 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

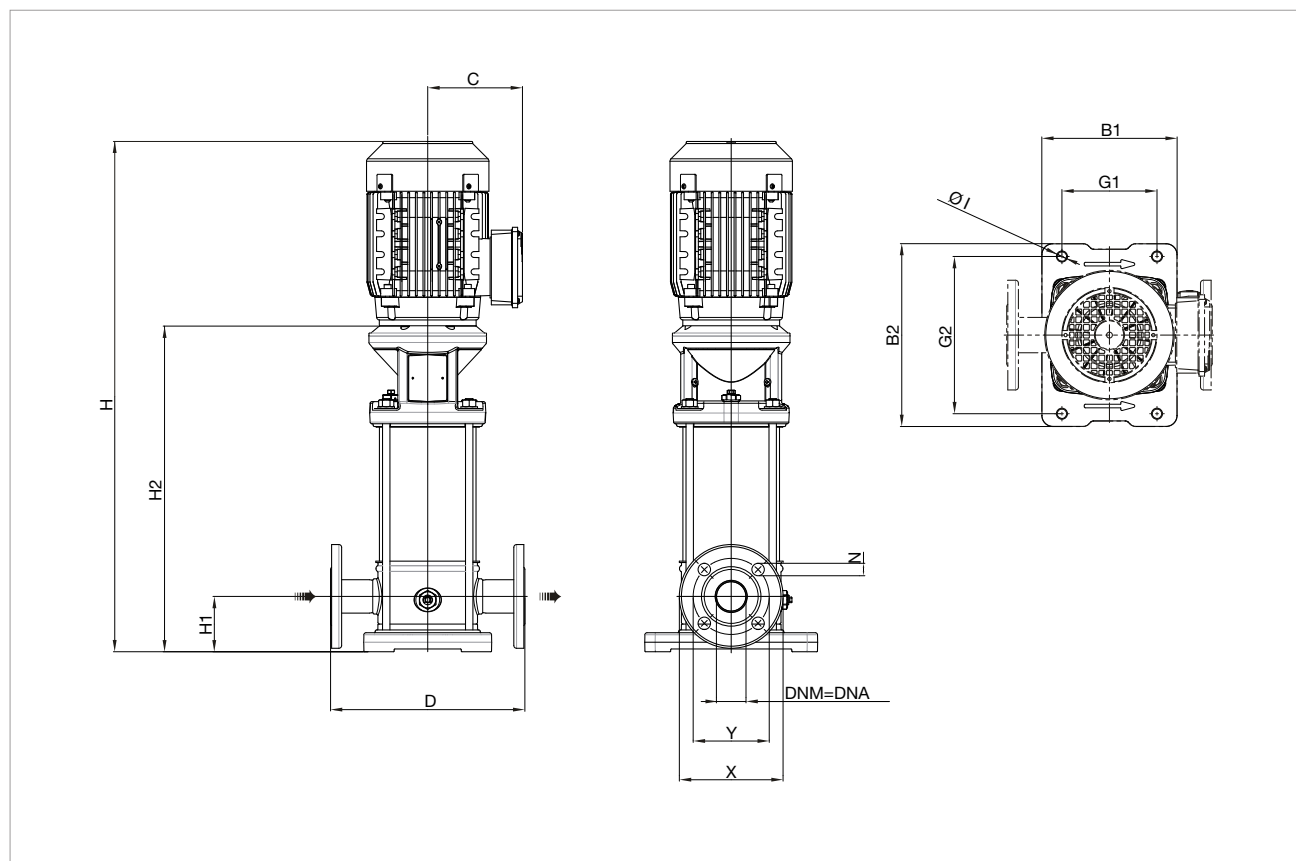


For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equivalent to 1000 kg/m³. Tolerance of curves to ISO 9906.

MODEL	VOLTAGE 50 Hz	P2 NOMINAL		In A	Ist A	Motor Frame	MEC Motor	1/min	η max Motor %	cos φ
		kW	HP							
NKV 1/17 T IE3	3 x 220-240Δ /380-415Y	1,10	1,50	4,1/2,4	28,5-31,5/16,3/17,9	B14	80M	2870	82,7	0,84-0,76
NKV 1/19 T IE3	3 x 220-240Δ /380-415Y	1,10	1,50	4,1/2,4	28,5-31,5/16,3/17,9	B14	80M	2870	82,7	0,84-0,76
NKV 1/22 T IE3	3 x 220-240Δ /380-415Y	1,10	1,50	4,1/2,4	28,5-31,5/16,3/17,9	B14	80M	2870	82,7	0,84-0,76
NKV 1/23 T IE3	3 x 220-240Δ /380-415Y	1,50	2,00	5,1/3,0	46,3-50,7/26,8-29,3	B14	90S	2875	84,2	0,85-0,75
NKV 1/25 T IE3	3 x 220-240Δ /380-415Y	1,50	2,00	5,1/3,0	46,3-50,7/26,8-29,3	B14	90S	2875	84,2	0,85-0,75
NKV 1/27 T IE3	3 x 220-240Δ /380-415Y	1,50	2,00	5,1/3,0	46,3-50,7/26,8-29,3	B14	90S	2875	84,2	0,85-0,75
NKV 1/30 T IE3	3 x 220-240Δ /380-415Y	1,50	2,00	5,1/3,0	46,3-50,7/26,8-29,3	B14	90S	2875	84,2	0,85-0,75
NKV 1/32 T IE3	3 x 220-240Δ /380-415Y	2,20	3,00	7,8-4,6	37,8-42,3	B14	90L	2880	86,5	0,87-0,80
NKV 1/34 T IE3	3 x 220-240Δ /380-415Y	2,20	3,00	7,8-4,6	37,8-42,3	B14	90L	2880	86,5	0,87-0,80
NKV 1/37 T IE3	3 x 220-240Δ /380-415Y	2,20	3,00	7,8-4,6	37,8-42,3	B14	90L	2880	86,5	0,87-0,80

NKV 1 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

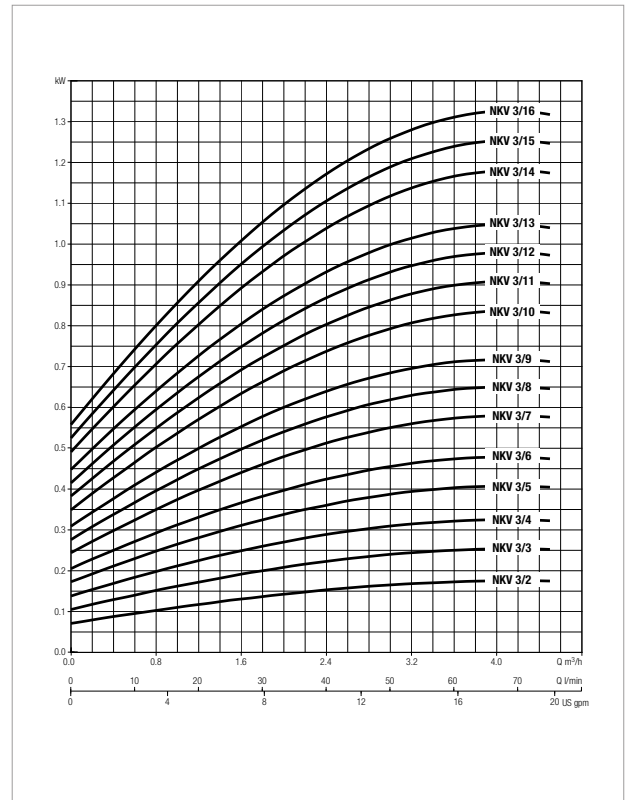
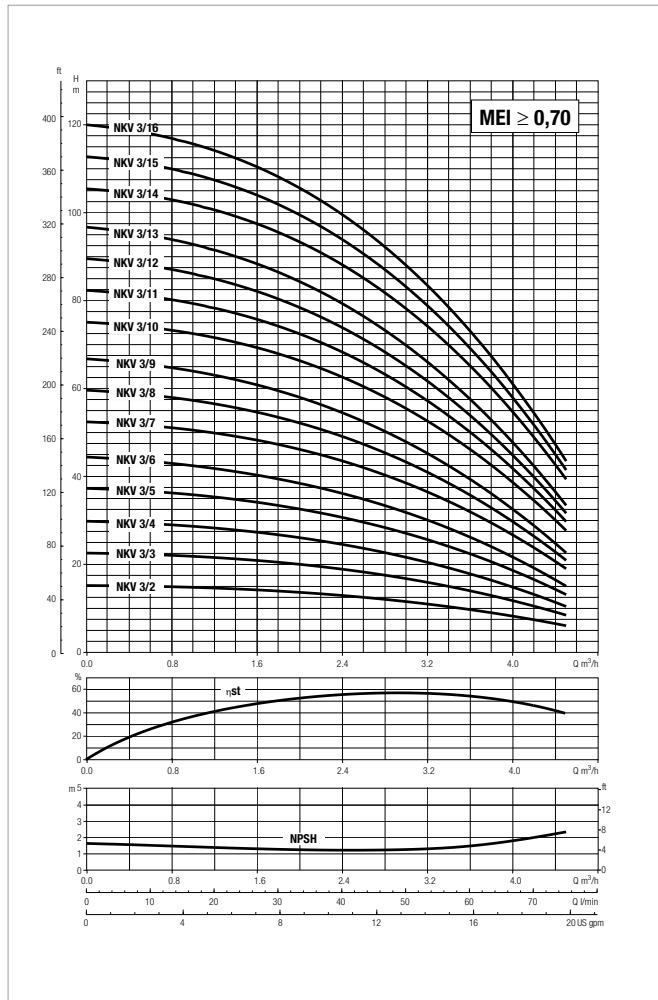


Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

MODEL	STAGE N°	B1	B2	G1	G2	Ø1	C	D	H	H1	H2	DNA = DNM (DN 25)			PACKING DIMENSIONS			VOL. mc	WEIGHT Kg
												X	Y	N	L/A	L/B	H		
NKV 1/2 T IE3	2	150	210	100	180	13	110	250	529	75	313	115	85	14	655	272	275	0,049	17,3
NKV 1/3 T IE3	3	150	210	100	180	13	110	250	552	75	336	115	85	14	655	272	275	0,049	17,8
NKV 1/4 T IE3	4	150	210	100	180	13	110	250	574	75	358	115	85	14	655	272	275	0,049	18,3
NKV 1/5 T IE3	5	150	210	100	180	13	110	250	597	75	381	115	85	14	655	272	275	0,049	18,8
NKV 1/6 T IE3	6	150	210	100	180	13	110	250	619	75	403	115	85	14	655	272	275	0,049	19,3
NKV 1/7 T IE3	7	150	210	100	180	13	110	250	642	75	426	115	85	14	655	272	275	0,049	19,8
NKV 1/8 T IE3	8	150	210	100	180	13	110	250	664	75	448	115	85	14	905	272	275	0,068	20,7
NKV 1/9 T IE3	9	150	210	100	180	13	110	250	687	75	471	115	85	14	905	272	275	0,068	21,2
NKV 1/10 T IE3	10	150	210	100	180	13	110	250	709	75	493	115	85	14	905	272	275	0,068	21,7
NKV 1/11 T IE3	11	150	210	100	180	13	110	250	732	75	516	115	85	14	905	272	275	0,068	22,2
NKV 1/12 T IE3	12	150	210	100	180	13	129	250	770	75	538	115	85	14	905	272	275	0,068	26,0
NKV 1/13 T IE3	13	150	210	100	180	13	129	250	793	75	561	115	85	14	905	272	275	0,068	26,5
NKV 1/14 T IE3	14	150	210	100	180	13	129	250	815	75	583	115	85	14	905	272	275	0,068	26,5
NKV 1/15 T IE3	15	150	210	100	180	13	129	250	838	75	606	115	85	14	905	272	275	0,068	27,0
NKV 1/17 T IE3	17	150	210	100	180	13	129	250	883	75	651	115	85	14	950	290	440	0,121	29,6
NKV 1/19 T IE3	19	150	210	100	180	13	129	250	928	75	696	115	85	14	1220	280	430	0,147	30,6
NKV 1/22 T IE3	22	150	210	100	180	13	129	250	995	75	763	115	85	14	1220	280	430	0,147	32,1
NKV 1/23 T IE3	23	150	210	100	180	13	138	250	1063	75	796	115	85	14	1220	280	430	0,147	36,0
NKV 1/25 T IE3	25	150	210	100	180	13	138	250	1108	75	841	115	85	14	1220	280	430	0,147	37,0
NKV 1/27 T IE3	27	150	210	100	180	13	138	250	1153	75	886	115	85	14	1220	280	430	0,147	38,0
NKV 1/30 T IE3	30	150	210	100	180	13	138	250	1220	75	953	115	85	14	1610	340	480	0,263	39,0
NKV 1/32 T IE3	32	150	210	100	180	13	138	250	1265	75	998	115	85	14	1610	340	480	0,263	42,0
NKV 1/34 T IE3	34	150	210	100	180	13	138	250	1310	75	1043	115	85	14	1610	340	480	0,263	43,0
NKV 1/37 T IE3	37	150	210	100	180	13	138	250	1378	75	1111	115	85	14	1610	340	480	0,263	44,5

NKV 3 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

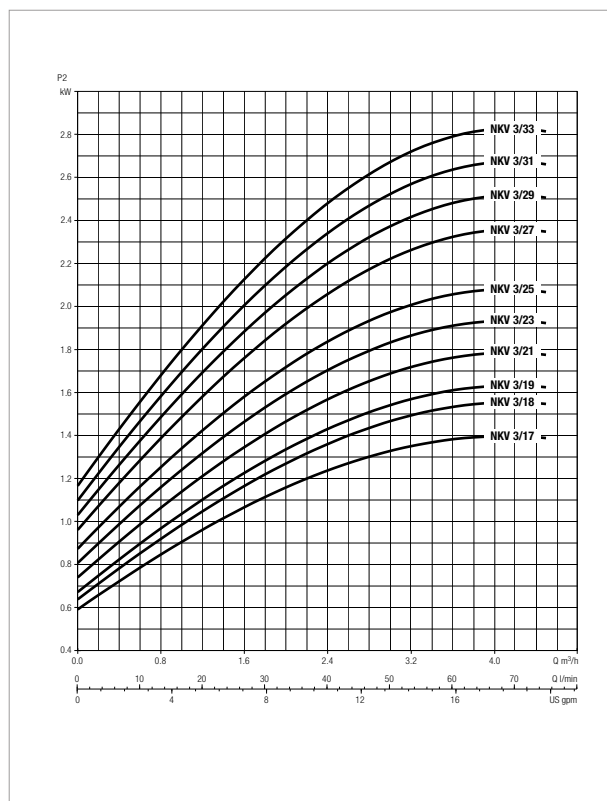
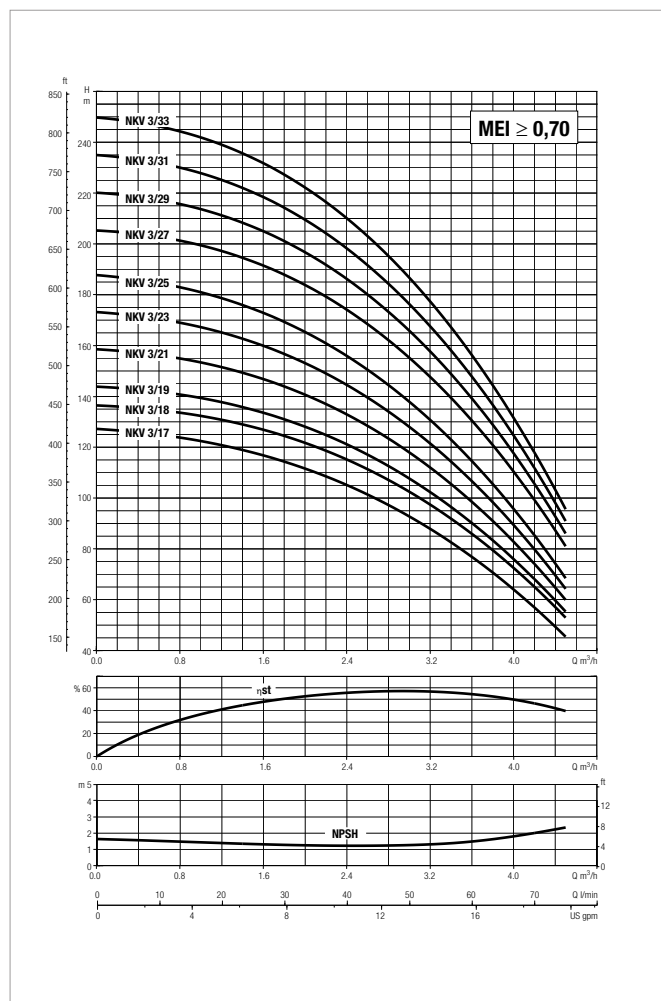


For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equivalent to 1000 kg/m³. Tolerance of curves to ISO 9906.

MODEL	VOLTAGE 50 Hz	P2 NOMINAL		In A	Ist A	Motor Frame	MEC Motor	1/min	η max Motor %	cos φ
		kW	HP							
NKV 3/2 T IE3	3 x 220-240Δ /380-415Y	0,37	0,50	1,7/1,0	8,5-9,2/4,9-5,3	B14	71	2800	78,5	0,80-0,70
NKV 3/3 T IE3	3 x 220-240Δ /380-415Y	0,37	0,50	1,7/1,0	8,5-9,2/4,9-5,3	B14	71	2800	78,5	0,80-0,70
NKV 3/4 T IE3	3 x 220-240Δ /380-415Y	0,37	0,50	1,7/1,0	8,5-9,2/4,9-5,3	B14	71	2800	78,5	0,80-0,70
NKV 3/5 T IE3	3 x 220-240Δ /380-415Y	0,55	0,75	2,7/1,6	12-13/6,9-7,5	B14	71	2830	80	0,80-0,70
NKV 3/6 T IE3	3 x 220-240Δ /380-415Y	0,55	0,75	2,7/1,6	12-13/6,9-7,5	B14	71	2830	80	0,80-0,70
NKV 3/7 T IE3	3 x 220-240Δ /380-415Y	0,75	1,00	3,9/1,7	19,1-20,5/11,0-11,8	B14	80S	2910	81	0,81-0,71
NKV 3/8 T IE3	3 x 220-240Δ /380-415Y	0,75	1,00	3,9/1,7	19,1-20,5/11,0-11,8	B14	80S	2910	81	0,81-0,71
NKV 3/9 T IE3	3 x 220-240Δ /380-415Y	0,75	1,00	3,9/1,7	19,1-20,5/11,0-11,8	B14	80S	2910	81	0,81-0,71
NKV 3/10 T IE3	3 x 220-240Δ /380-415Y	1,10	1,50	4,1/2,4	28,5-31,5/16,3/17,9	B14	80M	2870	82,7	0,84-0,76
NKV 3/11 T IE3	3 x 220-240Δ /380-415Y	1,10	1,50	4,1/2,4	28,5-31,5/16,3/17,9	B14	80M	2870	82,7	0,84-0,76
NKV 3/12 T IE3	3 x 220-240Δ /380-415Y	1,10	1,50	4,1/2,4	28,5-31,5/16,3/17,9	B14	80M	2870	82,7	0,84-0,76
NKV 3/13 T IE3	3 x 220-240Δ /380-415Y	1,10	1,50	4,1/2,4	28,5-31,5/16,3/17,9	B14	80M	2870	82,7	0,84-0,76
NKV 3/14 T IE3	3 x 220-240Δ /380-415Y	1,50	2,00	5,1/3,0	46,3-50,7/26,8-29,3	B14	90S	2875	84,2	0,85-0,75
NKV 3/15 T IE3	3 x 220-240Δ /380-415Y	1,50	2,00	5,1/3,0	46,3-50,7/26,8-29,3	B14	90S	2875	84,2	0,85-0,75
NKV 3/16 T IE3	3 x 220-240Δ /380-415Y	1,50	2,00	5,1/3,0	46,3-50,7/26,8-29,3	B14	90S	2875	84,2	0,85-0,75

NKV 3 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

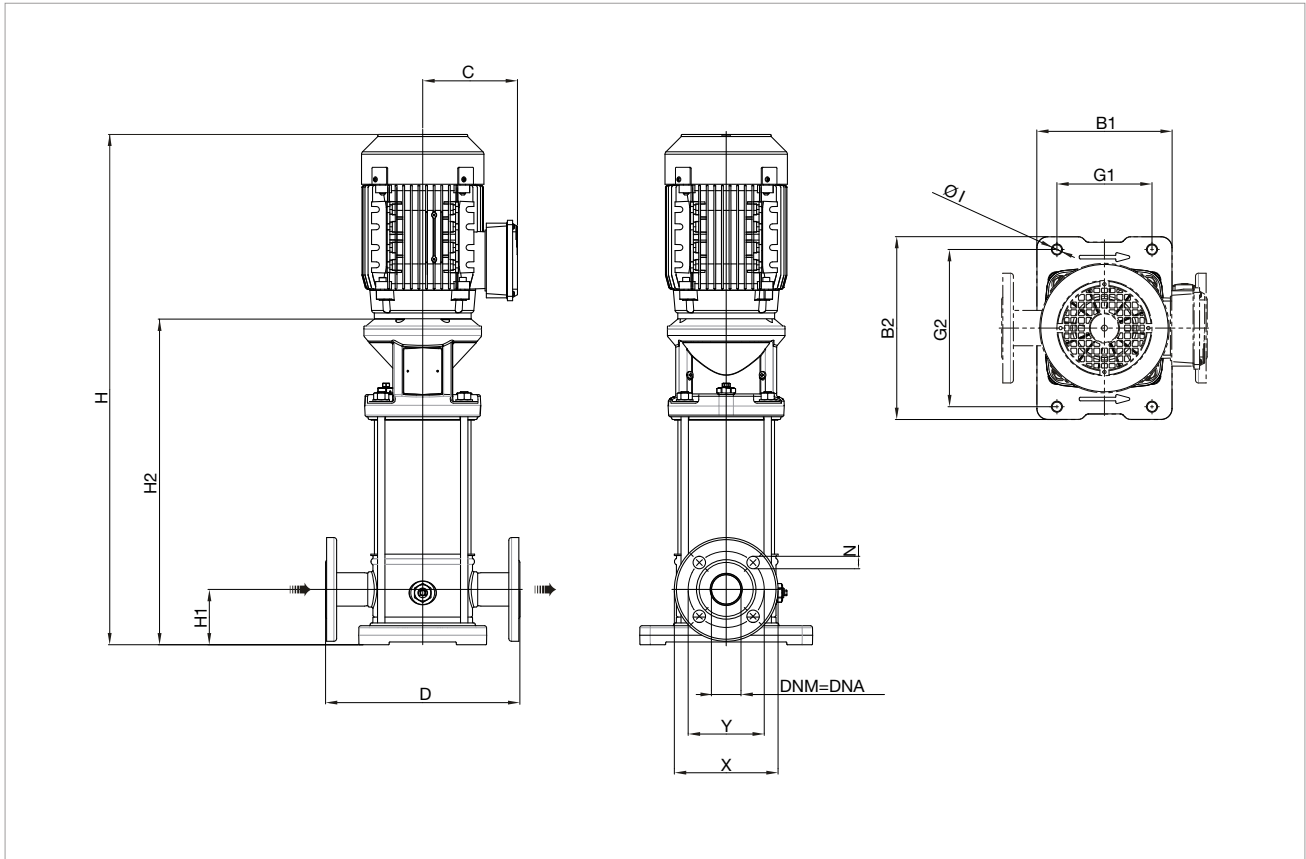


For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equivalent to 1000 kg/m³. Tolerance of curves to ISO 9906.

MODEL	VOLTAGE 50 Hz	P2 NOMINAL		In A	Ist A	Motor Frame	MEC Motor	1/min	η max Motor %	cos φ
		kW	HP							
NKV 3/17 T IE3	3 x 220-240Δ /380-415Y	1,50	2,00	5,1/3,0	46,3-50,7/26,8-29,3	B14	90S	2875	84,2	0,85-0,75
NKV 3/18 T IE3	3 x 220-240Δ /380-415Y	2,20	3,00	7,8-4,6	37,8-42,3	B14	90L	2880	86,5	0,87-0,80
NKV 3/19 T IE3	3 x 220-240Δ /380-415Y	2,20	3,00	7,8-4,6	37,8-42,3	B14	90L	2880	86,5	0,87-0,80
NKV 3/21 T IE3	3 x 220-240Δ /380-415Y	2,20	3,00	7,8-4,6	37,8-42,3	B14	90L	2880	86,5	0,87-0,80
NKV 3/23 T IE3	3 x 220-240Δ /380-415Y	2,20	3,00	7,8-4,6	37,8-42,3	B14	90L	2880	86,5	0,87-0,80
NKV 3/25 T IE3	3 x 220-240Δ /380-415Y	2,20	3,00	7,8-4,6	37,8-42,3	B14	90L	2880	86,5	0,87-0,80
NKV 3/27 T IE3	3 x 380-415Δ	3,00	4,00	5,6	52,9-58	B14	100L	2900	87,1	0,89
NKV 3/29 T IE3	3 x 380-415Δ	3,00	4,00	5,6	52,9-58	B14	100L	2900	87,1	0,89
NKV 3/31 T IE3	3 x 380-415Δ	3,00	4,00	5,6	52,9-58	B14	100L	2900	87,1	0,89
NKV 3/33 T IE3	3 x 380-415Δ	3,00	4,00	5,6	52,9-58	B14	100L	2900	87,1	0,89

NKV 3 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

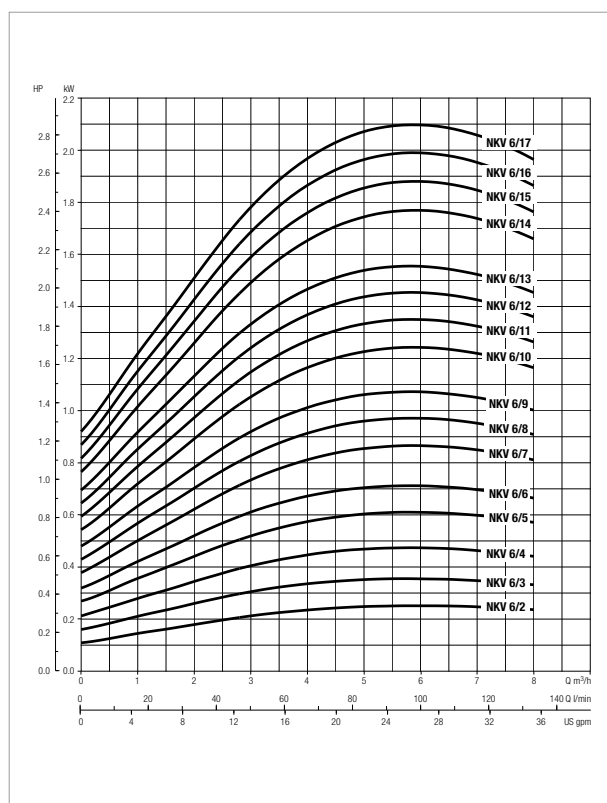
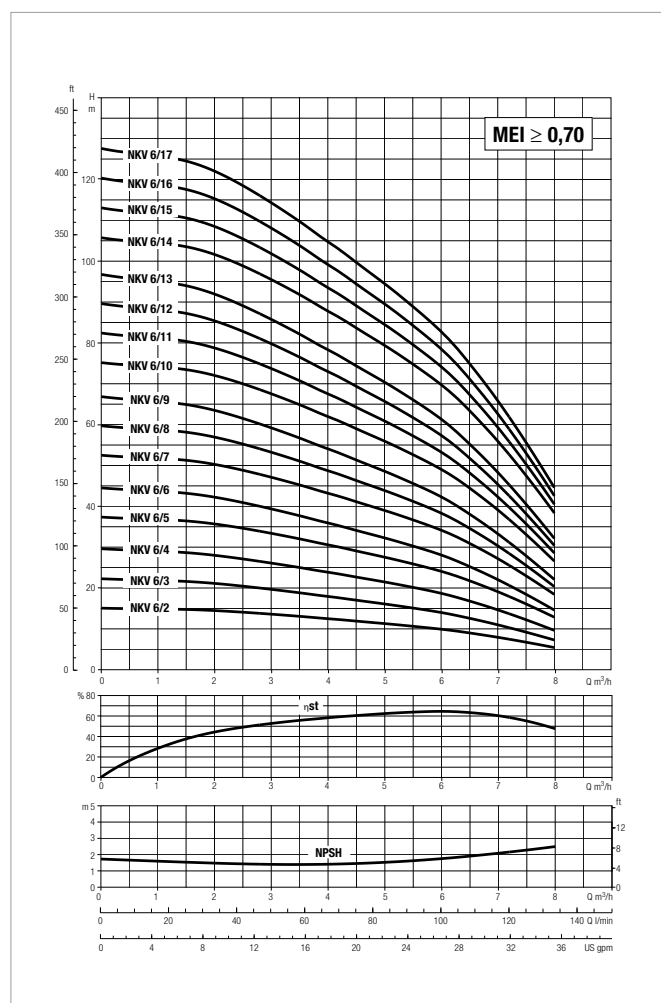


Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

MODEL	STAGE N°	B1	B2	G1	G2	Ø1	C	D	H	H1	H2	DNA = DNM (DN 25)			PACKING DIMENSIONS			VOL. mc	WEIGHT Kg
												X	Y	N	L/A	L/B	H		
NKV 3/2 T IE3	2	150	210	100	180	13	110	250	529	75	313	115	85	14	655	272	275	0,049	17,3
NKV 3/3 T IE3	3	150	210	100	180	13	110	250	552	75	336	115	85	14	655	272	275	0,049	17,8
NKV 3/4 T IE3	4	150	210	100	180	13	110	250	574	75	358	115	85	14	655	272	275	0,049	18,3
NKV 3/5 T IE3	5	150	210	100	180	13	110	250	597	75	381	115	85	14	655	272	275	0,049	19,2
NKV 3/6 T IE3	6	150	210	100	180	13	110	250	619	75	403	115	85	14	655	272	275	0,049	19,7
NKV 3/7 T IE3	7	150	210	100	180	13	129	250	658	75	426	115	85	14	905	272	275	0,068	23,5
NKV 3/8 T IE3	8	150	210	100	180	13	129	250	680	75	448	115	85	14	905	272	275	0,068	24,0
NKV 3/9 T IE3	9	150	210	100	180	13	129	250	703	75	471	115	85	14	905	272	275	0,068	24,5
NKV 3/10 T IE3	10	150	210	100	180	13	129	250	725	75	493	115	85	14	905	272	275	0,068	26,6
NKV 3/11 T IE3	11	150	210	100	180	13	129	250	748	75	516	115	85	14	905	272	275	0,068	27,1
NKV 3/12 T IE3	12	150	210	100	180	13	129	250	770	75	538	115	85	14	905	272	275	0,068	27,6
NKV 3/13 T IE3	13	150	210	100	180	13	129	250	793	75	561	115	85	14	905	272	275	0,068	28,1
NKV 3/14 T IE3	14	150	210	100	180	13	138	250	860	75	593	115	85	14	950	290	440	0,121	32,0
NKV 3/15 T IE3	15	150	210	100	180	13	138	250	883	75	616	115	85	14	950	290	440	0,121	32,5
NKV 3/16 T IE3	16	150	210	100	180	13	138	250	905	75	638	115	85	14	1220	280	430	0,147	32,5
NKV 3/17 T IE3	17	150	210	100	180	13	138	250	928	75	661	115	85	14	1220	280	430	0,147	33,0
NKV 3/18 T IE3	18	150	210	100	180	13	138	250	950	75	683	115	85	14	1220	280	430	0,147	35,5
NKV 3/19 T IE3	19	150	210	100	180	13	138	250	973	75	706	115	85	14	1220	280	430	0,147	36,0
NKV 3/21 T IE3	21	150	210	100	180	13	138	250	1018	75	751	115	85	14	1220	280	430	0,147	37,0
NKV 3/23 T IE3	23	150	210	100	180	13	138	250	1063	75	796	115	85	14	1220	280	430	0,147	38,0
NKV 3/25 T IE3	25	150	210	100	180	13	138	250	1108	75	841	115	85	14	1220	280	430	0,147	39,0
NKV 3/27 T IE3	27	150	210	100	180	13	145	250	1202	75	896	115	85	14	1610	340	480	0,263	47,3
NKV 3/29 T IE3	29	150	210	100	180	13	145	250	1247	75	941	115	85	14	1610	340	480	0,263	48,3
NKV 3/31 T IE3	31	150	210	100	180	13	145	250	1292	75	986	115	85	14	1610	340	480	0,263	49,3
NKV 3/33 T IE3	33	150	210	100	180	13	145	250	1337	75	1031	115	85	14	1610	340	480	0,263	50,3

NKV 6 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS,

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

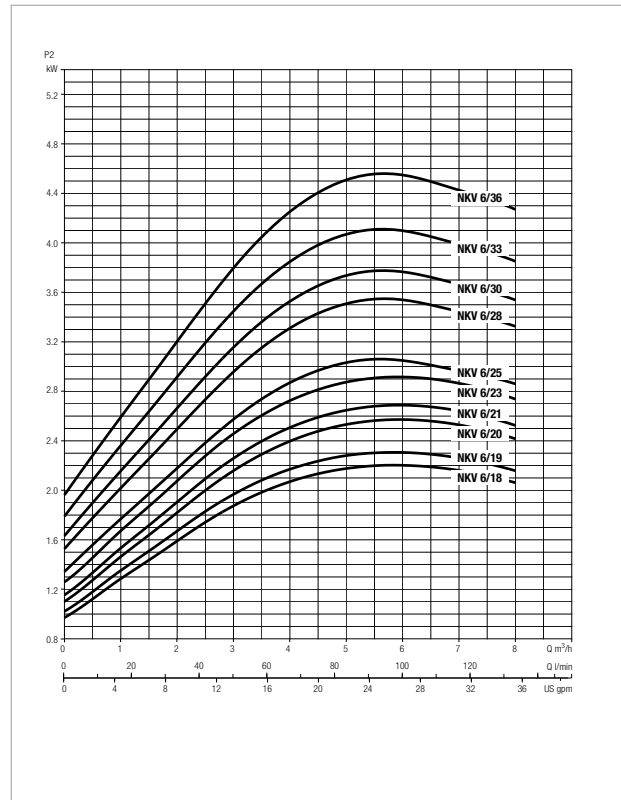
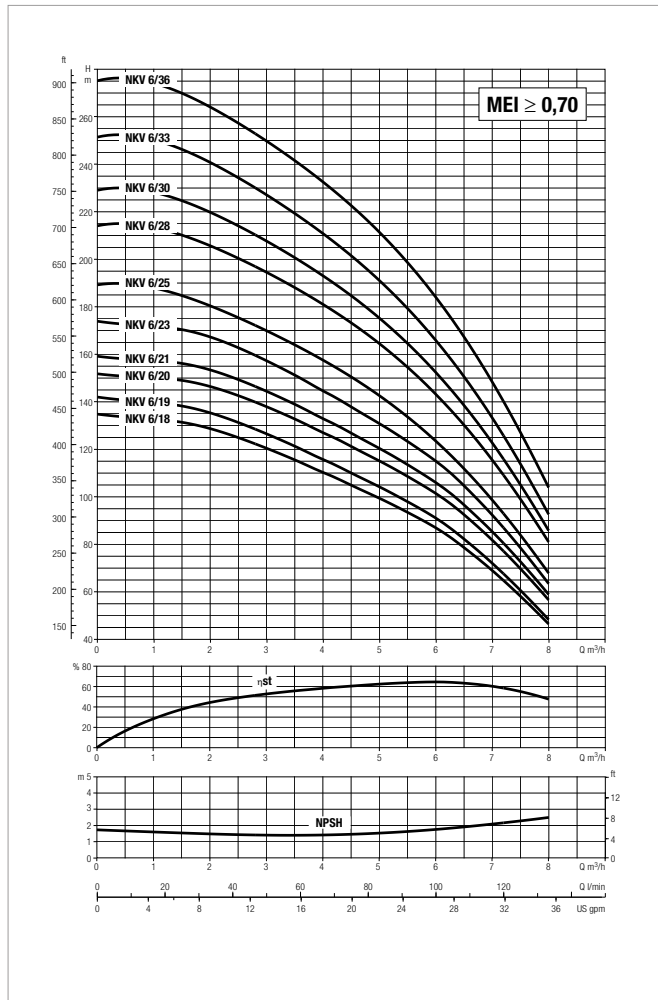


For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equivalent to 1000 kg/m³. Tolerance of curves to ISO 9906.

MODEL	VOLTAGE 50 Hz	P2 NOMINAL		In A	Ist A	Motor Frame	MEC Motor	1/min	η max Motor %	cos φ
		kW	HP							
NKV 6/2 T IE3	3 x 220-240Δ /380-415Y	0,37	0,50	1,7/1,0	8,5-9,2/4,9-5,3	B14	71	2800	78,5	0,80-0,70
NKV 6/3 T IE3	3 x 220-240Δ /380-415Y	0,37	0,50	1,7/1,0	8,5-9,2/4,9-5,3	B14	71	2800	78,5	0,80-0,70
NKV 6/4 T IE3	3 x 220-240Δ /380-415Y	0,55	0,75	2,7/1,6	12-13/6,9-7,5	B14	71	2830	80	0,80-0,70
NKV 6/5 T IE3	3 x 220-240Δ /380-415Y	0,75	1,00	3,9/1,7	19,1-20,5/11,0-11,8	B14	80S	2910	81	0,81-0,71
NKV 6/6 T IE3	3 x 220-240Δ /380-415Y	0,75	1,00	3,9/1,7	19,1-20,5/11,0-11,8	B14	80S	2910	81	0,81-0,71
NKV 6/7 T IE3	3 x 220-240Δ /380-415Y	1,10	1,50	4,1/2,4	28,5-31,5/16,3/17,9	B14	80M	2870	82,7	0,84-0,76
NKV 6/8 T IE3	3 x 220-240Δ /380-415Y	1,10	1,50	4,1/2,4	28,5-31,5/16,3/17,9	B14	80M	2870	82,7	0,84-0,76
NKV 6/9 T IE3	3 x 220-240Δ /380-415Y	1,10	1,50	4,1/2,4	28,5-31,5/16,3/17,9	B14	80M	2870	82,7	0,84-0,76
NKV 6/10 T IE3	3 x 220-240Δ /380-415Y	1,50	2,00	5,1/3,0	46,3-50,7/26,8-29,3	B14	90S	2875	84,2	0,85-0,75
NKV 6/11 T IE3	3 x 220-240Δ /380-415Y	1,50	2,00	5,1/3,0	46,3-50,7/26,8-29,3	B14	90S	2875	84,2	0,85-0,75
NKV 6/12 T IE3	3 x 220-240Δ /380-415Y	1,50	2,00	5,1/3,0	46,3-50,7/26,8-29,3	B14	90S	2875	84,2	0,85-0,75
NKV 6/13 T IE3	3 x 220-240Δ /380-415Y	1,50	2,00	5,1/3,0	46,3-50,7/26,8-29,3	B14	90S	2875	84,2	0,85-0,75
NKV 6/14 T IE3	3 x 220-240Δ /380-415Y	2,20	3,00	7,8-4,6	37,8-42,3	B14	90L	2880	86,5	0,87-0,80
NKV 6/15 T IE3	3 x 220-240Δ /380-415Y	2,20	3,00	7,8-4,6	37,8-42,3	B14	90L	2880	86,5	0,87-0,80
NKV 6/16 T IE3	3 x 220-240Δ /380-415Y	2,20	3,00	7,8-4,6	37,8-42,3	B14	90L	2880	86,5	0,87-0,80
NKV 6/17 T IE3	3 x 220-240Δ /380-415Y	2,20	3,00	7,8-4,6	37,8-42,3	B14	90L	2880	86,5	0,87-0,80

NKV 6 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

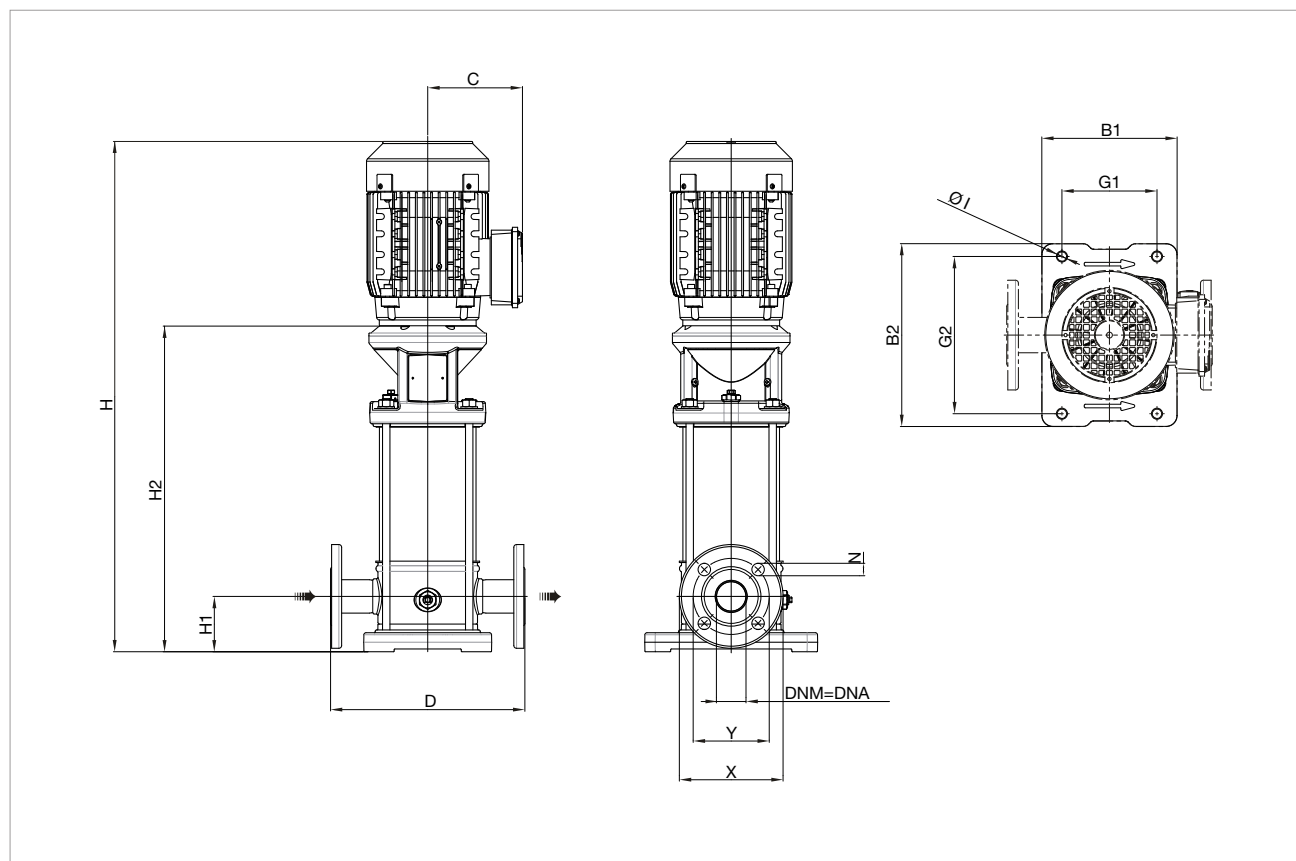


For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equivalent to 1000 kg/m³. Tolerance of curves to ISO 9906.

MODEL	VOLTAGE 50 Hz	P2 NOMINAL		In A	Ist A	Motor Frame	MEC Motor	1/min	η max Motor %	cos φ
		kW	HP							
NKV 6/18 T IE3	3 x 220-240Δ /380-415Y	2,20	3,00	7,8-4,6	37,8-42,3	B14	90L	2880	86,5	0,87-0,80
NKV 6/19 T IE3	3 x 220-240Δ /380-415Y	2,20	3,00	7,8-4,6	37,8-42,3	B14	90L	2880	86,5	0,87-0,80
NKV 6/20 T IE3	3 x 380-415Δ	3,00	4,00	5,6	52,9-58	B14	100L	2900	87,1	0,89
NKV 6/21 T IE3	3 x 380-415Δ	3,00	4,00	5,6	52,9-58	B14	100L	2900	87,1	0,89
NKV 6/23 T IE3	3 x 380-415Δ	3,00	4,00	5,6	52,9-58	B14	100L	2900	87,1	0,89
NKV 6/25 T IE3	3 x 380-415Δ	3,00	4,00	5,6	52,9-58	B14	100L	2900	87,1	0,89
NKV 6/28 T IE3	3 x 380-415Δ	4,00	5,50	8	89,6-98,4	B14	112M	2920	88,1	0,81
NKV 6/30 T IE3	3 x 380-415Δ	4,00	5,50	8	89,6-98,4	B14	112M	2920	88,1	0,81
NKV 6/33 T IE3	3 x 380-415Δ	4,00	5,50	8	89,6-98,4	B14	112M	2920	88,1	0,81
NKV 6/36 T IE3	3 x 380-415Δ	5,50	7,50	10,2	119,8-131	B5	132S	2935	89,2	0,87

NKV 6 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

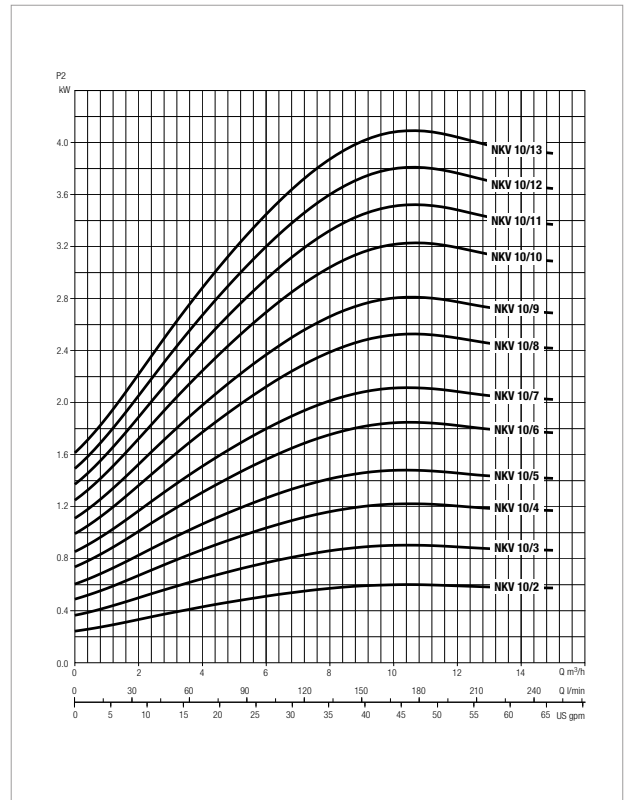
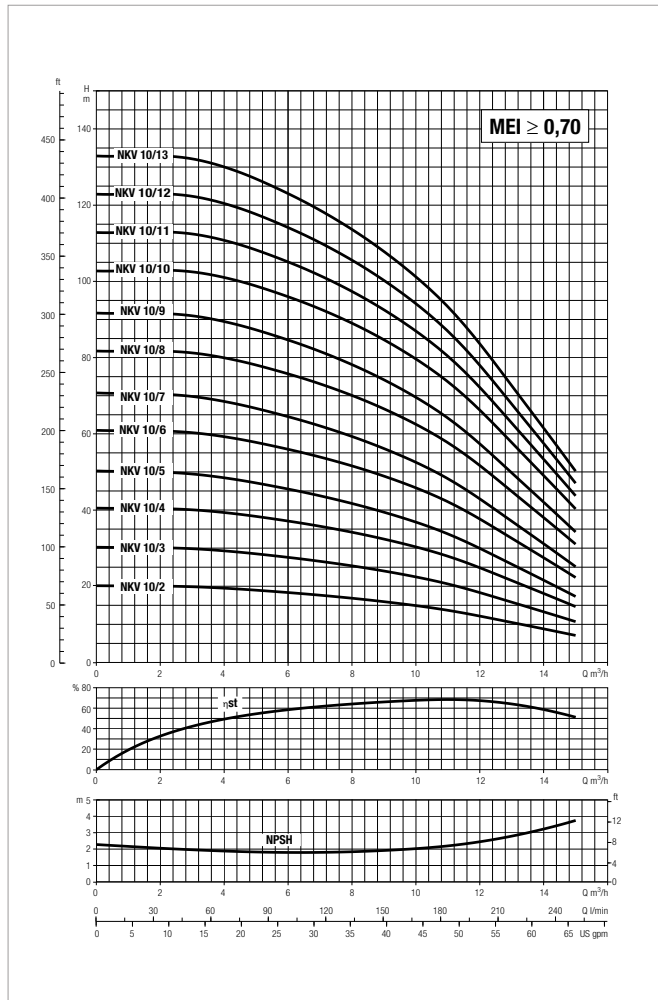


Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

MODEL	STAGE N°	B1	B2	G1	G2	Ø1	C	D	H	H1	H2	DNA = DNM (DN 32)			PACKING DIMENSIONS			VOL. mc	WEIGHT Kg
												X	Y	N	L/A	L/B	H		
NKV 6/2 T IE3	2	150	210	100	180	13	110	250	536	75	320	140	100	19	655	272	275	0,049	17,8
NKV 6/3 T IE3	3	150	210	100	180	13	110	250	562	75	346	140	100	19	655	272	275	0,049	18,3
NKV 6/4 T IE3	4	150	210	100	180	13	110	250	588	75	372	140	100	19	655	272	275	0,049	19,2
NKV 6/5 T IE3	5	150	210	100	180	13	129	250	630	75	398	140	100	19	655	272	275	0,049	23,0
NKV 6/6 T IE3	6	150	210	100	180	13	129	250	656	75	424	140	100	19	905	272	275	0,068	23,5
NKV 6/7 T IE3	7	150	210	100	180	13	129	250	682	75	450	140	100	19	905	272	275	0,068	25,6
NKV 6/8 T IE3	8	150	210	100	180	13	129	250	708	75	476	140	100	19	905	272	275	0,068	26,1
NKV 6/9 T IE3	9	150	210	100	180	13	129	250	734	75	502	140	100	19	905	272	275	0,068	26,6
NKV 6/10 T IE3	10	150	210	100	180	13	138	250	805	75	538	140	100	19	950	290	440	0,121	30,5
NKV 6/11 T IE3	11	150	210	100	180	13	138	250	831	75	564	140	100	19	950	290	440	0,121	31,5
NKV 6/12 T IE3	12	150	210	100	180	13	138	250	857	75	590	140	100	19	950	290	440	0,121	32,0
NKV 6/13 T IE3	13	150	210	100	180	13	138	250	883	75	616	140	100	19	950	290	440	0,121	32,5
NKV 6/14 T IE3	14	150	210	100	180	13	138	250	909	75	642	140	100	19	1220	280	430	0,147	35,0
NKV 6/15 T IE3	15	150	210	100	180	13	138	250	935	75	668	140	100	19	1220	280	430	0,147	35,5
NKV 6/16 T IE3	16	150	210	100	180	13	138	250	961	75	694	140	100	19	1220	280	430	0,147	36,0
NKV 6/17 T IE3	17	150	210	100	180	13	138	250	987	75	720	140	100	19	1220	280	430	0,147	36,5
NKV 6/18 T IE3	18	150	210	100	180	13	138	250	1013	75	746	140	100	19	1220	280	430	0,147	37,0
NKV 6/19 T IE3	19	150	210	100	180	13	138	250	1039	75	772	140	100	19	1220	280	430	0,147	37,5
NKV 6/20 T IE3	20	150	210	100	180	13	145	250	1114	75	808	140	100	19	1220	280	430	0,147	45,3
NKV 6/21 T IE3	21	150	210	100	180	13	145	250	1140	75	834	140	100	19	1220	280	430	0,147	45,8
NKV 6/23 T IE3	23	150	210	100	180	13	145	250	1192	75	886	140	100	19	1610	340	480	0,263	46,8
NKV 6/25 T IE3	25	150	210	100	180	13	145	250	1244	75	938	140	100	19	1610	340	480	0,263	47,8
NKV 6/28 T IE3	28	150	210	100	180	13	145	250	1322	75	1016	140	100	19	1610	340	480	0,263	53,0
NKV 6/30 T IE3	30	150	210	100	180	13	145	250	1374	75	1068	140	100	19	1610	340	480	0,263	54,5
NKV 6/33 T IE3	33	150	210	100	180	13	145	250	1452	75	1146	140	100	19	1610	340	480	0,263	56,0
NKV 6/36 T IE3	36	150	210	100	180	13	160	250	1728	75	1400	140	100	19	1820	500	630	0,573	84,1

NKV 10 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

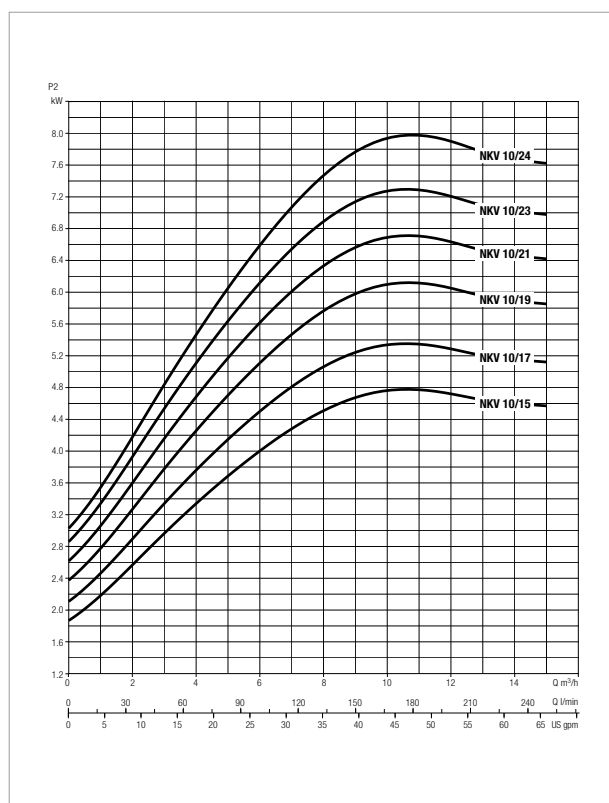
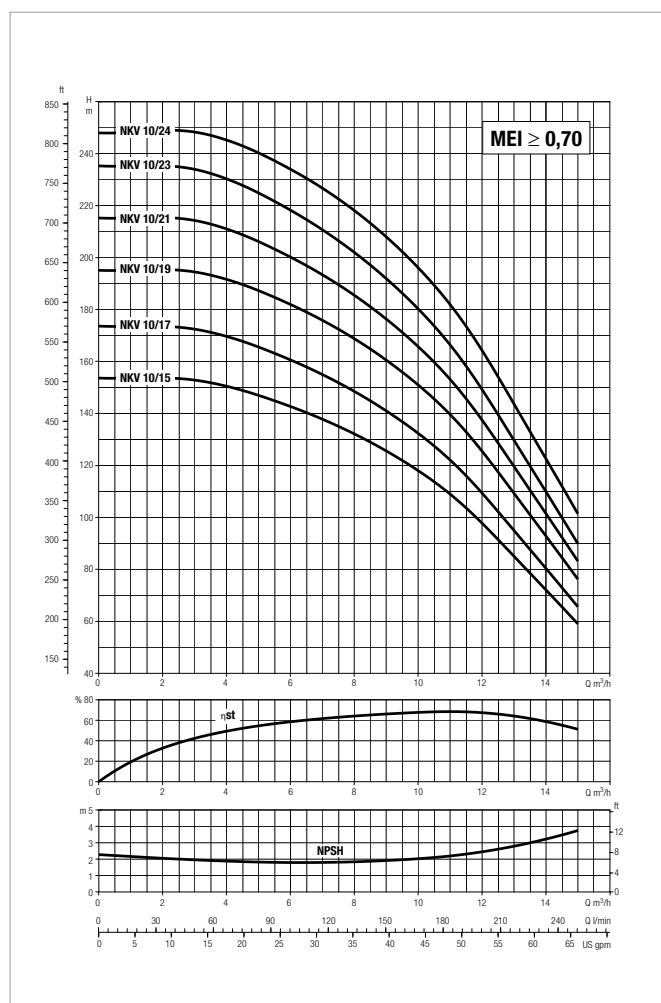


For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equivalent to 1000 kg/m³. Tolerance of curves to ISO 9906.

MODEL	VOLTAGE 50 Hz	P2 NOMINAL		In A	Ist A	Motor Frame	MEC Motor	1/min	η max Motor %	cos φ
		kW	HP							
NKV 10/2 T IE3	3 x 220-240Δ /380-415Y	0,75	1,00	3,9/1,7	19,1-20,5/11,0-11,8	B14	80S	2910	81	0,81-0,71
NKV 10/3 T IE3	3 x 220-240Δ /380-415Y	1,10	1,50	4,1/2,4	28,5-31,5/16,3/17,9	B14	80M	2870	82,7	0,84-0,76
NKV 10/4 T IE3	3 x 220-240Δ /380-415Y	1,50	2,00	5,1/3,0	46,3-50,7/26,8-29,3	B14	90S	2875	84,2	0,85-0,75
NKV 10/5 T IE3	3 x 220-240Δ /380-415Y	1,50	2,00	5,1/3,0	46,3-50,7/26,8-29,3	B14	90S	2875	84,2	0,85-0,75
NKV 10/6 T IE3	3 x 220-240Δ /380-415Y	2,20	3,00	7,8-4,6	37,8-42,3	B14	90L	2880	86,5	0,87-0,80
NKV 10/7 T IE3	3 x 220-240Δ /380-415Y	2,20	3,00	7,8-4,6	37,8-42,3	B14	90L	2880	86,5	0,87-0,80
NKV 10/8 T IE3	3 x 380-415Δ	3,00	4,00	5,6	52,9-58	B14	100L	2900	87,1	0,89
NKV 10/9 T IE3	3 x 380-415Δ	3,00	4,00	5,6	52,9-58	B14	100L	2900	87,1	0,89
NKV 10/10 T IE3	3 x 380-415Δ	4,00	5,50	8	89,6-98,4	B14	112M	2920	88,1	0,81
NKV 10/11 T IE3	3 x 380-415Δ	4,00	5,50	8	89,6-98,4	B14	112M	2920	88,1	0,81
NKV 10/12 T IE3	3 x 380-415Δ	4,00	5,50	8	89,6-98,4	B14	112M	2920	88,1	0,81
NKV 10/13 T IE3	3 x 380-415Δ	4,00	5,50	8	89,6-98,4	B14	112M	2920	88,1	0,81

NKV 10 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)



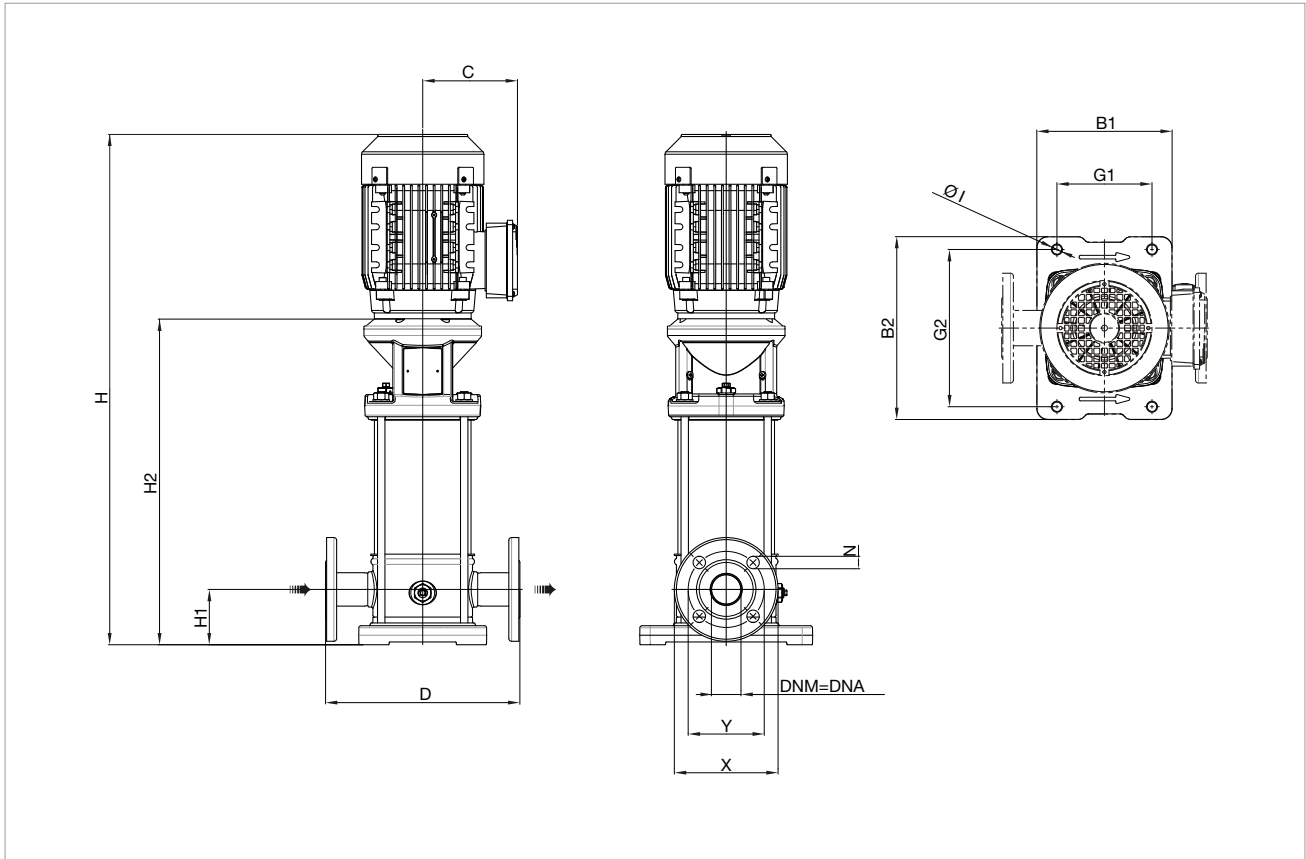
For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equivalent to 1000 kg/m³. Tolerance of curves to ISO 9906.

MODEL	VOLTAGE 50 Hz	P2 NOMINAL		In A	Ist A	Motor Frame	MEC Motor	1/min	η max Motor %	cos φ
		kW	HP							
NKV 10/15 T IE3	3 x 380-415Δ	5,50	7,50	10,2	119,8-131	B5	132S	2935	89,2	0,87
NKV 10/17 T IE3	3 x 380-415Δ	5,50	7,50	10,2	119,8-131	B5	132S	2935	89,2	0,87
NKV 10/19 T IE3	3 x 380-415Δ	7,50	10,00	14,4	152-169	B5	132S	2930	90,1	0,84
NKV 10/21 T IE3	3 x 380-415Δ	7,50	10,00	14,4	152-169	B5	132S	2930	90,1	0,84
NKV 10/23 T IE3	3 x 380-415Δ	7,50	10,00	14,4	152-169	B5	132S	2930	90,1	0,84
NKV 10/24 T IE3	3 x 380-415Δ	11,00	15,00	19,7	156-171	B5	160M	2950	91,2	0,89

NKV 10 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

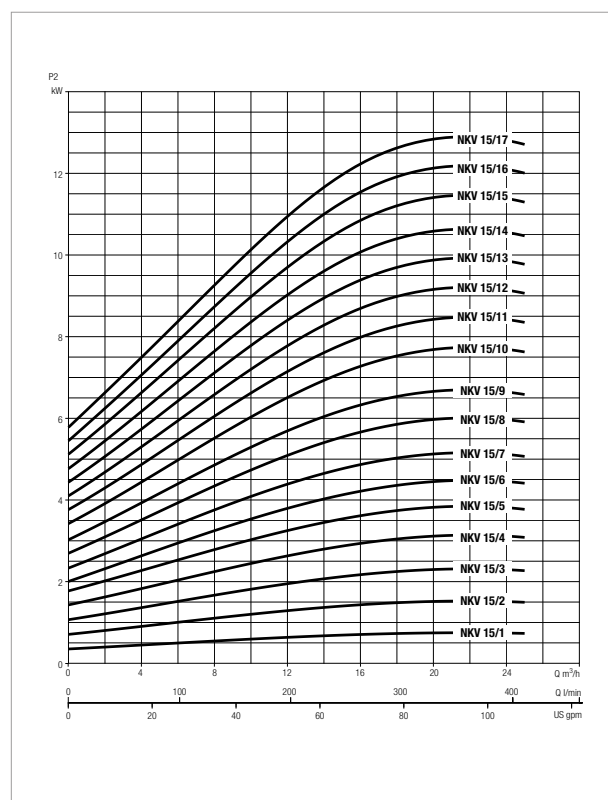
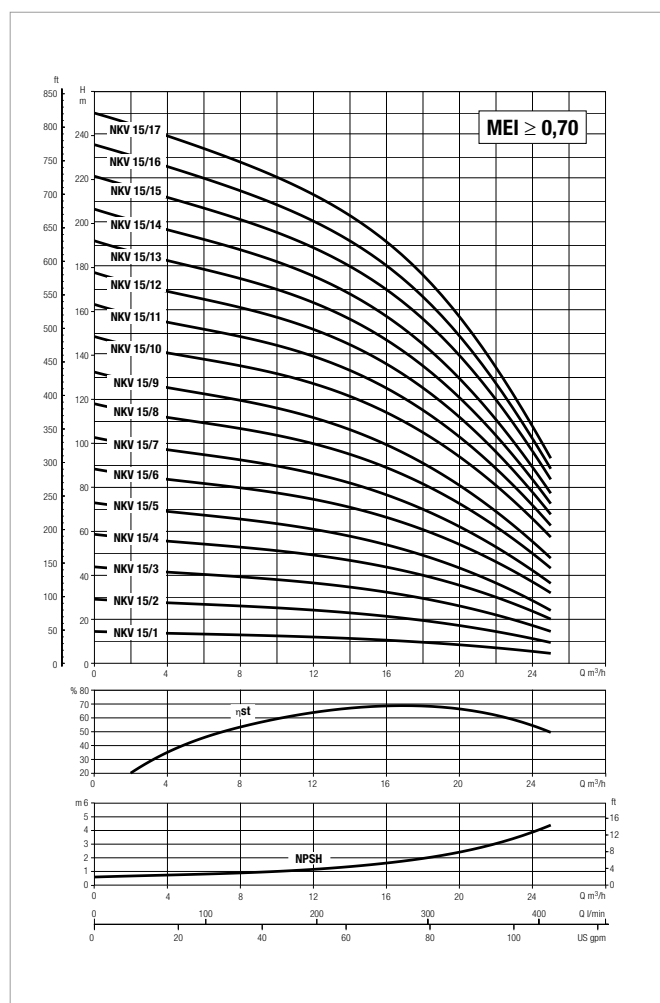


Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

MODEL	STAGE N°	B1	B2	G1	G2	Ø1	C	D	H	H1	H2	DNA = DNM (DN 40)			PACKING DIMENSIONS			VOL. mc	WEIGHT Kg
												X	Y	N	L/A	L/B	H		
NKV 10/2 T IE3	2	185	250	130	215	13	129	280	573	80	341	150	110	18	655	272	275	0,049	22.5
NKV 10/3 T IE3	3	185	250	130	215	13	129	280	603	80	371	150	110	18	655	272	275	0,049	25.1
NKV 10/4 T IE3	4	185	250	130	215	13	138	280	678	80	411	150	110	18	1050	340	490	0,175	29.0
NKV 10/5 T IE3	5	185	250	130	215	13	138	280	708	80	441	150	110	18	1050	340	490	0,175	29.5
NKV 10/6 T IE3	6	185	250	130	215	13	138	280	738	80	471	150	110	18	1050	340	490	0,175	32.5
NKV 10/7 T IE3	7	185	250	130	215	13	138	280	768	80	501	150	110	18	1050	340	490	0,175	33.0
NKV 10/8 T IE3	8	185	250	130	215	13	145	280	847	80	541	150	110	18	1050	340	490	0,175	41.3
NKV 10/9 T IE3	9	185	250	130	215	13	145	280	877	80	571	150	110	18	1050	340	490	0,175	41.8
NKV 10/10 T IE3	10	185	250	130	215	13	145	280	907	80	601	150	110	18	1050	340	490	0,175	46.0
NKV 10/11 T IE3	11	185	250	130	215	13	145	280	937	80	631	150	110	18	1050	340	490	0,175	46.5
NKV 10/12 T IE3	12	185	250	130	215	13	145	280	967	80	661	150	110	18	1050	340	490	0,175	47.5
NKV 10/13 T IE3	13	185	250	130	215	13	145	280	997	80	691	150	110	18	1412	377	530	0,282	48.0
NKV 10/15 T IE3	15	185	250	130	215	13	160	280	1254	80	926	150	110	18	1412	377	530	0,282	76.1
NKV 10/17 T IE3	17	185	250	130	215	13	160	280	1314	80	986	150	110	18	1412	377	530	0,282	77.1
NKV 10/19 T IE3	19	185	250	130	215	13	160	280	1396	80	1046	150	110	18	1610	340	480	0,263	81.0
NKV 10/21 T IE3	21	185	250	130	215	13	160	280	1456	80	1106	150	110	18	1610	340	480	0,263	82.5
NKV 10/23 T IE3	23	185	250	130	215	13	160	280	1516	80	1166	150	110	18	1610	340	480	0,263	83.5
NKV 10/24 T IE3	24	185	250	130	215	13	194	280	1641	80	1216	150	110	18	1820	500	630	0,573	109.5

NKV 15 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)



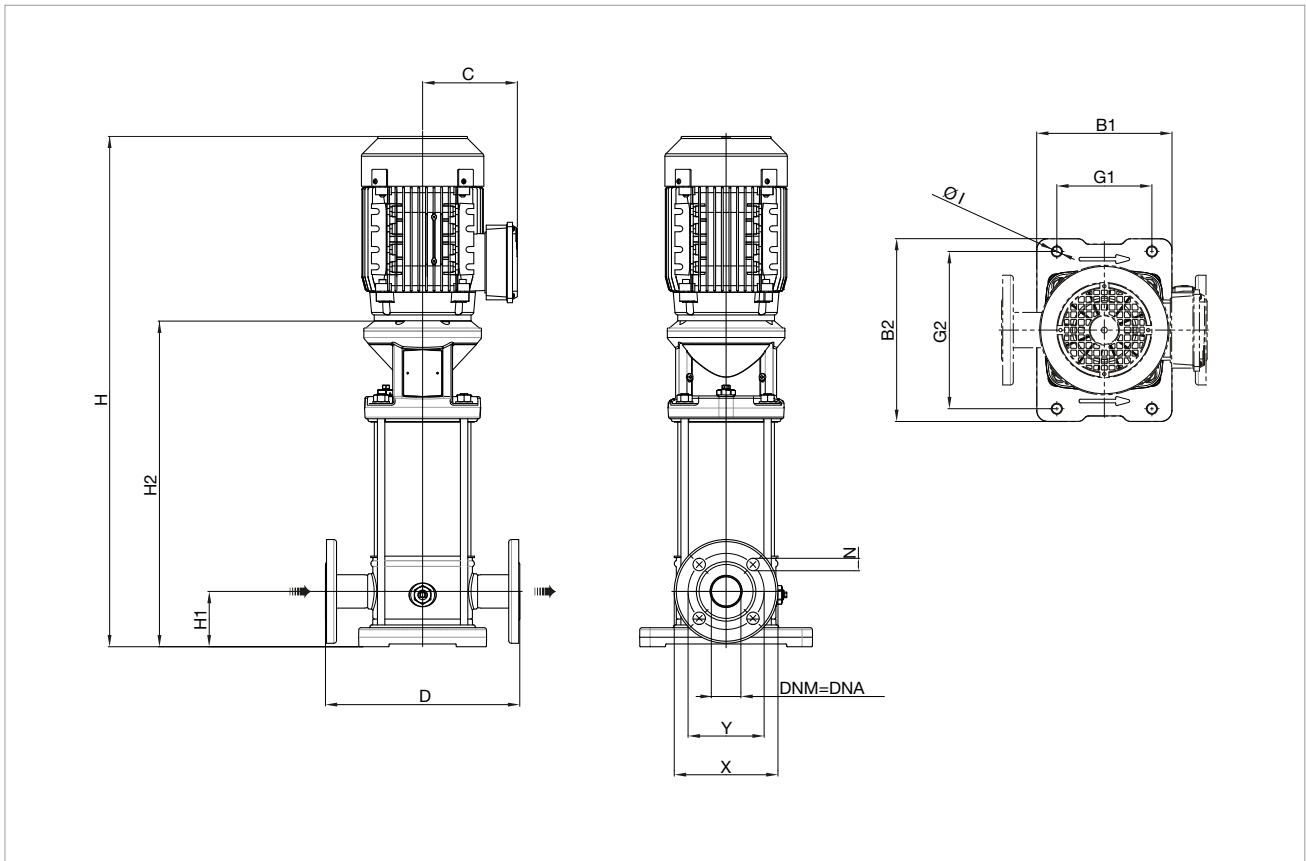
For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equivalent to 1000 kg/m³. Tolerance of curves to ISO 9906.

MODEL	VOLTAGE 50 Hz	P2 NOMINAL		In A	Ist A	Motor Frame	MEC Motor	1/min	η max Motor %	cos φ
		kW	HP							
NKV 15/1 T IE3	3 x 220-240Δ /380-415Y	1,10	1,50	4,1/2,4	28,5-31,5/16,3/17,9	B14	80M	2870	82,7	0,84-0,76
NKV 15/2 T IE3	3 x 220-240Δ /380-415Y	2,20	3,00	7,8-4,6	37,8-42,3	B14	90L	2880	86,5	0,87-0,80
NKV 15/3 T IE3	3 x 380-415Δ	3,00	4,00	5,6	52,9-58	B14	100L	2900	87,1	0,89
NKV 15/4 T IE3	3 x 380-415Δ	4,00	5,50	8	89,6-98,4	B14	112M	2920	88,1	0,81
NKV 15/5 T IE3	3 x 380-415Δ	4,00	5,50	8	89,6-98,4	B14	112M	2920	88,1	0,81
NKV 15/6 T IE3	3 x 380-415Δ	5,50	7,50	10,2	119,8-131	B5	132S	2935	89,2	0,87
NKV 15/7 T IE3	3 x 380-415Δ	5,50	7,50	10,2	119,8-131	B5	132S	2935	89,2	0,87
NKV 15/8 T IE3	3 x 380-415Δ	7,50	10,00	14,4	152-169	B5	132S	2930	90,1	0,84
NKV 15/9 T IE3	3 x 380-415Δ	7,50	10,00	14,4	152-169	B5	132S	2930	90,1	0,84
NKV 15/10 T IE3	3 x 380-415Δ	11,00	15,00	19,7	156-171	B5	160M	2950	91,2	0,89
NKV 15/11 T IE3	3 x 380-415Δ	11,00	15,00	19,7	156-171	B5	160M	2950	91,2	0,89
NKV 15/12 T IE3	3 x 380-415Δ	11,00	15,00	19,7	156-171	B5	160M	2950	91,2	0,89
NKV 15/13 T IE3	3 x 380-415Δ	11,00	15,00	19,7	156-171	B5	160M	2950	91,2	0,89
NKV 15/14 T IE3	3 x 380-415Δ	11,00	15,00	19,7	156-171	B5	160M	2950	91,2	0,89
NKV 15/15 T IE3	3 x 380-415Δ	15,00	20,00	26,7	185-106	B5	160M	2940	91,9	0,89
NKV 15/16 T IE3	3 x 380-415Δ	15,00	20,00	26,7	185-106	B5	160M	2940	91,9	0,89
NKV 15/17 T IE3	3 x 380-415Δ	15,00	20,00	26,7	185-106	B5	160M	2940	91,9	0,89

NKV 15 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

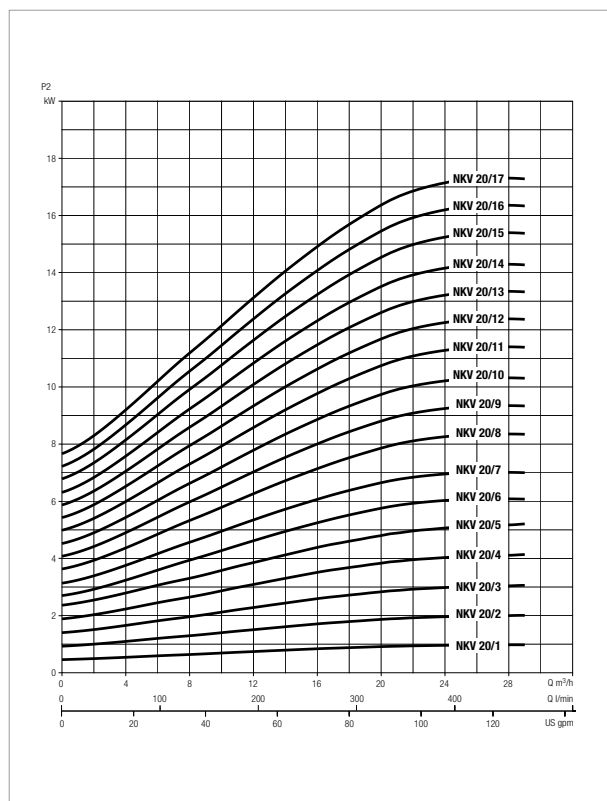
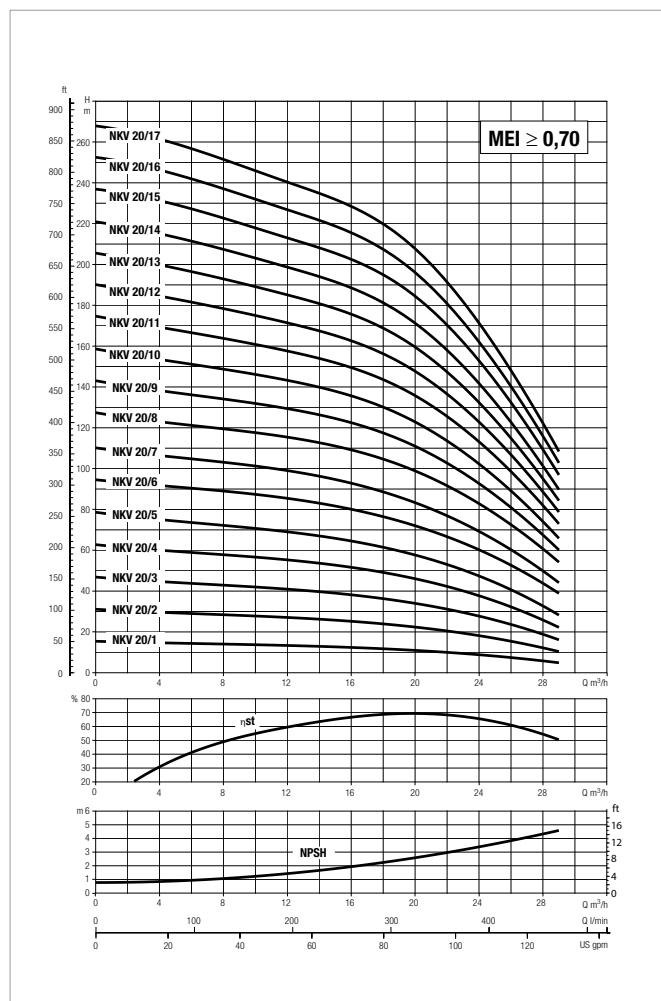


Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

MODEL	STAGE N°	B1	B2	G1	G2	Ø1	C	D	H	H1	H2	DNA = DNM (DN 50)			PACKING DIMENSIONS			VOL. mc	WEIGHT Kg
												X	Y	N	L/A	L/B	H		
NKV 15/1 T IE3	1	185	250	130	215	13	129	300	633	90	401	165	127	19	1050	340	490	0,175	30.6
NKV 15/2 T IE3	2	185	250	130	215	13	138	300	678	90	411	165	127	19	1050	340	490	0,175	37.0
NKV 15/3 T IE3	3	185	250	130	215	13	145	300	775	90	469	165	127	19	1050	340	490	0,175	45.8
NKV 15/4 T IE3	4	185	250	130	215	13	145	300	823	90	517	165	127	19	1050	340	490	0,175	51.0
NKV 15/5 T IE3	5	185	250	130	215	13	145	300	871	90	565	165	127	19	1050	340	490	0,175	52.5
NKV 15/6 T IE3	6	185	250	130	215	13	160	300	1128	90	800	165	127	19	1412	377	530	0,282	81.1
NKV 15/7 T IE3	7	185	250	130	215	13	160	300	1176	90	848	165	127	19	1412	377	530	0,282	82.6
NKV 15/8 T IE3	8	185	250	130	215	13	160	300	1246	90	896	165	127	19	1412	377	530	0,282	86.5
NKV 15/9 T IE3	9	185	250	130	215	13	160	300	1294	90	944	165	127	19	1412	377	530	0,282	88.0
NKV 15/10 T IE3	10	185	250	130	215	13	194	300	1437	90	1012	165	127	19	1820	500	630	0,573	115.0
NKV 15/11 T IE3	11	185	250	130	215	13	194	300	1485	90	1060	165	127	19	1820	500	630	0,573	116.5
NKV 15/12 T IE3	12	185	250	130	215	13	194	300	1533	90	1108	165	127	19	1820	500	630	0,573	118.0
NKV 15/13 T IE3	13	185	250	130	215	13	194	300	1581	90	1156	165	127	19	1820	500	630	0,573	119.5
NKV 15/14 T IE3	14	185	250	130	215	13	194	300	1629	90	1204	165	127	19	1820	500	630	0,573	121.0
NKV 15/15 T IE3	15	185	250	130	215	13	194	300	1728	90	1252	165	127	19	1820	500	630	0,573	131.0
NKV 15/16 T IE3	16	185	250	130	215	13	194	300	1776	90	1300	165	127	19	2550	500	750	0,956	132.5
NKV 15/17 T IE3	17	185	250	130	215	13	194	300	1824	90	1348	165	127	19	2550	500	750	0,956	134.0

NKV 20 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)



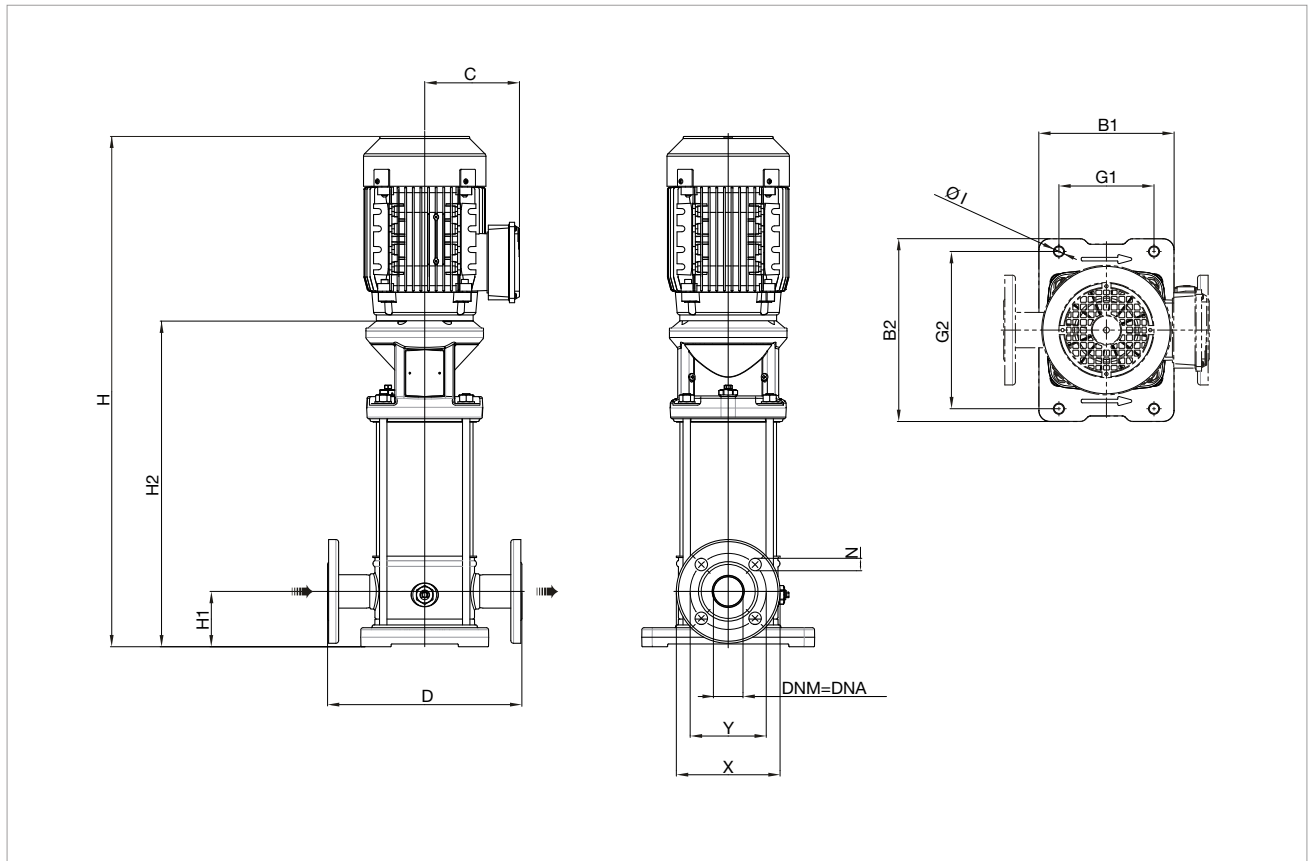
For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equivalent to 1000 kg/m³. Tolerance of curves to ISO 9906.

MODEL	VOLTAGE 50 Hz	P2 NOMINAL		In A	Ist A	Motor Frame	MEC Motor	1/min	η max Motor %	cos ϕ
		kW	HP							
NKV 20/1 T IE3	3 x 220-240Δ /380-415Y	1,10	1,50	4,1/2,4	28,5-31,5/16,3/17,9	B14	80M	2870	82,7	0,84-0,76
NKV 20/2 T IE3	3 x 220-240Δ /380-415Y	2,20	3,00	7,8-4,6	37,8-42,3	B14	90L	2880	86,5	0,87-0,80
NKV 20/3 T IE3	3 x 380-415Δ	3,00	4,00	5,6	52,9-58	B14	100L	2900	87,1	0,89
NKV 20/4 T IE3	3 x 380-415Δ	4,00	5,50	8	89,6-98,4	B14	112M	2920	88,1	0,81
NKV 20/5 T IE3	3 x 380-415Δ	5,50	7,50	10,2	119,8-131	B5	132S	2935	89,2	0,87
NKV 20/6 T IE3	3 x 380-415Δ	7,50	10,00	14,4	152-169	B5	132S	2930	90,1	0,84
NKV 20/7 T IE3	3 x 380-415Δ	7,50	10,00	14,4	152-169	B5	132S	2930	90,1	0,84
NKV 20/8 T IE3	3 x 380-415Δ	11,00	15,00	19,7	156-171	B5	160M	2950	91,2	0,89
NKV 20/9 T IE3	3 x 380-415Δ	11,00	15,00	19,7	156-171	B5	160M	2950	91,2	0,89
NKV 20/10 T IE3	3 x 380-415Δ	11,00	15,00	19,7	156-171	B5	160M	2950	91,2	0,89
NKV 20/11 T IE3	3 x 380-415Δ	15,00	20,00	26,7	185-106	B5	160M	2940	91,9	0,89
NKV 20/12 T IE3	3 x 380-415Δ	15,00	20,00	26,7	185-106	B5	160M	2940	91,9	0,89
NKV 20/13 T IE3	3 x 380-415Δ	15,00	20,00	26,7	185-106	B5	160M	2940	91,9	0,89
NKV 20/14 T IE3	3 x 380-415Δ	15,00	20,00	26,7	185-106	B5	160M	2940	91,9	0,89
NKV 20/15 T IE3	3 x 380-415Δ	18,50	25,00	33	220-129	B5	160L	2950	92,4	0,88
NKV 20/16 T IE3	3 x 380-415Δ	18,50	25,00	33	220-129	B5	160L	2950	92,4	0,88
NKV 20/17 T IE3	3 x 380-415Δ	18,50	25,00	33	220-129	B5	160L	2950	92,4	0,88

NKV 20 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

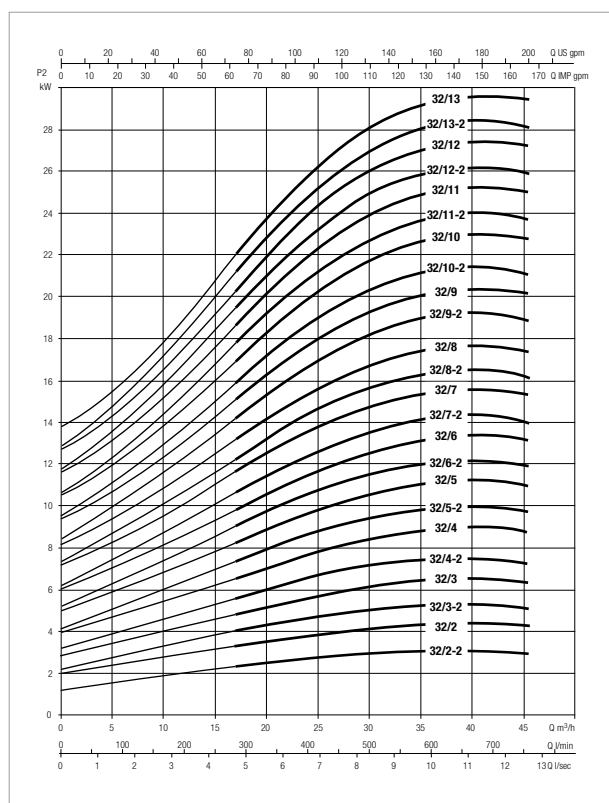
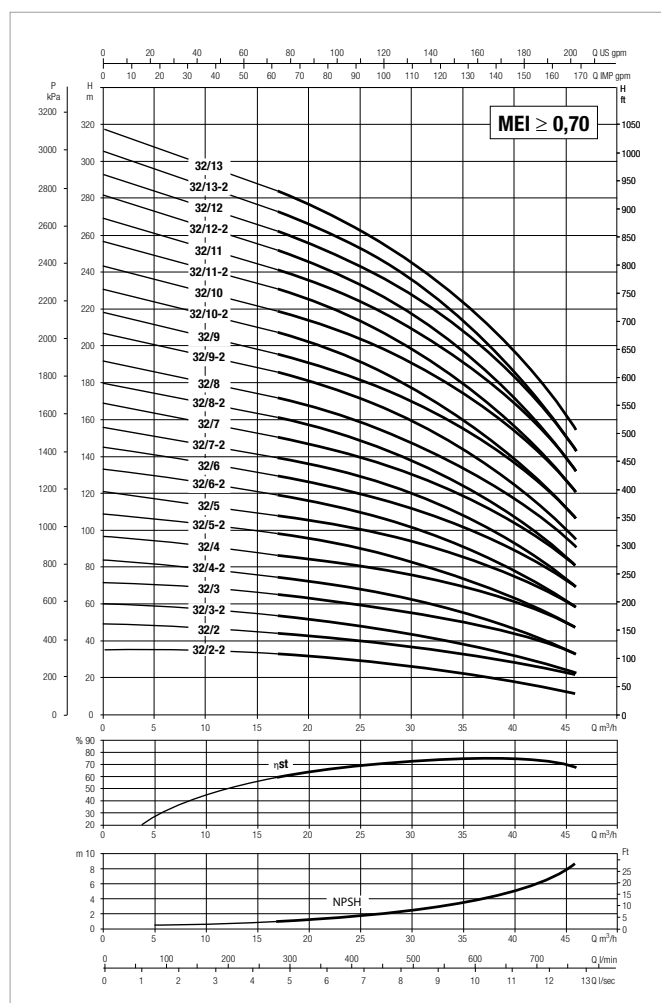


Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

MODEL	STAGE N°	B1	B2	G1	G2	Ø1	C	D	H	H1	H2	DNA = DNM (DN 40)			PACKING DIMENSIONS			VOL. mc	WEIGHT Kg
												X	Y	N	L/A	L/B	H		
NKV 20/1 T IE3	1	185	250	130	215	13	129	300	633	90	401	165	127	19	1050	340	490	0,175	30,6
NKV 20/2 T IE3	2	185	250	130	215	13	138	300	678	90	411	165	127	19	1050	340	490	0,175	37,0
NKV 20/3 T IE3	3	185	250	130	215	13	145	300	775	90	469	165	127	19	1050	340	490	0,175	45,8
NKV 20/4 T IE3	4	185	250	130	215	13	145	300	823	90	517	165	127	19	1412	377	530	0,282	51,0
NKV 20/5 T IE3	5	185	250	130	215	13	160	300	1080	90	752	165	127	19	1412	377	530	0,282	80,1
NKV 20/6 T IE3	6	185	250	130	215	13	160	300	1150	90	800	165	127	19	1412	377	530	0,282	84,0
NKV 20/7 T IE3	7	185	250	130	215	13	160	300	1198	90	848	165	127	19	1412	377	530	0,282	85,0
NKV 20/8 T IE3	8	185	250	130	215	13	194	300	1341	90	916	165	127	19	1820	500	630	0,573	112,5
NKV 20/9 T IE3	9	185	250	130	215	13	194	300	1389	90	964	165	127	19	1820	500	630	0,573	114,0
NKV 20/10 T IE3	10	185	250	130	215	13	194	300	1437	90	1012	165	127	19	1820	500	630	0,573	115,0
NKV 20/11 T IE3	11	185	250	130	215	13	194	300	1536	90	1060	165	127	19	1820	500	630	0,573	125,5
NKV 20/12 T IE3	12	185	250	130	215	13	194	300	1584	90	1108	165	127	19	1820	500	630	0,573	127,0
NKV 20/13 T IE3	13	185	250	130	215	13	194	300	1632	90	1156	165	127	19	1820	500	630	0,573	128,5
NKV 20/14 T IE3	14	185	250	130	215	13	194	300	1680	90	1204	165	127	19	1820	500	630	0,573	130,0
NKV 20/15 T IE3	15	185	250	130	215	13	238	300	1794	90	1252	165	127	19	2550	500	750	0,956	167,0
NKV 20/16 T IE3	16	185	250	130	215	13	238	300	1842	90	1300	165	127	19	2550	500	750	0,956	168,5
NKV 20/17 T IE3	17	185	250	130	215	13	238	300	1890	90	1348	165	127	19	2550	500	750	0,956	170,0

NKV 32 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 32 bar (3200 kPa)



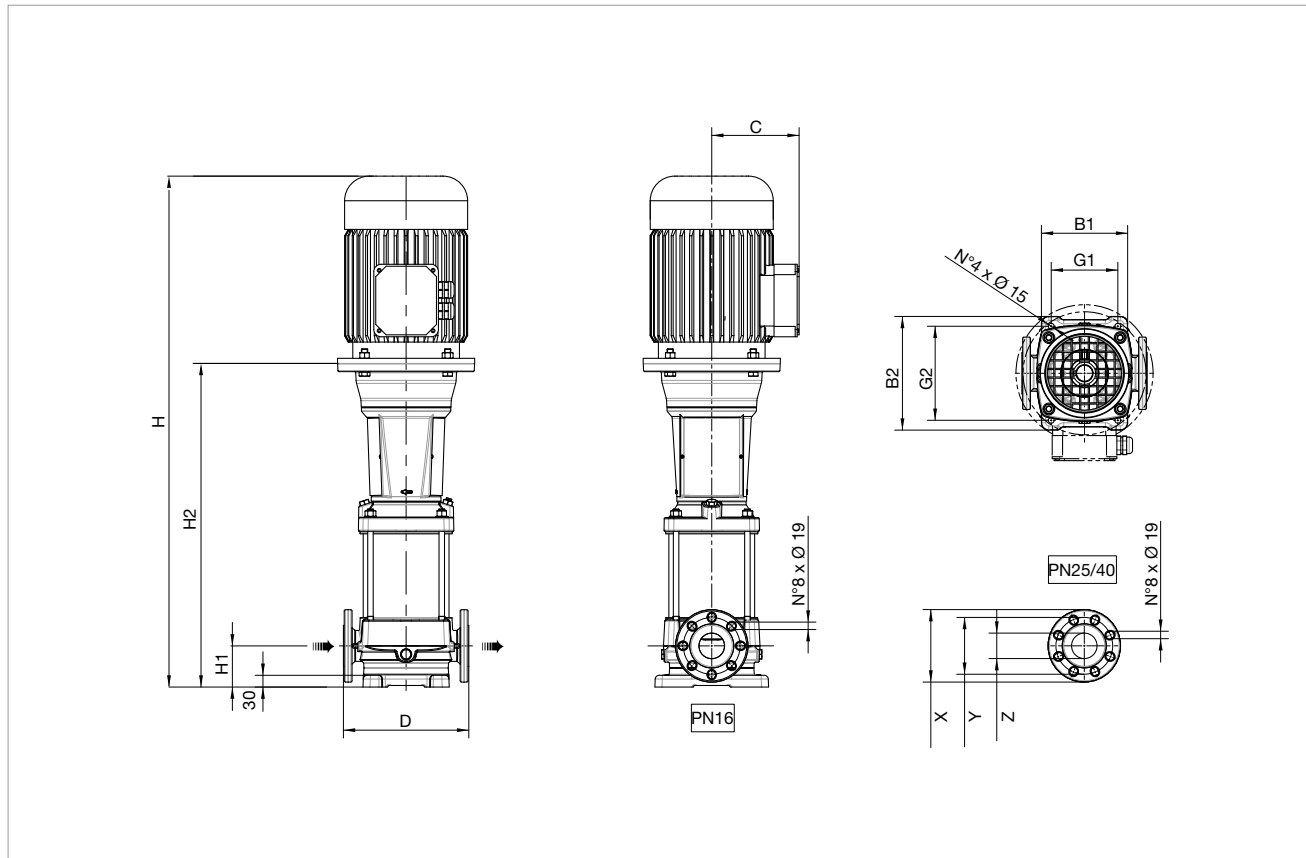
For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equivalent to 1000 kg/m³. Tolerance of curves to ISO 9906.

MODEL	VOLTAGE 50 Hz	P2 NOMINAL		In A	Ist A	Motor Frame	MEC Motor	1/min	η max Motor %	cos φ	RPM	
		kW	HP								max	min
NKV 32/2-2 T IE3	3 x 400 V Δ	4,00	5,50	8	89,6-98,4	B14	112M	2920	88,1	0,81	2980	2910
NKV 32/2 T IE3	3 x 400 V Δ	5,50	7,50	10,2	119,8-131	B5	132S	2935	89,2	0,87	2980	2910
NKV 32/3-2 T IE3	3 x 400 V Δ	5,50	7,50	10,2	119,8-131	B5	132S	2935	89,2	0,87	2980	2910
NKV 32/3 T IE3	3 x 400 V Δ	7,50	10,00	14,4	152-169	B5	132S	2930	90,1	0,84	2980	2900
NKV 32/4-2 T IE3	3 x 400 V Δ	7,50	10,00	14,4	152-169	B5	132S	2930	90,1	0,84	2980	2900
NKV 32/4 T IE3	3 x 400 V Δ	11,00	15,00	19,7	156-171	B5	160M	2950	91,2	0,89	2980	2930
NKV 32/5-2 T IE3	3 x 400 V Δ	11,00	15,00	19,7	156-171	B5	160M	2950	91,2	0,89	2980	2930
NKV 32/5 T IE3	3 x 400 V Δ	15,00	20,00	26,7	185-106	B5	160M	2940	91,9	0,89	2980	2940
NKV 32/6-2 T IE3	3 x 400 V Δ	15,00	20,00	26,7	185-106	B5	160M	2940	91,9	0,89	2980	2940
NKV 32/6 T IE3	3 x 400 V Δ	15,00	20,00	26,7	185-106	B5	160M	2940	91,9	0,89	2980	2940
NKV 32/7-2 T IE3	3 x 400 V Δ	15,00	20,00	26,7	185-106	B5	160M	2940	91,9	0,89	2980	2940
NKV 32/7 T IE3	3 x 400 V Δ	18,50	25,00	33	220-129	B5	160L	2950	92,4	0,88	2990	2940
NKV 32/8-2 T IE3	3 x 400 V Δ	18,50	25,00	33	220-129	B5	160L	2950	92,4	0,88	2990	2940
NKV 32/8 T IE3	3 x 400 V Δ	18,50	25,00	33	220-129	B5	160L	2950	92,4	0,88	2990	2940
NKV 32/9-2 T IE3	3 x 400 V Δ	22,00	30,00	38,1	156-171	B5	180M	2955	92,7	0,9	2990	2960
NKV 32/9 T IE3	3 x 400 V Δ	22,00	30,00	38,1	156-171	B5	180M	2955	92,7	0,9	2990	2960
NKV 32/10-2 T IE3	3 x 400 V Δ	22,00	30,00	38,1	156-171	B5	180M	2955	92,7	0,9	2990	2960
NKV 32/10 T IE3	3 x 400 V Δ	30,00	40,00	52,1	185-106	B5	200L	2960	93,3	0,89	2990	2950
NKV 32/11-2 T IE3	3 x 400 V Δ	30,00	40,00	52,1	185-106	B5	200L	2960	93,3	0,89	2990	2950
NKV 32/11 T IE3	3 x 400 V Δ	30,00	40,00	52,1	185-106	B5	200L	2960	93,3	0,89	2990	2950
NKV 32/12-2 T IE3	3 x 400 V Δ	30,00	40,00	52,1	185-106	B5	200L	2960	93,3	0,89	2990	2950
NKV 32/12 T IE3	3 x 400 V Δ	30,00	40,00	52,1	185-106	B5	200L	2960	93,3	0,89	2990	2950
NKV 32/13-2 T IE3	3 x 400 V Δ	30,00	40,00	52,1	185-106	B5	200L	2960	93,3	0,89	2990	2950
NKV 32/13 T IE3	3 x 400 V Δ	30,00	40,00	52,1	185-106	B5	200L	2960	93,3	0,89	2990	2950

NKV 32 - MULTISTAGE CENTRIFUGAL ELECTRICPUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 32 bar (3200 kPa)

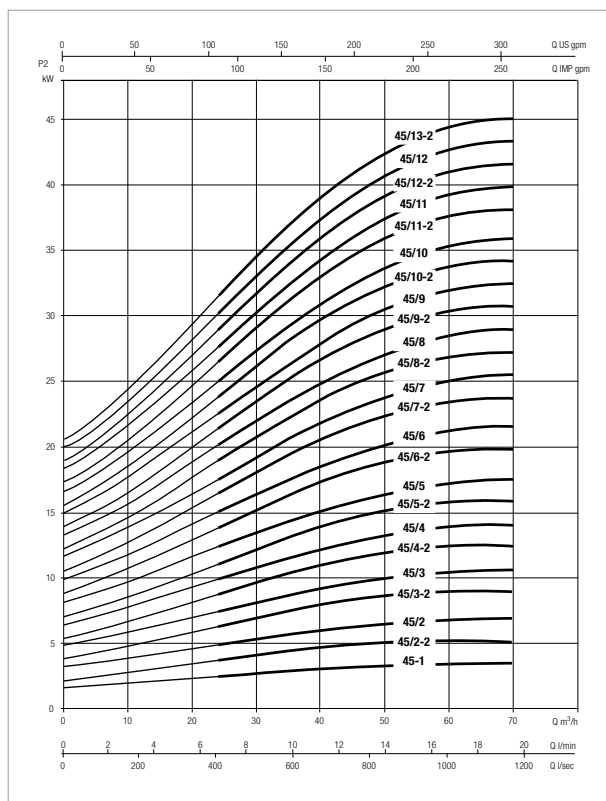
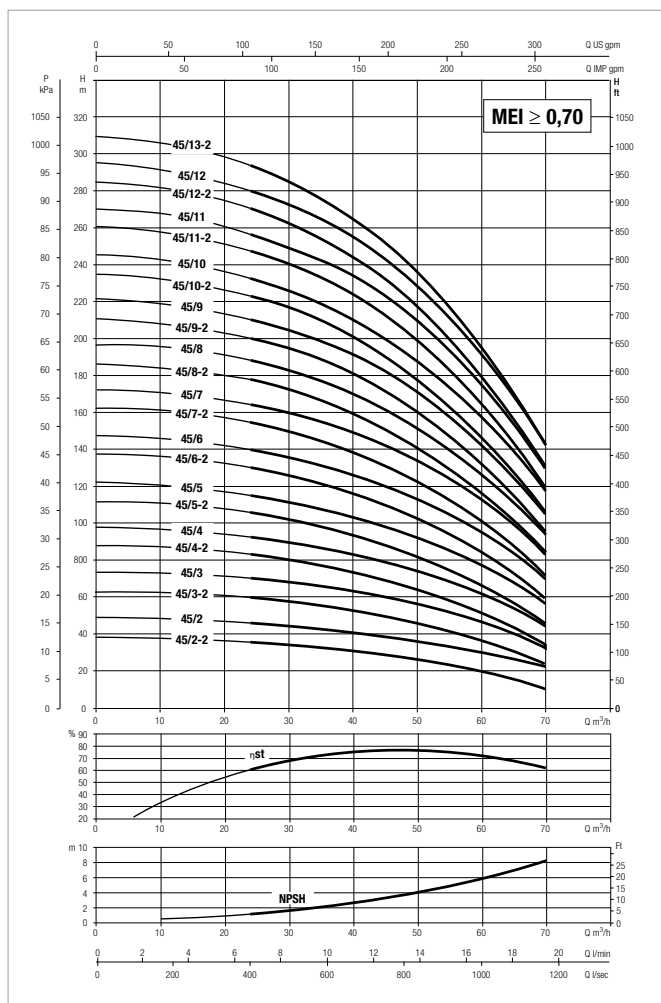


Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

MODEL	STAGE N°	B1	B2	G1	G2	C	D	H	H1	H2	DNA = DNM (DN 65)			PACKING DIMENSIONS			WEIGHT Kg
											X	Y	Z	L/A	L/B	H	
NKV 32/2-2 T IE3	2	220	290	170	240	190	320	947	105	537	185	145	65	1120	500	630	93
NKV 32/2 T IE3	2	220	290	170	240	210	320	1114	105	724	185	145	65	1120	500	630	140
NKV 32/3-2 T IE3	3	220	290	170	240	210	320	1196	105	806	185	145	65	1820	500	630	144
NKV 32/3 T IE3	3	220	290	170	240	188	320	1243	105	806	185	145	65	1820	500	630	125
NKV 32/4-2 T IE3	4	220	290	170	240	188	320	1325	105	888	185	145	65	1820	500	630	132
NKV 32/4 T IE3	4	220	290	170	240	242	320	1345	105	908	185	145	65	1820	500	630	203
NKV 32/5-2 T IE3	5	220	290	170	240	242	320	1427	105	990	185	145	65	1820	500	630	207
NKV 32/5 T IE3	5	220	290	170	240	242	320	1495	105	990	185	145	65	1820	500	630	214
NKV 32/6-2 T IE3	6	220	290	170	240	242	320	1577	105	1072	185	145	65	1820	500	630	218
NKV 32/6 T IE3	6	220	290	170	240	242	320	1577	105	1072	185	145	65	1820	500	630	218
NKV 32/7-2 T IE3	7	220	290	170	240	242	320	1659	105	1154	185	145	65	1820	500	630	222
NKV 32/7 T IE3	7	220	290	170	240	242	320	1703	105	1154	185	145	65	1820	500	630	243
NKV 32/8-2 T IE3	8	220	290	170	240	242	320	1785	105	1236	185	145	65	2550	500	750	247
NKV 32/8 T IE3	8	220	290	170	240	242	320	1785	105	1236	185	145	65	2550	500	750	247
NKV 32/9-2 T IE3	9	220	290	170	240	260	320	1898	105	1318	185	145	65	2550	500	750	283
NKV 32/9 T IE3	9	220	290	170	240	260	320	1898	105	1318	185	145	65	2550	500	750	283
NKV 32/10-2 T IE3	10	220	290	170	240	260	320	1980	105	1400	185	145	65	2550	500	750	290
NKV 32/10 T IE3	10	220	290	170	240	292	320	2075	105	1405	185	145	65	2550	500	750	363
NKV 32/11-2 T IE3	11	220	290	170	240	292	320	2157	105	1487	185	145	65	2550	500	750	367
NKV 32/11 T IE3	11	220	290	170	240	292	320	2157	105	1487	185	145	65	2550	500	750	367
NKV 32/12-2 T IE3	12	220	290	170	240	292	320	2239	105	1569	185	145	65	2550	500	750	371
NKV 32/12 T IE3	12	220	290	170	240	292	320	2239	105	1569	185	145	65	2550	500	750	371
NKV 32/13-2 T IE3	13	220	290	170	240	292	320	2321	105	1651	185	145	65	2550	500	750	375
NKV 32/13 T IE3	13	220	290	170	240	292	320	2321	105	1651	185	145	65	2550	500	750	375

NKV 45 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 32 bar (3200 kPa)

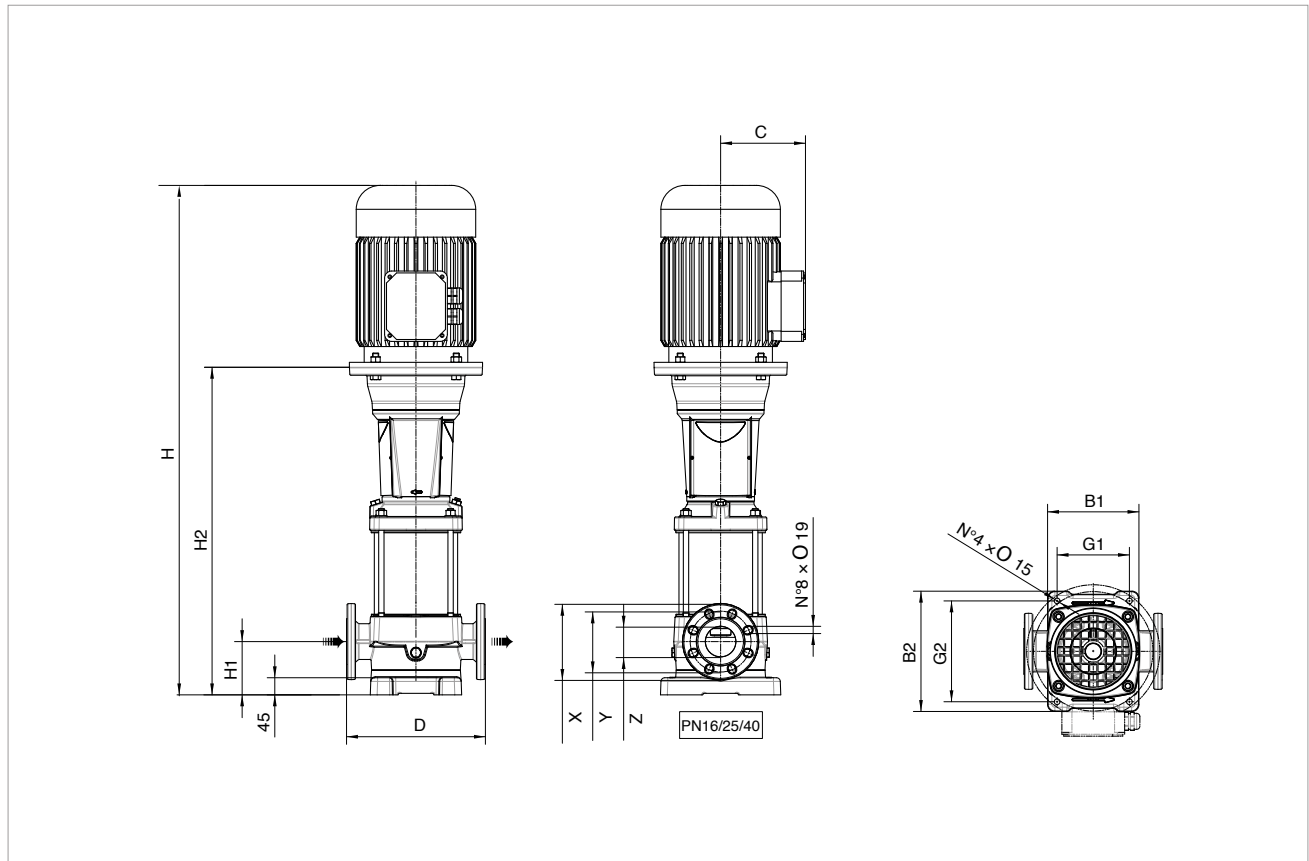


For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equivalent to 1000 kg/m³. Tolerance of curves to ISO 9906.

MODEL	VOLTAGE 50 Hz	P2 NOMINAL		In A	Ist A	Motor Frame	MEC Motor	1/min	η max Motor %	cos φ	RPM	
		kW	HP								max	min
NKV 45/2-2 T IE3	3 x 400 V Δ	5,50	7,50	10,2	119,8-131	B5	132S	2935	89,2	0,87	2980	2910
NKV 45/2 T IE3	3 x 400 V Δ	7,50	10,00	14,4	152-169	B5	132S	2930	90,1	0,84	2980	2900
NKV 45/3-2 T IE3	3 x 400 V Δ	11,00	15,00	19,7	156-171	B5	160M	2950	91,2	0,89	2980	2930
NKV 45/3 T IE3	3 x 400 V Δ	11,00	15,00	19,7	156-171	B5	160M	2950	91,2	0,89	2980	2930
NKV 45/4-2 T IE3	3 x 400 V Δ	15,00	20,00	26,7	185-106	B5	160M	2940	91,9	0,89	2980	2940
NKV 45/4 T IE3	3 x 400 V Δ	15,00	20,00	26,7	185-106	B5	160M	2940	91,9	0,89	2980	2940
NKV 45/5-2 T IE3	3 x 400 V Δ	18,50	25,00	33	220-129	B5	160L	2950	92,4	0,88	2990	2940
NKV 45/5 T IE3	3 x 400 V Δ	18,50	25,00	33	220-129	B5	160L	2950	92,4	0,88	2990	2940
NKV 45/6-2 T IE3	3 x 400 V Δ	22,00	30,00	38,1	156-171	B5	180M	2955	92,7	0,9	2990	2960
NKV 45/6 T IE3	3 x 400 V Δ	22,00	30,00	38,1	156-171	B5	180M	2955	92,7	0,9	2990	2960
NKV 45/7-2 T IE3	3 x 400 V Δ	30,00	40,00	52,1	185-106	B5	200L	2960	93,3	0,89	2990	2950
NKV 45/7 T IE3	3 x 400 V Δ	30,00	40,00	52,1	185-106	B5	200L	2960	93,3	0,89	2990	2950
NKV 45/8-2 T IE3	3 x 400 V Δ	30,00	40,00	52,1	185-106	B5	200L	2960	93,3	0,89	2990	2950
NKV 45/8 T IE3	3 x 400 V Δ	30,00	40,00	52,1	185-106	B5	200L	2960	93,3	0,89	2990	2950
NKV 45/9-2 T IE3	3 x 400 V Δ	37,00	50,00	62,6	220-129	B5	200L	2960	93,7	0,91	2990	2960
NKV 45/9 T IE3	3 x 400 V Δ	37,00	50,00	62,6	220-129	B5	200L	2960	93,7	0,91	2990	2960
NKV 45/10-2 T IE3	3 x 400 V Δ	37,00	50,00	62,6	220-129	B5	200L	2960	93,7	0,91	2990	2960
NKV 45/10 T IE3	3 x 400 V Δ	37,00	50,00	62,6	220-129	B5	200L	2960	93,7	0,91	2990	2960
NKV 45/11-2 T IE3	3 x 400 V Δ	45,00	60,00	78,4	220-129	B5	225M	2965	94	0,88	2990	2960
NKV 45/11 T IE3	3 x 400 V Δ	45,00	60,00	78,4	220-129	B5	225M	2965	94	0,88	2990	2960
NKV 45/12-2 T IE3	3 x 400 V Δ	45,00	60,00	78,4	220-129	B5	225M	2965	94	0,88	2990	2960
NKV 45/12 T IE3	3 x 400 V Δ	45,00	60,00	78,4	220-129	B5	225M	2965	94	0,88	2990	2960
NKV 45/13-2 T IE3	3 x 400 V Δ	45,00	60,00	78,4	220-129	B5	225M	2965	94	0,88	2990	2960

NKV 45 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 32 bar (3200 kPa)

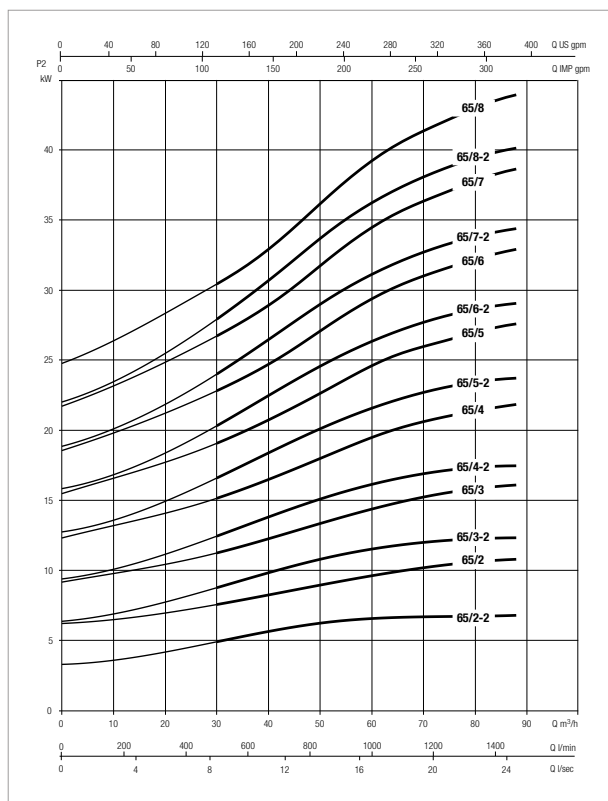
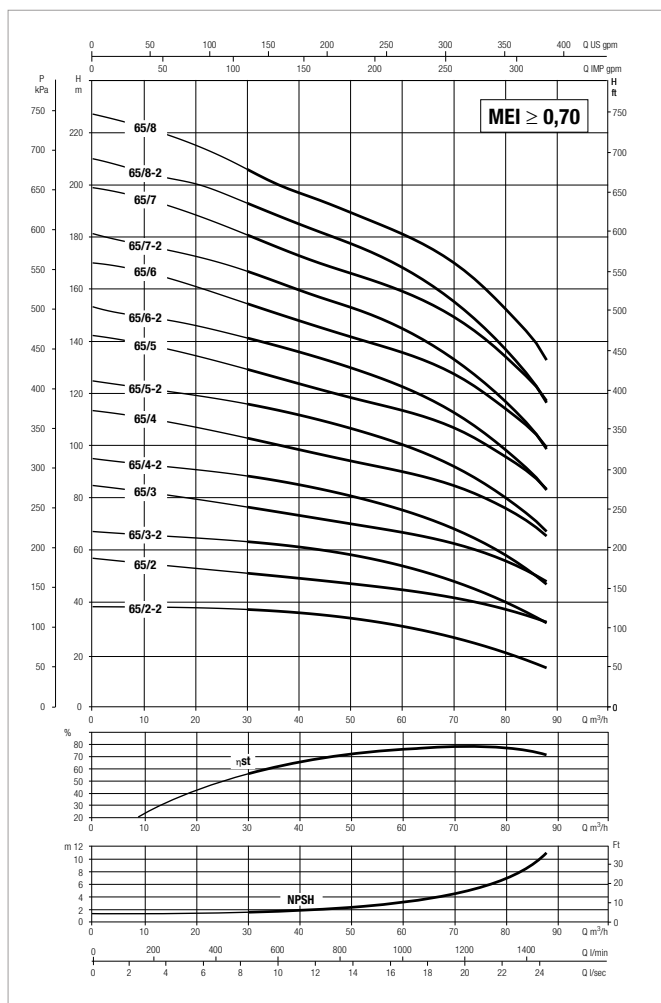


Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

MODEL	STAGE N°	B1	B2	G1	G2	C	D	H	H1	H2	DNA = DNM (DN 80)			PACKING DIMENSIONS			WEIGHT Kg
											X	Y	Z	L/A	L/B	H	
NKV 45/2-2 T IE3	2	240	316	190	265	161	365	1149	140	759	200	160	80	1820	500	630	146
NKV 45/2 T IE3	2	240	316	190	265	188	365	1196	140	759	200	160	80	1820	500	630	127
NKV 45/3-2 T IE3	3	240	316	190	265	242	365	1298	140	861	200	160	80	1820	500	630	205
NKV 45/3 T IE3	3	240	316	190	265	242	365	1298	140	861	200	160	80	1820	500	630	205
NKV 45/4-2 T IE3	4	240	316	190	265	242	365	1448	140	943	200	160	80	1820	500	630	216
NKV 45/4 T IE3	4	240	316	190	265	242	365	1448	140	943	200	160	80	1820	500	630	216
NKV 45/5-2 T IE3	5	240	316	190	265	242	365	1574	140	1025	200	160	80	1820	500	630	241
NKV 45/5 T IE3	5	240	316	190	265	242	365	1574	140	1025	200	160	80	1820	500	630	241
NKV 45/6-2 T IE3	6	240	316	190	265	260	365	1687	140	1107	200	160	80	1820	500	630	276
NKV 45/6 T IE3	6	240	316	190	265	260	365	1687	140	1107	200	160	80	1820	500	630	276
NKV 45/7-2 T IE3	7	240	316	190	265	292	365	1864	140	1194	200	160	80	2550	500	750	356
NKV 45/7 T IE3	7	240	316	190	265	292	365	1864	140	1194	200	160	80	2550	500	750	356
NKV 45/8-2 T IE3	8	240	316	190	265	292	365	1946	140	1276	200	160	80	2550	500	750	360
NKV 45/8 T IE3	8	240	316	190	265	292	365	1946	140	1276	200	160	80	2550	500	750	360
NKV 45/9-2 T IE3	9	240	316	190	265	292	365	2028	140	1358	200	160	80	2550	500	750	384
NKV 45/9 T IE3	9	240	316	190	265	292	365	2028	140	1358	200	160	80	2550	500	750	384
NKV 45/10-2 T IE3	10	240	316	190	265	292	365	2110	140	1440	200	160	80	2550	500	750	388
NKV 45/10 T IE3	10	240	316	190	265	292	365	2110	140	1440	200	160	80	2550	500	750	388
NKV 45/11-2 T IE3	11	240	316	190	265	315	365	2232	140	1522	200	160	80	2550	500	750	449
NKV 45/11 T IE3	11	240	316	190	265	315	365	2232	140	1522	200	160	80	2550	500	750	449
NKV 45/12-2 T IE3	12	240	316	190	265	315	365	2314	140	1604	200	160	80	2550	500	750	453
NKV 45/12 T IE3	12	240	316	190	265	315	365	2314	140	1604	200	160	80	2550	500	750	453
NKV 45/13-2 T IE3	13	240	316	190	265	315	365	2396	140	1686	200	160	80	2550	500	750	457

NKV 65 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)



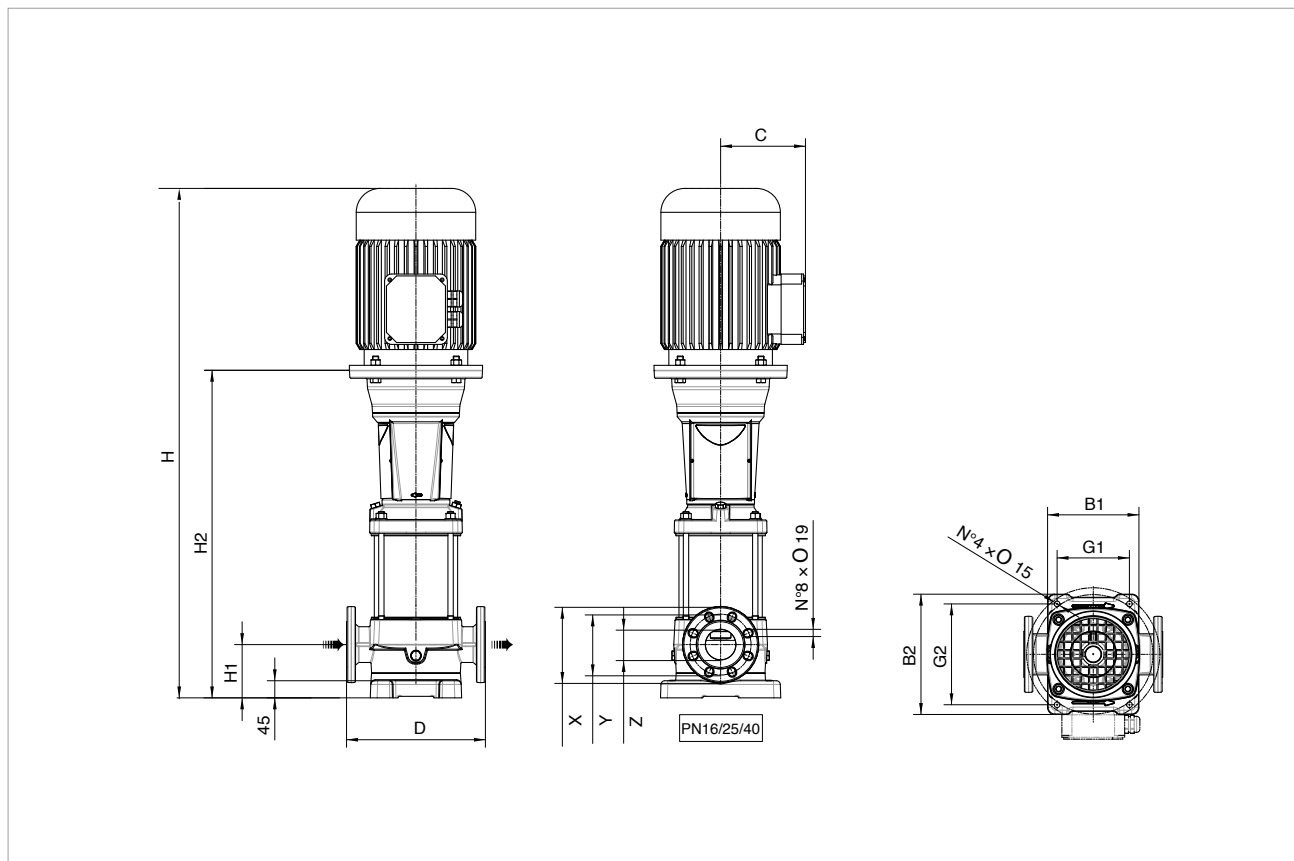
For MEI index refer to the hydraulic efficiency section.

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equivalent to 1000 kg/m³. Tolerance of curves to ISO 9906.

MODEL	VOLTAGE 50 Hz	P2 NOMINAL		In A	Ist A	Motor Frame	MEC Motor	1/min	η max Motor %	cos ϕ	RPM	
		kW	HP								max	min
NKV 65/2-2 T IE3	3 x 400 V Δ	7,50	10,00	14,4	152-169	B5	132S	2930	90,1	0,84	2980	2900
NKV 65/2 T IE3	3 x 400 V Δ	11,00	15,00	19,7	156-171	B5	160M	2950	91,2	0,89	2980	2930
NKV 65/3-2 T IE3	3 x 400 V Δ	15,00	20,00	26,7	185-106	B5	160M	2940	91,9	0,89	2980	2940
NKV 65/3 T IE3	3 x 400 V Δ	18,50	25,00	33	220-129	B5	160L	2950	92,4	0,88	2990	2940
NKV 65/4-2 T IE3	3 x 400 V Δ	18,50	25,00	33	220-129	B5	160L	2950	92,4	0,88	2990	2940
NKV 65/4 T IE3	3 x 400 V Δ	22,00	30,00	38,1	156-171	B5	180M	2955	92,7	0,9	2990	2960
NKV 65/5-2 T IE3	3 x 400 V Δ	30,00	40,00	52,1	185-106	B5	200L	2960	93,3	0,89	2990	2950
NKV 65/5 T IE3	3 x 400 V Δ	30,00	40,00	52,1	185-106	B5	200L	2960	93,3	0,89	2990	2950
NKV 65/6-2 T IE3	3 x 400 V Δ	30,00	40,00	52,1	185-106	B5	200L	2960	93,3	0,89	2990	2950
NKV 65/6 T IE3	3 x 400 V Δ	37,00	50,00	62,6	220-129	B5	200L	2960	93,7	0,91	2990	2960
NKV 65/7-2 T IE3	3 x 400 V Δ	37,00	50,00	62,6	220-129	B5	200L	2960	93,7	0,91	2990	2960
NKV 65/7 T IE3	3 x 400 V Δ	45,00	60,00	78,4	220-129	B5	225M	2965	94	0,88	2990	2960
NKV 65/8-2 T IE3	3 x 400 V Δ	45,00	60,00	78,4	220-129	B5	225M	2965	94	0,88	2990	2960
NKV 65/8 T IE3	3 x 400 V Δ	45,00	60,00	78,4	220-129	B5	225M	2965	94	0,88	2990	2960

NKV 65 - MULTISTAGE CENTRIFUGAL ELECTRICPUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

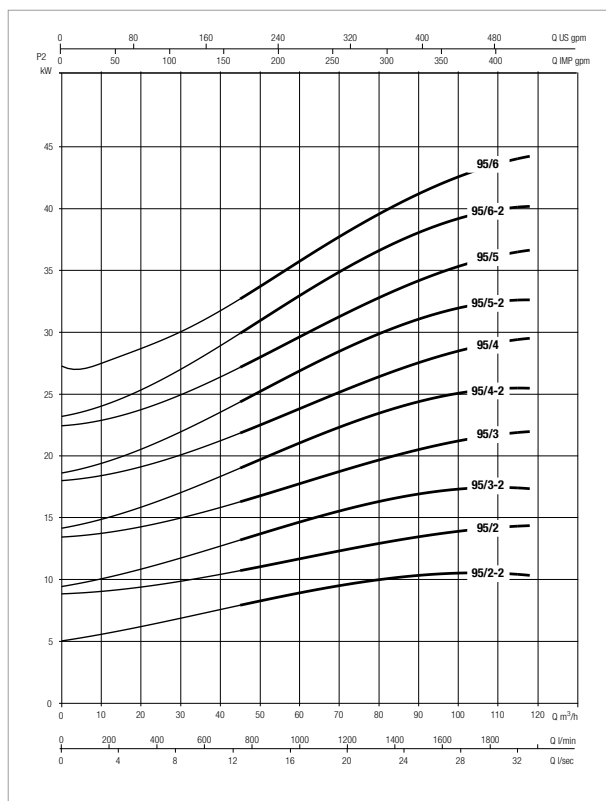
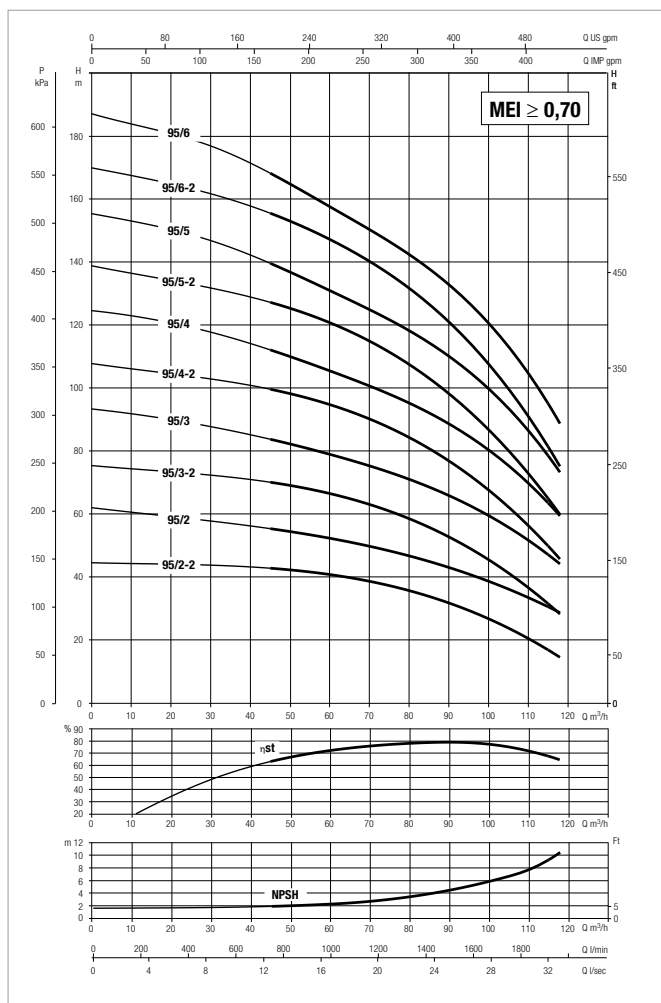


Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

MODEL	STAGE N°	B1	B2	G1	G2	C	D	H	H1	H2	DNA = DNM (DN 100)			PACKING DIMENSIONS			WEIGHT Kg
											X	Y	Z	L/A	L/B	H	
NKV 65/2-2 T IE3	2	240	316	190	265	161	365	1266,2	140	829,2	230	180	100	1820	500	630	84
NKV 65/2 T IE3	2	240	316	190	265	198	365	1354,2	140	849,2	230	180	100	1820	500	630	155
NKV 65/3-2 T IE3	3	240	316	190	265	198	365	1446,3	140	941,3	230	180	100	1820	500	630	171
NKV 65/3 T IE3	3	240	316	190	265	235	365	1490,3	140	941,3	230	180	100	1820	500	630	213
NKV 65/4-2 T IE3	4	240	316	190	265	235	365	1582,4	140	1033,4	230	180	100	1820	500	630	213
NKV 65/4 T IE3	4	240	316	190	265	238	365	1613,4	140	1033,4	230	180	100	1820	500	630	255
NKV 65/5-2 T IE3	5	240	316	190	265	300	365	1800,5	140	1130,5	230	180	100	2550	500	750	471
NKV 65/5 T IE3	5	240	316	190	265	300	365	1800,5	140	1130,5	230	180	100	2550	500	750	471
NKV 65/6-2 T IE3	6	240	316	190	265	300	365	1892,6	140	1222,6	230	180	100	2550	500	750	471
NKV 65/6 T IE3	6	240	316	190	265	300	365	1892,6	140	1222,6	230	180	100	2550	500	750	517
NKV 65/7-2 T IE3	7	240	316	190	265	300	365	1984,7	140	1314,7	230	180	100	2550	500	750	517
NKV 65/7 T IE3	7	240	316	190	265	335	365	2024,7	140	1314,7	230	180	100	2550	500	750	653
NKV 65/8-2 T IE3	8	240	316	190	265	335	365	2116,8	140	1406,8	230	180	100	2550	500	750	653
NKV 65/8 T IE3	8	240	316	190	265	335	365	2116,8	140	1406,8	230	180	100	2550	500	750	653

NKV 95 - MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)

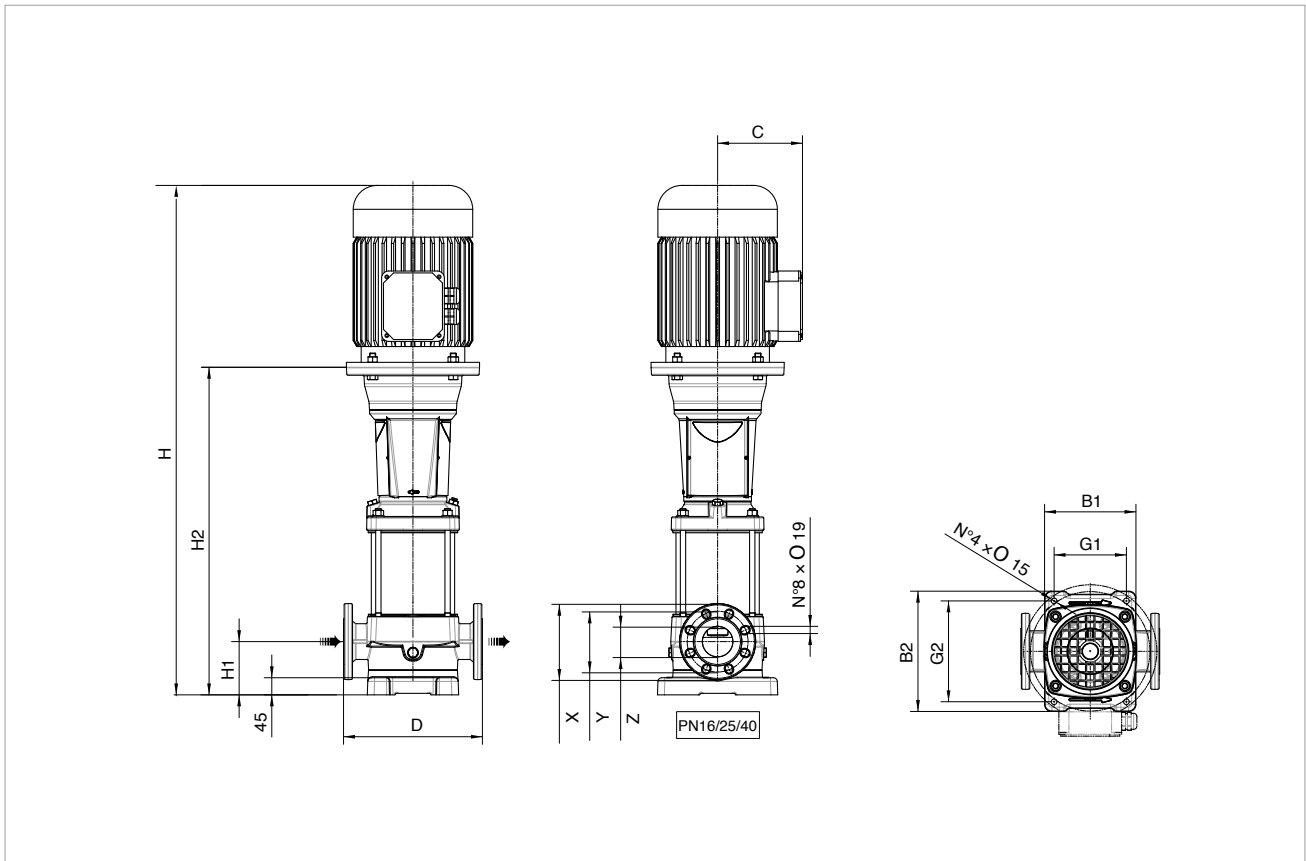


For MEI index refer to the hydraulic efficiency section.
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equivalent to 1000 kg/m³. Tolerance of curves to ISO 9906.

MODEL	VOLTAGE 50 Hz	P2 NOMINAL		In A	Ist A	Motor Frame	MEC Motor	1/min	η max Motor %	cos φ	RPM	
		kW	HP								max	min
NKV 95/2-2 T IE3	3 x 400 V Δ	11,00	15,00	19,7	156-171	B5	160M	2950	91,2	0,89	2980	2930
NKV 95/2 T IE3	3 x 400 V Δ	15,00	20,00	26,7	185-106	B5	160M	2940	91,9	0,89	2980	2940
NKV 95/3-2 T IE3	3 x 400 V Δ	18,50	25,00	33	220-129	B5	160L	2950	92,4	0,88	2990	2940
NKV 95/3 T IE3	3 x 400 V Δ	22,00	30,00	38,1	156-171	B5	180M	2955	92,7	0,9	2990	2960
NKV 95/4-2 T IE3	3 x 400 V Δ	30,00	40,00	52,1	185-106	B5	200L	2960	93,3	0,89	2990	2950
NKV 95/4 T IE3	3 x 400 V Δ	30,00	40,00	52,1	185-106	B5	200L	2960	93,3	0,89	2990	2950
NKV 95/5-2 T IE3	3 x 400 V Δ	37,00	50,00	62,6	220-129	B5	200L	2960	93,7	0,91	2990	2960
NKV 95/5 T IE3	3 x 400 V Δ	37,00	50,00	62,6	220-129	B5	200L	2960	93,7	0,91	2990	2960
NKV 95/6-2 T IE3	3 x 400 V Δ	45,00	60,00	78,4	220-129	B5	225M	2965	94	0,88	2990	2960
NKV 95/6 T IE3	3 x 400 V Δ	45,00	60,00	78,4	220-129	B5	225M	2965	94	0,88	2990	2960

NKV 95 - MULTISTAGE CENTRIFUGAL ELECTRICPUMPS WITH VERTICAL AXIS

Liquid temperature range: from - 30°C to +120°C - Maximum working pressure: 25 bar (2500 kPa)



Version F: The pump is supplied without counter flanges (optional accessories, including joints and bolts).

MODEL	STAGE N°	B1	B2	G1	G2	C	D	H	H1	H2	DNA = DNM (DN 100)			PACKING DIMENSIONS			WEIGHT Kg
											X	Y	Z	L/A	L/B	H	
NKV 95/2-2 T IE3	2	260	341	199	280	198	380	1354,2	140	849,2	230	180	100	1820	500	630	186
NKV 95/2 T IE3	2	260	341	199	280	198	380	1354,2	140	849,2	230	180	100	1820	500	630	196
NKV 95/3-2 T IE3	3	260	341	199	280	235	380	1490,3	140	941,3	230	180	100	1820	500	630	217
NKV 95/3 T IE3	3	260	341	199	280	238	380	1521,3	140	941,3	230	180	100	1820	500	630	238
NKV 95/4-2 T IE3	4	260	341	199	280	300	380	1708,4	140	1038,4	230	180	100	1820	500	630	343
NKV 95/4 T IE3	4	260	341	199	280	300	380	1708,4	140	1038,4	230	180	100	1820	500	630	343
NKV 95/5-2 T IE3	5	260	341	199	280	300	380	1800,5	140	1130,5	230	180	100	2550	500	750	379
NKV 95/5 T IE3	5	260	341	199	280	300	380	1800,5	140	1130,5	230	180	100	2550	500	750	379
NKV 95/6-2 T IE3	6	260	341	199	280	335	380	1932,6	140	1222,6	230	180	100	2550	500	750	455
NKV 95/6 T IE3	6	260	341	199	280	335	380	1932,6	140	1222,6	230	180	100	2550	500	750	455

HYDRAULIC EFFICIENCY

EU 547/2012 REGULATION - MEI

GENERAL INFORMATION

The MEI index (Minimum Efficiency Index) was issued with the objective of defining a performance threshold value applicable to all the water pumps found on the market. The MEI index takes into account the size of the pump, its specific speed, and its speed of rotation.

The regulation applies to centrifugal pumps used for pumping clean waters included in the following categories:

- Axial suction pumps with support (ESOB - End Suction Own Bearings)
- Horizontal monobloc axial suction pumps (ESCC - End Suction Close Coupled)
- In-line monobloc axial suction pumps (ESCCI End Suction Close Coupled Inline)
- Multistage vertical pumps (MS-V - Vertical multistage)
- Multistage submerged pumps (MSS - Submersible multistage)

MEI is a dimensionless indicator for hydraulic performance, and a measure of the quality of the sizing of the pump in relation to the performance.

The higher the MEI value, the better is the sizing of the pump in relation to the performance, and the lower is the annual energy consumption due to the use of the pump. In theory, the upper limit of the MEI values is open, and only depends on physical and technological limitations.

The minimum efficiency index (MEI) is based on the maximum diameter of the impeller. Multistage vertical water pumps must be tested in the 3-stage version.

The value of reference for the more efficient water pumps is $MEI \geq 0,70$.

The efficiency of a pump with turned impeller is generally lower to that of a pump with full impeller diameter. The turning of the impeller adapts the pump to a fixed point of operation, resulting in lower energy consumption.

The operation of this water pump with variable operating points can be more efficient and economical if controlled, for example, by means of a variable speed motor adapting the operation of the pump to the system.

The information on the efficiency of reference can be found at the address: www.dabpumps.com. In alternative contact your local sales representatives.

The $MEI=0,7$ and $MEI=0,4$ efficiency charts for the different types of pumps can be found at the website: www.europump.org/efficiencycharts

PUMP MODEL	IMPELLER	MEI
K 20/41	-	not applicable
K 30/70	-	
K 36/100	Full	$\geq 0,70$
K 30/100	Turned	$\geq 0,70$
K 12/200	Full	$\geq 0,70$
K 55/200 T	Full	$\geq 0,70$
K 36/200 T	Turned	
K 40/200 T	Turned	
K 14/400	Full	$\geq 0,40$
K 28/500	Full	$\geq 0,70$
K 11/500 T	Turned	
K 18/500 T	Turned	
K 50/400 T	Full	$\geq 0,50$
K 40/400 T	Turned	
K 50/800 T	Full	$\geq 0,60$
K 30/800 T	Turned	
K 40/800 T	Turned	
K 35/1200 T	Full	$\geq 0,60$
K 20/1200 T	Turned	
K 25/1200 T	Turned	

PUMP MODEL	IMPELLER	MEI
KC/KCV 300	Full	$\geq 0,40$
KC/KCV 250	Full	
KC/KCV 200	Turned	
KC/KCV 150	Turned	

PUMP MODEL	IMPELLER	MEI
KI 30/90 M - T	Full	$\geq 0,40$
KI 30/120 M - T	Full	
KI 40/120 M - T	-	not applicable

HYDRAULIC EFFICIENCY

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PUMP MODEL	IMPELLER	MEI
NKM-G 32-125.1/140 T 0,25	Full	≥ 0,40
NKP-G 32-125.1/140 T 2,2	Full	≥ 0,40
NKP-G 32-125.1/102 T 0,75	Turned	
NKP-G 32-125.1/115 T 1,1	Turned	
NKP-G 32-125.1/125 T 1,5	Turned	
NKM-G 32-160.1/169 T 0,37	Full	≥ 0,40
NKP-G 32-160.1/177	Full	≥ 0,40
NKP-G 32-160.1/155 T 2,2	Turned	
NKP-G 32-160.1/166 T 3	Turned	
NKM-G 32-200.1/200 T 0,55	Full	≥ 0,40
NKP-G 32-200.1/205 T 5,5	Full	≥ 0,40
NKP-G 32-200.1/188 T 4	Turned	
NKM-G 32-125/142 T 0,37	Full	≥ 0,40
NKP-G 32-125/142 T 3	Full	≥ 0,40
NKP-G 32-125/110 T 1,1	Turned	
NKP-G 32-125/120 T 1,5	Turned	
NKP-G 32-125/130 T 2,2	Turned	
NKM-G 32-160/169 T 0,55	Full	≥ 0,40
NKP-G 32-160/177 T 5,5	Full	≥ 0,40
NKP-G 32-160/151 T 3	Turned	
NKP-G 32-160/163 T 4	Turned	
NKM-G 32-200/219 T 1,1	Full	≥ 0,60
NKM-G 32-200/200 T 0,75	Turned	
NKP-G 32-200/210 T 7,5	Full	≥ 0,50
NKP-G 32-200/190 T 5,5	Turned	
NKM-G 40-125/142 T 0,55	Full	≥ 0,40
NKM-G 40-125/115 T 0,25	Turned	
NKM-G 40-125/130 T 0,37	Turned	
NKP-G 40-125/139 1 A T 4	Full	≥ 0,40
NKP-G 40-125/107 7 A T 1,5	Turned	
NKP-G 40-125/120 5 A T 2,2	Turned	
NKP-G 40-125/130 3 A T 3	Turned	
NKM-G 40-160/166 T 0,75	Full	≥ 0,40
NKM-G 40-160/153 T 0,55	Turned	
NKP-G 40-160/172 T 7,5	Full	≥ 0,50
NKP-G 40-160/158 T 5,5	Turned	
NKM-G 40-200/219 T 1,5	Full	≥ 0,60
NKM-G 40-200/200 T 1,1	Turned	
NKP-G 40-200/210 T 11	Full	≥ 0,40

PUMP MODEL	IMPELLER	MEI
NKM-G 40-250/260 T 3	Full	≥ 0,60
NKM-G 40-250/245 T 2,2	Turned	
NKP-G 40-250/260 T 22	Full	≥ 0,50
NKP-G 40-250/230 T 15	Turned	
NKP-G 40-250/245 T 18,5	Turned	
NKM-G 50-125/141 T 0,75	Full	≥ 0,40
NKM-G 50-125/130 T 0,55	Turned	
NKP-G 50-125/144 T 6,9	Full	≥ 0,40
NKP-G 50-125/115 T 3	Turned	
NKP-G 50-125/125 T 4	Turned	
NKP-G 50-125/135 T 5,5	Turned	
NKM-G 50-160/177 T 1,5	Full	≥ 0,60
NKM-G 50-160/161 T 1,1	Turned	
NKP-G 50-160/169 T 11	Full	≥ 0,40
NKP-G 50-160/153 T 7,5	Turned	
NKM-G 50-200/219 T 3	Full	≥ 0,60
NKM-G 50-200/210 T 2,2	Turned	
NKP-G 50-200/219 T 22	Full	≥ 0,50
NKP-G 50-200/200 T 15	Turned	
NKP-G 50-200/210 T 18,5	Turned	
NKM-G 50-250/263 T 4	Full	≥ 0,60
NKP-G 50-250/257 T 30	Full	≥ 0,40
NKP-G 50-250/230 T 22	Turned	
NKM-G 65-125/144 T 1,1	Full	≥ 0,40
NKM-G 65-125/130 T 0,75	Turned	
NKP-G 65-125/137 T 7,5	Full	≥ 0,40
NKP-G 65-125/120 T 4	Turned	
NKP-G 65-125/127 T 5,5	Turned	
NKM-G 65-160/177 T 2,2	Full	≥ 0,60
NKM-G 65-160/153 T 1,1	Turned	
NKM-G 65-160/165 T 1,5	Turned	
NKP-G 65-160/173 T 15	Full	≥ 0,50
NKP-G 65-160/157 T 11	Turned	
NKM-G 65-200/219 T 4	Full	≥ 0,60
NKM-G 65-200/210 T 3	Turned	
NKP-G 65-200/219 T 30	Full	≥ 0,70
NKP-G 65-200/190 T 18,5	Turned	
NKP-G 65-200/200 T 22	Turned	
NKM-G 65-250/263 T 5,5	Full	≥ 0,50
NKM-G 65-315/309 T 11	Full	≥ 0,40
NKM-G 65-315/279 T 7,5	Turned	

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PUMP MODEL	IMPELLER	MEI
NKM-G 80-160/177 T 3	Full	≥ 0,40
NKM-G 80-160/153-136 T 1,5	Turned	
NKM-G 80-160/163 T 2,2	Turned	
NKP-G 80-160/169 T 22	Full	≥ 0,40
NKP-G 80-160/147-127 T 11	Turned	
NKP-G 80-160/153 T 15	Turned	
NKP-G 80-160/163 T 18,5	Turned	≥ 0,40
NKM-G 80-200/222 T 5,5	Full	
NKM-G 80-200/200 T 4	Turned	≥ 0,40
NKP-G 80-200/190 T 30	Full	≥ 0,40
NKM-G 80-250/270 T 11	Full	≥ 0,40
NKM-G 80-250/240 T 7,5	Turned	
NKM-G 80-315/334 T 22	Full	≥ 0,50
NKM-G 80-315/305 T 15	Turned	
NKM-G 80-315/320 T 18,5	Turned	
NKM-G 100-200/214 T 7,5	Full	≥ 0,40
NKM-G 100-200/200 T 5,5	Turned	
NKM-G 100-250/270 T 15	Full	≥ 0,40
NKM-G 100-250/250 T 11	Turned	
NKM-G 100-315/316 T 22	Full	≥ 0,40
NKM-G 100-315/300 T 18,5	Turned	
NKM-G 125-250/266 T 22	Full	≥ 0,40
NKM-G 125-250/243 T 15	Turned	
NKM-G 125-250/256 T 18,5	Turned	
NKM-G 150-200/218 T 11	-	not applicable

PUMP MODEL	IMPELLER	MEI
KDN 32-125.1/140 4P	Full	≥ 0,40
KDN 32-125.1/105 4P	Turned	
KDN 32-125.1/110 4P	Turned	
KDN 32-125.1/115 4P	Turned	
KDN 32-125.1/120 4P	Turned	
KDN 32-125.1/125 4P	Turned	
KDN 32-125.1/130 4P	Turned	≥ 0,40
KDN 32-125.1/135 4P	Turned	
KDN 32-125.1/140 2P	Full	
KDN 32-125.1/105 2P	Turned	
KDN 32-125.1/110 2P	Turned	
KDN 32-125.1/115 2P	Turned	
KDN 32-125.1/120 2P	Turned	≥ 0,40
KDN 32-125.1/125 2P	Turned	
KDN 32-125.1/130 2P	Turned	
KDN 32-125.1/135 2P	Turned	
KDN 32-160.1/177 4P	Full	
KDN 32-160.1/137 4P	Turned	
KDN 32-160.1/145 4P	Turned	≥ 0,40
KDN 32-160.1/153 4P	Turned	
KDN 32-160.1/161 4P	Turned	
KDN 32-160.1/169 4P	Turned	
KDN 32-160.1/177 2P	Full	
KDN 32-160.1/137 2P	Turned	
KDN 32-160.1/145 2P	Turned	≥ 0,40
KDN 32-160.1/153 2P	Turned	
KDN 32-160.1/161 2P	Turned	
KDN 32-160.1/169 2P	Turned	
KDN 32-200.1/207 4P	Full	
KDN 32-200.1/170 4P	Turned	
KDN 32-200.1/180 4P	Turned	≥ 0,50
KDN 32-200.1/190 4P	Turned	
KDN 32-200.1/200 4P	Turned	
KDN 32-200.1/207 2P	Full	≥ 0,40
KDN 32-200.1/170 2P	Turned	
KDN 32-200.1/180 2P	Turned	
KDN 32-200.1/190 2P	Turned	
KDN 32-200.1/200 2P	Turned	

HYDRAULIC EFFICIENCY

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PUMP MODEL	IMPELLER	MEI
KDN 32-125/142 4P	Full	≥ 0,50
KDN 32-125/115 4P	Turned	
KDN 32-125/120 4P	Turned	
KDN 32-125/125 4P	Turned	
KDN 32-125/130 4P	Turned	
KDN 32-125/135 4P	Turned	
KDN 32-125/142 2P	Full	≥ 0,40
KDN 32-125/115 2P	Turned	
KDN 32-125/120 2P	Turned	
KDN 32-125/125 2P	Turned	
KDN 32-125/130 2P	Turned	
KDN 32-125/135 2P	Turned	
KDN 32-160/177 4P	Full	≥ 0,40
KDN 32-160/137 4P	Turned	
KDN 32-160/145 4P	Turned	
KDN 32-160/153 4P	Turned	
KDN 32-160/161 4P	Turned	
KDN 32-160/169 4P	Turned	
KDN 32-160/177 2P	Full	≥ 0,40
KDN 32-160/137 2P	Turned	
KDN 32-160/145 2P	Turned	
KDN 32-160/153 2P	Turned	
KDN 32-160/161 2P	Turned	
KDN 32-160/169 2P	Turned	
KDN 32-200/219 4P	Full	≥ 0,60
KDN 32-200/170 4P	Turned	
KDN 32-200/180 4P	Turned	
KDN 32-200/190 4P	Turned	
KDN 32-200/200 4P	Turned	
KDN 32-200/210 4P	Turned	
KDN 32-200/219 2P	Full	≥ 0,60
KDN 32-200/170 2P	Turned	
KDN 32-200/180 2P	Turned	
KDN 32-200/190 2P	Turned	
KDN 32-200/200 2P	Turned	
KDN 32-200/210 2P	Turned	

PUMP MODEL	IMPELLER	MEI
KDN 40-125/142 4P	Full	≥ 0,40
KDN 40-125/115 4P	Turned	
KDN 40-125/120 4P	Turned	
KDN 40-125/125 4P	Turned	
KDN 40-125/130 4P	Turned	
KDN 40-125/135 4P	Turned	
KDN 40-125/142 2P	Full	≥ 0,40
KDN 40-125/115 2P	Turned	
KDN 40-125/120 2P	Turned	
KDN 40-125/125 2P	Turned	
KDN 40-125/130 2P	Turned	
KDN 40-125/135 2P	Turned	
KDN 40-160/177 4P	Full	≥ 0,40
KDN 40-160/137 4P	Turned	
KDN 40-160/145 4P	Turned	
KDN 40-160/153 4P	Turned	
KDN 40-160/161 4P	Turned	
KDN 40-160/169 4P	Turned	
KDN 40-160/177 2P	Full	≥ 0,50
KDN 40-160/137 2P	Turned	
KDN 40-160/145 2P	Turned	
KDN 40-160/153 2P	Turned	
KDN 40-160/161 2P	Turned	
KDN 40-160/169 2P	Turned	
KDN 40-200/219 4P	Full	≥ 0,60
KDN 40-200/170 4P	Turned	
KDN 40-200/180 4P	Turned	
KDN 40-200/190 4P	Turned	
KDN 40-200/200 4P	Turned	
KDN 40-200/210 4P	Turned	
KDN 40-200/219 2P	Full	≥ 0,50
KDN 40-200/170 2P	Turned	
KDN 40-200/180 2P	Turned	
KDN 40-200/190 2P	Turned	
KDN 40-200/200 2P	Turned	
KDN 40-200/210 2P	Turned	

HYDRAULIC EFFICIENCY

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PUMP MODEL	IMPELLER	MEI
KDN 40-250/260 4P	Full	≥ 0,40
KDN 40-250/220 4P	Turned	
KDN 40-250/230 4P	Turned	
KDN 40-250/240 4P	Turned	
KDN 40-250/250 4P	Turned	
KDN 40-250/260 2P	Full	≥ 0,40
KDN 40-250/220 2P	Turned	
KDN 40-250/230 2P	Turned	
KDN 40-250/240 2P	Turned	
KDN 40-250/250 2P	Turned	
KDN 50-125/144 4P	Full	≥ 0,40
KDN 50-125/115 4P	Turned	
KDN 50-125/120 4P	Turned	
KDN 50-125/125 4P	Turned	
KDN 50-125/130 4P	Turned	
KDN 50-125/135 4P	Turned	≥ 0,40
KDN 50-125/139 4P	Turned	
KDN 50-125/144 2P	Full	
KDN 50-125/115 2P	Turned	
KDN 50-125/120 2P	Turned	
KDN 50-125/125 2P	Turned	≥ 0,40
KDN 50-125/130 2P	Turned	
KDN 50-125/135 2P	Turned	
KDN 50-125/139 2P	Turned	
KDN 50-160/177 4P	Full	
KDN 50-160/137 4P	Turned	
KDN 50-160/145 4P	Turned	
KDN 50-160/153 4P	Turned	
KDN 50-160/161 4P	Turned	
KDN 50-160/169 4P	Turned	≥ 0,50
KDN 50-160/177 2P	Full	
KDN 50-160/137 2P	Turned	
KDN 50-160/145 2P	Turned	
KDN 50-160/153 2P	Turned	
KDN 50-160/161 2P	Turned	
KDN 50-160/169 2P	Turned	

PUMP MODEL	IMPELLER	MEI
KDN 50-200/219 4P	Full	≥ 0,60
KDN 50-200/170 4P	Turned	
KDN 50-200/180 4P	Turned	
KDN 50-200/190 4P	Turned	
KDN 50-200/200 4P	Turned	
KDN 50-200/210 4P	Turned	≥ 0,40
KDN 50-200/219 2P	Full	
KDN 50-200/170 2P	Turned	
KDN 50-200/180 2P	Turned	
KDN 50-200/190 2P	Turned	
KDN 50-200/200 2P	Turned	≥ 0,60
KDN 50-200/210 2P	Turned	
KDN 50-250/263 4P	Full	
KDN 50-250/220 4P	Turned	
KDN 50-250/230 4P	Turned	
KDN 50-250/240 4P	Turned	≥ 0,50
KDN 50-250/250 4P	Turned	
KDN 50-250/263 2P	Full	
KDN 50-250/220 2P	Turned	
KDN 50-250/230 2P	Turned	
KDN 50-250/240 2P	Turned	≥ 0,40
KDN 50-250/250 2P	Turned	
KDN 65-125/144 4P	Full	
KDN 65-125/120-110 4P	Turned	
KDN 65-125/120 4P	Turned	
KDN 65-125/125 4P	Turned	≥ 0,40
KDN 65-125/130 4P	Turned	
KDN 65-125/135 4P	Turned	
KDN 65-125/140 4P	Turned	
KDN 65-125/144 2P	Full	
KDN 65-125/120-110 2P	Turned	
KDN 65-125/120 2P	Turned	
KDN 65-125/125 2P	Turned	
KDN 65-125/130 2P	Turned	
KDN 65-125/135 2P	Turned	
KDN 65-125/140 2P	Turned	

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PUMP MODEL	IMPELLER	MEI
KDN 65-160/177 4P	Full	≥ 0,60
KDN 65-160/137 4P	Turned	
KDN 65-160/145 4P	Turned	
KDN 65-160/153 4P	Turned	
KDN 65-160/161 4P	Turned	
KDN 65-160/169 4P	Turned	
KDN 65-160/177 2P	Full	≥ 0,50
KDN 65-160/137 2P	Turned	
KDN 65-160/145 2P	Turned	
KDN 65-160/153 2P	Turned	
KDN 65-160/161 2P	Turned	
KDN 65-160/169 2P	Turned	
KDN 65-200/219 4P	Full	≥ 0,60
KDN 65-200/170 4P	Turned	
KDN 65-200/180 4P	Turned	
KDN 65-200/190 4P	Turned	
KDN 65-200/200 4P	Turned	
KDN 65-200/210 4P	Turned	
KDN 65-200/219 2P	Full	≥ 0,60
KDN 65-200/170 2P	Turned	
KDN 65-200/180 2P	Turned	
KDN 65-200/190 2P	Turned	
KDN 65-200/200 2P	Turned	
KDN 65-200/210 2P	Turned	
KDN 65-250/263 4P	Full	≥ 0,50
KDN 65-250/220 4P	Turned	
KDN 65-250/230 4P	Turned	
KDN 65-250/240 4P	Turned	
KDN 65-250/250 4P	Turned	
KDN 65-250/263 2P	Full	
KDN 65-250/220 2P	Turned	
KDN 65-250/230 2P	Turned	
KDN 65-250/240 2P	Turned	
KDN 65-250/250 2P	Turned	

PUMP MODEL	IMPELLER	MEI
KDN 65-315/320 4P	Full	≥ 0,50
KDN 65-315/260 4P	Turned	
KDN 65-315/275 4P	Turned	
KDN 65-315/290 4P	Turned	
KDN 65-315/305 4P	Turned	
KDN 65-315/320 2P	Full	
KDN 65-315/260 2P	Turned	
KDN 65-315/275 2P	Turned	
KDN 65-315/290 2P	Turned	
KDN 65-315/305 2P	Turned	
KDN 80-160/177 4P	Full	≥ 0,50
KDN 80-160/147-127 4P	Turned	
KDN 80-160/153-136 4P	Turned	
KDN 80-160/153 4P	Turned	
KDN 80-160/161 4P	Turned	
KDN 80-160/169 4P	Turned	
KDN 80-160/177 2P	Full	≥ 0,40
KDN 80-160/147-127 2P	Turned	
KDN 80-160/153-136 2P	Turned	
KDN 80-160/153 2P	Turned	
KDN 80-160/161 2P	Turned	
KDN 80-160/169 2P	Turned	
KDN 80-200/222 4P	Full	≥ 0,50
KDN 80-200/170 4P	Turned	
KDN 80-200/180 4P	Turned	
KDN 80-200/190 4P	Turned	
KDN 80-200/200 4P	Turned	
KDN 80-200/210 4P	Turned	
KDN 80-200/222 2P	Full	≥ 0,40
KDN 80-200/170 2P	Turned	
KDN 80-200/180 2P	Turned	
KDN 80-200/190 2P	Turned	
KDN 80-200/200 2P	Turned	
KDN 80-200/210 2P	Turned	

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PUMP MODEL	IMPELLER	MEI
KDN 80-250/270 4P	Full	≥ 0,40
KDN 80-250/220 4P	Turned	
KDN 80-250/230 4P	Turned	
KDN 80-250/240 4P	Turned	
KDN 80-250/250 4P	Turned	
KDN 80-250/260 4P	Turned	
KDN 80-250/270 2P	Full	≥ 0,40
KDN 80-250/220 2P	Turned	
KDN 80-250/230 2P	Turned	
KDN 80-250/240 2P	Turned	
KDN 80-250/250 2P	Turned	
KDN 80-250/260 2P	Turned	
KDN 80-315/334 4P	Full	≥ 0,40
KDN 80-315/275 4P	Turned	
KDN 80-315/290 4P	Turned	
KDN 80-315/305 4P	Turned	
KDN 80-315/320 4P	Turned	
KDN 80-315/290 2P	Full	≥ 0,40
KDN 80-315/275 2P	Turned	
KDN 100-200/219 4P	Full	≥ 0,40
KDN 100-200/180 4P	Turned	
KDN 100-200/190 4P	Turned	
KDN 100-200/200 4P	Turned	
KDN 100-200/210 4P	Turned	
KDN 100-200/219 2P	Full	≥ 0,40
KDN 100-200/180 2P	Turned	
KDN 100-200/190 2P	Turned	
KDN 100-200/200 2P	Turned	
KDN 100-200/210 2P	Turned	

PUMP MODEL	IMPELLER	MEI
KDN 100-250/270 4P	Full	≥ 0,40
KDN 100-250/220 4P	Turned	
KDN 100-250/230 4P	Turned	
KDN 100-250/240 4P	Turned	
KDN 100-250/250 4P	Turned	
KDN 100-250/260 4P	Turned	
KDN 100-250/260 2P	Full	≥ 0,40
KDN 100-250/220 2P	Turned	
KDN 100-250/230 2P	Turned	
KDN 100-250/240 2P	Turned	
KDN 100-250/250 2P	Turned	
KDN 100-315/334 4P	Full	≥ 0,40
KDN 100-315/275 4P	Turned	
KDN 100-315/290 4P	Turned	
KDN 100-315/305 4P	Turned	
KDN 100-315/320 4P	Turned	
KDN 125-250/269 4P	Full	≥ 0,40
KDN 125-250/220 4P	Turned	
KDN 125-250/230 4P	Turned	
KDN 125-250/240 4P	Turned	
KDN 125-250/250 4P	Turned	
KDN 125-250/260 4P	Turned	
KDN 150-200/218 4P	Full	not applicable
KDN 150-200/210-170 4P	Turned	
KDN 150-200/218-182 4P	Turned	
KDN 150-200/218-200 4P	Turned	

HYDRAULIC EFFICIENCY

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PUMP MODEL	NUMBER OF STAGES	MEI	η_{PL}	η_{BEP}	η_{OL}	
KVC 25/30 M	3	$\geq 0,40$	31.30	34.00	33.56	
KVC 25/30 T			32.38	34.30	33.85	
KVC 15/30 M	2		35.93	38.72	38.51	
KVC 15/30 T			29.86	31.50	31.20	
KVC 35/30 M	4		35.95	38.50	37.99	
KVC 35/30 T			34.43	37.02	36.55	
KVC 45/30 M	5		34.29	36.35	36.08	
KVC 45/30 T			35.00	37.44	37.00	
KVC 50/30 M	6		29.03	30.86	30.56	
KVC 50/30 T			30.67	32.77	32.21	
KVC 60/30 M	7		28.82	30.95	30.56	
KVC 60/30 T			30.25	32.28	31.96	
KVC 70/30 M	8		35.16	37.89	37.32	
KVC 70/30 T			30.29	32.40	31.98	
KVC 30/50 M	3		$\geq 0,60$	40.75	43.10	42.76
KVC 30/50 T				40.19	43.10	42.60
KVC 20/50 M	2	41.40		42.95	42.35	
KVC 20/50 T		38.53		41.47	41.04	
KVC 40/50 M	4	40.73		43.34	42.91	
KVC 40/50 T		38.85		41.40	40.92	
KVC 55/50 M	5	38.90		41.70	41.20	
KVC 55/50 T		38.97		41.61	41.15	
KVC 65/50 M	6	37.53		39.21	38.75	
KVC 65/50 T		36.52		40.13	39.42	
KVC 75/50 M	7	36.39		38.91	38.35	
KVC 75/50 T		36.51		39.61	39.05	
KVC 20/80 M	3	$\geq 0,40$		45.00	47.70	47.37
KVC 20/80 T				45.45	47.80	47.29
KVC 15/80 M	2			43.13	46.70	45.99
KVC 15/80 T				41.78	44.09	43.43
KVC 30/80 M	4		44.06	46.30	45.84	
KVC 30/80 T			42.16	45.10	44.44	
KVC 40/80 M	5		43.43	46.97	46.80	
KVC 40/80 T			41.94	44.40	43.89	
KVC 45/80 M	6		41.91	43.96	43.57	
KVC 45/80 T			41.06	43.74	43.31	
KVC 55/80 M	7		41.05	43.00	42.63	
KVC 55/80 T			40.75	43.51	43.05	
KVC 65/80 T	8		41.08	44.02	43.48	

HYDRAULIC EFFICIENCY

EU 547/2012 REGULATION - MEI

PUMP MODEL	NUMBER OF STAGES	MEI	η_{PL}	η_{BEP}	η_{OL}
KVC 35/120 M	3	$\geq 0,50$	49.31	51.00	50.76
KVC 35/120 T			49.83	51.80	51.38
KVC 25/120 M	2		45.13	46.90	46.75
KVC 25/120 T			42.16	44.54	44.20
KVC 45/120 M	4		47.59	49.50	48.96
KVC 45/120 T			47.47	49.30	49.00
KVC 60/120 T	5		47.81	49.44	48.97
KVC 70/120 T	6		47.58	49.00	48.61
KVC 85/120 T	7		49.23	50.84	50.20

PUMP MODEL	NUMBER OF STAGES	MEI	η_{PL}	η_{BEP}	η_{OL}
NKV 1/2 T IE3	2	$\geq 0,70$	44,78	47,27	46,72
NKV 1/3 T IE3	3		44,78	47,27	46,72
NKV 1/4 T IE3	4		44,78	47,27	46,72
NKV 1/5 T IE3	5		44,78	47,27	46,72
NKV 1/6 T IE3	6		44,78	47,27	46,72
NKV 1/7 T IE3	7		44,78	47,27	46,72
NKV 1/8 T IE3	8		44,78	47,27	46,72
NKV 1/9 T IE3	9		44,78	47,27	46,72
NKV 1/10 T IE3	10		44,78	47,27	46,72
NKV 1/11 T IE3	11		44,78	47,27	46,72
NKV 1/12 T IE3	12		44,78	47,27	46,72
NKV 1/13 T IE3	13		44,78	47,27	46,72
NKV 1/14 T IE3	14		44,78	47,27	46,72
NKV 1/15 T IE3	15		44,78	47,27	46,72
NKV 1/17 T IE3	17		44,78	47,27	46,72
NKV 1/19 T IE3	19		44,78	47,27	46,72
NKV 1/22 T IE3	22		44,78	47,27	46,72
NKV 1/23 T IE3	23		44,78	47,27	46,72
NKV 1/25 T IE3	25		44,78	47,27	46,72
NKV 1/27 T IE3	27		44,78	47,27	46,72
NKV 1/30 T IE3	30	44,78	47,27	46,72	
NKV 1/32 T IE3	32	44,78	47,27	46,72	
NKV 1/34 T IE3	34	44,78	47,27	46,72	
NKV 1/37 T IE3	37	44,78	47,27	46,72	

HYDRAULIC EFFICIENCY

EU 547/2012 REGULATION - MEI

PUMP MODEL	NUMBER OF STAGES	MEI	η_{PL}	η_{BEP}	η_{OL}
NKV 3/2 T IE3	2	$\geq 0,70$	50,8	53,44	52,79
NKV 3/3 T IE3	3		50,8	53,44	52,79
NKV 3/4 T IE3	4		50,8	53,44	52,79
NKV 3/5 T IE3	5		50,8	53,44	52,79
NKV 3/6 T IE3	6		50,8	53,44	52,79
NKV 3/7 T IE3	7		50,8	53,44	52,79
NKV 3/8 T IE3	8		50,8	53,44	52,79
NKV 3/9 T IE3	9		50,8	53,44	52,79
NKV 3/10 T IE3	10		50,8	53,44	52,79
NKV 3/11 T IE3	11		50,8	53,44	52,79
NKV 3/12 T IE3	12		50,8	53,44	52,79
NKV 3/13 T IE3	13		50,8	53,44	52,79
NKV 3/14 T IE3	14		50,8	53,44	52,79
NKV 3/15 T IE3	15		50,8	53,44	52,79
NKV 3/16 T IE3	16		50,8	53,44	52,79
NKV 3/17 T IE3	17		50,8	53,44	52,79
NKV 3/18 T IE3	18		50,8	53,44	52,79
NKV 3/19 T IE3	19		50,8	53,44	52,79
NKV 3/21 T IE3	21		50,8	53,44	52,79
NKV 3/23 T IE3	23		50,8	53,44	52,79
NKV 3/25 T IE3	25		50,8	53,44	52,79
NKV 3/27 T IE3	27	50,8	53,44	52,79	
NKV 3/29 T IE3	29	50,8	53,44	52,79	
NKV 3/31 T IE3	31	50,8	53,44	52,79	
NKV 3/33 T IE3	33	50,8	53,44	52,79	

PUMP MODEL	NUMBER OF STAGES	MEI	η_{PL}	η_{BEP}	η_{OL}
NKV 6/2 T IE3	2	$\geq 0,70$	60,47	64,55	62,87
NKV 6/3 T IE3	3		60,47	64,55	62,87
NKV 6/4 T IE3	4		60,47	64,55	62,87
NKV 6/5 T IE3	5		60,47	64,55	62,87
NKV 6/6 T IE3	6		60,47	64,55	62,87
NKV 6/7 T IE3	7		60,47	64,55	62,87
NKV 6/8 T IE3	8		60,47	64,55	62,87
NKV 6/9 T IE3	9		60,47	64,55	62,87
NKV 6/10 T IE3	10		60,47	64,55	62,87
NKV 6/11 T IE3	11		60,47	64,55	62,87
NKV 6/12 T IE3	12		60,47	64,55	62,87

HYDRAULIC EFFICIENCY

EU 547/2012 REGULATION - MEI

PUMP MODEL	NUMBER OF STAGES	MEI	η_{PL}	η_{BEP}	η_{OL}
NKV 6/13 T IE3	13		60,47	64,55	62,87
NKV 6/14 T IE3	14		60,47	64,55	62,87
NKV 6/15 T IE3	15		60,47	64,55	62,87
NKV 6/16 T IE3	16		60,47	64,55	62,87
NKV 6/17 T IE3	17		60,47	64,55	62,87
NKV 6/18 T IE3	18		60,47	64,55	62,87
NKV 6/19 T IE3	19		60,47	64,55	62,87
NKV 6/20 T IE3	20		60,47	64,55	62,87
NKV 6/21 T IE3	21		60,47	64,55	62,87
NKV 6/23 T IE3	23		60,47	64,55	62,87
NKV 6/25 T IE3	25		62,5	66,2	64,98
NKV 6/28 T IE3	28		62,5	66,2	64,98
NKV 6/30 T IE3	30		62,5	66,2	64,98
NKV 6/33 T IE3	33		62,5	66,2	64,98
NKV 6/36 T IE3	36		62,5	66,2	64,98

PUMP MODEL	NUMBER OF STAGES	MEI	η_{PL}	η_{BEP}	η_{OL}
NKV 10/2 T IE3	2	≥ 0,70	64,72	67,58	66,82
NKV 10/3 T IE3	3		64,72	67,58	66,82
NKV 10/4 T IE3	4		64,72	67,58	66,82
NKV 10/5 T IE3	5		64,72	67,58	66,82
NKV 10/6 T IE3	6		64,72	67,58	66,82
NKV 10/7 T IE3	7		64,72	67,58	66,82
NKV 10/8 T IE3	8		64,72	67,58	66,82
NKV 10/9 T IE3	9		64,72	67,58	66,82
NKV 10/10 T IE3	10		64,72	67,58	66,82
NKV 10/11 T IE3	11		64,72	67,58	66,82
NKV 10/12 T IE3	12		64,72	67,58	66,82
NKV 10/13 T IE3	13		64,72	67,58	66,82
NKV 10/15 T IE3	15		64,72	67,58	66,82
NKV 10/17 T IE3	17		64,72	67,58	66,82
NKV 10/19 T IE3	19		64,72	67,58	66,82
NKV 10/21 T IE3	21		64,72	67,58	66,82
NKV 10/23 T IE3	23		64,72	67,58	66,82
NKV 10/24 T IE3	24		64,72	67,58	66,82

HYDRAULIC EFFICIENCY

EU 547/2012 REGULATION - MEI

PUMP MODEL	NUMBER OF STAGES	MEI	η_{PL}	η_{BEP}	η_{OL}
NKV 15/1 T IE3	1	≥ 0,70	61,59	65,63	64,65
NKV 15/2 T IE3	2		61,59	65,63	64,65
NKV 15/3 T IE3	3		61,59	65,63	64,65
NKV 15/4 T IE3	4		61,59	65,63	64,65
NKV 15/5 T IE3	5		61,59	65,63	64,65
NKV 15/6 T IE3	6		64,68	69,13	68,28
NKV 15/7 T IE3	7		64,68	69,13	68,28
NKV 15/8 T IE3	8		64,68	69,13	68,28
NKV 15/9 T IE3	9		64,68	69,13	68,28
NKV 15/10 T IE3	10		64,68	69,13	68,28
NKV 15/11 T IE3	11		64,68	69,13	68,28
NKV 15/12 T IE3	12		64,68	69,13	68,28
NKV 15/13 T IE3	13		64,68	69,13	68,28
NKV 15/14 T IE3	14		64,68	69,13	68,28
NKV 15/15 T IE3	15		64,68	69,13	68,28
NKV 15/16 T IE3	16		64,68	69,13	68,28
NKV 15/17 T IE3	17		64,68	69,13	68,28

PUMP MODEL	NUMBER OF STAGES	MEI	η_{PL}	η_{BEP}	η_{OL}
NKV 20/1 T IE3	1	≥ 0,70	61,78	66,22	65,64
NKV 20/2 T IE3	2		61,78	66,22	65,64
NKV 20/3 T IE3	3		61,78	66,22	65,64
NKV 20/4 T IE3	4		61,78	66,22	65,64
NKV 20/5 T IE3	5		61,78	66,22	65,64
NKV 20/6 T IE3	6		64,59	69,58	68,67
NKV 20/7 T IE3	7		64,59	69,58	68,67
NKV 20/8 T IE3	8		64,59	69,58	68,67
NKV 20/9 T IE3	9		64,59	69,58	68,67
NKV 20/10 T IE3	10		64,59	69,58	68,67
NKV 20/11 T IE3	11		64,59	69,58	68,67
NKV 20/12 T IE3	12		64,59	69,58	68,67
NKV 20/13 T IE3	13		64,59	69,58	68,67
NKV 20/14 T IE3	14		64,59	69,58	68,67
NKV 20/15 T IE3	15		64,59	69,58	68,67
NKV 20/16 T IE3	16		64,59	69,58	68,67
NKV 20/17 T IE3	17		64,59	69,58	68,67

HYDRAULIC EFFICIENCY

EU 547/2012 REGULATION - MEI

PUMP MODEL	NUMBER OF STAGES	MEI	η_{PL}	η_{BEP}	η_{OL}
NKV 32/3	3	$\geq 0,70$	70,08	74,12	73,16
NKV 32/2-2	2		65,89	69,98	69,26
NKV 32/2	2		70,08	74,12	73,16
NKV 32/3-2	3		67,38	71,10	70,20
NKV 32/4-2	4		68,05	71,78	70,92
NKV 32/4	4		70,08	74,12	73,16
NKV 32/5-2	5		68,40	72,20	71,44
NKV 32/5	5		70,08	74,12	73,16
NKV 32/6-2	6		68,62	72,49	71,81
NKV 32/6	6		70,08	74,12	73,16
NKV 32/7-2	7		68,82	72,70	72,04
NKV 32/7	7		70,08	74,12	73,16
NKV 32/8-2	8		68,96	72,86	72,22
NKV 32/8	8		70,08	74,12	73,16
NKV 32/9-2	9		69,06	72,98	72,37
NKV 32/9	9		70,08	74,12	73,16
NKV 32/10-2	10		69,15	73,09	72,47
NKV 32/10	10		70,08	74,12	73,16
NKV 32/11-2	11		69,24	73,17	72,55
NKV 32/11	11		70,08	74,12	73,16
NKV 32/12-2	12	69,29	73,25	72,63	
NKV 32/12	12	70,08	74,12	73,16	
NKV 32/13-2	13	69,37	73,31	72,66	
NKV 32/13	13	70,08	74,12	73,16	

PUMP MODEL	NUMBER OF STAGES	MEI	η_{PL}	η_{BEP}	η_{OL}
NKV 45/3	3	$\geq 0,70$	73,47	76,37	75,25
NKV 45/2-2	2		69,13	71,65	70,46
NKV 45/2	2		73,47	76,37	75,25
NKV 45/3-2	3		69,79	73,42	72,55
NKV 45/4-2	4		70,11	74,21	73,56
NKV 45/4	4		73,47	76,37	75,25
NKV 45/5-2	5		70,36	74,67	74,14
NKV 45/5	5		73,47	76,37	75,25
NKV 45/6-2	6		70,50	74,96	74,52
NKV 45/6	6		73,47	76,37	75,25
NKV 45/7-2	7		70,56	75,16	74,80
NKV 45/7	7		73,47	76,37	75,25
NKV 45/8-2	8		70,67	75,32	75,00

HYDRAULIC EFFICIENCY

EU 547/2012 REGULATION - MEI

PUMP MODEL	NUMBER OF STAGES	MEI	η_{PL}	η_{BEP}	η_{OL}
NKV 45/8	8		73,47	76,37	75,25
NKV 45/9-2	9		70,70	75,43	75,16
NKV 45/9	9		73,47	76,37	75,25
NKV 45/10-2	10		70,73	75,52	75,28
NKV 45/10	10		73,47	76,37	75,25
NKV 45/11-2	11		70,82	75,60	75,38
NKV 45/11	11		73,47	76,37	75,25
NKV 45/12-2	12		70,84	75,66	75,46
NKV 45/12	12		73,47	76,37	75,25
NKV 45/13-2	13		70,85	75,71	75,54


PUMP MODEL	N° STAGES	MEI	η_{PL}	η_{BEP}	η_{OL}
NKV 65/3	3	≥ 0,70	73,71	78,96	77,11
NKV 65/2-2	2		70,92	77,97	77,08
NKV 65/2	2		73,71	78,96	77,11
NKV 65/3-2	3		72,27	77,22	76,17
NKV 65/4-2	4		72,52	77,33	76,58
NKV 65/4	4		73,71	78,96	77,11
NKV 65/5-2	5		73,15	77,48	76,31
NKV 65/5	5		73,71	78,96	77,11
NKV 65/6-2	6		73,78	77,69	75,76
NKV 65/6	6		73,71	78,96	77,11
NKV 65/7-2	7		73,84	77,87	75,86
NKV 65/7	7		73,71	78,96	77,11
NKV 65/8-2	8		73,87	78,00	75,94
NKV 65/8	8		73,71	78,96	77,11

PUMP MODEL	NUMBER OF STAGES	MEI	η_{PL}	η_{BEP}	η_{OL}
NKV 95/3	3	≥ 0,70	74,38	79,43	77,94
NKV 95/2-2	2		72,37	78,87	77,79
NKV 95/2	2		74,38	79,43	77,94
NKV 95/3-2	3		73,03	78,58	77,65
NKV 95/4-2	4		73,56	78,64	77,44
NKV 95/4	4		74,38	79,43	77,94
NKV 95/5-2	5		73,82	78,74	77,41
NKV 95/5	5		74,38	79,43	77,94
NKV 95/6-2	6		73,90	78,83	77,51
NKV 95/6	6		74,38	79,43	77,94

ACCESSORIES

ACCESSORIES


CENTRIFUGAL PUMPS

COUNTER-FLANGE KIT	MODEL	COUNTER FLANGES AND GASKETS	THREADED	MATERIAL	PN	NKM-G- NKP-G	KDN
 <p>DN 32</p>	DN 32	1 x DN 32 + 1 x DN 50	Threaded	STEEL	16	•	•
	DN 40	1 x DN 40 + 1 x DN 65	Threaded	STEEL	16	•	•
	DN 50	1 x DN 50 + 1 x DN 65	Threaded	STEEL	16	•	•
	DN 65	1 x DN 65 + 1 x DN 80	Threaded	STEEL	16	•	•
	DN 32	1 x DN 32 + 1 x DN 50	To be welded	STEEL	16	•	•
	DN 40	1 x DN 40 + 1 x DN 65	To be welded	STEEL	16	•	•
	DN 50	1 x DN 50 + 1 x DN 65	To be welded	STEEL	16	•	•
	DN 50/1	1 x DN 50 + 1 x DN 80	To be welded	STEEL	16		•
	DN 65	1 x DN 65 + 1 x DN 80	To be welded	STEEL	16	•	•
	DN 65/1	1 x DN 65 + 1 x DN 100	To be welded	STEEL	16		•
	DN 80	1 x DN 80 + 1 x DN 100	To be welded	STEEL	16	•	•
	DN 80/1	1 x DN 80 + 1 x DN 125	To be welded	STEEL	16		•
	DN 100	1 x DN 100 + 1 x DN 125	To be welded	STEEL	16	•	•
	DN 125	1 x DN 125 + 1 x DN 150	To be welded	STEEL	16	•	•
	DN 150	1 x DN 150 + 1 x DN 200	To be welded	STEEL	16 (10 x DN 200)	•	•
	DN 200	1 x DN 200 + 1 x DN 250	To be welded	STEEL	16 (10 x DN 200)		•
	DN 250/1	1 x DN 250 + 1 x DN 300	To be welded	STEEL	16		•
DN 300	1 x DN 300 + 1 x DN 350	To be welded	STEEL	16		•	
DN 350	1 x DN 350 + 1 x DN 400	To be welded	STEEL	16		•	

The kit includes the suction and delivery counter-flanges with gaskets, screws and bolts required for the size of the relevant pump.

ACCESSORIES - VERTICAL CENTRIFUGAL PUMPS

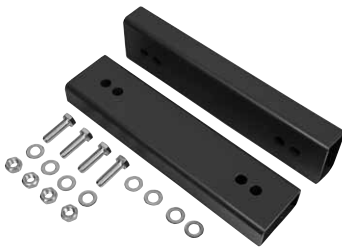
COUNTER-FLANGE KIT	MODEL	COUNTER FLANGES AND GASKETS	THREADED	MATERIALE	PN	NKV 10	NKV 15-20	NKV 32	NKV 45	NKV 65 - 95
 <p>DN 40</p>	DN 40	2 x DN 40	Threaded	STEEL	40	•				
	DN 50	2 x DN 50	Threaded	STEEL	40		•			
	DN 65	2 x DN 65	Threaded	STEEL	40			•		
	DN 80	2 x DN 80	Threaded	STEEL	40				•	
	DN 100	2 x DN 100	Threaded	STEEL	25					•

PORTS	MODEL	KVC	KVCX
	MT 1" 1/4 PORTS (ONE FOR DNA AND ONE FOR DNM)	•	•

Ports must be ordered separately, one for the suction, and one for the delivery

ACCESSORIES

CENTRIFUGAL PUMPS

SPACER KIT	MODEL	FOR PUMP TYPE	P2 kW	DIMENSIONS A x B x H mm	NKM-G 4 POLES	NKP-G 2 POLES
 <p>SPACER KIT nr 5</p>	SPACER KIT nr 1	NKM-G 65-315/309/1¼	11	90 x 335 x 65	•	
	SPACER KIT nr 5	NKM-G 80-250/270/1¼	11	80 x 290 x 40	•	
	SPACER KIT nr 2	NKM-G 80-315/305/15/4	15	90 x 335 x 90	•	
	SPACER KIT nr 3	NKM-G 80-315/320/18,5/4	18.5	100 x 320 x 70	•	
		NKM-G 80-315/334/22/4	22			
	SPACER KIT nr 1	NKM-G100-250/250/1¼	11	90 x 335 x 65	•	
		NKM-G100-250/270/15/4	15			
	SPACER KIT nr 3	NKM-G100-315/300/18.5/4	18.5	100 x 320 x 70	•	
		NKM-G100-315/316/22/4	22			
	SPACER KIT nr 2	NKM-G125-250/243/15/4	15	90 x 335 x 90	•	
	SPACER KIT nr 3	NKM-G125-250/256/18,5/4	18.5	100 x 320 x 70	•	
		NKM-G125-250/266/22/4	22			
	SPACER KIT nr 4	NKM-G150-200/218/1¼	11	80 x 290 x 120	•	
	SPACER KIT nr 6	NKP-G 32-125/142/3/2	3	50 x 100 x 20		•
		NKP-G 32-160/177/5,5/2	5.5			
		NKP-G 40-125/130/3/2	3			
		NKP-G 40-125/139/4/2	4			
		NKP-G 40-160/158/5,5/2	5.5			
		NKP-G 40-160/172/7,5/2	7.5			
	SPACER KIT nr 7	NKP-G 40-200/210/1½	11	70 x 332 x 20		•
		NKP-G 40-250/230/15/2	15			
		NKP-G 40-250/245/18,5/2	18.5			
	SPACER KIT nr 6	NKP-G 50-125/135/5,5/2	5.5	50 x 100 x 20		•
		NKP-G 50-125/144/7,5/2	7.5			
	SPACER KIT nr 7	NKP-G 50-160/169/1½	11	70 x 332 x 20		•
		NKP-G 50-200/200/15/2	15			
		NKP-G 50-200/210/18,5/2	18.5			
NKP-G 65-160/157/1½		11				
NKP-G 65-160/173/15/2		15				
NKP-G 65-200/190/18,5/2		18.5				
NKP-G 80-160/147-127/1½		11				
NKP-G 80-160/153/15/2		15				
NKP-G 80-160/163/18,5/2		18.5				
SPACER KIT nr 8	NKP-G 80-200/190/30/2	30	70 x 125 x 20		•	

Available on request, separately from the pump. Used to place the pump in the horizontal position during installation, to compensate for the different pump / motor axis heights. The kits include two spacers with sizes A (width), B (length), and H (height) as shown in the table.

Spacers with H size exceeding 20 mm are supplied with screws, nuts, and washers to secure the pump/motor to the spacer.

TECHNICAL APPENDIX

CONVERSION TABLE FOR UNITS OF MEASURE

CHARACTERISTIC	SYSTEM UNIT OF MEASURE	UNIT OF MEASURE	SYMBOL	CONVERSIONS		
				SYSTEM	INTERNATIONAL SYSTEM (SI)	IMPERIAL SYSTEM
LENGTH	Technical and International	metre decimetre centimetre millimetre	m dm cm mm	1 dm = 0,1 m 1 cm = 0,01 m 1 mm = 0,001 m		1 m = 3,28 ft 1 dm = 3,937 in 1 cm = 0,3937 in
	Imperial	inch foot yard	1", in 1", ft yd	1" = 25,4 mm 1" ft = 0,3048 m 1 yd = 0,9144 m		1 ft = 12" 1 yd = 3 ft = 26"
AREA	Technical and International	metres squared centimetres squared millimetres squared	m ² cm ² mm ²	1 cm ² = 0,0001 m ² 1 mm ² = 0,01 cm ²		1 m ² = 1,196 sq.yd 1 m ² = 10,764 sq.ft 1 cm ² = 0,155 sq.in
	Imperial	square inch square foot square yard	sq.in sq.ft sq.yd	1 sq.in = 6,45 cm ² 1 sq.ft = 0,0929 m ² 1 sq.yd = 0,836 m ²		1 sq.ft = 144 sq.in 1 sq.yd = 1,296 sq.in 1 sq.yd = 9 sq.ft
VOLUME	Technical and International	metre cubed decimetre cubed centimetre cubed litre cubed	m ³ cm ³ mm ³ l	1 m ³ = 1.000 dm ³ 1 cm ³ = 0,001 m ³ = 1.000 cm ³ 1 mm ³ = 0,001 dm ³ 1 l = dm ³		1 dm ³ = 0,22 Imp.gal 1 dm ³ = 0,264 US.gal 1 dm ³ = 61,0 cu.in
	Imperial	cubic inch cubic feet Imperial gallons U.S. gallons	cu.in cu.ft Imp.gal USA.gal	1 cu.in = 16,39 cm ³ 1 cu.ft = 28,34 m ³ 1 Imp.gal = 4,546 m ³ 1 US.gal = 3,785 dm ³		1 Imp.gal = 1,201 US.gal 1 US.gal = 0,833 Imp.gal
TEMPERATURE	Technical and International	degrees Centigrade degrees Kelvin	°C °K	°C = °K - 273 °K = °C + 273		°C = 5/9 x (°F - 32) °K = 5/9 x (°F - 32) + 273
	Imperial	degrees Fahrenheit	°F	°F = 9/5 x °C + 32		-
		freezing point of water at atmospheric pressure: boiling point of water at atmospheric pressure:		0°C = 273 °K = 032 °F 100°C = 373 °K = 212 °F		
WEIGHT and FORCE	Technical	kilogram	kg	-	1 kg = 9,81 N	1 kg = 2,203 lb
	International	Newton	N	1 N = 0,102 kg	-	1 N = 0,22546 lb
	Imperial	pound	lb	1 lb = 0,454 kg	1 lb = 4,452 N	-
SPECIFIC WEIGHT	Technical	kilogram per decimetre cubed	kg/dm ³	-	1 kg/dm ³ = 9,807 N/dm ³	1 kg/dm ³ = 62,46 lb/cu.ft
	International	Newton per decimetre cubed	N/dm ³	1 N/dm ³ = 0,102 kg/dm ³	-	1 N/dm ³ = 6,36 lb/cu.ft
	Imperial	pound per cubic foot	lb/dm ³	1 lb/cu.ft = 0,01600 kg/dm ³	1 lb/cu.ft = 0,160 N/dm ³	-
PRESSURE	Technical	atmospheres	kg/cm ²	-	1 kg/cm ² = 98,067 kPa 1 kg/cm ² = 0,9807 bar	1 kg/cm ² = 14,22 psi
	International	Pascal kiloPascal bar	Pa kPa bar	1 kPa = 0,0102 kg/cm ² 1 bar = 1,02 kg/cm ²	1 kPa = 1.000 Pa 1 bar = 100.000 Pa	1 kPa = 0,145 psi 1 bar = 14,50 psi
	Imperial	pounds per square inch	psi	1 psi = 0,0703 kg/cm ²	1 psi = 0,06895 bar 1 psi = 6,894 kPa	-
FLOW	Technical	litres per minute litres per second metres cubed per hour	l/min l/s m ³ /h	1 l/min = 0,0167 l/s 1 l/s = 3,6 m ³ /h 1 m ³ /h = 16,667 l/min	1 l/s = 0,001 m ³ /s	1 l/min = 0,22 imp.g.p.m. 1 l/min = 0,264 US.g.p.m. 1 m ³ /h = 3,666 imp.g.p.m. 1 m ³ /h = 4,403 US.g.p.m.
	International	metres cubed per second	m ³ /s	1 m ³ /s = 1.000 l/s 1 m ³ /s = 3.600 m ³ /h	-	1 m ³ /s = 13,198 imp.g.p.m. 1 m ³ /s = 15,852 US.g.p.m.
	Imperial	imperial gallons per minute U.S. gallons per minute	Imp.g.p.m. US.g.p.m.	1 Imp.g.p.m. = 4,546 l/min 1 Imp.g.p.m. = 0,273 m ³ /h 1 US.g.p.m. = 3,785 l/min 1 US.g.p.m. = 0,227 m ³ /h	-	1 Imp.g.p.m. = 1,201 US.g.p.m. 1 US.g.p.m. = 0,833 Imp.g.p.m.
TORQUE	Technical	kilogram metre	kgm	-	1 kgm = 9,807 Nm	1 kgm = 7,233 ft.lb
	International	Newton metre	Nm	1 Nm = 0,102 kgm	-	1 Nm = 0,7376 ft.lb
	Imperial	foot pound	ft.lb	1 ft.lb = 0,138 kgm	1 ft.lb = 1,358 Nm	-
WORK and ENERGY	Technical	kilogram metre vapour-horsepower hour	kgm CVh		1 kgm = 9,807 J 1 CVh = 0,736 kWh	1 kgm = 7,233 ft.lb 1 Nm = 0,986 HP.hr.
	International	Joule kiloWatt hour	J kWhq	1 J = 0,102 kgm kWh = 1,36 CVh	-	1 Nm = 0,7376 ft.lb 1 Nm = 0,7376 ft.lb
	Imperial	foot pound Horsepower hour	ft.lb HP.hr.	1 ft.lb = 0,138 kgm 1 HP.hr. = 1,014 CVh	1 ft.lb = 0,358 Nm 1 HP.hr. = 0,746 kWh	-
POWER	Technical	Horse power	HP	1 HP = 0,736 kW	1 HP = 736 W	-
	International	Watt kiloWatt	W kW	1 W = 0,00136 Hp 1 kW = 1,36 Hp	1 kW = 1.000 W	-
KINETIC VISCOSITY	Technical	stokes centistokes	1 St 1 cSt	1 St = 1 cm ² /s 1 cSt = 0,01 St	1 St = 0.0001 m ² /s	1 St = 0.00107 ft ² /s
	International	m ² /s	m ² /s	1 m ² /s = 10.000 St	1 m ² /s = 10.000 cm ² /s	1 m ² /s = 10.764 ft ² /s
	Imperial	square foot per second	ft ² /s	1 ft ² /s = 929 St	1 ft ² /s = 0.0929 m ² /s	-

GENERAL INFORMATION

FUNDAMENTAL TERMS USED IN PUMPS

The following is a list of fundamental terms used in pumps and an explanation of their meanings. Their knowledge is necessary in order to discuss hydraulic pumps. All measurements are given in Technical units. Reference should be made to the chart for their international and Anglo-Saxon equivalents.

HEAD

Head means height, difference in level, gradient. For example if a pump has a flow of Q litres per second and a head of 30 metres, it means that it is capable of raising Q litres of liquid by 30 metres every second (therefore achieving a 30 metre gradient). For each given pump, the head is determined by its construction, such as the external diameter of the impeller and the speed of rotation, but it is not affected by the pumped liquid. This means that the pump as such can raise by 30 metres Q litres per second of water, petrol, mercury, etc.; the only difference in the three cases will be the power of the motor required.

SPECIFIC WEIGHT OF A LIQUID OR FLUID

The specific weight of a liquid or fluid is the weight per unit volume of the liquid/fluid. Specific weight is usually measured in kg/dm³ or kg/l, remembering that 1 dm³ equals 1 litre.

PRESSURE

Pressure means weight per unit of area (e.g. kg/cm²), and it should not be confused with head. In the case of liquids, the pressure that the liquid exerts on a surface is given by the product of the head (or height) of the liquid, multiplied by its specific weight. For this reason, the column of several km of air on the earth's surface produces at sea level a pressure of about 1kg/cm² (equal to approx. 1 atmosphere). If the same column were of water rather than air, the pressure would be some 700 to 800 times greater, due to the fact that water has a specific weight approximately 700-800 times greater than that of air.

Bearing in mind that a column of water 10 m high is equivalent to approx. 1 kg/cm², if we placed a manometer on the delivery of the pump, the following pressure increases would be measured:

- | | |
|--|---|
| a) with petrol (specific weight 0,7 kg/dm ³) | = 00,7 x 0,001 x 30 x 100 = 2,1 kg/cm ² |
| b) with water (specific weight 1,0 kg/dm ³) | = 00,1 x 0,001 x 30 x 100 = 3,0 kg/cm ² |
| c) with mercury (specific weight 13,6 kg/dm ³) | = 13,6 x 0,001 x 30 x 100 = 40,8 kg/cm ² |

FLOW

Flow means the quantity of liquid or fluid that passes through a point, such as the delivery outlet of a pump, or a cross section of a pipe, in the set unit of time.

This can be measured in litres per minute (l/min), litres per second (l/s), cubic metres per hour (m³/h) etc.

It should be noted that there is a perfect analogy between the flow of water through a pipe and the flow of electricity through a wire. It is sufficient to remember that hydraulic head is equivalent to electrical potential or voltage, and hydraulic flow is equivalent to electric current or amperes in electrotechnics. Even their behaviour is the same. Just as a thin wire restricts the flow of electricity more than one with a larger section, in the same way, a pipe of a smaller diameter offers a greater resistance to the flow of a liquid than one of a larger one. Just as the passage of electric current through the wire to a cable needs a voltage difference, in the same way, the flow of a liquid or fluid through a pipe needs a certain head.

There will never be a movement of liquid between two points of a perfectly horizontal pipe, and with the liquid at the same head in both points. This is due to the fact that, in the same way as the cable exerts a certain resistance to the passage of the electric current (electric resistance), the pipe also exerts a certain resistance to the passage of the fluid, the extent of which depends on the quality of the pipe (material, shape, presence of scale) and its section, and therefore the speed at which the fluid runs through the pipe. This resistance is called head loss.

HEAD LOSS

Head loss is that part of the head, possessed by the liquid, which is lost when passing through a pipe, a valve, a filter, etc. This loss cannot be recovered, as it is lost due to friction. Going back to the analogy between electrical and hydraulic phenomena, just as the losses in a cable increase in proportion with the current, so head losses are proportionally greater as the speed of the liquid increases. This means that the more the flow is restricted by scaled pipes, clogged filters, partially closed valves etc. the greater the head loss will be.

PUMP

A pump is a machine used to give a certain head to a liquid that passes through it. The head can be used to raise the liquid to a higher level, or to make it flow inside a pipe, or even in the open air, so that it covers a certain distance. The characteristics of a pump are:

- Flow** (the quantity of liquid that is moved through the pump in a unit of time)
- Head** (that is the height at which the pump is capable lifting the flow)

Based on the existing relationship between the flow and the head, it is possible to have:

- Pumps with small flow and large head (piston pumps, rotary pumps, small centrifugal pumps).
- Pumps with medium flow and medium head (centrifugal pumps in general).
- Pumps with large flow and small head (helico-centrifugal pumps, propeller pumps).

Centrifugal pumps, helico-centrifugal pumps and propeller pumps have a rotary motion and their speed is universally measured in revolutions per minute (rpm). With these machines operating at a given speed, for each given value of flow, there is only one value of head. This means that in order to increase or decrease the performance of these types of pumps, the operating speed must be varied accordingly. Basically, the liquid passing through the pump is supplied with energy that is related to the head and the speed of the liquid itself. This energy supplied within the unit of time is known as delivered power.

DELIVERED POWER

The delivered power is the power delivered by the pump to the liquid. The value of this delivered power depends on three factors: flow, head, and specific weight of the pumped liquid. The higher these three factors, the higher is the power delivered by the pump. For example, a pump delivering petrol does less work than when delivering sulphuric acid, because the specific weights of the two liquids are different.

In order to pump a liquid, a pump must be driven by a motor. In the vast majority of cases, this is either an electric, or an internal combustion motor. Electric motors use electric power, while internal combustion motors (engines) use oil or oil derivative fuels. The power that the pump needs in order to operate is called absorbed power.

DELIVERED POWER CALCULATION

Delivered power is normally expressed in kW or HP, indicating with:

Q = the flow

H = the head in metres of the column of liquid (m.c.l.)

γ = the specific weight of the liquid

The delivered power (P3) is calculated using one of the following equations:

$$P3 = \frac{\gamma \text{ (kg/dm}^3\text{)} \times Q \text{ (l/s)} \times H \text{ (m.c.l.)}}{75} \text{ in HP}$$

$$P3 = \frac{\gamma \text{ (kg/dm}^3\text{)} \times Q \text{ (m}^3\text{/h)} \times H \text{ (m.c.l.)}}{270} \text{ in HP}$$

$$P3 = \frac{\gamma \text{ (kg/dm}^3\text{)} \times Q \text{ (l/s)} \times H \text{ (m.c.l.)}}{102} \text{ in kW}$$

$$P3 = \frac{\gamma \text{ (kg/dm}^3\text{)} \times Q \text{ (l/min)} \times H \text{ (m.c.l.)}}{4500} \text{ in HP}$$

$$P3 = \frac{\gamma \text{ (kg/dm}^3\text{)} \times Q \text{ (m}^3\text{/h)} \times H \text{ (m.c.l.)}}{367} \text{ in kW}$$

$$P3 = \frac{\gamma \text{ (kg/dm}^3\text{)} \times Q \text{ (l/min)} \times H \text{ (m.c.l.)}}{6120} \text{ in kW}$$

ABSORBED POWER

Absorbed power is the power that the pump absorbs from the motor, to give to the liquid the delivered power discussed above.

Not all the absorbed power becomes delivered power, as some power is lost through friction, and even more within the pump itself, due to hydraulic losses. It is therefore clear that the delivered power is always less than the absorbed power, and the relation between the two is a number always lower than 1. This number is known as the efficiency.

YIELD

The efficiency is obtained by dividing the delivered power by the absorbed power, and is normally expressed as a percentage. For example, an efficiency of 75 % of a pump indicates that only 75 % of the absorbed power is converted into delivered power, with the remaining 25 % being lost due to friction. Therefore, the higher the efficiency of a pump, the smaller the portion of absorbed power being lost. If one then considers that the cost of energy relates to the absorbed power, it immediately becomes apparent just how important efficiency is. If we compare two pumps with the same 1 HP delivered power, but with an efficiency of 50 % for the first, and 60 % for the second, we can assume that the first one will need 2 HP to supply 1, while the second will only need 1,67 HP to achieve the same result. This means that the efficiency of a pump expresses, better than any other parameter, the quality of the pump and the related savings in terms of operating costs.

CALCULATION OF POWER OUTPUTS

P1: is the power absorbed by the motor in kW (generally indicated by the wattmeter).

P2: the power delivered by the motor in kW. This is measured at the brake (it basically is the power absorbed by the pump).

P3: the power delivered by the pump in kW.

$$\text{Power output of the motor } \eta = \frac{P_2}{P_1}$$

$$\text{Power output of the motor } \eta = \frac{P_3}{P_2}$$

$$\text{Power output of the motor } \eta = \frac{P_3}{P_1}$$

THE HEAD OF A PUMP AND ITS MEASUREMENT

The head of a pump is always the differential head, or that given by the pump itself. This is generally expressed in metres. In order to ascertain the head of a surface pump, during its operation it is necessary to measure the value of the head both at the suction and at the delivery of the pump itself, making sure that the readings are taken at the same level, which is called the reference plane. Two cases are possible, depending on installation:

- 1) the value of the head at the suction is negative (i.e. below zero shown on the manometer): in this case, the level of the liquid collected is lower than the level of the suction inlet.
- 2) the value of the head at the suction is positive (i.e. above zero shown on the manometer) in this case, the level of the liquid collected is higher than the level of the suction inlet (flooded suction).

In the first case the head of the pump is given by the sum of the two readings, while in the second it is given by subtracting the value of the head at the suction inlet from the value at the delivery outlet.

Finally, it is necessary to make sure that the readings at the suction and the delivery have been taken from apertures of the same diameter, so that they are not distorted by a difference in the speed of the liquid at the point of measurement. Any correction is made by calculating the dynamic head, or that part of the head linked with the speed of the liquid, which means that part of the head that the liquid possesses at the measuring section, due to the fact that it is moving. The dynamic head H_d , expressed in metres, is calculated using the following formula:

$$H_d = \frac{v^2}{2g}$$

where: v = speed of the fluid at the measuring point, given in m/s

g = acceleration of gravity (9,81), expressed in m/s²

$2g = 2 \times 9,81 = 19,62 \text{ m/s}^2$

The correction of the head is given by the difference between the dynamic head at the delivery, and the dynamic head at the suction. It is therefore clear that if the readings upstream and downstream the pump have been taken on pipes of the same diameter, and therefore with the liquid flowing at the same speed, the correction is zero.

To find the head of submersible impeller pumps, it is sufficient, during operation, to measure the head at the delivery port. In this case, the head of the pump is then given by adding the value read to the dynamic head (at the delivery outlet), and to the difference in level between the free surface of the liquid collected and the manometer.

VARIATION IN PUMP HEAD IN RELATION TO SPEED VARIATION

The performance of a pump is directly connected to its speed in rpm (n). Providing that there is no cavitation, the law of similarity may be used, which is expressed as follows:

$$Q_x = Q \times \frac{n_x}{n}$$

$$H_x = H \times \left(\frac{n_x}{n}\right)^2$$

$$P_{2-x} = P_2 \times \left(\frac{n_x}{n}\right)^3$$

For example, when doubling the number of revolutions (n_x) one obtains:

Q_x = the value of the flow doubles

H_x = the value of the head is 4 times higher

P_{2-x} = the value of the absorbed power is 8 times higher

$Q - H - P_2$ are the values at speed n

$Q_x - H_x - P_{2-x}$ are the values at speed n_x .

PRACTICAL NOTES ON NPSH

NPSH stands for Net Positive Suction Head.

The physical meaning of this expression is the absolute pressure that must exist at the suction port of the pump in order to pump the liquid without causing cavitation.

This can occur when the absolute pressure falls to values likely to allow the formation of vapour bubbles within the fluid, causing the pump to work with reduced head.

Therefore, NPSH can also be seen as the pressure required to compensate load losses in the path between the suction port and the point with the lowest pressure of the impeller.

All this demonstrates the importance of checking that the pump is not producing cavitation, as in addition to creating high noise similar to metal hammering, cavitation will also quickly damage the impeller.

A special formula associates the NPSH value required by the pump with the conditions of the system and with the type of liquid, allowing to calculate the minimum pressure required at the suction, and consequently to determine the position in which to locate the pump in relation to the free surface of the liquid to be pumped.

The general NPSH formula is:

$$NPSH = Z1 + \left(\frac{p1 + pb - pv}{\gamma} \times 10 \right) - Hr$$

$$Z1 = NPSH - \left(\frac{p1 + pb - pv}{\gamma} \times 10 \right) + Hr$$

where:

Z1 = the difference in level (in m) between the axis of the pump and the free surface of the liquid to be pumped.

p1 = the possible pressure (in kg/cm²) on the surface of the liquid in the tank from which it is collected. If the liquid is collected from an open tank and the surface of the liquid is in contact with the atmosphere, p1 will be equal to 0.

pb = atmospheric pressure (in kg/cm²) at the site of installation.

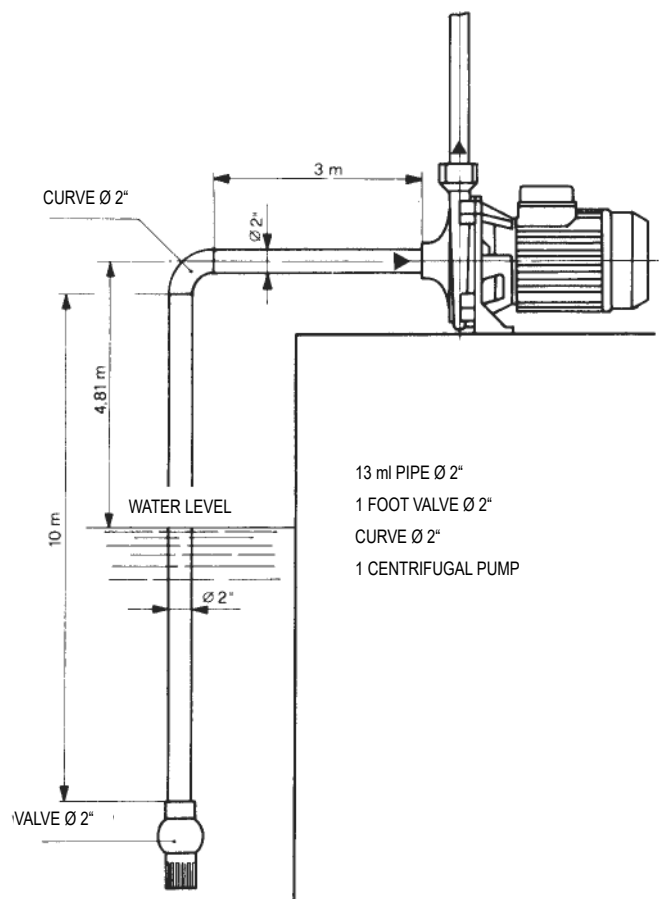
pv = the vapour tension (in kg/cm²) of the liquid at pumping temperature.

γ = the specific weight (in kg/dm³) of the liquid at pumping temperature.

10 = conversion factor of the units of measure used.

Hr = head loss (in m) in the suction pipework.

To give a practical example, the diagram below is of a system (see the Figure) for a centrifugal pump, for which a flow rate Q of 235 l/min is required, under four different conditions.



CALCULATION OF THE HEAD LOSS AT THE SUCTION (Hr)

Flow rate : $Q = 235 \text{ l/min} = 0,00392 \text{ m}^3/\text{s}$
 Cross section area of the pipe : $S = 19,6 \text{ cm}^2 = 0,00196 \text{ m}^2$

Velocity of the water in the pipe : $V = Q/S = \frac{0,00392}{0,00196} = 2 \text{ m/s}$

The head losses (see table 1 & 2) are:

- 2" foot valve = 0,610 m
- Curve (assume $\frac{d}{R} = 1$) = 0,058 m
- Suction piping (10 m + 3 m) = 1,370 m
- Total loss at the suction = 2,040 m

Let's now consider the four different conditions, notwithstanding the Hr head losses, and assuming an NPSH for the pump equal to 3,25 m, at the flow rate being considered. The atmospheric pressure p_b can be read from the diagram, the vapour tension p_v and the specific weight can be found on table 3.

1st case: system at sea level and water at 20 °C.

$$3,25 = Z_1 + \left(\frac{1,033 - 0,0238}{0,9982} \times 10 \right) - 2,04$$

$$Z_1 = 3,25 - \left(\frac{1,033 - 0,0238}{0,9982} \times 10 \right) + 2,04 = - 4,82$$

Which means that the pump, for the flow rate being considered, can collect water at 20° from a maximum depth of 4,82 m. It must be noted that a for flow rate greater than 235 l/min, when increasing the value of the NPSH of the pump and the head loss at the suction, the maximum suction depth will be less 4,82m. The opposite happens for flow rates lower than 235 l/min. From this, it follows that in order to bring the pump back to regular operation, it is often sufficient to partially close the delivery valve and reduce the flow rate.

2nd case: system at sea level and water at 60 °C.

$$3,25 = Z_1 + \left(\frac{1,033 - 0,2031}{0,9831} \times 10 \right) - 2,04$$

$$Z_1 = 3,25 - \left(\frac{1,033 - 0,2031}{0,9831} \times 10 \right) + 2,04 = - 3,15$$

Which means that the pump, for the flow rate being considered, can collect water at 60° from a maximum depth of 3,15 m.

3rd case: system at sea level and water at 90°C.

$$3,25 = Z_1 + \left(\frac{1,033 - 0,7149}{0,9653} \times 10 \right) - 2,04$$

$$Z_1 = 3,25 - \left(\frac{1,033 - 0,7149}{0,9653} \times 10 \right) + 2,04 = - 1,99$$

Which means that the free surface of the water at 90 °C for the flow rate considered must be 1,99 metres higher than the axis of the pump.

4th case: system at 1500 m above sea level and water at 50 °C.

$$3,25 = Z_1 + \left(\frac{0,860 - 0,1258}{0,9880} \times 10 \right) - 2,04$$

$$Z_1 = 3,25 - \left(\frac{0,860 - 0,1258}{0,9880} \times 10 \right) + 2,04 = - 2,14$$

Which means that the pump, for the flow rate being considered, in a system at 1500 metres above sea level can collect water at 50 °C from a maximum depth of 2,14 metres.

Note: it's always wise to include a safety margin (0,5m for cold water) to allow for errors and unforeseen variations in the estimated values. Such a margin is even more important with liquids near boiling point, as small temperature changes can produce large differences in operating conditions. For example, in case 3, if the temperature of the water were at any time to reach 95°C, instead of 90 °C, the necessary pump suction pressure would no longer be 1,99 metres, but would increase from 1,99 metres to 3,51 metres.

NOTES ON THE MOTORS OF ELECTRIC PUMPS

INDEX OF SYMBOLS USED	
P_1	: POWER ABSORBED BY THE MOTOR IN KW.
P_2	: POWER DELIVERED BY THE MOTOR IN KW OR HP.
$V \sim$	= AC POWER INPUT VOLTAGE AT THE MAINS.
Hz	= FREQUENCY IN CYCLES PER SECOND OF THE POWER INPUT VOLTAGE.
I	= CURRENT ABSORBED BY THE MOTOR IN AMPERES.
$\cos\phi$	= POWER FACTOR.
$n^{1/min}$	= SPEED OF ROTATION IN RPM.
η	= OUTPUT POWER (RELATION BETWEEN DEVELOPED POWER AND ABSORBED POWER P_2/P_1).
p	= NUMBER OF POLES OF THE MOTOR.
Cn	= NOMINAL TORQUE OF THE MOTOR.

NO-LOAD SPEED OF ROTATION

The no-load speed of single-phase and three-phase electric induction motors is given by the formula:

$$n^{1/min} = \frac{120 \times \text{Hz}}{p}$$

No-load speed of rotation $n^{1/min}$

FREQUENCY Hz	2 POLES	4 POLES
50	3000	1500
60	3600	1800

The full-load speed is 2 to 7 % lower than the no-load speed (2 to 7 % sliding).

CURRENT ABSORBED

$$\text{Single-phase: } I = \frac{1000 \times P_2 \text{ (kW)}}{V \times \cos\phi \times \eta} \quad \text{or: } I = \frac{736 \times P_2 \text{ (HP)}}{V \times \cos\phi \times \eta}$$

$$\text{Three-phase: } I = \frac{1000 \times P_2 \text{ (kW)}}{1.73 \times V \times \cos\phi \times \eta} \quad \text{or: } I = \frac{736 \times P_2 \text{ (HP)}}{1.73 \times V \times \cos\phi \times \eta}$$

ABSORBED POWER

$$\text{Single-phase: } P_1 \text{ (kW)} = \frac{V \times I \times \cos\phi}{1000}$$

$$\text{Three-phase: } P_1 \text{ (kW)} = \frac{1.73 \times V \times I \times \cos\phi}{1000}$$

POWER DELIVERED AT THE MOTOR AXIS

$$\text{Single-phase: } P_2 \text{ (kW)} = \frac{V \times I \times \cos\phi \times \eta}{1000} \quad \text{or: } P_2 \text{ (HP)} = \frac{V \times I \times \cos\phi \times \eta}{736}$$

$$\text{Three-phase: } P_2 \text{ (kW)} = \frac{1.73 \times V \times I \times \cos\phi \times \eta}{1000} \quad \text{or: } P_2 \text{ (HP)} = \frac{1.73 \times V \times I \times \cos\phi \times \eta}{736}$$

YIELD

$$\eta = \frac{P_2 \text{ (kW)}}{P_1 \text{ (kW)}}$$

POWER FACTOR

$$\text{Single-phase: } \cos\varphi = \frac{P_2 (\text{kW}) \times 1000}{V \times I \times \eta}$$

$$\text{or: } \cos\varphi = \frac{P_1 (\text{kW}) \times 1000}{V \times I}$$

$$\text{Three-phase: } \cos\varphi = \frac{P_2 (\text{kW}) \times 1000}{1,73 \times V \times I \times \eta}$$

$$\text{or: } \cos\varphi = \frac{P_1 (\text{kW}) \times 1000}{1,73 \times V \times I}$$

TORQUE FACTOR

$$C_n = \frac{P_2 (\text{kW}) \times 1000}{1.027 \times n^{1/\text{min}}} \text{ in kgm}$$

$$C_n = \frac{P_2 (\text{HP}) \times 736}{1.027 \times n^{1/\text{min}}} \text{ in kgm}$$

$$C_n = \frac{702 \times \text{HP}}{n^{1/\text{min}}} \text{ in decaNewtonmetres}$$

RELATIONSHIP BETWEEN KW AND HP

$$1 \text{ HP} = 0,736 \text{ kW}$$

$$1 \text{ kW} = 1,36 \text{ HP}$$

$$\frac{\text{HP}}{1.36} = \text{kW}$$

$$\text{kW} \times 1,36 = \text{HP}$$

STARTING CURRENT (ISP)

The starting current (at switch on) of a motor is 4 to 8 times greater than the nominal current, depending on the power of the motor.

$$I_{sp} = I_n \times 4 \div 8$$

DETAILS ON CAPACITORS

The approximate current absorbed by a capacitor is:

$$I = \frac{6,28 \times F \times C \times V}{1,000,000}$$

Where:

I = current in Amps absorbed by the capacitor.

F = frequency in Hz of the applied voltage.

C = capacity of capacitor μF .

V = applied voltage.

Example:

The current absorbed by a 14 μF capacitor connected to a 220 Volt - 50 Hz power input is:

$$I = \frac{6,28 \times 50 \times 14 \times 220}{1,000,000} = 0,96 \text{ Amperes}$$

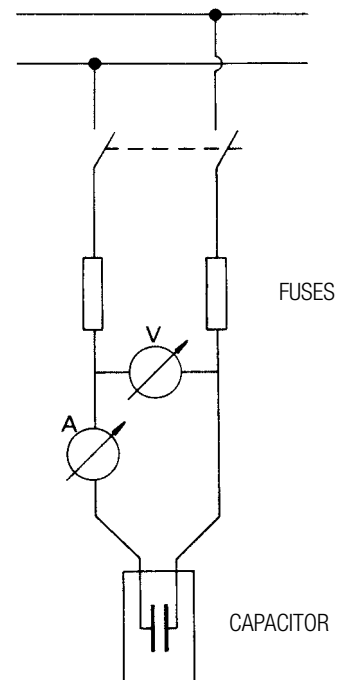
The approximate capacity of a capacitor is determined by:

$$C = \frac{I}{6,28 \times F \times V} \times 1,000,000$$

Example:

The capacity of a capacitor absorbing 1,4 Amps connected to a 220 Volt - 50 Hz power input is:

$$C = \frac{1,4}{6,28 \times 50 \times 220} \times 1,000,000 = 20,2 \mu\text{F}$$



STAR-DELTA START-UP

The normally delta Δ connected motor is connected to the network using a star type connection. The current and the starting torque are both reduced to 1/3 of the value they would be if delta Δ connected.

PROTECTION

It is recommended that motors are connected to the power input network using appropriate three-fuse thermal magnetic circuit breakers, or in any case circuit breakers complying with current local regulations.

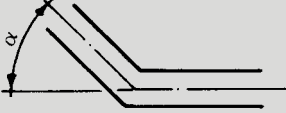
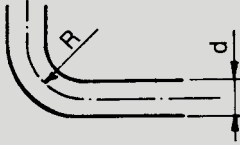
HEAD LOSS

In centimetres of column water for each metre of straight pipe

V	Q h	PIPE DIAMETER IN mm.																	
		20	25	30	40	50	65	80	100	125	150	175	200	250	300	350	400	450	500
0.5	Q	9.4	14.7	21.2	37.7	59.0	115	151	235	369	530	723	940	1480	2120	2880	3770	4780	5890
	h	2.4	1.9	1.5	1.0	0.8	0.56	0.46	0.36	0.28	0.23	0.19	0.16	0.13	0.105	0.089	0.076	0.067	0.06
0.6	Q	11.3	17.7	25.4	45.3	70.7	138	181	282	442	636	887	1130	1770	2540	3460	4520	5730	7060
	h	3.3	2.6	2.1	1.5	1.12	0.78	0.65	0.5	0.39	0.32	0.27	0.23	0.18	0.15	0.12	0.11	0.096	0.086
0.7	Q	13.2	20.6	29.7	52.9	82.5	161	211	329	516	742	1010	1315	2070	2960	4040	5270	6690	8250
	h	4.4	3.4	2.7	1.9	1.5	1.0	0.86	0.67	0.52	0.43	0.36	0.31	0.24	0.2	0.17	0.15	0.13	0.12
0.8	Q	15.05	23.6	33.9	60.4	94.5	184	241	377	590	848	1155	1505	2360	3390	4620	6030	7650	9420
	h	5.6	4.3	3.4	2.5	1.9	1.3	1.1	0.86	0.67	0.55	0.46	0.4	0.31	0.26	0.22	0.19	0.17	0.15
0.9	Q	16.95	26.5	38.2	68.0	106.0	207	272	423	664	955	1300	1695	2660	3810	5200	6780	8600	10600
	h	6.9	5.3	4.3	3.0	2.4	1.7	1.4	1.1	0.84	0.69	0.58	0.5	0.39	0.32	0.27	0.24	0.21	0.19
1.0	Q	18.8	29.5	42.4	75.5	117.7	230	302	471	737	1060	1445	1880	2950	4230	5770	7530	9550	11770
	h	8.3	6.4	5.1	3.7	2.9	2.1	1.7	1.3	1.0	0.84	0.71	0.61	0.48	0.4	0.34	0.29	0.26	0.23
1.1	Q	20.7	32.4	46.6	83.0	129.5	252	332	518	81	1165	1585	2070	3250	4650	6350	8290	10500	12950
	h	9.9	7.6	6.2	4.4	3.4	2.4	2.0	1.6	1.2	1.0	0.85	0.74	0.58	0.48	0.4	0.35	0.31	0.28
1.2	Q	22.6	35.4	50.9	90.6	141.0	276	362	565	885	1272	1730	2260	3550	5080	6930	9040	11450	14140
	h	11.7	9.0	7.2	5.2	4.0	2.9	2.4	1.9	1.5	1.2	1.0	0.87	0.69	0.56	0.48	0.42	0.37	0.32
1.3	Q	24.5	38.3	55.0	98.0	153.0	299	392	612	960	1378	1875	2450	3840	5500	7500	9800	12400	15320
	h	13.5	10.4	8.4	6.0	4.7	3.3	2.8	2.2	1.71	1.4	1.15	1.0	0.8	0.66	0.56	0.49	0.43	0.38
1.4	Q	26.35	41.3	59.3	105.5	165.0	302	422	660	1032	1473	2020	2635	4140	5920	8090	10530	13370	16500
	h	15.4	11.9	9.6	6.9	5.4	3.8	3.2	2.5	2.0	1.6	1.3	1.17	0.92	0.76	0.64	0.56	0.5	0.44
1.5	Q	28.25	44.2	63.6	113.0	176.5	345	452	707	1106	1590	2165	2825	4430	6350	8660	11300	14320	17680
	h	17.4	13.5	10.9	7.8	6.1	4.4	3.6	2.8	2.25	1.82	1.5	1.34	1.05	0.87	0.74	0.64	0.57	0.51
1.6	Q	30.1	47.1	67.8	121.0	188.5	368	483	753	1180	1695	2310	3010	4730	6770	9240	12055	5015270	18850
	h	19.6	15.3	12.4	8.9	6.9	4.9	4.1	3.2	2.55	2.05	1.7	1.53	1.18	0.99	0.84	0.72	0.64	0.58
1.7	Q	32.0	50.1	72.0	128.0	200.0	392	513	800	1253	1802	2455	3200	5020	7190	9820	12800	16230	20030
	h	21.9	17.2	13.9	10.0	7.8	5.4	4.6	3.6	2.85	2.3	1.95	1.7	1.33	1.11	0.94	0.81	0.73	0.65
1.8	Q	33.9	53.0	76.3	136.0	212.0	415	543	848	1327	1905	2600	3390	5320	7610	10380	13550	17200	21200
	h	24.2	19.1	15.4	11.1	8.7	6.0	5.1	4.0	3.15	2.6	2.2	1.9	1.48	1.24	1.05	0.91	0.81	0.73
1.9	Q	35.8	56.0	80.5	143.5	224.0	438	573	895	1400	2015	2740	3580	5610	8040	10960	14300	18150	22400
	h	26.8	21.0	17.0	12.3	9.6	6.8	5.6	4.4	3.45	2.85	2.45	2.1	1.64	1.38	1.17	1.01	0.9	0.81
2.0	Q	37.7	59.0	84.8	151.0	235.5	461	603	943	1475	2120	2885	3765	5910	8460	11540	15060	19100	23570
	h	29.6	23.0	18.6	13.4	10.5	7.5	6.2	4.9	3.8	3.17	2.7	2.33	1	1.52	1.3	1.12	0.99	0.89
2.1	Q	39.5	62.0	89.0	158.5	247.5	484	633	990	1548	225	3030	3955	6200	8890	12100	15810	20050	24750
	h	32.2	25.1	20.4	14.8	11.5	8.2	6.8	5.4	4.2	3.5	2.95	2.55	2.0	1.68	1.43	1.22	1.08	0.98
2.2	Q	41.5	64.9	93.2	176.0	259.0	507	663	1036	1620	2330	3175	4145	6500	9300	12700	16570	21000	25930
	h	35.0	27.3	22.3	16.2	12.5	9.1	7.4	5.9	4.6	3.85	3.25	2.8	22	1.85	1.56	1.34	1.18	1.08
2.3	Q	43.3	67.9	97.5	173.5	271.0	530	694	1082	1695	2440	3320	4330	6800	9730	13270	17310	21950	27100
	h	38.0	29.7	24.2	17.7	13.6	9.8	8.1	6.4	5.0	4.15	3.5	3.05	2.4	2.03	1.7	1.46	1.28	1.18
2.4	Q	45.2	70.8	101.5	181.0	282.5	553	724	1130	1770	2545	3460	4520	7090	10140	13850	18090	22900	28300
	h	42.1	32.1	26.2	19.1	14.7	10.6	8.8	6.9	5.45	4.55	3.8	3.3	2.62	2.21	1.85	1.58	1.38	1.28
2.5	Q	47.1	73.7	105.8	189.0	294.5	576	755	1178	1843	2650	3610	4710	7390	10570	14420	18820	23880	29450
	h	45.0	34.7	28.3	20.5	16.0	11.4	9.6	7.5	5.9	4.9	4.1	3.58	2.84	2.4	2.0	1.7	1.5	1.4
2.6	Q	49.0	76.6	110.0	196.0	306.0	599	785	1225	1915	2755	3755	4900	7680	11000	15000	19590	24820	30630
	h	48.3	37.3	30.4	22.2	17.2	12.3	10.4	8.1	6.35	5.25	4.4	3.85	3.07	2.59	2.17	1.84	1.62	1.51
2.7	Q	50.9	79.6	114.3	204.0	318.0	622	815	1271	1990	2860	3900	5090	7980	111410	15590	20340	25800	31820
	h	51.7	40.0	32.5	23.8	18.5	13.2	11.2	8.7	6.85	5.65	4.75	4.15	3.3	2.78	2.34	1.98	1.74	1.62
2.8	Q	52.7	82.6	118.5	211.5	330.0	645	845	1320	2060	2970	4040	5280	8270	11830	16160	21090	26730	33000
	h	55.2	42.5	34.8	25.5	19.9	14.0	12.0	9.3	7.35	6.05	5.10	4.45	3.56	2.98	2.51	2.13	1.88	1.74
2.9	Q	54.6	85.5	123.0	219.0	342.0	668	875	1365	2140	3075	4190	5460	8560	12250	16730	21480	27700	34200
	h	58.7	45.1	37.1	27.1	21.3	15.2	12.8	10.0	7.85	6.45	5.5	4.75	3.82	3.18	2.7	2.3	2.03	1.87
3.0	Q	56.5	88.5	127.0	226.5	354.0	691	905	1414	2210	3180	4330	5650	8850	12690	17310	22600	28650	35350
	h	62.9	47.9	39.6	28.8	22.6	16.3	13.6	10.7	8.4	6.9	5.9	5.1	4.1	3.4	2.9	2.5	2.2	2.0

HEAD LOSS

in cm of column of water in bends, gate valves, and foot valves

VELOCITY OF WATER IN m/s	SHARP EDGED BENDS					NORMAL BENDS					GATE VALVE	FOOT VALVE	NON-RETURN VALVE	HEAD LOSS ON EXIT FROM PIPES $V^2/2g$
														
	$\alpha = 30^\circ$	$\alpha = 40^\circ$	$\alpha = 60^\circ$	$\alpha = 80^\circ$	$\alpha = 90^\circ$	$\frac{d}{R} = 0,4$	$\frac{d}{R} = 0,6$	$\frac{d}{R} = 0,8$	$\frac{d}{R} = 1$	$\frac{d}{R} = 1,5$				
0,10	0,03	0,04	0,05	0,07	0,08	0,07	0,08	0,01	0,0155	0,027	0,03	30	30	0,05
0,15	0,06	0,73	0,1	0,14	0,17	0,016	0,019	0,024	0,033	0,06	0,033	31	31	0,12
0,2	0,11	0,13	0,18	0,26	0,31	0,028	0,033	0,04	0,059	0,11	0,058	31	31	0,21
0,25	0,17	0,21	0,28	0,4	0,48	0,044	0,052	0,063	0,091	0,17	0,09	31	31	0,32
0,3	0,25	0,3	0,41	0,6	0,7	0,063	0,074	0,09	0,13	0,25	0,13	31	31	0,46
0,35	0,33	0,4	0,54	0,8	0,93	0,085	0,10	0,12	0,18	0,33	0,18	31	31	0,62
0,4	0,43	0,52	0,71	1,0	1,2	0,11	0,13	0,16	0,23	0,43	0,23	32	31	0,82
0,5	0,67	0,81	1,1	1,6	1,9	0,18	0,21	0,26	0,37	0,67	0,37	33	32	1,27
0,6	0,97	1,2	1,6	2,3	2,8	0,25	0,29	0,36	0,52	0,97	0,52	34	32	1,84
0,7	1,35	1,65	2,2	3,2	3,9	0,34	0,40	0,48	0,70	1,35	0,7	35	32	2,5
0,8	1,7	2,1	2,8	4,0	4,8	0,45	0,53	0,64	0,93	1,7	0,95	36	33	3,3
0,9	2,2	2,7	6	5,2	6,2	0,57	0,67	0,82	1,18	2,2	1,2	37	34	4,2
1,0	2,7	3,3	4,5	6,4	7,6	0,7	0,82	1,0	1,45	2,7	1,45	38	35	5,1
1,5	6,0	7,3	10,0	14,0	17,0	1,6	1,9	2,3	3,3	6,0	3,3	47	40	11,5
2,0	11,0	14,0	18,0	26,0	31,0	2,8	3,3	4,0	5,8	11,0	5,8	61	48	20,4
2,5	17,0	21,0	28,0	40,0	48,0	4,4	5,2	6,3	9,1	17,0	9,1	78	58	32,0
3,0	25,0	30,0	41,0	60,0	70,0	6,3	7,4	9,0	13,0	25,0	13,0	100	71	46,0
3,5	33,0	40,0	55,0	78,0	93,0	8,5	10,0	12,0	18,0	33,0	18,0	123	85	62,0
4,0	43,0	52,0	70,0	100,0	120,0	11,0	13,0	16,0	23,0	42,0	23,0	150	100	82,0
4,5	55,0	67,0	90,0	130,0	160,0	14,0	21,0	26,0	37,0	55,0	37,0	190	120	103,0
5,0	67,0	82,0	110,0	160,0	190,0	18,0	29,0	36,0	52,0	67,0	52,0	220	140	127,0

Q = flow rate in l/min

v = velocity of water in metres per second

d = diameter of pipes in m metres

h = head loss in cm of water column for each metre of pipework, calculated according to the Lang formula:

$$h = \lambda \times \frac{100}{d} \times \frac{v^2}{2g} \quad \lambda = 0,02 + \frac{0,0018}{\sqrt{v \times d}}$$

The only loss in bends is that due to the contraction of the liquid stream when changing direction (the development of the curves must therefore be included in the length of the pipework); the head loss for gate valves has been determined through technical tests.

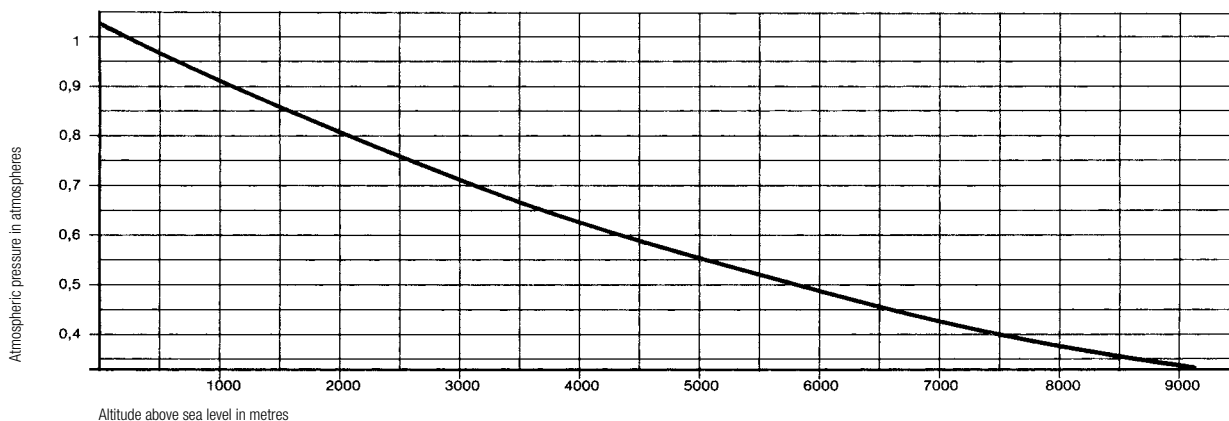
The head loss for gate valves and normal bends is equal to that of 5 m of straight pipework, while that of non-return valves is equal to 15 m.

The values given are for pipes with a completely smooth internal surface. In case of rough or scaled pipes, allowances must be made accordingly.

VAPOUR TENSION AND SPECIFIC WEIGHT OF WATER AS A FUNCTION OF TEMPERATURE

t °C	pv kg/cm ²	γ kg/dm ³	t °C	pv kg/cm ²	γ kg/dm ³	t °C	pv kg/cm ²	γ kg/dm ³	t °C	pv kg/cm ²	γ kg/dm ³
00	0.0062	0.9998	41	0.793	0.9917	82	0.5234	0.9705	170	008.076	0.8973
01	0.0067	0.9999	42	0.836	0.9913	83	0.5447	0.9698	175	009.101	0.8920
02	0.0072	0.9999	43	0.881	0.9909	84	0.5667	0.9693	180	010.225	0.8869
03	0.0077	1.0000	44	0.0928	0.9905	85	0.5897	0.9687	185	011.456	0.8814
04	0.0083	1.0000	45	0.0977	0.9900	86	0.6129	0.9680	190	012.800	0.8760
05	0.0089	1.0000	46	0.1028	0.9898	87	0.6372	0.9673	195	014.265	0.8703
06	0.0095	0.9999	47	0.1082	0.9883	88	0.6623	0.9667	200	015.857	0.8646
07	0.0102	0.9999	48	0.1138	0.9889	89	0.6882	0.9659	205	017.858	0.8587
08	0.0109	0.9998	49	0.1197	0.9885	90	0.7149	0.9653	210	019.456	0.8528
09	0.0117	0.9997	50	0.1258	0.9880	91	0.7425	0.9646	215	021.477	0.8465
10	0.0125	0.9996	51	0.1322	0.9876	92	0.7710	0.9640	220	023.659	0.8403
11	0.0134	0.9995	52	0.1388	0.9871	93	0.8004	0.9632	225	026.007	0.8339
12	0.0143	0.9994	53	0.1457	0.9866	94	0.8307	0.9625	230	028.531	0.8272
13	0.0153	0.9993	54	0.1530	0.9861	95	0.8619	0.9619	235	031.239	0.8206
14	0.0163	0.9992	55	0.1605	0.9857	96	0.8942	0.9611	240	034.140	0.8136
15	0.0174	0.9990	56	0.1683	0.9852	97	0.9271	0.9604	245	037.244	0.8064
16	0.0185	0.9989	57	0.1765	0.9847	98	0.9616	0.9596	250	040.560	0.7992
17	0.0197	0.9987	58	0.1850	0.9842	99	0.9969	0.9590	255	044.100	0.7918
18	0.0210	0.9985	59	0.1939	0.9836	100	1.0032	0.9583	260	047.870	0.7840
19	0.0224	0.9984	60	0.2031	0.9831	102	1.1092	0.9568	265	051.880	0.7759
20	0.0238	0.9982	61	0.2127	0.9826	104	1.1898	0.9554	270	056.140	0.7678
21	0.0253	0.9979	62	0.2227	0.9821	106	1.2751	0.9540	275	060.660	0.7593
22	0.0269	0.9977	63	0.2330	0.9816	108	1.6354	0.9525	280	065.460	0.7506
23	0.0286	0.9974	64	0.2438	0.9810	110	1.4609	0.9510	285	070.540	0.7416
24	0.0304	0.9972	65	0.2550	0.9804	112	1.5618	0.9495	290	075.920	0.7323
25	0.0323	0.9970	66	0.2666	0.9800	114	1.6684	0.9479	286	081.600	0.7227
26	0.0343	0.9966	67	0.2787	0.9794	116	1.7809	0.9464	300	087.610	0.7214
27	0.0363	0.9964	68	0.2912	0.9788	118	1.8995	0.9448	305	093.950	0.7017
28	0.0385	0.9961	69	0.3042	0.9782	120	2.0245	0.9431	310	100.640	0.6906
29	0.0408	0.9957	70	0.3177	0.9777	122	2.1561	0.9414	315	107.690	0.6793
30	0.0432	0.9955	71	0.3317	0.9771	124	2.2947	0.9398	320	115.130	0.6671
31	0.0458	0.9952	72	0.3463	0.9765	126	2.4404	0.9381	325	122.950	0.6540
32	0.0485	0.9949	73	0.3613	0.9759	128	2.5935	0.9365	330	131.180	0.6402
33	0.0513	0.9946	74	0.3869	0.9754	130	2.7544	0.9348	335	139.850	0.6257
34	0.0542	0.9942	75	0.3931	0.9748	135	3.1920	0.9305	340	148.960	0.6093
35	0.0573	0.9939	76	0.4098	0.9742	140	3.6850	0.9260	345	157.540	0.5910
36	0.0606	0.9934	77	0.4274	0.9737	145	4.2370	0.9216	350	168.630	0.5724
37	0.0640	0.9932	78	0.4451	0.9730	150	4.8540	0.9169	355	179.240	0.5512
38	0.0675	0.9928	79	0.4637	0.9724	155	5.5400	0.9121	360	190.420	0.5243
39	0.0713	0.9925	80	0.4829	0.9718	160	6.3020	0.9073	365	202.210	0.4926
40	0.0752	0.9921	81	0.5028	0.9712	165	7.1460	0.9023	370	214.680	0.4484

ATMOSPHERIC PRESSURE AT VARIOUS HEIGHTS



TECHNICAL APPENDIX

CENTRIFUGAL PUMPS

FLOW RATE OF WATER FROM NOZZLES AND FIRE HOSES IN l/s AS A FUNCTION OF THE PRESSURE MEASURED UPSTREAM THE NOZZLE, IN METRES OF COLUMN OF WATER.

Ø NOZZLE IN mm	PRESSURE in m.c.w.												
	4	6	8	10	12	14	16	18	20	22	24	26	28
1	0.0068	0.0083	0.0096	0.0107	0.0118	0.0127	0.0136	0.0144	0.0152	0.0159	0.0167	0.0174	0.018
2	0.273	0.0334	0.0386	0.0432	0.0473	0.0511	0.0546	0.0579	0.0611	0.064	0.0668	0.696	0.0722
3	0.614	0.0751	0.0868	0.097	0.1063	0.1148	0.1228	0.13	0.137	0.144	0.15	0.156	0.162
4	0.109	0.133	0.154	0.175	0.189	0.204	0.218	0.231	0.244	0.255	0.267	0.278	0.288
5	1.171	0.209	0.242	0.271	0.296	0.32	0.342	0.363	0.383	0.401	0.419	0.4336	0.453
6	0.246	0.301	0.348	0.389	0.426	0.455	0.492	0.522	0.55	0.577	0.603	0.627	0.652
7	0.334	0.408	0.472	0.527	0.578	0.625	0.667	0.708	0.747	0.783	0.817	0.851	0.883
8	0.436	0.534	0.616	0.689	0.755	0.815	0.871	0.925	0.975	1.022	1.067	1.11	1.152
9	0.553	0.677	0.782	0.875	0.958	1.035	1.107	1.172	1.236	1.297	1.355	1.41	1.461
10	0.684	0.836	0.966	1.08	1.183	1.27	1.368	1.448	1.523	1.6	1.672	1.742	1.808
11	0.83	1.017	1.173	1.313	1.439	1.555	1.66	1.76	1.855	1.99	2.03	2.117	2.196
12	0.982	1.2	1.387	1.55	1.7	1.87	1.964	2.08	2.19	2.3	2.4	2.5	2.59
13	1.154	1.412	1.63	1.825	2.0	2.16	2.31	2.45	2.58	2.7	2.83	2.94	3.05
14	1.337	1.635	1.89	2.113	2.313	2.5	2.67	2.834	2.99	3.135	3.27	3.41	2.538
15	1.535	1.88	2.17	2.417	2.66	2.87	3.07	3.25	3.43	3.6	3.76	3.91	4.06
16	1.742	2.132	2.464	2.757	3.02	3.26	3.486	3.7	3.9	4.08	4.27	4.45	4.62
17	1.97	2.413	2.787	3.119	3.417	3.686	3.947	4.18	4.41	4.62	4.83	58.025	5.21
18	2.21	2.703	3.125	3.499	3.83	4.13	4.42	4.68	4.94	5.18	5.42	5.64	5.85
20	2.73	3.34	3.86	4.32	4.73	5.11	5.46	5.78	6.11	6.4	6.78	6.96	7.23
22	3.298	4.04	4.66	5.22	5.72	6.17	6.75	7.0	7.48	7.74	8.07	8.4	8.8
25	4.265	5.22	6.02	6.74	7.38	7.87	8.52	9.04	9.53	9.99	10.42	10.85	11.25
26	4.6	5.64	6.5	7.27	7.97	8.61	9.2	9.76	10.28	10.69	11.27	11.71	12.16
28	5.36	6.56	7.56	8.46	9.28	10.2	10.7	11.36	11.9	12.55	13.12	13.64	14.09
32	6.97	8.55	9.85	11.02	12.08	13.05	13.93	14.8	15.6	16.7	17.2	17.79	18.44
35	8.358	10.23	11.8	13.2	14.45	15.6	16.7	17.7	18.68	19.59	20.43	21.26	22.09
45	13.8	16.9	19.5	21.82	23.9	25.84	27.6	29.3	30.9	32.39	33.8	35.2	26.5
55	20.3	25.2	28.5	32.6	35.7	38.6	41.2	44.0	46.1	48.3	50.5	52.6	54.5
65	28.5	34.8	40.2	45.0	49.3	53.4	56.9	60.5	63.6	66.6	69.7	72.6	75.4
75	38.3	46.9	54.2	60.6	66.4	71.7	76.6	81.4	85.6	90.0	93.9	97.7	101.4
85	49.4	60.5	69.7	77.0	85.5	92.4	98.7	104.7	110.3	115.7	121.0	125.0	130.5
95	61.5	75.4	87.0	97.4	106.5	115.2	123.0	130.5	137.6	143.3	150.8	157.0	162.8

Ø NOZZLE IN mm	PRESSURE in m.c.w.												
	4	6	8	10	12	14	16	18	20	22	24	26	28
1	0.0068	0.0083	0.0096	0.0107	0.0118	0.0127	0.0136	0.0144	0.0152	0.0159	0.0167	0.0174	0.018
2	0.273	0.0334	0.0386	0.0432	0.0473	0.0511	0.0546	0.0579	0.0611	0.064	0.0668	0.696	0.0722
3	0.614	0.0751	0.0868	0.097	0.1063	0.1148	0.1228	0.13	0.137	0.144	0.15	0.156	0.162
4	0.109	0.133	0.154	0.175	0.189	0.204	0.218	0.231	0.244	0.255	0.267	0.278	0.288
5	1.171	0.209	0.242	0.271	0.296	0.32	0.342	0.363	0.383	0.401	0.419	0.4336	0.453
6	0.246	0.301	0.348	0.389	0.426	0.455	0.492	0.522	0.55	0.577	0.603	0.627	0.652
7	0.334	0.408	0.472	0.527	0.578	0.625	0.667	0.708	0.747	0.783	0.817	0.851	0.883
8	0.436	0.534	0.616	0.689	0.755	0.815	0.871	0.925	0.975	1.022	1.067	1.11	1.152
9	0.553	0.677	0.782	0.875	0.958	1.035	1.107	1.172	1.236	1.297	1.355	1.41	1.461
10	0.684	0.836	0.966	1.08	1.183	1.27	1.368	1.448	1.523	1.6	1.672	1.742	1.808
11	0.83	1.017	1.173	1.313	1.439	1.555	1.66	1.76	1.855	1.99	2.03	2.117	2.196
12	0.982	1.2	1.387	1.55	1.7	1.87	1.964	2.08	2.19	2.3	2.4	2.5	2.59
13	1.154	1.412	1.63	1.825	2.0	2.16	2.31	2.45	2.58	2.7	2.83	2.94	3.05
14	1.337	1.635	1.89	2.113	2.313	2.5	2.67	2.834	2.99	3.135	3.27	3.41	2.538
15	1.535	1.88	2.17	2.417	2.66	2.87	3.07	3.25	3.43	3.6	3.76	3.91	4.06
16	1.742	2.132	2.464	2.757	3.02	3.26	3.486	3.7	3.9	4.08	4.27	4.45	4.62
17	1.97	2.413	2.787	3.119	3.417	3.686	3.947	4.18	4.41	4.62	4.83	58.025	5.21
18	2.21	2.703	3.125	3.499	3.83	4.13	4.42	4.68	4.94	5.18	5.42	5.64	5.85
20	2.73	3.34	3.86	4.32	4.73	5.11	5.46	5.78	6.11	6.4	6.78	6.96	7.23
22	3.298	4.04	4.66	5.22	5.72	6.17	6.75	7.0	7.48	7.74	8.07	8.4	8.8
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26	4.6	5.64	6.5	7.27	7.97	8.61	9.2	9.76	10.28	10.69	11.27	11.71	12.16
28	5.36	6.56	7.56	8.46	9.28	10.2	10.7	11.36	11.9	12.55	13.12	13.64	14.09
32	6.97	8.55	9.85	11.02	12.08	13.05	13.93	14.8	15.6	16.7	17.2	17.79	18.44
35	8.358	10.23	11.8	13.2	14.45	15.6	16.7	17.7	18.68	19.59	20.43	21.26	22.09
45	13.8	16.9	19.5	21.82	23.9	25.84	27.6	29.3	30.9	32.39	33.8	35.2	26.5
55	20.3	25.2	28.5	32.6	35.7	38.6	41.2	44.0	46.1	48.3	50.5	52.6	54.5
65	28.5	34.8	40.2	45.0	49.3	53.4	56.9	60.5	63.6	66.6	69.7	72.6	75.4
75	38.3	46.9	54.2	60.6	66.4	71.7	76.6	81.4	85.6	90.0	93.9	97.7	101.4
85	49.4	60.5	69.7	77.0	85.5	92.4	98.7	104.7	110.3	115.7	121.0	125.0	130.5
95	61.5	75.4	87.0	97.4	106.5	115.2	123.0	130.5	137.6	143.3	150.8	157.0	162.8

TECHNICAL APPENDIX

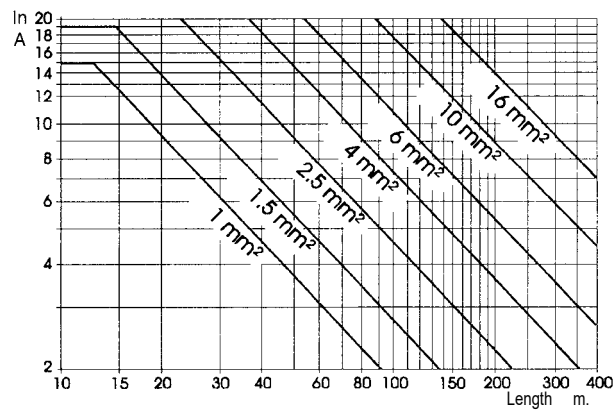
CENTRIFUGAL PUMPS

TABLE OF EQUIVALENT STANDARDS FOR MATERIALS

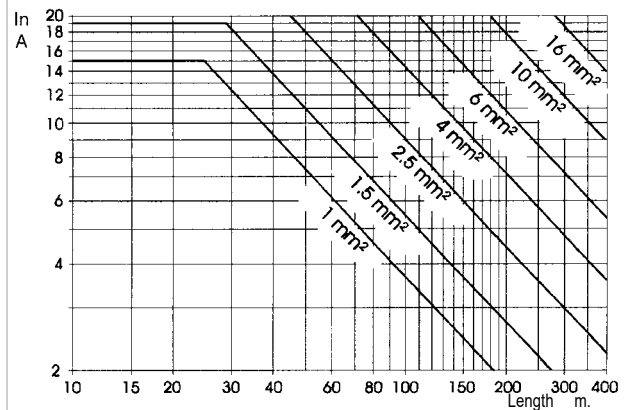
MATERIAL	UNI		DIN		ISO	AISI	ASTM
STEEL	X 30Cr13	UNI 6900/71	X 30Cr13	DIN 17440	-	AISI 420B	-
	X 12CrS13	UNI 6900/71	X 12CrS13	DIN 17440	-	AISI 416	-
	X 20Cr13	UNI 6900/71	X 20Cr13	DIN 17440	-	AISI 420A	S 42000 A 276
	X 10CrNiS1809	UNI 6900/71	X 10CrNiS1809	DIN 17440	XIII-17 ISO 683/XIII	AISI 303	S 30300 A 276
	X 5CrNi 1810	UNI 6900/71	X 5CrNi 1810	DIN 17440	XIII-11 ISO 683/XIII	AISI 304	S 30400 A 276
	X 10CrS17	UNI 6900/71	X 10CrS17	DIN 17440	XIII-84 ISO 683/XIII	AISI 430F	-
CAST IRON	G 20	UNI ISO 185	GG 20	DIN 1691	Grade 20 ISO R 185	-	Class 25 A 48
	G 25	UNI ISO 185	GG 25	DIN 1691	Grade 20 ISO R 185	-	Class 35 A 48
BRASS	G CuZn38Al 1Fe 1Mni	UNI 6138/68	-	-	-	-	B 30 C 86550
	P CuZn40 Pb2	UNI 5705	P CuZn40 Pb2	DIN 17660	-	-	C 37740
BRONZE	G CuSn12	UNI 7013/72	G CuSn12	DIN 17006	CuSn 12 ISO 1338	-	B 205 C 90700

CHART FOR THE SELECTION OF THE POWER INPUT CABLE IN RELATION TO LENGTH

Voltage 1 x 230 V ~ direct start
3 % voltage drop
Ambient temperature 30 °C



Voltage 3 x 400 V ~ direct start
3 % voltage drop
Ambient temperature 30 °C



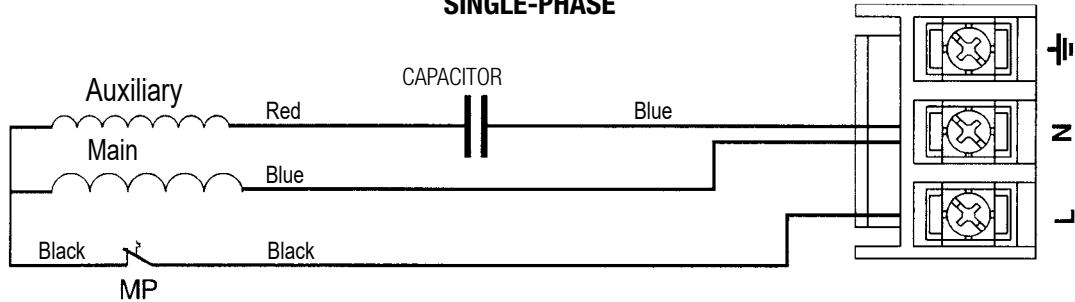
EXPLANATION OF PUMP DATA PLATES

No.	SERIAL NUMBER	-
Q	FLOW	m³/h
H	HEAD	m
H max	MAXIMUM HEAD	m
H min	MINIMUM HEAD	m
-	REVOLUTIONS PER MINUTE	1/min
-	ABSORBED POWER	kWass
-	NOMINAL DEVELOPED POWER	HP
-	VOLTAGE	V ~
-	FREQUENCY	Hz
-	CURRENT	A
-	PROTECTION CLASS (IEC)	IP
I.C.L.	INSULATION CLASS	µF Vc
-	CAPACITY AND VOLTAGE OF CAPACITOR	µF Vc
∇_m	MAXIMUM IMMERSION	m
Lwa	NOISE LEVEL	dB

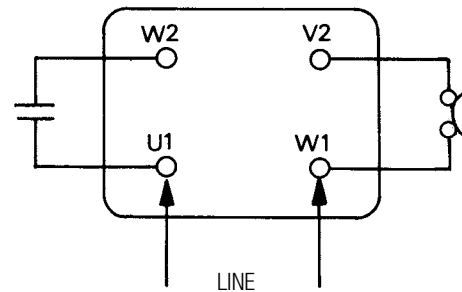
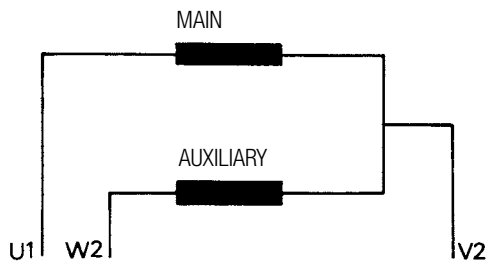
DAB WATER TECHNOLOGY					
DAB PUMPS S.p.A. Via Marco Polo, 14 35035 Mestrino (PD) - Italy					
N.		TF	S1		
Q	m³/h	H	m		HP
Hmax	m	Hmin	m	I.C.L. F	kW ass.
1/min	IP	Hz	µF	V~	MADE IN ITALY

WIRING DIAGRAMS FOR ELECTRIC MOTORS

SINGLE-PHASE



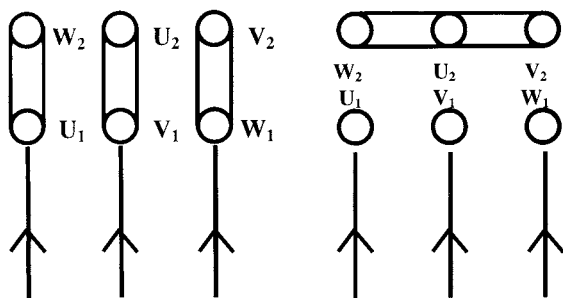
Overload protection inside the winding - MEC 63-71 M



Overload protection inside the terminal board - MEC 80 M

THREE-PHASE

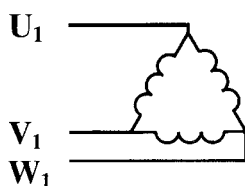
3 ~ 230/400 V



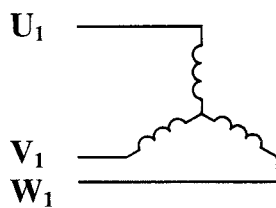
Power input line
230 V

400 V

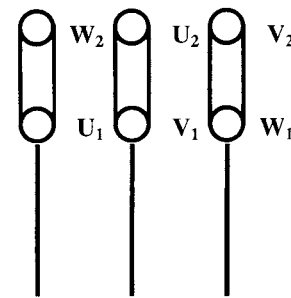
TRIANGLE connection



STAR connection

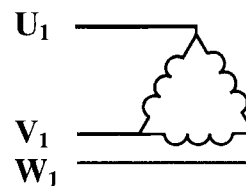


3 ~ 400 Δ V

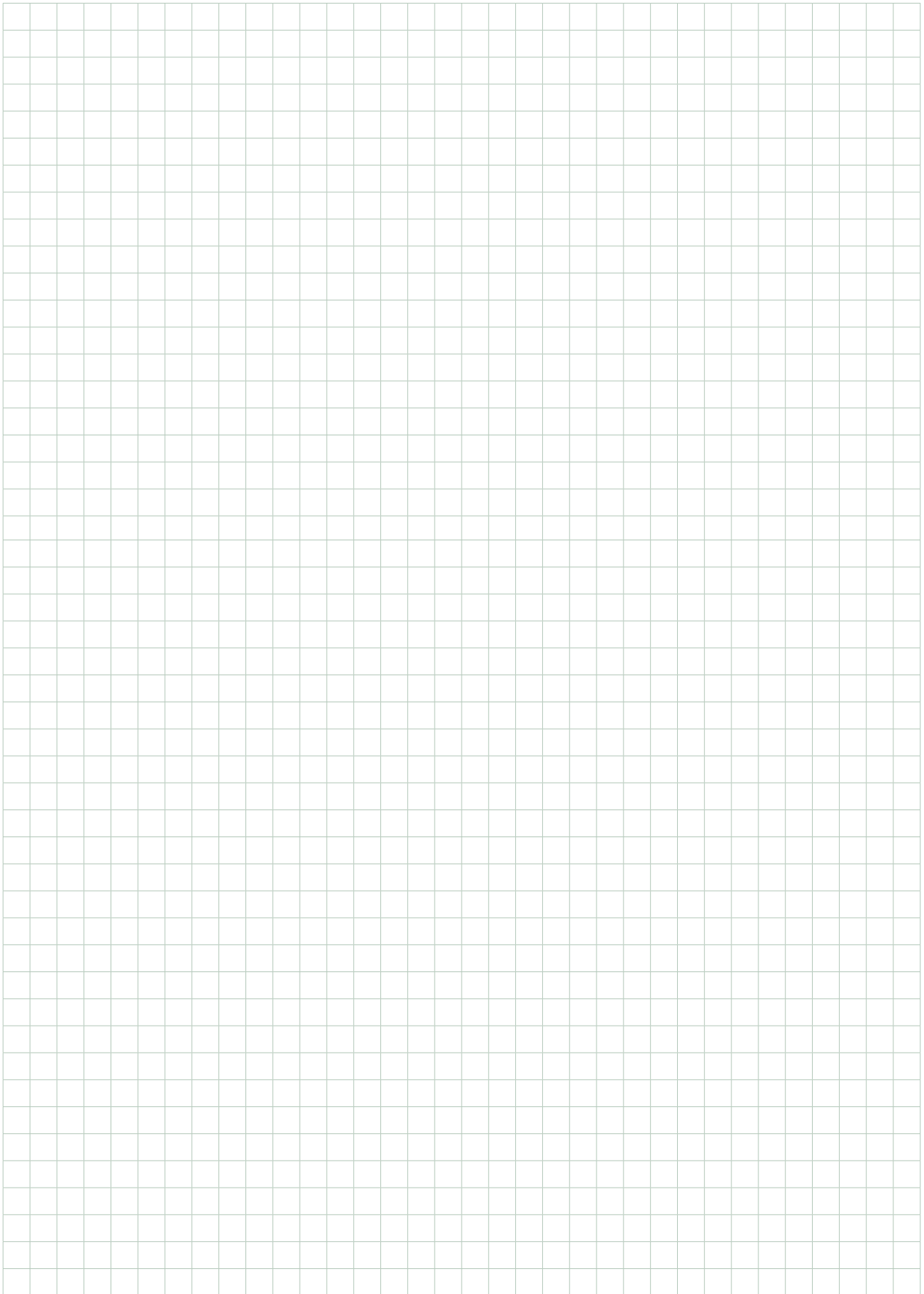


Power input line

DELTA connection



Clockwise rotation when viewed from the fan end





DAB
PUMPS SELECTOR

On-line product selection



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