

NB, NBE, NK, NKE

Single-stage end-suction pumps according to EN 733
50 Hz



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GRUNDFOS 

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1. Applications

Introduction

NB and NK are multipurpose pumps suitable for a variety of different applications demanding reliable and cost-efficient supply.

NB and NK pumps are used in five main fields of application:

- water supply
- industrial pressure boosting
- industrial liquid transfer
- HVAC
- irrigation.

Water supply

Besides general water supply in municipal and industrial waterworks, the NB and NK pumps are used for these specific applications:

- filtration and transfer at waterworks
- pressure boosting in mains
- pressure boosting in high-rise buildings, hotels, etc.
- pressure boosting in industrial buildings
- various swimming bath applications.

Industrial pressure boosting

Pressure boosting in:

- industrial washing and cleaning systems
- industrial wash-down systems
- vehicle washing tunnels
- fire-fighting systems.

Industrial liquid transfer

Liquid transfer in:

- cooling and air-conditioning systems (refrigerants)
- boiler-feed and condensate systems
- aquafarming
- industrial heating systems
- district heating plants.

HVAC

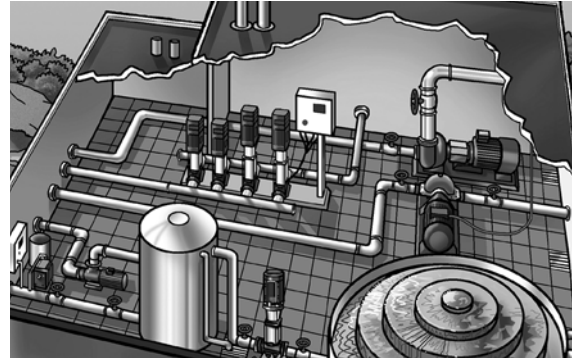
Liquid transfer in:

- heating systems
- ventilation systems
- air-conditioning systems.

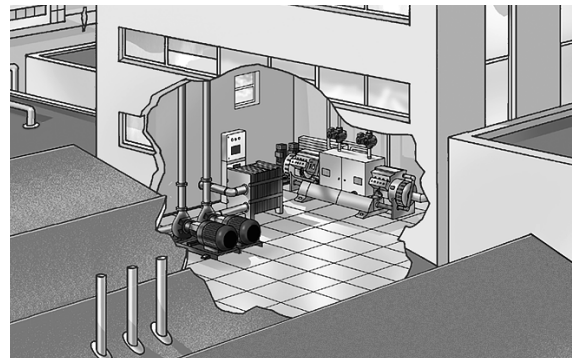
Irrigation

Irrigation covers these applications:

- field irrigation (flooding)
- sprinkler irrigation
- drip-feed irrigation.



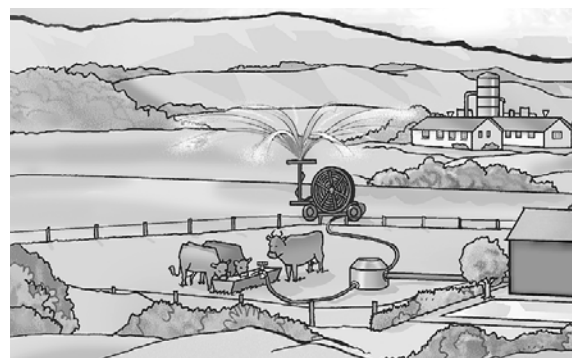
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2. Features and benefits

NB and NK pumps offer the following features and benefits:

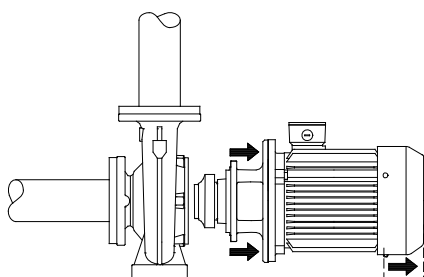
- The pumps are non-self-priming, single-stage, centrifugal volute pumps with axial suction port, radial discharge port and horizontal shaft.
- All pumps are according to ISO 5199.
- Suction and discharge flanges are according to EN 1092-2.
- Dimensions and rated performance are according to EN 733 (10 bar).
However, pumps with flange dimensions up to and including DN 150 are marked PN 16 and thus suitable for 16 bar operation.
- The mechanical shaft seal has dimensions according to EN 12756.
- The pumps offer flow rates from 2 to 1300 m³/h and heads from 2 to 160 m.
- The pumps can be equipped with an MGE motor (with integrated frequency converter) or to a Grundfos CUE external frequency converter.
- All pumps are statically balanced according to ISO 1940-1 class 6.3.
Impellers are hydraulically balanced.



GrA2519

Fig. 1 NB pump

- For NB pumps the back pull-out design enables removal of the motor, motor stool and impeller without disturbing the pump housing or pipework. Even the largest pumps can thus be serviced by a single person with a crane.



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Fig. 3 NB back pull-out design

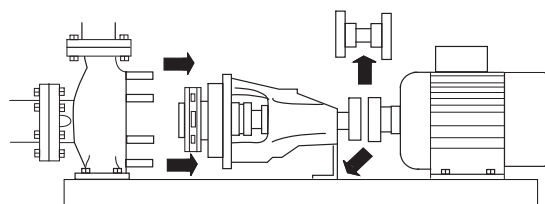
- The NB pump is close-coupled with a totally enclosed fan-cooled standard motor with main dimensions to IEC and DIN standards.
- For most of the NB pumps, a Grundfos-designed base frame is available. For more information, see page 285.



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Fig. 2 NK pump

- For NK pumps the back pull-out design enables removal of the motor, motor stool and impeller without disturbing the pump housing or pipework. Even the largest pumps can thus be serviced by a single person with a crane.



TM03 1004 0905

Fig. 4 NK back pull-out design

- The NK pump is long-coupled with a totally enclosed fan-cooled standard motor with main dimensions to IEC and DIN standards and mounting designation B3 (IM 1001).
- The NK pump and motor are mounted on a common steel base frame in accordance with EN 23661.

Pumps with standard motors

IE1 IE2 IE3

NB and NK pumps are fitted with standard motors with efficiency classes IE1, IE2 and IE3 for low-voltage three-phase motors.

The IE3 (premium efficiency) motors have a higher efficiency level than IE2 (high efficiency) and IE1 (standard efficiency) motors.

Pumps with electronic speed control

NB and NK pumps are equipped with a motor with built-in frequency converter and the necessary application software to achieve an all-in-one solution enabling electronic speed control. These pumps are called NBE and NKE.

Electronic speed control enables continuously variable control of motor speed which again enables adaptation of the performance to a given requirement.

The pump materials of NBE and NKE pumps are the same as those of the NB and NK pump range.

If a sensor is installed, NBE and NKE pumps allow for any of these configurations and control methods:

- constant pressure
- temperature control
- constant flow.

Why select an NBE, NKE pump?

Select an NBE, NKE pump if the following features are required:

- controlled operation
- constant pressure
- communication with the pump.

This furthermore gives these obvious advantages:

- energy savings
- increased comfort.

For further information on electronic speed control, see section 9. *Speed-controlled pumps*.

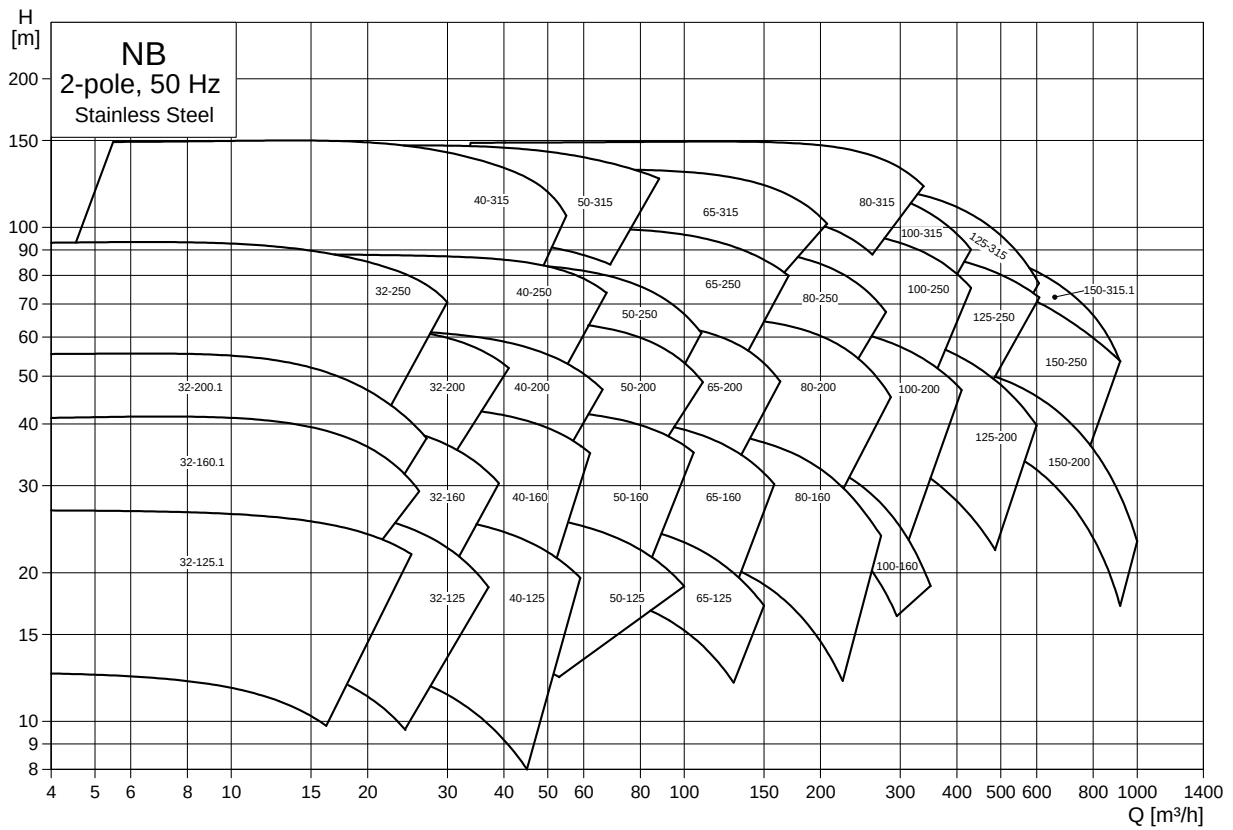
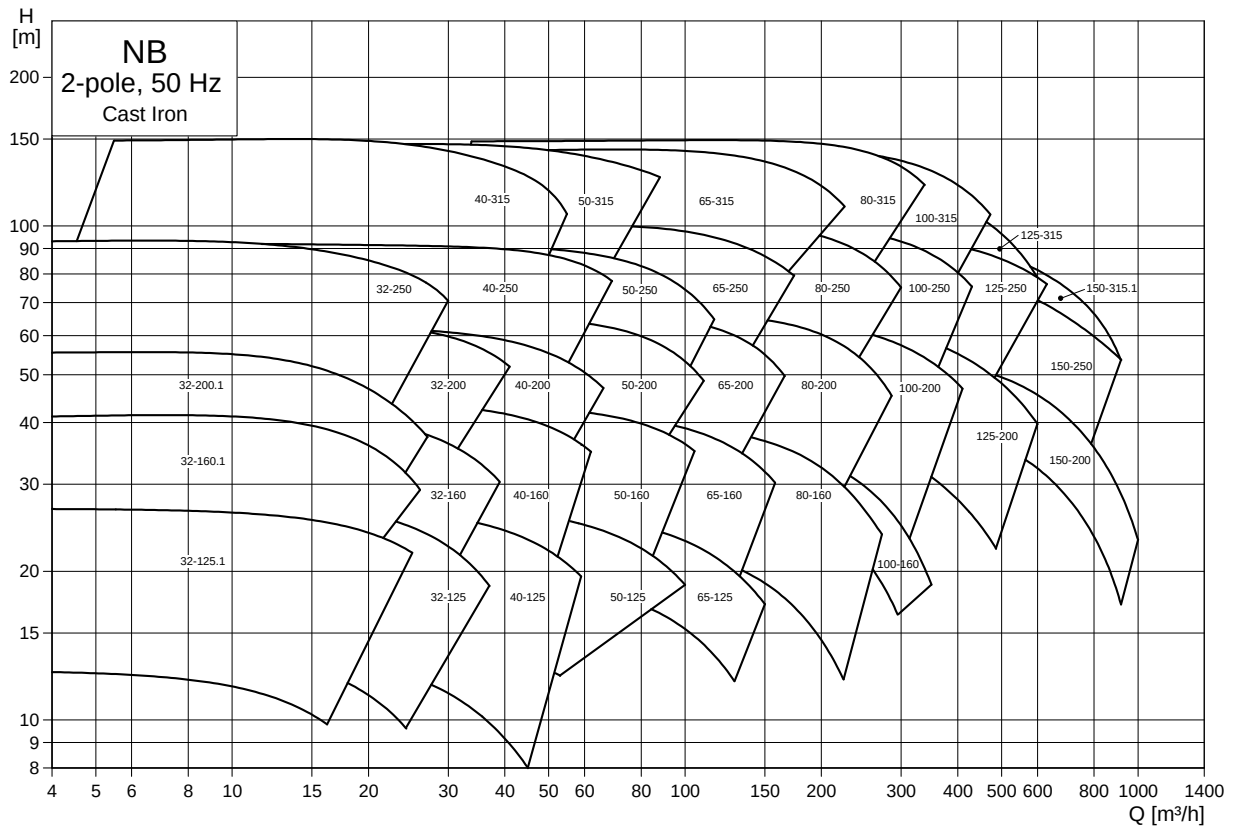
ATEX-approved pumps



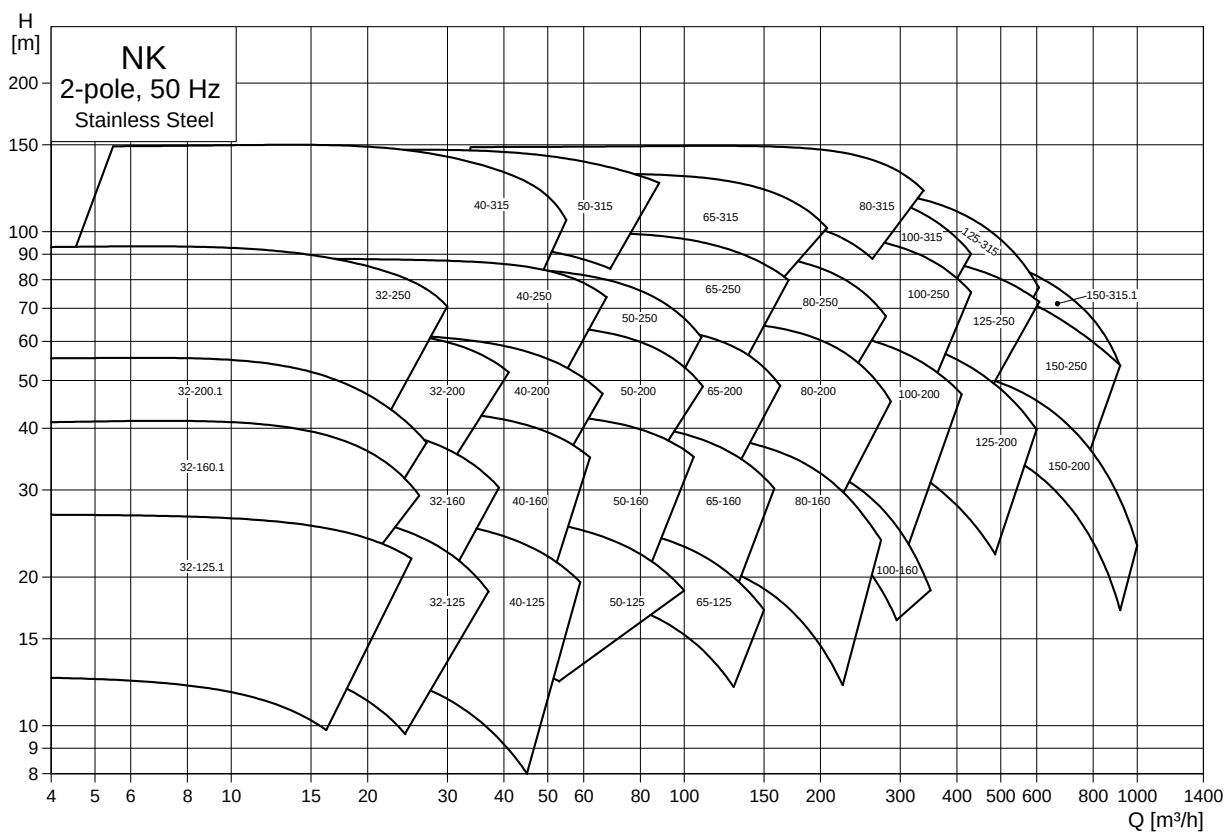
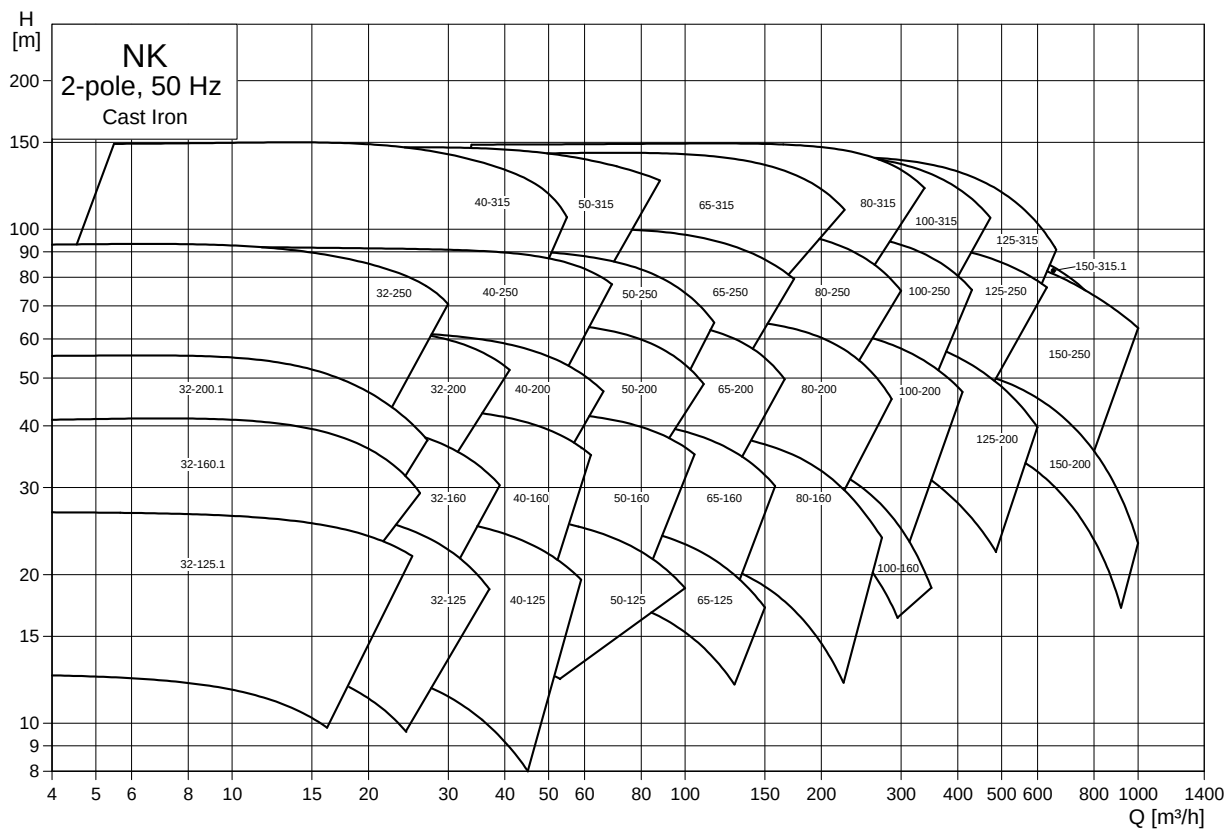
On request, Grundfos offers NB and NK pumps with ATEX-approval in accordance with Directive 94/9/EC (group II, category 2G/D and 3G/D). For more information on ATEX-approved pumps, see the data booklet "NB, NBG, NK, NKG, NBE, NBGE, NKE, NKGE - Custom-built pumps according to EN 733 and ISO 2858".

3. Performance range

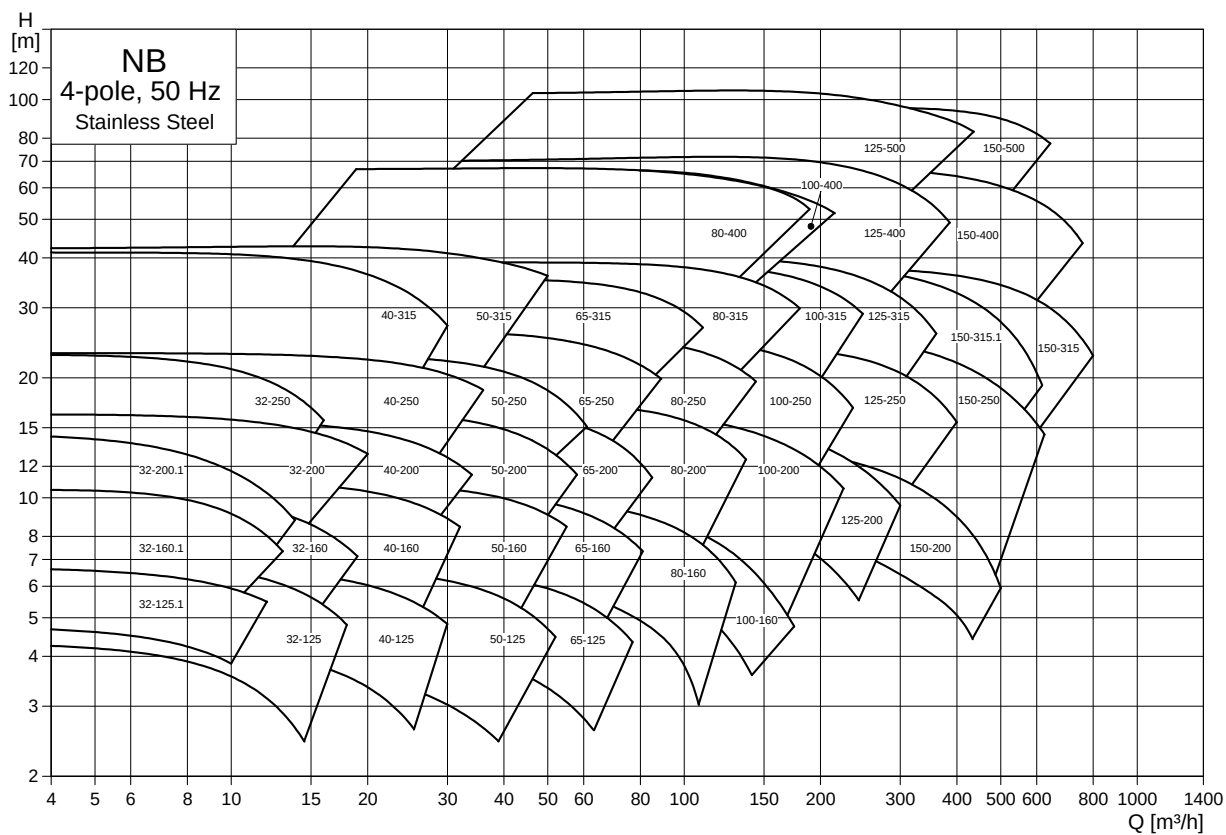
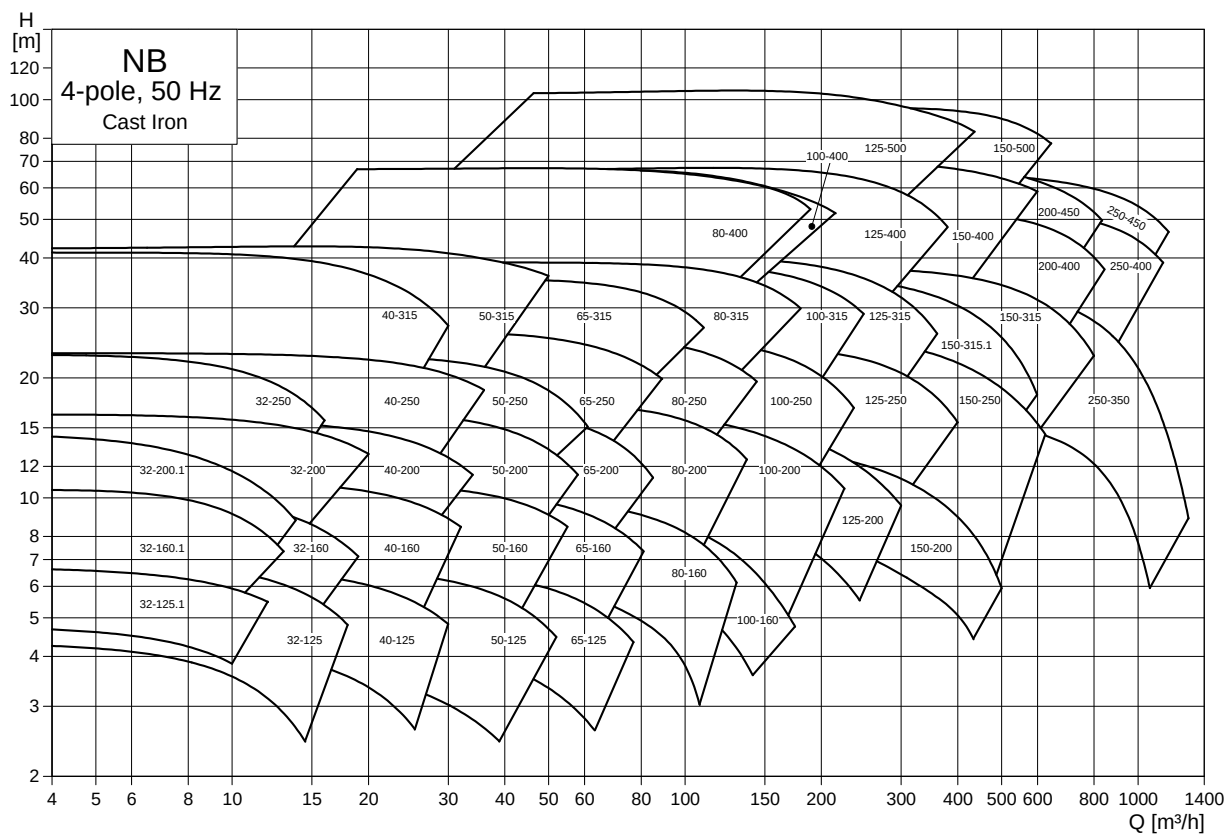
NB, 2-pole



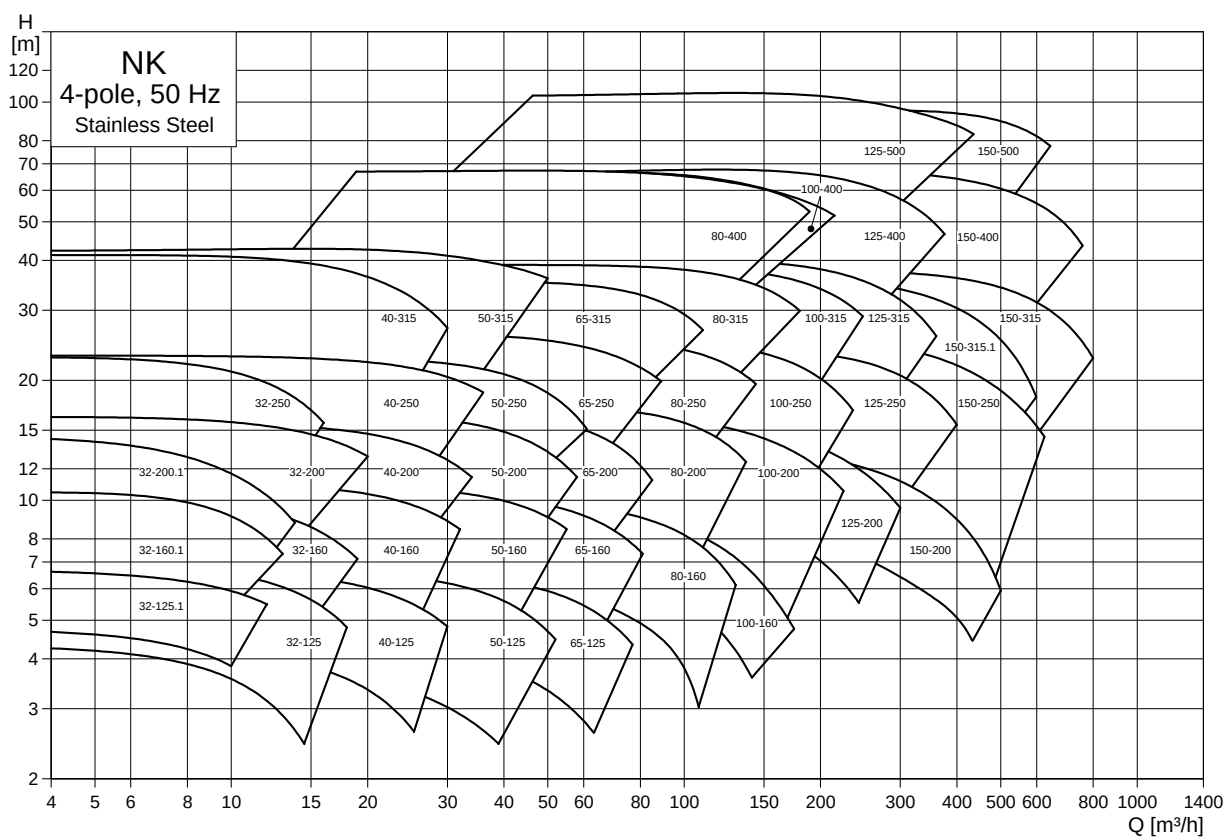
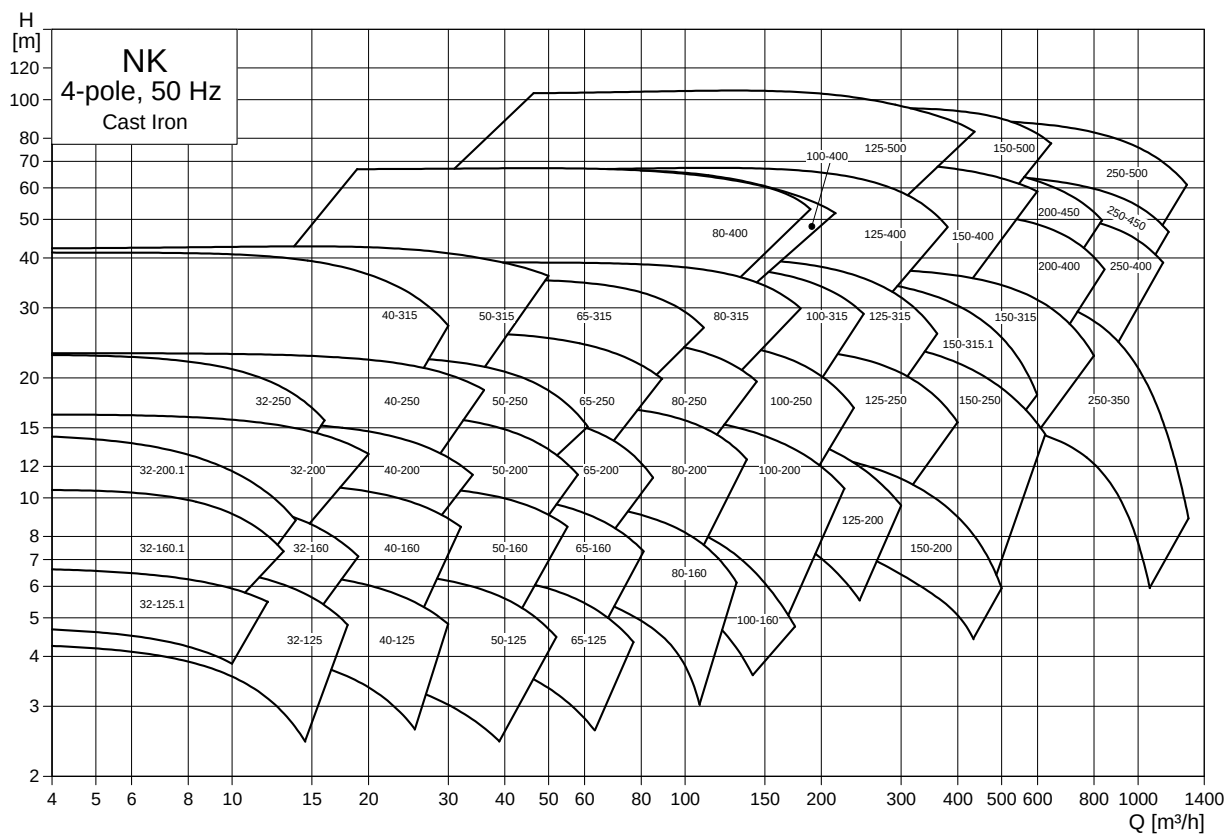
NK, 2-pole



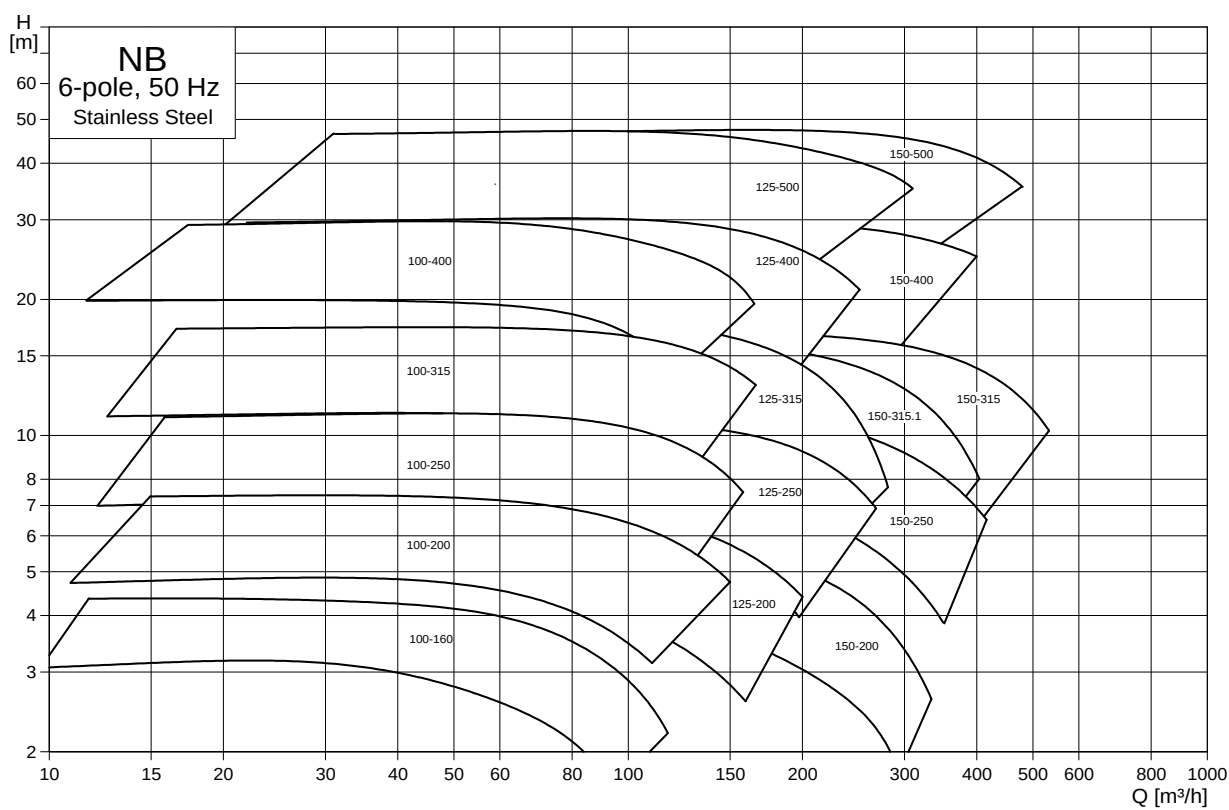
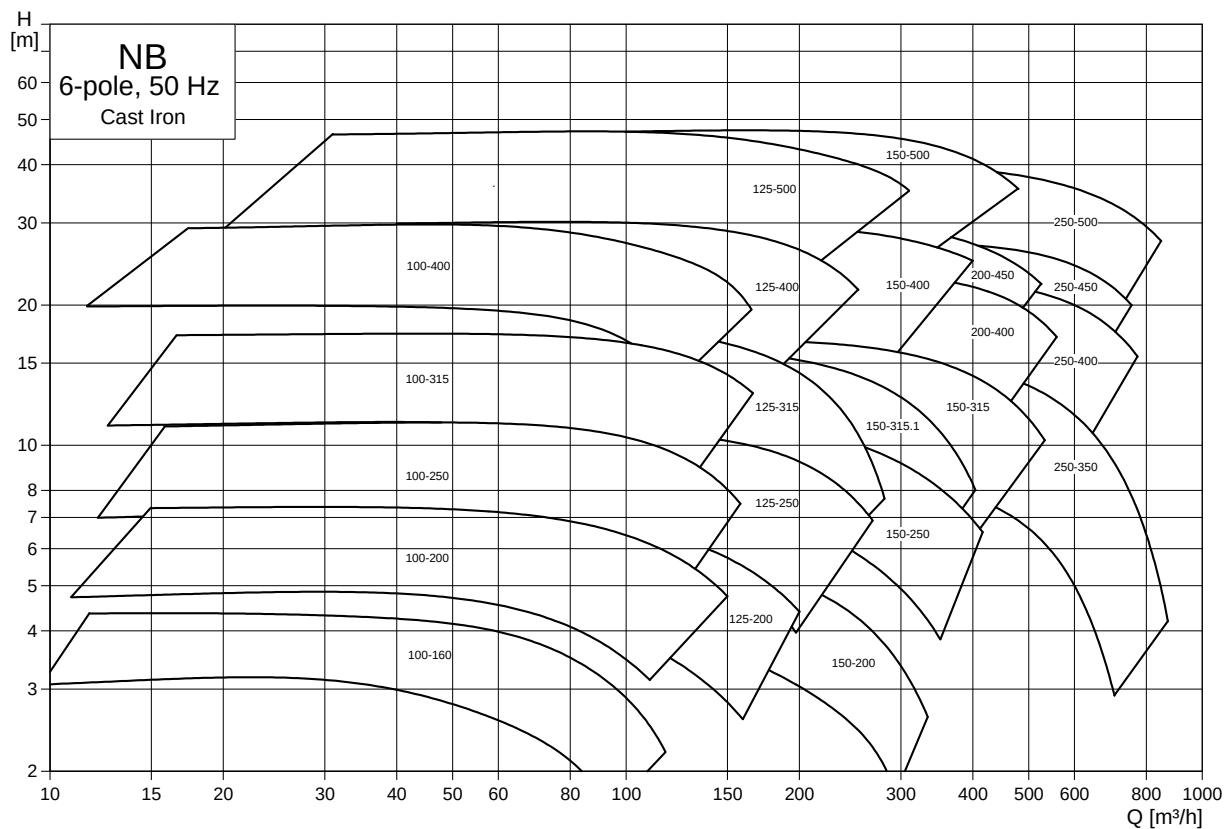
NB, 4-pole



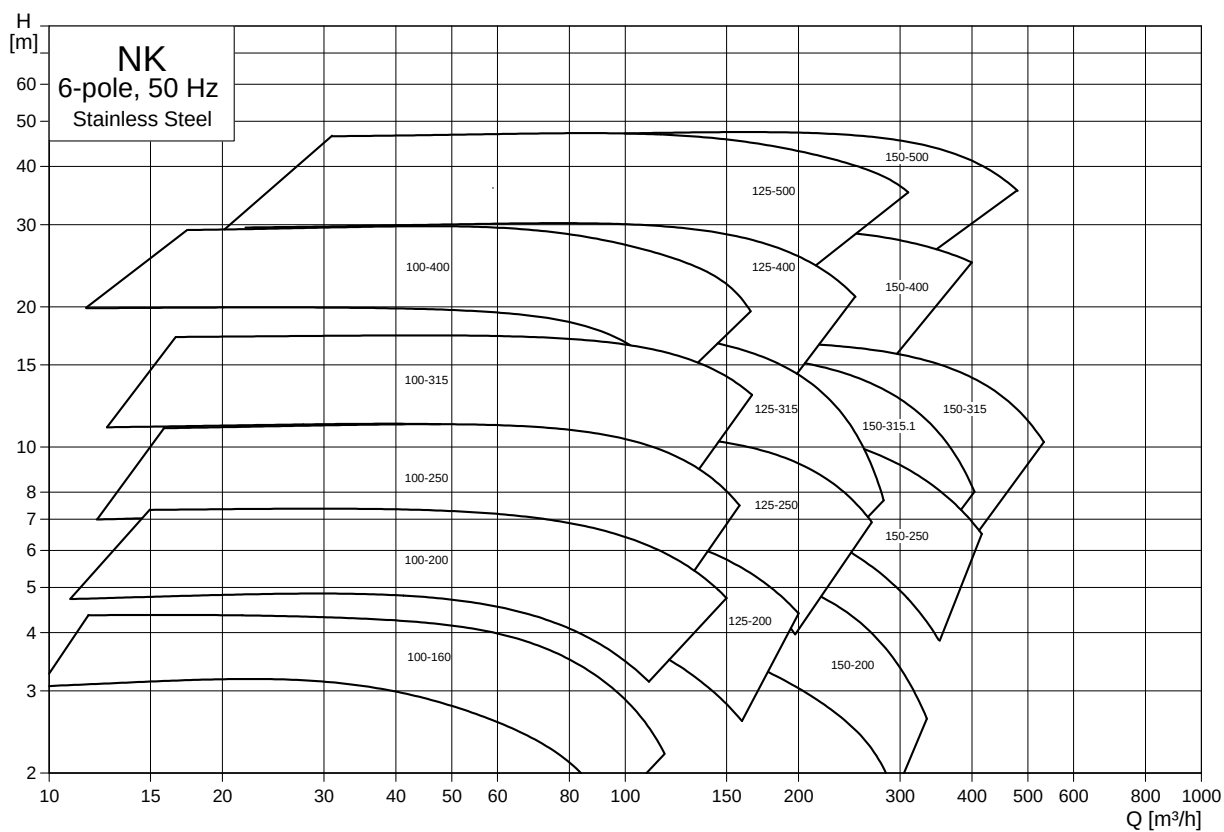
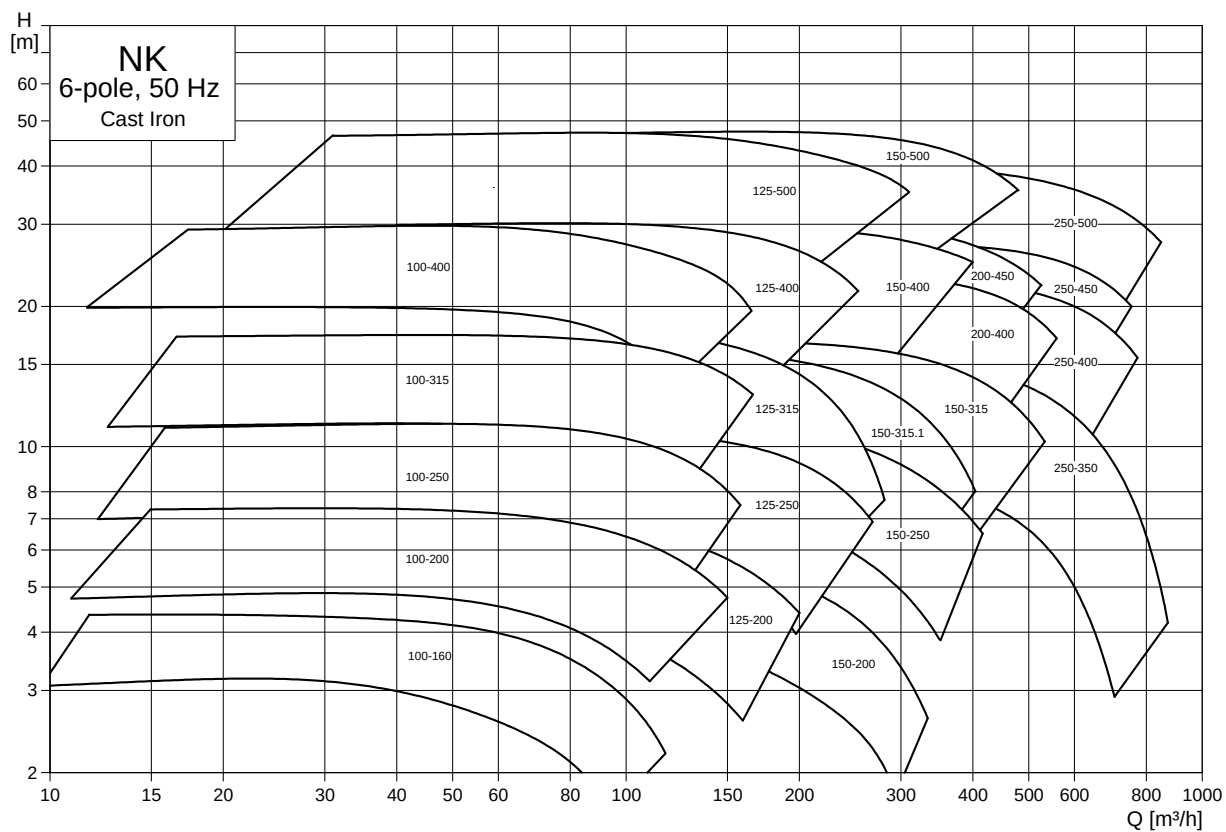
NK, 4-pole



NB, 6-pole



NK, 6-pole



4. Product range

The tables on the following pages show the complete product ranges of NB, NBE and NK, NKE pumps. The standard range has been combined on the basis of the following parameters:

Pump

- Pump housings have discharge flanges from DN 32 to DN 250.
- Some stainless steel pump sizes have loose flanges. All other have fixed flanges.
- NB pumps are available in mounting design A, B, C (C with base frame as an accessory) and F (F with base frame). For further information, see page 35.
- Support blocks: NB, NBG pumps combine with many motor frame sizes. In some cases support blocks or support rails are needed in order to level out the height difference between pump and motor. Also the size of the motor flange may necessitate the use of supports. See page 333. The Grundfos Product Configuration System makes it possible to configure the NB, NBG pump and the supports, if needed.

Motor

- Motors are for 50 Hz.
- NB and NK pumps are available with 2-, 4- and 6-pole motors; NBE and NKE with 2- and 4-pole motors.
- NB and NK pumps are available with IE2 and IE3 motors; for some regions also IE1 motors.
- Motors with power rating up to and including 4 kW are available for "low voltage"; motors as from 2.2 kW are available for "high voltage".
- Some pumps can be equipped with an MGE motor (with integrated frequency converter).
- Some pumps can be connected to a Grundfos CUE external frequency converter.
- All pumps with non-E-motor can be connected to an external frequency converter.

Custom-built pumps

See the data booklet "NB, NBG, NK, NKG, NBE, NBGE, NKE, NKGE - Custom-built pumps according to EN 733 and ISO 2858", or contact Grundfos.

NB, NK, 2-pole

50 Hz, 2-pole				NB pumps								NK pumps								Cast iron pump				Stainless steel pump				Shaft seal diameter [mm]																																																																																																															
Pump type	P2 [kW]	E-solution	Oversize shaft	Mounting design ¹⁾	Material code				Options				Material code				Options				Flange rating ²⁾		Flange standard		Flange rating ²⁾		Flange standard																																																																																																																
					A, B, C, D, S, T E, F, G, H K, L, M N, P, R	Double seal arrangement Cartridge seal - single/double Pump housing with feet Pump with base frame	A, B, C, D, S, T E, F, G, H K, L, M N, P, R	Stuffing box (only cast iron versions) Double seal arrangement Cartridge seal - single/double Standard bearing bracket Heavy-duty bearing bracket	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)	PN 10 PN 16 DIN (code F) ANSI (code G) 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10

50 Hz, 2-pole				NB pumps								NK pumps								Cast iron pump				Stainless steel pump				Shaft seal diameter [mm]		
Pump type	P2 [kW]	E-solution	Oversize shaft	Mounting design ¹⁾	Material code				Options				Material code				Options				Flange rating ²⁾		Flange standard		Flange rating ²⁾		Flange standard			
					A, B, C, D, S, T E, F, G, H	K, L, M N, P, R	Double seal arrangement Cartridge seal - single/double Pump housing with feet Pump with base frame	A, B, C, D, S, T E, F, G, H	K, L, M N, P, R	Stuffing box (only cast iron versions) Double seal arrangement Cartridge seal - single/double Standard bearing bracket Heavy-duty bearing bracket	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)																
															d5 [mm]															
32-250	5.5	MGE	-	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	7.5	MGE	-	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	11	MGE	-	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	15	MGE	-	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
40-125	1.5	MGE	-	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	2.2	MGE	-	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	3	MGE	-	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	4	MGE	-	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
40-160	5.5	MGE	-	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	4	MGE	-	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	5.5	MGE	-	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	7.5	MGE	-	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
40-200	11	MGE	-	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	5.5	MGE	-	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	7.5	MGE	-	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	11	MGE	-	B	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
40-250	15	MGE	-	B	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	11	MGE	-	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	15	MGE	-	B	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	18.5	MGE	-	B	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
40-315	22	MGE	-	B	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	30	CUE	-	B	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	22	MGE	-	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	32	38	
	30	CUE	-	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	32	38	
50-125	37	CUE	-	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	32	38	
	45	CUE	-	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	32	38	
	3	MGE	-	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	4	MGE	-	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
50-160	5.5	MGE	-	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	7.5	MGE	-	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	11	MGE	-	B	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	15	MGE	-	B	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
50-200	11	MGE	-	B	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	15	MGE	-	B	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	18.5	MGE	-	B	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	22	MGE	-	B	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
50-250	15	MGE	-	B	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	18.5	MGE	-	B	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	22	MGE	-	B	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	30	CUE	-	B	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
50-315	37	CUE	-	B	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	30	CUE	-	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	32	38	
	37	CUE	-	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	32	38	
	45	CUE	-	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	32	38	
65-125	55	CUE	-	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	32	38	
	4	MGE	-	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	5.5	MGE	-	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	7.5	MGE	-	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
65-160	11	MGE	-	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	7.5	MGE	-	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	11	MGE	-	B	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	
	15	MGE	-	B	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28	

50 Hz, 2-pole				NB pumps								NK pumps						Cast iron pump				Stainless steel pump				Shaft seal diameter [mm]			
Pump type	P2 [kW]	E-solution	Oversize shaft	Mounting design ¹⁾	Material code				Options				Material code		Options				Flange rating ²⁾	Flange standard	Flange rating ²⁾	Flange standard							
					A, B, C, D, S, T E, F, G, H	K, L, M N, P, R	Double seal arrangement Cartridge seal - single/double Pump housing with feet Pump with base frame	A, B, C, D, S, T E, F, G, H	K, L, M N, P, R	Stuffing box (only cast iron versions) Double seal arrangement Cartridge seal - single/double Standard bearing bracket Heavy-duty bearing bracket	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)																	
65-200	11	MGE	-	B	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	F	F	•	-	-	24	28	
	15	MGE	-	B	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	F	F	•	-	-	24	28	
	18.5	MGE	-	B	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	F	F	•	-	-	24	28	
	22	MGE	-	B	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	F	F	•	-	-	24	28	
	30	CUE	-	B	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	F	F	•	-	-	24	28	
65-250	37	CUE	-	B	•	-	-	-	-	•	•	-	-	•	•	-	F	F	•	-	-	-	-	-	-	-	-	24	28
	30	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	F	F	•	-	-	32	38	
	37	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	F	F	•	-	-	32	38	
	45	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	F	F	•	-	-	32	38	
	55	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	F	F	•	-	-	32	38	
65-315	75	CUE	-	C	•	-	-	-	-	•	•	-	-	•	•	-	F	F	•	-	-	-	-	-	-	-	-	32	38
	55	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	F	F	•	-	-	32	38	
	75	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	F	F	•	-	-	32	38	
	90	CUE	-	C	•	-	-	•	-	-	•	•	-	•	•	-	F	F	•	-	-	F	F	•	-	-	32	38	
	110	CUE	-	C	•	-	-	-	-	•	•	-	-	•	•	-	F	F	•	-	-	-	-	-	-	-	32	38	
80-160	11	MGE	-	B	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	F	F	•	-	-	24	28	
	15	MGE	-	B	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	F	F	•	-	-	24	28	
	18.5	MGE	-	B	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	F	F	•	-	-	24	28	
	22	MGE	-	B	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	F	F	•	-	-	24	28	
	30	CUE	-	B	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	F	F	•	-	-	24	28	
80-200	22	MGE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	F	F	•	-	-	32	38	
	30	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	F	F	•	-	-	32	38	
	37	CUE	-	C	•	-	•	•	-	-	•	•	-	•	•	-	F	F	•	-	-	F	F	•	-	-	32	38	
	45	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	F	F	•	-	-	32	38	
	55	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	F	F	•	-	-	32	38	
80-250	45	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	F	F	•	-	-	32	38	
	55	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	F	F	•	-	-	32	38	
	75	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	F	F	•	-	-	32	38	
	90	CUE	-	C	•	-	-	-	-	•	•	-	-	•	•	-	F	F	•	-	-	-	-	-	-	-	32	38	
	90	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	F	F	•	-	-	32	38	
80-315	110	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	F	F	•	-	-	32	38	
	132	CUE	-	C	•	-	•	-	-	-	•	•	-	•	•	-	F	F	•	-	-	F	F	•	-	-	32	38	
	160	CUE	•	C	•	-	•	-	-	-	•	•	-	•	•	-	F	F	•	-	-	F	F	•	-	-	42	48	
	22	MGE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	L	L	•	-	-	24	28	
	30	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	L	L	•	-	-	24	28	
100-160	37	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	L	L	•	-	-	24	28	
	30	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	L	L	•	-	-	32	38	
	37	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	L	L	•	-	-	32	38	
	45	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	L	L	•	-	-	32	38	
	55	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	L	L	•	-	-	32	38	
100-200	75	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	L	L	•	-	-	32	38	
	55	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	L	L	•	-	-	32	38	
	75	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	L	L	•	-	-	32	38	
	90	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	L	L	•	-	-	32	38	
	110	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	L	L	•	-	-	32	38	
100-250	132	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	L	L	•	-	-	32	38	
	110	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	L	L	•	-	-	32	38	
	132	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	L	L	•	-	-	32	38	
	160	CUE	•	C	•	-	•	-	-	-	•	•	-	•	•	-	F	F	•	-	-	L	L	•	-	-	42	48	
	200	CUE	•	C	•	-	-	-	-	•	•	-	•	•	•	-	F	F	•	-	-	-	-	-	-	-	42	48	
125-200	45	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	L	L	•	-	-	32	38	
	55	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	L	L	•	-	-	32	38	
	75	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	L	L	•	-	-	32	38	
	90	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	L	L	•	-	-	32	38	
	110	CUE	-	C	•	-	•	•	-	-	•	•	•	•	•	-	F	F	•	-	-	L	L	•	-	-	32	38	

50 Hz, 2-pole				NB pumps				NK pumps				Cast iron pump		Stainless steel pump						
Pump type	P2 [kW]	E-solution	Oversize shaft	Mounting design ¹⁾	Material code		Options		Material code		Options		Flange rating ²⁾	Flange standard	Flange rating ²⁾	Flange standard	d5 [mm]	Shaft seal diameter [mm]		
					A, B, C, D, S, T E, F, G, H K, L, M N, P, R	Double seal arrangement Cartridge seal - single/double Pump housing with feet Pump with base frame	A, B, C, D, S, T E, F, G, H K, L, M N, P, R	Stuffing box (only cast iron versions) Double seal arrangement Cartridge seal - single/double Standard bearing bracket Heavy-duty bearing bracket	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)										
125-250	90	CUE	•	C	•	-	•	•	-	•	•	•	-	F	F	•	-	-	42 48	
	110	CUE	•	C	•	-	•	•	-	•	•	•	-	F	F	•	-	-	42 48	
	132	CUE	•	C	•	-	•	•	-	•	•	•	-	F	F	•	-	-	42 48	
	160	CUE	•	C	•	-	•	•	-	•	•	•	-	F	F	•	-	-	42 48	
	200	CUE	•	C	•	-	-	-	•	•	-	-	•	-	F	F	•	-	-	42 48
125-315	132	CUE	-	C	•	-	•	•	-	•	•	•	-	F	F	•	-	-	42 48	
	160	CUE	-	C	•	-	•	•	-	•	•	•	-	F	F	•	-	-	42 48	
	200	CUE	-	C	•	-	-	-	•	•	-	-	•	-	F	F	•	-	-	42 48
	250	CUE	-	-	-	-	-	-	•	•	-	-	•	-	F	F	•	-	-	42 48
150-200	75	CUE	-	C	•	-	•	•	-	•	•	•	-	F	-	•	-	-	32 38	
	90	CUE	-	C	•	-	•	•	-	•	•	•	-	F	-	•	-	-	32 38	
	110	CUE	-	C	•	-	•	•	-	•	•	•	-	F	-	•	-	-	32 38	
150-250	132	CUE	-	C	•	-	•	•	-	•	•	•	-	F	-	•	-	-	42 48	
	160	CUE	-	C	•	-	•	•	-	•	•	•	-	F	-	•	-	-	42 48	
	200	CUE	-	C	•	-	•	-	•	•	-	-	•	-	F	-	•	-	42 48	
	250	CUE	-	-	-	-	-	-	•	•	-	-	•	-	F	-	•	-	-	42 48
150-315.1	160	CUE	-	C	•	-	•	•	-	•	•	•	-	F	-	•	-	-	42 48	
	200	CUE	-	C	•	-	•	•	-	•	•	•	-	F	-	•	-	-	42 48	

1) For information about mounting designs, see page 35.

2) F = fixed flange. L = loose flange.

NB, NK, 4-pole

50 Hz, 4-pole				NB pumps								NK pumps								Cast iron pump				Stainless steel pump				Shaft seal diameter [mm]				
Pump type	P2 [kW]	E-solution	Oversize shaft	Mounting design ¹⁾	Material code				Options				Material code				Options				Flange rating ²⁾		Flange standard		Flange rating ²⁾		Flange standard					
					A, B, C, D, S, T E, F, G, H	K, L, M N, P, R	Double seal arrangement Cartridge seal - single/double Pump housing with feet Pump with base frame					A, B, C, D, S, T E, F, G, H	K, L, M N, P, R	Stuffing box (only cast iron versions) Double seal arrangement Cartridge seal - single/double Standard bearing bracket Heavy-duty bearing bracket					PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)					PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)								
32-125.1	0.25	-	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	0.37	-	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
32-125	0.25	-	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	0.37	-	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
32-160.1	0.25	-	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	0.37	-	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	0.55	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
32-160	0.25	-	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	0.37	-	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	0.55	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	0.75	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
32-200.1	0.37	-	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	0.55	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	0.75	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
32-200	0.55	-	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	0.75	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	1.1	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	1.5	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
32-250	0.75	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	1.1	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	1.5	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	2.2	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
40-125	0.25	-	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	0.37	-	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	0.55	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
40-160	0.37	-	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	0.55	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	0.75	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	1.1	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
40-200	0.75	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	1.1	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	1.5	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	2.2	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
40-250	1.5	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	2.2	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	3	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
40-315	3	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	32	38
	4	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	32	38
	5.5	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	32	38
	7.5	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	32	38
50-125	0.37	-	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	0.55	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	0.75	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	1.1	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
50-160	0.55	-	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	0.75	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	1.1	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	1.5	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	2.2	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
50-200	1.1	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	1.5	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	2.2	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28
	3	MGE	-	A	•	•	•	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	24	28

50 Hz, 4-pole				NB pumps				NK pumps				Cast iron pump		Stainless steel pump				
Pump type	P2 [kW]	E-solution	Oversize shaft	Mounting design ¹⁾	Material code		Options	Material code		Options		Flange rating ²⁾	Flange standard	Flange rating ²⁾	Flange standard			
					A, B, C, D, S, T E, F, G, H	K, L, M N, P, R	Double seal arrangement Cartridge seal - single/double Pump housing with feet Pump with base frame	A, B, C, D, S, T E, F, G, H	K, L, M N, P, R	Stuffing box (only cast iron versions) Double seal arrangement Cartridge seal - single/double Standard bearing bracket Heavy-duty bearing bracket	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)	d5 [mm]	Shaft seal diameter [mm]				
50-250	2.2	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	F	F	24 28
	3	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	F	F	24 28
	4	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	F	F	24 28
50-315	4	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	F	F	32 38
	5.5	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	F	F	32 38
	7.5	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	F	F	32 38
65-125	11	MGE	-	C	•	•	•	•	•	•	•	F	F	•	•	F	F	32 38
	0.55	-	-	A	•	•	•	•	•	•	•	F	F	•	•	F	F	24 28
	0.75	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	F	F	24 28
65-160	1.1	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	F	F	24 28
	1.5	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	F	F	24 28
	2.2	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	F	F	24 28
65-200	1.5	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	F	F	24 28
	2.2	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	F	F	24 28
	3	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	F	F	24 28
65-250	4	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	F	F	24 28
	3	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	F	F	32 38
	4	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	F	F	32 38
65-315	5.5	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	F	F	32 38
	7.5	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	F	F	32 38
	11	MGE	-	C	•	•	•	•	•	•	•	F	F	•	•	F	F	32 38
80-160	15	MGE	-	C	•	•	•	•	•	•	•	F	F	•	•	F	F	32 38
	1.5	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	F	F	24 28
	2.2	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	F	F	24 28
80-200	3	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	F	F	24 28
	4	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	F	F	24 28
	2.2	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	F	F	32 38
80-250	3	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	F	F	32 38
	4	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	F	F	32 38
	5.5	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	F	F	32 38
80-315	7.5	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	F	F	32 38
	11	MGE	-	C	•	•	•	•	•	•	•	F	F	•	•	F	F	32 38
	15	MGE	-	C	•	•	•	•	•	•	•	F	F	•	•	F	F	32 38
80-400	18.5	CUE	-	C	•	•	•	•	•	•	•	F	F	•	•	F	F	32 38
	22	CUE	-	C	•	•	•	•	•	•	•	F	F	•	•	F	F	32 38
	18.5	CUE	-	C	•	•	•	•	•	•	•	F	F	•	•	F	F	42 48
100-160	22	CUE	-	C	•	•	•	•	•	•	•	F	F	•	•	F	F	42 48
	30	CUE	-	C	•	•	•	•	•	•	•	F	F	•	•	F	F	42 48
	37	CUE	-	C	•	•	•	•	•	•	•	F	F	•	•	F	F	42 48
100-200	45	CUE	-	C	•	•	•	•	•	•	•	F	F	•	•	F	F	42 48
	2.2	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	L	L	24 28
	3	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	L	L	24 28
100-250	4	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	L	L	24 28
	4	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	L	L	32 38
	5.5	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	L	L	32 38
100-315	7.5	MGE	-	A	•	•	•	•	•	•	•	F	F	•	•	L	L	32 38
	11	MGE	-	C	•	•	•	•	•	•	•	F	F	•	•	L	L	32 38

50 Hz, 4-pole				NB pumps								NK pumps								Cast iron pump				Stainless steel pump				Shaft seal diameter [mm]		
Pump type	P2 [kW]	E-solution	Oversize shaft Mounting design ¹⁾	Material code				Options				Material code				Options				Flange rating ²⁾		Flange standard		Flange rating ²⁾		Flange standard				
				A, B, C, D, S, T E, F, G, H	K, L, M	N, P, R	Double seal arrangement Cartridge seal - single/double Pump housing with feet Pump with base frame	A, B, C, D, S, T E, F, G, H	K, L, M	N, P, R	Stuffing box (only cast iron versions) Double seal arrangement Cartridge seal - single/double Standard bearing bracket Heavy-duty bearing bracket	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)	d5 [mm]	Shaft seal diameter [mm]													
100-250	7.5	MGE	-	A	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	32	38
	11	MGE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	32	38
	15	MGE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	32	38
	18.5	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	32	38
100-315	15	MGE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	32	38
	18.5	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	32	38
	22	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	32	38
	30	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	32	38
100-400	22	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	42	48
	30	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	42	48
	37	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	42	48
	45	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	42	48
125-200	55	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	42	48
	5.5	MGE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	32	38
	7.5	MGE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	32	38
	11	MGE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	32	38
125-250	15	MGE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	32	38
	11	MGE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	32	38
	15	MGE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	32	38
	18.5	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	32	38
125-315	22	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	32	38
	30	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	32	38
	37	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	42	48
	45	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	42	48
125-400	30	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	42	48
	37	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	42	48
	45	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	42	48
	55	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	42	48
125-500	75	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	42	48
	90	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	42	48
	110	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	60	60
	132	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	60	60
150-200	160	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	F	•	-	-	L	L	•	-	-	60	60
	7.5	MGE	-	A	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	-	•	-	-	L	L	•	-	-	32	38
	11	MGE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	-	•	-	-	L	L	•	-	-	32	38
	15	MGE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	-	•	-	-	L	L	•	-	-	32	38
150-250	18.5	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	-	•	-	-	L	L	•	-	-	42	48
	22	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	-	•	-	-	L	L	•	-	-	42	48
	30	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	-	•	-	-	L	L	•	-	-	42	48
	37	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	-	•	-	-	L	L	•	-	-	42	48
150-315.1	45	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	-	•	-	-	L	L	•	-	-	42	48
	15	MGE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	-	•	-	-	L	L	•	-	-	42	48
	18.5	MGE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	-	•	-	-	L	L	•	-	-	42	48
	22	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	-	•	-	-	L	L	•	-	-	42	48
150-315.1	30	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	-	•	-	-	L	L	•	-	-	42	48
	37	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	-	•	-	-	L	L	•	-	-	42	48
	45	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	-	•	-	-	L	L	•	-	-	42	48
	55	CUE	-	C	•	-	•	•	-	•	-	•	•	•	•	-	•	-	F	-	•	-	-	L	L	•	-	-	42	48

50 Hz, 4-pole				NB pumps				NK pumps				Cast iron pump		Stainless steel pump			
Pump type	P2 [kW]	E-solution	Oversize shaft	Mounting design ¹⁾	Material code		Options	Material code		Options		Flange rating ²⁾	Flange standard	Flange rating ²⁾	Flange standard	d5 [mm]	Shaft seal diameter [mm]
					A, B, C, D, S, T E, F, G, H K, L, M N, P, R	Double seal arrangement Cartridge seal - single/double Pump housing with feet Pump with base frame	A, B, C, D, S, T E, F, G, H K, L, M N, P, R	Stuffing box (only cast iron versions) Double seal arrangement Cartridge seal - single/double Standard bearing bracket Heavy-duty bearing bracket	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)							
150-315	37	CUE	-	C	•	-	•	•	•	-	-	•	-	-	-	42	48
	45	CUE	-	C	•	-	•	•	•	-	-	•	-	-	-	42	48
	55	CUE	-	C	•	-	•	•	•	-	-	•	-	-	-	42	48
	75	CUE	-	C	•	-	•	•	•	-	-	•	-	-	-	42	48
	90	CUE	-	C	•	-	•	•	•	-	-	•	-	-	-	42	48
150-400	55	CUE	-	C	•	-	•	•	•	-	-	•	-	-	-	42 ³⁾	48 ⁴⁾
	75	CUE	-	C	•	-	•	•	•	-	-	•	-	-	-	42 ³⁾	48 ⁴⁾
	90	CUE	-	C	•	-	•	•	•	-	-	•	-	-	-	42 ³⁾	48 ⁴⁾
	110	CUE	-	C	•	-	•	•	•	-	-	•	-	-	-	42 ³⁾	48 ⁴⁾
	132	CUE	-	C	•	-	-	•	•	-	-	•	-	-	-	48	55
150-500	160	CUE	-	C	•	-	-	-	•	•	-	-	•	-	-	48	55
	132	CUE	-	C	•	-	•	•	•	-	-	•	-	-	-	60	60
	160	CUE	-	C	•	-	•	•	•	-	-	•	-	-	-	60	60
	200	CUE	-	C	•	-	•	•	•	-	-	•	-	-	-	60	60
	200	CUE	-	C	•	-	•	•	•	-	-	•	-	-	-	60	60
200-400	37	CUE	-	C	•	•	-	-	-	•	•	•	-	-	-	48	55
	45	CUE	-	C	•	•	•	-	-	-	•	•	•	-	-	48	55
	55	CUE	-	C	•	•	•	-	-	-	•	•	•	-	-	48	55
	75	CUE	-	C	•	•	•	-	-	-	•	•	•	-	-	48	55
	90	CUE	-	C	•	•	•	-	-	-	•	•	•	-	-	48	55
200-450	110	CUE	-	C	•	•	•	-	-	-	•	•	•	-	-	48	55
	132	CUE	-	C	•	•	•	-	-	-	•	•	•	-	-	48	55
	160	CUE	-	C	•	•	•	-	-	-	•	•	•	-	-	48	55
	75	CUE	-	C	•	•	•	-	-	-	•	•	•	-	-	48	55
	90	CUE	-	C	•	•	•	-	-	-	•	•	•	-	-	48	55
250-350	110	CUE	-	C	•	•	•	-	-	-	•	•	•	-	-	48	55
	132	CUE	-	C	•	•	•	-	-	-	•	•	•	-	-	48	55
	160	CUE	-	C	•	•	•	-	-	-	•	•	•	-	-	48	55
	37	CUE	-	C	•	•	•	-	-	-	•	•	•	-	-	48	55
	45	CUE	-	C	•	•	•	-	-	-	•	•	•	-	-	48	55
250-400	55	CUE	-	C	•	•	•	-	-	-	•	•	•	-	-	48	55
	75	CUE	-	C	•	•	•	-	-	-	•	•	•	-	-	48	55
	90	CUE	-	C	•	•	•	-	-	-	•	•	•	-	-	48	55
	110	CUE	-	C	•	•	•	-	-	-	•	•	•	-	-	48	55
	132	CUE	-	C	•	•	•	-	-	-	•	•	•	-	-	48	55
250-450	160	CUE	-	C	•	•	•	-	-	-	•	•	•	-	-	48	55
	75	CUE	-	C	•	•	•	-	-	-	•	•	•	-	-	60	60
	90	CUE	-	C	•	•	•	-	-	-	•	•	•	-	-	60	60
	110	CUE	-	C	•	•	•	-	-	-	•	•	•	-	-	60	60
	132	CUE	-	C	•	•	•	-	-	-	•	•	•	-	-	60	60
250-500	160	CUE	-	C	•	•	•	-	-	-	•	•	•	-	-	60	60
	200	CUE	-	C	•	•	•	-	-	-	•	•	•	-	-	60	60
	250	CUE	-	-	-	-	-	-	-	-	•	•	•	-	-	60	60
	315	-	-	-	-	-	-	-	-	-	•	•	•	-	-	60	60

1) For information about mounting designs, see page 35.

2) F = fixed flange. L = loose flange.

3) For NB, d5 = 48 mm.

4) For NB, shaft seal diameter = 55 mm.

NB, NK, 6-pole

50 Hz, 6-pole				NB pumps				NK pumps				Cast iron pump		Stainless steel pump		Shaft seal diameter [mm]										
Pump type	P2 [kW]	E-solution	Oversize shaft	Mounting design ¹⁾	Material code		Options		Material code	Options		Flange rating ²⁾	Flange standard	Flange rating ²⁾	Flange standard											
					A, B, C, D, S, T E, F, G, H K, L, M N, P, R	Double seal arrangement Cartridge seal - single/double Pump housing with feet Pump with base frame	A, B, C, D, S, T E, F, G, H K, L, M N, P, R	Stuffing box (only cast iron versions) Double seal arrangement Cartridge seal - single/double Standard bearing bracket Heavy-duty bearing bracket		PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)															
100-160	0.55	-	-	A	•	-	•	•	-	•	-	•	-	F	F	•	-	L	L	•	-	-	24	28		
	0.75	CUE	-	A	•	•	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	24	28
	1.1	CUE	-	A	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	24	28
100-200	1.1	CUE	-	A	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	32	38
	1.5	CUE	-	A	•	•	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	32	38
	2.2	CUE	-	A	•	•	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	32	38
100-250	3	CUE	-	A	•	•	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	32	38
	2.2	CUE	-	A	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	32	38
	3	CUE	-	A	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	32	38
100-315	4	CUE	-	A	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	32	38
	5.5	CUE	-	A	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	32	38
	7.5	CUE	-	C	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	32	38
100-400	11	CUE	-	C	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	32	38
	7.5	CUE	-	C	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	42	48
	11	CUE	-	C	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	42	48
125-200	15	CUE	-	C	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	42	48
	18.5	CUE	-	C	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	42	48
	1.5	CUE	-	A	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	32	38
125-250	2.2	CUE	-	A	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	32	38
	3	CUE	-	A	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	32	38
	4	CUE	-	A	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	32	38
125-315	4	CUE	-	A	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	32	38
	5.5	CUE	-	A	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	32	38
	7.5	CUE	-	C	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	32	38
125-400	7.5	CUE	-	C	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	42	48
	11	CUE	-	C	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	42	48
	15	CUE	-	C	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	42	48
125-500	11	CUE	-	C	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	42	48
	15	CUE	-	C	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	42	48
	18.5	CUE	-	C	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	42	48
150-200	22	CUE	-	C	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	42	48
	30	CUE	-	C	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	42	48
	18.5	CUE	-	C	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	60	60
150-250	22	CUE	-	C	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	60	60
	30	CUE	-	C	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	60	60
	37	CUE	-	C	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	60	60
150-315.1	45	CUE	-	C	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	60	60
	55	CUE	-	C	•	-	•	•	-	•	-	•	-	•	F	F	•	-	-	L	L	•	-	-	60	60
	2.2	CUE	-	A	•	-	•	•	-	•	-	•	-	•	F	-	•	-	-	L	L	•	-	-	32	38
150-400	3	CUE	-	A	•	-	•	•	-	•	-	•	-	•	F	-	•	-	-	L	L	•	-	-	32	38
	4	CUE	-	A	•	-	•	•	-	•	-	•	-	•	F	-	•	-	-	L	L	•	-	-	32	38
	5.5	CUE	-	A	•	-	•	•	-	•	-	•	-	•	F	-	•	-	-	L	L	•	-	-	42	48
150-500	7.5	CUE	-	C	•	-	•	•	-	•	-	•	-	•	F	-	•	-	-	L	L	•	-	-	42	48
	11	CUE	-	C	•	-	•	•	-	•	-	•	-	•	F	-	•	-	-	L	L	•	-	-	42	48
	5.5	CUE	-	A	•	-	•	•	-	•	-	•	-	•	F	-	•	-	-	L	L	•	-	-	42	48
150-600	7.5	CUE	-	C	•	-	•	•	-	•	-	•	-	•	F	-	•	-	-	L	L	•	-	-	42	48
	11	CUE	-	C	•	-	•	•	-	•	-	•	-	•	F	-	•	-	-	L	L	•	-	-	42	48
	15	CUE	-	C	•	-	•	•	-	•	-	•	-	•	F	-	•	-	-	L	L	•	-	-	42	48

50 Hz, 6-pole				NB pumps				NK pumps				Cast iron pump		Stainless steel pump		Shaft seal diameter [mm]					
Pump type	P2 [kW]	E-solution	Oversize shaft	Mounting design ¹⁾	Material code		Options		Material code	Options		Flange rating ²⁾	Flange standard	Flange rating ²⁾	Flange standard						
					A, B, C, D, S, T E, F, G, H K, L, M N, P, R	Double seal arrangement Cartridge seal - single/double Pump housing with feet Pump with base frame	A, B, C, D, S, T E, F, G, H K, L, M N, P, R	Stuffing box (only cast iron versions) Double seal arrangement Cartridge seal - single/double Standard bearing bracket Heavy-duty bearing bracket		PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)	PN 10 PN 16 DIN (code F) ANSI (code G) JIS (code J)										
150-315	11	CUE	-	C	●	-	●	●	-	●	-	●	●	-	L	L	●	-	-	42	48
	15	CUE	-	C	●	-	●	●	-	●	-	●	●	-	L	L	●	-	-	42	48
	18.5	CUE	-	C	●	-	●	●	-	●	-	●	●	-	L	L	●	-	-	42	48
	22	CUE	-	C	●	-	●	●	-	●	-	●	●	-	L	L	●	-	-	42	48
	30	CUE	-	C	●	-	●	●	-	●	-	●	●	-	L	L	●	-	-	42	48
150-400	18.5	CUE	-	C	●	-	●	●	-	●	-	●	●	-	L	L	●	-	-	42 ³⁾	48 ⁴⁾
	22	CUE	-	C	●	-	●	●	-	●	-	●	●	-	L	L	●	-	-	42 ³⁾	48 ⁴⁾
	30	CUE	-	C	●	-	●	●	-	●	-	●	●	-	L	L	●	-	-	42 ³⁾	48 ⁴⁾
	37	CUE	-	C	●	-	●	●	-	●	-	●	●	-	L	L	●	-	-	42 ³⁾	48 ⁴⁾
	45	CUE	-	C	●	-	●	●	-	●	-	●	●	-	L	L	●	-	-	42 ³⁾	48 ⁴⁾
150-500	37	CUE	-	C	●	-	●	●	-	●	-	●	●	-	L	L	●	-	-	60	60
	45	CUE	-	C	●	-	●	●	-	●	-	●	●	-	L	L	●	-	-	60	60
	55	CUE	-	C	●	-	●	●	-	●	-	●	●	-	L	L	●	-	-	60	60
	75	CUE	-	C	●	-	●	●	-	●	-	●	●	-	L	L	●	-	-	60	60
200-400	15	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	48	55
	18.5	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	48	55
	22	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	48	55
	30	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	48	55
	37	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	48	55
200-450	18.5	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	48	55
	22	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	48	55
	30	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	48	55
	37	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	48	55
	45	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	48	55
250-350	11	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	48	55
	15	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	48	55
	18.5	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	48	55
	22	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	48	55
	15	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	48	55
250-400	18.5	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	48	55
	22	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	48	55
	30	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	48	55
	37	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	48	55
	45	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	48	55
	18.5	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	60	60
250-450	22	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	60	60
	30	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	60	60
	37	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	60	60
	45	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	60	60
	55	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	60	60
250-500	45	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	60	60
	55	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	60	60
	75	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	60	60
	90	CUE	-	C	●	●	-	-	-	●	●	●	-	-	-	-	-	-	-	60	60

1) For information about mounting designs, see page 35.

2) F = fixed flange. L = loose flange.

3) For NB, d5 = 48 mm.

4) For NB, shaft seal diameter = 55 mm.

5. Identification

Nameplate

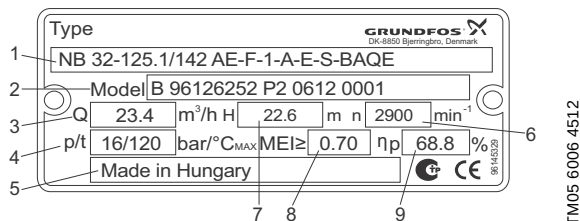


Fig. 5 Example of nameplate

Pos.	Description
1	Type designation
2	Model
3	Rated flow
4	Pressure rating/max temperature
5	Country of origin
6	Rated speed
7	Pump head
8	Minimum efficiency index
9	Hydraulic pump efficiency at optimum efficiency point

NB, NBE type key

Example 1 - (pump design according to EN 733)	NB	32	-125	.1	/142	AE	F	1	A	E	S	BAQE
Example 2 - (pump design according to ISO 2858)	NBG	125	-100	-160	/160-142	A	F	2	N	K	S	DQQK
Type range												
Nominal diameter of suction port (DN)												
Nominal diameter of discharge port (DN)												
Nominal impeller diameter [mm]												
Reduced performance = .1												
Actual impeller diameter [mm]												
Code for pump version (the codes may be combined)												
A Basic version												
B Oversize motor												
C Without motor												
D Pump housing with feet												
E With ATEX approval, certificate or test report (in case of ATEX-approved pumps, the second character of the code for pump version is an E).												
F With base frame												
S With support blocks												
X Special version (in case of further customisation than already listed)												
Pipe connection												
E Table E flange to AS 2129												
F DIN flange to EN 1092-2												
G ANSI flange to ASME B16.1												
J JIS flange to JIS B 2210												
Flange pressure rating (PN - nominal pressure)												
1 10 bar												
2 16 bar												
3 25 bar												
4 40 bar												
5 Other pressure rating												

Example 1 - (pump design according to EN 733)					NB	32	-125	.1	/142	AE	F	1	A	E	S	BAQE
Example 2 - (pump design according to ISO 2858)					NBG	125	-100	-160	/160-142	A	F	2	N	K	S	DQKK
Materials																
	Pump housing	Impeller	Wear ring	Shaft												
A	EN-GJL-250	EN-GJL-200	Bronze/brass	1.4301/1.4308												
B	EN-GJL-250	Bronze CuSn10	Bronze/brass	1.4301/1.4308												
C	EN-GJL-250	EN-GJL-200	Bronze/brass	1.4401/1.4408												
D	EN-GJL-250	Bronze CuSn10	Bronze/brass	1.4401/1.4408												
E	EN-GJL-250	EN-GJL-200	EN-GJL-250	1.4301/1.4308												
F	EN-GJL-250	Bronze CuSn10	EN-GJL-250	1.4301/1.4308												
G	EN-GJL-250	EN-GJL-200	EN-GJL-250	1.4401/1.4408												
H	EN-GJL-250	Bronze CuSn10	EN-GJL-250	1.4401/1.4408												
K	1.4408	1.4408	1.4517	1.4401/1.4408												
L	1.4517	1.4517	1.4517	1.4462												
M	1.4408	1.4517	1.4517	1.4401/1.4408												
N	1.4408	1.4408	Carbon-graphite-filled PTFE (Graflon®)	1.4401/1.4408												
P	1.4408	1.4517	Carbon-graphite-filled PTFE (Graflon®)	1.4401/1.4408												
R	1.4517	1.4517	Carbon-graphite-filled PTFE (Graflon®)	1.4462												
S	EN-GJL-250	1.4408	Bronze/brass	1.4401/1.4408												
T	EN-GJL-250	1.4517	Bronze/brass	1.4462												
X	Special version															
Rubber parts in pump																
The letter indicates material of pump cover O-ring																
E	EPDM															
F	FXM (Fluoraz®)															
K	FFKM (Kalrez®)															
M	FEPS (PTFE-sheathed silicone O-ring)															
X	HNBR															
V	FKM (Viton®)															
Shaft seal arrangement																
S	Single seal															
Code for mechanical shaft seal and shaft seal rubber parts																

Example 1 - (pump design according to EN 733)					NB	32	-125	.1	/142	AE	F	1	A	E	S	BAQE
Example 2 - (pump design according to ISO 2858)					NBG	125	-100	-160	/160-142	A	F	2	N	K	S	DQKK

Example 1 shows an NB 32-125.1 pump with the following features:

- reduced performance
- 142 mm impeller
- basic version
- report or certificate
- DIN flange to EN 1092-2 pipe connection
- 10 bar flange pressure rating
- cast iron pump housing, EN-GJL-250
- cast iron impeller, EN-GJL-200
- bronze/brass wear ring
- stainless steel shaft, EN 1.4301/1.4308
- EPDM pump cover O-ring
- single shaft seal arrangement
- BAQE shaft seal.

Example 2 shows an NBG 125-100-160 pump with the following features:

- 160-142 mm conical impeller
- basic version
- DIN flange to EN 1092-2 pipe connection
- 16 bar flange pressure rating
- stainless steel pump housing, EN 1.4408
- stainless steel impeller, EN 1.4408
- carbon-graphite-filled wear ring, PTFE (Graflon®)
- stainless steel shaft, EN 1.4401
- FFKM pump cover O-ring
- single shaft seal arrangement
- DQKK shaft seal.

NK, NKE type key

Model B

Example 1 - (pump design according to EN 733)					NK	32	-125	.1	/142	A1	F	1	A	E	S	BAQE
Example 2 - (pump design according to ISO 2858)					NKG	125	-100	-160	/160-142	H2	F	3	N	KE	O	2926
Type range																
Nominal diameter of suction port (DN)																
Nominal diameter of discharge port (DN)																
Nominal impeller diameter [mm]																
Reduced performance = .1																
Actual impeller diameter [mm]																
Code for pump version (the codes may be combined)																
A1 Basic version, grease-lubricated standard bearing design, standard coupling																
A2 Basic version, grease-lubricated standard bearing design, spacer coupling																
B Oversize motor																
E With ATEX approval, certificate or test report (in case of ATEX-approved pumps, the second character of the code for pump version is an E).																
G1 Grease-lubricated heavy-duty bearing design, standard coupling																
G2 Grease-lubricated heavy-duty bearing design, spacer coupling																
H1 Oil-lubricated heavy-duty bearing design, standard coupling																
H2 Oil-lubricated heavy-duty bearing design, spacer coupling																
I1 Pump without motor, with grease-lubricated standard bearing design, standard coupling																
I2 Pump without motor, with grease-lubricated standard bearing design, spacer coupling																
J1 Pump without motor, with grease-lubricated heavy-duty bearing design, standard coupling																
J2 Pump without motor, with grease-lubricated heavy-duty bearing design, spacer coupling																
K1 Pump without motor, with oil-lubricated heavy-duty bearing design, standard coupling																
K2 Pump without motor, with oil-lubricated heavy-duty bearing design, spacer coupling																
Y1 Bare shaft pump, with grease-lubricated standard bearing design																
W1 Bare shaft pump, with grease-lubricated heavy-duty bearing design																
Z1 Bare shaft pump, with oil-lubricated heavy-duty bearing design																
X Special version (if further customisation than already listed)																
Pipe connection																
E Table E flange to AS 2129																
F DIN flange to EN 1092-2																
G ANSI flange to ASME B16.1																
J JIS flange to JIS B 2210																
Flange pressure rating (PN - nominal pressure)																
1 10 bar																
2 16 bar																
3 25 bar																
4 40 bar																
5 Other pressure rating																
Materials																
	Pump housing	Impeller	Wear ring	Shaft												
A	EN-GJL-250	EN-GJL-200	Bronze/brass	1.4021/1.4034												
B	EN-GJL-250	Bronze CuSn10	Bronze/brass	1.4021/1.4034												
C	EN-GJL-250	EN-GJL-200	Bronze/brass	1.4401/1.4408												
D	EN-GJL-250	Bronze CuSn10	Bronze/brass	1.4401/1.4408												
E	EN-GJL-250	EN-GJL-200	EN-GJL-250	1.4021/1.4034												
F	EN-GJL-250	Bronze CuSn10	EN-GJL-250	1.4021/1.4034												
G	EN-GJL-250	EN-GJL-200	EN-GJL-250	1.4401/1.4408												
H	EN-GJL-250	Bronze CuSn10	EN-GJL-250	1.4401/1.4408												
K	1.4408	1.4408	1.4517	1.4401/1.4408												
L	1.4517	1.4517	1.4517	1.4462												
M	1.4408	1.4517	1.4517	1.4401/1.4408												
N	1.4408	1.4408	Carbon-graphite-filled PTFE (Graflon®)	1.4401/1.4408												
P	1.4408	1.4517	Carbon-graphite-filled PTFE (Graflon®)	1.4401/1.4408												

Example 1 - (pump design according to EN 733)				NK	32	-125	.1	/142	A1	F	1	A	E	S	BAQE
Example 2 - (pump design according to ISO 2858)				NKG	125	-100	-160	/160-142	H2	F	3	N	KE	O	2926
R	1.4517	1.4517	Carbon-graphite-filled PTFE (Graflon®)	1.4462											
S	EN-GJL-250	1.4408	Bronze/brass	1.4401/1.4408											
T	EN-GJL-250	1.4517	Bronze/brass	1.4462											
X	Special version														
Rubber parts in pump															
First letter indicates material of pump cover O-ring and seal cover O-ring (seal cover O-ring is only for double seal arrangements)															
Second letter indicates material of seal housing O-ring															
E	EPDM														
F	FXM (Fluoraz®)														
K	FFKM (Kalrez®)														
M	FEPS (PTFE-sheathed silicone O-ring)														
V	FKM (Viton®)														
X	HNBR														
Shaft seal arrangement															
B	Stuffing box														
C	Cartridge seal, single														
D	Cartridge seal, double														
O	Back-to-back, double seal														
P	Tandem, double seal														
S	Single seal														
Shaft seal(s) in pump															
Letter or digit code for mechanical shaft seal and shaft seal rubber parts															
4 letters: Single mechanical shaft seal (ex. BQQE) or single cartridge seal (ex. HBQV).															
4 digits: Double seal solution (ex. 2716, where 27 = DQQV (primary seal) and 16 = BQQV (secondary seal)) or double cartridge seal (ex. 5150 = where 51 = HQUU (primary seal) and 50 = HBQV (secondary seal))															
The relation between letters and digits of the shaft seals is described on page 28.															

Example 1 - (pump design according to EN 733)				NK	32	-125	.1	/142	A1	F	1	A	E	S	BAQE
Example 2 - (pump design according to ISO 2858)				NKG	125	-100	-160	/160-142	H2	F	3	N	KE	O	2926

Example 1 shows an NK 32-125.1 pump with

- reduced performance
- 142 mm impeller
- grease-lubricated standard bearing design
- standard coupling
- DIN flange to EN 1092-2 pipe connection
- PN 10 flange
- cast iron pump housing, EN-GJL-250
- cast iron impeller, EN-GJL-200
- bronze/brass wear ring
- stainless steel shaft, EN 1.4021/1.4034
- EPDM pump cover O-ring
- single shaft seal arrangement
- BAQE shaft seal.

Example 2 shows an NKG 125-100-160 pump with

- 160-142 mm conical impeller
- grease-lubricated heavy-duty bearing design
- spacer coupling
- DIN flange to EN 1092-2 pipe connection
- PN 25 flange
- stainless steel pump housing, EN 1.4408
- stainless steel impeller, EN 1.4408
- carbon-graphite-filled wear ring, PTFE (Graflon®)
- stainless steel shaft, EN 1.4401
- FFKM pump cover and seal cover O-rings
- EPDM seal housing O-ring
- back-to-back double shaft seal arrangement
- primary shaft seal: DQQK
- secondary shaft seal: DQQE.

Relation between letter and digit code of shaft seal and stuffing box description

Digits	Letters	Description
10	BAQE	Single mechanical shaft seal
11	BAQV	Single mechanical shaft seal
12	BBQE	Single mechanical shaft seal
13	BBQV	Single mechanical shaft seal
15	BQQE	Single mechanical shaft seal
16	BQQV	Single mechanical shaft seal
17	GQQE	Single mechanical shaft seal
18	GQQV	Single mechanical shaft seal
19	AQAE	Single mechanical shaft seal
20	AQAV	Single mechanical shaft seal
21	AQQE	Single mechanical shaft seal
22	AQQV	Single mechanical shaft seal
23	AQQX	Single mechanical shaft seal
24	AQQK	Single mechanical shaft seal
25	DAQF	Single mechanical shaft seal
26	DQQE	Single mechanical shaft seal
27	DQQV	Single mechanical shaft seal
28	DQQX	Single mechanical shaft seal
29	DQQK	Single mechanical shaft seal
50	HBQV	Cartridge seal
51	HQQU	Cartridge seal
52	HAQK	Cartridge seal
	SNEA	Stuffing box, internal barrier liquid, Buraflon [®] packing rings ¹⁾ , EPDM O-rings in the pump housing
	SNEB	Stuffing box, internal barrier liquid, Thermoflon [®] packing rings ²⁾ , EPDM O-rings in the pump housing
	SNEC	Stuffing box, internal barrier liquid, Buraflon [®] packing rings ¹⁾ , FKM O-rings in the pump housing
	SNED	Stuffing box, internal barrier liquid, Thermoflon [®] packing rings ²⁾ , FKM O-rings in the pump housing
	SNOA	Stuffing box, without barrier liquid, Buraflon [®] packing rings ¹⁾ , EPDM O-rings in the pump housing
	SNOB	Stuffing box, without barrier liquid, Thermoflon [®] packing rings ²⁾ , EPDM O-rings in the pump housing
	SNOC	Stuffing box, without barrier liquid, Buraflon [®] packing rings ¹⁾ , FKM O-rings in the pump housing
	SNOD	Stuffing box, without barrier liquid, Thermoflon [®] packing rings ²⁾ , FKM O-rings in the pump housing
	SNFA	Stuffing box, external barrier liquid, Buraflon [®] packing rings ¹⁾ , EPDM O-rings in the pump housing
	SNFB	Stuffing box, external barrier liquid, Thermoflon [®] packing rings ²⁾ , EPDM O-rings in the pump housing
	SNFC	Stuffing box, external barrier liquid, Buraflon [®] packing rings ¹⁾ , FKM O-rings in the pump housing
	SNFD	Stuffing box, external barrier liquid, Thermoflon [®] packing rings ²⁾ , FKM O-rings in the pump housing

¹⁾ Buraflon[®] packing rings are PTFE impregnated fibre packing rings.

²⁾ Thermoflon[®] packing rings are graphite-PTFE compound packing rings.

Shaft seals

Codes for shaft seals

Positions (1) - (4) cover four pieces of information about the shaft seal:

Example	(1)	(2)	(3)	(4)
Grundfos type designation				
Material, rotating seal face				
Material, stationary seat				
Material, secondary seal and other rubber and composite parts, except the wear ring				

The following table explains positions (1), (2), (3) and (4).

Pos.	Type	Short description of seal
(1)	A	O-ring seal with fixed driver
	B	Rubber bellows seal
	D	O-ring seal, balanced
	G	Bellows seal, type B, with reduced seal faces
	H	Cartridge seal, balanced
Pos.	Type	Material
(2) and (3)		Synthetic carbons:
	A	Carbon, metal-impregnated (antimony (not approved for potable water))
	B	Carbon, resin-impregnated
		Carbides:
	Q	Silicon carbide
Pos.	Type	Material
(4)	E	EPDM
	V	FKM (Viton®)
	F	FXM (Fluoraz®)
	K	FFKM (Kalrez®)
	X	HNBR
	U	Dynamic O-rings in FFKM and static O-rings in PTFE

For a thorough description of shaft seal types and materials, see the data booklet "NB, NBG, NK, NKG, NBE, NBGE, NKE, NKGE - Custom-built pumps according to EN 733 and ISO 2858".

Stuffing boxes (NK)

Various types of stuffing box are available as an alternative to shaft seals. Stuffing boxes are not quite as sensitive as shaft seals and therefore suitable for many different applications.

Three types of stuffing box are available for NK pumps: SNE(x), SNO(x) and SNF(x).

Codes for stuffing boxes

Positions (1) - (4) cover information about the stuffing box:

Pos.	Code	Short description of stuffing box
(1)	S	Packing type stuffing box
Pos.	Code	Cooling method
(2)	N	Uncooled stuffing box
Pos.	Code	Barrier liquid
(3)	E	With internal barrier liquid
	F	With external barrier liquid
	O	Without barrier liquid
Pos.	Code	Materials
(4)	A	PTFE-impregnated fibre packing rings and EPDM O-rings in the pump housing
	B	Graphite-PTFE compound packing rings and EPDM O-ring in the pump housing
	C	PTFE-impregnated fibre packing rings and FKM O-ring in the pump housing
	D	Graphite-PTFE compound packing rings and FKM O-ring in the pump housing

6. Construction

NB, centre-line outlet

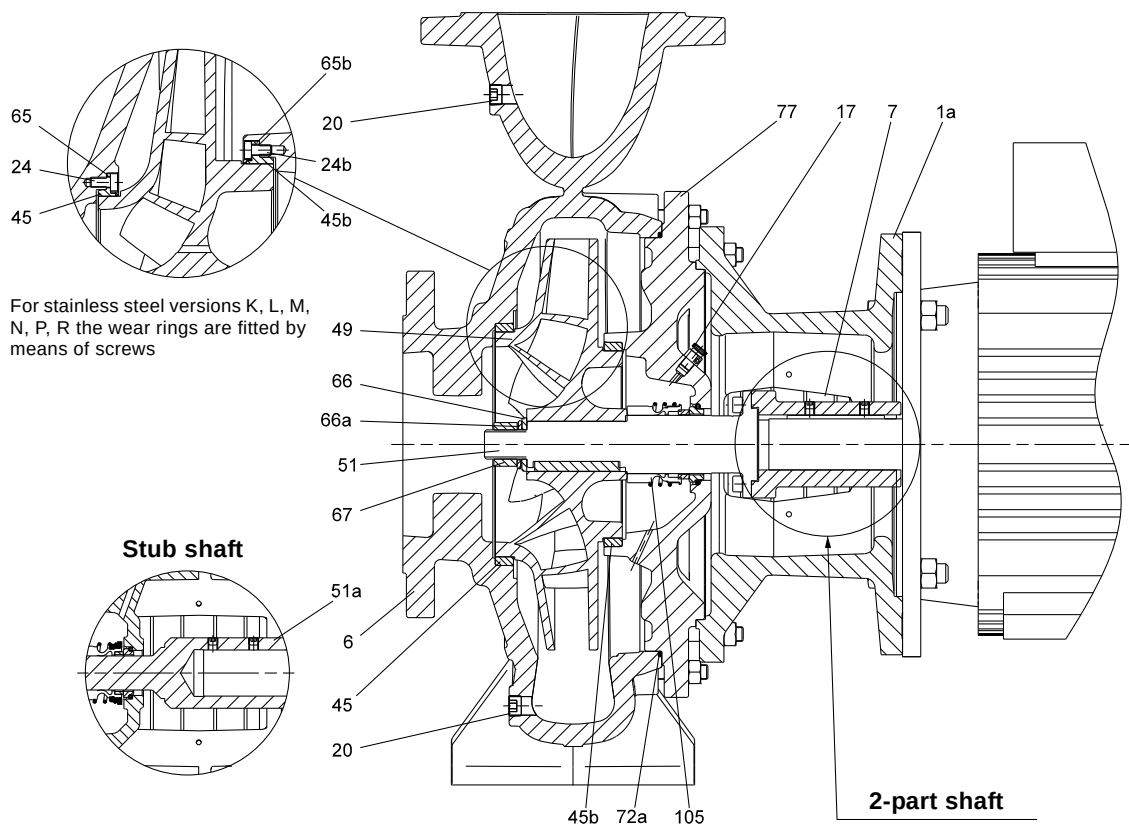


Fig. 6 Sectional drawing, centre-line outlet

NB, tangential outlet

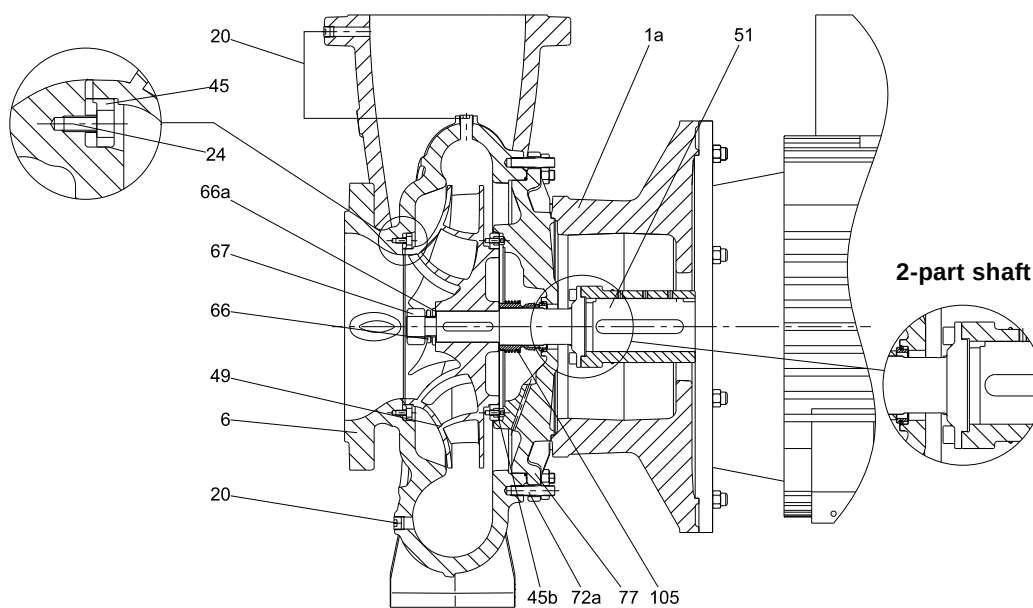


Fig. 7 Sectional drawing, tangential outlet, DN 200 and DN 250

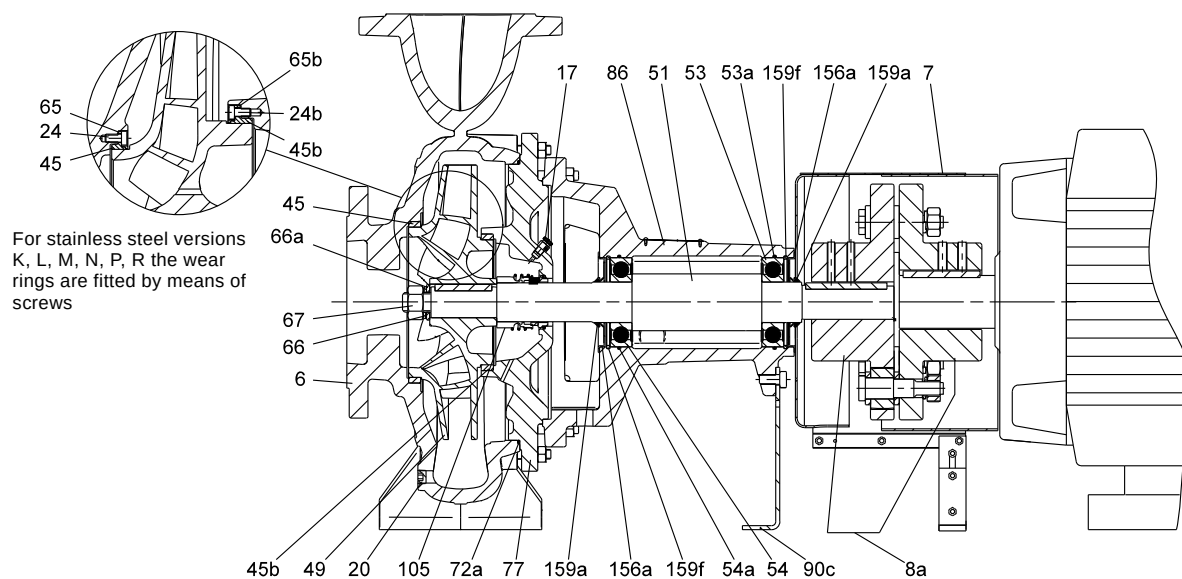
TM05 1525 3211

TM05 1526 3211

Material specification, NB

Pos.	Description	Materials	Material code																
			A	B	C	D	E	F	G	H	K	L	M	N	P	R	S	T	
1a	Motor stool	EN-GJL-250	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
6	Pump housing	EN-GJL-250	•	•	•	•	•	•	•	•	-	-	-	-	-	-	-	•	
		1.4408/CF8M	-	-	-	-	-	-	-	-	•	-	•	•	•	-	-	-	
		1.4517/CD4MCuN	-	-	-	-	-	-	-	-	-	•	-	-	-	•	-	-	
7	Coupling guard	1.4301/AISI 304	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
17	Air vent plug	2.0401/CuZn44Pb2	•	•	•	•	•	•	•	•	-	-	-	-	-	-	•	•	
		1.4401/AISI 316	-	-	-	-	-	-	-	-	•	-	•	•	•	-	-	-	
		1.4539/AISI 904L	-	-	-	-	-	-	-	-	-	•	-	-	-	-	•	-	
20	Plug	ISO 898 8.8 carbon steel	•	•	•	•	•	•	•	•	-	-	-	-	-	-	-	•	
		1.4401/AISI 316	-	-	-	-	-	-	-	-	•	-	•	•	•	-	-	-	
		1.4539/AISI 904L	-	-	-	-	-	-	-	-	-	•	-	-	-	-	•	-	
24	Hexagon socket head cap screw	1.4401/AISI 316	-	-	-	-	-	-	-	-	•	•	•	•	•	•	-	-	
		1.4539/AISI 904L	-	-	-	-	-	-	-	-	•	•	•	•	•	•	-	-	
24b	Hexagon socket head cap screw	1.4401/AISI 316	-	-	-	-	-	-	-	-	•	•	•	•	•	•	-	-	
		1.4539/AISI 904L	-	-	-	-	-	-	-	-	•	•	•	•	•	•	-	-	
45	Wear ring	CuSn10	•	•	•	•	-	-	-	-	-	-	-	-	-	-	-	•	
		CuZn34Mn3Al2Fe1-C	•	•	•	•	-	-	-	-	-	-	-	-	-	-	-	•	
		EN-GJL-250	-	-	-	-	•	•	•	•	-	-	-	-	-	-	-	-	
		1.4517/CD4MCuN	-	-	-	-	-	-	-	-	•	•	•	-	-	-	-	-	
		Carbon-graphite filled PTFE (Graflon®)	-	-	-	-	-	-	-	-	-	-	-	•	•	•	-	-	
45b	Wear ring	CuSn10	•	•	•	•	-	-	-	-	-	-	-	-	-	-	-	•	
		CuZn34Mn3Al2Fe1-C	•	•	•	•	-	-	-	-	-	-	-	-	-	-	-	•	
		EN-GJL-250	-	-	-	-	•	•	•	•	-	-	-	-	-	-	-	-	
		1.4517/CD4MCuN	-	-	-	-	-	-	-	-	•	•	•	-	-	-	-	-	
		Carbon-graphite-filled PTFE (Graflon®)	-	-	-	-	-	-	-	-	-	-	-	•	•	•	-	-	
49	Impeller	EN-GJL-200	•	-	•	-	•	-	•	-	-	-	-	-	-	-	-	-	
		CuSn10	-	•	-	•	-	•	-	•	-	-	-	-	-	-	-	-	
		1.4408/CF8M	-	-	-	-	-	-	-	-	•	-	-	•	-	-	•	-	
		1.4517/CD4MCuN	-	-	-	-	-	-	-	-	-	•	•	-	•	•	-	•	
51	2-part shaft	1.4301 + 1.0569/AISI 304 + carbon steel	•	•	-	-	•	•	-	-	-	-	-	-	-	-	-		
		1.4401 + 1.0569/AISI 316 + carbon steel	-	-	•	•	-	-	•	•	•	-	-	•	•	-	-	•	
		1.4462 + 1.0569/ASTM J92205 + carbon steel	-	-	-	-	-	-	-	-	-	•	•	-	•	•	-	•	
51a	Stub shaft	1.4301/AISI 304	•	•	-	-	-	-	-	-	-	-	-	-	-	-	-		
		1.4401/AISI 316	-	-	•	•	-	-	-	-	•	-	-	•	-	-	•	•	
65	Wear ring retainer	1.517/CD4MCuN	-	-	-	-	-	-	-	-	-	-	-	•	•	•	-	-	
65b	Wear ring retainer	1.4517/CD4MCuN	-	-	-	-	-	-	-	-	-	-	-	•	•	•	-	-	
66	Washer	1.4301/AISI 304	•	•	-	-	•	•	-	-	-	-	-	-	-	-	-	-	
		1.401/AISI 316	-	-	•	•	-	-	•	•	•	-	-	•	•	-	-	•	
		1.4539/AISI 904L	-	-	-	-	-	-	-	-	-	•	•	-	•	•	-	•	
66a	Spring lock washer	1.4301/AISI 304	•	•	-	-	•	•	-	-	-	-	-	-	-	-	-	-	
		1.4401/AISI 316	-	-	•	•	-	-	•	•	•	-	-	•	-	-	•	-	
		1.4539/AISI 904L	-	-	-	-	-	-	-	-	-	•	•	-	•	•	-	•	
67	Impeller nut	1.4301/AISI 304	•	•	-	-	•	•	-	-	-	-	-	-	-	-	-	-	
		1.4401/AISI 316	-	-	•	•	-	-	•	•	•	-	-	•	-	-	•	-	
		1.4539/AISI 904L	-	-	-	-	-	-	-	-	-	•	•	-	•	•	-	•	
72a	O-ring	E / F / K / M / V / X	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
77	Cover	EN-GJL-250	•	•	•	•	•	•	•	•	-	-	-	-	-	-	•	•	
		1.4408/CF8M	-	-	-	-	-	-	-	-	•	-	•	•	•	-	-	-	
		1.4517/CD4MCuN	-	-	-	-	-	-	-	-	-	•	-	-	-	-	•	-	
105	Shaft seal	Burgmann 1.4401/AISI 316	•	•	•	•	•	•	•	•	•	-	•	•	•	-	•	•	
		Burgmann 2.4610/Hastelloy C-4	-	-	-	-	-	-	-	-	-	•	-	-	-	-	•	-	

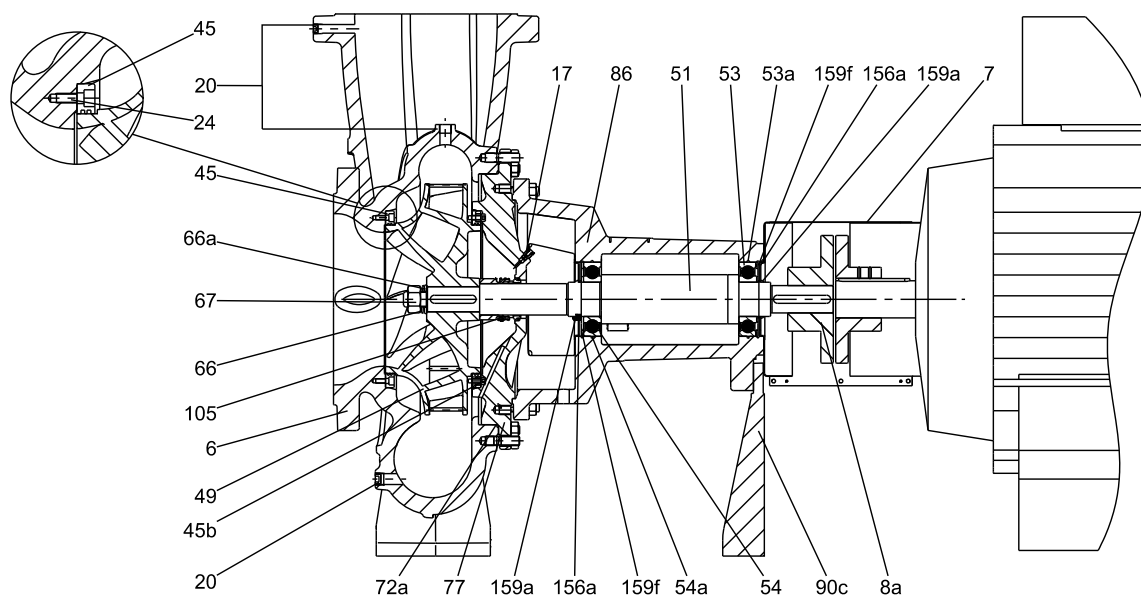
NK, centre-line outlet



TM05 1527 3211

Fig. 8 Sectional drawing, centre-line outlet

NK, tangential outlet



TM05 1528 3211

Fig. 9 Sectional drawing, with tangential outlet, DN 200 and DN 250

Material specification, NK

Pos.	Description	Materials	Material code																	
			A	B	C	D	E	F	G	H	K	L	M	N	P	R	S	T		
6	Pump housing	EN-GJL-250	•	•	•	•	•	•	•	•	-	-	-	-	-	-	•	•		
		1.4408/CF8M	-	-	-	-	-	-	-	-	•	-	•	•	•	-	-	-		
		1.4517/CD4MCuN	-	-	-	-	-	-	-	-	-	-	•	-	-	-	•	-		
7	Coupling guard	1.4301/AISI 304	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
8a	Coupling	See table below.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
8f	Grease cartridge	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
11	Key	1.4401/AISI 316	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
11a	Key	Steel	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
17	Air vent plug	2.0401/CuZn44Pb2	•	•	•	•	•	•	•	•	•	-	-	-	-	-	•	•		
		1.4401/AISI 316	-	-	-	-	-	-	-	-	•	-	•	•	•	-	-	-		
		1.4539/AISI 904L	-	-	-	-	-	-	-	-	-	•	-	-	-	-	•	-		
20	Plug	ISO 898 8.8 carbon steel	•	•	•	•	•	•	•	•	-	-	-	-	-	-	•	•		
		1.4401/AISI 316	-	-	-	-	-	-	-	-	•	-	•	•	•	-	-	-		
		1.4539/AISI 904L	-	-	-	-	-	-	-	-	-	-	•	-	-	-	•	-		
24	Hexagon socket head cap screw	1.4401/AISI 316	-	-	-	-	-	-	-	-	•	•	•	•	•	•	-	-		
		1.4539/AISI 904L	-	-	-	-	-	-	-	-	-	•	•	•	•	•	•	-		
24b	Hexagon socket head cap screw	1.4401/AISI 316	-	-	-	-	-	-	-	-	•	•	•	•	•	•	-	-		
		1.4539/AISI 904L	-	-	-	-	-	-	-	-	-	•	•	•	•	•	•	-		
45	Wear ring	CuSn10	•	•	•	•	-	-	-	-	-	-	-	-	-	-	•	•		
		CuZn34Mn3Al2Fe1-C	•	•	•	•	-	-	-	-	-	-	-	-	-	-	-	•	•	
		EN-GJL-250	-	-	-	-	•	•	•	•	-	-	-	-	-	-	-	•	•	
		1.4517/CD4MCuN	-	-	-	-	-	-	-	-	-	•	•	•	-	-	-	-	-	
		Carbon-graphite filled PTFE (Graflon®)	-	-	-	-	-	-	-	-	-	-	-	-	•	•	•	-	-	
45b	Wear ring	CuSn10	•	•	•	•	-	-	-	-	-	-	-	-	-	-	-	•	•	
		CuZn34Mn3Al2Fe1-C	•	•	•	•	-	-	-	-	-	-	-	-	-	-	-	-	•	•
		EN-GJL-250	-	-	-	-	•	•	•	•	-	-	-	-	-	-	-	-	•	•
		1.4517/CD4MCuN	-	-	-	-	-	-	-	-	-	-	•	•	•	-	-	-	-	-
		Carbon-graphite-filled PTFE (Graflon®)	-	-	-	-	-	-	-	-	-	-	-	-	-	•	•	•	-	-
49	Impeller	EN-GJL-200	•	-	•	-	•	-	•	-	-	-	-	-	-	-	-	-	-	
		CuSn10	-	•	-	•	-	•	-	•	-	-	-	-	-	-	-	-	-	
		1.4408/CF8M	-	-	-	-	-	-	-	-	-	-	-	-	•	•	-	•	-	
		1.4517/CD4MCuN	-	-	-	-	-	-	-	-	-	-	•	•	-	•	•	-	•	
51	Shaft	1.4034 + 1.0569/AISI 420 + carbon steel	•	•	-	-	•	•	-	-	-	-	-	-	-	-	-	-		
		1.4401 + 1.0569/AISI 316 + carbon steel	-	-	•	•	-	-	•	•	-	-	•	•	•	-	-	•	-	
		1.4462 + 1.0569/ASTM J92205 + carbon steel	-	-	-	-	-	-	-	-	-	-	•	-	-	-	•	-	•	
53	Deep-groove ball bearings	2ZR.C3	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	Angular contact bearing	BECBJ (SKF)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
53a	O-ring	EPDM/FKM	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
53c	Spacer ring, inner	1.4308	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
53d	Spacer ring, outer	1.4309	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
53e	Lock washer	Steel	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
53f	Lock nut	Steel	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
54	Deep-groove ball bearings	2ZR.C3	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	Roller bearing	ECJ (SKF)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
54a	O-ring	EPDM/FKM	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
58	Seal housing	1.4517/CD4MCuN	•	•	•	•	-	-	-	-	-	•	•	•	•	•	•	•		
58d	O-ring	E / F / K / M / V / X	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
65	Wear ring retainer	1.4517/CD4MCuN	-	-	-	-	-	-	-	-	-	-	-	•	•	•	-	-		
65b	Wear ring retainer	1.4517/CD4MCuN	-	-	-	-	-	-	-	-	-	-	-	•	•	•	-	-		
66	Washer	1.4301/AISI 304	•	•	-	-	•	•	-	-	-	-	-	-	-	-	-	-		
		1.4401/AISI 316	-	-	•	•	-	-	•	•	-	-	•	•	•	-	•	-		
		1.4539/AISI 904L	-	-	-	-	-	-	-	-	-	-	•	-	-	-	•	-	•	
66a	Spring lock washer	1.4301/AISI 304	•	•	-	-	•	•	-	-	-	-	-	-	-	-	-	-		
		1.4401/AISI 316	-	-	•	•	-	-	•	•	-	-	•	•	•	-	•	-	-	
		1.4539/AISI 904L	-	-	-	-	-	-	-	-	-	-	•	-	-	-	•	-	•	
67	Impeller nut	1.4301/AISI 304	•	•	-	-	•	•	-	-	-	-	-	-	-	-	-	-		
		1.4401/AISI 316	-	-	•	•	-	-	•	•	-	-	•	•	•	-	•	-	-	
		1.4539/AISI 904L	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	•	-	
72a	O-ring	E / F / K / M / V / X	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
77	Cover	EN-GJL-250	•	•	•	•	•	•	•	•	-	-	-	-	-	-	-	•	•	
		1.4408/CF8M	-	-	-	-	-	-	-	-	-	-	•	•	•	•	-	-	-	
		1.4517/CD4MCuN	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	•	-	
77a	Seal cover	1.4517/CD4MCuN	•	•	•	•	-	-	-	-	-	•	•	•	•	•	•	•		
77b	O-ring	E / F / K / M / V / X	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
86	Bearing bracket	EN-GJL-250	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
86a	SPM fitting	Steel	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
86b	Plug	Steel	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		

Pos.	Description	Materials	Material code																
			A	B	C	D	E	F	G	H	K	L	M	N	P	R	S	T	
86c	Plug	Composite	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
86d	Venting plug	Composite	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
88	Constant-level oiler	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
90c	Foot	EN-GJL-250 / 1.0338/carbon steel DC04	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
105	Shaft seal	Burgmann 1.4401/AISI 316	•	•	•	•	•	•	•	•	•	-	•	•	•	-	•	•	
		Burgmann 2.4610/Hastelloy C-4	-	-	-	-	-	-	-	-	-	•	-	-	-	•	-	-	
105f	Gasket for cartridge seal	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
156a	Cover (bearing)	1.0338/carbon steel DC04	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
156b	Screw	Steel	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
159a	Thrower	EPDM	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
159b	Oil seal	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
159f	Lock ring (circlip)	DIN 472 (C75 DIN 17 222)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
201	Loose flange, inlet	GGG50/1.4401/AISI 316	-	-	-	-	-	-	-	-	•	•	•	•	•	•	-	-	
201a	Loose flange, outlet	GGG50/1.4401/AISI 317	-	-	-	-	-	-	-	-	•	•	•	•	•	•	-	-	
203	Retainer, inlet	1.4310	-	-	-	-	-	-	-	-	•	•	•	•	•	•	-	-	
203a	Retainer, outlet	1.4310	-	-	-	-	-	-	-	-	•	•	•	•	•	•	-	-	

Material of coupling (pos. 8a)

Coupling type	Poles	Motor size	Material
Standard coupling	2	Up to 22 kW	EN-GJL-250
		From 30 kW	EN-GJS-450-10
	4	Up to 30 kW	EN-GJL-250
		From 37 kW	EN-GJS-450-10
	6	Up to 37 kW	EN-GJL-250
		From 45 kW	EN-GJS-450-10
Spacer coupling	All	All	EN-GJL-250

Note: Other configurations are available on request.
Please contact Grundfos.

Mechanical construction

Mounting design (NB)

NB pumps come in these mounting designs:

Mounting design A: pump housing with feet

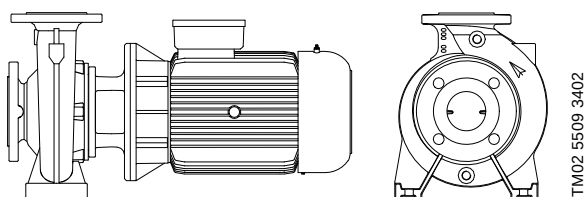


Fig. 10 Mounting design A

Mounting design B: motor with feet

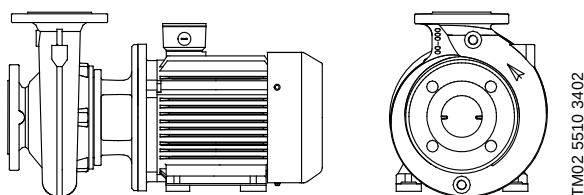


Fig. 11 Mounting design B

Mounting design C: pump housing and motor with feet

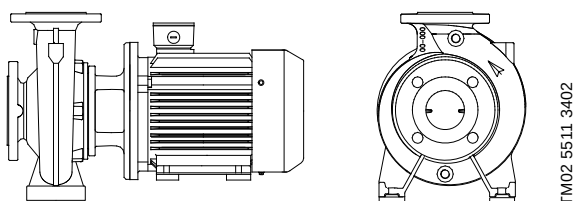


Fig. 12 Mounting design C

Mounting design F: design C with base frame.

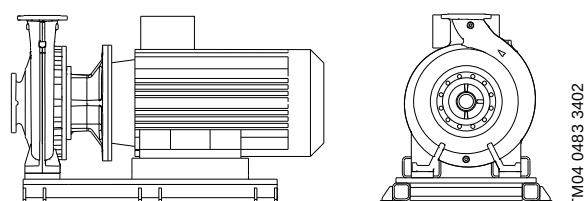


Fig. 13 Mounting design F

Pump housing

The volute pump housing has an axial suction port and a radial discharge (centre-line) port.

Flange dimensions are in accordance with EN 1092-2.

For DN 200 outlet and above, the discharge port is tangential.

The pump houses have both a priming and a drain hole closed by plugs.

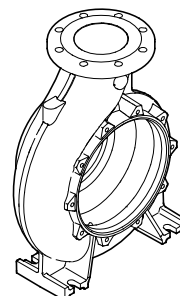


Fig. 14 NB and NK pump housing with centre-line outlet

Bearing bracket and shaft (NK)

The bearing bracket has two sturdy anti-friction, lubricated-for-life bearings.

The bearing bracket is made of cast iron EN-GJL-250.

The shaft is made of stainless steel. Shaft diameter d5 is either Ø24, Ø32, Ø42, Ø48 or Ø60 where the coupling is mounted.

A thrower on the shaft prevents liquid from entering the bearing bracket. In stuffing box versions, the shaft is protected by a stainless steel sleeve.

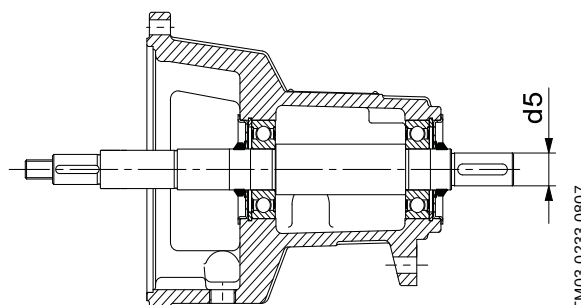


Fig. 15 Bearing bracket and shaft

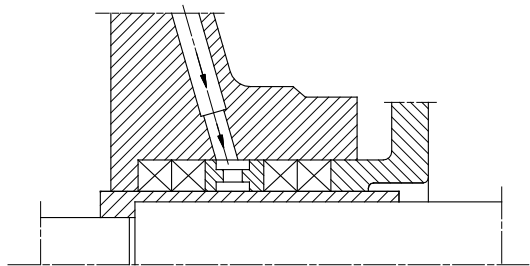
All NK pumps are fitted with one of five shaft, shaft seal and bearing sizes. As the bearings and shafts are large, the NK pumps can be driven by a belt drive or a diesel engine, if required.

For prolonged lifetime and to suit high inlet pressure, heavy duty bearing brackets are available. See the data booklet "NB, NBG, NK, NKG, NBE, NBGE, NKE, NKGE - Custom-built pumps according to EN 733 and ISO 2858", or contact Grundfos.

Stuffing boxes (NK)

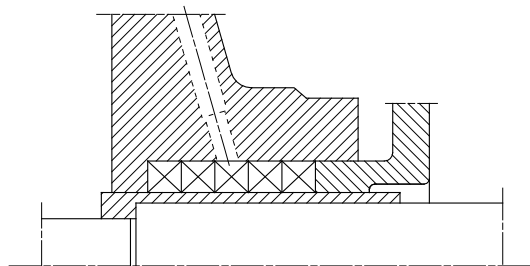
Stuffing boxes are available as pure packing rings or as packing rings with graphite seals. Stuffing box packing rings with graphite seals have proven their qualities in a wide range of applications, especially under extreme conditions, such as high pressure or high temperature, or operation with oils or aggressive liquids.

Braided material is effective for ensuring long service life for packing rings while protecting the shaft (sleeve) when used in pumps. When fitted, these packing rings are symmetrical, having parallel facings that rule out tilting.



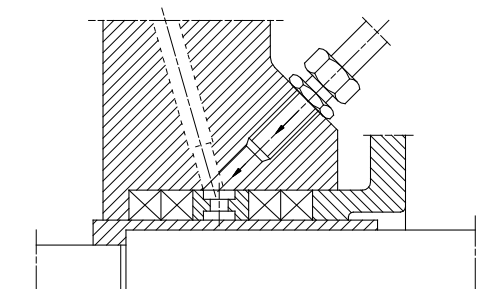
TM00 2584 0597

Fig. 16 Uncooled stuffing box, type SNE(x), with internal barrier liquid for the pumping of clean liquids in suction operation or at inlet pressures up to 4 bar



TM00 2585 0597

Fig. 17 Uncooled stuffing box, type SNO(x), without internal barrier liquid for the pumping of clean liquids in suction operation or at inlet pressures over 4 bar



TM00 2586 0597

Fig. 18 Uncooled stuffing box, type SNF(x), with external barrier liquid for the pumping of contaminated and malodorous liquids

Motor stool and cover (NB)

The cover is provided with a manual air vent screw for the venting of the pump housing and the shaft seal chamber. An O-ring forms the seal between cover and pump housing.

Coupling guards are fitted to the motor stool.

The mounting designations of motors for NB, NBE are as follows:

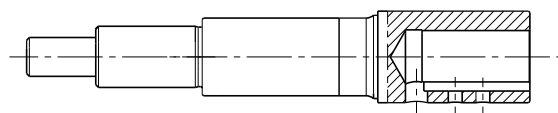
- IM B5: up to and including frame size 132.
- IM B35: as from frame size 160 and upwards.

The flange size of the motor stool is according to IEC 60034.

Shaft (NB)

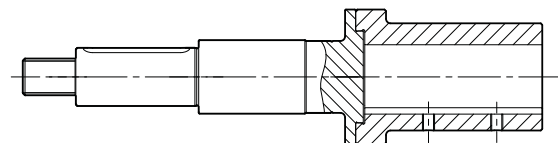
The stainless steel shaft is $\varnothing 28$, $\varnothing 38$, $\varnothing 48$, $\varnothing 55$ or $\varnothing 60$ where the shaft seal is mounted.

The coupling end of the shaft is cylindrical and has two drilled holes for the set screws of the coupling.



TM02 9500 2704

Fig. 19 Stub shaft, NB pump



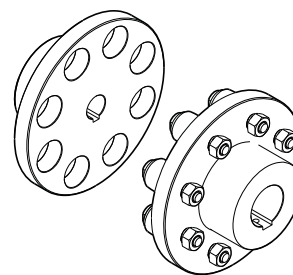
TM03 5393 3506

Fig. 20 2-part stub shaft, NB pump

Coupling (NK)

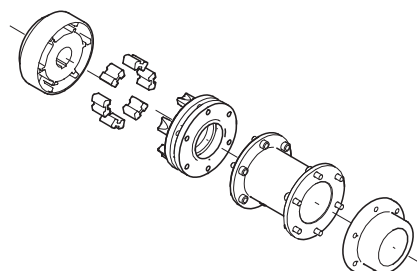
NK pumps are available with two types of coupling:

- standard coupling
- spacer coupling.



TM03 5394 3506

Fig. 21 Standard coupling



TM03 0234 4504

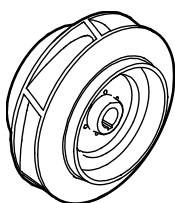
Fig. 22 Spacer coupling

Pumps fitted with a spacer coupling can be serviced without dismantling the motor from the base frame and without removing the pump housing from the pipework. This saves realignment of pump and motor after service.

For couplings for ATEX-approved pumps, see the data booklet "NB, NBG, NK, NKG, NBE, NBGE, NKE, NKGE - Custom-built pumps according to EN 733 and ISO 2858".

Impeller

The impeller is a closed impeller with double-curved blades with smooth surfaces. This ensures high efficiency.



TM03 0231 4504

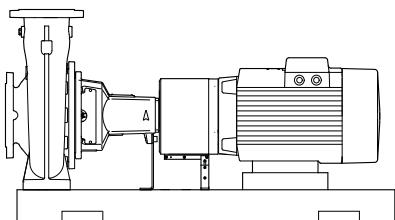
Fig. 23 Impeller, NB and NK pumps

All impellers are statically and hydraulically balanced. The hydraulic balancing compensates for axial thrust. The direction of rotation of the impeller is clockwise when viewed from the motor.

All impellers can be adapted to the duty point as requested by the customer.

Base frame (NK)

Pump and motor are mounted on a common steel base frame in accordance with EN 23661.



TM03 4227 1906

Fig. 24 Schematic view of NK pump-motor unit mounted on a base frame

A base frame prepared for grouting is available as an option. See page 46.

Surface treatment

NB and NK

The cast iron parts of NB and NK pumps have an epoxy-based coating made in a cathodic electro-deposition (CED) process. CED is a high-quality dip-painting process where an electrical field around the products ensures deposition of paint particles as a thin, well-controlled layer on the surface. An integral part of the process is a pretreatment. The entire process consists of these elements:

1. alkaline-based cleaning
2. zinc phosphating
3. cathodic electro-deposition
4. curing to a dry film thickness of 18-22 µm.

The colour code for the finished product is NCS 9000/AL 9005.

For low-temperature applications at high humidity, Grundfos offers NB and NK pumps with extra surface treatment to avoid corrosion. These pumps are available on request.

Test pressure

Pressure testing was made with +20 °C water containing corrosion inhibitor.

Pressure stage	Operating pressure		Test pressure	
	bar	MPa	bar	MPa
PN 10	10	1.0	15	1.5
PN 16	16	1.6	24	2.4
PN 25	25	2.5	37.5	3.75

Motors and drives

For NB, NBE, NK, NKE pumps Grundfos can provide a wide range of motors and drives within these two main categories:

- standard motors
- speed-controlled motors.

Standard motors are mains-operated whereas the speed-controlled motors can be started and operated in various ways.

The speed-controlled NBE, NKE pumps can be driven in two ways:

- by a standard motor with an external frequency converter. The frequency converter can be a Grundfos CUE solution or another make.
- by a motor with an integrated frequency converter, a Grundfos MGE motor.

Standard motors

The motor is a totally enclosed, fan-cooled standard motor with main dimensions according to IEC and DIN standards. Electrical tolerances are to IEC 60034.

Motor protection

Three-phase motors must be connected to a motor-protective circuit breaker according to local regulations.

Three-phase Grundfos motors (MG) as from 3 kW have a built-in thermistor (PTC) according to DIN 44082 (IEC 34-11: TP 211).

Energy efficiency classification

IE1 IE2 IE3

Along with the international discussion on energy efficiency a worldwide harmonised energy efficiency classification system has been established for low-voltage, three-phase asynchronous motors. The International Electrotechnical Commission, IEC, has developed and issued a new standard for the determination of motor efficiencies worldwide. The new standard IEC 60034-30 defines and harmonises the efficiency classes IE1, IE2 and IE3 for low-voltage, three-phase motors from 0.75 to 355 kW for 2-, 4- and 6-pole motors.

IE3 (premium efficiency) motors have a higher efficiency level than IE2 (high efficiency) and IE1 (standard efficiency) motors.

Standard motor ranges

The table shows the range of standard motors currently used for NB, NK pumps. The motors stated in section 16. *Performance curves and technical data* are MG and Siemens motors.

IE class	Motor	Pole	P2 [kW]																														
			0.25	0.37	0.55	0.75	1.1	1.5	2.2	3	4	5.5	7.5	11	15	18.5	22	30	37	45	55	75	90	110	132	160	200	250	315	355	400		
IE1	MMG-E	2	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		4	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		6	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	MMG-G	2	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		4	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		6	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
IE2	MG	2	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Siemens	2	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		4	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		6	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	MMG-E	2	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		6	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	MMG-G	2	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		4	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		6	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	MMG-H	2	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		6	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
IE3	MG	2	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		4	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Siemens	2	-	-	-	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		4	-	-	-	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		6	-	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Grey background = Outside definition of IE class

Note: Not all motor makes are available worldwide. For specific information about the motor makes available in your region, contact your Grundfos Customer Service Unit (CSU).

Speed-controlled standard motors

General considerations

If you connect an external frequency converter to your standard motor, the motor insulation will be exposed to higher voltage peaks due to the operation of the frequency converter. This will cause the motor to be more noisy than in normal operation. In addition, large motors will be exposed to bearing currents caused by the frequency converter.

If you operate the motor via a frequency converter, consider the following:

- In 2-, 4- and 6-pole motors, frame size 225 and up, isolate one of the motor bearings electrically to prevent damaging currents from passing through the motor bearings.
- In noise-sensitive applications you can reduce the motor noise by fitting a dU/dt filter between the motor and the frequency converter.
For particularly noise-sensitive applications, we recommend a sinusoidal filter.
- The length of the cable between motor and frequency converter affects the motor load. Therefore, check that the cable length meets the specifications laid down by the frequency converter supplier.
- For supply voltages between 500 and 690 V, fit a dU/dt filter to reduce voltage peaks, or use a motor with reinforced insulation.
- For supply voltages of 690 V, use a motor with reinforced insulation, and fit a dU/dt filter.

Grundfos CUE

NB, NK pumps connected to Grundfos CUE external frequency converters



GrA 4404

Fig. 25 Grundfos CUE frequency converters

Grundfos CUE is a complete range of wall-mounted frequency converters for pump control in a wide range of applications.

Grundfos CUE provides a variety of benefits to the end-user, such as:

- Grundfos E-pump functionality and user interface
- application- and pump family-related functions
- increased comfort compared to fixed-speed pump solutions
- simple installation and commissioning compared to standard frequency converters
- speed control of pumps up to 250 kW.

Intuitive start-up guide

The start-up guide enables easy installation and commissioning as well as plug-and-pump convenience. Few settings need to be made by the installer as the rest is done automatically or preset from the factory.

Smart user interface



TM04 3283 4108

Fig. 26 Grundfos CUE user interface

Grundfos CUE features a unique user-friendly control panel with graphic display and easy-to-use buttons. The panel layout resembles the well-known Grundfos R100 remote control used with Grundfos E-pumps.

Controlling the selected parameter

Grundfos CUE has a built-in PI controller offering closed-loop control of these parameters:

- constant differential pressure
- proportional pressure
- constant temperature
- constant flow rate.

Wide product range

The CUE product range is quite comprehensive, covering five different voltage ranges, enclosure classes IP20/21 (NEMA 1) and IP54/55 (NEMA 12), and a wide range of output powers.

The table below provides a general overview.

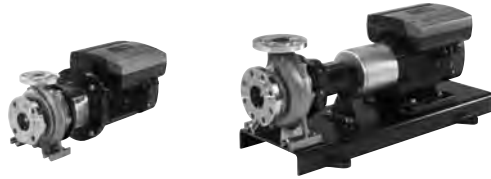
Input voltage [V]	Output voltage [V]	Motor [kW]
1 x 200-240	3 x 200-240	1.1 - 7.5
3 x 200-240	3 x 200-240	0.75 - 45
3 x 380-500	3 x 380-500	0.55 - 250
3 x 525-600	3 x 525-600	0.75 - 7.5
3 x 525-690	3 x 525-690	11 - 250

External communication

Grundfos CUE can communicate by means of LON, PROFIBUS, Modbus or BACnet via Grundfos CIU.

Grundfos MGE motors

NBE, NKE pumps with a motor with an integrated frequency converter



TM04 59374409
TM04 5939 4409

Fig. 27 NBE and NKE pumps

The MGE motor is a totally enclosed, fan-cooled, frequency-controlled motor with dimensions according to IEC and DIN standards. Electrical tolerances are to IEC 60034.

Motor protection

The motor requires no external motor protection. MGE motors incorporate thermal protection against steady overload and stalled condition (IEC 34-11: TP 211).

Benefits

Grundfos MGE motors provide a variety of benefits to the end-user, such as:

- Grundfos E-pump functionality and user interface
- a perfect match between pump and frequency drive
- application- and pump family-related functions
- increased comfort compared to fixed-speed pump solutions
- simple installation and commissioning compared to standard frequency converters.

Smart user interface



TM03 0302 4704

Fig. 28 MGE user interface

Grundfos MGE motors feature a user-friendly control panel with easy-to-use buttons. The panel layout resembles the well-known Grundfos R100 remote control used with Grundfos E-pumps.

Controlling the selected parameter

Grundfos MGE has a built-in PI controller offering closed-loop control of these parameters:

- constant differential pressure
- proportional pressure
- constant temperature
- constant flow rate.

MGE motor range

IE class	Pole	P2 [kW]													
		0.25	0.37	0.55	0.75	1.1	1.5	2.2	3	4	5.5	7.5	11	15	18.5
IE3	2	-	-	-	•	•	•	•	•	•	•	•	•	•	•
	4	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Outside definition of IE class

External communication

Grundfos MGE can communicate by means of LON, PROFIBUS, Modbus or BACnet as described in section *Communication with the E-solution*.

Optional motors

The Grundfos standard range of motors covers a wide variety of application requirements. However, for special applications or operating conditions, custom-built motor solutions can be provided.

For special applications or operating conditions, Grundfos offers custom-built motors such as:

- ATEX-approved motors
- MG motors with anti-condensation heating unit
- motors with thermal protection.

7. Operating conditions

Pump location

The pump is designed for installation in a non-aggressive and non-explosive atmosphere.
The relative air humidity must not exceed 95 %.

Ambient temperature and altitude

The ambient temperature and the installation altitude are important factors for the motor life, as they affect the life of the bearings and the insulation system.
If the ambient temperature exceeds the recommended maximum ambient temperature or maximum altitude above sea level (see fig. 29), the motor must not be fully loaded due to the low density and consequently low cooling effect of the air. In such cases it may be necessary to use a motor with a higher output.

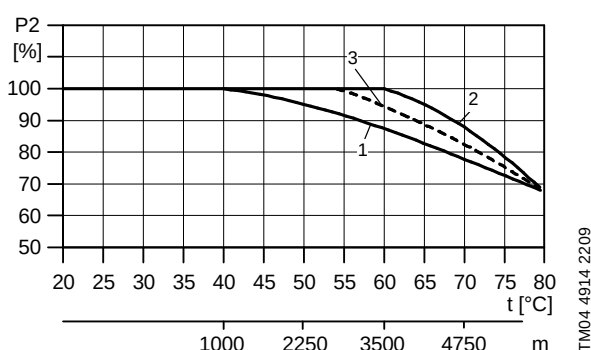


Fig. 29 Maximum motor output in relation to ambient temperature and altitude

Legend

Pos.	Description
1	0.25 - 0.55 kW MG motors
2	0.75 - 22 kW MG motors (IE2/IE3)
	0.75 - 450 kW MMG-H motors (IE2)
3	0.75 - 462 kW Siemens motors (IE2/IE3)

Example with a pump with a 1.1 kW IE2 MG motor:
If the pump is installed 4750 m above sea level, the motor must not be loaded more than 88 % of rated output. At an ambient temperature of 75 °C, the motor must not be loaded more than 78 % of rated output.
If the pump is installed 4750 m above sea level at an ambient temperature of 75 °C, the motor must not be loaded more than $88 \% \times 78 \% = 68.6 \%$ of rated output.

Flow rates

Minimum flow rate

The pump must not run against a closed discharge valve as this will cause an increase in temperature/formation of steam in the pump. This may cause shaft damage, impeller erosion, short life of bearings, damage to stuffing boxes or mechanical shaft seals due to stress or vibration.

The continuous flow rate must be at least 10 % of the maximum flow rate.

Maximum flow rate

The maximum flow rate must not be exceeded as otherwise there is a risk of for instance cavitation and overload.

The maximum flow rate can be read either from the performance curve pages or it can be read from a curve on a specific pump when selecting it in WebCAPS.

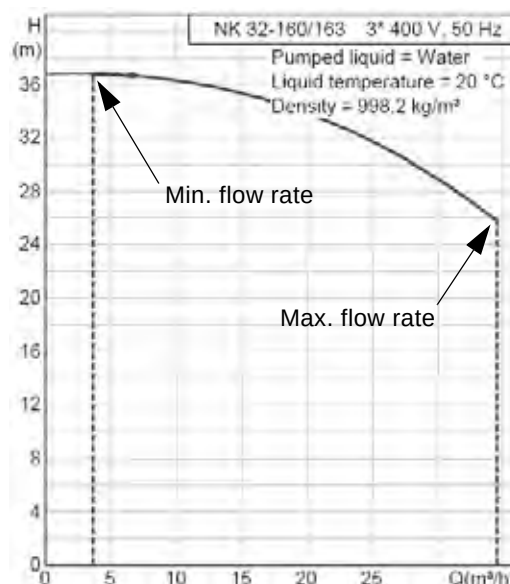


Fig. 30 Example from WebCAPS showing minimum and maximum flow rate

Sound pressure level

Data in this table applies to pump including motor.

Motor [kW]	Maximum sound pressure level [dB(A)] - ISO 3743		
	Three-phase motors		
	2-pole	4-pole	6-pole
0.25	56	41	-
0.37	56	45	-
0.55	57	42	40
0.75	56	42	43
1.1	59	50	43
1.5	58	50	47
2.2	60	52	52
3	67	58	63
4	69	58	63
5.5	68	64	63
7.5	68	64	67
11	70	65	67
15	70	65	57
18.5	70	57	57
22	67	57	57
30	67	57	57
37	67	57	57
45	67	57	58
55	71	57	58
75	73	65	59
90	73	65	59
110	73	65	60
132	73	65	60
160	76	65	63
200	76	65	67
250	78	73	68
315	82	74	71
355	77	75	71
400	-	75	

Liquid temperatures

Liquids with temperatures ranging from -25 °C to +140 °C are covered in this booklet.

For liquids from -40 °C to +220 °C, see the data booklet "NB, NBG, NK, NKG, NBE, NBGE, NKE, NKGE - Custom-built pumps according to EN 733 and ISO 2858", or contact Grundfos. In that data booklet you will also find information about the seals being used for other liquids than water and glycols, i.e. oils, chemicals and silicone oil. Further seal types are also described to support more application types and pumped liquids.

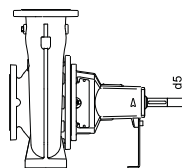
The maximum liquid temperature is stamped on the nameplate.

Note that the maximum liquid temperature limits stated by Grundfos may be overruled by local regulations and various laws.

Operating range of mechanical shaft seals

The temperature range applies to water and coolants.

Seals with a temperature range of 0 °C and up are mainly used for pumping water, while seals for temperatures below 0 °C are mainly intended for coolants.



Shaft seal diameter [mm]	NB, NK		28, 38	48	55	60		
d5 [mm]	NK		24, 32	42	48	60		
Shaft seal type	Code	Temperature range	Maximum pressure [bar]				Seal faces	Rubber
	BAQE	0 °C to +120 °C	16	16	16	16	AQ ₁	EPDM
	BAQV	0 °C to +90 °C	16	16	16	16	AQ ₁	FKM
	BBQE	0 °C to +120 °C	16	16	16	16	BQ ₁	EPDM
	BBQV	0 °C to +90 °C	16	16	16	16	BQ ₁	FKM
	BQQE	0 °C to +90 °C	16	16	16	16	Q ₁ Q ₁	EPDM
	BQQV	0 °C to +90 °C	16	16	16	16	Q ₁ Q ₁	FKM
	GQQE	-25 °C to +90 °C	16	16*	16*	16*	Q ₁ Q ₁	EPDM
	GQQV	-20 °C to +90 °C	16	16*	16*	16*	Q ₁ Q ₁	FKM
	AQAE	0 °C to +120 °C	25	25	25	25	Q ₁ A	EPDM
	AQAV	0 °C to +90 °C	25	25	25	25	Q ₁ A	FKM
	AQQE	0 °C to +90 °C	25	25	16	16	Q ₁ Q ₁	EPDM
	AQQV	0 °C to +90 °C	25	25	16	16	Q ₁ Q ₁	FKM
	AQQX	0 °C to +90 °C	25	25	16	16	Q ₁ Q ₁	HNBR
	AQQK	0 °C to +90 °C	16	16	16	16	Q ₁ Q ₁	FFKM
	DAQF	0 °C to +140 °C	25	25	25	25	AQ ₆	FXM
	DQQE	0 °C to +120 °C	25	25	25	25	Q ₆ Q ₆	EPDM
	DQQV	0 °C to +90 °C	25	25	25	25	Q ₆ Q ₆	FKM
	DQQX	0 °C to +120 °C	25	25	25	25	Q ₆ Q ₆	HNBR
	DQQK	0 °C to +120 °C	25	25	25	25	Q ₆ Q ₆	FFKM

* Max. 60 °C.

Carbon/silicon carbide (xAQx), (xBQx), (xQBx)

Mechanical shaft seals with carbon/silicon carbide seal faces have a wide range of applications and are especially suitable if there is risk of dry running and/or if the temperature is high. These mechanical shaft seals are not suitable for liquids containing abrasive particles as the carbon parts will be worn.

At temperatures below 0 °C, corrosion inhibitors containing abrasive particles will usually be added to the pumped liquid, and these seals will thus not be suitable.

Note: The antimony impregnation (A) is not approved for potable water applications.

Silicon carbide/silicon carbide (xQQx)

Mechanical shaft seals with silicon carbide/silicon carbide seal faces also have a very wide range of applications. These seals are very resistant to abrasive particles and well suited at liquid temperatures up to +90 °C for Q₁ types, and up to +120 °C for Q₆ types. At higher temperatures, the reduced lubricating properties of the pumped liquid may cause noise problems and limit the life of the seal faces.

EPDM (xxxE)

Mechanical shaft seals with EPDM (xxxE) rubber are primarily suitable for water.

If the water contains oil or if chemicals or other liquids than water are pumped, you may have to replace the rubber parts of the mechanical shaft seal.

FKM (xxxV)

Mechanical shaft seals with FKM (xxxV) rubber have excellent resistance against oil and a number of chemicals.

Note: For detailed information about properties of all shaft seal components, see the data booklet "NB, NBG, NK, NKG, NBE, NBGE, NKE, NKGE - Custom-built pumps according to EN 733 and ISO 2858".

Operating range of stuffing boxes

Stuffing box type	Code for stuffing box	Code for packing material ¹⁾	O-rings in pump	Temperature range ²⁾ [°C]	Max p [bar]	Availability						Pumps	
						Stuffing box inner diameter [mm]	28	38	48	55	60	NB, NBE, NK	NKE, NKG
							d5 [mm]	24	32	42	48		
	SNEA	B	EPDM	-30 to +140	16		•	•	-	-	-	-	•
	SNEB	T	EPDM	-30 to +140	16		•	•	-	-	-	-	•
	SNEC	B	FKM	-30 to +90	16		•	•	-	-	-	-	•
	SNED	T	FKM	-30 to +90	16		•	•	-	-	-	-	•
	SNOA	B	EPDM	-30 to +140	16		•	•	-	-	-	-	•
	SNOB	T	EPDM	-30 to +140	16		•	•	-	-	-	-	•
	SNOC	B	FKM	-30 to +90	16		•	•	-	-	-	-	•
	SNOD	T	FKM	-30 to +90	16		•	•	-	-	-	-	•
	SNFA	B	EPDM	-30 to +140	16		•	•	-	-	-	-	•
	SNFB	T	EPDM	-30 to +140	16		•	•	-	-	-	-	•
	SNFC	B	FKM	-30 to +90	16		•	•	-	-	-	-	•
	SNFD	T	FKM	-30 to +90	16		•	•	-	-	-	-	•

- ¹⁾ B = Buraflon® (PTFE-impregnated fibre packing rings)
T = Thermoflon® (graphite-PTFE compound packing rings)
²⁾ The temperature range applies to water and coolants.

Pressures in the pump

Maximum operating pressure

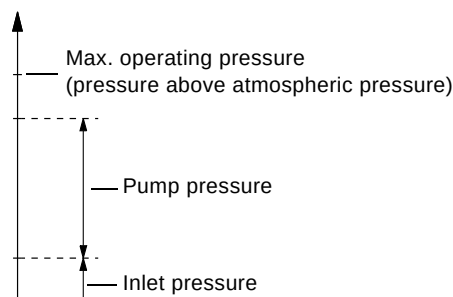


Fig. 31 Pressures in the pump

The inlet pressure + pump pressure must be lower than the maximum operating pressure (p) stated on the pump nameplate. The maximum operating pressure can be checked by closing the discharge valve briefly (max. 30 seconds).

Minimum inlet pressure

The minimum inlet pressure must be according to the NPSH curve + a safety margin of at least 0.5 m + correction for vapour pressure. We do, however, recommend that you calculate the inlet pressure in these cases:

- The liquid temperature is high.
- The flow rate is considerably higher than the pump's rated flow rate.
- The pump is operating in an open system with suction lift.
- The liquid is sucked through long pipes.
- The inlet conditions are poor.
- The operating pressure is low.

Maximum inlet pressure

The inlet pressure + pump pressure must be lower than the maximum operating pressure (p) stated on the pump nameplate. The maximum operating pressure can be checked by closing the discharge valve briefly (max. 30 seconds).

Suction lift in open systems

Calculation of suction lift in open systems (water)

The suction lift "H" in metres head required during operation to avoid cavitation in the pump can be calculated by means of the following formula:

$$H = p_b \times 10.2 - \text{NPSH} - H_f - H_v - H_s$$

H	Suction lift
p_b	Barometric pressure in bar. (The barometric pressure can be taken as (=) 1 bar.) In closed systems, p_b indicates system pressure in bar.
NPSH	Net Positive Suction Head in metres head (to be read from the NPSH curve at the highest flow the pump will be delivering). The maximum flow rate must not exceed the maximum flow rate shown on the QH curve. The NPSH curve and QH curve for the individual pump can be found in WebCAPS and in the relevant data booklet.
H_f	Friction loss in suction pipe in metres head (at the highest flow the pump will be delivering).
H_v	Vapour pressure in metres head (see fig. 32)
H_s	Safety margin = min. 0.5 metres head.

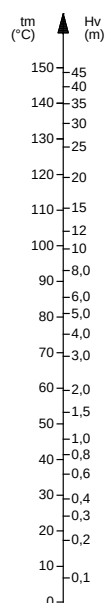


Fig. 32 Relation between liquid temperature and vapour pressure

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Example:

p_b :	1 bar
Pump type:	NK 50-200/219, 2-pole, 50 Hz
Flow rate:	70 m ³ /h
NPSH:	2.35 m head
H_f :	3.0 m head
Liquid temperature:	+90 °C
H_v :	7.2 m head

$$H = p_b \times 10.2 - \text{NPSH} - H_f - H_v - H_s \text{ [m head]}$$

$$H = 1 \times 10.2 - 2.35 - 3.0 - 7.2 - 0.5 = -2.85 \text{ m head}$$

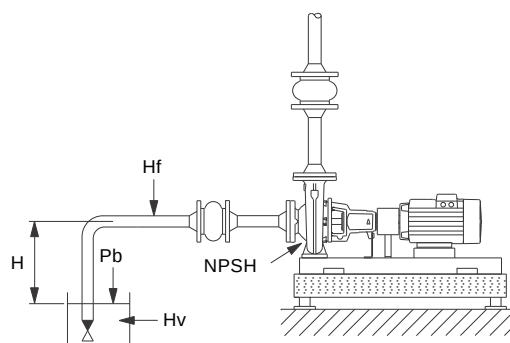
This means that a suction head of 2.85 metres is required during operation.

Inlet pressure calculated in bar: $2.85 \times 0.0981 = 0.28$ bar.

Inlet pressure calculated in kPa: $2.85 \times 9.81 = 28$ kPa.

Positive H value

If the calculated value of H is positive, the pump can operate with a maximum suction lift of H metres.

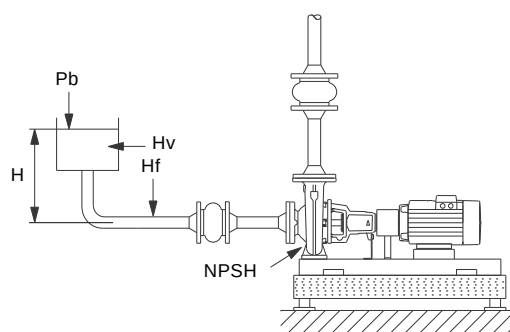


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Fig. 33 Suction lift with positive H

Negative H value

If the calculated value of H is negative, a minimum suction head of H metres is required. The calculated H must be present during operation.



TM05 6779 5112

Fig. 34 Suction lift with negative H

8. Mechanical installation

Foundation and grouting

Foundation

We recommend that you install the pump on a plane and rigid concrete foundation which is heavy enough to provide permanent support for the entire pump. The foundation must be capable of absorbing any vibration, normal strain or shock. As a rule of thumb, the weight of the concrete foundation should be 1.5 times the weight of the pump.

The foundation should be 100 mm larger than the base frame on all four sides. See fig. 35.

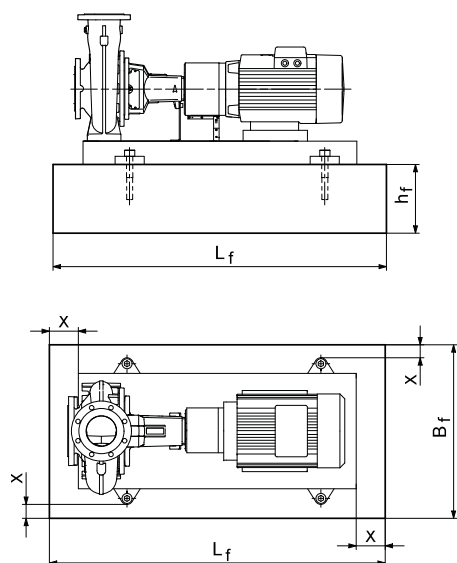


Fig. 35 Foundation, X = min. 100 mm

The minimum height of the foundation (h_f) can then be calculated:

$$h_f = \frac{m_{\text{pump}} \times 1.5}{L_f \times B_f \times \delta_{\text{concrete}}}$$

The density (δ) of concrete is usually taken as 2200 kg/m³.

Place the pump on the foundation, and fasten it. The base frame must be supported under its entire area. See fig. 36.

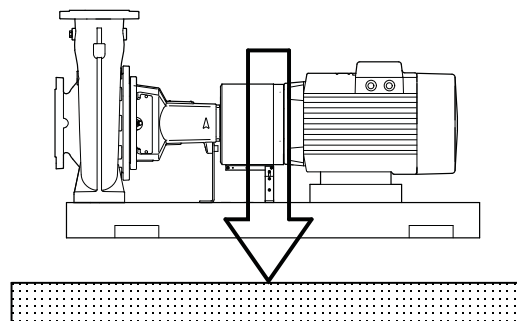


Fig. 36 Correct foundation

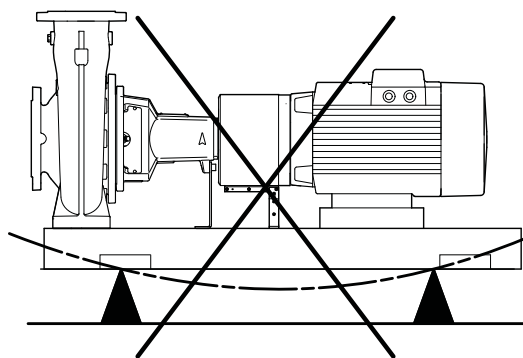


Fig. 37 Incorrect foundation

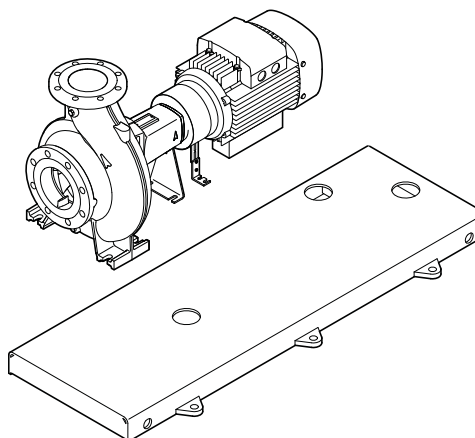


Fig. 38 Base frame prepared for grouting

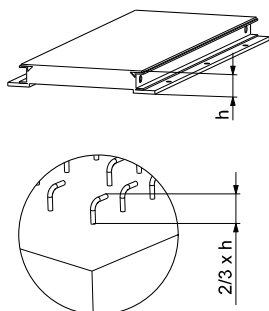
Grouting

Grouting compensates for uneven foundation, distributes the weight of the unit, dampens vibrations and prevents shifting.

All NK pumps can be delivered with base frames prepared for grouting as an option. NB pumps with base frames are always prepared for grouting.

For 2-pole NK and NB pumps with motors as from 55 kW, grouting of the base frame is mandatory in order to prevent vibration energy from the rotating motor and the liquid flow.

Use an approved, non-shrinking grout. (If in doubt, contact your grout supplier.)



TM04 0490 0708

Fig. 39 Reinforcing steel bars embedded in foundation

Use reinforcing steel bars embedded in the foundation to ensure proper grouting.

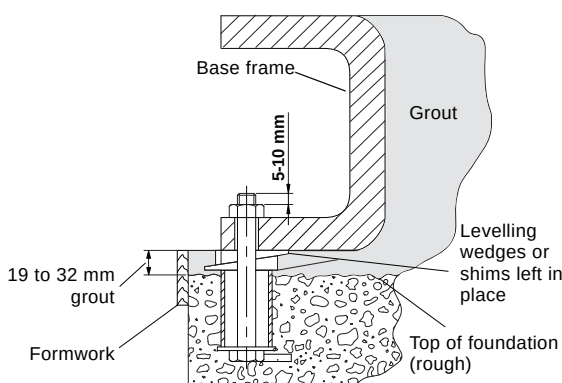
Build a strong formwork around the foundation.

Soak the top of the concrete foundation thoroughly, and remove surface water.

Fill the formwork with grout up to the base frame top level. See fig. 40. Allow the grout to dry thoroughly before attaching pipes to the pump. (24 hours is sufficient time with approved grouting procedure.)

When the grout has thoroughly hardened, check the foundation bolt nuts and tighten, if necessary.

Approximately two weeks after the grout has been poured, or when the grout has thoroughly dried, apply an oil-based paint to the exposed edges of the grout to prevent air and moisture from getting into contact with the grout.



TM03 2946 4707

Fig. 40 Sectional view of foundation with foundation bolt, grouting and base frame

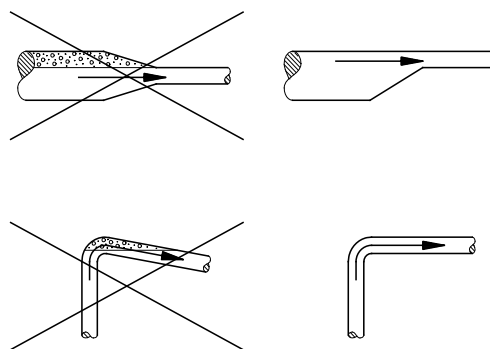
Pipework

Piping

When installing the pipes, make sure that the pump housing is not stressed by the pipework.

The suction and discharge pipes must be of an adequate size, taking the pump inlet pressure into account.

Install the pipes so that air locks are avoided, especially on the suction side of the pump. See fig. 41.

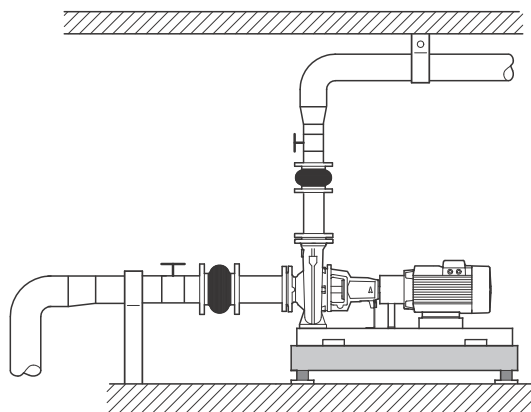


TM00 2263 3393

Fig. 41 Pipelines

Fit isolating valves on either side of the pump to avoid having to drain the system if the pump needs to be cleaned or repaired.

Make sure the pipes are adequately supported as close to the pump as possible, both on the suction and the discharge side. The counter-flanges should lie true against the pump flanges without being stressed as this would cause damage to the pump.

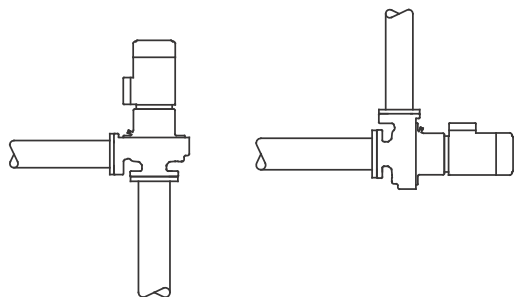


TM05 3488 1412

Fig. 42 Pipeline mounting

Direct mounting in pipework

NB pumps of mounting design A are suitable for direct mounting in supported pipework.



TM05 3337 1212

Fig. 43 Direct mounting in pipework

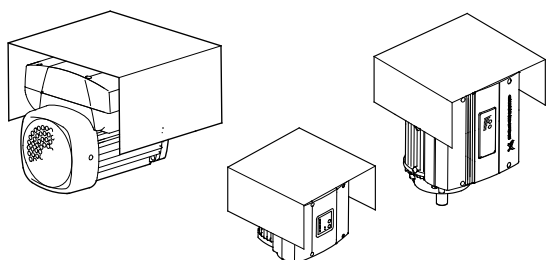
This type of installation does not allow the use of expansion joints.

Note: To ensure quiet operation, the pipes should be suspended from suitable pipe hangers.

Condensation cover

When installing NB, NBE, NK, NKE pumps outdoors, pump and motor must be provided with a suitable cover to avoid condensation on the electric components and to protect the pump and motor against direct sunlight.

When mounting the condensation cover on top of the motor, make sure to leave enough space for the air to cool the motor.



TM02 8514 0304 - TM00 8622 0101

Fig. 44 Speed-controlled motors with condensation cover

Elimination of noise and vibrations

In order to achieve optimum operation and minimum noise and vibration, consider vibration dampening of the pump. Generally, always consider this for pumps with motors above 11 kW. Smaller motor sizes, however, may also cause undesirable noise and vibration.

Noise and vibration are generated by the revolutions of the motor and pump and by the flow in pipes and fittings. The effect on the environment is subjective and depends on correct installation and the state of the remaining system.

Elimination of noise and vibrations is best achieved by means of vibration dampers and expansion joints.

See fig. 42.

Vibration dampers

To prevent the transmission of vibrations to buildings, we recommend that you isolate the pump foundation from building parts by means of vibration dampers.

The selection of the right vibration damper requires the following data:

- forces transmitted through the damper
- motor speed considering speed control, if any
- required dampening in % (suggested value is 70 %).

The selection of vibration damper differs from installation to installation. In certain cases, a wrong damper may increase the vibration level.

Vibration dampers should therefore be sized by the supplier of the vibration dampers.

If you install the pump on a foundation with vibration dampers, always fit expansion joints on the pump flanges. This is important to prevent the pump from "hanging" in the flanges.

Expansion joints

Install expansion joints to

- absorb expansions/contractions in the pipework caused by changing liquid temperature
- reduce mechanical strains in connection with pressure surges in the pipework
- isolate mechanical structure-borne noise in the pipework (only rubber bellows expansion joints).

Note: Do not install expansion joints to make up for inaccuracies in the pipework, such as centre displacement or misalignment of flanges.

The expansion joints should be fitted at a minimum distance of 1 to 1 1/2 pipe diameters (DN) away from the pump on the suction and the discharge side.

This prevents turbulence in the joints, thus ensuring optimum suction conditions and minimum pressure loss on the discharge side. At flow velocities > 5 m/s, we recommend fitting larger expansion joints matching the pipework.

The illustration below shows examples of rubber bellows expansion joints with or without limiting rods.



TM02 4979 1902

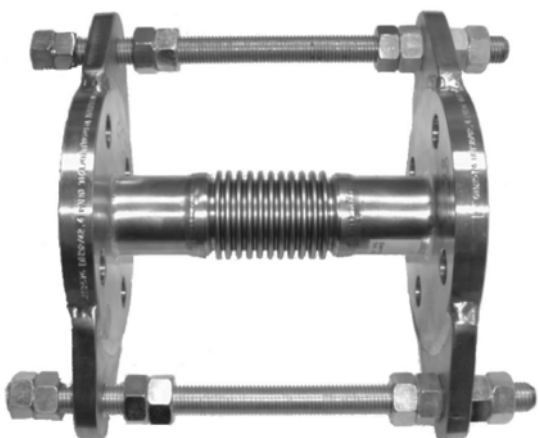


TM02 4981 1902

Fig. 45 Rubber bellows expansion joints with and without limiting rods

Expansion joints with limiting rods can be used to reduce the effects of the expansion/contraction forces on the pipework. We always recommend expansion joints with limiting rods for flanges larger than DN 100. Anchor the pipes in such a way that they do not stress the expansion joints and the pump. Follow the supplier's instructions and pass them on to advisers or pipe installers.

The illustration below shows an example of a metal bellows expansion joint with limiting rods.



TM02 4980 1902

Fig. 46 Metal bellows expansion joint with limiting rods

Due to the risk of rupture of the rubber bellows, metal bellows expansion joints may be preferred at temperatures above +100 °C combined with high pressure.

Alignment

Alignment applies only for NK, NKE pumps.

In a complete pump unit assembled and supplied from factory, the coupling halves have been accurately aligned. Alignment is made by inserting shims under the pump and motor mounting surfaces as required.

The pump/motor alignment may be affected during transport. Always check alignment after the pump has been installed.

If misalignment has occurred due to radial or angular shifting, realign by inserting/removing shims under the feet of the pump or the motor.

Take care to align carefully, as this will considerably increase the lives of the coupling, bearings and shaft seal.

Note: Check the final alignment when the pump has obtained its operating temperature under normal operating conditions.

9. Speed-controlled pumps

Most NB and NK pumps are available with motors with integrated speed control. These pumps are called NBE and NKE.

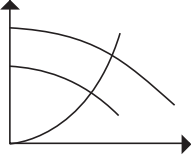
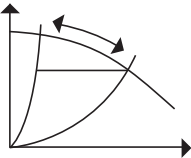
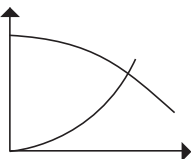
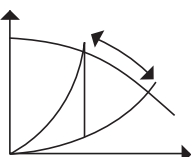
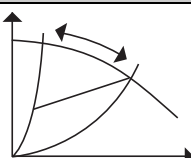
Alternatively, all NB and NK pumps with three-phase motors can be connected to an external frequency converter.

NBE and NKE pump applications

NBE and NKE pumps with integrated speed control enable automatic adaptation of performance to actual conditions. This keeps the energy consumption at a minimum.

Depending on the nature of the application, NBE and NKE pumps offer energy savings, increased comfort or improved processing.

The charts below show possible control modes of NBE and NKE pumps in different applications.

Control mode	Applications
Constant curve	
	Single-pipe heating systems Systems with three-way valves Heating and cooling surfaces Chiller pumps (Sensor not required)
Constant pressure	
	Pressure boosting systems (Sensor required)
Temperature control	
	Single-pipe heating systems Systems with three-way valves Cooling towers Chiller pumps Domestic hot-water recirculation systems (Sensor required)
Constant flow	
	Heating and cooling surfaces Cooling towers Flow filters (Sensor required)
Proportional differential pressure (measured)	
	System with two-way valves (Differential pressure sensor is located in the system)

Constant curve

In constant-curve mode the pump will adjust its speed to meet the required flow without using throttle valves.

In this control mode the pump can be set to operate within 12-100 % of the maximum performance range.

A sensor is not required for this control mode.

Constant pressure

In constant-pressure mode the pump will adjust its speed to keep a constant pressure where the sensor is fitted.

We recommend constant-pressure control in pressure-holding systems.

A pressure sensor with a suitable operating range is required.

Temperature control

In temperature mode the pump will adjust its speed to keep a constant temperature or a differential temperature.

We recommend this control mode in systems with three-way valves and systems without control valves.

A temperature sensor or a differential temperature sensor is required for this control mode.

Example

In an industrial cooling system, an NKE pump continuously adapts its performance to the changing demands reflected in the differences in temperature of the liquid circulating in the cooling system. The lower the demand for cooling, the smaller the quantity of liquid circulated in the system and vice versa.

Constant flow

In constant-flow mode the pump will adjust its speed to keep a constant flow irrespective of variations in the system characteristics.

We recommend this control mode in systems where a constant flow is required.

This control mode requires an electronic flowmeter or a differential pressure sensor.

Proportional differential pressure (measured)

In proportional differential pressure (measured) mode, the pump will adjust its speed to maintain the differential pressure at a reference point in the system.

This control mode is recommended in large circulation systems where the NBE or NKE pump functions as a secondary pump. A differential pressure sensor is required for this control mode.

Example

In a two-pipe heating system or an air-conditioning system with variable flow, the pressure sensor can be fitted at a reference point away from the NKE pump.

As the flow increases, the NKE pump continuously adapts its speed to maintain the same differential pressure at the reference point.

Maximum speed of the impeller

The table below shows the relationship between pump speed and impeller material and size.

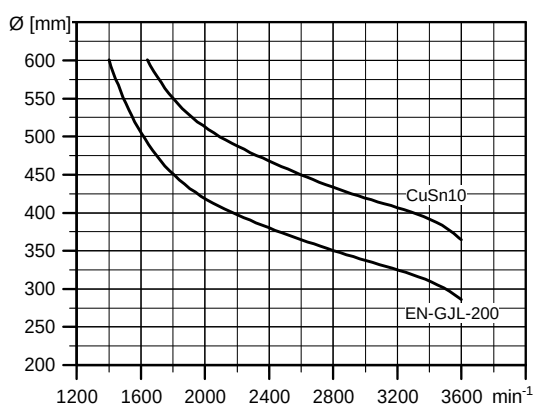


Fig. 47 Maximum permissible speed

For stainless steel impellers (1.4408/1.4517) the limit is 3600 min⁻¹ regardless of impeller size.

Affinity equations

Normally, NBE and NKE pumps are used in applications characterised by a variable flow. Consequently, it is not possible to select a pump that is constantly operating at its optimum efficiency.

In order to achieve optimum operating economy, the pump should be selected on the basis of the following criteria:

- The max. duty point required should be as close as possible to the QH curve of the pump.
- The flow rate at the duty point required should be close to the optimum efficiency (η) for most operating hours.

Between the min. and max. performance curve, NBE and NKE pumps have an infinite number of performance curves each representing a specific speed. It may therefore not be possible to select a duty point close to the max. curve.

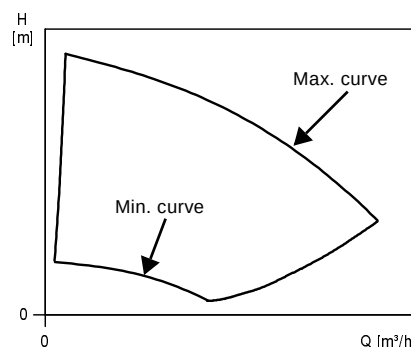


Fig. 48 Min. and max. performance curves

In situations where it is not possible to select a duty point close to the max. curve, use the affinity equations below. The head (H), the flow (Q) and the input power (P) are the appropriate variables you need to be able to calculate the motor speed (n).

Note: The approximated formulas apply on condition that the system characteristic remains unchanged for n_n and n_x and that it is based on the formula $H = k \times Q^2$, where k is a constant.

The power equation implies that the pump efficiency is unchanged at the two speeds. In practice this is not quite correct.

Finally, it is worth noting that the efficiencies of the frequency converter and the motor must be taken into account if a precise calculation of the power saving resulting from a reduction of the pump speed is wanted.

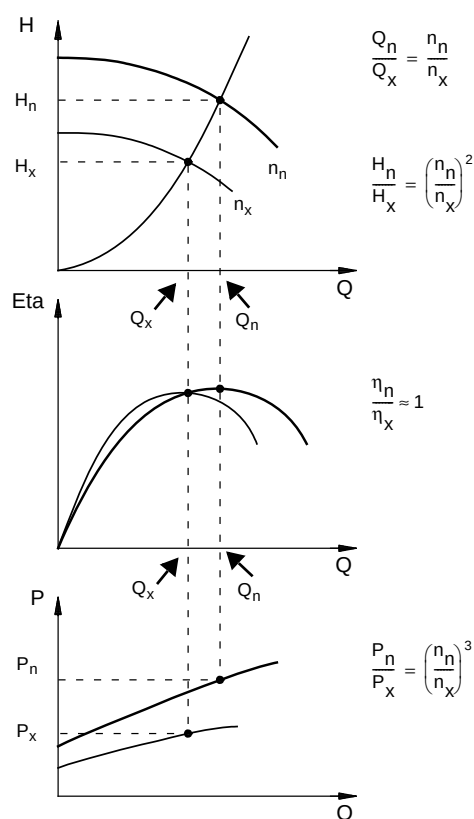


Fig. 49 Affinity equations

Legend

H_n	Rated head in m
H_x	Actual head in m
Q_n	Rated flow rate in m ³ /h
Q_x	Actual flow rate in m ³ /h
P_n	Rated input power in kW
P_x	Actual input power in kW
n_n	Rated motor speed in min ⁻¹
n_x	Actual motor speed in min ⁻¹
η_n	Rated efficiency in %
η_x	Actual efficiency in %

WinCAPS and WebCAPS

WinCAPS and WebCAPS are selection programs offered by Grundfos.

The two programs make it possible to calculate the specific duty point and energy consumption of an NBE or NKE pump.

When you enter the pump data, WinCAPS and WebCAPS can calculate the exact duty point and energy consumption. For further information, see page 345.

Communication with the E-solution

	E-solution	
	MGE	CUE
Control panel on unit	x	x
Grundfos GO remote control	x	-
R100 remote control	x	-
Central building management system	x	x

Control panel

The operator can change the setpoint settings manually on the control panel on the terminal box of the speed-controlled pump.

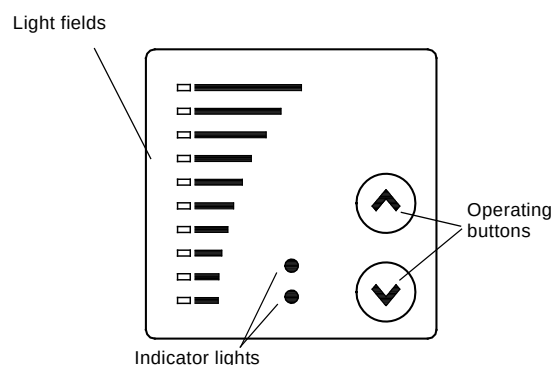


Fig. 50 Control panel of a speed-controlled pump, MGE

Remote control

Grundfos GO remote control

The operator can monitor and change control modes and settings of the speed-controlled pumps via Grundfos GO remote.

Grundfos GO remote communicates with the pump via wireless infrared or radio communication.

Grundfos GO remote which is available in a number of variants, is available as an accessory.



Fig. 51 MI 201, MI 202, MI 301

R100 remote control

The operator can monitor and change control modes and settings of the speed-controlled pump via the R100 remote control.

The operator can communicate with the speed-controlled pump by pointing the IR signal transmitter at the control panel on the terminal box of the speed-controlled pump.

The Grundfos R100 remote control is available as an accessory.

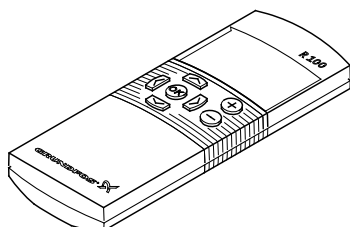
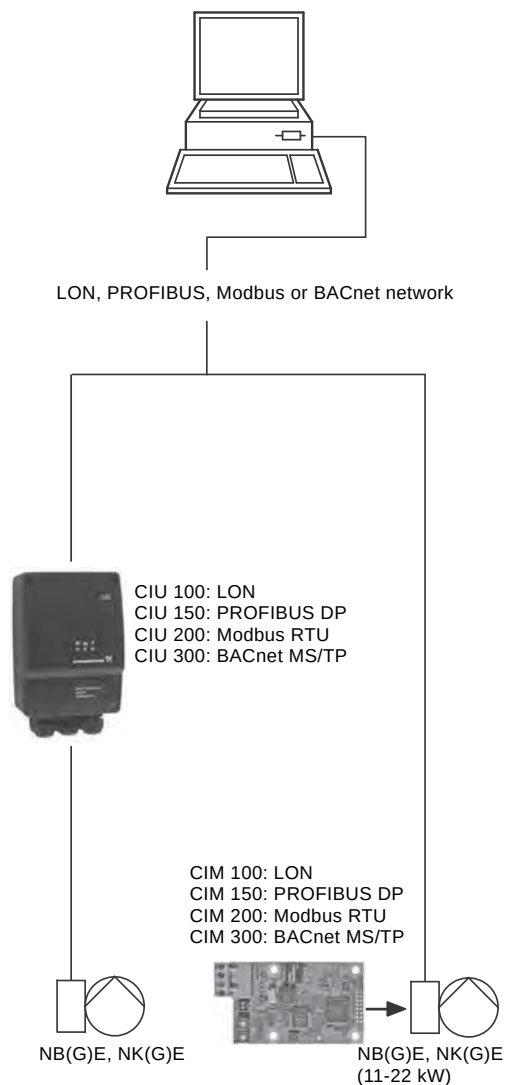


Fig. 52 R100 remote control

TM00 4498 2802

Central building management system

The operator can communicate with the speed-controlled pump without being present near the pump. Communication can take place via a central building management system allowing the operator to monitor and change control modes and setpoint settings.



TM04 5022 2409

Fig. 53 Structure of a central building management system

10. Pumps connected in parallel

Control of pumps connected in parallel

In some applications parallel pump operation is required for one or more of the following reasons:

- One pump cannot achieve the required performance (flow rate).
- Standby capacity is required to ensure reliability of supply.
- Overall efficiency needs to be improved in case of big variations in the flow demand.

NB, NBE, NK, NKE pumps connected in parallel can be controlled by Control MPC.



TM03 0413 5004

Fig. 54 Control MPC

Pumps connected to Control MPC

NB, NBE, NK, NKE pumps can be connected directly to Grundfos Control MPC.

Control MPC incorporates, among others, a CU 351 controller that can control up to six pumps.

By means of an external sensor, Control MPC can ensure optimum adaptation of the performance to the demand by closed-loop control of these parameters:

- proportional differential pressure
- constant differential pressure.
- differential pressure (remote)
- flow rate
- temperature.

CU 351 incorporates features such as those below:

Start-up wizard

Correct installation and commissioning is a prerequisite for attaining optimum performance of the system and trouble-free operation year in and year out. During commissioning of the system a start-up wizard is shown on the display of the CU 351. The wizard will guide the operator through the various steps via a series of dialogue boxes to ensure that all settings are done in the correct sequence.

Application-optimised software

CU 351 incorporates application-optimised software which helps you set up your system to the application in question.

Furthermore, navigating through the menus of the controller is done in a user-friendly way - you do not need any training to be able to set and monitor the system.

Ethernet connection

CU 351 incorporates an Ethernet connection which makes it possible to get full and unlimited access to the setting and monitoring of the system via a remote PC.

Service port (GENI TTL)

The service port of the CU 351 enables easy access to updating software and data logging in service situations.

External communication

Control MPC enables communication with other fieldbus protocols. In order to communicate with other fieldbus protocols a GENIbus module and a gateway is needed.

Control MPC can communicate with LON, PROFIBUS, Modbus or BACnet via Grundfos CIU.

Note: For further information about Control MPC, see the "Control MPC" data booklet. The data booklet is available in WebCAPS on www.grundfos.com.

For further information on WebCAPS, see page 345.

11. Selection of product

Key application data sheet

Our "Key application data sheet" can be used to gather the information typically needed in order to make the most suitable pump configuration.

Consider the following aspects when configuring a pump:

- the pumped liquid
- viscosity and density
- solids in the liquid
- operating temperatures and pressures
- customer-specific requirements.

These and other operating conditions listed in the data sheet are important for choosing the right pump material, shaft seal and shaft seal arrangement.

The data sheet can be seen as a check list and can be filled in by the customer alone or together with a Grundfos representative.

Grundfos always recommends filling in this data sheet as it saves a lot of time for the customer and for Grundfos.

The "Key application data sheet" can be found in WebCAPS.

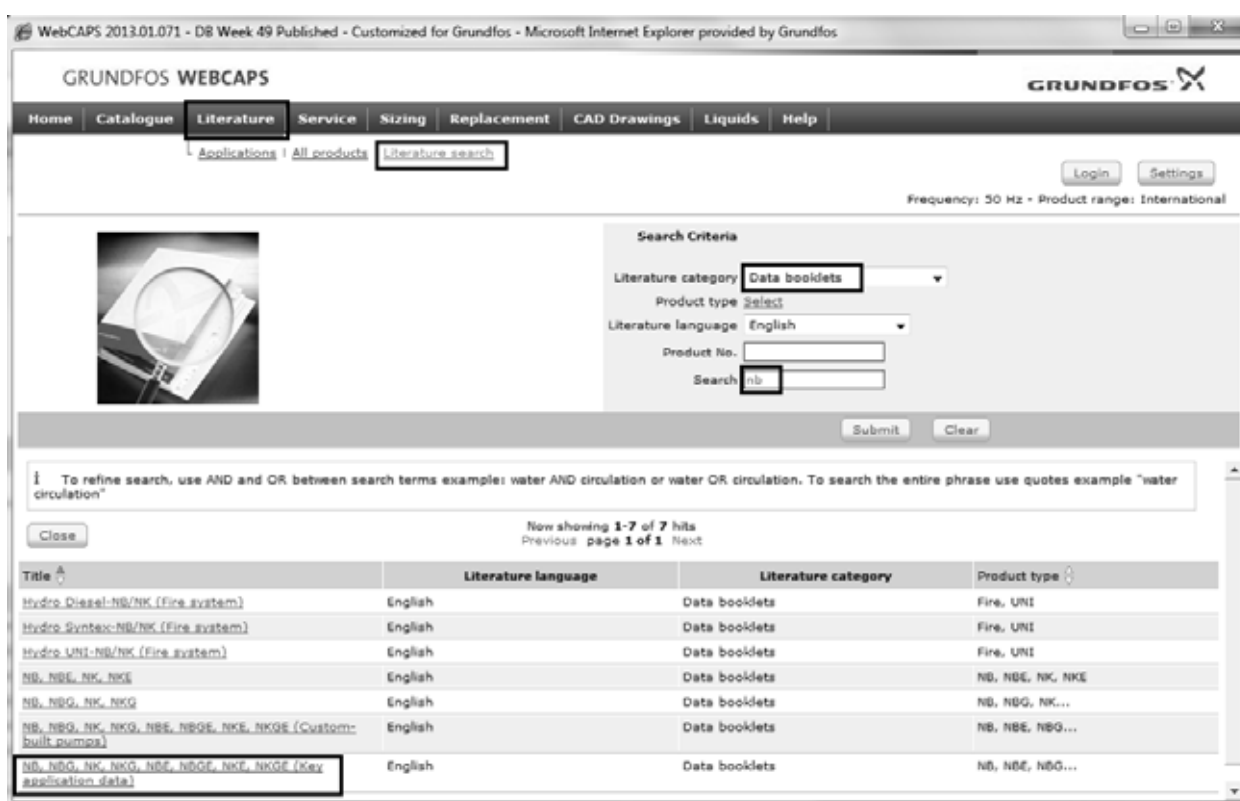


Fig. 55 How to find the "Key application data sheet" in WebCAPS

Pump size

Selection of pump size should be based on these conditions:

- required flow rate and pressure at the draw-off point
 - pressure loss as a result of height differences
 - friction loss in the pipework.
- It may be necessary to account for pressure loss in connection with long pipes, bends or valves, etc.
- optimum efficiency at the estimated duty point.

Efficiency

If you expect the pump to always operate at the same duty point, select a pump which operates at a duty point corresponding to the optimum efficiency of the pump.

In case of controlled operation or varying consumption, select a pump whose optimum efficiency falls within the duty range covering the greater part of the duty time.

Material

The material variant should be selected on the basis of the liquid to be pumped. See section 12. *Pumped liquids*.

TM05 6814 5212

Motor size

Selection of motor size should be based on the power required to achieve the duty point of the chosen pump. This information can be found in the power chart below each performance chart. See performance curves on pages 66 to 278.

Find the power curve corresponding to the required QH-value (or interpolate between curves).

To select the motor size, read the value of the P2 curve at the duty point and add a 5 % safety margin.

If the motor size must be selected according to ISO 5199, see the table below.

Safety margins according to ISO 5199

Required pump power up to [kW]	Motor power P2 [kW]
0.18	0.25
0.27	0.37
0.40	0.55
0.55	0.75
0.81	1.1
1.1	1.5
1.7	2.2
2.3	3
3.2	4
4.3	5.5
6.1	7.5
9.1	11
12.8	15
15.9	18.5
19	22
26	30
32.5	37
40	45
49	55
68	75
81	90
100	110
120	132
145	160
181	200
227	250
286	315
322	355
364	400

12. Pumped liquids

General recommendations

We recommend NB and NK pumps for thin, clean and non-explosive liquids not containing solid particles or fibres.

Liquids with temperatures ranging from -25 °C to +140 °C are covered in this data booklet.

For liquids ranging from -40 °C to +220 °C, see the data booklet "NB, NBG, NK, NKG, NBE, NBGE, NKE, NKGE - Custom-built pumps according to EN 733 and ISO 2858", or contact Grundfos.

Water in heating and ventilating systems often contains additives to prevent negative effects, such as system corrosion or calcareous deposits. In these cases we recommend special shaft seals to avoid crystallisation/precipitation between the seal faces.

For heating systems, the water quality should meet VDI2035.

"Liquids" in WebCAPS

The Grundfos product selection tool WebCAPS contains a "Liquids" module which is based on the type and properties of the pumped liquid and which will give recommendations with regard to materials for the wetted parts of the pump, i.e. recommends suitable and durable materials for pump housing, impeller, shaft, mechanical shaft seal and O-rings.

The "Liquids" module covers more than 170 widely used liquids.

Please note that other factors also affect the chemical resistance of the pump materials:

- solids
- contaminants
- pressure
- cleaning procedures.

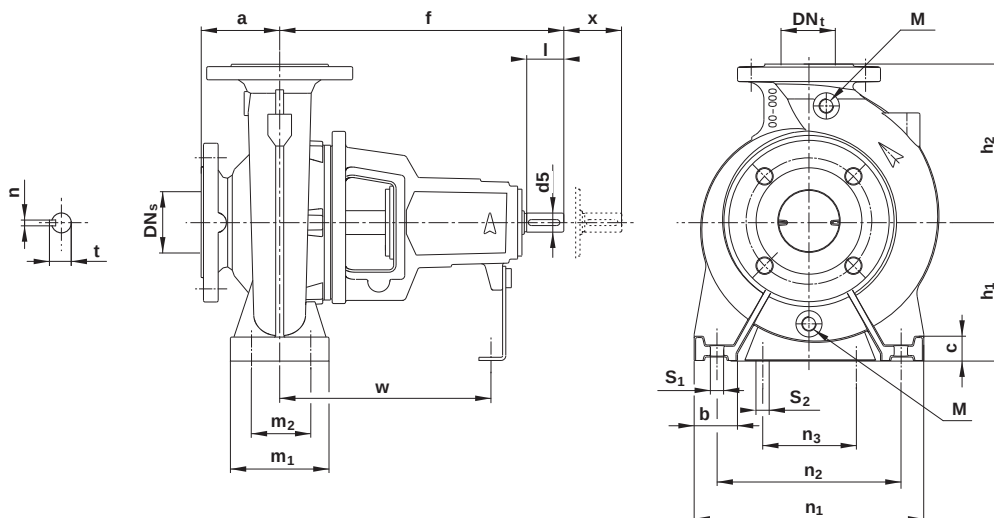
These factors are NOT considered in this tool, and the suitability of the pump material configuration can only be proved through a test.

When selecting the shaft seal and the shaft seal arrangement, you are recommended to consult the data booklet "NB, NBG, NK, NKG, NBE, NBGE, NKE, NKGE - Custom-built pumps" for further information.

For pumped liquids with a density and/or viscosity higher than those of water, use motors with correspondingly higher outputs.

13. NK bare-shaft pumps

NK, centre-line outlet



TM01 9274 4606

M Drain plug/priming plug

Type	Pump [mm]							Supporting feet [mm]										Shaft [mm]					Weight [kg]	
	DN _s	DN _t	a	f	h ₁	h ₂	M	b	m ₁	m ₂	n ₁	n ₂	n ₃	w	S ₁	S ₂	c	d5	l	x	t	n	CI ¹⁾	SS ²⁾
NK 32-125.1	50	32	80	360	112	140	3/8"	50	100	70	190	140	110	260	M12	M12	14	24	50	100	27	8	34	35
NK 32-125	50	32	80	360	112	140	3/8"	50	100	70	190	140	110	260	M12	M12	14	24	50	100	27	8	34	35
NK 32-160.1	50	32	80	360	132	160	3/8"	50	100	70	240	190	110	260	M12	M12	18	24	50	100	27	8	37	39
NK 32-160	50	32	80	360	132	160	3/8"	50	100	70	240	190	110	260	M12	M12	18	24	50	100	27	8	37	39
NK 32-200.1	50	32	80	360	160	180	3/8"	50	100	70	240	190	110	260	M12	M12	18	24	50	100	27	8	47	49
NK 32-200	50	32	80	360	160	180	3/8"	50	100	70	240	190	110	260	M12	M12	18	24	50	100	27	8	47	49
NK 32-250	50	32	100	360	180	225	3/8"	65	125	95	320	250	110	260	M12	M12	26	24	50	100	27	8	55	59
NK 40-125	65	40	80	360	112	140	3/8"	50	100	70	210	160	110	260	M12	M12	18	24	50	100	27	8	34	40
NK 40-160	65	40	80	360	132	160	3/8"	50	100	70	240	190	110	260	M12	M12	18	24	50	100	27	8	39	41
NK 40-200	65	40	100	360	160	180	3/8"	50	100	70	265	212	110	260	M12	M12	18	24	50	100	27	8	49	51
NK 40-250	65	40	100	360	180	225	3/8"	65	125	95	320	250	110	260	M12	M12	19	24	50	100	27	8	64	59
NK 40-315	65	40	125	470	200	250	1/2"	65	125	95	345	280	110	340	M12	M12	24	32	80	100	35	10	113	104
NK 50-125	65	50	100	360	132	160	3/8"	50	100	70	240	190	110	260	M12	M12	18	24	50	100	27	8	34	43
NK 50-160	65	50	100	360	160	180	3/8"	50	100	70	265	212	110	260	M12	M12	18	24	50	100	27	8	42	45
NK 50-200	65	50	100	360	160	200	3/8"	50	100	70	265	212	110	260	M12	M12	18	24	50	100	27	8	56	52
NK 50-250	65	50	100	360	180	225	3/8"	65	125	95	320	250	110	260	M12	M12	19	24	50	100	27	8	67	57
NK 50-315	65	50	125	470	225	280	1/2"	65	125	95	345	280	110	340	M12	M12	31	32	80	100	35	10	117	109
NK 65-125	80	65	100	360	160	180	3/8"	65	125	95	280	212	110	260	M12	M12	19	24	50	100	27	8	41	47
NK 65-160	80	65	100	360	160	200	3/8"	65	125	95	280	212	110	260	M12	M12	19	24	50	100	27	8	46	47
NK 65-200	80	65	100	360	180	225	3/8"	65	125	95	320	250	110	260	M12	M12	19	24	50	140	27	8	55	58
NK 65-250	80	65	100	470	200	250	3/8"	80	160	120	360	280	110	340	M16	M12	23	32	80	140	35	10	98	96
NK 65-315	80	65	125	470	225	280	3/8"	80	160	120	400	315	110	340	M16	M12	23	32	80	140	35	10	111	116
NK 80-160	100	80	125	360	180	225	3/8"	65	125	95	320	250	110	260	M12	M12	19	24	50	140	27	8	55	58
NK 80-200	100	80	125	470	180	250	3/8"	65	125	95	345	280	110	340	M12	M12	19	32	80	140	35	10	73	89
NK 80-250	100	80	125	470	200	280	3/8"	80	160	120	400	315	110	340	M16	M12	23	32	80	140	35	10	93	108
NK 80-315	100	80	125	470	250	315	3/8"	80	160	120	400	315	110	340	M16	M12	23	32	80	140	35	10	121	128
NK 80-315*	100	80	125	530	250	315	3/8"	80	160	120	400	315	110	370	M16	M12	23	42	110	140	45	12	152	156
NK 80-400	100	80	125	530	280	355	1/2"	80	160	120	435	355	110	370	M16	M12	31	42	110	140	45	12	203	197
NK 100-160	125	100	125	360	200	280	3/8"	80	160	120	360	280	110	260	M16	M12	21	24	50	140	27	8	74	77
NK 100-200	125	100	125	470	200	280	1/2"	80	160	120	360	280	110	340	M16	M12	23	32	80	140	35	10	83	86
NK 100-250	125	100	140	470	225	280	1/2"	80	160	120	400	315	110	340	M16	M12	24	32	80	140	35	10	101	103
NK 100-315	125	100	140	470	250	315	1/2"	80	160	120	400	315	110	340	M16	M12	23	32	80	140	35	10	130	132
NK 100-315*	125	100	140	530	250	315	1/2"	80	160	120	400	315	110	370	M16	M12	23	42	110	140	45	12	161	165
NK 100-400	125	100	140	530	280	355	1/2"	100	200	150	500	400	110	370	M20	M12	30	42	110	140	45	12	239	243
NK 125-200	150	125	140	470	250	315	1/2"	80	160	120	400	315	110	340	M16	M12	23	32	80	140	35	10	123	126
NK 125-250	150	125	140	470	250	355	1/2"	80	160	120	400	315	110	340	M16	M12	23	32	80	140	35	10	133	130
NK 125-250*	150	125	140	530	250	355	1/2"	80	160	120	400	315	110	370	M16	M12	23	42	110	140	45	12	158	155
NK 125-315	150	125	140	530	280	355	1/2"	100	200	150	500	400	110	370	M20	M12	26	42	110	140	45	12	186	190
NK 125-400	150	125	140	530	315	400	1/2"	100	200	150	500	400	110	370	M20	M12	38	42	110	140	45	12	250	243
NK 125-500	150	125	180	670	400	500	1/2"	125	200	150	625	500	140	500	M20	M12	49	60	110	180	64	18	502	493
NK 150-200	200	150	160	470	280	400	1/2"	100	200	150	550	450	110	340	M20	M12	27	32	80	140	35	10	210	205

Type	Pump [mm]							Supporting feet [mm]											Shaft [mm]					Weight [kg]	
	DN _s	DN _t	a	f	h ₁	h ₂	M	b	m ₁	m ₂	n ₁	n ₂	n ₃	w	S ₁	S ₂	c	d5	l	x	t	n	CI ¹⁾	SS ²⁾	
NK 150-250	200	150	160	530	280	375	1/2"	100	200	150	500	400	110	370	M20	M12	33	42	110	140	45	12	192	198	
NK 150-315.1	200	150	160	530	280	400	1/2"	100	200	150	550	450	110	370	M20	M12	33	42	110	140	45	12	252	255	
NK 150-315	200	150	160	530	280	400	1/2"	100	200	150	550	450	110	370	M20	M12	33	42	110	140	45	12	250	253	
NK 150-400	200	150	160	530	315	400	1/2"	100	200	150	550	450	110	370	M20	M12	28	42	110	140	45	12	286	291	
NK 150-400*	200	150	160	670	315	400	1/2"	100	200	150	550	450	140	500	M20	M16	28	48	110	180	51.5	14	366	370	
NK 150-500	200	150	180	670	400	500	1/2"	125	200	150	625	500	140	500	M20	M16	43	60	110	180	64	18	522	534	

¹⁾ CI: Cast iron version

²⁾ SS: Stainless steel version

* Oversize shaft

X is the minimum pull-back length of the bearing bracket required for service of impeller and shaft seal.

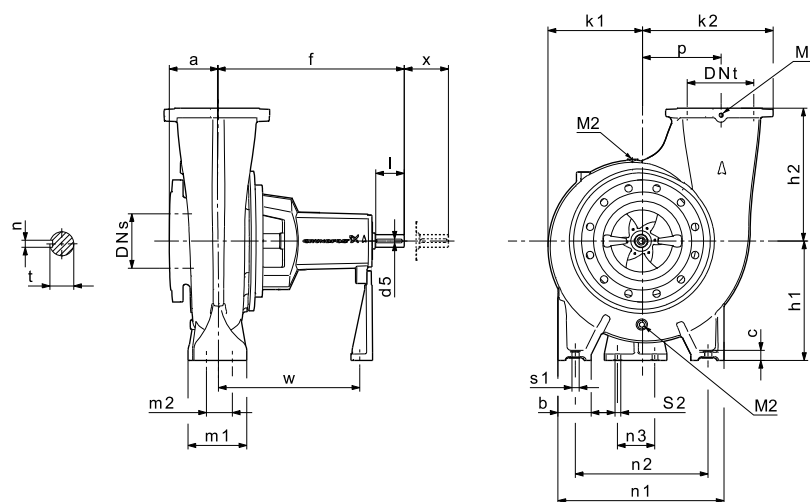
Oversize pumps

EN 733 describes only the standard types.

The NK range includes bigger models (oversize pumps) for higher flow rates and heads.

As oversize pumps are not according to the standard, dimensions of Grundfos NK oversize pumps may differ from the dimensions of similar pumps from other suppliers.

NK, tangential outlet



TM04 3857 5109

M1 / M2	Drain plug/priming plug
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Type	Pump [mm]											Supporting feet [mm]										Shaft [mm]								Weight	
	DN _s	DN _t	a	f	h ₁	h ₂	M1	M2	k ₁	k ₂	p	b	m ₁	m ₂	n ₁	n ₂	n ₃	w	S ₁	S ₂	c	d5	l	x	t	n	CI ⁽¹⁾				
NK 200-400	250	200	170	698	400	400	1/2"	3/8"	331	485	315	125	200	150	625	500	140	519	M20	M16	33	48	110	180	51.5	14	428				
NK 200-450	250	200	150	691	400	450	1/2"	3/8"	355	525	355	125	200	150	625	500	140	519	M20	M16	33	48	110	180	51.5	14	443				
NK 250-350	300	250	175	739	450	400	1/2"	3/8"	379	523	320	125	200	150	625	500	140	559	M20	M16	33	48	110	180	51.5	14	528				
NK 250-400	300	250	160	714	450	500	1/2"	3/8"	350	498	295	125	200	150	625	500	140	532	M20	M16	33	48	110	180	51.5	14	479				
NK 250-450	300	250	165	704	450	500	1/2"	3/8"	374	563	360	125	200	150	625	500	140	515	M20	M16	33	60	110	180	64	18	557				
NK 250-500	300	250	165	709	450	500	1/2"	3/8"	441	598	395	125	200	150	725	600	140	523	M20	M16	33	60	110	180	64	18	670				

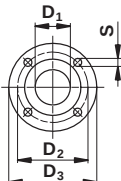
¹⁾ CI: Cast iron version

X is the minimum pull-back length of the bearing bracket required for service of impeller and shaft seal.

14. Pump flange dimensions

Fixed pump flanges, EN 1092-2

EN 1092-2 is the standard used for cast iron pump flanges. The flange dimensions are stated in mm.

EN 1092-2												
		Nominal diameter										
		DN 32	DN 40	DN 50	DN 65	DN 80	DN 100	DN 125	DN 150	DN 200	DN 250	DN 300
PN 10	D ₁	32	40	50	65	80	100	125	150	200	250	300
	D ₂	100	110	125	145	160	180	210	240	295	350	400
	D ₃	140	150	165	185	200	220	250	285	340	395	445
	S	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø23	8 x Ø23	12 x Ø23	12 x Ø23
PN 16	D ₂	100	110	125	145	160	180	210	240	295	355	410
	D ₃	140	150	165	185	200	220	250	285	340	405	460
	S	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø23	12 x Ø23	12 x Ø28	12 x Ø28

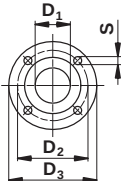
Fixed pump flanges, AS2129 table E

AS2129 table E is the Australian standard for cast iron pump flanges. The flanges are available on request. The flange dimensions are stated in mm.

		Nominal flange size	32	40	50	65	80	100	125	150	200
	Flange diameter	A	140	150	165	185	200	220	250	285	340
	Pitch circle diameter	B	87	98	114	127	146	178	210	235	292
	Flange thickness	C	18	18	20	20	22	24	26	26	30
	Hole diameter	D	14	14	18	18	18	18	18	22	22
	Number of holes	N	4	4	4	4	4	8	8	8	8

Fixed pump flanges, EN 1092-1

EN 1092-1 is the standard used for stainless steel pump flanges. The flange dimensions are stated in mm.

	EN 1092-1									
	PN 10	Nominal diameter								
		DN 32	DN 40	DN 50	DN 65	DN 80	DN 100	DN 125	DN 150	DN 200
		D ₁	32	40	50	65	80	100	125	150
PN 16	D ₂	100	110	125	145	160	180	210	240	295
	D ₃	140	150	165	185	200	220	250	285	340
	S	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø23	8 x Ø23
PN 25	D ₂	100	110	125	145	160	180	210	240	295
	D ₃	140	150	165	185	200	220	250	285	340
	S	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø23	12 x Ø23
PN 40	D ₂	100	110	125	145	160	190	220	250	310
	D ₃	140	150	165	185	200	235	270	300	360
	S	4 x Ø19	4 x Ø19	4 x Ø19	8 x Ø19	8 x Ø19	8 x Ø23	8 x Ø28	8 x Ø28	12 x Ø28
PN 65	D ₂	100	110	125	145	160	190	220	250	320
	D ₃	140	150	165	185	200	235	270	300	375
	S	4 x Ø19	4 x Ø19	4 x Ø19	8 x Ø19	8 x Ø19	8 x Ø23	8 x Ø28	8 x Ø28	12 x Ø31

Loose pump flanges, EN 1092-1

EN 1092-1 is the standard used for stainless steel pump flanges. The flange dimensions are stated in mm.

		EN 1092-1								
		Nominal diameter								
		DN 32	DN 40	DN 50	DN 65	DN 80	DN 100	DN 125	DN 150	DN 200
PN 10	D ₁	32	40	50	65	80	100	125	150	200
	D ₂	100	110	125	145	160	180	210	240	295
	D ₃	140	150	165	185	200	220	250	285	340
	S	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø23	8 x Ø23
PN 16	D ₂	100	110	125	145	160	180	210	240	295
	D ₃	140	150	165	185	200	220	250	285	340
	S	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø23	12 x Ø23
PN 25	D ₂	100	110	125	145	160	190	220	250	310
	D ₃	140	150	165	185	200	235	270	300	360
	S	4 x Ø19	4 x Ø19	4 x Ø19	8 x Ø19	8 x Ø19	8 x Ø23	8 x Ø28	8 x Ø28	12 x Ø28
PN 40	D ₂	100	110	125	145	160	190	220	250	320
	D ₃	140	150	165	185	200	235	270	300	375
	S	4 x Ø19	4 x Ø19	4 x Ø19	8 x Ø19	8 x Ø19	8 x Ø23	8 x Ø28	8 x Ø28	12 x Ø31

Loose pump flanges, ASME B16.5

ASME B16.5 is the standard used for stainless steel pump flanges.

Material of flange: AISI 316/A105.

		ASME B16.5								
		Nominal diameter								
		1 1/4" ¹⁾	1 1/2"	2"	2 1/2"	3"	4"	5"	6"	8"
Class 300	D ₁ [mm]	32.0	76.2	90.2	107.2	125.2	150.2	175.2	205.2	260.2
	D ₂ [mm]	98.4	114.3	127.0	149.2	168.3	200.0	235.0	269.9	330.2
	D ₃ [mm]	135.0	155.0	165.0	190.0	210.0	255.0	280.0	320.0	380.0
	S [inch]	4 x Ø3/4"	4 x Ø7/8"	8 x Ø3/4"	8 x Ø7/8"	8 x Ø7/8"	8 x Ø7/8"	8 x Ø7/8"	12 x Ø7/8"	12 x Ø1"

¹⁾ 1 1/4" is only available as fixed flange.

Loose pump flanges, JIS B 2220

JIS B 2220 is the standard used for stainless steel pump flanges. The flange dimensions are stated in mm.

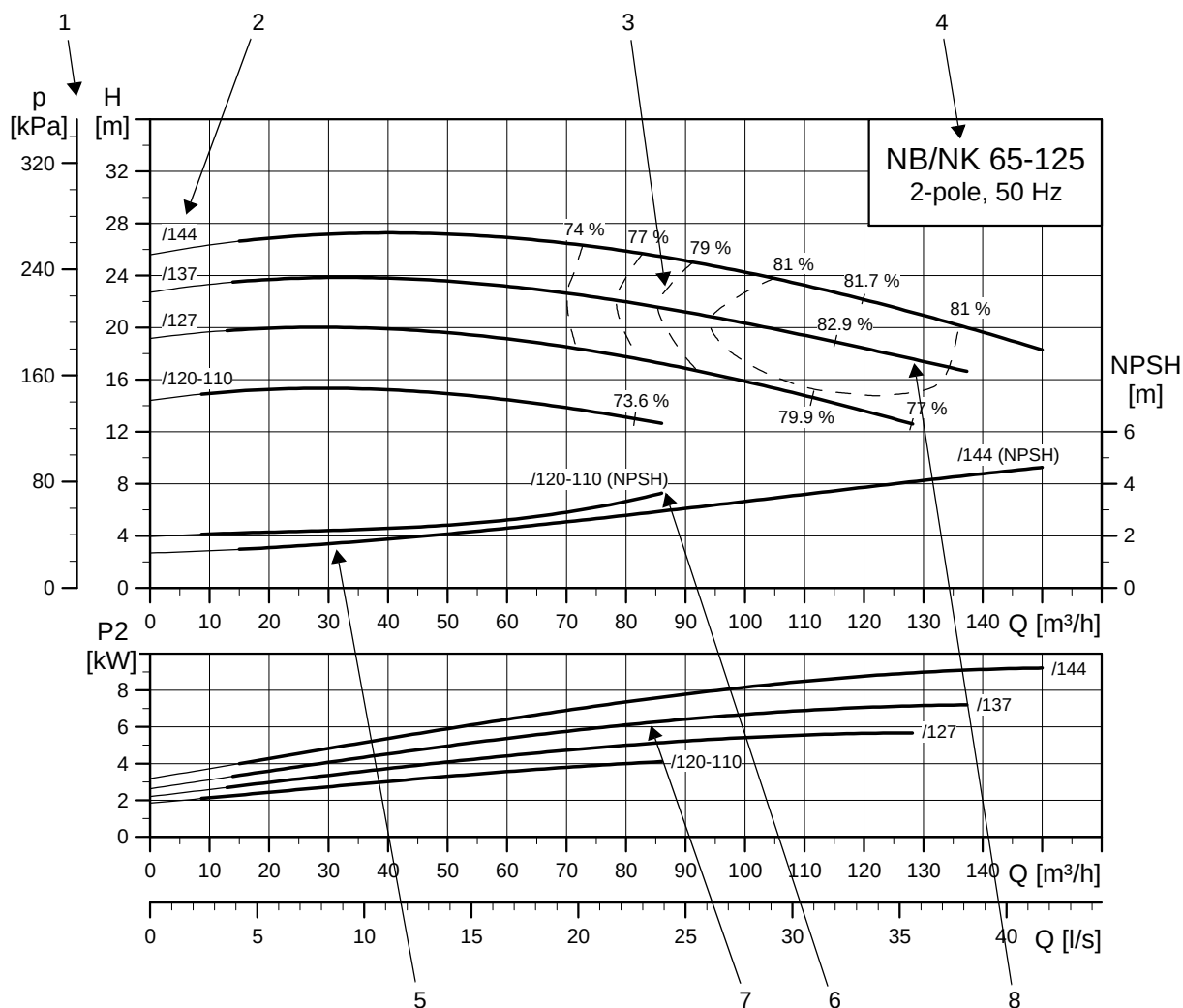
Material of flange: EN 1.4408/GGG50.

		JIS B 2220								
		Nominal diameter								
		DN 32 ¹⁾	DN 40	DN 50	DN 65	DN 80	DN 100	DN 125	DN 150	DN 200
20K	D ₁	32.0	76.2	90.2	107.2	125.2	150.2	175.2	205.2	260.2
	D ₂	100.0	105.0	120.0	140.0	160.0	185.0	225.0	260.0	305.0
	D ₃	135.0	150.0	165.0	178.0	200.0	225.0	270.0	305.0	350.0
	S	4 x Ø19.0	4 x Ø18.5	8 x Ø18.5	8 x Ø19.0	8 x Ø23.0	8 x Ø23.0	8 x Ø25.0	12 x Ø25.0	12 x Ø25.0

¹⁾ DN 32 is only available as fixed flange.

15. Introduction to curves and technical data

How to read the curve charts



TM003 5098 4312

Pos.	Description
1	Total pump head, p [kPa] or H [m] = H_{total}
2	Impeller diameter [mm]
3	Hydraulic efficiency curves are shown as dashed lines, η [%]
4	Pump type, pole number and frequency
5	The NPSH curve is shown for maximum impeller size. When sizing the pumps, add a safety margin of at least 0.5 m.
6	The NPSH curve is shown for minimum impeller size. When sizing the pumps, add a safety margin of at least 0.5 m.
7	The power curve indicates pump input power P_2 [kW]
8	QH curve for the individual pump. The bold curve indicates the recommended performance range.

Curve conditions

The guidelines below apply to the curves shown in the performance charts on pages 66 to 278.

- Tolerances according to ISO 9906:2012 Grade 3B.
- The curves show pump performance with different impeller diameters at the nominal speed.
- The bold part of the curves show the recommended operating range.
- The thin parts are not recommended as the possible operating range here might suggest the selection of a smaller/larger pump type.
- Do not use the pumps at minimum flow rates below $0.1 \times Q_{\max}$ because of the danger of overheating the pump.
- The curves apply to the pumping of water at a temperature of +20 °C and a kinematic viscosity of 1 mm²/s (1 cSt).
- Eta: The dashed lines show values of the hydraulic efficiency of the pump.
- NPSH: The curves show average values measured under the same conditions as the performance curves.
When sizing the pump, add a safety margin of at least 0.5 m.
- In case of other densities than 1000 kg/m³, the discharge pressure is proportional to the density.
- When pumping liquids with a density higher than 1000 kg/m³, motors with correspondingly higher outputs must be used.

Calculation of total head

The total pump head consists of the height difference between the measuring points + the differential head + the dynamic head.

$$H_{\text{total}} = H_{\text{geo}} + H_{\text{stat}} + H_{\text{dyn}}$$

H_{geo}	Height difference between measuring points.
H_{stat}	Differential head between the suction and discharge sides of the pump.
H_{dyn}	Calculated values based on the velocity of the pumped liquid on the suction and discharge sides of the pump.

Performance tests

The requested duty point for every pump is tested according to ISO 9906:2012 Grade 3B, without certification.

If the customer requires either more points on the curve to be checked or certain minimum performances or certificates, individual measurements must be made.

Technical data

The pump dimensions on the following pages are based on these data:

- NB, NK:
Data based on the NB, NK pumps with standard motors. The motors used are MG and Siemens motors.
- NBE, NKE:
Data on pumps fitted with motors with built-in frequency converter, type MGE.

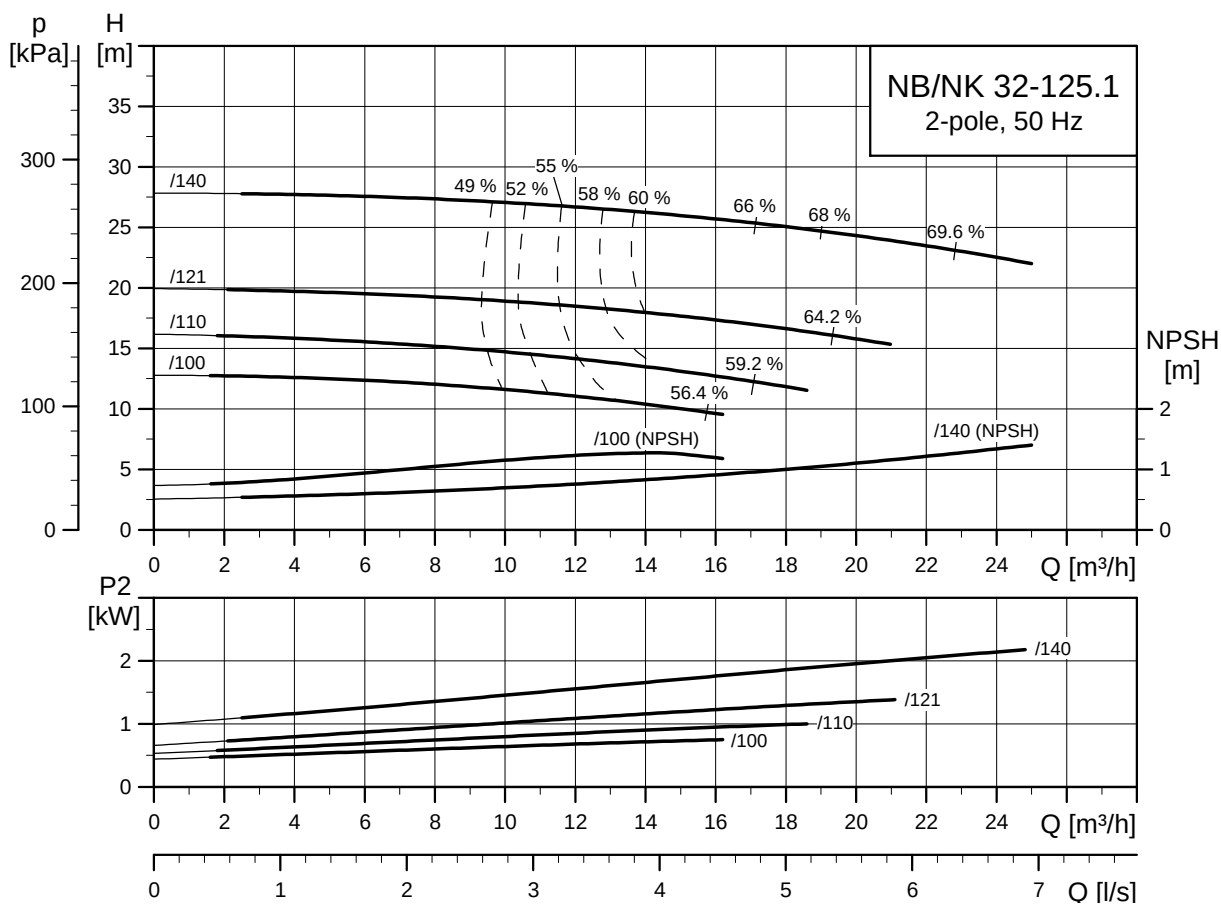
16. Performance curves and technical data

Overview

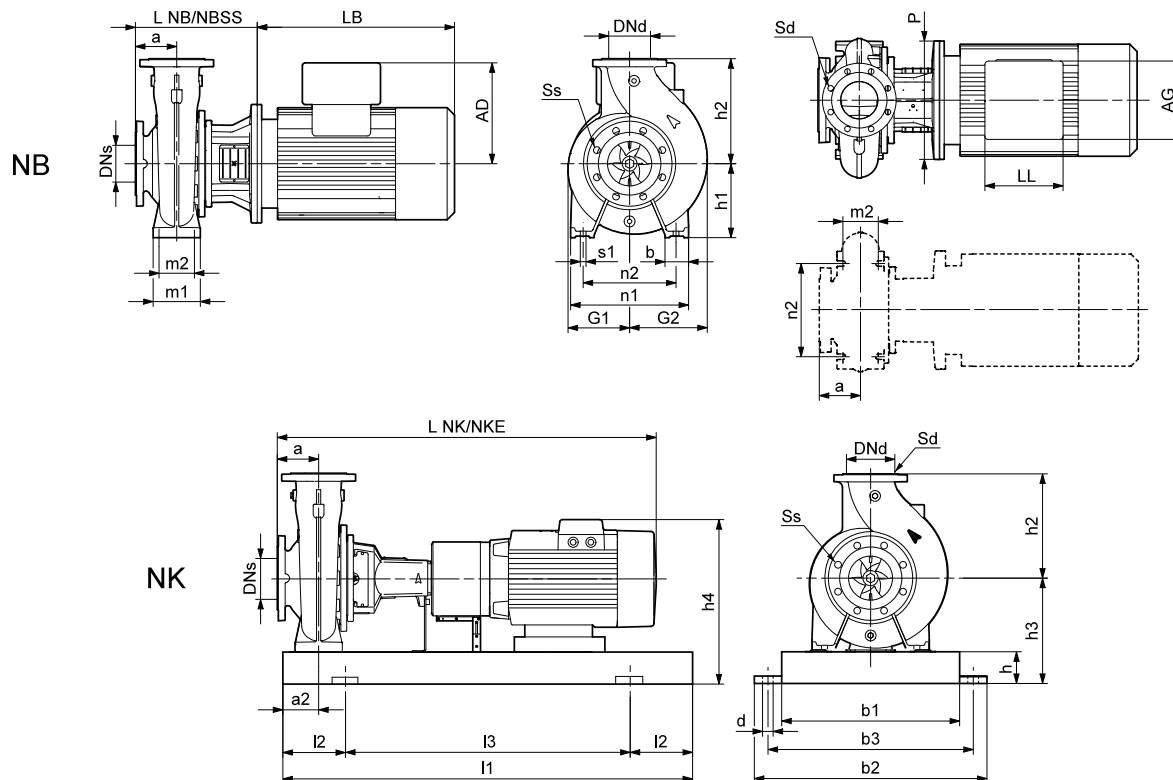
2-pole		4-pole		6-pole	
Pump type	See page	Pump type	See page	Pump type	See page
NB, NK 32-125.1	66	NB, NK 32-125.1	138	NB, NK 100-160	236
NB, NK 32-125	68	NB, NK 32-125	140	NB, NK 100-200	238
NB, NK 32-160.1	70	NB, NK 32-160.1	142	NB, NK 100-250	240
NB, NK 32-160	72	NB, NK 32-160	144	NB, NK 100-315	242
NB, NK 32-200.1	74	NB, NK 32-200.1	146	NB, NK 100-400	244
NB, NK 32-200	76	NB, NK 32-200	148	NB, NK 125-200	246
NB, NK 32-250	78	NB, NK 32-250	150	NB, NK 125-250	248
NB, NK 40-125	80	NB, NK 40-125	152	NB, NK 125-315	250
NB, NK 40-160	82	NB, NK 40-160	154	NB, NK 125-400	252
NB, NK 40-200	84	NB, NK 40-200	156	NB, NK 125-500	254
NB, NK 40-250	86	NB, NK 40-250	158	NB, NK 150-200	256
NB, NK 40-315	88	NB, NK 40-315	160	NB, NK 150-250	258
NB, NK 50-125	90	NB, NK 50-125	162	NB, NK 150-315.1	260
NB, NK 50-160	92	NB, NK 50-160	164	NB, NK 150-315	262
NB, NK 50-200	94	NB, NK 50-200	166	NB, NK 150-400	264
NB, NK 50-250	96	NB, NK 50-250	168	NB, NK 150-500	266
NB, NK 50-315	98	NB, NK 50-315	170	NB, NK 200-400	268
NB, NK 65-125	100	NB, NK 65-125	172	NB, NK 200-450	270
NB, NK 65-160	102	NB, NK 65-160	174	NB, NK 250-350	272
NB, NK 65-200	104	NB, NK 65-200	176	NB, NK 250-400	274
NB, NK 65-250	106	NB, NK 65-250	178	NB, NK 250-450	276
NB, NK 65-315	108	NB, NK 65-315	180	NB, NK 250-500	278
NB, NK 80-160	110	NB, NK 80-160	182		
NB, NK 80-200	112	NB, NK 80-200	184		
NB, NK 80-250	114	NB, NK 80-250	186		
NB, NK 80-315	116	NB, NK 80-315	188		
NB, NK 100-160	118	NB, NK 80-400	190		
NB, NK 100-200	120	NB, NK 100-160	192		
NB, NK 100-250	122	NB, NK 100-200	194		
NB, NK 100-315	124	NB, NK 100-250	196		
NB, NK 125-200	126	NB, NK 100-315	198		
NB, NK 125-250	128	NB, NK 100-400	200		
NB, NK 125-315	130	NB, NK 125-200	202		
NB, NK 150-200	132	NB, NK 125-250	204		
NB, NK 150-250	134	NB, NK 125-315	206		
NB, NK 150-315.1	136	NB, NK 125-400	208		
		NB, NK 125-500	210		
		NB, NK 150-200	212		
		NB, NK 150-250	214		
		NB, NK 150-315.1	216		
		NB, NK 150-315	218		
		NB, NK 150-400	220		
		NB, NK 150-500	222		
		NB, NK 200-400	224		
		NB, NK 200-450	226		
		NB, NK 250-350	228		
		NB, NK 250-400	230		
		NB, NK 250-450	232		
		NB, NK 250-500	234		

2-pole

NB, NK 32-125.1



TM03 5081 4312



TM03 4180 4106

TM03 6005 4106

Pump type	32-125.1/100 32-125.1/110 32-125.1/121 32-125.1/140					
Motor type	Standard Motor ⁵⁾		MG 80A-H3	MG 80C-H3	MG 90SB-H3	MG 90LC-H3
	E-Motor		-	-	MGE 90SB-G	MGE 90LC-G
Common data NB/NK	P2	[kW]	0.75	1.1	1.5	2.2
	PN	[bar]	16	16	16	16
	DNs	[mm]	50	50	50	50
	DNd	[mm]	32	32	32	32
	a	[mm]	80	80	80	80
	h2	[mm]	140	140	140	140
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	715/811	735/831	775/871	815/911
	L NKE ¹⁾	[mm]	-/-	-/-	815/911	815/911
	l1	[mm]	800	800	800	900
	l2	[mm]	130	130	130	150
	l3	[mm]	540	540	540	600
	b1	[mm]	270	270	270	300
	b2	[mm]	360	360	360	390
	b3	[mm]	320	320	320	345
	d	[mm]	19	19	19	19
	a2	[mm]	60	60	60	60
	h	[mm]	65	65	65	65
	h3	[mm]	177	177	180	180
	h4 ²⁾	[mm]	286/-	286/-	290/365	290/365
	Base frame no. ³⁾		2	2	2	3
NB data	Mounting design ⁴⁾		A	A	A	A
	L NB	[mm]	226	226	226	226
	L NB SS	[mm]	226	226	226	226
	h1	[mm]	112	112	112	112
	G1	[mm]	117	117	117	117
	G2	[mm]	117	117	117	117
	m1	[mm]	100	100	100	100
	m2	[mm]	70	70	70	70
	n1	[mm]	190	190	190	190
	n2	[mm]	140	140	140	140
	b	[mm]	50	50	50	50
	s1	[mm]	M12	M12	M12	M12
	H	[mm]	-	-	-	-
	LB ²⁾	[mm]	231/-	251/-	281/321	321/308
	AD ²⁾	[mm]	109/-	109/-	110/185	110/185
	AG ²⁾	[mm]	82/-	82/-	162/177	162/177
	LL ²⁾	[mm]	82/-	82/-	103/232	103/232
	P	[mm]	200	200	200	200
	C	[mm]	-	-	-	-
	B	[mm]	-	-	-	-
	A	[mm]	-	-	-	-
	K	[mm]	-	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	82/82	83/82	89/88	98/98
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	97/96	106/105
	Weight NB. CI	[kg]	36	37	43	47
	Weight NBE. CI	[kg]	-	-	49	53
	Weight diff. SS	[kg]	1	1	1	1

1) Pump with standard coupling / pump with spacer coupling.

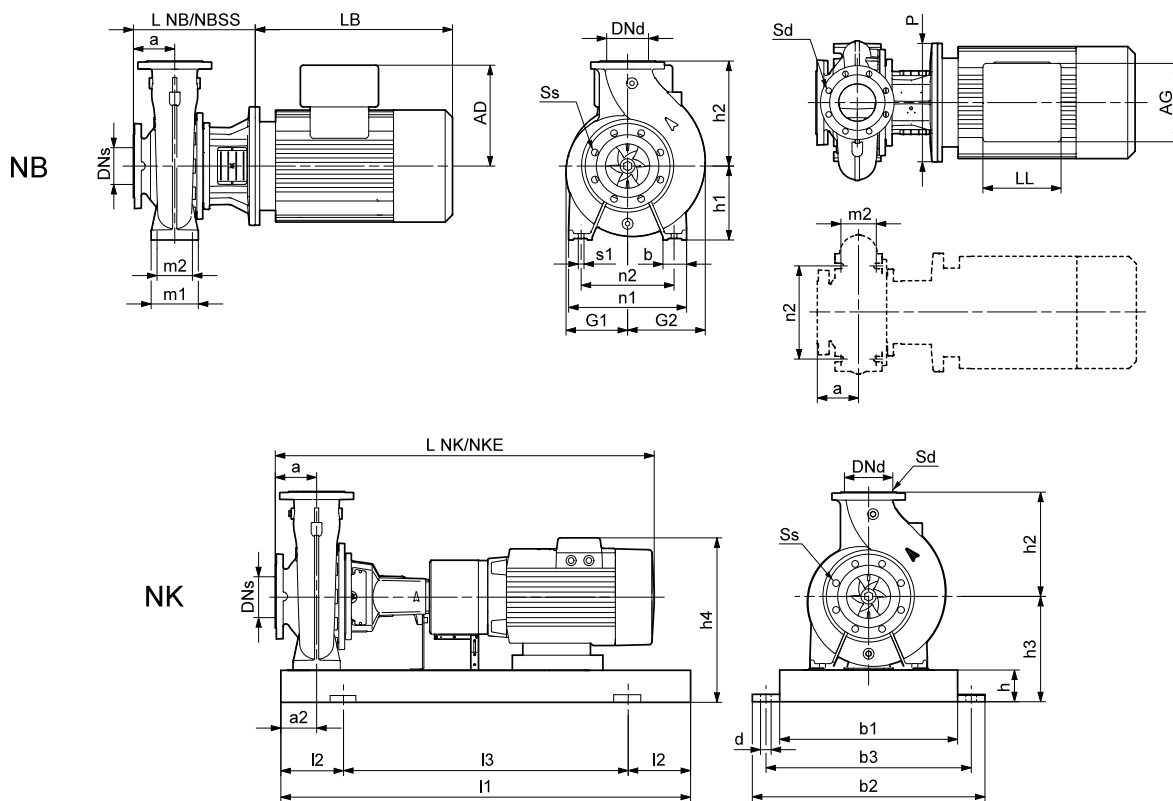
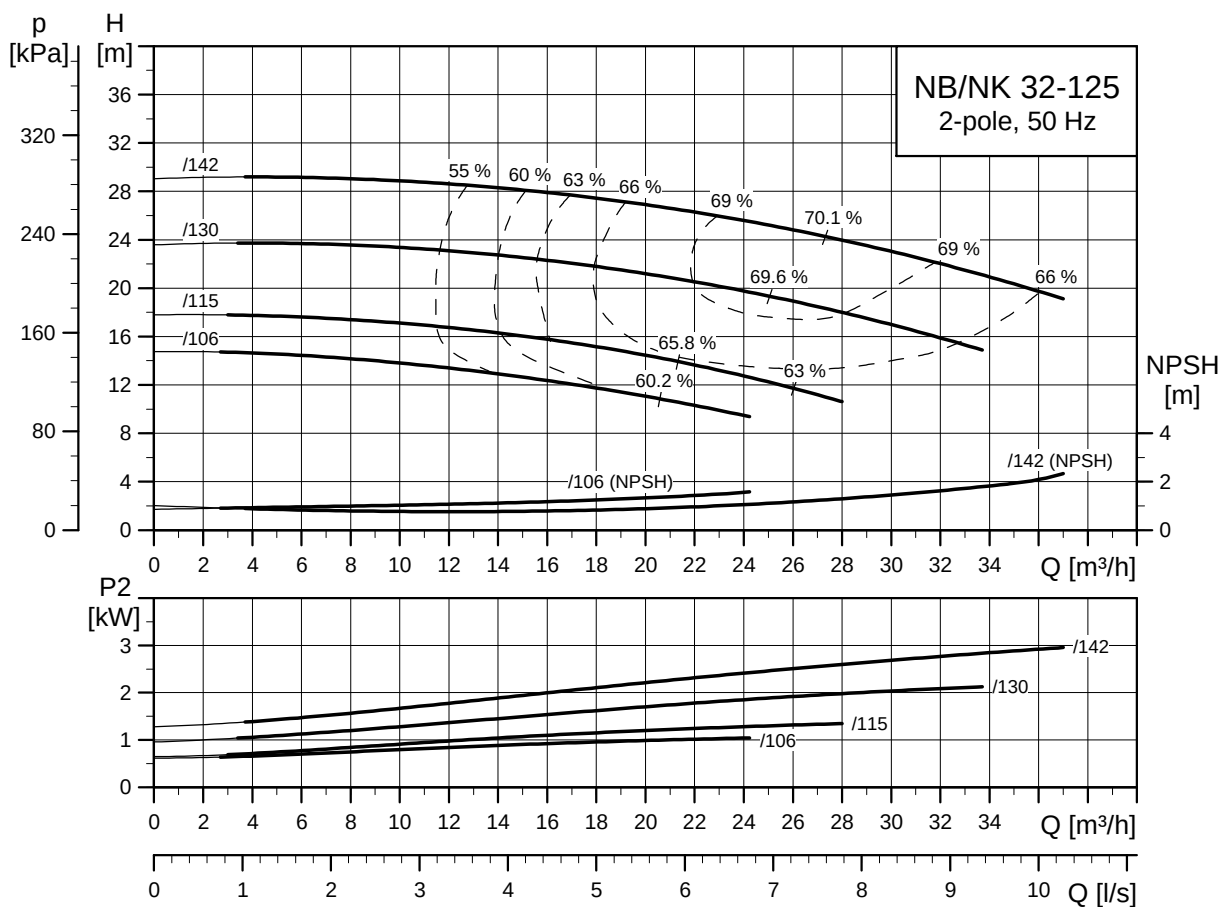
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 32-125



TM03 5084 4312

TM03 4180 4106

TM03 6005 4106

Pump type		32-125/106	32-125/115	32-125/130	32-125/142
Motor type	Standard Motor ⁵⁾	MG 80C-H3	MG 90SB-H3	MG 90LC-H3	MG 100LC-H3
	E-Motor	-	MGE 90SB-G	MGE 90LC-G	MGE 100LC-G
Common data NB/NK	P2	[kW]	1.1	1.5	2.2
	PN	[bar]	16	16	16
	DNs	[mm]	50	50	50
	DNd	[mm]	32	32	32
	a	[mm]	80	80	80
	h2	[mm]	140	140	140
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	735/831	775/871	815/911
	L NKE ¹⁾	[mm]	-/-	815/911	815/911
	I1	[mm]	800	800	900
	I2	[mm]	130	130	150
	I3	[mm]	540	540	600
	b1	[mm]	270	270	300
	b2	[mm]	360	360	390
	b3	[mm]	320	320	345
	d	[mm]	19	19	19
	a2	[mm]	60	60	60
	h	[mm]	65	65	65
	h3	[mm]	177	180	180
	h4 ²⁾	[mm]	286/-	290/365	290/365
	Base frame no. ³⁾		2	2	3
NB data	Mounting design ⁴⁾		A	A	A
	L NB	[mm]	226	226	226
	L NB SS	[mm]	226	226	226
	h1	[mm]	112	112	112
	G1	[mm]	117	117	117
	G2	[mm]	117	117	117
	m1	[mm]	100	100	100
	m2	[mm]	70	70	70
	n1	[mm]	190	190	190
	n2	[mm]	140	140	140
	b	[mm]	50	50	50
	s1	[mm]	M12	M12	M12
	H	[mm]	-	-	-
	LB ²⁾	[mm]	251/-	281/321	321/308
	AD ²⁾	[mm]	109/-	110/185	110/185
	AG ²⁾	[mm]	82/-	162/177	162/177
	LL ²⁾	[mm]	82/-	103/232	103/232
	P	[mm]	200	200	200
	C	[mm]	-	-	-
	B	[mm]	-	-	-
	A	[mm]	-	-	-
	K	[mm]	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	84/83	90/89	99/98
	Weight NKE. CI ¹⁾	[kg]	-/-	97/96	107/106
	Weight NB. CI	[kg]	37	44	48
	Weight NBE. CI	[kg]	-	49	53
	Weight diff. SS	[kg]	1	1	1

1) Pump with standard coupling / pump with spacer coupling.

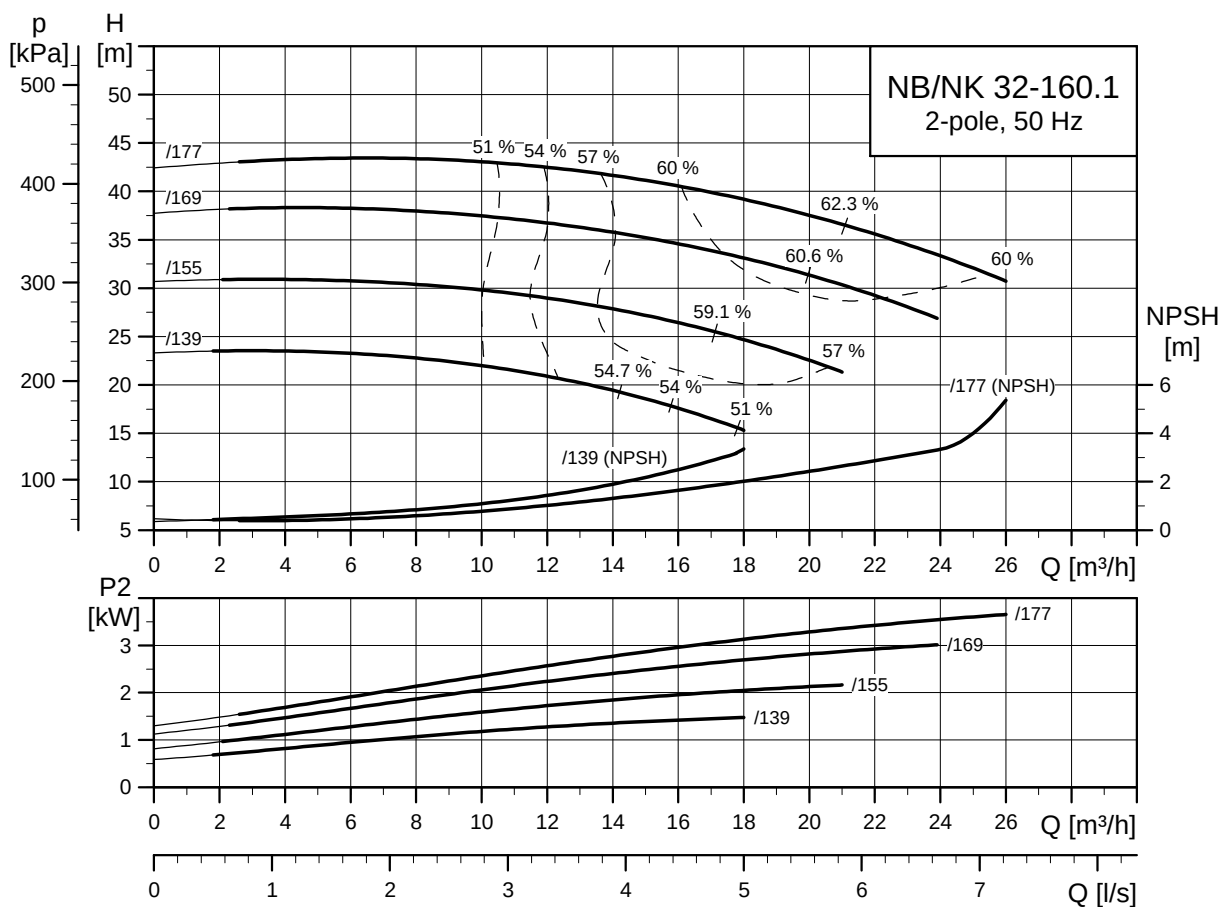
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

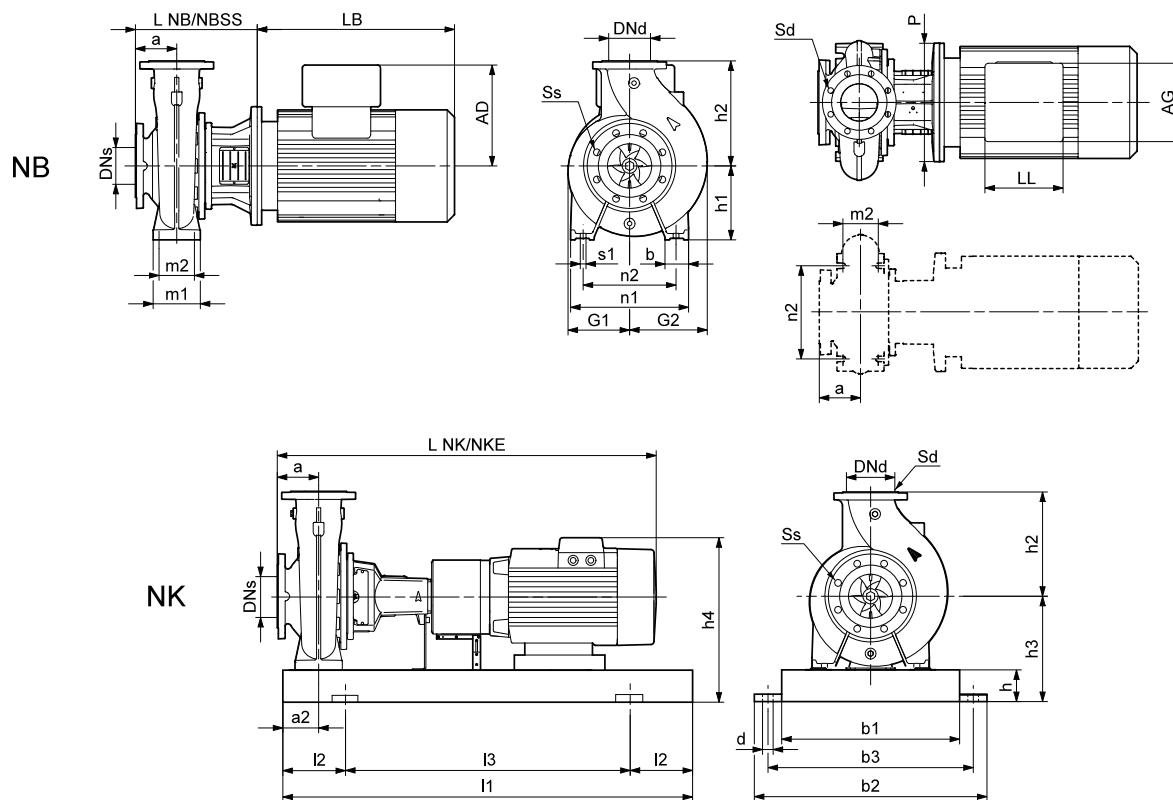
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 32-160.1



TM03 5082 4312



TM03 4180 4106

TM03 6005 4106

Pump type	32-160.1/139		32-160.1/155	32-160.1/169	32-160.1/177	
Motor type	Standard Motor ⁵⁾	MG 90SB-H3	MG 90LC-H3	MG 100LC-H3	MG 112MC-H3	
	E-Motor	MGE 90SB-G	MGE 90LC-G	MGE 100LC-G	MGE 112MC-G	
Common data NB/NK	P2	[kW]	1.5	2.2	3	4
	PN	[bar]	16	16	16	16
	DNs	[mm]	50	50	50	50
	DNd	[mm]	32	32	32	32
	a	[mm]	80	80	80	80
	h2	[mm]	160	160	160	160
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	775/871	815/911	839/935	876/972
	L NKE ¹⁾	[mm]	815/911	815/911	839/935	876/972
	I1	[mm]	1000	1000	1000	1000
	I2	[mm]	170	170	170	170
	I3	[mm]	660	660	660	660
	b1	[mm]	340	340	340	340
	b2	[mm]	450	450	450	450
	b3	[mm]	400	400	400	400
	d	[mm]	24	24	24	24
	a2	[mm]	60	60	60	60
	h	[mm]	80	80	80	80
	h3	[mm]	212	212	212	212
	h4 ²⁾	[mm]	322/397	322/397	332/404	346/414
	Base frame no. ³⁾		4	4	4	4
NB data	Mounting design ⁴⁾		A	A	A	A
	L NB	[mm]	226	226	254	254
	L NB SS	[mm]	226	226	254	254
	h1	[mm]	132	132	132	132
	G1	[mm]	117	117	117	117
	G2	[mm]	123	123	123	123
	m1	[mm]	100	100	100	100
	m2	[mm]	70	70	70	70
	n1	[mm]	240	240	240	240
	n2	[mm]	190	190	190	190
	b	[mm]	50	50	50	50
	s1	[mm]	M12	M12	M12	M12
	H	[mm]	-	-	-	-
	LB ²⁾	[mm]	281/321	321/308	335/347	372/371
	AD ²⁾	[mm]	110/185	110/185	120/192	134/202
	AG ²⁾	[mm]	162/177	162/177	162/222	202/208
	LL ²⁾	[mm]	103/232	103/232	103/277	103/317
	P	[mm]	200	200	250	250
	C	[mm]	-	-	-	-
	B	[mm]	-	-	-	-
	A	[mm]	-	-	-	-
	K	[mm]	-	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	110/109	114/113	120/118	136/134
	Weight NKE. CI ¹⁾	[kg]	118/117	122/121	128/126	137/135
	Weight NB. CI	[kg]	45	49	55	73
	Weight NBE. CI	[kg]	50	54	61	65
	Weight diff. SS	[kg]	2	2	2	2

1) Pump with standard coupling / pump with spacer coupling.

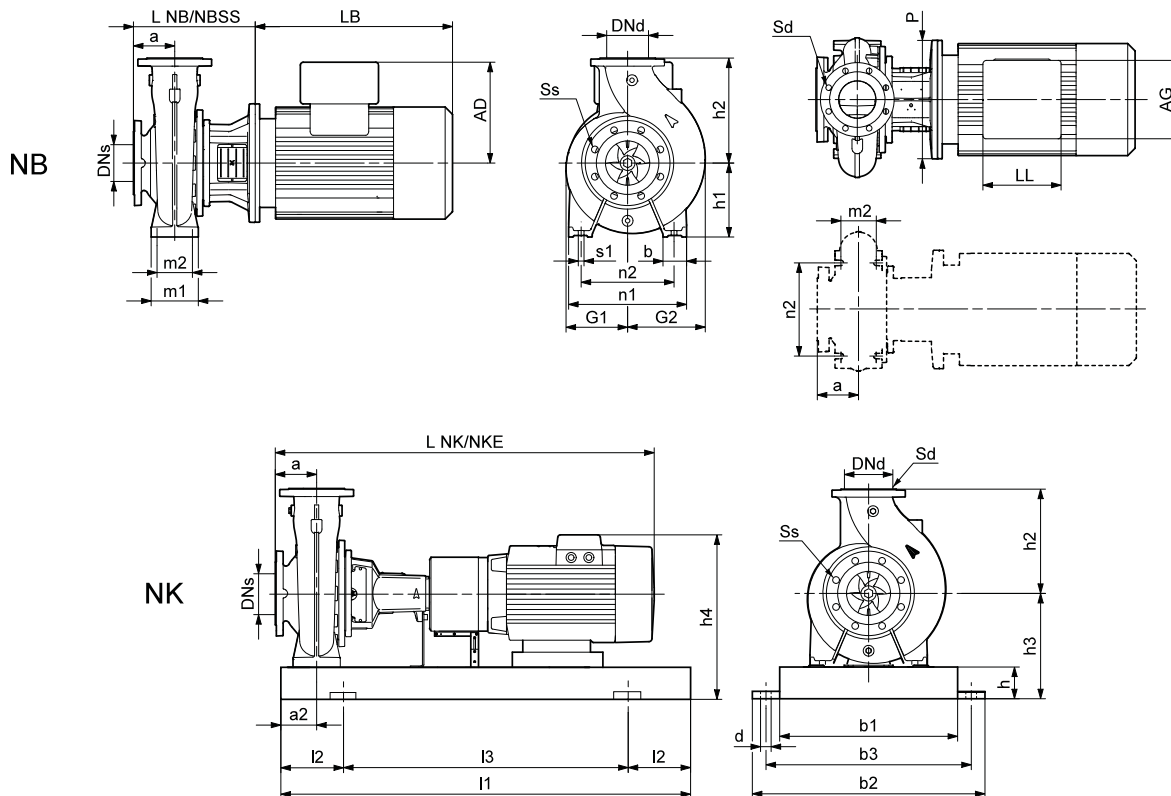
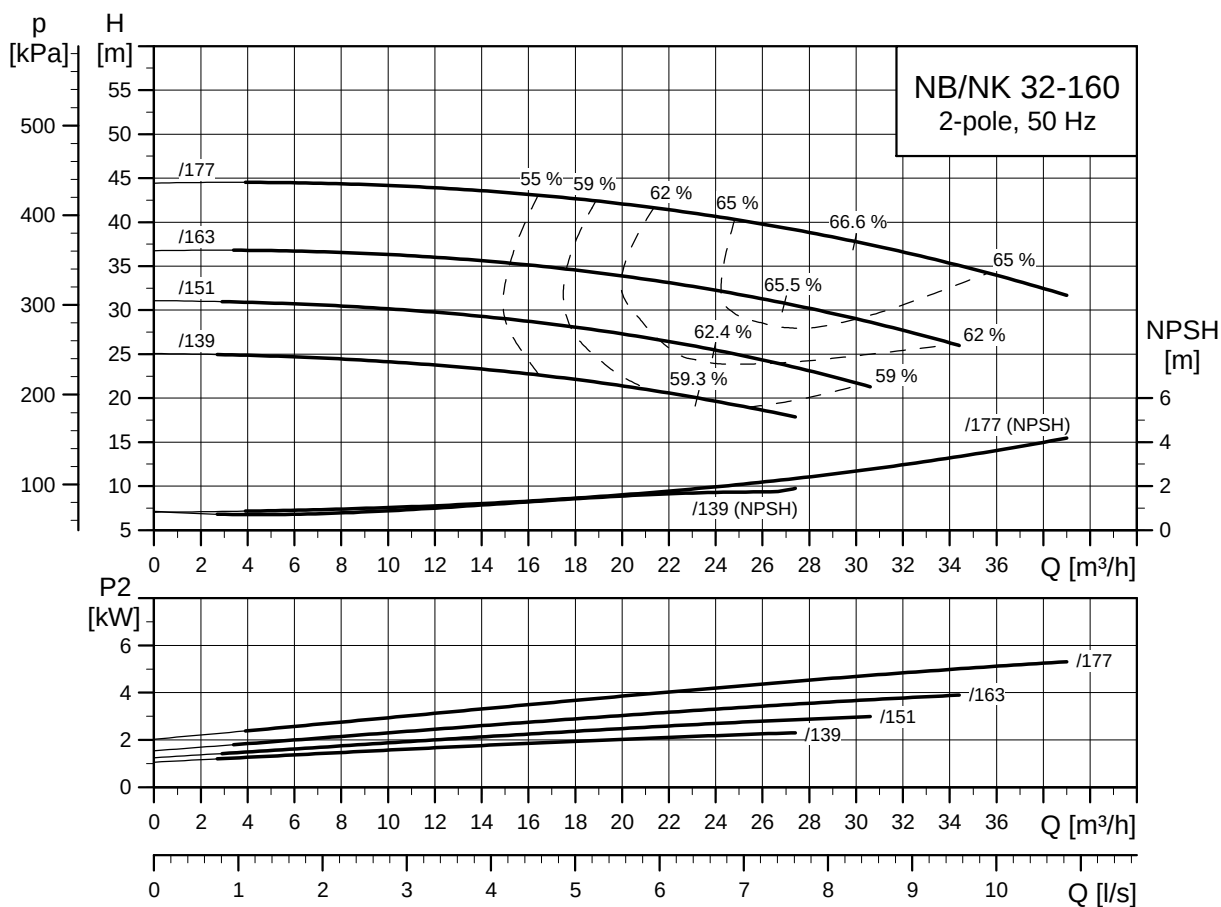
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 32-160



TM03 5085 4312

TM03 4180 4106

TM03 6005 4106

Pump type			32-160/139	32-160/151	32-160/163	32-160/177
Motor type	Standard Motor ⁵⁾		MG 90LC-H3	MG 100LC-H3	MG 112MC-H3	MG 132SC-H3
	E-Motor		MGE 90LC-G	MGE 100LC-G	MGE 112MC-G	MGE 132SC-G
Common data NB/NK	P2	[kW]	2.2	3	4	5.5
	PN	[bar]	16	16	16	16
	DNs	[mm]	50	50	50	50
	DNd	[mm]	32	32	32	32
	a	[mm]	80	80	80	80
	h2	[mm]	160	160	160	160
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	815/911	839/935	876/972	921/1011
	L NKE ¹⁾	[mm]	815/911	839/935	876/972	921/1011
	l1	[mm]	1000	1000	1000	1120
	l2	[mm]	170	170	170	190
	l3	[mm]	660	660	660	740
	b1	[mm]	340	340	340	380
	b2	[mm]	450	450	450	490
	b3	[mm]	400	400	400	440
	d	[mm]	24	24	24	24
	a2	[mm]	60	60	60	60
	h	[mm]	80	80	80	80
	h3	[mm]	212	212	212	215
	h4 ²⁾	[mm]	322/397	332/404	346/414	349/436
	Base frame no. ³⁾		4	4	4	5
NB data	Mounting design ⁴⁾		A	A	A	A
	L NB	[mm]	226	254	254	293
	L NB SS	[mm]	226	254	254	293
	h1	[mm]	132	132	132	132
	G1	[mm]	117	117	117	117
	G2	[mm]	125	125	125	125
	m1	[mm]	100	100	100	100
	m2	[mm]	70	70	70	70
	n1	[mm]	240	240	240	240
	n2	[mm]	190	190	190	190
	b	[mm]	50	50	50	50
	s1	[mm]	M12	M12	M12	M12
	H	[mm]	-	-	-	-
	LB ²⁾	[mm]	321/308	335/347	372/371	391/373
	AD ²⁾	[mm]	110/185	120/192	134/202	134/221
	AG ²⁾	[mm]	162/177	162/222	202/208	202/228
	LL ²⁾	[mm]	103/232	103/277	103/317	103/337
	P	[mm]	200	250	250	300
	C	[mm]	-	-	-	-
	B	[mm]	-	-	-	-
	A	[mm]	-	-	-	-
	K	[mm]	-	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	115/114	121/119	137/135	147/144
	Weight NKE. CI ¹⁾	[kg]	123/122	129/127	138/136	154/151
	Weight NB. CI	[kg]	50	56	74	79
	Weight NBE. CI	[kg]	55	62	66	87
	Weight diff. SS	[kg]	2	2	2	2

1) Pump with standard coupling / pump with spacer coupling.

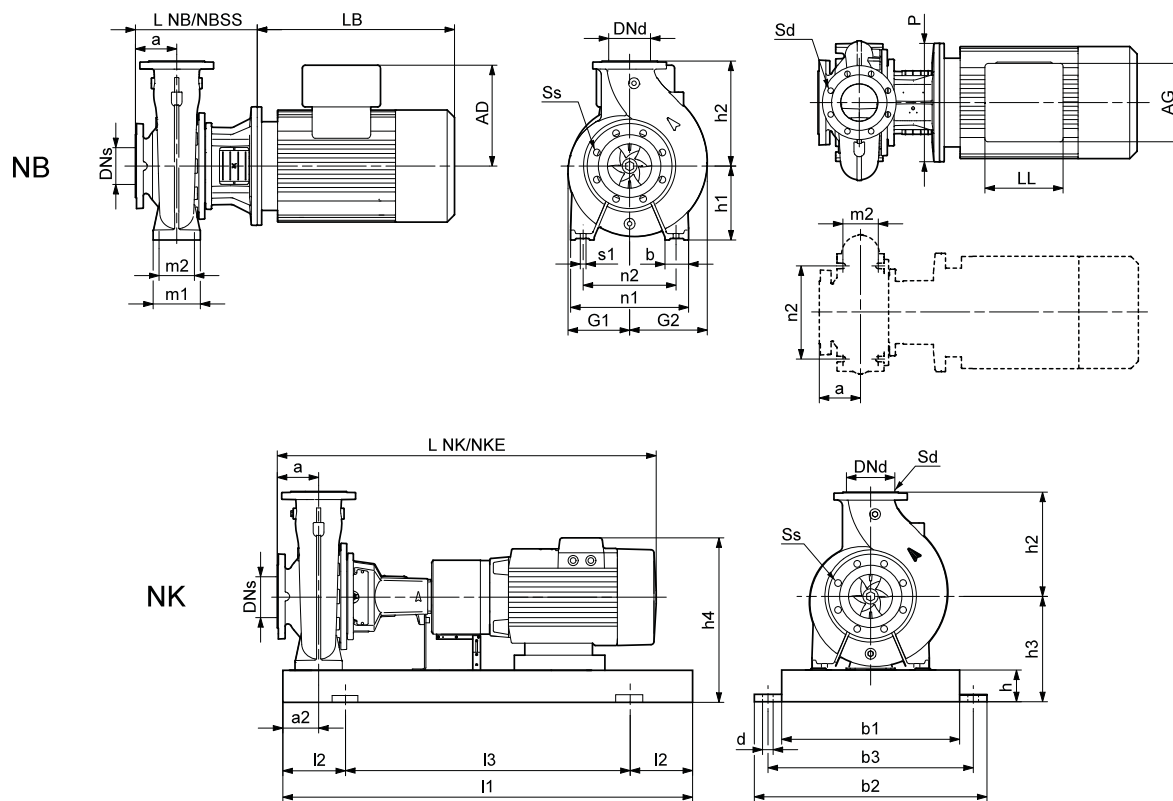
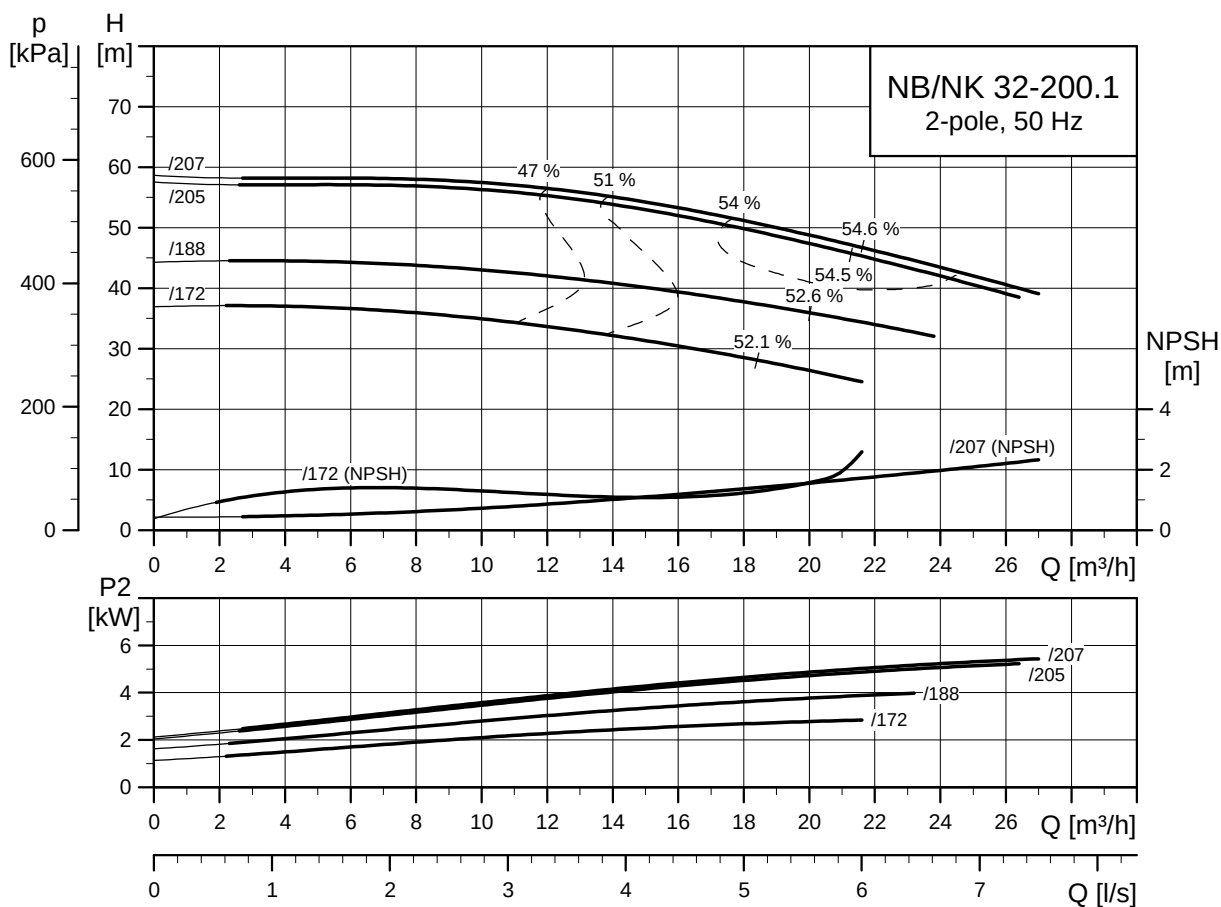
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 32-200.1



TM03 5083 4312

TM03 4180 4106

TM03 6005 4106

Pump type		32-200.1/172	32-200.1/188	32-200.1/205	32-200.1/207
Motor type	Standard Motor ⁵⁾	MG 100LC-H3	MG 112MC-H3	MG 132SC-H3	MG 132SB-H3
	E-Motor	MGE 100LC-G	MGE 112MC-G	MGE 132SC-G	MGE 132SB-F
Common data NB/NK	P2	[kW]	3	4	5.5
	PN	[bar]	16	16	16
	DNs	[mm]	50	50	50
	DNd	[mm]	32	32	32
	a	[mm]	80	80	80
	h2	[mm]	180	180	180
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	839/935	876/972	921/1011
	L NKE ¹⁾	[mm]	839/935	876/972	921/1011
	l1	[mm]	1000	1000	1120
	l2	[mm]	170	170	190
	l3	[mm]	660	660	740
	b1	[mm]	340	340	380
	b2	[mm]	450	450	490
	b3	[mm]	400	400	440
	d	[mm]	24	24	24
	a2	[mm]	60	60	60
	h	[mm]	80	80	80
	h3	[mm]	240	240	240
	h4 ²⁾	[mm]	360/432	374/442	374/461
	Base frame no. ³⁾		4	4	5
NB data	Mounting design ⁴⁾		A	A	A
	L NB	[mm]	254	254	293
	L NB SS	[mm]	254	254	293
	h1	[mm]	160	160	160
	G1	[mm]	135	135	135
	G2	[mm]	137	137	137
	m1	[mm]	100	100	100
	m2	[mm]	70	70	70
	n1	[mm]	240	240	240
	n2	[mm]	190	190	190
	b	[mm]	50	50	50
	s1	[mm]	M12	M12	M12
	H	[mm]	-	-	-
	LB ²⁾	[mm]	335/347	372/371	391/373
	AD ²⁾	[mm]	120/192	134/202	134/221
	AG ²⁾	[mm]	162/222	202/208	202/228
	LL ²⁾	[mm]	103/277	103/317	103/337
	P	[mm]	250	250	300
	C	[mm]	-	-	-
	B	[mm]	-	-	-
	A	[mm]	-	-	-
	K	[mm]	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	130/128	153/151	161/158
	Weight NKE. CI ¹⁾	[kg]	138/136	153/151	168/164
	Weight NB. CI	[kg]	62	80	85
	Weight NBE. CI	[kg]	68	72	93
	Weight diff. SS	[kg]	2	2	2

1) Pump with standard coupling / pump with spacer coupling.

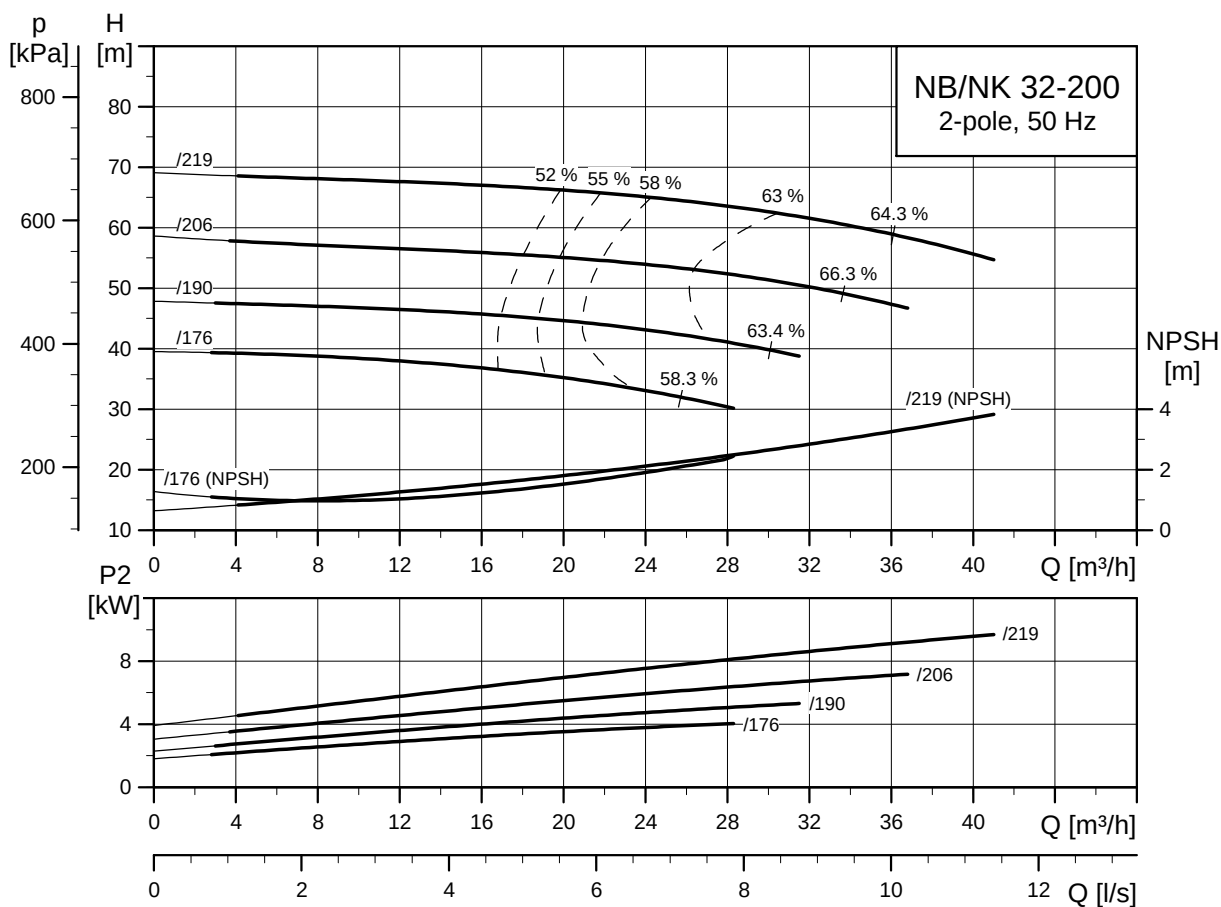
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

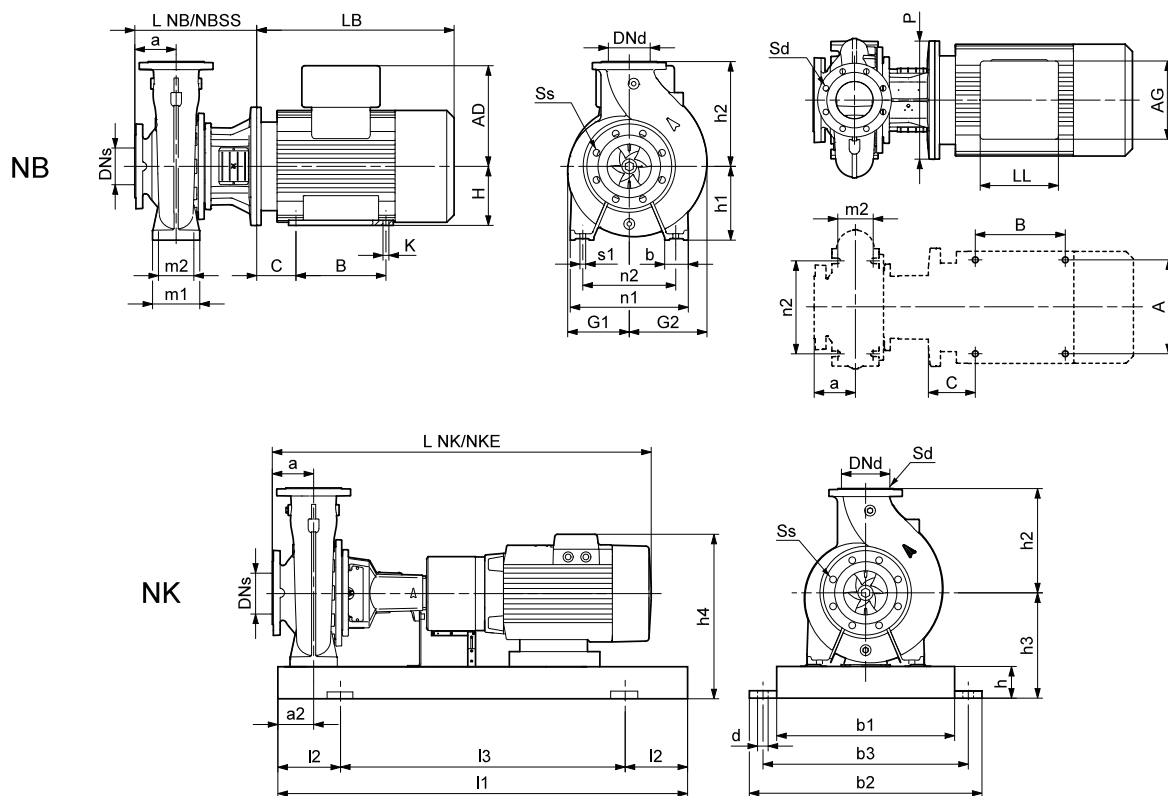
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 32-200



TM03 5086 4312



TM03 4182 4106

TM03 6005 4106

Pump type			32-200/176	32-200/190	32-200/206	32-200/219
Motor type	Standard Motor ⁵⁾		MG 112MC-H3	MG 132SC-H3	MG 132SB-H3	MG 160MB-H3
	E-Motor		MGE 112MC-G	MGE 132SC-G	MGE 132SB-F	MGE 160MB-F
Common data NB/NK	P2	[kW]	4	5.5	7.5	11
	PN	[bar]	16	16	16	16
	DNs	[mm]	50	50	50	50
	DNd	[mm]	32	32	32	32
	a	[mm]	80	80	80	80
	h2	[mm]	180	180	180	180
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	876/972	921/1011	909/999	1038/1121
	L NKE ¹⁾	[mm]	876/972	921/1011	909/999	1038/1121
	l1	[mm]	1000	1120	1120	1250
	l2	[mm]	170	190	190	205
	l3	[mm]	660	740	740	840
	b1	[mm]	340	380	380	430
	b2	[mm]	450	490	490	540
	b3	[mm]	400	440	440	490
	d	[mm]	24	24	24	24
	a2	[mm]	60	60	60	60
	h	[mm]	80	80	80	80
	h3	[mm]	240	240	240	245
	h4 ²⁾	[mm]	374/442	374/461	399/461	449/546
	Base frame no. ³⁾		4	5	5	6
NB data	Mounting design ⁴⁾		A	A	A	C
	L NB	[mm]	254	293	293	323
	L NB SS	[mm]	254	293	293	323
	h1	[mm]	160	160	160	160
	G1	[mm]	124	124	124	124
	G2	[mm]	145	145	145	145
	m1	[mm]	100	100	100	100
	m2	[mm]	70	70	70	70
	n1	[mm]	240	240	240	240
	n2	[mm]	190	190	190	190
	b	[mm]	50	50	50	50
	s1	[mm]	M12	M12	M12	M12
	H	[mm]	-	-	-	160
	LB ²⁾	[mm]	372/371	391/373	379/411	471/478
	AD ²⁾	[mm]	134/202	134/221	159/221	204/301
	AG ²⁾	[mm]	202/208	202/228	203/227	243/342
	LL ²⁾	[mm]	103/317	103/337	135/305	213/352
	P	[mm]	250	300	300	350
	C	[mm]	-	-	-	254
	B	[mm]	-	-	-	210
	A	[mm]	-	-	-	108
	K	[mm]	-	-	-	15
Weight data	Weight NK. CI ¹⁾	[kg]	153/151	161/158	172/169	220/215
	Weight NKE. CI ¹⁾	[kg]	153/151	168/165	181/178	249/244
	Weight NB. CI	[kg]	80	85	97	142
	Weight NBE. CI	[kg]	72	93	108	152
	Weight diff. SS	[kg]	2	2	2	2

1) Pump with standard coupling / pump with spacer coupling.

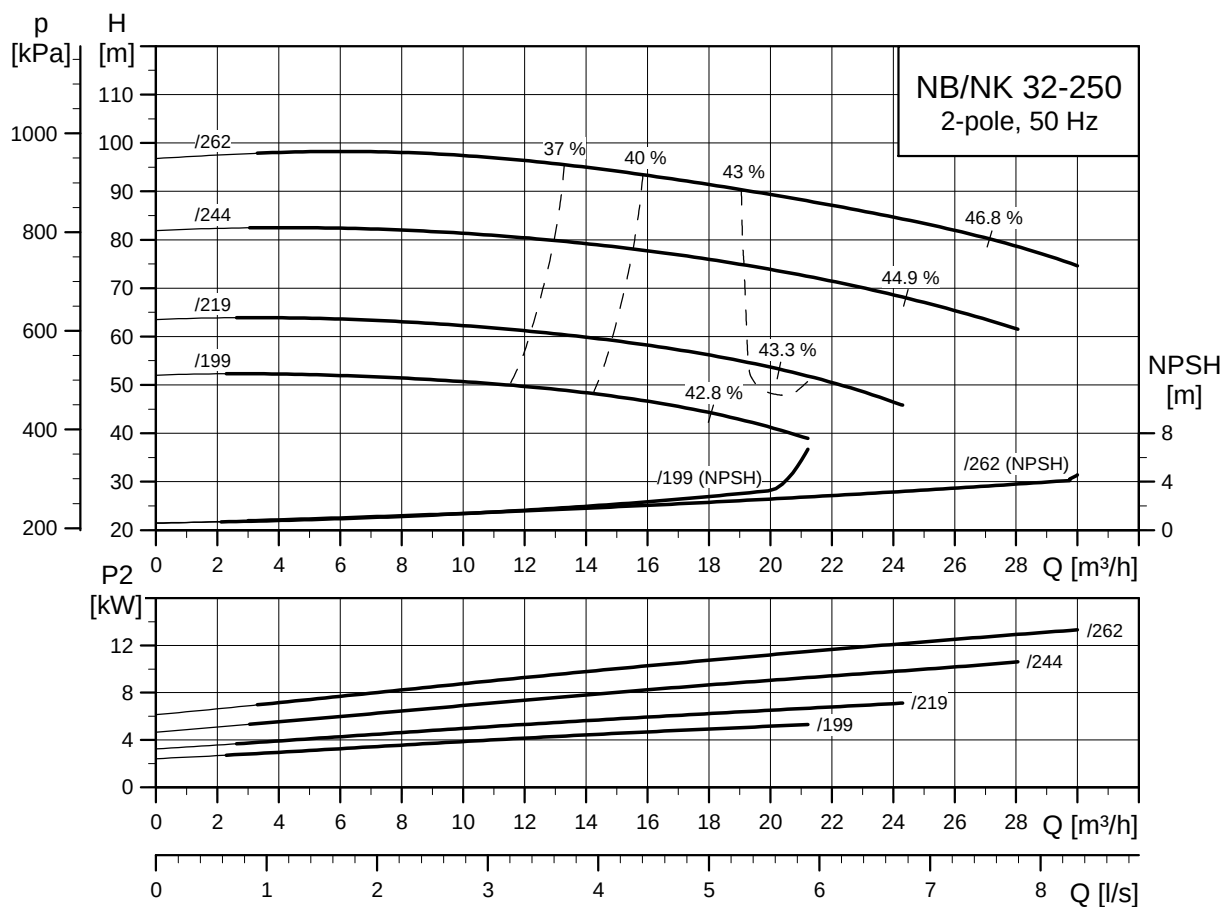
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

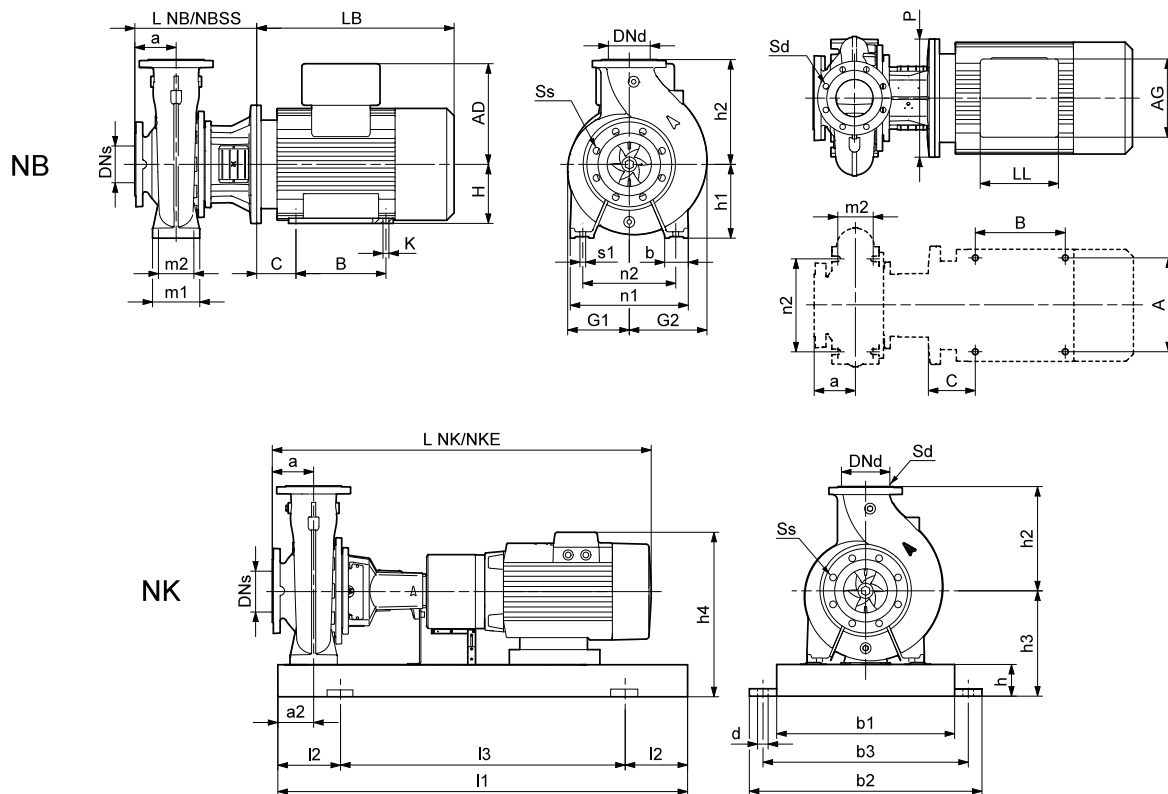
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 32-250



TM03 5087 4312



TM03 4182 4106

TM03 6005 4106

Pump type	32-250/199		32-250/219	32-250/244	32-250/262	
Motor type	Standard Motor ⁵⁾		MG 132SC-H3	MG 132SB-H3	MG 160MB-H3	MG 160MD-H3
	E-Motor		MGE 132SC-G	MGE 132SB-F	MGE 160MB-F	MGE 160MD-F
Common data NB/NK	P2	[kW]	5.5	7.5	11	15
	PN	[bar]	16	16	16	16
	DNs	[mm]	50	50	50	50
	DNd	[mm]	32	32	32	32
	a	[mm]	100	100	100	100
	h2	[mm]	225	225	225	225
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	941/1031	929/1019	1058/1141	1058/1141
	L NKE ¹⁾	[mm]	941/1031	929/1019	1058/1141	1058/1141
	l1	[mm]	1120	1120	1250	1250
	l2	[mm]	190	190	205	205
	l3	[mm]	740	740	840	840
	b1	[mm]	380	380	430	430
	b2	[mm]	490	490	540	540
	b3	[mm]	440	440	490	490
	d	[mm]	24	24	24	24
	a2	[mm]	75	75	75	75
	h	[mm]	80	80	80	80
	h3	[mm]	260	260	260	260
	h4 ²⁾	[mm]	394/481	419/481	464/561	464/561
	Base frame no. ³⁾		5	5	6	6
NB data	Mounting design ⁴⁾		A	A	C	C
	L NB	[mm]	313	313	343	343
	L NB SS	[mm]	313	313	343	343
	h1	[mm]	180	180	180	180
	G1	[mm]	162	162	162	162
	G2	[mm]	164	164	164	164
	m1	[mm]	125	125	125	125
	m2	[mm]	95	95	95	95
	n1	[mm]	320	320	320	320
	n2	[mm]	250	250	250	250
	b	[mm]	65	65	65	65
	s1	[mm]	M12	M12	M12	M12
	H	[mm]	-	-	160	160
	LB ²⁾	[mm]	391/373	379/411	471/478	471/478
	AD ²⁾	[mm]	134/221	159/221	204/301	204/301
	AG ²⁾	[mm]	202/228	203/227	243/342	243/342
	LL ²⁾	[mm]	103/337	135/305	213/352	213/352
	P	[mm]	300	300	350	350
	C	[mm]	-	-	254	254
	B	[mm]	-	-	210	210
	A	[mm]	-	-	108	108
K	[mm]	-	-	15	15	
Weight data	Weight NK. CI ¹⁾	[kg]	176/172	187/183	234/228	246/240
	Weight NKE. CI ¹⁾	[kg]	182/179	196/192	263/257	276/270
	Weight NB. CI	[kg]	97	109	154	167
	Weight NBE. CI	[kg]	105	120	164	174
	Weight diff. SS	[kg]	4	4	4	4

1) Pump with standard coupling / pump with spacer coupling.

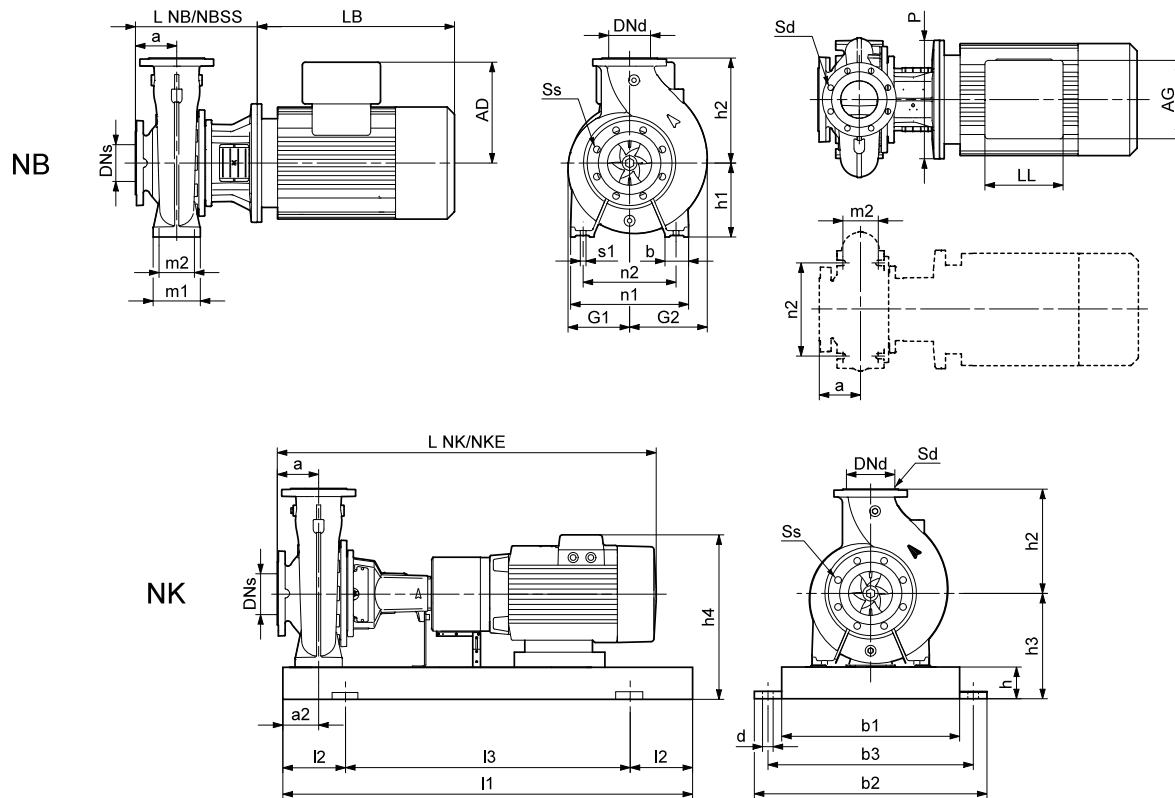
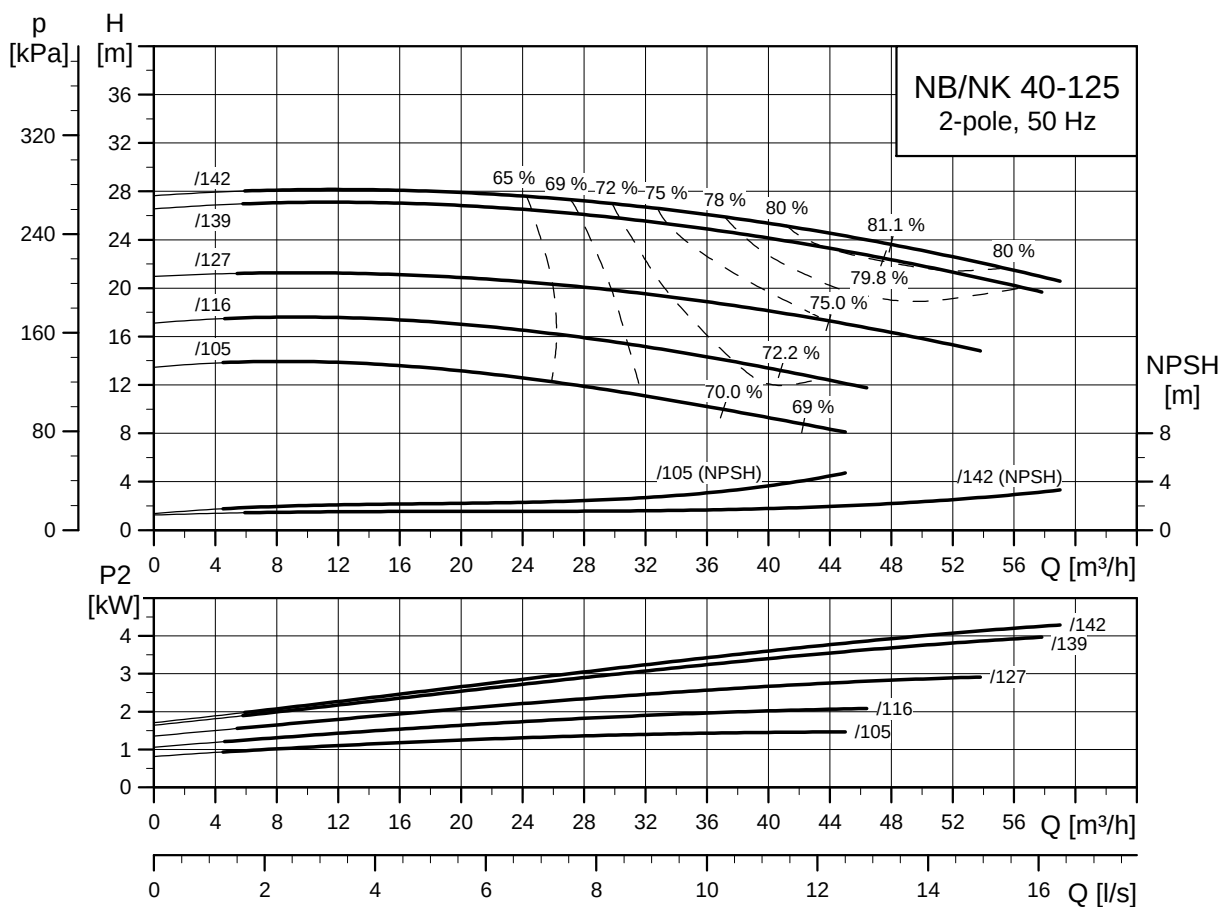
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 40-125



TM03 5088 4312

TM03 4180 4106

TM03 6005 4106

Pump type		40-125/105	40-125/116	40-125/127	40-125/139	40-125/142
Motor type	Standard Motor ⁵⁾	MG 90SB-H3	MG 90LC-H3	MG 100LC-H3	MG 112MC-H3	MG 132SC-H3
	E-Motor	MGE 90SB-G	MGE 90LC-G	MGE 100LC-G	MGE 112MC-G	MGE 132SC-G
Common data NB/NK	P2	[kW]	1.5	2.2	3	4
	PN	[bar]	16	16	16	16
	DNs	[mm]	65	65	65	65
	DNd	[mm]	40	40	40	40
	a	[mm]	80	80	80	80
	h2	[mm]	140	140	140	140
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	775/871	815/911	839/935	876/972
	L NKE ¹⁾	[mm]	815/911	815/911	839/935	876/972
	l1	[mm]	900	900	900	1000
	l2	[mm]	150	150	150	170
	l3	[mm]	600	600	600	660
	b1	[mm]	300	300	300	340
	b2	[mm]	390	390	390	450
	b3	[mm]	345	345	345	400
	d	[mm]	19	19	19	24
	a2	[mm]	60	60	60	60
	h	[mm]	65	65	65	80
	h3	[mm]	180	180	177	195
	h4 ²⁾	[mm]	290/365	290/365	297/369	329/397
	Base frame no. ³⁾		3	3	3	4
	Mounting design ⁴⁾		A	A	A	A
NB data	L NB	[mm]	226	226	254	254
	L NB SS	[mm]	253	253	273	273
	h1	[mm]	112	112	112	112
	G1	[mm]	117	117	117	117
	G2	[mm]	118	118	118	118
	m1	[mm]	100	100	100	100
	m2	[mm]	70	70	70	70
	n1	[mm]	210	210	210	210
	n2	[mm]	160	160	160	160
	b	[mm]	50	50	50	50
	s1	[mm]	M12	M12	M12	M12
	H	[mm]	-	-	-	-
	LB ²⁾	[mm]	281/321	321/308	335/347	372/371
	AD ²⁾	[mm]	110/185	110/185	120/192	134/202
	AG ²⁾	[mm]	162/177	162/177	162/222	202/208
	LL ²⁾	[mm]	103/232	103/232	103/277	103/317
	P	[mm]	200	200	250	250
	C	[mm]	-	-	-	-
	B	[mm]	-	-	-	-
	A	[mm]	-	-	-	-
	K	[mm]	-	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	98/97	102/101	106/104	135/132
	Weight NKE. CI ¹⁾	[kg]	105/104	109/108	114/112	135/133
	Weight NB. CI	[kg]	47	51	57	75
	Weight NBE. CI	[kg]	52	56	63	67
	Weight diff. SS	[kg]	6	6	6	6

1) Pump with standard coupling / pump with spacer coupling.

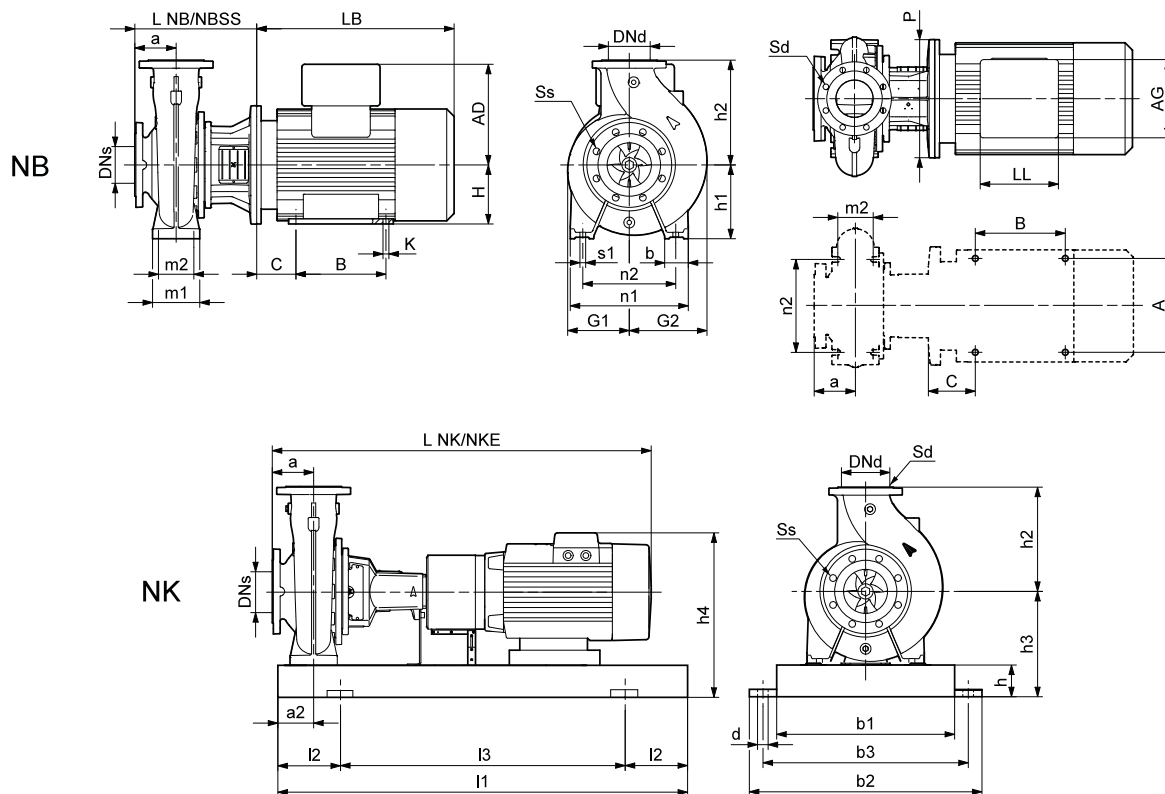
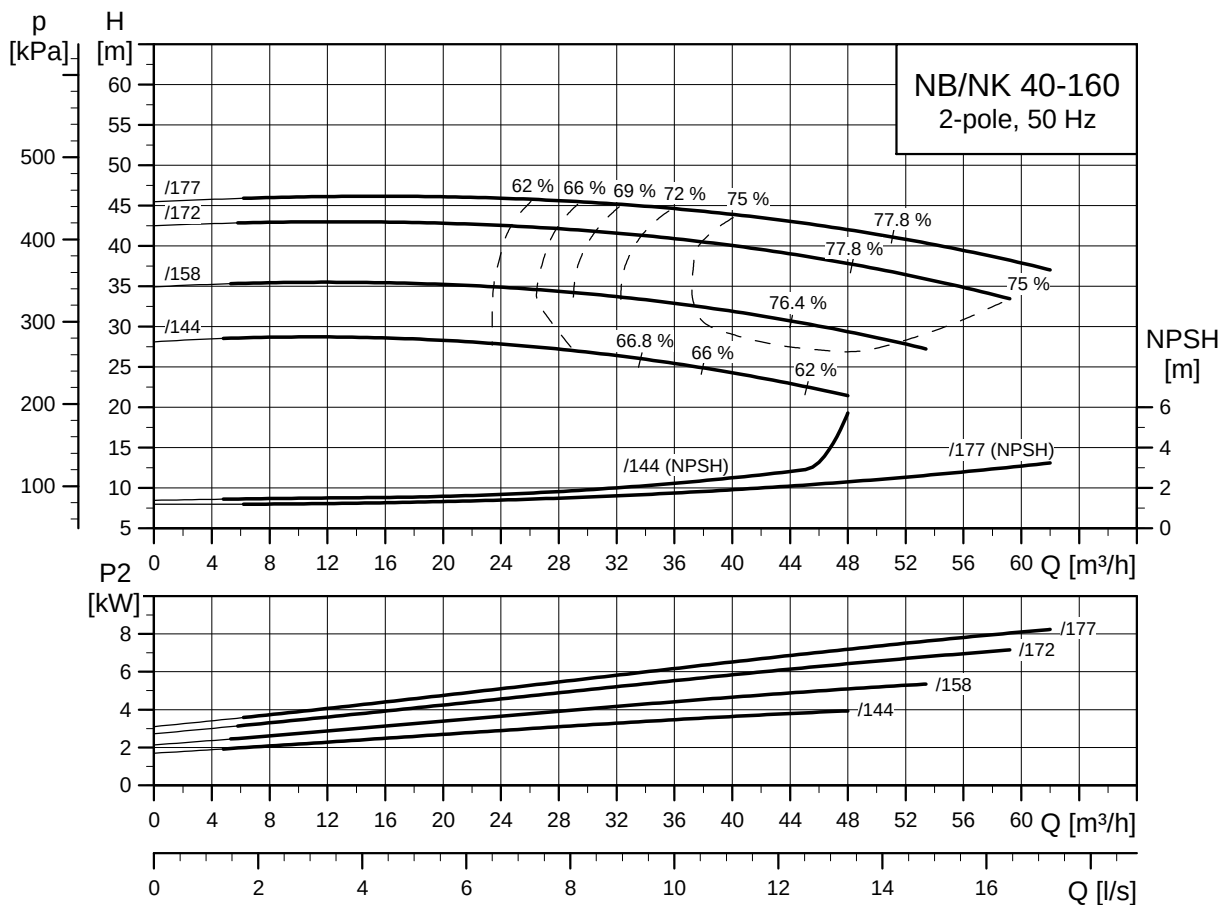
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 40-160



TM03 5089 4312

TM03 4182 4106

TM03 6005 4106

Pump type		40-160/144	40-160/158	40-160/172	40-160/177
Motor type	Standard Motor ⁵⁾	MG 112MC-H3	MG 132SC-H3	MG 132SB-H3	MG 160MB-H3
	E-Motor	MGE 112MC-G	MGE 132SC-G	MGE 132SB-F	MGE 160MB-F
Common data NB/NK	P2	[kW]	4	5.5	7.5
	PN	[bar]	16	16	16
	DNs	[mm]	65	65	65
	DNd	[mm]	40	40	40
	a	[mm]	80	80	80
	h2	[mm]	160	160	160
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	876/972	921/1011	909/999
	L NKE ¹⁾	[mm]	876/972	921/1011	909/999
	l1	[mm]	1000	1120	1120
	l2	[mm]	170	190	190
	l3	[mm]	660	740	740
	b1	[mm]	340	380	380
	b2	[mm]	450	490	490
	b3	[mm]	400	440	440
	d	[mm]	24	24	24
	a2	[mm]	60	60	60
	h	[mm]	80	80	80
	h3	[mm]	212	215	215
	h4 ²⁾	[mm]	346/414	349/436	374/436
	Base frame no. ³⁾		4	5	5
	Base frame no. ³⁾		4	5	6
NB data	Mounting design ⁴⁾		A	A	A
	L NB	[mm]	254	293	293
	L NB SS	[mm]	273	293	293
	h1	[mm]	132	132	132
	G1	[mm]	117	117	117
	G2	[mm]	133	133	133
	m1	[mm]	100	100	100
	m2	[mm]	70	70	70
	n1	[mm]	240	240	240
	n2	[mm]	190	190	190
	b	[mm]	50	50	50
	s1	[mm]	M12	M12	M12
	H	[mm]	-	-	-
	LB ²⁾	[mm]	372/371	391/373	379/411
	AD ²⁾	[mm]	134/202	134/221	159/221
	AG ²⁾	[mm]	202/208	202/228	203/227
	LL ²⁾	[mm]	103/317	103/337	135/305
	P	[mm]	250	300	300
	C	[mm]	-	-	-
	B	[mm]	-	-	-
	A	[mm]	-	-	-
	K	[mm]	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	139/137	150/146	161/157
	Weight NKE. CI ¹⁾	[kg]	140/138	156/153	170/166
	Weight NB. CI	[kg]	76	81	93
	Weight NBE. CI	[kg]	68	89	104
	Weight diff. SS	[kg]	2	2	2

1) Pump with standard coupling / pump with spacer coupling.

2) Pump with standard motor / pump with E-motor (built-in frequency converter).

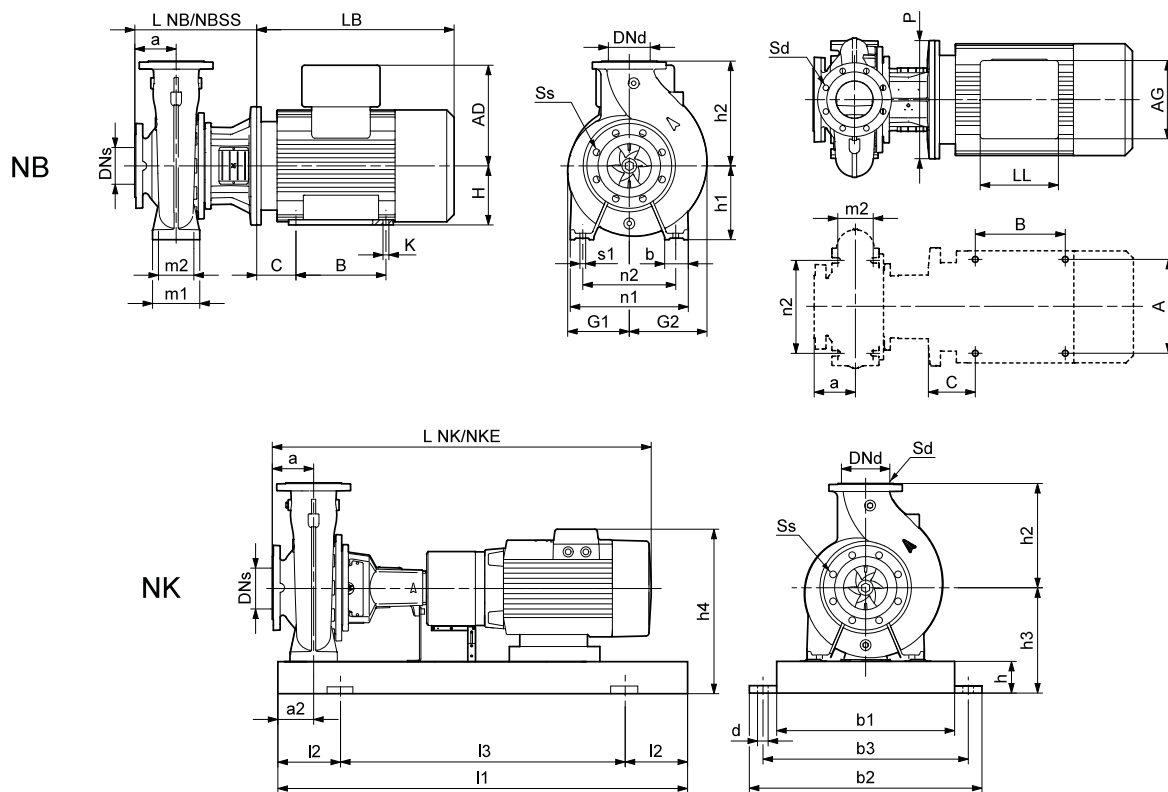
3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

Performance Curves for NB/NK 40-200 2-pole, 50 Hz

The top graph displays the head (H) in meters [m] and kilopascals [kPa] on the left y-axis (10 to 80) against the flow rate (Q) in m³/h on the x-axis (0 to 65). It includes efficiency curves (55% to 69.3%) and NPSH curves for models /219 and /172. The bottom graph shows the power (P2) in kW on the y-axis (0 to 12) against the flow rate (Q) in m³/h on the x-axis (0 to 65). Both graphs also feature a bottom x-axis for flow rate in l/s (0 to 18).



Pump type			40-200/172	40-200/188	40-200/206	40-200/219
Motor type	Standard Motor ⁵⁾		MG 132SC-H3	MG 132SB-H3	MG 160MB-H3	MG 160MD-H3
	E-Motor		MGE 132SC-G	MGE 132SB-F	MGE 160MB-F	MGE 160MD-F
Common data NB/NK	P2	[kW]	5.5	7.5	11	15
	PN	[bar]	16	16	16	16
	DNs	[mm]	65	65	65	65
	DNd	[mm]	40	40	40	40
	a	[mm]	100	100	100	100
	h2	[mm]	180	180	180	180
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	941/1031	929/1019	1058/1141	1058/1141
	L NKE ¹⁾	[mm]	941/1031	929/1019	1058/1141	1058/1141
	l1	[mm]	1120	1120	1250	1250
	l2	[mm]	190	190	205	205
	l3	[mm]	740	740	840	840
	b1	[mm]	380	380	430	430
	b2	[mm]	490	490	540	540
	b3	[mm]	440	440	490	490
	d	[mm]	24	24	24	24
	a2	[mm]	60	60	60	60
	h	[mm]	80	80	80	80
	h3	[mm]	240	240	245	245
	h4 ²⁾	[mm]	374/461	399/461	449/546	449/546
	Base frame no. ³⁾		5	5	6	6
NB data	Mounting design ⁴⁾		A	A	B	B
	L NB	[mm]	313	313	343	343
	L NB SS	[mm]	313	313	343	343
	h1	[mm]	160	160	-	-
	G1	[mm]	140	140	140	140
	G2	[mm]	157	157	157	157
	m1	[mm]	100	100	-	-
	m2	[mm]	70	70	-	-
	n1	[mm]	265	265	-	-
	n2	[mm]	212	212	-	-
	b	[mm]	50	50	-	-
	s1	[mm]	M12	M12	-	-
	H	[mm]	-	-	160	160
	LB ²⁾	[mm]	391/373	379/411	471/478	471/478
	AD ²⁾	[mm]	134/221	159/221	204/301	204/301
	AG ²⁾	[mm]	202/228	203/227	243/342	243/342
	LL ²⁾	[mm]	103/337	135/305	213/352	213/352
	P	[mm]	300	300	350	350
	C	[mm]	-	-	254	254
	B	[mm]	-	-	210	210
	A	[mm]	-	-	108	108
	K	[mm]	-	-	15	15
Weight data	Weight NK. CI ¹⁾	[kg]	162/159	173/170	222/216	234/228
	Weight NKE. CI ¹⁾	[kg]	169/166	182/179	251/245	264/258
	Weight NB. CI	[kg]	86	98	143	156
	Weight NBE. CI	[kg]	94	109	153	163
	Weight diff. SS	[kg]	2	2	2	2

1) Pump with standard coupling / pump with spacer coupling.

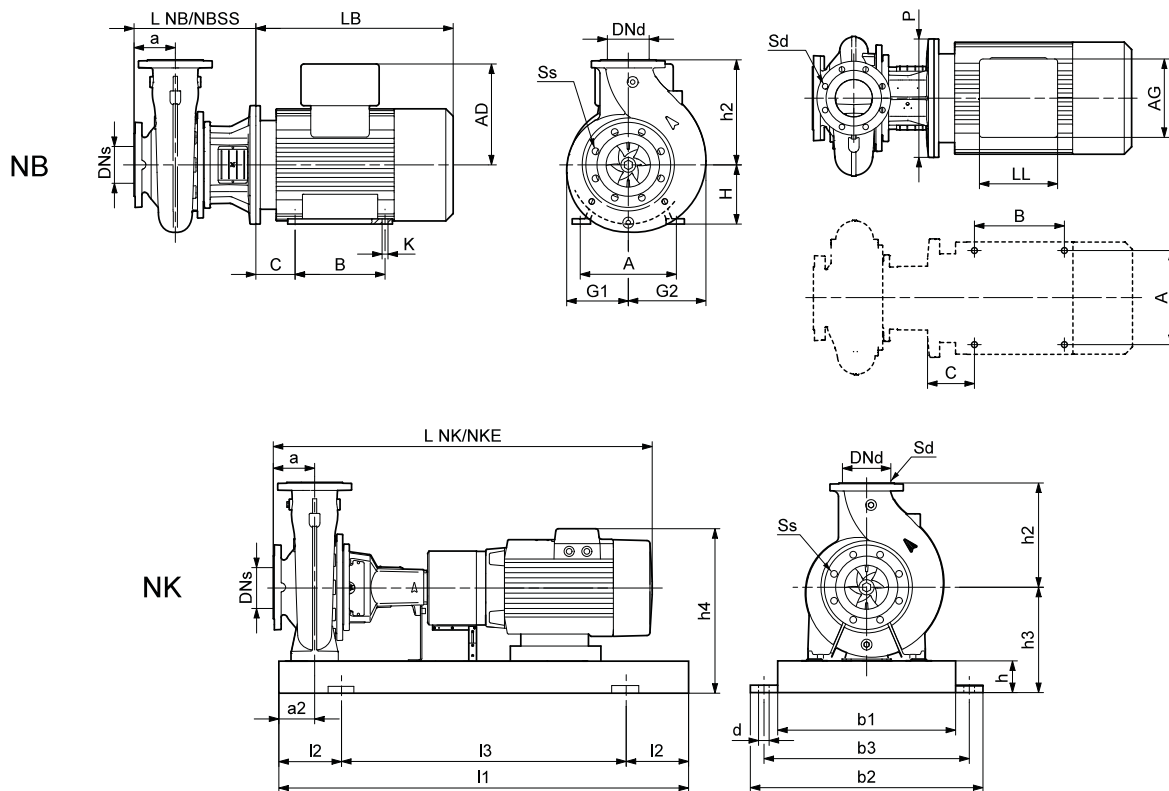
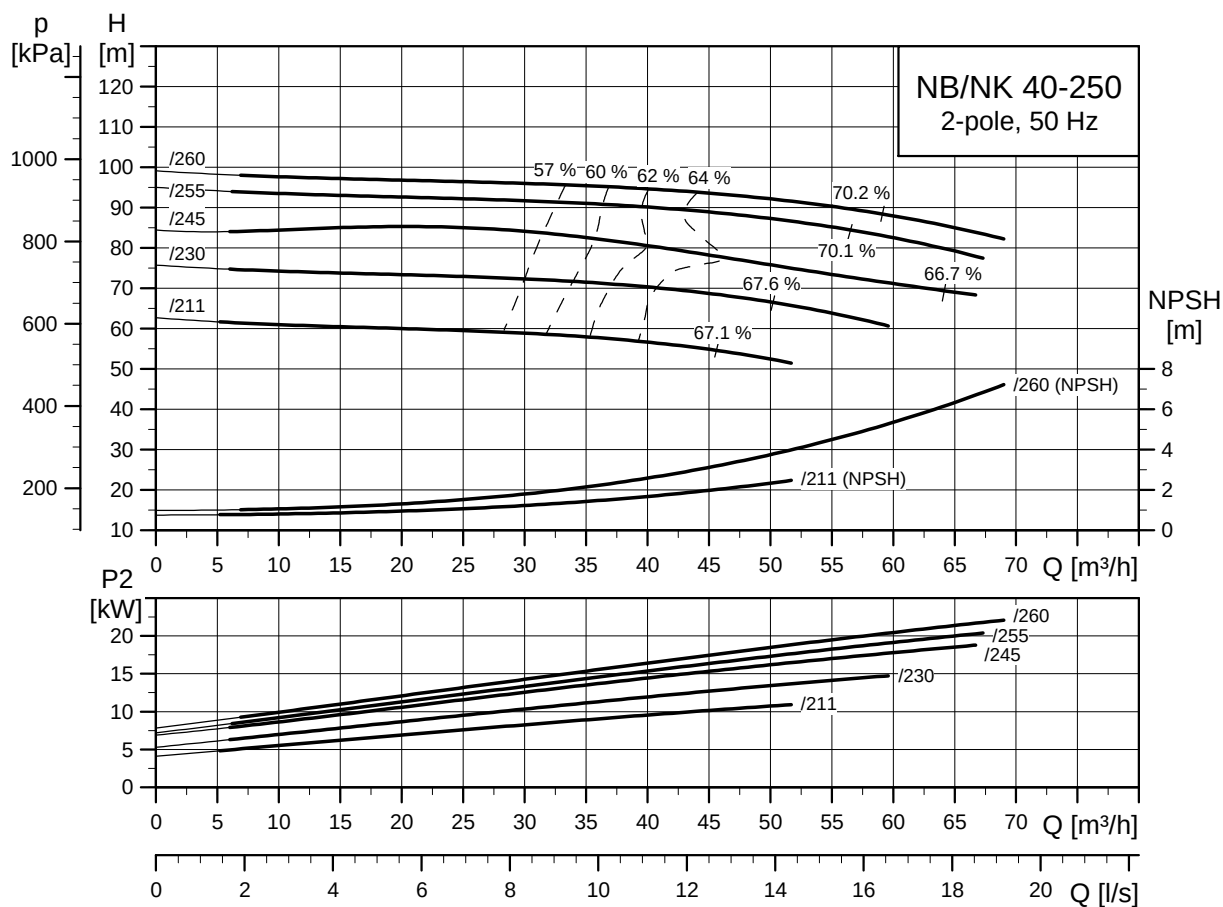
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 40-250



TM03 5091 4312

TM03 4181 4106

TM03 6005 4106

Pump type			40-250/211	40-250/230	40-250/245	40-250/255	40-250/260
Motor type	Standard Motor ⁵⁾		MG 160MB-H3	MG 160MD-H3	MG 160LB-H3	MG 180MB-H3	Siemens 200L
	E-Motor		MGE 160MB-F	MGE 160MD-F	MGE 160LB-F	MGE 180MB-F	-
Common data NB/NK	P2	[kW]	11	15	18.5	22	30
	PN	[bar]	16	16	16	16	16
	DNs	[mm]	65	65	65	65	65
	DNd	[mm]	40	40	40	40	40
	a	[mm]	100	100	100	100	100
	h2	[mm]	225	225	225	225	225
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	1058/1141	1058/1141	1102/1185	1139/1214	1206/1281
	L NKE ¹⁾	[mm]	1058/1141	1058/1141	1102/1185	1136/1211	-/-
	I1	[mm]	1250	1250	1250	1250	1600
	I2	[mm]	205	205	205	205	270
	I3	[mm]	840	840	840	840	1060
	b1	[mm]	430	430	430	430	530
	b2	[mm]	540	540	540	540	660
	b3	[mm]	490	490	490	490	600
	d	[mm]	24	24	24	24	28
	a2	[mm]	75	75	75	75	75
	h	[mm]	80	80	80	80	100
	h3	[mm]	260	260	260	265	305
	h4 ²⁾	[mm]	464/561	464/561	464/561	469/627	620/-
	Base frame no. ³⁾		6	6	6	6	8
NB data	Mounting design ⁴⁾		B	B	B	B	B
	L NB	[mm]	343	343	343	343	343
	L NB SS	[mm]	343	343	343	343	343
	h1	[mm]	-	-	-	-	-
	G1	[mm]	164	164	164	164	164
	G2	[mm]	172	172	172	172	172
	m1	[mm]	-	-	-	-	-
	m2	[mm]	-	-	-	-	-
	n1	[mm]	-	-	-	-	-
	n2	[mm]	-	-	-	-	-
	b	[mm]	-	-	-	-	-
	s1	[mm]	-	-	-	-	-
	H	[mm]	160	160	160	180	200
	LB ²⁾	[mm]	471/478	471/478	515/518	541/602	611/-
	AD ²⁾	[mm]	204/301	204/301	204/301	204/362	315/-
	AG ²⁾	[mm]	243/342	243/342	243/342	243/329	265/-
	LL ²⁾	[mm]	213/352	213/352	213/352	213/319	197/-
	P	[mm]	350	350	350	350	400
	C	[mm]	254	254	254	279	318
	B	[mm]	210	210	254	241	305
	A	[mm]	108	108	108	121	133
K	[mm]	15	15	15	15	19	
Weight data	Weight NK. CI ¹⁾	[kg]	232/227	244/239	258/253	273/264	419/413
	Weight NKE. CI ¹⁾	[kg]	261/256	274/269	288/283	303/294	-/-
	Weight NB. CI	[kg]	148	161	174	196	301
	Weight NBE. CI	[kg]	158	168	188	223	-
	Weight diff. SS	[kg]	-5	-5	-5	-5	-5

1) Pump with standard coupling / pump with spacer coupling.

2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

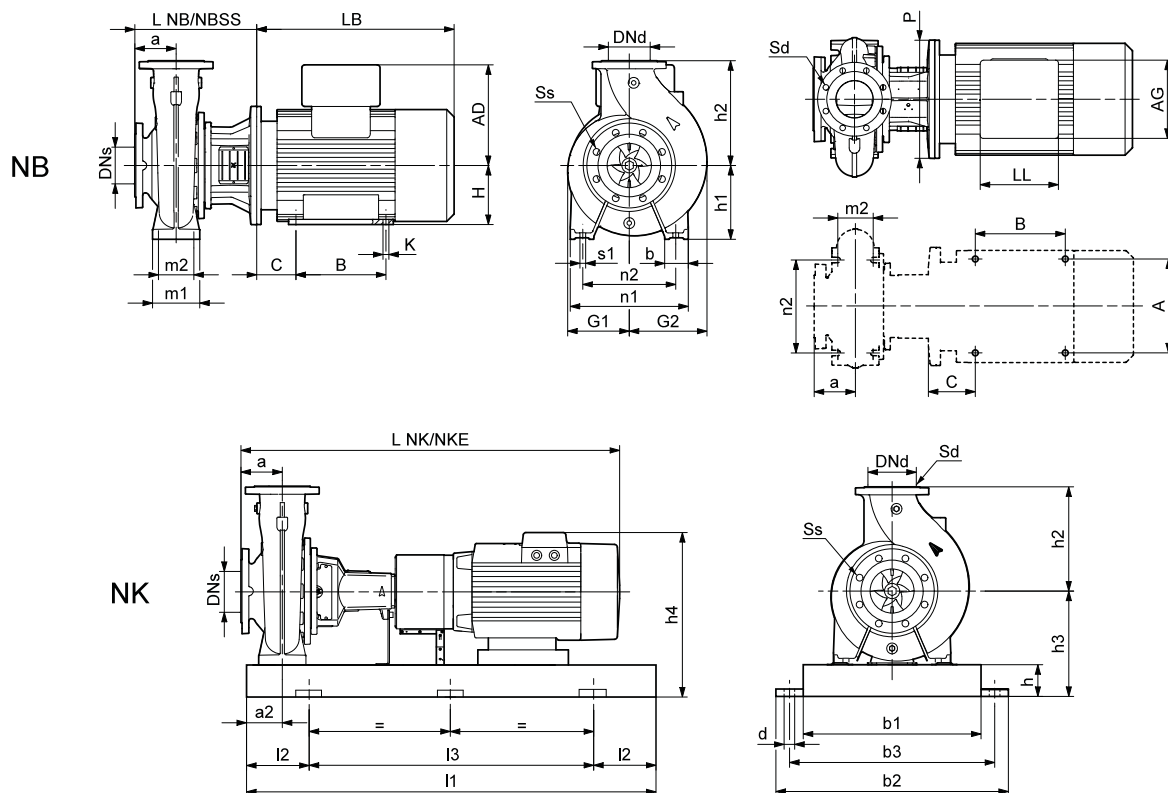
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

Performance Curves for NB/NK 40-315 2-pole, 50 Hz

The top graph displays the head (H) in meters and pressure (p) in kPa on the left y-axis (0 to 180 m, 20 to 1600 kPa) against the flow rate (Q) in m³/h (0 to 55) and l/s (0 to 15). The curves represent the pump's performance at different efficiencies: 36%, 39%, 42%, 48%, 48.5%, and 42.4%. The NPSH curves for models /273 and /344 are also shown, indicating the required head for safe operation.

The bottom graph displays the power (P2) in kW on the left y-axis (0 to 40) against the flow rate (Q) in m³/h (0 to 55) and l/s (0 to 15). The curves represent the power consumption for models /273, /298, /318, and /336.



Pump type		40-315/273	40-315/298	40-315/318	40-315/336
Motor type	Standard Motor ⁵⁾	MG 180MB-H3	Siemens 200L	Siemens 200L	Siemens 225M
	E-Motor	MGE 180MB-F	-	-	-
Common data NB/NK	P2	[kW]	22	30	45
	PN	[bar]	16	16	16
	DNs	[mm]	65	65	65
	DNd	[mm]	40	40	40
	a	[mm]	125	125	125
	h2	[mm]	250	250	250
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	1253/1349	1320/1416	1345/1441
	L NKE ¹⁾	[mm]	1250/1346	-/-	-/-
	l1	[mm]	1250	1600	1600
	l2	[mm]	205	270	270
	l3	[mm]	840	1060	1060
	b1	[mm]	430	530	530
	b2	[mm]	540	660	660
	b3	[mm]	490	600	600
	d	[mm]	24	28	28
	a2	[mm]	75	75	75
	h	[mm]	80	100	100
	h3	[mm]	280	305	330
	h4 ²⁾	[mm]	484/642	620/-	668/-
	Base frame no. ³⁾		6	8	8
NB data	Mounting design ⁴⁾		C	C	C
	L NB	[mm]	398	398	428
	L NB SS	[mm]	398	398	428
	h1	[mm]	200	200	200
	G1	[mm]	200	200	200
	G2	[mm]	206	206	206
	m1	[mm]	125	125	125
	m2	[mm]	95	95	95
	n1	[mm]	345	345	345
	n2	[mm]	280	280	280
	b	[mm]	65	65	65
	s1	[mm]	M12	M12	M12
	H	[mm]	180	200	225
	LB ²⁾	[mm]	541/602	611/-	708/-
	AD ²⁾	[mm]	204/362	315/-	338/-
	AG ²⁾	[mm]	243/329	265/-	266/-
	LL ²⁾	[mm]	213/319	197/-	197/-
	P	[mm]	350	400	450
	C	[mm]	279	318	356
	B	[mm]	241	305	286
	A	[mm]	121	133	149
	K	[mm]	15	19	19
Weight data	Weight NK. CI ¹⁾	[kg]	337/329	474/468	504/498
	Weight NKE. CI ¹⁾	[kg]	367/359	-/-	-/-
	Weight NB. CI	[kg]	247	354	379
	Weight NBE. CI	[kg]	274	-	-
	Weight diff. SS	[kg]	-9	-9	-9

1) Pump with standard coupling / pump with spacer coupling.

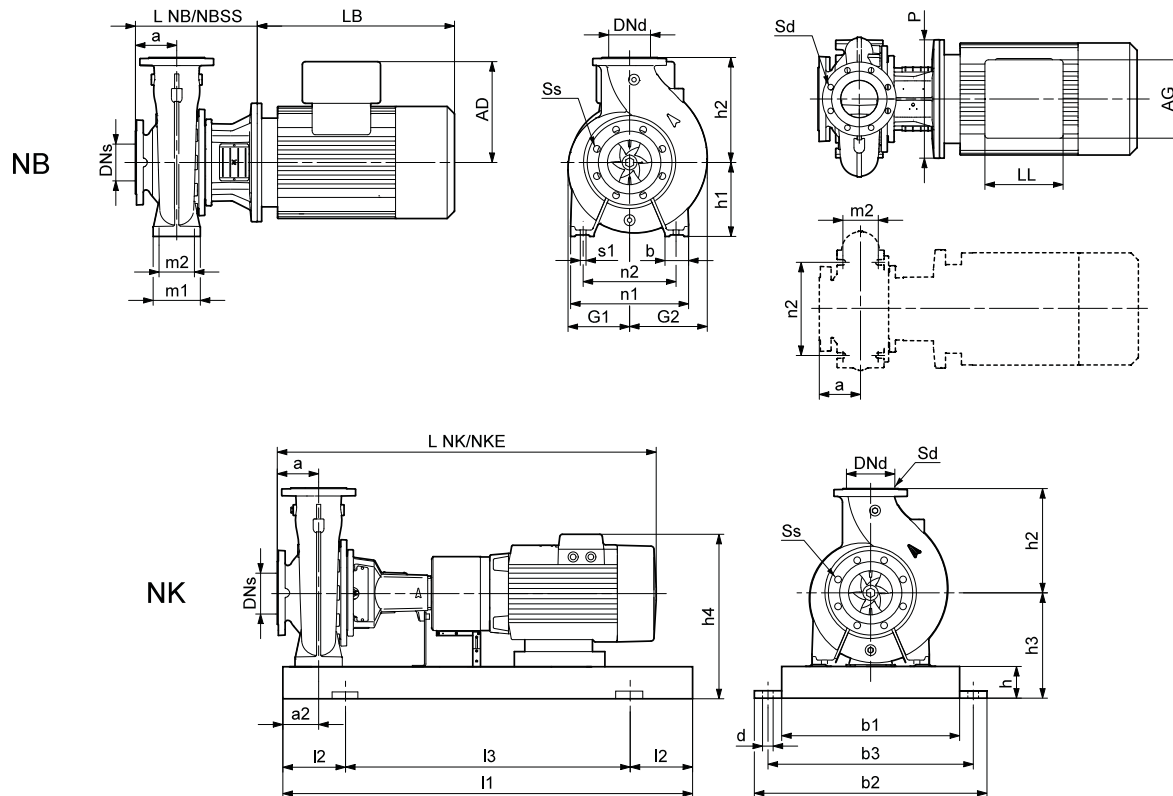
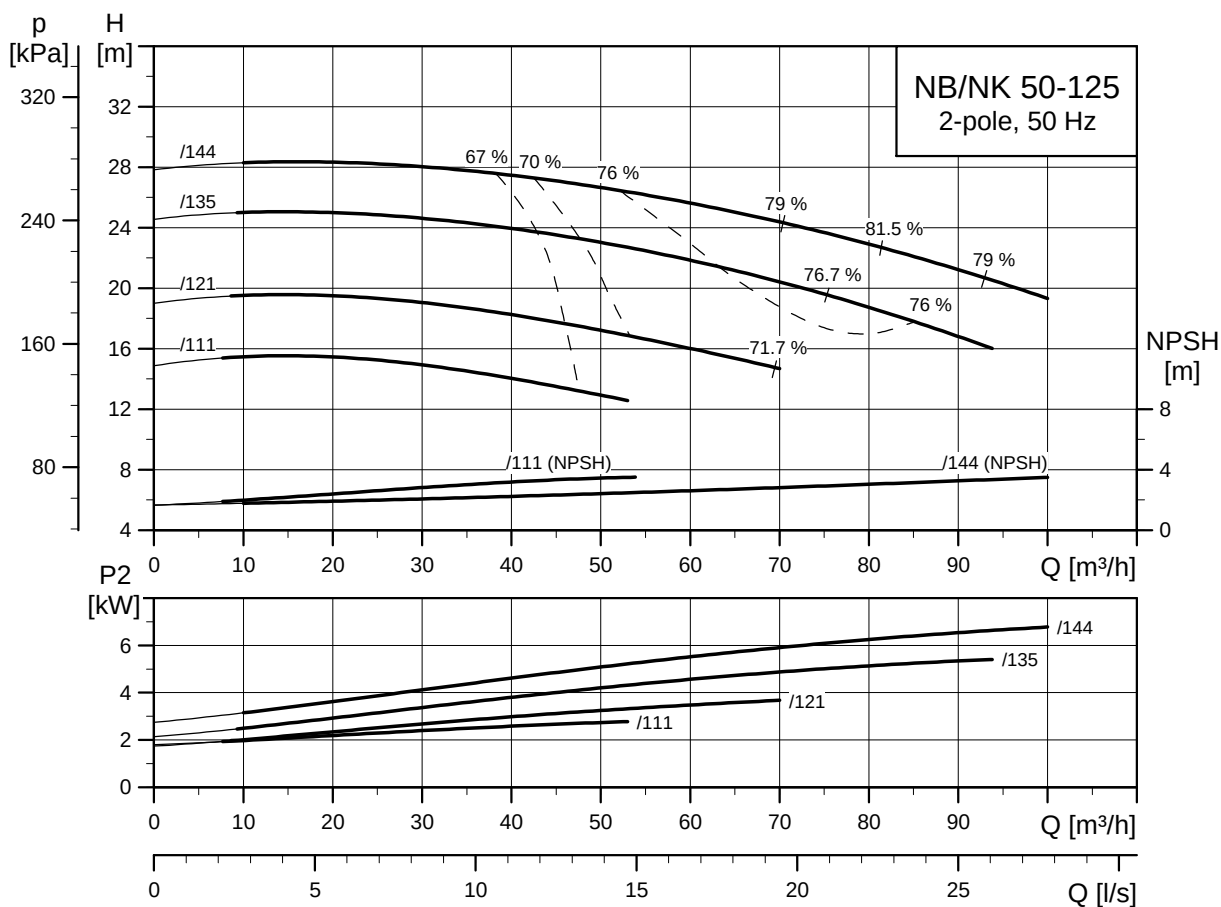
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 50-125



TM03 5093 4312

TM03 4180 4106

TM03 6005 4106

Pump type		50-125/111	50-125/121	50-125/135	50-125/144
Motor type	Standard Motor ⁵⁾	MG 100LC-H3	MG 112MC-H3	MG 132SC-H3	MG 132SB-H3
	E-Motor	MGE 100LC-G	MGE 112MC-G	MGE 132SC-G	MGE 132SB-F
Common data NB/NK	P2	[kW]	3	4	5.5
	PN	[bar]	16	16	16
	DNs	[mm]	65	65	65
	DNd	[mm]	50	50	50
	a	[mm]	100	100	100
	h2	[mm]	160	160	160
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	859/955	896/992	941/1031
	L NKE ¹⁾	[mm]	859/955	896/992	941/1031
	l1	[mm]	1000	1000	1120
	l2	[mm]	170	170	190
	l3	[mm]	660	660	740
	b1	[mm]	340	340	380
	b2	[mm]	450	450	490
	b3	[mm]	400	400	440
	d	[mm]	24	24	24
	a2	[mm]	60	60	60
	h	[mm]	80	80	80
	h3	[mm]	212	212	215
	h4 ²⁾	[mm]	332/404	346/414	349/436
	Base frame no. ³⁾		4	4	5
NB data	Mounting design ⁴⁾		A	A	A
	L NB	[mm]	274	274	313
	L NB SS	[mm]	293	293	313
	h1	[mm]	132	132	132
	G1	[mm]	117	117	117
	G2	[mm]	130	130	130
	m1	[mm]	100	100	100
	m2	[mm]	70	70	70
	n1	[mm]	240	240	240
	n2	[mm]	190	190	190
	b	[mm]	50	50	50
	s1	[mm]	M12	M12	M12
	H	[mm]	-	-	-
	LB ²⁾	[mm]	335/347	372/371	391/373
	AD ²⁾	[mm]	120/192	134/202	134/221
	AG ²⁾	[mm]	162/222	202/208	202/228
	LL ²⁾	[mm]	103/277	103/317	103/337
	P	[mm]	250	250	300
	C	[mm]	-	-	-
	B	[mm]	-	-	-
	A	[mm]	-	-	-
	K	[mm]	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	125/123	141/139	151/148
	Weight NKE. CI ¹⁾	[kg]	133/131	141/139	158/154
	Weight NB. CI	[kg]	59	77	83
	Weight NBE. CI	[kg]	66	70	90
	Weight diff. SS	[kg]	9	9	9

1) Pump with standard coupling / pump with spacer coupling.

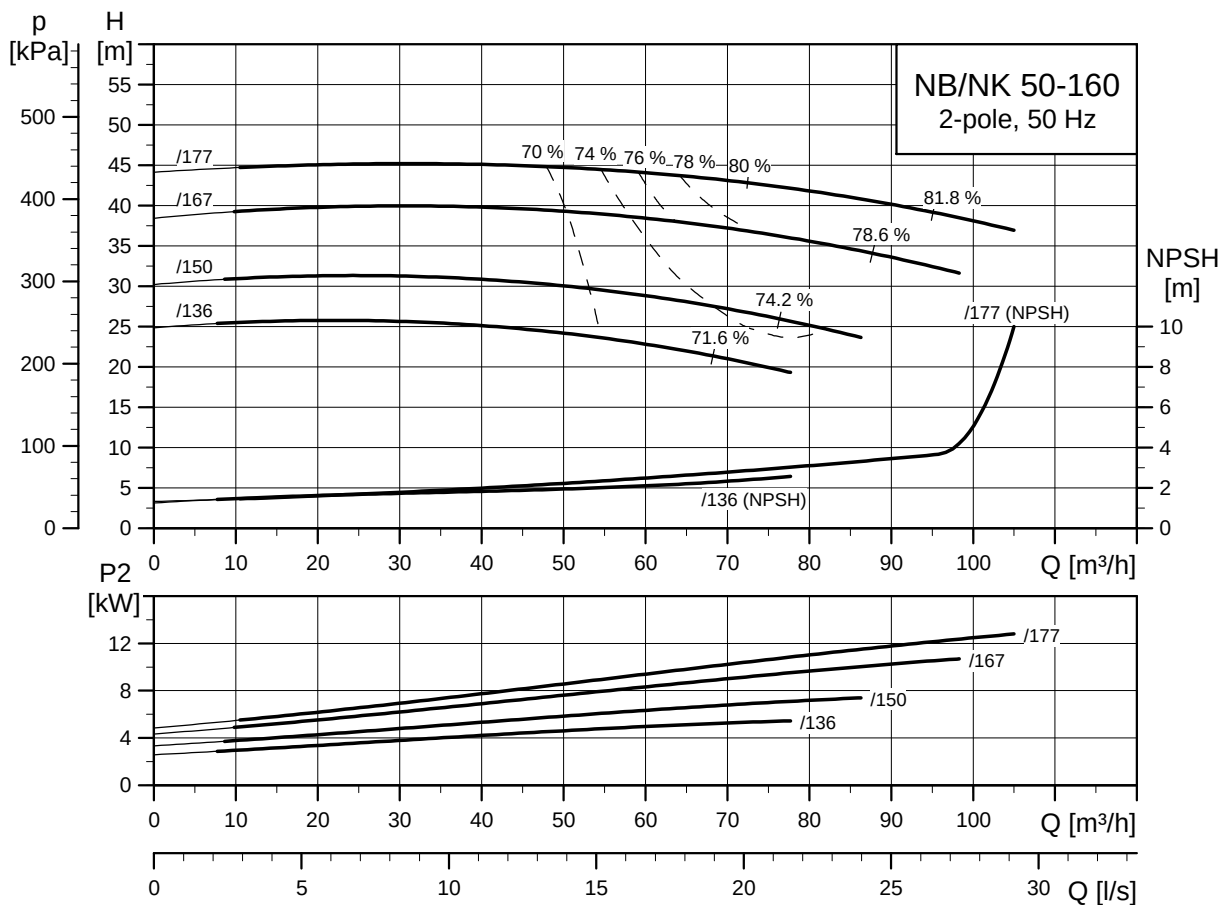
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

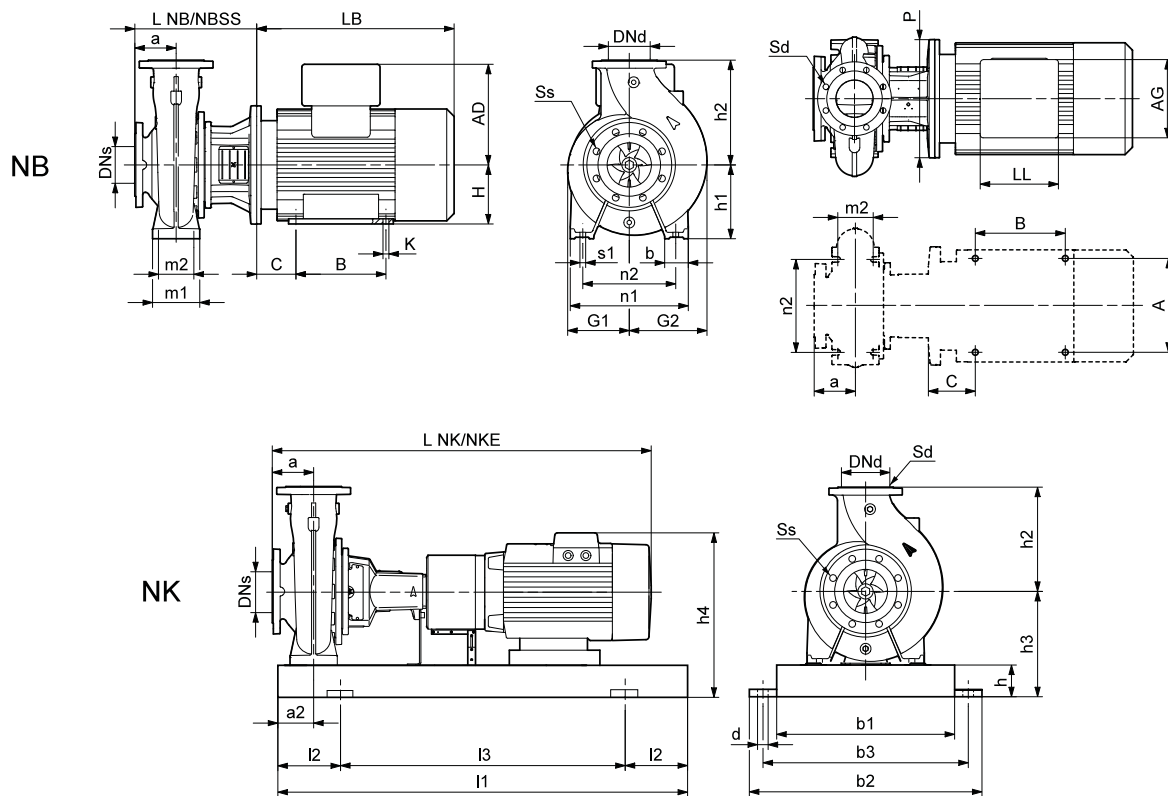
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 50-160



TM03 5094 4312



TM03 4182 4106

TM03 6005 4106

Pump type	50-160/136		50-160/150	50-160/167	50-160/177	
Motor type	Standard Motor ⁵⁾		MG 132SC-H3	MG 132SB-H3	MG 160MB-H3	MG 160MD-H3
	E-Motor		MGE 132SC-G	MGE 132SB-F	MGE 160MB-F	MGE 160MD-F
Common data NB/NK	P2	[kW]	5.5	7.5	11	15
	PN	[bar]	16	16	16	16
	DNs	[mm]	65	65	65	65
	DNd	[mm]	50	50	50	50
	a	[mm]	100	100	100	100
	h2	[mm]	180	180	180	180
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	941/1031	929/1019	1058/1141	1058/1141
	L NKE ¹⁾	[mm]	941/1031	929/1019	1058/1141	1058/1141
	l1	[mm]	1120	1120	1250	1250
	l2	[mm]	190	190	205	205
	l3	[mm]	740	740	840	840
	b1	[mm]	380	380	430	430
	b2	[mm]	490	490	540	540
	b3	[mm]	440	440	490	490
	d	[mm]	24	24	24	24
	a2	[mm]	60	60	60	60
	h	[mm]	80	80	80	80
	h3	[mm]	240	240	245	245
	h4 ²⁾	[mm]	374/461	399/461	449/546	449/546
Base frame no. ³⁾		5	5	6	6	
NB data	Mounting design ⁴⁾		A	A	B	B
	L NB	[mm]	313	313	343	343
	L NB SS	[mm]	213	213	243	243
	h1	[mm]	160	160	-	-
	G1	[mm]	125	125	125	125
	G2	[mm]	150	150	150	150
	m1	[mm]	100	100	-	-
	m2	[mm]	70	70	-	-
	n1	[mm]	265	265	-	-
	n2	[mm]	212	212	-	-
	b	[mm]	50	50	-	-
	s1	[mm]	M12	M12	-	-
	H	[mm]	-	-	160	160
	LB ²⁾	[mm]	391/373	379/411	471/478	471/478
	AD ²⁾	[mm]	134/221	159/221	204/301	204/301
	AG ²⁾	[mm]	202/228	203/227	243/342	243/342
	LL ²⁾	[mm]	103/337	135/305	213/352	213/352
	P	[mm]	300	300	350	350
	C	[mm]	-	-	254	254
	B	[mm]	-	-	210	210
	A	[mm]	-	-	108	108
K	[mm]	-	-	15	15	
Weight data	Weight NK. CI ¹⁾	[kg]	157/153	168/164	216/210	228/222
	Weight NKE. CI ¹⁾	[kg]	163/160	177/173	245/239	258/252
	Weight NB. CI	[kg]	83	95	139	152
	Weight NBE. CI	[kg]	90	106	149	159
	Weight diff. SS	[kg]	3	3	3	3

1) Pump with standard coupling / pump with spacer coupling.

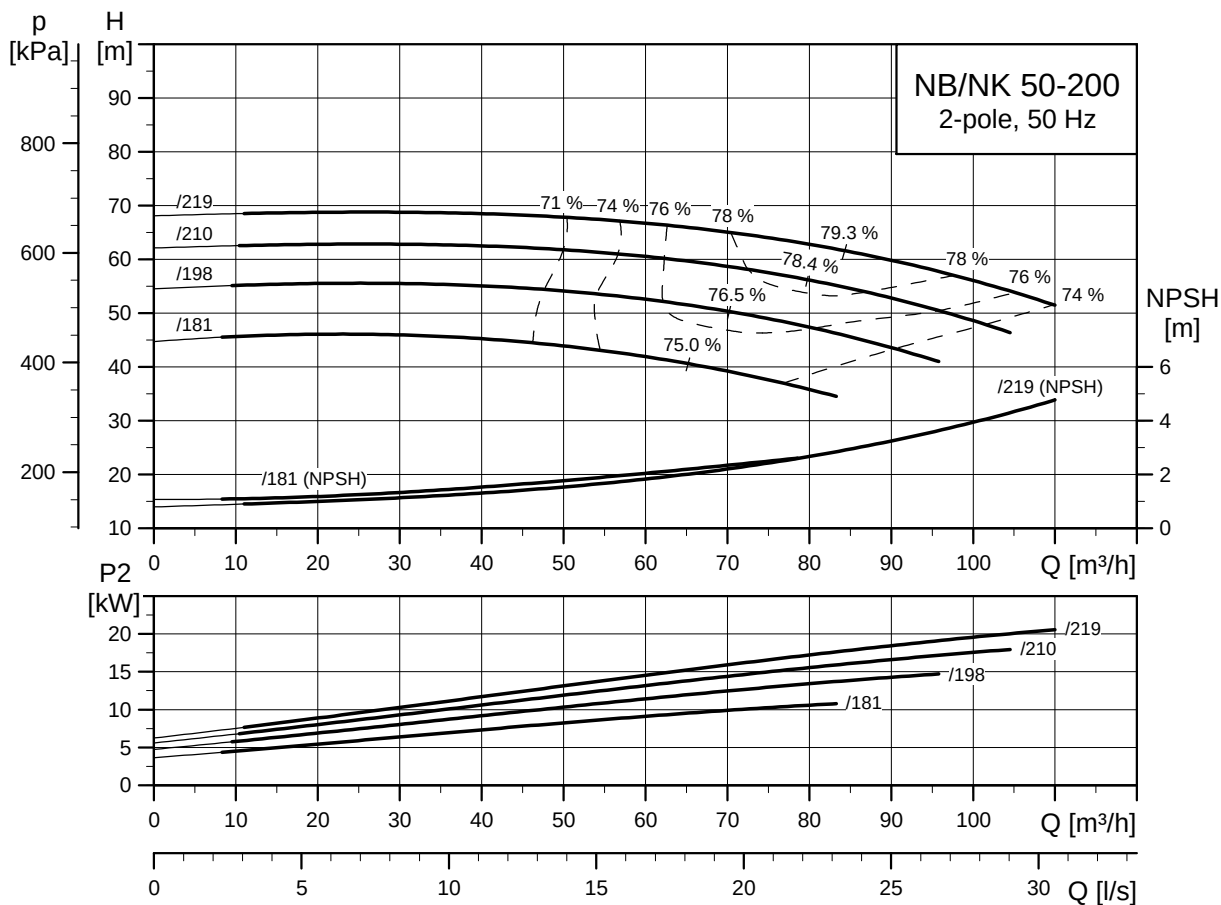
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

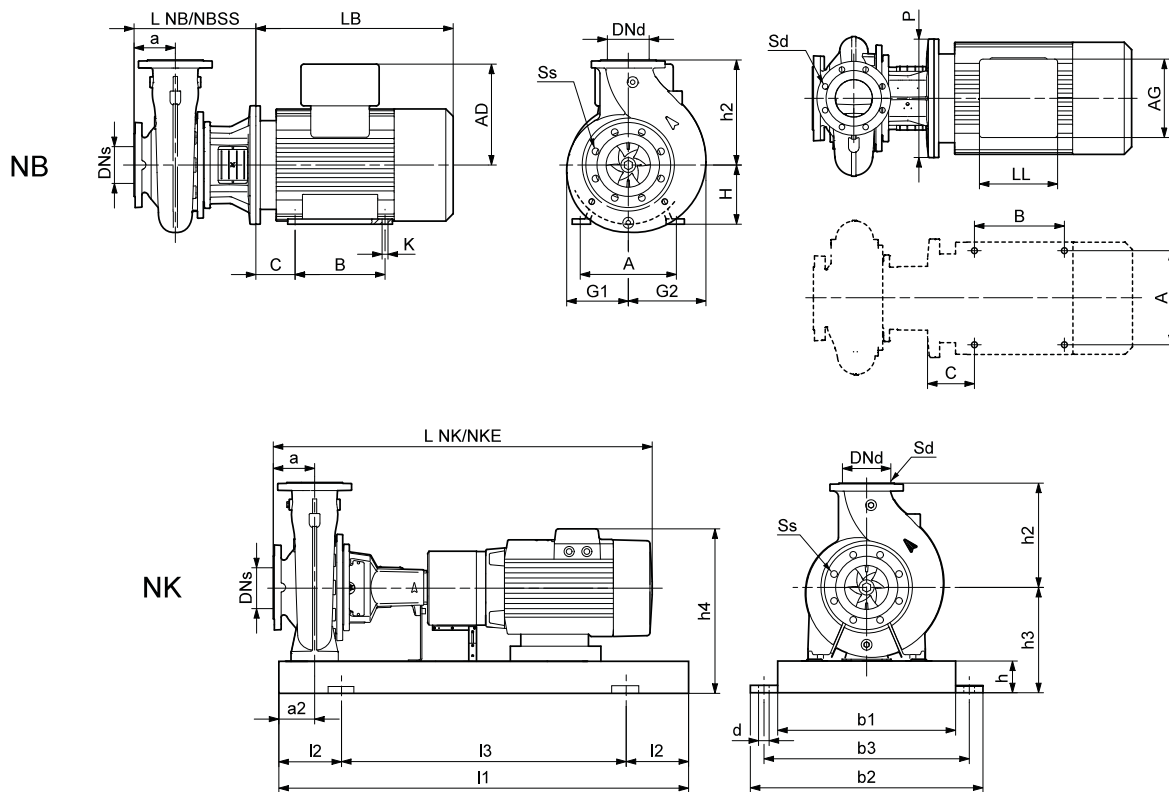
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 50-200



TM03 5095 4312



TM03 4181 4106

TM03 6005 4106

Pump type	50-200/181		50-200/198	50-200/210	50-200/219	
Motor type	Standard Motor ⁵⁾		MG 160MB-H3	MG 160MD-H3	MG 160LB-H3	MG 180MB-H3
	E-Motor		MGE 160MB-F	MGE 160MD-F	MGE 160LB-F	MGE 180MB-F
Common data NB/NK	P2	[kW]	11	15	18.5	22
	PN	[bar]	16	16	16	16
	DNs	[mm]	65	65	65	65
	DNd	[mm]	50	50	50	50
	a	[mm]	100	100	100	100
	h2	[mm]	200	200	200	200
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	1058/1141	1058/1141	1102/1185	1139/1214
	L NKE ¹⁾	[mm]	1058/1141	1058/1141	1102/1185	1136/1211
	l1	[mm]	1250	1250	1250	1250
	l2	[mm]	205	205	205	205
	l3	[mm]	840	840	840	840
	b1	[mm]	430	430	430	430
	b2	[mm]	540	540	540	540
	b3	[mm]	490	490	490	490
	d	[mm]	24	24	24	24
	a2	[mm]	60	60	60	60
	h	[mm]	80	80	80	80
	h3	[mm]	245	245	245	265
	h4 ²⁾	[mm]	449/546	449/546	449/546	469/627
	Base frame no. ³⁾		6	6	6	6
NB data	Mounting design ⁴⁾		B	B	B	B
	L NB	[mm]	343	343	343	343
	L NB SS	[mm]	343	343	343	343
	h1	[mm]	-	-	-	-
	G1	[mm]	141	141	141	141
	G2	[mm]	162	162	162	162
	m1	[mm]	-	-	-	-
	m2	[mm]	-	-	-	-
	n1	[mm]	-	-	-	-
	n2	[mm]	-	-	-	-
	b	[mm]	-	-	-	-
	s1	[mm]	-	-	-	-
	H	[mm]	160	160	160	180
	LB ²⁾	[mm]	471/478	471/478	515/518	541/602
	AD ²⁾	[mm]	204/301	204/301	204/301	204/362
	AG ²⁾	[mm]	243/342	243/342	243/342	243/329
	LL ²⁾	[mm]	213/352	213/352	213/352	213/319
	P	[mm]	350	350	350	350
	C	[mm]	254	254	254	279
	B	[mm]	210	210	254	241
	A	[mm]	108	108	108	121
	K	[mm]	15	15	15	15
Weight data	Weight NK. CI ¹⁾	[kg]	219/213	231/225	245/239	268/259
	Weight NKE. CI ¹⁾	[kg]	248/242	261/255	275/269	298/289
	Weight NB. CI	[kg]	140	153	166	188
	Weight NBE. CI	[kg]	150	160	180	215
	Weight diff. SS	[kg]	-4	-4	-4	-4

1) Pump with standard coupling / pump with spacer coupling.

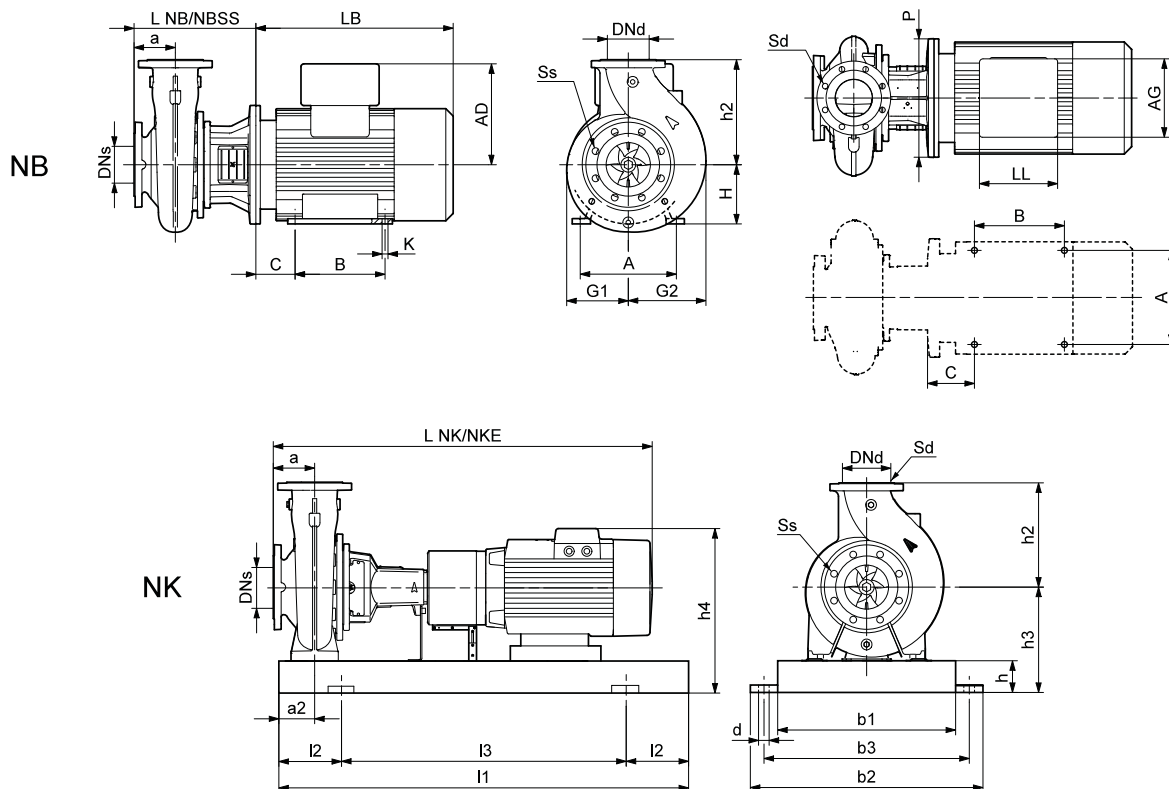
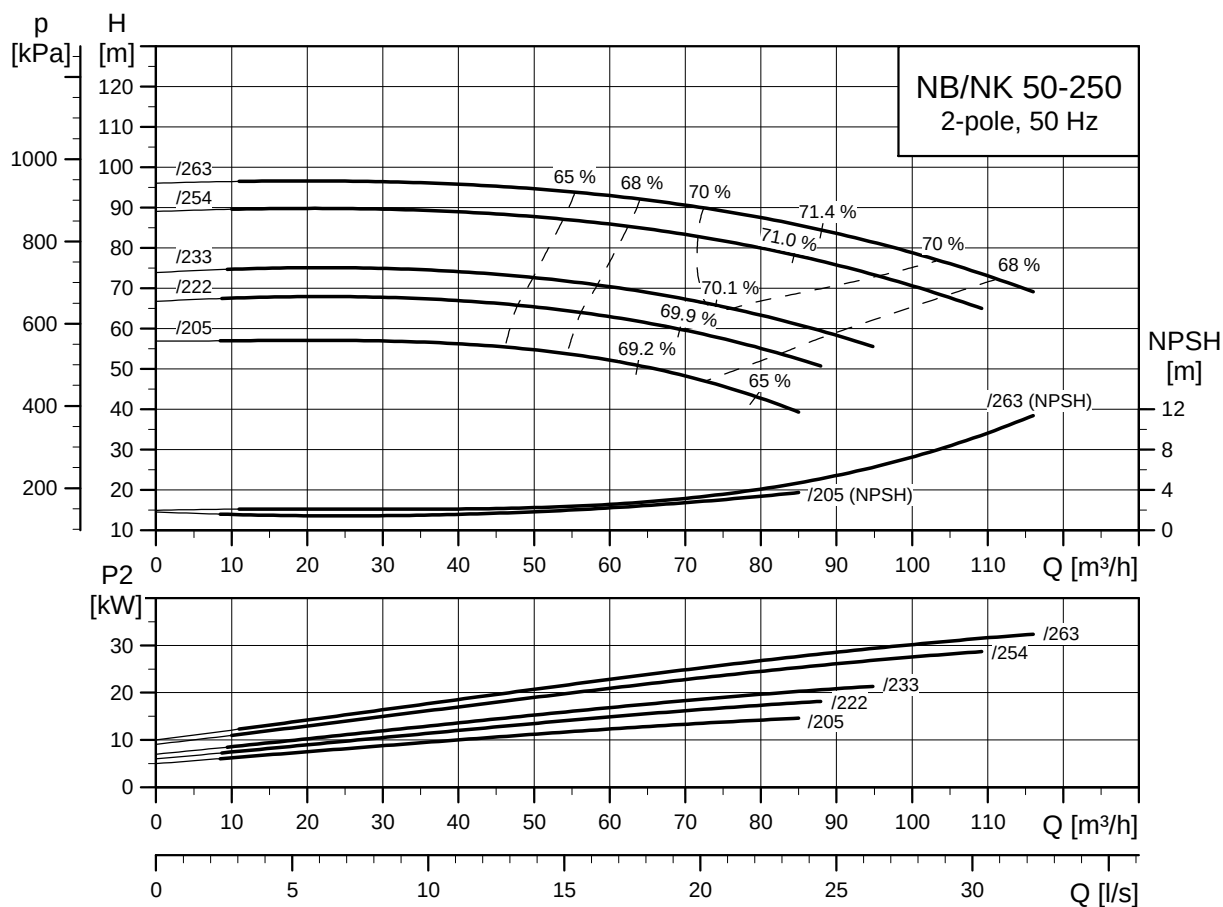
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 50-250



TM03 509 6 4312

TM03 4181 4106

TM03 6005 4106

Pump type		50-250/205	50-250/222	50-250/233	50-250/254	50-250/263
Motor type	Standard Motor ⁵⁾	MG 160MD-H3	MG 160LB-H3	MG 180MB-H3	Siemens 200L	Siemens 200L
	E-Motor	MGE 160MD-F	MGE 160LB-F	MGE 180MB-F	-	-
Common data NB/NK	P2	[kW]	15	18.5	22	30
	PN	[bar]	16	16	16	16
	DNs	[mm]	65	65	65	65
	DNd	[mm]	50	50	50	50
	a	[mm]	100	100	100	100
	h2	[mm]	225	225	225	225
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	1058/1141	1102/1185	1139/1214	1206/1281
	L NKE ¹⁾	[mm]	1058/1141	1102/1185	1136/1211	-/-
	l1	[mm]	1250	1250	1250	1600
	l2	[mm]	205	205	205	270
	l3	[mm]	840	840	840	1060
	b1	[mm]	430	430	430	530
	b2	[mm]	540	540	540	660
	b3	[mm]	490	490	490	600
	d	[mm]	24	24	24	28
	a2	[mm]	75	75	75	75
	h	[mm]	80	80	80	100
	h3	[mm]	260	260	265	305
	h4 ²⁾	[mm]	464/561	464/561	469/627	620/-
	Base frame no. ³⁾		6	6	6	8
	Mounting design ⁴⁾		B	B	B	B
NB data	L NB	[mm]	343	343	343	343
	L NB SS	[mm]	343	343	343	343
	h1	[mm]	-	-	-	-
	G1	[mm]	164	164	164	164
	G2	[mm]	180	180	180	180
	m1	[mm]	-	-	-	-
	m2	[mm]	-	-	-	-
	n1	[mm]	-	-	-	-
	n2	[mm]	-	-	-	-
	b	[mm]	-	-	-	-
	s1	[mm]	-	-	-	-
	H	[mm]	160	160	180	200
	LB ²⁾	[mm]	471/478	515/518	541/602	611/-
	AD ²⁾	[mm]	204/301	204/301	204/362	315/-
	AG ²⁾	[mm]	243/342	243/342	243/329	265/-
	LL ²⁾	[mm]	213/352	213/352	213/319	197/-
	P	[mm]	350	350	350	400
	C	[mm]	254	254	279	318
	B	[mm]	210	254	241	305
	A	[mm]	108	108	121	133
	K	[mm]	15	15	15	19
Weight data	Weight NK. CI ¹⁾	[kg]	246/240	260/254	275/266	420/414
	Weight NKE. CI ¹⁾	[kg]	276/270	290/284	305/296	-/-
	Weight NB. CI	[kg]	162	175	197	302
	Weight NBE. CI	[kg]	169	189	224	-
	Weight diff. SS	[kg]	-10	-10	-10	-

1) Pump with standard coupling / pump with spacer coupling.

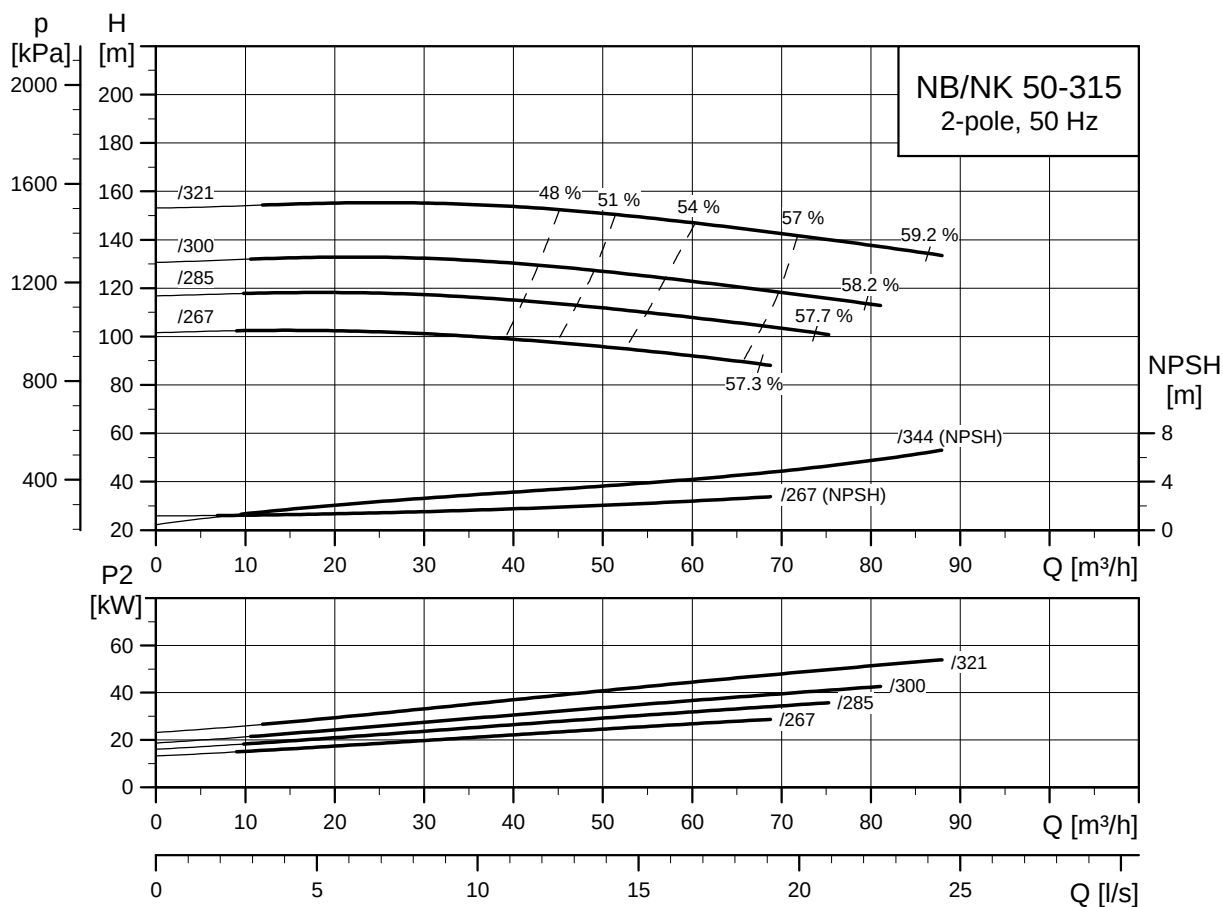
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

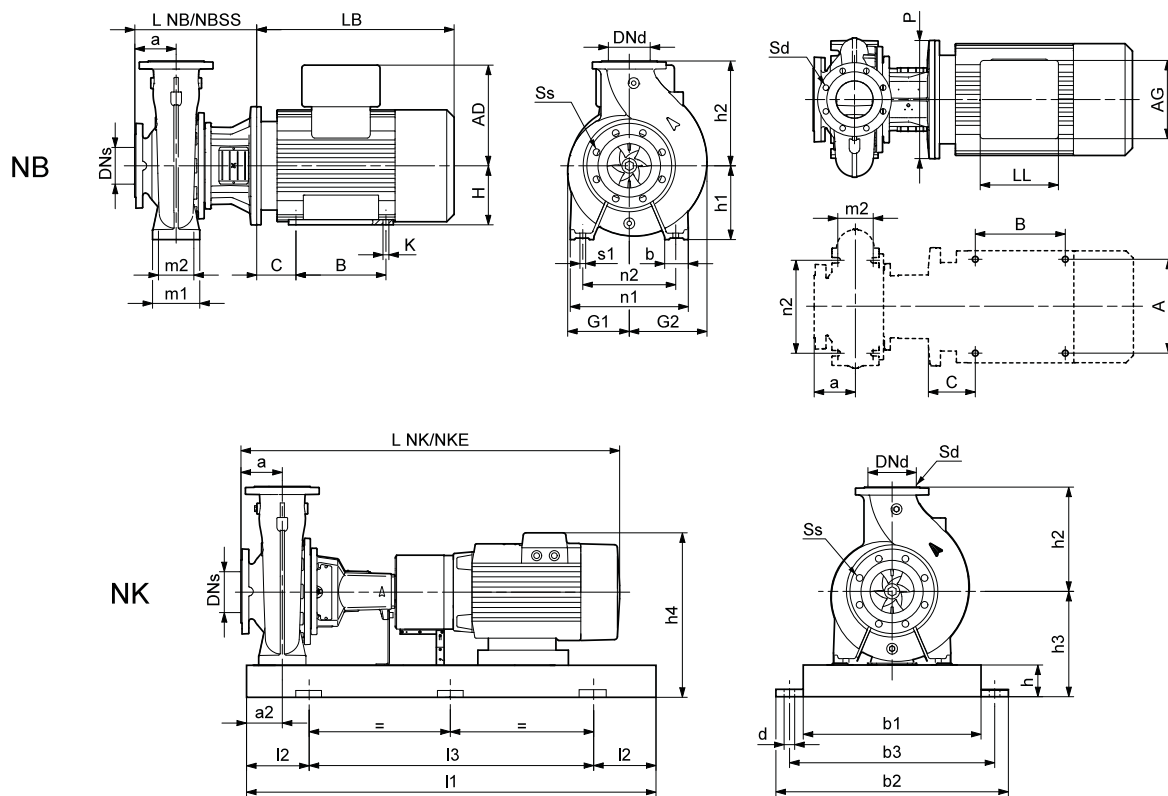
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 50-315



TM03 5097 4312



TM03 4182 4106

TM03 4179 1806

Pump type	50-315/267		50-315/285	50-315/300	50-315/321	
Motor type	Standard Motor ⁵⁾	Siemens 200L	Siemens 200L	Siemens 225M	Siemens 250M	
	E-Motor	-	-	-	-	
Common data NB/NK	P2	[kW]	30	37	45	55
	PN	[bar]	16	16	16	16
	DNs	[mm]	65	65	65	65
	DNd	[mm]	50	50	50	50
	a	[mm]	125	125	125	125
	h2	[mm]	280	280	280	280
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	1320/1416	1345/1441	1417/1513	1486/1582
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-
	l1	[mm]	1600	1600	1600	1800
	l2	[mm]	270	270	270	300
	l3	[mm]	1060	1060	1060	1200
	b1	[mm]	530	530	530	600
	b2	[mm]	660	660	660	730
	b3	[mm]	600	600	600	670
	d	[mm]	28	28	28	28
	a2	[mm]	75	75	75	75
	h	[mm]	100	100	100	100
	h3	[mm]	325	325	330	355
	h4 ²⁾	[mm]	640/-	640/-	668/-	765/-
	Base frame no. ³⁾		8	8	8	9
NB data	Mounting design ⁴⁾		C	C	C	C
	L NB	[mm]	398	398	428	428
	L NB SS	[mm]	398	398	428	428
	h1	[mm]	225	225	225	225
	G1	[mm]	203	203	203	203
	G2	[mm]	214	214	214	214
	m1	[mm]	125	125	125	125
	m2	[mm]	95	95	95	95
	n1	[mm]	345	345	345	345
	n2	[mm]	280	280	280	280
	b	[mm]	65	65	65	65
	s1	[mm]	M12	M12	M12	M12
	H	[mm]	200	200	225	250
	LB ²⁾	[mm]	611/-	636/-	708/-	747/-
	AD ²⁾	[mm]	315/-	315/-	338/-	410/-
	AG ²⁾	[mm]	265/-	265/-	266/-	319/-
	LL ²⁾	[mm]	197/-	197/-	197/-	233/-
	P	[mm]	400	400	450	550
	C	[mm]	318	318	356	406
	B	[mm]	305	305	286	349
	A	[mm]	133	133	149	168
	K	[mm]	19	19	19	24
Weight data	Weight NK. CI ¹⁾	[kg]	491/486	521/516	588/582	694/689
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	359	384	457	548
	Weight NBE. CI	[kg]	-	-	-	-
	Weight diff. SS	[kg]	-8	-8	-8	-8

1) Pump with standard coupling / pump with spacer coupling.

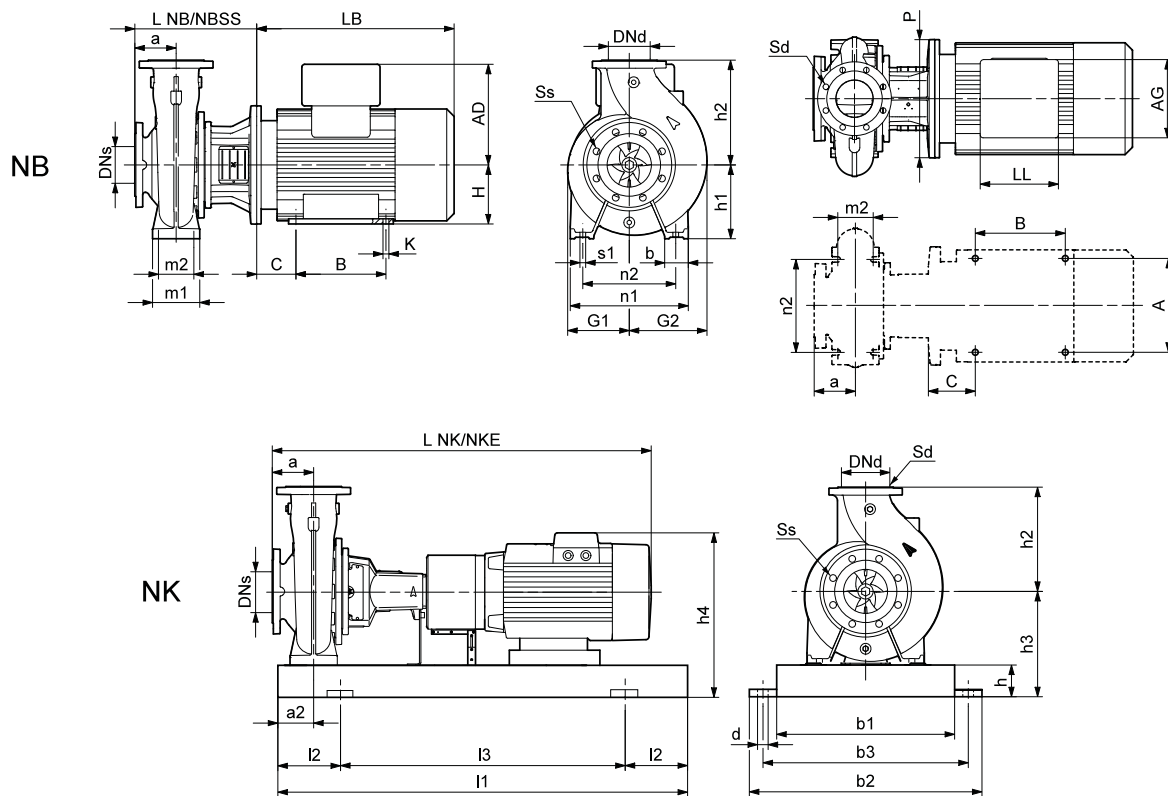
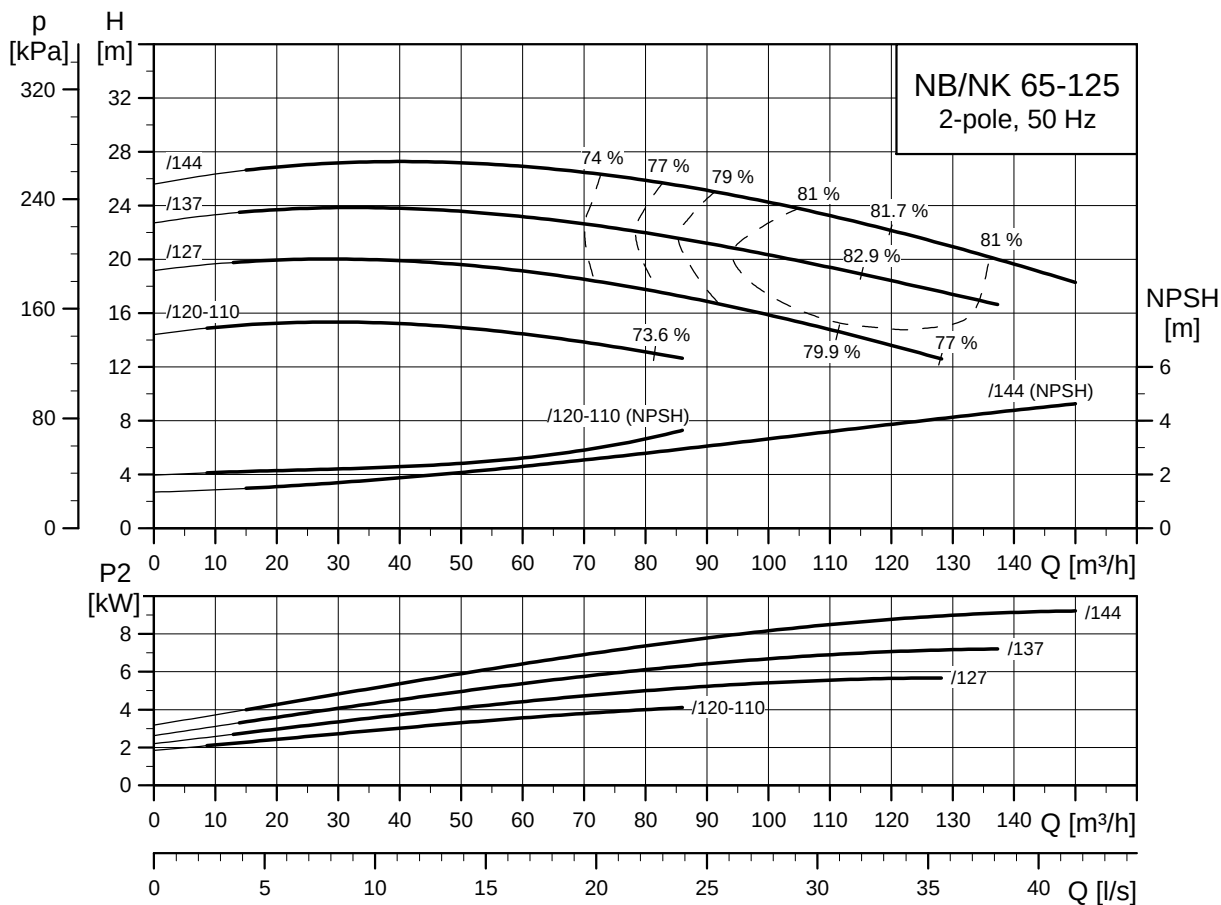
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 65-125



TM03 5098 4312

TM03 4182 4106

TM03 6005 4106

Pump type		65-125/120-110	65-125/127	65-125/137	65-125/144
Motor type	Standard Motor ⁵⁾	MG 112MC-H3	MG 132SC-H3	MG 132SB-H3	MG 160MB-H3
	E-Motor	MGE 112MC-G	MGE 132SC-G	MGE 132SB-F	MGE 160MB-F
Common data NB/NK	P2	[kW]	4	5.5	7.5
	PN	[bar]	16	16	16
	DNs	[mm]	80	80	80
	DNd	[mm]	65	65	65
	a	[mm]	100	100	100
	h2	[mm]	180	180	180
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	896/992	941/1031	929/1019
	L NKE ¹⁾	[mm]	896/992	941/1031	929/1019
	I1	[mm]	1000	1120	1120
	I2	[mm]	170	190	190
	I3	[mm]	660	740	740
	b1	[mm]	340	380	380
	b2	[mm]	450	490	490
	b3	[mm]	400	440	440
	d	[mm]	24	24	24
	a2	[mm]	60	60	60
	h	[mm]	80	80	80
	h3	[mm]	240	240	240
	h4 ²⁾	[mm]	374/442	374/461	399/461
	Base frame no. ³⁾		4	5	5
	Mounting design ⁴⁾		A	A	A
NB data	L NB	[mm]	274	313	313
	L NB SS	[mm]	293	313	313
	h1	[mm]	160	160	160
	G1	[mm]	117	117	117
	G2	[mm]	146	146	146
	m1	[mm]	125	125	125
	m2	[mm]	95	95	95
	n1	[mm]	280	280	280
	n2	[mm]	212	212	212
	b	[mm]	65	65	65
	s1	[mm]	M12	M12	M12
	H	[mm]	-	-	-
	LB ²⁾	[mm]	372/371	391/373	379/411
	AD ²⁾	[mm]	134/202	134/221	159/221
	AG ²⁾	[mm]	202/208	202/228	203/227
	LL ²⁾	[mm]	103/317	103/337	135/305
	P	[mm]	250	300	300
	C	[mm]	-	-	-
	B	[mm]	-	-	-
	A	[mm]	-	-	-
	K	[mm]	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	153/151	161/158	172/169
	Weight NKE. CI ¹⁾	[kg]	153/151	168/164	181/178
	Weight NB. CI	[kg]	81	87	99
	Weight NBE. CI	[kg]	74	95	110
	Weight diff. SS	[kg]	6	6	6

1) Pump with standard coupling / pump with spacer coupling.

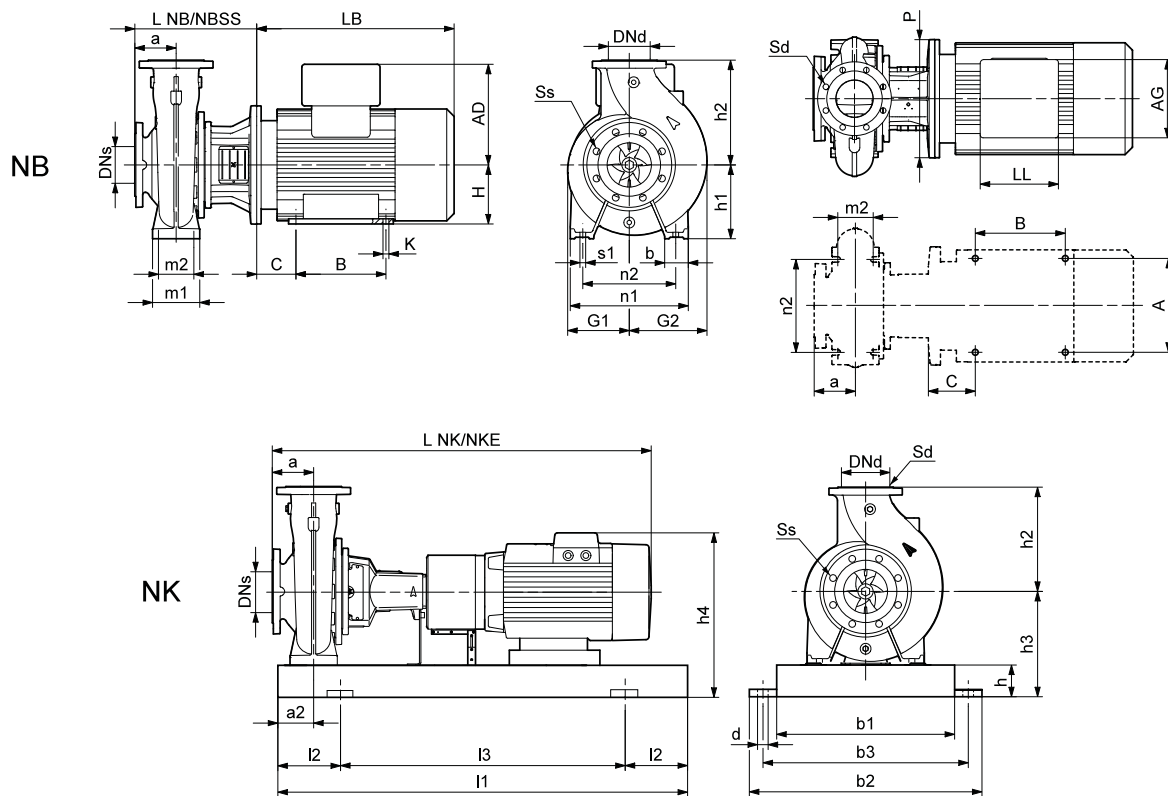
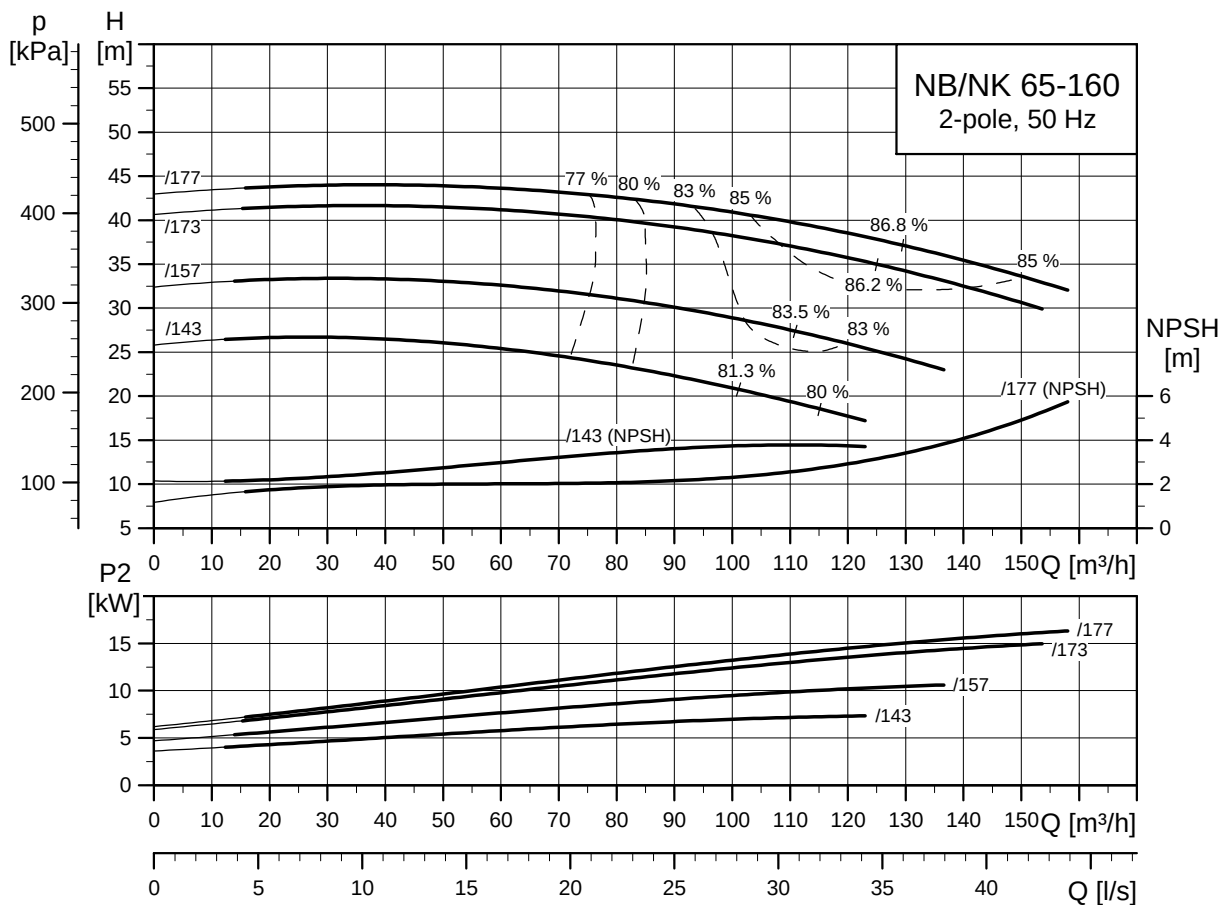
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 65-160



TM03 5099 4312

TM03 4182 4106

TM03 6005 4106

Pump type		65-160/143	65-160/157	65-160/173	65-160/177
Motor type	Standard Motor ⁵⁾	MG 132SB-H3	MG 160MB-H3	MG 160MD-H3	MG 160LB-H3
	E-Motor	MGE 132SB-F	MGE 160MB-F	MGE 160MD-F	MGE 160LB-F
Common data NB/NK	P2	[kW]	7.5	11	15
	PN	[bar]	16	16	16
	DNs	[mm]	80	80	80
	DNd	[mm]	65	65	65
	a	[mm]	100	100	100
	h2	[mm]	200	200	200
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	929/1019	1058/1141	1058/1141
	L NKE ¹⁾	[mm]	929/1019	1058/1141	1058/1141
	l1	[mm]	1120	1250	1250
	l2	[mm]	190	205	205
	l3	[mm]	740	840	840
	b1	[mm]	380	430	430
	b2	[mm]	490	540	540
	b3	[mm]	440	490	490
	d	[mm]	24	24	24
	a2	[mm]	60	60	60
	h	[mm]	80	80	80
	h3	[mm]	240	245	245
	h4 ²⁾	[mm]	399/461	449/546	449/546
	Base frame no. ³⁾		5	6	6
	Mounting design ⁴⁾		A	B	B
NB data	L NB	[mm]	313	343	343
	L NB SS	[mm]	313	343	343
	h1	[mm]	160	-	-
	G1	[mm]	127	127	127
	G2	[mm]	161	161	161
	m1	[mm]	125	-	-
	m2	[mm]	95	-	-
	n1	[mm]	280	-	-
	n2	[mm]	212	-	-
	b	[mm]	65	-	-
	s1	[mm]	M12	-	-
	H	[mm]	-	160	160
	LB ²⁾	[mm]	379/411	471/478	471/478
	AD ²⁾	[mm]	159/221	204/301	204/301
	AG ²⁾	[mm]	203/227	243/342	243/342
	LL ²⁾	[mm]	135/305	213/352	213/352
	P	[mm]	300	350	350
	C	[mm]	-	254	254
	B	[mm]	-	210	210
	A	[mm]	-	108	108
	K	[mm]	-	15	15
Weight data	Weight NK. CI ¹⁾	[kg]	170/167	219/213	231/225
	Weight NKE. CI ¹⁾	[kg]	179/176	248/242	261/255
	Weight NB. CI	[kg]	97	141	154
	Weight NBE. CI	[kg]	108	151	161
	Weight diff. SS	[kg]	1	1	1

1) Pump with standard coupling / pump with spacer coupling.

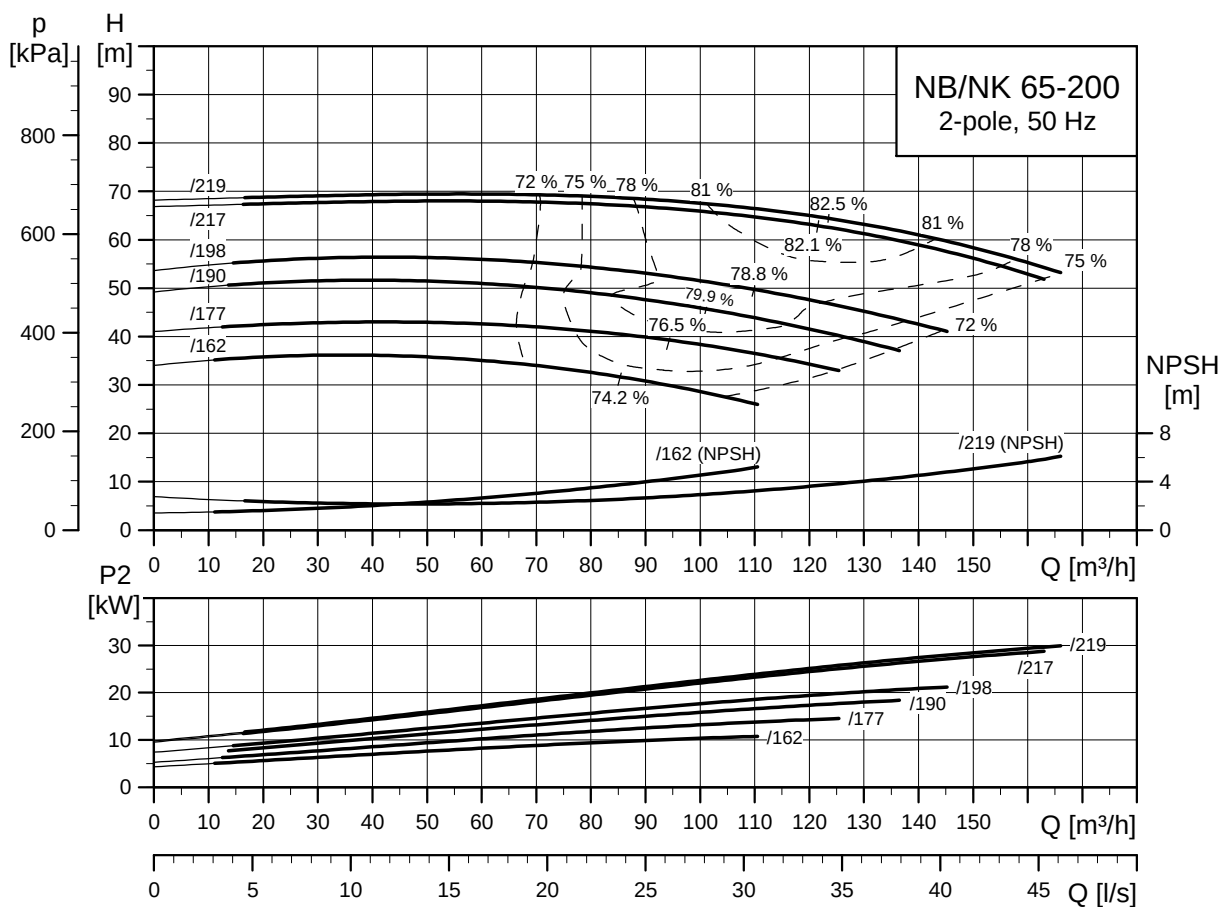
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

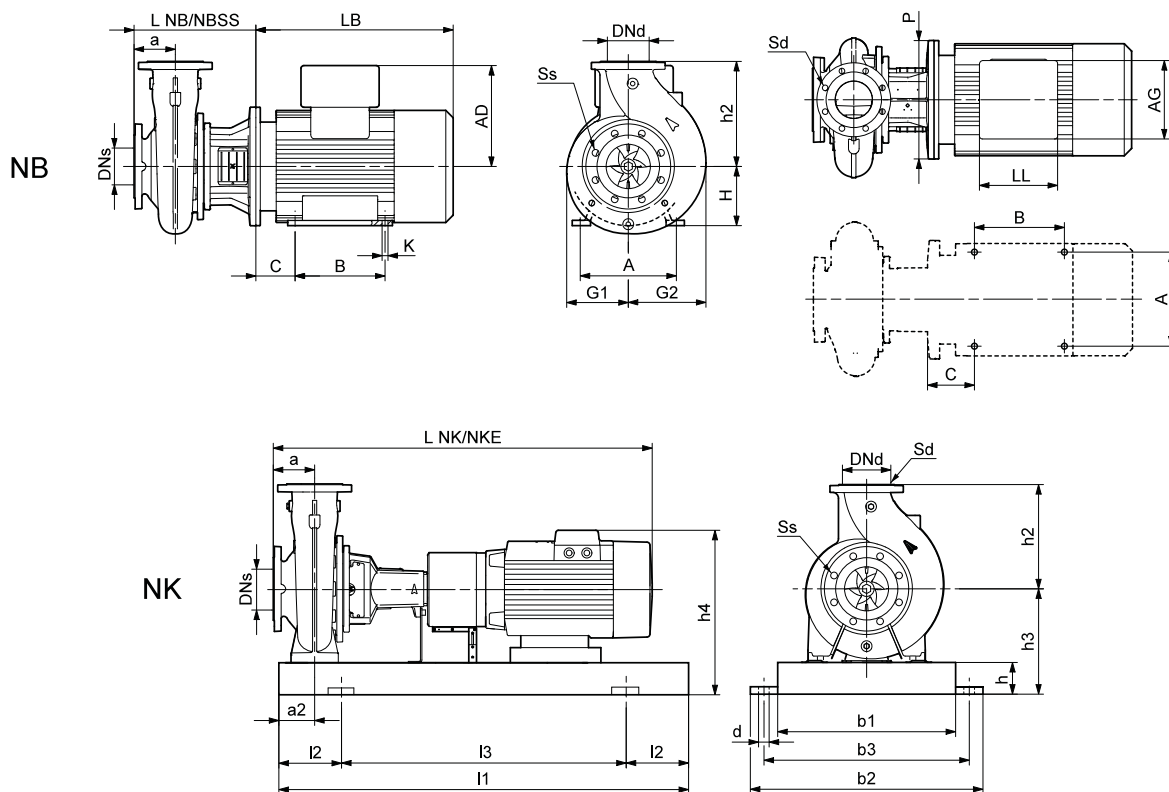
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 65-200



TM03 5100 4312



TM03 4181 4106

TM03 6005 4106

Pump type			65-200/162	65-200/177	65-200/190	65-200/198	65-200/217	65-200/219
Motor type	Standard Motor ⁵⁾		MG 160MB-H3	MG 160MD-H3	MG 160LB-H3	MG 180MB-H3	Siemens 200L	Siemens 200L
	E-Motor		MGE 160MB-F	MGE 160MD-F	MGE 160LB-F	MGE 180MB-F	-	-
Common data NB/NK	P2	[kW]	11	15	18.5	22	30	37
	PN	[bar]	16	16	16	16	16	16
	DNs	[mm]	80	80	80	80	80	80
	DNd	[mm]	65	65	65	65	65	65
	a	[mm]	100	100	100	100	100	100
	h2	[mm]	225	225	225	225	225	225
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	1058/1181	1058/1181	1102/1225	1139/1254	1206/1321	1231/1346
	L NKE ¹⁾	[mm]	1058/1181	1058/1181	1102/1225	1136/1251	-/-	-/-
	l1	[mm]	1250	1250	1250	1250	1600	1600
	l2	[mm]	205	205	205	205	270	270
	l3	[mm]	840	840	840	840	1060	1060
	b1	[mm]	430	430	430	430	530	530
	b2	[mm]	540	540	540	540	660	660
	b3	[mm]	490	490	490	490	600	600
	d	[mm]	24	24	24	24	28	28
	a2	[mm]	75	75	75	75	75	75
	h	[mm]	80	80	80	80	100	100
	h3	[mm]	260	260	260	265	305	305
	h4 ²⁾	[mm]	464/561	464/561	464/561	469/627	620/-	620/-
	Base frame no. ³⁾		6	6	6	6	8	8
NB data	Mounting design ⁴⁾		B	B	B	B	B	B
	L NB	[mm]	343	343	343	343	343	343
	L NB SS	[mm]	343	343	343	343	343	343
	h1	[mm]	-	-	-	-	-	-
	G1	[mm]	149	149	149	149	149	149
	G2	[mm]	173	173	173	173	173	173
	m1	[mm]	-	-	-	-	-	-
	m2	[mm]	-	-	-	-	-	-
	n1	[mm]	-	-	-	-	-	-
	n2	[mm]	-	-	-	-	-	-
	b	[mm]	-	-	-	-	-	-
	s1	[mm]	-	-	-	-	-	-
	H	[mm]	160	160	160	180	200	200
	LB ²⁾	[mm]	471/478	471/478	515/518	541/602	611/-	636/-
	AD ²⁾	[mm]	204/301	204/301	204/301	204/362	315/-	315/-
	AG ²⁾	[mm]	243/342	243/342	243/342	243/329	265/-	265/-
	LL ²⁾	[mm]	213/352	213/352	213/352	213/319	197/-	197/-
	P	[mm]	350	350	350	350	400	400
	C	[mm]	254	254	254	279	318	318
	B	[mm]	210	210	254	241	305	305
	A	[mm]	108	108	108	121	133	133
	K	[mm]	15	15	15	15	19	19
Weight data	Weight NK. CI ¹⁾	[kg]	231/226	243/238	257/252	272/264	418/412	448/442
	Weight NKE. CI ¹⁾	[kg]	260/255	273/268	287/282	302/294	-/-	-/-
	Weight NB. CI	[kg]	148	161	174	196	301	326
	Weight NBE. CI	[kg]	158	168	188	223	-	-
	Weight diff. SS	[kg]	3	3	3	3	3	-

1) Pump with standard coupling / pump with spacer coupling.

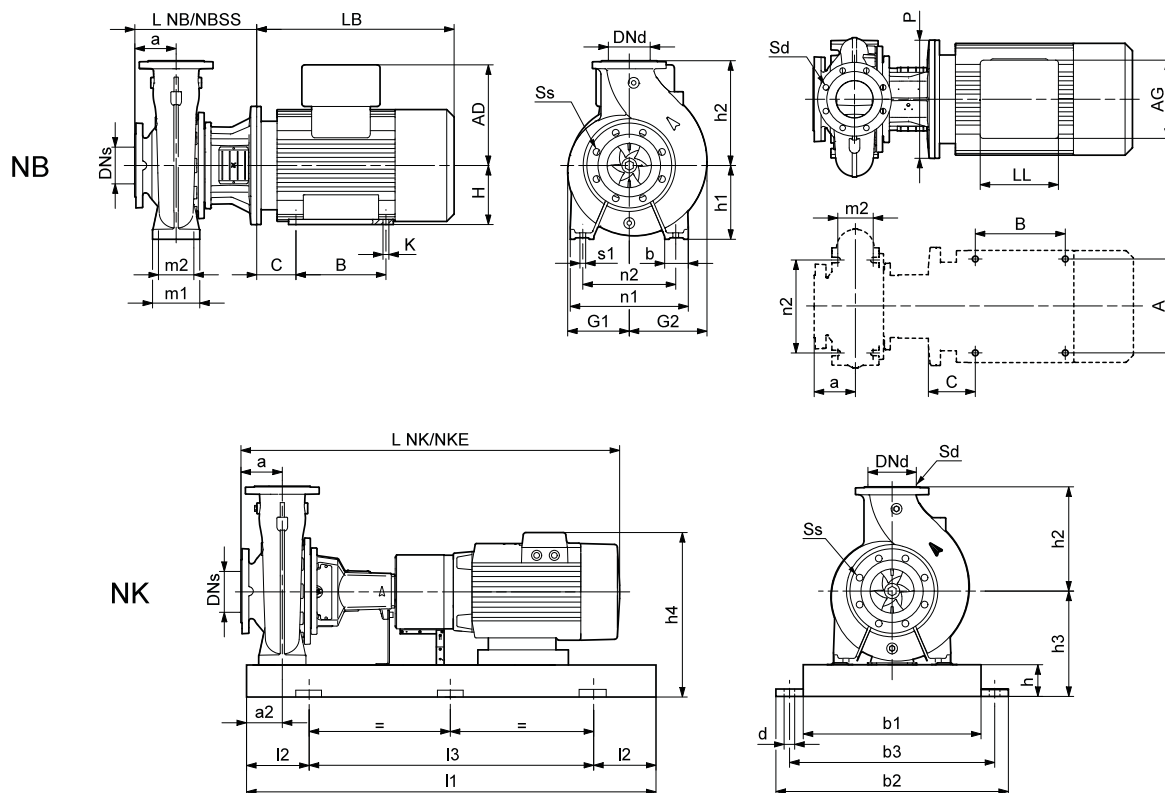
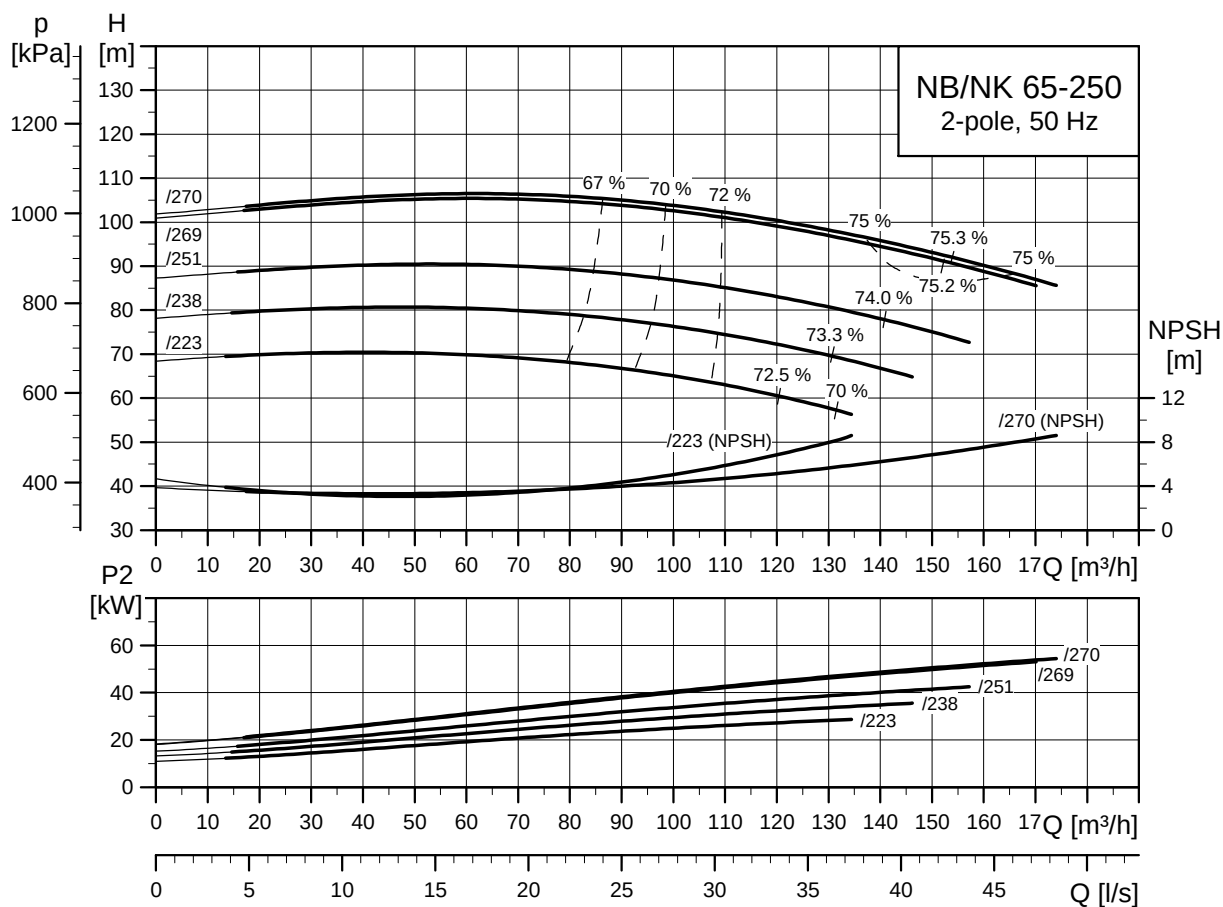
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 65-250



TM03 5101 4312

TM03 4182 4106

TM03 4179 1806

Pump type			65-250/223	65-250/238	65-250/251	65-250/269	65-250/270
Motor type	Standard Motor ⁵⁾		Siemens 200L	Siemens 200L	Siemens 225M	Siemens 250M	Siemens 280S
	E-Motor		-	-	-	-	-
Common data NB/NK	P2	[kW]	30	37	45	55	75
	PN	[bar]	16	16	16	16	16
	DNs	[mm]	80	80	80	80	80
	DNd	[mm]	65	65	65	65	65
	a	[mm]	100	100	100	100	100
	h2	[mm]	250	250	250	250	250
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	1295/1431	1320/1456	1392/1528	1461/1597	1534/1670
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-	-/-
	l1	[mm]	1600	1600	1600	1800	2000
	l2	[mm]	270	270	270	300	330
	l3	[mm]	1060	1060	1060	1200	1340
	b1	[mm]	530	530	530	600	750
	b2	[mm]	660	660	660	730	890
	b3	[mm]	600	600	600	670	830
	d	[mm]	28	28	28	28	28
	a2	[mm]	90	90	90	90	90
	h	[mm]	100	100	100	100	130
	h3	[mm]	305	305	330	360	415
	h4 ²⁾	[mm]	620/-	620/-	668/-	770/-	848/-
	Base frame no. ³⁾		8	8	8	9	10
NB data	Mounting design ⁴⁾		C	C	C	C	C
	L NB	[mm]	373	373	403	403	403
	L NB SS	[mm]	373	373	403	403	403
	h1	[mm]	200	200	200	200	200
	G1	[mm]	183	183	183	183	183
	G2	[mm]	200	200	200	200	200
	m1	[mm]	160	160	160	160	160
	m2	[mm]	120	120	120	120	120
	n1	[mm]	360	360	360	360	360
	n2	[mm]	280	280	280	280	280
	b	[mm]	80	80	80	80	80
	s1	[mm]	M16	M16	M16	M16	M16
	H	[mm]	200	200	225	250	280
	LB ²⁾	[mm]	611/-	636/-	708/-	747/-	820/-
	AD ²⁾	[mm]	315/-	315/-	338/-	410/-	433/-
	AG ²⁾	[mm]	265/-	265/-	266/-	319/-	319/-
	LL ²⁾	[mm]	197/-	197/-	197/-	233/-	233/-
	P	[mm]	400	400	450	550	550
	C	[mm]	318	318	356	406	457
	B	[mm]	305	305	286	349	368
	A	[mm]	133	133	149	168	190
	K	[mm]	19	19	19	24	24
Weight data	Weight NK. CI ¹⁾	[kg]	463/458	493/488	574/569	688/683	961/960
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	344	369	442	533	658
	Weight NBE. CI	[kg]	-	-	-	-	-
	Weight diff. SS	[kg]	-2	-2	-2	-2	-

1) Pump with standard coupling / pump with spacer coupling.

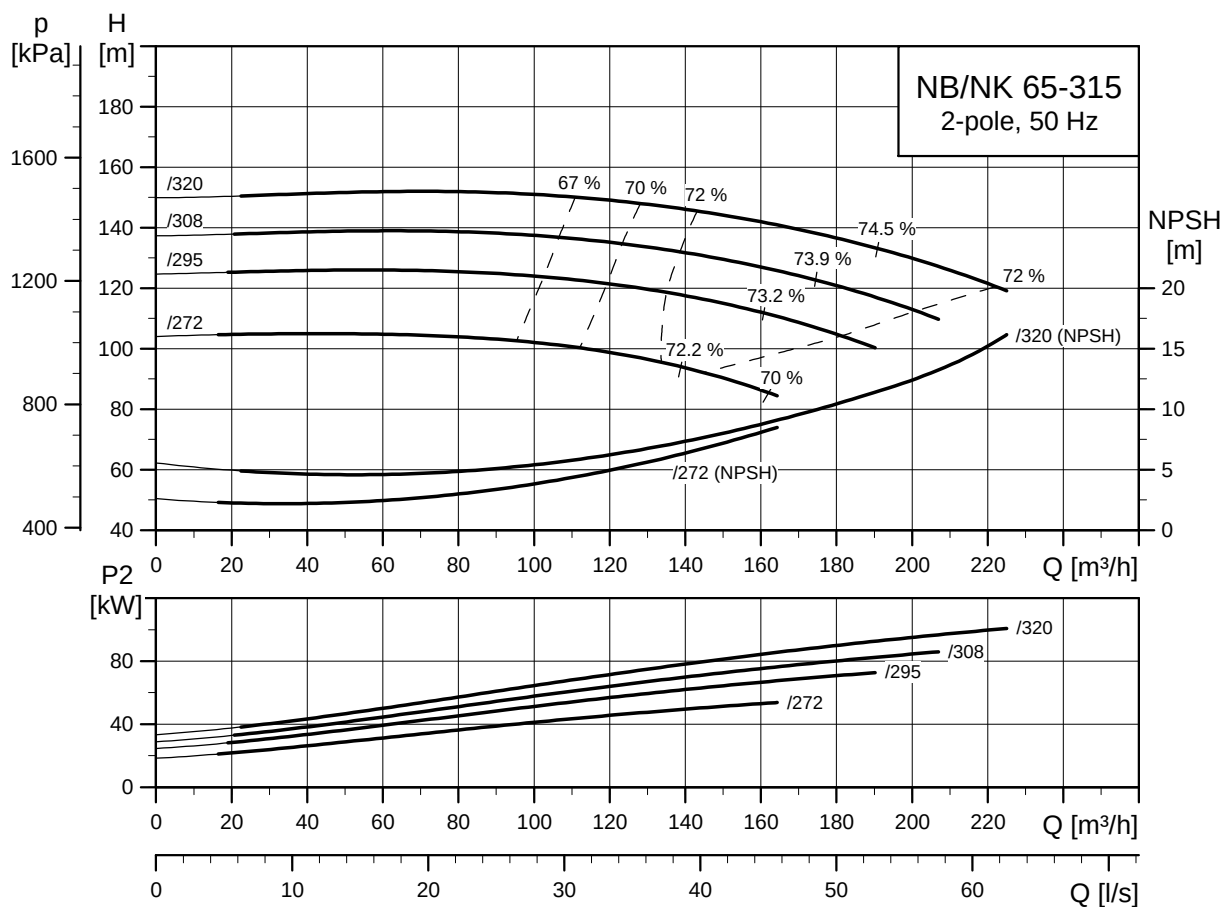
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

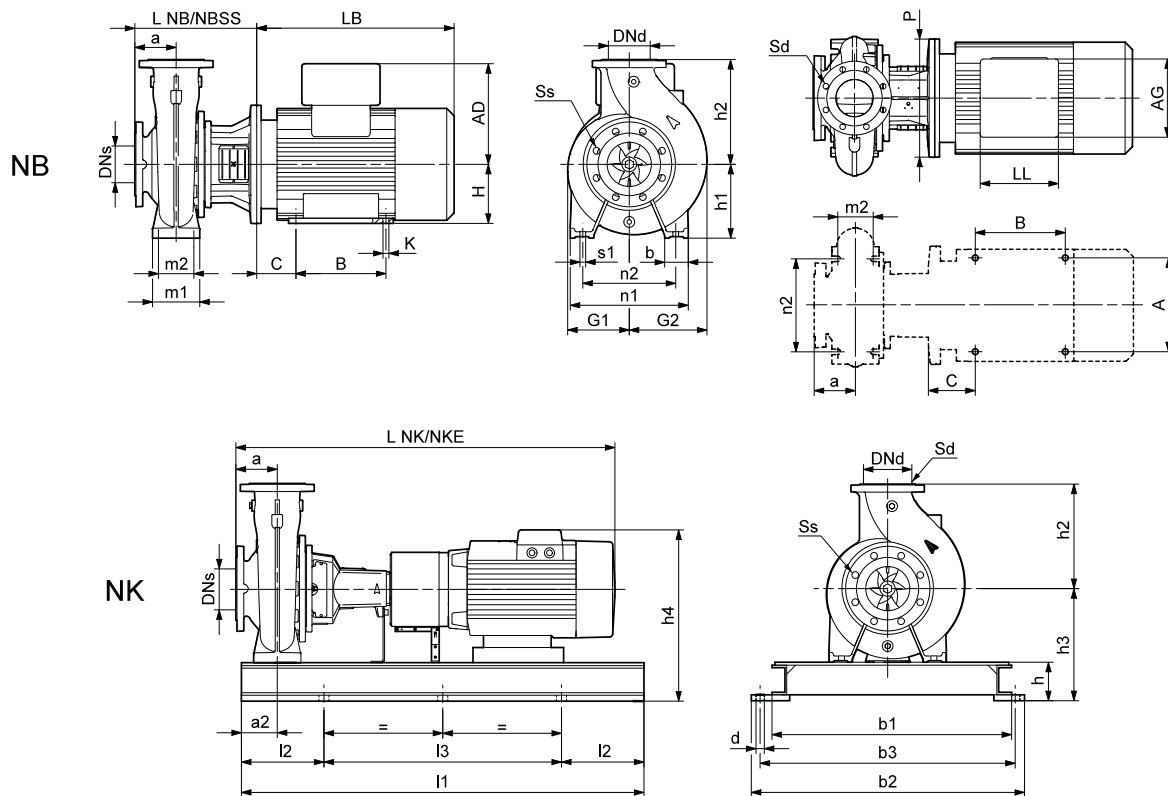
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 65-315



TM03 5102 4312



TM03 4182 4106

TM03 4051 1806

Pump type			65-315/272	65-315/295	65-315/308	65-315/320
Motor type	Standard Motor ⁵⁾		Siemens 250M	Siemens 280S	Siemens 280M	Siemens 315S
	E-Motor		-	-	-	-
Common data NB/NK	P2	[kW]	55	75	90	110
	PN	[bar]	16	16	16	16
	DNs	[mm]	80	80	80	80
	DNd	[mm]	65	65	65	65
	a	[mm]	125	125	125	125
	h2	[mm]	280	280	280	280
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	1486/1622	1559/1695	1669/1805	1651/1787
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-
	l1	[mm]	1800	2000	2000	2000
	l2	[mm]	300	330	330	330
	l3	[mm]	1200	1340	1340	1340
	b1	[mm]	600	750	750	750
	b2	[mm]	730	890	890	890
	b3	[mm]	670	830	830	830
	d	[mm]	28	28	28	28
	a2	[mm]	90	90	90	90
	h	[mm]	100	130	130	130
	h3	[mm]	355	415	415	455
	h4 ²⁾	[mm]	765/-	848/-	848/-	970/-
Base frame no. ³⁾		9	10	10	10	
NB data	Mounting design ⁴⁾		C	C	C	C
	L NB	[mm]	428	428	428	458
	L NB SS	[mm]	428	428	428	458
	h1	[mm]	225	225	225	225
	G1	[mm]	211	211	211	211
	G2	[mm]	219	219	219	219
	m1	[mm]	160	160	160	160
	m2	[mm]	120	120	120	120
	n1	[mm]	400	400	400	400
	n2	[mm]	315	315	315	315
	b	[mm]	80	80	80	80
	s1	[mm]	M16	M16	M16	M16
	H	[mm]	250	280	280	315
	LB ²⁾	[mm]	747/-	820/-	930/-	912/-
	AD ²⁾	[mm]	410/-	433/-	433/-	515/-
	AG ²⁾	[mm]	319/-	319/-	319/-	374/-
	LL ²⁾	[mm]	233/-	233/-	233/-	299/-
	P	[mm]	550	550	550	660
	C	[mm]	406	457	457	508
	B	[mm]	349	368	368	406
	A	[mm]	168	190	190	216
	K	[mm]	24	24	24	28
Weight data	Weight NK. CI ¹⁾	[kg]	693/688	969/967	1049/1048	1317/1315
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	545	670	750	948
	Weight NBE. CI	[kg]	-	-	-	-
	Weight diff. SS	[kg]	5	5	5	-

1) Pump with standard coupling / pump with spacer coupling.

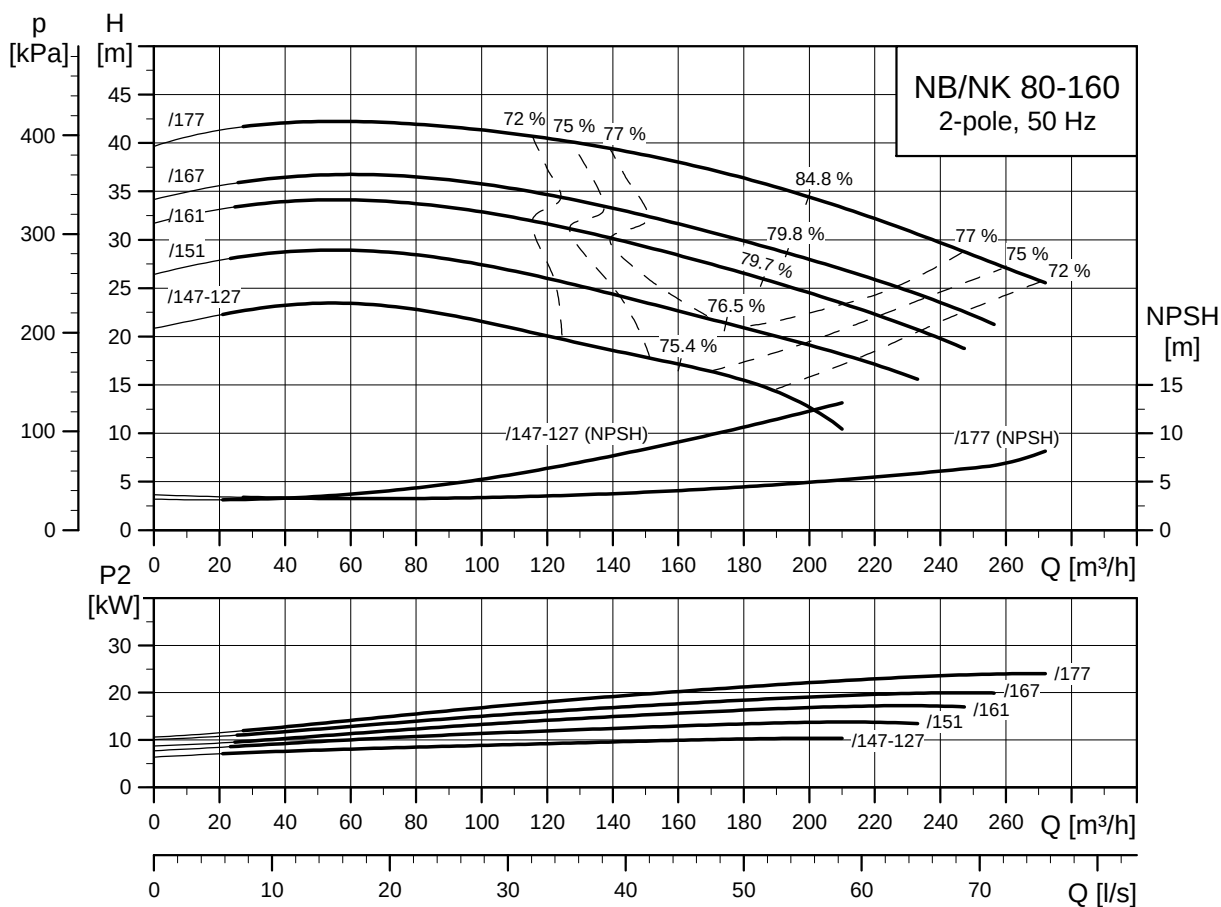
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

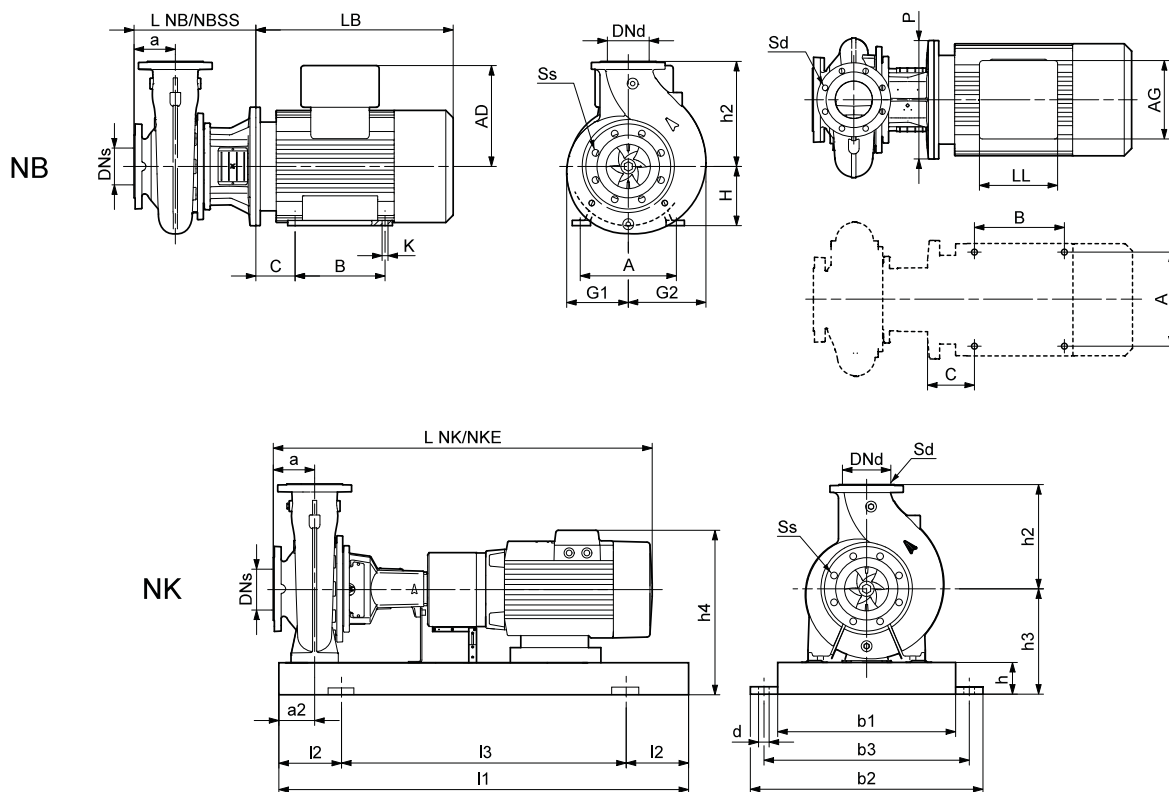
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 80-160



TM03 5103 4312



TM03 4181 4106

TM03 6005 4106

Pump type	80-160/147-127		80-160/151	80-160/161	80-160/167	80-160/177	
Motor type	Standard Motor ⁵⁾	MG 160MB-H3	MG 160MD-H3	MG 160LB-H3	MG 180MB-H3	Siemens 200L	
	E-Motor	MGE 160MB-F	MGE 160MD-F	MGE 160LB-F	MGE 180MB-F	-	
Common data NB/NK	P2	[kW]	11	15	18.5	22	30
	PN	[bar]	16	16	16	16	16
	DNs	[mm]	100	100	100	100	100
	DNd	[mm]	80	80	80	80	80
	a	[mm]	125	125	125	125	125
	h2	[mm]	225	225	225	225	225
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1083/1206	1083/1206	1127/1250	1164/1279	1231/1346
	L NKE ¹⁾	[mm]	1083/1206	1083/1206	1127/1250	1161/1276	-/-
	l1	[mm]	1250	1250	1250	1250	1600
	l2	[mm]	205	205	205	205	270
	l3	[mm]	840	840	840	840	1060
	b1	[mm]	430	430	430	430	530
	b2	[mm]	540	540	540	540	660
	b3	[mm]	490	490	490	490	600
	d	[mm]	24	24	24	24	28
	a2	[mm]	75	75	75	75	75
	h	[mm]	80	80	80	80	100
	h3	[mm]	260	260	260	265	305
	h4 ²⁾	[mm]	464/561	464/561	464/561	469/627	620/-
	Base frame no. ³⁾		6	6	6	6	8
NB data	Mounting design ⁴⁾		B	B	B	B	B
	L NB	[mm]	368	368	368	368	368
	L NB SS	[mm]	368	368	368	368	368
	h1	[mm]	-	-	-	-	-
	G1	[mm]	139	139	139	139	139
	G2	[mm]	182	182	182	182	182
	m1	[mm]	-	-	-	-	-
	m2	[mm]	-	-	-	-	-
	n1	[mm]	-	-	-	-	-
	n2	[mm]	-	-	-	-	-
	b	[mm]	-	-	-	-	-
	s1	[mm]	-	-	-	-	-
	H	[mm]	160	160	160	180	200
	LB ²⁾	[mm]	471/478	471/478	515/518	541/602	611/-
	AD ²⁾	[mm]	204/301	204/301	204/301	204/362	315/-
	AG ²⁾	[mm]	243/342	243/342	243/342	243/329	265/-
	LL ²⁾	[mm]	213/352	213/352	213/352	213/319	197/-
	P	[mm]	350	350	350	350	400
	C	[mm]	254	254	254	279	318
	B	[mm]	210	210	254	241	305
	A	[mm]	108	108	108	121	133
K	[mm]	15	15	15	15	19	
Weight data	Weight NK. CI ¹⁾	[kg]	231/226	243/238	257/252	272/264	418/412
	Weight NKE. CI ¹⁾	[kg]	260/255	273/268	287/282	302/294	-/-
	Weight NB. CI	[kg]	149	162	175	197	303
	Weight NBE. CI	[kg]	159	169	189	224	-
	Weight diff. SS	[kg]	3	3	3	3	3

1) Pump with standard coupling / pump with spacer coupling.

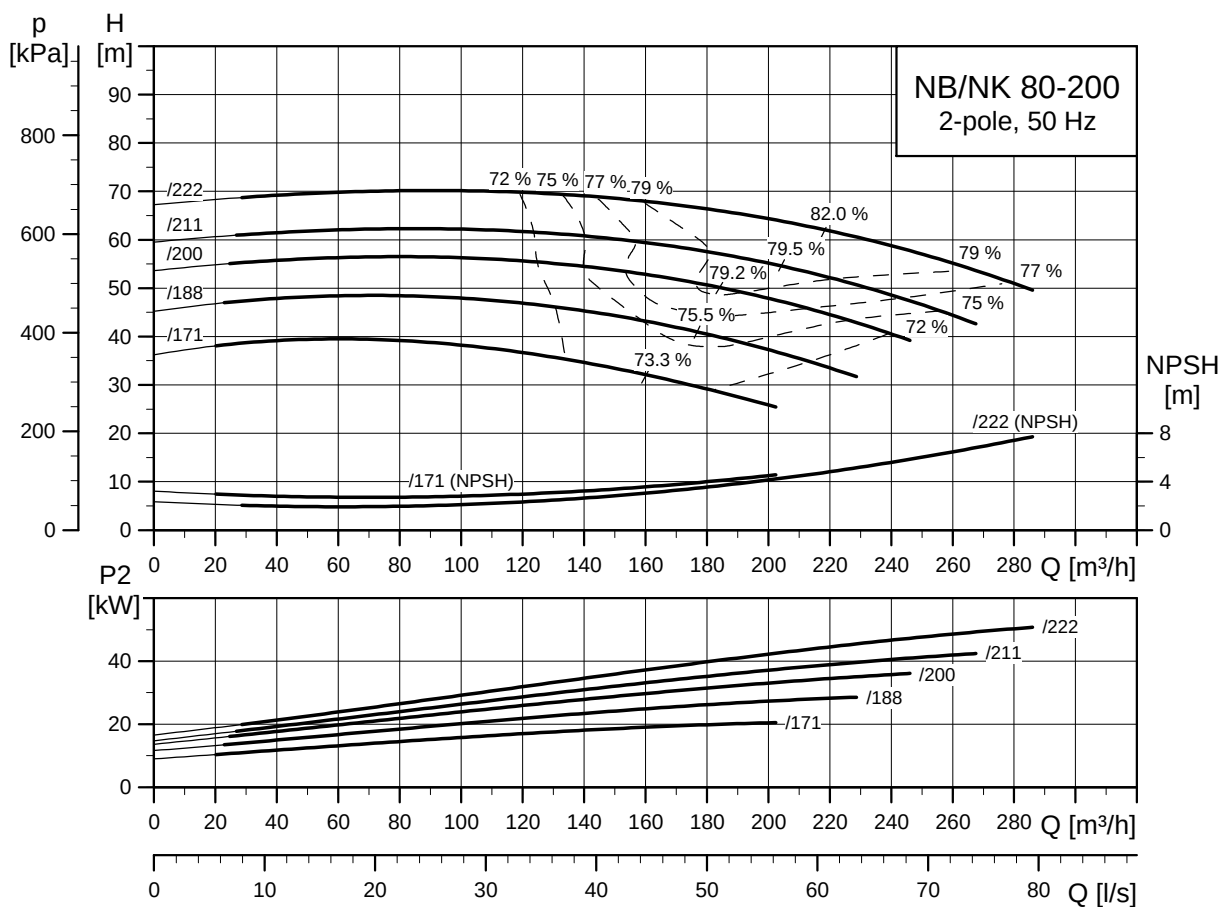
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

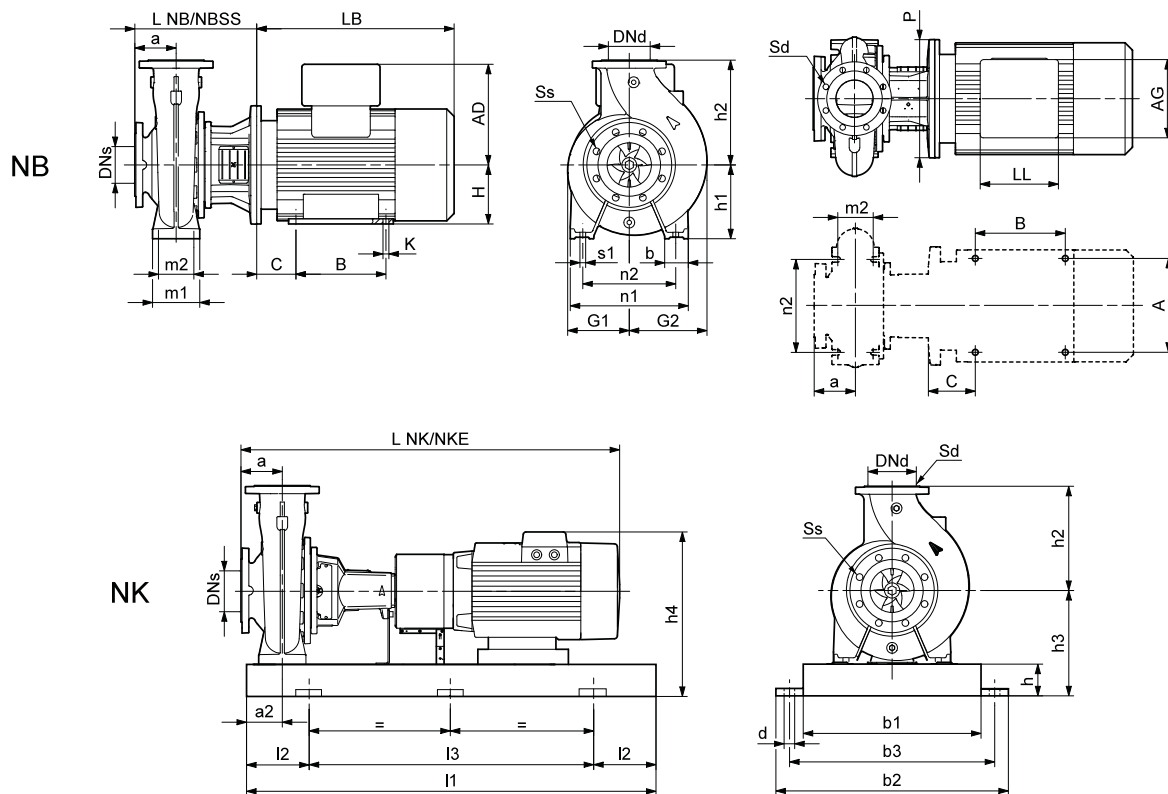
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 80-200



TM03 5104 4312



TM03 4182 4106

TM03 4179 1806

Pump type		80-200/171	80-200/188	80-200/200	80-200/211	80-200/222
Motor type	Standard Motor ⁵⁾	MG 180MB-H3	Siemens 200L	Siemens 200L	Siemens 225M	Siemens 250M
	E-Motor	MGE 180MB-F	-	-	-	-
Common data NB/NK	P2	[kW]	22	30	45	55
	PN	[bar]	16	16	16	16
	DNs	[mm]	100	100	100	100
	DNd	[mm]	80	80	80	80
	a	[mm]	125	125	125	125
	h2	[mm]	250	250	250	250
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1253/1389	1320/1456	1345/1481	1417/1553
	L NKE ¹⁾	[mm]	1250/1386	-/-	-/-	-/-
	l1	[mm]	1250	1600	1600	1800
	l2	[mm]	205	270	270	300
	l3	[mm]	840	1060	1060	1200
	b1	[mm]	430	530	530	600
	b2	[mm]	540	660	660	730
	b3	[mm]	490	600	600	670
	d	[mm]	24	28	28	28
	a2	[mm]	75	75	75	75
	h	[mm]	80	100	100	100
	h3	[mm]	265	305	305	355
	h4 ²⁾	[mm]	469/627	620/-	620/-	668/-
	Base frame no. ³⁾		6	8	8	9
	Mounting design ⁴⁾		C	C	C	C
NB data	L NB	[mm]	398	398	398	428
	L NB SS	[mm]	398	398	398	428
	h1	[mm]	180	180	180	180
	G1	[mm]	160	160	160	160
	G2	[mm]	193	193	193	193
	m1	[mm]	125	125	125	125
	m2	[mm]	95	95	95	95
	n1	[mm]	345	345	345	345
	n2	[mm]	280	280	280	280
	b	[mm]	65	65	65	65
	s1	[mm]	M12	M12	M12	M12
	H	[mm]	180	200	200	225
	LB ²⁾	[mm]	541/602	611/-	636/-	708/-
	AD ²⁾	[mm]	204/362	315/-	315/-	338/-
	AG ²⁾	[mm]	243/329	265/-	265/-	266/-
	LL ²⁾	[mm]	213/319	197/-	197/-	197/-
	P	[mm]	350	400	400	450
	C	[mm]	279	318	318	356
	B	[mm]	241	305	305	286
	A	[mm]	121	133	133	149
	K	[mm]	15	19	19	24
Weight data	Weight NK. CI ¹⁾	[kg]	306/297	451/446	481/476	557/551
	Weight NKE. CI ¹⁾	[kg]	336/327	-/-	-/-	-/-
	Weight NB. CI	[kg]	221	328	353	427
	Weight NBE. CI	[kg]	248	-	-	-
	Weight diff. SS	[kg]	16	16	16	16

1) Pump with standard coupling / pump with spacer coupling.

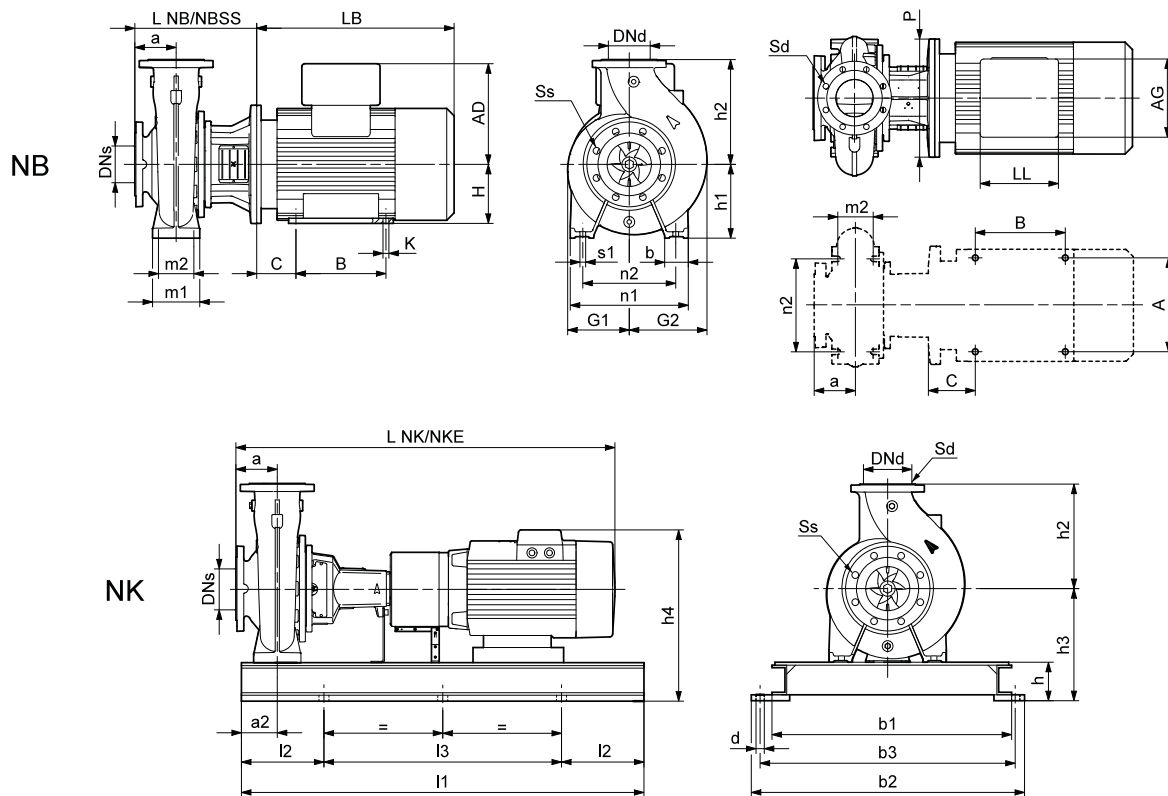
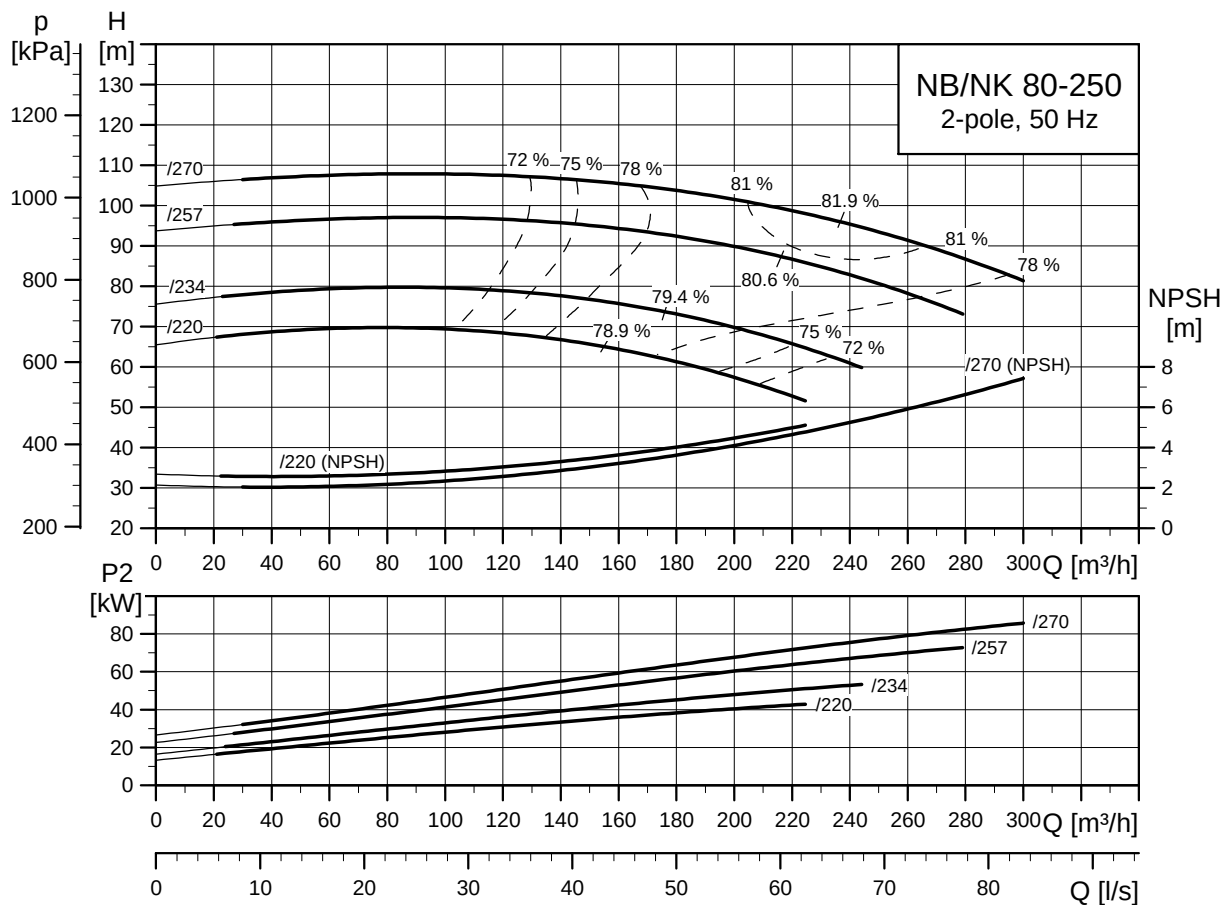
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 80-250



TM03 5105 4312

TM03 4182 4106

TM03 4051 1806

Pump type			80-250/220	80-250/234	80-250/257	80-250/270
Motor type	Standard Motor ⁵⁾		Siemens 225M	Siemens 250M	Siemens 280S	Siemens 280M
	E-Motor		-	-	-	-
Common data NB/NK	P2	[kW]	45	55	75	90
	PN	[bar]	16	16	16	16
	DNs	[mm]	100	100	100	100
	DNd	[mm]	80	80	80	80
	a	[mm]	125	125	125	125
	h2	[mm]	280	280	280	280
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1417/1553	1486/1622	1559/1695	1669/1805
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-
	l1	[mm]	1600	1800	2000	2000
	l2	[mm]	270	300	330	330
	l3	[mm]	1060	1200	1340	1340
	b1	[mm]	530	600	750	750
	b2	[mm]	660	730	890	890
	b3	[mm]	600	670	830	830
	d	[mm]	28	28	28	28
	a2	[mm]	90	90	90	90
	h	[mm]	100	100	130	130
	h3	[mm]	330	360	415	415
	h4 ²⁾	[mm]	668/-	770/-	848/-	848/-
	Base frame no. ³⁾		8	9	10	10
NB data	Mounting design ⁴⁾		C	C	C	C
	L NB	[mm]	428	428	428	428
	L NB SS	[mm]	428	428	428	428
	h1	[mm]	200	200	200	200
	G1	[mm]	182	182	182	182
	G2	[mm]	210	210	210	210
	m1	[mm]	160	160	160	160
	m2	[mm]	120	120	120	120
	n1	[mm]	400	400	400	400
	n2	[mm]	315	315	315	315
	b	[mm]	80	80	80	80
	s1	[mm]	M16	M16	M16	M16
	H	[mm]	225	250	280	280
	LB ²⁾	[mm]	708/-	747/-	820/-	930/-
	AD ²⁾	[mm]	338/-	410/-	433/-	433/-
	AG ²⁾	[mm]	266/-	319/-	319/-	319/-
	LL ²⁾	[mm]	197/-	233/-	233/-	233/-
	P	[mm]	450	550	550	550
	C	[mm]	356	406	457	457
	B	[mm]	286	349	368	368
	A	[mm]	149	168	190	190
	K	[mm]	19	24	24	24
Weight data	Weight NK. CI ¹⁾	[kg]	578/572	692/687	965/964	1046/1044
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	446	537	662	742
	Weight NBE. CI	[kg]	-	-	-	-
	Weight diff. SS	[kg]	15	15	15	-

1) Pump with standard coupling / pump with spacer coupling.

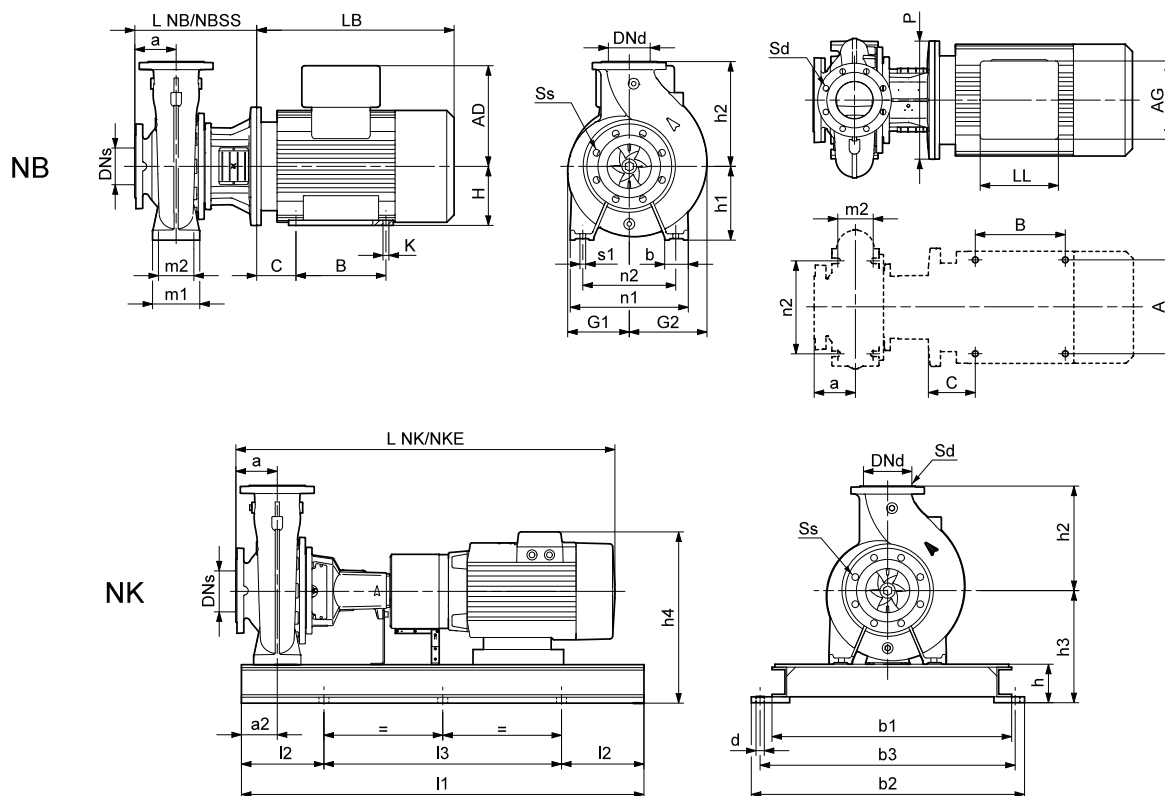
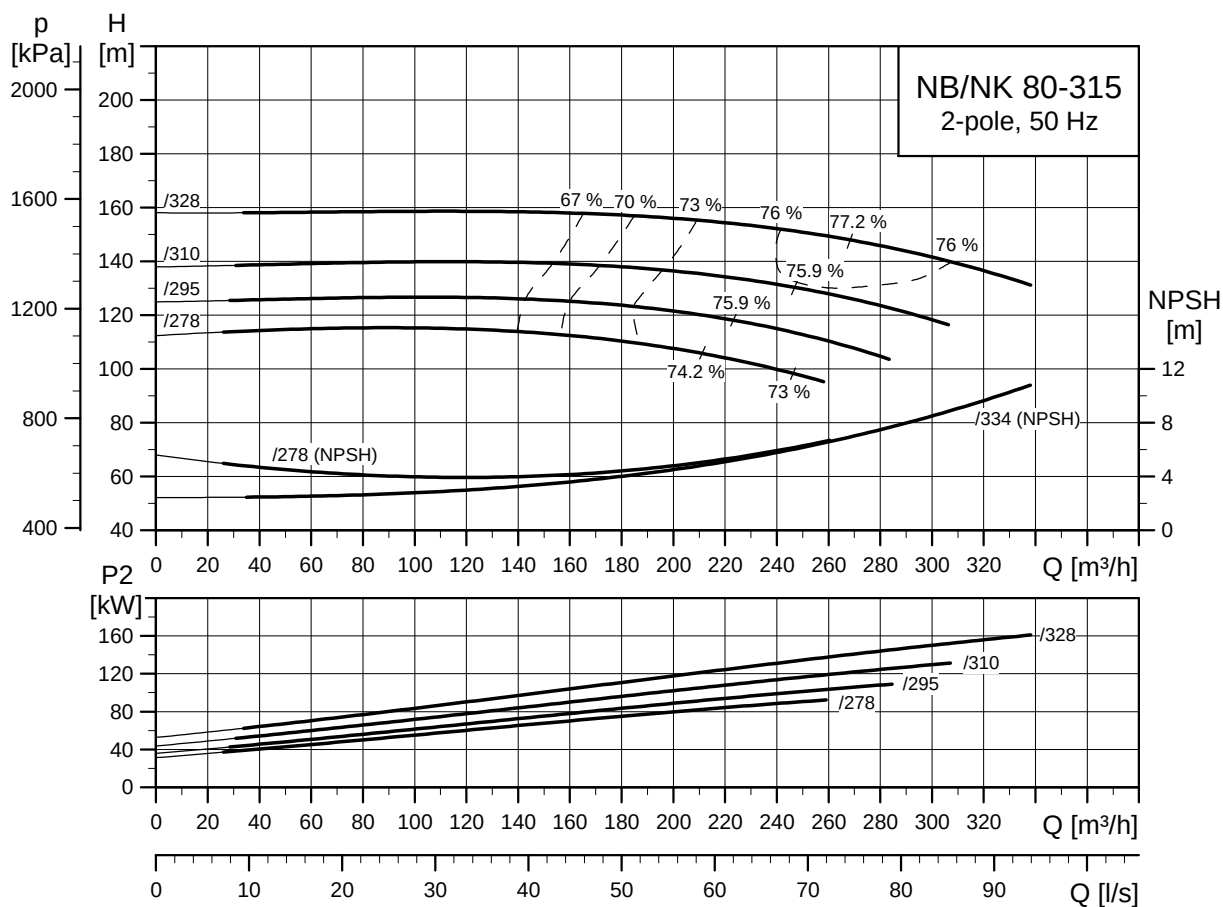
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 80-315



TM03 5106 4312

TM03 4182 4106

TM03 4051 1806

Pump type	80-315/278		80-315/295	80-315/310	80-315/328	
Motor type	Standard Motor ⁵⁾	Siemens 280M	Siemens 315S	Siemens 315M	Siemens 315L	
	E-Motor	-	-	-	-	
Common data NB/NK	P2	[kW]	90	110	132	160
	PN	[bar]	16	16	16	16
	DNs	[mm]	100	100	100	100
	DNd	[mm]	80	80	80	80
	a	[mm]	125	125	125	125
	h2	[mm]	315	315	315	315
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1669/1805	1651/1787	1816/1952	1876/2012
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-
	l1	[mm]	2000	2000	2000	2000
	l2	[mm]	330	330	330	330
	l3	[mm]	1340	1340	1340	1340
	b1	[mm]	750	750	750	750
	b2	[mm]	890	890	890	890
	b3	[mm]	830	830	830	830
	d	[mm]	28	28	28	28
	a2	[mm]	90	90	90	90
	h	[mm]	130	130	130	130
	h3	[mm]	415	450	450	450
	h4 ²⁾	[mm]	848/-	965/-	965/-	965/-
	Base frame no. ³⁾		10	10	10	10
NB data	Mounting design ⁴⁾		C	C	C	C
	L NB	[mm]	428	458	458	458
	L NB SS	[mm]	428	458	458	458
	h1	[mm]	250	250	250	250
	G1	[mm]	216	216	216	216
	G2	[mm]	243	243	243	243
	m1	[mm]	160	160	160	160
	m2	[mm]	120	120	120	120
	n1	[mm]	400	400	400	400
	n2	[mm]	315	315	315	315
	b	[mm]	80	80	80	80
	s1	[mm]	M16	M16	M16	M16
	H	[mm]	280	315	315	315
	LB ²⁾	[mm]	930/-	912/-	1077/-	1077/-
	AD ²⁾	[mm]	433/-	515/-	515/-	515/-
	AG ²⁾	[mm]	319/-	374/-	374/-	374/-
	LL ²⁾	[mm]	233/-	299/-	299/-	299/-
	P	[mm]	550	660	660	660
	C	[mm]	457	508	508	508
	B	[mm]	368	406	457	457
	A	[mm]	190	216	216	216
	K	[mm]	24	28	28	28
Weight data	Weight NK. CI ¹⁾	[kg]	1060/1058	1314/1312	1374/1373	1481/1480
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	760	958	1088	1189
	Weight NBE. CI	[kg]	-	-	-	-
	Weight diff. SS	[kg]	7	7	7	7

1) Pump with standard coupling / pump with spacer coupling.

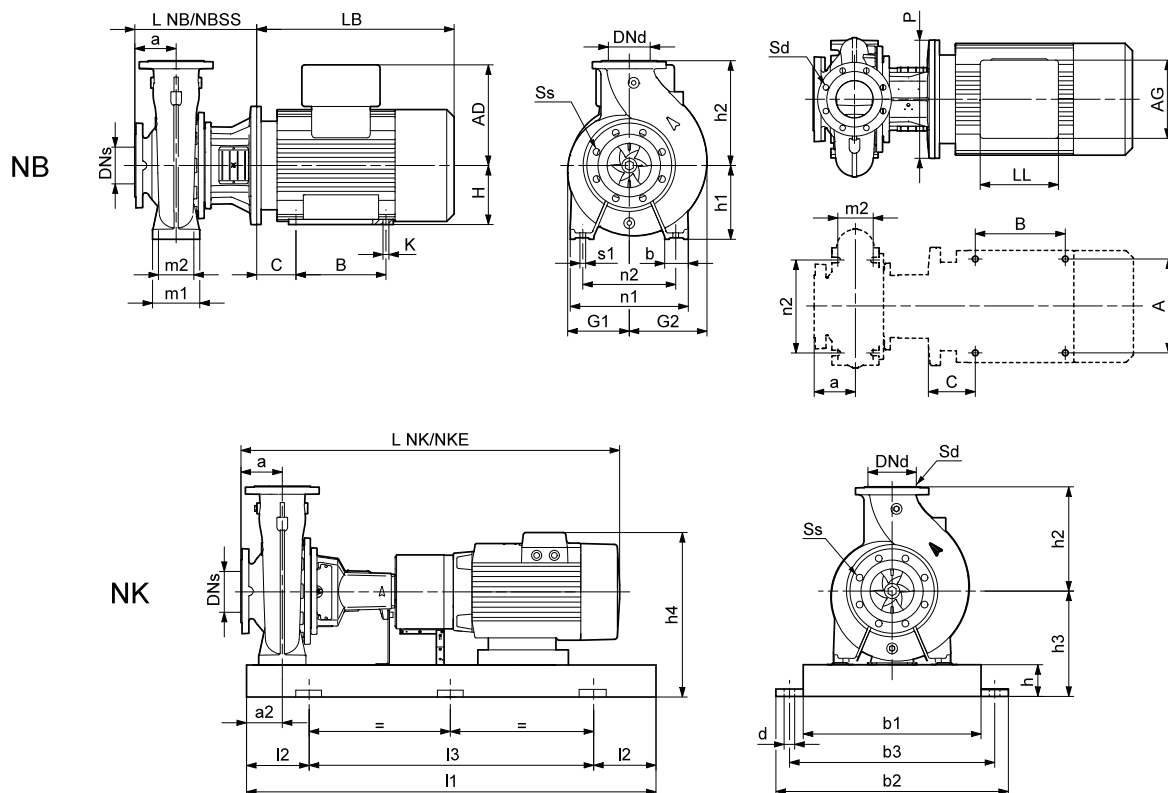
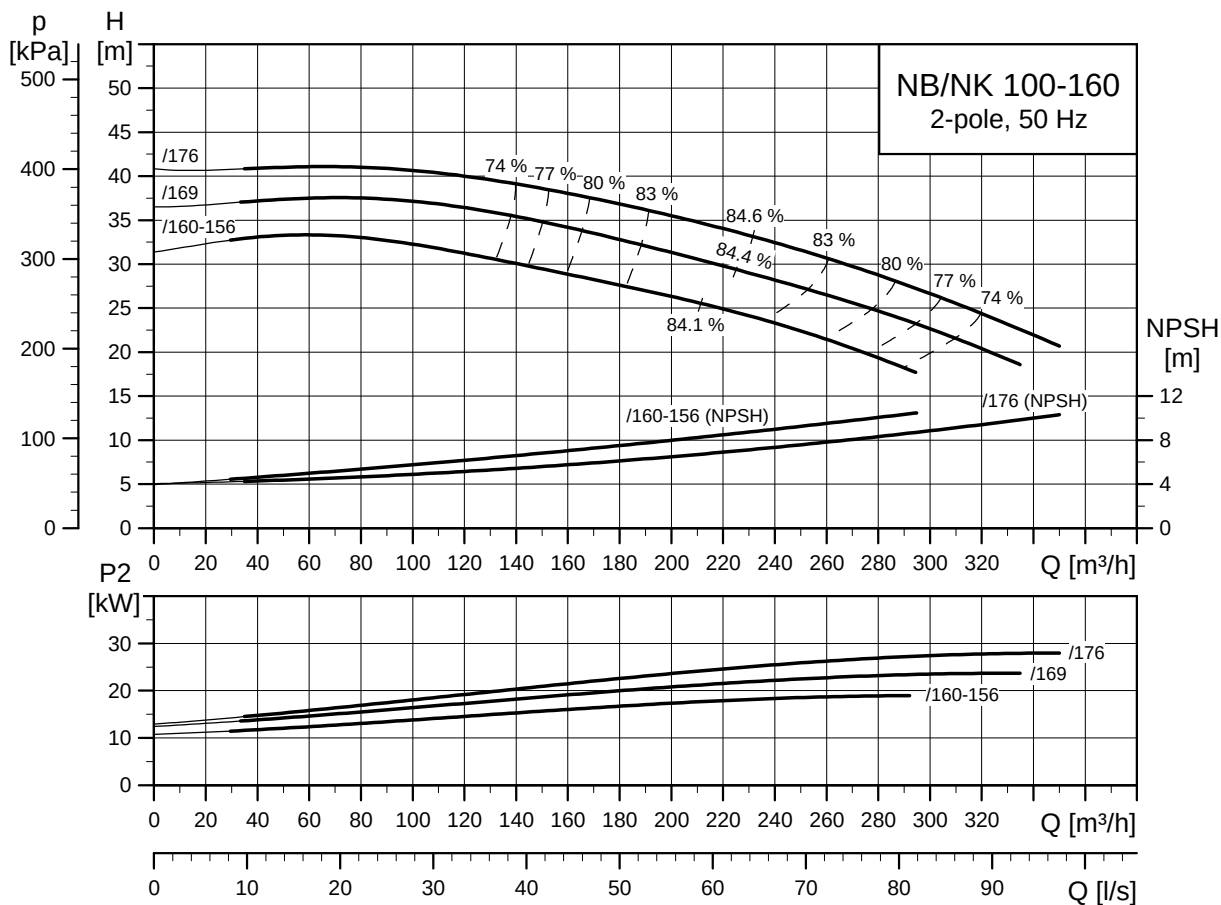
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 100-160



TM03 5107 4312

TM03 4182 4106

TM03 4179 1806

Pump type		100-160/160-156	100-160/169	100-160/176
Motor type	Standard Motor ⁵⁾	MG 180MB-H3	Siemens 200L	Siemens 200L
	E-Motor	MGE 180MB-F	-	-
Common data NB/NK	P2	[kW]	22	30
	PN	[bar]	16	16
	DNs	[mm]	125	125
	DNd	[mm]	100	100
	a	[mm]	125	125
	h2	[mm]	280	280
	Ss	[mm]	8 x Ø19	8 x Ø19
	Sd	[mm]	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1164/1279	1231/1346
	L NKE ¹⁾	[mm]	1161/1276	-/-
	l1	[mm]	1250	1600
	l2	[mm]	205	270
	l3	[mm]	840	1060
	b1	[mm]	430	530
	b2	[mm]	540	660
	b3	[mm]	490	600
	d	[mm]	24	28
	a2	[mm]	90	90
	h	[mm]	80	100
	h3	[mm]	280	305
	h4 ²⁾	[mm]	484/642	620/-
	Base frame no. ³⁾		6	8
NB data	Mounting design ⁴⁾		C	C
	L NB	[mm]	368	368
	L NB SS	[mm]	368	368
	h1	[mm]	200	200
	G1	[mm]	146	146
	G2	[mm]	187	187
	m1	[mm]	160	160
	m2	[mm]	120	120
	n1	[mm]	360	360
	n2	[mm]	280	280
	b	[mm]	80	80
	s1	[mm]	M16	M16
	H	[mm]	180	200
	LB ²⁾	[mm]	541/602	611/-
	AD ²⁾	[mm]	204/362	315/-
	AG ²⁾	[mm]	243/329	265/-
	LL ²⁾	[mm]	213/319	197/-
	P	[mm]	350	400
	C	[mm]	279	318
	B	[mm]	241	305
Weight data	A	[mm]	121	133
	K	[mm]	15	19
	Weight NK. CI ¹⁾	[kg]	300/291	437/430
	Weight NKE. CI ¹⁾	[kg]	330/321	-/-
	Weight NB. CI	[kg]	221	325
	Weight NBE. CI	[kg]	248	-
	Weight diff. SS	[kg]	3	3

1) Pump with standard coupling / pump with spacer coupling.

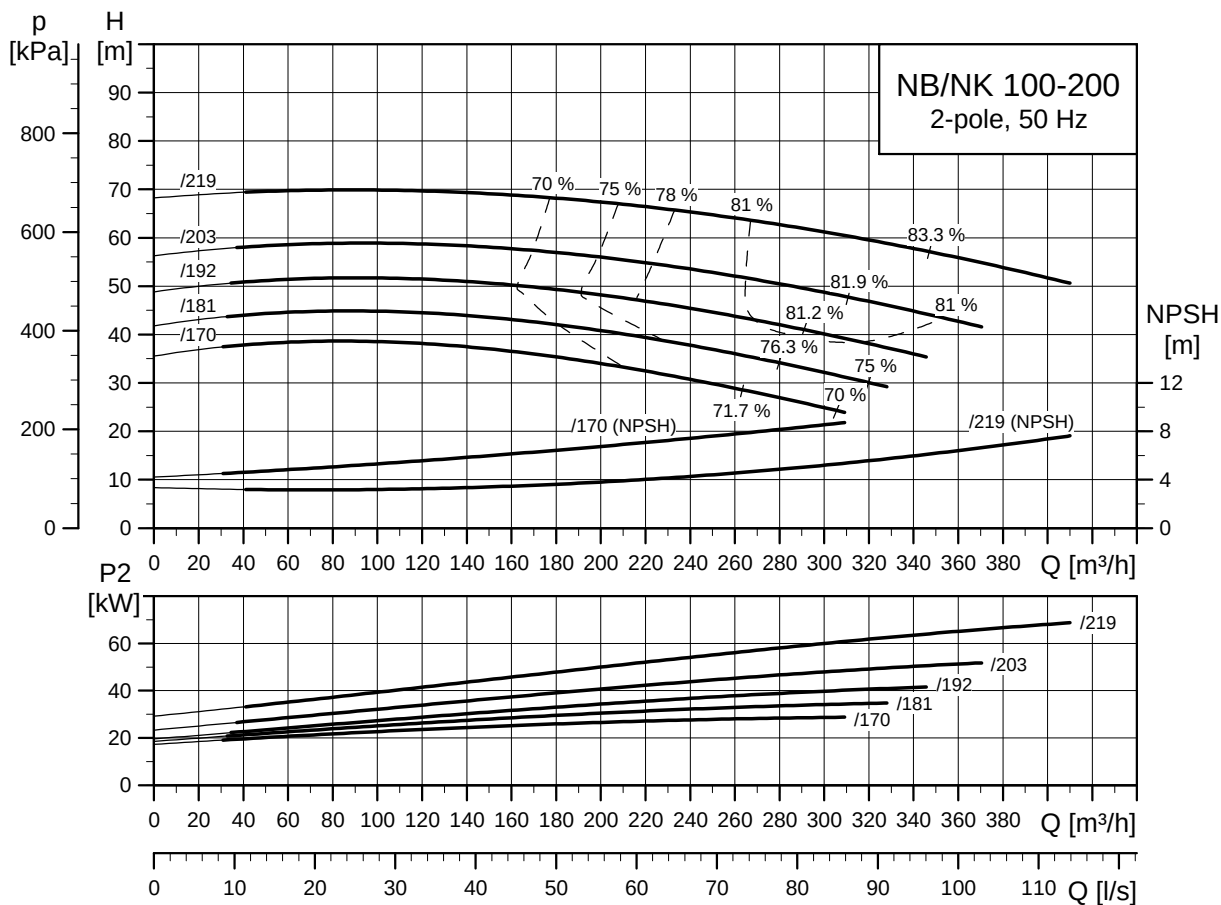
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

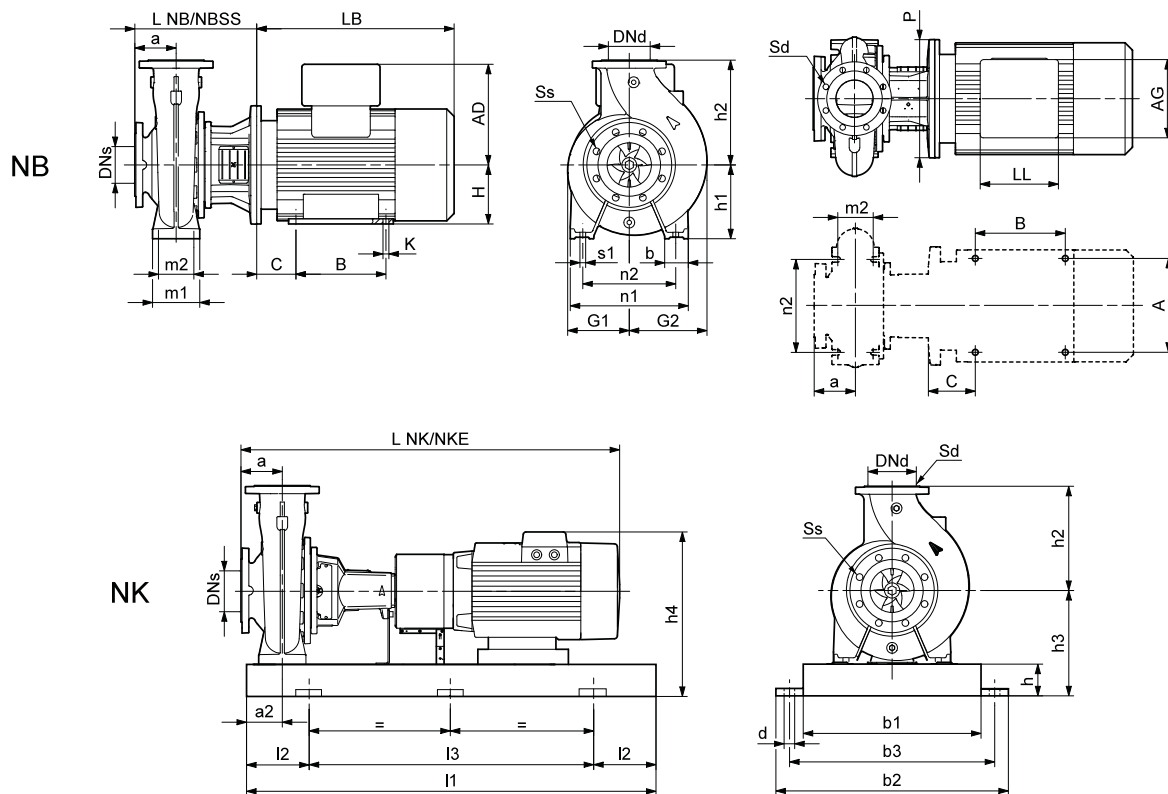
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 100-200



TM03 5108 4312



TM03 4182 4106

TM03 4179 1806

Pump type			100-200/170	100-200/181	100-200/192	100-200/203	100-200/219
Motor type	Standard Motor ⁵⁾		Siemens 200L	Siemens 200L	Siemens 225M	Siemens 250M	Siemens 280S
	E-Motor		-	-	-	-	-
Common data NB/NK	P2	[kW]	30	37	45	55	75
	PN	[bar]	16	16	16	16	16
	DNs	[mm]	125	125	125	125	125
	DNd	[mm]	100	100	100	100	100
	a	[mm]	125	125	125	125	125
	h2	[mm]	280	280	280	280	280
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1320/1456	1345/1481	1417/1553	1486/1622	1559/1695
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-	-/-
	l1	[mm]	1600	1600	1600	1800	2000
	l2	[mm]	270	270	270	300	330
	l3	[mm]	1060	1060	1060	1200	1340
	b1	[mm]	530	530	530	600	750
	b2	[mm]	660	660	660	730	890
	b3	[mm]	600	600	600	670	830
	d	[mm]	28	28	28	28	28
	a2	[mm]	90	90	90	90	90
	h	[mm]	100	100	100	100	130
	h3	[mm]	305	305	330	360	415
	h4 ²⁾	[mm]	620/-	620/-	668/-	770/-	848/-
	Base frame no. ³⁾		8	8	8	9	10
NB data	Mounting design ⁴⁾		C	C	C	C	C
	L NB	[mm]	398	398	428	428	428
	L NB SS	[mm]	398	398	428	428	428
	h1	[mm]	200	200	200	200	200
	G1	[mm]	169	169	169	169	169
	G2	[mm]	212	212	212	212	212
	m1	[mm]	160	160	160	160	160
	m2	[mm]	120	120	120	120	120
	n1	[mm]	360	360	360	360	360
	n2	[mm]	280	280	280	280	280
	b	[mm]	80	80	80	80	80
	s1	[mm]	M16	M16	M16	M16	M16
	H	[mm]	200	200	225	250	280
	LB ²⁾	[mm]	611/-	636/-	708/-	747/-	820/-
	AD ²⁾	[mm]	315/-	315/-	338/-	410/-	433/-
	AG ²⁾	[mm]	265/-	265/-	266/-	319/-	319/-
	LL ²⁾	[mm]	197/-	197/-	197/-	233/-	233/-
	P	[mm]	400	400	450	550	550
	C	[mm]	318	318	356	406	457
	B	[mm]	305	305	286	349	368
	A	[mm]	133	133	149	168	190
	K	[mm]	19	19	19	24	24
Weight data	Weight NK. CI ¹⁾	[kg]	461/455	491/485	572/566	686/681	959/957
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	341	366	439	530	656
	Weight NBE. CI	[kg]	-	-	-	-	-
	Weight diff. SS	[kg]	3	3	3	3	3

1) Pump with standard coupling / pump with spacer coupling.

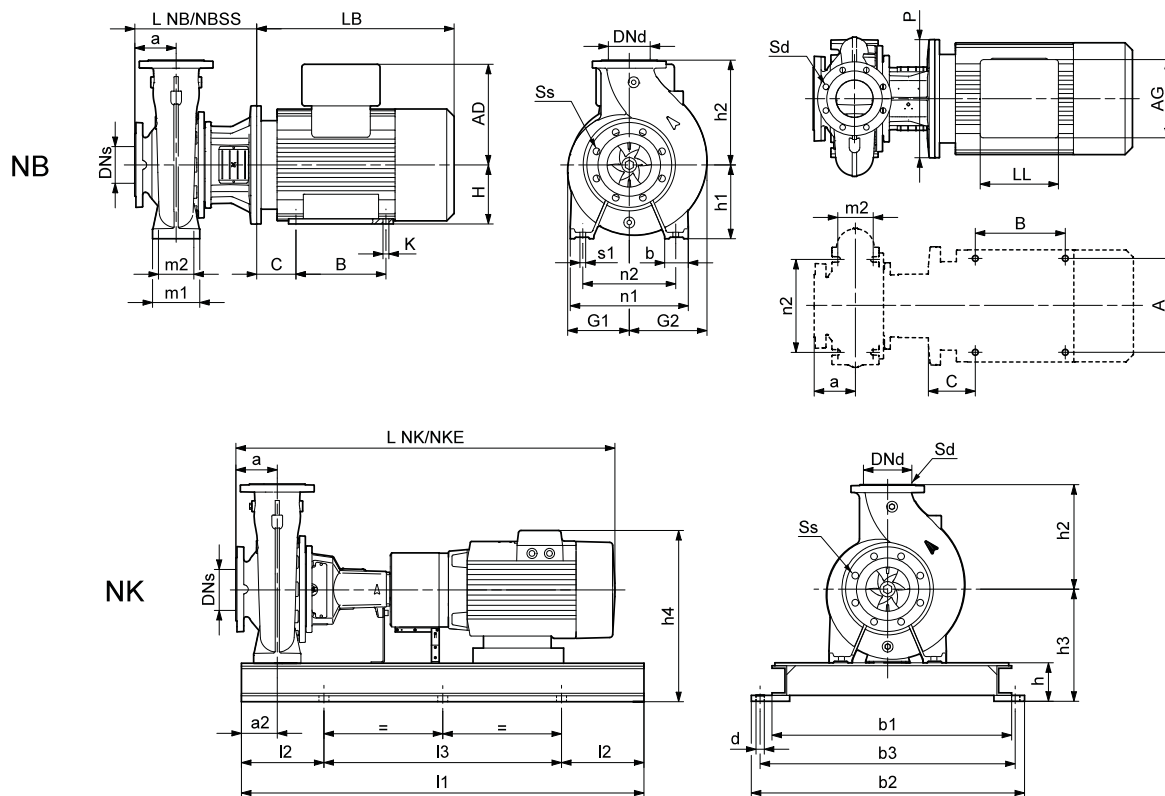
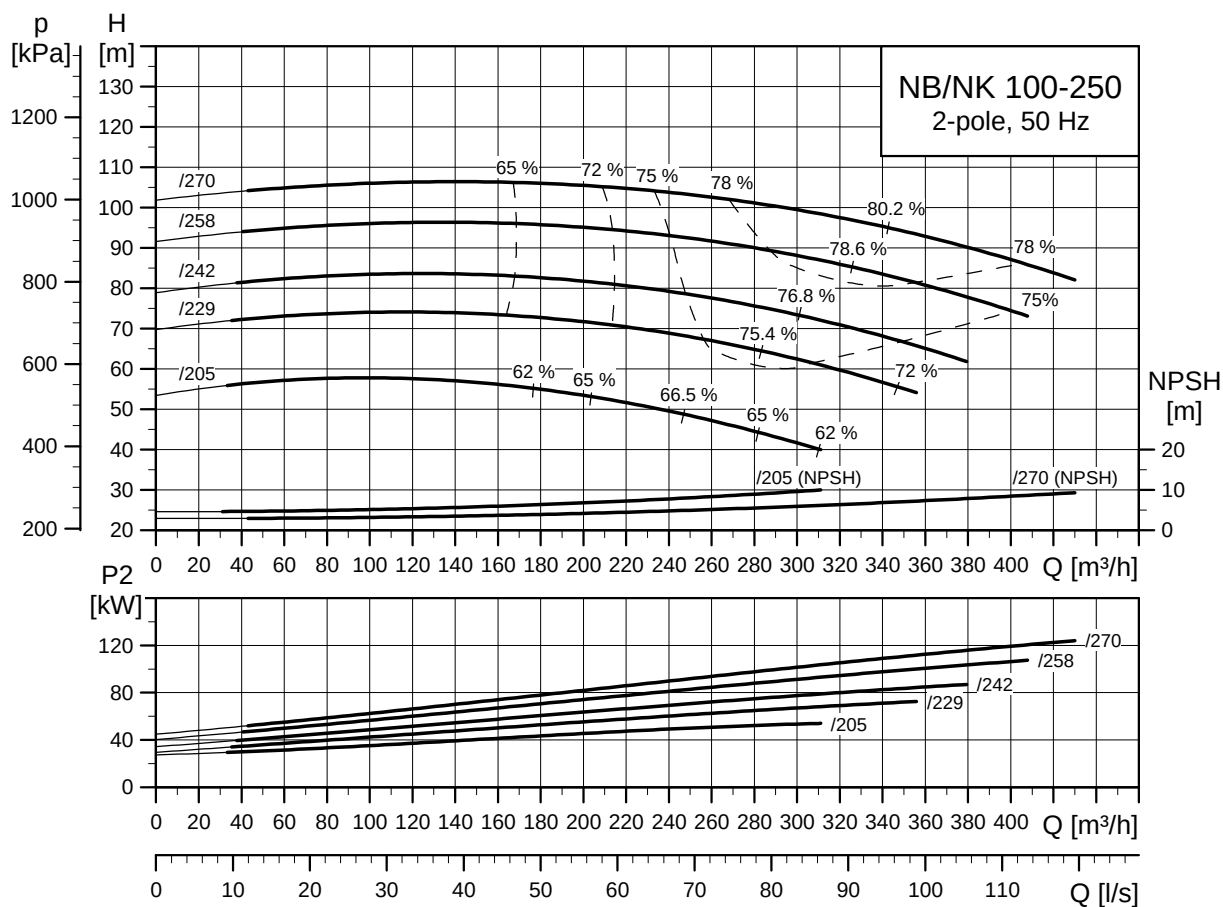
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 100-250



TM03 5109 4312

TM03 4182 4106

TM03 4051 1806

Pump type	100-250/205		100-250/229	100-250/242	100-250/258	100-250/270	
Motor type	Standard Motor ⁵⁾		Siemens 250M	Siemens 280S	Siemens 280M	Siemens 315S	Siemens 315M
	E-Motor		-	-	-	-	-
Common data NB/NK	P2	[kW]	55	75	90	110	132
	PN	[bar]	16	16	16	16	16
	DNs	[mm]	125	125	125	125	125
	DNd	[mm]	100	100	100	100	100
	a	[mm]	140	140	140	140	140
	h2	[mm]	280	280	280	280	280
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1501/1637	1574/1710	1684/1820	1666/1802	1831/1967
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-	-/-
	l1	[mm]	1800	2000	2000	2000	2000
	l2	[mm]	300	330	330	330	330
	l3	[mm]	1200	1340	1340	1340	1340
	b1	[mm]	600	750	750	750	750
	b2	[mm]	730	890	890	890	890
	b3	[mm]	670	830	830	830	830
	d	[mm]	28	28	28	28	28
	a2	[mm]	90	90	90	90	90
	h	[mm]	100	130	130	130	130
	h3	[mm]	355	415	415	455	455
	h4 ²⁾	[mm]	765/-	848/-	848/-	970/-	970/-
Base frame no. ³⁾		9	10	10	10	10	
NB data	Mounting design ⁴⁾		C	C	C	C	C
	L NB	[mm]	443	443	443	473	473
	L NB SS	[mm]	443	443	443	473	473
	h1	[mm]	225	225	225	225	225
	G1	[mm]	188	188	188	188	188
	G2	[mm]	224	224	224	224	224
	m1	[mm]	160	160	160	160	160
	m2	[mm]	120	120	120	120	120
	n1	[mm]	400	400	400	400	400
	n2	[mm]	315	315	315	315	315
	b	[mm]	80	80	80	80	80
	s1	[mm]	M16	M16	M16	M16	M16
	H	[mm]	250	280	280	315	315
	LB ²⁾	[mm]	747/-	820/-	930/-	912/-	1077/-
	AD ²⁾	[mm]	410/-	433/-	433/-	515/-	515/-
	AG ²⁾	[mm]	319/-	319/-	319/-	374/-	374/-
	LL ²⁾	[mm]	233/-	233/-	233/-	299/-	299/-
	P	[mm]	550	550	550	660	660
	C	[mm]	406	457	457	508	508
	B	[mm]	349	368	368	406	457
	A	[mm]	168	190	190	216	216
K	[mm]	24	24	24	28	28	
Weight data	Weight NK. CI ¹⁾	[kg]	692/687	968/967	1049/1047	1316/1315	1377/1376
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	544	669	749	947	1077
	Weight NBE. CI	[kg]	-	-	-	-	-
	Weight diff. SS	[kg]	2	2	2	2	2

1) Pump with standard coupling / pump with spacer coupling.

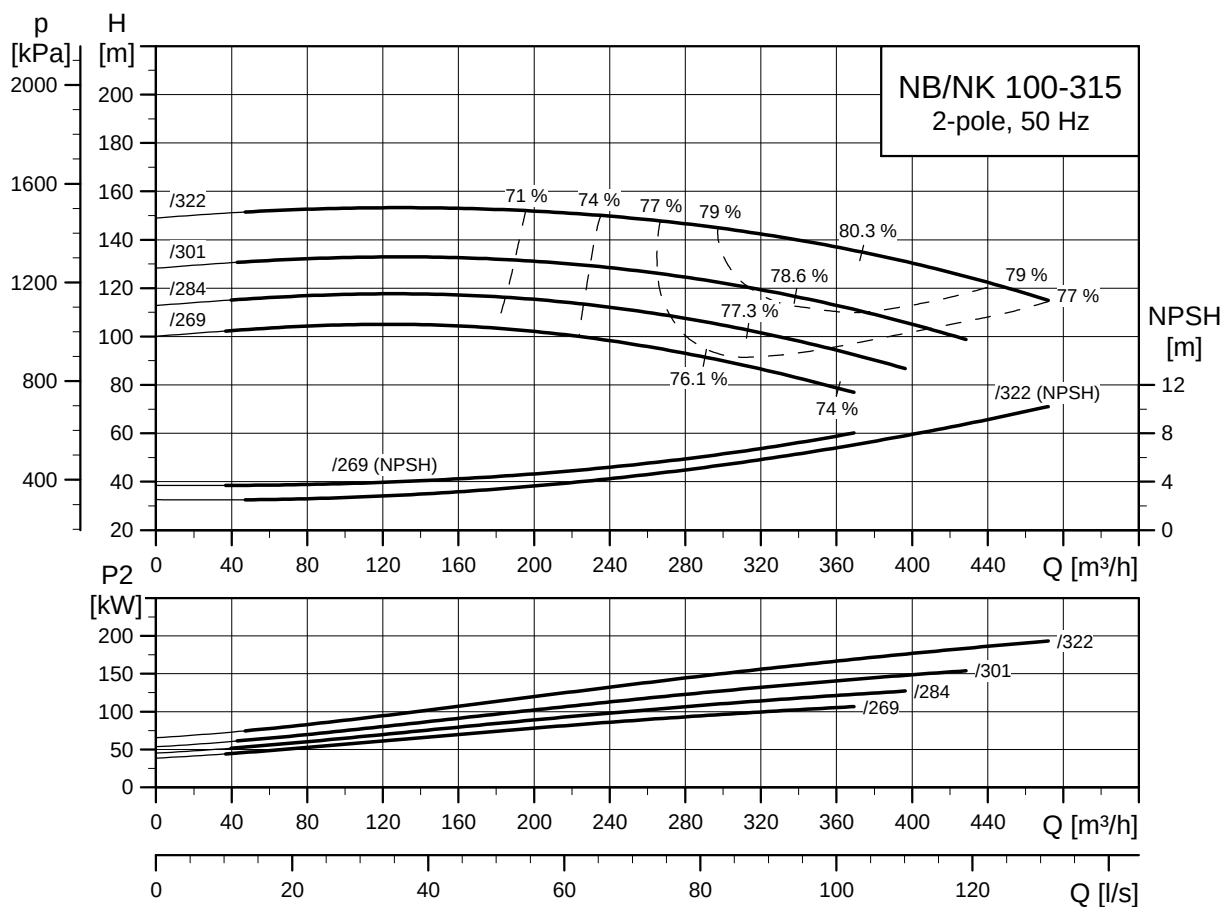
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

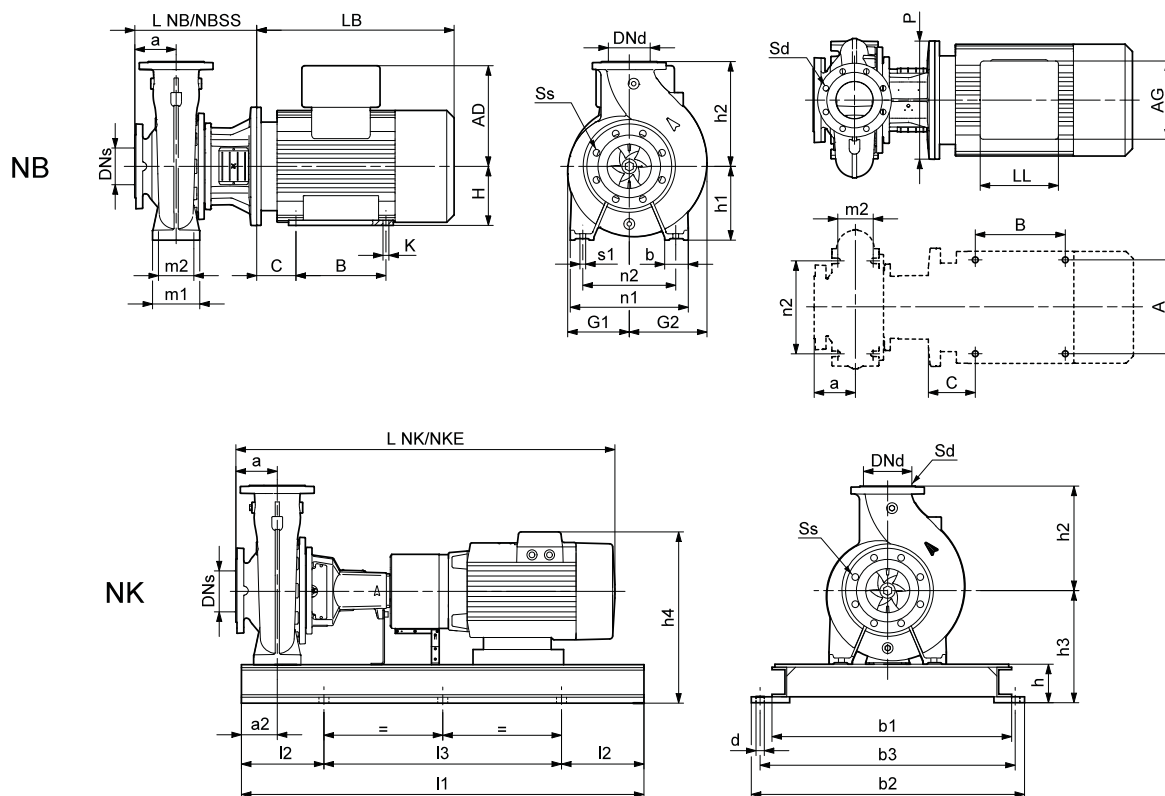
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 100-315



TM03 5110 4312



TM03 4182 4106

TM03 4051 1806

Pump type			100-315/269	100-315/284	100-315/301	100-315/322
Motor type	Standard Motor ⁵⁾		Siemens 315S	Siemens 315M	Siemens 315L	Siemens 315L
	E-Motor		-	-	-	-
Common data NB/NK	P2	[kW]	110	132	160	200
	PN	[bar]	16	16	16	16
	DNs	[mm]	125	125	125	125
	DNd	[mm]	100	100	100	100
	a	[mm]	140	140	140	140
	h2	[mm]	315	315	315	315
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1666/1802	1831/1967	1891/2027	2046/2182
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-
	I1	[mm]	2000	2000	2000	2000
	I2	[mm]	330	330	330	330
	I3	[mm]	1340	1340	1340	1340
	b1	[mm]	750	750	750	750
	b2	[mm]	890	890	890	890
	b3	[mm]	830	830	830	830
	d	[mm]	28	28	28	28
	a2	[mm]	90	90	90	90
	h	[mm]	130	130	130	130
	h3	[mm]	450	450	450	450
	h4 ²⁾	[mm]	965/-	965/-	965/-	965/-
	Base frame no. ³⁾		10	10	10	10
NB data	Mounting design ⁴⁾		C	C	C	C
	L NB	[mm]	473	473	473	473
	L NB SS	[mm]	473	473	473	473
	h1	[mm]	250	250	250	250
	G1	[mm]	208	208	208	208
	G2	[mm]	264	264	264	264
	m1	[mm]	160	160	160	160
	m2	[mm]	120	120	120	120
	n1	[mm]	400	400	400	400
	n2	[mm]	315	315	315	315
	b	[mm]	80	80	80	80
	s1	[mm]	M16	M16	M16	M16
	H	[mm]	315	315	315	315
	LB ²⁾	[mm]	912/-	1077/-	1077/-	1232/-
	AD ²⁾	[mm]	515/-	515/-	515/-	515/-
	AG ²⁾	[mm]	374/-	374/-	374/-	374/-
	LL ²⁾	[mm]	299/-	299/-	299/-	299/-
	P	[mm]	660	660	660	660
	C	[mm]	508	508	508	508
	B	[mm]	406	457	457	457
	A	[mm]	216	216	216	216
	K	[mm]	28	28	28	28
Weight data	Weight NK. CI ¹⁾	[kg]	1323/1322	1384/1382	1491/1490	1691/1690
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	968	1098	1199	1369
	Weight NBE. CI	[kg]	-	-	-	-
	Weight diff. SS	[kg]	2	2	2	-

1) Pump with standard coupling / pump with spacer coupling.

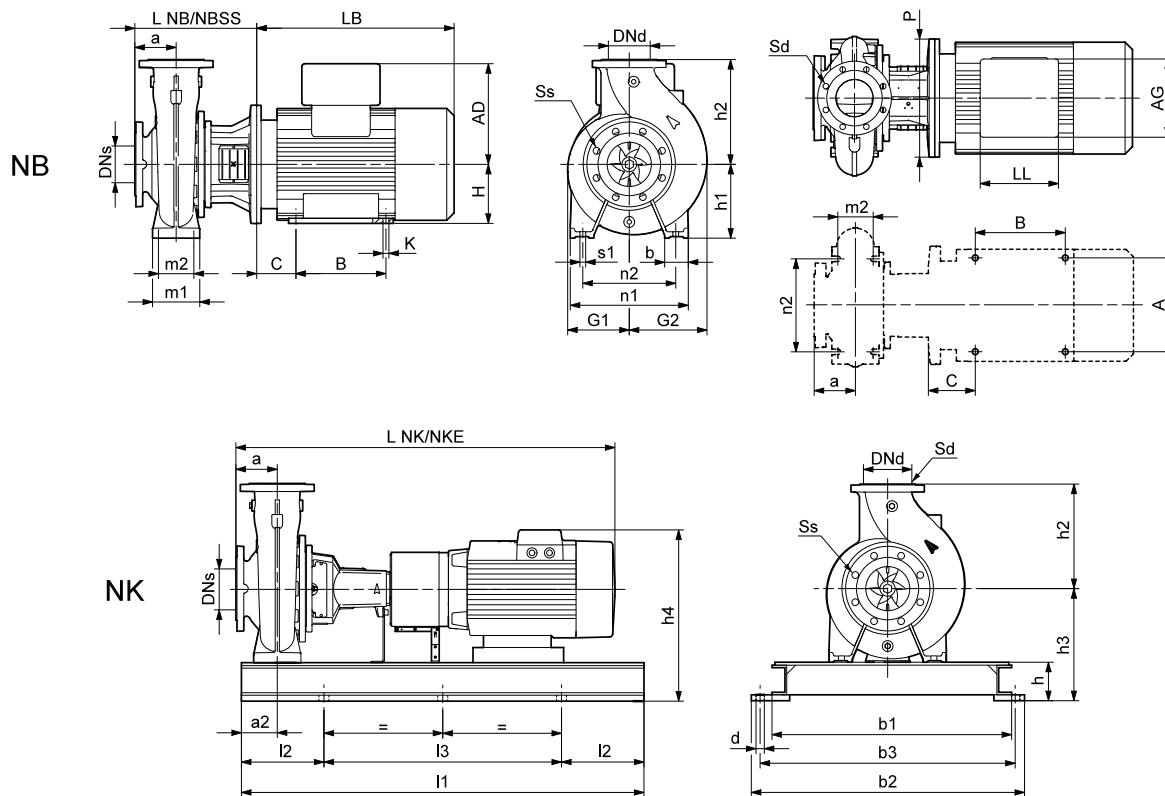
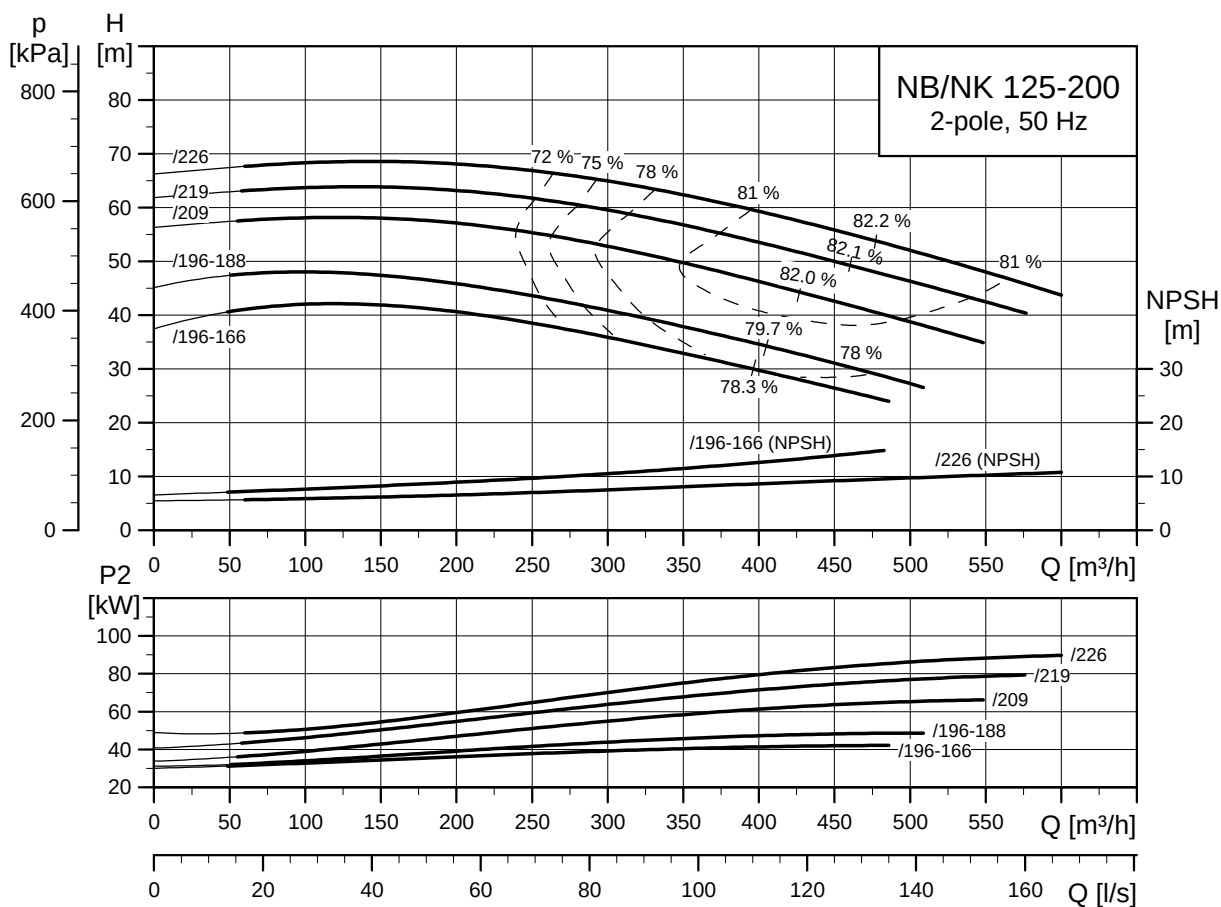
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 125-200



TM03 5111 4312

TM03 4182 4106

TM03 4051 1806

Pump type		125-200/196-166	125-200/196-188	125-200/209	125-200/219	125-200/226
Motor type	Standard Motor ⁵⁾	Siemens 225M	Siemens 250M	Siemens 280S	Siemens 280M	Siemens 315S
	E-Motor	-	-	-	-	-
Common data NB/NK	P2	[kW]	45	55	75	90
	PN	[bar]	16	16	16	16
	DNs	[mm]	150	150	150	150
	DNd	[mm]	125	125	125	125
	a	[mm]	140	140	140	140
	h2	[mm]	315	315	315	315
	Ss	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1432/1568	1501/1637	1574/1710	1684/1820
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-
	l1	[mm]	1600	1800	2000	2000
	l2	[mm]	270	300	330	330
	l3	[mm]	1060	1200	1340	1340
	b1	[mm]	530	600	750	750
	b2	[mm]	660	730	890	890
	b3	[mm]	600	670	830	830
	d	[mm]	28	28	28	28
	a2	[mm]	90	90	90	90
	h	[mm]	100	100	130	130
	h3	[mm]	350	355	415	450
	h4 ²⁾	[mm]	688/-	765/-	848/-	965/-
	Base frame no. ³⁾		8	9	10	10
NB data	Mounting design ⁴⁾		C	C	C	C
	L NB	[mm]	443	443	443	473
	L NB SS	[mm]	443	443	443	473
	h1	[mm]	250	250	250	250
	G1	[mm]	183	183	183	183
	G2	[mm]	234	234	234	234
	m1	[mm]	160	160	160	160
	m2	[mm]	120	120	120	120
	n1	[mm]	400	400	400	400
	n2	[mm]	315	315	315	315
	b	[mm]	80	80	80	80
	s1	[mm]	M16	M16	M16	M16
	H	[mm]	225	250	280	315
	LB ²⁾	[mm]	708/-	747/-	820/-	930/-
	AD ²⁾	[mm]	338/-	410/-	433/-	515/-
	AG ²⁾	[mm]	266/-	319/-	319/-	374/-
	LL ²⁾	[mm]	197/-	233/-	233/-	299/-
	P	[mm]	450	550	550	660
	C	[mm]	356	406	457	508
	B	[mm]	286	349	368	406
	A	[mm]	149	168	190	216
	K	[mm]	19	24	24	28
Weight data	Weight NK. CI ¹⁾	[kg]	607/601	700/695	983/981	1063/1062
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	468	558	684	764
	Weight NBE. CI	[kg]	-	-	-	-
	Weight diff. SS	[kg]	3	3	3	3

1) Pump with standard coupling / pump with spacer coupling.

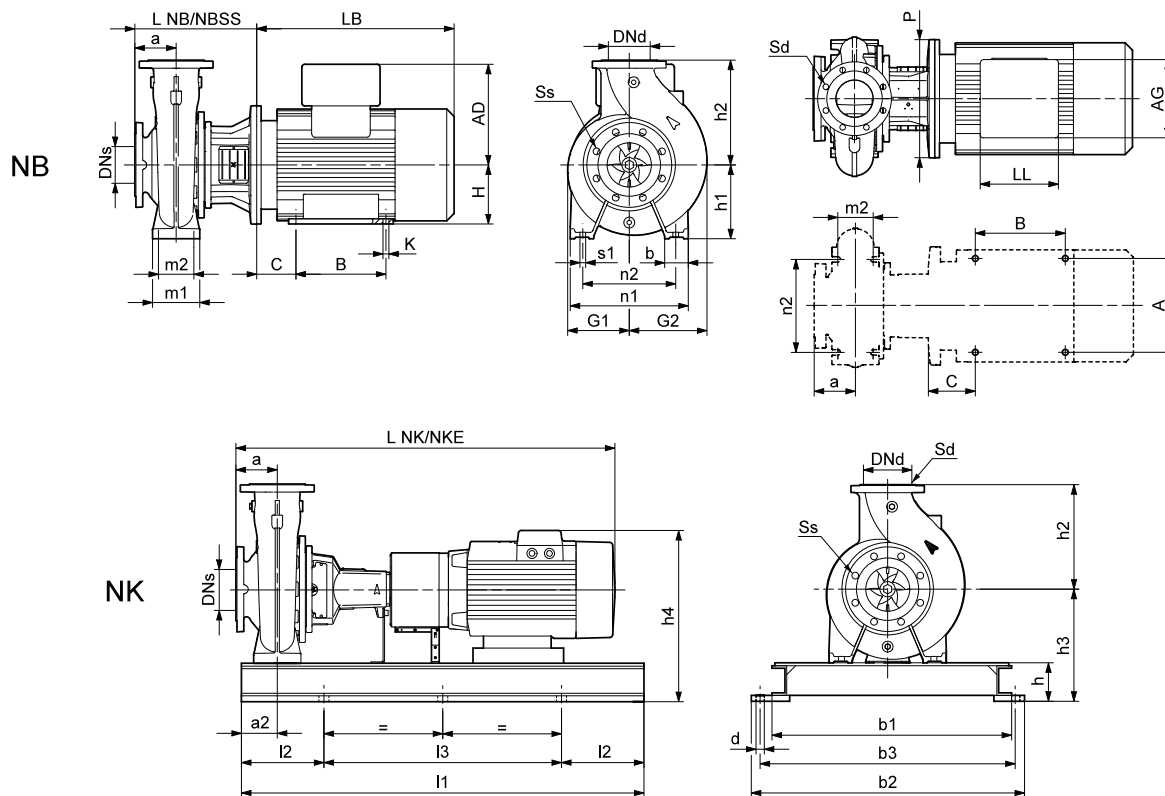
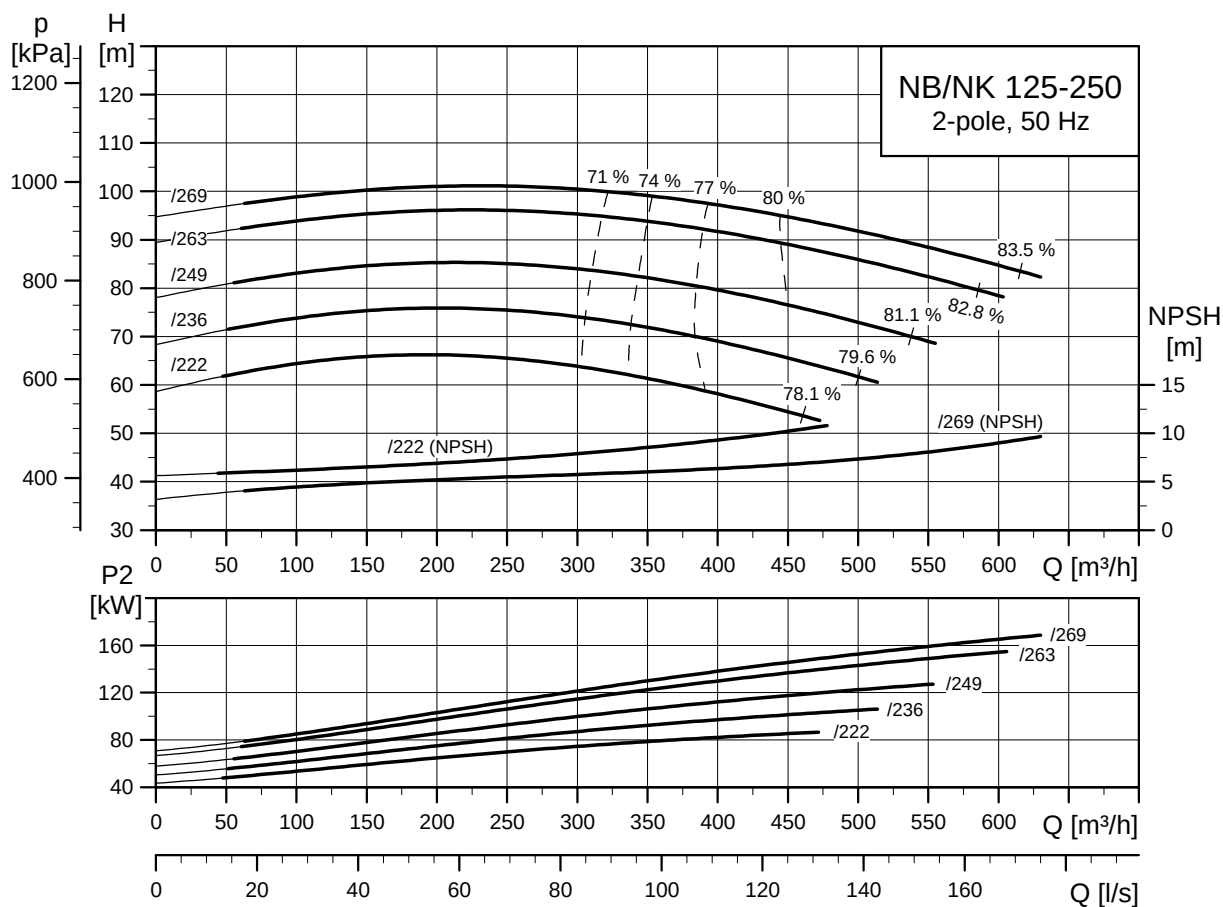
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 125-250



TM03 5112 4312

TM03 4182 4106

TM03 4051 1806

Pump type			125-250/222	125-250/236	125-250/249	125-250/263	125-250/269
Motor type	Standard Motor ⁵⁾		Siemens 280M	Siemens 315S	Siemens 315M	Siemens 315L	Siemens 315L
	E-Motor		-	-	-	-	-
Common data NB/NK	P2	[kW]	90	110	132	160	200
	PN	[bar]	16	16	16	16	16
	DNs	[mm]	150	150	150	150	150
	DNd	[mm]	125	125	125	125	125
	a	[mm]	140	140	140	140	140
	h2	[mm]	355	355	355	355	355
	Ss	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1744/1880	1726/1862	1891/2027	1891/2027	2046/2182
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-	-/-
	l1	[mm]	2000	2000	2000	2000	2000
	l2	[mm]	330	330	330	330	330
	l3	[mm]	1340	1340	1340	1340	1340
	b1	[mm]	750	750	750	750	750
	b2	[mm]	890	890	890	890	890
	b3	[mm]	830	830	830	830	830
	d	[mm]	28	28	28	28	28
	a2	[mm]	90	90	90	90	90
	h	[mm]	130	130	130	130	130
	h3	[mm]	415	450	450	450	450
	h4 ²⁾	[mm]	848/-	965/-	965/-	965/-	965/-
	Base frame no. ³⁾		10	10	10	10	10
NB data	Mounting design ⁴⁾		C	C	C	C	C
	L NB	[mm]	441	471	471	471	471
	L NB SS	[mm]	441	471	471	471	471
	h1	[mm]	250	250	250	250	250
	G1	[mm]	208	208	208	208	208
	G2	[mm]	264	264	264	264	264
	m1	[mm]	160	160	160	160	160
	m2	[mm]	120	120	120	120	120
	n1	[mm]	400	400	400	400	400
	n2	[mm]	315	315	315	315	315
	b	[mm]	80	80	80	80	80
	s1	[mm]	M16	M16	M16	M16	M16
	H	[mm]	280	315	315	315	315
	LB ²⁾	[mm]	930/-	912/-	1077/-	1077/-	1232/-
	AD ²⁾	[mm]	433/-	515/-	515/-	515/-	515/-
	AG ²⁾	[mm]	319/-	374/-	374/-	374/-	374/-
	LL ²⁾	[mm]	233/-	299/-	299/-	299/-	299/-
	P	[mm]	550	660	660	660	660
	C	[mm]	457	508	508	508	508
	B	[mm]	368	406	457	457	457
	A	[mm]	190	216	216	216	216
	K	[mm]	24	28	28	28	28
Weight data	Weight NK. CI ¹⁾	[kg]	1092/1091	1346/1345	1406/1405	1486/1485	1686/1685
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	773	975	1105	1205	1375
	Weight NBE. CI	[kg]	-	-	-	-	-
	Weight diff. SS	[kg]	-3	-3	-3	-3	-

1) Pump with standard coupling / pump with spacer coupling.

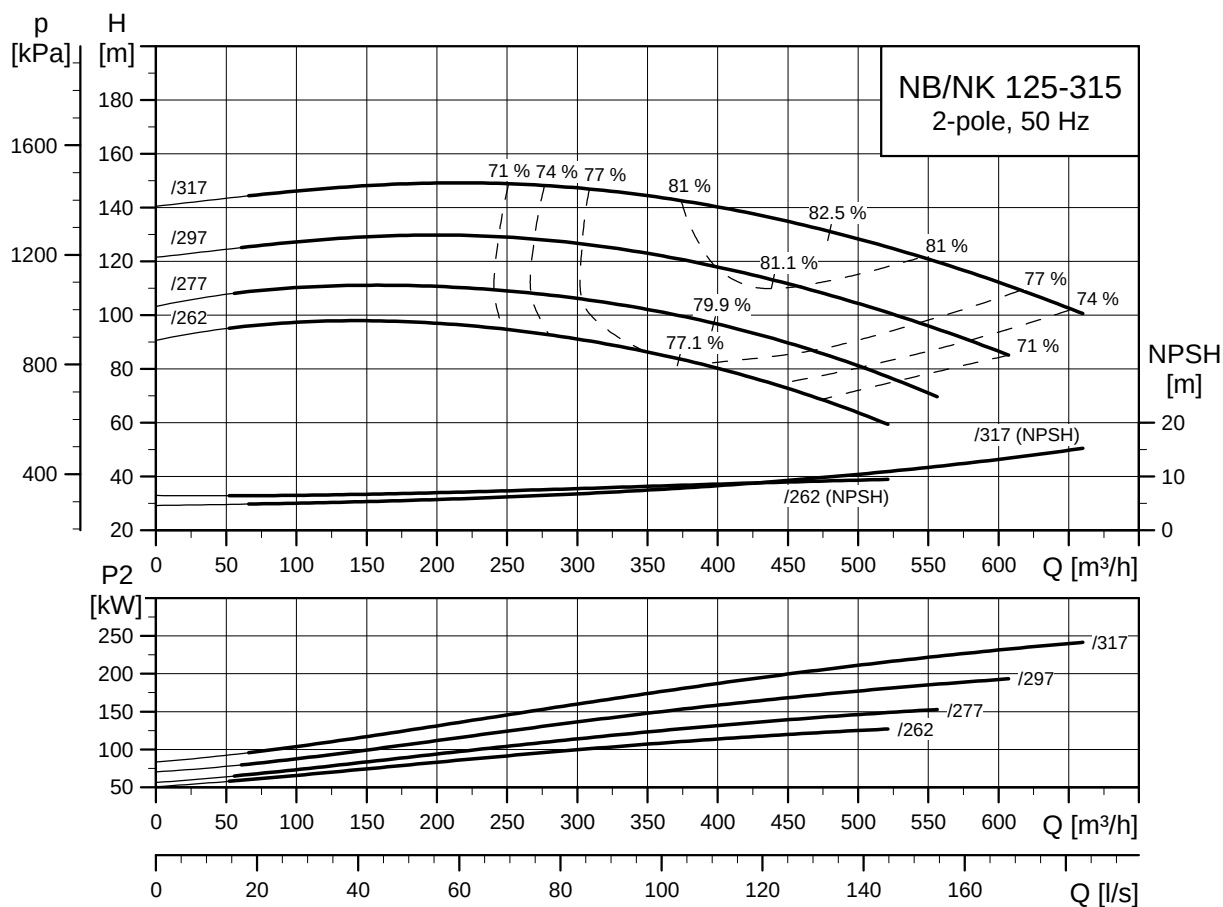
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

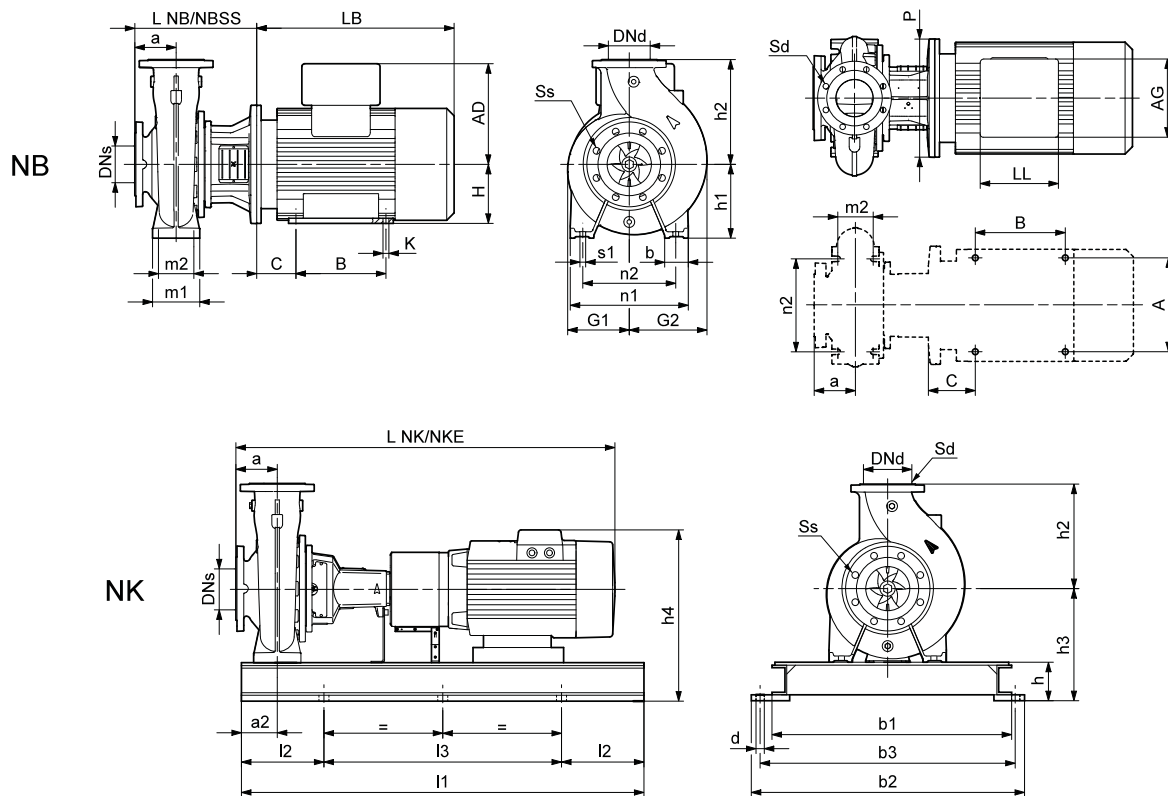
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 125-315



TM03 5113 4312



TM03 4182 4106

TM03 4051 1806

Pump type	125-315/262		125-315/277	125-315/297	125-315/317	
Motor type	Standard Motor ⁵⁾	Siemens 315M	Siemens 315L	Siemens 315L	Siemens 315L	
	E-Motor	-	-	-	-	
Common data NB/NK	P2	[kW]	132	160	200	250
	PN	[bar]	16	16	16	16
	DNs	[mm]	150	150	150	150
	DNd	[mm]	125	125	125	125
	a	[mm]	140	140	140	140
	h2	[mm]	355	355	355	355
	Ss	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1891/2027	1891/2027	2046/2182	2046/2182
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-
	l1	[mm]	2000	2000	2000	2250
	l2	[mm]	330	330	330	125
	l3	[mm]	1340	1340	1340	2000
	b1	[mm]	750	750	750	740
	b2	[mm]	890	890	890	1120
	b3	[mm]	830	830	830	1060
	d	[mm]	28	28	28	28
	a2	[mm]	110	110	110	110
	h	[mm]	130	130	130	140
	h3	[mm]	450	450	450	460
	h4 ²⁾	[mm]	965/-	965/-	965/-	960/-
	Base frame no. ³⁾		10	10	10	11C
NB data	Mounting design ⁴⁾		C	C	C	-
	L NB	[mm]	471	471	471	-
	L NB SS	[mm]	471	471	471	-
	h1	[mm]	280	280	280	-
	G1	[mm]	231	231	231	-
	G2	[mm]	268	268	268	-
	m1	[mm]	200	200	200	-
	m2	[mm]	150	150	150	-
	n1	[mm]	500	500	500	-
	n2	[mm]	400	400	400	-
	b	[mm]	100	100	100	-
	s1	[mm]	M20	M20	M20	-
	H	[mm]	315	315	315	-
	LB ²⁾	[mm]	1077/-	1077/-	1232/-	-/-
	AD ²⁾	[mm]	515/-	515/-	515/-	-/-
	AG ²⁾	[mm]	374/-	374/-	374/-	-/-
	LL ²⁾	[mm]	299/-	299/-	299/-	-/-
	P	[mm]	660	660	660	-
	C	[mm]	508	508	508	-
	B	[mm]	457	457	457	-
	A	[mm]	216	216	216	-
	K	[mm]	28	28	28	-
Weight data	Weight NK. CI ¹⁾	[kg]	1449/1447	1528/1527	1728/1727	2147/2146
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	1143	1243	1413	-
	Weight NBE. CI	[kg]	-	-	-	-
	Weight diff. SS	[kg]	4	4	-	-

1) Pump with standard coupling / pump with spacer coupling.

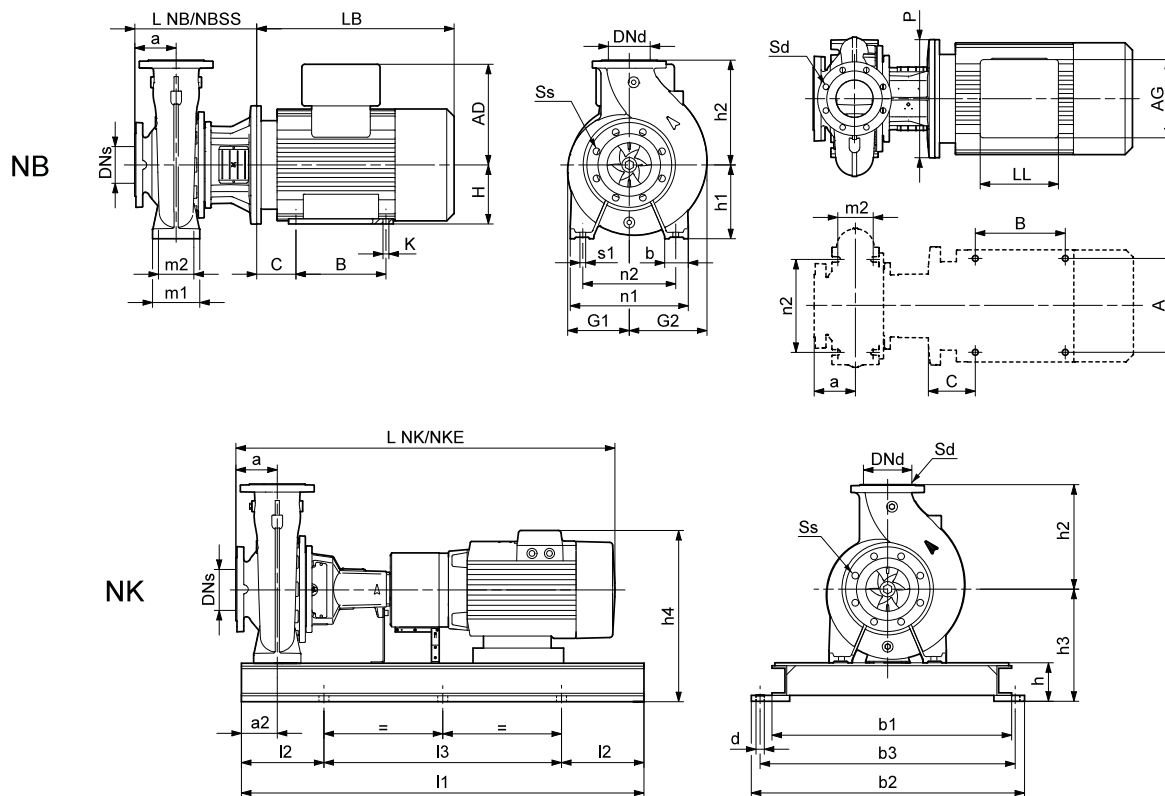
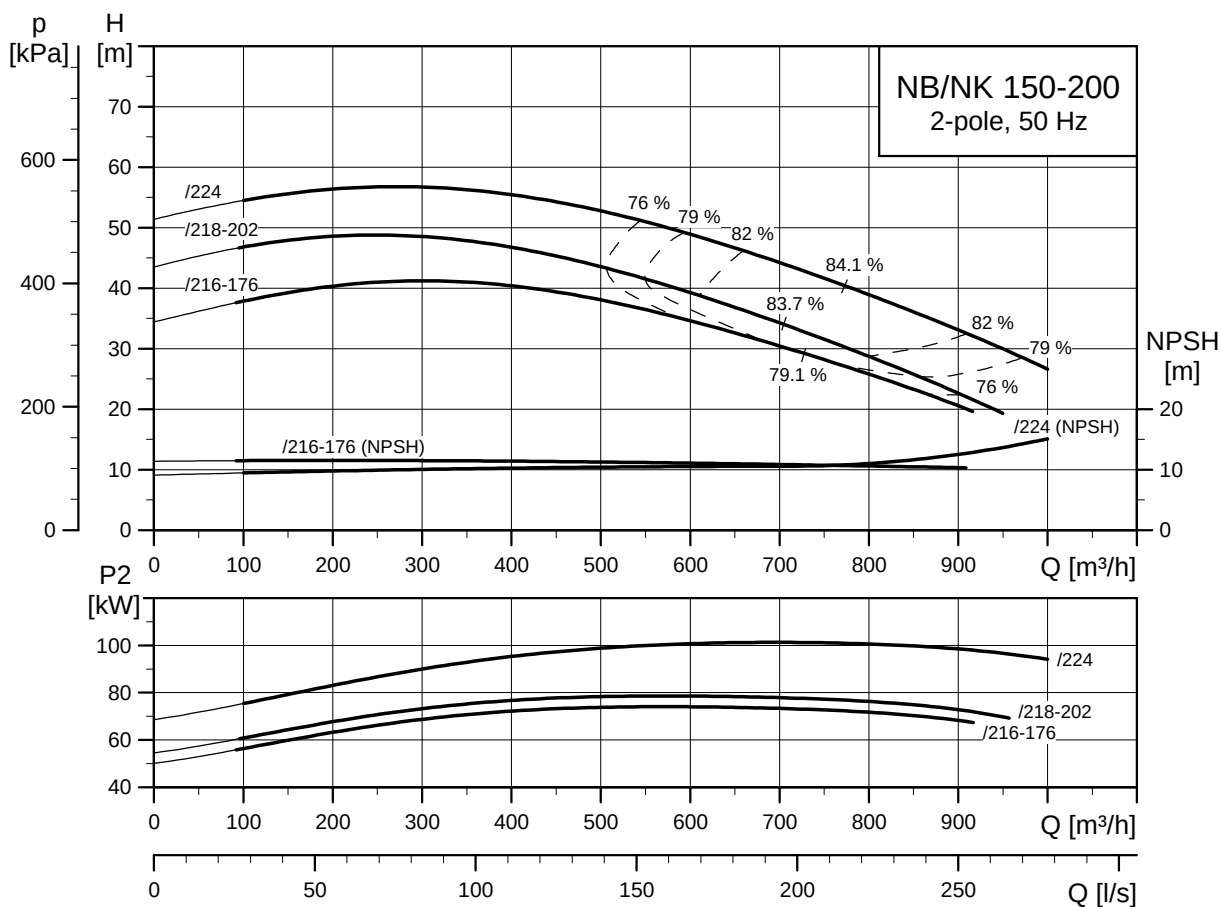
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 150-200



TM03 5114 4312

TM03 4182 4106

TM03 4051 1806

Pump type	150-200/216-176 150-200/218-202 150-200/224				
Motor type	Standard Motor ⁵⁾		Siemens 280S	Siemens 280M	Siemens 315S
	E-Motor		-	-	-
Common data NB/NK	P2	[kW]	75	90	110
	PN	[bar]	10	10	10
	DNs	[mm]	200	200	200
	DNd	[mm]	150	150	150
	a	[mm]	160	160	160
	h2	[mm]	400	400	400
	Ss	[mm]	8 x Ø23	8 x Ø23	8 x Ø23
	Sd	[mm]	8 x Ø23	8 x Ø23	8 x Ø23
NK data	L NK ¹⁾	[mm]	1594/1730	1704/1840	1686/1822
	L NKE ¹⁾	[mm]	-/-	-/-	-/-
	l1	[mm]	2000	2000	2000
	l2	[mm]	330	330	330
	l3	[mm]	1340	1340	1340
	b1	[mm]	750	750	750
	b2	[mm]	890	890	890
	b3	[mm]	830	830	830
	d	[mm]	28	28	28
	a2	[mm]	110	110	110
	h	[mm]	130	130	130
	h3	[mm]	415	415	450
	h4 ²⁾	[mm]	848/-	848/-	965/-
	Base frame no. ³⁾		10	10	10
NB data	Mounting design ⁴⁾		C	C	C
	L NB	[mm]	463	463	493
	L NB SS	[mm]	463	463	493
	h1	[mm]	280	280	280
	G1	[mm]	230	230	230
	G2	[mm]	319	319	319
	m1	[mm]	200	200	200
	m2	[mm]	150	150	150
	n1	[mm]	550	550	550
	n2	[mm]	450	450	450
	b	[mm]	100	100	100
	s1	[mm]	M20	M20	M20
	H	[mm]	280	280	315
	LB ²⁾	[mm]	820/-	930/-	912/-
	AD ²⁾	[mm]	433/-	433/-	515/-
	AG ²⁾	[mm]	319/-	319/-	374/-
	LL ²⁾	[mm]	233/-	233/-	299/-
	P	[mm]	550	550	660
	C	[mm]	457	457	508
	B	[mm]	368	368	406
	A	[mm]	190	190	216
	K	[mm]	24	24	28
Weight data	Weight NK. CI ¹⁾	[kg]	1030/1029	1111/1109	1377/1376
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-
	Weight NB. CI	[kg]	738	818	1017
	Weight NBE. CI	[kg]	-	-	-
	Weight diff. SS	[kg]	-5	-5	-5

1) Pump with standard coupling / pump with spacer coupling.

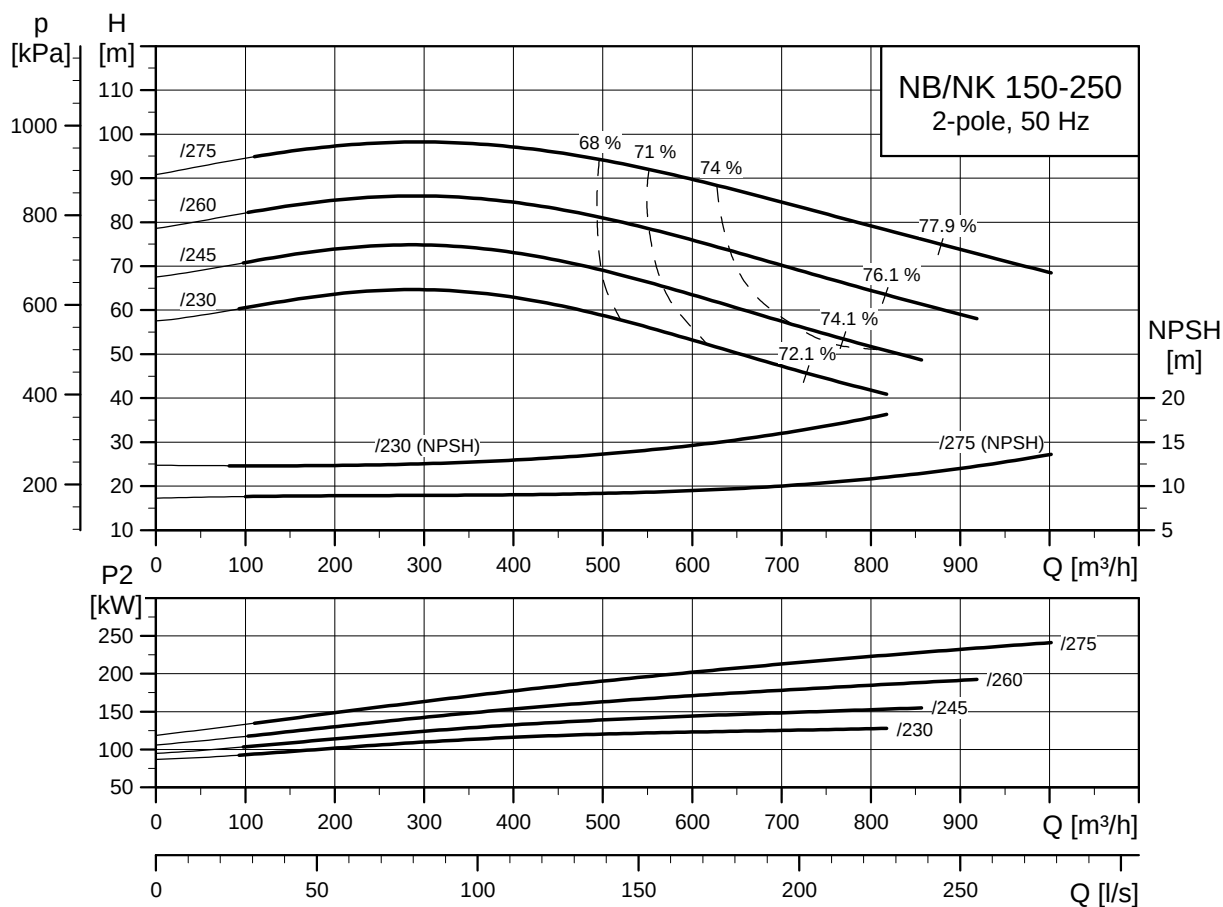
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

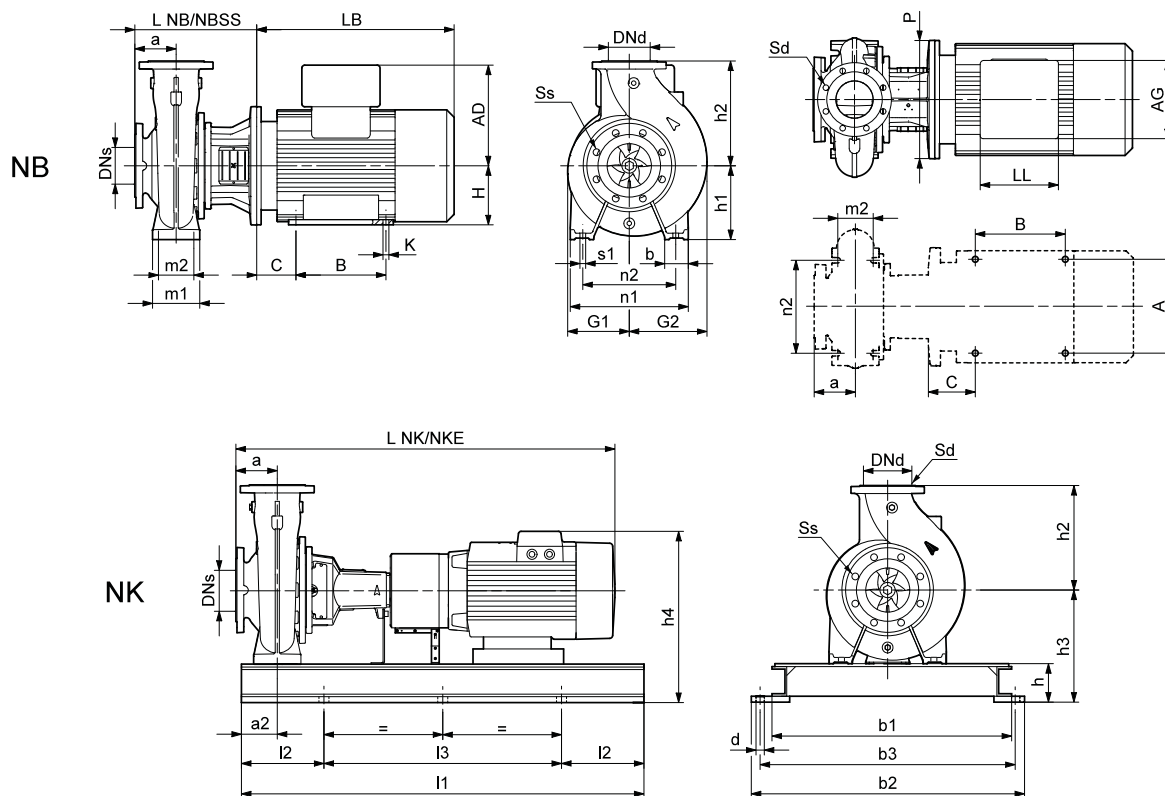
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 150-250



TM03 5115 4312



TM03 4182 4106

TM03 4051 1806

Pump type			150-250/230	150-250/245	150-250/260	150-250/275
Motor type	Standard Motor ⁵⁾		Siemens 315M	Siemens 315L	Siemens 315L	Siemens 315L
	E-Motor		-	-	-	-
Common data NB/NK	P2	[kW]	132	160	200	250
	PN	[bar]	10	10	10	10
	DNs	[mm]	200	200	200	200
	DNd	[mm]	150	150	150	150
	a	[mm]	160	160	160	160
	h2	[mm]	375	375	375	375
	Ss	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
	Sd	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
NK data	L NK ¹⁾	[mm]	1911/2047	1911/2047	2066/2202	2066/2202
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-
	l1	[mm]	2000	2000	2000	2250
	l2	[mm]	330	330	330	125
	l3	[mm]	1340	1340	1340	2000
	b1	[mm]	750	750	750	740
	b2	[mm]	890	890	890	1120
	b3	[mm]	830	830	830	1060
	d	[mm]	28	28	28	28
	a2	[mm]	110	110	110	110
	h	[mm]	130	130	130	140
	h3	[mm]	450	450	450	460
	h4 ²⁾	[mm]	965/-	965/-	965/-	960/-
	Base frame no. ³⁾		10	10	10	11C
NB data	Mounting design ⁴⁾		C	C	C	-
	L NB	[mm]	491	491	491	-
	L NB SS	[mm]	491	491	491	-
	h1	[mm]	280	280	280	-
	G1	[mm]	223	223	223	-
	G2	[mm]	287	287	287	-
	m1	[mm]	200	200	200	-
	m2	[mm]	150	150	150	-
	n1	[mm]	500	500	500	-
	n2	[mm]	400	400	400	-
	b	[mm]	100	100	100	-
	s1	[mm]	M20	M20	M20	-
	H	[mm]	315	315	315	-
	LB ²⁾	[mm]	1077/-	1077/-	1232/-	-/-
	AD ²⁾	[mm]	515/-	515/-	515/-	-/-
	AG ²⁾	[mm]	374/-	374/-	374/-	-/-
	LL ²⁾	[mm]	299/-	299/-	299/-	-/-
	P	[mm]	660	660	660	-
	C	[mm]	508	508	508	-
	B	[mm]	457	457	457	-
	A	[mm]	216	216	216	-
	K	[mm]	28	28	28	-
Weight data	Weight NK. CI ¹⁾	[kg]	1447/1446	1526/1525	1726/1725	2145/2144
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	1141	1241	1411	-
	Weight NBE. CI	[kg]	-	-	-	-
	Weight diff. SS	[kg]	6	6	6	-

1) Pump with standard coupling / pump with spacer coupling.

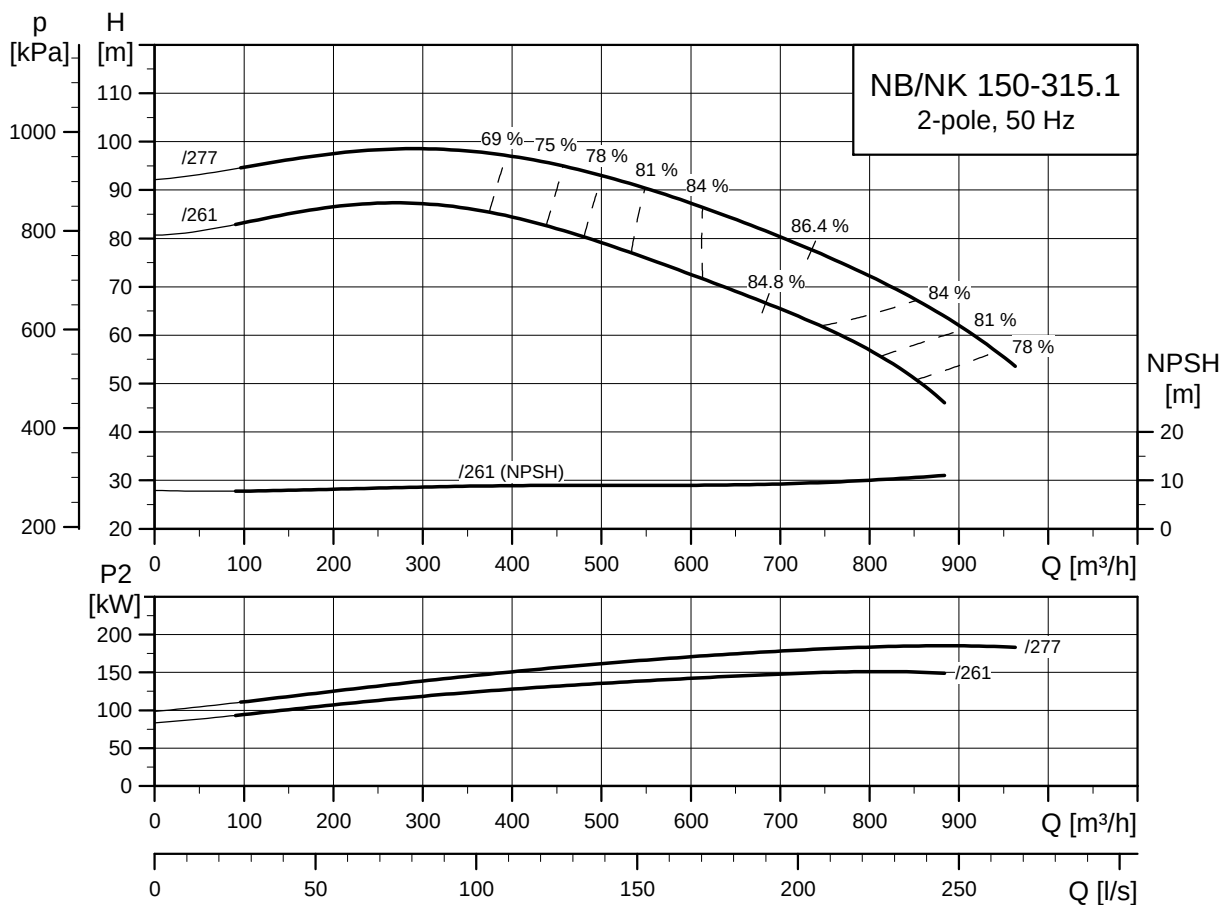
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

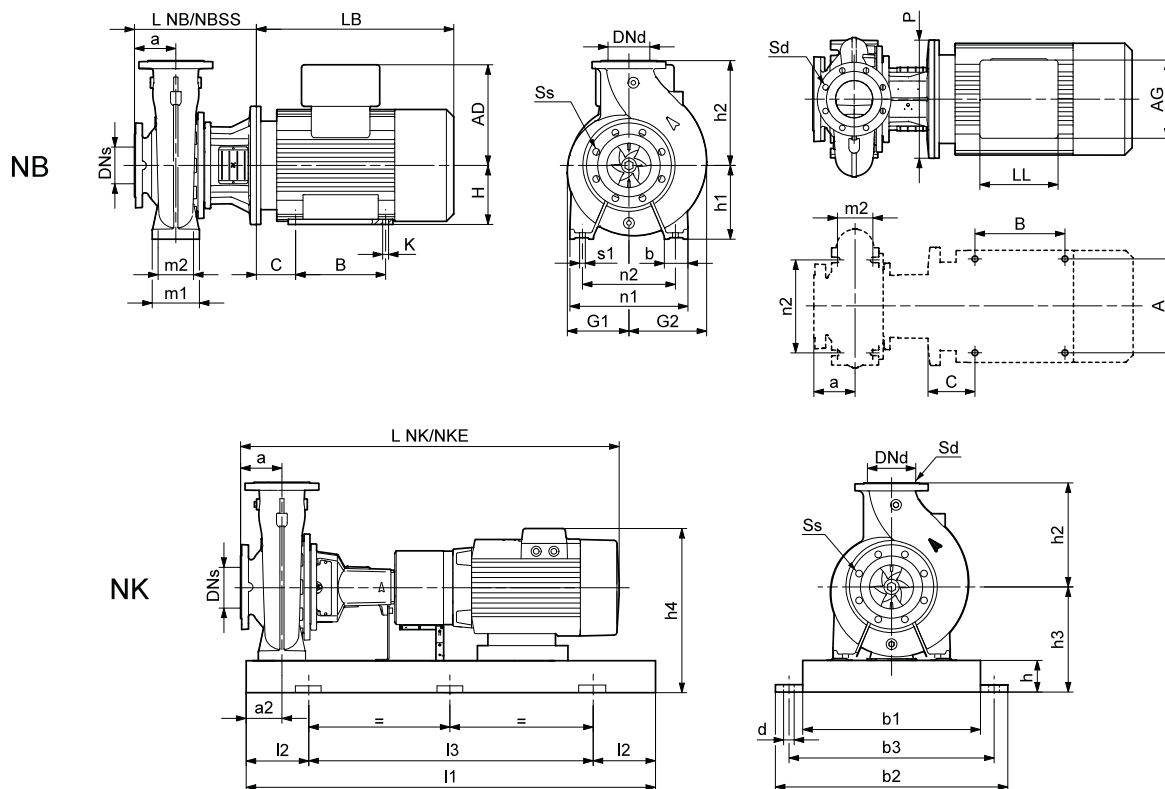
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 150-315.1



TM05 4267 4312



TM03 4182 1806

TM03 4179 1806

Pump type	150-315.1/261		150-315.1/277	
Motor type	Standard Motor ⁵⁾	Siemens 315L	Siemens 315L	
	E-Motor	-	-	
Common data NB/NK	P2	[kW]	160	200
	PN	[bar]	10	10
	DNs	[mm]	200	200
	DNd	[mm]	150	150
	a	[mm]	160	160
	h2	[mm]	375	375
	Ss	[mm]	8 x Ø23	8 x Ø23
	Sd	[mm]	8 x Ø23	8 x Ø23
NK data	L NK ¹⁾	[mm]	2191/2367	2206/2382
	L NKE ¹⁾	[mm]	-/-	-/-
	l1	[mm]	2000	2000
	l2	[mm]	330	330
	l3	[mm]	1340	1340
	b1	[mm]	750	750
	b2	[mm]	890	890
	b3	[mm]	830	830
	d	[mm]	28	28
	a2	[mm]	110	110
	h	[mm]	130	130
	h3	[mm]	450	450
	h4 ²⁾	[mm]	970/-	970/-
	Base frame no. ³⁾		10	10
NB data	Mounting design ⁴⁾		C	C
	L NB	[mm]	491	491
	L NB SS	[mm]	491	491
	h1	[mm]	280	280
	G1	[mm]	264	264
	G2	[mm]	334	334
	m1	[mm]	200	200
	m2	[mm]	150	150
	n1	[mm]	550	550
	n2	[mm]	450	450
	b	[mm]	100	100
	s1	[mm]	M20	M20
	H	[mm]	315	315
	LB ²⁾	[mm]	1077/-	1232/-
	AD ²⁾	[mm]	515/-	515/-
	AG ²⁾	[mm]	374/-	374/-
	LL ²⁾	[mm]	299/-	299/-
	P	[mm]	660	660
	C	[mm]	508	508
	B	[mm]	457	457
	A	[mm]	216	216
	K	[mm]	28	28
Weight data	Weight NK. CI ¹⁾	[kg]	1554/1552	1670/1683
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-
	Weight NB. CI	[kg]	1303	1473
	Weight NBE. CI	[kg]	-	-
	Weight diff. SS	[kg]	3	5

1) Pump with standard coupling / pump with spacer coupling.

2) Pump with standard motor / pump with E-motor (built-in frequency converter).

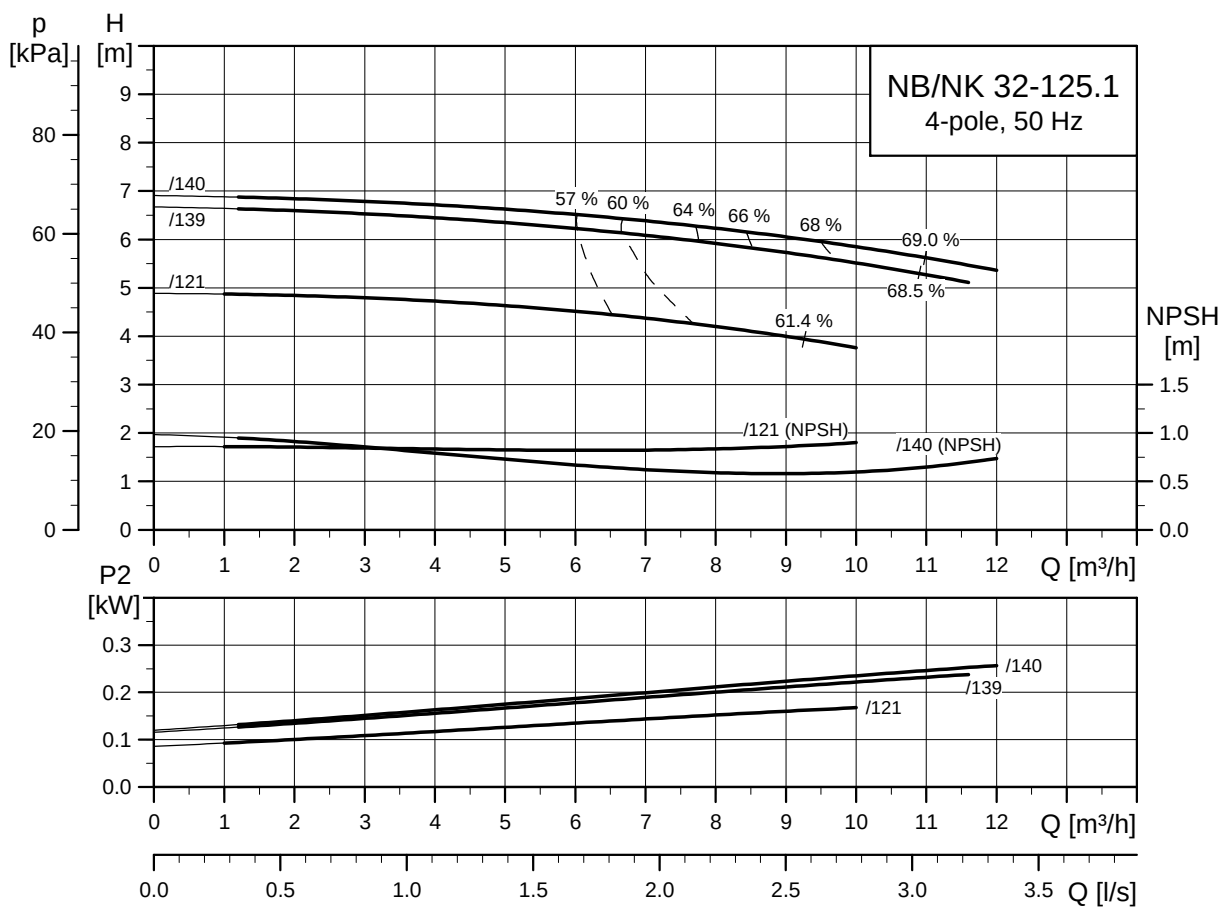
3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

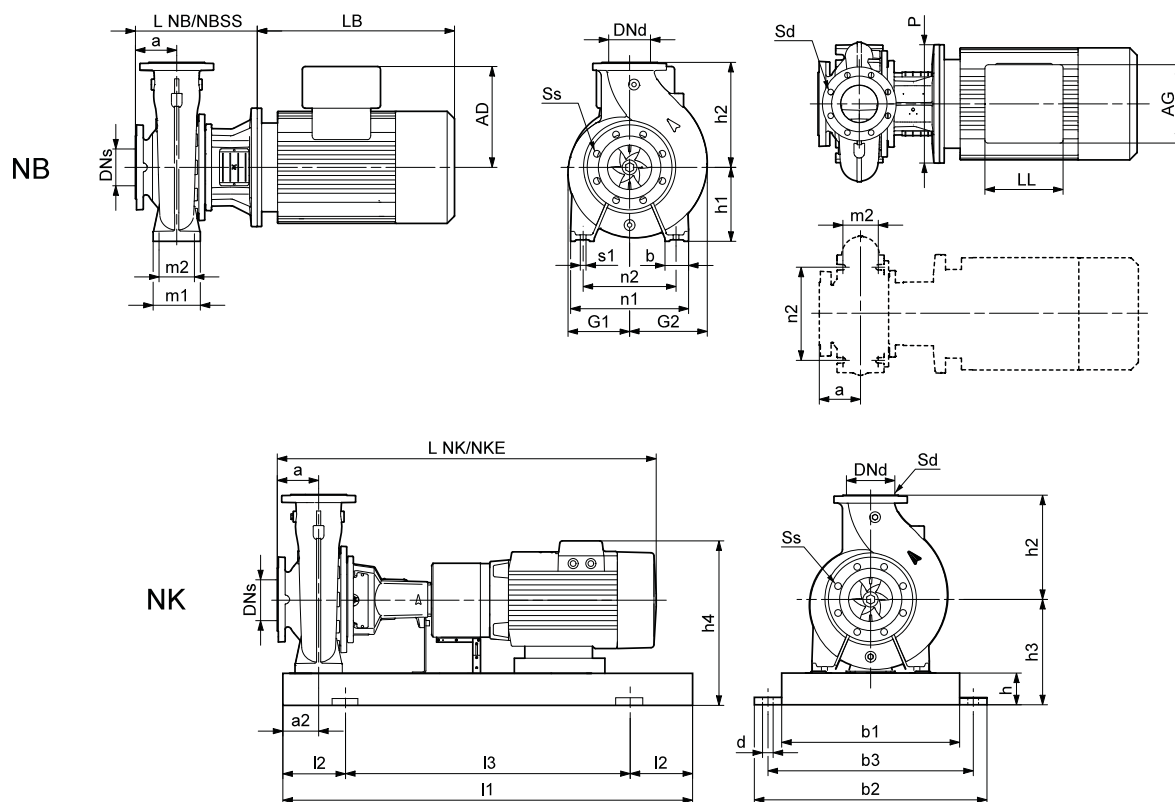
5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

4-pole

NB, NK 32-125.1



TM03 5117 4312



TM03 4180 1806

TM03 6005 4106

Pump type	32-125.1/121 32-125.1/139 32-125.1/140				
Motor type	Standard Motor ⁵⁾		MG 71A-C	MG 71A-C	MG 71B-C
	E-Motor		-	-	-
Common data NB/NK	P2	[kW]	0.25	0.25	0.37
	PN	[bar]	16	16	16
	DNs	[mm]	50	50	50
	DNd	[mm]	32	32	32
	a	[mm]	80	80	80
	h2	[mm]	140	140	140
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	675/761	675/761	675/761
	L NKE ¹⁾	[mm]	-/-	-/-	-/-
	l1	[mm]	800	800	800
	l2	[mm]	130	130	130
	l3	[mm]	540	540	540
	b1	[mm]	270	270	270
	b2	[mm]	360	360	360
	b3	[mm]	320	320	320
	d	[mm]	19	19	19
	a2	[mm]	60	60	60
	h	[mm]	65	65	65
	h3	[mm]	177	177	177
	h4 ²⁾	[mm]	286/-	286/-	286/-
Base frame no. ³⁾		2	2	2	
NB data	Mounting design ⁴⁾		A	A	A
	L NB	[mm]	201	201	201
	L NB SS	[mm]	201	201	201
	h1	[mm]	112	112	112
	G1	[mm]	117	117	117
	G2	[mm]	117	117	117
	m1	[mm]	100	100	100
	m2	[mm]	70	70	70
	n1	[mm]	190	190	190
	n2	[mm]	140	140	140
	b	[mm]	50	50	50
	s1	[mm]	M12	M12	M12
	H	[mm]	-	-	-
	LB ²⁾	[mm]	191/-	191/-	191/-
	AD ²⁾	[mm]	109/-	109/-	109/-
	AG ²⁾	[mm]	82/-	82/-	82/-
	LL ²⁾	[mm]	82/-	82/-	82/-
	P	[mm]	160	160	160
	C	[mm]	-	-	-
	B	[mm]	-	-	-
	A	[mm]	-	-	-
	K	[mm]	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	80/80	80/80	81/81
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-
	Weight NB. CI	[kg]	32	32	32
	Weight NBE. CI	[kg]	-	-	-
	Weight diff. SS	[kg]	1	1	1

1) Pump with standard coupling / pump with spacer coupling.

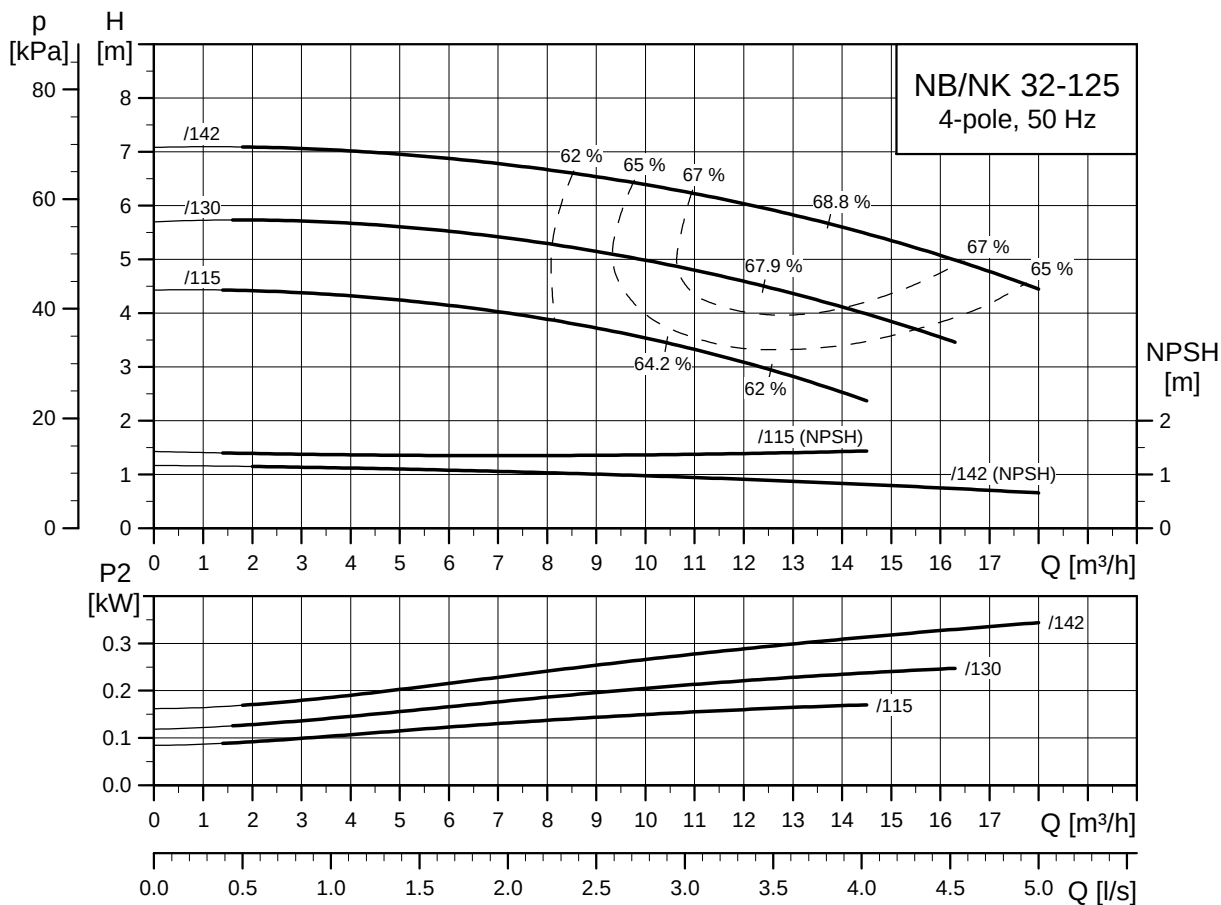
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

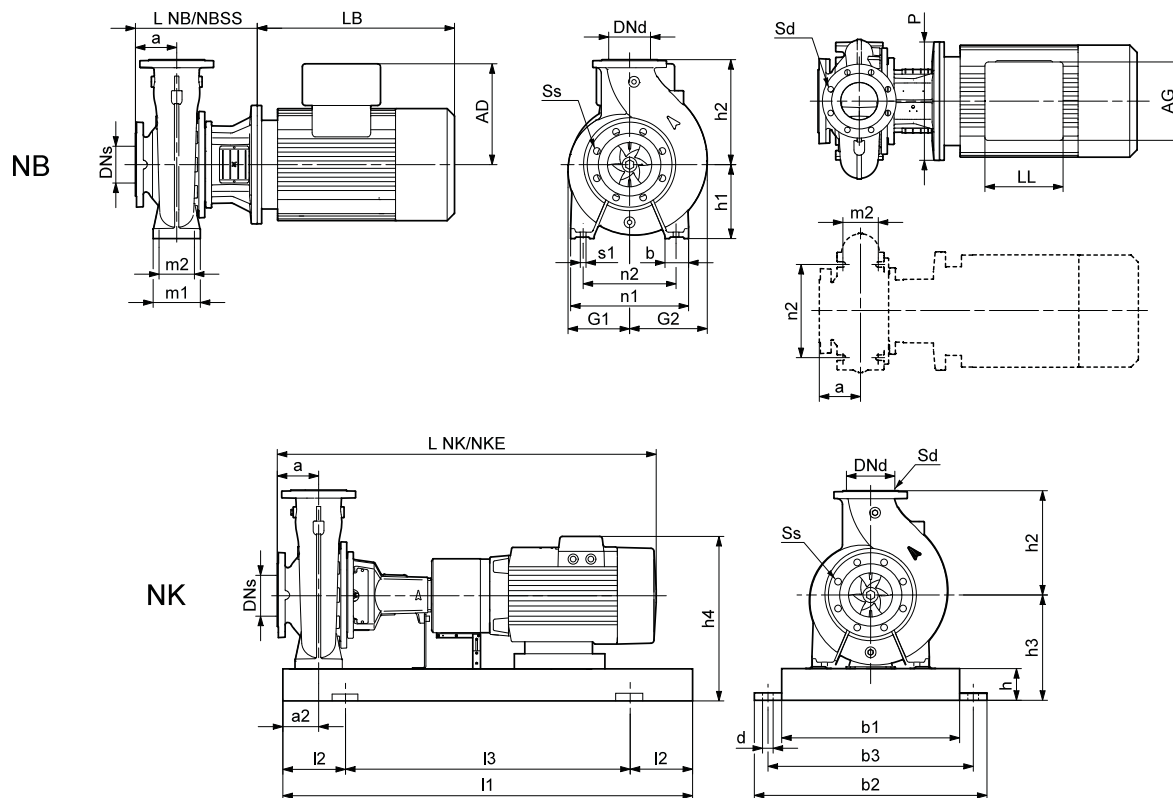
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 32-125



TM03 5120 4312



TM03 4180 1806

TM03 6005 4106

Pump type	32-125/115 32-125/130 32-125/142				
Motor type	Standard Motor ⁵⁾		MG 71A-C	MG 71A-C	MG 71B-C
	E-Motor		-	-	-
Common data NB/NK	P2	[kW]	0.25	0.25	0.37
	PN	[bar]	16	16	16
	DNs	[mm]	50	50	50
	DNd	[mm]	32	32	32
	a	[mm]	80	80	80
	h2	[mm]	140	140	140
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	675/761	675/761	675/761
	L NKE ¹⁾	[mm]	-/-	-/-	-/-
	l1	[mm]	800	800	800
	l2	[mm]	130	130	130
	l3	[mm]	540	540	540
	b1	[mm]	270	270	270
	b2	[mm]	360	360	360
	b3	[mm]	320	320	320
	d	[mm]	19	19	19
	a2	[mm]	60	60	60
	h	[mm]	65	65	65
	h3	[mm]	177	177	177
	h4 ²⁾	[mm]	286/-	286/-	286/-
	Base frame no. ³⁾		2	2	2
NB data	Mounting design ⁴⁾		A	A	A
	L NB	[mm]	201	201	201
	L NB SS	[mm]	201	201	201
	h1	[mm]	112	112	112
	G1	[mm]	117	117	117
	G2	[mm]	117	117	117
	m1	[mm]	100	100	100
	m2	[mm]	70	70	70
	n1	[mm]	190	190	190
	n2	[mm]	140	140	140
	b	[mm]	50	50	50
	s1	[mm]	M12	M12	M12
	H	[mm]	-	-	-
	LB ²⁾	[mm]	191/-	191/-	191/-
	AD ²⁾	[mm]	109/-	109/-	109/-
	AG ²⁾	[mm]	82/-	82/-	82/-
	LL ²⁾	[mm]	82/-	82/-	82/-
	P	[mm]	160	160	160
	C	[mm]	-	-	-
	B	[mm]	-	-	-
	A	[mm]	-	-	-
	K	[mm]	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	81/81	81/81	81/81
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-
	Weight NB. CI	[kg]	32	32	33
	Weight NBE. CI	[kg]	-	-	-
	Weight diff. SS	[kg]	1	1	1

1) Pump with standard coupling / pump with spacer coupling.

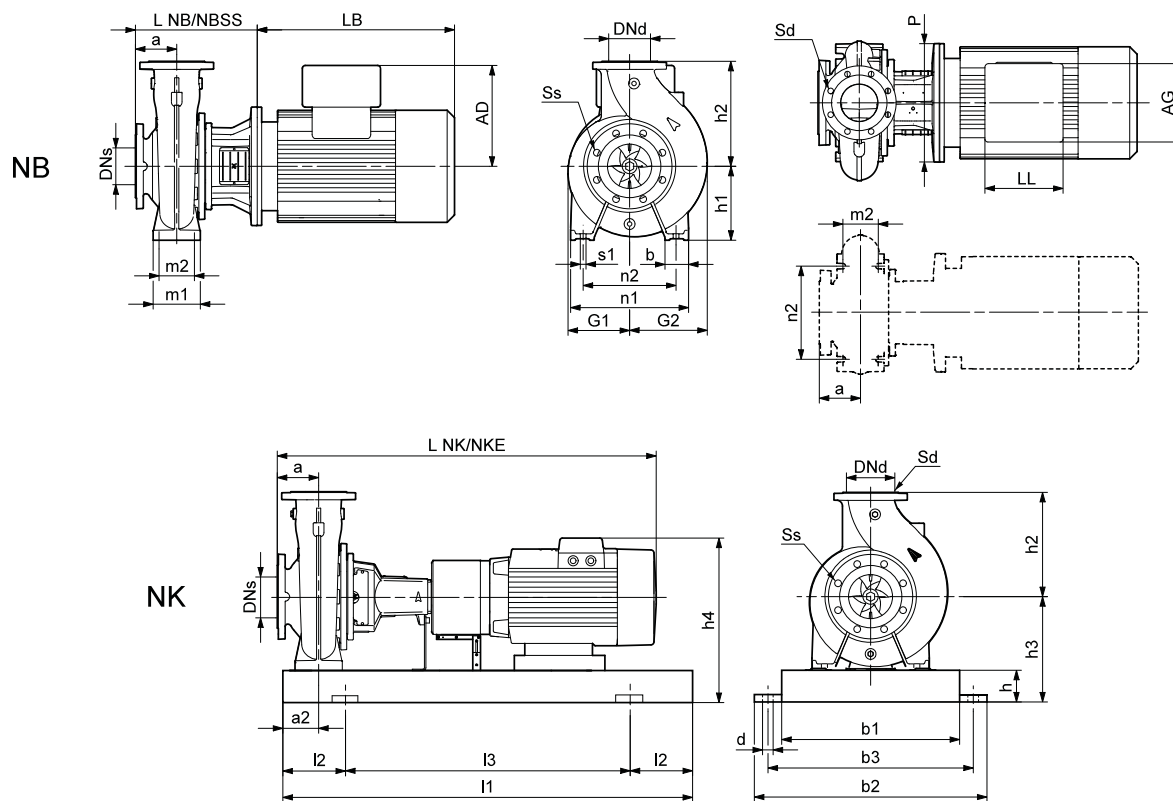
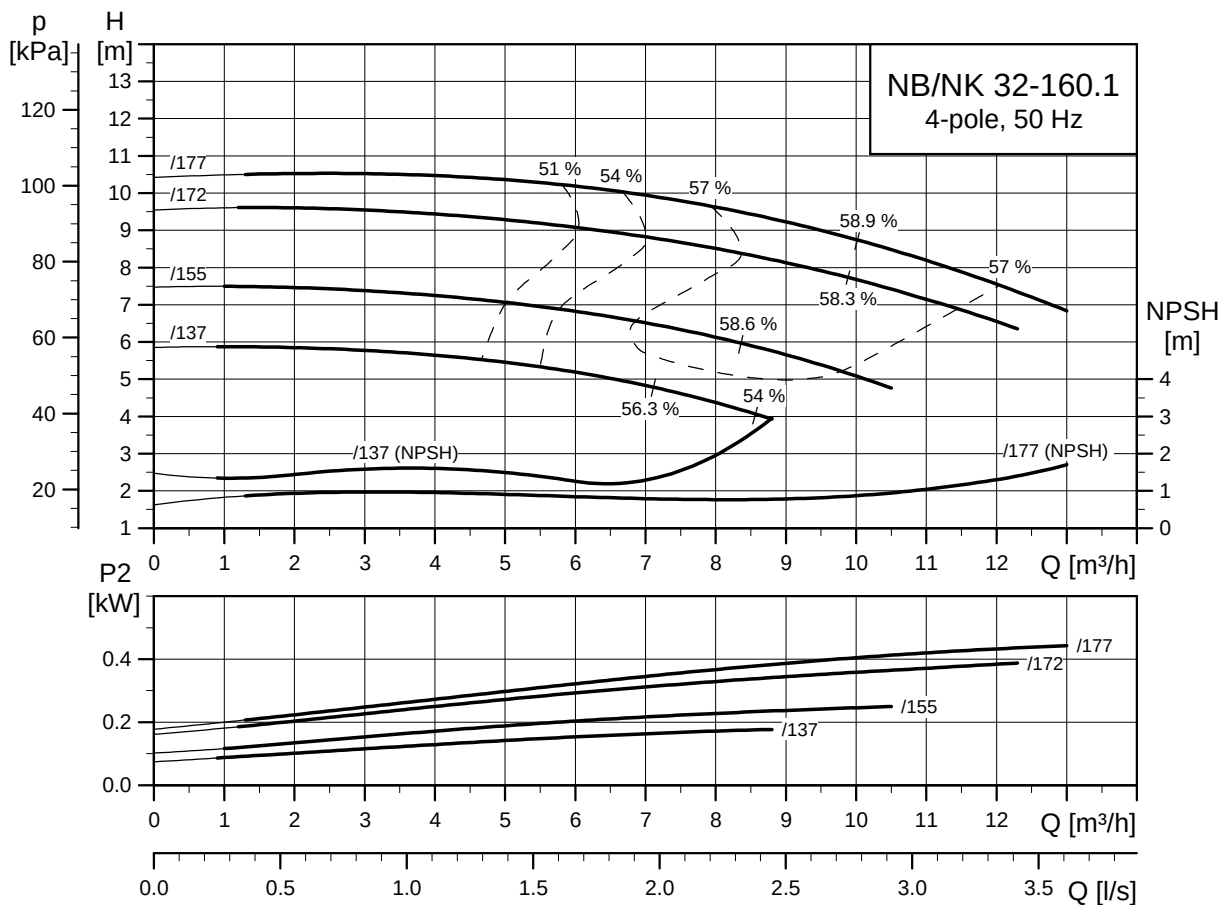
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 32-160.1



TM03 5118 4312

TM03 4180 1806

TM03 6005 4106

Pump type		32-160.1/137	32-160.1/155	32-160.1/172	32-160.1/177
Motor type	Standard Motor ⁵⁾	MG 71A-C	MG 71A-C	MG 71B-C	MG 80A-C
	E-Motor	-	-	-	-
Common data NB/NK	P2	[kW]	0.25	0.25	0.37
	PN	[bar]	16	16	16
	DNs	[mm]	50	50	50
	DNd	[mm]	32	32	32
	a	[mm]	80	80	80
	h2	[mm]	160	160	160
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	675/761	675/761	715/811
	L NKE ¹⁾	[mm]	-/-	-/-	-/-
	l1	[mm]	1000	1000	1000
	l2	[mm]	170	170	170
	l3	[mm]	660	660	660
	b1	[mm]	340	340	340
	b2	[mm]	450	450	450
	b3	[mm]	400	400	400
	d	[mm]	24	24	24
	a2	[mm]	60	60	60
	h	[mm]	80	80	80
	h3	[mm]	212	212	212
	h4 ²⁾	[mm]	321/-	321/-	321/-
	Base frame no. ³⁾		4	4	4
NB data	Mounting design ⁴⁾		A	A	A
	L NB	[mm]	201	201	226
	L NB SS	[mm]	201	201	226
	h1	[mm]	132	132	132
	G1	[mm]	117	117	117
	G2	[mm]	123	123	123
	m1	[mm]	100	100	100
	m2	[mm]	70	70	70
	n1	[mm]	240	240	240
	n2	[mm]	190	190	190
	b	[mm]	50	50	50
	s1	[mm]	M12	M12	M12
	H	[mm]	-	-	-
	LB ²⁾	[mm]	191/-	191/-	231/-
	AD ²⁾	[mm]	109/-	109/-	109/-
	AG ²⁾	[mm]	82/-	82/-	82/-
	LL ²⁾	[mm]	82/-	82/-	82/-
	P	[mm]	160	160	200
	C	[mm]	-	-	-
	B	[mm]	-	-	-
	A	[mm]	-	-	-
	K	[mm]	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	100/100	100/100	101/101
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-
	Weight NB. CI	[kg]	33	33	37
	Weight NBE. CI	[kg]	-	-	-
	Weight diff. SS	[kg]	2	2	2

1) Pump with standard coupling / pump with spacer coupling.

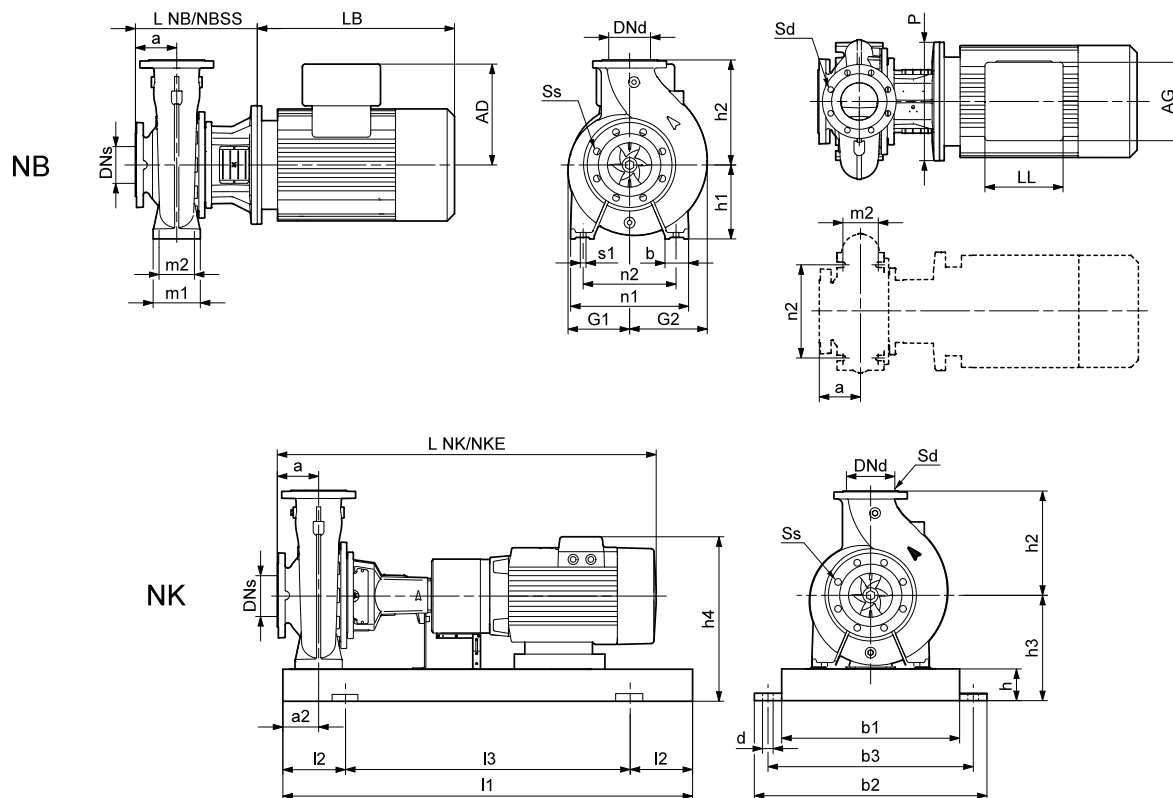
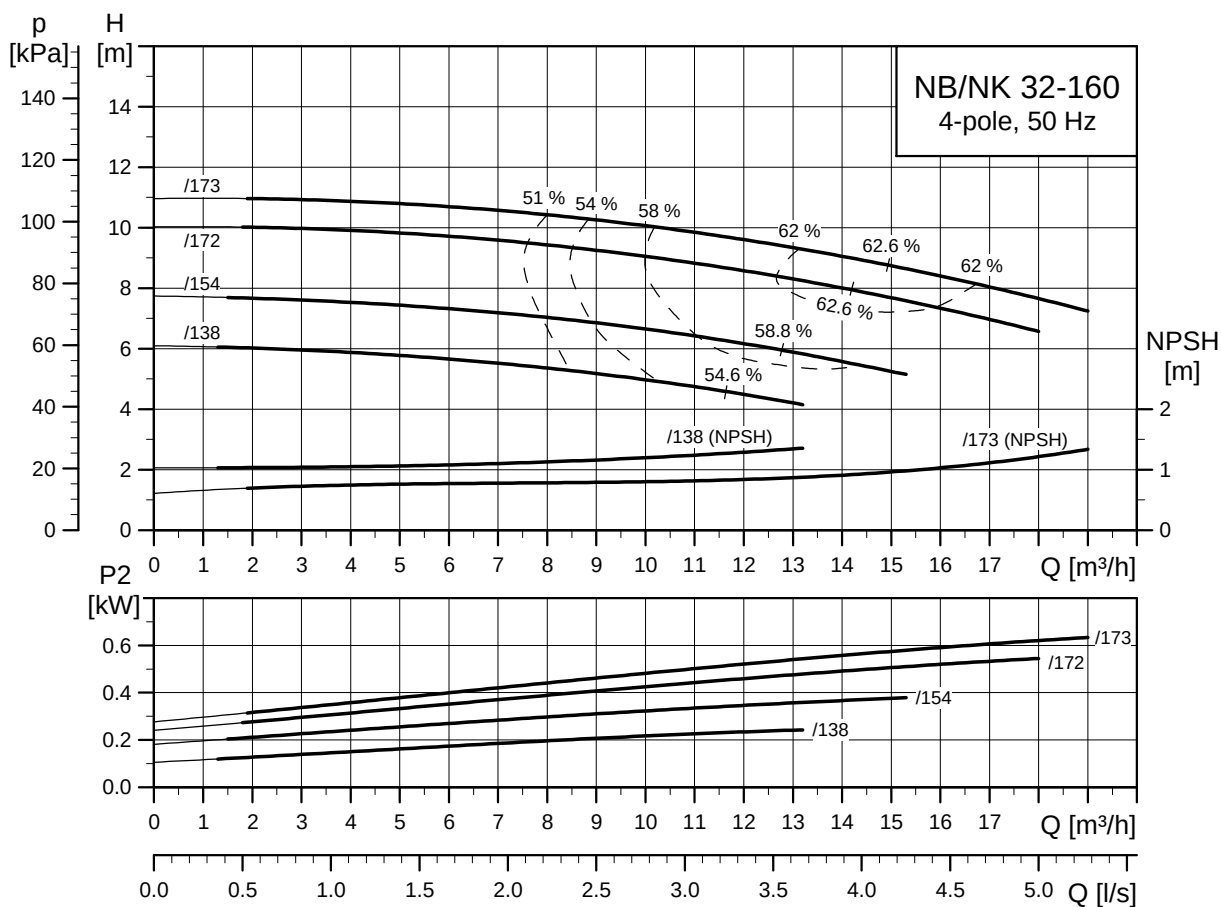
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 32-160



TM03 5121 4312

TM03 4180 1806

TM03 6005 4106

Pump type		32-160/138	32-160/154	32-160/172	32-160/173
Motor type	Standard Motor ⁵⁾	MG 71A-C	MG 71B-C	MG 80A-C	MG 90SC-H3
	E-Motor	-	-	-	MGE 90SA-G
Common data NB/NK	P2	[kW]	0.25	0.37	0.55
	PN	[bar]	16	16	16
	DNs	[mm]	50	50	50
	DNd	[mm]	32	32	32
	a	[mm]	80	80	80
	h2	[mm]	160	160	160
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	675/761	675/761	715/811
	L NKE ¹⁾	[mm]	-/-	-/-	-/-
	I1	[mm]	1000	1000	1000
	I2	[mm]	170	170	170
	I3	[mm]	660	660	660
	b1	[mm]	340	340	340
	b2	[mm]	450	450	450
	b3	[mm]	400	400	400
	d	[mm]	24	24	24
	a2	[mm]	60	60	60
	h	[mm]	80	80	80
	h3	[mm]	212	212	212
	h4 ²⁾	[mm]	321/-	321/-	321/-
	Base frame no. ³⁾		4	4	4
NB data	Mounting design ⁴⁾		A	A	A
	L NB	[mm]	201	201	226
	L NB SS	[mm]	201	201	226
	h1	[mm]	132	132	132
	G1	[mm]	117	117	117
	G2	[mm]	125	125	125
	m1	[mm]	100	100	100
	m2	[mm]	70	70	70
	n1	[mm]	240	240	240
	n2	[mm]	190	190	190
	b	[mm]	50	50	50
	s1	[mm]	M12	M12	M12
	H	[mm]	-	-	-
	LB ²⁾	[mm]	191/-	191/-	231/-
	AD ²⁾	[mm]	109/-	109/-	109/-
	AG ²⁾	[mm]	82/-	82/-	82/-
	LL ²⁾	[mm]	82/-	82/-	82/-
	P	[mm]	160	160	200
	C	[mm]	-	-	-
	B	[mm]	-	-	-
	A	[mm]	-	-	-
	K	[mm]	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	101/101	102/102	104/104
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-
	Weight NB. CI	[kg]	34	34	38
	Weight NBE. CI	[kg]	-	-	-
	Weight diff. SS	[kg]	2	2	2

1) Pump with standard coupling / pump with spacer coupling.

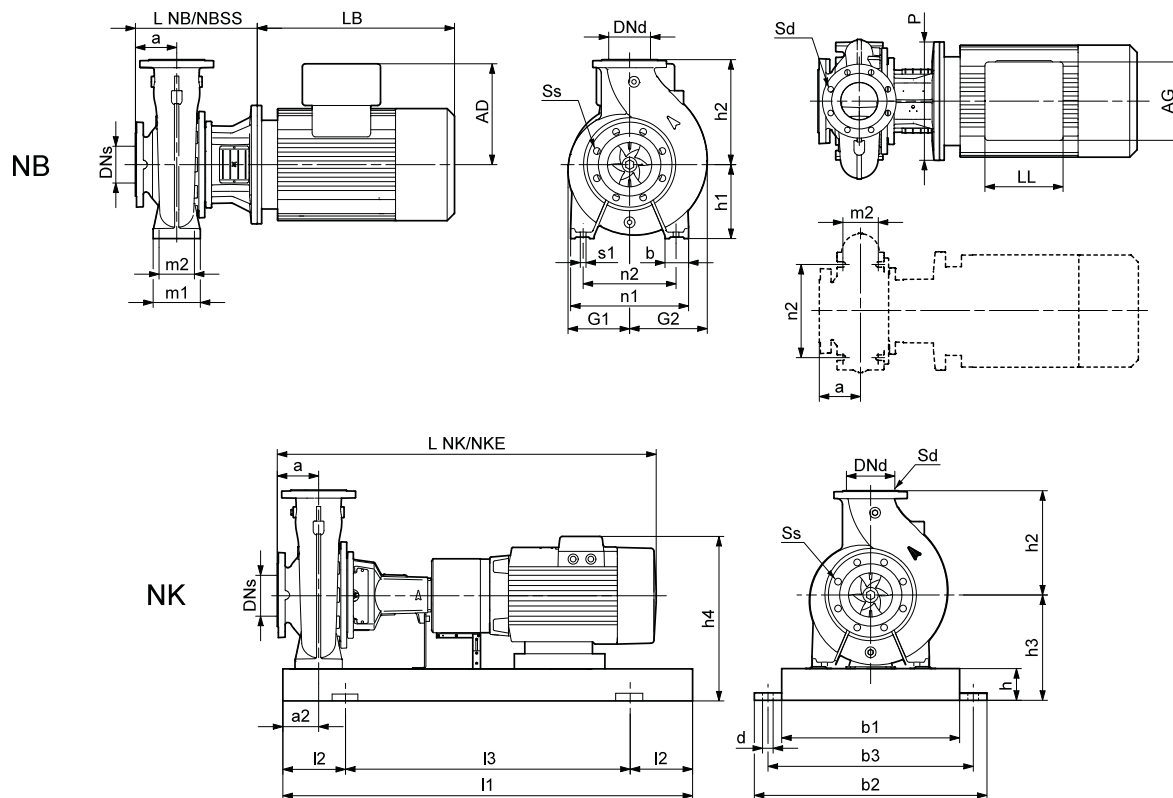
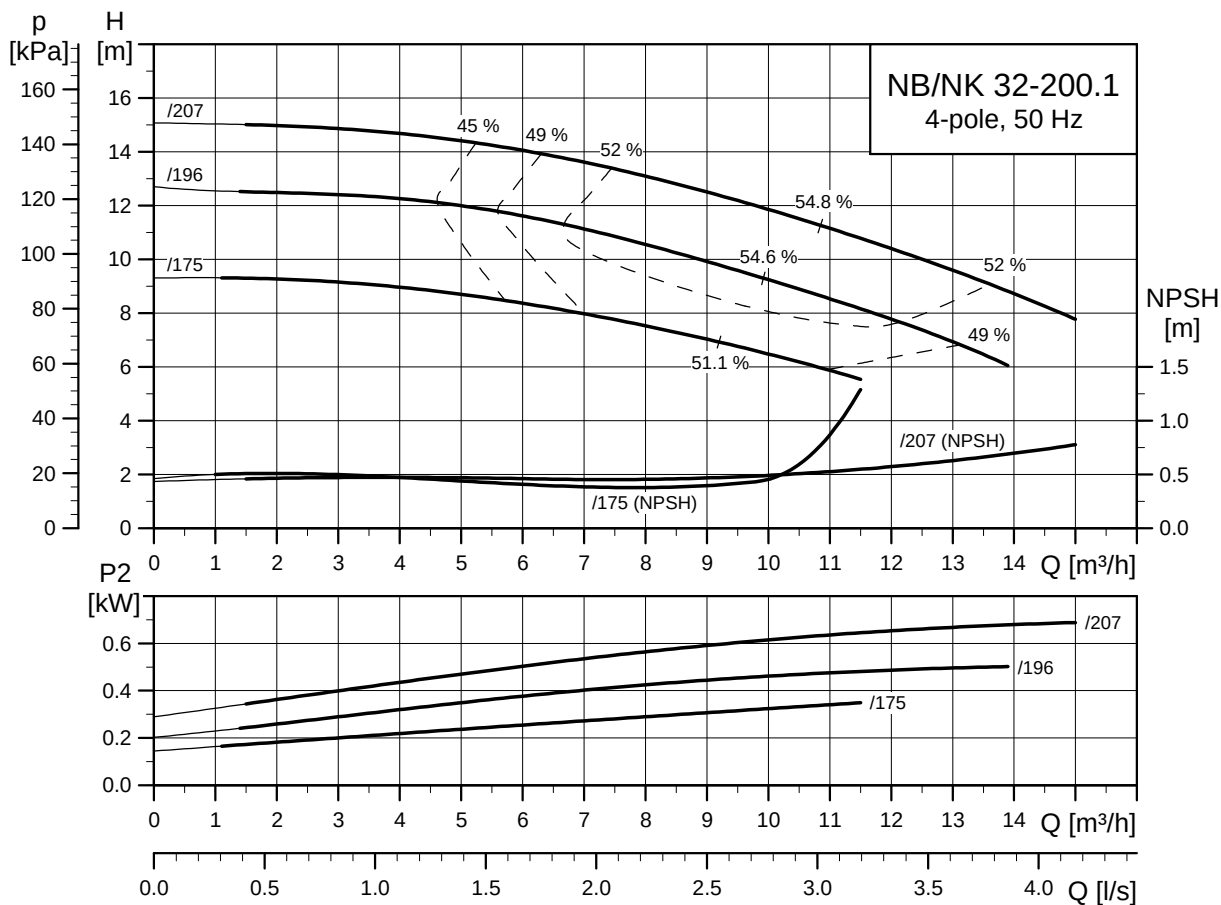
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 32-200.1



TM03 5119 4312

TM03 4180 1806

TM03 6005 4106

Pump type	32-200.1/175 32-200.1/196 32-200.1/207				
Motor type	Standard Motor ⁵⁾		MG 71B-C	MG 80A-C	MG 90SC-H3
	E-Motor		-	-	MGE 90SA-G
Common data NB/NK	P2	[kW]	0.37	0.55	0.75
	PN	[bar]	16	16	16
	DNs	[mm]	50	50	50
	DNd	[mm]	32	32	32
	a	[mm]	80	80	80
	h2	[mm]	180	180	180
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	675/761	715/811	765/861
	L NKE ¹⁾	[mm]	-/-	-/-	765/861
	l1	[mm]	1000	1000	1000
	l2	[mm]	170	170	170
	l3	[mm]	660	660	660
	b1	[mm]	340	340	340
	b2	[mm]	450	450	450
	b3	[mm]	400	400	400
	d	[mm]	24	24	24
	a2	[mm]	60	60	60
	h	[mm]	80	80	80
	h3	[mm]	240	240	240
	h4 ²⁾	[mm]	349/-	349/-	350/418
Base frame no. ³⁾		4	4	4	
NB data	Mounting design ⁴⁾		A	A	A
	L NB	[mm]	243	226	226
	L NB SS	[mm]	243	226	226
	h1	[mm]	160	160	160
	G1	[mm]	135	135	135
	G2	[mm]	137	137	137
	m1	[mm]	100	100	100
	m2	[mm]	70	70	70
	n1	[mm]	240	240	240
	n2	[mm]	190	190	190
	b	[mm]	50	50	50
	s1	[mm]	M12	M12	M12
	H	[mm]	-	-	-
	LB ²⁾	[mm]	191/-	231/-	281/359
	AD ²⁾	[mm]	109/-	109/-	110/178
	AG ²⁾	[mm]	82/-	82/-	162/257
	LL ²⁾	[mm]	82/-	82/-	103/253
	P	[mm]	160	200	200
	C	[mm]	-	-	-
	B	[mm]	-	-	-
	A	[mm]	-	-	-
	K	[mm]	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	110/110	113/113	114/114
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	123/122
	Weight NB. CI	[kg]	45	44	45
	Weight NBE. CI	[kg]	-	-	58
	Weight diff. SS	[kg]	2	2	2

1) Pump with standard coupling / pump with spacer coupling.

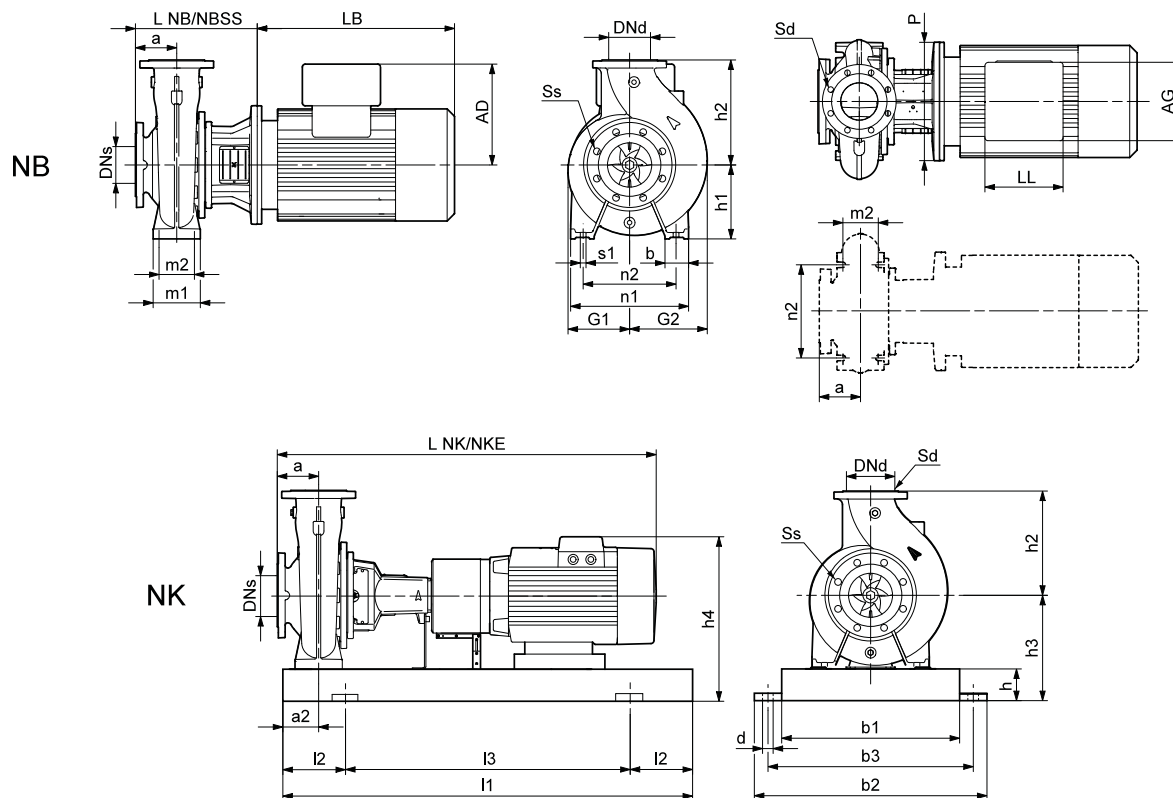
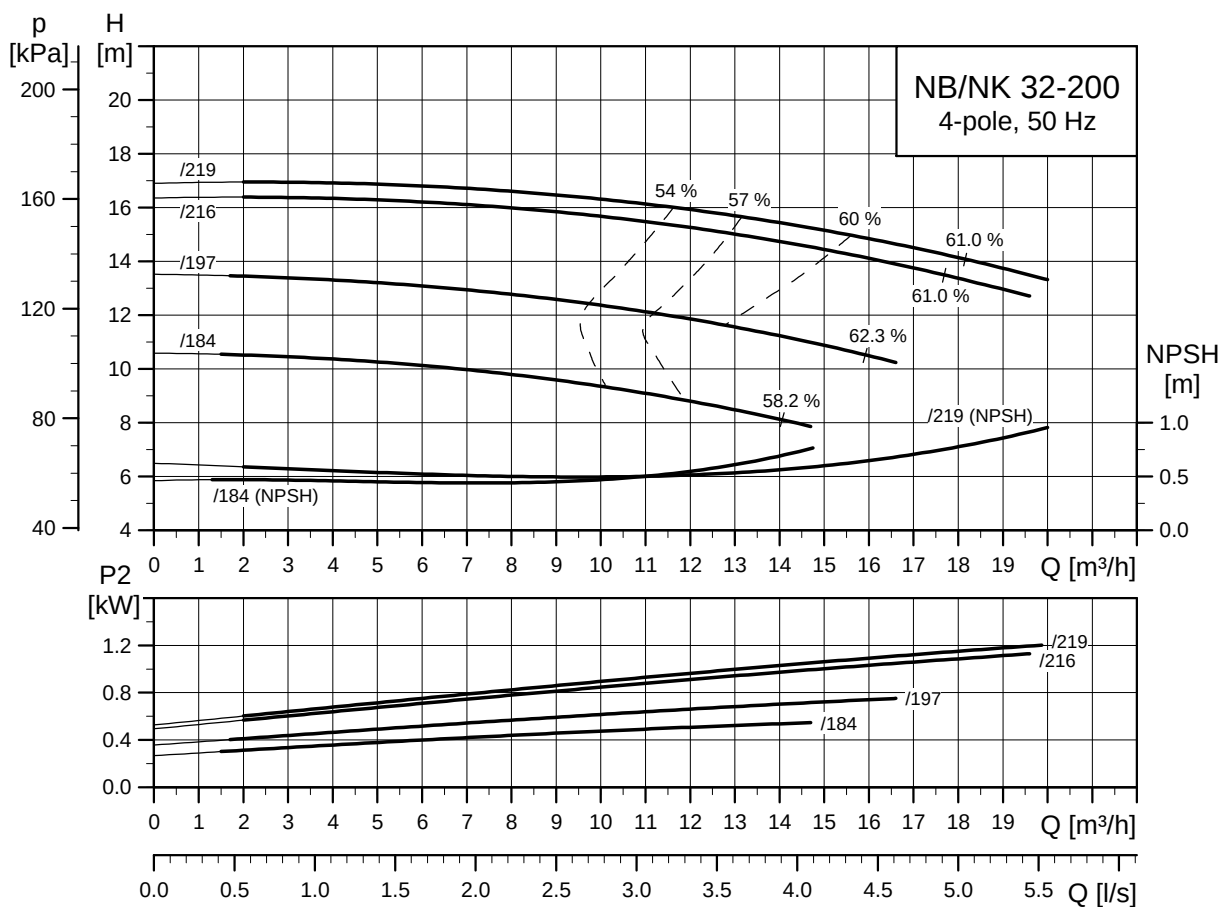
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 32-200



TM03 5122 4312

TM03 4180 1806

TM03 6005 4106

Pump type		32-200/184	32-200/197	32-200/216	32-200/219
Motor type	Standard Motor ⁵⁾	MG 80A-C	MG 90SC-H3	MG 90SB-H3	MG 90LC-H3
	E-Motor	-	MGE 90SA-G	MGE 90SB-G	MGE 90LC-G
Common data NB/NK	P2	[kW]	0.55	0.75	1.1
	PN	[bar]	16	16	16
	DNs	[mm]	50	50	50
	DNd	[mm]	32	32	32
	a	[mm]	80	80	80
	h2	[mm]	180	180	180
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	715/811	765/861	775/871
	L NKE ¹⁾	[mm]	-/-	765/861	815/911
	l1	[mm]	1000	1000	1000
	l2	[mm]	170	170	170
	l3	[mm]	660	660	660
	b1	[mm]	340	340	340
	b2	[mm]	450	450	450
	b3	[mm]	400	400	400
	d	[mm]	24	24	24
	a2	[mm]	60	60	60
	h	[mm]	80	80	80
	h3	[mm]	240	240	240
	h4 ²⁾	[mm]	349/-	350/418	350/425
	Base frame no. ³⁾		4	4	4
NB data	Mounting design ⁴⁾		A	A	A
	L NB	[mm]	226	226	226
	L NB SS	[mm]	226	226	226
	h1	[mm]	160	160	160
	G1	[mm]	124	124	124
	G2	[mm]	145	145	145
	m1	[mm]	100	100	100
	m2	[mm]	70	70	70
	n1	[mm]	240	240	240
	n2	[mm]	190	190	190
	b	[mm]	50	50	50
	s1	[mm]	M12	M12	M12
	H	[mm]	-	-	-
	LB ²⁾	[mm]	231/-	281/359	281/321
	AD ²⁾	[mm]	109/-	110/178	110/185
	AG ²⁾	[mm]	82/-	162/257	162/177
	LL ²⁾	[mm]	82/-	103/253	103/232
	P	[mm]	200	200	200
	C	[mm]	-	-	-
	B	[mm]	-	-	-
	A	[mm]	-	-	-
	K	[mm]	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	113/113	115/115	123/122
	Weight NKE. CI ¹⁾	[kg]	-/-	123/122	129/128
	Weight NB. CI	[kg]	44	45	56
	Weight NBE. CI	[kg]	-	58	59
	Weight diff. SS	[kg]	2	2	2

1) Pump with standard coupling / pump with spacer coupling.

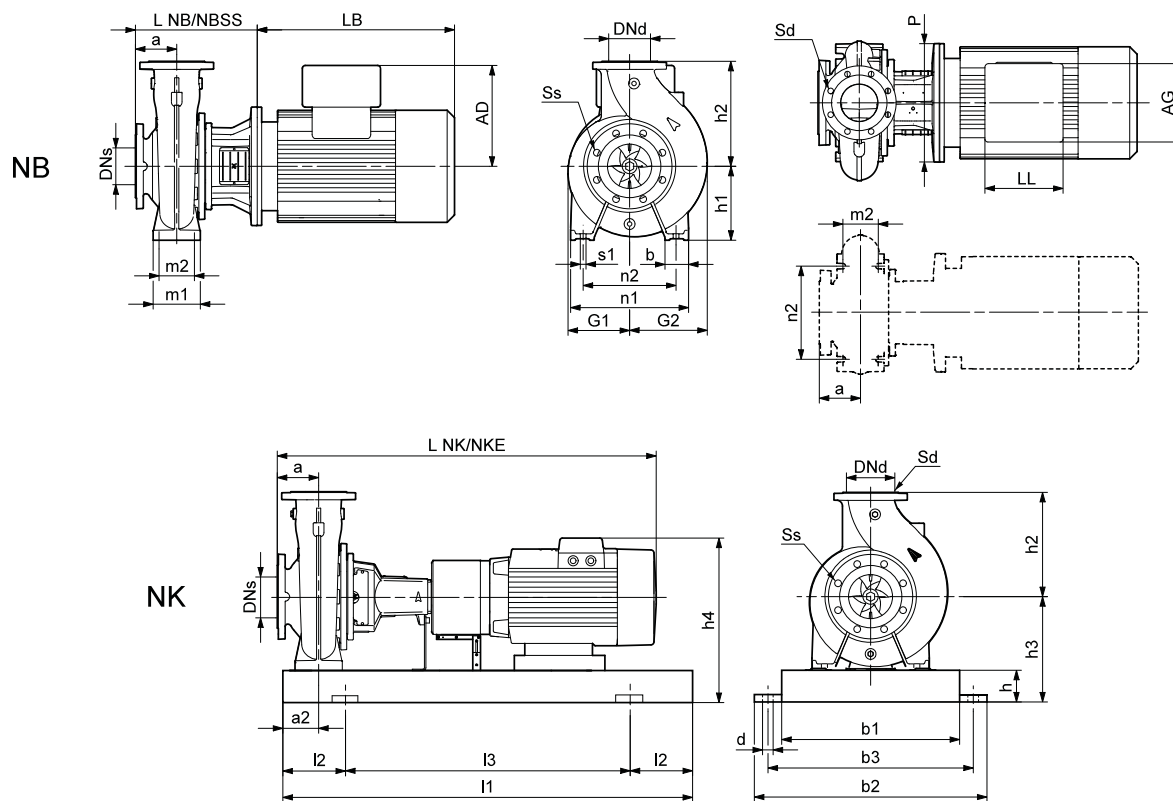
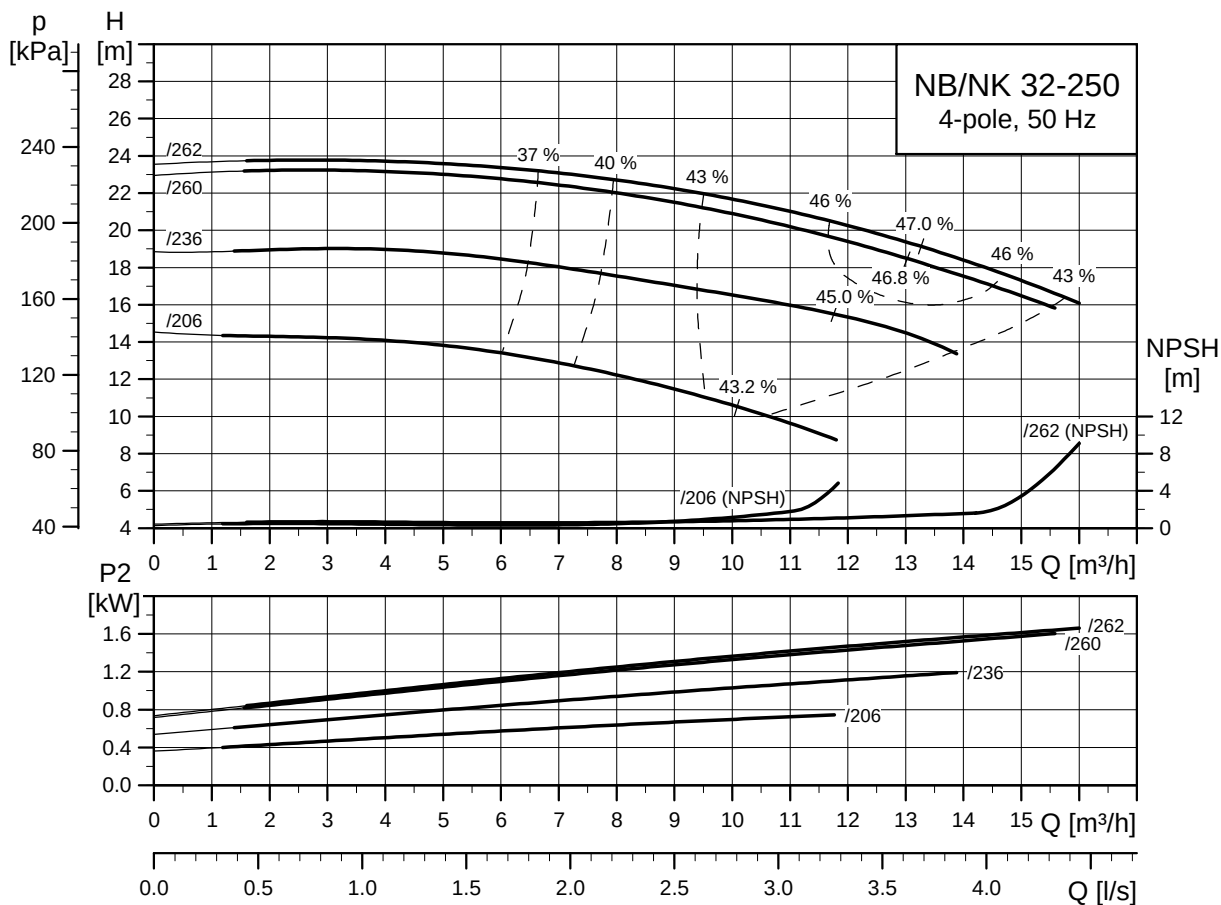
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 32-250



TM03 5123 4312

TM03 4180 1806

TM03 6005 4106

Pump type		32-250/206	32-250/236	32-250/260	32-250/262
Motor type	Standard Motor ⁵⁾	MG 90SC-H3	MG 90SB-H3	MG 90LC-H3	MG 100LB-H3
	E-Motor	MGE 90SA-G	MGE 90SB-G	MGE 90LC-G	MGE 100LB-G
Common data NB/NK	P2	[kW]	0.75	1.1	1.5
	PN	[bar]	16	16	16
	DNs	[mm]	50	50	50
	DNd	[mm]	32	32	32
	a	[mm]	100	100	100
	h2	[mm]	225	225	225
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	785/881	795/891	835/931
	L NKE ¹⁾	[mm]	785/881	835/931	835/931
	I1	[mm]	1120	1120	1120
	I2	[mm]	190	190	190
	I3	[mm]	740	740	740
	b1	[mm]	380	380	380
	b2	[mm]	490	490	490
	b3	[mm]	440	440	440
	d	[mm]	24	24	24
	a2	[mm]	75	75	75
	h	[mm]	80	80	80
	h3	[mm]	260	260	260
	h4 ²⁾	[mm]	370/438	370/445	370/445
	Base frame no. ³⁾		5	5	5
	Mounting design ⁴⁾		A	A	A
NB data	L NB	[mm]	273	273	273
	L NB SS	[mm]	273	273	273
	h1	[mm]	180	180	180
	G1	[mm]	162	162	162
	G2	[mm]	164	164	164
	m1	[mm]	125	125	125
	m2	[mm]	95	95	95
	n1	[mm]	320	320	320
	n2	[mm]	250	250	250
	b	[mm]	65	65	65
	s1	[mm]	M12	M12	M12
	H	[mm]	-	-	-
	LB ²⁾	[mm]	281/359	281/321	321/308
	AD ²⁾	[mm]	110/178	110/185	110/185
	AG ²⁾	[mm]	162/257	162/177	162/177
	LL ²⁾	[mm]	103/253	103/232	103/232
	P	[mm]	200	200	200
	C	[mm]	-	-	-
	B	[mm]	-	-	-
	A	[mm]	-	-	-
	K	[mm]	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	137/137	148/147	149/148
	Weight NKE. CI ¹⁾	[kg]	149/148	155/154	156/155
	Weight NB. CI	[kg]	58	69	70
	Weight NBE. CI	[kg]	71	69	72
	Weight diff. SS	[kg]	4	4	4

1) Pump with standard coupling / pump with spacer coupling.

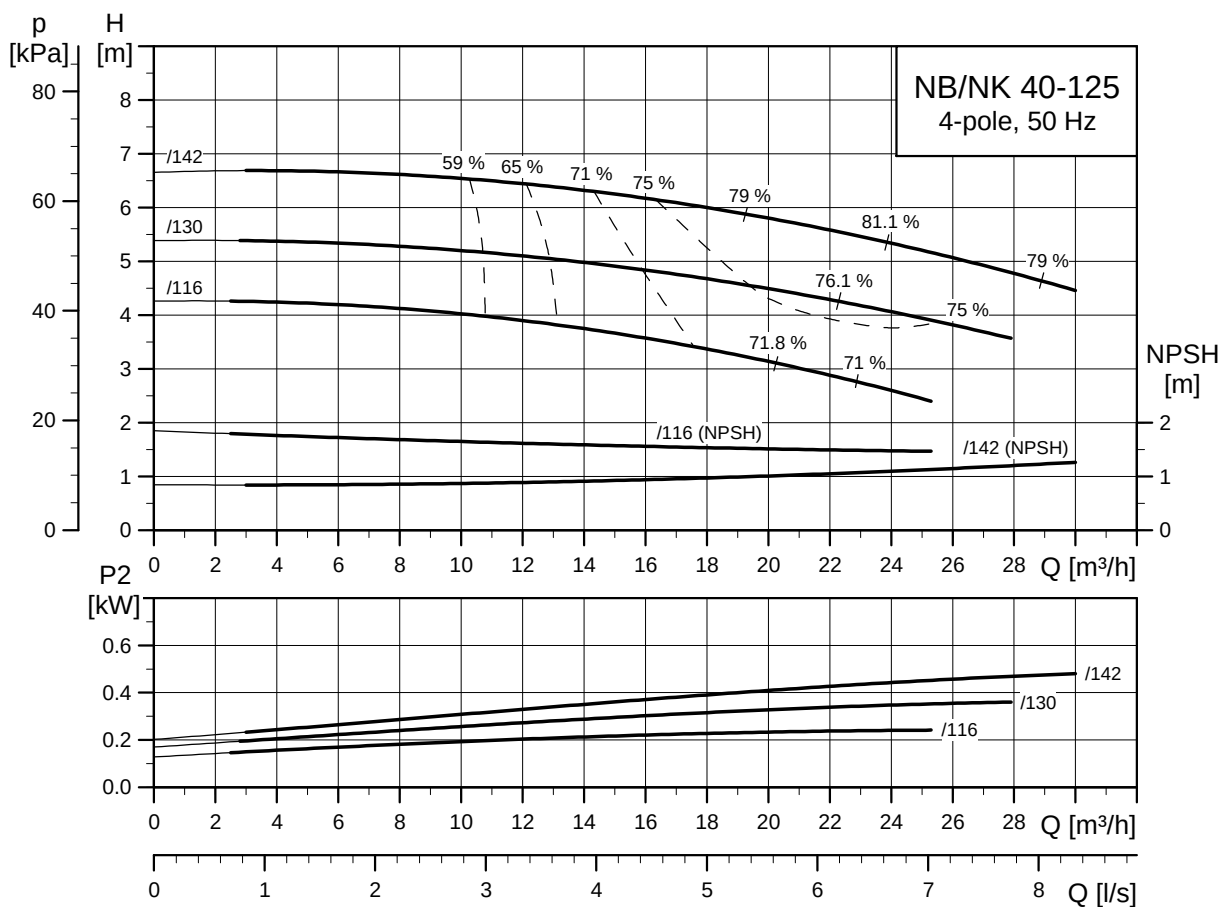
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

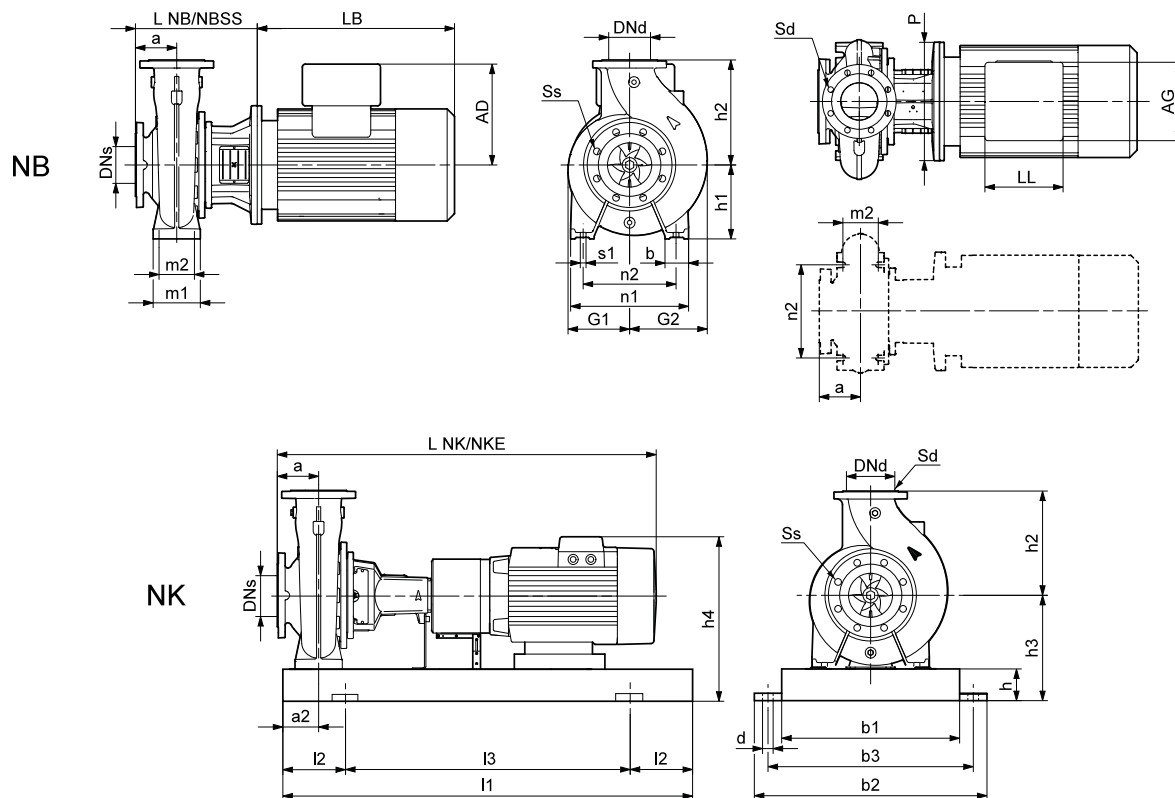
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 40-125



TM03 5124 4312



TM03 4180 1806

TM03 6005 4106

Pump type	40-125/116 40-125/130 40-125/142				
Motor type	Standard Motor ⁵⁾		MG 71A-C	MG 71B-C	MG 80A-C
	E-Motor		-	-	-
Common data NB/NK	P2	[kW]	0.25	0.37	0.55
	PN	[bar]	16	16	16
	DNs	[mm]	65	65	65
	DNd	[mm]	40	40	40
	a	[mm]	80	80	80
	h2	[mm]	140	140	140
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	675/761	675/761	715/811
	L NKE ¹⁾	[mm]	-/-	-/-	-/-
	I1	[mm]	900	900	900
	I2	[mm]	150	150	150
	I3	[mm]	600	600	600
	b1	[mm]	300	300	300
	b2	[mm]	390	390	390
	b3	[mm]	345	345	345
	d	[mm]	19	19	19
	a2	[mm]	60	60	60
	h	[mm]	65	65	65
	h3	[mm]	177	177	177
	h4 ²⁾	[mm]	286/-	286/-	286/-
	Base frame no. ³⁾		3	3	3
NB data	Mounting design ⁴⁾		A	A	A
	L NB	[mm]	201	201	226
	L NB SS	[mm]	243	243	253
	h1	[mm]	112	112	112
	G1	[mm]	117	117	117
	G2	[mm]	118	118	118
	m1	[mm]	100	100	100
	m2	[mm]	70	70	70
	n1	[mm]	210	210	210
	n2	[mm]	160	160	160
	b	[mm]	50	50	50
	s1	[mm]	M12	M12	M12
	H	[mm]	-	-	-
	LB ²⁾	[mm]	191/-	191/-	231/-
	AD ²⁾	[mm]	109/-	109/-	109/-
	AG ²⁾	[mm]	82/-	82/-	82/-
	LL ²⁾	[mm]	82/-	82/-	82/-
	P	[mm]	160	160	200
	C	[mm]	-	-	-
	B	[mm]	-	-	-
	A	[mm]	-	-	-
	K	[mm]	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	89/89	89/89	90/90
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-
	Weight NB. CI	[kg]	35	35	39
	Weight NBE. CI	[kg]	-	-	-
	Weight diff. SS	[kg]	6	6	6

1) Pump with standard coupling / pump with spacer coupling.

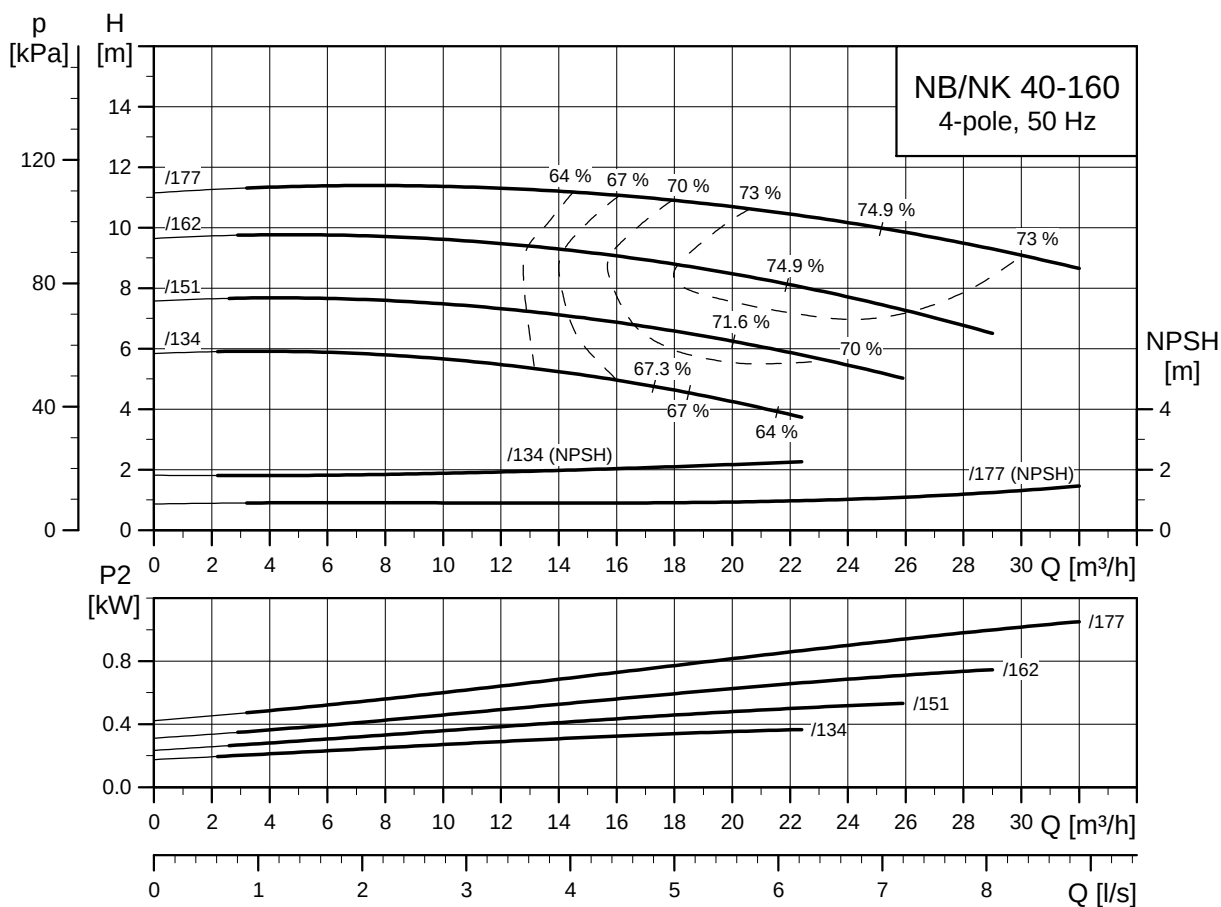
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

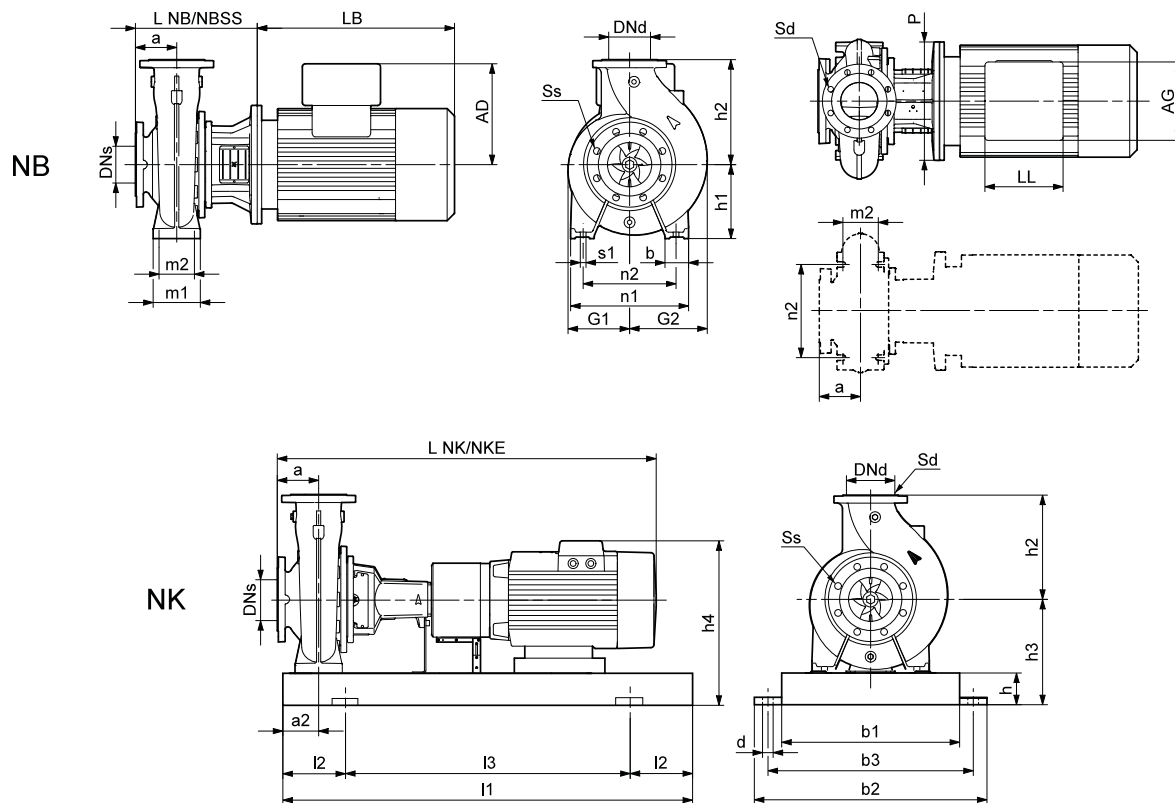
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 40-160



TM03 5125 4312



TM03 4180 1806

TM03 6005 4106

Pump type		40-160/134	40-160/151	40-160/162	40-160/177
Motor type	Standard Motor ⁵⁾	MG 71B-C	MG 80A-C	MG 90SC-H3	MG 90SB-H3
	E-Motor	-	-	MGE 90SA-G	MGE 90SB-G
Common data NB/NK	P2	[kW]	0.37	0.55	0.75
	PN	[bar]	16	16	16
	DNs	[mm]	65	65	65
	DNd	[mm]	40	40	40
	a	[mm]	80	80	80
	h2	[mm]	160	160	160
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	675/761	715/811	765/861
	L NKE ¹⁾	[mm]	-/-	-/-	765/861
	I1	[mm]	1000	1000	1000
	I2	[mm]	170	170	170
	I3	[mm]	660	660	660
	b1	[mm]	340	340	340
	b2	[mm]	450	450	450
	b3	[mm]	400	400	400
	d	[mm]	24	24	24
	a2	[mm]	60	60	60
	h	[mm]	80	80	80
	h3	[mm]	212	212	212
	h4 ²⁾	[mm]	321/-	321/-	322/390
NB data	Base frame no. ³⁾		4	4	4
	Mounting design ⁴⁾		A	A	A
	L NB	[mm]	201	226	226
	L NB SS	[mm]	243	253	253
	h1	[mm]	132	132	132
	G1	[mm]	117	117	117
	G2	[mm]	133	133	133
	m1	[mm]	100	100	100
	m2	[mm]	70	70	70
	n1	[mm]	240	240	240
	n2	[mm]	190	190	190
	b	[mm]	50	50	50
	s1	[mm]	M12	M12	M12
	H	[mm]	-	-	-
	LB ²⁾	[mm]	191/-	231/-	281/359
	AD ²⁾	[mm]	109/-	109/-	110/178
	AG ²⁾	[mm]	82/-	82/-	162/257
	LL ²⁾	[mm]	82/-	82/-	103/253
	P	[mm]	160	200	200
	C	[mm]	-	-	-
	B	[mm]	-	-	-
	A	[mm]	-	-	-
	K	[mm]	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	104/104	106/106	107/107
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	118/117
	Weight NB. CI	[kg]	36	40	41
	Weight NBE. CI	[kg]	-	-	54
	Weight diff. SS	[kg]	2	2	2

1) Pump with standard coupling / pump with spacer coupling.

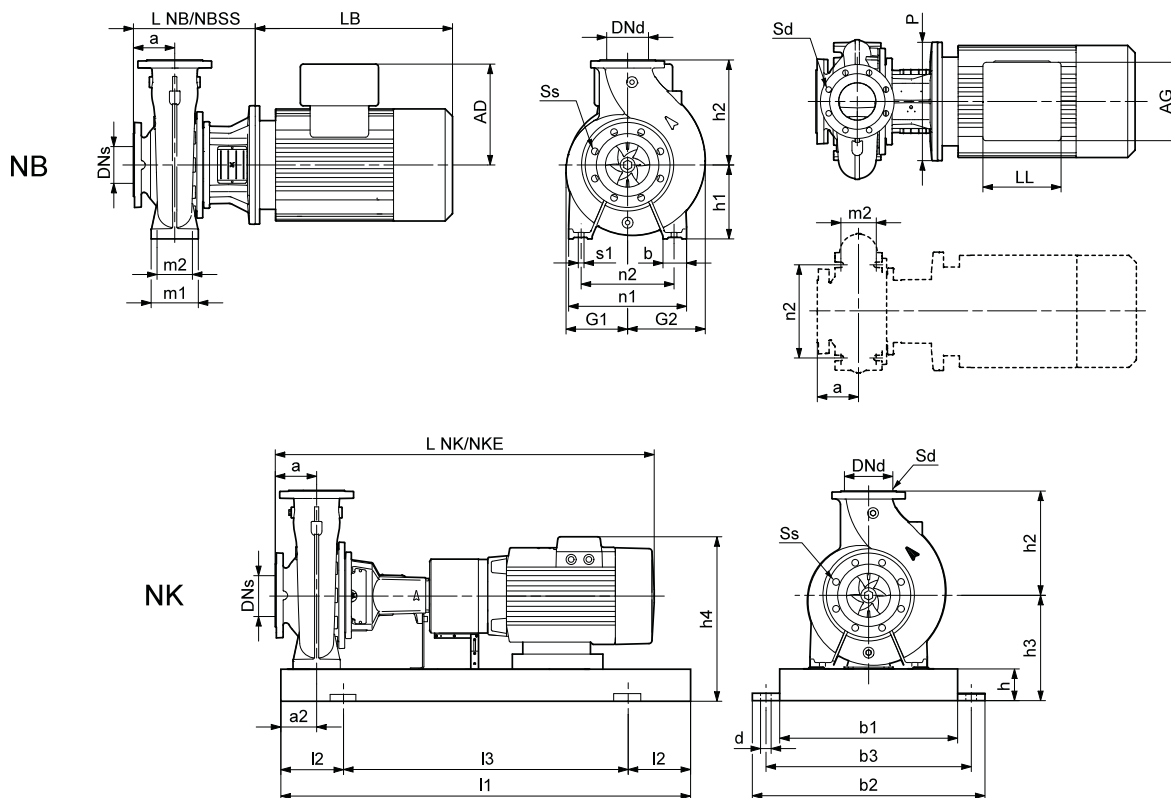
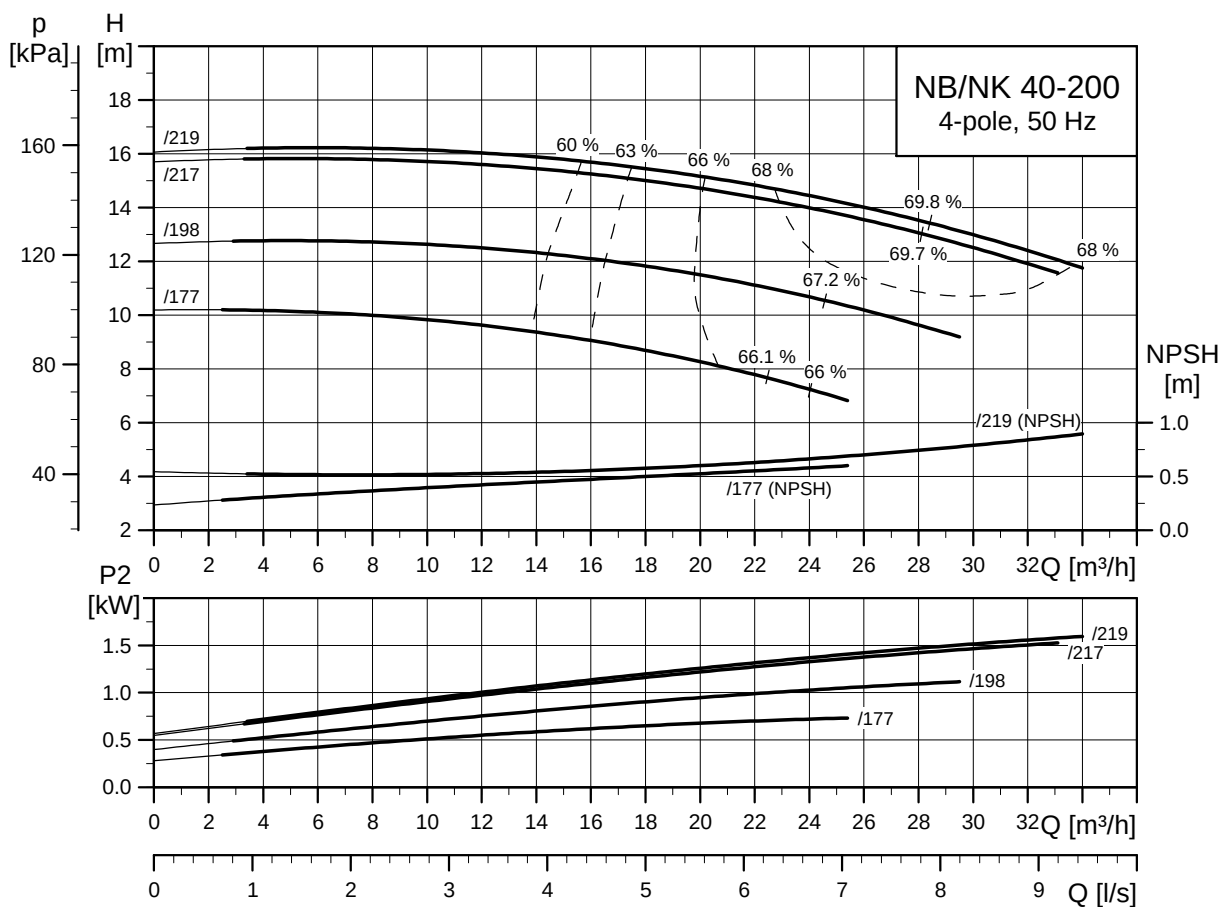
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 40-200



TM03 5126 4312

TM03 4180 1806

TM03 6005 4106

Pump type		40-200/177	40-200/198	40-200/217	40-200/219
Motor type	Standard Motor ⁵⁾	MG 90SC-H3	MG 90SB-H3	MG 90LC-H3	MG 100LB-H3
	E-Motor	MGE 90SA-G	MGE 90SB-G	MGE 90LC-G	MGE 100LB-G
Common data NB/NK	P2	[kW]	0.75	1.1	1.5
	PN	[bar]	16	16	16
	DNs	[mm]	65	65	65
	DNd	[mm]	40	40	40
	a	[mm]	100	100	100
	h2	[mm]	180	180	180
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	785/881	795/891	835/931
	L NKE ¹⁾	[mm]	785/881	835/931	835/931
	l1	[mm]	1000	1000	1000
	l2	[mm]	170	170	170
	l3	[mm]	660	660	660
	b1	[mm]	340	340	340
	b2	[mm]	450	450	450
	b3	[mm]	400	400	400
	d	[mm]	24	24	24
	a2	[mm]	60	60	60
	h	[mm]	80	80	80
	h3	[mm]	240	240	240
	h4 ²⁾	[mm]	350/418	350/425	350/425
	Base frame no. ³⁾		4	4	4
NB data	Mounting design ⁴⁾		A	A	A
	L NB	[mm]	246	246	246
	L NB SS	[mm]	273	273	273
	h1	[mm]	160	160	160
	G1	[mm]	140	140	140
	G2	[mm]	157	157	157
	m1	[mm]	100	100	100
	m2	[mm]	70	70	70
	n1	[mm]	265	265	265
	n2	[mm]	212	212	212
	b	[mm]	50	50	50
	s1	[mm]	M12	M12	M12
	H	[mm]	-	-	-
	LB ²⁾	[mm]	281/359	281/321	321/308
	AD ²⁾	[mm]	110/178	110/185	110/185
	AG ²⁾	[mm]	162/257	162/177	162/177
	LL ²⁾	[mm]	103/253	103/232	103/232
	P	[mm]	200	200	200
	C	[mm]	-	-	-
	B	[mm]	-	-	-
	A	[mm]	-	-	-
	K	[mm]	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	116/116	124/123	125/124
	Weight NKE. CI ¹⁾	[kg]	124/124	130/130	131/131
	Weight NB. CI	[kg]	46	57	58
	Weight NBE. CI	[kg]	59	57	60
	Weight diff. SS	[kg]	2	2	2

1) Pump with standard coupling / pump with spacer coupling.

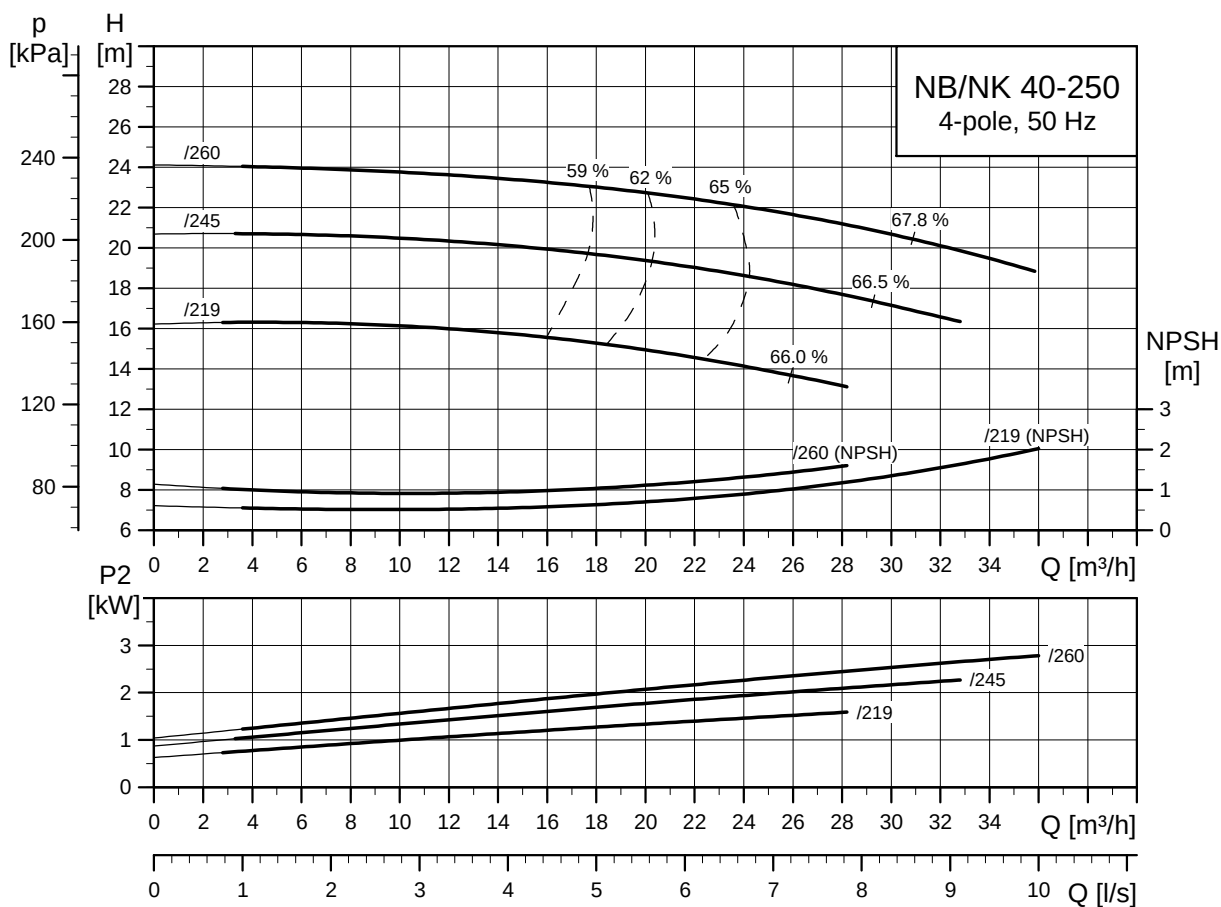
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

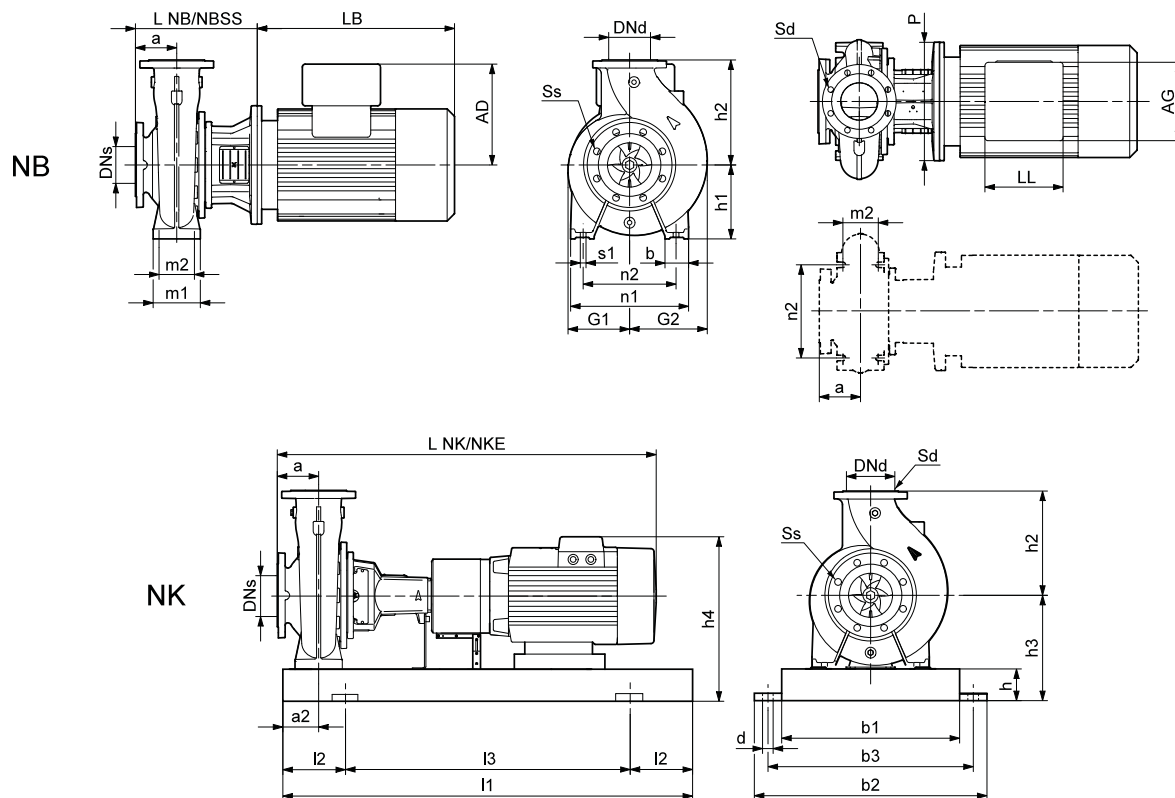
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 40-250



TM03 5127 4312



TM03 4180 1806

TM03 6005 4106

Pump type	40-250/219		40-250/245	40-250/260
Motor type	Standard Motor ⁵⁾		MG 90LC-H3	MG 100LB-H3
	E-Motor		MGE 90LC-G	MGE 100LB-G
Common data NB/NK	P2	[kW]	1.5	2.2
	PN	[bar]	16	16
	DNs	[mm]	65	65
	DNd	[mm]	40	40
	a	[mm]	100	100
	h2	[mm]	225	225
	Ss	[mm]	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	835/931	859/955
	L NKE ¹⁾	[mm]	835/931	859/955
	l1	[mm]	1120	1120
	l2	[mm]	190	190
	l3	[mm]	740	740
	b1	[mm]	380	380
	b2	[mm]	490	490
	b3	[mm]	440	440
	d	[mm]	24	24
	a2	[mm]	75	75
	h	[mm]	80	80
	h3	[mm]	260	260
	h4 ²⁾	[mm]	370/445	380/452
	Base frame no. ³⁾		5	5
NB data	Mounting design ⁴⁾		A	A
	L NB	[mm]	246	274
	L NB SS	[mm]	273	293
	h1	[mm]	180	180
	G1	[mm]	164	164
	G2	[mm]	172	172
	m1	[mm]	125	125
	m2	[mm]	95	95
	n1	[mm]	320	320
	n2	[mm]	250	250
	b	[mm]	65	65
	s1	[mm]	M12	M12
	H	[mm]	-	-
	LB ²⁾	[mm]	321/308	335/347
	AD ²⁾	[mm]	110/185	120/192
	AG ²⁾	[mm]	162/177	162/222
	LL ²⁾	[mm]	103/232	103/277
	P	[mm]	200	250
	C	[mm]	-	-
	B	[mm]	-	-
	A	[mm]	-	-
	K	[mm]	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	147/147	152/150
	Weight NKE. CI ¹⁾	[kg]	154/153	163/161
	Weight NB. CI	[kg]	63	70
	Weight NBE. CI	[kg]	66	76
	Weight diff. SS	[kg]	-5	-5

1) Pump with standard coupling / pump with spacer coupling.

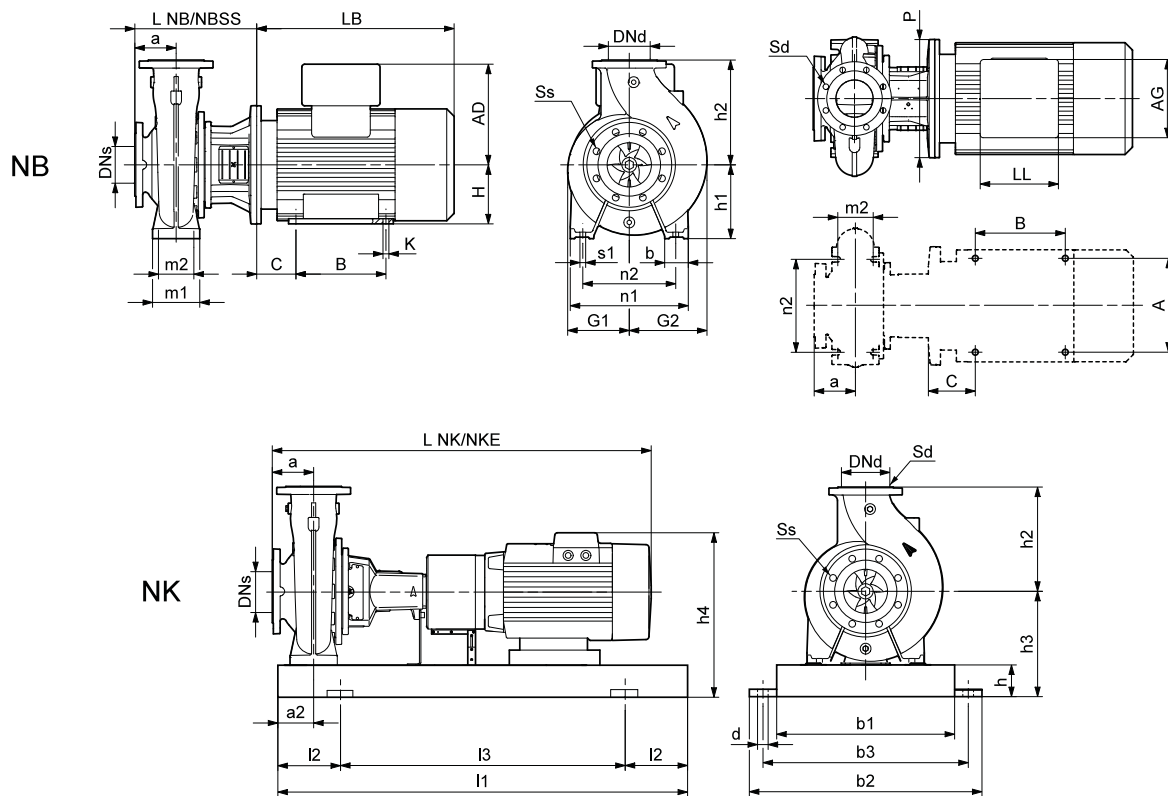
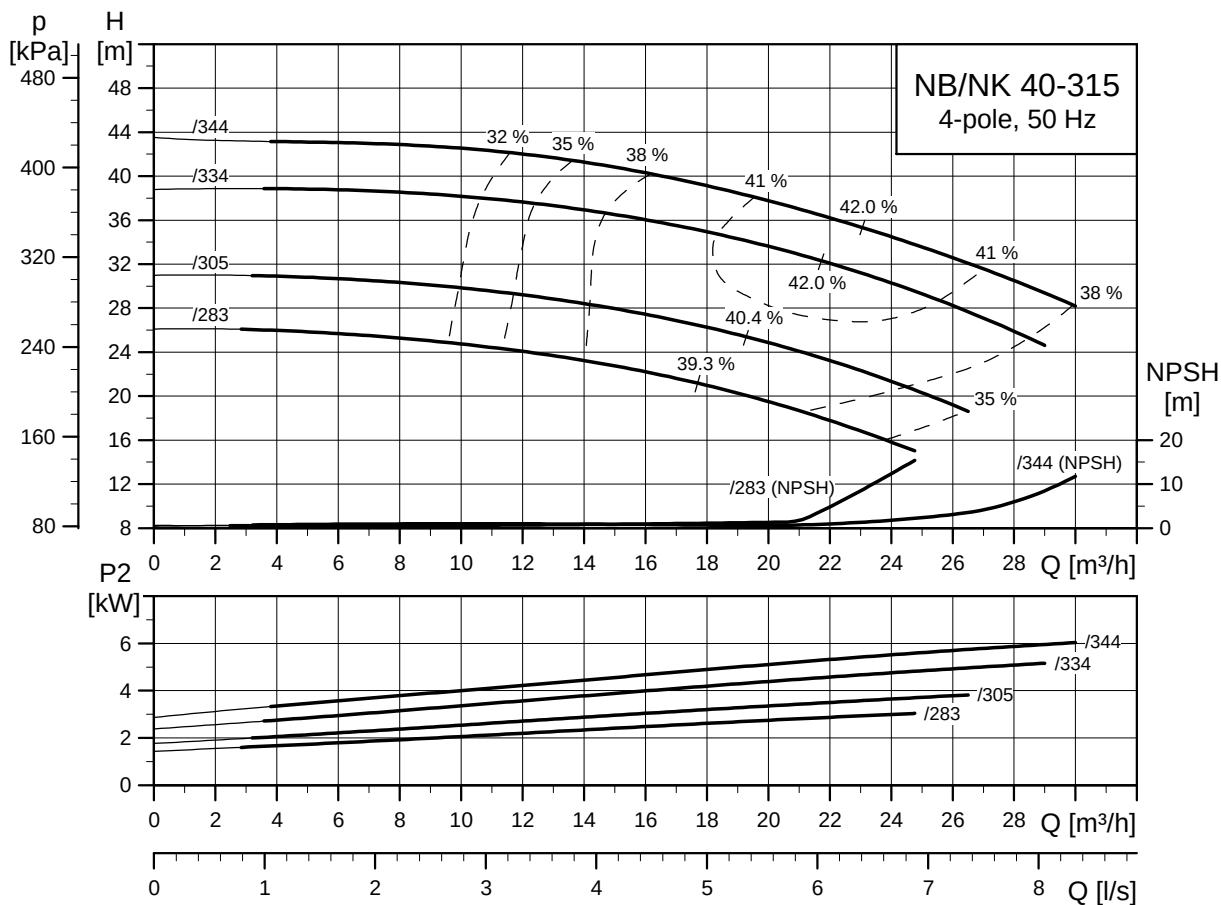
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 40-315



TM03 5128 4312

TM03 4182 1806

TM03 6005 4106

Pump type		40-315/283	40-315/305	40-315/334	40-315/344
Motor type	Standard Motor ⁵⁾	MG 100LC-H3	MG 112MC-H3	MG 132SB-H3	MG 132MB-H3
	E-Motor	MGE 100LC-G	MGE 112MC-G	MGE 132SB-F	MGE 132MB-F
Common data NB/NK	P2	[kW]	3	4	5.5
	PN	[bar]	16	16	16
	DNs	[mm]	65	65	65
	DNd	[mm]	40	40	40
	a	[mm]	125	125	125
	h2	[mm]	250	250	250
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	994/1090	1031/1127	1058/1154
	L NKE ¹⁾	[mm]	994/1090	1031/1127	1058/1154
	I1	[mm]	1250	1250	1250
	I2	[mm]	205	205	205
	I3	[mm]	840	840	840
	b1	[mm]	430	430	430
	b2	[mm]	540	540	540
	b3	[mm]	490	490	490
	d	[mm]	24	24	24
	a2	[mm]	75	75	75
	h	[mm]	80	80	80
	h3	[mm]	280	280	280
	h4 ²⁾	[mm]	400/472	414/482	439/501
	Base frame no. ³⁾		6	6	6
	Mounting design ⁴⁾		A	A	A
NB data	L NB	[mm]	348	348	368
	L NB SS	[mm]	348	348	368
	h1	[mm]	200	200	200
	G1	[mm]	200	200	200
	G2	[mm]	206	206	206
	m1	[mm]	125	125	125
	m2	[mm]	95	95	95
	n1	[mm]	345	345	345
	n2	[mm]	280	280	280
	b	[mm]	65	65	65
	s1	[mm]	M12	M12	M12
	H	[mm]	-	-	-
	LB ²⁾	[mm]	335/382	372/371	379/373
	AD ²⁾	[mm]	120/192	134/202	159/221
	AG ²⁾	[mm]	162/222	202/208	203/227
	LL ²⁾	[mm]	103/277	103/317	135/305
	P	[mm]	250	250	300
	C	[mm]	-	-	-
	B	[mm]	-	-	-
	A	[mm]	-	-	-
	K	[mm]	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	238/235	251/249	261/258
	Weight NKE. CI ¹⁾	[kg]	246/243	255/253	267/264
	Weight NB. CI	[kg]	124	139	157
	Weight NBE. CI	[kg]	133	136	154
	Weight diff. SS	[kg]	-9	-9	-9

1) Pump with standard coupling / pump with spacer coupling.

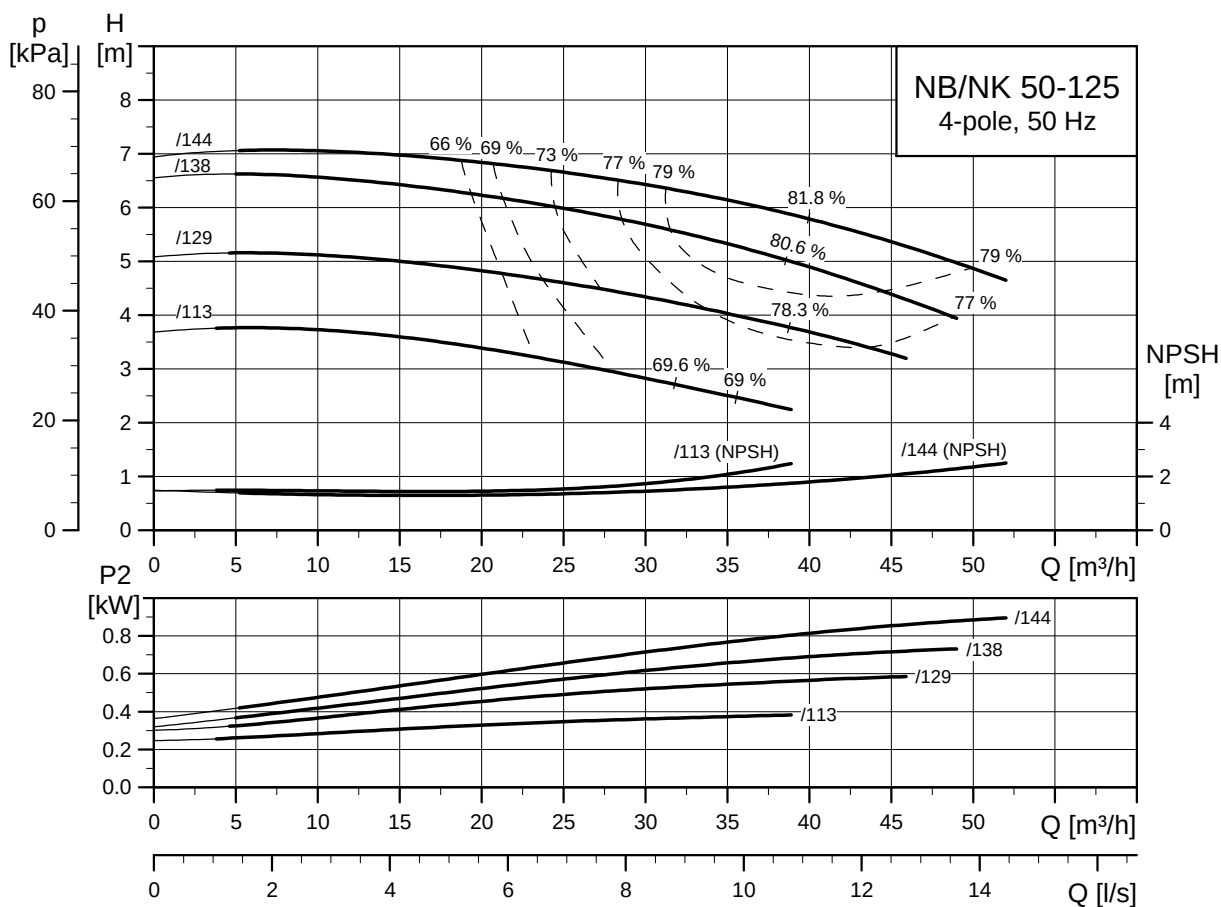
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

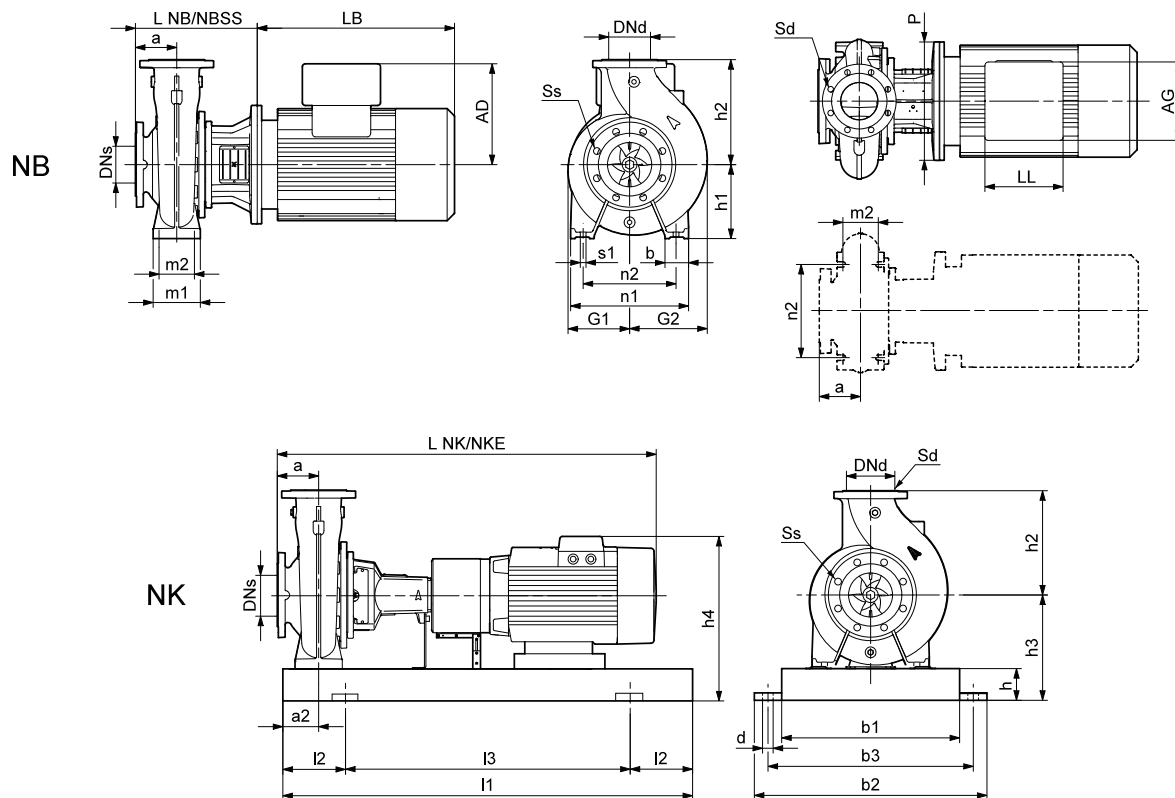
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 50-125



TM03 5129 4312



TM03 4180 1806

TM03 6005 4106

Pump type			50-125/113	50-125/129	50-125/138	50-125/144
Motor type	Standard Motor ⁵⁾		MG 71B-C	MG 80A-C	MG 90SC-H3	MG 90SB-H3
	E-Motor		-	-	MGE 90SA-G	MGE 90SB-G
Common data NB/NK	P2	[kW]	0.37	0.55	0.75	1.1
	PN	[bar]	16	16	16	16
	DNs	[mm]	65	65	65	65
	DNd	[mm]	50	50	50	50
	a	[mm]	100	100	100	100
	h2	[mm]	160	160	160	160
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	695/781	735/831	785/881	795/891
	L NKE ¹⁾	[mm]	-/-	-/-	785/881	835/931
	I1	[mm]	1000	1000	1000	1000
	I2	[mm]	170	170	170	170
	I3	[mm]	660	660	660	660
	b1	[mm]	340	340	340	340
	b2	[mm]	450	450	450	450
	b3	[mm]	400	400	400	400
	d	[mm]	24	24	24	24
	a2	[mm]	60	60	60	60
	h	[mm]	80	80	80	80
	h3	[mm]	212	212	212	212
	h4 ²⁾	[mm]	321/-	321/-	322/390	322/397
	Base frame no. ³⁾		4	4	4	4
NB data	Mounting design ⁴⁾		A	A	A	A
	L NB	[mm]	221	246	246	246
	L NB SS	[mm]	263	273	273	273
	h1	[mm]	132	132	132	132
	G1	[mm]	117	117	117	117
	G2	[mm]	130	130	130	130
	m1	[mm]	100	100	100	100
	m2	[mm]	70	70	70	70
	n1	[mm]	240	240	240	240
	n2	[mm]	190	190	190	190
	b	[mm]	50	50	50	50
	s1	[mm]	M12	M12	M12	M12
	H	[mm]	-	-	-	-
	LB ²⁾	[mm]	191/-	231/-	281/359	281/321
	AD ²⁾	[mm]	109/-	109/-	110/178	110/185
	AG ²⁾	[mm]	82/-	82/-	162/257	162/177
	LL ²⁾	[mm]	82/-	82/-	103/253	103/232
	P	[mm]	160	200	200	200
	C	[mm]	-	-	-	-
	B	[mm]	-	-	-	-
	A	[mm]	-	-	-	-
	K	[mm]	-	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	105/105	108/108	109/109	118/118
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	119/118	125/124
	Weight NB. CI	[kg]	38	41	42	53
	Weight NBE. CI	[kg]	-	-	55	53
	Weight diff. SS	[kg]	9	9	9	9

1) Pump with standard coupling / pump with spacer coupling.

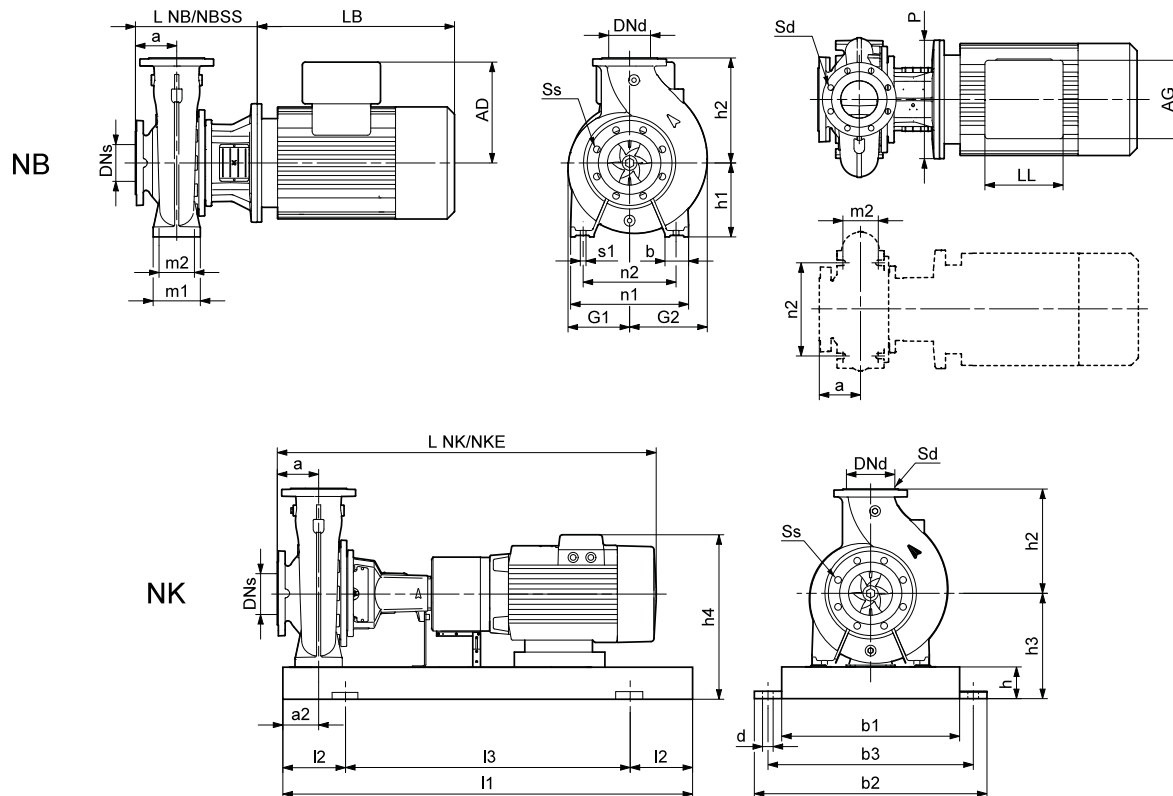
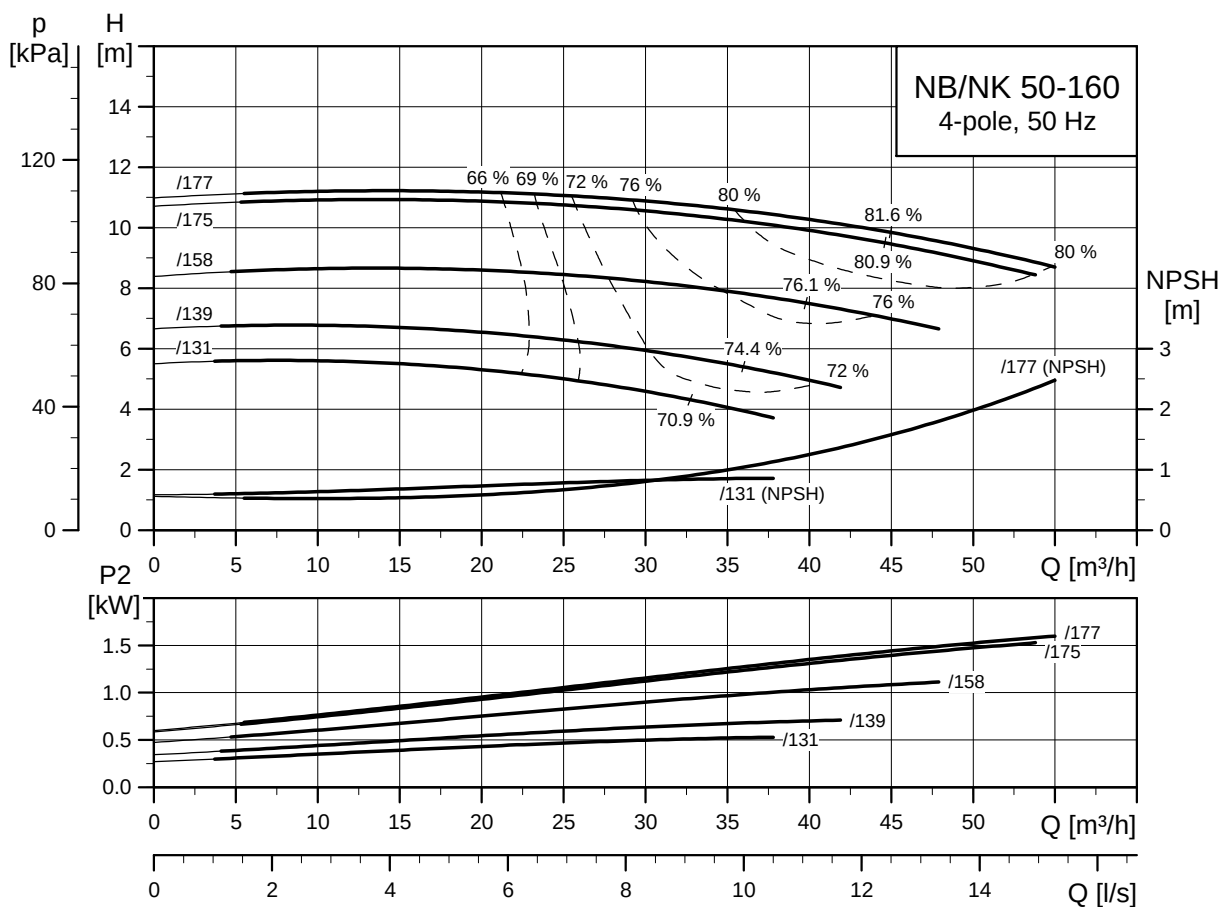
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 50-160



TM03 5130 4312

TM03 4180 1806

TM03 6005 4106

Pump type		50-160/131	50-160/139	50-160/158	50-160/175	50-160/177
Motor type	Standard Motor ⁵⁾	MG 80A-C	MG 90SC-H3	MG 90SB-H3	MG 90LC-H3	MG 100LB-H3
	E-Motor	-	MGE 90SA-G	MGE 90SB-G	MGE 90LC-G	MGE 100LB-G
Common data NB/NK	P2	[kW]	0.55	0.75	1.1	1.5
	PN	[bar]	16	16	16	16
	DNs	[mm]	65	65	65	65
	DNd	[mm]	50	50	50	50
	a	[mm]	100	100	100	100
	h2	[mm]	180	180	180	180
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	735/831	785/881	795/891	835/931
	L NKE ¹⁾	[mm]	-/-	785/881	835/931	835/931
	I1	[mm]	1000	1000	1000	1000
	I2	[mm]	170	170	170	170
	I3	[mm]	660	660	660	660
	b1	[mm]	340	340	340	340
	b2	[mm]	450	450	450	450
	b3	[mm]	400	400	400	400
	d	[mm]	24	24	24	24
	a2	[mm]	60	60	60	60
	h	[mm]	80	80	80	80
	h3	[mm]	240	240	240	240
	h4 ²⁾	[mm]	349/-	350/418	350/425	350/425
	Base frame no. ³⁾		4	4	4	4
NB data	Mounting design ⁴⁾		A	A	A	A
	L NB	[mm]	246	246	246	246
	L NB SS	[mm]	173	173	173	173
	h1	[mm]	160	160	160	160
	G1	[mm]	125	125	125	125
	G2	[mm]	150	150	150	150
	m1	[mm]	100	100	100	100
	m2	[mm]	70	70	70	70
	n1	[mm]	265	265	265	265
	n2	[mm]	212	212	212	212
	b	[mm]	50	50	50	50
	s1	[mm]	M12	M12	M12	M12
	H	[mm]	-	-	-	-
	LB ²⁾	[mm]	231/-	281/359	281/321	321/308
	AD ²⁾	[mm]	109/-	110/178	110/185	110/185
	AG ²⁾	[mm]	82/-	162/257	162/177	162/177
	LL ²⁾	[mm]	82/-	103/253	103/232	103/232
	P	[mm]	200	200	200	200
	C	[mm]	-	-	-	-
	B	[mm]	-	-	-	-
	A	[mm]	-	-	-	-
	K	[mm]	-	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	109/109	110/110	118/117	119/118
	Weight NKE. CI ¹⁾	[kg]	-/-	119/118	125/124	126/125
	Weight NB. CI	[kg]	41	42	53	54
	Weight NBE. CI	[kg]	-	55	53	56
	Weight diff. SS	[kg]	3	3	3	3

1) Pump with standard coupling / pump with spacer coupling.

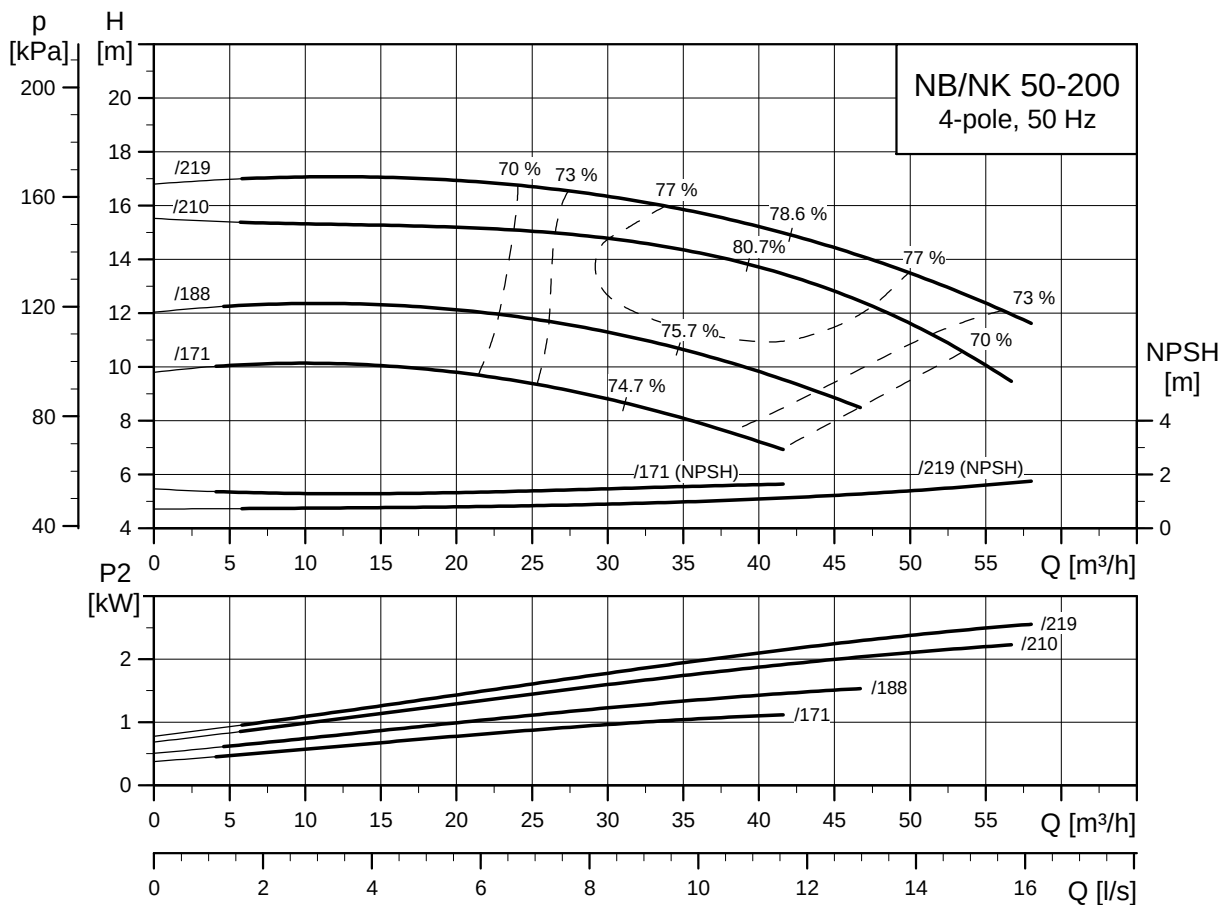
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

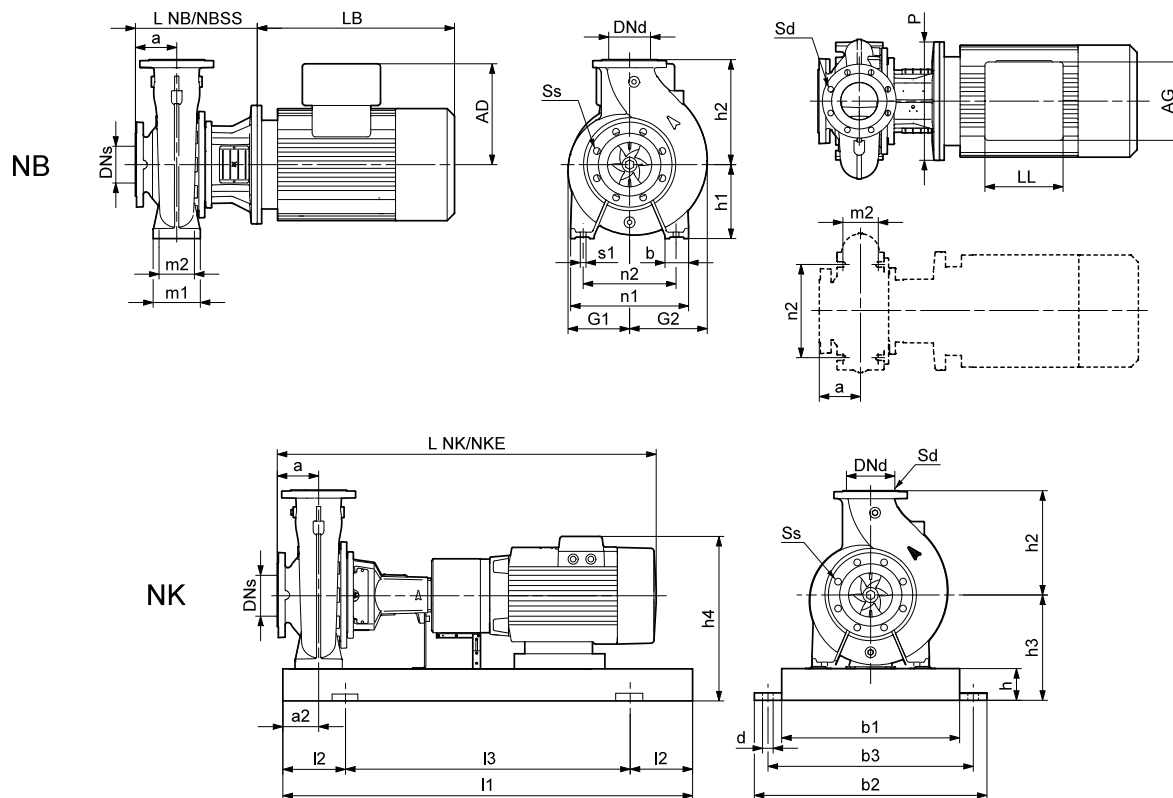
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 50-200



TM03 5131 4312



TM03 4180 1806

TM03 6005 4106

Pump type	50-200/171		50-200/188	50-200/210	50-200/219	
Motor type	Standard Motor ⁵⁾	MG 90SB-H3	MG 90LC-H3	MG 100LB-H3	MG 100LC-H3	
	E-Motor	MGE 90SB-G	MGE 90LC-G	MGE 100LB-G	MGE 100LC-G	
Common data NB/NK	P2	[kW]	1.1	1.5	2.2	3
	PN	[bar]	16	16	16	16
	DNs	[mm]	65	65	65	65
	DNd	[mm]	50	50	50	50
	a	[mm]	100	100	100	100
	h2	[mm]	200	200	200	200
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	795/891	835/931	859/955	859/955
	L NKE ¹⁾	[mm]	835/931	835/931	859/955	859/955
	l1	[mm]	1000	1000	1000	1000
	l2	[mm]	170	170	170	170
	l3	[mm]	660	660	660	660
	b1	[mm]	340	340	340	340
	b2	[mm]	450	450	450	450
	b3	[mm]	400	400	400	400
	d	[mm]	24	24	24	24
	a2	[mm]	60	60	60	60
	h	[mm]	80	80	80	80
	h3	[mm]	240	240	240	240
	h4 ²⁾	[mm]	350/425	350/425	360/432	360/432
	Base frame no. ³⁾		4	4	4	4
NB data	Mounting design ⁴⁾		A	A	A	A
	L NB	[mm]	246	246	274	274
	L NB SS	[mm]	273	273	293	293
	h1	[mm]	160	160	160	160
	G1	[mm]	141	141	141	141
	G2	[mm]	162	162	162	162
	m1	[mm]	100	100	100	100
	m2	[mm]	70	70	70	70
	n1	[mm]	265	265	265	265
	n2	[mm]	212	212	212	212
	b	[mm]	50	50	50	50
	s1	[mm]	M12	M12	M12	M12
	H	[mm]	-	-	-	-
	LB ²⁾	[mm]	281/321	321/308	335/347	335/382
	AD ²⁾	[mm]	110/185	110/185	120/192	120/192
	AG ²⁾	[mm]	162/177	162/177	162/222	162/222
	LL ²⁾	[mm]	103/232	103/232	103/277	103/277
	P	[mm]	200	200	250	250
	C	[mm]	-	-	-	-
	B	[mm]	-	-	-	-
	A	[mm]	-	-	-	-
	K	[mm]	-	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	121/121	122/122	128/126	133/131
	Weight NKE. CI ¹⁾	[kg]	128/127	129/128	139/137	141/139
	Weight NB. CI	[kg]	55	56	63	65
	Weight NBE. CI	[kg]	55	58	69	74
	Weight diff. SS	[kg]	-4	-4	-4	-4

1) Pump with standard coupling / pump with spacer coupling.

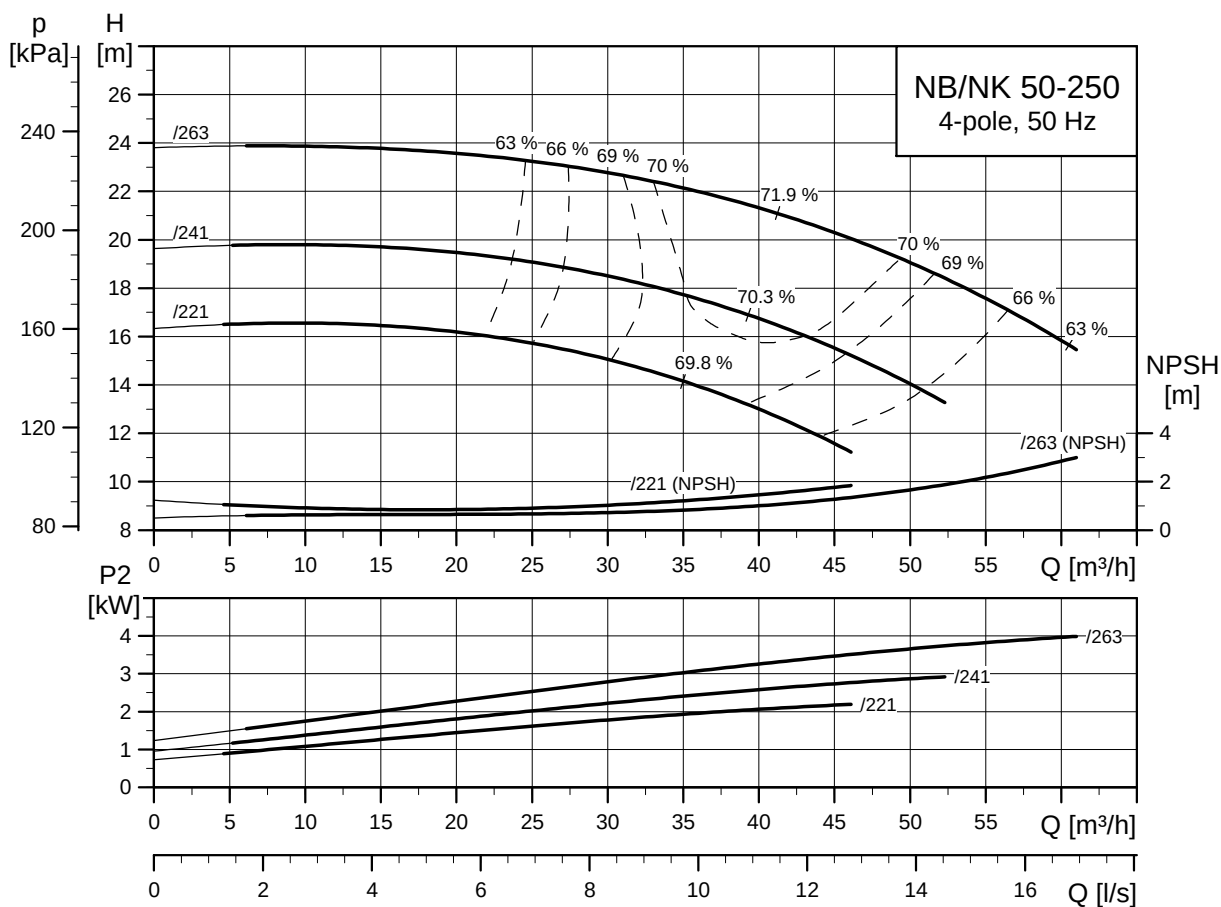
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

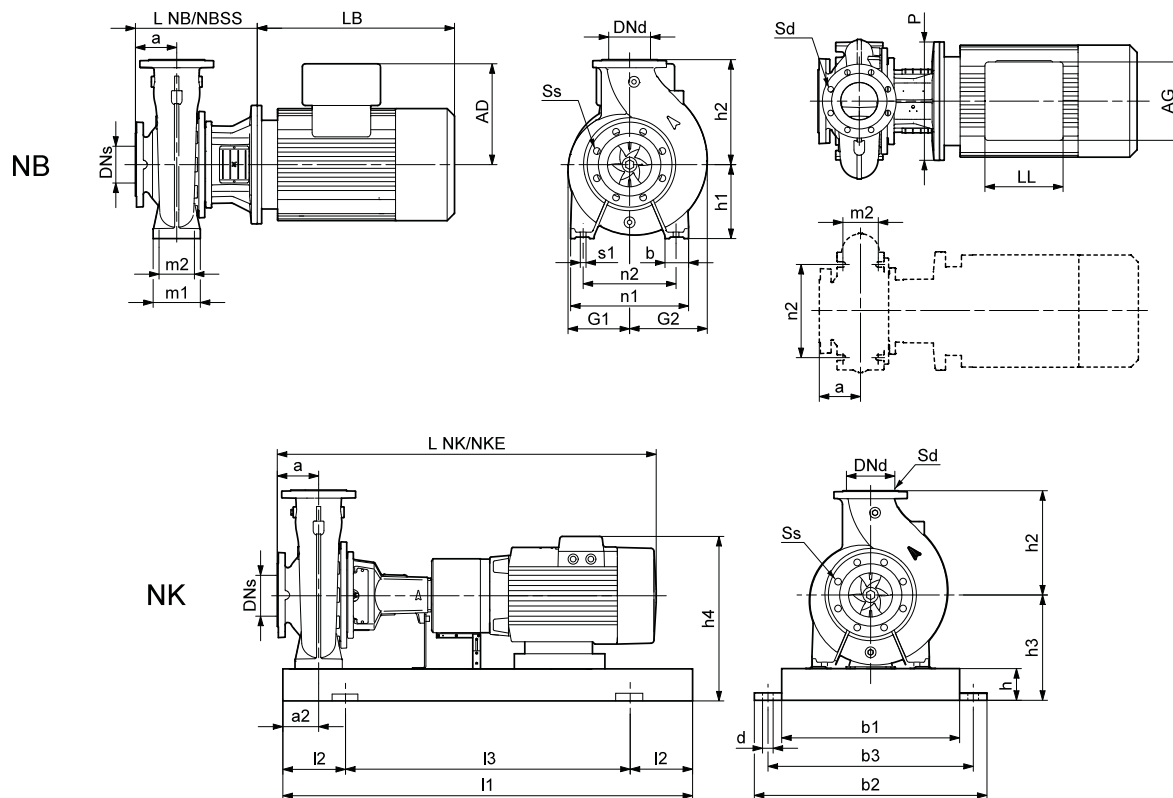
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 50-250



TM03 5132 4312



TM03 4180 1806

TM03 6005 4106

Pump type	50-250/221		50-250/241	50-250/263
Motor type	Standard Motor ⁵⁾		MG 100LB-H3	MG 100LC-H3
	E-Motor		MGE 100LB-G	MGE 100LC-G
Common data NB/NK	P2	[kW]	2.2	3
	PN	[bar]	16	16
	DNs	[mm]	65	65
	DNd	[mm]	50	50
	a	[mm]	100	100
	h2	[mm]	225	225
	Ss	[mm]	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	859/955	859/955
	L NKE ¹⁾	[mm]	859/955	859/955
	l1	[mm]	1120	1120
	l2	[mm]	190	190
	l3	[mm]	740	740
	b1	[mm]	380	380
	b2	[mm]	490	490
	b3	[mm]	440	440
	d	[mm]	24	24
	a2	[mm]	75	75
	h	[mm]	80	80
	h3	[mm]	260	260
	h4 ²⁾	[mm]	380/452	380/452
Base frame no. ³⁾		5	5	
NB data	Mounting design ⁴⁾		A	A
	L NB	[mm]	274	274
	L NB SS	[mm]	293	293
	h1	[mm]	180	180
	G1	[mm]	164	164
	G2	[mm]	180	180
	m1	[mm]	125	125
	m2	[mm]	95	95
	n1	[mm]	320	320
	n2	[mm]	250	250
	b	[mm]	65	65
	s1	[mm]	M12	M12
	H	[mm]	-	-
	LB ²⁾	[mm]	335/347	335/382
	AD ²⁾	[mm]	120/192	120/192
	AG ²⁾	[mm]	162/222	162/222
	LL ²⁾	[mm]	103/277	103/277
	P	[mm]	250	250
	C	[mm]	-	-
	B	[mm]	-	-
A	[mm]	-	-	
K	[mm]	-	-	
Weight data	Weight NK. CI ¹⁾	[kg]	153/151	158/156
	Weight NKE. CI ¹⁾	[kg]	164/162	166/164
	Weight NB. CI	[kg]	72	74
	Weight NBE. CI	[kg]	77	82
	Weight diff. SS	[kg]	-10	-10

1) Pump with standard coupling / pump with spacer coupling.

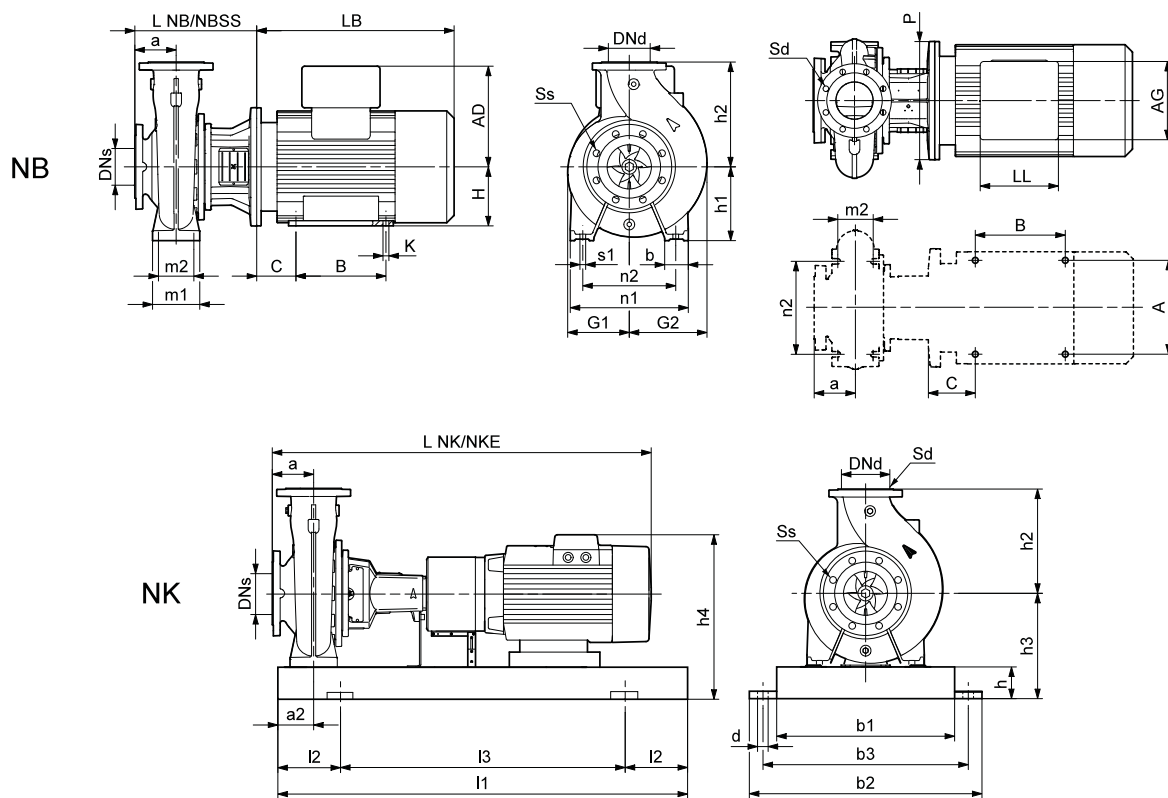
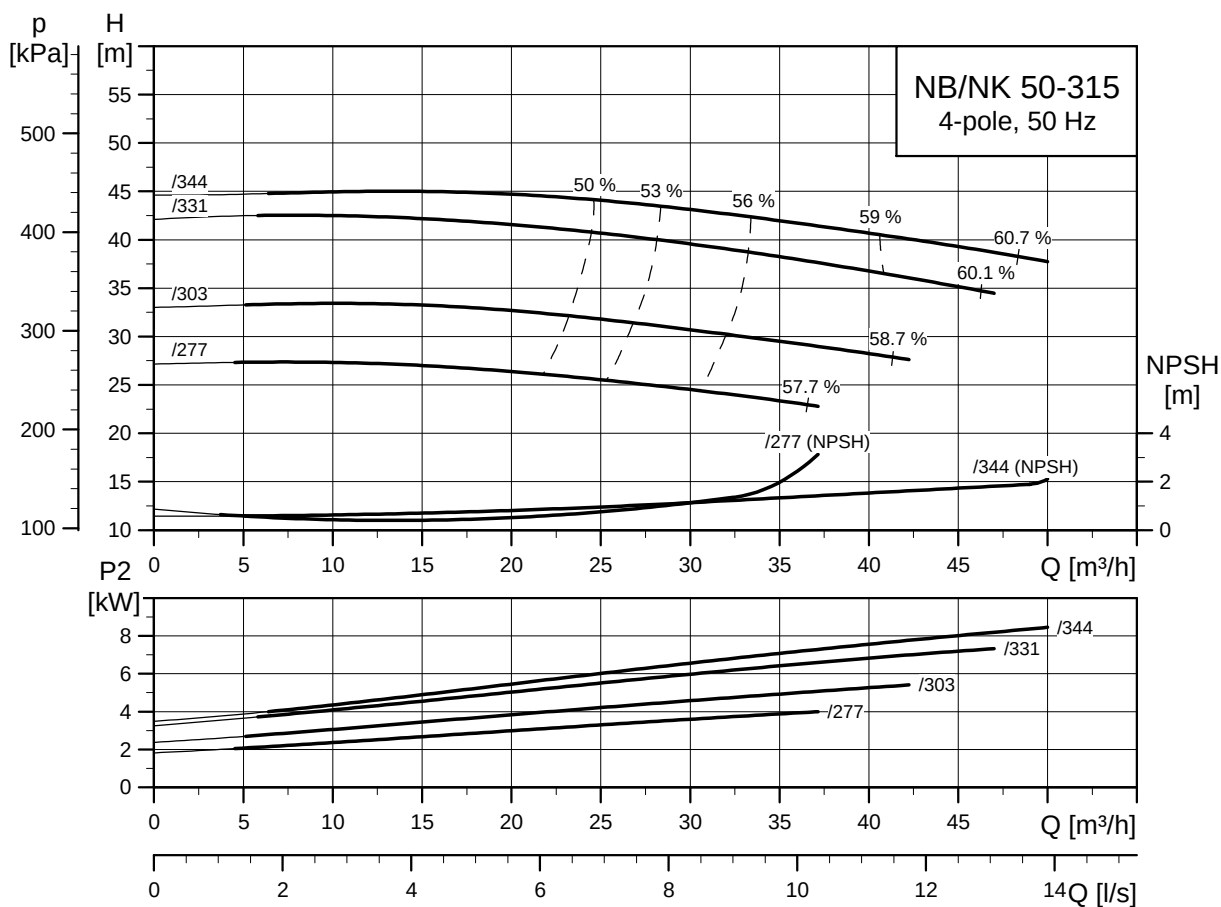
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 50-315



TM03 5133 4312

TM03 4182 1806

TM03 6005 4106

Pump type		50-315/277	50-315/303	50-315/331	50-315/344
Motor type	Standard Motor ⁵⁾	MG 112MC-H3	MG 132SB-H3	MG 132MB-H3	MG 160MA-H3
	E-Motor	MGE 112MC-G	MGE 132SB-F	MGE 132MB-F	MGE 160MB-F
Common data NB/NK	P2	[kW]	4	5.5	7.5
	PN	[bar]	16	16	16
	DNs	[mm]	65	65	65
	DNd	[mm]	50	50	50
	a	[mm]	125	125	125
	h2	[mm]	280	280	280
	Ss	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	1031/1127	1058/1154	1108/1204
	L NKE ¹⁾	[mm]	1031/1127	1058/1154	1180/1276
	l1	[mm]	1250	1250	1250
	l2	[mm]	205	205	205
	l3	[mm]	840	840	840
	b1	[mm]	430	430	430
	b2	[mm]	540	540	540
	b3	[mm]	490	490	490
	d	[mm]	24	24	24
	a2	[mm]	75	75	75
	h	[mm]	80	80	80
	h3	[mm]	305	305	305
	h4 ²⁾	[mm]	439/507	464/526	509/606
	Base frame no. ³⁾		6	6	6
	Mounting design ⁴⁾		A	A	C
NB data	L NB	[mm]	348	368	398
	L NB SS	[mm]	348	368	398
	h1	[mm]	225	225	225
	G1	[mm]	203	203	203
	G2	[mm]	214	214	214
	m1	[mm]	125	125	125
	m2	[mm]	95	95	95
	n1	[mm]	345	345	345
	n2	[mm]	280	280	280
	b	[mm]	65	65	65
	s1	[mm]	M12	M12	M12
	H	[mm]	-	-	160
	LB ²⁾	[mm]	372/371	379/373	429/411
	AD ²⁾	[mm]	134/202	159/221	159/221
	AG ²⁾	[mm]	202/208	203/227	203/227
	LL ²⁾	[mm]	103/317	135/305	135/305
	P	[mm]	250	300	350
Weight data	C	[mm]	-	-	254
	B	[mm]	-	-	254
	A	[mm]	-	-	108
	K	[mm]	-	-	15
	Weight NK. CI ¹⁾	[kg]	255/253	272/269	284/281
	Weight NKE. CI ¹⁾	[kg]	259/257	278/275	293/290
	Weight NB. CI	[kg]	143	161	177
	Weight NBE. CI	[kg]	141	158	175
	Weight diff. SS	[kg]	-8	-8	-8

1) Pump with standard coupling / pump with spacer coupling.

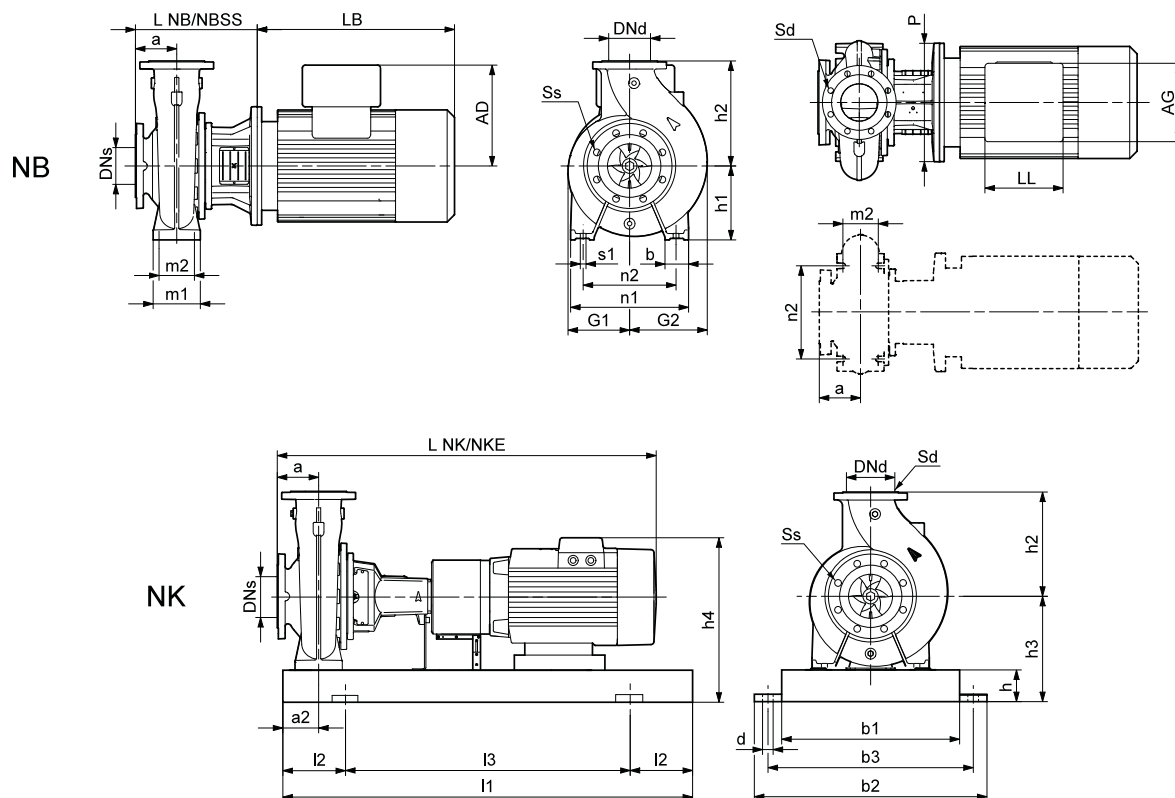
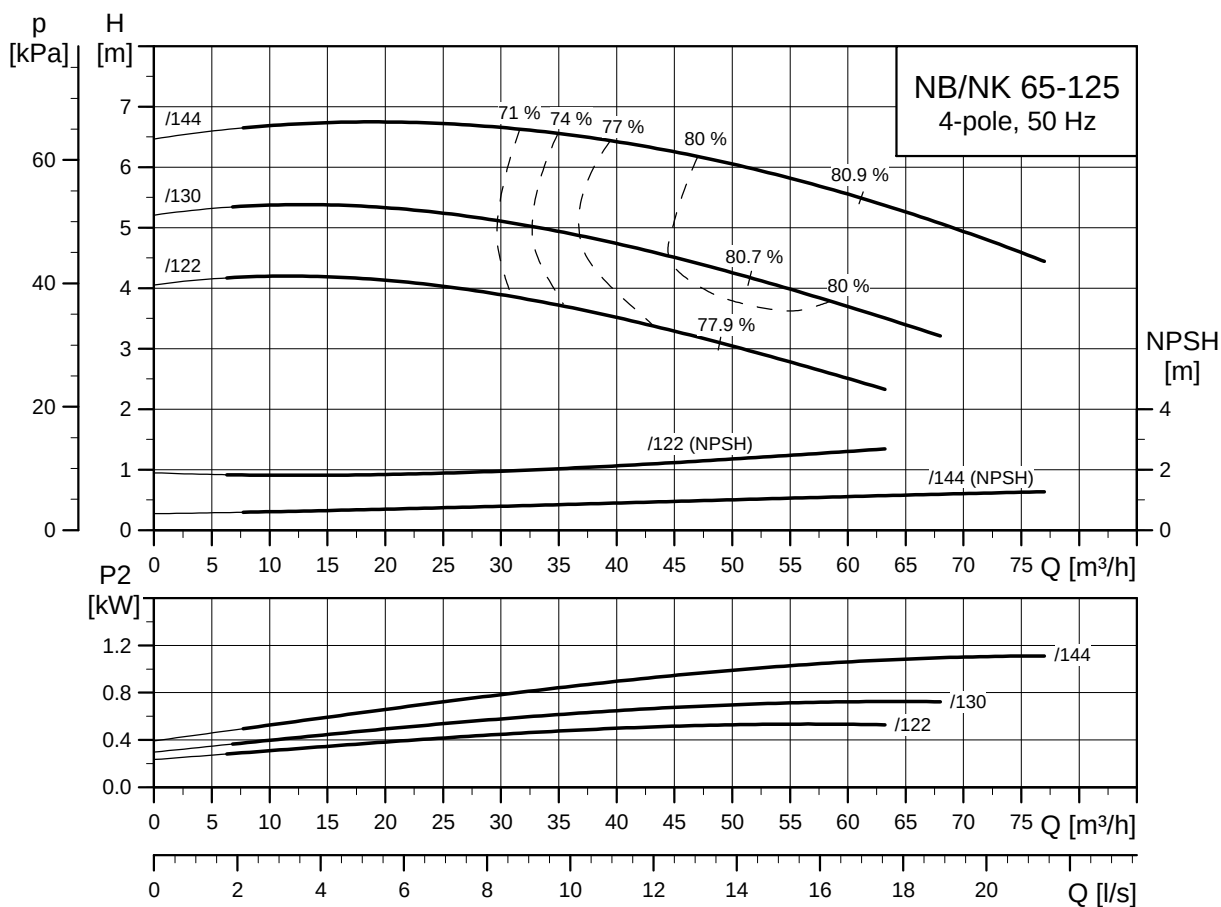
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 65-125



TM03 5134 4312

TM03 4180 1806

TM03 6005 4106

Pump type	65-125/122		65-125/130	65-125/144
Motor type	Standard Motor ⁵⁾		MG 80A-C	MG 90SC-H3
	E-Motor		-	MGE 90SA-G
Common data NB/NK	P2	[kW]	0.55	0.75
	PN	[bar]	16	16
	DNs	[mm]	80	80
	DNd	[mm]	65	65
	a	[mm]	100	100
	h2	[mm]	180	180
	Ss	[mm]	8 x Ø19	8 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	735/831	785/881
	L NKE ¹⁾	[mm]	-/-	785/881
	I1	[mm]	1000	1000
	I2	[mm]	170	170
	I3	[mm]	660	660
	b1	[mm]	340	340
	b2	[mm]	450	450
	b3	[mm]	400	400
	d	[mm]	24	24
	a2	[mm]	60	60
	h	[mm]	80	80
	h3	[mm]	240	240
	h4 ²⁾	[mm]	349/-	350/418
Base frame no. ³⁾		4	4	
NB data	Mounting design ⁴⁾		A	A
	L NB	[mm]	246	246
	L NB SS	[mm]	273	273
	h1	[mm]	160	160
	G1	[mm]	117	117
	G2	[mm]	146	146
	m1	[mm]	125	125
	m2	[mm]	95	95
	n1	[mm]	280	280
	n2	[mm]	212	212
	b	[mm]	65	65
	s1	[mm]	M12	M12
	H	[mm]	-	-
	LB ²⁾	[mm]	231/-	281/359
	AD ²⁾	[mm]	109/-	110/178
	AG ²⁾	[mm]	82/-	162/257
	LL ²⁾	[mm]	82/-	103/253
	P	[mm]	200	200
	C	[mm]	-	-
	B	[mm]	-	-
	A	[mm]	-	-
K	[mm]	-	-	
Weight data	Weight NK. CI ¹⁾	[kg]	113/113	114/114
	Weight NKE. CI ¹⁾	[kg]	-/-	123/122
	Weight NB. CI	[kg]	46	46
	Weight NBE. CI	[kg]	-	60
	Weight diff. SS	[kg]	6	6

1) Pump with standard coupling / pump with spacer coupling.

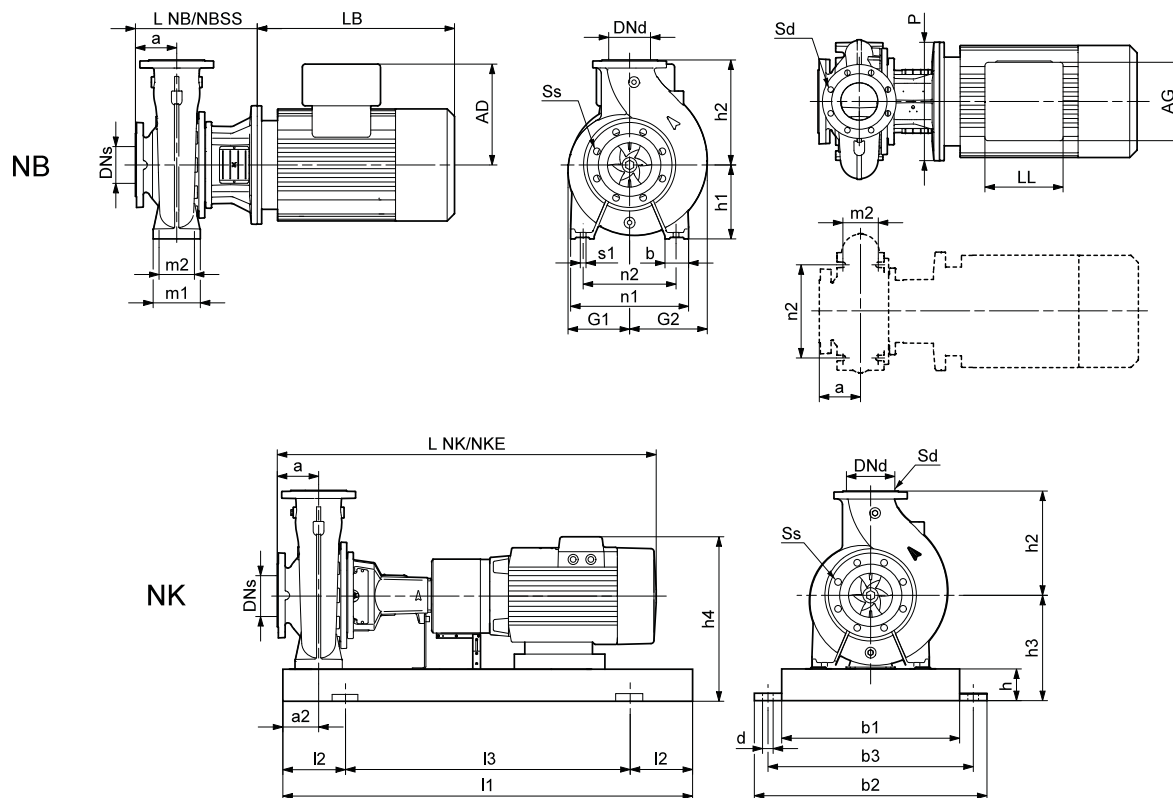
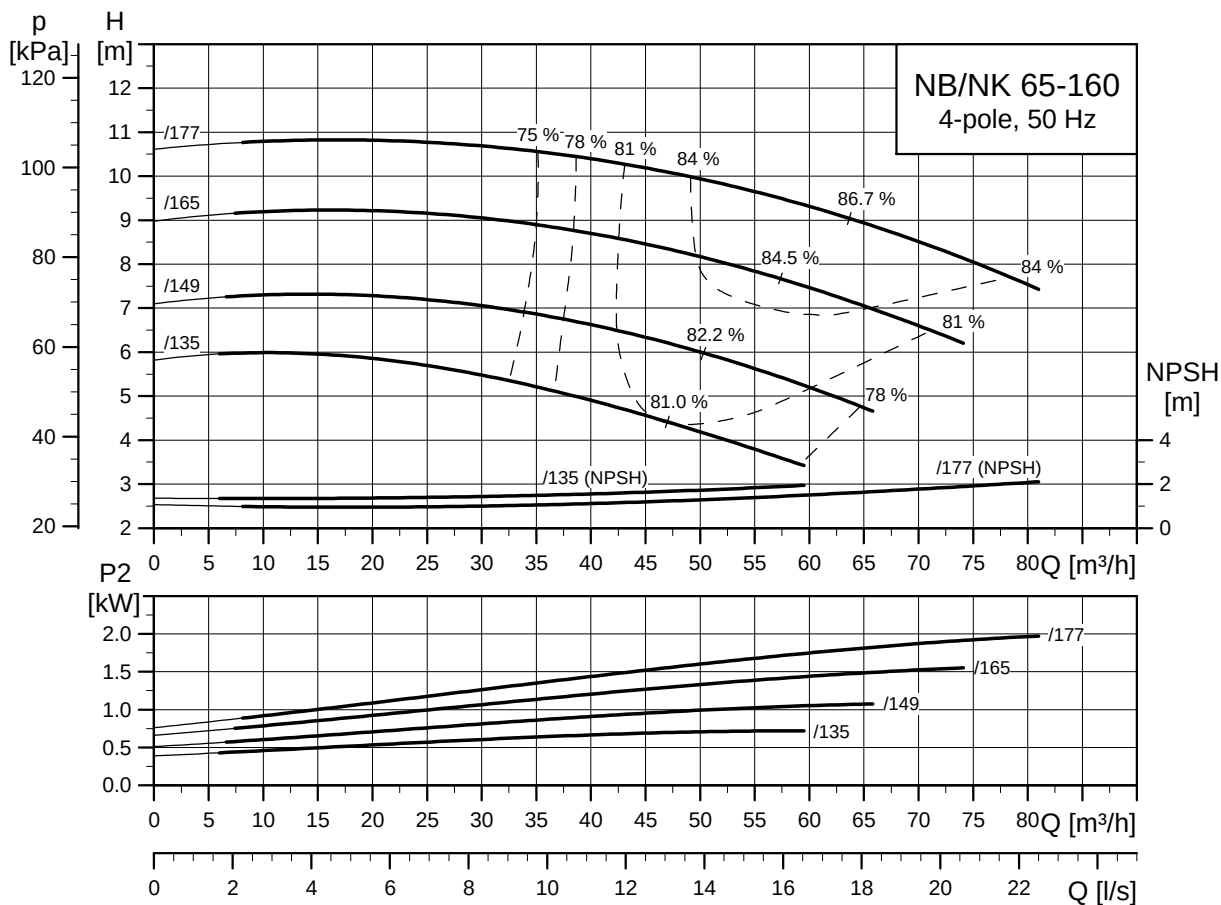
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 65-160



TM03 5135 4312

TM03 4180 1806

TM03 6005 4106

Pump type		65-160/135	65-160/149	65-160/165	65-160/177
Motor type	Standard Motor ⁵⁾	MG 90SC-H3	MG 90SB-H3	MG 90LC-H3	MG 100LB-H3
	E-Motor	MGE 90SA-G	MGE 90SB-G	MGE 90LC-G	MGE 100LB-G
Common data NB/NK	P2	[kW]	0.75	1.1	1.5
	PN	[bar]	16	16	16
	DNs	[mm]	80	80	80
	DNd	[mm]	65	65	65
	a	[mm]	100	100	100
	h2	[mm]	200	200	200
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	785/881	795/891	835/931
	L NKE ¹⁾	[mm]	785/881	835/931	835/931
	I1	[mm]	1000	1000	1000
	I2	[mm]	170	170	170
	I3	[mm]	660	660	660
	b1	[mm]	340	340	340
	b2	[mm]	450	450	450
	b3	[mm]	400	400	400
	d	[mm]	24	24	24
	a2	[mm]	60	60	60
	h	[mm]	80	80	80
	h3	[mm]	240	240	240
	h4 ²⁾	[mm]	350/418	350/425	350/425
	Base frame no. ³⁾		4	4	4
NB data	Mounting design ⁴⁾		A	A	A
	L NB	[mm]	246	246	246
	L NB SS	[mm]	273	273	273
	h1	[mm]	160	160	160
	G1	[mm]	127	127	127
	G2	[mm]	161	161	161
	m1	[mm]	125	125	125
	m2	[mm]	95	95	95
	n1	[mm]	280	280	280
	n2	[mm]	212	212	212
	b	[mm]	65	65	65
	s1	[mm]	M12	M12	M12
	H	[mm]	-	-	-
	LB ²⁾	[mm]	281/359	281/321	321/308
	AD ²⁾	[mm]	110/178	110/185	110/185
	AG ²⁾	[mm]	162/257	162/177	162/177
	LL ²⁾	[mm]	103/253	103/232	103/232
	P	[mm]	200	200	200
	C	[mm]	-	-	-
	B	[mm]	-	-	-
	A	[mm]	-	-	-
	K	[mm]	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	113/113	121/120	122/121
	Weight NKE. CI ¹⁾	[kg]	121/121	127/127	128/128
	Weight NB. CI	[kg]	45	56	57
	Weight NBE. CI	[kg]	58	56	59
	Weight diff. SS	[kg]	1	1	1

1) Pump with standard coupling / pump with spacer coupling.

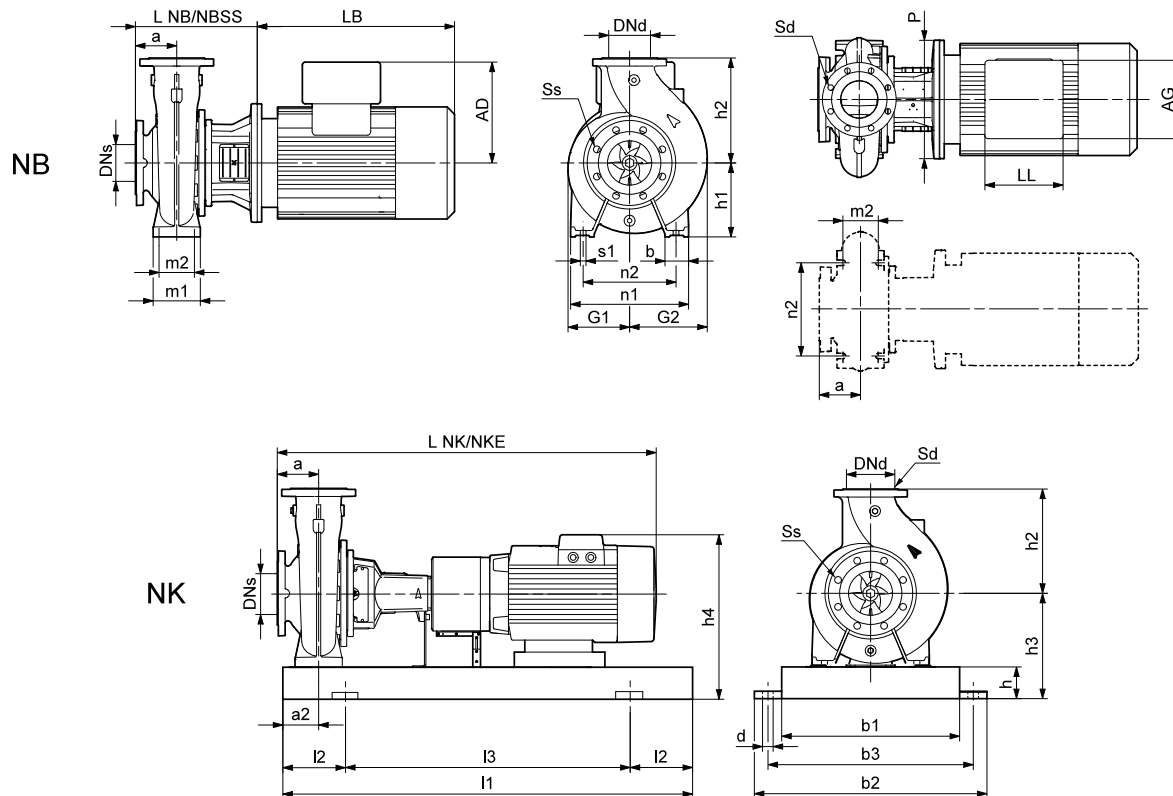
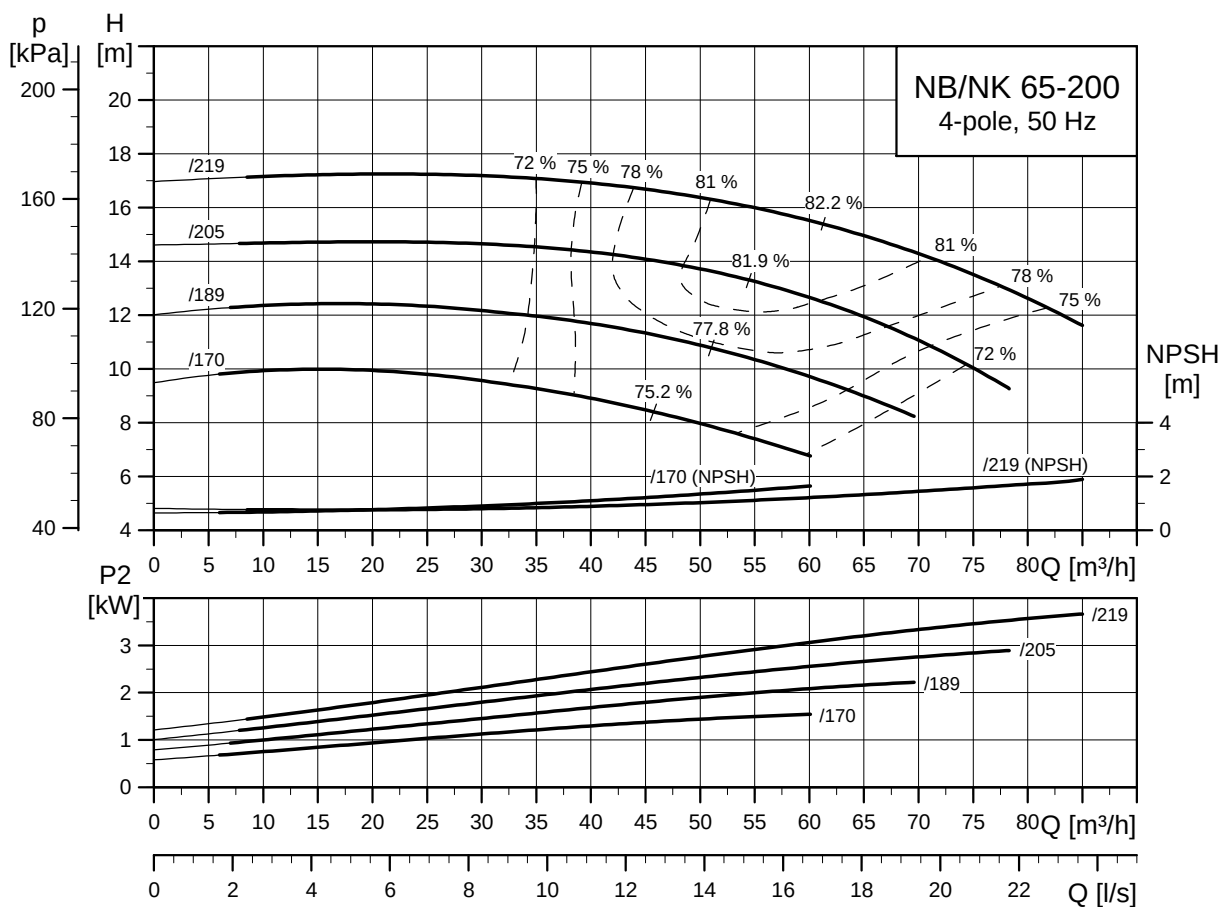
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 65-200



TM03 5136 4312

TM03 4180 1806

TM03 6005 4106

Pump type	65-200/170		65-200/189	65-200/205	65-200/219	
Motor type	Standard Motor ⁵⁾		MG 90LC-H3	MG 100LB-H3	MG 100LC-H3	MG 112MC-H3
	E-Motor		MGE 90LC-G	MGE 100LB-G	MGE 100LC-G	MGE 112MC-G
Common data NB/NK	P2	[kW]	1.5	2.2	3	4
	PN	[bar]	16	16	16	16
	DNs	[mm]	80	80	80	80
	DNd	[mm]	65	65	65	65
	a	[mm]	100	100	100	100
	h2	[mm]	225	225	225	225
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	835/971	859/995	859/995	896/1032
	L NKE ¹⁾	[mm]	835/971	859/995	859/995	896/1032
	l1	[mm]	1120	1120	1120	1120
	l2	[mm]	190	190	190	190
	l3	[mm]	740	740	740	740
	b1	[mm]	380	380	380	380
	b2	[mm]	490	490	490	490
	b3	[mm]	440	440	440	440
	d	[mm]	24	24	24	24
	a2	[mm]	75	75	75	75
	h	[mm]	80	80	80	80
	h3	[mm]	260	260	260	260
	h4 ²⁾	[mm]	370/445	380/452	380/452	394/462
	Base frame no. ³⁾		5	5	5	5
NB data	Mounting design ⁴⁾		A	A	A	A
	L NB	[mm]	273	303	303	303
	L NB SS	[mm]	273	293	293	293
	h1	[mm]	180	180	180	180
	G1	[mm]	149	149	149	149
	G2	[mm]	173	173	173	173
	m1	[mm]	125	125	125	125
	m2	[mm]	95	95	95	95
	n1	[mm]	320	320	320	320
	n2	[mm]	250	250	250	250
	b	[mm]	65	65	65	65
	s1	[mm]	M12	M12	M12	M12
	H	[mm]	-	-	-	-
	LB ²⁾	[mm]	321/308	335/347	335/382	372/371
	AD ²⁾	[mm]	110/185	120/192	120/192	134/202
	AG ²⁾	[mm]	162/177	162/222	162/222	202/208
	LL ²⁾	[mm]	103/232	103/277	103/277	103/317
	P	[mm]	200	250	250	250
	C	[mm]	-	-	-	-
	B	[mm]	-	-	-	-
	A	[mm]	-	-	-	-
	K	[mm]	-	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	146/146	151/149	156/154	172/170
	Weight NKE. CI ¹⁾	[kg]	153/152	162/160	164/162	177/175
	Weight NB. CI	[kg]	67	70	72	87
	Weight NBE. CI	[kg]	69	76	81	85
	Weight diff. SS	[kg]	3	3	3	3

1) Pump with standard coupling / pump with spacer coupling.

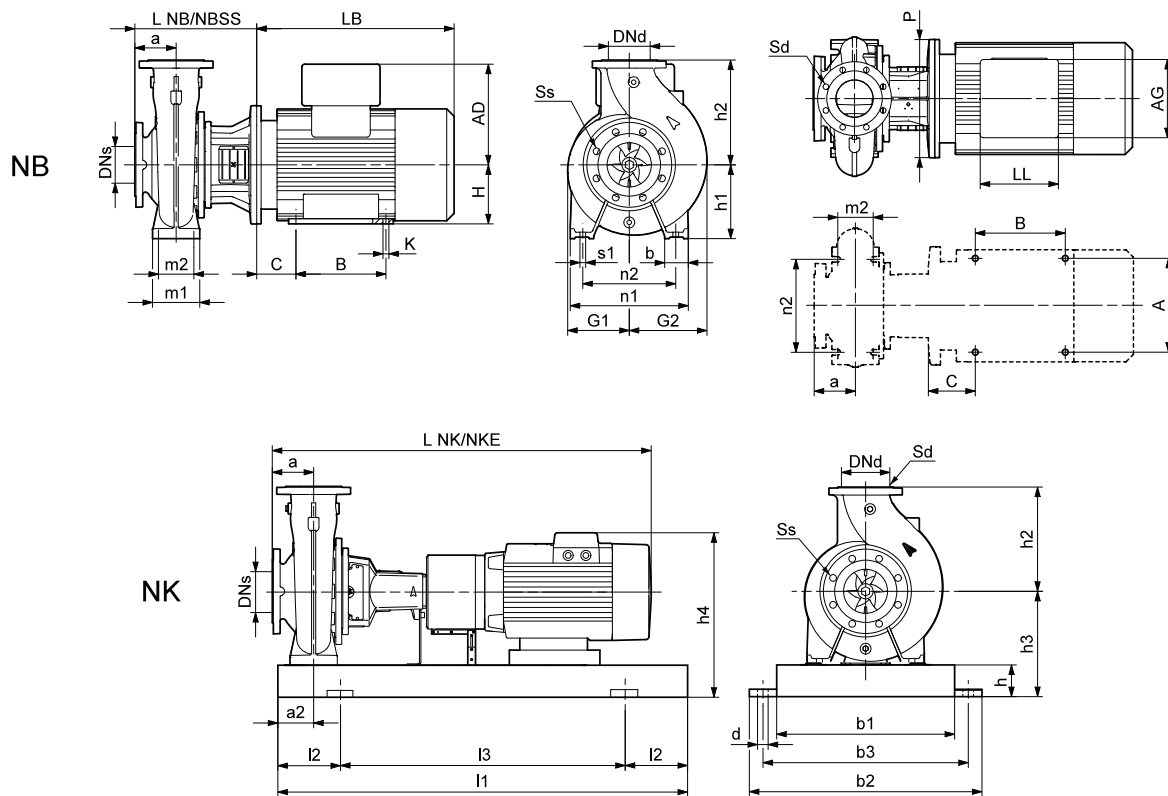
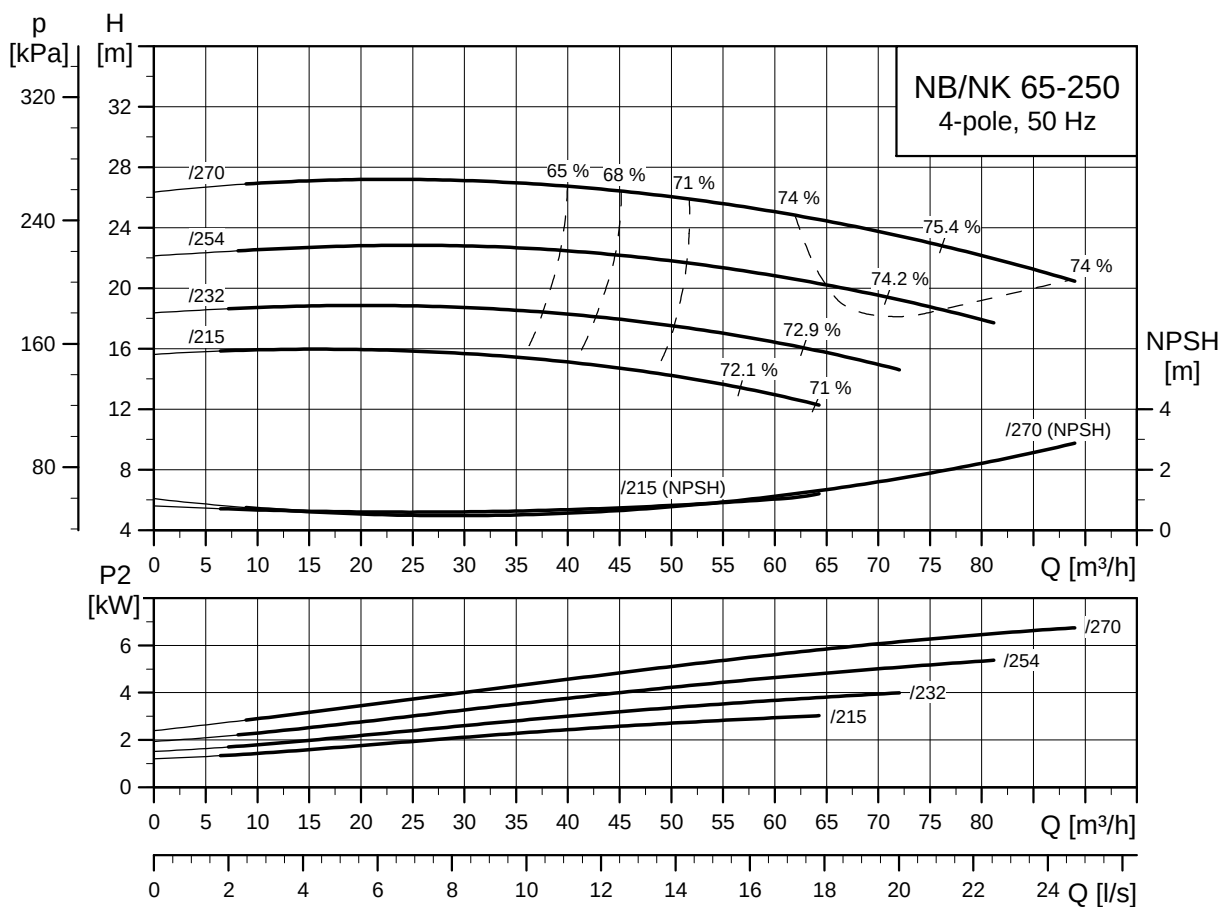
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 65-250



TM03 5137 4312

TM03 4182 1806

TM03 6005 4106

Pump type		65-250/215	65-250/232	65-250/254	65-250/270
Motor type	Standard Motor ⁵⁾	MG 100LC-H3	MG 112MC-H3	MG 132SB-H3	MG 132MB-H3
	E-Motor	MGE 100LC-G	MGE 112MC-G	MGE 132SB-F	MGE 132MB-F
Common data NB/NK	P2	[kW]	3	4	5.5
	PN	[bar]	16	16	16
	DNs	[mm]	80	80	80
	DNd	[mm]	65	65	65
	a	[mm]	100	100	100
	h2	[mm]	250	250	250
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	969/1105	1006/1142	1033/1169
	L NKE ¹⁾	[mm]	969/1105	1006/1142	1033/1169
	l1	[mm]	1250	1250	1250
	l2	[mm]	205	205	205
	l3	[mm]	840	840	840
	b1	[mm]	430	430	430
	b2	[mm]	540	540	540
	b3	[mm]	490	490	490
	d	[mm]	24	24	24
	a2	[mm]	90	90	90
	h	[mm]	80	80	80
	h3	[mm]	280	280	280
	h4 ²⁾	[mm]	400/472	414/482	439/501
	Base frame no. ³⁾		6	6	6
	Mounting design ⁴⁾		A	A	A
NB data	L NB	[mm]	323	323	343
	L NB SS	[mm]	323	323	343
	h1	[mm]	200	200	200
	G1	[mm]	183	183	183
	G2	[mm]	200	200	200
	m1	[mm]	160	160	160
	m2	[mm]	120	120	120
	n1	[mm]	360	360	360
	n2	[mm]	280	280	280
	b	[mm]	80	80	80
	s1	[mm]	M16	M16	M16
	H	[mm]	-	-	-
	LB ²⁾	[mm]	335/382	372/371	379/373
	AD ²⁾	[mm]	120/192	134/202	159/221
	AG ²⁾	[mm]	162/222	202/208	203/227
	LL ²⁾	[mm]	103/277	103/317	135/305
	P	[mm]	250	250	300
	C	[mm]	-	-	-
	B	[mm]	-	-	-
	A	[mm]	-	-	-
	K	[mm]	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	227/225	240/238	250/247
	Weight NKE. CI ¹⁾	[kg]	235/233	244/242	256/253
	Weight NB. CI	[kg]	113	128	146
	Weight NBE. CI	[kg]	122	125	143
	Weight diff. SS	[kg]	-2	-2	-2

1) Pump with standard coupling / pump with spacer coupling.

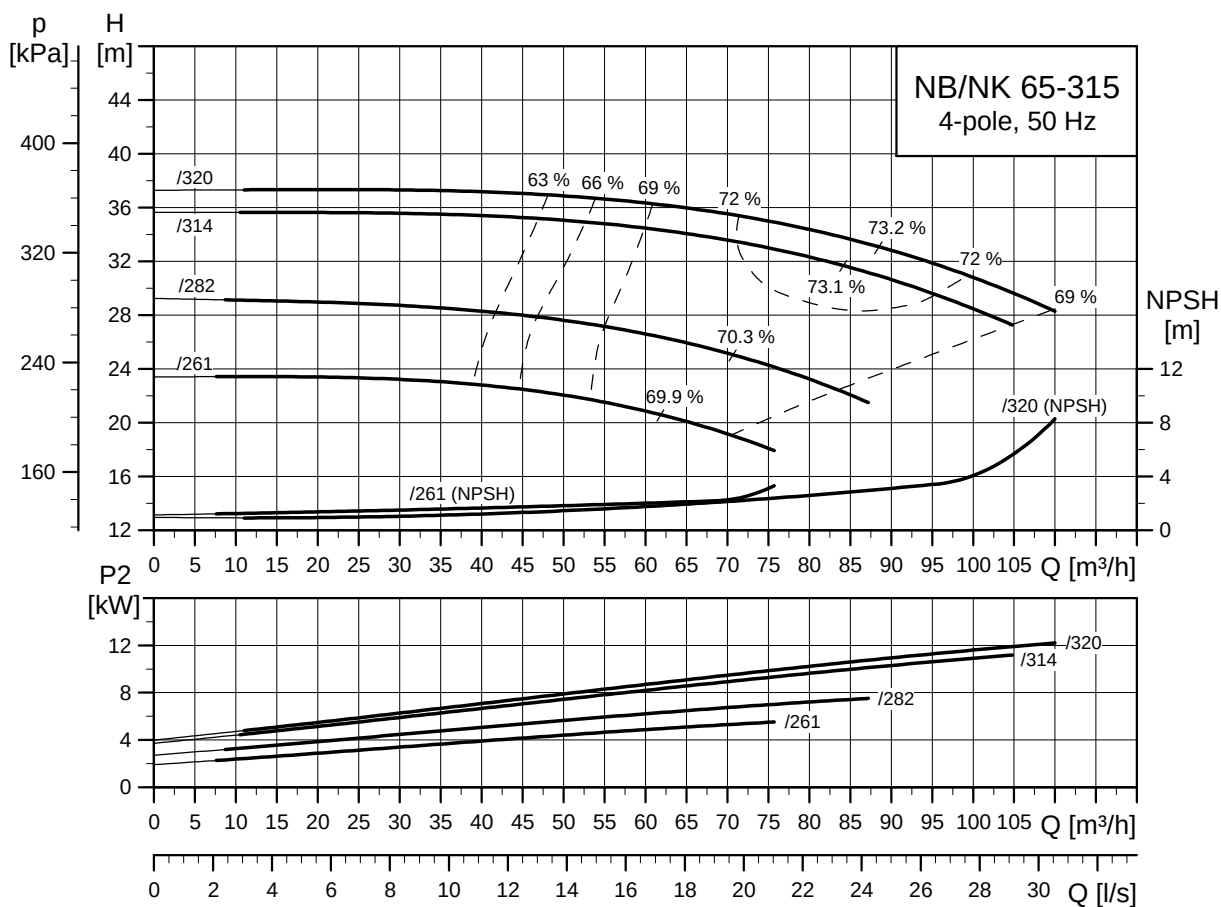
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

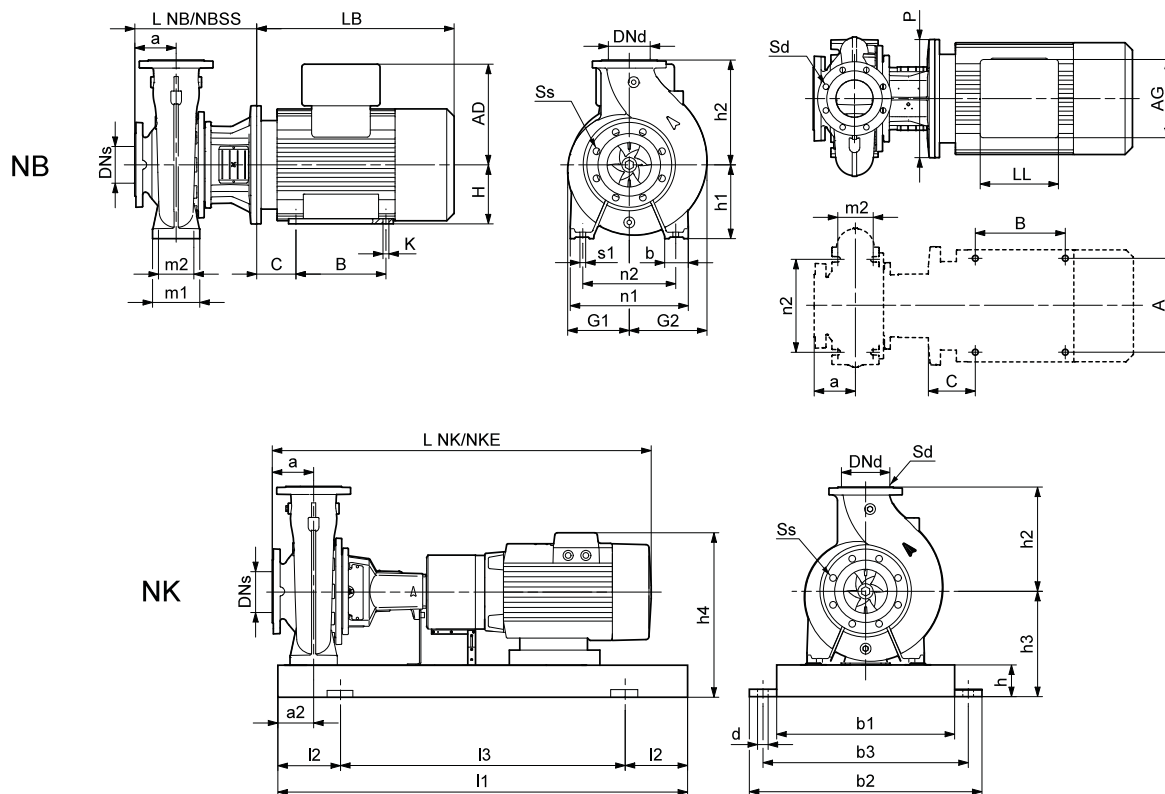
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 65-315



TM03 5138 4312



TM03 4182 1806

TM03 6005 4106

Pump type	65-315/261		65-315/282	65-315/314	65-315/320	
Motor type	Standard Motor ⁵⁾		MG 132SB-H3	MG 132MB-H3	MG 160MA-H3	MG 160LB-H3
	E-Motor		MGE 132SB-F	MGE 132MB-F	MGE 160MB-F	MGE 160LB-F
Common data NB/NK	P2	[kW]	5.5	7.5	11	15
	PN	[bar]	16	16	16	16
	DNs	[mm]	80	80	80	80
	DNd	[mm]	65	65	65	65
	a	[mm]	125	125	125	125
	h2	[mm]	280	280	280	280
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	4 x Ø19	4 x Ø19	4 x Ø19	4 x Ø19
NK data	L NK ¹⁾	[mm]	1058/1194	1108/1244	1254/1390	1284/1420
	L NKE ¹⁾	[mm]	1058/1194	1108/1244	1180/1316	1224/1360
	l1	[mm]	1400	1400	1400	1400
	l2	[mm]	230	230	230	230
	l3	[mm]	940	940	940	940
	b1	[mm]	480	480	480	480
	b2	[mm]	610	610	610	610
	b3	[mm]	560	560	560	560
	d	[mm]	28	28	28	28
	a2	[mm]	90	90	90	90
	h	[mm]	100	100	100	100
	h3	[mm]	325	325	325	325
	h4 ²⁾	[mm]	484/546	484/546	529/626	529/626
	Base frame no. ³⁾		7	7	7	7
NB data	Mounting design ⁴⁾		A	A	C	C
	L NB	[mm]	368	368	398	398
	L NB SS	[mm]	368	368	398	398
	h1	[mm]	225	225	225	225
	G1	[mm]	211	211	211	211
	G2	[mm]	219	219	219	219
	m1	[mm]	160	160	160	160
	m2	[mm]	120	120	120	120
	n1	[mm]	400	400	400	400
	n2	[mm]	315	315	315	315
	b	[mm]	80	80	80	80
	s1	[mm]	M16	M16	M16	M16
	H	[mm]	-	-	160	160
	LB ²⁾	[mm]	379/373	429/411	545/478	575/518
	AD ²⁾	[mm]	159/221	159/221	204/301	204/301
	AG ²⁾	[mm]	203/227	203/227	243/342	243/342
	LL ²⁾	[mm]	135/305	135/305	213/352	213/352
	P	[mm]	300	300	350	350
	C	[mm]	-	-	254	254
	B	[mm]	-	-	254	254
	A	[mm]	-	-	108	108
	K	[mm]	-	-	15	15
Weight data	Weight NK. CI ¹⁾	[kg]	300/297	312/309	336/331	358/353
	Weight NKE. CI ¹⁾	[kg]	306/303	321/318	365/360	388/383
	Weight NB. CI	[kg]	158	174	209	230
	Weight NBE. CI	[kg]	155	172	217	244
	Weight diff. SS	[kg]	5	5	5	5

1) Pump with standard coupling / pump with spacer coupling.

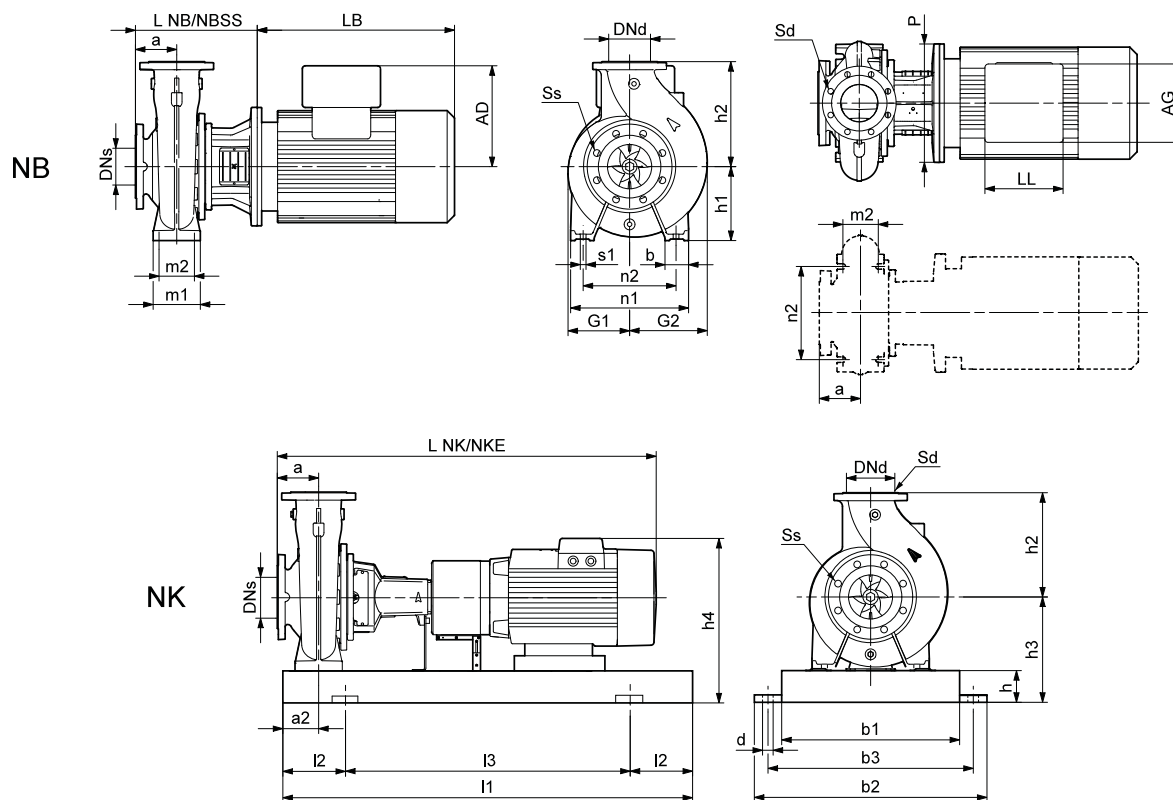
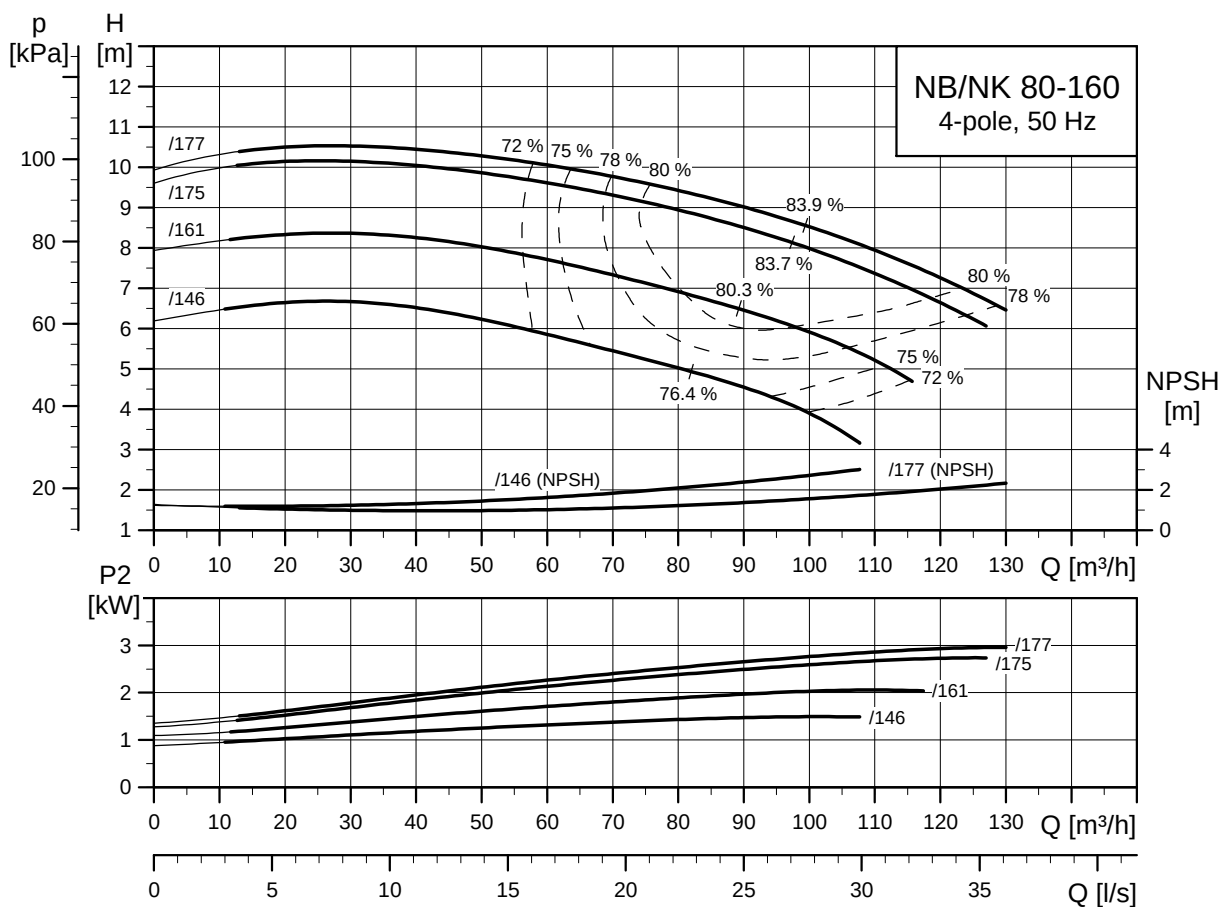
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 80-160



TM03 5139 4312

TM03 4180 1806

TM03 6005 4106

Pump type	80-160/146		80-160/161	80-160/175	80-160/177	
Motor type	Standard Motor ⁵⁾		MG 90LC-H3	MG 100LB-H3	MG 100LC-H3	MG 112MC-H3
	E-Motor		MGE 90LC-G	MGE 100LB-G	MGE 100LC-G	MGE 112MC-G
Common data NB/NK	P2	[kW]	1.5	2.2	3	4
	PN	[bar]	16	16	16	16
	DNs	[mm]	100	100	100	100
	DNd	[mm]	80	80	80	80
	a	[mm]	125	125	125	125
	h2	[mm]	225	225	225	225
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	860/996	884/1020	884/1020	921/1057
	L NKE ¹⁾	[mm]	860/996	884/1020	884/1020	921/1057
	l1	[mm]	1120	1120	1120	1120
	l2	[mm]	190	190	190	190
	l3	[mm]	740	740	740	740
	b1	[mm]	380	380	380	380
	b2	[mm]	490	490	490	490
	b3	[mm]	440	440	440	440
	d	[mm]	24	24	24	24
	a2	[mm]	75	75	75	75
	h	[mm]	80	80	80	80
	h3	[mm]	260	260	260	260
	h4 ²⁾	[mm]	370/445	380/452	380/452	394/462
	Base frame no. ³⁾		5	5	5	5
NB data	Mounting design ⁴⁾		A	A	A	A
	L NB	[mm]	271	299	299	299
	L NB SS	[mm]	298	318	318	318
	h1	[mm]	180	180	180	180
	G1	[mm]	139	139	139	139
	G2	[mm]	182	182	182	182
	m1	[mm]	125	125	125	125
	m2	[mm]	95	95	95	95
	n1	[mm]	320	320	320	320
	n2	[mm]	250	250	250	250
	b	[mm]	65	65	65	65
	s1	[mm]	M12	M12	M12	M12
	H	[mm]	-	-	-	-
	LB ²⁾	[mm]	321/308	335/347	335/382	372/371
	AD ²⁾	[mm]	110/185	120/192	120/192	134/202
	AG ²⁾	[mm]	162/177	162/222	162/222	202/208
	LL ²⁾	[mm]	103/232	103/277	103/277	103/317
	P	[mm]	200	250	250	250
	C	[mm]	-	-	-	-
	B	[mm]	-	-	-	-
	A	[mm]	-	-	-	-
	K	[mm]	-	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	146/145	151/149	156/154	172/170
	Weight NKE. CI ¹⁾	[kg]	153/152	162/160	164/162	176/174
	Weight NB. CI	[kg]	65	71	73	88
	Weight NBE. CI	[kg]	67	77	82	86
	Weight diff. SS	[kg]	3	3	3	3

1) Pump with standard coupling / pump with spacer coupling.

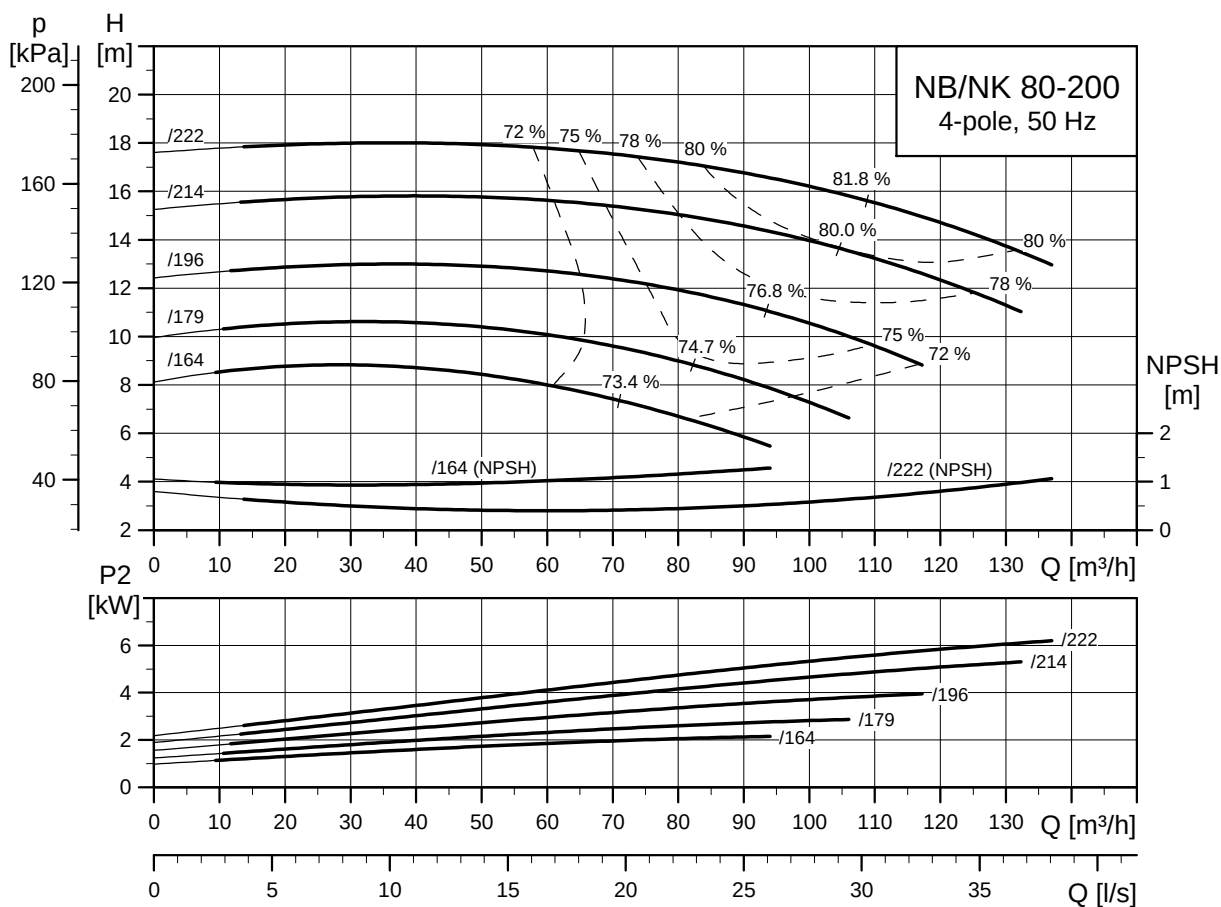
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

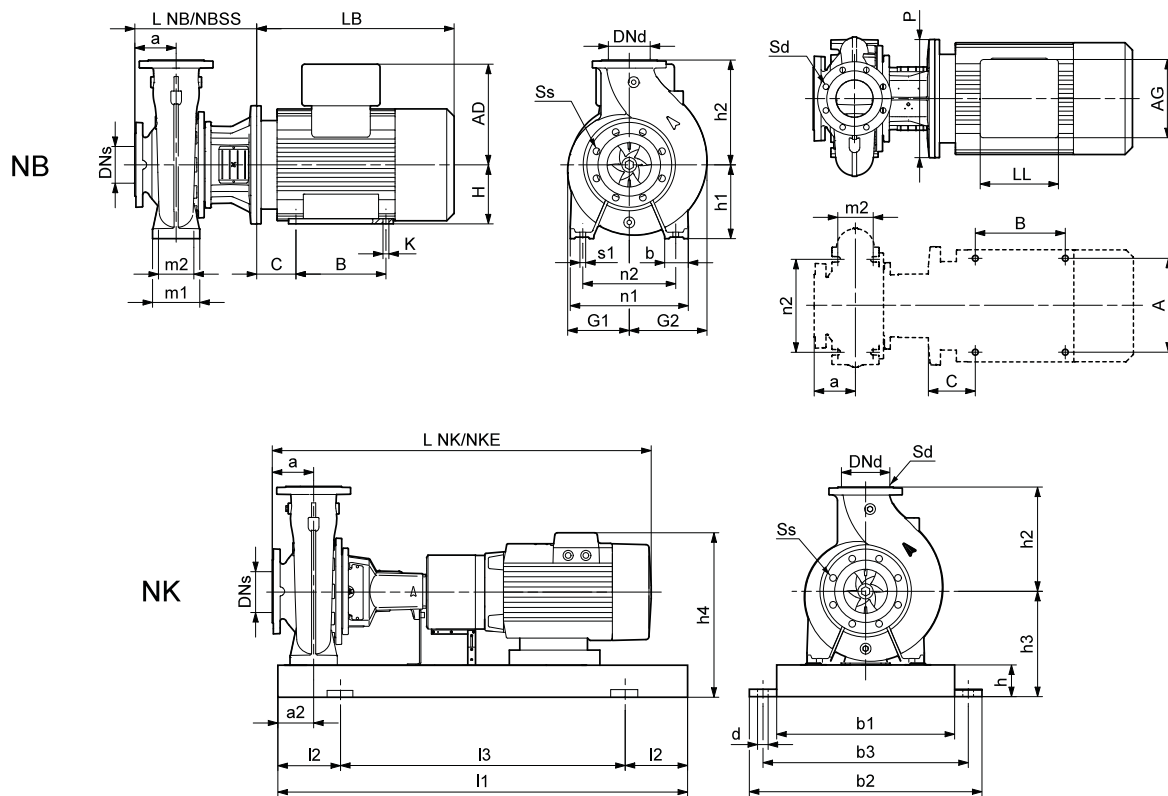
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 80-200



TM03 5140 4312



TM03 4182 1806

TM03 6005 4106

Pump type		80-200/164	80-200/179	80-200/196	80-200/214	80-200/222
Motor type	Standard Motor ⁵⁾	MG 100LB-H3	MG 100LC-H3	MG 112MC-H3	MG 132SB-H3	MG 132MB-H3
	E-Motor	MGE 100LB-G	MGE 100LC-G	MGE 112MC-G	MGE 132SB-F	MGE 132MB-F
Common data NB/NK	P2	[kW]	2.2	3	4	5.5
	PN	[bar]	16	16	16	16
	DNs	[mm]	100	100	100	100
	DNd	[mm]	80	80	80	80
	a	[mm]	125	125	125	125
	h2	[mm]	250	250	250	250
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	994/1130	994/1130	1031/1167	1058/1194
	L NKE ¹⁾	[mm]	994/1130	994/1130	1031/1167	1058/1194
	I1	[mm]	1250	1250	1250	1250
	I2	[mm]	205	205	205	205
	I3	[mm]	840	840	840	840
	b1	[mm]	430	430	430	430
	b2	[mm]	540	540	540	540
	b3	[mm]	490	490	490	490
	d	[mm]	24	24	24	24
	a2	[mm]	75	75	75	75
	h	[mm]	80	80	80	80
	h3	[mm]	260	260	260	260
	h4 ²⁾	[mm]	380/452	380/452	394/462	419/481
	Base frame no. ³⁾		6	6	6	6
	Mounting design ⁴⁾		A	A	A	A
NB data	L NB	[mm]	348	348	348	368
	L NB SS	[mm]	348	348	348	368
	h1	[mm]	180	180	180	180
	G1	[mm]	160	160	160	160
	G2	[mm]	193	193	193	193
	m1	[mm]	125	125	125	125
	m2	[mm]	95	95	95	95
	n1	[mm]	345	345	345	345
	n2	[mm]	280	280	280	280
	b	[mm]	65	65	65	65
	s1	[mm]	M12	M12	M12	M12
	H	[mm]	-	-	-	-
	LB ²⁾	[mm]	335/347	335/382	372/371	379/373
	AD ²⁾	[mm]	120/192	120/192	134/202	159/221
	AG ²⁾	[mm]	162/222	162/222	202/208	203/227
	LL ²⁾	[mm]	103/277	103/277	103/317	135/305
	P	[mm]	250	250	250	300
	C	[mm]	-	-	-	-
	B	[mm]	-	-	-	-
	A	[mm]	-	-	-	-
	K	[mm]	-	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	197/195	202/200	220/218	236/233
	Weight NKE. CI ¹⁾	[kg]	208/206	210/208	224/222	242/239
	Weight NB. CI	[kg]	96	98	113	131
	Weight NBE. CI	[kg]	102	107	110	128
	Weight diff. SS	[kg]	16	16	16	16

1) Pump with standard coupling / pump with spacer coupling.

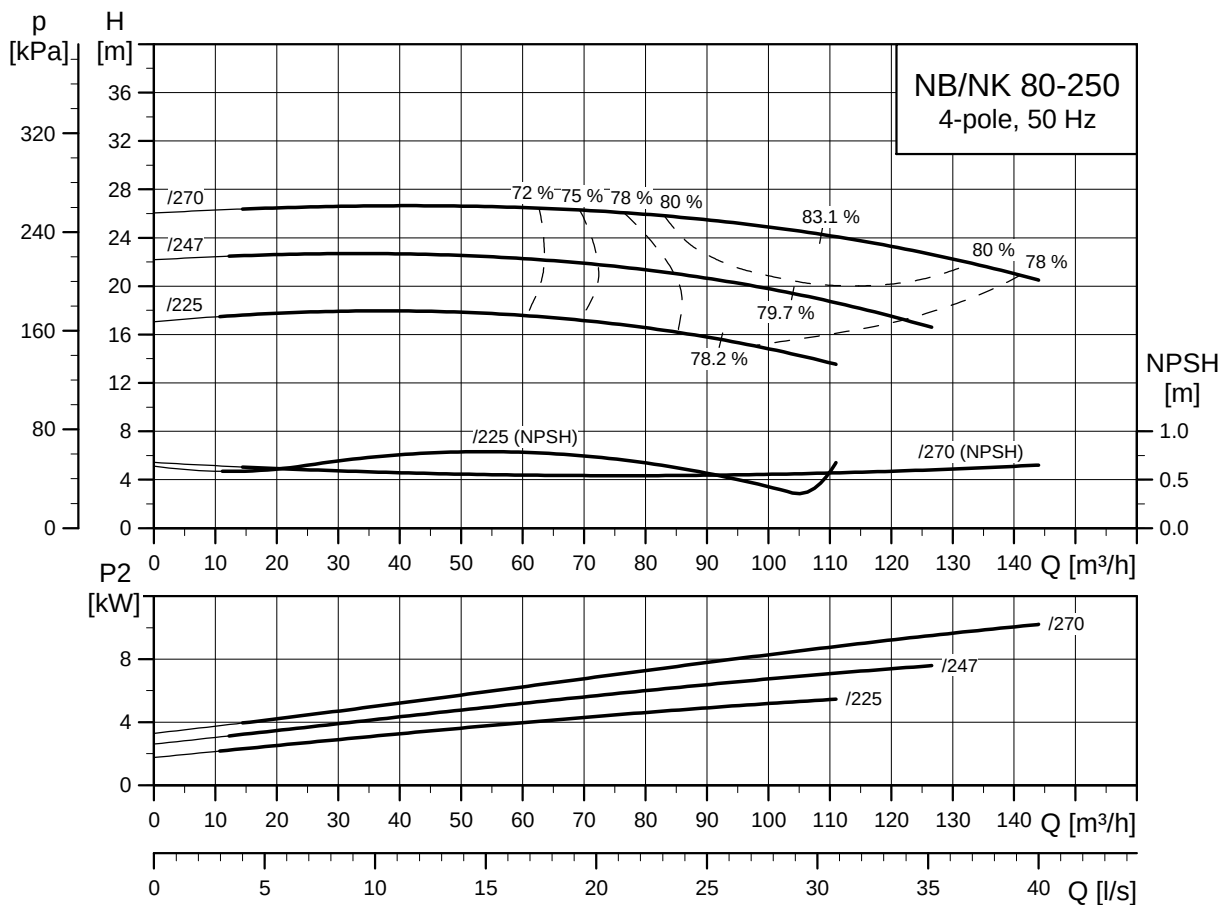
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

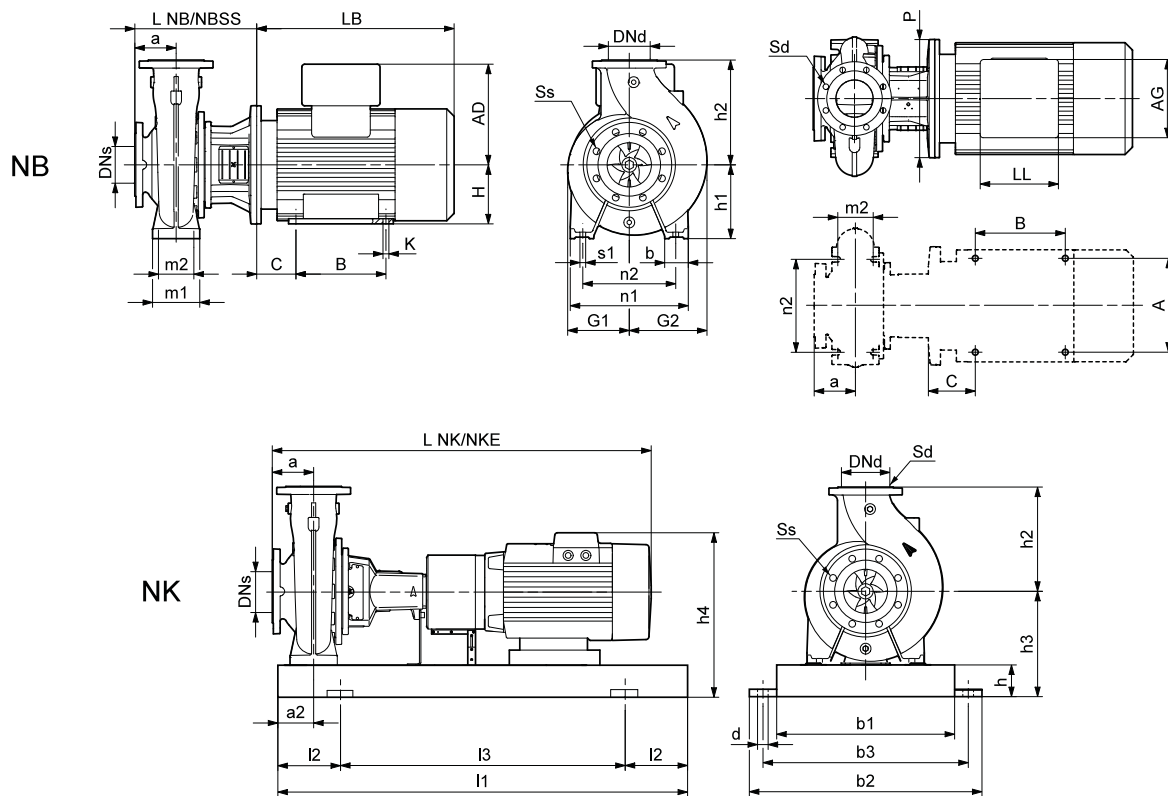
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 80-250



TM03 5141 4312



TM03 4182 1806

TM03 6005 4106

Pump type		80-250/225	80-250/247	80-250/270
Motor type	Standard Motor ⁵⁾	MG 132SB-H3	MG 132MB-H3	MG 160MA-H3
	E-Motor	MGE 132SB-F	MGE 132MB-F	MGE 160MB-F
Common data NB/NK	P2	[kW]	5.5	7.5
	PN	[bar]	16	16
	DNs	[mm]	100	100
	DNd	[mm]	80	80
	a	[mm]	125	125
	h2	[mm]	280	280
	Ss	[mm]	8 x Ø19	8 x Ø19
	Sd	[mm]	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1058/1194	1108/1244
	L NKE ¹⁾	[mm]	1058/1194	1180/1316
	I1	[mm]	1400	1400
	I2	[mm]	230	230
	I3	[mm]	940	940
	b1	[mm]	480	480
	b2	[mm]	610	610
	b3	[mm]	560	560
	d	[mm]	28	28
	a2	[mm]	90	90
	h	[mm]	100	100
	h3	[mm]	300	300
	h4 ²⁾	[mm]	459/521	504/601
	Base frame no. ³⁾		7	7
NB data	Mounting design ⁴⁾		A	C
	L NB	[mm]	368	368
	L NB SS	[mm]	368	368
	h1	[mm]	200	200
	G1	[mm]	182	182
	G2	[mm]	210	210
	m1	[mm]	160	160
	m2	[mm]	120	120
	n1	[mm]	400	400
	n2	[mm]	315	315
	b	[mm]	80	80
	s1	[mm]	M16	M16
	H	[mm]	-	160
	LB ²⁾	[mm]	379/373	429/411
	AD ²⁾	[mm]	159/221	159/221
	AG ²⁾	[mm]	203/227	203/227
	LL ²⁾	[mm]	135/305	135/305
	P	[mm]	300	300
	C	[mm]	-	254
	B	[mm]	-	254
	A	[mm]	-	108
	K	[mm]	-	15
Weight data	Weight NK. CI ¹⁾	[kg]	286/283	298/295
	Weight NKE. CI ¹⁾	[kg]	291/288	307/304
	Weight NB. CI	[kg]	150	166
	Weight NBE. CI	[kg]	147	164
	Weight diff. SS	[kg]	15	15

1) Pump with standard coupling / pump with spacer coupling.

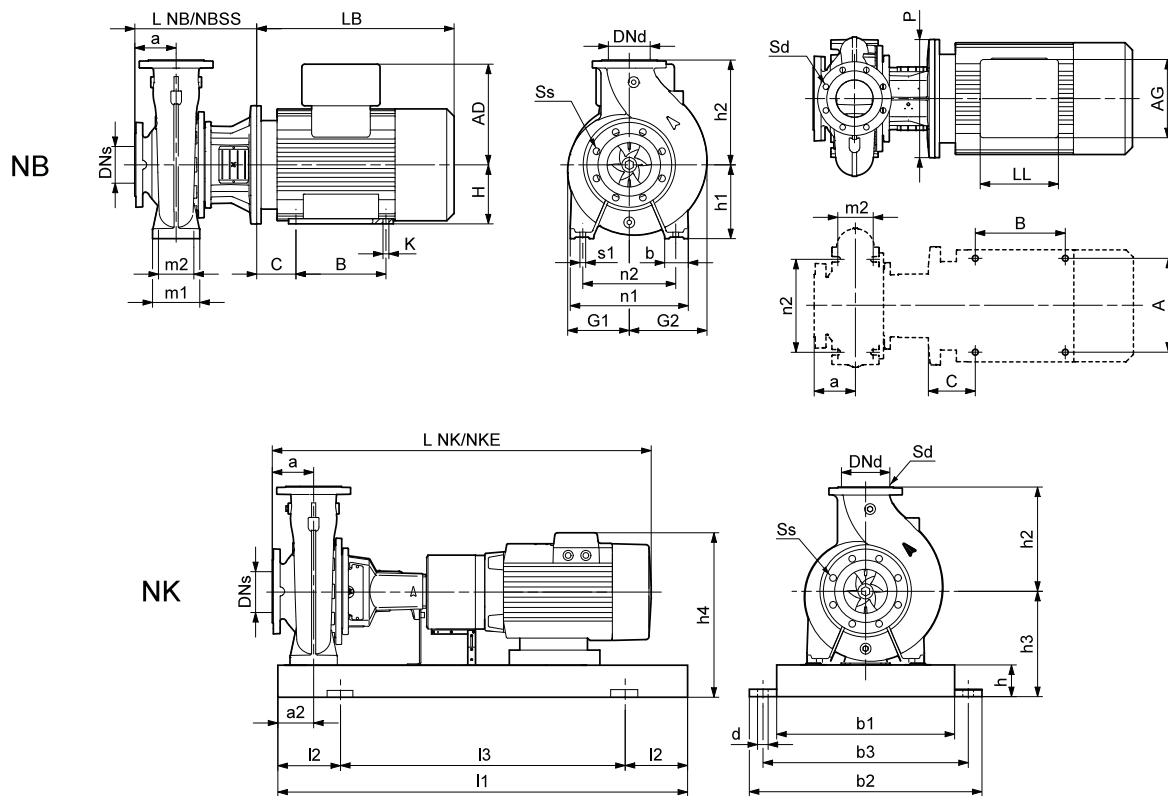
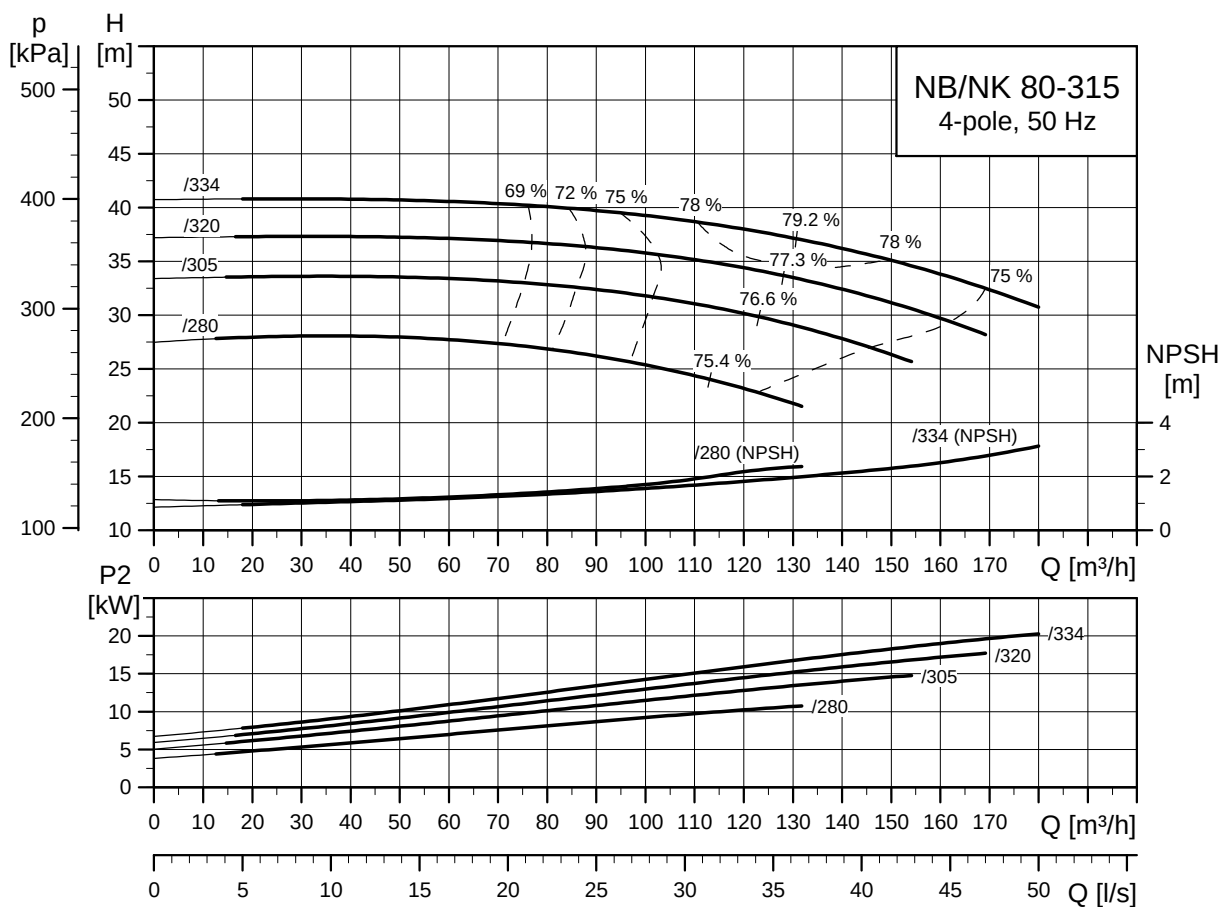
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 80-315



TM03 5142 4312

TM03 4182 1806

TM03 6005 4106

Pump type		80-315/280	80-315/305	80-315/320	80-315/334
Motor type	Standard Motor ⁵⁾	MG 160MA-H3	MG 160LB-H3	Siemens 180M	Siemens 180L
	E-Motor	MGE 160MB-F	MGE 160LB-F	MGE 180MA-F	-
Common data NB/NK	P2	[kW]	11	15	18.5
	PN	[bar]	16	16	16
	DNs	[mm]	100	100	100
	DNd	[mm]	80	80	80
	a	[mm]	125	125	125
	h2	[mm]	315	315	315
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1254/1390	1284/1420	1267/1403
	L NKE ¹⁾	[mm]	1180/1316	1224/1360	1250/1386
	I1	[mm]	1400	1400	1400
	I2	[mm]	230	230	230
	I3	[mm]	940	940	940
	b1	[mm]	480	480	480
	b2	[mm]	610	610	610
	b3	[mm]	560	560	560
	d	[mm]	28	28	28
	a2	[mm]	90	90	90
	h	[mm]	100	100	100
	h3	[mm]	350	350	350
	h4 ²⁾	[mm]	554/651	554/651	636/658
	Base frame no. ³⁾		7	7	7
NB data	Mounting design ⁴⁾		C	C	C
	L NB	[mm]	398	398	398
	L NB SS	[mm]	398	398	398
	h1	[mm]	250	250	250
	G1	[mm]	216	216	216
	G2	[mm]	243	243	243
	m1	[mm]	160	160	160
	m2	[mm]	120	120	120
	n1	[mm]	400	400	400
	n2	[mm]	315	315	315
	b	[mm]	80	80	80
	s1	[mm]	M16	M16	M16
	H	[mm]	160	160	180
	LB ²⁾	[mm]	545/478	575/518	558/541
	AD ²⁾	[mm]	204/301	204/301	286/308
	AG ²⁾	[mm]	243/342	243/342	189/420
	LL ²⁾	[mm]	213/352	213/352	164/400
	P	[mm]	350	350	350
	C	[mm]	254	254	279
	B	[mm]	254	254	241
	A	[mm]	108	108	121
	K	[mm]	15	15	15
Weight data	Weight NK. CI ¹⁾	[kg]	355/350	377/372	418/409
	Weight NKE. CI ¹⁾	[kg]	384/379	407/402	412/403
	Weight NB. CI	[kg]	220	241	283
	Weight NBE. CI	[kg]	228	255	278
	Weight diff. SS	[kg]	7	7	7

1) Pump with standard coupling / pump with spacer coupling.

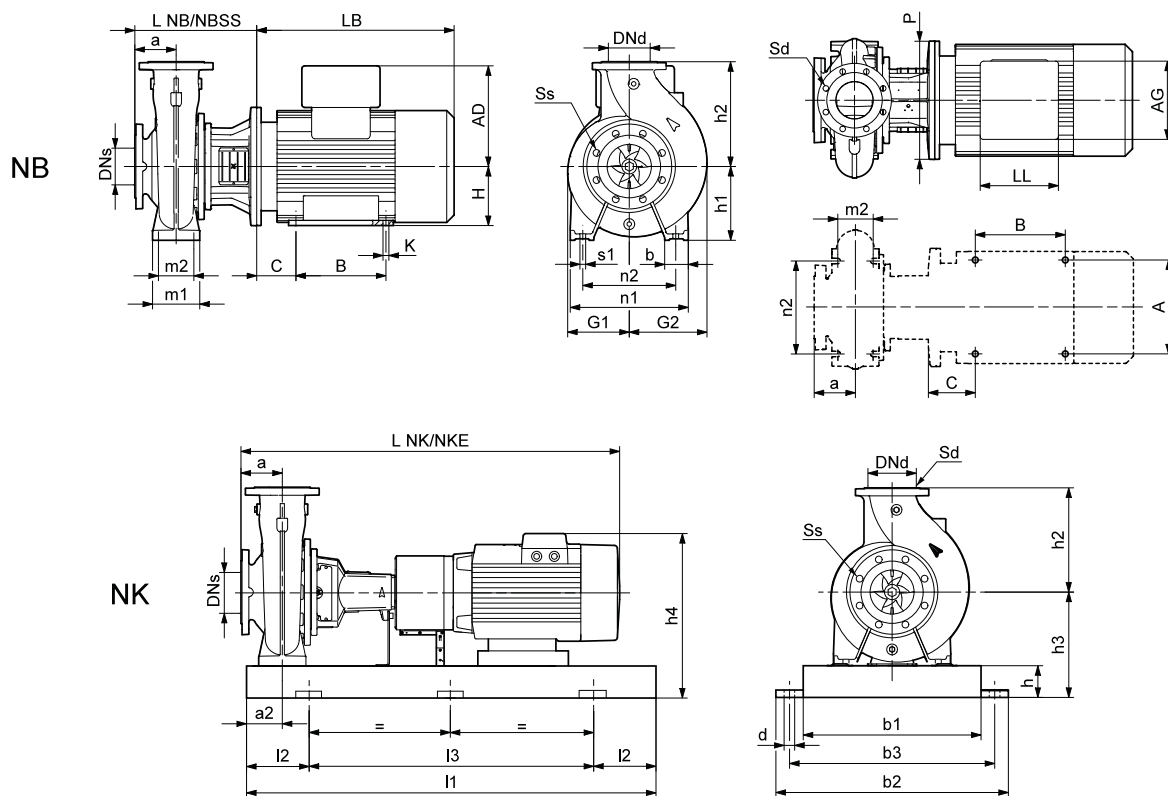
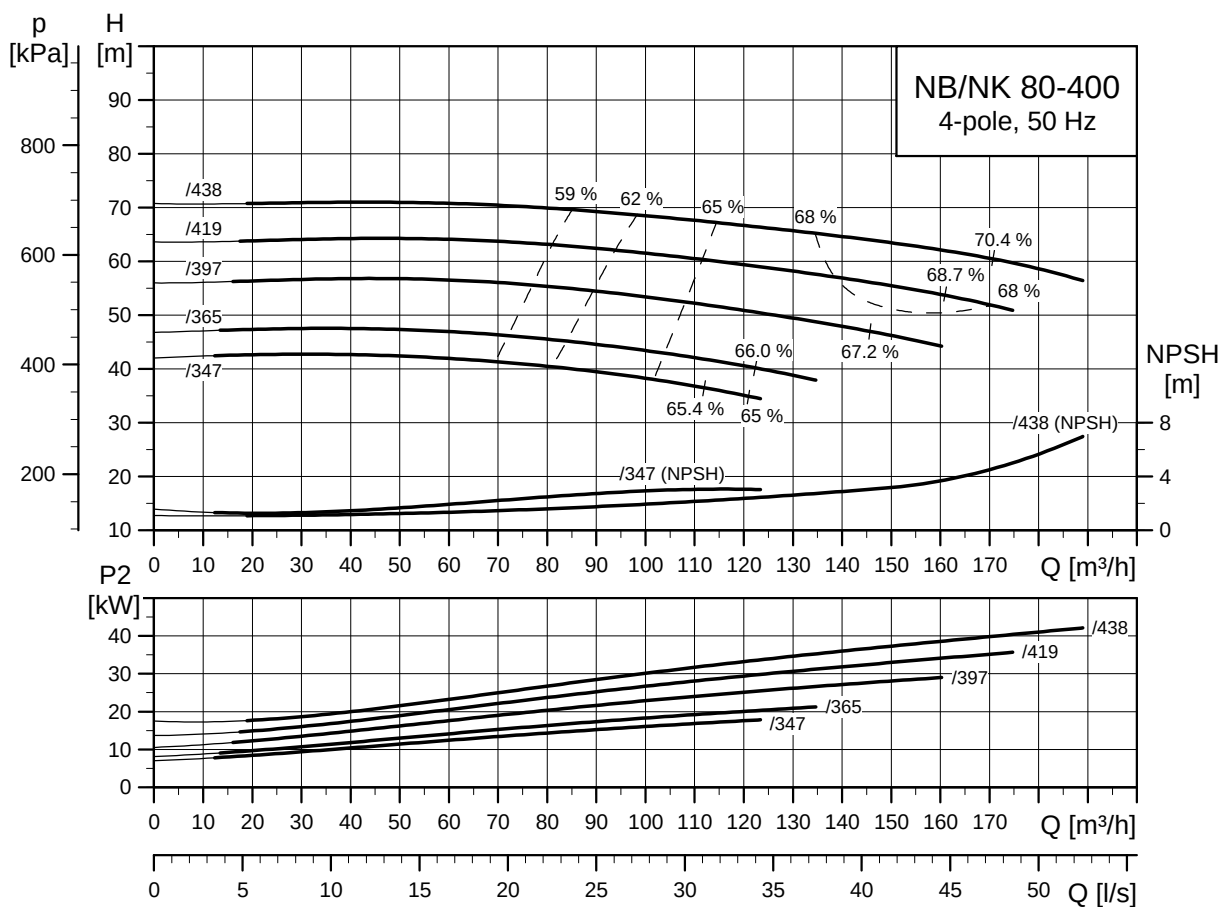
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 80-400



TM03 5143 4312

TM03 4182 1806

TM03 4179 1806

Pump type		80-400/347	80-400/365	80-400/397	80-400/419	80-400/438
Motor type	Standard Motor ⁵⁾	Siemens 180M	Siemens 180L	Siemens 200L	Siemens 225S	Siemens 225M
	E-Motor	MGE 180MA-F	-	-	-	-
Common data NB/NK	P2	[kW]	18.5	22	30	45
	PN	[bar]	16	16	16	16
	DNs	[mm]	100	100	100	100
	DNd	[mm]	80	80	80	80
	a	[mm]	125	125	125	125
	h2	[mm]	355	355	355	355
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1327/1463	1357/1493	1405/1541	1447/1583
	L NKE ¹⁾	[mm]	1310/1446	-/-	-/-	-/-
	I1	[mm]	1600	1600	1600	1600
	I2	[mm]	270	270	270	270
	I3	[mm]	1060	1060	1060	1060
	b1	[mm]	530	530	530	530
	b2	[mm]	660	660	660	660
	b3	[mm]	600	600	600	600
	d	[mm]	28	28	28	28
	a2	[mm]	90	90	90	90
	h	[mm]	100	100	100	100
	h3	[mm]	383	383	380	380
	h4 ²⁾	[mm]	669/691	669/-	695/-	718/-
	Base frame no. ³⁾		8	8	8	8
NB data	Mounting design ⁴⁾		C	C	C	C
	L NB	[mm]	396	396	396	426
	L NB SS	[mm]	398	398	398	428
	h1	[mm]	280	280	280	280
	G1	[mm]	266	266	266	266
	G2	[mm]	287	287	287	287
	m1	[mm]	160	160	160	160
	m2	[mm]	120	120	120	120
	n1	[mm]	435	435	435	435
	n2	[mm]	355	355	355	355
	b	[mm]	80	80	80	80
	s1	[mm]	M16	M16	M16	M16
	H	[mm]	180	180	200	225
	LB ²⁾	[mm]	558/541	588/-	636/-	648/-
	AD ²⁾	[mm]	286/308	286/-	315/-	338/-
	AG ²⁾	[mm]	189/420	189/-	265/-	266/-
	LL ²⁾	[mm]	164/400	164/-	197/-	197/-
	P	[mm]	350	350	400	450
	C	[mm]	279	279	318	356
	B	[mm]	241	241	305	286
	A	[mm]	121	121	133	149
	K	[mm]	15	15	19	19
Weight data	Weight NK. CI ¹⁾	[kg]	546/538	556/548	616/611	681/677
	Weight NKE. CI ¹⁾	[kg]	540/532	-/-	-/-	-/-
	Weight NB. CI	[kg]	358	373	439	510
	Weight NBE. CI	[kg]	353	-	-	-
	Weight diff. SS	[kg]	-6	-6	-6	-6

1) Pump with standard coupling / pump with spacer coupling.

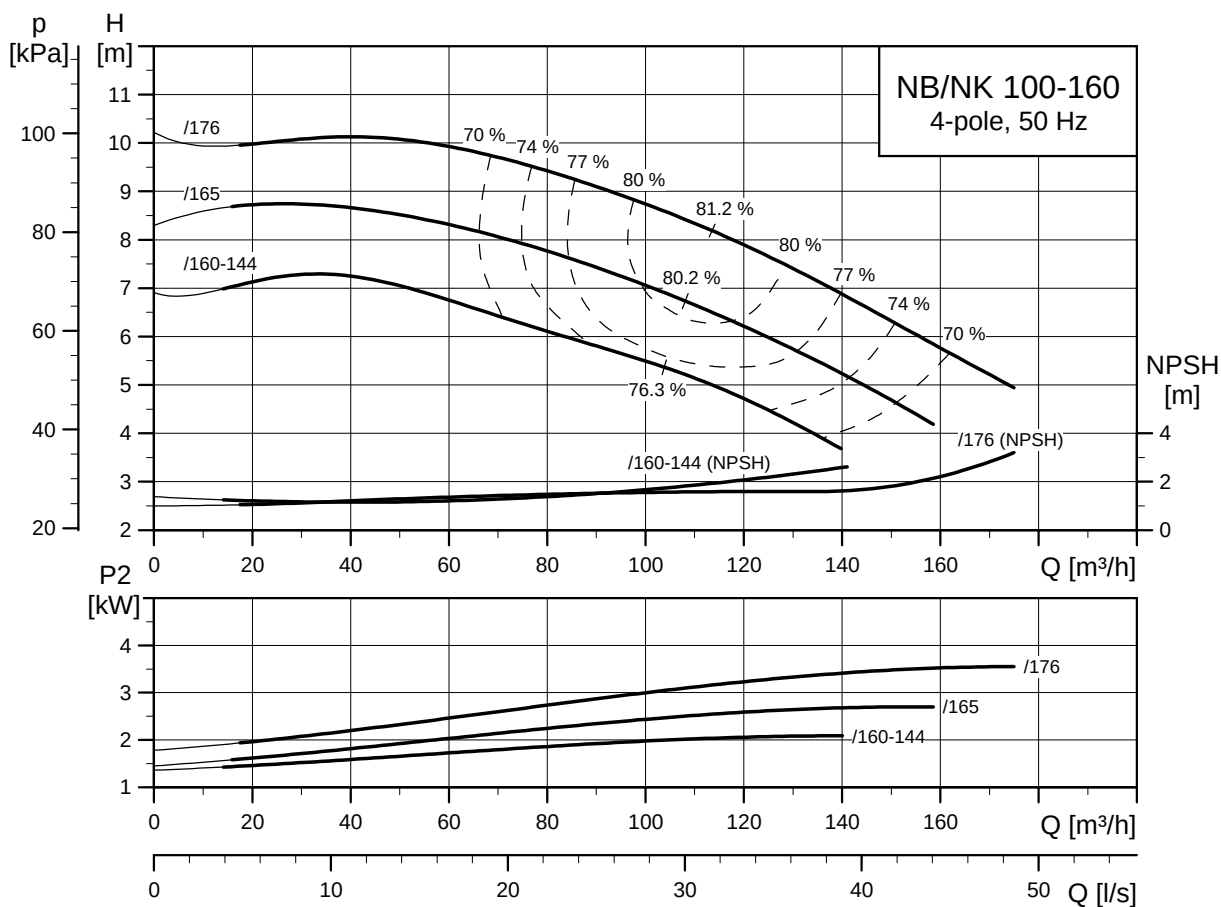
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

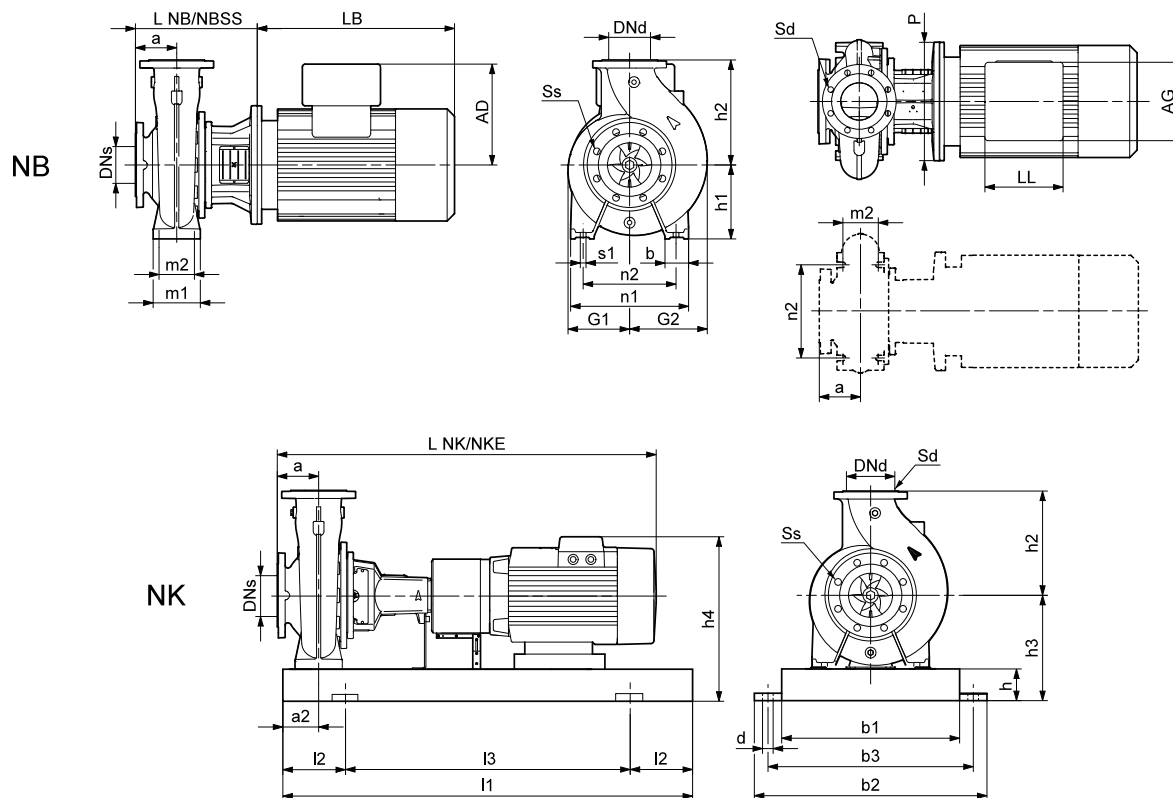
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 100-160



TM03 5144 4312



TM03 4180 1806

TM03 6005 4106

Pump type	100-160/160-144		100-160/165	100-160/176
Motor type	Standard Motor ⁵⁾		MG 100LB-H3	MG 100LC-H3
	E-Motor		MGE 100LB-G	MGE 100LC-G
Common data NB/NK	P2	[kW]	2.2	3
	PN	[bar]	16	16
	DNs	[mm]	125	125
	DNd	[mm]	100	100
	a	[mm]	125	125
	h2	[mm]	280	280
	Ss	[mm]	8 x Ø19	8 x Ø19
	Sd	[mm]	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	884/1020	884/1020
	L NKE ¹⁾	[mm]	884/1020	884/1020
	l1	[mm]	1250	1250
	l2	[mm]	205	205
	l3	[mm]	840	840
	b1	[mm]	430	430
	b2	[mm]	540	540
	b3	[mm]	490	490
	d	[mm]	24	24
	a2	[mm]	90	90
	h	[mm]	80	80
	h3	[mm]	280	280
	h4 ²⁾	[mm]	400/472	400/472
	Base frame no. ³⁾		6	6
NB data	Mounting design ⁴⁾		A	A
	L NB	[mm]	318	318
	L NB SS	[mm]	318	318
	h1	[mm]	200	200
	G1	[mm]	146	146
	G2	[mm]	187	187
	m1	[mm]	160	160
	m2	[mm]	120	120
	n1	[mm]	360	360
	n2	[mm]	280	280
	b	[mm]	80	80
	s1	[mm]	M16	M16
	H	[mm]	-	-
	LB ²⁾	[mm]	335/347	335/382
	AD ²⁾	[mm]	120/192	120/192
	AG ²⁾	[mm]	162/222	162/222
	LL ²⁾	[mm]	103/277	103/277
	P	[mm]	250	250
	C	[mm]	-	-
	B	[mm]	-	-
	A	[mm]	-	-
	K	[mm]	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	195/193	200/198
	Weight NKE. CI ¹⁾	[kg]	206/204	208/206
	Weight NB. CI	[kg]	97	99
	Weight NBE. CI	[kg]	102	107
	Weight diff. SS	[kg]	3	3

1) Pump with standard coupling / pump with spacer coupling.

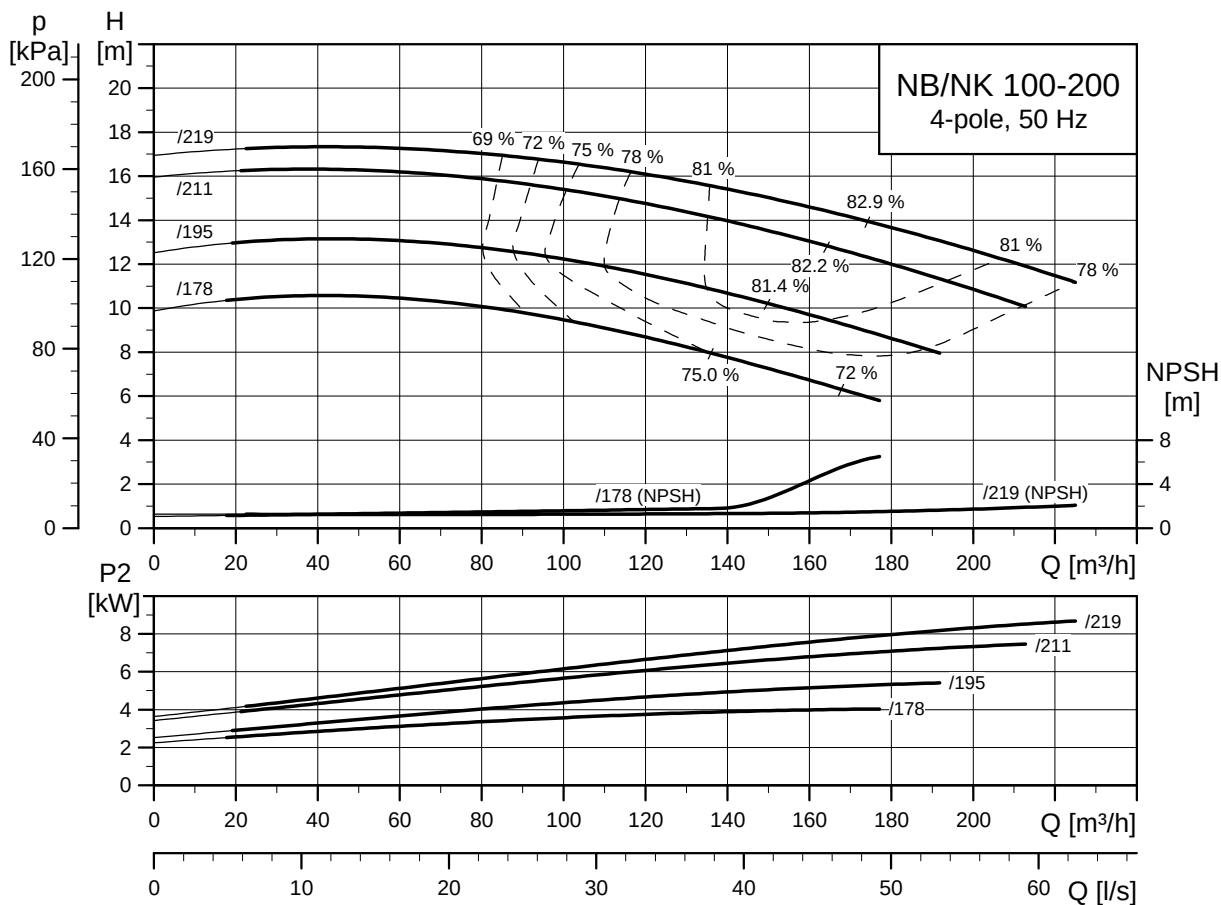
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

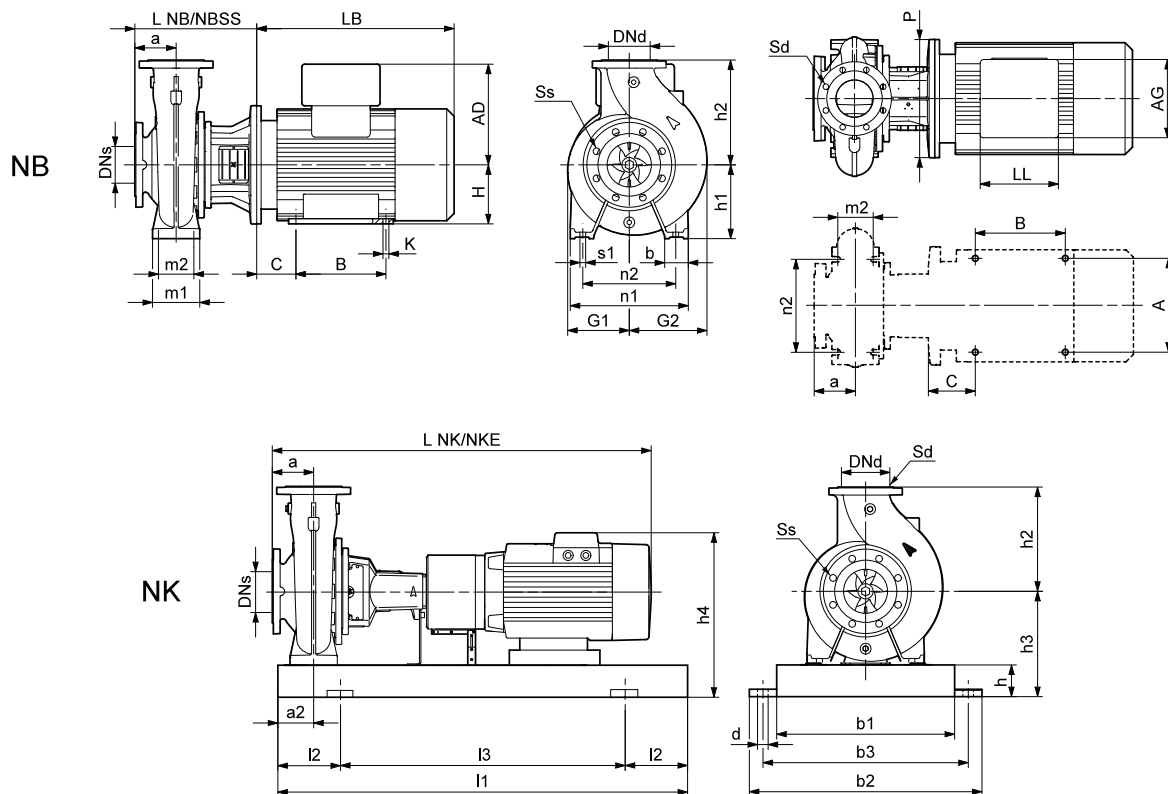
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 100-200



TM03 5145 4312



TM03 4182 1806

TM03 6005 4106

Pump type		100-200/178	100-200/195	100-200/211	100-200/219
Motor type	Standard Motor ⁵⁾	MG 112MC-H3	MG 132SB-H3	MG 132MB-H3	MG 160MA-H3
	E-Motor	MGE 112MC-G	MGE 132SB-F	MGE 132MB-F	MGE 160MB-F
Common data NB/NK	P2	[kW]	4	5.5	7.5
	PN	[bar]	16	16	16
	DNs	[mm]	125	125	125
	DNd	[mm]	100	100	100
	a	[mm]	125	125	125
	h2	[mm]	280	280	280
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1031/1167	1058/1194	1108/1244
	L NKE ¹⁾	[mm]	1031/1167	1058/1194	1180/1316
	l1	[mm]	1250	1250	1250
	l2	[mm]	205	205	205
	l3	[mm]	840	840	840
	b1	[mm]	430	430	430
	b2	[mm]	540	540	540
	b3	[mm]	490	490	490
	d	[mm]	24	24	24
	a2	[mm]	90	90	90
	h	[mm]	80	80	80
	h3	[mm]	280	280	280
	h4 ²⁾	[mm]	414/482	439/501	484/581
	Base frame no. ³⁾		6	6	6
NB data	Mounting design ⁴⁾		A	A	C
	L NB	[mm]	348	368	398
	L NB SS	[mm]	348	368	398
	h1	[mm]	200	200	200
	G1	[mm]	169	169	169
	G2	[mm]	212	212	212
	m1	[mm]	160	160	160
	m2	[mm]	120	120	120
	n1	[mm]	360	360	360
	n2	[mm]	280	280	280
	b	[mm]	80	80	80
	s1	[mm]	M16	M16	M16
	H	[mm]	-	-	160
	LB ²⁾	[mm]	372/371	379/373	429/411
	AD ²⁾	[mm]	134/202	159/221	159/221
	AG ²⁾	[mm]	202/208	203/227	203/227
	LL ²⁾	[mm]	103/317	135/305	135/305
	P	[mm]	250	300	350
	C	[mm]	-	-	254
	B	[mm]	-	-	254
	A	[mm]	-	-	108
	K	[mm]	-	-	15
Weight data	Weight NK. CI ¹⁾	[kg]	238/236	248/245	260/257
	Weight NKE. CI ¹⁾	[kg]	242/240	254/251	269/266
	Weight NB. CI	[kg]	126	144	160
	Weight NBE. CI	[kg]	123	141	158
	Weight diff. SS	[kg]	3	3	3

1) Pump with standard coupling / pump with spacer coupling.

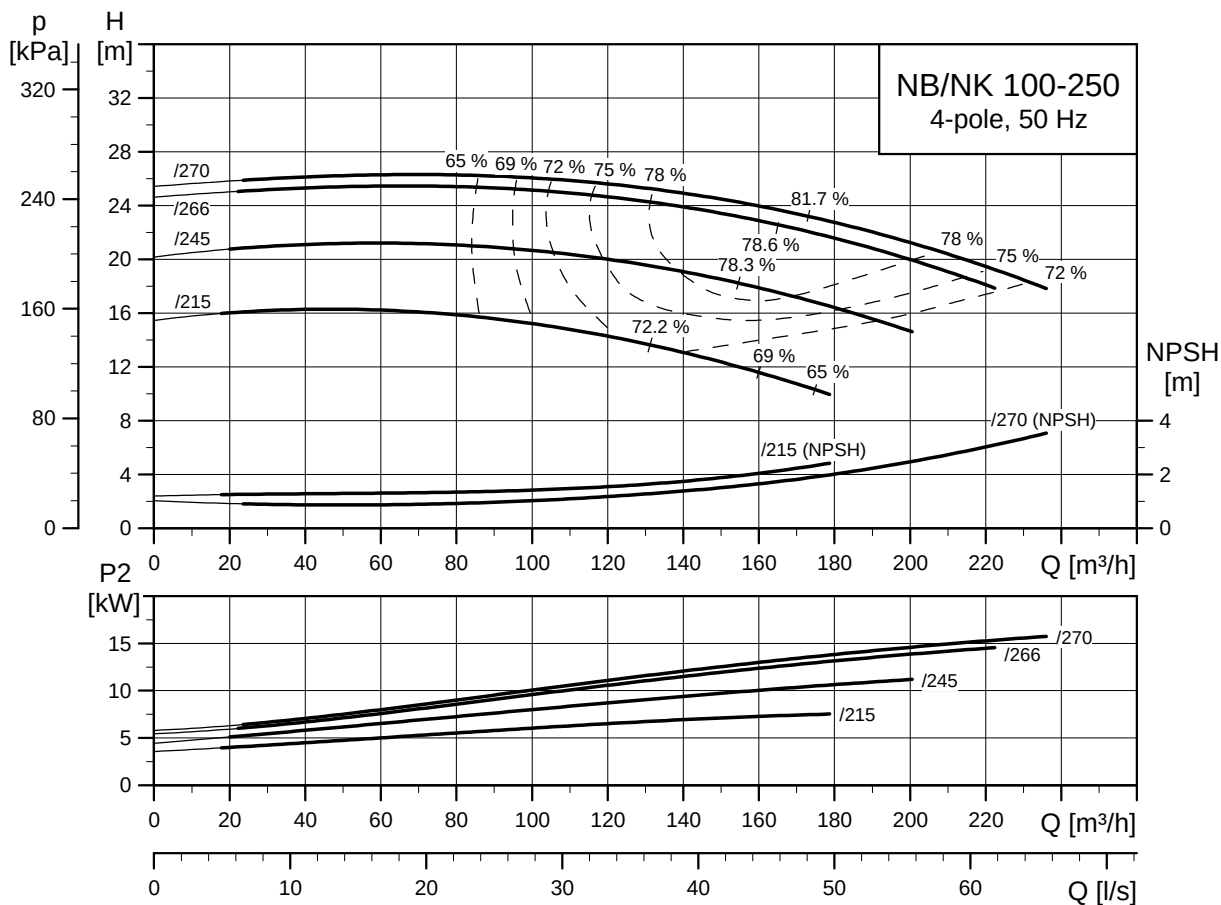
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

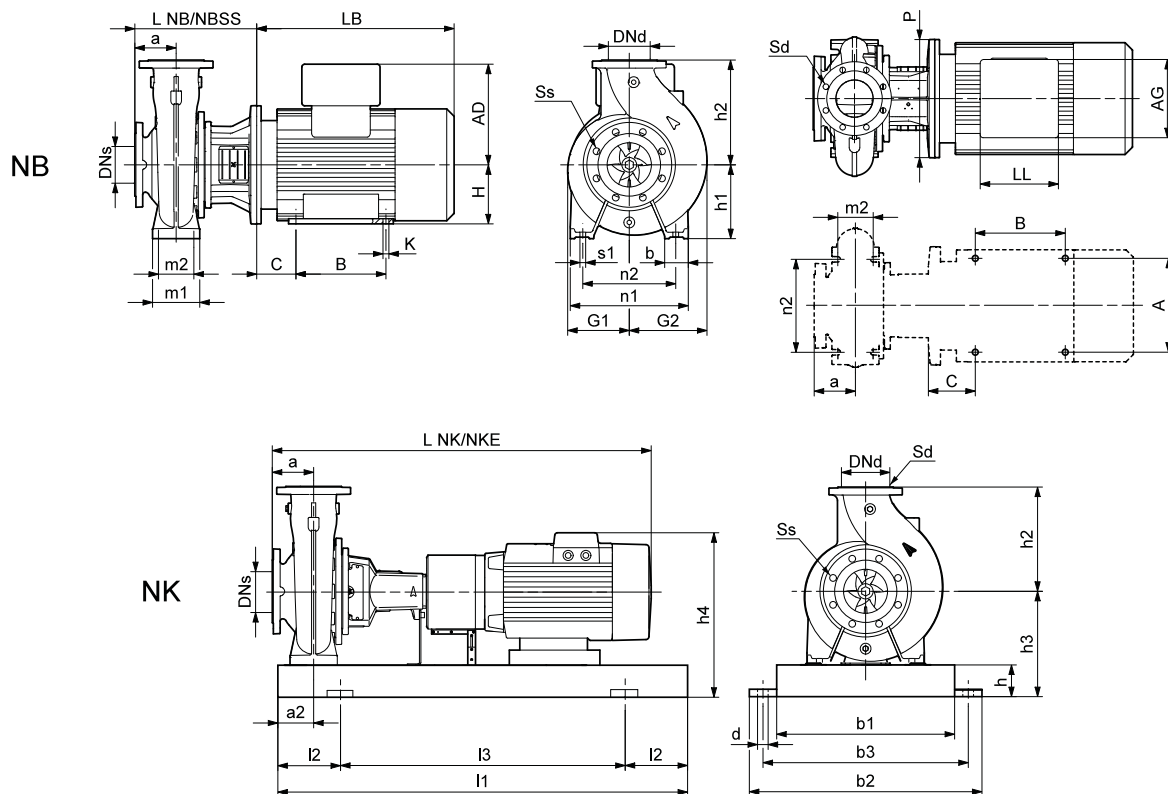
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 100-250



TM03 5146 4312



TM03 4182 1806

TM03 6005 4106

Pump type			100-250/215	100-250/245	100-250/266	100-250/270
Motor type	Standard Motor ⁵⁾		MG 132MB-H3	MG 160MA-H3	MG 160LB-H3	Siemens 180M
	E-Motor		MGE 132MB-F	MGE 160MB-F	MGE 160LB-F	MGE 180MA-F
Common data NB/NK	P2	[kW]	7.5	11	15	18.5
	PN	[bar]	16	16	16	16
	DNs	[mm]	125	125	125	125
	DNd	[mm]	100	100	100	100
	a	[mm]	140	140	140	140
	h2	[mm]	280	280	280	280
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1123/1259	1269/1405	1299/1435	1282/1418
	L NKE ¹⁾	[mm]	1123/1259	1195/1331	1239/1375	1265/1401
	l1	[mm]	1400	1400	1400	1400
	l2	[mm]	230	230	230	230
	l3	[mm]	940	940	940	940
	b1	[mm]	480	480	480	480
	b2	[mm]	610	610	610	610
	b3	[mm]	560	560	560	560
	d	[mm]	28	28	28	28
	a2	[mm]	90	90	90	90
	h	[mm]	100	100	100	100
	h3	[mm]	325	325	325	325
	h4 ²⁾	[mm]	484/546	529/626	529/626	611/633
	Base frame no. ³⁾		7	7	7	7
NB data	Mounting design ⁴⁾		A	C	C	C
	L NB	[mm]	383	413	413	413
	L NB SS	[mm]	383	413	413	413
	h1	[mm]	225	225	225	225
	G1	[mm]	188	188	188	188
	G2	[mm]	224	224	224	224
	m1	[mm]	160	160	160	160
	m2	[mm]	120	120	120	120
	n1	[mm]	400	400	400	400
	n2	[mm]	315	315	315	315
	b	[mm]	80	80	80	80
	s1	[mm]	M16	M16	M16	M16
	H	[mm]	-	160	160	180
	LB ²⁾	[mm]	429/411	545/478	575/518	558/541
	AD ²⁾	[mm]	159/221	204/301	204/301	286/308
	AG ²⁾	[mm]	203/227	243/342	243/342	189/420
	LL ²⁾	[mm]	135/305	213/352	213/352	164/400
	P	[mm]	300	350	350	350
	C	[mm]	-	254	254	279
	B	[mm]	-	254	254	241
	A	[mm]	-	108	108	121
K	[mm]	-	15	15	15	
Weight data	Weight NK. CI ¹⁾	[kg]	311/308	335/330	357/352	410/402
	Weight NKE. CI ¹⁾	[kg]	320/317	364/359	387/382	404/396
	Weight NB. CI	[kg]	173	208	229	272
	Weight NBE. CI	[kg]	171	216	243	267
	Weight diff. SS	[kg]	2	2	2	2

1) Pump with standard coupling / pump with spacer coupling.

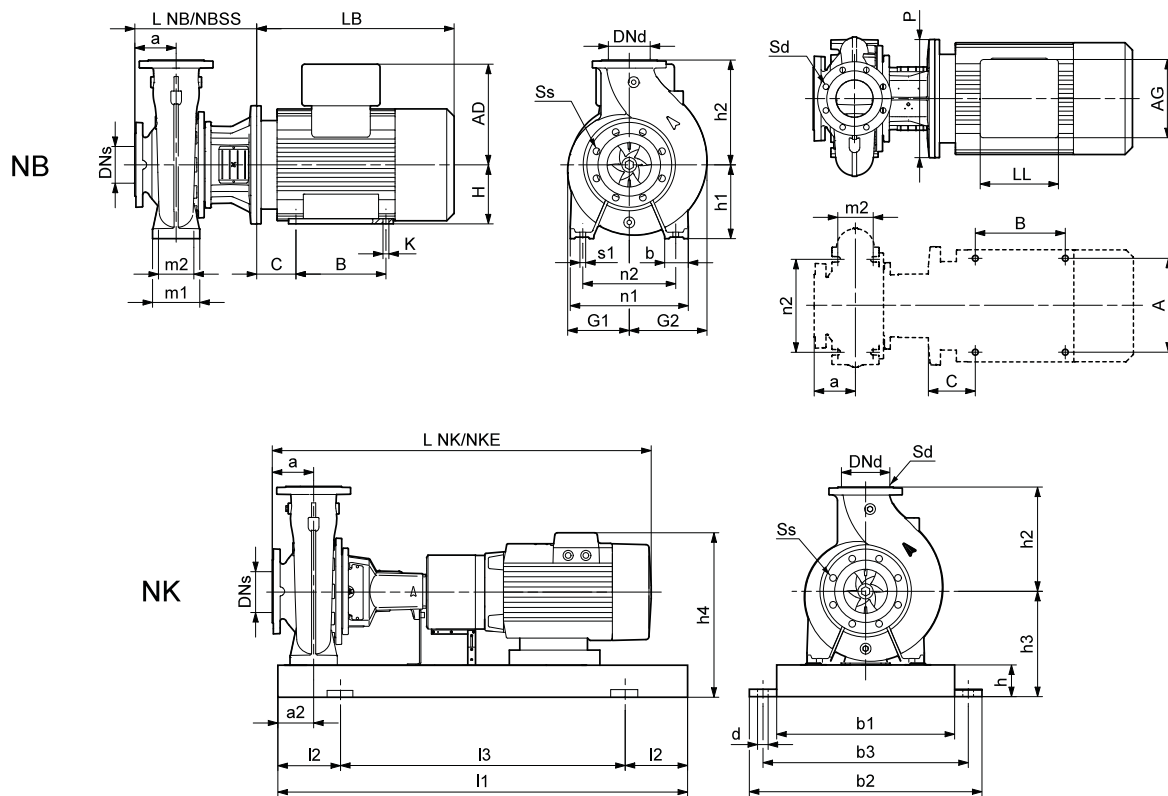
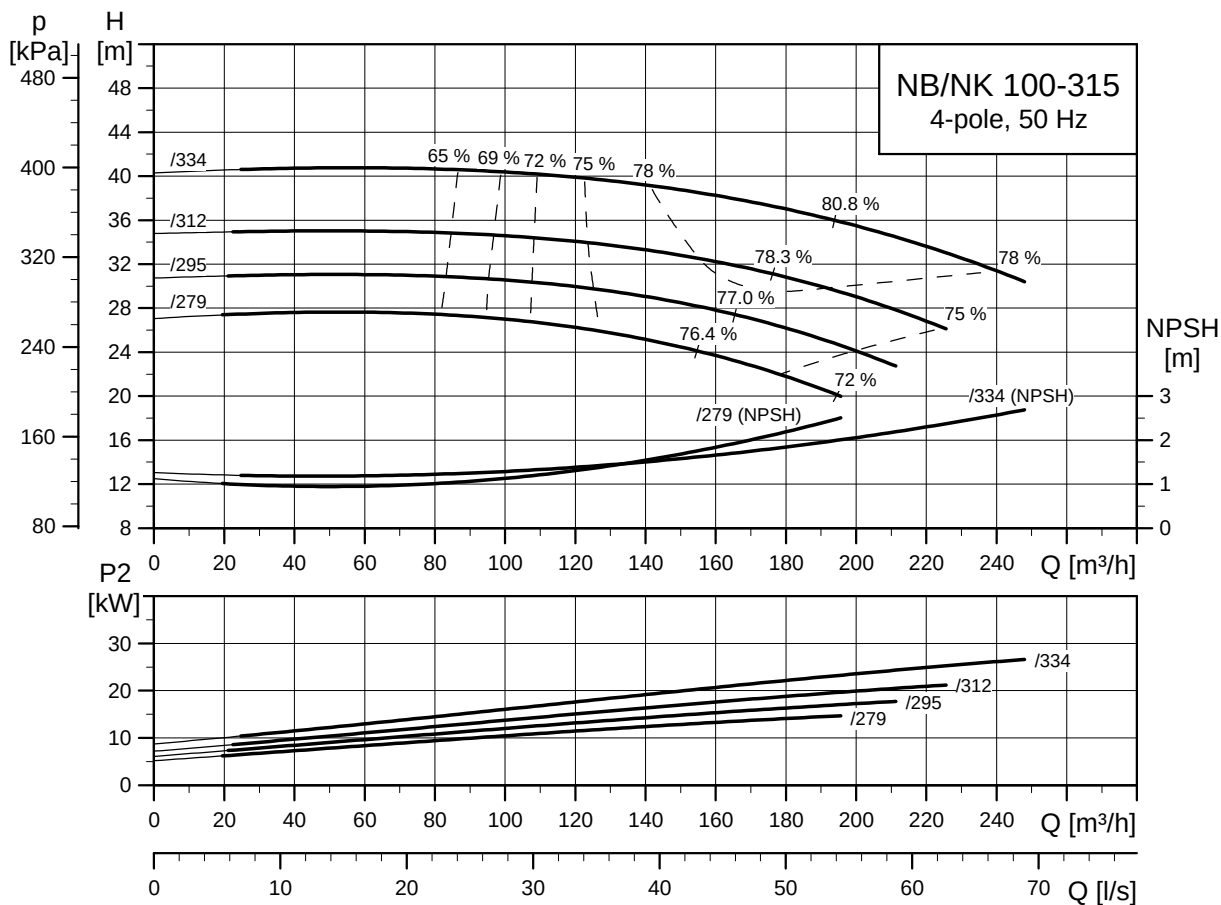
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 100-315



TM03 5147 4312

TM03 4182 1806

TM03 6005 4106

Pump type	100-315/279		100-315/295	100-315/312	100-315/334	
Motor type	Standard Motor ⁵⁾		MG 160LB-H3	Siemens 180M	Siemens 180L	Siemens 200L
	E-Motor		MGE 160LB-F	MGE 180MA-F	-	-
Common data NB/NK	P2	[kW]	15	18.5	22	30
	PN	[bar]	16	16	16	16
	DNs	[mm]	125	125	125	125
	DNd	[mm]	100	100	100	100
	a	[mm]	140	140	140	140
	h2	[mm]	315	315	315	315
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1299/1435	1282/1418	1312/1448	1360/1496
	L NKE ¹⁾	[mm]	1239/1375	1265/1401	-/-	-/-
	I1	[mm]	1400	1400	1400	1600
	I2	[mm]	230	230	230	270
	I3	[mm]	940	940	940	1060
	b1	[mm]	480	480	480	530
	b2	[mm]	610	610	610	660
	b3	[mm]	560	560	560	600
	d	[mm]	28	28	28	28
	a2	[mm]	90	90	90	90
	h	[mm]	100	100	100	100
	h3	[mm]	350	350	350	355
	h4 ²⁾	[mm]	554/651	636/658	636/-	670/-
	Base frame no. ³⁾		7	7	7	8
NB data	Mounting design ⁴⁾		C	C	C	C
	L NB	[mm]	413	413	413	413
	L NB SS	[mm]	413	413	413	413
	h1	[mm]	250	250	250	250
	G1	[mm]	208	208	208	208
	G2	[mm]	264	264	264	264
	m1	[mm]	160	160	160	160
	m2	[mm]	120	120	120	120
	n1	[mm]	400	400	400	400
	n2	[mm]	315	315	315	315
	b	[mm]	80	80	80	80
	s1	[mm]	M16	M16	M16	M16
	H	[mm]	160	180	180	200
	LB ²⁾	[mm]	575/518	558/541	588/-	636/-
	AD ²⁾	[mm]	204/301	286/308	286/-	315/-
	AG ²⁾	[mm]	243/342	189/420	189/-	265/-
	LL ²⁾	[mm]	213/352	164/400	164/-	197/-
	P	[mm]	350	350	350	400
	C	[mm]	254	279	279	318
	B	[mm]	254	241	241	305
	A	[mm]	108	121	121	133
	K	[mm]	15	15	15	19
Weight data	Weight NK. CI ¹⁾	[kg]	387/381	427/419	437/429	551/545
	Weight NKE. CI ¹⁾	[kg]	417/411	421/413	-/-	-/-
	Weight NB. CI	[kg]	250	292	307	375
	Weight NBE. CI	[kg]	264	287	-	-
	Weight diff. SS	[kg]	2	2	2	2

1) Pump with standard coupling / pump with spacer coupling.

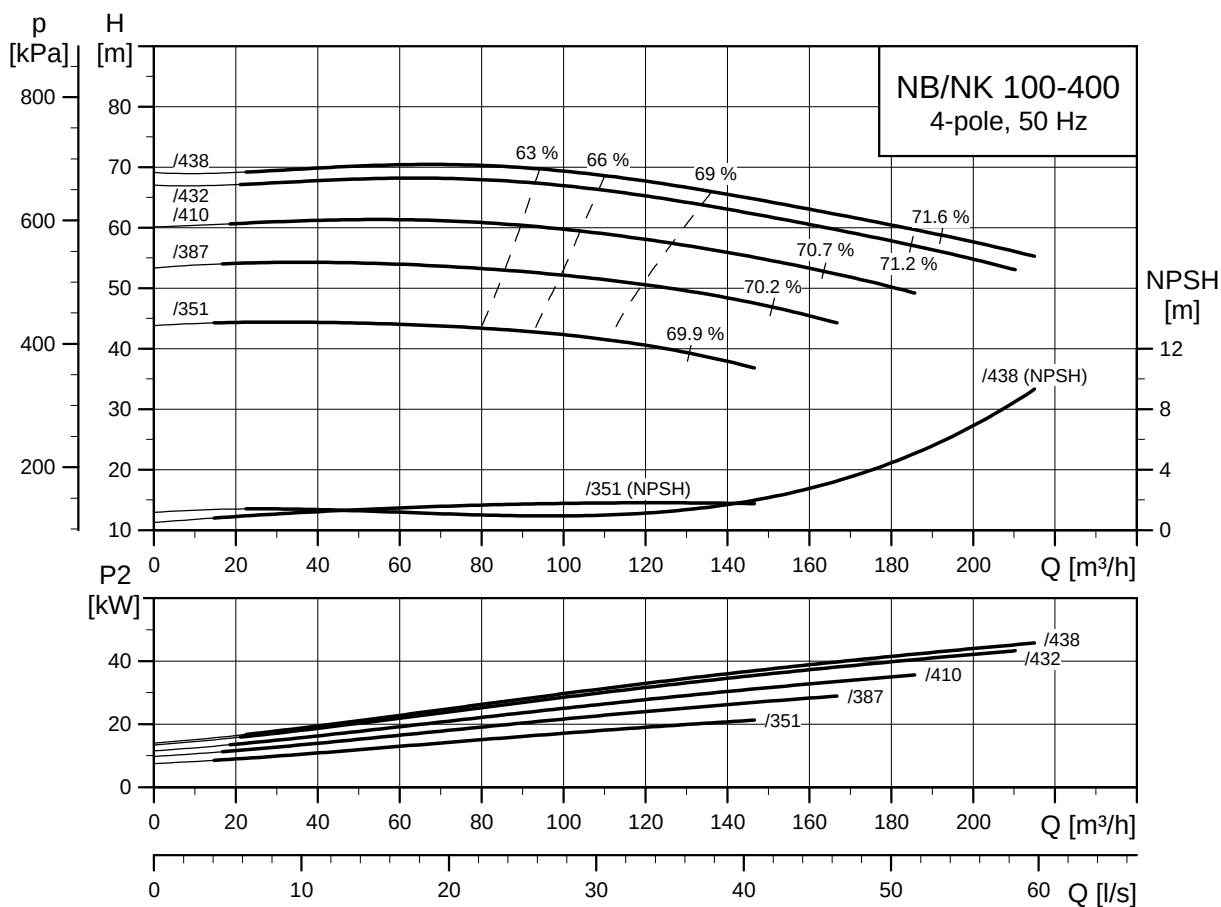
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

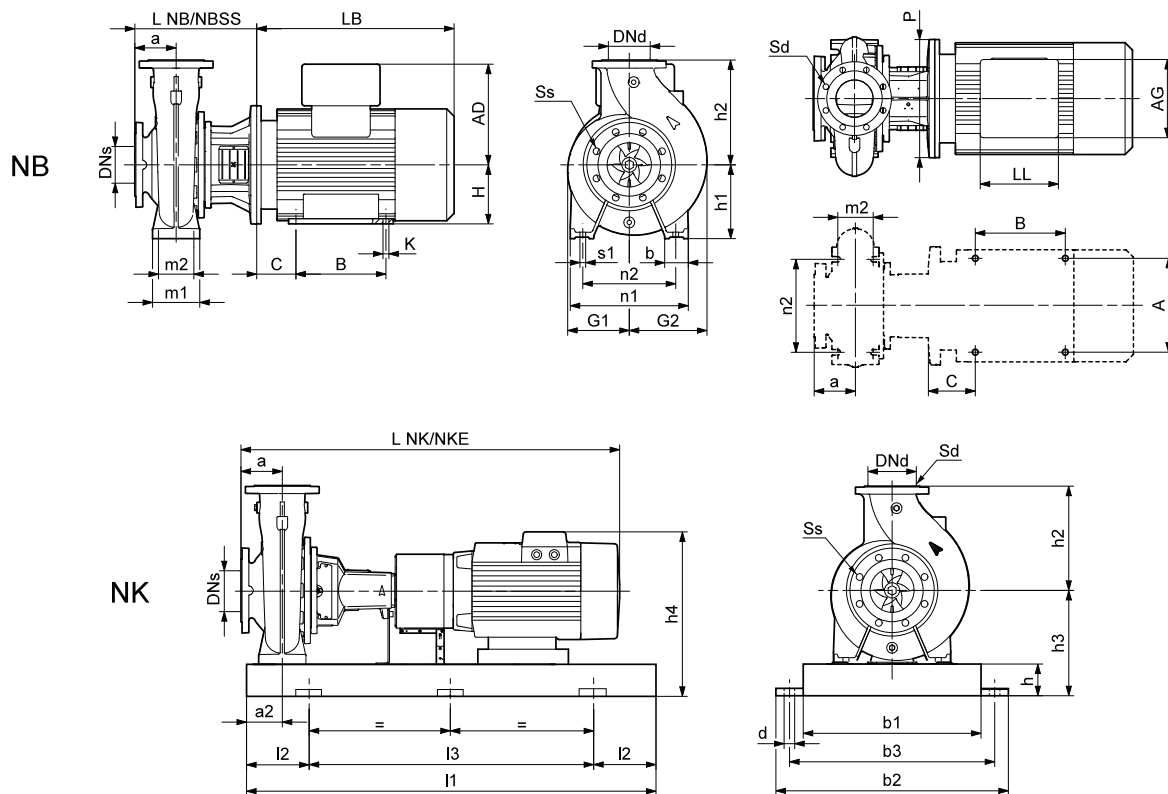
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 100-400



TM03 5148 4312



TM03 4182 1806

TM03 4179 1806

Pump type	100-400/351 100-400/387 100-400/410 100-400/432 100-400/438						
Motor type	Standard Motor ⁵⁾ Siemens 180L Siemens 200L Siemens 225S Siemens 225M Siemens 250M						
	E-Motor		-	-	-	-	-
Common data NB/NK	P2	[kW]	22	30	37	45	55
	PN	[bar]	16	16	16	16	16
	DNs	[mm]	125	125	125	125	125
	DNd	[mm]	100	100	100	100	100
	a	[mm]	140	140	140	140	140
	h2	[mm]	355	355	355	355	355
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1372/1508	1420/1556	1462/1598	1522/1658	1561/1697
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-	-/-
	l1	[mm]	1800	1800	1800	1800	1800
	l2	[mm]	300	300	300	300	300
	l3	[mm]	1200	1200	1200	1200	1200
	b1	[mm]	600	600	600	600	600
	b2	[mm]	730	730	730	730	730
	b3	[mm]	670	670	670	670	670
	d	[mm]	28	28	28	28	28
	a2	[mm]	110	110	110	110	110
	h	[mm]	100	100	100	100	100
	h3	[mm]	383	380	380	380	380
	h4 ²⁾	[mm]	669/-	695/-	718/-	718/-	790/-
Base frame no. ³⁾		9	9	9	9	9	
NB data	Mounting design ⁴⁾		C	C	C	C	C
	L NB	[mm]	411	411	441	441	441
	L NB SS	[mm]	411	411	441	441	441
	h1	[mm]	280	280	280	280	280
	G1	[mm]	272	272	272	272	272
	G2	[mm]	298	298	298	298	298
	m1	[mm]	200	200	200	200	200
	m2	[mm]	150	150	150	150	150
	n1	[mm]	500	500	500	500	500
	n2	[mm]	400	400	400	400	400
	b	[mm]	100	100	100	100	100
	s1	[mm]	M20	M20	M20	M20	M20
	H	[mm]	180	200	225	225	250
	LB ²⁾	[mm]	588/-	636/-	648/-	708/-	747/-
	AD ²⁾	[mm]	286/-	315/-	338/-	338/-	410/-
	AG ²⁾	[mm]	189/-	265/-	266/-	266/-	319/-
	LL ²⁾	[mm]	164/-	197/-	197/-	197/-	233/-
	P	[mm]	350	400	450	450	550
	C	[mm]	279	318	356	356	406
	B	[mm]	241	305	286	286	349
	A	[mm]	121	133	149	149	168
	K	[mm]	15	19	19	19	24
Weight data	Weight NK. CI ¹⁾	[kg]	598/590	657/652	737/732	772/767	866/865
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	393	459	529	564	682
	Weight NBE. CI	[kg]	-	-	-	-	-
	Weight diff. SS	[kg]	4	4	4	4	4

1) Pump with standard coupling / pump with spacer coupling.

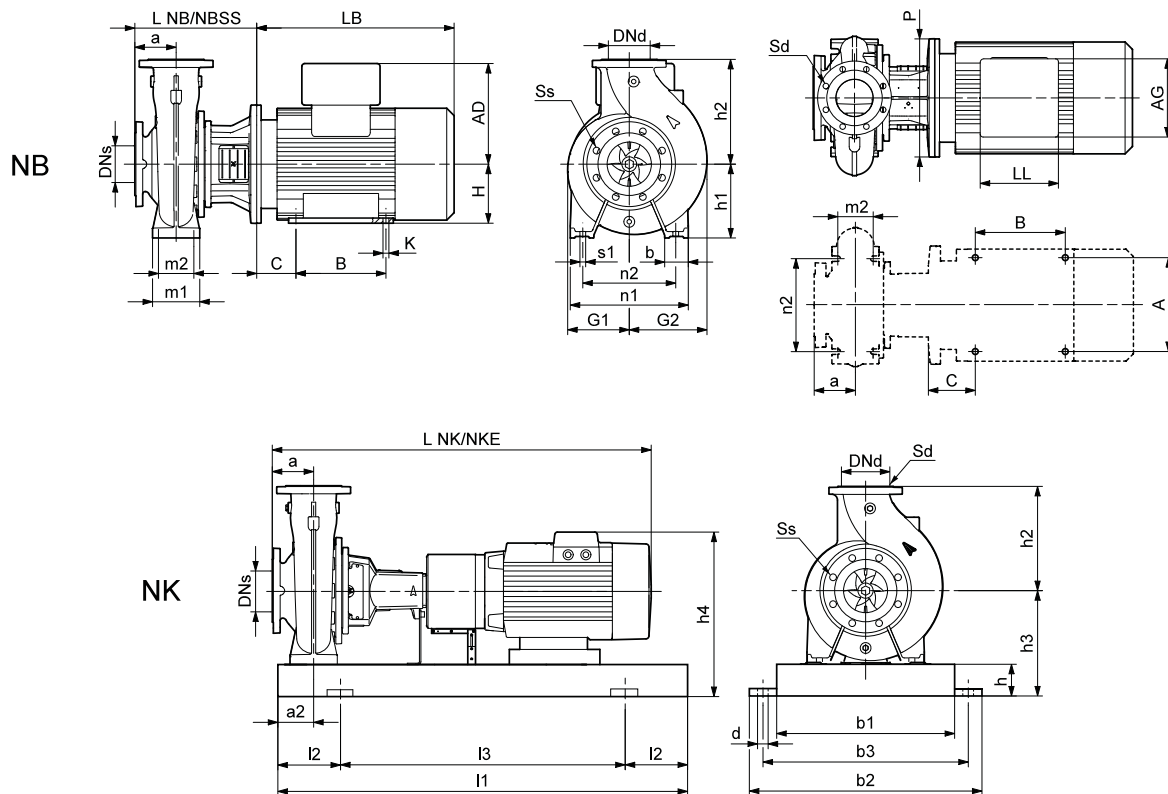
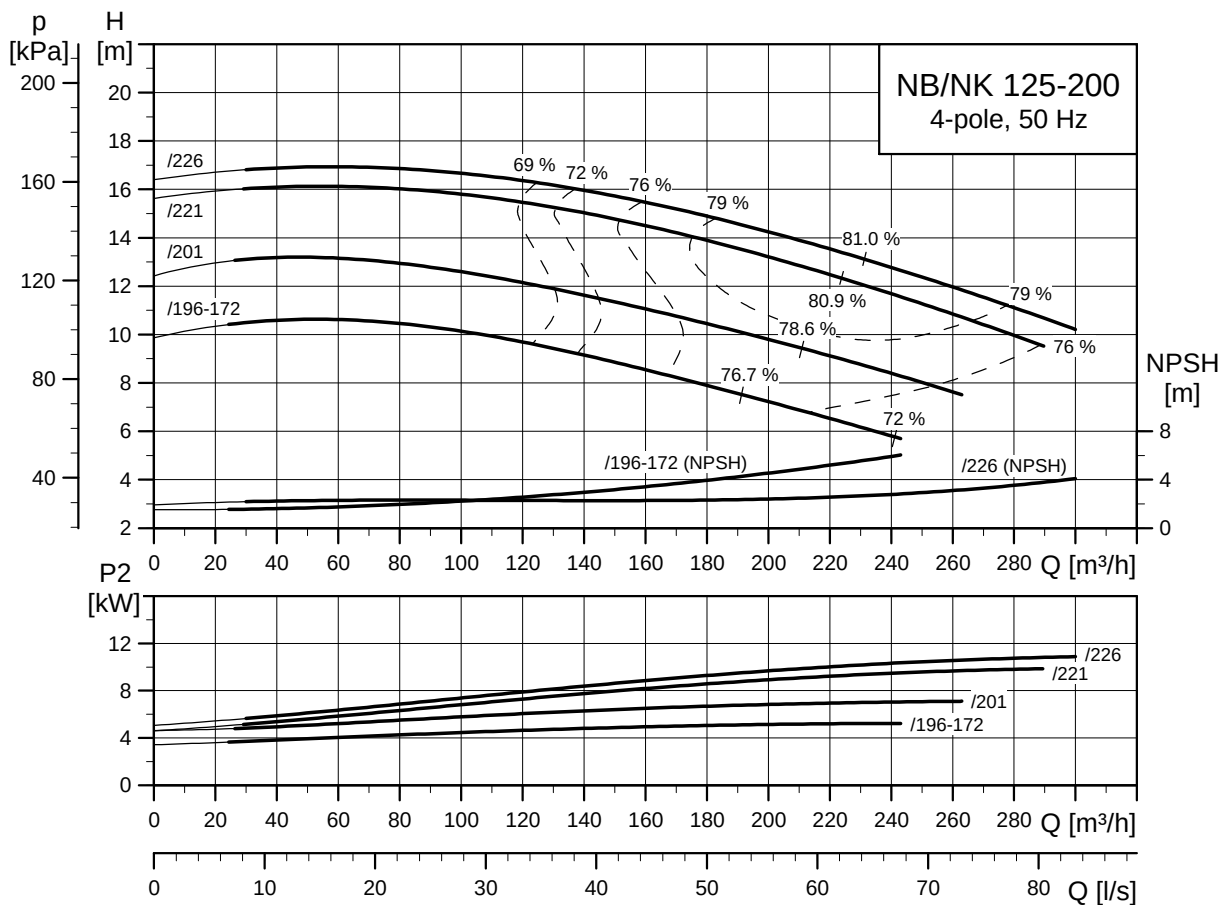
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 125-200



TM03 5149 4312

TM03 4182 1806

TM03 6005 4106

Pump type		125-200/196-172	125-200/201	125-200/221	125-200/226
Motor type	Standard Motor ⁵⁾	MG 132SB-H3	MG 132MB-H3	MG 160MA-H3	MG 160LB-H3
	E-Motor	MGE 132SB-F	MGE 132MB-F	MGE 160MB-F	MGE 160LB-F
Common data NB/NK	P2	[kW]	5.5	7.5	11
	PN	[bar]	16	16	16
	DNs	[mm]	150	150	150
	DNd	[mm]	125	125	125
	a	[mm]	140	140	140
	h2	[mm]	315	315	315
	Ss	[mm]	8 x Ø23	8 x Ø23	8 x Ø23
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1073/1209	1123/1259	1269/1405
	L NKE ¹⁾	[mm]	1073/1209	1123/1259	1195/1331
	I1	[mm]	1400	1400	1400
	I2	[mm]	230	230	230
	I3	[mm]	940	940	940
	b1	[mm]	480	480	480
	b2	[mm]	610	610	610
	b3	[mm]	560	560	560
	d	[mm]	28	28	28
	a2	[mm]	90	90	90
	h	[mm]	100	100	100
	h3	[mm]	350	350	350
	h4 ²⁾	[mm]	509/571	509/571	554/651
	Base frame no. ³⁾		7	7	7
NB data	Mounting design ⁴⁾		A	A	C
	L NB	[mm]	383	383	413
	L NB SS	[mm]	383	383	413
	h1	[mm]	250	250	250
	G1	[mm]	183	183	183
	G2	[mm]	234	234	234
	m1	[mm]	160	160	160
	m2	[mm]	120	120	120
	n1	[mm]	400	400	400
	n2	[mm]	315	315	315
	b	[mm]	80	80	80
	s1	[mm]	M16	M16	M16
	H	[mm]	-	-	160
	LB ²⁾	[mm]	379/373	429/411	545/478
	AD ²⁾	[mm]	159/221	159/221	204/301
	AG ²⁾	[mm]	203/227	203/227	243/342
	LL ²⁾	[mm]	135/305	135/305	213/352
	P	[mm]	300	300	350
	C	[mm]	-	-	254
	B	[mm]	-	-	254
	A	[mm]	-	-	108
	K	[mm]	-	-	15
Weight data	Weight NK. CI ¹⁾	[kg]	313/310	325/322	359/353
	Weight NKE. CI ¹⁾	[kg]	319/316	334/331	388/382
	Weight NB. CI	[kg]	172	185	223
	Weight NBE. CI	[kg]	169	186	231
	Weight diff. SS	[kg]	3	3	3

1) Pump with standard coupling / pump with spacer coupling.

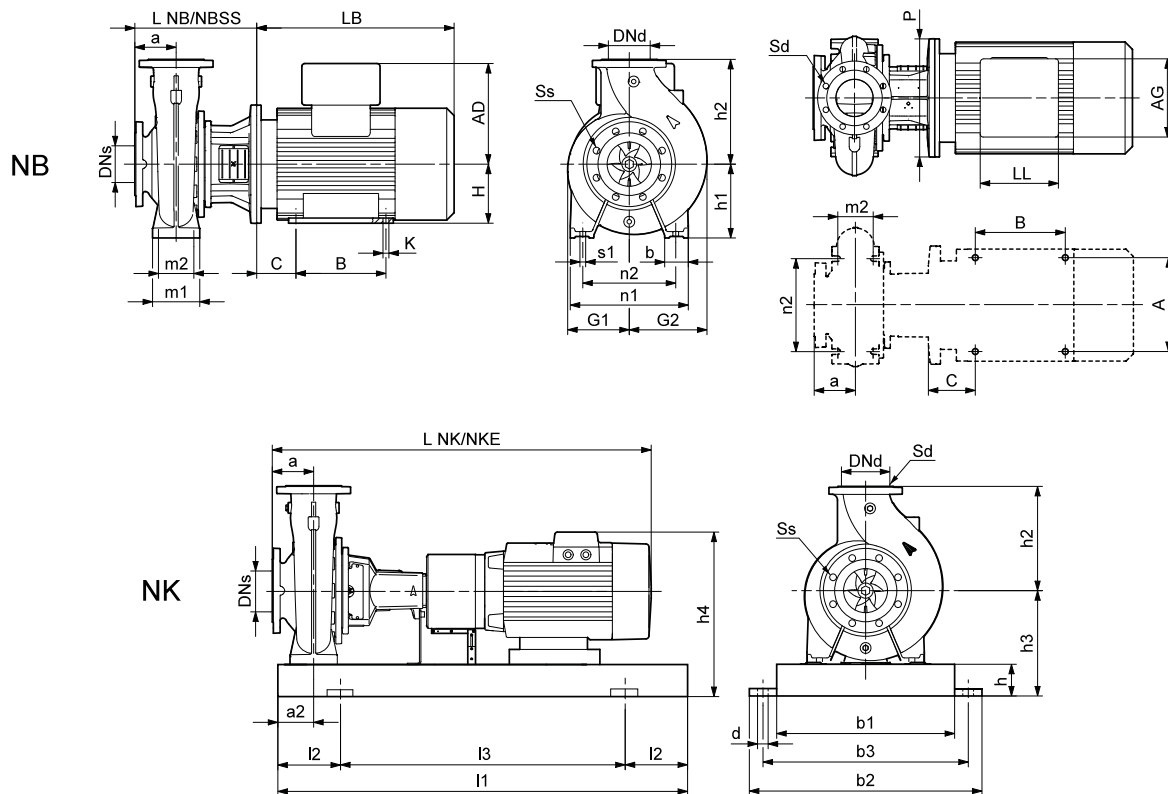
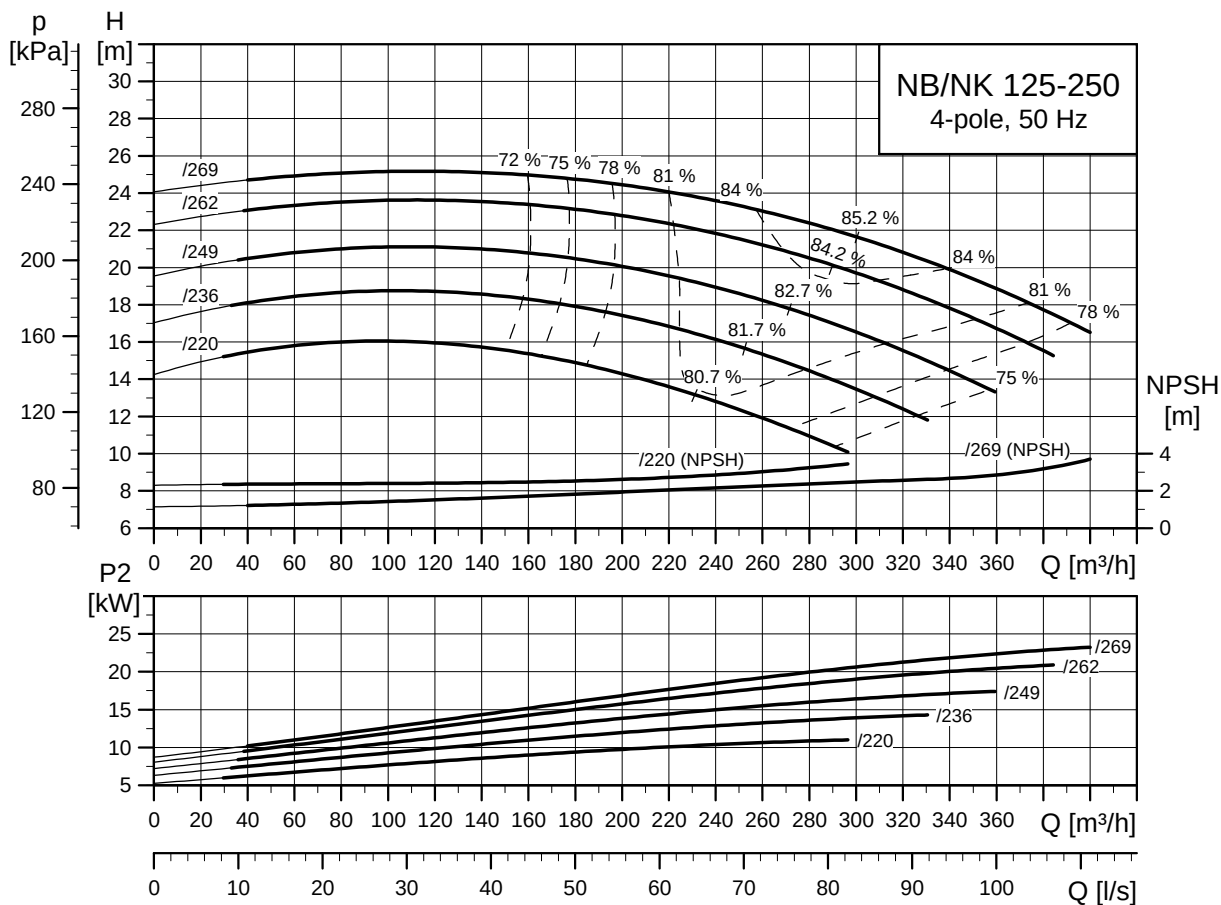
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 125-250



TM03 5150 4312

TM03 4182 1806

TM03 6005 4106

Pump type	125-250/220		125-250/236	125-250/249	125-250/262	125-250/269	
Motor type	Standard Motor ⁵⁾		MG 160MA-H3	MG 160LB-H3	Siemens 180M	Siemens 180L	Siemens 200L
	E-Motor		MGE 160MB-F	MGE 160LB-F	MGE 180MA-F	-	-
Common data NB/NK	P2	[kW]	11	15	18.5	22	30
	PN	[bar]	16	16	16	16	16
	DNs	[mm]	150	150	150	150	150
	DNd	[mm]	125	125	125	125	125
	a	[mm]	140	140	140	140	140
	h2	[mm]	355	355	355	355	355
	Ss	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1269/1405	1299/1435	1282/1418	1312/1448	1360/1496
	L NKE ¹⁾	[mm]	1195/1331	1239/1375	1265/1401	-/-	-/-
	l1	[mm]	1400	1400	1400	1400	1600
	l2	[mm]	230	230	230	230	270
	l3	[mm]	940	940	940	940	1060
	b1	[mm]	480	480	480	480	530
	b2	[mm]	610	610	610	610	660
	b3	[mm]	560	560	560	560	600
	d	[mm]	28	28	28	28	28
	a2	[mm]	90	90	90	90	90
	h	[mm]	100	100	100	100	100
	h3	[mm]	350	350	350	350	355
	h4 ²⁾	[mm]	554/651	554/651	636/658	636/-	670/-
Base frame no. ³⁾		7	7	7	7	8	
NB data	Mounting design ⁴⁾		C	C	C	C	C
	L NB	[mm]	413	413	413	413	413
	L NB SS	[mm]	413	413	413	413	413
	h1	[mm]	250	250	250	250	250
	G1	[mm]	208	208	208	208	208
	G2	[mm]	264	264	264	264	264
	m1	[mm]	160	160	160	160	160
	m2	[mm]	120	120	120	120	120
	n1	[mm]	400	400	400	400	400
	n2	[mm]	315	315	315	315	315
	b	[mm]	80	80	80	80	80
	s1	[mm]	M16	M16	M16	M16	M16
	H	[mm]	160	160	180	180	200
	LB ²⁾	[mm]	545/478	575/518	558/541	588/-	636/-
	AD ²⁾	[mm]	204/301	204/301	286/308	286/-	315/-
	AG ²⁾	[mm]	243/342	243/342	189/420	189/-	265/-
	LL ²⁾	[mm]	213/352	213/352	164/400	164/-	197/-
	P	[mm]	350	350	350	350	400
	C	[mm]	254	254	279	279	318
	B	[mm]	254	254	241	241	305
	A	[mm]	108	108	121	121	133
	K	[mm]	15	15	15	15	19
Weight data	Weight NK. CI ¹⁾	[kg]	368/362	390/384	430/422	440/432	554/548
	Weight NKE. CI ¹⁾	[kg]	397/391	420/414	424/416	-/-	-/-
	Weight NB. CI	[kg]	232	253	296	311	379
	Weight NBE. CI	[kg]	240	267	291	-	-
	Weight diff. SS	[kg]	-3	-3	-3	-3	-3

1) Pump with standard coupling / pump with spacer coupling.

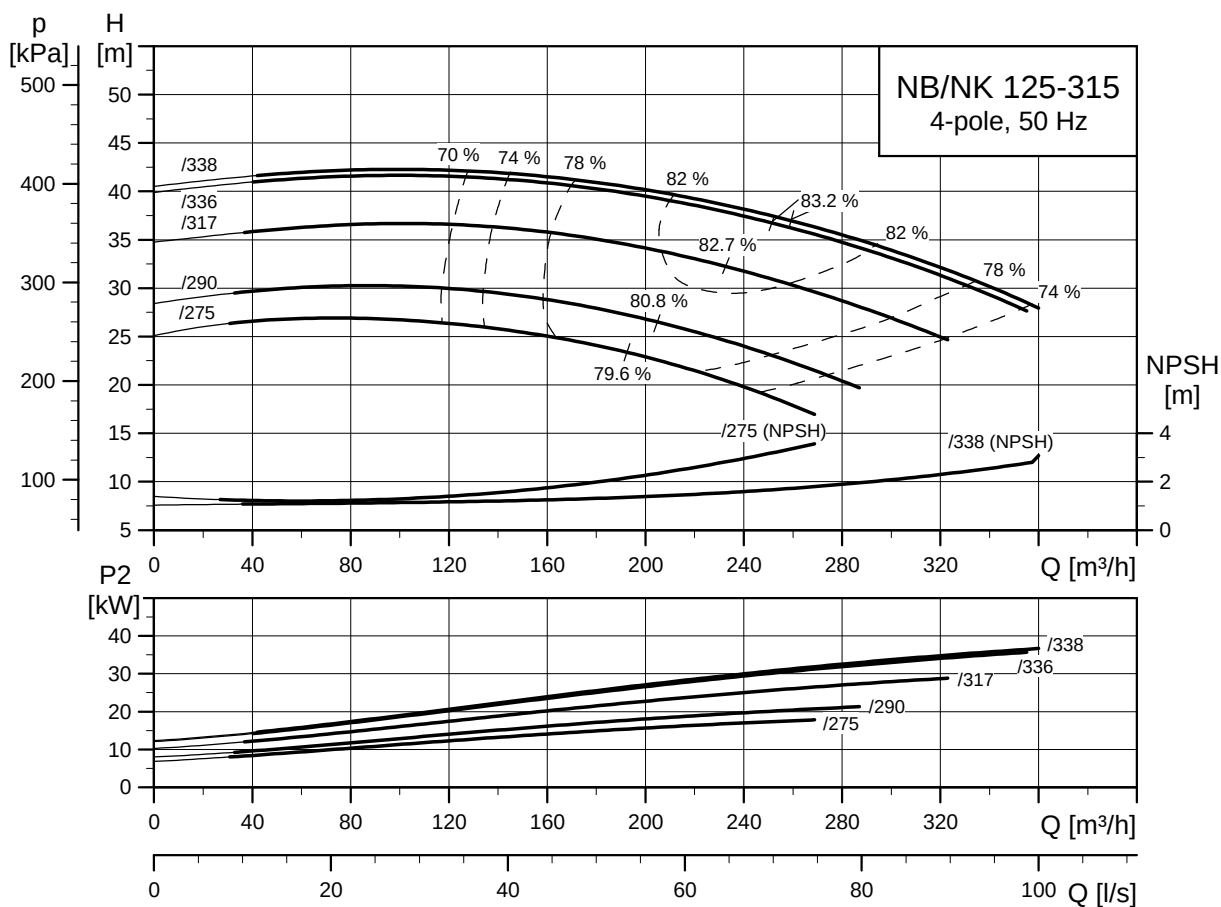
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

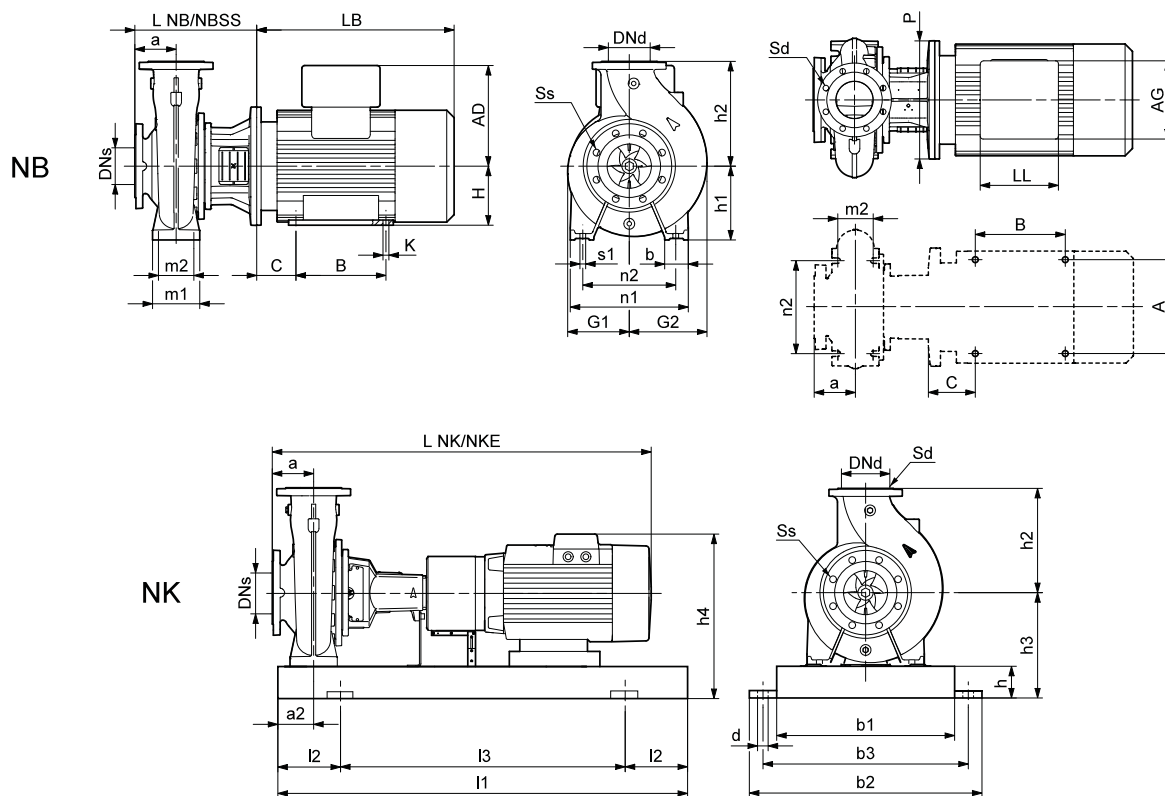
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 125-315



TM03 5151 4312



TM03 4182 1806

TM03 6005 4106

Pump type		125-315/275	125-315/290	125-315/317	125-315/336	125-315/338
Motor type	Standard Motor ⁵⁾	Siemens 180M	Siemens 180L	Siemens 200L	Siemens 225S	Siemens 225M
	E-Motor	MGE 180MA-F	-	-	-	-
Common data NB/NK	P2	[kW]	18.5	22	30	45
	PN	[bar]	16	16	16	16
	DNs	[mm]	150	150	150	150
	DNd	[mm]	125	125	125	125
	a	[mm]	140	140	140	140
	h2	[mm]	355	355	355	355
	Ss	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1342/1478	1372/1508	1420/1556	1462/1598
	L NKE ¹⁾	[mm]	1325/1461	-/-	-/-	-/-
	I1	[mm]	1800	1800	1800	1800
	I2	[mm]	300	300	300	300
	I3	[mm]	1200	1200	1200	1200
	b1	[mm]	600	600	600	600
	b2	[mm]	730	730	730	730
	b3	[mm]	670	670	670	670
	d	[mm]	28	28	28	28
	a2	[mm]	110	110	110	110
	h	[mm]	100	100	100	100
	h3	[mm]	383	383	380	380
	h4 ²⁾	[mm]	669/691	669/-	695/-	718/-
	Base frame no. ³⁾		9	9	9	9
NB data	Mounting design ⁴⁾		C	C	C	C
	L NB	[mm]	411	411	411	441
	L NB SS	[mm]	411	411	411	441
	h1	[mm]	280	280	280	280
	G1	[mm]	231	231	231	231
	G2	[mm]	268	268	268	268
	m1	[mm]	200	200	200	200
	m2	[mm]	150	150	150	150
	n1	[mm]	500	500	500	500
	n2	[mm]	400	400	400	400
	b	[mm]	100	100	100	100
	s1	[mm]	M20	M20	M20	M20
	H	[mm]	180	180	200	225
	LB ²⁾	[mm]	558/541	588/-	636/-	648/-
	AD ²⁾	[mm]	286/308	286/-	315/-	338/-
	AG ²⁾	[mm]	189/420	189/-	265/-	266/-
	LL ²⁾	[mm]	164/400	164/-	197/-	197/-
	P	[mm]	350	350	400	450
	C	[mm]	279	279	318	356
	B	[mm]	241	241	305	286
	A	[mm]	121	121	133	149
	K	[mm]	15	15	19	19
Weight data	Weight NK. CI ¹⁾	[kg]	548/540	558/550	617/612	697/693
	Weight NKE. CI ¹⁾	[kg]	542/534	-/-	-/-	-/-
	Weight NB. CI	[kg]	338	353	419	489
	Weight NBE. CI	[kg]	333	-	-	-
	Weight diff. SS	[kg]	4	4	4	4

1) Pump with standard coupling / pump with spacer coupling.

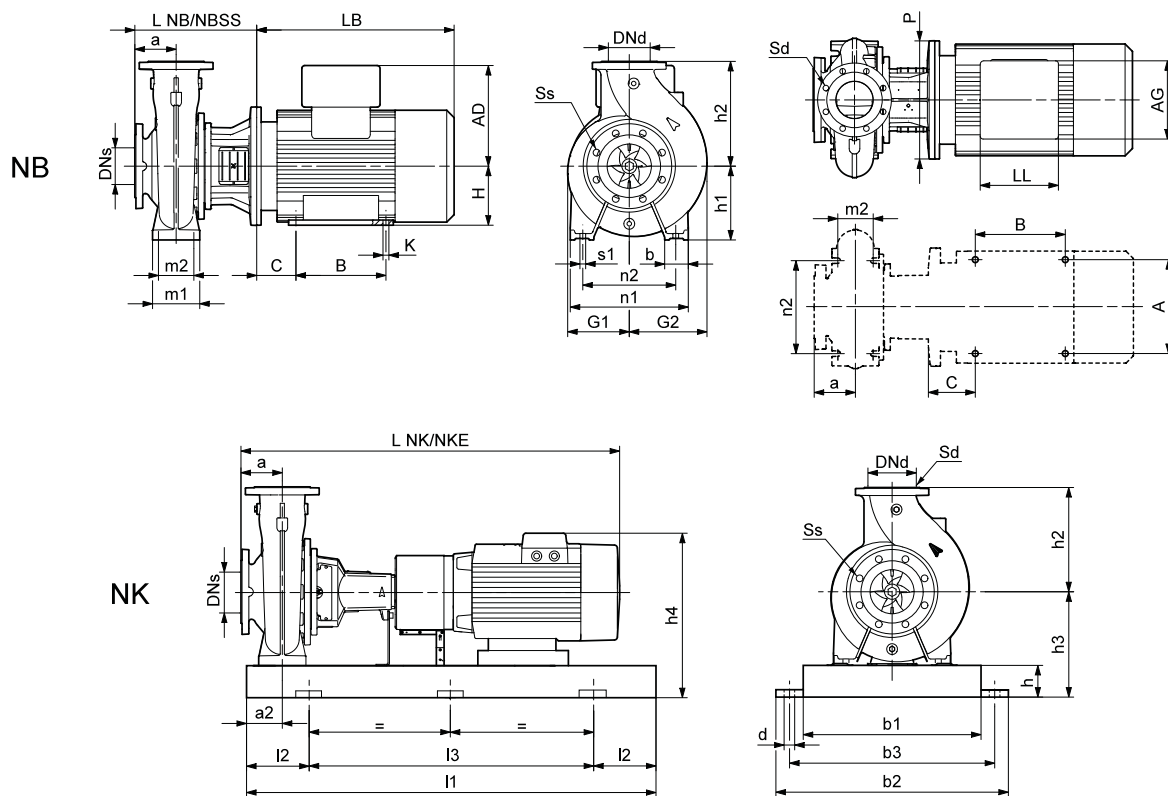
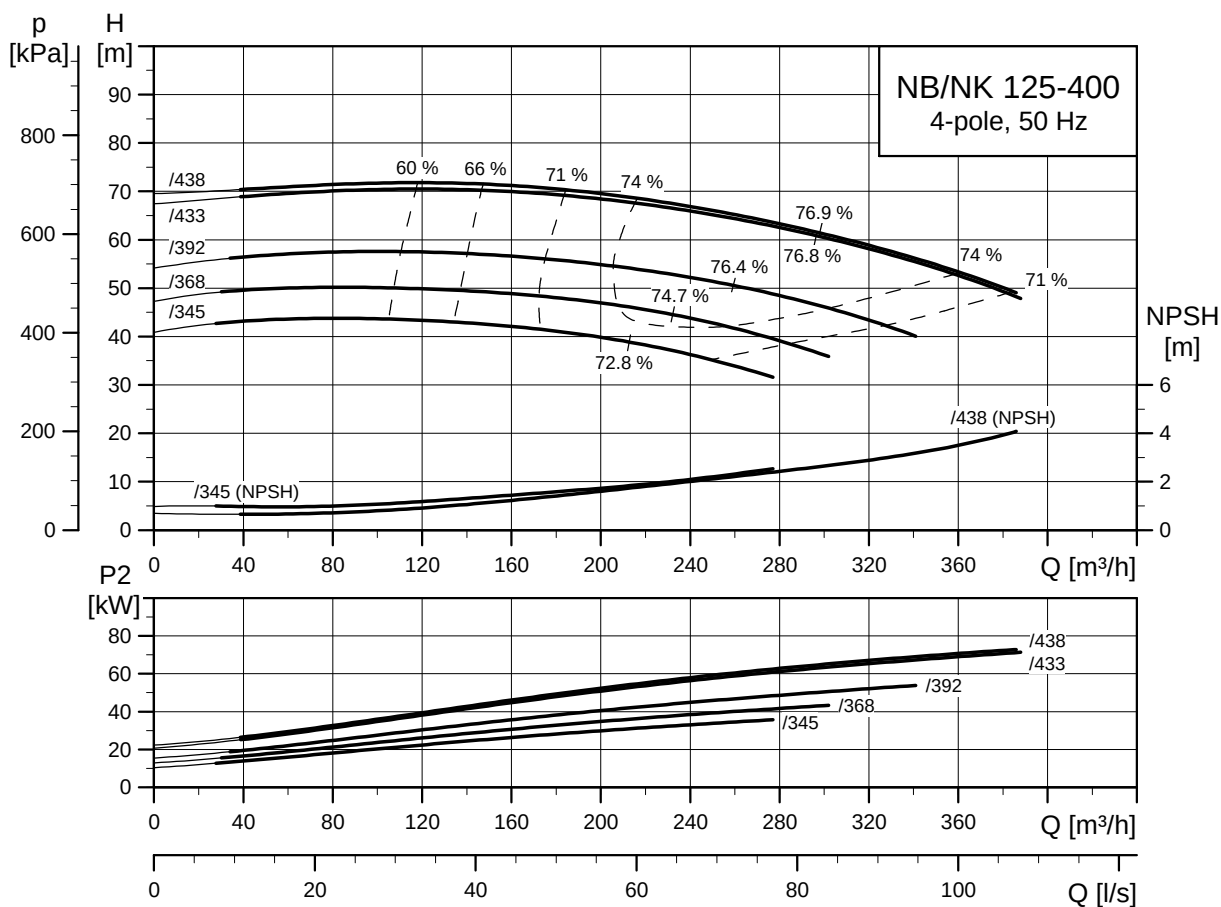
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 125-400



TM05 2347 4911

TM03 4182 1806

TM03 4179 1806

Pump type			125-400/345	125-400/368	125-400/392	125-400/433	125-400/438
Motor type	Standard Motor ⁵⁾		Siemens 225S	Siemens 225M	Siemens 250M	Siemens 280S	Siemens 280M
	E-Motor		-	-	-	-	-
Common data NB/NK	P2	[kW]	37	45	55	75	90
	PN	[bar]	16	16	16	16	16
	DNs	[mm]	150	150	150	150	150
	DNd	[mm]	125	125	125	125	125
	a	[mm]	140	140	140	140	140
	h2	[mm]	400	400	400	400	400
	Ss	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1462/1598	1522/1658	1561/1697	1634/1770	1744/1880
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-	-/-
	l1	[mm]	1800	1800	1800	2000	2000
	l2	[mm]	300	300	300	330	330
	l3	[mm]	1200	1200	1200	1340	1340
	b1	[mm]	600	600	600	750	750
	b2	[mm]	730	730	730	890	890
	b3	[mm]	670	670	670	830	830
	d	[mm]	28	28	28	28	28
	a2	[mm]	110	110	110	110	110
	h	[mm]	100	100	100	130	130
	h3	[mm]	415	415	415	445	445
	h4 ²⁾	[mm]	753/-	753/-	825/-	878/-	878/-
Base frame no. ³⁾		9	9	9	10	10	
NB data	Mounting design ⁴⁾		C	C	C	C	C
	L NB	[mm]	441	441	441	441	441
	L NB SS	[mm]	441	441	441	441	441
	h1	[mm]	315	315	315	315	315
	G1	[mm]	284	284	284	284	284
	G2	[mm]	320	320	320	320	320
	m1	[mm]	200	200	200	200	200
	m2	[mm]	150	150	150	150	150
	n1	[mm]	500	500	500	500	500
	n2	[mm]	400	400	400	400	400
	b	[mm]	100	100	100	100	100
	s1	[mm]	M20	M20	M20	M20	M20
	H	[mm]	225	225	250	280	280
	LB ²⁾	[mm]	648/-	708/-	747/-	820/-	930/-
	AD ²⁾	[mm]	338/-	338/-	410/-	433/-	433/-
	AG ²⁾	[mm]	266/-	266/-	319/-	319/-	319/-
	LL ²⁾	[mm]	197/-	197/-	233/-	233/-	233/-
	P	[mm]	450	450	550	550	550
	C	[mm]	356	356	406	457	457
	B	[mm]	286	286	349	368	368
	A	[mm]	149	149	168	190	190
	K	[mm]	19	19	24	24	24
Weight data	Weight NK. CI ¹⁾	[kg]	742/738	777/773	928/927	1186/1180	1300/1294
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	543	578	695	846	946
	Weight NBE. CI	[kg]	-	-	-	-	-
	Weight diff. SS	[kg]	-7	-7	-7	-7	-7

1) Pump with standard coupling / pump with spacer coupling.

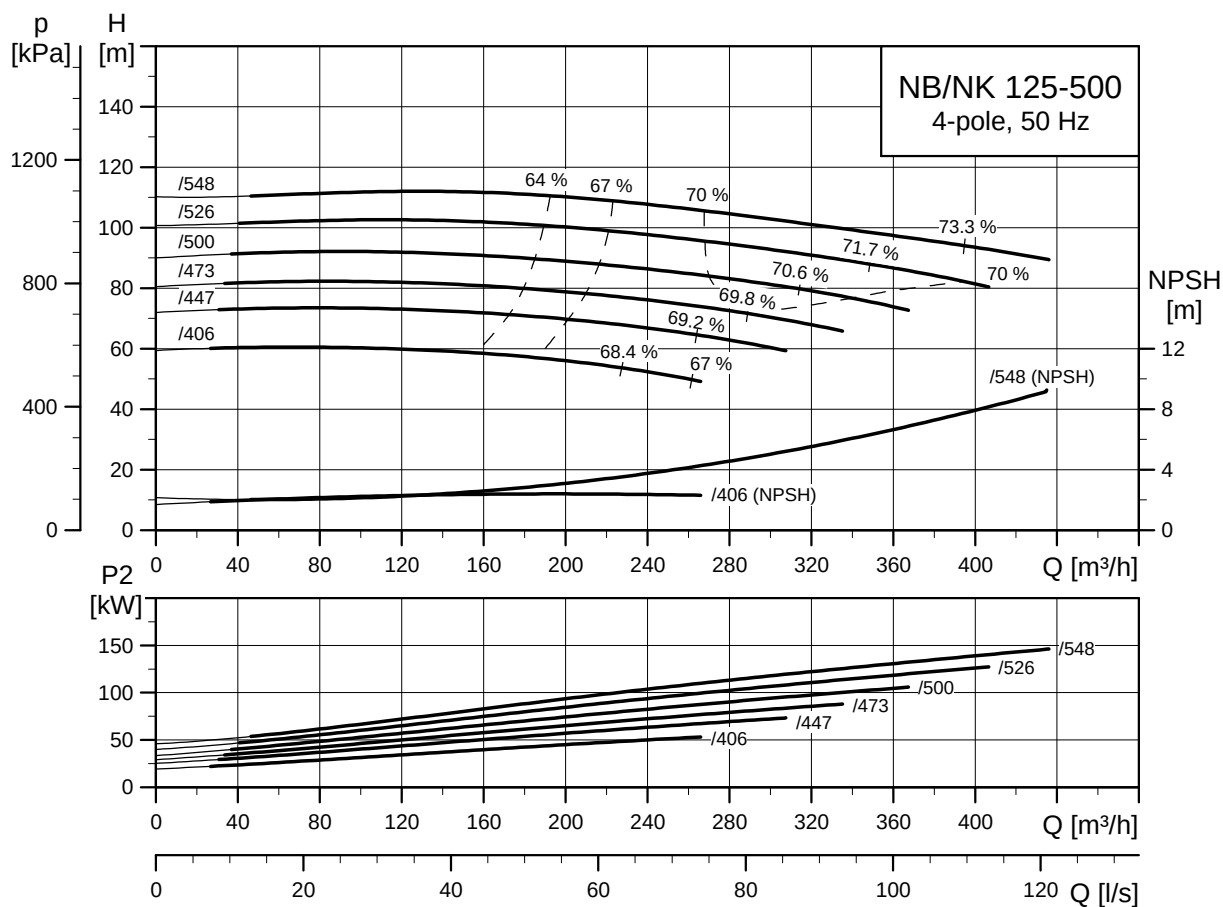
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

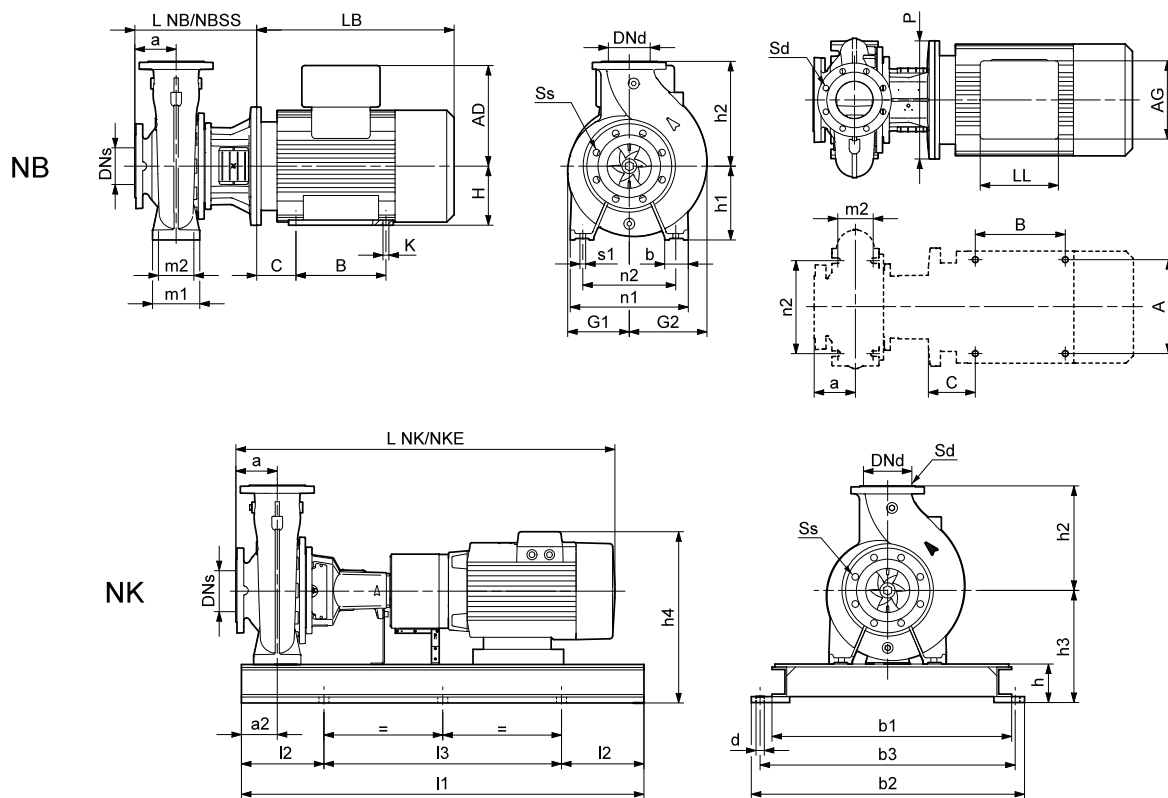
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 125-500



TM03 5153 4312



TM03 4182 1806

TM03 4051 1806

Pump type		125-500/406	125-500/447	125-500/473	125-500/500	125-500/526	125-500/548
Motor type	Standard Motor ⁵⁾	Siemens 250M	Siemens 280S	Siemens 280M	Siemens 315S	Siemens 315M	Siemens 315L
	E-Motor	-	-	-	-	-	-
Common data NB/NK	P2	[kW]	55	75	90	110	132
	PN	[bar]	16	16	16	16	16
	DNs	[mm]	150	150	150	150	150
	DNd	[mm]	125	125	125	125	125
	a	[mm]	180	180	180	180	180
	h2	[mm]	500	500	500	500	500
	Ss	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1741/1917	1814/1990	1924/2100	1936/2112	2101/2277
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-	-/-
	l1	[mm]	2000	2000	2000	2000	2000
	l2	[mm]	330	330	330	330	330
	l3	[mm]	1340	1340	1340	1340	1340
	b1	[mm]	750	750	750	750	750
	b2	[mm]	890	890	890	890	890
	b3	[mm]	830	830	830	830	830
	d	[mm]	28	28	28	28	28
	a2	[mm]	110	110	110	110	110
	h	[mm]	130	130	130	130	130
	h3	[mm]	530	530	530	530	530
	h4 ²⁾	[mm]	940/-	963/-	963/-	1045/-	1045/-
	Base frame no. ³⁾		10	10	10	10	10
NB data	Mounting design ⁴⁾		C	C	C	C	C
	L NB	[mm]	524	524	524	554	554
	L NB SS	[mm]	524	524	524	554	554
	h1	[mm]	400	400	400	400	400
	G1	[mm]	344	344	344	344	344
	G2	[mm]	377	377	377	377	377
	m1	[mm]	200	200	200	200	200
	m2	[mm]	150	150	150	150	150
	n1	[mm]	625	625	625	625	625
	n2	[mm]	500	500	500	500	500
	b	[mm]	125	125	125	125	125
	s1	[mm]	M20	M20	M20	M20	M20
	H	[mm]	250	280	280	315	315
	LB ²⁾	[mm]	747/-	820/-	930/-	912/-	1077/-
	AD ²⁾	[mm]	410/-	433/-	433/-	515/-	515/-
	AG ²⁾	[mm]	319/-	319/-	319/-	374/-	374/-
	LL ²⁾	[mm]	233/-	233/-	233/-	299/-	299/-
	P	[mm]	550	550	550	660	660
	C	[mm]	406	457	457	508	508
	B	[mm]	349	368	368	406	457
	A	[mm]	168	190	190	216	216
	K	[mm]	24	24	24	28	28
Weight data	Weight NK. CI ¹⁾	[kg]	1297/1293	1480/1476	1595/1591	1681/1677	1870/1866
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	907	1057	1157	1299	1499
	Weight NBE. CI	[kg]	-	-	-	-	-
	Weight diff. SS	[kg]	-9	-9	-9	-9	-9

1) Pump with standard coupling / pump with spacer coupling.

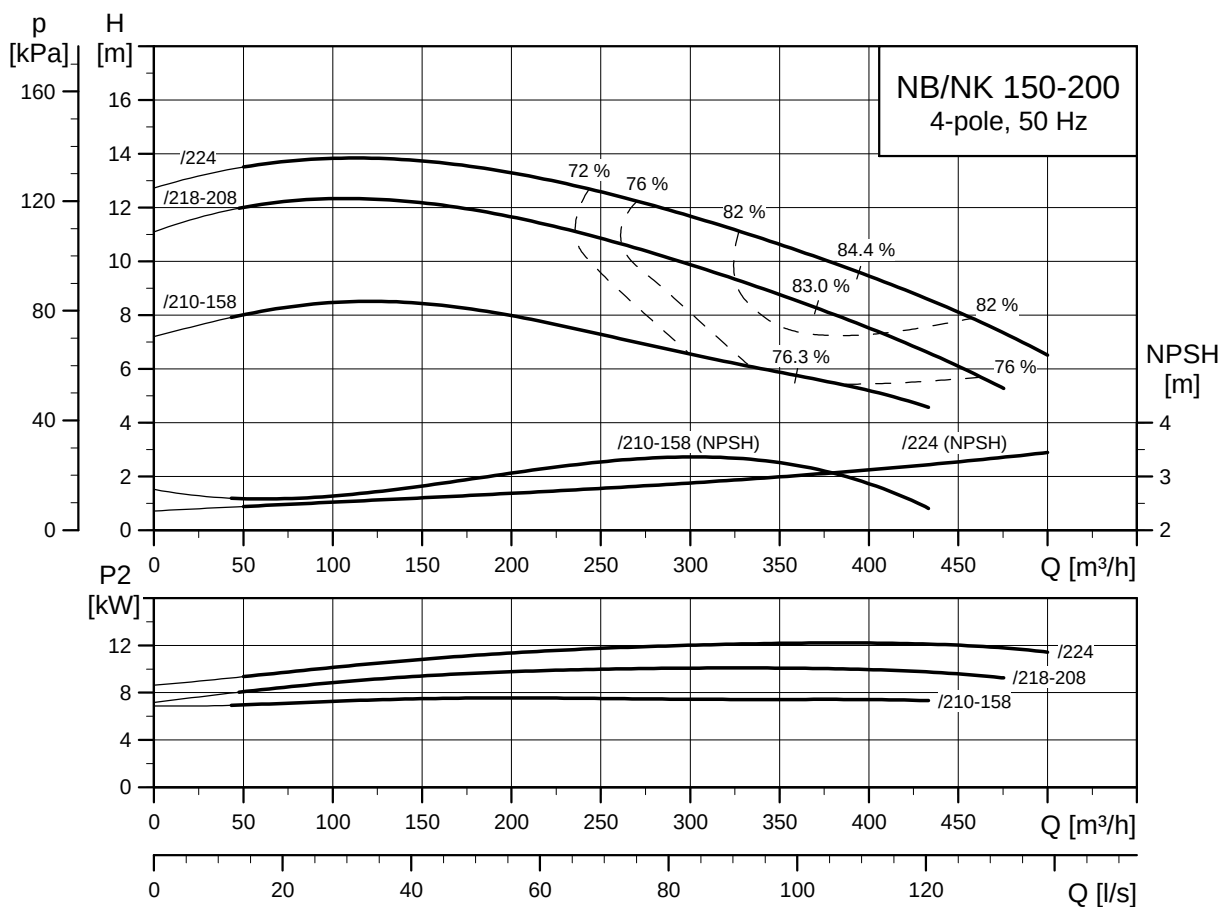
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

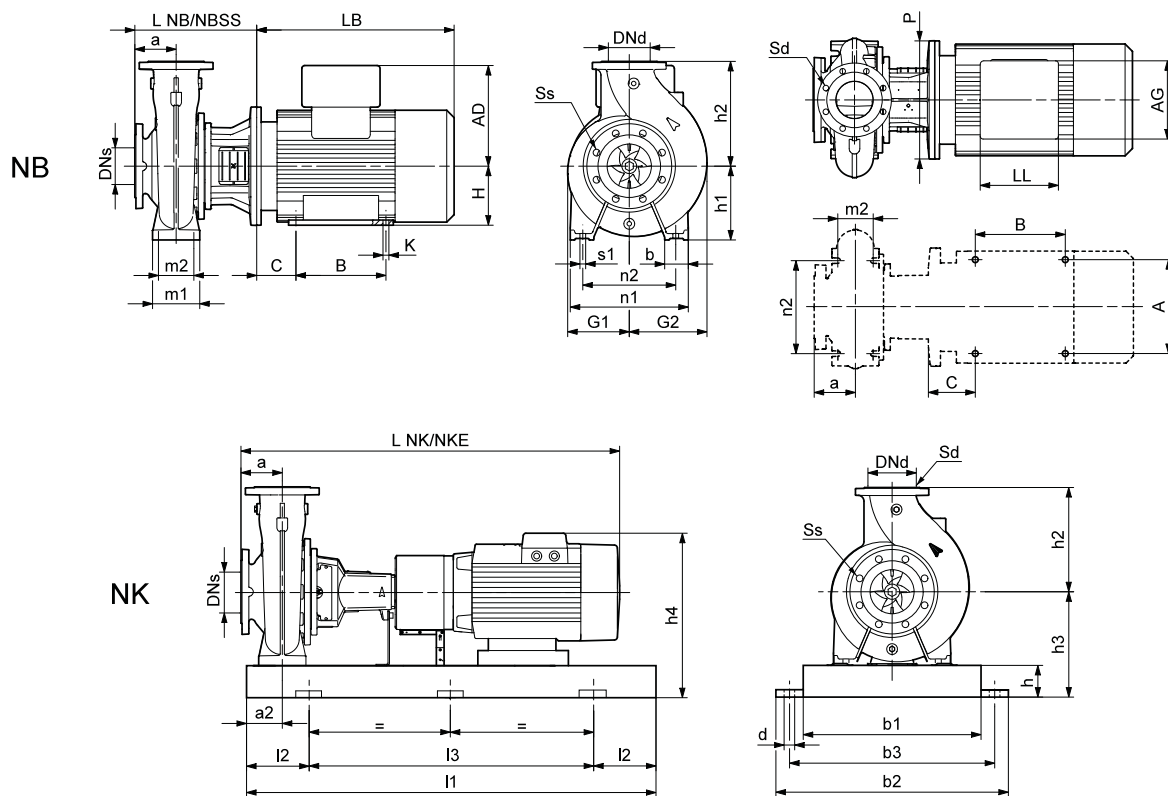
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 150-200



TM03 5154 4312



TM03 4182 1806

TM03 4179 1806

Pump type	150-200/210-158 150-200/218-208 150-200/224				
Motor type	Standard Motor ⁵⁾	MG 132MB-H3	MG 160MA-H3	MG 160LB-H3	
	E-Motor	MGE 132MB-F	MGE 160MB-F	MGE 160LB-F	
Common data NB/NK	P2	[kW]	7.5	11	15
	PN	[bar]	10	10	10
	DNs	[mm]	200	200	200
	DNd	[mm]	150	150	150
	a	[mm]	160	160	160
	h2	[mm]	400	400	400
	Ss	[mm]	8 x Ø23	8 x Ø23	8 x Ø23
	Sd	[mm]	8 x Ø23	8 x Ø23	8 x Ø23
NK data	L NK ¹⁾	[mm]	1143/1279	1289/1425	1319/1455
	L NKE ¹⁾	[mm]	1143/1279	1215/1351	1259/1395
	l1	[mm]	1800	1800	1800
	l2	[mm]	300	300	300
	l3	[mm]	1200	1200	1200
	b1	[mm]	600	600	600
	b2	[mm]	730	730	730
	b3	[mm]	670	670	670
	d	[mm]	28	28	28
	a2	[mm]	110	110	110
	h	[mm]	100	100	100
	h3	[mm]	385	380	380
	h4 ²⁾	[mm]	544/606	584/681	584/681
	Base frame no. ³⁾		9	9	9
NB data	Mounting design ⁴⁾		A	C	C
	L NB	[mm]	403	433	433
	L NB SS	[mm]	403	433	433
	h1	[mm]	280	280	280
	G1	[mm]	230	230	230
	G2	[mm]	319	319	319
	m1	[mm]	200	200	200
	m2	[mm]	150	150	150
	n1	[mm]	550	550	550
	n2	[mm]	450	450	450
	b	[mm]	100	100	100
	s1	[mm]	M20	M20	M20
	H	[mm]	-	160	160
	LB ²⁾	[mm]	429/411	545/478	575/518
	AD ²⁾	[mm]	159/221	204/301	204/301
	AG ²⁾	[mm]	203/227	243/342	243/342
	LL ²⁾	[mm]	135/305	213/352	213/352
	P	[mm]	300	350	350
	C	[mm]	-	254	254
	B	[mm]	-	254	254
	A	[mm]	-	108	108
	K	[mm]	-	15	15
Weight data	Weight NK. CI ¹⁾	[kg]	434/431	466/461	488/483
	Weight NKE. CI ¹⁾	[kg]	443/440	495/490	518/513
	Weight NB. CI	[kg]	242	278	299
	Weight NBE. CI	[kg]	240	286	313
	Weight diff. SS	[kg]	-5	-5	-5

1) Pump with standard coupling / pump with spacer coupling.

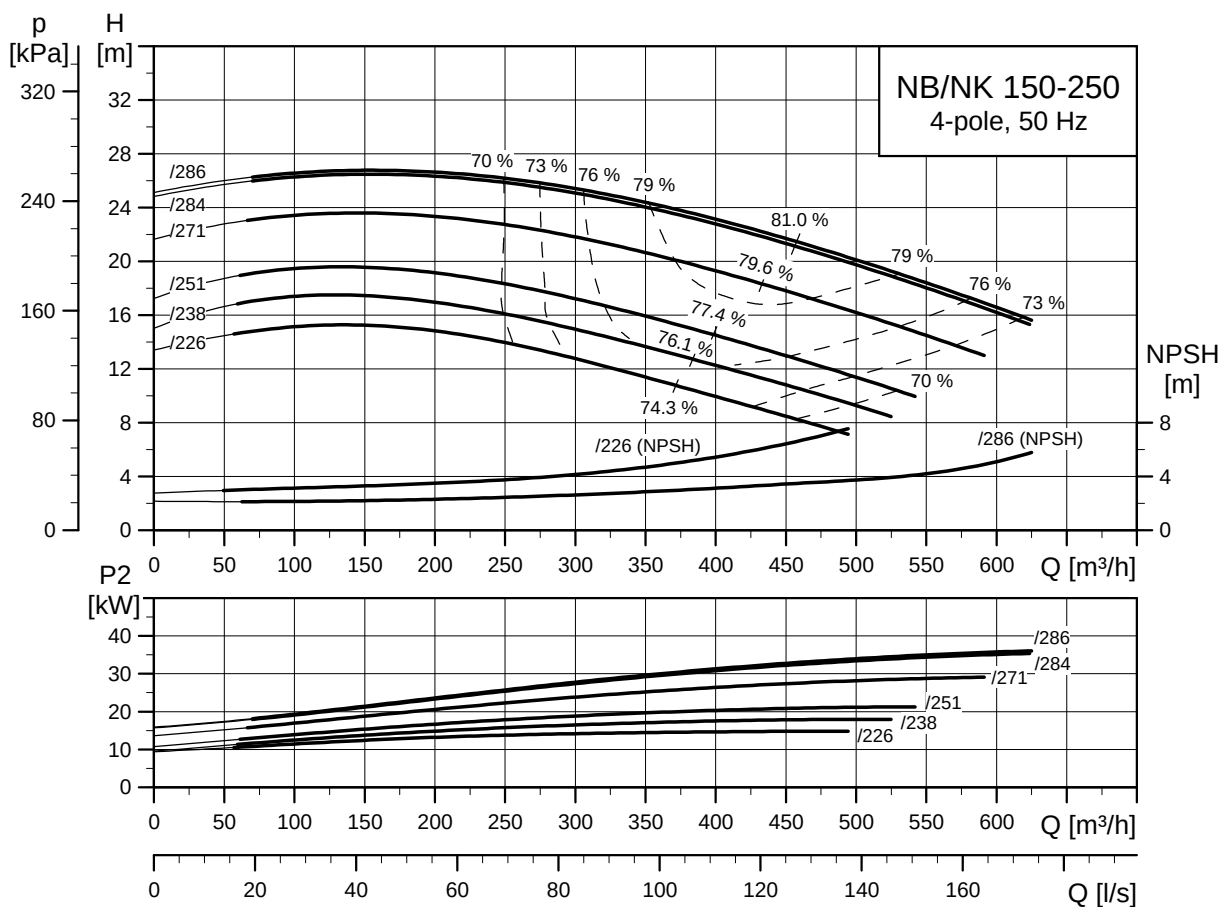
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

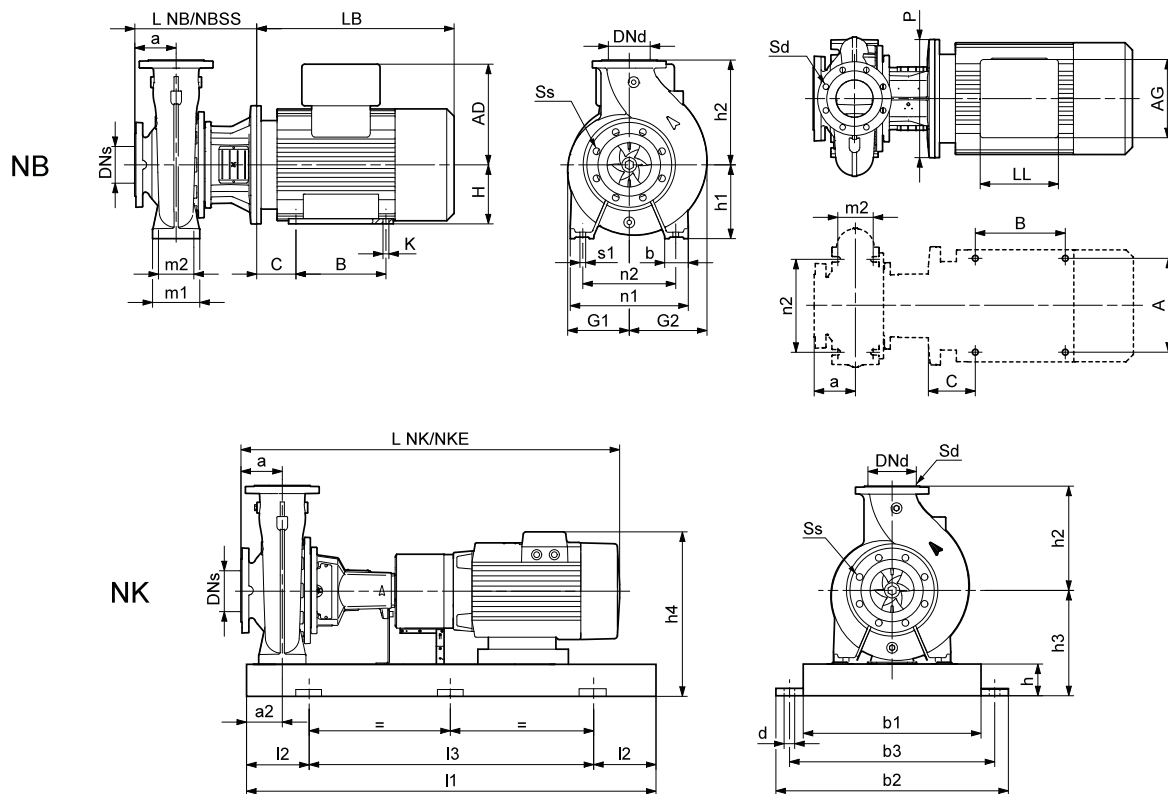
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 150-250



TM03 5155 4312



TM03 4182 1806

TM03 4179 1806

Pump type		150-250/226	150-250/238	150-250/251	150-250/271	150-250/284	150-250/286
Motor type	Standard Motor ⁵⁾	MG 160LB-H3	Siemens 180M	Siemens 180L	Siemens 200L	Siemens 225S	Siemens 225M
	E-Motor	MGE 160LB-F	MGE 180MA-F	-	-	-	-
Common data NB/NK	P2	[kW]	15	18.5	22	30	45
	PN	[bar]	10	10	10	10	10
	DNs	[mm]	200	200	200	200	200
	DNd	[mm]	150	150	150	150	150
	a	[mm]	160	160	160	160	160
	h2	[mm]	375	375	375	375	375
	Ss	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
	Sd	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
NK data	L NK ¹⁾	[mm]	1379/1515	1362/1498	1392/1528	1440/1576	1482/1618
	L NKE ¹⁾	[mm]	1319/1455	1345/1481	-/-	-/-	-/-
	l1	[mm]	1800	1800	1800	1800	1800
	l2	[mm]	300	300	300	300	300
	l3	[mm]	1200	1200	1200	1200	1200
	b1	[mm]	600	600	600	600	600
	b2	[mm]	730	730	730	730	730
	b3	[mm]	670	670	670	670	670
	d	[mm]	28	28	28	28	28
	a2	[mm]	110	110	110	110	110
	h	[mm]	100	100	100	100	100
	h3	[mm]	380	383	383	380	380
	h4 ²⁾	[mm]	584/681	669/691	669/-	695/-	718/-
	Base frame no. ³⁾		9	9	9	9	9
NB data	Mounting design ⁴⁾		C	C	C	C	C
	L NB	[mm]	431	431	431	431	461
	L NB SS	[mm]	431	431	431	431	461
	h1	[mm]	280	280	280	280	280
	G1	[mm]	223	223	223	223	223
	G2	[mm]	287	287	287	287	287
	m1	[mm]	200	200	200	200	200
	m2	[mm]	150	150	150	150	150
	n1	[mm]	500	500	500	500	500
	n2	[mm]	400	400	400	400	400
	b	[mm]	100	100	100	100	100
	s1	[mm]	M20	M20	M20	M20	M20
	H	[mm]	160	180	180	200	225
	LB ²⁾	[mm]	575/518	558/541	588/-	636/-	648/-
	AD ²⁾	[mm]	204/301	286/308	286/-	315/-	338/-
	AG ²⁾	[mm]	243/342	189/420	189/-	265/-	266/-
	LL ²⁾	[mm]	213/352	164/400	164/-	197/-	197/-
	P	[mm]	350	350	350	400	450
	C	[mm]	254	279	279	318	356
	B	[mm]	254	241	241	305	286
	A	[mm]	108	121	121	133	149
	K	[mm]	15	15	15	19	19
Weight data	Weight NK. CI ¹⁾	[kg]	497/492	546/538	556/548	616/611	695/691
	Weight NKE. CI ¹⁾	[kg]	527/522	540/532	-/-	-/-	-/-
	Weight NB. CI	[kg]	295	336	351	417	488
	Weight NBE. CI	[kg]	309	331	-	-	-
	Weight diff. SS	[kg]	6	6	6	6	6

1) Pump with standard coupling / pump with spacer coupling.

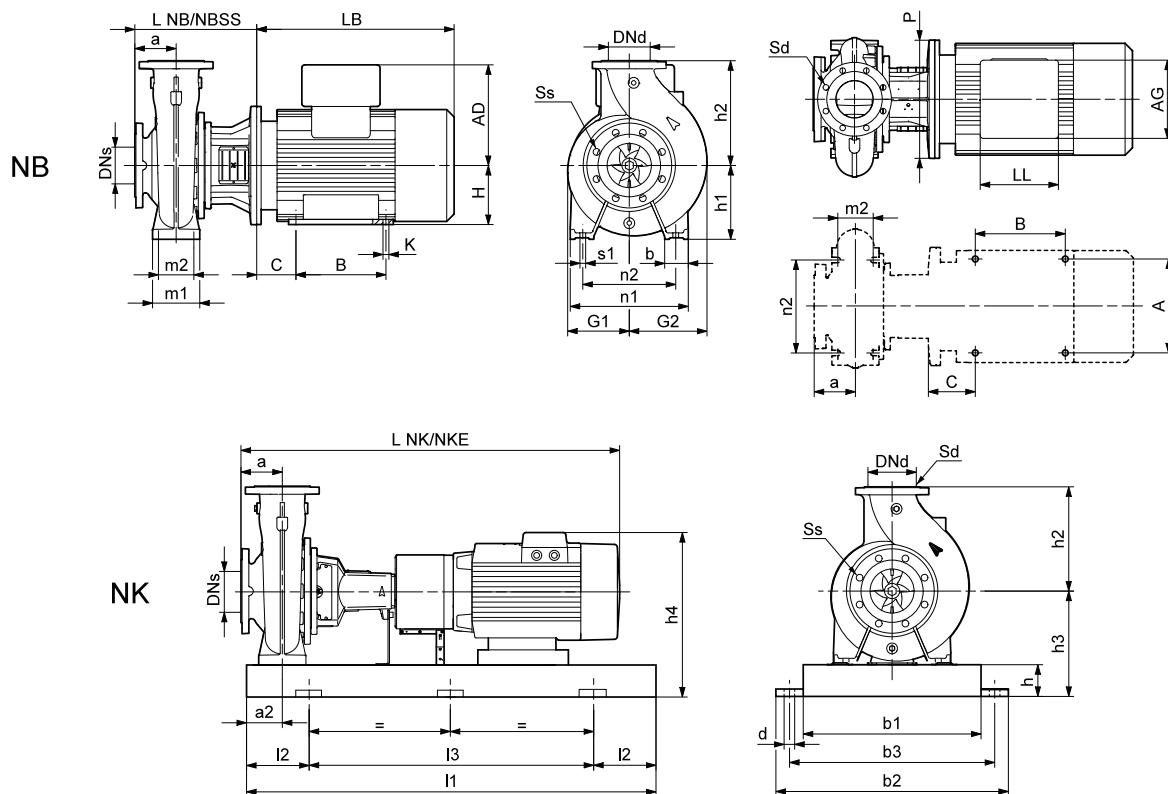
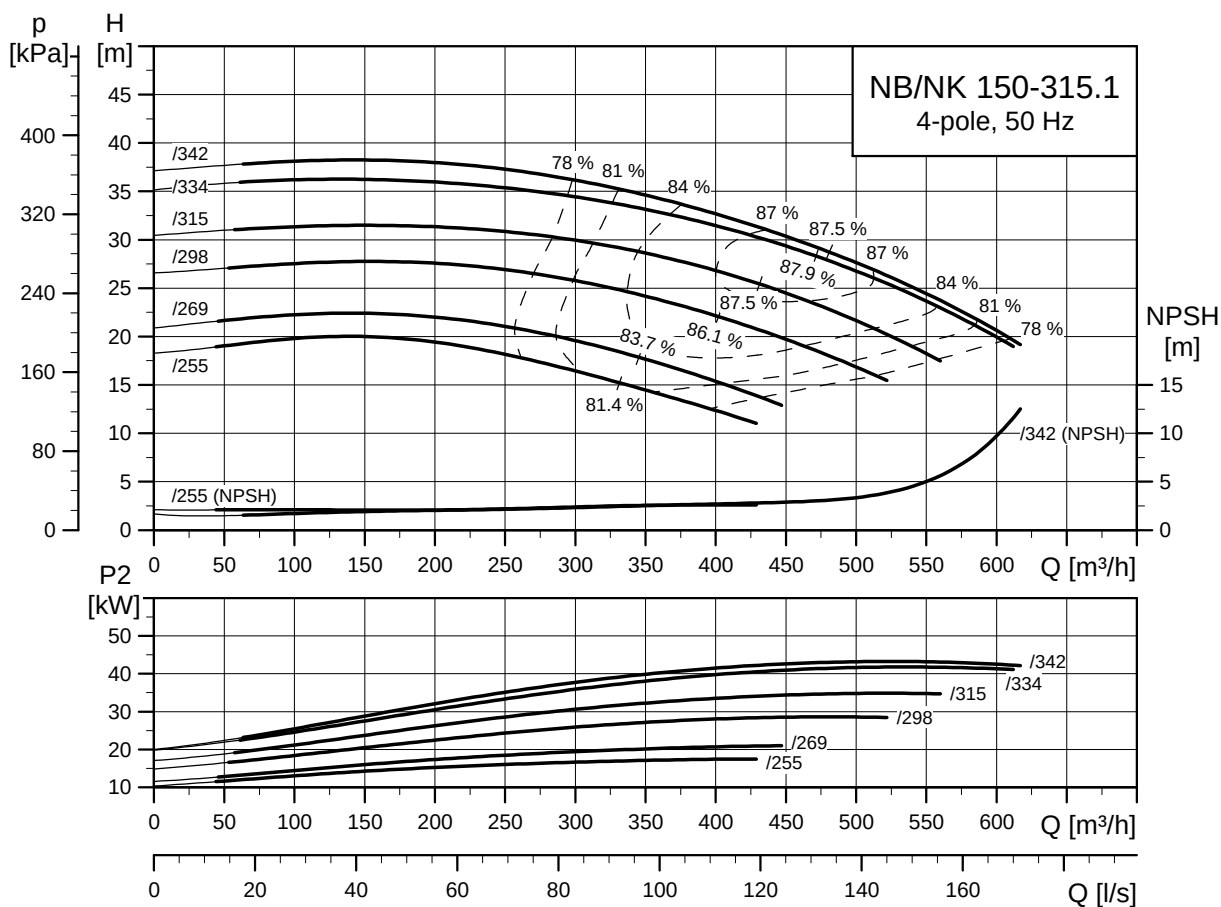
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 150-315.1



TM05 4269 2212

TM03 4182 1806

TM03 4179 1806

Pump type	150-315.1/255 150-315.1/269 150-315.1/298 150-315.1/315 150-315.1/334 150-315.1/342							
Motor type	Standard Motor ⁵⁾		Siemens 180M	Siemens 180L	Siemens 200L	Siemens 225S	Siemens 225M	Siemens 250M
	E-Motor		MGE 180MA-F	-	-	-	-	-
Common data NB/NK	P2	[kW]	18.5	22	30	37	45	55
	PN	[bar]	10	10	10	10	10	10
	DNs	[mm]	200	200	200	200	200	200
	DNd	[mm]	150	150	150	150	150	150
	a	[mm]	160	160	160	160	160	160
	h2	[mm]	400	400	400	400	400	400
	Ss	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
	Sd	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
NK data	L NK ¹⁾	[mm]	1362/1498	1392/1528	1440/1576	1482/1618	1542/1678	1583/1609
	L NKE ¹⁾	[mm]	1345/1481	-/-	-/-	-/-	-/-	-/-
	l1	[mm]	1800	1800	1800	1800	1800	1800
	l2	[mm]	300	300	300	300	300	300
	l3	[mm]	1200	1200	1200	1200	1200	1200
	b1	[mm]	600	600	600	600	600	600
	b2	[mm]	730	730	730	730	730	730
	b3	[mm]	670	670	670	670	670	670
	d	[mm]	28	28	28	28	28	28
	a2	[mm]	110	110	110	110	110	110
	h	[mm]	100	100	100	100	100	100
	h3	[mm]	383	383	383	380	380	380
	h4 ²⁾	[mm]	669/-	669/-	698/-	718/-	718/-	790/-
	Base frame no. ³⁾		9	9	9	9	9	9
NB data	Mounting design ⁴⁾		C	C	C	C	C	C
	L NB	[mm]	431	431	431	461	461	461
	L NB SS	[mm]	431	431	431	461	461	461
	h1	[mm]	280	280	280	280	280	280
	G1	[mm]	264	264	264	264	264	264
	G2	[mm]	334	334	334	334	334	334
	m1	[mm]	200	200	200	200	200	200
	m2	[mm]	150	150	150	150	150	150
	n1	[mm]	550	550	550	550	550	550
	n2	[mm]	450	450	450	450	450	450
	b	[mm]	100	100	100	100	100	100
	s1	[mm]	M20	M20	M20	M20	M20	M20
	H	[mm]	180	180	200	225	225	250
	LB ²⁾	[mm]	558/541	588/-	636/-	648/-	708/-	747/-
	AD ²⁾	[mm]	286/308	286/-	315/-	338/-	338/-	410/-
	AG ²⁾	[mm]	189/420	189/-	265/-	266/-	266/-	319/-
	LL ²⁾	[mm]	164/400	164/-	197/-	197/-	197/-	233/-
	P	[mm]	350	350	400	450	450	550
	C	[mm]	279	279	318	356	356	406
	B	[mm]	241	241	305	286	286	349
	A	[mm]	121	121	133	149	149	168
	K	[mm]	15	15	19	19	19	24
Weight data	Weight NK. CI ¹⁾	[kg]	632/624	595/597	659/665	742/737	777/772	871/860
	Weight NKE. CI ¹⁾	[kg]	598/590	-/-	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	394	397	466	534	569	686
	Weight NBE. CI	[kg]	361	-	-	-	-	-
	Weight diff. SS	[kg]	3	3	3	3	3	3

1) Pump with standard coupling / pump with spacer coupling.

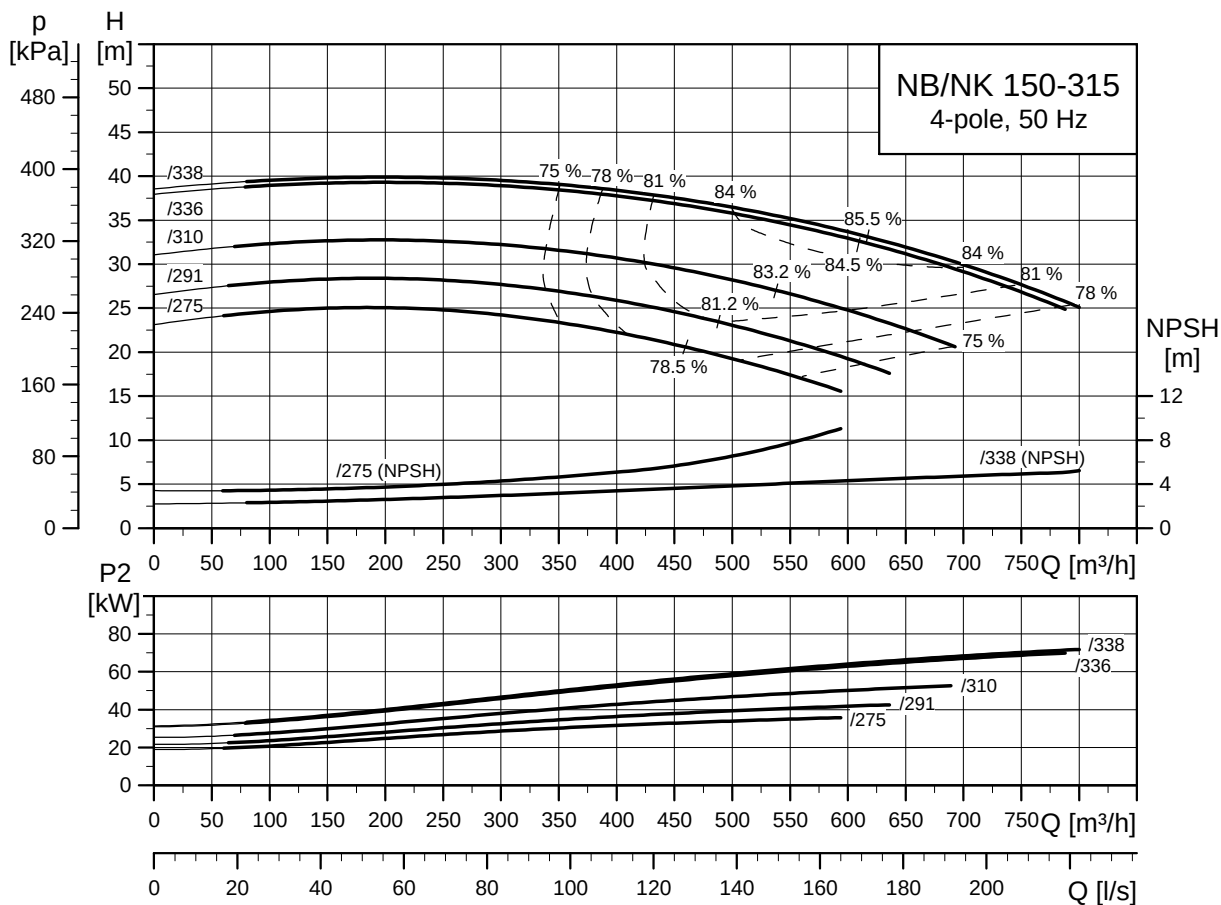
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

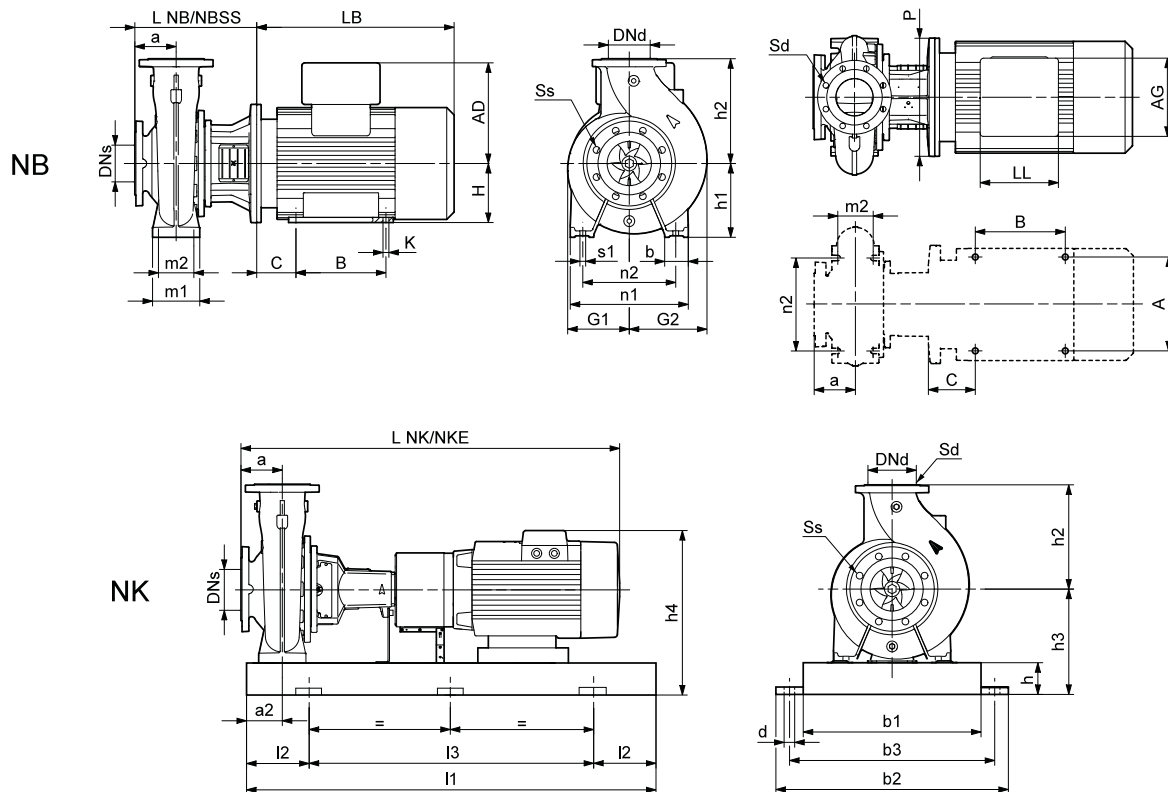
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 150-315



TM03 5156 4312



TM03 4182 1806

TM03 4179 1806

Pump type	150-315/275		150-315/291	150-315/310	150-315/336	150-315/338	
Motor type	Standard Motor ⁵⁾		Siemens 225S	Siemens 225M	Siemens 250M	Siemens 280S	Siemens 280M
	E-Motor		-	-	-	-	-
Common data NB/NK	P2	[kW]	37	45	55	75	90
	PN	[bar]	10	10	10	10	10
	DNs	[mm]	200	200	200	200	200
	DNd	[mm]	150	150	150	150	150
	a	[mm]	160	160	160	160	160
	h2	[mm]	400	400	400	400	400
	Ss	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
	Sd	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
NK data	L NK ¹⁾	[mm]	1482/1618	1542/1678	1581/1717	1654/1790	1764/1900
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-	-/-
	l1	[mm]	1800	1800	1800	2000	2000
	l2	[mm]	300	300	300	330	330
	l3	[mm]	1200	1200	1200	1340	1340
	b1	[mm]	600	600	600	750	750
	b2	[mm]	730	730	730	890	890
	b3	[mm]	670	670	670	830	830
	d	[mm]	28	28	28	28	28
	a2	[mm]	110	110	110	110	110
	h	[mm]	100	100	100	130	130
	h3	[mm]	380	380	380	415	415
	h4 ²⁾	[mm]	718/-	718/-	790/-	848/-	848/-
	Base frame no. ³⁾		9	9	9	10	10
NB data	Mounting design ⁴⁾		C	C	C	C	C
	L NB	[mm]	461	461	461	461	461
	L NB SS	[mm]	461	461	461	461	461
	h1	[mm]	280	280	280	280	280
	G1	[mm]	264	264	264	264	264
	G2	[mm]	334	334	334	334	334
	m1	[mm]	200	200	200	200	200
	m2	[mm]	150	150	150	150	150
	n1	[mm]	550	550	550	550	550
	n2	[mm]	450	450	450	450	450
	b	[mm]	100	100	100	100	100
	s1	[mm]	M20	M20	M20	M20	M20
	H	[mm]	225	225	250	280	280
	LB ²⁾	[mm]	648/-	708/-	747/-	820/-	930/-
	AD ²⁾	[mm]	338/-	338/-	410/-	433/-	433/-
	AG ²⁾	[mm]	266/-	266/-	319/-	319/-	319/-
	LL ²⁾	[mm]	197/-	197/-	233/-	233/-	233/-
	P	[mm]	450	450	550	550	550
	C	[mm]	356	356	406	457	457
	B	[mm]	286	286	349	368	368
	A	[mm]	149	149	168	190	190
K	[mm]	19	19	24	24	24	
Weight data	Weight NK. CI ¹⁾	[kg]	740/735	775/770	869/868	1146/1140	1256/1250
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	532	567	684	834	934
	Weight NBE. CI	[kg]	-	-	-	-	-
	Weight diff. SS	[kg]	3	3	3	3	3

1) Pump with standard coupling / pump with spacer coupling.

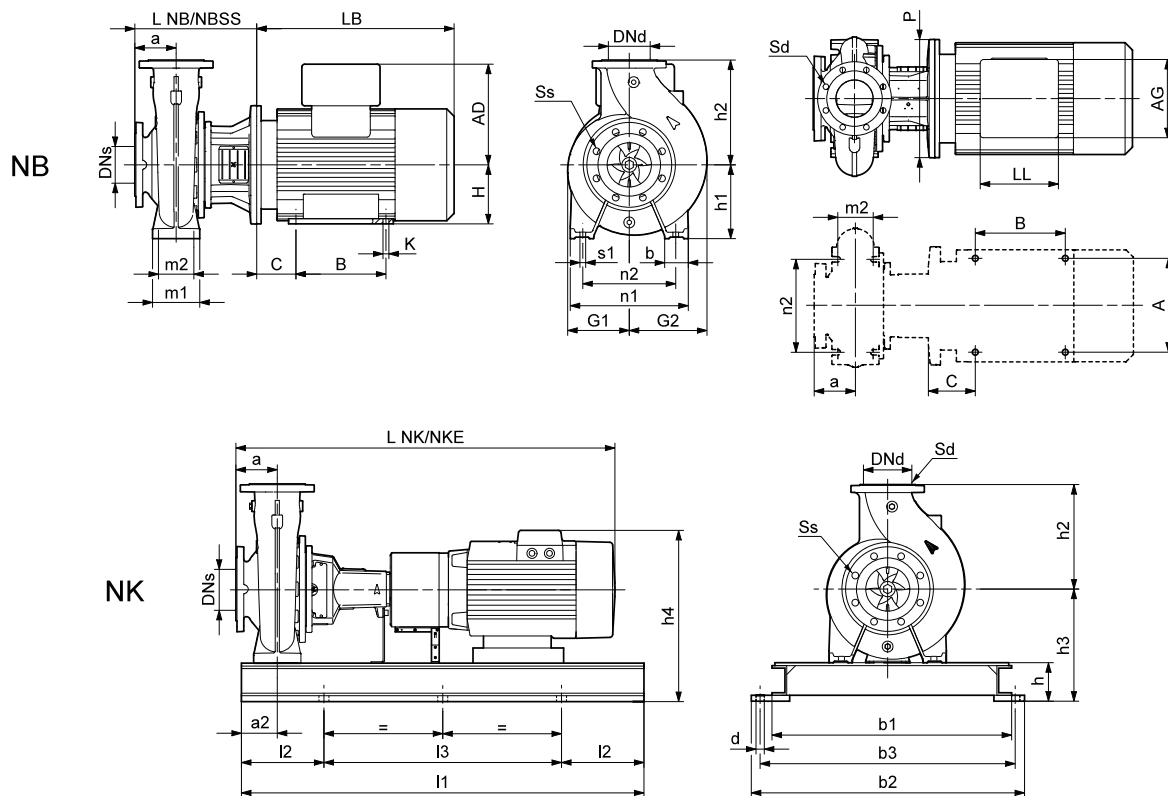
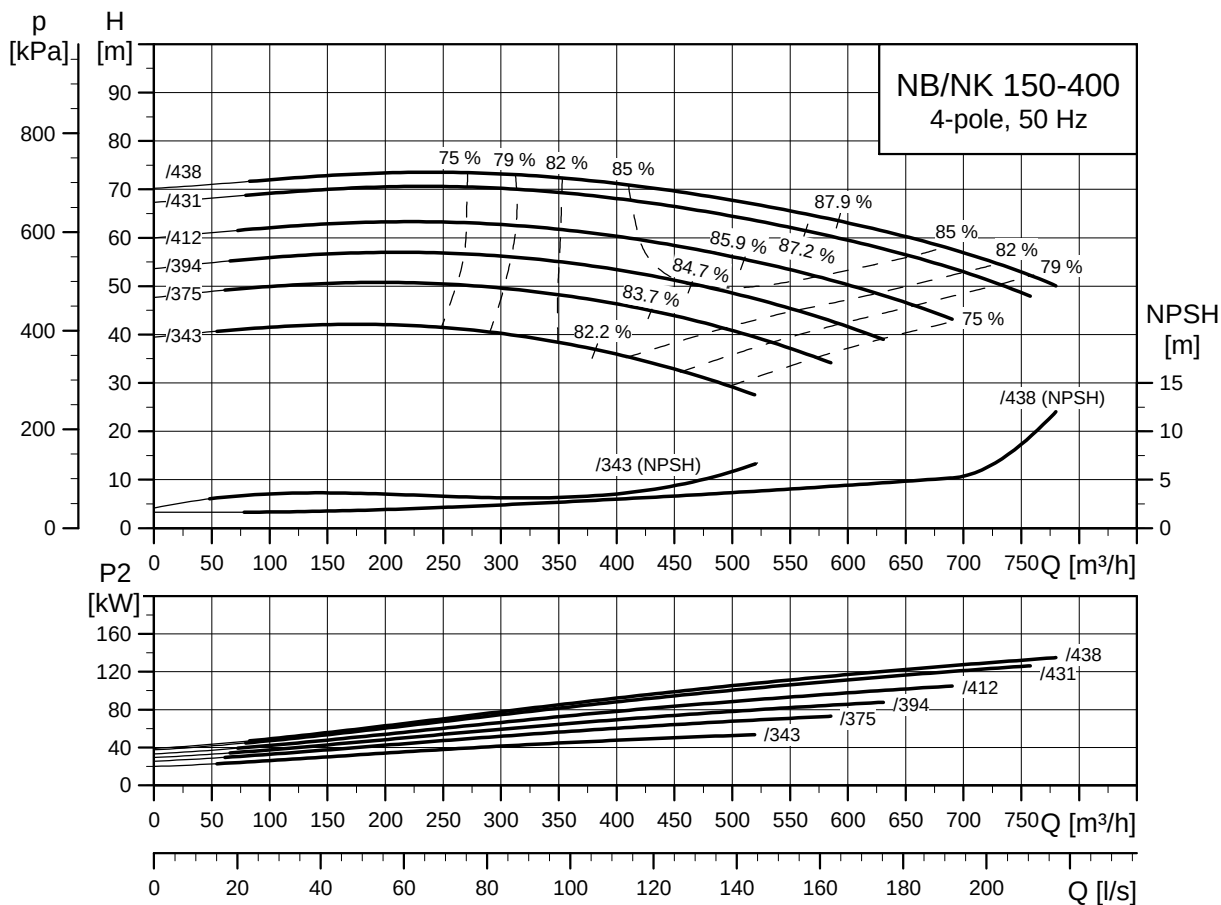
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 150-400



TM03 5157 4312

TM03 4182 1806

TM03 4051 1806

Pump type		150-400/343	150-400/375	150-400/394	150-400/412	150-400/431	150-400/438
Motor type	Standard Motor ⁵⁾	Siemens 250M	Siemens 280S	Siemens 280M	Siemens 315S	Siemens 315M	Siemens 315L
	E-Motor	-	-	-	-	-	-
Common data NB/NK	P2	[kW]	55	75	90	110	132
	PN	[bar]	10	10	10	10	10
	DNs	[mm]	200	200	200	200	200
	DNd	[mm]	150	150	150	150	150
	a	[mm]	160	160	160	160	160
	h2	[mm]	450	450	450	450	450
	Ss	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
	Sd	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
NK data	L NK ¹⁾	[mm]	1581/1717	1654/1790	1764/1900	1776/1912	2081/2257
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-	-/-
	l1	[mm]	1800	2000	2000	2000	2000
	l2	[mm]	300	330	330	330	330
	l3	[mm]	1200	1340	1340	1340	1340
	b1	[mm]	600	750	750	750	750
	b2	[mm]	730	890	890	890	890
	b3	[mm]	670	830	830	830	830
	d	[mm]	28	28	28	28	28
	a2	[mm]	110	110	110	110	110
	h	[mm]	100	130	130	130	130
	h3	[mm]	415	445	445	450	450
	h4 ²⁾	[mm]	825/-	878/-	878/-	965/-	965/-
	Base frame no. ³⁾		9	10	10	10	10
NB data	Mounting design ⁴⁾		C	C	C	C	C
	L NB	[mm]	474	474	474	504	504
	L NB SS	[mm]	474	474	474	504	504
	h1	[mm]	315	315	315	315	315
	G1	[mm]	291	291	291	291	291
	G2	[mm]	339	339	339	339	339
	m1	[mm]	200	200	200	200	200
	m2	[mm]	150	150	150	150	150
	n1	[mm]	550	550	550	550	550
	n2	[mm]	450	450	450	450	450
	b	[mm]	100	100	100	100	100
	s1	[mm]	M20	M20	M20	M20	M20
	H	[mm]	250	280	280	315	315
	LB ²⁾	[mm]	747/-	820/-	930/-	912/-	1077/-
	AD ²⁾	[mm]	410/-	433/-	433/-	515/-	515/-
	AG ²⁾	[mm]	319/-	319/-	319/-	374/-	374/-
	LL ²⁾	[mm]	233/-	233/-	233/-	299/-	299/-
	P	[mm]	550	550	550	660	660
	C	[mm]	406	457	457	508	508
	B	[mm]	349	368	368	406	457
	A	[mm]	168	190	190	216	216
	K	[mm]	24	24	24	28	28
Weight data	Weight NK. CI ¹⁾	[kg]	955/954	1212/1206	1326/1320	1393/1395	1666/1670
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	750	900	1000	1142	1342
	Weight NBE. CI	[kg]	-	-	-	-	-
	Weight diff. SS	[kg]	5	5	5	5	5

1) Pump with standard coupling / pump with spacer coupling.

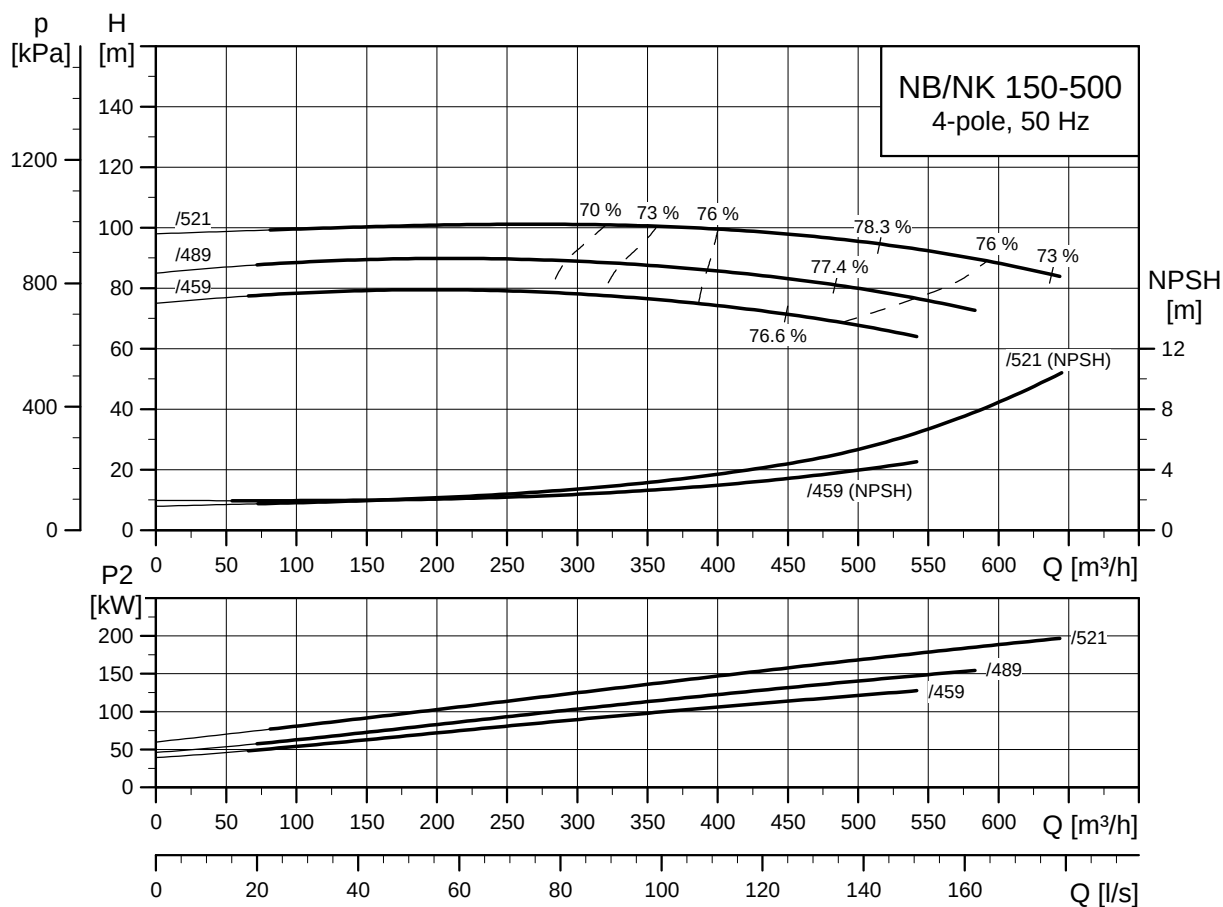
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

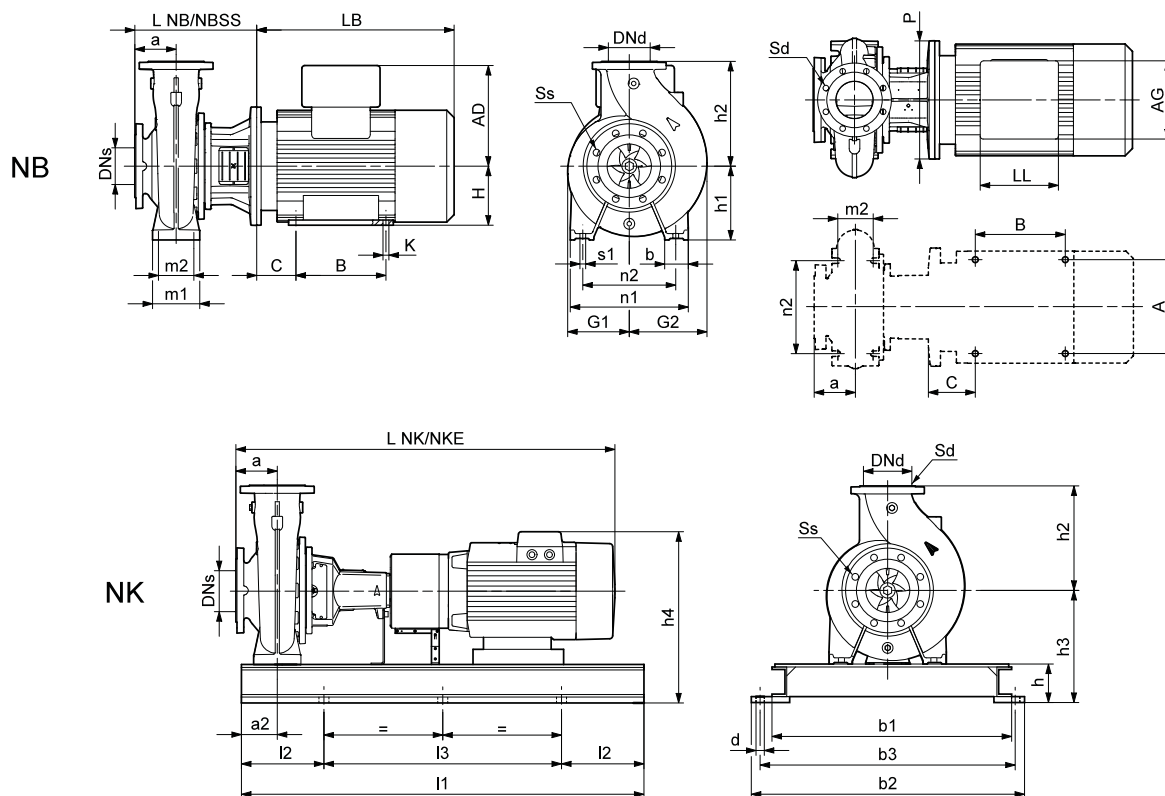
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 150-500



TM03 5158 4312



TM03 4182 1806

TM03 4051 1806

Pump type	150-500/459		150-500/489	150-500/521	
Motor type	Standard Motor ⁵⁾	Siemens 315M	Siemens 315L	Siemens 315L	
	E-Motor	-	-	-	
Common data NB/NK	P2	[kW]	132	160	200
	PN	[bar]	10	10	10
	DNs	[mm]	200	200	200
	DNd	[mm]	150	150	150
	a	[mm]	180	180	180
	h2	[mm]	500	500	500
	Ss	[mm]	8 x Ø23	8 x Ø23	8 x Ø23
	Sd	[mm]	8 x Ø23	8 x Ø23	8 x Ø23
NK data	L NK ¹⁾	[mm]	2101/2277	2101/2277	2256/2432
	L NKE ¹⁾	[mm]	-/-	-/-	-/-
	I1	[mm]	2000	2000	2000
	I2	[mm]	330	330	330
	I3	[mm]	1340	1340	1340
	b1	[mm]	750	750	750
	b2	[mm]	890	890	890
	b3	[mm]	830	830	830
	d	[mm]	28	28	28
	a2	[mm]	110	110	110
	h	[mm]	130	130	130
	h3	[mm]	530	530	530
	h4 ²⁾	[mm]	1045/-	1045/-	1045/-
	Base frame no. ³⁾		10	10	10
NB data	Mounting design ⁴⁾		C	C	C
	L NB	[mm]	554	554	554
	L NB SS	[mm]	554	554	554
	h1	[mm]	400	400	400
	G1	[mm]	353	353	353
	G2	[mm]	396	396	396
	m1	[mm]	200	200	200
	m2	[mm]	150	150	150
	n1	[mm]	625	625	625
	n2	[mm]	500	500	500
	b	[mm]	125	125	125
	s1	[mm]	M20	M20	M20
	H	[mm]	315	315	315
	LB ²⁾	[mm]	1077/-	1077/-	1232/-
	AD ²⁾	[mm]	515/-	515/-	515/-
	AG ²⁾	[mm]	374/-	374/-	374/-
	LL ²⁾	[mm]	299/-	299/-	299/-
	P	[mm]	660	660	660
	C	[mm]	508	508	508
	B	[mm]	457	457	457
	A	[mm]	216	216	216
	K	[mm]	28	28	28
Weight data	Weight NK. CI ¹⁾	[kg]	1881/1877	1931/1927	2117/2112
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-
	Weight NB. CI	[kg]	1509	1539	1739
	Weight NBE. CI	[kg]	-	-	-
	Weight diff. SS	[kg]	12	12	12

1) Pump with standard coupling / pump with spacer coupling.

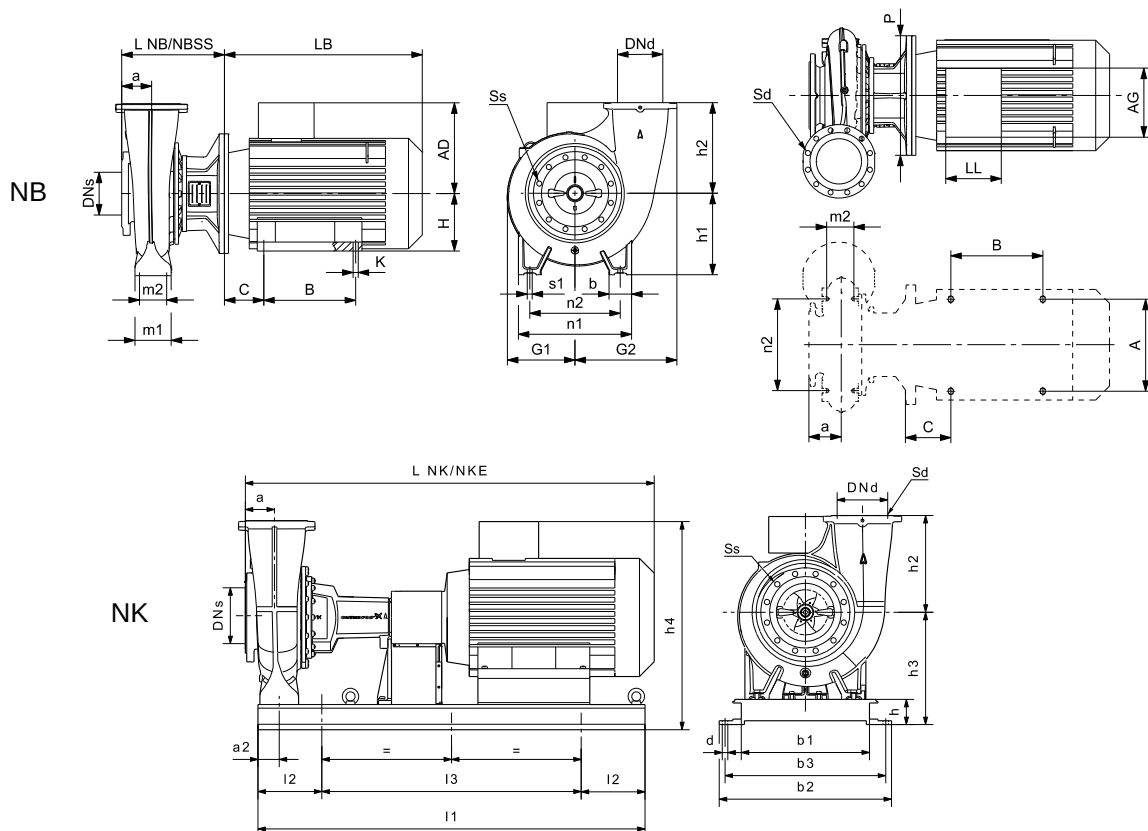
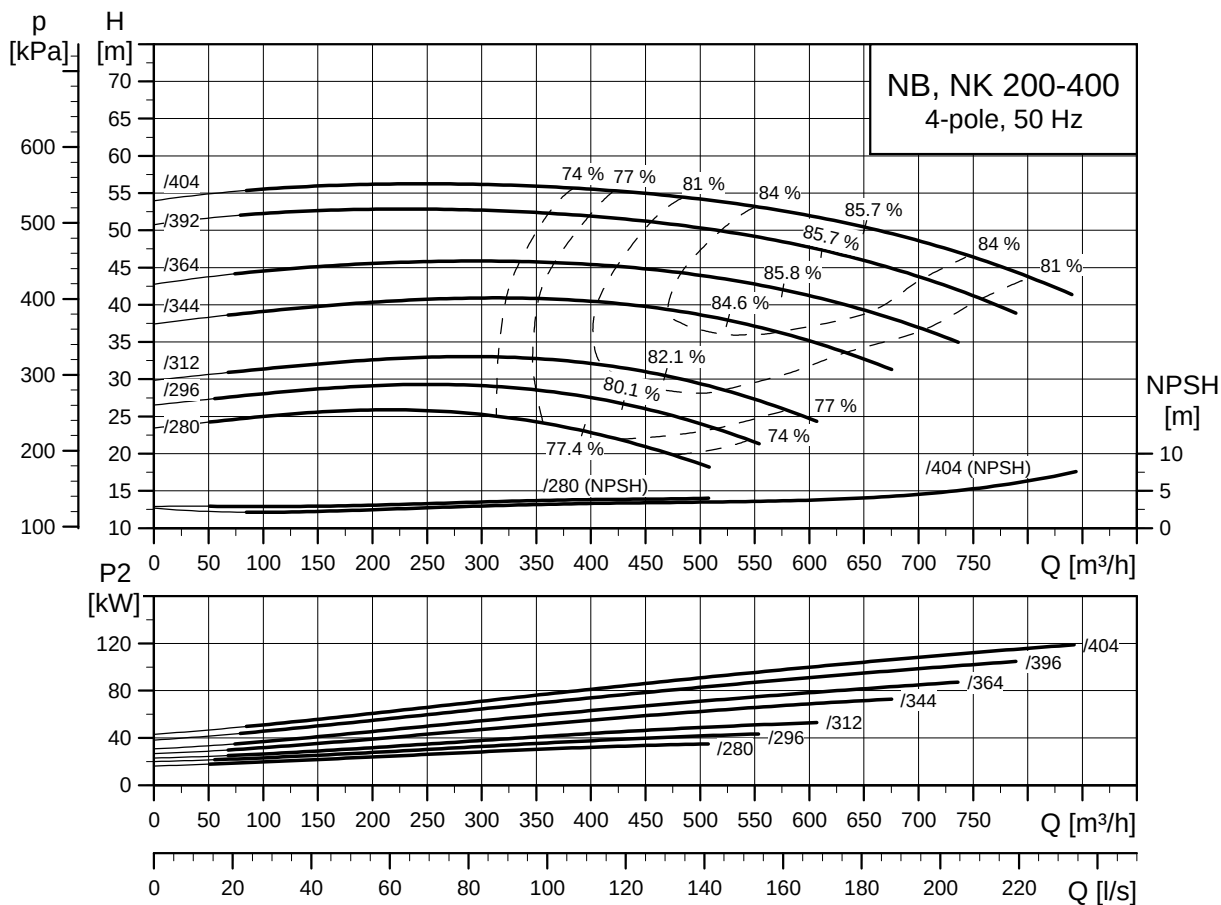
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 200-400



TM04 4935 4312

TM05 1432 2711

TM04 6113 5009

Pump type		200-400/280	200-400/296	200-400/312	200-400/344	200-400/364	200-400/392	200-400/404
Motor type	Standard Motor ⁵⁾	Siemens 225S	Siemens 225M	Siemens 250M	Siemens 280S	Siemens 280M	Siemens 315S	Siemens 315M
	E-Motor	-	-	-	-	-	-	-
Common data NB/NK	P2	[kW]	37	45	55	75	90	132
	PN	[bar]	10	10	10	10	10	10
	DNs	[mm]	250	250	250	250	250	250
	DNd	[mm]	200	200	200	200	200	200
	a	[mm]	170	170	170	170	170	170
	h2	[mm]	400	400	400	400	400	400
	Ss	[mm]	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23
	Sd	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
NK data	L NK ¹⁾	[mm]	1660/1836	1720/1896	1759/1935	1832/2008	1942/2118	2119/2295
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-	-/-	-/-
	l1	[mm]	1690	1690	1690	1690	1880	2110
	l2	[mm]	330	330	330	330	330	330
	l3	[mm]	1030	1030	1030	1030	1220	1450
	b1	[mm]	730	730	730	730	730	730
	b2	[mm]	890	890	890	890	890	890
	b3	[mm]	830	830	830	830	830	830
	d	[mm]	28	28	28	28	28	28
	a2	[mm]	110	110	110	110	110	110
	h	[mm]	130	130	130	130	130	130
	h3	[mm]	530	530	530	530	530	530
	h4 ²⁾	[mm]	868/-	868/-	940/-	963/-	1050/-	1050/-
	Base frame no. ³⁾		10E	10E	10E	10F	10F	10D
NB data	Mounting design ⁴⁾		C	C	C	C	C	C
	L NB	[mm]	512	512	512	512	512	542
	L NB SS	[mm]	-	-	-	-	-	-
	h1	[mm]	400	400	400	400	400	400
	G1	[mm]	331	331	331	331	331	331
	G2	[mm]	485	485	485	485	485	485
	m1	[mm]	200	200	200	200	200	200
	m2	[mm]	150	150	150	150	150	150
	n1	[mm]	625	625	625	625	625	625
	n2	[mm]	500	500	500	500	500	500
	b	[mm]	125	125	125	125	125	125
	s1	[mm]	M20	M20	M20	M20	M20	M20
	H	[mm]	225	225	250	280	315	315
	LB ²⁾	[mm]	648/-	708/-	747/-	820/-	930/-	1077/-
	AD ²⁾	[mm]	338/-	338/-	410/-	433/-	515/-	515/-
	AG ²⁾	[mm]	266/-	266/-	319/-	319/-	374/-	374/-
	LL ²⁾	[mm]	197/-	197/-	233/-	233/-	299/-	299/-
	P	[mm]	450	450	550	550	660	660
	C	[mm]	356	356	406	457	508	508
	B	[mm]	286	286	349	368	406	457
	A	[mm]	149	149	168	190	216	216
	K	[mm]	19	19	24	24	28	28
Weight data	Weight NK. CI ¹⁾	[kg]	1037/1064	1072/1099	1221/1216	1329/1383	1470/1493	1575/1607
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	688	683	847	997	1097	1239
	Weight NBE. CI	[kg]	-	-	-	-	-	-
	Weight diff. SS	[kg]	-	-	-	-	-	-

1) Pump with standard coupling / pump with spacer coupling.

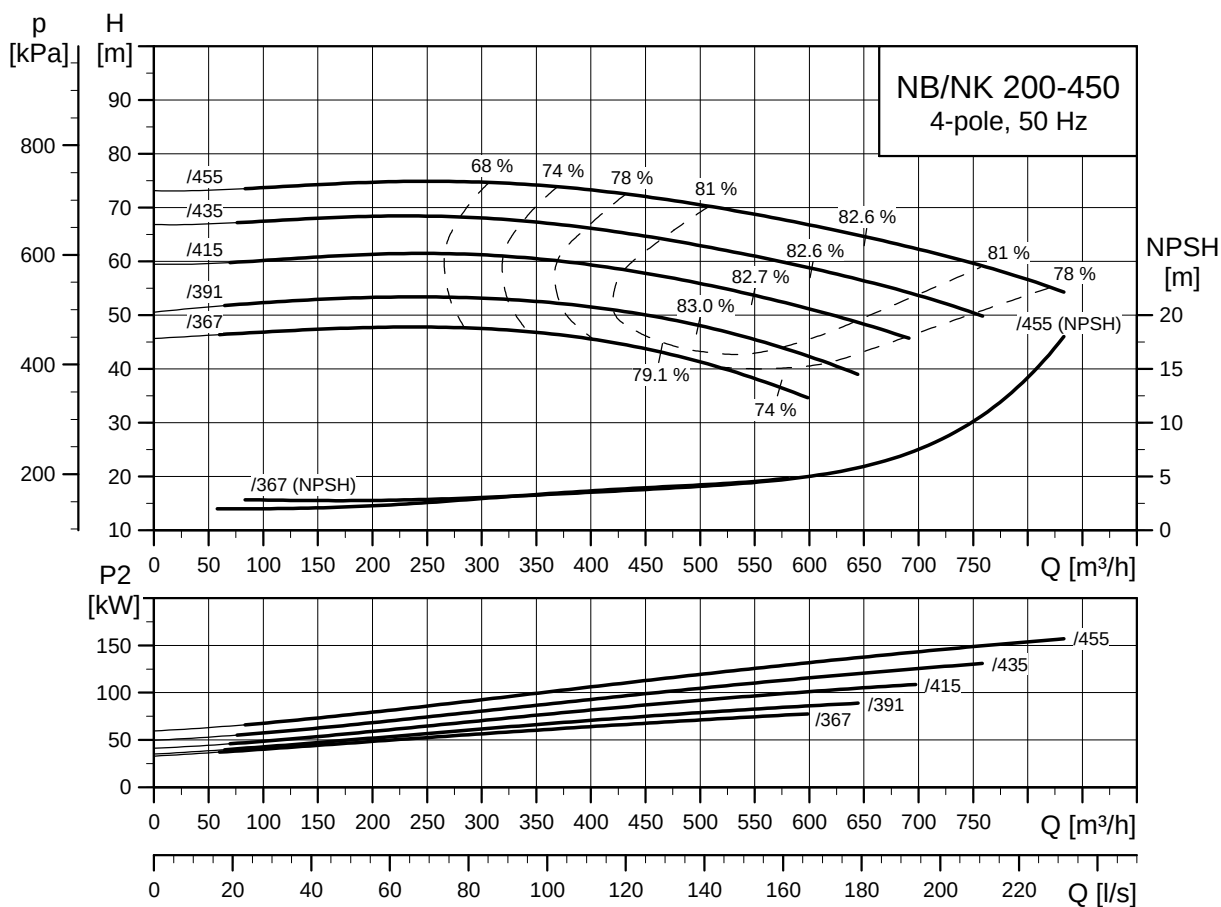
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

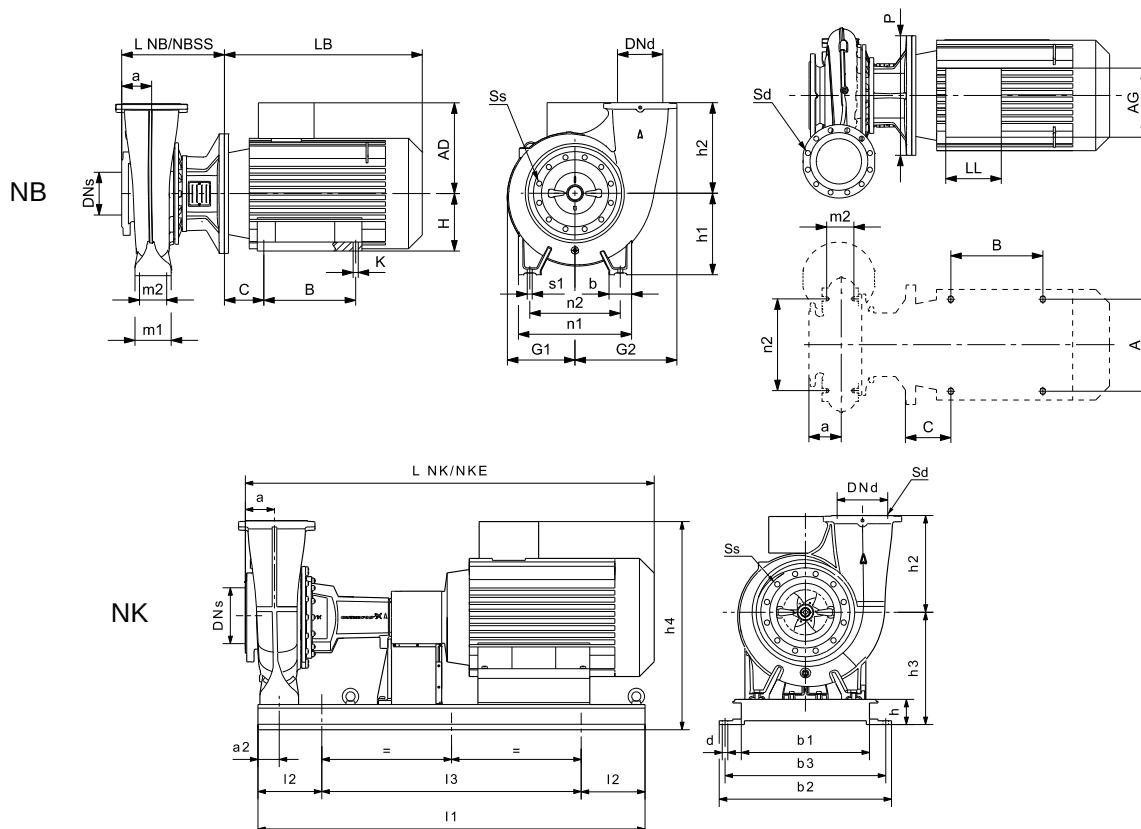
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 200-450



TM04 3967 4312



TM05 1432 2711

TM04 6113 5009

Pump type	200-450/367 200-450/391 200-450/415 200-450/435 200-450/455						
Motor type	Standard Motor ⁵⁾ Siemens 280S Siemens 280M Siemens 315S Siemens 315M Siemens 315L						
	E-Motor - - - - -						
Common data NB/NK	P2	[kW]	75	90	110	132	160
	PN	[bar]	10	10	10	10	10
	DNs	[mm]	250	250	250	250	250
	DNd	[mm]	200	200	200	200	200
	a	[mm]	150	150	150	150	150
	h2	[mm]	450	450	450	450	450
	Ss	[mm]	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23
	Sd	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
NK data	L NK ¹⁾	[mm]	1805/1981	1915/2091	1927/2103	2092/2268	2092/2268
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-	-/-
	l1	[mm]	1690	1880	1880	2110	2110
	l2	[mm]	330	330	330	330	330
	l3	[mm]	1030	1220	1220	1450	1450
	b1	[mm]	730	730	730	730	730
	b2	[mm]	890	890	890	890	890
	b3	[mm]	830	830	830	830	830
	d	[mm]	28	28	28	28	28
	a2	[mm]	110	110	110	110	110
	h	[mm]	130	130	130	130	130
	h3	[mm]	530	530	530	530	530
	h4 ²⁾	[mm]	963/-	963/-	1050/-	1050/-	1050/-
	Base frame no. ³⁾		10E	10F	10F	10D	10D
NB data	Mounting design ⁴⁾		C	C	C	C	C
	L NB	[mm]	484	484	514	514	514
	L NB SS	[mm]	-	-	-	-	-
	h1	[mm]	400	400	400	400	400
	G1	[mm]	355	355	355	355	355
	G2	[mm]	525	525	525	525	525
	m1	[mm]	200	200	200	200	200
	m2	[mm]	150	150	150	150	150
	n1	[mm]	625	625	625	625	625
	n2	[mm]	500	500	500	500	500
	b	[mm]	125	125	125	125	125
	s1	[mm]	M20	M20	M20	M20	M20
	H	[mm]	280	280	315	315	315
	LB ²⁾	[mm]	820/-	930/-	912/-	1077/-	1077/-
	AD ²⁾	[mm]	433/-	433/-	515/-	515/-	515/-
	AG ²⁾	[mm]	319/-	319/-	374/-	374/-	374/-
	LL ²⁾	[mm]	233/-	233/-	299/-	299/-	299/-
	P	[mm]	550	550	660	660	660
	C	[mm]	457	457	508	508	508
	B	[mm]	368	368	406	457	457
	A	[mm]	190	190	216	216	216
K	[mm]	24	24	28	28	28	
Weight data	Weight NK. CI ¹⁾	[kg]	1344/1398	1485/1508	1590/1622	1811/1815	1861/1865
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	1011	1111	1253	1453	1483
	Weight NBE. CI	[kg]	-	-	-	-	-
	Weight diff. SS	[kg]	-	-	-	-	-

1) Pump with standard coupling / pump with spacer coupling.

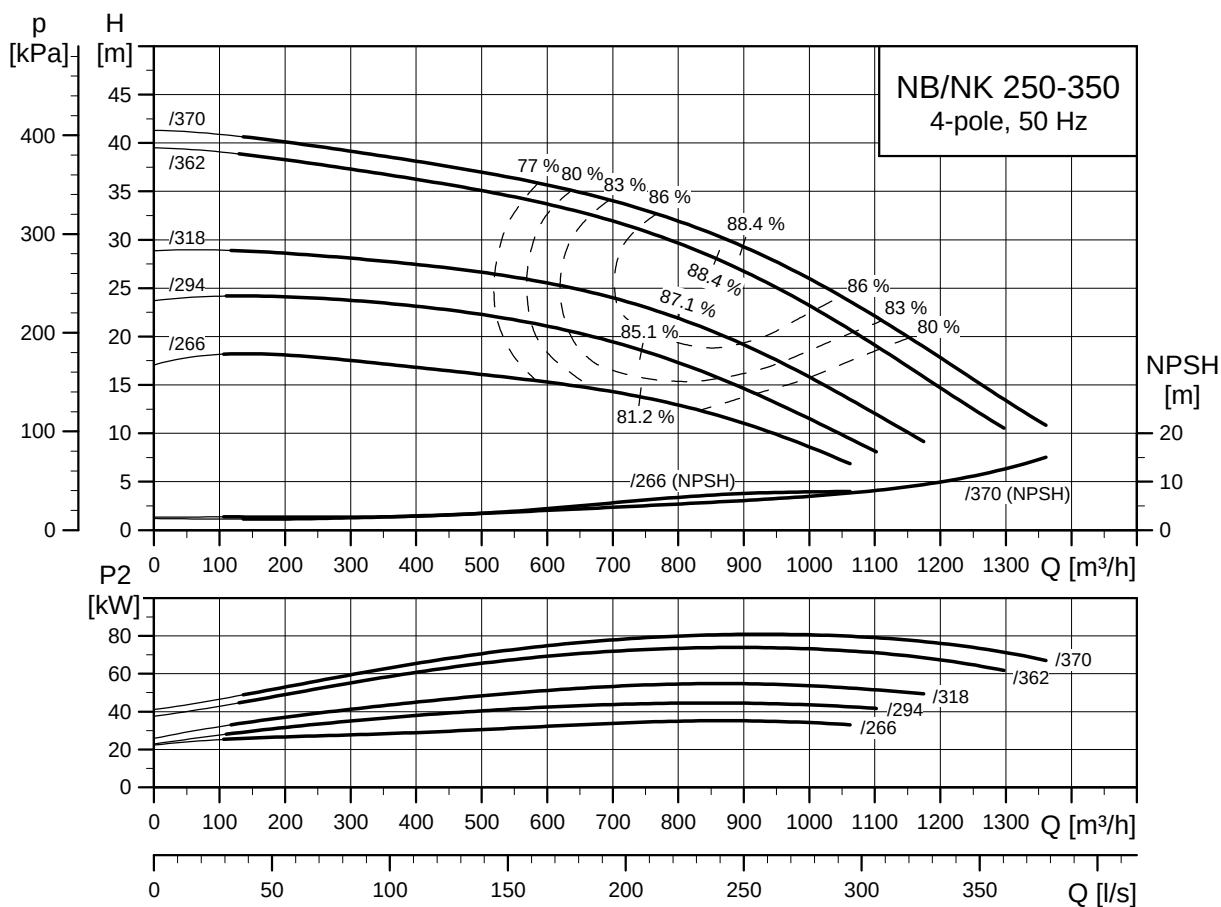
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

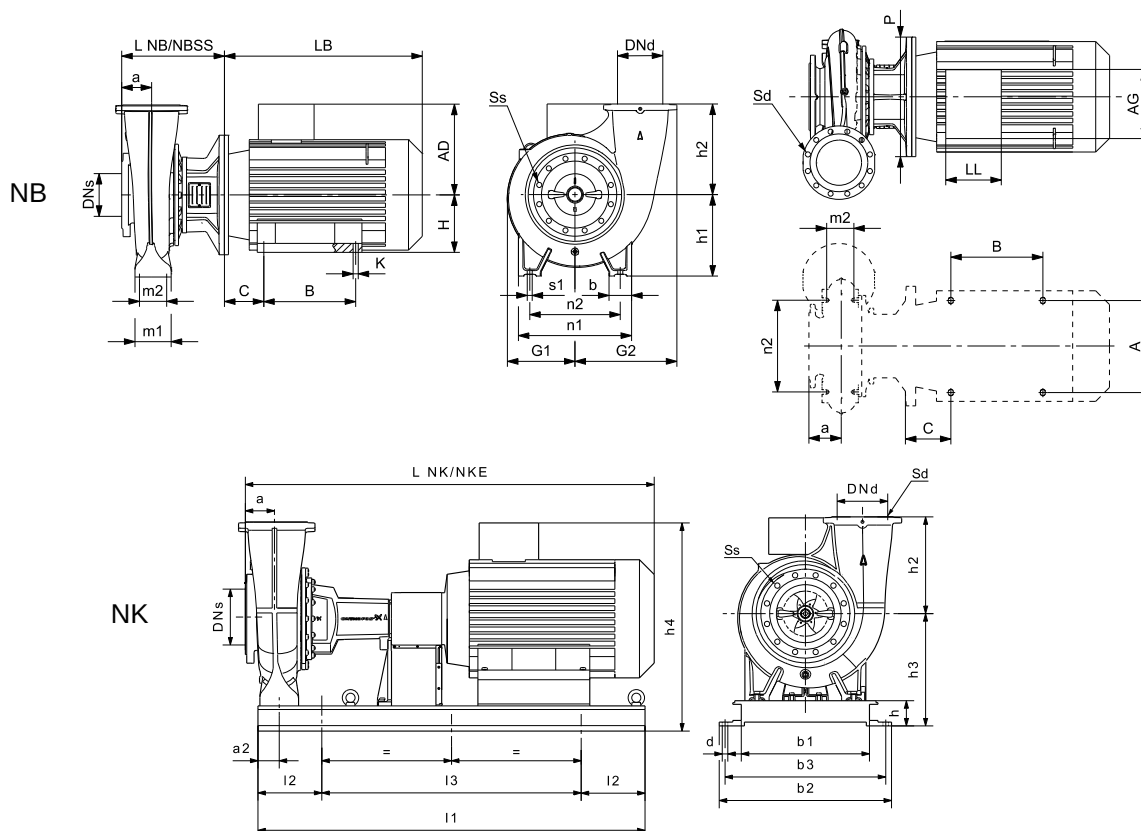
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 250-350



TM04 5997 4312



TM05 1432 2711

TM04 6113 5009

Pump type			250-350/266	250-350/294	250-350/318	250-350/362	250-350/370
Motor type	Standard Motor ⁵⁾		Siemens 225S	Siemens 225M	Siemens 250M	Siemens 280S	Siemens 280M
	E-Motor		-	-	-	-	-
Common data NB/NK	P2	[kW]	37	45	55	75	90
	PN	[bar]	10	10	10	10	10
	DNs	[mm]	300	300	300	300	300
	DNd	[mm]	250	250	250	250	250
	a	[mm]	180	180	180	180	180
	h2	[mm]	400	400	400	400	400
	Ss	[mm]	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23
	Sd	[mm]	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23
NK data	L NK ¹⁾	[mm]	1711/1887	1771/1947	1810/1986	1883/2059	1993/2169
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-	-/-
	l1	[mm]	1690	1690	1690	1880	1880
	l2	[mm]	330	330	330	330	330
	l3	[mm]	1030	1030	1030	1220	1220
	b1	[mm]	730	730	730	730	730
	b2	[mm]	890	890	890	890	890
	b3	[mm]	830	830	830	830	830
	d	[mm]	28	28	28	28	28
	a2	[mm]	110	110	110	110	110
	h	[mm]	130	130	130	130	130
	h3	[mm]	580	580	580	580	580
	h4 ²⁾	[mm]	918/-	918/-	990/-	1013/-	1013/-
	Base frame no. ³⁾		10E	10E	10E	10F	10F
NB data	Mounting design ⁴⁾		C	C	C	C	C
	L NB	[mm]	566	566	566	566	566
	L NB SS	[mm]	-	-	-	-	-
	h1	[mm]	450	450	450	450	450
	G1	[mm]	379	379	379	379	379
	G2	[mm]	523	523	523	523	523
	m1	[mm]	200	200	200	200	200
	m2	[mm]	150	150	150	150	150
	n1	[mm]	625	625	625	625	625
	n2	[mm]	500	500	500	500	500
	b	[mm]	125	125	125	125	125
	s1	[mm]	M20	M20	M20	M20	M20
	H	[mm]	225	225	250	280	280
	LB ²⁾	[mm]	648/-	708/-	747/-	820/-	930/-
	AD ²⁾	[mm]	338/-	338/-	410/-	433/-	433/-
	AG ²⁾	[mm]	266/-	266/-	319/-	319/-	319/-
	LL ²⁾	[mm]	197/-	197/-	233/-	233/-	233/-
	P	[mm]	450	450	550	550	550
	C	[mm]	356	356	406	457	457
	B	[mm]	286	286	349	368	368
	A	[mm]	149	149	168	190	190
	K	[mm]	19	19	24	24	24
Weight data	Weight NK. CI ¹⁾	[kg]	1140/1167	1180/1207	1323/1318	1430/1489	1581/1604
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	782	817	941	1091	1191
	Weight NBE. CI	[kg]	-	-	-	-	-
	Weight diff. SS	[kg]	-	-	-	-	-

1) Pump with standard coupling / pump with spacer coupling.

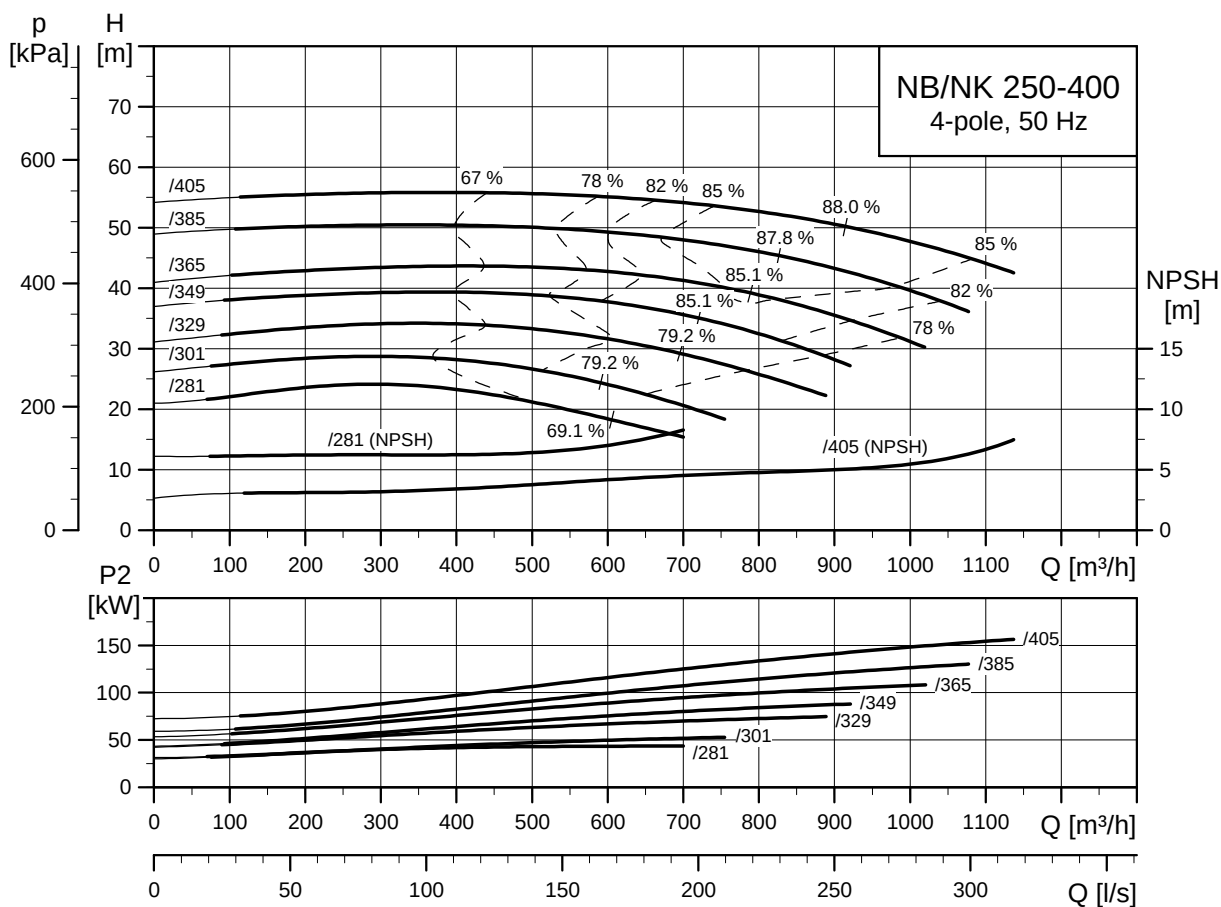
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

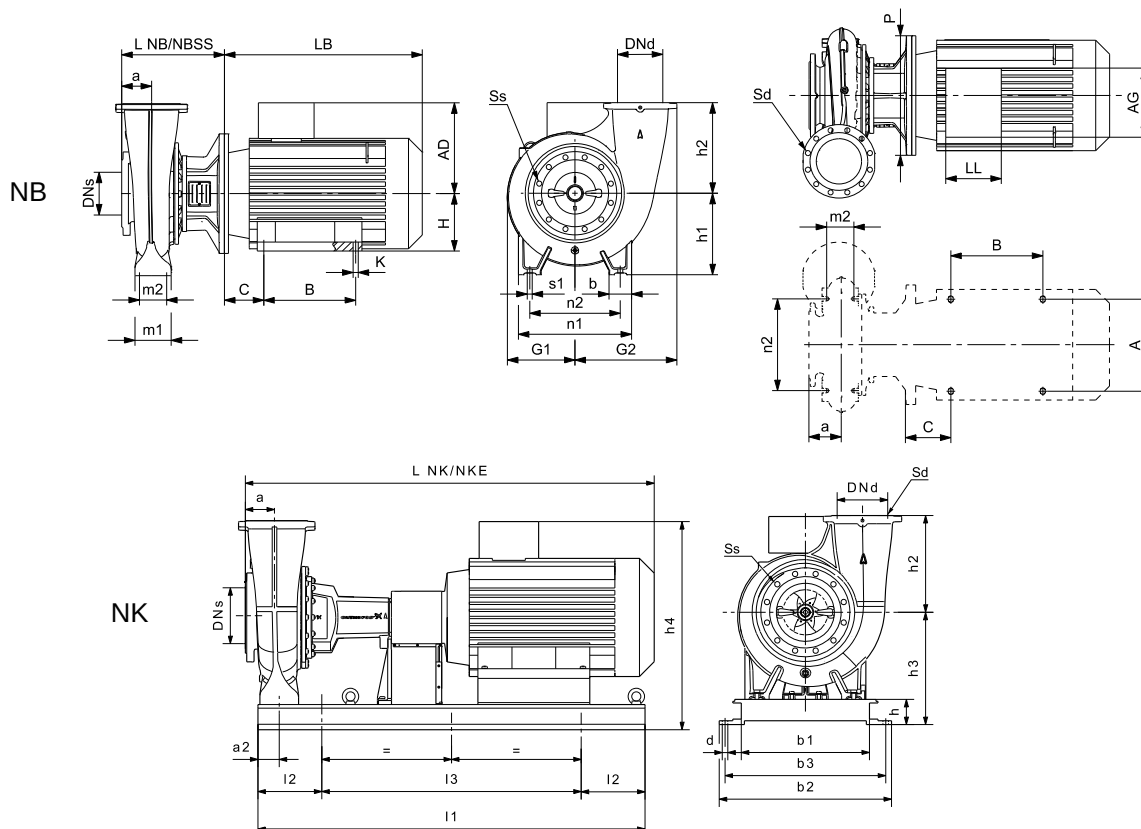
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 250-400



TM04 4022 4312



TM05 1432 2711

TM04 6113 5009

Pump type		250-400/281	250-400/301	250-400/329	250-400/349	250-400/365	250-400/385	250-400/405
Motor type	Standard Motor ⁵⁾	Siemens 225M	Siemens 250M	Siemens 280S	Siemens 280M	Siemens 315S	Siemens 315M	Siemens 315L
Common data NB/NK	E-Motor	-	-	-	-	-	-	-
	P2	[kW]	45	55	75	90	110	160
	PN	[bar]	10	10	10	10	10	10
	DNs	[mm]	300	300	300	300	300	300
	DNd	[mm]	250	250	250	250	250	250
	a	[mm]	160	160	160	160	160	160
	h2	[mm]	500	500	500	500	500	500
	Ss	[mm]	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23
	Sd	[mm]	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23
NK data	L NK ¹⁾	[mm]	1726/1902	1765/1941	1838/2014	1948/2124	1960/2136	2125/2301
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-	-/-	-/-
	l1	[mm]	1690	1690	1880	1880	1880	1880
	l2	[mm]	330	330	330	330	330	330
	l3	[mm]	1030	1030	1220	1220	1220	1220
	b1	[mm]	730	730	730	730	730	730
	b2	[mm]	890	890	890	890	890	890
	b3	[mm]	830	830	830	830	830	830
	d	[mm]	28	28	28	28	28	28
	a2	[mm]	110	110	110	110	110	110
	h	[mm]	130	130	130	130	130	130
	h3	[mm]	580	580	580	580	580	580
	h4 ²⁾	[mm]	918/-	990/-	1013/-	1013/-	1100/-	1100/-
	Base frame no. ³⁾		10E	10E	10F	10F	10F	10F
NB data	Mounting design ⁴⁾		C	C	C	C	C	C
	L NB	[mm]	518	518	518	518	548	548
	L NB SS	[mm]	-	-	-	-	-	-
	h1	[mm]	450	450	450	450	450	450
	G1	[mm]	350	350	350	350	350	350
	G2	[mm]	498	498	498	498	498	498
	m1	[mm]	200	200	200	200	200	200
	m2	[mm]	150	150	150	150	150	150
	n1	[mm]	625	625	625	625	625	625
	n2	[mm]	500	500	500	500	500	500
	b	[mm]	125	125	125	125	125	125
	s1	[mm]	M20	M20	M20	M20	M20	M20
	H	[mm]	225	250	280	280	315	315
	LB ²⁾	[mm]	708/-	747/-	820/-	930/-	912/-	1077/-
	AD ²⁾	[mm]	338/-	410/-	433/-	433/-	515/-	515/-
	AG ²⁾	[mm]	266/-	319/-	319/-	319/-	374/-	374/-
	LL ²⁾	[mm]	197/-	233/-	233/-	233/-	299/-	299/-
	P	[mm]	450	550	550	550	660	660
	C	[mm]	356	406	457	457	508	508
	B	[mm]	286	349	368	368	406	457
	A	[mm]	149	168	190	190	216	216
	K	[mm]	19	24	24	24	28	28
Weight data	Weight NK. CI ¹⁾	[kg]	1131/1158	1274/1269	1417/1440	1532/1555	1634/1666	1834/1866
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	769	893	1043	1143	1285	1485
	Weight NBE. CI	[kg]	-	-	-	-	-	-
	Weight diff. SS	[kg]	-	-	-	-	-	-

1) Pump with standard coupling / pump with spacer coupling.

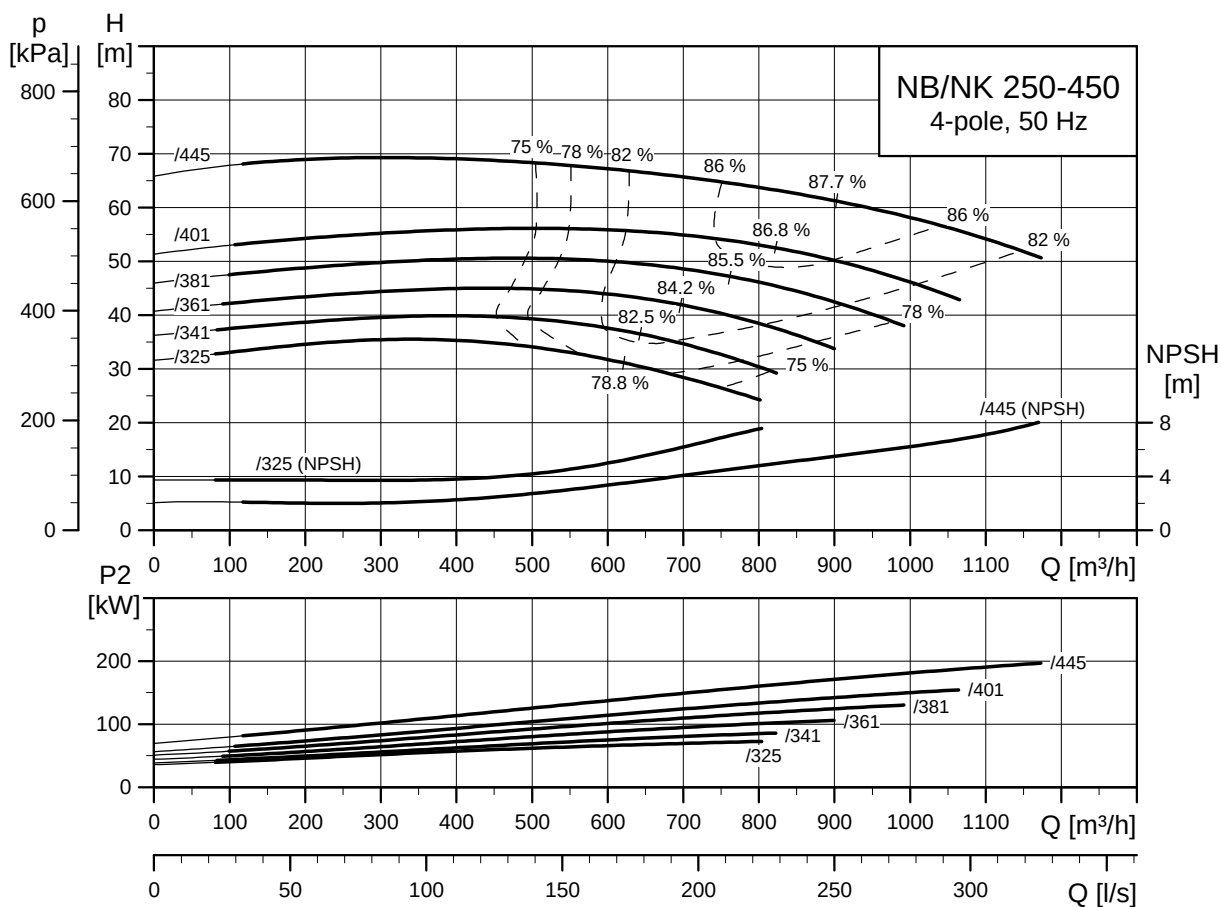
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

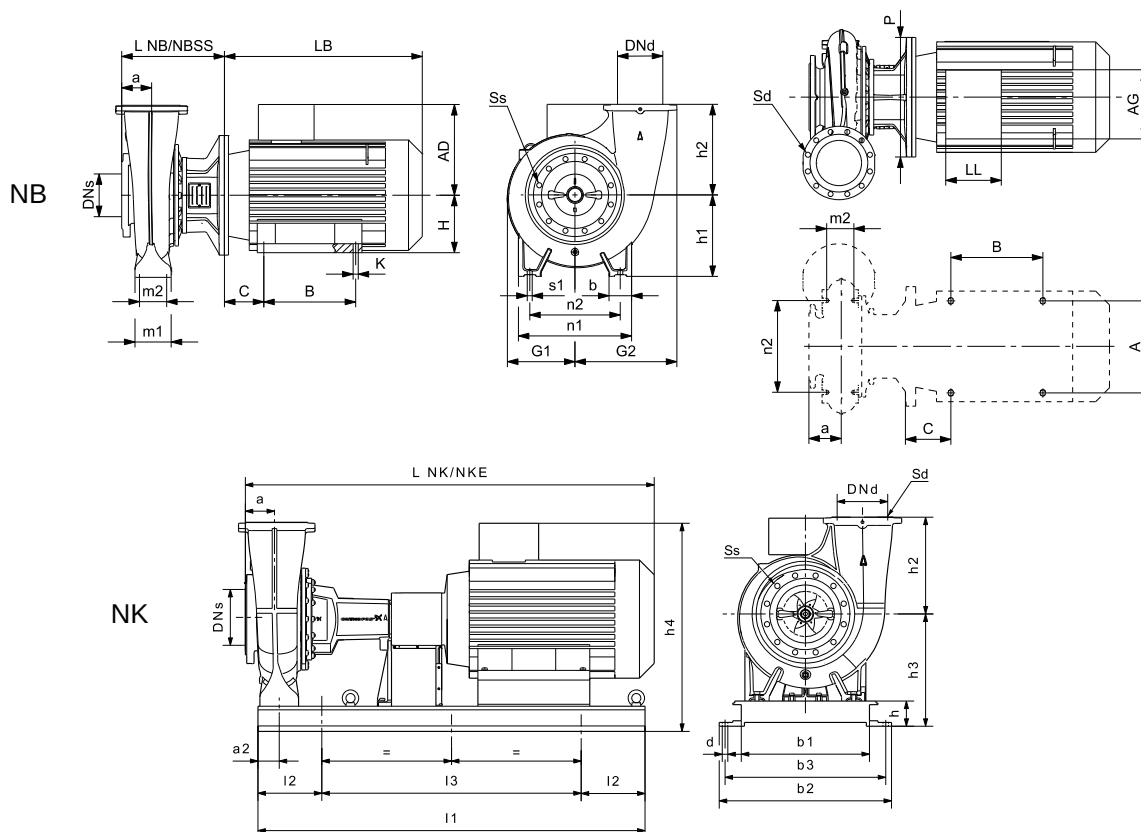
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 250-450



TM04 4939 4312



TM05 1432 2711

TM04 6113 5009

Pump type			250-450/325	250-450/341	250-450/361	250-450/381	250-450/401	250-450/445
Motor type	Standard Motor ⁵⁾		Siemens 280S	Siemens 280M	Siemens 315S	Siemens 315M	Siemens 315L	Siemens 315L
	E-Motor		-	-	-	-	-	-
Common data NB/NK	P2	[kW]	75	90	110	132	160	200
	PN	[bar]	10	10	10	10	10	10
	DNs	[mm]	300	300	300	300	300	300
	DNd	[mm]	250	250	250	250	250	250
	a	[mm]	165	165	165	165	165	165
	h2	[mm]	500	500	500	500	500	500
	Ss	[mm]	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23
	Sd	[mm]	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23
NK data	L NK ¹⁾	[mm]	1833/2009	1943/2119	1955/2131	2120/2296	2120/2296	2275/2451
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-	-/-	-/-
	l1	[mm]	1880	1880	1880	1880	1880	1880
	l2	[mm]	330	330	330	330	330	330
	l3	[mm]	1220	1220	1220	1220	1220	1220
	b1	[mm]	730	730	730	730	730	730
	b2	[mm]	890	890	890	890	890	890
	b3	[mm]	830	830	830	830	830	830
	d	[mm]	28	28	28	28	28	28
	a2	[mm]	110	110	110	110	110	110
	h	[mm]	130	130	130	130	130	130
	h3	[mm]	580	580	580	580	580	580
	h4 ²⁾	[mm]	1013/-	1013/-	1100/-	1100/-	1100/-	1100/-
	Base frame no. ³⁾		10F	10F	10F	10F	10F	10F
NB data	Mounting design ⁴⁾		C	C	C	C	C	C
	L NB	[mm]	521	521	551	551	551	551
	L NB SS	[mm]	-	-	-	-	-	-
	h1	[mm]	450	450	450	450	450	450
	G1	[mm]	374	374	374	374	374	374
	G2	[mm]	563	563	563	563	563	563
	m1	[mm]	200	200	200	200	200	200
	m2	[mm]	150	150	150	150	150	150
	n1	[mm]	625	625	625	625	625	625
	n2	[mm]	500	500	500	500	500	500
	b	[mm]	125	125	125	125	125	125
	s1	[mm]	M20	M20	M20	M20	M20	M20
	H	[mm]	280	280	315	315	315	315
	LB ²⁾	[mm]	820/-	930/-	912/-	1077/-	1077/-	1232/-
	AD ²⁾	[mm]	433/-	433/-	515/-	515/-	515/-	515/-
	AG ²⁾	[mm]	319/-	319/-	374/-	374/-	374/-	374/-
	LL ²⁾	[mm]	233/-	233/-	299/-	299/-	299/-	299/-
	P	[mm]	550	550	660	660	660	660
	C	[mm]	457	457	508	508	508	508
	B	[mm]	368	368	406	457	457	457
	A	[mm]	190	190	216	216	216	216
	K	[mm]	24	24	28	28	28	28
Weight data	Weight NK. CI ¹⁾	[kg]	1494/1518	1609/1633	1711/1735	1911/1935	1961/1985	2151/2175
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	1079	1179	1321	1521	1551	1751
	Weight NBE. CI	[kg]	-	-	-	-	-	-
	Weight diff. SS	[kg]	-	-	-	-	-	-

1) Pump with standard coupling / pump with spacer coupling.

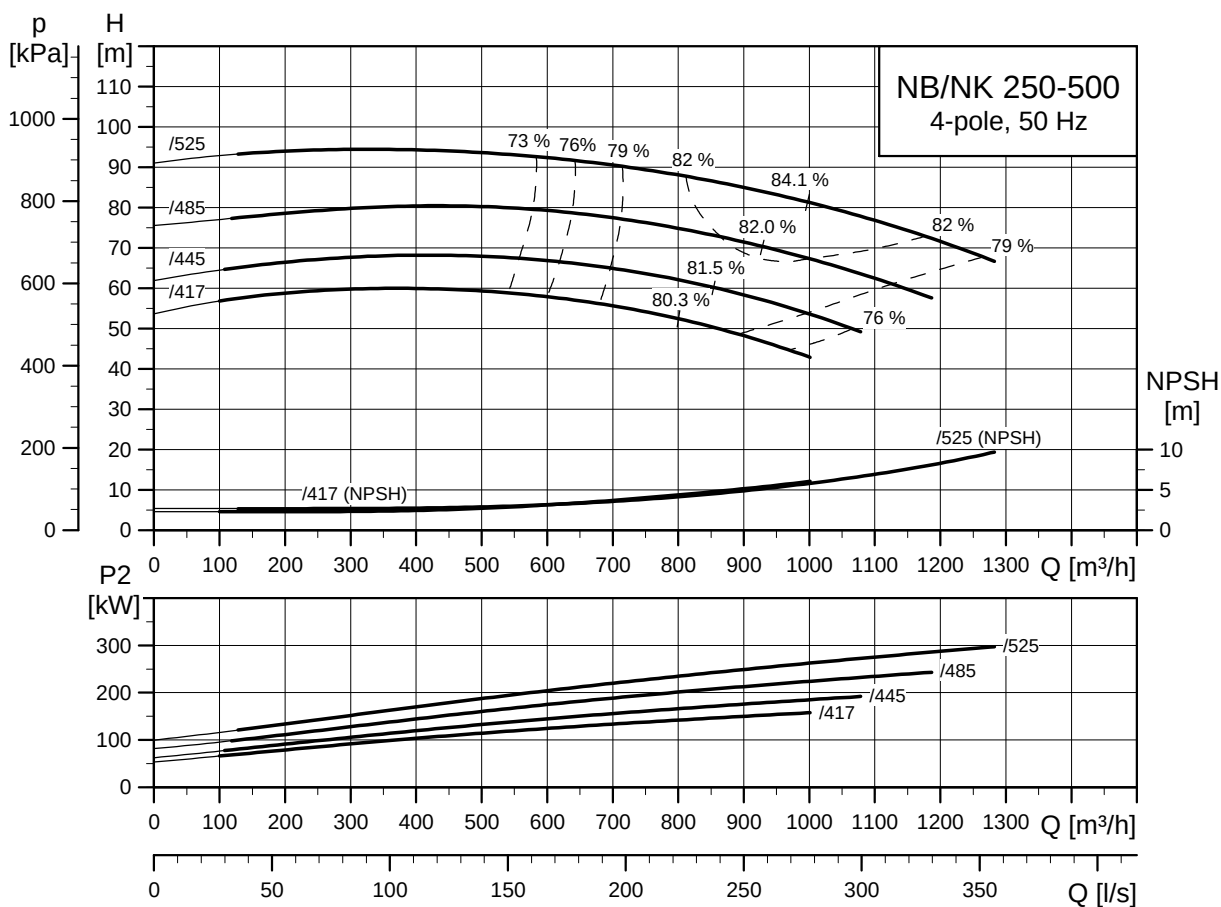
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

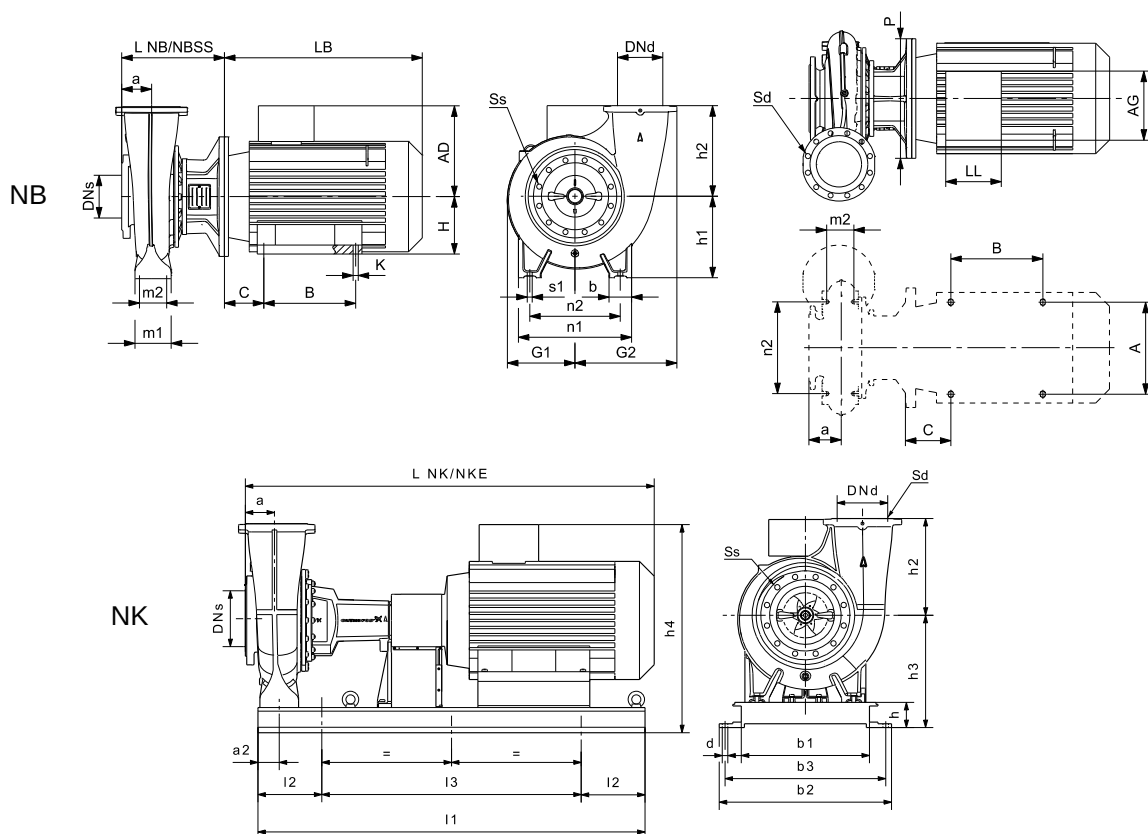
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 250-500



TM04 6001 4312



TM05 1432 2711

TM04 6113 5009

Pump type			250-500/417	250-500/445	250-500/485	250-500/525
Motor type	Standard Motor ⁵⁾		Siemens 315L	Siemens 315L	Siemens 315L	Siemens 315L
	E-Motor		-	-	-	-
Common data NB/NK	P2	[kW]	160	200	250	315
	PN	[bar]	10	10	10	10
	DNs	[mm]	300	300	300	300
	DNd	[mm]	250	250	250	250
	a	[mm]	165	165	165	165
	h2	[mm]	500	500	500	500
	Ss	[mm]	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23
	Sd	[mm]	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23
NK data	L NK ¹⁾	[mm]	2125/2301	2280/2456	2280/2456	-/2600
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-
	l1	[mm]	2110	1880	2110	2290
	l2	[mm]	330	330	330	330
	l3	[mm]	1450	1220	1450	1630
	b1	[mm]	730	730	730	730
	b2	[mm]	890	890	890	890
	b3	[mm]	830	830	830	830
	d	[mm]	28	28	28	28
	a2	[mm]	110	110	110	110
	h	[mm]	130	130	130	130
	h3	[mm]	580	580	580	580
	h4 ²⁾	[mm]	1100/-	1100/-	1080/-	1080/-
	Base frame no. ³⁾		10D	10F	10D	10G
NB data	Mounting design ⁴⁾		C	C	-	-
	L NB	[mm]	578	578	-	-
	L NB SS	[mm]	-	-	-	-
	h1	[mm]	450	450	-	-
	G1	[mm]	441	441	-	-
	G2	[mm]	598	598	-	-
	m1	[mm]	200	200	-	-
	m2	[mm]	150	150	-	-
	n1	[mm]	725	725	-	-
	n2	[mm]	600	600	-	-
	b	[mm]	125	125	-	-
	s1	[mm]	M20	M20	-	-
	H	[mm]	315	315	-	-
	LB ²⁾	[mm]	1077/-	1232/-	-/-	-/-
	AD ²⁾	[mm]	515/-	515/-	-/-	-/-
	AG ²⁾	[mm]	374/-	374/-	-/-	-/-
	LL ²⁾	[mm]	299/-	299/-	-/-	-/-
	P	[mm]	660	660	-	-
	C	[mm]	508	508	-	-
	B	[mm]	457	457	-	-
	A	[mm]	216	216	-	-
	K	[mm]	28	28	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	2074/2098	2264/2288	2376/2414	-/2624
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	1663	1863	-	-
	Weight NBE. CI	[kg]	-	-	-	-
	Weight diff. SS	[kg]	-	-	-	-

1) Pump with standard coupling / pump with spacer coupling.

2) Pump with standard motor / pump with E-motor (built-in frequency converter).

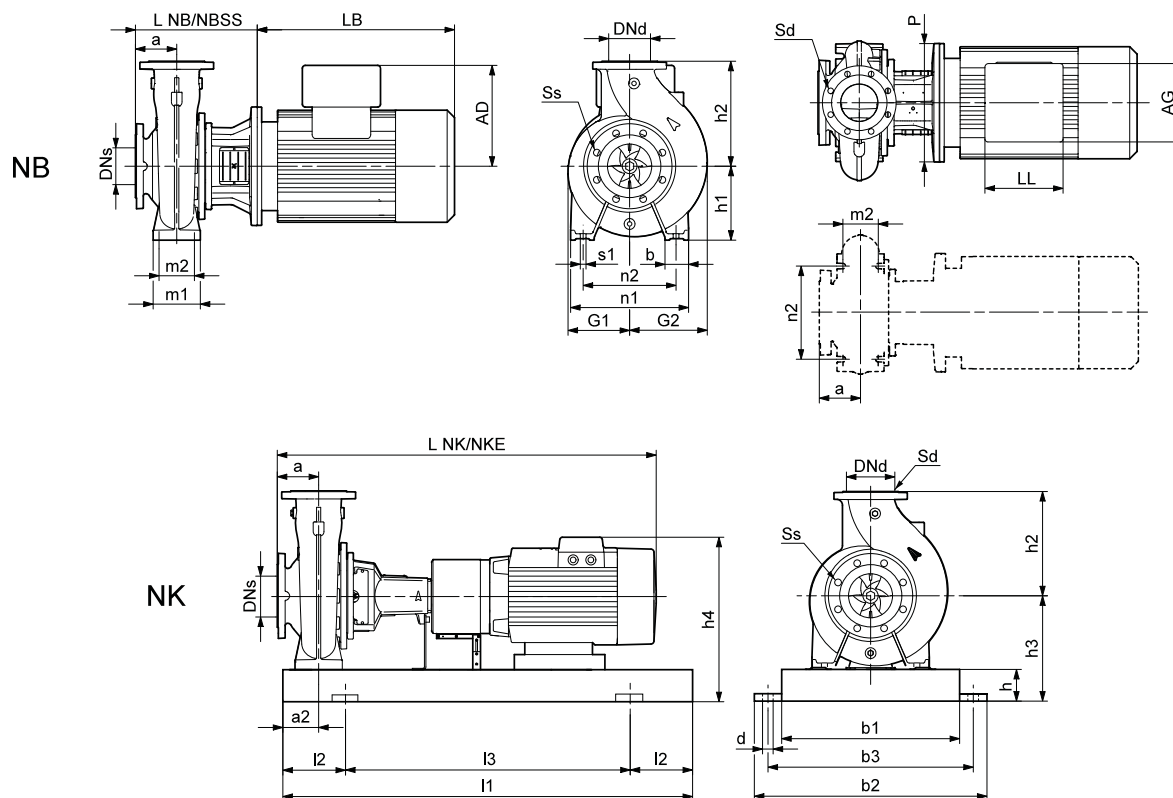
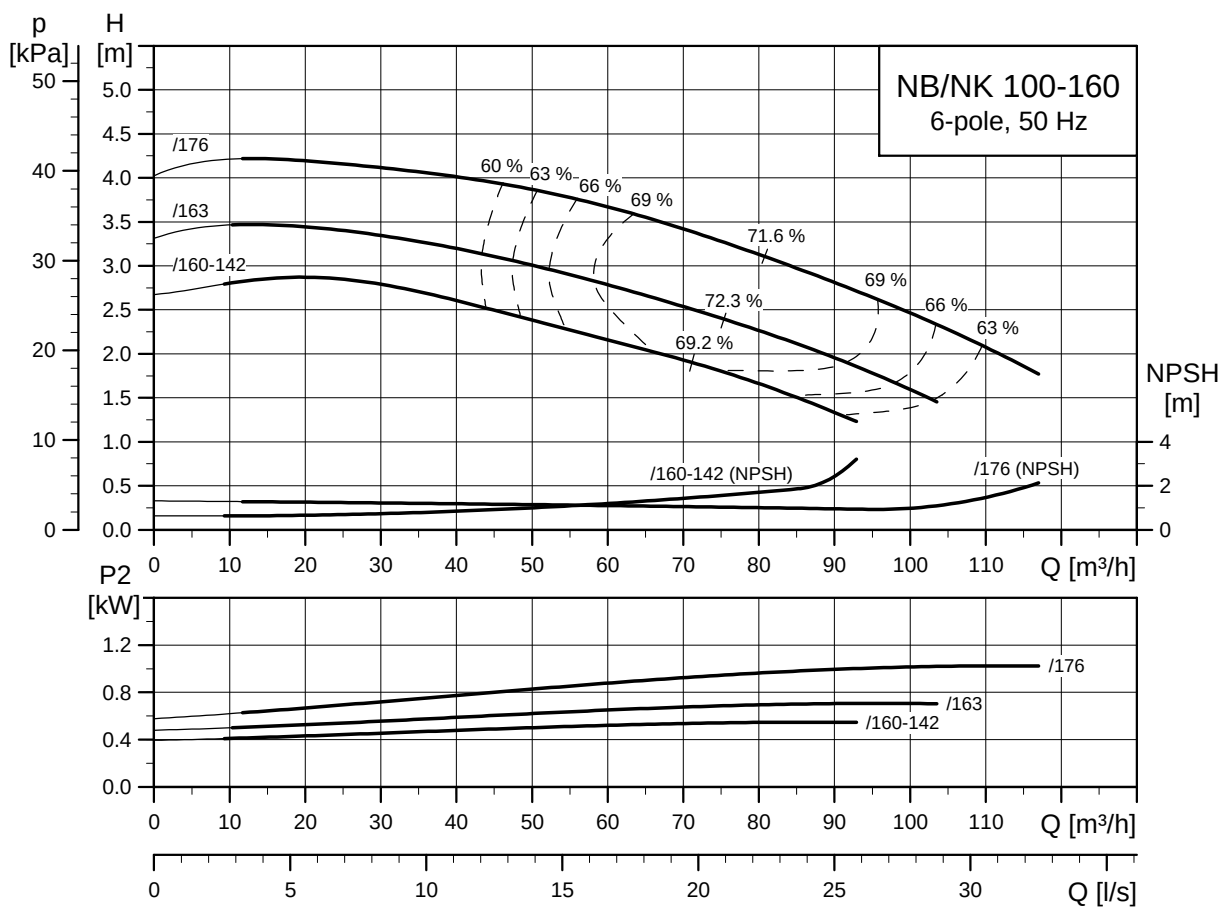
3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

6-pole

NB, NK 100-160



TM03 5159 4312

TM03 4180 1806

TM03 6005 4106

Pump type	100-160/160-142 100-160/163 100-160/176				
Motor type	Standard Motor ⁵⁾		Siemens 80B	Siemens 90S	Siemens 90L
	E-Motor		-	-	-
Common data NB/NK	P2	[kW]	0.55	0.75	1.1
	PN	[bar]	16	16	16
	DNs	[mm]	125	125	125
	DNd	[mm]	100	100	100
	a	[mm]	125	125	125
	h2	[mm]	280	280	280
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	763/899	820/956	865/1001
	L NKE ¹⁾	[mm]	-/-	-/-	-/-
	I1	[mm]	1250	1250	1250
	I2	[mm]	205	205	205
	I3	[mm]	840	840	840
	b1	[mm]	430	430	430
	b2	[mm]	540	540	540
	b3	[mm]	490	490	490
	d	[mm]	24	24	24
	a2	[mm]	90	90	90
	h	[mm]	80	80	80
	h3	[mm]	280	280	280
	h4 ²⁾	[mm]	400/-	408/-	408/-
	Base frame no. ³⁾		6	6	6
NB data	Mounting design ⁴⁾		A	A	A
	L NB	[mm]	298	298	298
	L NB SS	[mm]	298	298	298
	h1	[mm]	200	200	200
	G1	[mm]	146	146	146
	G2	[mm]	187	187	187
	m1	[mm]	160	160	160
	m2	[mm]	120	120	120
	n1	[mm]	360	360	360
	n2	[mm]	280	280	280
	b	[mm]	80	80	80
	s1	[mm]	M16	M16	M16
	H	[mm]	-	-	-
	LB ²⁾	[mm]	234/-	281/-	326/-
	AD ²⁾	[mm]	120/-	128/-	128/-
	AG ²⁾	[mm]	75/-	75/-	75/-
	LL ²⁾	[mm]	75/-	75/-	75/-
	P	[mm]	200	200	200
	C	[mm]	-	-	-
	B	[mm]	-	-	-
	A	[mm]	-	-	-
	K	[mm]	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	172/171	176/175	179/178
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-
	Weight NB. CI	[kg]	77	83	86
	Weight NBE. CI	[kg]	-	-	-
	Weight diff. SS	[kg]	3	3	3

1) Pump with standard coupling / pump with spacer coupling.

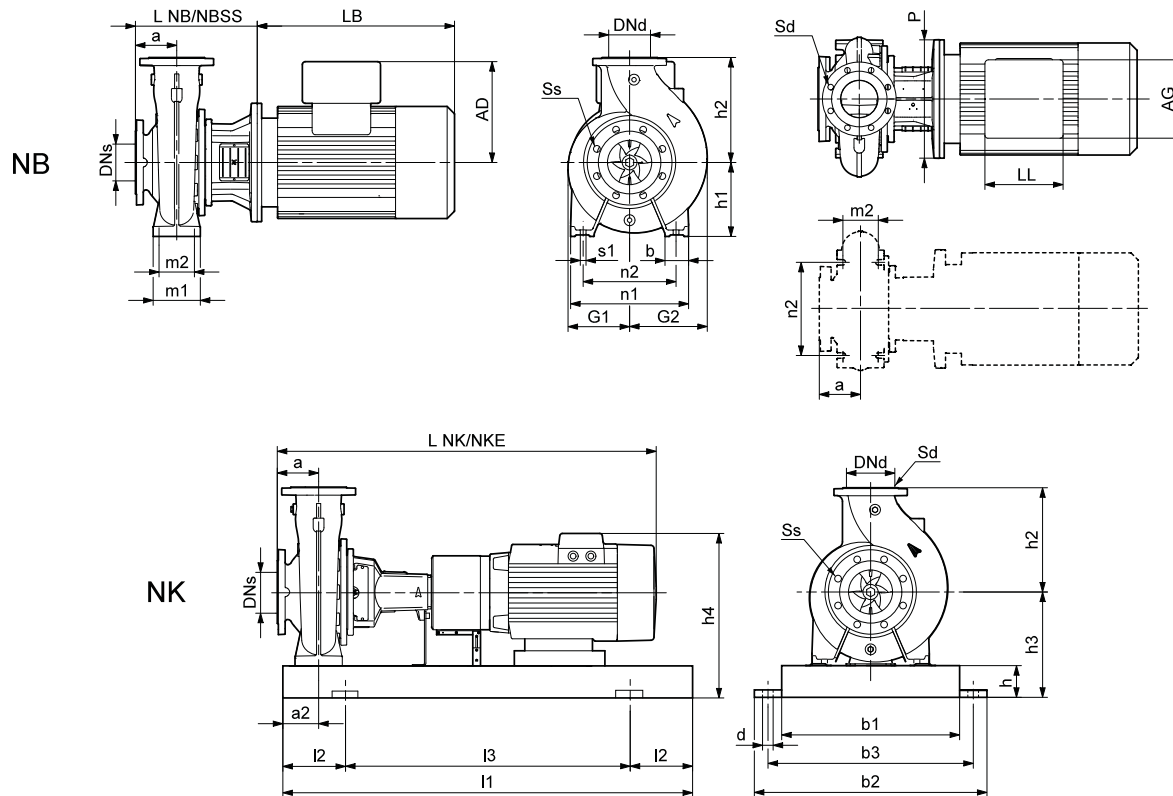
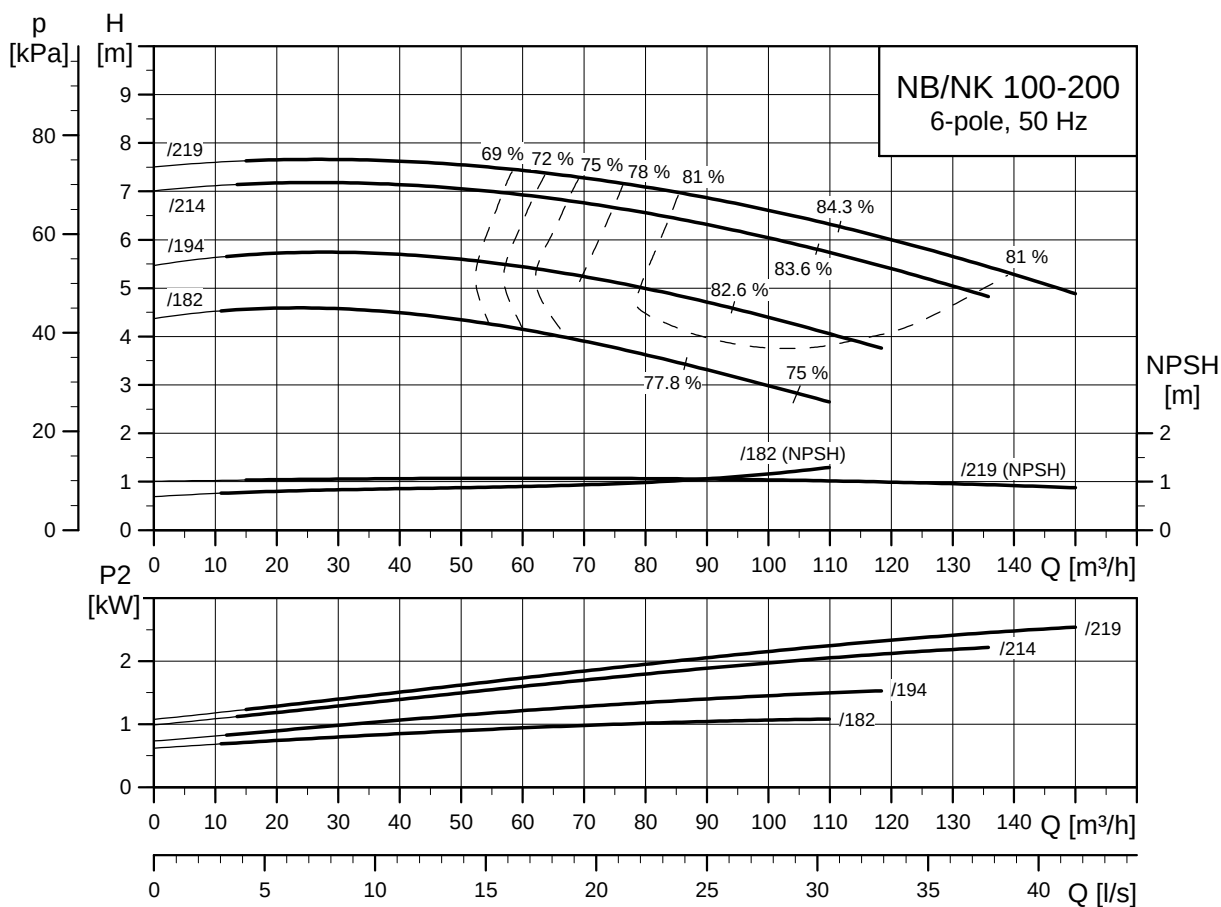
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 100-200



TM03 5160 4312

TM03 4180 1806

TM03 6005 4106

Pump type			100-200/182	100-200/194	100-200/214	100-200/219
Motor type	Standard Motor ⁵⁾		Siemens 90L	Siemens 100L	Siemens 112M	Siemens 132S
	E-Motor		-	-	-	-
Common data NB/NK	P2	[kW]	1.1	1.5	2.2	3
	PN	[bar]	16	16	16	16
	DNs	[mm]	125	125	125	125
	DNd	[mm]	100	100	100	100
	a	[mm]	125	125	125	125
	h2	[mm]	280	280	280	280
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	975/1111	995/1131	1013/1149	1064/1200
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-
	l1	[mm]	1250	1250	1250	1250
	l2	[mm]	205	205	205	205
	l3	[mm]	840	840	840	840
	b1	[mm]	430	430	430	430
	b2	[mm]	540	540	540	540
	b3	[mm]	490	490	490	490
	d	[mm]	24	24	24	24
	a2	[mm]	90	90	90	90
	h	[mm]	80	80	80	80
	h3	[mm]	280	280	280	280
	h4 ²⁾	[mm]	408/-	446/-	457/-	482/-
	Base frame no. ³⁾		6	6	6	6
NB data	Mounting design ⁴⁾		A	A	A	A
	L NB	[mm]	328	348	348	368
	L NB SS	[mm]	328	348	348	368
	h1	[mm]	200	200	200	200
	G1	[mm]	169	169	169	169
	G2	[mm]	212	212	212	212
	m1	[mm]	160	160	160	160
	m2	[mm]	120	120	120	120
	n1	[mm]	360	360	360	360
	n2	[mm]	280	280	280	280
	b	[mm]	80	80	80	80
	s1	[mm]	M16	M16	M16	M16
	H	[mm]	-	-	-	-
	LB ²⁾	[mm]	326/-	336/-	354/-	385/-
	AD ²⁾	[mm]	128/-	166/-	177/-	202/-
	AG ²⁾	[mm]	75/-	135/-	135/-	155/-
	LL ²⁾	[mm]	75/-	112/-	112/-	130/-
	P	[mm]	200	250	250	300
	C	[mm]	-	-	-	-
	B	[mm]	-	-	-	-
	A	[mm]	-	-	-	-
K	[mm]	-	-	-	-	
Weight data	Weight NK. CI ¹⁾	[kg]	203/203	223/221	230/228	244/241
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	99	108	117	145
	Weight NBE. CI	[kg]	-	-	-	-
	Weight diff. SS	[kg]	3	3	3	3

1) Pump with standard coupling / pump with spacer coupling.

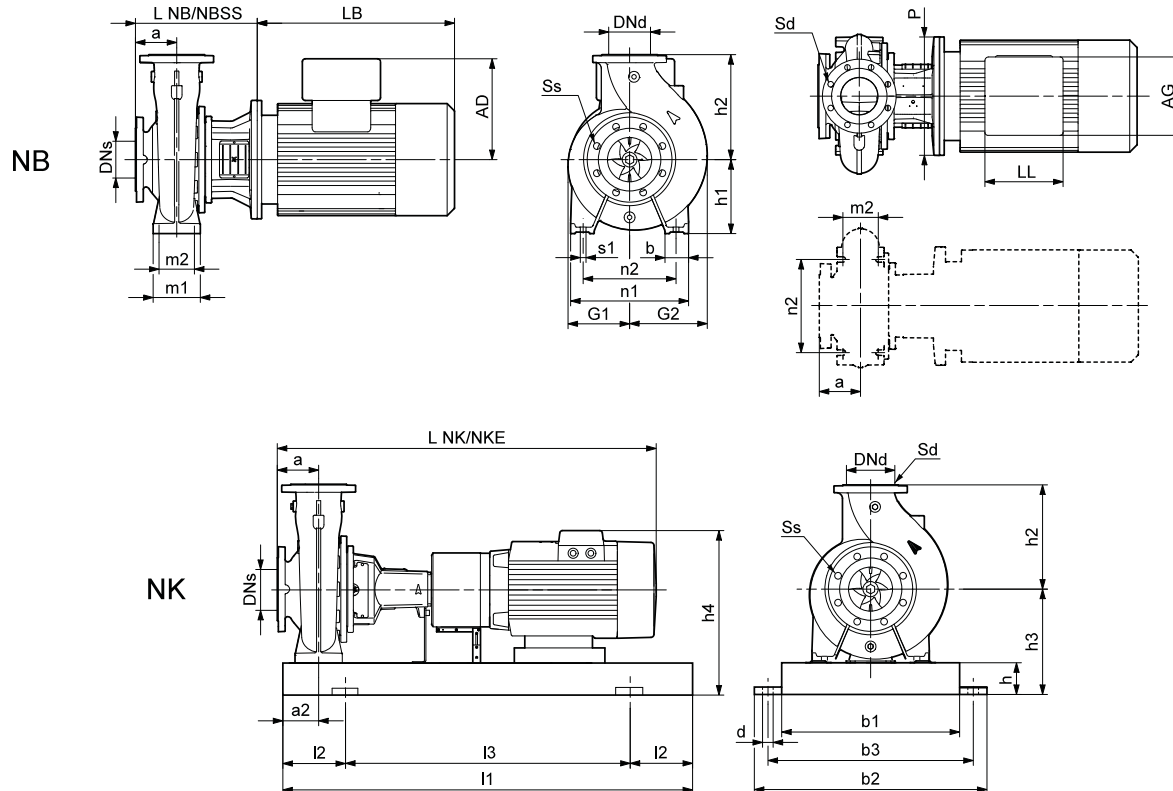
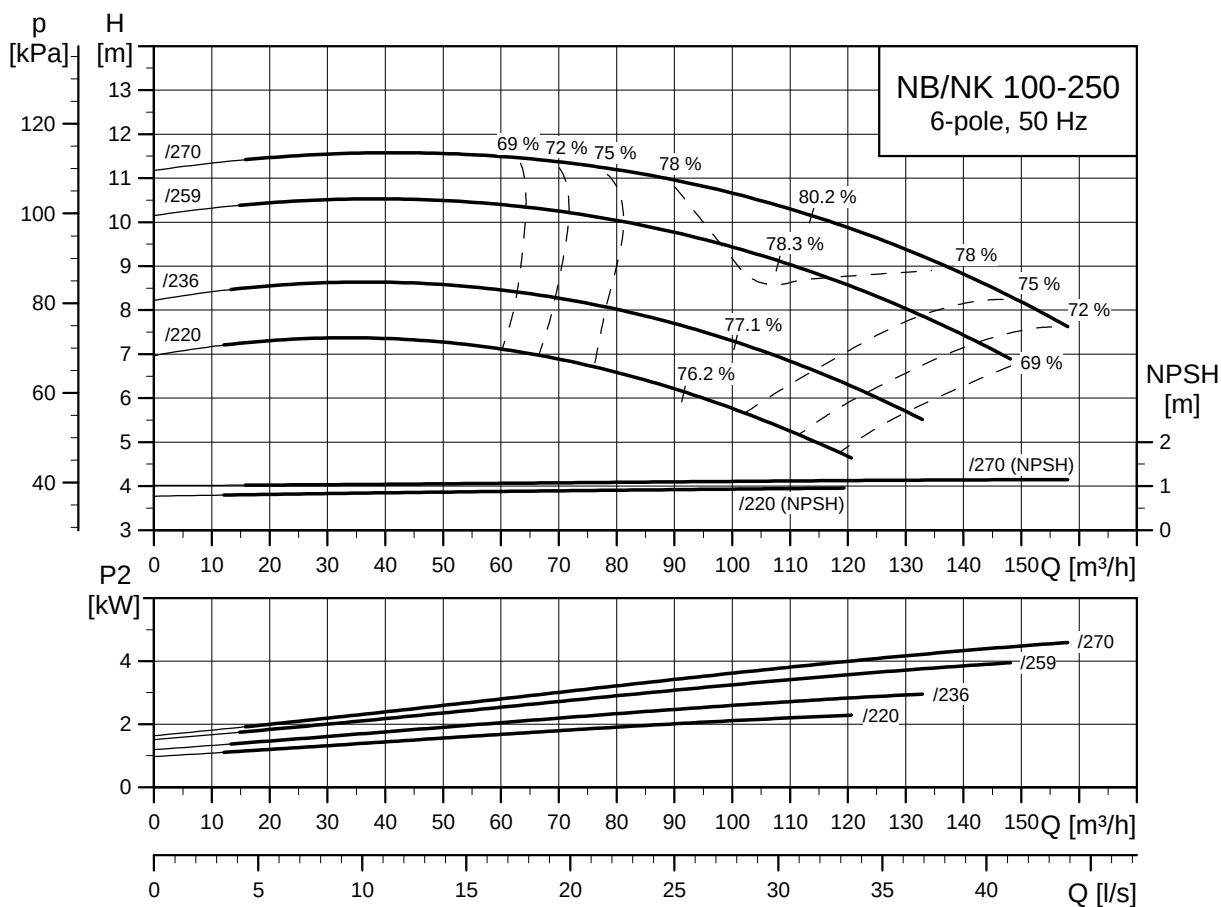
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 100-250



TM03 5161 4312

TM03 4180 1806

TM03 6005 4106

Pump type			100-250/220	100-250/236	100-250/259	100-250/270
Motor type	Standard Motor ⁵⁾		Siemens 112M	Siemens 132S	Siemens 132M	Siemens 132M
	E-Motor		-	-	-	-
Common data NB/NK	P2	[kW]	2.2	3	4	5.5
	PN	[bar]	16	16	16	16
	DNs	[mm]	125	125	125	125
	DNd	[mm]	100	100	100	100
	a	[mm]	140	140	140	140
	h2	[mm]	280	280	280	280
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1028/1164	1079/1215	1079/1215	1129/1265
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-
	l1	[mm]	1400	1400	1400	1400
	l2	[mm]	230	230	230	230
	l3	[mm]	940	940	940	940
	b1	[mm]	480	480	480	480
	b2	[mm]	610	610	610	610
	b3	[mm]	560	560	560	560
	d	[mm]	28	28	28	28
	a2	[mm]	90	90	90	90
	h	[mm]	100	100	100	100
	h3	[mm]	325	325	325	325
	h4 ²⁾	[mm]	502/-	527/-	527/-	527/-
Base frame no. ³⁾		7	7	7	7	
NB data	Mounting design ⁴⁾		A	A	A	A
	L NB	[mm]	363	383	383	383
	L NB SS	[mm]	363	383	383	383
	h1	[mm]	225	225	225	225
	G1	[mm]	188	188	188	188
	G2	[mm]	224	224	224	224
	m1	[mm]	160	160	160	160
	m2	[mm]	120	120	120	120
	n1	[mm]	400	400	400	400
	n2	[mm]	315	315	315	315
	b	[mm]	80	80	80	80
	s1	[mm]	M16	M16	M16	M16
	H	[mm]	-	-	-	-
	LB ²⁾	[mm]	354/-	385/-	385/-	435/-
	AD ²⁾	[mm]	177/-	202/-	202/-	202/-
	AG ²⁾	[mm]	135/-	155/-	155/-	155/-
	LL ²⁾	[mm]	112/-	130/-	130/-	130/-
	P	[mm]	250	300	300	300
	C	[mm]	-	-	-	-
	B	[mm]	-	-	-	-
	A	[mm]	-	-	-	-
	K	[mm]	-	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	274/272	295/292	295/292	295/292
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	130	158	158	170
	Weight NBE. CI	[kg]	-	-	-	-
	Weight diff. SS	[kg]	2	2	2	2

1) Pump with standard coupling / pump with spacer coupling.

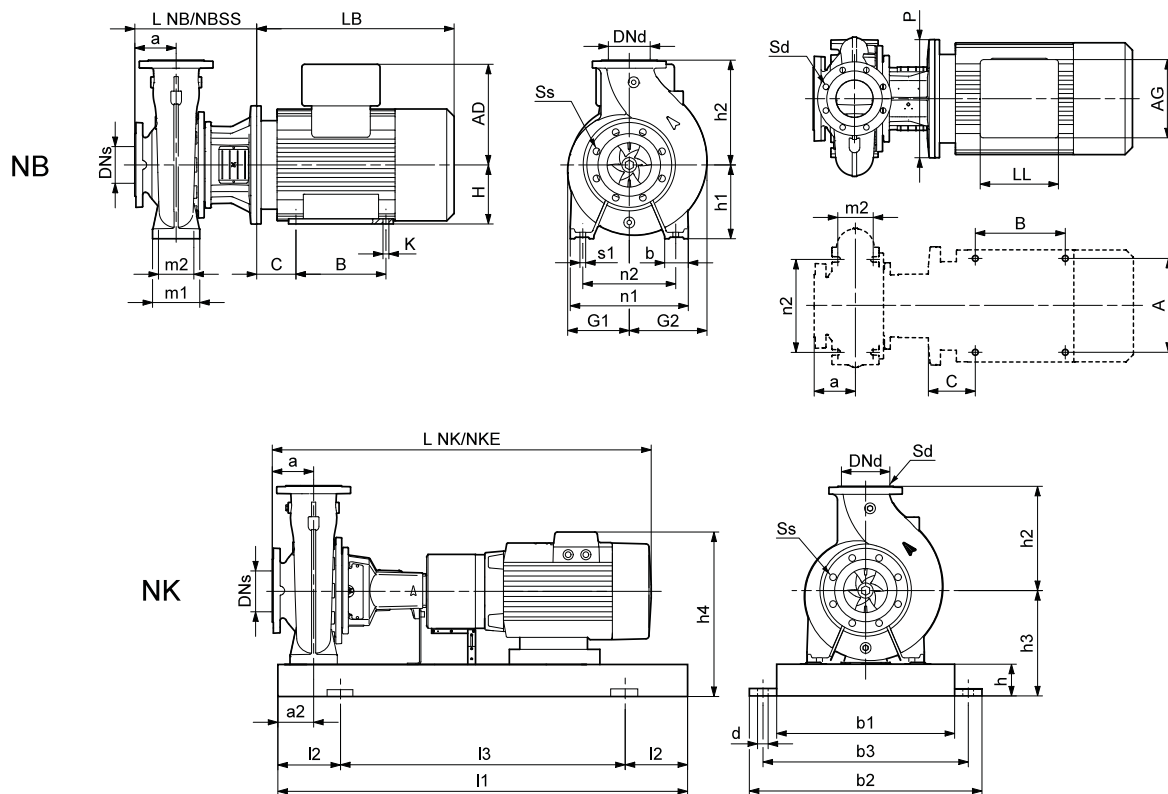
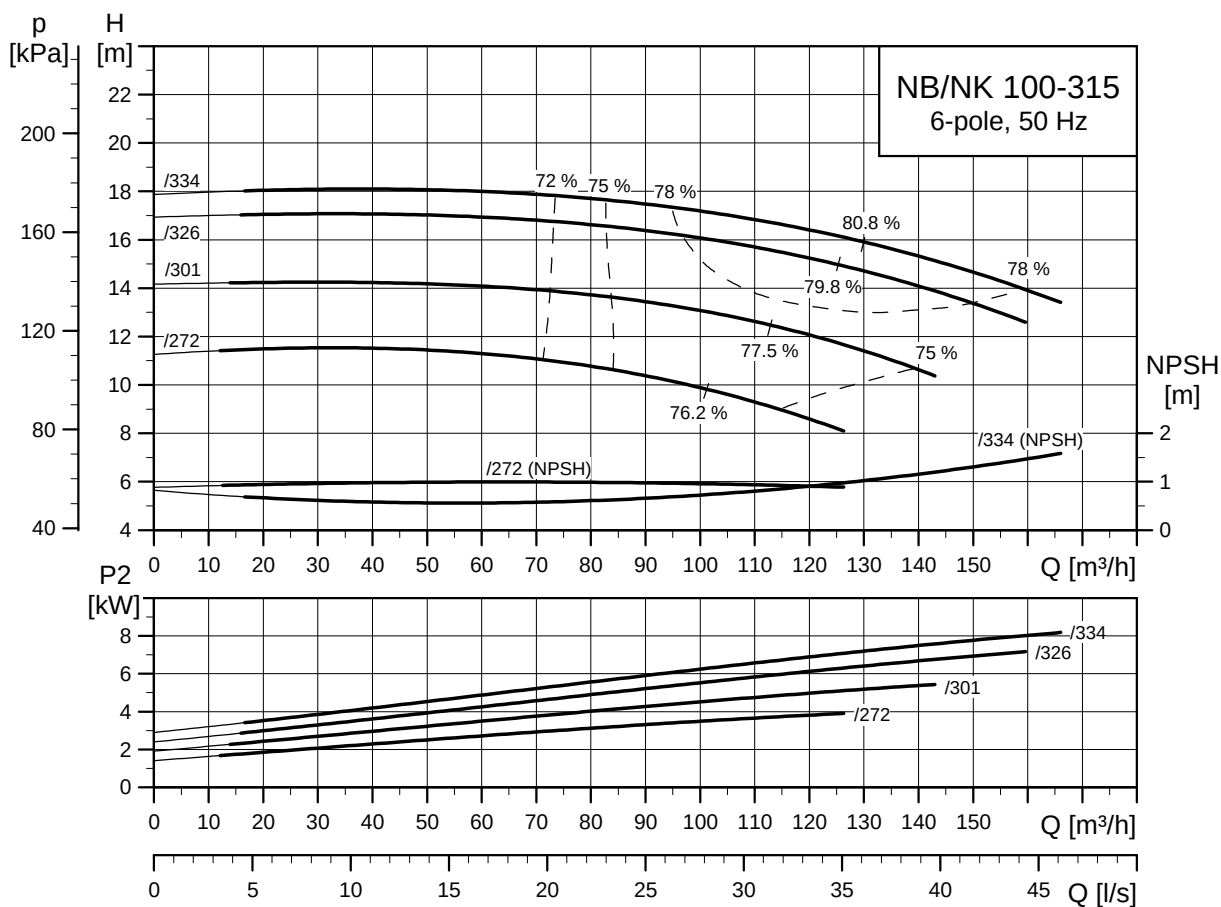
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 100-315



TM03 5162 4312

TM03 4182 1806

TM03 6005 4106

Pump type		100-315/272	100-315/301	100-315/326	100-315/334
Motor type	Standard Motor ⁵⁾	Siemens 132M	Siemens 132M	Siemens 160M	Siemens 160L
	E-Motor	-	-	-	-
Common data NB/NK	P2	[kW]	4	5.5	7.5
	PN	[bar]	16	16	16
	DNs	[mm]	125	125	125
	DNd	[mm]	100	100	100
	a	[mm]	140	140	140
	h2	[mm]	315	315	315
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1079/1215	1129/1265	1218/1354
	L NKE ¹⁾	[mm]	-/-	-/-	-/-
	l1	[mm]	1400	1400	1400
	l2	[mm]	230	230	230
	l3	[mm]	940	940	940
	b1	[mm]	480	480	480
	b2	[mm]	610	610	610
	b3	[mm]	560	560	560
	d	[mm]	28	28	28
	a2	[mm]	90	90	90
	h	[mm]	100	100	100
	h3	[mm]	350	350	350
	h4 ²⁾	[mm]	552/-	552/-	587/-
	Base frame no. ³⁾		7	7	7
NB data	Mounting design ⁴⁾		A	A	C
	L NB	[mm]	383	383	413
	L NB SS	[mm]	383	383	413
	h1	[mm]	250	250	250
	G1	[mm]	208	208	208
	G2	[mm]	264	264	264
	m1	[mm]	160	160	160
	m2	[mm]	120	120	120
	n1	[mm]	400	400	400
	n2	[mm]	315	315	315
	b	[mm]	80	80	80
	s1	[mm]	M16	M16	M16
	H	[mm]	-	-	160
	LB ²⁾	[mm]	385/-	435/-	494/-
	AD ²⁾	[mm]	202/-	202/-	237/-
	AG ²⁾	[mm]	155/-	155/-	175/-
	LL ²⁾	[mm]	130/-	130/-	145/-
	P	[mm]	300	300	350
	C	[mm]	-	-	254
	B	[mm]	-	-	210
	A	[mm]	-	-	108
	K	[mm]	-	-	15
Weight data	Weight NK. CI ¹⁾	[kg]	315/312	315/312	363/357
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-
	Weight NB. CI	[kg]	179	191	229
	Weight NBE. CI	[kg]	-	-	-
	Weight diff. SS	[kg]	2	2	2

1) Pump with standard coupling / pump with spacer coupling.

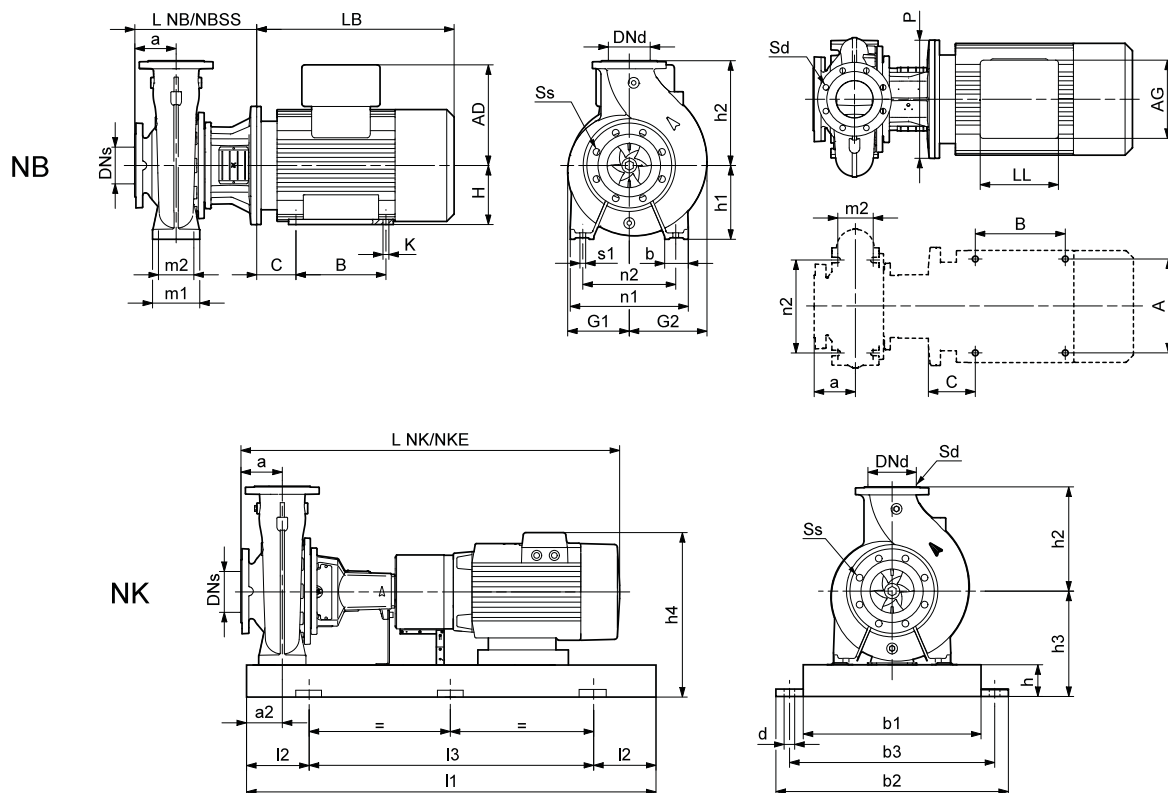
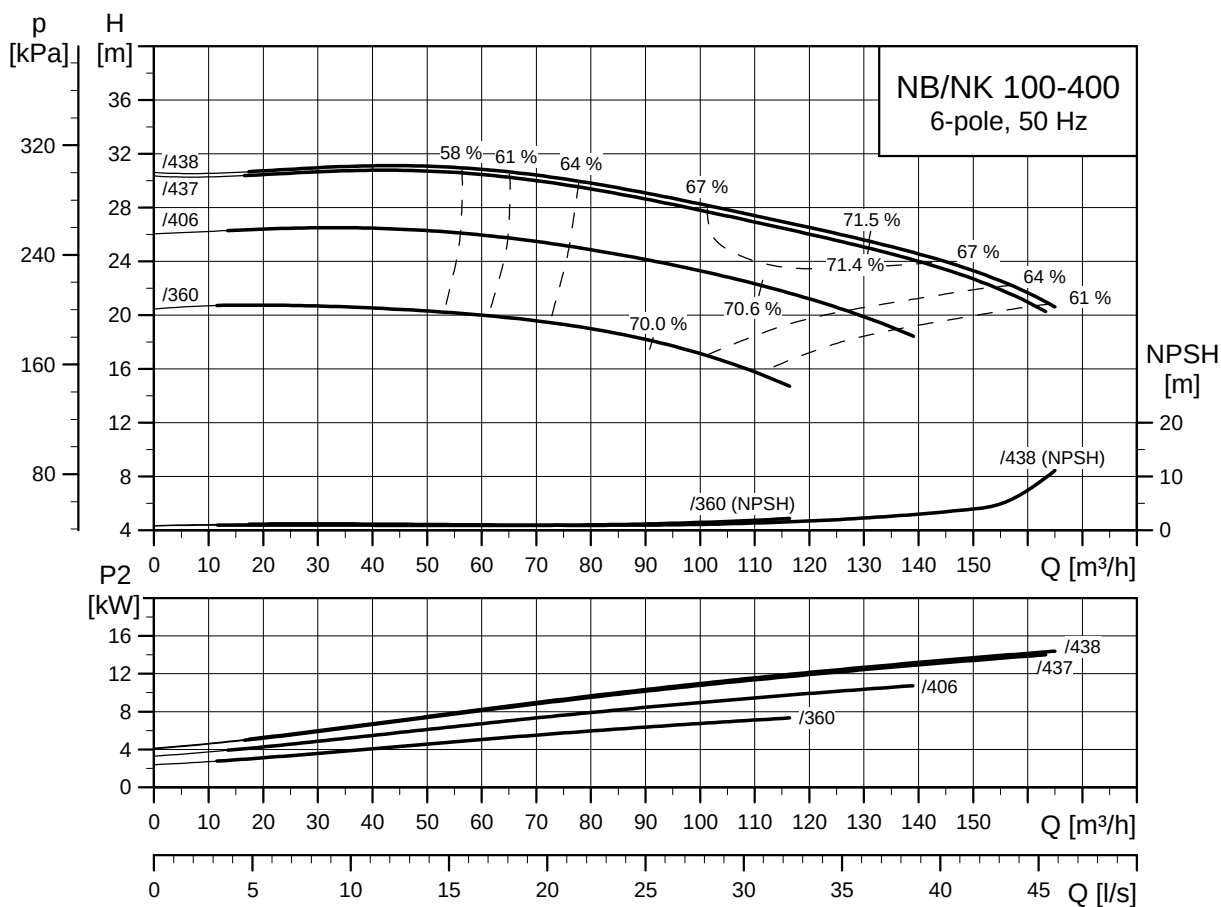
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 100-400



TM03 5163 4312

TM03 4182 1806

TM03 4179 1806

Pump type			100-400/360	100-400/406	100-400/437	100-400/438
Motor type	Standard Motor ⁵⁾		Siemens 160M	Siemens 160L	Siemens 180L	Siemens 200L
	E-Motor		-	-	-	-
Common data NB/NK	P2	[kW]	7.5	11	15	18.5
	PN	[bar]	16	16	16	16
	DNs	[mm]	125	125	125	125
	DNd	[mm]	100	100	100	100
	a	[mm]	140	140	140	140
	h2	[mm]	355	355	355	355
	Ss	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1278/1414	1338/1474	1372/1508	1395/1531
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-
	l1	[mm]	1800	1800	1800	1800
	l2	[mm]	300	300	300	300
	l3	[mm]	1200	1200	1200	1200
	b1	[mm]	600	600	600	600
	b2	[mm]	730	730	730	730
	b3	[mm]	670	670	670	670
	d	[mm]	28	28	28	28
	a2	[mm]	110	110	110	110
	h	[mm]	100	100	100	100
	h3	[mm]	380	380	383	380
	h4 ²⁾	[mm]	617/-	617/-	669/-	695/-
	Base frame no. ³⁾		9	9	9	9
NB data	Mounting design ⁴⁾		C	C	C	C
	L NB	[mm]	411	411	411	411
	L NB SS	[mm]	411	411	411	411
	h1	[mm]	280	280	280	280
	G1	[mm]	272	272	272	272
	G2	[mm]	298	298	298	298
	m1	[mm]	200	200	200	200
	m2	[mm]	150	150	150	150
	n1	[mm]	500	500	500	500
	n2	[mm]	400	400	400	400
	b	[mm]	100	100	100	100
	s1	[mm]	M20	M20	M20	M20
	H	[mm]	160	160	180	200
	LB ²⁾	[mm]	494/-	554/-	588/-	611/-
	AD ²⁾	[mm]	237/-	237/-	286/-	315/-
	AG ²⁾	[mm]	175/-	175/-	189/-	265/-
	LL ²⁾	[mm]	145/-	145/-	164/-	197/-
	P	[mm]	350	350	350	400
	C	[mm]	254	254	279	318
	B	[mm]	210	254	241	305
	A	[mm]	108	108	121	133
	K	[mm]	15	15	15	19
Weight data	Weight NK. CI ¹⁾	[kg]	515/510	537/532	593/585	637/632
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	315	337	378	437
	Weight NBE. CI	[kg]	-	-	-	-
	Weight diff. SS	[kg]	4	4	4	4

1) Pump with standard coupling / pump with spacer coupling.

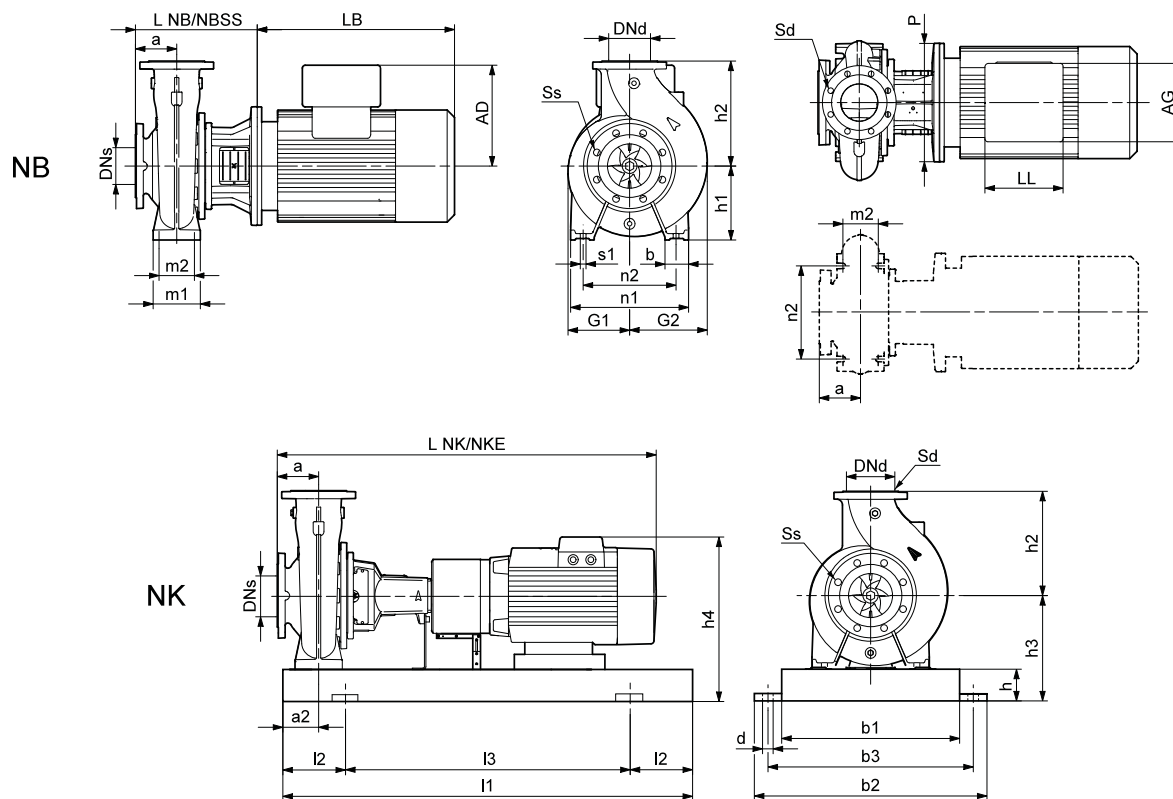
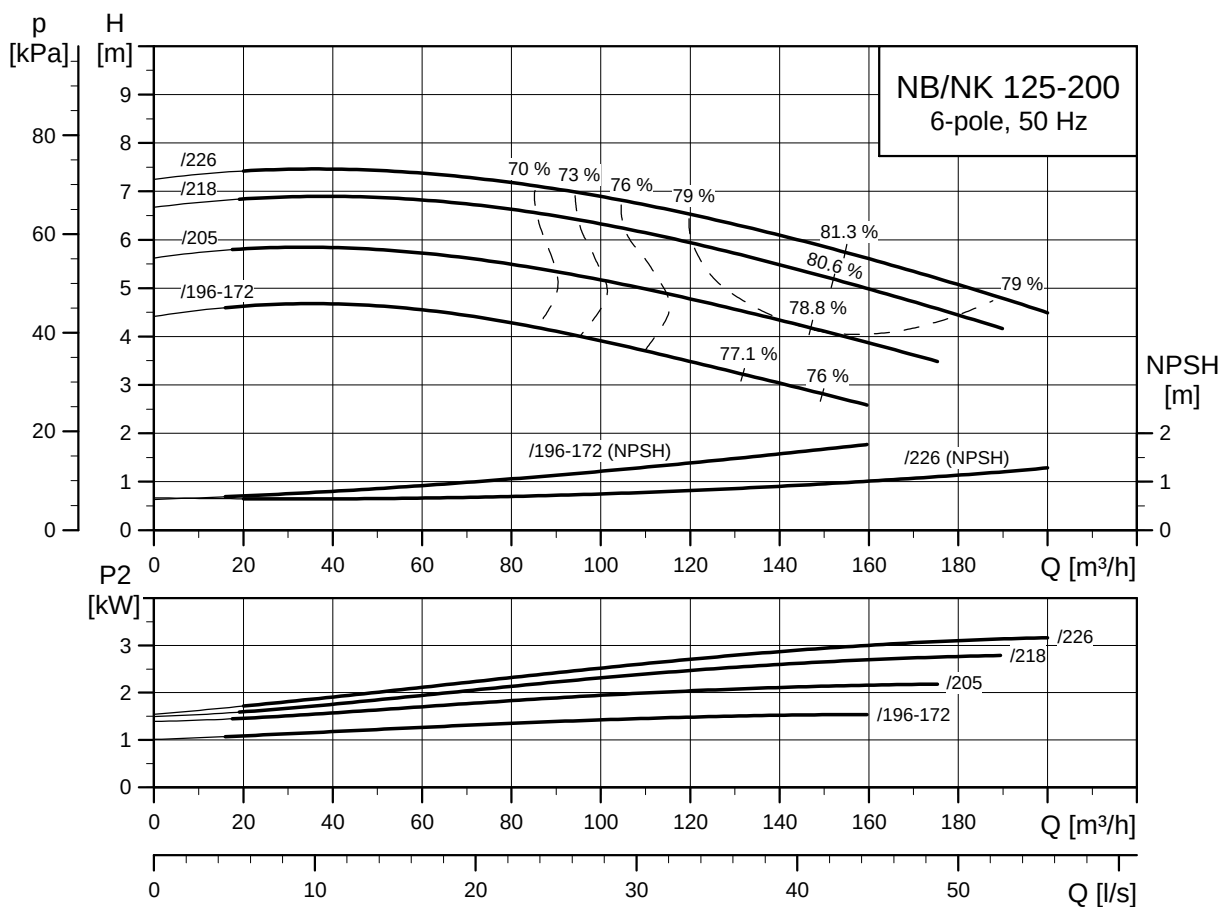
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 125-200



TM03 5164 4312

TM03 4180 1806

TM03 6005 4106

Pump type	125-200/196-172		125-200/205	125-200/218	125-200/226	
Motor type	Standard Motor ⁵⁾		Siemens 100L	Siemens 112M	Siemens 132S	Siemens 132M
	E-Motor	-	-	-	-	
Common data NB/NK	P2	[kW]	1.5	2.2	3	4
	PN	[bar]	16	16	16	16
	DNs	[mm]	150	150	150	150
	DNd	[mm]	125	125	125	125
	a	[mm]	140	140	140	140
	h2	[mm]	315	315	315	315
	Ss	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1010/1146	1028/1164	1079/1215	1079/1215
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-
	l1	[mm]	1400	1400	1400	1400
	l2	[mm]	230	230	230	230
	l3	[mm]	940	940	940	940
	b1	[mm]	480	480	480	480
	b2	[mm]	610	610	610	610
	b3	[mm]	560	560	560	560
	d	[mm]	28	28	28	28
	a2	[mm]	90	90	90	90
	h	[mm]	100	100	100	100
	h3	[mm]	350	350	350	350
	h4 ²⁾	[mm]	516/-	527/-	552/-	552/-
Base frame no. ³⁾		7	7	7	7	
NB data	Mounting design ⁴⁾		A	A	A	A
	L NB	[mm]	363	363	383	383
	L NB SS	[mm]	363	363	383	383
	h1	[mm]	250	250	250	250
	G1	[mm]	183	183	183	183
	G2	[mm]	234	234	234	234
	m1	[mm]	160	160	160	160
	m2	[mm]	120	120	120	120
	n1	[mm]	400	400	400	400
	n2	[mm]	315	315	315	315
	b	[mm]	80	80	80	80
	s1	[mm]	M16	M16	M16	M16
	H	[mm]	-	-	-	-
	LB ²⁾	[mm]	336/-	354/-	385/-	385/-
	AD ²⁾	[mm]	166/-	177/-	202/-	202/-
	AG ²⁾	[mm]	135/-	135/-	155/-	155/-
	LL ²⁾	[mm]	112/-	112/-	130/-	130/-
	P	[mm]	250	250	300	300
	C	[mm]	-	-	-	-
	B	[mm]	-	-	-	-
A	[mm]	-	-	-	-	
K	[mm]	-	-	-	-	
Weight data	Weight NK. CI ¹⁾	[kg]	278/276	293/291	309/306	309/306
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	136	145	173	173
	Weight NBE. CI	[kg]	-	-	-	-
	Weight diff. SS	[kg]	3	3	3	3

1) Pump with standard coupling / pump with spacer coupling.

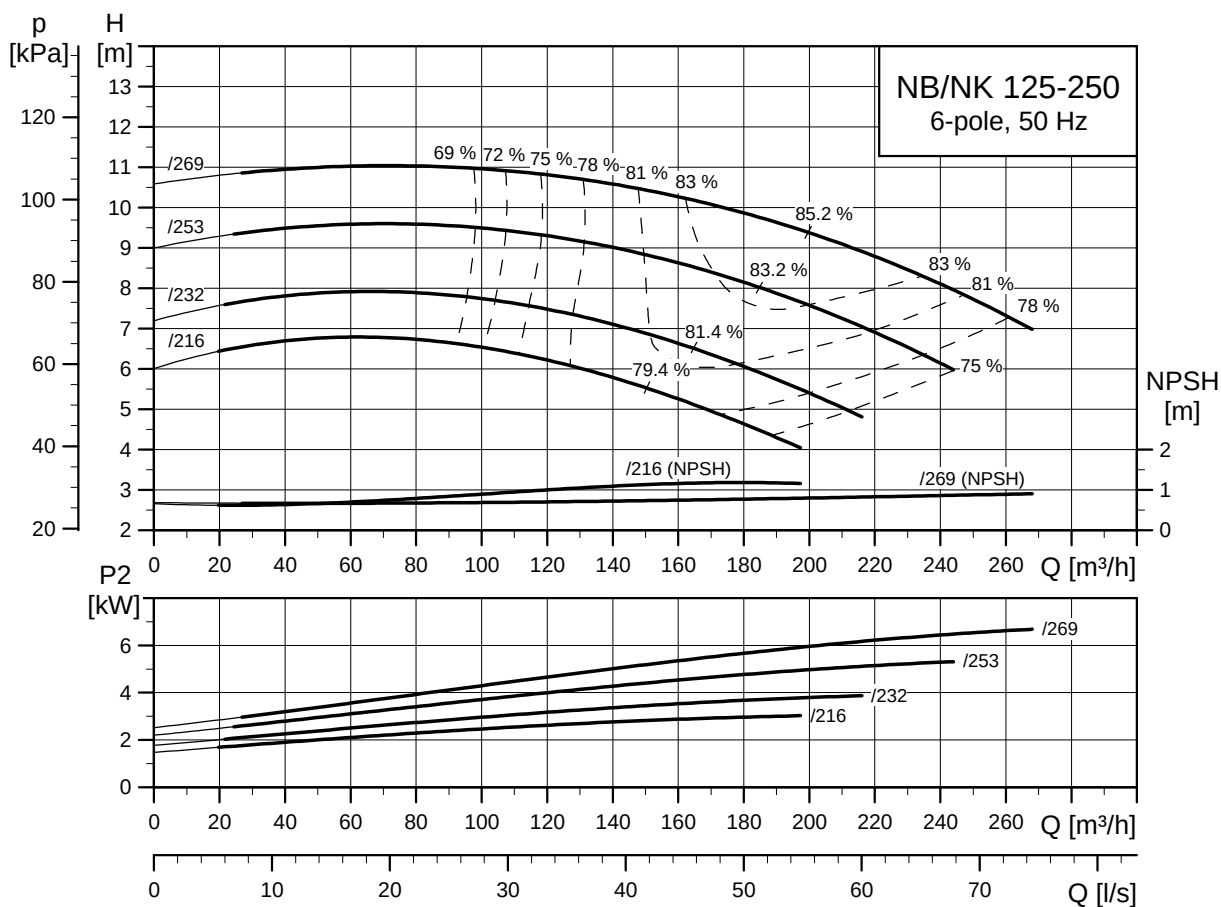
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

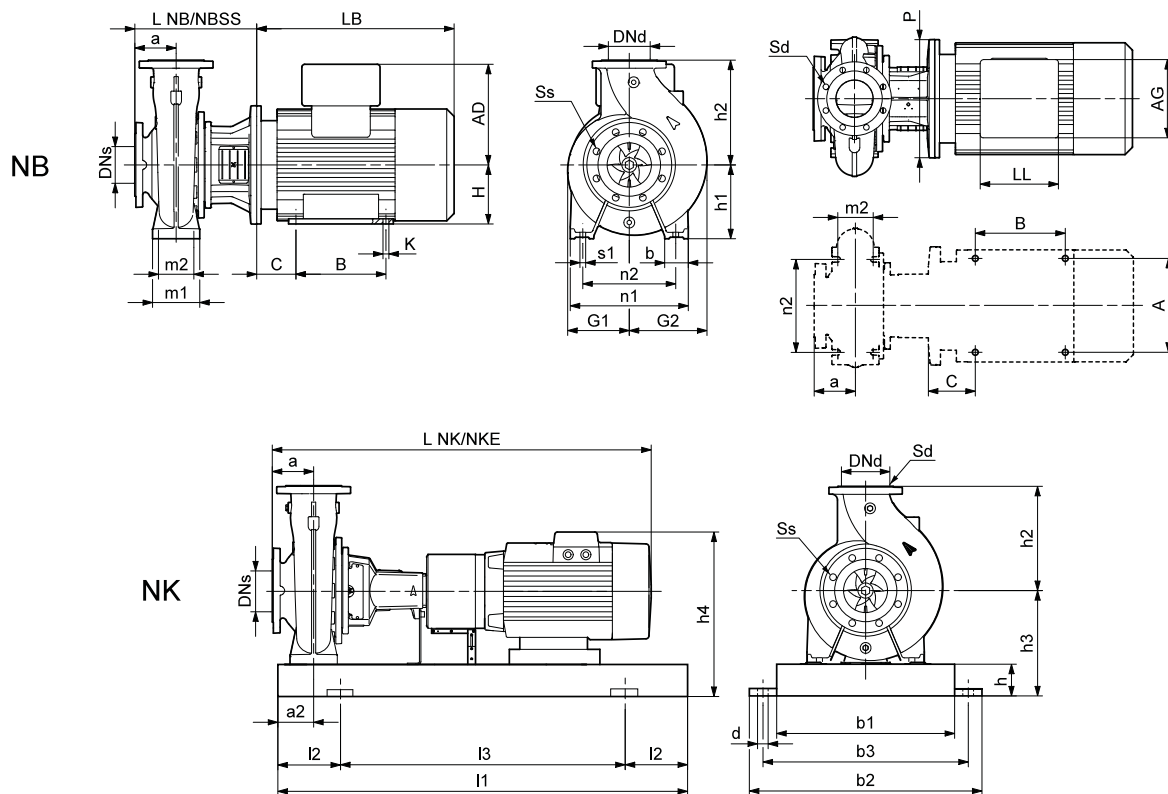
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 125-250



TM03 5165 4312



TM03 4182 1806

TM03 6005 4106

Pump type			125-250/216	125-250/232	125-250/253	125-250/269
Motor type	Standard Motor ⁵⁾		Siemens 132S	Siemens 132M	Siemens 132M	Siemens 160M
	E-Motor		-	-	-	-
Common data NB/NK	P2	[kW]	3	4	5.5	7.5
	PN	[bar]	16	16	16	16
	DNs	[mm]	150	150	150	150
	DNd	[mm]	125	125	125	125
	a	[mm]	140	140	140	140
	h2	[mm]	355	355	355	355
	Ss	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1079/1215	1079/1215	1129/1265	1218/1354
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-
	l1	[mm]	1400	1400	1400	1400
	l2	[mm]	230	230	230	230
	l3	[mm]	940	940	940	940
	b1	[mm]	480	480	480	480
	b2	[mm]	610	610	610	610
	b3	[mm]	560	560	560	560
	d	[mm]	28	28	28	28
	a2	[mm]	90	90	90	90
	h	[mm]	100	100	100	100
	h3	[mm]	350	350	350	350
	h4 ²⁾	[mm]	552/-	552/-	552/-	587/-
	Base frame no. ³⁾		7	7	7	7
NB data	Mounting design ⁴⁾		A	A	A	C
	L NB	[mm]	383	383	383	413
	L NB SS	[mm]	383	383	383	413
	h1	[mm]	250	250	250	250
	G1	[mm]	208	208	208	208
	G2	[mm]	264	264	264	264
	m1	[mm]	160	160	160	160
	m2	[mm]	120	120	120	120
	n1	[mm]	400	400	400	400
	n2	[mm]	315	315	315	315
	b	[mm]	80	80	80	80
	s1	[mm]	M16	M16	M16	M16
	H	[mm]	-	-	-	160
	LB ²⁾	[mm]	385/-	385/-	435/-	494/-
	AD ²⁾	[mm]	202/-	202/-	202/-	237/-
	AG ²⁾	[mm]	155/-	155/-	155/-	175/-
	LL ²⁾	[mm]	130/-	130/-	130/-	145/-
	P	[mm]	300	300	300	350
	C	[mm]	-	-	-	254
	B	[mm]	-	-	-	210
	A	[mm]	-	-	-	108
	K	[mm]	-	-	-	15
Weight data	Weight NK. CI ¹⁾	[kg]	318/315	318/315	318/315	366/360
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	182	182	194	232
	Weight NBE. CI	[kg]	-	-	-	-
	Weight diff. SS	[kg]	-3	-3	-3	-3

1) Pump with standard coupling / pump with spacer coupling.

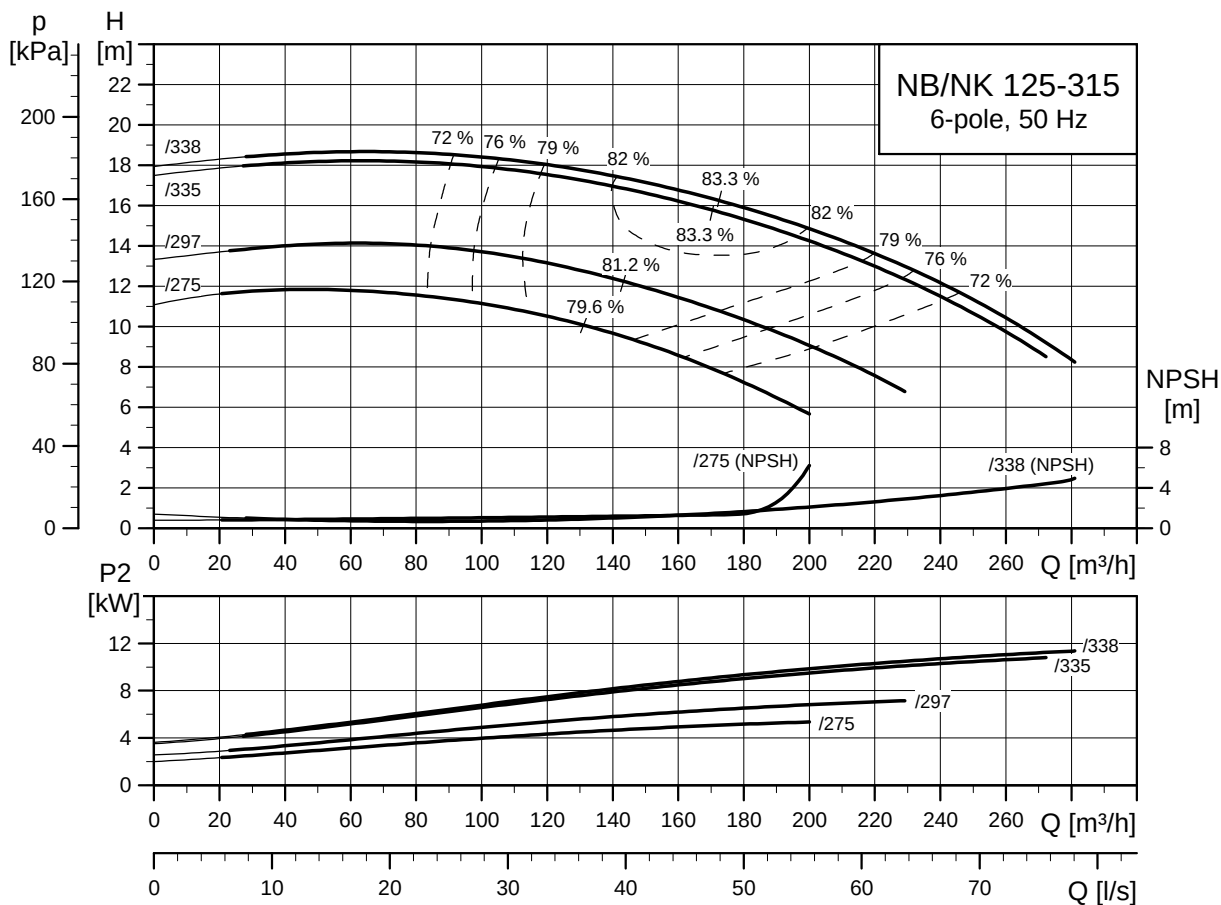
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

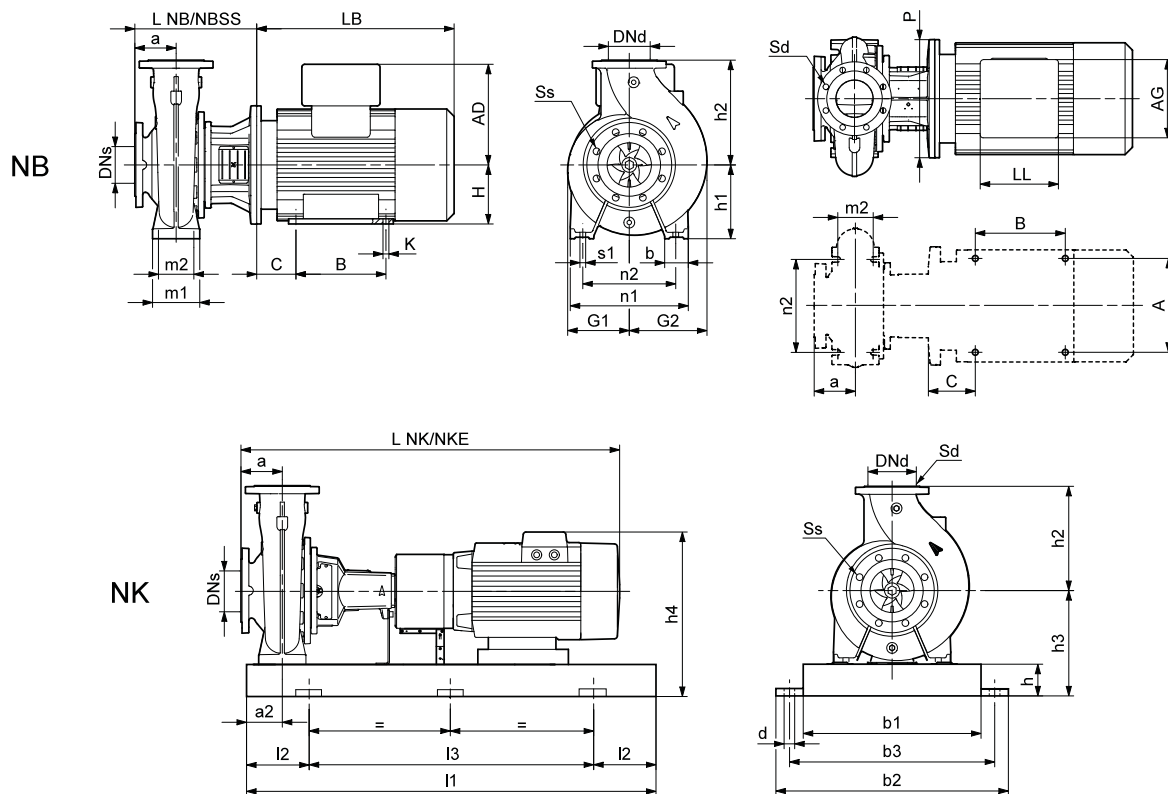
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 125-315



TM03 5166 4312



TM03 4182 1806

TM03 4179 1806

Pump type	125-315/275		125-315/297	125-315/335	125-315/338	
Motor type	Standard Motor ⁵⁾	Siemens 132M	Siemens 160M	Siemens 160L	Siemens 180L	
	E-Motor	-	-	-	-	
Common data NB/NK	P2	[kW]	5.5	7.5	11	15
	PN	[bar]	16	16	16	16
	DNs	[mm]	150	150	150	150
	DNd	[mm]	125	125	125	125
	a	[mm]	140	140	140	140
	h2	[mm]	355	355	355	355
	Ss	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1189/1325	1278/1414	1338/1474	1372/1508
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-
	l1	[mm]	1800	1800	1800	1800
	l2	[mm]	300	300	300	300
	l3	[mm]	1200	1200	1200	1200
	b1	[mm]	600	600	600	600
	b2	[mm]	730	730	730	730
	b3	[mm]	670	670	670	670
	d	[mm]	28	28	28	28
	a2	[mm]	110	110	110	110
	h	[mm]	100	100	100	100
	h3	[mm]	385	380	380	383
	h4 ²⁾	[mm]	587/-	617/-	617/-	669/-
	Base frame no. ³⁾		9	9	9	9
NB data	Mounting design ⁴⁾		A	C	C	C
	L NB	[mm]	381	411	411	411
	L NB SS	[mm]	381	411	411	411
	h1	[mm]	280	280	280	280
	G1	[mm]	231	231	231	231
	G2	[mm]	268	268	268	268
	m1	[mm]	200	200	200	200
	m2	[mm]	150	150	150	150
	n1	[mm]	500	500	500	500
	n2	[mm]	400	400	400	400
	b	[mm]	100	100	100	100
	s1	[mm]	M20	M20	M20	M20
	H	[mm]	-	160	160	180
	LB ²⁾	[mm]	435/-	494/-	554/-	588/-
	AD ²⁾	[mm]	202/-	237/-	237/-	286/-
	AG ²⁾	[mm]	155/-	175/-	175/-	189/-
	LL ²⁾	[mm]	130/-	145/-	145/-	164/-
	P	[mm]	300	350	350	350
	C	[mm]	-	254	254	279
	B	[mm]	-	210	254	241
	A	[mm]	-	108	108	121
	K	[mm]	-	15	15	15
Weight data	Weight NK. CI ¹⁾	[kg]	429/426	475/470	497/492	553/545
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	236	275	297	338
	Weight NBE. CI	[kg]	-	-	-	-
	Weight diff. SS	[kg]	4	4	4	4

1) Pump with standard coupling / pump with spacer coupling.

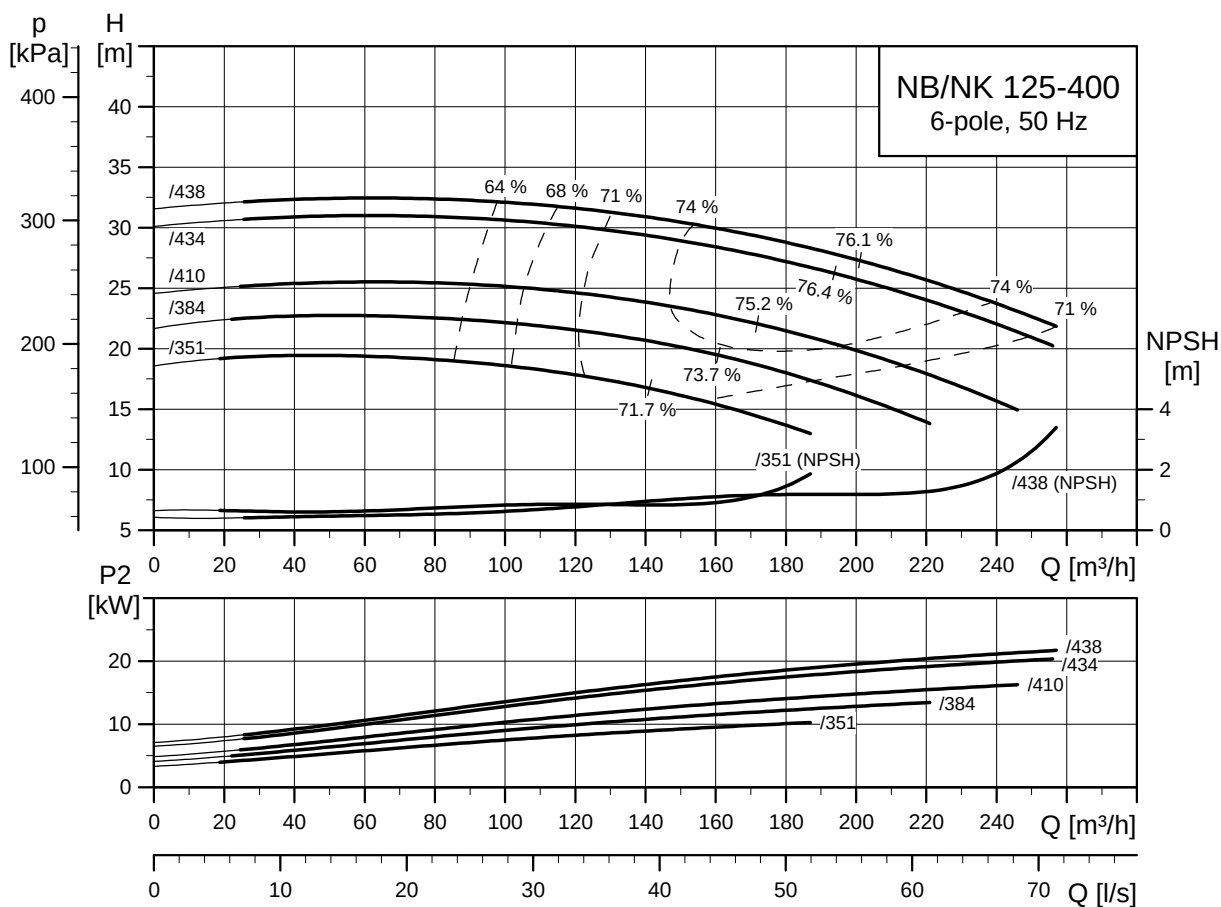
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

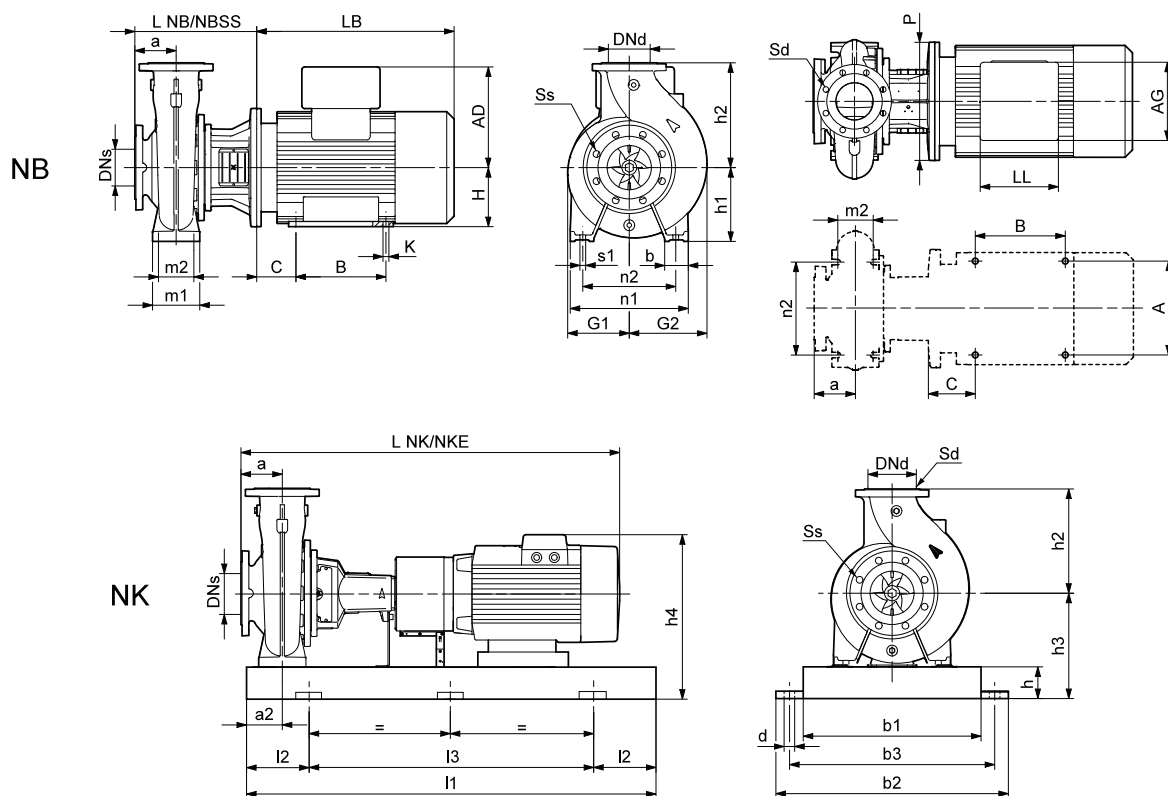
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 125-400



TM05 2348 4911



TM03 4182 1806

TM03 4179 1806

Pump type			125-400/351	125-400/384	125-400/410	125-400/434	125-400/438
Motor type	Standard Motor ⁵⁾		Siemens 160L	Siemens 180L	Siemens 200L	Siemens 200L	Siemens 225M
	E-Motor		-	-	-	-	-
Common data NB/NK	P2	[kW]	11	15	18.5	22	30
	PN	[bar]	16	16	16	16	16
	DNs	[mm]	150	150	150	150	150
	DNd	[mm]	125	125	125	125	125
	a	[mm]	140	140	140	140	140
	h2	[mm]	400	400	400	400	400
	Ss	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1338/1474	1372/1508	1395/1531	1420/1556	1522/1658
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-	-/-
	l1	[mm]	1800	1800	1800	1800	1800
	l2	[mm]	300	300	300	300	300
	l3	[mm]	1200	1200	1200	1200	1200
	b1	[mm]	600	600	600	600	600
	b2	[mm]	730	730	730	730	730
	b3	[mm]	670	670	670	670	670
	d	[mm]	28	28	28	28	28
	a2	[mm]	110	110	110	110	110
	h	[mm]	100	100	100	100	100
	h3	[mm]	415	415	415	415	415
	h4 ²⁾	[mm]	652/-	701/-	730/-	730/-	753/-
Base frame no. ³⁾		9	9	9	9	9	
NB data	Mounting design ⁴⁾		C	C	C	C	C
	L NB	[mm]	411	411	411	411	441
	L NB SS	[mm]	411	411	411	411	441
	h1	[mm]	315	315	315	315	315
	G1	[mm]	284	284	284	284	284
	G2	[mm]	320	320	320	320	320
	m1	[mm]	200	200	200	200	200
	m2	[mm]	150	150	150	150	150
	n1	[mm]	500	500	500	500	500
	n2	[mm]	400	400	400	400	400
	b	[mm]	100	100	100	100	100
	s1	[mm]	M20	M20	M20	M20	M20
	H	[mm]	160	180	200	200	225
	LB ²⁾	[mm]	554/-	588/-	611/-	636/-	708/-
	AD ²⁾	[mm]	237/-	286/-	315/-	315/-	338/-
	AG ²⁾	[mm]	175/-	189/-	265/-	265/-	266/-
	LL ²⁾	[mm]	145/-	164/-	197/-	197/-	197/-
	P	[mm]	350	350	400	400	450
	C	[mm]	254	279	318	318	356
	B	[mm]	254	241	305	305	286
	A	[mm]	108	121	133	133	149
	K	[mm]	15	15	19	19	19
Weight data	Weight NK. CI ¹⁾	[kg]	555/550	610/602	658/653	683/678	783/779
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	351	391	451	468	584
	Weight NBE. CI	[kg]	-	-	-	-	-
	Weight diff. SS	[kg]	-7	-7	-7	-7	-7

1) Pump with standard coupling / pump with spacer coupling.

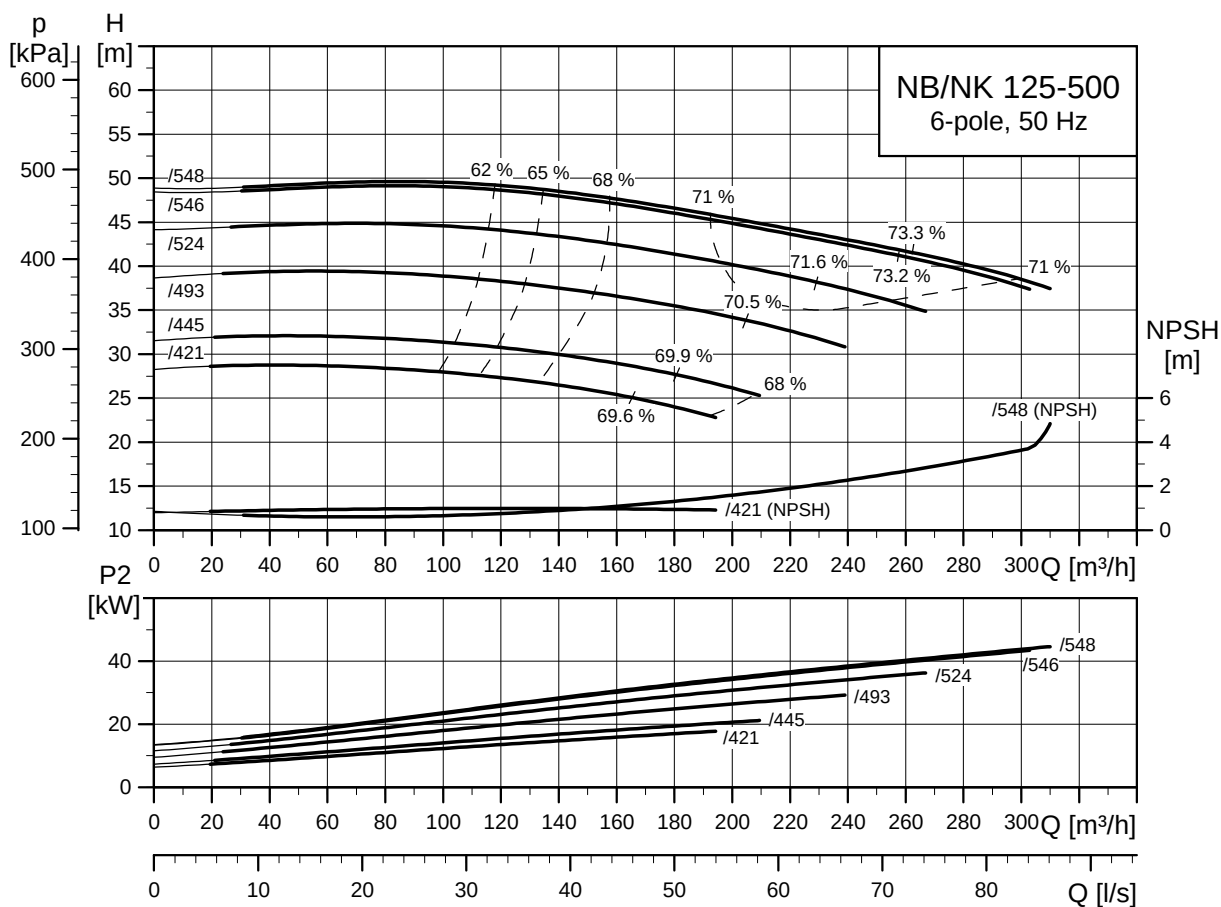
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

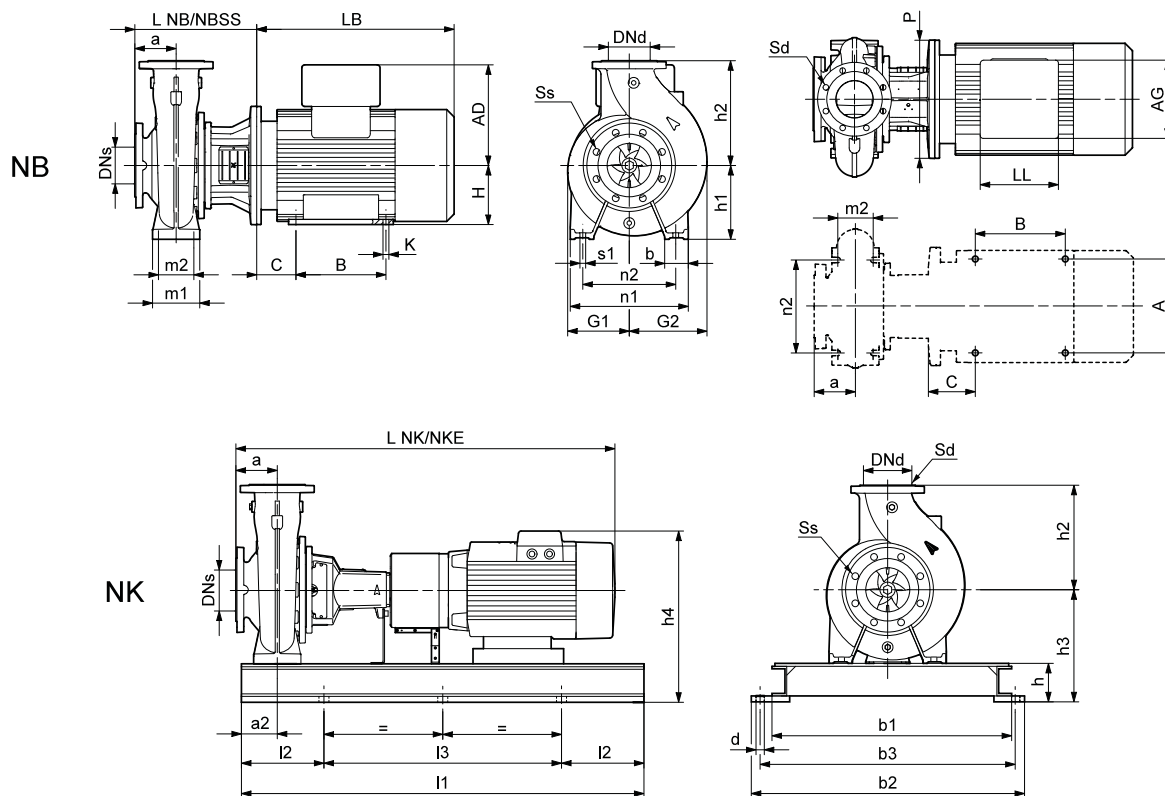
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 125-500



TM03 5168 4312



TM03 4182 1806

TM03 4051 1806

Pump type		125-500/421	125-500/445	125-500/493	125-500/524	125-500/546	125-500/548
Motor type	Standard Motor ⁵⁾	Siemens 200L	Siemens 200L	Siemens 225M	Siemens 250M	Siemens 280S	Siemens 280M
	E-Motor	-	-	-	-	-	-
Common data NB/NK	P2	[kW]	18.5	22	30	45	55
	PN	[bar]	16	16	16	16	16
	DNs	[mm]	150	150	150	150	150
	DNd	[mm]	125	125	125	125	125
	a	[mm]	180	180	180	180	180
	h2	[mm]	500	500	500	500	500
	Ss	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
	Sd	[mm]	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19	8 x Ø19
NK data	L NK ¹⁾	[mm]	1575/1751	1600/1776	1702/1878	1741/1917	1814/1990
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-	-/-
	l1	[mm]	2000	2000	2000	2000	2000
	l2	[mm]	330	330	330	330	330
	l3	[mm]	1340	1340	1340	1340	1340
	b1	[mm]	750	750	750	750	750
	b2	[mm]	890	890	890	890	890
	b3	[mm]	830	830	830	830	830
	d	[mm]	28	28	28	28	28
	a2	[mm]	110	110	110	110	110
	h	[mm]	130	130	130	130	130
	h3	[mm]	530	530	530	530	530
	h4 ²⁾	[mm]	845/-	845/-	868/-	940/-	963/-
	Base frame no. ³⁾		10	10	10	10	10
NB data	Mounting design ⁴⁾		C	C	C	C	C
	L NB	[mm]	494	494	524	524	524
	L NB SS	[mm]	494	494	524	524	524
	h1	[mm]	400	400	400	400	400
	G1	[mm]	344	344	344	344	344
	G2	[mm]	377	377	377	377	377
	m1	[mm]	200	200	200	200	200
	m2	[mm]	150	150	150	150	150
	n1	[mm]	625	625	625	625	625
	n2	[mm]	500	500	500	500	500
	b	[mm]	125	125	125	125	125
	s1	[mm]	M20	M20	M20	M20	M20
	H	[mm]	200	200	225	250	280
	LB ²⁾	[mm]	611/-	636/-	708/-	747/-	820/-
	AD ²⁾	[mm]	315/-	315/-	338/-	410/-	433/-
	AG ²⁾	[mm]	265/-	265/-	266/-	319/-	319/-
	LL ²⁾	[mm]	197/-	197/-	197/-	233/-	233/-
	P	[mm]	400	400	450	550	550
	C	[mm]	318	318	356	406	457
	B	[mm]	305	305	286	349	368
	A	[mm]	133	133	149	168	190
	K	[mm]	19	19	19	24	24
Weight data	Weight NK. CI ¹⁾	[kg]	1087/1086	1112/1111	1195/1192	1282/1278	1430/1426
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	655	672	789	892	997
	Weight NBE. CI	[kg]	-	-	-	-	-
	Weight diff. SS	[kg]	-9	-9	-9	-9	-9

1) Pump with standard coupling / pump with spacer coupling.

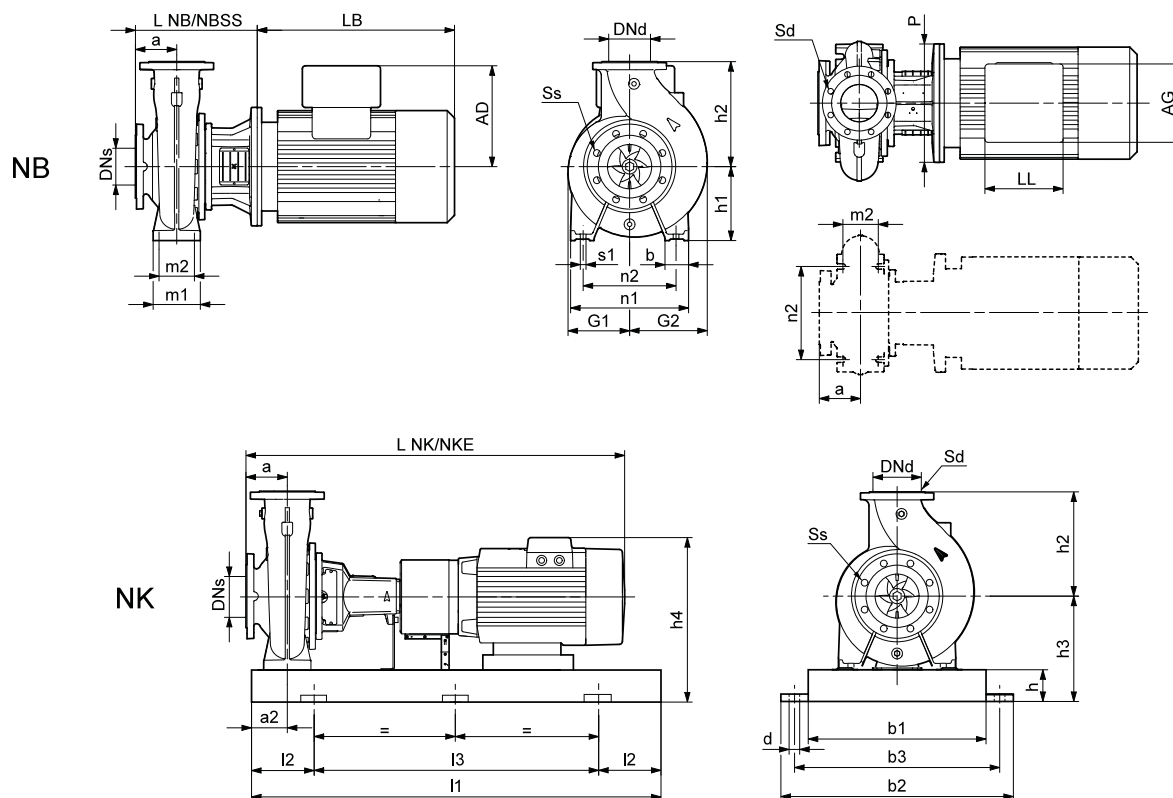
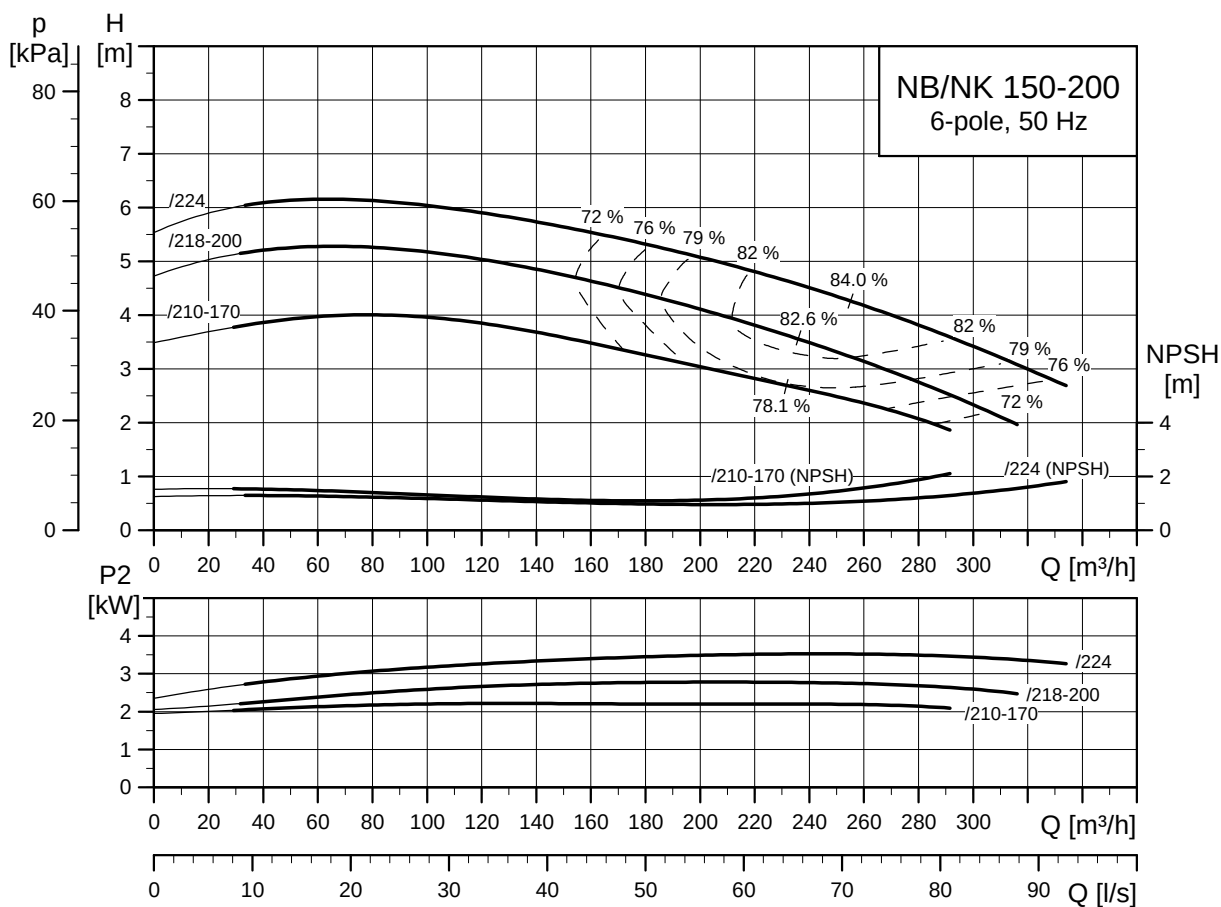
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 150-200



TM03 5169 4312

TM03 4180 1806

TM03 4179 1806

Pump type	150-200/210-170 150-200/218-200 150-200/224				
Motor type	Standard Motor ⁵⁾	Siemens 112M	Siemens 132S	Siemens 132M	
	E-Motor	-	-	-	
Common data NB/NK	P2	[kW]	2.2	3	4
	PN	[bar]	10	10	10
	DNs	[mm]	200	200	200
	DNd	[mm]	150	150	150
	a	[mm]	160	160	160
	h2	[mm]	400	400	400
	Ss	[mm]	8 x Ø23	8 x Ø23	8 x Ø23
	Sd	[mm]	8 x Ø23	8 x Ø23	8 x Ø23
NK data	L NK ¹⁾	[mm]	1048/1184	1099/1235	1099/1235
	L NKE ¹⁾	[mm]	-/-	-/-	-/-
	l1	[mm]	1800	1800	1800
	l2	[mm]	300	300	300
	l3	[mm]	1200	1200	1200
	b1	[mm]	600	600	600
	b2	[mm]	730	730	730
	b3	[mm]	670	670	670
	d	[mm]	28	28	28
	a2	[mm]	110	110	110
	h	[mm]	100	100	100
	h3	[mm]	380	385	385
	h4 ²⁾	[mm]	557/-	587/-	587/-
	Base frame no. ³⁾		9	9	9
NB data	Mounting design ⁴⁾		A	A	A
	L NB	[mm]	383	403	403
	L NB SS	[mm]	383	403	403
	h1	[mm]	280	280	280
	G1	[mm]	230	230	230
	G2	[mm]	319	319	319
	m1	[mm]	200	200	200
	m2	[mm]	150	150	150
	n1	[mm]	550	550	550
	n2	[mm]	450	450	450
	b	[mm]	100	100	100
	s1	[mm]	M20	M20	M20
	H	[mm]	-	-	-
	LB ²⁾	[mm]	354/-	385/-	385/-
	AD ²⁾	[mm]	177/-	202/-	202/-
	AG ²⁾	[mm]	135/-	155/-	155/-
	LL ²⁾	[mm]	112/-	130/-	130/-
	P	[mm]	250	300	300
	C	[mm]	-	-	-
	B	[mm]	-	-	-
	A	[mm]	-	-	-
	K	[mm]	-	-	-
Weight data	Weight NK. CI ¹⁾	[kg]	401/399	418/415	418/415
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-
	Weight NB. CI	[kg]	199	227	227
	Weight NBE. CI	[kg]	-	-	-
	Weight diff. SS	[kg]	-5	-5	-5

1) Pump with standard coupling / pump with spacer coupling.

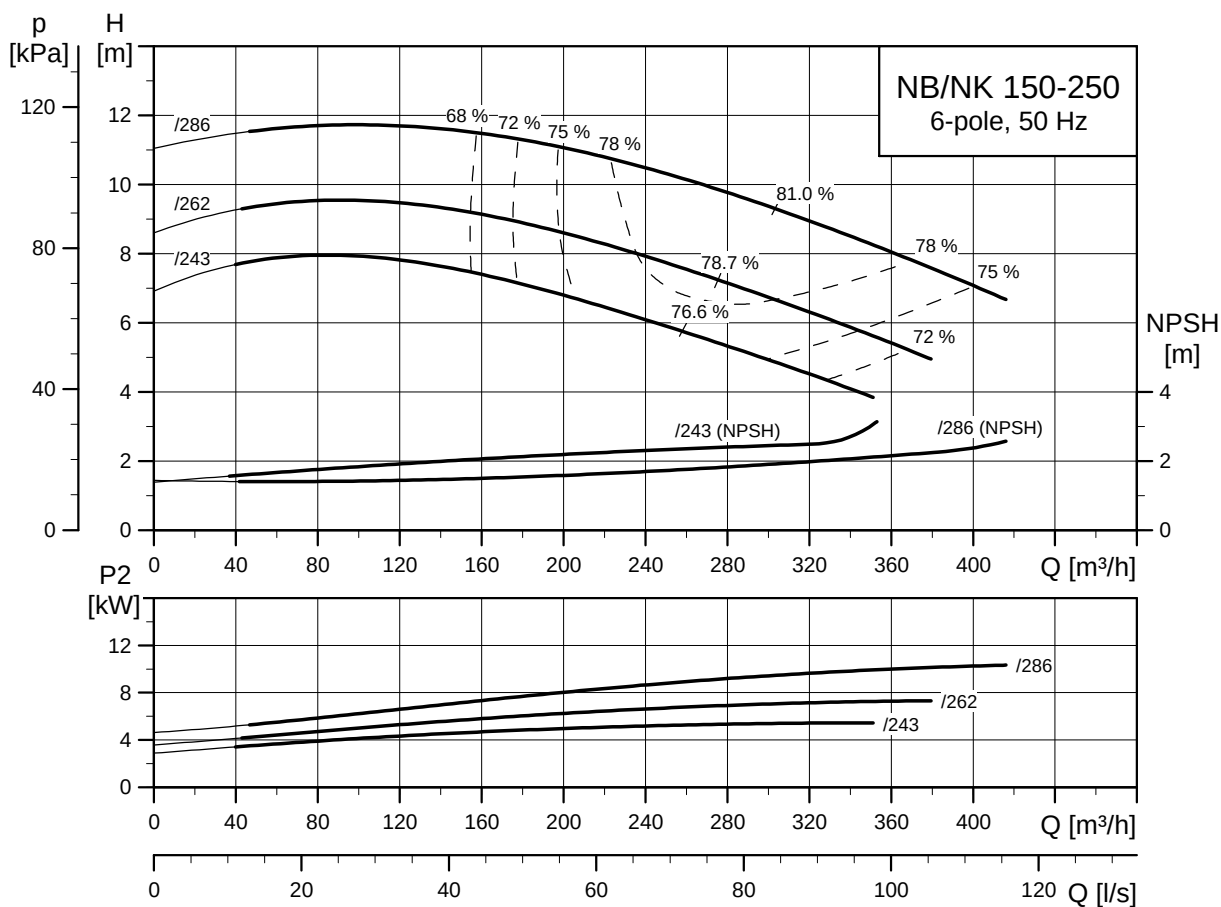
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

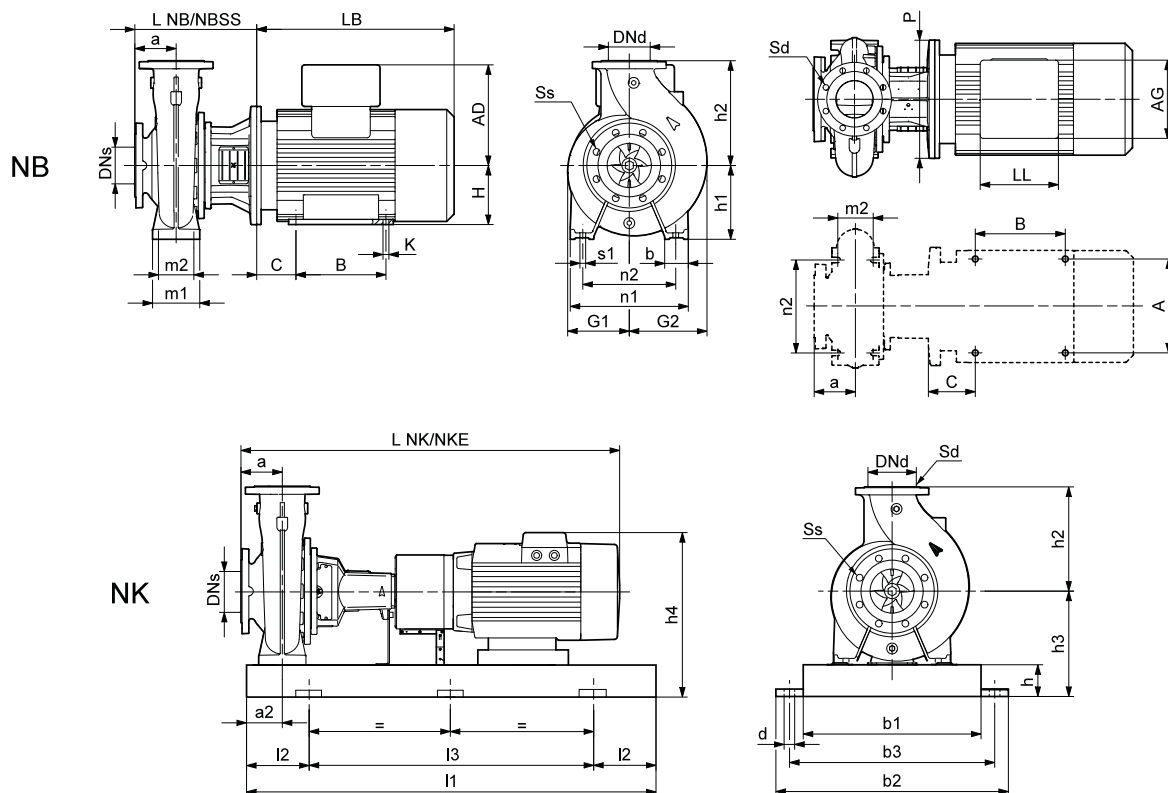
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 150-250



TM03 5170 4312



TM03 4182 1806

TM03 4179 1806

Pump type	150-250/243		150-250/262	150-250/286
Motor type	Standard Motor ⁵⁾		Siemens 132M	Siemens 160M
	E-Motor		-	-
Common data NB/NK	P2	[kW]	5.5	7.5
	PN	[bar]	10	10
	DNs	[mm]	200	200
	DNd	[mm]	150	150
	a	[mm]	160	160
	h2	[mm]	375	375
	Ss	[mm]	8 x Ø23	8 x Ø23
	Sd	[mm]	8 x Ø23	8 x Ø23
NK data	L NK ¹⁾	[mm]	1209/1345	1298/1434
	L NKE ¹⁾	[mm]	-/-	-/-
	l1	[mm]	1800	1800
	l2	[mm]	300	300
	l3	[mm]	1200	1200
	b1	[mm]	600	600
	b2	[mm]	730	730
	b3	[mm]	670	670
	d	[mm]	28	28
	a2	[mm]	110	110
	h	[mm]	100	100
	h3	[mm]	385	380
	h4 ²⁾	[mm]	587/-	617/-
	Base frame no. ³⁾		9	9
NB data	Mounting design ⁴⁾		A	C
	L NB	[mm]	401	431
	L NB SS	[mm]	401	431
	h1	[mm]	280	280
	G1	[mm]	223	223
	G2	[mm]	287	287
	m1	[mm]	200	200
	m2	[mm]	150	150
	n1	[mm]	500	500
	n2	[mm]	400	400
	b	[mm]	100	100
	s1	[mm]	M20	M20
	H	[mm]	-	160
	LB ²⁾	[mm]	435/-	494/-
	AD ²⁾	[mm]	202/-	237/-
	AG ²⁾	[mm]	155/-	175/-
	LL ²⁾	[mm]	130/-	145/-
	P	[mm]	300	350
	C	[mm]	-	254
	B	[mm]	-	210
	A	[mm]	-	108
	K	[mm]	-	15
Weight data	Weight NK. CI ¹⁾	[kg]	427/424	473/468
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-
	Weight NB. CI	[kg]	234	274
	Weight NBE. CI	[kg]	-	-
	Weight diff. SS	[kg]	6	6

1) Pump with standard coupling / pump with spacer coupling.

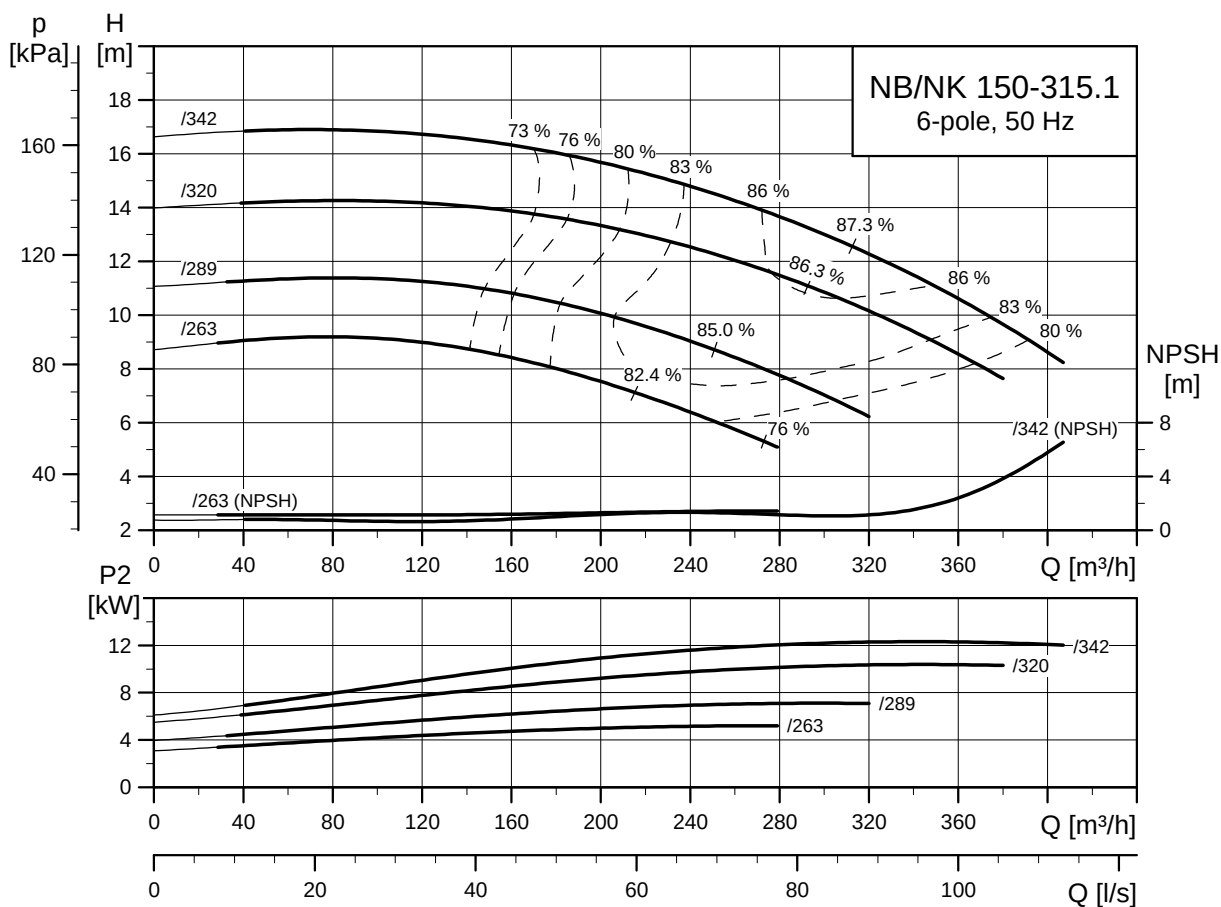
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

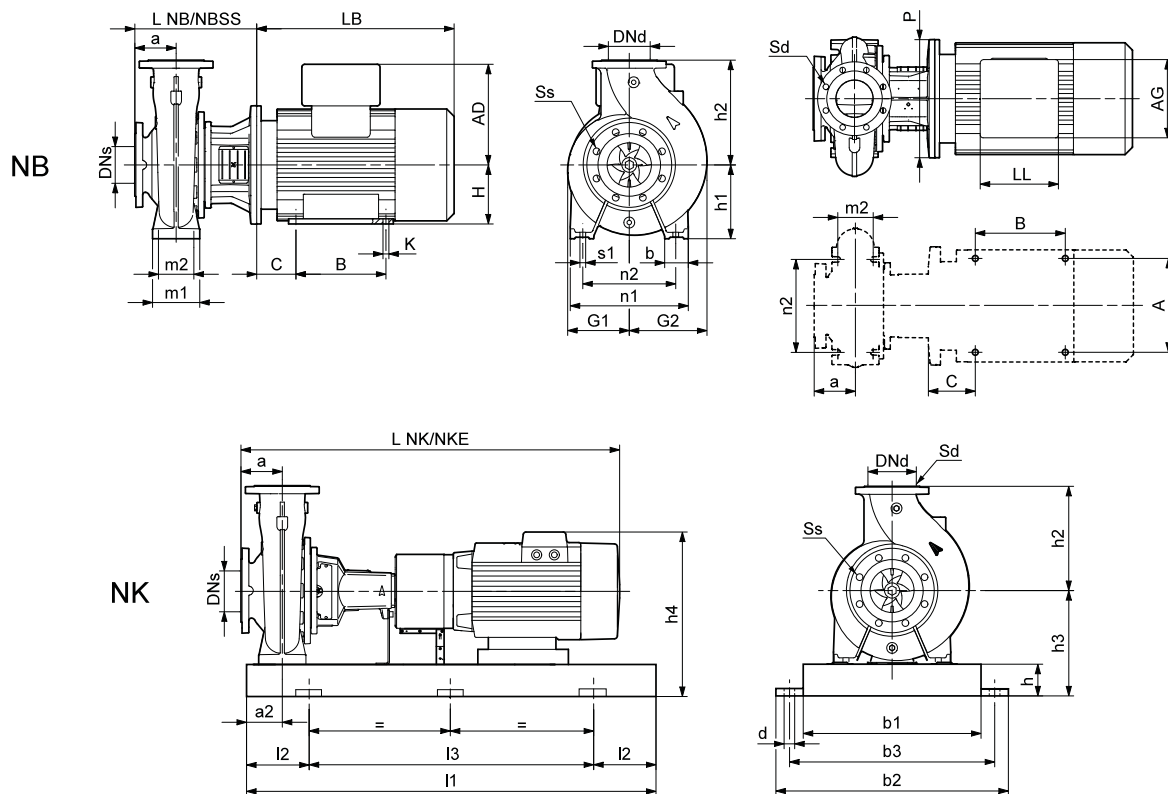
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 150-315.1



TM05 4271 2212



TM03 4182 1806

TM03 4179 1806

Pump type	150-315.1/263 150-315.1/289 150-315.1/320 150-315.1/342					
Motor type	Standard Motor ⁵⁾		Siemens 132M	Siemens 160M	Siemens 160L	Siemens 180L
	E-Motor		-	-	-	-
Common data NB/NK	P2	[kW]	5.5	7.5	11	15
	PN	[bar]	10	10	10	10
	DNs	[mm]	200	200	200	200
	DNd	[mm]	150	150	150	150
	a	[mm]	160	160	160	160
	h2	[mm]	400	400	400	400
	Ss	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
	Sd	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
NK data	L NK ¹⁾	[mm]	1171/1307	1298/1434	1358/1494	1392/1528
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-
	l1	[mm]	1800	1800	1800	1800
	l2	[mm]	300	300	300	300
	l3	[mm]	1200	1200	1200	1200
	b1	[mm]	600	600	600	600
	b2	[mm]	730	730	730	730
	b3	[mm]	670	670	670	670
	d	[mm]	28	28	28	28
	a2	[mm]	110	110	110	110
	h	[mm]	100	100	100	100
	h3	[mm]	385	380	380	380
	h4 ²⁾	[mm]	587/-	617/-	617/-	669/-
	Base frame no. ³⁾		9	9	9	9
NB data	Mounting design ⁴⁾		A	C	C	C
	L NB	[mm]	401	431	431	431
	L NB SS	[mm]	401	431	431	431
	h1	[mm]	280	280	280	280
	G1	[mm]	264	264	264	264
	G2	[mm]	334	334	334	334
	m1	[mm]	200	200	200	200
	m2	[mm]	150	150	150	150
	n1	[mm]	550	550	550	550
	n2	[mm]	450	450	450	450
	b	[mm]	100	100	100	100
	s1	[mm]	M20	M20	M20	M20
	H	[mm]	-	160	160	180
	LB ²⁾	[mm]	435/-	494/-	554/-	588/-
	AD ²⁾	[mm]	202/-	237/-	237/-	286/-
	AG ²⁾	[mm]	155/-	175/-	175/-	189/-
	LL ²⁾	[mm]	130/-	145/-	145/-	164/-
	P	[mm]	300	350	350	350
	C	[mm]	-	254	254	279
	B	[mm]	-	210	254	241
	A	[mm]	-	108	108	121
	K	[mm]	-	15	15	15
Weight data	Weight NK. CI ¹⁾	[kg]	485/482	509/514	541/536	697/590
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	263	315	342	382
	Weight NBE. CI	[kg]	-	-	-	-
	Weight diff. SS	[kg]	4	3	3	3

1) Pump with standard coupling / pump with spacer coupling.

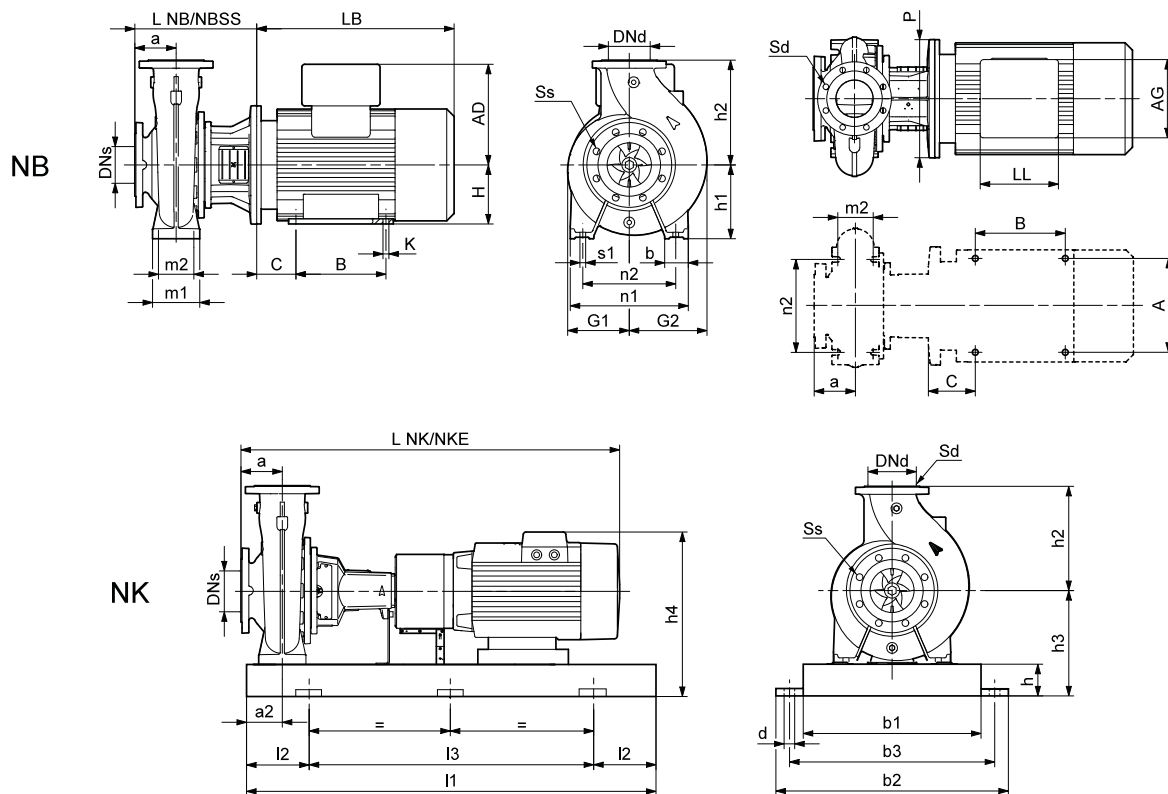
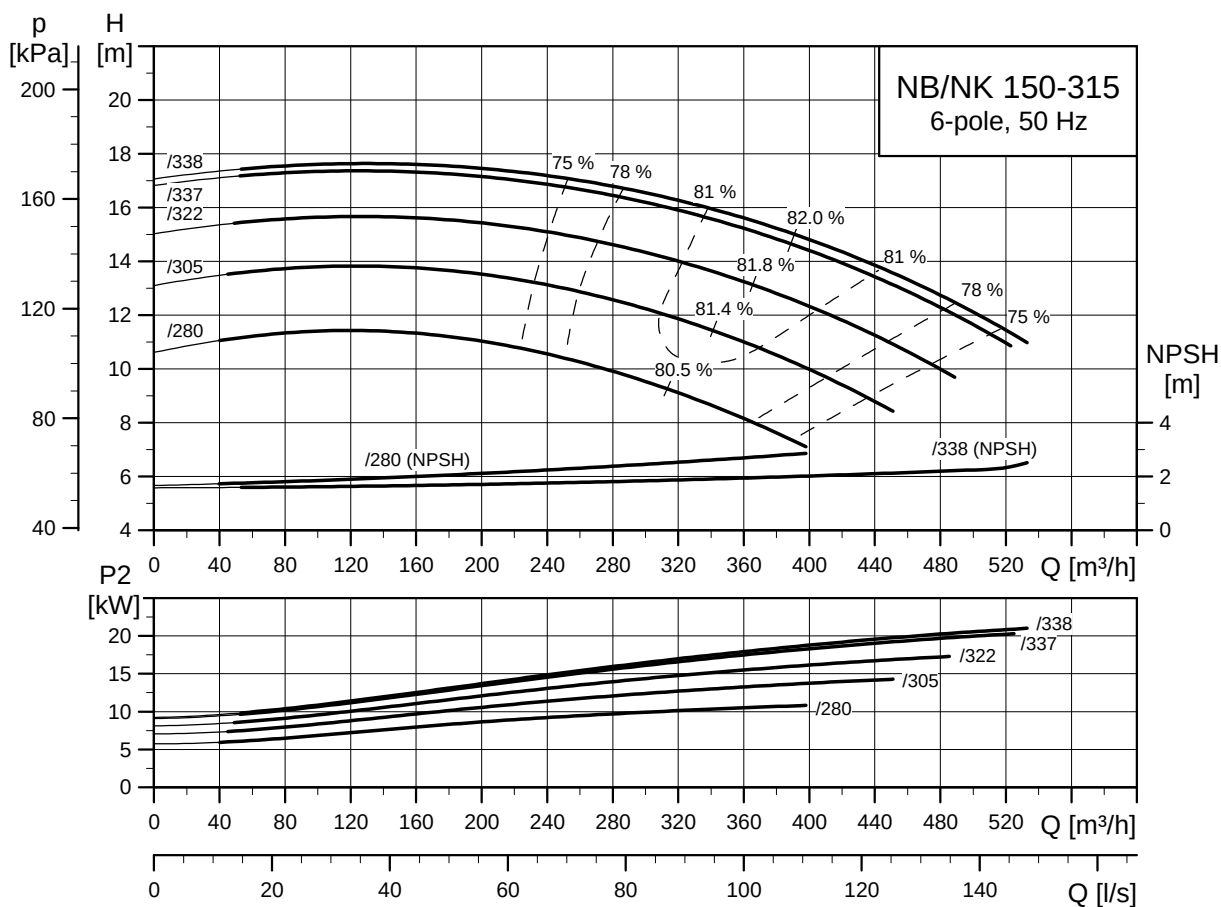
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 150-315



TM03 5171 4312

TM03 4182 1806

TM03 4179 1806

Pump type			150-315/280	150-315/305	150-315/322	150-315/337	150-315/338
Motor type	Standard Motor ⁵⁾		Siemens 160L	Siemens 180L	Siemens 200L	Siemens 200L	Siemens 225M
	E-Motor		-	-	-	-	-
Common data NB/NK	P2	[kW]	11	15	18.5	22	30
	PN	[bar]	10	10	10	10	10
	DNs	[mm]	200	200	200	200	200
	DNd	[mm]	150	150	150	150	150
	a	[mm]	160	160	160	160	160
	h2	[mm]	400	400	400	400	400
	Ss	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
	Sd	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
NK data	L NK ¹⁾	[mm]	1358/1494	1392/1528	1415/1551	1440/1576	1542/1678
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-	-/-
	l1	[mm]	1800	1800	1800	1800	1800
	l2	[mm]	300	300	300	300	300
	l3	[mm]	1200	1200	1200	1200	1200
	b1	[mm]	600	600	600	600	600
	b2	[mm]	730	730	730	730	730
	b3	[mm]	670	670	670	670	670
	d	[mm]	28	28	28	28	28
	a2	[mm]	110	110	110	110	110
	h	[mm]	100	100	100	100	100
	h3	[mm]	380	383	380	380	380
	h4 ²⁾	[mm]	617/-	669/-	695/-	695/-	718/-
Base frame no. ³⁾		9	9	9	9	9	
NB data	Mounting design ⁴⁾		C	C	C	C	C
	L NB	[mm]	431	431	431	431	461
	L NB SS	[mm]	431	431	431	431	461
	h1	[mm]	280	280	280	280	280
	G1	[mm]	264	264	264	264	264
	G2	[mm]	334	334	334	334	334
	m1	[mm]	200	200	200	200	200
	m2	[mm]	150	150	150	150	150
	n1	[mm]	550	550	550	550	550
	n2	[mm]	450	450	450	450	450
	b	[mm]	100	100	100	100	100
	s1	[mm]	M20	M20	M20	M20	M20
	H	[mm]	160	180	200	200	225
	LB ²⁾	[mm]	554/-	588/-	611/-	636/-	708/-
	AD ²⁾	[mm]	237/-	286/-	315/-	315/-	338/-
	AG ²⁾	[mm]	175/-	189/-	265/-	265/-	266/-
	LL ²⁾	[mm]	145/-	164/-	197/-	197/-	197/-
	P	[mm]	350	350	400	400	450
	C	[mm]	254	279	318	318	356
	B	[mm]	254	241	305	305	286
	A	[mm]	108	121	133	133	149
	K	[mm]	15	15	19	19	19
Weight data	Weight NK. CI ¹⁾	[kg]	539/534	595/588	640/635	665/660	780/775
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	340	380	439	456	572
	Weight NBE. CI	[kg]	-	-	-	-	-
	Weight diff. SS	[kg]	3	3	3	3	3

1) Pump with standard coupling / pump with spacer coupling.

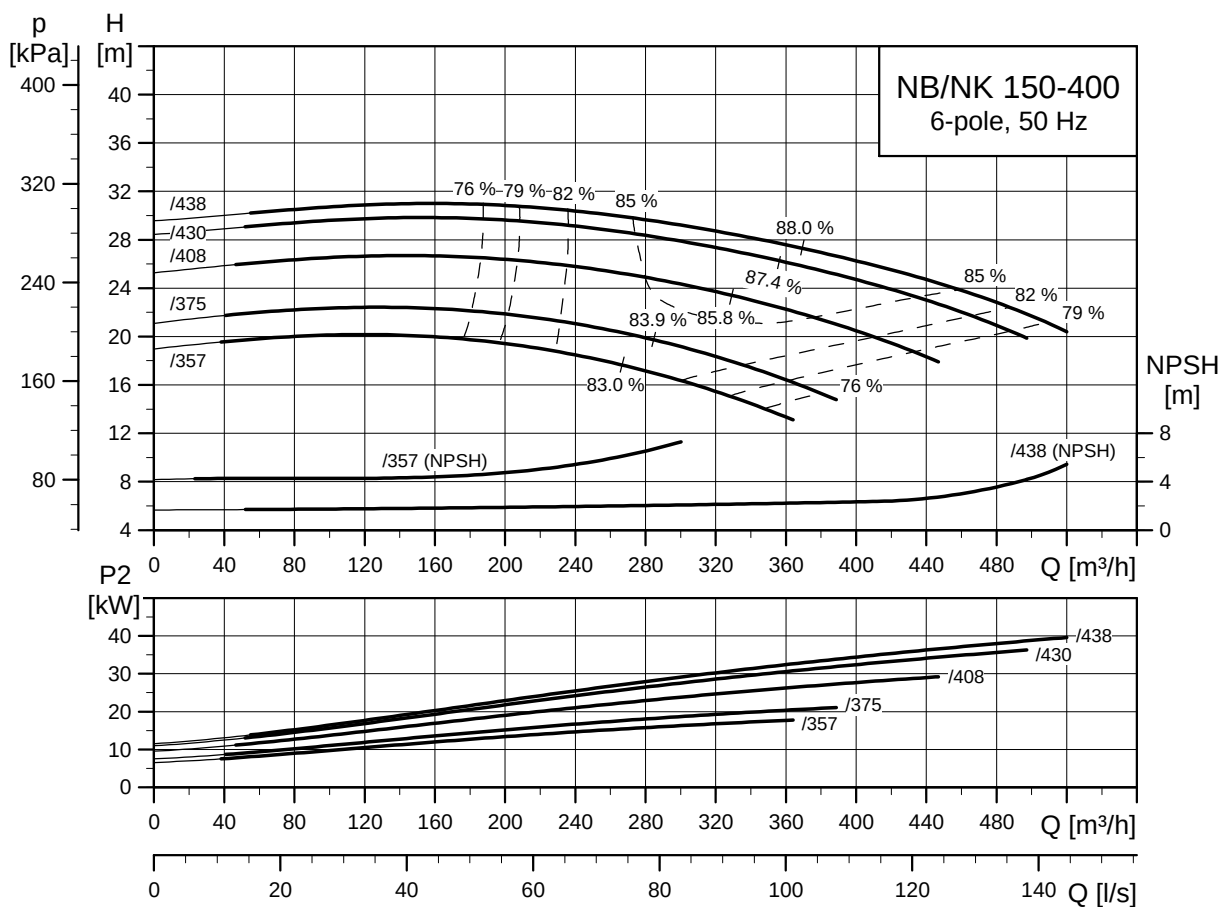
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

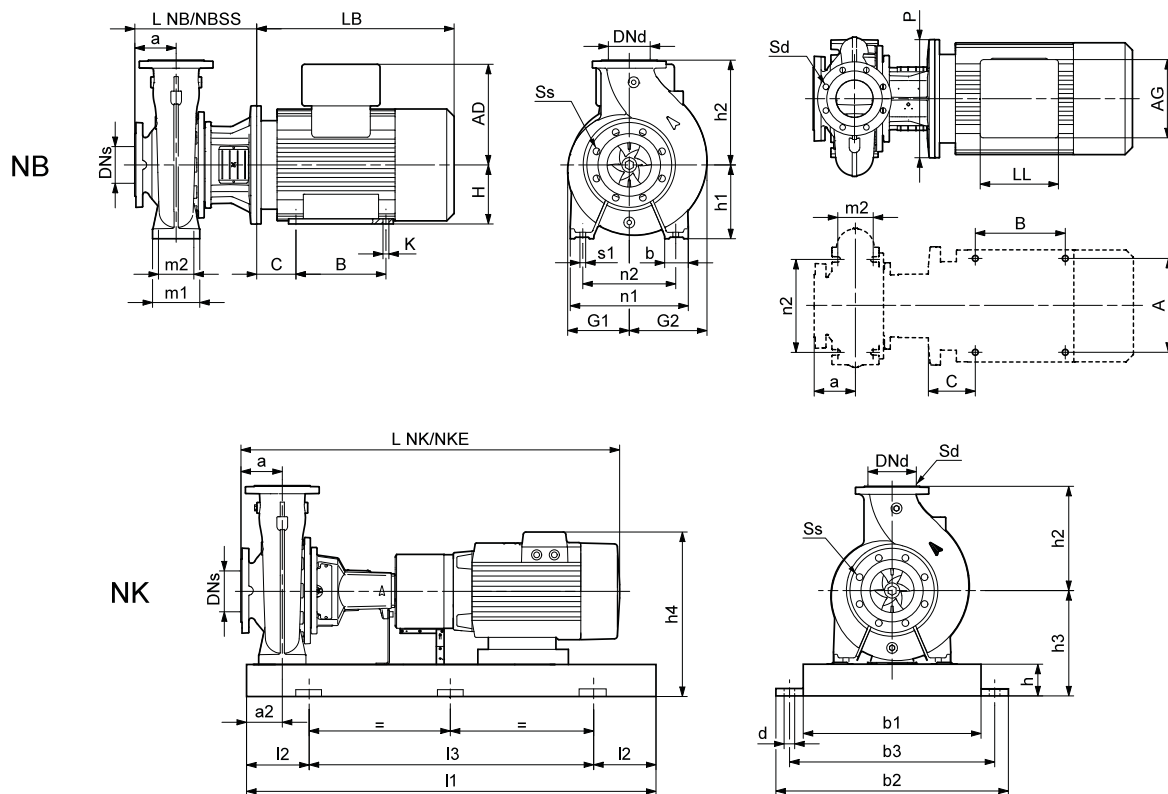
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 150-400



TM03 5172 4312



TM03 4182 1806

TM03 4179 1806

Pump type			150-400/357	150-400/375	150-400/408	150-400/430	150-400/438
Motor type	Standard Motor ⁵⁾		Siemens 200L	Siemens 200L	Siemens 225M	Siemens 250M	Siemens 280S
	E-Motor		-	-	-	-	-
Common data NB/NK	P2	[kW]	18.5	22	30	37	45
	PN	[bar]	10	10	10	10	10
	DNs	[mm]	200	200	200	200	200
	DNd	[mm]	150	150	150	150	150
	a	[mm]	160	160	160	160	160
	h2	[mm]	450	450	450	450	450
	Ss	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
	Sd	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
NK data	L NK ¹⁾	[mm]	1415/1551	1440/1576	1542/1678	1581/1717	1654/1790
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-	-/-
	l1	[mm]	1800	1800	1800	1800	2000
	l2	[mm]	300	300	300	300	330
	l3	[mm]	1200	1200	1200	1200	1340
	b1	[mm]	600	600	600	600	750
	b2	[mm]	730	730	730	730	890
	b3	[mm]	670	670	670	670	830
	d	[mm]	28	28	28	28	28
	a2	[mm]	110	110	110	110	110
	h	[mm]	100	100	100	100	130
	h3	[mm]	415	415	415	415	445
	h4 ²⁾	[mm]	730/-	730/-	753/-	825/-	878/-
	Base frame no. ³⁾		9	9	9	9	10
NB data	Mounting design ⁴⁾		C	C	C	C	C
	L NB	[mm]	444	444	474	474	474
	L NB SS	[mm]	444	444	474	474	474
	h1	[mm]	315	315	315	315	315
	G1	[mm]	291	291	291	291	291
	G2	[mm]	339	339	339	339	339
	m1	[mm]	200	200	200	200	200
	m2	[mm]	150	150	150	150	150
	n1	[mm]	550	550	550	550	550
	n2	[mm]	450	450	450	450	450
	b	[mm]	100	100	100	100	100
	s1	[mm]	M20	M20	M20	M20	M20
	H	[mm]	200	200	225	250	280
	LB ²⁾	[mm]	611/-	636/-	708/-	747/-	820/-
	AD ²⁾	[mm]	315/-	315/-	338/-	410/-	433/-
	AG ²⁾	[mm]	265/-	265/-	266/-	319/-	319/-
	LL ²⁾	[mm]	197/-	197/-	197/-	233/-	233/-
	P	[mm]	400	400	450	550	550
	C	[mm]	318	318	356	406	457
	B	[mm]	305	305	286	349	368
	A	[mm]	133	133	149	168	190
	K	[mm]	19	19	19	24	24
Weight data	Weight NK. CI ¹⁾	[kg]	684/679	709/704	809/805	940/939	1162/1156
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	499	516	632	735	840
	Weight NBE. CI	[kg]	-	-	-	-	-
	Weight diff. SS	[kg]	5	5	5	5	5

1) Pump with standard coupling / pump with spacer coupling.

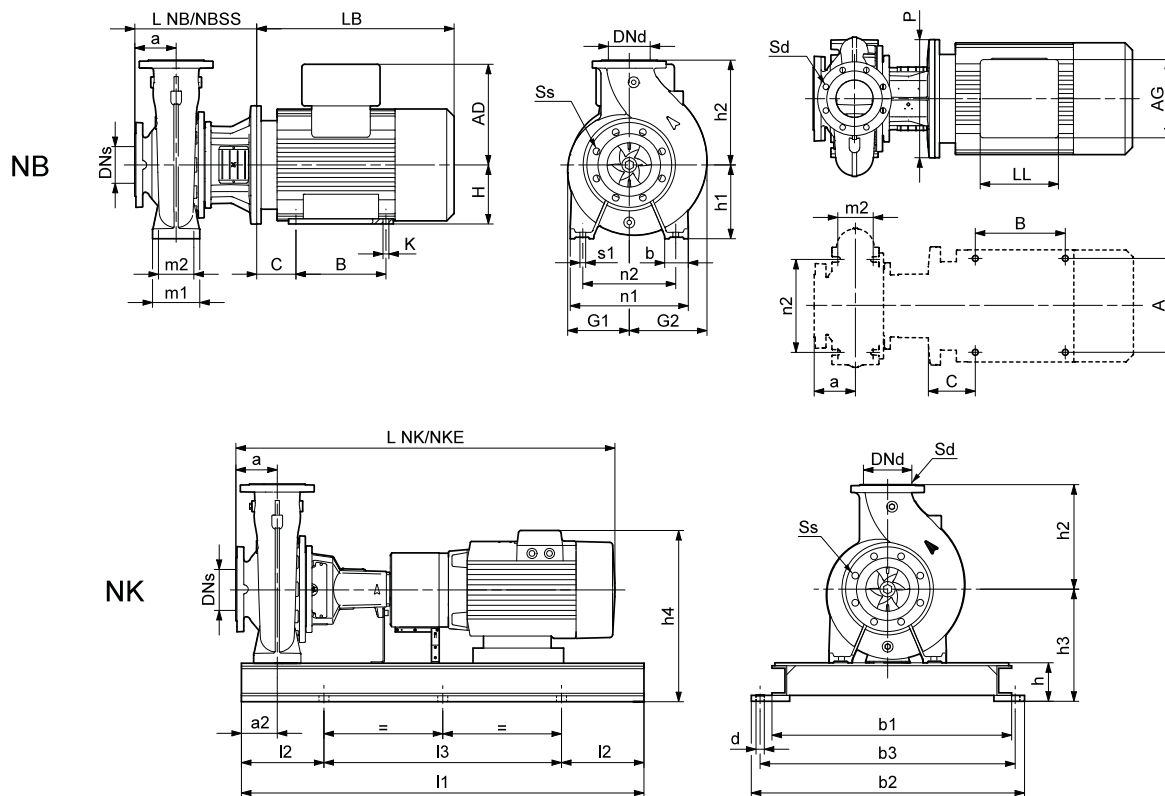
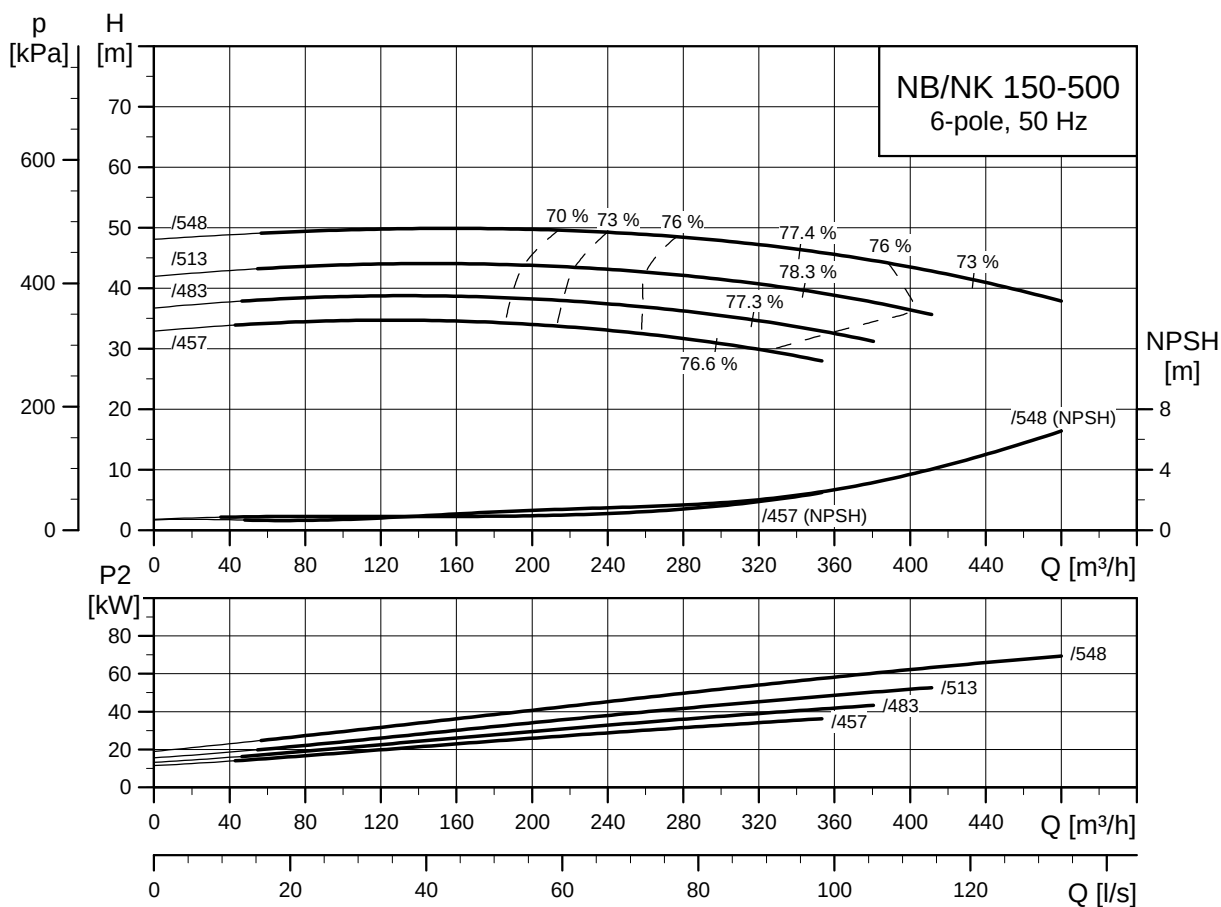
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 150-500



TM03 5173 4312

TM03 4182 1806

TM03 4051 1806

Pump type			150-500/457	150-500/483	150-500/513	150-500/548
Motor type	Standard Motor ⁵⁾		Siemens 250M	Siemens 280S	Siemens 280M	Siemens 315S
	E-Motor		-	-	-	-
Common data NB/NK	P2	[kW]	37	45	55	75
	PN	[bar]	10	10	10	10
	DNs	[mm]	200	200	200	200
	DNd	[mm]	150	150	150	150
	a	[mm]	180	180	180	180
	h2	[mm]	500	500	500	500
	Ss	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
	Sd	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
NK data	L NK ¹⁾	[mm]	1741/1917	1814/1990	1814/1990	1936/2112
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-
	l1	[mm]	2000	2000	2000	2000
	l2	[mm]	330	330	330	330
	l3	[mm]	1340	1340	1340	1340
	b1	[mm]	750	750	750	750
	b2	[mm]	890	890	890	890
	b3	[mm]	830	830	830	830
	d	[mm]	28	28	28	28
	a2	[mm]	110	110	110	110
	h	[mm]	130	130	130	130
	h3	[mm]	530	530	530	530
	h4 ²⁾	[mm]	940/-	963/-	963/-	1045/-
	Base frame no. ³⁾		10	10	10	10
NB data	Mounting design ⁴⁾		C	C	C	C
	L NB	[mm]	524	524	524	554
	L NB SS	[mm]	524	524	524	554
	h1	[mm]	400	400	400	400
	G1	[mm]	353	353	353	353
	G2	[mm]	396	396	396	396
	m1	[mm]	200	200	200	200
	m2	[mm]	150	150	150	150
	n1	[mm]	625	625	625	625
	n2	[mm]	500	500	500	500
	b	[mm]	125	125	125	125
	s1	[mm]	M20	M20	M20	M20
	H	[mm]	250	280	280	315
	LB ²⁾	[mm]	747/-	820/-	820/-	912/-
	AD ²⁾	[mm]	410/-	433/-	433/-	515/-
	AG ²⁾	[mm]	319/-	319/-	319/-	374/-
	LL ²⁾	[mm]	233/-	233/-	233/-	299/-
	P	[mm]	550	550	550	660
	C	[mm]	406	457	457	508
	B	[mm]	349	368	368	406
	A	[mm]	168	190	190	216
	K	[mm]	24	24	24	28
Weight data	Weight NK. CI ¹⁾	[kg]	1292/1289	1440/1436	1496/1492	1707/1702
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	903	1008	1058	1299
	Weight NBE. CI	[kg]	-	-	-	-
	Weight diff. SS	[kg]	12	12	12	12

1) Pump with standard coupling / pump with spacer coupling.

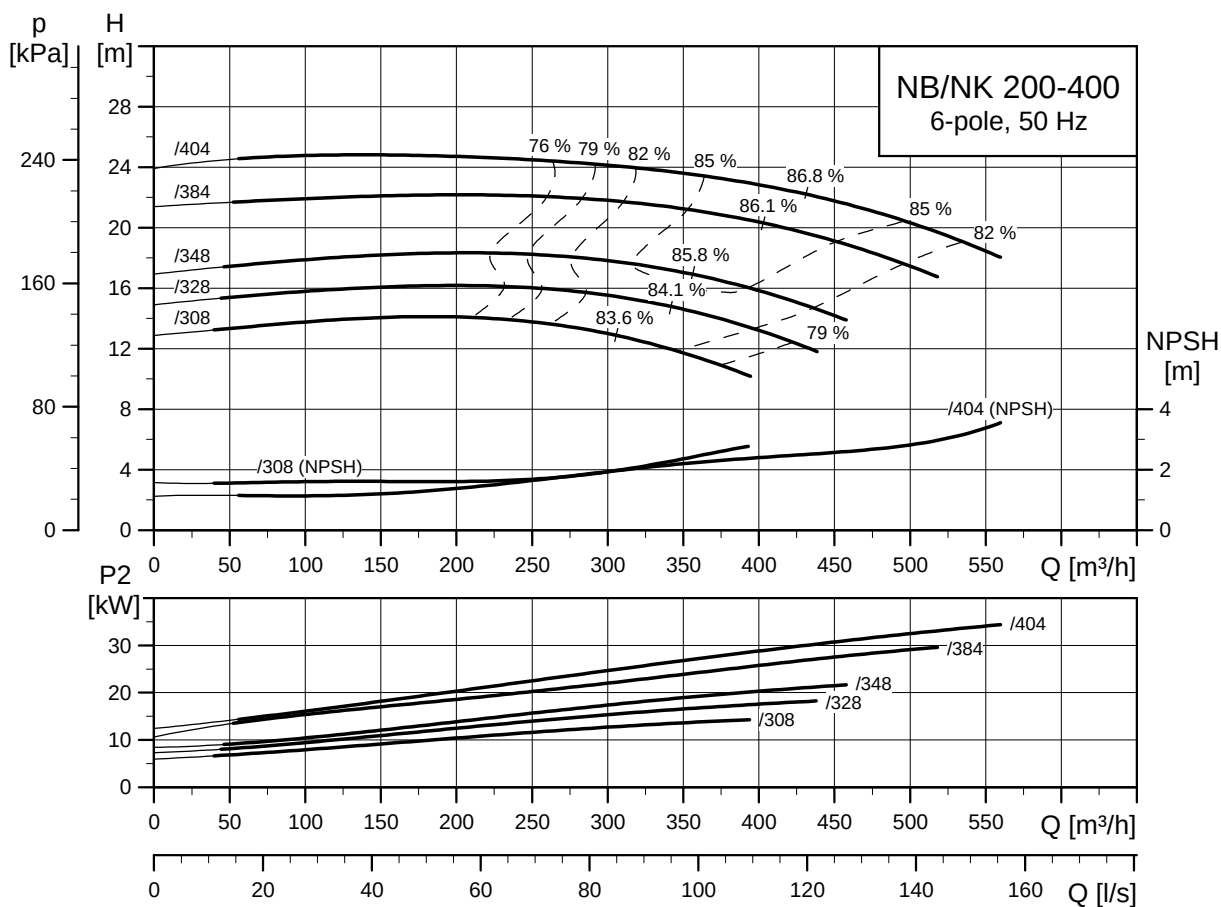
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

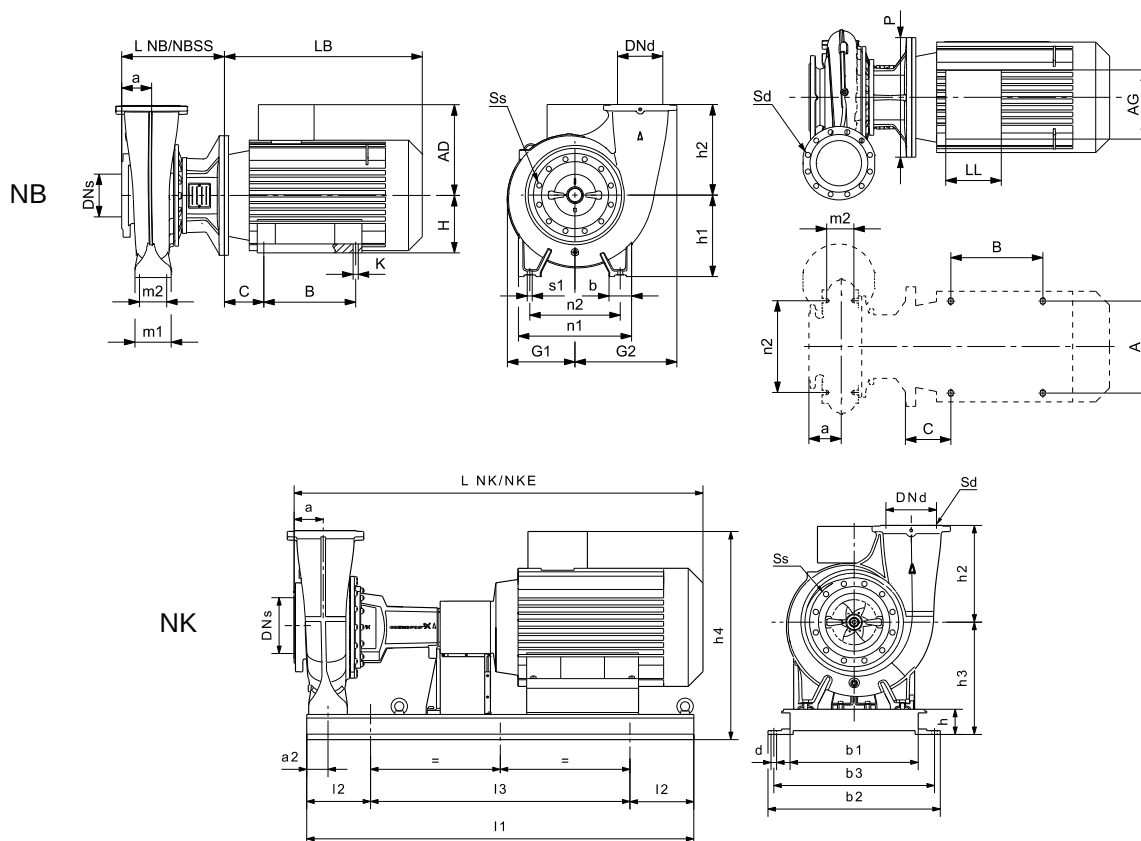
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 200-400



TM04 4936 4312



TM05 1432 2711

TM04 6113 5009

Pump type	200-400/308 200-400/328 200-400/348 200-400/384 200-400/404						
Motor type	Standard Motor ⁵⁾		Siemens 180L	Siemens 200L	Siemens 200L	Siemens 225M	Siemens 250M
	E-Motor		-	-	-	-	-
Common data NB/NK	P2	[kW]	15	18.5	22	30	37
	PN	[bar]	10	10	10	10	10
	DNs	[mm]	250	250	250	250	250
	DNd	[mm]	200	200	200	200	200
	a	[mm]	170	170	170	170	170
	h2	[mm]	400	400	400	400	400
	Ss	[mm]	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23
	Sd	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
NK data	L NK ¹⁾	[mm]	1570/1746	1593/1769	1618/1794	1720/1896	1759/1935
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-	-/-
	l1	[mm]	1690	1690	1690	1690	1690
	l2	[mm]	330	330	330	330	330
	l3	[mm]	1030	1030	1030	1030	1030
	b1	[mm]	730	730	730	730	730
	b2	[mm]	890	890	890	890	890
	b3	[mm]	830	830	830	830	830
	d	[mm]	28	28	28	28	28
	a2	[mm]	110	110	110	110	110
	h	[mm]	130	130	130	130	130
	h3	[mm]	530	530	530	530	530
	h4 ²⁾	[mm]	816/-	845/-	845/-	868/-	940/-
Base frame no. ³⁾		10E	10E	10E	10E	10E	
NB data	Mounting design ⁴⁾		C	C	C	C	C
	L NB	[mm]	482	482	482	512	512
	L NB SS	[mm]	-	-	-	-	-
	h1	[mm]	400	400	400	400	400
	G1	[mm]	331	331	331	331	331
	G2	[mm]	485	485	485	485	485
	m1	[mm]	200	200	200	200	200
	m2	[mm]	150	150	150	150	150
	n1	[mm]	625	625	625	625	625
	n2	[mm]	500	500	500	500	500
	b	[mm]	125	125	125	125	125
	s1	[mm]	M20	M20	M20	M20	M20
	H	[mm]	180	200	200	225	250
	LB ²⁾	[mm]	588/-	611/-	636/-	708/-	747/-
	AD ²⁾	[mm]	286/-	315/-	315/-	338/-	410/-
	AG ²⁾	[mm]	189/-	265/-	265/-	266/-	319/-
	LL ²⁾	[mm]	164/-	197/-	197/-	197/-	233/-
	P	[mm]	350	400	400	450	550
	C	[mm]	279	318	318	356	406
	B	[mm]	241	305	305	286	349
A	[mm]	121	133	133	149	168	
K	[mm]	15	19	19	19	24	
Weight data	Weight NK. CI ¹⁾	[kg]	917/910	963/990	988/1015	1077/1104	1206/1201
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	539	595	612	728	832
	Weight NBE. CI	[kg]	-	-	-	-	-
	Weight diff. SS	[kg]	-	-	-	-	-

1) Pump with standard coupling / pump with spacer coupling.

2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

Performance Curves for NB/NK 200-450 Pumps

Top Graph: Head (H) vs. Flow Rate (Q)

Y-axis: Head (H) [m] (left), Pressure (p) [kPa] (left), NPSH [m] (right).
 X-axis: Flow Rate (Q) [m³/h] (top), [l/s] (bottom).

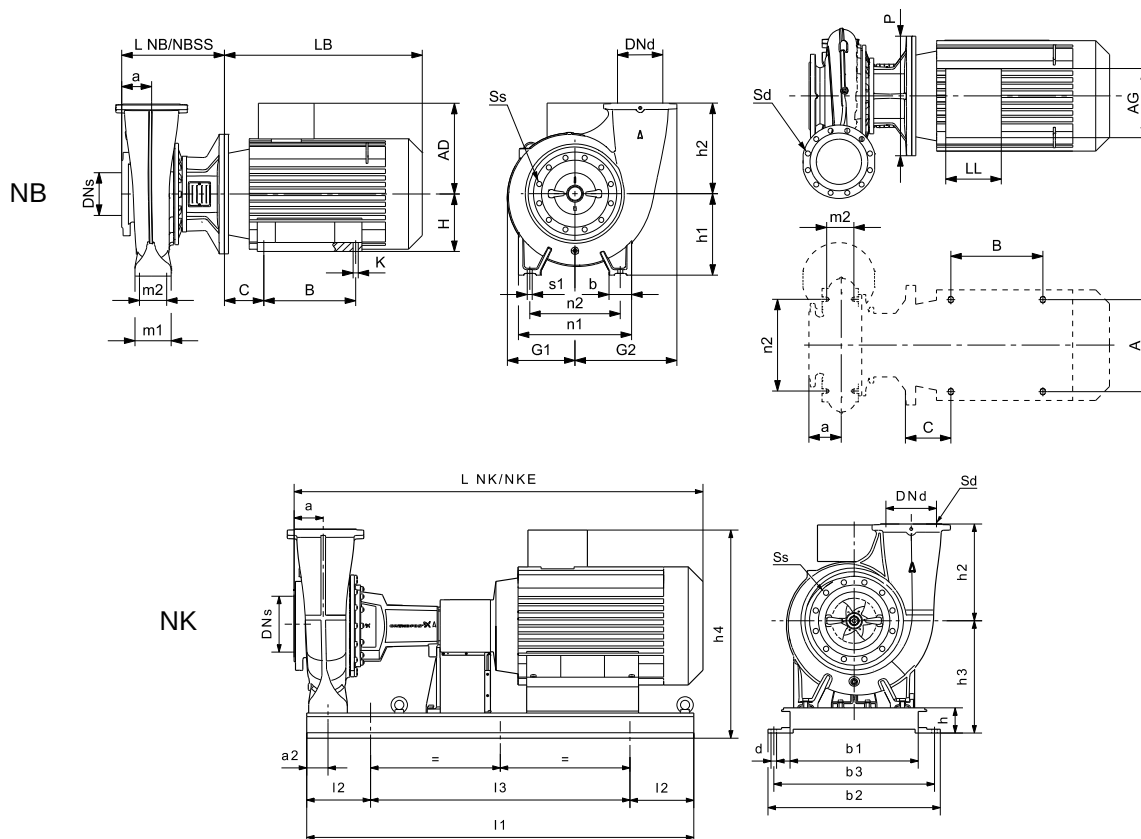
Efficiency Curves (η): 68 %, 74 %, 78 %, 81 %, 82.0 %, 81.9 %, 82.5 %.

NPSH Curves: /451 (NPSH), /431 (NPSH), /407 (NPSH), /371 (NPSH), /355 (NPSH).

Bottom Graph: Power (P2) vs. Flow Rate (Q)

Y-axis: Power (P2) [kW].
 X-axis: Flow Rate (Q) [m³/h] (top), [l/s] (bottom).

Power Curves: /451, /431, /407, /371, /355.



Pump type	200-450/355 200-450/371 200-450/407 200-450/431 200-450/451						
Motor type	Standard Motor ⁵⁾ Siemens 200L Siemens 200L Siemens 225M Siemens 250M Siemens 280S						
	E-Motor		-	-	-	-	-
Common data NB/NK	P2	[kW]	18.5	22	30	37	45
	PN	[bar]	10	10	10	10	10
	DNs	[mm]	250	250	250	250	250
	DNd	[mm]	200	200	200	200	200
	a	[mm]	150	150	150	150	150
	h2	[mm]	450	450	450	450	450
	Ss	[mm]	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23
	Sd	[mm]	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23	8 x Ø23
NK data	L NK ¹⁾	[mm]	1566/1742	1591/1767	1693/1869	1732/1908	1805/1981
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-	-/-
	l1	[mm]	1690	1690	1690	1690	1690
	l2	[mm]	330	330	330	330	330
	l3	[mm]	1030	1030	1030	1030	1030
	b1	[mm]	730	730	730	730	730
	b2	[mm]	890	890	890	890	890
	b3	[mm]	830	830	830	830	830
	d	[mm]	28	28	28	28	28
	a2	[mm]	110	110	110	110	110
	h	[mm]	130	130	130	130	130
	h3	[mm]	530	530	530	530	530
	h4 ²⁾	[mm]	845/-	845/-	868/-	940/-	963/-
	Base frame no. ³⁾		10E	10E	10E	10E	10E
NB data	Mounting design ⁴⁾		C	C	C	C	C
	L NB	[mm]	454	454	484	484	484
	L NB SS	[mm]	-	-	-	-	-
	h1	[mm]	400	400	400	400	400
	G1	[mm]	355	355	355	355	355
	G2	[mm]	525	525	525	525	525
	m1	[mm]	200	200	200	200	200
	m2	[mm]	150	150	150	150	150
	n1	[mm]	625	625	625	625	625
	n2	[mm]	500	500	500	500	500
	b	[mm]	125	125	125	125	125
	s1	[mm]	M20	M20	M20	M20	M20
	H	[mm]	200	200	225	250	280
	LB ²⁾	[mm]	611/-	636/-	708/-	747/-	820/-
	AD ²⁾	[mm]	315/-	315/-	338/-	410/-	433/-
	AG ²⁾	[mm]	265/-	265/-	266/-	319/-	319/-
	LL ²⁾	[mm]	197/-	197/-	197/-	233/-	233/-
	P	[mm]	400	400	450	550	550
	C	[mm]	318	318	356	406	457
	B	[mm]	305	305	286	349	368
	A	[mm]	133	133	149	168	190
K	[mm]	19	19	19	24	24	
Weight data	Weight NK. CI ¹⁾	[kg]	978/1005	1003/1030	1092/1119	1221/1216	1294/1348
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	609	626	742	846	951
	Weight NBE. CI	[kg]	-	-	-	-	-
	Weight diff. SS	[kg]	-	-	-	-	-

1) Pump with standard coupling / pump with spacer coupling.

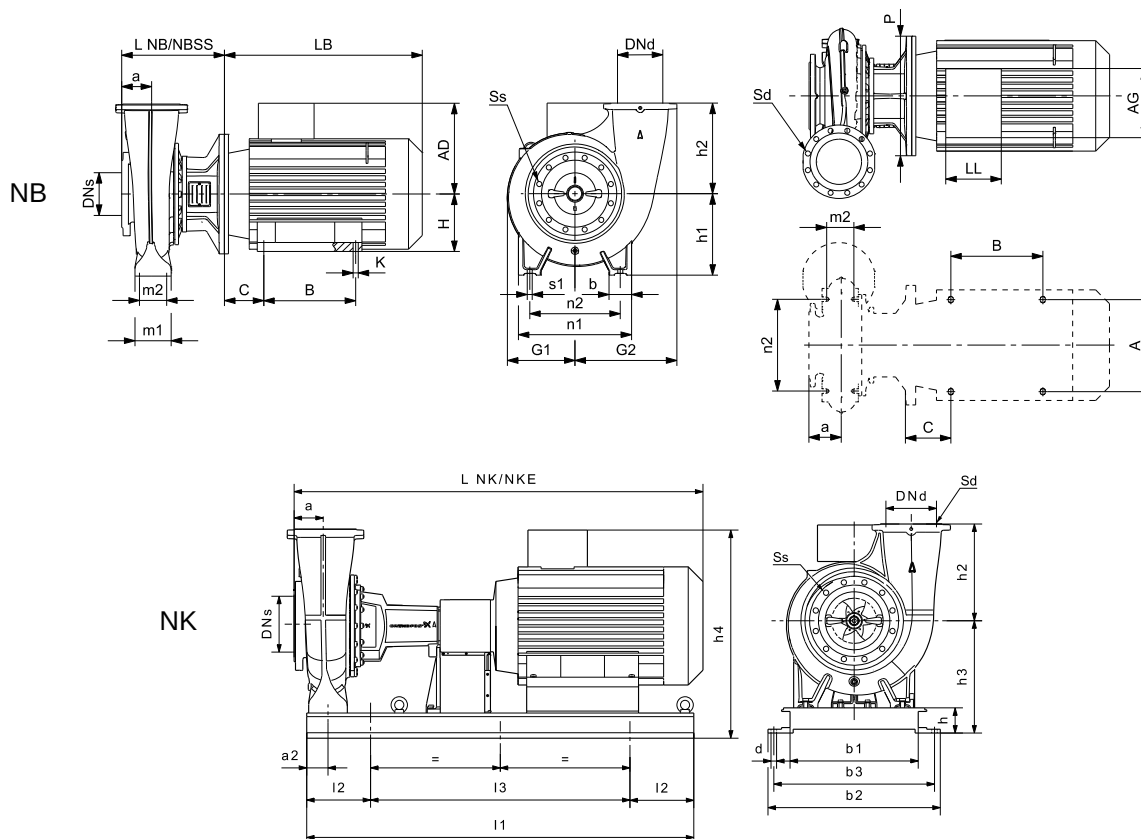
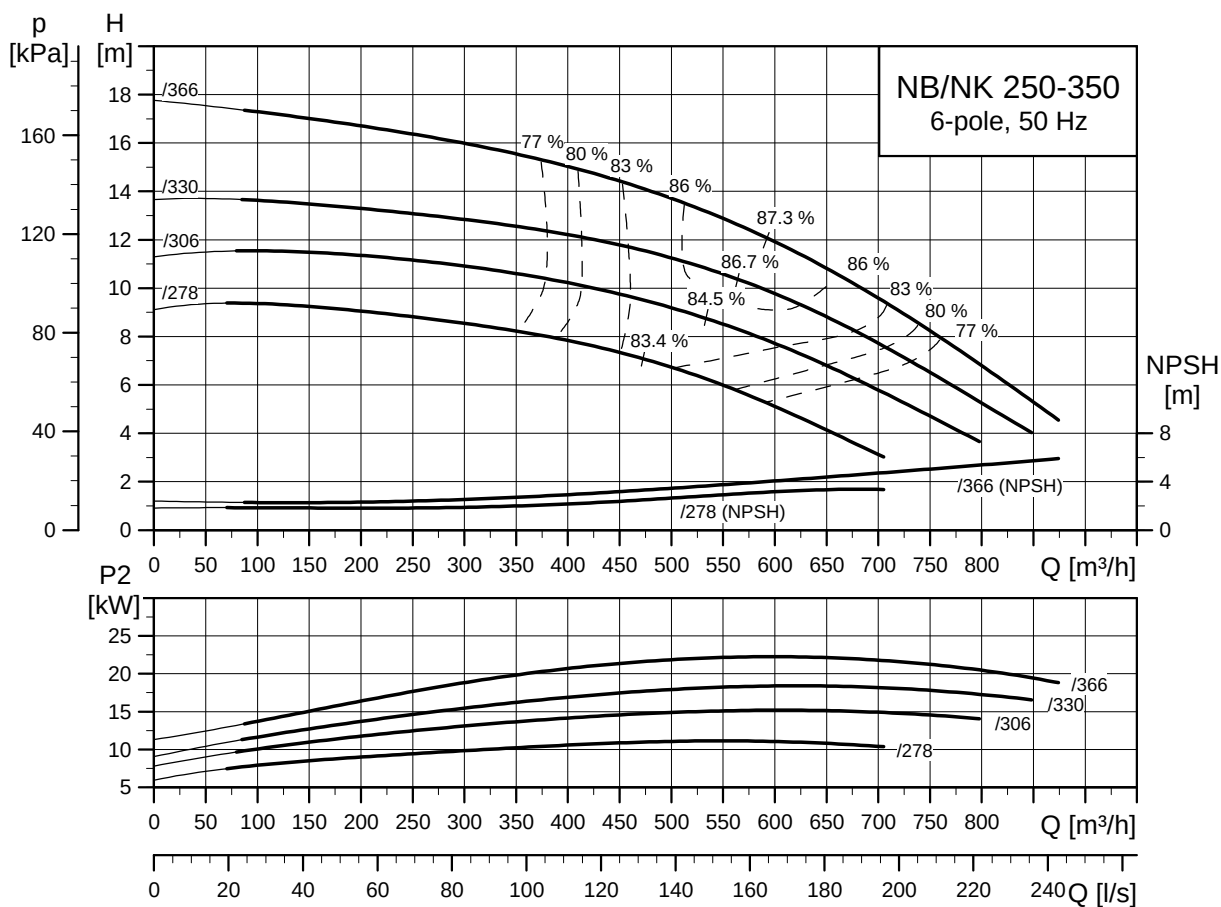
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 250-350



TM04 5998 4312

TM05 1432 2711

TM04 6113 5009

Pump type	250-350/278		250-350/306	250-350/330	250-350/366	
Motor type	Standard Motor ⁵⁾		Siemens 160L	Siemens 180L	Siemens 200L	Siemens 200L
	E-Motor		-	-	-	-
Common data NB/NK	P2	[kW]	11	15	18.5	22
	PN	[bar]	10	10	10	10
	DNs	[mm]	300	300	300	300
	DNd	[mm]	250	250	250	250
	a	[mm]	180	180	180	180
	h2	[mm]	400	400	400	400
	Ss	[mm]	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23
	Sd	[mm]	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23
NK data	L NK ¹⁾	[mm]	1587/1763	1621/1797	1644/1820	1669/1845
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-
	l1	[mm]	1690	1690	1690	1690
	l2	[mm]	330	330	330	330
	l3	[mm]	1030	1030	1030	1030
	b1	[mm]	730	730	730	730
	b2	[mm]	890	890	890	890
	b3	[mm]	830	830	830	830
	d	[mm]	28	28	28	28
	a2	[mm]	110	110	110	110
	h	[mm]	130	130	130	130
	h3	[mm]	580	580	580	580
	h4 ²⁾	[mm]	817/-	866/-	895/-	895/-
	Base frame no. ³⁾		10E	10E	10E	10E
NB data	Mounting design ⁴⁾		C	C	C	C
	L NB	[mm]	536	536	536	536
	L NB SS	[mm]	-	-	-	-
	h1	[mm]	450	450	450	450
	G1	[mm]	379	379	379	379
	G2	[mm]	523	523	523	523
	m1	[mm]	200	200	200	200
	m2	[mm]	150	150	150	150
	n1	[mm]	625	625	625	625
	n2	[mm]	500	500	500	500
	b	[mm]	125	125	125	125
	s1	[mm]	M20	M20	M20	M20
	H	[mm]	160	180	200	200
	LB ²⁾	[mm]	554/-	588/-	611/-	636/-
	AD ²⁾	[mm]	237/-	286/-	315/-	315/-
	AG ²⁾	[mm]	175/-	189/-	265/-	265/-
	LL ²⁾	[mm]	145/-	164/-	197/-	197/-
	P	[mm]	350	350	400	400
	C	[mm]	254	279	318	318
	B	[mm]	254	241	305	305
	A	[mm]	108	121	133	133
	K	[mm]	15	15	19	19
Weight data	Weight NK. CI ¹⁾	[kg]	969/967	1026/1019	1069/1096	1094/1121
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	592	633	689	706
	Weight NBE. CI	[kg]	-	-	-	-
	Weight diff. SS	[kg]	-	-	-	-

1) Pump with standard coupling / pump with spacer coupling.

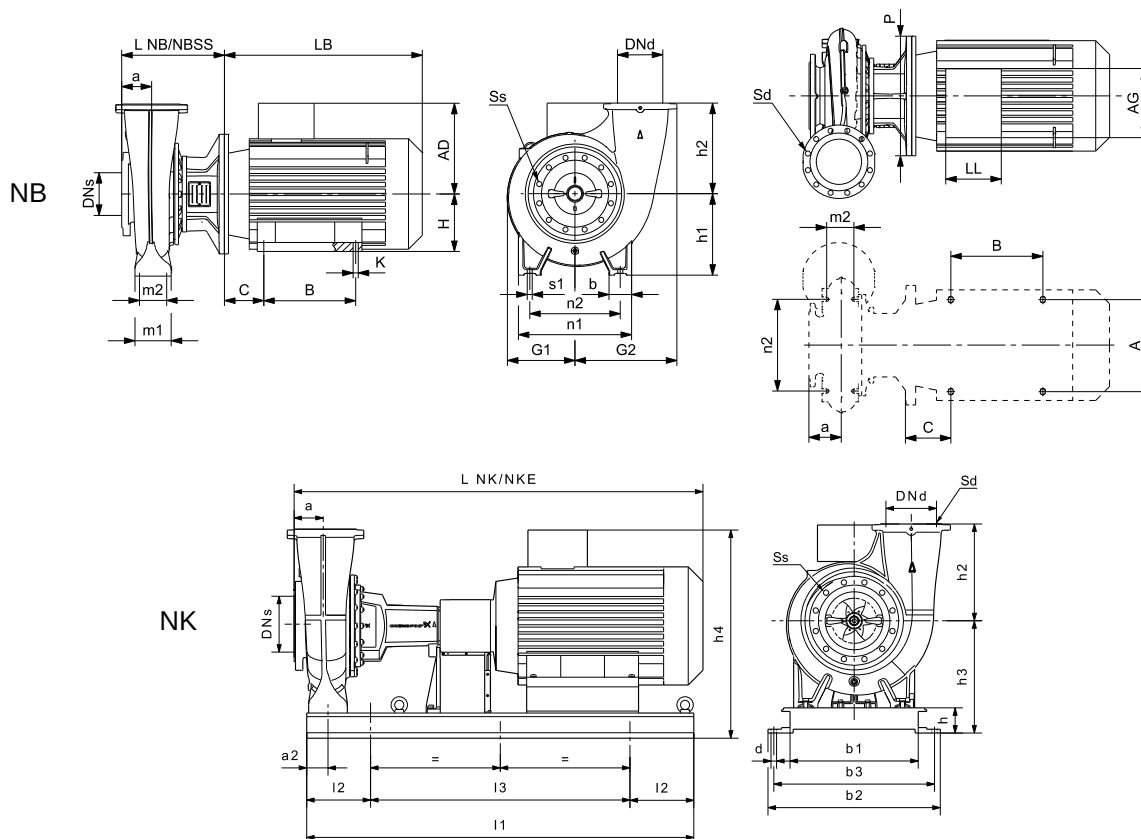
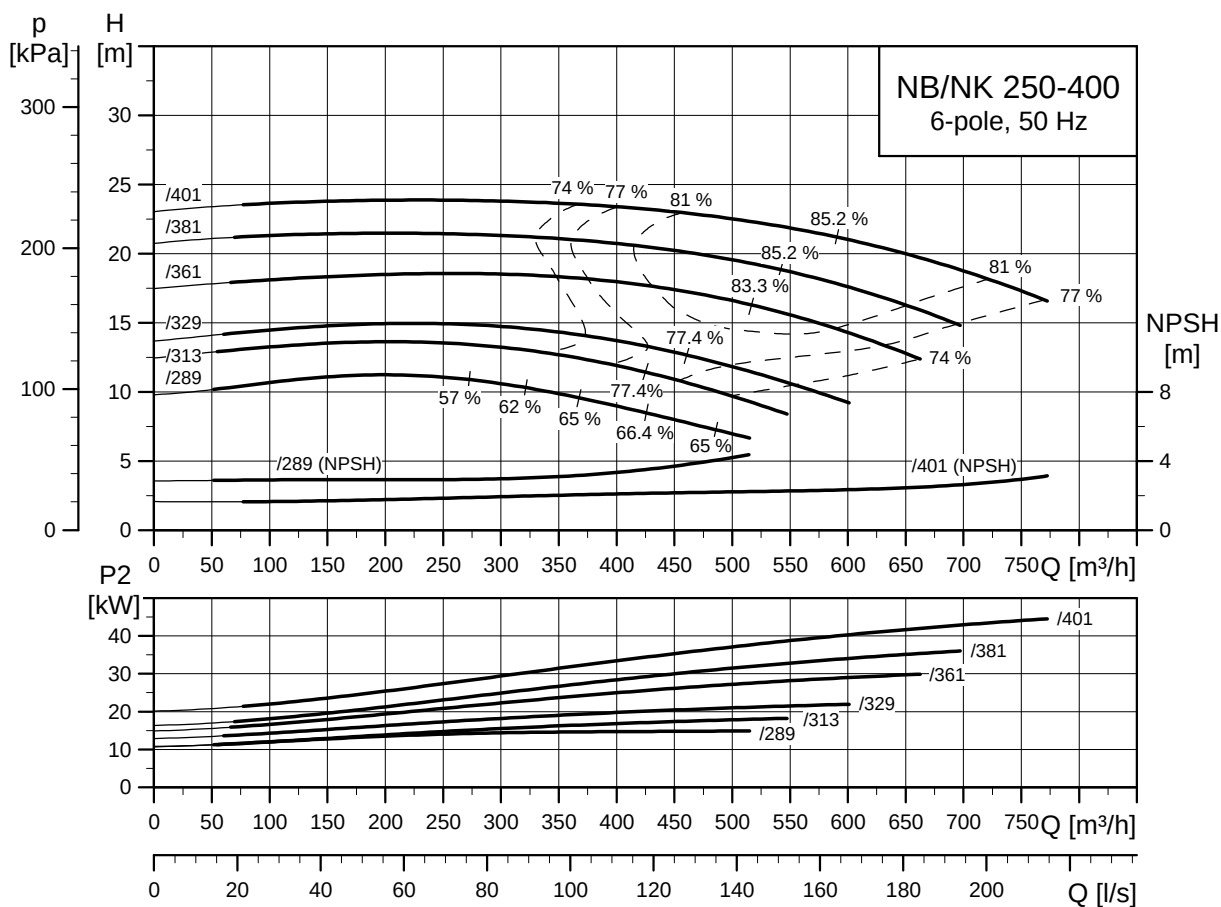
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 250-400



TM04 4023 4312

TM05 1432 2711

TM04 6113 5009

Pump type		250-400/289	250-400/313	250-400/329	250-400/361	250-400/381	250-400/401
Motor type	Standard Motor ⁵⁾	Siemens 180L	Siemens 200L	Siemens 200L	Siemens 225M	Siemens 250M	Siemens 280S
	E-Motor	-	-	-	-	-	-
Common data NB/NK	P2	[kW]	15	18.5	22	30	45
	PN	[bar]	10	10	10	10	10
	DNs	[mm]	300	300	300	300	300
	DNd	[mm]	250	250	250	250	250
	a	[mm]	160	160	160	160	160
	h2	[mm]	500	500	500	500	500
	Ss	[mm]	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23
	Sd	[mm]	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23
NK data	L NK ¹⁾	[mm]	1576/1752	1599/1775	1624/1800	1726/1902	1765/1941
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-	-/-
	l1	[mm]	1690	1690	1690	1690	1880
	l2	[mm]	330	330	330	330	330
	l3	[mm]	1030	1030	1030	1030	1220
	b1	[mm]	730	730	730	730	730
	b2	[mm]	890	890	890	890	890
	b3	[mm]	830	830	830	830	830
	d	[mm]	28	28	28	28	28
	a2	[mm]	110	110	110	110	110
	h	[mm]	130	130	130	130	130
	h3	[mm]	580	580	580	580	580
	h4 ²⁾	[mm]	866/-	895/-	895/-	918/-	990/-
	Base frame no. ³⁾		10E	10E	10E	10E	10F
NB data	Mounting design ⁴⁾		C	C	C	C	C
	L NB	[mm]	488	488	488	518	518
	L NB SS	[mm]	-	-	-	-	-
	h1	[mm]	450	450	450	450	450
	G1	[mm]	350	350	350	350	350
	G2	[mm]	498	498	498	498	498
	m1	[mm]	200	200	200	200	200
	m2	[mm]	150	150	150	150	150
	n1	[mm]	625	625	625	625	625
	n2	[mm]	500	500	500	500	500
	b	[mm]	125	125	125	125	125
	s1	[mm]	M20	M20	M20	M20	M20
	H	[mm]	180	200	200	225	250
	LB ²⁾	[mm]	588/-	611/-	636/-	708/-	747/-
	AD ²⁾	[mm]	286/-	315/-	315/-	338/-	410/-
	AG ²⁾	[mm]	189/-	265/-	265/-	266/-	319/-
	LL ²⁾	[mm]	164/-	197/-	197/-	197/-	233/-
	P	[mm]	350	400	400	450	550
	C	[mm]	279	318	318	356	406
	B	[mm]	241	305	305	286	349
	A	[mm]	121	133	133	149	168
	K	[mm]	15	19	19	19	24
Weight data	Weight NK. CI ¹⁾	[kg]	977/970	1020/1047	1045/1072	1136/1163	1259/1254
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	585	641	658	774	878
	Weight NBE. CI	[kg]	-	-	-	-	-
	Weight diff. SS	[kg]	-	-	-	-	-

1) Pump with standard coupling / pump with spacer coupling.

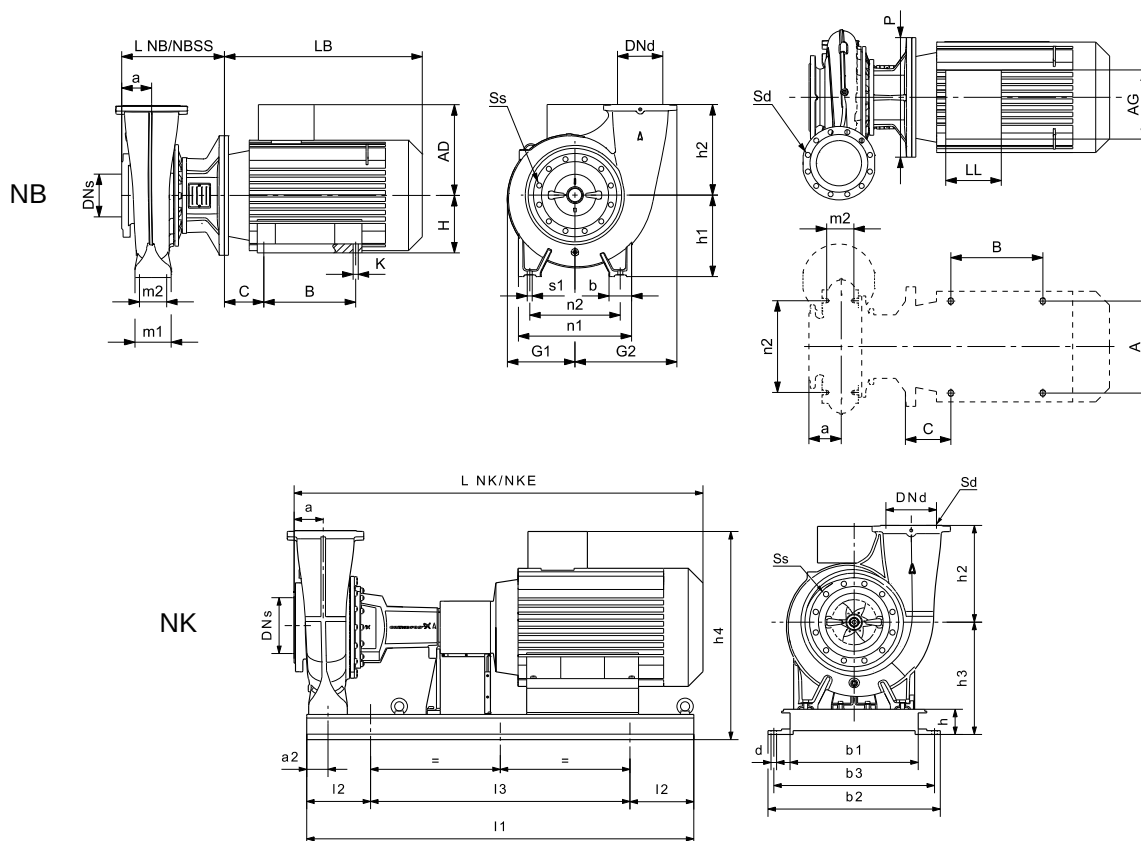
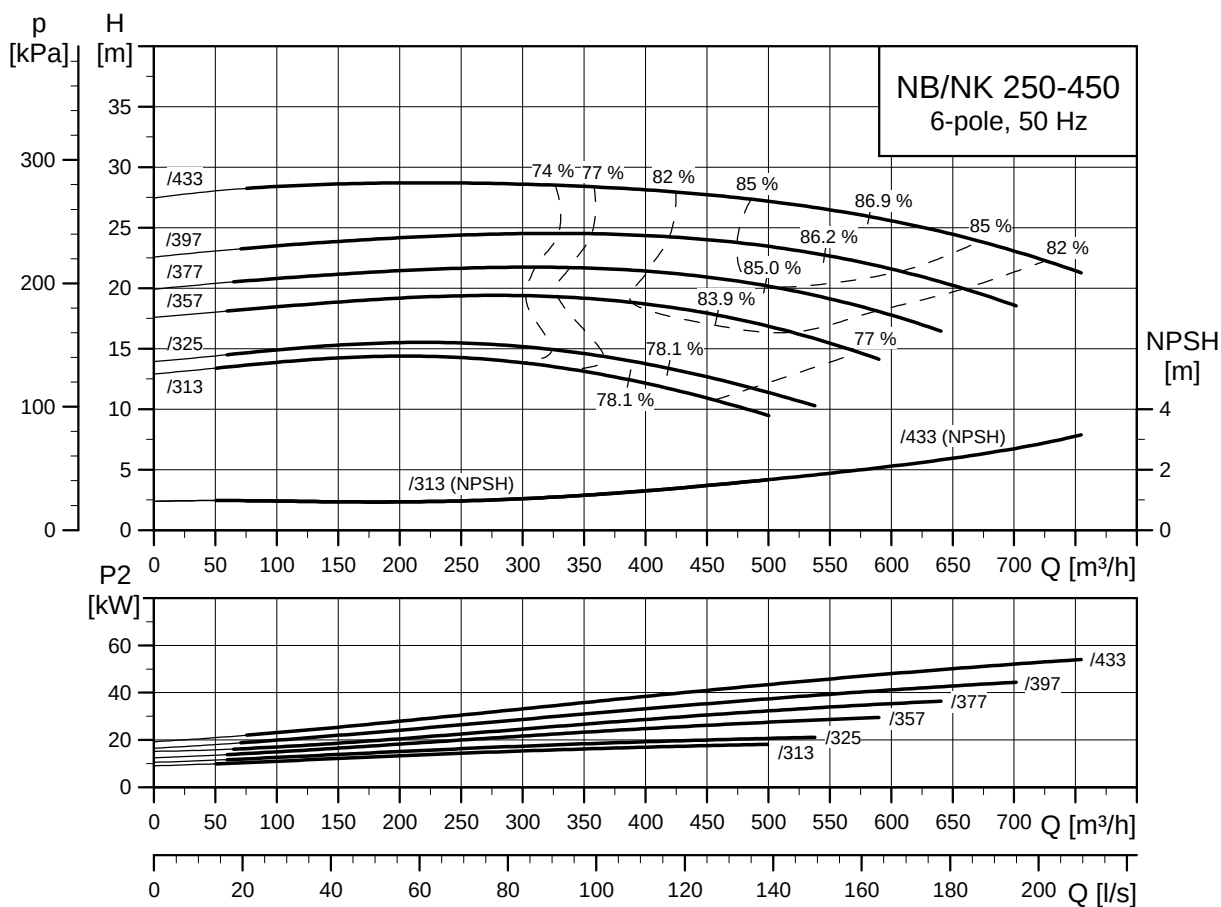
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 250-450



TM04 4940 4312

TM05 1432 2711

TM04 6113 5009

Pump type			250-450/313	250-450/325	250-450/357	250-450/377	250-450/397	250-450/433
Motor type	Standard Motor ⁵⁾		Siemens 200L	Siemens 200L	Siemens 225M	Siemens 250M	Siemens 280S	Siemens 280M
	E-Motor		-	-	-	-	-	-
Common data NB/NK	P2	[kW]	18.5	22	30	37	45	55
	PN	[bar]	10	10	10	10	10	10
	DNs	[mm]	300	300	300	300	300	300
	DNd	[mm]	250	250	250	250	250	250
	a	[mm]	165	165	165	165	165	165
	h2	[mm]	500	500	500	500	500	500
	Ss	[mm]	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23
	Sd	[mm]	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23
NK data	L NK ¹⁾	[mm]	1594/1770	1619/1795	1721/1897	1760/1936	1833/2009	1723/1899
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-	-/-	-/-
	l1	[mm]	1690	1690	1690	1690	1880	1880
	l2	[mm]	330	330	330	330	330	330
	l3	[mm]	1030	1030	1030	1030	1220	1220
	b1	[mm]	730	730	730	730	730	730
	b2	[mm]	890	890	890	890	890	890
	b3	[mm]	830	830	830	830	830	830
	d	[mm]	28	28	28	28	28	28
	a2	[mm]	110	110	110	110	110	110
	h	[mm]	130	130	130	130	130	130
	h3	[mm]	580	580	580	580	580	580
	h4 ²⁾	[mm]	895/-	895/-	918/-	990/-	1013/-	1013/-
	Base frame no. ³⁾		10E	10E	10E	10E	10F	10F
NB data	Mounting design ⁴⁾		C	C	C	C	C	C
	L NB	[mm]	491	491	521	521	521	521
	L NB SS	[mm]	-	-	-	-	-	-
	h1	[mm]	450	450	450	450	450	450
	G1	[mm]	374	374	374	374	374	374
	G2	[mm]	563	563	563	563	563	563
	m1	[mm]	200	200	200	200	200	200
	m2	[mm]	150	150	150	150	150	150
	n1	[mm]	625	625	625	625	625	625
	n2	[mm]	500	500	500	500	500	500
	b	[mm]	125	125	125	125	125	125
	s1	[mm]	M20	M20	M20	M20	M20	M20
	H	[mm]	200	200	225	250	280	280
	LB ²⁾	[mm]	611/-	636/-	708/-	747/-	820/-	820/-
	AD ²⁾	[mm]	315/-	315/-	338/-	410/-	433/-	433/-
	AG ²⁾	[mm]	265/-	265/-	266/-	319/-	319/-	319/-
	LL ²⁾	[mm]	197/-	197/-	197/-	233/-	233/-	233/-
	P	[mm]	400	400	450	550	550	550
	C	[mm]	318	318	356	406	457	457
	B	[mm]	305	305	286	349	368	368
	A	[mm]	133	133	149	168	190	190
	K	[mm]	19	19	19	24	24	24
Weight data	Weight NK. CI ¹⁾	[kg]	1098/1128	1123/1153	1214/1241	1301/1328	1444/1468	1499/1523
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	676	693	810	914	1019	1069
	Weight NBE. CI	[kg]	-	-	-	-	-	-
	Weight diff. SS	[kg]	-	-	-	-	-	-

1) Pump with standard coupling / pump with spacer coupling.

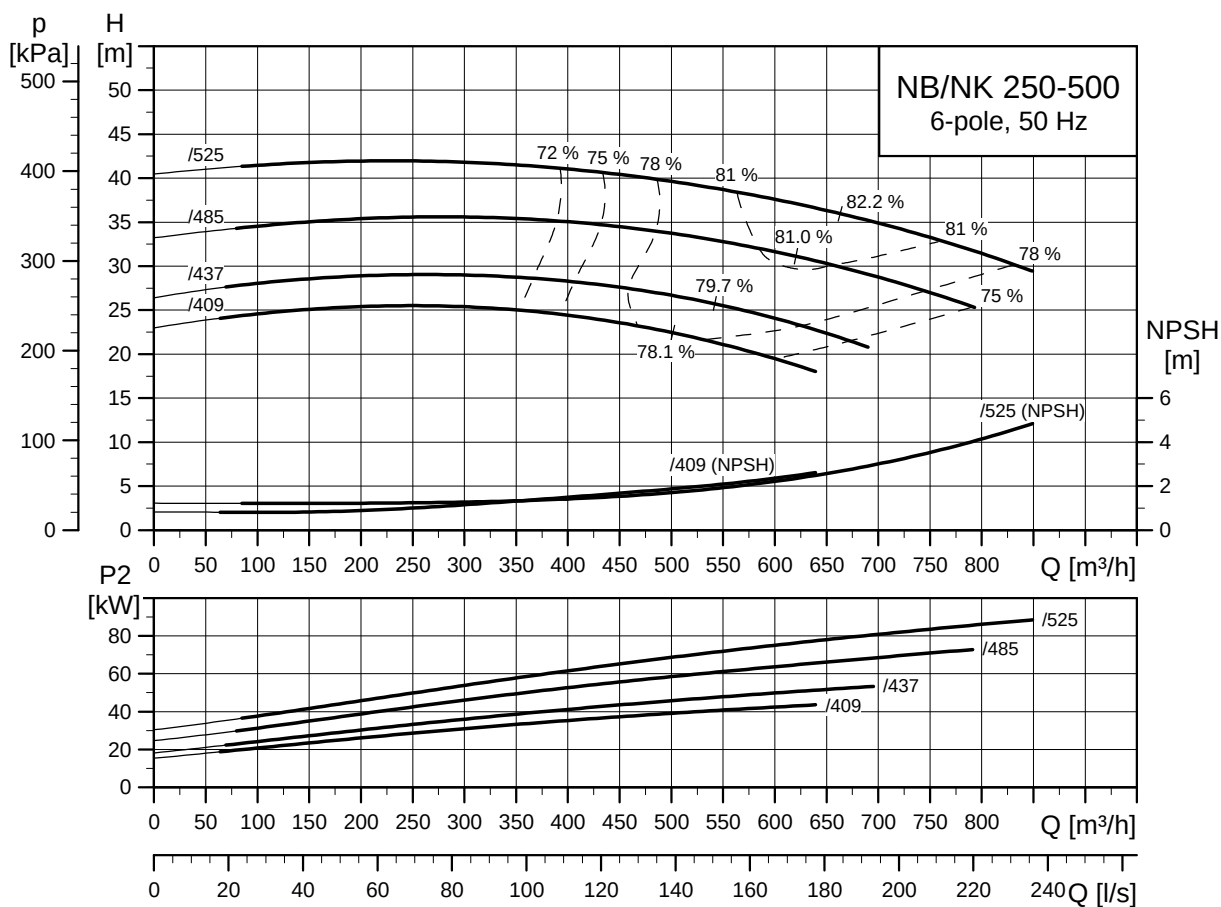
2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

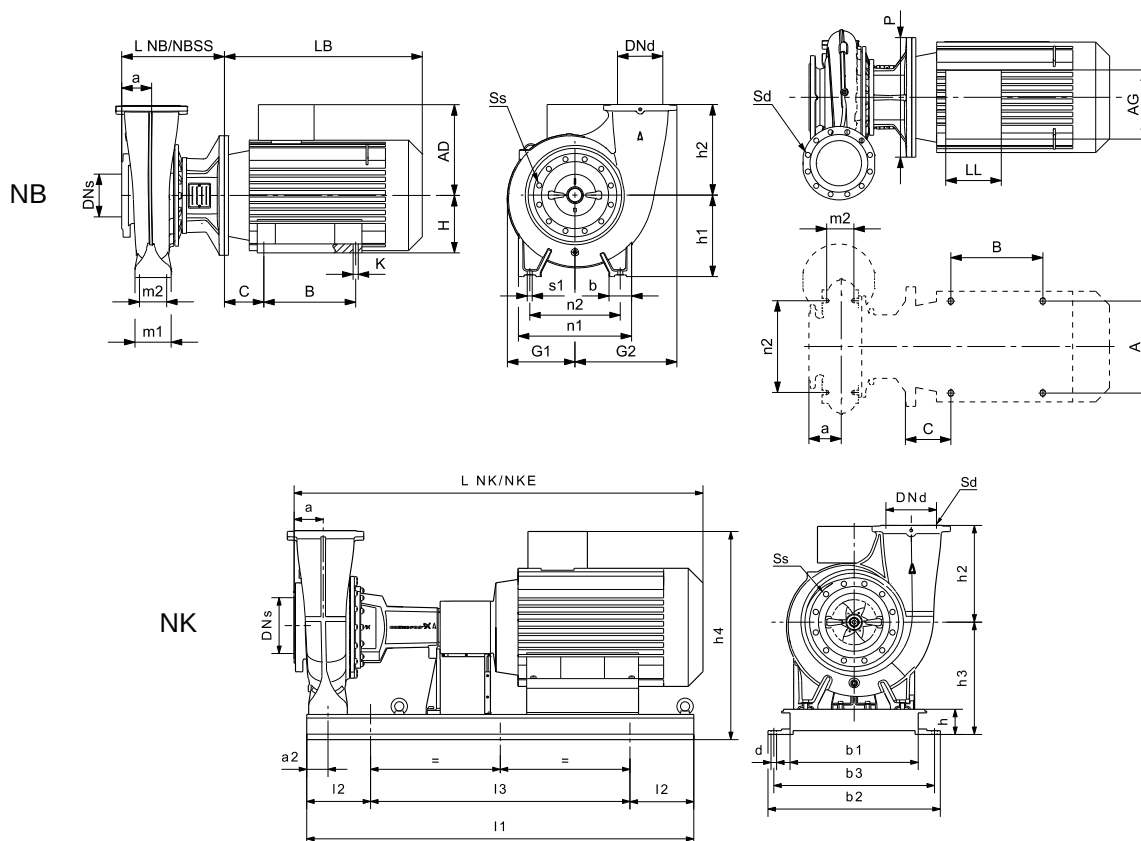
4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

NB, NK 250-500



TM04 6002 4312



TM05 1432 2711

TM04 6113 5009

Pump type			250-500/409	250-500/437	250-500/485	250-500/525
Motor type	Standard Motor ⁵⁾		Siemens 280S	Siemens 280M	Siemens 315S	Siemens 315M
	E-Motor		-	-	-	-
Common data NB/NK	P2	[kW]	45	55	75	90
	PN	[bar]	10	10	10	10
	DNs	[mm]	300	300	300	300
	DNd	[mm]	250	250	250	250
	a	[mm]	165	165	165	165
	h2	[mm]	500	500	500	500
	Ss	[mm]	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23
	Sd	[mm]	12 x Ø23	12 x Ø23	12 x Ø23	12 x Ø23
NK data	L NK ¹⁾	[mm]	1838/2014	1728/1904	1960/2136	2125/2301
	L NKE ¹⁾	[mm]	-/-	-/-	-/-	-/-
	l1	[mm]	1690	1880	1880	1880
	l2	[mm]	330	330	330	330
	l3	[mm]	1030	1220	1220	1220
	b1	[mm]	730	730	730	730
	b2	[mm]	890	890	890	890
	b3	[mm]	830	830	830	830
	d	[mm]	28	28	28	28
	a2	[mm]	110	110	110	110
	h	[mm]	130	130	130	130
	h3	[mm]	580	580	580	580
	h4 ²⁾	[mm]	1013/-	1013/-	1100/-	1100/-
	Base frame no. ³⁾		10E	10F	10F	10F
NB data	Mounting design ⁴⁾		C	C	C	C
	L NB	[mm]	549	549	578	578
	L NB SS	[mm]	-	-	-	-
	h1	[mm]	450	450	450	450
	G1	[mm]	441	441	441	441
	G2	[mm]	598	598	598	598
	m1	[mm]	200	200	200	200
	m2	[mm]	150	150	150	150
	n1	[mm]	725	725	725	725
	n2	[mm]	600	600	600	600
	b	[mm]	125	125	125	125
	s1	[mm]	M20	M20	M20	M20
	H	[mm]	280	280	315	315
	LB ²⁾	[mm]	820/-	820/-	912/-	1077/-
	AD ²⁾	[mm]	433/-	433/-	515/-	515/-
	AG ²⁾	[mm]	319/-	319/-	374/-	374/-
	LL ²⁾	[mm]	233/-	233/-	299/-	299/-
	P	[mm]	550	550	660	660
	C	[mm]	457	457	508	508
	B	[mm]	368	368	406	457
	A	[mm]	190	190	216	216
	K	[mm]	24	24	28	28
Weight data	Weight NK. CI ¹⁾	[kg]	1526/1581	1612/1636	1839/1863	1984/2008
	Weight NKE. CI ¹⁾	[kg]	-/-	-/-	-/-	-/-
	Weight NB. CI	[kg]	1131	1181	1423	1563
	Weight NBE. CI	[kg]	-	-	-	-
	Weight diff. SS	[kg]	-	-	-	-

1) Pump with standard coupling / pump with spacer coupling.

2) Pump with standard motor / pump with E-motor (built-in frequency converter).

3) For information about NK base frames, see page 280.

4) For information about mounting designs, see page 35. For support blocks, see page 333.

5) For NB pumps with motor frame sizes as from 225 a base frame is available as an option. See page 285.

17. Minimum efficiency index

Minimum efficiency index (MEI) means the dimensionless scale unit for hydraulic pump efficiency at best efficiency point (BEP), part load (PL) and overload (OL). The Commission Regulation (EU) sets efficiency requirements to $MEI \geq 0.10$ as from 1 January 2013 and $MEI \geq 0.40$ as from 1 January 2015. An indicative benchmark for best-performing water pump available on the market as from 1 January 2013 is determined in the Regulation.

- The benchmark for most efficient water pumps is $MEI \geq 0.70$.
- The efficiency of a pump with a trimmed impeller is usually lower than that of a pump with the full impeller diameter. The trimming of the impeller will adapt the pump to a fixed duty point, leading to reduced energy consumption. The minimum efficiency index (MEI) is based on the full impeller diameter.
- The operation of this water pump with variable duty points may be more efficient and economic when controlled, for example by using a variable-speed drive that matches the pump duty to the system.

Information on benchmark efficiency is available at <http://europump.eu/efficiencycharts>.

2-pole			4-pole			6-pole		
Pump size	NB MEI	NK MEI	Pump size	NB MEI	NK MEI	Pump size	NB MEI	NK MEI
32-125.1/140	0.70	0.70	32-125.1/140	0.70	0.70	100-160/176	0.31	0.28
32-125/142	0.70	0.70	32-125/142	0.70	0.70	100-200/219	0.70	0.65
32-160.1/177	0.70	0.70	32-160.1/177	0.60	0.55	100-250/270	0.62	0.57
32-160/177	0.59	0.52	32-160/173	0.65	0.60	100-315/334	0.70	0.70
32-200.1/207	0.58	0.52	32-200.1/207	0.70	0.70	100-400/438	0.34	0.30
32-200/219	0.62	0.55	32-200/219	0.69	0.64	125-200/226	0.46	0.42
32-250/262	0.70	0.65	32-250/262	0.70	0.70	125-250/269	0.70	0.68
40-125/142	0.70	0.70	40-125/142	0.70	0.70	125-315/338	0.70	0.70
40-160/177	0.70	0.70	40-160/177	0.70	0.70	125-400/438	0.56	0.51
40-200/219	0.65	0.59	40-200/219	0.70	0.70	125-500/548	0.41	0.37
40-250/260	0.70	0.70	40-250/260	0.70	0.70	150-200/224	0.70	0.70
40-315/336	0.16	0.14	40-315/344	0.64	0.60	150-250/286	0.28	0.24
50-125/144	0.70	0.68	50-125/144	0.64	0.60	150-315.1/342	0.70	0.70
50-160/177	0.70	0.70	50-160/177	0.70	0.70	150-315/338	0.60	0.54
50-200/219	0.70	0.70	50-200/219	0.70	0.70	150-400/438	0.70	0.70
50-250/263	0.67	0.61	50-250/263	0.70	0.70	150-500/548	0.25	0.22
50-315/321	0.56	0.50	50-315/344	0.70	0.70	200-400/404	0.70	0.69
65-125/144	0.70	0.70	65-125/144	0.70	0.70	200-450/451	0.45	0.42
65-160/177	0.70	0.70	65-160/177	0.70	0.70	250-350/366	0.70	0.70
65-200/219	0.70	0.70	65-200/219	0.70	0.70	250-400/401	0.41	0.38
65-250/270	0.57	0.51	65-250/270	0.70	0.67	250-450/433	0.69	0.64
65-315/320	0.70	0.65	65-315/320	0.70	0.70	250-500/525	0.48	0.45
80-160/177	0.70	0.70	80-160/177	0.70	0.70			
80-200/222	0.70	0.65	80-200/222	0.70	0.70			
80-250/270	0.70	0.70	80-250/270	0.70	0.70			
80-315/328	0.68	0.62	80-315/334	0.70	0.70			
100-160/176	0.69	0.62	80-400/438	0.44	0.41			
100-200/219	0.68	0.62	100-160/176	0.31	0.28			
100-250/270	0.48	0.42	100-200/219	0.65	0.61			
100-315/322	0.63	0.56	100-250/270	0.42	0.38			
125-200/226	0.53	0.47	100-315/334	0.70	0.70			
125-250/269	0.55	0.49	100-400/438	0.30	0.27			
125-315/317	0.69	0.62	125-200/226	0.32	0.29			
150-200/224	0.70	0.70	125-250/269	0.62	0.57			
150-250/275	0.17	0.15	125-315/338	0.68	0.63			
150-315.1/277	0.70	0.70	125-400/438	0.55	0.50			
			125-500/548	0.31	0.28			
			150-200/224	0.70	0.70			
			150-250/286	0.22	0.18			
			150-315.1/342	0.70	0.65			
			150-315/338	0.53	0.48			
			150-400/438	0.70	0.70			
			150-500/521	0.40	0.37			
			200-400/404	0.58	0.52			
			200-450/455	0.44	0.40			
			250-350/370	0.70	0.70			
			250-400/405	0.50	0.46			
			250-450/445	0.70	0.68			
			250-500/525	0.48	0.45			

18. Base frames

NK base frames

The base frame number is stated for each pump mentioned in section 16. *Performance curves and technical data.*

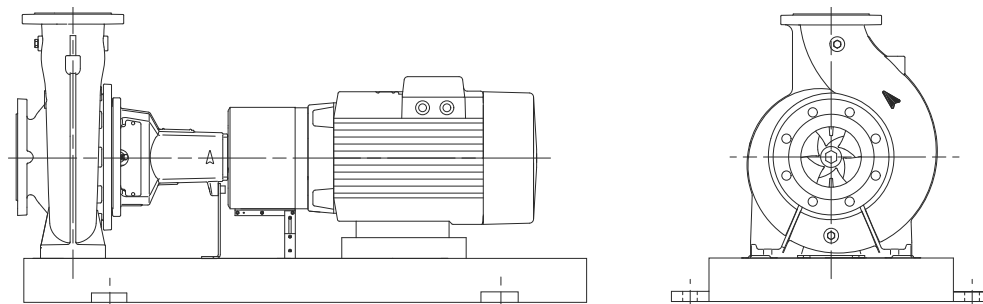


Fig. 56 NK pump with base frame

NK base frame as per motor and coupling

When using another motor than shown in the standard fixed-impeller product range, the base frame number will depend on the actual size of the pump/motor configuration.

The table below shows base frame numbers based on pump type, motor type, motor size and coupling type.

Pump type	Pole	P2 [kW]	Siemens			MMG-E			MMG-G			MMG-H		
			Motor frame size	Base frame number		Motor frame size	Base frame number		Motor frame size	Base frame number		Motor frame size	Base frame number	
				Standard coupling	Spacer coupling		Standard coupling	Spacer coupling		Standard coupling	Spacer coupling		Standard coupling	Spacer coupling
200-400	4	37	225S	10E	10F	225M	10E	10F	225S	10E	10F	225M	10E	10F
		45	225M	10E	10F	225M	10E	10F	225M	10E	10F	225M	10E	10F
		55	250M	10E	10F	250M	10E	10F	250M	10E	10F	250M	10E	10F
		75	280S	10E	10D	280S	10E	10D	280S	10E	10D	280S	10E	10D
		90	280M	10F	10D	280M	10F	10D	280S	10F	10D	280M	10F	10D
		110	315S	10F	10D	315S	10F	10D	280M	10F	10D	315S	10F	10D
		132	315M	10D	10D	315M	10F	10D	315S	10F	10D	315M	10F	10D
	6	15	180L	10E	10E	180L	10E	10E	180L	10E	10E	180L	10E	10E
		18.5	200L	10E	10F	200L	10E	10F	200L	10E	10F	200L	10E	10F
		22	200L	10E	10F	200L	10E	10F	200L	10E	10F	200L	10E	10F
		30	225M	10E	10F	225M	10E	10F	225M	10E	10F	225M	10E	10F
		37	250M	10E	10F	250M	10E	10F	250S	10E	10F	250M	10E	10F
		75	280S	10E	10D	280S	10E	10D	250M	10E	10F	280S	10E	10D
		90	280M	10F	10D	280M	10F	10D	280S	10F	10D	280M	10F	10D
200-450	4	110	315S	10F	10D	315S	10F	10D	280M	10F	10D	315S	10F	10D
		132	315M	10D	10D	315M	10F	10D	315S	10F	10D	315M	10F	10D
		160	315L	10D	10D	315L	10D	10D	315M	10D	10D	315L	10D	10D
		18.5	200L	10E	10F	200L	10E	10F	200L	10E	10F	200L	10E	10F
		22	200L	10E	10F	200L	10E	10F	200L	10E	10F	200L	10E	10F
	6	30	225M	10E	10F	225M	10E	10F	225M	10E	10F	225M	10E	10F
		37	250M	10E	10F	250M	10E	10F	250S	10E	10F	250M	10E	10F
		45	280S	10E	10D	280S	10E	10D	250M	10E	10F	280S	10E	10D

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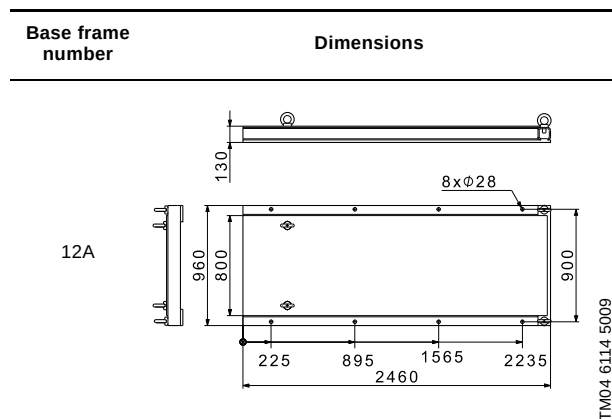
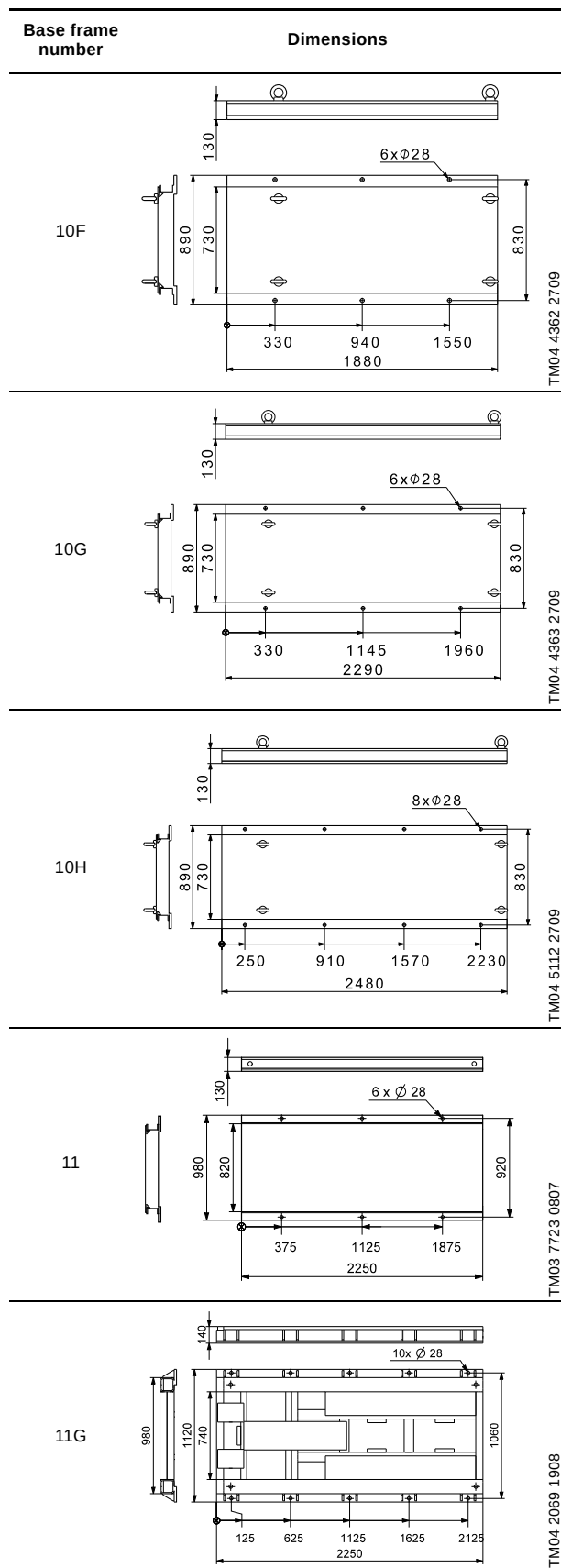
Pump type	Pole	P2 [kW]	Siemens			MMG-E			MMG-G			MMG-H		
			Motor frame size	Base frame number		Motor frame size	Base frame number		Motor frame size	Base frame number		Motor frame size	Base frame number	
				Standard coupling	Spacer coupling		Standard coupling	Spacer coupling		Standard coupling	Spacer coupling		Standard coupling	Spacer coupling
250-350	4	37	225S	10E	10F	225S	10E	10F	225S	10E	10F	225S	10E	10F
		45	225M	10E	10F	225M	10E	10F	225M	10E	10F	225M	10E	10F
		55	250M	10E	10F	250M	10E	10F	250S	10E	10F	250M	10E	10F
		75	280S	10F	10D	280S	10F	10D	250M	10E	10F	280S	10F	10D
		90	280M	10F	10D	280M	10F	10D	280S	10F	10D	280M	10F	10D
	6	11	160L	10E	10E	160L	10E	10E	160L	10E	10E	160L	10E	10E
		15	180L	10E	10E	180L	10E	10E	180L	10E	10E	180L	10E	10E
		18.5	200L	10E	10F	200L	10E	10F	200L	10E	10F	200L	10E	10F
		22	200L	10E	10F	200L	10E	10F	200L	10E	10F	200L	10E	10F
250-400	4	45	225M	10E	10F	225M	10E	10F	225M	10E	10F	225M	10E	10F
		55	250M	10E	10F	250M	10E	10F	250S	10E	10F	250M	10E	10F
		75	280S	10F	10D	280S	10F	10D	250M	10E	10F	280S	10F	10D
		90	280M	10F	10D	280M	10F	10D	280S	10F	10D	280M	10F	10D
		110	315S	10F	10D	315S	10F	10D	280M	10F	10D	315S	10F	10D
	6	132	315M	10F	10D	315M	10F	10D	315S	10F	10D	315M	10F	10D
		160	315L	10F	10D	315L	10D	10D	315M	10F	10D	315L	10D	10D
		15	180L	10E	10E	180L	10E	10E	180L	10E	10E	180L	10E	10E
		18.5	200L	10E	10F	200L	10E	10F	200L	10E	10F	200L	10E	10F
		22	200L	10E	10F	200L	10E	10F	200L	10E	10F	200L	10E	10F
	4	30	225M	10E	10F	225M	10E	10F	225M	10E	10F	225M	10E	10F
		37	250M	10E	10F	250M	10E	10F	250S	10E	10F	250M	10E	10F
		45	280S	10F	10D	280S	10F	10D	250M	10E	10F	280S	10F	10D
		75	280S	10F	10D	280S	10F	10D	250M	10E	10F	280S	10F	10D
		90	280M	10F	10D	280M	10F	10D	280S	10F	10D	280M	10F	10D
250-450	4	110	315S	10F	10D	315S	10F	10D	280M	10F	10D	315S	10F	10D
		132	315M	10F	10D	315M	10F	10D	315S	10F	10D	315M	10F	10D
		160	315L	10F	10D	315L	10D	10D	315M	10F	10D	315L	10D	10D
		200	315L	10F	10D	315L	10D	10D	315M	10F	10D	315L	10D	10D
		18.5	200L	10E	10F	200L	10E	10F	200L	10E	10F	200L	10E	10F
	6	22	200L	10E	10F	200L	10E	10F	200L	10E	10F	200L	10E	10F
		30	225M	10E	10F	225M	10E	10F	225M	10E	10F	225M	10E	10F
		37	250M	10E	10F	250M	10E	10F	250S	10E	10F	250M	10E	10F
		45	280S	10F	10D	280S	10F	10D	250M	10E	10F	280S	10F	10D
		55	280M	10F	10D	280M	10F	10D	280S	10F	10D	280M	10F	10D
250-500	4	160	315	10F	10D	315L	10F	10D	315M	10F	10D	315L	10F	10D
		200	315L	10F	10D	315L	10D	10D	315M	10F	10D	315L	10D	10D
		250	315	10D	10G	355M	10D	10G	315C	10G	10G	355M	10D	10G
		315	315	-	10G	355L	-	10G	315D	-	10H	355L	-	10G
		45	280S	10E	10D	280S	10E	10D	250M	10E	10F	280S	10E	10D
	6	55	280M	10F	10D	280M	10F	10D	280S	10F	10D	280M	10F	10D
		75	315S	10F	10D	315S	10F	10D	280M	10F	10D	315S	10F	10D
		90	315M	10F	10D	315M	10F	10D	315S	10F	10D	315M	10F	10D

NK base frames, dimensional sketches

The base frame number is stated for each pump mentioned in section 16. *Performance curves and technical data.*

Base frame number	Dimensions
2	
3	
4	
5	
6	

Base frame number	Dimensions
7	
8	
9	
10	
10D	
10E	



When not using the standard motor in combination with a tangential outlet pump, see page 280.

NB base frames

Some NB pumps are available with base frame as an option. The pump is mounted on the base frame when produced, and therefore the base frame should be ordered together with the pump.

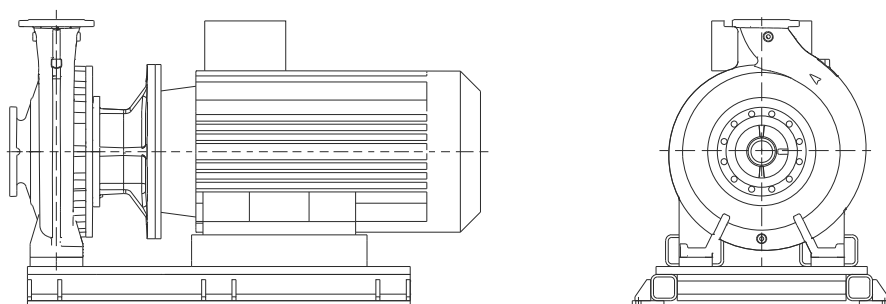


Fig. 57 NB pump with base frame

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NB base frames as per motor

The table below shows the base frame number based on pump type, motor make and motor size.

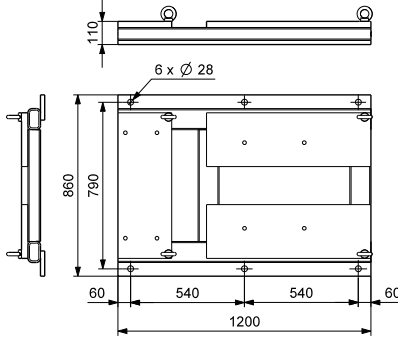
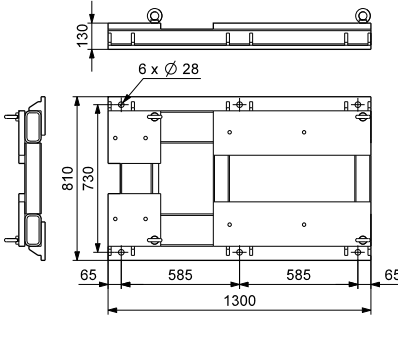
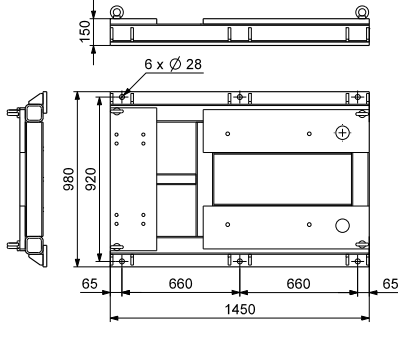
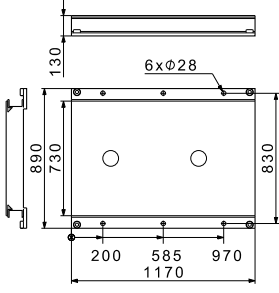
Pump type	Pole	P2 [kW]	Siemens		MMG-E		MMG-G		MMG-H	
			Motor frame size	Base frame number	Motor frame size	Base frame number	Motor frame size	Base frame number	Motor frame size	Base frame number
40-315	2	45	225M	13	225	13	225M	13	225M	13
50-315	2	45	225M	13	225	13	225M	13	225M	13
		55	250M	13	250	13	250S	13	250MA	13
65-250	2	45	225M	13	225	13	225M	13	225M	13
		55	250M	13	250	13	250S	13	250MA	13
		75	280S	14	280	14	250M	13	280SA	14
65-315	2	55	250M	13	250	13	250S	13	250MA	13
		75	280S	14	280	14	250M	13	280SA	14
		90	280M	14	280	14	280S	14	280MA	14
		110	315S	15	315	15	280M	14	315S	15
80-200	2	45	225M	13	225	13	225M	13	225M	13
		55	250M	13	250	13	250S	13	250MA	13
80-250	2	45	225M	13	225	13	225M	13	225M	13
		55	250M	13	250	13	250S	13	250MA	13
		75	280S	14	280	14	250M	13	280SA	14
		90	280M	14	280	14	280S	14	280MA	14
		90	280M	14	280	14	280S	14	280MA	14
80-315	2	110	315S	15	315	15	280M	14	315S	15
		132	315M	15	315	15	315S	15	315M	15
		160	315L	15	315	15	315M	15	315L	15
		37	225S	13	225S	13	225S	13	225S	13
80-400	4	45	225M	13	225M	13	225M	13	225M	13
		45	225M	13	225	13	225M	13	225M	13
100-200	2	55	250M	13	250	13	250S	13	250MA	13
		75	280S	14	280	14	250M	13	280SA	14
		55	250M	13	250	13	250S	13	250MA	13
100-250	2	75	280S	14	280	14	250M	13	280SA	14
		90	280M	14	280	14	280S	14	280MA	14
		110	315S	15	315	15	280M	14	315S	15
		132	315M	15	315	15	315S	15	315M	15
		110	315S	15	315	15	280M	14	315S	15
100-315	2	132	315M	15	315	15	315S	15	315M	15
		160	315L	15	315	15	315M	15	315L	15
		200	315L	15	315	15	315M	15	315L	15
		37	225S	13	225S	13	225S	13	225S	13
100-400	4	45	225M	13	225M	13	225M	13	225M	13
		55	250M	13	250M	13	250S	13	250M	13

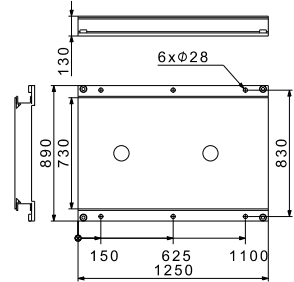
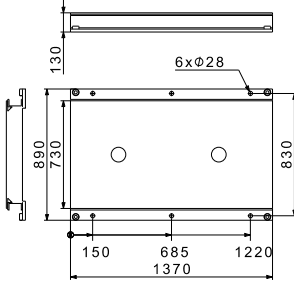
Pump type	Pole	P2 [kW]	Siemens		MMG-E		MMG-G		MMG-H	
			Motor frame size	Base frame number	Motor frame size	Base frame number	Motor frame size	Base frame number	Motor frame size	Base frame number
125-200	2	45	225M	13	225	13	225M	13	225M	13
		55	250M	13	250	13	250S	13	250MA	13
		75	280S	14	280	14	250M	13	280SA	14
		90	280M	14	280	14	280S	14	280MA	14
		110	315S	15	315	15	280M	14	315S	15
125-250	2	90	280M	14	280	14	280S	14	280MA	14
		110	315S	15	315	15	280M	14	315S	15
		132	315M	15	315	15	315S	15	315M	15
		160	315L	15	315	15	315M	15	315L	15
		200	315L	15	315	15	315M	15	315L	15
125-315	2	132	315M	15	315	15	315S	15	315M	15
		160	315L	15	315	15	315M	15	315L	15
	4	200	315L	15	315	15	315M	15	315L	15
		37	225S	13	225S	13	225S	13	225S	13
		45	225M	13	225M	13	225M	13	225M	13
125-400	4	37	225S	13	225S	13	225S	13	225S	13
		45	225M	13	225M	13	225M	13	225M	13
		55	250M	13	250M	13	250S	13	250M	13
		75	280S	14	280S	14	250M	13	280S	14
		90	280M	14	280M	14	280S	14	280MA	14
125-500	6	30	225M	13	225M	13	225M	13	225M	13
		55	250M	13	250M	13	250S	13	250M	13
		75	280S	14	280S	14	250M	13	280S	14
		90	280M	14	280M	14	280S	14	280MA	14
		110	315S	15	315S	15	280M	14	315S	15
150-200	2	132	315M	15	315	15	315S	15	315M	15
		160	315L	15	315	15	315M	15	315L	15
		200	315L	15	315	15	315M	15	315L	15
		37	225S	13	225S	13	225S	13	225S	13
		45	225M	13	225M	13	225M	13	225M	13
150-250	4	37	225S	13	225S	13	225S	13	225S	13
		45	225M	13	225M	13	225M	13	225M	13
		55	250M	13	250M	13	250S	13	250M	13
		75	280S	14	280S	14	250M	13	280S	14
		90	280M	14	280M	14	280S	14	280MA	14
150-315	6	30	225M	13	225M	13	225M	13	225M	13
		55	250M	13	250M	13	250S	13	250M	13
		75	280S	14	280S	14	250M	13	280S	14
		90	280M	14	280M	14	280S	14	280MA	14
		110	315S	15	315S	15	280M	14	315S	15
150-400	4	132	315MA	15	315	15	315S	15	315M	15
		160	315MB	15	315	15	315M	15	315L	15
		30	225M	13	225M	13	225M	13	225M	13
		37	250M	13	250M	13	250S	13	250M	13
		45	280S	14	280S	14	250M	13	280S	14
150-500	6	55	280M	14	280M	14	280S	14	280M	14
		75	280S	14	280S	14	250M	13	280S	14
		90	280M	14	280M	14	280S	14	280MA	14
		110	315S	15	315S	15	280M	14	315S	15
		132	315MA	15	315	15	315S	15	315M	15
150-500	4	160	315MB	15	315	15	315M	15	315L	15
		200	315L	15	315L	15	315M	15	315L	15
		37	250M	13	250M	13	250S	13	250M	13
		45	280S	14	280S	14	250M	13	280S	14
		55	280M	14	280M	14	280S	14	280M	14
150-500	6	75	315S	15	315S	15	280M	14	315S	15

Pump type	Pole	P2 [kW]	Siemens		MMG-E		MMG-G		MMG-H	
			Motor frame size	Base frame number	Motor frame size	Base frame number	Motor frame size	Base frame number	Motor frame size	Base frame number
200-400	4	37	225S	10K	225S	10K	225S	10K	225S	10K
		45	225M	10K	225M	10K	225MC	10K	225M	10K
		55	250M	10L	250M	10L	250SC	10K	250M	10L
		75	280S	10L	280S	10L	250M	10L	280S	10L
		90	280M	10L	280M	10L	280M	10L	280M	10L
		110	315S	10L	315S	10L	280M	10L	315S	10L
		132	315MA	10M	315M	10M	315MA	10M	315LA	10M
		160	315LA	10M	315LA	10M	315MB	10M	315LA	10M
		200	315LA	10M	315LA	10M	315MB	10M	315LA	10M
	6	15	180L	10K	180L	10K	180LC	10K	180L	10K
		18.5	200L	10K	200L	10K	200L	10K	200L	10K
		22	200L	10K	200L	10K	200L	10K	200L	10K
		30	225M	10K	225M	10K	225MC	10K	225M	10K
		37	250M	10L	250M	10L	250SC	10K	250M	10L
		45	280S	10L	280S	10L	250M	10L	280S	10L
		55	280M	10L	280M	10L	280S	10L	280M	10L
200-450	4	75	280S	10L	280S	10L	250MC	10L	280S	10L
		90	280M	10L	280M	10L	280S	10L	280M	10L
		110	315S	10L	315S	10L	280M	10L	315S	10L
		132	315MA	10M	315M	10M	315S	10L	315LA	10M
		160	315LA	10M	315LA	10M	315MB	10M	315LA	10M
		200	315MA	10M	315LA	10M	315MA	10M	315LA	10M
	6	18.5	200L	10K	200L	10K	200L	10K	200L	10K
		22	200L	10K	200L	10K	200L	10K	200L	10K
		30	225M	10K	225M	10K	225MC	10K	225M	10K
		37	250MC	10L	250MC	10L	250SC	10K	250MC	10L
		45	280S	10L	280S	10L	250MC	10L	280S	10L
		55	280M	10L	280M	10L	280S	10L	280M	10L
		75	315S	10L	315S	10L	280M	10L	315S	10L
		90	315MA	10M	315MA	10M	315S	10L	315MA	10M
250-350	4	37	225S	10K	225S	10K	225S	10K	225S	10K
		45	225M	10K	225M	10K	225MC	10K	225M	10K
		55	250M	10L	250M	10L	250SC	10K	250M	10L
		75	280S	10L	280S	10L	250M	10L	280S	10L
		90	280M	10L	280M	10L	280S	10L	280M	10L
		110	315S	10L	315S	10L	280M	10L	315S	10L
		132	315MA	10M	315M	10M	315S	10L	315MA	10M
	6	11	160L	10K	160L	10K	160L	10K	160L	10K
		15	180L	10K	180L	10K	180LC	10K	180L	10K
		18.5	200L	10K	200L	10K	200L	10K	200L	10K
		22	200L	10K	200L	10K	200L	10K	200L	10K
		30	225M	10K	225M	10K	225M	10K	225M	10K
		37	250M	10L	250M	10L	250SC	10K	250M	10L
		45	280S	10L	280S	10L	250M	10L	280S	10L
250-400	4	45	225M	10K	225M	10K	225MC	10K	225M	10K
		55	250M	10L	250M	10L	250SC	10K	250M	10L
		75	280S	10L	280S	10L	250M	10L	280S	10L
		90	280M	10L	280M	10L	280S	10L	280M	10L
		110	315S	10L	315S	10L	280M	10L	315S	10L
		132	315MA	10M	315M	10M	315S	10L	315MA	10M
		160	315LA	10M	315LA	10M	315MB	10M	315LA	10M
		200	315MB	10M	315LA	10M	315MB	10M	315LA	10M
	6	15	180L	10K	180L	10K	180LC	10K	180L	10K
		18.5	200L	10K	200L	10K	200L	10K	200L	10K
		22	200L	10K	200L	10K	200L	10K	200L	10K
		30	225M	10K	225M	10K	225M	10K	225M	10K
		37	250M	10L	250M	10L	225M	10K	250M	10L
		45	280S	10L	280S	10L	250M	10L	280S	10L
		55	280M	10L	280M	10L	280S	10L	280M	10L
		75	315S	10L	315S	10L	280M	10L	315S	10L
		90	315MA	10M	315MA	10M	315S	10L	315MA	10M

Pump type	Pole	P2 [kW]	Siemens		MMG-E		MMG-G		MMG-H	
			Motor frame size	Base frame number	Motor frame size	Base frame number	Motor frame size	Base frame number	Motor frame size	Base frame number
250-450	4	75	280S	10L	280S	10L	250MC	10L	280S	10L
		90	280M	10L	280M	10L	280S	10L	280M	10L
		110	315S	10L	315S	10L	280M	10L	315S	10L
		132	315MA	10M	315M	10M	315S	10L	315LA	10M
		160	315LA	10M	315LA	10M	315MB	10M	315LA	10M
	6	18.5	200L	10K	200L	10K	200L	10K	200L	10K
		22	200L	10K	200L	10K	200L	10K	200L	10K
		30	225M	10K	225M	10K	225MC	10K	225M	10K
		37	250M	10L	250M	10L	250SC	10K	250M	10L
		45	280S	10L	280S	10L	250MC	10L	280S	10L
		55	280M	10L	280M	10L	280S	10L	280M	10L
		75	315S	10L	315S	10L	280M	10L	315S	10L
		90	315MA	10M	315MA	10M	315S	10L	315LA	10M
		110	315LA	10M	315LA	10M	315MB	10M	315LA	10M
		160	315L	10M	315L	10M	315MB	10M	315L	10M
		200	315MB	10M	315L	10M	315MB	10M	315L	10M
250-500	4	45	280S	10L	280S	10L	250MC	10L	280S	10L
		55	280M	10L	280M	10L	280S	10L	280M	10L
		75	315S	10L	315S	10L	280M	10L	315S	10L
		90	315M	10M	315M	10M	315S	10L	315M	10M
	6	110	315L	10M	315L	10M	315M	10M	315L	10M
		132	315M	10M	315L	10M	315M	10M	315L	10M
		160	315L	10M	-	-	-	-	-	-
		160	315L	10M	-	-	-	-	-	-

NB base frames, dimensional sketches

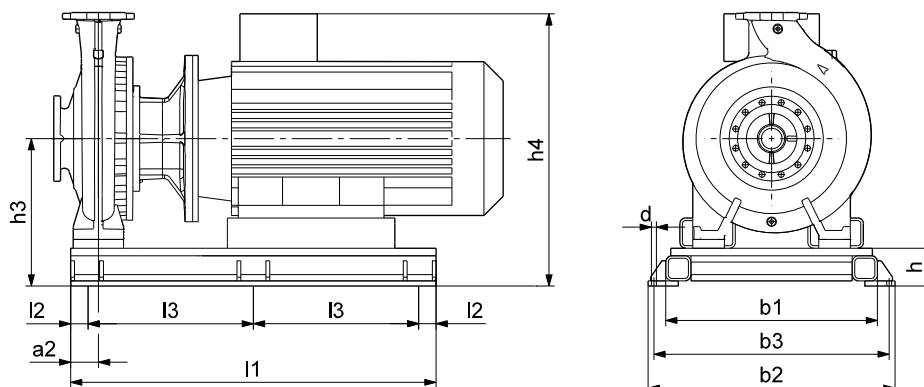
Base frame number	Dimensions
13 (IEC 225/250)	 TM04 0486 0708
14 (IEC 280)	 TM04 0485 0708
15 (IEC 315)	 TM04 0484 0708
10K	 TM04 9284 3810

Base frame number	Dimensions
10L	 TM04 9285 3810
10M	 TM04 9286 3810

NB pump dimensions as per motor type

NB, 2-pole

All dimensions are in mm.



TM04 0482 0808

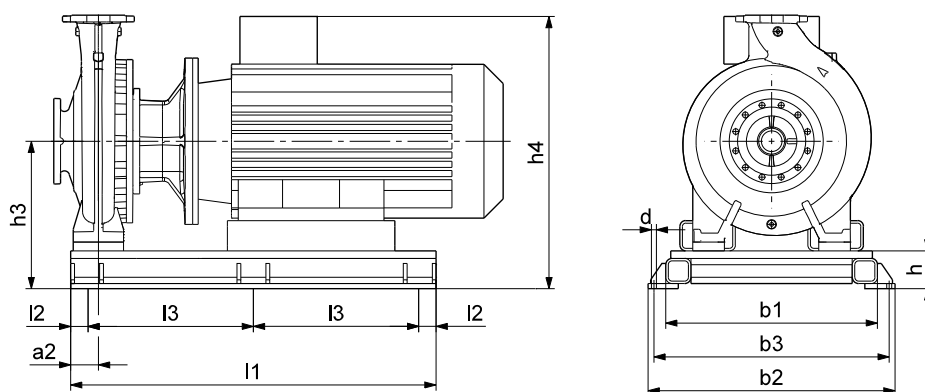
Pump type	P2 [kW]	Motor frame size	Motor	Base frame number	L1	L2	L3	b1	b2	b3	h	h3	h4	a2	d	Weight [kg] Base frame incl. support blocks
40-315	45	225M	Siemens	13	1200	60	540	730	860	790	110	345	670	75	28	263
40-315	45	225	MMG-E	13	1200	60	540	730	860	790	110	345	665	75	28	263
40-315	45	225M	MMG-G	13	1200	60	540	730	860	790	110	345	772	75	28	263
50-315	45	225M	Siemens	13	1200	60	540	730	860	790	110	345	670	75	28	259
50-315	45	225	MMG-E	13	1200	60	540	730	860	790	110	345	665	75	28	259
50-315	45	225M	MMG-G	13	1200	60	540	730	860	790	110	345	772	75	28	259
50-315	55	250M	Siemens	13	1200	60	540	730	860	790	110	395	787	75	28	293
50-315	55	250	MMG-E	13	1200	60	540	730	860	790	110	395	754	75	28	293
50-315	55	250S	MMG-G	13	1200	60	540	730	860	790	110	395	888	75	28	293
65-250	45	225M	Siemens	13	1200	60	540	730	860	790	110	345	670	90	28	265
65-250	45	225	MMG-E	13	1200	60	540	730	860	790	110	345	665	90	28	265
65-250	45	225M	MMG-G	13	1200	60	540	730	860	790	110	345	772	90	28	265
65-250	55	250M	Siemens	13	1200	60	540	730	860	790	110	410	802	90	28	343
65-250	55	250	MMG-E	13	1200	60	540	730	860	790	110	410	769	90	28	343
65-250	55	250S	MMG-G	13	1200	60	540	730	860	790	110	410	903	90	28	343
65-250	75	280S	Siemens	14	1300	65	585	670	810	730	130	430	862	90	28	359
65-250	75	280	MMG-E	14	1300	65	585	670	810	730	130	430	816	90	28	359
65-250	75	250M	MMG-G	13	1200	60	540	730	860	790	110	410	903	90	28	308
65-315	55	250M	Siemens	13	1200	60	540	730	860	790	110	395	787	90	28	296
65-315	55	250	MMG-E	13	1200	60	540	730	860	790	110	395	754	90	28	296
65-315	55	250S	MMG-G	13	1200	60	540	730	860	790	110	395	888	90	28	296
65-315	75	280S	Siemens	14	1300	65	585	670	810	730	130	415	847	90	28	318
65-315	75	280	MMG-E	14	1300	65	585	670	810	730	130	415	801	90	28	318
65-315	75	250M	MMG-G	13	1200	60	540	730	860	790	110	395	888	90	28	267
65-315	90	280M	Siemens	14	1300	65	585	670	810	730	130	415	847	90	28	319
65-315	90	280	MMG-E	14	1300	65	585	670	810	730	130	415	801	90	28	319
65-315	90	280S	MMG-G	14	1300	65	585	670	810	730	130	415	938	90	28	319
65-315	110	280M	MMG-G	14	1300	65	585	670	810	730	130	475	998	90	28	384
65-315	110	315S	Siemens	15	1450	65	660	840	980	920	150	495	990	90	28	454
65-315	110	315	MMG-E	15	1450	65	660	840	980	920	150	495	966	90	28	454
80-200	45	225M	Siemens	13	1200	60	540	730	860	790	110	350	675	75	28	270
80-200	45	225	MMG-E	13	1200	60	540	730	860	790	110	350	670	75	28	270
80-200	45	225M	MMG-G	13	1200	60	540	730	860	790	110	350	777	75	28	270
80-200	55	250M	Siemens	13	1200	60	540	730	860	790	110	390	782	75	28	309
80-200	55	250	MMG-E	13	1200	60	540	730	860	790	110	390	749	75	28	309
80-200	55	250S	MMG-G	13	1200	60	540	730	860	790	110	390	883	75	28	309
80-250	45	225M	Siemens	13	1200	60	540	730	860	790	110	345	670	90	28	265
80-250	45	225	MMG-E	13	1200	60	540	730	860	790	110	345	665	90	28	265
80-250	45	225M	MMG-G	13	1200	60	540	730	860	790	110	345	772	90	28	265
80-250	55	250M	Siemens	13	1200	60	540	730	860	790	110	410	802	90	28	343
80-250	55	250	MMG-E	13	1200	60	540	730	860	790	110	410	769	90	28	343
80-250	55	250S	MMG-G	13	1200	60	540	730	860	790	110	410	903	90	28	343
80-250	75	280S	Siemens	14	1300	65	585	670	810	730	130	430	862	90	28	359
80-250	75	280	MMG-E	14	1300	65	585	670	810	730	130	430	816	90	28	359
80-250	75	250M	MMG-G	13	1200	60	540	730	860	790	110	410	903	90	28	308
80-250	90	280M	Siemens	14	1300	65	585	670	810	730	130	430	862	90	28	361
80-250	90	280	MMG-E	14	1300	65	585	670	810	730	130	430	816	90	28	361
80-250	90	280S	MMG-G	14	1300	65	585	670	810	730	130	430	953	90	28	361

Pump type	P2 [kW]	Motor frame size	Motor	Base frame number	L1	L2	L3	b1	b2	b3	h	h3	h4	a2	d	Weight [kg] Base frame incl. support blocks
80-315	90	280M	Siemens	14	1300	65	585	670	810	730	130	415	847	90	28	314
80-315	90	280	MMG-E	14	1300	65	585	670	810	730	130	415	801	90	28	314
80-315	90	280S	MMG-G	14	1300	65	585	670	810	730	130	415	938	90	28	314
80-315	110	315S	Siemens	15	1450	65	660	840	980	920	150	500	995	90	28	458
80-315	110	315	MMG-E	15	1450	65	660	840	980	920	150	500	971	90	28	458
80-315	110	280M	MMG-G	14	1300	65	585	670	810	730	130	480	1003	90	28	388
80-315	132	315M	Siemens	15	1450	65	660	840	980	920	150	500	995	90	28	462
80-315	132	315	MMG-E	15	1450	65	660	840	980	920	150	500	971	90	28	462
80-315	132	315S	MMG-G	15	1450	65	660	840	980	920	150	500	1048	90	28	462
80-315	160	315L	Siemens	15	1450	65	660	840	980	920	150	500	995	90	28	466
80-315	160	315	MMG-E	15	1450	65	660	840	980	920	150	500	971	90	28	466
80-315	160	315M	MMG-G	15	1450	65	660	840	980	920	150	500	1048	90	28	466
100-200	45	225M	Siemens	13	1200	60	540	730	860	790	110	345	670	90	28	265
100-200	45	225	MMG-E	13	1200	60	540	730	860	790	110	345	665	90	28	265
100-200	45	225M	MMG-G	13	1200	60	540	730	860	790	110	345	772	90	28	265
100-200	55	250M	Siemens	13	1200	60	540	730	860	790	110	410	802	90	28	343
100-200	55	250	MMG-E	13	1200	60	540	730	860	790	110	410	769	90	28	343
100-200	55	250S	MMG-G	13	1200	60	540	730	860	790	110	410	903	90	28	343
100-200	75	280S	Siemens	14	1300	65	585	670	810	730	130	430	862	90	28	359
100-200	75	280	MMG-E	14	1300	65	585	670	810	730	130	430	816	90	28	359
100-200	75	250M	MMG-G	13	1200	60	540	730	860	790	110	410	903	90	28	308
100-250	55	250M	Siemens	13	1200	60	540	730	860	790	110	395	787	90	28	296
100-250	55	250	MMG-E	13	1200	60	540	730	860	790	110	395	754	90	28	296
100-250	55	250S	MMG-G	13	1200	60	540	730	860	790	110	395	888	90	28	296
100-250	75	280S	Siemens	14	1300	65	585	670	810	730	130	415	847	90	28	318
100-250	75	280	MMG-E	14	1300	65	585	670	810	730	130	415	801	90	28	318
100-250	75	250M	MMG-G	13	1200	60	540	730	860	790	110	395	888	90	28	267
100-250	90	280M	Siemens	14	1300	65	585	670	810	730	130	415	847	90	28	319
100-250	90	280	MMG-E	14	1300	65	585	670	810	730	130	415	801	90	28	319
100-250	90	280S	MMG-G	14	1300	65	585	670	810	730	130	415	938	90	28	319
100-250	110	315S	Siemens	15	1450	65	660	840	980	920	150	495	990	90	28	454
100-250	110	315	MMG-E	15	1450	65	660	840	980	920	150	495	966	90	28	454
100-250	110	280M	MMG-G	14	1300	65	585	670	810	730	130	475	998	90	28	384
100-250	132	315M	Siemens	15	1450	65	660	840	980	920	150	495	990	90	28	458
100-250	132	315	MMG-E	15	1450	65	660	840	980	920	150	495	966	90	28	458
100-250	132	315S	MMG-G	15	1450	65	660	840	980	920	150	495	1043	90	28	458
100-315	110	315S	Siemens	15	1450	65	660	840	980	920	150	500	995	90	28	458
100-315	110	315	MMG-E	15	1450	65	660	840	980	920	150	500	971	90	28	458
100-315	110	280M	MMG-G	14	1300	65	585	670	810	730	130	480	1003	90	28	388
100-315	132	315M	Siemens	15	1450	65	660	840	980	920	150	500	995	90	28	462
100-315	132	315	MMG-E	15	1450	65	660	840	980	920	150	500	971	90	28	462
100-315	132	315S	MMG-G	15	1450	65	660	840	980	920	150	500	1048	90	28	462
100-315	160	315L	Siemens	15	1450	65	660	840	980	920	150	500	995	90	28	466
100-315	160	315	MMG-E	15	1450	65	660	840	980	920	150	500	971	90	28	466
100-315	160	315M	MMG-G	15	1450	65	660	840	980	920	150	500	1048	90	28	466
100-315	200	315L	Siemens	15	1450	65	660	840	980	920	150	500	995	90	28	466
100-315	200	315	MMG-E	15	1450	65	660	840	980	920	150	500	1024	90	28	466
100-315	200	315M	MMG-G	15	1450	65	660	840	980	920	150	500	995	90	28	466
125-200	45	225M	Siemens	13	1200	60	540	730	860	790	110	360	685	90	28	269
125-200	45	225	MMG-E	13	1200	60	540	730	860	790	110	360	680	90	28	269
125-200	45	225M	MMG-G	13	1200	60	540	730	860	790	110	360	787	90	28	269
125-200	55	250M	Siemens	13	1200	60	540	730	860	790	110	395	787	90	28	291
125-200	55	250	MMG-E	13	1200	60	540	730	860	790	110	395	754	90	28	291
125-200	55	250S	MMG-G	13	1200	60	540	730	860	790	110	395	888	90	28	291
125-200	75	280S	Siemens	14	1300	65	585	670	810	730	130	415	847	90	28	314
125-200	75	280	MMG-E	14	1300	65	585	670	810	730	130	415	801	90	28	314
125-200	75	250M	MMG-G	13	1200	60	540	730	860	790	110	395	888	90	28	263
125-200	90	280M	Siemens	14	1300	65	585	670	810	730	130	415	847	90	28	314
125-200	90	280	MMG-E	14	1300	65	585	670	810	730	130	415	801	90	28	314
125-200	90	280S	MMG-G	14	1300	65	585	670	810	730	130	415	938	90	28	314
125-200	110	315S	Siemens	15	1450	65	660	840	980	920	150	500	995	90	28	458
125-200	110	315	MMG-E	15	1450	65	660	840	980	920	150	500	971	90	28	458
125-200	110	280M	MMG-G	14	1300	65	585	670	810	730	130	480	1003	90	28	388
125-250	90	280M	Siemens	14	1300	65	585	670	810	730	130	415	847	90	28	314
125-250	90	280	MMG-E	14	1300	65	585	670	810	730	130	415	801	90	28	314
125-250	90	280S	MMG-G	14	1300	65	585	670	810	730	130	415	938	90	28	314
125-250	110	315S	Siemens	15	1450	65	660	840	980	920	150	500	995	90	28	458
125-250	110	315	MMG-E	15	1450	65	660	840	980	920	150	500	971	90	28	458
125-250	110	280M	MMG-G	14	1300	65	585	670	810	730	130	480	1003	90	28	388

Pump type	P2 [kW]	Motor frame size	Motor	Base frame number	L1	L2	L3	b1	b2	b3	h	h3	h4	a2	d	Weight [kg] Base frame incl. support blocks
125-250	132	315M	Siemens	15	1450	65	660	840	980	920	150	500	995	90	28	462
125-250	132	315	MMG-E	15	1450	65	660	840	980	920	150	500	971	90	28	462
125-250	132	315S	MMG-G	15	1450	65	660	840	980	920	150	500	1048	90	28	462
125-250	160	315L	Siemens	15	1450	65	660	840	980	920	150	500	995	90	28	466
125-250	160	315	MMG-E	15	1450	65	660	840	980	920	150	500	971	90	28	466
125-250	160	315M	MMG-G	15	1450	65	660	840	980	920	150	500	1048	90	28	466
125-250	200	315L	Siemens	15	1450	65	660	840	980	920	150	500	995	90	28	466
125-250	200	315	MMG-E	15	1450	65	660	840	980	920	150	500	1024	90	28	466
125-250	200	315M	MMG-G	15	1450	65	660	840	980	920	150	500	995	90	28	466
125-315	132	315M	Siemens	15	1450	65	660	840	980	920	150	490	985	110	28	433
125-315	132	315	MMG-E	15	1450	65	660	840	980	920	150	490	961	110	28	433
125-315	132	315S	MMG-G	15	1450	65	660	840	980	920	150	490	1038	110	28	433
125-315	160	315L	Siemens	15	1450	65	660	840	980	920	150	490	985	110	28	436
125-315	160	315	MMG-E	15	1450	65	660	840	980	920	150	490	961	110	28	436
125-315	160	315M	MMG-G	15	1450	65	660	840	980	920	150	490	1038	110	28	436
125-315	200	315L	Siemens	15	1450	65	660	840	980	920	150	490	985	110	28	436
125-315	200	315	MMG-E	15	1450	65	660	840	980	920	150	490	1014	110	28	436
125-315	200	315M	MMG-G	15	1450	65	660	840	980	920	150	490	985	110	28	436
150-200	75	280S	Siemens	14	1300	65	585	670	810	730	130	410	842	110	28	302
150-200	75	280	MMG-E	14	1300	65	585	670	810	730	130	410	796	110	28	302
150-200	75	250M	MMG-G	13	1200	60	540	730	860	790	110	390	883	110	28	251
150-200	90	280M	Siemens	14	1300	65	585	670	810	730	130	410	842	110	28	302
150-200	90	280	MMG-E	14	1300	65	585	670	810	730	130	410	796	110	28	302
150-200	90	280S	MMG-G	14	1300	65	585	670	810	730	130	410	933	110	28	302
150-200	110	315S	Siemens	15	1450	65	660	840	980	920	150	490	985	110	28	430
150-200	110	315	MMG-E	15	1450	65	660	840	980	920	150	490	961	110	28	430
150-200	110	280M	MMG-G	14	1300	65	585	670	810	730	130	470	993	110	28	360
150-250	132	315M	Siemens	15	1450	65	660	840	980	920	150	490	985	110	28	433
150-250	132	315	MMG-E	15	1450	65	660	840	980	920	150	490	961	110	28	433
150-250	132	315S	MMG-G	15	1450	65	660	840	980	920	150	490	1038	110	28	433
150-250	160	315L	Siemens	15	1450	65	660	840	980	920	150	490	985	110	28	436
150-250	160	315	MMG-E	15	1450	65	660	840	980	920	150	490	961	110	28	436
150-250	160	315M	MMG-G	15	1450	65	660	840	980	920	150	490	1038	110	28	436
150-250	200	315L	Siemens	15	1450	65	660	840	980	920	150	490	985	110	28	436
150-250	200	315	MMG-E	15	1450	65	660	840	980	920	150	490	1014	110	28	436
150-250	200	315M	MMG-G	15	1450	65	660	840	980	920	150	490	985	110	28	436

NB, 4-pole

All dimensions are in mm.



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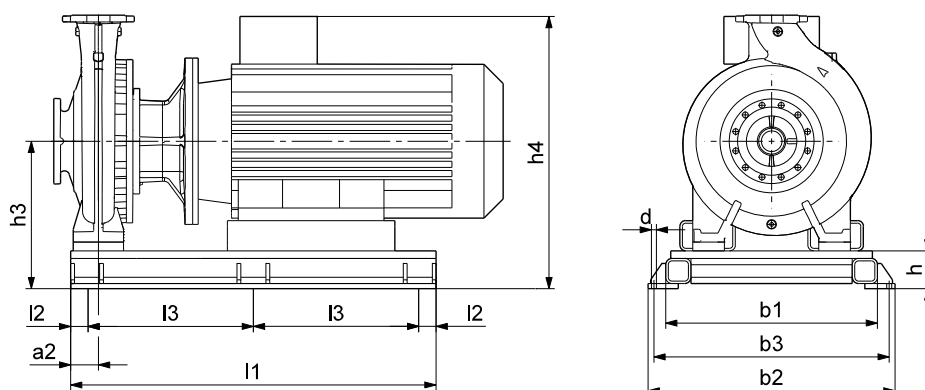
Pump type	P2 [kW]	Motor frame size	Motor	Base frame number	L1	L2	L3	b1	b2	b3	h	h3	h4	a2	d	Weight [kg] Base frame incl. support blocks
80-400	37	225S	Siemens	13	1200	60	540	730	860	790	110	395	720	90	28	266
80-400	37	225S	MMG-G	13	1200	60	540	730	860	790	110	395	822	90	28	266
80-400	45	225M	Siemens	13	1200	60	540	730	860	790	110	395	720	90	28	267
80-400	45	225M	MMG-E	13	1200	60	540	730	860	790	110	395	715	90	28	267
80-400	45	225M	MMG-G	13	1200	60	540	730	860	790	110	395	822	90	28	267
100-400	37	225S	Siemens	13	1200	60	540	730	860	790	110	395	720	110	28	267
100-400	37	225S	MMG-E	13	1200	60	540	730	860	790	110	395	715	110	28	267
100-400	37	225S	MMG-G	13	1200	60	540	730	860	790	110	395	822	110	28	267
100-400	45	225M	Siemens	13	1200	60	540	730	860	790	110	395	720	110	28	267
100-400	45	225M	MMG-E	13	1200	60	540	730	860	790	110	395	715	110	28	267
100-400	45	225M	MMG-G	13	1200	60	540	730	860	790	110	395	822	110	28	267
100-400	55	250M	Siemens	13	1200	60	540	730	860	790	110	395	787	110	28	286
100-400	55	250M	MMG-E	13	1200	60	540	730	860	790	110	395	754	110	28	286
100-400	55	250S	MMG-G	13	1200	60	540	730	860	790	110	395	888	110	28	286
125-315	37	225S	Siemens	13	1200	60	540	730	860	790	110	395	720	110	28	267
125-315	37	225S	MMG-E	13	1200	60	540	730	860	790	110	395	715	110	28	267
125-315	37	225S	MMG-G	13	1200	60	540	730	860	790	110	390	822	110	28	267
125-315	45	225M	Siemens	13	1200	60	540	730	860	790	110	395	720	110	28	267
125-315	45	225M	MMG-E	13	1200	60	540	730	860	790	110	395	715	110	28	267
125-315	45	225M	MMG-G	13	1200	60	540	730	860	790	110	395	822	110	28	267
125-400	37	225S	Siemens	13	1200	60	540	730	860	790	110	435	760	110	28	280
125-400	37	225S	MMG-E	13	1200	60	540	730	860	790	110	435	755	110	28	280
125-400	37	225S	MMG-G	13	1200	60	540	730	860	790	110	435	862	110	28	280
125-400	45	225M	Siemens	13	1200	60	540	730	860	790	110	435	760	110	28	282
125-400	45	225M	MMG-E	13	1200	60	540	730	860	790	110	435	755	110	28	282
125-400	45	225M	MMG-G	13	1200	60	540	730	860	790	110	435	862	110	28	282
125-400	55	250M	Siemens	13	1200	60	540	730	860	790	110	425	817	110	28	314
125-400	55	250M	MMG-E	13	1200	60	540	730	860	790	110	425	784	110	28	314
125-400	55	250S	MMG-G	13	1200	60	540	730	860	790	110	425	918	110	28	314
125-400	75	280S	Siemens	14	1300	65	585	670	810	730	130	445	877	110	28	337
125-400	75	280S	MMG-E	14	1300	65	585	670	810	730	130	445	831	110	28	337
125-400	75	250M	MMG-G	13	1200	60	540	730	860	790	110	425	918	110	28	286
125-400	90	280M	Siemens	14	1300	65	585	670	810	730	130	445	877	110	28	341
125-400	90	280M	MMG-E	14	1300	65	585	670	810	730	130	445	831	110	28	341
125-400	90	280S	MMG-G	14	1300	65	585	670	810	730	130	445	968	110	28	341
125-500	55	250M	Siemens	13	1200	60	540	730	860	790	110	540	932	110	28	311
125-500	55	250M	MMG-E	13	1200	60	540	730	860	790	110	540	899	110	28	311
125-500	55	250S	MMG-G	13	1200	60	540	730	860	790	110	540	1033	110	28	311
125-500	75	280S	Siemens	14	1300	65	585	670	810	730	130	590	1022	110	28	376
125-500	75	280S	MMG-E	14	1300	65	585	670	810	730	130	590	976	110	28	376
125-500	75	250M	MMG-G	13	1200	60	540	730	860	790	110	570	1063	110	28	325
125-500	90	280M	Siemens	14	1300	65	585	670	810	730	130	590	1022	110	28	381
125-500	90	280M	MMG-E	14	1300	65	585	670	810	730	130	590	976	110	28	381
125-500	90	280S	MMG-G	14	1300	65	585	670	810	730	130	590	1113	110	28	381
125-500	110	315S	Siemens	15	1450	65	660	840	980	920	150	585	1080	110	28	439
125-500	110	315S	MMG-E	15	1450	65	660	840	980	920	150	585	1056	110	28	439

Pump type	P2 [kW]	Motor frame size	Motor	Base frame number	L1	L2	L3	b1	b2	b3	h	h3	h4	a2	d	Weight [kg] Base frame incl. support blocks
125-500	110	280M	MMG-G	14	1300	65	585	670	810	730	130	565	1088	110	28	369
125-500	132	315MA	Siemens	15	1450	65	660	840	980	920	150	585	1080	110	28	444
125-500	132	315MA	MMG-E	15	1450	65	660	840	980	920	150	585	1056	110	28	444
125-500	132	315S	MMG-G	15	1450	65	660	840	980	920	150	585	1133	110	28	444
125-500	160	315MB	Siemens	15	1450	65	660	840	980	920	150	585	1080	110	28	449
125-500	160	315MB	MMG-E	15	1450	65	660	840	980	920	150	585	1056	110	28	449
125-500	160	315M	MMG-G	15	1450	65	660	840	980	920	150	585	1133	110	28	449
150-250	37	225S	Siemens	13	1200	60	540	730	860	790	110	395	720	110	28	267
150-250	37	225S	MMG-E	13	1200	60	540	730	860	790	110	395	715	110	28	267
150-250	37	225S	MMG-G	13	1200	60	540	730	860	790	110	395	822	110	28	267
150-250	45	225M	Siemens	13	1200	60	540	730	860	790	110	395	720	110	28	267
150-250	45	225M	MMG-E	13	1200	60	540	730	860	790	110	395	715	110	28	267
150-250	45	225M	MMG-G	13	1200	60	540	730	860	790	110	395	822	110	28	267
150-315	37	225S	Siemens	13	1200	60	540	730	860	790	110	435	760	110	28	280
150-315	37	225S	MMG-E	13	1200	60	540	730	860	790	110	435	755	110	28	280
150-315	37	225S	MMG-G	13	1200	60	540	730	860	790	110	435	862	110	28	280
150-315	45	225M	Siemens	13	1200	60	540	730	860	790	110	435	760	110	28	282
150-315	45	225M	MMG-E	13	1200	60	540	730	860	790	110	435	755	110	28	282
150-315	45	225M	MMG-G	13	1200	60	540	730	860	790	110	435	862	110	28	282
150-315	55	250M	Siemens	13	1200	60	540	730	860	790	110	425	817	110	28	314
150-315	55	250M	MMG-E	13	1200	60	540	730	860	790	110	425	784	110	28	314
150-315	55	250S	MMG-G	13	1200	60	540	730	860	790	110	425	918	110	28	314
150-315	75	280S	Siemens	14	1300	65	585	670	810	730	130	445	877	110	28	337
150-315	75	280S	MMG-E	14	1300	65	585	670	810	730	130	445	831	110	28	337
150-315	75	250M	MMG-G	13	1200	60	540	730	860	790	110	425	918	110	28	286
150-315	90	280M	Siemens	14	1300	65	585	670	810	730	130	445	877	110	28	341
150-315	90	280M	MMG-E	14	1300	65	585	670	810	730	130	445	831	110	28	341
150-315	90	280S	MMG-G	14	1300	65	585	670	810	730	130	445	968	110	28	341
150-400	55	250M	Siemens	13	1200	60	540	730	860	790	110	425	817	110	28	314
150-400	55	250M	MMG-E	13	1200	60	540	730	860	790	110	425	784	110	28	314
150-400	55	250S	MMG-G	13	1200	60	540	730	860	790	110	425	918	110	28	314
150-400	75	280S	Siemens	14	1300	65	585	670	810	730	130	445	877	110	28	337
150-400	75	280S	MMG-E	14	1300	65	585	670	810	730	130	445	831	110	28	337
150-400	75	250M	MMG-G	13	1200	60	540	730	860	790	110	425	918	110	28	286
150-400	90	280M	Siemens	14	1300	65	585	670	810	730	130	445	877	110	28	341
150-400	90	280M	MMG-E	14	1300	65	585	670	810	730	130	445	831	110	28	341
150-400	90	280S	MMG-G	14	1300	65	585	670	810	730	130	445	968	110	28	341
150-400	110	315S	Siemens	15	1450	65	660	840	980	920	150	490	985	110	28	414
150-400	110	315S	MMG-E	15	1450	65	660	840	980	920	150	490	961	110	28	414
150-400	110	280M	MMG-G	14	1300	65	585	670	810	730	130	470	993	110	28	344
150-400	132	315MA	Siemens	15	1450	65	660	840	980	920	150	490	985	110	28	418
150-400	132	315	MMG-E	15	1450	65	660	840	980	920	150	490	961	110	28	418
150-400	132	315S	MMG-G	15	1450	65	660	840	980	920	150	490	1038	110	28	418
150-400	160	315MB	Siemens	15	1450	65	660	840	980	920	150	490	985	110	28	380
150-400	160	315	MMG-E	15	1450	65	660	840	980	920	150	490	961	110	28	380
150-400	160	315M	MMG-G	15	1450	65	660	840	980	920	150	490	1038	110	28	380
150-500	132	315MA	Siemens	15	1450	65	660	840	980	920	150	585	1080	110	28	444
150-500	132	315	MMG-E	15	1450	65	660	840	980	920	150	585	1056	110	28	444
150-500	132	315S	MMG-G	15	1450	65	660	840	980	920	150	585	1133	110	28	444
150-500	160	315MB	Siemens	15	1450	65	660	840	980	920	150	585	1080	110	28	449
150-500	160	315	MMG-E	15	1450	65	660	840	980	920	150	585	1056	110	28	449
150-500	160	315M	MMG-G	15	1450	65	660	840	980	920	150	585	1133	110	28	449
150-500	200	315L	Siemens	15	1450	65	660	840	980	920	150	585	1080	110	28	444
150-500	200	315L	MMG-E	15	1450	65	660	840	980	920	150	585	1056	110	28	444
150-500	200	315M	MMG-G	15	1450	65	660	840	980	920	150	585	1133	110	28	444
200-400																
200-450																
250-350																
250-400																
250-450																
250-500																

For information about pump dimensions, see WebCAPS

NB, 6-pole

All dimensions are in mm.



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Pump type	P2 [kW]	Motor frame size	Motor	Base frame number	L1	L2	L3	b1	b2	b3	h	h3	h4	a2	d	Weight [kg] Base frame incl. support blocks
125-400	30	225M	Siemens	13	1200	60	540	730	860	790	110	435	760	110	28	282
125-400	30	225M	MMG-G	13	1200	60	540	730	860	790	110	435	862	110	28	282
125-500	30	225M	Siemens	13	1200	60	540	730	860	790	110	515	840	110	28	295
125-500	30	225M	MMG-E	13	1200	60	540	730	860	790	110	515	835	110	28	295
125-500	30	225M	MMG-G	13	1200	60	540	730	860	790	110	515	942	110	28	295
125-500	37	250M	Siemens	13	1200	60	540	730	860	790	110	540	932	110	28	311
125-500	37	250M	MMG-E	13	1200	60	540	730	860	790	110	540	899	110	28	311
125-500	37	250S	MMG-G	13	1200	60	540	730	860	790	110	540	1033	110	28	311
125-500	45	280S	Siemens	14	1300	65	585	670	810	730	130	530	962	110	28	350
125-500	45	280S	MMG-E	14	1300	65	585	670	810	730	130	530	916	110	28	350
125-500	45	250M	MMG-G	13	1200	60	540	730	860	790	110	510	1003	110	28	299
125-500	55	280M	Siemens	14	1300	65	585	670	810	730	130	530	962	110	28	355
125-500	55	280M	MMG-E	14	1300	65	585	670	810	730	130	530	916	110	28	355
125-500	55	280S	MMG-G	14	1300	65	585	670	810	730	130	530	1053	110	28	355
150-315	30	225M	Siemens	13	1200	60	540	730	860	790	110	435	760	110	28	282
150-315	30	225M	MMG-E	13	1200	60	540	730	860	790	110	435	755	110	28	282
150-315	30	225M	MMG-G	13	1200	60	540	730	860	790	110	435	862	110	28	282
150-400	30	225M	Siemens	13	1200	60	540	730	860	790	110	435	760	110	28	282
150-400	30	225M	MMG-E	13	1200	60	540	730	860	790	110	435	755	110	28	282
150-400	30	225M	MMG-G	13	1200	60	540	730	860	790	110	435	862	110	28	282
150-400	37	250M	Siemens	13	1200	60	540	730	860	790	110	425	817	110	28	314
150-400	37	250M	MMG-E	13	1200	60	540	730	860	790	110	425	784	110	28	314
150-400	37	250S	MMG-G	13	1200	60	540	730	860	790	110	425	918	110	28	314
150-400	45	280S	Siemens	14	1300	65	585	670	810	730	130	445	877	110	28	337
150-400	45	280S	MMG-E	14	1300	65	585	670	810	730	130	445	831	110	28	337
150-400	45	250M	MMG-G	13	1200	60	540	730	860	790	110	425	918	110	28	286
150-500	37	250M	Siemens	13	1200	60	540	730	860	790	110	540	932	110	28	311
150-500	37	250M	MMG-E	13	1200	60	540	730	860	790	110	540	899	110	28	311
150-500	37	250S	MMG-G	13	1200	60	540	730	860	790	110	540	1033	110	28	311
150-500	45	280S	MMG-E	14	1300	65	585	670	810	730	130	530	916	110	28	350
150-500	45	250M	MMG-G	13	1200	60	540	730	860	790	110	510	1003	110	28	299
150-500	55	280M	Siemens	14	1300	65	585	670	810	730	130	530	962	110	28	355
150-500	55	280M	MMG-E	14	1300	65	585	670	810	730	130	530	916	110	28	355
150-500	55	280S	MMG-G	14	1300	65	585	670	810	730	130	530	1053	110	28	355
150-500	75	315S	Siemens	15	1450	65	660	840	980	920	150	585	1080	110	28	439
150-500	75	315S	MMG-E	15	1450	65	660	840	980	920	150	585	1056	110	28	439
150-500	75	280M	MMG-G	14	1300	65	585	670	810	730	130	565	1088	110	28	369
200-400																
200-450																
250-350																
250-400																
250-450																
250-500																

For information about pump dimensions, see WebCAPS

NB base frames, product numbers

When you order a separate base frame, you will receive the components needed for mounting the pump on the base frame such as:

- base frame
- eye bolts for lifting
- support blocks or support rail
- instructions
- nuts and bolts for securing the pump on the base frame.

NB, 2-pole, 50 Hz

Pump type	P2 [kW]	Product number			
		Base frame			
		Siemens	MMG-E	MMG-G	MMG-H
40-315	45	95921801	95921802	95921801	95921801
50-315	45	95921803	95921804	95921803	95921803
50-315	55	95921813	95921813	95921814	95921813
65-250	45	95921805	95921806	95921805	95921805
65-250	55	95921815	95921815	95921816	95921815
65-250	75	95921830	95921830	95921825	95921830
65-315	55	95921821	95921821	95921822	95921821
65-315	75	95921832	95921832	95921827	95921832
65-315	90	95921837	95921837	95921838	95921837
65-315	110	95921880	95921881	95921879	95921880
80-200	45	95921807	95921808	95921807	95921807
80-200	55	95921819	95921819	95921820	95921819
80-250	45	95921871	95921872	95921871	95921871
80-250	55	95921873	95921873	95921874	95921873
80-250	75	95921876	95921876	95921875	95921876
80-250	90	95921877	95921877	95921878	95921877
80-315	90	95921841	95921841	95921842	95921841
80-315	110	95921852	95921853	95921846	95921852
80-315	132	95921882	95921883	95921884	95921882
80-315	160	95921888	95921889	95921890	95921888
100-200	45	95921805	95921806	95921805	95921805
100-200	55	95921815	95921815	95921816	95921815
100-200	75	95921830	95921830	95921825	95921830
100-250	55	95921821	95921821	95921822	95921821
100-250	75	95921832	95921832	95921827	95921832
100-250	90	95921837	95921837	95921838	95921837
100-250	110	95921880	95921881	95921879	95921880
100-250	132	95921885	95921886	95921887	95921885
100-315	110	95921852	95921853	95921846	95921852
100-315	132	95921882	95921883	95921884	95921882
100-315	160	95921888	95921889	95921890	95921888
100-315	200	95921888	95921889	95921890	95921888
125-200	45	95921811	95921812	95921811	95921811
125-200	55	95921823	95921823	95921824	95921823
125-200	75	95921833	95921833	95921828	95921833
125-200	90	95921841	95921841	95921842	95921841
125-200	110	95921852	95921853	95921846	95921852
125-250	90	95921839	95921839	95921840	95921839
125-250	110	95921850	95921851	95921845	95921850
125-250	132	95921856	95921857	95921858	95921856
125-250	160	95921865	95921866	95921867	95921865
125-250	200	95921865	95921866	95921867	95921865
125-315	132	95921862	95921863	95921864	95921862
125-315	160	95921868	95921869	95921870	95921868
125-315	200	95921868	95921869	95921870	95921868
150-200	110	95921834	95921834	95921829	95921834
150-250	132	95921843	95921843	95921834	95921843
150-250	160	95921854	95921855	95921847	95921854
150-250	200	95921862	95921863	95921864	95921862

NB, 4-pole, 50 Hz

Pump type	P2 [kW]	Product number			
		Base frame			
		Siemens	MMG-E	MMG-G	MMG-H
80-400	37	95921891	95921892	95921891	95921892
80-400	45	95921899	95921900	95921901	95921901
100-400	37	95921893	95921894	95921893	95921894
100-400	45	95921902	95921903	95921904	95921904
100-400	55	95921911	95921911	95921912	95921911
125-315	37	95921893	95921894	95921893	95921894
125-315	45	95921902	95921903	95921904	95921904
125-400	37	95921895	95921896	95921895	95921896
125-400	45	95921905	95921906	95921907	95921907
125-400	55	95921913	95921913	95921914	95921913
125-400	75	95921922	95921922	95921919	95921922
125-400	90	95921925	95921925	95921926	95921925
125-500	55	95921915	95921915	95921916	95921915
125-500	75	95921923	95921923	95921920	95921923
125-500	90	95921927	95921927	95921928	95921927
125-500	110	95921933	95921934	95921931	95921933
125-500	132	95921937	95921938	95921939	95921937
125-500	160	95921943	95921944	95921945	95921943
150-250	37	95921893	95921894	95921893	95921894
150-250	45	95921902	95921903	95921904	95921904
150-315	37	95921949	95921950	95921949	95921950
150-315	45	95921951	95921952	95921953	95921953
150-315	55	95921954	95921954	95921955	95921954
150-315	75	95921957	95921957	95921956	95921957
150-315	90	95921958	95921958	95921930	95921958
150-400	55	95921965	95921965	95921966	95921965
150-400	75	95921968	95921968	95921967	95921968
150-400	90	95921969	95921969	95921970	95921969
150-400	110	95921935	95921936	95921932	95921935
150-400	132	95921940	95921941	95921942	95921940
150-400	160	95921946	95921947	95921948	95921946
150-500	132	95921937	95921938	95921939	95921937
150-500	160	95921943	95921944	95921945	95921943
150-500	200	95921937	95921944	95921937	95921937
200-400		Base frames are not available as an accessory for these pump sizes, but can be configured as part of the pump.			
200-450					
250-350					
250-400					
250-450					
250-500					

NB, 6-pole, 50 Hz

Pump type	P2 [kW]	Product number			
		Base frame			
		Siemens	MMG-E	MMG-G	MMG-H
125-400	30	95921905	95921906	95921907	95921907
125-500	30	95921959	95921960	95921961	95921961
125-500	37	95921915	95921915	95921916	95921915
125-500	45	95921962	95921962	95921971	95921962
125-500	55	95921963	95921963	95921964	-
150-315	30	95921951	95921952	95921953	95921953
150-400	30	95921908	95921909	95921910	95921910
150-400	37	95921965	95921965	95921966	95921965
150-400	45	95921968	95921968	95921967	95921968
150-500	37	95921915	95921915	95921916	95921915
150-500	45	95921962	95921962	95921971	95921962
150-500	55	95921963	95921963	95921964	-
150-500	75	95921933	95921933	95921931	-
200-400	Base frames are not available as an accessory for these pump sizes, but can be configured as part of the pump.				
200-450					
250-350					
250-400					
250-450					
250-500					

19. Motor data

Standard motor range

The table shows the standard motors currently available for NB, NK pumps. The motors in section 16. *Performance curves and technical data* are MG and Siemens motors.

IE class	Motor	Pole	P2 [kW]																														
			0.25	0.37	0.55	0.75	1.1	1.5	2.2	3	4	5.5	7.5	11	15	18.5	22	30	37	45	55	75	90	110	132	160	200	250	315	355	400		
IE1	MMG-E	2	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		4	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		6	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	MMG-G	2	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		4	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		6	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
IE2	MG	2	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Siemens	2	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		4	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	MMG-E	2	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		6	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	MMG-G	2	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		4	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		6	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	MMG-H	2	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		6	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	IE3	MG	2	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			4	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siemens		2	-	-	-	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		4	-	-	-	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		6	-	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Grey background = Outside definition of IE class

Note: Not all motors are available worldwide. For specific information about the motors available in your region, contact your Grundfos Customer Service Unit (CSU).

MGE motor range

IE class	Motor	Pole	P2 [kW]															
			0.25	0.37	0.55	0.75	1.1	1.5	2.2	3	4	5.5	7.5	11	15	18.5	22	
IE3		2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	

Grey background = Outside definition of IE class

Electrical data, IE1 motors

MMG-E, 2-pole

Motor	Frame size	IE class	Voltage [V]	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ 1/1	n [min ⁻¹]	I _{start} I _{1/1}
MMG-E	71B	IE1	3 x 220-240 Δ/380-415 Y	0.55	2.18/1.26	73.0	0.82	2790	6.5
MMG-E	80A	IE1		0.75	2.88/1.66	75.0	0.83	2820	6.1
MMG-E	80B	IE1		1.1	4.00/2.30	76.2	0.84	2820	6.6
MMG-E	90S	IE1		1.5	5.75/3.30	78.5	0.83	2830	7.5
MMG-E	90L	IE1		2.2	7.90/4.55	81.0	0.85	2830	7.3
MMG-E	100L	IE1		3	10.2/5.90	82.6	0.87	2860	7.5
MMG-E	112M	IE1	3 x 380-415 Δ	4	13.6/7.80	84.2	0.87	2890	7.7
MMG-E	90L	IE1		2.2	4.60/2.70	81.0	0.85	2830	7.3
MMG-E	100L	IE1		3	5.90/3.40	82.6	0.87	2860	7.5
MMG-E	112M	IE1		4	7.80/4.50	84.2	0.87	2890	7.7
MMG-E	132S	IE1		5.5	10.2/6.00	85.7	0.88	2910	7.9
MMG-E	132S	IE1		7.5	13.6/7.90	87.0	0.89	2900	7.8
MMG-E	160MA	IE1	3 x 380-415 Δ/660-690 Y	11	20.2/11.6	89.3	0.89	2930	5.6
MMG-E	160MB	IE1		15	26.5/15.2	91.0	0.87	2940	5.8
MMG-E	160L	IE1		18.5	32.5/18.8	91.6	0.89	2940	6.5
MMG-E	180M	IE1		22	39.5/22.8	91.0	0.89	2950	7.4
MMG-E	200LA	IE1		30	57.5/33.0	92.2	0.88	2960	7.0
MMG-E	200LB	IE1		37	65.0/37.5	92.0	0.89	2960	7.6
MMG-E	225M	IE1		45	78.0/45.0	93.5	0.89	2980	7.4
MMG-E	250M	IE1		55	96.5/55.5	93.0	0.90	2960	7.9
MMG-E	280S	IE1		75	130/75.0	94.0	0.89	2970	6.6
MMG-E	280M	IE1		90	154/89.0	95.0	0.90	2980	7.2
MMG-E	315S	IE1		110	188/108	94.0	0.90	2980	7.2
MMG-E	315M	IE1		132	222/128	95.0	0.90	2980	7.5
MMG-E	315LA	IE1		160	270/156	95.7	0.91	2980	6.0
MMG-E	315LB	IE1		200	330/190	95.0	0.92	2980	5.8
MMG-E	355M	IE1		250	435/250	95.5	0.92	2980	6.2
MMG-E	355L	IE1		315	525/303	95.5	0.91	2980	6.9
MMG-E	355L	IE1		355	630/360	95.4	0.90	2980	7.1

MMG-E, 4-pole

Motor	Frame size	IE class	Voltage [V]	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ 1/1	n [min ⁻¹]	I _{start} I _{1/1}
MMG-E	80A	IE1	3 x 220-240 Δ/380-415 Y	0.55	2.60/1.50	71.0	0.72	1410	5.3
MMG-E	80B	IE1		0.75	3.30/1.90	73.0	0.75	1400	5.4
MMG-E	90S	IE1		1.1	4.35/2.50	76.2	0.80	1390	5.9
MMG-E	90L	IE1		1.5	6.00/3.45	78.5	0.79	1400	5.8
MMG-E	100LA	IE1		2.2	7.95/4.60	81.0	0.84	1430	6.9
MMG-E	100LB	IE1		3	11.6/6.70	82.6	0.78	1440	7.9
MMG-E	112M	IE1	3 x 380-415 Δ	4	14.2/8.10	84.2	0.84	1440	7.6
MMG-E	100LA	IE1		2.2	4.70/2.70	81.0	0.84	1430	6.9
MMG-E	100LB	IE1		3	6.70/3.90	82.6	0.78	1440	7.9
MMG-E	112M	IE1		4	8.10/4.70	84.2	0.84	1440	7.6
MMG-E	132S	IE1		5.5	10.6/6.15	85.7	0.85	1450	7.4
MMG-E	132SB	IE1		7.5	14.4/8.3	89.1	0.84	1445	7.8
MMG-E	160MA	IE1	3 x 380-415 Δ/660-690 Y	11	21.0/12.2	89.8	0.84	1460	7.4
MMG-E	160MB	IE1		15	28.5/16.4	89.4	0.85	1460	7.8
MMG-E	180M	IE1		18.5	33.5/19.4	91.2	0.86	1465	7.6
MMG-E	180L	IE1		22	39.0/22.6	91.4	0.86	1465	7.8
MMG-E	200L	IE1		30	53.5/31.0	91.5	0.88	1470	7.5
MMG-E	225S	IE1		37	71.0/41.0	92.0	0.89	1480	6.9
MMG-E	225M	IE1		45	78.0/45.0	92.5	0.89	1480	7.5
MMG-E	250M	IE1		55	95.0/55.0	93.0	0.89	1480	7.5
MMG-E	280S	IE1		75	128/74.0	94.5	0.87	1480	7.4
MMG-E	280M	IE1		90	150/86.5	94.0	0.88	1480	7.5
MMG-E	315S	IE1		110	192/110	94.5	0.91	1490	7.3
MMG-E	315M	IE1		132	226/130	95.0	0.89	1490	6.7
MMG-E	315LA	IE1		160	270/156	95.0	0.89	1490	6.7
MMG-E	315LB	IE1		200	340/196	95.5	0.89	1490	5.5
MMG-E	355M	IE1		250	410/236	95.5	0.91	1490	6.4
MMG-E	355L	IE1		315	525/300	96.0	0.89	1490	6.8

MMG-E, 6-pole

Motor	Frame size	IE class	Voltage [V]	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ 1/1	n [min ⁻¹]	$\frac{I_{start}}{I_{1/1}}$
MMG-E	80B	IE1	3 x 220-240 Δ/380-415 Y	0.55	1.7/0.98	66.0	0.72	890	3.0
MMG-E	90S	IE1		0.75	2.15/1.24	70.3	0.72	910	3.5
MMG-E	90L	IE1		1.1	2.95/1.7	73.0	0.74	910	3.6
MMG-E	100L	IE1		1.5	3.7/2.14	76.3	0.77	920	4.3
MMG-E	112M	IE1		2.2	5.2/3.0	81.4	0.75	950	5.0
MMG-E	132S	IE1		3	6.7/3.85	84.1	0.77	960	6.0
MMG-E	132MA	IE1		4	8.85/5.1	84.7	0.77	960	6.4
MMG-E	112M	IE1		2.2	3.0/1.73	81.4	0.75	950	5.0
MMG-E	132S	IE1		3	3.85/2.2	84.1	0.77	960	6.0
MMG-E	132MA	IE1		4	5.1/2.94	84.7	0.77	960	6.4
MMG-E	132MB	IE1	3 x 380-415 Δ/660-690 Y	5.5	11.4/6.65	86.4	0.80	960	5.9
MMG-E	160M	IE1		7.5	16.0/9.2	87.1	0.78	960	5.8
MMG-E	160L	IE1		11	22.8/12.2	88.5	0.79	970	7.3
MMG-E	180L	IE1		15	31.5/18.2	80.5	0.67	940	5.9
MMG-E	200LA	IE1		18.5	35.5/20.4	90.5	0.83	980	7.8
MMG-E	200LB	IE1		22	41.5/24.0	91.5	0.84	980	6.6
MMG-E	225M	IE1		30	55.0/32.0	91.5	0.85	980	7.0
MMG-E	250M	IE1		37	65.5/37.5	92.5	0.88	980	7.0
MMG-E	280S	IE1		45	79.0/45.5	92.5	0.87	990	7.3
MMG-E	280M	IE1		55	97.0/56.0	93.5	0.87	990	7.2
MMG-E	315S	IE1		75	134/77.0	94.0	0.86	990	6.3
MMG-E	315M	IE1		90	158/91.0	94.5	0.87	990	5.9
MMG-E	315L	IE1		110	192/112	95.0	0.87	990	6.0
MMG-E	315LB	IE1		132	250/144	94.2	0.87	990	6.2

Electrical data, IE2 motors

MG (Motor Grundfos), 2-pole

Motor	Frame size	IE class	Voltage [V]	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ 1/1	n [min ⁻¹]	I _{start} I _{1/1}
MG	80A-C	IE2	3 x 220-240 Δ/380-415 Y	0.75	3.3/1.9	80-80	0.81-0.71	2840-2870	5.8-6.2
MG	90SA-D	IE2		1.1	4.1/2.35	84-84	0.87-0.82	2890-2910	7.4-8.0
MG	90SB-D	IE2		1.5	5.45/3.15	85.5-85.5	0.87-0.82	2890-2910	8.5-9.3
MG	90LC-D	IE2		2.2	7.7/4.45	87.5-87.5	0.89-0.87	2890-2910	8.5-9.5
MG	100LC-D	IE2		3	10.9/6.3	87.5-87.5	0.87-0.82	2900-2920	8.4-9.2
MG	112MC-D	IE2		4	13.9/8.0	89-89	0.88-0.84	2910-2930	11.2-12.3
MG	90LC-D	IE2	3 x 380-415 Δ	2.2	4.45	87.5-87.5	0.89-0.87	2890-2910	8.5-9.5
MG	100LC-D	IE2		3	6.3	87.5-87.5	0.87-0.82	2900-2920	8.4-9.2
MG	112MC-D	IE2		4	8.0	89-89	0.88-0.84	2910-2930	11.2-12.3
MG	132SC-D	IE2		5.5	11.2	90-90	0.88-0.84	2910-2930	10.7-11.7
MG	132SB-F	IE2		7.5	14.8-13.6	89.5-90.5	0.89-0.88	2920-2930	7.8-9.1
MG	160MB-F	IE2		11	21.2-19.6/12.2-11.6	90.7-91.7	0.90-0.88	2930-2940	6.6-7.8
MG	160MD-F	IE2	3 x 380-415 Δ/660-690 Y	15	28.5-26.0/16.2-15.6	91.2-92.3	0.91-0.90	2920-2940	6.6-7.8
MG	160LB-F	IE2		18.5	35.0-32.0/20.0-19.2	91.6-92.6	0.91-0.90	2920-2940	7.1-8.5
MG	180MB-F	IE2		22	41.5-38.5/23.8-22.8	91.9-92.8	0.91-0.89	2930-2940	7.5-8.9

MG (Motor Grundfos), 4-pole

Motor	Frame size	IE class	Voltage [V]	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ 1/1	n [min ⁻¹]	I _{start} I _{1/1}
MG	71A-C	IE2	3 x 220-240 Δ/380-415 Y	0.25	1.48/0.85	69-69	0.75-0.65	1400-1420	4.0-4.4
MG	71B-C	IE2		0.37	1.9/1.1	71-71	0.77-0.67	1400-1420	4.0-4.4
MG	80A-C	IE2		0.55	2.6/1.5	77-77	0.79-0.70	1390-1410	4.3-4.7
MG	80B-C	IE2		0.75	3.3/1.9	78-78	0.79-0.70	1390-1410	4.3-4.7
MG	90SB-D	IE2		1.1	4.7/2.7	83.8	0.78	1440	7.0
MG	90LC-D	IE2		1.5	6.2/3.6	85	0.77	1440	6.0
MG	100LB-D	IE2	3 x 380-415 Δ	2.2	8.5/4.9	86.4	0.82	1440	6.5
MG	100LC-D	IE2		3	11.8/6.75	87.4	0.81	1450	6.7
MG	112MC-D	IE2		4	15.4/8.9	88.3	0.81	1450	7.3
MG	100LB-D	IE2		2.2	5.35	86.4	0.77/0.7	1440	6.2/6.7
MG	100LC-D	IE2		3	7.2	87.4	0.77/0.7	1440	6.1/6.7
MG	112MC-D	IE2		4	8.9	88.3	0.81/0.75	1450	7.3/8.0
MG	132SB-F	IE2	3 x 380-415 Δ/660-690 Y	5.5	11.2-10.4/6.50-6.25	89.0-90.0	0.86-0.84	1440-1450	7.0-8.2
MG	132MB-F	IE2		7.5	15.2-14.0/8.70-8.40	89.5-90.5	0.87-0.85	1440-1450	6.7-7.9
MG	160MB-F	IE2		11	21.6-20.4/12.4-12.0	91.0-92.0	0.88-0.84	1460-1470	7.1-8.1
MG	160LB-F	IE2		15	29.0-28.0/16.8-16.4	92.6-92.0	0.8-0.84	1460-1470	7.6-8.7

Siemens, 2-pole

Motor	Frame size	IE class	Voltage [V]	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ 1/1	n [min ⁻¹]	I _{start} I _{1/1}
Siemens	80M	IE2	3 x 220-240 Δ/380-415 Y	1.1	3.65/2.10	84	0.89	2860	7.0
Siemens	90S	IE2		1.5	5.10/2.95	85	0.87	2890	7.0
Siemens	90L	IE2		2.2	7.30/4.20	86.5	0.87	2890	7.0
Siemens	100L	IE2		3	9.90/5.70	87	0.88	2890	7.0
Siemens	112M	IE2		4	12.6/7.30	88.5	0.89	2905	7.0
Siemens	90L	IE2		2.2	4.20/2.45	86.5	0.87	2890	7.0
Siemens	100L	IE2	3 x 380-415 Δ/660-690 Y	3	5.70/3.30	87	0.88	2890	7.0
Siemens	112M	IE2		4	7.30/4.20	88.5	0.89	2905	7.0
Siemens	132S	IE2		5.5	9.90/5.70	89.5	0.9	2930	7.0
Siemens	132S	IE2		7.5	13.0/7.50	90.5	0.92		7.0
Siemens	160M	IE2		11	19.4/11.2	91	0.9	2950	7.0
Siemens	160M	IE2		15	26.4/15.2	91.5	0.9	2950	7.0
Siemens	160L	IE2		18.5	31.5/18.2	92.3	0.92	2940	7.0
Siemens	180M	IE2		22	38.0/21.9	93	0.89	2950	7.0
Siemens	200L	IE2		30	52.0/30.0	93.5	0.89	2950	7.0

Siemens, 4-pole

Motor	Frame size	IE class	Voltage [V]	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ 1/1	n [min ⁻¹]	I _{start} / I _{1/1}
Siemens 90S	90S	IE2	3 x 220-240 Δ/380-415 Y	1.1	4.25/2.45	84	0.77	1440	6.4
Siemens 90L	90L	IE2		1.5	5.70/3.30	85	0.77	1440	6.7
Siemens 100L	100L	IE2		2.2	7.80/4.50	86.5	0.82	1435	7.0
Siemens 100L	100L	IE2		3.0	10.6/6.10	87.7	0.81		7.0
Siemens 112M	112M	IE2	3 x 380-415 Δ/660-690 Y	4	14.0/8.10	89	0.81	1440	6.9
Siemens 100L	100L	IE2		2.2	4.50/2.60	86.5	0.82	1435	7.0
Siemens 100L	100L	IE2		3.0	6.10/3.50	87.7	0.81		7.0
Siemens 112M	112M	IE2		4	8.10/4.70	89	0.81	1440	6.9
Siemens 132S	132S	IE2		5.5	10.6/6.10	89.5	0.84	1460	7.0
Siemens 132M	132M	IE2		7.5	14.4/8.30	90.3	0.84	1460	7.0
Siemens 160M	160M	IE2		11	20.4/11.8	91.5	0.85	1460	6.9
Siemens 160L	160L	IE2		15	27.5/16.0	92	0.86	1460	7.0
Siemens 180M	180M	IE2		18.5	34.5/20.0	92.5	0.84	1470	7.0
Siemens 180L	180L	IE2		22	40.5/23.4	93	0.84	1470	7.3
Siemens 200L	200L	IE2		30	53.0/30.5	93.5	0.87	1470	7.3

Siemens, 6-pole

Motor	Frame size	IE class	Voltage [V]	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ 1/1	n [min ⁻¹]	I _{start} / I _{1/1}
Siemens 80B	80B	IE2	3 x 220-240 Δ/380-415 Y	0.55	2.77/1.60	67.0	0.74	910	3.0
Siemens 90S	90S	IE2		0.75	3.46/2.00	75.5	0.72	925	4.0
Siemens 90L	90L	IE2		1.1	4.85/2.80	82.0	0.70	940	6.0
Siemens 100L	100L	IE2		1.5	6.32/3.65	85.0	0.70	950	6.0
Siemens 112M	112M	IE2		2.2	9.35/5.40	84.0	0.70	955	6.0
Siemens 132SA	132SA	IE2		3	10.5/6.10	84.0	0.85	955	7.0
Siemens 132MA	132MA	IE2		4	14.7/8.50	84.0	0.81	950	6.0
Siemens 112M	112M	IE2		2.2	5.40/3.12	84.0	0.70	955	6.0
Siemens 132SA	132SA	IE2	3 x 380-415 Δ/660-690 Y	3	6.10/3.50	84.0	0.84	955	7.0
Siemens 132MA	132MA	IE2		4	8.50/4.91	84.0	0.81	950	6.0
Siemens 132MB	132MB	IE2		5.5	12.0/6.93	86.0	0.77	960	7.0
Siemens 160M	160M	IE2		7.5	17.1/9.87	88.0	0.72	965	6.0
Siemens 160L	160L	IE2		11	23.0/13.3	88.5	0.78	960	7.0
Siemens 180L	180L	IE2		15	31.5/18.2	91.0	0.75	970	7.0
Siemens 200LA	200LA	IE2		18.5	38.0/21.9	91.0	0.77	975	6.0
Siemens 200LB	200LB	IE2		22	45.0/26.0	91.5	0.77	975	6.0
Siemens 225M	225M	IE2		30	56.0/32.3	93.2	0.83	980	7.0
Siemens 250M	250M	IE2		37	69.0/39.8	93.7	0.83	985	7.0
Siemens 280S	280S	IE2		45	81.0/46.8	94.4	0.85	988	7.0
Siemens 280M	280M	IE2		55	99.0/57.2	94.6	0.85	988	7.0
Siemens 315S	315S	IE2		75	138/79.7	95.0	0.83	990	7.0
Siemens 315MA	315MA	IE2		90	160/92.4	95.3	0.85	990	7.0
Siemens 315MB	315MB	IE2		110	196/113	95.6	0.85	990	7.0
Siemens 315L	315L	IE2		132	235/136	95.8	0.85	990	8.0

MMG-E, 2-pole

Motor	Frame size	IE class	Voltage [V]	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ 1/1	n [min ⁻¹]	I _{start} I _{1/1}
MMG-E	071B	IE2	220-240 Δ/380-415 Y	0.55	2.2/1.3	77.0	0.80	2810	6.4
MMG-E	80A	IE2		0.75	2.8/1.6	81.5	0.82	2880	7.9
MMG-E	80B	IE2		1.1	4.1/2.4	81.8	0.83	2870	7.9
MMG-E	90S	IE2		1.5	5.8/3.4	83.0	0.79	2880	8.9
MMG-E	90L	IE2		2.2	8.3/4.8	83.4	0.81	2870	8.3
MMG-E	100L	IE2		3	10.2/5.9	86.3	0.86	2880	8.9
MMG-E	112M	IE2	380-415 Δ/660-690 Y	4	14/8.1	87.1	0.86	2910	9.1
MMG-E	90L	IE2		2.2	4.8/2.8	83.4	0.81	2870	8.3
MMG-E	100L	IE2		3	5.9/3.4	86.3	0.86	2880	8.9
MMG-E	112M	IE2		4	8.1/4.7	87.1	0.86	2910	9.1
MMG-E	132SA	IE2		5.5	10.4/6.0	88.4	0.87	2910	7.8
MMG-E	132SB	IE2		7.5	14/8.1	88.4	0.88	2900	7.6
MMG-E	160MA	IE2		11	20.2/11.6	89.8	0.89	2930	6.2
MMG-E	160MB	IE2		15	27/15.6	90.5	0.89	2940	7.0
MMG-E	160L	IE2		18.5	33/19	91.5	0.89	2940	7.3
MMG-E	180M	IE2		22	39.5/23	92.1	0.88	2960	8.3
MMG-E	200LA	IE2		30	52/30	92.5	0.90	2950	7.8
MMG-E	200LB	IE2		37	64/37	92.9	0.90	2960	7.6
MMG-E	225M	IE2		45	79/46	92.9	0.90	2960	6.7
MMG-E	250M	IE2		55	94/55	94.0	0.90	2970	8.3
MMG-E	280S	IE2		75	130/75	94.1	0.90	2980	7.7
MMG-E	280M	IE2		90	154/89	94.5	0.92	2980	8.0
MMG-E	315S	IE2		110	188/110	94.5	0.89	2980	8.1
MMG-E	315M	IE2		132	220/130	94.8	0.92	2970	6.2
MMG-E	315LA	IE2		160	265/156	94.8	0.93	2970	6.0
MMG-E	315LB	IE2		200	330/190	95.2	0.93	2970	5.8
MMG-E	355M	IE2		250	410/236	95.0	0.93	2980	7.1
MMG-E	355L	IE2		315	515/295	95.1	0.94	2980	7.2

MMG-E, 4-pole

Motor	Frame size	IE class	Voltage [V]	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ 1/1	n [min ⁻¹]	I _{start} I _{1/1}
MMG-E	071A	IE2	220-240 Δ/380-415 Y	0.25	1.2/0.7	72.6	0.71	1375	4.7
MMG-E	071B	IE2		0.37	1.7/1.0	71.9	0.74	1360	4.4
MMG-E	80MA	IE2		0.55	2.8/1.6	70.0	0.76	1400	4.4
MMG-E	80MB	IE2		0.75	3.6/2.1	79.8	0.80	1430	6.7
MMG-E	090S	IE2		1.1	4.7/2.7	82.2	0.73	1440	7.3
MMG-E	090L	IE2		1.5	5.9/3.4	82.8	0.77	1430	6.5
MMG-E	100LA	IE2		2.2	8.8/5.1	83.4	0.77	1450	8.4
MMG-E	100LB	IE2		3.0	11/6.3	86.7	0.80	1440	7.0
MMG-E	112M	IE2		4.0	13.8/8	87.2	0.83	1450	8.9
MMG-E	100LA	IE2		2.2	5.1/3.0	83.4	0.76	1450	8.4
MMG-E	100LB	IE2		3.0	6.3/3.6	86.7	0.80	1440	6.9
MMG-E	112M	IE2		4.0	8/4.6	87.2	0.83	1450	8.7
MMG-E	132S	IE2	380-415 Δ/660-690 Y	5.5	10.6/6.2	88.8	0.85	1460	8.0
MMG-E	132M	IE2		7.5	14.2/8.2	89.8	0.85	1460	8.7
MMG-E	160M	IE2		11	21.6/12.5	90.4	0.81	1470	8.3
MMG-E	160L	IE2		15	29/16.7	90.5	0.83	1470	8.2
MMG-E	180M	IE2		18.5	33/19.1	92.0	0.87	1470	7.7
MMG-E	180L	IE2		22	40/23	92.3	0.86	1470	7.9
MMG-E	200L	IE2		30	53/31	92.8	0.87	1480	8.7
MMG-E	225S	IE2		37	67/38	93.2	0.87	1480	6.7
MMG-E	225M	IE2		45	80/46	93.1	0.88	1480	7.5
MMG-E	250M	IE2		55	98/57	94.2	0.84	1490	8.5
MMG-E	280S	IE2		75	132/77	94.5	0.88	1480	8.7
MMG-E	280M	IE2		90	154/89	94.8	0.89	1480	9.5
MMG-E	315S	IE2		110	195/113	94.7	0.88	1490	7.1
MMG-E	315M	IE2		132	235/136	94.8	0.88	1490	7.1
MMG-E	315LA	IE2		160	285/165	95.0	0.88	1490	7.2
MMG-E	315LB	IE2		200	350/202	95.1	0.87	1490	7.2
MMG-E	355M	IE2		250	425/245	95.3	0.91	1490	6.3
MMG-E	355L	IE2		315	535/309	95.4	0.90	1490	6.6

MMG-E, 6-pole

Motor	Frame size	IE class	Voltage [V]	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ 1/1	n [min ⁻¹]	I _{start} / I _{1/1}
MMG-E	090S	IE2	220-240 Δ/380-415 Y	0.75	3.4/1.9	76.0	0.73	930	4.4
MMG-E	090L	IE2		1.1	4.8/2.8	79.0	0.73	930	4.7
MMG-E	100L	IE2		1.5	6.3/3.7	79.9	0.74	950	4.9
MMG-E	112M	IE2		2.2	8.7/4.5	83.4	0.77	960	6.2
MMG-E	132S	IE2		3.0	12.6/7.3	84.6	0.74	970	6.7
MMG-E	132MA	IE2		4.0	16.2/9.3	85.0	0.73	970	7.4
MMG-E	112M	IE2		2.2	4.5/2.6	83.4	0.77	960	6.2
MMG-E	132S	IE2		3.0	7.3/4.2	84.6	0.74	970	6.7
MMG-E	132MA	IE2		4.0	9.3/5.4	85.0	0.73	970	7.4
MMG-E	132MB	IE2		5.5	12.4/7.2	86.3	0.75	970	7.5
MMG-E	160M	IE2	380-415 Δ/660-690 Y	7.5	16.4/9.5	87.5	0.76	970	6.9
MMG-E	160L	IE2		11	23.6/13.6	88.7	0.76	970	7.1
MMG-E	180L	IE2		15	31.5/18.2	89.7	0.76	980	7.0
MMG-E	200LA	IE2		18.5	36.5/21.1	90.3	0.81	980	7.4
MMG-E	200LB	IE2		22	44/25	91.0	0.79	980	8.2
MMG-E	225M	IE2		30	55/32	91.8	0.86	980	5.7
MMG-E	250M	IE2		37	69/40	92.5	0.84	980	8.0
MMG-E	280S	IE2		45	86/50	92.8	0.82	980	6.3
MMG-E	280M	IE2		55	103/60	93.2	0.82	980	6.3
MMG-E	315S	IE2		75	134/77	93.8	0.87	990	7.0
MMG-E	315M	IE2		90	162/94	94.0	0.86	990	7.3
MMG-E	315LA	IE2		110	194/112	94.3	0.87	990	7.4
MMG-E	315LB	IE2		132	230/133	94.6	0.88	990	6.7
MMG-E	355MA	IE2		160	288/166	94.8	0.85	990	6.7
MMG-E	355MB	IE2		185	327/189	95.0	0.86	990	6.3
MMG-E	355MC	IE2		200	355/205	95.0	0.86	990	6.6
MMG-E	355MD	IE2		220	397/229	95.0	0.84	990	7.1
MMG-E	355L	IE2		250	440/254	95.1	0.86	990	6.3

MMG-G, 2-pole

Motor	Frame size	IE class	Voltage [V]	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ 1/1	n [min ⁻¹]	I _{start} / I _{1/1}
MMG-G	80	IE2	3 x 220-240 Δ/380-415 Y	0.75	2.90/1.68	80.0	0.85	2810	6.3
MMG-G	80	IE2		1.1	4.15/2.42	82.5	0.84	2810	6.7
MMG-G	90S	IE2		1.5	5.50/3.20	84.1	0.85	2810	7.2
MMG-G	90L	IE2		2.2	7.95/4.60	85.7	0.85	2820	7.3
MMG-G	100L	IE2		3	10.4/6.05	86.7	0.87	2850	8.6
MMG-G	112M	IE2		4	13.8/7.95	87.6	0.87	2860	8.3
MMG-G	90L	IE2	3 x 380-415 Δ	2.2	4.55-4.35	85.1-84.8	0.86-0.83	2820-2840	7.3
MMG-G	100L	IE2		3	6.00-5.65	86.7-86.4	0.88-0.85	2850-2870	8.6
MMG-G	112M	IE2		4	7.90-7.45	87.8-87.5	0.88-0.85	2860-2880	8.3
MMG-G	132S	IE2		5.5	10.2-9.85	90.5-90.9	0.90-0.85	2900-2920	7.2
MMG-G	132S	IE2		7.5	14.0-14.0	89.9-90.2	0.91-0.83	2890-2910	6.7
MMG-G	160M	IE2		11	20.6/11.8	90.4	0.91	2910	7.2
MMG-G	160M	IE2	3 x 380-415 Δ/660-690 Y	15	27.5/15.8	91.1	0.91	2920	7.1
MMG-G	160L	IE2		18.5	33.5/19.2	91.6	0.92	2920	8.4
MMG-G	180MA	IE2		22	39.0/22.6	92.8	0.92	2940	8.6
MMG-G	200LA	IE2		30	55.5/32.0	92.7	0.88	2940	8.6
MMG-G	200LA	IE2		37	66.5/38.5	93.7	0.90	2940	8.6
MMG-G	225MA	IE2		45	81.0/46.5	93.8	0.90	2940	8.4
MMG-G	250SA	IE2		55	97.5/56.0	94.0	0.91	2950	7.4
MMG-G	250MA	IE2		75	130/75.0	95.0	0.92	2950	7.5
MMG-G	280SA	IE2		90	158/91.0	95.0	0.91	2950	7.0
MMG-G	280MA	IE2		110	190/110	95.5	0.92	2960	7.6
MMG-G	315SA	IE2		132	230/132	95.5	0.91	2980	7.5
MMG-G	315MA	IE2		160	280/162	95.6	0.90	2980	7.0
MMG-G	315MA	IE2		200	355/204	94.0	0.90	2980	8.0
MMG-G	315CA	IE2		250	455/260	94.2	0.89	2970	6.4
MMG-G	315DA	IE2		315	560/325	94.5	0.90	2970	6.5
MMG-G	355AA	IE2		355	630/365	94.8	0.90	2970	6.5

MMG-G, 4-pole

Motor	Frame size	IE class	Voltage [V]	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ 1/1	n [min ⁻¹]	I _{start} I _{1/1}
MMG-G	80	IE2	3 x 220-240 Δ/380-415 Y	0.55	2.60/1.50	80.0	0.70	1390	5.7
MMG-G	80	IE2		0.75	3.25/1.90	81.5	0.74	1400	5.7
MMG-G	90S	IE2		1.1	4.30/2.50	83.8	0.80	1410	6.1
MMG-G	90L	IE2		1.5	5.80/3.35	85.0	0.80	1400	6.4
MMG-G	100L	IE2		2.2	7.75/4.50	86.5	0.86	1410	6.7
MMG-G	100L	IE2		3	11.0/6.35	87.5	0.82	1420	7.7
MMG-G	112M	IE2	3 x 380-415 Δ	4	14.2/8.20	88.5	0.84	1430	7.7
MMG-G	100L	IE2		2.2	4.50-4.25	86.5-86.2	0.86-0.83	1410-1430	9.6
MMG-G	100L	IE2		3	6.35-6.05	87.5-87.2	0.82-0.79	1420-1440	9.8
MMG-G	112M	IE2		4	8.20-7.75	88.5-88.2	0.84-0.81	1430-1450	9.8
MMG-G	132S	IE2		5.5	11.0-10.4	89.1-89.2	0.86-0.82	1450-1470	9.8
MMG-G	132M	IE2		7.5	14.6/8.40	91.0	0.86	1450	9.5
MMG-G	160M	IE2		11	20.6/11.8	92.5	0.88	1450	9.0
MMG-G	160L	IE2		15	31.0/17.8	93.7	0.89	1450	8.6
MMG-G	180MC	IE2		18.5	35.0/20.0	94.0	0.86	1460	8.8
MMG-G	180LC	IE2		22	41.0/23.6	94.0	0.87	1460	8.3
MMG-G	200LC	IE2	3 x 380-415 Δ/660-690 Y	30	55.0/31.5	94.5	0.88	1460	9.3
MMG-G	225SC	IE2		37	69.0/39.5	95.0	0.86	1470	7.8
MMG-G	225MC	IE2		45	84.0/48.5	95.0	0.86	1470	7.4
MMG-G	250SC	IE2		55	100/58.0	95.5	0.87	1480	7.4
MMG-G	250MC	IE2		75	138/79.0	95.5	0.87	1480	7.3
MMG-G	280SB	IE2		90	164/94.0	95.4	0.88	1480	7.0
MMG-G	280MC	IE2		110	200/114	95.4	0.88	1480	6.8
MMG-G	315SC	IE2		132	240/138	95.4	0.88	1490	6.0
MMG-G	315MCB	IE2		160	290/166	95.4	0.88	1490	6.0
MMG-G	315MB	IE2		200	335/192	95.8	0.88	1480	7.8
MMG-G	315CB	IE2		250	450/260	94.5	0.89	1480	6.4
MMG-G	315DB	IE2		315	565/325	94.8	0.89	1480	6.4

MMG-G, 6-pole

Motor	Frame size	IE class	Voltage [V]	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ 1/1	n [min ⁻¹]	I _{start} I _{1/1}
MMG-G	80	IE2	3 x 220-240 Δ/380-415 Y	0.55	3.10/1.80	75.0	0.62	910	5.0
MMG-G	90S	IE2		0.75	3.90/2.26	77.7	0.65	920	4.8
MMG-G	90L	IE2		1.1	5.50/3.20	79.9	0.66	920	4.7
MMG-G	100L	IE2		1.5	7.00/4.05	81.0	0.70	920	5.3
MMG-G	112M	IE2		2.2	9.00/5.20	82.6	0.78	930	5.9
MMG-G	132S	IE2		3	11.2/6.45	88.5	0.80	970	7.4
MMG-G	132M	IE2	3 x 380-415 Δ/660-690 Y	4	14.8/8.60	89.5	0.79	970	7.4
MMG-G	112M	IE2		2.2	5.20/3.00	82.6	0.78	930	5.9
MMG-G	132S	IE2		3	6.45/3.70	88.5	0.80	970	7.4
MMG-G	132M	IE2		4	8.60/4.95	89.5	0.79	970	7.4
MMG-G	132M	IE2		5.5	11.4/6.60	89.0	0.82	960	6.5
MMG-G	160M	IE2		7.5	15.4/8.90	91.0	0.81	970	6.7
MMG-G	160L	IE2		11	23.0/13.4	91.0	0.79	980	7.4
MMG-G	180LC	IE2		15	29.5/17.0	91.5	0.84	970	6.1
MMG-G	200LC	IE2		18.5	37.5/21.6	93.0	0.81	980	6.4
MMG-G	200LC	IE2		22	43.5/25.0	93.5	0.83	980	6.2
MMG-G	225MC	IE2		30	56.5/32.5	94.0	0.86	980	5.9
MMG-G	250SC	IE2		37	68.5/39.5	94.0	0.87	990	6.4
MMG-G	250MC	IE2		45	82.5/47.5	94.5	0.88	990	7.0
MMG-G	280SB	IE2		55	106/60.5	94.5	0.84	980	6.4
MMG-G	280MB	IE2		75	140/80.5	95.0	0.86	980	6.7
MMG-G	315SB	IE2		90	168/96.0	95.3	0.86	990	6.7
MMG-G	315MB	IE2		110	200/114	95.4	0.88	990	6.4
MMG-G	315MB	IE2		132	246/140	95.8	0.86	990	6.4

MMG-H, 2-pole

Motor	Frame size	IE class	Voltage [V]	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ 1/1	n [min ⁻¹]	I _{start} I _{1/1}
MMG-H	71B	IE2	3 x 220-240 Δ/380-420 Y	0.55	2.42-2.22/1.40-1.26		0.82	2820	6.1-6.1
MMG-H	80B	IE2		0.75	3.20-2.90/1.84-1.66	79.3	0.78	2880	7.0-7.0
MMG-H	80B	IE2		1.1	4.50-4.10/2.60-2.36	81.3	0.79	2880	7.0-7.0
MMG-H	90S	IE2		1.5	5.40-4.95/3.10-2.80	83.0	0.88	2900	8.5-8.5
MMG-H	90L	IE2		2.2	7.70-7.05/4.45-4.05	84.2	0.89	2900	8.5-8.5
MMG-H	100LA	IE2		3	10.2-9.40/5.95-5.35	85.4	0.90	2900	9.0-9.0
MMG-H	112M	IE2		4	13.6-12.6/7.90-7.15	86.3	0.89	2920	9.0-9.0
MMG-H	90L	IE2		2.2	4.45-4.05/2.55-2.34	84.2	0.89	2900	8.5-8.5
MMG-H	100LA	IE2		3	5.95-5.35/3.40-3.10	85.4	0.90	2900	9.0-9.0
MMG-H	112M	IE2		4	7.90-7.15/4.55-4.15	86.3	0.89	2920	9.0-9.0
MMG-H	132SA	IE2	3 x 380-420 Δ/660-725 Y	5.5	10.8-9.70/6.20-5.60	87.5	0.89	2930	8.5-8.5
MMG-H	132SB	IE2		7.5	14.4-13.2/8.35-7.60	88.4	0.89	2930	8.5-8.5
MMG-H	160MA	IE2		11	20.6-18.6/11.8-10.8	89.9	0.90	2940	7.5-7.5
MMG-H	160MB	IE2		15	28.0-25.5/16.0-14.6	90.7	0.90	2940	7.5-7.5
MMG-H	160L	IE2		18.5	34.0-30.5/19.6-17.8	91.2	0.91	2940	7.5-7.5
MMG-H	180M	IE2		22	40.0-36.5/23.2-21.0	91.5	0.91	2950	7.5-7.5
MMG-H	200LA	IE2		30	54.5-49.0/31.5-28.5	92.2	0.91	2950	7.5-7.5
MMG-H	200LB	IE2		37	66.5-60.5/38.5-35.0	92.6	0.91	2950	7.5-7.5
MMG-H	225M	IE2		45	80.5-73.0/46.5-42.5	93.1	0.91	2960	7.5-7.5
MMG-H	250M	IE2		55	99.5-90.0/57.0-52.0	93.4	0.90	2970	7.5-7.5
MMG-H	280S	IE2		75	134-122/76.5-70.0	94.0	0.91	2970	7.5-7.5
MMG-H	280MA	IE2		90	160-144/91.5-83.5	94.5	0.91	2980	7.5-7.5
MMG-H	315S	IE2		110	194-176/112-102	94.6	0.91	2980	7.1-7.1
MMG-H	315M	IE2		132	232-210/134-122	94.8	0.91	2980	7.1-7.1
MMG-H	315L	IE2		160	280-255/162-148	95.0	0.91	2980	7.1-7.1
MMG-H	315L	IE2		200	350-315/202-184	95.7	0.91	2980	7.1-7.1
MMG-H	355M	IE2		250	440-400/255-232	95.4	0.90	2990	7.1-7.1
MMG-H	355L	IE2		315	550-495/315-285	95.9	0.91	2990	7.1-7.1
MMG-H	355L	IE2		355	620-560/355-325	95.8	0.91	2990	8.20-8.20

MMG-H, 4-pole

Motor	Frame size	IE class	Voltage [V]	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ 1/1	n [min ⁻¹]	I _{start} I _{1/1}
MMG-H	71B	IE2	3 x 220-240 Δ/380-420 Y	0.25	1.36-1.26/0.79-0.79		0.74	1350	5.2-5.2
MMG-H	71B	IE2		0.37	1.94-1.78/1.12-1.02		0.75	1340	5.2-5.2
MMG-H	80B	IE2		0.55	2.55-2.36/1.48-1.34		0.73	1420	8.8-8.8
MMG-H	80B	IE2		0.75	3.40-3.10/1.96-1.78	79.6	0.73	1420	8.8-8.8
MMG-H	90S	IE2		1.1	4.50-4.10/2.60-2.36	81.4	0.79	1450	8.8-8.8
MMG-H	90L	IE2		1.5	6.00-5.50/3.50-3.15	82.8	0.79	1450	8.5-8.5
MMG-H	100LA	IE2		2.2	8.80-8.05/5.10-4.60	84.3	0.78	1440	9.0-9.0
MMG-H	100LB	IE2		3.0	11.8-10.8/6.85-6.20	85.5	0.78	1440	9.0-9.0
MMG-H	112M	IE2		4.0	14.6-13.4/8.40-7.60	87.0	0.83	1460	8.8-8.8
MMG-H	100LA	IE2		2.2	5.10-4.60/2.95-2.65	84.3	0.78	1440	9.0-9.0
MMG-H	100LA	IE2	3 x 380-420 Δ/660-725 Y	3.0	6.85-6.20/3.95-3.60	85.5	0.78	1440	9.0-9.0
MMG-H	112M	IE2		4.0	8.40-7.60/4.85-4.40	87.0	0.83	1460	8.8-8.8
MMG-H	132SA	IE2		5.5	11.6-10.6/6.70-6.10	87.8	0.82	1460	8.5-8.5
MMG-H	132MA	IE2		7.5	15.4-14.0/8.90-8.10	89.0	0.83	1460	8.2-8.2
MMG-H	160MA	IE2		11	21.8-19.8/12.6-11.4	90.3	0.85	1460	7.0-7.0
MMG-H	160L	IE2		15	29.0-26.5/16.8-15.2	91.0	0.86	1460	7.5-7.5
MMG-H	180MA	IE2		18.5	36.0-32.5/20.6-18.8	91.3	0.86	1470	7.5-7.5
MMG-H	180L	IE2		22	42.5-38.5/24.4-22.2	91.8	0.86	1470	7.5-7.5
MMG-H	200LA	IE2		30	55.5-50.0/32.0-29.0	92.5	0.89	1470	7.2-7.2
MMG-H	225S	IE2		37	69.0-62.5/39.5-36.0	93.9	0.87	1480	7.2-7.2
MMG-H	225M	IE2		45	84.0-76.0/48.5-44.0	93.3	0.87	1480	7.2-7.2
MMG-H	250MA	IE2		55	100-90.5/57.5-52.5	93.9	0.89	1480	7.2-7.2
MMG-H	280SA	IE2		75	134-126/80.0-73.0	94.1	0.87	1490	7.2-7.2
MMG-H	280MA	IE2		90	168-152/96.0-87.5	94.3	0.87	1490	7.2-7.2
MMG-H	315S	IE2		110	200-182/116-106	94.8	0.88	1490	6.9-6.9
MMG-H	315M	IE2		132	240-218/138-126	94.9	0.88	1490	6.9-6.9
MMG-H	315L	IE2		160	290-265/168-152	95.2	0.88	1490	6.9-6.9
MMG-H	315L	IE2		200	365-330/210-190	95.2	0.88	1490	6.9-6.9
MMG-H	355M	IE2		250	440-395/250-230	95.3	0.91	1490	7.1-7.1
MMG-H	355L	IE2		315	560-510/325-295	95.7	0.89	1490	6.9-6.9

MMG-H, 6-pole

Motor	Frame size	IE class	Voltage [V]	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ 1/1	n [min ⁻¹]	$\frac{I_{start}}{I_{1/1}}$
MMG-H	80	IE2	3 x 220-240 Δ/380-420 Y	0.55	2.80-0.25/1.62-1.46		0.70	905	6.7-6.7
MMG-H	90S	IE2		0.75	3.70-0.34/2.14-1.94	76.0	0.70	920	7.5-7.5
MMG-H	90L	IE2		1.1	5.25-0.48/3.05-2.75	78.3	0.70	920	7.5-7.5
MMG-H	100L	IE2		1.5	6.95-0.63/4.00-3.65	79.8	0.71	925	7.5-7.5
MMG-H	112M	IE2		2.2	9.80-0.90/5.70-5.15	81.8	0.72	925	7.5-7.5
MMG-H	132S	IE2		3.0	12.6-1.16/7.30-6.60	83.3	0.75	950	8.5-8.5
MMG-H	132M	IE2		4.0	16.4-1.50/9.45-8.55	84.6	0.76	950	9.0-9.0
MMG-H	132M	IE2		4.0	9.45-0.85/5.45-4.95	84.6	0.76	950	9.0-9.0
MMG-H	132M	IE2		5.5	12.8-1.16/7.35-6.70	86.0	0.76	960	9.5-9.5
MMG-H	160M	IE2		7.5	17.0-15.4/9.75-8.90	87.4	0.77	970	6.5-6.5
MMG-H	160L	IE2	3 x 380-420 Δ/660-725 Y	11	24.2-21.8/13.8-12.6	88.9	0.78	970	6.4-6.4
MMG-H	180L	IE2		15	31.5-28.5/18.0-16.4	89.9	0.81	970	7.0-7.0
MMG-H	200LA	IE2		18.5	38.5-34.5/22.0-20.0	90.5	0.81	980	7.0-7.0
MMG-H	200LB	IE2		22	45.5-41.0/26.0-23.8	90.9	0.81	980	7.0-7.0
MMG-H	225M	IE2		30	59.0-53.5/34.0-31.0	91.8	0.84	980	7.0-7.0
MMG-H	250M	IE2		37	70.0-63.5/40.5-36.5	92.3	0.87	980	7.0-7.0
MMG-H	280S	IE2		45	85.5-77.5/49.5-45.0	92.8	0.86	990	7.0-7.0
MMG-H	280MA	IE2		55	104-94.5/60.0-54.5	93.2	0.86	980	7.0-7.0
MMG-H	315S	IE2		75	142-130/82.5-75.0	93.8	0.85	980	7.0-7.0
MMG-H	315M	IE2		90	170-154/98.5-89.5	94.2	0.85	980	7.0-7.0
MMG-H	315L	IE2		110	206-186/118-108	94.4	0.86	980	6.7-6.7
MMG-H	315L	IE2		132	246-224/142-130	94.6	0.86	980	6.7-6.7
MMG-H	355M	IE2		160	290-265/168-152	94.9	0.88	990	6.7-6.7

Electrical data, IE3 motors

MG, 2-pole

Motor	Frame size	IE class	Voltage [V]	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ 1/1	n [min ⁻¹]	I _{start} I _{1/1}
MG	80A	IE3	3 x 220-240 Δ/380-415 Y	0.75	3.30/1.90	80.7	0.81-0.71	2840-2870	5.8-6.2
MG	80C	IE3		1.1	4.35/2.50	82.7	0.83-0.76	2840-2870	4.5-5.0
MG	90SB	IE3		1.5	5.45/3.15	84.2	0.87-0.82	2890-2910	8.5-9.3
MG	90LC	IE3		2.2	7.70/4.45	85.9	0.89-0.87	2890-2910	8.5-9.5
MG	100LC	IE3		3	11.0/6.30	87.1	0.87-0.82	2900-2920	8.4-9.2
MG	112MC	IE3		4	13.6/7.90	88.1	0.87	2920-2940	10.0-11.1
MG	90LC	IE3	3 x 380-415 Δ	2.2	4.45	85.9	0.89-0.87	2890-2910	8.5-9.5
MG	100LC	IE3		3	6.30	87.1	0.87-0.82	2900-2920	8.4-9.2
MG	112MC	IE3		4	7.90	88.1	0.87	2920-2940	10.0-11.1
MG	132SC	IE3		5.5	11.0	89.2	0.87-0.82	2920-2940	10.8-11.8
MG	132SB	IE3	3 x 380-415 Δ/660-690 Y	7.5	14.4-14.0/8.30-8.10	90.1	0.88-0.82	2910-2920	7.8-9.1
MG	160MB	IE3		11	20.8-19.8/12.0-11.8	91.2	0.88-0.84	2940-2950	6.6-7.8
MG	160MD	IE3		15	28.0-26.0/16.2-15.6	91.9	0.89-0.87	2930-2950	6.6-7.8
MG	160LB	IE3		18.5	34.5-32.5/20.0-18.8	92.4	0.89-0.85	2940-2950	8.3-9.8
MG	180MB	IE3		22	39.5/22.8	92.7	0.90	2950	8.3-8.3

MG, 4-pole

Motor	Frame size	IE class	Voltage [V]	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ 1/1	n [min ⁻¹]	I _{start} I _{1/1}
MG	90SC	IE3	3 x 220-240 Δ/380-415 Y	0.75	3.30/1.90	82.5	0.76-0.71	1440-1450	6.6-7.2
MG	90SB	IE3		1.1	4.85/2.80	84.1	0.71-0.64	1450-1460	8.2-9.0
MG	90LC	IE3		1.5	6.15-6.30/3.55-3.65	85.3	0.75-0.68	1450-1460	7.3-7.9
MG	100LB	IE3		2.2	8.50/4.90	86.7	0.79-0.73	1450	6.0-6.6
MG	100LC	IE3		3	11.0/6.30	87.7	0.82-0.76	1440-1450	7.0-7.7
MG	112MC	IE3		4	16.2/9.30	88.6	0.75-0.68	1460	7.9-8.7
MG	100LB	IE3	3 x 380-415 Δ	2.2	4.90	86.7	0.79-0.73	1450	6.0-6.6
MG	100LC	IE3		3	6.30	87.7	0.82-0.76	1440-1450	7.0-7.7
MG	112MC	IE3		4	9.30	88.6	0.75-0.68	1460	7.9-8.7
MG	132SB	IE3		5.5	11.0-11.0/6.35-6.35	89.6	0.86-0.80	1460	7.0-7.6
MG	132MB	IE3	3 x 380-415 Δ/660-690 Y	7.5	14.9-14.2/8.60-8.40	90.4	0.86-0.82	1460	6.8-7.8
MG	160MA	IE3		11	21.2-20.4/12.2-12.0	91.4	0.86-0.81	1470-1470	7.1-8.1
MG	160LA	IE3		15	29.0-28.0/16.8-16.4	92.1	0.86-0.82	1460-1470	7.6-8.7

Siemens, 2-pole

Motor	Frame size	IE class	Voltage [V]	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ 1/1	n [min ⁻¹]	I _{start} I _{1/1}
Siemens	100L	IE3	3 x 220-240 Δ/380-420 Y	3	10.2-9.20/5.90-5.30	87.1	0.88	2920	10
Siemens	112M	IE3		4	13.6-12.2/7.80-7.00	88.1	0.89	2955	10
Siemens	100L	IE3		3	5.90-5.30/3.40-3.10	87.1	0.88	2920	10
Siemens	112M	IE3		4	7.80-7.00/4.50-4.10	88.1	0.89	2955	10
Siemens	132S	IE3		5.5	10.4-9.40/6.00-5.40	89.2	0.90	2950	10
Siemens	132S	IE3		7.5	13.8-12.4/9.00-7.20	90.1	0.92	2950	10
Siemens	160M	IE3	3 x 380-420 Δ/660-725 Y	11	21.0-19.0/12.2-11.0	91.2	0.87	2955	10
Siemens	160M	IE3		15	29.0-26.0/17.0-15.0	91.9	0.86	2955	10
Siemens	160L	IE3		18.5	33.5-30.5/19.6-17.6	92.4	0.90	2960	10
Siemens	180M	IE3		22	40.5-36.5/23.6-21.0	92.7	0.89	2950	7.5
Siemens	200L	IE3		30	56.0-51.0/32.0-29.5	93.3	0.86	2955	6.6
Siemens	200L	IE3		37	68.0-63.0/39.0-36.0	93.7	0.87	2955	6.7
Siemens	225M	IE3		45	82.0-75.0/47.5-43.5	94.0	0.89	2960	6.9
Siemens	250M	IE3		55	99.0-92.0/57.0-53.0	94.3	0.89	2975	6.7
Siemens	280S	IE3		75	134-126/77.0-72.0	94.7	0.89	2975	6.8
Siemens	280M	IE3		90	160-148/92.0-85.0	95.0	0.90	2975	7.2
Siemens	315S	IE3		110	192-176/110-102	95.2	0.91	2980	7.1
Siemens	315M	IE3		132	230-210/134-122	95.4	0.91	2980	7.2
Siemens	315L	IE3		160	280-255/162-148	95.6	0.92	2980	7.8
Siemens	315L	IE3		200	345-310/200-180	95.8	0.92	2980	7.2
Siemens	315L	IE3		250	435-395/250-230	95.8	0.92	2985	10
Siemens	315L	IE3		315	550-530/320-305	95.8	0.89	2990	10
Siemens	355L	IE3		355	620-570/360-330	96.0	0.90	2980	10

Siemens, 4-pole

Motor	Frame size	IE class	Voltage [V]	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ 1/1	n [min ⁻¹]	I _{start} I _{1/1}
Siemens	100L	IE3	3 x 220-240 Δ/380-420 Y	2.2	8.00-7.30/4.60-4.20	86.7	0.83	1465	10
Siemens	100L	IE3		3	10.8-9.70/6.30-5.60	87.7	0.83	1460	10
Siemens	112M	IE3		4	14.6-13.2/8.40-7.60	88.6	0.82	1460	10
Siemens	100L	IE3		2.2	4.60-4.20/2.70-2.46	86.7	0.83	1465	10
Siemens	100L	IE3		3	6.30-5.60/3.60-3.30	87.7	0.83	1460	10
Siemens	112M	IE3		4	8.40-7.60/4.80-4.40	88.6	0.82	1460	10
Siemens	132S	IE3	3 x 380-420 Δ/660-725 Y	5.5	11.2-10.0/6.40-5.80	89.6	0.84	1475	10
Siemens	132M	IE3		7.5	15.0-13.6/8.70-7.90	90.4	0.84	1465	10
Siemens	160M	IE3		11	22.0-20.0/12.6-11.6	91.4	0.84	1475	10
Siemens	160L	IE3		15	30.0-27.5/17.6-16.0	92.1	0.82	1475	10
Siemens	180M	IE3		18.5	37.0-33.5/21.6-19.6	92.6	0.82	1470	6.9
Siemens	180L	IE3		22	42.5-40.5/24.6-23.6	93.0	0.83	1470	6.8
Siemens	200L	IE3		30	57.5-54.0/33.5-31.5	93.6	0.84	1470	6.9
Siemens	225S	IE3		37	69.0-64.0/39.5-37.0	93.9	0.86	1480	6.4
Siemens	225M	IE3		45	83.0-77.0/48.0-44.5	94.2	0.86	1480	6.4
Siemens	250M	IE3		55	100-93.0/58.0-54.0	94.6	0.87	1480	6.8
Siemens	280S	IE3		75	140-130/80.0-74.0	95.0	0.86	1485	6.9
Siemens	280M	IE3		90	166-152/95.0-88.0	95.2	0.87	1485	7.2
Siemens	315S	IE3		110	200-186/116-108	95.4	0.87	1490	6.8
Siemens	315M	IE3		132	240-220/140-128	95.6	0.87	1490	7.3
Siemens	315L	IE3		160	285-265/166-154	95.8	0.87	1490	7.3
Siemens	315L	IE3		200	355-330/206-190	96.0	0.88	1490	7.4
Siemens	315L	IE3		250	455-420/260-240	96.0	0.87	1490	10
Siemens	315L	IE3		315	570-550/330-320	96.0	0.86	1490	10
Siemens	315L	IE3		355	650-610/375-355	96.1	0.85	1490	10

Siemens, 6-pole

Motor	Frame size	IE class	Voltage [V]	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ 1/1	n [min ⁻¹]	I _{start} I _{1/1}
Siemens	100L	IE3	3 x 220-240 Δ/380-420 Y	1.5	6.60-5.90/3.80-3.40	82.5	0.73	970	10
Siemens	112M	IE3		2.2	9.15-8.30/5.30-4.80	84.3	0.75	970	10
Siemens	132S	IE3		3	12.0-11.0/7.00-6.40	85.6	0.76	975	10
Siemens	132M	IE3		4	15.8-14.2/9.10-8.20	86.8	0.77	970	10
Siemens	112M	IE3		2.2	5.30-4.80/3.00-2.80	84.3	0.75	970	10
Siemens	132S	IE3		3	7.00-6.40/4.05-3.70	85.6	0.76	975	10
Siemens	132M	IE3	3 x 380-420 Δ/660-725 Y	4	9.10-8.20/5.20-4.80	86.8	0.77	970	10
Siemens	132M	IE3		5.5	12.2-11.0/7.00-6.40	88.0	0.78	970	10
Siemens	160M	IE3		7.5	16.0-14.6/9.20-8.40	89.1	0.80	975	10
Siemens	160L	IE3		11	23.2-21.0/13.4-12.2	90.3	0.80	975	10
Siemens	180L	IE3		15	31.0-28.0/17.8-16.6	91.2	0.80	975	5.9
Siemens	200L	IE3		18.5	38.0-36.5/22.0-21.0	91.7	0.79	980	5.6
Siemens	200L	IE3		22	45.0-42.5/26.0-24.6	92.2	0.79	980	5.6
Siemens	225M	IE3		30	58.0-55.0/33.5-32.0	92.9	0.83	980	6.6
Siemens	250M	IE3		37	70.0-65.0/40.5-37.5	93.3	0.85	985	7.0
Siemens	280S	IE3		45	86.0-79.0/49.5-45.5	93.7	0.85	990	6.8
Siemens	280M	IE3		55	106-97.0/61.0-56.0	94.1	0.85	990	7.2
Siemens	315S	IE3		75	142-134/81.0-77.0	94.6	0.84	990	7.3
Siemens	315M	IE3		90	168-156/97.0-90.0	94.9	0.85	990	6.7
Siemens	315L	IE3		110	206-194/118-112	95.1	0.84	990	7.2
Siemens	315L	IE3		132	250-236/144-136	95.4	0.84	990	7.2
Siemens	315L	IE3		160	300-290/174-168	95.6	0.83	990	7.7

Electrical data, MGE motors

Electrical data for motors with built-in frequency converter.

NBE, NKE range, 2-pole

Motor	Frame size	Voltage	P2 [kW]	I _{1/1} [A]
MGE	90SB-D	3 x 380-480 V	1.5	3.3-2.7
MGE	90LC-D		2.2	4.6-3.8
MGE	100LC-D		3	6.2-5.0
MGE	112MC-D		4	8.1-6.6
MGE	132SC-D		5.5	11.0-8.8
MGE	132SB-F		7.5	14.8-11.6
MGE	160MB-F		11	22.5-18.8
MGE	160MD-F		15	30.0-26.0
MGE	160LB-F		18.5	37.0-31.0
MGE	180MB-F		22	43.5-35.0

NBE, NKE range, 4-pole

Motor	Frame size	Voltage	P2 [kW]	I _{1/1} [A]
MGE	90SA-D	3 x 380-480 V	0.75	1.8-1.9
MGE	90SB-D		1.1	2.5-2.2
MGE	90LC-D		1.5	3.3-2.9
MGE	100LB-D		2.2	4.6-3.8
MGE	112LC-D		3	6.2-5.0
MGE	112MC-D		4	8.1-6.6
MGE	132SB-F		5.5	11.0-9.00
MGE	132MB-F		7.5	15.0-12.0
MGE	160MB-F		11	22.0-17.8
MGE	160LB-F		15	30.0-25.4
MGE	180MA-F		18.5	37.0-30.0

Pump dimensions with other motors

The tables below show changes of pump dimensions when using other motors than the standard motors listed in section 16. *Performance curves and technical data.*

IE class	Motor
IE1	MMG-E
	MMG-G
IE2	MG
	Siemens
	MMG-E
	MMG-G
IE3	MMG-H
	Siemens

IE1

IE1, MMG-E, 2-pole

P2 [kW]		Motors on data pages		Other motors		L/LB	H	h4/AD	AG	LL	P	A	B	C	K	Weight [kg]	
50 Hz	60 Hz	Motor	Frame size	Motor	Frame size	[mm]										NK	NB
0.55	0.55	MG-C	71B	MMG-E	71B	21	0	12	10	10	0	0	0	0	0	4.9	4.6
0.75	0.75	MG-H3	80A	MMG-E	80A	13	0	24	10	10	0	0	0	0	0	9.6	8.7
1.1	1.1	MG-H3	80C	MMG-E	80B	-7	0	24	10	10	0	0	0	0	0	8.5	7.4
1.5	1.5	MG-H3	90S	MMG-E	90S	-21	0	36	-56	-3	0	0	0	0	0	9	10
2.2	2.2	MG-H3	90L	MMG-E	90L	-36	0	36	-56	-3	3	0	0	0	0	7	11
3	3	MG-H3	100L	MMG-E	100L	-18	0	40	-66	3	-1	0	0	0	0	9	1
4	4	MG-H3	112M	MMG-E	112M	-41	0	46	-86	15	0	0	0	0	0	3	2
5.5	5.5	MG-H3	132S	MMG-E	132SA	-8	0	66	-86	15	0	0	0	0	0	26	24
7.5	7.5	MG-H3	132S	MMG-E	132SB	4	0	41	-87	-17	0	0	0	0	0	15	12
11	11	MG-H3	160M	MMG-E	160MA	27	0	44	-83	-63	-1	0	0	0	0	29	25
15	15	MG-H3	160M	MMG-E	160MB	27	0	44	-83	-63	-1	0	0	0	0	25	20
18.5	18.5	MG-H3	160L	MMG-E	160L	27	0	44	-83	-63	-1	0	0	0	0	34	30
22	22	MG-H3	180M	MMG-E	180M	39	0	60	-83	-63	0	0	0	0	0	56	51
30	30	Siemens IE3	200L	MMG-E	200LA	36	0	-18	-37	-9	-1	0	0	0	0	38	8
37	37	Siemens IE3	200L	MMG-E	200LB	11	0	-18	-37	-9	-1	0	0	0	0	30	7
45	45	Siemens IE3	225M	MMG-E	225M	-11	0	-18	-38	-9	-1	0	25	1	0	26	20
55	55	Siemens IE3	250M	MMG-E	250M	23	0	-51	-73	-17	0	0	0	0	0	77	63
75	75	Siemens IE3	280S	MMG-E	280S	-17	0	-47	-73	-17	0	0	0	-0.5	0	15	0
90	90	Siemens IE3	280M	MMG-E	280M	-76	0	-47	-73	-17	0	0	51	-0.5	0	0	-10
110	110	Siemens IE3	315S	MMG-E	315S	125	0	-44	-54	-19	0	0	0	-1	0	113	185
132	132	Siemens IE3	315M	MMG-E	315M	70	0	-44	-54	-19	0	0	0	-1	0	147	147
160	160	Siemens IE3	315L	MMG-E	315LA	70	0	-44	-54	-19	0	0	51	-1	0	170	150
200	200	Siemens IE3	315L	MMG-E	315LB	-85	0	-44	-54	-19	0	0	51	-1	0	45	55
250	250	Siemens IE3	315L	MMG-E	355M	114	40	139	154	23	240	102	52	38	0	310	310
315	315	Siemens IE3	315L	MMG-E	355L	114	40	139	154	23	240	102	122	38	0	545	-

Note: The dimensions L and h4 refer to NK pumps, LB and AD to NB pumps.

Example

If a 2-pole, 0.55 kW MMG-E motor, class IE1, is selected, the AG dimension will be 10 mm bigger.

IE1, MMG-E, 4-pole

P2 [kW]		Motors on data pages		Other motors		L/LB	H	h4/AD	AG	LL	P	A	B	C	K	Weight [kg]	
50 Hz	60 Hz	Motor	Frame size	Motor	Frame size	[mm]										NK	NB
0.25	0.25	MG-C	71B	MMG-E	71A	21	0	12	10	10	0	0	0	0	0	4.8	4.5
0.37	0.37	MG-C	71B	MMG-E	71B	21	0	12	10	10	0	0	0	0	0	5.3	5
0.55	0.55	MG-C	80A	MMG-E	80A	13	0	24	10	10	0	0	0	0	0	9.7	8.9
0.75	0.75	MG-H3	90S	MMG-E	80B	-37	-10	23	-70	-11	0	-15	0	-6	0	8.5	8
1.1	1.1	MG-H3	90S	MMG-E	90S	-21	0	36	-56	-3	0	0	0	0	0	5	6
1.5	1.5	MG-H3	90L	MMG-E	90L	-36	0	36	-56	-3	3	0	0	0	0	6	10
2.2	2.2	MG-H3	100L	MMG-E	100LA	-18	0	40	-66	3	-1	0	0	0	0	10	-1
3	3	MG-H3	100L	MMG-E	100LB	-18	0	40	-66	3	-1	0	0	0	0	5	-3
4	4	MG-H3	112M	MMG-E	112MB	-41	0	46	-86	15	0	0	0	0	0	2	1
5.5	5.5	MG-H3	132S	MMG-E	132S	4	0	41	-87	-17	0	0	0	0	0	10	10
7.5	7.5	MG-H3	132M	MMG-E	132M	-8	0	41	-87	-17	0	0	0	0	0	13	9
11	11	MG-H3	160M	MMG-E	160MA	-47	0	44	-83	-63	-1	0	-44	0	0	34	33
15	15	MG-H3	160L	MMG-E	160L	-33	0	44	-83	-63	-1	0	0	0	0	28	25
18.5	18.5	Siemens IE3	180M	MMG-E	180M	22	0	-22	-29	-14	0	0	0	0	0	20	19
22	22	Siemens IE3	180L	MMG-E	180L	-8	0	-22	-29	-14	0	0	38	0	0	37	32
30	30	Siemens IE3	200L	MMG-E	200L	11	0	-18	-37	-9	-1	0	0	0	0	35	33
37	37	Siemens IE3	225S	MMG-E	225S	24	0	-18	-38	-9	-1	0	0	1	0	40	30
45	45	Siemens IE3	225M	MMG-E	225M	-11	0	-18	-38	-9	-1	0	25	1	0	30	20
55	55	Siemens IE3	250M	MMG-E	250M	23	0	-51	-73	-17	0	0	0	0	0	50	35
75	75	Siemens IE3	280S	MMG-E	280S	-17	0	-47	-73	-17	0	0	0	-0.5	0	-6	-30
90	90	Siemens IE3	280M	MMG-E	280M	-76	0	-47	-73	-17	0	0	51	-0.5	0	-70	-80
110	110	Siemens IE3	315S	MMG-E	315S	122	0	-44	-54	-19	0	0	0	-1	0	200	175
132	132	Siemens IE3	315M	MMG-E	315M	70	0	-44	-54	-19	0	0	0	-1	0	170	130
160	160	Siemens IE3	315L	MMG-E	315LA	70	0	-44	-54	-19	0	0	51	-1	0	200	180
200	200	Siemens IE3	315L	MMG-E	315LB	-85	0	-44	-54	-19	0	0	51	-1	0	105	75
250	250	Siemens IE3	315L	MMG-E	355M	114	40	139	154	23	100	102	52	38	-7	380	380
315	315	Siemens IE3	315L	MMG-E	355L	-30	40	139	154	23	100	102	122	38	-7	470	-

Note: The dimensions L and h4 refer to NK pumps, LB and AD to NB pumps.

IE1, MMG-E, 6-pole

P2 [kW]		Motors on data pages		Other motors		L/LB	H	h4/AD	AG	LL	P	A	B	C	K	Weight [kg]	
50 Hz	60 Hz	Motor	Frame size	Motor	Frame size	[mm]										NK	NB
0.37	0.37	Siemens IE2	80A	MMG-E	80A	14	0	13	17	17	0	0	0	0	0.5	7	7
0.55	0.55	Siemens IE2	80B	MMG-E	80B	14	0	13	17	17	0	0	0	0	0.5	8	8
0.75	0.75	Siemens IE2	90S	MMG-E	90S	-21	0	18	31	25	0	0	0	3	0	9	11
1.1	1.1	Siemens IE2	90L	MMG-E	90L	-41	0	18	31	25	3	0	0	3	0	8	13
1.5	1.5	Siemens IE3	100L	MMG-E	100L	-19	0	-6	-39	-6	-1	0	0	0	0	6	0
2.2	2.2	Siemens IE3	112M	MMG-E	112M	-23	0	3	-19	6	0	0	0	0	0	10	10
3	3	Siemens IE3	132S	MMG-E	132S	-2	0	-2	-39	-12	0	0	0	0	0	14	9
4	4	Siemens IE3	132M	MMG-E	132MA	36	0	-2	-39	-12	0	0	0	0	0	24	19
5.5	5.5	Siemens IE3	132M	MMG-E	132MB	-14	0	-2	-39	-12	0	0	38	0	0	32	15
7.5	7.5	Siemens IE3	160M	MMG-E	160M	4	0	11.5	-15	5	-1	0	0	0	0	29	25
11	11	Siemens IE3	160L	MMG-E	160L	-12	0	11.5	-15	5	-1	0	0	0	0	30	26
15	15	Siemens IE3	180L	MMG-E	180L	-8	0	-22	-29	-14	0	0	38	0	0	19	24
18.5	18.5	Siemens IE3	200L	MMG-E	200LA	36	0	-18	-37	-9	-1	0	0	0	0	23	15
22	22	Siemens IE3	200L	MMG-E	200LB	11	0	-18	-37	-9	-1	0	0	0	0	13	13
30	30	Siemens IE3	225M	MMG-E	225M	-11	0	-18	-38	-9	-1	0	25	1	0	-29	-44
37	37	Siemens IE3	250M	MMG-E	250M	23	0	-51	-73	-17	0	0	0	0	0	-17	-35
45	45	Siemens IE3	280S	MMG-E	280S	-17	0	-47	-73	-17	0	0	0	-0.5	0	8	-12
55	55	Siemens IE3	280M	MMG-E	280M	34	0	-47	-73	-17	0	0	51	-0.5	0	26	6
75	75	Siemens IE3	315S	MMG-E	315S	122	0	-44	-54	-19	0	0	0	-1	0	212	212
90	90	Siemens IE3	315M	MMG-E	315M	70	0	-44	-54	-19	0	0	0	-1	0	140	130
110	110	Siemens IE3	315L	MMG-E	315LA	70	0	-44	-54	-19	0	0	51	-1	0	110	90
132	132	Siemens IE3	315L	MMG-E	315LB	-85	0	-44	-54	-19	0	0	51	-1	0	91	71
160	160	Siemens IE3	315L	MMG-E	355M	114	40	124	6	31	140	102	103	38	0	-	-
200	230	Siemens IE3	315L	MMG-E	355M	-30	40	139	154	23	0	102	52	38	-7	-	-

Note: The dimensions L and h4 refer to NK pumps, LB and AD to NB pumps.

IE1, MMG-G, 2-pole

P2 [kW]		Motors on data pages		Other motors		L/LB	H	h4/AD	AG	LL	P	A	B	C	K	Weight [kg]	
50 Hz	60 Hz	Motor	Frame size	Motor	Frame size	[mm]										NK	NB
0.55	0.55	MG-C	71B	MMG-G	71	29.5	0	23	-37	-2	0	0	0	0	0	5.5	5.2
0.75	0.75	MG-H3	80A	MMG-G	80	11.5	0	49	-22	-2	0	0	0	0	0	6.2	5.3
1.1	1.1	MG-H3	80C	MMG-G2	80	-8.5	0	49	-22	-2	0	0	0	0	0	8.1	7
1.5	1.5	MG-H3	90S	MMG-G2	90S	-23.5	0	60	-102	-23	0	0	0	0	0	5.5	4.5
2.2	2.2	MG-H3	90L	MMG-G2	90L	-38.5	0	60	-102	-23	0	0	0	0	0	6.5	5.5
3	3	MG-H3	100L	MMG-G2	100L	-20.5	0	60	-72	17	0	0	0	0	0	12	10
4	4	MG-H3	112M	MMG-G2	112M	-40.5	0	55	-112	17	0	0	0	0	0	2	1
5.5	5.5	MG-H3	132S	MMG-G2	132S	-17	0	91	-112	37	0	0	0	0	0	25	23
7.5	7.5	MG-H3	132S	MMG-G2	132S	-5	0	66	-113	5	0	0	0	0	0	19	16
11	11	MG-H3	160M	MMG-G2	160M	27	0	59	-153	-48	0	0	0	0	-0.5	22	16
15	15	MG-H3	160M	MMG-G2	160M	27	0	59	-153	-48	0	0	0	0	-0.5	24	17
18.5	18.5	MG-H3	160L	MMG-G2	160L	27	0	59	-153	-48	0	0	0	0	-0.5	26	20
22	22	MG-H3	180M	MMG-G2	180M	21	0	101	-143	-81	0	0	0	0	-0.5	59	52
30	30	Siemens IE3	200L	MMG-G2	200L	49	0	59	-165	-7	0	0	0	0	-0.5	60	30
37	37	Siemens IE3	200L	MMG-G2	200L	24	0	59	-165	-7	0	0	0	0	-0.5	50	25
45	45	Siemens IE3	225M	MMG-G2	225M	-7	0	89	-125	-7	0	0	25	0	-0.5	25	15
55	55	Siemens IE3	250M	MMG-G2	250S	-4.5	0	83	-143	-3	0	0	-38	0	0	65	45
75	75	Siemens IE3	280S	MMG-G2	250M	-39.5	-30	60	-143	-3	0	-51	-19	-22	0	15	-5
90	90	Siemens IE3	280M	MMG-G	280S	-78	0	90	-145	-3	0	0	0	0	0	10	-10
110	110	Siemens IE3	315S	MMG-G	280M	-10	-35	8	-200	-69	-110	-51	13	-26	-4	-140	-70
132	132	Siemens IE3	315M	MMG-G	315S	-131	0	33	-195	1	0	0	-51	0	0	20	20
160	160	Siemens IE3	315L	MMG-G	315M	-80	0	33	-195	1	0	0	0	0	0	220	200
200	200	Siemens IE3	315L	MMG-G	315M	-235	0	33	-195	1	0	0	0	0	0	170	210
250	250	Siemens IE3	315L	MMG-G	355M	128	40	150	-	-	-	102	52	38	0	810	810
315	315	Siemens IE3	315L	MMG-G	355L	128	40	150	-	-	-	102	122	38	0	745	745

Note: The dimensions L and h4 refer to NK pumps, LB and AD to NB pumps.

IE1, MMG-G, 4-pole

P2 [kW]		Motors on data pages		Other motors		L/LB	H	h4/AD	AG	LL	P	A	B	C	K	Weight [kg]	
50 Hz	60 Hz	Motor	Frame size	Motor	Frame size	[mm]										NK	NB
0.25	0.25	MG-C	71B	MMG-G	63	5	-8	13	-32	-2	0	-12	-10	-5	0	5.8	5.5
0.37	0.37	MG-C	71B	MMG-G	71	29.5	0	23	-37	-2	0	0	0	0	0	5.3	5
0.55	0.55	MG-C	80A	MMG-G	80	11.5	0	49	-22	-2	0	0	0	0	0	5.7	4.9
0.75	0.75	MG-H3	90S	MMG-G	80	-38.5	-10	48	-102	-23	0	-15	0	-6	0	7.5	7
1.1	1.1	MG-H3	90S	MMG-G2	90S	-23.5	0	60	-102	-23	0	0	0	0	0	-0.4	-1.4
1.5	1.5	MG-H3	90L	MMG-G2	90L	-38.5	0	60	-102	-23	0	0	0	0	0	2.5	1.5
2.2	2.2	MG-H3	100L	MMG-G2	100L	-20.5	0	60	-72	17	0	0	0	0	0	10	5
3	3	MG-H3	100L	MMG-G2	100L	-20.5	0	60	-72	17	0	0	0	0	0	9	7
4	4	MG-H3	112M	MMG-G2	112M	-40.5	0	55	-112	17	0	0	0	0	0	0	-1
5.5	5.5	MG-H3	132S	MMG-G2	132S	-5	0	66	-113	5	0	0	0	0	0	7	7
7.5	7.5	MG-H3	132M	MMG-G2	132M	-17	0	66	-113	5	0	-1	0	0	0	9	5
11	11	MG-H3	160M	MMG-G2	160M	-47	0	59	-153	-48	0	0	-44	0	-0.5	21	14
15	15	MG-H3	160L	MMG-G2	160L	-33	0	59	-153	-48	0	0	0	0	-0.5	15	9
18.5	18.5	Siemens IE3	180M	MMG-G2	180M	4	0	19	-89	-32	0	0	0	0	-0.5	12	7
22	22	Siemens IE3	180L	MMG-G2	180L	12	0	19	-89	-32	0	0	38	0	-0.5	35	25
30	30	Siemens IE3	200L	MMG-G2	200L	24	0	59	-165	-7	0	0	0	0	-0.5	50	40
37	37	Siemens IE3	225S	MMG-G2	225S	28	0	89	-125	-7	0	0	0	0	-0.5	40	25
45	45	Siemens IE3	225M	MMG-G2	225M	-7	0	89	-125	-7	0	0	25	0	-0.5	30	15
55	55	Siemens IE3	250M	MMG-G2	250S	-4.5	0	83	-143	-3	0	0	-38	0	0	55	35
75	75	Siemens IE3	280S	MMG-G2	250M	-39.5	-30	60	-143	-3	0	-51	-19	-22	0	-10	-40
90	90	Siemens IE3	280M	MMG-G	280S	-78	0	90	-145	-3	0	0	0	0	0	-10	-30
110	110	Siemens IE3	315S	MMG-G	280M	-10	-35	8	-200	-69	-110	-51	13	-26	-4	-45	-70
132	132	Siemens IE3	315M	MMG-G	315S	-131	0	33	-195	1	0	0	-51	0	0	-30	-70
160	160	Siemens IE3	315L	MMG-G	315M	-80	0	33	-195	1	0	0	0	0	0	200	180
200	200	Siemens IE3	315L	MMG-G	315M	-235	0	33	-195	1	0	0	0	0	0	60	60
250	250	Siemens IE3	315L	MMG-G	355M	128	40	150	-	-	-	102	52	38	-7	830	830
315	315	Siemens IE3	315L	MMG-G	355L	-16	40	150	-	-	-	102	122	38	-7	620	620

Note: The dimensions L and h4 refer to NK pumps, LB and AD to NB pumps.

IE1, MMG-G, 6-pole

P2 [kW]		Motors on data pages		Other motors		L/LB	H	h4/AD	AG	LL	P	A	B	C	K	Weight [kg]	
50 Hz	60 Hz	Motor	Frame size	Motor	Frame size	[mm]										NK	NB
0.37	0.37	Siemens IE2	80A	MMG-G	80	8.5	0	38	-15	5	0	0	0	0	0.5	7	7
0.55	0.55	Siemens IE2	80B	MMG-G	80	8.5	0	38	-15	5	0	0	0	0	0.5	7	7
0.75	0.75	Siemens IE2	90S	MMG-G	90S	-23.5	0	42	-15	5	0	0	0	0	0	5.5	5.5
1.1	1.1	Siemens IE2	90L	MMG-G2	90L	-43.5	0	42	-15	5	0	0	0	0	0	6	6
1.5	1.5	Siemens IE3	100L	MMG-G2	100L	-21.5	0	14	-45	8	0	0	0	0	0	7	7
2.2	2.2	Siemens IE3	112M	MMG-G2	112M	-22.5	0	12	-45	8	0	0	0	0	0	6	6
3	3	Siemens IE3	132S	MMG-G2	132S	-11	0	23	-65	10	0	0	0	0	0	8	3
4	4	Siemens IE3	132M	MMG-G2	132M	27	0	23	-65	10	0	-1	0	0	0	13	8
5.5	5.5	Siemens IE3	132M	MMG-G2	132M	-23	0	23	-65	10	0	-1	38	0	0	28	11
7.5	7.5	Siemens IE3	160M	MMG-G2	160M	4	0	26.5	-85	20	0	0	0	0	-0.5	21	12
11	11	Siemens IE3	160L	MMG-G2	160L	-12	0	26.5	-85	20	0	0	0	0	-0.5	29	20
15	15	Siemens IE3	180L	MMG-G2	180L	12	0	19	-89	-32	0	0	38	0	-0.5	45	45
18.5	18.5	Siemens IE3	200L	MMG-G2	200L	49	0	59	-165	-7	0	0	0	0	-0.5	60	52
22	22	Siemens IE3	200L	MMG-G2	200L	24	0	59	-165	-7	0	0	0	0	-0.5	45	45
30	30	Siemens IE3	225M	MMG-G2	225M	-7	0	89	-125	-7	0	0	25	0	-0.5	20	5
37	37	Siemens IE3	250M	MMG-G2	250S	-4.5	0	83	-143	-3	0	0	-38	0	0	0	-20
45	45	Siemens IE3	280S	MMG-G2	250M	-39.5	-30	60	-143	-3	0	-51	-19	-22	0	-70	-90
55	55	Siemens IE3	280M	MMG-G2	280S	32	0	90	-145	-3	0	0	0	0	0	50	30
75	75	Siemens IE3	315S	MMG-G2	280M	-10	-35	8	-200	-69	-110	-51	13	-26	-4	-70	-70
90	90	Siemens IE3	315M	MMG-G	315S	-131	0	33	-195	1	0	0	-51	0	0	-40	-50
110	110	Siemens IE3	315L	MMG-G	315M	-80	0	33	-195	1	0	0	0	0	0	0	-20
132	132	Siemens IE3	315L	MMG-G	315M	-235	0	33	-195	1	0	0	0	0	0	-20	-40

Note: The dimensions L and h4 refer to NK pumps, LB and AD to NB pumps.

IE2

IE2, MG, 2-pole

P2 [kW]		Motors on data pages		Other motors		L/LB	H	h4/AD	AG	LL	P	A	B	C	K	Weight [kg]	
50 Hz	60 Hz	Motor	Frame size	Motor	Frame size	[mm]										NK	NB
1.1	1.1	MG-H3	80C	MG-D	80B	-20	0	0	0	0	0	0	0	0	0	0	0
1.5	1.5	MG-H3	90S	MG-D	90SB	0	0	0	0	0	0	0	0	0	0	0	0
2.2	2.2	MG-H3	90L	MG-D	90LC	0	0	0	0	0	0	0	0	0	0	0	0
3	3	MG-H3	100L	MG-D	100LC	0	0	0	0	0	0	0	0	0	0	0	0
4	4	MG-H3	112M	MG-D	112MC	0	0	0	0	0	0	0	0	0	0	0	0
5.5	5.5	MG-H3	132S	MG-D	132SC	0	0	0	0	0	0	0	0	0	0	0	0
7.5	7.5	MG-H3	132S	MG-F	132SB	0	0	0	0	0	0	0	0	0	0	0	0
11	11	MG-H3	160M	MG-F	160MB	0	0	0	0	0	0	0	0	0	0	0	0
15	15	MG-H3	160M	MG-F	160MD	0	0	0	0	0	0	0	0	0	0	0	0
18.5	18.5	MG-H3	160L	MG-F	160LB	0	0	0	0	0	0	0	0	0	0	0	0
22	22	MG-H3	180M	MG-F	180MB	0	0	0	0	0	0	0	0	0	0	0	0

Note: The dimensions L and h4 refer to NK pumps, LB and AD to NB pumps.

IE2, MG, 4-pole

P2 [kW]		Motors on data pages		Other motors		L/LB	H	h4/AD	AG	LL	P	A	B	C	K	Weight [kg]	
50 Hz	60 Hz	Motor	Frame size	Motor	Frame size	[mm]										NK	NB
1.1	1.1	MG-H3	90S	MG-D	90SB	0	0	0	0	0	0	0	0	0	0	0	0
1.5	1.5	MG-H3	90L	MG-D	90LC	0	0	0	0	0	0	0	0	0	0	0	0
2.2	2.2	MG-H3	100L	MG-D	100LB	0	0	0	0	0	0	0	0	0	0	0	0
3	3	MG-H3	100L	MG-D	100LC	0	0	0	0	0	0	0	0	0	0	0	0
4	4	MG-H3	112M	MG-D	112MC	0	0	0	0	0	0	0	0	0	0	0	0
5.5	5.5	MG-H3	132S	MG-F	132SB	0	0	0	0	0	0	0	0	0	0	0	0
7.5	7.5	MG-H3	132M	MG-F	132MB	0	0	0	0	0	0	0	0	0	0	0	0
11	11	MG-H3	160M	MG-F	160MB	-74	0	0	0	0	0	0	-44	0	0	0	0
15	15	MG-H3	160L	MG-F	160LB	-60	0	0	0	0	0	0	0	0	0	0	0

Note: The dimensions L and h4 refer to NK pumps, LB and AD to NB pumps.

IE2, Siemens, 2-pole

P2 [kW]		Motors on data pages		Other motors		L/LB	H	h4/AD	AG	LL	P	A	B	C	K	Weight [kg]	
50 Hz	60 Hz	Motor	Frame size	Motor	Frame size	[mm]										NK	NB
0.75	0.75	MG-H3	80A	Siemens IE2	80M	37.5	0	11	-7	-7	0	0	0	0	-0.5	3.9	3
1.1	1.1	MG-H3	80C	Siemens IE2	80M	17.5	0	11	-7	-7	0	0	0	0	-0.5	2.8	1.7
1.5	1.5	MG-H3	90S	Siemens IE2	90S	0	0	18	-87	-28	0	0	0	0	0	-1	-2
2.2	2.2	MG-H3	90L	Siemens IE2	90L	-13	0	18	-87	-28	0	0	0	0	0	-1.4	-2.4
3	3	MG-H3	100L	Siemens IE2	100L	12	0	15	-42	17	0	0	0	0	0	1	-1
4	4	MG-H3	112M	Siemens IE2	112M	-1	0	14	-82	17	0	0	0	0	0	-7	-8
5.5	5.5	MG-H3	132S	Siemens IE2	132S	-18.5	0	33	-62	37	0	0	0	0	0	3	1
7.5	7.5	MG-H3	132S	Siemens IE2	132S	31.5	0	8	-63	5	0	0	0	0	0	5	2
11	11	MG-H3	160M	Siemens IE2	160M	7	0	-7	-78	-48	0	0	0	0	0	-13	-19
15	15	MG-H3	160M	Siemens IE2	160M	7	0	-7	-78	-48	0	0	0	0	0	-16	-23
18.5	18.5	MG-H3	160L	Siemens IE2	160L	3	0	-7	-78	-48	0	0	0	0	0	-10	-16
22	22	MG-H3	180M	Siemens IE2	180M	61	0	54	-91	-81	0	0	0	0	0	4	-3
30	30	Siemens IE3	200L	Siemens IE2	200L	47.5	0	-10	-5	-5	0	0	0	0	0	4	-26
37	37	Siemens IE3	200L	Siemens IE2	200L	22.5	0	-10	-5	-5	0	0	0	0	0	-26	-51
45	45	Siemens IE3	225M	Siemens IE2	225M	1	0	-13	-6	-5	0	0	25	0	0	10	0
55	55	Siemens IE3	250M	Siemens IE2	250M	0	0	-18	-19	3	0	0	0	0	0	35	15
75	75	Siemens IE3	280S	Siemens IE2	280S	0	0	-1	-19	3	0	0	0	0	0	20	0
90	90	Siemens IE3	280M	Siemens IE2	280M	0	0	-1	-19	3	0	0	51	0	0	25	5
110	110	Siemens IE3	315S	Siemens IE2	315S	20	0	-20	5	8	0	0	0	0	0	-50	20
132	132	Siemens IE3	315M	Siemens IE2	315M	15	0	-20	5	8	0	0	0	0	0	15	15
160	160	Siemens IE3	315L	Siemens IE2	315L	15	0	-20	5	8	0	0	51	0	0	75	55
200	200	Siemens IE3	315L	Siemens IE2	315L	0	0	-20	5	8	0	0	51	0	0	65	75
250	280	Siemens IE3	315L	Siemens IE2	315	8	0	-32	-	1	140	52	122	-36	-2	10	10
315	353	Siemens IE3	315L	Siemens IE2	315	8	0	-32	-	1	140	52	122	-36	-2	145	-
355	398	Siemens IE3	355L	Siemens IE2	355	0	0	-50	-	0	0	0	0	0	0	0	-

Note: The dimensions L and h4 refer to NK pumps, LB and AD to NB pumps.

IE2, Siemens, 4-pole

P2 [kW]		Motors on data pages		Other motors		L/LB	H	h4/AD	AG	LL	P	A	B	C	K	Weight [kg]	
50 Hz	60 Hz	Motor	Frame size	Motor	Frame size	[mm]										NK	NB
0.75	0.75	MG-H3	90S	Siemens IE2	80M	-12.5	-10	10	-87	-28	0	-15	0	-6	-0.5	2.8	2.3
1.1	1.1	MG-H3	90S	Siemens IE2	90S	0	0	18	-87	-28	0	0	0	0	0	-5	-6
1.5	1.5	MG-H3	90L	Siemens IE2	90L	-13	0	18	-87	-28	0	0	0	0	0	-3	-4
2.2	2.2	MG-H3	100L	Siemens IE2	100L	12	0	15	-42	17	0	0	0	0	0	3	-2
3	3	MG-H3	100L	Siemens IE2	100L	47	0	15	-42	17	0	0	0	0	0	3	1
4	4	MG-H3	112M	Siemens IE2	112M	-1	0	14	-82	17	0	0	0	0	0	-6	-7
5.5	5.5	MG-H3	132S	Siemens IE2	132S	-6.5	0	8	-63	5	0	0	0	0	0	-11	-11
7.5	7.5	MG-H3	132M	Siemens IE2	132M	-18.5	0	8	-63	5	0	0	0	0	0	-8	-12
11	11	MG-H3	160M	Siemens IE2	160M	-67	0	-7	-78	-48	0	0	-44	0	0	-14	-21
15	15	MG-H3	160L	Siemens IE2	160L	-57	0	-7	-78	-48	0	0	0	0	0	-10	-16
18.5	18.5	Siemens IE3	180M	Siemens IE2	180M	44	0	-28	-37	-32	0	0	0	0	0	-34	-39
22	22	Siemens IE3	180L	Siemens IE2	180L	14	0	-28	-37	-32	0	0	38	0	0	-24	-34
30	30	Siemens IE3	200L	Siemens IE2	200L	22.5	0	-10	-5	-5	0	0	0	0	0	-31	-41
37	37	Siemens IE3	225S	Siemens IE2	225S	1	0	-13	-6	-5	0	0	0	0	0	5	-10
45	45	Siemens IE3	225M	Siemens IE2	225M	1	0	-13	-6	-5	0	0	25	0	0	10	-5
55	55	Siemens IE3	250M	Siemens IE2	250M	70	0	-18	-19	3	0	0	0	0	0	40	20
75	75	Siemens IE3	280S	Siemens IE2	280S	0	0	-1	-19	3	0	0	0	0	0	15	-15
90	90	Siemens IE3	280M	Siemens IE2	280M	0	0	-1	-19	3	0	0	51	0	0	5	-15
110	110	Siemens IE3	315S	Siemens IE2	315S	20	0	-20	5	8	0	0	0	0	0	45	20
132	132	Siemens IE3	315M	Siemens IE2	315MA	15	0	-20	5	8	0	0	0	0	0	15	-25
160	160	Siemens IE3	315L	Siemens IE2	315L	15	0	-20	5	8	0	0	51	0	0	105	85
200	200	Siemens IE3	315L	Siemens IE2	315L	0	0	-20	5	8	0	0	51	0	0	115	85
250	288	Siemens IE3	315L	Siemens IE2	315	8	0	-32	-	1	0	52	122	-36	-9	30	30
315	362	Siemens IE3	315L	Siemens IE2	315	-136	0	-32	-	1	0	52	122	-36	-9	20	-
355	408	Siemens IE3	355L	Siemens IE2	355	0	0	106	-	0	0	0	0	0	0	-100	-

Note: The dimensions L and h4 refer to NK pumps, LB and AD to NB pumps.

IE2, Siemens, 6-pole

P2 [kW]		Motors on data pages		Other motors		L/LB	H	h4/AD	AG	LL	P	A	B	C	K	Weight [kg]	
50 Hz	60 Hz	Motor	Frame size	Motor	Frame size	[mm]										NK	NB
0.37	0.37	Siemens IE2	80A	Siemens IE2	80A	-0.5	0	0	0	0	0	0	0	0	0	0	0
0.55	0.55	Siemens IE2	80B	Siemens IE2	80B	-0.5	0	0	0	0	0	0	0	0	0	0	0
0.75	0.75	Siemens IE2	90S	Siemens IE2	90S	0	0	0	0	0	0	0	0	0	0	0	0
1.1	1.1	Siemens IE2	90L	Siemens IE2	90L	0	0	0	0	0	0	0	0	0	0	0	0
1.5	1.5	Siemens IE3	100L	Siemens IE2	100L	11	0	-31	-15	8	0	0	0	0	0	-1	-1
2.2	2.2	Siemens IE3	112M	Siemens IE2	112M	17	0	-29	-15	8	0	0	0	0	0	2	2
3	3	Siemens IE3	132S	Siemens IE2	132SA	-12.5	0	-35	-15	10	0	0	0	0	0	-3	-8
4	4	Siemens IE3	132M	Siemens IE2	132MA	-12.5	0	-35	-15	10	0	0	0	0	0	-3	-8
5.5	5.5	Siemens IE3	132M	Siemens IE2	132MB	-24.5	0	-35	-15	10	0	0	38	0	0	15	-2
7.5	7.5	Siemens IE3	160M	Siemens IE2	160M	-16	0	-39.5	-10	20	0	0	0	0	0	5	-4
11	11	Siemens IE3	160L	Siemens IE2	160L	-36	0	-39.5	-10	20	0	0	0	0	0	-10	-19
15	15	Siemens IE3	180L	Siemens IE2	180L	14	0	-28	-37	-32	0	0	38	0	0	-21	-21
18.5	18.5	Siemens IE3	200L	Siemens IE2	200LA	47.5	0	-10	-5	-5	0	0	0	0	0	-24	-32
22	22	Siemens IE3	200L	Siemens IE2	200LB	22.5	0	-10	-5	-5	0	0	0	0	0	-18	-18
30	30	Siemens IE3	225M	Siemens IE2	225M	1	0	-13	-6	-5	0	0	25	0	0	0	-15
37	37	Siemens IE3	250M	Siemens IE2	250M	0	0	-18	-19	3	0	0	0	0	0	0	-20
45	45	Siemens IE3	280S	Siemens IE2	280S	0	0	-1	-19	3	0	0	0	0	0	10	-10
55	55	Siemens IE3	280M	Siemens IE2	280M	110	0	-1	-19	3	0	0	51	0	0	10	-10
75	75	Siemens IE3	315S	Siemens IE2	315S	20	0	-20	5	8	0	0	0	0	0	-20	-20
90	90	Siemens IE3	315M	Siemens IE2	315MA	15	0	-20	5	8	0	0	0	0	0	25	15
110	110	Siemens IE3	315L	Siemens IE2	315L	15	0	-20	5	8	0	0	51	0	0	10	-10
132	132	Siemens IE3	315L	Siemens IE2	315L	0	0	-20	5	8	0	0	51	0	0	60	40
160	160	Siemens IE3	315L	Siemens IE2	315L	0	0	-15	6	8	0	0	51	0	0	85	55
200	230	Siemens IE3	315L	Siemens IE2	315	-136	0	-32	-	1	0	52	122	-36	-9	-120	-120

Note: The dimensions L and h4 refer to NK pumps, LB and AD to NB pumps.

IE2, MMG-E, 2-pole

P2 [kW]		Motors on data pages		Other motors		L/LB	H	h4/AD	AG	LL	P	A	B	C	K	Weight [kg]	
50 Hz	60 Hz	Motor	Frame size	Motor	Frame size	[mm]										NK	NB
0.75	0.75	MG-C	71B	MMG-E1	80A	24	0	31	10	118	-108	0	0	0	0	7.6	7.7
1.1	1.1	MG-H3	80A	MMG-E1	80B	4	0	31	10	118	-108	0	0	0	0	8.5	8.4
1.5	1.5	MG-H3	80C	MMG-E1	90S	-11	0	50	-56	96	-100	0	0	0	0	4	5
2.2	2.2	MG-H3	90S	MMG-E1	90L	-26	0	50	-56	96	-100	0	0	0	0	4	5
3	3	MG-H3	90L	MMG-E1	100L	-10	0	60	-56	147	-150	0	0	0	0	11	11
4	4	MG-H3	100L	MMG-E1	112M	-32	0	54	-84	147	-140	0	0	-10	0	3	4
5.5	5.5	MG-H3	112M	MMG-E1	132SA	-1	0	76	-84	197	-190	0	0	0	0	25	23
7.5	7.5	MG-H3	132S	MMG-E1	132SB	11	0	51	-85	165	-190	0	0	0	0	21	18
11	11	MG-H3	132S	MMG-E1	160MA	40	0	48	-82	137	-199	0	0	0	0	34	37
15	15	MG-H3	160M	MMG-E1	160MB	40	0	48	-82	137	-199	0	0	0	0	36	38
18.5	18.5	MG-H3	160M	MMG-E1	160L	-4	0	48	-82	137	-199	0	0	0	0	44	45
22	22	MG-H3	160L	MMG-E1	180M	39	0	81	-82	137	-199	0	38	0	0	60	60
30	30	MG-H3	180M	MMG-E1	200LA	49	0	-5	-36	203	-211	0	0	0	0	23	8
37	37	Siemens IE3	200L	MMG-E1	200LB	24	0	-5	-36	203	-211	0	0	0	0	10	0
45	45	Siemens IE3	200L	MMG-E1	225M	2	0	-3	-38	252	-262	0	25	0	0	-14	-5
55	55	Siemens IE3	225M	MMG-E1	250M	28	0	-40	-73	317	-334	0	0	0	0	20	23
75	75	Siemens IE3	250M	MMG-E1	280S	10	0	-38	-73	317	-334	0	0	0	0	32	34
90	90	Siemens IE3	280S	MMG-E1	280M	-50	0	-38	-73	317	-334	0	51	0	0	3	5
110	110	Siemens IE3	280M	MMG-E1	315S	188	0	-10	-54	361	-380	0	0	0	0	65	170
132	132	Siemens IE3	315S	MMG-E1	315M	163	0	15	-54	361	-380	0	0	0	0	110	145
160	160	Siemens IE3	315M	MMG-E1	315LA	163	0	15	-54	361	-380	0	0	0	0	135	150
200	200	Siemens IE3	315L	MMG-E1	315LB	8	0	15	-54	361	-380	0	0	0	0	-25	20
250	250	Siemens IE3	315L	MMG-E1	355M	218	40	155	154	353	-330	102	52	38	0	370	420
315	315	Siemens IE3	315L	MMG-E1	355L	368	40	155	154	353	-330	102	52	38	0	415	465

Note: The dimensions L and h4 refer to NK pumps, LB and AD to NB pumps.

IE2, MMG-E, 4-pole

P2 [kW]		Motors on data pages		Other motors		L/LB	H	h4/AD	AG	LL	P	A	B	C	K	Weight [kg]	
50 Hz	60 Hz	Motor	Frame size	Motor	Frame size	[mm]										NK	NB
0.25	0.25	Siemens IE3	355L	MMG-E1	71A	34	0	15	10	78	-68	0	0	0	0	4.8	5.5
0.37	0.37	MG-C	71B	MMG-E1	71B	34	0	15	10	78	-68	0	0	0	0	5.3	6
0.55	0.55	MG-C	71B	MMG-E1	80A	24	0	31	10	118	-108	0	0	0	0	7.7	7.9
0.75	0.75	MG-C	80A	MMG-E1	80MB	-26	-10	30	-70	97	-108	-15	0	-6	0	8	7.5
1.1	1.1	MG-H3	90S	MMG-E1	90S	14	0	50	-54	97	-98	0	0	0	0	6	7
1.5	1.5	MG-H3	90S	MMG-E1	90L	-26	0	50	-54	97	-98	0	-25	0	0	9	10
2.2	2.2	MG-H3	90L	MMG-E1	100LA	-10	0	60	-54	147	-148	0	0	0	0	11	8
3	3	MG-H3	100L	MMG-E1	100LB	-10	0	60	-54	147	-148	0	0	0	0	14	14
4	4	MG-H3	100L	MMG-E1	112M	38	0	56	-84	147	-140	0	0	0	0	14	15
5.5	5.5	MG-H3	112M	MMG-E1	132S	11	0	51	-85	164	-190	0	0	0	0	17	19
7.5	7.5	MG-H3	132S	MMG-E1	132M	1	0	51	-85	164	-190	0	0	0	0	14	12
11	11	MG-H3	132M	MMG-E1	160M	-47	0	48	-82	137	-199	0	-44	0	0	31	26
15	15	MG-H3	160M	MMG-E1	160L	-33	0	48	-82	137	-199	0	0	0	0	25	21
18.5	18.5	MG-H3	160L	MMG-E1	180M	22	0	-11	-28	186	-199	0	0	0	0	23	28
22	22	Siemens IE3	180M	MMG-E1	180L	42	0	-11	-28	186	-199	0	38	0	0	31	32
30	30	Siemens IE3	180L	MMG-E1	200L	24	0	-5	-36	203	-211	0	0	0	0	35	30
37	37	Siemens IE3	200L	MMG-E1	225S	32	0	-28	-38	252	-262	0	0	0	0	29	32
45	45	Siemens IE3	225S	MMG-E1	225M	-3	0	-3	-37	252	-261	0	25	0	0	10	13
55	55	Siemens IE3	225M	MMG-E1	250M	28	0	-40	-73	317	-334	0	0	0	0	22	25
75	75	Siemens IE3	250M	MMG-E1	280S	10	0	-38	-73	317	-334	0	0	0	0	-1	-10
90	90	Siemens IE3	280S	MMG-E1	280M	-50	0	-38	-73	317	-334	0	51	0	0	9	10
110	110	Siemens IE3	280M	MMG-E1	315S	188	0	-10	-54	361	-380	0	0	0	0	160	170
132	132	Siemens IE3	315S	MMG-E1	315M	133	0	15	-54	361	-380	0	0	0	0	95	90
160	160	Siemens IE3	315M	MMG-E1	315LA	133	0	15	-54	361	-380	0	0	0	0	135	150
200	200	Siemens IE3	315L	MMG-E1	315LB	-22	0	15	-54	361	-380	0	0	0	0	105	110
250	250	Siemens IE3	315L	MMG-E1	355M	148	40	155	154	353	-470	102	52	38	-7	400	450

Note: The dimensions L and h4 refer to NK pumps, LB and AD to NB pumps.

IE2, MMG-E, 6-pole

P2 [kW]		Motors on data pages		Other motors		L/LB	H	h4/AD	AG	LL	P	A	B	C	K	Weight [kg]	
50 Hz	60 Hz	Motor	Frame size	Motor	Frame size	[mm]										NK	NB
0.75	0.75	Siemens IE2	80B	MMG-E1	90S	14	0	32	33	125	-98	0	0	0	0	7	13
1.1	1.1	Siemens IE2	90S	MMG-E1	90L	-31	0	32	33	125	-98	0	-25	0	0	6	11
1.5	1.5	Siemens IE2	90L	MMG-E1	100L	-11	0	14	-27	138	-148	0	0	0	0	7	14
2.2	2.2	Siemens IE3	100L	MMG-E1	112M	56	0	13	-17	138	-140	0	0	0	0	8	13
3	3	Siemens IE3	112M	MMG-E1	132S	5	0	8	-37	169	-190	0	0	0	0	8	11
4	4	Siemens IE3	132S	MMG-E1	132MA	45	0	8	-37	169	-190	0	0	0	0	17	18
5.5	5.5	Siemens IE3	132M	MMG-E1	132MB	-5	0	8	-37	169	-190	0	38	0	0	26	19
7.5	7.5	Siemens IE3	132M	MMG-E1	160M	4	0	15.5	-14	205	-199	0	0	0	0	33	34
11	11	Siemens IE3	160M	MMG-E1	160L	-12	0	15.5	-14	205	-199	0	0	0	0	24	25
15	15	Siemens IE3	160L	MMG-E1	180L	42	0	-11	-28	186	-199	0	38	0	0	6	16
18.5	18.5	Siemens IE3	180L	MMG-E1	200LA	49	0	-5	-36	203	-211	0	0	0	0	30	32
22	22	Siemens IE3	200L	MMG-E1	200LB	24	0	-5	-36	203	-211	0	0	0	0	15	25
30	30	Siemens IE3	200L	MMG-E1	225M	-3	0	-3	-37	253	-261	0	25	0	0	-20	-25
37	37	Siemens IE3	225M	MMG-E1	250M	28	0	-40	-73	317	-334	0	0	0	0	-20	3
45	45	Siemens IE3	250M	MMG-E1	280S	10	0	-38	-73	317	-334	0	0	0	0	-9	12
55	55	Siemens IE3	280S	MMG-E1	280M	60	0	-38	-73	317	-334	0	51	0	0	10	32
75	75	Siemens IE3	280M	MMG-E1	315S	188	0	15	-54	361	-380	0	0	0	0	65	75
90	90	Siemens IE3	315S	MMG-E1	315M	133	0	15	-54	361	-380	0	0	0	0	50	50

Note: The dimensions L and h4 refer to NK pumps, LB and AD to NB pumps.

IE2, MMG-G, 2-pole

P2 [kW]		Motors on data pages		Other motors		L/LB	H	h4/AD	AG	LL	P	A	B	C	K	Weight [kg]	
50 Hz	60 Hz	Motor	Frame size	Motor	Frame size	[mm]										NK	NB
0.55	0.55	MG-C	71B	MMG-GA	71	29.5	0	23	-37	-2	0	0	0	0	0	7.9	7.6
0.75	0.75	MG-H3	80A	MMG-GA	80	11.5	0	49	-22	-2	0	0	0	0	0	8.6	7.7
1.1	1.1	MG-H3	80C	MMG-G1	80	-8.5	0	49	-22	-2	0	0	0	0	0	7.5	6.4
1.5	1.5	MG-H3	90S	MMG-G1	90S	-23.5	0	60	-102	-23	0	0	0	0	0	5	4
2.2	2.2	MG-H3	90L	MMG-G1	90L	-38.5	0	60	-102	-23	0	0	0	0	0	5	4
3	3	MG-H3	100L	MMG-G1	100L	-20.5	0	60	-72	17	0	0	0	0	0	12	10
4	4	MG-H3	112M	MMG-G1	112M	-40.5	0	55	-112	17	0	0	0	0	0	4	3
5.5	5.5	MG-H3	132S	MMG-G1	132S	-17	0	91	-112	37	0	0	0	0	0	35	33
7.5	7.5	MG-H3	132S	MMG-G1	132S	-5	0	66	-113	5	0	0	0	0	0	24	21
11	11	MG-H3	160M	MMG-G1	160M	27	0	59	-153	-48	0	0	0	0	-0.5	44	38
15	15	MG-H3	160M	MMG-G1	160M	27	0	59	-153	-48	0	0	0	0	-0.5	32	25
18.5	18.5	MG-H3	160L	MMG-G1	160L	27	0	59	-153	-48	0	0	0	0	-0.5	46	40
22	22	MG-H3	180M	MMG-G1	180M	21	0	101	-143	-81	0	0	0	0	-0.5	53	46
30	30	Siemens IE3	200L	MMG-G1	200L	49	0	59	-165	-7	0	0	0	0	-0.5	70	40
37	37	Siemens IE3	200L	MMG-G1	200L	24	0	59	-165	-7	0	0	0	0	-0.5	40	15
45	45	Siemens IE3	225M	MMG-G1	225M	-7	0	89	-125	-7	0	0	25	0	-0.5	35	25
55	55	Siemens IE3	250M	MMG-G1	250S	-4.5	0	83	-143	-3	0	0	-38	0	0	85	65
75	75	Siemens IE3	280S	MMG-G1	250M	-39.5	-30	60	-143	-3	0	-51	-19	-22	0	30	10
90	90	Siemens IE3	280M	MMG-GA	280S	-78	0	90	-145	-3	0	0	0	0	0	40	20
110	110	Siemens IE3	315S	MMG-GA	280M	-10	-35	8	-200	-69	-110	-51	13	-26	-4	-140	-70
132	132	Siemens IE3	315M	MMG-GA	315S	-131	0	33	-195	1	0	0	-51	0	0	-60	-60
160	160	Siemens IE3	315L	MMG-GA	315M	-80	0	33	-195	1	0	0	0	0	0	-35	-55
200	200	Siemens IE3	315L	MMG-GA	315M	-235	0	33	-195	1	0	0	0	0	0	190	230
250	250	Siemens IE3	315L	MMG-GA	315CA	379	0	166	-	-	-	0	202	0	0	410	-
315	315	Siemens IE3	315L	MMG-GA	315DA	579	0	166	-	-	-	0	402	0	0	645	-
355	355	Siemens IE3	355L	MMG-GA	355AA	249	0	171	-	-	-	-20	-90	54	-5	300	-

Note: The dimensions L and h4 refer to NK pumps, LB and AD to NB pumps.

IE2, MMG-G, 4-pole

P2 [kW]		Motors on data pages		Other motors		L/LB	H	h4/AD	AG	LL	P	A	B	C	K	Weight [kg]	
50 Hz	60 Hz	Motor	Frame size	Motor	Frame size	[mm]										NK	NB
0.25	0.25	MG-C	71B	MMG-GA	63	5	-8	13	-32	-2	0	-12	-10	-5	0	5.8	5.5
0.37	0.37	MG-C	71B	MMG-GA	71	29.5	0	23	-37	-2	0	0	0	0	0	5.3	5
0.55	0.55	MG-C	80A	MMG-GA	80	11.5	0	49	-22	-2	0	0	0	0	0	6.7	5.9
0.75	0.75	MG-H3	90S	MMG-GA	80	-38.5	-10	48	-102	-23	0	-15	0	-6	0	7.5	7
1.1	1.1	MG-H3	90S	MMG-G1	90S	-23.5	0	60	-102	-23	0	0	0	0	0	1	0
1.5	1.5	MG-H3	90L	MMG-G1	90L	-38.5	0	60	-102	-23	0	0	0	0	0	4	3
2.2	2.2	MG-H3	100L	MMG-G1	100L	-20.5	0	60	-72	17	0	0	0	0	0	13	8
3	3	MG-H3	100L	MMG-G1	100L	-20.5	0	60	-72	17	0	0	0	0	0	8	6
4	4	MG-H3	112M	MMG-G1	112M	-40.5	0	55	-112	17	0	0	0	0	0	3	2
5.5	5.5	MG-H3	132S	MMG-G1	132S	-5	0	66	-113	5	0	0	0	0	0	19	19
7.5	7.5	MG-H3	132M	MMG-G1	132M	-17	0	66	-113	5	0	-1	0	0	0	14	10
11	11	MG-H3	160M	MMG-G1	160M	-47	0	59	-153	-48	0	0	-44	0	-0.5	35	28
15	15	MG-H3	160L	MMG-G1	160L	-33	0	59	-153	-48	0	0	0	0	-0.5	41	35
18.5	18.5	Siemens IE3	180M	MMG-G1	180M	4	0	19	-89	-32	0	0	0	0	-0.5	6	1
22	22	Siemens IE3	180L	MMG-G1	180L	12	0	19	-89	-32	0	0	38	0	-0.5	35	25
30	30	Siemens IE3	200L	MMG-G1	200L	24	0	59	-165	-7	0	0	0	0	-0.5	50	40
37	37	Siemens IE3	225S	MMG-G1	225S	28	0	89	-125	-7	0	0	0	0	-0.5	35	20
45	45	Siemens IE3	225M	MMG-G1	225M	-7	0	89	-125	-7	0	0	25	0	-0.5	40	25
55	55	Siemens IE3	250M	MMG-G1	250S	-4.5	0	83	-143	-3	0	0	-38	0	0	90	70
75	75	Siemens IE3	280S	MMG-G1	250M	-39.5	-30	60	-143	-3	0	-51	-19	-22	0	5	-25
90	90	Siemens IE3	280M	MMG-GA	280S	-78	0	90	-145	-3	0	0	0	0	0	10	-10
110	110	Siemens IE3	315S	MMG-GA	280M	-10	-35	8	-200	-69	-110	-51	13	-26	-4	-5	-30
132	132	Siemens IE3	315M	MMG-GA	315S	-131	0	33	-195	1	0	0	-51	0	0	-20	-60
160	160	Siemens IE3	315L	MMG-GA	315M	-80	0	33	-195	1	0	0	0	0	0	20	0
200	200	Siemens IE3	315L	MMG-GA	315M	-235	0	33	-195	1	0	0	0	0	0	80	80
250	250	Siemens IE3	315L	MMG-GA	315CB	244	0	166	-	-	-	0	202	0	-7	430	-
315	315	Siemens IE3	315L	MMG-GA	315DB	300	0	166	-	-	-	0	402	0	-7	220	-
355	355	Siemens IE3	355L	MMG-GA	355AB	114	0	171	-	-	-	-20	-90	54	-5	-	-

Note: The dimensions L and h4 refer to NK pumps, LB and AD to NB pumps.

IE2, MMG-G, 6-pole

P2 [kW]		Motors on data pages		Other motors		L/LB	H	h4/AD	AG	LL	P	A	B	C	K	Weight [kg]	
50 Hz	60 Hz	Motor	Frame size	Motor	Frame size	[mm]										NK	NB
0.37	0.37	Siemens IE2	80A	MMG-GA	80	8.5	0	38	-15	5	0	0	0	0	0.5	8	8
0.55	0.55	Siemens IE2	80B	MMG-GA	80	8.5	0	38	-15	5	0	0	0	0	0.5	9	9
0.75	0.75	Siemens IE2	90S	MMG-GA	90S	-23.5	0	42	-15	5	0	0	0	0	0	5	5
1.1	1.1	Siemens IE2	90L	MMG-G1	90L	-43.5	0	42	-15	5	0	0	0	0	0	6	6
1.5	1.5	Siemens IE3	100L	MMG-G1	100L	-21.5	0	14	-45	8	0	0	0	0	0	9	9
2.2	2.2	Siemens IE3	112M	MMG-G1	112M	-22.5	0	12	-45	8	0	0	0	0	0	11	11
3	3	Siemens IE3	132S	MMG-G1	132S	-11	0	23	-65	10	0	0	0	0	0	23	18
4	4	Siemens IE3	132M	MMG-G1	132M	27	0	23	-65	10	0	-1	0	0	0	30	25
5.5	5.5	Siemens IE3	132M	MMG-G1	132M	-23	0	23	-65	10	0	-1	38	0	0	30	13
7.5	7.5	Siemens IE3	160M	MMG-G1	160M	4	0	26.5	-85	20	0	0	0	0	-0.5	37	28
11	11	Siemens IE3	160L	MMG-G1	160L	-12	0	26.5	-85	20	0	0	0	0	-0.5	43	34
15	15	Siemens IE3	180L	MMG-G1	180L	12	0	19	-89	-32	0	0	38	0	-0.5	40	40
18.5	18.5	Siemens IE3	200L	MMG-G1	200L	49	0	59	-165	-7	0	0	0	0	-0.5	70	62
22	22	Siemens IE3	200L	MMG-G1	200L	24	0	59	-165	-7	0	0	0	0	-0.5	45	45
30	30	Siemens IE3	225M	MMG-G1	225M	-7	0	89	-125	-7	0	0	25	0	-0.5	35	20
37	37	Siemens IE3	250M	MMG-G1	250S	-4.5	0	83	-143	-3	0	0	-38	0	0	105	85
45	45	Siemens IE3	280S	MMG-G1	250M	-39.5	-30	60	-143	-3	0	-51	-19	-22	0	55	35
55	55	Siemens IE3	280M	MMG-G1	280S	32	0	90	-145	-3	0	0	0	0	0	90	70
75	75	Siemens IE3	315S	MMG-G1	280M	-10	-35	8	-200	-69	-110	-51	13	-26	-4	-50	-50
90	90	Siemens IE3	315M	MMG-GA	315S	-131	0	33	-195	1	0	0	-51	0	0	10	0
110	110	Siemens IE3	315L	MMG-GA	315M	-80	0	33	-195	1	0	0	0	0	0	20	0
132	132	Siemens IE3	315L	MMG-GA	315M	-235	0	33	-195	1	0	0	0	0	0	-80	-100

Note: The dimensions L and h4 refer to NK pumps, LB and AD to NB pumps.

IE2, MMG-H, 2-pole

P2 [kW]		Motors on data pages		Other motors		L/LB	H	h4/AD	AG	LL	P	A	B	C	K	Weight [kg]	
50 Hz	60 Hz	Motor	Frame size	Motor	Frame size	[mm]										NK	NB
0.55	0.55	MG-C	71B	MMG-H	71B	22	0	0	21	21	0	0	0	0	0	-0.8	-1.1
0.75	0.75	MG-H3	80A	MMG-H	80B	29	0	21	28	28	0	0	0	0	0	2.6	1.7
1.1	1.1	MG-H3	80C	MMG-H	80B	9	0	21	28	28	0	0	0	0	0	3.5	2.4
1.5	1.5	MG-H3	90S	MMG-H	90SA	-24	0	35	-47	7	0	0	0	0	0	0	-1
2.2	2.2	MG-H3	90L	MMG-H	90LA	-39	0	35	-47	7	0	0	0	0	0	-1	-2
3	3	MG-H3	100L	MMG-H	100LA	-20	0	35	-47	12	0	0	0	0	0	1	-1
4	4	MG-H3	112M	MMG-H	112MA	-47	0	34	-87	12	0	0	0	0	0	-14	-15
5.5	5.5	MG-H3	132S	MMG-H	132SA	-41	0	54	-64	35	0	0	0	0	0	0	-2
7.5	7.5	MG-H3	132S	MMG-H	132SB	9	0	29	-65	3	0	0	38	0	0	-8	-11
11	11	MG-H3	160M	MMG-H	160MA	33	0	45	-73	-3	0	0	0	0	0	23	17
15	15	MG-H3	160M	MMG-H	160MB	33	0	45	-73	-3	0	0	0	0	0	21	14
18.5	18.5	MG-H3	160L	MMG-H	160L	33	0	45	-73	-3	0	0	0	0	0	24	18
22	22	MG-H3	180M	MMG-H	180M	39	0	61	-73	-3	0	0	0	0	0	45	38
30	30	Siemens IE3	200L	MMG-H	200LA	59	0	-23	-57	53	0	0	0	0	0	13	-17
37	37	Siemens IE3	200L	MMG-H	200LB	34	0	-23	-57	53	0	0	0	0	0	2	-23
45	45	Siemens IE3	225M	MMG-H	225MA	2	0	-23	-58	53	0	0	25	0	0	-18	-28
55	55	Siemens IE3	250M	MMG-H	250MA	28	0	-38	31	-23	0	0	0	0	0	-3	-23
75	75	Siemens IE3	280S	MMG-H	250SA	8	0	-32	31	-23	0	0	0	0	0	5	-15
90	90	Siemens IE3	280M	MMG-H	280MA	-50	0	-32	31	-23	0	0	51	0	0	-45	-65
110	110	Siemens IE3	315S	MMG-H	315SA	153	0	-15	46	-19	0	0	0	0	0	90	160
132	132	Siemens IE3	315M	MMG-H	315MA	98	0	-15	46	-19	0	0	0	0	0	80	80
160	160	Siemens IE3	315L	MMG-H	315LA	98	0	-15	46	-19	0	0	51	0	0	110	90
200	200	Siemens IE3	315L	MMG-H	315LB	-57	0	-15	46	-19	0	0	51	0	0	10	20
250	250	Siemens IE3	315L	MMG-H	355MA	138	40	142	194	-7	140	102	52	38	0	420	420
315	315	Siemens IE3	315L	MMG-H	355LB	138	40	142	194	-7	140	102	122	38	0	565	565
355	355	Siemens IE3	355L	MMG-H	355LC	-95	0	51	-	-30	-100	-20	-170	54	-5	20	20

Note: The dimensions L and h4 refer to NK pumps, LB and AD to NB pumps.

IE2, MMG-H, 4-pole

P2 [kW]		Motors on data pages		Other motors		L/LB	H	h4/AD	AG	LL	P	A	B	C	K	Weight [kg]	
50 Hz	60 Hz	Motor	Frame size	Motor	Frame size	[mm]										NK	NB
0.25	0.25	MG-C	71B	MMG-H	71B	22	0	0	21	21	0	0	0	0	0	-0.1	-0.4
0.37	0.37	MG-C	71B	MMG-H	71B	22	0	0	21	21	0	0	0	0	0	0	-0.3
0.55	0.55	MG-C	80A	MMG-H	80B	29	0	21	28	28	0	0	0	0	0	3.7	2.9
0.75	0.75	MG-H3	90S	MMG-H	80B	-21	-10	20	-52	7	0	-15	0	-6	0	4.5	4
1.1	1.1	MG-H3	90S	MMG-H	90SA	-24	0	35	-47	7	0	0	0	0	0	-3	-4
1.5	1.5	MG-H3	90L	MMG-H	90LA	-39	0	35	-47	7	0	0	0	0	0	-1	-2
2.2	2.2	MG-H3	100L	MMG-H	100LA	-20	0	35	-47	12	0	0	0	0	0	3	-2
3	3	MG-H3	100L	MMG-H	100LB	-20	0	35	-47	12	0	0	0	0	0	2	0
4	4	MG-H3	112M	MMG-H	112MA	-47	0	34	-87	12	0	0	0	0	0	-10	-11
5.5	5.5	MG-H3	132S	MMG-H	132SA	-29	0	29	-65	3	0	0	0	0	0	-9	-9
7.5	7.5	MG-H3	132M	MMG-H	132MA	-41	0	29	-65	3	0	0	0	0	0	-8	-12
11	11	MG-H3	160M	MMG-H	160MA	-41	0	45	-73	-3	0	0	-44	0	0	20	13
15	15	MG-H3	160L	MMG-H	160LA	-27	0	45	-73	-3	0	0	0	0	0	18	12
18.5	18.5	Siemens IE3	180M	MMG-H	180MA	22	0	-21	-19	46	0	0	0	0	0	10	5
22	22	Siemens IE3	180L	MMG-H	180LA	30	0	-21	-19	46	0	0	38	0	0	14	4
30	30	Siemens IE3	200L	MMG-H	200LA	34	0	-23	-57	53	0	0	0	0	0	5	-5
37	37	Siemens IE3	225S	MMG-H	225SA	37	0	-23	-58	53	0	0	0	0	0	5	-10
45	45	Siemens IE3	225M	MMG-H	225MA	2	0	-23	-58	53	0	0	25	0	0	6	-9
55	55	Siemens IE3	250M	MMG-H	250MA	28	0	-38	31	-23	0	0	0	0	0	-35	-55
75	75	Siemens IE3	280S	MMG-H	280SA	8	0	-32	31	-23	0	0	0	0	0	-45	-75
90	90	Siemens IE3	280M	MMG-H	280MA	-50	0	-32	31	-23	0	0	51	0	0	-65	-85
110	110	Siemens IE3	315S	MMG-H	315SA	153	0	-15	46	-19	0	0	0	0	0	166	141
132	132	Siemens IE3	315M	MMG-H	315MA	98	0	-15	46	-19	0	0	0	0	0	67	27
160	160	Siemens IE3	315L	MMG-H	315LA	98	0	-15	46	-19	0	0	51	0	0	85	65
200	200	Siemens IE3	315L	MMG-H	315LB	-57	0	-15	46	-19	0	0	51	0	0	10	-20
250	250	Siemens IE3	315L	MMG-H	355MA	138	40	142	194	-7	0	102	52	38	-7	470	470
315	315	Siemens IE3	315L	MMG-H	355LB	-6	40	142	194	-7	0	102	122	38	-7	495	495

Note: The dimensions L and h4 refer to NK pumps, LB and AD to NB pumps.

IE2, MMG-H, 6-pole

P2 [kW]		Motors on data pages		Other motors		L/LB	H	h4/AD	AG	LL	P	A	B	C	K	Weight [kg]	
50 Hz	60 Hz	Motor	Frame size	Motor	Frame size	[mm]										NK	NB
0.37	0.37	Siemens IE2	80A	MMG-H	80	26	0	10	35	35	0	0	0	0	0.5	3	3
0.55	0.55	Siemens IE2	80B	MMG-H	80	26	0	10	35	35	0	0	0	0	0.5	6	6
0.75	0.75	Siemens IE2	90S	MMG-H	90S	-24	0	17	40	35	0	0	0	0	0	-1	-1
1.1	1.1	Siemens IE2	90L	MMG-H	90L	-44	0	17	40	35	0	0	0	0	0	-2	-2
1.5	1.5	Siemens IE3	100L	MMG-H	100L	-21	0	-11	-20	3	0	0	0	0	0	-4	-4
2.2	2.2	Siemens IE3	112M	MMG-H	112M	-29	0	-9	-20	3	0	0	0	0	0	-10	-10
3	3	Siemens IE3	132S	MMG-H	132S	-35	0	-14	-17	8	0	0	0	0	0	-18	-23
4	4	Siemens IE3	132M	MMG-H	132M	3	0	-14	-17	8	0	0	0	0	0	-9	-14
5.5	5.5	Siemens IE3	132M	MMG-H	132M	-47	0	-14	-17	8	0	0	38	0	0	0	-17
7.5	7.5	Siemens IE3	160M	MMG-H	160M	10	0	12.5	-5	65	0	0	0	0	0	17	8
11	11	Siemens IE3	160L	MMG-H	160L	-6	0	12.5	-5	65	0	0	0	0	0	18	9
15	15	Siemens IE3	180L	MMG-H	180L	30	0	-21	-19	46	0	0	38	0	0	9	9
18.5	18.5	Siemens IE3	200L	MMG-H	200LA	59	0	-23	-57	53	0	0	0	0	0	9	1
22	22	Siemens IE3	200L	MMG-H	200LB	34	0	-23	-57	53	0	0	0	0	0	-7	-7
30	30	Siemens IE3	225M	MMG-H	225MA	2	0	-23	-58	53	0	0	25	0	0	-29	-44
37	37	Siemens IE3	250M	MMG-H	250MA	28	0	-38	31	-23	0	0	0	0	0	-25	-45
45	45	Siemens IE3	280S	MMG-H	280SA	8	0	-32	31	-23	0	0	0	0	0	-40	-60
55	55	Siemens IE3	280M	MMG-H	280MA	60	0	-32	31	-23	0	0	51	0	0	-15	-35
75	75	Siemens IE3	315S	MMG-H	315SA	153	0	-15	46	-19	0	0	0	0	0	86	86
90	90	Siemens IE3	315M	MMG-H	315MA	98	0	-15	46	-19	0	0	0	0	0	38	28
110	110	Siemens IE3	315L	MMG-H	315LA	98	0	-15	46	-19	0	0	51	0	0	120	100
132	132	Siemens IE3	315L	MMG-H	315LB	-57	0	-15	46	-19	0	0	51	0	0	65	45
160	160	Siemens IE3	315L	MMG-H	355MA	138	40	127	46	1	140	102	103	38	0	-	-

Note: The dimensions L and h4 refer to NK pumps, LB and AD to NB pumps.

IE3

IE3, Siemens, 2-pole

P2 [kW]		Motors on data pages		Other motors		L/LB	H	h4/AD	AG	LL	P	A	B	C	K	Weight [kg]	
50 Hz	60 Hz	Motor	Frame size	Motor	Frame size	[mm]										NK	NB
3	3	MG-H3	100L	Siemens IE3	100L	35.5	0	46	-27	9	0	0	0	0	0	3	2
4	4	MG-H3	112M	Siemens IE3	112M	-18	0	43	-67	9	0	0	0	0	0	-8	-8
5.5	5.5	MG-H3	132S	Siemens IE3	132S	-6	0	68	-47	27	0	0	0	0	0	3	6
7.5	7.5	MG-H3	132S	Siemens IE3	132S	56	0	43	-48	-5	0	0	0	0	0	6	8
11	11	MG-H3	160M	Siemens IE3	160M	23	0	32.5	-68	-68	0	0	0	0	0	-11	-8
15	15	MG-H3	160M	Siemens IE3	160M	23	0	32.5	-68	-68	0	0	0	0	0	-14	-12
18.5	18.5	MG-H3	160L	Siemens IE3	160L	39	0	32.5	-68	-68	0	0	0	0	0	-18	-15
22	22	MG-H3	180M	Siemens IE3	180M	17	0	82	-54	-49	0	0	0	0	0	43	35

Note: The dimensions L and h4 refer to NK pumps, LB and AD to NB pumps.

IE3, Siemens, 4-pole

P2 [kW]		Motors on data pages		Other motors		L/LB	H	h4/AD	AG	LL	P	A	B	C	K	Weight [kg]	
50 Hz	60 Hz	Motor	Frame size	Motor	Frame size	[mm]										NK	NB
2.2	2.2	MG-H3	100L	Siemens IE3	100L	35.5	0	46	-27	9	0	0	0	0	0	8	4
3	3	MG-H3	100L	Siemens IE3	100L	35.5	0	46	-27	9	0	0	0	0	0	3	2
4	4	MG-H3	112M	Siemens IE3	112M	-18	0	43	-67	9	0	0	0	0	0	-9	-9
5.5	5.5	MG-H3	132S	Siemens IE3	132S	56	0	43	-48	-5	0	0	0	0	0	8	-2
7.5	7.5	MG-H3	132M	Siemens IE3	132M	6	0	43	-48	-5	0	0	-38	0	0	-4	-3
11	11	MG-H3	160M	Siemens IE3	160M	-51	0	32.5	-68	-68	0	0	-44	0	0	-12	-10
15	15	MG-H3	160L	Siemens IE3	160L	-21	0	32.5	-68	-68	0	0	0	0	0	-17	-14

Note: The dimensions L and h4 refer to NK pumps, LB and AD to NB pumps.

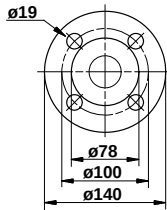
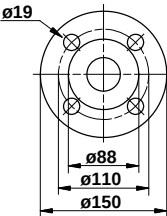
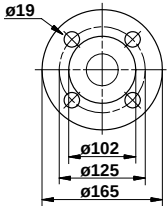
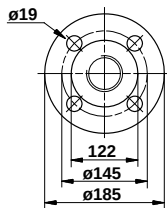
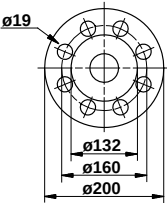
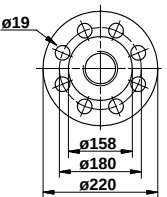
20. Accessories

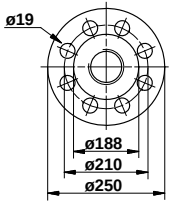
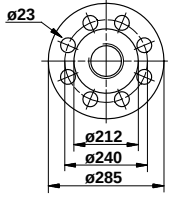
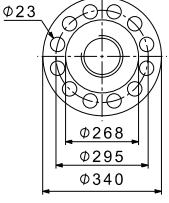
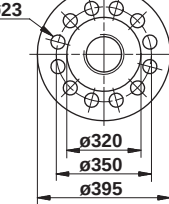
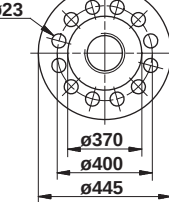
Counter-flanges

Cast iron pumps

Counter-flanges for cast iron NB, NBE and NK, NKE pumps are made of steel.

A set consists of one counter-flange, one gasket of asbestos-free material and the requisite number of bolts and nuts.

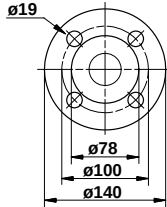
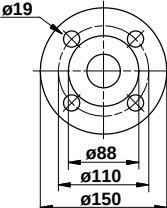
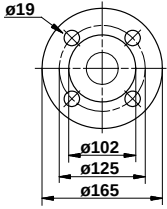
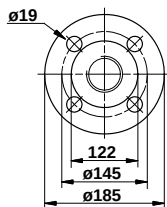
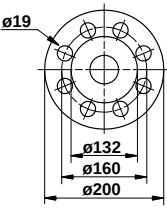
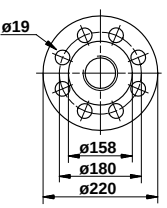
Counter-flange	Flange size	Description	Rated pressure [bar] EN 1092-2	Pipe connection	Product number
 TM03 0400 5004	DN 32	Threaded	10/16	Rp 1 1/4	419901
		For welding	10/16	32 mm	419902
 TM03 0401 5004	DN 40	Threaded	10/16	Rp 1 1/2	429902
		For welding	10/16	40 mm	429901
 TM03 0402 5004	DN 50	Threaded	10/16	Rp 2	339903
		For welding	10/16	50 mm	339901
 TM03 0403 5004	DN 65	Threaded	10/16	Rp 2 1/2	349902
		For welding	10/16	65 mm	349904
 TM03 2117 3705	DN 80	Threaded	10/16	Rp 3	350540
		For welding	10/16	80 mm	350541
 TM03 0405 5004	DN 100	Threaded	10/16	Rp 4	369901
		For welding	10/16	100 mm	369902

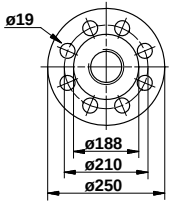
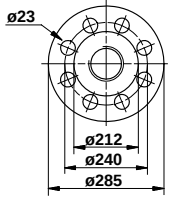
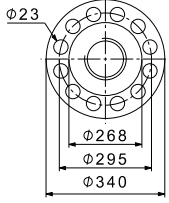
Counter-flange	Flange size	Description	Rated pressure [bar] EN 1092-2	Pipe connection	Product number
	DN 125	For welding	10/16	125 mm	96414677
	DN 150	For welding	10/16	150 mm	96414676
	DN 200	For welding	10	200 mm	96413358
	DN 250	For welding	10	250 mm	96691156
	DN 300	For welding	10	300 mm	96691157

Stainless steel pumps

Counter-flanges for stainless steel NB, NBE and NK, NKE pumps are made of stainless steel according to EN 1.4401 (AISI 316).

A set consists of one counter-flange, one gasket of asbestos-free material and the requisite number of bolts and nuts.

Counter-flange	Flange size	Description	Rated pressure [bar] EN 1092-2	Pipe connection	Product number
 TM03 0400 5004	DN 32	Threaded	10/16	Rp 1 1/4	415304
		For welding	10/16	32 mm	415305
 TM03 0401 5004	DN 40	Threaded	10/16	Rp 1 1/2	425245
		For welding	10/16	40 mm	425246
 TM03 0402 5004	DN 50	Threaded	10/16	Rp 2	335254
		For welding	10/16	50 mm	335255
 TM03 0403 5004	DN 65	Threaded	10/16	Rp 2 1/2	349910
		For welding	10/16	65 mm	349906
 TM03 2117 3705	DN 80	Threaded	10/16	Rp 3	350543
		For welding	10/16	80 mm	350544
 TM03 0405 5004	DN 100	Threaded	10/16	Rp 4	369904
		For welding	10/16	100 mm	369903

Counter-flange	Flange size	Description	Rated pressure [bar] EN 1092-2	Pipe connection	Product number
	TM03 0406 5004 DN 125	For welding	16 bar, EN 1092-2	125 mm	96694017
	TM03 0407 5004 DN 150	For welding	10/16	150 mm	98052936
	TM04 4364 5109 DN 200	For welding	10	200 mm	98052931

Sensors

Grundfos vortex flow sensor, VFI ¹⁾	Type	Flow range [m ³ /h]	Pipe connection	O-ring		Connection type		Product number
				EPDM	FKM	Cast iron flange	Stainless steel flange	
	VFI 1.3-25 DN32 020 E	1.3 - 25	DN 32	•		•		97686141
	VFI 1.3-25 DN32 020 F				•	•		97686142
	VFI 1.3-25 DN32 020 E			•			•	97688297
	VFI 1.3-25 DN32 020 F				•		•	97688298
	VFI 2-40 DN40 020 E	2 - 40	DN 40	•		•		97686143
	VFI 2-40 DN40 020 F				•	•		97686144
	VFI 2-40 DN40 020 E			•			•	97688299
	VFI 2-40 DN40 020 F				•		•	97688300
	VFI 3.2-64 DN50 020 E	2 - 64	DN 50	•		•		97686145
	VFI 3.2-64 DN50 020 F				•	•		97686146
	VFI 3.2-64 DN50 020 E			•			•	97688301
	VFI 3.2-64 DN50 020 F				•		•	97688302
	VFI 5.2-104 DN65 020 E	5.2 - 104	DN 65	•		•		97686147
	VFI 5.2-104 DN65 020 F				•	•		97686148
	VFI 5.2-104 DN65 020 E			•			•	97688303
	VFI 5.2-104 DN65 020 F				•		•	97688304
	VFI 8-160 DN80 020 E	8 - 160	DN 80	•		•		97686149
	VFI 8-160 DN80 020 F				•	•		97686150
	VFI 8-160 DN80 020 E			•			•	97688305
	VFI 8-160 DN80 020 F				•		•	97688306
	VFI 12-240 DN100 020 E	12 - 240	DN 100	•		•		97686151
	VFI 12-240 DN100 020 F				•	•		97686152
	VFI 12-240 DN100 020 E			•			•	97688308
	VFI 12-240 DN100 020 F				•		•	97688309

¹⁾ For more information about the VFI sensor, see the data booklet "Grundfos direct sensors", publication number 97790189.

Grundfos differential pressure sensor, DPI	Content of sensor kit	Data sheet - product number ²⁾	Pressure range [bar]	Product number
	• 1 sensor (7/16" connections), incl. 0.9 m screened cable	96985439	0 - 0.6	96611522
	• 1 original DPI bracket (for wall mounting)	96985440	0 - 1.0	96611523
	• 1 Grundfos bracket (for mounting on motor)	96985441	0 - 1.6	96611524
	• screws for mounting of sensor on bracket and motor	96985463	0 - 2.5	96611525
	• 3 capillary tubes (short/long)	96985464	0 - 4.0	96611526
	• 2 fittings (1/4" - 7/16")	96985465	0 - 6.0	96611527
	• 5 cable clips (black)	96985466	0 - 10	96611550
	• installation and operating instructions			
	• service kit instruction			

²⁾ Enter the product number of the data sheet into WebCAPS to view data for the sensor.

Note: Select the differential pressure sensor so that the maximum pressure of the sensor is higher than the maximum differential pressure of the pump.

Sensor interface, SI 001 PSU ³⁾	Description	Product number
	Grundfos Direct Sensors™, type SI 001 PSU, is an external power supply for the VFI, DPI and other transmitters with 24 VDC supply voltage. It is used when the cable between transmitter and controller is more than 30 metres long.	96915820

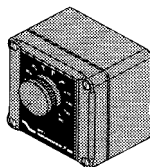
³⁾ For more information about the PSU sensor interface, see the Installation and operating instructions "SI 001 PSU - sensor interface", publication number 96944355, or Quick guide, publication number 96944356.

Danfoss pressure sensor kit		Pressure range [bar]	Product number	
• Connection: G 1/2 A (DIN 16288 - B6kt) • Electrical connection: Plug (DIN 43650)		0 - 2.5	96478188	
		0 - 4	91072075	
		0 - 6	91072076	
		0 - 10	91072077	
		0 - 16	91072078	
• Pressure sensor, type MBS 3000, with 2 m screened cable • Connection: G 1/4 A (DIN 16288 - B6kt) • 5 cable clips (black) • Fitting instructions PT (00400212)		0 - 2.5	405159	
		0 - 4	405160	
		0 - 6	405161	
		0 - 10	405162	
		0 - 16	405163	

	Type	Supplier	Measuring range	Product number
Flowmeter	SITRANS F M MAGFLO MAG 5100 W	Siemens	1-5 m ³ /h (DN 25)	ID8285
Flowmeter	SITRANS F M MAGFLO MAG 5100 W	Siemens	3-10 m ³ /h (DN 40)	ID8286
Flowmeter	SITRANS F M MAGFLO MAG 5100 W	Siemens	6-30 m ³ /h (DN 65)	ID8287
Flowmeter	SITRANS F M MAGFLO MAG 5100 W	Siemens	20-75 m ³ /h (DN 100)	ID8288
Temperature sensor	TTA (0) 25	Carlo Gavazzi	0 °C to +25 °C	96432591
Temperature sensor	TTA (-25) 25	Carlo Gavazzi	-25 °C to +25 °C	96430194
Temperature sensor	TTA (50) 100	Carlo Gavazzi	50 °C to +100 °C	96432592
Temperature sensor	TTA (0) 150	Carlo Gavazzi	0 °C to +150 °C	96430195
Accessory for temperature sensor. All with 1/2 RG connection.	Protecting tube Ø9 x 50 mm	Carlo Gavazzi		96430201
	Protecting tube Ø9 x 100 mm	Carlo Gavazzi		96430202
	Cutting ring bush	Carlo Gavazzi		96430203
Temperature sensor, ambient temperature	WR 52	tmg (DK: Plesner)	-50 °C to +50 °C	ID8295
Differential temperature sensor	ETSD	Honsberg	0 °C to +20 °C	96409362
Differential temperature sensor	ETSD	Honsberg	0 °C to +50 °C	96409363

Note: All sensors have 4-20 mA output signal.

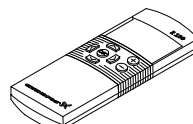
Potentiometer



Potentiometer for setpoint setting and start/stop of the pump.

Product	Product number
External potentiometer with cabinet for wall mounting	625468

R100



The R100 is used for wireless communication. Communication takes place via infrared light.

Product	Product number
R100	625333

Grundfos GO Remote

The Grundfos GO Remote is used for wireless infrared or radio communication with the pumps.

A number of Grundfos GO Remote variants are available. The variants are described in the following.

MI 201

The MI 201 is a complete solution, consisting of an Apple iPod touch 4G and a Grundfos cover for infrared and radio communication with Grundfos pumps or systems.



TM05 3886 1712

Fig. 58 MI 201

Supplied with the product:

- Apple iPod touch 4G incl. accessories
- Grundfos MI 201 cover
- battery charger
- quick guide.

MI 202

The MI 202 is an add-on module with built-in infrared and radio communication. The MI 202 can be used in conjunction with Apple iPod Touch 4, iPhone 4 or later.



TM05 3887 1712

Fig. 59 MI 202

Supplied with the product:

- Grundfos MI 202
- Quick guide.

MI 301

The MI 301 is a module with built-in infrared and radio communication. The MI 301 must be used in conjunction with an Android or iOS-based smartphone with a Bluetooth connection. The MI 301 has a rechargeable Li-ion battery and must be charged separately.



TM05 3890 1712

Fig. 60 MI 301

Supplied with the product:

- Grundfos MI 301
- battery charger
- Quick guide.

Product numbers

Grundfos GO Remote variant	Product number
Grundfos MI 201	98140638
Grundfos MI 202	98046376
Grundfos MI 301	98046408

Supported units

Make	Model	Operating system	MI 201	MI 202	MI 301
Apple	iPod touch 4G	iOS 5.0 or later	•	•	•
	iPhone 4G, 4GS		-	•	•
HTC	Desire S	Android 2.3.3 or later	-	-	•
	Sensation	Android 2.3.4 or later	-	-	•
Samsung	Galaxy S II	Android 2.3.4 or later	-	-	•

Note: Similar Android and iOS-based devices may work as well, but are not supported by Grundfos.

CIU communication interface units



GrA6118

Fig. 61 Grundfos CIU communication interface unit

The CIU units enable communication of operating data, such as measured values and setpoints, between pumps and a building management system. The CIU unit incorporates a 24-240 VAC/VDC power supply module and a CIM module. It can either be mounted on a DIN rail or on a wall.

We offer the following CIU units:

Product	Description	Product number
CIU 100	LON	96753735
CIU 150	PROFIBUS DP	96753081
CIU 200	Modbus RTU	96753082
CIU 250	GSM call up (Modbus RTU) GPRS (Modbus TCP)	96787106
CIU 272	Grundfos Remote Management	97644730
CIU 300	BACnet MS/TP	Contact Grundfos

For further information about data communication via CIU units and fieldbus protocols, see the CIU documentation available in WebCAPS.

CIM communication interface modules



GrA6121

Fig. 62 Grundfos CIM communication interface module

The CIM modules enable communication of operating data, such as measured values and setpoints, between E-pumps of 11-22 kW and a building management system. The CIM modules are add-on communication modules which are installed in the terminal box.

Note: CIM modules must be installed by authorised personnel.

We offer the following CIM modules:

Product	Description	Product number
CIM 100	LON	96824797
CIM 150	PROFIBUS DP	96824793
CIM 200	Modbus RTU	96824796
CIM 250	GSM call up (Modbus RTU) GPRS (Modbus TCP)	96824795
CIM 270	Grundfos Remote Management	96898815
CIM 300	BACnet MS/TP	Contact Grundfos

For further information about data communication via CIM modules and fieldbus protocols, see the CIM documentation available in WebCAPS.

EMC filter

EMC (electromagnetic compatibility to EN 61800-3)

Motor [kW]		Emission/immunity
2-pole	4-pole	
0.37	0.37	Emission Motors may be installed in residential areas (first environment), unrestricted distribution, corresponding to CISPR11, group 1, class B.
0.55	0.55	
0.75	0.75	
1.1	1.1	
1.5	1.5	
2.2	2.2	Immunity Motors fulfil the requirements for both the first and second environment.
3.0	3.0	
4.0	4.0	
5.5	-	
7.5	-	
-	5.5	Emission The motors are category C3, corresponding to CISPR11, group 2, class A, and may be installed in industrial areas (second environment).
-	7.5	
11	11	
15	15	
18.5	18.5	
22	-	If equipped with an external Grundfos EMC filter, the motors are category C2, corresponding to CISPR11, group 1, class A, and may be installed in residential areas (first environment).



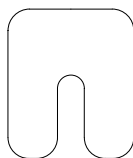
TM02 9198 1203

Fig. 63 EMC filter

The EMC filter for residential areas is available as a complete kit ready for installation.

Product	Product number
EMC-filter (5.5 kW and 7.5 kW, 4-pole)	96041047
EMC-filter (11-22 kW)	96478309

Shims



TM04 3264 0908

Fig. 64 Shim

Shims to adjust motor height when aligning pump and motor.

Product	Product number
Small case (180 pcs)	96659156
Large case (360 pcs)	96659157

Each case contains three types of shims:

Type 1: 55 x 50 mm, 15 mm slot.

Type 2: 75 x 70 mm, 23 mm slot.

Type 3: 90 x 80 mm, 32 mm slot.

Each type has ten of each of three sizes:

0.05; 0.1; 0.2; 0.5; 0.7; 1 mm.

A large case contains 20 of each of the above-mentioned shims. Refills can be found via service.

MP 204 - advanced motor protection

The MP 204 is an electronic motor protection for pumps. One unit covers all electrical motors from 3 to 999 A, as well as voltages from 100 to 480 VAC.

Installation of the MP 204 is by means of screws onto a wall or back plate, or on a mounting rail.



MP 204

The MP 204 is an electronic motor protector and data collecting unit. Apart from protecting the motor, it can also send information to a CIU unit via GENIbus, like for instance:

- trip
- warning
- energy consumption
- input power
- motor temperature.

The MP 204 protects the motor primarily by measuring the motor current by means of a true RMS measurement.

The pump is protected secondarily by measuring the temperature with a Tempcon sensor, a Pt100/Pt1000 sensor and a PTC sensor/thermal switch.

The MP 204 is designed for single- and three-phase motors.

TM03 0150 4204

Functions

Features

- Phase-sequence monitoring
- indication of current or temperature
- input for PTC sensor/thermal switch
- indication of temperature in °C or °F
- 4-digit, 7-segment display
- setting and status reading with the Grundfos R100 remote control
- setting and status reading via the Grundfos GENIbus fieldbus.

Tripping conditions

- Overload
- underload (dry running)
- temperature
- missing phase
- phase sequence
- overvoltage
- undervoltage
- power factor (cos φ)
- current unbalance.

Warnings

- Overload
- underload
- temperature
- overvoltage
- undervoltage
- power factor (cos φ)
- run capacitor (single-phase operation)
- starting capacitor (single-phase operation)
- loss of communication in network
- harmonic distortion.

Learning function

- Phase sequence (three-phase operation)
- run capacitor (single-phase operation)
- starting capacitor (single-phase operation)
- identification and measurement of Pt100/Pt1000 sensor circuit.

Control MP 204

The Control MP 204 is supplied as a plug-and-play control cabinet solution. The main switch and LED panel showing power consumption are all you see on the front. Inside you find the MP 204 unit and optional communication interface units.



Control MP 204

The Control MP 204 control cabinets are supplied with all necessary components. Three types of control cabinets are available, depending on functions and starting method. The control cabinets are designed for installation in a control cabinet for outdoor use. The Control MP 204 control cabinets have a built-in main switch and a thermal magnetic circuit breaker.

TM04 9512 4410

Digital input

- Float switch or pressure relay (if no IO 112 is used).

Analog input

- Too high motor temperature (Tempcon)
- thermistor/PTC, pump
- pressure sensor, 4-20 mA (with IO 112).

Relay output

- Pump alarm.

Communication

- Grundfos Remote Management.
- GSM/GPRS (IO 112 not supported)
- Modbus RTU wired (IO 112 not supported)
- PROFIBUS DP (IO 112 not supported).

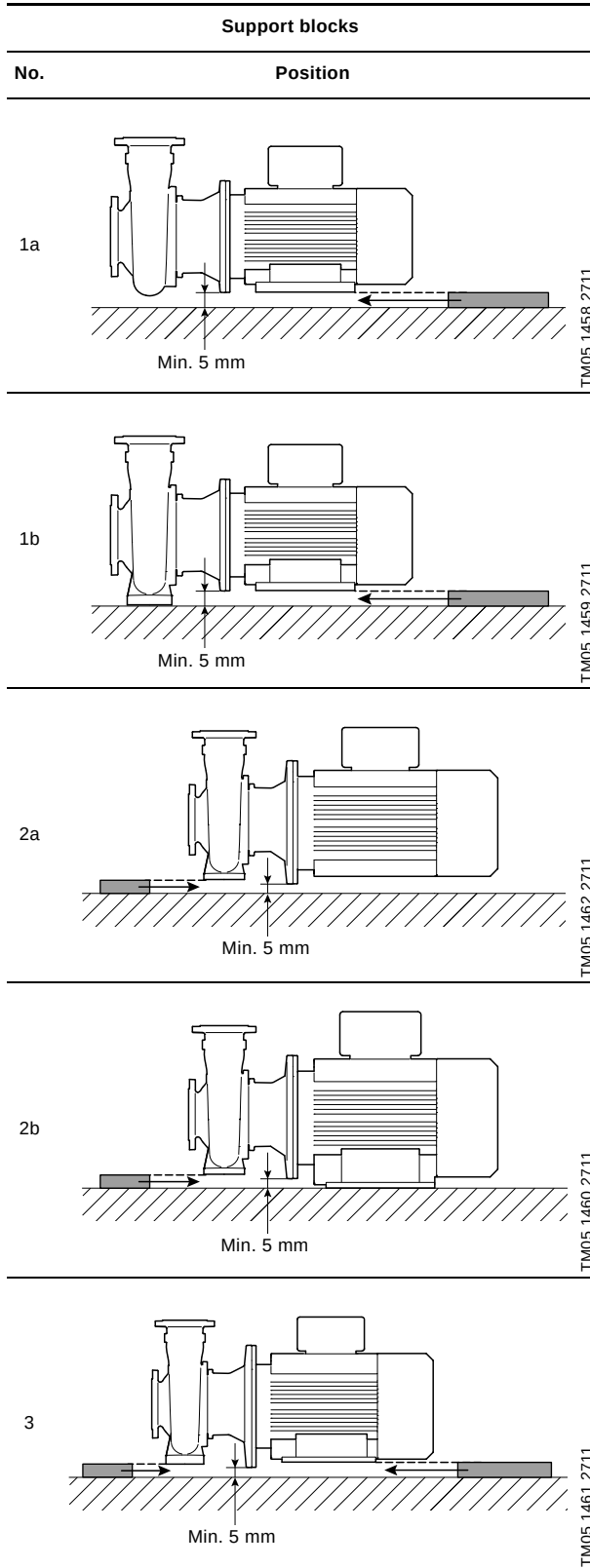
Protection

- Protects the pump against short-circuit.

For more information about the MP 204 and Control MP 204, see the data booklet "Control MP 204", publication number 97770915.

Support blocks (NB)

Steel support blocks are used to compensate for dimensional differences between pump housing and motor frame sizes. The support blocks can be fitted under the motor or pump housing feet during installation thus enabling horizontal alignment of the pump.



Key to support block number

No.	Description
1a	Support blocks to be fitted under motor feet
1b	
2a	Support blocks to be fitted under pump housing feet
2b	
3	Support blocks to be fitted under both motor and pump housing feet

Base frames

As an additional feature a base frame for improving the installation is available. The base frame is placed between the foundation and the support blocks.

When ordering a base frame as an accessory, the relevant support blocks, bolts, nuts and washers for mounting of the pump on the base frame are always included. Bolts for mounting the base frame on the foundation are not included.

Product numbers

Information on the pump nameplate will indicate which support block number to choose.

The product numbers in the tables on the following pages refer to one support block. Therefore always order two of the product numbers in the list as the pump/motor needs to be supported on both sides.

Note: Bolts, washers and nuts are not supplied together with support blocks.

If the pump housing of your pump has feet and two options are indicated, choose the one with support blocks for the pump.

If your pump/motor combination is not in the list, contact your Grundfos Customer Service Unit (CSU).

NB, 2-pole, 50 Hz

Pump type	P2 [kW]	Axial height with support blocks	Product number of support block*		Support blocks for pump and/or motor are available for motors marked with X							
			Support block under pump	Support block under motor	E-motor	Standard motor						
					MGE	MG	Siemens	MMG-E	MMG-H			
					IE3	IE2	IE3	IE2	IE3	IE1	IE2	IE2
32-125	3	137	96735813	-	x	x	x	x	x			x
32-160	5.5	157	96735813	-	x	x	x	x	x			x
32-200	11	185	96735813	95921203	x		x	x	x			x
32-250	11	185	95040657	95921203	x	x	x	x	x			x
32-250	15	185	95040657	95921203	x		x	x	x			
32-250	15	185	95040657	95921206								x
40-125	3	137	96735813	-	x	x	x	x	x			x
40-125	4	137	96735813	-	x	x	x	x	x			x
40-125	5.5	162	97975651	-	x	x	x	x	x			x
40-160	5.5	157	96735813	-	x	x	x	x	x			x
40-160	7.5	157	96735813	-	x	x	x	x	x			x
40-160	11	182	97975651	97975652	x		x	x	x			x
40-200	11	185	96735813	95921203		x	x					
40-200	11	185	-	95921203	x		x	x	x			x
40-200	15	185	96735813	95921203		x	x					
40-200	15	185	-	95921203	x		x	x	x			
40-200	15	185	-	95921206								x
40-250	11	185	95040657	95921203			x					
40-250	11	185	-	95921203	x		x	x	x			x
40-250	15	185	-	95921203	x		x	x	x			
40-250	15	185	-	95921206								x
40-250	18.5	185	-	95921203			x					
40-250	18.5	185	-	95921206	x		x		x			x
40-250	30	205	95040665	95040707				x				
40-250	30	205	-	95040707				x	x			x
40-315	22	200	-	95921205	x		x	x	x			x
40-315	30	205	95040657	95040707				x	x			x
40-315	37	205	95040657	95040707				x	x			x
40-315	45	230	95040667	95040707				x	x			x
50-125	5.5	157	96735813	-	x	x	x	x	x			x
50-125	7.5	157	96735813	-	x	x	x	x	x			x
50-160	11	185	96735813	95921203			x					
50-160	11	185	-	95921203	x		x	x	x			x
50-160	15	185	-	95921203	x		x	x	x			
50-160	15	185	-	95921206								x
50-200	11	185	96735813	95921203	x							
50-200	11	185	-	95921203	x		x	x	x			x
50-200	15	185	96735813	95921203			x					
50-200	15	185	-	95921203	x		x	x	x			
50-200	15	185	-	95921206								x
50-200	18.5	185	96735813	95921203			x					
50-200	18.5	185	96735813	95921206			x					
50-200	18.5	185	-	95921203			x					
50-200	18.5	185	-	95921206	x	x	x		x			x
50-200	22	185	96735813	95921204				x				
50-250	15	185	-	95921203	x		x	x	x			
50-250	15	185	-	95921206								x
50-250	18.5	185	-	95921203			x					
50-250	18.5	185	-	95921206	x		x		x			x
50-250	30	205	95040665	95040707				x				x
50-250	30	205	-	95040707				x	x			x
50-250	37	205	95040665	95040707				x				
50-250	37	205	-	95040707				x	x			x
50-315	30	225	-	95921208				x	x			x
50-315	37	225	-	95921208				x	x			x
50-315	45	230	95040657	95040707				x	x			x
50-315	55	285	97975653	95921213				x	x			x
65-125	11	185	95040665	95921203	x		x	x	x			x
65-160	11	185	95040665	95921203	x		x					
65-160	11	185	-	95921203	x		x	x	x			x
65-160	15	185	95040665	95921203			x					

Pump type	P2 [kW]	Axial height with support blocks	Product number of support block*		Support blocks for pump and/or motor are available for motors marked with X						
			Support block under pump	Support block under motor	E-motor	Standard motor					
					MGE	MG	Siemens	MMG-E	MMG-H		
					IE3	IE2	IE3	IE2	IE3	IE1	IE2
65-160	15	185	-	95921203	x		x	x	x		
65-160	15	185	-	95921206							x
65-160	18.5	185	95040665	95921206	x						
65-160	18.5	185	-	95921203			x				
65-160	18.5	185	-	95921206	x		x	x			x
65-200	11	185	-	95921203	x		x	x	x		x
65-200	15	185	95040657	95921203			x				
65-200	15	185	-	95921203	x		x	x	x		
65-200	15	185	-	95921206							x
65-200	18.5	185	95040657	95921206			x				
65-200	18.5	185	-	95921203			x				
65-200	18.5	185	-	95921206	x		x		x		x
65-200	30	205	95040665	95040707			x	x			
65-200	30	205	-	95040707			x	x			x
65-200	37	205	95040665	95040707				x			
65-200	37	205	-	95040707			x	x			x
65-250	30	205	95040668	95040707			x	x			x
65-250	37	205	95040668	95040707			x	x			x
65-250	45	235	95040715	95040708			x				
65-250	45	235	95040715	95921210				x			x
65-250	55	300	97975654	95921214			x	x			x
65-250	75	300	97975654	95921216			x	x			x
65-315	55	285	97975655	95921213			x	x			x
65-315	75	285	97975655	95921215			x	x			x
65-315	90	285	97975655	95921217			x	x			x
65-315	110	345	97975656	95921219			x	x			x
80-160	11	185	95040657	95921203	x						
80-160	11	185	-	95921203	x		x	x	x		x
80-160	15	185	95040657	95921203	x		x				
80-160	15	185	95040657	95921206							x
80-160	15	185	-	95921203	x		x	x	x		
80-160	15	185	-	95921206							x
80-160	18.5	185	95040657	95921206	x						
80-160	18.5	185	-	95921203			x				
80-160	18.5	185	-	95921206	x		x	x			x
80-160	30	205	95040665	95040707			x	x			
80-160	30	205	-	95040707			x	x			x
80-200	30	205	95040665	95040707			x	x			x
80-200	37	205	95040665	95040707			x	x			x
80-200	45	230	95921123	95040707			x	x			x
80-200	55	280	97975657	95921212			x	x			x
80-250	45	235	95040715	95040708			x				
80-250	45	235	95040715	95921210				x			x
80-250	55	300	97975654	95921214			x	x			x
80-250	75	300	97975654	95921216			x	x			x
80-250	90	300	97975654	95921291			x	x			x
80-315	90	285	95040715	95921217			x	x			x
80-315	110	350	97975654	95921220			x	x			x
80-315	132	350	97975654	95921223			x	x			x
80-315	160	350	97975654	95921223							x
80-315	160	350	97975654	95921225			x	x			
100-160	18.5	200	-	98283087	x						
100-160	22	200	-	95921205	x		x	x	x		x
100-160	30	205	95040668	95040707			x	x			x
100-160	37	205	95040668	95040707			x	x			x
100-200	30	205	95040668	95040707			x	x			x
100-200	37	205	95040668	95040707			x	x			x
100-200	45	235	95040715	95040708			x				
100-200	45	235	95040715	95921210				x			x
100-200	55	300	97975654	95921214			x	x			x
100-200	75	300	97975654	95921216			x	x			x
100-250	55	285	97975655	95921213			x	x			x
100-250	75	285	97975655	95921215			x	x			x

Pump type	P2 [kW]	Axial height with support blocks	Product number of support block*		Support blocks for pump and/or motor are available for motors marked with X								
					E-motor	Standard motor							
					MGE	MG	Siemens		MMG-E		MMG-H		
			Support block under pump	Support block under motor	IE3	IE2	IE3	IE2	IE3	IE1	IE2	IE2	
100-250	90	285	97975655	95921217				x	x			x	
100-250	110	345	97975656	95921219				x	x			x	
100-250	132	345	97975656	95921222				x	x			x	
100-315	110	350	97975654	95921220				x	x			x	
100-315	132	350	97975654	95921223				x	x			x	
100-315	160	350	97975654	95921223								x	
100-315	160	350	97975654	95921225				x	x				
100-315	200	350	97975654	95921223								x	
100-315	200	350	97975654	95921225				x	x				
125-200	45	250	-	95921209					x			x	
125-200	45	285	95040715	95921260				x					
125-200	55	285	95040715	95921213				x	x			x	
125-200	75	285	95040715	95921215				x	x			x	
125-200	90	285	95040715	95921217				x	x			x	
125-200	110	350	97975654	95921220				x	x			x	
125-250	90	285	95040715	95921217				x	x			x	
125-250	110	350	97975654	95921220				x	x			x	
125-250	132	350	97975654	95921223				x	x			x	
125-250	160	350	97975654	95921223								x	
125-250	160	350	97975654	95921225				x	x				
125-250	200	350	97975654	95921223								x	
125-250	200	350	97975654	95921225				x	x				
125-315	132	340	97975658	95921221				x	x			x	
125-315	160	340	97975658	95921221								x	
125-315	160	340	97975658	95921224				x	x				
125-315	200	340	97975658	95921221								x	
125-315	200	340	97975658	95921224				x	x				
150-200	110	340	97975658	95921218				x	x			x	
150-250	132	340	97975658	95921221				x	x			x	
150-250	160	340	97975658	95921221								x	
150-250	160	340	97975658	95921224				x	x				
150-250	200	340	97975658	95921221								x	
150-250	200	340	97975658	95921224				x	x				
150-315	160	340	97975658	95921221							x	x	
150-315	160	340	97975658	95921224				x	x				
150-315	160	340	97975658	-						x			
150-315	200	340	97975658	95921221							x	x	
150-315	200	340	97975658	95921224				x	x				
150-315	200	340	97975658	-						x			

* Always order two of the product numbers in the list as the pump/motor needs to be supported on both sides.

NB, 4-pole, 50 Hz

Pump type	P2 [kW]	Axial height with support blocks	Product number of support block*		Support blocks for pump and/or motor are available for motors marked with X												
			Support block under pump	Support block under motor	E-motor		Standard motor										
					MGE	MG	Siemens	MMG-E	MMG-G	MMG-H							
											IE1	IE2	IE2	IE3	IE2	IE3	IE2
50-315	11	240	95040662	95921247		x				x	x						x
50-315	11	240	95040662	95921253					x								
65-315	11	240	95040671	95921247		x				x	x						x
65-315	11	240	95040671	95921253					x								
65-315	15	240	95040671	95921247		x											
65-315	15	240	95040671	95921253					x	x	x						x
80-250	11	200	-	95921246		x	x			x	x						x
80-250	11	200	-	98283087					x								
80-315	11	260	95040670	95921249		x				x	x						x
80-315	11	260	95040670	95921255					x								
80-315	15	260	95040670	95921249		x											
80-315	15	260	95040670	95921255					x	x	x						x
80-315	18.5	260	95040670	95921251	x					x	x						x
80-315	22	260	95040670	95921251							x						
80-315	22	260	95040670	95921256						x							x
80-400	18.5	280	-	95921252	x					x	x						x
80-400	22	280	-	95921252							x						
80-400	22	280	-	95921257							x						x
80-400	30	300	95040712	95921263						x	x						x
80-400	37	285	95040668	95921260						x	x						x
80-400	45	280	-	98042221							x						x
80-400	45	285	95040668	95921260								x					
100-200	11	200	-	95921246		x	x			x	x						x
100-200	11	200	-	98283087						x							
100-250	11	240	95040671	95921247		x					x	x					x
100-250	11	240	95040671	95921253						x							
100-250	15	240	95040671	95921247		x											
100-250	15	240	95040671	95921253						x	x	x					x
100-250	18.5	240	95040671	95921250	x						x	x					x
100-315	15	260	95040670	95921249		x											
100-315	15	260	95040670	95921255						x	x	x					x
100-315	18.5	260	95040670	95921251	x						x	x					x
100-315	22	260	95040670	95921251								x					
100-315	22	260	95040670	95921256							x						x
100-315	30	260	95040670	95921262							x	x					x
100-400	22	280	-	95921252								x					
100-400	22	280	-	95921257								x					x
100-400	30	300	95040720	95921263							x	x					x
100-400	37	285	95040718	95921260							x	x					x
100-400	45	280	-	98042221								x					x
100-400	45	285	95040718	95921260									x				
100-400	55	280	-	95921212								x	x				x
125-200	11	260	95040670	95921249		x	x				x	x					x
125-200	11	260	95040670	95921255						x							
125-200	15	260	95040670	95921249		x											
125-200	15	260	95040670	95921255						x	x	x					x
125-250	11	260	95040670	95921249		x					x	x					x
125-250	11	260	95040670	95921255						x							
125-250	15	260	95040670	95921249		x											
125-250	15	260	95040670	95921255						x	x	x					x
125-250	18.5	260	95040670	95921251	x						x	x					x
125-250	22	260	95040670	95921251								x					
125-250	22	260	95040670	95921256							x						x
125-250	30	260	95040670	95921262							x	x					x
125-315	18.5	280	-	95921252	x						x	x					x
125-315	22	280	-	95921252								x					
125-315	22	280	-	95921257								x					x
125-315	30	300	95040720	95921263							x	x					x
125-315	37	285	95040718	95921260							x	x					x
125-315	45	280	-	98042221								x					x
125-315	45	285	95040718	95921260									x				

Pump type	P2 [kW]	Axial height with support blocks	Product number of support block*		Support blocks for pump and/or motor are available for motors marked with X							
			Support block under pump	Support block under motor	E-motor		Standard motor					
					MGE		MG	Siemens		MMG-E	MMG-G	
					IE1	IE2		IE2	IE3		IE1	IE2
125-400	37	325	95040719	95921261				x	x			x
125-400	45	325	95040719	95921261					x			
125-400	45	325	95040719	95921273				x				x
125-400	55	315	-	97975659				x	x			x
125-400	75	315	-	95921265				x	x			x
125-400	90	315	-	95921265					x			
125-400	90	315	-	95921268				x				x
125-500	55	400	-	98042212				x	x			x
125-500	75	400	-	95921282				x	x			x
125-500	90	400	-	95921282					x			
125-500	90	400	-	95921283				x				x
125-500	110	400	-	98042216				x	x			x
125-500	132	400	-	98042220				x				x
125-500	132	435	95921301	95921270					x			
125-500	160	400	-	98042220				x	x			x
150-200	11	300	95040720	95921248	x			x	x			x
150-200	11	300	95040720	95921254				x				
150-200	15	300	95040720	95921248		x						
150-200	15	300	95040720	95921254				x	x	x		x
150-250	15	300	95040720	95921248		x						
150-250	15	300	95040720	95921254				x	x	x		x
150-250	18.5	280	-	95921252	x			x	x			x
150-250	22	280	-	95921252					x			
150-250	22	280	-	95921257				x				x
150-250	30	300	95040720	95921263				x	x			x
150-250	37	285	95040718	95921260				x	x			x
150-250	45	280	-	98042221				x				x
150-250	45	285	95040718	95921260					x			
150-315	18.5	280	-	95921252	x			x	x	x	x	x
150-315	22	280	-	95921252					x			
150-315	22	280	-	95921257				x		x	x	x
150-315	30	300	95040720	95921263				x	x	x	x	x
150-315	37	285	95040718	95921260				x	x	x	x	x
150-315	45	280	-	98042221				x		x	x	x
150-315	45	285	95040718	95921260					x			
150-315	55	280	-	95921212				x	x	x		x
150-400	55	315	-	97975659				x	x			x
150-400	75	315	-	95921265				x	x			x
150-400	90	315	-	95921265					x			
150-400	90	315	-	95921268				x				x
150-400	110	335	95040720	97994325				x	x			x
150-400	132	335	95040720	97994327				x				x
150-400	132	335	95040720	-					x			
150-400	160	335	95040720	97994327				x	x			x
150-500	132	400	-	98042220				x				x
150-500	132	435	95921301	95921270					x			
150-500	160	400	-	98042220				x	x			x
150-500	200	400	-	98042220				x	x			x
200-400	37	400	-	98042208				x	x			x
200-400	45	400	-	98042208					x			
200-400	45	400	-	98042233				x				x
200-400	55	400	-	98042212				x	x			x
200-400	75	400	-	95921282				x	x			x
200-400	90	400	-	95921282					x			
200-400	90	400	-	95921283				x				x
200-400	110	400	-	98042216				x	x			x
200-400	132	400	-	98042220				x				x
200-400	132	435	95921301	95921270					x			
200-450	75	400	-	95921282				x	x			x
200-450	90	400	-	95921282					x			
200-450	90	400	-	95921283				x				x
200-450	110	400	-	98042216				x	x			x
200-450	132	400	-	98042220				x				x

Pump type	P2 [kW]	Axial height with support blocks	Product number of support block*		Support blocks for pump and/or motor are available for motors marked with X											
			Support block under pump	Support block under motor	E-motor		Standard motor									
					MGE		MG		Siemens		MMG-E		MMG-G		MMG-H	
					IE1	IE2	IE2	IE3	IE2	IE3	IE2	IE1	IE2	IE2		
200-450	132	435	95921301	95921270						x						
200-450	160	400	-	98042220					x	x					x	
250-350	37	450	-	98042207					x	x					x	
250-350	45	450	-	98042207						x						
250-350	45	450	-	98042231					x						x	
250-350	55	450	-	98042192					x	x					x	
250-350	75	450	-	98042213					x	x					x	
250-350	90	450	-	98042213						x						
250-350	90	450	-	98042218					x						x	
250-400	45	450	-	98042207						x						
250-400	45	450	-	98042231					x						x	
250-400	55	450	-	98042192					x	x					x	
250-400	75	450	-	98042213					x	x					x	
250-400	90	450	-	98042213						x						
250-400	90	450	-	98042218					x						x	
250-400	110	450	-	98042215					x	x					x	
250-400	132	450	-	98042219					x						x	
250-400	160	450	-	98042219					x	x					x	
250-450	75	450	-	98042213					x	x					x	
250-450	90	450	-	98042213						x						
250-450	90	450	-	98042218					x						x	
250-450	110	450	-	98042215					x	x					x	
250-450	132	450	-	98042219					x						x	
250-450	160	450	-	98042219					x	x					x	
250-450	200	450	-	98042219					x	x					x	
250-500	160	450	-	98042219					x	x					x	
250-500	200	450	-	98042219					x	x					x	

* Always order two of the product numbers in the list as the pump/motor needs to be supported on both sides.

NB, 6-pole, 50 Hz

Pump type	P2 [kW]	Axial height with support blocks	Product number of support block*		Support blocks for pump and/or motor are available for motors marked with X				
			Support block under pump	Support block under motor	Standard motor				
					Siemens	MMG-E	MMG-G	MMG-H	
					IE2	IE3	IE2	IE2	IE2
100-315	7.5	260	95040670	95921249	x	x			
100-315	11	260	95040670	95921255	x	x			x
100-400	7.5	300	95040720	95921248	x	x			
100-400	11	300	95040720	95921254	x	x			x
100-400	15	280	-	95921252		x			
100-400	15	280	-	95921257	x				x
100-400	18.5	300	95040720	95921263	x	x			x
125-250	7.5	260	95040670	95921249	x	x			
125-315	7.5	300	95040720	95921248	x	x			
125-315	11	300	95040720	95921254	x	x			x
125-315	15	280	-	95921252		x			
125-315	15	280	-	95921257	x				x
125-400	11	320	95040718	95921284	x	x			x
125-400	15	320	95040718	95921285	x				x
125-400	15	320	95040718	98189154		x			
125-400	18.5	320	95040718	95921287	x	x			x
125-400	22	320	95040718	95921287	x	x			x
125-400	30	325	95040719	95921261		x			
125-400	30	325	95040719	95921273	x				x
125-500	18.5	400	-	97975660	x	x			x
125-500	22	400	-	97975660	x	x			x
125-500	30	400	-	98042208		x			
125-500	30	400	-	98042233	x				x
125-500	37	400	-	98042212	x	x			x
125-500	45	400	-	95921282	x	x			x
125-500	55	400	-	95921282		x			
125-500	55	400	-	95921283	x				x
150-250	7.5	300	95040720	95921248	x	x			
150-250	11	300	95040720	95921254	x	x			x
150-315	7.5	300	95040720	95921248	x	x	x	x	
150-315	11	300	95040720	95921254	x	x	x	x	x
150-315	15	280	-	95921252		x			
150-315	15	280	-	95921257	x		x	x	x
150-315	18.5	300	95040720	95921263	x	x			x
150-315	22	300	95040720	95921263	x	x			x
150-315	30	280	-	98042221	x				x
150-315	30	285	95040718	95921260		x			
150-400	18.5	320	95040718	95921287	x	x			x
150-400	22	320	95040718	95921287	x	x			x
150-400	30	325	95040719	95921261		x			
150-400	30	325	95040719	95921273	x				x
150-400	30	325	-	-	x				
150-400	37	315	-	97975659	x	x			x
150-400	45	315	-	95921265	x	x			x
150-500	37	400	-	98042212	x	x			x
150-500	45	400	-	95921282	x	x			x
150-500	55	400	-	95921282		x			
150-500	55	400	-	95921283	x				x
150-500	75	400	-	98042216	x	x			x
200-400	15	400	-	98042205	x				x
200-400	18.5	400	-	97975660	x	x			x
200-400	22	400	-	97975660	x	x			x
200-400	30	400	-	98042208		x			
200-400	30	400	-	98042233	x				x
200-400	37	400	-	98042212	x	x			x
200-450	18.5	400	-	97975660	x	x			x
200-450	22	400	-	97975660	x	x			x
200-450	30	400	-	98042208		x			
200-450	30	400	-	98042233	x				x
200-450	37	400	-	98042212	x	x			x

Pump type	P2 [kW]	Axial height with support blocks	Product number of support block*		Support blocks for pump and/or motor are available for motors marked with X				
			Support block under pump	Support block under motor	Standard motor				
					Siemens		MMG-E	MMG-G	MMG-H
					IE2	IE3	IE2	IE2	IE2
200-450	45	400	-	95921282	x	x			x
250-350	11	450	-	98042191	x	x			x
250-350	15	450	-	98042189	x				x
250-350	18.5	450	-	98042210	x	x			x
250-350	22	450	-	98042210	x	x			x
250-400	15	450	-	98042189	x				x
250-400	18.5	450	-	98042210	x	x			x
250-400	22	450	-	98042210	x	x			x
250-400	30	450	-	98042207		x			
250-400	30	450	-	98042231	x				x
250-400	37	450	-	98042192	x	x			x
250-400	45	450	-	98042213	x	x			x
250-450	18.5	450	-	98042210	x	x			x
250-450	22	450	-	98042210	x	x			x
250-450	30	450	-	98042207		x			
250-450	30	450	-	98042231	x				x
250-450	37	450	-	98042192	x	x			x
250-450	45	450	-	98042213	x	x			x
250-450	55	450	-	98042213		x			
250-450	55	450	-	98042218	x				x
250-500	45	450	-	98042213	x	x			x
250-500	55	450	-	98042213		x			
250-500	55	450	-	98042218	x				x
250-500	75	450	-	98042215	x	x			x
250-500	90	450	-	98042219	x				

* Always order two of the product numbers in the list as the pump/motor needs to be supported on both sides.

Certificates and reports

Grundfos offers a number of certificates and reports. If a certificate or report is required, it must be stated on the order. Please use the product numbers of the certificates/reports shown in the tables below.

Certificates according to EN 10204

Certificate	Description	Certificate according to EN 10204	Product number
Certificate of compliance with the order specifications	Grundfos document certifying that the pump supplied is in compliance with the order specifications.	2.1	96507895
Test certificate - Non-specific inspection and testing	Certificate with inspection and test results of a non-specific pump.	2.2	96507896
Inspection certificate	Grundfos document certifying that the pump supplied is in compliance with the order specifications. Inspection and test results are mentioned in the certificate.	3.1.B	96507897
Inspection certificate	Grundfos document certifying that the pump supplied is in compliance with the order specifications. Inspection and test results are mentioned in the certificate. Compliance is assured by inspection by an accredited third party.		
	• Lloyds Register EMEA LR	3.1.C	96507898
	• Det Norske Veritas DNV	3.1.C	96507899
	• Germanischer Lloyd GL	3.1.C	96507920
	• Bureau Veritas BV	3.1.C	96507921
	• American Bureau of Shipping ABS	3.1.C	96507922
	• Registro Italiano Navale Agenture RINA	3.1.C	96507923
	• United States Coast Guard USCG	3.1.C	96507927

Reports overview

Special Grundfos reports	Description	Product number
Standard test report for pump	Certifies that the main components of the specific pump are manufactured by Grundfos, and that the pump has been QH-tested, inspected and conforms to the full requirements of the appropriate catalogues, drawings and specifications.	96507930
ATEX-approved pump report	Confirms that the specific pump is ATEX-approved according to the EU directive 94/9/EC, the "ATEX directive".	96512240

21. Service

Some pump parts will become worn over time and need to be replaced. These parts can be ordered as service kits.

Service recommendations

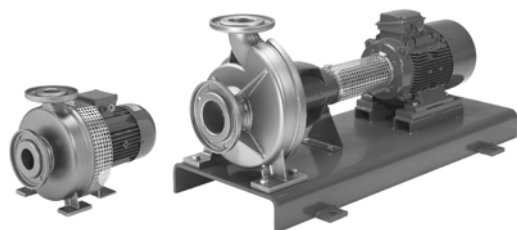
To avoid unnecessary downtime, we recommend stocking certain service parts. These service parts should be ordered together with the pump.

Information about service kits and recommended service parts can be found in the service kit catalogue.

In WebCAPS, you can also search for the "Service offerings" data booklet, which gives relevant information about service issues.

22. Sanitary pumps

Grundfos also offers MAXA and MAXANA end-suction pumps for sanitary applications.



TM03 0170 4304

Fig. 65 MAXA and MAXANA

Applications

The pump types MAXA and MAXANA are mainly suitable for applications in the food and beverage industry and in the pharmaceutical industry, but also in water treatment and almost any application in the chemical industry.

Food industry, dairies and breweries

- Gentle pumping of beer, wort, mash and for beer filtration
- milk and milk products, milk-based drinks
- soft drinks, lemonade, cola and fruit juice-producing industries, mineral water, filtration, distilleries etc.
- CIP applications.

Industrial applications

- Water and wastewater treatment plants
- chemical industry
- pumping of liquids with a high concentration of solids.

Pharmaceutical and biotechnical applications

- Water for injection (WFI)
- sterile product applications
- CIP and SIP applications.

MAXA and MAXANA product characteristics

- Main dimensions and pump characteristics comply with DIN EN 733.
- Wetted parts of AISI 316L (1.4404/1.4435) cold-rolled stainless steel
- Single and double mechanical shaft seals complying with DIN EN 12756.

Among many others, the pump ranges fulfil the following requirements:

- EHEDG recommendations for CIP cleanability.
- GOST (Russia).



Options

- Numerous types of installation for motor and pump.
- Variable nominal connection diameters and variable position of the discharge port (upward, to the right or left), or housings that can be drained.
- CIP (Cleaning-in-Place) and SIP (Sterilisation-in-Place) features according to the hygienic design criteria.
- Electro-polished surfaces can be ordered as an option to ensure optimal cleaning and corrosion resistance.
- Pump construction on base frame (CN) with explosion-proof motors for applications complying with the ATEX guidelines.
- and much more....

Product range

Head: max. 100 m

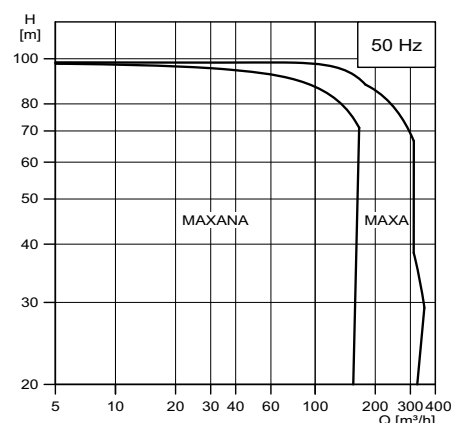
Flow: max. 820 m³/h

Operating pressure: 10 bar

Operating temperature: 95 °C (up to 150 °C on request)

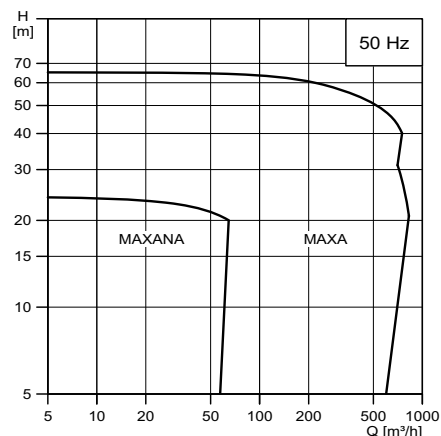
Sterilisation temperature: 140 °C (SIP).

2-pole range



TM05 1593 3211

4-pole range

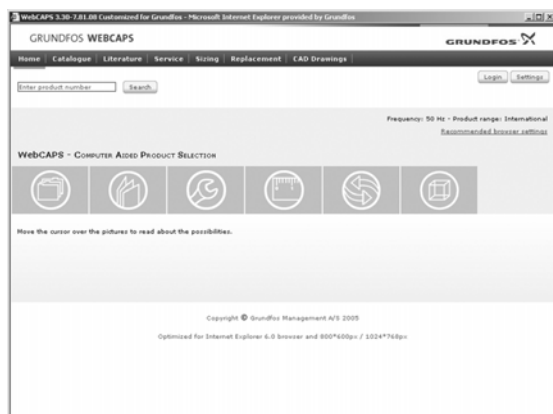


TM05 1594 3211

For further information, see the "Sanitary pumps" data booklet. Search for MAXA or MAXANA in WebCAPS.

23. Further product information

WebCAPS

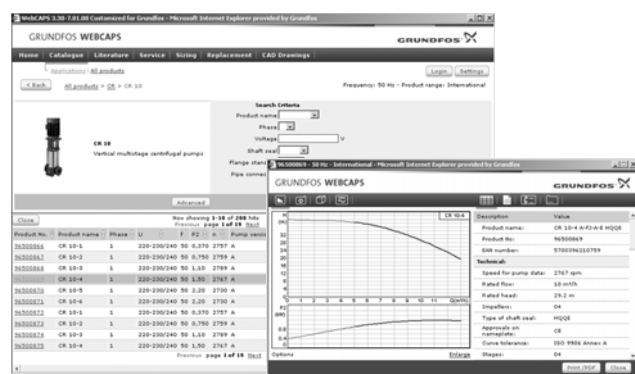


WebCAPS is a **Web-based Computer Aided Product Selection** program available on www.grundfos.com.

WebCAPS contains detailed information on more than 220,000 Grundfos products in more than 30 languages.

Information in WebCAPS is divided into six sections:

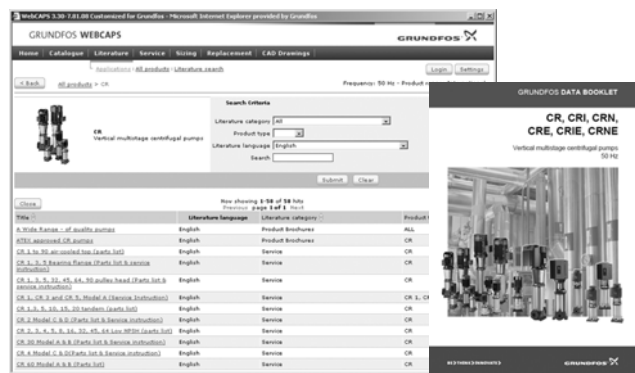
- Catalogue
- Literature
- Service
- Sizing
- Replacement
- CAD drawings.



Catalogue

Based on fields of application and pump types, this section contains the following:

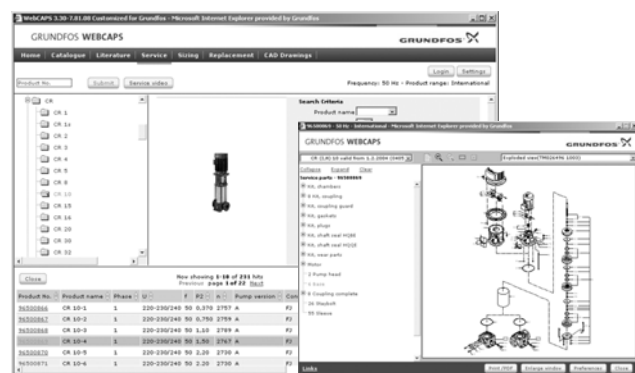
- technical data
- curves (QH, Eta, P1, P2, etc.) which can be adapted to the density and viscosity of the pumped liquid and show the number of pumps in operation
- product photos
- dimensional drawings
- wiring diagrams
- quotation texts, etc.



Literature

This section contains all the latest documents of a given pump, such as

- data booklets
- installation and operating instructions
- service documentation, such as Service kit catalogue and Service kit instructions
- quick guides
- product brochures.



Service

This section contains an easy-to-use interactive service catalogue. Here you can find and identify service parts of both existing and discontinued Grundfos pumps. Furthermore, the section contains service videos showing you how to replace service parts.



Sizing

This section is based on different fields of application and installation examples and gives easy step-by-step instructions in how to size a product:

- Select the most suitable and efficient pump for your installation.
- Carry out advanced calculations based on energy, consumption, payback periods, load profiles, life cycle costs, etc.
- Analyse your selected pump via the built-in life cycle cost tool.
- Determine the flow velocity in wastewater applications, etc.

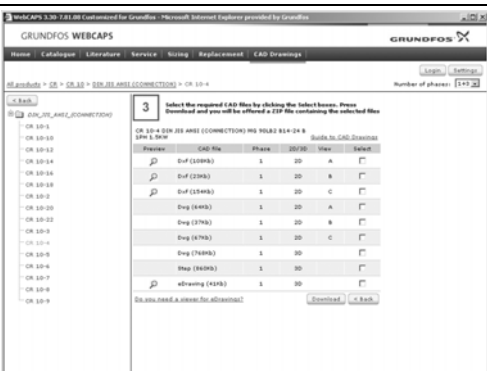


Replacement

In this section you find a guide to selecting and comparing replacement data of an installed pump in order to replace the pump with a more efficient Grundfos pump.

The section contains replacement data of a wide range of pumps produced by other manufacturers than Grundfos.

Based on an easy step-by-step guide, you can compare Grundfos pumps with the one you have installed on your site. When you have specified the installed pump, the guide will suggest a number of Grundfos pumps which can improve both comfort and efficiency.



CAD drawings

In this section, it is possible to download 2-dimensional (2D) and 3-dimensional (3D) CAD drawings of most Grundfos pumps.

These formats are available in WebCAPS:

2-dimensional drawings:

- .dxf, wireframe drawings
- .dwg, wireframe drawings.

3-dimensional drawings:

- .dwg, wireframe drawings (without surfaces)
- .stp, solid drawings (with surfaces)
- .eprt, E-drawings.

WinCAPS



Fig. 66 WinCAPS DVD

WinCAPS is a **Windows-based Computer Aided Product Selection** program containing detailed information on more than 220,000 Grundfos products in more than 30 languages.

The program contains the same features and functions as WebCAPS, but is an ideal solution if no internet connection is available.

WinCAPS is available on DVD and updated once a year.

GO CAPS

Mobile solution for professionals on the GO!



CAPS functionality on the mobile workplace.



Subject to alterations.



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ECM: 1106899