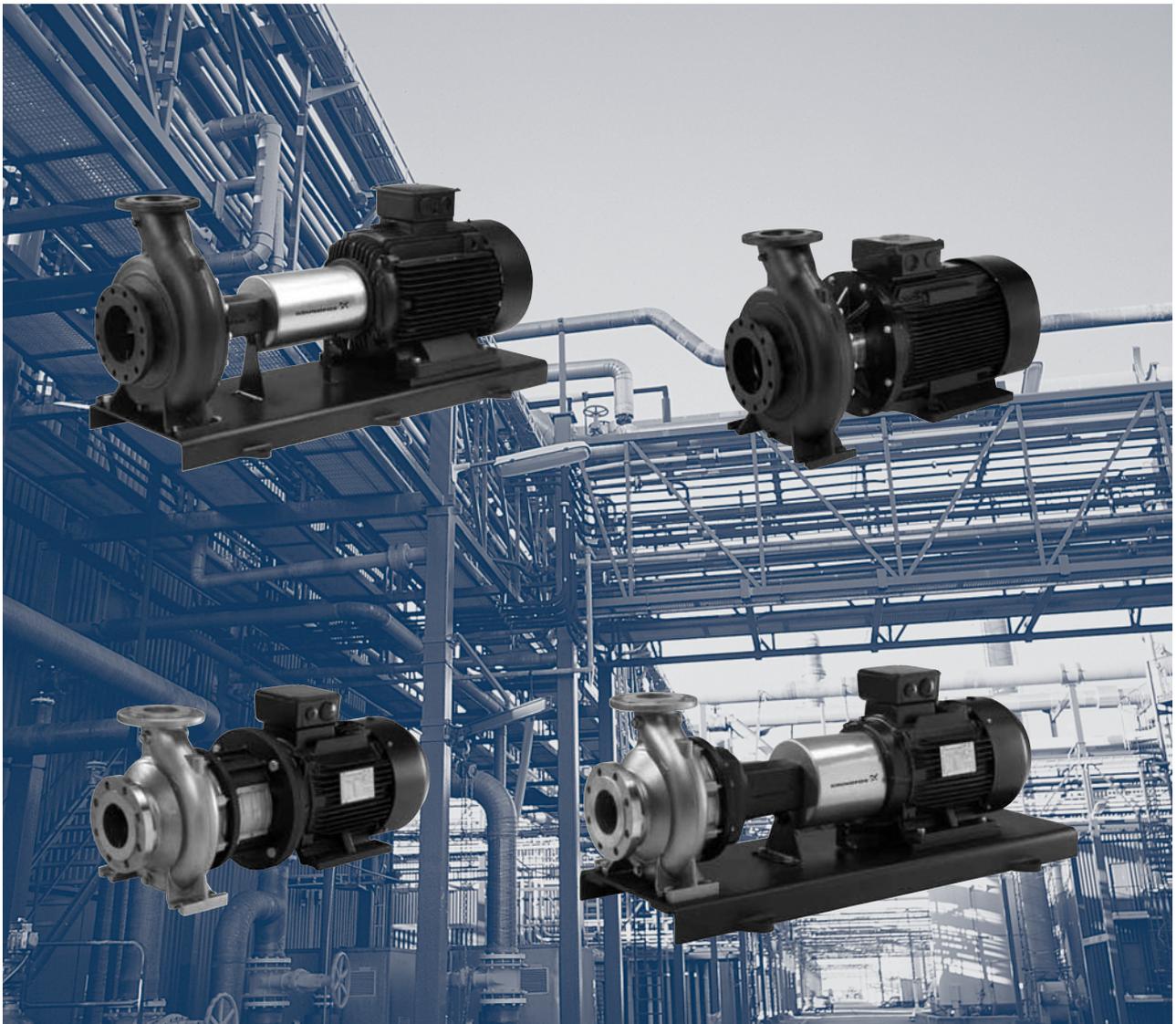


NB, NBE, NK, NKE

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



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Introduction

NB and NK are multi-purpose 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 washdown systems
- vehicle washing tunnels
- fire protection 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

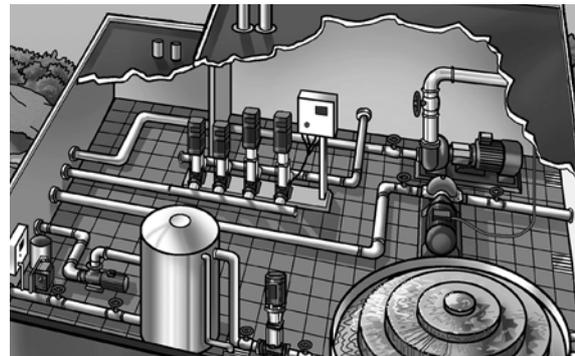
Liquid transfer in:

- heating systems
- ventilation systems
- air-conditioning systems

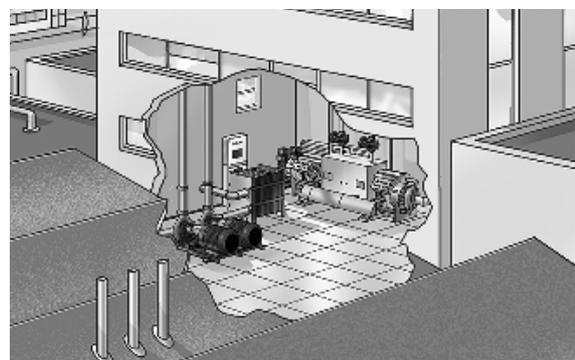
Irrigation

Irrigation covers these applications:

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



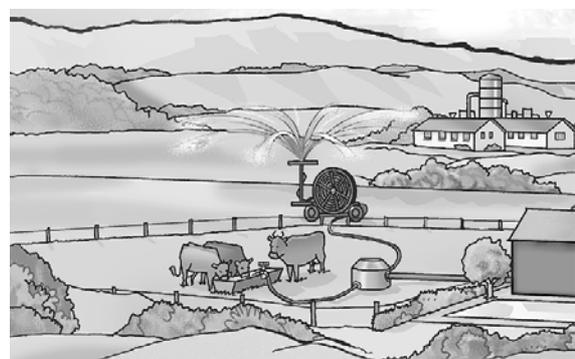
TM03 0146 4204



TM03 0147 4204



TM03 0148 4204



TM03 0149 4204

Features and benefits

NB and NK pumps present these features and benefits:

- The pumps are non-self-priming, single-stage, centrifugal volute pumps with axial suction port, radial discharge port and horizontal shaft.
- Suction and discharge flanges are PN 10 or PN 16 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 NB pump is close-coupled with a totally enclosed fan-cooled standard motor with main dimensions to IEC and DIN standards.
- 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 mechanical shaft seal has dimensions according to EN 12756.
- NB and NK pumps offer flow rates from 2 to 2000 m³/h and heads from 2 to 160 m. Motor sizes fall in the 0.37 to 355 kW range.
- Pumps with power requirement of 1.1 to 22 kW are available with motors with built-in frequency converter. These pumps are called NBE and NKE.
- All pumps are statically balanced according to ISO 1940 class 6.3.
Impellers are hydraulically balanced.
- The NK pump and motor are mounted on a common, steel base frame in accordance with EN 23661.
- The NB and NK product ranges are available in two product series, "standard range" and "premium range". Premium-range products are available with EFF1 motors; standard-range products with EFF2 motors.
- The pumps are of the back pull-out design enabling removal of the motor, coupling, bearing bracket and impeller without disturbing the pump housing or pipework. Even the largest pumps can thus be serviced by a single person with a crane. See fig. 1 and fig. 2.

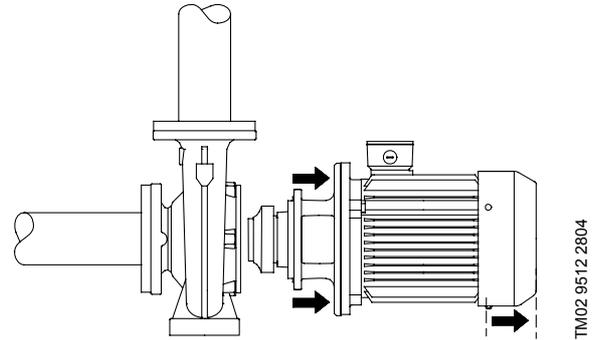


Fig. 1 NB back pull-out design

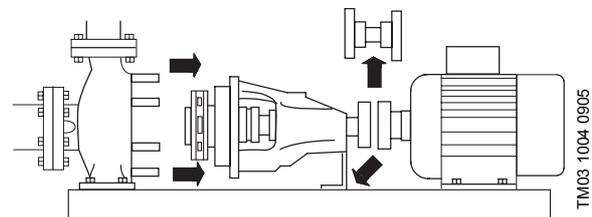


Fig. 2 NK back pull-out design

High-efficiency motors



Premium range 2- and 4-pole NB and NK pumps with motor sizes from 1.1 to 90 kW are fitted with high-efficiency motors (EFF1). EFF1 is the highest efficiency class defined by CEMEP (European Committee of Manufacturers of Electrical Machines and Power Electronics).

Pumps with electronic speed control

NB and NK pumps equipped with a motor with built-in frequency converter and the necessary application software to achieve an all-in-one solution enable 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

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

This furthermore gives these obvious advantages:

- energy savings
- increased comfort.

For further information on electronic speed control, see section "Speed-controlled NB and NK pumps" on page 38.

ATEX-approved NB and NK pumps

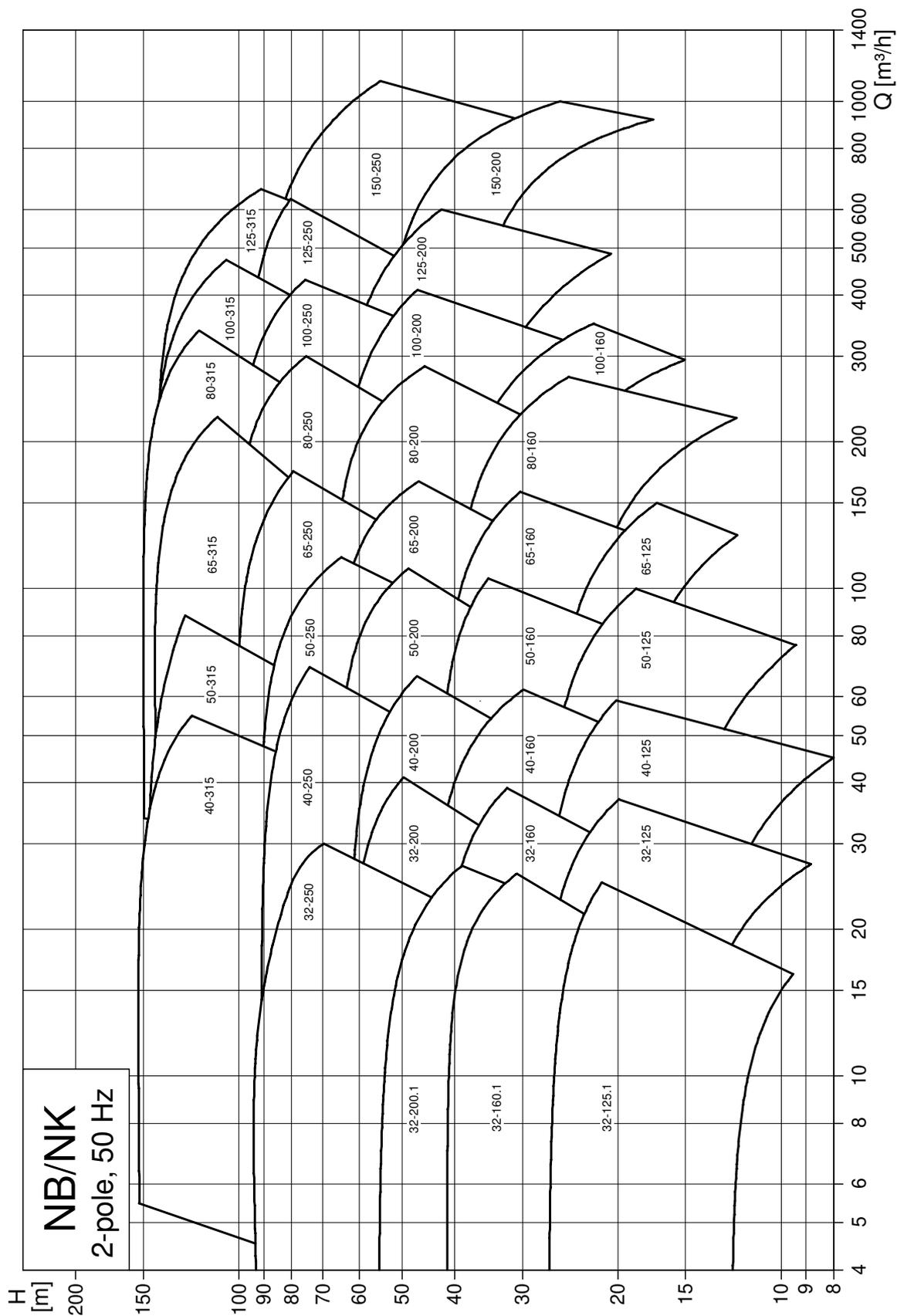


On request, Grundfos offers NB and NK pumps with ATEX-approval in accordance with Directive 94/9/EC (group II, category 3G and 3D). If an ATEX-approved dry-running protection is installed, the pump can be upgraded to category 2G.

Performance range

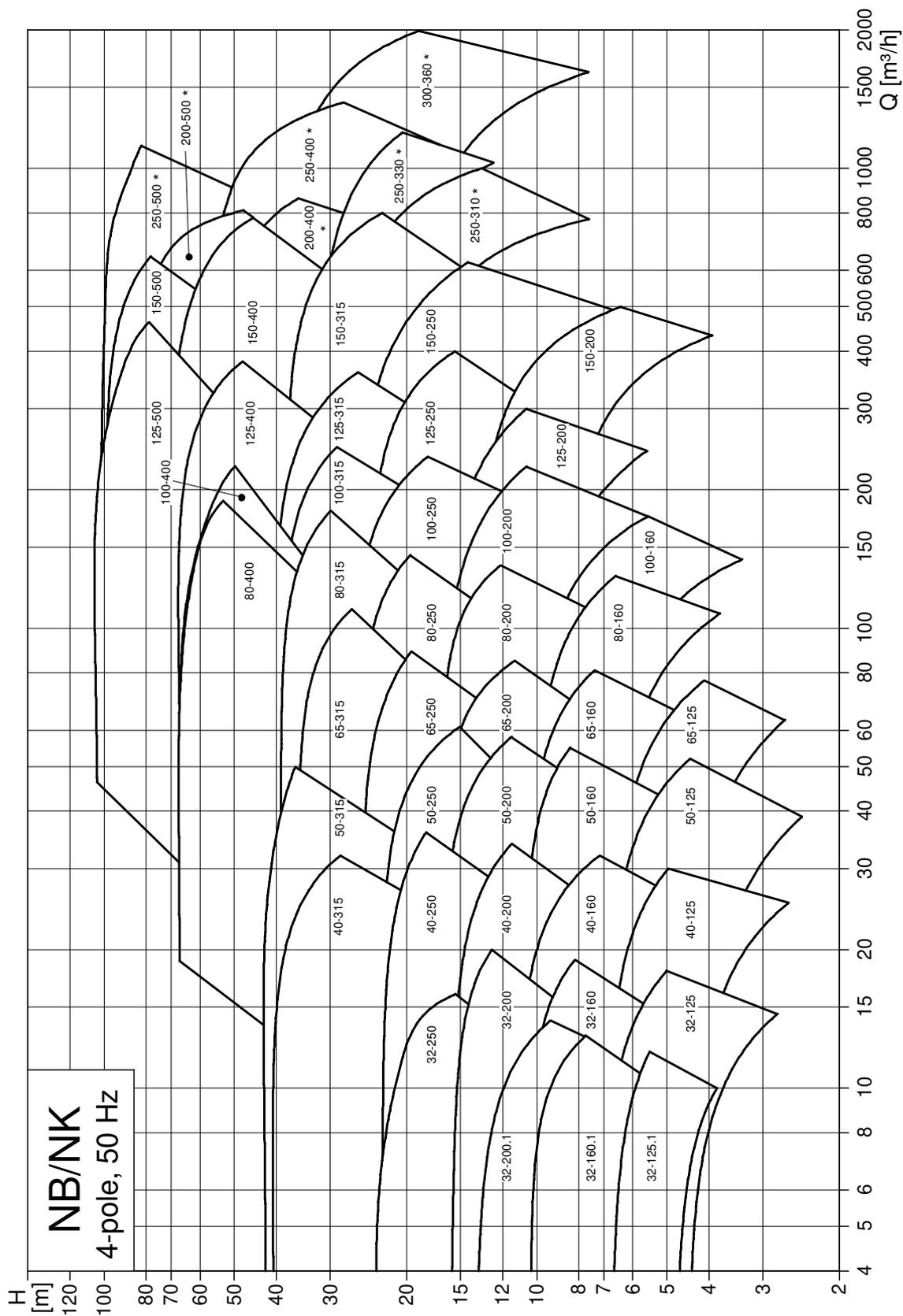
NB, NK

NB, NK, 2-pole



TM03 5261 3406

NB, NK, 4-pole



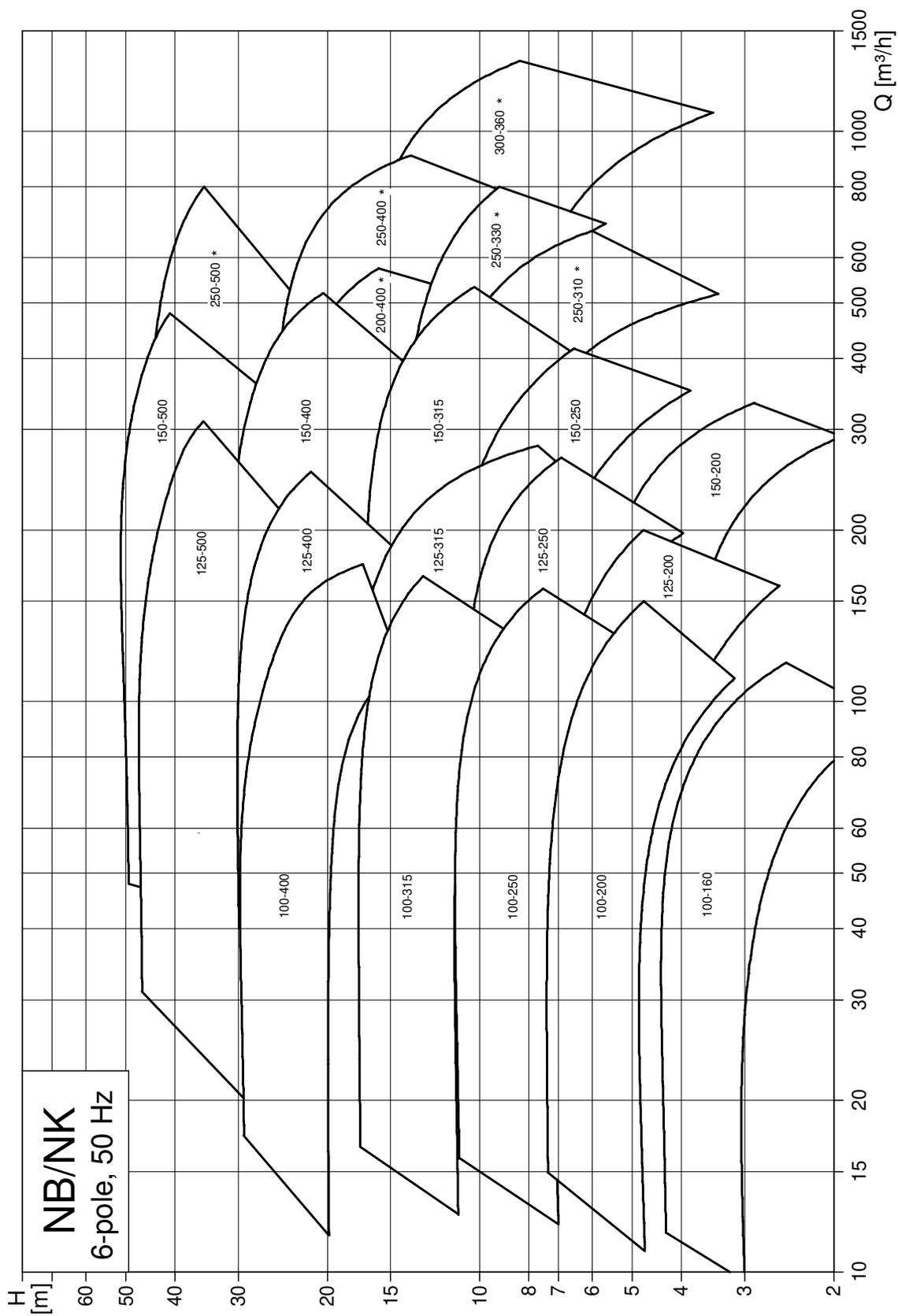
★ Only available as an NK pump.

TM03 5262 4806

Performance range

NB, NK

NB, NK, 6-pole



★ Only available as an NK pump.

TM03 5263 4806

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 housings have discharge flanges from DN 32 to DN 300.
- 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 premium-range and standard-range 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".
- The range of pumps with electronically speed-controlled motors (three-phase) covers 2-pole motors from 1.5 to 22 kW, and 4-pole motors from 0.75 to 22 kW.

To a great extent, the pumps can be adapted to the requirements of the individual customer. For customized solutions, please contact Grundfos.

Product range

NB, NBE, NK, NKE

NB, NK, 2-pole

Pump type 50 Hz, 2-pole	NK model	NB design	Available in stainless steel	Available as NBE/NKE	Pressure stage		P ₂ [kW]
					PN 10	PN 16	
32-125.1	B	A				●	0.75
		A				●	1.1
		A	●			●	1.5
		A	●			●	2.2
		A	●			●	1.5
32-160.1	B	A	●			●	2.2
		A	●			●	3
		A	●			●	4
		A	●			●	3
		A	●			●	4
32-200.1	B	A	●			●	3
		A	●			●	4
		A	●			●	5.5
		A	●			●	7.5
32-125	B	A	●			●	1.1
		A	●			●	1.5
		A	●			●	2.2
		A	●			●	3
32-160	B	A	●			●	2.2
		A	●			●	3
		A	●			●	4
		A	●			●	5.5
32-200	B	A	●			●	4
		A	●			●	5.5
		A	●			●	7.5
		C	●			●	11
32-250	B	A	●	●		●	5.5
		A	●	●		●	7.5
		C	●	●		●	11
		C	●	●		●	15
40-125	B	A	●	●		●	1.5
		A	●	●		●	2.2
		A	●	●		●	3
		A	●	●		●	4
		A	●	●		●	5.5
40-160	B	A	●	●		●	4
		A	●	●		●	5.5
		A	●	●		●	7.5
		C	●	●		●	11
40-200	B	A	●	●		●	5.5
		A	●	●		●	7.5
		B	●	●		●	11
		B	●	●		●	15

Pump type 50 Hz, 2-pole	NK model	NB design	Available in stainless steel	Available as NBE/NKE	Pressure stage		P ₂ [kW]
					PN 10	PN 16	
40-250	B	A	●	●		●	11
		B	●	●		●	15
		B	●	●		●	18.5
		B	●	●		●	22
		B	●			●	30
40-315	B	C	●	●		●	22
		C	●			●	30
		C	●			●	37
		C	●			●	45
		C	●			●	55
50-125	B	A	●	●		●	3
		A	●	●		●	4
		A	●	●		●	5.5
		A	●	●		●	7.5
50-160	B	A	●	●		●	5.5
		A	●	●		●	7.5
		B	●	●		●	11
50-200	B	B	●	●		●	15
		B	●	●		●	18.5
		B	●	●		●	22
50-250	B	B	●	●		●	15
		B	●	●		●	18.5
		B	●	●		●	22
		B	●	●		●	30
		B	●	●		●	37
50-315	B	C	●			●	30
		C	●			●	37
		C	●			●	45
		C	●			●	55
		C	●			●	75
65-125	B	A	●	●		●	4
		A	●	●		●	5.5
		A	●	●		●	7.5
		C	●	●		●	11
65-160	B	A	●	●		●	7.5
		B	●	●		●	11
		B	●	●		●	15
		B	●	●		●	18.5

Product range

NB, NBE, NK, NKE

Pump type 50 Hz, 2-pole	NK model	NB design	Available in stainless steel	Available as NBE/NKE	Pressure stage		P ₂ [kW]
					PN 10	PN 16	
65-200	B	B	●	●		●	11
		B	●	●		●	15
		B	●	●		●	18.5
		B	●	●		●	22
		B	●			●	30
		B	●			●	37
65-250	B	C	●			●	30
		C	●			●	37
		C	●			●	45
		C	●			●	55
		C	●			●	75
65-315	B	C	●			●	55
		C	●			●	75
		C	●			●	90
		C	●			●	110
80-160	B	B	●	●		●	11
		B	●	●		●	15
		B	●	●		●	18.5
		B	●	●		●	22
		B	●			●	30
80-200	B	C	●	●		●	22
		C	●			●	30
		C	●			●	37
		C	●			●	45
		C	●			●	55
80-250	B	C	●			●	45
		C	●			●	55
		C	●			●	75
		C	●			●	90
80-315	B	C	●			●	90
		C	●			●	110
		C	●			●	132
		C	●			●	160
		C	●			●	200
100-160	B	C		●		●	22
		C				●	30
		C				●	37
100-200	B	C				●	30
		C				●	37
		C				●	45
		C				●	55
		C				●	75

Pump type 50 Hz, 2-pole	NK model	NB design	Available in stainless steel	Available as NBE/NKE	Pressure stage		P ₂ [kW]
					PN 10	PN 16	
100-250	B	C				●	55
		C				●	75
		C				●	90
		C				●	110
		C				●	132
		C				●	110
100-315	B	C				●	132
		C				●	160
		C				●	200
		-				●	250
		C				●	45
125-200	B	C				●	55
		C				●	75
		C				●	90
		C				●	110
125-250	B	C				●	90
		C				●	110
		C				●	132
		C				●	160
		C				●	200
125-315	B	C				●	132
		C				●	160
		C				●	200
		-				●	250
150-200	B	C			●	75	
		C			●	90	
		C			●	110	
150-250	B	C			●	132	
		C			●	160	
		C			●	200	
		-			●	250	

NB, NK, 4-pole

Pump type 50 Hz, 4-pole	NK model	NB design	Available as stainless steel	Available as NBE/NKE	Pressure stage		P ₂ [kW]	
					PN 10	PN 16		
32-125.1	B	A				●	0.25	
		A				●	0.25	
		A					●	0.37
32-160.1	B	A				●	0.25	
		A				●	0.25	
		A					●	0.37
32-200.1	B	A				●	0.37	
		A				●	0.55	
		A	●				●	0.75
32-125	B	A				●	0.25	
		A				●	0.25	
		A					●	0.37
32-160	B	A				●	0.25	
		A				●	0.37	
		A					●	0.55
		A	●				●	0.75
32-200	B	A				●	0.55	
		A	●			●	0.75	
		A	●				●	1.1
		A	●				●	1.5
32-250	B	A	●	●		●	0.75	
		A	●	●		●	1.1	
		A	●	●		●	1.5	
		A	●	●		●	2.2	
40-125	B	A	●			●	0.25	
		A	●			●	0.37	
		A	●				●	0.55
40-160	B	A	●			●	0.37	
		A	●			●	0.55	
		A	●	●		●	0.75	
		A	●	●		●	1.1	
40-200	B	A	●	●		●	0.75	
		A	●	●		●	1.1	
		A	●	●		●	1.5	
		A	●	●		●	2.2	
40-250	B	A	●	●		●	1.5	
		A	●	●		●	2.2	
		A	●	●		●	3	
40-315	B	A	●	●		●	3	
		A	●	●		●	4	
		A	●	●		●	5.5	
		A	●	●		●	7.5	

Pump type 50 Hz, 4-pole	NK model	NB design	Available as stainless steel	Available as NBE/NKE	Pressure stage		P ₂ [kW]
					PN 10	PN 16	
50-125	B	A	●	●		●	0.37
		A	●	●		●	0.55
		A	●	●		●	0.75
		A	●	●		●	1.1
50-160	B	A	●	●		●	0.55
		A	●	●		●	0.75
		A	●	●		●	1.1
		A	●	●		●	1.5
50-200	B	A	●	●		●	1.1
		A	●	●		●	1.5
		A	●	●		●	2.2
50-250	B	A	●	●		●	1.1
		A	●	●		●	1.5
		A	●	●		●	2.2
		A	●	●		●	3
50-315	B	A	●	●		●	2.2
		A	●	●		●	3
		A	●	●		●	4
65-125	B	A	●	●		●	4
		A	●	●		●	5.5
		A	●	●		●	7.5
		C	●	●		●	11
65-160	B	A	●	●		●	0.55
		A	●	●		●	0.75
		A	●	●		●	1.1
65-200	B	A	●	●		●	0.75
		A	●	●		●	1.1
		A	●	●		●	1.5
		A	●	●		●	2.2
65-250	B	A	●	●		●	1.5
		A	●	●		●	2.2
		A	●	●		●	3
		A	●	●		●	4
65-315	B	A	●	●		●	3
		A	●	●		●	4
		A	●	●		●	5.5
80-160	B	A	●	●		●	7.5
		A	●	●		●	11
		C	●	●		●	15
		A	●	●		●	1.5

Product range

NB, NBE, NK, NKE

Pump type 50 Hz, 4-pole	NK model	NB design	Available as stainless steel	Available as NBE/NKE	Pressure stage		P ₂ [kW]
					PN 10	PN 16	
80-200	B	A	●	●		●	2.2
		A	●	●		●	3
		A	●	●		●	4
		A	●	●		●	5.5
		A	●	●		●	7.5
80-250	B	A	●	●		●	5.5
		A	●	●		●	7.5
		C	●	●		●	11
80-315	B	C	●	●		●	11
		C	●	●		●	15
		C	●	●		●	18.5
		C	●	●		●	22
80-400	B	C	●	●		●	18.5
		C	●	●		●	22
		C	●			●	30
		C	●			●	37
		C	●			●	45
100-160	B	A		●		●	2.2
		A		●		●	3
		A		●		●	4
100-200	B	A		●		●	4
		A		●		●	5.5
		A		●		●	7.5
		C		●		●	11
100-250	B	A		●		●	7.5
		C		●		●	11
		C		●		●	15
		C		●		●	18.5
100-315	B	C		●		●	15
		C		●		●	18.5
		C		●		●	22
		C				●	30
100-400	B	C		●		●	22
		C				●	30
		C				●	37
		C				●	45
		C				●	55
125-200	B	C				●	75
		C		●		●	5.5
		C		●		●	7.5
		C		●		●	11
		C		●		●	15

Pump type 50 Hz, 4-pole	NK model	NB design	Available as stainless steel	Available as NBE/NKE	Pressure stage		P ₂ [kW]
					PN 10	PN 16	
125-250	B	C		●		●	11
		C		●		●	15
		C		●		●	18.5
		C		●		●	22
		C				●	30
125-315	B	C		●		●	18.5
		C		●		●	22
		C				●	30
		C				●	37
125-400	B	C				●	45
		C				●	37
		C				●	45
		C				●	55
125-500	B	C				●	75
		C				●	90
		C				●	110
		C				●	132
		C				●	160
150-200	B	A		●	●		7.5
		C		●	●		11
		C		●	●		15
150-250	B	C		●	●		15
		C		●	●		18.5
		C		●	●		22
		C			●		30
		C			●		37
150-315	B	C				●	45
		C				●	37
		C				●	45
		C				●	55
150-400	B	C				●	75
		C				●	90
		C				●	110
		C				●	132
150-500	B	C				●	160
		C				●	132
		C				●	200

Product range

NB, NBE, NK, NKE

Pump type 50 Hz, 4-pole	NK model	NB design	Available as stainless steel	Available as NBE/NKE	Pressure stage		P ₂ [kW]
					PN 10	PN 16	
200-400	A	-			●		45
		-			●		55
		-			●		75
		-			●		90
		-			●		110
200-500	A	-			●		55
		-			●		75
		-			●		90
		-			●		110
		-			●		132
250-310	A	-			●		30
		-			●		37
		-			●		45
		-			●		55
		-			●		75
250-330	A	-			●		55
		-			●		75
		-			●		90
		-			●		110
		-			●		160
250-400	A	-			●		55
		-			●		75
		-			●		90
		-			●		110
		-			●		132
250-500	A	-			●		90
		-			●		110
		-			●		132
		-			●		160
		-			●		200
300-360	A	-			●		55
		-			●		75
		-			●		90
		-			●		110
		-			●		132
-			●		160		

NB, NK, 6-pole

Pump type 50 Hz, 6-pole	NK model	NB design	Available as stainless steel	Available as NBE/NKE	Pressure stage		P ₂ [kW]	
					PN 10	PN 16		
100-160	B	A				●	0.55	
		A				●	0.75	
		A					●	1.1
100-200	B	A				●	1.1	
		A				●	1.5	
		A					●	2.2
		A					●	3
100-250	B	A				●	2.2	
		A				●	3	
		A					●	4
		A					●	5.5
100-315	B	A				●	4	
		A				●	5.5	
		C					●	7.5
		C					●	11
100-400	B	C				●	7.5	
		C				●	11	
		C					●	15
		C					●	18.5
125-200	B	A				●	1.5	
		A				●	2.2	
		A					●	3
125-250	B	A				●	4	
		A				●	4	
		A					●	5.5
125-315	B	A				●	5.5	
		C				●	7.5	
		C					●	11
		C					●	15
125-400	B	C				●	11	
		C				●	15	
		C					●	18.5
		C					●	22
125-500	B	C				●	30	
		C				●	37	
		C					●	45
		C					●	55
		C					●	55

Product range

NB, NBE, NK, NKE

Pump type 50 Hz, 6-pole	NK model	NB design	Available as stainless steel	Available as NBE/NKE	Pressure stage		P ₂ [kW]
					PN 10	PN 16	
150-200	B	A			●		2.2
		A			●		3
		A			●		4
150-250	B	A			●		4
		A			●		5.5
		C			●		7.5
150-315	B	C			●		11
		C			●		15
		C			●		18.5
150-400	B	C			●		22
		C			●		30
		C			●		37
150-500	B	C			●		45
		C			●		37
		C			●		45
200-400	A	-			●		18.5
		-			●		22
		-			●		30
250-310	A	-			●		37
		-			●		11
		-			●		15
250-330	A	-			●		18.5
		-			●		22
		-			●		30
250-400	A	-			●		18.5
		-			●		22
		-			●		30
250-500	A	-			●		37
		-			●		45
		-			●		55
250-500	A	-			●		45
		-			●		55
		-			●		75
250-500	A	-			●		90
		-			●		110
		-			●		110

Pump type 50 Hz, 6-pole	NK model	NB design	Available as stainless steel	Available as NBE/NKE	Pressure stage		P ₂ [kW]
					PN 10	PN 16	
300-360	A	-			●		22
		-			●		30
		-			●		37
		-			●		45
		-			●		55

NB type key

The example shows an NB 32-125.1, 50 Hz, with a 142 mm impeller, made of cast iron and with a BAQE shaft seal.

Example	NB	32	-125	.1	/142	A	-F	-A	-BAQE
Type range									
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									
X = Special version									
Code for pipework connection:									
F = DIN flange (EN 1092-2)									
Code for materials:									
A = EN-GJL-250 pump housing, EN-GJL-200 impeller and bronze wear ring									
B = EN-GJL-250 pump housing and bronze CuSn10 impeller, bronze wear ring									
S = EN-GJL-250 pump housing and 1.4408 impeller, bronze wear ring									
N = 1.4408 pump housing and impeller, Graflon wear ring									
R = 1.4517 pump housing and impeller, Graflon wear ring									
P = 1.4408 pump housing, 1.4517 impeller, Graflon wear ring									
K = 1.4408 pump housing and impeller, 1.4517 wear ring									
L = 1.4517 pump housing, impeller and wear ring									
M = 1.4408 pump housing, 1.4517 impeller and wear ring									
X = Special version									
Code for mechanical shaft seal and rubber pump parts									

Model B

The example shows an NK 32-125.1, 50 Hz, with a 142 mm impeller and a standard coupling, made of cast iron and with a BAQE shaft seal.

Example	NK	32	-125	.1	/142	A1	-F	-A	-BAQE
Type range									
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 with standard coupling									
A2 = Basic version with spacer coupling									
AH = Bare shaft pump									
C = Without motor									
E = With ATEX approval, certificate or test report									
X = Special version									
Code for pipework connection:									
F = DIN flange (EN 1092-2)									
Code for materials:									
A = EN-GJL-250 pump housing, EN-GJL-200 impeller and bronze wear ring									
B = EN-GJL-250 pump housing and bronze impeller CuSn10, bronze wear ring									
S = EN-GJL-250 pump housing and 1.4408 impeller, bronze wear ring									
N = 1.4408 pump housing and impeller, Graflon wear ring									
R = 1.4517 pump housing and impeller, Graflon wear ring									
P = 1.4408 pump housing, 1.4517 impeller, Graflon wear ring									
K = 1.4408 pump housing and impeller, 1.4517 wear ring									
L = 1.4517 pump housing, impeller and wear ring									
M = 1.4408 pump housing, 1.4517 impeller and wear ring									
X = Special version									
Code for mechanical shaft seal and rubber pump parts									

NK type keys

Model A

The example shows an NK 200-400, 50 Hz, with a 377 mm impeller, made of cast iron and with a BAQE shaft seal.

Note: For pumps without motor, the motor data are left out; for bare shaft pumps, the coupling and motor data are left out.

Example	NK	200	-400	/377	/A	W	/BAQE	/1	/75	/4
Type range										
Nominal diameter of discharge port (DN)										
Nominal impeller diameter [mm]										
Actual impeller diameter [mm]										
Code for materials:										
A = Cast iron EN-GJL-250										
B = EN-GJL-250 with bronze impeller										
W = Wear ring(s)										
Code for stuffing box or shaft seal										
Coupling type:										
1 = Standard										
2 = Spacer										
Motor power [kW]										
2-, 4- or 6-pole motor										

Shaft seals

NB and NK pumps are available with a BAQE shaft seal as standard. Other shaft seal variants are available on request.

Codes for shaft seals

The 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 the positions (1), (2), (3) and (4).

Pos.	Type	Short description of seal
(1)	A	O-ring seal with fixed driver
	B	Rubber bellows seal
	G	Bellows seal, type B, with reduced seal faces
	D	O-ring 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
	F	FXM

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 are therefore suitable for many different applications.

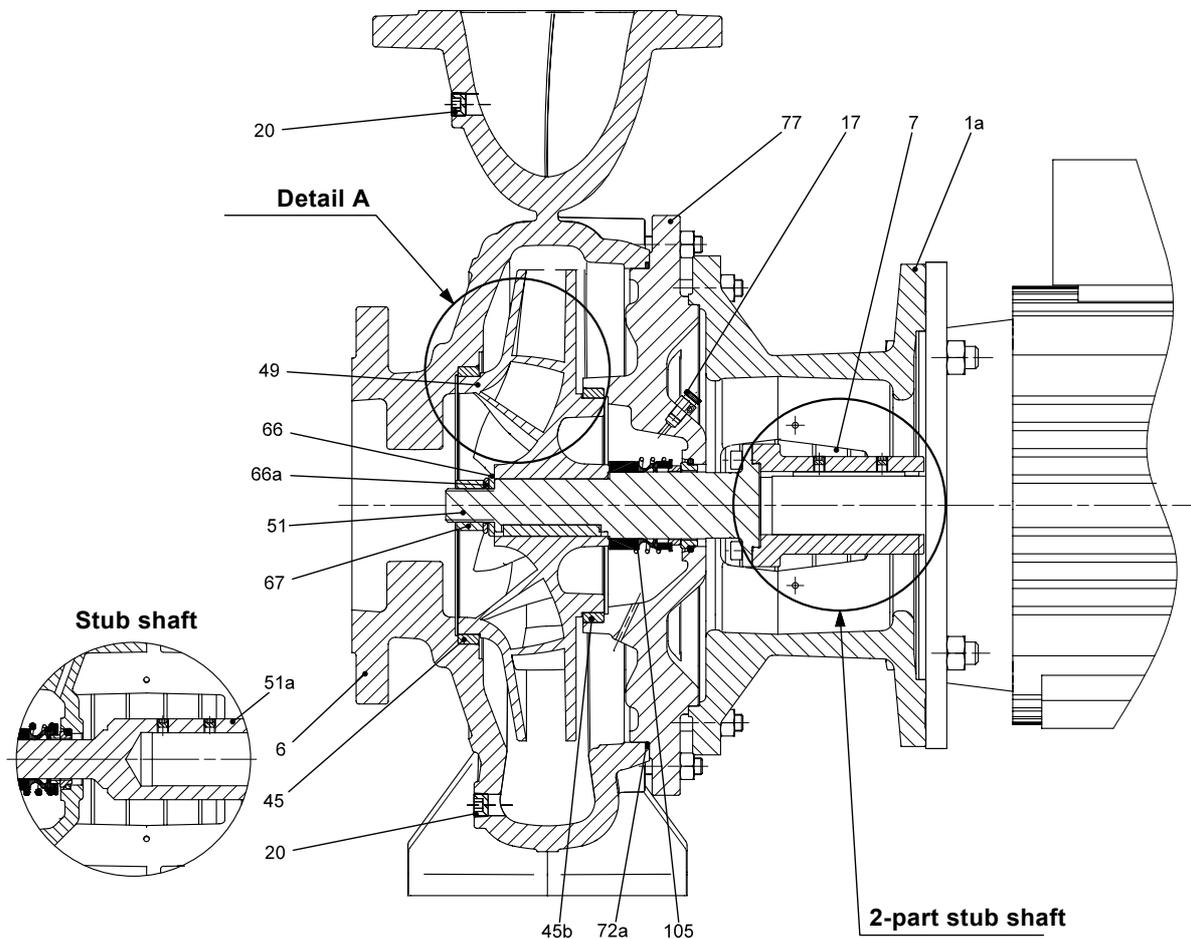
Three types of stuffing box are available for NK pumps: SNE(x), SNO(x) and SNF(x).

Codes for stuffing boxes

The 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 fluid
(3)	E	With internal barrier fluid
	F	With external barrier fluid
	O	Without barrier fluid
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

Sectional drawing NB



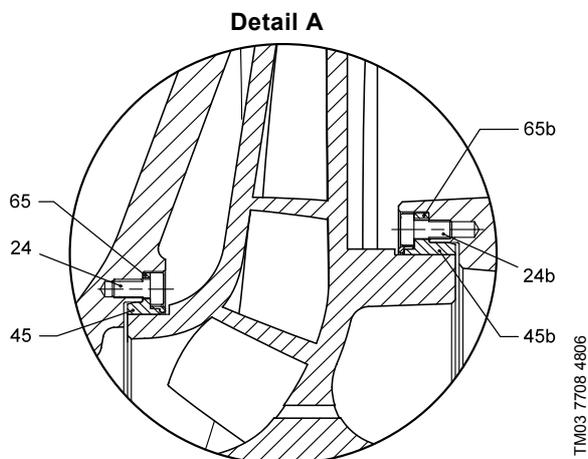
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Fig. 3 Sectional drawing NB

Cast iron pump

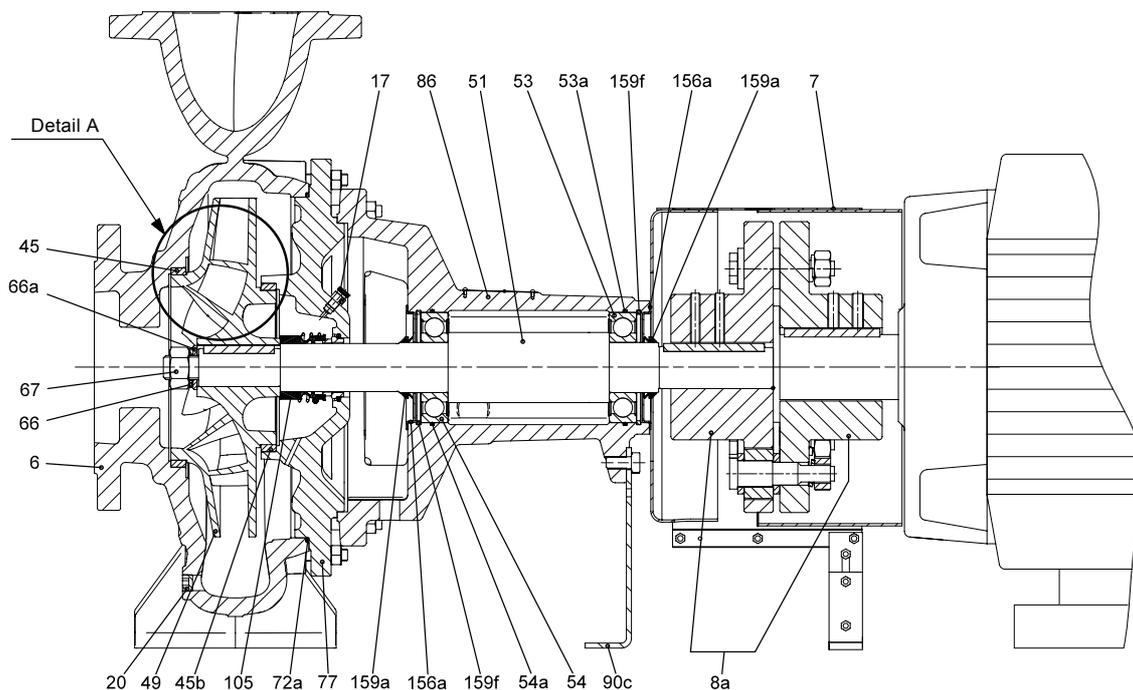
Pos.	Component	A-version Cast-iron impeller	B-version Bronze impeller	S-version Stainless steel impeller
1a	Motor stool	EN-GJL-250	EN-GJL-250	EN-GJL-250
6	Pump housing	EN-GJL-250	EN-GJL-250	EN-GJL-250
7	Coupling guard	1.4016/AISI 430	1.4016/AISI 430	1.4016/AISI 430
17	Air vent plug	2.0401/CuZn44Pb2	2.0401/CuZn44Pb2	2.0401/CuZn44Pb2
20	Plug	ISO898 8.8 carbon steel	ISO898 8.8 carbon steel	ISO898 8.8 carbon steel
45	Wear ring	CuSn10	CuSn10	CuSn10
45b	Wear ring	CuSn10	CuSn10	CuSn10
49	Impeller	EN-GJL-200	CuSn10	1.4408/CF8M
51	2-part stub shaft	1.4301+1.0301/AISI 304+ carbon steel C10	1.4301+1.0301/AISI 304+ carbon steel C10	1.4401+1.0301/AISI 316+ carbon steel C10
51a	Stub shaft	1.4301/AISI 304	1.4301/AISI 304	1.4401/AISI 316
66	Washer	1.4301/AISI 304	1.4301/AISI 304	1.4401/AISI 316
66a	Spring lock washer	1.4301/AISI 304	1.4301/AISI 304	1.4401/AISI 316
67	Impeller nut	1.4301/AISI 304	1.4301/AISI 304	1.4401/AISI 316
72a	O-ring	EPDM or FKM	EPDM or FKM	EPDM or FKM
77	Cover	EN-GJL-250	EN-GJL-250	EN-GJL-250
105	Shaft seal	Burgmann 1.4401/AISI 316	Burgmann 1.4401/AISI 316	Burgmann 1.4401/AISI 316

Stainless steel pump



Pos.	Component	N-version	R-version
1a	Motor stool	EN-GJL-250	EN-GJL-250
6	Pump housing	1.4408/CF8M	1.4517/CD4MCuN
7	Coupling guard	1.4016/AISI 430	1.4016/AISI 430
17	Air vent plug	1.4401/AISI 316	1.4539/AISI 904L
20	Plug	1.4401/AISI 316	1.4539/AISI 904L
24	Hexagon socket head cap screw	ISO898 1.4401/AISI 316	ISO898 1.4539/AISI 904L
24b	Hexagon socket head cap screw	ISO898 1.4401/AISI 316	ISO898 1.4539/AISI 904L
45	Wear ring	Graflon	Graflon
45b	Wear ring	Graflon	Graflon
49	Impeller	1.4408/CF8M	1.4517/CD4MCuN
51	2-part stub shaft	1.4401+1.0301/AISI 316+ carbon steel C10	1.4462+1.0301/ASTM J92205+ carbon steel C10
65	Wear ring retainer	1.4517/CD4MCuN	1.4517/CD4MCuN
65b	Wear ring retainer	1.4517/CD4MCuN	1.4517/CD4MCuN
66	Washer	1.4401/AISI 316	1.4539/AISI 904L
66a	Spring lock washer	1.4401/AISI 316	1.4539/AISI 904L
67	Impeller nut	1.4401/AISI 316	1.4539/AISI 904L
72a	O-ring	EPDM or FKM	EPDM or FKM
77	Cover	1.4408/CF8M	1.4517/CD4MCuN
105	Shaft seal	Burgmann 1.4401/AISI 316	Burgmann 2.4610/Hastelloy C-4

Sectional drawing NK



TM03 4896 3306

Fig. 4 Sectional drawing NK, model B

Cast iron pump

Pos.	Component	A-version Cast iron impeller	B-version Bronze impeller	S-version Stainless steel impeller
6	Pump housing	EN-GJL-250	EN-GJL-250	EN-GJL-250
7	Coupling guard	1.4301/AISI 304	1.4301/AISI 304	1.4301/AISI 304
8a	Coupling assembly	★	★	★
17	Air vent plug	2.0401/CuZn44Pb2	2.0401/CuZn44Pb2	2.0401/CuZn44Pb2
20	Plug	ISO898 8.8 carbon steel	ISO898 8.8 carbon steel	ISO898 8.8 carbon steel
45	Wear ring	CuSn10	CuSn10	CuSn10
45b	Wear ring	CuSn10	CuSn10	CuSn10
49	Impeller	EN-GJL-200	CuSn10	1.4408/CF8M
51	Shaft	1.4034+ 1.0301/AISI 420 + carbon steel C10	1.4034+1.0301/AISI 420 + carbon steel C10	1.4401+1.0301/AISI 316 + carbon steel C10
53	Deep-groove ball bearings	2ZR.C3	2ZR.C3	2ZR.C3
53a	O-ring	EPDM	EPDM	EPDM
54	Deep-groove ball bearings	2ZR.C3	2ZR.C3	2ZR.C3
54a	O-ring	EPDM	EPDM	EPDM
66	Washer	1.4301/AISI 304	1.4301/AISI 304	1.4401/AISI 316
66a	Spring lock washer	1.4301/AISI 304	1.4301/AISI 304	1.4401/AISI 316
67	Impeller nut	1.4301/AISI 304	1.4301/AISI 304	1.4401/AISI 316
72a	O-ring	EPDM or FKM	EPDM or FKM	EPDM or FKM
77	Cover	EN-GJL-250	EN-GJL-250	EN-GJL-250
86	Bearing bracket	EN-GJL-250	EN-GJL-250	EN-GJL-250
90c	Foot	EN-GJL-250 / 1.0338/carbon steel DC04	EN-GJL-250 / 1.0338/carbon steel DC04	EN-GJL-250 / 1.0338/carbon steel DC04
105	Shaft seal	Burgmann 1.4401/AISI 316	Burgmann 1.4401/AISI 316	Burgmann 1.4401/AISI 316
156a	Cover (bearing)	1.0338/carbon steel DC04	1.0338/carbon steel DC04	1.0338/carbon steel DC04
159a	Thrower	EPDM	EPDM	EPDM
159f	Lock ring (circlip)	DIN472(C75 DIN17 222)	DIN472(C75 DIN17 222)	DIN472(C75 DIN17 222)

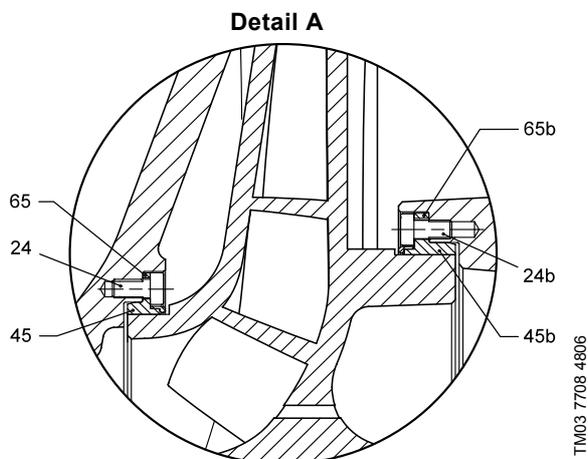
★ Material of male and female part

Standard coupling EN-GJL-250	2-pole	up to 22 kW
	4-pole	up to 30 kW
	6-pole	up to 37 kW

Standard coupling EN-GJS-450-10	2-pole	from 30 kW
	4-pole	from 37 kW
	6-pole	from 45 kW

Spacer coupling (not shown) for all outputs: EN-GJL-250

Stainless steel pump



TM03 7708 4806

Pos.	Component	N-version	R-version
6	Pump housing	1.4408/CF8M	1.4517/CD4MCuN
7	Coupling guard	1.4301/AISI 304	1.4301/AISI 304
8a	Coupling assembly	★	★
17	Air vent plug	1.4401/AISI 316	1.4539/AISI 904L
20	Plug	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	Graflon	Graflon
45b	Wear ring	Graflon	Graflon
49	Impeller	1.4408/CF8M	1.4517/CD4MCuN
51	Shaft	1.4401+1.0301/AISI 316 + carbon steel C10	1.4462+1.0301/ASTM J92205 + carbon steel C10
53	Deep-groove ball bearings	2ZR.C3	2ZR.C3
53a	O-ring	EPDM	EPDM
54	Deep-groove ball bearings	2ZR.C3	2ZR.C3
54a	O-ring	EPDM	EPDM
65	Wear ring retainer	1.4517/CD4MCuN	1.4517/CD4MCuN
65b	Wear ring retainer	1.4517/CD4MCuN	1.4517/CD4MCuN
66	Washer	1.4401/AISI 316	1.4539/AISI 904L
66a	Spring lock washer	1.4401/AISI 316	1.4539/AISI 904L
67	Impeller nut	1.4401/AISI 316	1.4539/AISI 904L
72a	O-ring	EPDM or FKM	EPDM or FKM
77	Cover	1.4408/CF8M	1.4517/CD4MCuN
86	Bearing bracket	EN-GJL-250	EN-GJL-250
90c	Foot	EN-GJL-250 / 1.0338/carbon steel DC04	EN-GJL-250 / 1.0338/carbon steel DC04
105	Shaft seal	Burgmann 1.4401/AISI 316	Burgmann 2.4610/Hastelloy C-4
156a	Cover (bearing)	1.0338/carbon steel DC04	1.0338/carbon steel DC04
159a	Thrower	EPDM	EPDM
159f	Lock ring (circlip)	DIN472(C75 DIN17 222)	DIN472(C75 DIN17 222)

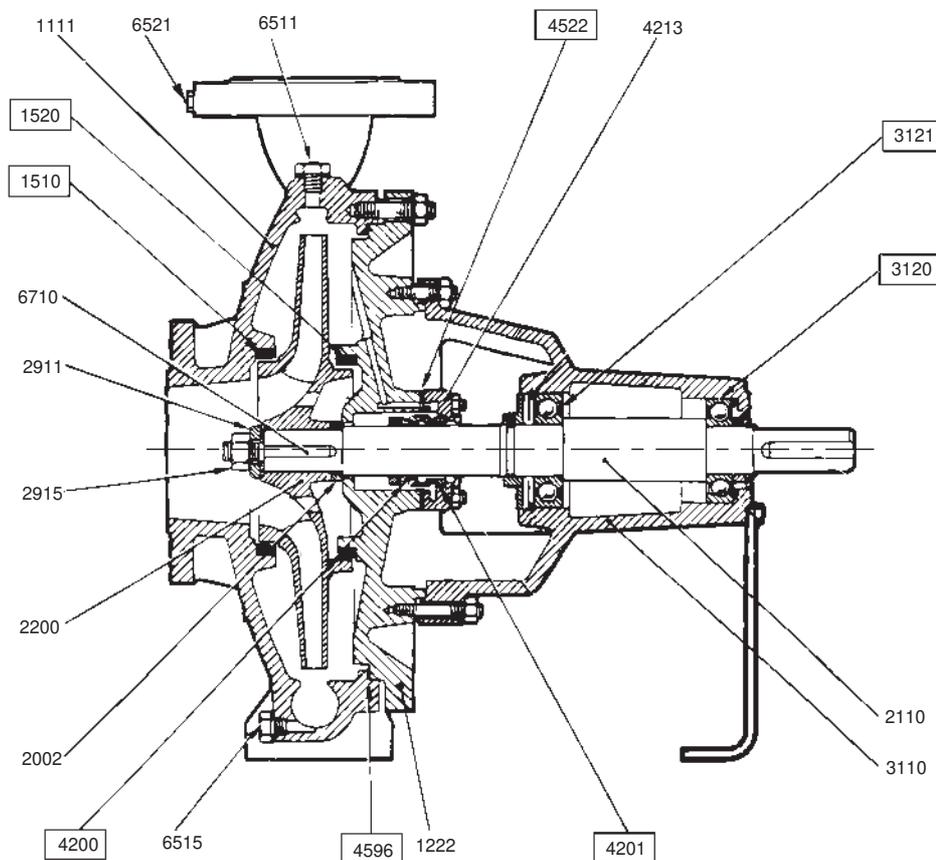
★ Material of male and female part

Standard coupling EN-GJL-250	2-pole	up to 22 kW
	4-pole	up to 30 kW
	6-pole	up to 37 kW

Standard coupling EN-GJS-450-10	2-pole	from 30 kW
	4-pole	from 37 kW
	6-pole	from 45 kW

Spacer coupling (not shown) for all outputs: EN-GJL-250

Sectional drawing, NK "oversize", model A



TM03 1009 0905

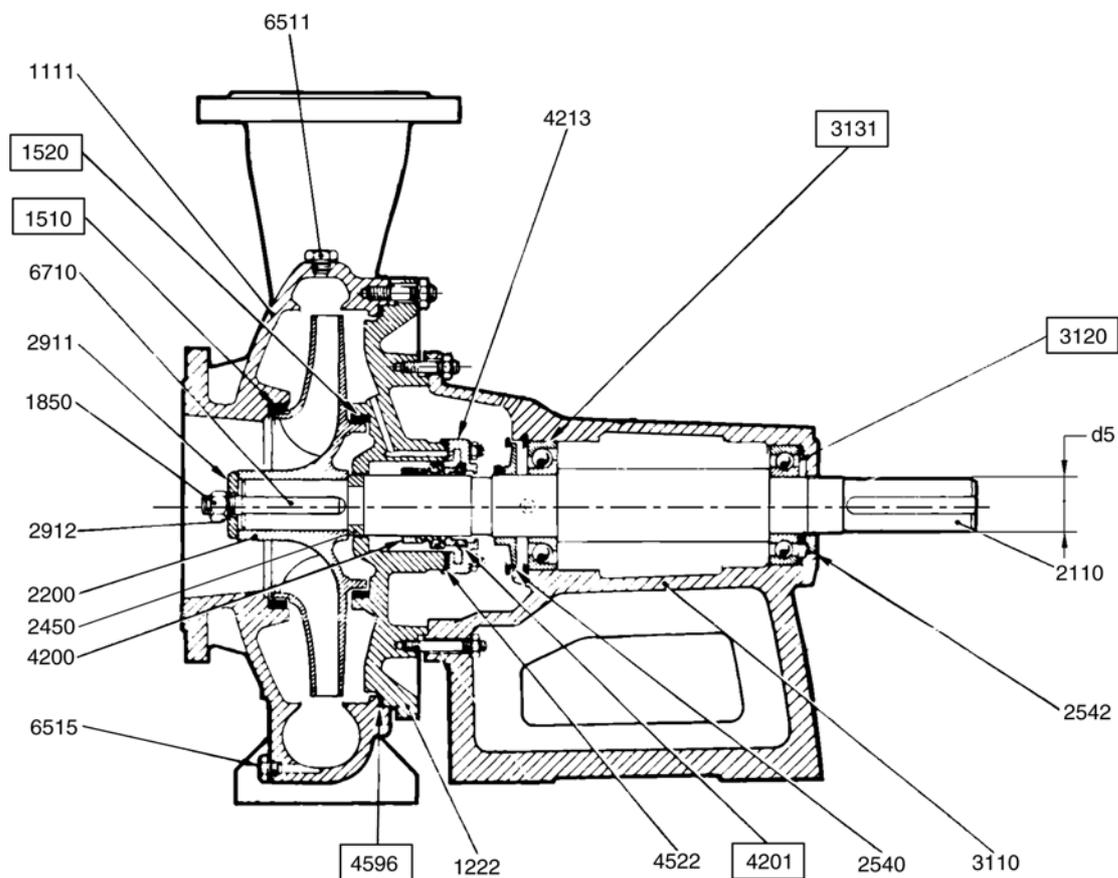
Fig. 5 Sectional drawing, NK 250-310 "oversize"

Legend

:Recommended spare part.

Pos.	Component	Pos.	Component	Pos.	Component
1111	Pump housing	2911	Impeller washer	4213	Cover for seal
1222	Seal box	2915	Lock nut	4522	Gasket for cover
1510	Wear ring	3110	Bearing housing	4596	Gasket for pump
1520	Wear ring	3120	Ball bearing	6511	Priming plug
2002	Spacer ring	3121	Ball bearing	6515	Drain plug
2110	Shaft	4200	Rotary seal ring	6521	Pressure tapping plug
2200	Impeller	4201	Stationary seat	6710	Impeller key

Sectional drawing, NK "oversize", model A



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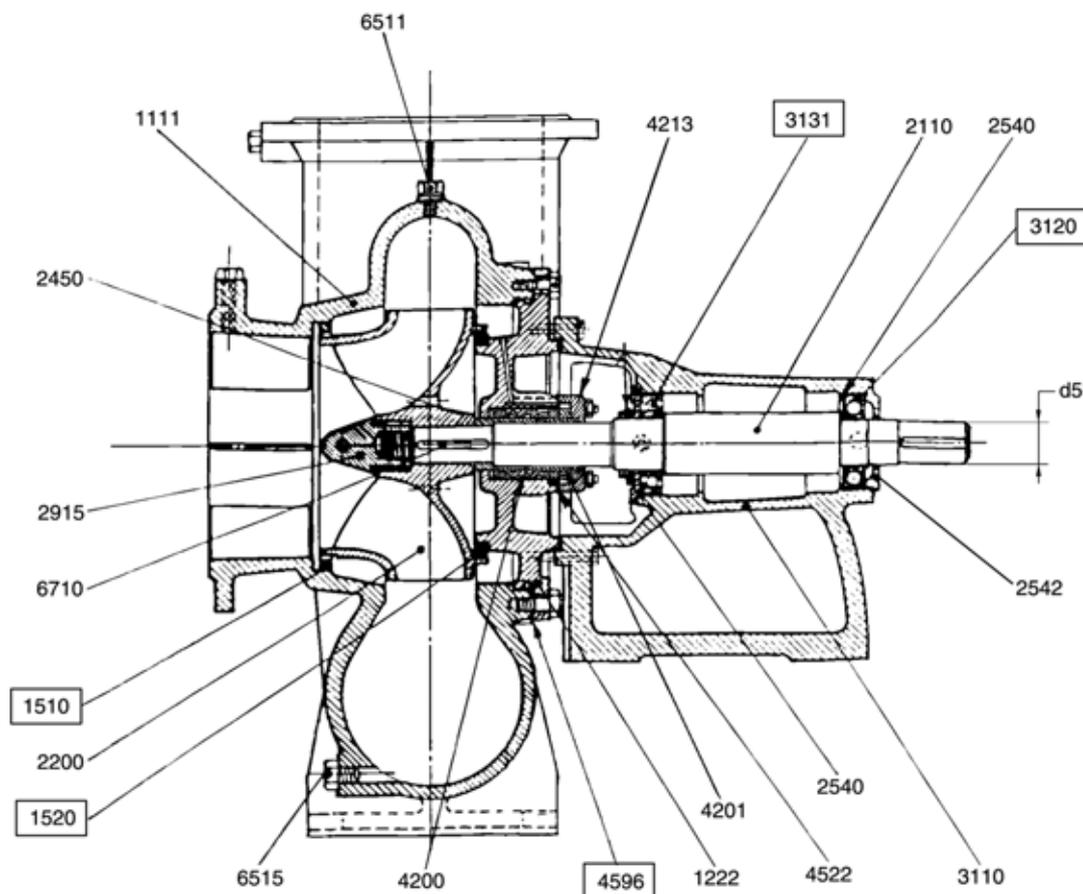
Fig. 6 Sectional drawing, NK 200-500, 250-400, 250-500 "oversizes"

Legend

:Recommended spare part.

Pos.	Component	Pos.	Component	Pos.	Component
1111	Pump housing	2540	Thrower	4201	Stationary seat
1222	Seal box	2542	Thrower	4213	Cover for seal
1510	Wear ring	2911	Impeller washer	4522	Gasket for cover
1520	Wear ring	2912	Impeller nut	4596	Gasket for pump
1850	Impeller counter nut	3110	Bearing housing	6511	Priming plug
2110	Shaft	3120	Ball bearing	6515	Drain plug
2200	Impeller	3131	Ball bearing	6710	Impeller key
2450	Shaft sleeve	4200	Rotary seal ring		

Sectional drawing, NK "oversize", model A



TM01 3279 0203

Fig. 7 Sectional drawing NK 200-400, 250-330, 300-360 "oversizes"

Legend

:Recommended spare part.

Pos.	Component	Pos.	Component	Pos.	Component
1111	Pump housing	2540	Thrower	4201	Stationary seat
1222	Seal box	2542	Thrower	4213	Cover for seal
1510	Wear ring	2915	Lock nut	4522	Gasket for cover
1520	Wear ring	3110	Bearing housing	4596	Gasket for pump
2110	Shaft	3120	Ball bearing	6511	Priming plug
2200	Impeller	3131	Ball bearing	6515	Drain plug
2450	Shaft sleeve	4200	Rotary seal ring	6710	Impeller key

Mechanical construction

Mounting (NB)

NB pumps come in three different designs:

- Design A: Pump housing with feet
- Design B: Motor with feet
- Design C: Pump housing and motor with feet.

See the figures below.

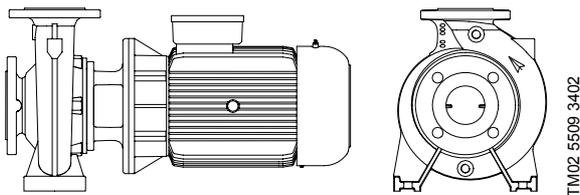


Fig. 8 NB pump design A

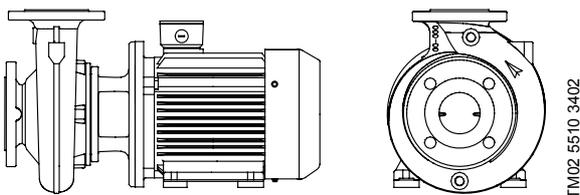


Fig. 9 NB pump design B

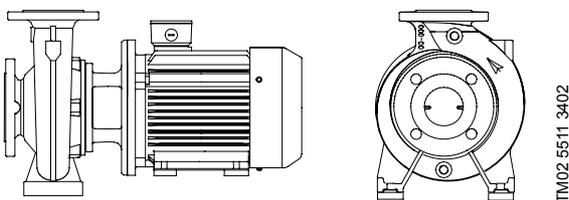


Fig. 10 NB pump design C

Pump housing

The volute pump housing has an axial suction port and a radial discharge port. Flange dimensions are in accordance with EN 1092-2.

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

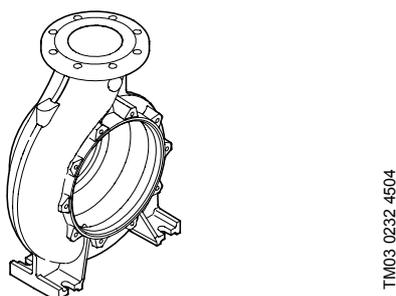


Fig. 11 NB and NK pump housing

Bearing bracket and shaft (NK)

The bearing bracket has two sturdy antifriction, lubricated-for-life bearings. NK model A pumps with shaft diameter of 55 mm, however, have open bearings with lubricating nipples.

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

The shaft is made of stainless steel. Shaft diameter d_5 is either $\varnothing 24$, 32, 42, 55 or 60.

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.

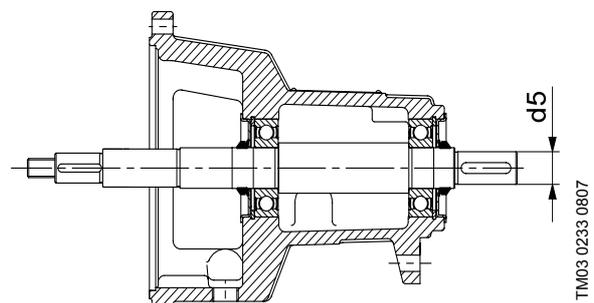


Fig. 12 Bearing bracket and shaft

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.

Shaft seal NK model A

The shaft seal is an unbalanced, mechanical shaft seal with dimensions to EN 12 756. Seal faces are available in a variety of combinations. The code of the standard version is BAQE. See page 18.

For shaft seal variants other than those specified, please contact Grundfos.

The drawings below illustrate shaft seals for NK, model A.

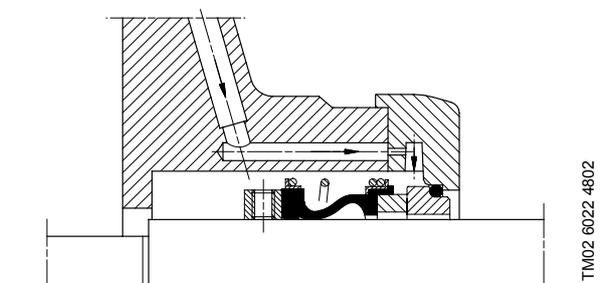


Fig. 13 Rubber bellows seal, type BAQE, counteracts deposits from the pumped liquid

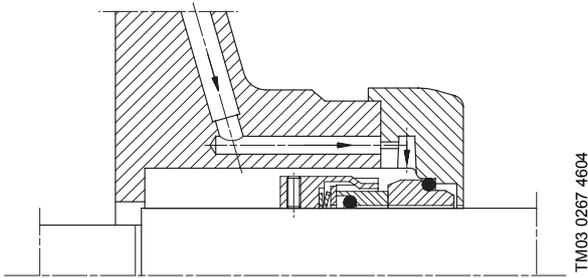


Fig. 14 Unbalanced O-ring seal, type AQAE, for high pressures

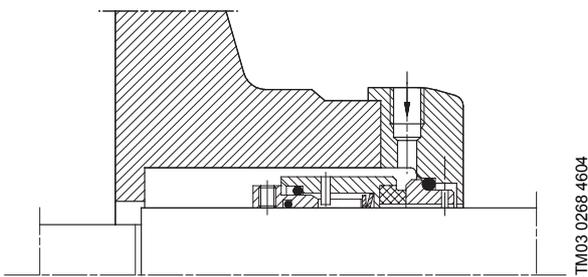


Fig. 15 Balanced O-ring seal, type DAQF, for high pressures and temperatures (120 °C to 140 °C)

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.

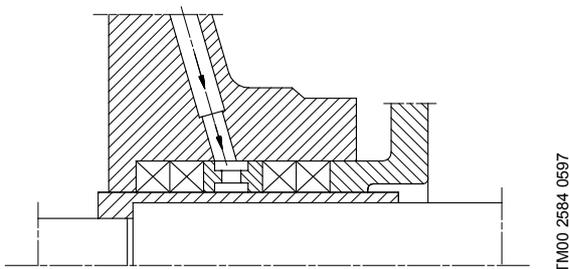


Fig. 16 Uncooled stuffing box, type SNE(x), with internal barrier fluid for the pumping of clean liquids in suction operation or at inlet pressures up to 4 bar

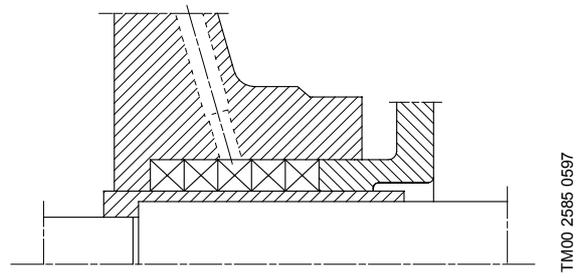


Fig. 17 Uncooled stuffing box, type SNO(x), without internal barrier fluid for the pumping of clean liquids in suction operation or at inlet pressures over 4 bar

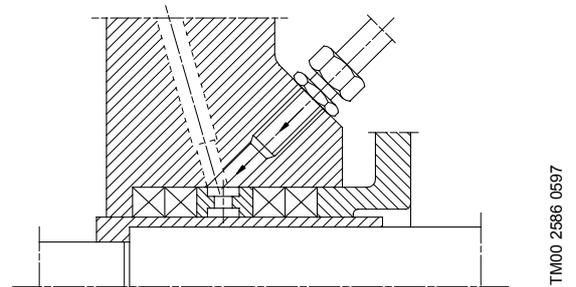


Fig. 18 Uncooled stuffing box, type SNF(x), with external barrier fluid for the pumping of contaminated and malodorous liquids

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 B 35: 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 $\varnothing 60$.

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

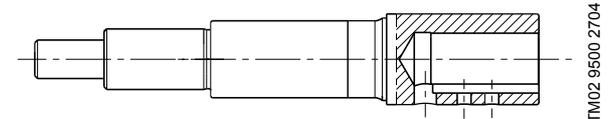


Fig. 19 Stub shaft, NB pump

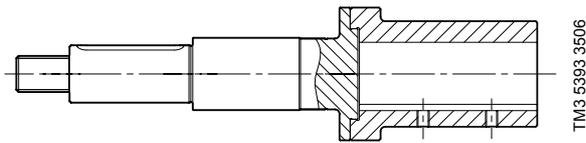


Fig. 20 2-part stub shaft, NB pump

TM03 5393 3506

Coupling (NK)

NK pumps are available with two types of coupling:

- standard coupling
- spacer coupling

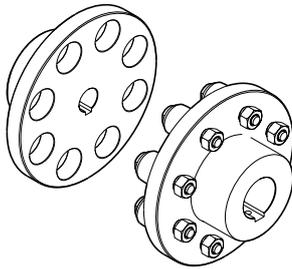


Fig. 21 Standard coupling

TM03 5394 3506

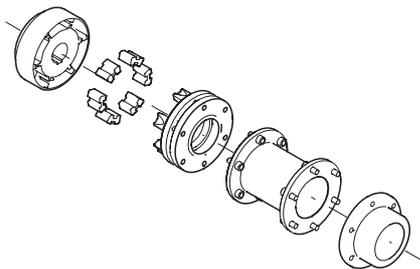


Fig. 22 Spacer coupling

TM03 0234 4504

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.

Impeller

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



Fig. 23 Impeller, NB and NK pumps

TM03 0231 4504

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.

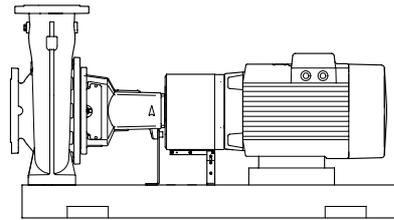


Fig. 24 Schematic view of NK pump-motor unit mounted on a base frame

TM03 4227 1906

A base frame prepared for grouting is available as an option, see "Foundation (NK)" on page 35.

Surface treatment

NK, model A

All stationary cast-iron parts are spray-painted with primer. The thickness of the dry coating is 30-50 μm . Finally, the parts are spray-painted with black (NCS 9000/RAL 9005) water-based, ether-epoxy no-lead paint. The thickness of the dry coating is 30-60 μm .

NB and NK, model B

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 18-22 μm .

The colour code for the finished product is NCS 9000/RAL 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

Motor

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

The tables below show the motors available for NB and NK.

As appears from the tables you can choose between standard range with EFF2 (efficiency 2) motors and premium range with EFF1 (efficiency 1) motors for NB and NK, and motors with built-in frequency converter for NBE and NKE.

Standard motor range

Standard range - including EFF2 motors			
Output P ₂ [kW]	2-pole	4-pole	6-pole
0.25			
0.37			
0.55		MG model C	
0.75	MG model C		
1.1	MG model C EFF2	MG model C EFF2	MMG model E
1.5			
2.2			
3			
4			
5.5			
7.5			
11	MMG model E EFF2	MMG model E EFF2	
15			
18.5			
22			
30			
37			
45	MMG model E	MMG model E	
55			
75			
90			
110			
132			
160			
200			
250			
315			
355			

EFF1 is the highest efficiency class of the CEMEP efficiency classes.

Note: The CEMEP list of minimum requirements for high-efficiency motors covers the range from 1.1 kW to 90.0 kW, 2-pole and 4-pole motors, see bold frame. Consequently, only the motors within this range may be designated EFF1 and EFF2.

Premium motor range

Premium range - including EFF1 motors			
Output P ₂ [kW]	2-pole	4-pole	6-pole
0.25			
0.37		MG model C	
0.55			
0.75	MG model C		
1.1	MG model D EFF1	MG model D EFF1	Siemens
1.5			
2.2			
3			
4			
5.5			
7.5	Siemens EFF1	Siemens EFF1	
11			
15			
18.5			
22			
30			
37	Siemens	Siemens	
45			
55			
75			
90			
110			
132			
160			
200			
250			
315			
355			

Motors with built-in frequency converter

Electronically speed-controlled motors		
Output P ₂ [kW]	2-pole	4-pole
0.75		
1.1		
1.5	MGE	MGE
2.2		
3		
4		
5.5		
7.5		
11	MMGE	MMGE
15		
18.5		
22		

Pump location

The pump is designed for installation in a non-aggressive and non-explosive atmosphere.

The relative air humidity must not exceed 95 %.

Sound pressure level

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	59	52	63
4	63	54	63
5.5	63	62	63
7.5	68	62	66
11	70	66	66
15	70	66	66
18.5	70	63	66
22	70	63	66
30	71	65	59
37	71	66	60
45	71	66	58
55	71	67	58
75	73	70	61
90	73	70	61
110	76	70	61
132	76	70	61
160	76	70	-
200	76	70	-
250	82	73	-
315	82	73	-
355	77	-	-

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.

Ambient temperature must not exceed:

- +40 °C for EFF2 motors
- +60 °C for EFF1 motors.

If the ambient temperature exceeds +40 °C (+60 °C) or if the motor is installed more than 1000 m (3500 m) above sea level, 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.

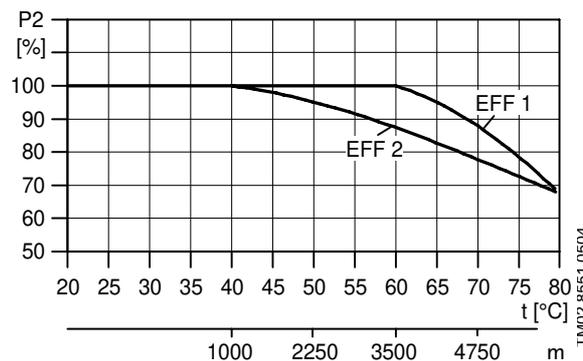


Fig. 25 Motor P2 depends on temperature/altitude

Example:

Fig. 25 shows that the load of an EFF2-motor must be reduced to 88 % when installed 3500 m above sea level.

At an ambient temperature of 70 °C the load of an EFF2-motor must be reduced to 78 % of the rated output.

In such situations an oversize motor can be used.

Pumped liquids

NB and NK pumps are suitable for pumping clean, thin and non-explosive liquids, not containing any solid particles.

The effect of viscosity on centrifugal pump performance

A viscous liquid affects a centrifugal pump in several ways.

- The power consumption will be increased, i.e. a larger motor is required.
- Head, flow rate and pump efficiency will be reduced.

The effect of high density on centrifugal pump performance

A high density liquid only affects the power consumption of a centrifugal pump.

- The head, flow rate and pump efficiency will remain unchanged.
- The power consumption will increase at a ratio corresponding to the increase in density. A liquid with a specific gravity of 1.2 will thus require a 20 % larger power input.
- An oversize motor will often be required.

WinCAPS and WebCAPS can help you select the right pump for liquids with viscosity/density different from those of water.

Liquid temperatures

The NB and NK pump range covers the temperature range from $-25\text{ }^{\circ}\text{C}$ to $+140\text{ }^{\circ}\text{C}$. The permissible liquid temperature depends on the mechanical shaft seal type and pump type. See also the table below.

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

The maximum liquid temperature is stamped on the nameplate.

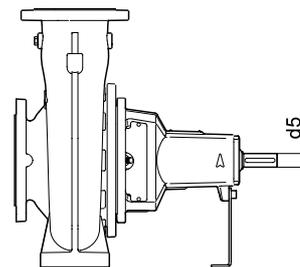


Fig. 26 Diameter of shaft end d5

TM03 3951 1206

Relationship between mechanical shaft seals and temperature

Shaft seal diameter [mm]	NB/NK	28, 38	48	55	-	60
d5 [mm]	NK	24, 32	42	48	55	60
	Code	Temperature range	Maximum pressure [bar]			
Rubber bellows seal, metal-impregnated carbon/silicon carbide, EPDM	BAQE	$0\text{ }^{\circ}\text{C}$ to $+120\text{ }^{\circ}\text{C}$	16	16	16	16
Rubber bellows seal, metal-impregnated carbon/silicon carbide, FKM	BAQV	$0\text{ }^{\circ}\text{C}$ to $+90\text{ }^{\circ}\text{C}$	16	16	16	16
Rubber bellows seal, silicon carbide/silicon carbide, EPDM	BQQE	$0\text{ }^{\circ}\text{C}$ to $+90\text{ }^{\circ}\text{C}$	16	16	16	16
Rubber bellows seal, silicon carbide/silicon carbide, FKM	BQQV	$0\text{ }^{\circ}\text{C}$ to $+90\text{ }^{\circ}\text{C}$	16	16	16	16
Bellow seal, type B, with reduced seal faces, silicon carbide/silicon carbide, EPDM	GQQE	$-25\text{ }^{\circ}\text{C}$ to $+90\text{ }^{\circ}\text{C}$	16	16*	16*	16*
Bellow seal, type B, with reduced seal faces, silicon carbide/silicon carbide, FKM	GQQV	$-20\text{ }^{\circ}\text{C}$ to $+90\text{ }^{\circ}\text{C}$	16	16*	16*	16*
O-ring seal with fixed seal driver, silicon carbide/silicon carbide, EPDM	AQQE	$0\text{ }^{\circ}\text{C}$ to $+90\text{ }^{\circ}\text{C}$	25	25	16	16
O-ring seal with fixed seal driver, silicon carbide/silicon carbide, FKM	AQQV	$0\text{ }^{\circ}\text{C}$ to $+90\text{ }^{\circ}\text{C}$	25	25	16	16
O-ring seal with fixed seal driver, silicon carbide/metal-impregnated carbon, EPDM	AQAE	$0\text{ }^{\circ}\text{C}$ to $+120\text{ }^{\circ}\text{C}$	25	25	25	25
O-ring seal with fixed seal driver, silicon carbide/metal-impregnated carbon, FKM	AQAV	$0\text{ }^{\circ}\text{C}$ to $+90\text{ }^{\circ}\text{C}$	25	25	25	25
Rubber bellows seal, silicon carbide/resin-impregnated carbon, EPDM	BQBE	$0\text{ }^{\circ}\text{C}$ to $+140\text{ }^{\circ}\text{C}$	16	-	-	-
O-ring seal, balanced, metal-impregnated carbon/silicon carbide, FXM	DAQF	$0\text{ }^{\circ}\text{C}$ to $+140\text{ }^{\circ}\text{C}$	25	25	25	25
Rubber bellows seal, resin-impregnated carbon/silicon carbide, EPDM	BBQE	$0\text{ }^{\circ}\text{C}$ to $+120\text{ }^{\circ}\text{C}$	16	16	16	16

*) Max. $60\text{ }^{\circ}\text{C}$

EPDM

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

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

Carbon/silicon carbide

Mechanical shaft seals with carbon/silicon carbide (xAQx) 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 $0\text{ }^{\circ}\text{C}$, corrosion inhibitors containing abrasive particles will usually be added to the pumped liquid, and xAQx seals will thus not be suitable.

Silicon carbide/silicon carbide

Mechanical shaft seals with silicon carbide/silicon carbide (xQQx) 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 $+90\text{ }^{\circ}\text{C}$. At higher temperatures, the reduced lubricating properties of the pumped liquid may cause noise problems and limit the life of the seal faces.

Pump speed relative to impeller material and size

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

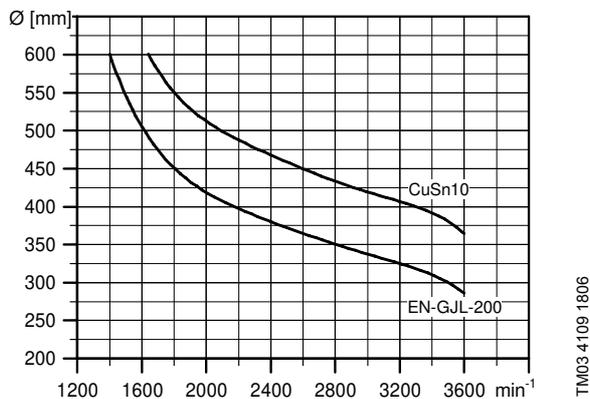


Fig. 27 Maximum permissible speed

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

Inlet pressure

Maximum inlet pressure, model A

The maximum inlet pressure appears from this table:

Inlet pressure	Max. 9 bar.
	Max. 7 bar for 400 mm impellers or bigger.

Maximum inlet pressure, model B

The actual inlet pressure + pressure when the pump is running against a closed valve must always be lower than the maximum permissible operating pressure.

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. It is, however, advisable to calculate the inlet pressure if:

- 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.

Calculation of maximum suction lift for water in open systems

To avoid cavitation, make sure that there is a minimum pressure on the suction side of the pump. The maximum suction lift "H" in metres head can be calculated as follows:

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

p_b = Barometric pressure in bar.
(Barometric pressure can be set to 1 bar.) In closed systems, p_b indicates the 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.)

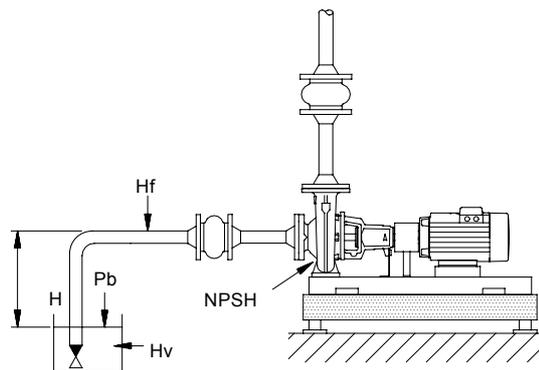
H_f = Friction loss in suction pipe in metres head.
(At the highest flow the pump will be delivering.)

H_v = Vapour pressure in metres head. (To be read from the vapour pressure scale. " H_v " depends on the liquid temperature " T_m ".)

H_s = Safety margin = minimum 0.5 metres head.

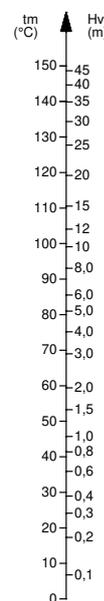
If the "H" calculated is positive, the pump can operate at a suction lift of maximum "H" metres head.

If the "H" calculated is negative, an inlet pressure of minimum "H" metres head is required.



TM02 6572 1003

Fig. 28 Schematic view of open system with an NK pump



TM00 3037 0798

Fig. 29 Relation between liquid temperature and vapour pressure

Foundation (NK)

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 pump weight. Base frame prepared for grouting is available as an option. See fig. 33.

The foundation should be 100 mm larger than the base frame on all four sides. See fig. 30.

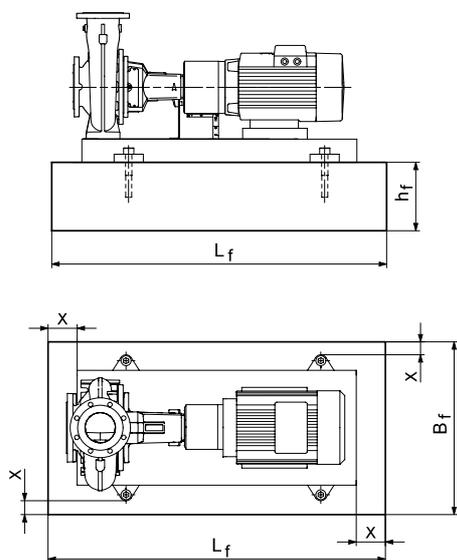


Fig. 30 Foundation, X = min. 100 mm

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. 31.

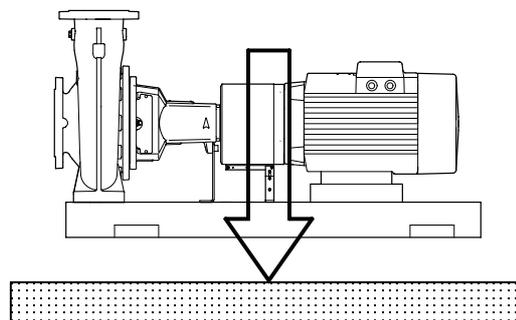


Fig. 31 Correct foundation

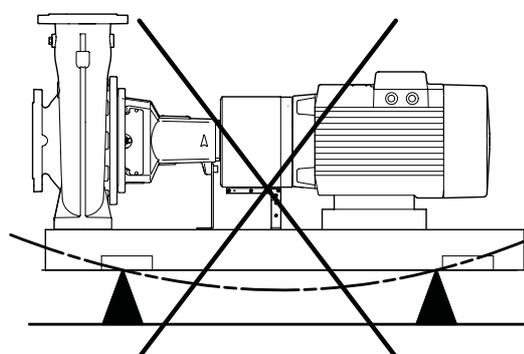


Fig. 32 Incorrect foundation

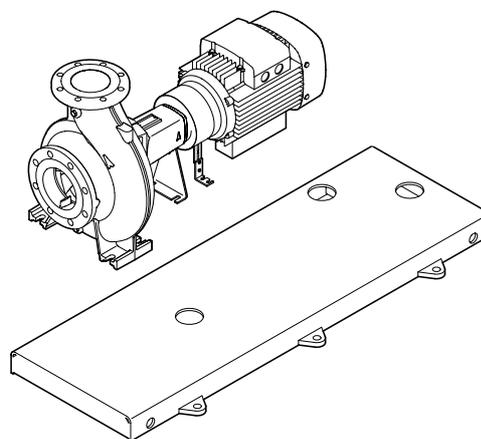


Fig. 33 Base frame prepared for grouting

TM03 3950 1206

TM03 4324 1206

TM03 3771 1206

TM03 4587 2206

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. 34.

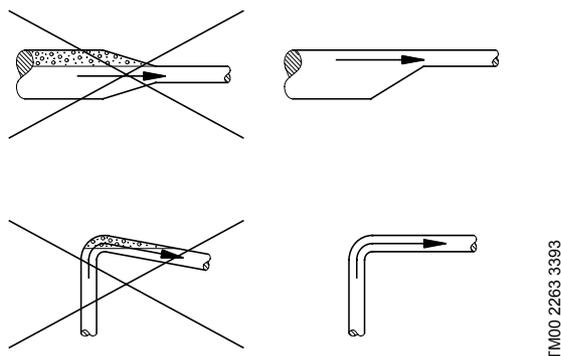


Fig. 34 Pipelines

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 will cause damage to the pump.

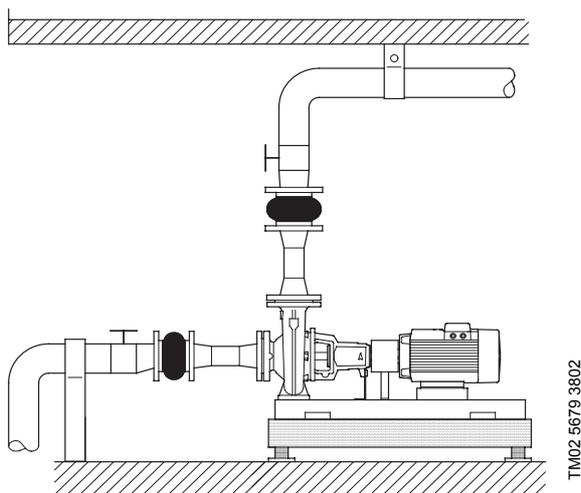


Fig. 35 Pipeline mounting

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.

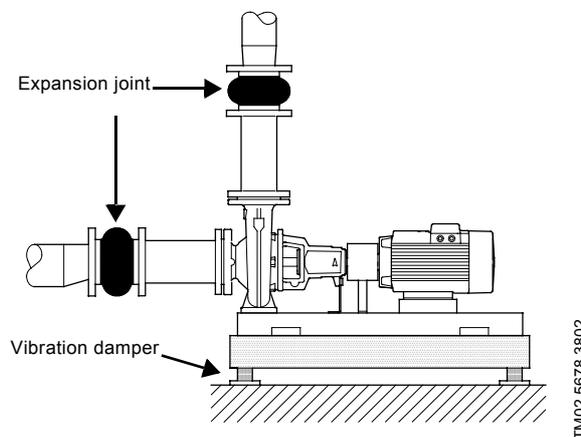


Fig. 36 NK, NKE pump with expansion joints and vibration dampers

Vibration dampers

To prevent the transmission of vibrations to buildings, we recommend you to 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 %).

Which is the right damper varies from installation to installation, and a wrong damper may increase the vibration level. Vibration dampers should therefore be sized by the supplier.

Expansion joints

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.

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 compensate for inaccuracies in the pipework such as centre displacement of flanges.

Fit expansion joints at a distance of minimum 1 to 1½ times the nominal flange diameter away from the pump on the suction as well as on the discharge side. This will prevent the development of turbulence in the expansion joints, resulting in better suction conditions and a minimum pressure loss on the pressure side. At high water velocities (> 5 m/s) we recommend you to install larger expansion joints corresponding to the pipework.

We always recommend expansion joints with limiting rods for flanges larger than DN 100.

Alignment (NK)

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.

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

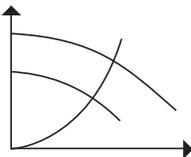
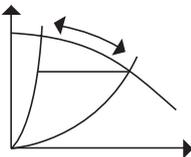
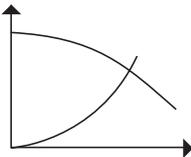
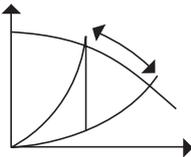
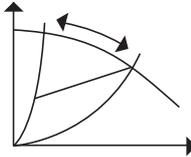
Alternatively, all NB and NK pumps with three-phase motors can be connected to an external frequency converter.

NBE and NKE pump applications

NBE and NKE pumps with integrated speed control enable automatic adaptation of performance to current 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 control 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-control mode, the pump will adjust its speed to keep a constant pressure where the sensor is fitted.

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

A pressure sensor with a suitable operating range is required.

Temperature control

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

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

In this control mode either an electronic flowmeter or a differential pressure sensor is required.

Proportional differential pressure (measured)

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

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 (eta) 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.

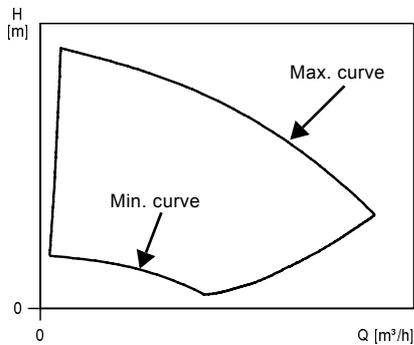


Fig. 37 Min. and max. performance curves

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.

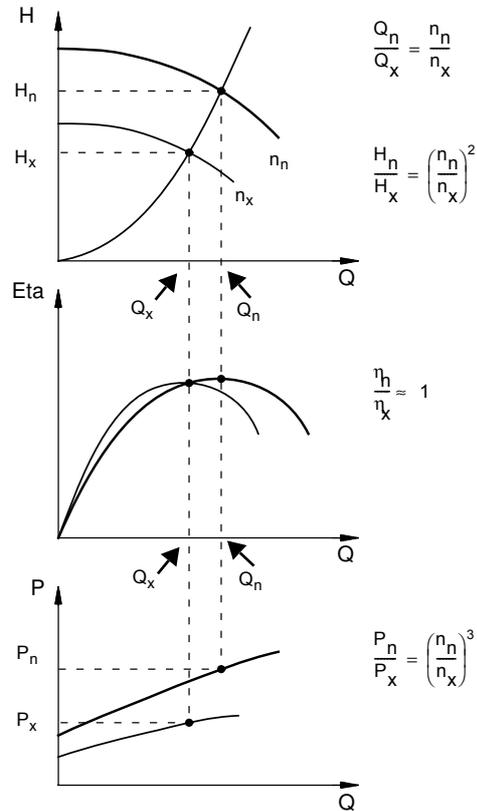


Fig. 38 Affinity equations

Legend

H_n	Rated head in metres
H_x	Current head in metres
Q_n	Rated flow in m^3/h
Q_x	Current flow rate in m^3/h
P_n	Rated input power in kW
P_x	Current input power in kW
n_n	Rated motor speed in min^{-1}
n_x	Current motor speed in min^{-1}
η_n	Rated efficiency in %
η_x	Current efficiency in %

TM00 8720 3496

TM01 4916 4803

WinCAPS and WebCAPS

WinCAPS and WebCAPS are both 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 287.

Communication with NKE pumps

Communication with NBE, NKE pumps is possible via a central building management system, remote control (Grundfos R100) or a control panel.

Central building management system

The operator can communicate with the NBE, NKE pump even though he is not 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.

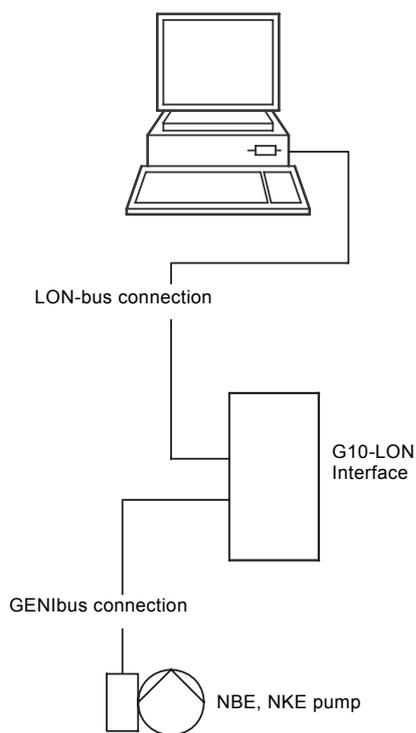


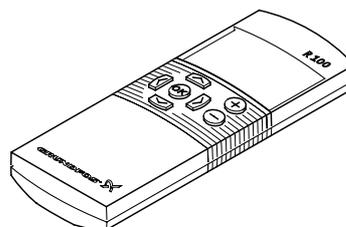
Fig. 39 Structure of a central building management system

TM02 6592 1103

Remote control

The R100 remote control produced by Grundfos is available as an accessory.

The operator can communicate with the NBE, NKE pump by pointing the IR-signal transmitter at the control panel of the NBE, NKE pump terminal box.



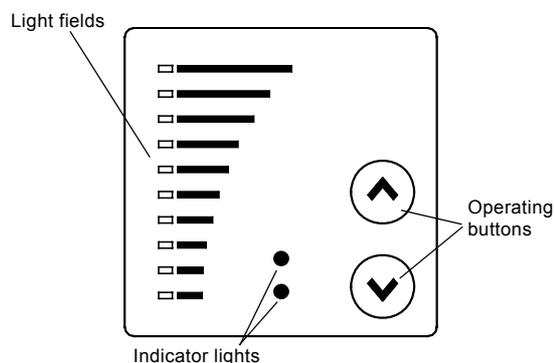
TM00 4498 2802

Fig. 40 R100 remote control

The operator can monitor and change control modes and settings of the NBE, NKE pump via the R100 display.

Control panel

The operator can change the setpoint settings manually on the control panel of the NBE, NKE pump terminal box.



TM00 7600 0404

Fig. 41 Control panel of an NBE, NKE pump

Pump size

Selection of pump size should be based on:

- 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.
- best efficiency at the estimated duty point.

Efficiency

If you expect the pump to always operate in the same duty point, select a pump which is operating in a duty point corresponding to the best efficiency of the pump.

In case of controlled operation or varying consumption, select a pump whose best 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 "List of pumped liquids", page 43.

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 page 58 to page 269.

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 P ₂ [kW]
322	355
286	315
227	250
181	200
145	160
120	132
100	110
81	90
68	75
49	55
40	45
32.5	37
26	30
19	22
15.9	18.5
12.8	15
9.1	11
6.1	7.5
4.3	5.5
3.2	4
2.3	3
1.7	2.2
1.1	1.5
0.81	1.1
0.55	0.75
0.40	0.55
0.27	0.37
0.18	0.25

Pumped liquids

We recommend NB and NK pumps for thin, clean and non-explosive liquids, not containing solid particles or fibres. The liquid must not affect the pump materials chemically or mechanically.

If you pump liquids with a density and/or viscosity higher than those of water, use motors with correspondingly higher outputs. See "List of pumped liquids".

The mechanical shaft seal must be suitable for the liquid.

Water in heating and ventilating systems often contains additives to prevent negative effects, such as system corrosion or calcareous deposits. If you want to use the pump for such liquids, use special shaft seals to avoid crystallization/precipitation between the seal faces.

Liquid temperature: -25 °C to +140 °C.

For heating systems, the water quality should meet VDI 2035.

List of pumped liquids

The list on the following pages gives an overview of liquids which may typically be pumped by NB and NK pumps.

The list states the recommended shaft seals. Other shaft seals may be applicable, but we consider those stated in the list to be the best choices.

The list is intended as a general guide only, and it cannot replace actual testing of pumped liquids and pump materials under specific working conditions.

However, use the list with some caution, as factors may affect the chemical resistance of a specific pump version.

Factors:

- operating conditions
- solids
- cleaning procedures
- contaminants
- pressure.

Legend for notes in the list

a	To minimize the risk of corrosion, the pump must run continuously, i.e. standstills must not exceed 6-8 hours.
b	May contain additives or impurities which can cause shaft seal problems.
c	The pump should run continuously to prevent discoloration of pool tiles. For intermittent use, the N version should be used.
d	Density and viscosity may differ from those of water. Consider this when calculating motor and pump performance.
e	In order to avoid corrosion, the liquid must be free of oxygen.
f	Flammable or combustible liquid.
g	Risk of crystallization/precipitation at the shaft seal.

Pumped liquids	Notes	Additional information	Material version					Shaft seal
			A	B	S	N	R	
Water								
Acidic minewater		Low pH value, high chloride content				x	x	BQQE
		<120 °C	x					BAQE
Boiler-feed water		120 °C - 140 °C	x					BQBE/DAQF ¹⁾
Brackish water	a	30 °C, 2000 ppm chloride				x		BQQE
		<90 °C	x					BQQE
Condensate		90 °C - 120 °C	x					BAQE
		120 °C - 140 °C	x					BQBE/DAQF ¹⁾
Cooling and cutting lubricant			x					BQQV
Demineralized water		<90 °C				x		BQQE
		<120 °C						BAQE
District heating water		120 °C - 140 °C	x					BQBE/DAQF ¹⁾
		<90 °C	x	x	x			BQQE
Groundwater		>90 °C	x	x	x			BAQE ²⁾ /BQBE
Oil containing water		<90 °C	x					BQQV
		<90 °C		x	x			BQQE
Softened water		90 °C - 120 °C		x	x			BAQE ²⁾
Seawater	a	<35 °C					x	BQQE
Swimming-pool water, chlorinated	c	40 °C, 150 ppm Cl- (< 2 ppm free chlorine)		x	x			BQQE
Coolants								
Calcium chloride	b, d, e, g	<5 °C, 30 %	x					BQQE/GQQE
Ethylene glycol	b, d	<50 °C	x					BQQE/GQQE
Glycerine (glycerol)	b, d	<50 °C	x					BQQE/GQQE
Hydrocarbon-based coolant	d, f	50 °C	x					BQQV/GQQV
Potassium acetate (inhibited)	b, d, e, g	<20 °C	x	x	x			BQQE/GQQE
Potassium formate (inhibited)	b, d, e, g	<20 °C	x	x	x			BQQE/GQQE
Propylene glycol	b, d	<50 °C	x					BQQE/GQQE
Sodium chloride	b, d, e, g	<5 °C, 30 %	x					BQQE/GQQE
Fuels								
Biodiesel	f		x					BAQV
Diesel oil	f		x					BAQV
Jet fuel	f		x					BAQV
Kerosene	f		x					BAQV
Naphta	f		x					BAQV
Petrol	f		x					BAQV
Mineral oils								
Crude oil	b, d, f	<20 °C			x			BQQV
Mineral lubricating oil	d, f		x					BAQV/BQQV
Mineral motor oil	d, f		x					BAQV/BQQV
Synthetic oils								
Synthetic lubricating oil	d, f		x					BAQV/BQQV
Synthetic motor oil	d, f		x					BAQV/BQQV
Silicone oil	d		x					BAQV/BQQV
Vegetable oils								
Corn oil	b, d		x		x			BAQV/BQQV
Olive oil	b, d		x		x			BAQV/BQQV
Peanut oil	b, d		x		x			BAQV/BQQV
Rapeseed oil	b, d		x		x			BAQV/BQQV
Soya oil	b, d		x		x			BAQV/BQQV
Cleaning								
Alkaline degreasing agent	b, h	<80 °C	x		x			BQQE/DAQF ⁴⁾
Soap (salts of fatty acids)	b	<80 °C	x	x	x			BQQV
Organic solvents								
Acetone	f	40 °C	x					BAQE ³⁾ /BBQE
Ethyl alcohol (ethanol)	f	40 °C	x					BAQE ³⁾ /BBQE
Hydrogen peroxide		20 °C, 5 %				x		BQQE
Isopropyl alcohol	f	40 °C	x					BAQE ³⁾ /BBQE

Pumped liquids

NB, NBE, NK, NKE

Pumped liquids	Notes	Additional information	Material version					Shaft seal
			A	B	S	N	R	
Methyl alcohol (methanol)	f	40 °C	x					BAQE ³⁾ /BBQE
Oxidants								
Sodium hypochlorite		20 °C, 0.1 %					x	BQQV
Salts								
Ammonium bicarbonate	b, d	20 °C, 15 %	x					BQQE
		60 °C, 20 %					x	BQQE
Copper sulphate	b, d, g	60 °C, 20 %				x	x	BQQE
Ferric sulphate	b, d, g	20 °C, 20 %				x	x	BQQE
Potassium bicarbonate	b, d	20 °C, 20 %	x					BQQE
		60 °C, 20 %					x	BQQE
Sodium carbonate	b, d, g	20 °C, 20 %					x	BQQE
		60 °C, 20 %					x	BQQE
Potassium permanganate	b, d	20 °C, 1 %					x	BQQE
		50 °C, 10 %				x		BQQE
Sodium nitrate	b, d	20 °C, 5 %					x	BQQE
		60 °C, 20 %					x	BQQE
Sodium nitrite	b, d	20 °C, 20 %	x					BQQE
		60 °C, 20 %					x	BQQE
Sodium phosphate (mono)	b, d	60 °C, 20 %					x	BQQE
Sodium phosphate (di)	b, d	30 °C, 20 %					x	BQQE
		60 °C, 20 %					x	BQQE
Sodium phosphate (tri)	b, d, g	20 °C, 10 %					x	BQQE
		70 °C, 20 %					x	BQQE
Sodium sulphate	b, d, g	60 °C, 20 %					x	BQQE
Sodium sulphite	b, d, g	20 °C, 1 %					x	BQQE
		60 °C, 20 %					x	BQQE
Acids								
Acetic acid		20 °C, 15 %					x	BQQE
Chromic acid		20 °C, 10 %					x	BQQE
Citric acid	d	50 °C, 20 %					x	BQQE
Formic acid	d	20 °C, 30 %					x	BQQE
Nitric acid	d	20 °C, 40 %					x	BQQE
Oxalic acid	g	20 °C, 10 %					x	BQQE
Phosphoric acid	b, d, g	70 °C, 40 %					x	BQQE
Sulphuric acid	b, d	20 °C, 20 %					x	BQQV
Sulphurous acid		20 °C, 5 %					x	BQQV
Alkalies								
Ammonium hydroxide		30 °C, 30 %	x					BQQE
Calcium hydroxide	b	30 °C, 5 %					x	BQQE
Potassium hydroxide	d, g	20 °C, 20 %					x	BQQE
		60 °C, 20 %					x	BQQE
Sodium hydroxide	d, g	20 °C, 20 %					x	BQQE
		80 °C, 20 %					x	BQQE

1) Shaft diameters measured at the shaft end (d5) are either 24, 32, 42, 48 or 60 mm. BQBE shaft seals can be used for shaft end diameter (d5) 24 or 32 mm. DAQF shaft seals can be used for all five shaft diameters.

2) Do not use BAQE for potable water. For potable water, we recommend BBQE shaft seals.

3) If diluted with water, use BBQE.

4) If oil residuals are present, use DAQF.

The tables below give all electrical data for motors for NB(E) and NK(E).

Note: For information about electrical data of MMG model E motors, TECO EFF1 and TECO EFF2, see page 278 to 281.

Electrical data, mains-operated motors

NB, NK, standard motor range, 2-pole

Motor	Frame size	Voltage	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ _{1/1}	n [min ⁻¹]	I _{start} / I _{1/1}
MG	80A-C	3x220-240Δ/380-415Y	0.75	3.3/1.9	80-80	0.81-0.71	2840-2870	5.8-6.2
MG	80B-C		1.1	4.5/2.6	81-81	0.81-0.75	2820-2850	5.8-6.3
MG	90SA-C		1.5	5.9/3.4	82-82	0.85-0.79	2860-2890	6.3-6.9
MG	90LA-C		2.2	8.25/4.75	84-84	0.87-0.82	2860-2890	7.0-7.6
MG	100LB-C		3	10.8/6.25	85-85	0.88-0.82	2880-2910	7.8-8.5
MG	112MB-C		4	13.8/8.0	86-86	0.90-0.87	2900-2910	8.7-9.5
MG	90LA-C		2.2	4.75	84-84	0.87-0.82	2860-2890	7.0-7.6
MG	100LB-C		3	6.25	85-85	0.88-0.82	2880-2910	7.8-8.5
MG	112MB-C		4	8.0	86-86	0.90-0.87	2900-2910	8.7-9.5
MG	132SB-C		5.5	11.0	87.5-87.5	0.89-0.86	2890-2910	8.9-9.7
MG	132SC-C	7.5	15.2	88-88	0.87-0.81	2890-2910	9.1-9.9	
MMG	160MA-E	3x380-415Δ/660-690Y	11	20.2/11.6	89.3	0.89	2930	5.6
MMG	160MB-E		15	26.5/15.2	91.0	0.87	2940	5.8
MMG	160L-E		18.5	32.5/18.8	91.6	0.89	2940	6.5
MMG	180M-E		22	39.5/22.8	91.0	0.89	2950	7.4
MMG	200LA-E		30	57.5/33.0	92.2	0.88	2960	7.0
MMG	200LB-E		37	65.0/37.5	92.0	0.89	2960	7.6
MMG	225M-E		45	78.0/45.0	93.5	0.89	2980	7.4
MMG	250M-E		55	96.5/55.5	93.0	0.90	2960	7.9
MMG	280S-E		75	130/75.0	94.0	0.89	2970	6.6
MMG	280M-E		90	154/89.0	95.0	0.90	2980	7.2
MMG	315S-E		110	188/108	94.0	0.90	2980	7.2
MMG	315M-E		132	222/128	95.0	0.90	2980	7.5
MMG	315LA-E		160	270/156	95.7	0.91	2980	6.0
MMG	315LB-E		200	330/190	95.0	0.92	2980	5.8
MMG	355M-E		250	435/250	95.5	0.92	2980	6.2
MMG	355L-E		315	525/303	95.5	0.91	2980	6.9
MMG	355L-E		355	630/360	95.4	0.90	2980	7.1

NB, NK, standard motor range, 4-pole

Motor	Frame size	Voltage	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ _{1/1}	n [min ⁻¹]	I _{start} / I _{1/1}
MG	71A-C	3x220-240D/380-415Y	0.25	1.48/0.85	69-69	0.75-0.65	1400-1420	4.0-4.4
MG	71B-C		0.37	1.9/1.1	71-71	0.77-0.67	1400-1420	4.0-4.4
MG	80A-C		0.55	2.6/1.5	77-77	0.79-0.70	1390-1410	4.3-4.7
MG	80B-C		0.75	3.3/1.9	78-78	0.79-0.70	1390-1410	4.3-4.7
MG	90SA-C		1.1	5.0/2.9	78-78	0.78-0.71	1420-1440	4.3-4.7
MG	90LA-C		1.5	6.4/3.7	80-80	0.80-0.74	1420-1430	5.0-5.5
MG	100LB-C		2.2	9.2/5.3	82-82	0.80-0.73	1420-1440	5.2-5.7
MG	112MA-C		3	12.0/6.9	85-85	0.80-0.74	1440-1450	6.2-6.7
MG	112MB-C		4	15.4/8.9	86.5-87	0.82-0.76	1440-1450	6.6-7.2
MG	100 LA-D		2.2	5.3	83.5-84	0.79-0.76	1430-1440	5.4-5.9
MG	112LB-D	3	6.9	85-85	0.80-0.74	1440-1450	6.2-6.7	
MG	112MB-C	4	8.9	86.5-87	0.82-0.76	1440-1450	6.6-7.2	
MG	132SC-C	5.5	12.6	87-87	0.80-0.74	1430-1450	6.3-6.9	

Motor	Frame size	Voltage	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ _{1/1}	n [min ⁻¹]	I _{start} I _{1/1}
MMG	132SB-E	3x380-415Δ/660-690Y	7.5	14.4/8.3	89.1	0.84	1445	7.8
MMG	160MA-E		11	21.0/12.2	89.8	0.84	1460	7.4
MMG	160MB-E		15	28.5/16.4	89.4	0.85	1460	7.8
MMG	180M-E		18.5	33.5/19.4	91.2	0.86	1465	7.6
MMG	180L-E		22	39.0/22.6	91.4	0.86	1465	7.8
MMG	200L-E		30	53.5/31.0	91.5	0.88	1470	7.5
MMG	225S-E		37	71.0/41.0	92.0	0.89	1480	6.9
MMG	225M-E		45	78.0/45.0	92.5	0.89	1480	7.5
MMG	250M-E		55	95.0/55.0	93.0	0.89	1480	7.5
MMG	280S-E		75	128/74.0	94.5	0.87	1480	7.4
MMG	280M-E		90	150/86.5	94.0	0.88	1480	7.5
MMG	315S-E		110	192/110	94.5	0.91	1490	7.3
MMG	315M-E		132	226/130	95.0	0.89	1490	6.7
MMG	315LA-E		160	270/156	95.0	0.89	1490	6.7
MMG	315LB-E		200	340/196	95.5	0.89	1490	5.5
MMG	355M-E		250	410/236	95.5	0.91	1490	6.4
MMG	355L-E		315	525/300	96.0	0.89	1490	6.8

NB, NK, standard motor range, 6-pole

Motor	Frame size	Voltage	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ _{1/1}	n [min ⁻¹]	I _{start} I _{1/1}
MMG	80B-E	3x220-240Δ/380-415Y	0.55	1.7/0.98	66.0	0.72	890	3.0
MMG	90S-E		0.75	2.15/1.24	70.3	0.72	910	3.5
MMG	90L-E		1.1	2.95/1.7	73.0	0.74	910	3.6
MMG	100L-E		1.5	3.7/2.14	76.3	0.77	920	4.3
MMG	112M-E		2.2	5.2/3.0	81.4	0.75	950	5.0
MMG	132S-E		3	6.7/3.85	84.1	0.77	960	6.0
MMG	132MA-E		4	8.85/5.1	84.7	0.77	960	6.4
MMG	112M-E		2.2	3.0/1.73	81.4	0.75	950	5.0
MMG	132S-E		3	3.85/2.2	84.1	0.77	960	6.0
MMG	132MA-E		4	5.1/2.94	84.7	0.77	960	6.4
MMG	132MB-E	5.5	11.4/6.65	86.4	0.80	960	5.9	
MMG	160M-E	7.5	16.0/9.2	87.1	0.78	960	5.8	
MMG	160L-E	11	22.8/12.2	88.5	0.79	970	7.3	
MMG	180L-E	15	31.5/18.2	80.5	0.67	940	5.9	
MMG	200LA-E	18.5	35.5/20.4	90.5	0.83	980	7.8	
MMG	200LB-E	22	41.5/24.0	91.5	0.84	980	6.6	
MMG	225M-E	30	55.0/32.0	91.5	0.85	980	7.0	
MMG	250M-E	37	65.5/37.5	92.5	0.88	980	7.0	
MMG	280S-E	45	79.0/45.5	92.5	0.87	990	7.3	
MMG	280M-E	55	97.0/56.0	93.5	0.87	990	7.2	
MMG	315S-E	75	134/77.0	94.0	0.86	990	6.3	
MMG	315M-E	90	158/91.0	94.5	0.87	990	5.9	
MMG	315L-E	110	192/112	95.0	0.87	990	6.0	
MMG	315LB-E	132	250/144	94.2	0.87	990	6.2	

NB, NK, premium motor range, 2-pole

Motor	Frame size	Voltage	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ _{1/1}	n [min ⁻¹]	I _{start} / I _{1/1}
MG	80A-C	3x220-240Δ/380-415Y	0.75	3.3/1.9	80-80	0.81-0.71	2840-2870	5.8-6.2
MG	90SA-D		1.1	4.1/2.35	84-84	0.87-0.82	2890-2910	7.4-8.0
MG	90SB-D		1.5	5.45/3.15	85.5-85.5	0.87-0.82	2890-2910	8.5-9.3
MG	90LC-D		2.2	7.7/4.45	87.5-87.5	0.89-0.87	2890-2910	8.5-9.5
MG	100LC-D		3	10.9/6.3	87.5-87.5	0.87-0.82	2900-2920	8.4-9.2
MG	112MC-D		4	13.9/8.0	89-89	0.88-0.84	2910-2930	11.2-12.3
MG	90LC-D	3x380-415Δ	2.2	4.45	87.5-87.5	0.89-0.87	2890-2910	8.5-9.5
MG	100LC-D		3	6.3	87.5-87.5	0.87-0.82	2900-2920	8.4-9.2
MG	112MC-D		4	8.0	89-89	0.88-0.84	2910-2930	11.2-12.3
MG	132SC-D		5.5	11.2	90-90	0.88-0.84	2910-2930	10.7-11.7
MG	132SD-D		7.5	15.2	89.5-89.5	0.87-0.80	2900-2920	10.0-11.1
Siemens	160M		3x380-415Δ/660-690Y	11	19.4/11.2	91.0	0.90	2945
Siemens	160M	15		26.3/15.2	91.5	0.90	2945	7.0
Siemens	160L	18.5		31.5/18.2	92.3	0.92	2940	7.0
Siemens	180M	22		38.0/21.9	93.0	0.89	2945	7.2
Siemens	200L	30		52.0/30.0	93.5	0.89	2950	7.0
Siemens	200L	37		64.0/37.0	94.0	0.89	2950	7.0
Siemens	225M	45		77.0/44.5	94.9	0.89	2965	7.3
Siemens	250M	55		93.0/53.7	95.3	0.90	2975	6.8
Siemens	280S	75		128/73.9	95.2	0.89	2975	7.0
Siemens	280M	90		150/86.6	95.6	0.90	2978	7.6
Siemens	315S	110		182/105	95.8	0.91	2982	6.9
Siemens	315M	132		220/127	96.0	0.91	2982	7.1
Siemens	315L	160		260/150	96.4	0.92	2982	7.1
Siemens	315L	200		320/185	96.5	0.93	2982	6.9
Siemens	315	250		415/240	96.0	0.90	2979	7.0
Siemens	315	315		520/300	96.6	0.91	2980	7.0
Siemens	355	355	590/341	96.6	0.90	2982	6.5	

NB, NK, premium motor range, 4-pole

Motor	Frame size	Voltage	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ _{1/1}	n [min ⁻¹]	I _{start} / I _{1/1}
MG	71A-C	3x220-240Δ/380-415Y	0.25	1.48/0.85	69-69	0.75-0.65	1400-1420	4.0-4.4
MG	71B-C		0.37	1.9/1.1	71-71	0.77-0.67	1400-1420	4.0-4.4
MG	80A-C		0.55	2.6/1.5	77-77	0.79-0.70	1390-1410	4.3-4.7
MG	80B-C		0.75	3.3/1.9	78-78	0.79-0.70	1390-1410	4.3-4.7
MG	90SB-D		1.1	4.7/2.7	83.8	0.78	1440	7.0
MG	90LC-D		1.5	6.2/3.6	85	0.77	1440	6.0
MG	100LB-D	3x380-415Δ	2.2	8.5/4.9	86.4	0.82	1440	6.5
MG	100LC-D		3	11.8/6.75	87.4	0.81	1450	6.7
MG	112MC-D		4	15.4/8.9	88.3	0.81	1450	7.3
MG	100LB4-D		2.2	5.35	86.4	0.77/0.7	1440	6.2/6.7
MG	100LC4-D		3	7.2	87.4	0.77/0.7	1440	6.1/6.7
MG	112MC4-D		4	8.9	88.3	0.81/0.75	1450	7.3/8.0

Motor	Frame size	Voltage	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ _{1/1}	n [min ⁻¹]	I _{start} / I _{1/1}
Siemens	132S	3x380-415Δ/660-690Y	5.5	10.6/6.1	89.5	0.84	1455	7.0
Siemens	132M		7.5	14.3/8.3	90.3	0.84	1455	7.0
Siemens	160M		11	20.5/11.8	91.5	0.85	1460	6.9
Siemens	160L		15	27.5/15.9	92.0	0.86	1460	7.0
Siemens	180M		18.5	34.5/19.9	92.5	0.84	1465	7.0
Siemens	180L		22	40.5/23.4	93.0	0.84	1465	7.3
Siemens	200L		30	53.0/30.6	93.5	0.87	1465	7.0
Siemens	225S		37	67.0/38.7	94.0	0.85	1480	6.8
Siemens	225M		45	81.0/46.8	94.5	0.85	1480	6.9
Siemens	250M		55	96.0/55.4	95.1	0.87	1485	7.5
Siemens	280S		75	130/75.0	95.1	0.87	1485	6.8
Siemens	280M		90	158/91.2	95.4	0.86	1486	7.5
Siemens	315S		110	190/110	95.9	0.87	1488	7.1
Siemens	315MA		132	225/130	96.1	0.88	1488	7.3
Siemens	315MB		160	275/159	96.3	0.88	1490	7.4
Siemens	315L		200	340/196	96.4	0.88	1490	7.6
Siemens	315		250	425/245	96.0	0.88	1488	6.5
Siemens	315		315	540/312	96.3	0.88	1488	6.8

NB, NK, premium motor range, 6-pole

Motor	Frame size	Voltage	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ _{1/1}	n [min ⁻¹]	I _{start} / I _{1/1}
Siemens	80B	3x220-240Δ/380-415Y	0.55	2.77/1.60	67.0	0.74	910	3
Siemens	90S		0.75	3.46/2.00	75.5	0.72	925	4
Siemens	90L		1.1	4.85/2.80	82.0	0.70	940	6
Siemens	100L		1.5	6.32/3.65	85.0	0.70	950	6
Siemens	112M		2.2	9.35/5.40	84.0	0.70	955	6
Siemens	132SA		3	10.5/6.10	84.0	0.85	955	7
Siemens	132MA		4	14.7/8.50	84.0	0.81	950	6
Siemens	112M		2.2	5.40/3.12	84.0	0.70	955	6
Siemens	132SA		3	6.10/3.50	84.0	0.84	955	7
Siemens	132MA		4	8.50/4.91	84.0	0.81	950	6
Siemens	132MB		5.5	12.0/6.93	86.0	0.77	960	7
Siemens	160M		7.5	17.1/9.87	88.0	0.72	965	6
Siemens	160L		11	23.0/13.3	88.5	0.78	960	7
Siemens	180L		15	31.5/18.2	91.0	0.75	970	7
Siemens	200LA		18.5	38.0/21.9	91.0	0.77	975	6
Siemens	200LB		22	45.0/26.0	91.5	0.77	975	6
Siemens	225M	3x380-415Δ/660-690Y	30	56.0/32.3	93.2	0.83	980	7
Siemens	250M		37	69.0/39.8	93.7	0.83	985	7
Siemens	280S		45	81.0/46.8	94.4	0.85	988	7
Siemens	280M		55	99.0/57.2	94.6	0.85	988	7
Siemens	315S		75	138/79.7	95.0	0.83	990	7
Siemens	315MA		90	160/92.4	95.3	0.85	990	7
Siemens	315MB		110	196/113	95.6	0.85	990	7
Siemens	315L		132	235/136	95.8	0.85	990	8

Electrical data, motors with built-in frequency converter

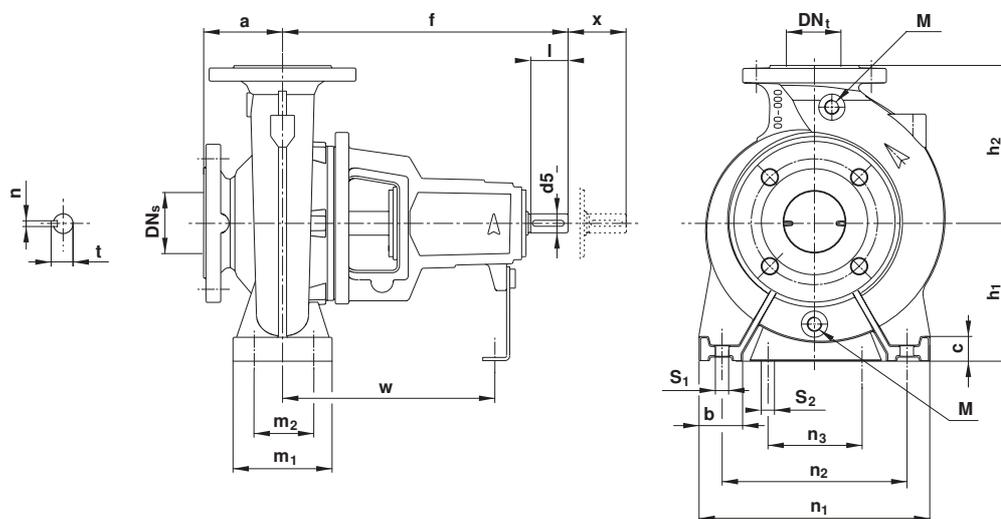
NBE, NKE range, 2-pole

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	132SD-D		7.5	15.0 - 12.0
MMGE	160M	3 x 380-415 V	11	21.4
MMGE	160MX		15	28.0
MMGE	160L		18.5	34.0
MMGE	180M		22	42.0

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	132SC-D	3 x 380-415 V	5.5	11.3 - 10.5
MMGE	160M		7.5	14.7
MMGE	160M		11	21.7
MMGE	160L		15	28.5
MMGE	180M		18.5	34.7
MMGE	180L		22	41.0

NK, model B



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	Cj ⁽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	-
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	-
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	-
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	-
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	-
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	-
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	-
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	-
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	-
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	-
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	-
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	-
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	-
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	-

NK bare shaft pumps

NB, NBE, NK, NKE

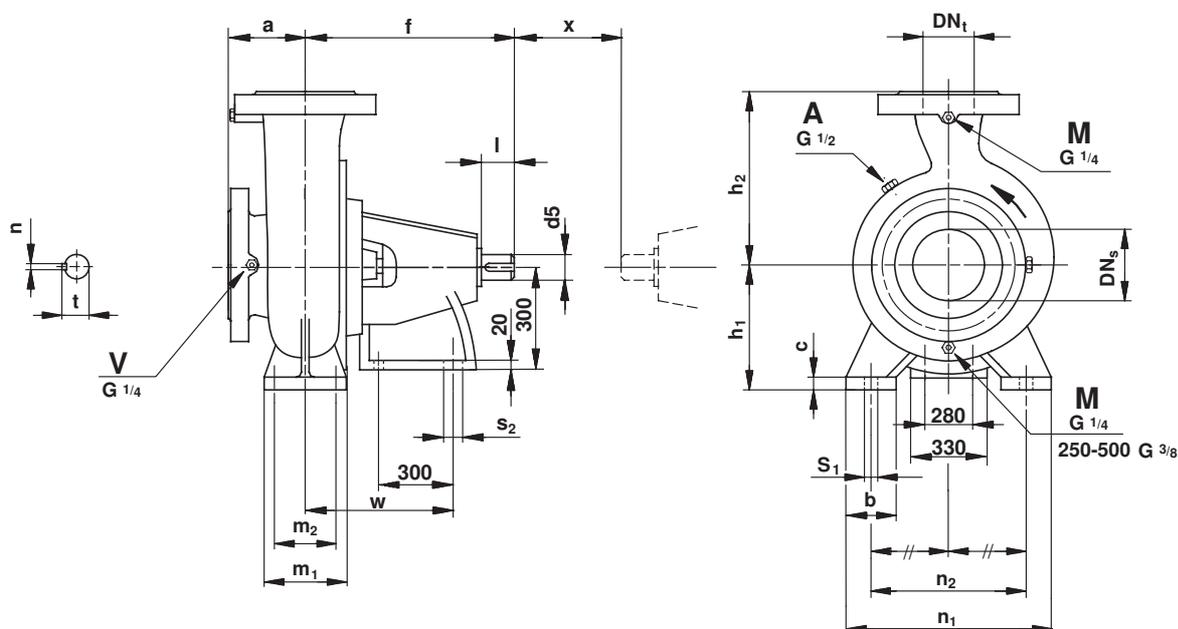
Type	Pump [mm]							Supporting feet [mm]										Shaft [mm]					Weight [kg]	
	DN _s	DN _t	a	f	h ₁	h ₂	M	b	m ₁	m ₂	n ₁	n ₂	n ₃	w	S ₁	S ₂	c	d5	l	x	t	n	CJ ⁽¹⁾	SS ⁽²⁾
NK 125-250*	150	125	140	530	250	355	1/2"	80	160	120	400	315	110	370	M16	M12	23	42	110	140	45	12	158	-
NK 125-315	150	125	140	530	280	355	1/2"	100	200	150	500	400	110	370	M20	M12	26	42	110	140	45	12	186	-
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	-
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	-
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	-
NK 150-250	200	150	160	470	280	375	1/2"	100	200	150	500	400	110	340	M20	M12	33	42	110	140	45	12	192	-
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	-
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	-
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	-
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	-

⁽¹⁾ CI: Cast-iron version

⁽²⁾ SS: Stainless steel version

* Oversize

NK, model A



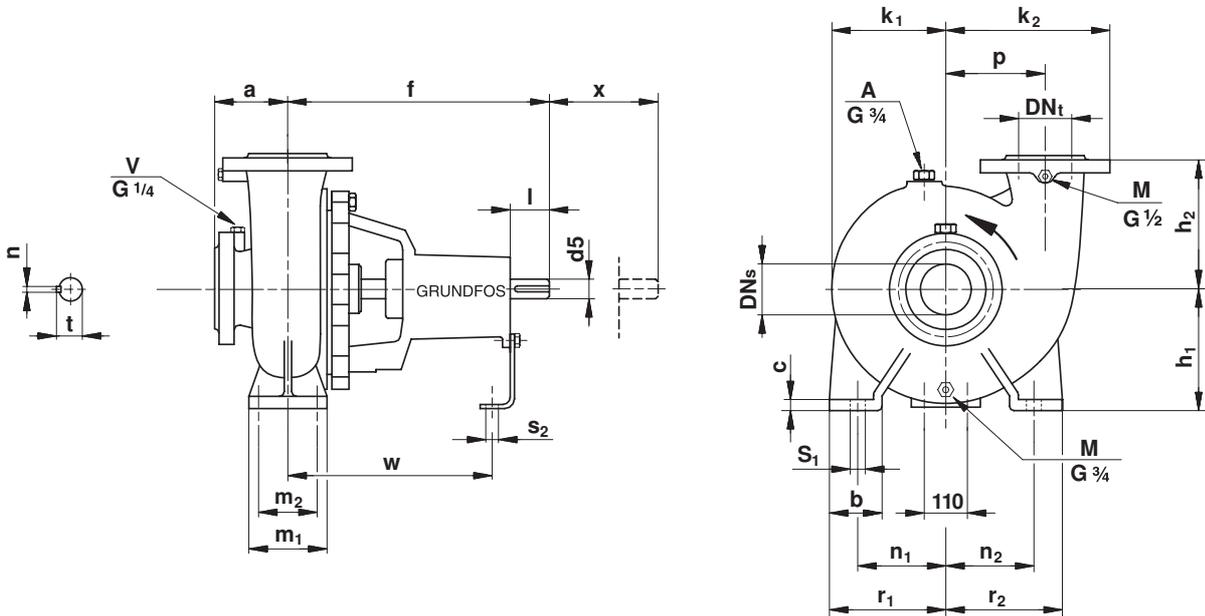
Type	Pump [mm]						Supporting feet [mm]										Shaft [mm]					Weight [kg]
	DN _s	DN _t	a	f	h ₁	h ₂	b	c	m ₁	m ₂	n ₁	n ₂	S ₁	S ₂	w	d5	l	t	n	x		
NK 200-500*	250	200	250	750	410	675	140	22	250	190	790	660	28	24	536	55	140	59	16	180	480	
NK 250-400*	300	250	200	740	400	600	140	20	250	190	700	580	28	24	530	55	140	59	16	180	415	
NK 250-500*	300	250	300	750	410	660	140	23	250	190	790	660	28	24	536	55	140	59	16	180	507	

* Oversize

NK bare shaft pumps

NB, NBE, NK, NKE

NK, model A

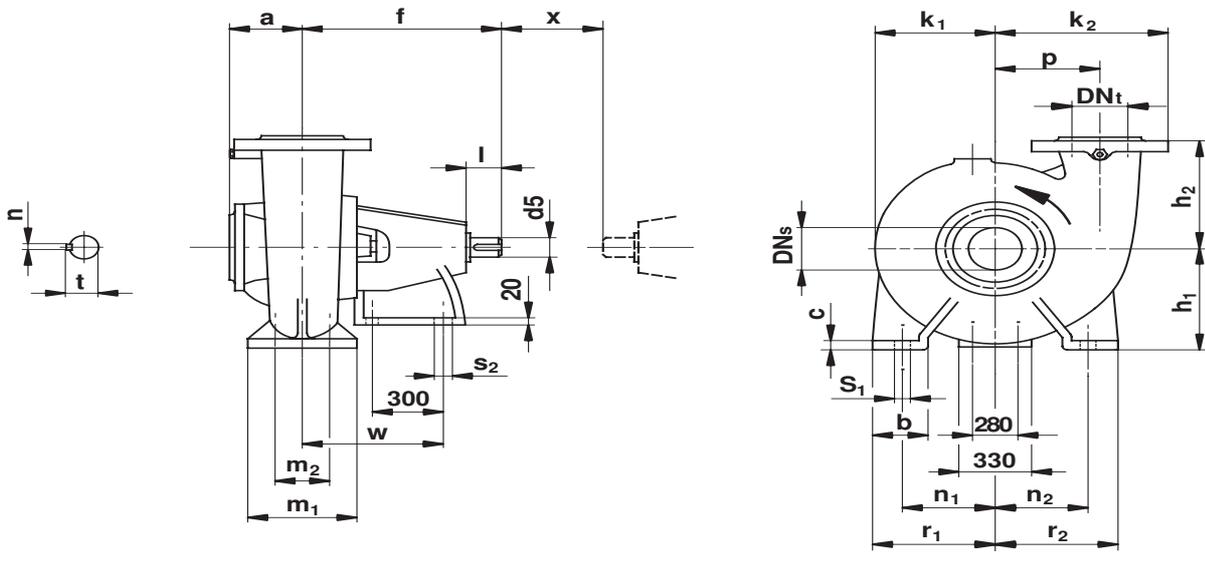


TM01 3281 3798

Type	Pump [mm]									Supporting feet [mm]										Shaft [mm]					Weight [kg]	
	DN _s	DN _t	a	f	h ₁	h ₂	k ₁	k ₂	p	b	c	m ₁	m ₂	n ₁	n ₂	r ₁	r ₂	s ₁	s ₂	w	d5	l	t	n		x
NK 250-310*	300	250	250	565	400	400	358	498	295	140	22	300	250	330	330	400	400	28	20	400	42	110	45	12	180	350

* Oversize

NK, model A



TM01 0527 3803

Type	Pump [mm]									Supporting feet [mm]										Shaft [mm]					Weight [kg]	
	DN _s	DN _t	a	f	h ₁	h ₂	k ₁	k ₂	p	b	c	m ₁	m ₂	n ₁	n ₂	r ₁	r ₂	s ₁	s ₂	w	d5	l	t	n		x
NK 200-400*	250	200	180	750	400	400	268	460	290	130	25	250	200	155	215	220	280	28	24	536	55	140	59	16	200	405
NK 250-330*	250	250	250	740	450	400	338	545	345	130	25	355	280	245	330	310	395	34	24	600	55	140	59	16	200	430
NK 300-360*	300	300	300	760	520	440	410	580	358	160	25	330	280	340	340	423	423	26	24	540	55	140	59	16	280	560

* Oversize

Oversize pumps

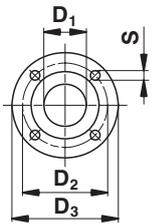
EN 733 describes only the standard types.

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

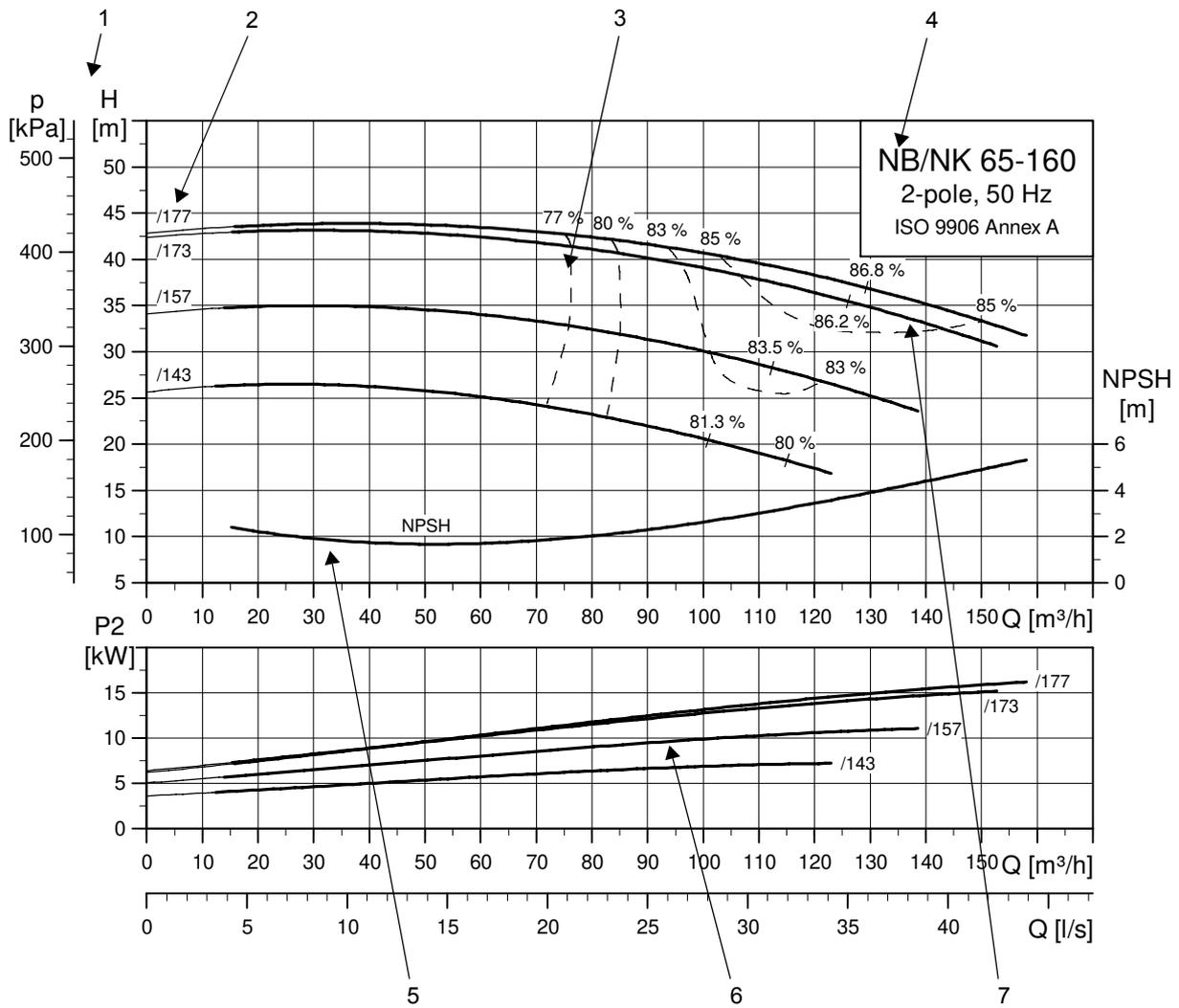
As oversize pumps are not according to the standard, dimensions of Grundfos NK oversize pumps may differ from the dimensions of similar pumps from other suppliers.

Flange dimensions

The flange dimensions are in mm.

	EN 1092-2 - PN 10/16								EN 1092-2 - PN 10		
	Nominal diameter (DN)										
		32	40	50	65	80	100	125	150	200	250
D₁	32	40	50	65	80	100	125	150	200	250	300
D₂	100	110	125	145	160	180	210	240	295	350	400
D₃	140	150	165	185	200	220	250	285	340	395	445
S	4 x 19	4 x 19	4 x 19	4 x 19	8 x 19	8 x 19	8 x 19	8 x 23	8 x 23	12 x 23	12 x 23

How to read the curve charts



TM03 4213 1906

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 power curve indicates pump input power P_2 [kW]
7	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 page 58 to 267.

- Tolerances according to ISO 9906, Annex A.
- 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 $1 \text{ mm}^2/\text{s}$ (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/m^3 , the discharge pressure is proportional to the density.
- When pumping liquids with a density higher than 1000 kg/m^3 , 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 side of the pump.
H_{dyn}	Calculated values based on the velocity of the pumped liquid on the suction and discharge side of the pump.

Performance tests

The requested duty point for every pump is tested according to ISO 9906, Annex A, and 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.

Certificates

Certificates have to be confirmed for every order and are available on request as follows:

- Certificate for compliance with the order
EN 10204-2.1
- Pump certificate
EN 10204-2.2
- Works certificate
EN 10204-2.3
(NK model A)
- Inspection certificate
EN 10204-3.1.B
- Inspection certificate
EN 10204-3.1.C.

Technical data

The pump dimensions on the following pages include

- NB/NK:
Data based on the NB/NK premium range. That is pumps fitted with Grundfos MG (EFF1) or Siemens (EFF1) motors.
Note: See the correction tables on page 282 and 286 for dimensions of pumps with MG EFF2, MMG model E, TECO EFF1 and TECO EFF2 motors.
- NBE/NKE:
Data on pumps fitted with motors with built-in frequency converter, type MGE/MMGE.

Overview – Curves/ technical data

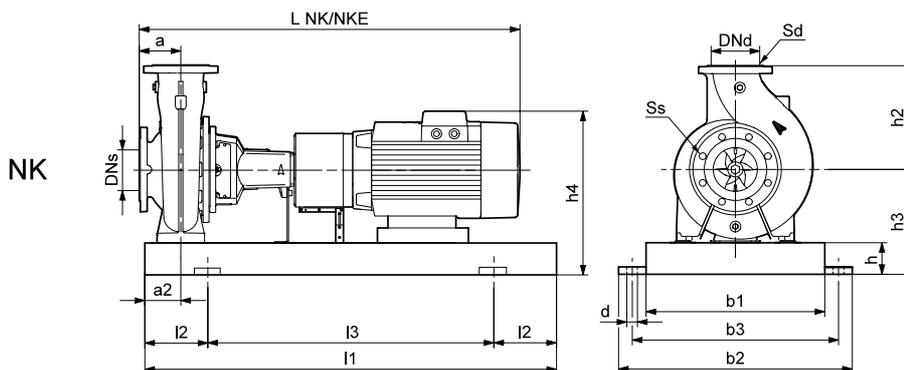
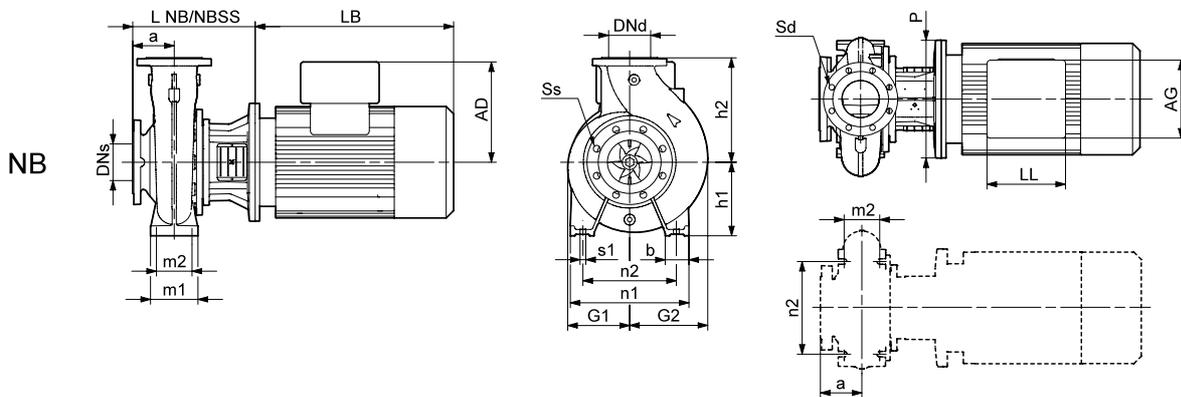
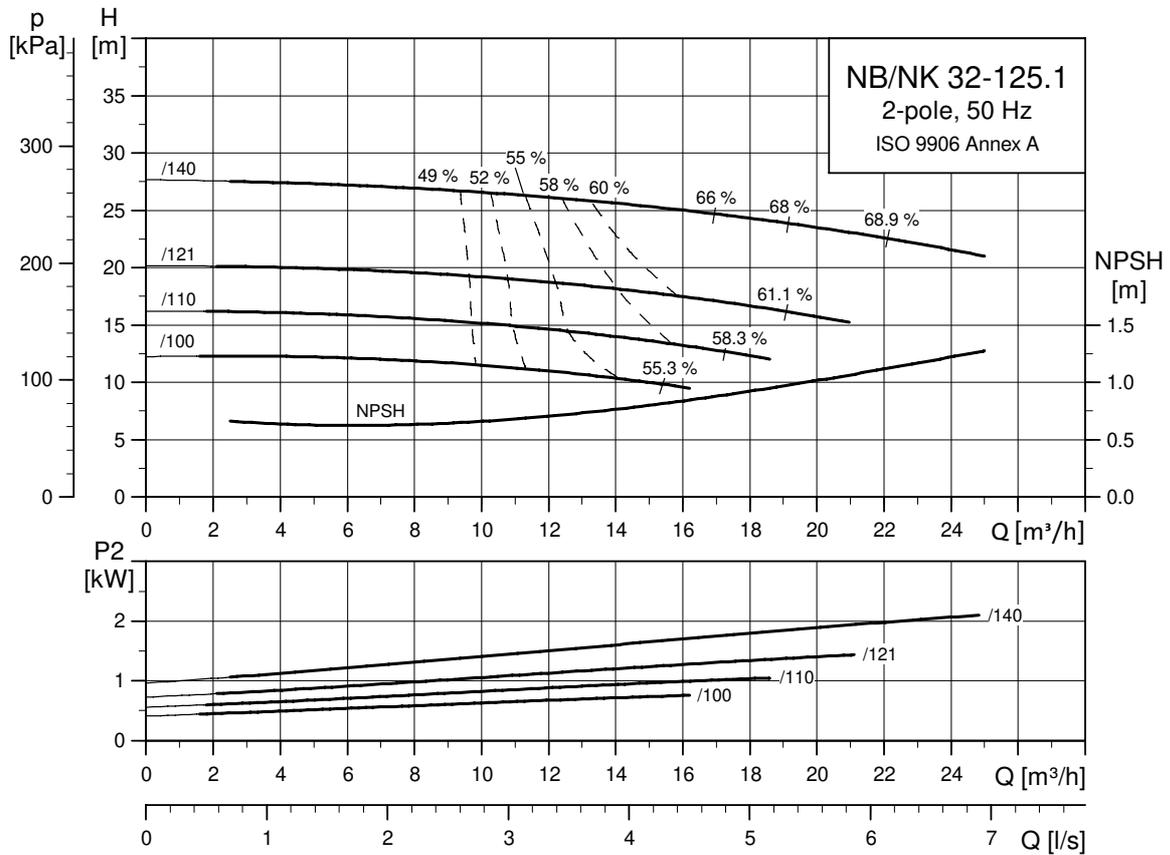
NB, NBE, NK, NKE

2-pole		4-pole		6-pole	
Pump type	See page	Pump type	See page	Pump type	See page
NB, NK 32-125.1	58	NB, NK 32-125.1	128	NB, NK 100-160	226
NB, NK 32-160.1	60	NB, NK 32-160.1	130	NB, NK 100-200	228
NB, NK 32-200.1	62	NB, NK 32-200.1	132	NB, NK 100-250	230
NB, NK 32-125	64	NB, NK 32-125	134	NB, NK 100-315	232
NB, NK 32-160	66	NB, NK 32-160	136	NB, NK 100-400	234
NB, NK 32-200	68	NB, NK 32-200	138	NB, NK 125-200	236
NB, NK 32-250	70	NB, NK 32-250	140	NB, NK 125-250	238
NB, NK 40-125	72	NB, NK 40-125	142	NB, NK 125-315	240
NB, NK 40-160	74	NB, NK 40-160	144	NB, NK 125-400	242
NB, NK 40-200	76	NB, NK 40-200	146	NB, NK 125-500	244
NB, NK 40-250	78	NB, NK 40-250	148	NB, NK 150-200	246
NB, NK 40-315	80	NB, NK 40-315	150	NB, NK 150-250	248
NB, NK 50-125	82	NB, NK 50-125	152	NB, NK 150-315	250
NB, NK 50-160	84	NB, NK 50-160	154	NB, NK 150-400	252
NB, NK 50-200	86	NB, NK 50-200	156	NB, NK 150-500	254
NB, NK 50-250	88	NB, NK 50-250	158	NK 200-400	256
NB, NK 50-315	90	NB, NK 50-315	160	NK 200-500	258
NB, NK 65-125	92	NB, NK 65-125	162	NK 250-310	260
NB, NK 65-160	94	NB, NK 65-160	164	NK 250-330	262
NB, NK 65-200	96	NB, NK 65-200	166	NK 250-400	264
NB, NK 65-250	98	NB, NK 65-250	168	NK 250-500	266
NB, NK 65-315	100	NB, NK 65-315	170	NK 300-360	268
NB, NK 80-160	102	NB, NK 80-160	172		
NB, NK 80-200	104	NB, NK 80-200	174		
NB, NK 80-250	106	NB, NK 80-250	176		
NB, NK 80-315	108	NB, NK 80-315	178		
NB, NK 100-160	110	NB, NK 80-400	180		
NB, NK 100-200	112	NB, NK 100-160	182		
NB, NK 100-250	114	NB, NK 100-200	184		
NB, NK 100-315	116	NB, NK 100-250	186		
NB, NK 125-200	118	NB, NK 100-315	188		
NB, NK 125-250	120	NB, NK 100-400	190		
NB, NK 125-315	122	NB, NK 125-200	192		
NB, NK 150-200	124	NB, NK 125-250	194		
NB, NK 150-250	126	NB, NK 125-315	196		
		NB, NK 125-400	198		
		NB, NK 125-500	200		
		NB, NK 150-200	202		
		NB, NK 150-250	204		
		NB, NK 150-315	206		
		NB, NK 150-400	208		
		NB, NK 150-500	210		
		NK 200-400	212		
		NK 200-500	214		
		NK 250-310	216		
		NK 250-330	218		
		NK 250-400	220		
		NK 250-500	222		
		NK 300-360	224		

Technical data/ performance curves

NB, NK 32-125.1
2-pole

NB, NK 2-pole



TM03 5081 4106

TM03 4180 4106

TM03 6005 4106

Technical data

NB, NK 32-125.1
2-pole

Pump type		32-125.1/100	32-125.1/110	32-125.1/121	32-125.1/140	
Motor type	Premium Motor	MG 80A-C	MG 90SA-D	MG 90SB-D	MG 90LC-D	
	E-Motor	-	-	MGE 90SB	MGE 90LC	
Common data NB/NK	P ₂	[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		4x19	4x19	4x19	4x19
Common data NK standard/ spacer coupling	Sd		4x19	4x19	4x19	4x19
	L NK	[mm]	715/811	765/861	775/871	815/911
	L NKE	[mm]	-/-	-/-	815/911	815/911
	Weight NK	[kg]	81/81	88/88	88/88	99/98
	Weight NKE	[kg]	-/-	-/-	96/95	107/106
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-
NK data	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-
	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	180 ²⁾	180	180
h4 ¹⁾	[mm]	286/-	290/-	290/347	290/347	
Base frame no.		2	2	2	3	
NB data	Design		A	A	A	A
	L NB	[mm]	226	226	226	226
	L NB SS	[mm]	-	-	-	-
	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 ¹⁾	[mm]	231/-	281/-	281/321	321/321
	AD ¹⁾	[mm]	109/-	110/-	110/167	110/167
	AG ¹⁾	[mm]	82/-	162/-	162/264	162/264
	LL ¹⁾	[mm]	82/-	103/-	103/260	103/260
	P	[mm]	200	200	200	200
	C	[mm]	-	-	-	-
	B	[mm]	-	-	-	-
	A	[mm]	-	-	-	-
K	[mm]	-	-	-	-	
Weight NB ¹⁾	[kg]	36/-	42/-	43/51	47/55	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	

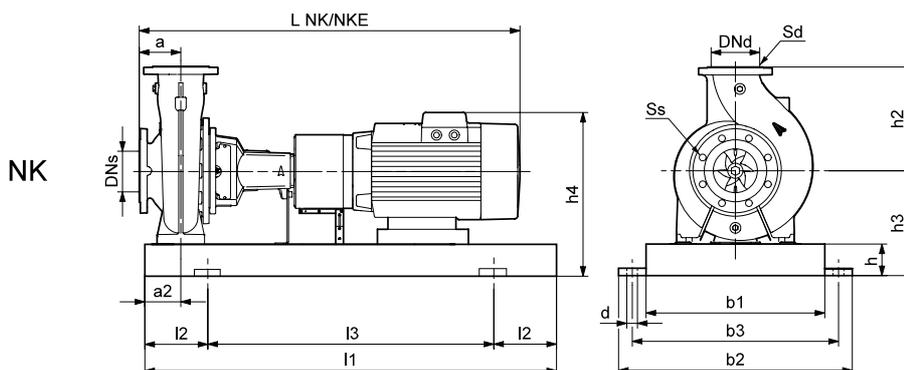
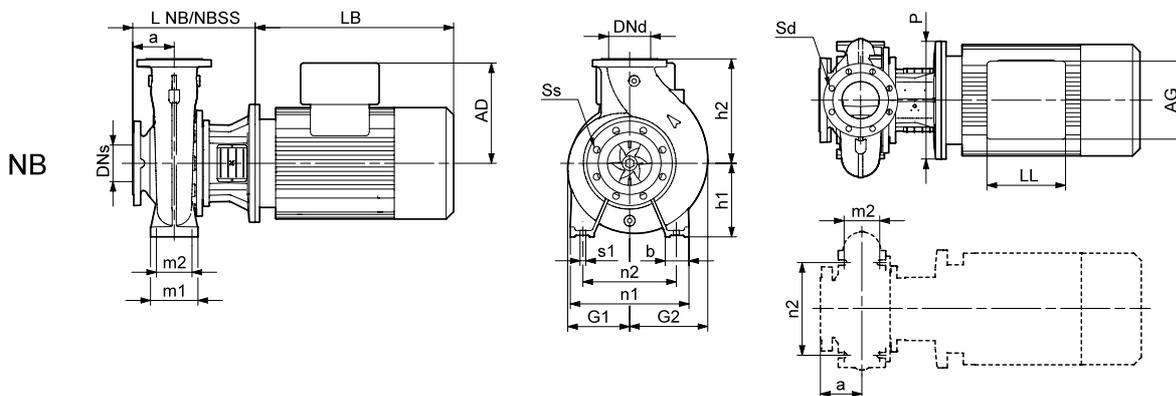
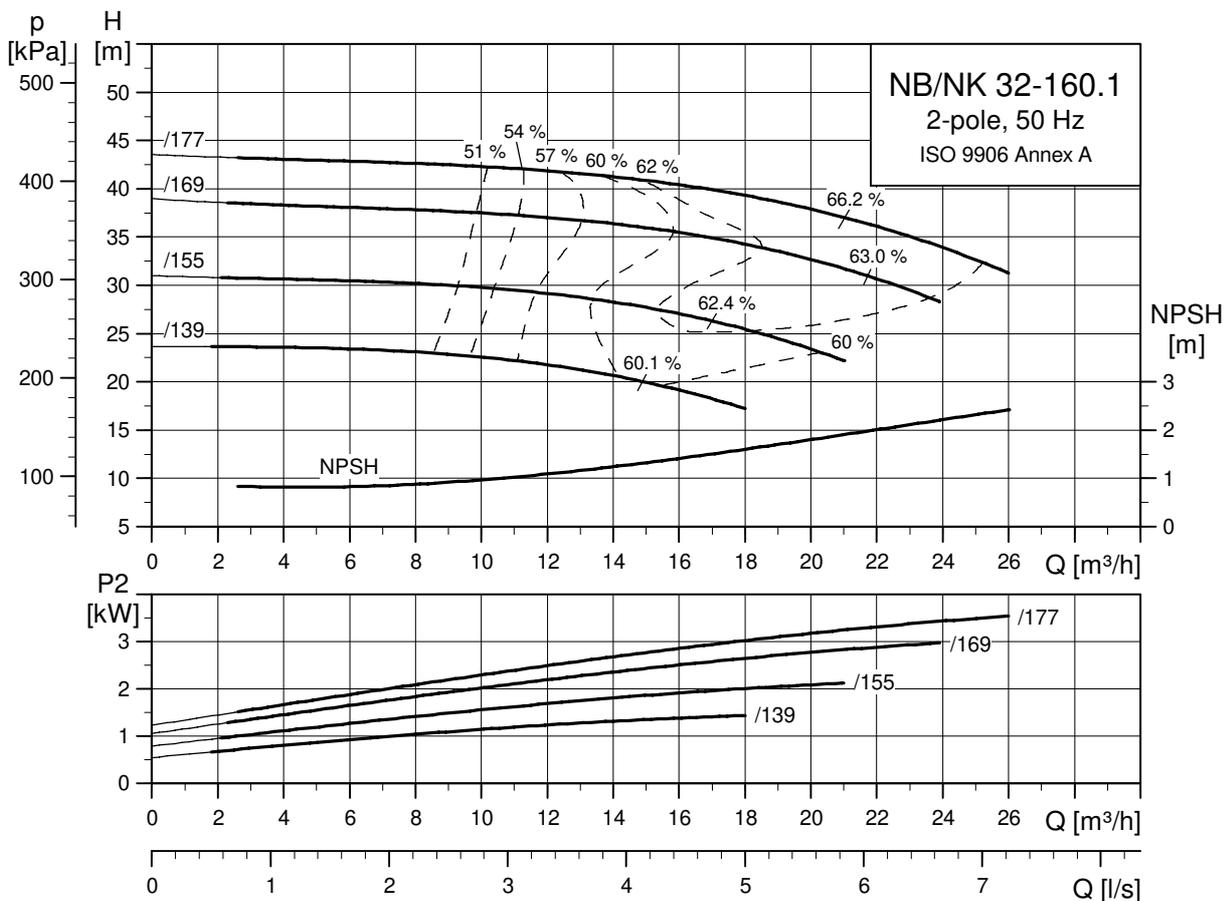
1) Dimension of pump with premium range motor/built-in frequency converter.

2) NK 32-125.1/110 fitted with an EFF2 motor has an H3 dimension of 177 mm.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 32-160.1
2-pole, 50 Hz
ISO 9906 Annex A



TM03 5082 4106

TM03 4180 4106

TM03 6005 4106

Technical data

NB, NK 32-160.1
2-pole

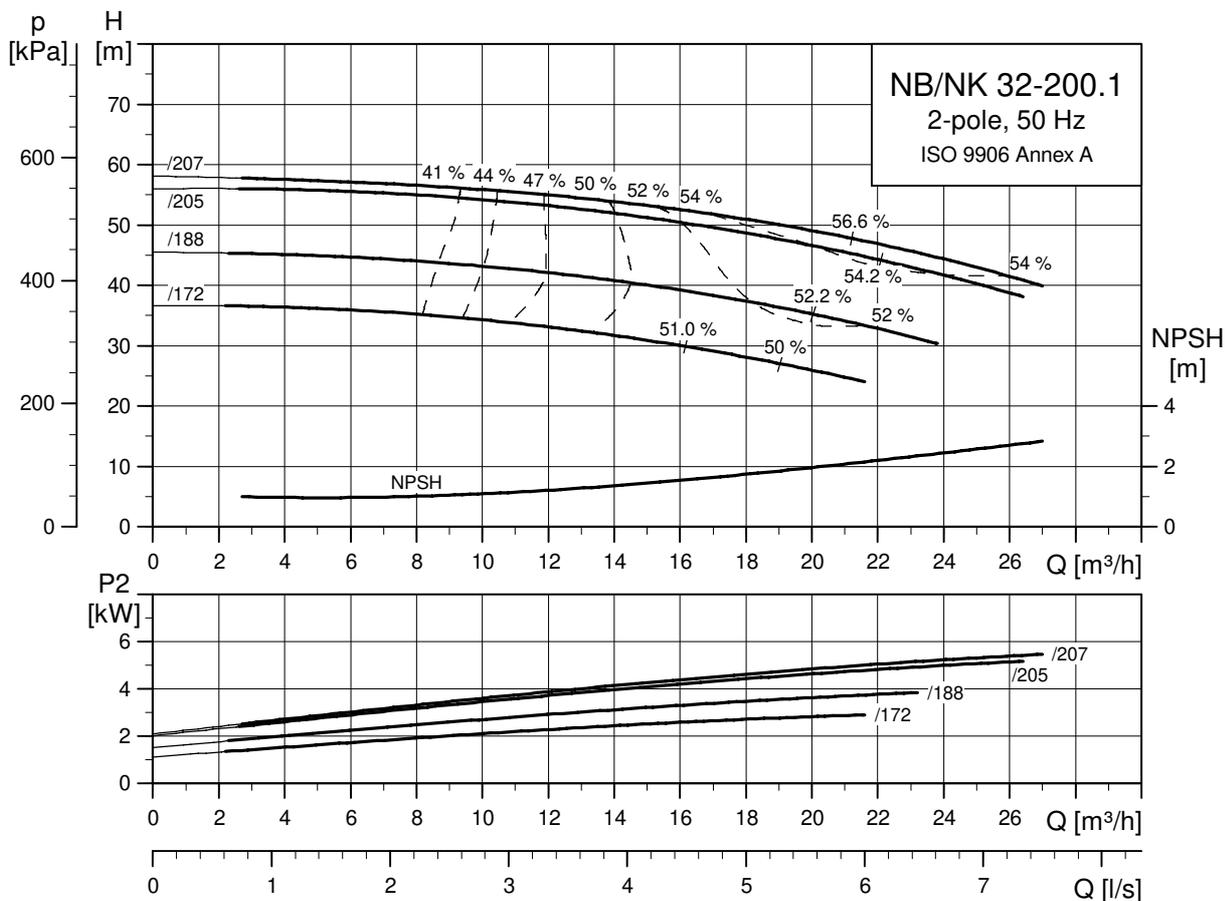
Pump type		32-160.1/139	32-160.1/155	32-160.1/169	32-160.1/177	
Motor type	Premium Motor	MG 90SB-D	MG 90LC-D	MG 100LC-D	MG 112MC-D	
	E-Motor	MGE 90SB	MGE 90LC	MGE 100LC	MGE 112MC	
Common data NB/NK	P ₂	[kW]	1.5	2.2	3	4
	PN	[bar]	16	16	16	16
	DNs	[mm]	50	50	50	50
	DNd	[mm]	32	32	32	32
	a	[mm]	80	80	80	80
	h2	[mm]	160	160	160	160
	Ss		4x19	4x19	4x19	4x19
Common data NK standard/ spacer coupling	Sd		4x19	4x19	4x19	
	L NK	[mm]	775/871	815/911	839/935	876/972
	L NKE	[mm]	815/911	815/911	839/935	876/972
	Weight NK	[kg]	111/111	115/115	122/120	138/136
	Weight NKE	[kg]	119/118	123/122	130/128	138/136
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-
NK data	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-
	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]	212	212	212	212
	h4 ¹⁾	[mm]	322/379	322/379	332/389	346/400
	Base frame no.		4	4	4	4
NB data	Design		A	A	A	A
	L NB	[mm]	226	226	254	254
	L NB SS	[mm]	-	-	-	-
	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 ¹⁾	[mm]	281/321	321/321	335/335	372/372
	AD ¹⁾	[mm]	110/167	110/167	120/177	134/188
	AG ¹⁾	[mm]	162/264	162/264	162/264	202/290
	LL ¹⁾	[mm]	103/260	103/260	103/260	103/300
	P	[mm]	200	200	250	250
	C	[mm]	-	-	-	-
	B	[mm]	-	-	-	-
A	[mm]	-	-	-	-	
K	[mm]	-	-	-	-	
Weight NB ¹⁾	[kg]	45/52	49/56	55/62	73/73	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	

1) Dimension of pump with premium range motor/built-in frequency converter.

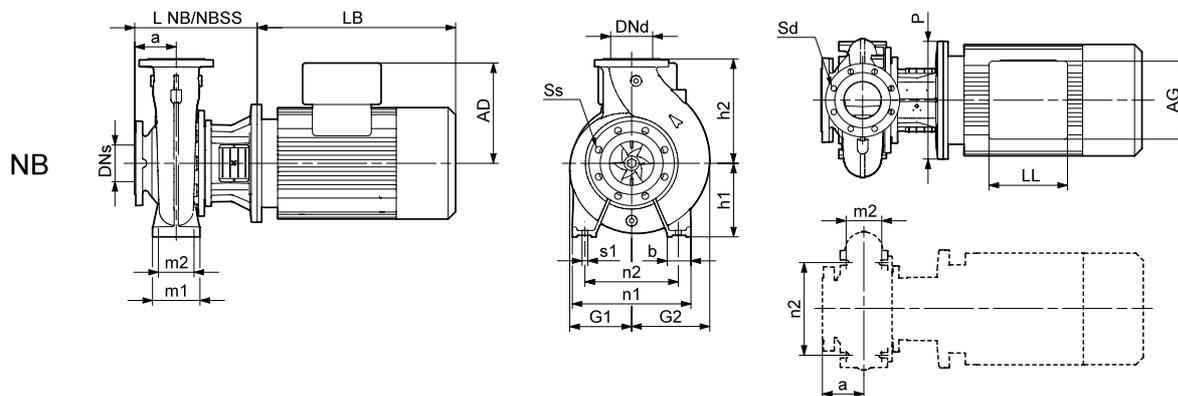
Note: For information about base frames, see page 270.

Performance curves

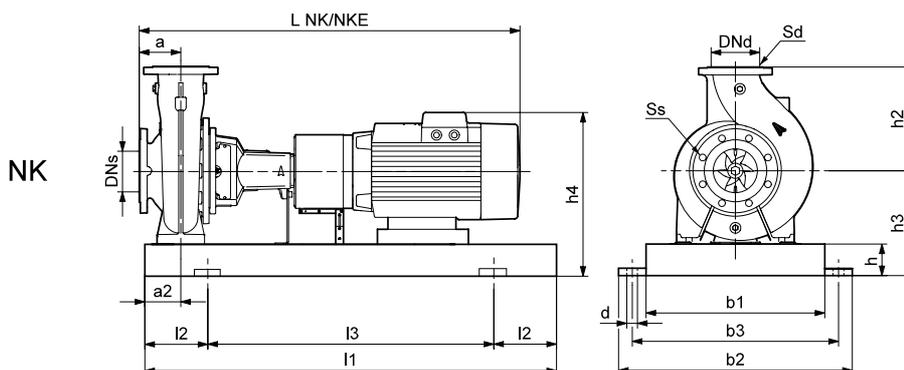
NB, NK 32-200.1
2-pole



TM03 5083 4106



TM03 4180 4106



TM03 6005 4106

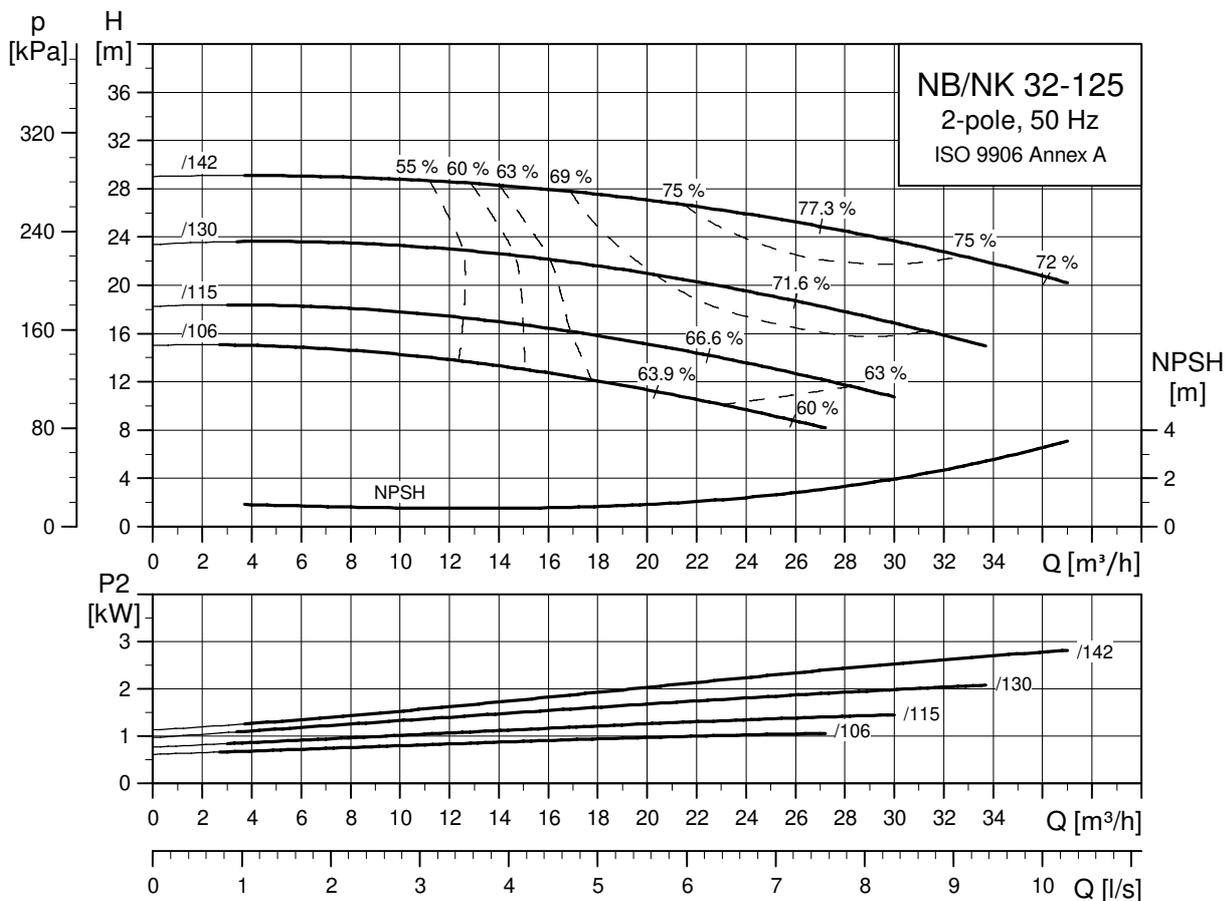
Pump type		32-200.1/172	32-200.1/188	32-200.1/205	32-200.1/207	
Motor type	Premium Motor	MG 100LC-D	MG 112MC-D	MG 132SC-D	MG 132SD-D	
	E-Motor	MGE 100LC	MGE 112MC	MGE 132SC	MGE 132SD	
Common data NB/NK	P ₂	[kW]	3	4	5.5	7.5
	PN	[bar]	16	16	16	16
	DNs	[mm]	50	50	50	50
	DNd	[mm]	32	32	32	32
	a	[mm]	80	80	80	80
	h2	[mm]	180	180	180	180
	Ss		4x19	4x19	4x19	4x19
Common data NK standard/ spacer coupling	Sd		4x19	4x19	4x19	4x19
	L NK	[mm]	839/935	876/972	921/1011	921/1011
	L NKE	[mm]	839/935	876/972	921/1011	921/1011
	Weight NK	[kg]	128/126	154/152	162/158	162/158
	Weight NKE	[kg]	136/134	154/152	168/165	171/168
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-
NK data	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-
	I1	[mm]	1000	1000	1120	1120
	I2	[mm]	170	170	190	190
	I3	[mm]	660	660	740	740
	b1	[mm]	340	340	380	380
	b2	[mm]	450	450	490	490
	b3	[mm]	400	400	440	440
	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 ¹⁾	[mm]	360/417	374/428	374/428	374/428
	Base frame no.		4	4	5	5
NB data	Design		A	A	A	A
	L NB	[mm]	254	254	293	293
	L NB SS	[mm]	-	-	-	-
	h1	[mm]	160	160	160	160
	G1	[mm]	135	135	135	135
	G2	[mm]	137	137	137	137
	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 ¹⁾	[mm]	335/335	372/372	391/391	391/391
	AD ¹⁾	[mm]	120/177	134/188	134/188	134/188
	AG ¹⁾	[mm]	162/264	202/290	202/290	202/290
	LL ¹⁾	[mm]	103/260	103/300	103/300	103/300
	P	[mm]	250	250	300	300
	C	[mm]	-	-	-	-
	B	[mm]	-	-	-	-
A	[mm]	-	-	-	-	
K	[mm]	-	-	-	-	
Weight NB ¹⁾	[kg]	62/69	80/80	85/92	85/95	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	

1) Dimension of pump with premium range motor/built-in frequency converter.

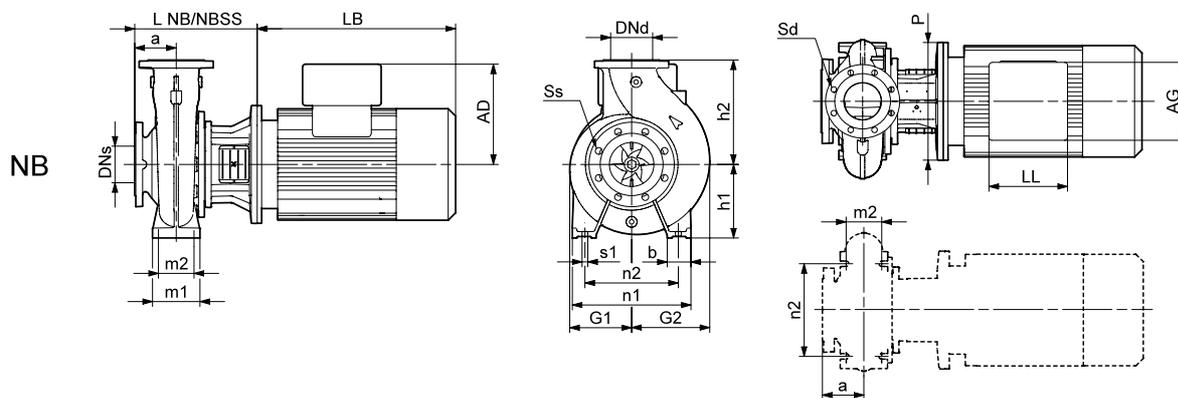
Note: For information about base frames, see page 270.

Performance curves

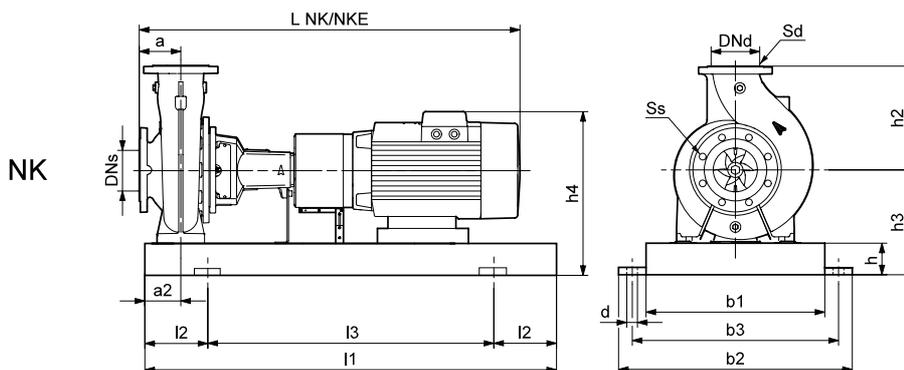
NB, NK 32-125
2-pole
ISO 9906 Annex A



TM03 5084 4106



TM03 4180 4106



TM03 6005 4106

Pump type		32-125/106	32-125/115	32-125/130	32-125/142	
Motor type	Premium Motor	MG 90SA-D	MG 90SB-D	MG 90LC-D	MG 100LC-D	
	E-Motor	-	MGE 90SB	MGE 90LC	MGE 100LC	
Common data NB/NK	P ₂	[kW]	1.1	1.5	2.2	3
	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		4x19	4x19	4x19	4x19
Common data NK standard/ spacer coupling	Sd		4x19	4x19	4x19	
	L NK	[mm]	765/861	775/871	815/911	839/935
	L NKE	[mm]	-/-	815/911	815/911	839/935
	Weight NK	[kg]	89/88	89/88	100/99	103/101
	Weight NKE	[kg]	-/-	96/96	107/107	111/109
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-
NK data	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-
	I1	[mm]	800	800	900	900
	I2	[mm]	130	130	150	150
	I3	[mm]	540	540	600	600
	b1	[mm]	270	270	300	300
	b2	[mm]	360	360	390	390
	b3	[mm]	320	320	345	345
	d	[mm]	19	19	19	19
	a2	[mm]	60	60	60	60
	h	[mm]	65	65	65	65
	h3	[mm]	180 ³⁾	180	180	177
NB data	h4 ¹⁾	[mm]	290/-	290/347	290/347	297/354
	Base frame no.		2	2	3	3
	Design		A	A	A	A ²⁾
	L NB	[mm]	226	226	226	254
	L NB SS	[mm]	-	-	-	-
	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 ¹⁾	[mm]	281/-	281/321	321/321	335/335
	AD ¹⁾	[mm]	110/-	110/167	110/167	120/177
	AG ¹⁾	[mm]	162/-	162/264	162/264	162/264
	LL ¹⁾	[mm]	103/-	103/260	103/260	103/260
P	[mm]	200	200	200	250	
C	[mm]	-	-	-	-	
B	[mm]	-	-	-	-	
A	[mm]	-	-	-	-	
K	[mm]	-	-	-	-	
Weight NB ¹⁾	[kg]	43/-	44/51	48/55	54/62	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	

1) Dimension of pump with premium range motor/built-in frequency converter.

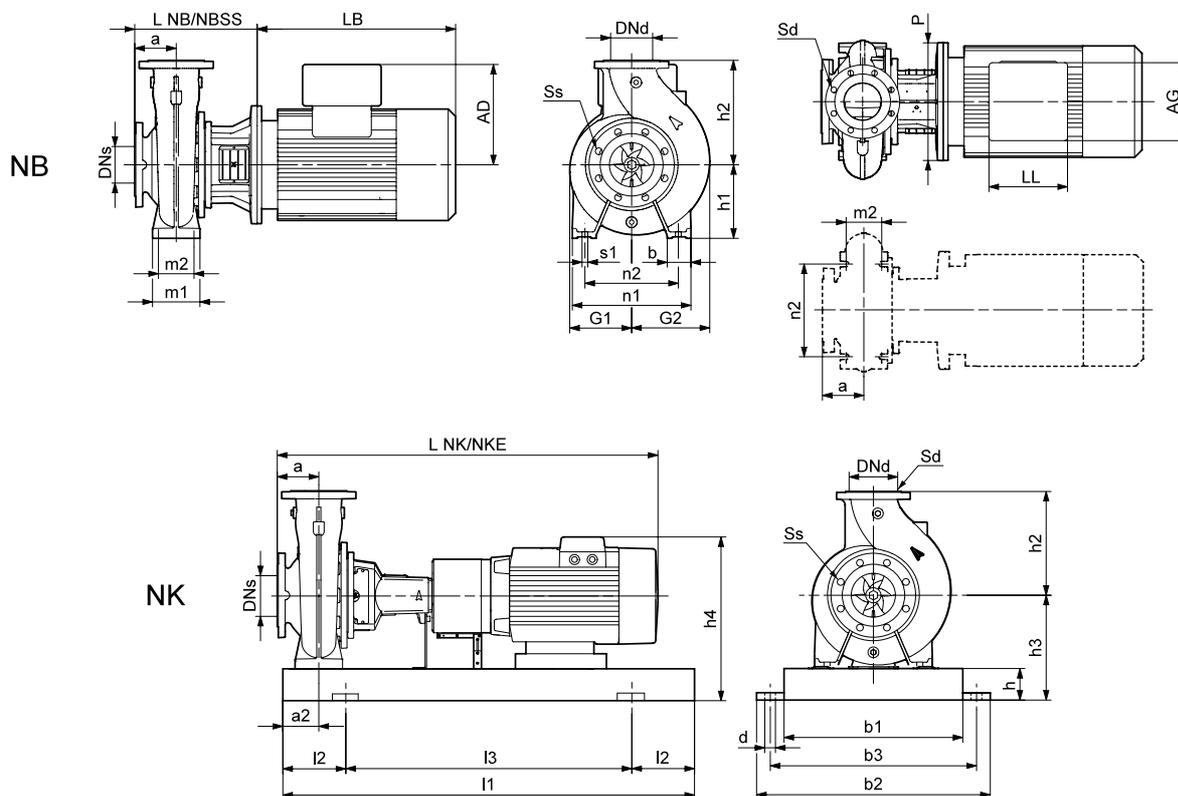
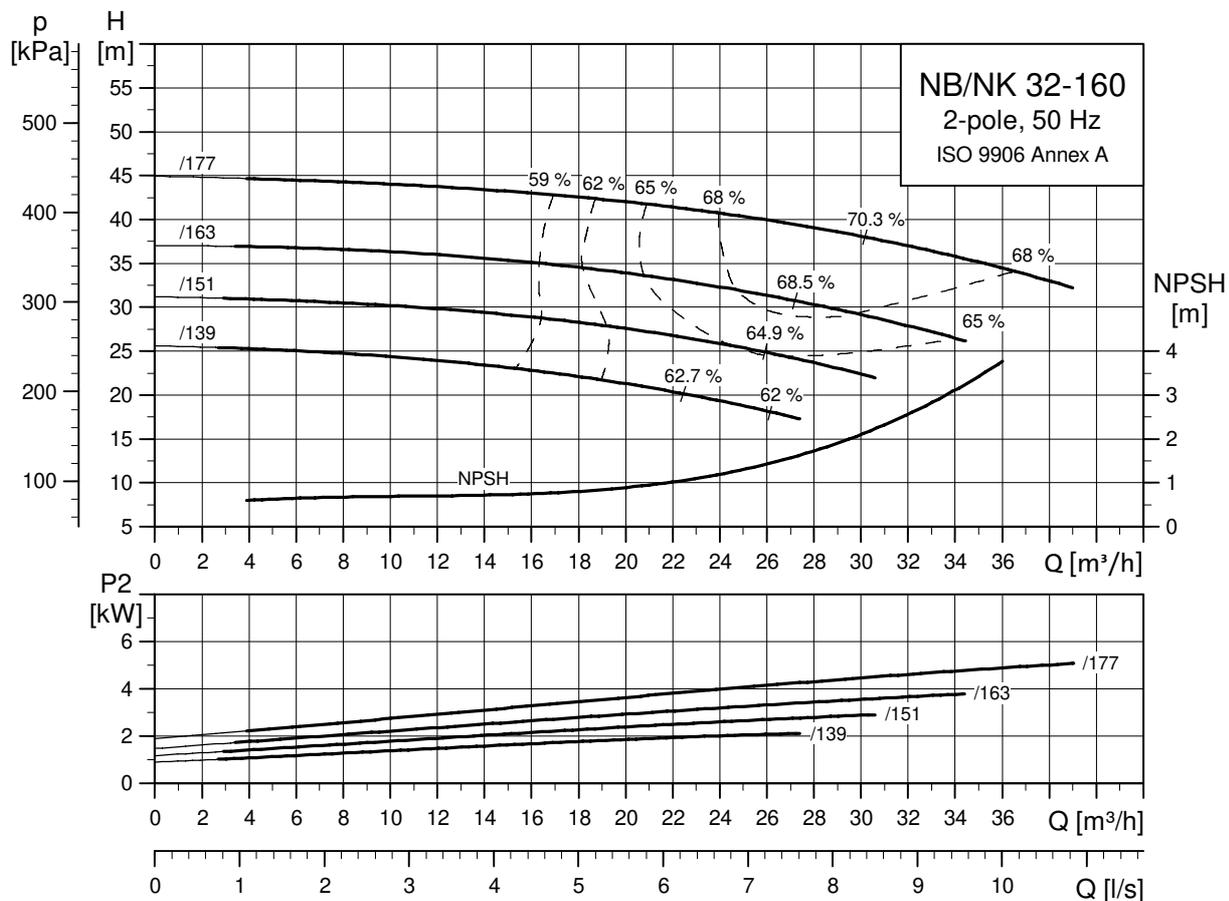
2) Support blocks are needed because of the P, h1 and H dimensions.

3) NK 32-125/106 fitted with an EFF2 motor has an H3 dimension of 177 mm.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 32-160
2-pole



TM03 5085 4106

TM03 4180 4106

TM03 6005 4106

Pump type		32-160/139	32-160/151	32-160/163	32-160/177	
Motor type	Premium Motor	MG 90LC-D	MG 100LC-D	MG 112MC-D	MG 132SC-D	
	E-Motor	MGE 90LC	MGE 100LC	MGE 112MC	MGE 132SC	
Common data NB/NK	P ₂	[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		4x19	4x19	4x19	4x19
Common data NK standard/ spacer coupling	Sd		4x19	4x19	4x19	4x19
	L NK	[mm]	815/911	839/935	876/972	921/1011
	L NKE	[mm]	815/911	839/935	876/972	921/1011
	Weight NK	[kg]	116/115	123/121	139/137	148/145
	Weight NKE	[kg]	124/123	131/129	139/137	155/152
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-
NK data	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-
	I1	[mm]	1000	1000	1000	1120
	I2	[mm]	170	170	170	190
	I3	[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 ¹⁾	[mm]	322/379	332/389	346/400	349/403
	Base frame no.		4	4	4	5
NB data	Design		A	A	A	A ²⁾
	L NB	[mm]	226	254	254	293
	L NB SS	[mm]	-	-	-	-
	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 ¹⁾	[mm]	321/321	335/335	372/372	391/391
	AD ¹⁾	[mm]	110/167	120/177	134/188	134/188
	AG ¹⁾	[mm]	162/264	162/264	202/290	202/290
	LL ¹⁾	[mm]	103/260	103/260	103/300	103/300
	P	[mm]	200	250	250	300
	C	[mm]	-	-	-	-
	B	[mm]	-	-	-	-
A	[mm]	-	-	-	-	
K	[mm]	-	-	-	-	
Weight NB ¹⁾	[kg]	50/57	56/63	74/74	79/86	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	

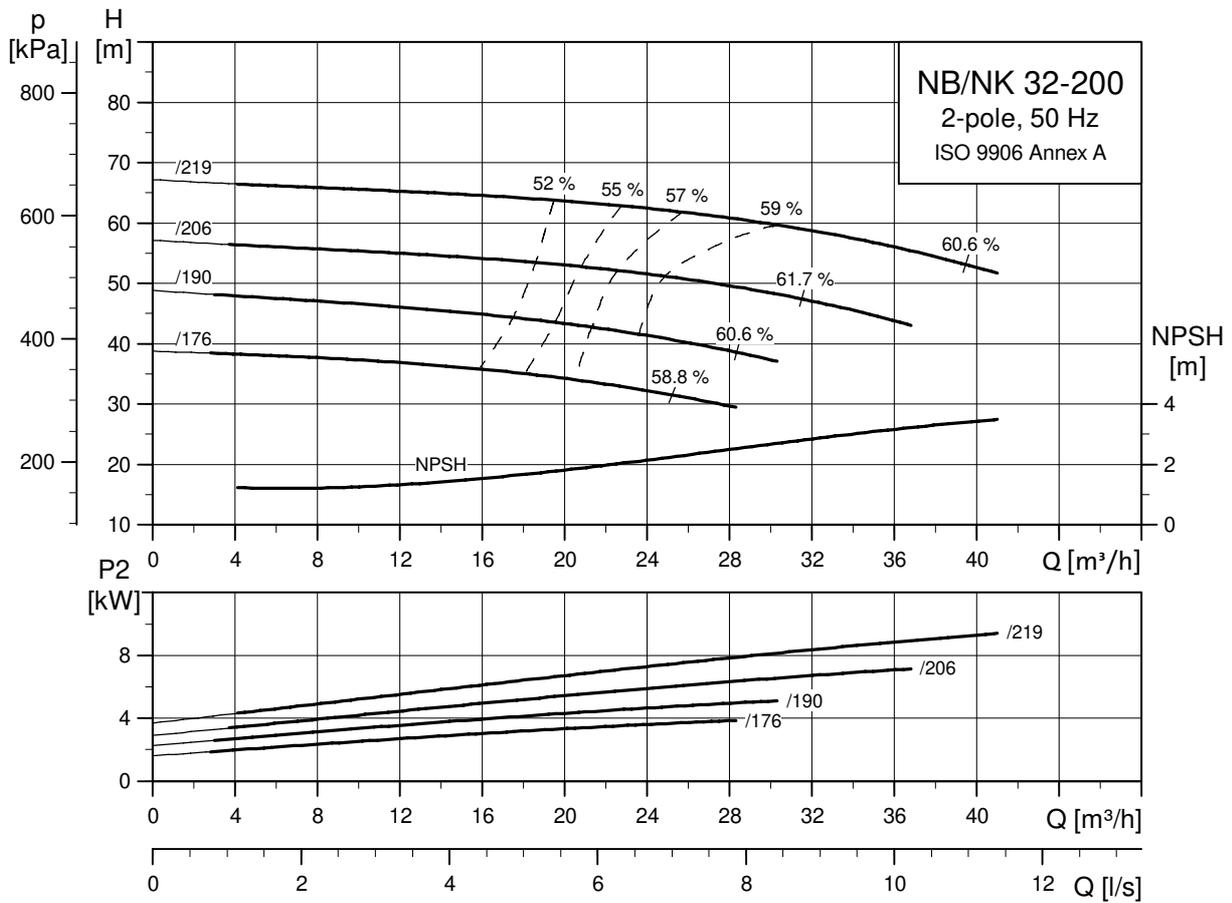
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h1 and H dimensions.

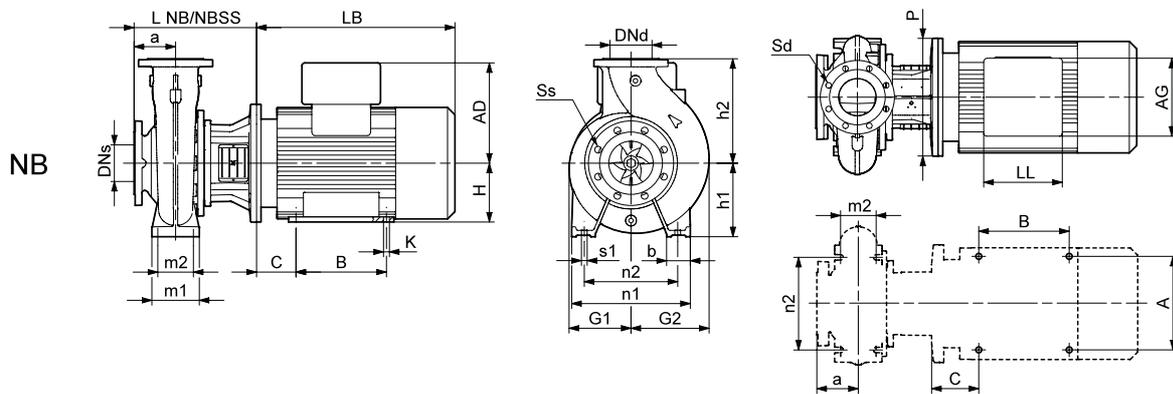
Note: For information about base frames, see page 270.

Performance curves

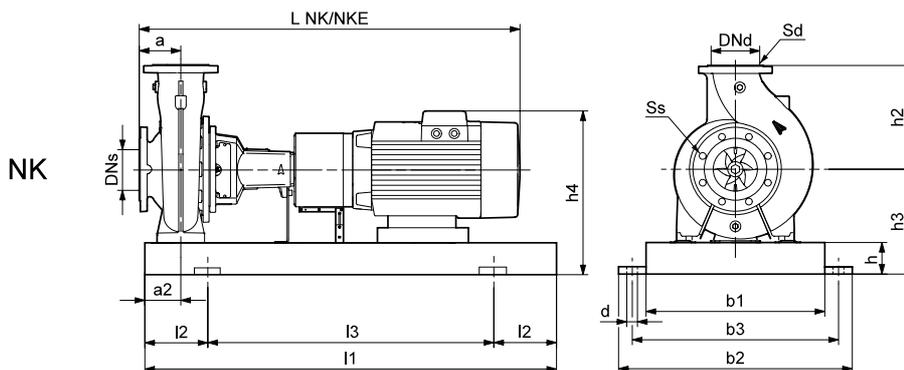
NB, NK 32-200
2-pole



TM03 5086 4106



TM03 4182 4106



TM03 6005 4106

Pump type		32-200/176	32-200/190	32-200/206	32-200/219	
Motor type	Premium Motor	MG 112MC-D	MG 132SC-D	MG 132SD-D	Siemens 160M	
	E-Motor	MGE 112MC	MGE 132SC	MGE 132SD	MMGE 160M	
Common data NB/NK	P ₂	[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
	h ₂	[mm]	180	180	180	180
	Ss		4x19	4x19	4x19	4x19
Common data NK standard/ spacer coupling	Sd		4x19	4x19	4x19	4x19
	L NK	[mm]	876/972	921/1011	921/1011	1045/1128
	L NKE	[mm]	876/972	921/1011	921/1011	1016/1099
	Weight NK	[kg]	154/152	162/159	162/159	207/201
	Weight NKE	[kg]	155/152	169/165	172/168	255/249
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-
NK data	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-
	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
	h ₄ ¹⁾	[mm]	374/428	374/428	374/428	442/604
	Base frame no.		4	5	5	6
NB data	Design		A	A	A	C ²⁾
	L NB	[mm]	254	293	293	323
	L NB SS	[mm]	-	-	-	-
	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 ¹⁾	[mm]	372/372	391/391	391/391	478/449
	AD ¹⁾	[mm]	134/188	134/188	134/188	197/359
	AG ¹⁾	[mm]	202/290	202/290	202/290	165/296
	LL ¹⁾	[mm]	103/300	103/300	103/300	165/410
	P	[mm]	250	300	300	350
	C	[mm]	-	-	-	108
	B	[mm]	-	-	-	210
	A	[mm]	-	-	-	254
K	[mm]	-	-	-	15	
Weight NB ¹⁾	[kg]	80/80	85/92	85/95	123/171	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	

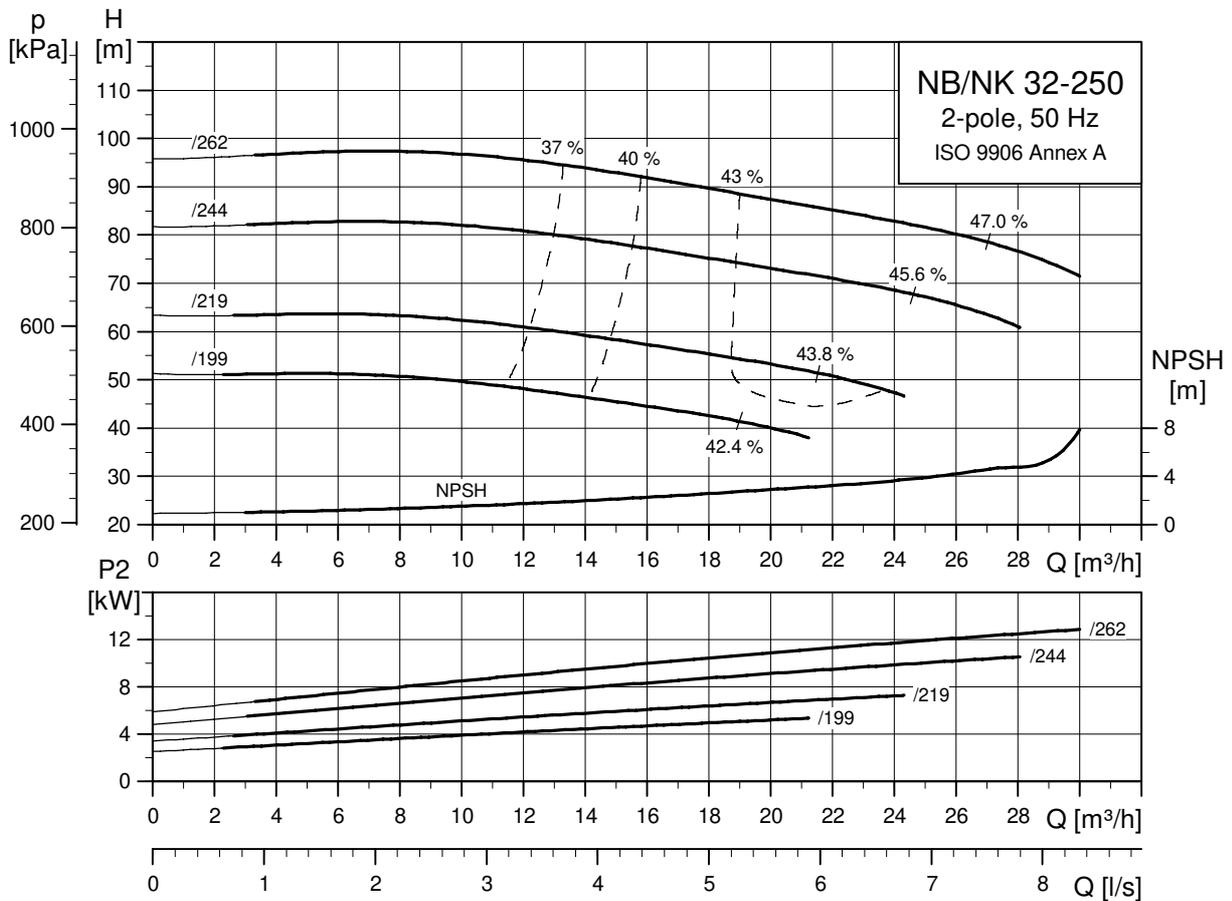
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h1 and H dimensions.

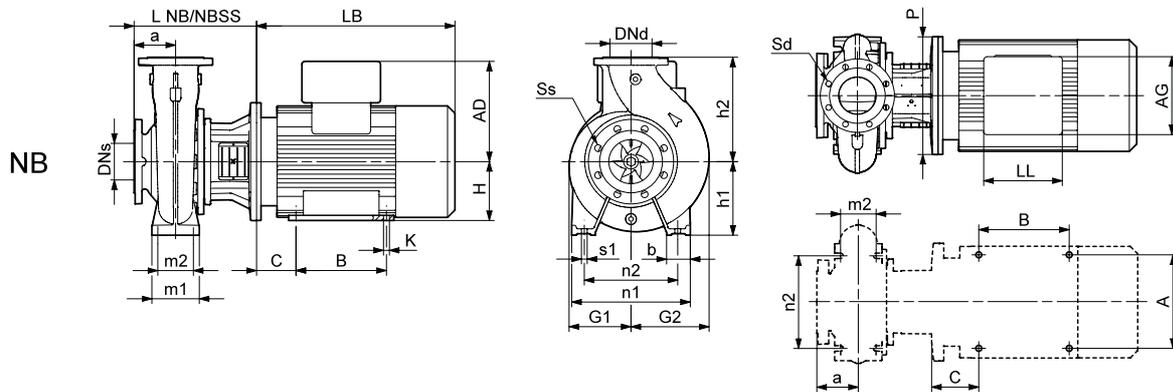
Note: For information about base frames, see page 270.

Performance curves

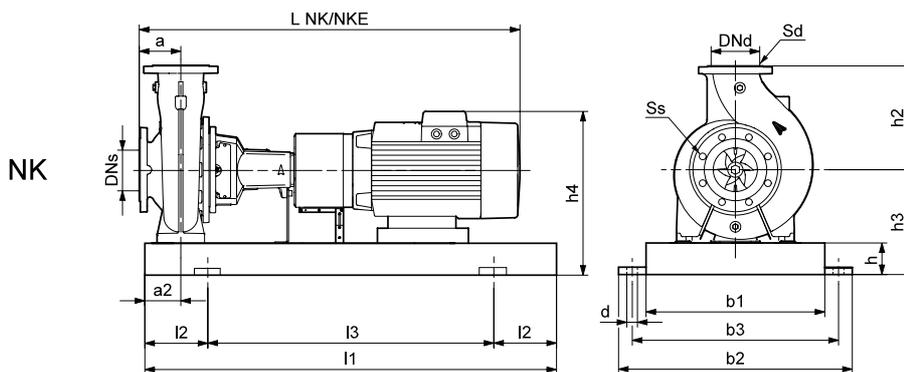
NB, NK 32-250
2-pole



TM03 5087 4106



TM03 4182 4106



TM03 6005 4106

Pump type		32-250/199	32-250/219	32-250/244	32-250/262	
Motor type	Premium Motor	MG 132SC-D	MG 132SD-D	Siemens 160M	Siemens 160M	
	E-Motor	MGE 132SC	MGE 132SD	MMGE 160M	MMGE 160MX	
Common data NB/NK	P ₂	[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
	h ₂	[mm]	225	225	225	225
	Ss		4x19	4x19	4x19	4x19
Common data NK standard/ spacer coupling	Sd		4x19	4x19	4x19	4x19
	L NK	[mm]	941/1031	941/1031	1065/1148	1065/1148
	L NKE	[mm]	941/1031	941/1031	1036/1119	1048/1131
	Weight NK	[kg]	176/173	176/173	221/215	230/224
	Weight NKE	[kg]	183/180	186/183	269/263	298/292
	Weight NK SS	[kg]	180/177	180/177	225/219	234/228
NK data	Weight NKE SS	[kg]	187/184	190/187	273/267	302/296
	l ₁	[mm]	1120	1120	1250	1250
	l ₂	[mm]	190	190	205	205
	l ₃	[mm]	740	740	840	840
	b ₁	[mm]	380	380	430	430
	b ₂	[mm]	490	490	540	540
	b ₃	[mm]	440	440	490	490
	d	[mm]	24	24	24	24
	a ₂	[mm]	75	75	75	75
	h	[mm]	80	80	80	80
	h ₃	[mm]	260	260	260	260
	h ₄ ¹⁾	[mm]	394/448	394/448	457/619	457/637
	Base frame no.		5	5	6	6
NB data	Design		A	A	C ²⁾	C ²⁾
	L NB	[mm]	313	313	343	343
	L NB SS	[mm]	313	313	343	343
	h ₁	[mm]	180	180	180	180
	G ₁	[mm]	162	162	162	162
	G ₂	[mm]	164	164	164	164
	m ₁	[mm]	125	125	125	125
	m ₂	[mm]	95	95	95	95
	n ₁	[mm]	320	320	320	320
	n ₂	[mm]	250	250	250	250
	b	[mm]	65	65	65	65
	s ₁	[mm]	M12	M12	M12	M12
	H	[mm]	-	-	160	160
	LB ¹⁾	[mm]	391/391	391/391	478/449	478/461
	AD ¹⁾	[mm]	134/188	134/188	197/359	197/377
	AG ¹⁾	[mm]	202/290	202/290	165/296	165/296
	LL ¹⁾	[mm]	103/300	103/300	165/410	165/410
	P	[mm]	300	300	350	350
	C	[mm]	-	-	108	108
	B	[mm]	-	-	210	210
	A	[mm]	-	-	254	254
K	[mm]	-	-	15	15	
Weight NB ¹⁾	[kg]	97/104	97/107	135/183	144/212	
Weight NB SS ¹⁾	[kg]	101/108	101/111	140/188	149/217	

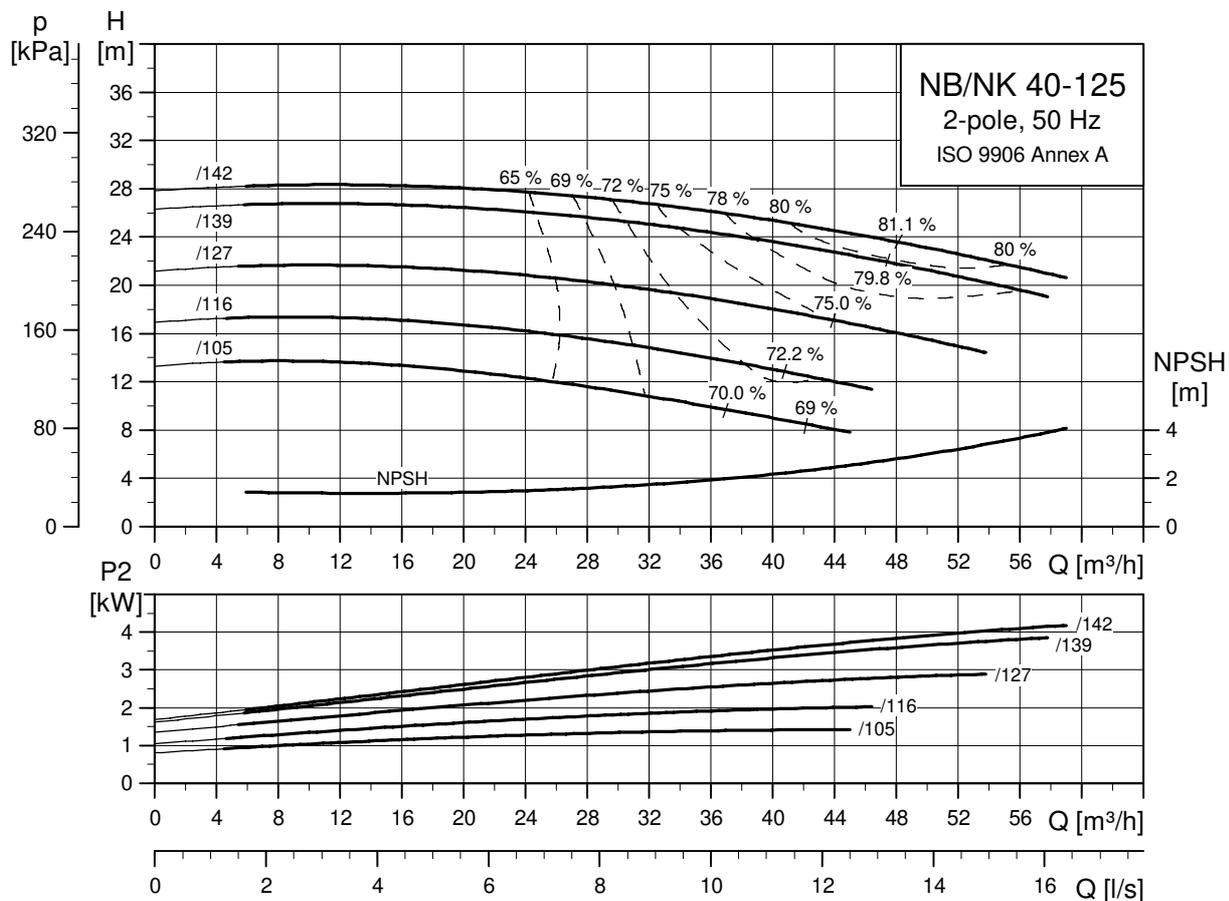
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

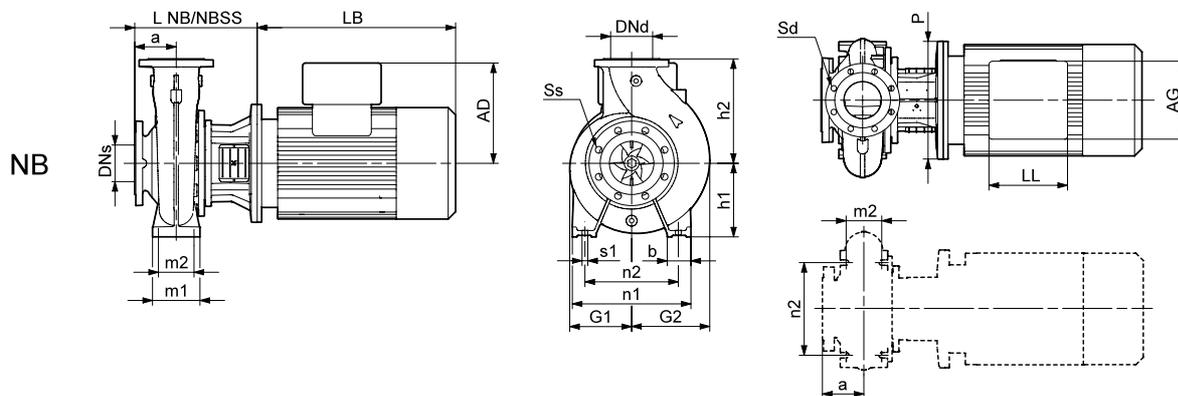
Note: For information about base frames, see page 270.

Performance curves

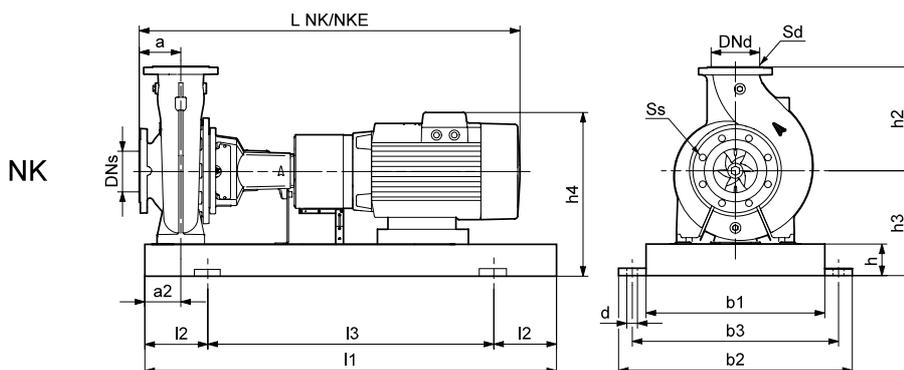
NB, NK 40-125
2-pole, 50 Hz



TM03 5088 4106



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	Premium Motor	MG 90SB-D	MG 90LC-D	MG 100LC-D	MG 112MC-D	MG 132SC-D	
	E-Motor	MGE 90SB	MGE 90LC	MGE 100LC	MGE 112MC	MGE 132SC	
Common data NB/NK	P ₂	[kW]	1.5	2.2	3	4	5.5
	PN	[bar]	16	16	16	16	16
	DNs	[mm]	65	65	65	65	65
	DNd	[mm]	40	40	40	40	40
	a	[mm]	80	80	80	80	80
	h ₂	[mm]	140	140	140	140	140
	Ss		4x19	4x19	4x19	4x19	4x19
Common data NK standard/ spacer coupling	Sd		4x19	4x19	4x19	4x19	
	L NK	[mm]	775/871	815/911	839/935	876/972	921/1011
	L NKE	[mm]	815/911	815/911	839/935	876/972	921/1011
	Weight NK	[kg]	98/98	102/102	106/104	136/134	153/150
	Weight NKE	[kg]	106/105	110/109	114/112	136/134	160/157
	Weight NK SS	[kg]	99/98	103/102	107/105	137/135	154/151
NK data	Weight NKE SS	[kg]	107/106	111/110	115/113	137/135	161/158
	l ₁	[mm]	900	900	900	1000	1120
	l ₂	[mm]	150	150	150	170	190
	l ₃	[mm]	600	600	600	660	740
	b ₁	[mm]	300	300	300	340	380
	b ₂	[mm]	390	390	390	450	490
	b ₃	[mm]	345	345	345	400	440
	d	[mm]	19	19	19	24	24
	a ₂	[mm]	60	60	60	60	60
	h	[mm]	65	65	65	80	80
	h ₃	[mm]	180	180	177	195	217
	h ₄ ¹⁾	[mm]	290/347	290/347	297/354	329/383	351/405
	Base frame no.		3	3	3	4	5
NB data	Design		A	A	A ²⁾	A ²⁾	A ²⁾
	L NB	[mm]	226	226	254	254	293
	L NB SS	[mm]	253	253	273	273	293
	h ₁	[mm]	112	112	112	112	112
	G ₁	[mm]	117	117	117	117	117
	G ₂	[mm]	118	118	118	118	118
	m ₁	[mm]	100	100	100	100	100
	m ₂	[mm]	70	70	70	70	70
	n ₁	[mm]	210	210	210	210	210
	n ₂	[mm]	160	160	160	160	160
	b	[mm]	50	50	50	50	50
	s ₁	[mm]	M12	M12	M12	M12	M12
	H	[mm]	-	-	-	-	-
	LB ¹⁾	[mm]	281/321	321/321	335/335	372/372	391/391
	AD ¹⁾	[mm]	110/167	110/167	120/177	134/188	134/188
	AG ¹⁾	[mm]	162/264	162/264	162/264	202/290	202/290
	LL ¹⁾	[mm]	103/260	103/260	103/260	103/300	103/300
	P	[mm]	200	200	250	250	300
	C	[mm]	-	-	-	-	-
	B	[mm]	-	-	-	-	-
	A	[mm]	-	-	-	-	-
	K	[mm]	-	-	-	-	-
Weight NB ¹⁾	[kg]	47/54	51/58	57/64	75/75	80/87	
Weight NB SS ¹⁾	[kg]	50/57	54/61	60/68	78/79	82/89	

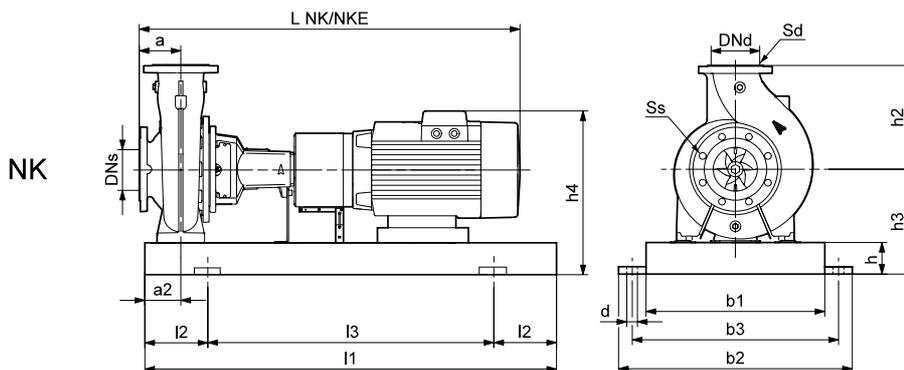
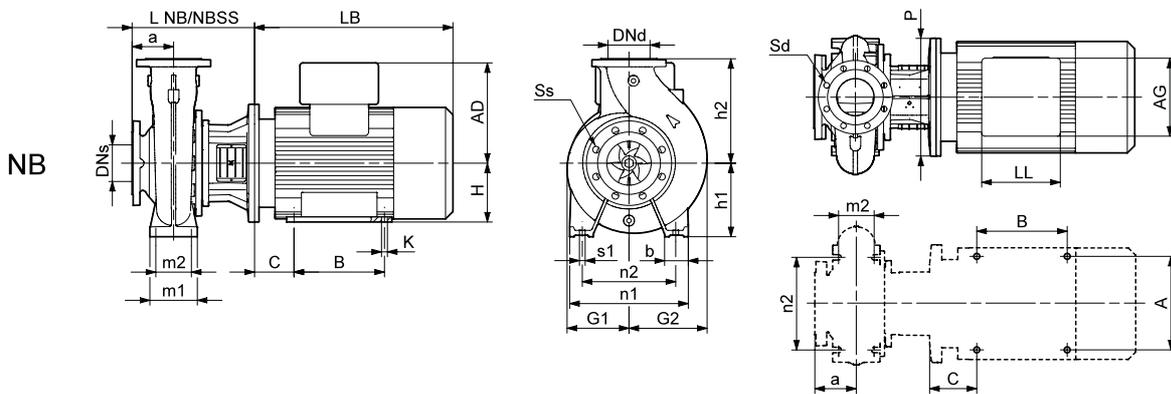
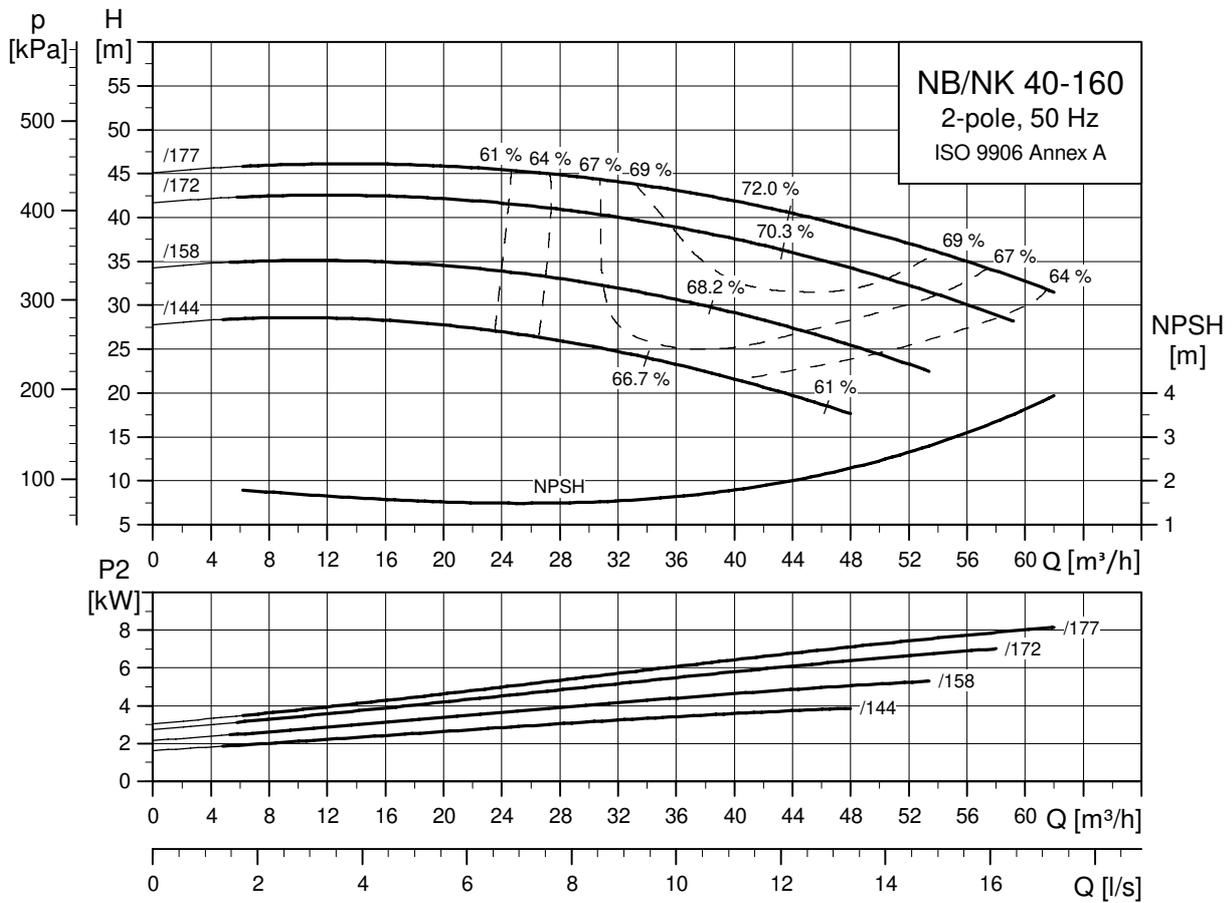
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 40-160
2-pole



TM03 5089 4106

TM03 4182 4106

TM03 6005 4106

Pump type		40-160/144	40-160/158	40-160/172	40-160/177	
Motor type	Premium Motor	MG 112MC-D	MG 132SC-D	MG 132SD-D	Siemens 160M	
	E-Motor	MGE 112MC	MGE 132SC	MGE 132SD	MMGE 160M	
Common data NB/NK	P ₂	[kW]	4	5.5	7.5	11
	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]	160	160	160	160
	Ss		4x19	4x19	4x19	4x19
Common data NK standard/ spacer coupling	Sd		4x19	4x19	4x19	4x19
	L NK	[mm]	876/972	921/1011	921/1011	1045/1128
	L NKE	[mm]	876/972	921/1011	921/1011	1016/1099
	Weight NK	[kg]	141/139	150/147	150/147	205/200
	Weight NKE	[kg]	141/139	157/154	160/157	253/248
NK data	Weight NK SS	[kg]	142/140	152/148	152/148	207/201
	Weight NKE SS	[kg]	142/140	158/155	162/158	255/249
	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]	212	215	215	245
	h4 ¹⁾	[mm]	346/400	349/403	349/403	442/604
Base frame no.		4	5	5	6	
NB data	Design		A	A ²⁾	A ²⁾	C ²⁾
	L NB	[mm]	254	293	293	323
	L NB SS	[mm]	273	293	293	323
	h1	[mm]	132	132	132	132
	G1	[mm]	117	117	117	117
	G2	[mm]	133	133	133	133
	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 ¹⁾	[mm]	372/372	391/391	391/391	478/449
	AD ¹⁾	[mm]	134/188	134/188	134/188	197/359
	AG ¹⁾	[mm]	202/290	202/290	202/290	165/296
	LL ¹⁾	[mm]	103/300	103/300	103/300	165/410
	P	[mm]	250	300	300	350
	C	[mm]	-	-	-	108
	B	[mm]	-	-	-	210
	A	[mm]	-	-	-	254
	K	[mm]	-	-	-	15
	Weight NB ¹⁾	[kg]	76/76	81/88	81/91	119/167
Weight NB SS ¹⁾	[kg]	80/80	84/90	84/93	122/170	

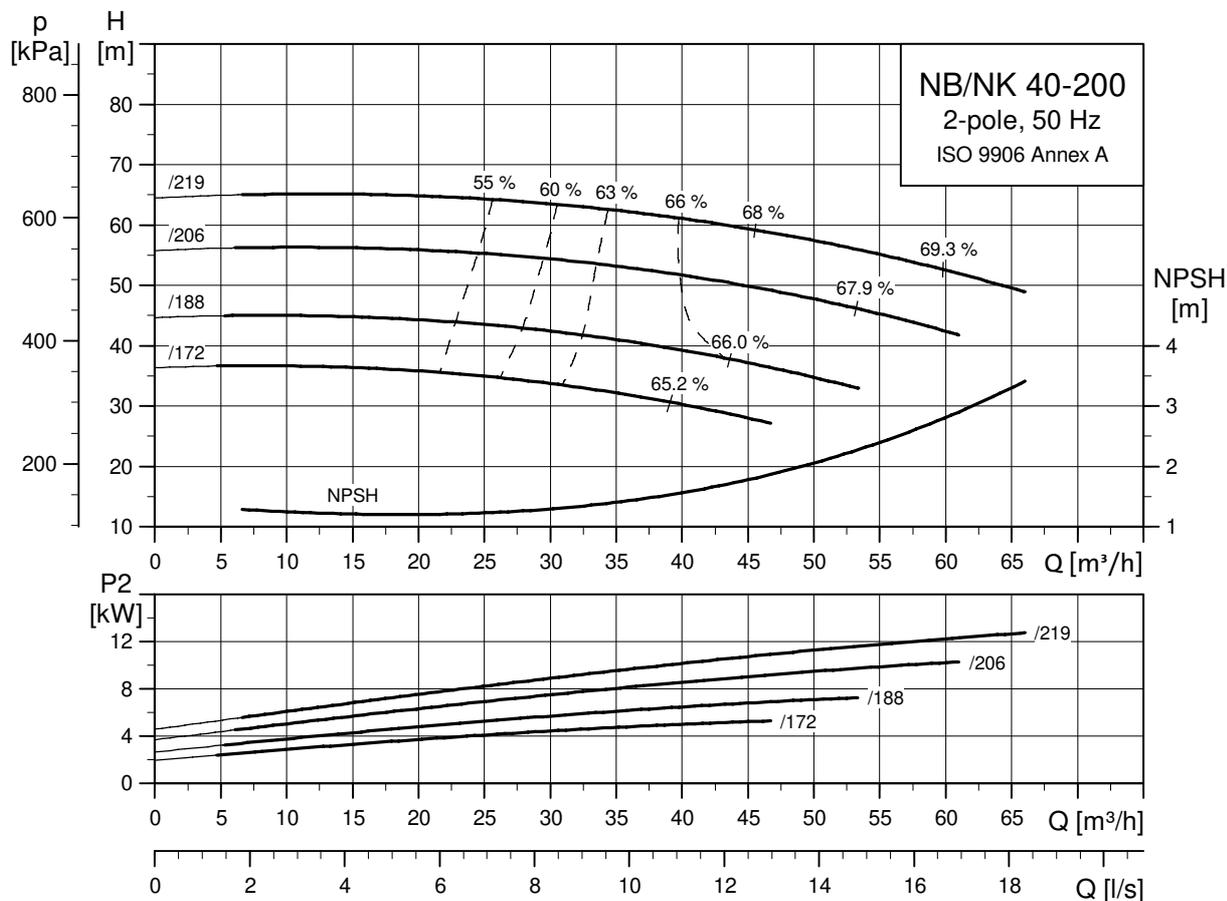
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h1 and H dimensions.

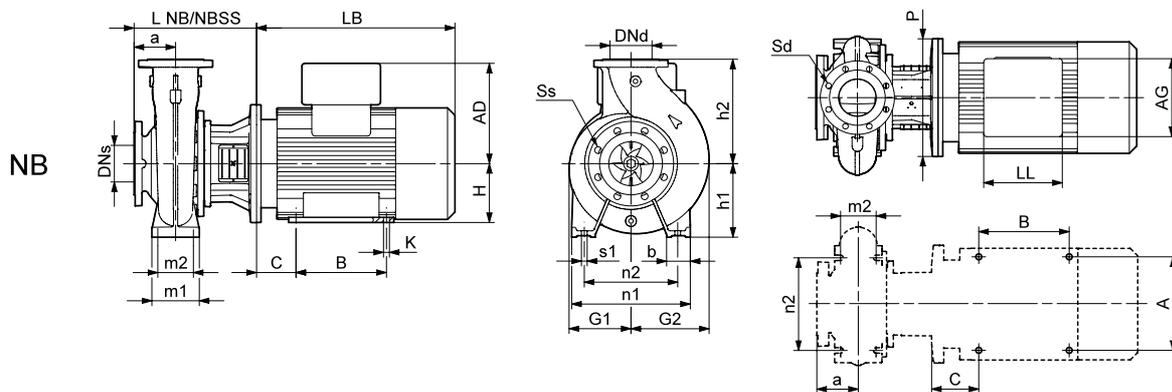
Note: For information about base frames, see page 270.

Performance curves

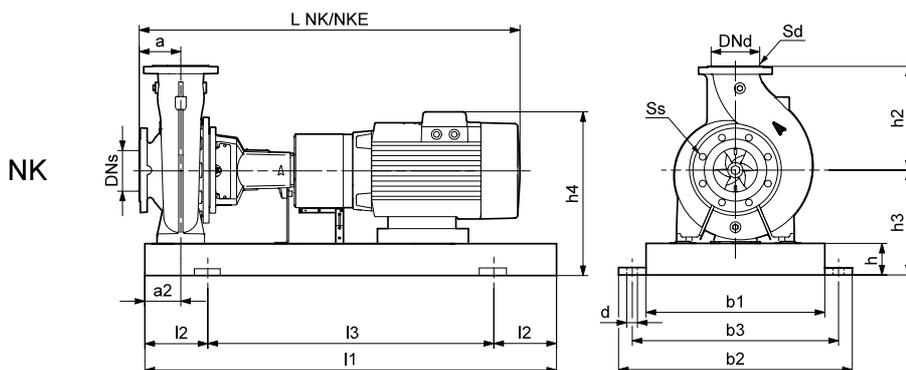
NB, NK 40-200
2-pole, 50 Hz



TM03 5090 4106



TM03 4182 4106



TM03 6005 4106

Pump type		40-200/172	40-200/188	40-200/206	40-200/219	
Motor type	Premium Motor	MG 132SC-D	MG 132SD-D	Siemens 160M	Siemens 160M	
	E-Motor	MGE 132SC	MGE 132SD	MMGE 160M	MMGE 160MX	
Common data NB/NK	P ₂	[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
	h ₂	[mm]	180	180	180	180
	Ss		4x19	4x19	4x19	4x19
Common data NK standard/ spacer coupling	Sd		4x19	4x19	4x19	4x19
	L NK	[mm]	941/1031	941/1031	1065/1148	1065/1148
	L NKE	[mm]	941/1031	941/1031	1036/1119	1048/1131
	Weight NK	[kg]	163/160	163/160	208/202	217/211
	Weight NKE	[kg]	170/167	173/170	256/250	285/279
	Weight NK SS	[kg]	167/163	167/163	211/206	220/215
NK data	Weight NKE SS	[kg]	173/170	176/173	259/254	288/283
	l ₁	[mm]	1120	1120	1250	1250
	l ₂	[mm]	190	190	205	205
	l ₃	[mm]	740	740	840	840
	b ₁	[mm]	380	380	430	430
	b ₂	[mm]	490	490	540	540
	b ₃	[mm]	440	440	490	490
	d	[mm]	24	24	24	24
	a ₂	[mm]	60	60	60	60
	h	[mm]	80	80	80	80
	h ₃	[mm]	240	240	245	245
	h ₄ ¹⁾	[mm]	374/428	374/428	442/604	442/622
NB data	Base frame no.		5	5	6	6
	Design		A	A	B ²⁾	B ²⁾
	L NB	[mm]	313	313	343	343
	L NB SS	[mm]	313	313	343	343
	h ₁	[mm]	160	160	-	-
	G ₁	[mm]	140	140	140	140
	G ₂	[mm]	157	157	157	157
	m ₁	[mm]	100	100	-	-
	m ₂	[mm]	70	70	-	-
	n ₁	[mm]	265	265	-	-
	n ₂	[mm]	212	212	-	-
	b	[mm]	50	50	-	-
	s ₁	[mm]	M12	M12	-	-
	H	[mm]	-	-	160	160
	LB ¹⁾	[mm]	391/391	391/391	478/449	478/461
	AD ¹⁾	[mm]	134/188	134/188	197/359	197/377
	AG ¹⁾	[mm]	202/290	202/290	165/296	165/296
	LL ¹⁾	[mm]	103/300	103/300	165/410	165/410
	P	[mm]	300	300	350	350
	C	[mm]	-	-	108	108
B	[mm]	-	-	210	210	
A	[mm]	-	-	254	254	
K	[mm]	-	-	15	15	
Weight NB ¹⁾	[kg]	86/93	86/96	124/172	133/201	
Weight NB SS ¹⁾	[kg]	93/100	93/103	130/178	139/207	

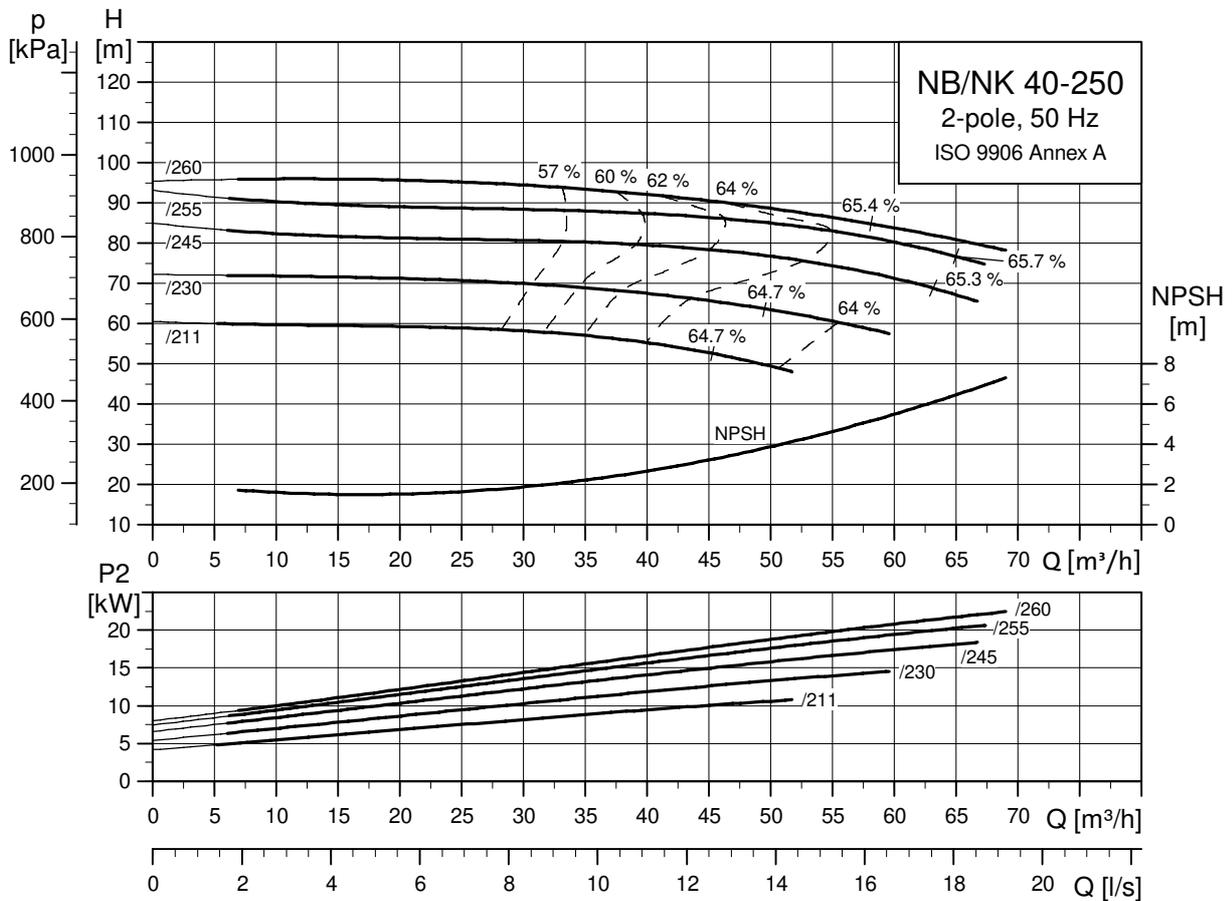
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

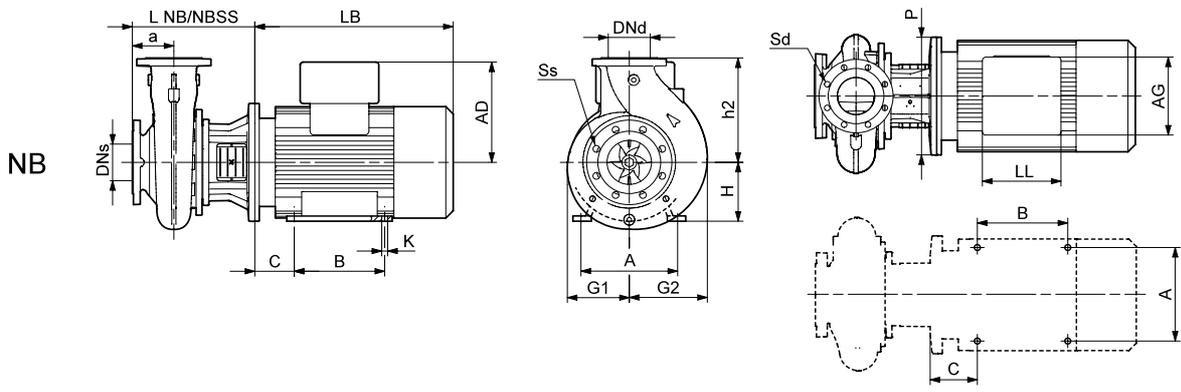
Note: For information about base frames, see page 270.

Performance curves

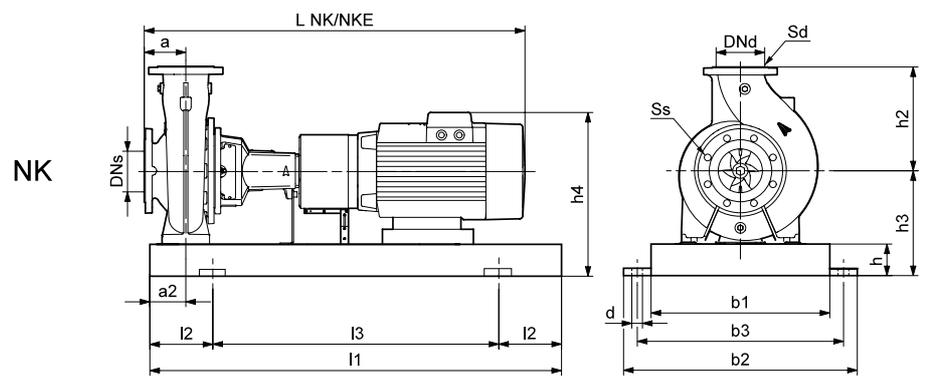
NB, NK 40-250
2-pole, 50 Hz



TM03 5091 4106



TM03 4181 4106



TM03 6005 4106

Technical data

NB, NK 40-250
2-pole

Pump type		40-250/211	40-250/230	40-250/245	40-250/255	40-250/260	
Motor type	Premium Motor	Siemens 160M	Siemens 160M	Siemens 160L	Siemens 180M	Siemens 200L	
	E-Motor	MMGE 160M	MMGE 160MX	MMGE 160L	MMGE 180M	-	
Common data NB/NK	P ₂	[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
	h ₂	[mm]	225	225	225	225	225
	Ss		4x19	4x19	4x19	4x19	4x19
Common data NK standard/ spacer coupling	Sd		4x19	4x19	4x19	4x19	
	L NK	[mm]	1065/1148	1065/1148	1105/1188	1197/1272	1254/1329
	L NKE	[mm]	1036/1119	1048/1131	1086/1169	1120/1195	-/-
	Weight NK	[kg]	219/213	228/222	248/242	277/268	421/415
	Weight NKE	[kg]	267/261	296/290	327/321	358/349	-/-
	Weight NK SS	[kg]	225/219	234/228	254/248	283/274	427/421
NK data	Weight NKE SS	[kg]	273/267	302/296	333/327	364/355	-/-
	l ₁	[mm]	1250	1250	1250	1250	1600
	l ₂	[mm]	205	205	205	205	270
	l ₃	[mm]	840	840	840	840	1060
	b ₁	[mm]	430	430	430	430	530
	b ₂	[mm]	540	540	540	540	660
	b ₃	[mm]	490	490	490	490	600
	d	[mm]	24	24	24	24	28
	a ₂	[mm]	75	75	75	75	75
	h	[mm]	80	80	80	80	100
	h ₃	[mm]	260	260	260	265	305
	h ₄ ¹⁾	[mm]	457/619	457/637	457/637	523/664	610/-
	Base frame no.		6	6	6	6	8
NB data	Design		B ²⁾	B ²⁾	B	B ²⁾	
	L NB	[mm]	343	343	343	343	343
	L NB SS	[mm]	343	343	343	343	343
	h ₁	[mm]	-	-	-	-	-
	G ₁	[mm]	164	164	164	164	164
	G ₂	[mm]	172	172	172	172	172
	m ₁	[mm]	-	-	-	-	-
	m ₂	[mm]	-	-	-	-	-
	n ₁	[mm]	-	-	-	-	-
	n ₂	[mm]	-	-	-	-	-
	b	[mm]	-	-	-	-	-
	s ₁	[mm]	-	-	-	-	-
	H	[mm]	160	160	160	180	200
	LB ¹⁾	[mm]	478/449	478/461	518/499	602/525	659/-
	AD ¹⁾	[mm]	197/359	197/377	197/377	258/399	305/-
	AG ¹⁾	[mm]	165/296	165/296	165/296	152/328	260/-
	LL ¹⁾	[mm]	165/410	165/410	165/410	132/456	192/-
	P	[mm]	350	350	350	350	400
	C	[mm]	108	108	108	121	133
	B	[mm]	210	210	254	241	305
A	[mm]	254	254	254	279	318	
K	[mm]	15	15	15	15	19	
Weight NB ¹⁾	[kg]	129/177	138/206	158/237	187/268	275/-	
Weight NB SS ¹⁾	[kg]	136/184	145/213	165/244	194/275	281/-	

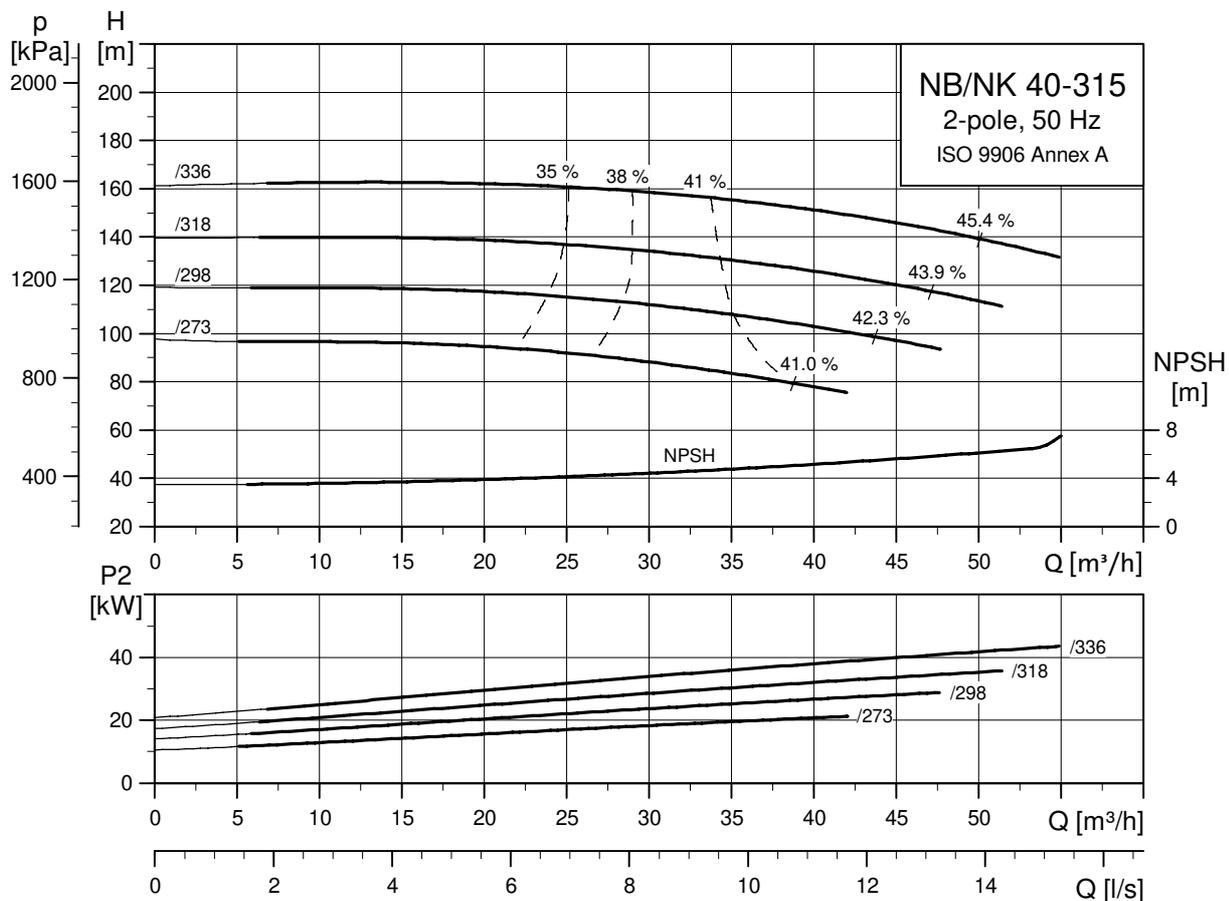
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

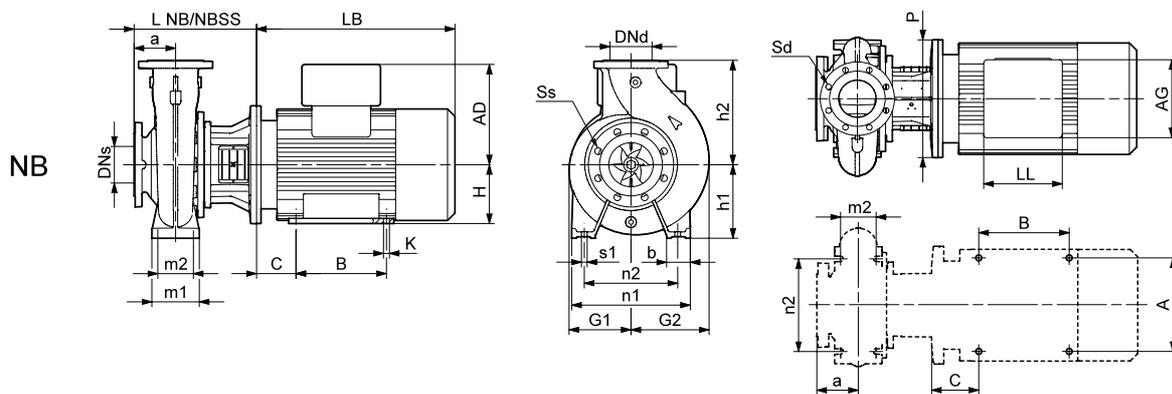
Note: For information about base frames, see page 270.

Performance curves

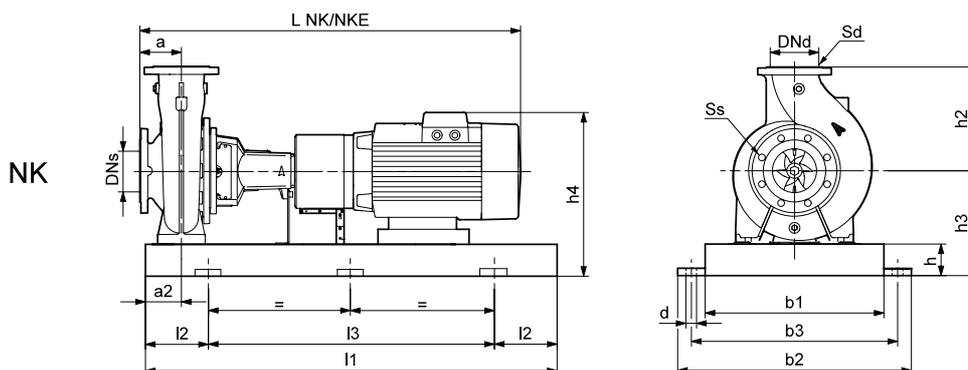
NB, NK 40-315
2-pole



TM03 5092 4106



TM03 4182 4106



TM03 4179 1806

Pump type		40-315/273	40-315/298	40-315/318	40-315/336	
Motor type	Premium Motor	Siemens 180M	Siemens 200L	Siemens 200L	Siemens 225M	
	E-Motor	MMGE 180M	-	-	-	
Common data NB/NK	P ₂	[kW]	22	30	37	45
	PN	[bar]	16	16	16	16
	DNs	[mm]	65	65	65	65
	DNd	[mm]	40	40	40	40
	a	[mm]	125	125	125	125
	h ₂	[mm]	250	250	250	250
	Ss		4x19	4x19	4x19	4x19
	Sd		4x19	4x19	4x19	4x19
Common data NK standard/ spacer coupling	L NK	[mm]	1311/1407	1368/1464	1368/1464	1418/1514
	L NKE	[mm]	1234/1330	-/-	-/-	-/-
	Weight NK	[kg]	341/333	476/470	476/470	597/591
	Weight NKE	[kg]	422/414	-/-	-/-	-/-
	Weight NK SS	[kg]	337/328	472/466	472/466	593/587
	Weight NKE SS	[kg]	418/409	-/-	-/-	-/-
NK data	l ₁	[mm]	1250	1600	1600	1600
	l ₂	[mm]	205	270	270	270
	l ₃	[mm]	840	1060	1060	1060
	b ₁	[mm]	430	530	530	530
	b ₂	[mm]	540	660	660	660
	b ₃	[mm]	490	600	600	600
	d	[mm]	24	28	28	28
	a ₂	[mm]	75	75	75	75
	h	[mm]	80	100	100	100
	h ₃	[mm]	280	305	305	330
	h ₄ ¹⁾	[mm]	538/679	610/-	610/-	655/-
	Base frame no.		6	8	8	8
	NB data	Design		C ²⁾	C ²⁾	C ²⁾
L NB		[mm]	398	398	398	428
L NB SS		[mm]	398	398	398	428
h ₁		[mm]	200	200	200	200
G ₁		[mm]	200	200	200	200
G ₂		[mm]	206	206	206	206
m ₁		[mm]	125	125	125	125
m ₂		[mm]	95	95	95	95
n ₁		[mm]	345	345	345	345
n ₂		[mm]	280	280	280	280
b		[mm]	65	65	65	65
s ₁		[mm]	M12	M12	M12	M12
H		[mm]	180	200	200	225
LB ¹⁾		[mm]	602/525	659/-	659/-	709/-
AD ¹⁾		[mm]	258/399	305/-	305/-	325/-
AG ¹⁾		[mm]	152/328	260/-	260/-	260/-
LL ¹⁾		[mm]	132/456	192/-	192/-	192/-
P		[mm]	350	400	400	450
C		[mm]	121	133	133	149
B		[mm]	241	305	305	311
A		[mm]	279	318	318	356
K		[mm]	15	19	19	19
Weight NB ¹⁾	[kg]	238/319	328/-	328/-	453/-	
Weight NB SS ¹⁾	[kg]	238/319	328/-	328/-	452/-	

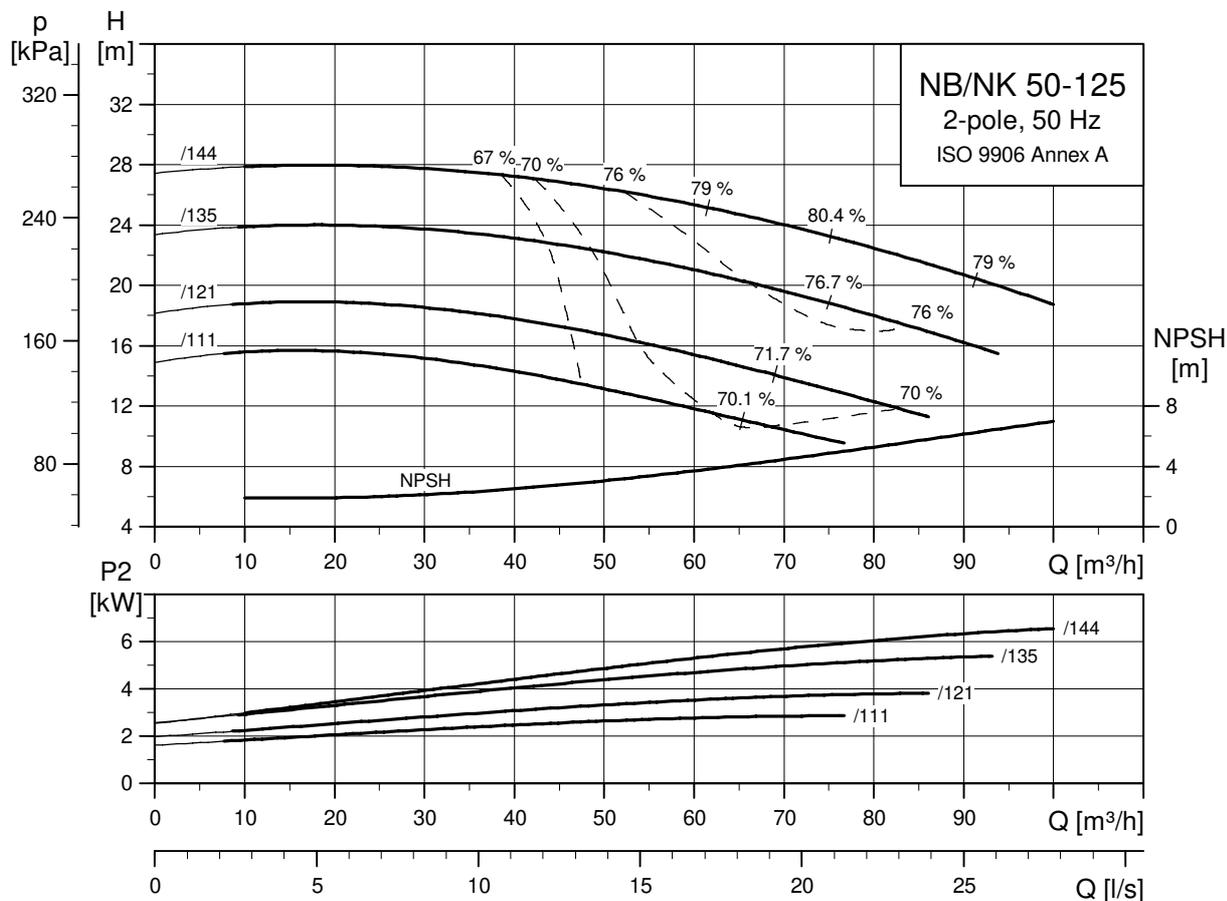
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

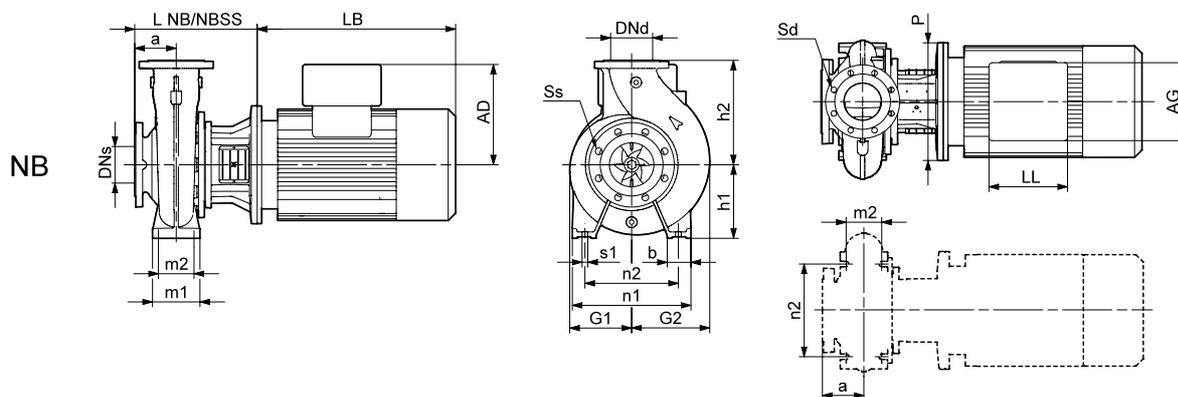
Note: For information about base frames, see page 270.

Performance curves

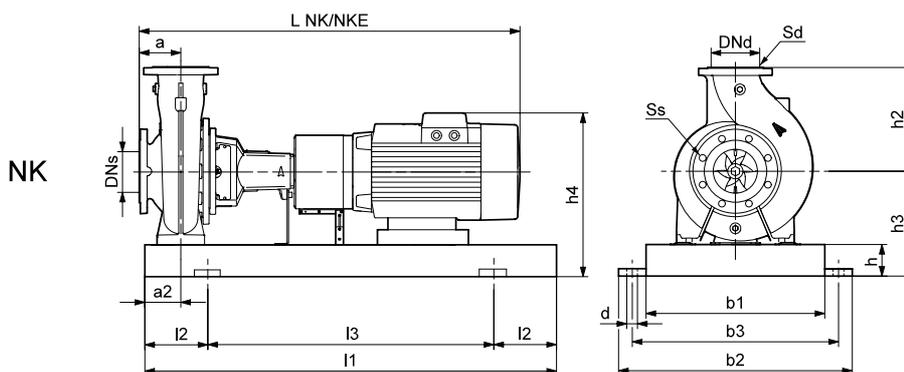
NB, NK 50-125
2-pole



TM03 5093 4106



TM03 4180 4106



TM03 6005 4106

Pump type		50-125/111	50-125/121	50-125/135	50-125/144	
Motor type	Premium Motor	MG 100LC-D	MG 112MC-D	MG 132SC-D	MG 132SD-D	
	E-Motor	MGE 100LC	MGE 112MC	MGE 132SC	MGE 132SD	
Common data NB/NK	P ₂	[kW]	3	4	5.5	7.5
	PN	[bar]	16	16	16	16
	DNs	[mm]	65	65	65	65
	DNd	[mm]	50	50	50	50
	a	[mm]	100	100	100	100
	h ₂	[mm]	160	160	160	160
	Ss		4x19	4x19	4x19	4x19
Common data NK standard/ spacer coupling	Sd		4x19	4x19	4x19	4x19
	L NK	[mm]	859/955	896/992	941/1031	941/1031
	L NKE	[mm]	859/955	896/992	941/1031	941/1031
	Weight NK	[kg]	127/125	142/140	152/149	152/149
	Weight NKE	[kg]	135/133	143/140	159/155	162/158
	Weight NK SS	[kg]	129/126	144/142	154/150	154/150
NK data	Weight NKE SS	[kg]	137/134	144/142	160/157	163/160
	l1	[mm]	1000	1000	1120	1120
	l2	[mm]	170	170	190	190
	l3	[mm]	660	660	740	740
	b1	[mm]	340	340	380	380
	b2	[mm]	450	450	490	490
	b3	[mm]	400	400	440	440
	d	[mm]	24	24	24	24
	a2	[mm]	60	60	60	60
	h	[mm]	80	80	80	80
	h3	[mm]	212	212	215	215
	h ₄ ¹⁾	[mm]	332/389	346/400	349/403	349/403
	Base frame no.		4	4	5	5
NB data	Design		A	A	A ²⁾	A ²⁾
	L NB	[mm]	274	274	313	313
	L NB SS	[mm]	293	293	313	313
	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 ¹⁾	[mm]	335/335	372/372	391/391	391/391
	AD ¹⁾	[mm]	120/177	134/188	134/188	134/188
	AG ¹⁾	[mm]	162/264	202/290	202/290	202/290
	LL ¹⁾	[mm]	103/260	103/300	103/300	103/300
	P	[mm]	250	250	300	300
	C	[mm]	-	-	-	-
	B	[mm]	-	-	-	-
	A	[mm]	-	-	-	-
	K	[mm]	-	-	-	-
	Weight NB ¹⁾	[kg]	59/67	77/78	83/89	83/93
Weight NB SS ¹⁾	[kg]	64/72	82/82	86/92	86/95	

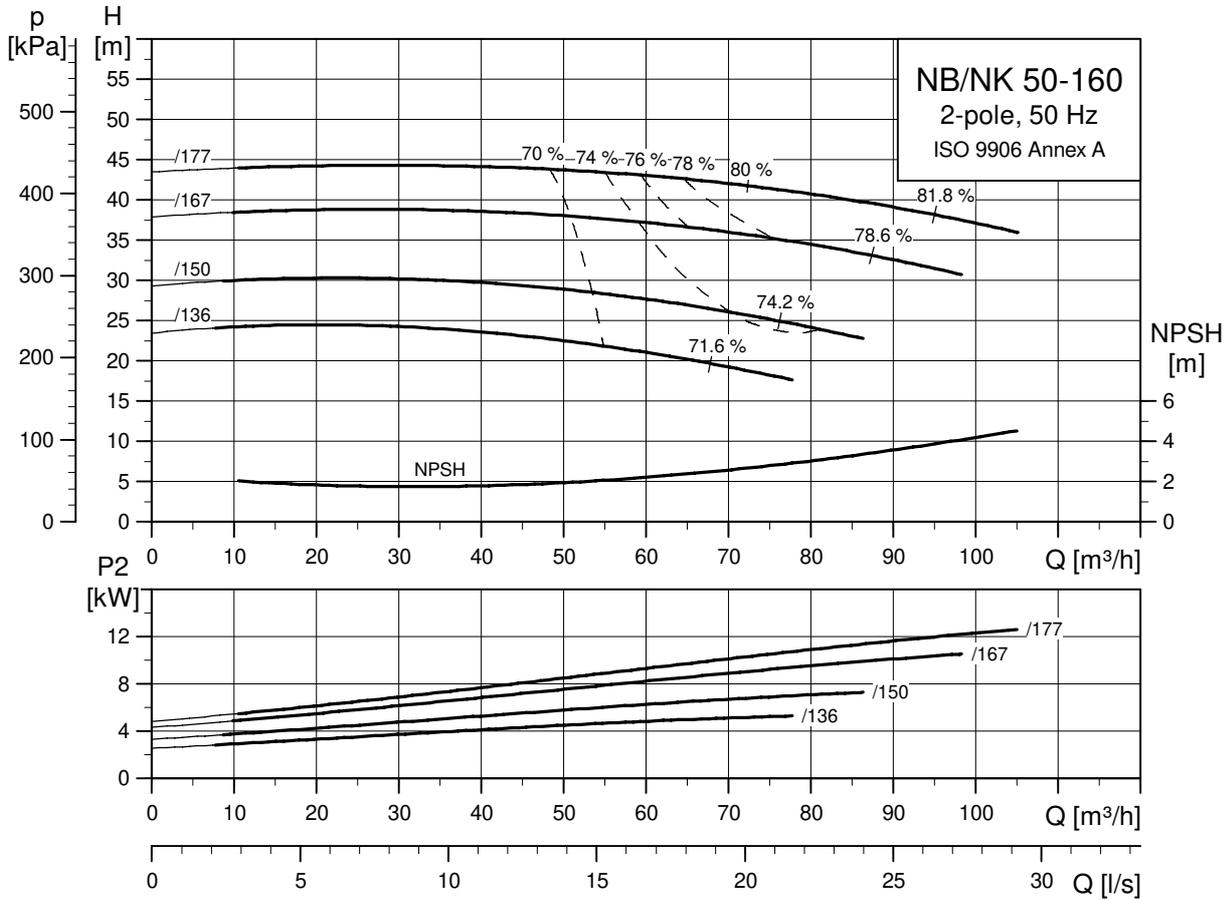
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h1 and H dimensions.

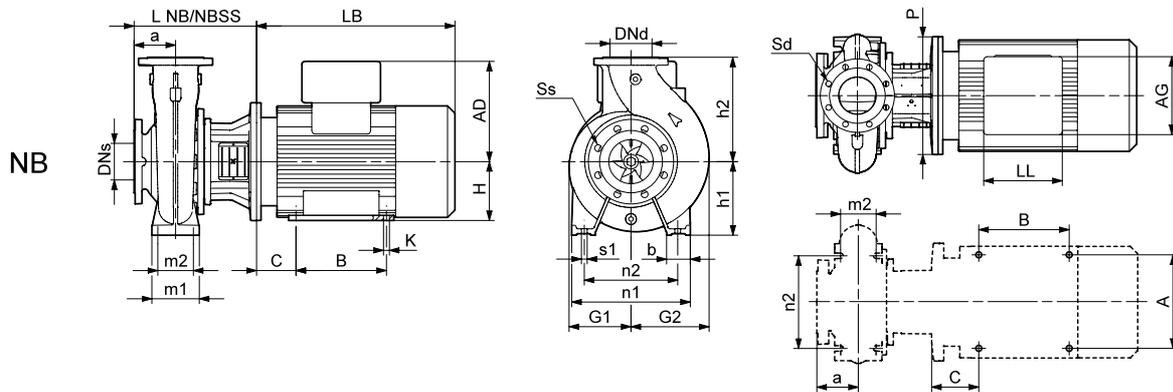
Note: For information about base frames, see page 270.

Performance curves

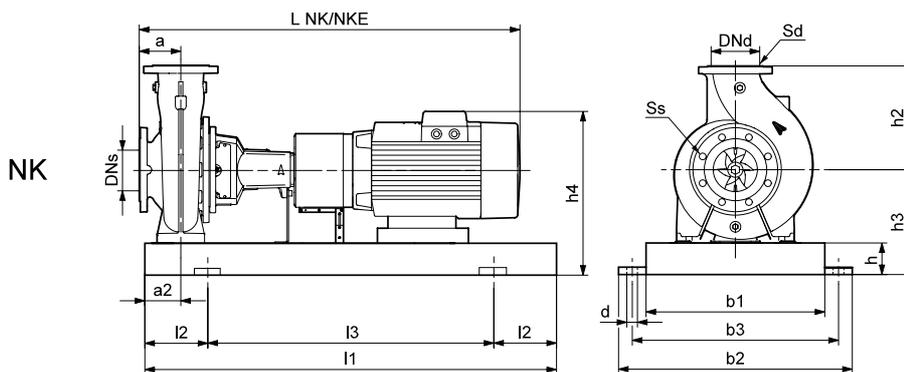
NB, NK 50-160
2-pole



TM03 5084 4106



TM03 4182 4106



TM03 6005 4106

Pump type		50-160/136	50-160/150	50-160/167	50-160/177	
Motor type	Premium Motor	MG 132SC-D	MG 132SD-D	Siemens 160M	Siemens 160M	
	E-Motor	MGE 132SC	MGE 132SD	MMGE 160M	MMGE 160MX	
Common data NB/NK	P ₂	[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
	h ₂	[mm]	180	180	180	180
	Ss		4x19	4x19	4x19	4x19
Common data NK standard/ spacer coupling	Sd		4x19	4x19	4x19	4x19
	L NK	[mm]	941/1031	941/1031	1065/1148	1065/1148
	L NKE	[mm]	941/1031	941/1031	1036/1119	1048/1131
	Weight NK	[kg]	157/154	157/154	202/196	211/205
	Weight NKE	[kg]	164/161	167/164	250/244	279/273
	Weight NK SS	[kg]	161/158	161/158	206/200	215/209
NK data	Weight NKE SS	[kg]	168/165	171/168	254/248	283/277
	l ₁	[mm]	1120	1120	1250	1250
	l ₂	[mm]	190	190	205	205
	l ₃	[mm]	740	740	840	840
	b ₁	[mm]	380	380	430	430
	b ₂	[mm]	490	490	540	540
	b ₃	[mm]	440	440	490	490
	d	[mm]	24	24	24	24
	a ₂	[mm]	60	60	60	60
	h	[mm]	80	80	80	80
	h ₃	[mm]	240	240	245	245
NB data	h ₄ ¹⁾	[mm]	374/428	374/428	442/604	442/622
	Base frame no.		5	5	6	6
	Design		A	A	B ²⁾	B ²⁾
	L NB	[mm]	313	313	343	343
	L NB SS	[mm]	213	213	243	243
	h ₁	[mm]	160	160	-	-
	G ₁	[mm]	125	125	125	125
	G ₂	[mm]	150	150	150	150
	m ₁	[mm]	100	100	-	-
	m ₂	[mm]	70	70	-	-
	n ₁	[mm]	265	265	-	-
	n ₂	[mm]	212	212	-	-
	b	[mm]	50	50	-	-
	s ₁	[mm]	M12	M12	-	-
	H	[mm]	-	-	160	160
	LB ¹⁾	[mm]	391/391	391/391	478/449	478/461
	AD ¹⁾	[mm]	134/188	134/188	197/359	197/377
AG ¹⁾	[mm]	202/290	202/290	165/296	165/296	
LL ¹⁾	[mm]	103/300	103/300	165/410	165/410	
P	[mm]	300	300	350	350	
C	[mm]	-	-	108	108	
B	[mm]	-	-	210	210	
A	[mm]	-	-	254	254	
K	[mm]	-	-	15	15	
Weight NB ¹⁾	[kg]	83/89	83/93	120/168	129/197	
Weight NB SS ¹⁾	[kg]	87/94	87/97	124/172	133/201	

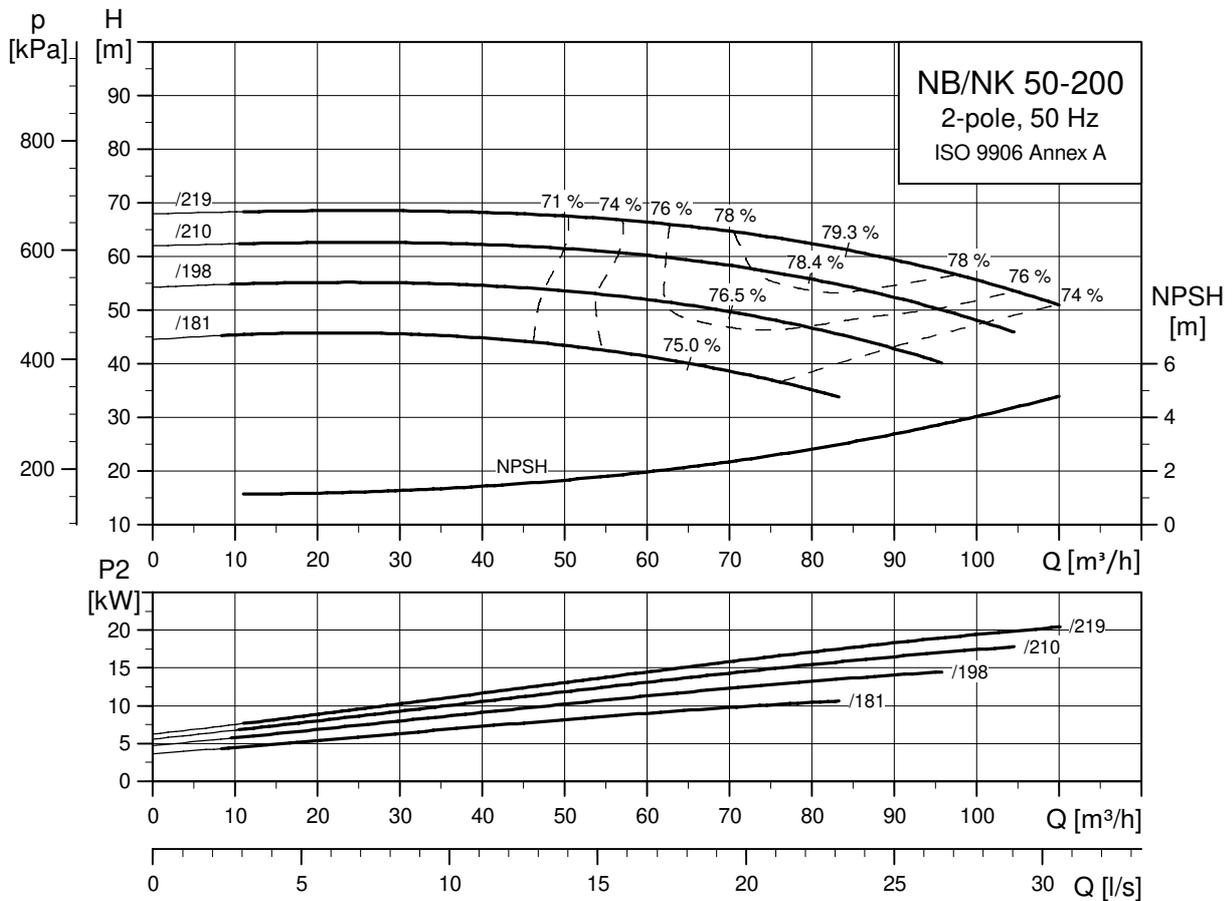
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

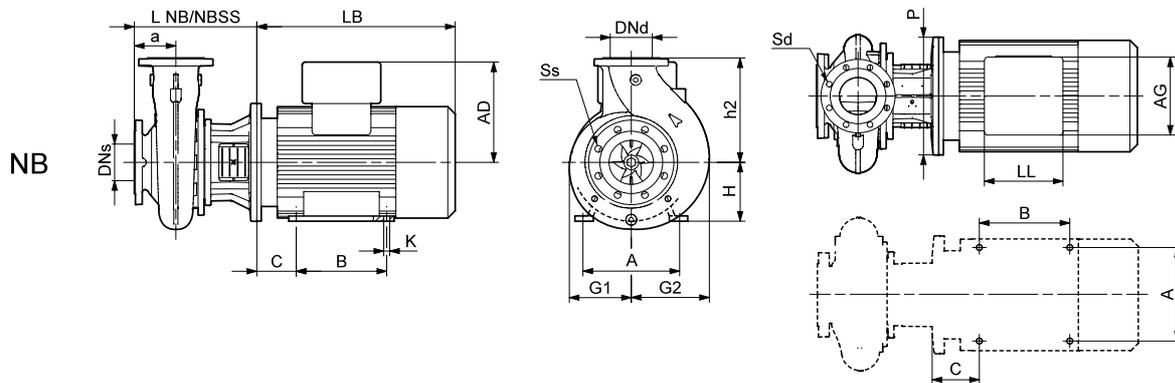
Note: For information about base frames, see page 270.

Performance curves

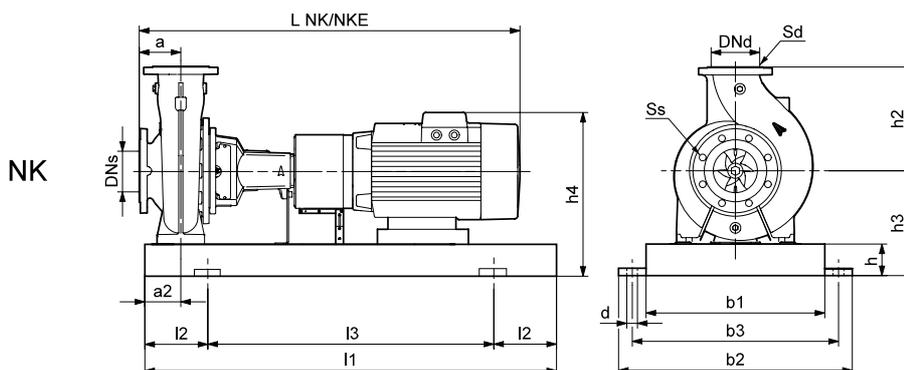
NB, NK 50-200
2-pole



TM03 5095 4106



TM03 4181 4106



TM03 6005 4106

Technical data

NB, NK 50-200
2-pole

Pump type		50-200/181	50-200/198	50-200/210	50-200/219	
Motor type	Premium Motor	Siemens 160M	Siemens 160M	Siemens 160L	Siemens 180M	
	E-Motor	MMGE 160M	MMGE 160MX	MMGE 160L	MMGE 180M	
Common data NB/NK	P ₂	[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
	h ₂	[mm]	200	200	200	200
	Ss		4x19	4x19	4x19	4x19
Common data NK standard/ spacer coupling	Sd		4x19	4x19	4x19	4x19
	L NK	[mm]	1065/1148	1065/1148	1105/1188	1197/1272
	L NKE	[mm]	1036/1119	1048/1131	1086/1169	1120/1195
	Weight NK	[kg]	206/200	215/209	235/229	272/263
	Weight NKE	[kg]	254/248	283/277	314/308	353/344
	Weight NK SS	[kg]	212/207	221/216	241/236	279/270
NK data	Weight NKE SS	[kg]	260/255	289/284	320/315	360/351
	l ₁	[mm]	1250	1250	1250	1250
	l ₂	[mm]	205	205	205	205
	l ₃	[mm]	840	840	840	840
	b ₁	[mm]	430	430	430	430
	b ₂	[mm]	540	540	540	540
	b ₃	[mm]	490	490	490	490
	d	[mm]	24	24	24	24
	a ₂	[mm]	60	60	60	60
	h	[mm]	80	80	80	80
	h ₃	[mm]	245	245	245	265
	h ₄ ¹⁾	[mm]	442/604	442/622	442/622	523/664
	Base frame no.		6	6	6	6
NB data	Design		B ²⁾	B ²⁾	B ²⁾	B
	L NB	[mm]	343	343	343	343
	L NB SS	[mm]	343	343	343	343
	h ₁	[mm]	-	-	-	-
	G ₁	[mm]	141	141	141	141
	G ₂	[mm]	162	162	162	162
	m ₁	[mm]	-	-	-	-
	m ₂	[mm]	-	-	-	-
	n ₁	[mm]	-	-	-	-
	n ₂	[mm]	-	-	-	-
	b	[mm]	-	-	-	-
	s ₁	[mm]	-	-	-	-
	H	[mm]	160	160	160	180
	LB ¹⁾	[mm]	478/449	478/461	518/499	602/525
	AD ¹⁾	[mm]	197/359	197/377	197/377	258/399
	AG ¹⁾	[mm]	165/296	165/296	165/296	152/328
	LL ¹⁾	[mm]	165/410	165/410	165/410	132/456
	P	[mm]	350	350	350	350
	C	[mm]	108	108	108	121
	B	[mm]	210	210	254	241
A	[mm]	254	254	254	279	
K	[mm]	15	15	15	15	
Weight NB ¹⁾	[kg]	121/169	130/198	150/229	179/260	
Weight NB SS ¹⁾	[kg]	130/178	139/207	159/238	188/269	

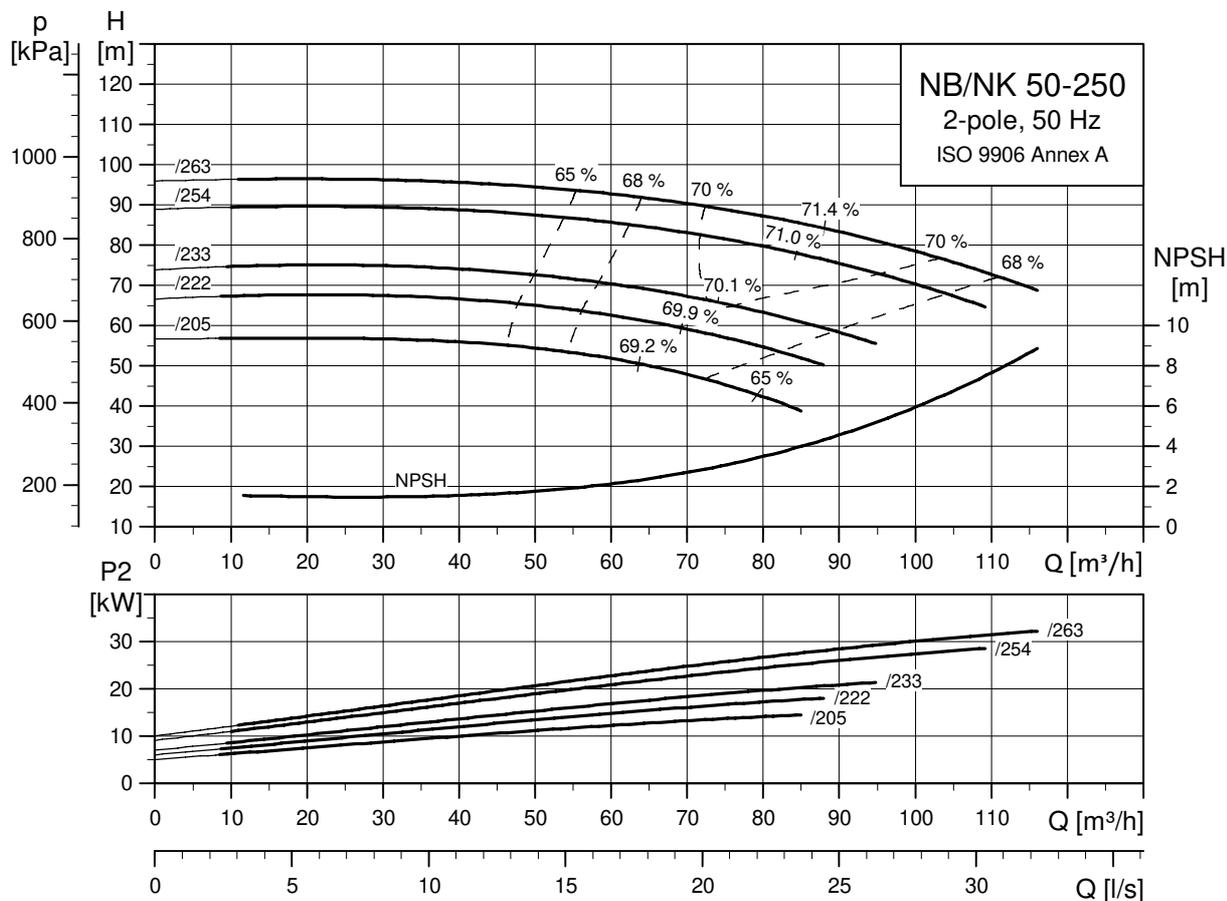
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

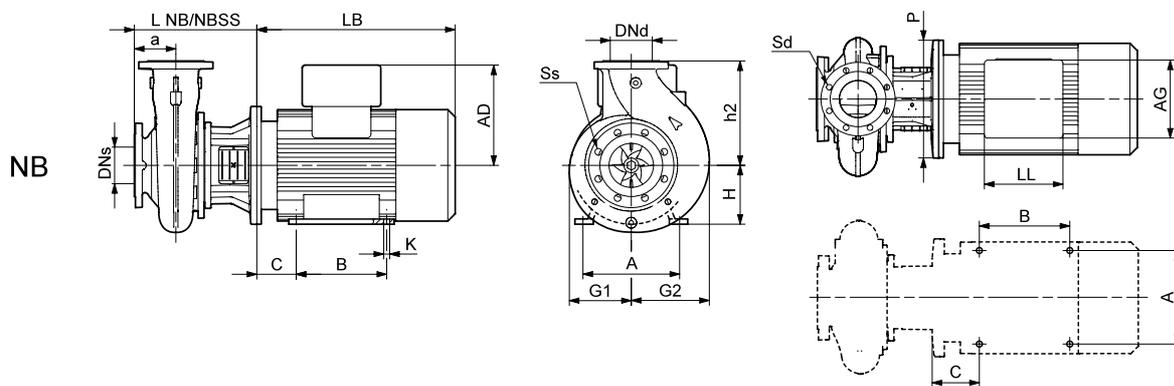
Note: For information about base frames, see page 270.

Performance curves

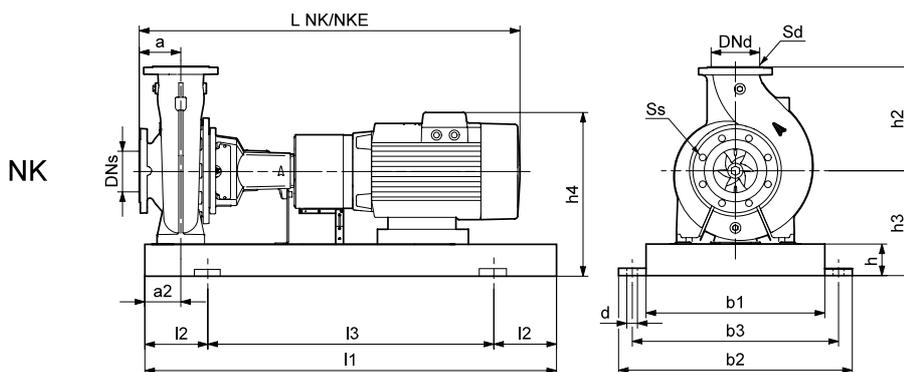
NB, NK 50-250
2-pole



TM03 5096 4106



TM03 4181 4106



TM03 6005 4106

Technical data

NB, NK 50-250
2-pole

Pump type		50-250/205	50-250/222	50-250/233	50-250/254	50-250/263	
Motor type	Premium Motor	Siemens 160M	Siemens 160L	Siemens 180M	Siemens 200L	Siemens 200L	
	E-Motor	MMGE 160MX	MMGE 160L	MMGE 180M	-	-	
Common data NB/NK	P ₂	[kW]	15	18.5	22	30	37
	PN	[bar]	16	16	16	16	16
	DNs	[mm]	65	65	65	65	65
	DNd	[mm]	50	50	50	50	50
	a	[mm]	100	100	100	100	100
	h ₂	[mm]	225	225	225	225	225
	Ss		4x19	4x19	4x19	4x19	4x19
Common data NK standard/ spacer coupling	Sd		4x19	4x19	4x19	4x19	
	L NK	[mm]	1065/1148	1105/1188	1197/1272	1254/1329	1254/1329
	L NKE	[mm]	1048/1131	1086/1169	1120/1195	-/-	-/-
	Weight NK	[kg]	229/224	249/244	278/270	423/416	423/416
	Weight NKE	[kg]	297/292	328/323	359/351	-/-	-/-
	Weight NK SS	[kg]	235/230	255/250	284/275	428/422	428/422
NK data	Weight NKE SS	[kg]	303/298	334/329	365/356	-/-	-/-
	l ₁	[mm]	1250	1250	1250	1600	1600
	l ₂	[mm]	205	205	205	270	270
	l ₃	[mm]	840	840	840	1060	1060
	b ₁	[mm]	430	430	430	530	530
	b ₂	[mm]	540	540	540	660	660
	b ₃	[mm]	490	490	490	600	600
	d	[mm]	24	24	24	28	28
	a ₂	[mm]	75	75	75	75	75
	h	[mm]	80	80	80	100	100
	h ₃	[mm]	260	260	265	305	305
	h ₄ ¹⁾	[mm]	457/637	457/637	523/664	610/-	610/-
	Base frame no.		6	6	6	8	8
NB data	Design		B ²⁾	B ²⁾	B	B ²⁾	B ²⁾
	L NB	[mm]	343	343	343	343	343
	L NB SS	[mm]	343	343	343	343	343
	h ₁	[mm]	-	-	-	-	-
	G ₁	[mm]	164	164	164	164	164
	G ₂	[mm]	180	180	180	180	180
	m ₁	[mm]	-	-	-	-	-
	m ₂	[mm]	-	-	-	-	-
	n ₁	[mm]	-	-	-	-	-
	n ₂	[mm]	-	-	-	-	-
	b	[mm]	-	-	-	-	-
	s ₁	[mm]	-	-	-	-	-
	H	[mm]	160	160	180	200	200
	LB ¹⁾	[mm]	478/461	518/499	602/525	659/-	659/-
	AD ¹⁾	[mm]	197/377	197/377	258/399	305/-	305/-
	AG ¹⁾	[mm]	165/296	165/296	152/328	260/-	260/-
	LL ¹⁾	[mm]	165/410	165/410	132/456	192/-	192/-
	P	[mm]	350	350	350	400	400
	C	[mm]	108	108	121	133	133
	B	[mm]	210	254	241	305	305
A	[mm]	254	254	279	318	318	
K	[mm]	15	15	15	19	19	
Weight NB ¹⁾	[kg]	139/207	159/238	188/269	276/-	276/-	
Weight NB SS ¹⁾	[kg]	147/215	167/246	195/276	282/-	282/-	

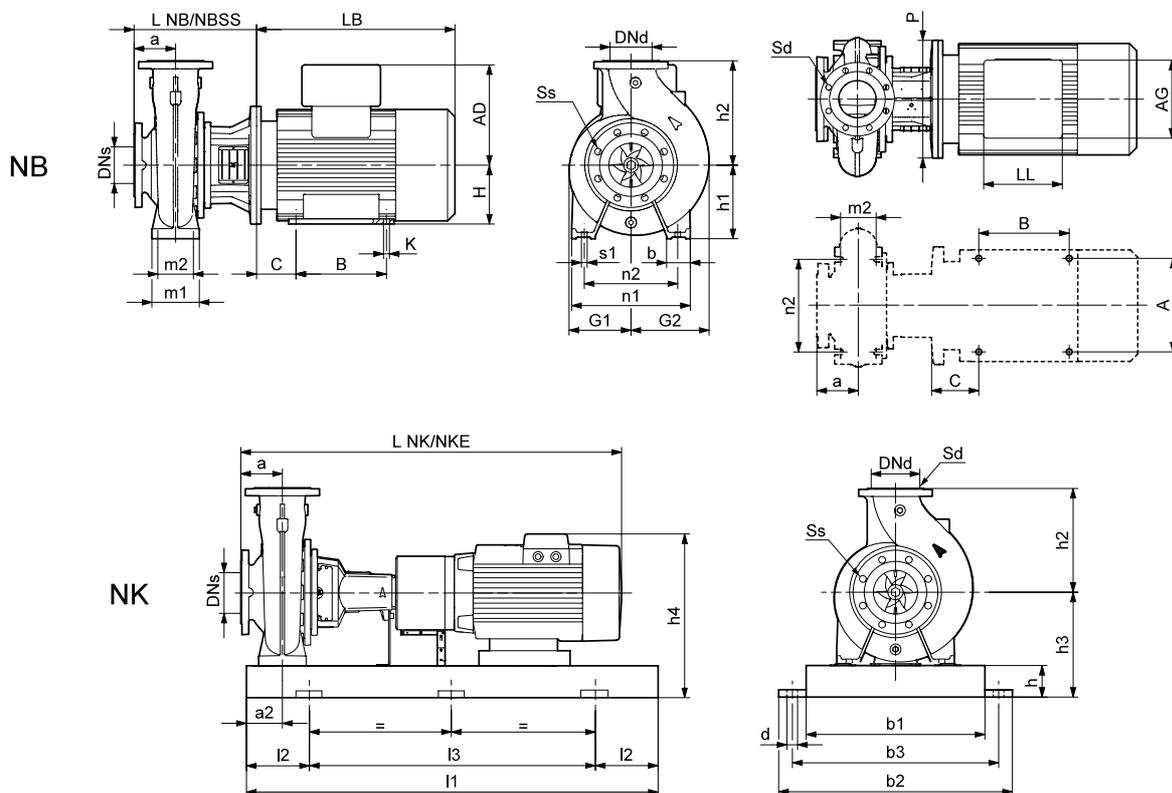
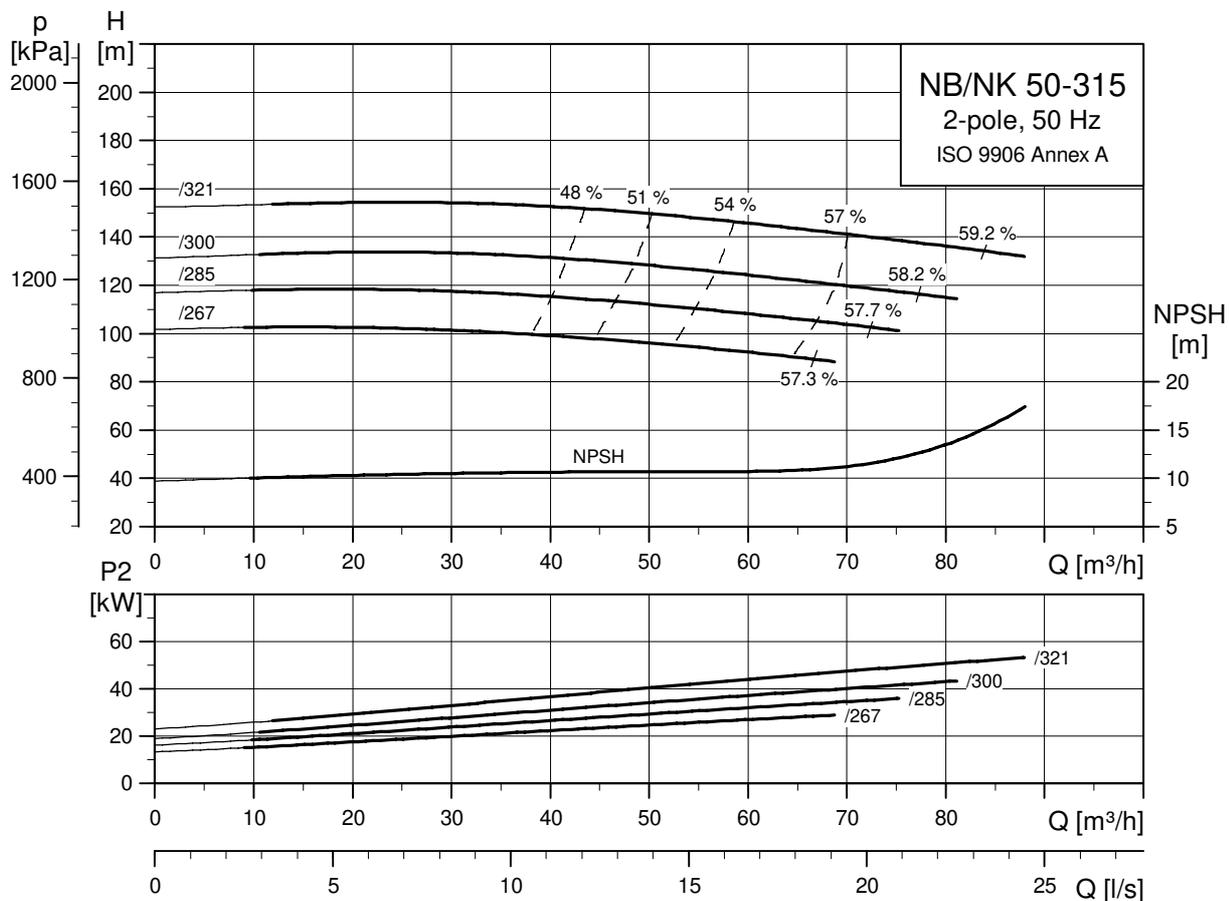
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 50-315
2-pole



TM03 5097 4106

TM03 4182 4106

TM03 4179 1806

Technical data

NB, NK 50-315
2-pole

Pump type		50-315/267	50-315/285	50-315/300	50-315/321	
Motor type	Premium Motor	Siemens 200L	Siemens 200L	Siemens 225M	Siemens 250M	
	E-Motor	-	-	-	-	
Common data NB/NK	P ₂	[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
	h ₂	[mm]	280	280	280	280
	Ss		4x19	4x19	4x19	4x19
	Sd		4x19	4x19	4x19	4x19
Common data NK standard/ spacer coupling	L NK	[mm]	1368/1464	1368/1464	1418/1514	1486/1582
	L NKE	[mm]	-/-	-/-	-/-	-/-
	Weight NK	[kg]	494/488	494/488	597/591	727/722
	Weight NKE	[kg]	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	488/482	488/482	591/585	721/716
	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-
NK data	l ₁	[mm]	1600	1600	1600	1800
	l ₂	[mm]	270	270	270	300
	l ₃	[mm]	1060	1060	1060	1200
	b ₁	[mm]	530	530	530	600
	b ₂	[mm]	660	660	660	730
	b ₃	[mm]	600	600	600	670
	d	[mm]	28	28	28	28
	a ₂	[mm]	75	75	75	75
	h	[mm]	100	100	100	100
	h ₃	[mm]	325	325	330	355
	h ₄ ¹⁾	[mm]	630/-	630/-	655/-	747/-
Base frame no.		8	8	8	9	
NB data	Design		C ²⁾	C ²⁾	C ²⁾	C ²⁾
	L NB	[mm]	398	398	428	428
	L NB SS	[mm]	398	398	428	428
	h ₁	[mm]	225	225	225	225
	G ₁	[mm]	203	203	203	203
	G ₂	[mm]	214	214	214	214
	m ₁	[mm]	125	125	125	125
	m ₂	[mm]	95	95	95	95
	n ₁	[mm]	345	345	345	345
	n ₂	[mm]	280	280	280	280
	b	[mm]	65	65	65	65
	s ₁	[mm]	M12	M12	M12	M12
	H	[mm]	200	200	225	250
	LB ¹⁾	[mm]	659/-	659/-	709/-	747/-
	AD ¹⁾	[mm]	305/-	305/-	325/-	392/-
	AG ¹⁾	[mm]	260/-	260/-	260/-	300/-
	LL ¹⁾	[mm]	192/-	192/-	192/-	236/-
	P	[mm]	400	400	450	550
	C	[mm]	133	133	149	168
	B	[mm]	305	305	311	349
	A	[mm]	318	318	356	406
K	[mm]	19	19	19	24	
Weight NB ¹⁾	[kg]	333/-	333/-	457/-	563/-	
Weight NB SS ¹⁾	[kg]	331/-	331/-	455/-	557/-	

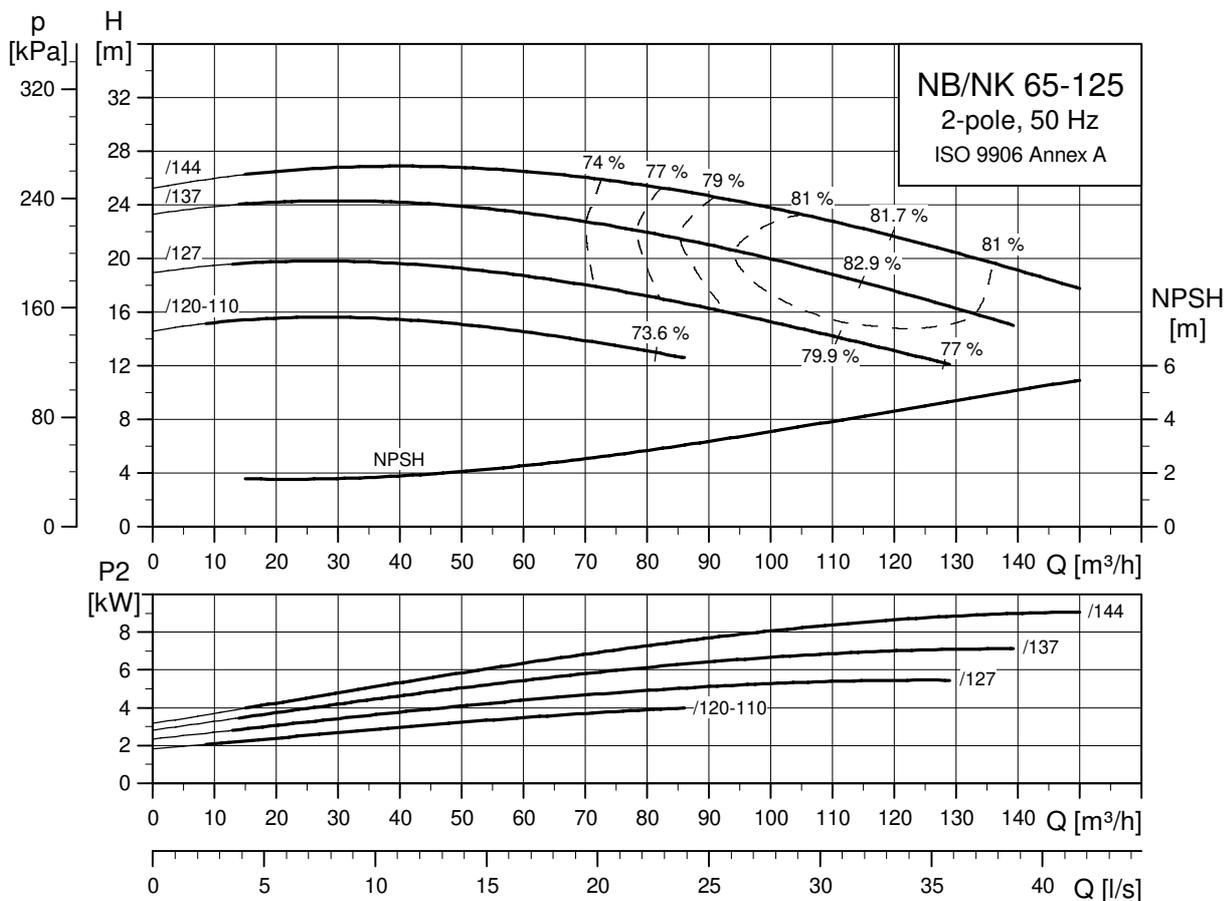
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

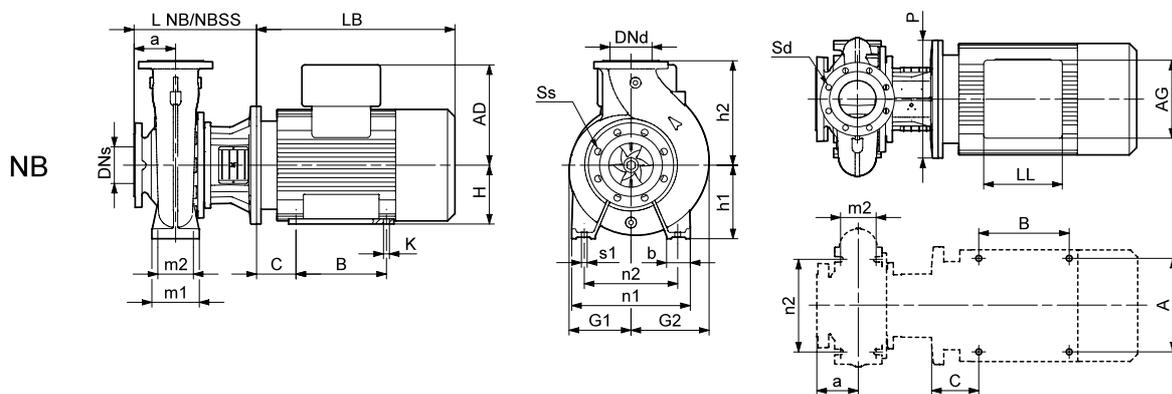
Note: For information about base frames, see page 270.

Performance curves

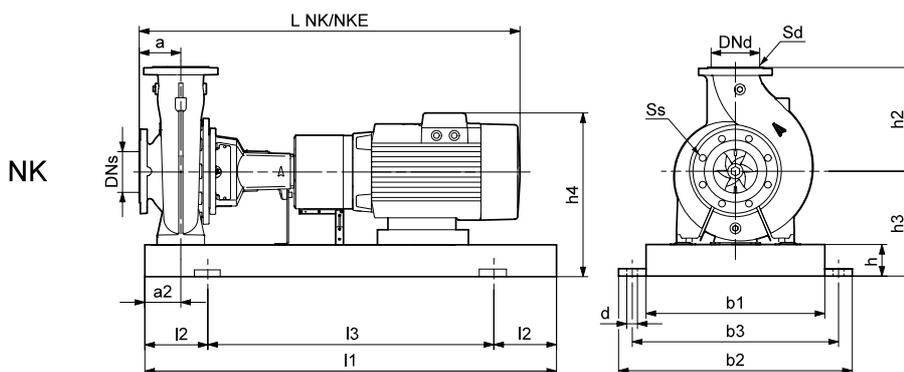
NB, NK 65-125
2-pole



TM03 5098 4106



TM03 4182 4106



TM03 6005 4106

Pump type		65-125/120-110	65-125/127	65-125/137	65-125/144	
Motor type	Premium Motor	MG 112MC-D	MG 132SC-D	MG 132SD-D	Siemens 160M	
	E-Motor	MGE 112MC	MGE 132SC	MGE 132SD	MMGE 160M	
Common data NB/NK	P ₂	[kW]	4	5.5	7.5	11
	PN	[bar]	16	16	16	16
	DNs	[mm]	80	80	80	80
	DNd	[mm]	65	65	65	65
	a	[mm]	100	100	100	100
	h ₂	[mm]	180	180	180	180
	Ss		8x19	8x19	8x19	8x19
Common data NK standard/ spacer coupling	Sd		4x19	4x19	4x19	4x19
	L NK	[mm]	896/992	941/1031	941/1031	1065/1148
	L NKE	[mm]	896/992	941/1031	941/1031	1036/1119
	Weight NK	[kg]	154/152	162/159	162/159	207/201
	Weight NKE	[kg]	154/152	169/165	172/168	255/249
	Weight NK SS	[kg]	156/153	163/160	163/160	208/202
NK data	Weight NKE SS	[kg]	156/154	170/167	173/170	256/250
	l ₁	[mm]	1000	1120	1120	1250
	l ₂	[mm]	170	190	190	205
	l ₃	[mm]	660	740	740	840
	b ₁	[mm]	340	380	380	430
	b ₂	[mm]	450	490	490	540
	b ₃	[mm]	400	440	440	490
	d	[mm]	24	24	24	24
	a ₂	[mm]	60	60	60	60
	h	[mm]	80	80	80	80
	h ₃	[mm]	240	240	240	245
NB data	h ₄ ¹⁾	[mm]	374/428	374/428	374/428	442/604
	Base frame no.		4	5	5	6
	Design		A	A	A	C ²⁾
	L NB	[mm]	274	313	313	343
	L NB SS	[mm]	293	313	313	343
	h ₁	[mm]	160	160	160	160
	G ₁	[mm]	117	117	117	117
	G ₂	[mm]	146	146	146	146
	m ₁	[mm]	125	125	125	125
	m ₂	[mm]	95	95	95	95
	n ₁	[mm]	280	280	280	280
	n ₂	[mm]	212	212	212	212
	b	[mm]	65	65	65	65
	s ₁	[mm]	M12	M12	M12	M12
	H	[mm]	-	-	-	160
	LB ¹⁾	[mm]	372/372	391/391	391/391	478/449
	AD ¹⁾	[mm]	134/188	134/188	134/188	197/359
AG ¹⁾	[mm]	202/290	202/290	202/290	165/296	
LL ¹⁾	[mm]	103/300	103/300	103/300	165/410	
P	[mm]	250	300	300	350	
C	[mm]	-	-	-	108	
B	[mm]	-	-	-	210	
A	[mm]	-	-	-	254	
K	[mm]	-	-	-	15	
Weight NB ¹⁾	[kg]	81/82	87/94	87/97	124/172	
Weight NB SS ¹⁾	[kg]	86/86	90/96	90/99	128/176	

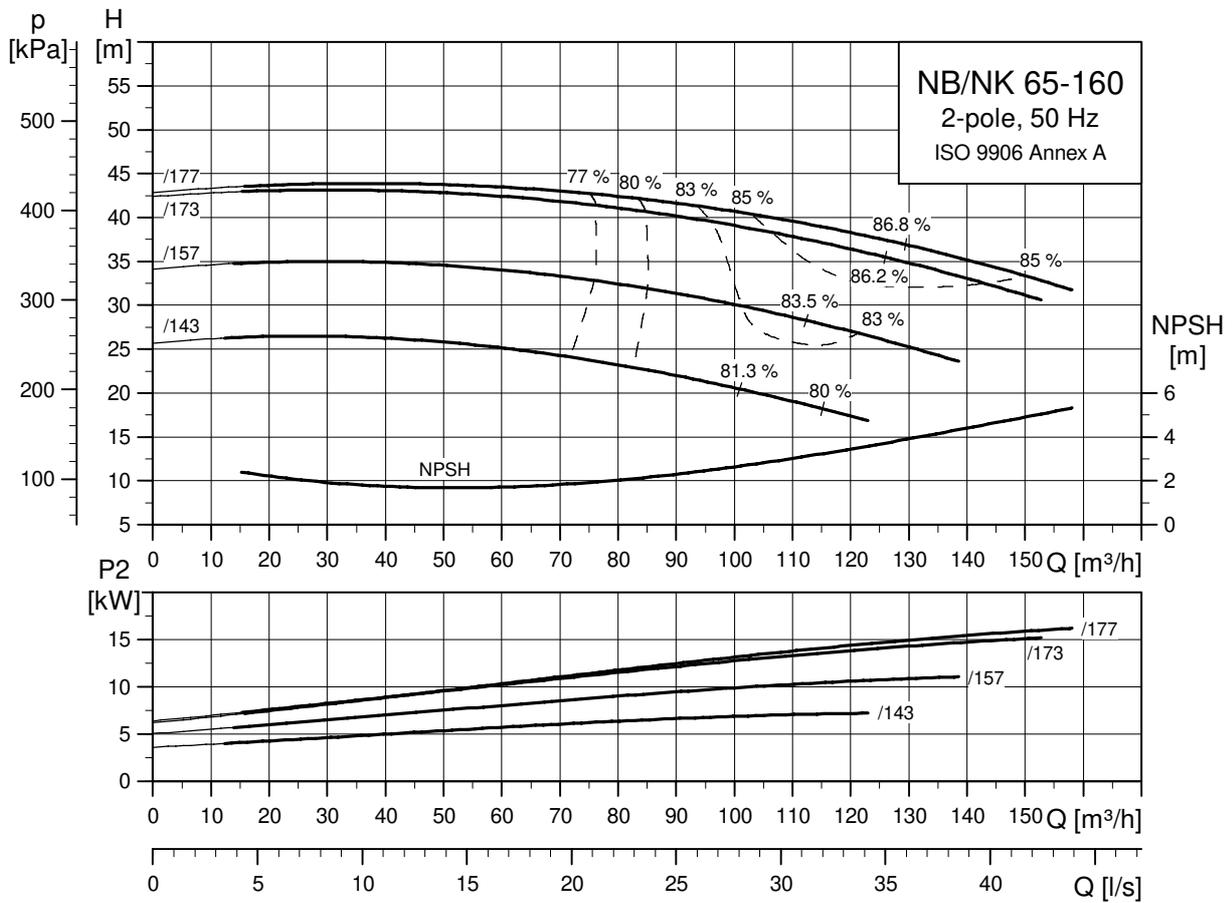
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

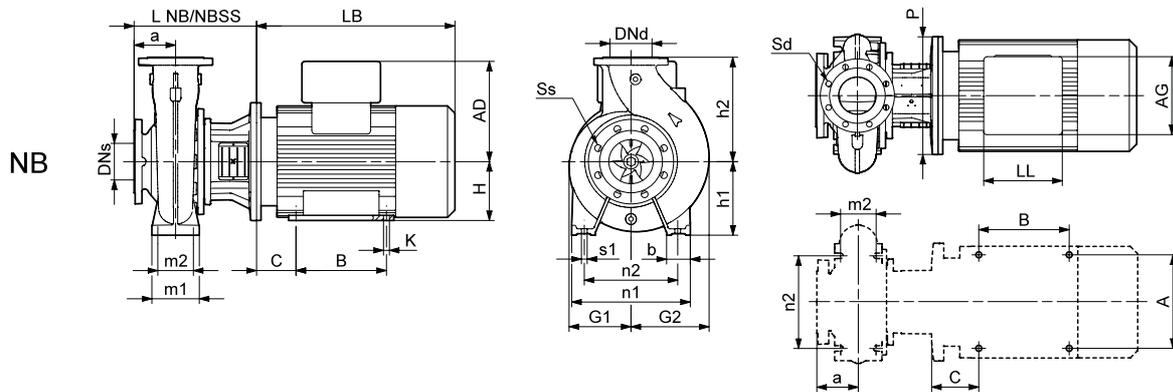
Note: For information about base frames, see page 270.

Performance curves

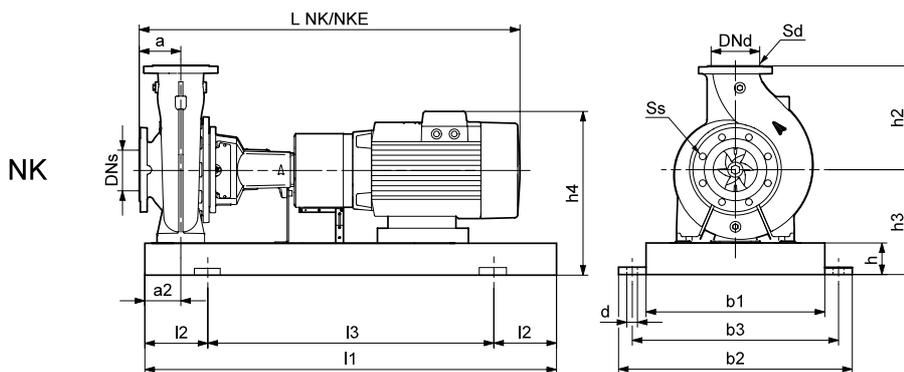
NB, NK 65-160
2-pole



TM03 5099 4106



TM03 4182 4106



TM03 6005 4106

Pump type		65-160/143	65-160/157	65-160/173	65-160/177	
Motor type	Premium Motor	MG 132SD-D	Siemens 160M	Siemens 160M	Siemens 160L	
	E-Motor	MGE 132SD	MMGE 160M	MMGE 160MX	MMGE 160L	
Common data NB/NK	P ₂	[kW]	7.5	11	15	18.5
	PN	[bar]	16	16	16	16
	DNs	[mm]	80	80	80	80
	DNd	[mm]	65	65	65	65
	a	[mm]	100	100	100	100
	h ₂	[mm]	200	200	200	200
	Ss		8x19	8x19	8x19	8x19
Sd		4x19	4x19	4x19	4x19	
Common data NK standard/ spacer coupling	L NK	[mm]	941/1031	1065/1148	1065/1148	1105/1188
	L NKE	[mm]	941/1031	1036/1119	1048/1131	1086/1169
	Weight NK	[kg]	160/157	205/199	214/208	234/228
	Weight NKE	[kg]	170/167	253/247	282/276	313/307
	Weight NK SS	[kg]	163/160	208/203	217/212	237/232
	Weight NKE SS	[kg]	173/170	256/251	285/280	316/311
NK data	l ₁	[mm]	1120	1250	1250	1250
	l ₂	[mm]	190	205	205	205
	l ₃	[mm]	740	840	840	840
	b ₁	[mm]	380	430	430	430
	b ₂	[mm]	490	540	540	540
	b ₃	[mm]	440	490	490	490
	d	[mm]	24	24	24	24
	a ₂	[mm]	60	60	60	60
	h	[mm]	80	80	80	80
	h ₃	[mm]	240	245	245	245
	h ₄ ¹⁾	[mm]	374/428	442/604	442/622	442/622
Base frame no.		5	6	6	6	
NB data	Design		A	B ²⁾	B ²⁾	B ²⁾
	L NB	[mm]	313	343	343	343
	L NB SS	[mm]	313	343	343	343
	h ₁	[mm]	160	-	-	-
	G ₁	[mm]	127	127	127	127
	G ₂	[mm]	161	161	161	161
	m ₁	[mm]	125	-	-	-
	m ₂	[mm]	95	-	-	-
	n ₁	[mm]	280	-	-	-
	n ₂	[mm]	212	-	-	-
	b	[mm]	65	-	-	-
	s ₁	[mm]	M12	-	-	-
	H	[mm]	-	160	160	160
	LB ¹⁾	[mm]	391/391	478/449	478/461	518/499
	AD ¹⁾	[mm]	134/188	197/359	197/377	197/377
	AG ¹⁾	[mm]	202/290	165/296	165/296	165/296
	LL ¹⁾	[mm]	103/300	165/410	165/410	165/410
	P	[mm]	300	350	350	350
	C	[mm]	-	108	108	108
	B	[mm]	-	210	210	254
A	[mm]	-	254	254	254	
K	[mm]	-	15	15	15	
Weight NB ¹⁾	[kg]	85/95	122/170	131/199	151/230	
Weight NB SS ¹⁾	[kg]	90/99	126/174	135/203	155/234	

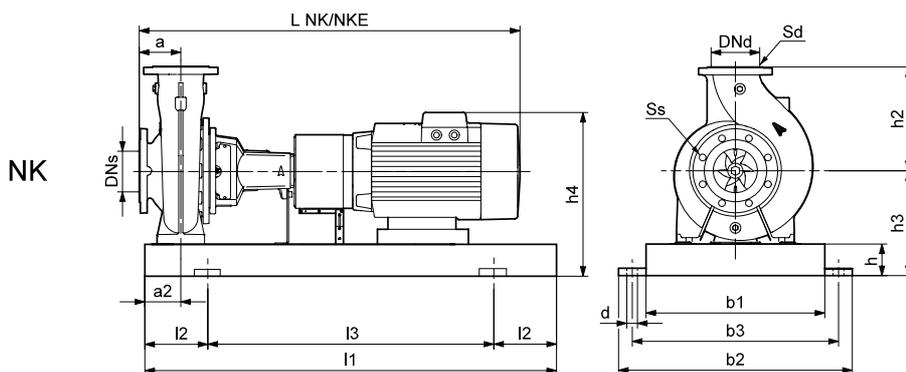
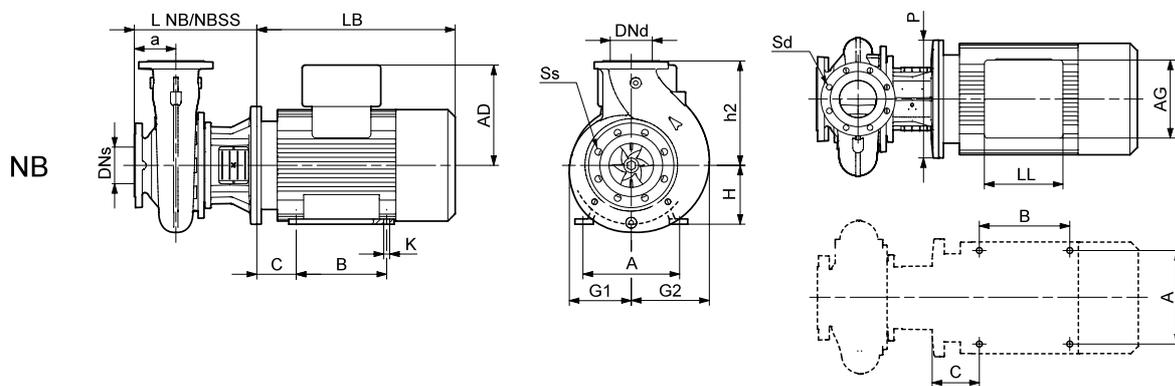
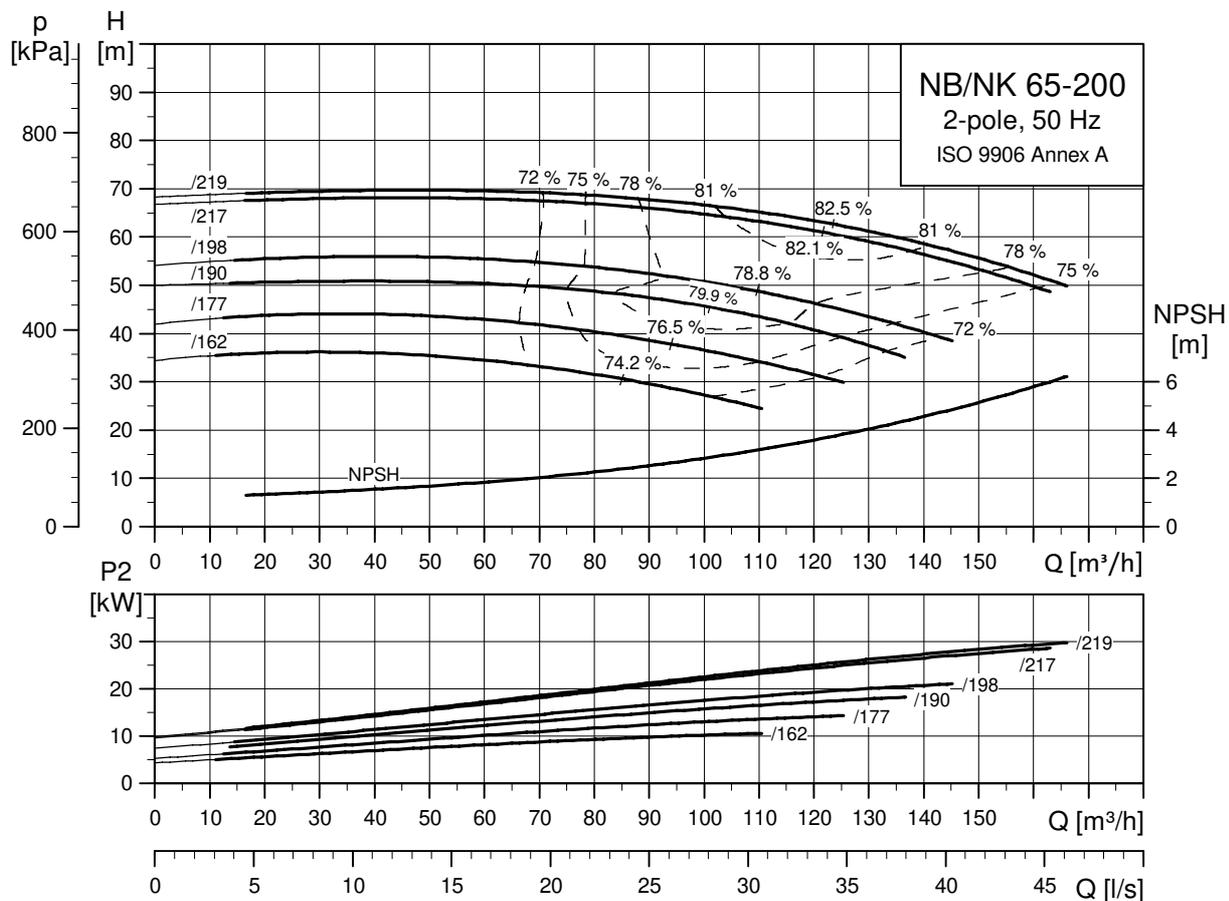
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 65-200
2-pole



TM03 5100 4106

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	Premium Motor	Siemens 160M	Siemens 160M	Siemens 160L	Siemens 180M	Siemens 200L	Siemens 200L	
	E-Motor	MMGE 160M	MMGE 160MX	MMGE 160L	MMGE 180M	-	-	
Common data NB/NK	P ₂	[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
	h ₂	[mm]	225	225	225	225	225	225
	Ss		8x19	8x19	8x19	8x19	8x19	8x19
	Sd		4x19	4x19	4x19	4x19	4x19	4x19
Common data NK standard/ spacer coupling	L NK	[mm]	1065/1188	1065/1188	1105/1228	1197/1312	1254/1369	1254/1369
	L NKE	[mm]	1036/1159	1048/1171	1086/1209	1120/1235	-/-	-/-
	Weight NK	[kg]	218/213	227/222	247/242	276/268	420/415	420/415
	Weight NKE	[kg]	266/261	295/290	326/321	357/349	-/-	-/-
	Weight NK SS	[kg]	224/218	233/227	253/247	282/273	426/420	426/420
	Weight NKE SS	[kg]	272/266	301/295	332/326	363/354	-/-	-/-
NK data	l ₁	[mm]	1250	1250	1250	1250	1600	1600
	l ₂	[mm]	205	205	205	205	270	270
	l ₃	[mm]	840	840	840	840	1060	1060
	b ₁	[mm]	430	430	430	430	530	530
	b ₂	[mm]	540	540	540	540	660	660
	b ₃	[mm]	490	490	490	490	600	600
	d	[mm]	24	24	24	24	28	28
	a ₂	[mm]	75	75	75	75	75	75
	h	[mm]	80	80	80	80	100	100
	h ₃	[mm]	260	260	260	265	305	305
	h ₄ ¹⁾	[mm]	457/619	457/637	457/637	523/664	610/-	610/-
	Base frame no.		6	6	6	6	8	8
	NB data	Design		B ²⁾	B ²⁾	B ²⁾	B	B ²⁾
L NB		[mm]	343	343	343	343	343	343
L NB SS		[mm]	343	343	343	343	343	343
h ₁		[mm]	-	-	-	-	-	-
G ₁		[mm]	149	149	149	149	149	149
G ₂		[mm]	173	173	173	173	173	173
m ₁		[mm]	-	-	-	-	-	-
m ₂		[mm]	-	-	-	-	-	-
n ₁		[mm]	-	-	-	-	-	-
n ₂		[mm]	-	-	-	-	-	-
b		[mm]	-	-	-	-	-	-
s ₁		[mm]	-	-	-	-	-	-
H		[mm]	160	160	160	180	200	200
LB ¹⁾		[mm]	478/449	478/461	518/499	602/525	659/-	659/-
AD ¹⁾		[mm]	197/359	197/377	197/377	258/399	305/-	305/-
AG ¹⁾		[mm]	165/296	165/296	165/296	152/328	260/-	260/-
LL ¹⁾		[mm]	165/410	165/410	165/410	132/456	192/-	192/-
P		[mm]	350	350	350	350	400	400
C		[mm]	108	108	108	121	133	133
B		[mm]	210	210	254	241	305	305
A		[mm]	254	254	254	279	318	318
K	[mm]	15	15	15	15	19	19	
Weight NB ¹⁾	[kg]	129/177	138/206	158/237	187/268	275/-	275/-	
Weight NB SS ¹⁾	[kg]	135/183	144/212	164/243	193/274	280/-	280/-	

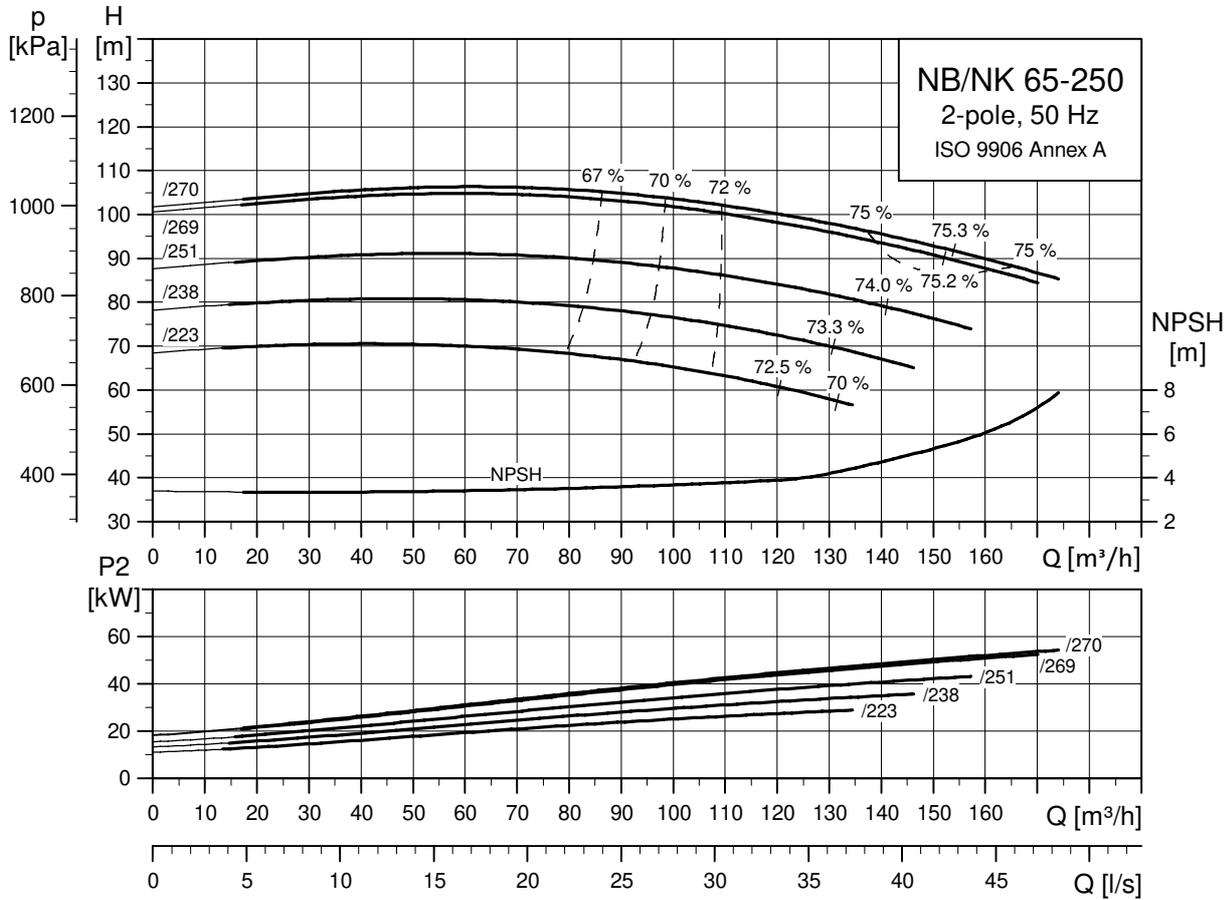
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

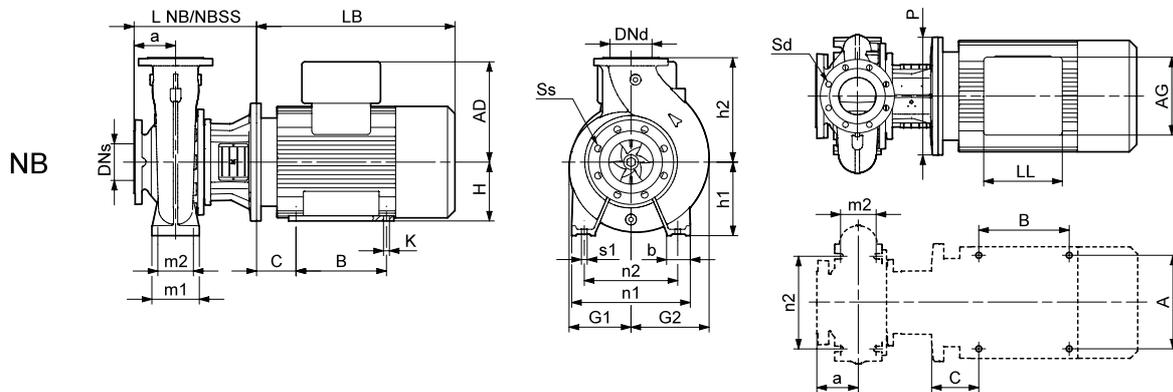
Note: For information about base frames, see page 270.

Performance curves

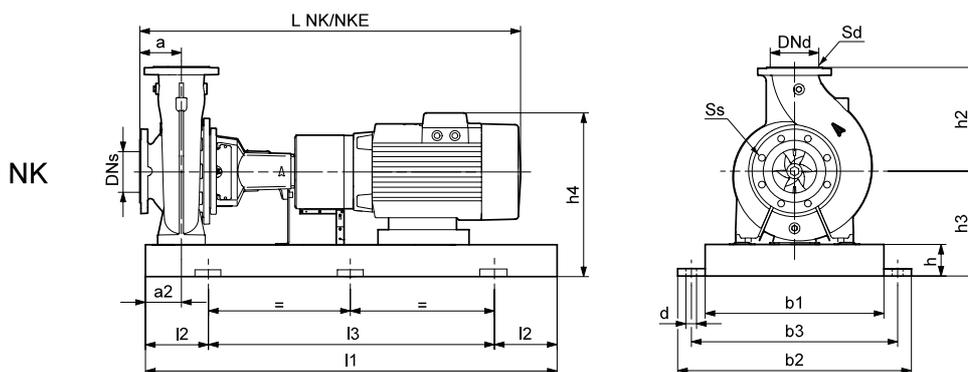
NB, NK 65-250
2-pole



TM03 5101 4106



TM03 4182 4106



TM03 4179 1806

Technical data

NB, NK 65-250
2-pole

Pump type		65-250/223	65-250/238	65-250/251	65-250/269	65-250/270	
Motor type	Premium Motor	Siemens 200L	Siemens 200L	Siemens 225M	Siemens 250M	Siemens 280S	
	E-Motor	-	-	-	-	-	
Common data NB/NK	P ₂	[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		8x19	8x19	8x19	8x19	8x19
	Sd		4x19	4x19	4x19	4x19	4x19
Common data NK standard/ spacer coupling	L NK	[mm]	1343/1479	1343/1479	1393/1529	1461/1597	1534/1670
	L NKE	[mm]	-/-	-/-	-/-	-/-	-/-
	Weight NK	[kg]	465/460	465/460	588/582	718/713	976/974
	Weight NKE	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	464/458	464/458	586/581	717/712	974/973
	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-	-/-
NK data	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 ¹⁾	[mm]	610/-	610/-	655/-	752/-	847/-
Base frame no.		8	8	8	9	10	
NB data	Design		C ²⁾				
	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 ¹⁾	[mm]	659/-	659/-	709/-	747/-	820/-
	AD ¹⁾	[mm]	305/-	305/-	325/-	392/-	432/-
	AG ¹⁾	[mm]	260/-	260/-	260/-	300/-	300/-
	LL ¹⁾	[mm]	192/-	192/-	192/-	236/-	236/-
	P	[mm]	400	400	450	550	550
	C	[mm]	133	133	149	168	190
	B	[mm]	305	305	311	349	368
	A	[mm]	318	318	356	406	457
	K	[mm]	19	19	19	24	24
Weight NB ¹⁾	[kg]	318/-	318/-	442/-	548/-	658/-	
Weight NB SS ¹⁾	[kg]	320/-	320/-	444/-	546/-	656/-	

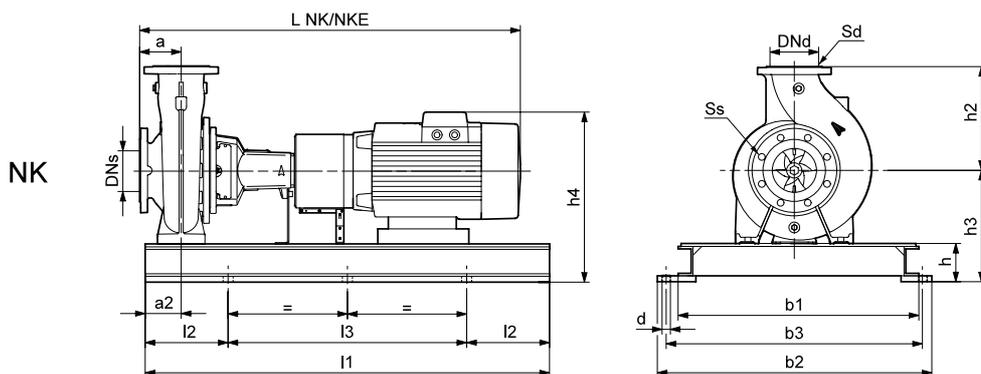
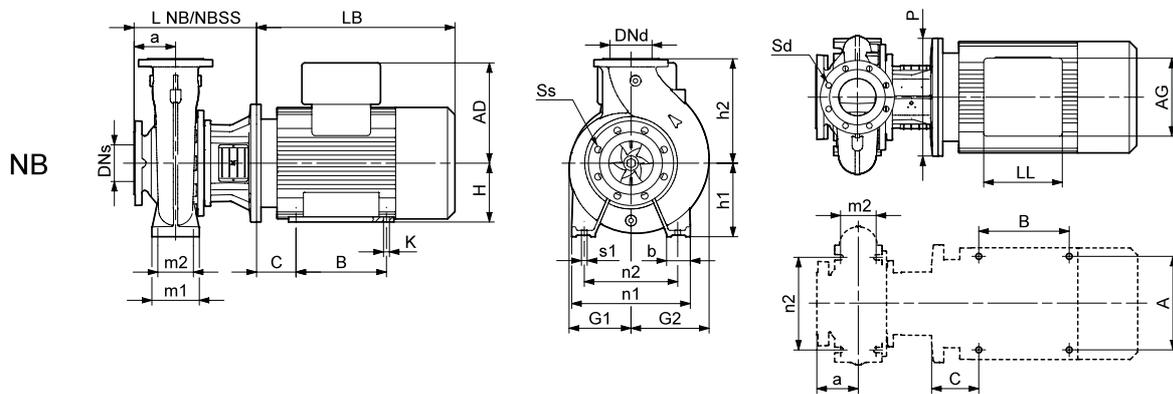
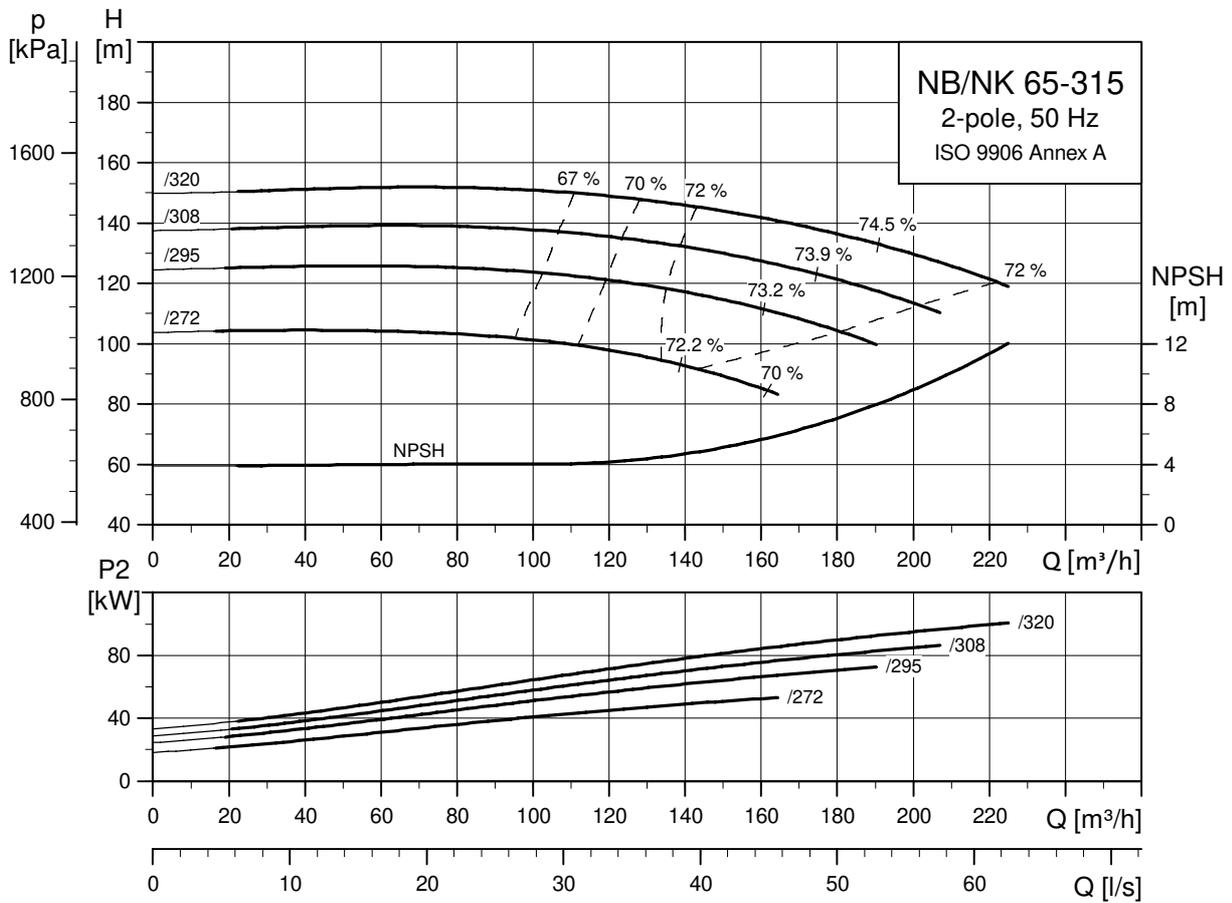
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h1 and H dimensions.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 65-315
2-pole



TM03 5102 4106

TM03 4182 4106

TM03 4051 1806

Technical data

NB, NK 65-315
2-pole

Pump type		65-315/272	65-315/295	65-315/308	65-315/320	
Motor type	Premium Motor	Siemens 250M	Siemens 280S	Siemens 280M	Siemens 315S	
	E-Motor	-	-	-	-	
Common data NB/NK	P ₂	[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		8x19	8x19	8x19	8x19
Common data NK standard/ spacer coupling	Sd		4x19	4x19	4x19	4x19
	L NK	[mm]	1486/1622	1559/1695	1669/1805	1671/1807
	L NKE	[mm]	-/-	-/-	-/-	-/-
	Weight NK	[kg]	726/721	988/986	1073/1072	1260/1259
	Weight NKE	[kg]	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	732/727	994/993	1080/1078	1266/1265
NK data	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-
	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 ¹⁾	[mm]	747/-	847/-	847/-	950/-
	Base frame no.		9	10	10	10
NB data	Design		C ²⁾	C ²⁾	C ²⁾	
	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 ¹⁾	[mm]	747/-	820/-	930/-	932/-
	AD ¹⁾	[mm]	392/-	432/-	432/-	495/-
	AG ¹⁾	[mm]	300/-	300/-	300/-	379/-
	LL ¹⁾	[mm]	236/-	236/-	236/-	307/-
	P	[mm]	550	550	550	660
	C	[mm]	168	190	190	216
	B	[mm]	349	368	419	406
A	[mm]	406	457	457	508	
K	[mm]	24	24	24	28	
Weight NB ¹⁾	[kg]	560/-	670/-	755/-	968/-	
Weight NB SS ¹⁾	[kg]	566/-	676/-	761/-	974/-	

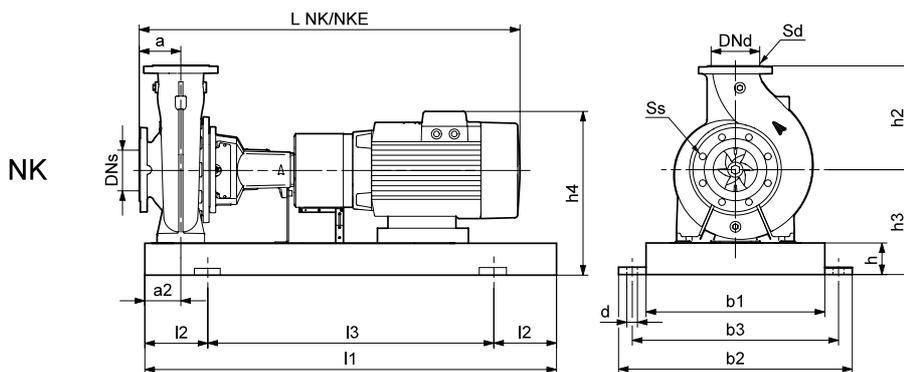
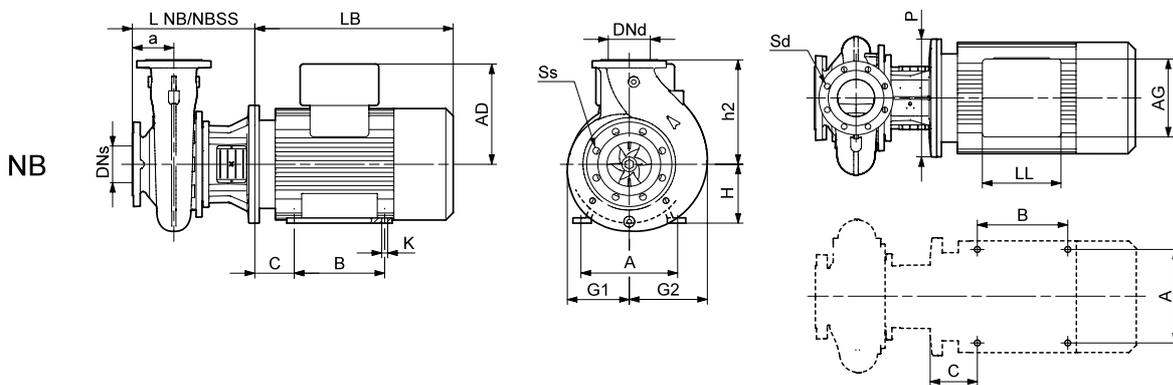
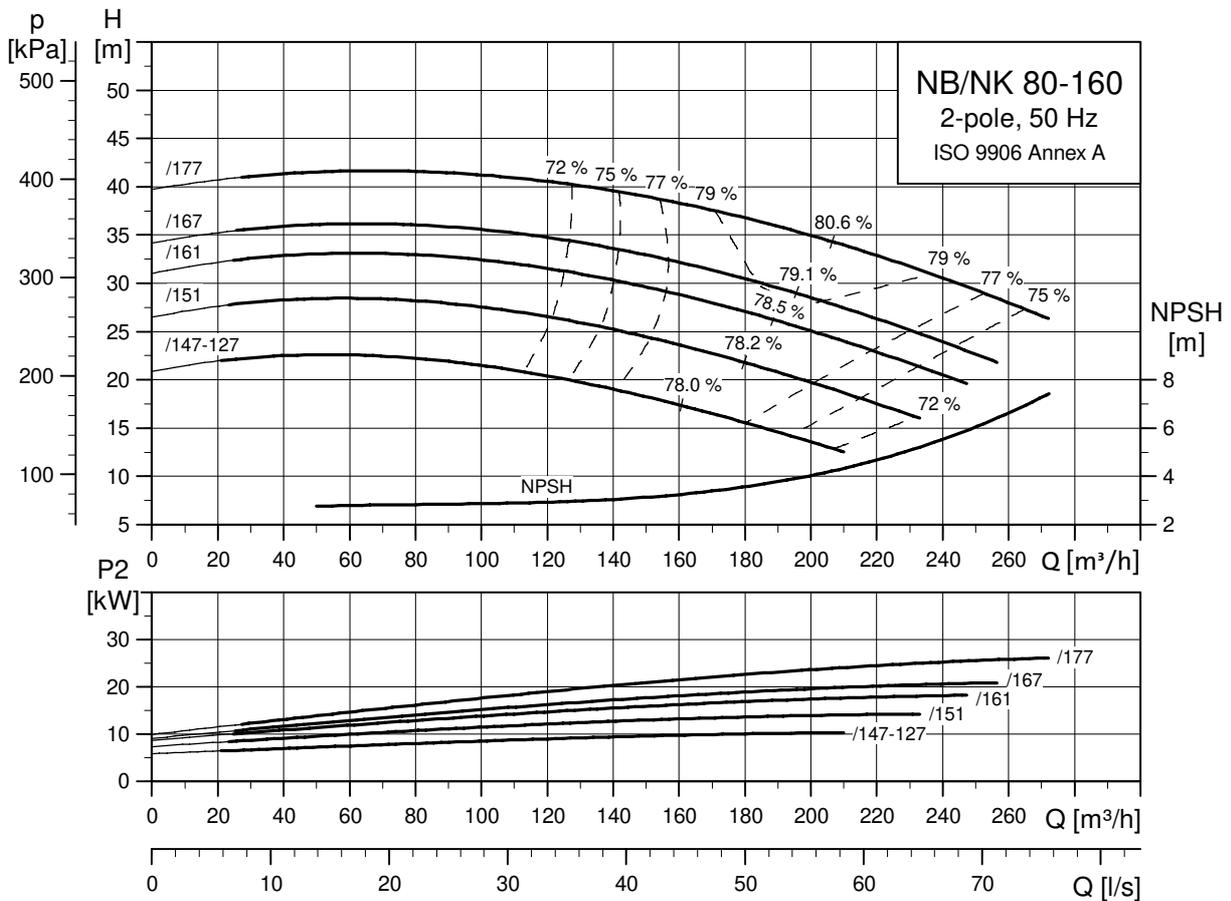
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h1 and H dimensions.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 80-160
2-pole



TM03 5103 4106

TM03 4181 4106

TM03 6005 4106

Technical data

NB, NK 80-160
2-pole

Pump type		80-160/147-127	80-160/151	80-160/161	80-160/167	80-160/177	
Motor type	Premium Motor	Siemens 160M	Siemens 160M	Siemens 160L	Siemens 180M	Siemens 200L	
	E-Motor	MMGE 160M	MMGE 160MX	MMGE 160L	MMGE 180M	-	
Common data NB/NK	P ₂	[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		8x19	8x19	8x19	8x19	8x19
	Sd		8x19	8x19	8x19	8x19	8x19
Common data NK standard/ spacer coupling	L NK	[mm]	1090/1213	1090/1213	1130/1253	1222/1337	1279/1394
	L NKE	[mm]	1061/1184	1073/1196	1111/1234	1145/1260	-/-
	Weight NK	[kg]	218/212	227/221	247/241	276/267	420/414
	Weight NKE	[kg]	266/260	295/289	326/320	357/348	-/-
	Weight NK SS	[kg]	224/219	233/228	253/248	282/273	426/420
	Weight NKE SS	[kg]	272/267	301/296	332/327	363/354	-/-
NK data	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 ¹⁾	[mm]	457/619	457/637	457/637	523/664	610/-	
NB data	Base frame no.		6	6	6	6	8
	Design		B ²⁾	B ²⁾	B ²⁾	B	B ²⁾
	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 ¹⁾	[mm]	478/449	478/461	518/499	602/525	659/-
	AD ¹⁾	[mm]	197/359	197/377	197/377	258/399	305/-
	AG ¹⁾	[mm]	165/296	165/296	165/296	152/328	260/-
	LL ¹⁾	[mm]	165/410	165/410	165/410	132/456	192/-
	P	[mm]	350	350	350	350	400
	C	[mm]	108	108	108	121	133
B	[mm]	210	210	254	241	305	
A	[mm]	254	254	254	279	318	
K	[mm]	15	15	15	15	19	
Weight NB ¹⁾	[kg]	130/178	139/207	159/238	188/269	277/-	
Weight NB SS ¹⁾	[kg]	135/183	144/212	164/243	193/274	280/-	

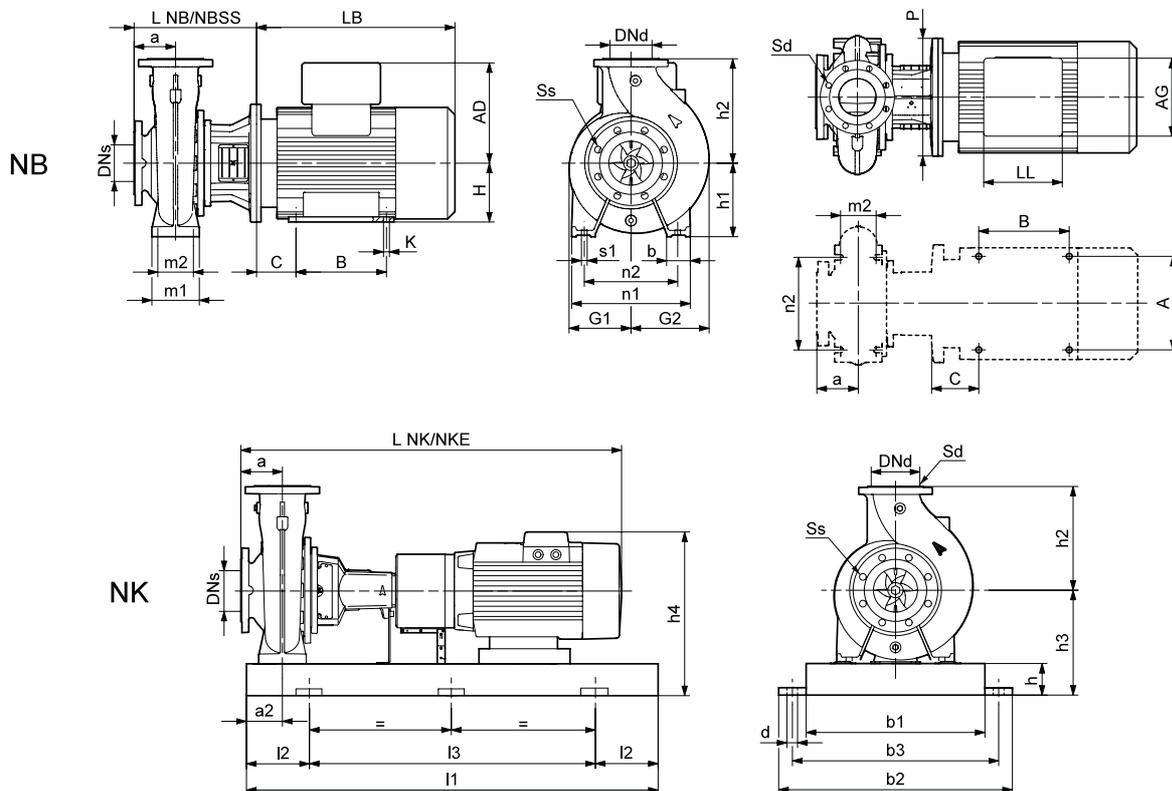
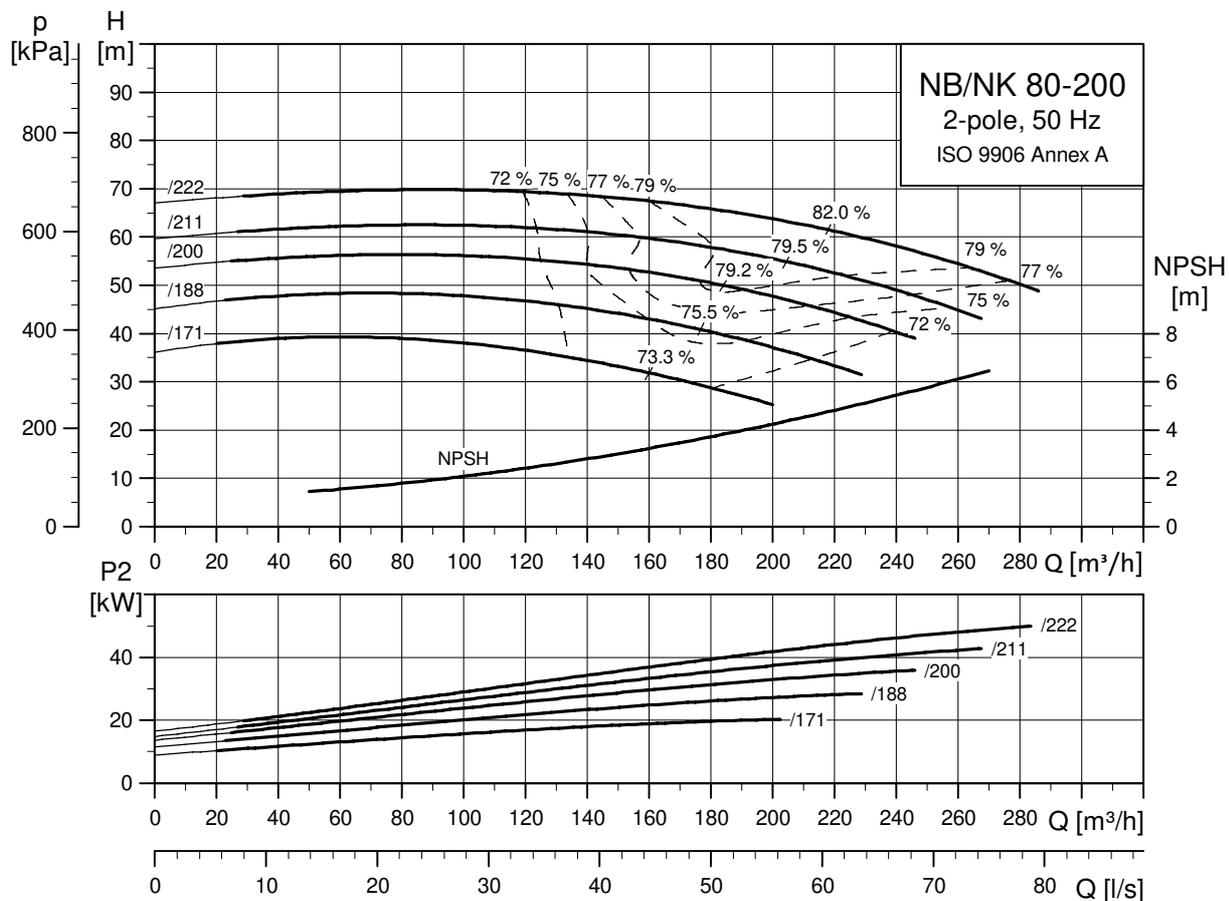
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h1 and H dimensions.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 80-200
2-pole



TM03 5104 4106

TM03 4182 4106

TM03 4179 1806

Technical data

NB, NK 80-200
2-pole

Pump type		80-200/171	80-200/188	80-200/200	80-200/211	80-200/222	
Motor type	Premium Motor	Siemens 180M	Siemens 200L	Siemens 200L	Siemens 225M	Siemens 250M	
	E-Motor	MMGE 180M	-	-	-	-	
Common data NB/NK	P ₂	[kW]	22	30	37	45	55
	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
	h ₂	[mm]	250	250	250	250	250
	Ss		8x19	8x19	8x19	8x19	8x19
Sd		8x19	8x19	8x19	8x19	8x19	
Common data NK standard/ spacer coupling	L NK	[mm]	1311/1447	1368/1504	1368/1504	1418/1554	1486/1622
	L NKE	[mm]	1234/1370	-/-	-/-	-/-	-/-
	Weight NK	[kg]	309/301	454/448	454/448	569/563	696/691
	Weight NKE	[kg]	390/382	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	316/307	460/454	460/454	575/569	702/698
Weight NKE SS	[kg]	397/388	-/-	-/-	-/-	-/-	
NK data	l ₁	[mm]	1250	1600	1600	1600	1800
	l ₂	[mm]	205	270	270	270	300
	l ₃	[mm]	840	1060	1060	1060	1200
	b ₁	[mm]	430	530	530	530	600
	b ₂	[mm]	540	660	660	660	730
	b ₃	[mm]	490	600	600	600	670
	d	[mm]	24	28	28	28	28
	a ₂	[mm]	75	75	75	75	75
	h	[mm]	80	100	100	100	100
	h ₃	[mm]	265	305	305	330	355
	h ₄ ¹⁾	[mm]	523/664	610/-	610/-	655/-	747/-
Base frame no.		6	8	8	8	9	
NB data	Design		C	C ²⁾	C ²⁾	C ²⁾	C ²⁾
	L NB	[mm]	398	398	398	428	428
	L NB SS	[mm]	398	398	398	428	428
	h ₁	[mm]	180	180	180	180	180
	G ₁	[mm]	160	160	160	160	160
	G ₂	[mm]	193	193	193	193	193
	m ₁	[mm]	125	125	125	125	125
	m ₂	[mm]	95	95	95	95	95
	n ₁	[mm]	345	345	345	345	345
	n ₂	[mm]	280	280	280	280	280
	b	[mm]	65	65	65	65	65
	s ₁	[mm]	M12	M12	M12	M12	M12
	H	[mm]	180	200	200	225	250
	LB ¹⁾	[mm]	602/525	659/-	659/-	709/-	747/-
	AD ¹⁾	[mm]	258/399	305/-	305/-	325/-	392/-
	AG ¹⁾	[mm]	152/328	260/-	260/-	260/-	300/-
	LL ¹⁾	[mm]	132/456	192/-	192/-	192/-	236/-
	P	[mm]	350	400	400	450	550
	C	[mm]	121	133	133	149	168
	B	[mm]	241	305	305	311	349
	A	[mm]	279	318	318	356	406
	K	[mm]	15	19	19	19	24
	Weight NB ¹⁾	[kg]	212/293	302/-	302/-	427/-	533/-
Weight NB SS ¹⁾	[kg]	223/304	313/-	313/-	437/-	539/-	

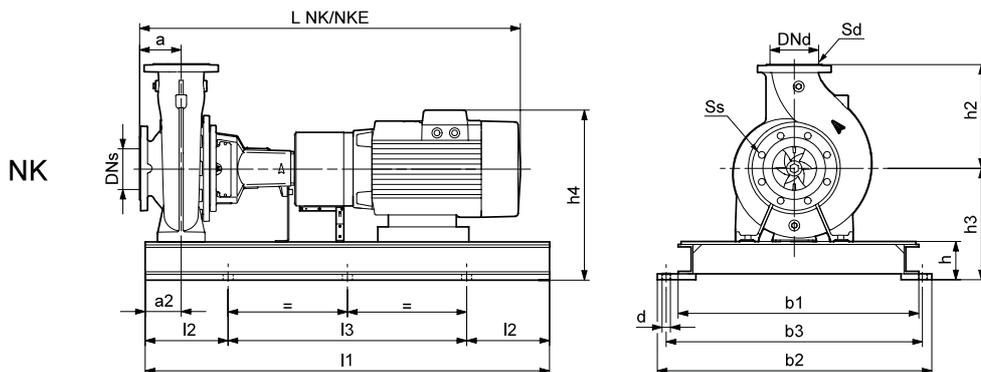
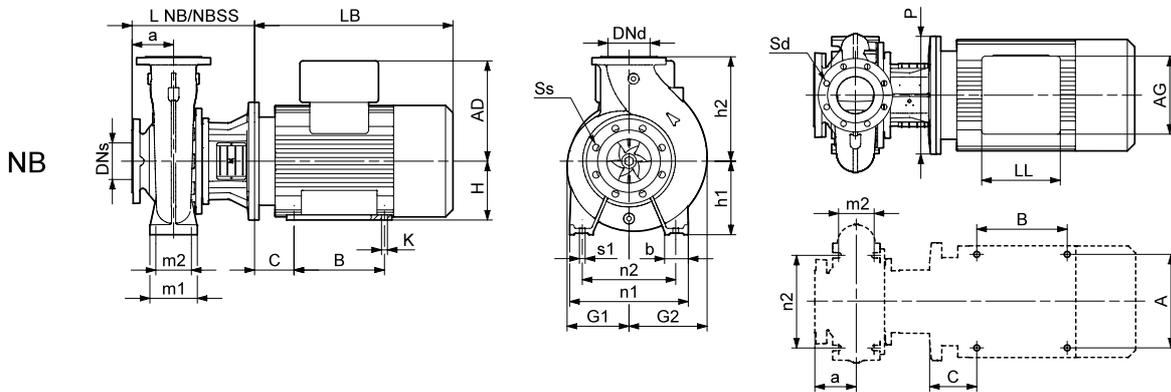
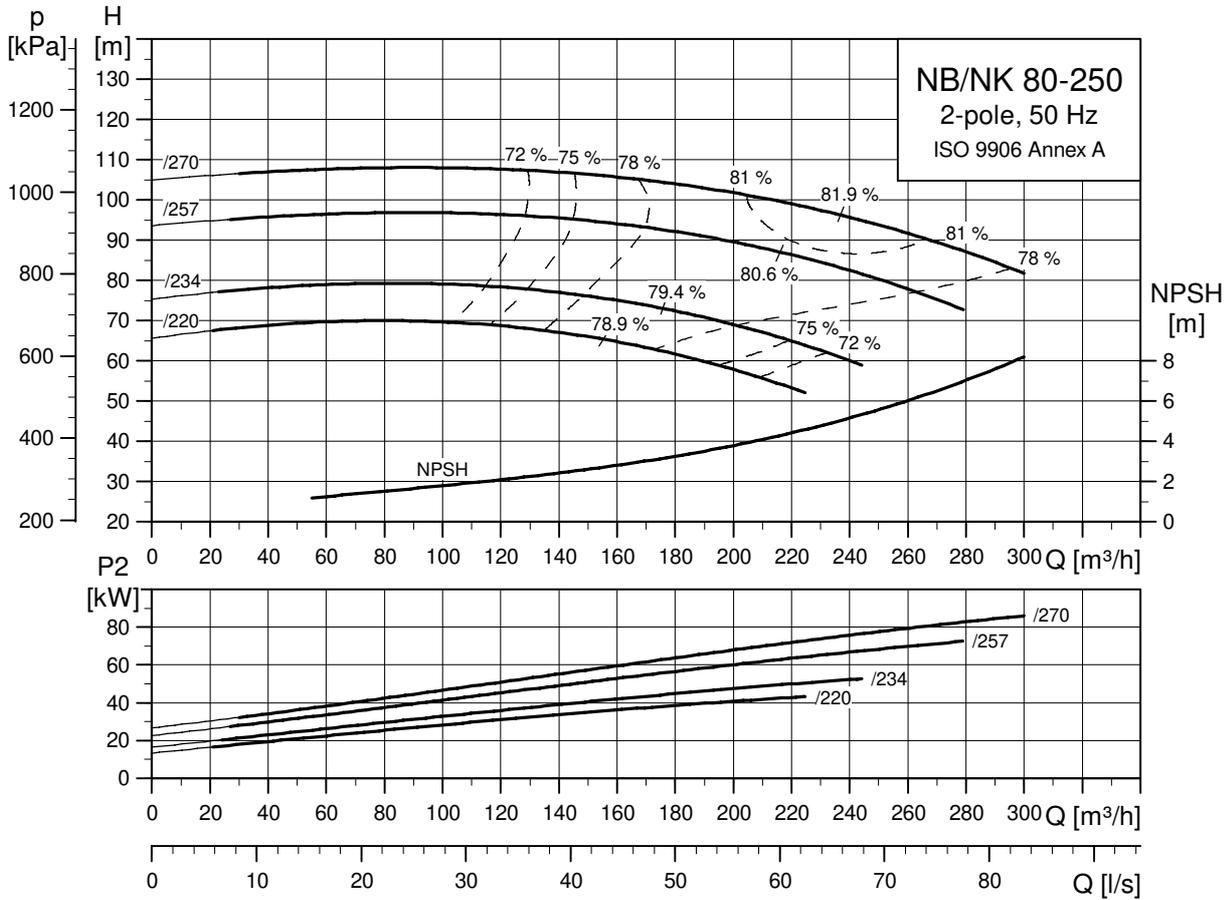
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 80-250
2-pole, 50 Hz



TM03 5105 4106

TM03 4182 4106

TM03 4051 1806

Technical data

NB, NK 80-250
2-pole

Pump type		80-250/220	80-250/234	80-250/257	80-250/270	
Motor type	Premium Motor	Siemens 225M	Siemens 250M	Siemens 280S	Siemens 280M	
	E-Motor	-	-	-	-	
Common data NB/NK	P ₂	[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		8x19	8x19	8x19	8x19
	Sd		8x19	8x19	8x19	
Common data NK standard/ spacer coupling	L NK	[mm]	1418/1554	1486/1622	1559/1695	1669/1805
	L NKE	[mm]	-/-	-/-	-/-	-/-
	Weight NK	[kg]	592/586	722/717	979/978	1065/1063
	Weight NKE	[kg]	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	598/592	728/724	986/984	1071/1070
	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-
NK data	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 ¹⁾	[mm]	655/-	752/-	847/-	847/-
	Base frame no.		8	9	10	10
NB data	Design		C ²⁾	C ²⁾	C ²⁾	C ²⁾
	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 ¹⁾	[mm]	709/-	747/-	820/-	930/-
	AD ¹⁾	[mm]	325/-	392/-	432/-	432/-
	AG ¹⁾	[mm]	260/-	300/-	300/-	300/-
	LL ¹⁾	[mm]	192/-	236/-	236/-	236/-
	P	[mm]	450	550	550	550
	C	[mm]	149	168	190	190
	B	[mm]	311	349	368	419
A	[mm]	356	406	457	457	
K	[mm]	19	24	24	24	
	Weight NB ¹⁾	[kg]	446/-	552/-	662/-	747/-
	Weight NB SS ¹⁾	[kg]	456/-	558/-	668/-	753/-

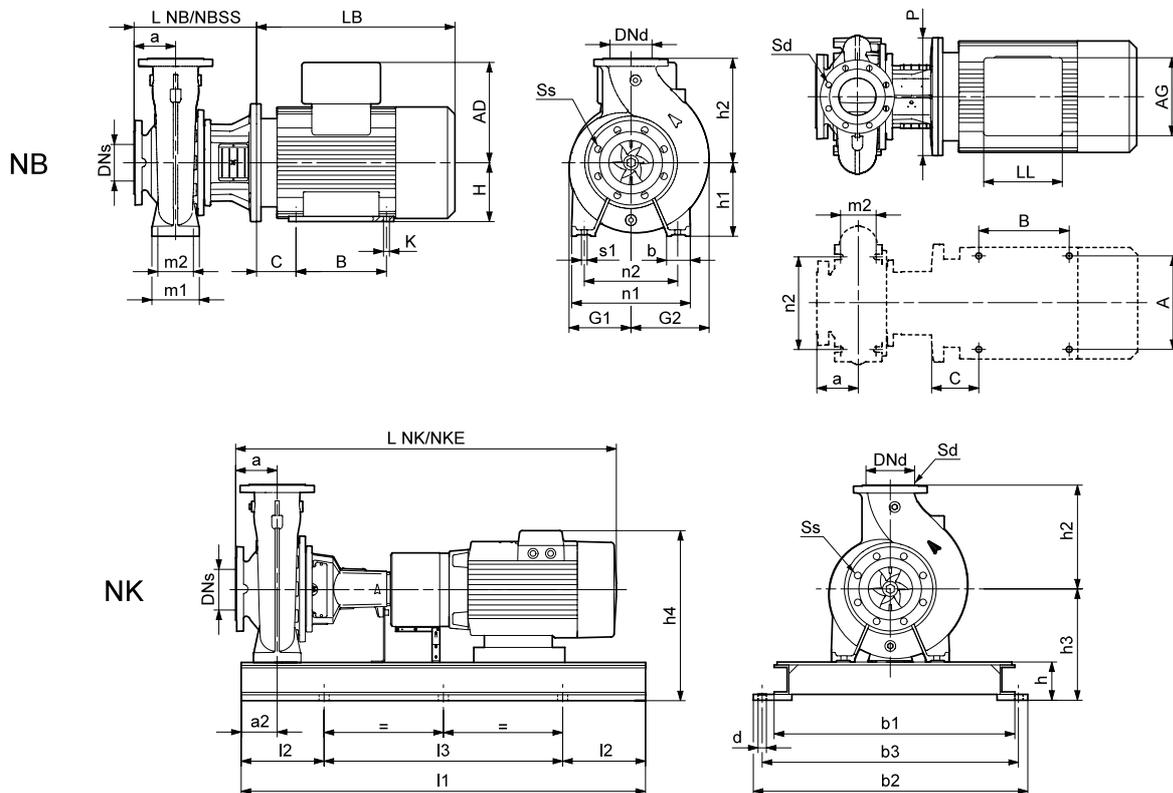
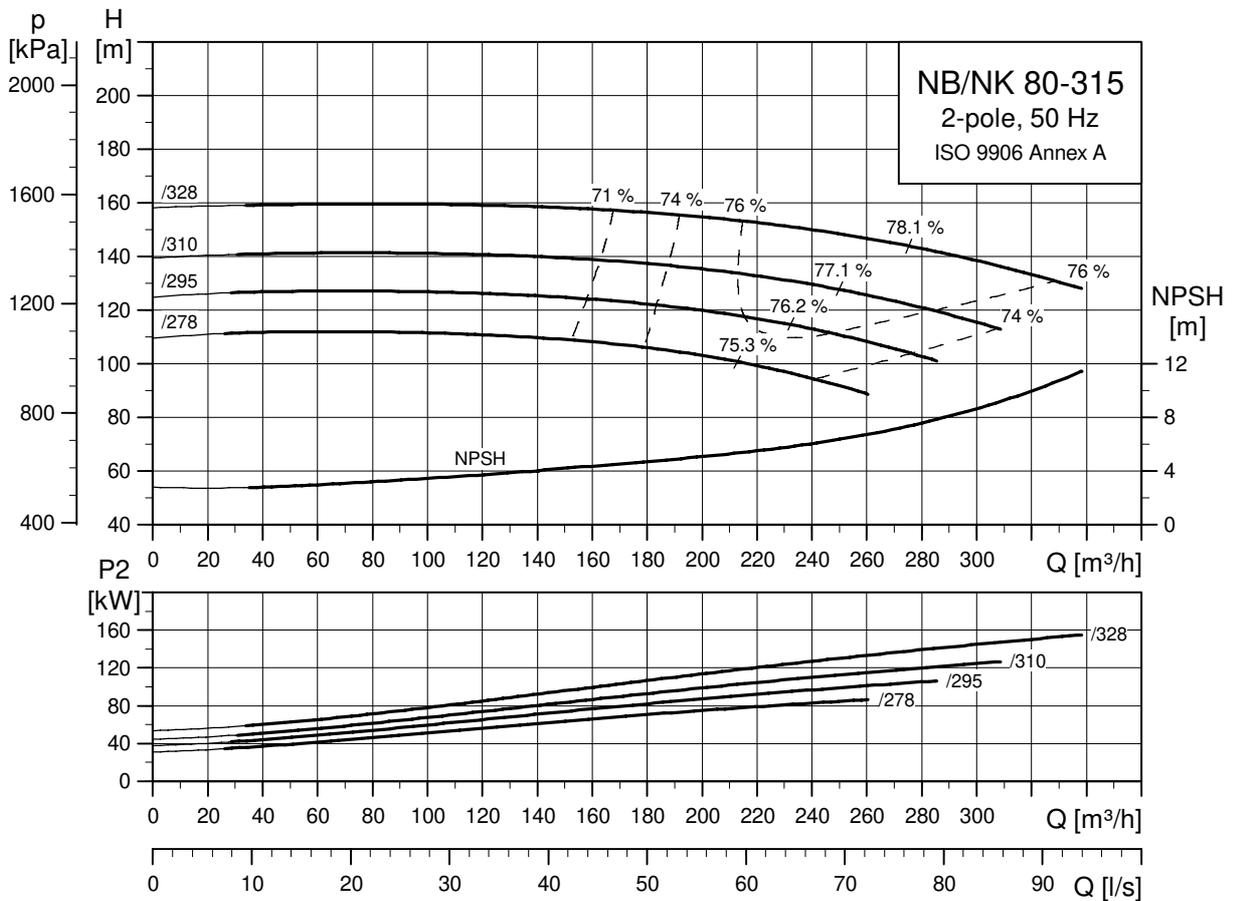
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h1 and H dimensions.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 80-315
2-pole



TM03 5106 4106

TM03 4182 4106

TM03 4051 1806

Technical data

NB, NK 80-315
2-pole

Pump type		80-315/278	80-315/295	80-315/310	80-315/328 ³⁾	
Motor type	Premium Motor	Siemens 280M	Siemens 315S	Siemens 315M	Siemens 315L	
	E-Motor	-	-	-	-	
Common data NB/NK	P ₂	[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
	h ₂	[mm]	315	315	315	315
	Ss		8x19	8x19	8x19	8x19
	Sd		8x19	8x19	8x19	8x19
Common data NK standard/ spacer coupling	L NK	[mm]	1669/1805	1671/1807	1831/1967	1891/2027
	L NKE	[mm]	-/-	-/-	-/-	-/-
	Weight NK	[kg]	1087/1085	1262/1260	1387/1386	1554/1553
	Weight NKE	[kg]	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	1094/1093	1269/1268	1395/1394	1562/1561
	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-
NK data	l ₁	[mm]	2000	2000	2000	2000
	l ₂	[mm]	330	330	330	330
	l ₃	[mm]	1340	1340	1340	1340
	b ₁	[mm]	750	750	750	750
	b ₂	[mm]	890	890	890	890
	b ₃	[mm]	830	830	830	830
	d	[mm]	28	28	28	28
	a ₂	[mm]	90	90	90	90
	h	[mm]	130	130	130	130
	h ₃	[mm]	415	450	450	450
	h ₄ ¹⁾	[mm]	847/-	945/-	945/-	945/-
	Base frame no.		10	10	10	10
	NB data	Design		C ²⁾	C ²⁾	C ²⁾
L NB		[mm]	428	458	458	458
L NB SS		[mm]	428	458	458	458
h ₁		[mm]	250	250	250	250
G ₁		[mm]	216	216	216	216
G ₂		[mm]	243	243	243	243
m ₁		[mm]	160	160	160	160
m ₂		[mm]	120	120	120	120
n ₁		[mm]	400	400	400	400
n ₂		[mm]	315	315	315	315
b		[mm]	80	80	80	80
s ₁		[mm]	M16	M16	M16	M16
H		[mm]	280	315	315	315
LB ¹⁾		[mm]	930/-	932/-	1092/-	1092/-
AD ¹⁾		[mm]	432/-	495/-	495/-	495/-
AG ¹⁾		[mm]	300/-	379/-	379/-	379/-
LL ¹⁾		[mm]	236/-	307/-	307/-	307/-
P		[mm]	550	660	660	660
C		[mm]	190	216	216	216
B		[mm]	419	406	457	508
A	[mm]	457	508	508	508	
K	[mm]	24	28	28	28	
Weight NB ¹⁾	[kg]	765/-	978/-	1103/-	1244/-	
Weight NB SS ¹⁾	[kg]	773/-	986/-	1111/-	1252/-	

1) Dimension of pump with premium range motor/built-in frequency converter.

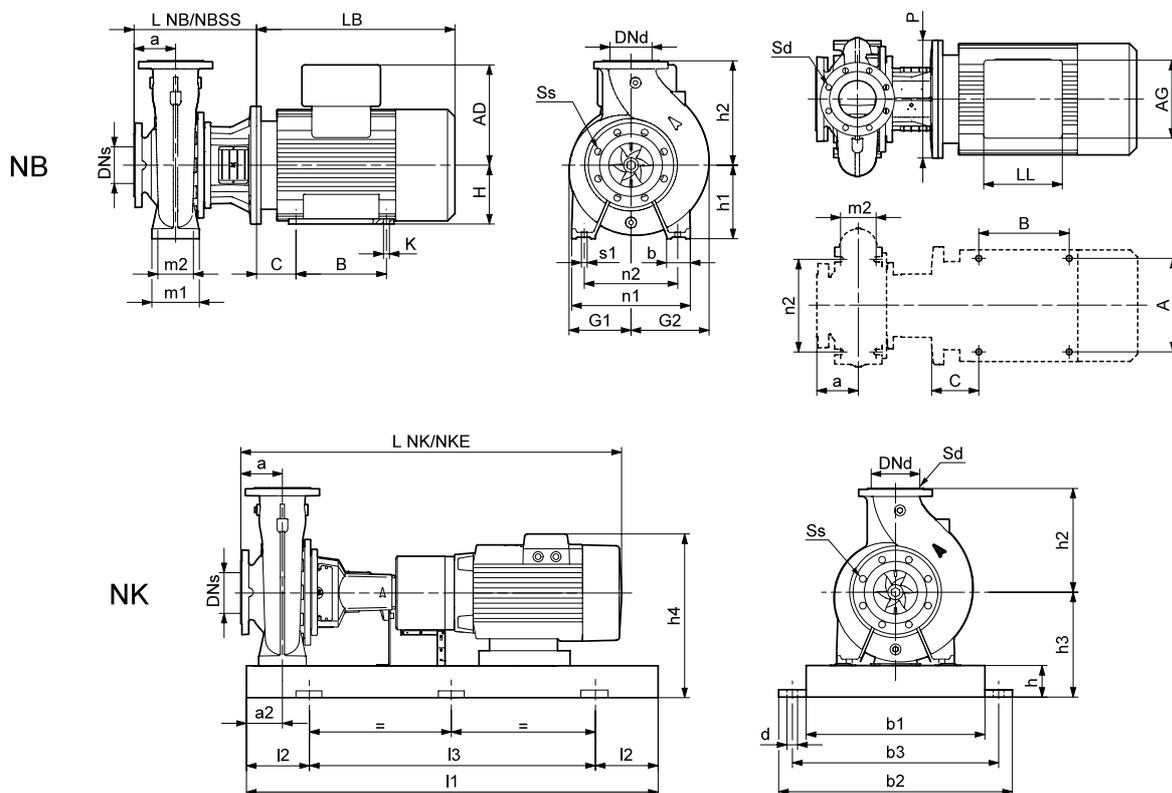
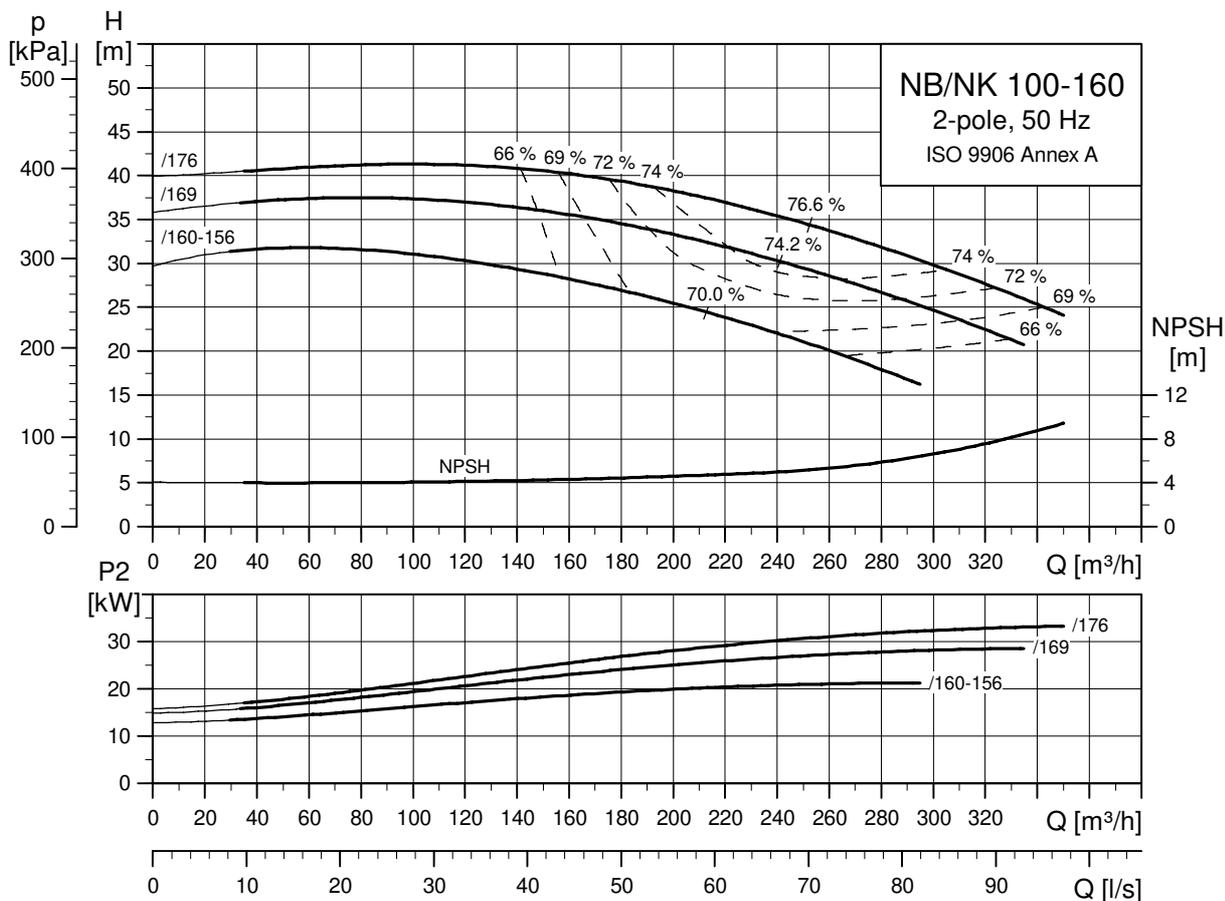
2) Support blocks are needed because of the P, h₁ and H dimensions.

3) NK 80-315/328 is an oversize pump.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 100-160
2-pole



TM03 5107 4106

TM03 4182 4106

TM03 4179 1806

Technical data

NB, NK 100-160
2-pole

Pump type		100-160/160-156	100-160/169	100-160/176	
Motor type	Premium Motor	Siemens 180M	Siemens 200L	Siemens 200L	
	E-Motor	MMGE 180M	-	-	
Common data NB/NK	P ₂	[kW]	22	30	37
	PN	[bar]	16	16	16
	DNs	[mm]	125	125	125
	DNd	[mm]	100	100	100
	a	[mm]	125	125	125
	h ₂	[mm]	280	280	280
	Ss		8x19	8x19	8x19
Common data NK standard/ spacer coupling	Sd		8x19	8x19	
	L NK	[mm]	1222/1337	1279/1394	1279/1394
	L NKE	[mm]	1145/1260	-/-	-/-
	Weight NK	[kg]	304/295	439/433	439/433
	Weight NKE	[kg]	385/376	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-
NK data	Weight NKE SS	[kg]	-/-	-/-	-/-
	l ₁	[mm]	1250	1600	1600
	l ₂	[mm]	205	270	270
	l ₃	[mm]	840	1060	1060
	b ₁	[mm]	430	530	530
	b ₂	[mm]	540	660	660
	b ₃	[mm]	490	600	600
	d	[mm]	24	28	28
	a ₂	[mm]	90	90	90
	h	[mm]	80	100	100
	h ₃	[mm]	280	305	305
	h ₄ ¹⁾	[mm]	538/679	610/-	610/-
Base frame no.		6	8	8	
NB data	Design		C ²⁾	C ²⁾	
	L NB	[mm]	368	368	368
	L NB SS	[mm]	-	-	-
	h ₁	[mm]	200	200	200
	G ₁	[mm]	146	146	146
	G ₂	[mm]	187	187	187
	m ₁	[mm]	160	160	160
	m ₂	[mm]	120	120	120
	n ₁	[mm]	360	360	360
	n ₂	[mm]	280	280	280
	b	[mm]	80	80	80
	s ₁	[mm]	M16	M16	M16
	H	[mm]	180	200	200
	LB ¹⁾	[mm]	602/525	659/-	659/-
	AD ¹⁾	[mm]	258/399	305/-	305/-
	AG ¹⁾	[mm]	152/328	260/-	260/-
	LL ¹⁾	[mm]	132/456	192/-	192/-
	P	[mm]	350	400	400
	C	[mm]	121	133	133
	B	[mm]	241	305	305
	A	[mm]	279	318	318
	K	[mm]	15	19	19
Weight NB ¹⁾	[kg]	212/293	299/-	299/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	

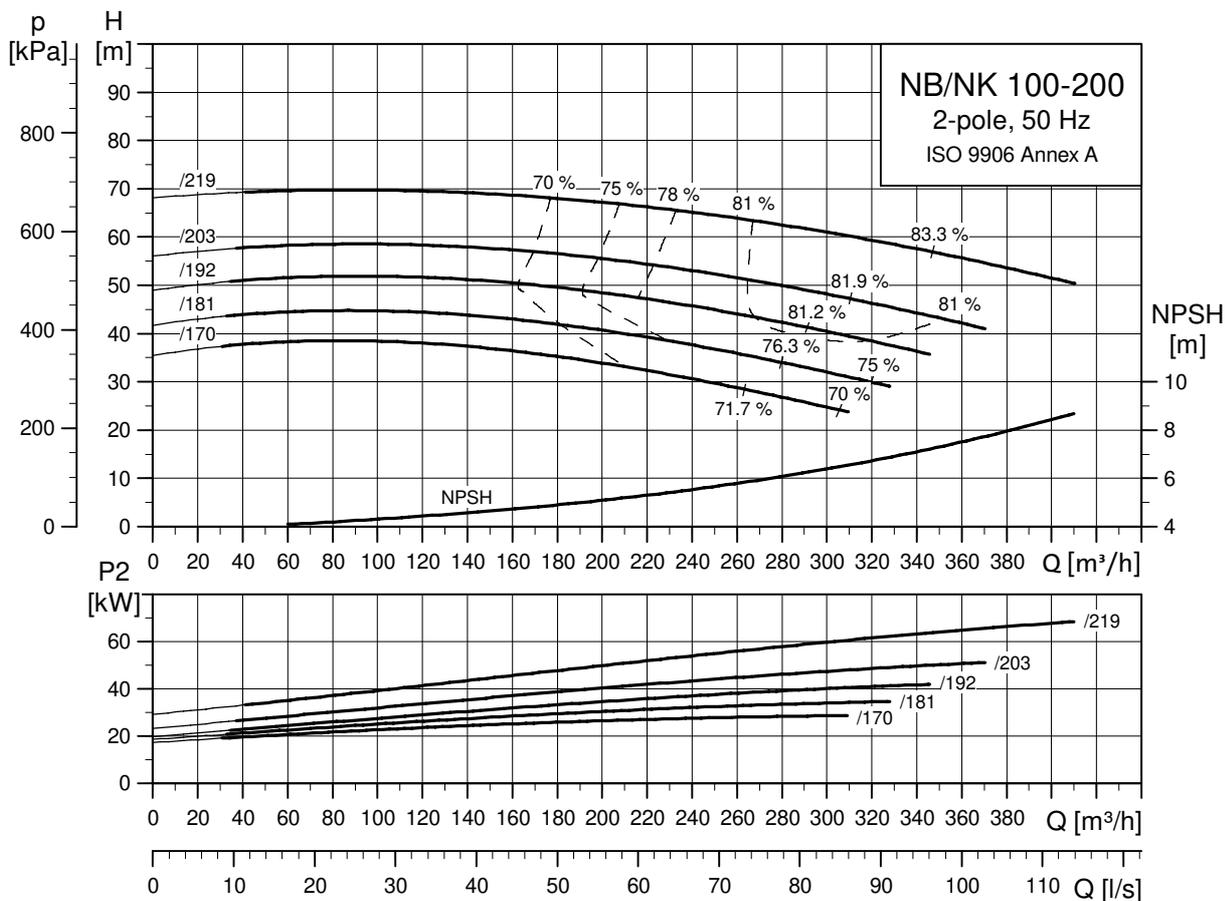
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

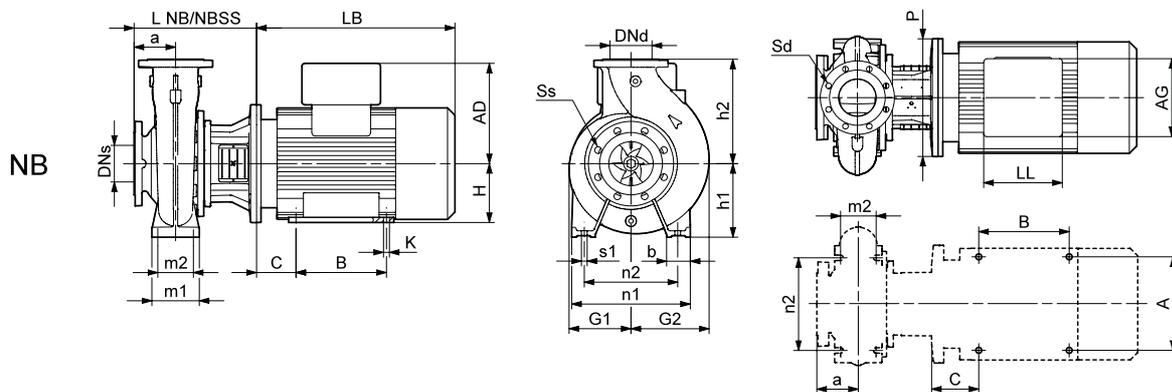
Note: For information about base frames, see page 270.

Performance curves

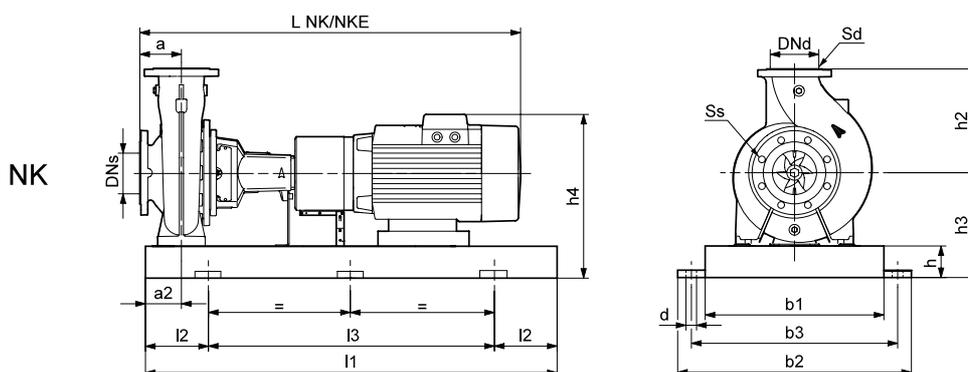
NB, NK 100-200
2-pole



TM03 5108 4106



TM03 4182 4106



TM03 4179 1806

Technical data

NB, NK 100-200
2-pole

Pump type		100-200/170	100-200/181	100-200/192	100-200/203	100-200/219	
Motor type	Premium Motor	Siemens 200L	Siemens 200L	Siemens 225M	Siemens 250M	Siemens 280S	
	E-Motor	-	-	-	-	-	
Common data NB/NK	P ₂	[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		8x19	8x19	8x19	8x19	8x19
Common data NK standard/ spacer coupling	Sd		8x19	8x19	8x19	8x19	
	L NK	[mm]	1368/1504	1368/1504	1418/1554	1486/1622	1559/1695
	L NKE	[mm]	-/-	-/-	-/-	-/-	-/-
	Weight NK	[kg]	463/458	463/458	585/580	716/711	973/972
	Weight NKE	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-	-/-
NK data	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-	
	I1	[mm]	1600	1600	1600	1800	2000
	I2	[mm]	270	270	270	300	330
	I3	[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 ¹⁾	[mm]	610/-	610/-	655/-	752/-	847/-
NB data	Base frame no.		8	8	8	9	10
	Design		C ²⁾				
	L NB	[mm]	398	398	428	428	428
	L NB SS	[mm]	-	-	-	-	-
	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 ¹⁾	[mm]	659/-	659/-	709/-	747/-	820/-
	AD ¹⁾	[mm]	305/-	305/-	325/-	392/-	432/-
	AG ¹⁾	[mm]	260/-	260/-	260/-	300/-	300/-
	LL ¹⁾	[mm]	192/-	192/-	192/-	236/-	236/-
	P	[mm]	400	400	450	550	550
	C	[mm]	133	133	149	168	190
	B	[mm]	305	305	311	349	368
	A	[mm]	318	318	356	406	457
K	[mm]	19	19	19	24	24	
Weight NB ¹⁾	[kg]	315/-	315/-	439/-	545/-	656/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-	

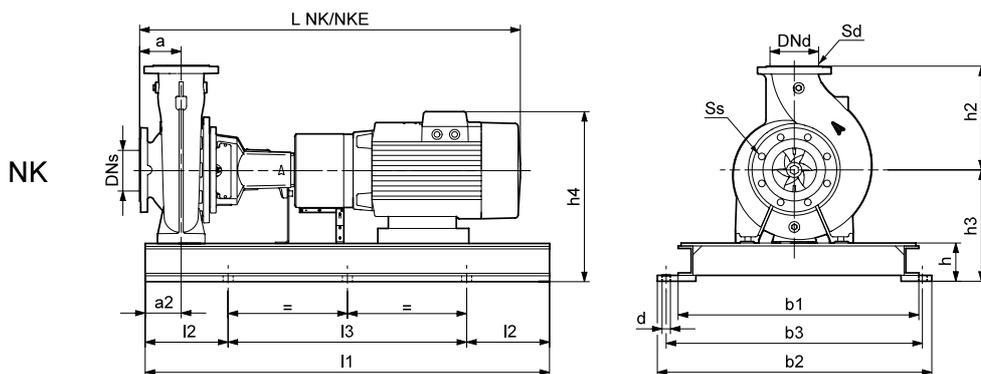
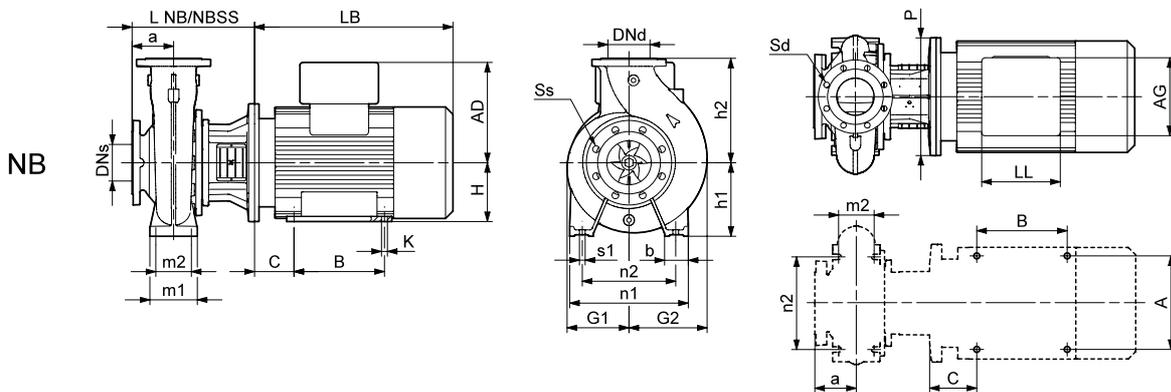
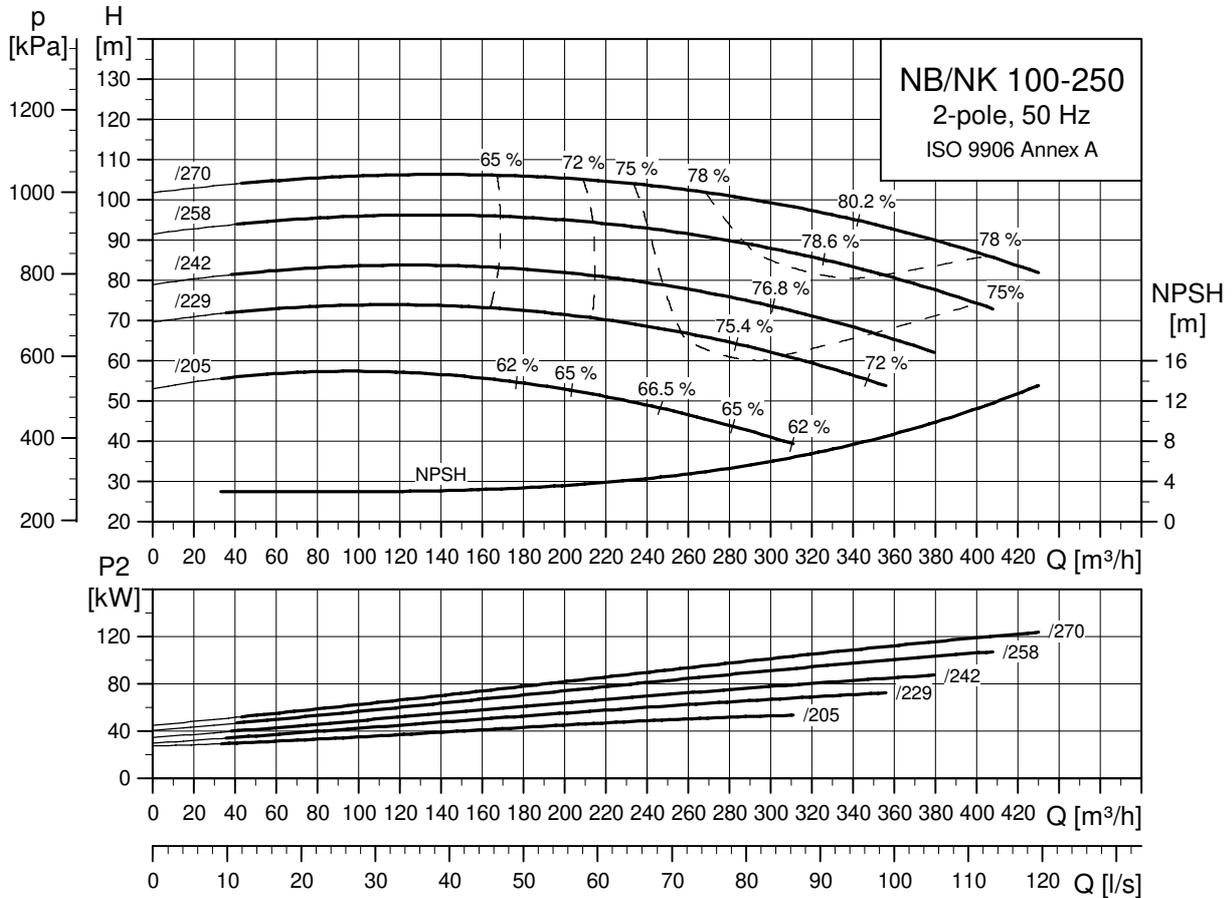
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h1 and H dimensions.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 100-250
2-pole



TM03 5109 4106

TM03 4182 4106

TM03 4051 1806

Technical data

NB, NK 100-250
2-pole

Pump type		100-250/205	100-250/229	100-250/242	100-250/258	100-250/270	
Motor type	Premium Motor	Siemens 250M	Siemens 280S	Siemens 280M	Siemens 315S	Siemens 315M	
	E-Motor	-	-	-	-	-	
Common data NB/NK	P ₂	[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		8x19	8x19	8x19	8x19	8x19
	Sd		8x19	8x19	8x19	8x19	
Common data NK standard/ spacer coupling	L NK	[mm]	1501/1637	1574/1710	1684/1820	1686/1822	1846/1982
	L NKE	[mm]	-/-	-/-	-/-	-/-	-/-
	Weight NK	[kg]	725/720	987/986	1073/1071	1259/1258	1386/1384
	Weight NKE	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-	
NK data	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 ¹⁾	[mm]	747/-	847/-	847/-	950/-	950/-
	Base frame no.		9	10	10	10	
NB data	Design		C ²⁾				
	L NB	[mm]	443	443	443	473	473
	L NB SS	[mm]	-	-	-	-	-
	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 ¹⁾	[mm]	747/-	820/-	930/-	932/-	1092/-
	AD ¹⁾	[mm]	392/-	432/-	432/-	495/-	495/-
	AG ¹⁾	[mm]	300/-	300/-	300/-	379/-	379/-
	LL ¹⁾	[mm]	236/-	236/-	236/-	307/-	307/-
	P	[mm]	550	550	550	660	660
	C	[mm]	168	190	190	216	216
	B	[mm]	349	368	419	406	457
A	[mm]	406	457	457	508	508	
K	[mm]	24	24	24	28	28	
	Weight NB ¹⁾	[kg]	559/-	669/-	754/-	967/-	1092/-
	Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-

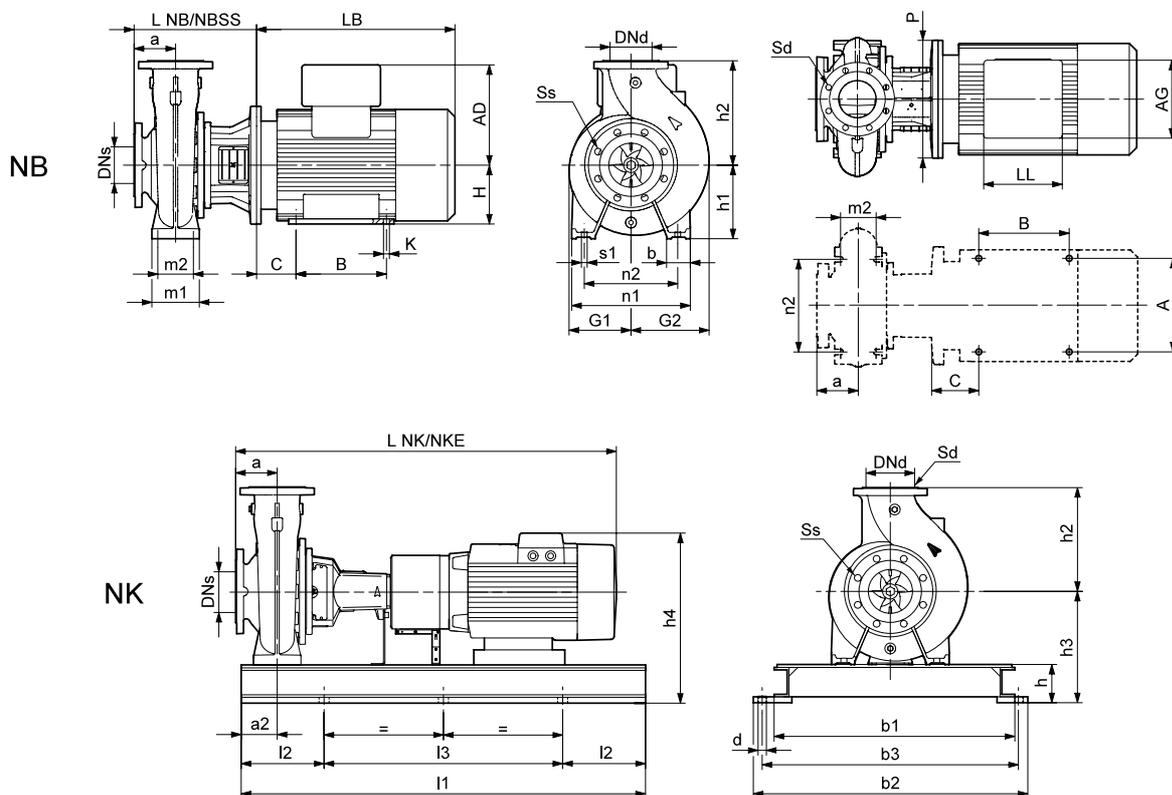
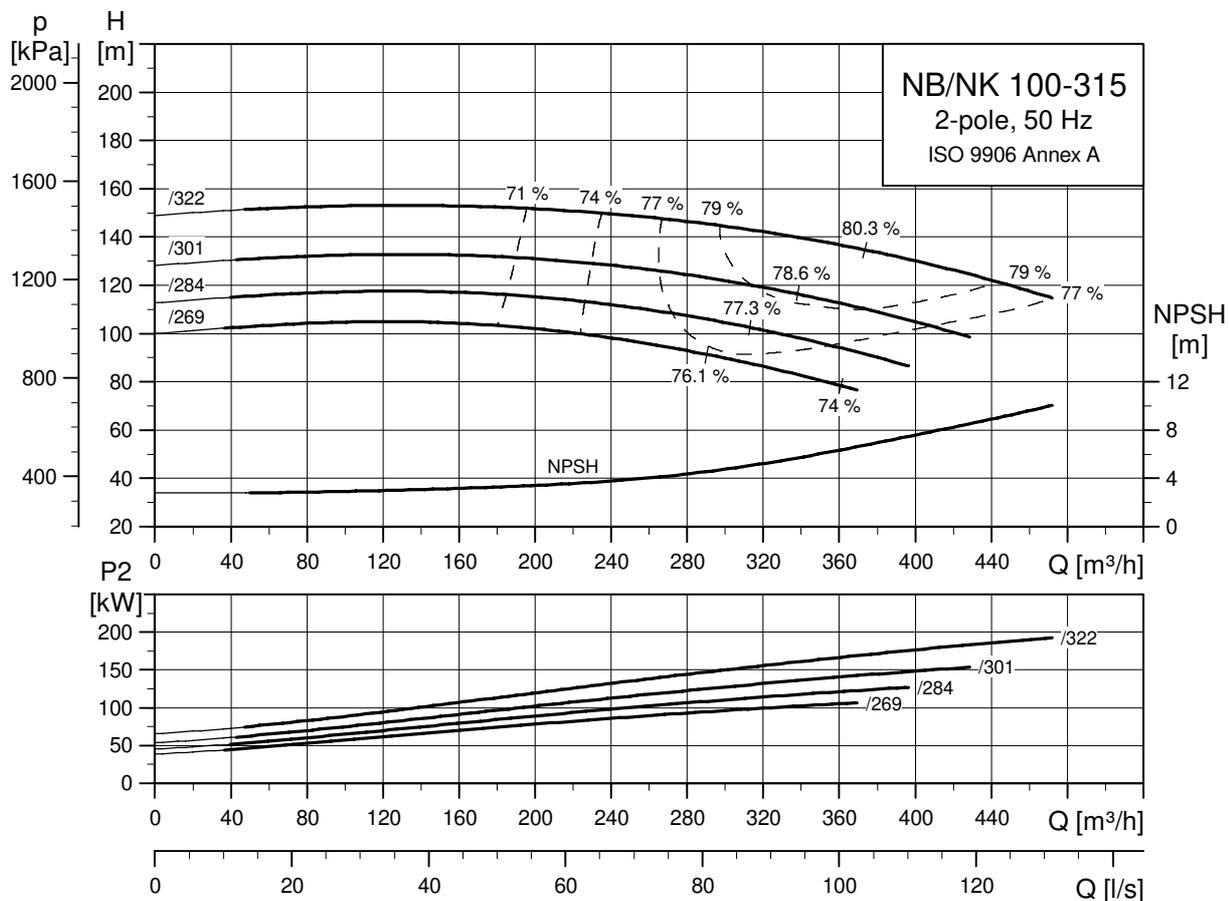
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h1 and H dimensions.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 100-315
2-pole



TM03 5110 4601

TM03 4182 4106

TM03 4051 1806

Technical data

NB, NK 100-315
2-pole

Pump type		100-315/269	100-315/284	100-315/301 ³⁾	100-315/322 ³⁾	
Motor type	Premium Motor	Siemens 315S	Siemens 315M	Siemens 315L	Siemens 315L	
	E-Motor	-	-	-	-	
Common data NB/NK	P ₂	[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
	h ₂	[mm]	315	315	315	315
	Ss		8x19	8x19	8x19	8x19
Sd		8x19	8x19	8x19	8x19	
Common data NK standard/ spacer coupling	L NK	[mm]	1686/1822	1846/1982	1906/2042	2046/2182
	L NKE	[mm]	-/-	-/-	-/-	-/-
	Weight NK	[kg]	1271/1270	1397/1395	1564/1563	1754/1753
	Weight NKE	[kg]	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-
NK data	l ₁	[mm]	2000	2000	2000	2000
	l ₂	[mm]	330	330	330	330
	l ₃	[mm]	1340	1340	1340	1340
	b ₁	[mm]	750	750	750	750
	b ₂	[mm]	890	890	890	890
	b ₃	[mm]	830	830	830	830
	d	[mm]	28	28	28	28
	a ₂	[mm]	90	90	90	90
	h	[mm]	130	130	130	130
	h ₃	[mm]	450	450	450	450
	h ₄ ¹⁾	[mm]	945/-	945/-	945/-	945/-
	Base frame no.		10	10	10	10
	NB data	Design		C ²⁾	C ²⁾	C ²⁾
L NB		[mm]	473	473	473	473
L NB SS		[mm]	-	-	-	-
h ₁		[mm]	250	250	250	250
G ₁		[mm]	208	208	208	208
G ₂		[mm]	264	264	264	264
m ₁		[mm]	160	160	160	160
m ₂		[mm]	120	120	120	120
n ₁		[mm]	400	400	400	400
n ₂		[mm]	315	315	315	315
b		[mm]	80	80	80	80
s ₁		[mm]	M16	M16	M16	M16
H		[mm]	315	315	315	315
LB ¹⁾		[mm]	932/-	1092/-	1092/-	1232/-
AD ¹⁾		[mm]	495/-	495/-	495/-	495/-
AG ¹⁾		[mm]	379/-	379/-	379/-	379/-
LL ¹⁾		[mm]	307/-	307/-	307/-	307/-
P		[mm]	660	660	660	660
C		[mm]	216	216	216	216
B		[mm]	406	457	508	508
A	[mm]	508	508	508	508	
K	[mm]	28	28	28	28	
Weight NB ¹⁾	[kg]	988/-	1113/-	1254/-	1444/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	

1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

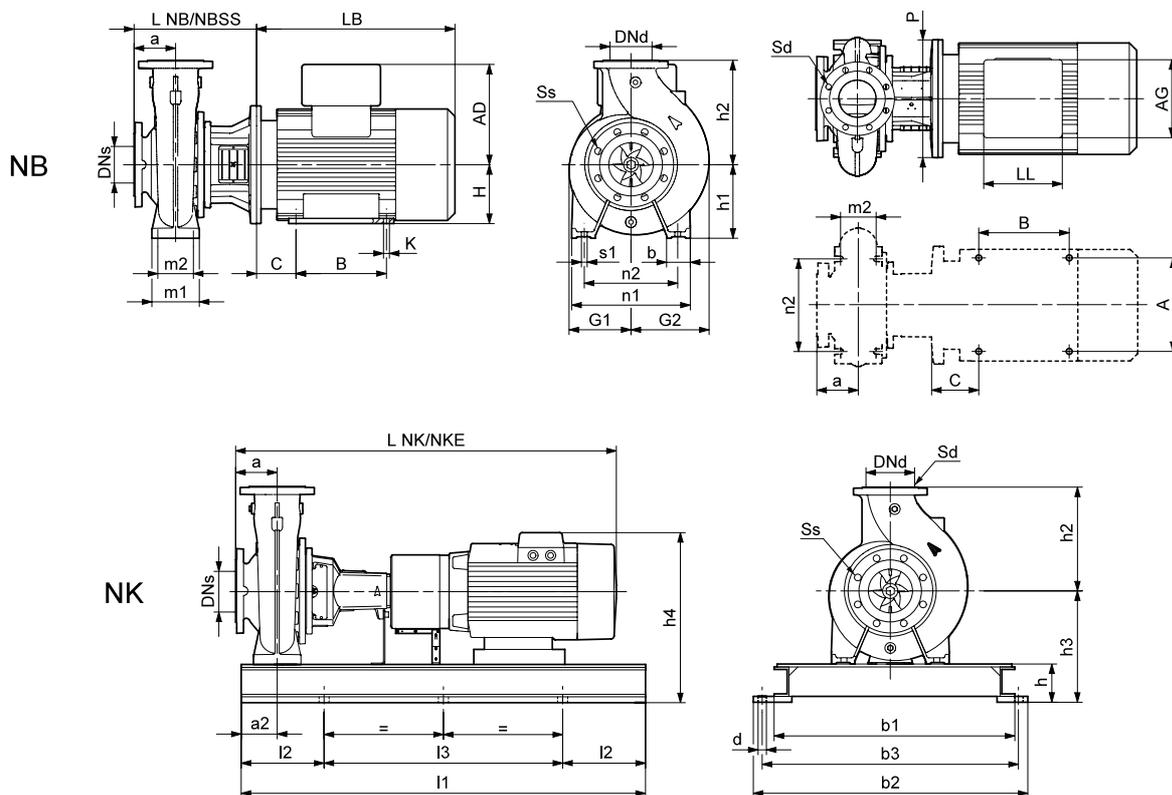
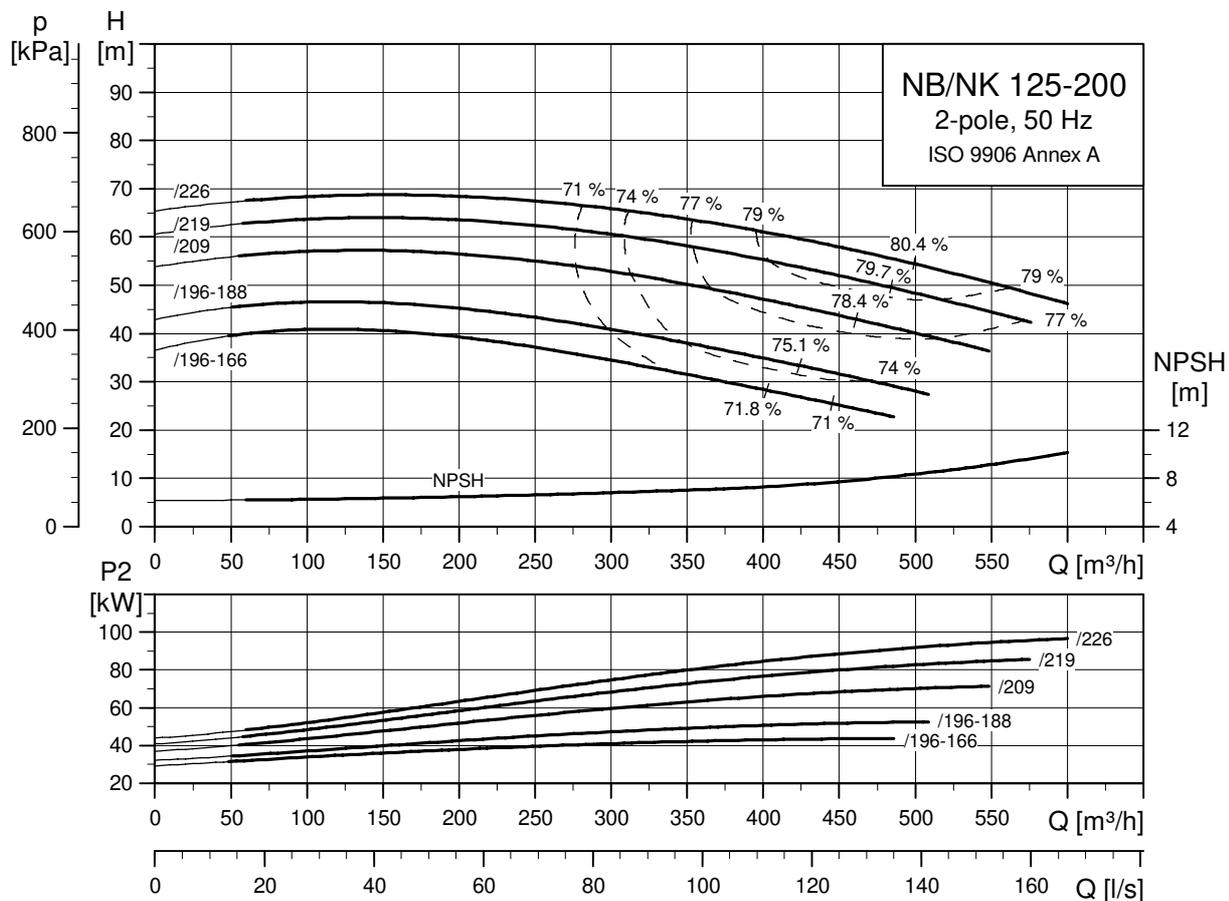
3) NK 100-315/301 and NK 100-315/322 are oversize pumps.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 125-200
2-pole, 50 Hz

ISO 9906 Annex A



TM03 5111 4106

TM03 4182 4106

TM03 4051 1806

Technical data

NB, NK 125-200
2-pole

Pump type		125-200/196-166	125-200/196-188	125-200/209	125-200/219	125-200/226	
Motor type	Premium Motor	Siemens 225M	Siemens 250M	Siemens 280S	Siemens 280M	Siemens 315S	
	E-Motor	-	-	-	-	-	
Common data NB/NK	P ₂	[kW]	45	55	75	90	110
	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
	h ₂	[mm]	315	315	315	315	315
	Ss		8x23	8x23	8x23	8x23	8x23
	Sd		8x19	8x19	8x19	8x19	
Common data NK standard/ spacer coupling	L NK	[mm]	1433/1569	1501/1637	1574/1710	1684/1820	1686/1822
	L NKE	[mm]	-/-	-/-	-/-	-/-	-/-
	Weight NK	[kg]	620/615	733/728	1004/1003	1090/1088	1265/1264
	Weight NKE	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-	
NK data	l ₁	[mm]	1600	1800	2000	2000	2000
	l ₂	[mm]	270	300	330	330	330
	l ₃	[mm]	1060	1200	1340	1340	1340
	b ₁	[mm]	530	600	750	750	750
	b ₂	[mm]	660	730	890	890	890
	b ₃	[mm]	600	670	830	830	830
	d	[mm]	28	28	28	28	28
	a ₂	[mm]	90	90	90	90	90
	h	[mm]	100	100	130	130	130
	h ₃	[mm]	350	355	415	415	450
	h ₄ ¹⁾	[mm]	675/-	747/-	847/-	847/-	945/-
	Base frame no.		8	9	10	10	10
NB data	Design		C ²⁾				
	L NB	[mm]	443	443	443	443	473
	L NB SS	[mm]	-	-	-	-	-
	h ₁	[mm]	250	250	250	250	250
	G ₁	[mm]	183	183	183	183	183
	G ₂	[mm]	234	234	234	234	234
	m ₁	[mm]	160	160	160	160	160
	m ₂	[mm]	120	120	120	120	120
	n ₁	[mm]	400	400	400	400	400
	n ₂	[mm]	315	315	315	315	315
	b	[mm]	80	80	80	80	80
	s ₁	[mm]	M16	M16	M16	M16	M16
	H	[mm]	225	250	280	280	315
	LB ¹⁾	[mm]	709/-	747/-	820/-	930/-	932/-
	AD ¹⁾	[mm]	325/-	392/-	432/-	432/-	495/-
	AG ¹⁾	[mm]	260/-	300/-	300/-	300/-	379/-
	LL ¹⁾	[mm]	192/-	236/-	236/-	236/-	307/-
	P	[mm]	450	550	550	550	660
	C	[mm]	149	168	190	190	216
	B	[mm]	311	349	368	419	406
A	[mm]	356	406	457	457	508	
K	[mm]	19	24	24	24	28	
	Weight NB ¹⁾	[kg]	468/-	573/-	684/-	769/-	982/-
	Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-

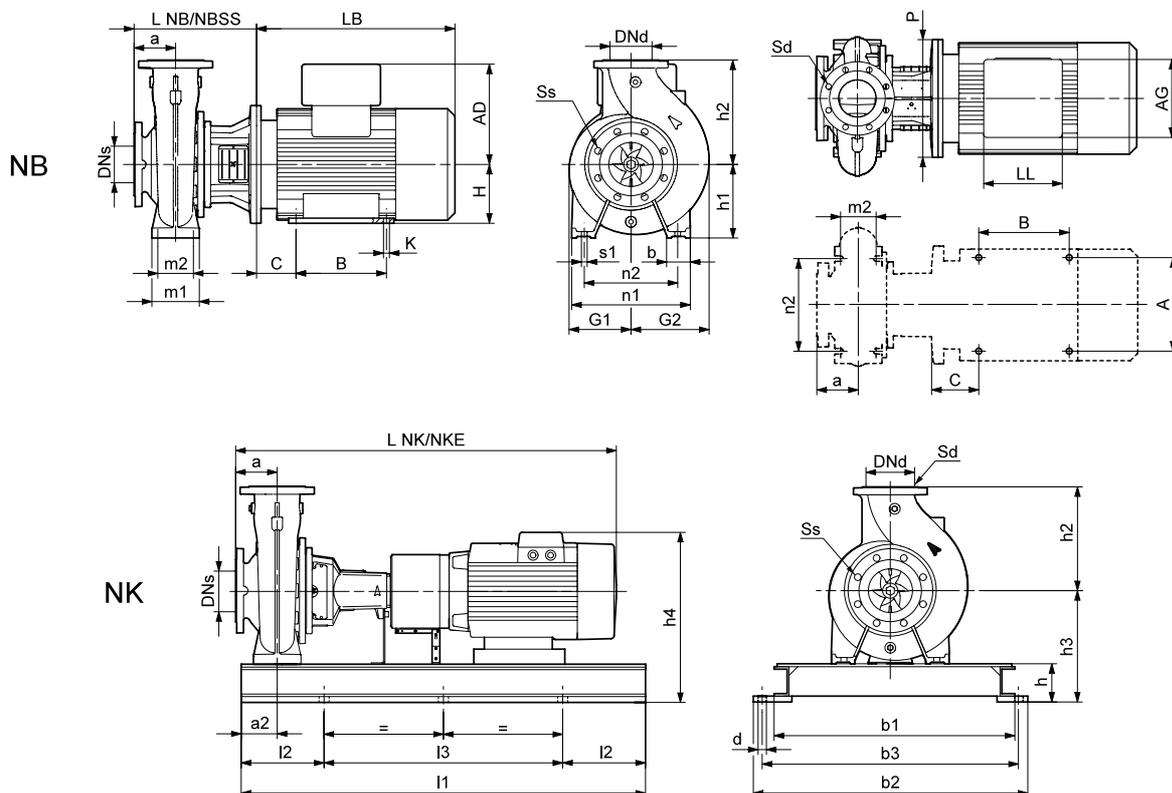
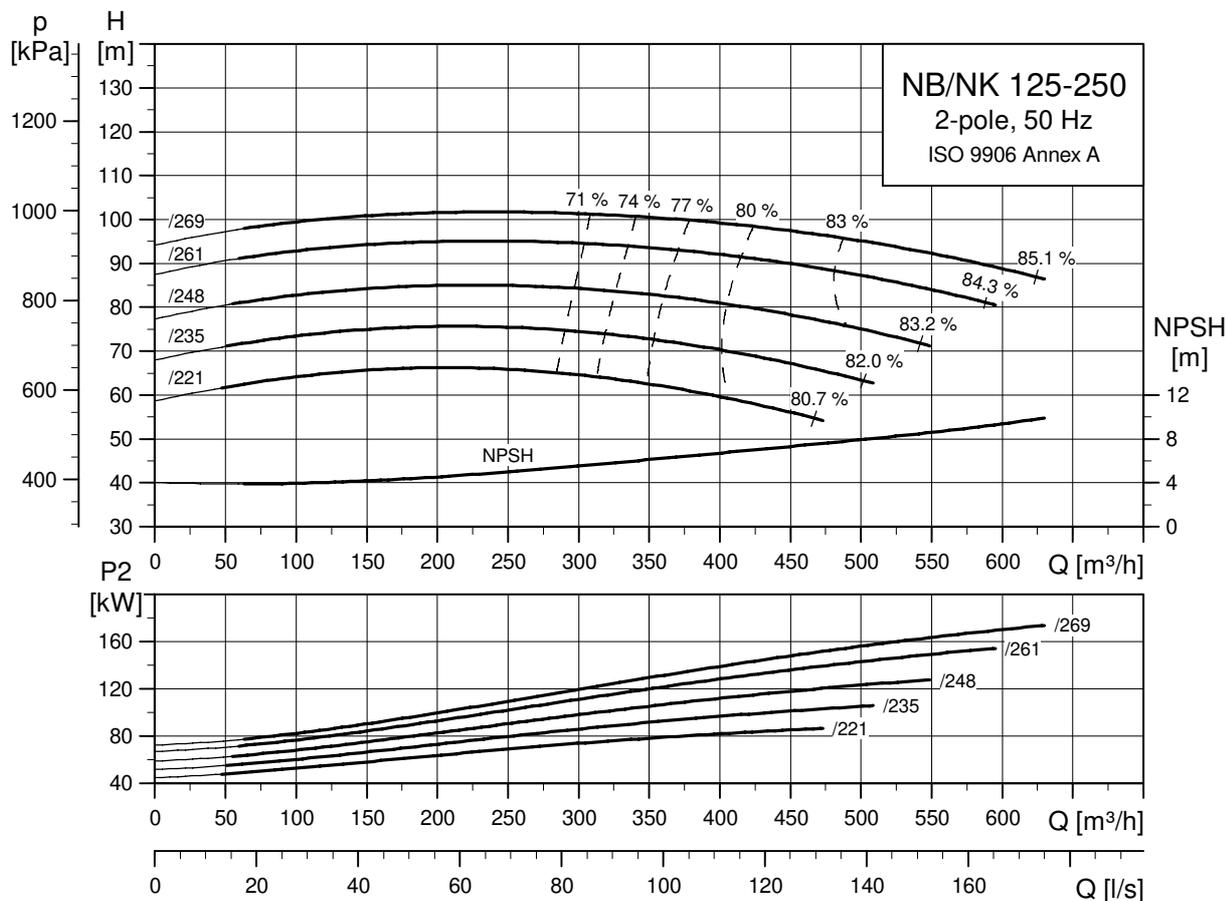
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 125-250
2-pole



TM03 5112 4106

TM03 4182 4106

TM03 4051 1806

Technical data

NB, NK 125-250
2-pole

Pump type		125-250/221 ³⁾	125-250/235 ³⁾	125-250/248 ³⁾	125-250/261 ³⁾	125-250/269 ³⁾		
Motor type	Premium Motor	Siemens 280M	Siemens 315S	Siemens 315M	Siemens 315L	Siemens 315L		
	E-Motor	-	-	-	-	-		
Common data NB/NK	P ₂	[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	
	h ₂	[mm]	355	355	355	355	355	
	Ss		8x23	8x23	8x23	8x23	8x23	
	Sd		8x19	8x19	8x19	8x19	8x19	
Common data NK standard/ spacer coupling	L NK	[mm]	1744/1880	1746/1882	1906/2042	1906/2042	2046/2182	
	L NKE	[mm]	-/-	-/-	-/-	-/-	-/-	
	Weight NK	[kg]	1119/1117	1294/1293	1419/1418	1559/1558	1749/1748	
	Weight NKE	[kg]	-/-	-/-	-/-	-/-	-/-	
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-	-/-	
	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-	-/-	
NK data	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 ¹⁾	[mm]	847/-	945/-	945/-	945/-	945/-	
	Base frame no.		10	10	10	10	10	
	NB data	Design		C ²⁾	C ²⁾	C ²⁾	C ²⁾	C ²⁾
		L NB	[mm]	441	471	471	471	471
L NB SS		[mm]	-	-	-	-	-	
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 ¹⁾		[mm]	930/-	932/-	1092/-	1092/-	1232/-	
AD ¹⁾		[mm]	432/-	495/-	495/-	495/-	495/-	
AG ¹⁾		[mm]	300/-	379/-	379/-	379/-	379/-	
LL ¹⁾		[mm]	236/-	307/-	307/-	307/-	307/-	
P		[mm]	550	660	660	660	660	
C		[mm]	190	216	216	216	216	
B		[mm]	419	406	457	508	508	
A		[mm]	457	508	508	508	508	
K		[mm]	24	28	28	28	28	
Weight NB ¹⁾		[kg]	778/-	995/-	1120/-	1260/-	1450/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-		

1) Dimension of pump with premium range motor/built-in frequency converter.

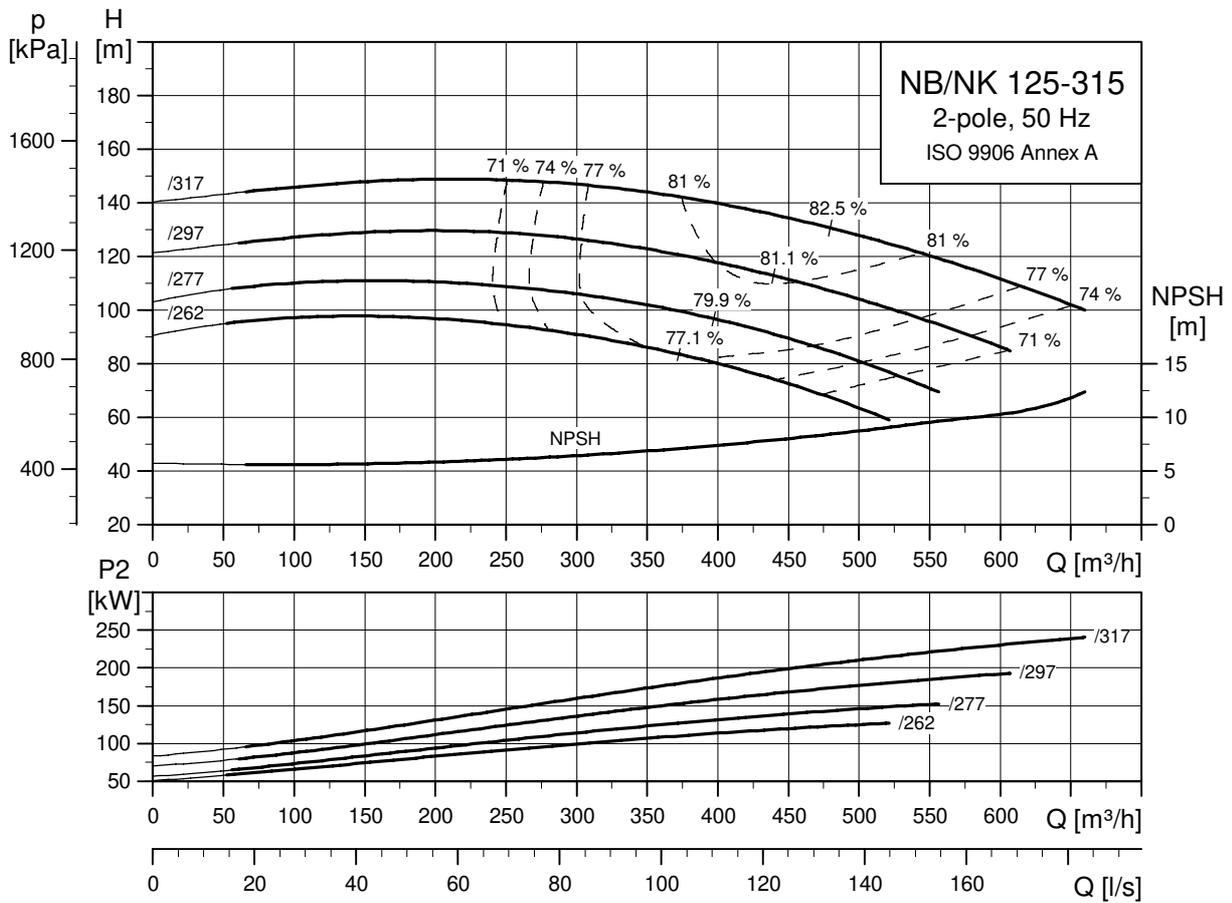
2) Support blocks are needed because of the P, h1 and H dimensions.

3) All NK pumps in the table above are oversize pumps.

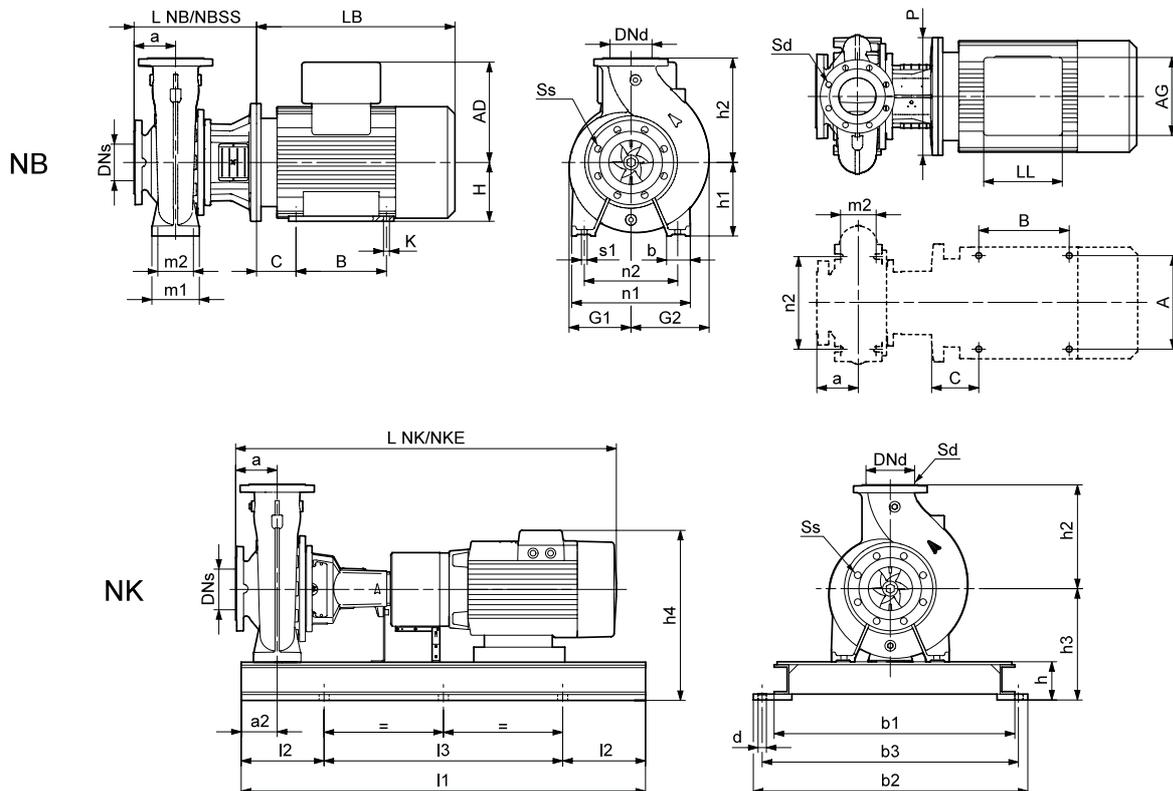
Note: For information about base frames, see page 270.

Performance curves

NB, NK 125-315
2-pole



TM03 5113 4106



TM03 4182 4106

TM03 4051 1806

Technical data

NB, NK 125-315
2-pole

Pump type		125-315/262	125-315/277	125-315/297	125-315/317 ³⁾	
Motor type	Premium Motor	Siemens 315M	Siemens 315L	Siemens 315L	Siemens 315	
	E-Motor	-	-	-	-	
Common data NB/NK	P ₂	[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
	h ₂	[mm]	355	355	355	355
	Ss		8x23	8x23	8x23	8x23
	Sd		8x19	8x19	8x19	8x19
Common data NK standard/ spacer coupling	L NK	[mm]	1906/2042	1906/2042	2046/2182	2054/2190
	L NKE	[mm]	-/-	-/-	-/-	-/-
	Weight NK	[kg]	1464/1463	1603/1602	1793/1792	1850/1849
	Weight NKE	[kg]	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-
	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-
NK data	l ₁	[mm]	2000	2000	2000	2000
	l ₂	[mm]	330	330	330	330
	l ₃	[mm]	1340	1340	1340	1340
	b ₁	[mm]	750	750	750	750
	b ₂	[mm]	890	890	890	890
	b ₃	[mm]	830	830	830	830
	d	[mm]	28	28	28	28
	a ₂	[mm]	110	110	110	110
	h	[mm]	130	130	130	130
	h ₃	[mm]	450	450	450	450
	h ₄ ¹⁾	[mm]	945/-	945/-	945/-	918/-
	Base frame no.		10	10	10	10
	NB data	Design		C ²⁾	C ²⁾	C ²⁾
L NB		[mm]	471	471	471	-
L NB SS		[mm]	-	-	-	-
h ₁		[mm]	280	280	280	-
G ₁		[mm]	231	231	231	-
G ₂		[mm]	268	268	268	-
m ₁		[mm]	200	200	200	-
m ₂		[mm]	150	150	150	-
n ₁		[mm]	500	500	500	-
n ₂		[mm]	400	400	400	-
b		[mm]	100	100	100	-
s ₁		[mm]	M20	M20	M20	-
H		[mm]	315	315	315	-
LB ¹⁾		[mm]	1092/-	1092/-	1232/-	-/-
AD ¹⁾		[mm]	495/-	495/-	495/-	-/-
AG ¹⁾		[mm]	379/-	379/-	379/-	-/-
LL ¹⁾		[mm]	307/-	307/-	307/-	-/-
P		[mm]	660	660	660	-
C		[mm]	216	216	216	-
B		[mm]	457	508	508	-
A	[mm]	508	508	508	-	
K	[mm]	28	28	28	-	
Weight NB ¹⁾	[kg]	1158/-	1298/-	1488/-	-/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	

1) Dimension of pump with premium range motor/built-in frequency converter.

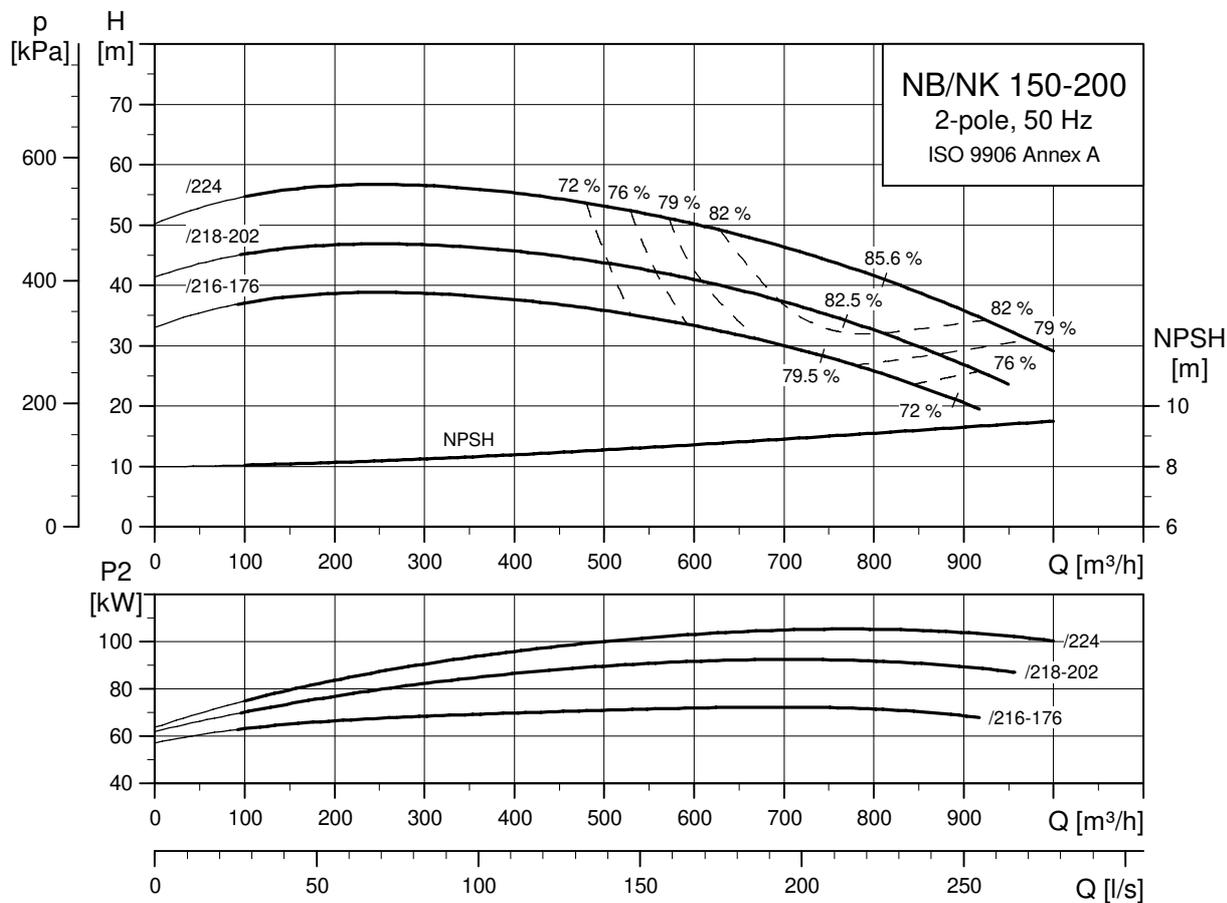
2) Support blocks are needed because of the P, h₁ and H dimensions.

3) NK 125-315/317 fitted with an EFF2 motor is fitted on base frame no.11.

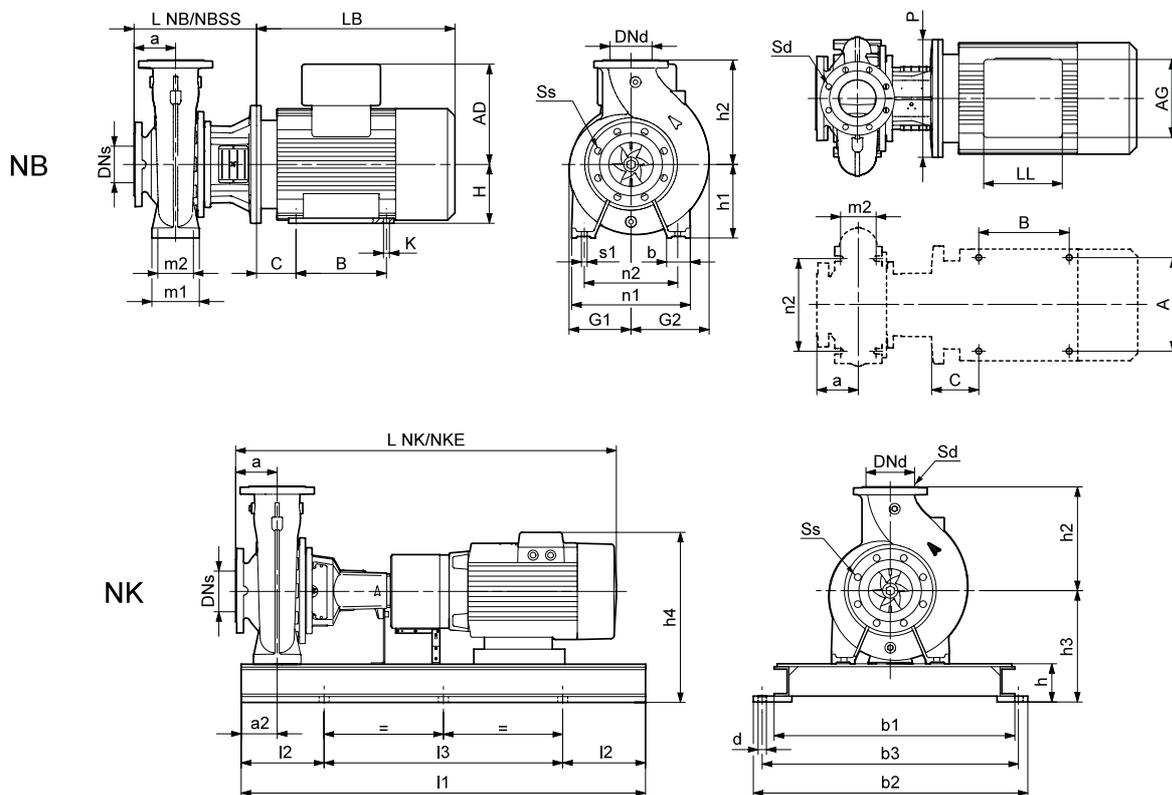
Note: For information about base frames, see page 270.

Performance curves

NB, NK 150-200
2-pole



TM03 5114 4106



TM03 4182 4106

TM03 4051 1806

Technical data

NB, NK 150-200
2-pole

Pump type		150-200/216-176	150-200/218-202	150-200/224	
Motor type	Premium Motor	Siemens 280S	Siemens 280M	Siemens 315S	
	E-Motor	-	-	-	
Common data NB/NK	P ₂	[kW]	75	90	110
	PN	[bar]	10	10	10
	DNs	[mm]	200	200	200
	DNd	[mm]	150	150	150
	a	[mm]	160	160	160
	h ₂	[mm]	400	400	400
	Ss		8x23	8x23	8x23
Common data NK standard/ spacer coupling	Sd		8x23	8x23	
	L NK	[mm]	1594/1730	1704/1840	1706/1842
	L NKE	[mm]	-/-	-/-	-/-
	Weight NK	[kg]	1052/1050	1137/1136	1328/1326
	Weight NKE	[kg]	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-
NK data	Weight NKE SS	[kg]	-/-	-/-	-/-
	l ₁	[mm]	2000	2000	2000
	l ₂	[mm]	330	330	330
	l ₃	[mm]	1340	1340	1340
	b ₁	[mm]	750	750	750
	b ₂	[mm]	890	890	890
	b ₃	[mm]	830	830	830
	d	[mm]	28	28	28
	a ₂	[mm]	110	110	110
	h	[mm]	130	130	130
	h ₃	[mm]	415	415	450
	h ₄ ¹⁾	[mm]	847/-	847/-	945/-
NB data	Base frame no.		10	10	10
	Design		C	C	C ²⁾
	L NB	[mm]	463	463	493
	L NB SS	[mm]	-	-	-
	h ₁	[mm]	280	280	280
	G ₁	[mm]	230	230	230
	G ₂	[mm]	319	319	319
	m ₁	[mm]	200	200	200
	m ₂	[mm]	150	150	150
	n ₁	[mm]	550	550	550
	n ₂	[mm]	450	450	450
	b	[mm]	100	100	100
	s ₁	[mm]	M20	M20	M20
	H	[mm]	280	280	315
	LB ¹⁾	[mm]	820/-	930/-	932/-
	AD ¹⁾	[mm]	432/-	432/-	495/-
	AG ¹⁾	[mm]	300/-	300/-	379/-
	LL ¹⁾	[mm]	236/-	236/-	307/-
	P	[mm]	550	550	660
	C	[mm]	190	190	216
	B	[mm]	368	419	406
	A	[mm]	457	457	508
K	[mm]	24	24	28	
Weight NB ¹⁾	[kg]	738/-	823/-	1037/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	

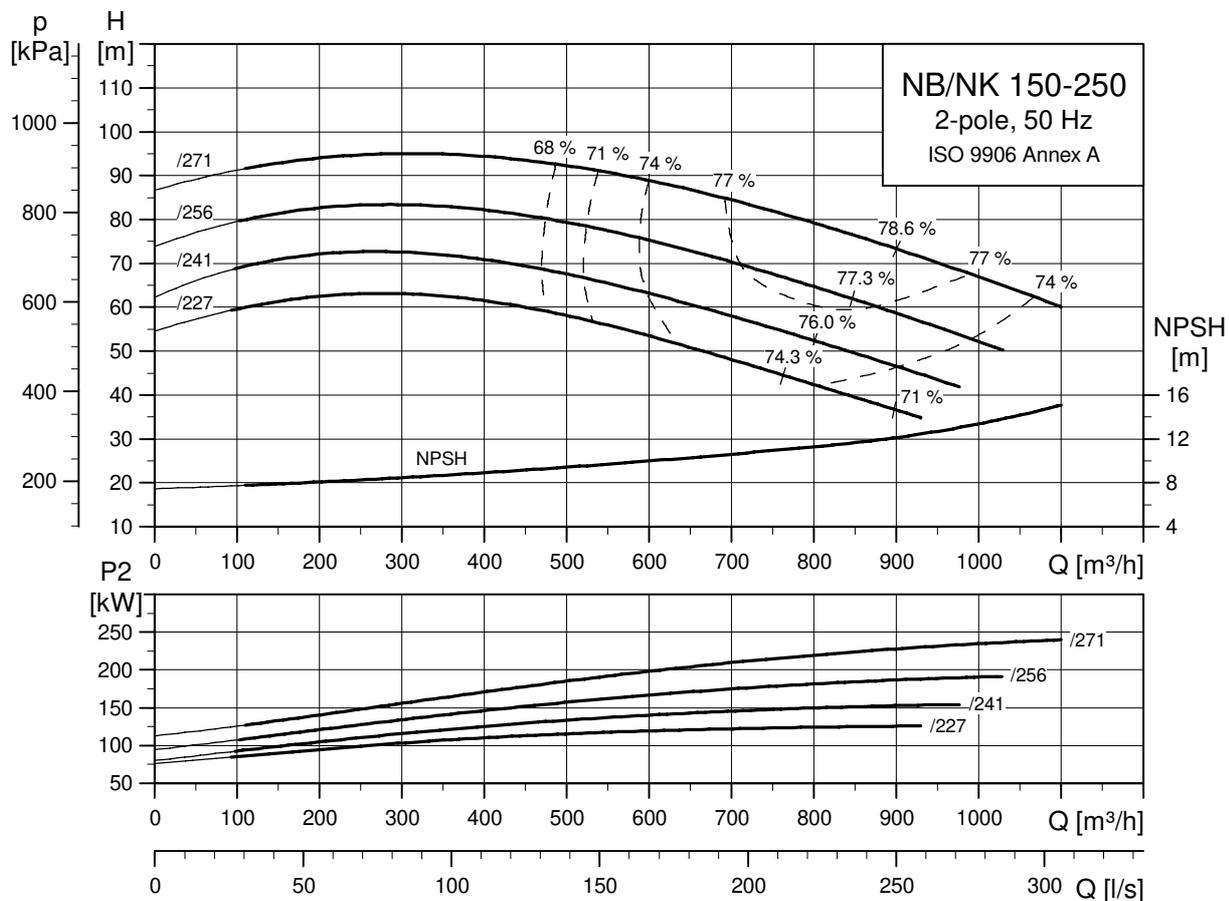
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

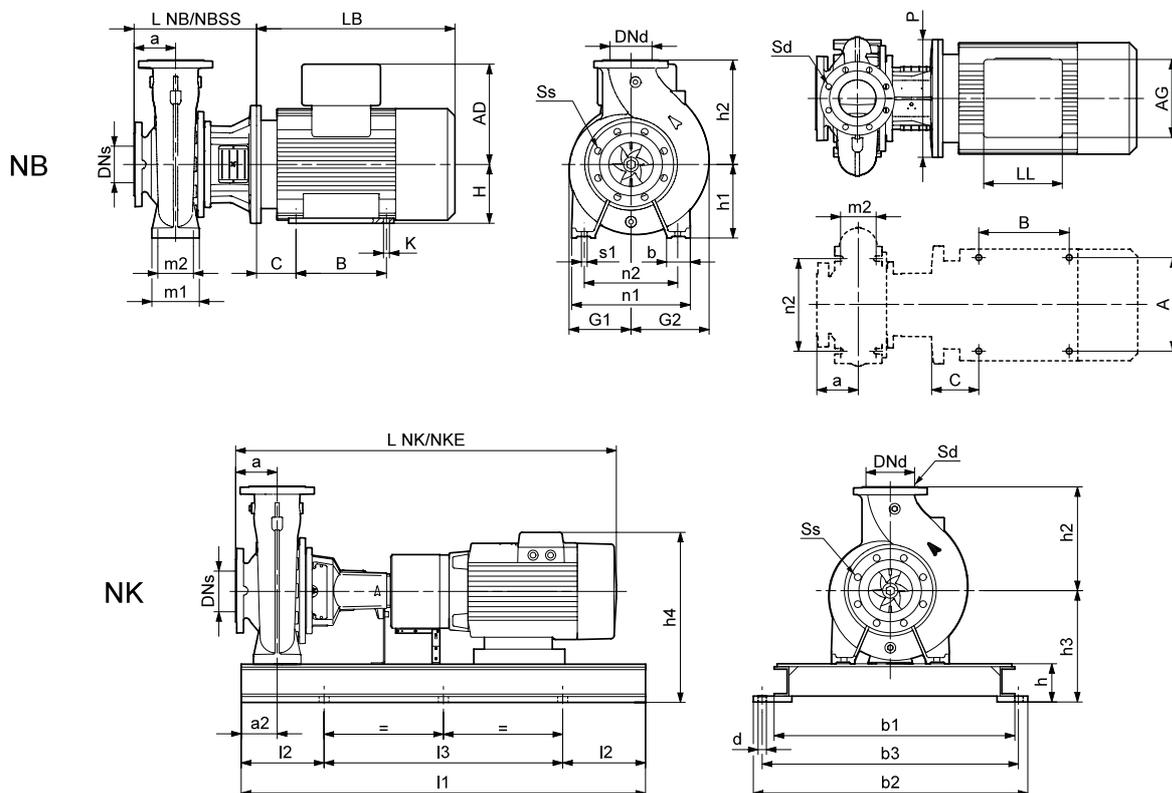
Note: For information about base frames, see page 270.

Performance curves

NB, NK 150-250
2-pole



TM03 5115 4106



TM03 4182 4106

TM03 4051 1806

Technical data

NB, NK 150-250
2-pole

Pump type		150-250/227	150-250/241	150-250/256	150-250/271 ³⁾	
Motor type	Premium Motor	Siemens 315M	Siemens 315L	Siemens 315L	Siemens 315	
	E-Motor	-	-	-	-	
Common data NB/NK	P ₂	[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
	h ₂	[mm]	375	375	375	375
	Ss		8x23	8x23	8x23	8x23
	Sd		8x23	8x23	8x23	8x23
Common data NK standard/ spacer coupling	L NK	[mm]	1926/2062	1926/2062	2066/2202	2074/2210
	L NKE	[mm]	-/-	-/-	-/-	-/-
	Weight NK	[kg]	1462/1461	1602/1601	1792/1791	1848/1847
	Weight NKE	[kg]	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-
	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-
NK data	l ₁	[mm]	2000	2000	2000	2000
	l ₂	[mm]	330	330	330	330
	l ₃	[mm]	1340	1340	1340	1340
	b ₁	[mm]	750	750	750	750
	b ₂	[mm]	890	890	890	890
	b ₃	[mm]	830	830	830	830
	d	[mm]	28	28	28	28
	a ₂	[mm]	110	110	110	110
	h	[mm]	130	130	130	130
	h ₃	[mm]	450	450	450	450
	h ₄ ¹⁾	[mm]	945/-	945/-	945/-	918/-
	Base frame no.		10	10	10	10
	NB data	Design		C ²⁾	C ²⁾	C ²⁾
L NB		[mm]	491	491	491	-
L NB SS		[mm]	-	-	-	-
h ₁		[mm]	280	280	280	-
G ₁		[mm]	223	223	223	-
G ₂		[mm]	287	287	287	-
m ₁		[mm]	200	200	200	-
m ₂		[mm]	150	150	150	-
n ₁		[mm]	500	500	500	-
n ₂		[mm]	400	400	400	-
b		[mm]	100	100	100	-
s ₁		[mm]	M20	M20	M20	-
H		[mm]	315	315	315	-
LB ¹⁾		[mm]	1092/-	1092/-	1232/-	-/-
AD ¹⁾		[mm]	495/-	495/-	495/-	-/-
AG ¹⁾		[mm]	379/-	379/-	379/-	-/-
LL ¹⁾		[mm]	307/-	307/-	307/-	-/-
P		[mm]	660	660	660	-
C		[mm]	216	216	216	-
B		[mm]	457	508	508	-
A	[mm]	508	508	508	-	
K	[mm]	28	28	28	-	
Weight NB ¹⁾	[kg]	1156/-	1296/-	1486/-	-/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	

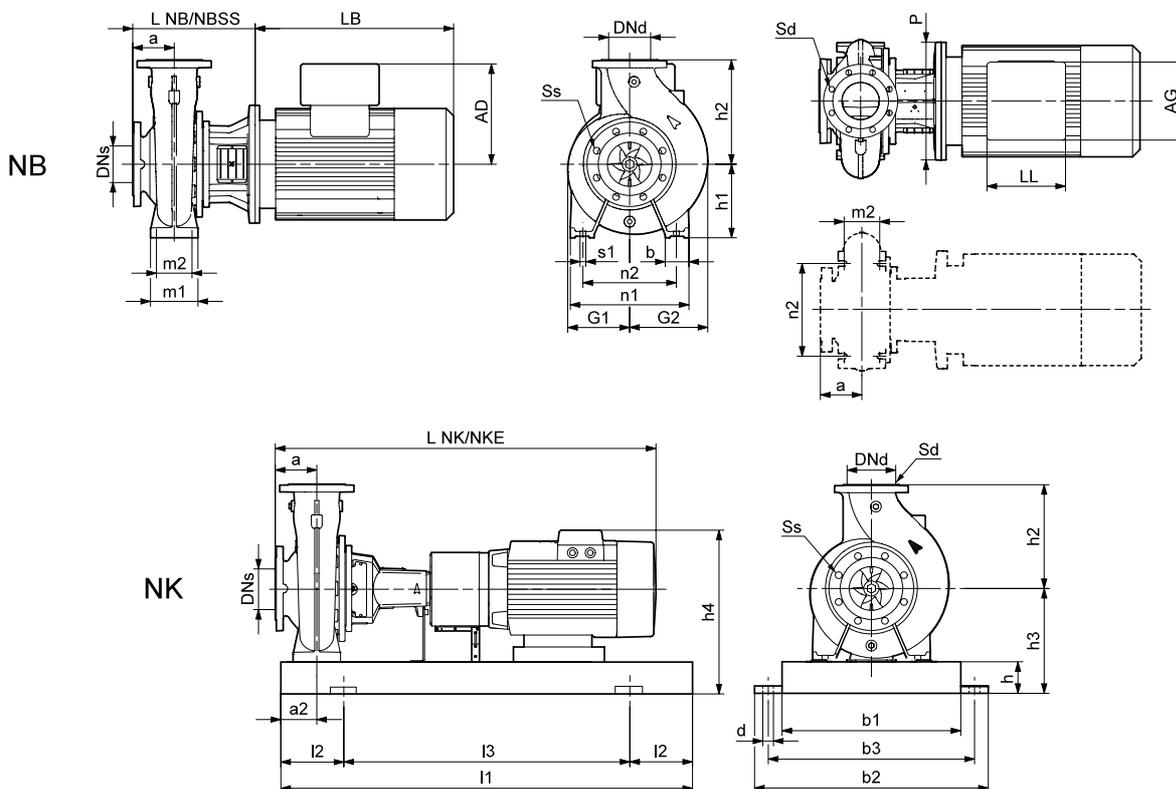
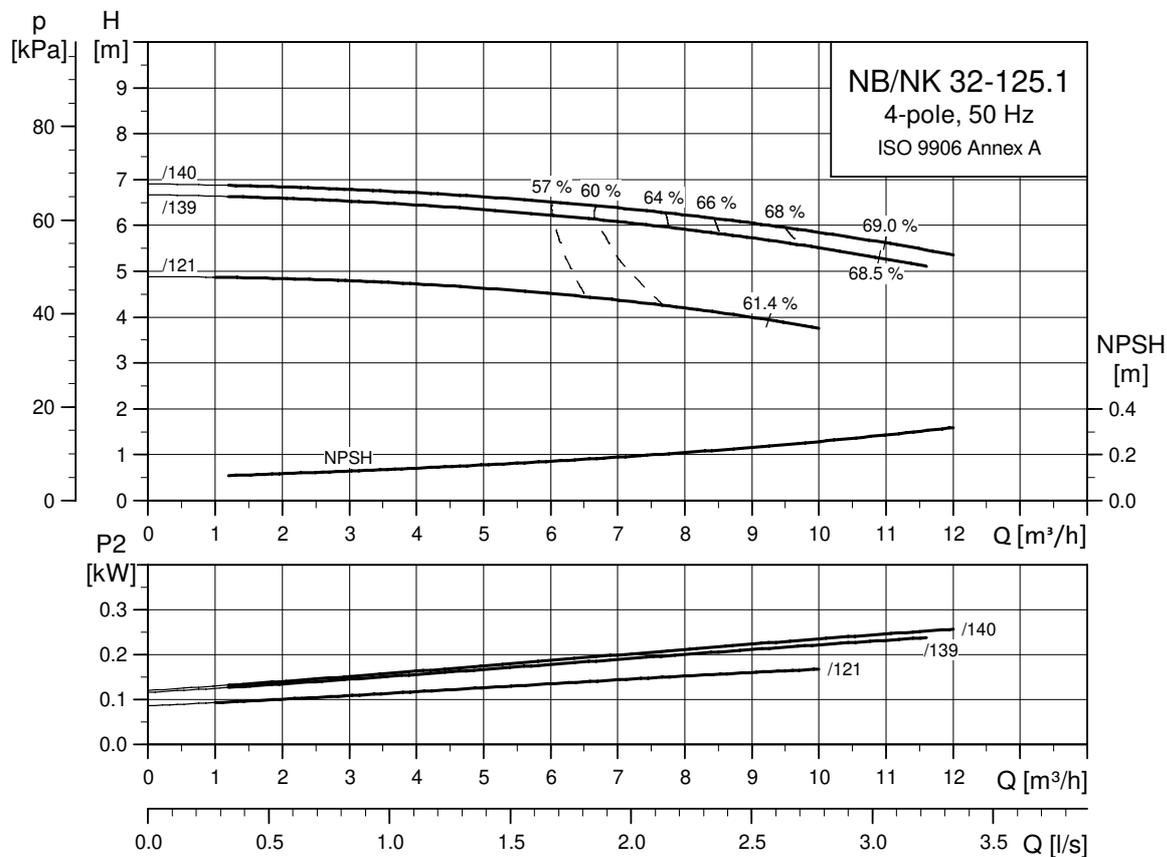
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

3) NK 150-250/271 fitted with an EFF2 motor is fitted on base frame no.11.

Note: For information about base frames, see page 270.

NB, NK 4-pole



TM03 5117 4106

TM03 4180 1806

TM03 6005 4106

Technical data

NB, NK 32-125.1
4-pole

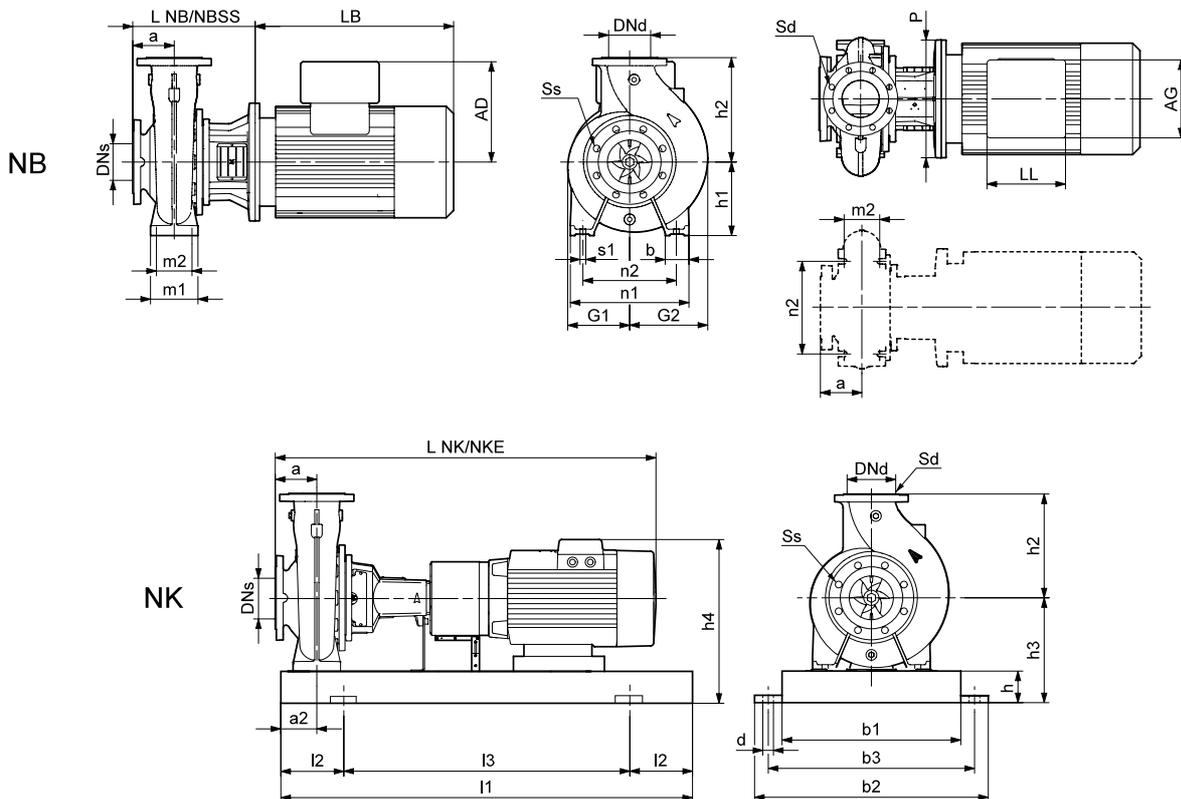
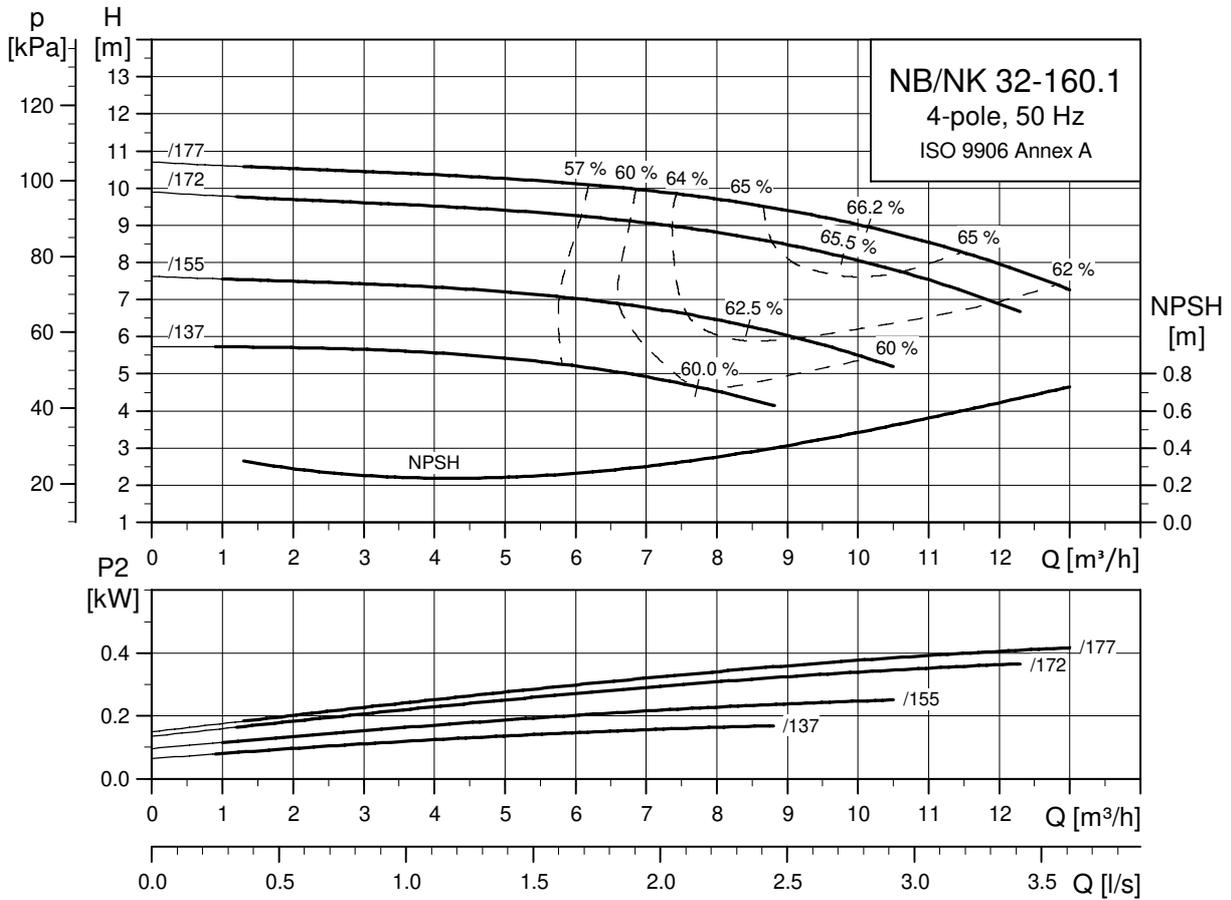
Pump type		32-125.1/121	32-125.1/139	32-125.1/140	
Motor type	Premium Motor	MG 71A-C	MG 71A-C	MG 71B-C	
	E-Motor	-	-	-	
Common data NB/NK	P ₂	[kW]	0.25	0.25	0.37
	PN	[bar]	16	16	16
	DNs	[mm]	50	50	50
	DNd	[mm]	32	32	32
	a	[mm]	80	80	80
	h2	[mm]	140	140	140
	Ss		4x19	4x19	4x19
	Sd		4x19	4x19	4x19
Common data NK standard/ spacer coupling	L NK	[mm]	675/761	675/761	675/761
	L NKE	[mm]	-/-	-/-	-/-
	Weight NK	[kg]	79/79	79/79	80/80
	Weight NKE	[kg]	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-
	Weight NKE SS	[kg]	-/-	-/-	-/-
NK data	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 ¹⁾	[mm]	286/-	286/-	286/-
Base frame no.		2	2	2	
NB data	Design		A	A	A
	L NB	[mm]	201	201	201
	L NB SS	[mm]	-	-	-
	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 ¹⁾	[mm]	191/-	191/-	191/-
	AD ¹⁾	[mm]	109/-	109/-	109/-
	AG ¹⁾	[mm]	82/-	82/-	82/-
	LL ¹⁾	[mm]	82/-	82/-	82/-
	P	[mm]	160	160	160
	C	[mm]	-	-	-
	B	[mm]	-	-	-
	A	[mm]	-	-	-
K	[mm]	-	-	-	
Weight NB ¹⁾	[kg]	32/-	32/-	32/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	

1) Dimension of pump with premium range motor/built-in frequency converter.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 32-160.1
4-pole, 50 Hz
ISO 9906 Annex A



TM03 5118 4106

TM03 4180 1806

TM03 6005 4106

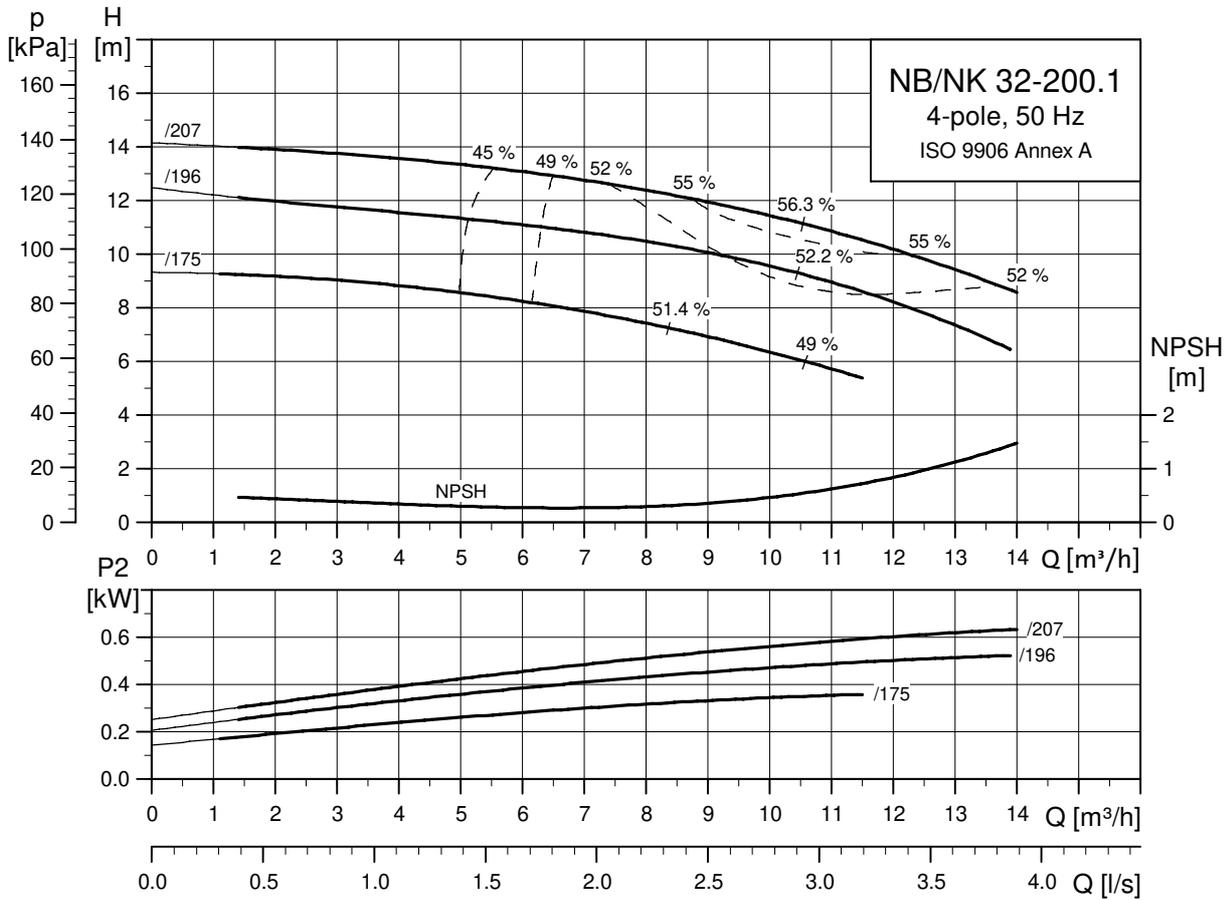
Technical data

NB, NK 32-160.1
4-pole

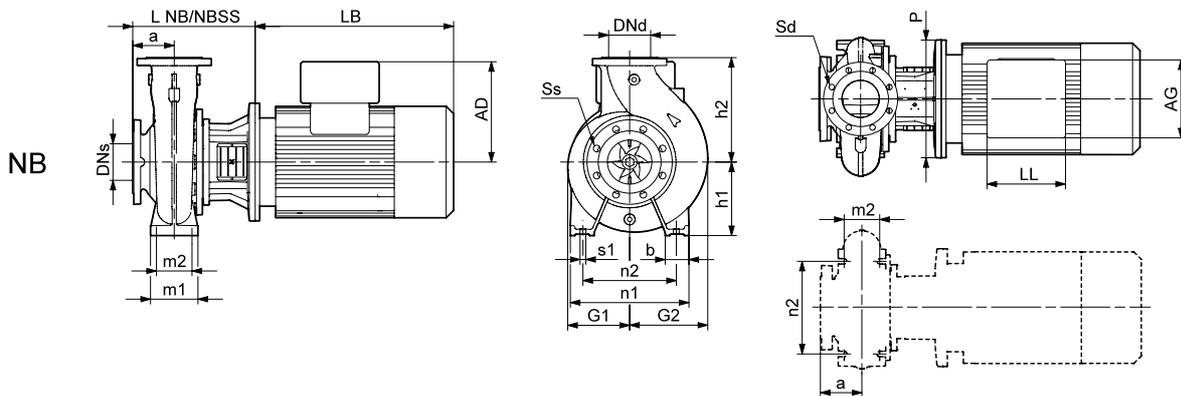
Pump type		32-160.1/137	32-160.1/155	32-160.1/172	32-160.1/177	
Motor type	Premium Motor	MG 71A-C	MG 71A-C	MG 71B-C	MG 80A-C	
	E-Motor	-	-	-	-	
Common data NB/NK	P ₂	[kW]	0.25	0.25	0.37	0.55
	PN	[bar]	16	16	16	16
	DNs	[mm]	50	50	50	50
	DNd	[mm]	32	32	32	32
	a	[mm]	80	80	80	80
	h2	[mm]	160	160	160	160
	Ss		4x19	4x19	4x19	4x19
	Sd		4x19	4x19	4x19	4x19
Common data NK standard/ spacer coupling	L NK	[mm]	675/761	675/761	675/761	715/811
	L NKE	[mm]	-/-	-/-	-/-	-/-
	Weight NK	[kg]	98/98	98/98	99/99	102/102
	Weight NKE	[kg]	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-
	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-
NK data	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]	212	212	212	212
	h4 ¹⁾	[mm]	321/-	321/-	321/-	321/-
Base frame no.		4	4	4	4	
NB data	Design		A	A	A	A
	L NB	[mm]	201	201	201	226
	L NB SS	[mm]	-	-	-	-
	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 ¹⁾	[mm]	191/-	191/-	191/-	231/-
	AD ¹⁾	[mm]	109/-	109/-	109/-	109/-
	AG ¹⁾	[mm]	82/-	82/-	82/-	82/-
	LL ¹⁾	[mm]	82/-	82/-	82/-	82/-
	P	[mm]	160	160	160	200
	C	[mm]	-	-	-	-
	B	[mm]	-	-	-	-
A	[mm]	-	-	-	-	
K	[mm]	-	-	-	-	
Weight NB ¹⁾	[kg]	33/-	33/-	33/-	37/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	

1) Dimension of pump with premium range motor/built-in frequency converter.

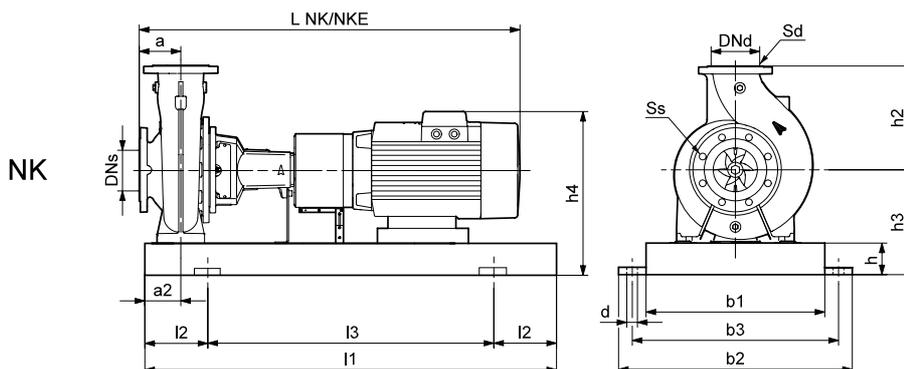
Note: For information about base frames, see page 270.



TM03 5119 4106



TM03 4180 1806



TM03 6005 4106

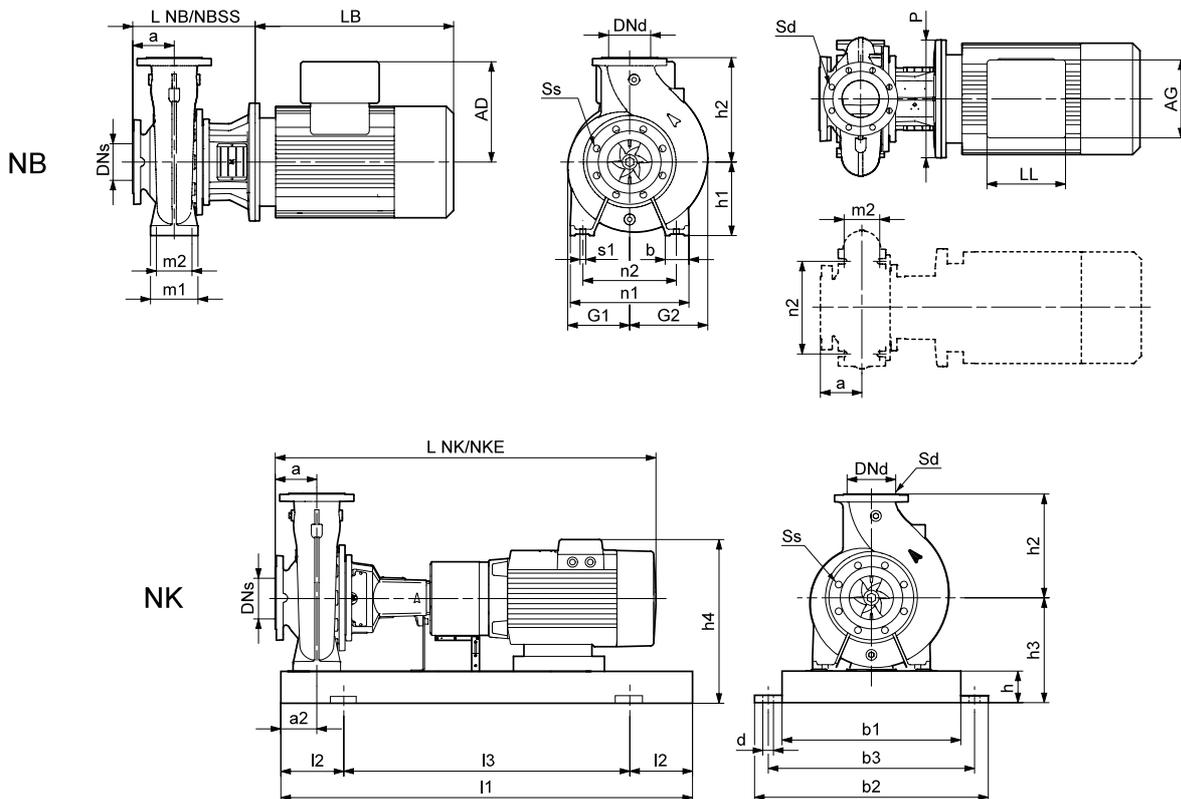
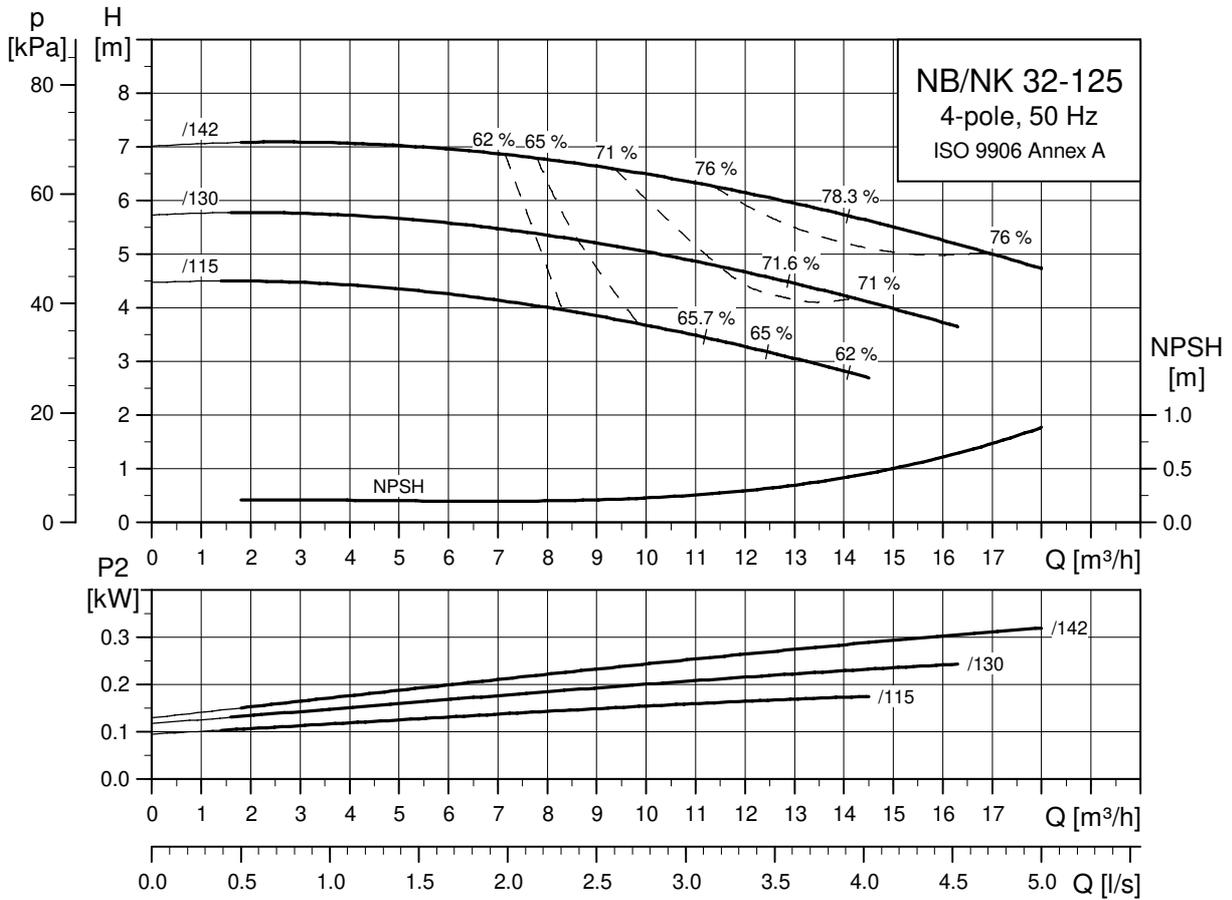
Technical data

NB, NK 32-200.1
4-pole

Pump type		32-200.1/175	32-200.1/196	32-200.1/207	
Motor type	Premium Motor	MG 71B-C	MG 80A-C	MG 80B-C	
	E-Motor	-	-	MGE 90SA	
Common data NB/NK	P ₂	[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		4x19	4x19	4x19
	Sd		4x19	4x19	4x19
Common data NK standard/ spacer coupling	L NK	[mm]	675/761	715/811	715/811
	L NKE	[mm]	-/-	-/-	805/901
	Weight NK	[kg]	108/108	110/110	111/111
	Weight NKE	[kg]	-/-	-/-	122/121
	Weight NK SS	[kg]	-/-	-/-	-/-
	Weight NKE SS	[kg]	-/-	-/-	-/-
NK data	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 ¹⁾	[mm]	349/-	349/-	349/407
Base frame no.		4	4	4	
NB data	Design		A	A	A
	L NB	[mm]	243	226	226
	L NB SS	[mm]	-	-	-
	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 ¹⁾	[mm]	191/-	231/-	231/321
	AD ¹⁾	[mm]	109/-	109/-	109/167
	AG ¹⁾	[mm]	82/-	82/-	82/264
	LL ¹⁾	[mm]	82/-	82/-	82/260
	P	[mm]	160	200	200
	C	[mm]	-	-	-
	B	[mm]	-	-	-
A	[mm]	-	-	-	
K	[mm]	-	-	-	
Weight NB ¹⁾	[kg]	45/-	44/-	45/56	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	

1) Dimension of pump with premium range motor/built-in frequency converter.

Note: For information about base frames, see page 270.



TM03 5120 4106

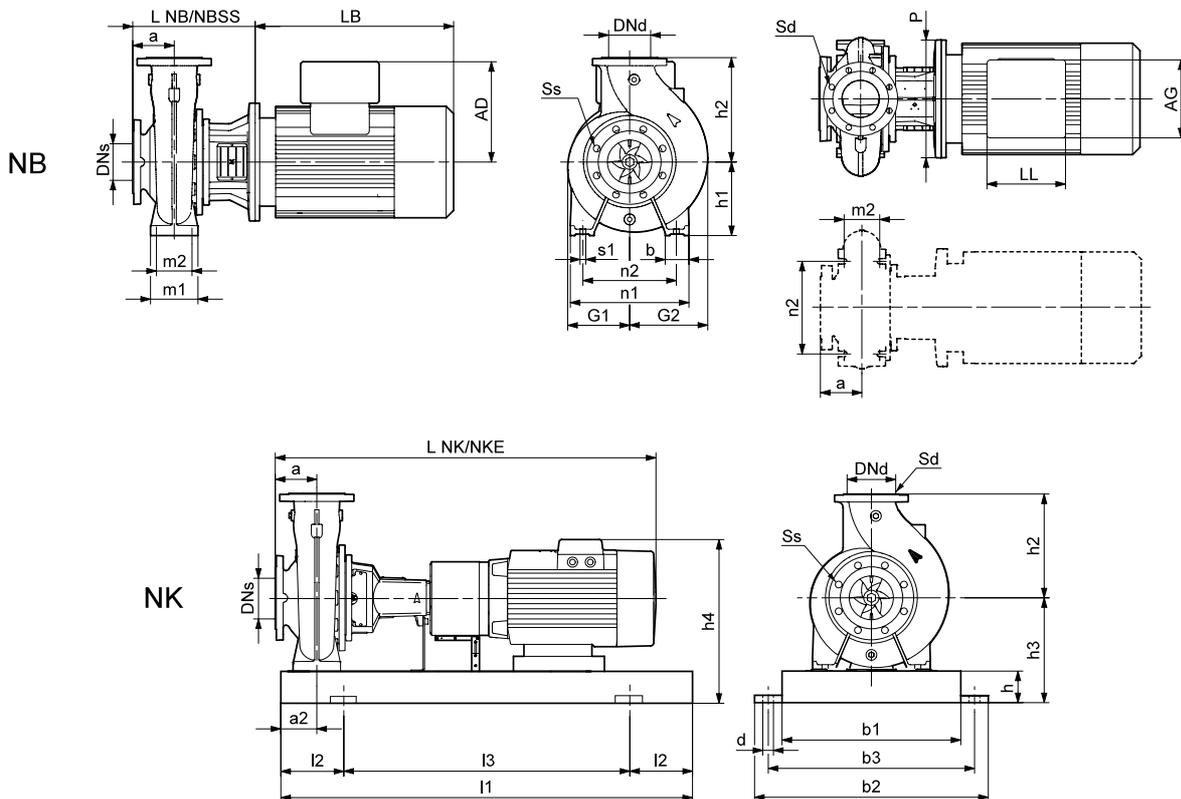
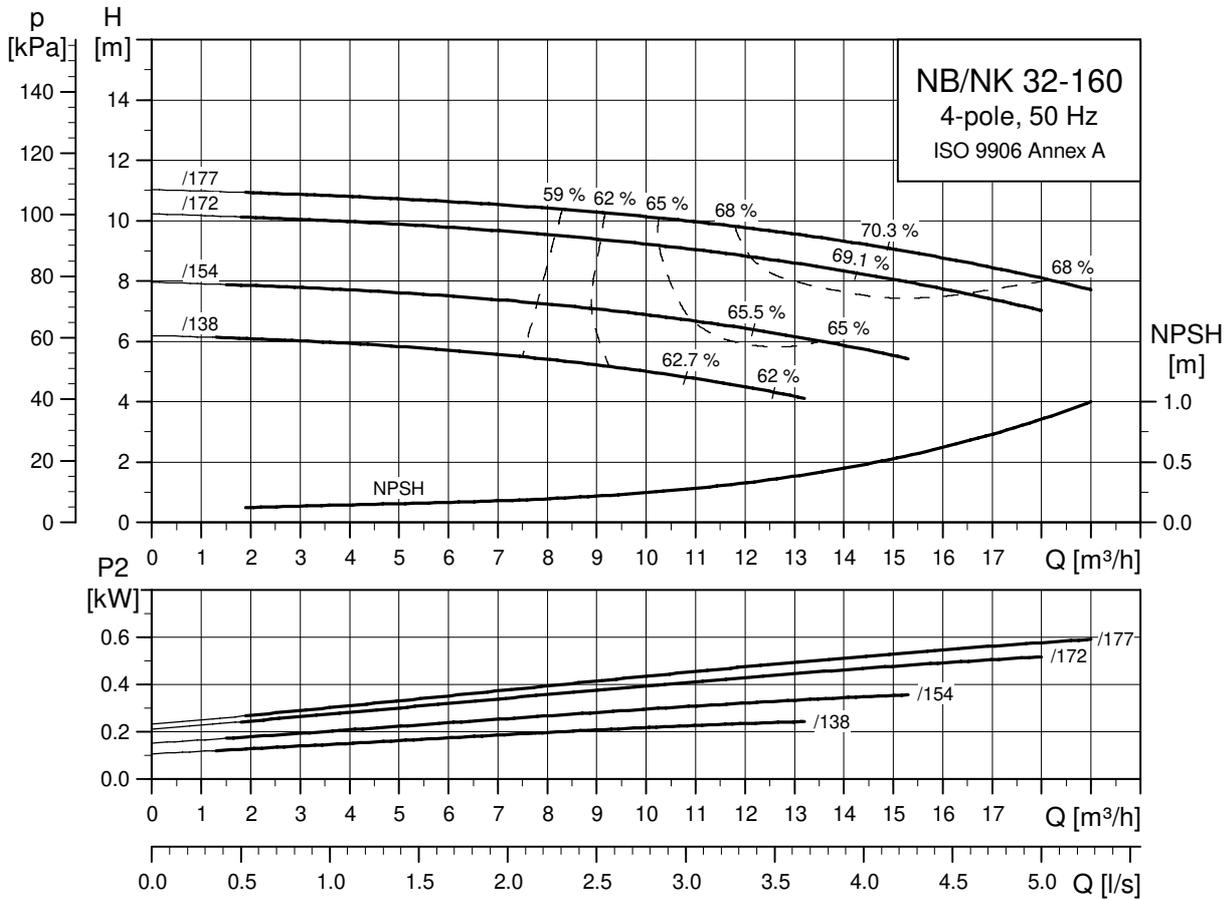
TM03 4180 1806

TM03 6005 4106

Pump type		32-125/115	32-125/130	32-125/142	
Motor type	Premium Motor	MG 71A-C	MG 71A-C	MG 71B-C	
	E-Motor	-	-	-	
Common data NB/NK	P ₂	[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		4x19	4x19	4x19
	Sd		4x19	4x19	4x19
Common data NK standard/ spacer coupling	L NK	[mm]	675/761	675/761	675/761
	L NKE	[mm]	-/-	-/-	-/-
	Weight NK	[kg]	80/80	80/80	80/80
	Weight NKE	[kg]	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-
	Weight NKE SS	[kg]	-/-	-/-	-/-
NK data	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 ¹⁾	[mm]	286/-	286/-	286/-
	Base frame no.		2	2	2
NB data	Design		A	A	A
	L NB	[mm]	201	201	201
	L NB SS	[mm]	-	-	-
	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 ¹⁾	[mm]	191/-	191/-	191/-
	AD ¹⁾	[mm]	109/-	109/-	109/-
	AG ¹⁾	[mm]	82/-	82/-	82/-
	LL ¹⁾	[mm]	82/-	82/-	82/-
	P	[mm]	160	160	160
	C	[mm]	-	-	-
	B	[mm]	-	-	-
A	[mm]	-	-	-	
K	[mm]	-	-	-	
Weight NB ¹⁾	[kg]	32/-	32/-	33/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	

1) Dimension of pump with premium range motor/built-in frequency converter.

Note: For information about base frames, see page 270.



TM03 5121 4106

TM03 4180 1806

TM03 6005 4106

Technical data

NB, NK 32-160
4-pole

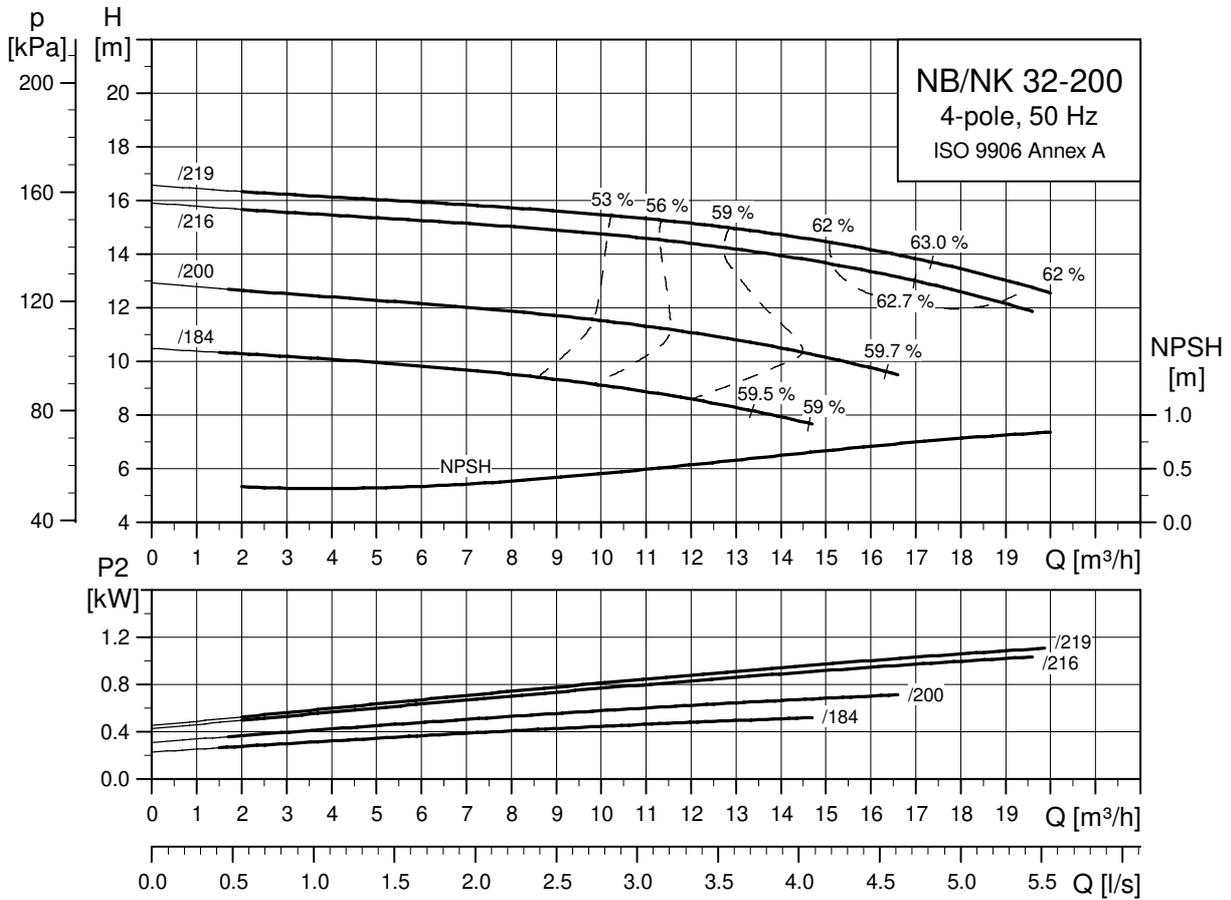
Pump type		32-160/138	32-160/154	32-160/172	32-160/177	
Motor type	Premium Motor	MG 71A-C	MG 71B-C	MG 80A-C	MG 80B-C	
	E-Motor	-	-	-	MGE 90SA	
Common data NB/NK	P ₂	[kW]	0.25	0.37	0.55	0.75
	PN	[bar]	16	16	16	16
	DNs	[mm]	50	50	50	50
	DNd	[mm]	32	32	32	32
	a	[mm]	80	80	80	80
	h2	[mm]	160	160	160	160
	Ss		4x19	4x19	4x19	4x19
	Sd		4x19	4x19	4x19	
Common data NK standard/ spacer coupling	L NK	[mm]	675/761	675/761	715/811	715/811
	L NKE	[mm]	-/-	-/-	-/-	805/901
	Weight NK	[kg]	99/99	100/100	103/103	104/104
	Weight NKE	[kg]	-/-	-/-	-/-	117/116
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-
	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-
NK data	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]	212	212	212	212
	h4 ¹⁾	[mm]	321/-	321/-	321/-	321/379
	Base frame no.		4	4	4	4
NB data	Design		A	A	A	A
	L NB	[mm]	201	201	226	226
	L NB SS	[mm]	-	-	-	-
	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 ¹⁾	[mm]	191/-	191/-	231/-	231/321
	AD ¹⁾	[mm]	109/-	109/-	109/-	109/167
	AG ¹⁾	[mm]	82/-	82/-	82/-	82/264
	LL ¹⁾	[mm]	82/-	82/-	82/-	82/260
	P	[mm]	160	160	200	200
	C	[mm]	-	-	-	-
	B	[mm]	-	-	-	-
A	[mm]	-	-	-	-	
K	[mm]	-	-	-	-	
	Weight NB ¹⁾	[kg]	34/-	34/-	38/-	39/50
	Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-

1) Dimension of pump with premium range motor/built-in frequency converter.

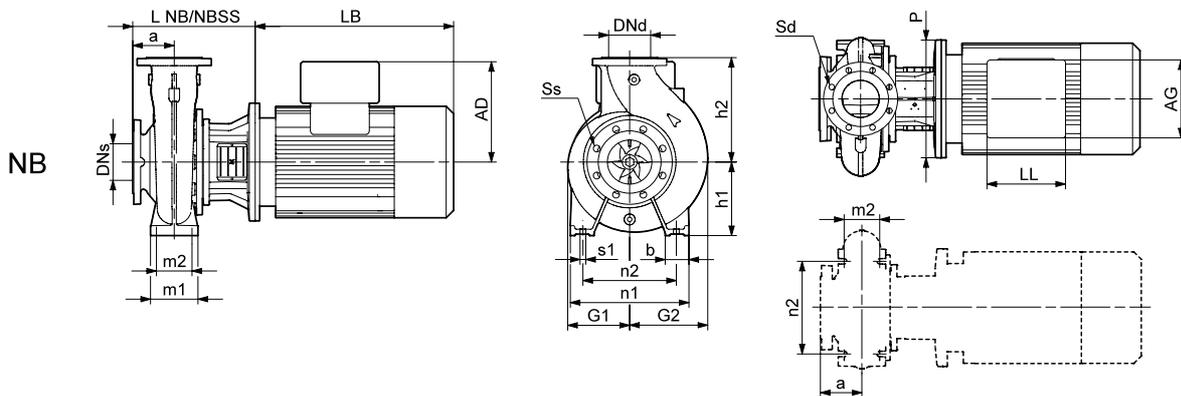
Note: For information about base frames, see page 270.

Performance curves

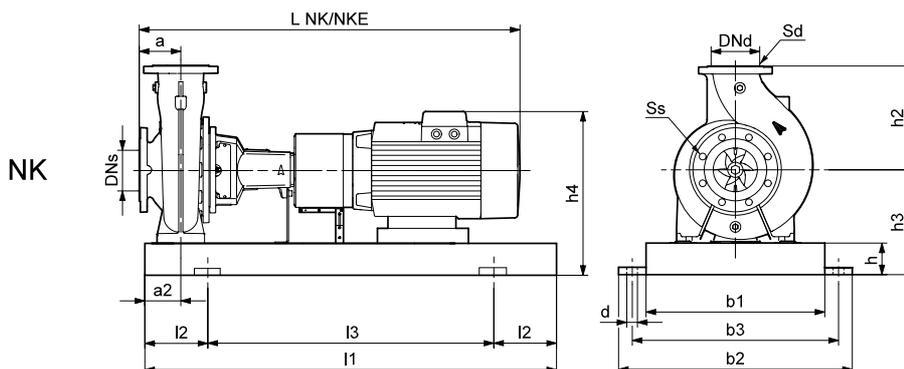
NB, NK 32-200
4-pole, 50 Hz
ISO 9906 Annex A



TM03 5122 4106



TM03 4180 1806



TM03 6005 4106

Technical data

NB, NK 32-200
4-pole

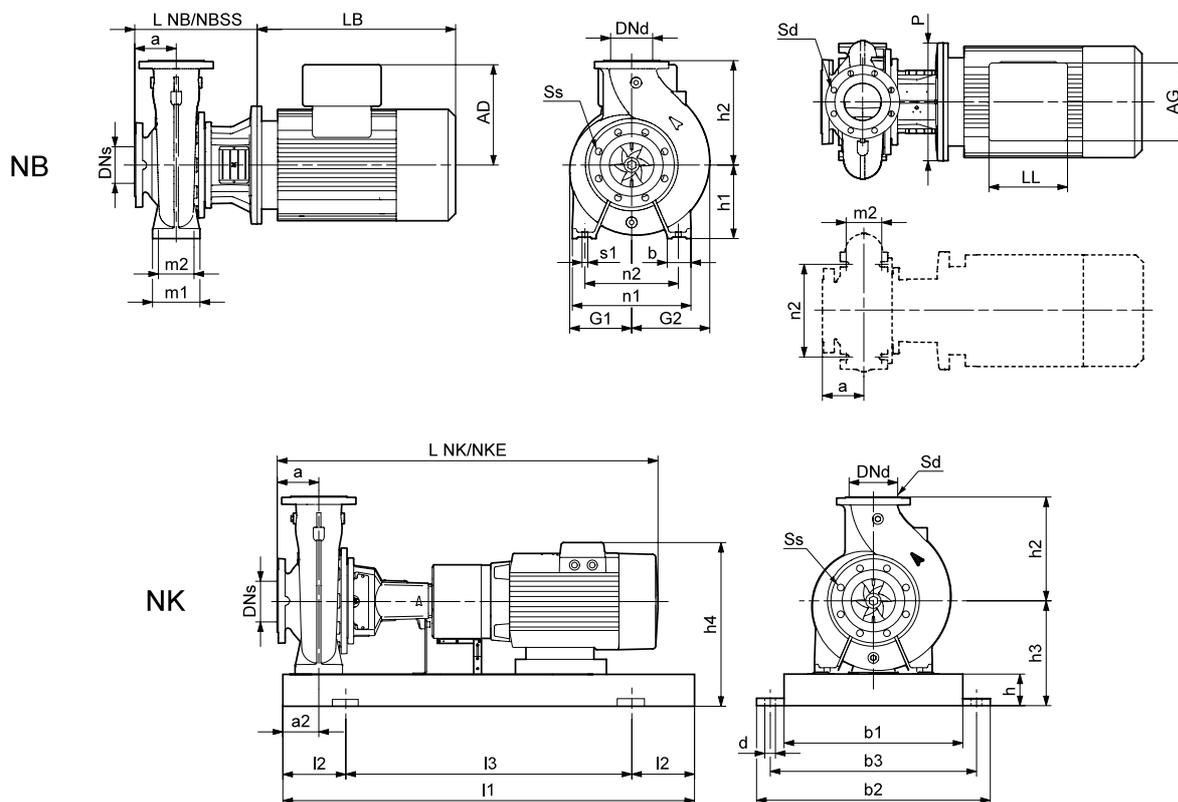
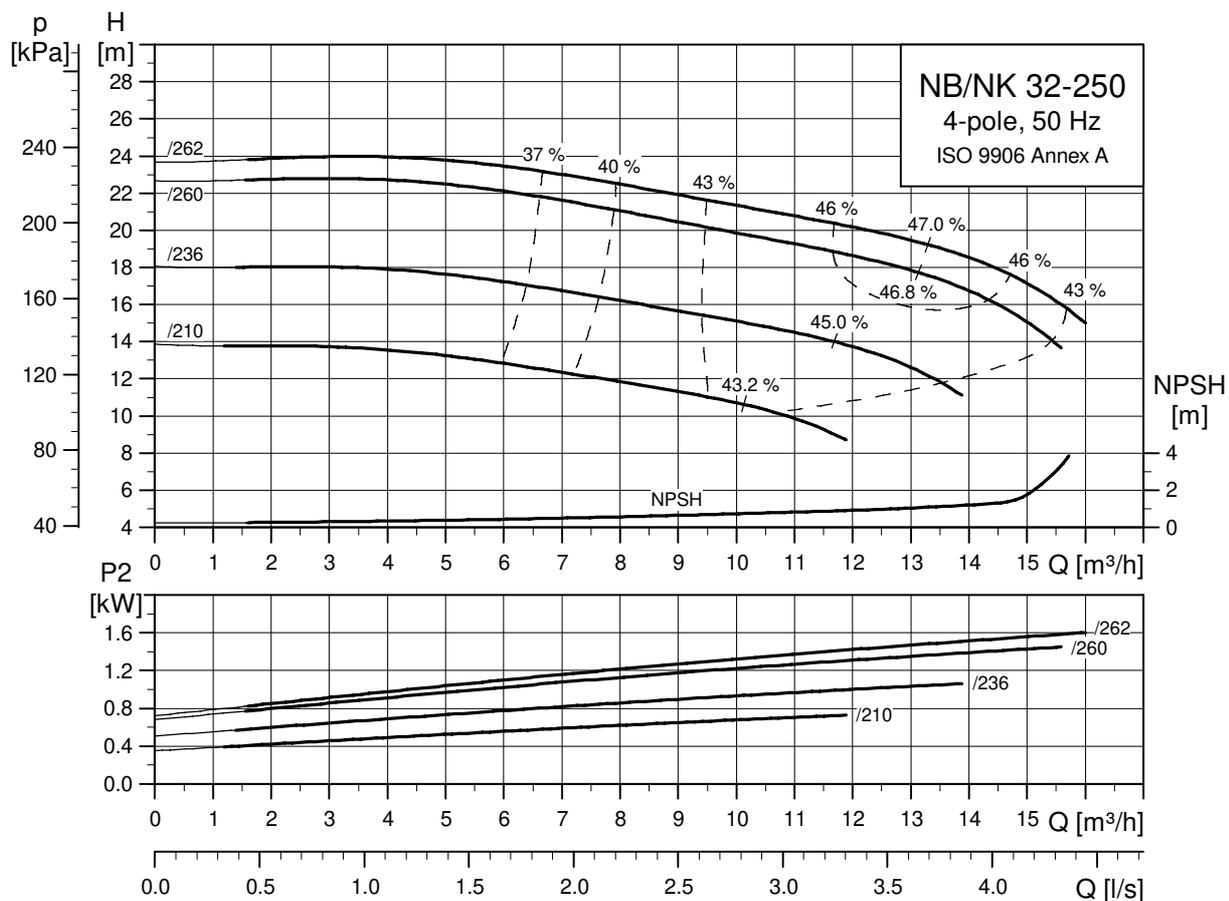
Pump type		32-200/184	32-200/200	32-200/216	32-200/219	
Motor type	Premium Motor	MG 80A-C	MG 80B-C	MG 90SB-D	MG 90LC-D	
	E-Motor	-	MGE 90SA	MGE 90SB	MGE 90LC	
Common data NB/NK	P ₂	[kW]	0.55	0.75	1.1	1.5
	PN	[bar]	16	16	16	16
	DNs	[mm]	50	50	50	50
	DNd	[mm]	32	32	32	32
	a	[mm]	80	80	80	80
	h2	[mm]	180	180	180	180
	Ss		4x19	4x19	4x19	4x19
Common data NK standard/ spacer coupling	Sd		4x19	4x19	4x19	4x19
	L NK	[mm]	715/811	715/811	775/871	815/911
	L NKE	[mm]	-/-	805/901	815/911	815/911
	Weight NK	[kg]	110/110	112/112	121/121	122/122
	Weight NKE	[kg]	-/-	122/121	128/127	129/128
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-
NK data	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-
	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 ¹⁾	[mm]	349/-	349/407	350/407	350/407
Base frame no.		4	4	4	4	
NB data	Design		A	A	A	A
	L NB	[mm]	226	226	226	226
	L NB SS	[mm]	-	-	-	-
	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]	-	-	-	-
	LB ¹⁾	[mm]	231/-	231/321	281/321	321/321
	AD ¹⁾	[mm]	109/-	109/167	110/167	110/167
	AG ¹⁾	[mm]	82/-	82/264	162/264	162/264
	LL ¹⁾	[mm]	82/-	82/260	103/260	103/260
	P	[mm]	200	200	200	200
	C	[mm]	-	-	-	-
	B	[mm]	-	-	-	-
A	[mm]	-	-	-	-	
K	[mm]	-	-	-	-	
Weight NB ¹⁾	[kg]	44/-	45/56	56/62	57/63	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	

1) Dimension of pump with premium range motor/built-in frequency converter.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 32-250
4-pole, 50 Hz



TM03 5123 4106

TM03 4180 1806

TM03 6005 4106

Technical data

NB, NK 32-250
4-pole

Pump type		32-250/210	32-250/236	32-250/260	32-250/262	
Motor type	Premium Motor	MG 80B-C	MG 90SB-D	MG 90LC-D	MG 100LB-D	
	E-Motor	MGE 90SA	MGE 90SB	MGE 90LC	MGE 100LB	
Common data NB/NK	P ₂	[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]	100	100	100	100
	h2	[mm]	225	225	225	225
	Ss		4x19	4x19	4x19	4x19
Common data NK standard/ spacer coupling	Sd		4x19	4x19	4x19	4x19
	L NK	[mm]	735/831	795/891	835/931	859/955
	L NKE	[mm]	825/921	835/931	835/931	859/955
	Weight NK	[kg]	134/134	145/144	146/145	151/149
	Weight NKE	[kg]	146/145	152/151	153/152	162/160
NK data	Weight NK SS	[kg]	138/137	149/149	150/150	155/153
	Weight NKE SS	[kg]	150/149	156/155	157/156	166/164
	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 ¹⁾	[mm]	369/427	370/427	370/427	380/437
Base frame no.		5	5	5	5	
NB data	Design		A	A	A	A
	L NB	[mm]	273	273	273	293
	L NB SS	[mm]	273	273	273	293
	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]	-	-	-	-
	LB ¹⁾	[mm]	231/321	281/321	321/321	335/335
	AD ¹⁾	[mm]	109/167	110/167	110/167	120/177
	AG ¹⁾	[mm]	82/264	162/264	162/264	162/264
	LL ¹⁾	[mm]	82/260	103/260	103/260	103/260
	P	[mm]	200	200	200	250
	C	[mm]	-	-	-	-
	B	[mm]	-	-	-	-
A	[mm]	-	-	-	-	
K	[mm]	-	-	-	-	
Weight NB ¹⁾	[kg]	58/69	69/75	70/76	77/85	
Weight NB SS ¹⁾	[kg]	62/73	73/79	74/80	82/89	

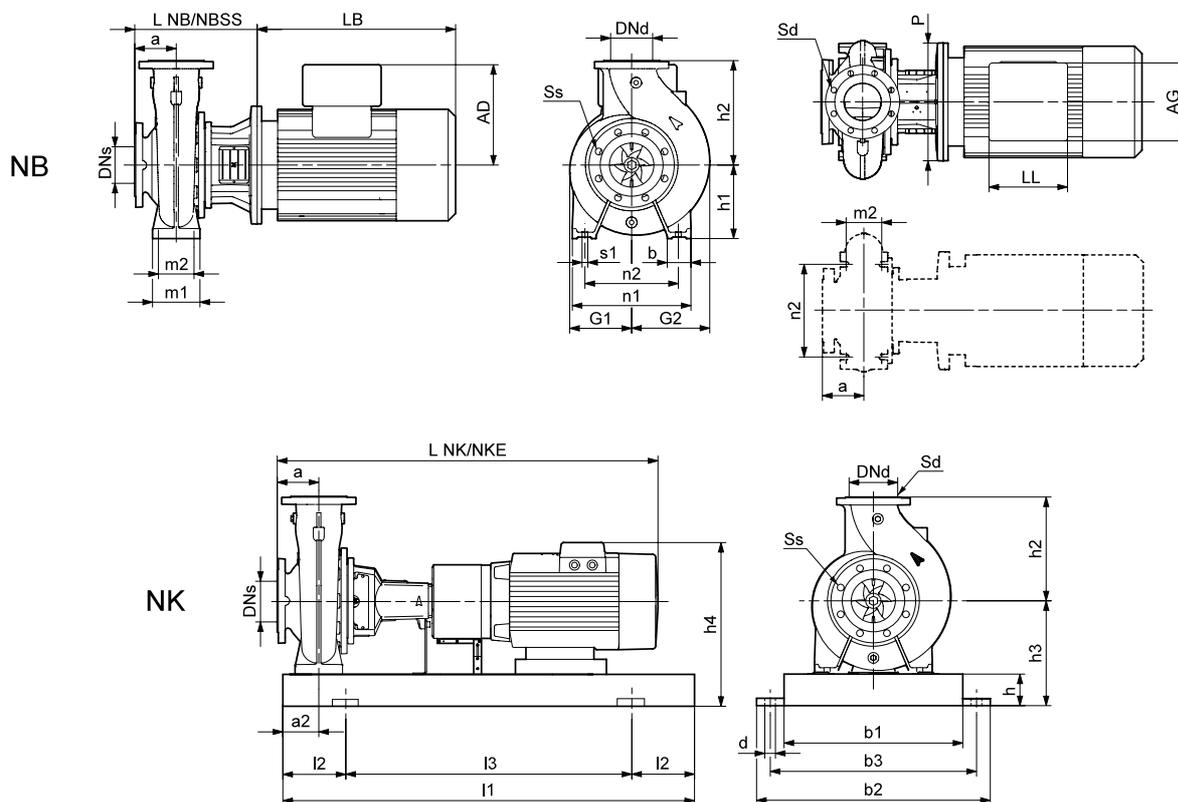
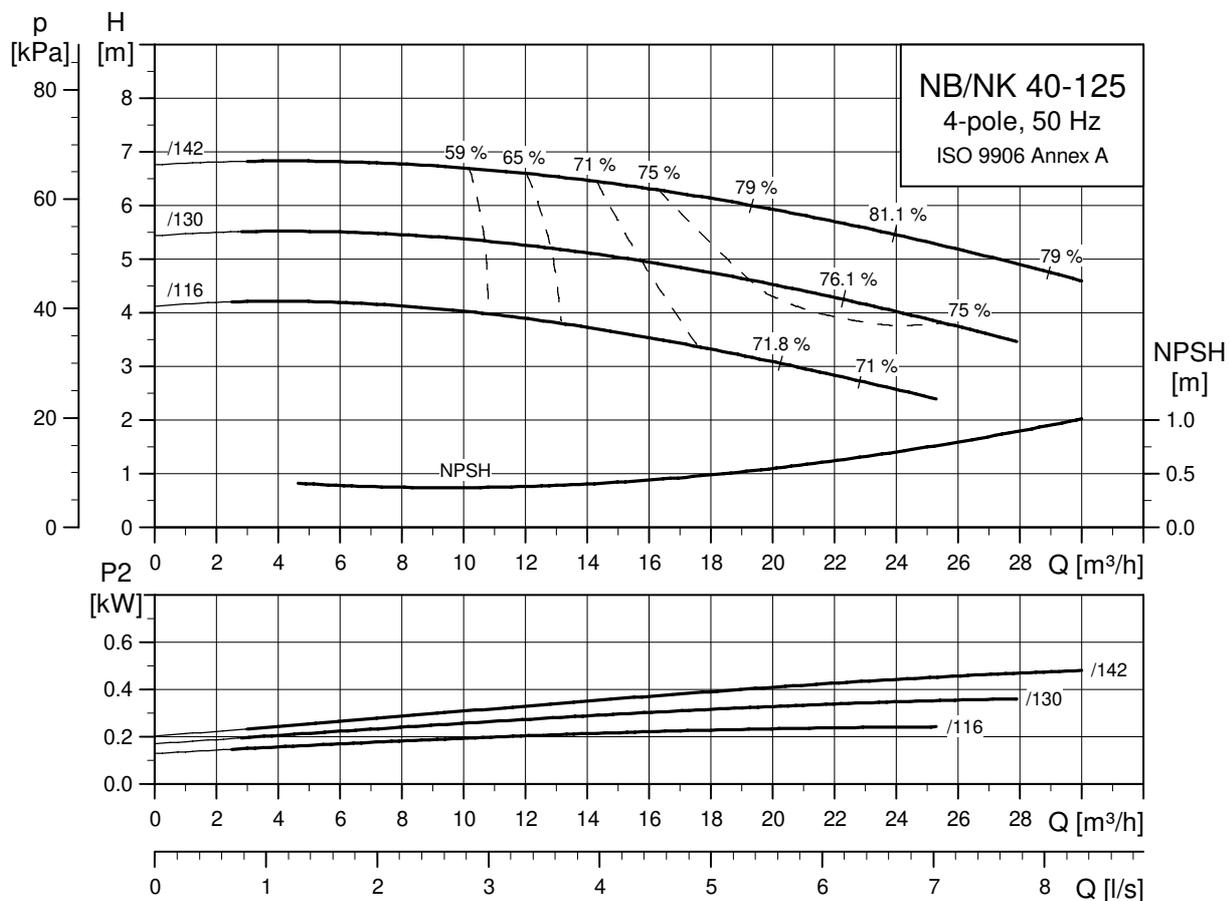
1) Dimension of pump with premium range motor/built-in frequency converter.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 40-125
4-pole, 50 Hz

4-pole



TM03 5124 4106

TM03 4180 1806

TM03 6005 4106

Technical data

NB, NK 40-125
4-pole

Pump type		40-125/116	40-125/130	40-125/142	
Motor type	Premium Motor	MG 71A-C	MG 71B-C	MG 80A-C	
	E-Motor	-	-	-	
Common data NB/NK	P ₂	[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		4x19	4x19	4x19
	Sd		4x19	4x19	4x19
Common data NK standard/ spacer coupling	L NK	[mm]	675/761	675/761	715/811
	L NKE	[mm]	-/-	-/-	-/-
	Weight NK	[kg]	89/89	90/90	91/91
	Weight NKE	[kg]	-/-	-/-	-/-
	Weight NK SS	[kg]	90/90	91/90	92/91
	Weight NKE SS	[kg]	-/-	-/-	-/-
NK data	l1	[mm]	900	900	900
	l2	[mm]	150	150	150
	l3	[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 ¹⁾	[mm]	286/-	286/-	286/-
Base frame no.		3	3	3	
NB data	Design		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 ¹⁾	[mm]	191/-	191/-	231/-
	AD ¹⁾	[mm]	109/-	109/-	109/-
	AG ¹⁾	[mm]	82/-	82/-	82/-
	LL ¹⁾	[mm]	82/-	82/-	82/-
	P	[mm]	160	160	200
	C	[mm]	-	-	-
	B	[mm]	-	-	-
A	[mm]	-	-	-	
K	[mm]	-	-	-	
Weight NB ¹⁾	[kg]	35/-	35/-	39/-	
Weight NB SS ¹⁾	[kg]	39/-	39/-	42/-	

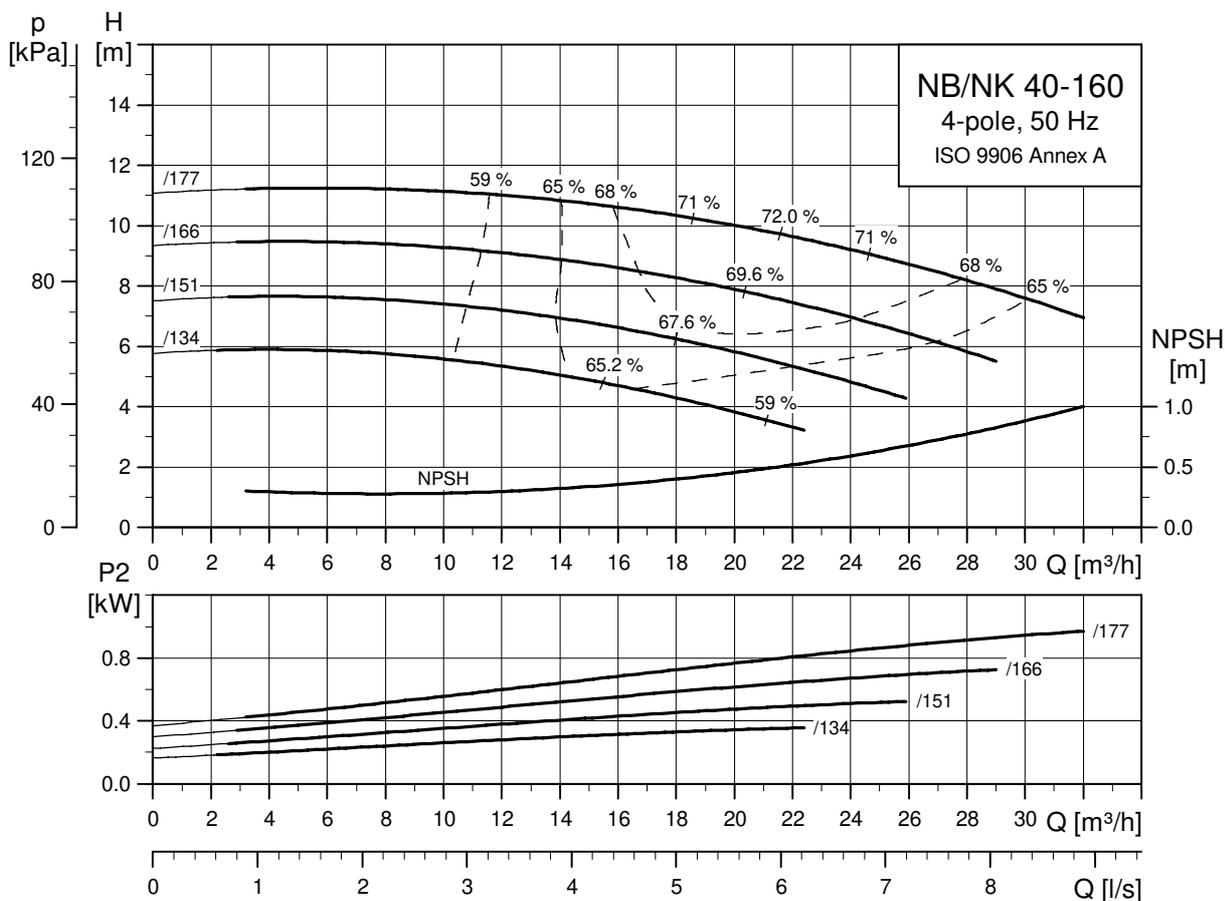
1) Dimension of pump with premium range motor/built-in frequency converter.

Note: For information about base frames, see page 270.

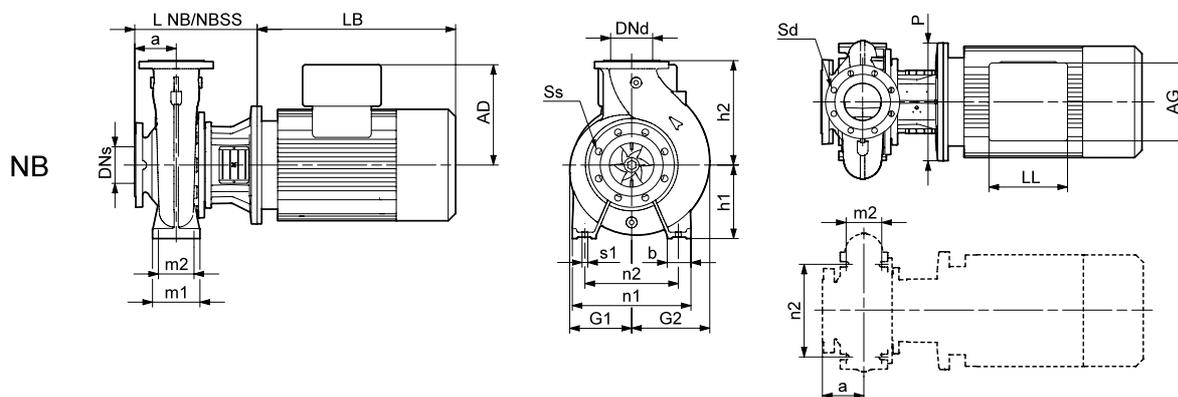
Performance curves

NB, NK 40-160
4-pole, 50 Hz

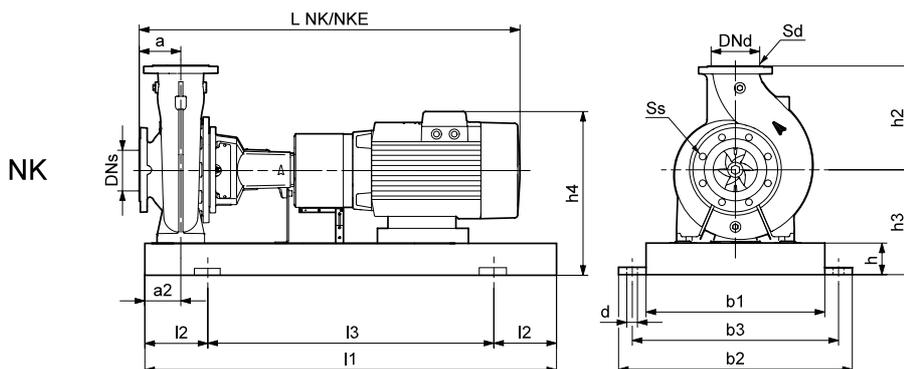
4-pole



TM03 5125 4106



TM03 4180 1806



TM03 6005 4106

Technical data

NB, NK 40-160
4-pole

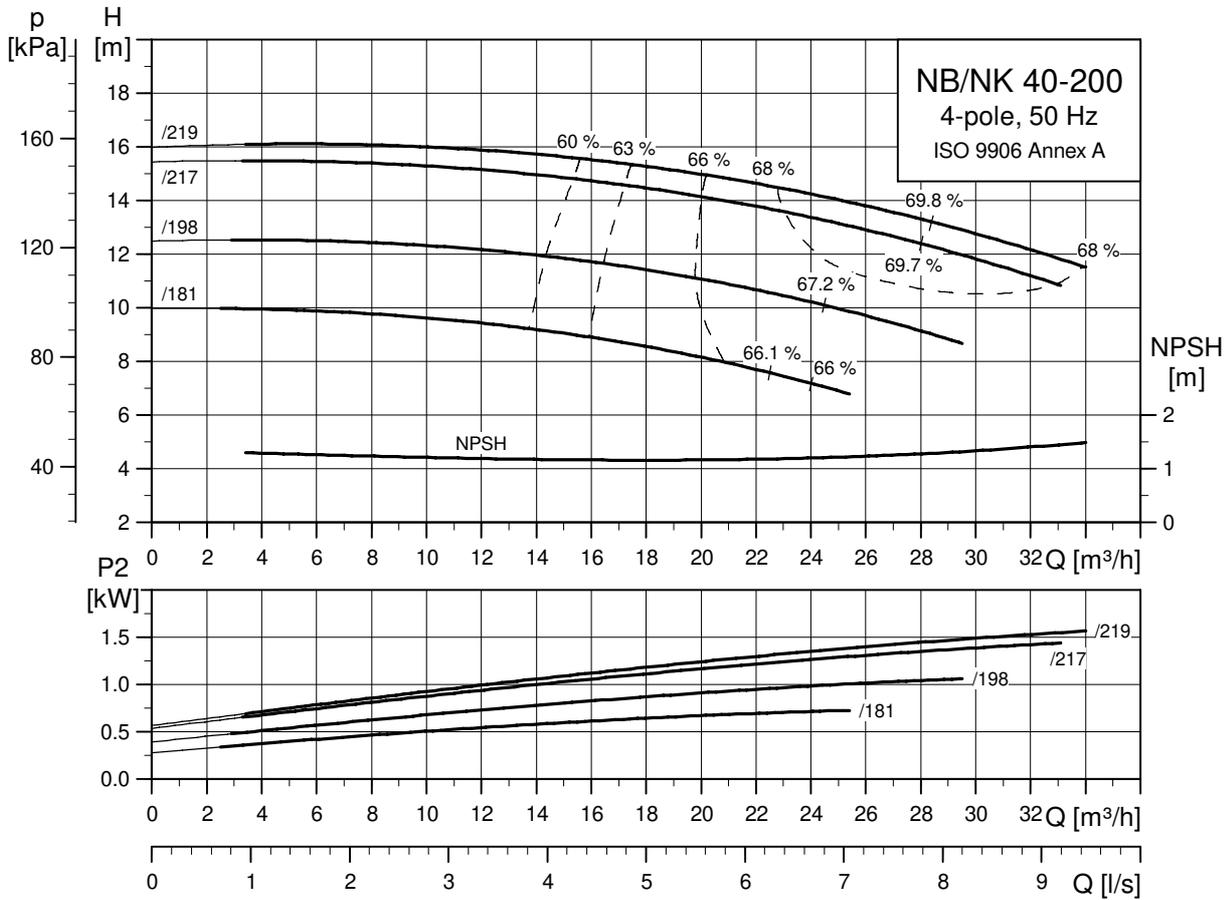
Pump type		40-160/134	40-160/151	40-160/166	40-160/177	
Motor type	Premium Motor	MG 71B-C	MG 80A-C	MG 80B-C	MG 90SB-D	
	E-Motor	-	-	MGE 90SA	MGE 90SB	
Common data NB/NK	P ₂	[kW]	0.37	0.55	0.75	1.1
	PN	[bar]	16	16	16	16
	DNs	[mm]	65	65	65	65
	DNd	[mm]	40	40	40	40
	a	[mm]	80	80	80	80
	h2	[mm]	160	160	160	160
	Ss		4x19	4x19	4x19	4x19
Common data NK standard/ spacer coupling	Sd		4x19	4x19	4x19	4x19
	L NK	[mm]	675/761	715/811	715/811	775/871
	L NKE	[mm]	-/-	-/-	805/901	815/911
	Weight NK	[kg]	102/102	105/105	106/106	118/118
	Weight NKE	[kg]	-/-	-/-	119/118	125/124
	Weight NK SS	[kg]	103/102	106/105	107/106	120/119
NK data	Weight NKE SS	[kg]	-/-	-/-	120/119	126/125
	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]	212	212	212	212
NB data	h4 ¹⁾	[mm]	321/-	321/-	321/379	322/379
	Base frame no.		4	4	4	4
	Design		A	A	A	A
	L NB	[mm]	201	226	226	226
	L NB SS	[mm]	243	253	253	253
	h1	[mm]	132	132	132	132
	G1	[mm]	117	117	117	117
	G2	[mm]	133	133	133	133
	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 ¹⁾	[mm]	191/-	231/-	231/321	281/321
	AD ¹⁾	[mm]	109/-	109/-	109/167	110/167
AG ¹⁾	[mm]	82/-	82/-	82/264	162/264	
LL ¹⁾	[mm]	82/-	82/-	82/260	103/260	
P	[mm]	160	200	200	200	
C	[mm]	-	-	-	-	
B	[mm]	-	-	-	-	
A	[mm]	-	-	-	-	
K	[mm]	-	-	-	-	
Weight NB ¹⁾	[kg]	36/-	40/-	41/52	52/58	
Weight NB SS ¹⁾	[kg]	41/-	44/-	44/56	55/62	

1) Dimension of pump with premium range motor/built-in frequency converter.

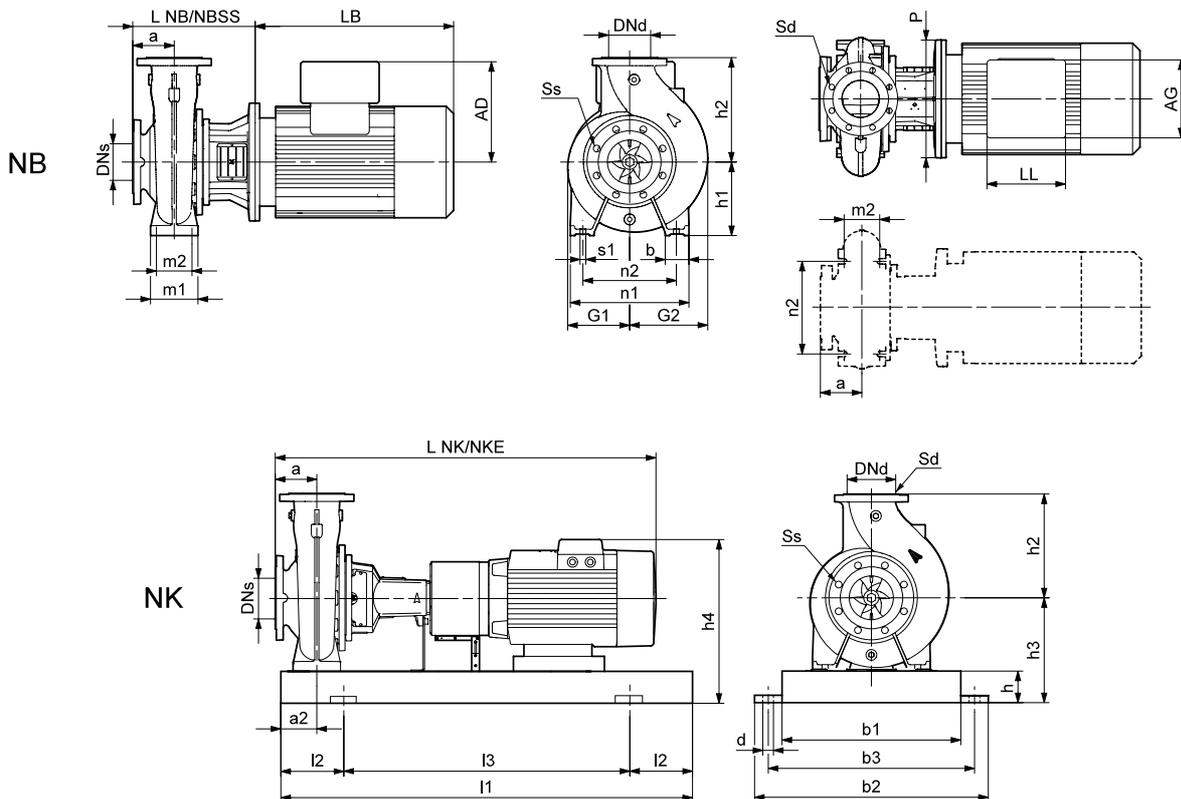
Note: For information about base frames, see page 270.

Performance curves

NB, NK 40-200
4-pole, 50 Hz
ISO 9906 Annex A



TM03 5126 4106



TM03 4180 1806

TM03 6005 4106

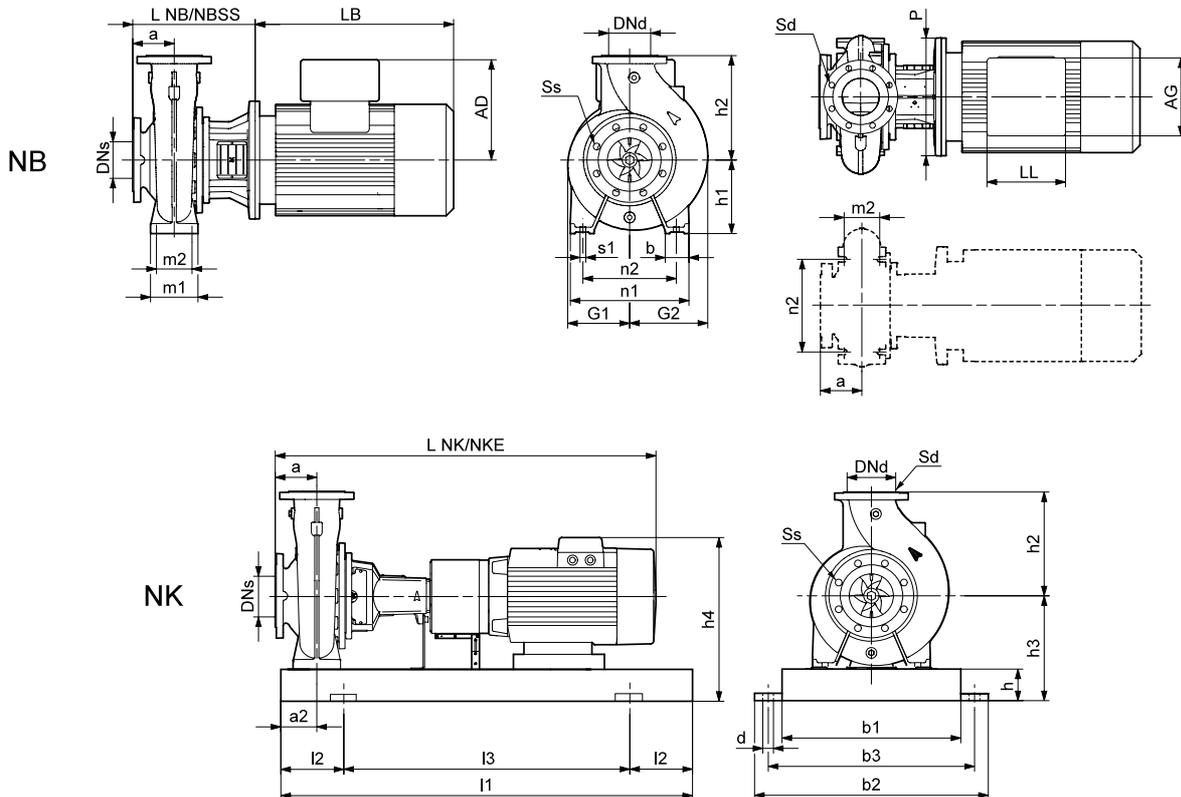
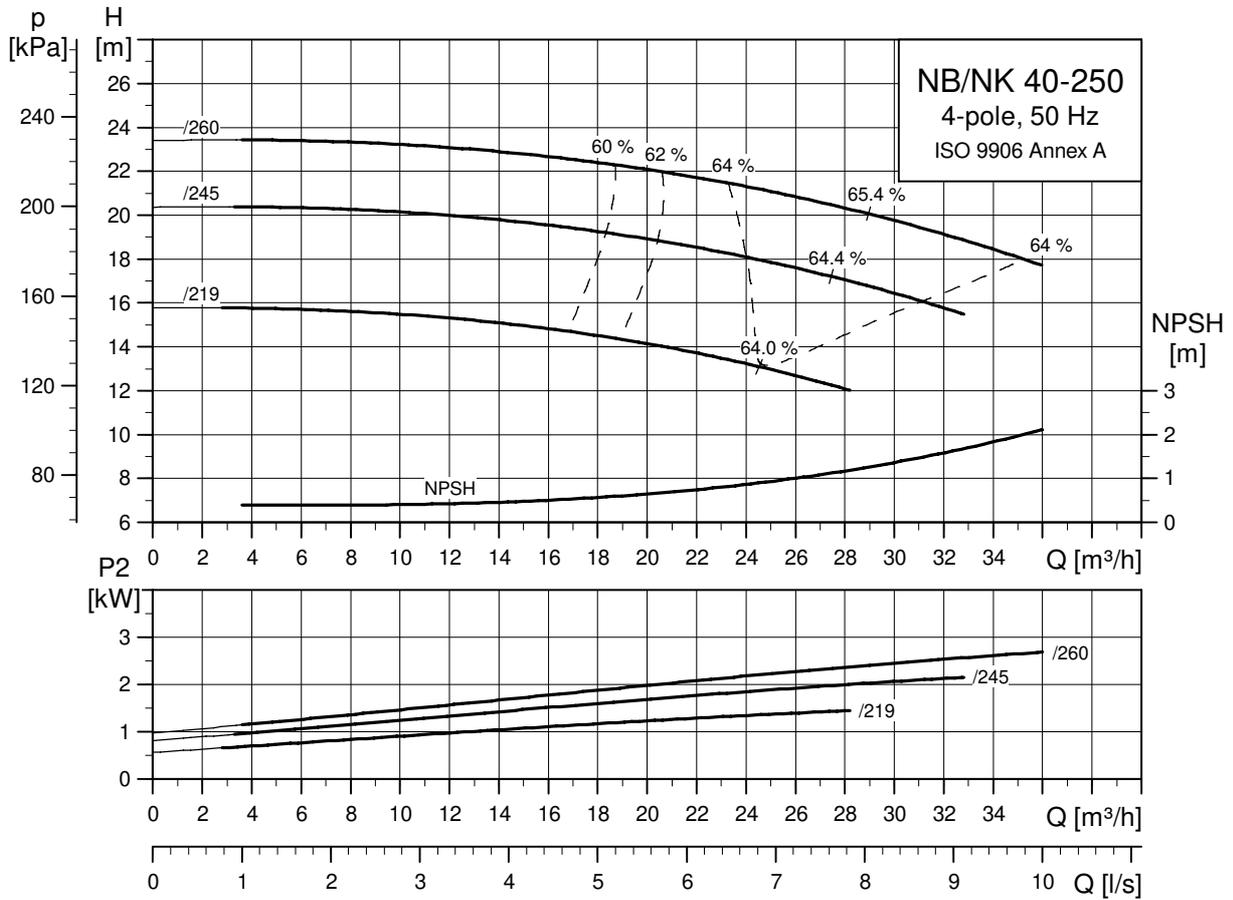
Pump type		40-200/181	40-200/198	40-200/217	40-200/219	
Motor type	Premium Motor	MG 80B-C	MG 90SB-D	MG 90LC-D	MG 100LB-D	
	E-Motor	MGE 90SA	MGE 90SB	MGE 90LC	MGE 100LB	
Common data NB/NK	P ₂	[kW]	0.75	1.1	1.5	2.2
	PN	[bar]	16	16	16	16
	DNs	[mm]	65	65	65	65
	DNd	[mm]	40	40	40	40
	a	[mm]	100	100	100	100
	h2	[mm]	180	180	180	180
	Ss		4x19	4x19	4x19	4x19
Common data NK standard/ spacer coupling	Sd		4x19	4x19	4x19	4x19
	L NK	[mm]	735/831	795/891	835/931	859/955
	L NKE	[mm]	825/921	835/931	835/931	859/955
	Weight NK	[kg]	113/113	123/122	124/123	129/127
	Weight NKE	[kg]	123/122	129/128	130/129	140/138
	Weight NK SS	[kg]	116/116	126/125	127/126	132/130
NK data	Weight NKE SS	[kg]	127/126	133/132	134/133	143/141
	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
NB data	h4 ¹⁾	[mm]	349/407	350/407	350/407	360/417
	Base frame no.		4	4	4	4
	Design		A	A	A	A
	L NB	[mm]	246	246	246	274
	L NB SS	[mm]	273	273	273	293
	h1	[mm]	160	160	160	160
	G1	[mm]	140	140	140	140
	G2	[mm]	157	157	157	157
	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 ¹⁾	[mm]	231/321	281/321	321/321	335/335
	AD ¹⁾	[mm]	109/167	110/167	110/167	120/177
AG ¹⁾	[mm]	82/264	162/264	162/264	162/264	
LL ¹⁾	[mm]	82/260	103/260	103/260	103/260	
P	[mm]	200	200	200	250	
C	[mm]	-	-	-	-	
B	[mm]	-	-	-	-	
A	[mm]	-	-	-	-	
K	[mm]	-	-	-	-	
Weight NB ¹⁾	[kg]	46/57	57/63	58/64	65/73	
Weight NB SS ¹⁾	[kg]	54/65	65/71	66/72	73/81	

1) Dimension of pump with premium range motor/built-in frequency converter.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 40-250
4-pole
ISO 9906 Annex A



TM03 5127 4106

TM03 4180 1806

TM03 6005 4106

Technical data

NB, NK 40-250
4-pole

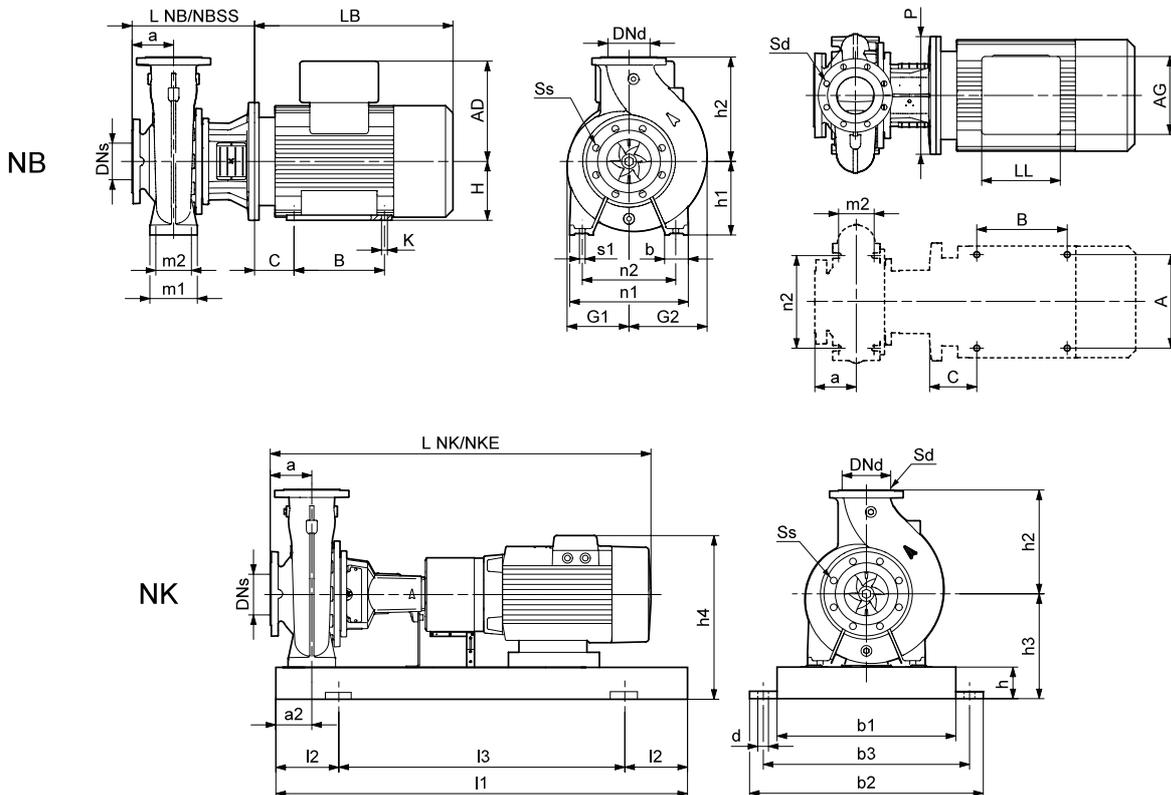
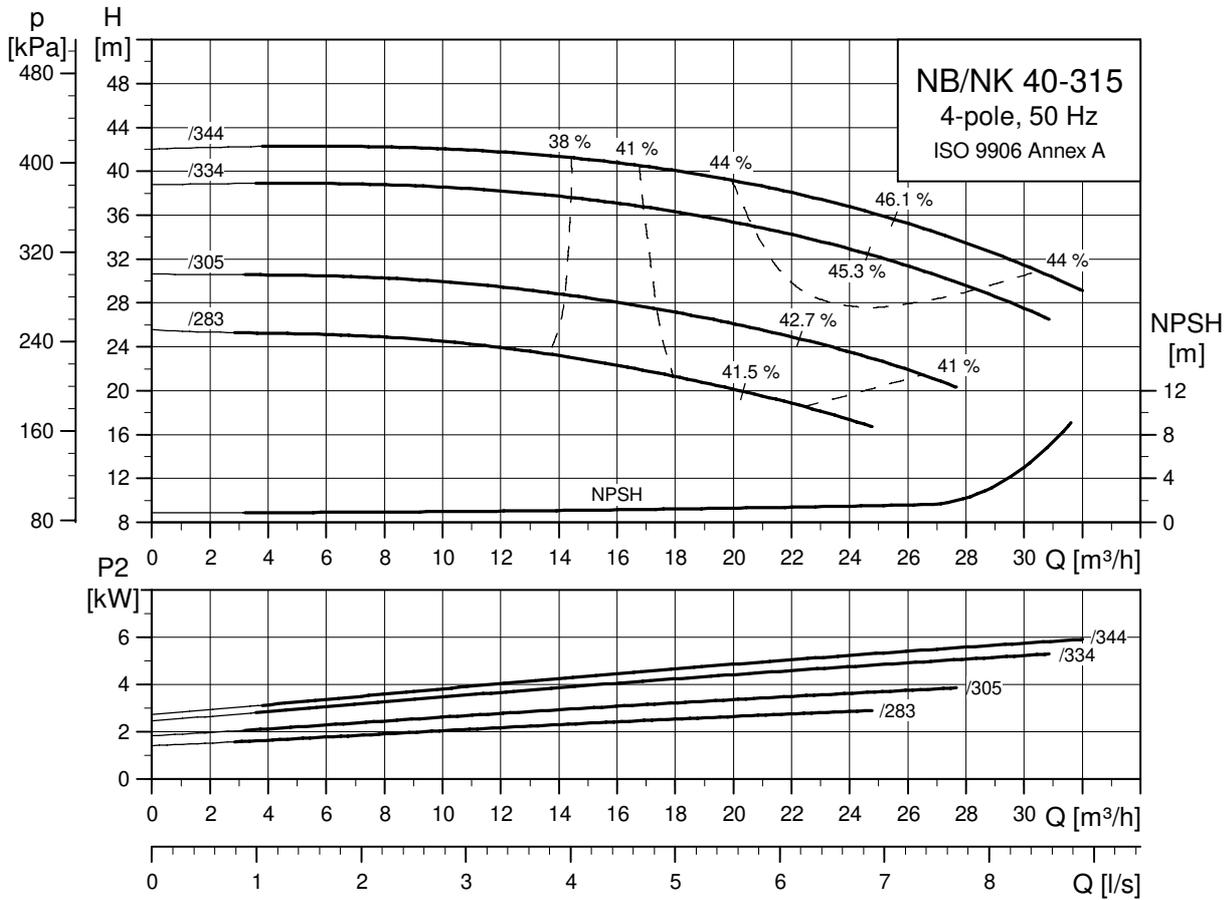
Pump type		40-250/219	40-250/245	40-250/260	
Motor type	Premium Motor	MG 90LC-D	MG 100LB-D	MG 100LC-D	
	E-Motor	MGE 90LC	MGE 100LB	MGE 100LC	
Common data NB/NK	P ₂	[kW]	1.5	2.2	3
	PN	[bar]	16	16	16
	DNs	[mm]	65	65	65
	DNd	[mm]	40	40	40
	a	[mm]	100	100	100
	h ₂	[mm]	225	225	225
	Ss		4x19	4x19	4x19
	Sd		4x19	4x19	4x19
Common data NK standard/ spacer coupling	L NK	[mm]	835/931	859/955	859/955
	L NKE	[mm]	835/931	859/955	859/955
	Weight NK	[kg]	144/144	149/147	154/152
	Weight NKE	[kg]	151/150	160/158	162/160
	Weight NK SS	[kg]	150/149	155/152	160/157
	Weight NKE SS	[kg]	157/156	166/163	168/165
NK data	l1	[mm]	1120	1120	1120
	l2	[mm]	190	190	190
	l3	[mm]	740	740	740
	b1	[mm]	380	380	380
	b2	[mm]	490	490	490
	b3	[mm]	440	440	440
	d	[mm]	24	24	24
	a ₂	[mm]	75	75	75
	h	[mm]	80	80	80
	h ₃	[mm]	260	260	260
	h ₄ ¹⁾	[mm]	370/427	380/437	380/437
Base frame no.		5	5	5	
NB data	Design		A	A	A
	L NB	[mm]	246	274	274
	L NB SS	[mm]	273	293	293
	h ₁	[mm]	180	180	180
	G ₁	[mm]	164	164	164
	G ₂	[mm]	172	172	172
	m ₁	[mm]	125	125	125
	m ₂	[mm]	95	95	95
	n ₁	[mm]	320	320	320
	n ₂	[mm]	250	250	250
	b	[mm]	65	65	65
	s ₁	[mm]	M12	M12	M12
	H	[mm]	-	-	-
	LB ¹⁾	[mm]	321/321	335/335	335/335
	AD ¹⁾	[mm]	110/167	120/177	120/177
	AG ¹⁾	[mm]	162/264	162/264	162/264
	LL ¹⁾	[mm]	103/260	103/260	103/260
	P	[mm]	200	250	250
	C	[mm]	-	-	-
	B	[mm]	-	-	-
A	[mm]	-	-	-	
K	[mm]	-	-	-	
Weight NB ¹⁾	[kg]	63/70	70/78	72/80	
Weight NB SS ¹⁾	[kg]	74/80	81/89	83/91	

1) Dimension of pump with premium range motor/built-in frequency converter.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 40-315
4-pole, 50 Hz



TM03 5128 4106

TM03 4182 1806

TM03 6005 4106

Pump type		40-315/283	40-315/305	40-315/334	40-315/344	
Motor type	Premium Motor	MG 100LC-D	MG 112MC-D	Siemens 132S	Siemens 132M	
	E-Motor	MGE 100LC	MGE 112MC	MGE 132SC	MMGE 132M ²⁾	
Common data NB/NK	P ₂	[kW]	3	4	5.5	7.5
	PN	[bar]	16	16	16	16
	DN _s	[mm]	65	65	65	65
	DN _d	[mm]	40	40	40	40
	a	[mm]	125	125	125	125
	h ₂	[mm]	250	250	250	250
	S _s		4x19	4x19	4x19	4x19
S _d		4x19	4x19	4x19	4x19	
Common data NK standard/ spacer coupling	L NK	[mm]	994/1090	1031/1127	1052/1148	1090/1186
	L NKE	[mm]	994/1090	1031/1127	1070/1166	1158/1254
	Weight NK	[kg]	228/226	242/239	246/243	261/258
	Weight NKE	[kg]	236/234	246/244	256/253	314/308
	Weight NK SS	[kg]	224/222	237/235	242/239	257/254
Weight NKE SS	[kg]	232/230	242/240	252/249	309/304	
NK data	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]	75	75	75	75
	h	[mm]	80	80	80	80
	h3	[mm]	280	280	280	280
	h4 ¹⁾	[mm]	400/457	414/468	447/468	447/639
Base frame no.		6	6	6	6	
NB data	Design		A	A	A	A
	L NB	[mm]	348	348	368	368
	L NB SS	[mm]	348	348	368	368
	h1	[mm]	200	200	200	200
	G1	[mm]	200	200	200	200
	G2	[mm]	206	206	206	206
	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]	-	-	-	132
	LB ¹⁾	[mm]	335/335	372/372	373/391	411/449
	AD ¹⁾	[mm]	120/177	134/188	167/188	167/333
	AG ¹⁾	[mm]	162/264	202/290	140/290	140/246
	LL ¹⁾	[mm]	103/260	103/300	140/300	140/410
	P	[mm]	250	250	300	300
	C	[mm]	-	-	-	89
	B	[mm]	-	-	-	178
A	[mm]	-	-	-	216	
K	[mm]	-	-	-	12	
Weight NB ¹⁾	[kg]	124/132	139/143	146/158	161/202	
Weight NB SS ¹⁾	[kg]	124/132	139/143	146/158	161/202	

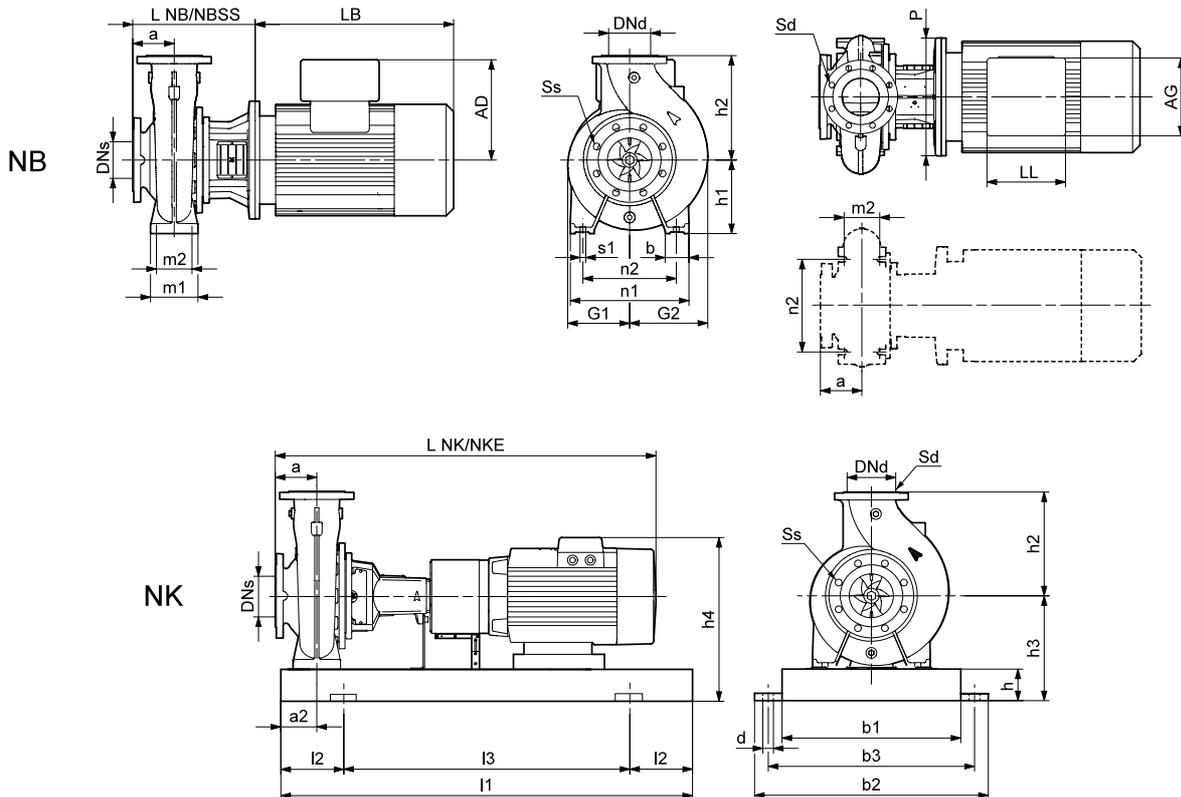
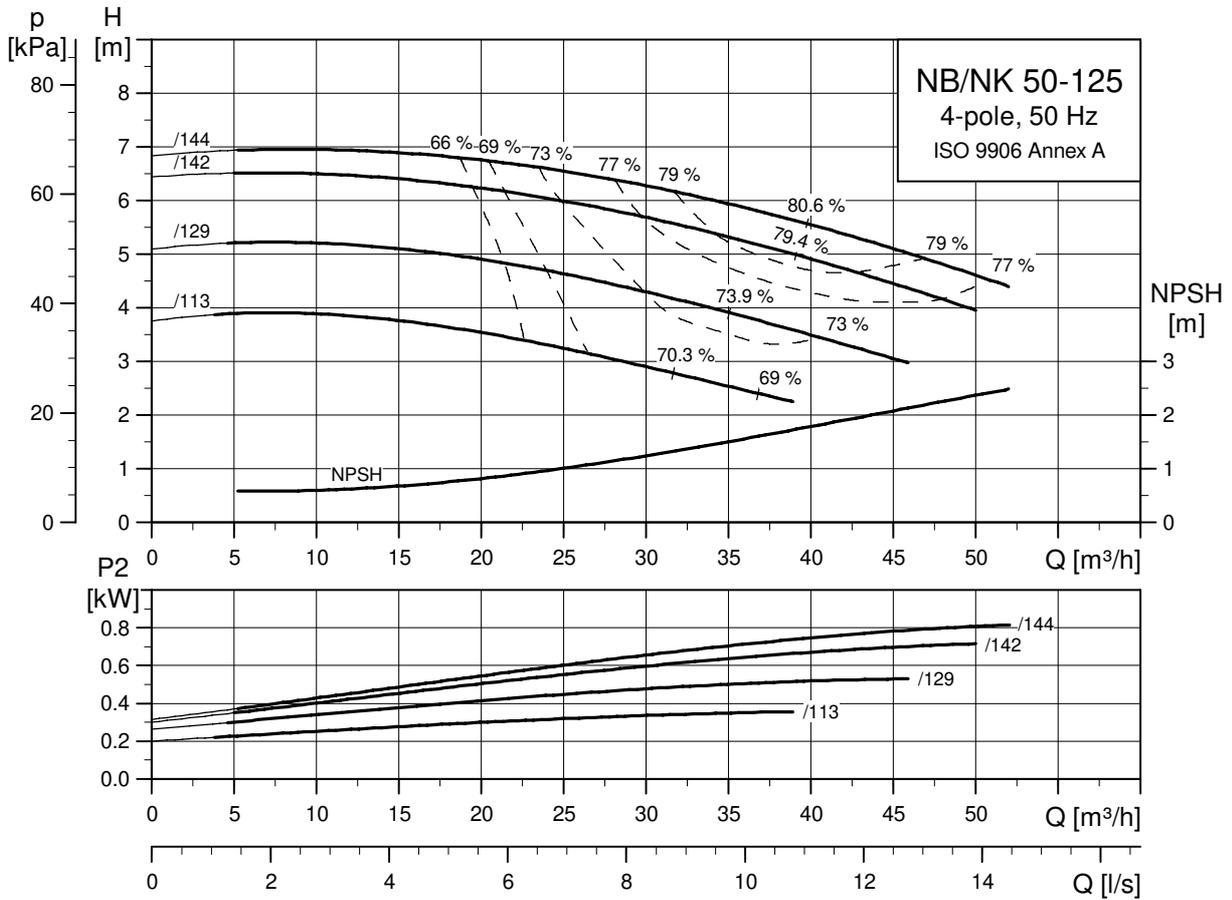
1) Dimension of pump with premium range motor/built-in frequency converter.

2) NBE 40-315/344 is fitted with an MMGE 132M motor with motor feet; NKE 40-315/344 is fitted with an MMGE 160M motor.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 50-125
4-pole, 50 Hz



TM03 5129 4106

TM03 4180 1806

TM03 6005 4106

Technical data

NB, NK 50-125
4-pole

Pump type		50-125/113	50-125/129	50-125/142	50-125/144	
Motor type	Premium Motor	MG 71B-C	MG 80A-C	MG 80B-C	MG 90SB-D	
	E-Motor	-	-	MGE 90SA	MGE 90SB	
Common data NB/NK	P ₂	[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		4x19	4x19	4x19	4x19
Sd		4x19	4x19	4x19	4x19	
Common data NK standard/ spacer coupling	L NK	[mm]	695/781	735/831	735/831	795/891
	L NKE	[mm]	-/-	-/-	825/921	835/931
	Weight NK	[kg]	103/103	106/106	107/107	120/119
	Weight NKE	[kg]	-/-	-/-	120/120	126/126
	Weight NK SS	[kg]	105/104	108/107	109/108	122/121
	Weight NKE SS	[kg]	-/-	-/-	122/121	128/127
NK data	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]	212	212	212	212
	h4 ¹⁾	[mm]	321/-	321/-	321/379	322/379
Base frame no.		4	4	4	4	
NB data	Design		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 ¹⁾	[mm]	191/-	231/-	231/321	281/321
	AD ¹⁾	[mm]	109/-	109/-	109/167	110/167
	AG ¹⁾	[mm]	82/-	82/-	82/264	162/264
	LL ¹⁾	[mm]	82/-	82/-	82/260	103/260
	P	[mm]	160	200	200	200
	C	[mm]	-	-	-	-
	B	[mm]	-	-	-	-
A	[mm]	-	-	-	-	
K	[mm]	-	-	-	-	
Weight NB ¹⁾	[kg]	38/-	41/-	42/53	53/59	
Weight NB SS ¹⁾	[kg]	43/-	46/-	46/58	57/64	

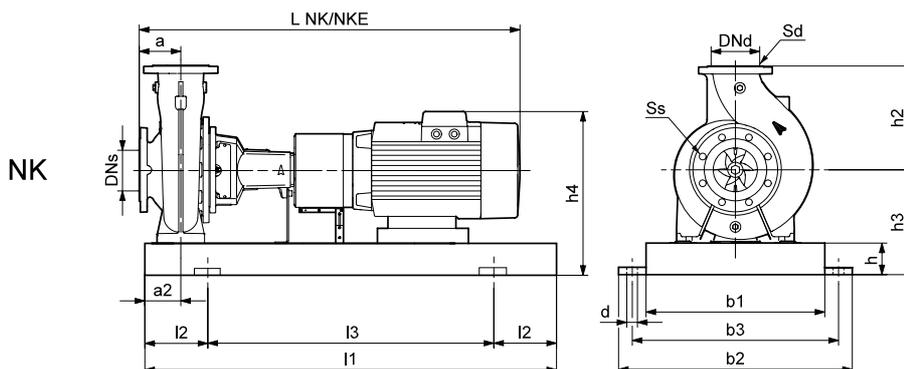
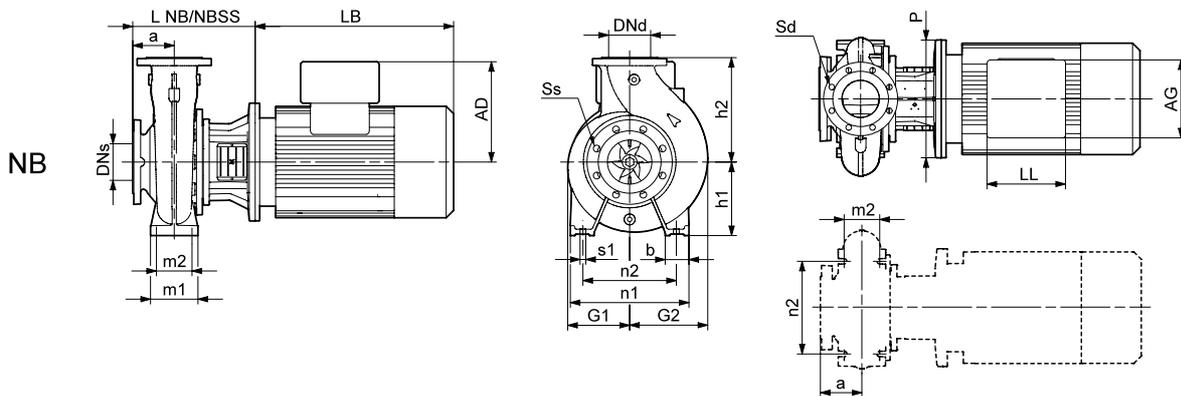
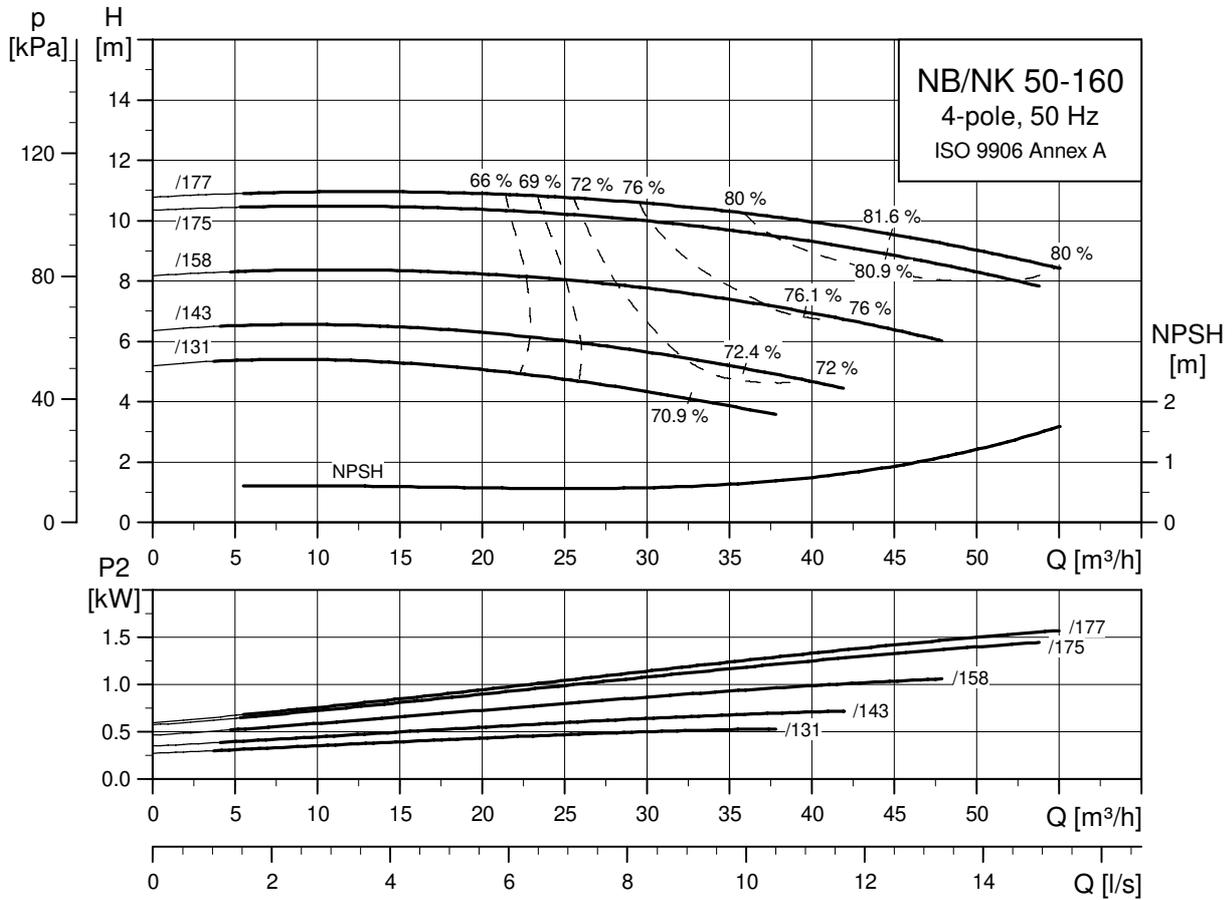
1) Dimension of pump with premium range motor/built-in frequency converter.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 50-160
4-pole, 50 Hz

4-pole



TM03 5130 4106

TM03 4180 1806

TM03 6005 4106

Technical data

NB, NK 50-160
4-pole

Pump type		50-160/131	50-160/143	50-160/158	50-160/175	50-160/177	
Motor type	Premium Motor	MG 80A-C	MG 80B-C	MG 90SB-D	MG 90LC-D	MG 100LB-D	
	E-Motor	-	MGE 90SA	MGE 90SB	MGE 90LC	MGE 100LB	
Common data NB/NK	P ₂	[kW]	0.55	0.75	1.1	1.5	2.2
	PN	[bar]	16	16	16	16	16
	DNs	[mm]	65	65	65	65	65
	DNd	[mm]	50	50	50	50	50
	a	[mm]	100	100	100	100	100
	h ₂	[mm]	180	180	180	180	180
	Ss		4x19	4x19	4x19	4x19	4x19
Common data NK standard/ spacer coupling	Sd		4x19	4x19	4x19	4x19	
	L NK	[mm]	735/831	735/831	795/891	835/931	859/955
	L NKE	[mm]	-/-	825/921	835/931	835/931	859/955
	Weight NK	[kg]	106/106	107/107	117/116	118/117	123/121
	Weight NKE	[kg]	-/-	117/117	123/123	124/124	134/132
	Weight NK SS	[kg]	110/109	111/110	121/120	122/121	127/125
NK data	Weight NKE SS	[kg]	-/-	121/120	127/126	128/127	138/136
	l1	[mm]	1000	1000	1000	1000	1000
	l2	[mm]	170	170	170	170	170
	l3	[mm]	660	660	660	660	660
	b1	[mm]	340	340	340	340	340
	b2	[mm]	450	450	450	450	450
	b3	[mm]	400	400	400	400	400
	d	[mm]	24	24	24	24	24
	a2	[mm]	60	60	60	60	60
	h	[mm]	80	80	80	80	80
	h3	[mm]	240	240	240	240	240
	h ₄ ¹⁾	[mm]	349/-	349/407	350/407	350/407	360/417
	Base frame no.		4	4	4	4	4
NB data	Design		A	A	A	A	A
	L NB	[mm]	246	246	246	246	274
	L NB SS	[mm]	173	173	173	173	193
	h1	[mm]	160	160	160	160	160
	G1	[mm]	125	125	125	125	125
	G2	[mm]	150	150	150	150	150
	m1	[mm]	100	100	100	100	100
	m2	[mm]	70	70	70	70	70
	n1	[mm]	265	265	265	265	265
	n2	[mm]	212	212	212	212	212
	b	[mm]	50	50	50	50	50
	s1	[mm]	M12	M12	M12	M12	M12
	H	[mm]	-	-	-	-	-
	LB ¹⁾	[mm]	231/-	231/321	281/321	321/321	335/335
	AD ¹⁾	[mm]	109/-	109/167	110/167	110/167	120/177
	AG ¹⁾	[mm]	82/-	82/264	162/264	162/264	162/264
	LL ¹⁾	[mm]	82/-	82/260	103/260	103/260	103/260
	P	[mm]	200	200	200	200	250
	C	[mm]	-	-	-	-	-
	B	[mm]	-	-	-	-	-
A	[mm]	-	-	-	-	-	
K	[mm]	-	-	-	-	-	
Weight NB ¹⁾	[kg]	41/-	42/53	53/59	54/60	61/69	
Weight NB SS ¹⁾	[kg]	47/-	48/60	59/66	60/67	68/76	

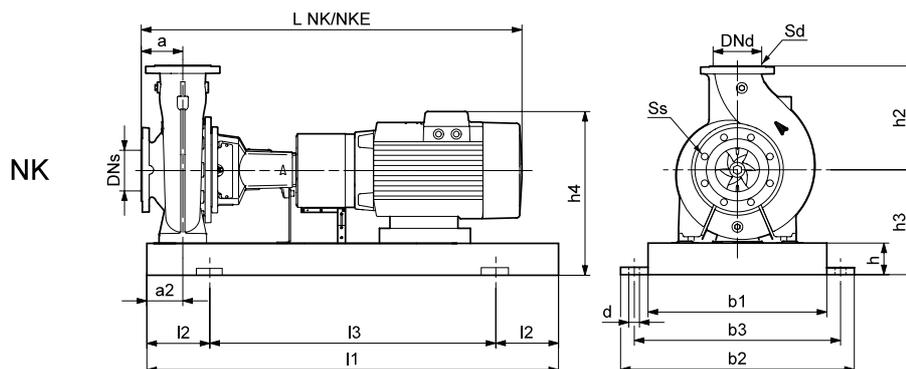
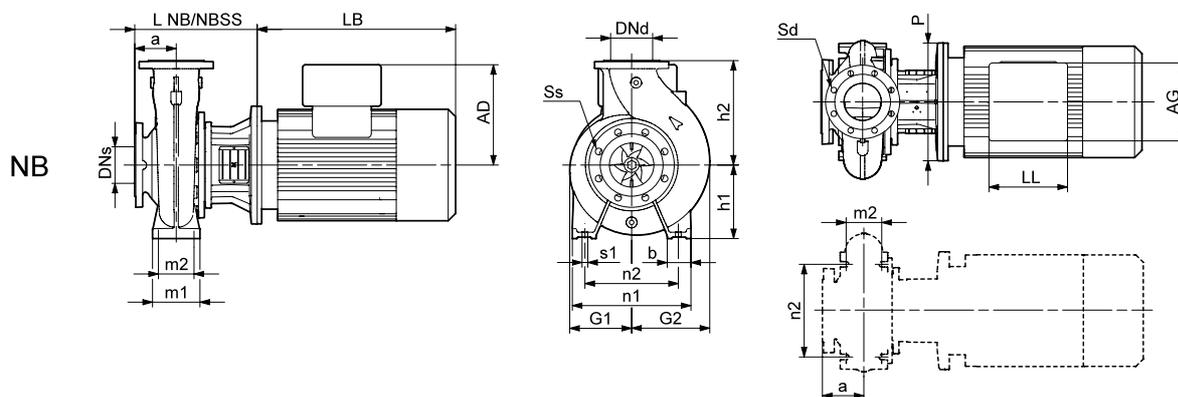
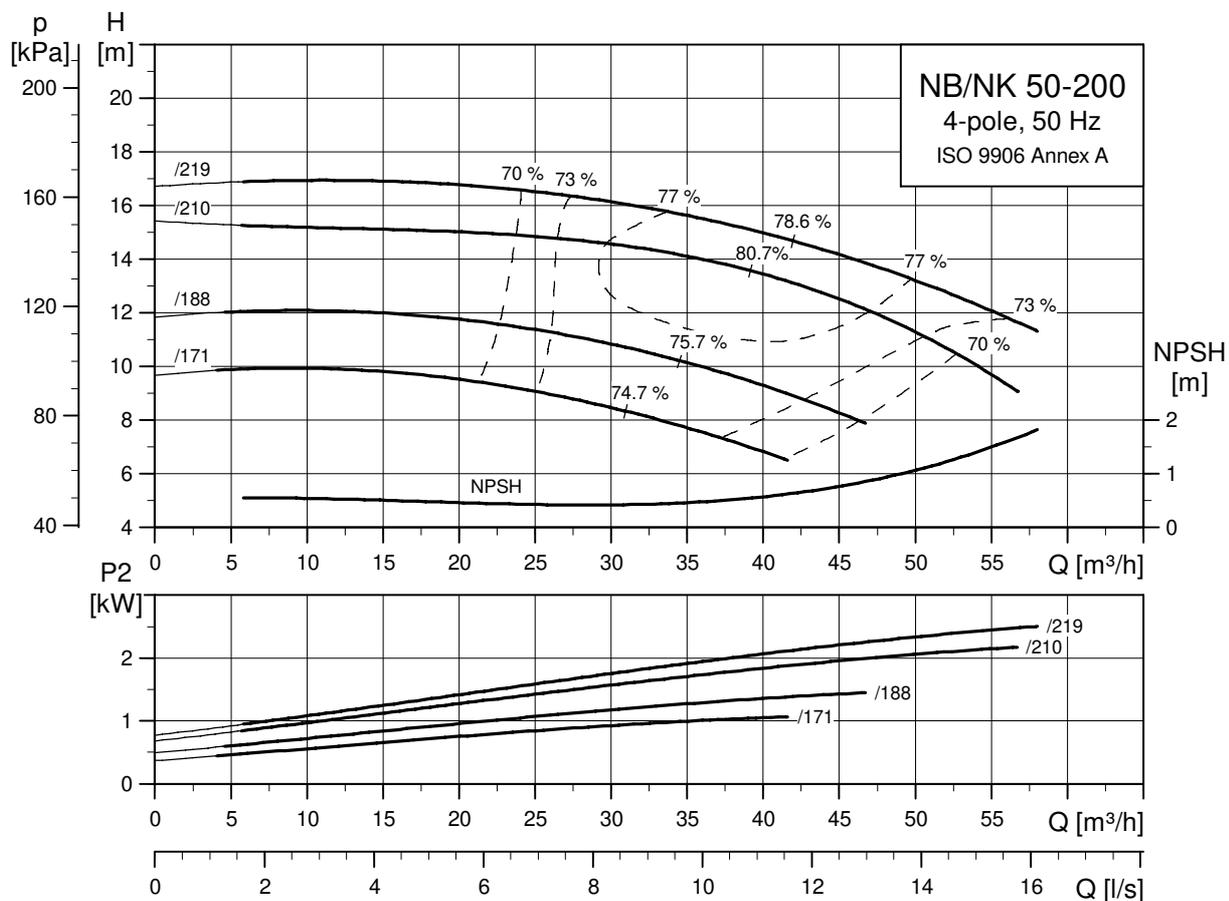
1) Dimension of pump with premium range motor/built-in frequency converter.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 50-200
4-pole, 50 Hz

4-pole



TM03 5131 4106

TM03 4180 1806

TM03 6005 4106

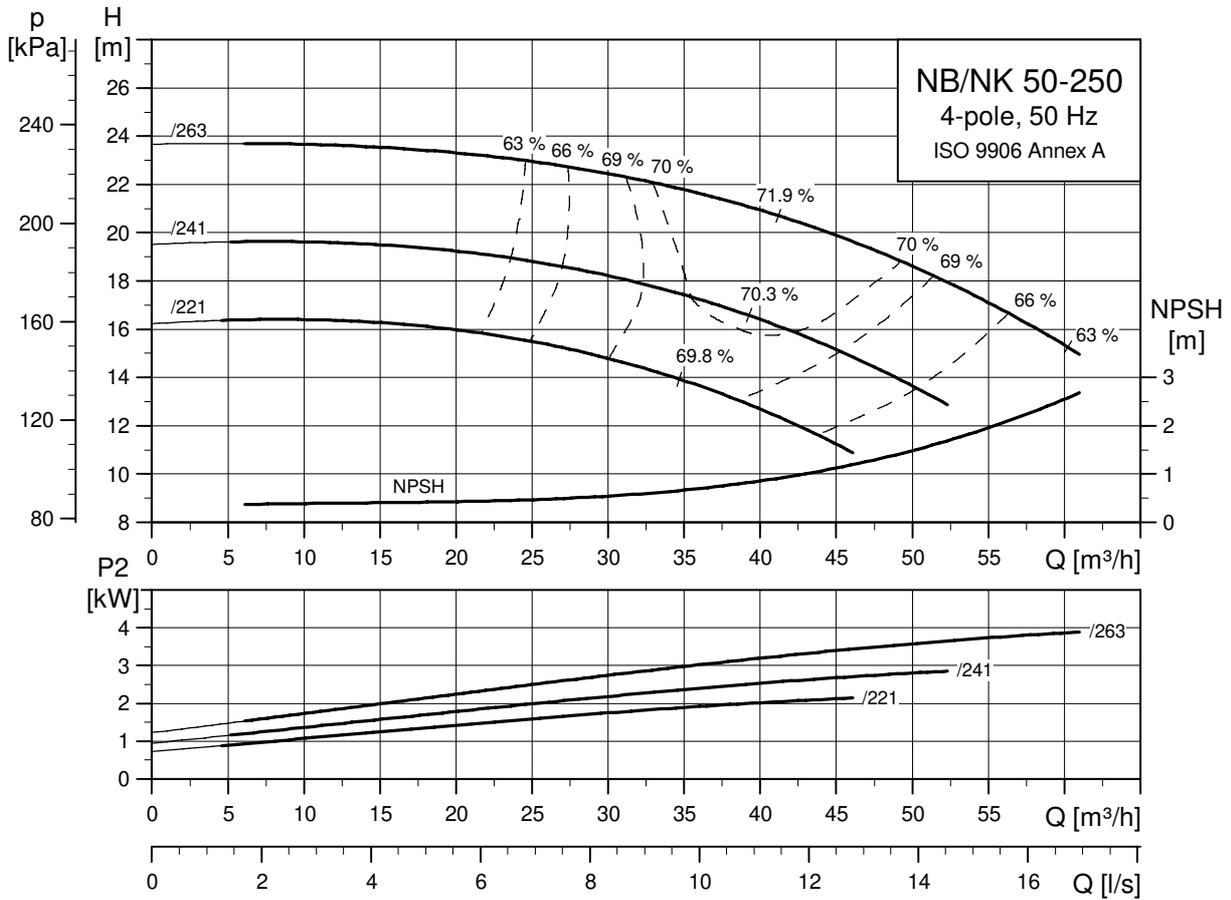
Pump type		50-200/171	50-200/188	50-200/210	50-200/219	
Motor type	Premium Motor	MG 90SB-D	MG 90LC-D	MG 100LB-D	MG 100LC-D	
	E-Motor	MGE 90SB	MGE 90LC	MGE 100LB	MGE 100LC	
Common data NB/NK	P ₂	[kW]	1.1	1.5	2.2	3
	PN	[bar]	16	16	16	16
	DNs	[mm]	65	65	65	65
	DNd	[mm]	50	50	50	50
	a	[mm]	100	100	100	100
	h ₂	[mm]	200	200	200	200
	Ss		4x19	4x19	4x19	4x19
Common data NK standard/ spacer coupling	Sd		4x19	4x19	4x19	4x19
	L NK	[mm]	795/891	835/931	859/955	859/955
	L NKE	[mm]	835/931	835/931	859/955	859/955
	Weight NK	[kg]	120/119	121/120	126/124	131/129
	Weight NKE	[kg]	127/126	128/127	137/135	139/137
NK data	Weight NK SS	[kg]	127/126	128/127	133/131	138/136
	Weight NKE SS	[kg]	134/133	135/134	144/142	146/144
	l ₁	[mm]	1000	1000	1000	1000
	l ₂	[mm]	170	170	170	170
	l ₃	[mm]	660	660	660	660
	b ₁	[mm]	340	340	340	340
	b ₂	[mm]	450	450	450	450
	b ₃	[mm]	400	400	400	400
	d	[mm]	24	24	24	24
	a ₂	[mm]	60	60	60	60
	h	[mm]	80	80	80	80
	h ₃	[mm]	240	240	240	240
	h ₄ ¹⁾	[mm]	350/407	350/407	360/417	360/417
Base frame no.		4	4	4	4	
NB data	Design		A	A	A	A
	L NB	[mm]	246	246	274	274
	L NB SS	[mm]	273	273	293	293
	h ₁	[mm]	160	160	160	160
	G ₁	[mm]	141	141	141	141
	G ₂	[mm]	162	162	162	162
	m ₁	[mm]	100	100	100	100
	m ₂	[mm]	70	70	70	70
	n ₁	[mm]	265	265	265	265
	n ₂	[mm]	212	212	212	212
	b	[mm]	50	50	50	50
	s ₁	[mm]	M12	M12	M12	M12
	H	[mm]	-	-	-	-
	LB ¹⁾	[mm]	281/321	321/321	335/335	335/335
	AD ¹⁾	[mm]	110/167	110/167	120/177	120/177
	AG ¹⁾	[mm]	162/264	162/264	162/264	162/264
	LL ¹⁾	[mm]	103/260	103/260	103/260	103/260
	P	[mm]	200	200	250	250
	C	[mm]	-	-	-	-
	B	[mm]	-	-	-	-
A	[mm]	-	-	-	-	
K	[mm]	-	-	-	-	
Weight NB ¹⁾	[kg]	55/61	56/62	63/71	65/73	
Weight NB SS ¹⁾	[kg]	66/72	67/73	74/82	76/84	

1) Dimension of pump with premium range motor/built-in frequency converter.

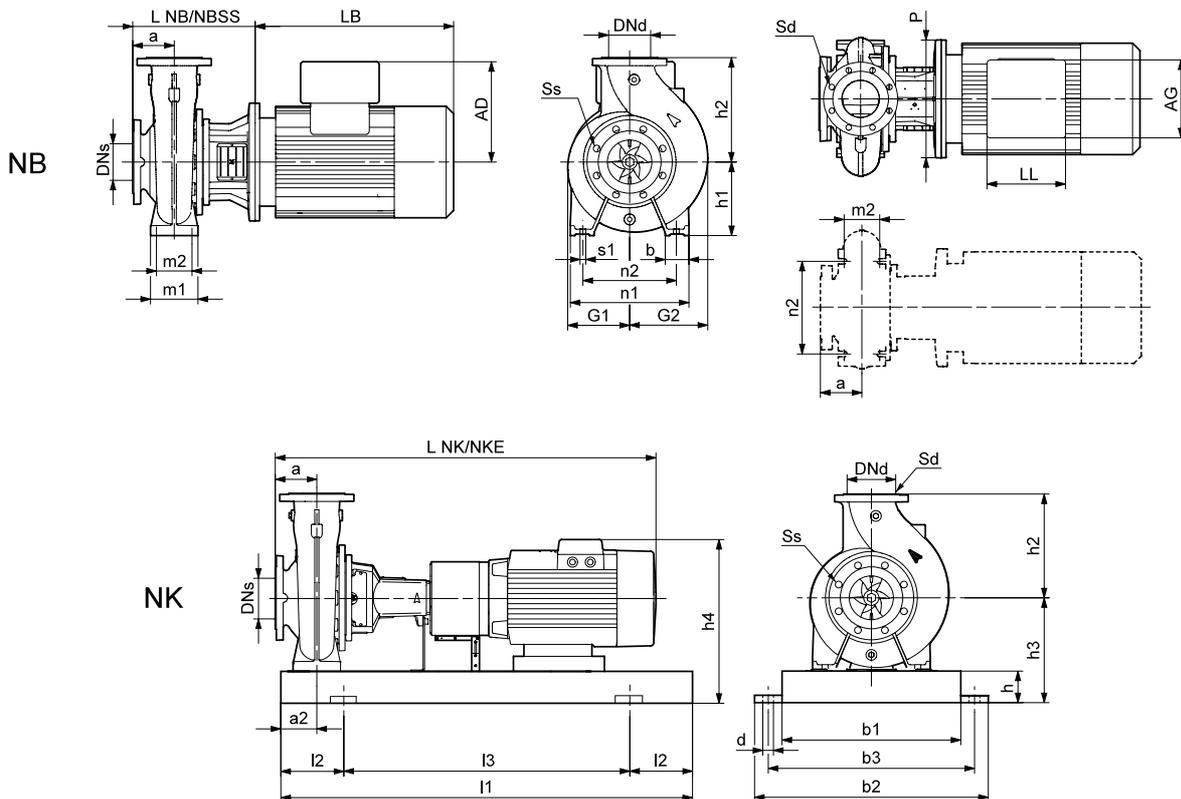
Note: For information about base frames, see page 270.

Performance curves

NB, NK 50-250
4-pole, 50 Hz
ISO 9906 Annex A



TM03 5132 4106



TM03 4180 1806

TM03 6005 4106

Pump type		50-250/221	50-250/241	50-250/263	
Motor type	Premium Motor	MG 100LB-D	MG 100LC-D	MG 112MC-D	
	E-Motor	MGE 100LB	MGE 100LC	MGE 112MC	
Common data NB/NK	P ₂	[kW]	2.2	3	4
	PN	[bar]	16	16	16
	DNs	[mm]	65	65	65
	DNd	[mm]	50	50	50
	a	[mm]	100	100	100
	h ₂	[mm]	225	225	225
	Ss		4x19	4x19	4x19
Common data NK standard/ spacer coupling	Sd		4x19	4x19	
	L NK	[mm]	859/955	859/955	896/992
	L NKE	[mm]	859/955	859/955	896/992
	Weight NK	[kg]	150/148	155/153	172/170
	Weight NKE	[kg]	161/159	163/161	176/174
	Weight NK SS	[kg]	156/154	161/159	178/175
NK data	Weight NKE SS	[kg]	167/165	169/167	182/180
	l ₁	[mm]	1120	1120	1120
	l ₂	[mm]	190	190	190
	l ₃	[mm]	740	740	740
	b ₁	[mm]	380	380	380
	b ₂	[mm]	490	490	490
	b ₃	[mm]	440	440	440
	d	[mm]	24	24	24
	a ₂	[mm]	75	75	75
	h	[mm]	80	80	80
	h ₃	[mm]	260	260	260
	h ₄ ¹⁾	[mm]	380/437	380/437	394/448
	Base frame no.		5	5	5
NB data	Design		A	A	A
	L NB	[mm]	274	274	274
	L NB SS	[mm]	293	293	293
	h ₁	[mm]	180	180	180
	G ₁	[mm]	164	164	164
	G ₂	[mm]	180	180	180
	m ₁	[mm]	125	125	125
	m ₂	[mm]	95	95	95
	n ₁	[mm]	320	320	320
	n ₂	[mm]	250	250	250
	b	[mm]	65	65	65
	s ₁	[mm]	M12	M12	M12
	H	[mm]	-	-	-
	LB ¹⁾	[mm]	335/335	335/335	372/372
	AD ¹⁾	[mm]	120/177	120/177	134/188
	AG ¹⁾	[mm]	162/264	162/264	202/290
	LL ¹⁾	[mm]	103/260	103/260	103/300
	P	[mm]	250	250	250
	C	[mm]	-	-	-
	B	[mm]	-	-	-
A	[mm]	-	-	-	
K	[mm]	-	-	-	
Weight NB ¹⁾	[kg]	72/79	74/81	89/93	
Weight NB SS ¹⁾	[kg]	83/91	85/93	100/104	

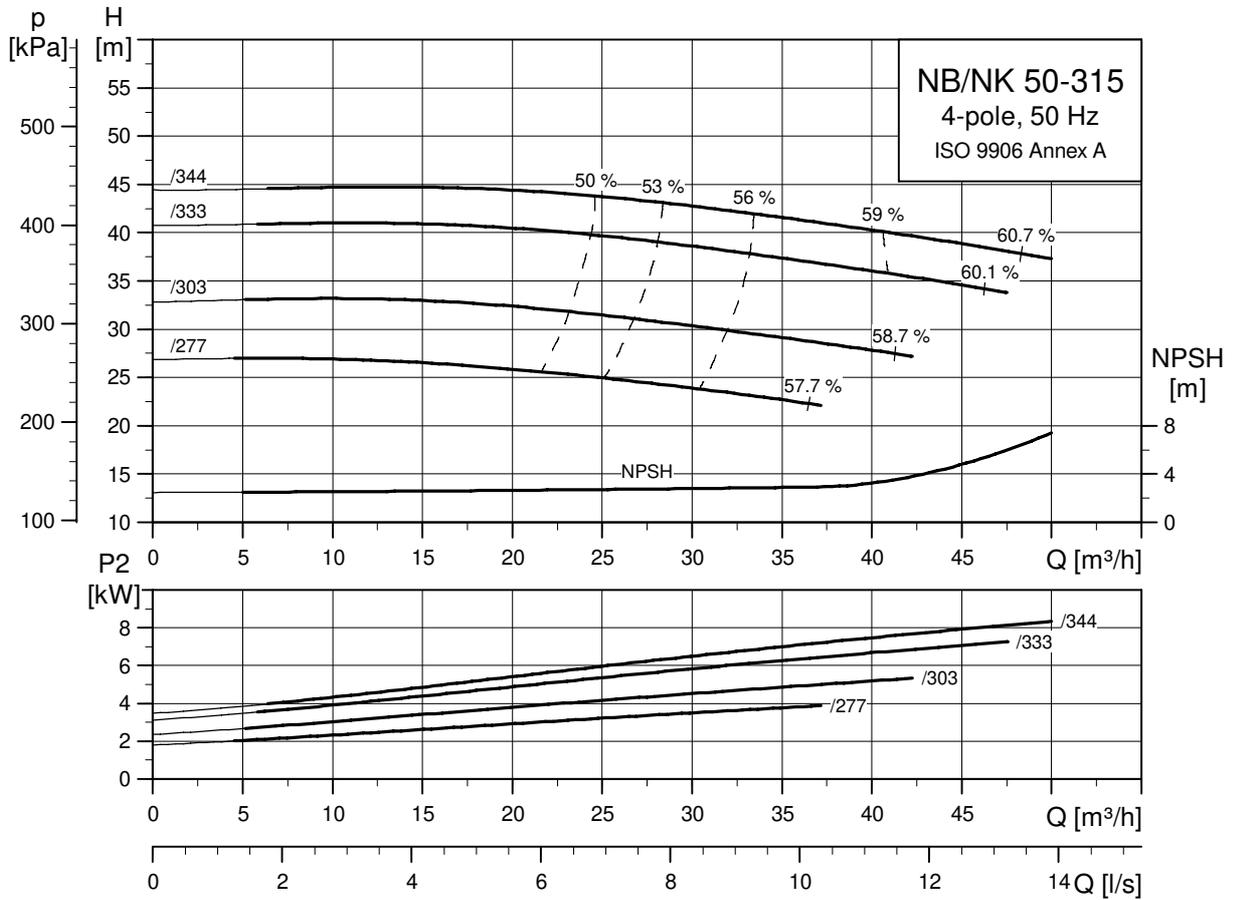
1) Dimension of pump with premium range motor/built-in frequency converter.

Note: For information about base frames, see page 270.

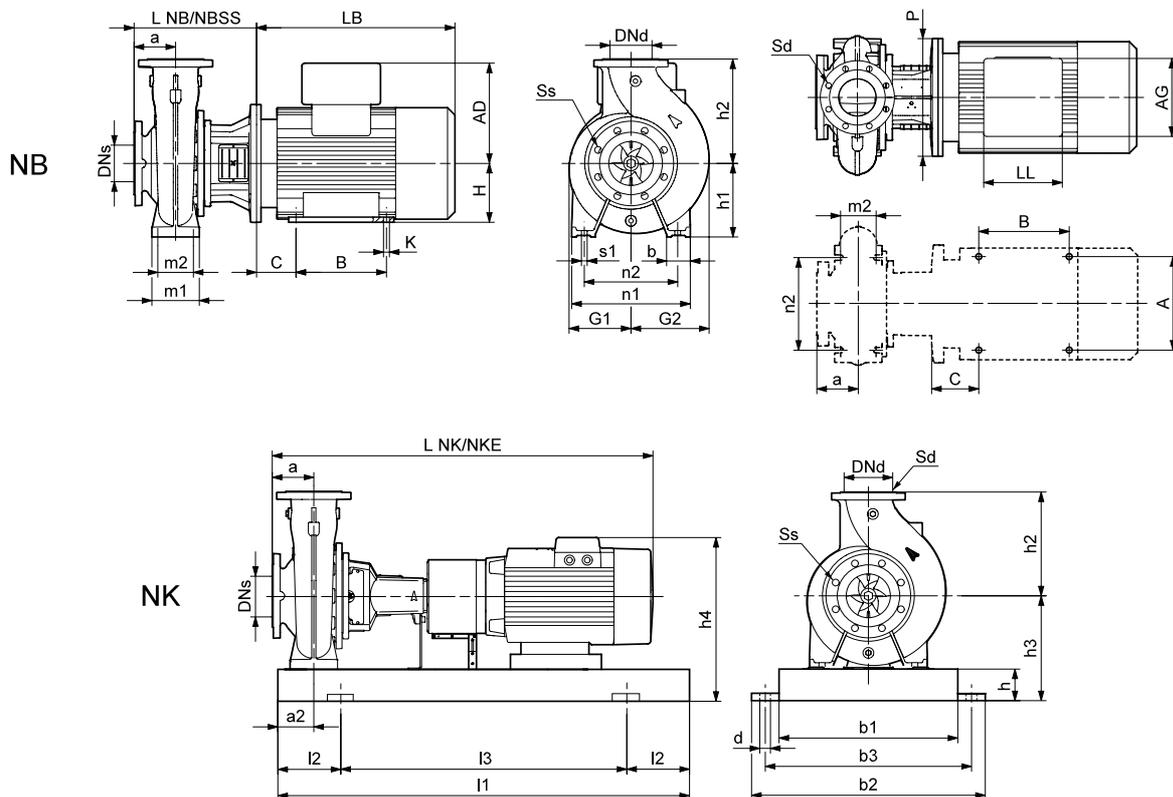
Performance curves

NB, NK 50-315
4-pole, 50 Hz

4-pole



TM03 5133 4106



TM03 4182 1806

TM03 6005 4106

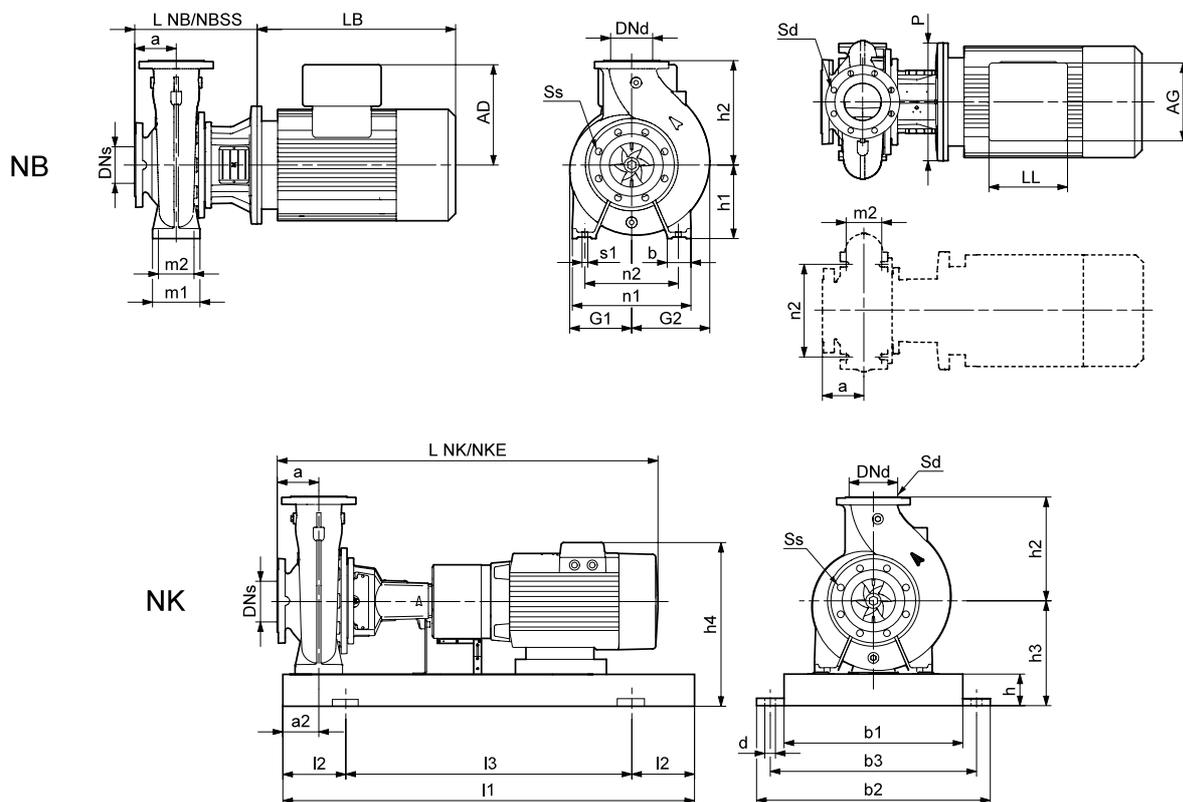
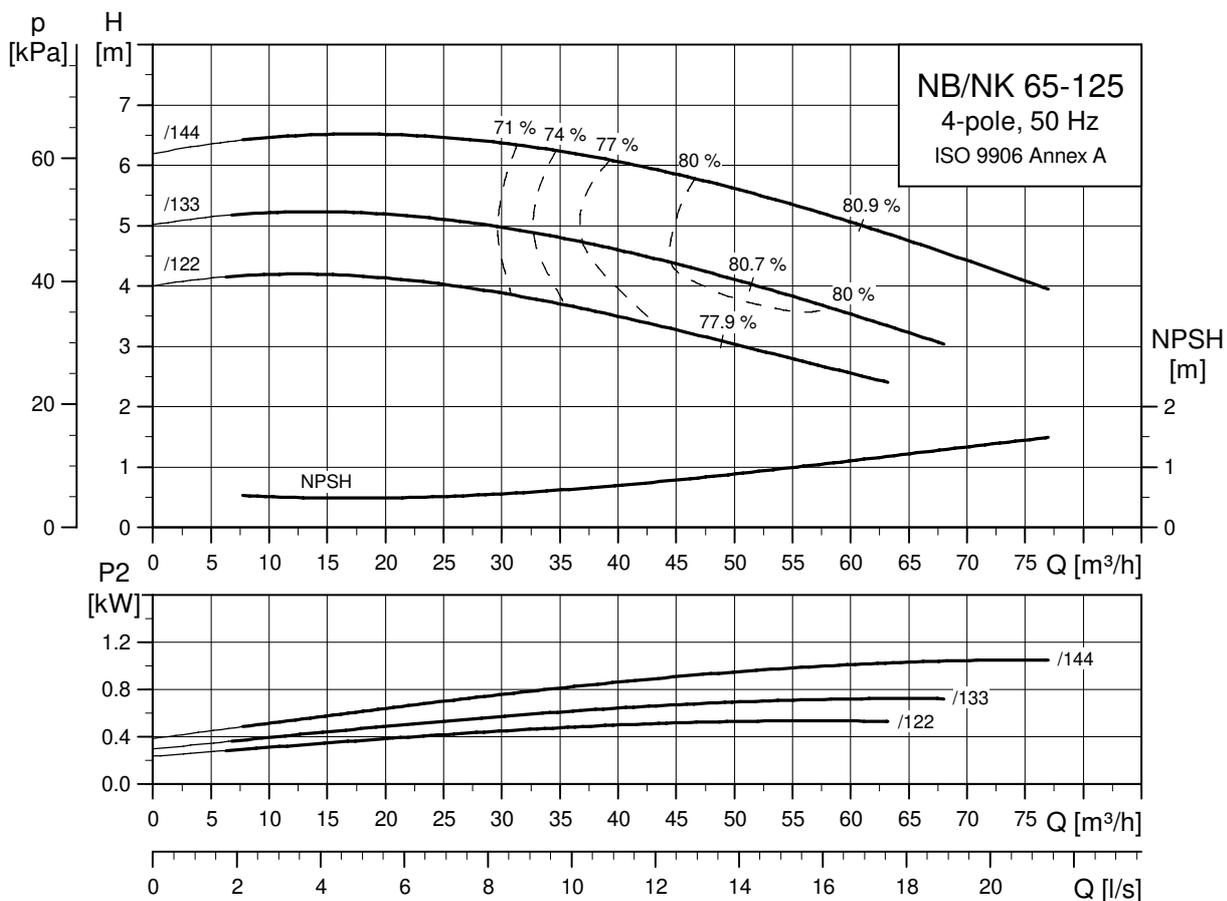
Pump type		50-315/277	50-315/303	50-315/333	50-315/344	
Motor type	Premium Motor	MG 112MC-D	Siemens 132S	Siemens 132M	Siemens 160M	
	E-Motor	MGE 112MC	MGE 132SC	MMGE 132M ³⁾	MMGE 160M	
Common data NB/NK	P ₂	[kW]	4	5.5	7.5	11
	PN	[bar]	16	16	16	16
	DN _s	[mm]	65	65	65	65
	DN _d	[mm]	50	50	50	50
	a	[mm]	125	125	125	125
	h ₂	[mm]	280	280	280	280
	S _s		4x19	4x19	4x19	4x19
S _d		4x19	4x19	4x19	4x19	
Common data NK standard/ spacer coupling	L NK	[mm]	1031/1127	1052/1148	1090/1186	1187/1283
	L NKE	[mm]	1031/1127	1070/1166	1158/1254	1158/1254
	Weight NK	[kg]	247/245	251/248	266/263	291/285
	Weight NKE	[kg]	252/250	261/258	311/305	342/336
	Weight NK SS	[kg]	241/239	246/243	261/258	285/279
Weight NKE SS	[kg]	246/244	256/253	305/299	336/330	
NK data	l ₁	[mm]	1250	1250	1250	1250
	l ₂	[mm]	205	205	205	205
	l ₃	[mm]	840	840	840	840
	b ₁	[mm]	430	430	430	430
	b ₂	[mm]	540	540	540	540
	b ₃	[mm]	490	490	490	490
	d	[mm]	24	24	24	24
	a ₂	[mm]	75	75	75	75
	h	[mm]	80	80	80	80
	h ₃	[mm]	305	305	305	305
	h ₄ ¹⁾	[mm]	439/493	472/493	472/664	502/664
	Base frame no.		6	6	6	6
NB data	Design		A	A	A	C ²⁾
	L NB	[mm]	348	368	368	398
	L NB SS	[mm]	348	368	368	398
	h ₁	[mm]	225	225	225	225
	G ₁	[mm]	203	203	203	203
	G ₂	[mm]	214	214	214	214
	m ₁	[mm]	125	125	125	125
	m ₂	[mm]	95	95	95	95
	n ₁	[mm]	345	345	345	345
	n ₂	[mm]	280	280	280	280
	b	[mm]	65	65	65	65
	s ₁	[mm]	M12	M12	M12	M12
	H	[mm]	-	-	132	160
	LB ¹⁾	[mm]	372/372	373/391	411/449	478/449
	AD ¹⁾	[mm]	134/188	167/188	167/333	197/359
	AG ¹⁾	[mm]	202/290	140/290	140/246	165/296
	LL ¹⁾	[mm]	103/300	140/300	140/410	165/410
	P	[mm]	250	300	300	350
	C	[mm]	-	-	89	108
	B	[mm]	-	-	178	210
A	[mm]	-	-	216	254	
K	[mm]	-	-	12	15	
Weight NB ¹⁾	[kg]	143/148	150/162	165/206	192/243	
Weight NB SS ¹⁾	[kg]	142/146	149/161	164/205	191/242	

1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

3) NBE 50-315/333 is fitted with an MMGE 132M motor with motor feet; NKE 50-315/333 is fitted with an MMGE 160M motor.

Note: For information about base frames, see page 270.



TM03 5134 4106

TM03 4180 1806

TM03 6005 4106

Pump type		65-125/122	65-125/133	65-125/144	
Motor type	Premium Motor	MG 80A-C	MG 80B-C	MG 90SB-D	
	E-Motor	-	MGE 90SA	MGE 90SB	
Common data NB/NK	P ₂	[kW]	0.55	0.75	1.1
	PN	[bar]	16	16	16
	DNs	[mm]	80	80	80
	DNd	[mm]	65	65	65
	a	[mm]	100	100	100
	h ₂	[mm]	180	180	180
	Ss		8x19	8x19	8x19
Common data NK standard/ spacer coupling	Sd		4x19	4x19	
	L NK	[mm]	735/831	735/831	795/891
	L NKE	[mm]	-/-	825/921	835/931
	Weight NK	[kg]	110/110	112/112	121/121
	Weight NKE	[kg]	-/-	122/121	128/127
	Weight NK SS	[kg]	112/111	113/112	123/122
NK data	Weight NKE SS	[kg]	-/-	123/123	129/129
	l ₁	[mm]	1000	1000	1000
	l ₂	[mm]	170	170	170
	l ₃	[mm]	660	660	660
	b ₁	[mm]	340	340	340
	b ₂	[mm]	450	450	450
	b ₃	[mm]	400	400	400
	d	[mm]	24	24	24
	a ₂	[mm]	60	60	60
	h	[mm]	80	80	80
	h ₃	[mm]	240	240	240
	h ₄ ¹⁾	[mm]	349/-	349/407	350/407
Base frame no.		4	4	4	
NB data	Design		A	A	A
	L NB	[mm]	246	246	246
	L NB SS	[mm]	273	273	273
	h ₁	[mm]	160	160	160
	G ₁	[mm]	117	117	117
	G ₂	[mm]	146	146	146
	m ₁	[mm]	125	125	125
	m ₂	[mm]	95	95	95
	n ₁	[mm]	280	280	280
	n ₂	[mm]	212	212	212
	b	[mm]	65	65	65
	s ₁	[mm]	M12	M12	M12
	H	[mm]	-	-	-
	LB ¹⁾	[mm]	231/-	231/321	281/321
	AD ¹⁾	[mm]	109/-	109/167	110/167
	AG ¹⁾	[mm]	82/-	82/264	162/264
	LL ¹⁾	[mm]	82/-	82/260	103/260
	P	[mm]	200	200	200
	C	[mm]	-	-	-
	B	[mm]	-	-	-
A	[mm]	-	-	-	
K	[mm]	-	-	-	
Weight NB ¹⁾	[kg]	46/-	46/58	57/64	
Weight NB SS ¹⁾	[kg]	50/-	50/62	61/68	

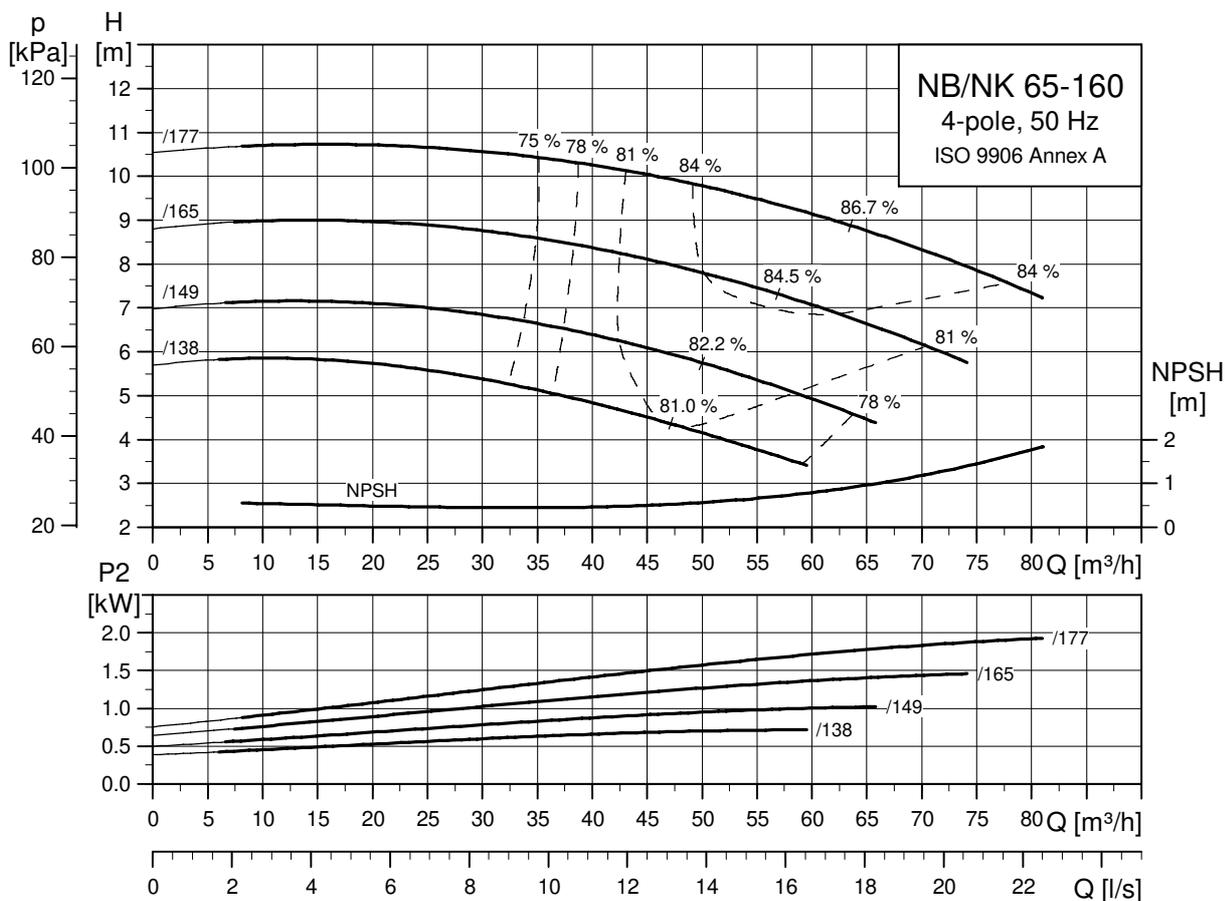
1) Dimension of pump with premium range motor/built-in frequency converter.

Note: For information about base frames, see page 270.

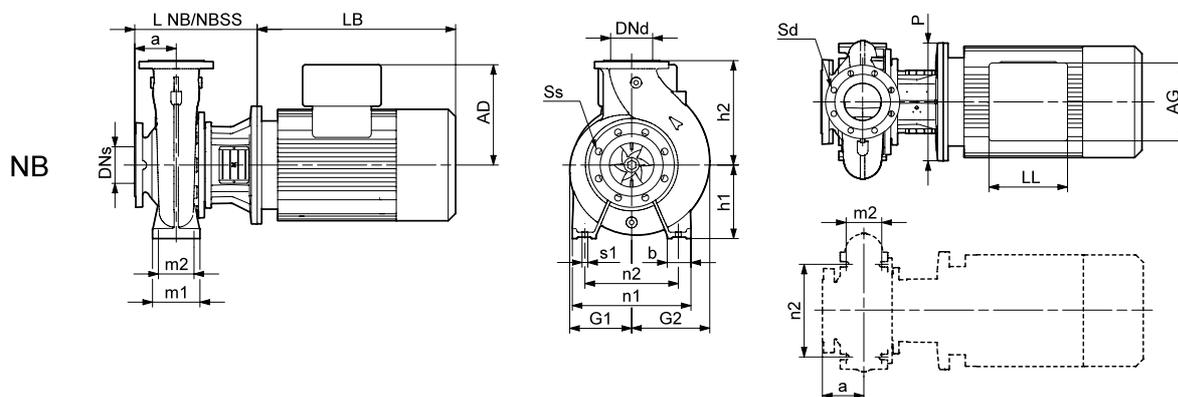
Performance curves

NB, NK 65-160
4-pole, 50 Hz

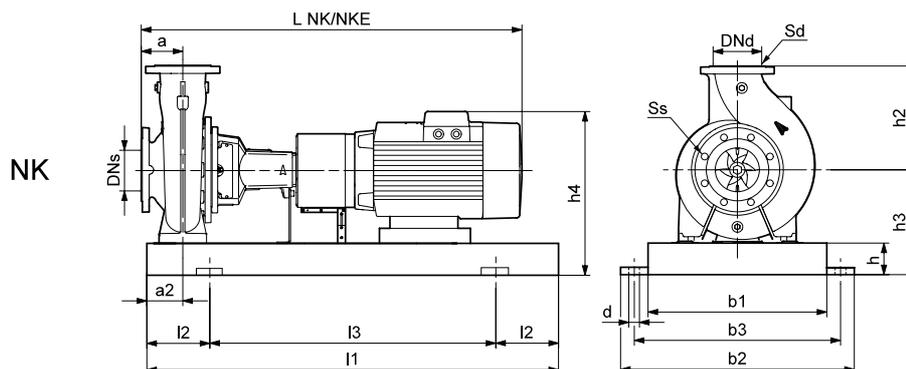
4-pole



TM03 5135 4106



TM03 4180 1806



TM03 6005 4106

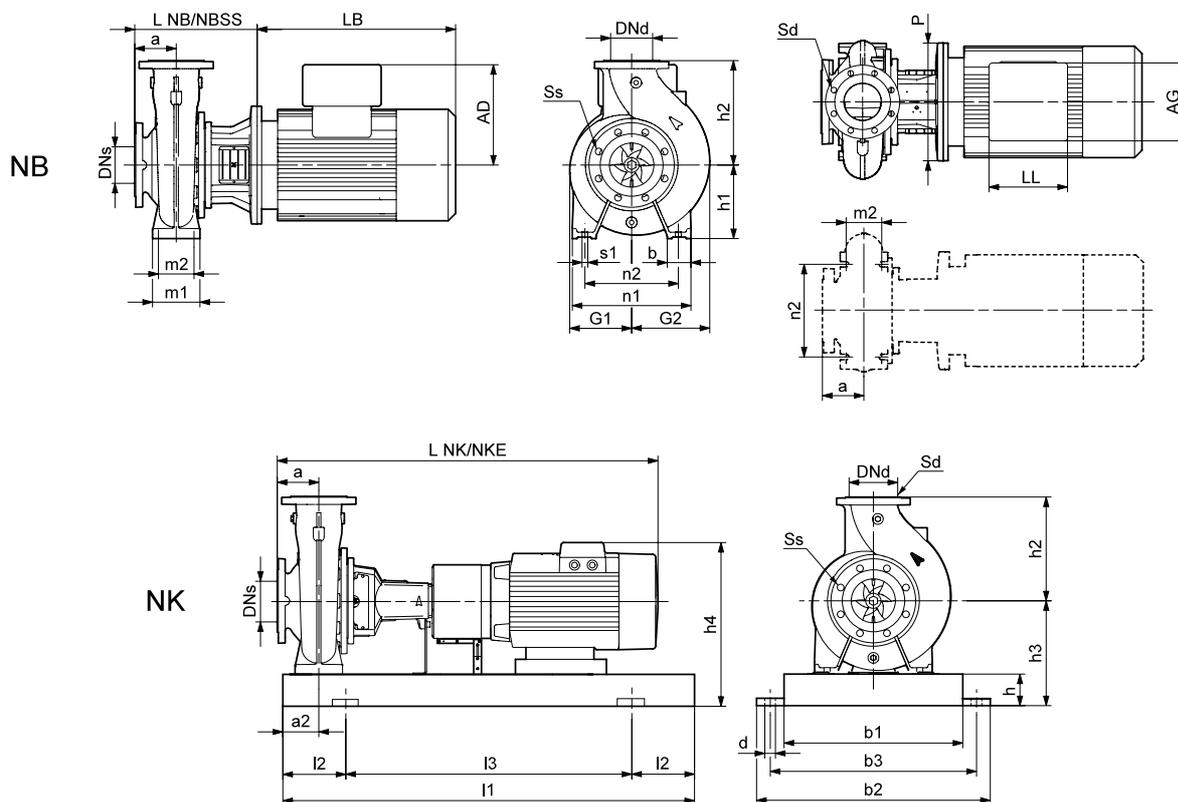
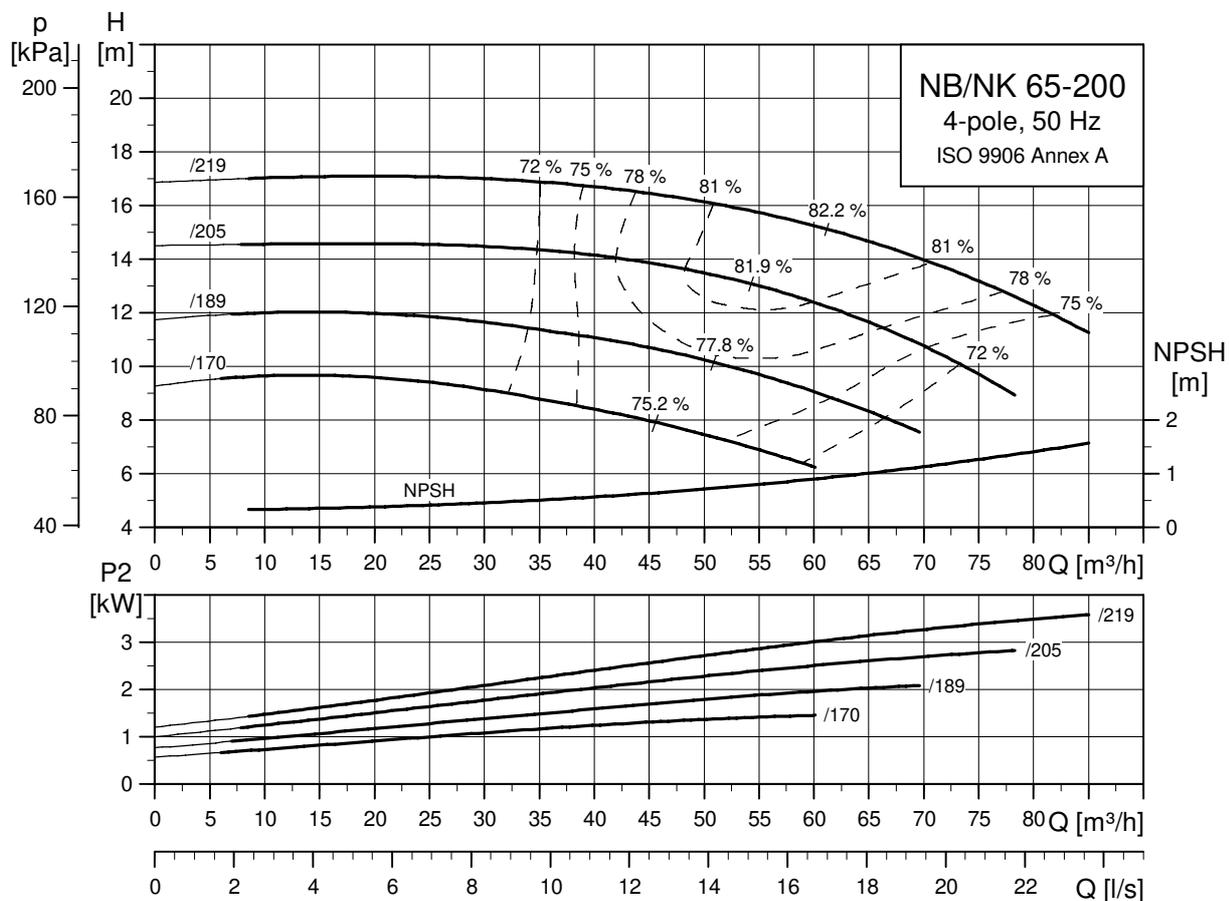
Pump type		65-160/138	65-160/149	65-160/165	65-160/177	
Motor type	Premium Motor	MG 80B-C	MG 90SB-D	MG 90LC-D	MG 100LB-D	
	E-Motor	MGE 90SA	MGE 90SB	MGE 90LC	MGE 100LB	
Common data NB/NK	P ₂	[kW]	0.75	1.1	1.5	2.2
	PN	[bar]	16	16	16	16
	DNs	[mm]	80	80	80	80
	DNd	[mm]	65	65	65	65
	a	[mm]	100	100	100	100
	h2	[mm]	200	200	200	200
	Ss		8x19	8x19	8x19	8x19
Common data NK standard/ spacer coupling	Sd		4x19	4x19	4x19	4x19
	L NK	[mm]	735/831	795/891	835/931	859/955
	L NKE	[mm]	825/921	835/931	835/931	859/955
	Weight NK	[kg]	110/110	120/119	121/120	126/124
	Weight NKE	[kg]	120/119	126/125	127/126	137/135
	Weight NK SS	[kg]	113/112	123/122	124/123	129/127
NK data	Weight NKE SS	[kg]	123/123	129/129	130/130	140/138
	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 ¹⁾	[mm]	349/407	350/407	350/407	360/417
NB data	Base frame no.		4	4	4	4
	Design		A	A	A	A
	L NB	[mm]	246	246	246	274
	L NB SS	[mm]	273	273	273	293
	h1	[mm]	160	160	160	160
	G1	[mm]	127	127	127	127
	G2	[mm]	161	161	161	161
	m1	[mm]	125	125	125	125
	m2	[mm]	95	95	95	95
	n1	[mm]	280	280	280	280
	n2	[mm]	212	212	212	212
	b	[mm]	65	65	65	65
	s1	[mm]	M12	M12	M12	M12
	H	[mm]	-	-	-	-
	LB ¹⁾	[mm]	231/321	281/321	321/321	335/335
	AD ¹⁾	[mm]	109/167	110/167	110/167	120/177
	AG ¹⁾	[mm]	82/264	162/264	162/264	162/264
	LL ¹⁾	[mm]	82/260	103/260	103/260	103/260
	P	[mm]	200	200	200	250
	C	[mm]	-	-	-	-
B	[mm]	-	-	-	-	
A	[mm]	-	-	-	-	
K	[mm]	-	-	-	-	
Weight NB ¹⁾	[kg]	45/56	56/62	57/63	64/72	
Weight NB SS ¹⁾	[kg]	51/62	61/68	62/69	70/78	

1) Dimension of pump with premium range motor/built-in frequency converter.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 65-200
4-pole, 50 Hz
ISO 9906 Annex A



TM03 5136 4106

TM03 4180 1806

TM03 6005 4106

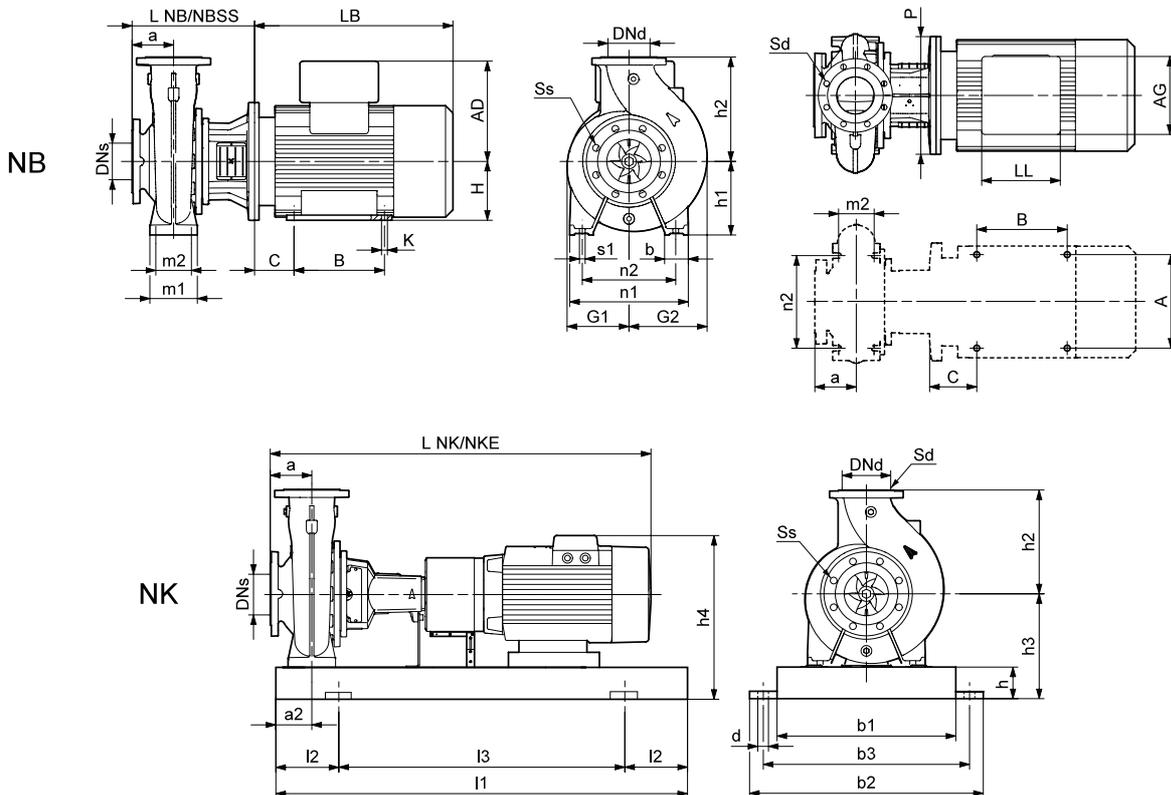
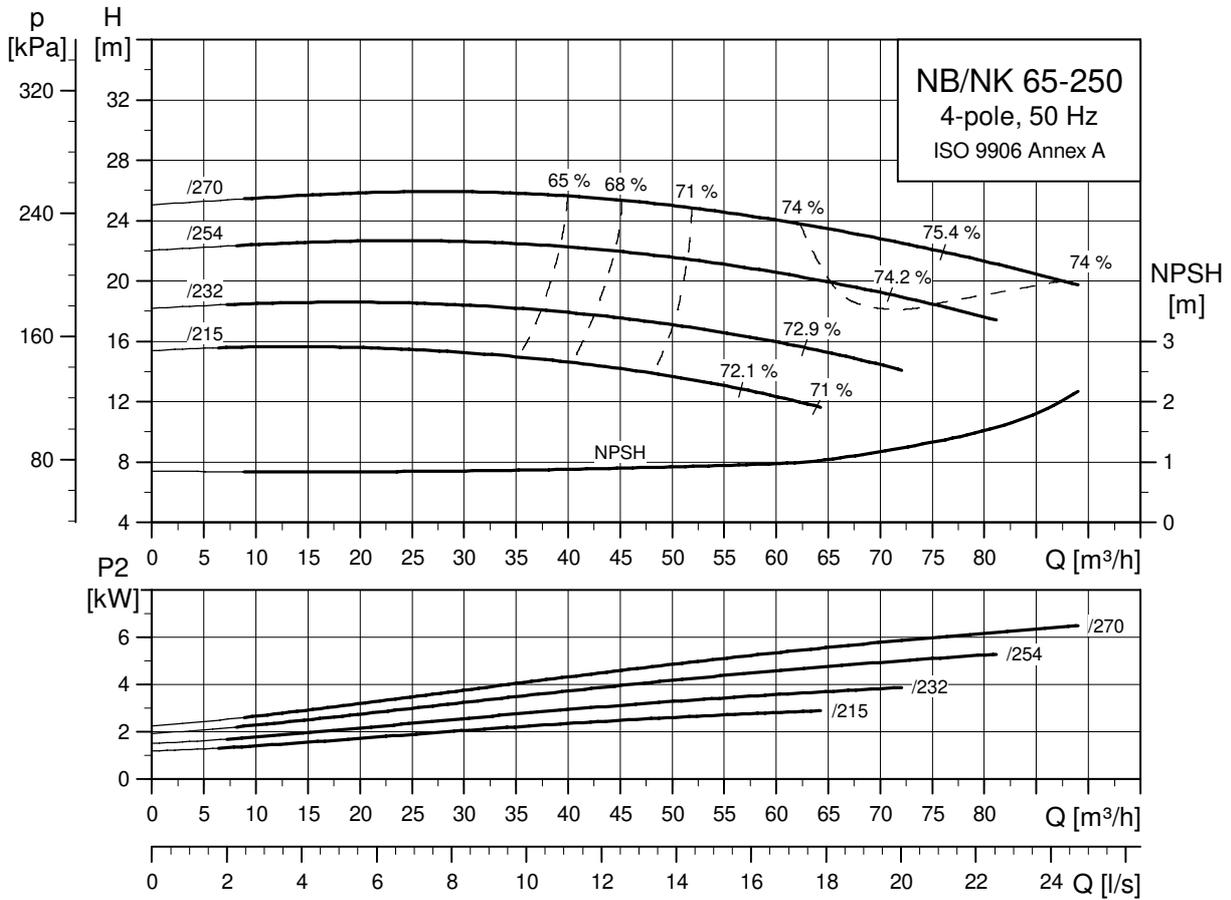
Pump type		65-200/170	65-200/189	65-200/205	65-200/219	
Motor type	Premium Motor	MG 90LC-D	MG 100LB-D	MG 100LC-D	MG 112MC-D	
	E-Motor	MGE 90LC	MGE 100LB	MGE 100LC	MGE 112MC	
Common data NB/NK	P ₂	[kW]	1.5	2.2	3	4
	PN	[bar]	16	16	16	16
	DNs	[mm]	80	80	80	80
	DNd	[mm]	65	65	65	65
	a	[mm]	100	100	100	100
	h2	[mm]	225	225	225	225
	Ss		8x19	8x19	8x19	8x19
	Sd		4x19	4x19	4x19	4x19
Common data NK standard/ spacer coupling	L NK	[mm]	835/971	859/995	859/995	896/1032
	L NKE	[mm]	835/971	859/995	859/995	896/1032
	Weight NK	[kg]	143/143	148/146	153/151	169/167
	Weight NKE	[kg]	150/149	159/157	161/159	174/172
	Weight NK SS	[kg]	149/148	154/152	159/157	175/173
	Weight NKE SS	[kg]	156/155	165/163	167/165	180/178
NK data	I1	[mm]	1120	1120	1120	1120
	I2	[mm]	190	190	190	190
	I3	[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 ¹⁾	[mm]	370/427	380/437	380/437	394/448
Base frame no.		5	5	5	5	
NB data	Design		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 ¹⁾	[mm]	321/321	335/335	335/335	372/372
	AD ¹⁾	[mm]	110/167	120/177	120/177	134/188
	AG ¹⁾	[mm]	162/264	162/264	162/264	202/290
	LL ¹⁾	[mm]	103/260	103/260	103/260	103/300
	P	[mm]	200	250	250	250
	C	[mm]	-	-	-	-
	B	[mm]	-	-	-	-
A	[mm]	-	-	-	-	
K	[mm]	-	-	-	-	
Weight NB ¹⁾	[kg]	67/73	70/78	72/80	87/92	
Weight NB SS ¹⁾	[kg]	73/79	80/88	82/90	97/102	

1) Dimension of pump with premium range motor/built-in frequency converter.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 65-250
4-pole, 50 Hz
ISO 9906 Annex A



TM03 5137 4106

TM03 4182 1806

TM03 6005 4106

Technical data

NB, NK 65-250
4-pole

Pump type		65-250/215	65-250/232	65-250/254	65-250/270	
Motor type	Premium Motor	MG 100LC-D	MG 112MC-D	Siemens 132S	Siemens 132M	
	E-Motor	MGE 100LC	MGE 112MC	MGE 132SC	MMGE 132M ²⁾	
Common data NB/NK	P ₂	[kW]	3	4	5.5	7.5
	PN	[bar]	16	16	16	16
	DN _s	[mm]	80	80	80	80
	DN _d	[mm]	65	65	65	65
	a	[mm]	100	100	100	100
	h ₂	[mm]	250	250	250	250
	S _s		8x19	8x19	8x19	8x19
S _d		4x19	4x19	4x19	4x19	
Common data NK standard/ spacer coupling	L NK	[mm]	969/1105	1006/1142	1027/1163	1065/1201
	L NKE	[mm]	969/1105	1006/1142	1045/1181	1133/1269
	Weight NK	[kg]	217/215	231/228	235/232	250/247
	Weight NKE	[kg]	225/223	235/233	245/242	303/297
	Weight NK SS	[kg]	216/214	229/227	234/231	249/246
	Weight NKE SS	[kg]	224/222	234/232	244/241	301/296
NK data	l ₁	[mm]	1250	1250	1250	1250
	l ₂	[mm]	205	205	205	205
	l ₃	[mm]	840	840	840	840
	b ₁	[mm]	430	430	430	430
	b ₂	[mm]	540	540	540	540
	b ₃	[mm]	490	490	490	490
	d	[mm]	24	24	24	24
	a ₂	[mm]	90	90	90	90
	h	[mm]	80	80	80	80
	h ₃	[mm]	280	280	280	280
	h ₄ ¹⁾	[mm]	400/457	414/468	447/468	447/639
	Base frame no.		6	6	6	6
NB data	Design		A	A	A	A
	L NB	[mm]	323	323	343	343
	L NB SS	[mm]	323	323	343	343
	h ₁	[mm]	200	200	200	200
	G ₁	[mm]	183	183	183	183
	G ₂	[mm]	200	200	200	200
	m ₁	[mm]	160	160	160	160
	m ₂	[mm]	120	120	120	120
	n ₁	[mm]	360	360	360	360
	n ₂	[mm]	280	280	280	280
	b	[mm]	80	80	80	80
	s ₁	[mm]	M16	M16	M16	M16
	H	[mm]	-	-	-	132
	LB ¹⁾	[mm]	335/335	372/372	373/391	411/449
	AD ¹⁾	[mm]	120/177	134/188	167/188	167/333
	AG ¹⁾	[mm]	162/264	202/290	140/290	140/246
	LL ¹⁾	[mm]	103/260	103/300	140/300	140/410
	P	[mm]	250	250	300	300
	C	[mm]	-	-	-	89
	B	[mm]	-	-	-	178
A	[mm]	-	-	-	216	
K	[mm]	-	-	-	12	
	Weight NB ¹⁾	[kg]	113/121	128/132	135/147	150/191
	Weight NB SS ¹⁾	[kg]	116/124	131/135	138/150	153/194

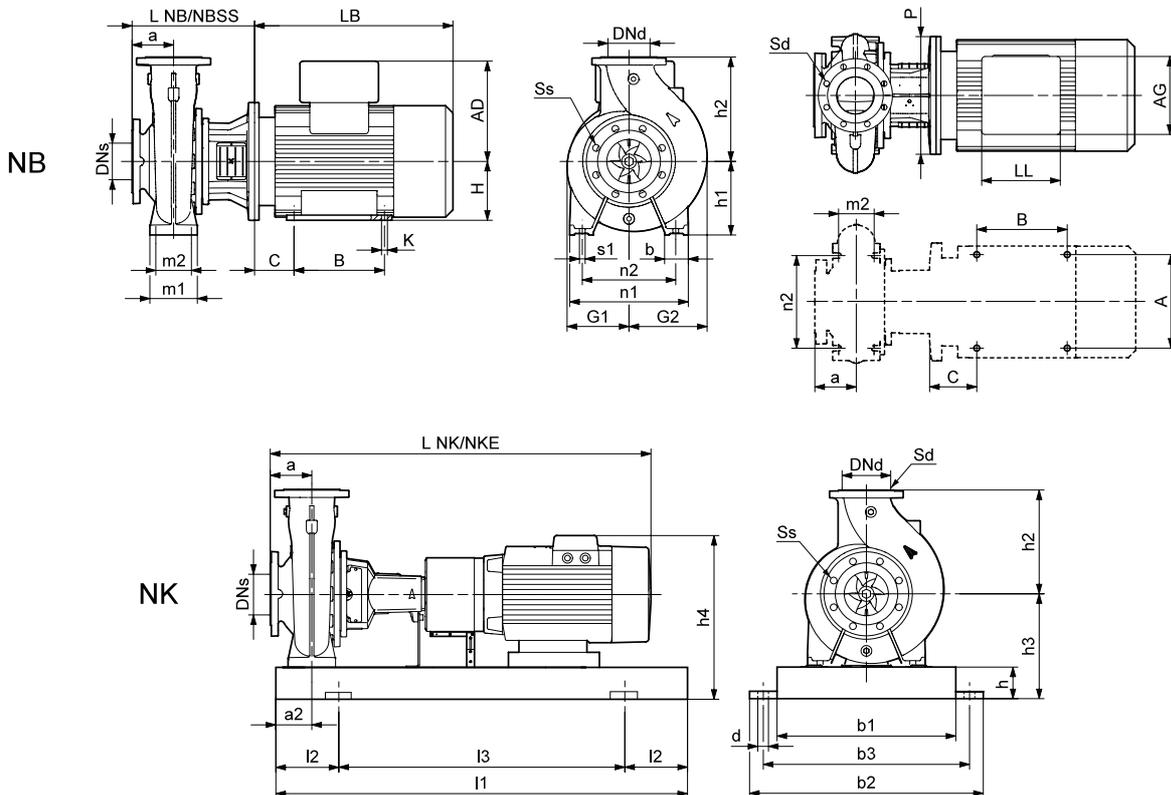
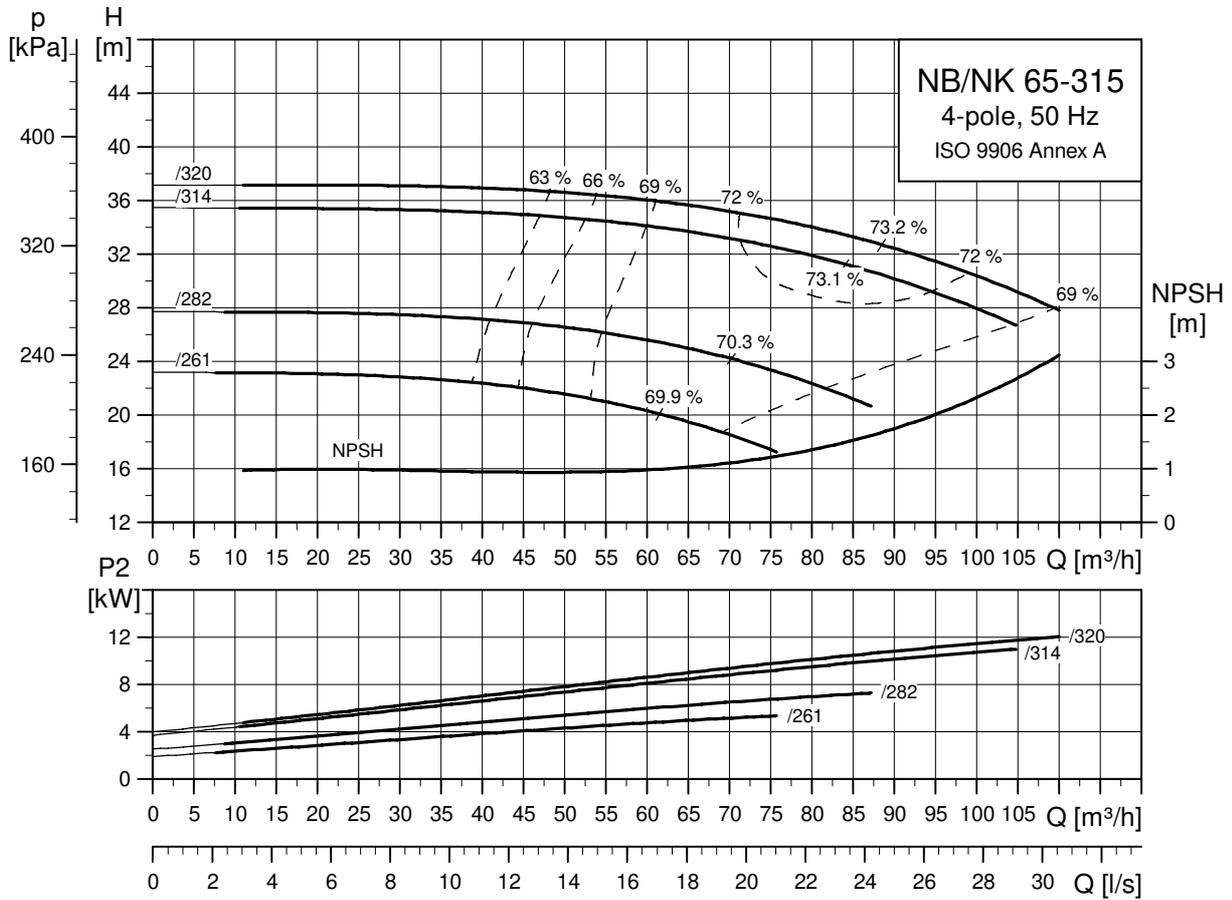
1) Dimension of pump with premium range motor/built-in frequency converter.

2) NBE 65-250/270 is fitted with an MMGE 132M motor with motor feet; NKE 65-250/270 is fitted with an MMGE 160M motor.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 65-315
4-pole, 50 Hz
ISO 9906 Annex A



TM03 5138 4106

TM03 4182 1806

TM03 6005 4106

Pump type		65-315/261	65-315/282	65-315/314	65-315/320	
Motor type	Premium Motor	Siemens 132S	Siemens 132M	Siemens 160M	Siemens 160L	
	E-Motor	MGE 132SC	MMGE 132M ³⁾	MMGE 160M	MMGE 160L	
Common data NB/NK	P ₂	[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
	h ₂	[mm]	280	280	280	280
	Ss		8x19	8x19	8x19	8x19
Sd		4x19	4x19	4x19	4x19	
Common data NK standard/ spacer coupling	L NK	[mm]	1052/1188	1090/1226	1187/1323	1227/1363
	L NKE	[mm]	1070/1206	1158/1294	1158/1294	1208/1344
	Weight NK	[kg]	278/275	293/290	317/312	343/338
	Weight NKE	[kg]	288/285	337/332	368/363	386/381
	Weight NK SS	[kg]	284/281	299/296	323/318	349/344
Weight NKE SS	[kg]	294/291	343/338	374/369	392/387	
NK data	l ₁	[mm]	1400	1400	1400	1400
	l ₂	[mm]	230	230	230	230
	l ₃	[mm]	940	940	940	940
	b ₁	[mm]	480	480	480	480
	b ₂	[mm]	610	610	610	610
	b ₃	[mm]	560	560	560	560
	d	[mm]	28	28	28	28
	a ₂	[mm]	90	90	90	90
	h	[mm]	100	100	100	100
	h ₃	[mm]	325	325	325	325
	h ₄ ¹⁾	[mm]	492/513	492/684	522/684	522/702
Base frame no.		7	7	7	7	
NB data	Design		A	A	C ²⁾	C ²⁾
	L NB	[mm]	368	368	398	398
	L NB SS	[mm]	368	368	398	398
	h ₁	[mm]	225	225	225	225
	G ₁	[mm]	211	211	211	211
	G ₂	[mm]	219	219	219	219
	m ₁	[mm]	160	160	160	160
	m ₂	[mm]	120	120	120	120
	n ₁	[mm]	400	400	400	400
	n ₂	[mm]	315	315	315	315
	b	[mm]	80	80	80	80
	s ₁	[mm]	M16	M16	M16	M16
	H	[mm]	-	132	160	160
	LB ¹⁾	[mm]	373/391	411/449	478/449	518/499
	AD ¹⁾	[mm]	167/188	167/333	197/359	197/377
	AG ¹⁾	[mm]	140/290	140/246	165/296	165/296
	LL ¹⁾	[mm]	140/300	140/410	165/410	165/410
	P	[mm]	300	300	350	350
	C	[mm]	-	89	108	108
	B	[mm]	-	178	210	254
A	[mm]	-	216	254	254	
K	[mm]	-	12	15	15	
Weight NB ¹⁾	[kg]	147/159	162/203	188/239	214/257	
Weight NB SS ¹⁾	[kg]	158/169	173/214	200/251	226/269	

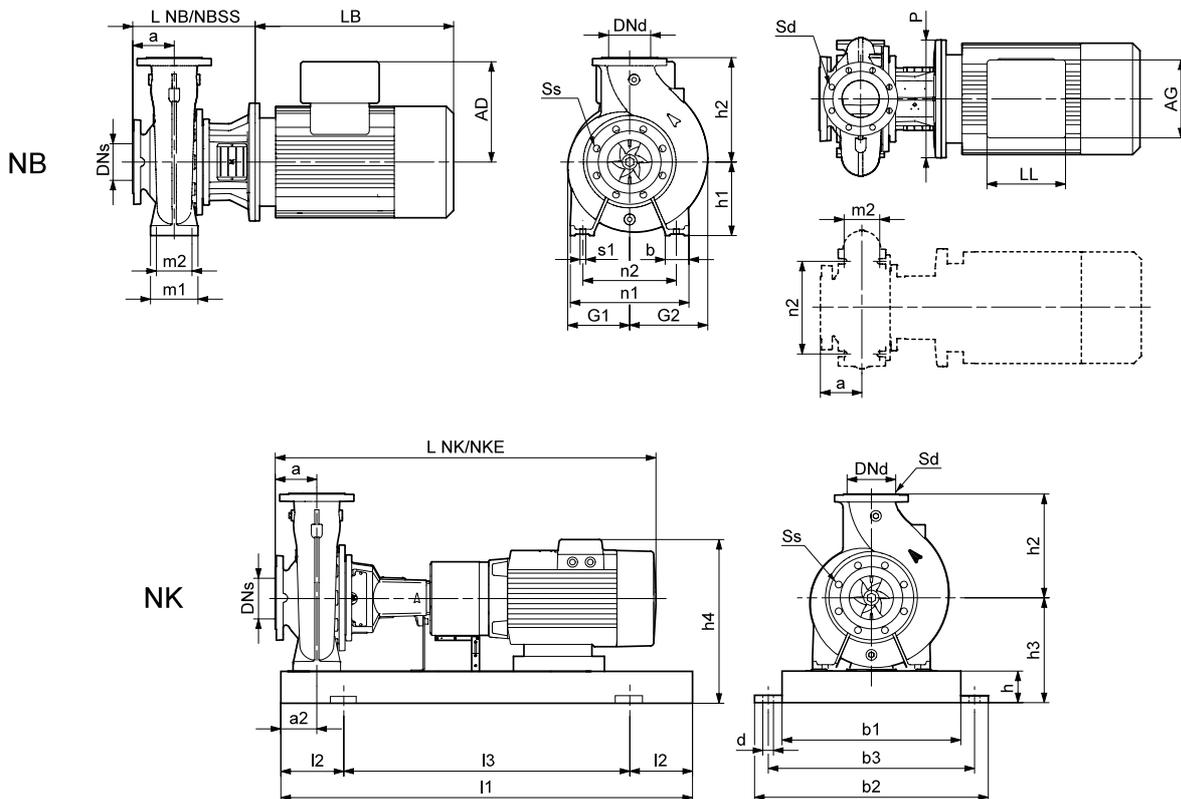
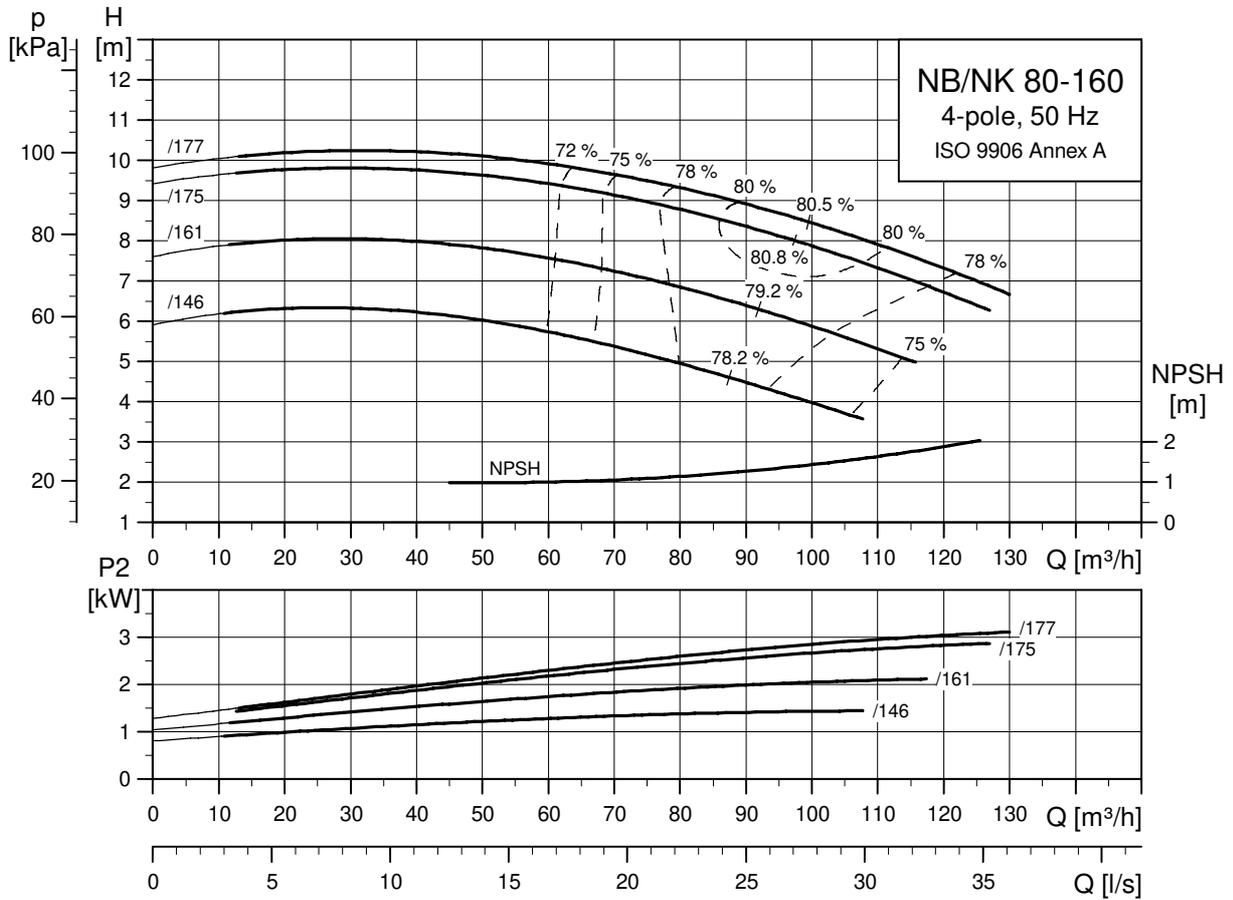
- 1) Dimension of pump with premium range motor/built-in frequency converter.
- 2) Support blocks are needed because of the P, h₁ and H dimensions.
- 3) NBE 65-315/282 is fitted with an MMGE 132M motor with motor feet; NKE 65-315/282 is fitted with an MMGE 160M motor.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 80-160
4-pole, 50 Hz

4-pole



TM03 5139 4106

TM03 4180 1806

TM03 6005 4106

Technical data

NB, NK 80-160
4-pole

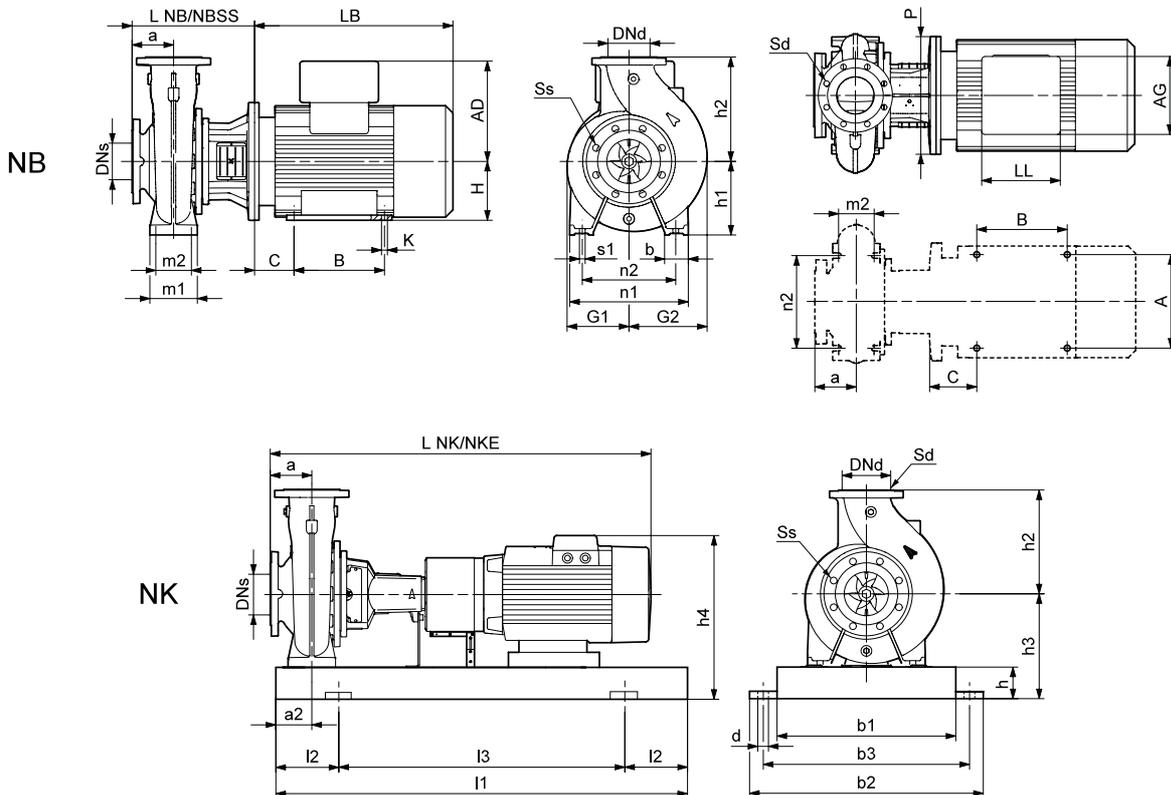
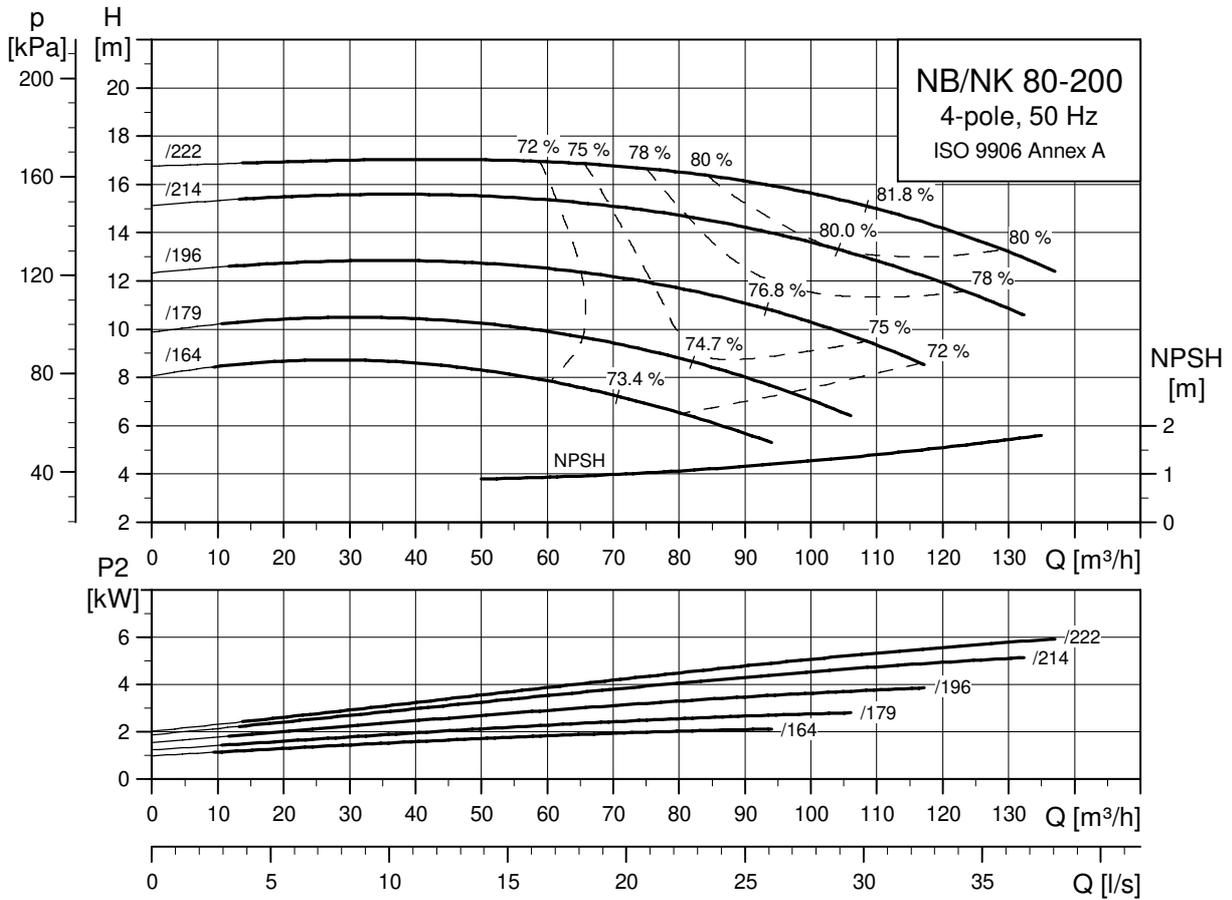
Pump type		80-160/146	80-160/161	80-160/175	80-160/177	
Motor type	Premium Motor	MG 90LC-D	MG 100LB-D	MG 100LC-D	MG 112MC-D	
	E-Motor	MGE 90LC	MGE 100LB	MGE 100LC	MGE 112MC	
Common data NB/NK	P ₂	[kW]	1.5	2.2	3	4
	PN	[bar]	16	16	16	16
	DNs	[mm]	100	100	100	100
	DNd	[mm]	80	80	80	80
	a	[mm]	125	125	125	125
	h ₂	[mm]	225	225	225	225
	Ss		8x19	8x19	8x19	8x19
Common data NK standard/ spacer coupling	Sd		8x19	8x19	8x19	8x19
	L NK	[mm]	860/996	884/1020	884/1020	921/1057
	L NKE	[mm]	860/996	884/1020	884/1020	921/1057
	Weight NK	[kg]	143/142	148/146	153/151	169/167
	Weight NKE	[kg]	150/149	159/157	161/159	174/172
	Weight NK SS	[kg]	149/149	154/152	159/157	175/173
NK data	Weight NKE SS	[kg]	156/155	165/163	167/165	180/178
	I1	[mm]	1120	1120	1120	1120
	I2	[mm]	190	190	190	190
	I3	[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
	a ₂	[mm]	75	75	75	75
	h	[mm]	80	80	80	80
	h ₃	[mm]	260	260	260	260
NB data	h ₄ ¹⁾	[mm]	370/427	380/437	380/437	394/448
	Base frame no.		5	5	5	5
	Design		A	A	A	A
	L NB	[mm]	271	299	299	299
	L NB SS	[mm]	298	318	318	318
	h ₁	[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 ¹⁾	[mm]	321/321	335/335	335/335	372/372
	AD ¹⁾	[mm]	110/167	120/177	120/177	134/188
	AG ¹⁾	[mm]	162/264	162/264	162/264	202/290
	LL ¹⁾	[mm]	103/260	103/260	103/260	103/300
P	[mm]	200	250	250	250	
C	[mm]	-	-	-	-	
B	[mm]	-	-	-	-	
A	[mm]	-	-	-	-	
K	[mm]	-	-	-	-	
Weight NB ¹⁾	[kg]	65/71	71/79	73/81	88/93	
Weight NB SS ¹⁾	[kg]	73/79	81/88	83/90	98/102	

1) Dimension of pump with premium range motor/built-in frequency converter.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 80-200
4-pole, 50 Hz



TM03 5140 4106

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	Premium Motor	MG 100LB-D	MG 100LC-D	MG 112MC-D	Siemens 132S	Siemens 132M	
	E-Motor	MGE 100LB	MGE 100LC	MGE 112MC	MGE 132SC	MMGE 132M ²⁾	
Common data NB/NK	P ₂	[kW]	2.2	3	4	5.5	7.5
	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
	h ₂	[mm]	250	250	250	250	250
	Ss		8x19	8x19	8x19	8x19	8x19
Sd		8x19	8x19	8x19	8x19	8x19	
Common data NK standard/ spacer coupling	L NK	[mm]	994/1130	994/1130	1031/1167	1052/1188	1090/1226
	L NKE	[mm]	994/1130	994/1130	1031/1167	1070/1206	1158/1294
	Weight NK	[kg]	195/193	200/198	216/214	225/222	240/237
	Weight NKE	[kg]	206/204	208/206	221/218	235/232	279/274
	Weight NK SS	[kg]	201/199	206/204	222/220	232/229	247/244
Weight NKE SS	[kg]	212/210	214/212	227/225	241/238	286/280	
NK data	l1	[mm]	1250	1250	1250	1250	1250
	l2	[mm]	205	205	205	205	205
	l3	[mm]	840	840	840	840	840
	b1	[mm]	430	430	430	430	430
	b2	[mm]	540	540	540	540	540
	b3	[mm]	490	490	490	490	490
	d	[mm]	24	24	24	24	24
	a2	[mm]	75	75	75	75	75
	h	[mm]	80	80	80	80	80
	h3	[mm]	260	260	260	260	260
	h4 ¹⁾	[mm]	380/437	380/437	394/448	427/448	427/619
Base frame no.		6	6	6	6	6	
NB data	Design		A	A	A	A	A
	L NB	[mm]	348	348	348	368	368
	L NB SS	[mm]	348	348	348	368	368
	h1	[mm]	180	180	180	180	180
	G1	[mm]	160	160	160	160	160
	G2	[mm]	193	193	193	193	193
	m1	[mm]	125	125	125	125	125
	m2	[mm]	95	95	95	95	95
	n1	[mm]	345	345	345	345	345
	n2	[mm]	280	280	280	280	280
	b	[mm]	65	65	65	65	65
	s1	[mm]	M12	M12	M12	M12	M12
	H	[mm]	-	-	-	-	132
	LB ¹⁾	[mm]	335/335	335/335	372/372	373/391	411/449
	AD ¹⁾	[mm]	120/177	120/177	134/188	167/188	167/333
	AG ¹⁾	[mm]	162/264	162/264	202/290	140/290	140/246
	LL ¹⁾	[mm]	103/260	103/260	103/300	140/300	140/410
	P	[mm]	250	250	250	300	300
	C	[mm]	-	-	-	-	89
	B	[mm]	-	-	-	-	178
A	[mm]	-	-	-	-	216	
K	[mm]	-	-	-	-	12	
Weight NB ¹⁾	[kg]	96/104	98/106	113/117	120/132	135/176	
Weight NB SS ¹⁾	[kg]	106/114	108/116	123/128	131/143	146/187	

1) Dimension of pump with premium range motor/built-in frequency converter.

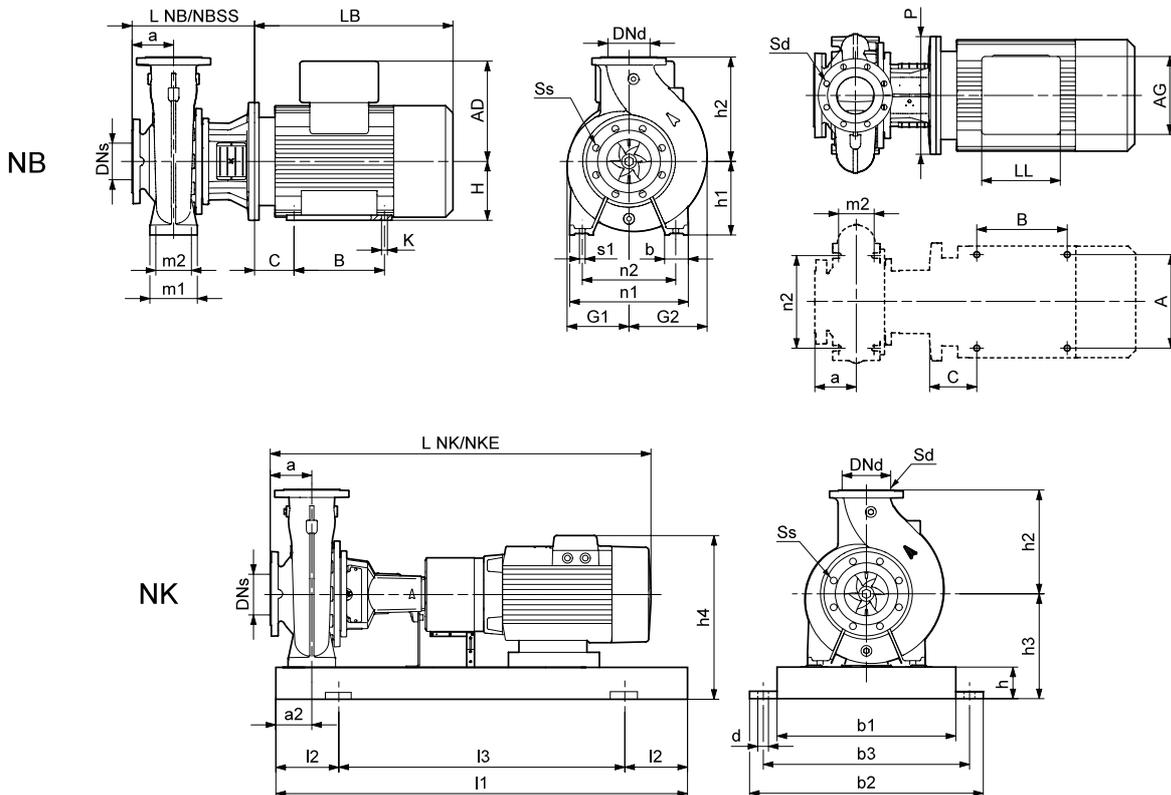
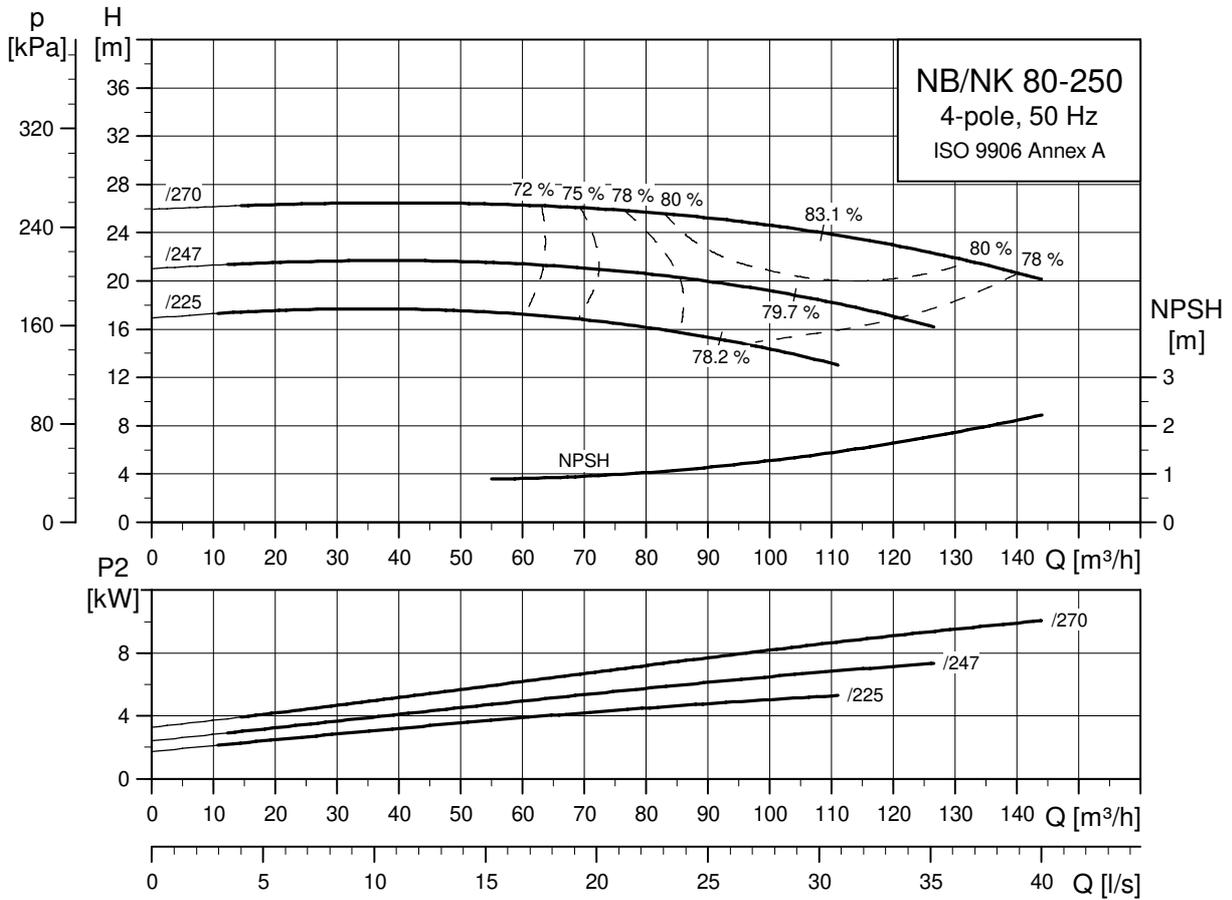
2) NBE 80-200/222 is fitted with an MMGE 132M motor with motor feet; NKE 80-200/222 is fitted with an MMGE 160M motor.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 80-250
4-pole, 50 Hz

4-pole



TM03 5141 4106

TM03 4182 1806

TM03 6005 4106

Technical data

NB, NK 80-250
4-pole

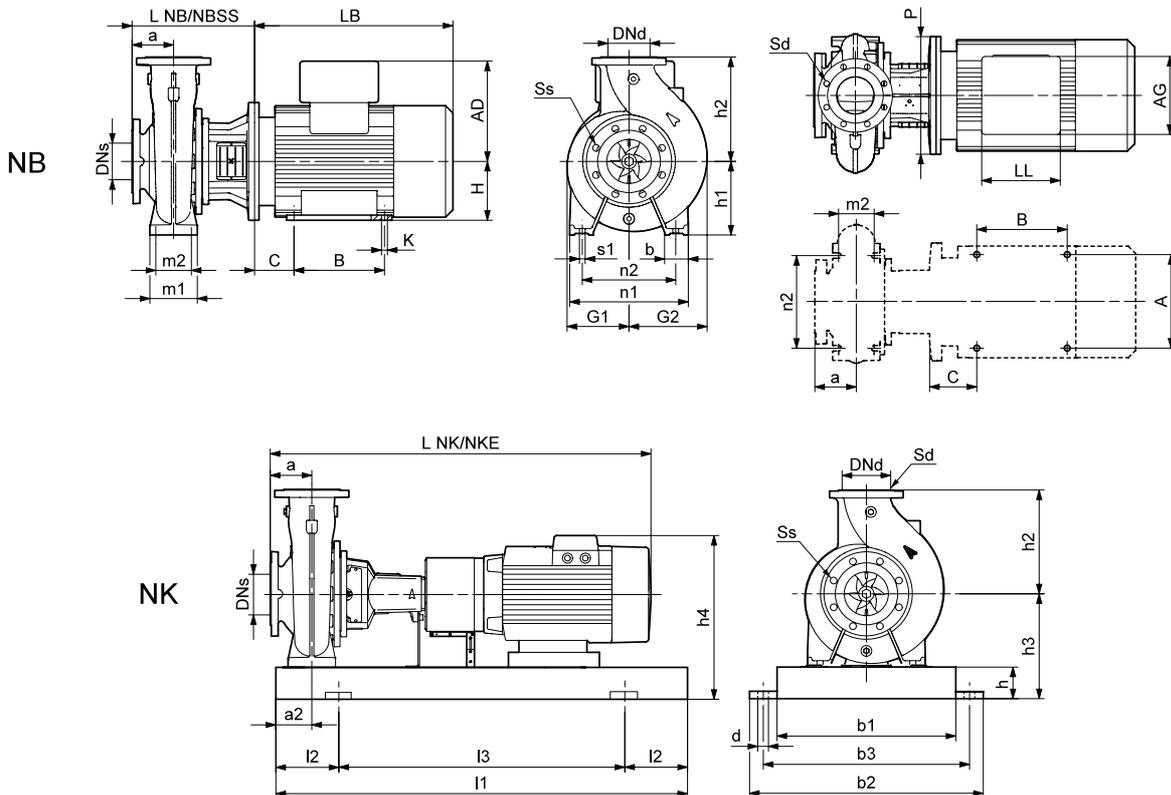
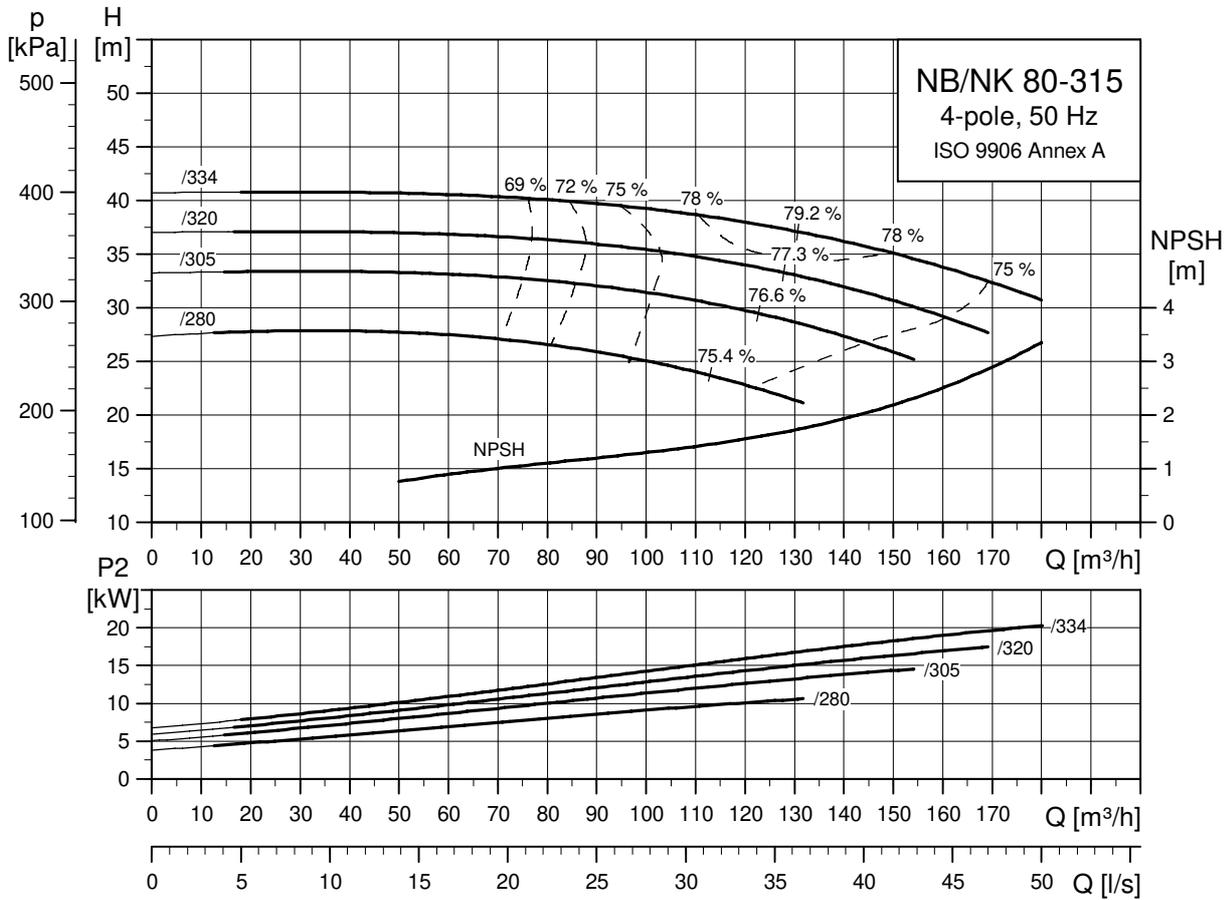
Pump type		80-250/225	80-250/247	80-250/270	
Motor type	Premium Motor	Siemens 132S	Siemens 132M	Siemens 160M	
	E-Motor	MGE 132SC	MMGE 132M ³⁾	MMGE 160M	
Common data NB/NK	P ₂	[kW]	5.5	7.5	11
	PN	[bar]	16	16	16
	DN _s	[mm]	100	100	100
	DN _d	[mm]	80	80	80
	a	[mm]	125	125	125
	h ₂	[mm]	280	280	280
	S _s		8x19	8x19	8x19
S _d		8x19	8x19	8x19	
Common data NK standard/ spacer coupling	L NK	[mm]	1052/1188	1090/1226	1187/1323
	L NKE	[mm]	1070/1206	1158/1294	1158/1294
	Weight NK	[kg]	269/266	284/281	317/311
	Weight NKE	[kg]	279/276	337/331	368/362
	Weight NK SS	[kg]	276/273	291/288	323/318
Weight NKE SS	[kg]	286/283	343/338	374/369	
NK data	l ₁	[mm]	1400	1400	1400
	l ₂	[mm]	230	230	230
	l ₃	[mm]	940	940	940
	b ₁	[mm]	480	480	480
	b ₂	[mm]	610	610	610
	b ₃	[mm]	560	560	560
	d	[mm]	28	28	28
	a ₂	[mm]	90	90	90
	h	[mm]	100	100	100
	h ₃	[mm]	300	300	300
	h ₄ ¹⁾	[mm]	467/488	467/659	497/659
Base frame no.		7	7	7	
NB data	Design		A	A	C ²⁾
	L NB	[mm]	368	368	398
	L NB SS	[mm]	368	368	398
	h ₁	[mm]	200	200	200
	G ₁	[mm]	182	182	182
	G ₂	[mm]	210	210	210
	m ₁	[mm]	160	160	160
	m ₂	[mm]	120	120	120
	n ₁	[mm]	400	400	400
	n ₂	[mm]	315	315	315
	b	[mm]	80	80	80
	s ₁	[mm]	M16	M16	M16
	H	[mm]	-	132	160
	LB ¹⁾	[mm]	373/391	411/449	478/449
	AD ¹⁾	[mm]	167/188	167/333	197/359
	AG ¹⁾	[mm]	140/290	140/246	165/296
	LL ¹⁾	[mm]	140/300	140/410	165/410
	P	[mm]	300	300	350
	C	[mm]	-	89	108
	B	[mm]	-	178	210
	A	[mm]	-	216	254
	K	[mm]	-	12	15
	Weight NB ¹⁾	[kg]	139/151	154/195	180/231
Weight NB SS ¹⁾	[kg]	150/162	165/206	192/243	

1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

3) NBE 80-250/247 is fitted with an MMGE 132M motor with motor feet; NKE 80-250/247 is fitted with an MMGE 160M motor.

Note: For information about base frames, see page 270.



TM03 5142 4106

TM03 4182 1806

TM03 6005 4106

Pump type		80-315/280	80-315/305	80-315/320	80-315/334	
Motor type	Premium Motor	Siemens 160M	Siemens 160L	Siemens 180M	Siemens 180L	
	E-Motor	MMGE 160M	MMGE 160L	MMGE 180M	MMGE 180L	
Common data NB/NK	P ₂	[kW]	11	15	18.5	22
	PN	[bar]	16	16	16	16
	DNs	[mm]	100	100	100	100
	DNd	[mm]	80	80	80	80
	a	[mm]	125	125	125	125
	h ₂	[mm]	315	315	315	315
	Ss		8x19	8x19	8x19	8x19
	Sd		8x19	8x19	8x19	
Common data NK standard/ spacer coupling	L NK	[mm]	1187/1323	1227/1363	1311/1447	1311/1447
	L NKE	[mm]	1158/1294	1208/1344	1208/1344	1279/1415
	Weight NK	[kg]	330/324	356/350	380/371	400/391
	Weight NKE	[kg]	381/375	399/393	437/428	471/462
	Weight NK SS	[kg]	337/332	363/358	388/379	408/399
	Weight NKE SS	[kg]	388/383	406/401	445/436	479/470
NK data	l ₁	[mm]	1400	1400	1400	1400
	l ₂	[mm]	230	230	230	230
	l ₃	[mm]	940	940	940	940
	b ₁	[mm]	480	480	480	480
	b ₂	[mm]	610	610	610	610
	b ₃	[mm]	560	560	560	560
	d	[mm]	28	28	28	28
	a ₂	[mm]	90	90	90	90
	h	[mm]	100	100	100	100
	h ₃	[mm]	350	350	350	350
	h ₄ ¹⁾	[mm]	547/709	547/727	608/749	608/749
	Base frame no.		7	7	7	7
NB data	Design		C ²⁾	C ²⁾	C ²⁾	C ²⁾
	L NB	[mm]	398	398	398	398
	L NB SS	[mm]	398	398	398	398
	h ₁	[mm]	250	250	250	250
	G ₁	[mm]	216	216	216	216
	G ₂	[mm]	243	243	243	243
	m ₁	[mm]	160	160	160	160
	m ₂	[mm]	120	120	120	120
	n ₁	[mm]	400	400	400	400
	n ₂	[mm]	315	315	315	315
	b	[mm]	80	80	80	80
	s ₁	[mm]	M16	M16	M16	M16
	H	[mm]	160	160	180	180
	LB ¹⁾	[mm]	478/449	518/499	602/499	602/570
	AD ¹⁾	[mm]	197/359	197/377	258/399	258/399
	AG ¹⁾	[mm]	165/296	165/296	152/328	152/328
	LL ¹⁾	[mm]	165/410	165/410	132/456	132/456
	P	[mm]	350	350	350	350
	C	[mm]	108	108	121	121
	B	[mm]	210	254	241	279
A	[mm]	254	254	279	279	
K	[mm]	15	15	15	15	
	Weight NB ¹⁾	[kg]	199/250	225/268	244/301	264/335
	Weight NB SS ¹⁾	[kg]	212/263	238/281	256/313	276/347

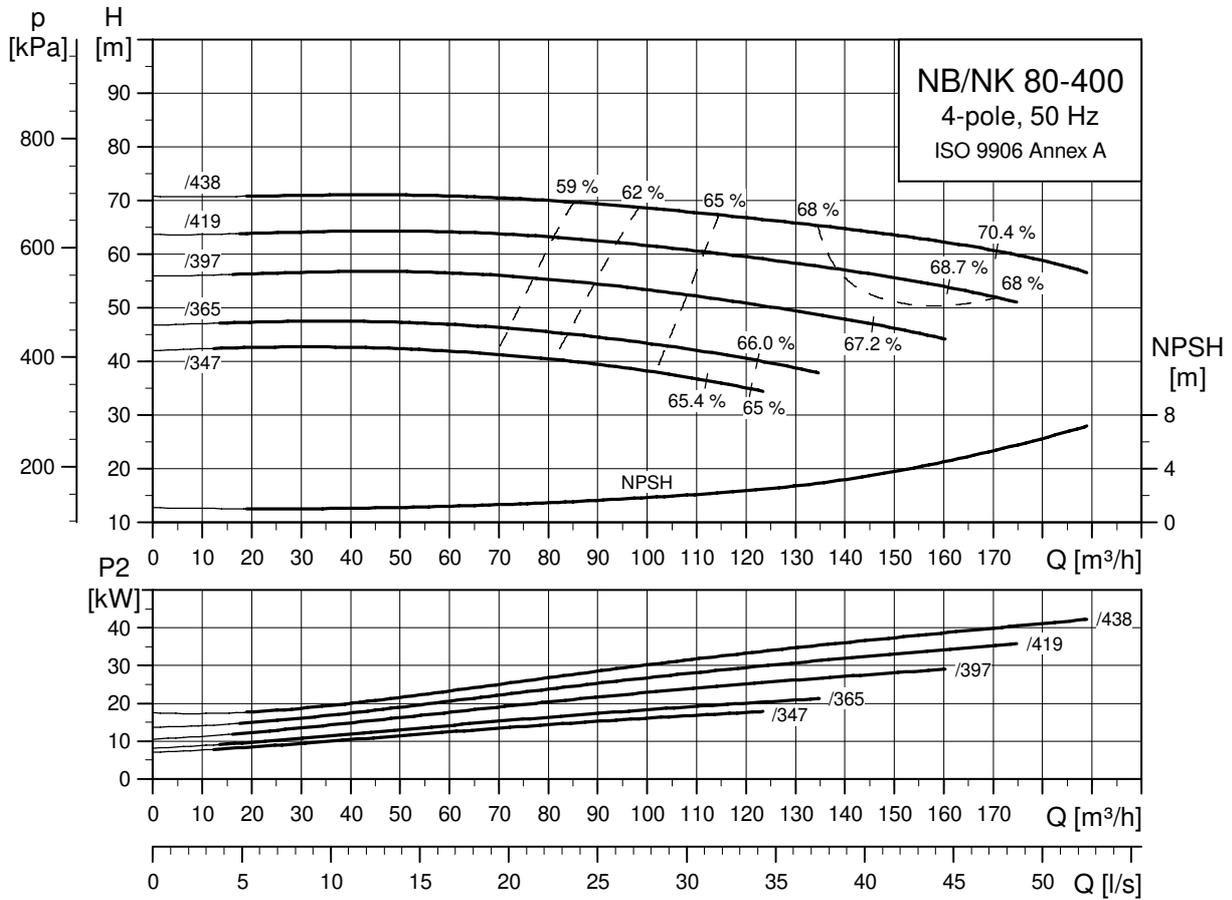
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

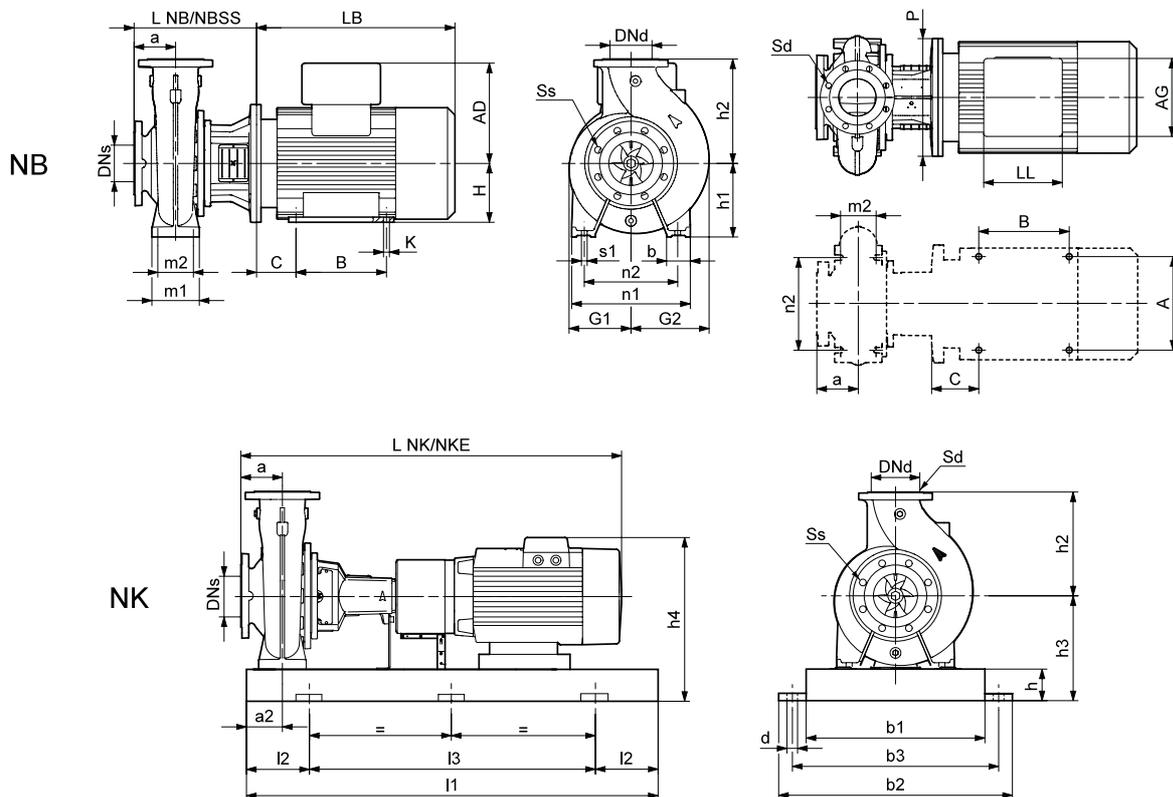
Note: For information about base frames, see page 270.

Performance curves

NB, NK 80-400
4-pole, 50 Hz
ISO 9906 Annex A



TM03 5143 4106



TM03 4182 1806

TM03 4179 1806

Technical data

NB, NK 80-400
4-pole

Pump type		80-400/347	80-400/365	80-400/397	80-400/419	80-400/438	
Motor type	Premium Motor	Siemens 180M	Siemens 180L	Siemens 200L	Siemens 225S	Siemens 225M	
	E-Motor	MMGE 180M	MMGE 180L	-	-	-	
Common data NB/NK	P ₂	[kW]	18.5	22	30	37	45
	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
	h ₂	[mm]	355	355	355	355	355
	Ss		8x19	8x19	8x19	8x19	8x19
	Sd		8x19	8x19	8x19	8x19	
Common data NK standard/ spacer coupling	L NK	[mm]	1371/1507	1371/1507	1428/1564	1448/1584	1508/1644
	L NKE	[mm]	1268/1404	1339/1475	-/-	-/-	-/-
	Weight NK	[kg]	499/492	519/512	574/569	690/685	730/725
	Weight NKE	[kg]	556/549	590/583	-/-	-/-	-/-
	Weight NK SS	[kg]	480/473	500/493	555/550	671/666	711/706
	Weight NKE SS	[kg]	537/530	571/564	-/-	-/-	-/-
NK data	l ₁	[mm]	1600	1600	1600	1600	1600
	l ₂	[mm]	270	270	270	270	270
	l ₃	[mm]	1060	1060	1060	1060	1060
	b ₁	[mm]	530	530	530	530	530
	b ₂	[mm]	660	660	660	660	660
	b ₃	[mm]	600	600	600	600	600
	d	[mm]	28	28	28	28	28
	a ₂	[mm]	90	90	90	90	90
	h	[mm]	100	100	100	100	100
	h ₃	[mm]	383	383	380	380	380
	h ₄ ¹⁾	[mm]	641/782	641/782	685/-	705/-	705/-
	Base frame no.		8	8	8	8	
NB data	Design		C ²⁾				
	L NB	[mm]	396	396	396	426	426
	L NB SS	[mm]	398	398	398	428	428
	h ₁	[mm]	280	280	280	280	280
	G ₁	[mm]	266	266	266	266	266
	G ₂	[mm]	287	287	287	287	287
	m ₁	[mm]	160	160	160	160	160
	m ₂	[mm]	120	120	120	120	120
	n ₁	[mm]	435	435	435	435	435
	n ₂	[mm]	355	355	355	355	355
	b	[mm]	80	80	80	80	80
	s ₁	[mm]	M16	M16	M16	M16	M16
	H	[mm]	180	180	200	225	225
	LB ¹⁾	[mm]	602/499	602/570	659/-	649/-	709/-
	AD ¹⁾	[mm]	258/399	258/399	305/-	325/-	325/-
	AG ¹⁾	[mm]	152/328	152/328	260/-	260/-	260/-
	LL ¹⁾	[mm]	132/456	132/456	192/-	192/-	192/-
	P	[mm]	350	350	400	450	450
	C	[mm]	121	121	133	149	149
	B	[mm]	241	279	305	286	286
A	[mm]	279	279	318	356	356	
K	[mm]	15	15	19	19	19	
	Weight NB ¹⁾	[kg]	319/376	339/410	398/-	500/-	540/-
	Weight NB SS ¹⁾	[kg]	300/357	320/391	379/-	481/-	521/-

1) Dimension of pump with premium range motor/built-in frequency converter.

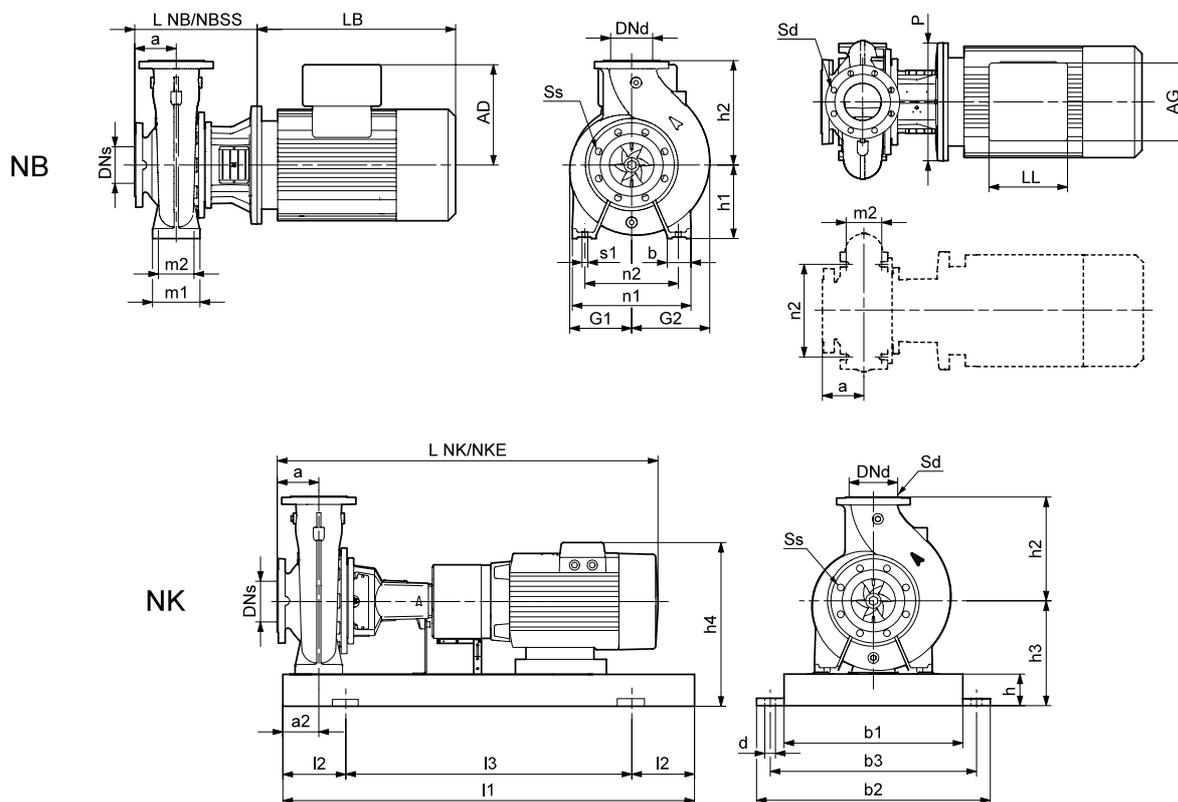
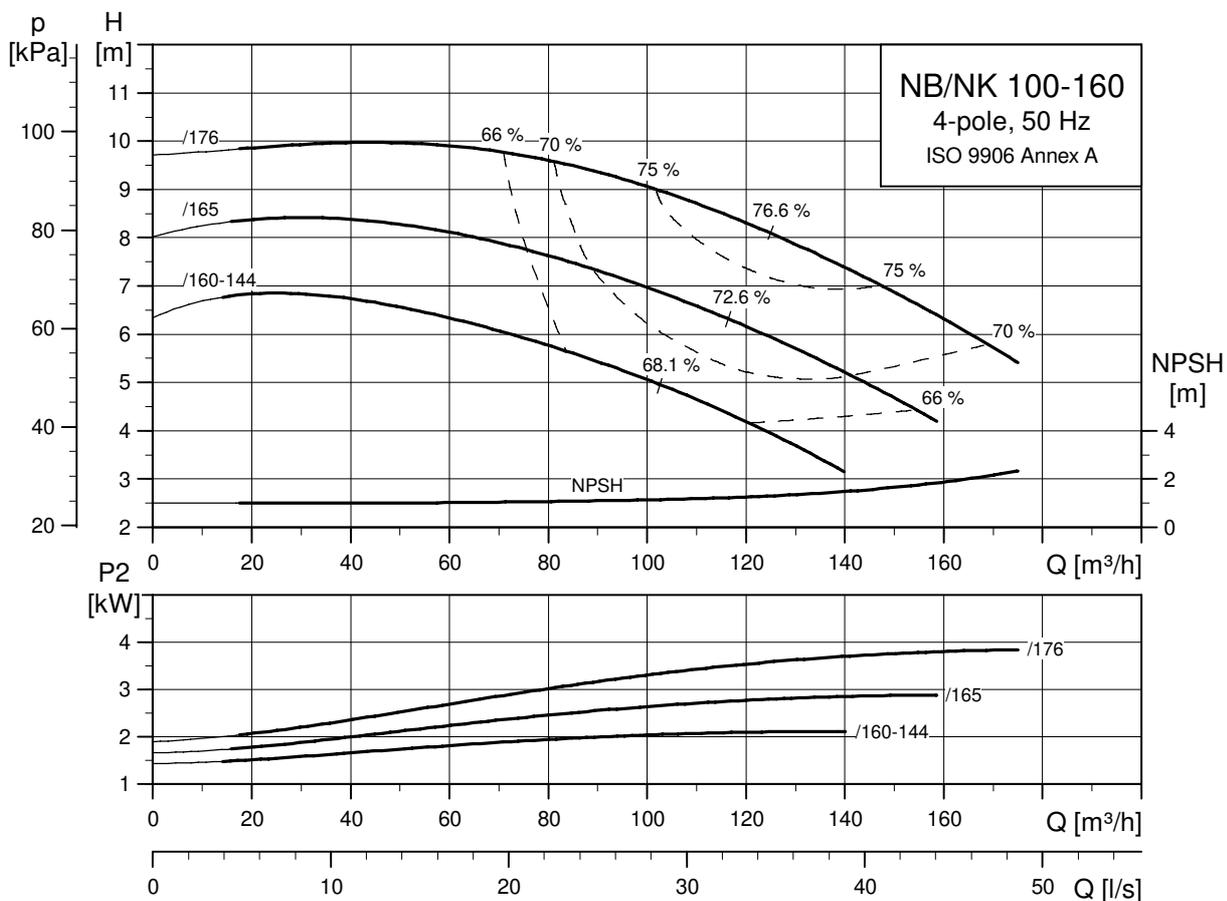
2) Support blocks are needed because of the P, h₁ and H dimensions.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 100-160
4-pole, 50 Hz

NB/NK 100-160
4-pole, 50 Hz
ISO 9906 Annex A



TM03 5144 4106

TM03 4180 1806

TM03 6005 4106

Technical data

NB, NK 100-160
4-pole

Pump type		100-160/160-144	100-160/165	100-160/176	
Motor type	Premium Motor	MG 100LB-D	MG 100LC-D	MG 112MC-D	
	E-Motor	MGE 100LB	MGE 100LC	MGE 112MC	
Common data NB/NK	P ₂	[kW]	2.2	3	4
	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		8x19	8x19	8x19
Common data NK standard/ spacer coupling	Sd		8x19	8x19	
	L NK	[mm]	884/1020	884/1020	921/1057
	L NKE	[mm]	884/1020	884/1020	921/1057
	Weight NK	[kg]	186/184	191/189	204/202
	Weight NKE	[kg]	197/195	199/197	209/206
	Weight NK SS	[kg]	-/-	-/-	-/-
NK data	Weight NKE SS	[kg]	-/-	-/-	-/-
	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 ¹⁾	[mm]	400/457	400/457	414/468
	Base frame no.		6	6	6
NB data	Design		A	A	A
	L NB	[mm]	318	318	318
	L NB SS	[mm]	-	-	-
	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 ¹⁾	[mm]	335/335	335/335	372/372
	AD ¹⁾	[mm]	120/177	120/177	134/188
	AG ¹⁾	[mm]	162/264	162/264	202/290
	LL ¹⁾	[mm]	103/260	103/260	103/300
	P	[mm]	250	250	250
	C	[mm]	-	-	-
	B	[mm]	-	-	-
A	[mm]	-	-	-	
K	[mm]	-	-	-	
Weight NB ¹⁾	[kg]	97/104	99/106	114/118	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	

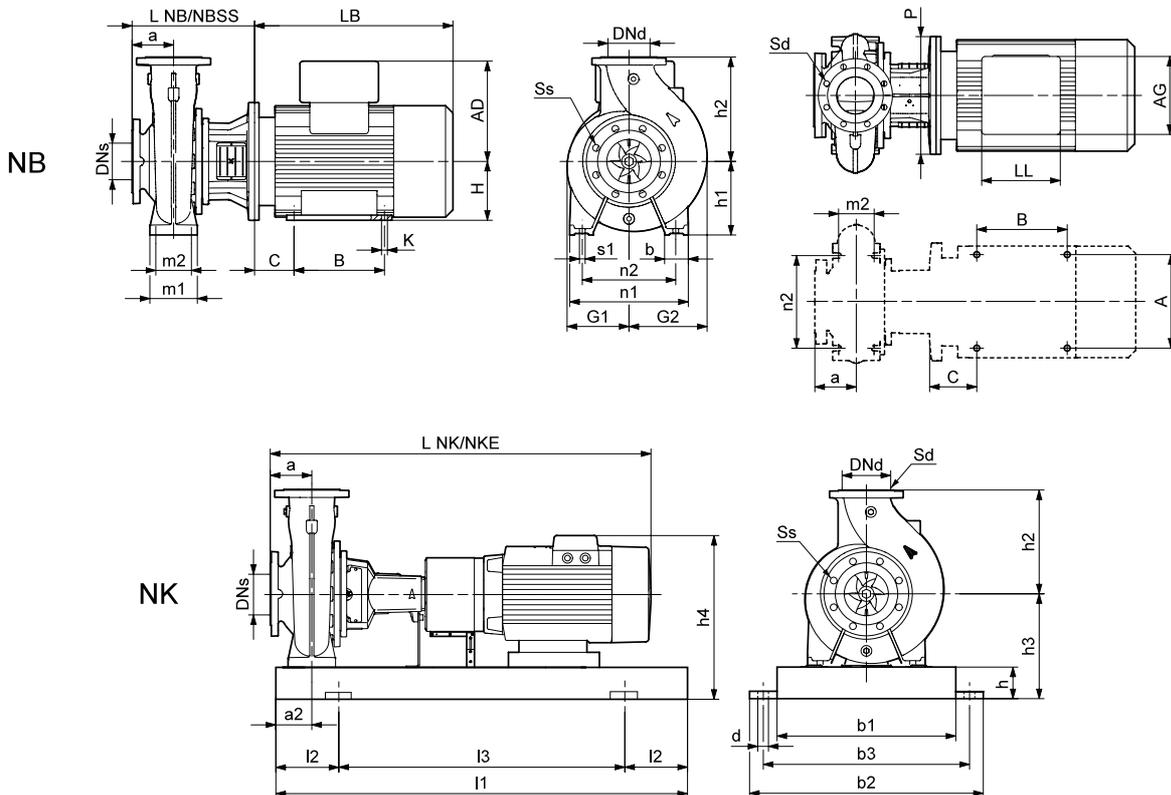
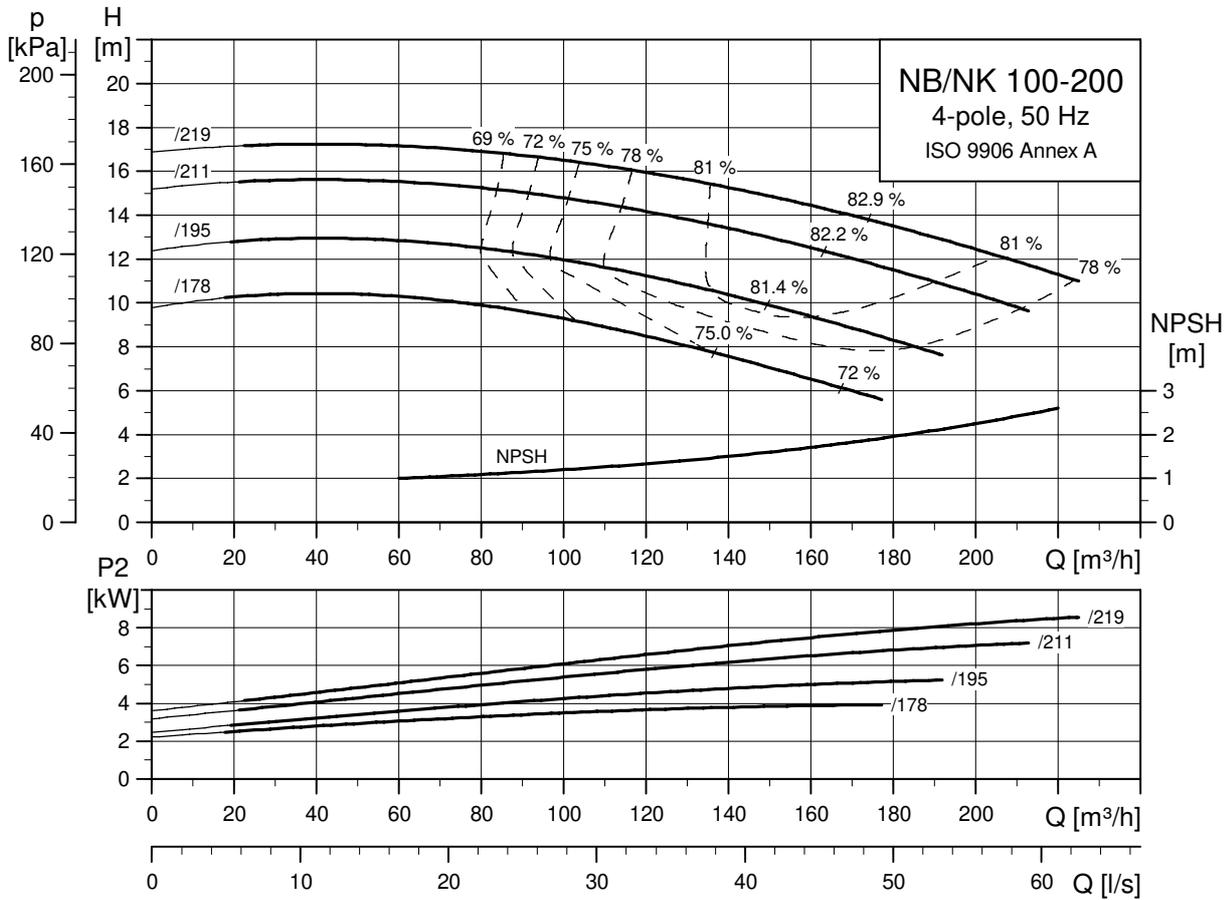
1) Dimension of pump with premium range motor/built-in frequency converter.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 100-200
4-pole, 50 Hz

NB/NK 100-200
4-pole, 50 Hz
ISO 9906 Annex A



TM03 5145 4106

TM03 4182 1806

TM03 6005 4106

Technical data

NB, NK 100-200
4-pole

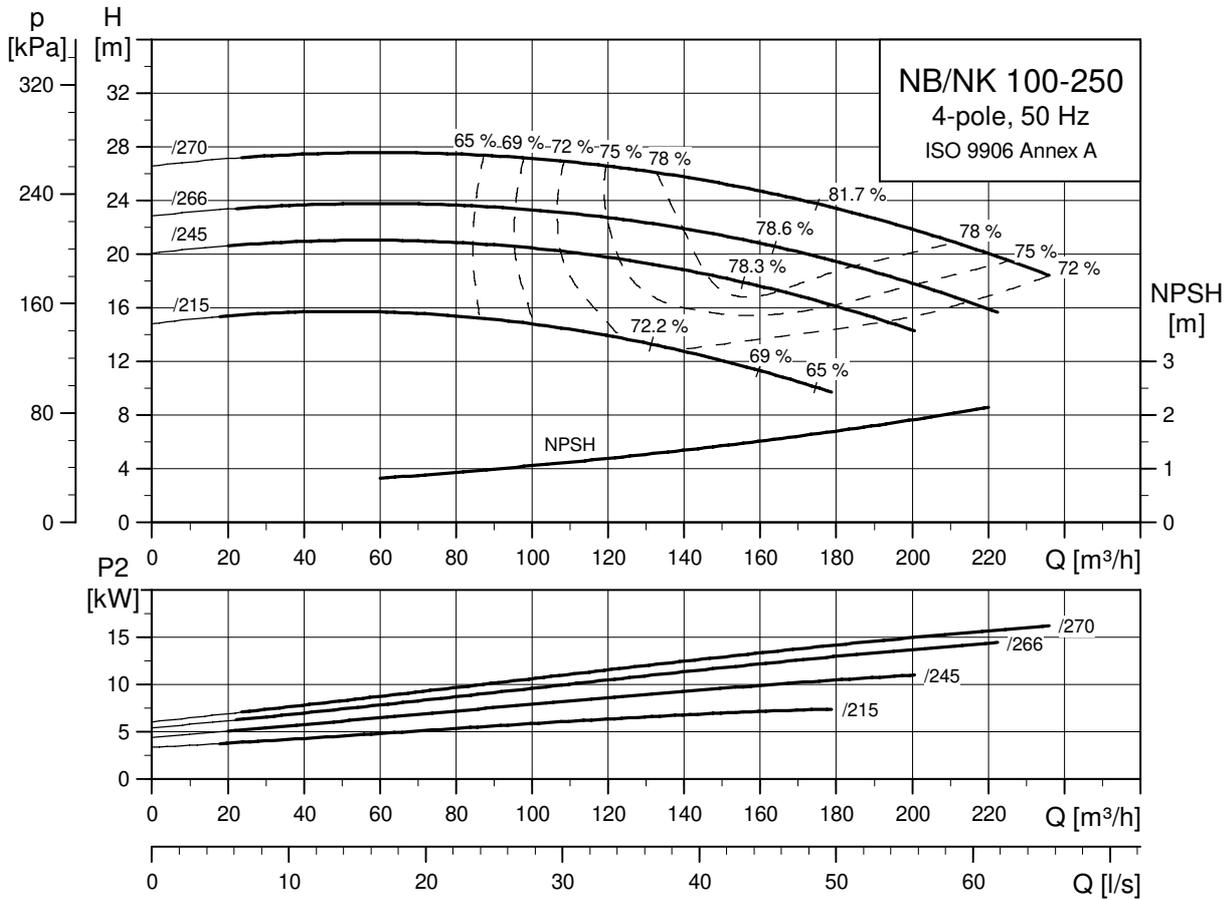
Pump type		100-200/178	100-200/195	100-200/211	100-200/219	
Motor type	Premium Motor	MG 112MC-D	Siemens 132S	Siemens 132M	Siemens 160M	
	E-Motor	MGE 112MC	MGE 132SC	MMGE 132M ³⁾	MMGE 160M	
Common data NB/NK	P ₂	[kW]	4	5.5	7.5	11
	PN	[bar]	16	16	16	16
	DN _s	[mm]	125	125	125	125
	DN _d	[mm]	100	100	100	100
	a	[mm]	125	125	125	125
	h ₂	[mm]	280	280	280	280
	S _s		8x19	8x19	8x19	8x19
S _d		8x19	8x19	8x19	8x19	
Common data NK standard/ spacer coupling	L NK	[mm]	1031/1167	1052/1188	1090/1226	1187/1323
	L NKE	[mm]	1031/1167	1070/1206	1158/1294	1158/1294
	Weight NK	[kg]	228/226	233/230	248/245	280/275
	Weight NKE	[kg]	233/231	243/240	300/295	331/326
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-
	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-
NK data	l ₁	[mm]	1250	1250	1250	1250
	l ₂	[mm]	205	205	205	205
	l ₃	[mm]	840	840	840	840
	b ₁	[mm]	430	430	430	430
	b ₂	[mm]	540	540	540	540
	b ₃	[mm]	490	490	490	490
	d	[mm]	24	24	24	24
	a ₂	[mm]	90	90	90	90
	h	[mm]	80	80	80	80
	h ₃	[mm]	280	280	280	280
	h ₄ ¹⁾	[mm]	414/468	447/468	447/639	477/639
	Base frame no.		6	6	6	6
	NB data	Design		A	A	A
L NB		[mm]	348	368	368	398
L NB SS		[mm]	-	-	-	-
h ₁		[mm]	200	200	200	200
G ₁		[mm]	169	169	169	169
G ₂		[mm]	212	212	212	212
m ₁		[mm]	160	160	160	160
m ₂		[mm]	120	120	120	120
n ₁		[mm]	360	360	360	360
n ₂		[mm]	280	280	280	280
b		[mm]	80	80	80	80
s ₁		[mm]	M16	M16	M16	M16
H		[mm]	-	-	132	160
LB ¹⁾		[mm]	372/372	373/391	411/449	478/449
AD ¹⁾		[mm]	134/188	167/188	167/333	197/359
AG ¹⁾		[mm]	202/290	140/290	140/246	165/296
LL ¹⁾		[mm]	103/300	140/300	140/410	165/410
P		[mm]	250	300	300	350
C		[mm]	-	-	89	108
B		[mm]	-	-	178	210
A		[mm]	-	-	216	254
K		[mm]	-	-	12	15
Weight NB ¹⁾	[kg]	126/130	133/144	148/189	174/225	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	

- 1) Dimension of pump with premium range motor/built-in frequency converter.
- 2) Support blocks are needed because of the P, h₁ and H dimensions.
- 3) NBE 100-200/211 is fitted with an MMGE 132M motor with motor feet; NKE 100-200/211 is fitted with an MMGE 160M motor.

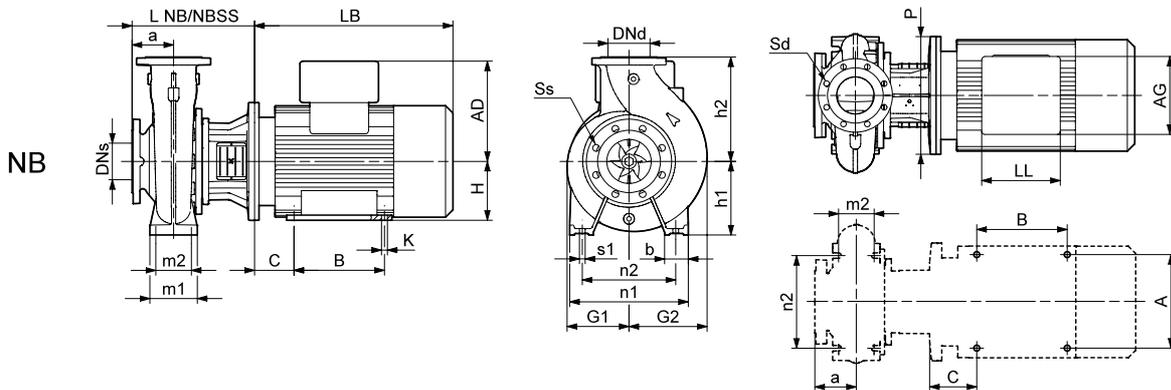
Note: For information about base frames, see page 270.

Performance curves

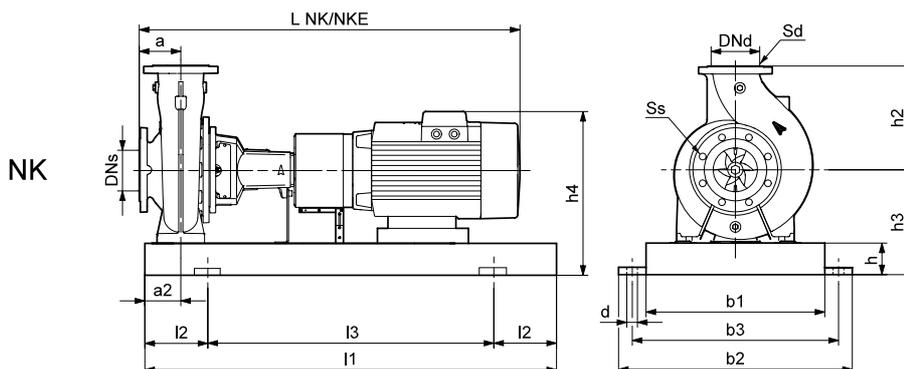
NB, NK 100-250
4-pole, 50 Hz
ISO 9906 Annex A



TM03 5146 4106



TM03 4182 1806



TM03 6005 4106

Technical data

NB, NK 100-250
4-pole

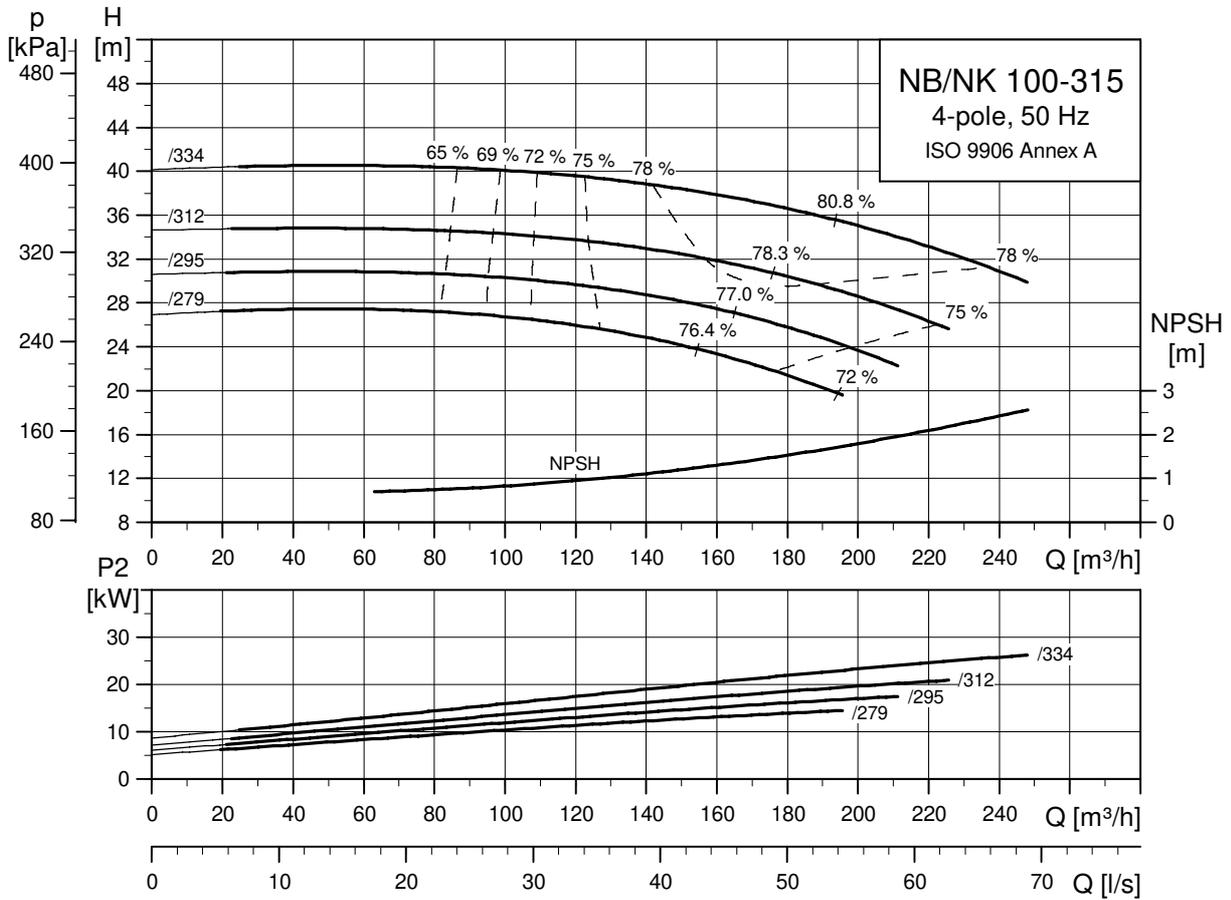
Pump type		100-250/215	100-250/245	100-250/266	100-250/270	
Motor type	Premium Motor	Siemens 132M	Siemens 160M	Siemens 160L	Siemens 180M	
	E-Motor	MMGE 132M ³⁾	MMGE 160M	MMGE 160L	MMGE 180M	
Common data NB/NK	P ₂	[kW]	7.5	11	15	18.5
	PN	[bar]	16	16	16	16
	DNs	[mm]	125	125	125	125
	DNd	[mm]	100	100	100	100
	a	[mm]	140	140	140	140
	h ₂	[mm]	280	280	280	280
	Ss		8x19	8x19	8x19	8x19
Sd		8x19	8x19	8x19	8x19	
Common data NK standard/ spacer coupling	L NK	[mm]	1105/1241	1202/1338	1242/1378	1326/1462
	L NKE	[mm]	1173/1309	1173/1309	1223/1359	1223/1359
	Weight NK	[kg]	292/289	316/311	342/337	377/369
	Weight NKE	[kg]	336/331	367/362	385/380	434/426
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-
Weight NKE SS	[kg]	-/-	-/-	-/-	-/-	
NK data	l ₁	[mm]	1400	1400	1400	1400
	l ₂	[mm]	230	230	230	230
	l ₃	[mm]	940	940	940	940
	b ₁	[mm]	480	480	480	480
	b ₂	[mm]	610	610	610	610
	b ₃	[mm]	560	560	560	560
	d	[mm]	28	28	28	28
	a ₂	[mm]	90	90	90	90
	h	[mm]	100	100	100	100
	h ₃	[mm]	325	325	325	325
	h ₄ ¹⁾	[mm]	492/684	522/684	522/702	583/724
Base frame no.		7	7	7	7	
NB data	Design		A	C ²⁾	C ²⁾	C ²⁾
	L NB	[mm]	383	413	413	413
	L NB SS	[mm]	-	-	-	-
	h ₁	[mm]	225	225	225	225
	G ₁	[mm]	188	188	188	188
	G ₂	[mm]	224	224	224	224
	m ₁	[mm]	160	160	160	160
	m ₂	[mm]	120	120	120	120
	n ₁	[mm]	400	400	400	400
	n ₂	[mm]	315	315	315	315
	b	[mm]	80	80	80	80
	s ₁	[mm]	M16	M16	M16	M16
	H	[mm]	132	160	160	180
	LB ¹⁾	[mm]	411/449	478/449	518/499	602/499
	AD ¹⁾	[mm]	167/333	197/359	197/377	258/399
	AG ¹⁾	[mm]	140/246	165/296	165/296	152/328
	LL ¹⁾	[mm]	140/410	165/410	165/410	132/456
	P	[mm]	300	350	350	350
	C	[mm]	89	108	108	121
	B	[mm]	178	210	254	241
A	[mm]	216	254	254	279	
K	[mm]	12	15	15	15	
Weight NB ¹⁾	[kg]	161/202	187/238	213/256	233/290	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	

- 1) Dimension of pump with premium range motor/built-in frequency converter.
- 2) Support blocks are needed because of the P, h₁ and H dimensions.
- 3) NBE 100-250/215 is fitted with an MMGE 132M motor with motor feet; NKE 100-250/215 is fitted with an MMGE 160M motor.

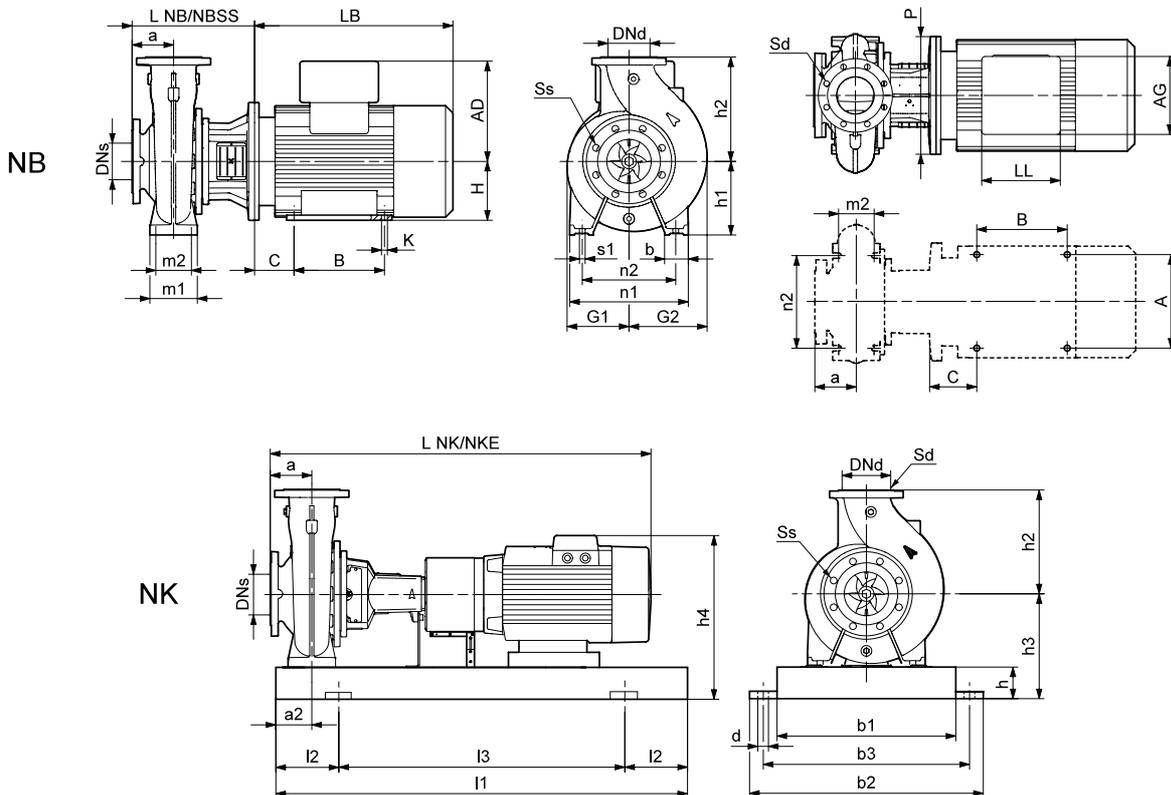
Note: For information about base frames, see page 270.

Performance curves

NB, NK 100-315
4-pole



TM03 5147 4106



TM03 4182 1806

TM03 6005 4106

Technical data

NB, NK 100-315
4-pole

Pump type		100-315/279	100-315/295	100-315/312	100-315/334	
Motor type	Premium Motor	Siemens 160L	Siemens 180M	Siemens 180L	Siemens 200L	
	E-Motor	MMGE 160L	MMGE 180M	MMGE 180L	-	
Common data NB/NK	P ₂	[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
	h ₂	[mm]	315	315	315	315
	Ss		8x19	8x19	8x19	8x19
	Sd		8x19	8x19	8x19	8x19
Common data NK standard/ spacer coupling	L NK	[mm]	1242/1378	1326/1462	1326/1462	1383/1519
	L NKE	[mm]	1223/1359	1223/1359	1294/1430	-/-
	Weight NK	[kg]	365/360	389/381	409/401	518/512
	Weight NKE	[kg]	408/403	446/438	480/472	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-
	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-
NK data	l ₁	[mm]	1400	1400	1400	1600
	l ₂	[mm]	230	230	230	270
	l ₃	[mm]	940	940	940	1060
	b ₁	[mm]	480	480	480	530
	b ₂	[mm]	610	610	610	660
	b ₃	[mm]	560	560	560	600
	d	[mm]	28	28	28	28
	a ₂	[mm]	90	90	90	90
	h	[mm]	100	100	100	100
	h ₃	[mm]	350	350	350	355
	h ₄ ¹⁾	[mm]	547/727	608/749	608/749	660/-
	Base frame no.		7	7	7	8
	NB data	Design		C ²⁾	C ²⁾	C ²⁾
L NB		[mm]	413	413	413	413
L NB SS		[mm]	-	-	-	-
h ₁		[mm]	250	250	250	250
G ₁		[mm]	208	208	208	208
G ₂		[mm]	264	264	264	264
m ₁		[mm]	160	160	160	160
m ₂		[mm]	120	120	120	120
n ₁		[mm]	400	400	400	400
n ₂		[mm]	315	315	315	315
b		[mm]	80	80	80	80
s ₁		[mm]	M16	M16	M16	M16
H		[mm]	160	180	180	200
LB ¹⁾		[mm]	518/499	602/499	602/570	659/-
AD ¹⁾		[mm]	197/377	258/399	258/399	305/-
AG ¹⁾		[mm]	165/296	152/328	152/328	260/-
LL ¹⁾		[mm]	165/410	132/456	132/456	192/-
P		[mm]	350	350	350	400
C		[mm]	108	121	121	133
B		[mm]	254	241	279	305
A		[mm]	254	279	279	318
K	[mm]	15	15	15	19	
Weight NB ¹⁾	[kg]	234/277	253/310	273/344	334/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	

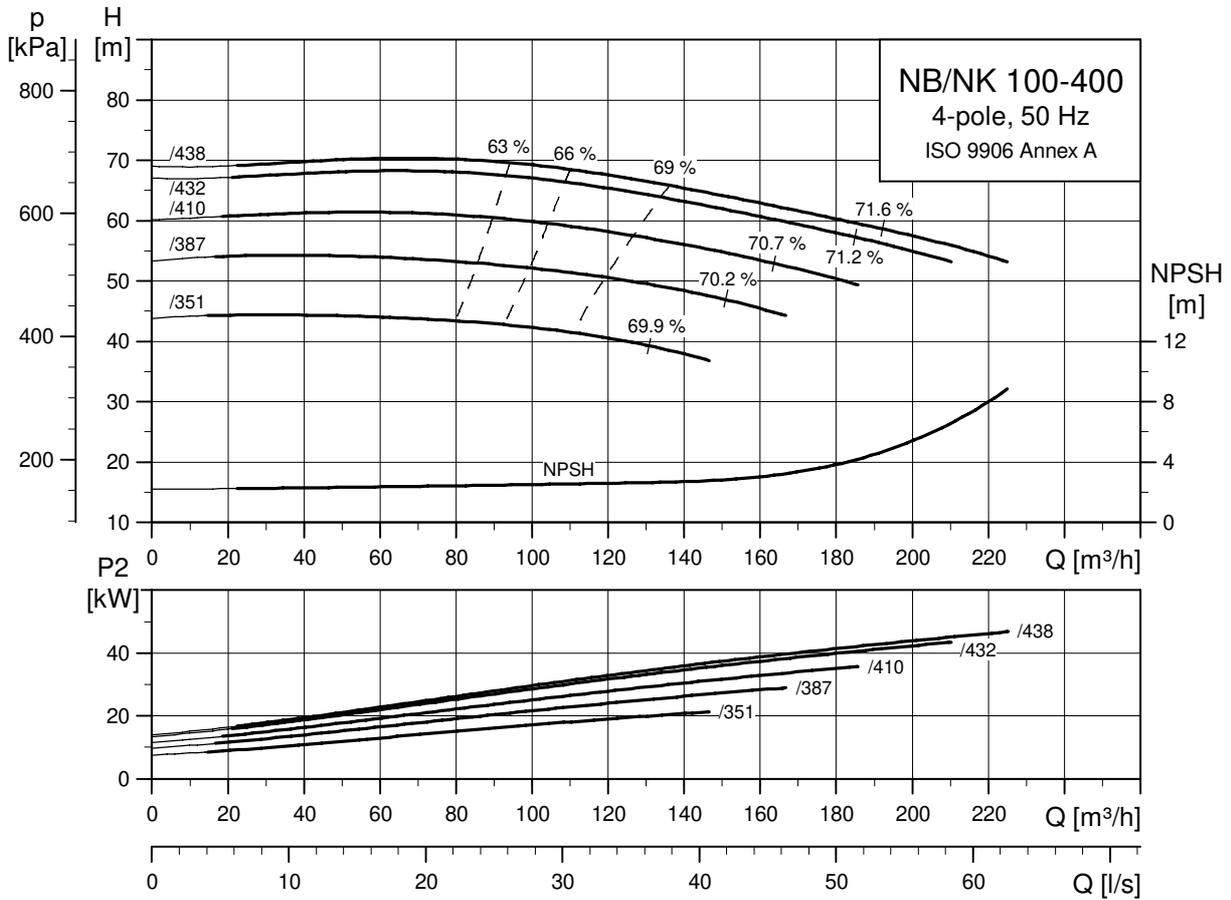
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

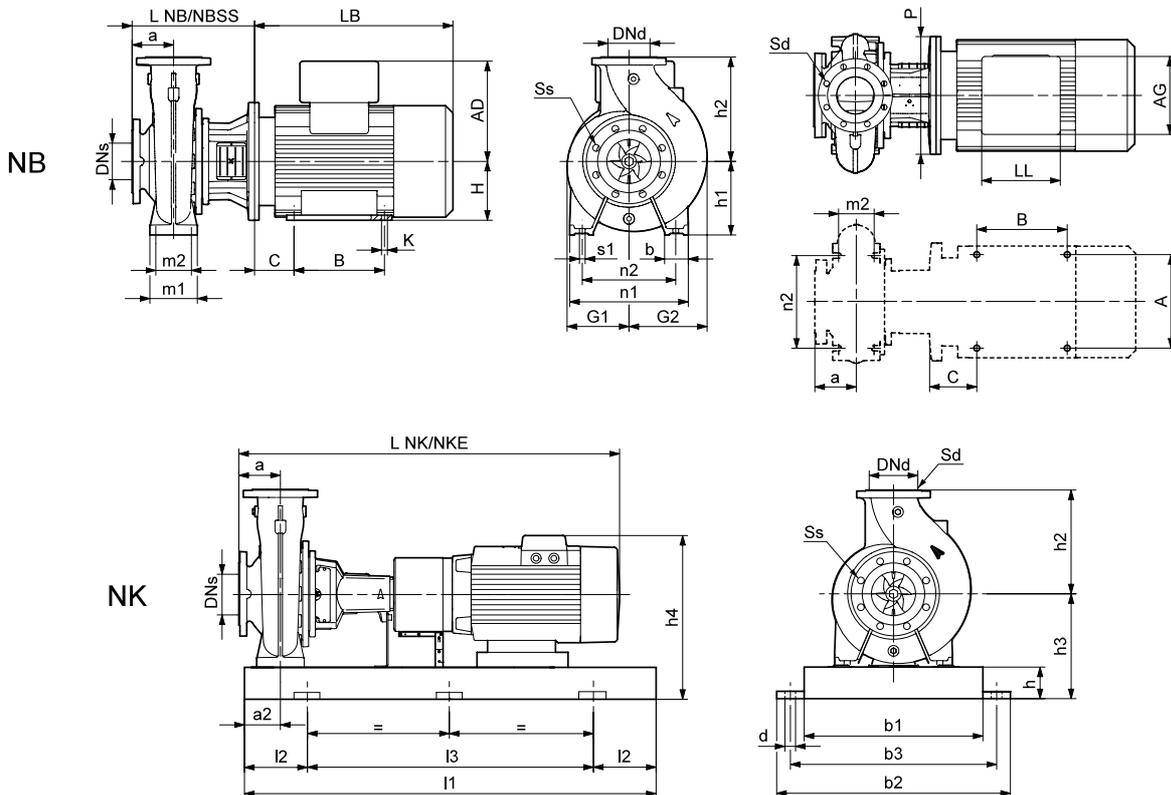
Note: For information about base frames, see page 270.

Performance curves

NB, NK 100-400
4-pole



TM03 5148 4106



TM03 4182 1806

TM03 4179 1806

Technical data

NB, NK 100-400
4-pole

Pump type		100-400/351	100-400/387	100-400/410	100-400/432	100-400/438	
Motor type	Premium Motor	Siemens 180L	Siemens 200L	Siemens 225S	Siemens 225M	Siemens 250M	
	E-Motor	MMGE 180L	-	-	-	-	
Common data NB/NK	P ₂	[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		8x19	8x19	8x19	8x19	8x19
	Sd		8x19	8x19	8x19	8x19	
Common data NK standard/ spacer coupling	L NK	[mm]	1386/1522	1443/1579	1463/1599	1523/1659	1631/1767
	L NKE	[mm]	1354/1490	-/-	-/-	-/-	-/-
	Weight NK	[kg]	571/563	625/620	741/736	781/776	905/904
	Weight NKE	[kg]	642/634	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-	
NK data	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 ¹⁾	[mm]	641/782	685/-	705/-	705/-	772/-
	Base frame no.		9	9	9	9	
NB data	Design		C ²⁾				
	L NB	[mm]	411	411	441	441	441
	L NB SS	[mm]	-	-	-	-	-
	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 ¹⁾	[mm]	602/570	659/-	649/-	709/-	817/-
	AD ¹⁾	[mm]	258/399	305/-	325/-	325/-	392/-
	AG ¹⁾	[mm]	152/328	260/-	260/-	260/-	300/-
	LL ¹⁾	[mm]	132/456	192/-	192/-	192/-	236/-
	P	[mm]	350	400	450	450	550
	C	[mm]	121	133	149	149	168
	B	[mm]	279	305	286	286	349
A	[mm]	279	318	356	356	406	
K	[mm]	15	19	19	19	24	
	Weight NB ¹⁾	[kg]	359/430	418/-	519/-	559/-	702/-
	Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-

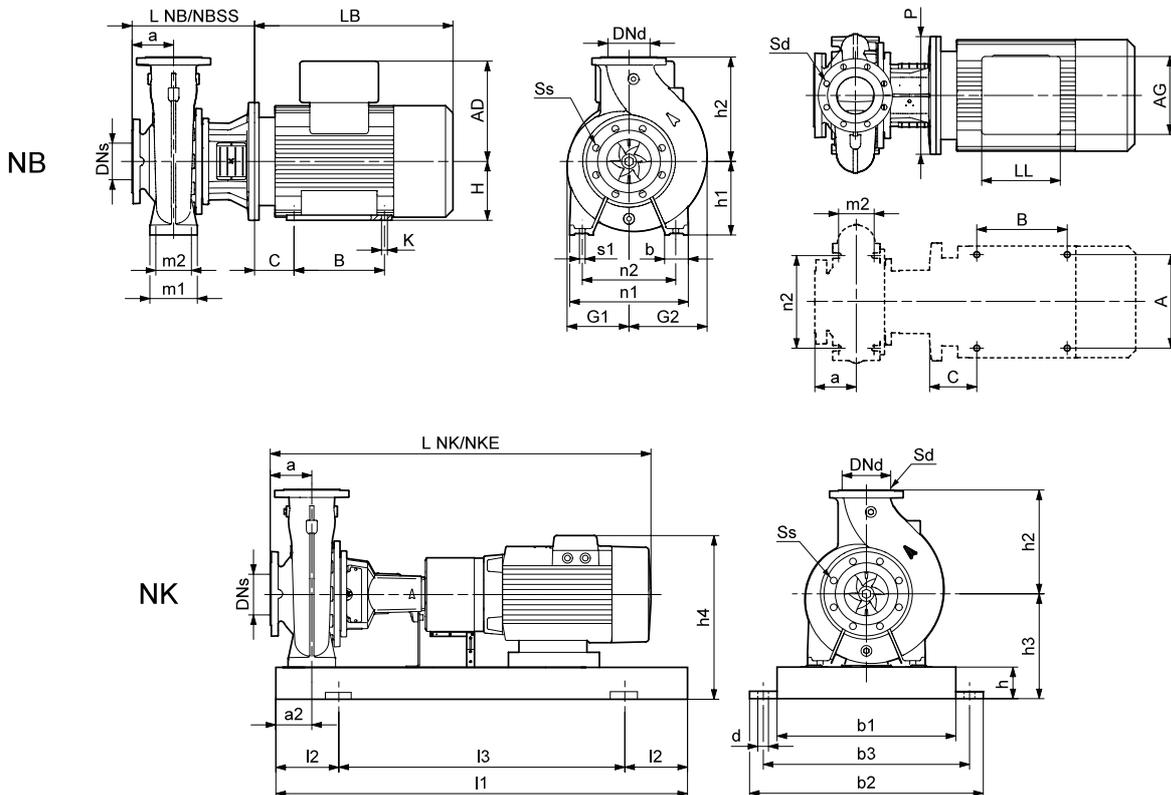
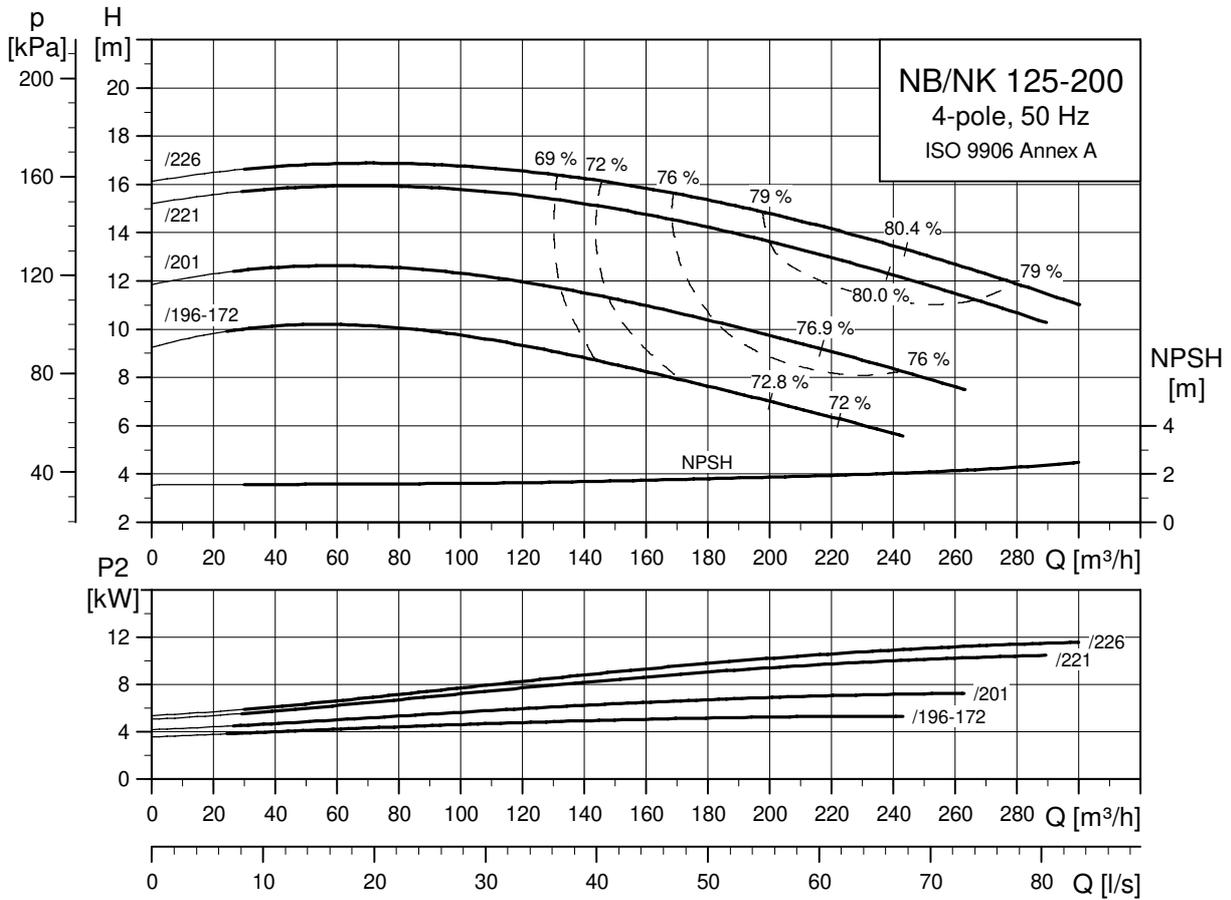
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h1 and H dimensions.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 125-200
4-pole, 50 Hz
ISO 9906 Annex A



TM03 5149 4106

TM03 4182 1806

TM03 6005 4106

Technical data

NB, NK 125-200
4-pole

Pump type		125-200/196-172	125-200/201	125-200/221	125-200/226	
Motor type	Premium Motor	Siemens 132S	Siemens 132M	Siemens 160M	Siemens 160L	
	E-Motor	MGE 132SC	MMGE 132M ³⁾	MMGE 160M	MMGE 160L	
Common data NB/NK	P ₂	[kW]	5.5	7.5	11	15
	PN	[bar]	16	16	16	16
	DN _s	[mm]	150	150	150	150
	DN _d	[mm]	125	125	125	125
	a	[mm]	140	140	140	140
	h ₂	[mm]	315	315	315	315
	S _s		8x23	8x23	8x23	8x23
S _d		8x19	8x19	8x19	8x19	
Common data NK standard/ spacer coupling	L NK	[mm]	1067/1203	1105/1241	1202/1338	1242/1378
	L NKE	[mm]	1085/1221	1173/1309	1173/1309	1223/1359
	Weight NK	[kg]	293/290	308/305	333/328	359/354
	Weight NKE	[kg]	303/300	353/348	384/379	402/397
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-
	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-
NK data	l ₁	[mm]	1400	1400	1400	1400
	l ₂	[mm]	230	230	230	230
	l ₃	[mm]	940	940	940	940
	b ₁	[mm]	480	480	480	480
	b ₂	[mm]	610	610	610	610
	b ₃	[mm]	560	560	560	560
	d	[mm]	28	28	28	28
	a ₂	[mm]	90	90	90	90
	h	[mm]	100	100	100	100
	h ₃	[mm]	350	350	350	350
	h ₄ ¹⁾	[mm]	517/538	517/709	547/709	547/727
	Base frame no.		7	7	7	7
	NB data	Design		A	A	C ²⁾
L NB		[mm]	383	383	413	413
L NB SS		[mm]	-	-	-	-
h ₁		[mm]	250	250	250	250
G ₁		[mm]	183	183	183	183
G ₂		[mm]	234	234	234	234
m ₁		[mm]	160	160	160	160
m ₂		[mm]	120	120	120	120
n ₁		[mm]	400	400	400	400
n ₂		[mm]	315	315	315	315
b		[mm]	80	80	80	80
s ₁		[mm]	M16	M16	M16	M16
H		[mm]	-	132	160	160
LB ¹⁾		[mm]	373/391	411/449	478/449	518/499
AD ¹⁾		[mm]	167/188	167/333	197/359	197/377
AG ¹⁾		[mm]	140/290	140/246	165/296	165/296
LL ¹⁾		[mm]	140/300	140/410	165/410	165/410
P		[mm]	300	300	350	350
C		[mm]	-	89	108	108
B		[mm]	-	178	210	254
A		[mm]	-	216	254	254
K		[mm]	-	12	15	15
Weight NB ¹⁾		[kg]	161/172	176/217	202/253	228/271
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	

1) Dimension of pump with premium range motor/built-in frequency converter.

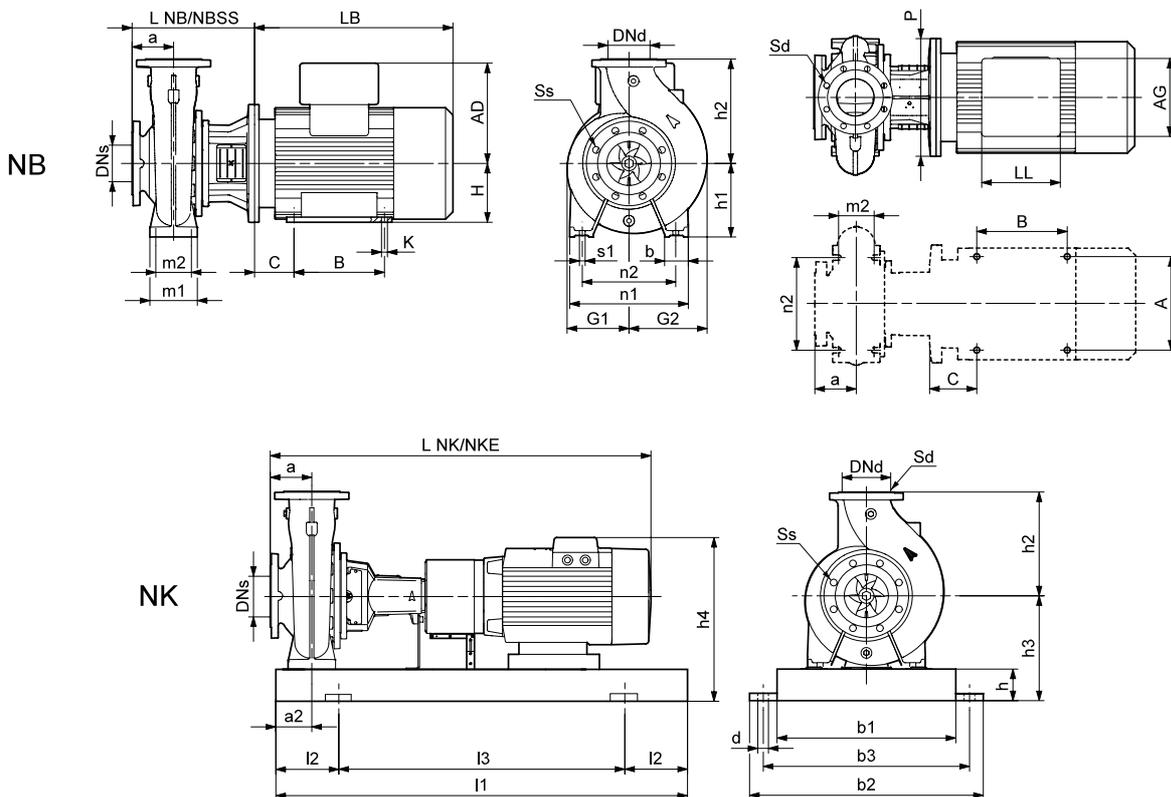
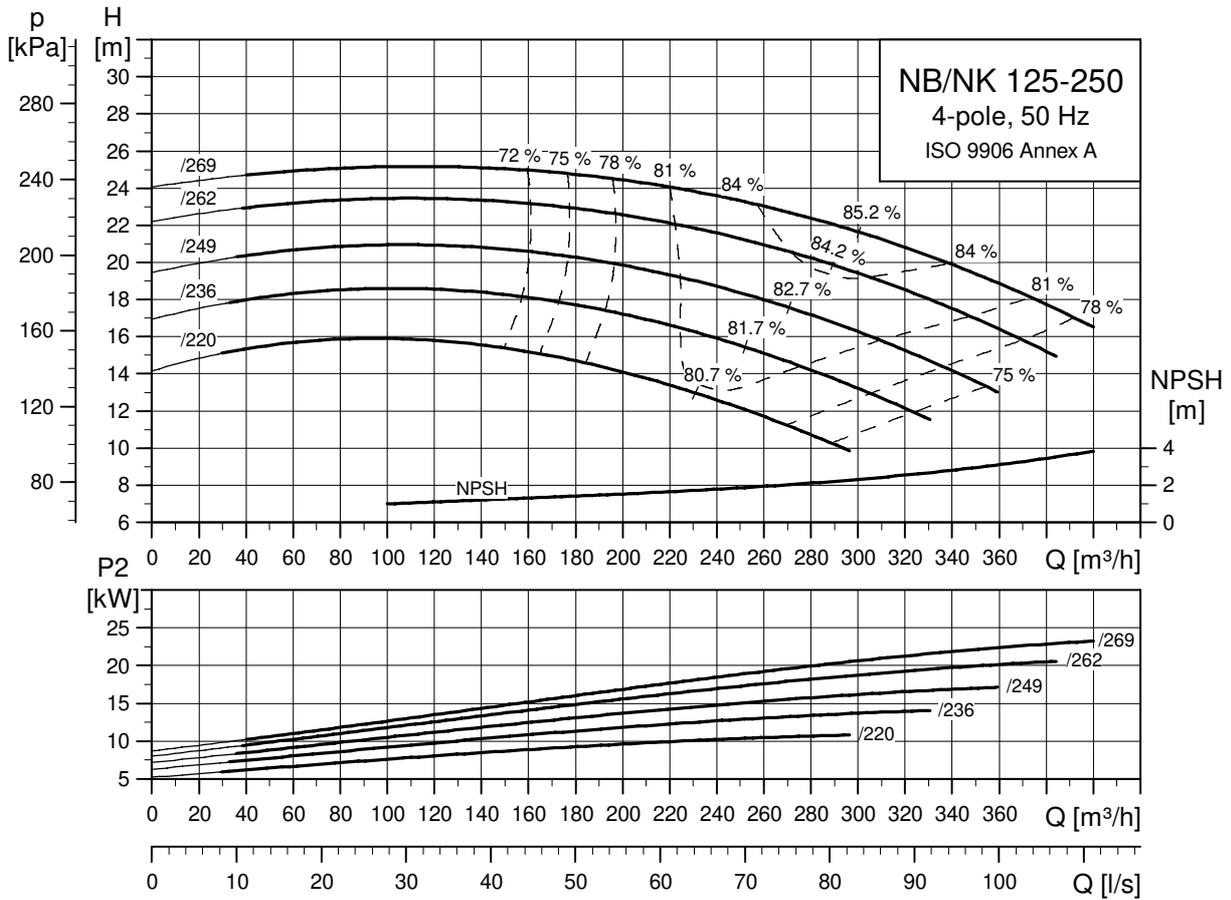
2) Support blocks are needed because of the P, h₁ and H dimensions.

3) NBE 125-200/201 is fitted with an MMGE 132M motor with motor feet; NKE 125-200/201 is fitted with an MMGE 160M motor.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 125-250
4-pole, 50 Hz
ISO 9906 Annex A



TM03 5150 4106

TM03 4182 1806

TM03 6005 4106

Technical data

NB, NK 125-250
4-pole

Pump type		125-250/220	125-250/236	125-250/249	125-250/262	125-250/269	
Motor type	Premium Motor	Siemens 160M	Siemens 160L	Siemens 180M	Siemens 180L	Siemens 200L	
	E-Motor	MMGE 160M	MMGE 160L	MMGE 180M	MMGE 180L	-	
Common data NB/NK	P ₂	[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
	h ₂	[mm]	355	355	355	355	355
	Ss		8x23	8x23	8x23	8x23	8x23
	Sd		8x19	8x19	8x19	8x19	
Common data NK standard/ spacer coupling	L NK	[mm]	1202/1338	1242/1378	1326/1462	1326/1462	1383/1519
	L NKE	[mm]	1173/1309	1223/1359	1223/1359	1294/1430	-/-
	Weight NK	[kg]	342/337	368/363	392/384	412/404	521/515
	Weight NKE	[kg]	393/388	411/406	449/441	483/475	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-	-/-
NK data	l ₁	[mm]	1400	1400	1400	1400	1600
	l ₂	[mm]	230	230	230	230	270
	l ₃	[mm]	940	940	940	940	1060
	b ₁	[mm]	480	480	480	480	530
	b ₂	[mm]	610	610	610	610	660
	b ₃	[mm]	560	560	560	560	600
	d	[mm]	28	28	28	28	28
	a ₂	[mm]	90	90	90	90	90
	h	[mm]	100	100	100	100	100
	h ₃	[mm]	350	350	350	350	355
	h ₄ ¹⁾	[mm]	547/709	547/727	608/749	608/749	660/-
	Base frame no.		7	7	7	7	8
	NB data	Design		C ²⁾	C ²⁾	C ²⁾	C ²⁾
L NB		[mm]	413	413	413	413	413
L NB SS		[mm]	-	-	-	-	-
h ₁		[mm]	250	250	250	250	250
G ₁		[mm]	208	208	208	208	208
G ₂		[mm]	264	264	264	264	264
m ₁		[mm]	160	160	160	160	160
m ₂		[mm]	120	120	120	120	120
n ₁		[mm]	400	400	400	400	400
n ₂		[mm]	315	315	315	315	315
b		[mm]	80	80	80	80	80
s ₁		[mm]	M16	M16	M16	M16	M16
H		[mm]	160	160	180	180	200
LB ¹⁾		[mm]	478/449	518/499	602/499	602/570	659/-
AD ¹⁾		[mm]	197/359	197/377	258/399	258/399	305/-
AG ¹⁾		[mm]	165/296	165/296	152/328	152/328	260/-
LL ¹⁾		[mm]	165/410	165/410	132/456	132/456	192/-
P		[mm]	350	350	350	350	400
C		[mm]	108	108	121	121	133
B		[mm]	210	254	241	279	305
A		[mm]	254	254	279	279	318
K	[mm]	15	15	15	15	19	
Weight NB ¹⁾	[kg]	211/262	237/280	257/314	277/348	338/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-	

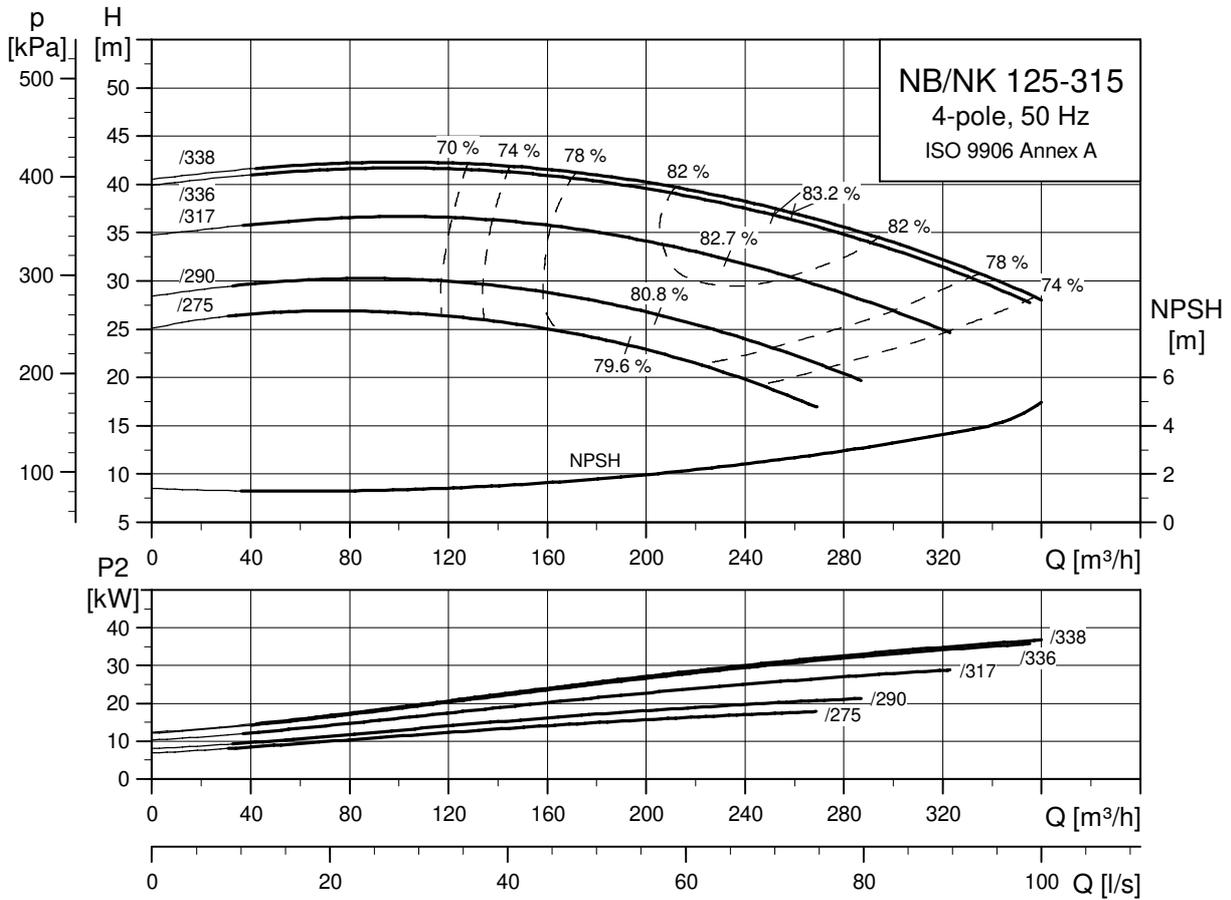
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

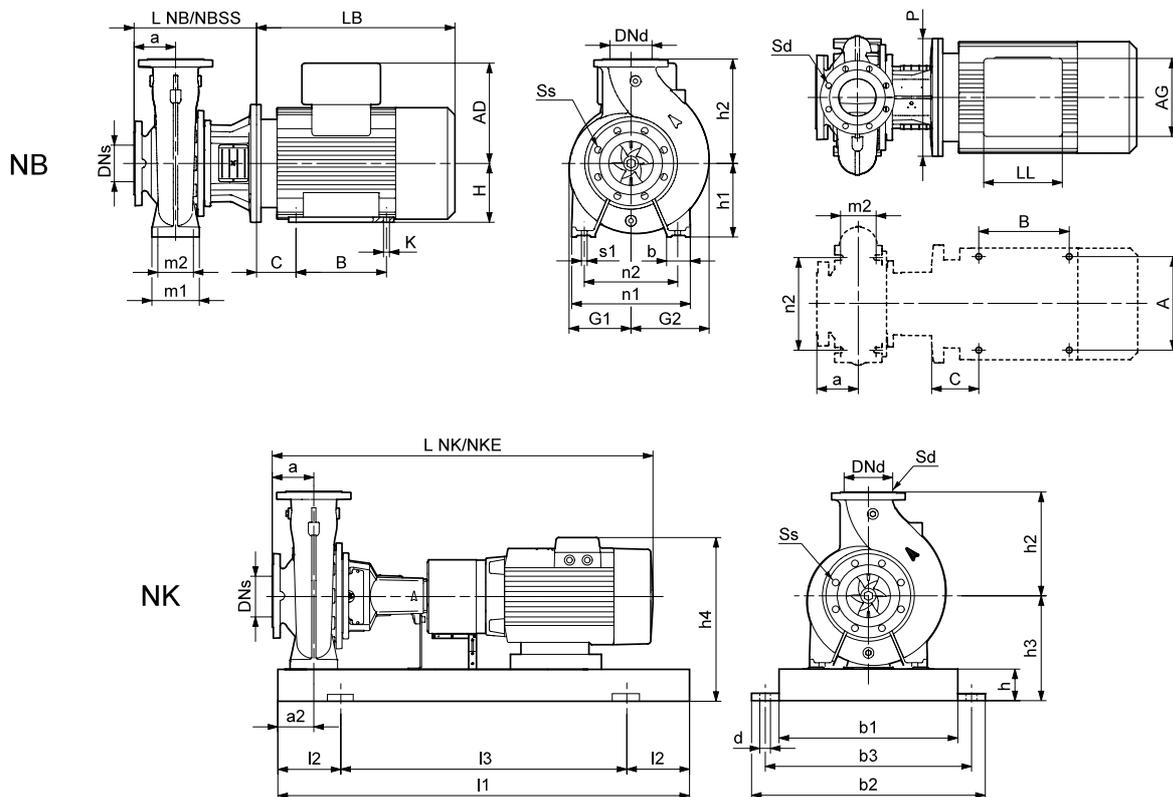
Note: For information about base frames, see page 270.

Performance curves

NB, NK 125-315
4-pole, 50 Hz
ISO 9906 Annex A



TM03 5151 4106



TM03 4182 1806

TM03 6005 4106

Technical data

NB, NK 125-315
4-pole

Pump type		125-315/275	125-315/290	125-315/317	125-315/336	125-315/338	
Motor type	Premium Motor	Siemens 180M	Siemens 180L	Siemens 200L	Siemens 225S	Siemens 225M	
	E-Motor	MMGE 180M	MMGE 180L	-	-	-	
Common data NB/NK	P ₂	[kW]	18.5	22	30	37	45
	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
	h ₂	[mm]	355	355	355	355	355
	Ss		8x23	8x23	8x23	8x23	8x23
	Sd		8x19	8x19	8x19	8x19	
Common data NK standard/ spacer coupling	L NK	[mm]	1386/1522	1386/1522	1443/1579	1463/1599	1523/1659
	L NKE	[mm]	1283/1419	1354/1490	-/-	-/-	-/-
	Weight NK	[kg]	511/503	531/523	585/580	701/696	741/736
	Weight NKE	[kg]	568/560	602/594	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-	-/-
NK data	l ₁	[mm]	1800	1800	1800	1800	1800
	l ₂	[mm]	300	300	300	300	300
	l ₃	[mm]	1200	1200	1200	1200	1200
	b ₁	[mm]	600	600	600	600	600
	b ₂	[mm]	730	730	730	730	730
	b ₃	[mm]	670	670	670	670	670
	d	[mm]	28	28	28	28	28
	a ₂	[mm]	110	110	110	110	110
	h	[mm]	100	100	100	100	100
	h ₃	[mm]	383	383	380	380	380
	h ₄ ¹⁾	[mm]	641/782	641/782	685/-	705/-	705/-
	Base frame no.		9	9	9	9	
NB data	Design		C ²⁾				
	L NB	[mm]	411	411	411	441	441
	L NB SS	[mm]	-	-	-	-	-
	h ₁	[mm]	280	280	280	280	280
	G ₁	[mm]	231	231	231	231	231
	G ₂	[mm]	268	268	268	268	268
	m ₁	[mm]	200	200	200	200	200
	m ₂	[mm]	150	150	150	150	150
	n ₁	[mm]	500	500	500	500	500
	n ₂	[mm]	400	400	400	400	400
	b	[mm]	100	100	100	100	100
	s ₁	[mm]	M20	M20	M20	M20	M20
	H	[mm]	180	180	200	225	225
	LB ¹⁾	[mm]	602/499	602/570	659/-	649/-	709/-
	AD ¹⁾	[mm]	258/399	258/399	305/-	325/-	325/-
	AG ¹⁾	[mm]	152/328	152/328	260/-	260/-	260/-
	LL ¹⁾	[mm]	132/456	132/456	192/-	192/-	192/-
	P	[mm]	350	350	400	450	450
	C	[mm]	121	121	133	149	149
	B	[mm]	241	279	305	286	286
A	[mm]	279	279	318	356	356	
K	[mm]	15	15	19	19	19	
	Weight NB ¹⁾	[kg]	299/356	319/390	378/-	479/-	519/-
	Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-

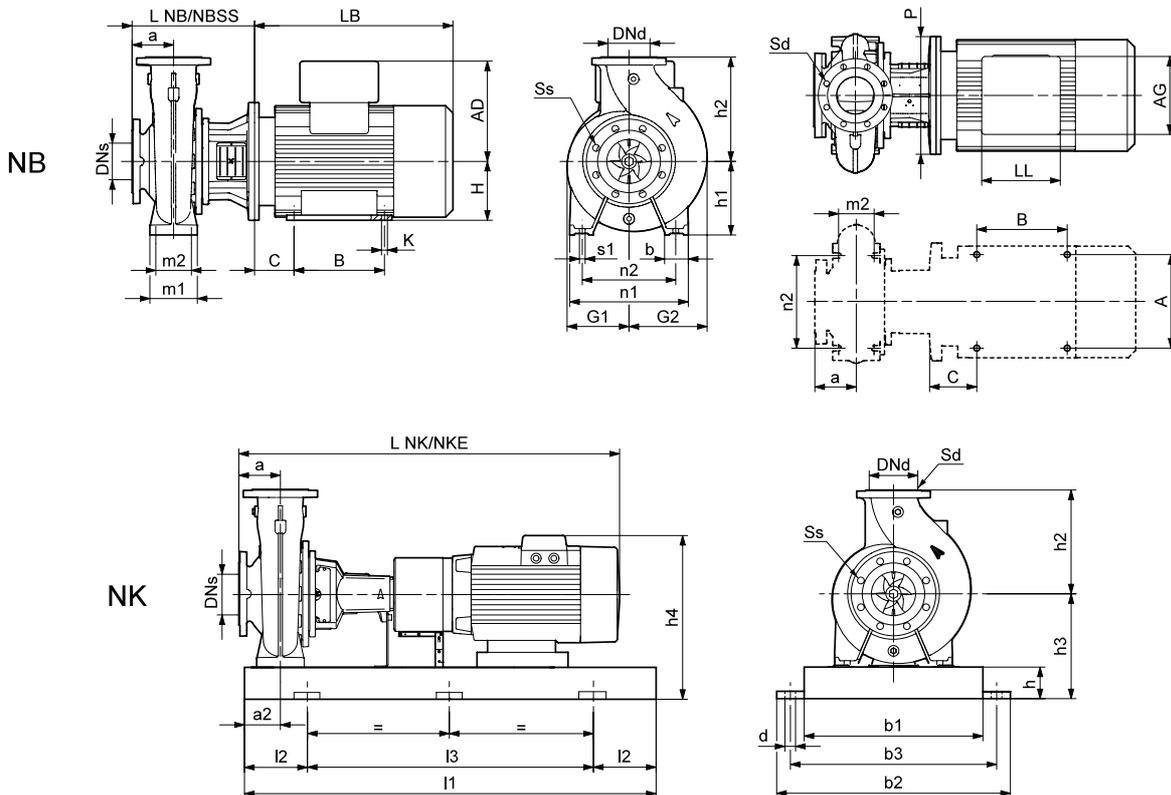
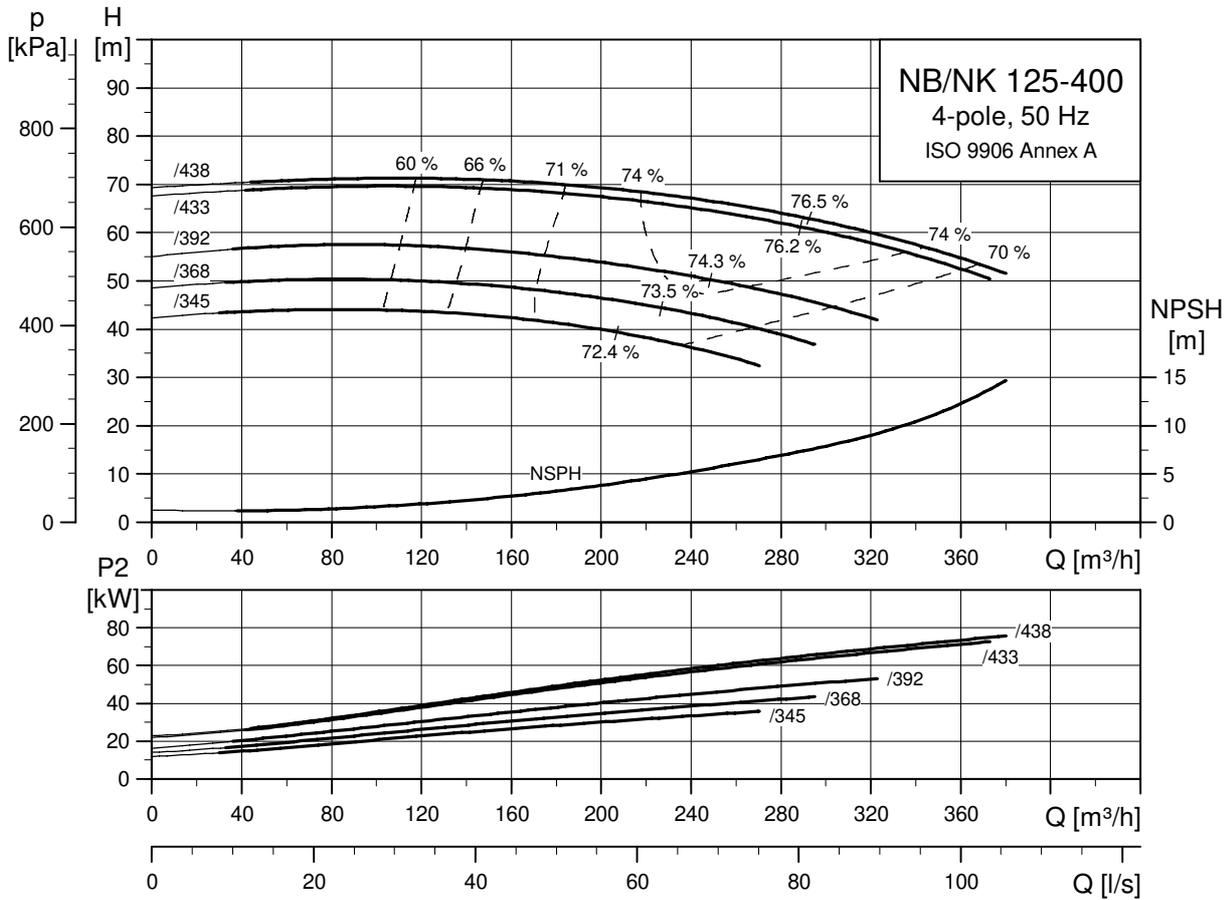
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 125-400
4-pole, 50 Hz
ISO 9906 Annex A



TM03 5152 4106

TM03 4182 1806

TM03 4179 1806

Technical data

NB, NK 125-400
4-pole

Pump type		125-400/345	125-400/368	125-400/392	125-400/433	125-400/438	
Motor type	Premium Motor	Siemens 225S	Siemens 225M	Siemens 250M	Siemens 280S	Siemens 280M	
	E-Motor	-	-	-	-	-	
Common data NB/NK	P ₂	[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		8x23	8x23	8x23	8x23	8x23
	Sd		8x19	8x19	8x19	8x19	
Common data NK standard/ spacer coupling	L NK	[mm]	1463/1599	1523/1659	1631/1767	1634/1770	1744/1880
	L NKE	[mm]	-/-	-/-	-/-	-/-	-/-
	Weight NK	[kg]	729/724	769/764	913/912	1198/1192	1302/1295
	Weight NKE	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-	
NK data	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 ¹⁾	[mm]	740/-	740/-	807/-	877/-	877/-
	Base frame no.		9	9	10	10	
NB data	Design		C ²⁾				
	L NB	[mm]	441	441	441	441	441
	L NB SS	[mm]	-	-	-	-	-
	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 ¹⁾	[mm]	649/-	709/-	817/-	820/-	930/-
	AD ¹⁾	[mm]	325/-	325/-	392/-	432/-	432/-
	AG ¹⁾	[mm]	260/-	260/-	300/-	300/-	300/-
	LL ¹⁾	[mm]	192/-	192/-	236/-	236/-	236/-
	P	[mm]	450	450	550	550	550
	C	[mm]	149	149	168	190	190
	B	[mm]	286	286	349	368	419
	A	[mm]	356	356	406	457	457
K	[mm]	19	19	24	24	24	
Weight NB ¹⁾	[kg]	531/-	571/-	713/-	828/-	928/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-	

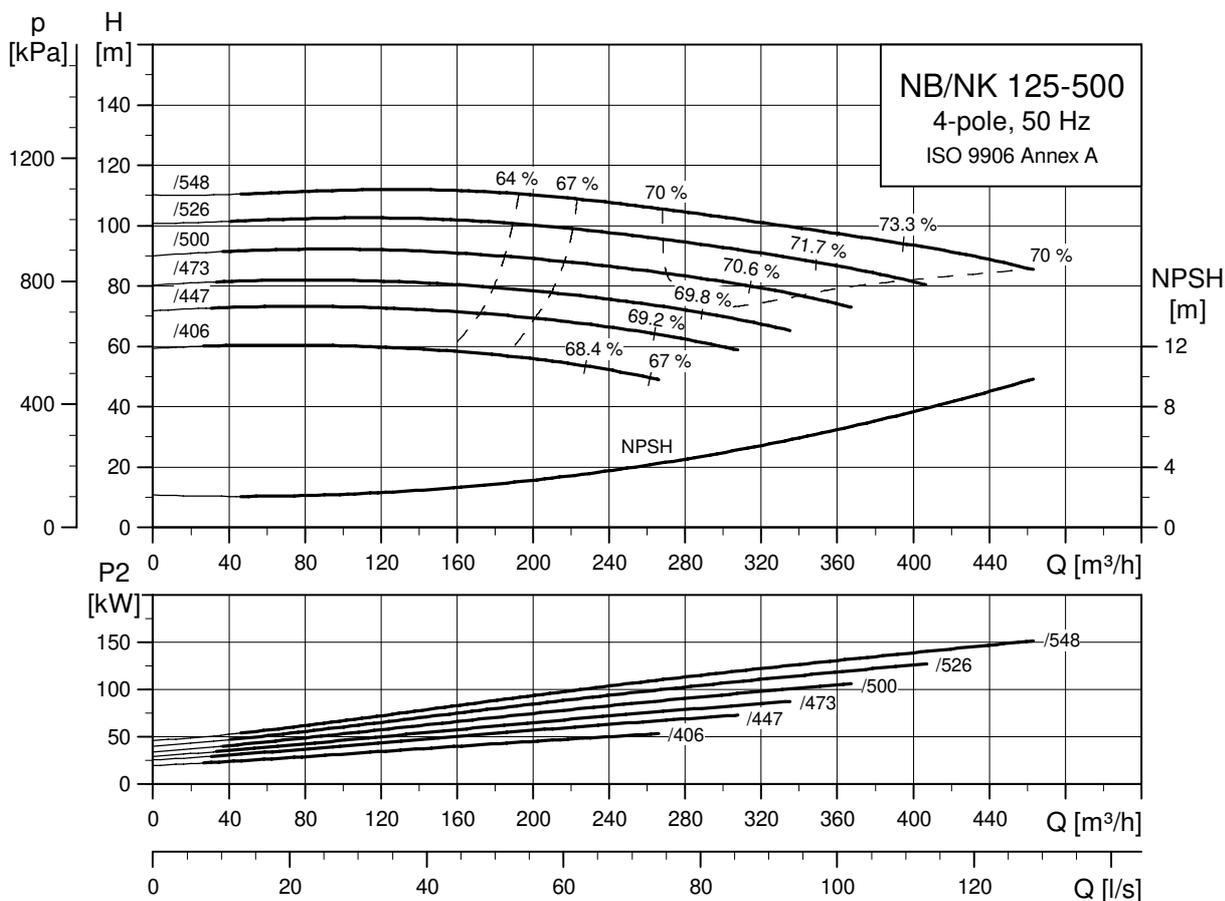
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h1 and H dimensions.

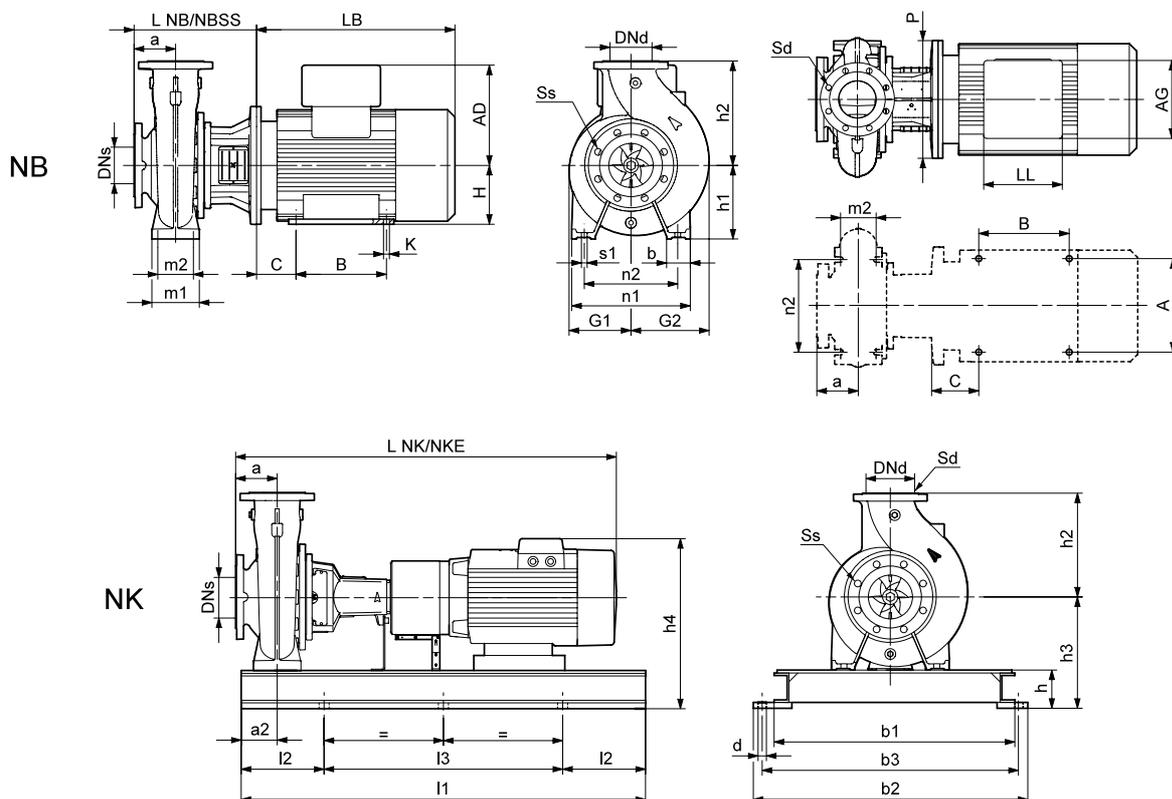
Note: For information about base frames, see page 270.

Performance curves

NB, NK 125-500
4-pole, 50 Hz
ISO 9906 Annex A



TM03 5153 4106



TM03 4182 1806

TM03 4051 1806

Technical data

NB, NK 125-500
4-pole

Pump type		125-500/406	125-500/447	125-500/473	125-500/500	125-500/526	125-500/548	
Motor type	Premium Motor	Siemens 250M	Siemens 280S	Siemens 280M	Siemens 315S	Siemens 315MA	Siemens 315MB	
	E-Motor	-	-	-	-	-	-	
Common data NB/NK	P ₂	[kW]	55	75	90	110	132	160
	PN	[bar]	16	16	16	16	16	16
	DNs	[mm]	150	150	150	150	150	150
	DNd	[mm]	125	125	125	125	125	125
	a	[mm]	180	180	180	180	180	180
	h2	[mm]	500	500	500	500	500	500
	Ss		8x23	8x23	8x23	8x23	8x23	8x23
	Sd		8x19	8x19	8x19	8x19	8x19	8x19
Common data NK standard/ spacer coupling	L NK	[mm]	1811/1987	1814/1990	1924/2100	1956/2132	2116/2292	2116/2292
	L NKE	[mm]	-/-	-/-	-/-	-/-	-/-	-/-
	Weight NK	[kg]	1366/1363	1477/1473	1581/1577	1715/1711	1874/1870	2010/2006
	Weight NKE	[kg]	-/-	-/-	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-	-/-	-/-
	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-	-/-	-/-
NK data	l1	[mm]	2000	2000	2000	2000	2000	2000
	l2	[mm]	330	330	330	330	330	330
	l3	[mm]	1340	1340	1340	1340	1340	1340
	b1	[mm]	750	750	750	750	750	750
	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 ¹⁾	[mm]	922/-	962/-	962/-	1025/-	1025/-	1025/-
Base frame no.		10	10	10	10	10	10	
NB data	Design		C ²⁾					
	L NB	[mm]	524	524	524	554	554	554
	L NB SS	[mm]	-	-	-	-	-	-
	h1	[mm]	400	400	400	400	400	400
	G1	[mm]	344	344	344	344	344	344
	G2	[mm]	377	377	377	377	377	377
	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]	250	280	280	315	315	315
	LB ¹⁾	[mm]	817/-	820/-	930/-	932/-	1092/-	1092/-
	AD ¹⁾	[mm]	392/-	432/-	432/-	495/-	495/-	495/-
	AG ¹⁾	[mm]	300/-	300/-	300/-	379/-	379/-	379/-
	LL ¹⁾	[mm]	236/-	236/-	236/-	307/-	307/-	307/-
	P	[mm]	550	550	550	660	660	660
	C	[mm]	168	190	190	216	216	216
	B	[mm]	349	368	419	406	457	508
A	[mm]	406	457	457	508	508	508	
K	[mm]	24	24	24	28	28	28	
Weight NB ¹⁾	[kg]	927/-	1042/-	1142/-	1319/-	1474/-	1614/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-	-/-	

1) Dimension of pump with premium range motor/built-in frequency converter.

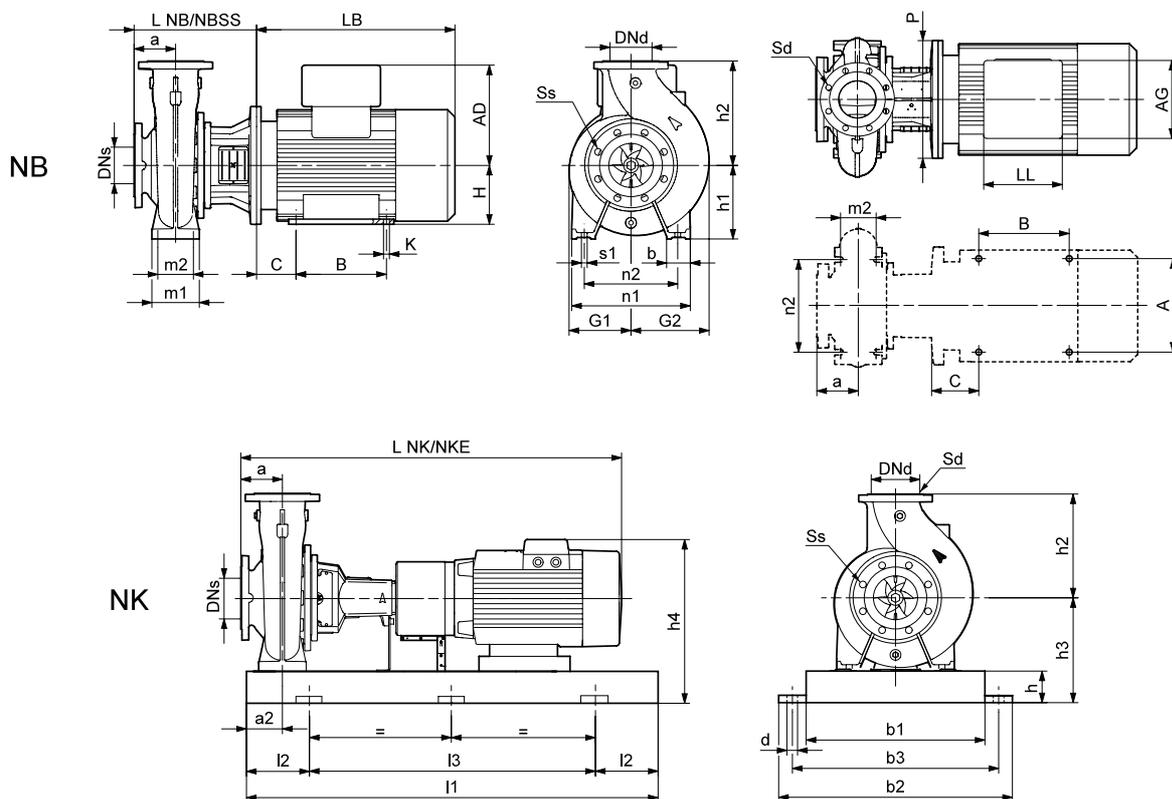
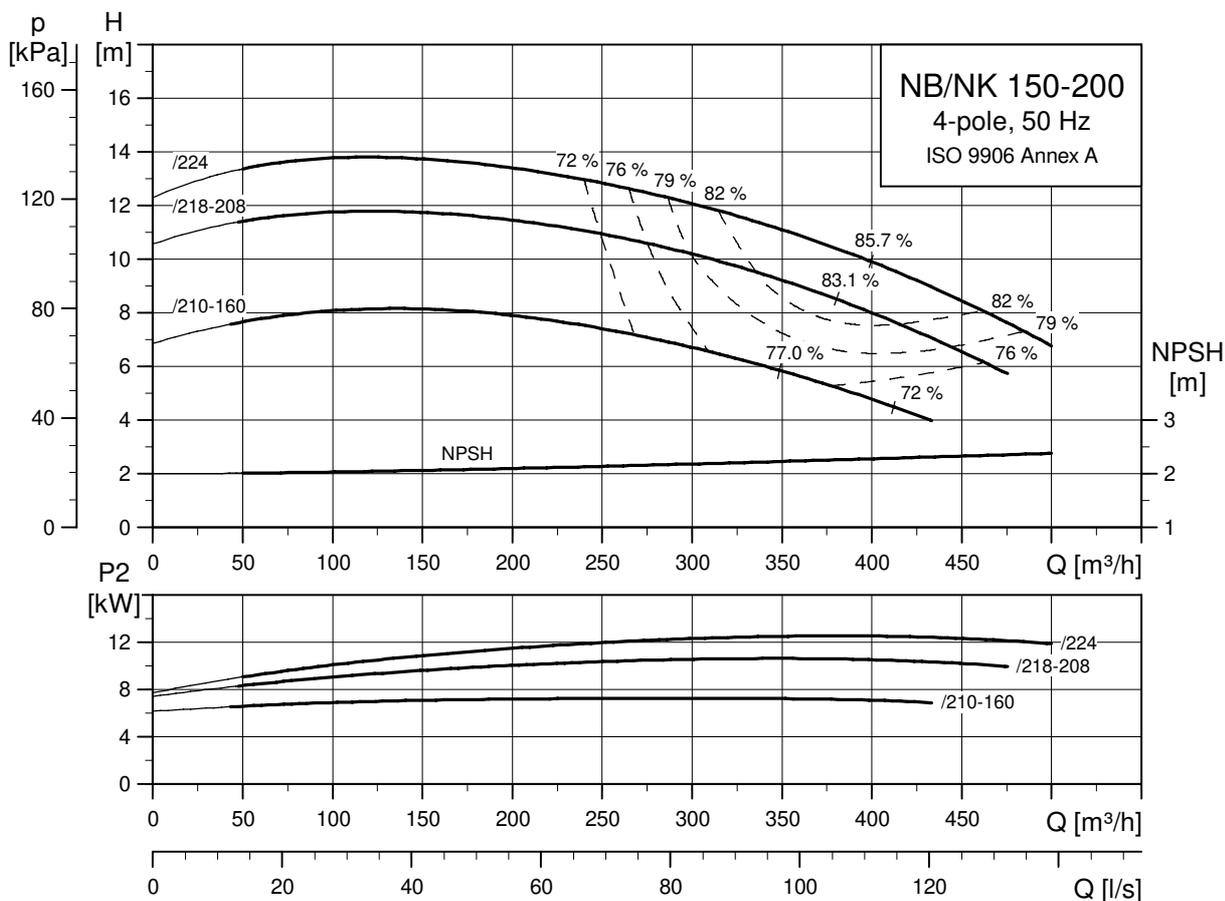
2) Support blocks are needed because of the P, h1 and H dimensions.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 150-200
4-pole, 50 Hz

NB/NK 150-200
4-pole, 50 Hz
ISO 9906 Annex A



TM03 5154 4106

TM03 4182 1806

TM03 4179 1806

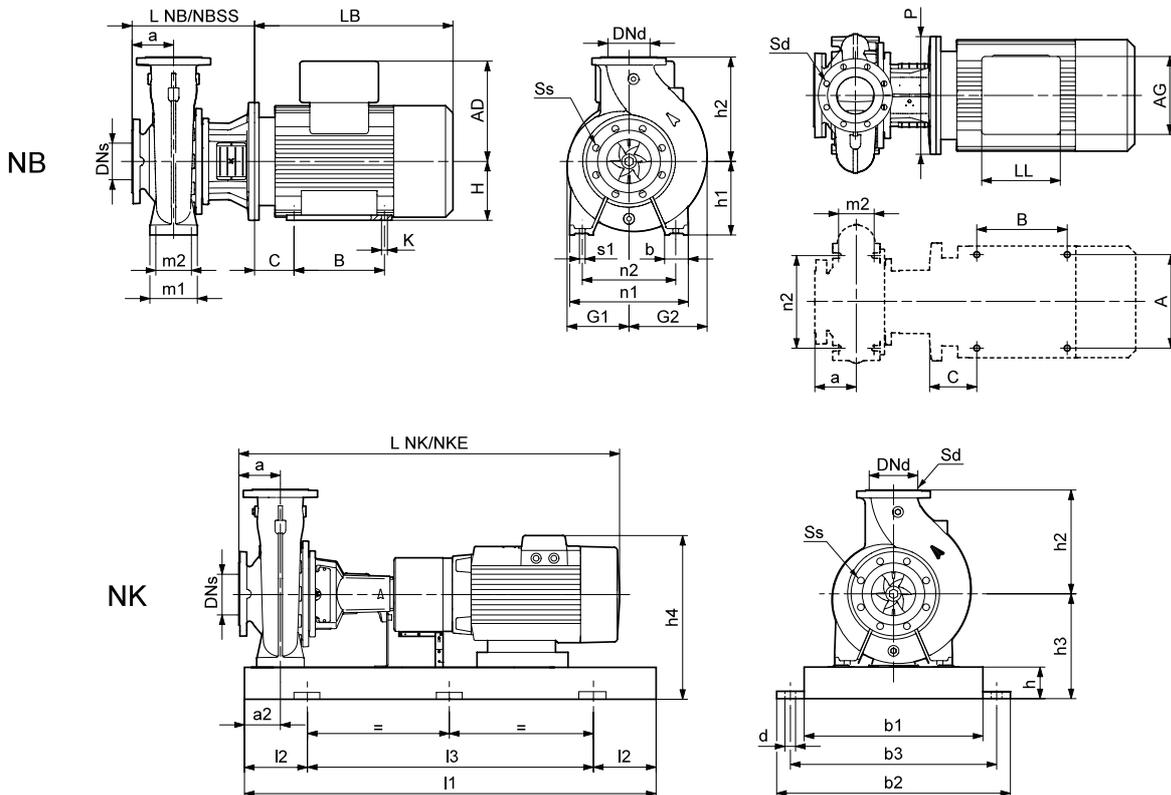
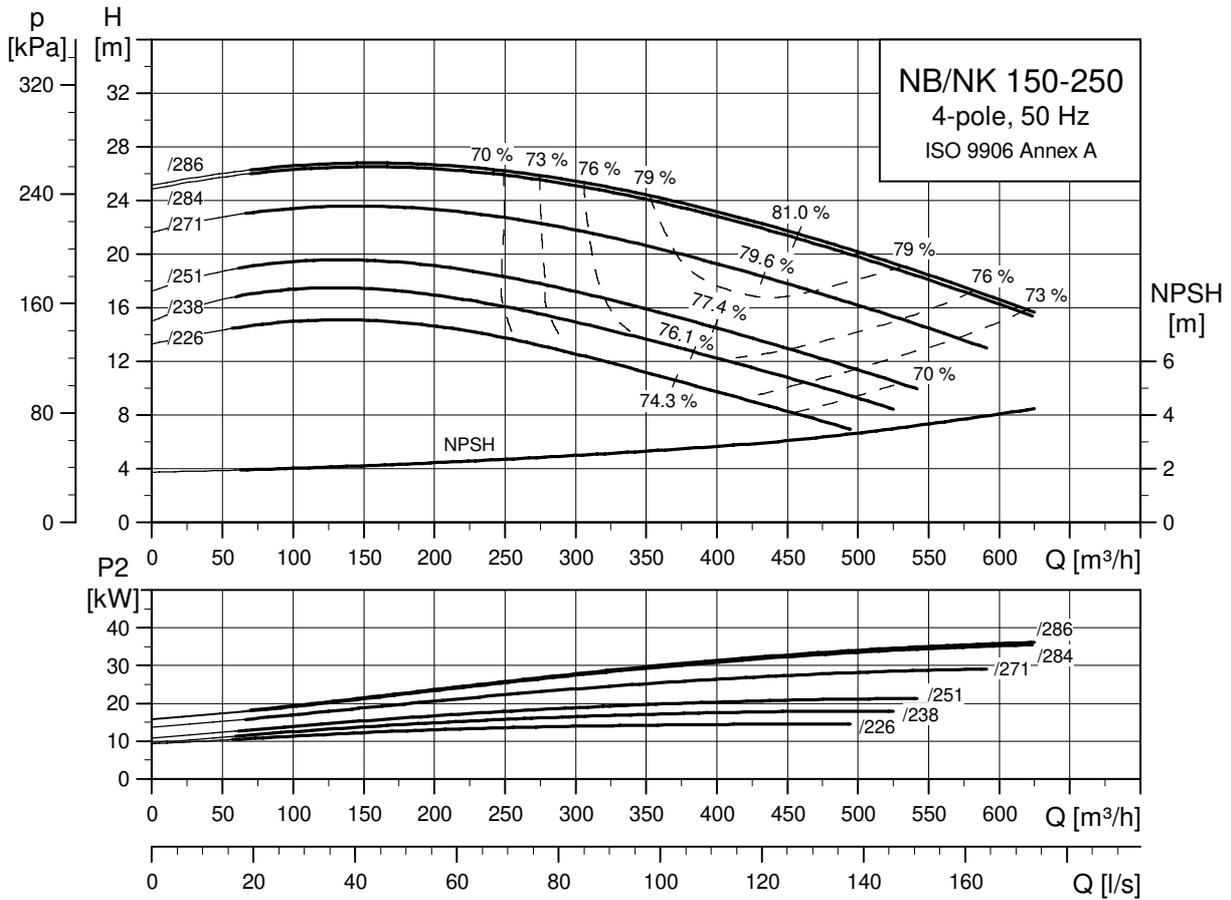
Pump type		150-200/210-160	150-200/218-208	150-200/224	
Motor type	Premium Motor	Siemens 132M	Siemens 160M	Siemens 160L	
	E-Motor	MMGE 132M ³⁾	MMGE 160M	MMGE 160L	
Common data NB/NK	P ₂	[kW]	7.5	11	15
	PN	[bar]	10	10	10
	DNs	[mm]	200	200	200
	DNd	[mm]	150	150	150
	a	[mm]	160	160	160
	h ₂	[mm]	400	400	400
	Ss		8x23	8x23	8x23
	Sd		8x23	8x23	
Common data NK standard/ spacer coupling	L NK	[mm]	1125/1261	1222/1358	1262/1398
	L NKE	[mm]	1193/1329	1193/1329	1243/1379
	Weight NK	[kg]	434/431	450/445	476/471
	Weight NKE	[kg]	470/465	501/496	519/514
	Weight NK SS	[kg]	-/-	-/-	-/-
	Weight NKE SS	[kg]	-/-	-/-	-/-
NK data	l ₁	[mm]	1800	1800	1800
	l ₂	[mm]	300	300	300
	l ₃	[mm]	1200	1200	1200
	b ₁	[mm]	600	600	600
	b ₂	[mm]	730	730	730
	b ₃	[mm]	670	670	670
	d	[mm]	28	28	28
	a ₂	[mm]	110	110	110
	h	[mm]	100	100	100
	h ₃	[mm]	385 ⁴⁾	380	380
	h ₄ ¹⁾	[mm]	552/744	577/739	577/757
	Base frame no.		9	9	9
	Design		A	C ²⁾	C ²⁾
L NB	[mm]	403	433	433	
L NB SS	[mm]	-	-	-	
h ₁	[mm]	280	280	280	
G ₁	[mm]	230	230	230	
G ₂	[mm]	319	319	319	
m ₁	[mm]	200	200	200	
m ₂	[mm]	150	150	150	
n ₁	[mm]	550	550	550	
n ₂	[mm]	450	450	450	
b	[mm]	100	100	100	
s ₁	[mm]	M20	M20	M20	
H	[mm]	132	160	160	
LB ¹⁾	[mm]	411/449	478/449	518/499	
AD ¹⁾	[mm]	167/333	197/359	197/377	
AG ¹⁾	[mm]	140/246	165/296	165/296	
LL ¹⁾	[mm]	140/410	165/410	165/410	
P	[mm]	300	350	350	
C	[mm]	89	108	108	
B	[mm]	178	210	254	
A	[mm]	216	254	254	
K	[mm]	12	15	15	
Weight NB ¹⁾	[kg]	230/271	257/308	283/326	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	

- 1) Dimension of pump with premium range motor/built-in frequency converter.
- 2) Support blocks are needed because of the P, h₁ and H dimensions.
- 3) NBE 150-200/210-160 is fitted with an MMGE 132M motor with motor feet; NKE 150-200/210-160 is fitted with an MMGE 160M motor.
- 4) The h₃ dimension of NKE 150-200/210-160 is 380 mm.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 150-250
4-pole, 50 Hz
ISO 9906 Annex A



TM03 5155 4106

TM03 4182 1806

TM03 4179 1806

Technical data

NB, NK 150-250
4-pole

Pump type		150-250/226	150-250/238	150-250/251	150-250/271	150-250/284	150-250/286	
Motor type	Premium Motor	Siemens 160L	Siemens 180M	Siemens 180L	Siemens 200L	Siemens 225S	Siemens 225M	
	E-Motor	MMGE 160L	MMGE 180M	MMGE 180L	-	-	-	
Common data NB/NK	P ₂	[kW]	15	18.5	22	30	37	45
	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
	h ₂	[mm]	375	375	375	375	375	375
	Ss		8x23	8x23	8x23	8x23	8x23	8x23
Sd		8x23	8x23	8x23	8x23	8x23	8x23	
Common data NK standard/ spacer coupling	L NK	[mm]	1322/1458	1406/1542	1406/1542	1463/1599	1483/1619	1543/1679
	L NKE	[mm]	1303/1439	1303/1439	1374/1510	-/-	-/-	-/-
	Weight NK	[kg]	485/480	509/501	529/521	584/578	699/695	739/735
	Weight NKE	[kg]	528/523	566/558	600/592	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-	-/-	-/-
	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-	-/-	-/-
NK data	l ₁	[mm]	1800	1800	1800	1800	1800	1800
	l ₂	[mm]	300	300	300	300	300	300
	l ₃	[mm]	1200	1200	1200	1200	1200	1200
	b ₁	[mm]	600	600	600	600	600	600
	b ₂	[mm]	730	730	730	730	730	730
	b ₃	[mm]	670	670	670	670	670	670
	d	[mm]	28	28	28	28	28	28
	a ₂	[mm]	110	110	110	110	110	110
	h	[mm]	100	100	100	100	100	100
	h ₃	[mm]	380	383	383	380	380	380
	h ₄ ¹⁾	[mm]	577/757	641/782	641/782	685/-	705/-	705/-
Base frame no.		9	9	9	9	9	9	
NB data	Design		C ²⁾					
	L NB	[mm]	431	431	431	431	461	461
	L NB SS	[mm]	-	-	-	-	-	-
	h ₁	[mm]	280	280	280	280	280	280
	G ₁	[mm]	223	223	223	223	223	223
	G ₂	[mm]	287	287	287	287	287	287
	m ₁	[mm]	200	200	200	200	200	200
	m ₂	[mm]	150	150	150	150	150	150
	n ₁	[mm]	500	500	500	500	500	500
	n ₂	[mm]	400	400	400	400	400	400
	b	[mm]	100	100	100	100	100	100
	s ₁	[mm]	M20	M20	M20	M20	M20	M20
	H	[mm]	160	180	180	200	225	225
	LB ¹⁾	[mm]	518/499	602/499	602/570	659/-	649/-	709/-
	AD ¹⁾	[mm]	197/377	258/399	258/399	305/-	325/-	325/-
	AG ¹⁾	[mm]	165/296	152/328	152/328	260/-	260/-	260/-
	LL ¹⁾	[mm]	165/410	132/456	132/456	192/-	192/-	192/-
	P	[mm]	350	350	350	400	450	450
	C	[mm]	108	121	121	133	149	149
	B	[mm]	254	241	279	305	286	286
A	[mm]	254	279	279	318	356	356	
K	[mm]	15	15	15	19	19	19	
Weight NB ¹⁾	[kg]	279/322	297/354	317/388	376/-	478/-	518/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-	-/-	

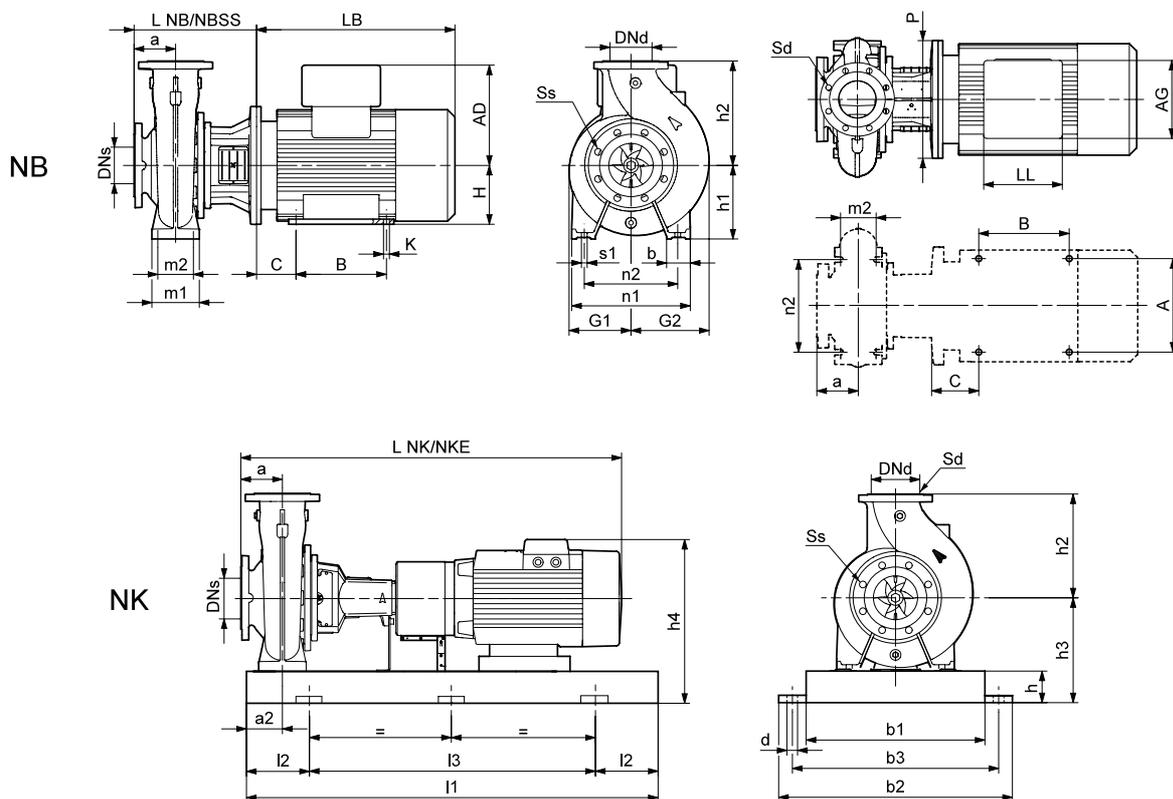
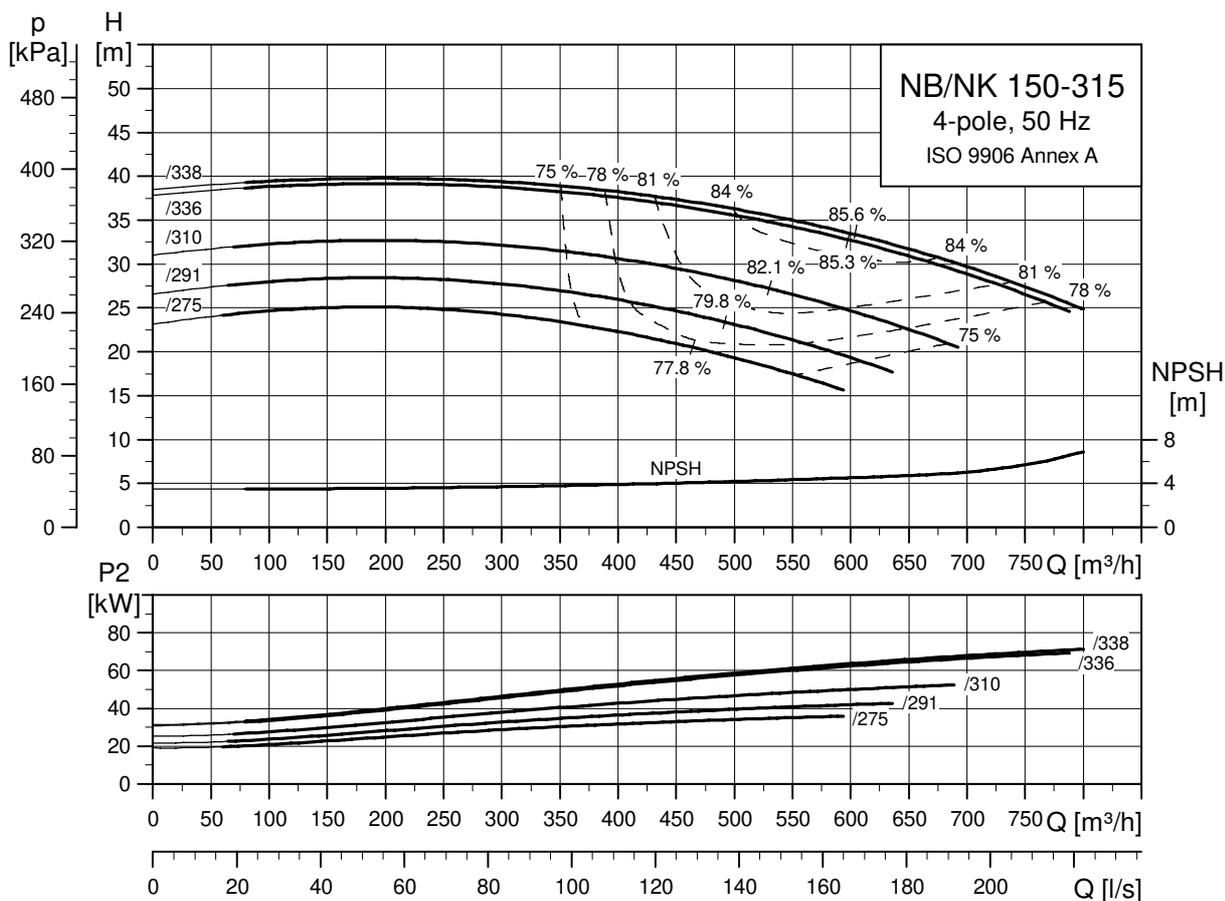
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 150-315
4-pole



TM03 5156 4106

TM03 4182 1806

TM03 4179 1806

Technical data

NB, NK 150-315
4-pole

Pump type		150-315/275	150-315/291	150-315/310	150-315/336	150-315/338	
Motor type	Premium Motor	Siemens 225S	Siemens 225M	Siemens 250M	Siemens 280S	Siemens 280M	
	E-Motor	-	-	-	-	-	
Common data NB/NK	P ₂	[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]	450	450	450	450	450
	Ss		8x23	8x23	8x23	8x23	8x23
	Sd		8x23	8x23	8x23	8x23	
Common data NK standard/ spacer coupling	L NK	[mm]	1483/1619	1543/1679	1651/1787	1654/1790	1764/1900
	L NKE	[mm]	-/-	-/-	-/-	-/-	-/-
	Weight NK	[kg]	753/748	793/788	917/916	1170/1164	1271/1265
	Weight NKE	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-	
NK data	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 ¹⁾	[mm]	705/-	705/-	772/-	847/-	847/-
	Base frame no.		9	9	9	10	10
NB data	Design		C ²⁾	C ²⁾	C ²⁾	C	C
	L NB	[mm]	461	461	461	461	461
	L NB SS	[mm]	-	-	-	-	-
	h1	[mm]	315	315	315	315	315
	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 ¹⁾	[mm]	649/-	709/-	817/-	820/-	930/-
	AD ¹⁾	[mm]	325/-	325/-	392/-	432/-	432/-
	AG ¹⁾	[mm]	260/-	260/-	300/-	300/-	300/-
	LL ¹⁾	[mm]	192/-	192/-	236/-	236/-	236/-
	P	[mm]	450	450	550	550	550
	C	[mm]	149	149	168	190	190
	B	[mm]	286	286	349	368	419
A	[mm]	356	356	406	457	457	
K	[mm]	19	19	24	24	24	
	Weight NB ¹⁾	[kg]	531/-	571/-	714/-	829/-	929/-
	Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-

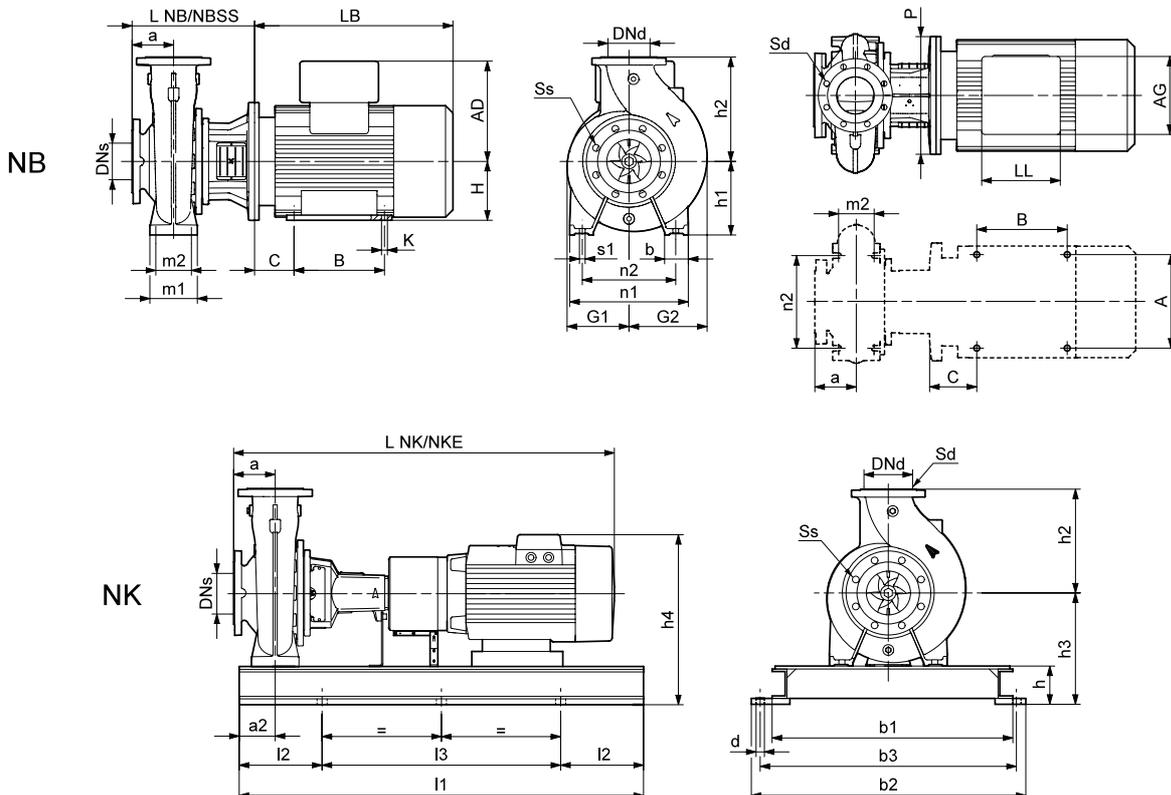
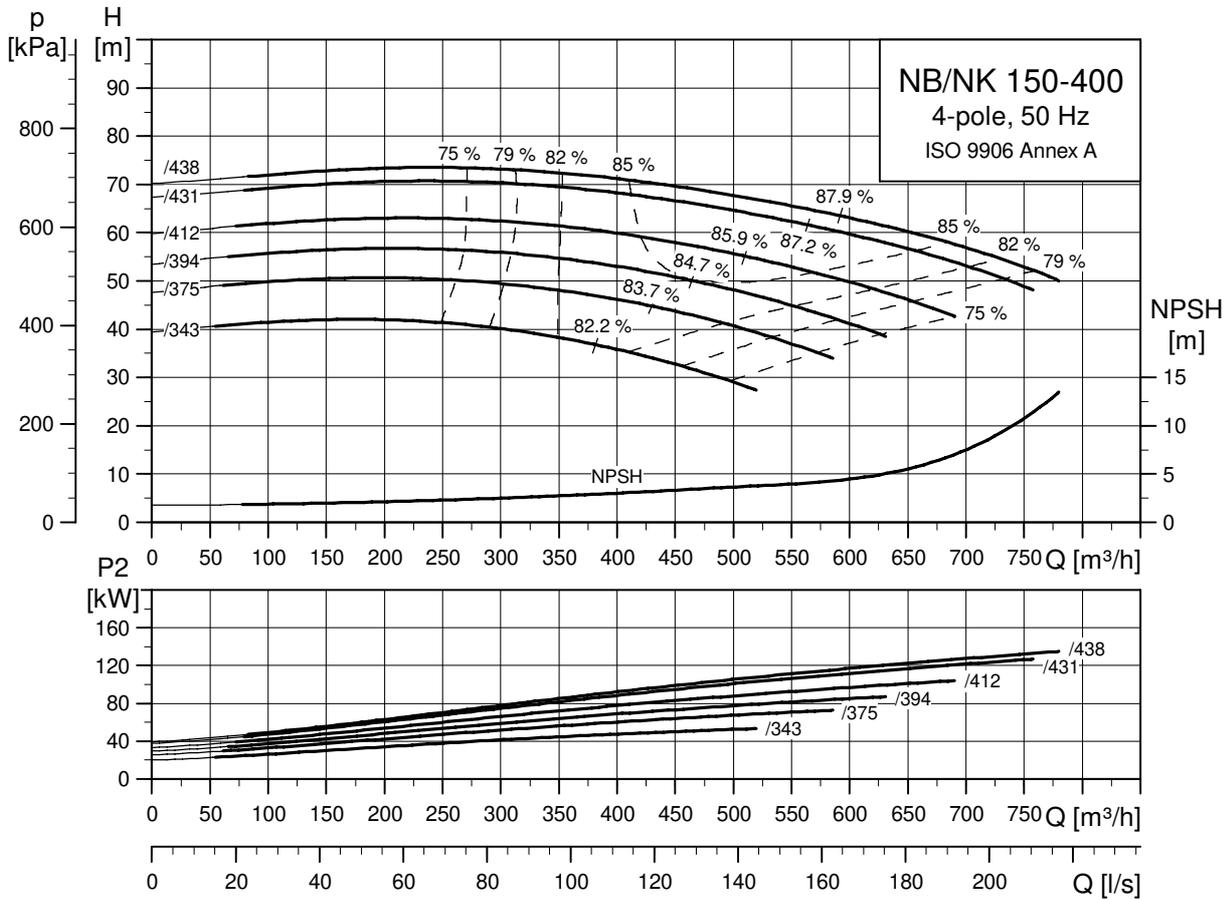
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h1 and H dimensions.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 150-400
4-pole, 50 Hz
ISO 9906 Annex A



TM03 5157 4106

TM03 4182 1806

TM03 4051 1806

Technical data

NB, NK 150-400
4-pole

Pump type		150-400/343	150-400/375	150-400/394	150-400/412	150-400/431 ³⁾	150-400/438 ³⁾	
Motor type	Premium Motor	Siemens 250M	Siemens 280S	Siemens 280M	Siemens 315S	Siemens 315MA	Siemens 315MB	
	E-Motor	-	-	-	-	-	-	
Common data NB/NK	P ₂	[kW]	55	75	90	110	132	160
	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
	h ₂	[mm]	450	450	450	450	450	450
	Ss		8x23	8x23	8x23	8x23	8x23	8x23
	Sd		8x23	8x23	8x23	8x23	8x23	8x23
Common data NK standard/ spacer coupling	L NK	[mm]	1651/1787	1654/1790	1764/1900	1796/1932	2096/2272	2096/2272
	L NKE	[mm]	-/-	-/-	-/-	-/-	-/-	-/-
	Weight NK	[kg]	942/941	1227/1221	1330/1324	1437/1439	1681/1685	1820/1824
	Weight NKE	[kg]	-/-	-/-	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-	-/-	-/-
	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-	-/-	-/-
NK data	l ₁	[mm]	1800	2000	2000	2000	2000	2000
	l ₂	[mm]	300	330	330	330	330	330
	l ₃	[mm]	1200	1340	1340	1340	1340	1340
	b ₁	[mm]	600	750	750	750	750	750
	b ₂	[mm]	730	890	890	890	890	890
	b ₃	[mm]	670	830	830	830	830	830
	d	[mm]	28	28	28	28	28	28
	a ₂	[mm]	110	110	110	110	110	110
	h	[mm]	100	130	130	130	130	130
	h ₃	[mm]	415	445	445	450	450	450
	h ₄ ¹⁾	[mm]	807/-	877/-	877/-	945/-	945/-	945/-
	Base frame no.		9	10	10	10	10	10
	NB data	Design		C ²⁾	C ²⁾	C ²⁾	C ²⁾	C ²⁾
		L NB	[mm]	474	474	474	504	504
L NB SS		[mm]	-	-	-	-	-	-
h ₁		[mm]	315	315	315	315	315	315
G ₁		[mm]	291	291	291	291	291	291
G ₂		[mm]	339	339	339	339	339	339
m ₁		[mm]	200	200	200	200	200	200
m ₂		[mm]	150	150	150	150	150	150
n ₁		[mm]	550	550	550	550	550	550
n ₂		[mm]	450	450	450	450	450	450
b		[mm]	100	100	100	100	100	100
s ₁		[mm]	M20	M20	M20	M20	M20	M20
H		[mm]	250	280	280	315	315	315
LB ¹⁾		[mm]	817/-	820/-	930/-	932/-	1092/-	1092/-
AD ¹⁾		[mm]	392/-	432/-	432/-	495/-	495/-	495/-
AG ¹⁾		[mm]	300/-	300/-	300/-	379/-	379/-	379/-
LL ¹⁾		[mm]	236/-	236/-	236/-	307/-	307/-	307/-
P		[mm]	550	550	550	660	660	660
C		[mm]	168	190	190	216	216	216
B		[mm]	349	368	419	406	457	508
A		[mm]	406	457	457	508	508	508
K		[mm]	24	24	24	28	28	28
Weight NB ¹⁾	[kg]	770/-	885/-	985/-	1162/-	1317/-	1457/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-	-/-	

1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

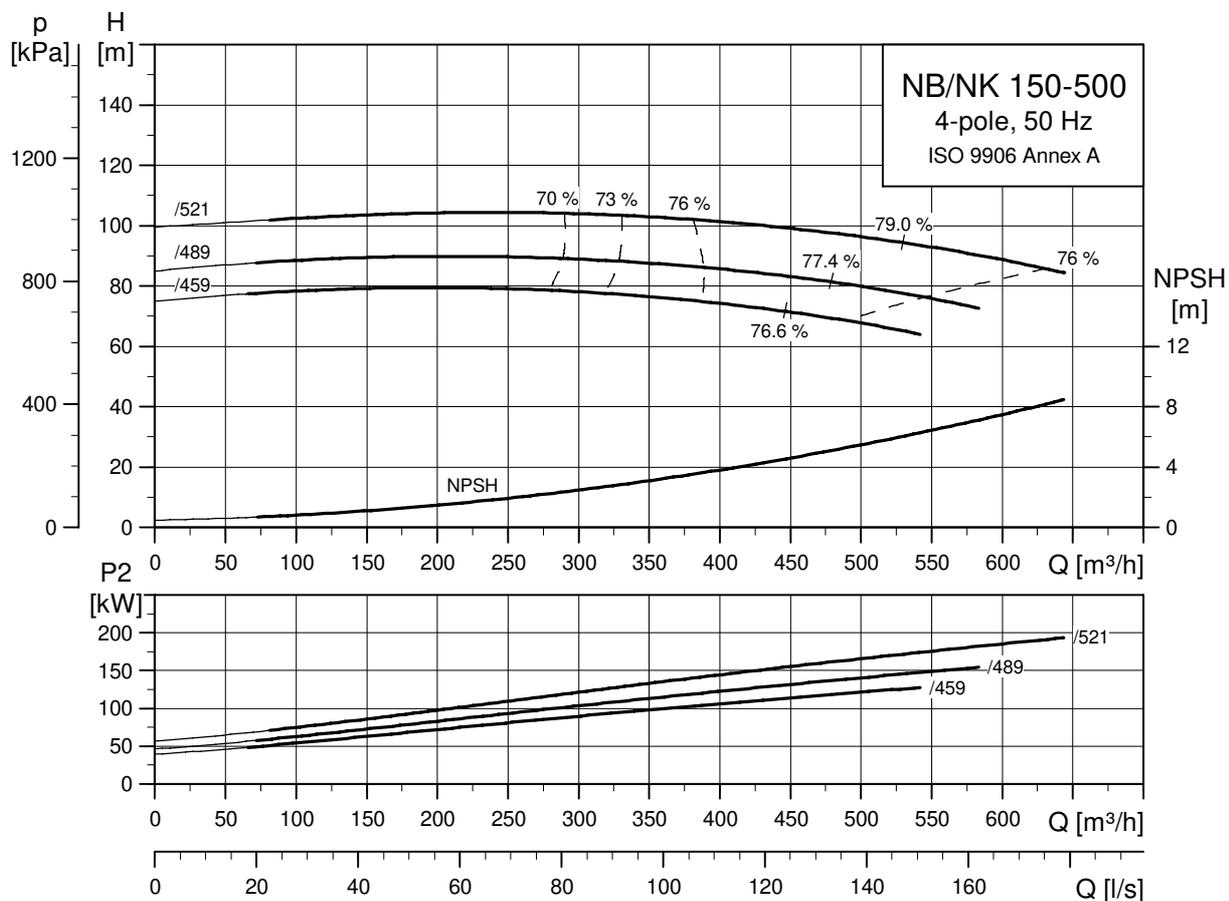
3) NK 150-400/431 and NK 150-400/438 are oversize pumps.

Note: For information about base frames, see page 270.

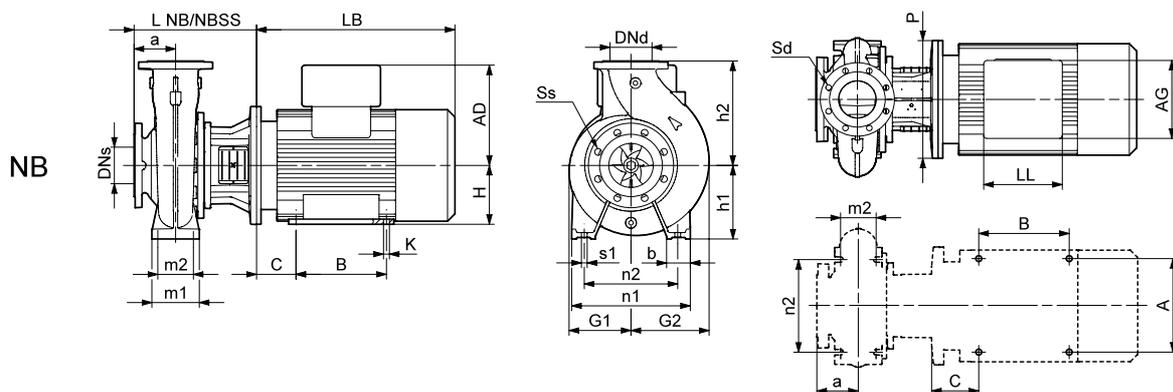
Performance curves

NB, NK 150-500
4-pole, 50 Hz

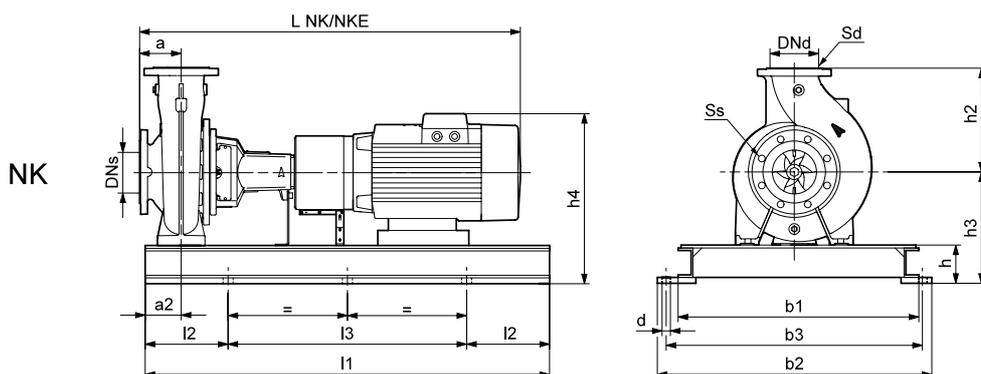
4-pole



TM03 5158 4106



TM03 4182 1806



TM03 4051 1806

Technical data

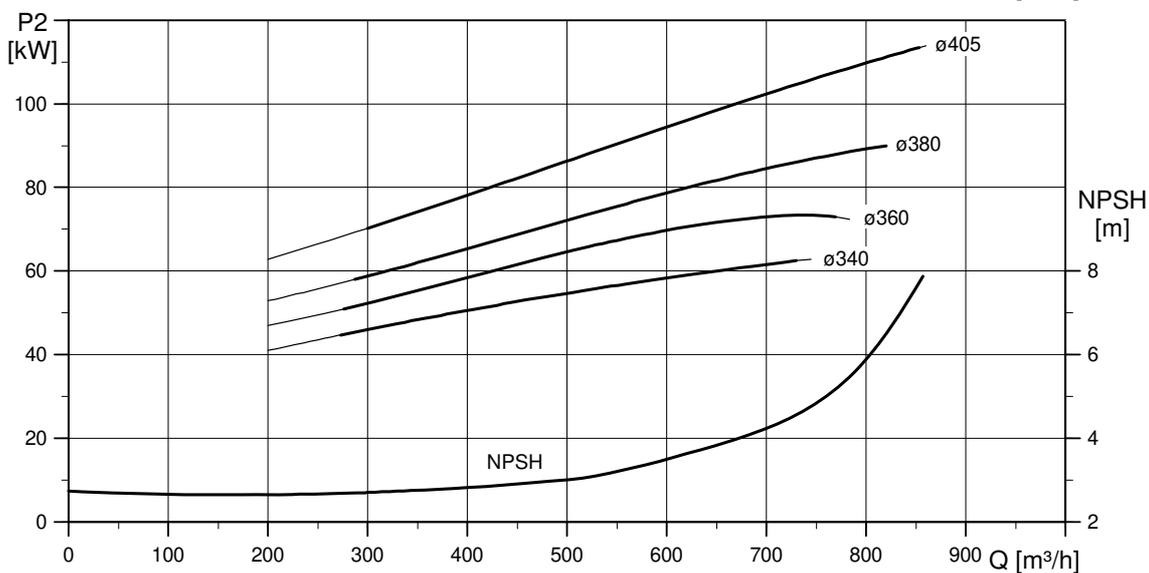
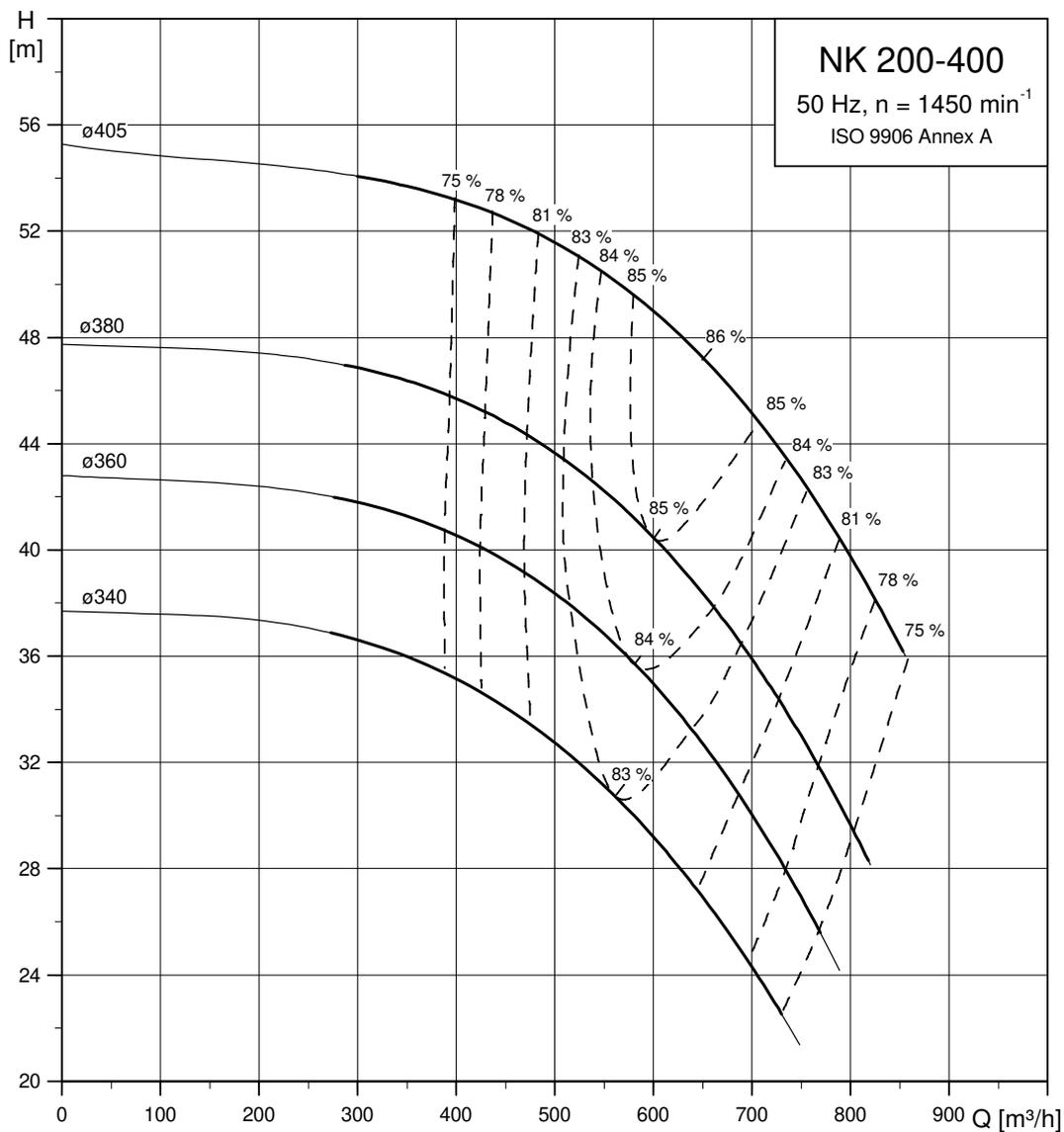
NB, NK 150-500
4-pole

Pump type		150-500/459	150-500/489	150-500/521	
Motor type	Premium Motor	Siemens 315MA	Siemens 315MB	Siemens 315L	
	E-Motor	-	-	-	
Common data NB/NK	P ₂	[kW]	132	160	200
	PN	[bar]	10	10	10
	DNs	[mm]	200	200	200
	DNd	[mm]	150	150	150
	a	[mm]	180	180	180
	h ₂	[mm]	500	500	500
	Ss		8x23	8x23	8x23
	Sd		8x23	8x23	
Common data NK standard/ spacer coupling	L NK	[mm]	2116/2292	2116/2292	2256/2432
	L NKE	[mm]	-/-	-/-	-/-
	Weight NK	[kg]	1884/1880	2021/2017	2221/2217
	Weight NKE	[kg]	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-
	Weight NKE SS	[kg]	-/-	-/-	-/-
NK data	l ₁	[mm]	2000	2000	2000
	l ₂	[mm]	330	330	330
	l ₃	[mm]	1340	1340	1340
	b ₁	[mm]	750	750	750
	b ₂	[mm]	890	890	890
	b ₃	[mm]	830	830	830
	d	[mm]	28	28	28
	a ₂	[mm]	110	110	110
	h	[mm]	130	130	130
	h ₃	[mm]	530	530	530
	h ₄ ¹⁾	[mm]	1025/-	1025/-	1025/-
	Base frame no.		10	10	
NB data	Design		C ²⁾	C ²⁾	C ²⁾
	L NB	[mm]	554	554	554
	L NB SS	[mm]	-	-	-
	h ₁	[mm]	400	400	400
	G ₁	[mm]	353	353	353
	G ₂	[mm]	396	396	396
	m ₁	[mm]	200	200	200
	m ₂	[mm]	150	150	150
	n ₁	[mm]	625	625	625
	n ₂	[mm]	500	500	500
	b	[mm]	125	125	125
	s ₁	[mm]	M20	M20	M20
	H	[mm]	315	315	315
	LB ¹⁾	[mm]	1092/-	1092/-	1232/-
	AD ¹⁾	[mm]	495/-	495/-	495/-
	AG ¹⁾	[mm]	379/-	379/-	379/-
	LL ¹⁾	[mm]	307/-	307/-	307/-
	P	[mm]	660	660	660
	C	[mm]	216	216	216
	B	[mm]	457	508	457
	A	[mm]	508	508	508
K	[mm]	28	28	28	
Weight NB ¹⁾	[kg]	1484/-	1624/-	1824/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	

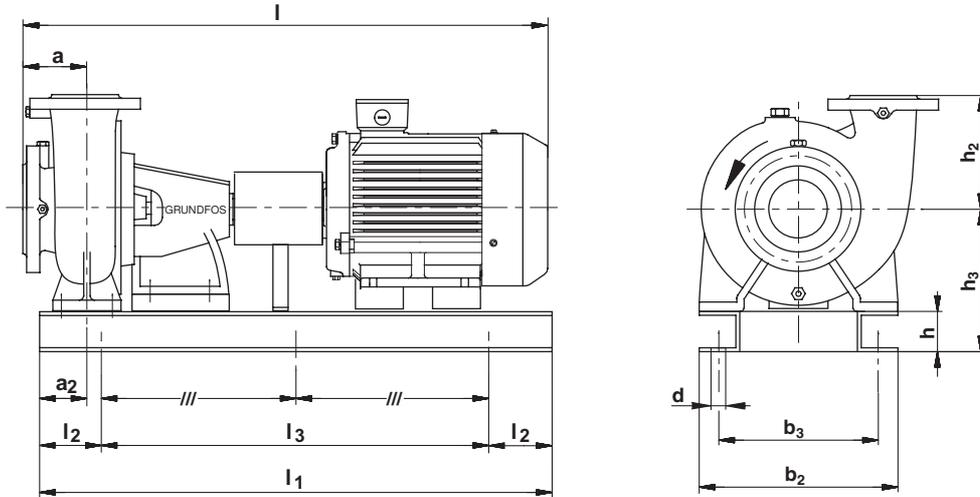
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

Note: For information about base frames, see page 270.



TM00 9733 0499



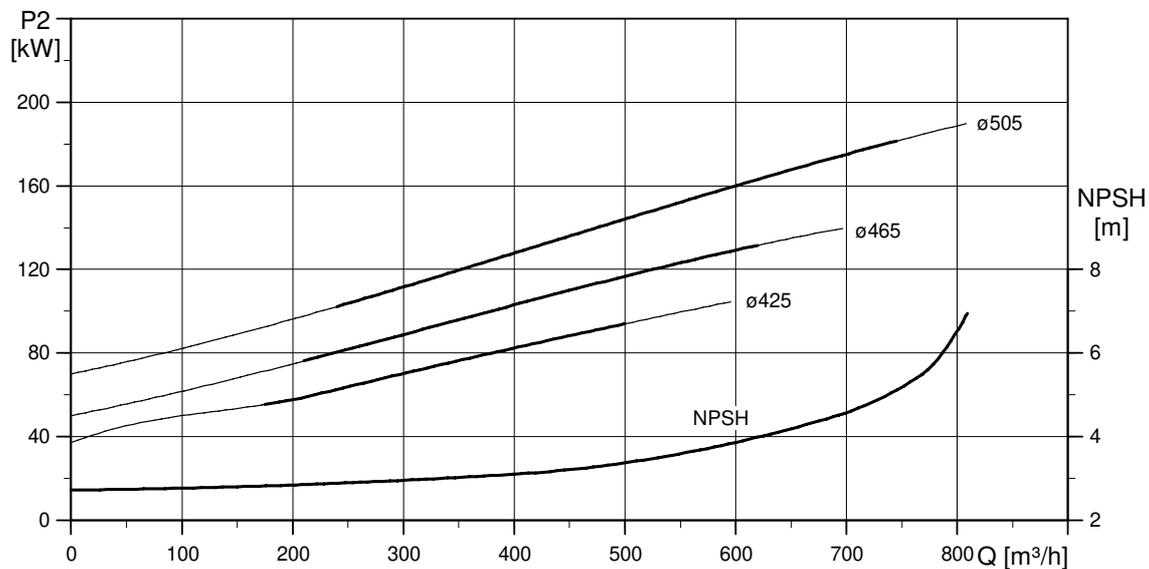
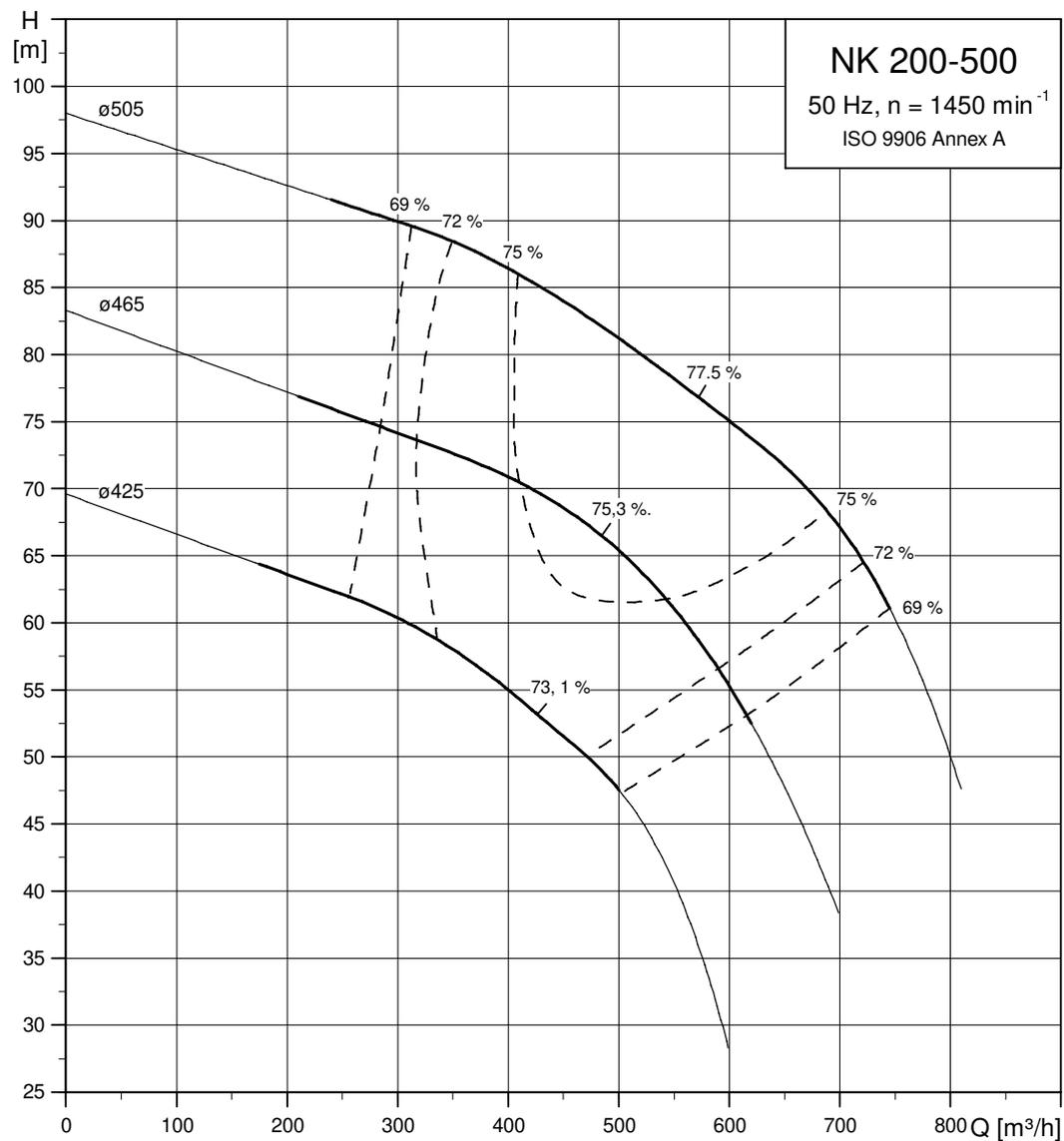
TM03 1279 1505

NK 200-400*						
kW	45	55	75	90	110	132
Standard motor range	MMG 225M-E	MMG 250M-E	MMG 280S-E	MMG 280M-E	MMG 315S-E	MMG 315M-E
Premium motor range	MMG 225M-D	MMG 250M-D	MMG 280S-D	MMG 280M-D	MMG 315S-D	MMG 315MA-D
E-motor range	-	-	-	-	-	-
PN [bar]	10	10	10	10	10	10
DN _d [mm]	200	200	200	200	200	200
DN _s [mm]	250	250	250	250	250	250
a [mm]	180	180	180	180	180	180
a ₂ [mm]	245	255	255	255	255	255
h [mm]	160	180	180	180	180	200
h ₂ [mm]	400	400	400	400	400	400
h ₃ [mm]	470	490	490	490	495	515
h ₄ ¹⁾ [mm]	790/836/-	849/875/-	876/909/-	876/909/-	966/1007/-	986/1027/-
Standard coupling						
l ₁ ¹⁾ [mm]	1771/1821/-	1844/1905/-	1879/1971/-	1930/2022/-	2140/2060/-	2253/2060/-
l ₁ [mm]	1900	2000	2000	2100	2100	2200
l ₂ [mm]	200	200	200	200	200	200
l ₃ [mm]	1500	1600	1600	1700	1700	1800
b ₁ [mm]	-	-	-	-	-	-
b ₂ [mm]	680	690	715	715	750	760
b ₃ [mm]	620	625	650	650	685	690
d [mm]	18	18	18	18	18	18
Weight ¹⁾ Net [kg]	931/814/-	1080/1323/-	1151/1614/-	1202/1167/-	1583/1238/-	1761/1501/-
Spacer coupling						
l ₁ ¹⁾ [mm]	1967/2017/-	2040/2101/-	2073/2165/-	2124/2216/-	2334/2254/-	2447/2254/-
l ₁ [mm]	1900	2000	2000	2100	2200	2200
l ₂ [mm]	200	200	200	200	200	200
l ₃ [mm]	1500	1600	1600	1700	1800	1800
b ₁ [mm]	-	-	-	-	-	-
b ₂ [mm]	680	690	715	715	750	760
b ₃ [mm]	620	625	650	650	685	690
d [mm]	18	18	18	18	18	18
Weight ¹⁾ Net [kg]	930/820/-	1077/1319/-	1159/1622/-	1210/1175/-	1597/1252/-	1771/1511/-

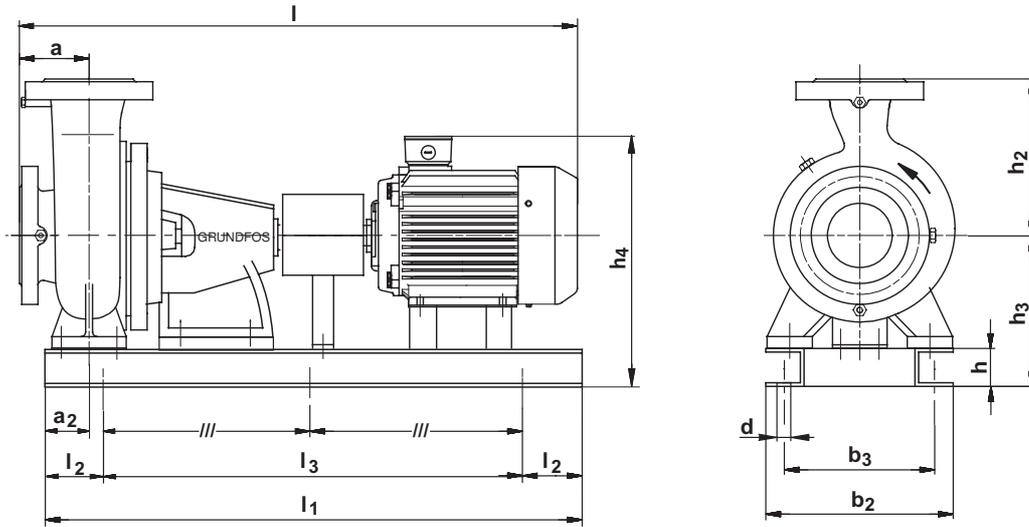
1) Dimension of pump with standard range motor/premium range motor/built-in frequency converter.

Performance curves

NK 200-500
4-pole



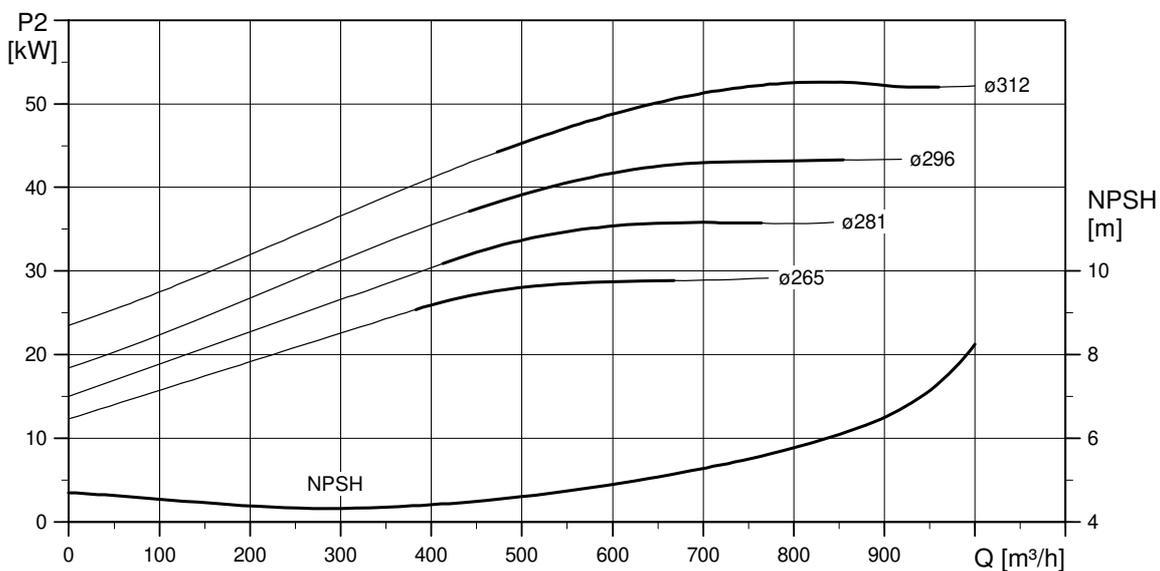
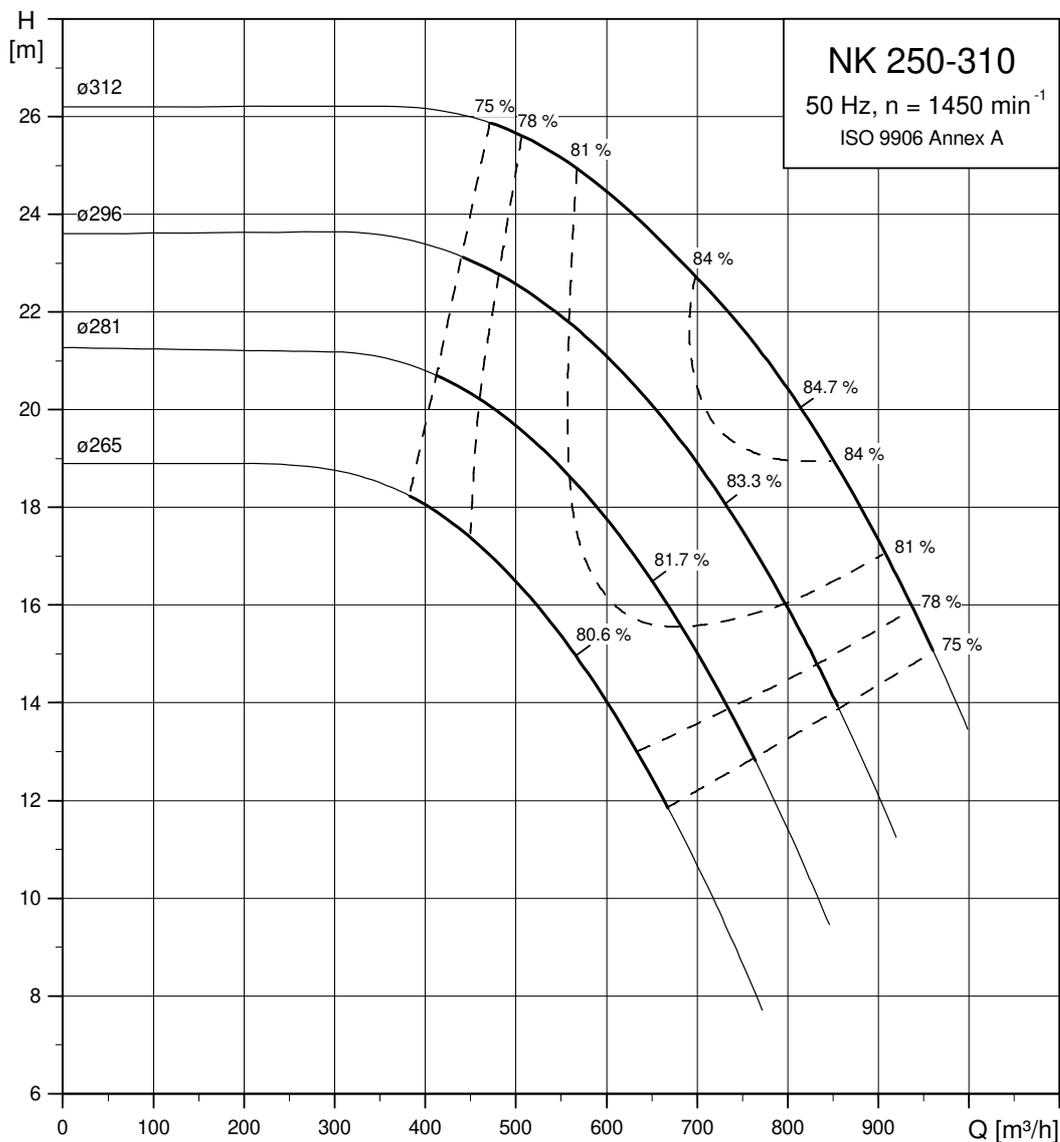
TM00 9734 1005



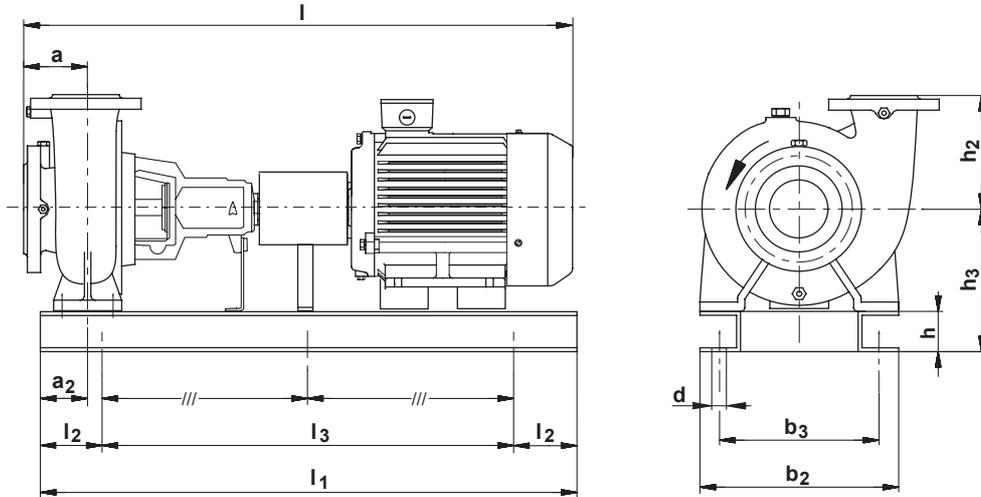
TM03 1282 1505

NK 200-500*								
kW	55	75	90	110	132	160	200	250
Standard motor range	MMG 250M-E	MMG 280S-E	MMG 280M-E	MMG 315S-E	MMG 315M-E	MMG 315LA-E	MMG 315LB-E	MMG 355M-E
Premium motor range	MMG 250M-D	MMG 280S-D	MMG 280M-D	MMG 315S-D	MMG 315MA-D	MMG 315MB-D	MMG 315L-D	Siemens 315
E-motor range	-	-	-	-	-	-	-	-
PN [bar]	10	10	10	10	10	10	10	10
DN _d [mm]	200	200	200	200	200	200	200	200
DN _s [mm]	250	250	250	250	250	250	250	250
a [mm]	250	250	250	250	250	250	250	250
a ₂ [mm]	175	175	175	185	185	185	185	132
h [mm]	160	180	180	180	200	200	220	240
h ₂ [mm]	675	675	675	675	675	675	675	675
h ₃ [mm]	480	490	490	495	515	515	535	595
h ₄ ¹⁾ [mm]	839/865/-	876/909/-	876/909/-	966/1007/-	986/1027/-	986/1027/-	1006/1047/-	1234/1045/-
Standard coupling								
l ₁ [mm]	1914/1975/-	1949/2041/-	2000/2092/-	2210/2130/-	2323/2130/-	2323/2130/-	2323/2250/-	2522/2406/-
l ₁ [mm]	1900	2000	2000	2100	2100	2100	2200	2400
l ₂ [mm]	150	150	150	150	150	150	150	150
l ₃ [mm]	1600	1700	1700	1800	1800	1800	1900	2100
b ₁ [mm]	-	-	-	-	-	-	-	-
b ₂ [mm]	935	945	945	945	955	955	965	975
b ₃ [mm]	875	880	880	880	885	885	890	895
d [mm]	18	18	18	18	18	18	18	22
Weight ¹⁾ Net [kg]	1162/1254/-	1258/2040/-	1304/1269/-	1694/1349/-	1864/1604/-	1949/1689/-	2068/1893/-	2467/2117/-
Spacer coupling								
l ₁ [mm]	2110/2171/-	2143/2235/-	2194/2286/-	2404/2324/-	2517/2324/-	2517/2324/-	2517/2444/-	2716/2600/-
l ₁ [mm]	1900	2000	2000	2200	2200	2200	2200	2700
l ₂ [mm]	150	150	150	150	150	150	150	150
l ₃ [mm]	1600	1700	1700	1900	1900	1900	1900	2400
b ₁ [mm]	-	-	-	-	-	-	-	-
b ₂ [mm]	935	945	945	945	955	955	965	975
b ₃ [mm]	875	880	880	880	885	885	890	895
d [mm]	18	18	18	18	18	18	18	22
Weight ¹⁾ Net [kg]	1159/1251/-	1266/2055/-	1312/1277/-	1700/1355/-	1879/1619/-	1970/1710/-	2084/1909/-	2509/2159/-

1) Dimension of pump with standard range motor/premium range motor/built-in frequency converter.



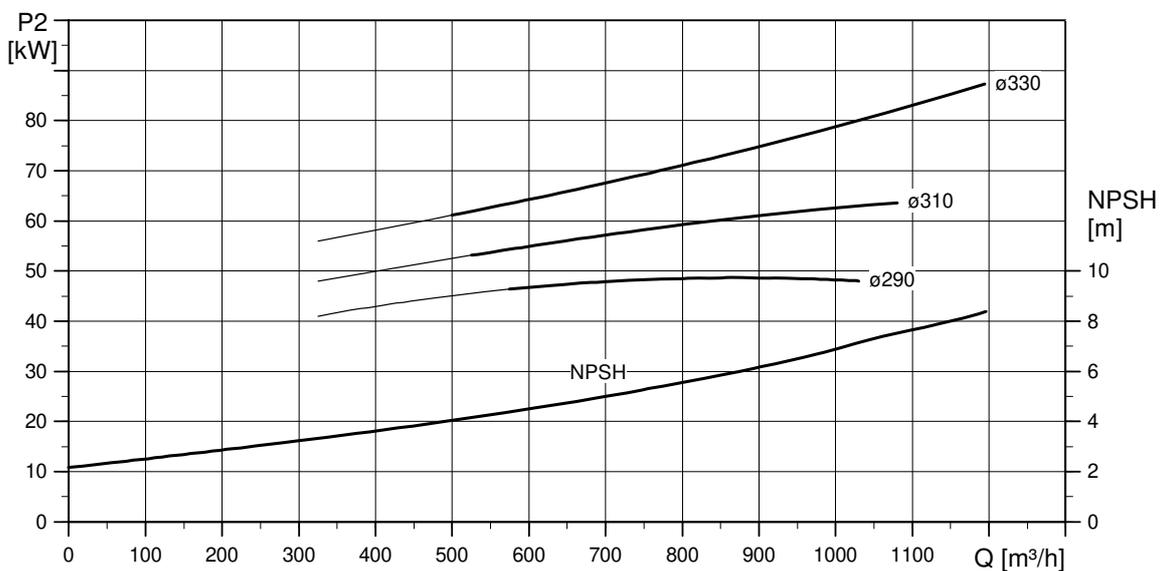
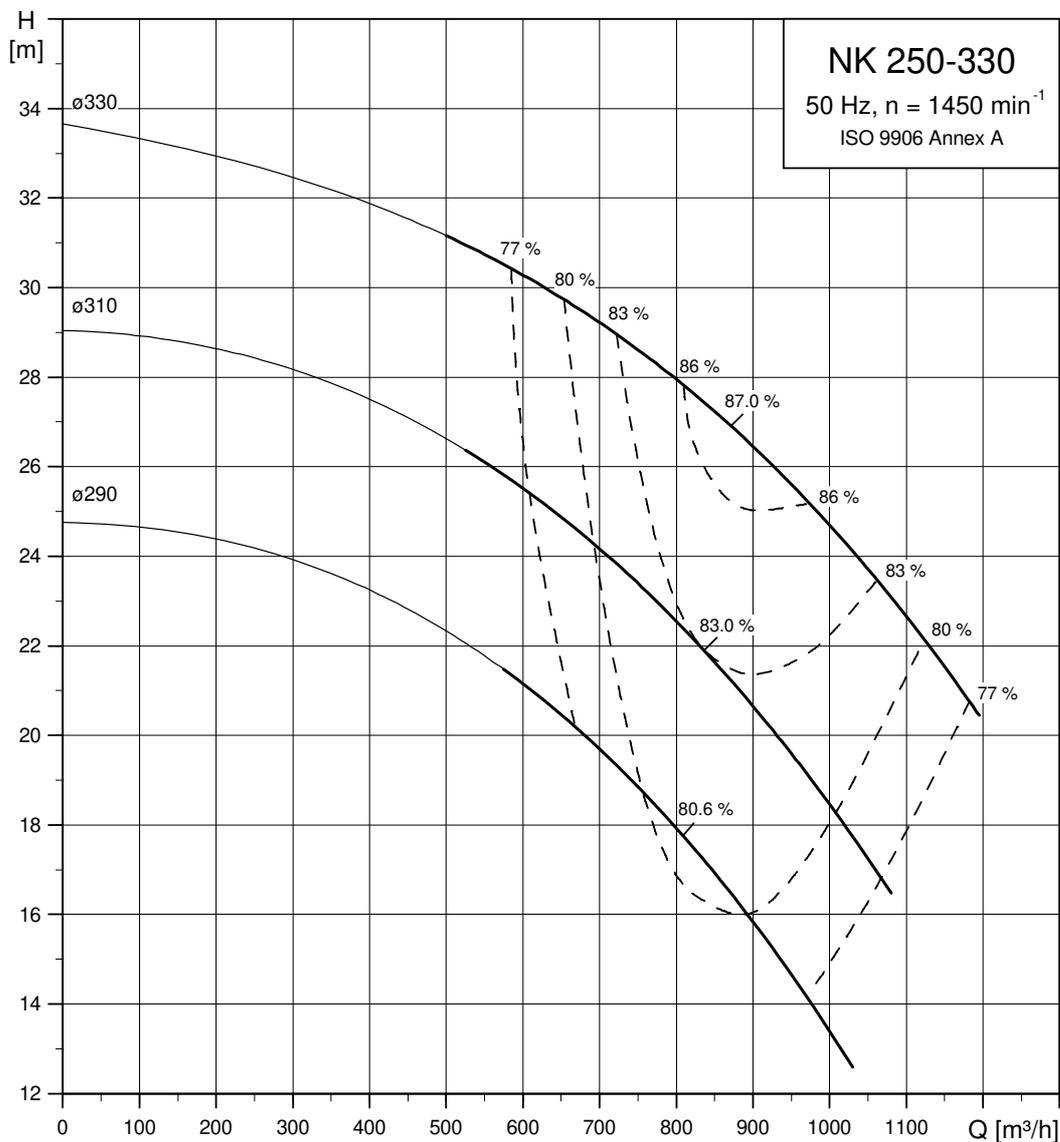
TM01 2901 0499



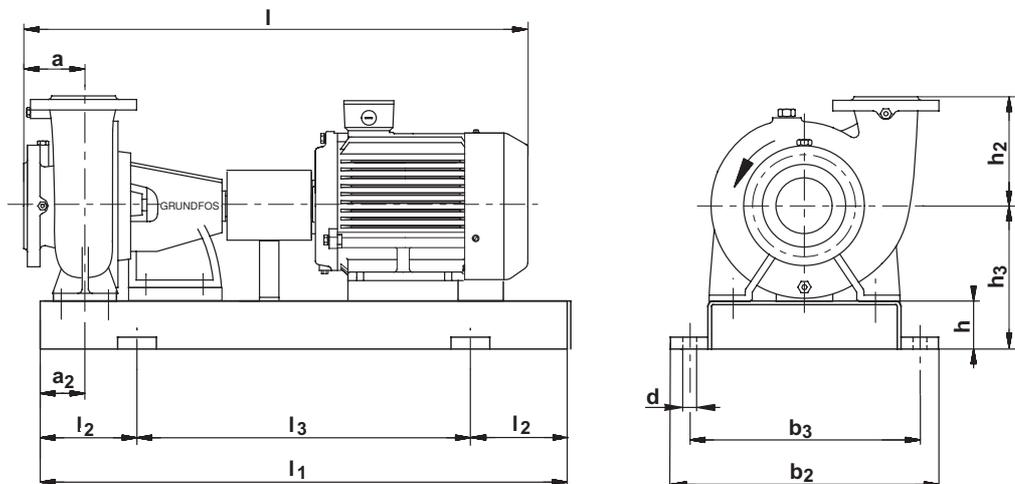
TM03 1278 1505

NK 250-310*					
kW	30	37	45	55	75
Standard motor range	MMG 200L-E	MMG 225S-E	MMG 225M-E	MMG 250M-E	MMG 280S-E
Premium motor range	MMG 200L-D	MMG 225S-D	MMG 225M-D	MMG 250M-D	MMG 280S-D
E-motor range	-	-	-	-	-
PN [bar]	10	10	10	10	10
DN _d [mm]	250	250	250	250	250
DN _s [mm]	300	300	300	300	300
a [mm]	250	250	250	250	250
a ₂ [mm]	195	195	195	205	205
h [mm]	140	160	160	160	180
h ₂ [mm]	400	400	400	400	400
h ₃ [mm]	480	505	505	510	560
h ₄ ¹⁾ [mm]	777/807/-	825/871/-	825/871/-	869/895/-	946/979/-
Standard coupling					
l ₁ ¹⁾ [mm]	1576/1598/-	1631/1706/-	1656/1706/-	1729/1790/-	1764/1856/-
l ₁ [mm]	1700	1700	1700	1800	1800
l ₂ [mm]	100	100	100	100	100
l ₃ [mm]	1500	1500	1500	1600	1600
b ₁ [mm]	-	-	-	-	-
b ₂ [mm]	950	950	950	950	960
b ₃ [mm]	885	885	885	885	890
d [mm]	18	18	18	18	18
Weight ¹⁾ Net [kg]	781/661/-	856/808/-	881/873/-	1015/1354/-	1115/2345/-
Spacer coupling					
l ₁ ¹⁾ [mm]	1772/1794/-	1827/1902/-	1852/1902/-	1925/1986/-	1958/2050/-
l ₁ [mm]	1700	1800	1800	1900	1900
l ₂ [mm]	100	100	100	100	100
l ₃ [mm]	1500	1600	1600	1700	1700
b ₁ [mm]	-	-	-	-	-
b ₂ [mm]	950	950	950	950	960
b ₃ [mm]	885	885	885	885	890
d [mm]	18	18	18	18	18
Weight ¹⁾ Net [kg]	778/666/-	863/805/-	888/870/-	1017/1358/-	1135/2366/-

1) Dimension of pump with standard range motor/premium range motor/built-in frequency converter.



TM01 2900 0499



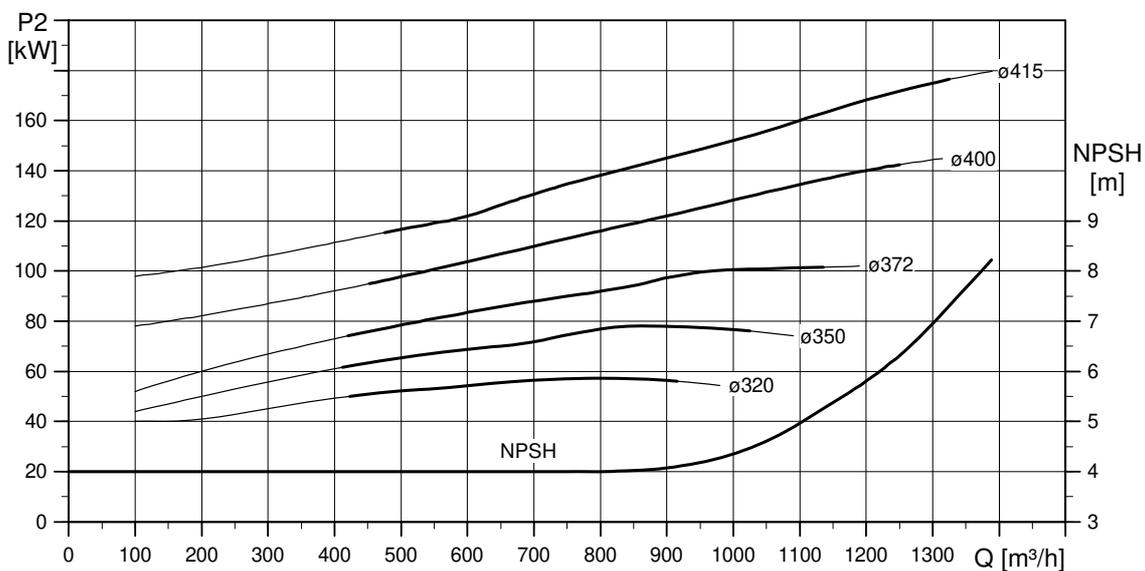
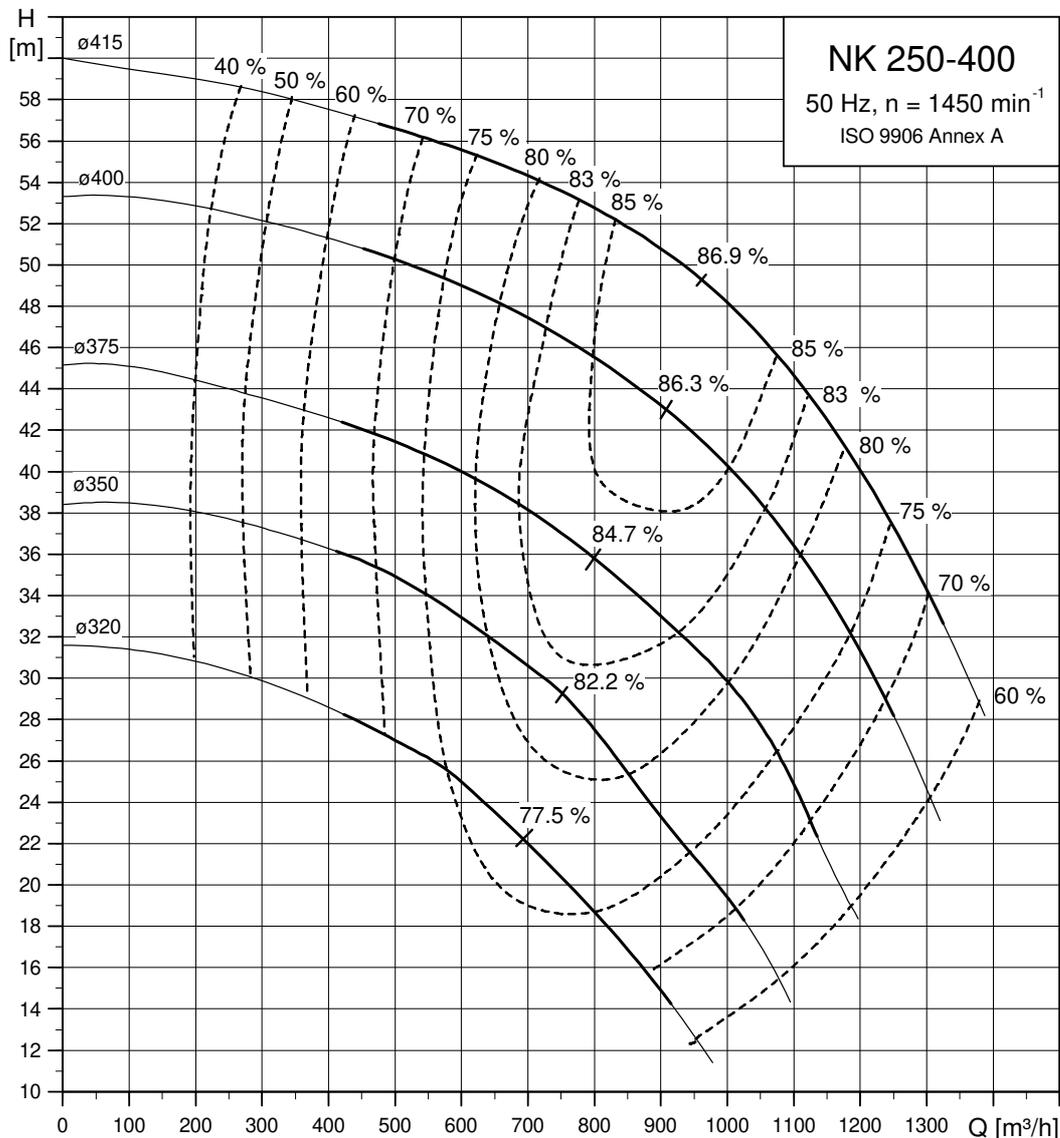
TM03 1280 1505

NK 250-330*				
kW	55	75 ³⁾	90 ³⁾	110 ³⁾
Standard motor range	MMG 250M-E	MMG 280S-E	MMG 280M-E	MMG 315S-E
Premium motor range	MMG 250M-D	MMG 280S-D	MMG 280M-D	MMG 315S-D
E-motor range	-	-	-	-
PN [bar]	10	10	10	10
DN _d [mm]	250	250	250	250
DN _s [mm]	250	250	250	250
a [mm]	250	250	250	250
a ₂ [mm]	220	220	220	220
h [mm]	120	120	120	120
h ₂ [mm]	400	400	400	400
h ₃ [mm]	570	570	570	570
h ₄ ¹⁾ [mm]	929/955/-	956/989/-	956/989/-	1041/1082/-
Standard coupling				
l ₁ ¹⁾ [mm]	1904/1965/-	1939/2031/-	1990/2082/-	2200/2120/-
l ₁ [mm]	2000	2000	2000	2000
l ₂ [mm]	330	330	330	330
l ₃ [mm]	1340	1340	1340	1340
b ₁ [mm]	750	750	750	750
b ₂ [mm]	910	910	910	910
b ₃ [mm]	830	830	830	830
d [mm]	28	28	28	28
Weight ¹⁾ Net [kg]	1059/1346/-	1138/1114/-	1184/1149/-	1555/1210/-
Spacer coupling				
l ₁ ¹⁾ [mm]	2100/2161/-	2133/2225/-	2184/2276/-	2394/2314/-
l ₁ [mm]	2000	2100	2200	2200
l ₂ [mm]	330	150	150	150
l ₃ [mm]	1340	1800	1900	1900
b ₁ [mm]	750	-	-	-
b ₂ [mm]	910	850	860	860
b ₃ [mm]	830	790	795	795
d [mm]	28	18	18	18
Weight ¹⁾ Net [kg]	1056/1348/-	1267/1243/-	1340/1305/-	1713/1368/-

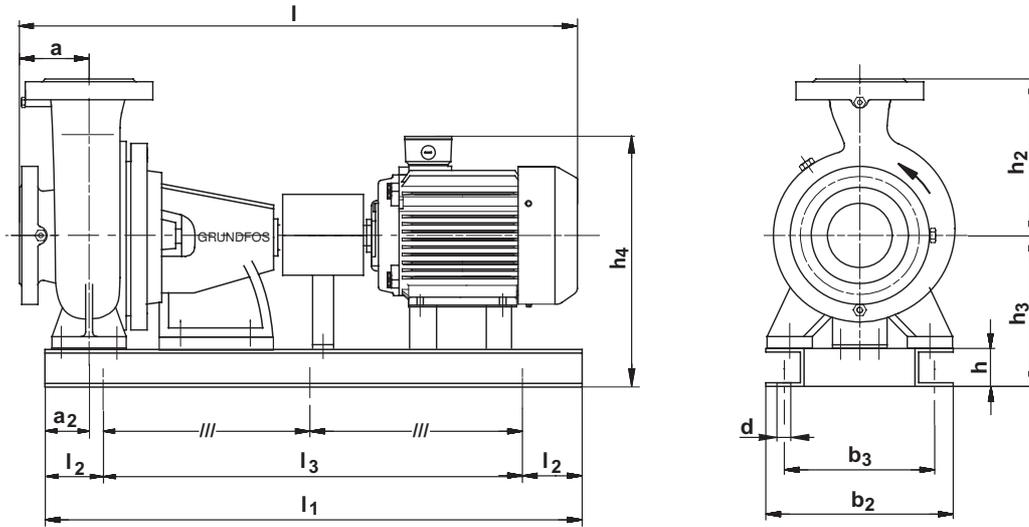
1) Dimension of pump with standard range motor/premium range motor/built-in frequency converter.

Performance curves

NK 250-400
4-pole



TM00 9735 0499



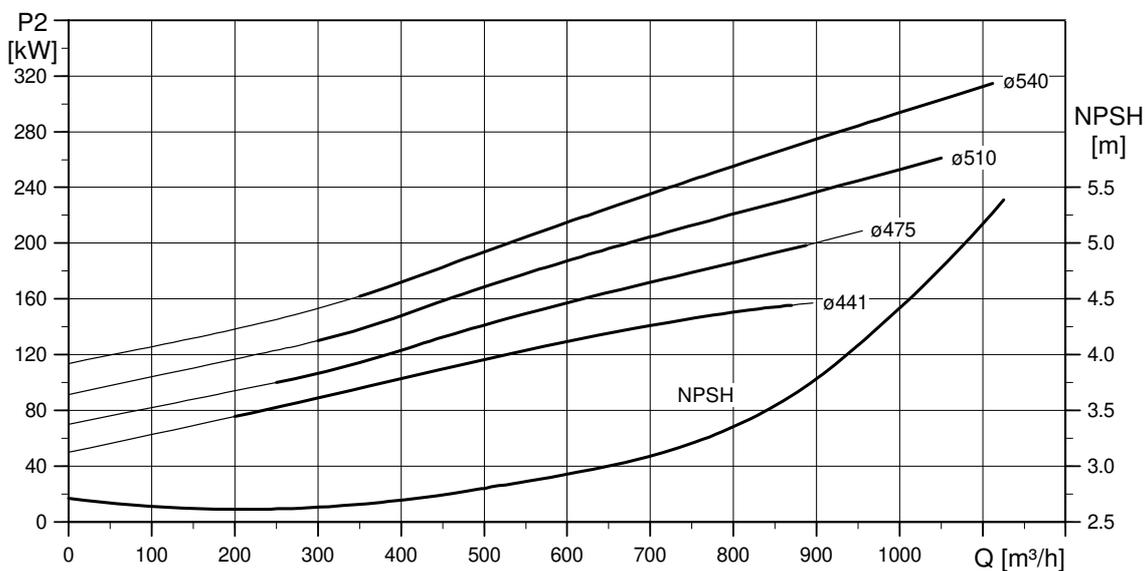
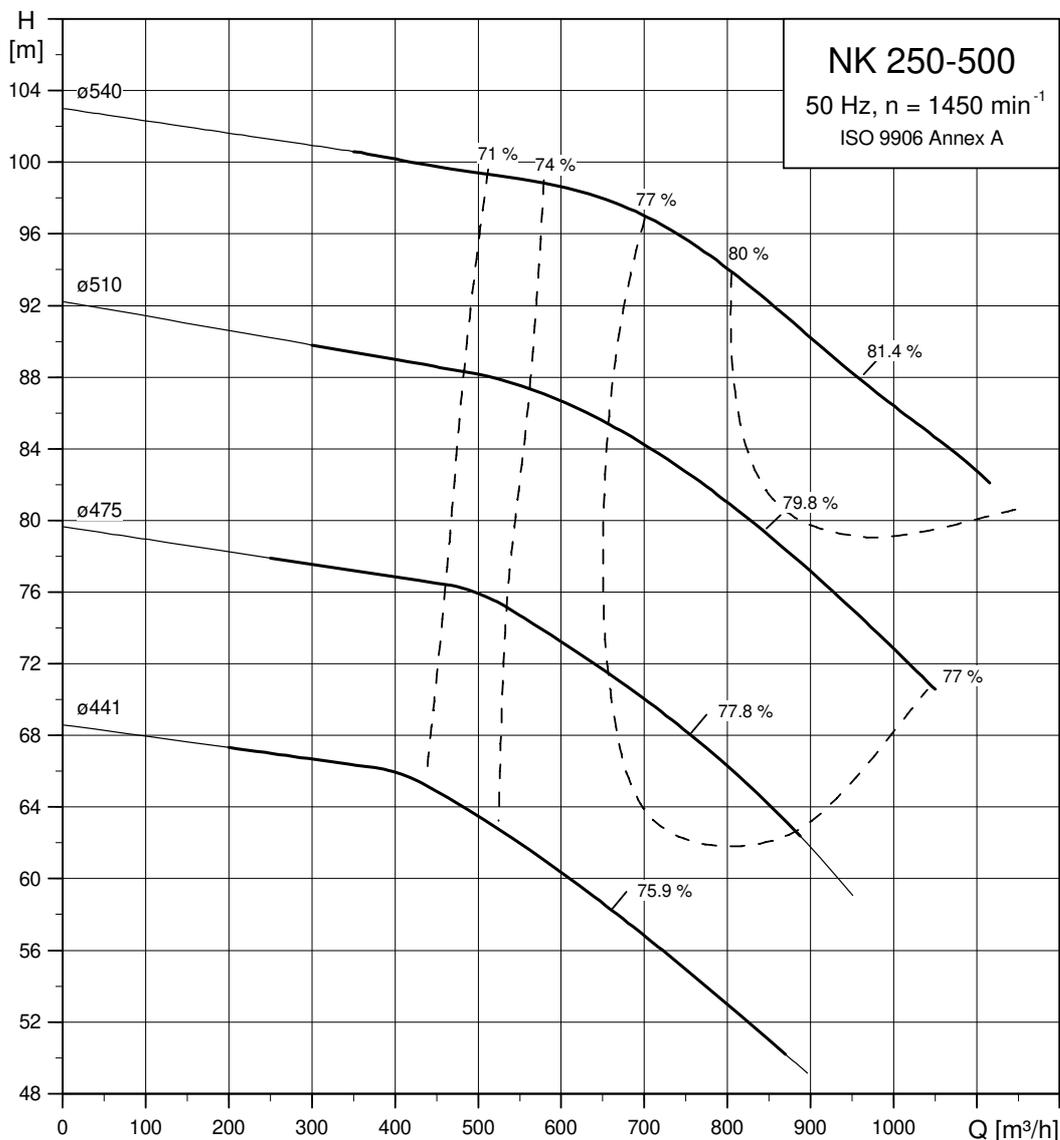
TM03 1282 1505

NK 250-400*							
kW	55	75	90	110	132	160	200
Standard motor range	MMG 250M-E	MMG 280S-E	MMG 280M-E	MMG 315S-E	MMG 315M-E	MMG 315LA-E	MMG 315LB-E
Premium motor range	MMG 250M-D	MMG 280S-D	MMG 280M-D	MMG 315S-D	MMG 315MA-D	MMG 315MB-D	MMG 315L-D
E-motor range							
PN [bar]	10	10	10	10	10	10	10
DN _d [mm]	250	250	250	250	250	250	250
DN _s [mm]	300	300	300	300	300	300	300
a [mm]	200	200	200	200	200	200	200
a ₂ [mm]	175	175	175	185	185	185	185
h [mm]	160	180	180	180	200	200	220
h ₂ [mm]	600	600	600	600	600	600	600
h ₃ [mm]	470	480	480	495	515	515	535
h ₄ ¹⁾ [mm]	829/855/-	866/899/-	866/899/-	966/1007/-	986/1027/-	986/1027/-	1006/1047/-
Standard coupling							
l ¹⁾ [mm]	1854/1915/-	1889/1981/-	1940/2032/-	2150/2070/-	2263/2070/-	2263/2070/-	2263/2190/-
l ₁ [mm]	1900	2000	2000	2100	2100	2100	2200
l ₂ [mm]	150	150	150	150	150	150	150
l ₃ [mm]	1600	1700	1700	1800	1800	1800	1900
b ₁ [mm]	-	-	-	-	-	-	-
b ₂ [mm]	850	860	860	860	870	870	880
b ₃ [mm]	790	795	795	796	800	800	805
d [mm]	18	18	18	18	18	18	18
Weight ¹⁾ Net [kg]	1090/1417/-	1179/1155/-	1225/1190/-	1611/1266/-	1784/1524/-	1869/1609/-	1995/1820/-
Spacer coupling							
l ¹⁾ [mm]	2050/2111/-	2083/2175/-	2134/2226/-	2344/2264/-	2457/2264/-	2457/2264/-	2457/2384/-
l ₁ [mm]	1900	2000	2000	2100	2100	2100	2200
l ₂ [mm]	150	150	150	150	150	150	150
l ₃ [mm]	1600	1700	1700	1800	1800	1800	1900
b ₁ [mm]	-	-	-	-	-	-	-
b ₂ [mm]	850	860	860	860	870	870	880
b ₃ [mm]	790	795	795	796	800	800	805
d [mm]	18	18	18	18	18	18	18
Weight ¹⁾ Net [kg]	1087/1413/-	1187/1163/-	1233/1198/-	1621/1276/-	1794/1534/-	1885/1625/-	2011/1836/-

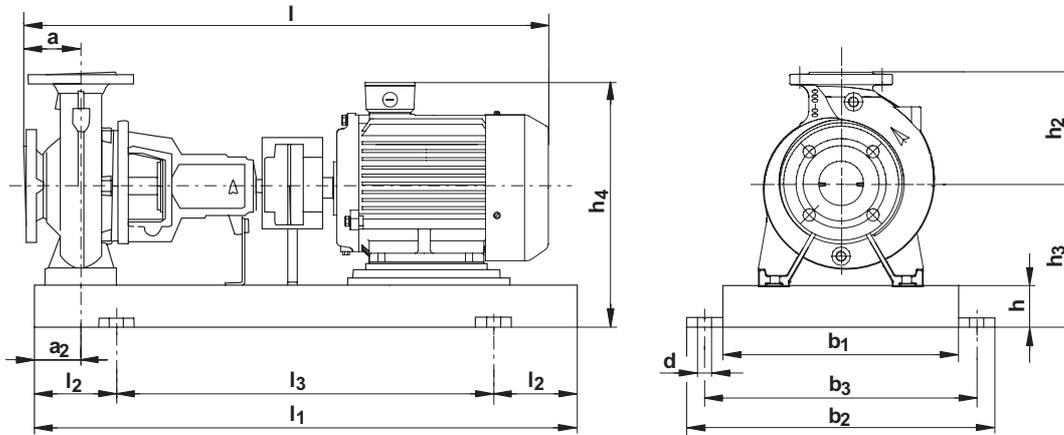
1) Dimension of pump with standard range motor/premium range motor/built-in frequency converter.

Performance curves

NK 250-500
4-pole



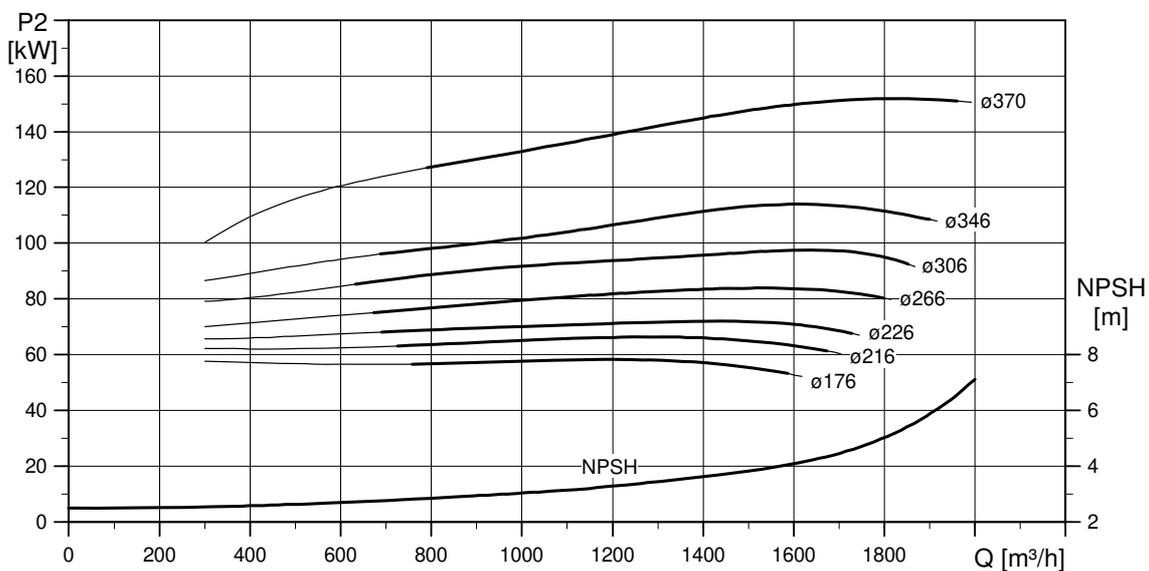
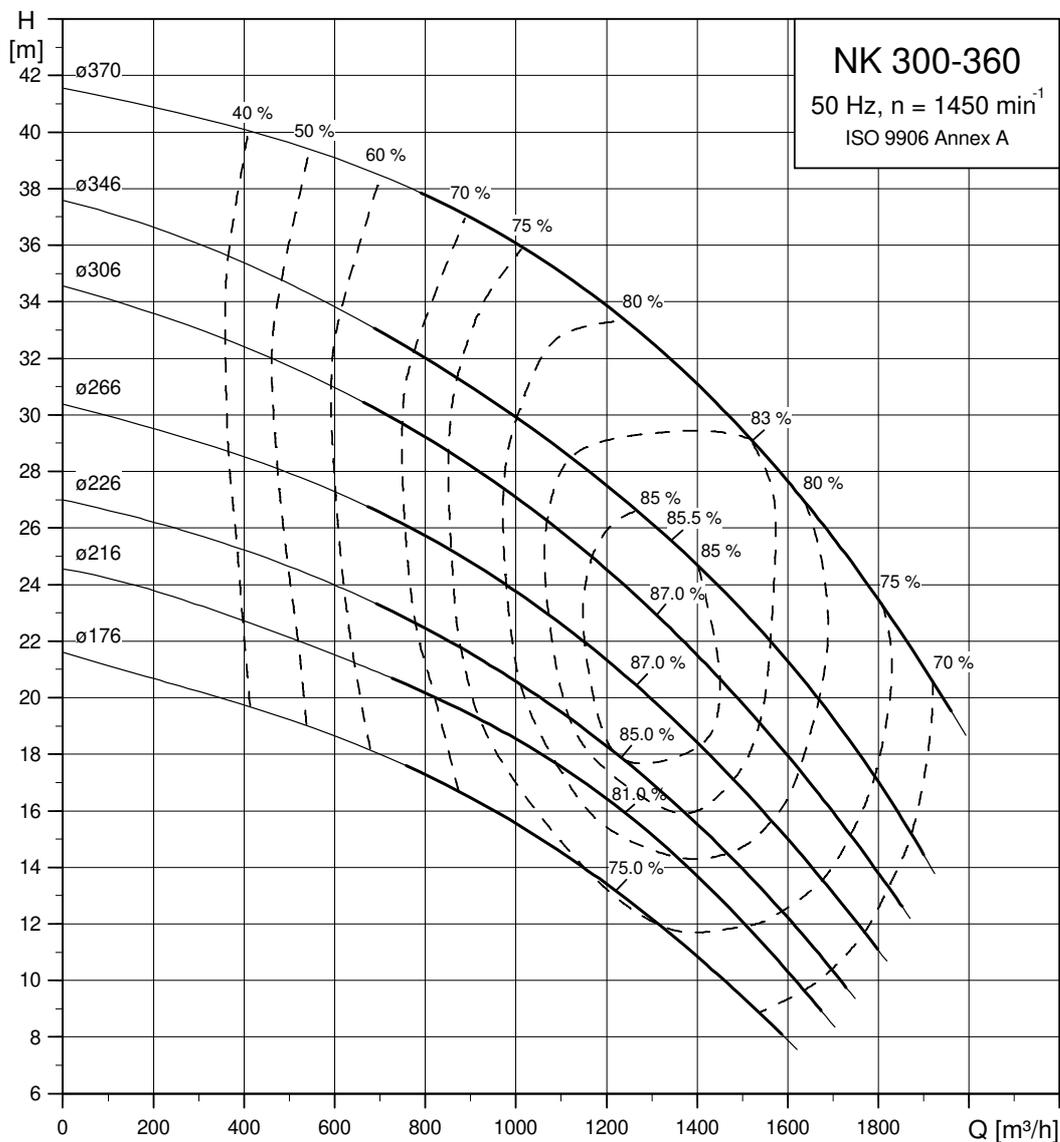
TM00 9736 0499



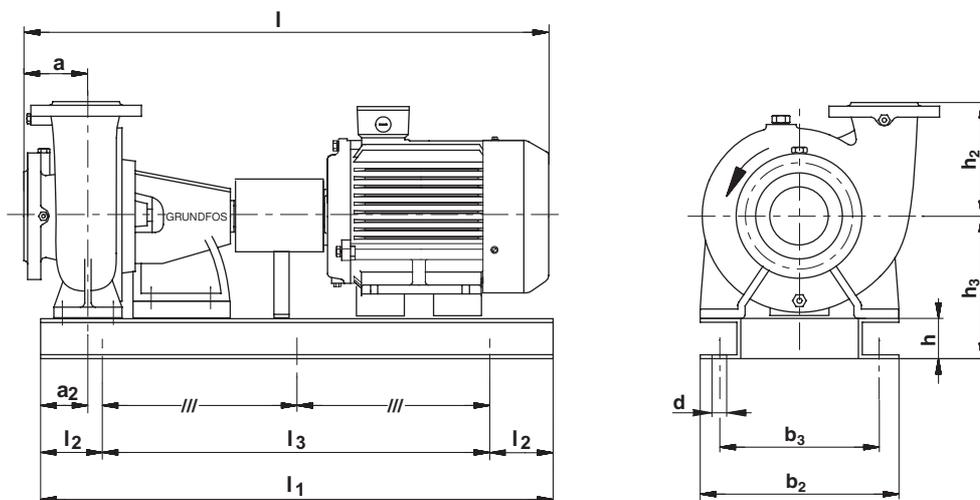
TM03 1282 1505

NK 250-500*							
kW	90	110	132	160	200	250	315
Standard motor range	MMG 280M-E	MMG 315S-E	MMG 315M-E	MMG 315LA-E	MMG 315LB-E	MMG 355M-E	MMG 355L-E
Premium motor range	MMG 280M-D	MMG 315S-D	MMG 315MA-D	MMG 315MB-D	MMG 315L-D	Siemens 315	Siemens 315
E-motor range							
PN [bar]	10	10	10	10	10	10	10
DN _d [mm]	250	250	250	250	250	250	250
DN _s [mm]	300	300	300	300	300	300	300
a [mm]	300	300	300	300	300	300	300
a ₂ [mm]	175	185	185	185	185	132	134
h [mm]	180	180	200	200	220	240	240
h ₂ [mm]	660	660	660	660	660	660	660
h ₃ [mm]	490	495	515	515	535	615	615
h ₄ ¹⁾ [mm]	876/909/-	966/1007/-	986/1027/-	986/1027/-	1006/1047/-	1254/1045/-	1254/1045/-
Standard coupling							
l ₁ ¹⁾ [mm]	2050/2142/-	2260/2180/-	2373/2180/-	2373/2180/-	2373/2300/-	2572/2456/-	2542/2456/-
l ₁ [mm]	2000	2100	2100	2100	2200	2400	2400
l ₂ [mm]	150	150	150	150	150	150	150
l ₃ [mm]	1700	1800	1800	1800	1900	2100	2100
b ₁ [mm]	-	-	-	-	-	-	-
b ₂ [mm]	945	945	955	955	965	985	985
b ₃ [mm]	880	880	885	885	890	900	900
d [mm]	18	18	18	18	18	22	22
Weight ¹⁾ Net [kg]	1331/1296/-	1721/1376/-	1891/1631/-	1976/1716/-	2095/1920/-	2491/2141/-	2741/2341/-
Spacer coupling							
l ₁ ¹⁾ [mm]	2244/2336/-	2454/2374/-	2567/2374/-	2567/2374/-	2567/2494/-	2766/2650/-	2736/2650/-
l ₁ [mm]	2000	2100	2100	2100	2200	2600	2600
l ₂ [mm]	150	150	150	150	150	150	150
l ₃ [mm]	1700	1800	1800	1800	1900	2300	2300
b ₁ [mm]	-	-	-	-	-	-	-
b ₂ [mm]	945	945	955	955	965	985	985
b ₃ [mm]	880	880	885	885	890	900	900
d [mm]	18	18	18	18	18	22	22
Weight ¹⁾ Net [kg]	1339/1304/-	1731/1386/-	1901/1641/-	1992/1732/-	2111/1936/-	2517/2167/-	2767/2367/-

1) Dimension of pump with standard range motor/premium range motor/built-in frequency converter.



TM01 1715 0499

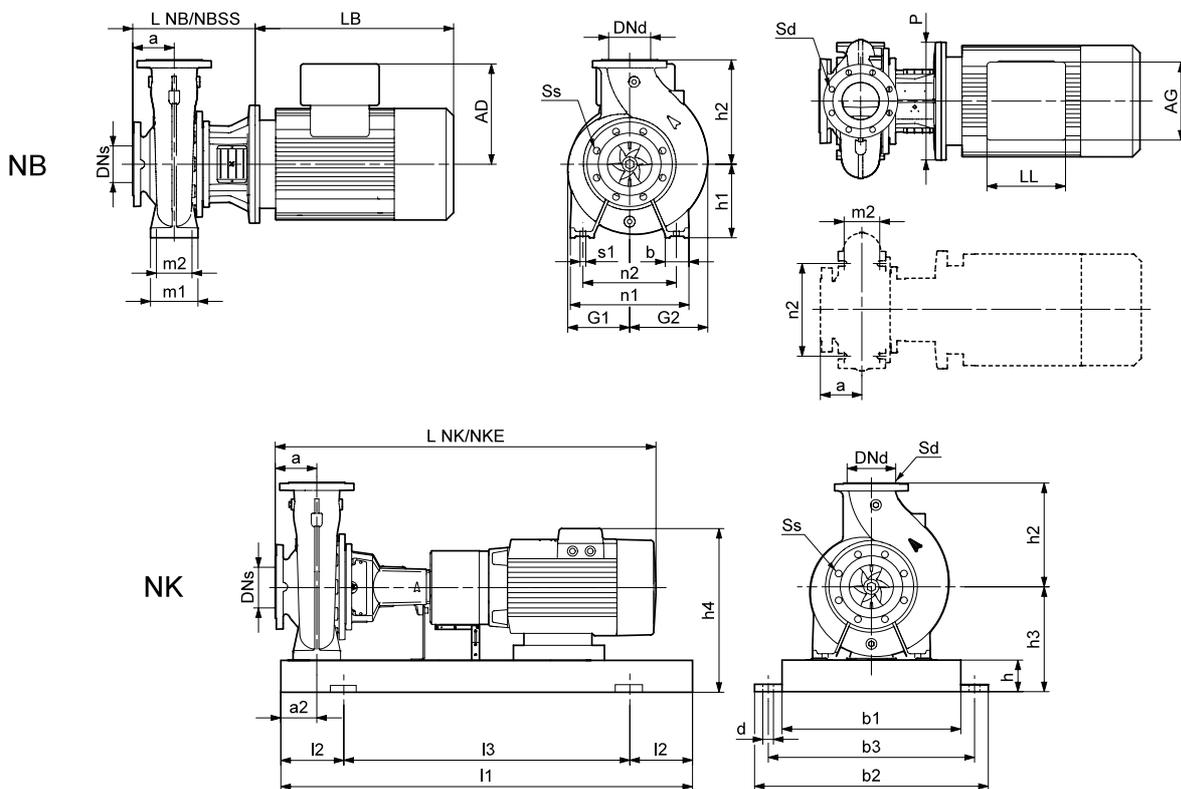
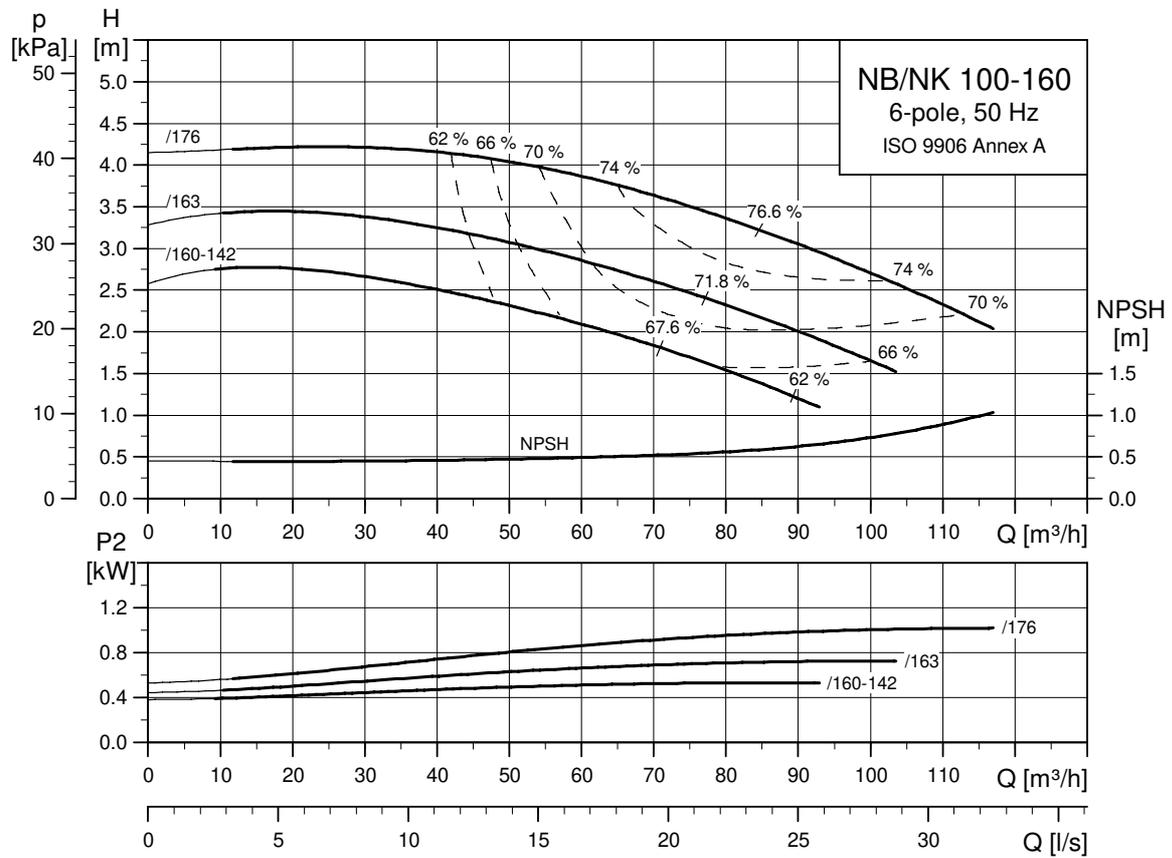


TM03 1279 1505

NK 300-360*						
kW	55	75	90	110	132	160
Standard motor range	MMG 250M-E	MMG 280S-E	MMG 280M-E	MMG 315S-E	MMG 315M-E	MMG 315LA-E
Premium motor range	MMG 250M-D	MMG 280S-D	MMG 280M-D	MMG 315S-D	MMG 315MA-D	MMG 315MB-D
E-motor range	-	-	-	-	-	-
PN [bar]	10	10	10	10	10	10
DN _d [mm]	300	300	300	300	300	300
DN _s [mm]	300	300	300	300	300	300
a [mm]	300	300	300	300	300	300
a ₂ [mm]	180	180	180	180	180	180
h [mm]	180	180	180	180	180	180
h ₂ [mm]	440	440	440	440	440	440
h ₃ [mm]	700	700	700	700	700	700
h ₄ ¹⁾ [mm]	1059/1085/-	1086/1119/-	1086/1119/-	1171/1212/-	1171/1212/-	1171/1212/-
Standard coupling						
l ¹⁾ [mm]	1974/2035/-	2009/2101/-	2060/2152/-	2270/2190/-	2383/2190/-	2383/2190/-
l ₁ [mm]	2200	2300	2300	2400	2400	2400
l ₂ [mm]	150	150	150	150	150	150
l ₃ [mm]	1900	2000	2000	2100	2100	2100
b ₁ [mm]	-	-	-	-	-	-
b ₂ [mm]	860	860	860	860	860	860
b ₃ [mm]	796	795	795	795	795	795
d [mm]	22	22	22	22	22	22
Weight ¹⁾ Net [kg]	1378/1348/-	1465/1441/-	1511/1476/-	1928/1583/-	2083/1823/-	2168/1907/-
Spacer coupling						
l ¹⁾ [mm]	2250/2311/-	2283/2375/-	2334/2426/-	2544/2464/-	2657/2464/-	2657/2464/-
l ₁ [mm]	2200	2300	2300	2400	2400	2400
l ₂ [mm]	150	150	150	150	150	150
l ₃ [mm]	1900	2000	2000	2100	2100	2100
b ₁ [mm]	-	-	-	-	-	-
b ₂ [mm]	860	860	860	860	860	860
b ₃ [mm]	796	795	795	795	795	795
d [mm]	22	22	22	22	22	22
Weight ¹⁾ Net [kg]	1400/1345/-	1492/1468/-	1538/1503/-	1949/1604/-	2104/1844/-	2183/1923/-

1) Dimension of pump with standard range motor/premium range motor/built-in frequency converter.

NB, NK 6-pole



TM03 5159 4106

TM03 4180 1806

TM03 6005 4106

Technical data

NB, NK 100-160
6-pole

Pump type		100-160/160-142	100-160/163	100-160/176	
Motor type	Premium Motor	Siemens 80B	Siemens 90S	Siemens 90L	
	E-Motor	-	-	-	
Common data NB/NK	P ₂	[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		8x19	8x19	8x19
Common data NK standard/ spacer coupling	Sd		8x19	8x19	
	L NK	[mm]	763/899	820/956	865/1001
	L NKE	[mm]	-/-	-/-	-/-
	Weight NK	[kg]	169/168	174/173	177/176
	Weight NKE	[kg]	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-
NK data	Weight NKE SS	[kg]	-/-	-/-	-/-
	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 ¹⁾	[mm]	400/-	408/-	408/-
Base frame no.		6	6	6	
NB data	Design		A	A	A
	L NB	[mm]	298	298	298
	L NB SS	[mm]	-	-	-
	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 ¹⁾	[mm]	234/-	281/-	326/-
	AD ¹⁾	[mm]	120/-	128/-	128/-
	AG ¹⁾	[mm]	75/-	75/-	75/-
	LL ¹⁾	[mm]	75/-	75/-	75/-
	P	[mm]	200	200	200
	C	[mm]	-	-	-
	B	[mm]	-	-	-
A	[mm]	-	-	-	
K	[mm]	-	-	-	
Weight NB ¹⁾	[kg]	77/-	83/-	86/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	

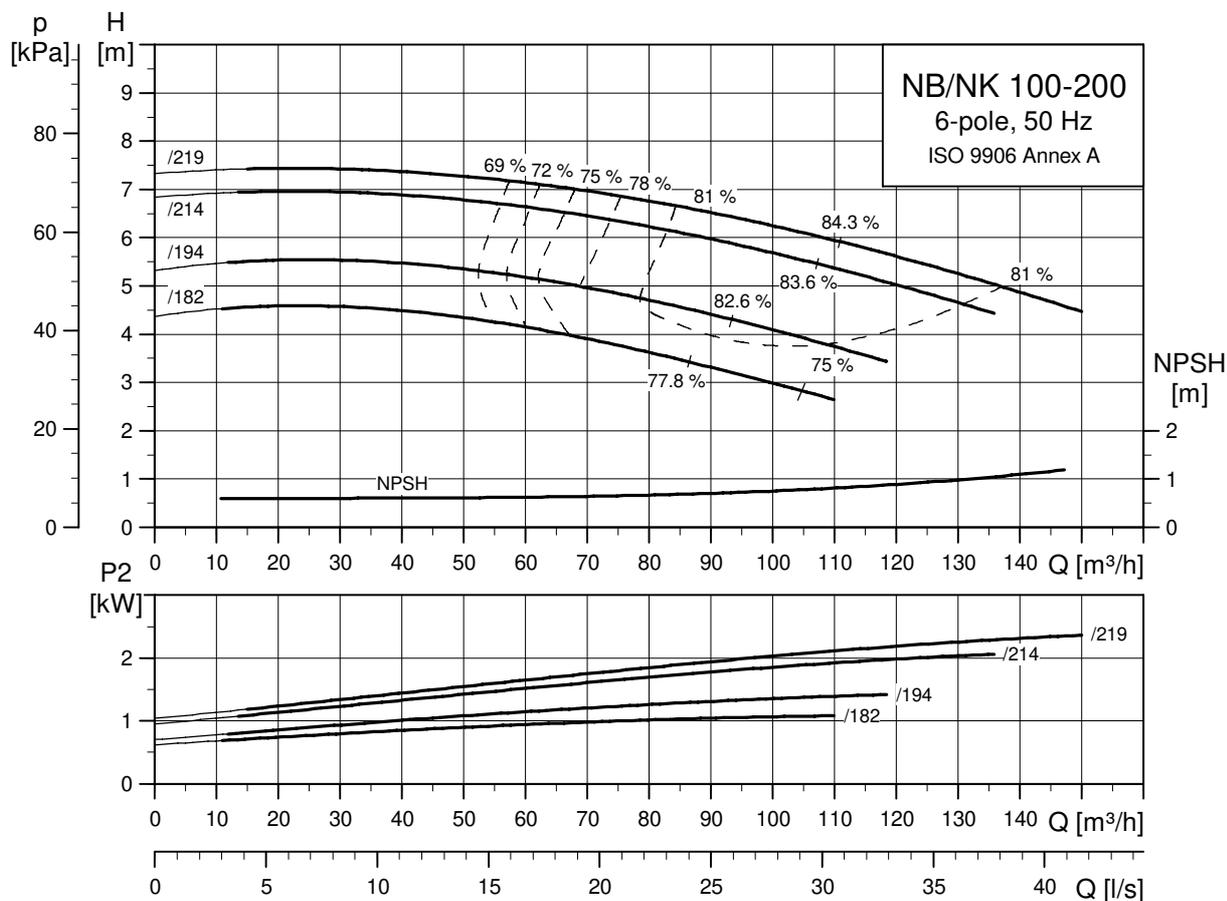
1) Dimension of pump with premium range motor/built-in frequency converter.

Note: For information about base frames, see page 270.

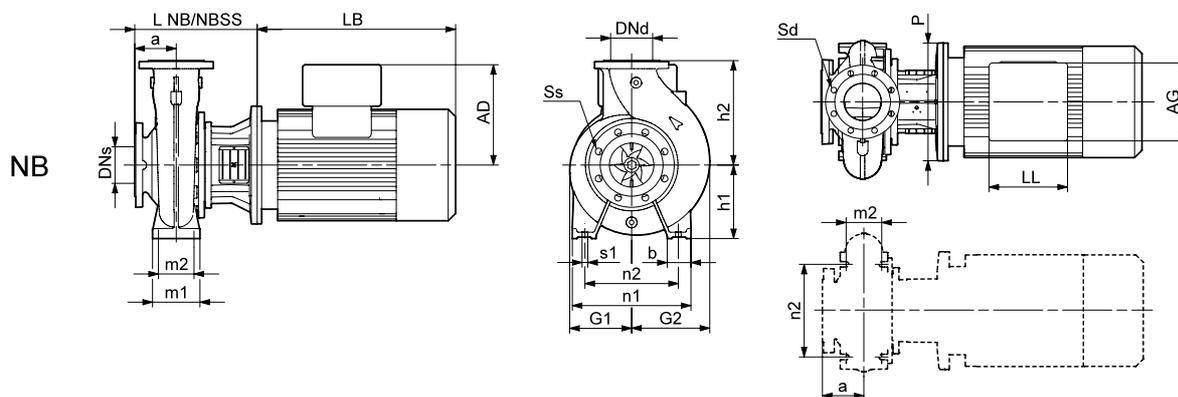
Performance curves

NB, NK 100-200
6-pole, 50 Hz

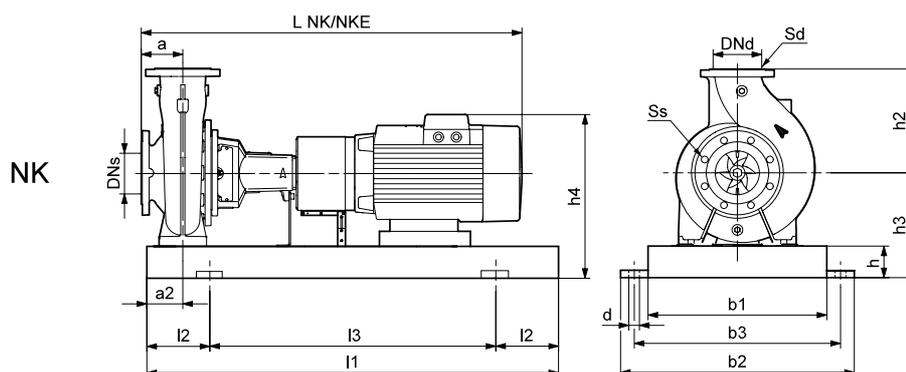
6-pole



TM03 5160 4106



TM03 4180 1806



TM03 6005 4106

Technical data

NB, NK 100-200
6-pole

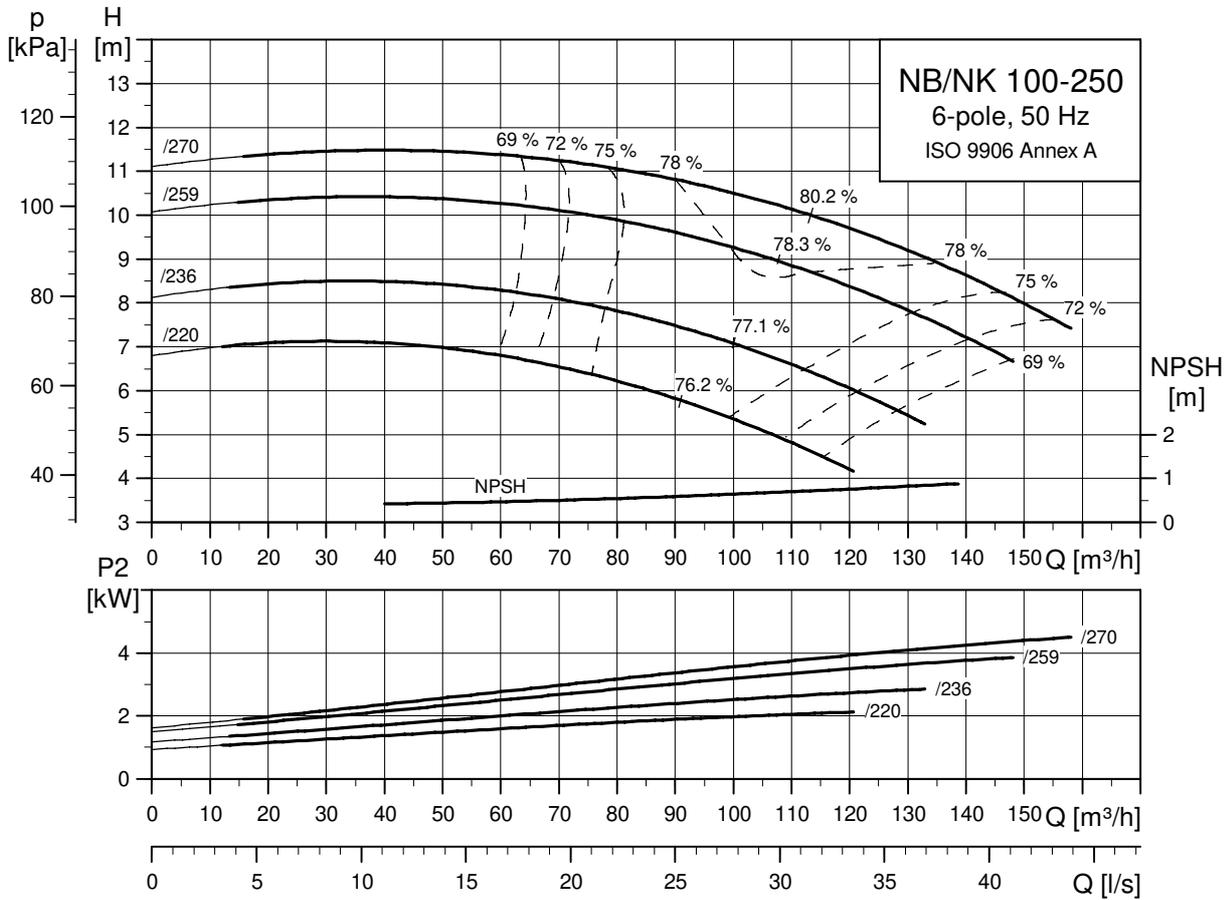
Pump type		100-200/182	100-200/194	100-200/214	100-200/219	
Motor type	Premium Motor	Siemens 90L	Siemens 100L	Siemens 112M	Siemens 132SA	
	E-Motor	-	-	-	-	
Common data NB/NK	P ₂	[kW]	1.1	1.5	2.2	3
	PN	[bar]	16	16	16	16
	DNs	[mm]	125	125	125	125
	DNd	[mm]	100	100	100	100
	a	[mm]	125	125	125	125
	h2	[mm]	280	280	280	280
	Ss		8x19	8x19	8x19	8x19
Common data NK standard/ spacer coupling	Sd		8x19	8x19	8x19	
	L NK	[mm]	975/1111	1006/1142	1030/1166	1052/1188
	L NKE	[mm]	-/-	-/-	-/-	-/-
	Weight NK	[kg]	201/200	213/211	222/220	237/234
	Weight NKE	[kg]	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-
NK data	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-
	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 ¹⁾	[mm]	408/-	415/-	428/-	447/-	
Base frame no.		6	6	6	6	
NB data	Design		A	A	A	A
	L NB	[mm]	328	348	348	368
	L NB SS	[mm]	-	-	-	-
	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 ¹⁾	[mm]	326/-	347/-	371/-	373/-
	AD ¹⁾	[mm]	128/-	135/-	148/-	167/-
	AG ¹⁾	[mm]	75/-	120/-	120/-	140/-
	LL ¹⁾	[mm]	75/-	120/-	120/-	140/-
	P	[mm]	200	250	250	300
	C	[mm]	-	-	-	-
	B	[mm]	-	-	-	-
A	[mm]	-	-	-	-	
K	[mm]	-	-	-	-	
Weight NB ¹⁾	[kg]	99/-	107/-	119/-	137/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	

1) Dimension of pump with premium range motor/built-in frequency converter.

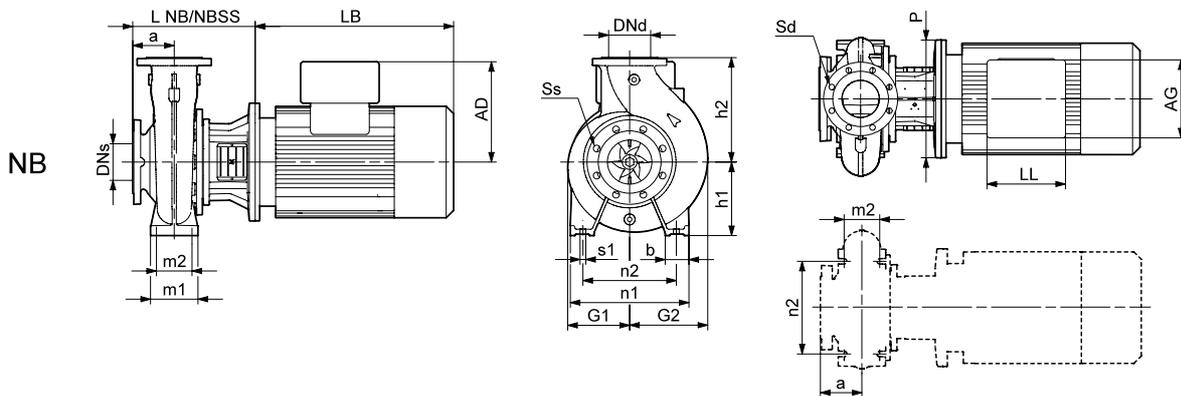
Note: For information about base frames, see page 270.

Performance curves

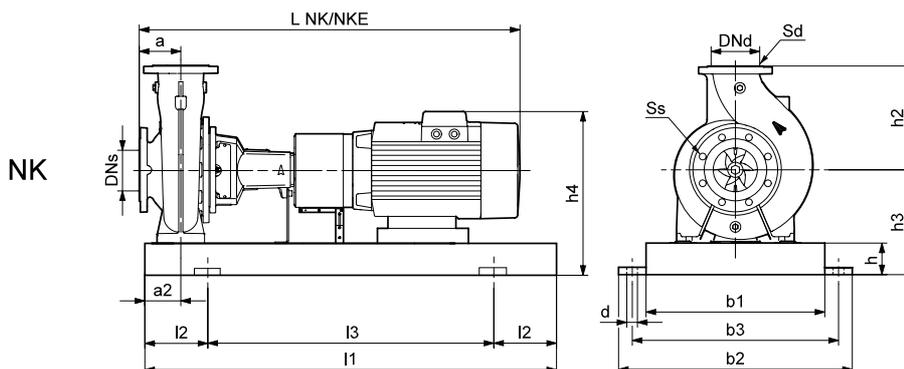
NB, NK 100-250
6-pole, 50 Hz
ISO 9906 Annex A



TM03 5161 4106



TM03 4180 1806



TM03 6005 4106

Technical data

NB, NK 100-250
6-pole

Pump type		100-250/220	100-250/236	100-250/259	100-250/270	
Motor type	Premium Motor	Siemens 112M	Siemens 132SA	Siemens 132MA	Siemens 132MB	
	E-Motor	-	-	-	-	
Common data NB/NK	P ₂	[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		8x19	8x19	8x19	8x19
Common data NK standard/ spacer coupling	Sd		8x19	8x19	8x19	
	L NK	[mm]	1045/1181	1067/1203	1067/1203	1105/1241
	L NKE	[mm]	-/-	-/-	-/-	-/-
	Weight NK	[kg]	267/265	281/278	281/278	299/296
	Weight NKE	[kg]	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-
NK data	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-
	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 ¹⁾	[mm]	473/-	492/-	492/-	492/-	
Base frame no.		7	7	7	7	
NB data	Design		A	A	A	A
	L NB	[mm]	363	383	383	383
	L NB SS	[mm]	-	-	-	-
	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 ¹⁾	[mm]	371/-	373/-	373/-	411/-
	AD ¹⁾	[mm]	148/-	167/-	167/-	167/-
	AG ¹⁾	[mm]	120/-	140/-	140/-	140/-
	LL ¹⁾	[mm]	120/-	140/-	140/-	140/-
	P	[mm]	250	300	300	300
	C	[mm]	-	-	-	-
	B	[mm]	-	-	-	-
A	[mm]	-	-	-	-	
K	[mm]	-	-	-	-	
Weight NB ¹⁾	[kg]	132/-	150/-	150/-	168/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	

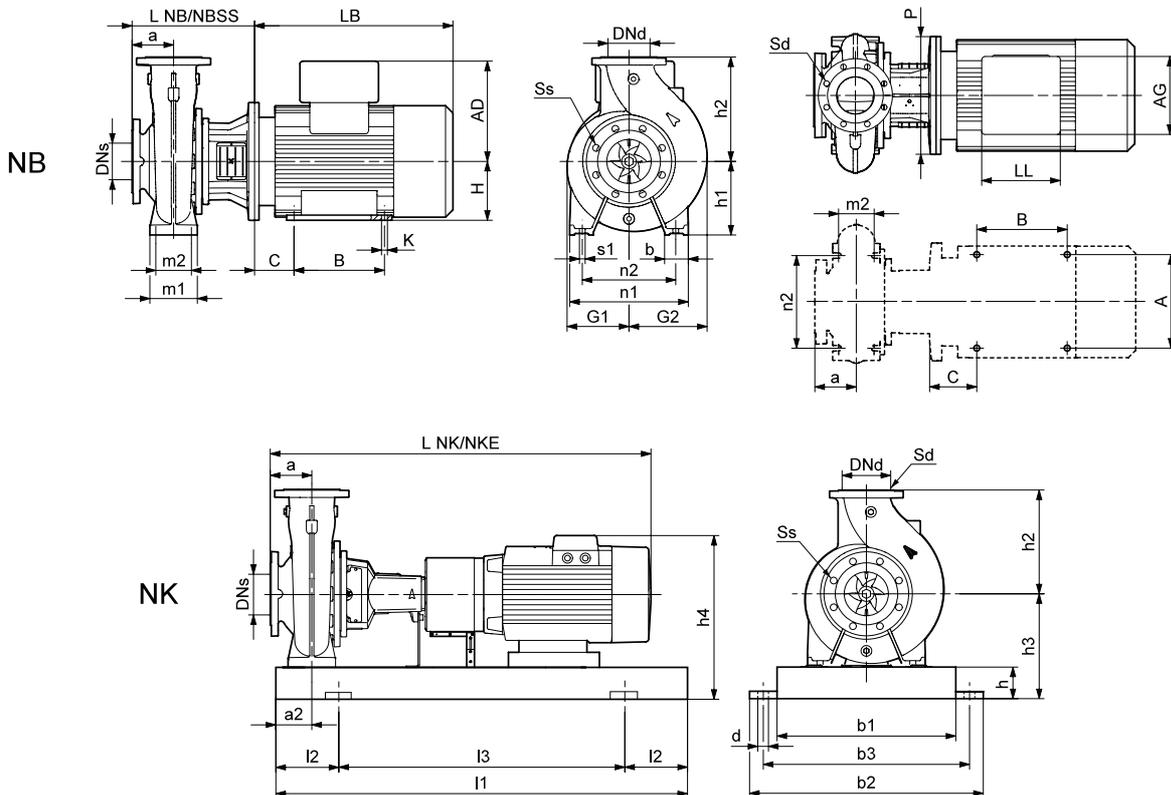
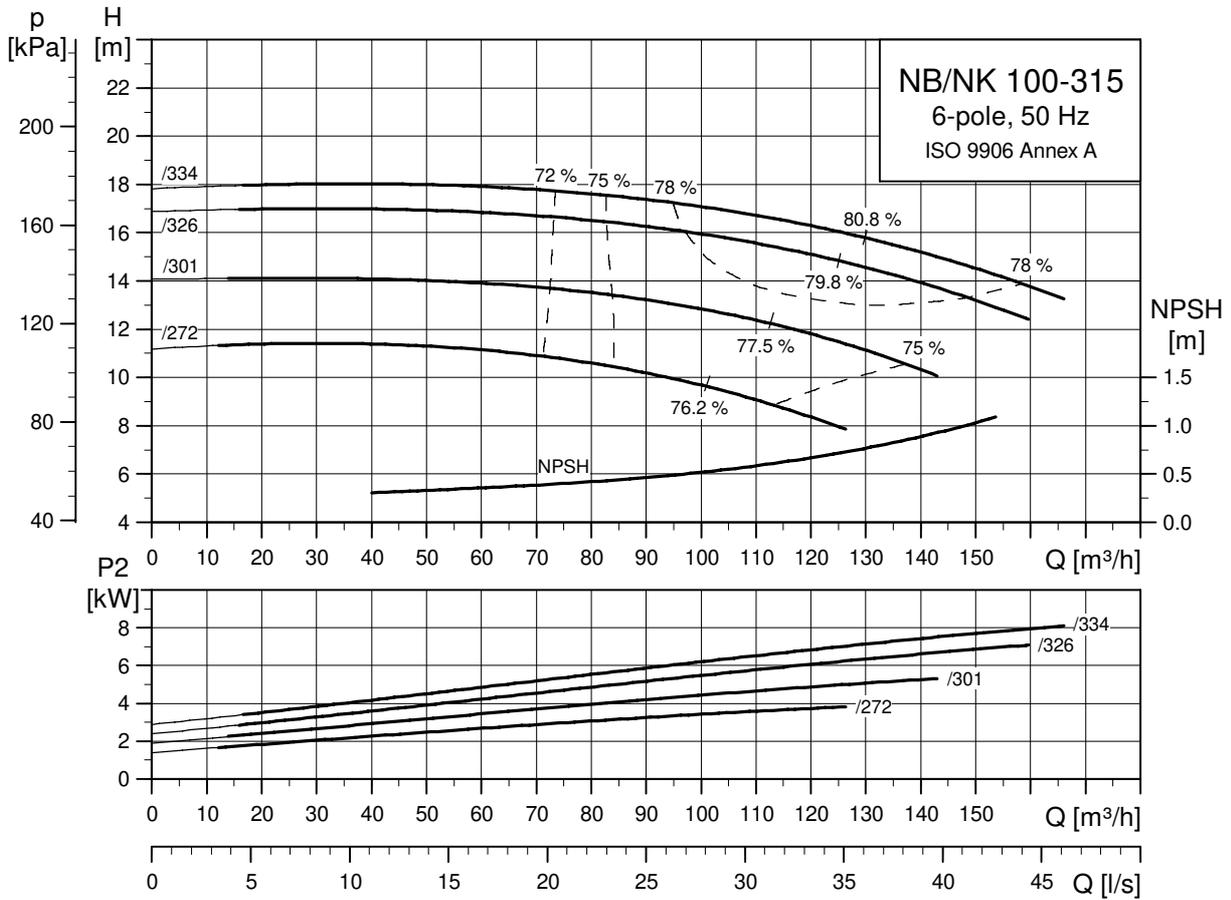
1) Dimension of pump with premium range motor/built-in frequency converter.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 100-315
6-pole, 50 Hz

ISO 9906 Annex A



TM03 5162 4106

TM03 4182 1806

TM03 6005 4106

Pump type		100-315/272	100-315/301	100-315/326	100-315/334	
Motor type	Premium Motor	Siemens 132MA	Siemens 132MB	Siemens 160M	Siemens 160L	
	E-Motor	-	-	-	-	
Common data NB/NK	P ₂	[kW]	4	5.5	7.5	11
	PN	[bar]	16	16	16	16
	DNs	[mm]	125	125	125	125
	DNd	[mm]	100	100	100	100
	a	[mm]	140	140	140	140
	h ₂	[mm]	315	315	315	315
	Ss		8x19	8x19	8x19	8x19
	Sd		8x19	8x19	8x19	8x19
Common data NK standard/ spacer coupling	L NK	[mm]	1067/1203	1105/1241	1202/1338	1242/1378
	L NKE	[mm]	-/-	-/-	-/-	-/-
	Weight NK	[kg]	303/300	321/318	356/351	363/358
	Weight NKE	[kg]	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-
	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-
NK data	l ₁	[mm]	1400	1400	1400	1400
	l ₂	[mm]	230	230	230	230
	l ₃	[mm]	940	940	940	940
	b ₁	[mm]	480	480	480	480
	b ₂	[mm]	610	610	610	610
	b ₃	[mm]	560	560	560	560
	d	[mm]	28	28	28	28
	a ₂	[mm]	90	90	90	90
	h	[mm]	100	100	100	100
	h ₃	[mm]	350	350	350	350
	h ₄ ¹⁾	[mm]	517/-	517/-	547/-	547/-
Base frame no.		7	7	7	7	
NB data	Design		A	A	C ²⁾	C ²⁾
	L NB	[mm]	383	383	413	413
	L NB SS	[mm]	-	-	-	-
	h ₁	[mm]	250	250	250	250
	G ₁	[mm]	208	208	208	208
	G ₂	[mm]	264	264	264	264
	m ₁	[mm]	160	160	160	160
	m ₂	[mm]	120	120	120	120
	n ₁	[mm]	400	400	400	400
	n ₂	[mm]	315	315	315	315
	b	[mm]	80	80	80	80
	s ₁	[mm]	M16	M16	M16	M16
	H	[mm]	-	-	160	160
	LB ¹⁾	[mm]	373/-	411/-	478/-	518/-
	AD ¹⁾	[mm]	167/-	167/-	197/-	197/-
	AG ¹⁾	[mm]	140/-	140/-	165/-	165/-
	LL ¹⁾	[mm]	140/-	140/-	165/-	165/-
	P	[mm]	300	300	350	350
	C	[mm]	-	-	108	108
	B	[mm]	-	-	210	254
	A	[mm]	-	-	254	254
K	[mm]	-	-	15	15	
Weight NB ¹⁾	[kg]	171/-	189/-	225/-	232/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	

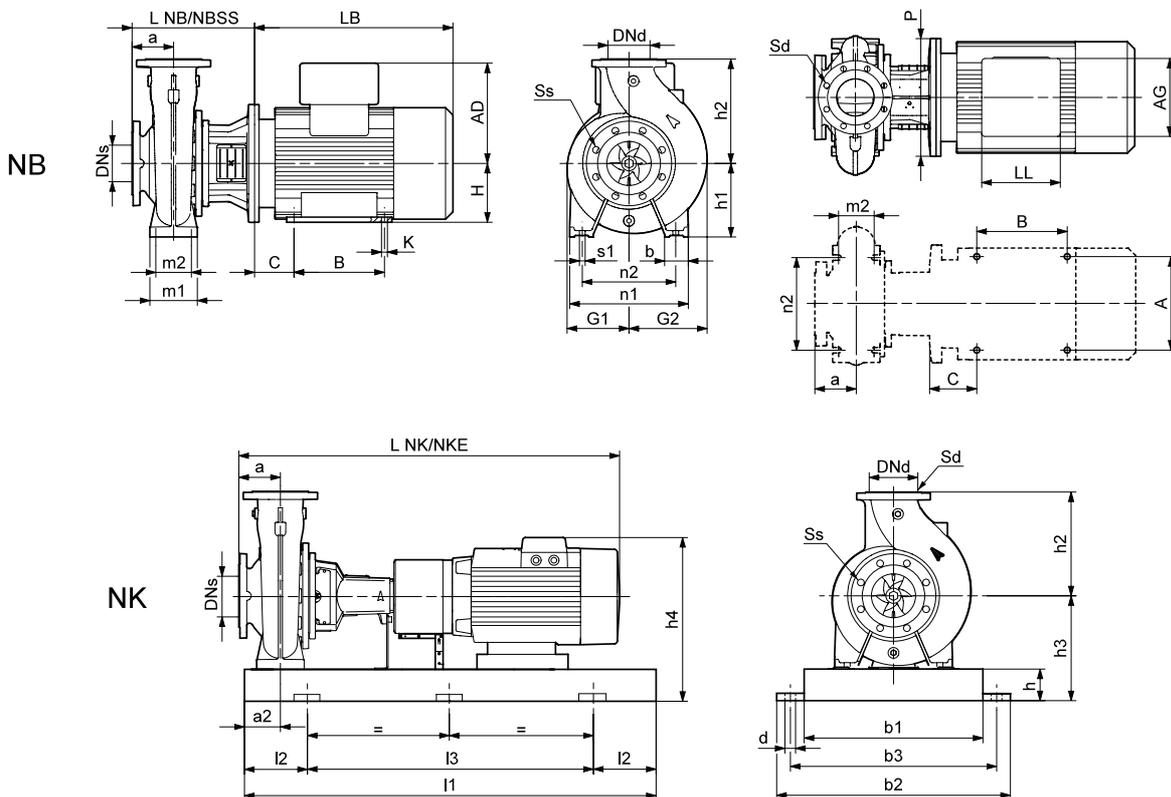
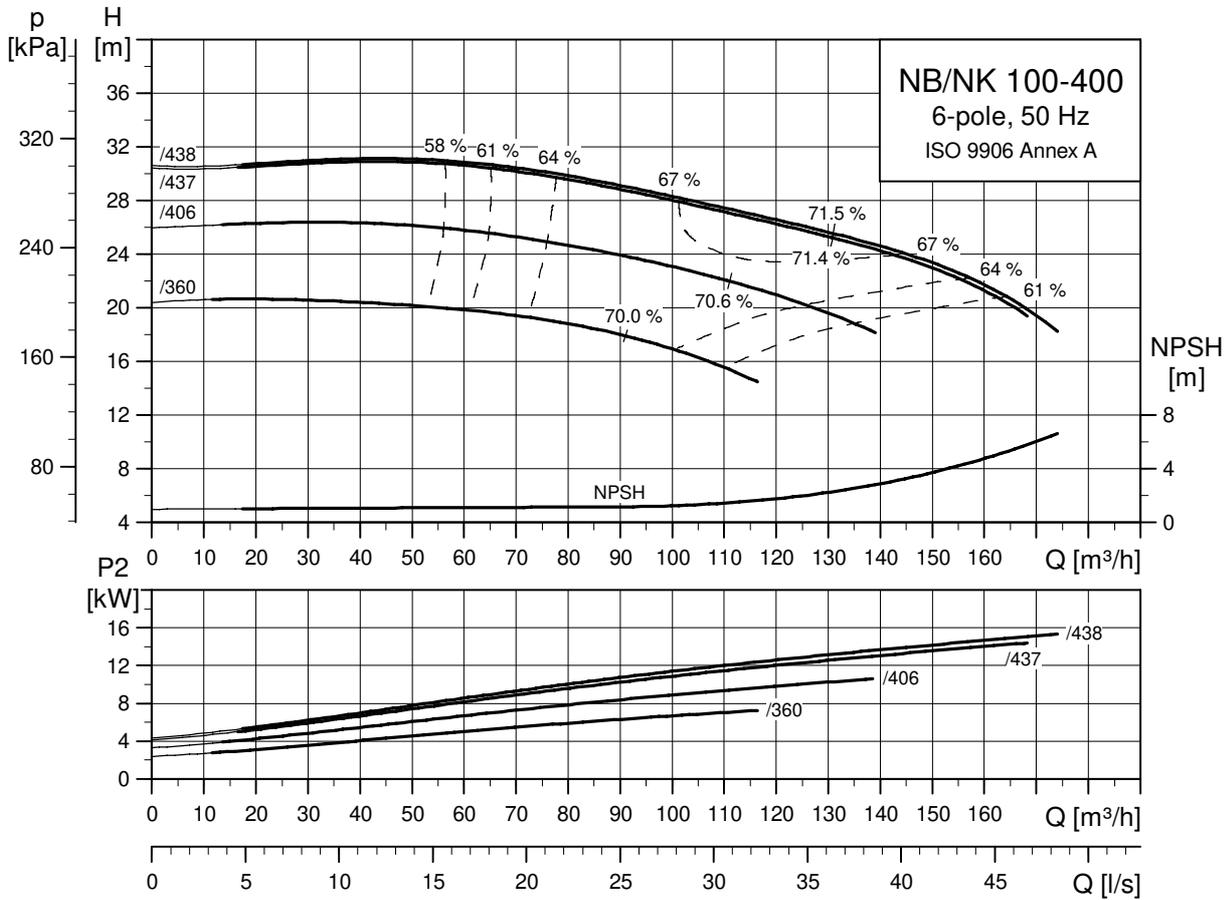
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 100-400
6-pole, 50 Hz
ISO 9906 Annex A



TM03 5163 4106

TM03 4182 1806

TM03 4179 1806

Technical data

NB, NK 100-400
6-pole

Pump type		100-400/360	100-400/406	100-400/437	100-400/438	
Motor type	Premium Motor	Siemens 160M	Siemens 160L	Siemens 180L	Siemens 200LA	
	E-Motor	-	-	-	-	
Common data NB/NK	P ₂	[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
	h ₂	[mm]	355	355	355	355
	Ss		8x19	8x19	8x19	8x19
Common data NK standard/ spacer coupling	Sd		8x19	8x19	8x19	8x19
	L NK	[mm]	1262/1398	1302/1438	1386/1522	1443/1579
	L NKE	[mm]	-/-	-/-	-/-	-/-
	Weight NK	[kg]	518/513	525/520	569/561	612/607
	Weight NKE	[kg]	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-
NK data	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-
	l ₁	[mm]	1800	1800	1800	1800
	l ₂	[mm]	300	300	300	300
	l ₃	[mm]	1200	1200	1200	1200
	b ₁	[mm]	600	600	600	600
	b ₂	[mm]	730	730	730	730
	b ₃	[mm]	670	670	670	670
	d	[mm]	28	28	28	28
	a ₂	[mm]	110	110	110	110
	h	[mm]	100	100	100	100
	h ₃	[mm]	380	380	383	380
h ₄ ¹⁾	[mm]	577/-	577/-	641/-	685/-	
Base frame no.		9	9	9	9	
NB data	Design		C ²⁾	C ²⁾	C ²⁾	
	L NB	[mm]	411	411	411	411
	L NB SS	[mm]	-	-	-	-
	h ₁	[mm]	280	280	280	280
	G ₁	[mm]	272	272	272	272
	G ₂	[mm]	298	298	298	298
	m ₁	[mm]	200	200	200	200
	m ₂	[mm]	150	150	150	150
	n ₁	[mm]	500	500	500	500
	n ₂	[mm]	400	400	400	400
	b	[mm]	100	100	100	100
	s ₁	[mm]	M20	M20	M20	M20
	H	[mm]	160	160	180	200
	LB ¹⁾	[mm]	478/-	518/-	602/-	659/-
	AD ¹⁾	[mm]	197/-	197/-	258/-	305/-
	AG ¹⁾	[mm]	165/-	165/-	152/-	260/-
	LL ¹⁾	[mm]	165/-	165/-	132/-	192/-
	P	[mm]	350	350	350	400
	C	[mm]	108	108	121	133
	B	[mm]	210	254	279	305
A	[mm]	254	254	279	318	
K	[mm]	15	15	15	19	
Weight NB ¹⁾	[kg]	311/-	318/-	357/-	405/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	

1) Dimension of pump with premium range motor/built-in frequency converter.

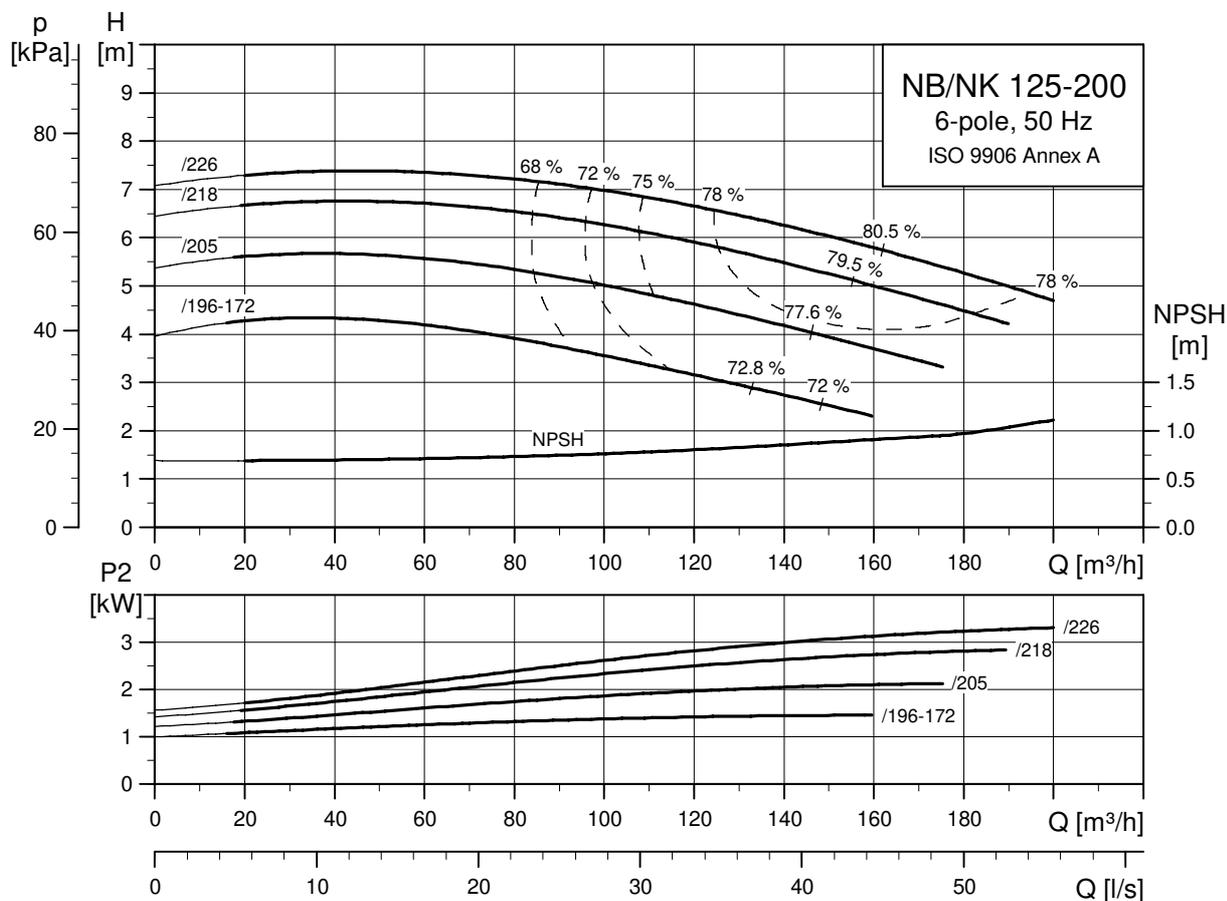
2) Support blocks are needed because of the P, h₁ and H dimensions.

Note: For information about base frames, see page 270.

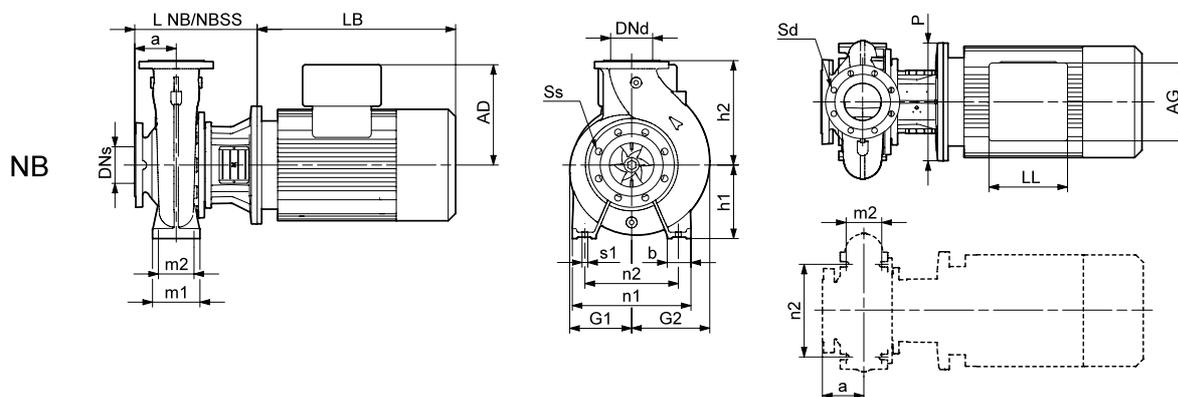
Performance curves

NB, NK 125-200
6-pole, 50 Hz

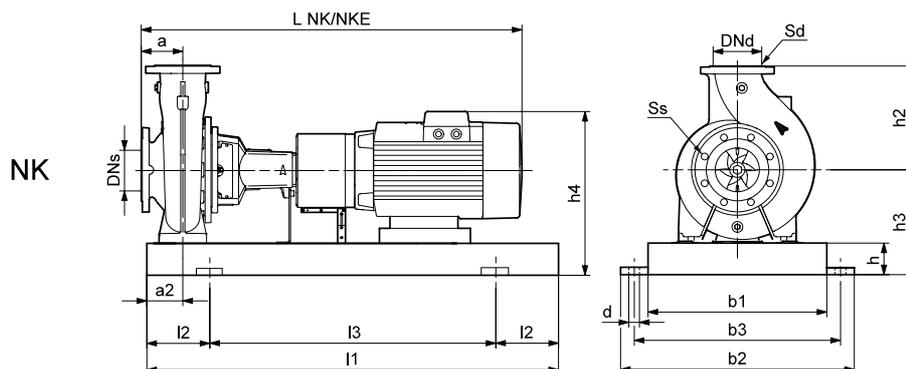
6-pole



TM03 5164 4106



TM03 4180 1806



TM03 6005 4106

Technical data

NB, NK 125-200
6-pole

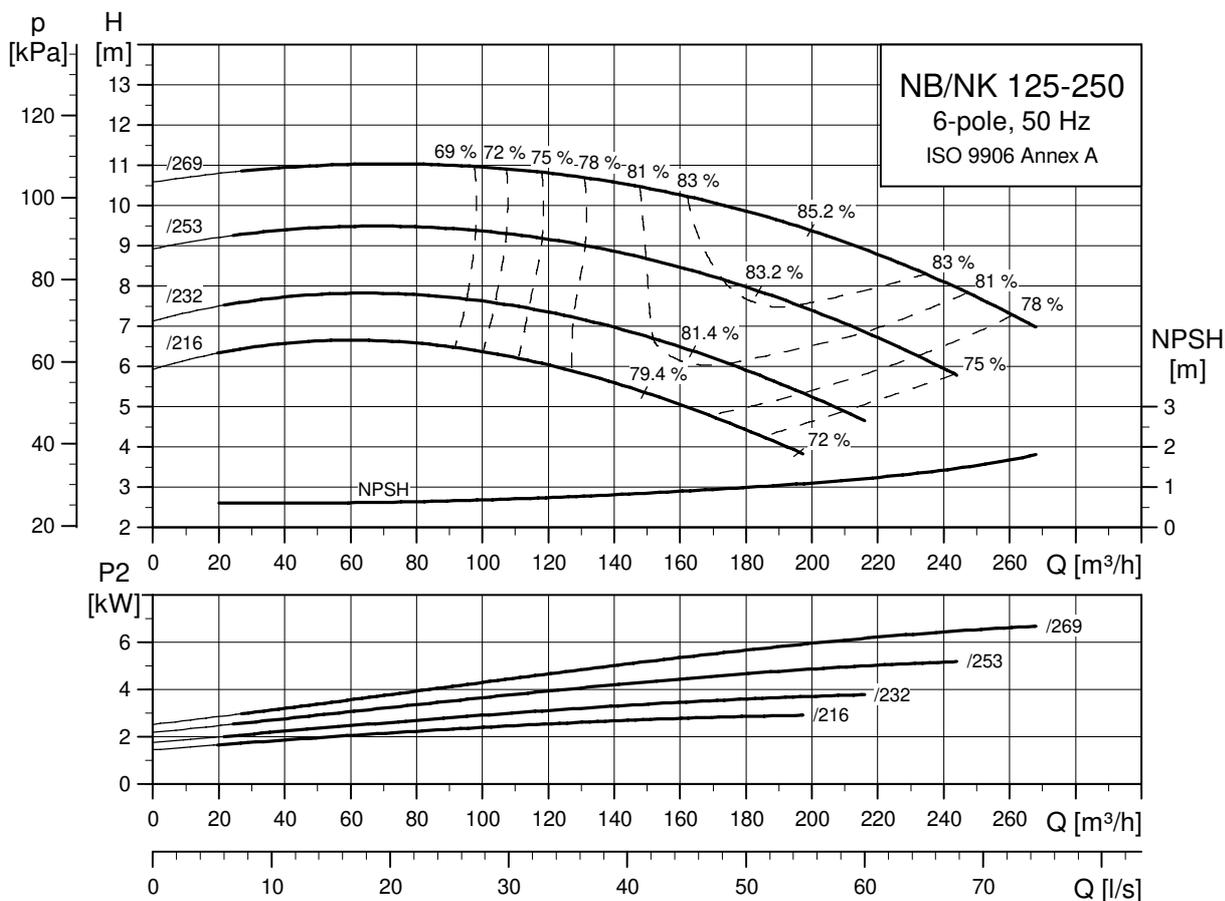
Pump type		125-200/196-172	125-200/205	125-200/218	125-200/226	
Motor type	Premium Motor	Siemens 100L	Siemens 112M	Siemens 132SA	Siemens 132MA	
	E-Motor	-	-	-	-	
Common data NB/NK	P ₂	[kW]	1.5	2.2	3	4
	PN	[bar]	16	16	16	16
	DNs	[mm]	150	150	150	150
	DNd	[mm]	125	125	125	125
	a	[mm]	140	140	140	140
	h2	[mm]	315	315	315	315
	Ss		8x23	8x23	8x23	8x23
Common data NK standard/ spacer coupling	Sd		8x19	8x19	8x19	8x19
	L NK	[mm]	1021/1157	1045/1181	1067/1203	1067/1203
	L NKE	[mm]	-/-	-/-	-/-	-/-
	Weight NK	[kg]	273/271	291/289	297/294	297/294
	Weight NKE	[kg]	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-
NK data	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-
	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 ¹⁾	[mm]	485/-	498/-	517/-	517/-	
Base frame no.		7	7	7	7	
NB data	Design		A	A	A	A
	L NB	[mm]	363	363	383	383
	L NB SS	[mm]	-	-	-	-
	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 ¹⁾	[mm]	347/-	371/-	373/-	373/-
	AD ¹⁾	[mm]	135/-	148/-	167/-	167/-
	AG ¹⁾	[mm]	120/-	120/-	140/-	140/-
	LL ¹⁾	[mm]	120/-	120/-	140/-	140/-
	P	[mm]	250	250	300	300
	C	[mm]	-	-	-	-
	B	[mm]	-	-	-	-
A	[mm]	-	-	-	-	
K	[mm]	-	-	-	-	
Weight NB ¹⁾	[kg]	135/-	147/-	165/-	165/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	

1) Dimension of pump with premium range motor/built-in frequency converter.

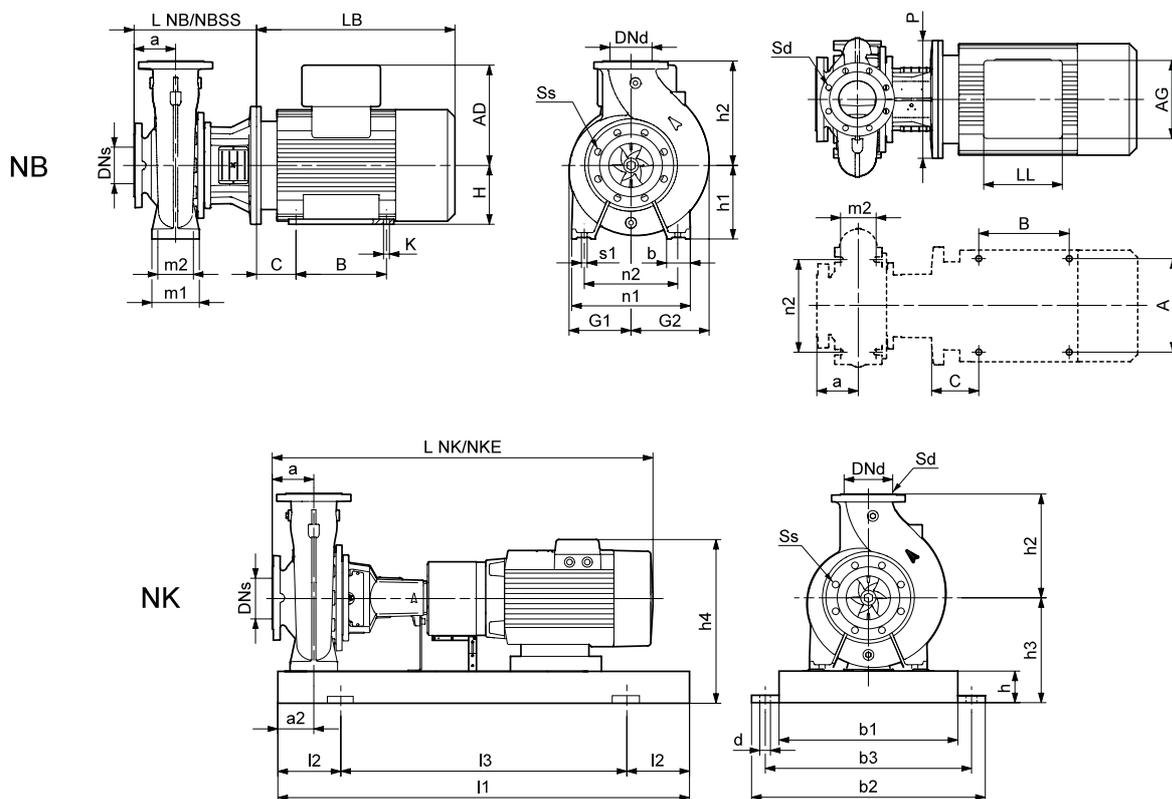
Note: For information about base frames, see page 270.

Performance curves

NB, NK 125-250
6-pole, 50 Hz
ISO 9906 Annex A



TM03 5165 4106



TM03 4182 1806

TM03 6005 4106

Technical data

NB, NK 125-250
6-pole

Pump type		125-250/216	125-250/232	125-250/253	125-250/269	
Motor type	Premium Motor	Siemens 132SA	Siemens 132MA	Siemens 132MB	Siemens 160M	
	E-Motor	-	-	-	-	
Common data NB/NK	P ₂	[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		8x23	8x23	8x23	8x23
	Sd		8x19	8x19	8x19	8x19
Common data NK standard/ spacer coupling	L NK	[mm]	1067/1203	1067/1203	1105/1241	1202/1338
	L NKE	[mm]	-/-	-/-	-/-	-/-
	Weight NK	[kg]	306/303	306/303	324/321	359/354
	Weight NKE	[kg]	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-
	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-
NK data	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 ¹⁾	[mm]	517/-	517/-	517/-	547/-
Base frame no.		7	7	7	7	
NB data	Design		A	A	A	C ²⁾
	L NB	[mm]	383	383	383	413
	L NB SS	[mm]	-	-	-	-
	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 ¹⁾	[mm]	373/-	373/-	411/-	478/-
	AD ¹⁾	[mm]	167/-	167/-	167/-	197/-
	AG ¹⁾	[mm]	140/-	140/-	140/-	165/-
	LL ¹⁾	[mm]	140/-	140/-	140/-	165/-
	P	[mm]	300	300	300	350
	C	[mm]	-	-	-	108
	B	[mm]	-	-	-	210
A	[mm]	-	-	-	254	
K	[mm]	-	-	-	15	
Weight NB ¹⁾	[kg]	174/-	174/-	192/-	228/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	

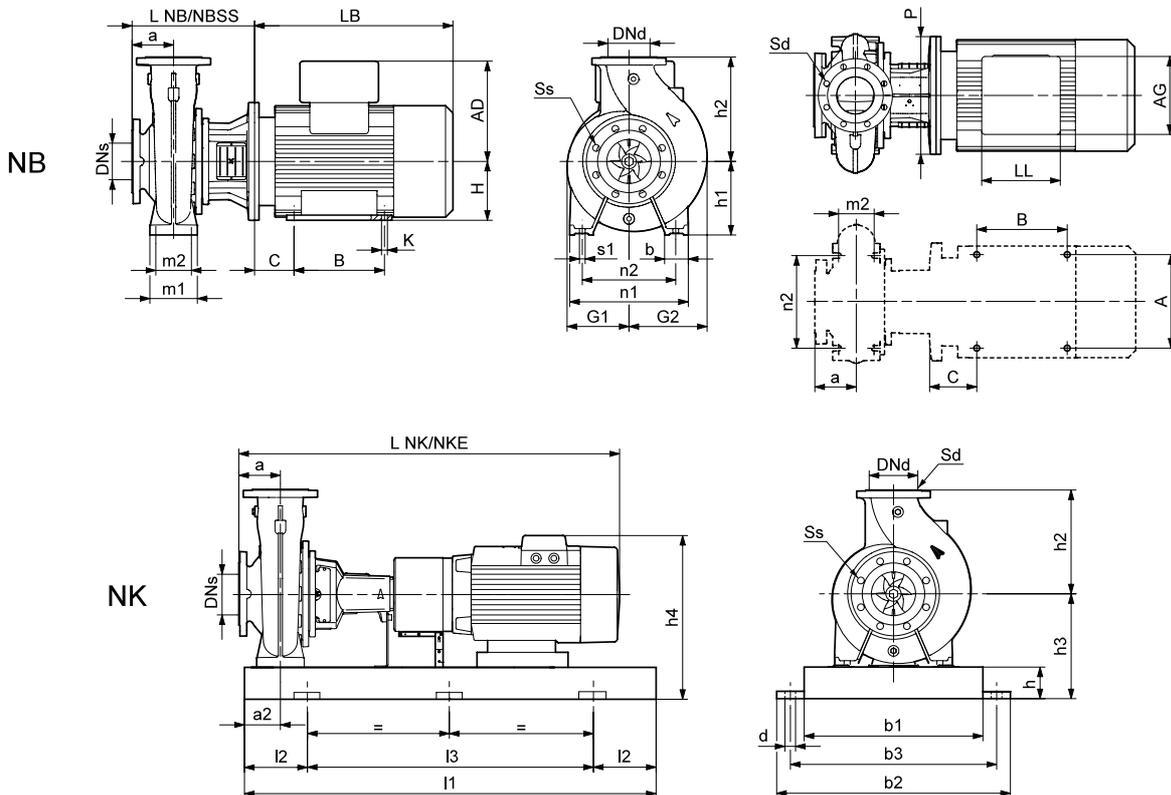
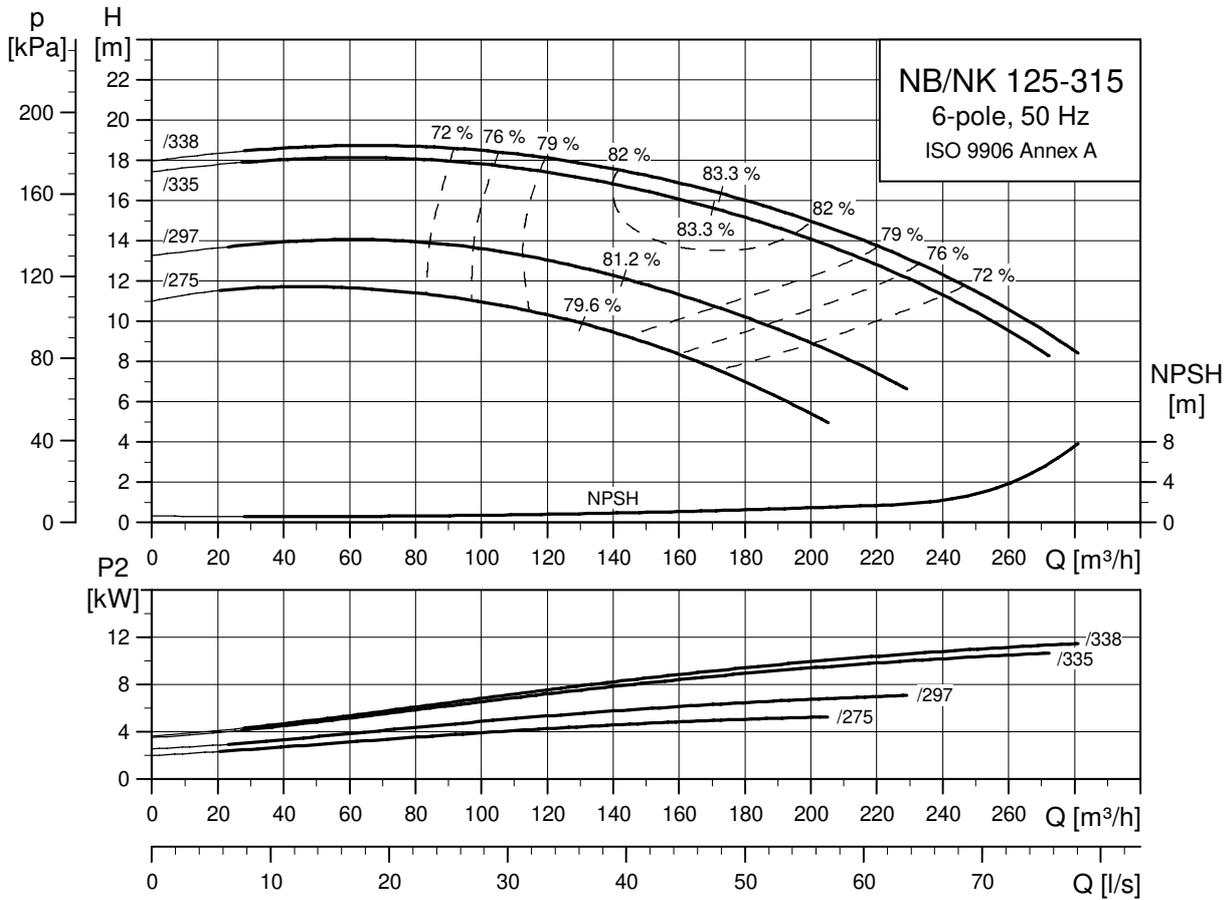
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h1 and H dimensions.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 125-315
6-pole, 50 Hz
ISO 9906 Annex A



TM03 5166 4106

TM03 4182 1806

TM03 4179 1806

Technical data

NB, NK125-315
6-pole

Pump type		125-315/275	125-315/297	125-315/335	125-315/338	
Motor type	Premium Motor	Siemens 132MB	Siemens 160M	Siemens 160L	Siemens 180L	
	E-Motor	-	-	-	-	
Common data NB/NK	P ₂	[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		8x23	8x23	8x23	8x23
	Sd		8x19	8x19	8x19	8x19
Common data NK standard/ spacer coupling	L NK	[mm]	1165/1301	1262/1398	1302/1438	1386/1522
	L NKE	[mm]	-/-	-/-	-/-	-/-
	Weight NK	[kg]	452/449	478/473	485/480	529/521
	Weight NKE	[kg]	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-
	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-
NK data	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 ¹⁾	[mm]	552/-	577/-	577/-	641/-
Base frame no.		9	9	9	9	
NB data	Design		A	C ²⁾	C ²⁾	C ²⁾
	L NB	[mm]	381	411	411	411
	L NB SS	[mm]	-	-	-	-
	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 ¹⁾	[mm]	411/-	478/-	518/-	602/-
	AD ¹⁾	[mm]	167/-	197/-	197/-	258/-
	AG ¹⁾	[mm]	140/-	165/-	165/-	152/-
	LL ¹⁾	[mm]	140/-	165/-	165/-	132/-
	P	[mm]	300	350	350	350
	C	[mm]	-	108	108	121
	B	[mm]	-	210	254	279
A	[mm]	-	254	254	279	
K	[mm]	-	15	15	15	
Weight NB ¹⁾	[kg]	234/-	271/-	278/-	317/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	

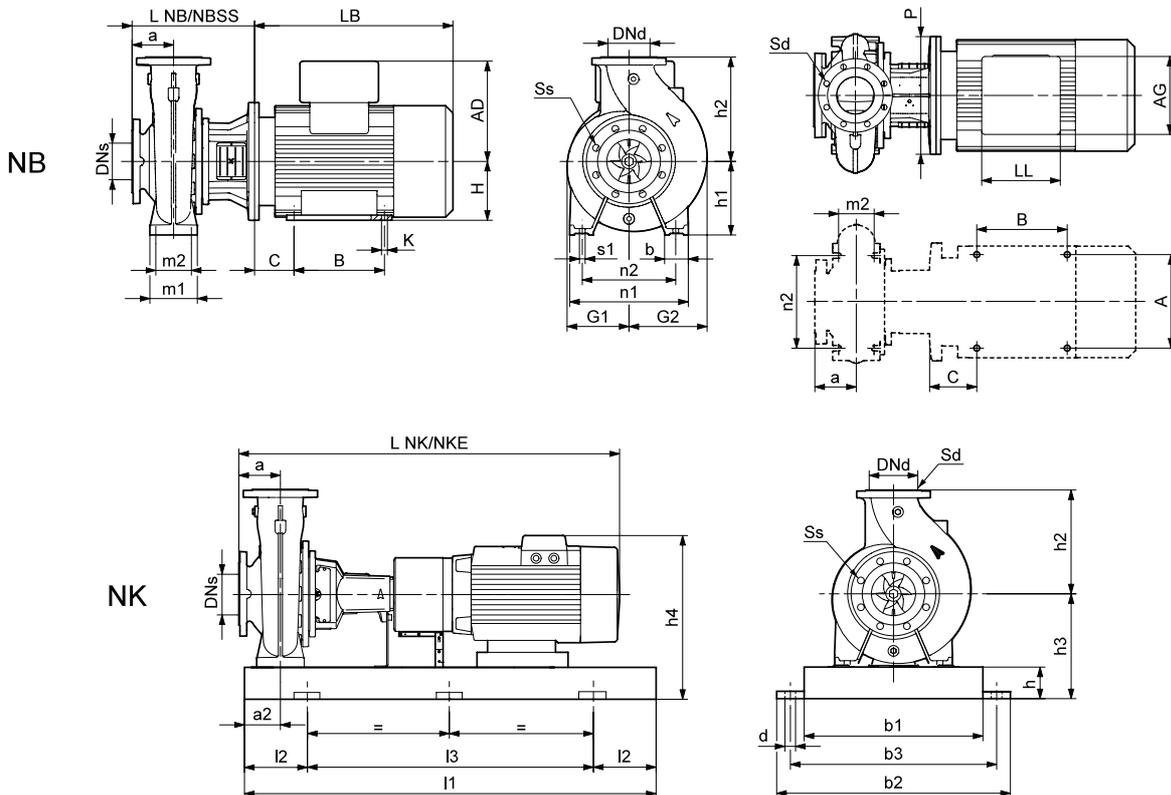
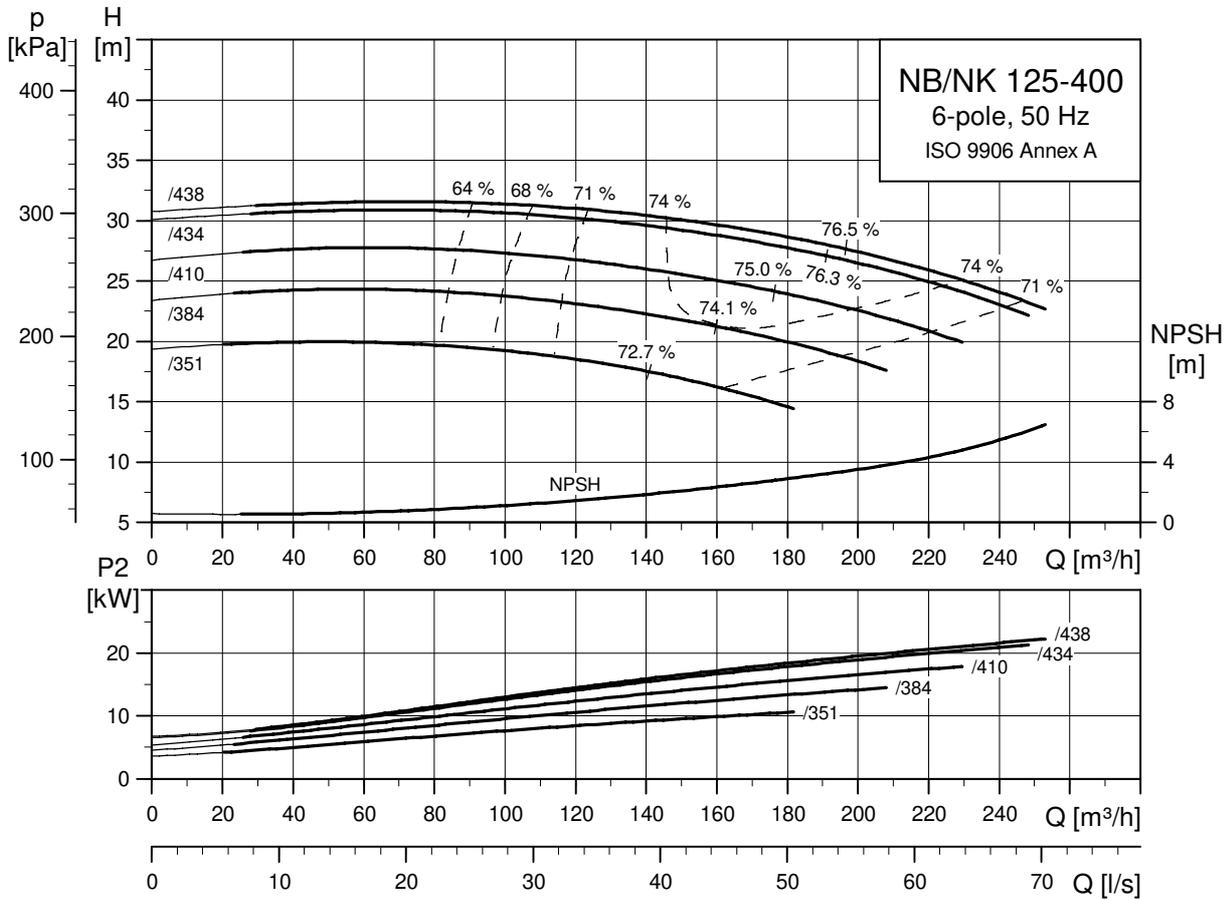
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h1 and H dimensions.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 125-400
6-pole, 50 Hz
ISO 9906 Annex A



TM03 5167 4106

TM03 4182 1806

TM03 4179 1806

Technical data

NB, NK 125-400
6-pole

Pump type		125-400/351	125-400/384	125-400/410	125-400/434	125-400/438	
Motor type	Premium Motor	Siemens 160L	Siemens 180L	Siemens 200LA	Siemens 200LB	Siemens 225M	
	E-Motor	-	-	-	-	-	
Common data NB/NK	P ₂	[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		8x23	8x23	8x23	8x23	8x23
Common data NK standard/ spacer coupling	Sd		8x19	8x19	8x19	8x19	8x19
	L NK	[mm]	1302/1438	1386/1522	1443/1579	1443/1579	1523/1659
	L NKE	[mm]	-/-	-/-	-/-	-/-	-/-
	Weight NK	[kg]	551/546	591/583	629/624	660/655	764/759
	Weight NKE	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-	-/-
NK data	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-	-/-
	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 ¹⁾	[mm]	612/-	673/-	720/-	720/-	740/-	
Base frame no.		9	9	9	9	9	
NB data	Design		C ²⁾	C ²⁾	C ²⁾	C ²⁾	
	L NB	[mm]	411	411	411	411	441
	L NB SS	[mm]	-	-	-	-	-
	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 ¹⁾	[mm]	518/-	602/-	659/-	659/-	709/-
	AD ¹⁾	[mm]	197/-	258/-	305/-	305/-	325/-
	AG ¹⁾	[mm]	165/-	152/-	260/-	260/-	260/-
	LL ¹⁾	[mm]	165/-	132/-	192/-	192/-	192/-
	P	[mm]	350	350	400	400	450
	C	[mm]	108	121	133	133	149
	B	[mm]	254	279	305	305	286
A	[mm]	254	279	318	318	356	
K	[mm]	15	15	19	19	19	
Weight NB ¹⁾	[kg]	330/-	368/-	416/-	447/-	566/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-	

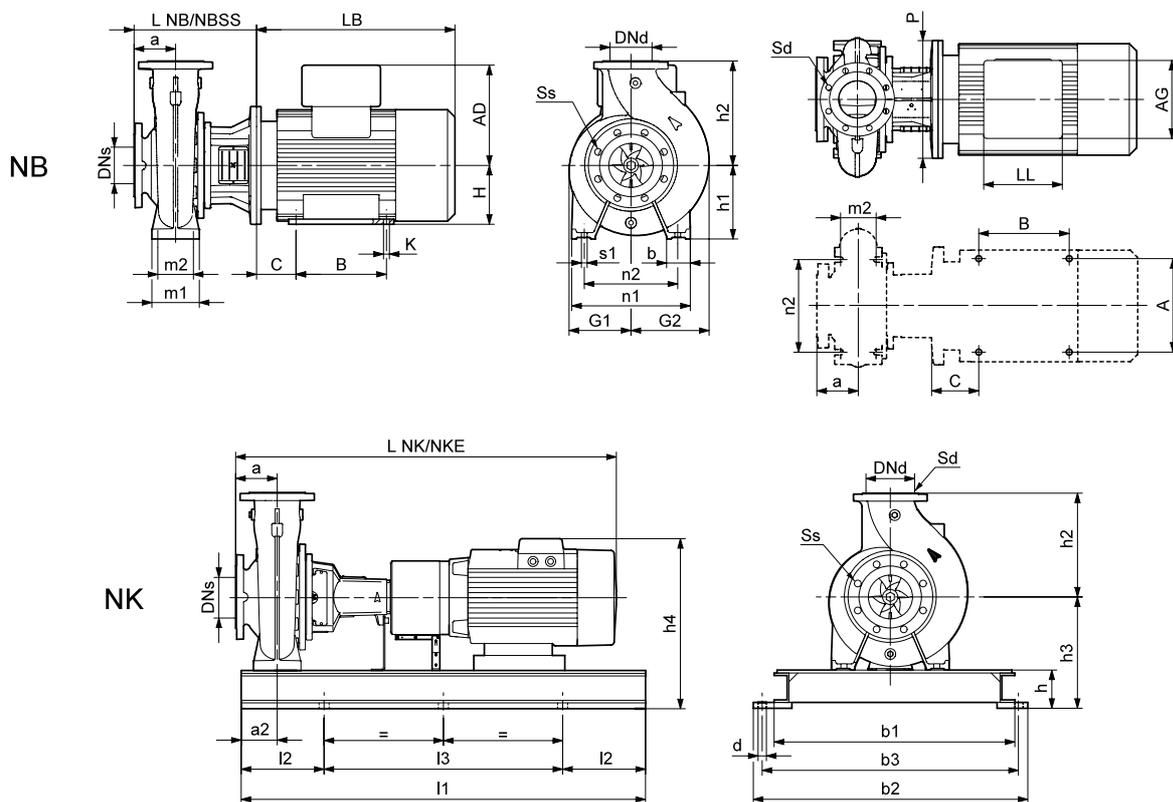
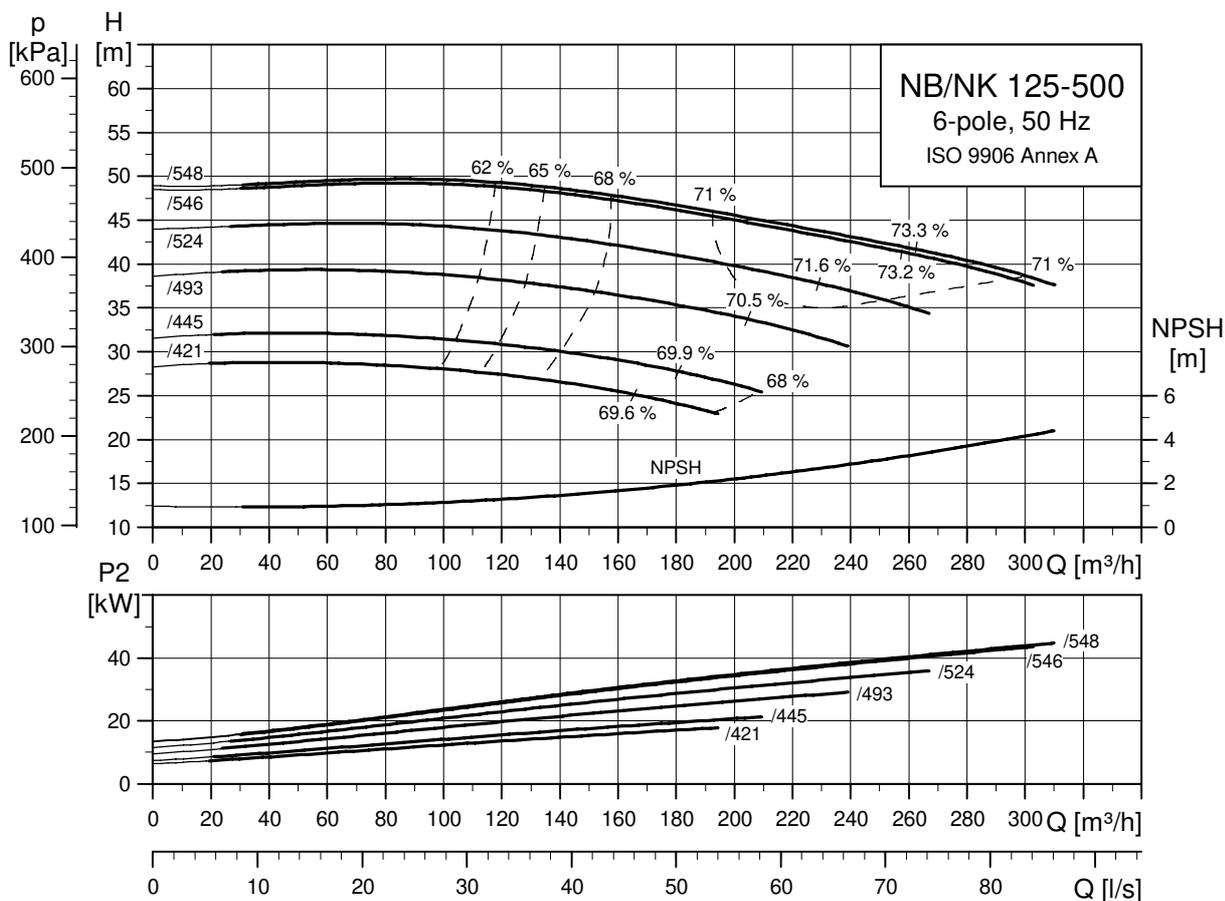
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h1 and H dimensions.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 125-500
6-pole, 50 Hz
ISO 9906 Annex A



TM03 5168 4106

TM03 4182 1806

TM03 4051 1806

Technical data

NB, NK 125-500
6-pole

Pump type		125-500/421	125-500/445	125-500/493	125-500/524	125-500/546	125-500/548	
Motor type	Premium Motor	Siemens 200LA	Siemens 200LB	Siemens 225M	Siemens 250M	Siemens 280S	Siemens 280M	
	E-Motor	-	-	-	-	-	-	
Common data NB/NK	P ₂	[kW]	18,5	22	30	37	45	55
	PN	[bar]	16	16	16	16	16	16
	DNs	[mm]	150	150	150	150	150	150
	DNd	[mm]	125	125	125	125	125	125
	a	[mm]	180	180	180	180	180	180
	h2	[mm]	500	500	500	500	500	500
	Ss		8x23	8x23	8x23	8x23	8x23	8x23
	Sd		8x19	8x19	8x19	8x19	8x19	8x19
Common data NK standard/ spacer coupling	L NK	[mm]	1623/1799	1623/1799	1703/1879	1741/1917	1814/1990	1924/2100
	L NKE	[mm]	-/-	-/-	-/-	-/-	-/-	-/-
	Weight NK	[kg]	1093/1092	1124/1123	1225/1222	1311/1308	1422/1418	1476/1472
	Weight NKE	[kg]	-/-	-/-	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-	-/-	-/-
	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-	-/-	-/-
NK data	l1	[mm]	2000	2000	2000	2000	2000	2000
	l2	[mm]	330	330	330	330	330	330
	l3	[mm]	1340	1340	1340	1340	1340	1340
	b1	[mm]	750	750	750	750	750	750
	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 ¹⁾	[mm]	835/-	835/-	855/-	922/-	962/-	962/-
Base frame no.		10	10	10	10	10	10	
NB data	Design		C ²⁾					
	L NB	[mm]	494	494	524	524	524	524
	L NB SS	[mm]	-	-	-	-	-	-
	h1	[mm]	400	400	400	400	400	400
	G1	[mm]	344	344	344	344	344	344
	G2	[mm]	377	377	377	377	377	377
	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 ¹⁾	[mm]	659/-	659/-	709/-	747/-	820/-	930/-
	AD ¹⁾	[mm]	305/-	305/-	325/-	392/-	432/-	432/-
	AG ¹⁾	[mm]	260/-	260/-	260/-	300/-	300/-	300/-
	LL ¹⁾	[mm]	192/-	192/-	192/-	236/-	236/-	236/-
	P	[mm]	400	400	450	550	550	550
	C	[mm]	133	133	149	168	190	190
	B	[mm]	305	305	286	349	368	419
A	[mm]	318	318	356	406	457	457	
K	[mm]	19	19	19	24	24	24	
Weight NB ¹⁾	[kg]	623/-	654/-	774/-	872/-	987/-	1037/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-	-/-	

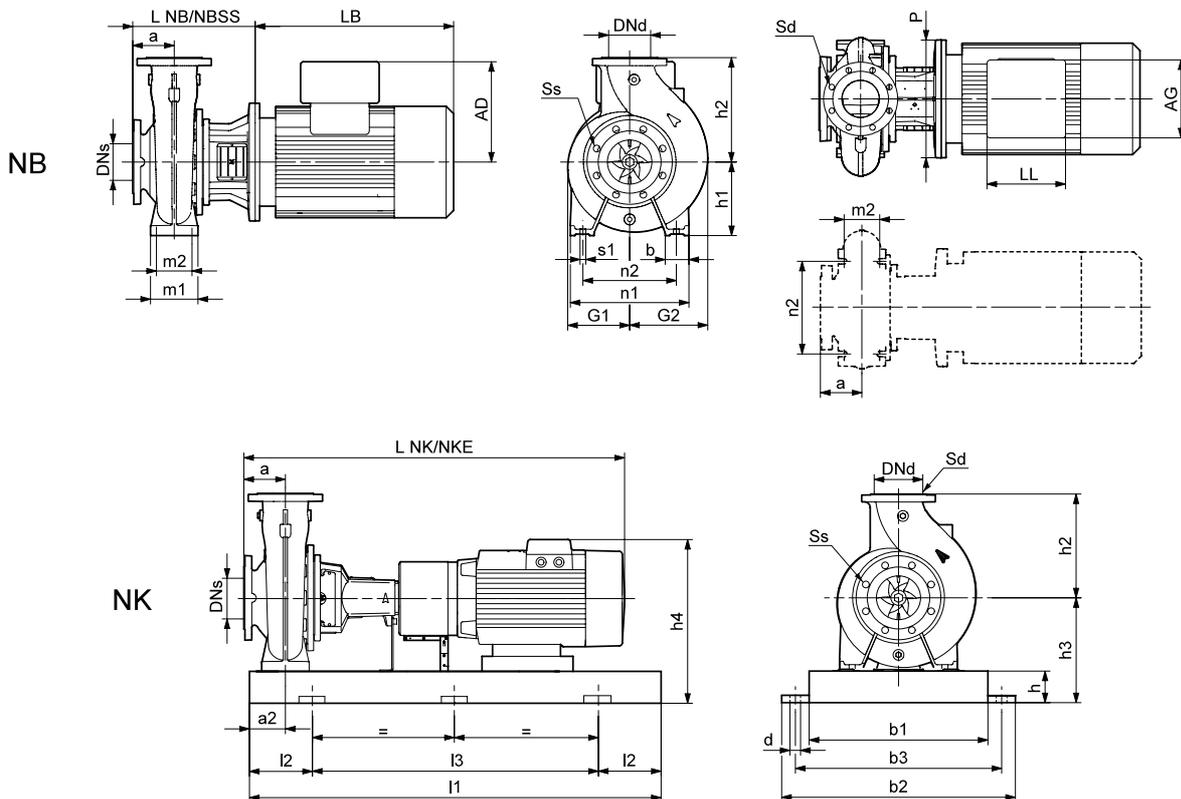
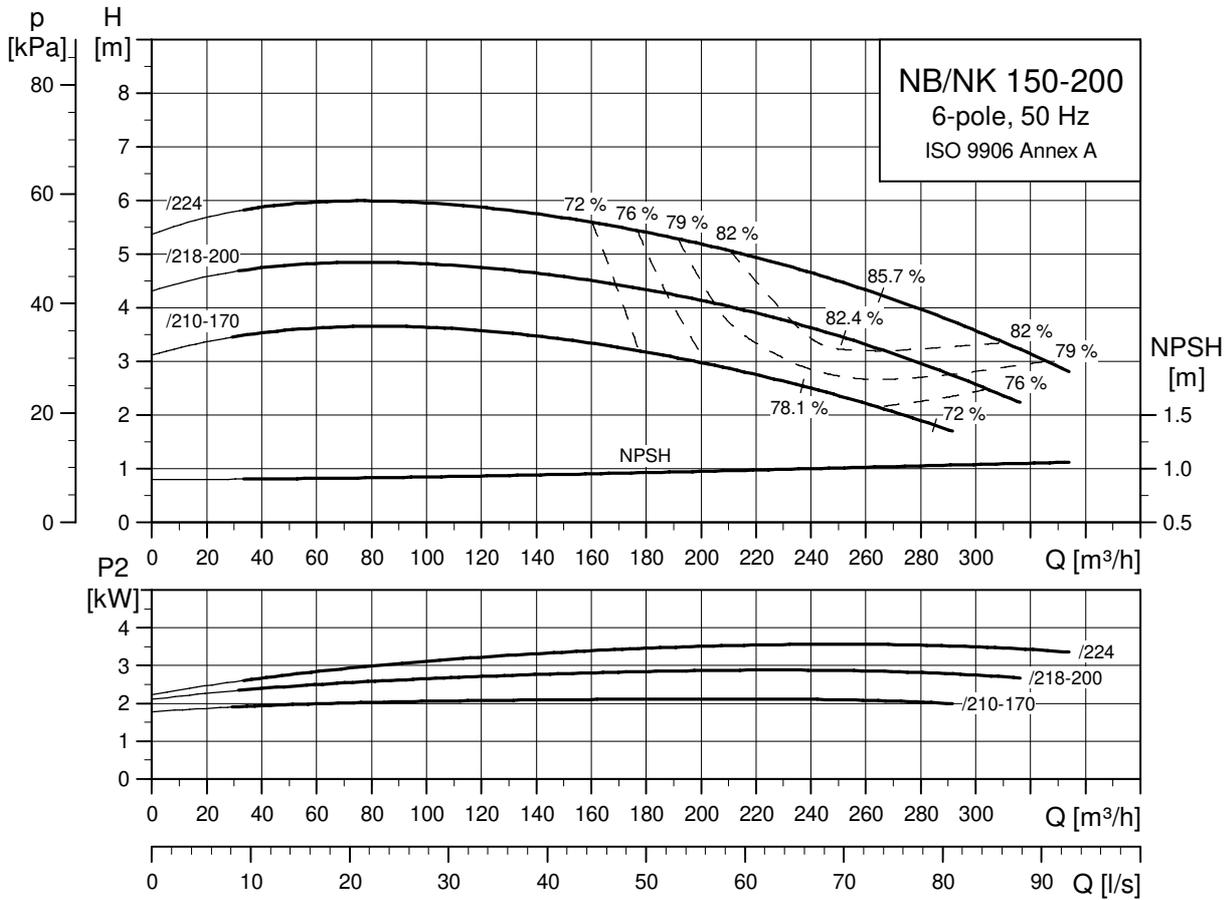
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h1 and H dimensions.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 150-200
6-pole, 50 Hz
ISO 9906 Annex A



TM03 5169 4106

TM03 4180 1806

TM03 4179 1806

Technical data

NB, NK 150-200
6-pole

Pump type		150-200/210-170	150-200/218-200	150-200/224	
Motor type	Premium Motor	Siemens 112M	Siemens 132SA	Siemens 132MA	
	E-Motor	-	-	-	
Common data NB/NK	P ₂	[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
	h ₂	[mm]	400	400	400
	Ss		8x23	8x23	8x23
Common data NK standard/ spacer coupling	Sd		8x23	8x23	
	L NK	[mm]	1065/1201	1087/1223	1087/1223
	L NKE	[mm]	-/-	-/-	-/-
	Weight NK	[kg]	411/409	423/420	423/420
	Weight NKE	[kg]	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-
NK data	Weight NKE SS	[kg]	-/-	-/-	-/-
	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
	h ₄ ¹⁾	[mm]	528/-	552/-	552/-
NB data	Base frame no.		9	9	9
	Design		A ²⁾	A ²⁾	A ²⁾
	L NB	[mm]	383	403	403
	L NB SS	[mm]	-	-	-
	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 ¹⁾	[mm]	371/-	373/-	373/-
	AD ¹⁾	[mm]	148/-	167/-	167/-
	AG ¹⁾	[mm]	120/-	140/-	140/-
	LL ¹⁾	[mm]	120/-	140/-	140/-
	P	[mm]	250	300	300
	C	[mm]	-	-	-
B	[mm]	-	-	-	
A	[mm]	-	-	-	
K	[mm]	-	-	-	
Weight NB ¹⁾	[kg]	201/-	219/-	219/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	

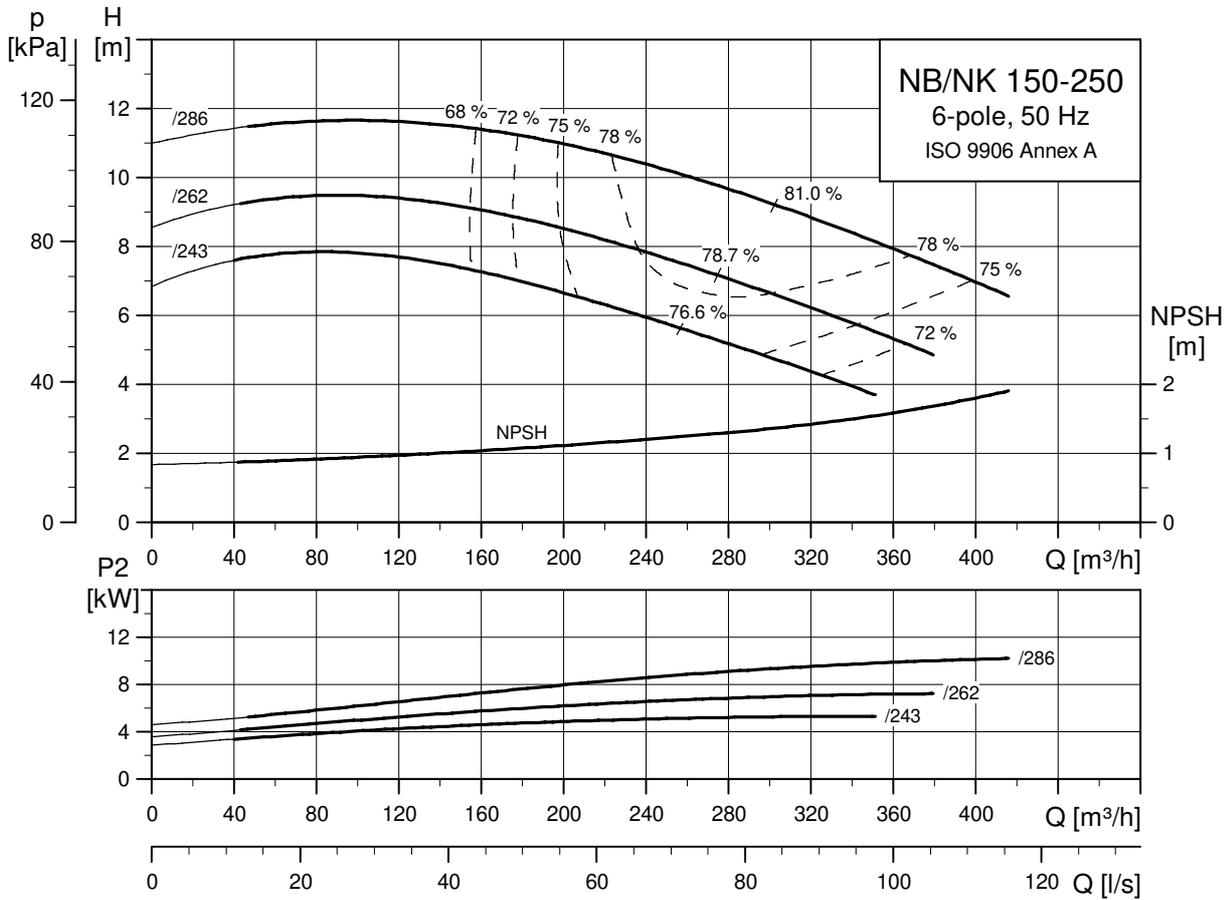
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h1 and H dimensions.

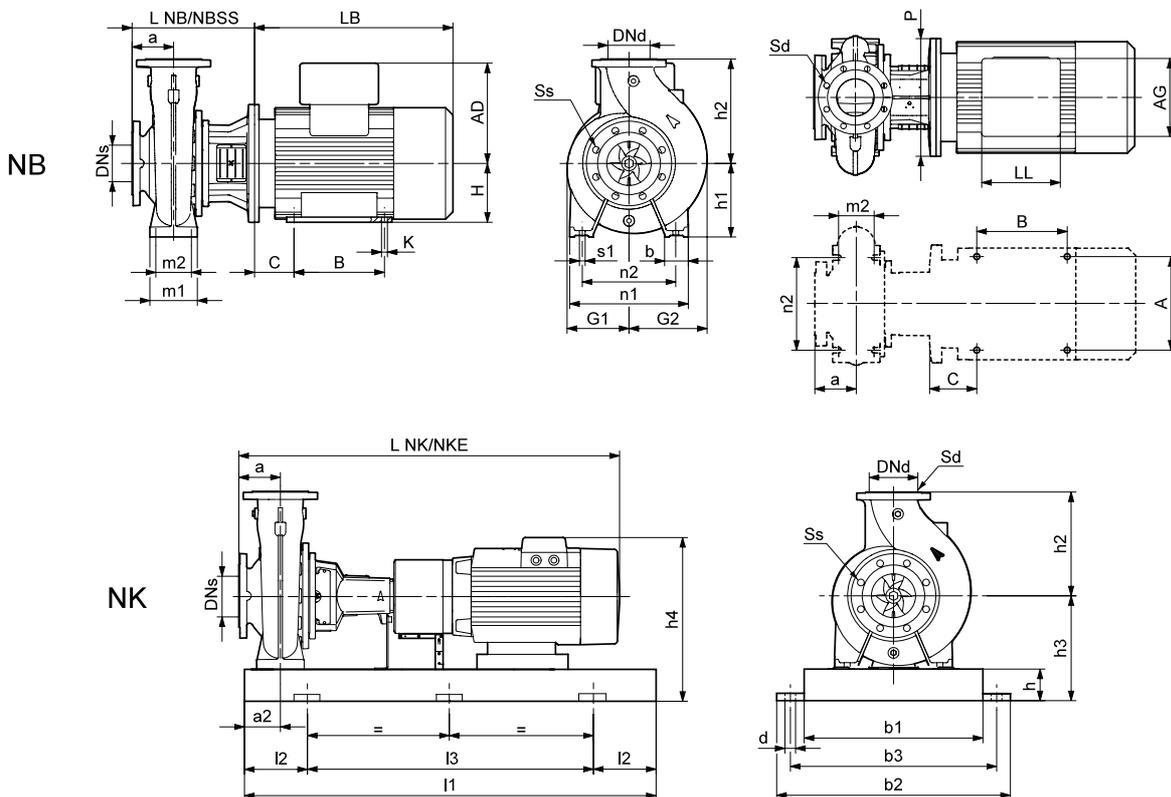
Note: For information about base frames, see page 270.

Performance curves

NB, NK 150-250
6-pole, 50 Hz
ISO 9906 Annex A



Tm03 5170 4106



TM03 4182 1806

TM03 4179 1806

Technical data

NB, NK 150-250
6-pole

Pump type		150-250/243	150-250/262	150-250/286	
Motor type	Premium Motor	Siemens 132MB	Siemens 160M	Siemens 160L	
	E-Motor	-	-	-	
Common data NB/NK	P ₂	[kW]	5.5	7.5	11
	PN	[bar]	10	10	10
	DNs	[mm]	200	200	200
	DNd	[mm]	150	150	150
	a	[mm]	160	160	160
	h ₂	[mm]	375	375	375
	Ss		8x23	8x23	8x23
	Sd		8x23	8x23	
Common data NK standard/ spacer coupling	L NK	[mm]	1185/1321	1282/1418	1322/1458
	L NKE	[mm]	-/-	-/-	-/-
	Weight NK	[kg]	451/448	476/471	483/478
	Weight NKE	[kg]	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-
	Weight NKE SS	[kg]	-/-	-/-	-/-
NK data	l ₁	[mm]	1800	1800	1800
	l ₂	[mm]	300	300	300
	l ₃	[mm]	1200	1200	1200
	b ₁	[mm]	600	600	600
	b ₂	[mm]	730	730	730
	b ₃	[mm]	670	670	670
	d	[mm]	28	28	28
	a ₂	[mm]	110	110	110
	h	[mm]	100	100	100
	h ₃	[mm]	385	380	380
	h ₄ ¹⁾	[mm]	552/-	577/-	577/-
	Base frame no.		9	9	
NB data	Design		A	C ²⁾	C ²⁾
	L NB	[mm]	401	431	431
	L NB SS	[mm]	-	-	-
	h ₁	[mm]	280	280	280
	G ₁	[mm]	223	223	223
	G ₂	[mm]	287	287	287
	m ₁	[mm]	200	200	200
	m ₂	[mm]	150	150	150
	n ₁	[mm]	500	500	500
	n ₂	[mm]	400	400	400
	b	[mm]	100	100	100
	s ₁	[mm]	M20	M20	M20
	H	[mm]	-	160	160
	LB ¹⁾	[mm]	411/-	478/-	518/-
	AD ¹⁾	[mm]	167/-	197/-	197/-
	AG ¹⁾	[mm]	140/-	165/-	165/-
	LL ¹⁾	[mm]	140/-	165/-	165/-
	P	[mm]	300	350	350
	C	[mm]	-	108	108
	B	[mm]	-	210	254
	A	[mm]	-	254	254
K	[mm]	-	15	15	
	Weight NB ¹⁾	[kg]	232/-	270/-	277/-
	Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-

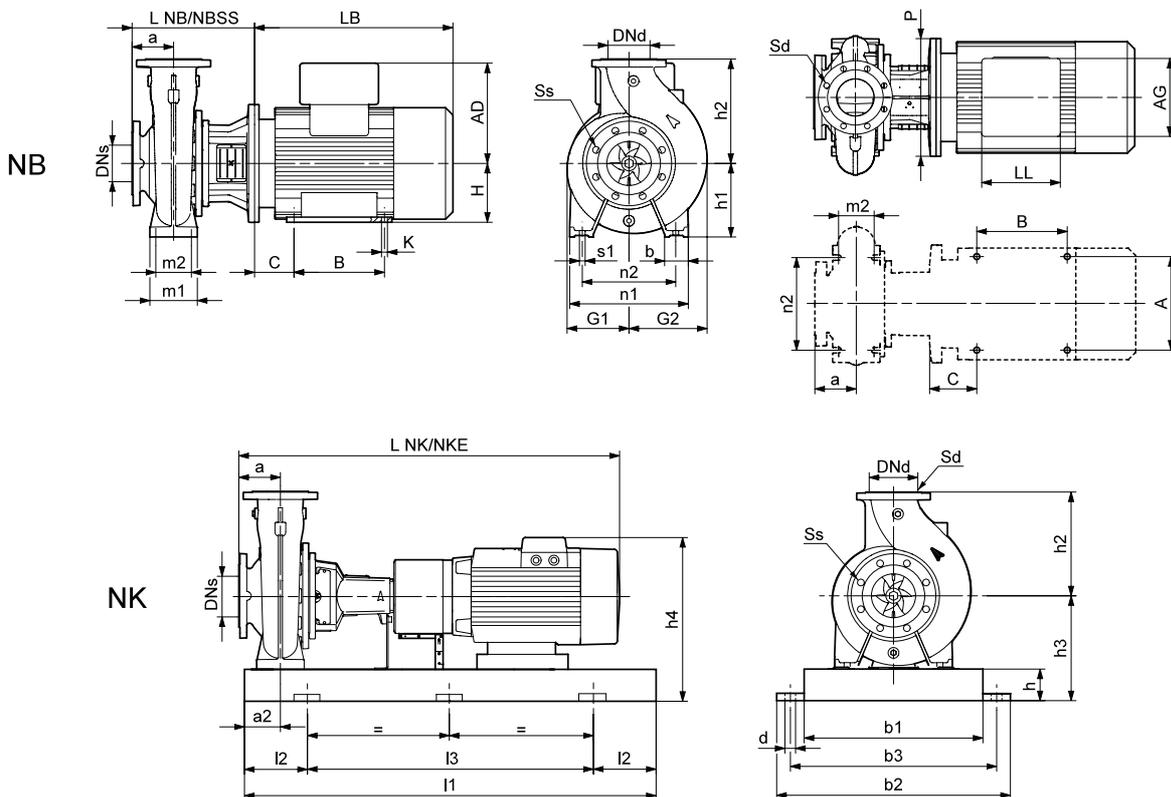
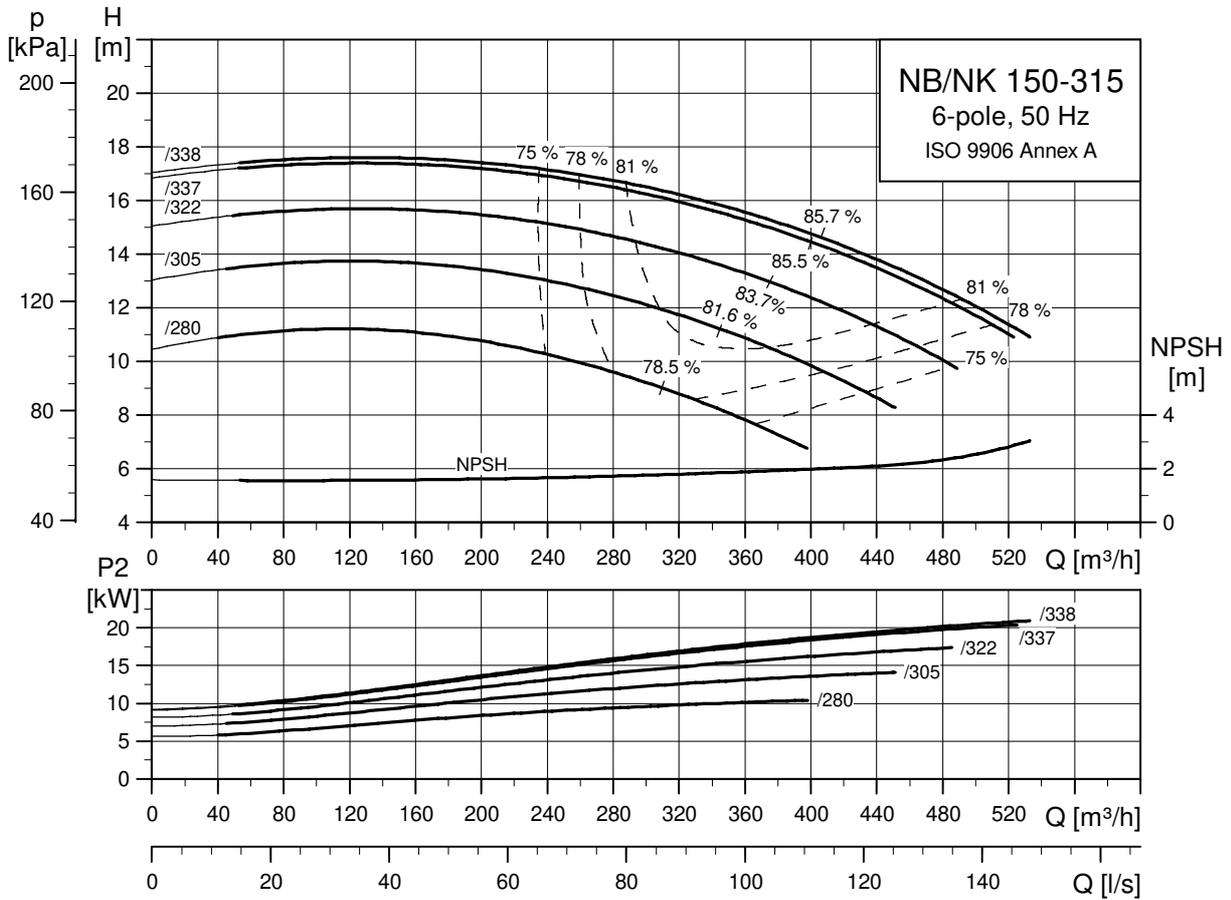
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h₁ and H dimensions.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 150-315
6-pole, 50 Hz
ISO 9906 Annex A



TM03 5171 4106

TM03 4182 1806

TM03 4179 1806

Technical data

NB, NK 150-315
6-pole

Pump type		150-315/280	150-315/305	150-315/322	150-315/337	150-315/338	
Motor type	Premium Motor	Siemens 160L	Siemens 180L	Siemens 200LA	Siemens 200LB	Siemens 225M	
	E-Motor	-	-	-	-	-	
Common data NB/NK	P ₂	[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]	450	450	450	450	450
	Ss		8x23	8x23	8x23	8x23	8x23
Common data NK standard/ spacer coupling	Sd		8x23	8x23	8x23	8x23	
	L NK	[mm]	1322/1458	1406/1542	1463/1599	1463/1599	1543/1679
	L NKE	[mm]	-/-	-/-	-/-	-/-	-/-
	Weight NK	[kg]	537/532	581/573	624/619	655/650	788/783
	Weight NKE	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-	-/-
NK data	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-	
	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 ¹⁾	[mm]	577/-	641/-	685/-	685/-	705/-
Base frame no.		9	9	9	9	9	
NB data	Design		C ²⁾	C ²⁾	C ²⁾	C ²⁾	
	L NB	[mm]	431	431	431	431	461
	L NB SS	[mm]	-	-	-	-	-
	h1	[mm]	315	315	315	315	315
	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 ¹⁾	[mm]	518/-	602/-	659/-	659/-	709/-
	AD ¹⁾	[mm]	197/-	258/-	305/-	305/-	325/-
	AG ¹⁾	[mm]	165/-	152/-	260/-	260/-	260/-
	LL ¹⁾	[mm]	165/-	132/-	192/-	192/-	192/-
	P	[mm]	350	350	400	400	450
	C	[mm]	108	121	133	133	149
	B	[mm]	254	279	305	305	286
A	[mm]	254	279	318	318	356	
K	[mm]	15	15	19	19	19	
Weight NB ¹⁾	[kg]	330/-	369/-	417/-	448/-	566/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-	

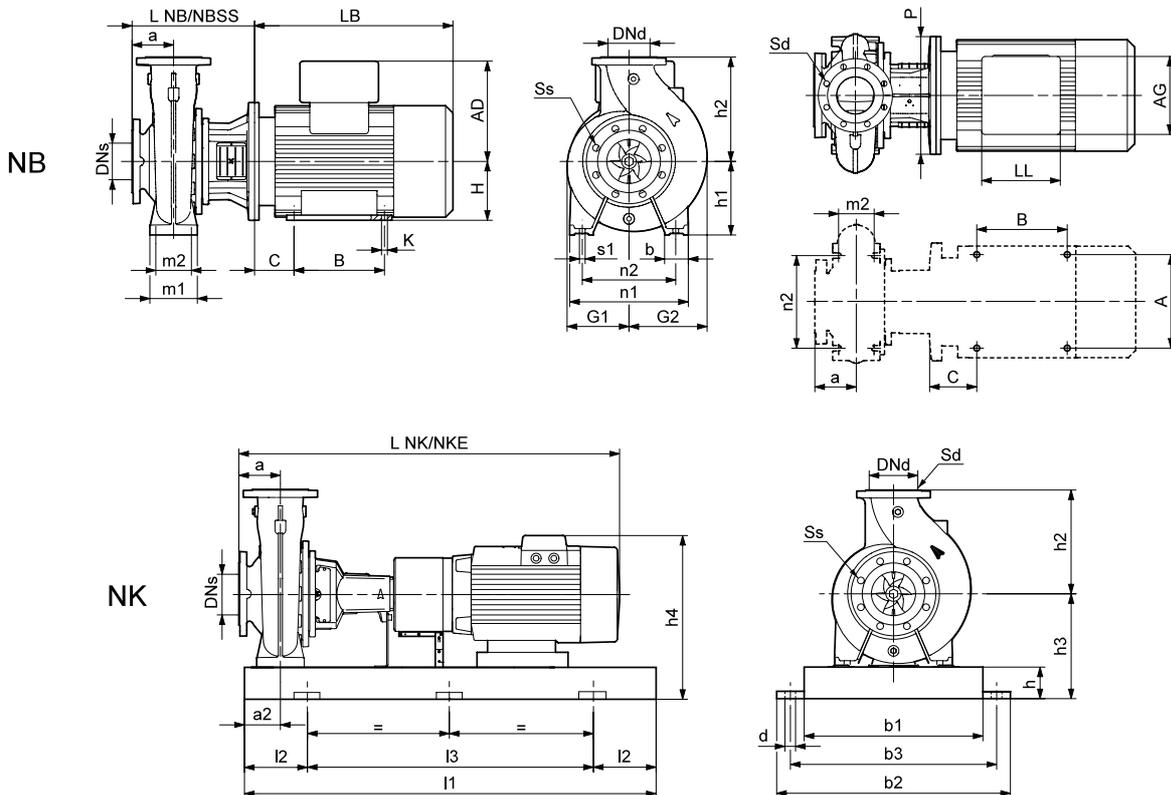
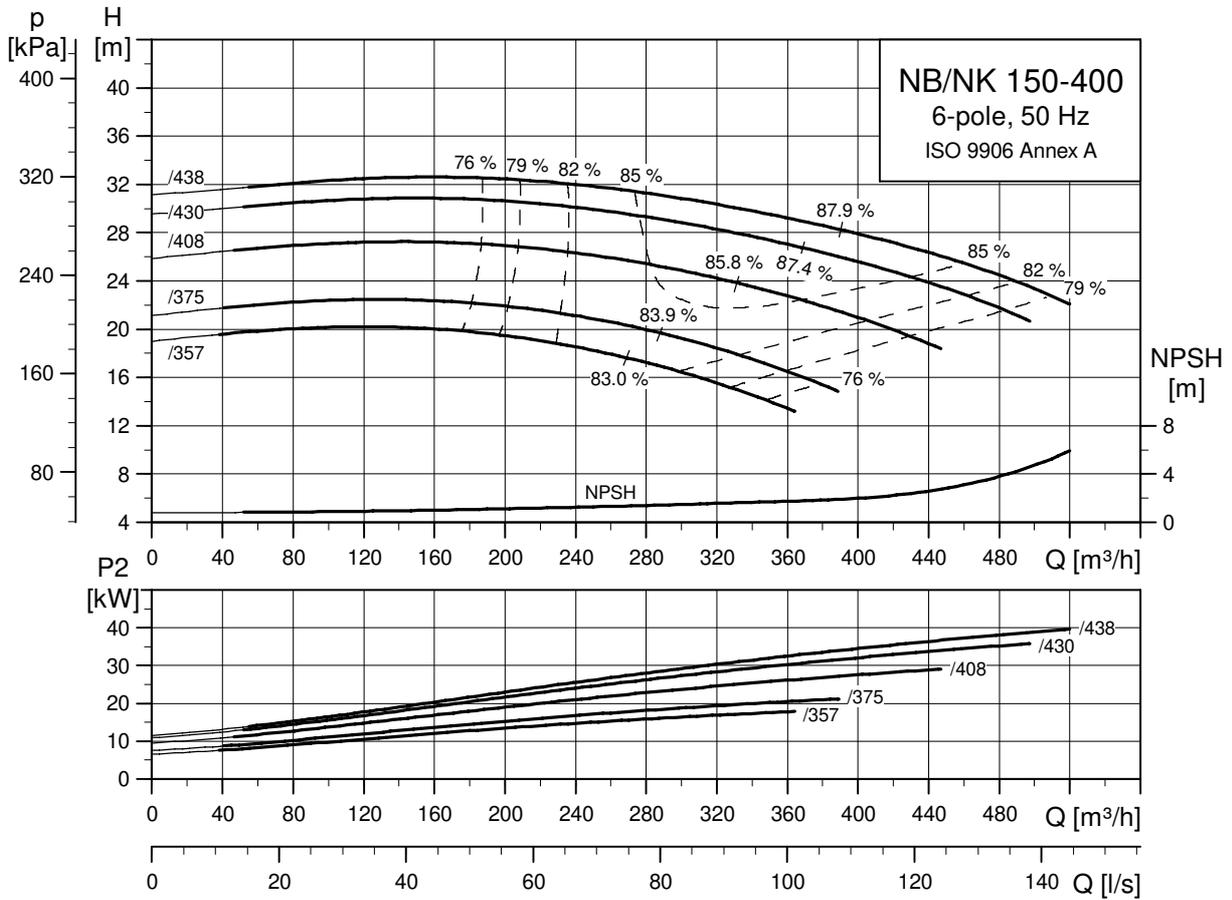
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h1 and H dimensions.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 150-400
6-pole, 50 Hz
ISO 9906 Annex A



TM03 5172 4106

TM03 4182 1806

TM03 4179 1806

Technical data

NB, NK 150-400
6-pole

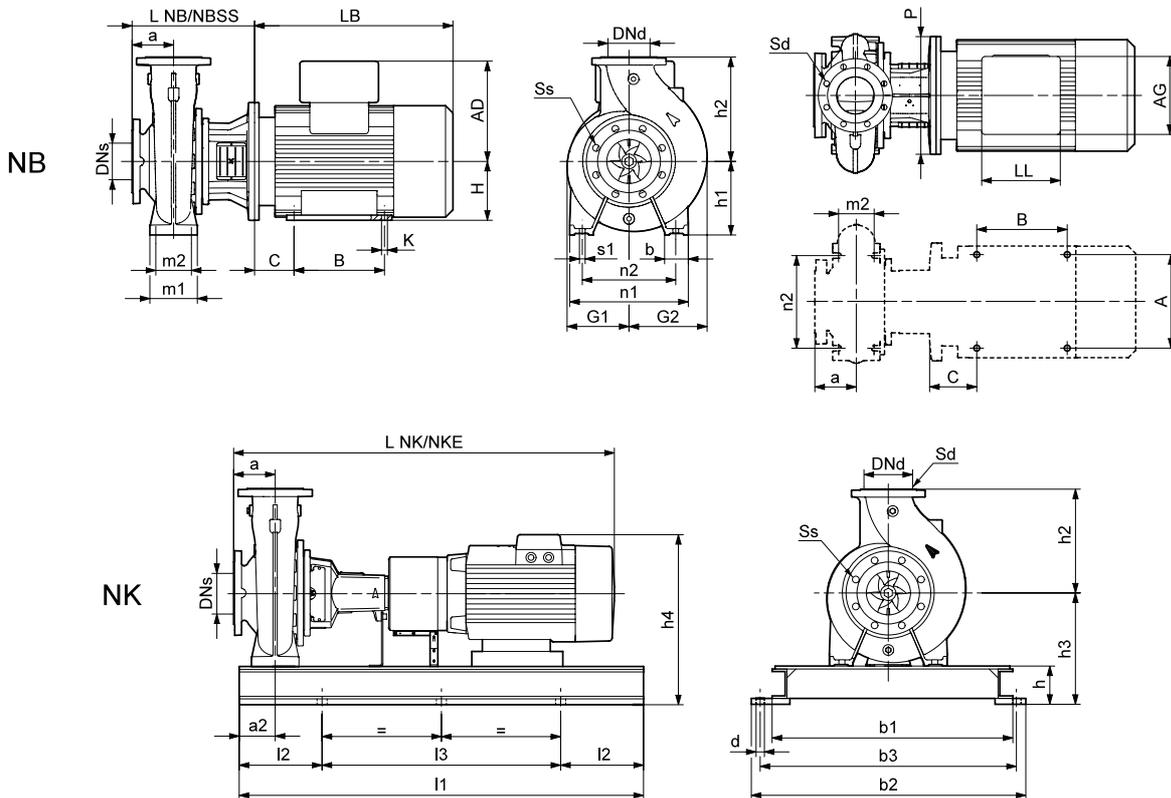
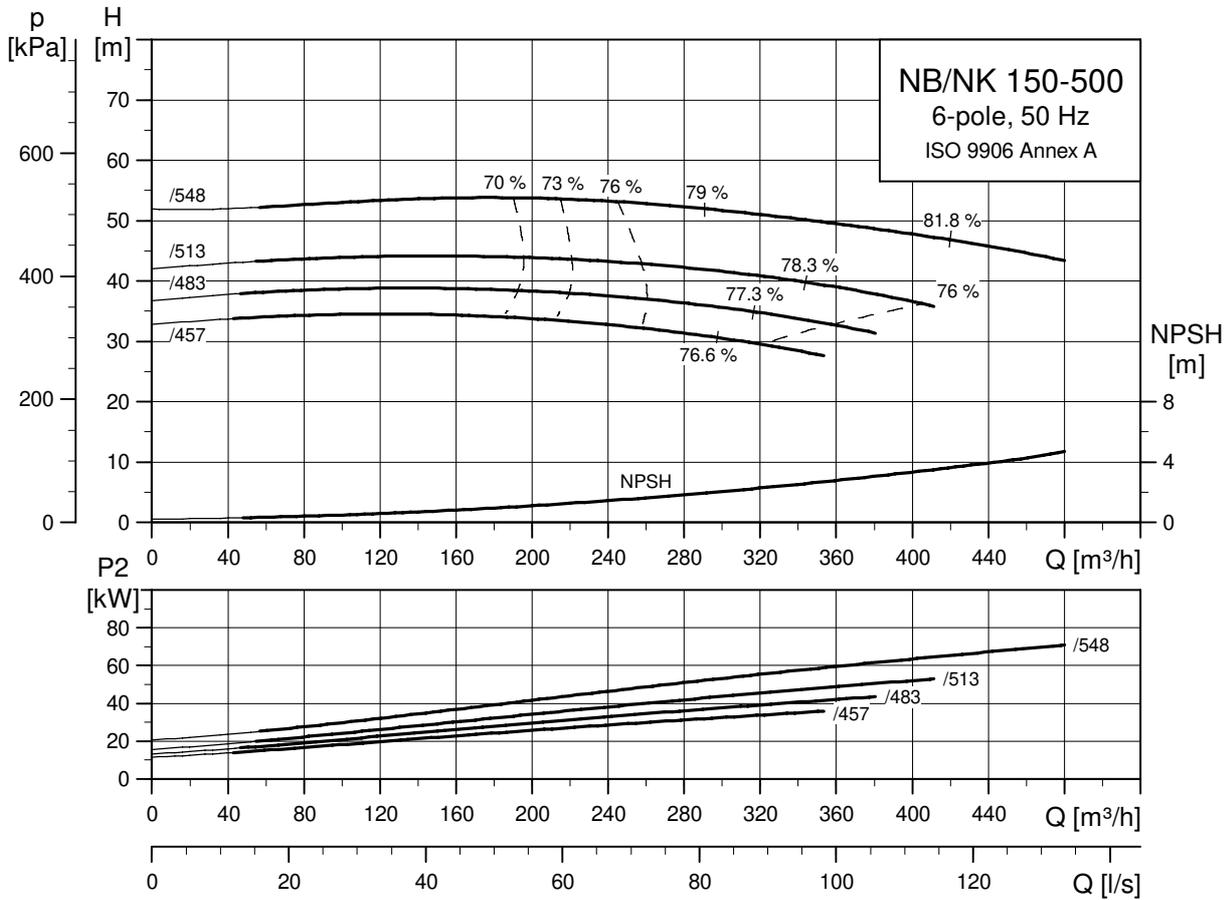
Pump type		150-400/357	150-400/375	150-400/408	150-400/430	150-400/438	
Motor type	Premium Motor	Siemens 200LA	Siemens 200LB	Siemens 225M	Siemens 250M	Siemens 280S	
	E-Motor	-	-	-	-	-	
Common data NB/NK	P ₂	[kW]	18,5	22	30	37	45
	PN	[bar]	10	10	10	10	10
	DNs	[mm]	200	200	200	200	200
	DNd	[mm]	150	150	150	150	150
	a	[mm]	160	160	160	160	160
	h ₂	[mm]	450	450	450	450	450
	Ss		8x23	8x23	8x23	8x23	8x23
	Sd		8x23	8x23	8x23	8x23	
Common data NK standard/ spacer coupling	L NK	[mm]	1463/1599	1463/1599	1543/1679	1581/1717	1654/1790
	L NKE	[mm]	-/-	-/-	-/-	-/-	-/-
	Weight NK	[kg]	658/653	689/684	793/788	887/886	1172/1166
	Weight NKE	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-	-/-
	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-	-/-
NK data	l ₁	[mm]	1800	1800	1800	1800	2000
	l ₂	[mm]	300	300	300	300	330
	l ₃	[mm]	1200	1200	1200	1200	1340
	b ₁	[mm]	600	600	600	600	750
	b ₂	[mm]	730	730	730	730	890
	b ₃	[mm]	670	670	670	670	830
	d	[mm]	28	28	28	28	28
	a ₂	[mm]	110	110	110	110	110
	h	[mm]	100	100	100	100	130
	h ₃	[mm]	415	415	415	415	445
	h ₄ ¹⁾	[mm]	720/-	720/-	740/-	807/-	877/-
	Base frame no.		9	9	9	10	
NB data	Design		C ²⁾				
	L NB	[mm]	444	444	474	474	474
	L NB SS	[mm]	-	-	-	-	-
	h ₁	[mm]	315	315	315	315	315
	G ₁	[mm]	291	291	291	291	291
	G ₂	[mm]	339	339	339	339	339
	m ₁	[mm]	200	200	200	200	200
	m ₂	[mm]	150	150	150	150	150
	n ₁	[mm]	550	550	550	550	550
	n ₂	[mm]	450	450	450	450	450
	b	[mm]	100	100	100	100	100
	s ₁	[mm]	M20	M20	M20	M20	M20
	H	[mm]	200	200	225	250	280
	LB ¹⁾	[mm]	659/-	659/-	709/-	747/-	820/-
	AD ¹⁾	[mm]	305/-	305/-	325/-	392/-	432/-
	AG ¹⁾	[mm]	260/-	260/-	260/-	300/-	300/-
	LL ¹⁾	[mm]	192/-	192/-	192/-	236/-	236/-
	P	[mm]	400	400	450	550	550
	C	[mm]	133	133	149	168	190
	B	[mm]	305	305	286	349	368
A	[mm]	318	318	356	406	457	
K	[mm]	19	19	19	24	24	
	Weight NB ¹⁾	[kg]	467/-	498/-	617/-	715/-	830/-
	Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	-/-

1) Dimension of pump with premium range motor/built-in frequency converter.

Note: For information about base frames, see page 270.

Performance curves

NB, NK 150-500
6-pole, 50 Hz
ISO 9906 Annex A



TM03 5173 4106

TM03 4182 1806

TM03 4051 1806

Technical data

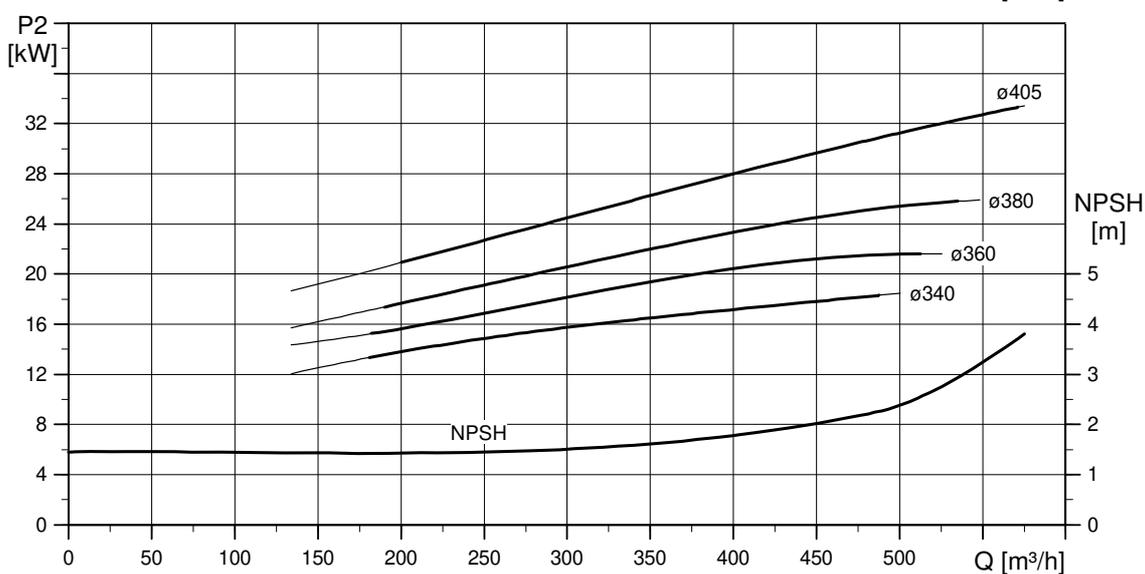
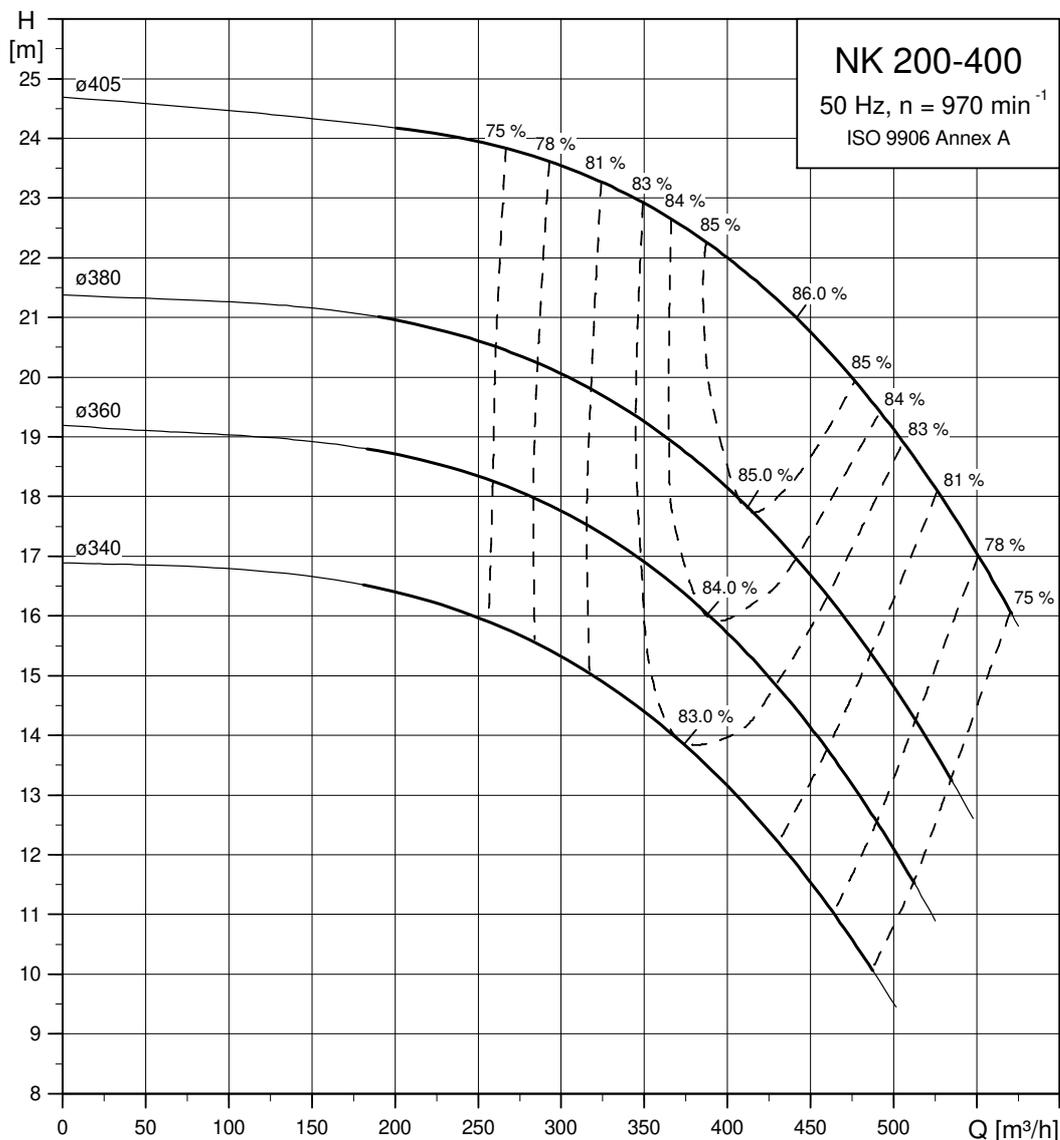
NB, NK 150-500
6-pole

Pump type		150-500/457	150-500/483	150-500/513	150-500/548	
Motor type	Premium Motor	Siemens 250M	Siemens 280S	Siemens 280M	Siemens 315S	
	E-Motor	-	-	-	-	
Common data NB/NK	P ₂	[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		8x23	8x23	8x23	8x23
Common data NK standard/ spacer coupling	Sd		8x23	8x23	8x23	8x23
	L NK	[mm]	1741/1917	1814/1990	1924/2100	1956/2132
	L NKE	[mm]	-/-	-/-	-/-	-/-
	Weight NK	[kg]	1322/1319	1433/1429	1487/1483	1676/1672
	Weight NKE	[kg]	-/-	-/-	-/-	-/-
	Weight NK SS	[kg]	-/-	-/-	-/-	-/-
NK data	Weight NKE SS	[kg]	-/-	-/-	-/-	-/-
	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 ¹⁾	[mm]	922/-	962/-	962/-	1025/-
	Base frame no.		10	10	10	10
NB data	Design		C ²⁾	C ²⁾	C ²⁾	C ²⁾
	L NB	[mm]	524	524	524	554
	L NB SS	[mm]	-	-	-	-
	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 ¹⁾	[mm]	747/-	820/-	930/-	932/-
	AD ¹⁾	[mm]	392/-	432/-	432/-	495/-
	AG ¹⁾	[mm]	300/-	300/-	300/-	379/-
	LL ¹⁾	[mm]	236/-	236/-	236/-	307/-
	P	[mm]	550	550	550	660
	C	[mm]	168	190	190	216
	B	[mm]	349	368	419	406
A	[mm]	406	457	457	508	
K	[mm]	24	24	24	28	
Weight NB ¹⁾	[kg]	883/-	998/-	1048/-	1279/-	
Weight NB SS ¹⁾	[kg]	-/-	-/-	-/-	-/-	

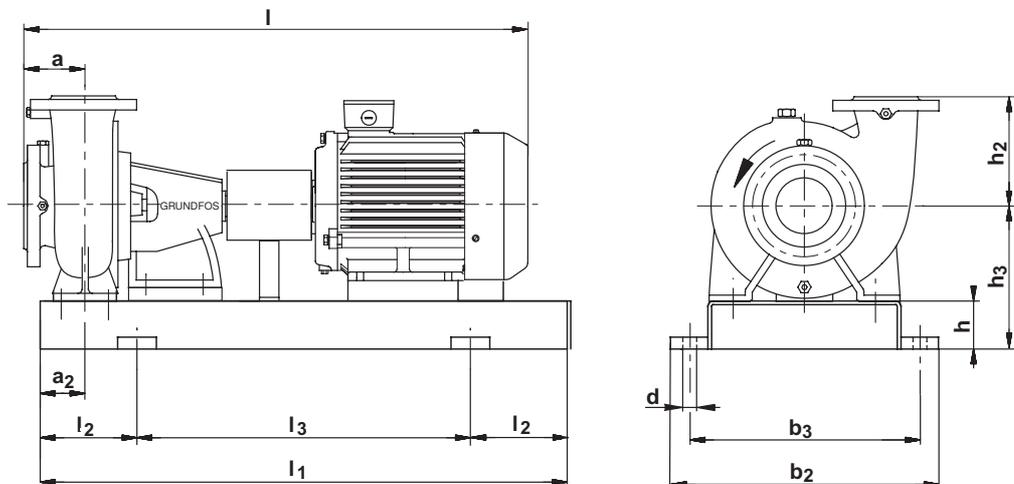
1) Dimension of pump with premium range motor/built-in frequency converter.

2) Support blocks are needed because of the P, h1 and H dimensions.

Note: For information about base frames, see page 270.



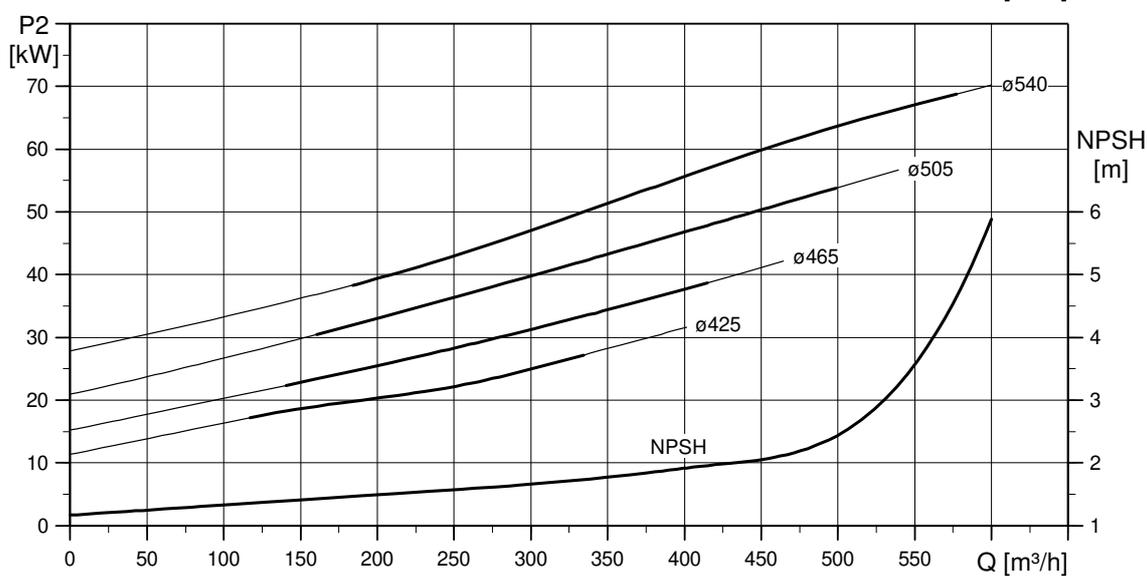
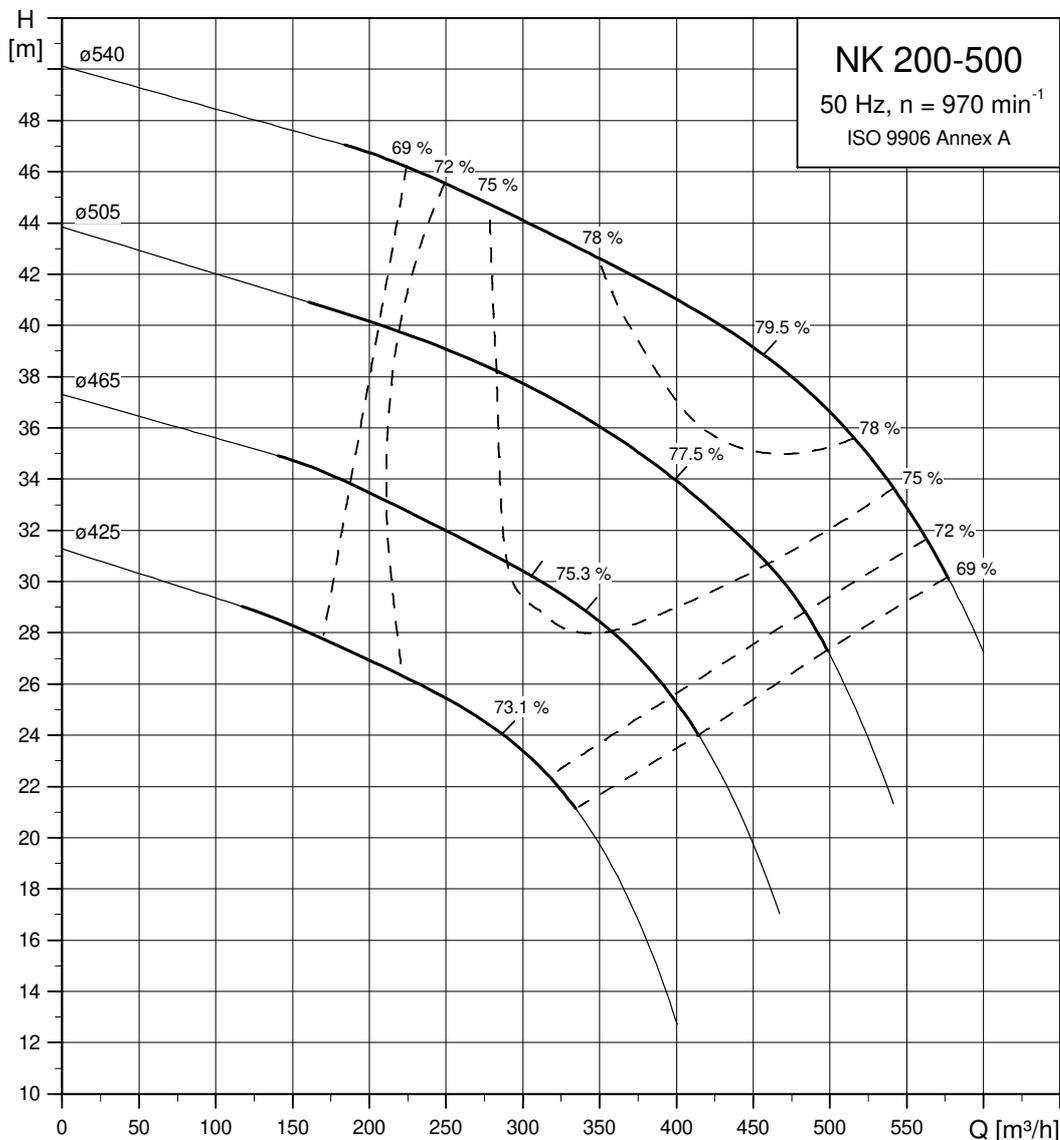
TM01 2894 0499



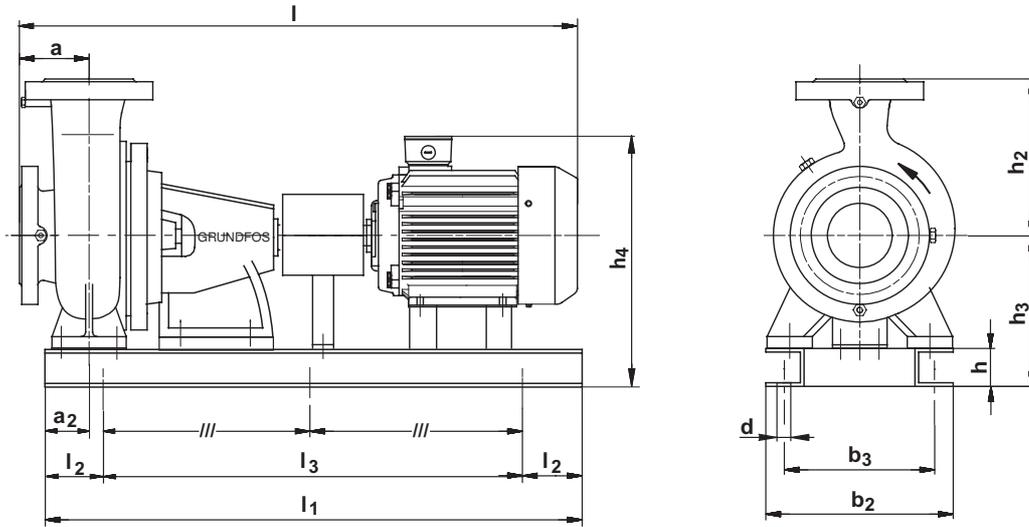
TM03 1280 1505

NK 200-400*				
kW	18,5	22	30	37
Standard motor range	MMG 200LA-E	MMG 200LB-E	MMG 225M-E	MMG 250M-E
Premium motor range	MMG 200LA-D	MMG 200LB-D	MMG 225M-D	MMG 250M-D
E-motor range	-	-	-	-
PN [bar]	10	10	10	10
DN _d [mm]	200	200	200	200
DN _s [mm]	250	250	250	250
a [mm]	180	180	180	180
a ₂ [mm]	200	200	245	255
h [mm]	100	100	160	180
h ₂ [mm]	400	400	400	400
h ₃ [mm]	500	500	500	500
h ₄ ¹⁾ [mm]	797/827/-	797/827/-	820/866/-	859/885/-
Standard coupling				
l ¹⁾ [mm]	1691/1713/-	1691/1713/-	1771/1822/-	1844/1906/-
l ₁ [mm]	1800	1800	1800	1800
l ₂ [mm]	300	300	300	300
l ₃ [mm]	1200	1200	1200	1200
b ₁ [mm]	600	600	600	600
b ₂ [mm]	730	730	730	730
b ₃ [mm]	670	670	670	670
d [mm]	28	28	28	28
Weight ¹⁾ Net [kg]	771/748/-	786/758/-	837/831/-	935/927/-
Spacer coupling				
l ¹⁾ [mm]	1887/1909/-	1887/1909/-	1967/2018/-	2040/2102/-
l ₁ [mm]	1800	1800	2000	2000
l ₂ [mm]	300	300	330	330
l ₃ [mm]	1200	1200	1340	1340
b ₁ [mm]	600	600	750	750
b ₂ [mm]	730	730	910	910
b ₃ [mm]	670	670	830	830
d [mm]	28	28	28	28
Weight ¹⁾ Net [kg]	769/746/-	784/756/-	854/848/-	949/941/-

1) Dimension of pump with standard range motor/premium range motor/built-in frequency converter.



TM01 2895 0499



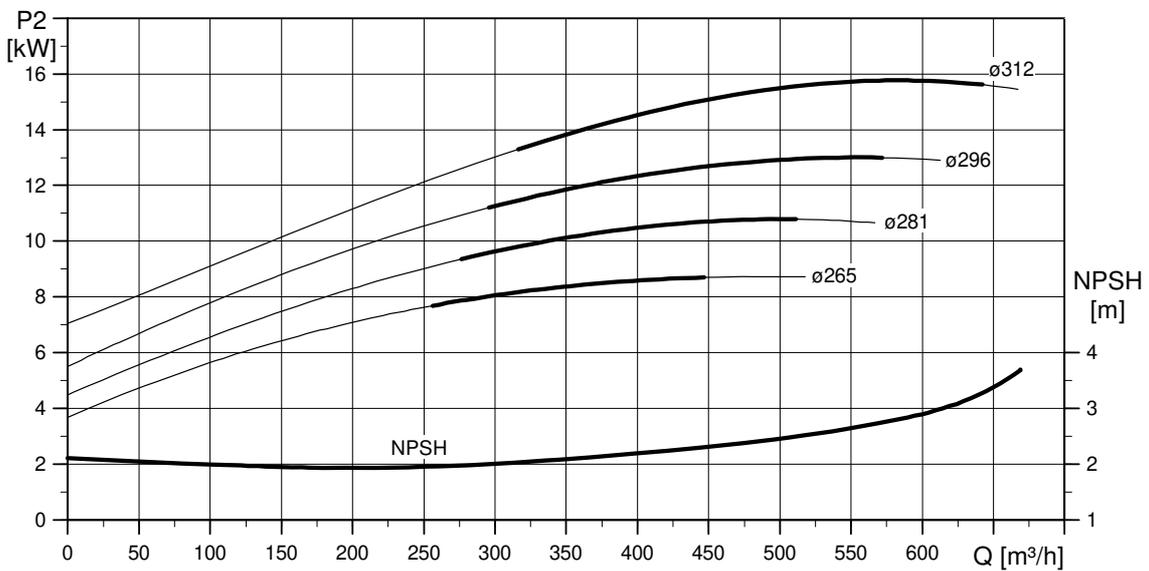
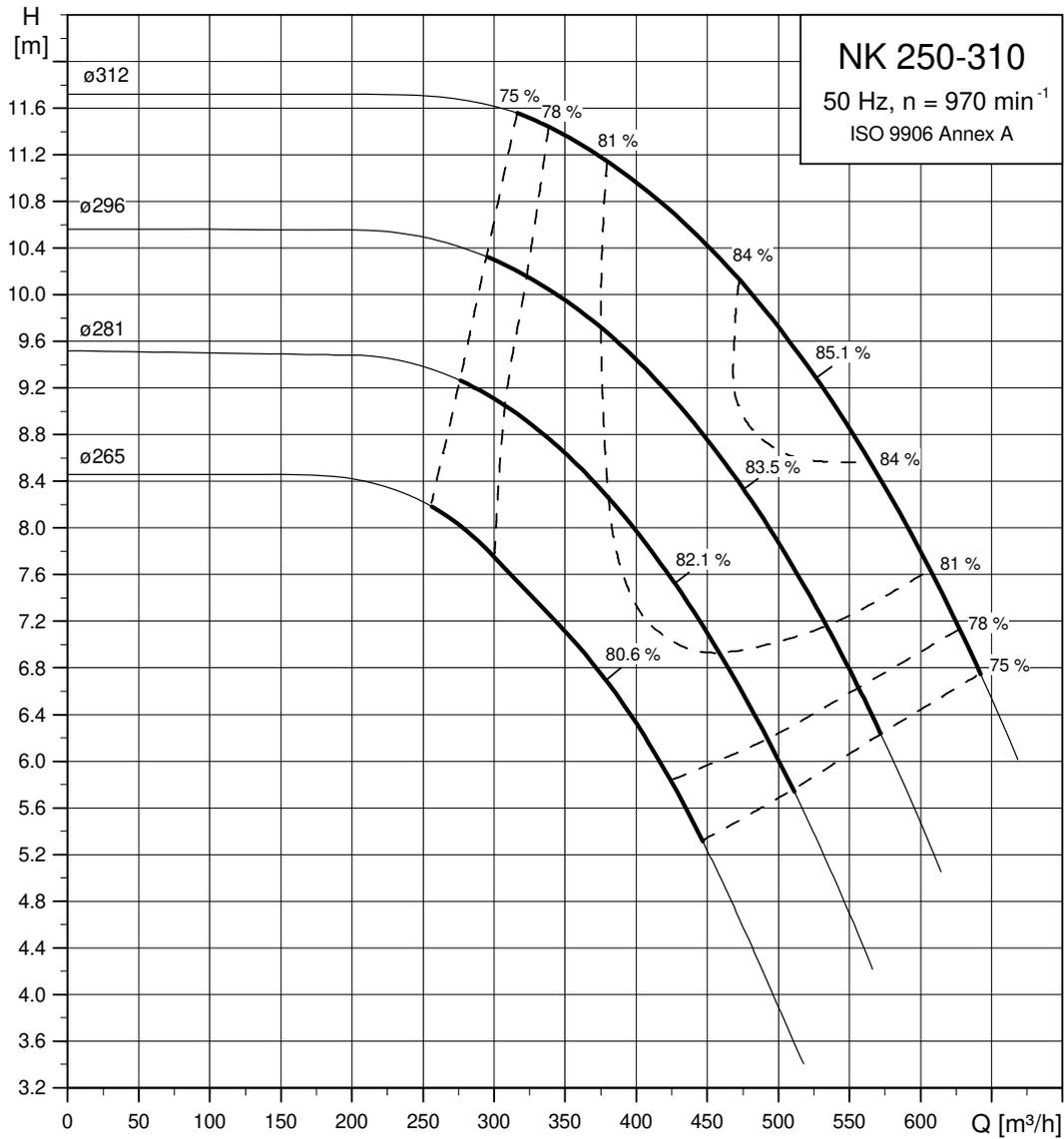
TM03 1282 1505

NK 200-500*					
kW	30	37	45	55	75
Standard motor range	MMG 225M-E	MMG 250M-E	MMG 280S-E	MMG 280M-E	MMG 315S-E
Premium motor range	MMG 225M-D	MMG 250M-D	MMG 280S-D	MMG 280M-D	MMG 315S-D
E-motor range	-	-	-	-	-
PN [bar]	10	10	10	10	10
DN _d [mm]	200	200	200	200	200
DN _s [mm]	250	250	250	250	250
a [mm]	250	250	250	250	250
a ₂ [mm]	175	175	175	175	175
h [mm]	160	160	180	180	180
h ₂ [mm]	675	675	675	675	675
h ₃ [mm]	480	480	480	480	495
h ₄ ¹⁾ [mm]	800/846/-	839/865/-	866/899/-	866/899/-	966/1007/-
Standard coupling					
l ₁ ¹⁾ [mm]	1841/1892/-	1914/1976/-	1949/2042/-	2000/2093/-	2210/2130/-
l ₁ [mm]	1900	1900	2000	2000	2000
l ₂ [mm]	150	150	150	150	150
l ₃ [mm]	1600	1600	1700	1700	1700
b ₁ [mm]	-	-	-	-	-
b ₂ [mm]	945	945	945	945	945
b ₃ [mm]	885	885	885	885	880
d [mm]	18	18	18	18	18
Weight ¹⁾ Net [kg]	984/978/-	1082/1074/-	1206/1148/-	1274/1203/-	1696/1324/-
Spacer coupling					
l ₁ ¹⁾ [mm]	2037/2088/-	2110/2172/-	2143/2236/-	2194/2287/-	2404/2324/-
l ₁ [mm]	2000	2100	2100	2100	2100
l ₂ [mm]	150	150	150	150	150
l ₃ [mm]	1700	1800	1800	1800	1800
b ₁ [mm]	-	-	-	-	-
b ₂ [mm]	945	945	945	945	945
b ₃ [mm]	885	885	885	885	880
d [mm]	18	18	18	18	18
Weight ¹⁾ Net [kg]	983/977/-	1089/1081/-	1225/1167/-	1293/1222/-	1723/1351/-

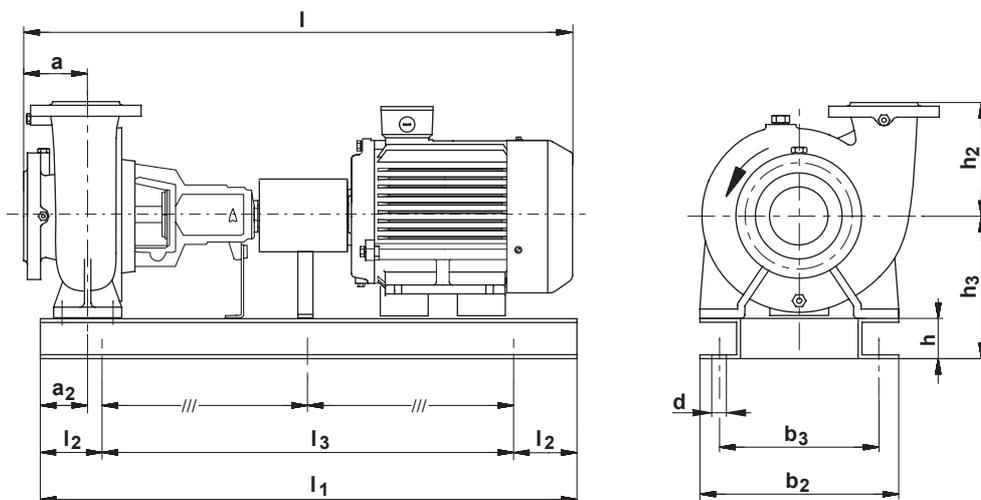
1) Dimension of pump with standard range motor/premium range motor/built-in frequency converter.

Performance curves

NK 250-310
6-pole



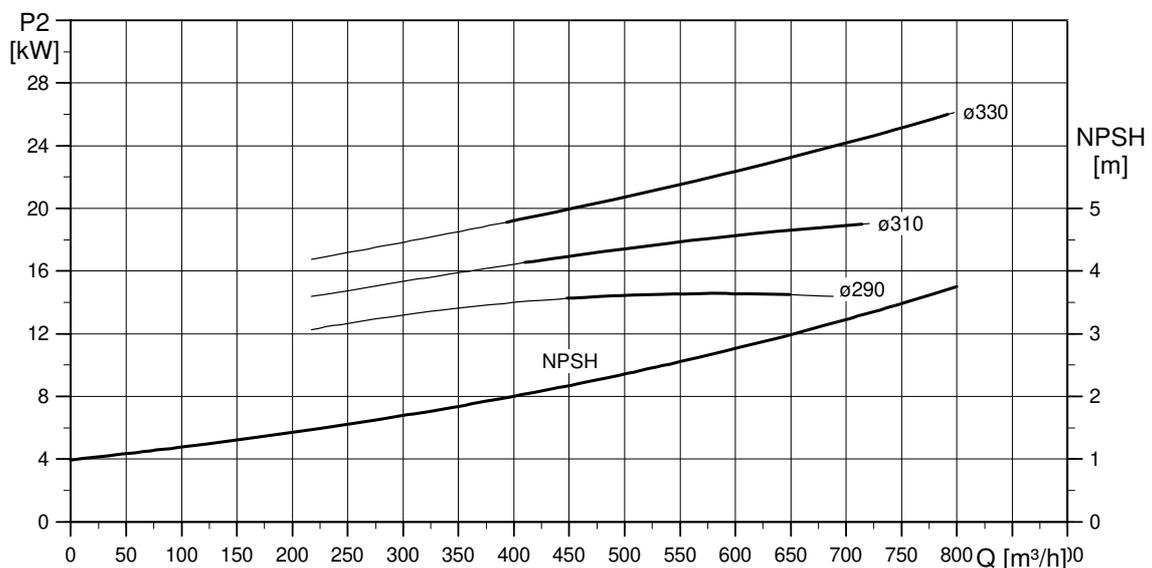
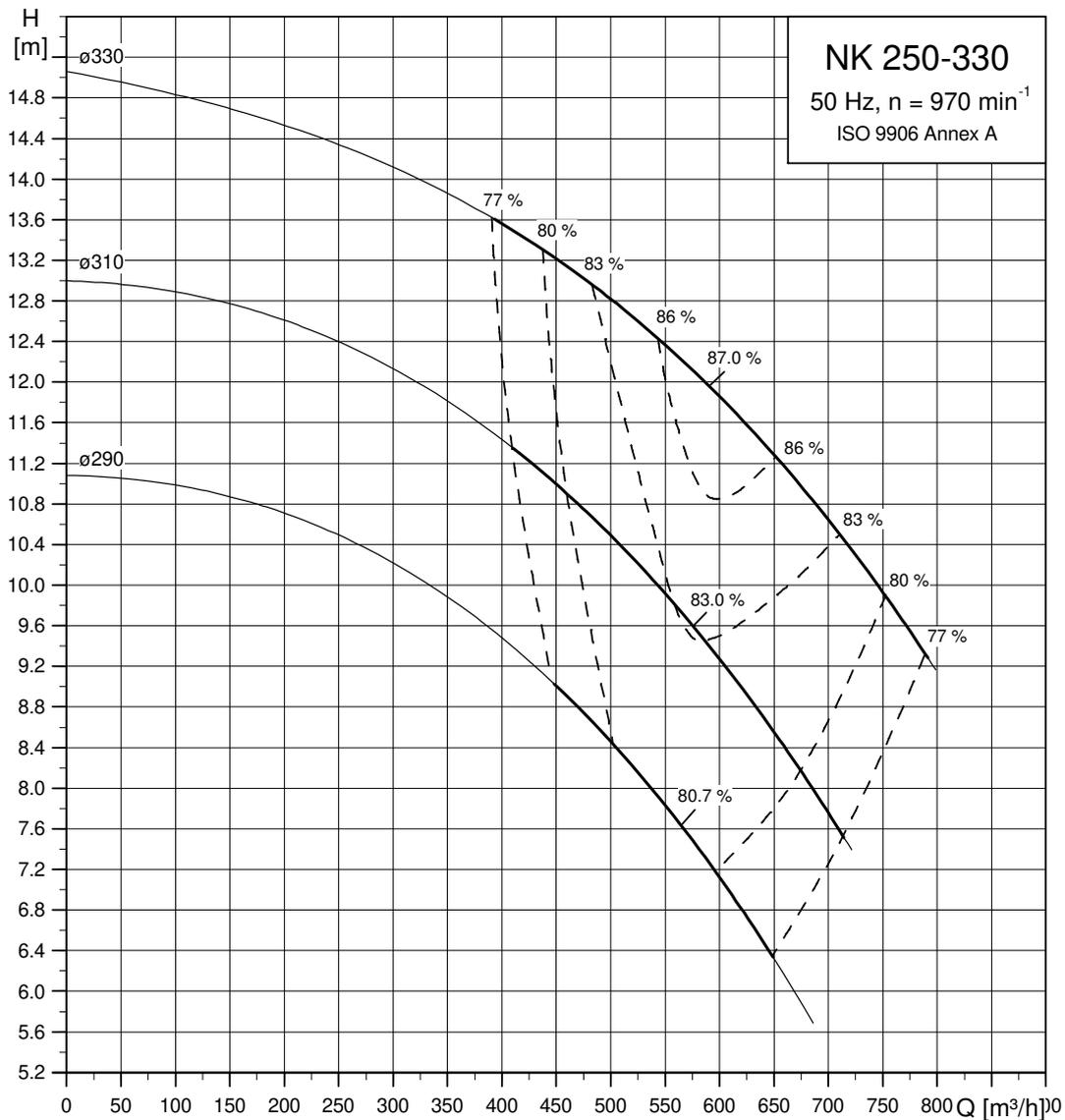
TM01 2896 0499



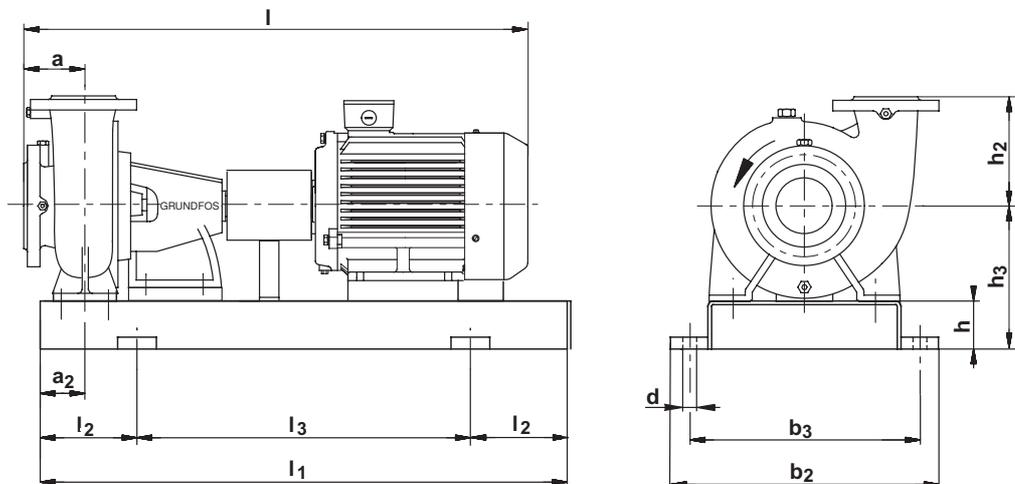
TM03 1278 1505

NK 250-310*			
kW	11	15	18,5
Standard motor range	MMG 160L-E	MMG 180L-E	MMG 200LA-E
Premium motor range	MMG 160L-D	MMG 180L-D	MMG 200LA-D
E-motor range	-	-	-
PN [bar]	10	10	10
DN _d [mm]	250	250	250
DN _s [mm]	300	300	300
a [mm]	250	250	250
a ₂ [mm]	200	200	200
h [mm]	140	140	140
h ₂ [mm]	400	400	400
h ₃ [mm]	480	480	480
h ₄ ¹⁾ [mm]	728/725/-	744/746/-	777/807/-
Standard coupling			
l ₁ ¹⁾ [mm]	1471/1476/-	1509/1531/-	1576/1598/-
l ₁ [mm]	1700	1700	1700
l ₂ [mm]	150	150	150
l ₃ [mm]	1400	1400	1400
b ₁ [mm]	-	-	-
b ₂ [mm]	950	950	950
b ₃ [mm]	890	890	890
d [mm]	18	18	18
Weight ¹⁾ Net [kg]	656/611/-	699/645/-	748/725/-
Spacer coupling			
l ₁ ¹⁾ [mm]	1667/1672/-	1705/1727/-	1772/1794/-
l ₁ [mm]	1700	1700	1800
l ₂ [mm]	150	150	150
l ₃ [mm]	1400	1400	1500
b ₁ [mm]	-	-	-
b ₂ [mm]	950	950	950
b ₃ [mm]	890	890	890
d [mm]	18	18	18
Weight ¹⁾ Net [kg]	654/609/-	695/641/-	756/733/-

1) Dimension of pump with standard range motor/premium range motor/built-in frequency converter.



TM01 2897 0499



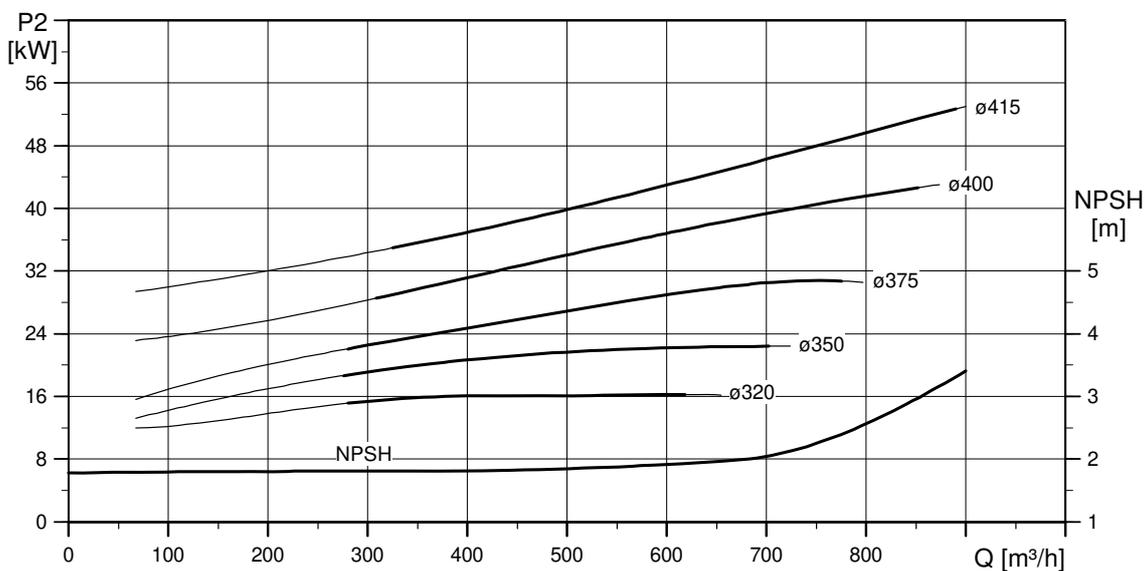
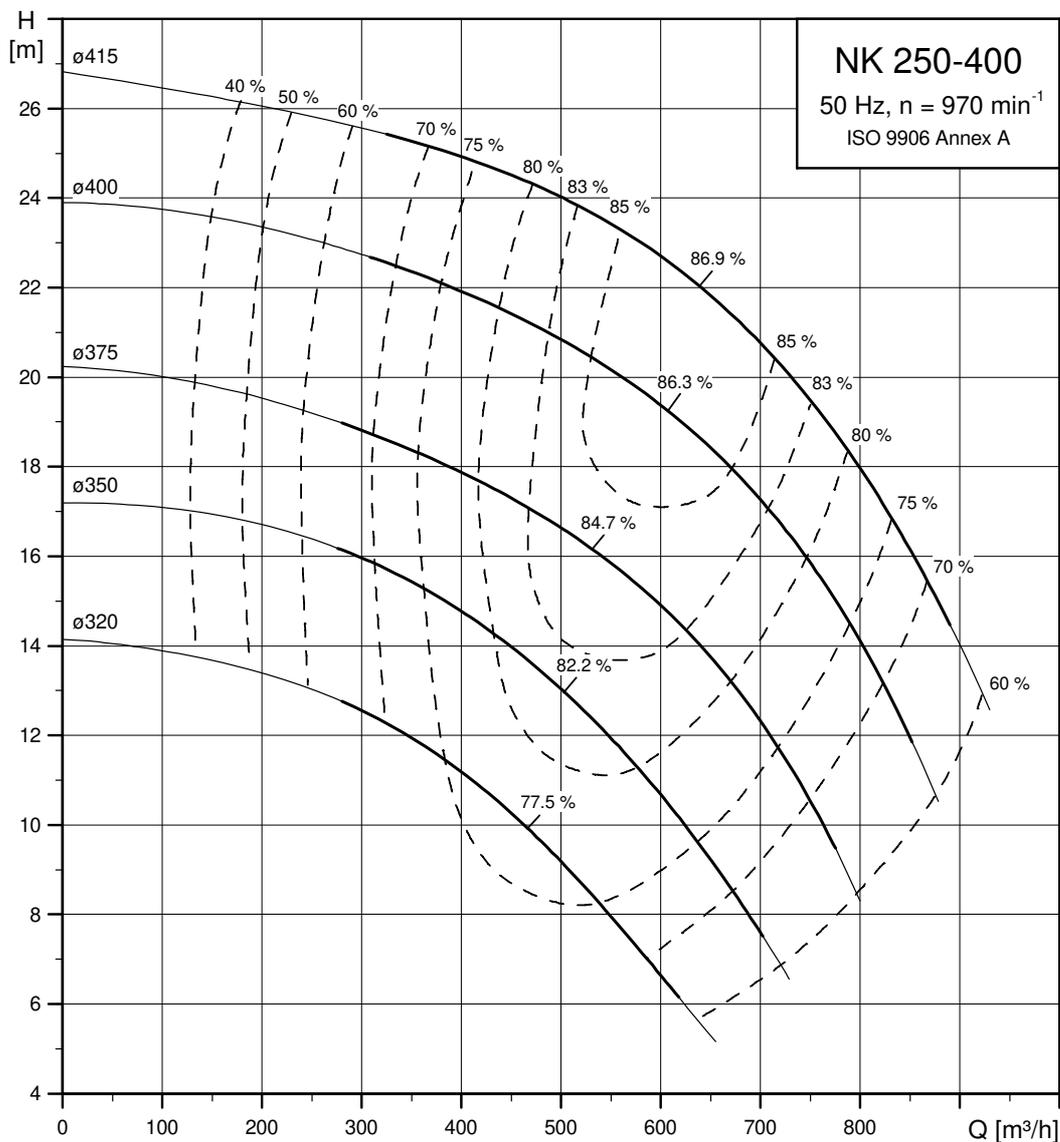
TM03 1280 1505

NK 250-330*			
kW	18,5	22	30
Standard motor range	MMG 200LA-E	MMG 200LB-E	MMG 225M-E
Premium motor range	MMG 200LA-D	MMG 200LB-D	MMG 225M-D
E-motor range	-	-	-
PN [bar]	10	10	10
DN _d [mm]	250	250	250
DN _s [mm]	250	250	250
a [mm]	250	250	250
a ₂ [mm]	225	225	225
h [mm]	120	120	120
h ₂ [mm]	400	400	400
h ₃ [mm]	570	570	570
h ₄ ¹⁾ [mm]	867/897/-	867/897/-	890/936/-
Standard coupling			
l ₁ [mm]	1751/1773/-	1751/1773/-	1831/1882/-
l ₁ [mm]	2000	2000	2000
l ₂ [mm]	330	330	330
l ₃ [mm]	1340	1340	1340
b ₁ [mm]	750	750	750
b ₂ [mm]	910	910	910
b ₃ [mm]	830	830	830
d [mm]	28	28	28
Weight ¹⁾ Net [kg]	814/791/-	829/801/-	880/874/-
Spacer coupling			
l ₁ [mm]	1947/1969/-	1947/1969/-	2027/2078/-
l ₁ [mm]	2000	2000	2000
l ₂ [mm]	330	330	330
l ₃ [mm]	1340	1340	1340
b ₁ [mm]	750	750	750
b ₂ [mm]	910	910	910
b ₃ [mm]	830	830	830
d [mm]	28	28	28
Weight ¹⁾ Net [kg]	812/789/-	827/799/-	879/873/-

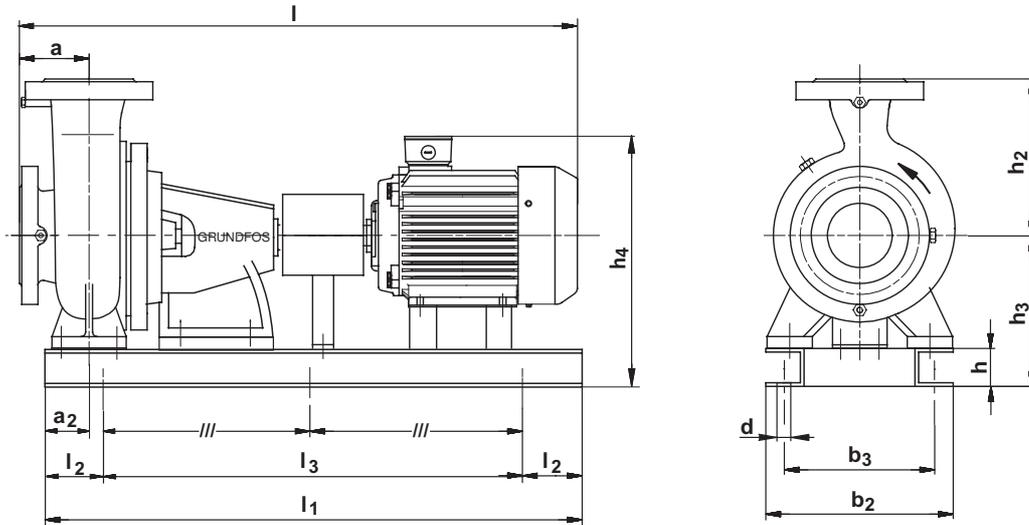
1) Dimension of pump with standard range motor/premium range motor/built-in frequency converter.

Performance curves

NK 250-400
6-pole



TM01 2898 0499



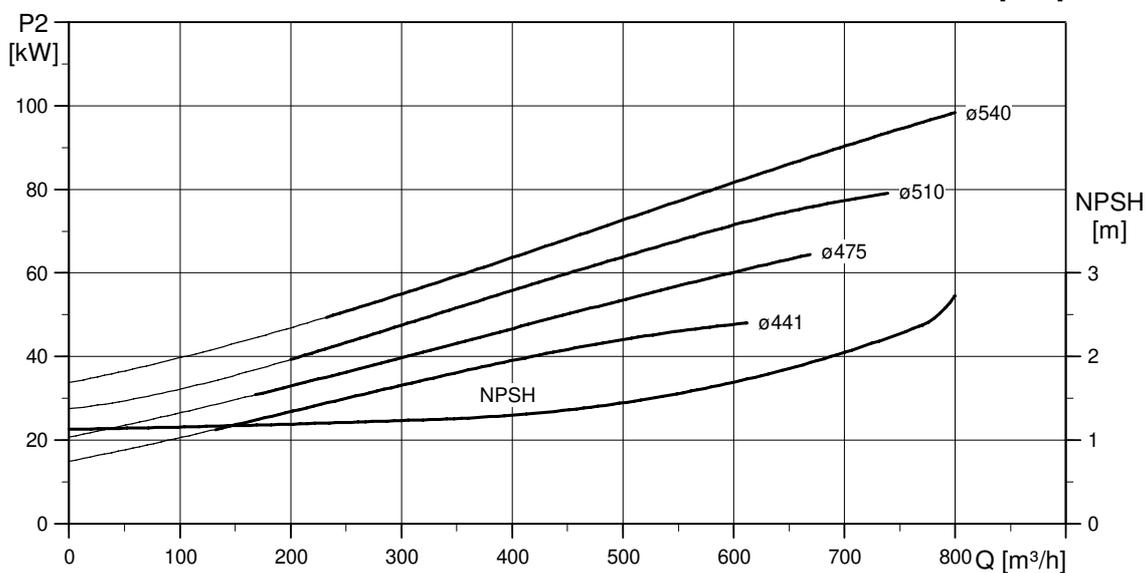
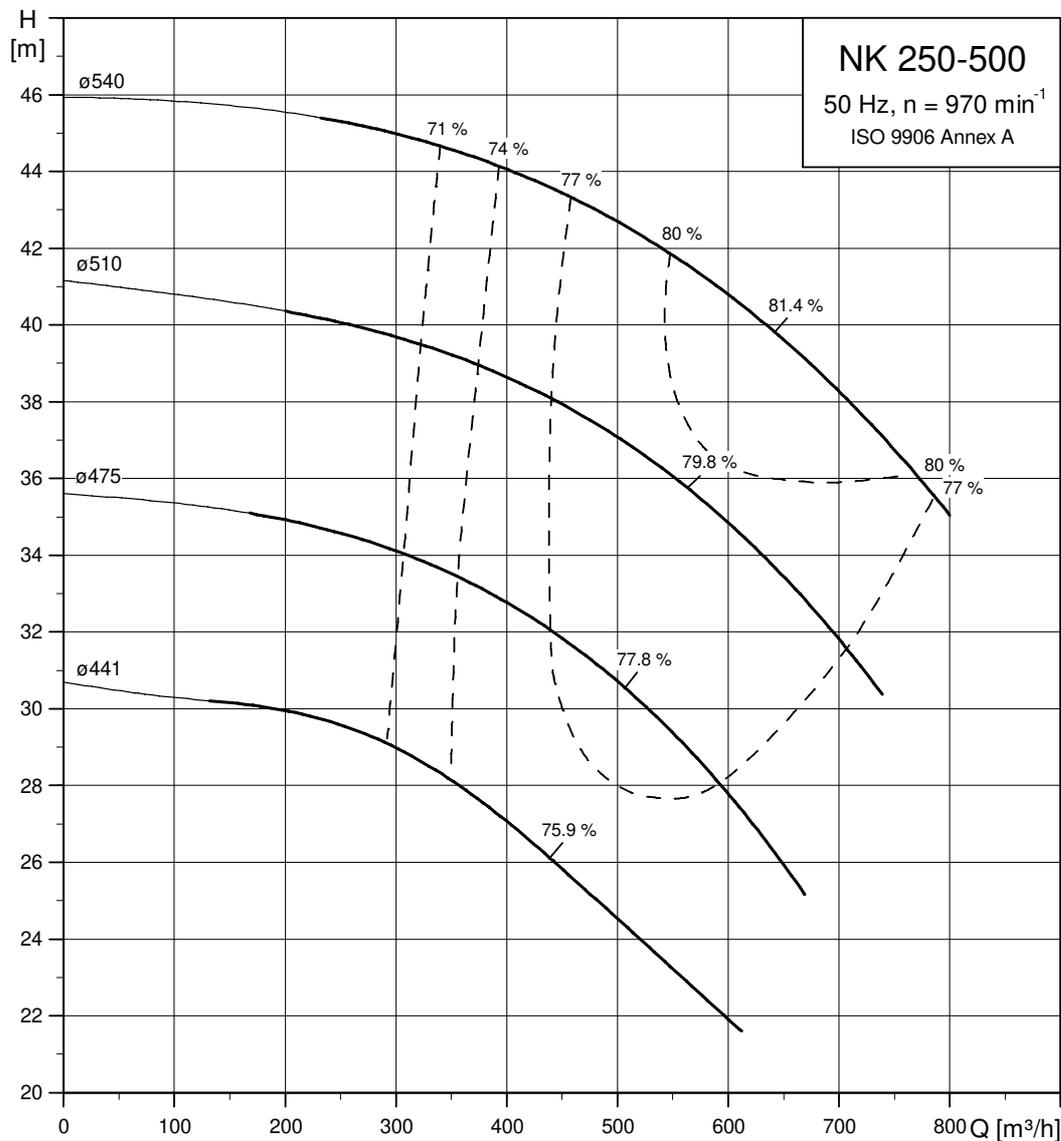
TM03 1282 1505

NK 250-400*						
kW	18,5	22	30	37	45	55
Standard motor range	MMG 200LA-E	MMG 200LB-E	MMG 225M-E	MMG 250M-E	MMG 280S-E	MMG 280M-E
Premium motor range	MMG 200LA-D	MMG 200LB-D	MMG 225M-D	MMG 250M-D	MMG 280S-D	MMG 280M-D
E-motor range	-	-	-	-	-	-
PN [bar]	10	10	10	10	10	10
DN _d [mm]	250	250	250	250	250	250
DN _s [mm]	300	300	300	300	300	300
a [mm]	200	200	200	200	200	200
a ₂ [mm]	175	175	175	175	175	175
h [mm]	160	160	160	180	180	180
h ₂ [mm]	600	600	600	600	600	600
h ₃ [mm]	470	470	470	470	480	480
h ₄ ¹⁾ [mm]	767/797/-	767/797/-	790/836/-	829/855/-	866/899/-	866/899/-
Standard coupling						
l ₁ [mm]	1701/1723/-	1701/1723/-	1781/1832/-	1854/1916/-	1889/1982/-	1940/2032.5/-
l ₁ [mm]	1800	1800	1800	1900	1900	2000
l ₂ [mm]	150	150	150	150	150	150
l ₃ [mm]	1500	1500	1500	1600	1600	1700
b ₁ [mm]	-	-	-	-	-	-
b ₂ [mm]	850	850	850	850	860	860
b ₃ [mm]	790	790	790	790	795	795
d [mm]	18	18	18	18	18	18
Weight ¹⁾ Net [kg]	836/813/-	851/823/-	902/896/-	1009/1001/-	1241/1183/-	1211/1140/-
Spacer coupling						
l ₁ [mm]	1897/1919/-	1897/1919/-	1977/2028/-	2050/2112/-	2083/2176/-	2134/2227/-
l ₁ [mm]	1900	1900	2000	2100	2100	2100
l ₂ [mm]	150	150	150	150	150	150
l ₃ [mm]	1600	1600	1700	1800	1800	1800
b ₁ [mm]	-	-	-	-	-	-
b ₂ [mm]	850	850	850	850	860	860
b ₃ [mm]	790	790	790	790	795	795
d [mm]	18	18	18	18	18	18
Weight ¹⁾ Net [kg]	843/820/-	858/830/-	912/906/-	1080/1072/-	1287/1229/-	1355/1284/-

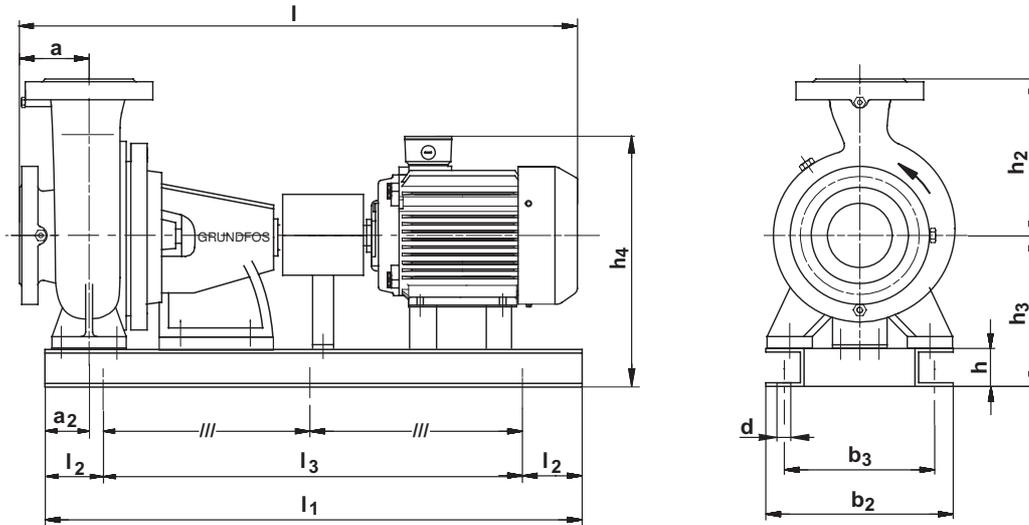
1) Dimension of pump with standard range motor/premium range motor/built-in frequency converter.

Performance curves

NK 250-500
6-pole



TM01 2899 3102



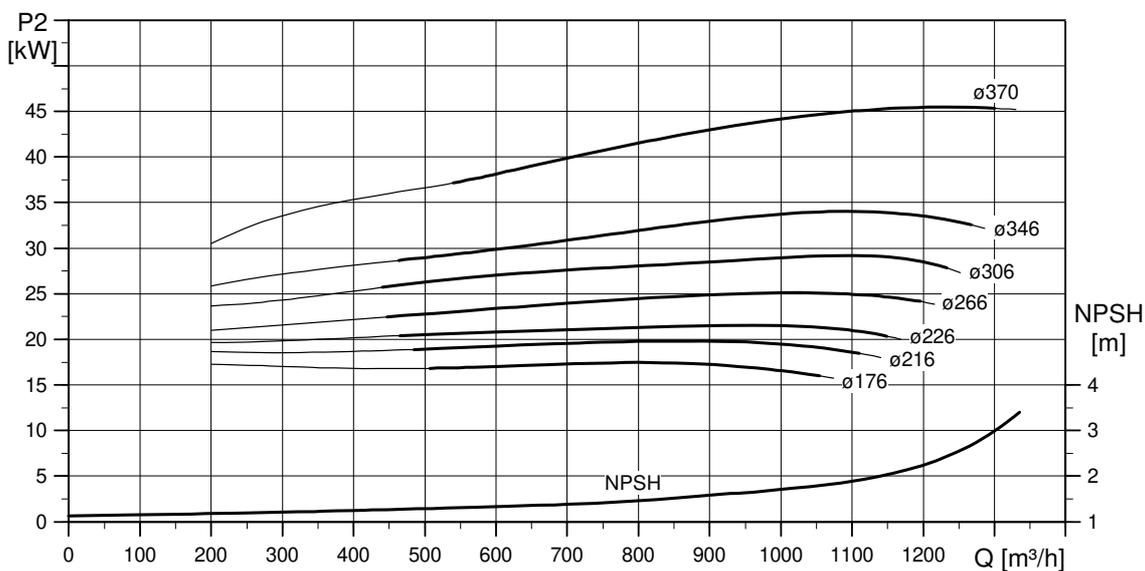
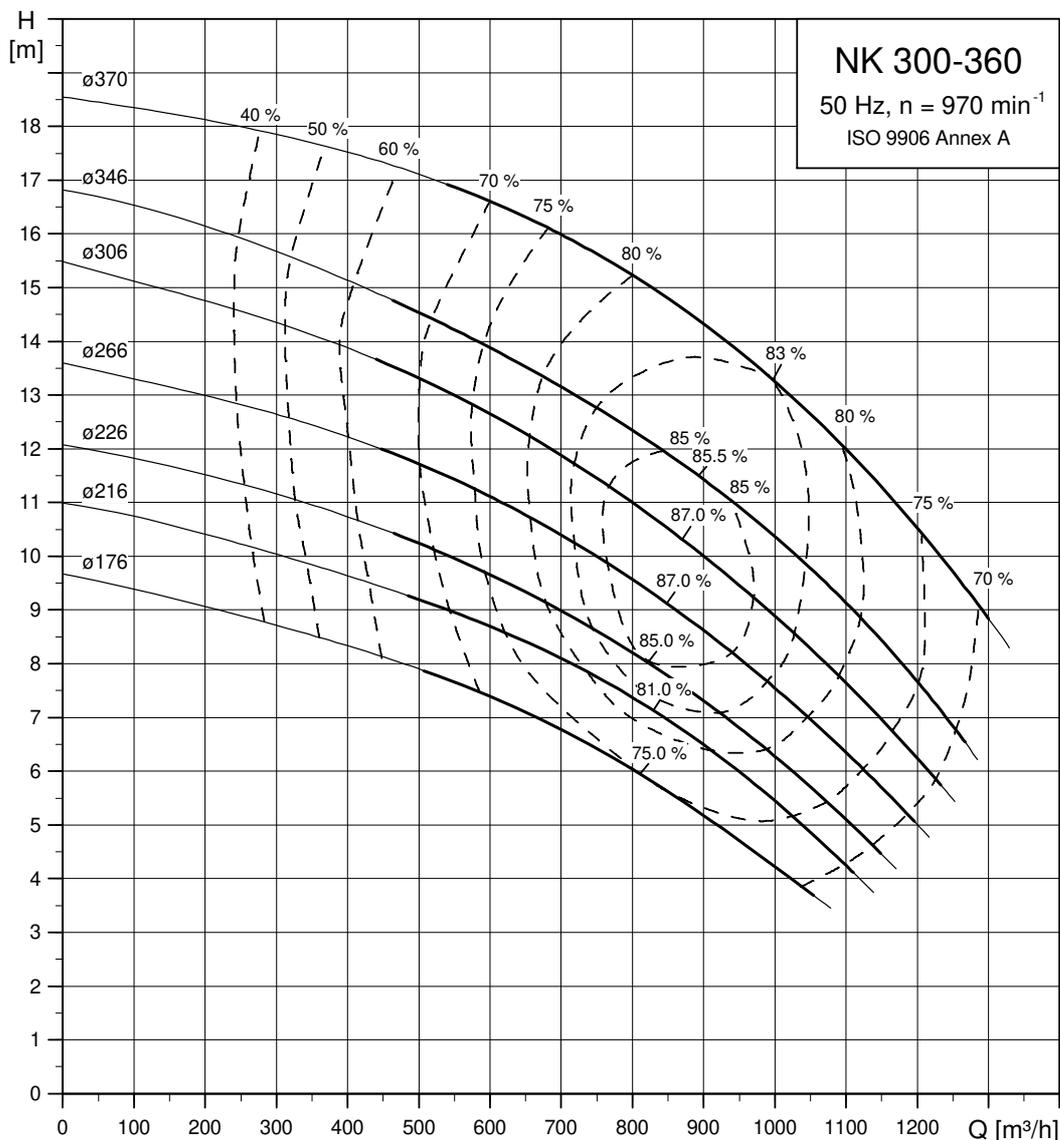
TM03 1282 1505

NK 250-500*					
kW	45	55	75	90	110
Standard motor range	MMG 280S-E	MMG 280M-E	MMG 315S-E	MMG 315M-E	MMG 315LA-E
Premium motor range	MMG 280S-D	MMG 280M-D	MMG 315S-D	MMG 315MA-D	MMG 315MB-D
E-motor range	-	-	-	-	-
PN [bar]	10	10	10	10	10
DN _d [mm]	250	250	250	250	250
DN _s [mm]	300	300	300	300	300
a [mm]	300	300	300	300	300
a ₂ [mm]	175	175	175	185	185
h [mm]	180	180	180	180	200
h ₂ [mm]	660	660	660	660	660
h ₃ [mm]	490	490	495	515	515
h ₄ ¹⁾ [mm]	876/909/-	876/909/-	966/1007/-	986/1027/-	986/1027/-
Standard coupling					
l ₁ [mm]	1999/2092/-	2050/2143/-	2260/2180/-	2373/2180/-	2373/2180/-
l ₁ [mm]	2000	2000	2200	2200	2200
l ₂ [mm]	150	150	150	150	150
l ₃ [mm]	1700	1700	1900	1900	1900
b ₁ [mm]	-	-	-	-	-
b ₂ [mm]	945	945	945	955	955
b ₃ [mm]	880	880	880	885	885
d [mm]	18	18	18	18	18
Weight ¹⁾ Net [kg]	1249/1191/-	1317/1246/-	1744/1372/-	1826/1566/-	1891/1641/-
Spacer coupling					
l ₁ [mm]	2193/2286/-	2244/2337/-	2454/2374/-	2567/2374/-	2567/2374/-
l ₁ [mm]	2200	2200	2400	2400	2400
l ₂ [mm]	150	150	150	150	150
l ₃ [mm]	1900	1900	2100	2100	2100
b ₁ [mm]	-	-	-	-	-
b ₂ [mm]	945	945	955	955	955
b ₃ [mm]	880	880	885	885	885
d [mm]	18	18	18	18	18
Weight ¹⁾ Net [kg]	1272/1214/-	1340/1269/-	1769/1397/-	1846/1586/-	1916/1666/-

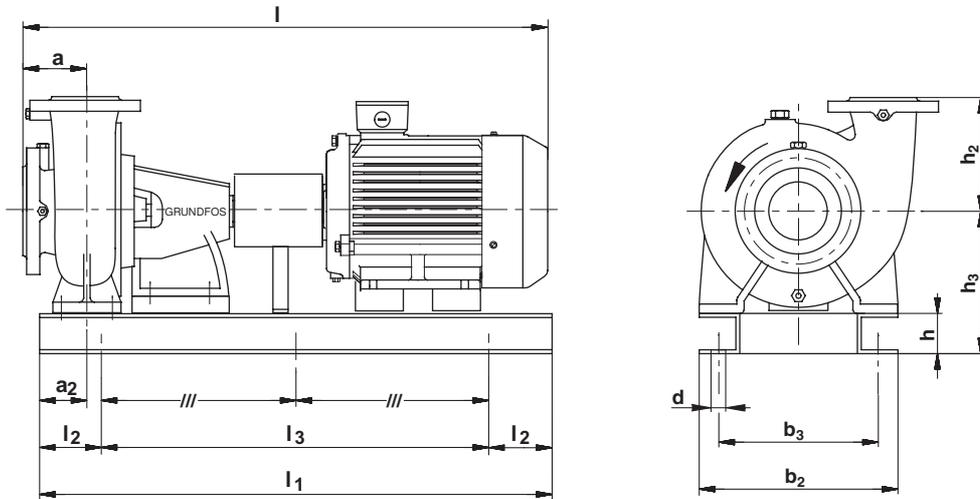
1) Dimension of pump with standard range motor/premium range motor/built-in frequency converter.

Performance curves

NK 300-360
6-pole



TM01 1717 0499



TM03 1279 1505

NK 300-360*					
kW	22	30	37	45	55
Standard motor range	MMG 200LB-E	MMG 225M-E	MMG 250M-E	MMG 280S-E	MMG 280M-E
Premium motor range	MMG 200LB-D	MMG 225M-D	MMG 250M-D	MMG 280S-D	MMG 280M-D
E-motor range	-	-	-	-	-
PN [bar]	10	10	10	10	10
DN _d [mm]	300	300	300	300	300
DN _s [mm]	300	300	300	300	300
a [mm]	300	300	300	300	300
a ₂ [mm]	180	180	180	180	180
h [mm]	180	180	180	180	180
h ₂ [mm]	440	440	440	440	440
h ₃ [mm]	700	700	700	700	700
h ₄ ¹⁾ [mm]	997/1027/-	1020/1066/-	1059/1085/-	1086/1119/-	1086/1119/-
Standard coupling					
l ¹⁾ [mm]	1821/1843/-	1901/1952/-	1974/2036/-	2009/2102/-	2060/2153/-
l ₁ [mm]	1800	1900	1900	2000	2000
l ₂ [mm]	150	150	150	150	150
l ₃ [mm]	1500	1600	1600	1700	1700
b ₁ [mm]	-	-	-	-	-
b ₂ [mm]	860	860	860	860	860
b ₃ [mm]	795	795	795	795	795
d [mm]	18	18	18	18	18
Weight ¹⁾ Net [kg]	1108/1080/-	1164/1158/-	1262/1254/-	1288/1230/-	1356/1285/-
Spacer coupling					
l ¹⁾ [mm]	2097/2119/-	2177/2228/-	2250/2312/-	2283/2376/-	2334/2427/-
l ₁ [mm]	2000	2100	2100	2100	2200
l ₂ [mm]	150	150	150	150	150
l ₃ [mm]	1700	1800	1800	1800	1900
b ₁ [mm]	-	-	-	-	-
b ₂ [mm]	860	860	860	860	860
b ₃ [mm]	795	795	795	795	795
d [mm]	18	18	18	18	18
Weight ¹⁾ Net [kg]	1044/1016/-	1228/1222/-	1320/1312/-	1450/1392/-	1474/1403/-

1) Dimension of pump with standard range motor/premium range motor/built-in frequency converter.

Base frames

The dimensional sketches below show the dimensions of the base frames fitted to NK, NKE pumps.

The type number of the base frame is stated for each NK, NKE pump mentioned in the section "Technical data/performance curves".

Base frame type No	Base frame	
2		TM03 7714 4806
3		TM03 7715 4806
4		TM03 7716 4806
5		TM03 7717 4806
6		TM03 7718 4806

Base frames

NB, NBE, NK, NKE

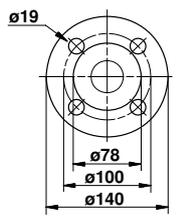
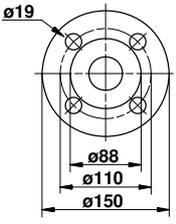
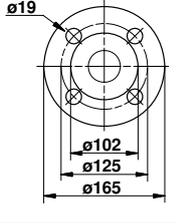
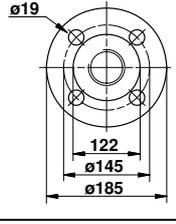
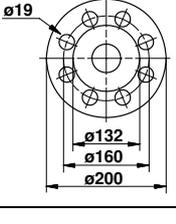
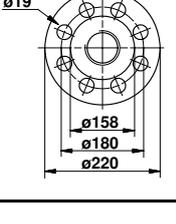
Base frame type No	Base frame	
7		TM03 7719 4806
8		TM03 7720 4806
9		TM03 7721 4806
10		TM03 7722 0807
11		TM03 7723 0807

Counter flanges

Cast iron pumps

Counter flanges for NB(E) and NK(E) pumps of cast iron 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.

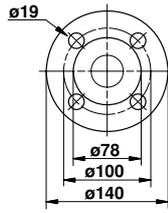
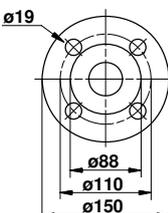
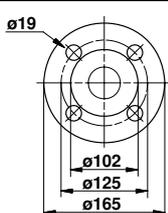
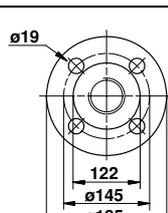
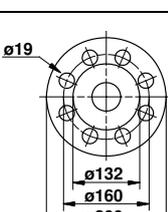
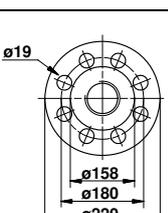
Counter flange	Flange size	Description	Rated pressure	Pipework connection	Product number	
	TM03 0400 5004	DN 32	Threaded	10/16 bar, EN 1092-2	Rp 1¼	419901
			For welding	10/16 bar, EN 1092-2	32 mm	419902
	TM03 0401 5004	DN 40	Threaded	10/16 bar, EN 1092-2	Rp 1½	429902
			For welding	10/16 bar, EN 1092-2	40 mm	429901
	TM03 0402 5004	DN 50	Threaded	10/16 bar, EN 1092-2	Rp 2	339903
			For welding	10/16 bar, EN 1092-2	50 mm	339901
	TM03 0403 5004	DN 65	Threaded	10/16 bar, EN 1092-2	Rp 2½	349902
			For welding	10/16 bar, EN 1092-2	65 mm	349904
	TM03 2117 3705	DN 80	Threaded	10/16 bar, EN 1092-2	Rp 3	350540
			For welding	10/16 bar, EN 1092-2	80 mm	350541
	TM03 0405 5004	DN 100	Threaded	10/16 bar, EN 1092-2	Rp 4	369901
			For welding	10/16 bar, EN 1092-2	100 mm	369902

Counter flange	Flange size	Description	Rated pressure	Pipework connection	Product number
	DN 125	For welding	10/16 bar, EN 1092-2	125 mm	96414677
	DN 150	For welding	10/16 bar, EN 1092-2	150 mm	96414676
	DN 200	For welding	10 bar, EN 1092-2	200 mm	96413358
	DN 250	For welding	10 bar, EN 1092-2	250 mm	96691156
	DN 300	For welding	10 bar, EN 1092-2	300 mm	96691157

Stainless steel pumps

Counter flanges for NB(E) and NK(E) stainless steel 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	Pipework connection	Product number	
	TM03 0400 5004	DN 32	Threaded	10/16 bar, EN 1092-2	Rp 1¼	415304
			For welding	10/16 bar, EN 1092-2	32 mm	415305
	TM03 0401 5004	DN 40	Threaded	10/16 bar, EN 1092-2	Rp 1½	425245
			For welding	10/16 bar, EN 1092-2	40 mm	425246
	TM03 0402 5004	DN 50	Threaded	10/16 bar, EN 1092-2	Rp 2	335254
			For welding	10/16 bar, EN 1092-2	50 mm	335255
	TM03 0403 5004	DN 65	Threaded	10/16 bar, EN 1092-2	Rp 2½	349910
			For welding	10/16 bar, EN 1092-2	65 mm	349906
	TM03 2117 3705	DN 80	Threaded	10/16 bar, EN 1092-2	Rp 3	350543
			For welding	10/16 bar, EN 1092-2	80 mm	350544
	TM03 0405 5004	DN 100	Threaded	10/16 bar, EN 1092-2	Rp 4	369904
			For welding	10/16 bar, EN 1092-2	100 mm	369903

Sensors

Accessory	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 ½ 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.

Sensors for boosting applications

Danfoss pressure sensor kit	Pressure range	Product number
<ul style="list-style-type: none"> • Connection: G ½ A (DIN 16288 - B6kt) • Electrical connection: Plug (DIN 43650) 	0 - 2.5 bar	96478188
	0 - 4 bar	91072075
	0 - 6 bar	91072076
	0 - 10 bar	91072077
	0 - 16 bar	91072078
<ul style="list-style-type: none"> • Pressure sensor, type MBS 3000, with 2 m screened cable • Connection: G ¼ A (DIN 16288 - B6kt) • 5 cable clips (black) • Fitting instructions PT (00400212) 	0 - 2.5 bar	405159
	0 - 4 bar	405160
	0 - 6 bar	405161
	0 - 10 bar	405162
	0 - 16 bar	405163

Sensors for circulation applications

Grundfos differential pressure sensor, DPI	Pressure range	Product number
<ul style="list-style-type: none"> • 1 sensor incl. 0.9 m screened cable (7/16" connections) • 1 original DPI bracket (for wall mounting) • 1 Grundfos bracket (for mounting on motor) • 2 M4 screws for mounting of sensor on bracket • 1 M6 screw (self-cutting) for mounting on MGE 90/100 • 1 M8 screw (self-cutting) for mounting on MGE 112/132 • 1 M10 screw (self-cutting) for mounting on MMGE 160 • 1 M12 screw (self-cutting) for mounting on MMGE 180 • 3 capillary tubes (short/long) • 2 fittings (1/4" - 7/16") • 5 cable clips (black) • Installation and operating instructions • Service kit instruction 	0 - 0.6 bar	96611522
	0 - 1.0 bar	96611523
	0 - 1.6 bar	96611524
	0 - 2.5 bar	96611525
	0 - 4.0 bar	96611526
	0 - 6.0 bar	96611527
	0 - 10 bar	96611550

Select the differential pressure sensor so that the maximum pressure of the sensor is higher than the maximum differential pressure of the pump.

Potentiometer

Potentiometer for setpoint setting and start/stop of the pump.

Product	Product number
External potentiometer with cabinet for wall mounting	625468

R100

R100 is used for wireless communication. The communication takes place by means of infrared light.

Product	Product number
R100	625333

G10-LON interface

The G10-LON interface is used for data transmission between a Locally Operating Network (LON) and electronically controlled Grundfos pumps via the Grundfos GENibus protocol.

Product	Product number
G10-LON interface	00605726

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.

The product numbers in the tables below refer to a set of two support blocks with the dimensions specified.

Hexagon head bolts, washers and nuts are supplied together with support blocks higher than 20 mm.

NB 50 Hz, 2-pole

Pump type	P ₂ [kW]	Dimensions W x L x H [mm]	Support block No	Product number			
32-125	3	50x100x20	2	96434610			
32-200	11	80x332x20	3	96434611			
		50x100x20		96434610			
32-250	11, 15	80x332x20	1	96434611			
32-160	5.5	50x100x20	2	96434610			
40-125	3						
40-125	4						
40-160	5.5						
40-160	7.5						
40-200	11						
40-200	15						
40-250	11				80x332x20	1	96434611
40-250	15						
40-250	18.5						
50-125	5.5	50x100x20	2	96434610			
50-125	7.5						
50-160	11						
50-160	15						
50-200	11						
50-200	15				80x332x20	1	96434611
50-200	18.5						
50-250	15						
50-250	18.5						
65-125	11				80x332x20	3	96434611
		70x125x20	96434612				
65-160	11	80x332x20	1	96434611			
65-160	15						
65-160	18.5						
65-200	11						
65-200	15						
65-200	18.5						
80-160	11						
80-160	15						
80-160	18.5						
80-200	30				70x125x20	2	96434612
80-200	37						

NB 50 Hz, 4-pole

Pump type	P ₂ [kW]	Dimensions W x L x H [mm]	Support block No	Product number
50-315	11	90x335x65	1	96434605
65-315	11			
65-315	15			
80-250	11	100x332x40		96434609
80-315	11	90x335x90		96434606
80-315	15			
80-315	18.5	100x320x70		96434607
80-315	22			
100-200	11			
100-250	11	90x335x65	1	96434605
100-250	15			
100-315	15			
100-315	18.5	100x320x70		96434607
100-315	22			
125-200	15	90x335x90		96434606
125-200	11			
125-250	11			
125-250	15	100x320x70		96434607
125-250	18.5			
125-250	22			
150-200	11	80x290x120		96434608

NB 50 Hz, 6-pole

Pump type	P ₂ [kW]	Dimensions W x L x H [mm]	Support block No	Product number
100-315	7.5	90x335x90		96434606
100-315	11			
100-400	7.5	80x290x120	1	96434608
125-250	7.5	90x335x90		96434606
125-315	7.5	80x290x120		96434608
150-250	7.5			

Key to support block number

No	Description
1	Support blocks to be fitted under motor feet
2	Support blocks to be fitted under pump housing feet
3	Support blocks to be fitted under both motor and pump housing feet

Electrical data

The below tables show the electrical data of the following mains-operated motors

- MMG model E
- TECO, EFF2/standard efficiency
- TECO, EFF1/high efficiency.

MMG model E, 2-pole

Motor	Frame size	Voltage	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ _{1/1}	n [min ⁻¹]	I _{start} / I _{1/1}
MMG	71	3x220-240Δ/380-415Y	0.55	2.18/1.26	73.0	0.82	2790	6.5
MMG	80		0.75	2.88/1.66	75.0	0.83	2820	6.1
MMG	80		1.1	4.00/2.30	76.2	0.84	2820	6.6
MMG	90S		1.5	5.75/3.30	78.5	0.83	2830	7.5
MMG	90L		2.2	7.90/4.55	81.0	0.85	2830	7.3
MMG	100L		3	10.2/5.90	82.6	0.87	2860	7.5
MMG	112M		4	13.6/7.80	84.2	0.87	2890	7.7
MMG	90L	3x380-415Δ	2.2	4.60/2.70	81.0	0.85	2830	7.3
MMG	100L		3	5.90/3.40	82.6	0.87	2860	7.5
MMG	112M		4	7.80/4.50	84.2	0.87	2890	7.7
MMG	132S		5.5	10.2/6.00	85.7	0.88	2910	7.9
MMG	132S		7.5	13.6/7.90	87.0	0.89	2900	7.8

MMG model E, 4-pole

Motor	Frame size	Voltage	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ _{1/1}	n [min ⁻¹]	I _{start} / I _{1/1}
MMG	-	3x220-240Δ/380-415Y	0.55	2.60/1.50	71.0	0.72	1410	5.3
MMG	-		0.75	3.30/1.90	73.0	0.75	1400	5.4
MMG	-		1.1	4.35/2.50	76.2	0.80	1390	5.9
MMG	-		1.5	6.00/3.45	78.5	0.79	1400	5.8
MMG	-		2.2	7.95/4.60	81.0	0.84	1430	6.9
MMG	-		3	11.6/6.70	82.6	0.78	1440	7.9
MMG	-		4	14.2/8.10	84.2	0.84	1440	7.6
MMG	-	3x380-415Δ	2.2	4.70/2.70	81.0	0.84	1430	6.9
MMG	-		3	6.70/3.90	82.6	0.78	1440	7.9
MMG	-		4	8.10/4.70	84.2	0.84	1440	7.6
MMG	-		5.5	10.6/6.15	85.7	0.85	1450	7.4

TECO – EFF2/standard efficiency, 2-pole

Motor	Frame size	Voltage	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ _{1/1}	n [min ⁻¹]	I _{start} / I _{1/1}
TECO	80	3x220-240Δ/380-415Y	0.75	3.00/1.74	76.5	0.86	2780	6.6
TECO	80		1.1	4.30/2.50	79.0	0.86	2790	7.6
TECO	90S		1.5	5.80/3.35	80.0	0.86	2810	7.2
TECO	90L		2.2	8.35/4.85	82.3	0.85	2830	7.6
TECO	100L		3	10.8/6.25	83.8	0.88	2840	7.3
TECO	112M		4	14.0/8.10	85.3	0.89	2850	7.8
TECO	90L		2.2	4.60-4.45	82.3-82.1	0.88-0.84	2830-2850	7.6-8.2
TECO	100L	3x380-415Δ	3	6.20-5.85	83.8-83.5	0.88-0.85	2840-2860	7.3-8.0
TECO	112M		4	8.00-7.60	85.3-85.0	0.89-0.86	2850-2870	7.9-8.6
TECO	132S		5.5	10.8-10.2	86.3-86.7	0.90-0.86	2900-2920	6.0-7.1
TECO	132S		7.5	14.8-13.8	87.2-88.0	0.89-0.86	2870-2890	6.0-7.3

Motor	Frame size	Voltage	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ _{1/1}	n [min ⁻¹]	I _{start} I _{1/1}
TECO	160M	3x380-415Δ/660-690Y	11	21.0/12.2	88.5	0.89	2900	7.3
TECO	160M		15	27.5/16.0	90.5	0.91	2910	7.5
TECO	160L		18.5	34.0/19.6	91.0	0.91	2920	7.3
TECO	180MA		22	40.5/23.6	91.5	0.90	2920	7.2
TECO	200LA		30	56.5/32.5	91.0	0.89	2930	7.0
TECO	200LA		37	68.5/39.5	91.5	0.90	2930	7.2
TECO	225MA		45	82.5/47.5	91.0	0.91	2930	6.7
TECO	250SA		55	102/58.5	91.7	0.90	2950	6.7
TECO	250MA		75	138/79.5	92.4	0.90	2950	6.8
TECO	280SA		90	164/94	93.0	0.90	2950	6.5
TECO	280MA		110	200/116	93.0	0.90	2960	6.5
TECO	315SA		132	240/138	93.2	0.90	2960	6.5
TECO	315MA		160	290/168	93.2	0.90	2960	6.5
TECO	315MA		200	355/206	93.5	0.91	2960	6.4
TECO	355MA		250	430/248	95.3	0.93	2980	7.1
TECO	355LA		315	535/310	95.6	0.94	2980	7.1

TECO – EFF2/standard efficiency, 4-pole

Motor	Frame size	Voltage	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ _{1/1}	n [min ⁻¹]	I _{start} I _{1/1}
TECO	71	3x220-240Δ/380-415Y	0.25	1.38/0.80	68.5	0.70	1390	5.3
TECO	71		0.37	2.00/1.16	68.5	0.71	1380	5.0
TECO	80		0.55	2.70/1.56	73.5	0.73	1400	5.6
TECO	80		0.75	3.55/2.06	75.3	0.74	1400	5.5
TECO	90S		1.1	4.85/2.80	77.8	0.77	1400	6.0
TECO	90L		1.5	6.15/3.55	80.0	0.80	1400	6.2
TECO	100L		2.2	8.80/5.10	82.3	0.80	1410	6.7
TECO	100L		3	11.8/6.80	83.2	0.81	1410	6.7
TECO	112M		4	15.2/8.80	85.3	0.81	1420	7.2
TECO	100L		2.2	5.05-4.60	82.0-81.0	0.81-0.82	1430	6.7
TECO	100L	3	6.80-6.15	82.5-82.0	0.82-0.83	1430	7.4	
TECO	112M	4	8.80-8.00	84.5-84.0	0.82-0.83	1440	7.1	
TECO	132S	5.5	11.8/6.75	86.0	0.83	1450	6.6	
TECO	132M	7.5	15.4/8.90	88.0	0.84	1450	6.8	
TECO	160M	11	21.6/12.2	89.0	0.88	1450	7.3	
TECO	160L	15	29.0/16.8	90.0	0.87	1460	7.2	
TECO	180MC	18.5	36.0/21.0	91.0	0.86	1460	6.8	
TECO	180LC	22	42.0/24.6	91.0	0.87	1460	7.0	
TECO	200LC	30	57.5/33.0	91.5	0.87	1460	6.9	
TECO	225SC	37	71.0/41.0	91.7	0.87	1460	7.0	
TECO	225MC	45	85.5/49.5	92.4	0.87	1460	6.5	
TECO	250SC	55	104/60.0	92.4	0.87	1470	6.5	
TECO	250MC	75	140/80.5	93.0	0.88	1480	6.7	
TECO	280SC	90	166/96.0	93.7	0.88	1480	6.2	
TECO	280MC	110	202/118	93.8	0.88	1480	6.2	
TECO	315SC	132	240/138	93.8	0.89	1480	6.2	
TECO	315MC	160	290/168	94.2	0.89	1480	6.2	
TECO	315MB	200	355/204	94.8	0.91	1480	6.6	
TECO	355MB	250	435/250	95.5	0.91	1490	6.9	
TECO	355LB	315	535/310	95.6	0.94	1490	6.9	

TECO – standard efficiency, 6-pole

Motor	Frame size	Voltage	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ _{1/1}	n [min ⁻¹]	I _{start} / I _{1/1}
TECO	80	3x220-240Δ/380-415Y	0.55	3.60/2.10	63.0	0.66	890	4.2
TECO	90S		0.75	3.95/2.26	73.8	0.68	910	4.8
TECO	90L		1.1	5.55/3.20	74.0	0.68	910	4.9
TECO	100L		1.5	7.05/4.10	79.0	0.71	920	5.6
TECO	112M		2.2	9.80/5.70	81.6	0.73	940	6.0
TECO	132S		3	12.0/6.95	83.3	0.79	960	6.3
TECO	132M		4	16.6/9.55	83.3	0.76	960	6.3
TECO	112M		2.2	5.65/3.25	81.6	0.73	940	6.0
TECO	132S		3	6.95/4.00	83.3	0.79	960	6.4
TECO	132M		4	9.55/5.50	83.3	0.76	960	6.3
TECO	132M		5.5	12.4/7.20	84.8	0.79	960	6.6
TECO	160M		7.5	16.4/9.40	86.0	0.81	970	6.3
TECO	160L		11	23.0/13.2	88.5	0.83	970	6.8
TECO	180LC		15	30.0/17.2	89.5	0.86	970	7.0
TECO	200LC	18.5	36.5/21.0	91.0	0.85	970	6.8	
TECO	200LC	3x380-415Δ/660-690Y	22	43.5/25.0	92.0	0.84	970	6.8
TECO	225MC		30	61.5/35.5	91.0	0.82	970	6.4
TECO	250SC		37	74.5/43.0	91.7	0.83	970	6.5
TECO	250MC		45	88.0/50.5	92.4	0.84	970	6.3
TECO	280SC		55	108/62.0	92.4	0.84	970	6.3
TECO	280MC		75	144/82.5	93.0	0.86	980	6.5
TECO	315SC		90	172/99.0	93.0	0.86	980	6.5
TECO	315MC		110	210/122	93.0	0.86	980	6.2
TECO	315MC		132	250/144	93.6	0.86	980	6.2

TECO – EFF1/high efficiency, 2-pole

Motor	Frame size	Voltage	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ _{1/1}	n [min ⁻¹]	I _{start} / I _{1/1}	
TECO	80	3x220-240Δ/380-415Y	0.75	2.90/1.68	80.0	0.85	2810	6.3	
TECO	80		1.1	4.15/2.42	82.5	0.84	2810	6.7	
TECO	90S		1.5	5.50/3.20	84.1	0.85	2810	7.2	
TECO	90L		2.2	7.95/4.60	85.7	0.85	2820	7.3	
TECO	100L		3	10.4/6.05	86.7	0.87	2850	8.6	
TECO	112M		4	13.8/7.95	87.6	0.87	2860	8.3	
TECO	90L		2.2	4.55-4.35	85.1-84.8	0.86-0.83	2820-2840	7.3	
TECO	100L		3	6.00-5.65	86.7-86.4	0.88-0.85	2850-2870	8.6	
TECO	112M		3x380-415Δ	4	7.90-7.45	87.8-87.5	0.88-0.85	2860-2880	8.3
TECO	132S			5.5	10.2-9.85	90.5-90.9	0.90-0.85	2900-2920	7.2
TECO	132S	7.5		14.0-14.0	89.9-90.2	0.91-0.83	2890-2910	6.7	
TECO	160M	11		20.6/11.8	90.4	0.91	2910	7.2	
TECO	160M	15		27.5/15.8	91.1	0.91	2920	7.1	
TECO	160L	18.5		33.5/19.2	91.6	0.92	2920	8.4	
TECO	180MA	22		39.0/22.6	92.8	0.92	2940	8.6	
TECO	200LA	30		55.5/32.0	92.7	0.88	2940	8.6	
TECO	200LA	37		66.5/38.5	93.7	0.90	2940	8.6	
TECO	225MA	45		81.0/46.5	93.8	0.90	2940	8.4	
TECO	250SA	55	97.5/56.0	94.0	0.91	2950	7.4		
TECO	250MA	3x380-415Δ/660-690Y	75	130/75.0	95.0	0.92	2950	7.5	
TECO	280SA		90	158/91.0	95.0	0.91	2950	7.0	
TECO	280MA		110	190/110	95.5	0.92	2960	7.6	
TECO	315SA		132	230/132	95.5	0.91	2980	7.5	
TECO	315MA		160	280/162	95.6	0.90	2980	7.0	
TECO	315MA		200	355/204	94.0	0.90	2980	8.0	
TECO	315CA		250	455/260	94.2	0.89	2970	6.4	
TECO	315DA		315	560/325	94.5	0.90	2970	6.5	
TECO	355AA		355	630/365	94.8	0.90	2970	6.5	

TECO – EFF1/high efficiency, 4-pole

Motor	Frame size	Voltage	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ _{1/1}	n [min ⁻¹]	I _{start} / I _{1/1}	
TECO	80	3x220-240Δ/380-415Y	0.55	2.60/1.50	80.0	0.70	1390	5.7	
TECO	80		0.75	3.25/1.90	81.5	0.74	1400	5.7	
TECO	90S		1.1	4.30/2.50	83.8	0.80	1410	6.1	
TECO	90L		1.5	5.80/3.35	85.0	0.80	1400	6.4	
TECO	100L		2.2	7.75/4.50	86.5	0.86	1410	6.7	
TECO	100L		3	11.0/6.35	87.5	0.82	1420	7.7	
TECO	112M		4	14.2/8.20	88.5	0.84	1430	7.7	
TECO	100L	3x380-415Δ	2.2	4.50-4.25	86.5-86.2	0.86-0.83	1410-1430	9.6	
TECO	100L		3	6.35-6.05	87.5-87.2	0.82-0.79	1420-1440	9.8	
TECO	112M		4	8.20-7.75	88.5-88.2	0.84-0.81	1430-1450	9.8	
TECO	132S		5.5	11.0-10.4	89.1-89.2	0.86-0.82	1450-1470	9.8	
TECO	132M		7.5	14.6/8.40	91.0	0.86	1450	9.5	
TECO	160M		11	20.6/11.8	92.5	0.88	1450	9.0	
TECO	160L		15	31.0/17.8	93.7	0.89	1450	8.6	
TECO	180MC		18.5	35.0/20.0	94.0	0.86	1460	8.8	
TECO	180LC		22	41.0/23.6	94.0	0.87	1460	8.3	
TECO	200LC		30	55.0/31.5	94.5	0.88	1460	9.3	
TECO	225SC		37	69.0/39.5	95.0	0.86	1470	7.8	
TECO	225MC		45	84.0/48.5	95.0	0.86	1470	7.4	
TECO	250SC		3x380-415Δ/660-690Y	55	100/58.0	95.5	0.87	1480	7.4
TECO	250MC			75	138/79.0	95.5	0.87	1480	7.3
TECO	280SB	90		164/94.0	95.4	0.88	1480	7.0	
TECO	280MC	110		200/114	95.4	0.88	1480	6.8	
TECO	315SC	132		240/138	95.4	0.88	1490	6.0	
TECO	315MCB	160		290/166	95.4	0.88	1490	6.0	
TECO	315MB	200		335/192	95.8	0.88	1480	7.8	
TECO	315CB	250		450/260	94.5	0.89	1480	6.4	
TECO	315DB	315	565/325	94.8	0.89	1480	6.4		

TECO – high efficiency, 6-pole

Motor	Frame size	Voltage	P2 [kW]	I _{1/1} [A]	η [%]	Cos φ _{1/1}	n [min ⁻¹]	I _{start} / I _{1/1}
TECO	80	3x220-240Δ/380-415Y	0.55	3.10/1.80	75.0	0.62	910	5.0
TECO	90S		0.75	3.90/2.26	77.7	0.65	920	4.8
TECO	90L		1.1	5.50/3.20	79.9	0.66	920	4.7
TECO	100L		1.5	7.00/4.05	81.0	0.70	920	5.3
TECO	112M		2.2	9.00/5.20	82.6	0.78	930	5.9
TECO	132S		3	11.2/6.45	88.5	0.80	970	7.4
TECO	132M		4	14.8/8.60	89.5	0.79	970	7.4
TECO	112M	3x380-415Δ/660-690Y	2.2	5.20/3.00	82.6	0.78	930	5.9
TECO	132S		3	6.45/3.70	88.5	0.80	970	7.4
TECO	132M		4	8.60/4.95	89.5	0.79	970	7.4
TECO	132M		5.5	11.4/6.60	89.0	0.82	960	6.5
TECO	160M		7.5	15.4/8.90	91.0	0.81	970	6.7
TECO	160L		11	23.0/13.4	91.0	0.79	980	7.4
TECO	180LC		15	29.5/17.0	91.5	0.84	970	6.1
TECO	200LC		18.5	37.5/21.6	93.0	0.81	980	6.4
TECO	200LC		22	43.5/25.0	93.5	0.83	980	6.2
TECO	225MC		30	56.5/32.5	94.0	0.86	980	5.9
TECO	250SC		37	68.5/39.5	94.0	0.87	990	6.4
TECO	250MC		45	82.5/47.5	94.5	0.88	990	7.0
TECO	280SB		55	106/60.5	94.5	0.84	980	6.4
TECO	280MB		75	140/80.5	95.0	0.86	980	6.7
TECO	315SB	90	168/96.0	95.3	0.86	990	6.7	
TECO	315MB	110	200/114	95.4	0.88	990	6.4	
TECO	315MB	132	246/140	95.8	0.86	990	6.4	

Correction tables

The below tables show the dimensions of the following mains-operated motors

- MG EFF2
- MMG model E
- TECO, EFF2/standard efficiency
- TECO, EFF1/high efficiency.

MG EFF2

If MG EFF2 motors are selected, the dimension in Technical data on page 58 to 267 must be corrected according to the tables below.

2-pole

P ₂ [kW]	EFF1 motor	EFF2 motor	L/LB	H	h4/AD	AG	LL	P	A	B	C	K	NK weight [kg]	NB weight [kg]
0.55	MG 71B-C	MG 71B-C	0	0	0	0	0	0	0	0	0	0	0	0
0.75	MG 80A-C	MG 80A-C	0	0	0	0	0	0	0	0	0	0	0	0
1.1	MG 90SA-D	MG 80B-C	-50	-10	-1	-80	-21	0	-15	0	-6	0	-5.4	-5
1.5	MG 90SB-D	MG 90SA-C	0	0	0	0	0	0	0	0	0	0	0	-1
2.2	MG 90LC-D	MG 90LA-C	-40	0	0	0	0	0	0	0	0	0	-3	-3
3	MG 100LC-D	MG 100LA-C	0	0	0	0	0	0	0	0	0	0	-2	-2
4	MG 112MC-D	MG 112MB-C	0	0	0	0	0	0	0	0	0	0	-9	-9
5.5	MG 132SC-D	MG 132SB-C	0	0	0	0	0	0	0	0	0	0	0	0
7.5	MG 132SD-D	MG 132SC-C	0	0	0	0	0	0	0	0	0	0	2	2

Note:

The 'L' and 'h4' dimensions refer to NK pumps.
The 'LB' and 'AD' dimensions refer to NB pumps.

4-pole

P ₂ [kW]	EFF1 motor	EFF2 motor	L/LB	H	h4/AD	AG	LL	P	A	B	C	K	NK weight [kg]	NB weight [kg]
0.25	MG 71A-C	MG 71A-C	0	0	0	0	0	0	0	0	0	0	0	0
0.37	MG 71B-C	MG 71B-C	0	0	0	0	0	0	0	0	0	0	0	0
0.55	MG 80A-C	MG 80A-C	0	0	0	0	0	0	0	0	0	0	0	0
0.75	MG 80B-C	MG 80B-C	0	0	0	0	0	0	0	0	0	0	0	0
1.1	MG 90SB-D	MG 90SA-C	0	0	0	0	0	0	0	0	0	0	-5	-6
1.5	MG 90LC-D	MG 90LA-C	-40	0	0	0	0	0	0	0	0	0	-4	-5
2.2	MG 100LB-D	MG 100LA-C	0	0	0	0	0	0	0	0	0	0	-1	-4
3	MG 100LC-D	MG 100LB-C	0	0	0	0	0	0	0	0	0	0	-2	-2
4	MG 112MC-D	MG 112MB-C	0	0	0	0	0	0	0	0	0	0	-7	-7
5.5	Siemens 132S	MG 132SC-C	18.5	0	-33	62	-37	0	0	0	0	0	-3	-1

Note:

The 'L' and 'h4' dimensions refer to NK pumps.
The 'LB' and 'AD' dimensions refer to NB pumps.

MMG model E motors

If MMG model E motors are selected, the dimension in Technical data on page 58 to 267 must be corrected according to the tables below.

2-pole

P ₂ [kW]	EFF1 motor	EFF2 motor	L/LB	H	h4/AD	AG	LL	P	A	B	C	K	NK weight [kg]	NB weight [kg]
1.1	MG 90SA-D	MMG 80B-E	-37	-10	23	-70	-11	0	-15	0	-6	0	2	2
1.5	MG 90SB-D	MMG 90S-E	-21	0	36	-56	-3	0	0	0	3	0	9	10
2.2	MG 90LC-D	MMG 90L-E	-36	0	36	-56	-3	3	0	0	3	0	7	11
3	MG 100LC-D	MMG 100L-E	-18	0	40	-66	3	-1	0	0	0	0	9	1
4	MG 112MC-D	MMG 112M-E	-41	0	46	-86	15	0	0	0	0	0	3	2
5.5	MG 132SC-D	MMG 132SA-E	-8	0	66	-86	15	0	0	0	0	0	26	24
7.5	MG 132SD-D	MMG 132SB-E	-8	0	66	-86	15	0	0	0	0	0	26	24
11	Siemens 160M	MMG 160MA-E	20	0	51	-5	-15	-1	0	0	0	0	42	44
15	Siemens 160M	MMG 160MB-E	20	0	51	-5	-15	-1	0	0	0	0	41	43
18.5	Siemens 160L	MMG 160L-E	24	0	51	-5	-15	-1	0	0	0	0	44	46
22	Siemens 180M	MMG 180M-E	-22	0	6	8	18	0	0	0	0	0	52	54
30	Siemens 200L	MMG 200LA-E	-11.5	0	-8	-32	-4	-1	0	0	0	0	34	34
37	Siemens 200L	MMG 200LB-E	-11.5	0	-8	-32	-4	-1	0	0	0	0	56	58
45	Siemens 225M	MMG 225M-E	-12	0	-5	-32	-4	-1	0	0	1	0	16	20
55	Siemens 250M	MMG 250M-E	23	0	-33	-54	-20	0	0	0	0	0	42	48
75	Siemens 280S	MMG 280S-E	-17	0	-46	-54	-20	0	0	0	-0.5	0	-5	0
90	Siemens 280M	MMG 280M-E	-76	0	-46	-54	-20	0	0	0	-0.5	0	-25	-15
110	Siemens 315S	MMG 315S-E	105	0	-24	-59	-27	0	0	0	-1	0	163	165
132	Siemens 315M	MMG 315M-E	55	0	-24	-59	-27	0	0	0	-1	0	132	132
160	Siemens 315L	MMG 315LA-E	55	0	-24	-59	-27	0	0	0	-1	0	95	95
200	Siemens 315L	MMG 315LB-E	-85	0	-24	-59	-27	0	0	0	-1	0	-20	-20
250	Siemens 315	MMG 355M-E	106	40	171	-	22	100	50	-70	74	2	300	300
315	Siemens 315	MMG 355L-E	106	40	171	-	22	100	50	0	74	2	400	-
355	Siemens 355	MMG 355L-E	-119	0	98	-	0	0	-20	-170	54	-5	400	-

Note:

The 'L' and 'h4' dimensions refer to NK pumps.
The 'LB' and 'AD' dimensions refer to NB pumps.

4-pole

P ₂ [kW]	EFF1 motor	EFF2 motor	L/LB	H	h4/AD	AG	LL	P	A	B	C	K	NK weight [kg]	NB weight [kg]
0.25	MG 71A-C	MMG 71A-E	21	0	12	10	10	0	0	0	0	0	4.8	4.5
0.37	MG 71B-C	MMG 71B-E	21	0	12	10	10	0	0	0	0	0	5.3	5
0.55	MG 80A-C	MMG 80A-E	13	0	24	10	10	0	0	0	0	0	9.7	8.9
0.75	MG 80B-C	MMG 80B-E	13	0	24	10	10	0	0	0	0	0	8.5	8
1.1	MG 90SB-D	MMG 90S-E	-21	0	36	-56	-3	0	0	0	3	0	5	6
1.5	MG 90LC-D	MMG 90L-E	-36	0	36	-56	-3	3	0	0	3	0	6	10
2.2	MG 100LB-D	MMG 100LA-E	-18	0	40	-66	3	-1	0	0	0	0	10	-1
3	MG 100LC-D	MMG 100LB-E	-18	0	40	-66	3	-1	0	0	0	0	5	-3
4	MG 112MC-D	MMG 112M-E	-41	0	46	-86	15	0	0	0	0	0	2	1
5.5	Siemens_132S	MMG 132S-E	10.5	0	33	-24	-22	0	0	0	0	0	21	21
7.5	Siemens 132M	MMG 132M-E	10.5	0	33	-24	-22	0	0	0	0	0	21	21
11	Siemens 160M	MMG 160MA-E	20	0	51	-5	-15	-1	0	0	0	0	48	54
15	Siemens 160L	MMG 160L-E	24	0	51	-5	-15	-1	0	0	0	0	38	41
18.5	Siemens 180M	MMG 180M-E	-22	0	6	8	18	0	0	0	0	0	54	58
22	Siemens 180L	MMG 180L-E	-22	0	6	8	18	0	0	0	0	0	61	66
30	Siemens 200L	MMG 200L-E	-11.5	0	-8	-32	-4	-1	0	0	0	0	66	74
37	Siemens 225S	MMG 225M-E	23	0	-5	-32	-4	-1	0	0	1	0	35	40
45	Siemens 225M	MMG 225M-E	-12	0	-5	-32	-4	-1	0	25	1	0	20	25
55	Siemens 250M	MMG 250M-E	-47	0	-33	-54	-20	0	0	0	0	0	10	15
75	Siemens 280S	MMG 280S-E	-17	0	-46	-54	-20	0	0	0	-0.5	0	-21	-15
90	Siemens 280M	MMG 280M-E	-76	0	-46	-54	-20	0	0	0	-0.5	0	-75	-65
110	Siemens 315S	MMG 315S-E	102	0	-24	-59	-27	0	0	0	-1	0	155	155

P ₂ [kW]	EFF1 motor	EFF2 motor	L/LB	H	h4/AD	AG	LL	P	A	B	C	K	NK weight	NB weight
			[mm]										[kg]	[kg]
132	Siemens 315MA	MMG 315M-E	55	0	-24	-59	-27	0	0	0	-1	0	155	155
160	Siemens 315MB	MMG 315LA-E	55	0	-24	-59	-27	0	0	0	-1	0	95	95
200	Siemens 315L	MMG 315LB-E	-85	0	-24	-59	-27	0	0	51	-1	0	-10	-10
250	Siemens 315	MMG 355M-E	106	40	171	-	22	100	50	-70	74	2	350	350
315	Siemens 315	MMG 355L-E	106	40	171	-	22	100	50	0	74	2	450	-

Note:

The 'L' and 'h4' dimensions refer to NK pumps.

The 'LB' and 'AD' dimensions refer to NB pumps.

6-pole

P ₂ [kW]	EFF1 motor	EFF2 motor	L/LB	H	h4/AD	AG	LL	P	A	B	C	K	NK weight	NB weight
			[mm]										[kg]	[kg]
1.1	Siemens 90L	MMG 90L-E	-41	0	18	31	25	3	0	0	3	0	8	13
1.5	Siemens 100L	MMG 100L-E	-30	0	25	-24	-14	-1	0	0	0	0	7	1
2.2	Siemens 112M	MMG 112M-E	-40	0	32	-4	-2	0	0	0	0	0	8	8
3	Siemens 132SA	MMG 132S-E	10.5	0	33	-24	-22	0	0	-38	0	0	17	17
4	Siemens 132MA	MMG 132MA-E	48.5	0	33	-24	-22	0	0	0	0	0	27	27
5.5	Siemens 132MB	MMG 132MB-E	10.5	0	33	-24	-22	0	0	0	0	0	17	17
7.5	Siemens 160M	MMG 160M-E	20	0	51	-5	-15	-1	0	0	0	0	24	29
11	Siemens 160L	MMG 160L-E	24	0	51	-5	-15	-1	0	0	0	0	40	45
15	Siemens 180L	MMG 180L-E	-22	0	6	8	18	0	0	0	0	0	40	45
18.5	Siemens 200LA	MMG 200LA-E	-11.5	0	-8	-32	-4	-1	0	0	0	0	47	47
22	Siemens 200LB	MMG 200LB-E	-11.5	0	-8	-32	-4	-1	0	0	0	0	31	31
30	Siemens 225M	MMG 225M-E	-12	0	-5	-32	-4	-1	0	25	1	0	-29	-29
37	Siemens 250M	MMG 250M-E	23	0	-33	-54	-20	0	0	0	0	0	-17	-15
45	Siemens 280S	MMG 280S-E	-17	0	-46	-54	-20	0	0	0	-0.5	0	-2	-2
55	Siemens 280M	MMG 280M-E	-76	0	-46	-54	-20	0	0	0	-0.5	0	16	16
75	Siemens 315S	MMG 315S-E	102	0	-24	-59	-27	0	0	0	-1	0	232	232
90	Siemens 315MA	MMG 315M-E	55	0	-24	-59	-27	0	0	0	-1	0	115	115
110	Siemens 315MB	MMG 315LA-E	55	0	-24	-59	-27	0	0	0	-1	0	100	100
132	Siemens 315L	MMG 315LB-E	-85	0	-24	-59	-27	0	0	51	-1	0	31	31

Note:

The 'L' and 'h4' dimensions refer to NK pumps.

The 'LB' and 'AD' dimensions refer to NB pumps.

TECO EFF2/EFF1 motors

If TECO EFF2/EFF1 motors are selected, the dimension in Technical data on page 58 to 267 must be corrected according to the tables below.

2-pole

P ₂ [kW]	EFF1 motor	TECO motor	L (NB)	L(NK/LB(NK))	H	h4/AD	AG	LL	P	A	B	C	K	EFF2 motor		EFF1 motor	
														NK weight [kg]	NB weight [kg]	NK weight [kg]	NB weight [kg]
														[mm]			
1.1	MG 90SA-D	Teco 80	0	-38.5	-10	48	-	-	0	-15	0	-6	0	1.6	1.6	1	1
1.5	MG 90SB-D	Teco 90S	0	-23.5	0	60	-	-	0	0	0	0	0	5.5	4.5	5	4
2.2	MG 90LC-D	Teco 90L	0	-38.5	0	60	-	-	0	0	0	0	0	6.5	5.5	5	4
3	MG 100LC-D	Teco 100L	0	-20.5	0	60	-	-	0	0	0	0	0	12	10	12	10
4	MG 112MC-D	Teco 112M	0	-40.5	0	55	-	-	0	0	0	0	0	2	1	4	3
5.5	MG 132SC-D	Teco 132S	0	-17	0	91	-	-	0	0	0	0	0	25	23	35	33
7.5	MG 132SD-D	Teco 132S	0	-17	0	91	-	-	0	0	0	0	0	30	28	35	33
11	Siemens 160M	Teco 160M	0	20	0	66	-	-	0	0	0	0	-0.5	35	35	57	57
15	Siemens 160M	Teco 160M	0	20	0	66	-	-	0	0	0	0	-0.5	40	40	48	48
18.5	Siemens 160L	Teco 160L	0	24	0	66	-	-	0	0	0	0	-0.5	36	36	56	56
22	Siemens 180M	Teco 180L	0	-40	0	47	-	-	0	0	0	0	-0.5	55	55	49	49
30	Siemens 200L	Teco 200L	0	1.5	0	69	-	-	0	0	0	0	-0.5	56	56	66	66
37	Siemens 200L	Teco 200L	0	1.5	0	69	-	-	0	0	0	0	-0.5	76	76	66	66
45	Siemens 225M	Teco 225M	0	-8	0	102	-	-	0	0	0	0	-0.5	15	15	25	25
55	Siemens 250M	Teco 250S	0	-4.5	0	101	-	-	0	0	-38	0	0	30	30	50	50
75	Siemens 280S	Teco 250M	0	-39.5	-30	61	-	-	0	-51	-19	-22	0	-5	-5	10	10
90	Siemens 280M	Teco 280S	0	-78	0	91	-	-	0	0	-51	0	0	-15	-15	15	15
110	Siemens 315S	Teco 280M	-30	-30	-35	28	-	-	-110	-51	13	-26	-4	-90	-127	-90	-127
132	Siemens 315M	Teco 315S	0	-146	0	53	-	-	0	0	-51	0	0	5	5	-75	-75
160	Siemens 315L	Teco 315M	0	-95	0	53	-	-	0	0	-51	0	0	145	145	-110	-110
200	Siemens 315L	Teco 315M	0	-235	0	53	-	-	0	0	-51	0	0	105	135	125	155
250	Siemens 315	Teco 355MA	-	120	40	182	-	-	-	50	-70	74	2	800	-	-	-
250	Siemens 315	Teco 315CA	-	371	0	-	-	-	-	-52	80	36	2	-	-	400	-
315	Siemens 315	Teco 355LA	-	120	40	182	-	-	-	50	0	74	2	600	-	-	-
315	Siemens 315	Teco 315DA	-	571	0	-	-	-	-	-52	280	36	2	-	-	500	-

4-pole

P ₂ [kW]	EFF1 motor	TECO motor	L (NB)	L(NK/LB(NK))	H	h4/AD	AG	LL	P	A	B	C	K	EFF2 motor		EFF1 motor	
														NK weight [kg]	NB weight [kg]	NK weight [kg]	NB weight [kg]
														[mm]			
0.25	MG 71A-C	Teco 63	0	5	-8	13	-	-	0	-12	-10	-5	0	5.8	5.5	5.8	5.5
0.37	MG 71B-C	Teco 71	0	29.5	0	23	-	-	0	0	0	0	0	5.3	5	5.3	5
0.55	MG 80A-C	Teco 80	0	11.5	0	49	-	-	0	0	0	0	0	5.7	4.9	6.7	5.9
0.75	MG 80B-C	Teco 80	0	11.5	0	49	-	-	0	0	0	0	0	7.5	7	7.5	7
1.1	MG 90SB-D	Teco 90S	0	-23.5	0	60	-	-	0	0	0	0	0	-0.4	-1.4	1	0
1.5	MG 90LC-D	Teco 90L	0	-38.5	0	60	-	-	0	0	0	0	0	2.5	1.5	4	3
2.2	MG 100LB-D	Teco 100L	0	-20.5	0	60	-	-	0	0	0	0	0	10	5	13	8
3	MG 100LC-D	Teco 100L	0	-20.5	0	60	-	-	0	0	0	0	0	9	7	8	6
4	MG 112MC-D	Teco 112M	0	-40.5	0	55	-	-	0	0	0	0	0	0	-1	3	2
5.5	Siemens 132S	Teco 132S	0	1.5	0	58	-	-	0	0	0	0	0	18	18	30	30
7.5	Siemens 132M	Teco 132M	0	1.5	0	58	-	-	0	-1	0	0	0	17	17	22	22
11	Siemens 160M	Teco 160M	0	20	0	66	-	-	0	0	0	0	-0.5	35	35	49	49
15	Siemens 160L	Teco 160L	0	24	0	66	-	-	0	0	0	0	-0.5	25	25	51	51
18.5	Siemens 180M	Teco 180M	0	-40	0	47	-	-	0	0	0	0	-0.5	46	46	40	40
22	Siemens 180L	Teco 180M	0	-2	0	47	-	-	0	0	0	0	-0.5	59	59	59	59
30	Siemens 200L	Teco 200L	0	1.5	0	69	-	-	0	0	0	0	-0.5	81	81	81	81
37	Siemens 225S	Teco 225S	0	27	0	102	-	-	0	0	0	0	-0.5	35	35	30	30
45	Siemens 225M	Teco 225M	0	-8	0	102	-	-	0	0	25	0	-0.5	20	20	30	30
55	Siemens 250M	Teco 250S	0	-74.5	0	101	-	-	0	0	-38	0	0	15	15	50	50
75	Siemens 280S	Teco 250M	0	-39.5	-30	61	-	-	0	-51	-19	-22	0	-25	-25	-10	-10
90	Siemens 280M	Teco 280S	30	-48	0	91	-	-	0	0	-51	0	0	-15	-15	5	5

Other motor brands

NB, NBE, NK, NKE

P ₂ [kW]	EFF1 motor	TECO motor	L (NB)	L(NK/LB(NK))	H	h4/AD	AG	LL	P	A	B	C	K	EFF2 motor		EFF1 motor	
														NK weight [kg]	NB weight [kg]	NK weight [kg]	NB weight [kg]
			[mm]														
110	Siemens 315S	Teco 280M	0	0	-35	28	-	-	-110	-51	13	-26	-4	-90	-130	-50	-90
132	Siemens 315MA	Teco 315S	0	-146	0	53	-	-	0	0	-51	0	0	-45	-45	-35	-35
160	Siemens 315MB	Teco 315M	0	-95	0	53	-	-	0	0	-51	0	0	95	95	-85	-85
200	Siemens 315L	Teco 315M	0	-235	0	53	-	-	0	0	0	0	0	-55	-25	-35	-5
250	Siemens 315	Teco 355M	-	120	40	182	-	-	-	50	-70	74	2	800	-	-	-
250	Siemens 315	Teco 315CB	-	236	0	-	-	-	-	-52	80	36	2	-	-	400	-
315	Siemens 315	Teco 355L	-	120	40	182	-	-	-	50	0	74	2	600	-	-	-
315	Siemens 315	Teco 315DB	-	436	0	-	-	-	-	-52	280	36	2	-	-	200	-

6-pole

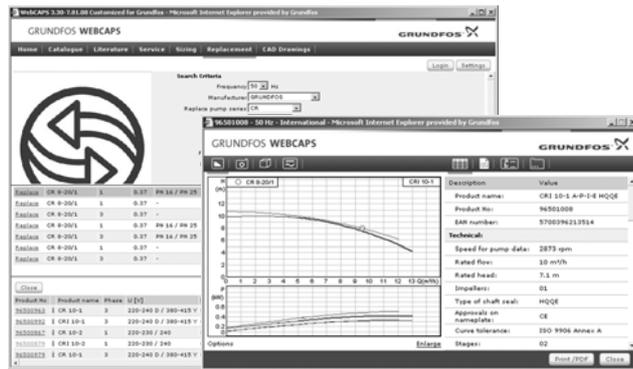
P ₂ [kW]	EFF1 motor	TECO motor	L (NB)	L(NK/LB(NK))	H	h4/AD	AG	LL	P	A	B	C	K	EFF2 motor		EFF1 motor	
														NK weight [kg]	NB weight [kg]	NK weight [kg]	NB weight [kg]
			[mm]														
1.1	Siemens 90L	Teco 90L	0	-43.5	0	42	-	-	0	0	0	0	0	6	6	6	6
1.5	Siemens 100L	Teco 100L	0	-32.5	0	45	-	-	0	0	0	0	0	8	8	10	10
2.2	Siemens 112M	Teco 112M	0	-39.5	0	41	-	-	0	0	0	0	0	4	4	9	9
3	Siemens 132SA	Teco 132S	0	1.5	0	58	-	-	0	0	-38	0	0	11	11	26	26
4	Siemens 132MA	Teco 132M	0	39.5	0	58	-	-	0	-1	0	0	0	16	16	33	33
5.5	Siemens 132MB	Teco 132M	0	1.5	0	58	-	-	0	-1	0	0	0	13	13	15	15
7.5	Siemens 160M	Teco 160M	0	20	0	66	-	-	0	0	0	0	-0,5	16	16	32	32
11	Siemens 160L	Teco 160L	0	24	0	66	-	-	0	0	0	0	-0,5	39	39	53	53
15	Siemens 180L	Teco 180M	0	-2	0	47	-	-	0	0	0	0	-0,5	66	66	61	61
18.5	Siemens 200LA	Teco 200L	0	1.5	0	69	-	-	0	0	0	0	-0,5	84	84	94	94
22	Siemens 200LB	Teco 200L	0	1.5	0	69	-	-	0	0	0	0	-0,5	63	63	63	63
30	Siemens 225M	Teco 225M	0	-8	0	102	-	-	0	0	25	0	-0,5	20	20	35	35
37	Siemens 250M	Teco 250S	0	-4.5	0	101	-	-	0	0	-38	0	0	0	0	105	105
45	Siemens 280S	Teco 250M	0	-39.5	-30	61	-	-	0	-51	-19	-22	0	-80	-80	45	45
55	Siemens 280M	Teco 280S	30	-48	0	91	-	-	0	0	-51	0	0	40	40	80	80
75	Siemens 315S	Teco 280M	0	0	-35	28	-	-	-110	-51	13	-26	-4	-50	-90	-30	-70
90	Siemens 315MA	Teco 315S	0	-146	0	53	-	-	0	0	-51	0	0	-65	-65	-15	-15
110	Siemens 315MB	Teco 315M	0	-95	0	53	-	-	0	0	-51	0	0	-10	-10	10	10
132	Siemens 315L	Teco 315M	0	-235	0	53	-	-	0	0	0	0	0	-80	-80	-140	-140



Sizing

This section is based on different fields of application and installation examples, and gives easy step-by-step instructions in how to

- 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. 42 WinCAPS CD-ROM

WinCAPS is a **Windows-based Computer Aided Product Selection** program containing detailed information on more than 185,000 Grundfos products in more than 20 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 CD-ROM and updated once a year.

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Subject to alterations.