

SNB & SMB PUMPS

SINGLE-STAGE END-SUCTION PUMPS 50 HZ



SHAKTI

THE POWER OF INNOVATION, EFFICIENCY & TECHNOLOGY.

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APPLICATION

INTRODUCTION

The SNB/SMB series is a multi-purpose pump range suitable for a variety of different applications demanding reliable and cost-efficient supply. SNB/SMB pumps are used in four main fields of application:

- Water Supply
- Industrial pressure boosting
- Industrial liquid transfer
- Irrigation.

WATER SUPPLY

Besides general water supply in municipal and industrial waterworks, the SNB/SMB 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.

IRRIGATION

Irrigation covers these applications:

- Field irrigation (flooding)
- Sprinkler irrigation
- Drip-feed irrigation.

FEATURES AND BENEFITS

FEATURES AND BENEFITS

SNB/SMB pumps present these features and benefits:

- The pumps are non-self-priming, single-stage, cen-trifugal 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 80 are marked PN 16 and thus suitable for 16 bar operation.
- The SNB pump is close-coupled with a totally enclosed fan-cooled standard motor with main dimensions to IEC and DIN standards
- The SMB pump is single shaft monoblock end suction pump with a totally enclosed fan-cooled motor.
- SNB pumps cover the performance range from 1 to 192 m³/hr and heads from 3 to 97 m. Motor sizes fall in the 0.25 to 37 kW range.
- SMB pumps cover the performance range from 1 to 192 m³/hr and heads from 9 to 98 m. Motor sizes fall in the 0.37 to 18.5 kW range.
- All pumps are dynamically balanced according to ISO 1940 class 6.3. Impellers are hydraulically balanced.
- The SNB/SMB product range is available "Premium range" product have IE3 motors.
- The pumps are of the back pull-out design enabling removal and dismantling of the motor and impeller without disturbing the pump housing or pipework. Consequently, even the largest pumps can be serviced by a single person with a crane, see Fig. 1.

- Motors are 50 Hz.
- SNB/SMB pumps are available with 2 & 4 pole motors.
- SNB pumps are available with Premium range.

To a great extent the pumps can be adapted to the requirements of the individual customer. For custom-ized solutions, please contact Shakti.

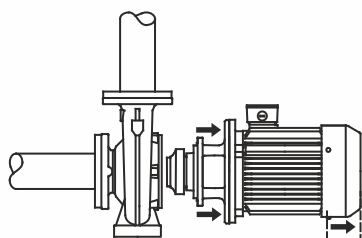


Fig. 1 Back pull-out design

PRODUCT RANGE

The tables on the following pages show the complete SNB/SMB product range. The standard range has been combined on the basis of the following parameters:

- Pump housings have discharge flanges from DN 32 to DN 80.
- Pump housings and motor stools are made of electro-coated cast iron. Pump housing also have stain-less steel.
- Impellers are made of fabricated stainless steel or cast iron or bronze.
- Neckrings are made of nbr+pps & bronze.
- Shaft seals are CVBP, BAQE and GQQE.

PRODUCT RANGE

SNB/SMB SS, 50 Hz, 2-pole

Pump type 50Hz, 2- pole	SNB model	SMB model	Pressure stage PN 16	P2 [HP/kW]
25-160		*		0.5/0.37
		*		1.0/0.75
30-136**		*		1.0/0.75
		*		1.5/1.1
32-160.1		*	*	2.0/1.5
		*	*	3.0/2.2
32-200		*	*	7.5/5.5
		*	*	10.0/7.5
		*	*	15.0/11.0
32-250**		*	*	15.0/11.0
	*	*	*	20.0/15.0
40-160		*	*	2.0/1.5
		*	*	3.0/2.2
		*	*	4.0/3.0
		*	*	5.5/4.0
		*	*	7.5/5.5
40-200		*	*	10.0/7.5
		*	*	15.0/11.0
	*	*	*	20.0/15.0
40-250	*	*	*	20.0/15.0
	*	*	*	25.0/18.5
	*	*	*	30.0/22.0
50-160		*	*	5.5/4.0
		*	*	7.5/5.5
		*	*	10.0/7.5
		*	*	15.0/11.0
	*	*	*	20.0/15.0
65-125		*	*	5.5/4.0
		*	*	7.5/5.5
		*	*	10.0/7.5
		*	*	15.0/11.0
65-160		*	*	10.0/7.5
		*	*	15.0/11.0
	*	*	*	20.0/15.0
	*	*	*	25.0/18.5
65-200	*	*	*	25.0/18.5
	*	*	*	30.0/22.0
	*	*	*	40.0/30.0

Note :-

1. * mark is indicated to availability of Product range
2. ** mark is indicated to SS fabricated pump housing remaining all models belongs to Investment casting pump housing

SNB/SMB CI, 50 Hz, 2-pole

Pump type 50Hz, 2-pole	SNB model	SMB model	Pressure stage PN 16	P2 [HP/kW]
32-160.1	*	*	*	2.0/1.5
	*	*	*	3.0/2.2
	*	*	*	4.0/3.0
32-160	*	*	*	3.0/2.2
	*	*	*	4.0/3.0
	*	*	*	5.5/4.0
	*	*	*	7.5/5.5
	*	*	*	5.5/4.0
32-200	*	*	*	7.5/5.5
	*	*	*	10.0/7.5
	*	*	*	15.0/11.0
32-250	*	*	*	15.0/11.0
	*	*	*	20.0/15.0
40-125	*	*	*	2.0/1.5
	*	*	*	3.0/2.2
40-160	*	*	*	4.0/3.0
	*	*	*	5.5/4.0
	*	*	*	7.5/5.5
	*	*	*	10.0/7.5
40-200	*	*	*	7.5/5.5
	*	*	*	10.0/7.5
	*	*	*	15.0/11.0
	*	*	*	20.0/15.0
	*	*	*	20.0/15.0
40-250	*	*	*	25.0/18.5
	*	*	*	30.0/22.0
	*	*	*	30.0/22.0
50-100		*	*	1.5/1.1
50-125		*	*	3.0/2.2
	*	*	*	4.0/3.0
	*	*	*	5.5/4.0
	*	*	*	7.5/5.5
	*	*	*	10.0/7.5
50-160	*	*	*	7.5/5.5
	*	*	*	10.0/7.5
	*	*	*	15.0/11.0
	*	*	*	20.0/15.0
	*	*	*	20.0/15.0
50-200	*	*	*	30.0/22.0
50-250	*	*	*	40.0/30.0
	*	*	*	50.0/37.0
65-125	*	*	*	5.5/4.0
	*	*	*	7.5/5.5
	*	*	*	10.0/7.5
	*	*	*	15.0/11.0
	*	*	*	10.0/7.5
65-160	*	*	*	15.0/11.0
	*	*	*	20.0/15.0
	*	*	*	25.0/18.5
	*	*	*	25.0/18.5
	*	*	*	30.0/22.0
65-200	*	*	*	40.0/30.0
	*	*	*	15.0/11.0
	*	*	*	20.0/15.0
80-160	*	*	*	25.0/18.5
	*	*	*	30.0/22.0
	*	*	*	30.0/22.0

Note :-

1. * mark is indicated to availability of Product range

PRODUCT RANGE

SNB, 50 Hz, 4-pole

Pump type 50Hz, 4-pole	SNB CI model	Pressure stage PN 16	P ₂ [HP/kW]
32-160.1	*	*	0.5/0.37
32-160	*	*	0.75/0.55
32-200	*	*	1.0/0.75
	*	*	1.5/1.1
40-125	*	*	0.3/0.25
	*	*	0.5/0.37
	*	*	0.75/0.55
40-160	*	*	1.0/0.75
40-200	*	*	1.5/1.1
	*	*	2.0/1.5
40-250	*	*	3.0/2.2
	*	*	4.0/3.0
50-125	*	*	0.75/0.55
	*	*	1.0/0.75
50-160	*	*	1.5/1.1
	*	*	2.0/1.5
	*	*	3.0/2.2
50-200	*	*	3.0/2.2
	*	*	4.0/3.0
50-250	*	*	5.5/4.0
65-125	*	*	1.0/0.75
	*	*	1.5/1.1
65-160	*	*	1.5/1.1
	*	*	2.0/1.5
	*	*	3.0/2.2
65-200	*	*	3.0/2.2
	*	*	4.0/3.0
	*	*	5.5/4.0
65-250	*	*	7.5/5.5
80-160	*	*	2.0/1.5
	*	*	3.0/2.2
	*	*	5.5/4.0
80-200	*	*	7.5/5.5

Note :- * mark is indicated to availability of Product range

IDENTIFICATION

TYPE KEY

SNB/SMB

Example	SNB	32	-160	.1	/142	A	-F	-A	-CVBP
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 = Without motor									
C = Pump housing with feet									
Code for pipework connection:									
F = DIN flange									
Code for materials:									
A = Fabricated ss/cast iron pump housing with fab. impeller/Cast Iron and nbr+pps neckring/ Bronze									
Code for mechanical shaft seal and rubber pump parts									

MECHANICAL SHAFT SEALS

SNB/SMB pumps are available as standard with BAQE and GQQE shaft seals. Other shaft seal variants are available on request.

Codes for mechanical shaft seal

The positions (1) - (4) cover four pieces of information about the mechanical shaft seal:

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

Position	Type	Short description of seal
(1)	A	O-ring seal with fixed driver
	B	Rubber bellows seal
	C	O-ring seal with spring as seal driver
	G	Bellows seal, type B, with reduced seal faces
(2) and (3)	D	O-ring seal, balanced
Position	Type	Material
(2) and (3)		Synthetic carbons:
	A	A Carbon, metal-impregnated (antimony (not approved for potable water))
	B	Carbon, synthetic resin-impregnated Carbides:
	Q	Silicon carbide
(4)	V	Ceramic
Position	Type	Material
(4)	E	EPDM
	V	FKM
	F	FXM
	P	NBR

CONSTRUCTION

SNB/SMB SECTIONAL VIEW AND MATERIAL SPECIFICATION

SNB SS - INV Sectional view

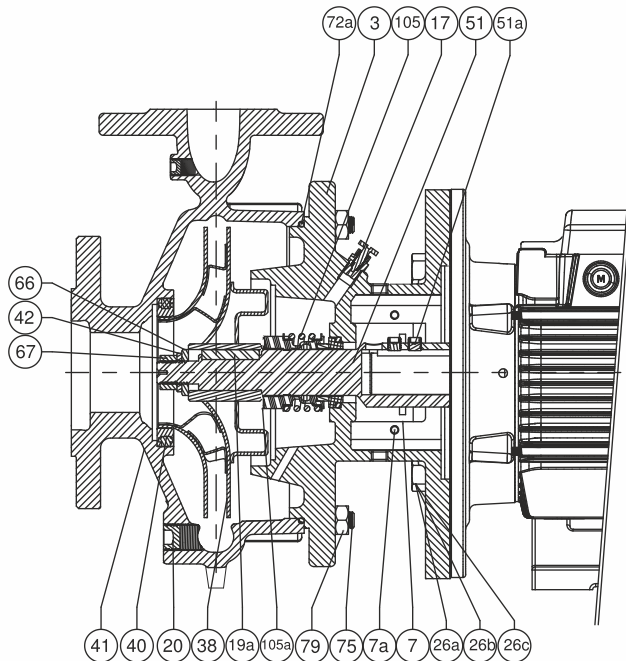


Fig.- 2 Sectional view

SNB SS- INV Material Specification

Pos.	Component	Materials
3	Motor Stool	CAST IRON
7	Cover	SS AISI 304
7a	Pan Head Screw	SS AISI 304
17	Air Vent Plug	BRONZE
19a	Impeller Key	SS AISI 304
26a,26b,26c	Nut Bolt Washer	M.S (H.T.)
38	Impeller Fabricated	SS AISI 304
40	Neckring	NBR + PPS
41	Pump Housing - INV	SS AISI 304
42	Spring Washer	SS AISI 304
51	Coupling shaft	AISI SS-304
51a	Grub Screw	M.S (H.T.)
66	Washer	SS AISI 304
67	Hex. Nut	SS AISI 304
72a	O-ring	NBR
75	Allen Bolt	SS AISI 304
79	Hex.Cap Nut	SS AISI 304
105	Shaft Seal	CVBP/BAQE
105a	Spacer for Shaft Seal	SS AISI 304
20	Priming / Drain plug	SS AISI 304

SMB SS - INV Sectional view

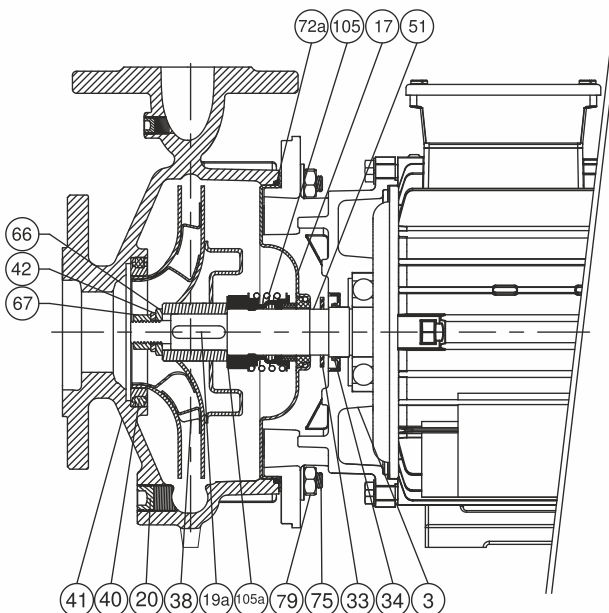


Fig.- 3 Sectional view

SMB SS Material Specification

Pos.	Component	Materials
3	Motor End Shield	CAST IRON
17	Casing Cover	AISI SS-304
19a	Impeller Key	SS AISI 304
33	Splash Ring	NBR
34	Oil Seal	STD.
38	Impeller Fabricated	SS AISI 304
40	Neckring	NBR + PPS
41	Pump Housing - INV	SS AISI 304
42	Spring Washer	SS AISI 304
51	Shaft with Rotor	AISI SS-420+Duplex
66	Washer	SS AISI 304
67	Hex. Nut	SS AISI 304
72a	O-ring	NBR
75	Hex. Bolt	SS AISI 304
79	Hex Cap Nut	SS AISI 304
105	Shaft Seal	CVBP/BAQE
105a	Spacer for Shaft Seal	SS AISI 304
20	Priming / Drain plug	SS AISI 304

CONSTRUCTION

SNB/SMB SECTIONAL VIEW AND MATERIAL SPECIFICATION

SNB SS - Fab. Sectional view

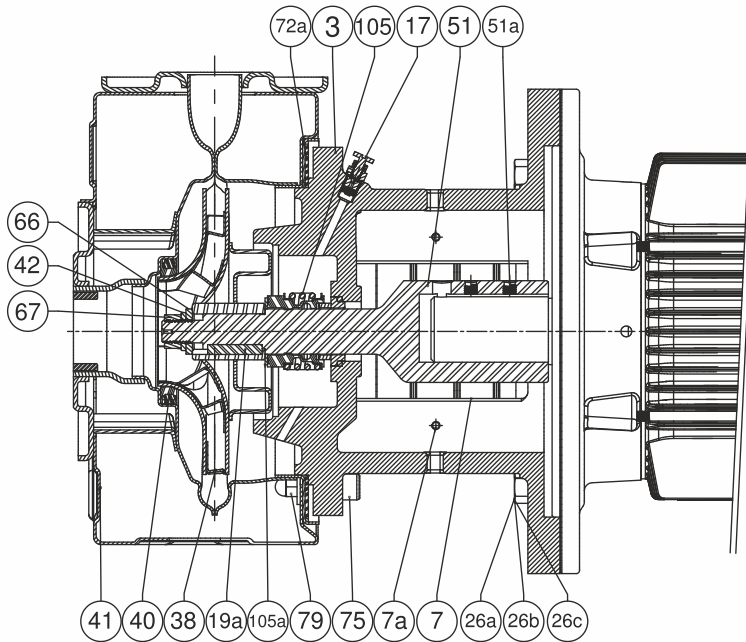


Fig.- 4 Sectional view

SNB SS- Fab. Material Specification

Pos.	Component	Materials
3	Motor Stool	CAST IRON
7	Cover	SS AISI 304
7a	Pan Head Screw	SS AISI 304
17	Air Vent Plug	BRONZE
19a	Impeller Key	SS AISI 304
26a,26b,26c	Nut Bolt Washer	M.S (H.T.)
38	Impeller Fabricated	SS AISI 304
40	Neckring	NBR + PPS
41	Pump Housing - Fab.	SS AISI 304
42	Spring Washer	SS AISI 304
51	Coupling shaft	AISI SS-304
51a	Grub Screw	M.S (H.T.)
66	Washer	SS AISI 304
67	Hex. Nut	SS AISI 304
72a	Gasket	NBR
75	Allen Bolt	SS AISI 304
79	Hex.Cap Nut	SS AISI 304
105	Shaft Seal	CVBP/BAQE
105a	Spacer for Shaft Seal	SS AISI 304
20	Priming / Drain plug	SS AISI 304

SMB SS - Fab. Sectional view

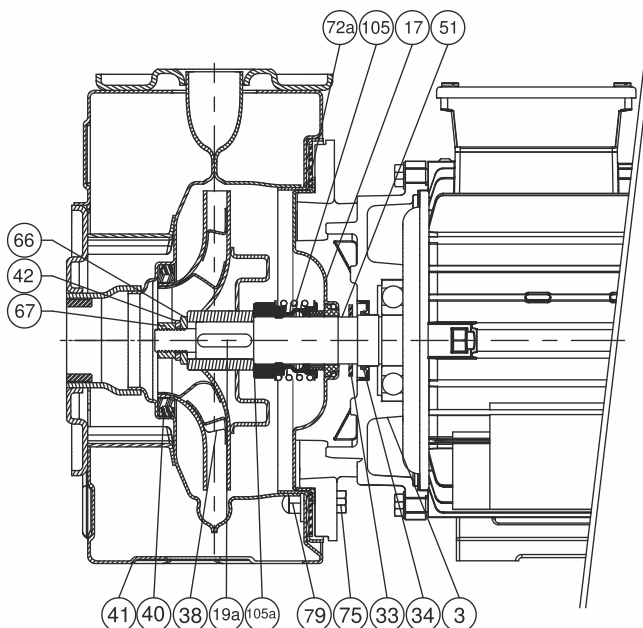


Fig.- 5 Sectional view

SMB SS- Fab. Material Specification

Pos.	Component	Materials
3	Motor End Shield	CAST IRON
17	Casing Cover	AISI SS-304
19a	Impeller Key	SS AISI 304
33	Splash Ring	NBR
34	Oil Seal	STD.
38	Impeller Fabricated	SS AISI 304
40	Neckring	NBR + PPS
41	Pump Housing - Fab.	SS AISI 304
42	Spring Washer	SS AISI 304
51	Shaft with Rotor	AISI SS-420+Duplex
66	Washer	SS AISI 304
67	Hex. Nut	SS AISI 304
72a	Gasket	NBR
75	Hex. Bolt	SS AISI 304
79	Hex Cap Nut	SS AISI 304
105	Shaft Seal	CVBP/BAQE
105a	Spacer for Shaft Seal	SS AISI 304
20	Priming / Drain plug	SS AISI 304

CONSTRUCTION

SNB/SMB SECTIONAL VIEW AND MATERIAL SPECIFICATION

SNB CI Sectional view

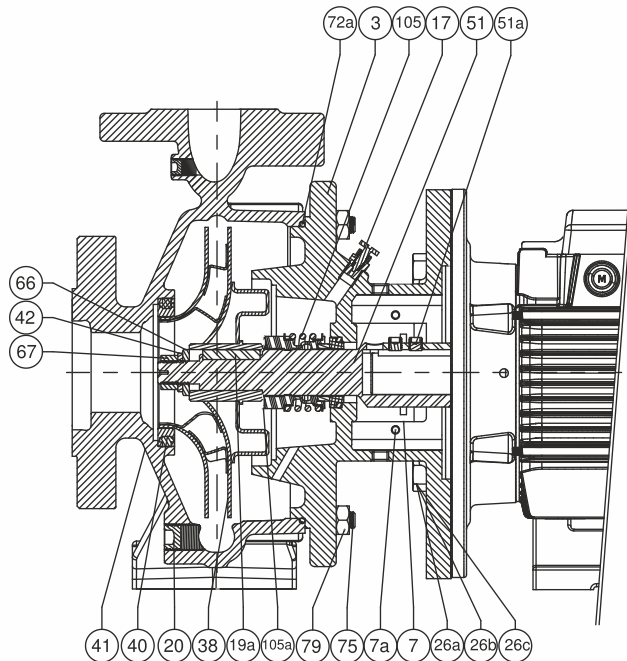


Fig.- 2 Sectional view

SNB CI Material Specification

Pos.	Component	Materials
3	Motor Stool	CAST IRON
7	Cover	SS AISI 304
7a	Pan Head Screw	SS AISI 304
17	Air Vent Plug	BRONZE
19a	Impeller Key	SS AISI 304
20	Grub Screw	SS AISI 304
26a,26b,26c	Nut Bolt Washer	M.S (H.T.)
38	Impeller	SS AISI 304/ Cast Iron
40	Neckring	NBR + PPS/ BRONZE
41	Pump Housing	CAST IRON
42	Spring Washer	SS AISI 304
51	Coupling shaft	AISI SS-304
51a	Grub Screw	M.S (H.T.)
66	Washer	SS AISI 304
67	Hex. Nut	SS AISI 304
72a	O Ring	NBR
75	Stud	M.S (H.T.)
79	Hex. Nut	M.S (H.T.)
105	Shaft Seal	CVBP/BAQE
105a	Spacer for Shaft Seal	SS AISI 304

SMB CI Sectional view

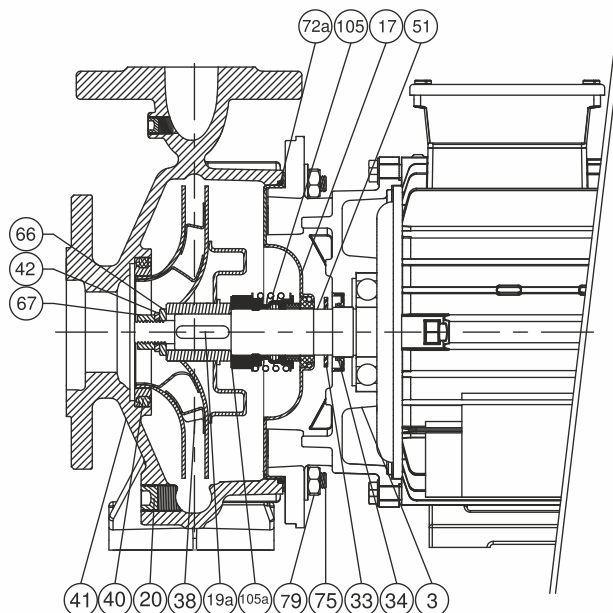


Fig.- 3 Sectional view

SMB CI Material Specification

Pos.	Component	Materials
3	Motor End Shield	CAST IRON
17	Casing Cover	AISI SS-304
19a	Impeller Key	SS AISI 304
20	Grub Screw	SS AISI 304
33	Splash Ring	NBR
34	Oil Seal	STD.
38	Impeller Fabricated	SS AISI 304
40	Neckring	NBR + PPS
41	Pump Housing	CAST IRON
42	Spring Washer	SS AISI 304
51	Shaft with Rotor	AISI SS-420+Duplex
66	Washer	SS AISI 304
67	Hex. Nut	SS AISI 304
72a	O Ring	NBR
75	Stud	M.S (H.T.)
79	Hex. Nut	M.S (H.T.)
105	Shaft Seal	CVBP/BAQE
105a	Spacer for Shaft Seal	SS AISI 304

CONSTRUCTION

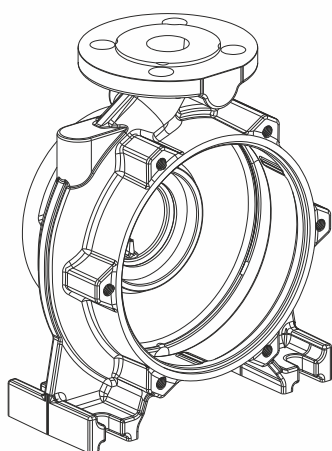
MECHANICAL CONSTRUCTION

Pump Housing

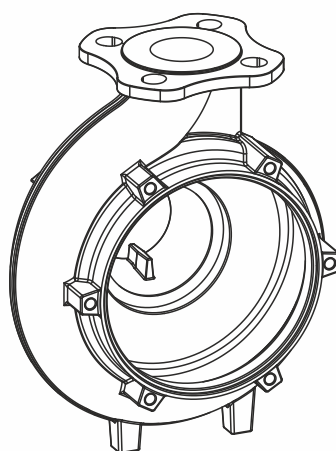
The volute type pump housing is made of cast iron and stainless steel and has axial suction port and radial discharge port.

Flange connection dimensions are in accordance with EN 1092-2.

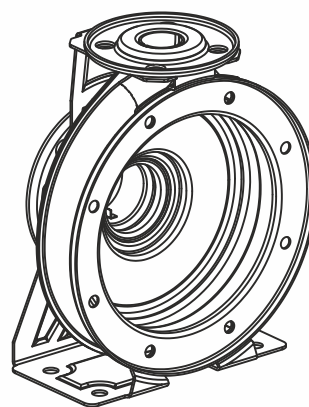
The bottom of the pump housing incorporates a drain plug. The discharge port has a pressure gauge tapping.



Pump housing (cast iron)



Pump housing (SS Investment Casting)



Pump housing (SS Fabricated)

Fig.- 6

SNB Motor stool and cover

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/gasket forms the seal between cover and pump housing.

Coupling guards are fitted to the motor stool.

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

SNB Shaft/Coupling

The stainless steel shaft is $\varnothing 28$, $\varnothing 38$ mm.

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

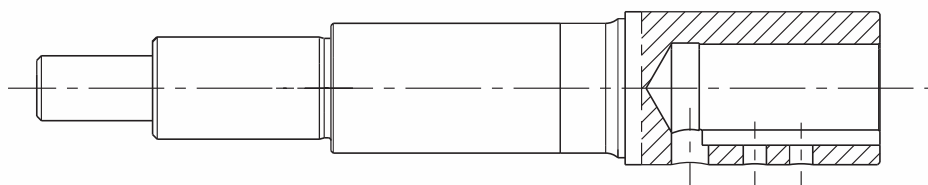


Fig.- 7 Shaft and coupling SNB pump

CONSTRUCTION

Impeller

The impeller is made from fabricated technology which is light weight which increase the pump efficiency. The impeller is closed and has double-curved blades with smooth surfaces ensuring high efficiency.

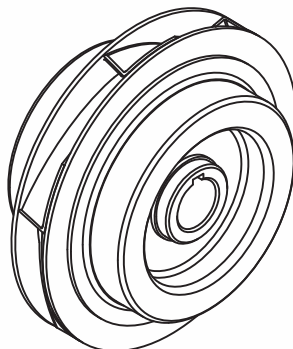


Fig.- 8 Fabricated Impeller SNB, SMB pump

All impellers are dynamically and hydraulically balanced. The hydraulic balancing compensates for axial thrust. The direction of rotation of the impeller is clockwise when viewed from the motor fan. If a certain duty point is required, pumps with reduced impeller diameter are available on request.

SMB Casing cover and motor/ pump bracket

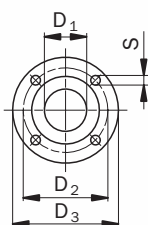
Motor/pump bracket assemble with motor body. Shaft seal is fitted with casing cover. An O-ring or gasket forms the seal between casing cover and pump housing.

Shaft seal

The shaft seal is an unbalanced, mechanical shaft seal with dimensions according to EN 12756. The seal faces are of carbon/silicon carbide. The code of the standard version is BAQE or GQQE. We recommend BAQE for high-temperature applications. The BAQE seal is not suitable for liquids containing abrasive particles as this will wear down the carbon face of the seal. We recommend GQQE for cooling applications involving the risk of precipitation on the seal faces. For general purpose all-round application carbon/ceramic (CVBP) seal face is used.

Flanges

The suction and discharge flanges of SNB, SMB pumps are according to EN 1092-2, PN 10 or PN 16. For size and number of holes, see the table below:



	Nominal Diameter (DN)								
	PN 16 (1.6 MPa)					PN 10 (1.0 MPa)			
	32	40	50	65	80	100	125	150	200
D1	32	40	50	65	80	100	125	150	200
D2	100	110	125	145	160	180	210	240	295
D3	140	150	165	185	200	220	250	285	340
s	4x19	4x19	4x19	4x19	8x19	8x19	8x19	8x23	8x23

Surface treatment

The cast iron parts of SNB, SMB pumps are electro-coated.

Electro-coating includes:

1. Alkaline cleaning
2. Pre-treatment with zinc phosphate coating
3. Cathodic electro-coating (epoxy)
4. Curing of paint film at 200-250 °C.

The colour code of the finished product is NCS 9000/RAL 9005.

CONSTRUCTION

Test pressure

Pressure testing of the pump housing was made with +20°C (~ +68°F) water containing corrosion inhibitor.

Pressure Stage	Operating Pressure		Test pressure	
	Bar	Mpa	Bar	Mpa
PN 10	10	1.0	13	1.3
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 on the following pages show the motors used for SNB model.

As appears from the tables you can choose between

- premium range with IE3 motors for SNB Pumps.

Premium range - including IE3 motors		
2 pole motors 50 Hz		
Frame size	Output P ₂	
	HP	kW
71	0.5	0.37
80	1	0.75
80	1.5	1.1
90	2	1.5
90	3	2.2
100	4	3
100	5.5	4
132	7.5	5.5
132	10	7.5
160	15	11
160	20	15
160	25	18.5
180	30	22
200	40	30
200	50	37

Premium range - including IE3 motors		
4-pole motors 50Hz		
Frame Size	Output P ₂	
	HP	kW
SMG 71	0.3	0.25
SMG 71	0.5	0.37
SMG 80	0.75	0.55
SMG 80	1.0	0.75
SMG 90	1.5	1.1
SMG 90	2.0	1.5
SMG 100	3.0	2.2
SMG 112	5.0	3.7
SMG 132	7.5	5.5

OPERATING CONDITIONS

Pump location

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

Ambient temperature and altitude

The ambient temperature and the installation altitude are important factors for the motor life, as they affect the life of the bearings and the insulation system. The installation altitude is the height of the installation site above sea level. If the ambient temperature exceeds the recommended maximum ambient temperature or maximum altitude above sea level, see fig. 9, 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.

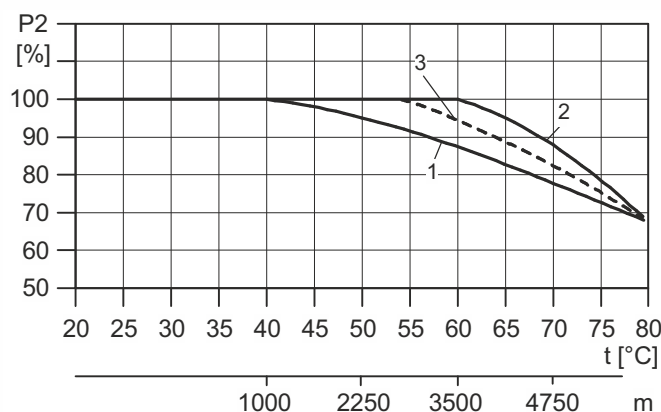


Fig.- 9 Maximum motor output in relation to ambient temperature and altitude

Example:

A pump with a 2.2 kW IE3 SMG motor: If the pump is installed 4750 m above sea level, the motor must not be loaded more than 88 % of rated output. At an ambient temperature of 70 °C, the motor must not be loaded more than 88 % of rated output. If the pump is installed 4750 m above sea level at an ambient temperature of 70 °C, the motor must not be loaded more than 88 % x 88 % equal to 77.4 % of the rated output.

Pumped liquid

SNB/SMB pumps are suitable for pumping clean, thin, nonaggressive 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.

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

OPERATING CONDITIONS

Liquid temperatures

The SNB, SMB pump range covers the temperature range from -25°C ($\sim -13^{\circ}\text{F}$) to $+140^{\circ}\text{C}$ ($\sim +284^{\circ}\text{F}$). The permissible liquid temperature depends on the mechanical shaft seal type and pump type. See also table below.

Relationship between mechanical shaft seals and temperature

Mechanical shaft seal	Operating temperature	Maximum operating pressure [bar]
BAQE	0°C to $+120^{\circ}\text{C}$	16 bar
GQQE	-25°C to $+90^{\circ}\text{C}$	16 bar
BQBE	0°C to $+140^{\circ}\text{C}$	16 bar
BQQE	-25°C to $+90^{\circ}\text{C}$	16 bar
BQQV ¹⁾	0°C to $+90^{\circ}\text{C}$	16 bar
BBQE	0°C to $+120^{\circ}\text{C}$	16 bar
BAQV ¹⁾	0°C to $+90^{\circ}\text{C}$	16 bar
GQQV ¹⁾	-20°C to $+90^{\circ}\text{C}$	16 bar
CVBP	0°C to $+90^{\circ}\text{C}$	10 bar

CVBP, BAQE and GQQE are standard shaft seals.

The remaining shaft seal combinations in the list are available for custom built pumps.

1) The maximum temperature for FKM rubber is 80°C ($\sim 176^{\circ}\text{F}$) in liquids containing water. For liquids not containing water, such as pure oil, the seal faces of the mechanical shaft seal are the temperature limiting factor.

EPDM

Mechanical shaft seals with EPDM 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 range 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°C ($\sim +32^{\circ}\text{F}$) 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 $+90^{\circ}\text{C}$ ($\sim +194^{\circ}\text{F}$). At higher temperatures the reduced lubricating properties of the pumped liquid may cause noise problems and limit the life of the seal faces.

Carbon/Ceramic

Mechanical Shaft seal with Carbon/ceramic (xVBx) seal faces is good all-round seal for not too demanding applications. These seals have relatively good dry-running properties. However, thermal cracks may occur in case of a sudden influx of water to a hot seal after a period of dry running or similar condition. Limited corrosion resistance, $5 < \text{pH} < 9$, depending on ceramic type.

NBR

Widely used all-round application, NBR (nitrile) rubber covers a wide range of liquids at relatively low temperatures (below $+100^{\circ}\text{C}$). Good mechanical properties at high and low temperatures. Heat resistant up to $+100^{\circ}\text{C}$, for short up to $+120^{\circ}\text{C}$, depending on the ambient environment, Resistant to water up to $+80^{\circ}\text{C}$. Resistant to weak acids and alkalis, Not resistant to polar solvents (alcohols, ketones and esters)

OPERATING CONDITIONS

INLET PRESSURE

Maximum inlet pressure

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 ~ 1.65 feet + 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:

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

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.

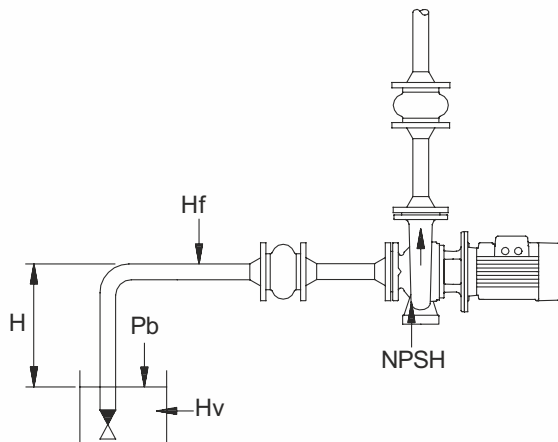


Fig.- 10 Schematic view of open system with SNB pump

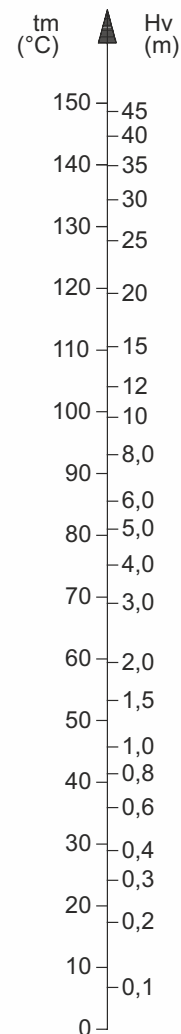


Fig.- 11 Relation between liquid temperature and vapour pressure

SELECTION OF PRODUCT

PUMP SIZE

Selection of pump size should be based on:

- Required flow 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 13

PUMPED LIQUIDS

PUMPED LIQUIDS

Maximum inlet pressure

We recommend SNB, SMB pumps for thin, clean and non-aggressive, non-explosive liquids, not containing solid particles or fibres. The liquid must not attack the pump materials chemically or mechanically.

If you pump liquids with a density and/or viscosity higher than that of water, use motors with correspondingly higher outputs, see "Pumped liquids" page 10.

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 and if the temperature is above 80°C, 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 SNB, SMB 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 can-not replace actual testing of pumped liquids and pump materials under specific working conditions. However, use the list with some caution as factors such as:

- Concentration of the pumped liquid
- liquid temperature
- Pressure

may affect the chemical resistance of a specific pump version.

Legend for notes in the list:

- A May contain additives or impurities that may cause shaft seal problems.
- B The density and/or viscosity differ from that of water. Consider this when calculating motor and pump performance.
- C The liquid must be oxygen-free (anaerobic).
- D Risk of crystallization /precipitation in shaft seal.
- E Due to the poor lubricating properties of the liquid, dry running should be avoided.
- F The pumped liquid is easily ignited.
- G The pumped liquid is flammable.
- H Insoluble in water.
- I The shaft seal rubber parts must be replaced with FKM rubber.
- J The pump should run continuously to prevent discoloration of pool tiles.
- K Pump life may be reduced.

PUMPED LIQUIDS

Pumped liquids	Notes	Additional information	Shaft seal
Water			
Groundwater		<+90°C	BQQE
		>+90°C	BAQE ¹⁾ BQBE
Boiler feed water		<+120°C	BAQE
		+120°C - +140°C	BQBE
District heating water		<+120°C	BAQE
		+120°C - +140°C	BQBE
Condensate		<+90°C	BQQE
		+90°C - +120°C	BAQE
		+120°C - +140°C	BQBE
Softened water	C	<+90°C	BQQE
		>+90°C	BAQE
Brackish water	J, L	pH >6.5, +40°C, 1000 ppm Cl ⁻	BQQE
Sea water	J, L	pH >6.5, +20°C, 20000 ppm Cl ⁻	BQQE
Swimming pool water	J, K	pH>6.5, 40°C, 150 ppm Cl ⁻	BQQE
Cooling and cutting lubricant	A, I		BQQV
Coolants			
Ethylene glycol	B, D	+50°C, 50%	BQQE/GQQE
Glycerine (glycerol)	B, D	+50°C, 50%	BQQE/GQQE
Hydrocarbon based antifreeze	B, D, F, G, I	+50°C, 100%	BQQV/GQQV
Potassium acetate	B, D, C	+50°C, 50%	BQQE/GQQE
Potassium formate	B, D, C	+50°C, 50%	BQQE/GQQE
Propylene glycol	B, D		BQQE/GQQE
Brine-sodium chloride	B, D, C	+5°C, 30%	BQQE/GQQE
Brine-calcium chloride	B, D, C	+5°C, 30%	BQQE/GQQE
Ethyl alcohol	B, D, F, I	+70°C	BAQE
Methyl alcohol-cooling	B, D, F, I	+40°C	BAQE
Fuels			
Diesel oil	F, G, H, I	<+20°C, 100%	BAQV
Jet fuel	F, G, H, I	<+20°C, 100%	BAQV
Kerosene	F, G, H, I	<+20°C, 100%	BAQV
Naphta	F, G, H, I	<+20°C, 100%	BAQV
Petrol	F, G, H, I	<+20°C, 100%	BAQV
Mineral oils			
Crude oil	A, B, G, I	<+20°C, 100%	BQQV
Mineral lubricating oil	B, D, G		BAQV/BQQV
Synthetic oils			
Silicone oil	B, H		BAQE/BQQE
Synthetic lubricating oil	B, G, I, H		BAQV/BQQV

PUMPED LIQUIDS

Pumped liquids	Notes	Additional information	Shaft seal
Vegetable oils			
Corn oil	B, I, H		BAQV/BQQV
Olive oil	B, I, H	<+80°C	BAQV/BQQV
Peanut oil	B, I, H		BAQV/BQQV
Rape seed oil	D, B, I, H		BAQV/BQQV
Soya oil	B, I, H		BAQV/BQQV
Cleaning			
Soap (salts of fatty acids)	A, H, (I)	<+80°C	BQQE (BQQV)
Alkaline degreasing agent	A, H, (I)	<+80°C	BQQE (BQQV)
Organic solvents			
Isopropyl alcohol	F, G	<+60°C	BAQE
Propyl alcohol	F, G	<+60°C	BAQE
Oxidants			
Hydrogen peroxide		<+40°C, <2%	BQQE
Salts			
Ammonium bicarbonate	A	<+20°C, <15%	BQQE
Calcium acetate	A, B	<+20°C, <30%	BQQE
Potassium bicarbonate	A	<+20°C, <20%	BQQE
Potassium carbonate	A	<+20°C, <20%	BQQE
Potassium permanganate	A	<+20°C, <10%	BQQE
Potassium sulfate	A	<+20°C, <20%	BQQE
Sodium acetate	A	<+20°C, <100%	BQQE
Sodium bicarbonate	A	<+20°C, <2%	BQQE
Sodium carbonate	A	<+20°C, <20%	BQQE
Sodium metasilicate	–	max. +30°C, 30%	-
Sodium nitrate	A	<+20°C, <40%	BQQE
Sodium nitrite	A	<+20°C, <40%	BQQE
Sodium phosphate (di)	A	<+100°C, <30%	BQQE
Sodium phosphate (tri)	A	<+90°C, <20%	BQQE
Sodium sulfate	A	<+20°C, <20%	BQQE
Sodium sulfite	A	<+20°C, <1%	BQQE
Alkalies			
Ammonium hydroxide		<+100°C, <30%	BQQE
Calcium hydroxide	A	<+100°C, <10%	BQQE
Potassium hydroxide	A	<+20°C, <20%	BQQE
Sodium hydroxide	A	<+40°C, <20%	BQQE

1) Do not use BAQE for potable water. For potable water we recommend you to fit the pump with a BQQE shaft seal. The BQQE shaft seal is available on request.

Note: We recommend the BQQE mechanical shaft seal for high-temperature applications.

The BAQE/BAQV mechanical shaft seal is not suited for pumped liquids with abrasive particles as the carbon part of the seal will be worn down. We recommend you to use BQQE/BQQV in stead. We recommend the GQQE mechanical shaft seal for cooling applications involving risk of precipitation on the seal faces.

ELECTRICAL DATA

ELECTRICAL DATA, MAINS-OPERATED MOTORS

SNB/SMB , Standard motor range, 2-pole

2-pole motors 50Hz, 3X 415V

FRAME SIZE	OUTPUT P ₂		RATED CURRENT	POWER FACTOR COS Ø AT % LOAD			EFFICIENCY [IE3]			RATED SPEED
	HP	kW		50%	75%	100%	50%	75%	100%	
SMG 90	2	1.5	3.6	0.67	0.69	0.71	77	79	81	2915
SMG 90	3	2.2	4.5	0.77	0.79	0.81	82	84	86	2915
SMG 100	4	3	5.7	0.83	0.85	0.87	83	85	87	2905
SMG 100	5.5	4	7.6	0.82	0.84	0.86	83	85	87	2941
SMG 132	7.5	5.5	10.8	0.76	0.78	0.80	84	86	88	2938
SMG 132	10	7.5	14.7	0.76	0.78	0.80	85	87	89	2931
SMG 160	15	11	20.5	0.78	0.80	0.82	87	89	91	2960
SMG 160	20	15	27.2	0.80	0.82	0.84	88	90	92	2960
SMG 160	25	18.5	32.3	0.82	0.84	0.86	89	91	93	2946
SMG 180	30	22	40	0.86	0.88	0.90	89	91	93	2935
SMG 200	40	30	49	0.87	0.89	0.91	89	91	93	2950
SMG 200	50	37	60.5	0.87	0.89	0.91	90	92	94	2955

SNB Standard motor range, 4-pole

4-pole motors 50Hz

FRAME SIZE	OUTPUT P ₂		RATED CURRENT	POWER FACTOR COS Ø AT % LOAD			EFFICIENCY [IE3]			RATED SPEED
	HP	kW		50%	75%	100%	50%	75%	100%	
SMG 71	0.5	0.37	1.0	0.5	0.63	0.71	68	73	73	1420
SMG 80	0.75	0.55	1.3	0.53	0.60	0.75	74	78	78	1430
SMG 80	1.0	0.75	1.6	0.64	0.75	0.79	78	83	83	1430
SMG 90	1.5	1.1	2.3	0.64	0.75	0.79	81.5	84	84	1430
SMG 90	2.0	1.5	3.1	0.64	0.75	0.79	83	85	85	1435
SMG 100	3.0	2.2	4.3	0.67	0.78	0.82	84	87	87	1440
SMG 112	5.0	3.7	7.5	0.60	0.69	0.78	85.5	88	88	1450
SMG 132	7.5	5.5	10.5	0.65	0.76	0.81	87	90	90	1455

CURVE CHARTS

The following many pages are divided into sections:

pages 20 - 21 A brief explanation of curve conditions and how to read the curve charts, etc.

Performance curves and technical data:

Page 22 SNB, SMB 50 Hz 2-pole pumps

Page 78 SNB 50 Hz 4-pole pumps

Curve Conditions

Selection of pumps

The guidelines below apply to the curves shown in the performance charts on page 19 to page 44.

- 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 possible operating range here might suggest the selection of a smaller/larger pump type.
- Do not use the pumps at minimum flows below $0.1 \times Q$ at an optimum efficiency because of the danger of overheating of the pump.
- The curves apply to the pumping of water at a temperature of $+20^{\circ}\text{C}$ and a kinematic viscosity of $1\text{mm}^2/\text{s}$ (1 cSt).
- NPSH : The curves show average values measured under the same conditions as the performance curves. When dimensioning 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.

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

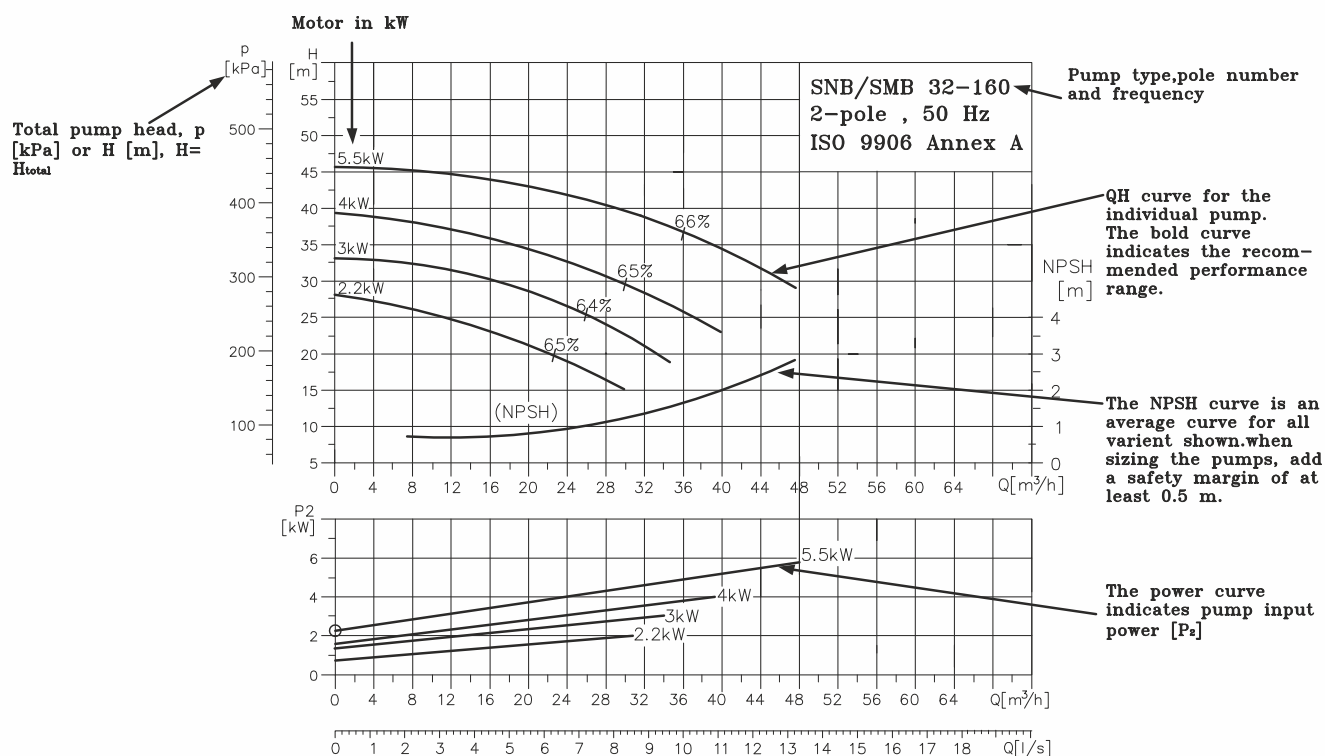
H_{geo} : Height difference between measuring points.

H_{start} : Differential head between suction and the discharge side of the pump.

H_{dyn} : Calculated values based on the velocity of the pumped liquid on the suction and the discharge side of the pump.

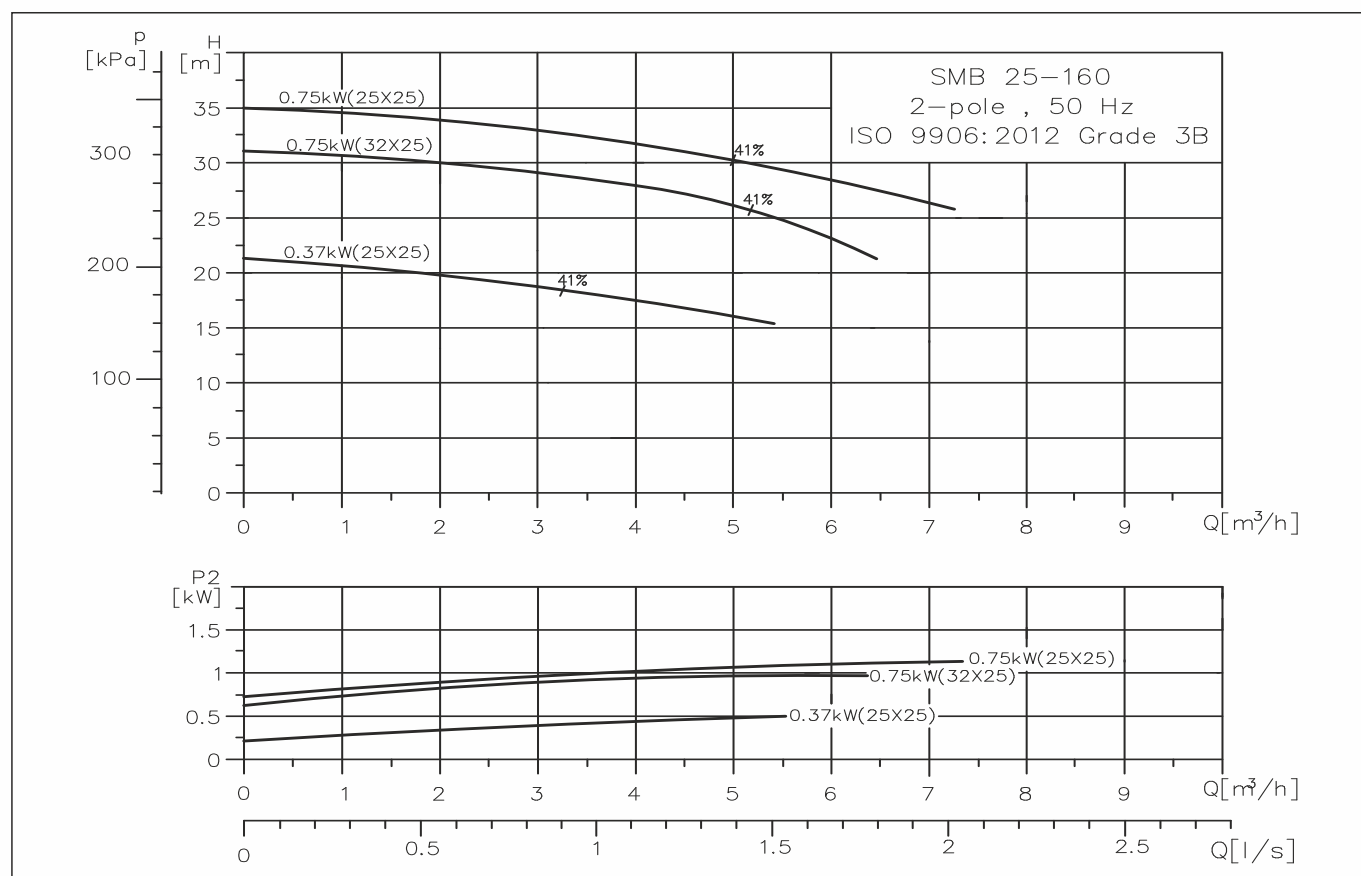
CURVE CHARTS

HOW TO READ THE CURVE CHARTS

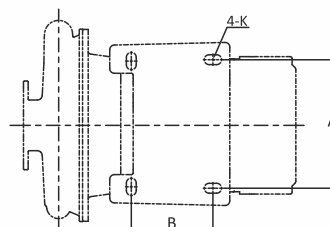
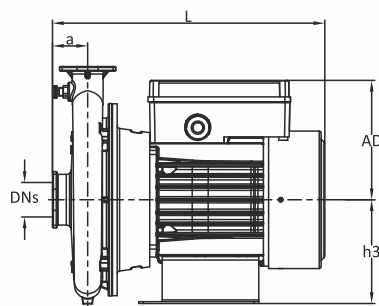
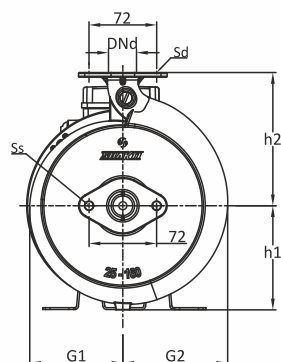


PERFORMANCE CURVE

SMB SS 25-160 (2 POLE)



[kW / HP]	Suc. x Del.	Material Code
0.37 / 0.5	: 25 x 25 mm	9000019098 (SMB)
0.75 / 1.0	: 32 x 25 mm	9000019109 (SMB)
0.75 / 1.0	: 25 x 25 mm	9000015708 (SMB)



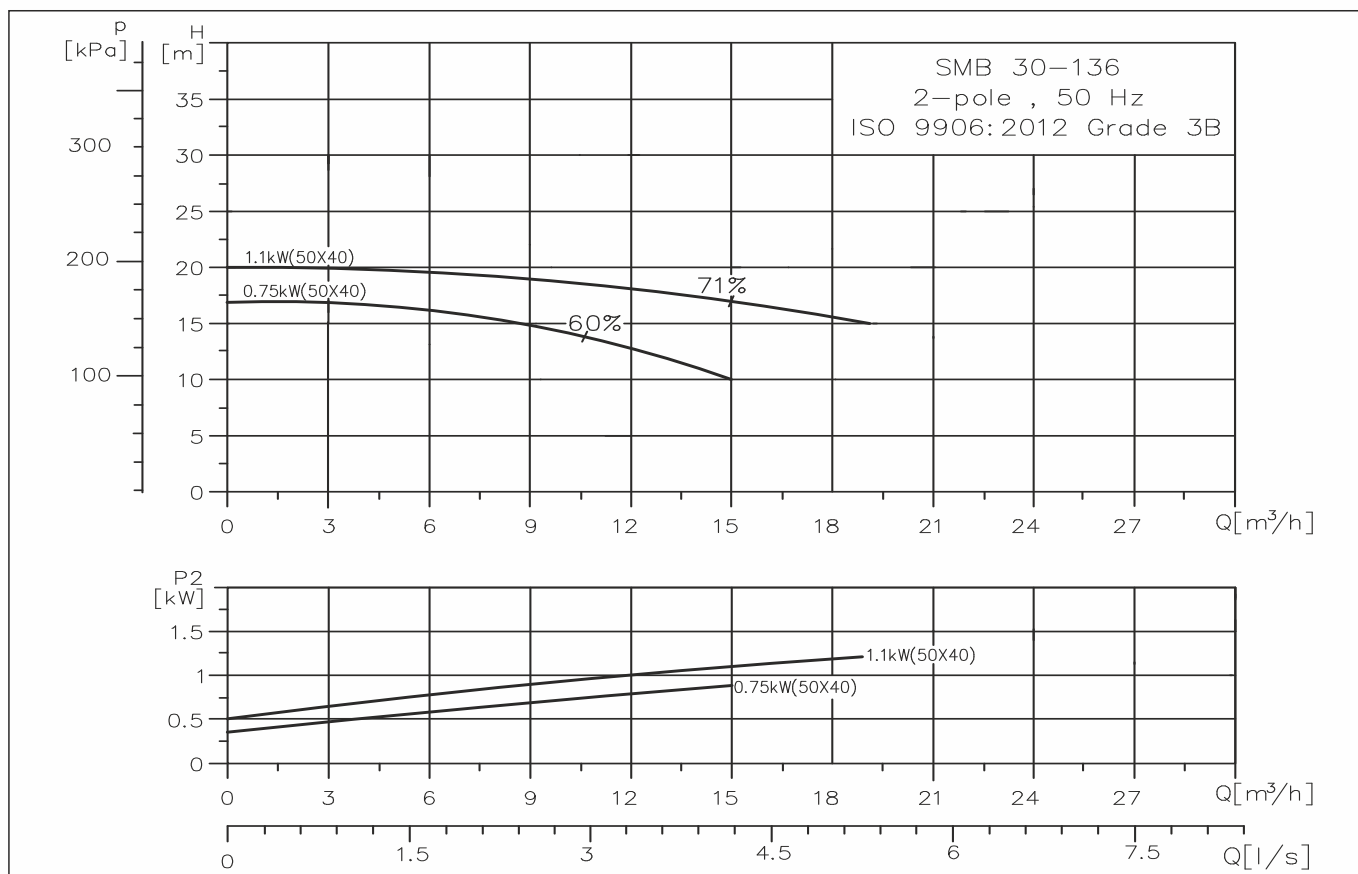
PERFORMANCE TABLE

SMB SS 25-160 (2 POLE)

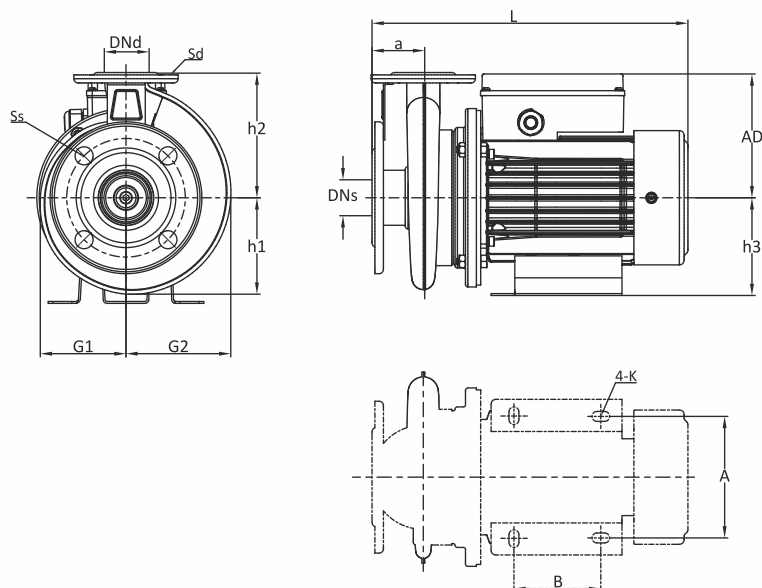
Pump type			25-160	
Motor type	HIGH EFF. MOTOR		SMG 71	SMG 80
SMB SS DATA	P ₂	[kW/HP]	0.37/0.5	0.75/1.0
	DNs	[mm]	30	30
	DNd	[mm]	25	25
	a	[mm]	37.5	37.5
	h2	[mm]	142	142
	h1	[mm]	111	111
	Ss		2X 9	2X 9
	Sd		2X 9	2X 9
	G1	[mm]	99	99
	G2	[mm]	112	112
	AD	[mm]	129	129
	h3	[mm]	111	111
	A	[mm]	137	137
	B	[mm]	87	87
	K	[mm]	4x Slot(10.5x18.5)	4x Slot(10.5x18.5)
	L	[mm]	282	322
	NET WT. (APX.)	[kg]	13	14

PERFORMANCE CURVE

SMB SS 30-136 (2 POLE)



[kW / HP]	Suc. x Del.	Material Code
0.75 / 1.0	: 50 x 40 mm	9000015609 (SMB)
1.1 / 1.5	: 50 x 40 mm	9000015610 (SMB)



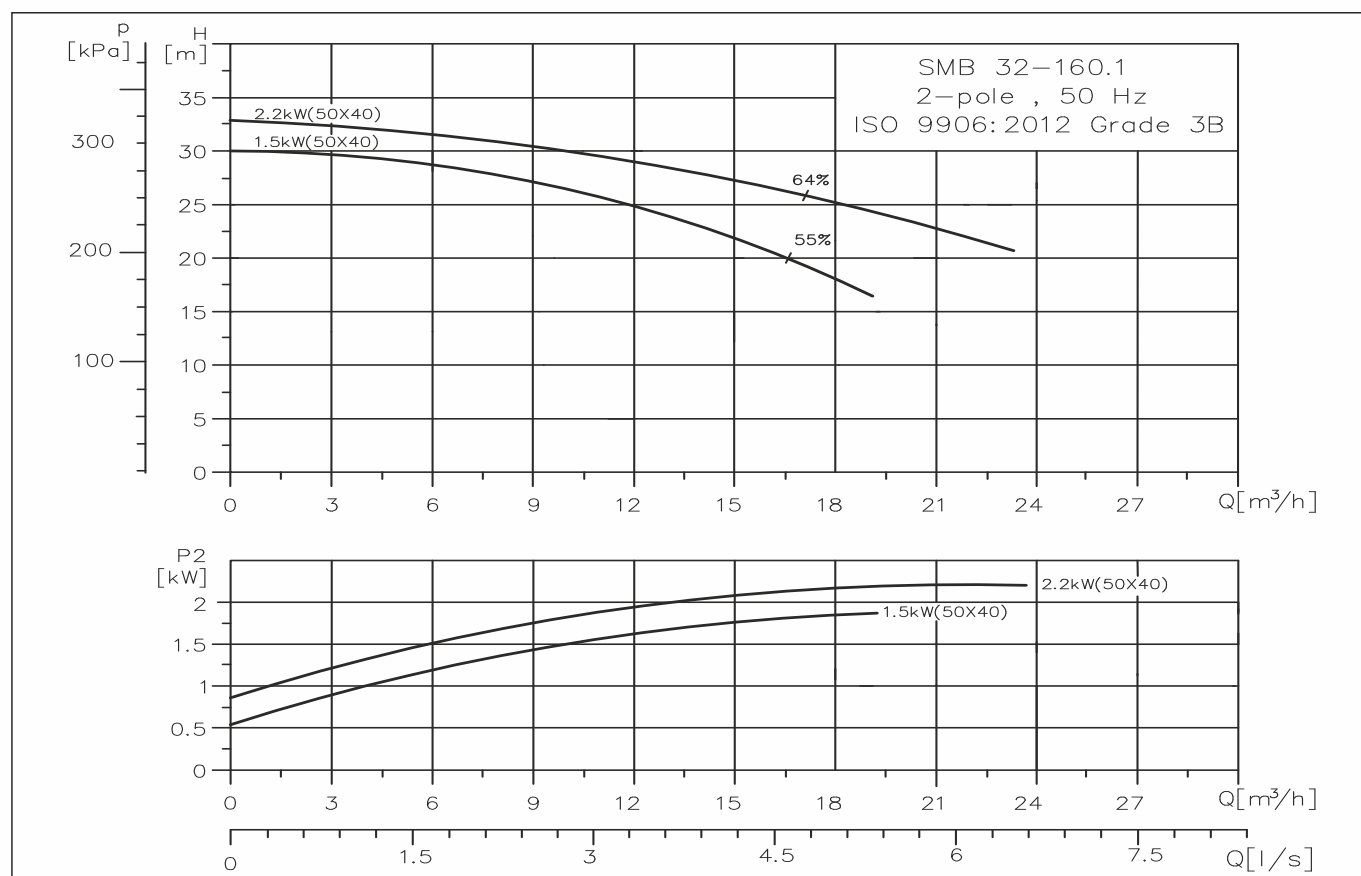
PERFORMANCE TABLE

SMB SS 30-136 (2 POLE)

Pump type			30-136	
Motor type	HIGH EFF. MOTOR		SMG 80	SMG 80
SMB SS DATA	P ₂	[kW/HP]	0.75/1.0	1.1/1.5
	DNs	[mm]	50	50
	DNd	[mm]	30	30
	a	[mm]	54	54
	h2	[mm]	132	132
	h1	[mm]	101	101
	Ss		4x19	4x19
	Sd		4x12.5	4x12.5
	G1	[mm]	90	90
	G2	[mm]	110	110
	AD	[mm]	129	129
	h3	[mm]	111	111
	A	[mm]	137	137
	B	[mm]	87	87
	K	[mm]	4x Slot(10.5x18.5)	4x Slot(10.5x18.5)
	L	[mm]	355	355
	NET WT. (APX.)	[kg]	14	14.3

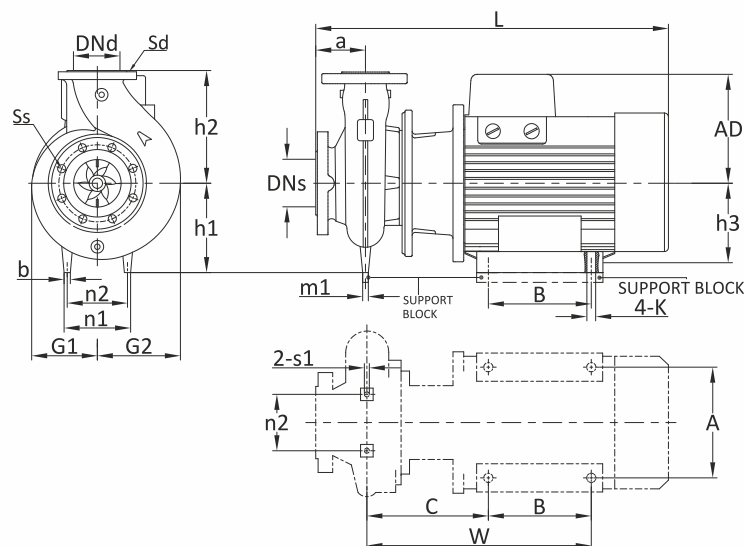
PERFORMANCE CURVE

SMB SS 32-160.1 (2 POLE)



[kW / HP]	Suc. x Del.	Material Code
1.5 / 2.0	: 50 x 40 mm	9000023455 (SMB)
2.2 / 3.0	: 50 x 40 mm	9000023456 (SMB)

SMB SS



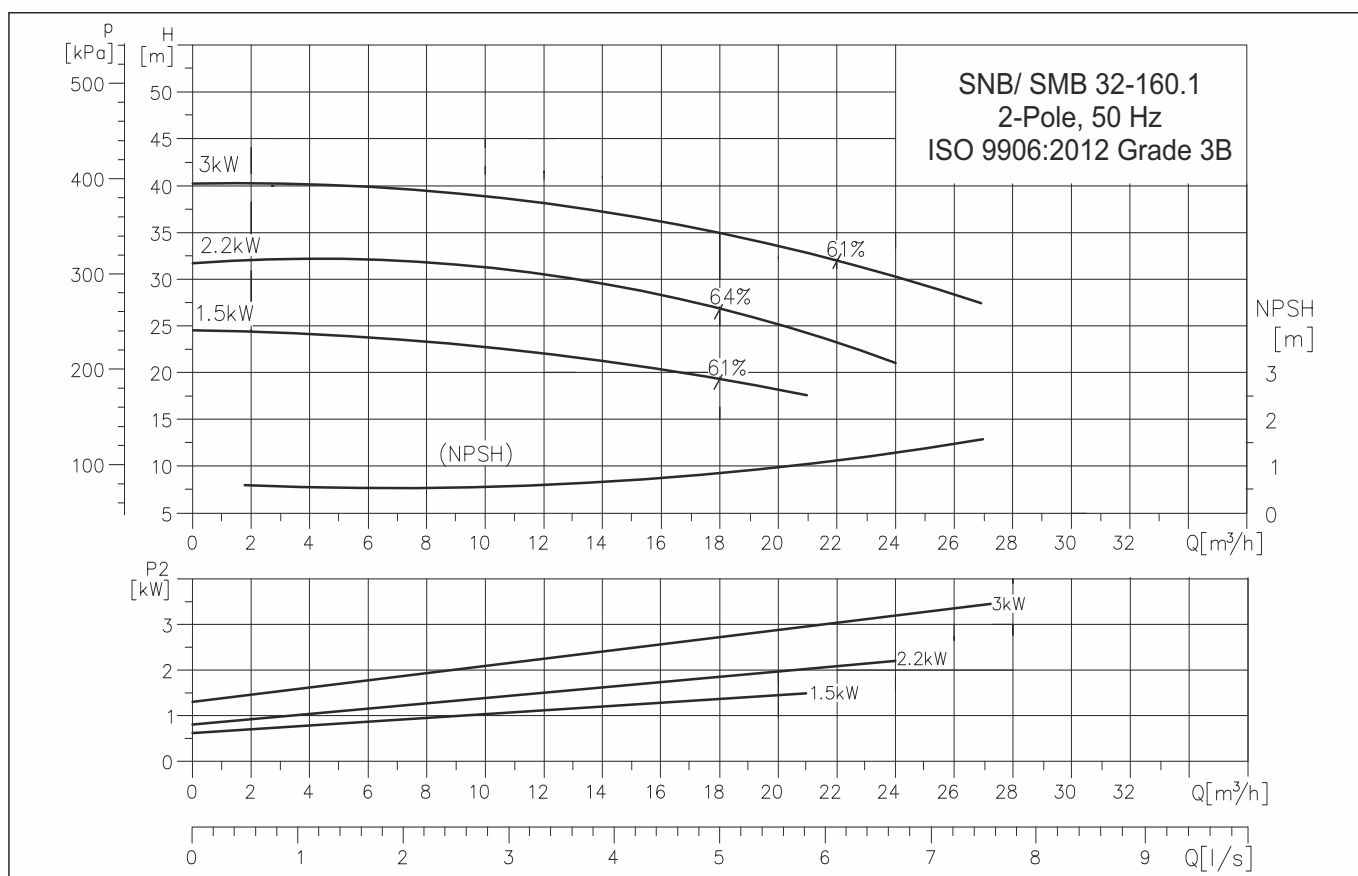
PERFORMANCE TABLE

SMB SS 32-160.1 (2 POLE)

Pump type			32-160.1	
Motor type	HIGH EFF. MOTOR		SMG 90	SMG 90
SMB SS DATA	P ₂	[kW/HP]	1.5/2.0	2.2/3.0
	PN	[bar]	16	16
	DNs	[mm]	50	50
	DNd	[mm]	32	32
	a	[mm]	87.5	87.5
	h2	[mm]	160	160
	h1	[mm]	132	132
	Ss		8x19	8x19
	Sd		4x19	4x19
	G1	[mm]	109	109
	G2	[mm]	122	122
	m1	[mm]	18	18
	m2	[mm]	-	-
	n1	[mm]	116	116
	n2	[mm]	98	98
	b	[mm]	18	18
	s1	[mm]	M8	M8
	AD	[mm]	145	145
	h3	[mm]	132	132
	A	[mm]	58.4	58.4
	B	[mm]	-	-
	K	[mm]	2X M8	2X M8
	C	[mm]	-	-
	W	[mm]	267	267
	L	[mm]	467	467
	NET WT. (APX.)	[kg]	25	30

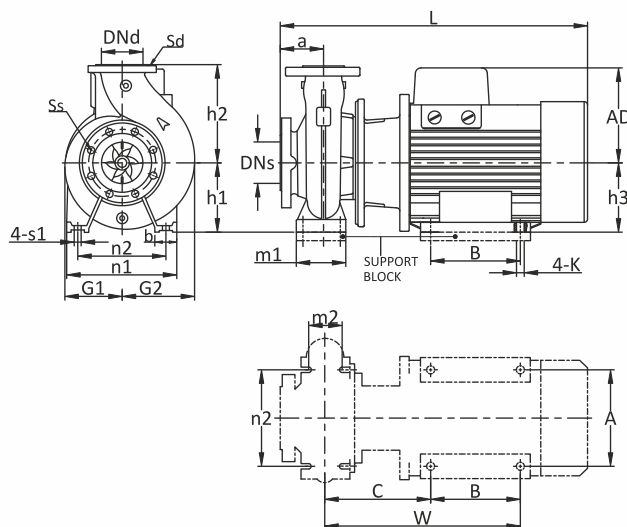
PERFORMANCE CURVE

SNB/SMB CI 32-160.1 (2 POLE)

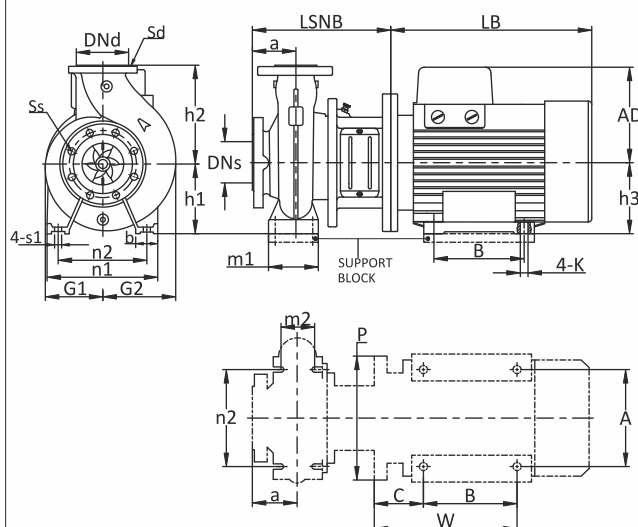


[kW / HP]	Suc. x Del.	Material Code
1.5 / 2.0	: 50 x 40 mm	9000020973 (SNB), 9000023298 (SMB)
2.2 / 3.0	: 50 x 40 mm	9000020975 (SNB), 9000023299 (SMB)
3.0 / 4.0	: 50 x 40 mm	9000019990 (SNB), 9000019360 (SMB)

SMB CI



SNB CI



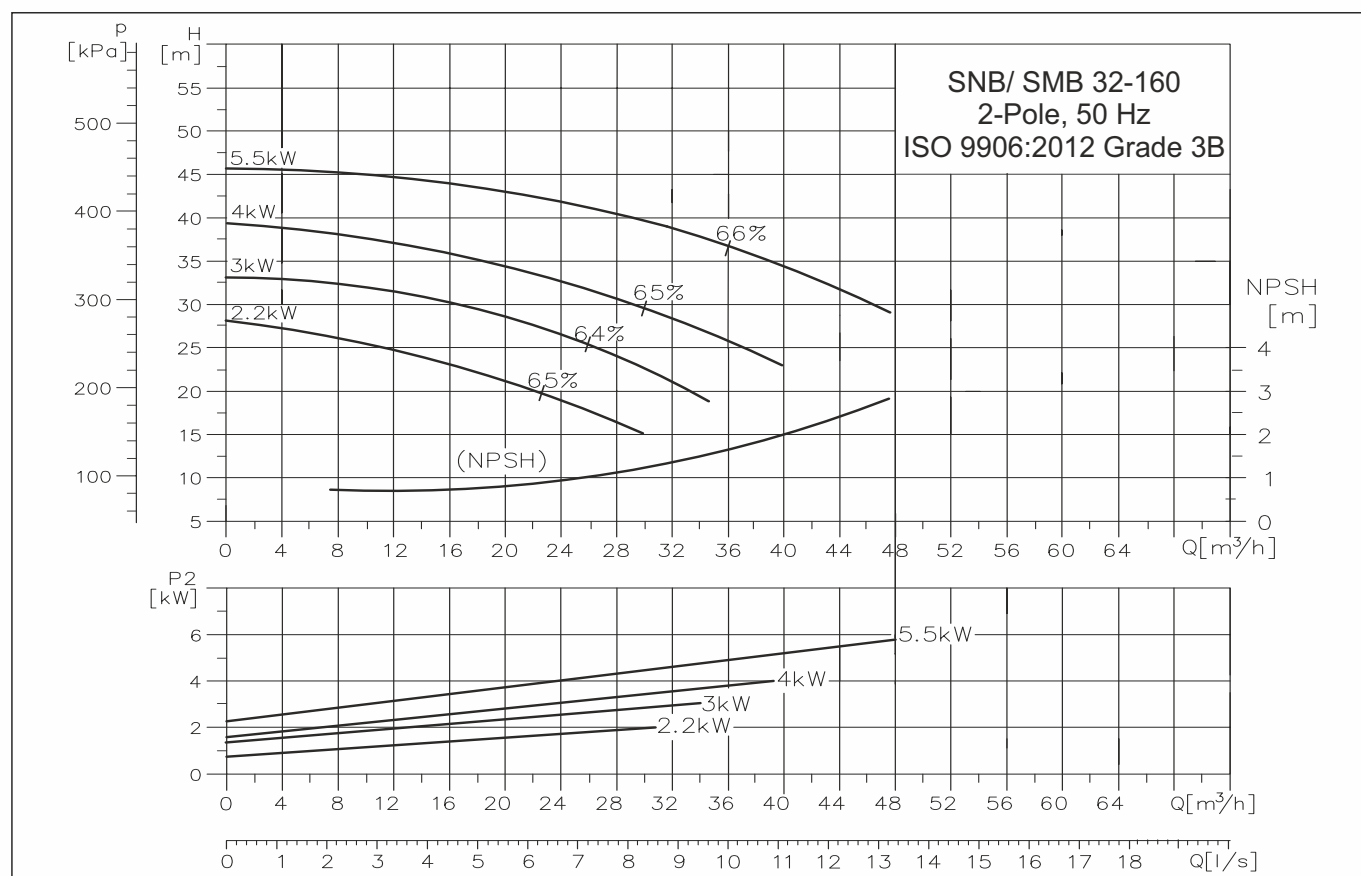
PERFORMANCE TABLE

SNB/SMB CI 32-160.1 (2 POLE)

Pump type			32-160.1		
Motor type	HIGH EFF. MOTOR		SMG 90	SMG 90	SMG 100
COMMON DATA SNB/SMB CI	P ₂	[kW/HP]	1.5/2.0	2.2/3.0	3.0/4.0
	PN	[bar]	16	16	16
	DNs	[mm]	50	50	50
	DNd	[mm]	32	32	32
	a	[mm]	80	80	80
	h ₂	[mm]	160	160	160
	h ₁	[mm]	132	132	132
	Ss		4x19	4x19	4x19
	Sd		4x19	4x19	4x19
	G1	[mm]	115	115	115
	G2	[mm]	123	123	123
	m1	[mm]	91	91	91
	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
SNB CI DATA	AD	[mm]	145	163	170
	h ₃	[mm]	132	132	112
	A	[mm]	58.4	58.4	189
	B	[mm]	-	-	140
	K	[mm]	2X M8	2X M8	M12
	L SNB	[mm]	225	225	253
	LB	[mm]	284	325	332
	C	[mm]	-	-	60
	P	[mm]	200	200	250
	W	[mm]	171	193	-
	NET WT. (APX.)	[kg]	45	45	60
SMB CI DATA	AD	[mm]	145	145	170
	h ₃	[mm]	132	132	112
	A	[mm]	58.4	58.4	189
	B	[mm]	-	-	140
	K	[mm]	2X M8	2X M8	M12
	L	[mm]	458	458	500
	C	[mm]	-	-	148
	W	[mm]	265	265	-
	NET WT. (APX.)	[kg]	36	40	60

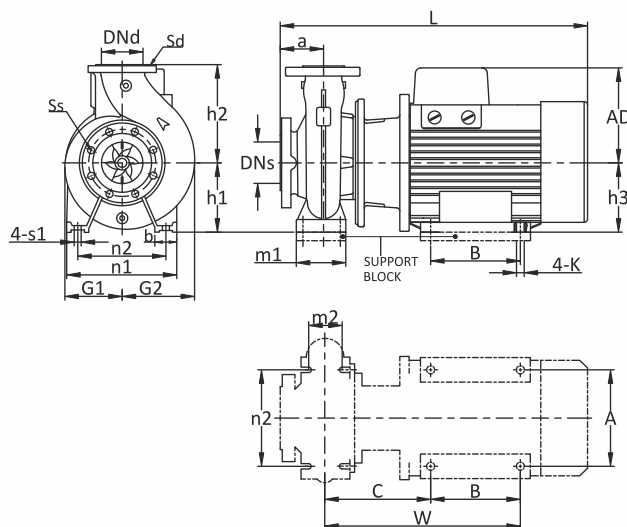
PERFORMANCE CURVE

SNB/SMB CI 32-160 (2 POLE)

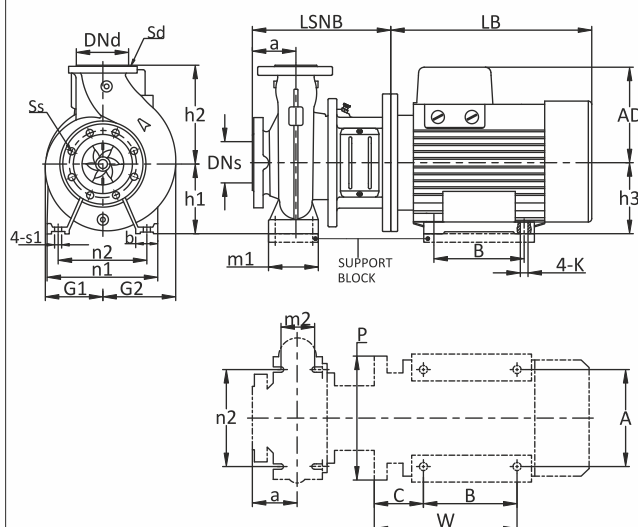


[kW / HP]	Suc. x Del.	Material Code
2.2 / 3.0	: 50 x 50 mm	9000020978 (SNB), 9000023297 (SMB)
3.7 / 4.0	: 50 x 50 mm	9000019991 (SNB), 9000023012 (SMB)
4.0 / 5.5	: 50 x 50 mm	9000020958 (SNB), 9000019365 (SMB)
5.5 / 7.5	: 50 x 50 mm	9000020963 (SNB), 9000019370 (SMB)

SMB CI



SNB CI



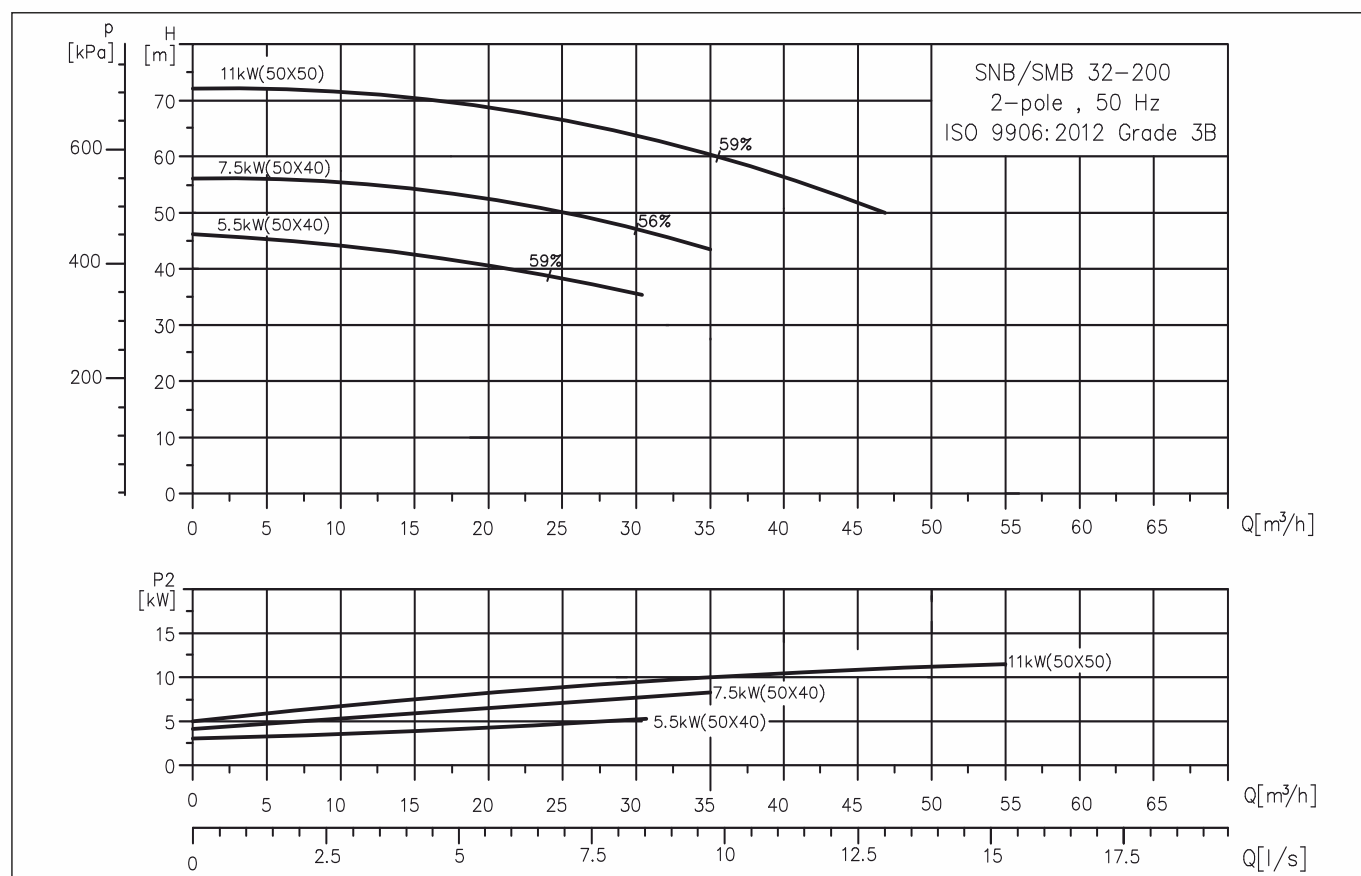
PERFORMANCE TABLE

SNB/SMB CI 32-160 (2 POLE)

Pump type			32-160			
Motor type	HIGH EFF. MOTOR		SMG 90	SMG 100	SMG 100	SMG 132
COMMON DATA SNB/SMB CI	P ₂	[kW/HP]	2.2/3.0	3.0/4.0	4.0/5.5	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
	h ₂	[mm]	160	160	160	160
	h ₁	[mm]	132	132	132	132
	Ss		4x19	4x19	4x19	4x19
	Sd		4x19	4x19	4x19	4x19
	G1	[mm]	115	115	115	115
	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
SNB CI DATA	AD	[mm]	163	170	170	138
	h ₃	[mm]	132	112	112	160
	A	[mm]	58.4	189	189	195
	B	[mm]	-	140	140	120
	K	[mm]	2X M8	M12	M12	M12
	L SNB	[mm]	224	252	252	291
	LB	[mm]	325	332	332	410
	C	[mm]	-	60	60	136
	P	[mm]	200	250	250	300
	W	[mm]	193	-	-	-
	NET WT. (APX.)	[kg]	56	59	60	100
SMB CI DATA	AD	[mm]	145	170	170	138
	h ₃	[mm]	132	112	112	160
	A	[mm]	58.4	189	189	195
	B	[mm]	-	140	140	120
	K	[mm]	2X M8	M12	M12	M12
	L	[mm]	458	499	499	568
	C	[mm]	-	147	147	214
	W	[mm]	265	-	-	-
	NET WT. (APX.)	[kg]	49	52	55	60

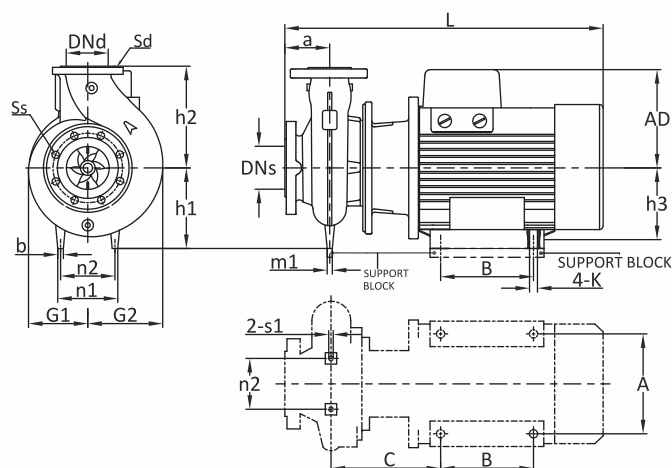
PERFORMANCE CURVE

SNB/SMB SS 32-200 (2 POLE)



[kW / HP]	Suc. x Del.	Material Code
5.5 / 7.5	: 50 x 40 mm	9000019121 (SMB)
7.5 / 10.0	: 50 x 40 mm	9000019126 (SMB)
11.0 / 15.0	: 50 x 50 mm	9000018822 (SMB)

SMB SS



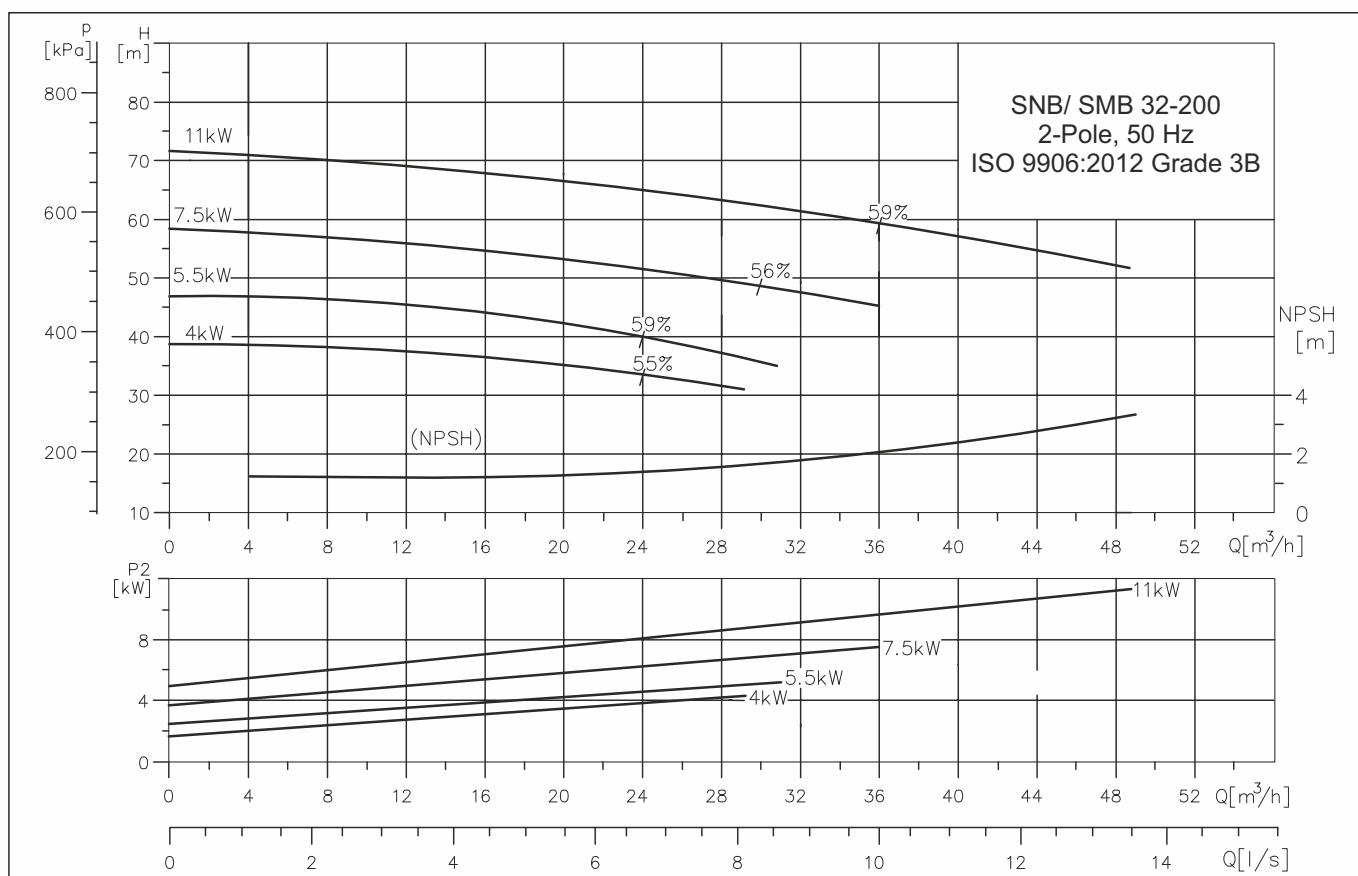
PERFORMANCE TABLE

SNB/SMB SS 32-200 (2 POLE)

Pump type			32-200		
Motor type	HIGH EFF. MOTOR		SMG 132	SMG 132	SMG 160
SMB SS DATA	P ₂	[kW/HP]	5.5/7.5	7.5/10	11/15
	PN	[bar]	16	16	16
	DNs	[mm]	50	50	50
	DNd	[mm]	32	32	32
	a	[mm]	86	86	86
	h2	[mm]	180	180	180
	h1	[mm]	160	160	160
	Ss		8x19	8x19	8x19
	Sd		4x19	4x19	4x19
	G1	[mm]	138	138	138
	G2	[mm]	152	152	152
	m1	[mm]	18	18	18
	m2	[mm]	-	-	-
	n1	[mm]	116	116	116
	n2	[mm]	98	98	98
	b	[mm]	18	18	18
	s1	[mm]	M8	M8	M8
	AD	[mm]	138	138	199
	h3	[mm]	160	160	170
	A	[mm]	195	195	232
	B	[mm]	120	120	310
	K	[mm]	M12	M12	M16
	C	[mm]	216.5	216.5	140
	L	[mm]	576	576	678
	NET WT. (APX.)	[kg]	65	80	120

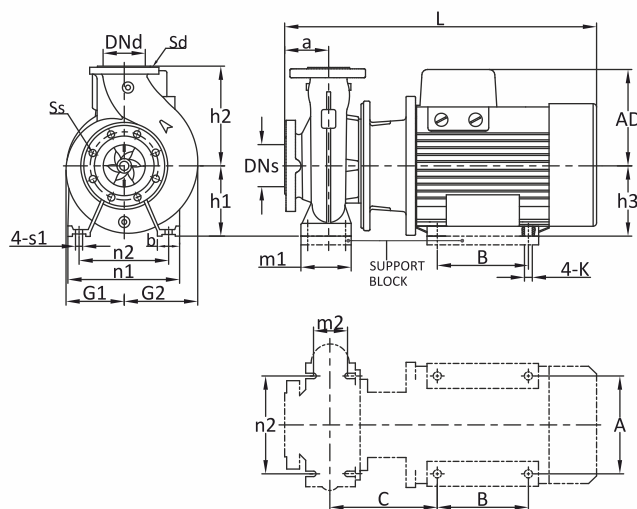
PERFORMANCE CURVE

SNB/SMB CI 32-200 (2 POLE)

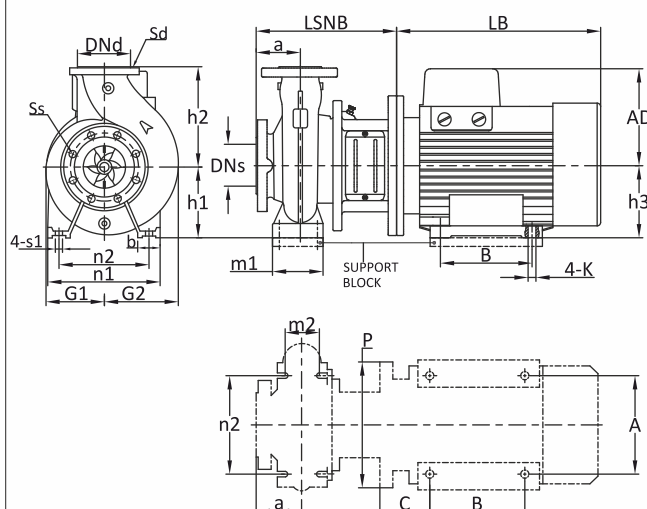


[kW / HP]	Suc. x Del.	Material Code
4.0 / 5.5	: 50 x 40 mm	9000020959 (SNB), 9000019366 (SMB)
5.5 / 7.5	: 50 x 40 mm	9000020964 (SNB), 9000019371 (SMB)
7.5 / 10.0	: 50 x 40 mm	9000020968 (SNB), 9000019377 (SMB)
11.0 / 15.0	: 50 x 50 mm	9000019104 (SNB), 9000019384 (SMB)

SMB CI



SNB CI



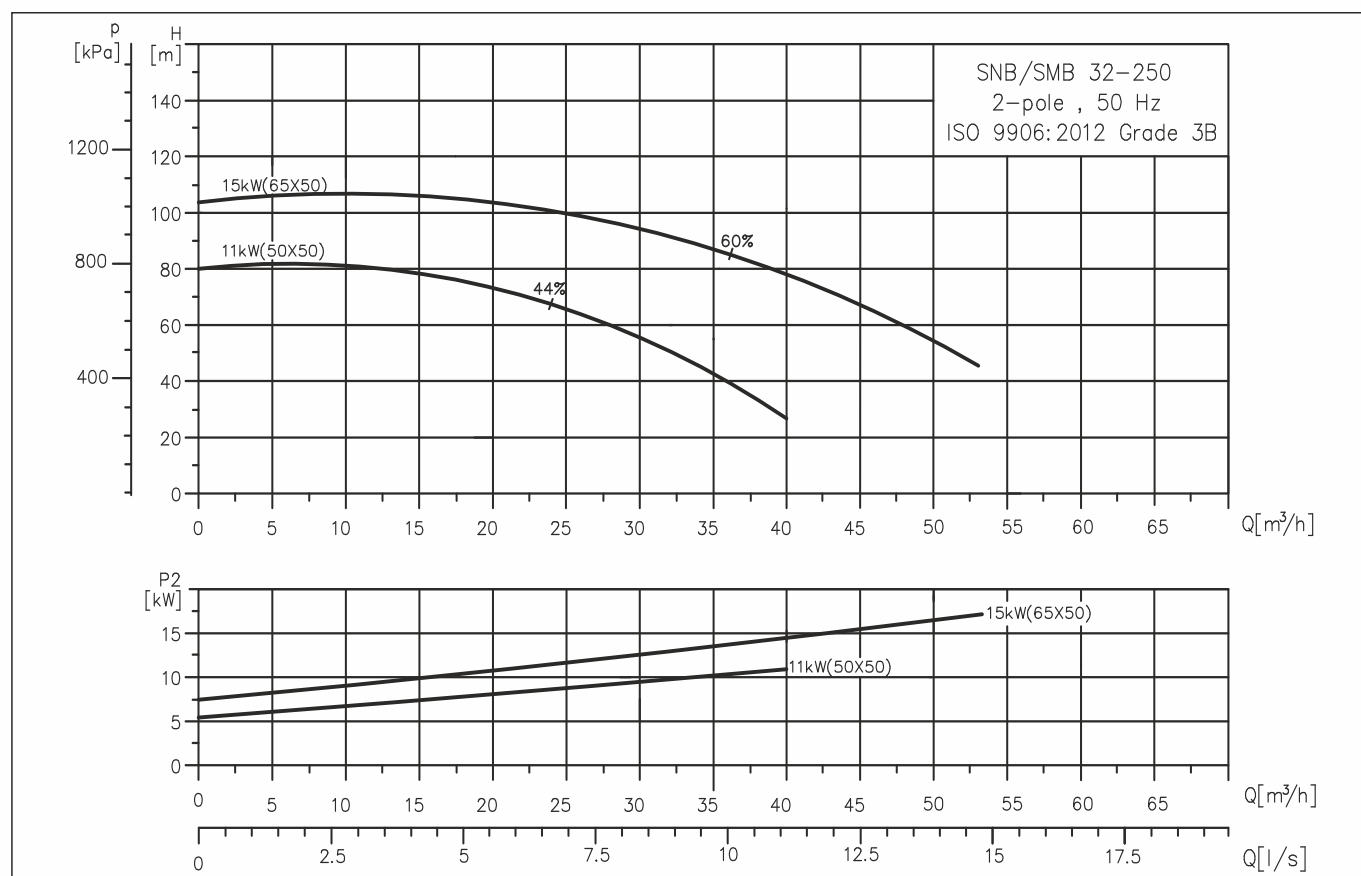
PERFORMANCE TABLE

SNB/SMB CI 32-200 (2 POLE)

Pump type			32-200			
Motor type	HIGH EFF. MOTOR		SMG 100	SMG 132	SMG 132	SMG 160
COMMON DATA SNB/SMB CI	P ₂	[kW/HP]	4/5.5	5.5/7.5	7.5/10	11/15
	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
	h ₁	[mm]	160	160	160	160
	Ss		4x19	4x19	4x19	4x19
	Sd		4x19	4x19	4x19	4x19
	G1	[mm]	134	134	134	134
	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
SNB CI DATA	AD	[mm]	170	138	138	233
	h ₃	[mm]	112	160	160	160
	A	[mm]	189	195	195	254
	B	[mm]	140	120	120	254
	K	[mm]	M12	M12	M12	M12
	L SNB	[mm]	251	290	290	320
	LB	[mm]	332	410	410	565
	C	[mm]	60	136	136	108
	P	[mm]	200	300	300	350
	NET WT. (APX.)	[kg]	85	89	95	130
SMB CI DATA	AD	[mm]	170	138	138	199
	h ₃	[mm]	112	160	160	170
	A	[mm]	189	195	195	232
	B	[mm]	140	120	120	310
	K	[mm]	M12	M12	M12	M16
	L	[mm]	498	567	567	669
	C	[mm]	147	214	214	137
	NET WT. (APX.)	[kg]	60	74	88	130

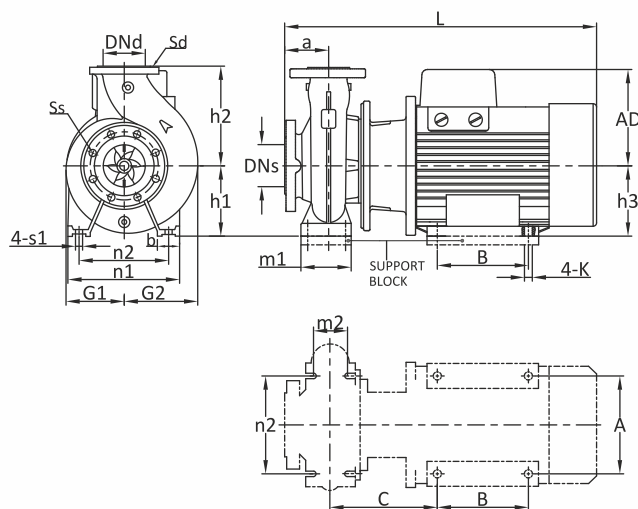
PERFORMANCE CURVE

SNB/SMB SS 32-250 (2 POLE)

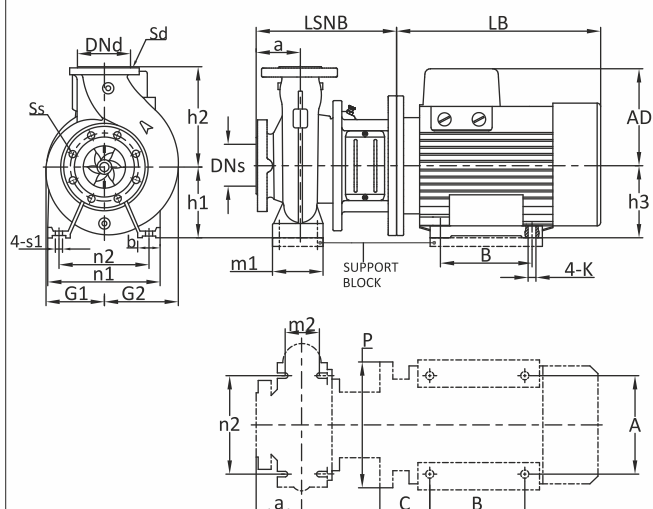


[kW / HP]	Suc. x Del.	Material Code
11.0 / 15.0	50 x 50 mm	9000019131 (SMB)
15.0 / 20.0	65 x 50 mm	9000018825 (SMB)
15.0 / 20.0	65 x 50 mm	9000017609 (SNB)

SMB SS



SNB SS



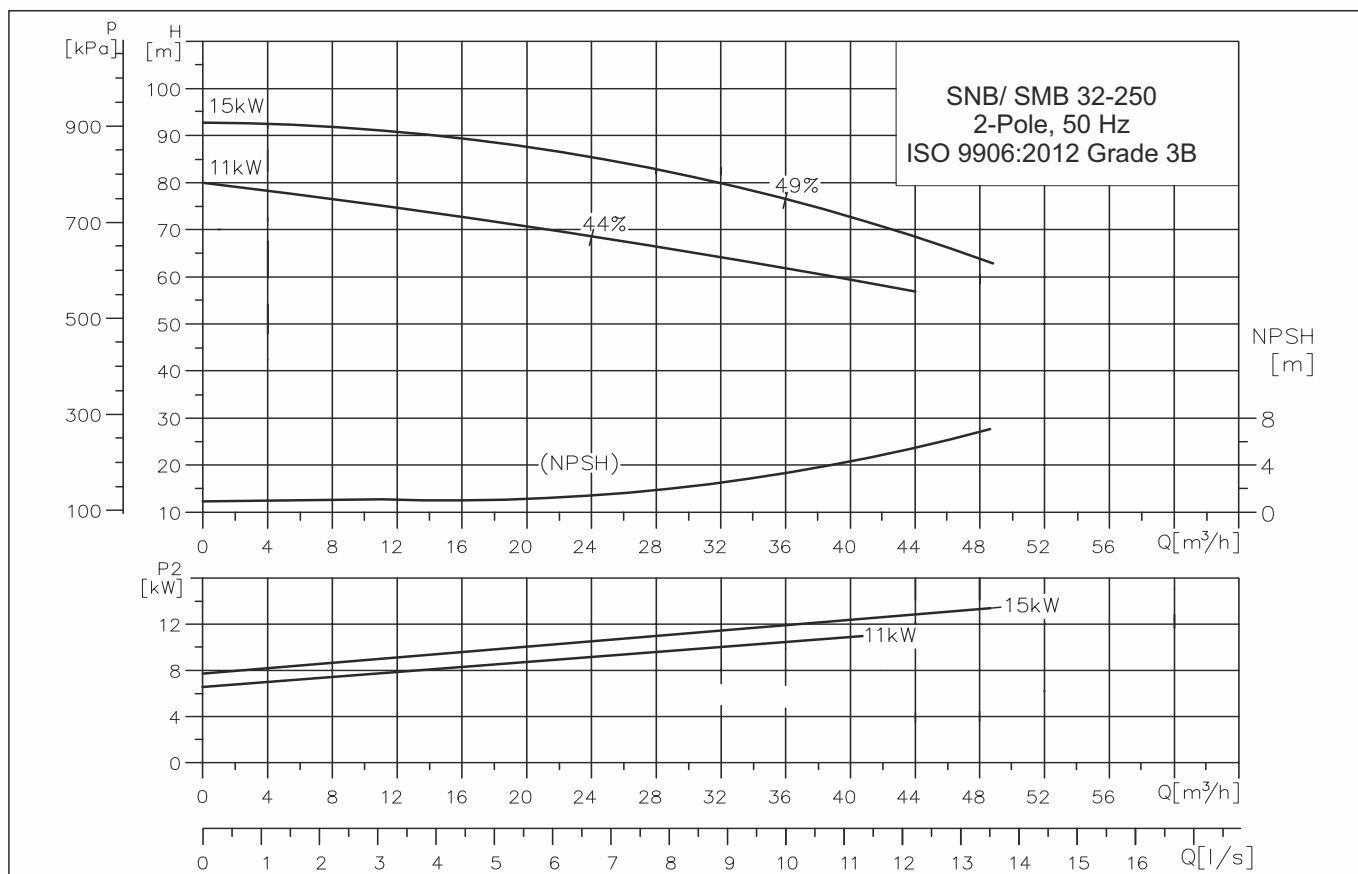
PERFORMANCE TABLE

SNB/SMB SS 32-250 (2 POLE)

Pump type			32-250	
Motor type	HIGH EFF. MOTOR		SMG 160	SMG 160
COMMON DATA SNB/SMB SS	P ₂	[kW/HP]	11/15	15/20
	PN	[bar]	16	16
	DNs	[mm]	50	50
	DNd	[mm]	32	32
	a	[mm]	100	100
	h ₂	[mm]	225	225
	h ₁	[mm]	180	180
	Ss		4x19	4x19
	Sd		4x19	4x19
	G1	[mm]	170	170
	G2	[mm]	190	190
	m1	[mm]	125	125
	m2	[mm]	95	95
	n1	[mm]	320	320
	n2	[mm]	250	250
	b	[mm]	-	-
	s1	[mm]	M12	M12
SNB SS DATA	AD	[mm]	-	233
	h ₃	[mm]	-	160
	A	[mm]	-	254
	B	[mm]	-	254
	K	[mm]	-	M12
	L SNB	[mm]	-	342
	LB	[mm]	-	565
	C	[mm]	-	108
	P	[mm]	-	350
SMB SS DATA	NET WT. (APX.)	[kg]	-	175
	AD	[mm]	199	233
	h ₃	[mm]	170	160
	A	[mm]	232	254
	B	[mm]	310	254
	K	[mm]	M16	M12
	L	[mm]	693	745
	C	[mm]	141.5	191.5
	NET WT. (APX.)	[kg]	132	155

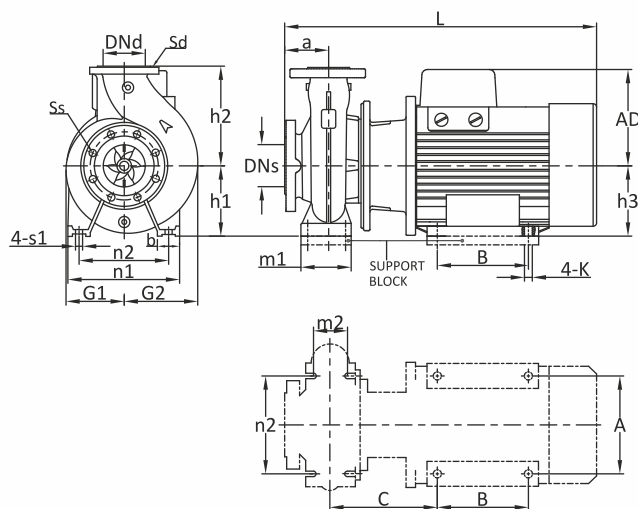
PERFORMANCE CURVE

SNB/SMB CI 32-250 (2 POLE)

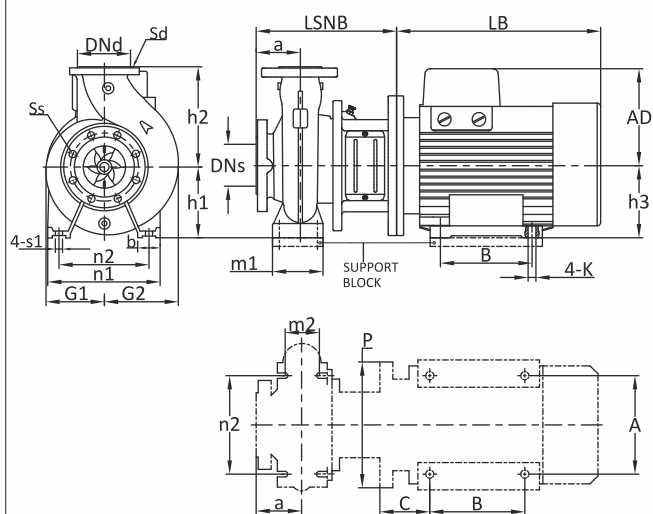


[kW / HP]	Suc. x Del.	Material Code
11.0 / 15.0	: 50 x 50 mm	9000021002 (SNB), 9000019385 (SMB)
15.0 / 20.0	: 50 x 50 mm	9000019981 (SNB), 9000019392 (SMB)

SMB CI



SNB CI



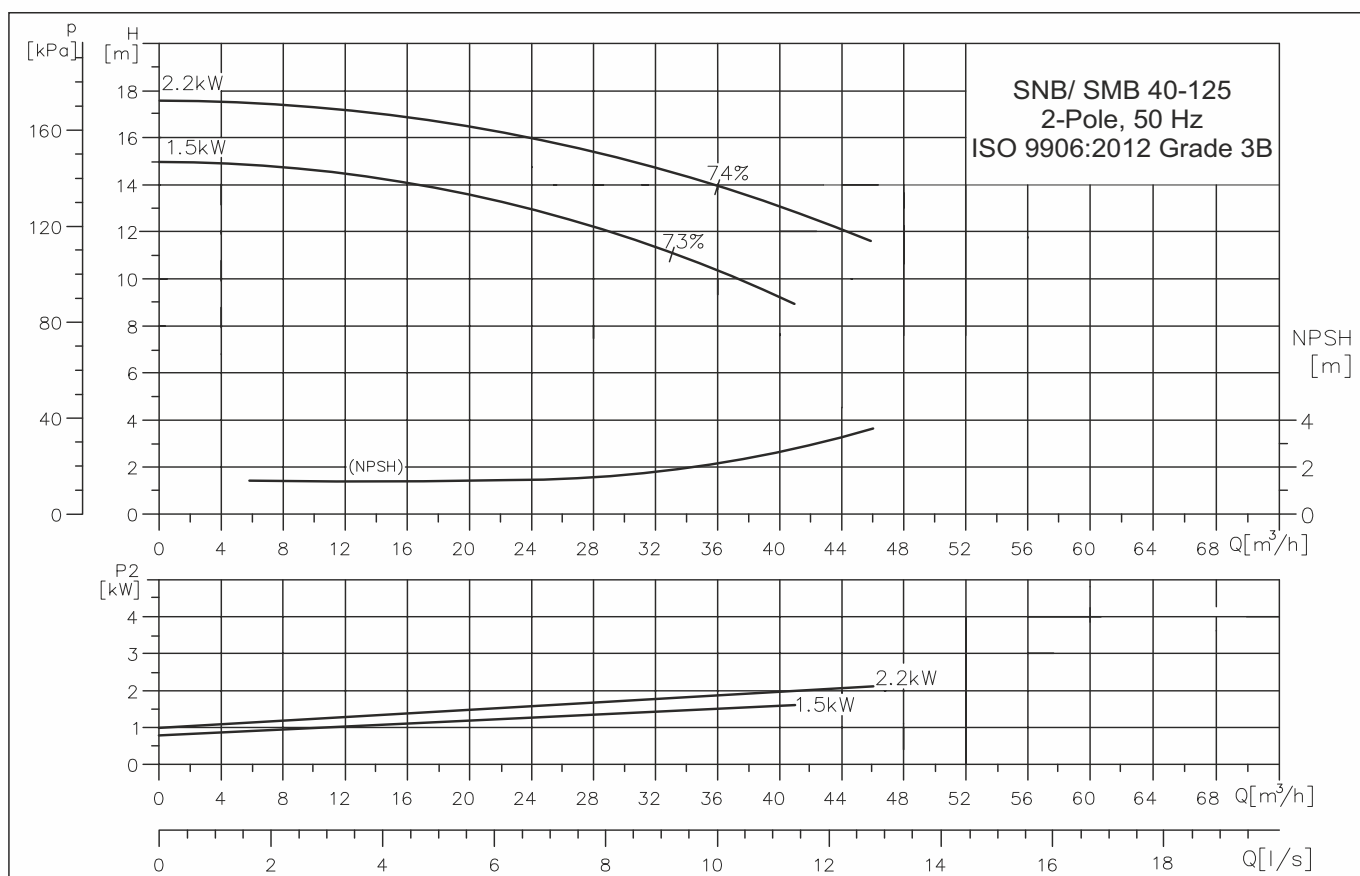
PERFORMANCE TABLE

SNB/SMB CI 32-250 (2 POLE)

Pump type			32-250	
Motor type	HIGH EFF. MOTOR		SMG 160	SMG 160
COMMON DATA SNB/SMB CI	P ₂	[kW/HP]	11/15	15/20
	PN	[bar]	16	16
	DNs	[mm]	50	50
	DNd	[mm]	32	32
	a	[mm]	100	100
	h ₂	[mm]	225	225
	h ₁	[mm]	180	180
	Ss		4x19	4x19
	Sd		4x19	4x19
	G1	[mm]	162	162
	G2	[mm]	177	177
	m1	[mm]	125	125
	m2	[mm]	95	95
	n1	[mm]	320	320
	n2	[mm]	250	250
	b	[mm]	65	65
	s1	[mm]	M12	M12
SNB CI DATA	AD	[mm]	233	233
	h ₃	[mm]	160	160
	A	[mm]	254	254
	B	[mm]	254	254
	K	[mm]	M12	M12
	L SNB	[mm]	342	342
	LB	[mm]	565	565
	C	[mm]	108	108
	P	[mm]	350	350
	NET WT. (APX.)	[kg]	165	175
SMB CI DATA	AD	[mm]	199	233
	h ₃	[mm]	170	160
	A	[mm]	232	254
	B	[mm]	310	254
	K	[mm]	M16	M12
	L	[mm]	693	745
	C	[mm]	141.5	191.5
	NET WT. (APX.)	[kg]	132	165

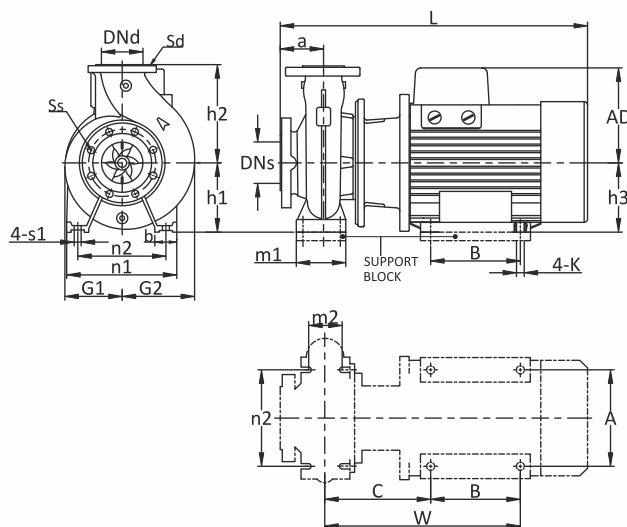
PERFORMANCE CURVE

SNB/SMB CI 40-125 (2 POLE)

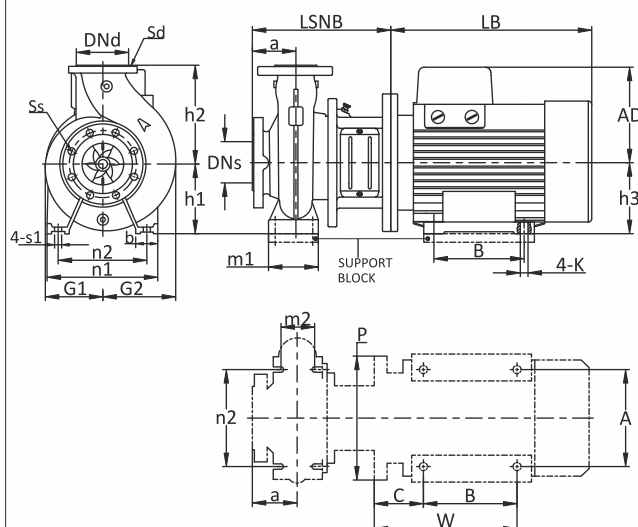


[kW / HP]	Suc. x Del.	Material Code
1.5 / 2.0	: 65 x 65 mm	9000020974 (SNB), 9000023300 (SMB)
2.2 / 3.0	: 65 x 65 mm	9000020976 (SNB), 9000023301 (SMB)

SMB CI



SNB CI



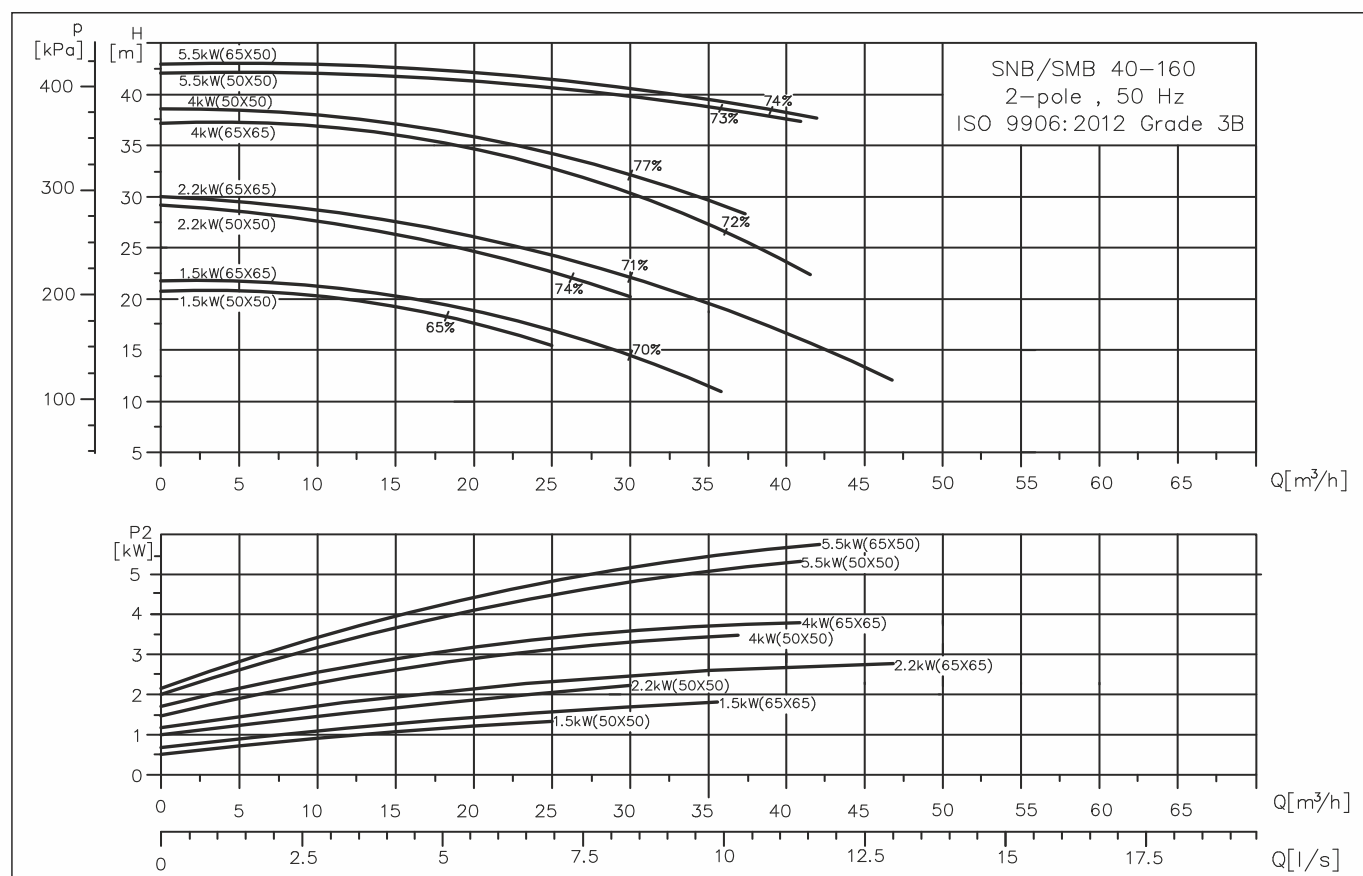
PERFORMANCE TABLE

SNB/SMB CI 40-125 (2 POLE)

Pump type			40-125	
Motor type	HIGH EFF. MOTOR		SMG 90	SMG 90
COMMON DATA SNB/SMB CI	P ₂	[kW/HP]	1.5/2.0	2.2/3.0
	PN	[bar]	16	16
	DNs	[mm]	65	65
	DNd	[mm]	40	40
	a	[mm]	80	80
	h ₂	[mm]	140	140
	h ₁	[mm]	112	112
	Ss		4x19	4x19
	Sd		4x19	4x19
	G1	[mm]	115	115
	G2	[mm]	118	118
	m1	[mm]	100	100
	m2	[mm]	70	70
	n1	[mm]	210	210
	n2	[mm]	160	160
	b	[mm]	50	50
	s1	[mm]	M12	M12
SNB CI DATA	AD	[mm]	145	163
	h ₃	[mm]	132	132
	A	[mm]	58.4	58.4
	K	[mm]	2X M8	2X M8
	L SNB	[mm]	225	225
	LB	[mm]	284	325
	P	[mm]	200	200
	W	[mm]	171	193
	NET WT. (APX.)	[kg]	47	48
SMB CI DATA	AD	[mm]	145	145
	h ₃	[mm]	132	132
	A	[mm]	58.4	58.4
	K	[mm]	2X M8	2X M8
	L	[mm]	458	458
	W	[mm]	265	265
	NET WT. (APX.)	[kg]	42	45

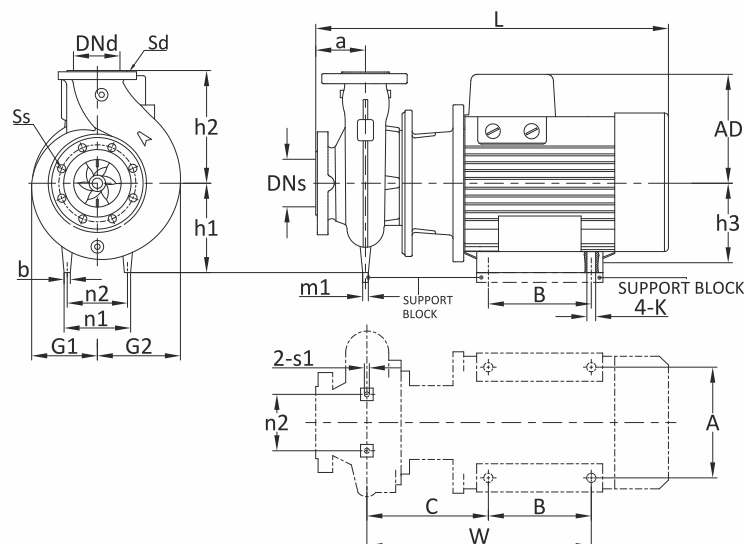
PERFORMANCE CURVE

SNB/SMB SS 40-160 (2 POLE)



[kW / HP]	Suc. x Del.	Material Code	[kW / HP]	Suc. x Del.	Material Code
1.5 / 2.0	: 50 x 50 mm	9000030126 (SMB)	1.5 / 2.0	: 65 x 65 mm	9000030128 (SMB)
2.2 / 3.0	: 50 x 50 mm	9000030129 (SMB)	2.2 / 3.0	: 65 x 65 mm	9000030131 (SMB)
4.0 / 5.5	: 50 x 50 mm	9000030133 (SMB)	4.0 / 5.5	: 65 x 65 mm	9000018379 (SMB)
5.5 / 7.5	: 50 x 50 mm	9000030137 (SMB)	5.5 / 7.5	: 65 x 50 mm	9000030139 (SMB)

SMB SS



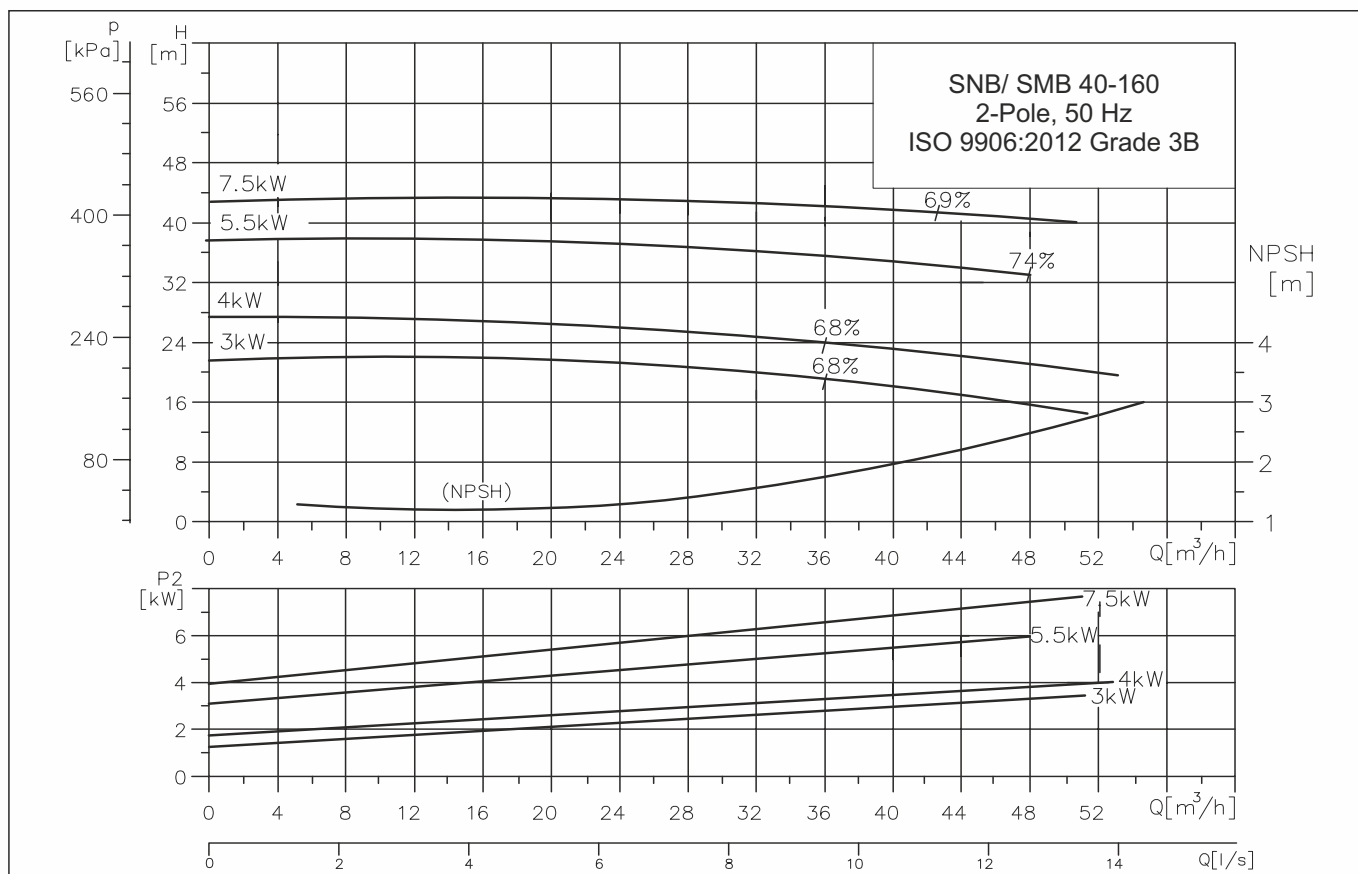
PERFORMANCE TABLE

SNB/SMB SS 40-160 (2 POLE)

Pump type			40-160			
Motor type	HIGH EFF. MOTOR		SMG 90	SMG 90	SMG100	SMG 132
SMB SS DATA	P ₂	[kW/HP]	1.5/2.0	2.2/3.0	4.0/5.5	5.5/7.5
	PN	[bar]	16	16	16	16
	DNs	[mm]	65	65	65	65
	DNd	[mm]	40	40	40	40
	a	[mm]	80	80	80	80
	h ₂	[mm]	160	160	160	160
	h ₁	[mm]	125	125	125	125
	Ss		4x Slot(19x22)	4x Slot(19x22)	4x Slot(19x22)	4x Slot(19x22)
	Sd		4x Slot(19x25)	4x Slot(19x25)	4x Slot(19x25)	4x Slot(19x25)
	G ₁	[mm]	113	113	113	113
	G ₂	[mm]	115	115	115	115
	m ₁	[mm]	18	18	18	18
	m ₂	[mm]	-	-	-	-
	n ₁	[mm]	116	116	116	116
	n ₂	[mm]	98	98	98	98
	b	[mm]	18	18	18	18
	s ₁	[mm]	M8	M8	M8	M8
	AD	[mm]	145	145	170	138
	h ₃	[mm]	132	132	112	160
	A	[mm]	58.4	58.4	189	195
	B	[mm]	-	-	140	120
	K	[mm]	2X M8	2X M8	M12	M12
	C	[mm]	-	-	154	221
	W	[mm]	270.5	270.5	-	-
	L	[mm]	463	463	505	574
	NET WT. (APX.)	[kg]	34	38	60	75

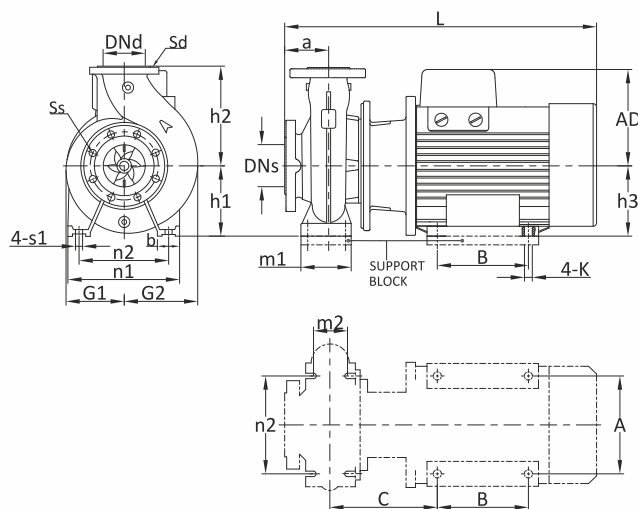
PERFORMANCE CURVE

SNB/SMB CI 40-160 (2 POLE)

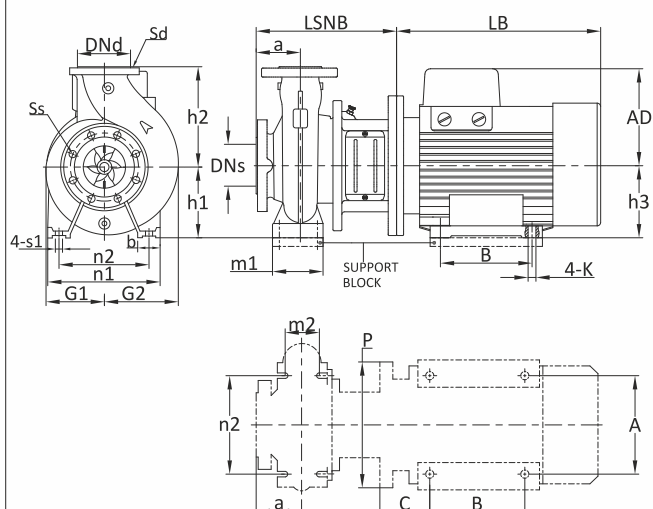


[kW / HP]	Suc. x Del.	Material Code
3.0 / 4.0	: 80 x 65 mm	9000023351 (SNB), 9000023349 (SMB)
4.0 / 5.5	: 80 x 65 mm	9000023352 (SNB), 9000019368 (SMB)
5.5 / 7.5	: 65 x 50 mm	9000023353 (SNB), 9000023350 (SMB)
7.5 / 10.0	: 65 x 50 mm	9000023277 (SNB), 9000023348 (SMB)

SMB CI



SNB CI



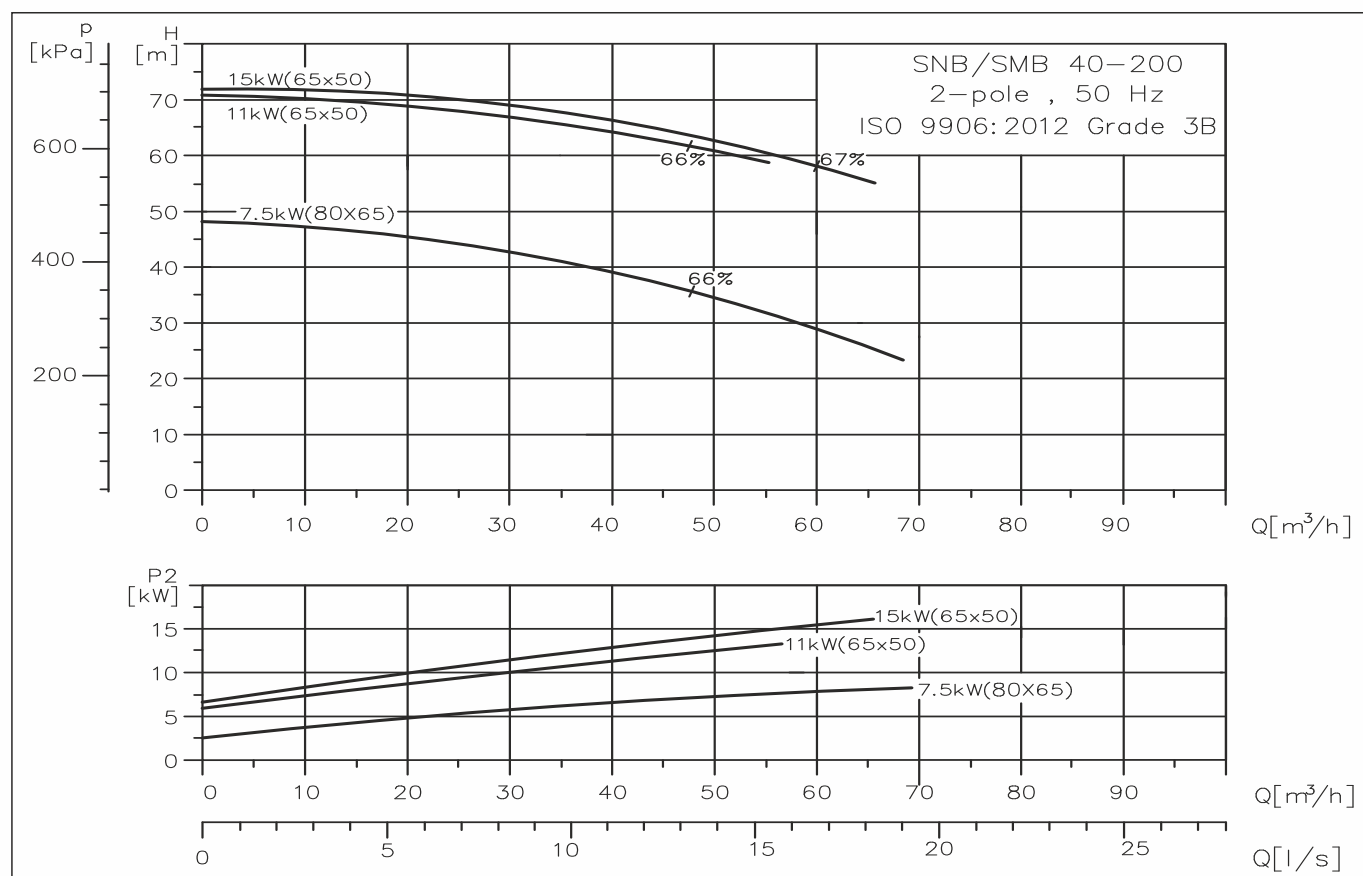
PERFORMANCE TABLE

SNB/SMB CI 40-160 (2 POLE)

Pump type			40-160			
Motor type	HIGH EFF. MOTOR		SMG 100	SMG 100	SMG 132	SMG 132
COMMON DATA SNB/SMB CI	P ₂	[kW/HP]	3.0/4.0	4.0/5.5	5.5/7.5	7.5/10.0
	PN	[bar]	16	16	16	16
	DNs	[mm]	65	65	65	65
	DNd	[mm]	40	40	40	40
	a	[mm]	80	80	80	80
	h ₂	[mm]	160	160	160	160
	h ₁	[mm]	132	132	132	132
	Ss		4x19	4x19	4x19	4x19
	Sd		4x19	4x19	4x19	4x19
	G1	[mm]	116	116	116	116
	G2	[mm]	134	134	134	134
	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
	AD	[mm]	170	170	138	138
	h3	[mm]	112	112	160	160
	A	[mm]	189	189	195	195
	B	[mm]	140	140	120	120
	K	[mm]	M12	M12	M12	M12
SNB CI DATA	L SNB	[mm]	254	254	293	293
	LB	[mm]	332	332	410	410
	C	[mm]	60	60	136	136
	P	[mm]	250	250	300	300
	NET WT. (APX.)	[kg]	74	74	92	100
SMB CI DATA	L	[mm]	504	504	573	573
	C	[mm]	152.5	152.5	219.5	219.5
	W	[mm]	-	-	-	-
	NET WT. (APX.)	[kg]	70	70	75	75

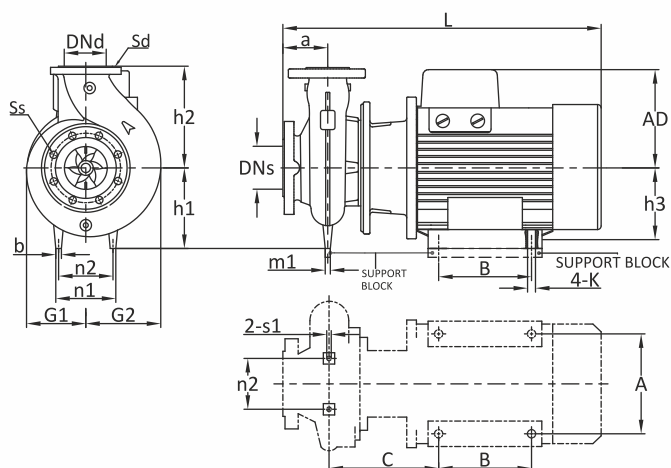
PERFORMANCE CURVE

SNB/SMB SS 40-200 (2 POLE)

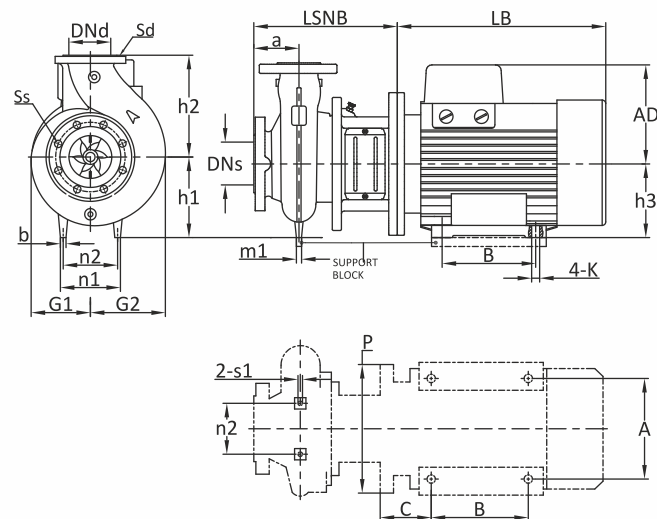


[kW / HP]	Suc. x Del.	Material Code
7.5 / 10.0	80 x 65 mm	9000019127 (SMB)
11.0 / 15.0	65 x 50 mm	9000019132 (SMB)
15.0 / 20.0	65 x 50 mm	9000018823 (SMB)
15.0 / 20.0	65 x 50 mm	9000016473 (SNB)

SMB SS



SNB SS



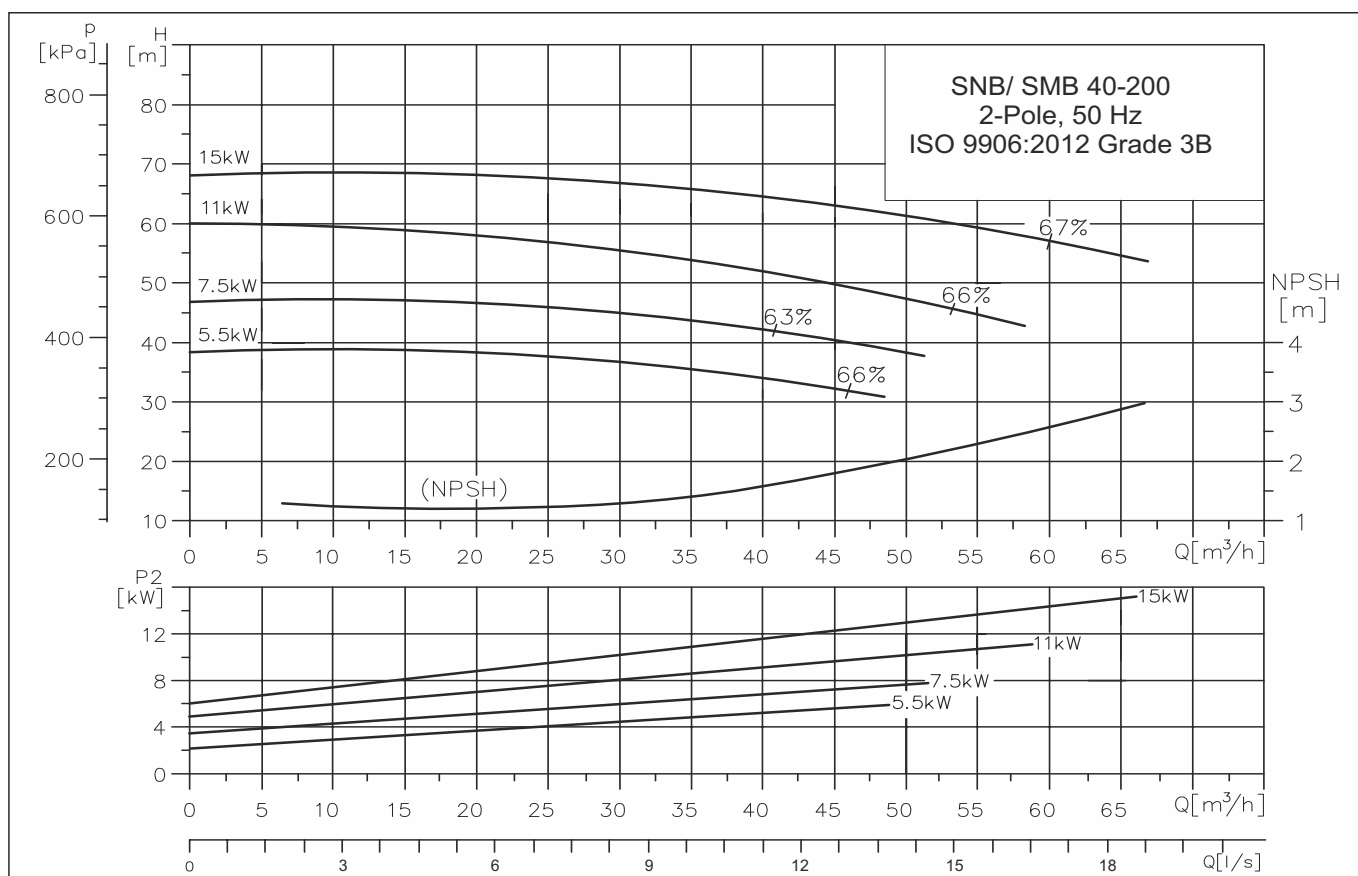
PERFORMANCE TABLE

SNB/SMB SS 40-200 (2 POLE)

Pump type			40-200		
Motor type	HIGH EFF. MOTOR		SMG 132	SMG 160	SMG 160
COMMON DATA SNB/SMB SS	P ₂	[kW/HP]	7.5/10	11/15	15/20
	PN	[bar]	16	16	16
	DNs	[mm]	65	65	65
	DNd	[mm]	40	40	40
	a	[mm]	100	100	100
	h ₂	[mm]	180	180	180
	h ₁	[mm]	160	160	160
	Ss		4x Slot(19x22)	4x Slot(19x22)	4x Slot(19x22)
	Sd		4x Slot(19x25)	4x Slot(19x25)	4x Slot(19x25)
	G1	[mm]	141	141	141
	G2	[mm]	155	155	155
	m1	[mm]	18	18	18
	m2	[mm]	-	-	-
	n1	[mm]	116	116	116
	n2	[mm]	98	98	98
	b	[mm]	18	18	18
	s1	[mm]	M8	M8	M8
SNB SS DATA	AD	[mm]	-	-	233
	h ₃	[mm]	-	-	160
	A	[mm]	-	-	254
	B	[mm]	-	-	254
	K	[mm]	-	-	M12
	L SNB	[mm]	-	-	341
	LB	[mm]	-	-	565
	C	[mm]	-	-	108
	P	[mm]	-	-	350
	NET WT. (APX.)	[kg]	-	-	169
SMB SS DATA	AD	[mm]	138	199	233
	h ₃	[mm]	160	170	160
	A	[mm]	195	232	254
	B	[mm]	120	310	254
	K	[mm]	M12	M16	M12
	L	[mm]	588	690	742
	C	[mm]	215	138	188
	NET WT. (APX.)	[kg]	66	129	160

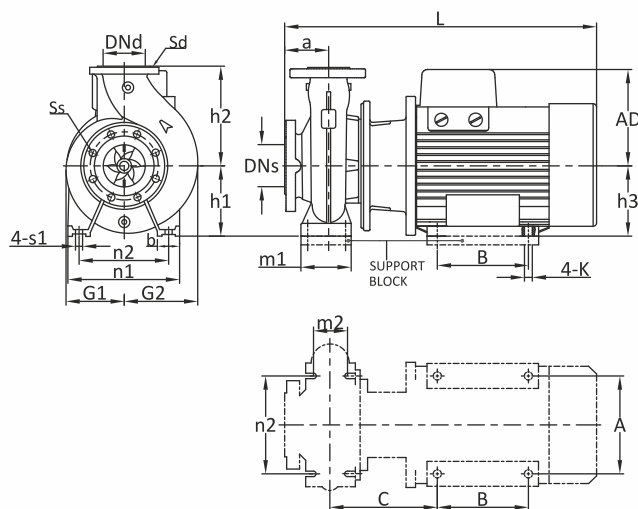
PERFORMANCE CURVE

SNB/SMB CI 40-200 (2 POLE)

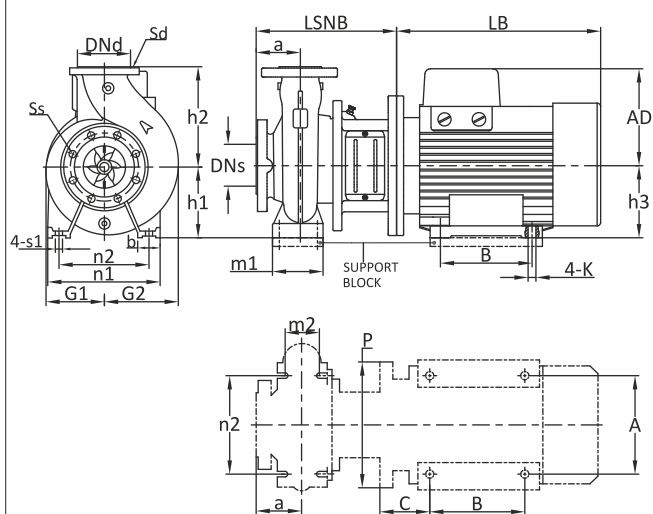


[kW / HP]	Suc. x Del.	Material Code
5.5 / 7.5	65 x 50 mm	9000014211 (SNB), 9000023015 (SMB)
7.5 / 10.0	65 x 50 mm	9000014212 (SNB), 9000019380 (SMB)
11.0 / 15.0	65 x 50 mm	9000019977 (SNB), 9000019386 (SMB)
15.0 / 20.0	65 x 50 mm	9000019105 (SNB), 9000019393 (SMB)

SMB CI



SNB CI



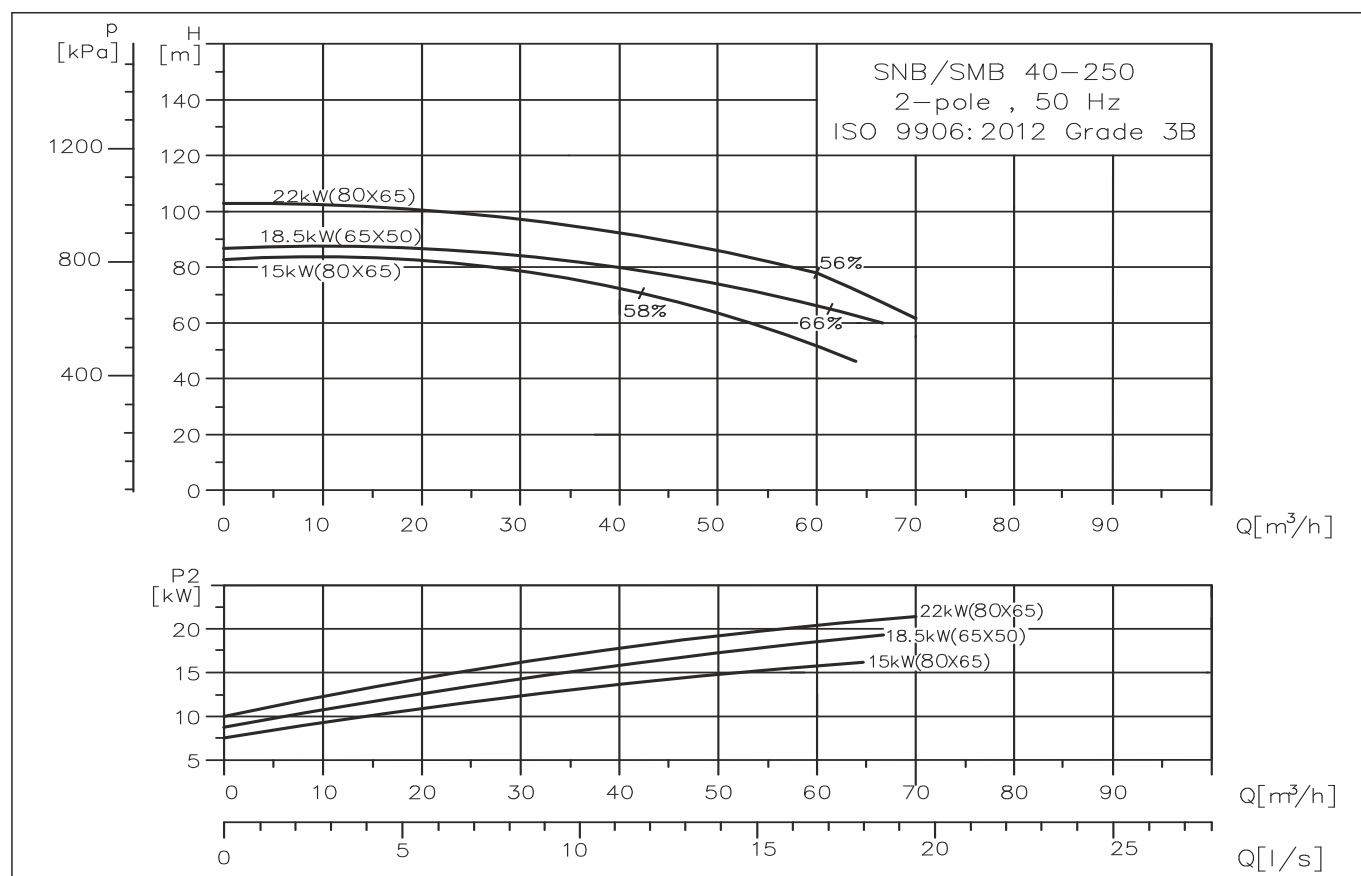
PERFORMANCE TABLE

SNB/SMB CI 40-200 (2 POLE)

Pump type			40-200			
Motor type	HIGH EFF. MOTOR		SMG 132	SMG 132	SMG 160	SMG 160
COMMON DATA SNB/SMB CI	P ₂	[kW/HP]	5.5/7.5	7.5/10	11/15	15/20
	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
	h ₁	[mm]	160	160	160	160
	Ss		4x19	4x19	4x19	4x19
	Sd		4x19	4x19	4x19	4x19
	G1	[mm]	143	143	143	143
	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
SNB CI DATA	AD	[mm]	138	138	233	233
	h ₃	[mm]	160	160	160	160
	A	[mm]	195	195	254	254
	B	[mm]	120	120	254	254
	K	[mm]	M12	M12	M12	M12
	L SNB	[mm]	311	311	341	341
	LB	[mm]	410	410	565	565
	C	[mm]	136	136	108	108
	P	[mm]	300	300	350	350
	NET WT. (APX.)	[kg]	92	97	162	169
SMB CI DATA	AD	[mm]	138	138	199	233
	h ₃	[mm]	160	160	170	160
	A	[mm]	195	195	232	254
	B	[mm]	120	120	310	254
	K	[mm]	M12	M12	M16	M12
	L	[mm]	588	588	690	742
	C	[mm]	215	215	138	188
	NET WT. (APX.)	[kg]	66	66	129	160

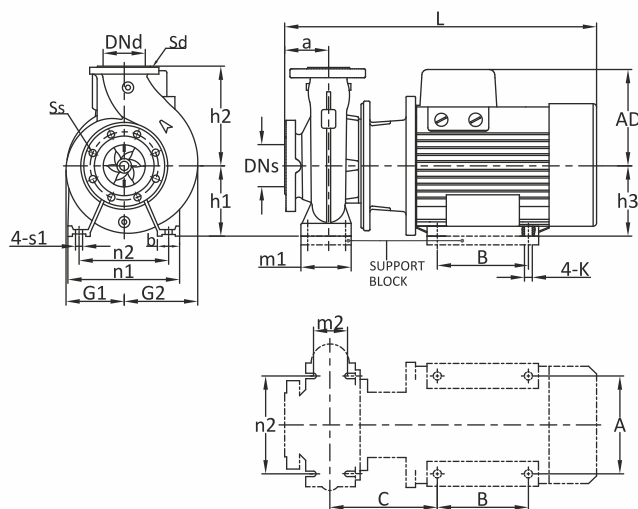
PERFORMANCE CURVE

SNB/SMB SS 40-250 (2 POLE)

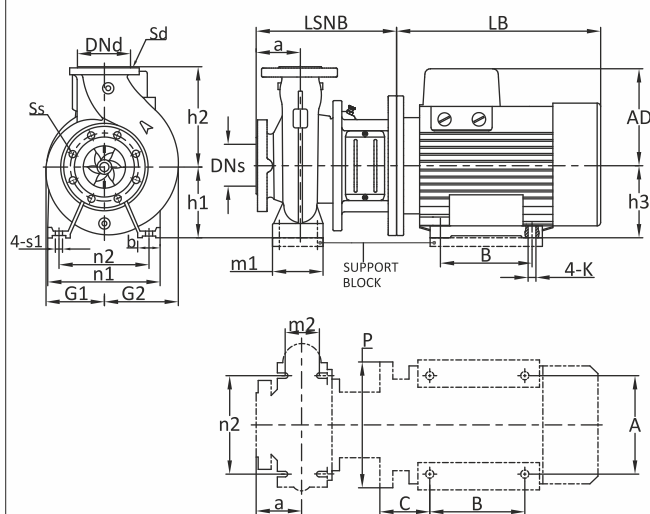


[kW / HP]	Suc. x Del.	Material Code
15.0 / 20.0	80 x 65 mm	9000017309 (SNB), 9000019136 (SMB)
18.5 / 25.0	65 x 50 mm	9000017310 (SNB), 9000018830 (SMB)
22.0 / 30.0	80 x 65 mm	9000017311 (SNB)

SMB SS



SNB SS



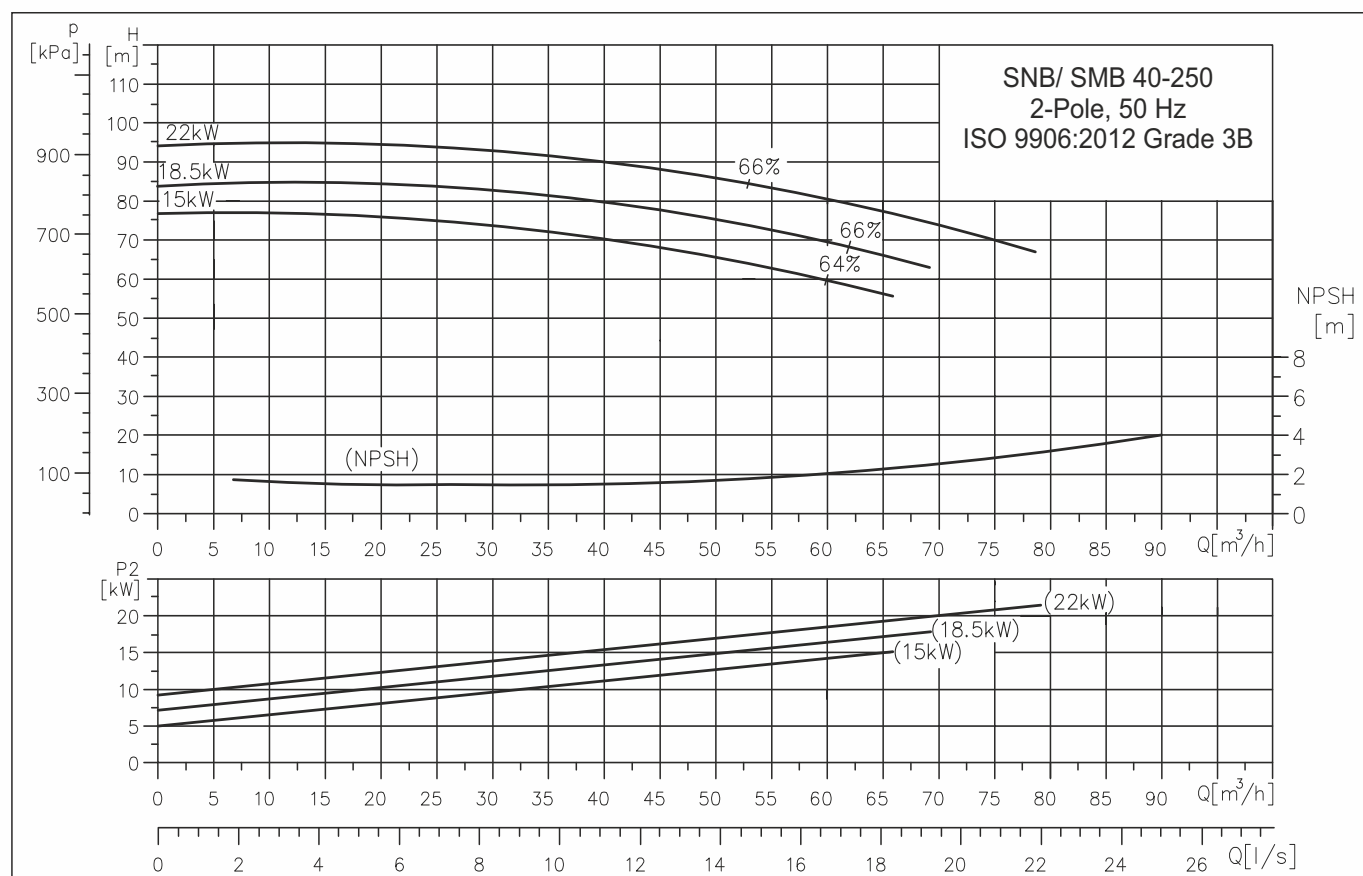
PERFORMANCE TABLE

SNB/SMB SS 40-250 (2 POLE)

Pump type			40-250		
Motor type	HIGH EFF. MOTOR		SMG 160	SMG 160	SMG 180
COMMON DATA SNB/SMB SS	P ₂	[kW/HP]	15/20	18.5/25	22/30
	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
	h ₁	[mm]	180	180	180
	Ss		4x19	4x19	4x19
	Sd		4x19	4x19	4x19
	G1	[mm]	170	170	170
	G2	[mm]	189	189	189
	m1	[mm]	125	125	125
	m2	[mm]	90	90	90
	n1	[mm]	320	320	320
	n2	[mm]	250	250	250
	b	[mm]	-	-	-
	s1	[mm]	M12	M12	M12
SNB SS DATA	AD	[mm]	233	233	242
	h ₃	[mm]	160	160	180
	A	[mm]	254	254	279
	B	[mm]	254	254	241
	K	[mm]	M12	M12	M12
	L SNB	[mm]	342	342	342
	LB	[mm]	565	565	568
	C	[mm]	108	108	121
	P	[mm]	350	350	350
	NET WT. (APX.)	[kg]	176	217	240
SMB SS DATA	AD	[mm]	233	233	-
	h ₃	[mm]	160	160	-
	A	[mm]	254	254	-
	B	[mm]	254	254	-
	K	[mm]	M12	M12	-
	L	[mm]	746	746	-
	C	[mm]	192	192	-
	NET WT. (APX.)	[kg]	160	170	-

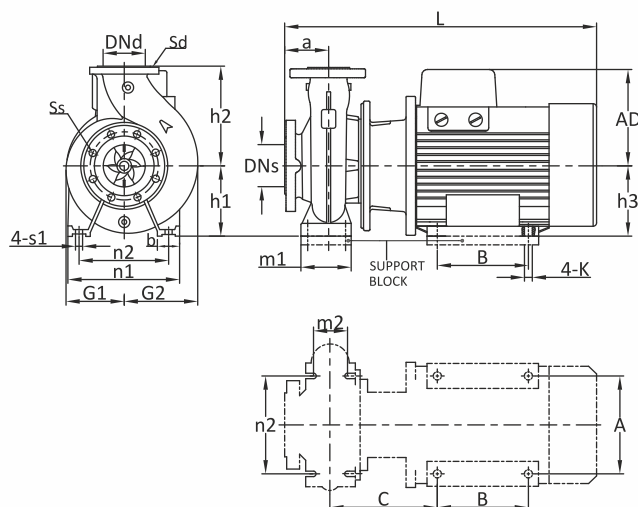
PERFORMANCE CURVE

SNB/SMB CI 40-250 (2 POLE)

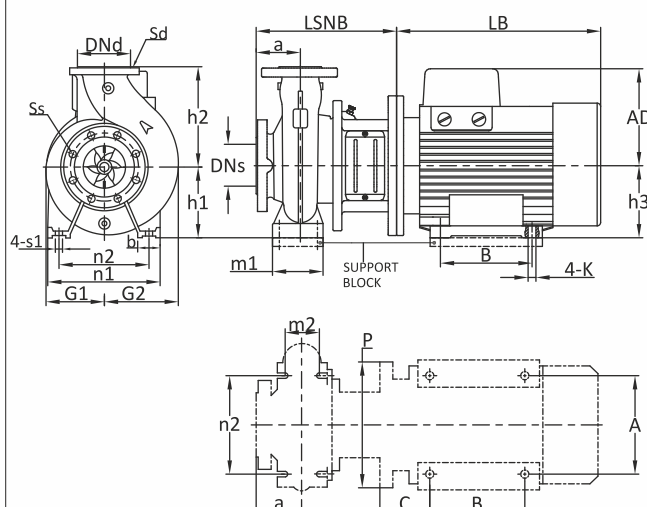


[kW / HP]	Suc. x Del.	Material Code
15.0 / 20.0	65 x 50 mm	9000019982 (SNB), 9000019975 (SMB)
18.5 / 25.0	65 x 50 mm	9000019107 (SNB), 9000019978 (SMB)
22.0 / 30.0	65 x 65 mm	9000019986 (SNB)

SMB CI



SNB CI



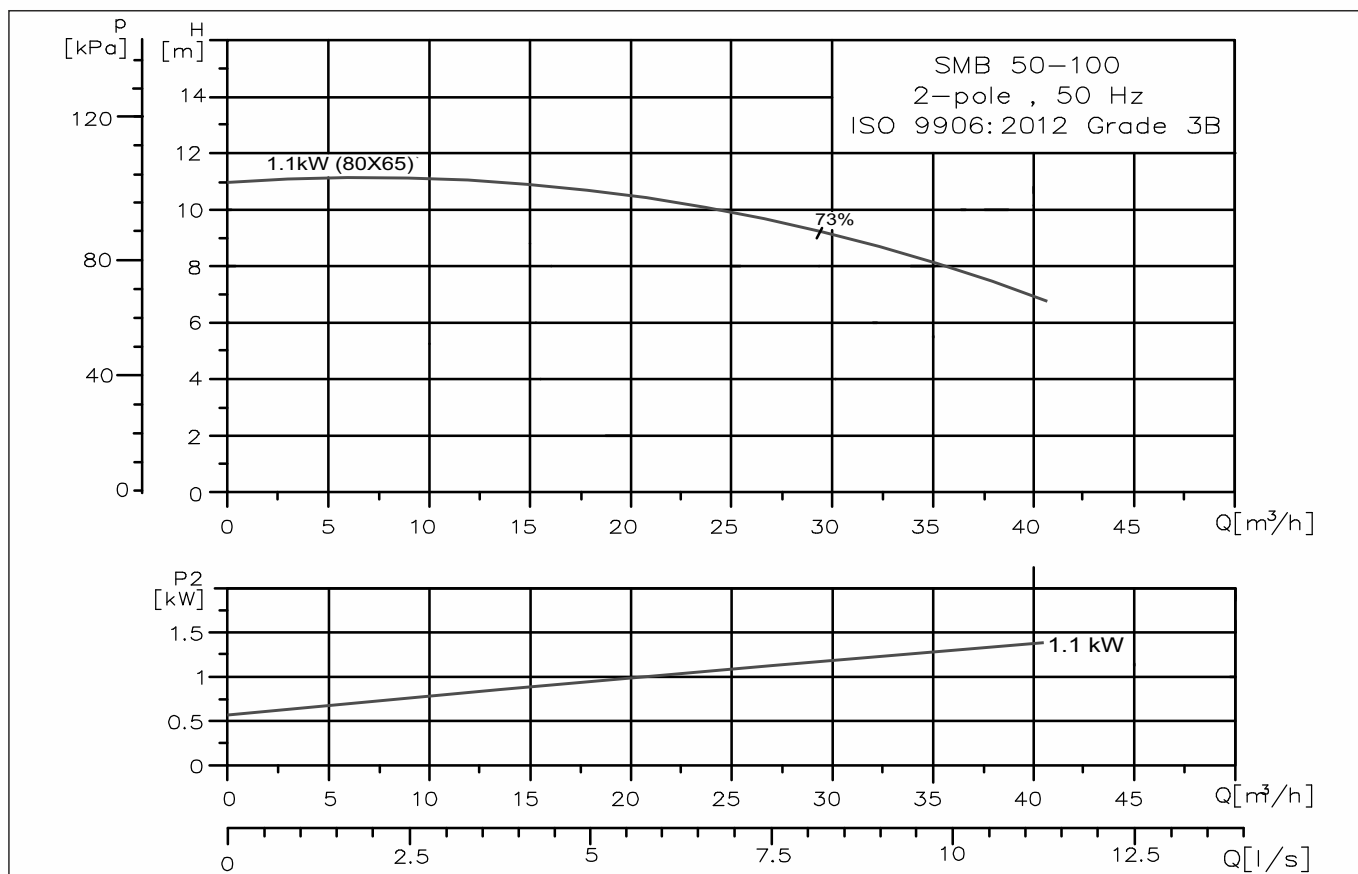
PERFORMANCE TABLE

SNB/SMB CI 40-250 (2 POLE)

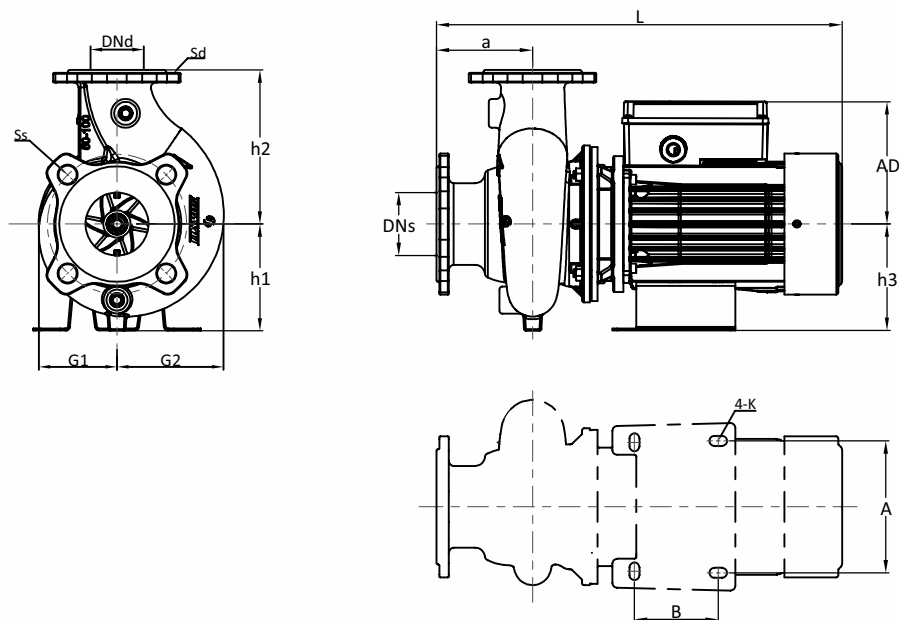
Pump type			40-250		
Motor type	HIGH EFF. MOTOR		SMG 160	SMG 160	SMG 180
COMMON DATA SNB/SMB SS	P ₂	[kW/HP]	15/20	18.5/25	22/30
	PN	[bar]	16	16	16
	DNs	[mm]	65	65	65
	DNd	[mm]	40	40	40
	a	[mm]	100	100	100
	h2	[mm]	225	225	225
	h1	[mm]	180	180	180
	Ss		4x19	4x19	4x19
	Sd		4x19	4x19	4x19
	G1	[mm]	162	162	162
	G2	[mm]	182	182	182
	m1	[mm]	125	125	125
	m2	[mm]	90	90	90
	n1	[mm]	320	320	320
	n2	[mm]	250	250	250
	b	[mm]	65	65	65
	s1	[mm]	M12	M12	M12
SNB SS DATA	AD	[mm]	233	233	242
	h3	[mm]	160	160	180
	A	[mm]	254	254	279
	B	[mm]	254	254	241
	K	[mm]	M12	M12	M12
	L SNB	[mm]	342	342	342
	LB	[mm]	565	565	568
	C	[mm]	108	108	121
	P	[mm]	350	350	350
	NET WT. (APX.)	[kg]	176	217	240
SMB SS DATA	AD	[mm]	233	233	-
	h3	[mm]	160	160	-
	A	[mm]	254	254	-
	B	[mm]	254	254	-
	K	[mm]	M12	M12	-
	L	[mm]	746	746	-
	C	[mm]	192	192	-
	NET WT. (APX.)	[kg]	160	170	-

PERFORMANCE CURVE

SMB CI 50-100 (2 POLE)



[kW / HP] Suc. x Del. Material Code
1.1 / 1.5 : 80 x 65 mm 9000031059 (SMB)



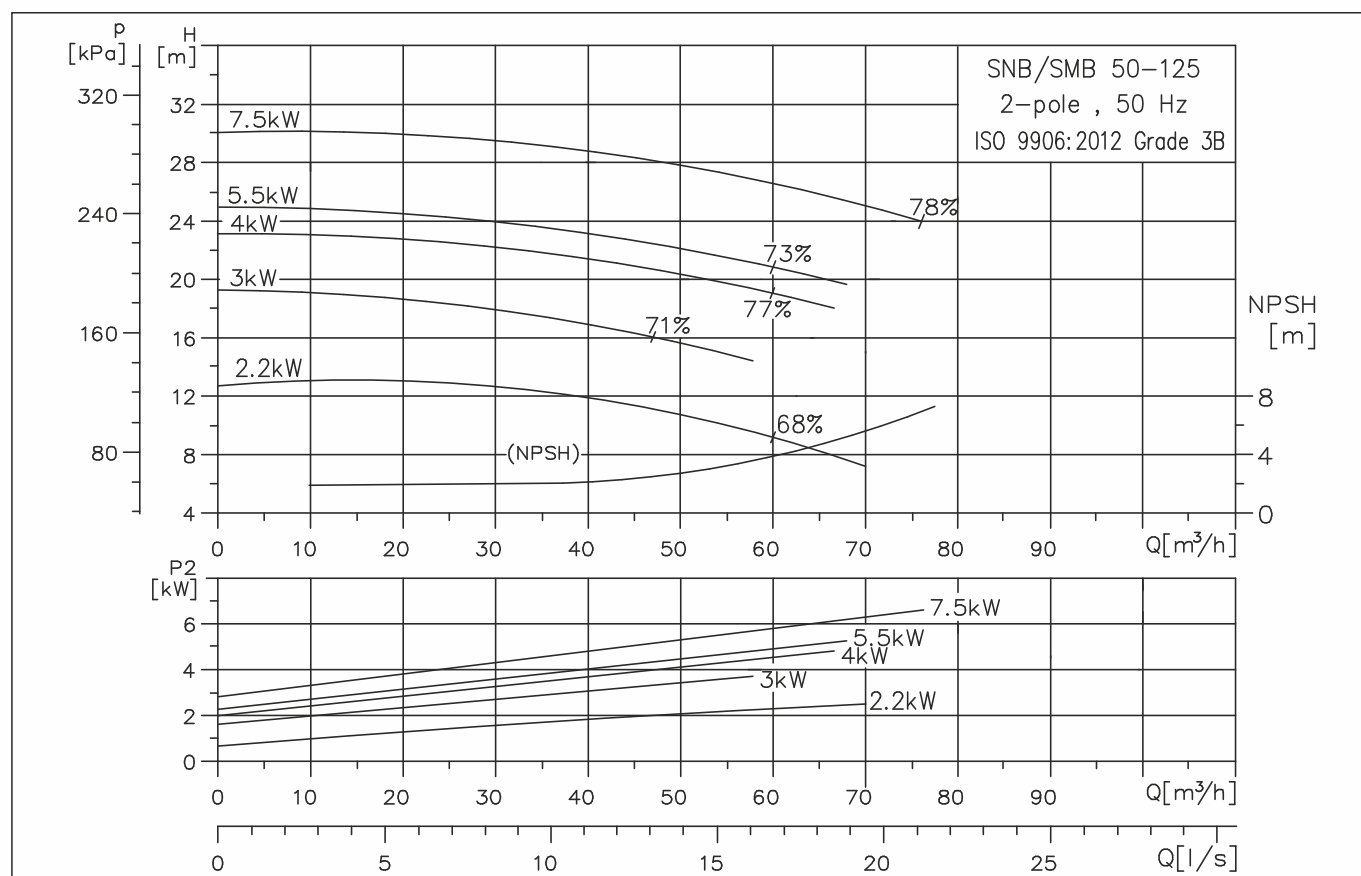
PERFORMANCE TABLE

SMB CI 50-100 (2 POLE)

Pump type			50-100
Motor type	HIGH EFF. MOTOR		SMG 80
SMB CI DATA	P ₂	[kW/HP]	1.1/1.5
	DNs	[mm]	65
	DNd	[mm]	54
	a	[mm]	100
	h ₂	[mm]	160
	h ₁	[mm]	111
	Ss		4x19
	Sd		4x19
	G1	[mm]	81.5
	G2	[mm]	110.5
	AD	[mm]	129
	h ₃	[mm]	111
	A	[mm]	137
	B	[mm]	87
	K	[mm]	4x Slot(10.5x18.5)
	L	[mm]	422
	NET WT. (APX.)	[kg]	20

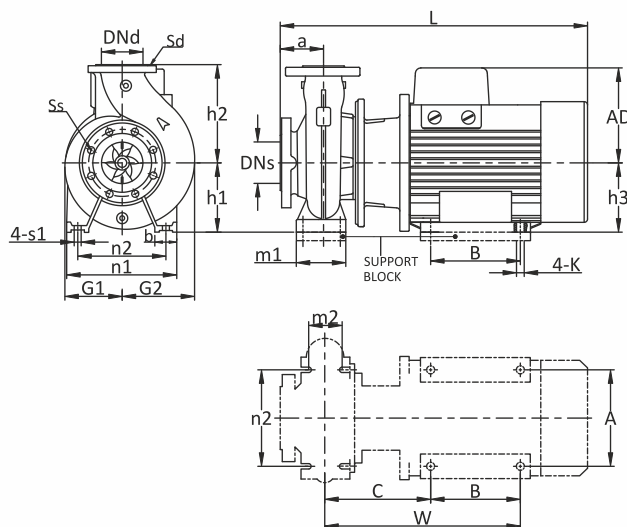
PERFORMANCE CURVE

SNB/SMB CI 50-125 (2 POLE)

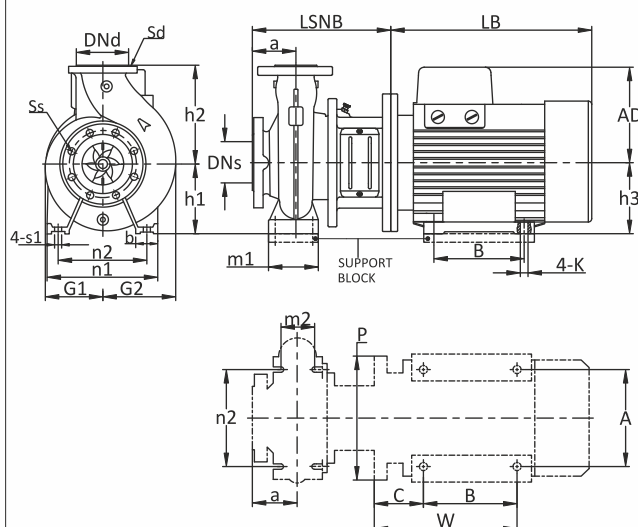


[kW / HP]	Suc. x Del.	Material Code
2.2/ 3.0	: 100 x 100 mm	9000030366 (SMB)
3.0 / 4.0	: 80 x 65 mm	9000019950 (SNB), 9000023357 (SMB)
4 / 5.5	: 80 x 65 mm	9000020961 (SNB), 9000019994 (SMB)
5.5 / 7.5	: 80 x 65 mm	9000022159 (SNB), 9000023358 (SMB)
7.5 / 10.0	: 80 x 65 mm	9000020972 (SNB), 9000019972 (SMB)

SMB CI



SNB CI



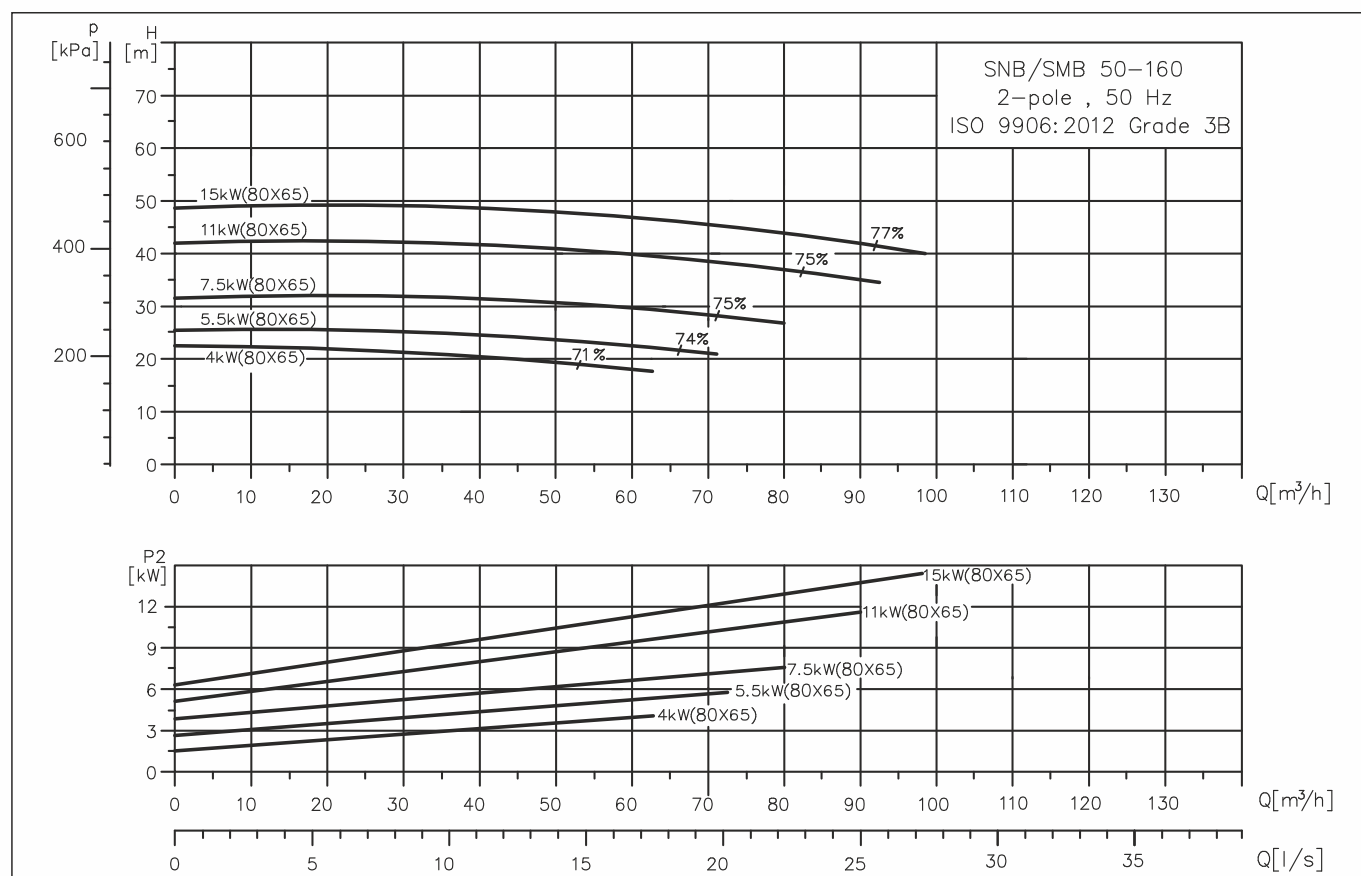
PERFORMANCE TABLE

SNB/SMB CI 50-125 (2 POLE)

Pump type			50-125				
Motor type	HIGH EFF. MOTOR		SMG 90	SMG 100	SMG 100	SMG 132	SMG 132
COMMON DATA SNB/SMB CI	P ₂	[kW/HP]	2.2/3.0	3.0/4.0	4.0/5.5	5.5/7.5	7.5/10
	PN	[bar]	16	16	16	16	16
	DNs	[mm]	70	70	70	70	70
	DNd	[mm]	50	50	50	50	50
	a	[mm]	100	100	100	100	100
	h ₂	[mm]	160	160	160	160	160
	h ₁	[mm]	132	132	132	132	132
	Ss		4x19	4x19	4x19	4x19	4x19
	Sd		4x19	4x19	4x19	4x19	4x19
	G1	[mm]	117	117	117	117	117
	G2	[mm]	130	130	130	130	130
	m1	[mm]	100	100	100	100	100
	m2	[mm]	70	70	70	70	70
	n1	[mm]	240	240	240	240	240
	n2	[mm]	190	190	190	190	190
	b	[mm]	50	50	50	50	50
	s1	[mm]	M12	M12	M12	M12	M12
SNB CI DATA	AD	[mm]	163	170	170	138	138
	h ₃	[mm]	132	112	112	160	160
	A	[mm]	58.4	189	189	195	195
	B	[mm]	-	140	140	120	120
	K	[mm]	2X M8	M12	M12	M12	M12
	L SNB	[mm]	-	273	273	312	312
	LB	[mm]	-	332	332	410	410
	C	[mm]	-	60	60	136	136
	P	[mm]	-	250	250	300	300
SMB CI DATA	NET WT. (APX.)	[kg]	-	77	77	92	93
	AD	[mm]	145	170	170	138	138
	h ₃	[mm]	132	112	112	160	160
	A	[mm]	58.4	189	189	195	195
	B	[mm]	-	140	140	120	120
	K	[mm]	2X M8	M12	M12	M12	M12
	L	[mm]	521	520	520	590	590
	C	[mm]	-	149	149	216	216
	W	[mm]	265	-	-	-	-
SMB CI DATA	NET WT. (APX.)	[kg]	45	67	68	74	74

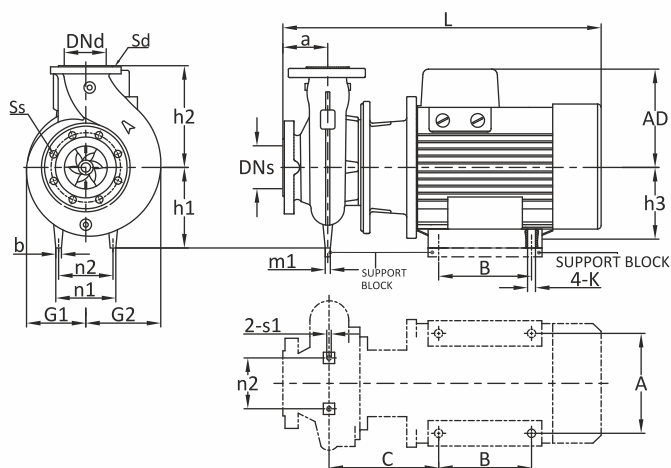
PERFORMANCE CURVE

SNB/SMB SS 50-160 (2 POLE)

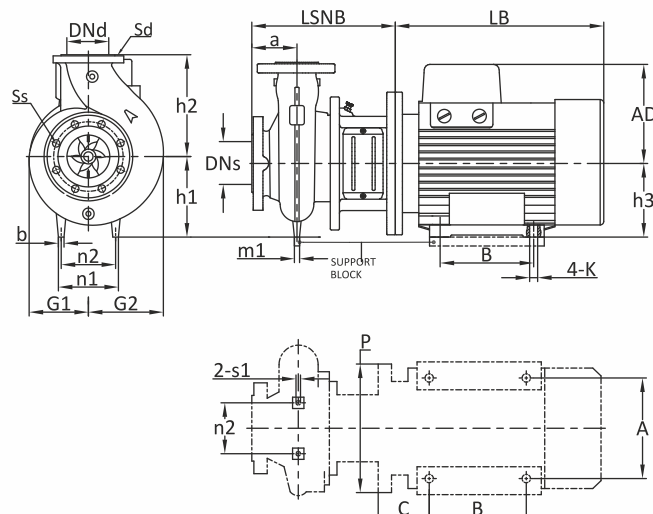


[kW / HP]	Suc. x Del.	Material Code
4.0 / 5.5	80 x 65 mm	9000030136 (SMB)
5.5 / 7.5	80 x 65 mm	9000019123 (SMB)
7.5 / 10.0	80 x 65 mm	9000019128 (SMB)
11.0 / 15.0	80 x 65 mm	9000019133 (SMB)
15.0 / 20.0	80 x 65 mm	9000018824 (SMB), 9000015584 (SNB)

SMB SS



SNB SS



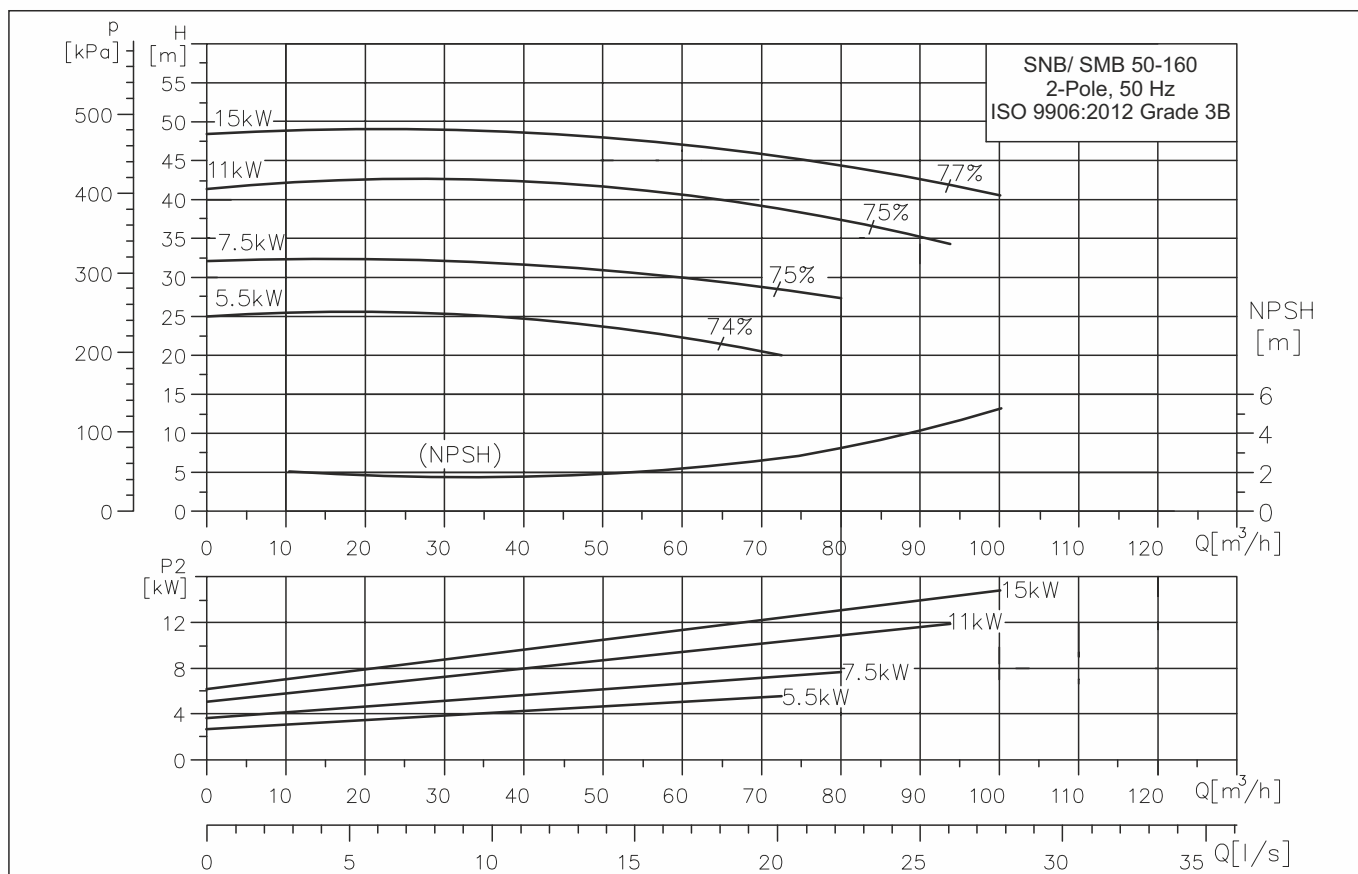
PERFORMANCE TABLE

SNB/SMB SS 50-160 (2 POLE)

Pump type				50-160			
Motor type	HIGH EFF. MOTOR		SMG 100	SMG 132	SMG 132	SMG 160	SMG 160
COMMON DATA SNB/SMB SS	P ₂	[kW/HP]	4/5.5	5.5/7.5	7.5/10	11/15	15/20
	PN	[bar]	16	16	16	16	16
	DNs	[mm]	70	70	70	70	70
	DNd	[mm]	50	50	50	50	50
	a	[mm]	100	100	100	100	100
	h2	[mm]	180	180	180	180	180
	h1	[mm]	153	153	153	153	153
	Ss		4x Slot(19x22)	4x Slot(19x22)	4x Slot(19x22)	4x Slot(19x22)	4x Slot(19x22)
	Sd		4x Slot(19x21)	4x Slot(19x21)	4x Slot(19x21)	4x Slot(19x21)	4x Slot(19x21)
	G1	[mm]	123	123	123	123	123
	G2	[mm]	148	148	148	148	148
	m1	[mm]	18	18	18	18	18
	m2	[mm]	-	-	-	-	-
	n1	[mm]	116	116	116	116	116
	n2	[mm]	98	98	98	98	98
	b	[mm]	18	18	18	18	18
	s1	[mm]	M8	M8	M8	M8	M8
SNB SS DATA	AD	[mm]	-	-	-	-	233
	h3	[mm]	-	-	-	-	160
	A	[mm]	-	-	-	-	254
	B	[mm]	-	-	-	-	254
	K	[mm]	-	-	-	-	M12
	L SNB	[mm]	-	-	-	-	344
	LB	[mm]	-	-	-	-	565
	C	[mm]	-	-	-	-	108
	P	[mm]	-	-	-	-	350
	NET WT. (APX.)	[kg]	-	-	-	-	185
SMB SS DATA	AD	[mm]	170	138	138	199	233
	h3	[mm]	112	160	160	170	160
	A	[mm]	189	195	195	232	254
	B	[mm]	140	120	120	310	254
	K	[mm]	M12	M12	M12	M16	M12
	L	[mm]	522	591	591	693	745
	C	[mm]	150.5	217.5	217.5	141	191
	NET WT. (APX.)	[kg]	60	76	76	145	160

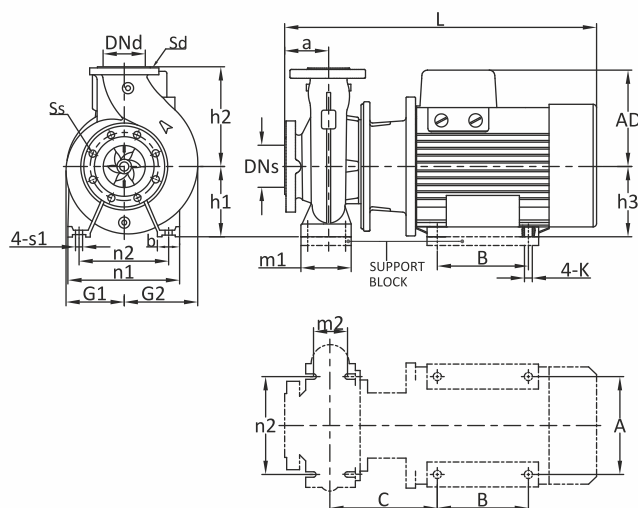
PERFORMANCE CURVE

SNB/SMB CI 50-160 (2 POLE)

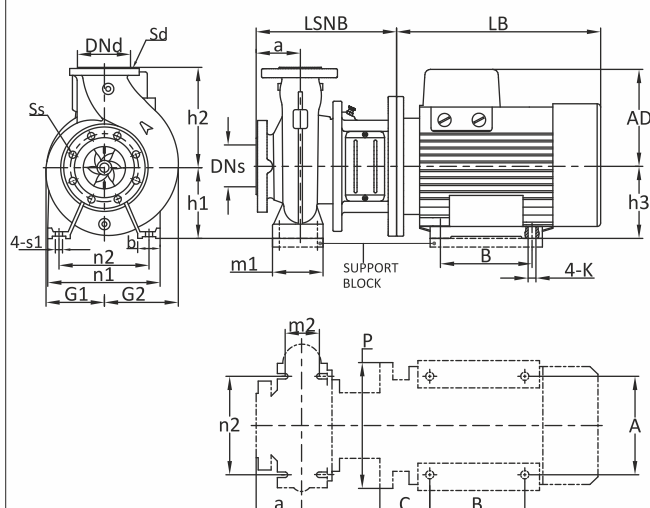


[kW / HP]	Suc. x Del.	Material Code
5.5 / 7.5	: 80 x 65 mm	9000020966 (SNB), 9000019374 (SMB)
7.5 / 10.0	: 80 x 65 mm	9000011595 (SNB), 9000019381 (SMB)
11.0 / 15.0	: 80 x 65 mm	9000011596 (SNB), 9000019387 (SMB)
15.0 / 20.0	: 80 x 65 mm	9000019108 (SNB), 9000019390 (SMB)

SMB CI



SNB CI



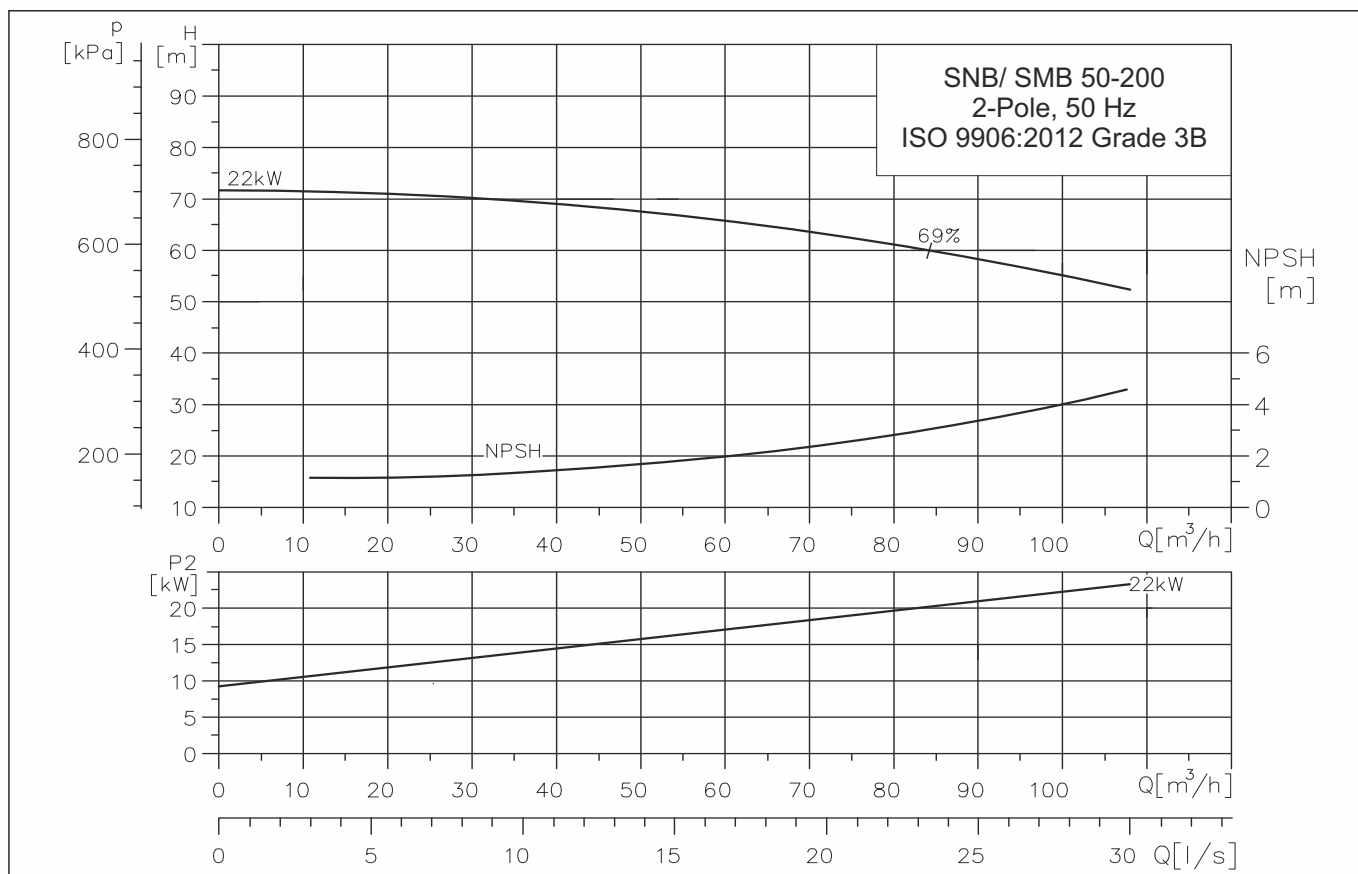
PERFORMANCE TABLE

SNB/SMB CI 50-160 (2 POLE)

Pump type			50-160			
Motor type	HIGH EFF. MOTOR		SMG 132	SMG 132	SMG 160	SMG 160
COMMON DATA SNB/SMB CI	P ₂	[kW/HP]	5.5/7.5	7.5/10	11/15	15/20
	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
	h ₁	[mm]	160	160	160	160
	Ss		4x19	4x19	4x19	4x19
	Sd		4x19	4x19	4x19	4x19
	G1	[mm]	124	124	124	124
	G2	[mm]	150	150	150	150
	m1	[mm]	100	100	100	100
	m2	[mm]	70	70	70	70
	n1	[mm]	265	265	265	265
	n2	[mm]	214.5	214.5	214.5	214.5
	b	[mm]	50	50	50	50
	s1	[mm]	M12	M12	M12	M12
SNB CI DATA	AD	[mm]	138	138	233	233
	h ₃	[mm]	160	160	160	160
	A	[mm]	195	195	254	254
	B	[mm]	120	120	254	254
	K	[mm]	M12	M12	M12	M12
	L SNB	[mm]	312	312	342	342
	LB	[mm]	410	410	565	565
	C	[mm]	136	136	108	108
	P	[mm]	300	300	350	350
	NET WT. (APX.)	[kg]	93	96	170	185
SMB CI DATA	AD	[mm]	138	138	199	233
	h ₃	[mm]	160	160	170	160
	A	[mm]	195	195	232	254
	B	[mm]	120	120	310	254
	K	[mm]	M12	M12	M16	M12
	L	[mm]	590	590	691	603
	C	[mm]	216	216	139	189
	NET WT. (APX.)	[kg]	76	76	145	160

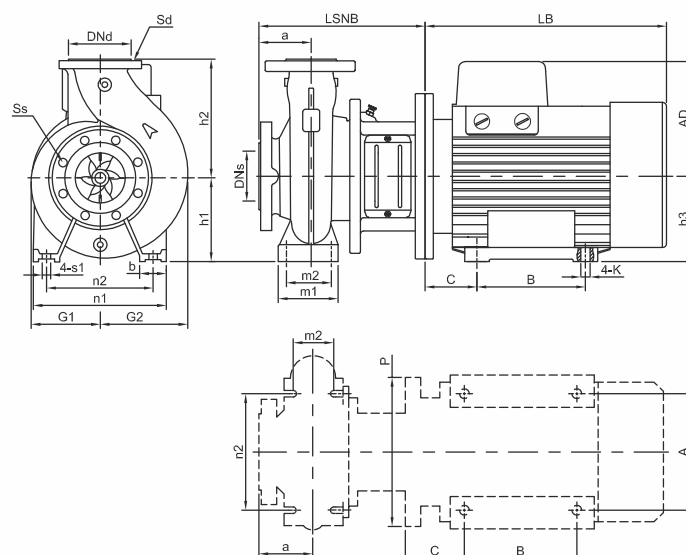
PERFORMANCE CURVE

SNB CI 50-200 (2 POLE)



[kW / HP] Suc. x Del. Material Code
22.0 / 30.0 : 80 x 65 mm 9000023279 (SNB)

SNB CI



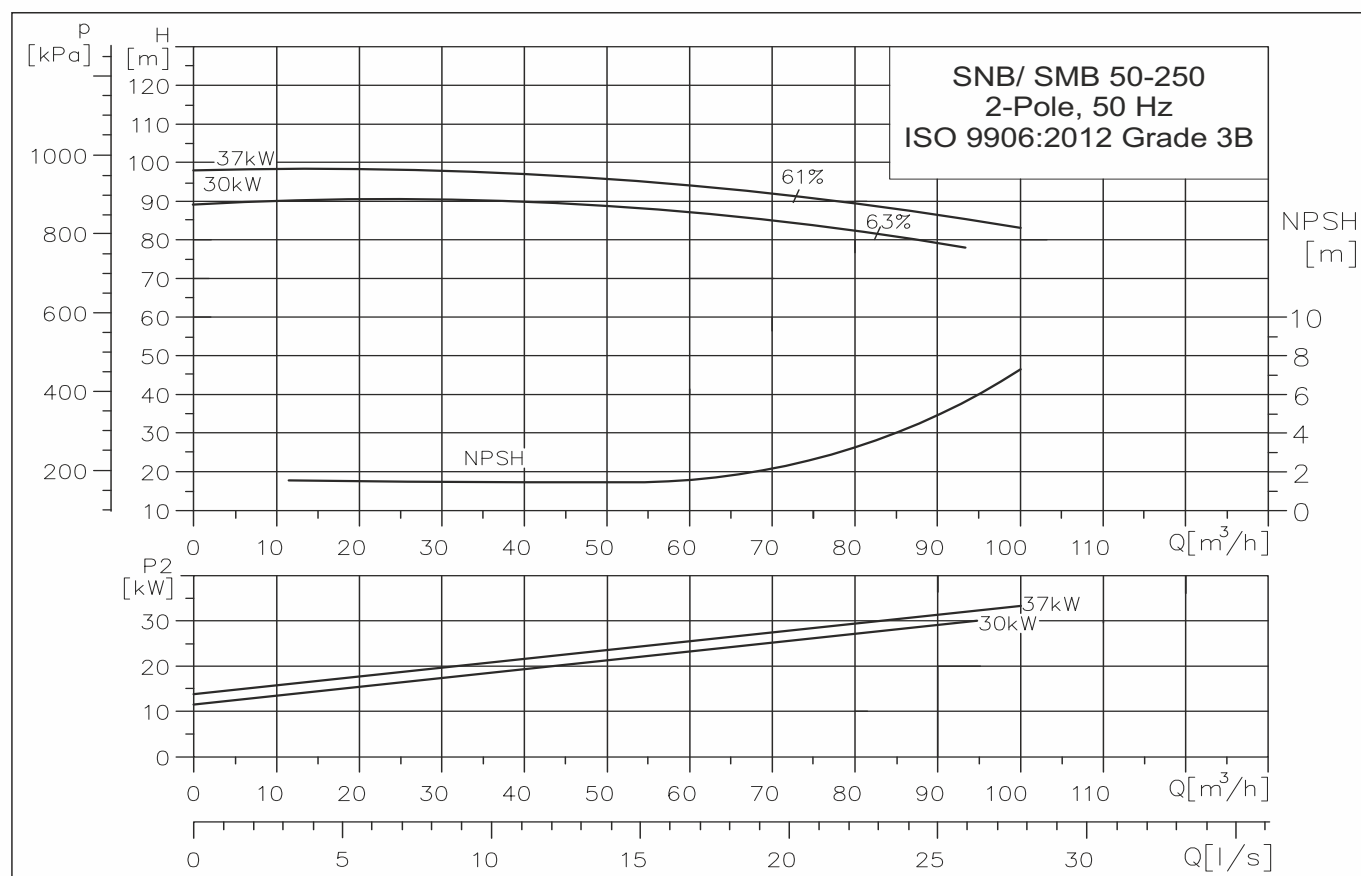
PERFORMANCE TABLE

SNB CI 50-200 (2 POLE)

Pump type		50-200	
Motor type	High Eff.Motor		SMMG 180
SNB CI DATA	P ₂	[kW/HP]	22/30
	PN	[bar]	16
	DNs	[mm]	80
	DNd	[mm]	50
	a	[mm]	120
	h2	[mm]	200
	h1	[mm]	160
	Ss		4x19
	Sd		4x19
	AD	[mm]	236
	G1	[mm]	150
	G2	[mm]	170
	m1	[mm]	100
	m2	[mm]	70
	n1	[mm]	270
	n2	[mm]	212
	b	[mm]	50
	s1	[mm]	M12
	h3	[mm]	180
	A	[mm]	279
	K	[mm]	M12
	B	[mm]	241
	L SNB	[mm]	363
	LB	[mm]	545
	C	[mm]	121
	P	[mm]	350
	NET WT. (APX.)	[kg]	322

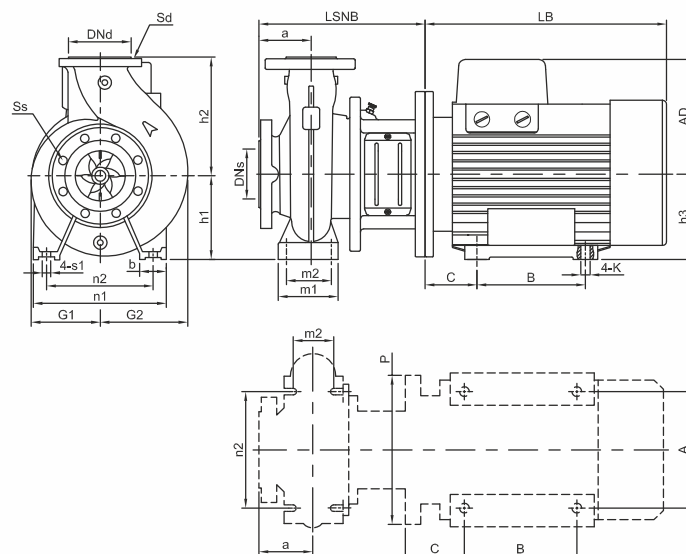
PERFORMANCE CURVE

SNB CI 50-250 (2 POLE)



[kW / HP]	Suc. x Del.	Material Code
30.0 / 40.0	80 x 80 mm	9000023721 (SNB)
37.0 / 50.0	100 x 80 mm	9000023722 (SNB)

SNB CI



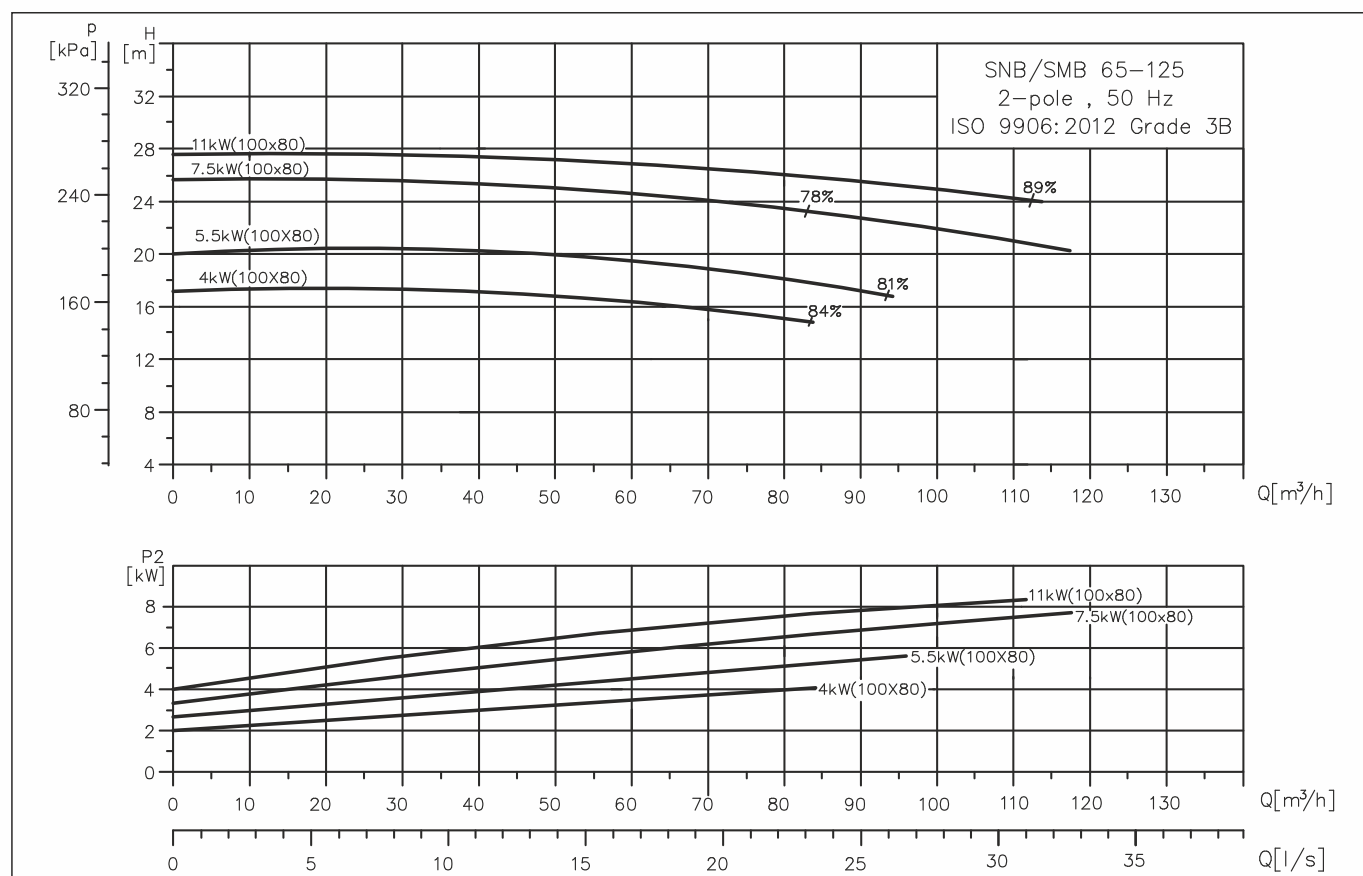
PERFORMANCE TABLE

SNB CI 50-250 (2 POLE)

Pump type		50-250		
Motor type	High Eff.Motor		SMMG 200	SMMG 200
SNB CI DATA	P ₂	[kW/HP]	30/40	37/50
	PN	[bar]	16	16
	DNs	[mm]	65	65
	DNd	[mm]	50	50
	a	[mm]	100	100
	h ₂	[mm]	234	234
	h ₁	[mm]	180	180
	Ss		4x19	4x19
	Sd		4x19	4x19
	AD	[mm]	276	276
	G1	[mm]	170	170
	G2	[mm]	188	188
	m1	[mm]	125	125
	m2	[mm]	95	95
	n1	[mm]	320	320
	n2	[mm]	250	250
	b	[mm]	65	65
	s1	[mm]	M12	M12
	h3	[mm]	200	200
	A	[mm]	318	318
	K	[mm]	M16	M16
	B	[mm]	305	305
	L SNB	[mm]	354	354
	LB	[mm]	650	650
	C	[mm]	133	133
	P	[mm]	400	400
	NET WT. (APX.)	[kg]	366	381

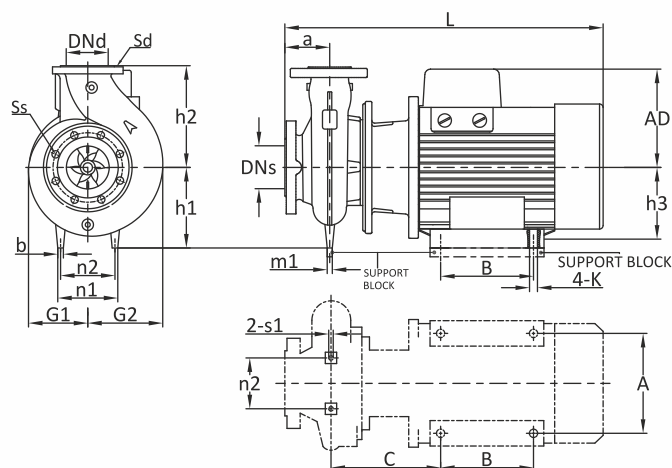
PERFORMANCE CURVE

SNB/SMB SS 65-125 (2 POLE)



[kW / HP]	Suc. x Del.	Material Code
4.0 / 5.5	: 100 x 80 mm	9000019118 (SMB)
5.5 / 7.5	: 100 x 80 mm	9000019124 (SMB)
7.5 / 10.0	: 100 x 80 mm	9000024764 (SMB)
11.0 / 15.0	: 100 x 80 mm	9000019135 (SMB)

SMB SS



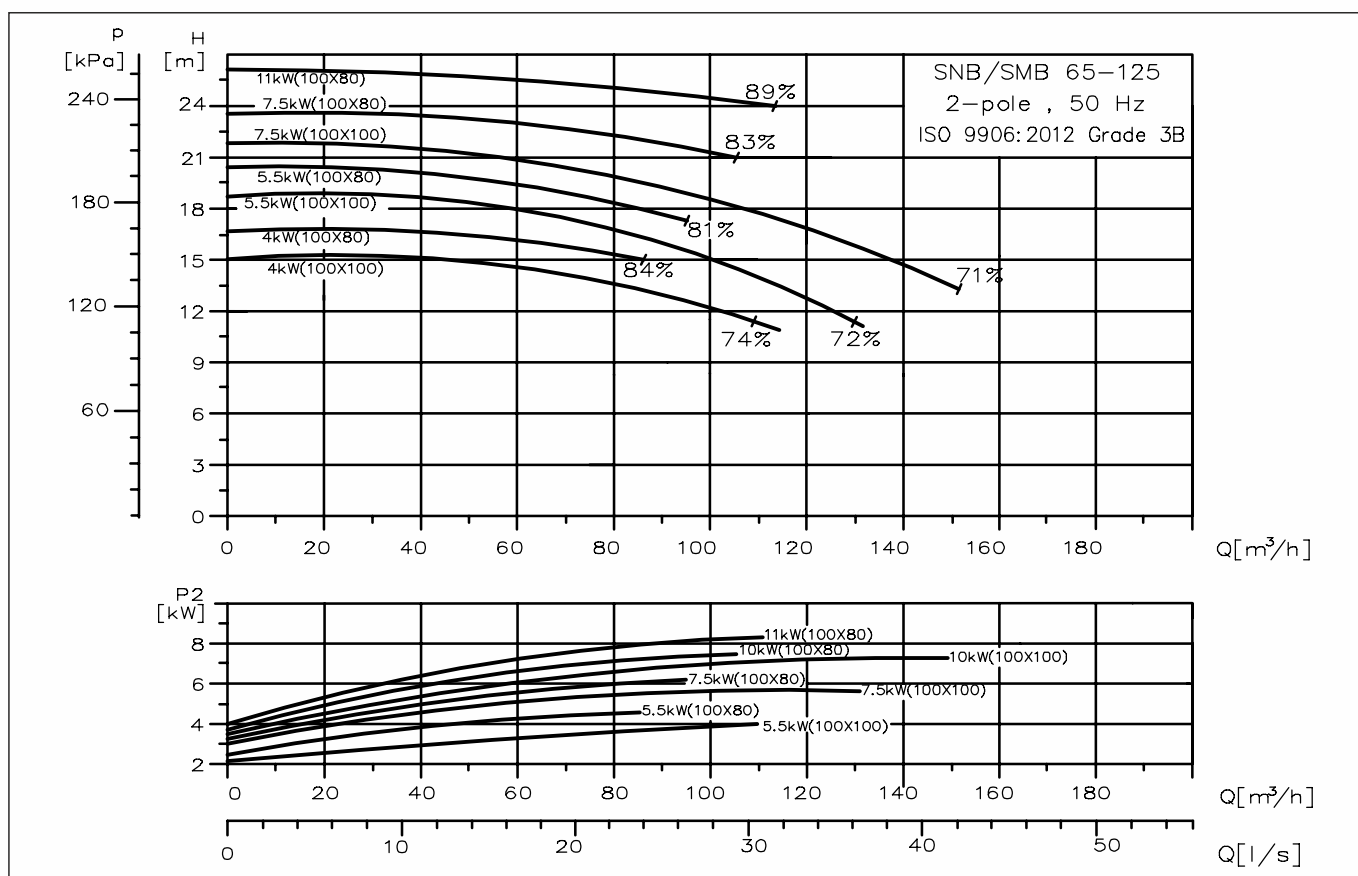
PERFORMANCE TABLE

SNB/SMB SS 65-125 (2 POLE)

Pump type			65-125			
Motor type	HIGH EFF. MOTOR		SMG 100	SMG 132	SMG 132	SMG 160
SMB SS DATA	P ₂	[kW/HP]	4/5.5	5.5/7.5	7.5/10	11/15
	PN	[bar]	16	16	16	16
	DNs	[mm]	92	92	92	92
	DNd	[mm]	65	65	65	65
	a	[mm]	100	100	100	100
	h ₂	[mm]	180	180	180	180
	h ₁	[mm]	160	160	160	160
	Ss		8x Slot(19x23)	8x Slot(19x23)	8x Slot(19x23)	8x Slot(19x23)
	Sd		8x Slot(19x21)	8x Slot(19x21)	8x Slot(19x21)	8x Slot(19x21)
	G1	[mm]	115	115	115	115
	G2	[mm]	145	145	145	145
	m1	[mm]	18	18	18	18
	m2	[mm]	-	-	-	-
	n1	[mm]	116	116	116	116
	n2	[mm]	98	98	98	98
	b	[mm]	18	18	18	18
	s1	[mm]	M8	M8	M8	M8
	AD	[mm]	170	138	138	199
	h3	[mm]	112	160	160	170
	A	[mm]	189	195	195	232
	B	[mm]	140	120	120	310
	K	[mm]	M12	M12	M12	M16
	L	[mm]	523	592	592	694
	C	[mm]	151.5	218.5	218.5	142
	NET WT. (APX.)	[kg]	60	68	69	130

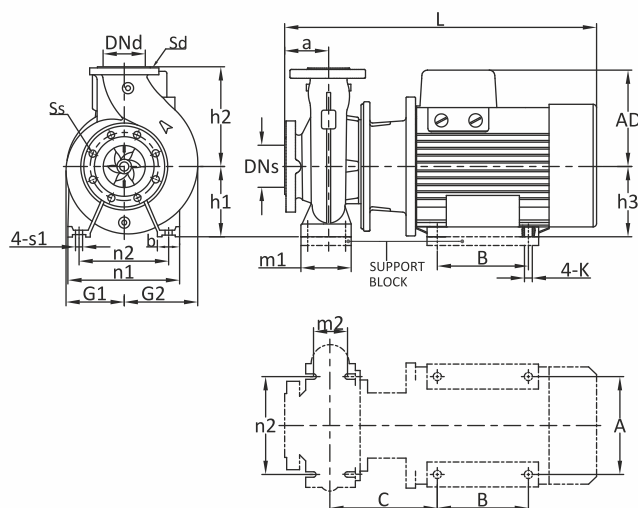
PERFORMANCE CURVE

SNB/SMB CI 65-125 (2 POLE)

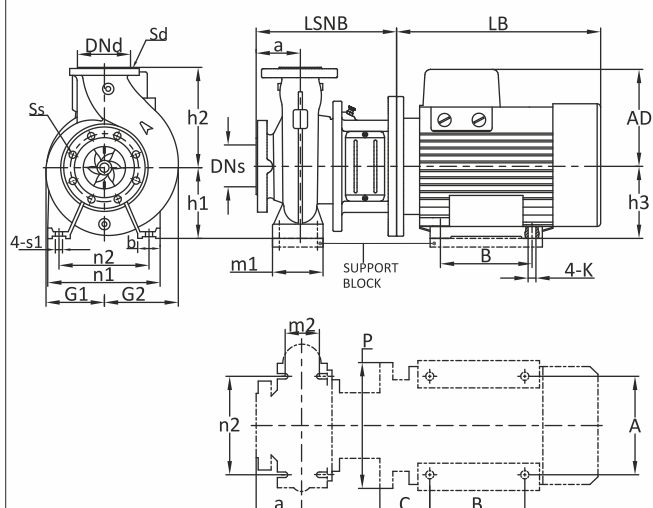


[kW / HP]	Suc. x Del.	Material Code	
4.0 / 5.5	: 100 x 80 mm	9000020962 (SNB), 9000019369 (SMB)	4.0 / 5.5 : 100 x 100 mm 9000030365 (SMB)
5.5 / 7.5	: 100 x 80 mm	9000020967 (SNB), 9000019375 (SMB)	5.5 / 7.5 : 100 x 100 mm 9000030380 (SMB)
7.5 / 10.0	: 100 x 80 mm	9000022163 (SNB), 9000023216 (SMB)	7.5 / 10 : 100 x 100 mm 9000030381 (SMB)
11.0 / 15.0	: 100 x 80 mm	9000023217 (SNB), 9000023219 (SMB)	

SMB CI



SNB CI



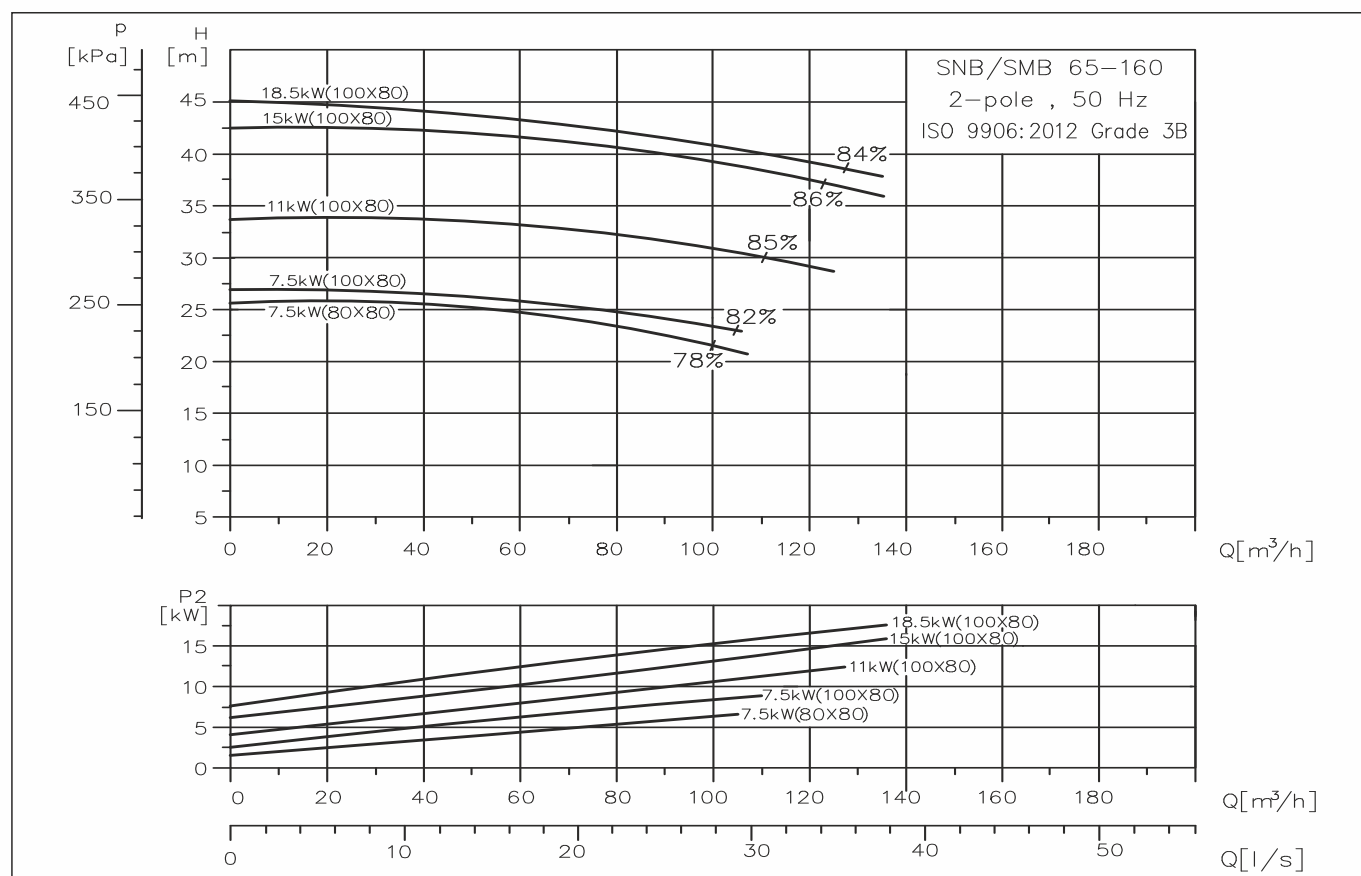
PERFORMANCE TABLE

SNB/SMB CI 65-125 (2 POLE)

Pump type			65-125			
Motor type	HIGH EFF. MOTOR		SMG 100	SMG 132	SMG 132	SMG 160
COMMON DATA SNB/SMB CI	P ₂	[kW/HP]	4/5.5	5.5/7.5	7.5/10	11/15
	PN	[bar]	16	16	16	16
	DNs	[mm]	95	95	95	95
	DNd	[mm]	65	65	65	65
	a	[mm]	100	100	100	100
	h ₂	[mm]	180	180	180	180
	h ₁	[mm]	160	160	160	160
	Ss		8x19	8x19	8x19	8x19
	Sd		4x19	4x19	4x19	4x19
	G1	[mm]	115	115	115	115
	G2	[mm]	145	145	145	145
	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
SNB CI DATA	AD	[mm]	170	138	138	233
	h ₃	[mm]	112	160	160	160
	A	[mm]	189	195	195	254
	B	[mm]	140	120	120	254
	K	[mm]	M12	M12	M12	M12
	L SNB	[mm]	276	315	315	345
	LB	[mm]	332	410	410	565
	C	[mm]	60	136	136	108
	P	[mm]	250	300	300	350
SMB CI DATA	NET WT. (APX.)	[kg]	80	95	96	163
	AD	[mm]	170	138	138	199
	h ₃	[mm]	112	160	160	170
	A	[mm]	189	195	195	232
	B	[mm]	140	120	120	310
	K	[mm]	M12	M12	M12	M16
	L	[mm]	523	592	592	694
	C	[mm]	151.5	218.5	218.5	142
	NET WT. (APX.)	[kg]	60	68	69	130

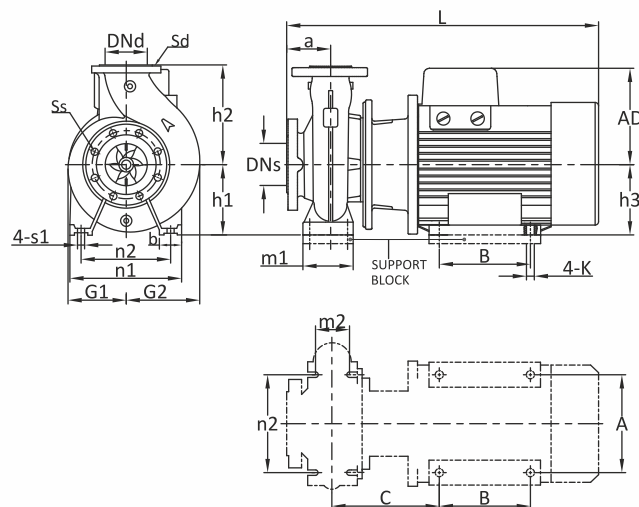
PERFORMANCE CURVE

SNB/SMB SS 65-160 (2 POLE)

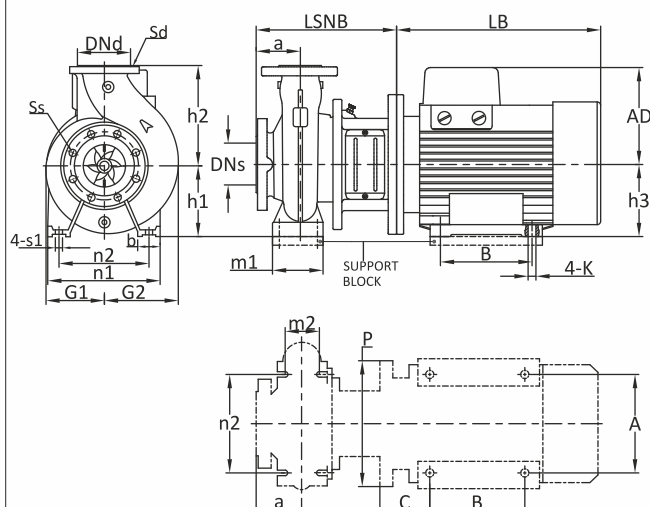


[kW / HP]	Suc. x Del.	Material Code
7.5 / 10.0	80 x 80 mm	9000023264 (SMB)
7.5 / 10.0	100 x 80 mm	9000019129 (SMB)
11.0 / 15.0	100 x 80 mm	9000023265 (SMB)
15.0 / 20.0	100 x 80 mm	9000023262 (SNB), 9000018826 (SMB)
18.5 / 25.0	100 x 80 mm	9000023263 (SNB), 9000019137 (SMB)

SMB SS



SNB SS



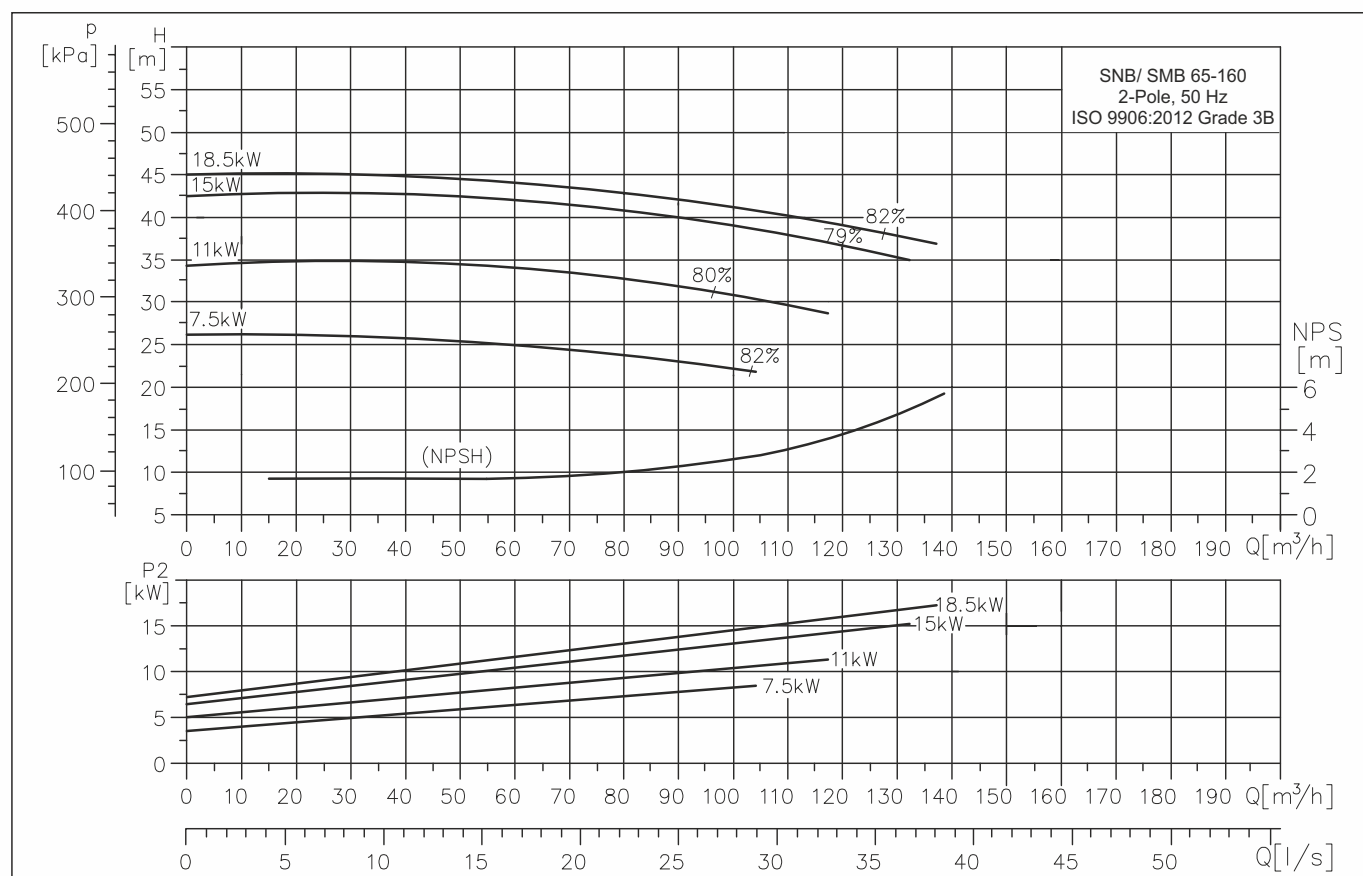
PERFORMANCE TABLE

SNB/SMB SS 65-160 (2 POLE)

Pump type			65-160			
Motor type	HIGH EFF. MOTOR		SMG 132	SMG 160	SMG 160	SMG 160
COMMON DATA SNB/SMB SS	P ₂	[kW/HP]	7.5/10	11/15	15/20	18.5/25
	PN	[bar]	16	16	16	16
	DNs	[mm]	95	95	95	95
	DNd	[mm]	65	65	65	65
	a	[mm]	100	100	100	100
	h ₂	[mm]	200	200	200	200
	h ₁	[mm]	160	160	160	160
	Ss		8x19	8x19	8x19	8x19
	Sd		4x19	4x19	4x19	4x19
	G1	[mm]	127	127	127	127
	G2	[mm]	165	165	165	165
	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
SNB SS DATA	AD	[mm]	-	-	233	233
	h ₃	[mm]	-	-	160	160
	A	[mm]	-	-	254	254
	B	[mm]	-	-	254	254
	K	[mm]	-	-	M12	M12
	L SNB	[mm]	-	-	341	341
	LB	[mm]	-	-	565	565
	C	[mm]	-	-	108	108
	P	[mm]	-	-	350	350
	NET WT. (APX.)	[kg]	-	-	178	220
SMB SS DATA	AD	[mm]	138	199	233	233
	h ₃	[mm]	160	170	160	160
	A	[mm]	195	232	254	254
	B	[mm]	120	310	254	254
	K	[mm]	M12	M16	M12	M12
	L	[mm]	588	690	742	742
	C	[mm]	215	138	188	188
	NET WT. (APX.)	[kg]	74	135	165	180

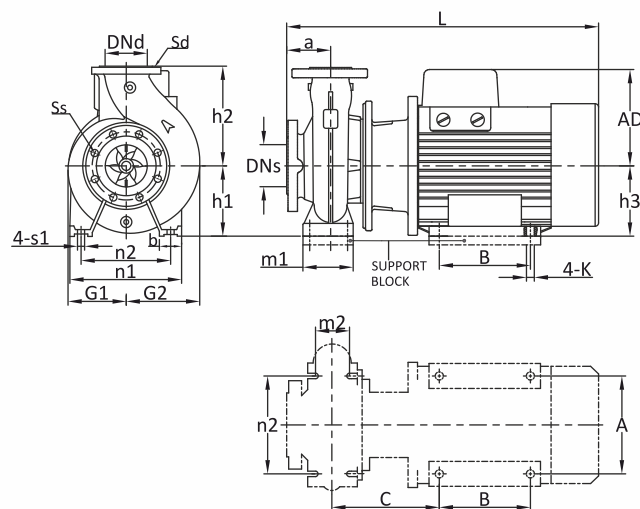
PERFORMANCE CURVE

SNB/SMB CI 65-160 (2 POLE)

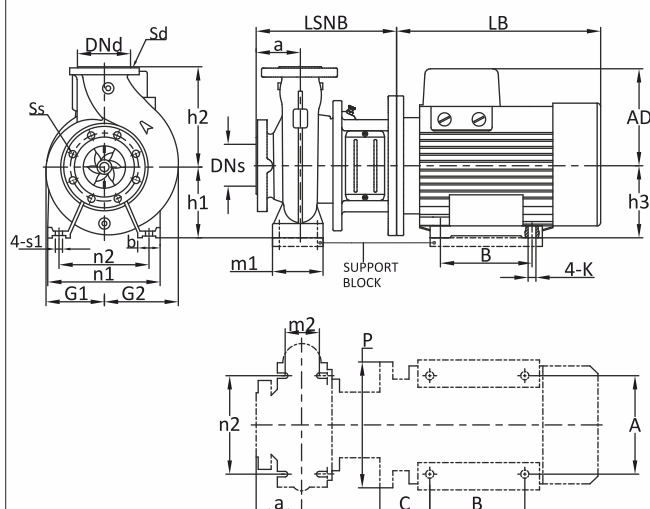


[kW / HP]	Suc. x Del.	Material Code
7.5 / 10.0	100 x 80 mm	9000020971 (SNB), 9000019383 (SMB)
11.0 / 15.0	100 x 80 mm	9000021004 (SNB), 9000019389 (SMB)
15.0 / 20.0	100 x 80 mm	9000021005 (SNB), 9000019394 (SMB)
18.5 / 25.0	100 x 80 mm	9000019983 (SNB), 9000029502 (SMB)

SMB CI



SNB CI



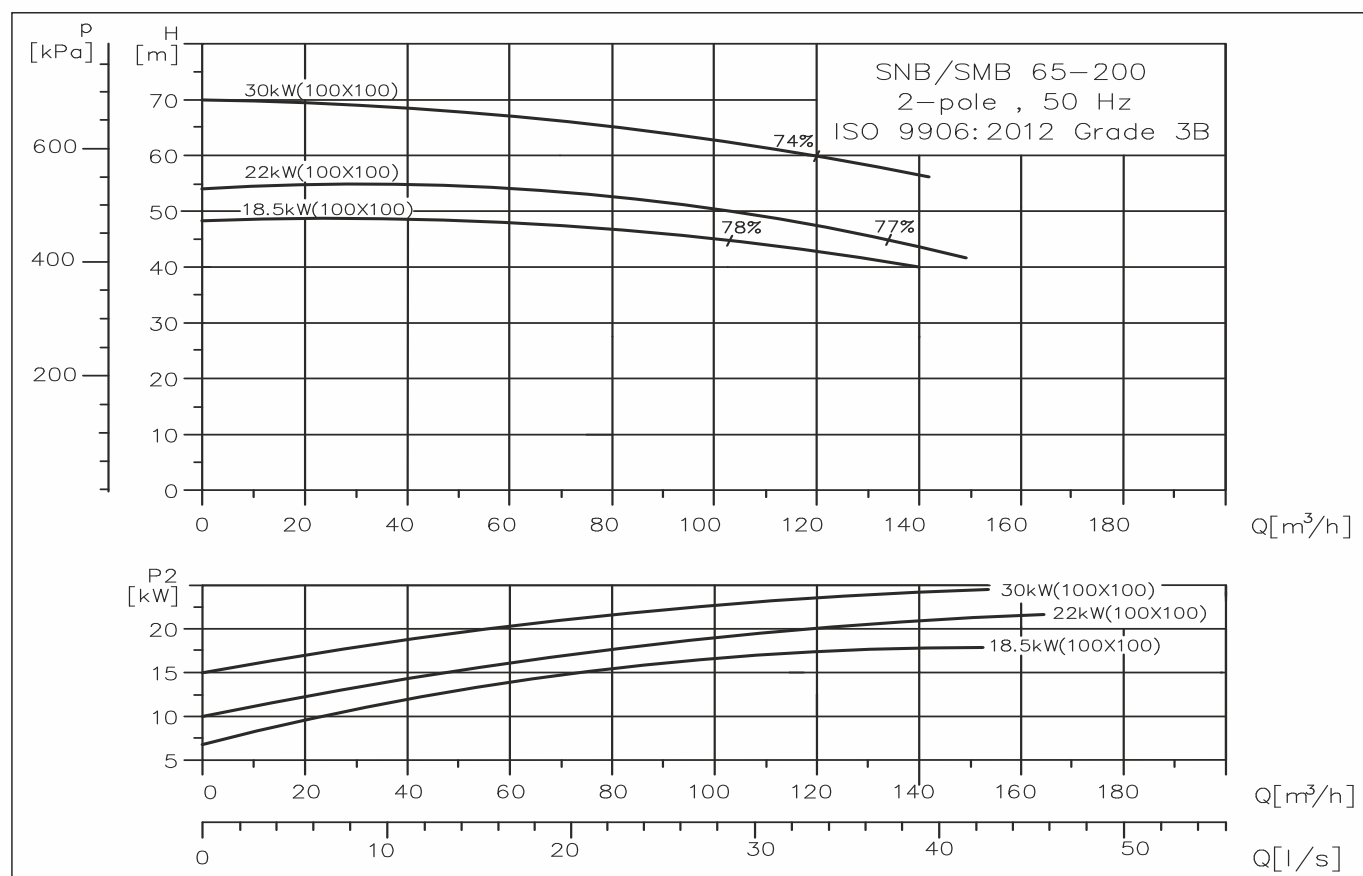
PERFORMANCE TABLE

SNB/SMB CI 65-160 (2 POLE)

Pump type			65-160			
Motor type	HIGH EFF. MOTOR		SMG 132	SMG 160	SMG 160	SMG 160
COMMON DATA SNB/SMB CI	P ₂	[kW/HP]	7.5/10	11/15	15/20	18.5/25
	PN	[bar]	16	16	16	16
	DNs	[mm]	95	95	95	95
	DNd	[mm]	65	65	65	65
	a	[mm]	100	100	100	100
	h ₂	[mm]	200	200	200	200
	h ₁	[mm]	160	160	160	160
	Ss		8x19	8x19	8x19	8x19
	Sd		4x19	4x19	4x19	4x19
	G1	[mm]	128	128	128	128
	G2	[mm]	166	166	166	166
	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
SNB CI DATA	AD	[mm]	138	233	233	233
	h ₃	[mm]	160	160	160	160
	A	[mm]	195	254	254	254
	B	[mm]	120	254	254	254
	K	[mm]	M12	M12	M12	M12
	L SNB	[mm]	311	341	341	341
	LB	[mm]	410	565	565	565
	C	[mm]	136	108	108	108
	P	[mm]	300	350	350	350
	NET WT. (APX.)	[kg]	94	165	178	220
SMB CI DATA	AD	[mm]	138	199	233	233
	h ₃	[mm]	160	170	160	160
	A	[mm]	195	232	254	254
	B	[mm]	120	310	254	254
	K	[mm]	M12	M16	M12	M12
	L	[mm]	588	690	742	742
	C	[mm]	215	138	188	188
	NET WT. (APX.)	[kg]	74	135	165	180

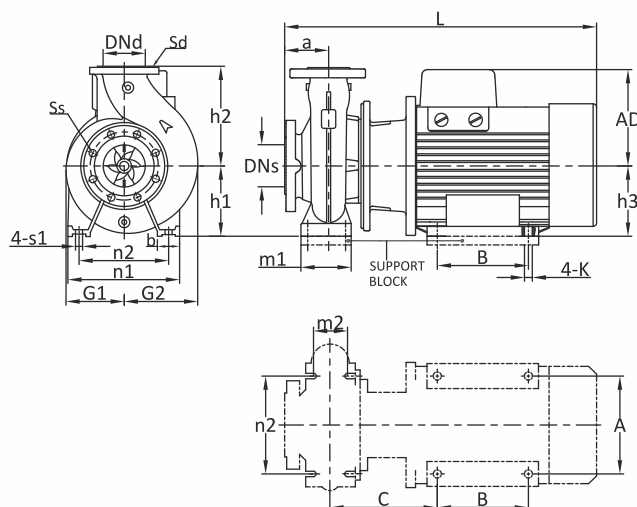
PERFORMANCE CURVE

SNB/SMB SS 65-200 (2 POLE)

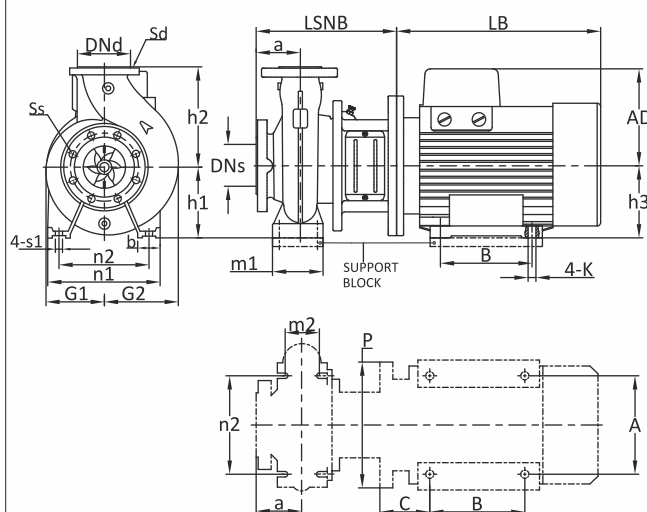


[kW / HP]	Suc. x Del.	Material Code
18.5 / 25.0	100 x 100 mm	9000030191 (SNB), 9000030495 (SMB)
22.0 / 30.0	100 x 100 mm	9000030192 (SNB)
30.0 / 40.0	100 x 100 mm	9000030193 (SNB)

SMB SS



SNB SS



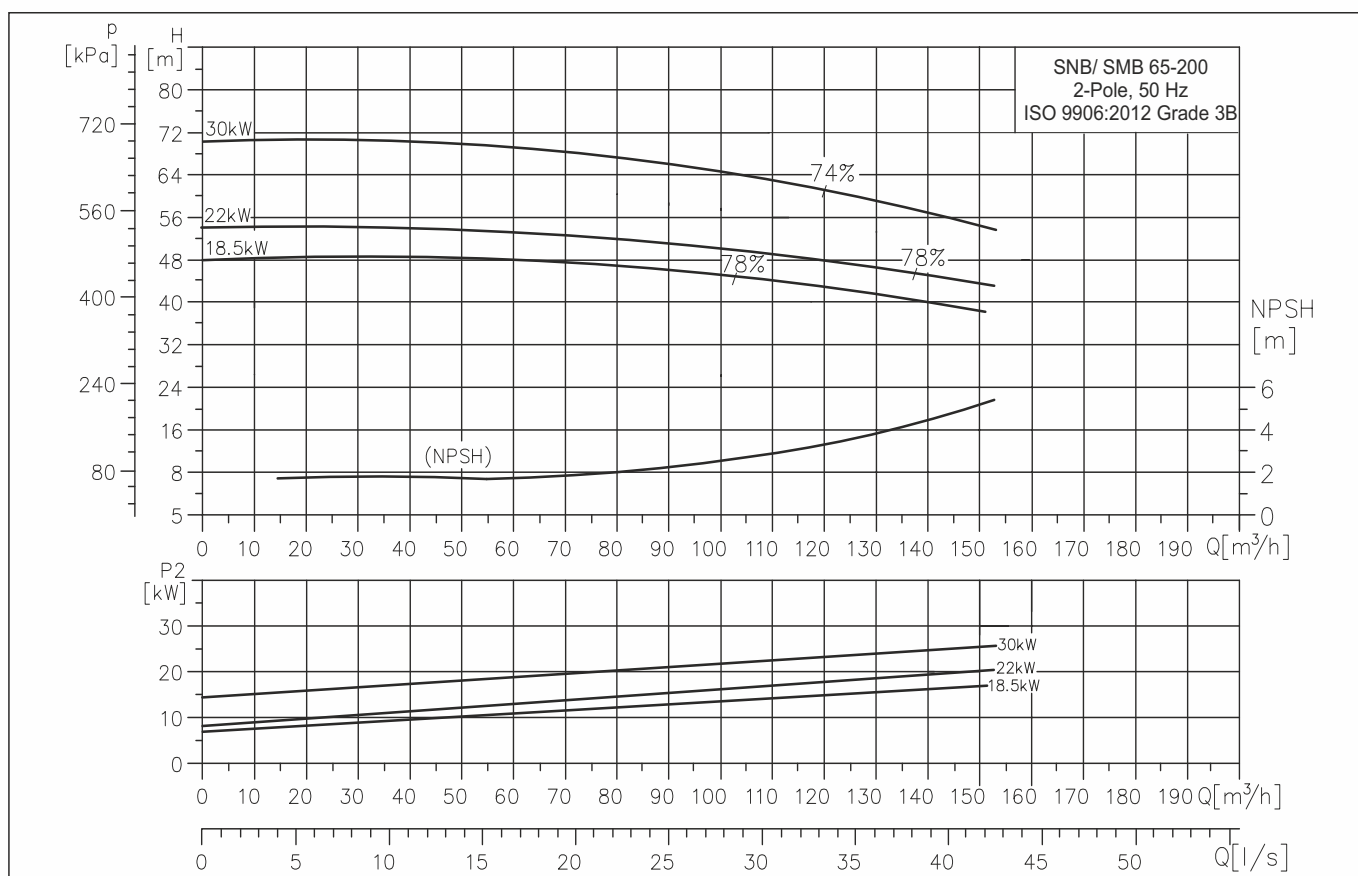
PERFORMANCE TABLE

SNB/SMB SS 65-200 (2 POLE)

Pump type			65-200		
Motor type	HIGH EFF. MOTOR		SMG 160	SMG 180	SMG 200
COMMON DATA SNB/SMB SS	P ₂	[kW/HP]	18.5/25	22/30	30/40
	PN	[bar]	16	16	16
	DNs	[mm]	90	90	90
	DNd	[mm]	65	65	65
	a	[mm]	100	100	100
	h ₂	[mm]	225	225	225
	h ₁	[mm]	180	180	180
	Ss		8x19	8x19	8x19
	Sd		4x19	4x19	4x19
	G1	[mm]	146	146	146
	G2	[mm]	184	184	184
	m1	[mm]	125	125	125
	m2	[mm]	95	95	95
	n1	[mm]	320	320	320
	n2	[mm]	250	250	250
	b	[mm]	65	65	65
	s1	[mm]	M12	M12	M12
SNB SS DATA	AD	[mm]	233	242	276
	h3	[mm]	160	180	200
	A	[mm]	254	279	318
	B	[mm]	254	241	305
	K	[mm]	M12	M12	M16
	L SNB	[mm]	342	342	342
	LB	[mm]	565	568	650
	C	[mm]	108	121	133
	P	[mm]	350	350	400
	NET WT. (APX.)	[kg]	220	246	305
SMB SS DATA	AD	[mm]	233	-	-
	h3	[mm]	160	-	-
	A	[mm]	254	-	-
	B	[mm]	254	-	-
	K	[mm]	M12	-	-
	L	[mm]	743	-	-
	C	[mm]	189	-	-
	NET WT. (APX.)	[kg]	190	-	-

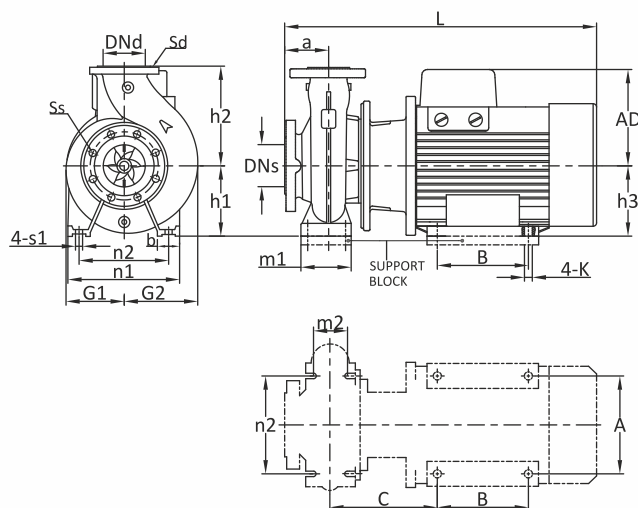
PERFORMANCE CURVE

SNB/SMB CI 65-200 (2 POLE)

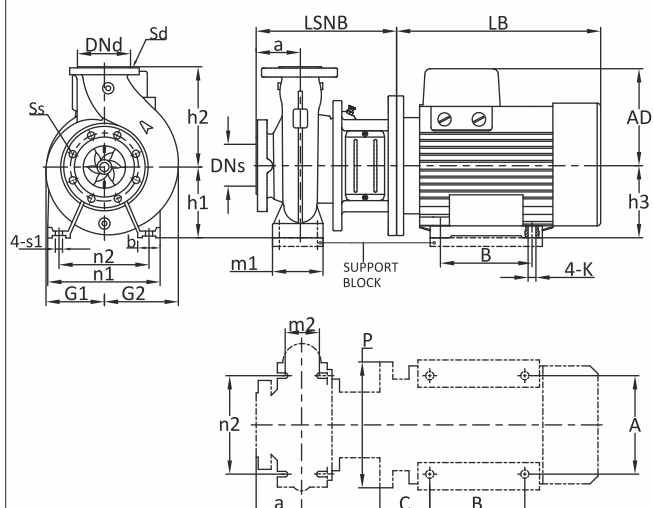


[kW / HP]	Suc. x Del.	Material Code
18.5 / 25.0	100 x 100 mm	9000023449 (SNB), 9000030496 (SMB)
22.0 / 30.0	100 x 100 mm	9000023452 (SNB)
30.0 / 40.0	100 x 100 mm	9000023453 (SNB)

SMB CI



SNB CI



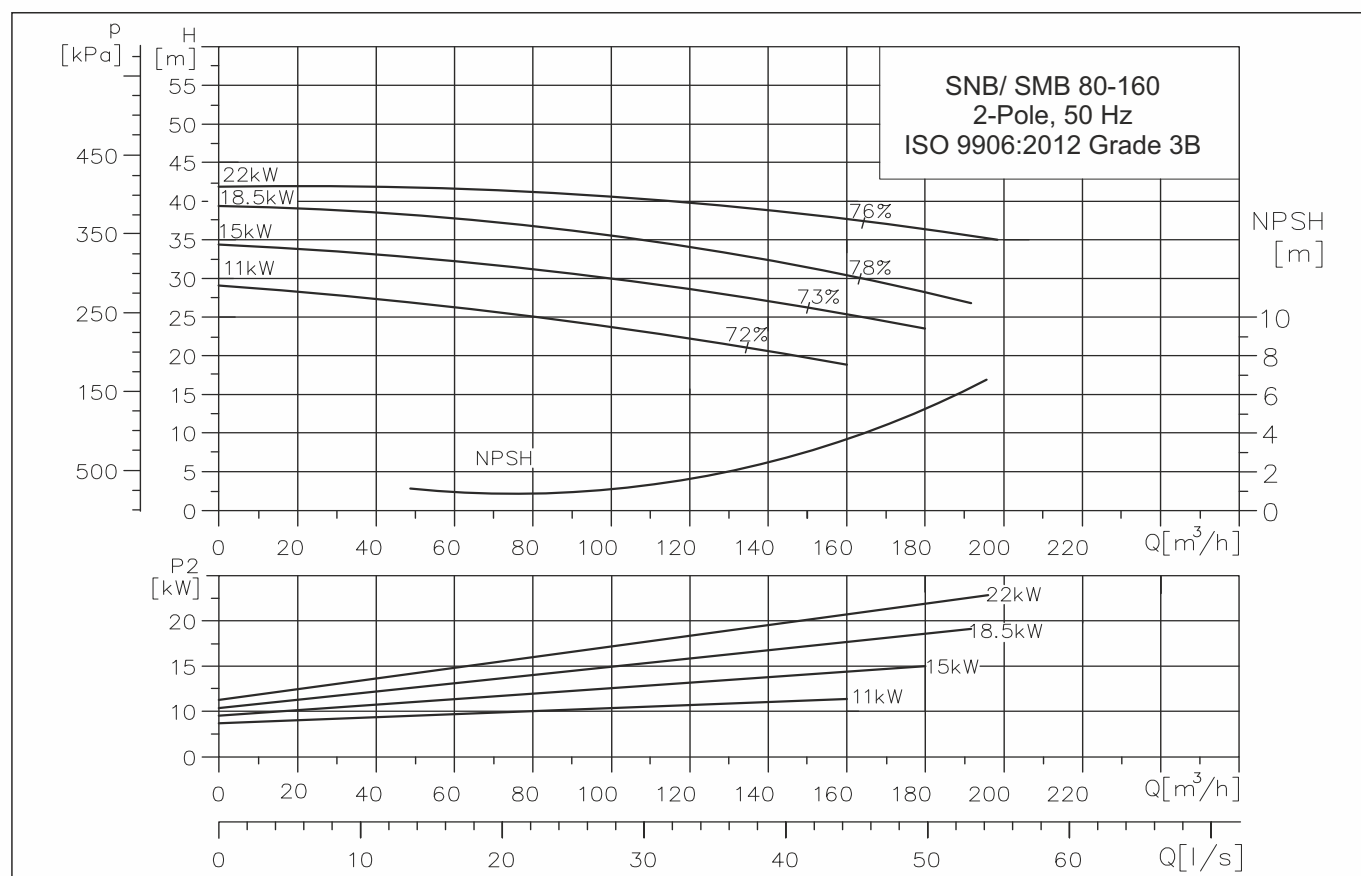
PERFORMANCE TABLE

SNB/SMB CI 65-200 (2 POLE)

Pump type			65-200		
Motor type	HIGH EFF. MOTOR		SMG 160	SMG 180	SMG 200
COMMON DATA SNB/SMB CI	P ₂	[kW/HP]	18.5/25	22/30	30/40
	PN	[bar]	16	16	16
	DNs	[mm]	90	90	90
	DNd	[mm]	65	65	65
	a	[mm]	100	100	100
	h ₂	[mm]	225	225	225
	h ₁	[mm]	180	180	180
	Ss		8x19	8x19	8x19
	Sd		4x19	4x19	4x19
	G1	[mm]	150	150	150
	G2	[mm]	187	187	187
	m1	[mm]	125	125	125
	m2	[mm]	95	95	95
	n1	[mm]	320	320	320
	n2	[mm]	250	250	250
	b	[mm]	65	65	65
	s1	[mm]	M12	M12	M12
SNB CI DATA	AD	[mm]	233	242	276
	h3	[mm]	160	180	200
	A	[mm]	254	279	318
	B	[mm]	254	241	305
	K	[mm]	M12	M12	M16
	L SNB	[mm]	342	342	342
	LB	[mm]	565	568	650
	C	[mm]	108	121	133
	P	[mm]	350	350	400
	NET WT. (APX.)	[kg]	220	246	305
SMB CI DATA	AD	[mm]	233	-	-
	h3	[mm]	160	-	-
	A	[mm]	254	-	-
	B	[mm]	254	-	-
	K	[mm]	M12	-	-
	L	[mm]	743	-	-
	C	[mm]	189	-	-
	NET WT. (APX.)	[kg]	190	-	-

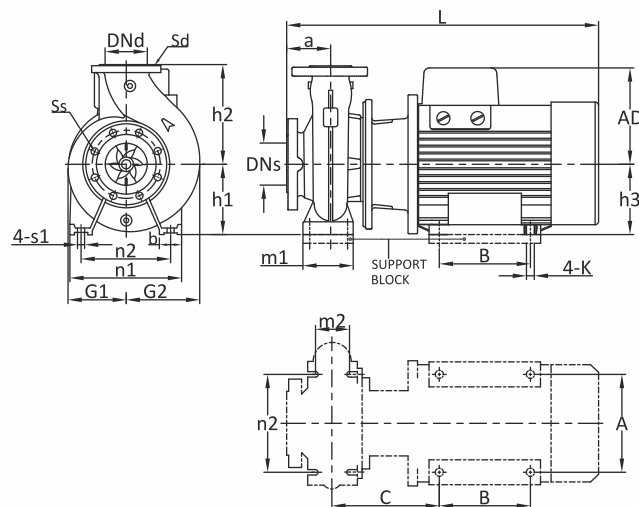
PERFORMANCE CURVE

SNB CI 80-160 (2 POLE)

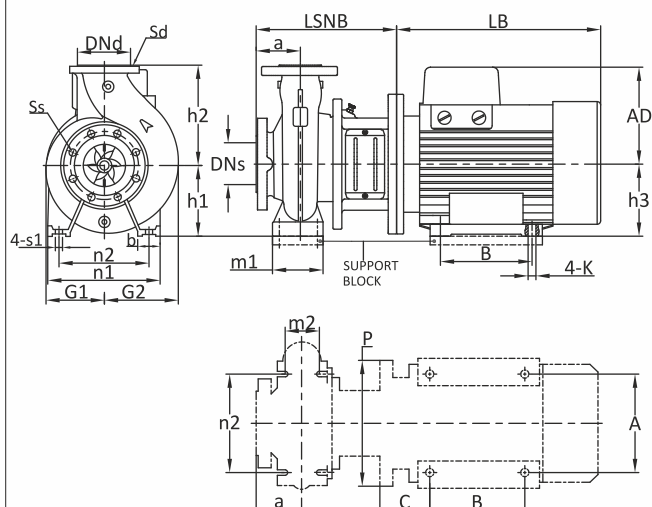


[kW / HP]	Suc. x Del.	Material Code
11.0 / 15.0	125 x 100 mm	9000023563 (SNB)
15.0 / 20.0	125 x 100 mm	9000023549 (SNB), 9000030497 (SMB)
18.5 / 25.0	125 x 100 mm	9000023552 (SNB), 9000030498 (SMB)
22.0 / 30.0	125 x 100 mm	9000023542 (SNB)

SMB CI



SNB CI



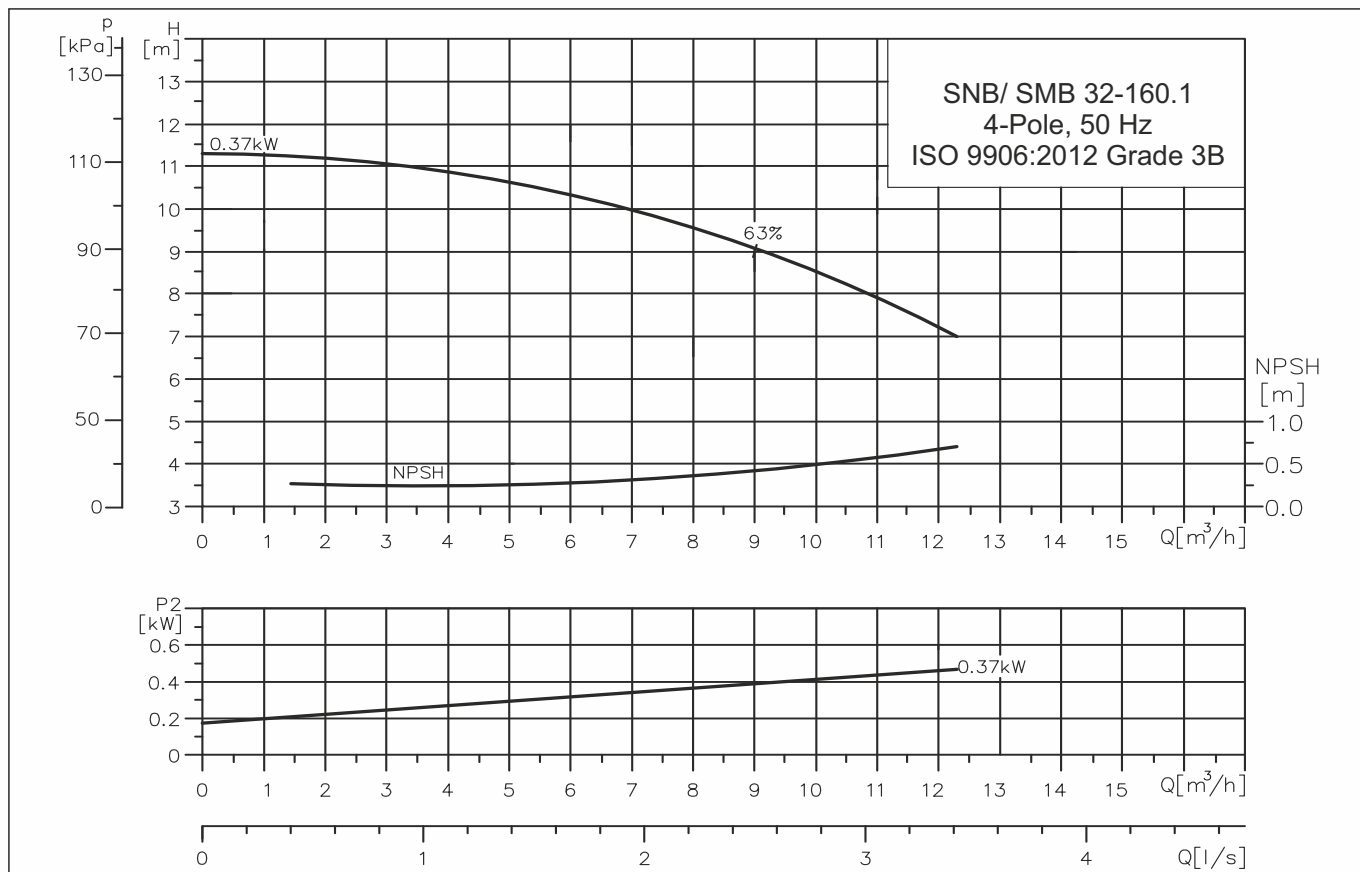
PERFORMANCE TABLE

SNB/SMB CI 80-160 (2 POLE)

Pump type		80-160				
Motor type	HIGH EFF. MOTOR		SMG 160	SMG 160	SMG 160	SMG 180
COMMON DATA SNB/SMB CI	P ₂	[kW/HP]	11/15	15/20	18.5/25	22/30
	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
	h ₁	[mm]	180	180	180	180
	Ss		8x19	8x19	8x19	8x19
	Sd		8x19	8x19	8x19	8x19
	G1	[mm]	141	141	141	141
	G2	[mm]	187	187	187	187
	m1	[mm]	135	135	135	135
	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
SNB CI DATA	AD	[mm]	233	233	233	242
	h ₃	[mm]	160	160	160	180
	A	[mm]	254	254	254	279
	B	[mm]	254	254	254	241
	K	[mm]	M12	M12	M12	M12
	L SNB	[mm]	368	368	368	368
	LB	[mm]	565	565	565	568
	C	[mm]	108	108	108	121
	P	[mm]	350	350	350	350
	NET WT. (APX.)	[kg]	174	182	202	226
SMB CI DATA	AD	[mm]	-	233	233	-
	h ₃	[mm]	-	160	160	-
	A	[mm]	-	254	254	-
	B	[mm]	-	254	254	-
	K	[mm]	-	M12	M12	-
	L	[mm]	-	769	769	-
	C	[mm]	-	190	190	-
	NET WT. (APX.)	[kg]	-	153	170	-

PERFORMANCE CURVE

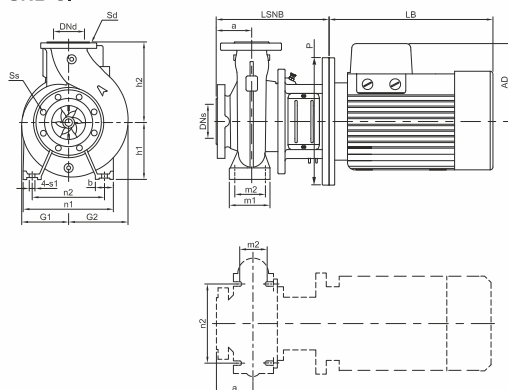
SNB 32-160.1 (4 POLE)



Recommended suction x delivery pipe size :

[kW / H.P.] 0.37/0.5 : 50 x 40 mm

SNB CI



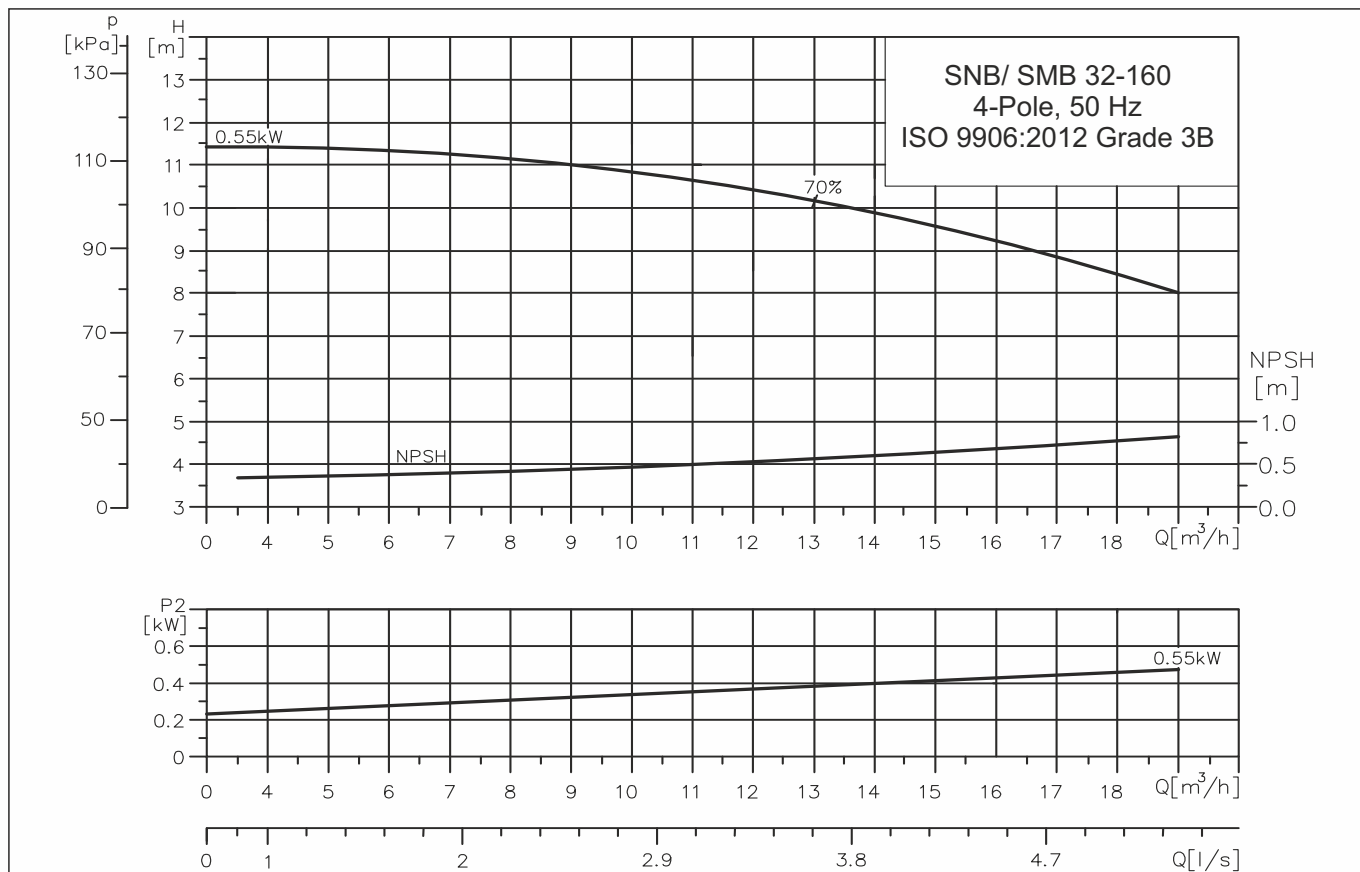
PERFORMANCE TABLE

SNB 32-160.1 (4 POLE)

Pump type		32-160.1	
Motor type	High Eff.Motor		SMG 71
SNB CI DATA	P ₂	[kW/HP]	0.37/0.5
	PN	[bar]	16
	DNs	[mm]	50
	DNd	[mm]	32
	a	[mm]	80
	h ₂	[mm]	160
	h ₁	[mm]	132
	Ss		4x19
	Sd		4x19
	G1	[mm]	120
	G2	[mm]	123
	m1	[mm]	100
	m2	[mm]	70
	n1	[mm]	240
	n2	[mm]	190
	b	[mm]	50
	s1	[mm]	M12
	L SNB	[mm]	201
	LB	[mm]	210
	P	[mm]	160
	AD	[mm]	107
	NET WT. (APX.)	[kg]	32
	GROSS WT. (APX.)	[kg]	38

PERFORMANCE CURVE

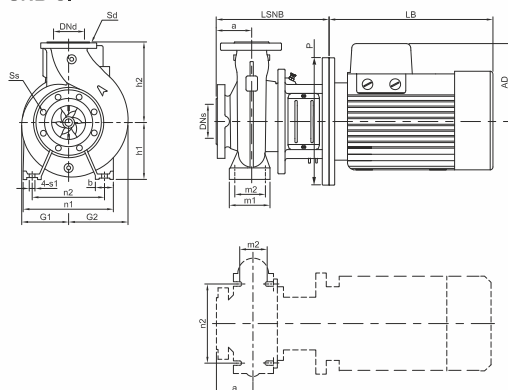
SNB 32-160 (4 POLE)



Recommended suction x delivery pipe size :

[kW / H.P.] 0.55/0.75 : 50 x 50 mm

SNB CI



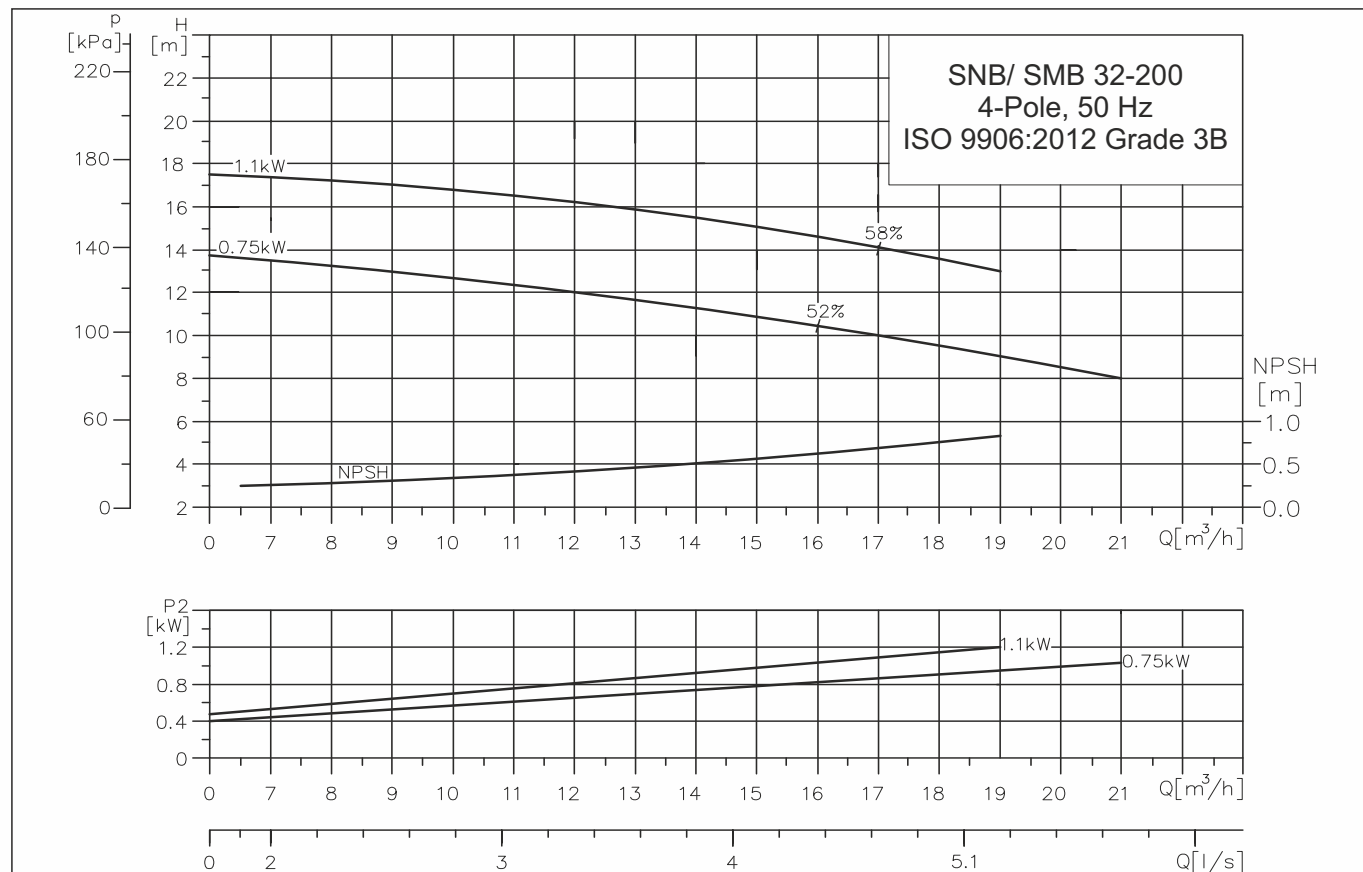
PERFORMANCE TABLE

SNB 32-160 (4 POLE)

Pump type		32-160	
Motor type	High Eff.Motor		SMG 80
SNB CI DATA	P ₂	[kW/HP]	0.55/0.75
	PN	[bar]	16
	DNs	[mm]	50
	DNd	[mm]	32
	a	[mm]	80
	h2	[mm]	160
	h1	[mm]	132
	Ss		4x19
	Sd		4x19
	G1	[mm]	115
	G2	[mm]	125
	m1	[mm]	100
	m2	[mm]	70
	n1	[mm]	240
	n2	[mm]	190
	b	[mm]	50
	s1	[mm]	M12
	L SNB	[mm]	212
	LB	[mm]	242
	P	[mm]	200
	AD	[mm]	125
	NET WT. (APX.)	[kg]	32
	GROSS WT. (APX.)	[kg]	38

PERFORMANCE CURVE

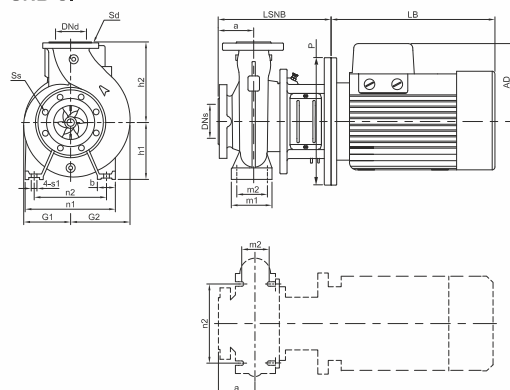
SNB 32-200 (4 POLE)



Recommended suction x delivery pipe size :

[kW / H.P.] 0.75/1.0 : 50 x 50 mm
[kW / H.P.] 1.1/1.5 : 50 x 50 mm

SNB CI



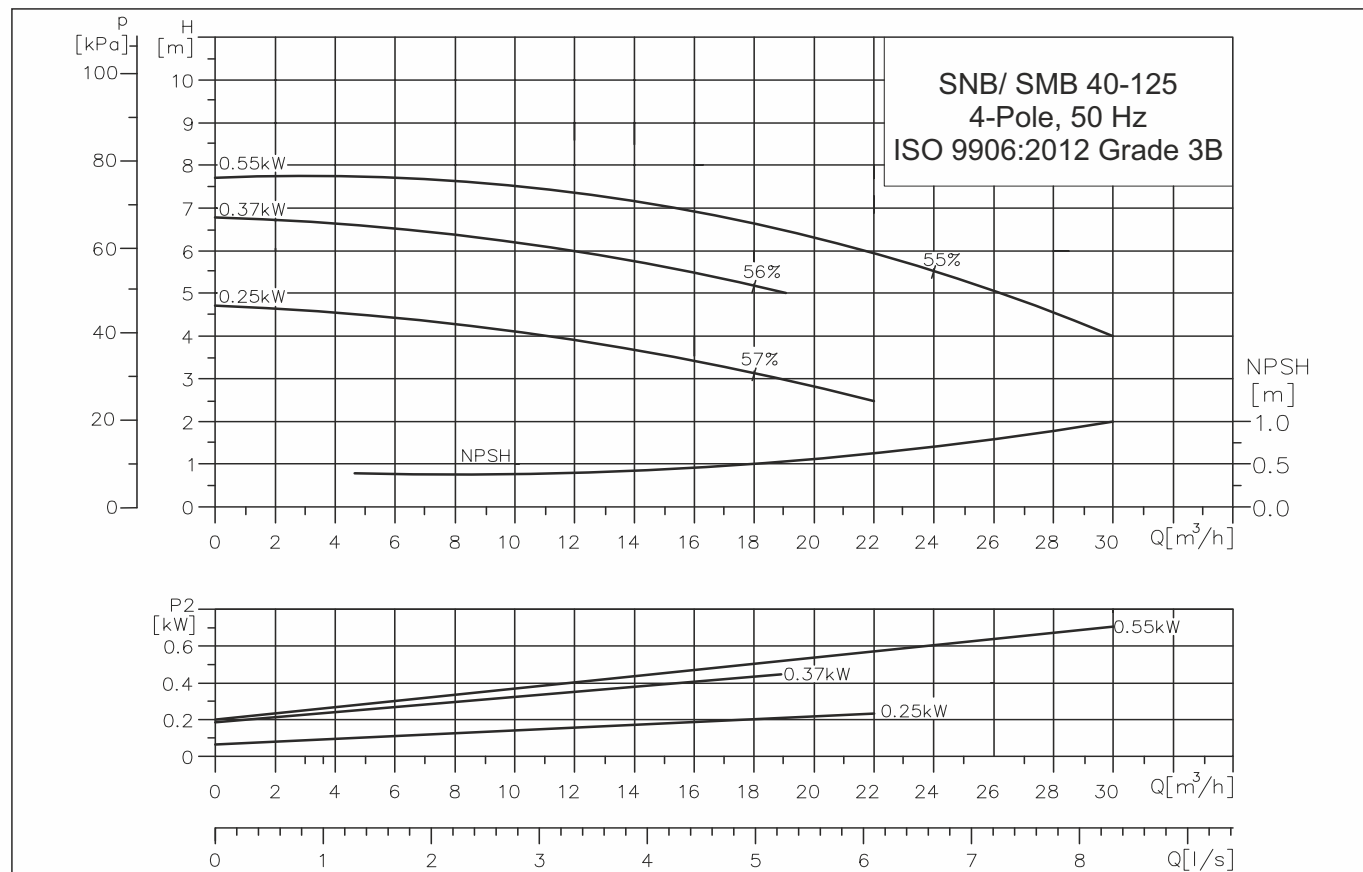
PERFORMANCE TABLE

SNB 32-200 (4 POLE)

Pump type		32-200		
Motor type	High Eff.Motor		SMG 80	SMG 90S
SNB CI DATA	P ₂	[kW/HP]	0.75/1.0	1.1/1.5
	PN	[bar]	16	16
	DNs	[mm]	50	50
	DNd	[mm]	32	32
	a	[mm]	80	80
	h ₂	[mm]	180	180
	h ₁	[mm]	160	160
	Ss		4x19	4x19
	Sd		4x19	4x19
	G1	[mm]	134	134
	G2	[mm]	145	145
	m1	[mm]	100	100
	m2	[mm]	70	70
	n1	[mm]	240	240
	n2	[mm]	190	190
	b	[mm]	50	50
	s1	[mm]	M12	M12
	L SNB	[mm]	229	242
	LB	[mm]	242	269
	P	[mm]	200	200
	AD	[mm]	125	133
	NET WT. (APX.)	[kg]	40	45
	GROSS WT. (APX.)	[kg]	36	51

PERFORMANCE CURVE

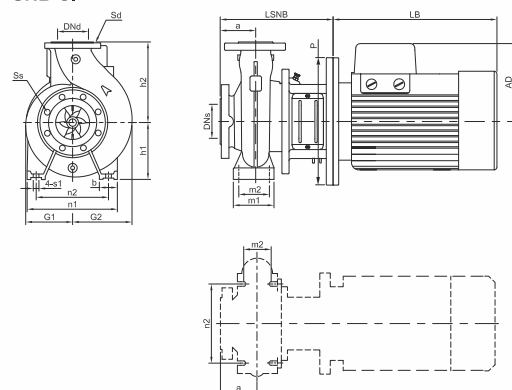
SNB 40-125 (4 POLE)



Recommended suction x delivery pipe size :

[kW / H.P.] 0.25/0.30	: 65 x 65 mm
[kW / H.P.] 0.37/0.50	: 65 x 65 mm
[kW / H.P.] 0.55/0.75	: 65 x 65 mm

SNB CI



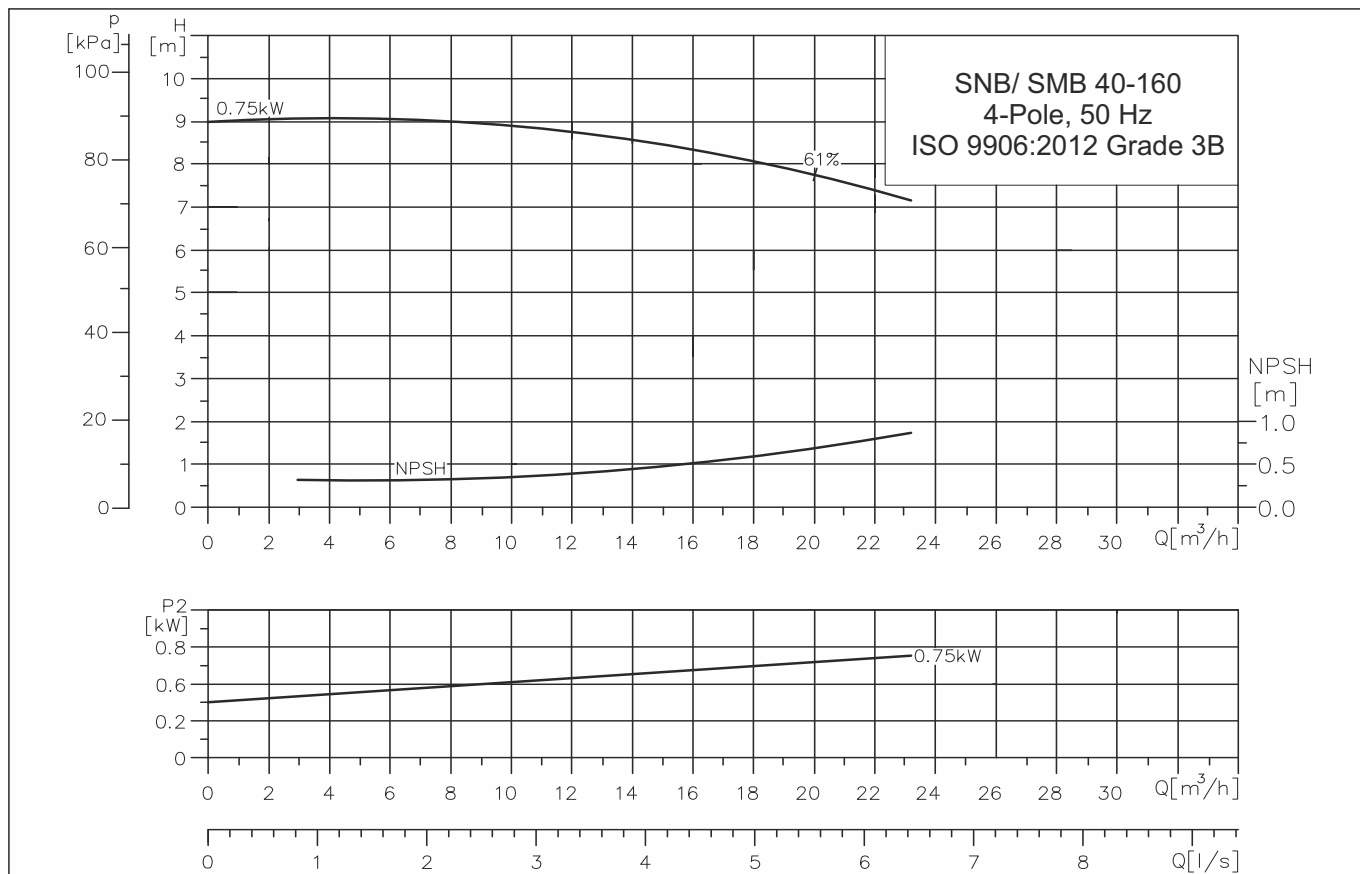
PERFORMANCE TABLE

SNB 40-125 (4 POLE)

Pump type		40-125			
Motor type	High Eff.Motor		SMG 71	SMG 71	SMG 80
SNB CI DATA	P ₂	[kW/HP]	0.25/0.3	0.37/0.5	0.55/0.75
	PN	[bar]	16	16	16
	DNs	[mm]	65	65	65
	DNd	[mm]	40	40	40
	a	[mm]	80	80	80
	h ₂	[mm]	140	140	140
	h ₁	[mm]	112	112	112
	Ss		4x19	4x19	4x19
	Sd		4x19	4x19	4x19
	G1	[mm]	115	115	115
	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
	L SNB	[mm]	201	201	212
	LB	[mm]	210	210	242
	P	[mm]	160	160	200
	AD	[mm]	107	107	125
	NET WT. (APX.)	[kg]	31	34	35
	GROSS WT. (APX.)	[kg]	37	40	41

PERFORMANCE CURVE

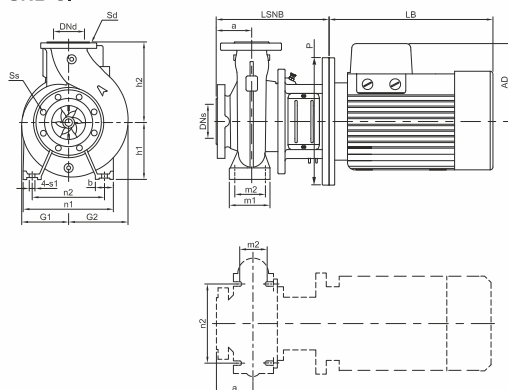
SNB 40-160 (4 POLE)



Recommended suction x delivery pipe size :

[kW / H.P.] 0.75/1.0 : 65 x 50 mm

SNB CI



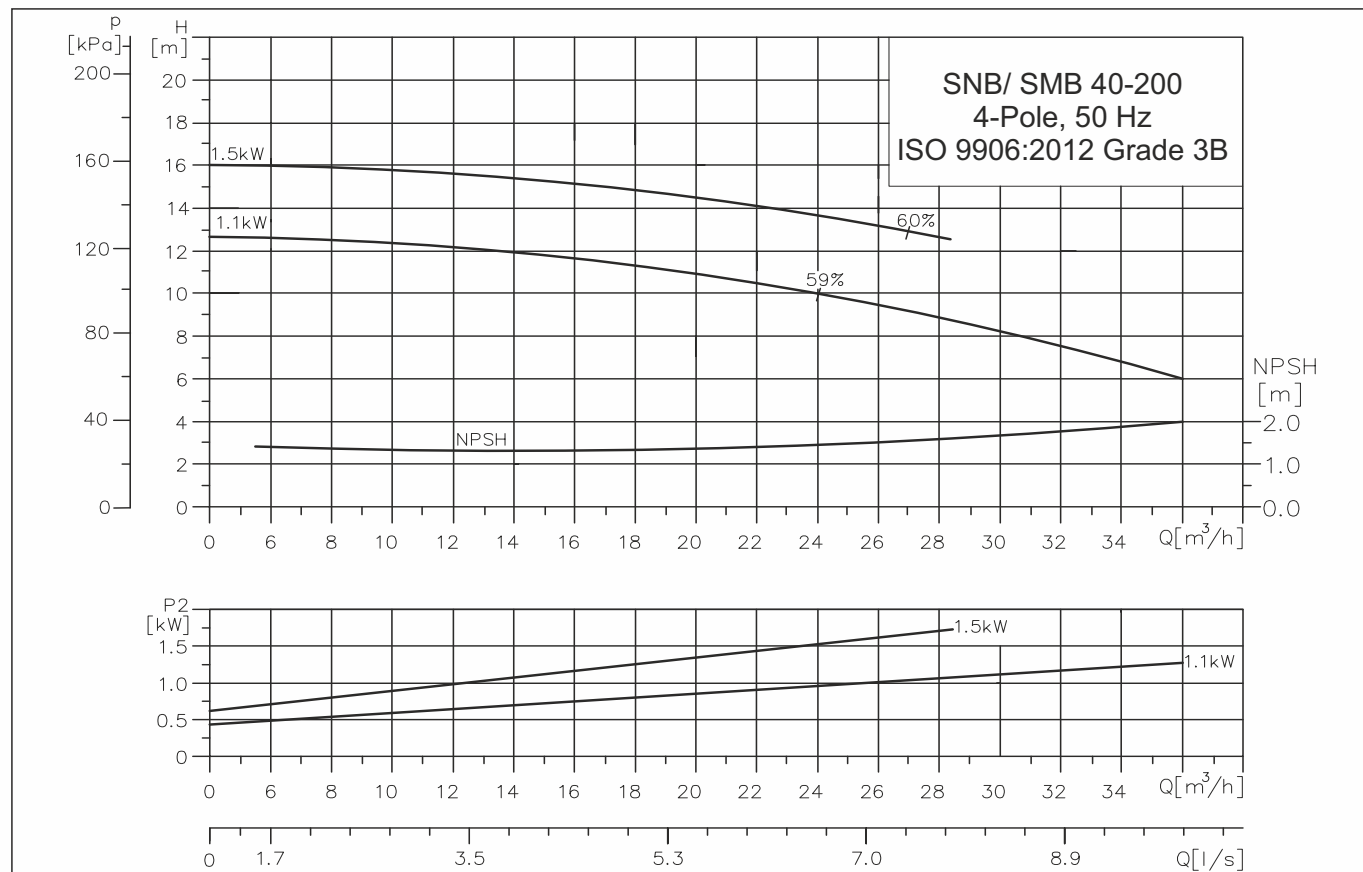
PERFORMANCE TABLE

SNB 40-160 (4 POLE)

Pump type		40-160	
Motor type	High Eff.Motor		SMG 80
SNB CI DATA	P ₂	[kW/HP]	0.75/1.0
	PN	[bar]	16
	DNs	[mm]	65
	DNd	[mm]	40
	a	[mm]	80
	h ₂	[mm]	160
	h ₁	[mm]	132
	Ss		4x19
	Sd		4x19
	G ₁	[mm]	116
	G ₂	[mm]	134
	m ₁	[mm]	100
	m ₂	[mm]	70
	n ₁	[mm]	240
	n ₂	[mm]	190
	b	[mm]	50
	s ₁	[mm]	M12
	L SNB	[mm]	212
	LB	[mm]	242
	P	[mm]	200
	AD	[mm]	125
	NET WT. (APX.)	[kg]	36
	GROSS WT. (APX.)	[kg]	42

PERFORMANCE CURVE

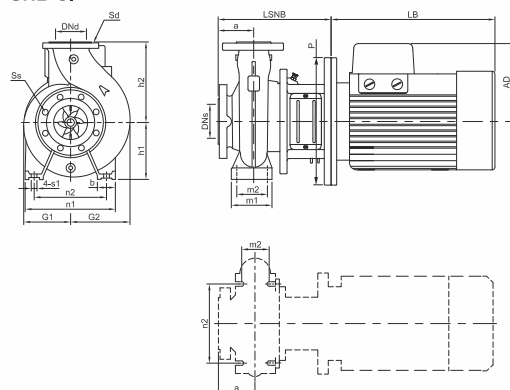
SNB 40-200 (4 POLE)



Recommended suction x delivery pipe size :

[kW / H.P.] 1.1/1.5	: 65 x 65 mm
[kW / H.P.] 1.5/2.0	: 65 x 65 mm

SNB CI



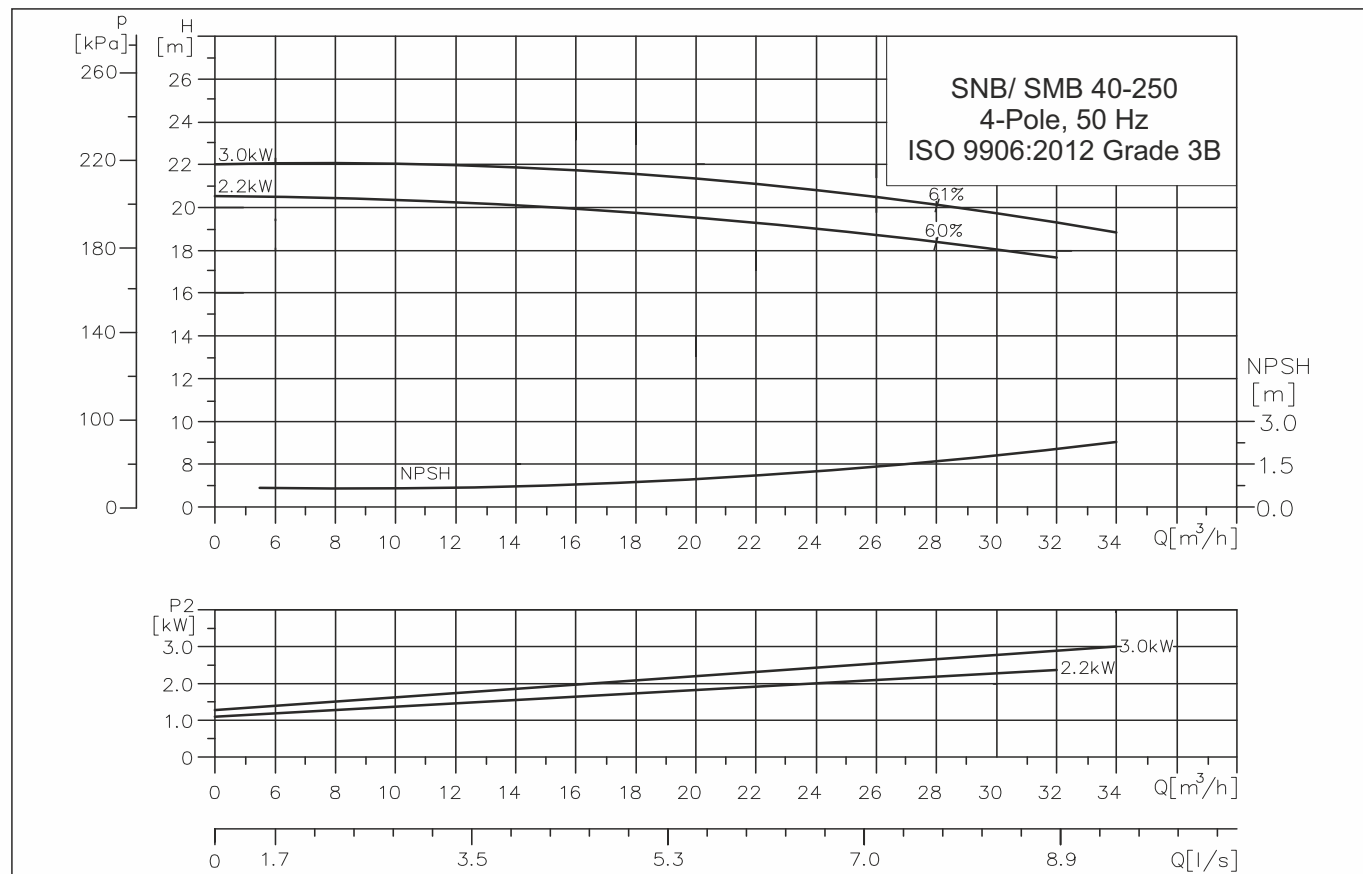
PERFORMANCE TABLE

SNB 40-200 (4 POLE)

Pump type		40-200		
Motor type	High Eff. Motor		SMG 90S	SMG 90L
SNB CI DATA	P ₂	[kW/HP]	1.1/1.5	1.5/2.0
	PN	[bar]	16	16
	DNs	[mm]	65	65
	DNd	[mm]	40	40
	a	[mm]	100	100
	h2	[mm]	180	180
	h1	[mm]	160	160
	Ss		4x19	4x19
	Sd		4x19	4x19
	G1	[mm]	143	143
	G2	[mm]	157	157
	m1	[mm]	100	100
	m2	[mm]	70	70
	n1	[mm]	265	265
	n2	[mm]	212	212
	b	[mm]	50	50
	s1	[mm]	M12	M12
	L SNB	[mm]	244	244
	LB	[mm]	269	325
	P	[mm]	200	200
	AD	[mm]	133	133
	NET WT. (APX.)	[kg]	45	46
	GROSS WT. (APX.)	[kg]	51	52

PERFORMANCE CURVE

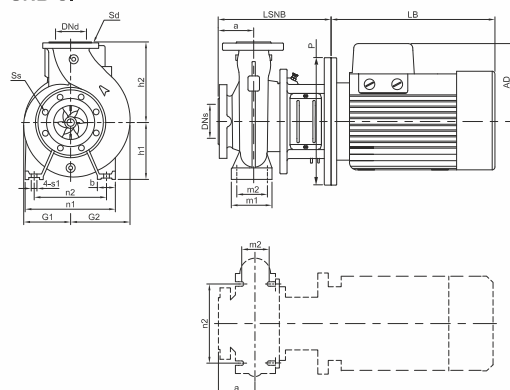
SNB 40-250 (4 POLE)



Recommended suction x delivery pipe size :

[kW / H.P.] 2.2/3.0	: 65 x 50 mm
[kW / H.P.] 3.0/4.0	: 65 x 50 mm

SNB CI



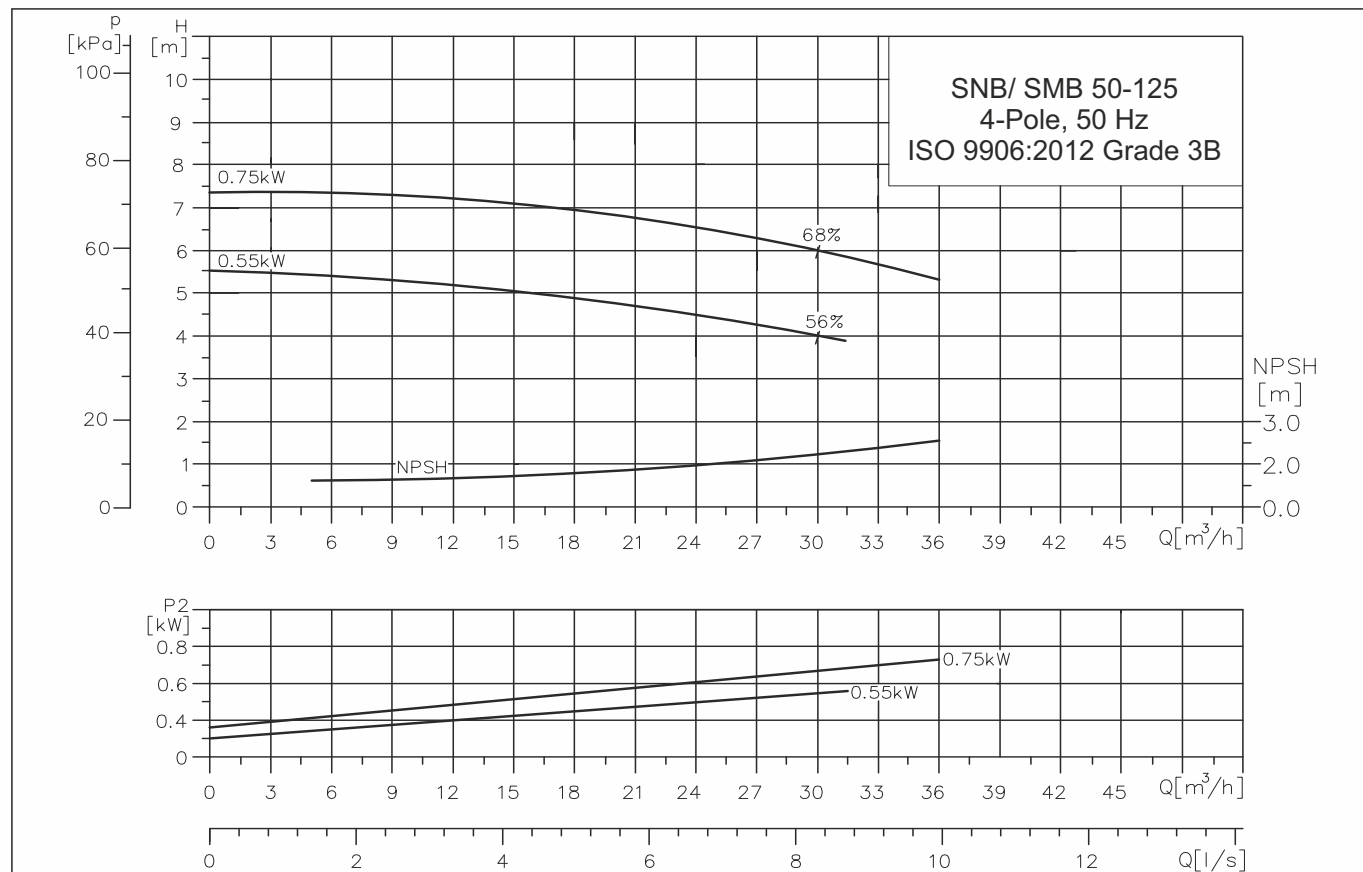
PERFORMANCE TABLE

SNB 40-250 (4 POLE)

Pump type		40-250		
Motor type	High Eff.Motor		SMG 100	SMG 100
SNB CI DATA	P ₂	[kW/HP]	2.2/3.0	3.0/4.0
	PN	[bar]	16	16
	DNs	[mm]	65	65
	DNd	[mm]	40	40
	a	[mm]	100	100
	h ₂	[mm]	225	225
	h ₁	[mm]	180	180
	Ss		4x19	4x19
	Sd		4x19	4x19
	G1	[mm]	162	162
	G2	[mm]	182	182
	m1	[mm]	125	125
	m2	[mm]	90	90
	n1	[mm]	320	320
	n2	[mm]	250	250
	b	[mm]	65	65
	s1	[mm]	M12	M12
	L SNB	[mm]	273	273
	LB	[mm]	314	324
	P	[mm]	250	250
	AD	[mm]	153	153
	NET WT. (APX.)	[kg]	62	63
	GROSS WT. (APX.)	[kg]	70	71

PERFORMANCE CURVE

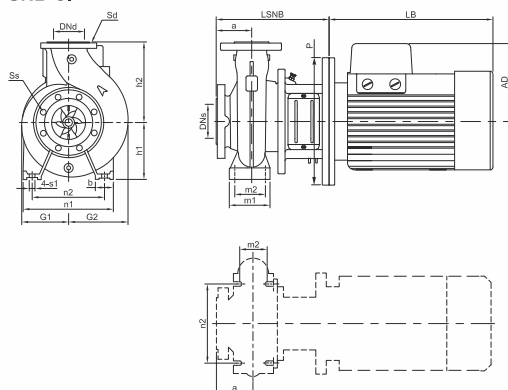
SNB 50-125 (4 POLE)



Recommended suction x delivery pipe size :

[kW / H.P.] 0.55/0.75 : 80 x 80 mm
[kW / H.P.] 0.75/1.0 : 80 x 65 mm

SNB CI



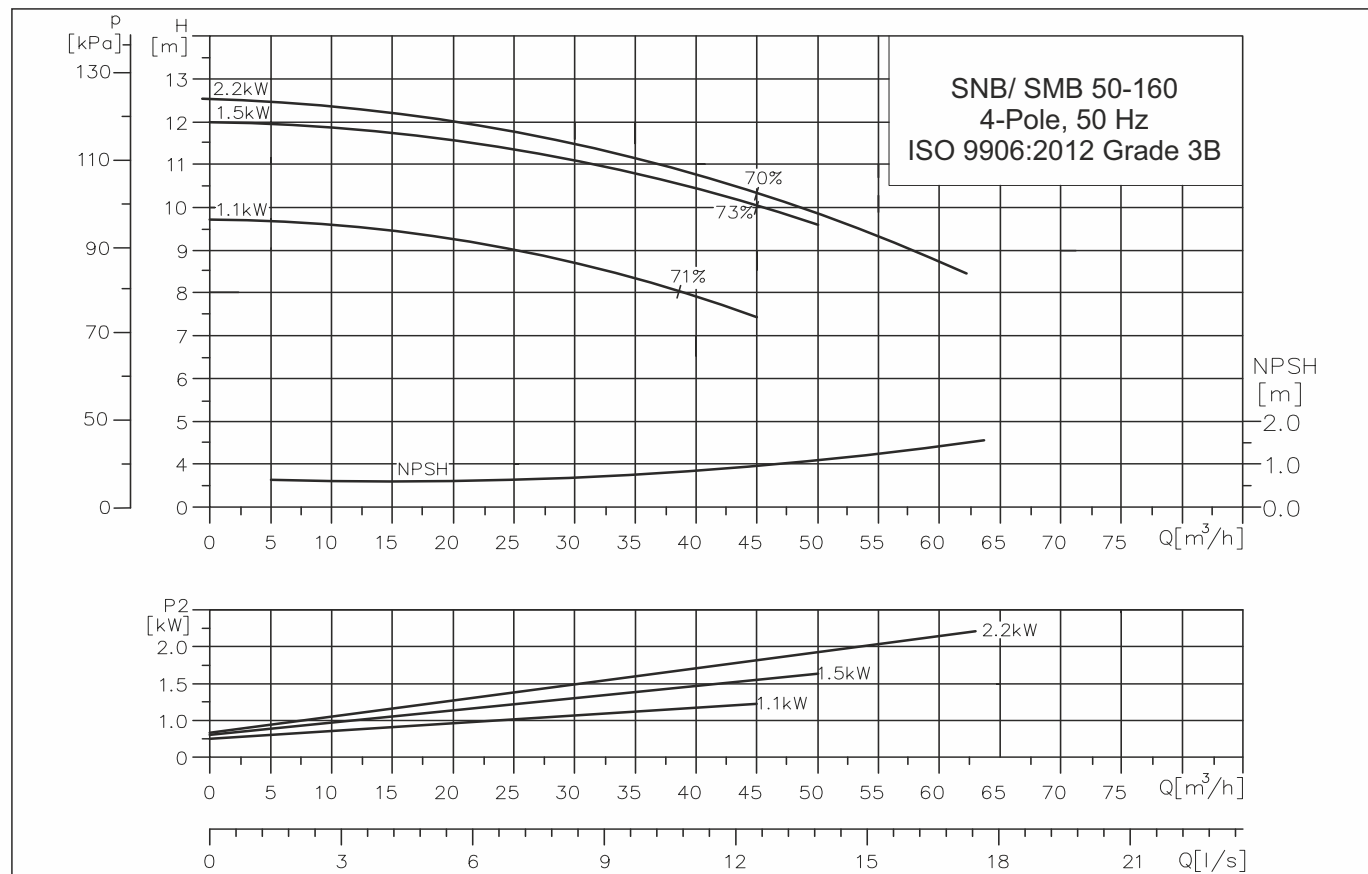
PERFORMANCE TABLE

SNB 50-125 (4 POLE)

Pump type		50-125		
Motor type	High Eff.Motor		SMG 80	SMG 80
SNB CI DATA	P ₂	[kW/HP]	0.55/0.75	0.75/1.0
	PN	[bar]	16	16
	DNs	[mm]	65	65
	DNd	[mm]	50	50
	a	[mm]	100	100
	h2	[mm]	160	160
	h1	[mm]	132	132
	Ss		4x19	4x19
	Sd		4x19	4x19
	G1	[mm]	117	117
	G2	[mm]	133	133
	m1	[mm]	100	100
	m2	[mm]	70	70
	n1	[mm]	240	240
	n2	[mm]	190	190
	b	[mm]	50	50
	s1	[mm]	M12	M12
	L SNB	[mm]	233	233
	LB	[mm]	242	242
	P	[mm]	200	200
	AD	[mm]	125	125
	NET WT. (APX.)	[kg]	35	36
	GROSS WT. (APX.)	[kg]	41	72

PERFORMANCE CURVE

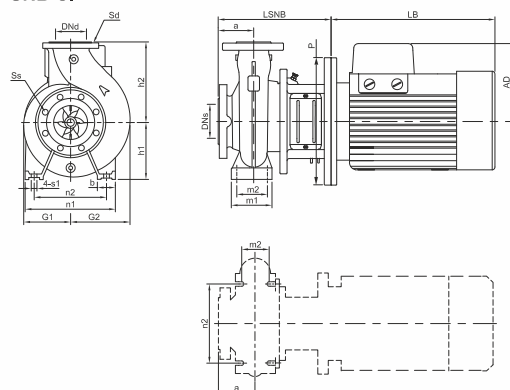
SNB 50-160 (4 POLE)



Recommended suction x delivery pipe size :

[kW / H.P.] 1.1/1.5	:	80 x 65 mm
[kW / H.P.] 1.5/2.0	:	80 x 65 mm
[kW / H.P.] 2.2/3.0	:	80 x 80 mm

SNB CI



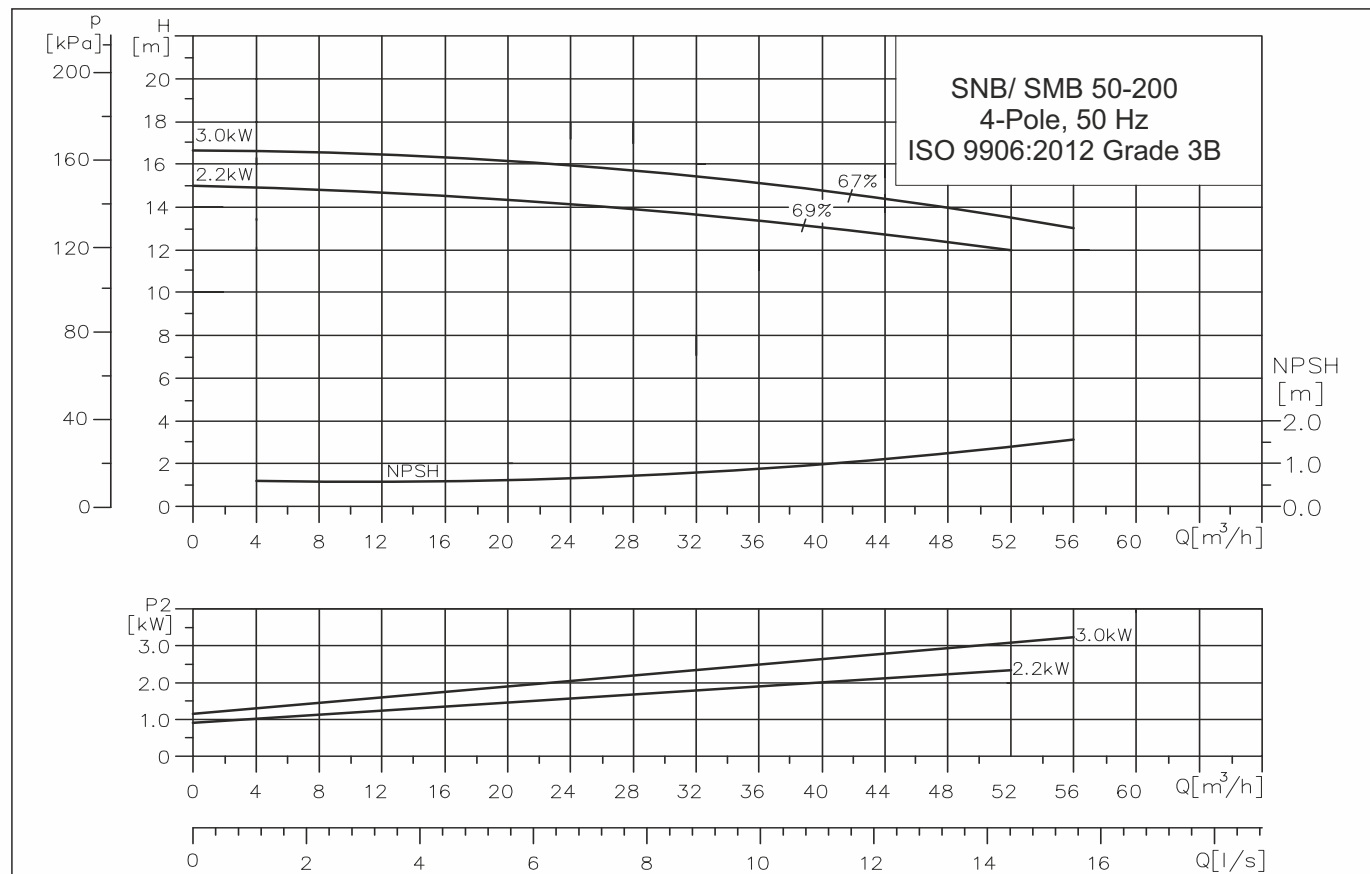
PERFORMANCE TABLE

SNB 50-160 (4 POLE)

Pump type		50-160			
Motor type	High Eff.Motor		SMG 90S	SMG 90L	SMG 100
SNB CI DATA	P ₂	[kW/HP]	1.1/1.5	1.5/2.0	2.2/3.0
	PN	[bar]	16	16	16
	DNs	[mm]	65	65	65
	DNd	[mm]	50	50	50
	a	[mm]	100	100	100
	h ₂	[mm]	180	180	180
	h ₁	[mm]	160	160	160
	Ss		4x19	4x19	4x19
	Sd		4x19	4x19	4x19
	G1	[mm]	150	150	150
	G2	[mm]	125	125	125
	m1	[mm]	100	100	100
	m2	[mm]	70	70	70
	n1	[mm]	265	265	265
	n2	[mm]	212	212	212
	b	[mm]	50	50	50
	s1	[mm]	M12	M12	M12
	L SNB	[mm]	245	245	273
	LB	[mm]	269	325	314
	P	[mm]	200	200	250
	AD	[mm]	133	133	153
	NET WT. (APX.)	[kg]	41	42	60
	GROSS WT. (APX.)	[kg]	46	47	68

PERFORMANCE CURVE

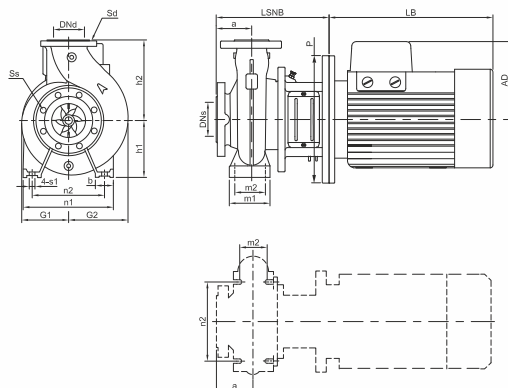
SNB 50-200 (4 POLE)



Recommended suction x delivery pipe size :

[kW / H.P.] 2.2/3.0	: 65 x 65 mm
[kW / H.P.] 3.0/4.0	: 65 x 65 mm

SNB CI



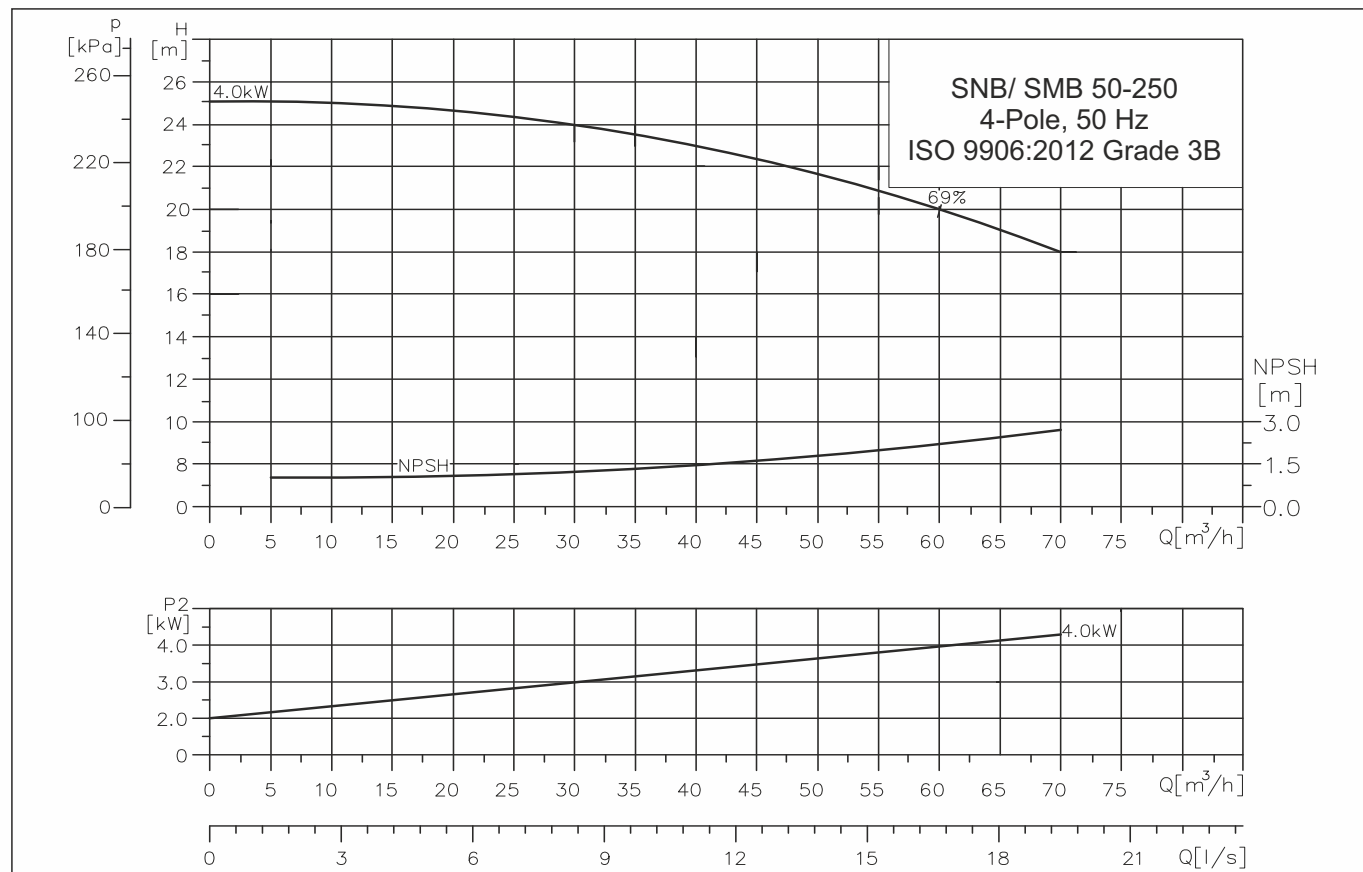
PERFORMANCE TABLE

SNB 50-200 (4 POLE)

Pump type		50-200		
Motor type	High Eff.Motor		SMG 100	SMG 100
SNB CI DATA	P ₂	[kW/HP]	2.2/3.0	3.0/4.0
	PN	[bar]	16	16
	DNs	[mm]	65	65
	DNd	[mm]	50	50
	a	[mm]	100	100
	h ₂	[mm]	200	200
	h ₁	[mm]	160	160
	Ss		4x19	4x19
	Sd		4x19	4x19
	G1	[mm]	150	150
	G2	[mm]	170	170
	m1	[mm]	100	100
	m2	[mm]	70	70
	n1	[mm]	270	270
	n2	[mm]	212	212
	b	[mm]	50	50
	s1	[mm]	M12	M12
	L SNB	[mm]	272	272
	LB	[mm]	314	324
	P	[mm]	250	250
	AD	[mm]	153	153
	NET WT. (APX.)	[kg]	55	59
	GROSS WT. (APX.)	[kg]	62	66

PERFORMANCE CURVE

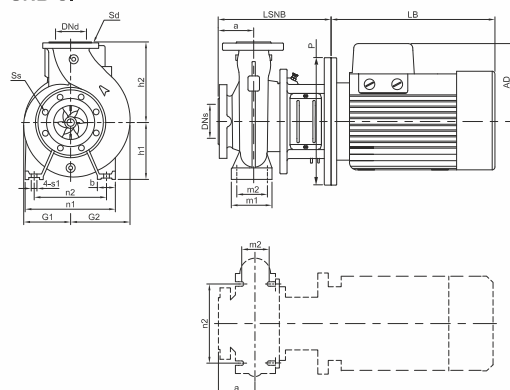
SNB 50-250 (4 POLE)



Recommended suction x delivery pipe size :

[kW / H.P.] 4.0/5.5 : 65 x 65 mm

SNB CI



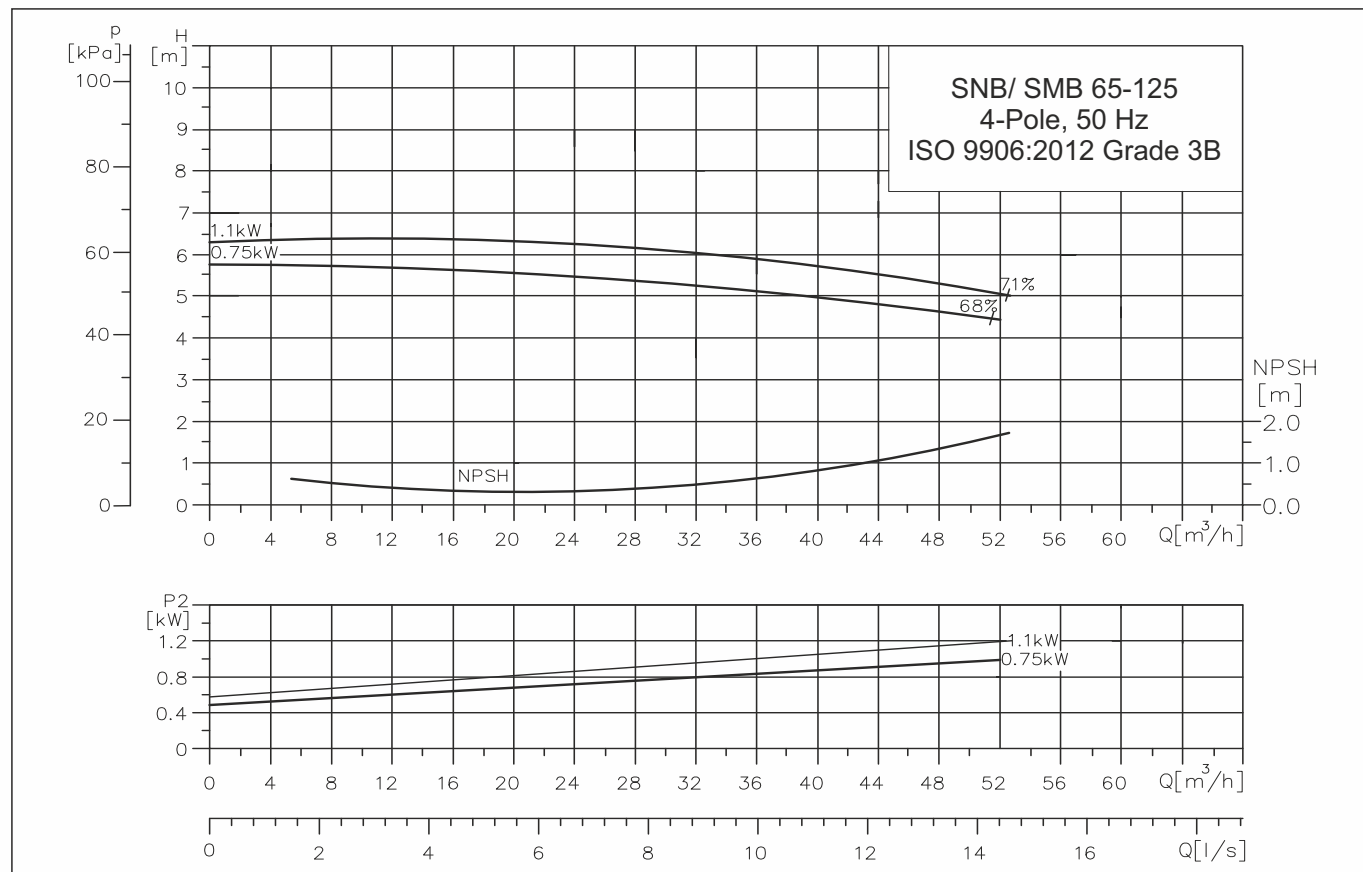
PERFORMANCE TABLE

SNB 50-250 (4 POLE)

Pump type		50-250	
Motor type	High Eff.Motor		SMG 112
SNB CI DATA	P ₂	[kW/HP]	4.0/5.5
	PN	[bar]	16
	DNs	[mm]	65
	DNd	[mm]	50
	a	[mm]	100
	h ₂	[mm]	234
	h ₁	[mm]	180
	Ss		4x19
	Sd		4x19
	G1	[mm]	170
	G2	[mm]	188
	m1	[mm]	125
	m2	[mm]	95
	n1	[mm]	320
	n2	[mm]	250
	b	[mm]	65
	s1	[mm]	M12
	L SNB	[mm]	273
	LB	[mm]	373
	P	[mm]	250
	AD	[mm]	168
	NET WT. (APX.)	[kg]	78
	GROSS WT. (APX.)	[kg]	86

PERFORMANCE CURVE

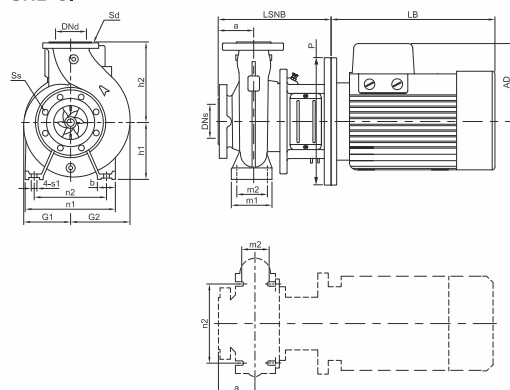
SNB 65-125 (4 POLE)



Recommended suction x delivery pipe size :

[kW / H.P.] 0.75/1.0	: 100 x 80 mm
[kW / H.P.] 1.1/1.5	: 80 x 80 mm

SNB CI



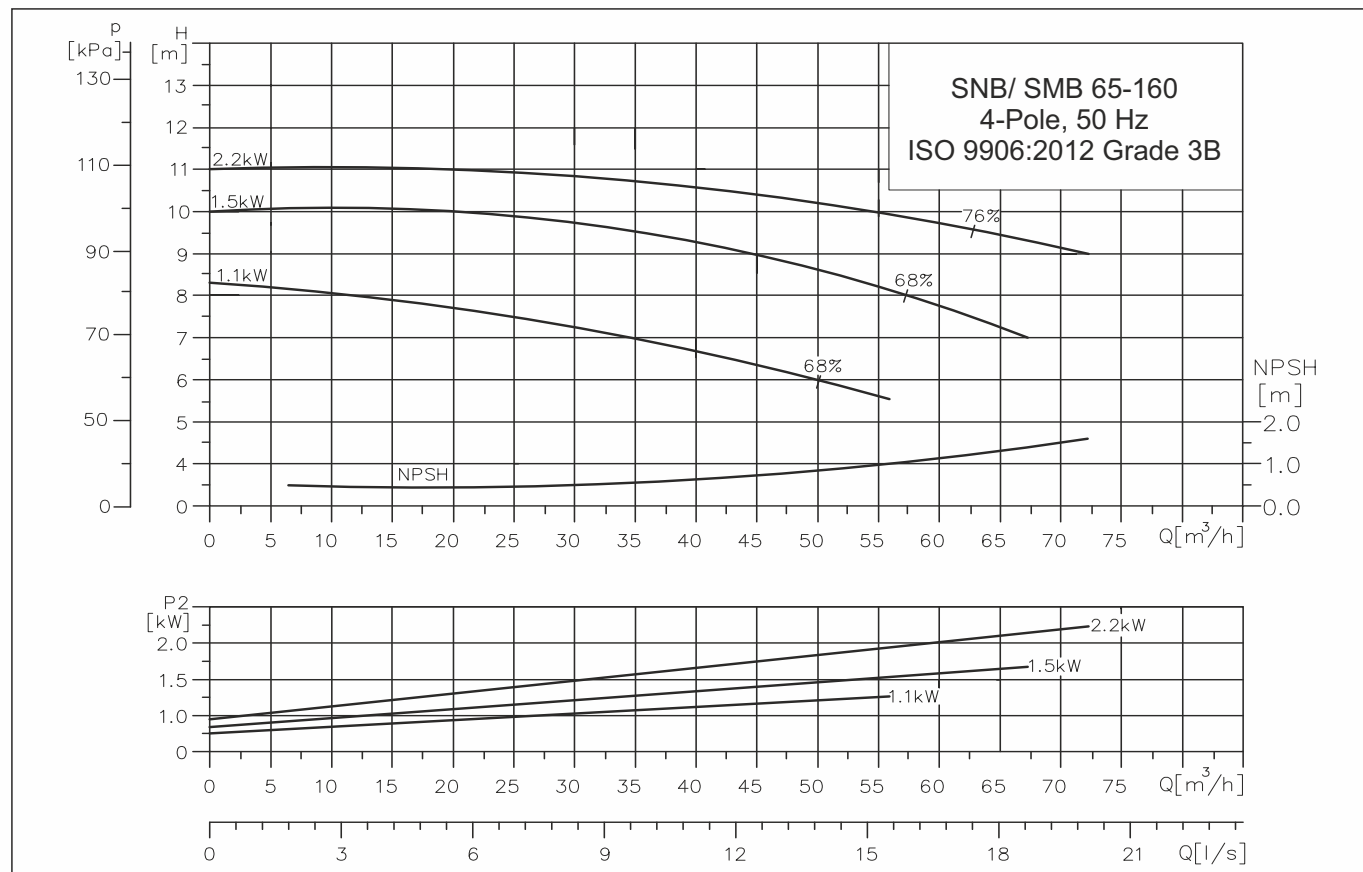
PERFORMANCE TABLE

SNB 65-125 (4 POLE)

Pump type		65-125		
Motor type	High Eff.Motor		SMG 80	SMG 90S
SNB CI DATA	P ₂	[kW/HP]	0.75/1.0	1.1/1.5
	PN	[bar]	16	16
	DNs	[mm]	95	95
	DNd	[mm]	65	65
	a	[mm]	100	100
	h2	[mm]	180	180
	h1	[mm]	160	160
	Ss		8x19	8x19
	Sd		4x19	4x19
	G1	[mm]	115	115
	G2	[mm]	145	145
	m1	[mm]	125	125
	m2	[mm]	95	95
	n1	[mm]	280	280
	n2	[mm]	212	212
	b	[mm]	65	65
	s1	[mm]	M12	M12
	L SNB	[mm]	236	248
	LB	[mm]	242	269
	P	[mm]	200	200
	AD	[mm]	125	133
	NET WT. (APX.)	[kg]	41	46
	GROSS WT. (APX.)	[kg]	47	52

PERFORMANCE CURVE

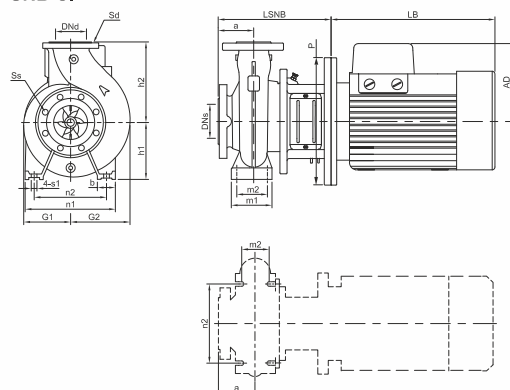
SNB 65-160 (4 POLE)



Recommended suction x delivery pipe size :

[kW / H.P.] 1.1/1.5	:	80 x 80 mm
[kW / H.P.] 1.5/2.0	:	100 x 80 mm
[kW / H.P.] 2.2/3.0	:	100 x 80 mm

SNB CI



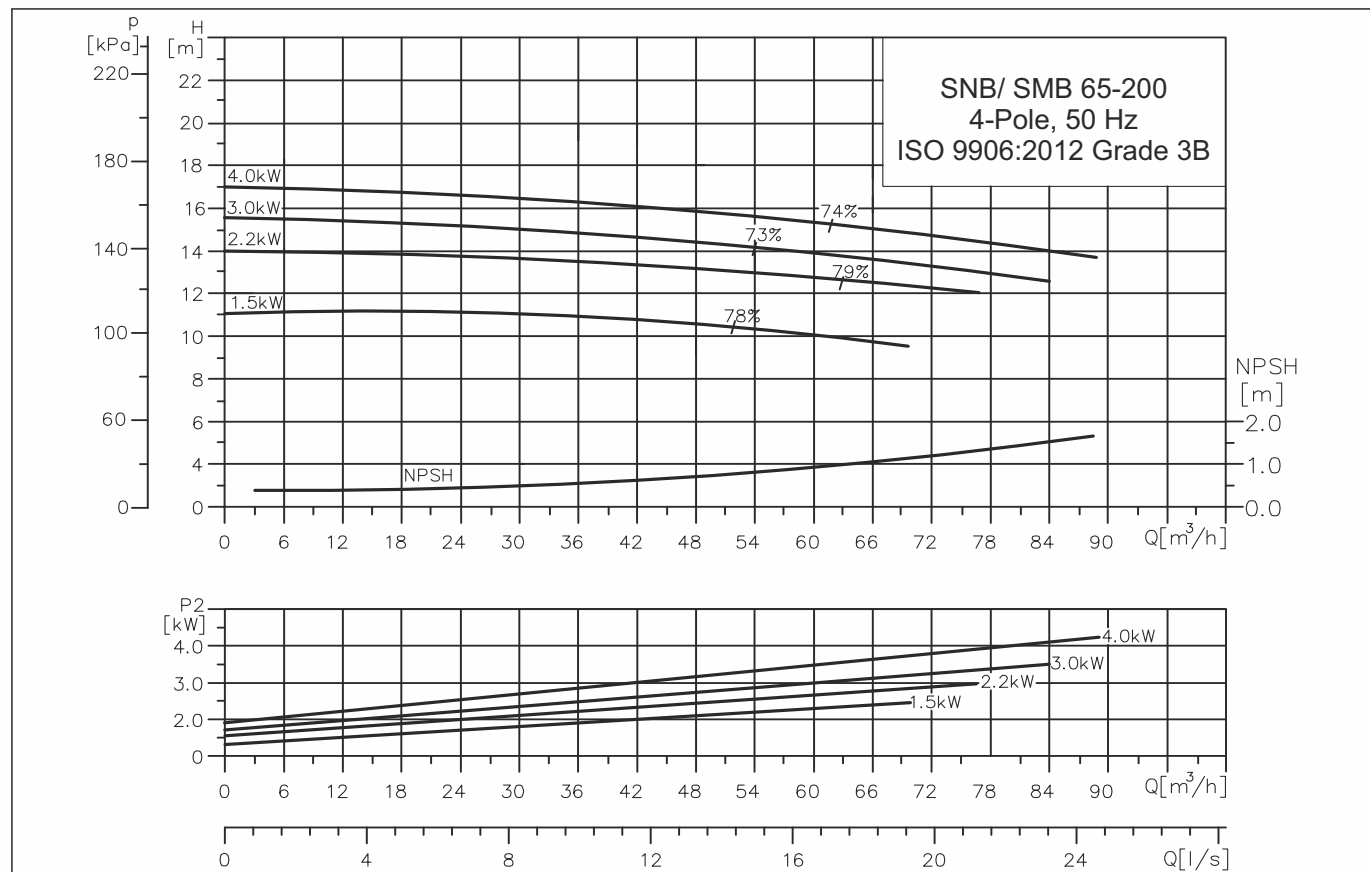
PERFORMANCE TABLE

SNB 65-160 (4 POLE)

Pump type			65-160		
Motor type	High Eff.Motor		SMG 90S	SMG 90L	SMG 100
SNB CI DATA	P ₂	[kW/HP]	1.1/1.5	1.5/2.0	2.2/3.0
	PN	[bar]	16	16	16
	DNs	[mm]	95	95	95
	DNd	[mm]	65	65	65
	a	[mm]	100	100	100
	h2	[mm]	200	200	200
	h1	[mm]	160	160	160
	Ss		8x19	8x19	8x19
	Sd		4x19	4x19	4x19
	G1	[mm]	128	128	128
	G2	[mm]	166	166	166
	m1	[mm]	125	125	125
	m2	[mm]	95	95	95
	n1	[mm]	280	280	280
	n2	[mm]	212	212	212
	b	[mm]	65	65	65
	s1	[mm]	M12	M12	M12
	L SNB	[mm]	245	245	272
	LB	[mm]	269	325	314
	P	[mm]	200	200	250
	AD	[mm]	133	133	153
	NET WT. (APX.)	[kg]	44	45	54
	GROSS WT. (APX.)	[kg]	50	51	62

PERFORMANCE CURVE

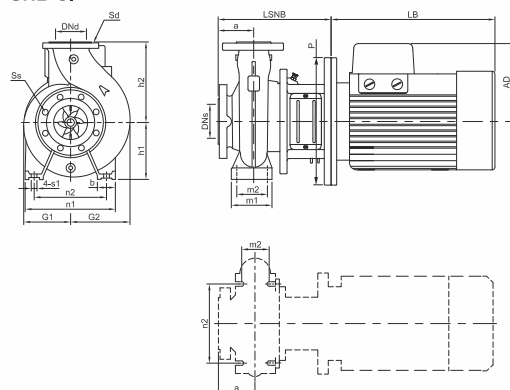
SNB 65-200 (4 POLE)



Recommended suction x delivery pipe size :

[kW / H.P.] 3.0/4.0 : 100 x 80 mm
[kW / H.P.] 4.0/5.5 : 100 x 80 mm

SNB CI



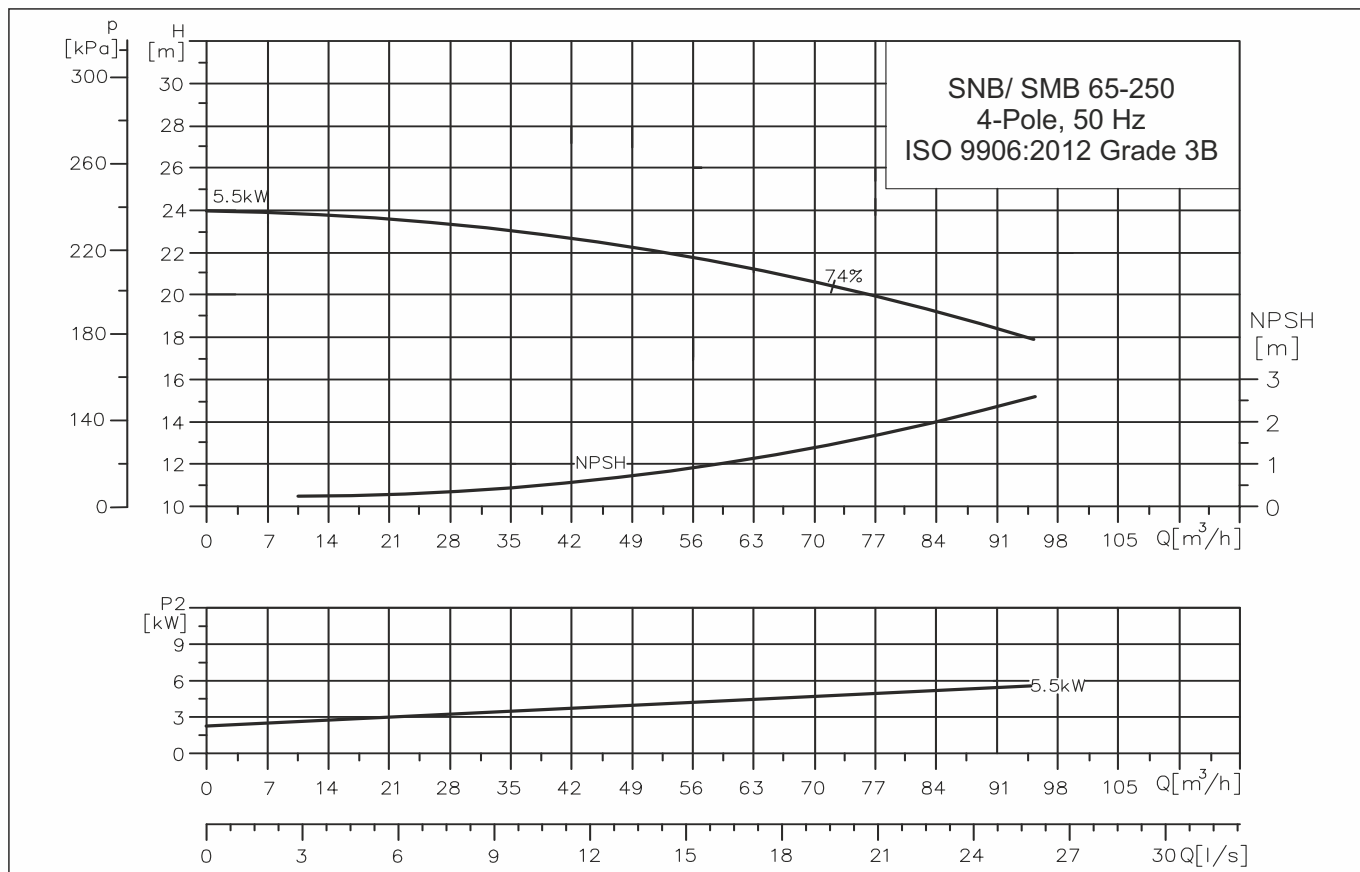
PERFORMANCE TABLE

SNB 65-200 (4 POLE)

Pump type			65-200			
Motor type	High Eff. Motor		SMG 90S	SMG 100	SMG 100	SMG 112
SNB CI DATA	P2	[kW/HP]	1.5/2.0	2.2/3.0	3.0/4.0	4.0/5.5
	PN	[bar]	16	16	16	16
	DNs	[mm]	90	90	90	90
	DNd	[mm]	65	65	65	65
	a	[mm]	100	100	100	100
	h2	[mm]	225	225	225	225
	h1	[mm]	180	180	180	180
	Ss		8x19	8x19	8x19	8x19
	Sd		4x19	4x19	4x19	4x19
	G1	[mm]	150	150	150	150
	G2	[mm]	182	182	182	182
	m1	[mm]	125	125	125	125
	m2	[mm]	90	90	90	90
	n1	[mm]	320	320	320	320
	n2	[mm]	250	250	250	250
	b	[mm]	65	65	65	65
	s1	[mm]	M12	M12	M12	M12
	L SNB	[mm]	245	272	272	272
	LB	[mm]	355	314	314	373
	P	[mm]	200	250	250	250
	AD	[mm]	140	153	153	168
	NET WT.(APX.)	[Kg]	55	62	65	67
	GROSS WT.(APX.)	[Kg]	60	67	70	74

PERFORMANCE CURVE

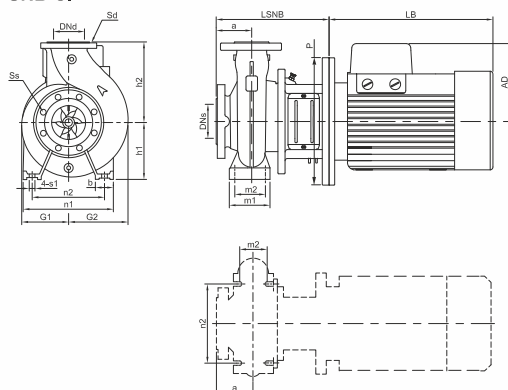
SNB 65-250 (4 POLE)



Recommended suction x delivery pipe size :

[kW / H.P.] 5.5/7.5 : 100 x 80 mm

SNB CI



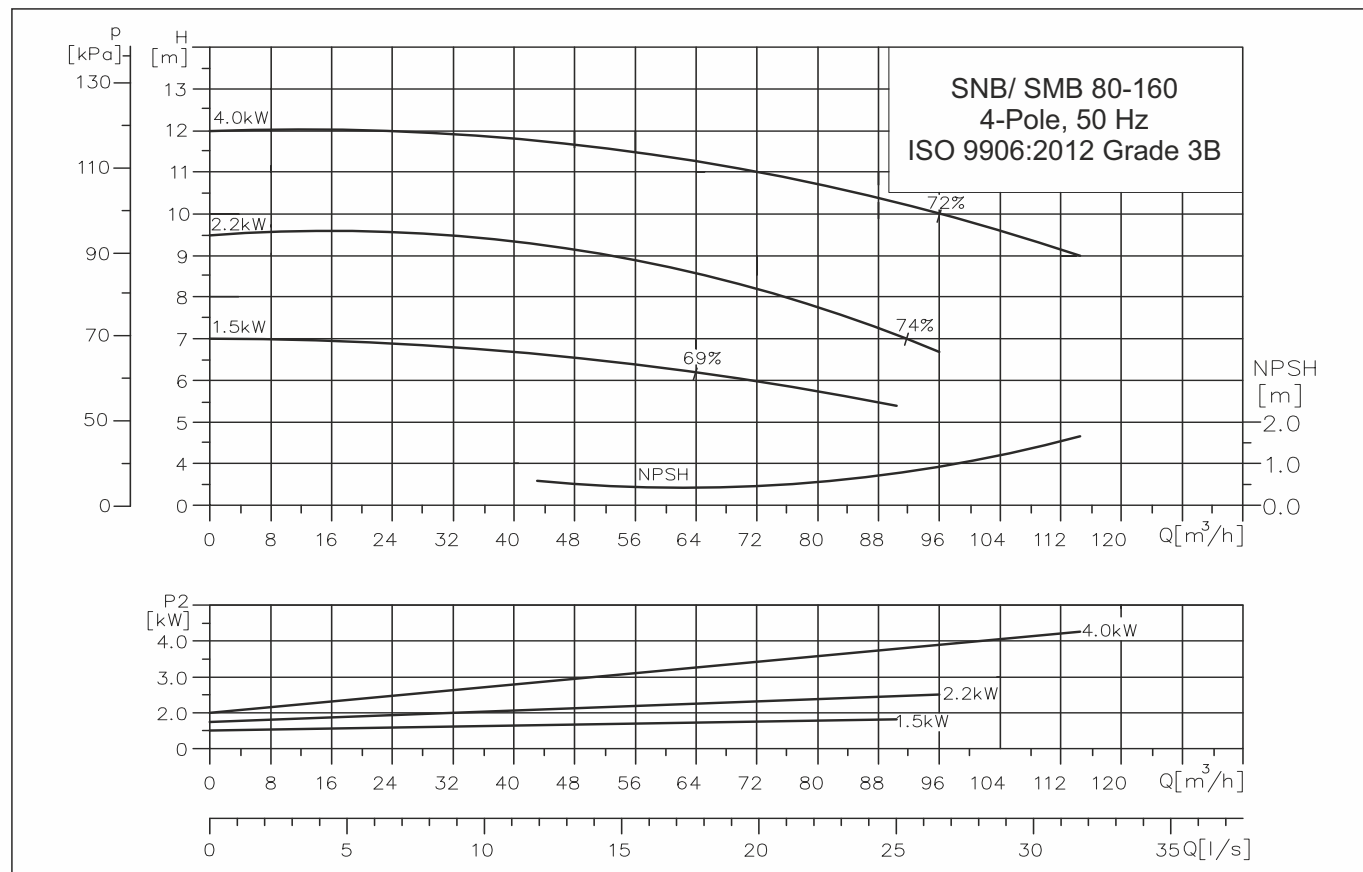
PERFORMANCE TABLE

SNB 65-250 (4 POLE)

Pump type			65-250
Motor type	High Eff.Motor		SMG 132
SNB CI DATA	P ₂	[kW/HP]	5.5/7.5
	PN	[bar]	16
	DNs	[mm]	80
	DNd	[mm]	65
	a	[mm]	100
	h2	[mm]	250
	h1	[mm]	200
	Ss		8x19
	Sd		4x19
	G1	[mm]	183
	G2	[mm]	200
	m1	[mm]	160
	m2	[mm]	120
	n1	[mm]	360
	n2	[mm]	280
	b	[mm]	80
	s1	[mm]	M16
	L SNB	[mm]	343
	LB	[mm]	428
	P	[mm]	300
	AD	[mm]	209
	NET WT. (APX.)	[kg]	124
	GROSS WT. (APX.)	[kg]	132

PERFORMANCE CURVE

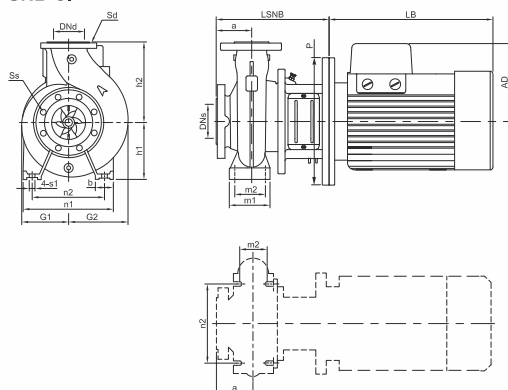
SNB 80-160 (4 POLE)



Recommended suction x delivery pipe size :

[kW / H.P.] 1.5/2.0	:	125 x 125 mm
[kW / H.P.] 2.2/3.0	:	125 x 100 mm
[kW / H.P.] 4.0/5.5	:	125 x 100 mm

SNB CI



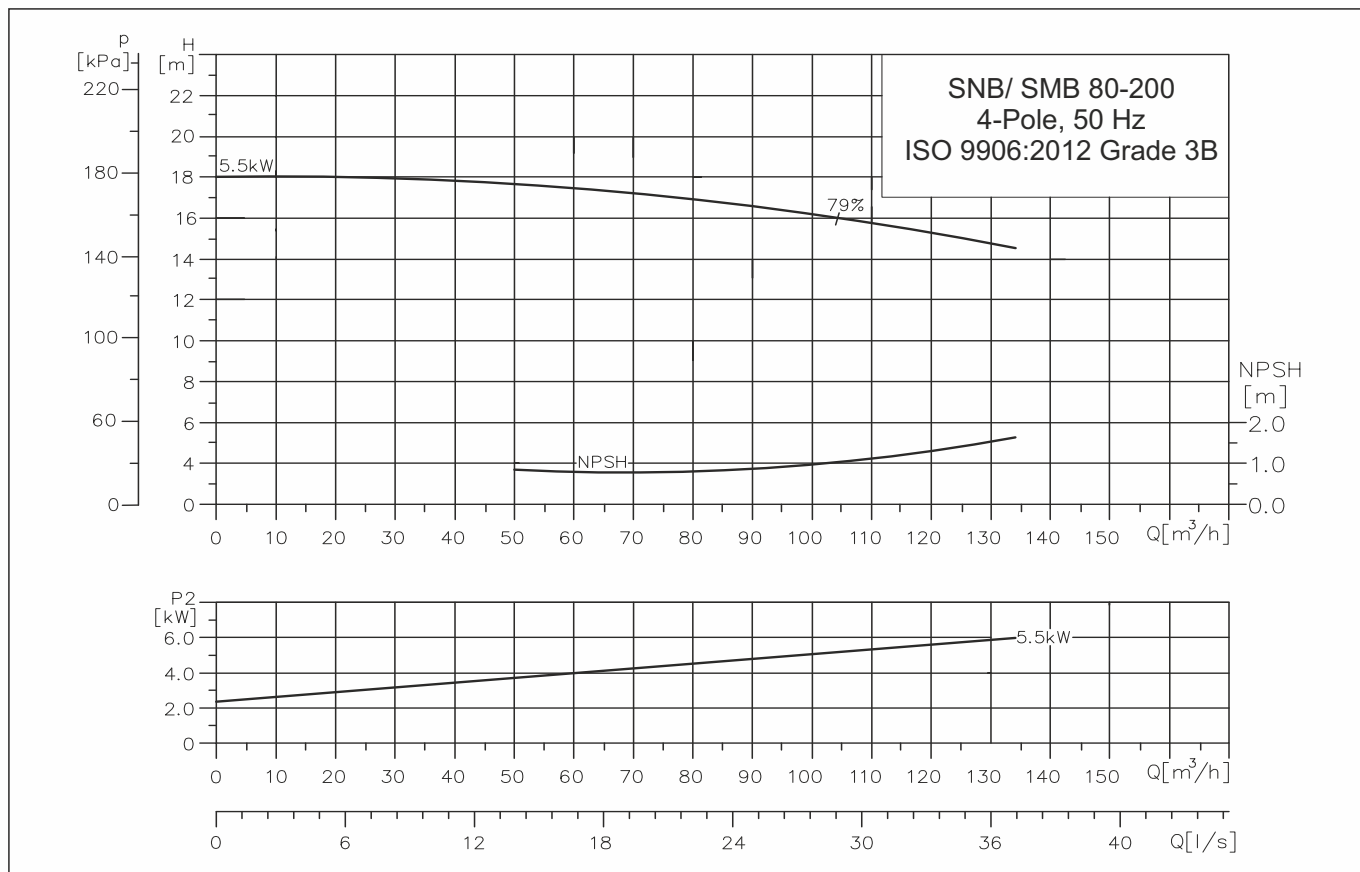
PERFORMANCE TABLE

SNB 80-160 (4 POLE)

Pump type			80-160		
Motor type	High Eff. Motor		SMG 90S	SMG 100	SMG 112
SNB CI DATA	P ₂	[kW/HP]	1.5/2.0	2.2/3.0	4.0/5.5
	PN	[bar]	16	16	16
	Dns	[mm]	100	100	100
	DNd	[mm]	80	80	80
	a	[mm]	125	125	125
	h ₂	[mm]	225	225	225
	h ₁	[mm]	180	180	180
	Ss		8x19	8x19	8x19
	Sd		8x19	8x19	8x19
	G1	[mm]	141	141	141
	G2	[mm]	187	187	187
	m1	[mm]	125	125	125
	m2	[mm]	95	95	95
	n1	[mm]	320	320	320
	n2	[mm]	250	250	250
	b	[mm]	65	65	65
	s1	[mm]	M12	M12	M12
	L SNB	[mm]	271	299	299
	LB	[mm]	280	314	373
	P	[mm]	200	250	250
	AD	[mm]	133	153	168
	NET WT.(APX.)	[Kg]	56	67	68
	GROSS WT.(APX.)	[Kg]	63	72	76

PERFORMANCE CURVE

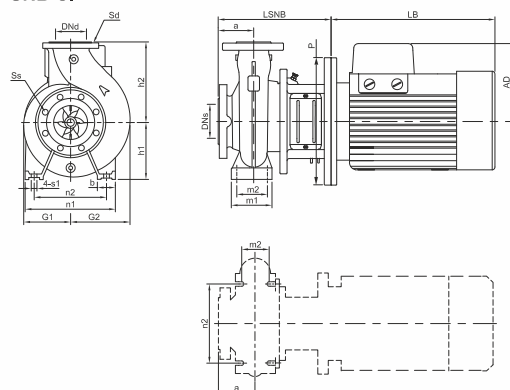
SNB 80-200 (4 POLE)



Recommended suction x delivery pipe size :

[kW / H.P.] 5.5/7.5 : 125 x 100 mm

SNB CI



PERFORMANCE TABLE

SNB 80-200 (4 POLE)

Pump type	80-200		
Motor type	High Eff. Motor		SMG 132
SNB CI DATA	P ₂	[kW/HP]	5.5/7.5
	PN	[bar]	16
	DNs	[mm]	100
	DNd	[mm]	80
	a	[mm]	125
	h2	[mm]	250
	h1	[mm]	180
	Ss		8x19
	Sd		8x19
	G1	[mm]	160
	G2	[mm]	191
	m1	[mm]	125
	m2	[mm]	95
	n1	[mm]	345
	n2	[mm]	280
	b	[mm]	65
	s1	[mm]	M12
	L SNB	[mm]	368
	LB	[mm]	428
	P	[mm]	300
	AD	[mm]	209
	NET WT. (APX.)	[kg]	109
	GROSS WT. (APX.)	[kg]	118

ACCESSORIES

SNB/SMB, CI/SS Support Blocks

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.

SNB/SMB CI, 50 Hz, 2-pole

Pump type	P ₂ [kW]	Support blocks (MOTOR FEET)	Support blocks product number (CI PUMP HOUSING)	Support blocks product number (SS/INV PUMP HOUSING)
SNB/SMB 40-125	1.5	N/A	1000007583	N/A
SNB/SMB 40-160		N/A	N/A	1000012793
SNB/SMB 40-125	2.2	N/A	1000007583	N/A
SNB/SMB 40-160		N/A	N/A	1000012793
SNB/SMB 32-160	3.0	1000007582	N/A	N/A
SNB/SMB 32-160.1		1000007582	N/A	N/A
SNB/SMB 40-160		1000007582	N/A	1000012793
SNB/SMB 50-125		1000007582	N/A	N/A
SNB/SMB 32-160	4.0	1000007582	N/A	N/A
SNB/SMB 32-200		1000007604	N/A	N/A
SNB/SMB 40-160		1000007582	N/A	1000012793
SNB/SMB 50-125		1000007582	N/A	N/A
SNB/SMB 50-160		1000007604	N/A	1000012793
SNB/SMB 65-125	5.5	1000007604	N/A	N/A
SNB/SMB 32-160		N/A	1000007603	N/A
SNB/SMB 40-160		N/A	1000007603	3000037628
SNB/SMB 50-125		N/A	1000007603	N/A
SNB/SMB 50-160	7.5	N/A	N/A	1000012793
SNB/SMB 40-160		N/A	1000007603	3000037628
SNB/SMB 50-125		N/A	1000007603	N/A
SNB/SMB 50-160	11	N/A	N/A	1000012793
SMB 32-200		1000007602	1000007583	3000038078
SMB 32-250		1000007602	N/A	N/A
SMB 40-200		1000007602	1000007583	3000038078
SMB 50-160		1000007602	1000007583	3000037696
SMB 65-125	11	1000007602	1000007601	3000038078
SMB 65-160		1000007602	1000007601	1000007601
SNB 32-200		1000007600	1000007583	3000038078
SNB 32-250		1000007600	N/A	N/A
SNB 40-200		1000007600	1000007583	3000038078
SNB 50-160	15	1000007600	1000007583	3000037696
SNB 65-125		1000007600	1000007601	3000038078
SNB 65-160		1000007600	1000007601	1000007601
SNB 80-160		1000007600	N/A	N/A
SNB/SMB 32-250		1000007600	N/A	N/A
SNB/SMB 40-200	18.5	1000007600	1000007583	3000038078
SNB/SMB 40-250		1000007600	N/A	N/A
SNB/SMB 50-160		1000007600	1000007583	3000037696
SNB/SMB 65-160		1000007600	1000007601	1000007601
SNB/SMB 80-160		1000007600	N/A	N/A
SNB/SMB 40-250	18.5	1000007600	N/A	N/A
SNB/SMB 65-160		1000007600	1000007601	1000007601
SNB/SMB 65-200		1000007600	1000007601	1000007601
SNB/SMB 80-160	30	1000007600	N/A	N/A
SNB 50-200		N/A	1000007583	N/A
SNB 50-250		N/A	1000007601	N/A
SNB 65-200	37	N/A	1000007601	1000007601
SNB 50-250		N/A	1000007601	N/A

PRODUCT NUMBER	DIMENSIONS W X L X H (mm)
1000007583	50 X 100 X 20
1000007600	65 X 304 X 20
1000007601	65 X 125 X 20
1000007602	60 X 350 X 10
1000007603	50 X 100 X 28
1000007604	SQ-50X50X3X175L
1000007582	50 X 175 X 20
3000037628	FABRICATED U CHANNEL - 35 X 120 X 35
3000037696	FABRICATED U CHANNEL - 35 X 120 X 27
3000038078	FABRICATED U CHANNEL - 35 X 120 X 20
1000012793	RUBBER PAD

ACCESSORIES

Counter flanges

Counter flange kits consist of one steel flange, one gasket of asbestos-free material, and the requisite number of screws.

Counter flange	Flange size	Description	Rated pressure	Pipework connection
	DN 32	Threaded	16 bar, EN 1092-2	Rp 1½
		For welding	16 bar, EN 1092-2	32 mm
	DN 40	Threaded	16 bar, EN 1092-2	Rp 1½
		For welding	16 bar, EN 1092-2	40 mm
	DN 50	Threaded	16 bar, EN 1092-2	Rp 2
	DN 65	Threaded	16 bar, EN 1092-2	Rp 2½
		For welding	16 bar, EN 1092-2	65 mm
	DN 80	Threaded	16 bar, EN 1092-2	Rp 3
		For welding	16 bar, EN 1092-2	80 mm
	DN 100	Threaded	16 bar, EN 1092-2	Rp 4
		For welding	16 bar, EN 1092-2	100 mm

