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N Z S

NZS ULTRA HIGH EFFICIENT HORIZONTAL SINGLE STAGE STAINLESS STEEL PUMPS

Neu-booom

ocbooom.® 澳升


澳升 . Chinese green

TOWARDS ZERO CARBON BALANCE AND GREEN TRANSFORMATION IN TECHNOLOGICAL INNOVATION

ocbooom.® Aosheng pumps is a Chinese water pump company driven by green innovation. lts core competitiveness lies in its focus on pumps and green innovation. Our mission is to provide carbon neutral and Chinese wisdom to the world. Always focus on high efficiency, we gather an authoritative team dedicated to green innovation. With cutting-edge fluid dynamics CFD technology, excellent 30-year process sedimentation and world leading intelligent manufacturing innovation, we provide high-quality, green, and intelligent water pumps and system solutions.

ocbooom.® Aosheng pumps is always raising the questions, finding the solutions. From new material to new technology, from hydraulic design to new structure, from hydromechanics to automatic controlling, we are discovering green on combining theory and practice.

Discover ultimate energy saving!

Neu-booom®

NZS

Redefine energy saving pumps!

Neu-booom

NZS ULTRA HIGH EFFICIENT
HORIZONTAL SINGLE STAGE STAINLESS STEEL PUMPS

Ultra high efficiency

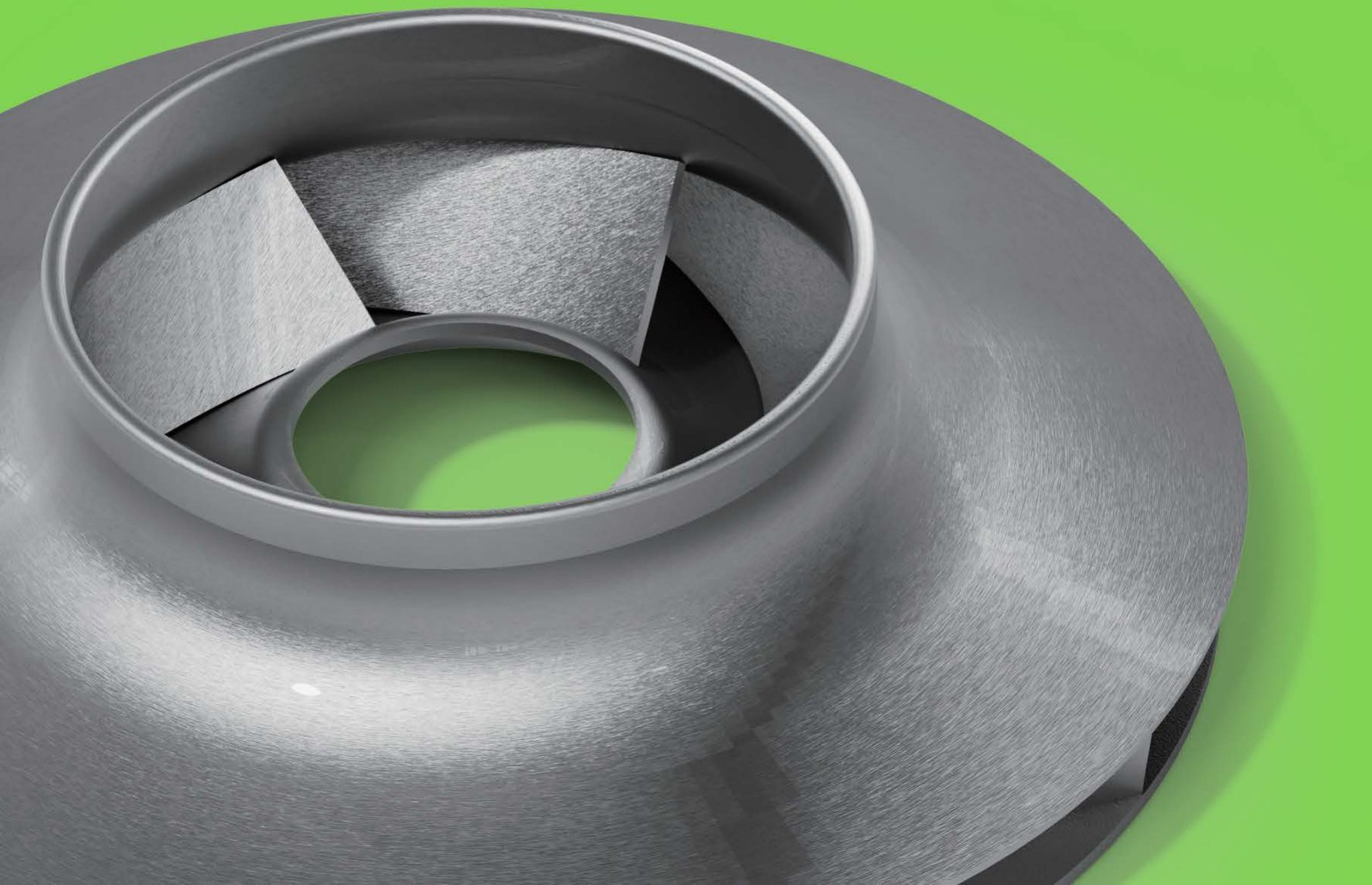
National energy-saving evaluated and certified products

Outstanding forming process

100% Restores efficient hydraulic model

ocbooom.®

100% REDUCTION EFFICIENT HYDRAULIC MODEL



NZS

ULTRA HIGH EFFICIENT HORIZONTAL SINGLE STAGE STAINLESS STEEL PUMPS

The NZS stainless steel horizontal single-stage centrifugal pumps are fabricated of stainless steel plates by advanced techniques such as stamping, bulging and welding. It features axial water intake and radial water discharge. The casing is firmly fixed to the base and is equipped with a fully enclosed air-cooled IEC motor as standard. This pump boasts a lightweight structure, an aesthetically pleasing appearance, high efficiency and energy saving, durability, low noise levels and resistance to mild corrosion.

Neu-booom®

NZS INNOVATION

- The monobloc design of the pumps offers high concentricity, efficient transmission, and less installation space.
- The impeller is fabricated through stamping stainless steel plates and laser welding, ensuring accurate streamline and excellent surface finish.
- The casing is formed by stamping, bulging and laser welding of stainless steel plates. The flow channel size is precisely controlled, restoring the high efficient hydraulic model by 100%. The impeller operates smoothly in the flow channel with low noise and high efficiency.
- The casing is thickened, ensuring sturdiness, durability and corrosion resistance.
- The high-standard design requirements, combined with advanced equipment and the meticulous processing approach, guarantee the accuracy of size processing. This makes the assembly of the entire pump more precise, its operation more stable and its service life longer.
- The BIA rubber bellows mechanical seal is standard. The dynamic and static rings and rubber rings are available with different materials, suitable for liquids of different temperatures and pH values.
- The stainless steel pump shaft is corrosion-resistant and leak-proof.
- O-rings are available with EPDM rubber, which can withstand a wider temperature range and prevent sealing leakage.

ocbooom.®

WE ASSIST YOU BASED ON YOUR INDUSTRY AND OPERATING CONDITIONS DESIGN AND OPTIMIZE THE PUMP SYSTEM.

The NZS stainless steel horizontal single-stage centrifugal pumps are a versatile product capable of transporting water or various non-corrosive and slightly corrosive industrial liquid.

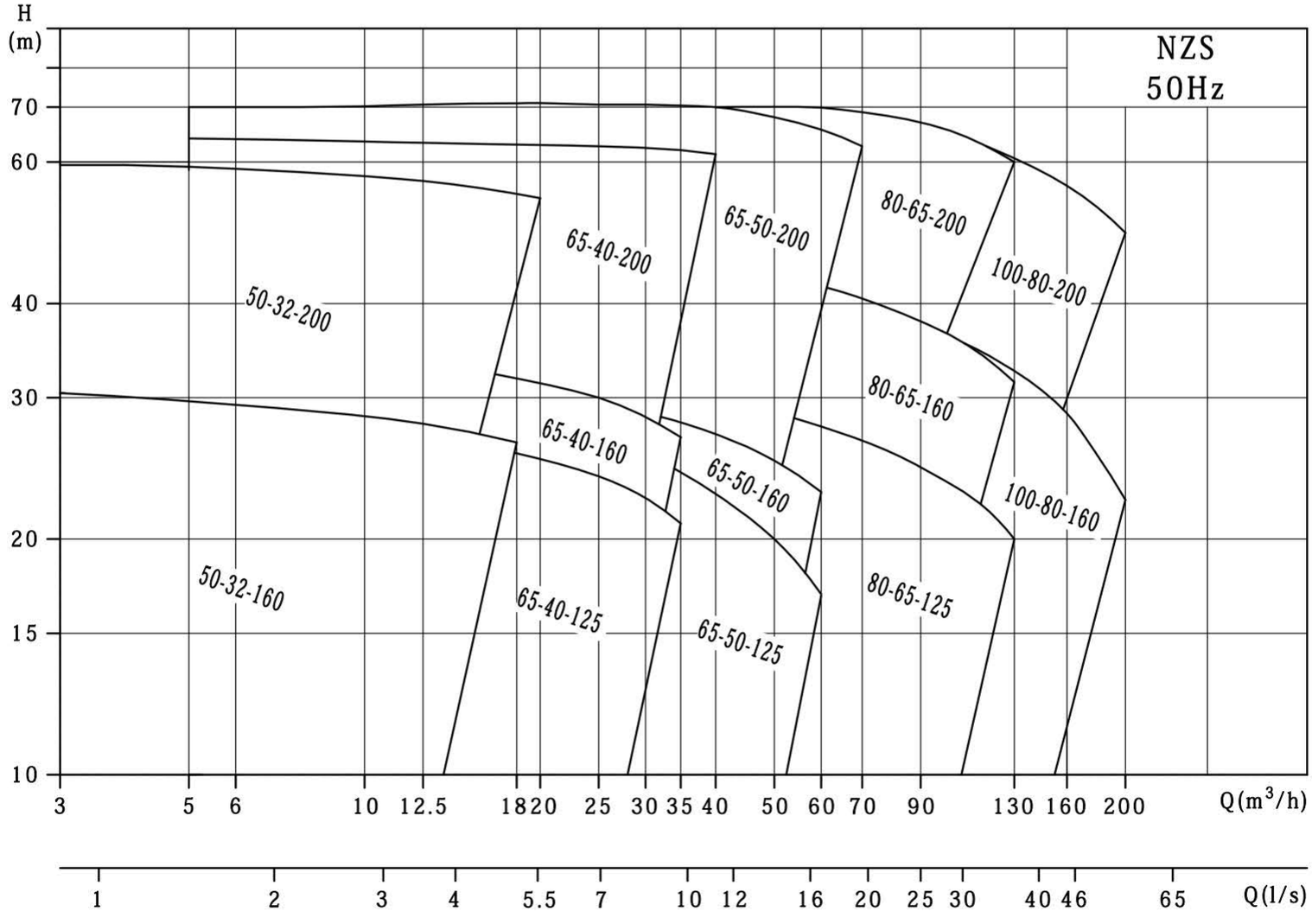
Makes your application system more sustainable!

Water Supply System	Filtration and transportation in water plants, pressurization of main pipes, pressurization in industrial buildings, etc.
Industrial Pressurization	Cleaning and cleaning systems, high-pressure flushing systems, process water systems, etc.
Industrial Liquid Transportation	Feed water for boilers, condensate systems, transportation of weak acids and weak bases, etc.
Cooling and Air Conditioning Systems	Liquid transportation in air conditioning systems and ventilation systems, etc.
Others	Applications of swimming pools, farmland irrigation, greenhouse water transportation, medicine and hygiene, etc.

NZS

NZS ULTRA HIGH EFFICIENT HORIZONTAL SINGLE STAGE STAINLESS STEEL PUMPS

Performance range



Product range

SN	MODEL	Q [m³/h]	H [m]	n [r/min]	Standard motor voltage[V]	
					1×220V	3×380V
					P2[kW]	P2[kW]
1	NZS50-32-160/1.1	6.3	21	2900	1.1	1.1
2	NZS50-32-160/1.5	12.5	22		1.5	1.5
3	NZS50-32-160/2.2	12.5	28		2.2	2.2
4	NZS50-32-200/3.0	12.5	35			3
5	NZS50-32-200/4.0	12.5	47			4
6	NZS50-32-200/5.5	12.5	57			5.5
7	NZS65-40-125/1.5	25	13		1.5	1.5
8	NZS65-40-125/2.2	25	18		2.2	2.2
9	NZS65-40-125/3.0	25	24			3
10	NZS65-40-160/4.0	25	30			4
11	NZS65-40-200/5.5	25	38			5.5
12	NZS65-40-200/7.5	25	48			7.5
13	NZS65-40-200/11.0	25	63	2950		11
14	NZS65-50-125/3.0	50	14.5	2900		3
15	NZS65-50-125/4.0	50	20			4
16	NZS65-50-160/5.5	50	25			5.5
17	NZS65-50-200/7.5	50	34			7.5
18	NZS65-50-200/9.2	50	42			9.2
19	NZS65-50-200/11.0	50	49	2950		11
20	NZS65-50-200/15.0	50	58			15
21	NZS65-50-200/18.5	50	68			18.5
22	NZS80-65-125/5.5	100	13	2900		5.5
23	NZS80-65-125/7.5	100	18			7.5
24	NZS80-65-125/9.2	100	24			9.2
25	NZS80-65-160/11.0	100	29	2950		11
26	NZS80-65-160/15.0	100	36			15
27	NZS80-65-200/18.5	100	45			18.5
28	NZS80-65-200/22.0	100	53			22
29	NZS80-65-200/30.0	100	66			30
30	NZS100-80-160/11.0	160	17			11
31	NZS100-80-160/15.0	160	22			15
32	NZS100-80-160/18.5	160	29			18.5
33	NZS100-80-200/22.0	160	34			22
34	NZS100-80-200/30.0	160	45			30
35	NZS100-80-200/37.0	160	56			37

Features

The NZS stainless steel horizontal single-stage centrifugal pump is fabricated of stainless steel plates by advanced techniques such as stamping, bulging and welding. It features axial water intake and radial water discharge. The casing is firmly fixed to the base and is equipped with a fully enclosed air-cooled IEC motor as standard. This pump boasts a lightweight structure, an aesthetically pleasing appearance, high efficiency and energy saving.

Applications

The NZS stainless steel horizontal single-stage centrifugal pumps are a versatile product capable of transporting water or various non-corrosive and slightly corrosive industrial liquid. Typical applications are as follows:

- Water Supply System: Filtration and transportation in water plants, pressurization of main pipes, pressurization in industrial buildings, etc.
- Industrial Pressurization: Cleaning and cleaning systems, high-pressure flushing systems, process water systems, etc.
- Industrial Liquid Transportation: Feed water for boilers, condensate systems, transportation of weak acids and weak bases, etc.
- Cooling and Air Conditioning Systems: Liquid transportation in air conditioning systems and ventilation systems, etc.
- Applications of swimming pools, farmland irrigation, greenhouse water transportation, medicine and hygiene, etc.

Curve conditions

The guidelines below apply to the curves on the following pages.

- All curves are based on the measured values of the motor at a constant speed of 2900 rpm or 2950rpm.
- Tolerances according to ISO9906:2012,3B.
- Measurements have been made with airless water at a temperature of 20 ° C. The curves apply to the following kinematic viscosity: 1mm²/s.
- The bold curves state the recommended performance range. Due to the risk of overheating or overload, the pumps should neither be used at a flow below the minimum flow rate, nor be used at a flow over the maximum flow rate.
- If the density and viscosity of the conveyed liquid are different from those of water, the motor power needs to be changed accordingly.

Operating conditions

Thin, clean, non-flammable and not explosive liquid that does not contain solid particles or fiber
Liquid temperature: -20° C to +100° C
Maximum ambient temperature: +40° C
Maximum altitude 1000 meters;
Maximum working pressure: 10 bar

Motor

The motor is a fully enclosed, air-cooled two-pole motor.
Protection class: IP55
Insulation class: F

- Standard voltage:50Hz:1x220V
  3x380V

Installation Conditions

- The pump should be installed in a well-ventilated and frost-proof place.
- When installing the pump, care should be taken that not let the weight and stress of the pipeline on the pump.
- In order to facilitate inspection and maintenance, sufficient space should be left around the pump.
- If the pump is installed outdoors, a suitable cover should be fit to prevent water inflow or condensation of electrical components.
- The pump should be installed horizontally on the base, horizontal suction, vertical discharge.

Model definition

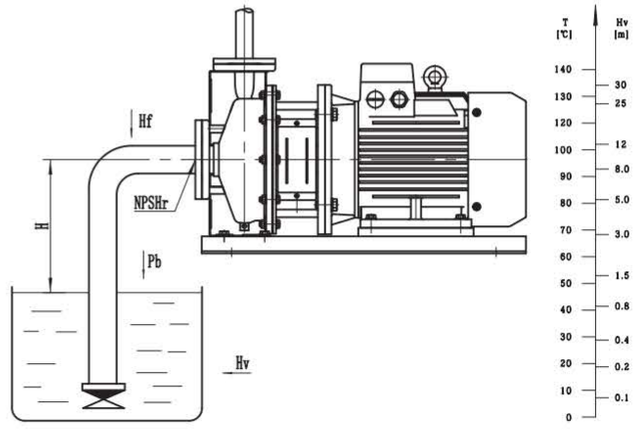
NZS 65 - 40 - 125 / 2.2

- Motor Power(kW)
- Nominal diameter of the impeller (mm)
- Discharge diameter(mm)
- Suction diameter(mm)
- Stainless steel horizontal single-stage centrifugal pumps

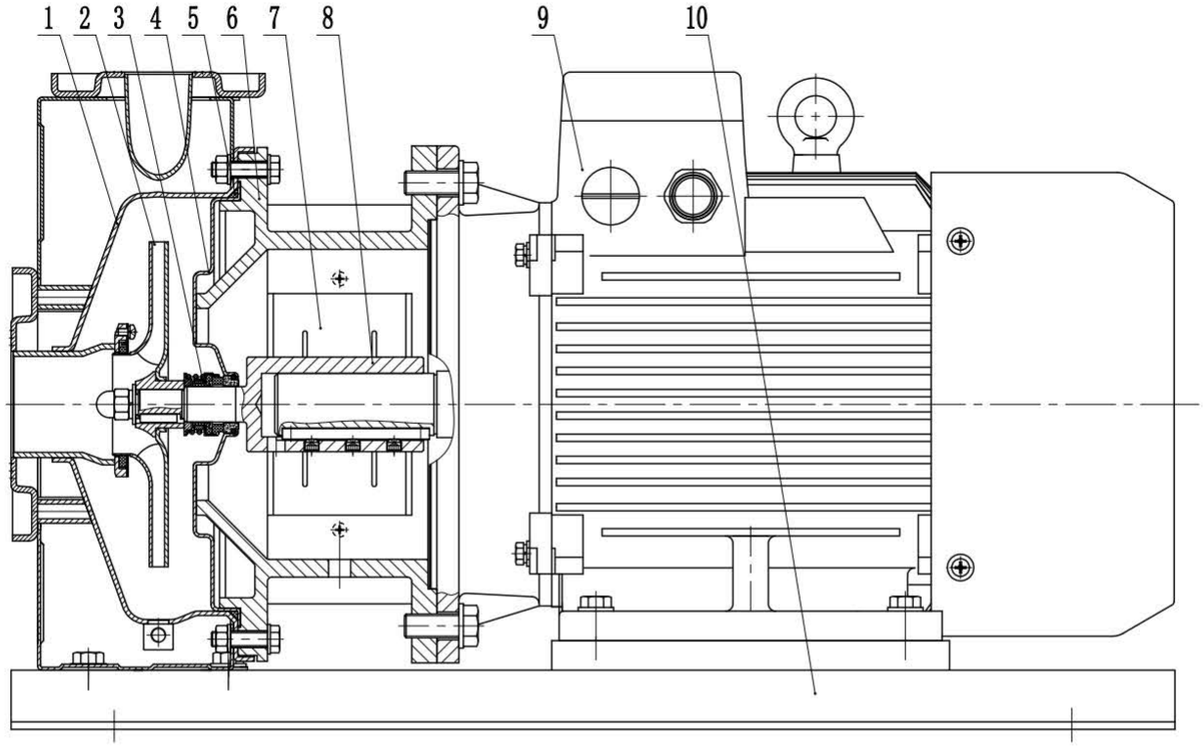
Minimum inlet pressure-NPSHr

If the inner pump pressure is less than liquid vapor pressure, cavitation could happen. To avoid cavitation, make sure that there is a minimum pressure on the inlet side of the pump. Calculate the maximum suction lift "H" in metres head as follows:
H=Pbx10.2-NPSHr-Hf-HV-HS
Pb =Barometric pressure in bar.
Pb can be set to 1 bar at sea level. In closed systems, Pb indicates the system pressure in bar. NPSHr =Net Positive Suction Head in metres head. To be read from the NPSHr curve at the highest flow rate that the pump will be delivering.
Hf = Friction loss in inlet pipe in metres head
Hv =Vapour pressure in metres head.
Hs= Safe margin =0.5 m head
If the calculated "H" is positive, the pump can operate at a suction lift of maximum "H" m head. If the calculated "H" is negative, an inlet pressure of minimum "H" m head is required.
Remark: Generally, the above calculations are not needed. The maximum suction lift "H" is calculated only when the pump is used under the following conditions:

- The suction lift is large.
- The system pressure is too low.
- The inlet conditions are poor and the inlet pipelines are long.
- The liquid temperature is high.
- The liquid flow rate is too high.



Sectional drawing



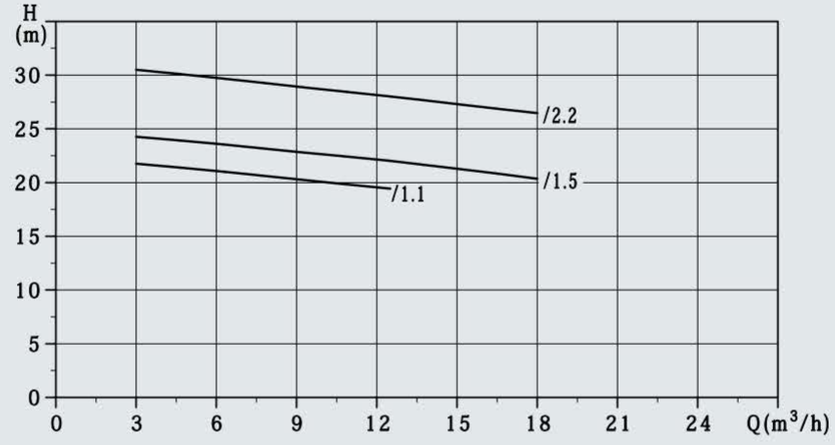
NZS Material list

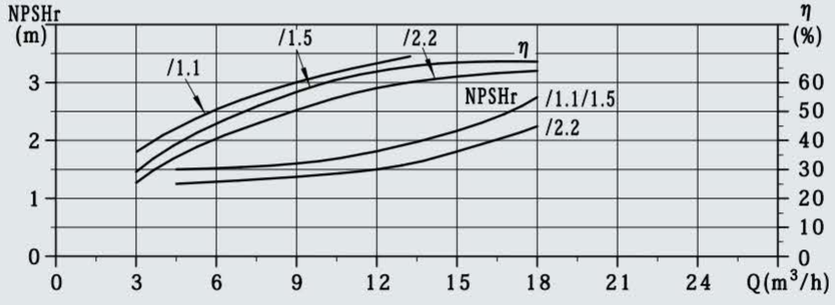
SN	Name	Material	AISI/ASTM
1	Casing	06Cr19Ni10/022Cr17Ni12Mo2	AISI304/AISI316L
2	Impeller	06Cr19Ni10/022Cr17Ni12Mo2	AISI304/AISI316L
3	Mechanical seal	M106K/SiC	
4	Lining of bracket	06Cr19Ni10/022Cr17Ni12Mo2	AISI304/AISI316L
5	O ring	NBR	
6	Bracket	HT200	ASTM25B
7	Coupling guard	06Cr19Ni10	AISI304
8	Shaft	06Cr19Ni10/022Cr17Ni12Mo2	AISI304/AISI316L
9	Motor	Assembly set	
10	Base plate	Q235-A	ASTMA570

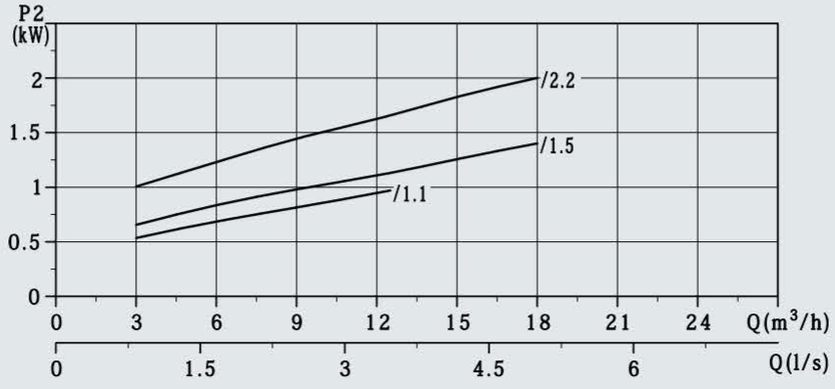
NZS50-32-160

50Hz

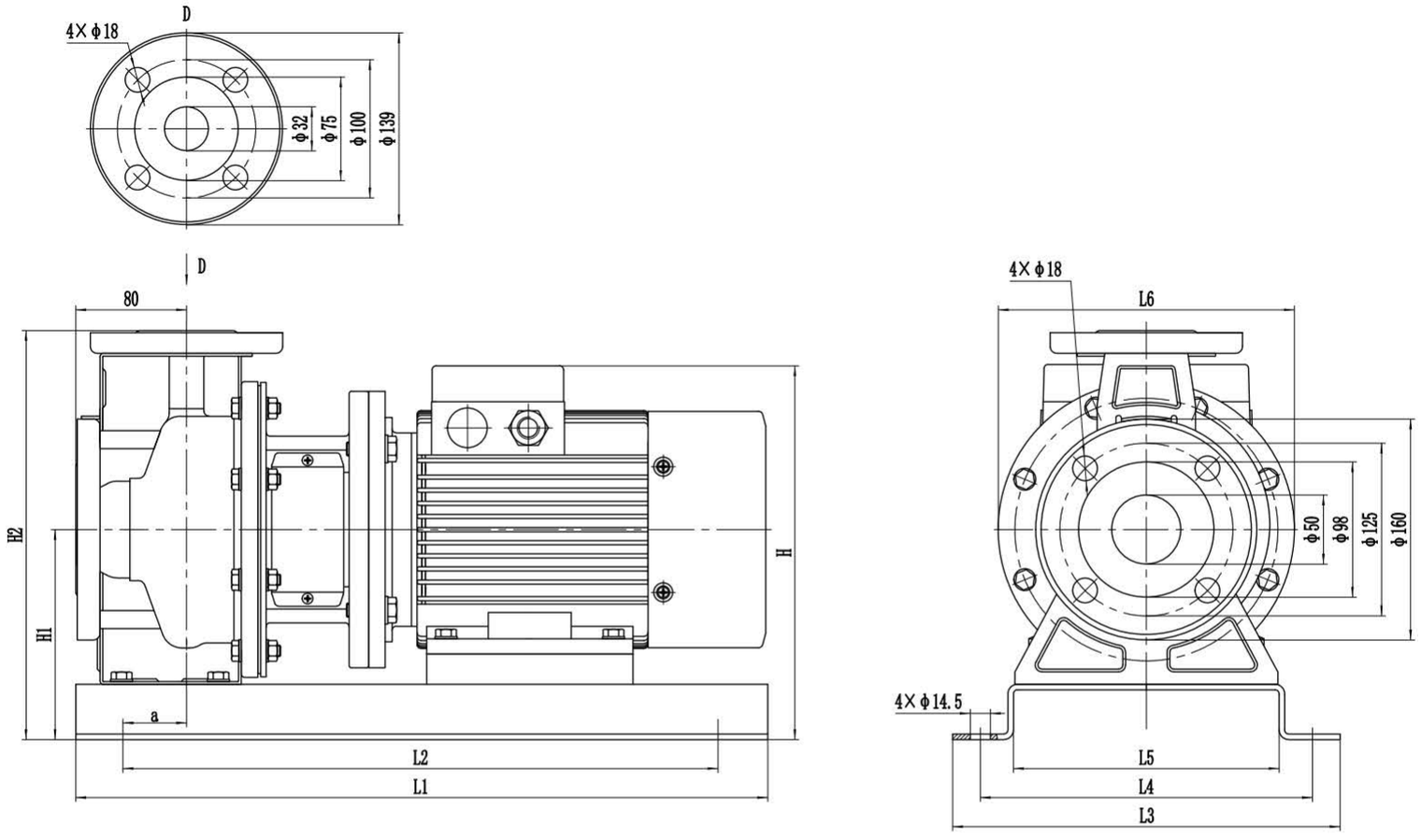
Performance curves







Installation dimensions



Performance tables

Model	Motor (kW)	Q (m³/h)	3	6.3	9	12.5	15	18
NZS50-32-160/1.1	1.1	H (m)	21.7	21	20.3	19.4		
NZS50-32-160/1.5	1.5		24.3	23.5	22.9	22	21.3	20.3
NZS50-32-160/2.2	2.2		30.5	29.7	28.9	28	27.3	26.4

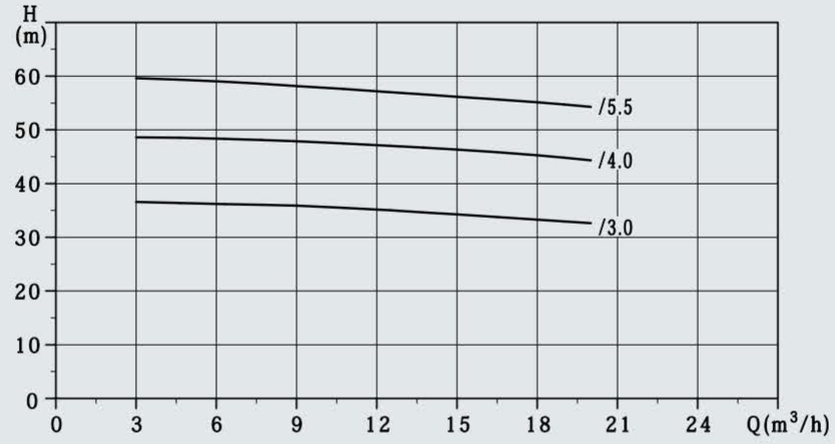
Dimensions and weight

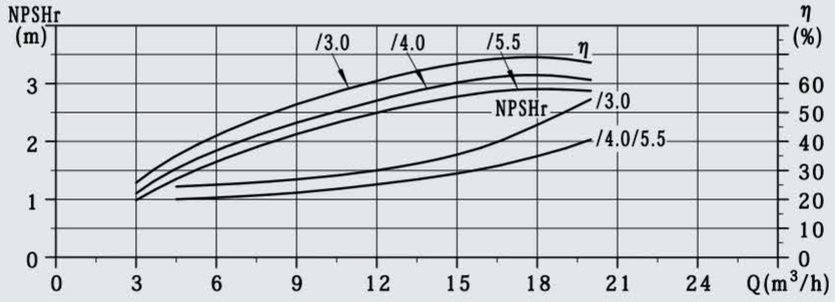
Model	Dimensions (mm)										Weight (kg)
	a	H	H1	H2	L1	L2	L3	L4	L5	L6	
NZS50-32-160/1.1	32	290	152	296	470	370	280	240	192	210	31
NZS50-32-160/1.5	46	307	152	296	500	430	280	240	192	210	37
NZS50-32-160/2.2	46	307	152	296	500	430	280	240	192	210	39

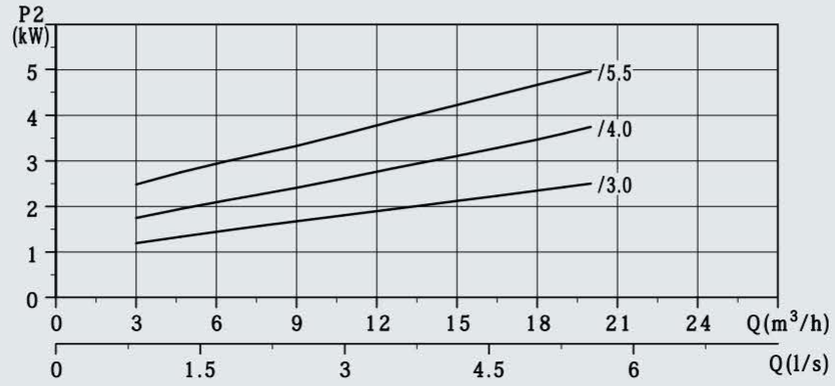
NZS50-32-200

50Hz

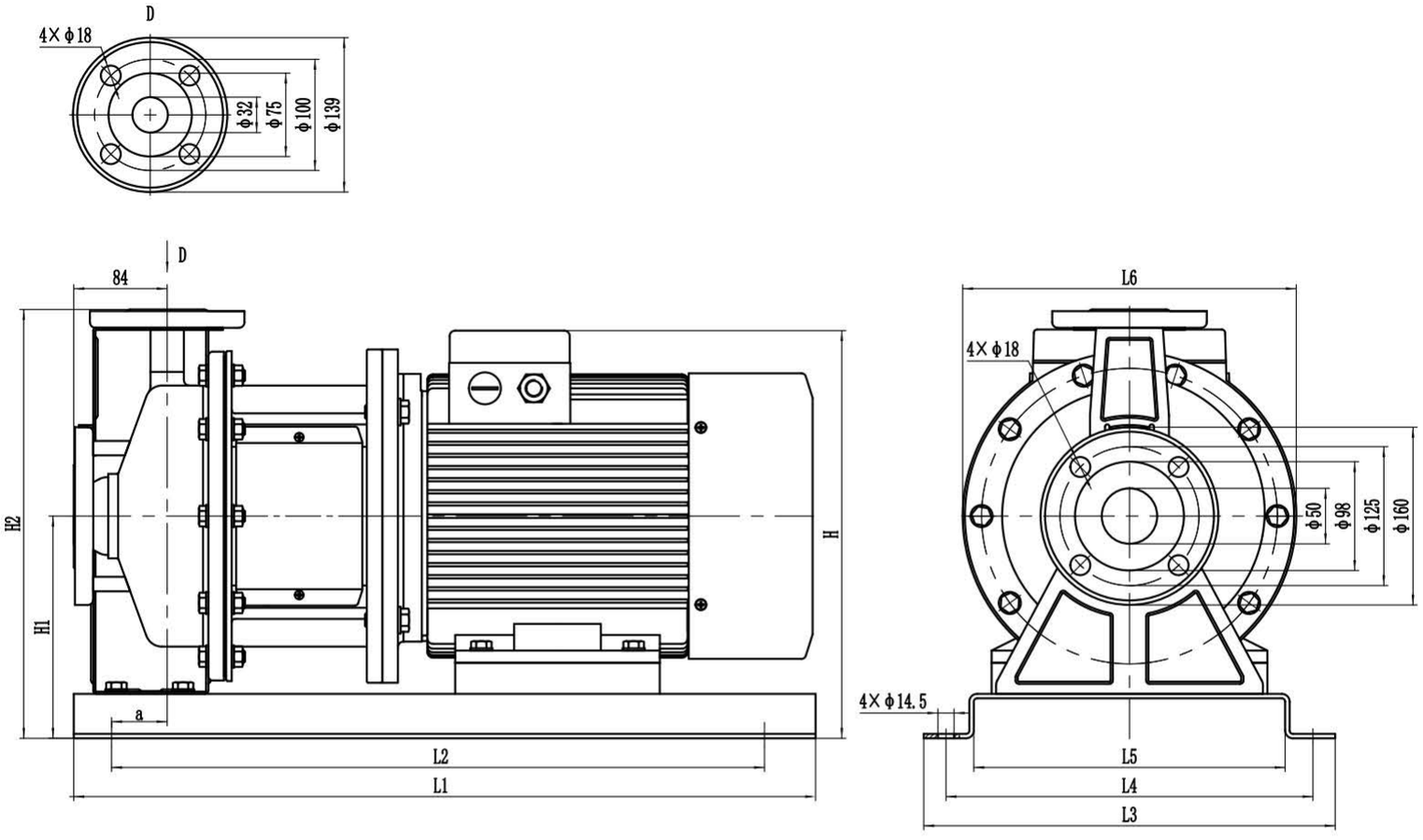
Performance curves







Installation dimensions



Performance tables

Model	Motor (kW)	Q (m³/h)	3	6.3	9	12.5	15	18	20
NZS50-32-200/3.0	3	H (m)	36.5	36.2	35.8	35	34.2	33.3	32.6
NZS50-32-200/4.0	4		48.6	48.3	47.9	47	46.3	45.2	44.3
NZS50-32-200/5.5	5.5		59.6	58.9	58.1	57	56.1	55.1	54.2

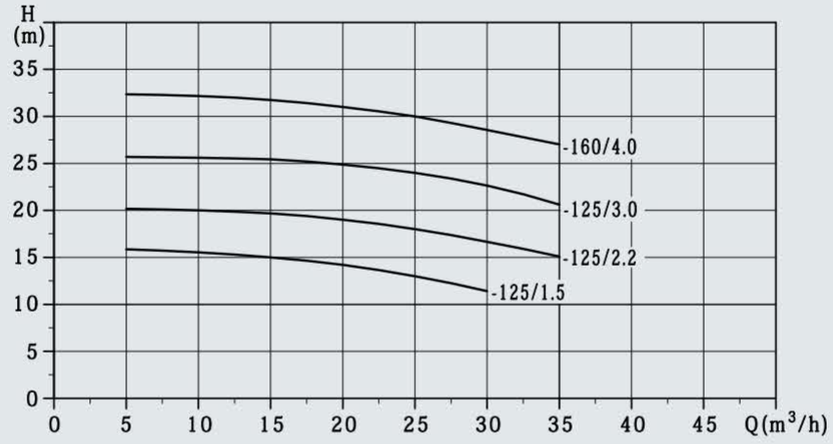
Dimensions and weight

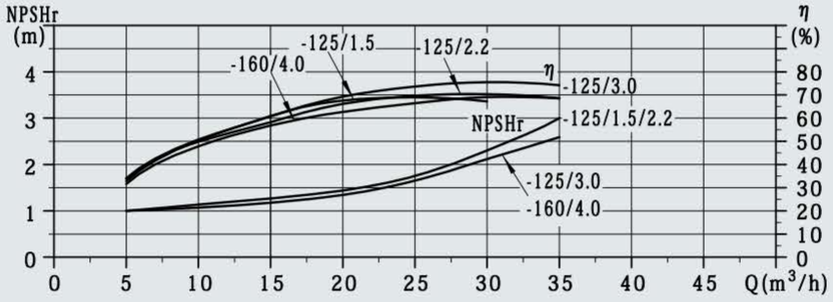
Model	Dimensions (mm)										Weight (kg)
	a	H	H1	H2	L1	L2	L3	L4	L5	L6	
NZS50-32-200/3.0	42	370	200	386	550	460	330	290	242	300	53
NZS50-32-200/4.0	47	393	200	386	560	480	330	290	242	300	58
NZS50-32-200/5.5	50	413	200	386	660	580	370	330	280	300	77

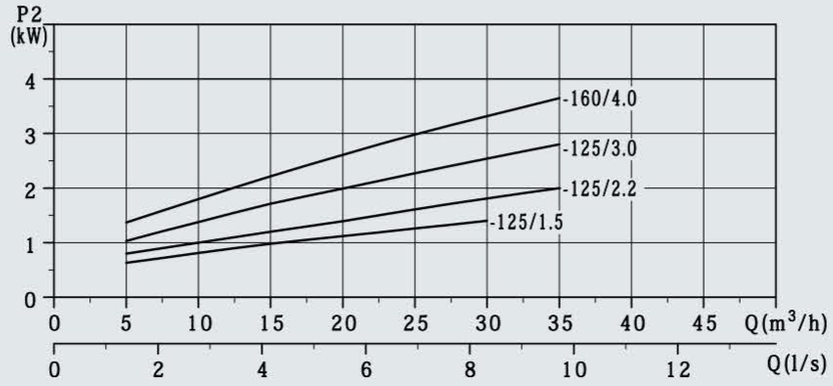
NZS65-40-125(160)

50Hz

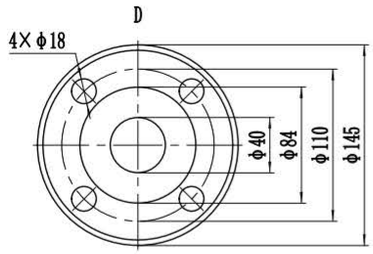
Performance curves

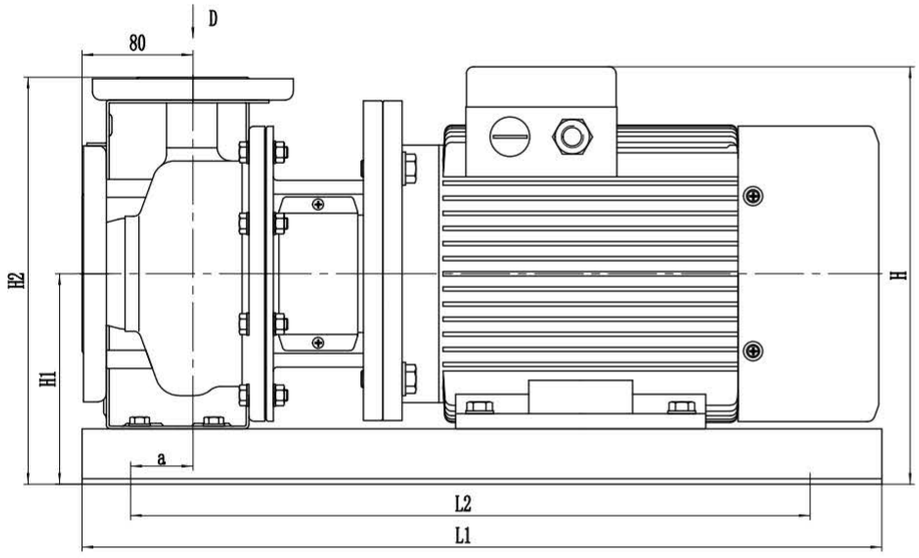


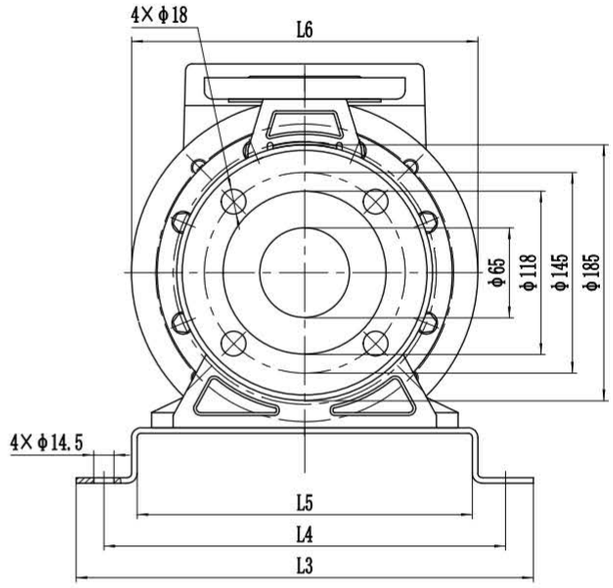




Installation dimensions







Performance tables

Model	Motor (kW)	Q (m³/h)	5	10	15	20	25	30	35
NZS65-40-125/1.5	1.5	H (m)	15.9	15.5	15	14.2	13	11.4	
NZS65-40-125/2.2	2.2		20.2	20	19.7	19	18	16.7	15.1
NZS65-40-125/3.0	3		25.7	25.6	25.4	24.9	24	22.6	20.6
NZS65-40-160/4.0	4		32.4	32.2	31.8	31	30	28.6	27

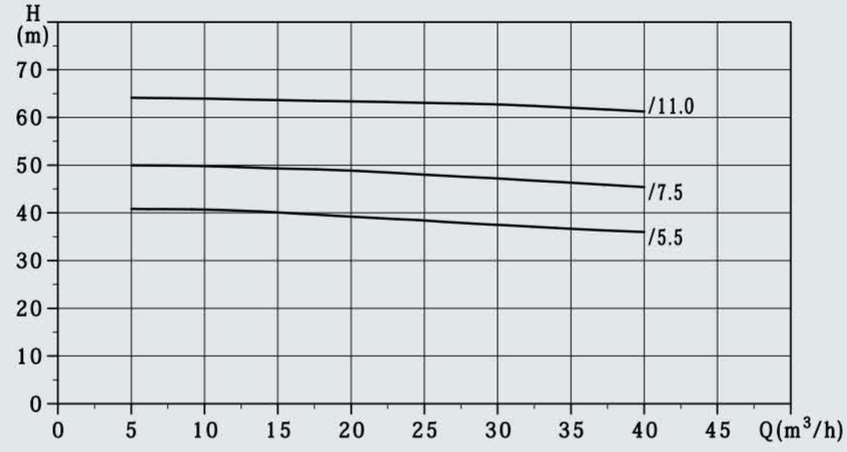
Dimensions and weight

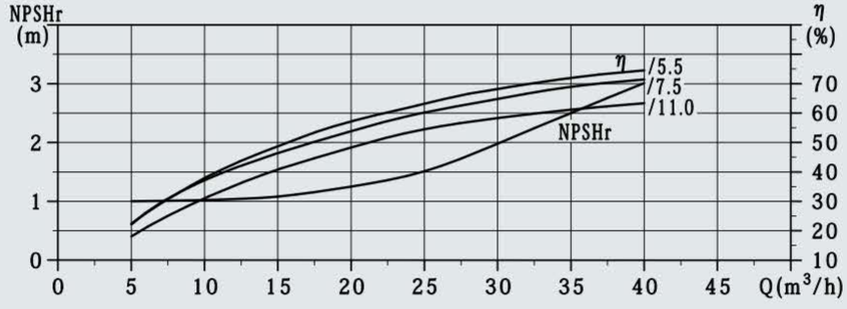
Model	Dimensions (mm)										Weight (kg)
	a	H	H1	H2	L1	L2	L3	L4	L5	L6	
NZS65-40-125/1.5	45	307	152	294	502	430	280	240	192	210	33
NZS65-40-125/2.2	45	307	152	294	502	430	280	240	192	210	35
NZS65-40-125/3.0	45	322	152	294	532	460	300	260	212	250	47
NZS65-40-160/4.0	45	345	152	294	557	480	330	290	242	250	52

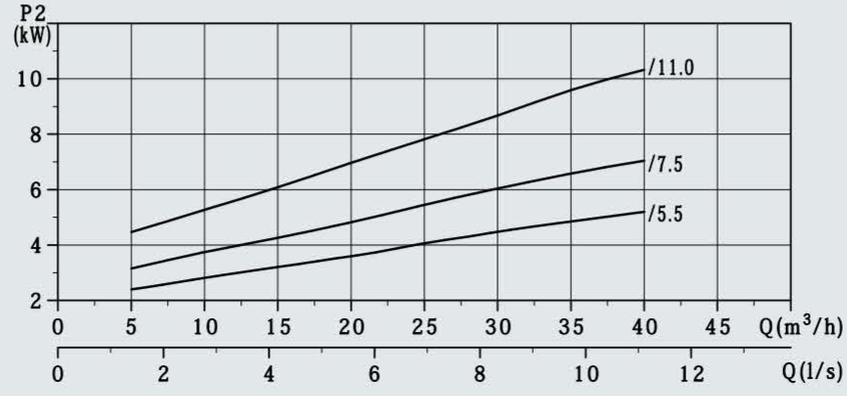
NZS65-40-200

50Hz

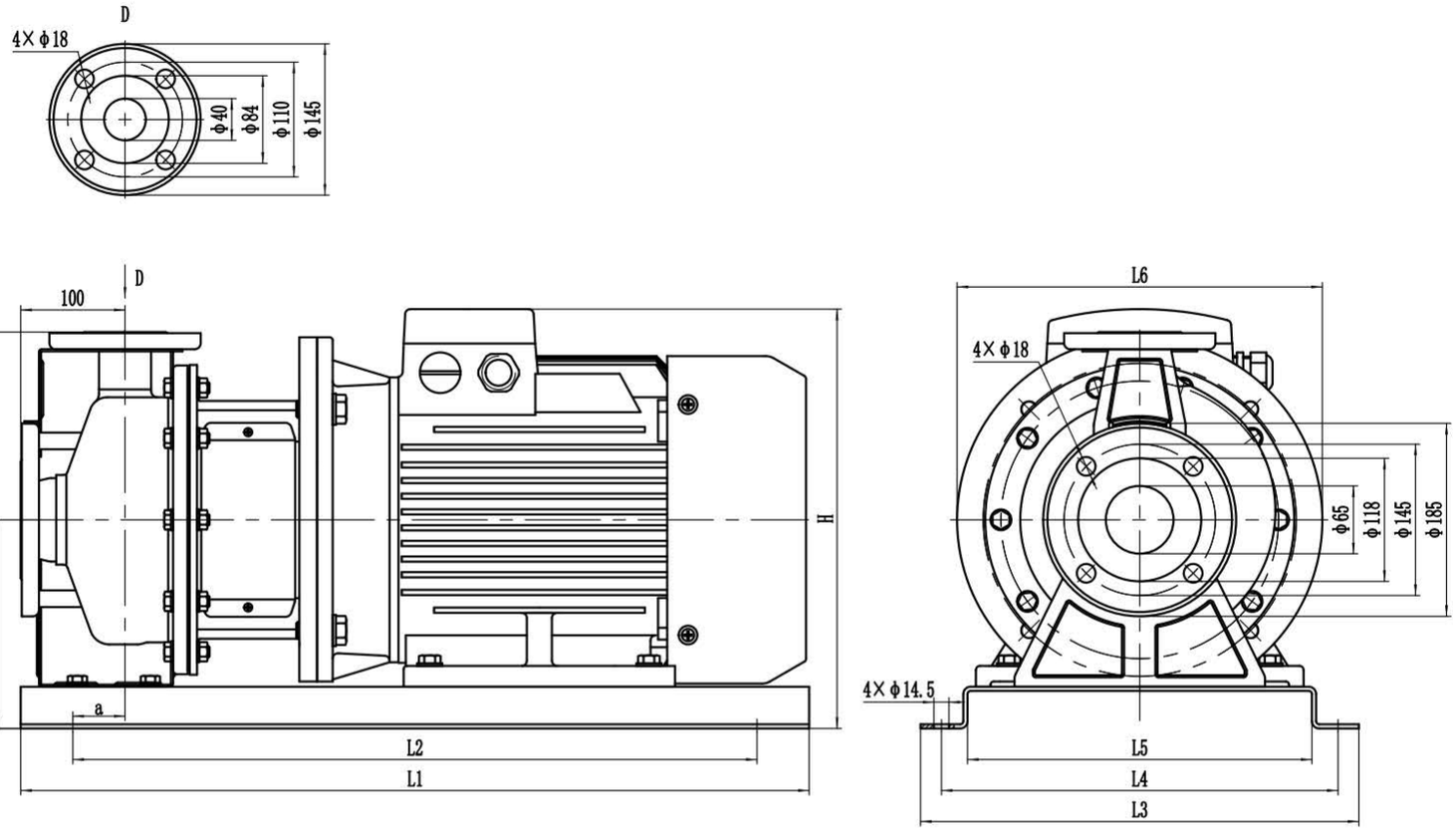
Performance curves







Installation dimensions



Performance tables

Model	Motor (kW)	Q (m³/h)	5	10	15	20	25	30	35	40
NZS65-40-200/5.5	5.5	H (m)	40.8	40.7	40.1	39.2	38	37.5	36.6	36
NZS65-40-200/7.5	7.5		50	49.8	49.3	48.8	48	47.2	46.3	45.4
NZS65-40-200/11.0	11		64.1	63.9	63.6	63.3	63	62.7	62	61.2

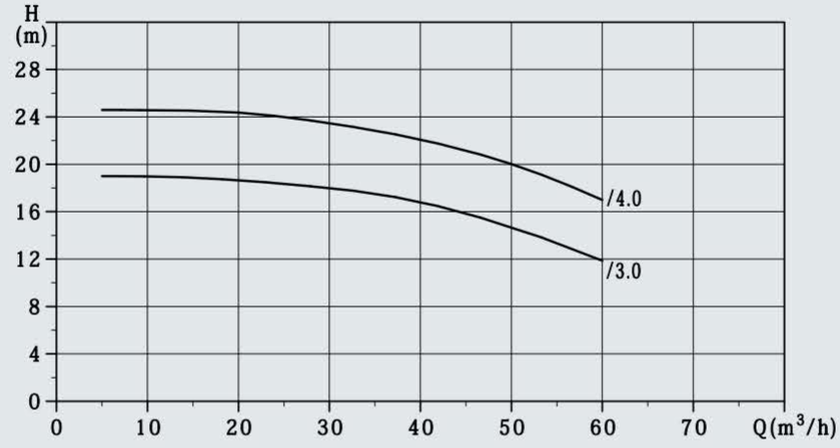
Dimensions and weight

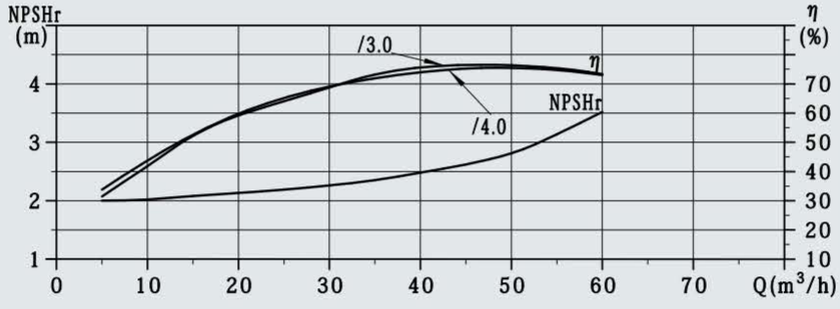
Model	Dimensions (mm)										Weight (kg)
	a	H	H1	H2	L1	L2	L3	L4	L5	L6	
NZS65-40-200/5.5	50	413	200	380	680	580	370	330	280	300	78
NZS65-40-200/7.5	50	413	200	380	680	580	370	330	280	300	82
NZS65-40-200/11.0	50	456	200	380	790	690	420	380	330	350	161

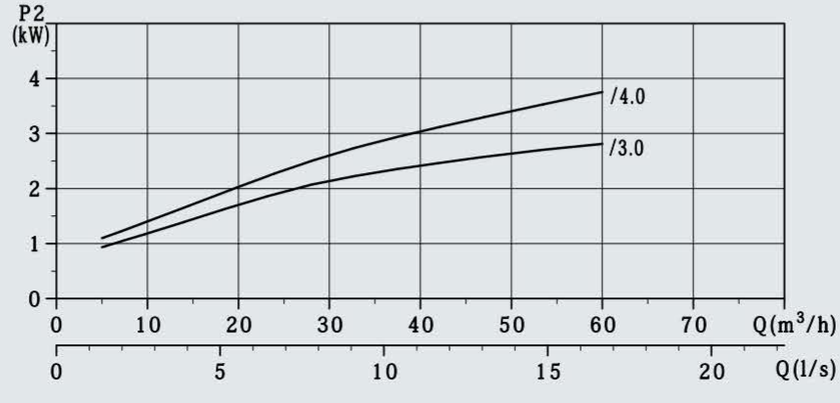
NZS65-50-125

50Hz

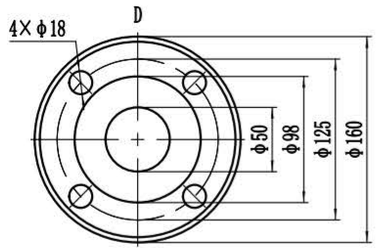
Performance curves

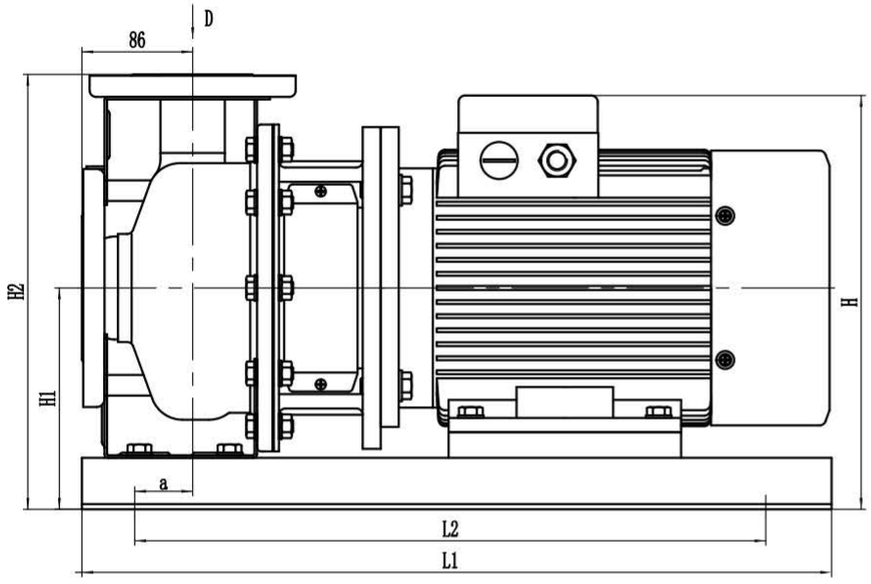


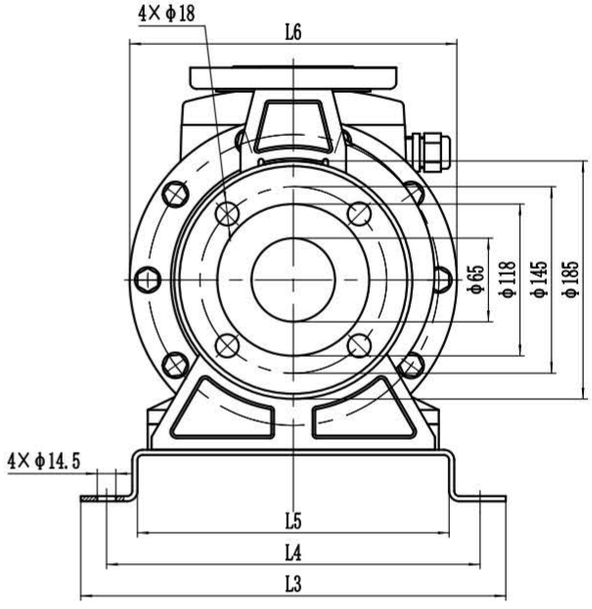




Installation dimensions







Performance tables

Model	Motor (kW)	Q (m³/h)	5	10	20	30	40	50	60
NZS65-50-125/3.0	3	H (m)	19	18.9	18.7	18	16.8	14.5	11.8
NZS65-50-125/4.0	4		24.6	24.5	24.3	23.5	22.1	20	17

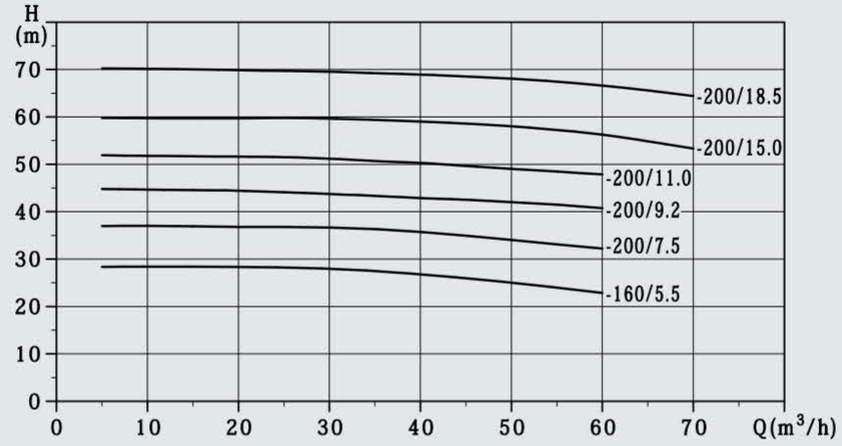
Dimensions and weight

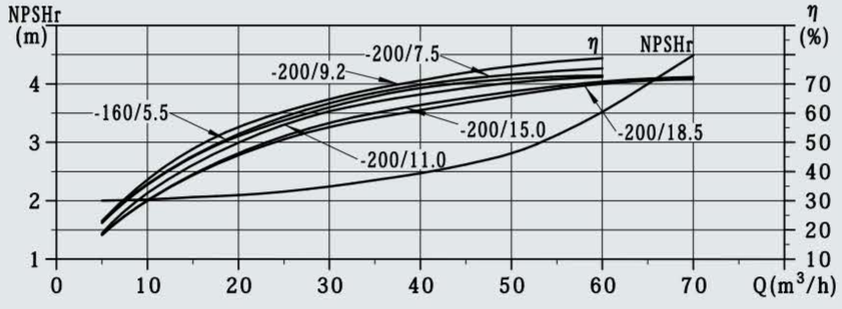
Model	Dimensions (mm)										Weight (kg)
	a	H	H1	H2	L1	L2	L3	L4	L5	L6	
NZS65-50-125/3.0	45	342	172	338	548	468	330	290	242	250	49
NZS65-50-125/4.0	45	365	172	338	570	490	330	290	242	250	54

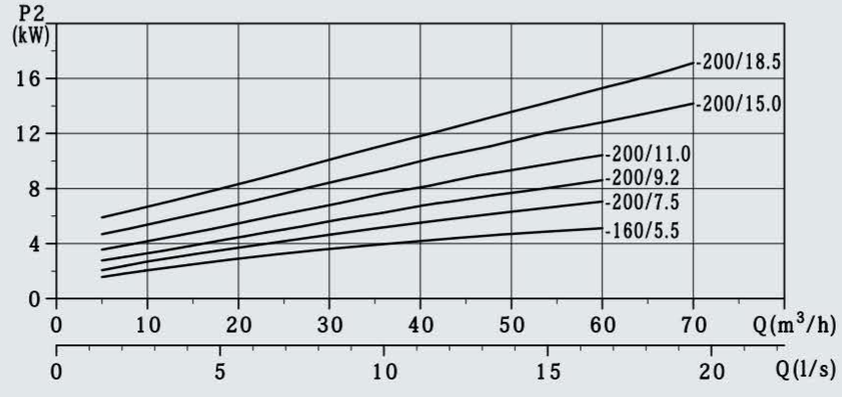
NZS65-50-160(200)

50Hz

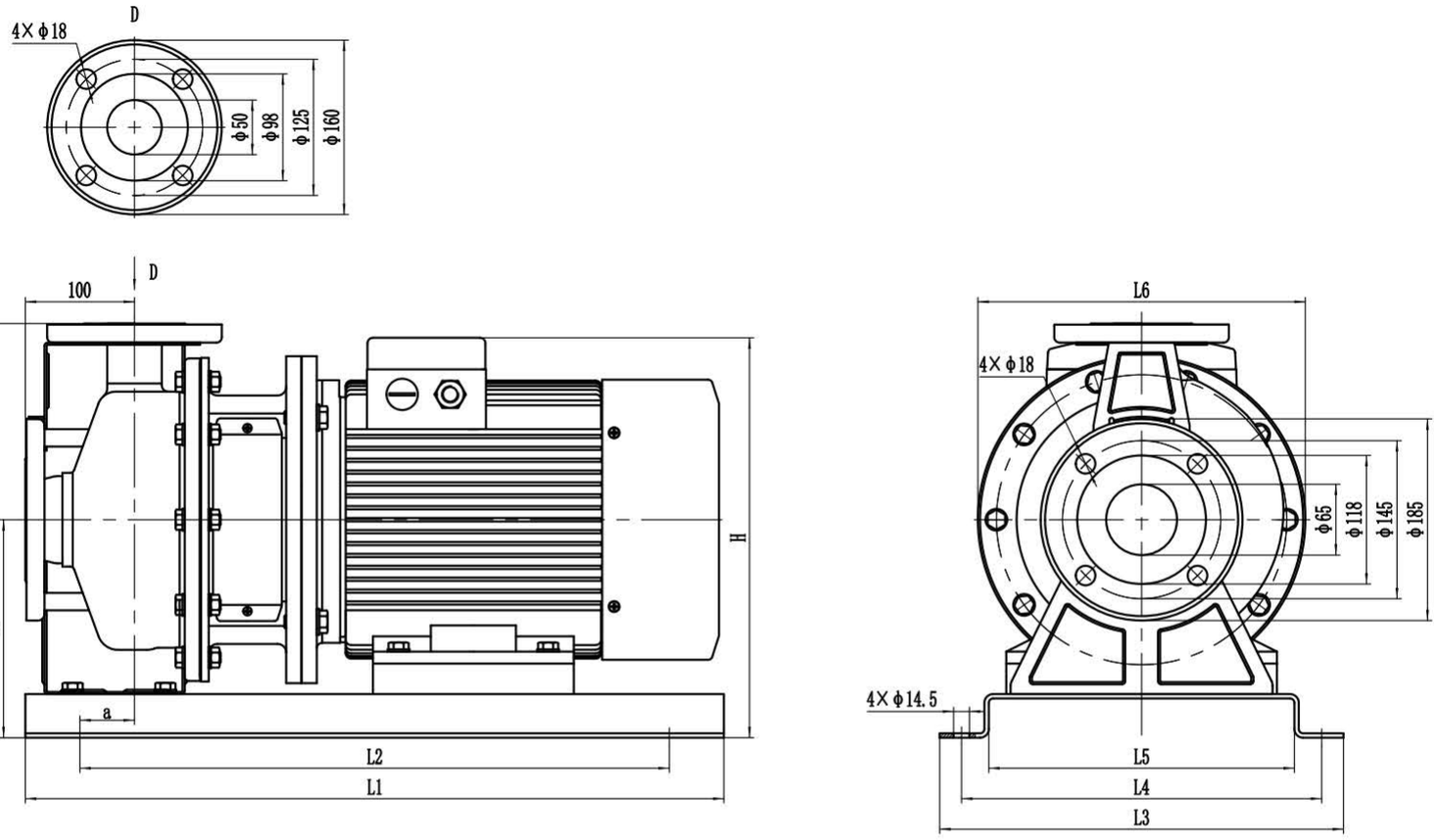
Performance curves







Installation dimensions



Performance tables

Model	Motor (kW)	Q (m³/h)	5	10	20	30	40	50	60	70
NZS65-50-160/5.5	5.5	H (m)	28.4	28.3	28.2	27.9	26.8	25	22.8	
NZS65-50-200/7.5	7.5		37	36.9	36.8	36.6	35.7	34	32.2	
NZS65-50-200/9.2	9.2		44.7	44.6	44.4	43.7	42.8	42	40.7	
NZS65-50-200/11.0	11		51.9	51.8	51.6	51.2	50.3	49	47.8	
NZS65-50-200/15.0	15		59.8	59.7	59.6	59.5	58.9	58	56.2	53.3
NZS65-50-200/18.5	18.5		70.2	70.1	69.8	69.5	68.9	68	66.6	64.3

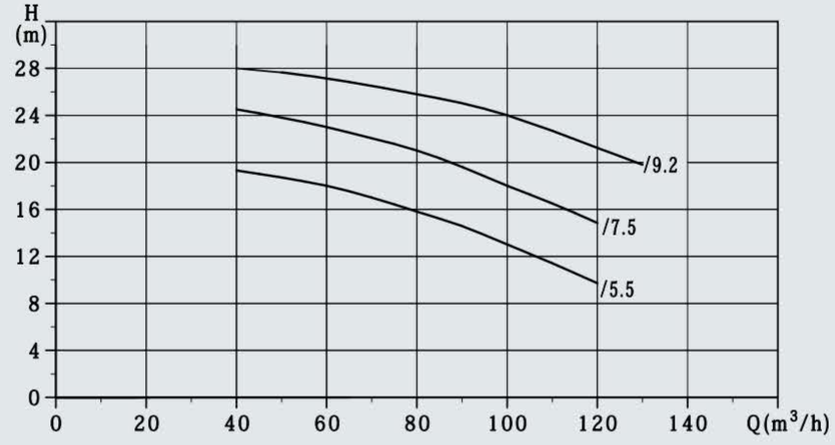
Dimensions and weight

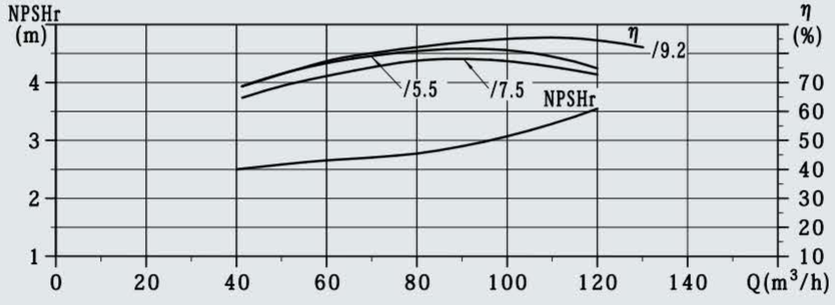
Model	Dimensions (mm)										Weight (kg)
	a	H	H1	H2	L1	L2	L3	L4	L5	L6	
NZS65-50-160/5.5	50	413	200	380	680	580	370	330	280	300	78
NZS65-50-200/7.5	50	413	200	380	680	580	370	330	280	300	82
NZS65-50-200/9.2	50	413	200	380	680	580	370	330	280	300	85
NZS65-50-200/11.0	50	456	200	380	790	690	420	380	330	350	161
NZS65-50-200/15.0	50	456	200	380	790	690	420	380	330	350	171
NZS65-50-200/18.5	50	456	200	380	830	730	420	380	330	350	188

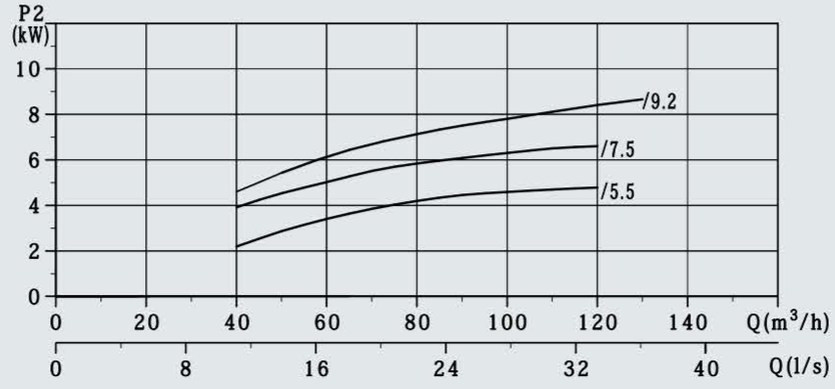
NZS80-65-125

50Hz

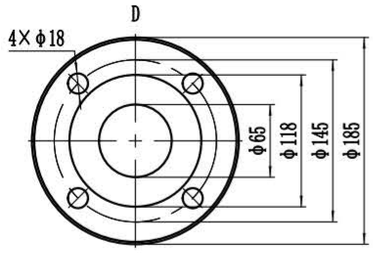
Performance curves

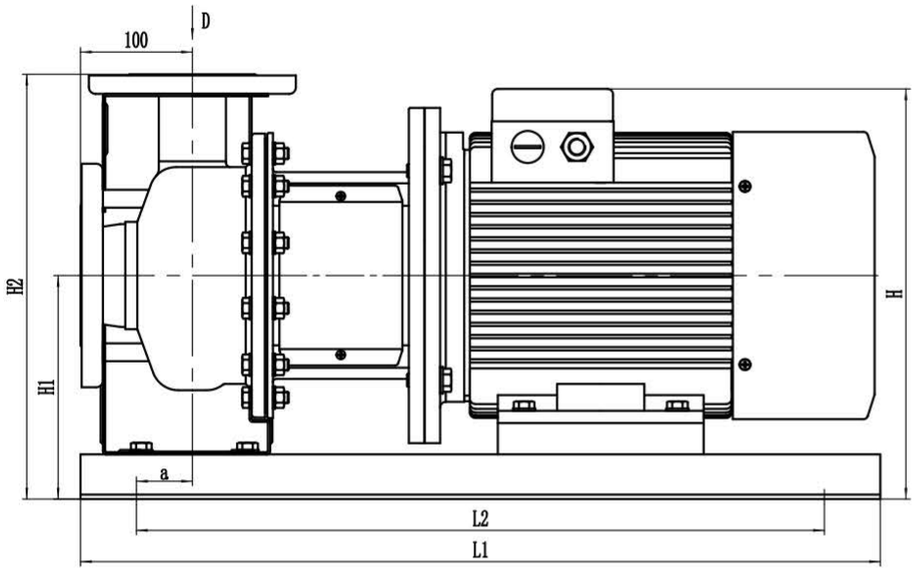


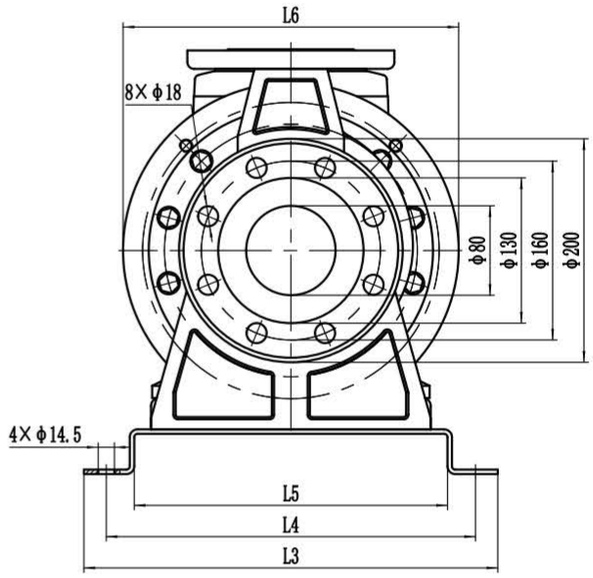




Installation dimensions







Performance tables

Model	Motor (kW)	Q (m³/h)	40	50	60	70	80	90	100	110	120	130
NZS80-65-125/5.5	5.5	H (m)	19.3	18.7	18	17	15.8	14.5	13	11.3	9.7	
NZS80-65-125/7.5	7.5		24.5	23.8	23	22.1	21	19.7	18	16.5	14.8	
NZS80-65-125/9.2	9.2		28	27.7	27	26.5	25.7	25	24	22.7	21.3	19.8

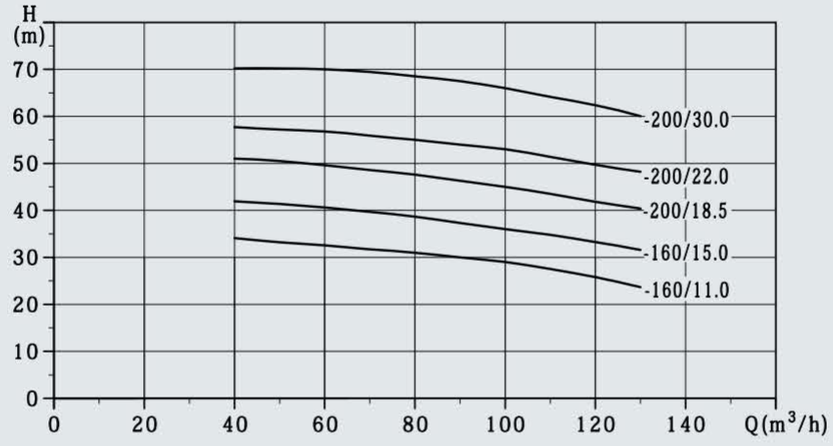
Dimensions and weight

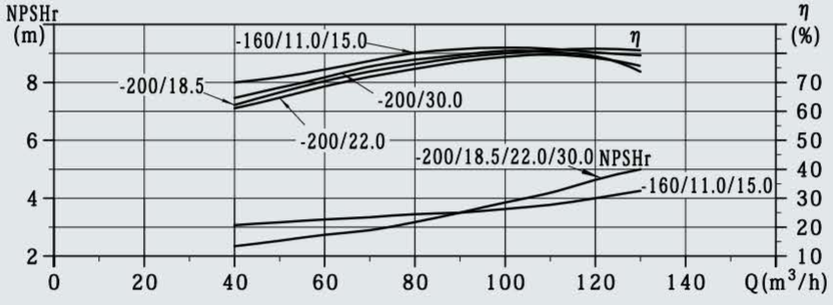
Model	Dimensions (mm)										Weight (kg)
	a	H	H1	H2	L1	L2	L3	L4	L5	L6	
NZS80-65-125/5.5	50	413	200	380	690	590	370	330	280	300	79
NZS80-65-125/7.5	50	413	200	380	690	590	370	330	280	300	83
NZS80-65-125/9.2	50	413	200	380	690	590	370	330	280	300	87

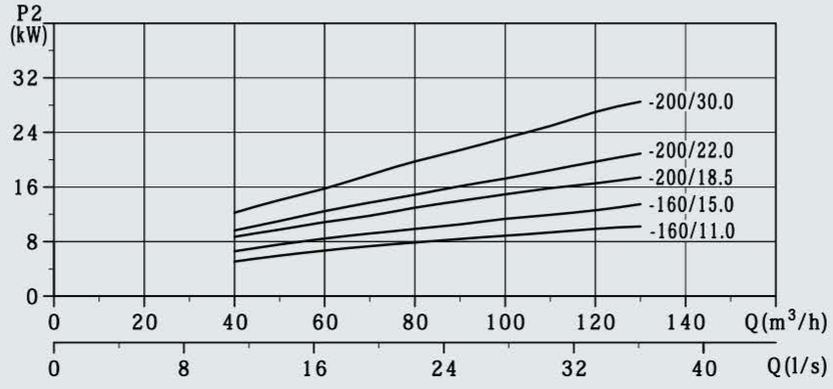
NZS80-65-160(200)

50Hz

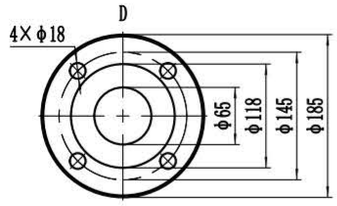
Performance curves

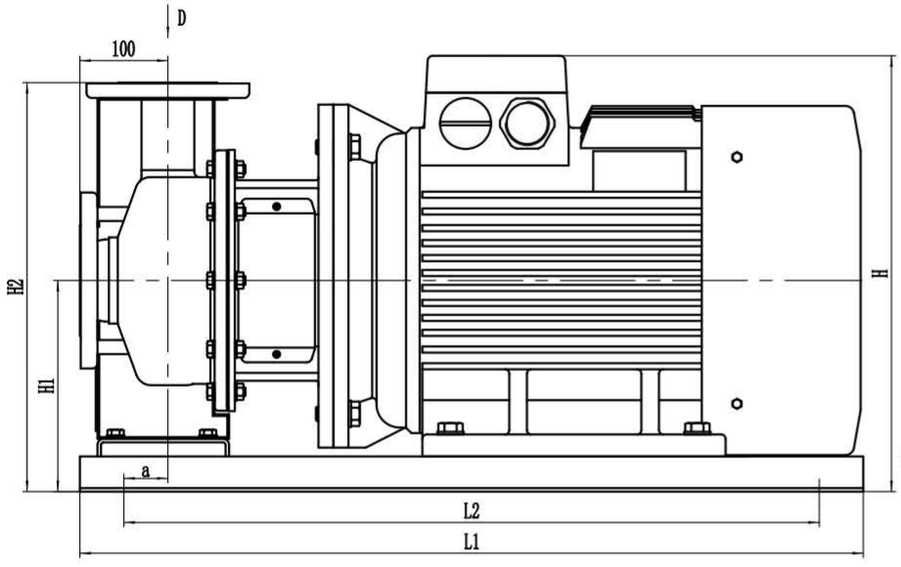


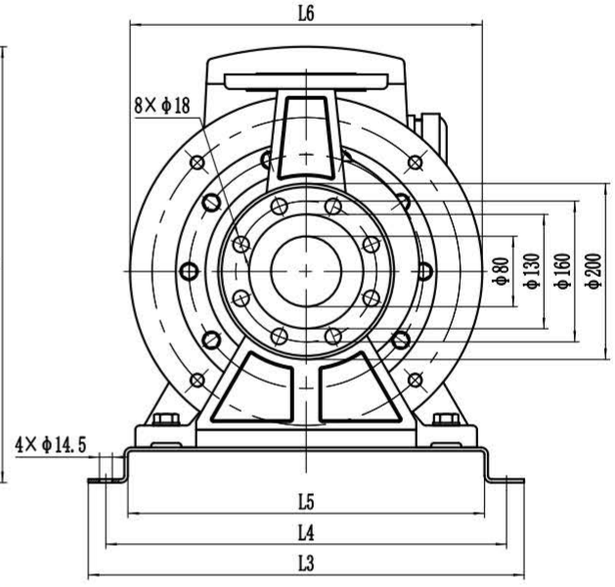




Installation dimensions







Performance tables

Model	Motor (kW)	Q (m^3/h)	40	50	60	70	80	90	100	110	120	130
NZS80-65-160/11.0	11	H (m)	34.1	33.2	32.6	31.7	31	30	29	27.4	25.8	23.7
NZS80-65-160/15.0	15		41.9	41.4	40.6	39.7	38.7	37.3	36	34.8	33.3	31.6
NZS80-65-200/18.5	18.5		51	50.5	49.6	48.6	47.6	46.3	45	43.5	41.8	40.4
NZS80-65-200/22.0	22		57.7	57.2	56.8	55.9	55	54	53	51.4	49.7	48.2
NZS80-65-200/30.0	30		70.2	70.1	70	69.4	68.5	67.5	66	64.2	62.4	60.1

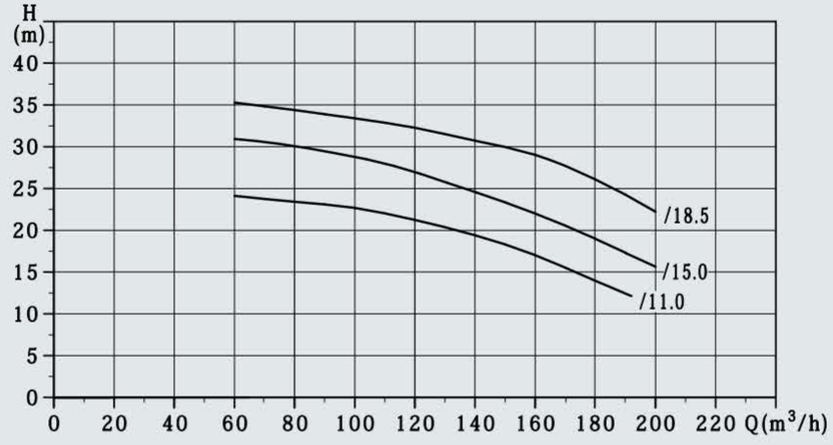
Dimensions and weight

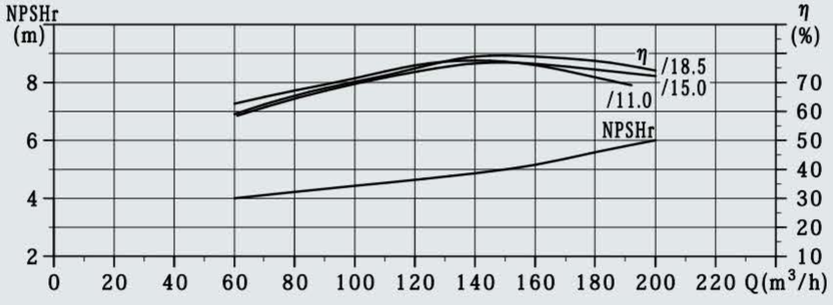
Model	Dimensions (mm)										Weight (kg)
	a	H	H1	H2	L1	L2	L3	L4	L5	L6	
NZS80-65-160/11.0	50	456	200	400	790	690	420	380	330	350	163
NZS80-65-160/15.0	50	456	200	400	790	690	420	380	330	350	173
NZS80-65-200/18.5	50	476	220	445	830	730	420	380	330	350	190
NZS80-65-200/22.0	50	500	220	445	880	780	455	415	365	350	220
NZS80-65-200/30.0	50	550	240	465	950	850	495	455	405	400	292

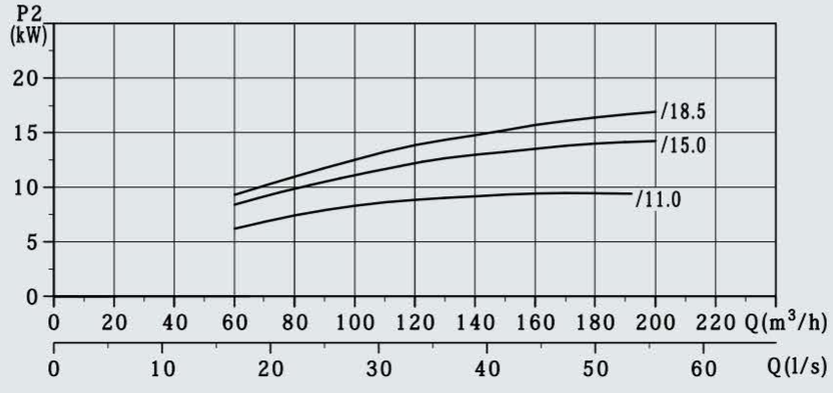
NZS100-80-160

50Hz

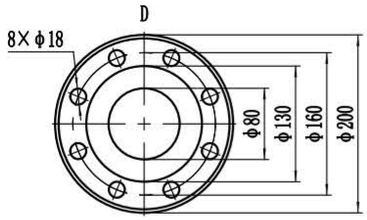
Performance curves

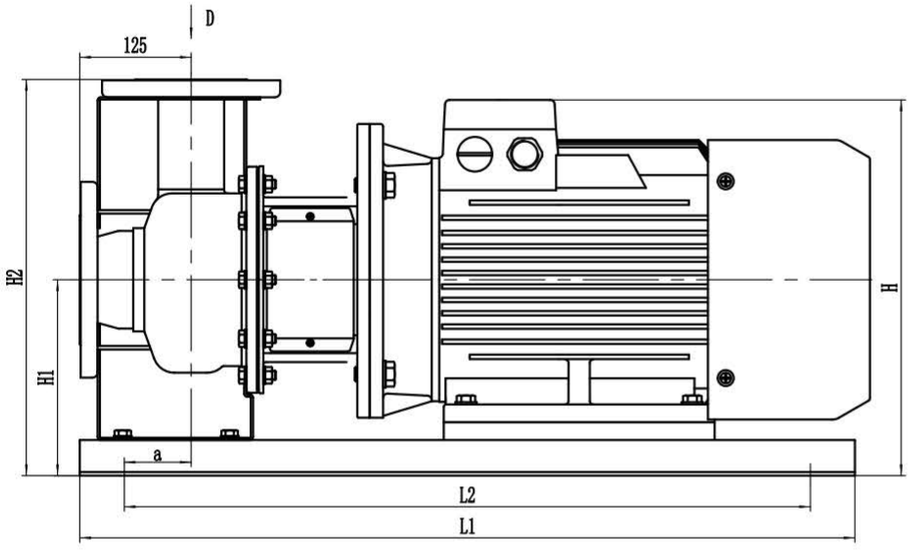


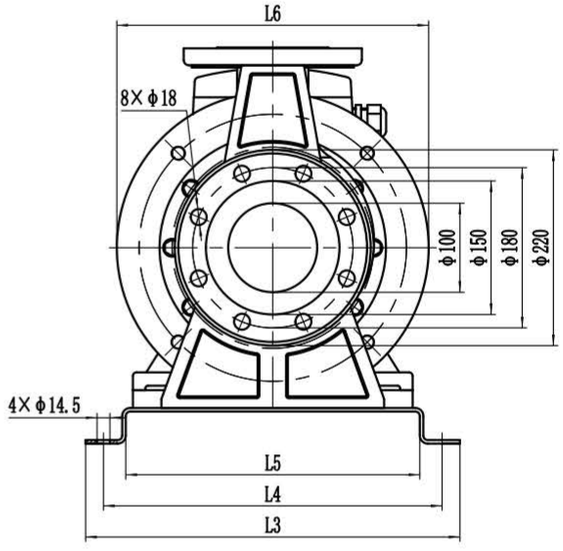




Installation dimensions







Performance tables

Model	Motor (kW)	Q (m³/h)	60	80	100	120	140	160	180	192	200
NZS100-80-160/11.0	11	H (m)	24.1	23.4	22.7	21.2	19.4	17	14	12.1	
NZS100-80-160/15.0	15		30.9	30.1	28.8	26.9	24.6	22	19	17	15.7
NZS100-80-160/18.5	18.5		35.3	34.4	33.4	32.2	30.7	29	26.1	23.9	22.2

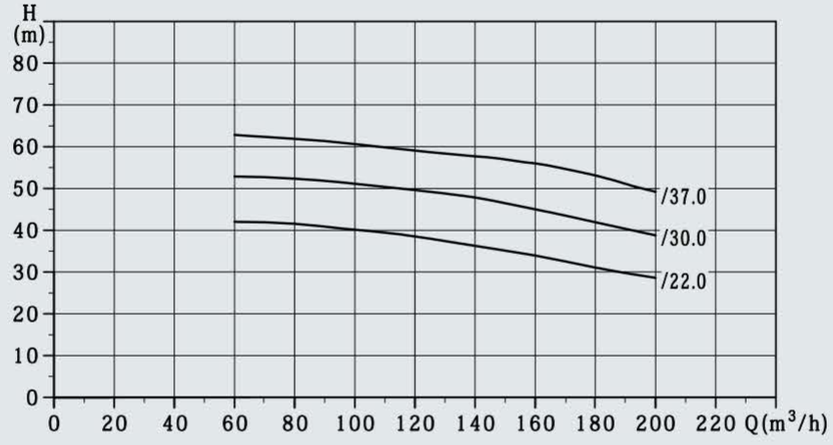
Dimensions and weight

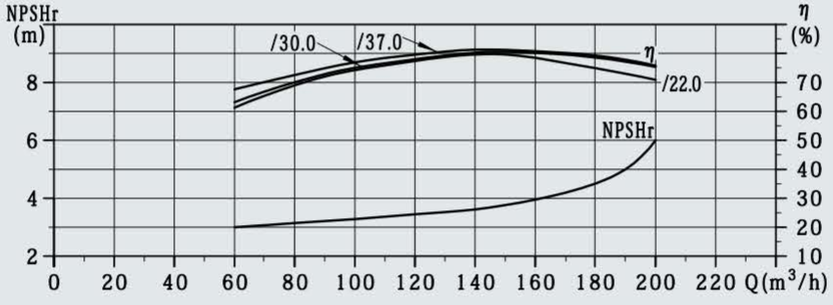
Model	Dimensions (mm)										Weight (kg)
	a	H	H1	H2	L1	L2	L3	L4	L5	L6	
NZS100-80-160/11.0	75	476	220	445	830	730	420	380	330	350	163
NZS100-80-160/15.0	75	476	220	445	830	730	420	380	330	350	173
NZS100-80-160/18.5	75	476	220	445	870	770	420	380	330	350	185

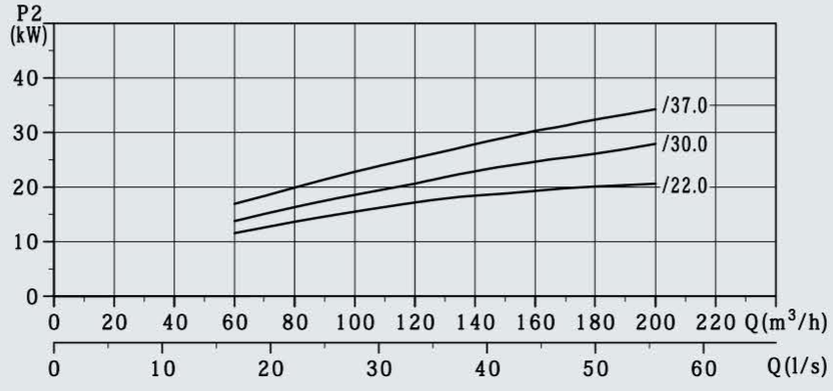
NZS100-80-200

50Hz

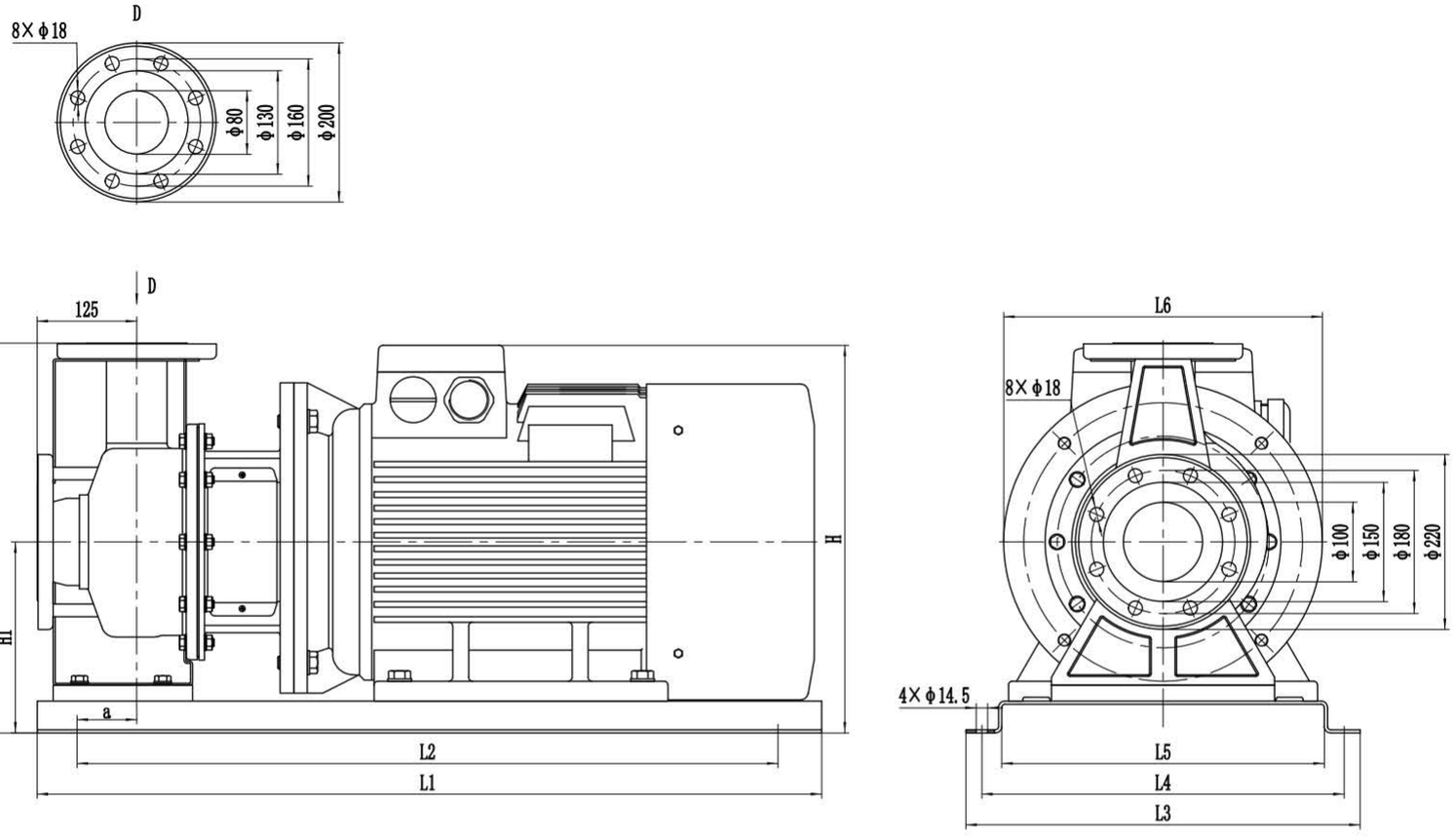
Performance curves







Installation dimensions



Performance tables

Model	Motor (kW)	Q (m³/h)	60	80	100	120	140	160	180	200
NZS100-80-200/22.0	22	H (m)	42	41.6	40.2	38.6	36.3	34	31.1	28.6
NZS100-80-200/30.0	30		52.9	52.4	51.1	49.6	47.8	45	41.9	38.8
NZS100-80-200/37.0	37		62.8	61.9	60.6	59.1	57.7	56	53.1	49.2

Dimensions and weight

Model	Dimensions (mm)										Weight (kg)
	a	H	H1	H2	L1	L2	L3	L4	L5	L6	
NZS100-80-200/22.0	75	500	220	470	915	810	455	415	365	350	223
NZS100-80-200/30.0	75	550	240	490	985	880	495	455	405	400	295
NZS100-80-200/37.0	75	550	240	490	985	880	495	455	405	400	315

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