

NISO

50Hz

End Suction Centrifugal Pump



 **CNP**
CHINA NANFANG PUMP

Company Profile



Hangzhou Nanfang Special Pump Industry Co.,Ltd. is specialized in manufacture of stainless steel multistage pumps, integrating scientific research, production and marketing. Since its establishment ten years ago, the company has devoted considerable efforts to innovation and management. The company has successfully developed various kinds of pumps which are applicable to industrial and mining enterprises, municipal water supply, farm irrigation, petrochemical engineering, domestic water and fire water supply of high buildings, industrial water treatment, water purification, pharmaceutical industry, boiler, air-conditioning system etc. The main performances of CDL series stainless steel multistage vertical pump, TD in-line circulation pump, SJ series stainless steel multistage deep-well submersible pump, CDLK, CDLKF immersion type multi-stage centrifugal pump, CHL/CHLK/CHLF series stainless steel multistage horizontal pumps and QY series stainless steel pump conveying mixed gas and liquid, ZS series stainless steel horizontal single-stage centrifugal pump, MS series light stainless steel horizontal single-stage centrifugal pump, have fully reached international advanced level.

Besides designing pumps with advanced tools such as three-dimensional CAD and CFD software, the company boasts a complete set of precision manufacturing and inspection equipment. With perfect quality control system, the company has passed ISO9001 Quality System Certification, ISO14001 Environment Management System Certificate, and obtained CE Mark also. The company sell products well not only at home, but also in foreign countries, Europe, America, Southeastern Asia etc, gaining popularity due to their excellent quality, good credit standing and considerate after-sales service.

The company has established a wide sales and service network which has representative offices and service centers. Offices and service centers are set in all large and medium-scale cities, aiming to providing timely and satisfactory service for customers.

Satisfying customers will be eternal pursuit of the company. Looking forward to the future, the company will further keep up its fine tradition and persist in its business principle of "quality first, credit first and clients first" to offer customers products of high quality and more considerate services.

Nanfang pump, an international brand worthy of your trust!

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Technical Data

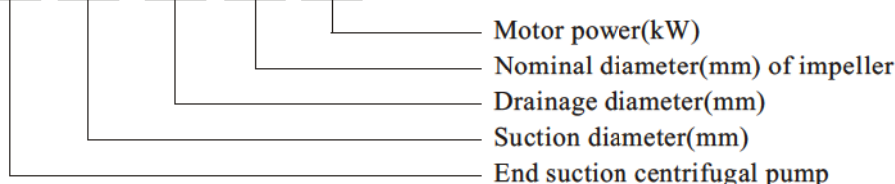
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NISO65-40-200	9
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NISO80-50-200	11
NISO80-50-250	11
NISO80-50-315	12
NISO80-65-160	12
NISO100-65-200	13
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General Data

● Definition of Model

NISO100-65-200/30

NISO 100 — 65 — 200 / 30



● Min Inlet Pressure

Min inlet pressure depends on NPSH+0.5m safety margin + gasified pressure. It should be re-calculated the inlet pressure if one of the following happens.

- The liquid is more warm.
- The flow exceeds the nominate value.
- Suction distance is very long or inlet pipe is very long.
- System pressure is too little.
- Inlet pressure is low.

● Typical Application

- Clean, thin, non-corrosive, non-flammable or non-explosive liquid without grain or fiber.
- Water supply system
- Heat, air condition system
- Booster, constant pressure water supply
- Firefighting, splitting system
- Irrigating, farming
- Industry cooling, heater circulation system
- Industry transferring, drainage system

● Construction

- Non-self-priming, single stage, single suction, horizontal, axial suction and radical discharge, pump body is fixed by base.
- Use bearing cradle, which can orientate bearing, prevent from radical vibration, improve the rigidity of rotary part.
- Compacted shaft, use deep groove grease lubricated roller bearing.
- Connect pump and motor with semi-flexible coupling.
- Use standard wearable mechanical seal.
- TEFC motor, size complies to IEC standard, installation type B3.

● Specification

- Flow: Max 340m³/h
- Head: Max 160m
- Working pressure: Max 16 bar
- Inlet pressure: Max 6 bar
- Power: Max 160kW
- Liquid temperature: -15℃ ~ 110℃
- Inlet and Outlet diameter: Inlet diameter: DN50~DN125
Outlet diameter: DN32~DN100

● Curve notes

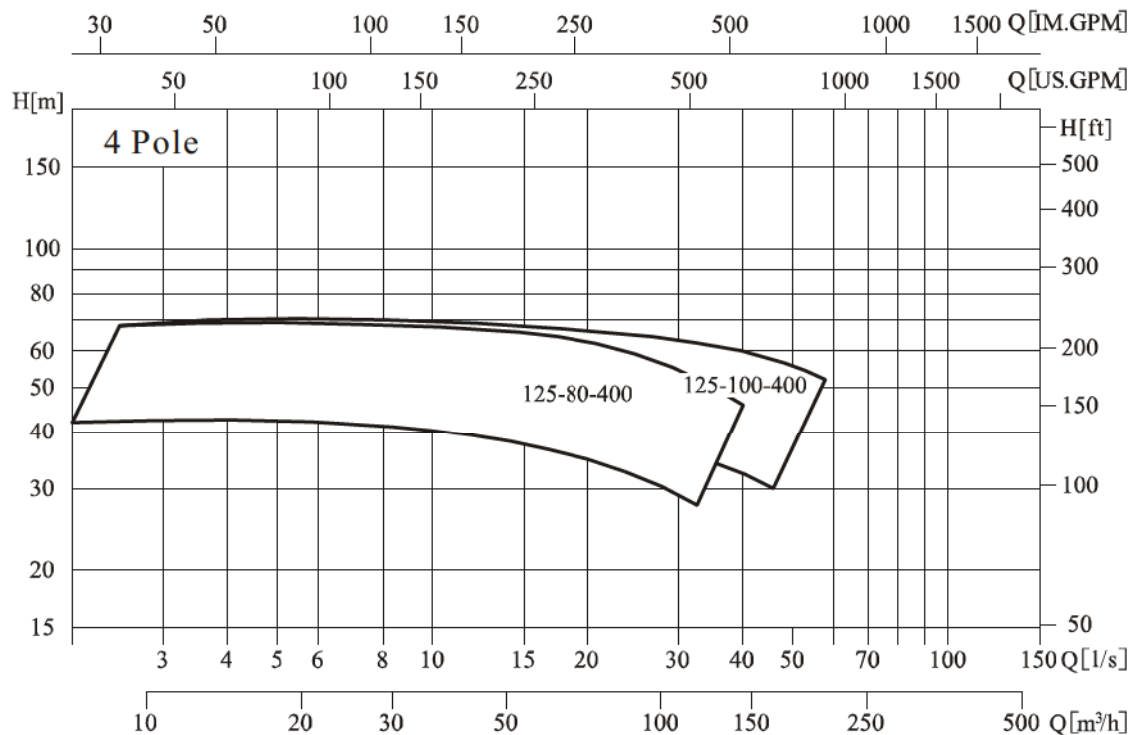
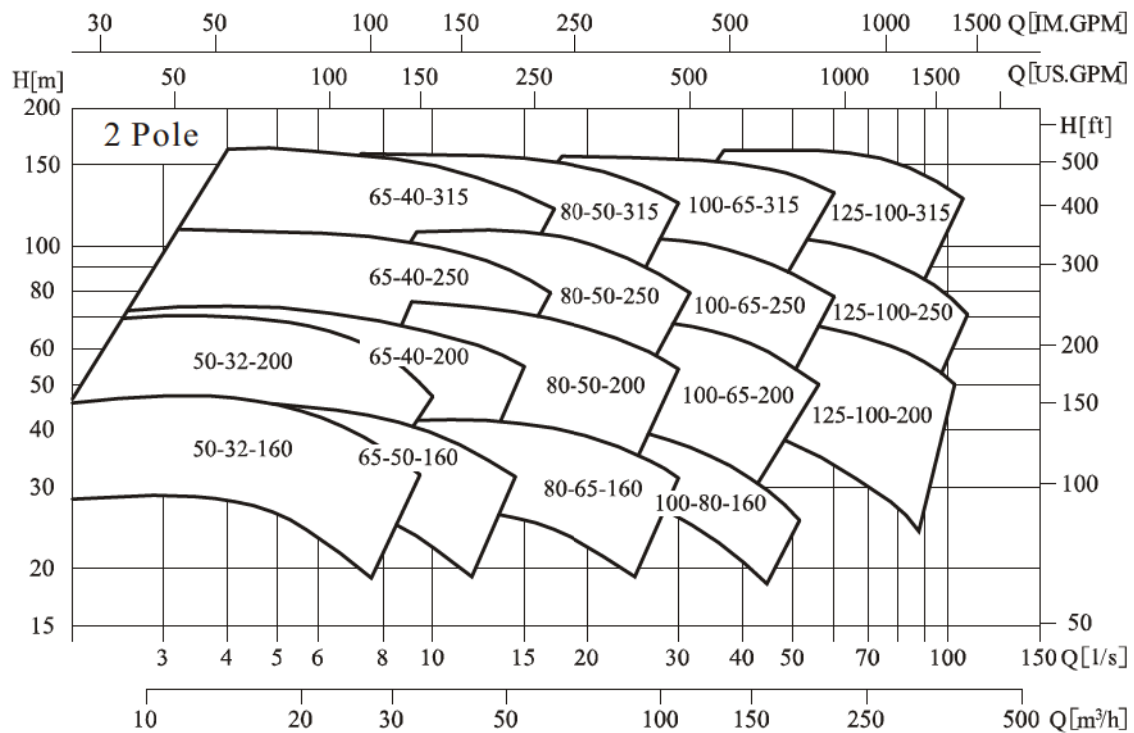
The following notes are for the curves in the following.

- Curve tolerance complies to ISO 9906, appendix A
- All the curves are based on the motor of constant speed 1480rpm, 2900rpm or 2950rpm
- The pumps were tested with 20℃ non-air water, kinematic viscosity is 1mm²/s

● Features

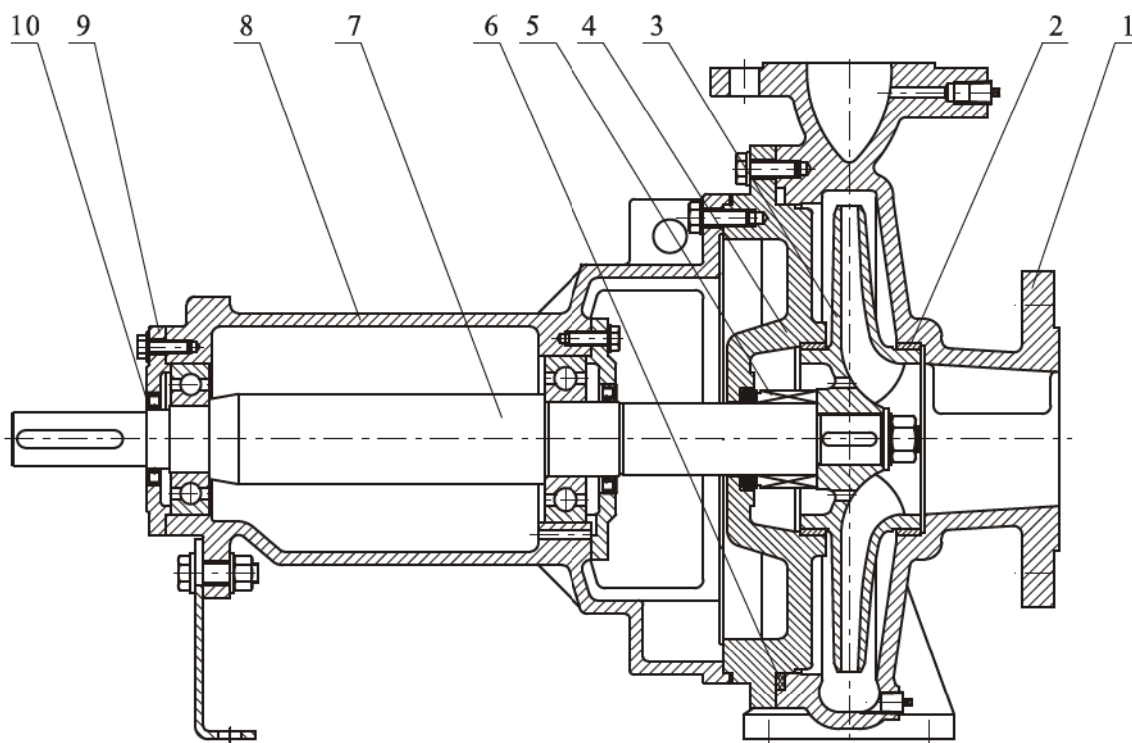
- Back-pull-out design, without having to disturb pump body and pipelines when servicing.
- All the models only use 3 kinds of pump shafts and bearing cover, make parts exchangeable.
- Impeller is optimum design, inlet is enlarged, no whirlpool, deduct the water pump NPSH efficiently, which makes pump work stable with little noise.
- Casing and casing cover use wearing neck ring structure, which makes pump easy to maintain, makes parts work longer. The replaceable seal ring, makes pump work efficiently in a long time.

● Model Performance Drawing



General Data

Sectional Drawing



Part List

No.	Name	Material	Code/AISI/ASTM
1	Casing	Cast Iron HT200	ASTM25B
2	Wearring	Cast Iron HT200	ASTM25B
3	Impeller	Cast Iron HT200	ASTM25B
4	Casing cover	Cast Iron HT200	ASTM25B
5	Mechanical seal	Carbon/Silicon Carbide	
6	O ring	NBR	
7	Shaft	SS 2Cr13	AISI420
8	Bearing housing	Cast Iron HT200	ASTM25B
9	Bearing cover	Cast Iron HT200	ASTM25B
10	Seal	NBR	

● Models

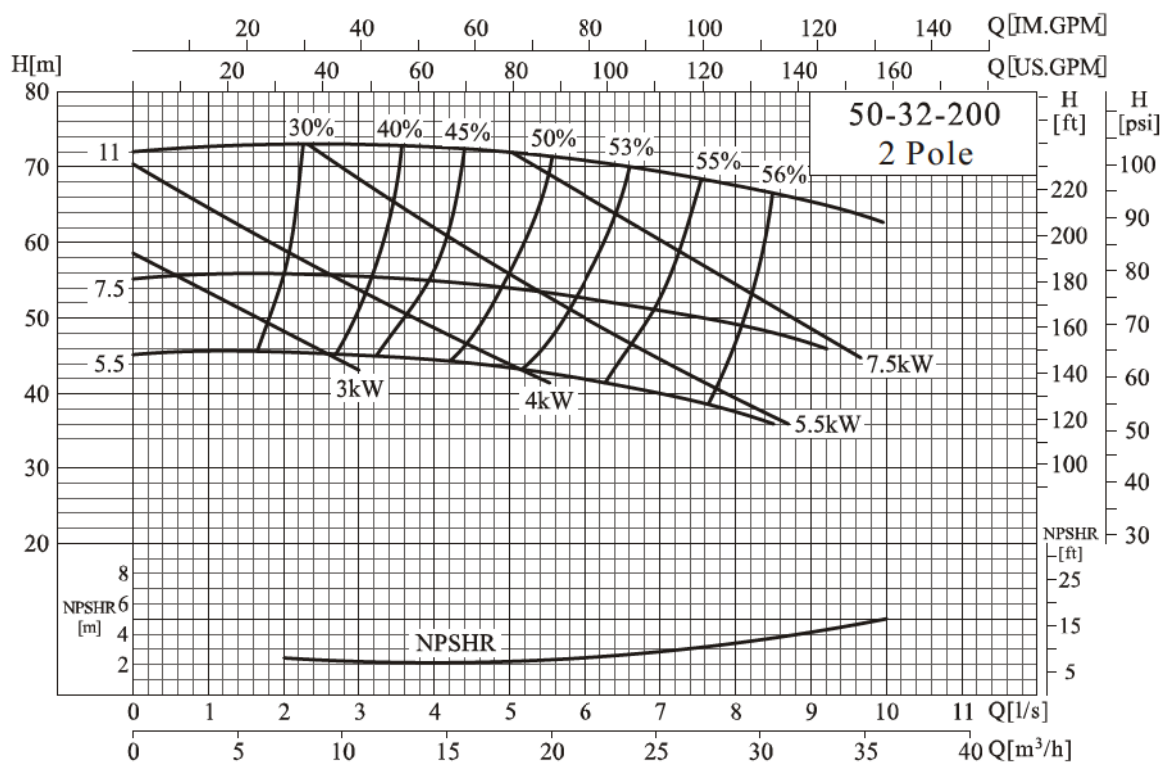
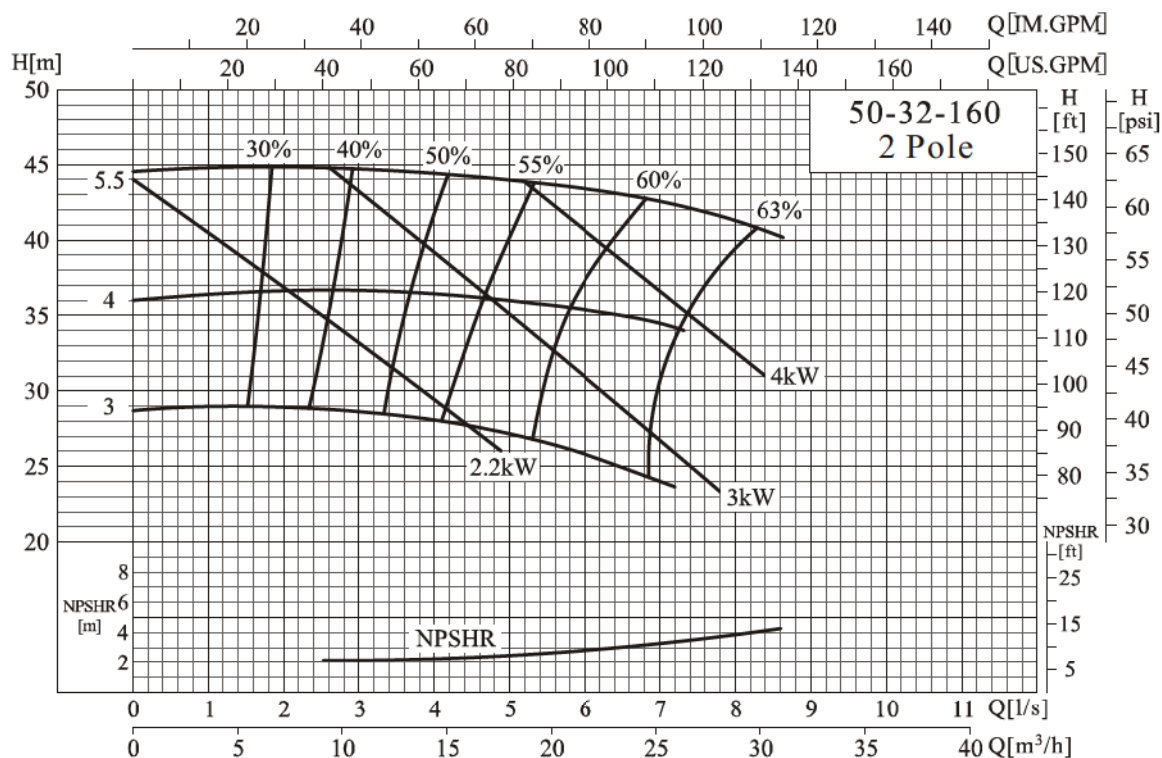
No.	Model	Q [m³/h]	H [m]	Motor [kW]	n [r/min]
1	NISO 50-32-160/3	12.5	28	3	2900
2	NISO 50-32-160/4		36	4	
3	NISO 50-32-160/5.5		44	5.5	
4	NISO 50-32-200/5.5		44	5.5	
5	NISO 50-32-200/7.5		55	7.5	
6	NISO 50-32-200/11		74	11	2950
7	NISO 65-40-200/7.5	25	48	7.5	2900
8	NISO 65-40-200/11		62	11	2950
9	NISO 65-40-200/15		72	15	
10	NISO 65-40-250/11		64	11	
11	NISO 65-40-250/15		75	15	
12	NISO 65-40-250/18.5		84	18.5	
13	NISO 65-40-250/22		95	22	
14	NISO 65-40-250/30		105	30	
15	NISO 65-40-315/22		105	22	
16	NISO 65-40-315/30		120	30	
17	NISO 65-40-315/37		145	37	
18	NISO 65-40-315/45		165	45	
19	NISO 65-50-160/4	25	28	4	2900
20	NISO 65-50-160/5.5		36	5.5	
21	NISO 65-50-160/7.5		42	7.5	
22	NISO 80-50-200/11	50	44	11	2950
23	NISO 80-50-200/15		57	15	
24	NISO 80-50-200/18.5		64	18.5	
25	NISO 80-50-200/22		71	22	
26	NISO 80-50-250/18.5		60	18.5	
27	NISO 80-50-250/22		68	22	
28	NISO 80-50-250/30		84	30	
29	NISO 80-50-250/37		100	37	
30	NISO 80-50-315/30		88	30	
31	NISO 80-50-315/37		105	37	
32	NISO 80-50-315/45		125	45	
33	NISO 80-50-315/55		140	55	
34	NISO 80-50-315/75		152	75	
35	NISO 80-65-160/5.5		22	5.5	2900
36	NISO 80-65-160/7.5		29	7.5	
37	NISO 80-65-160/11		38	11	2950
38	NISO 80-65-160/15		44	15	

General Data

Models

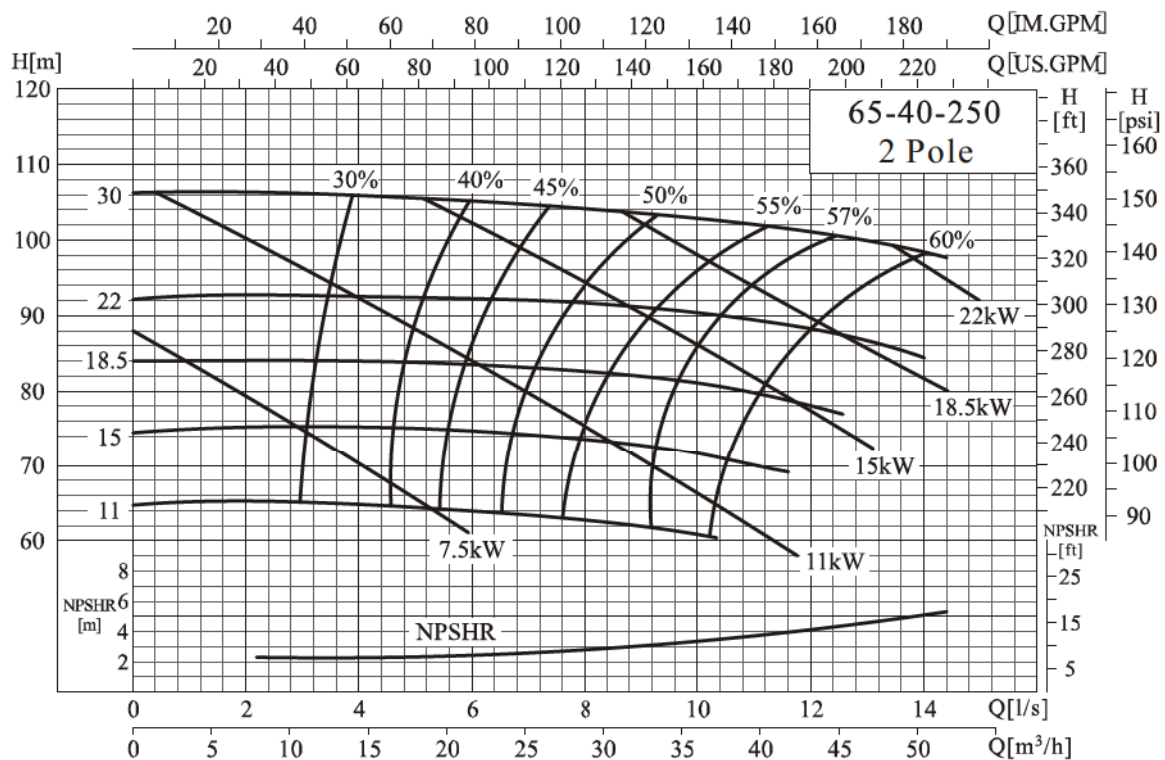
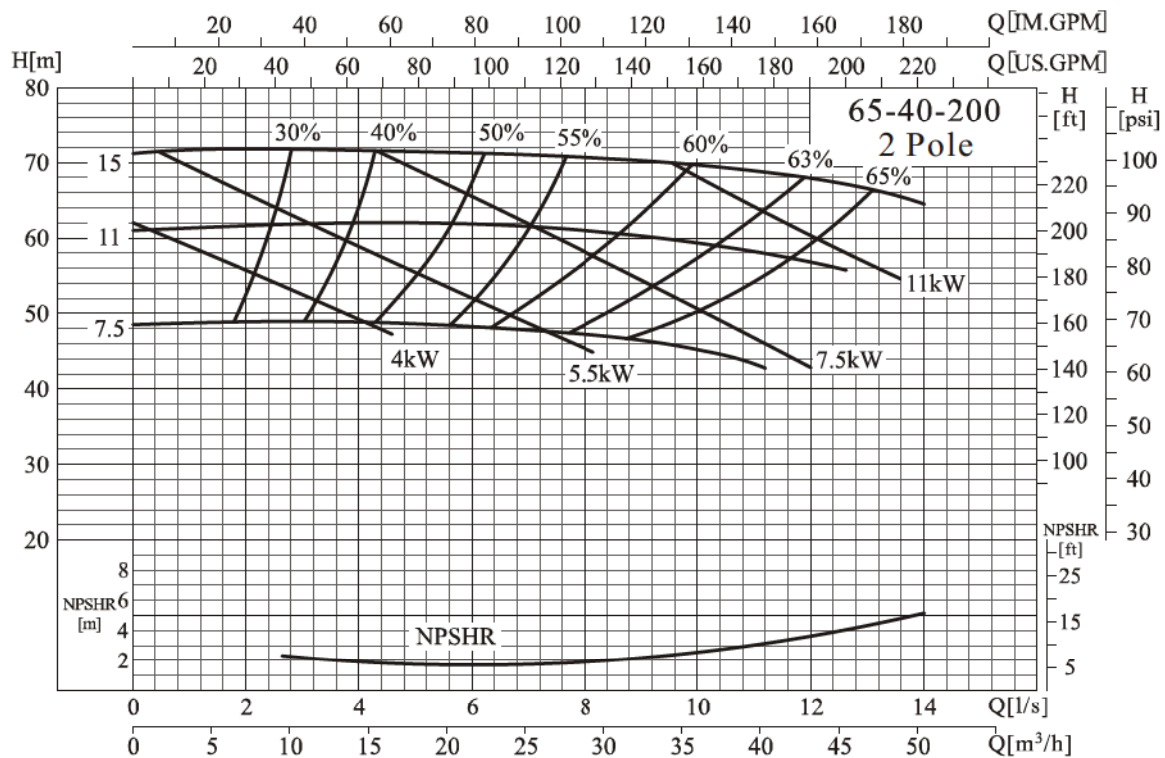
No.	Model	Q [m³/h]	H [m]	Motor [kW]	n [r/min]
39	NISO 100-65-200/18.5	100	36	18.5	2950
40	NISO 100-65-200/22		43	22	
41	NISO 100-65-200/30		56	30	
42	NISO 100-65-200/37		67	37	
43	NISO 100-65-250/30		58	30	
44	NISO 100-65-250/37		68	37	
45	NISO 100-65-250/45		80	45	
46	NISO 100-65-250/55		88	55	
47	NISO 100-65-250/75		108	75	
48	NISO 100-65-315/55		90	55	
49	NISO 100-65-315/75		112	75	
50	NISO 100-65-315/90		128	90	
51	NISO 100-65-315/110		148	110	
52	NISO 100-80-160/11		23	11	
53	NISO 100-80-160/15		30	15	
54	NISO 100-80-160/18.5		35	18.5	
55	NISO 100-80-160/22		40	22	
56	NISO 125-100-200/30	200	34	30	2950
57	NISO 125-100-200/37		41	37	
58	NISO 125-100-200/45		48	45	
59	NISO 125-100-200/55		55	55	
60	NISO 125-100-200/75		66	75	
61	NISO 125-100-250/55		59	55	
62	NISO 125-100-250/75		75	75	
63	NISO 125-100-250/90		86	90	
64	NISO 125-100-250/110		100	110	
65	NISO 125-100-315/90		93	90	
66	NISO 125-100-315/110		108	110	
67	NISO 125-100-315/132		124	132	
68	NISO 125-100-315/160		144	160	
69	NISO 125-80-400/15	50	39	15	1480
70	NISO 125-80-400/18.5		45	18.5	
71	NISO 125-80-400/22		50	22	
72	NISO 125-80-400/30		60	30	
73	NISO 125-80-400/37		67	37	
74	NISO 125-100-400/22	100	38	22	
75	NISO 125-100-400/30		50	30	
76	NISO 125-100-400/37		58	37	
77	NISO 125-100-400/45		65	45	

● NISO50-32-160/NISO50-32-200

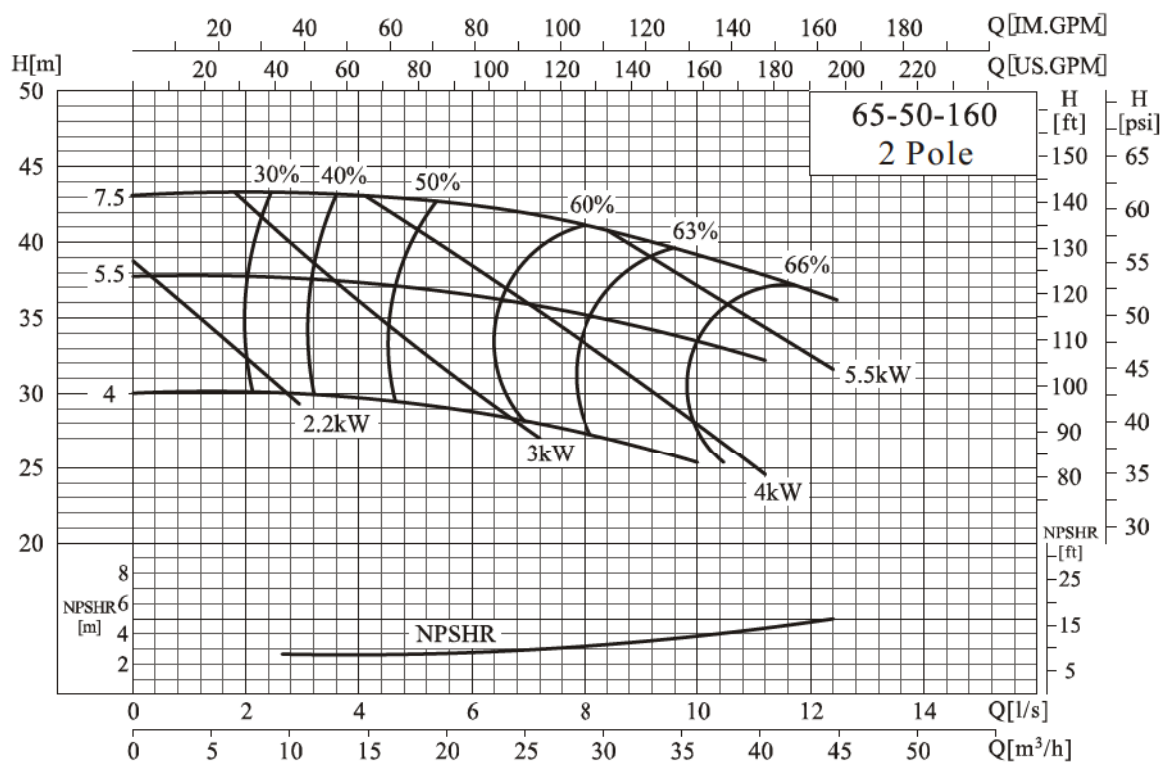
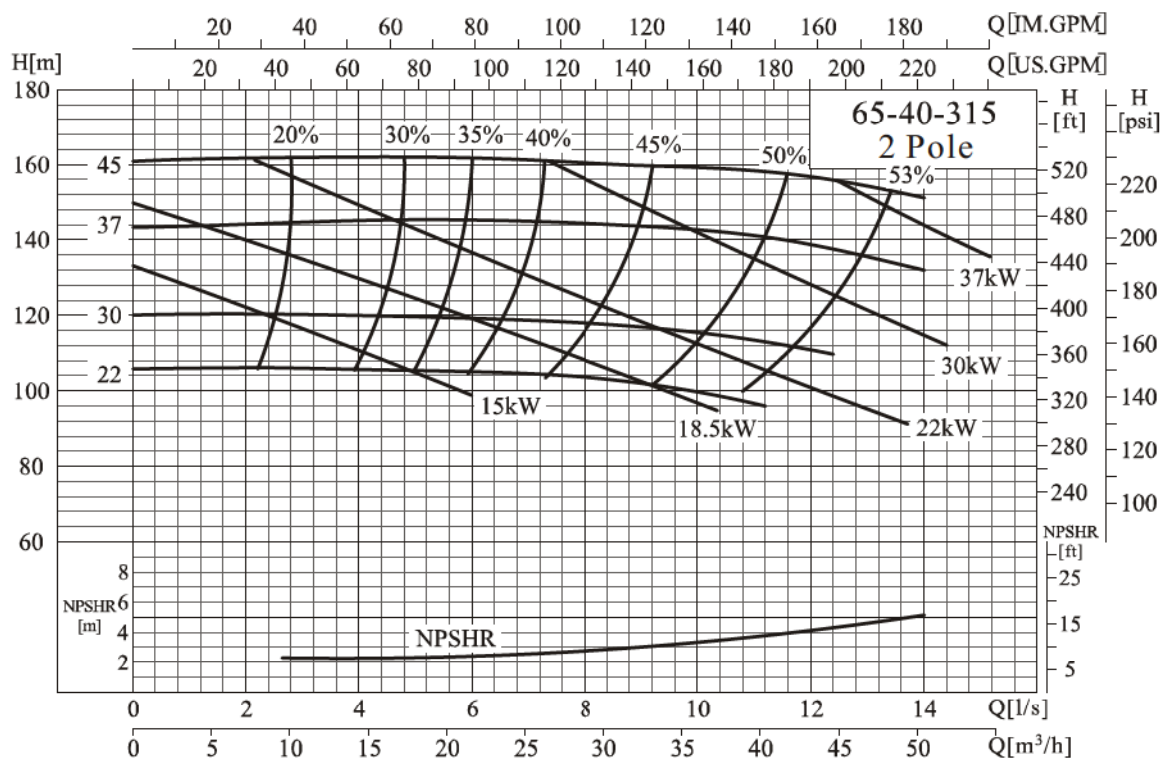


Technical Data

● NISO65-40-200/NISO65-40-250

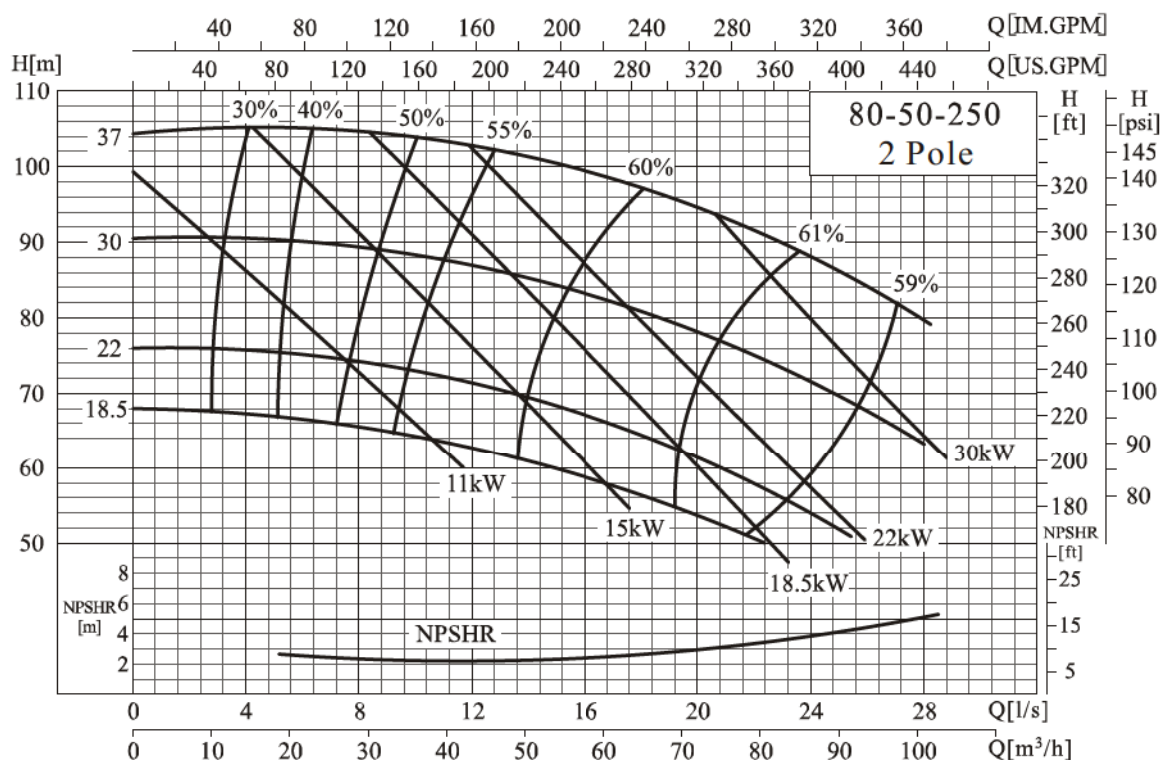
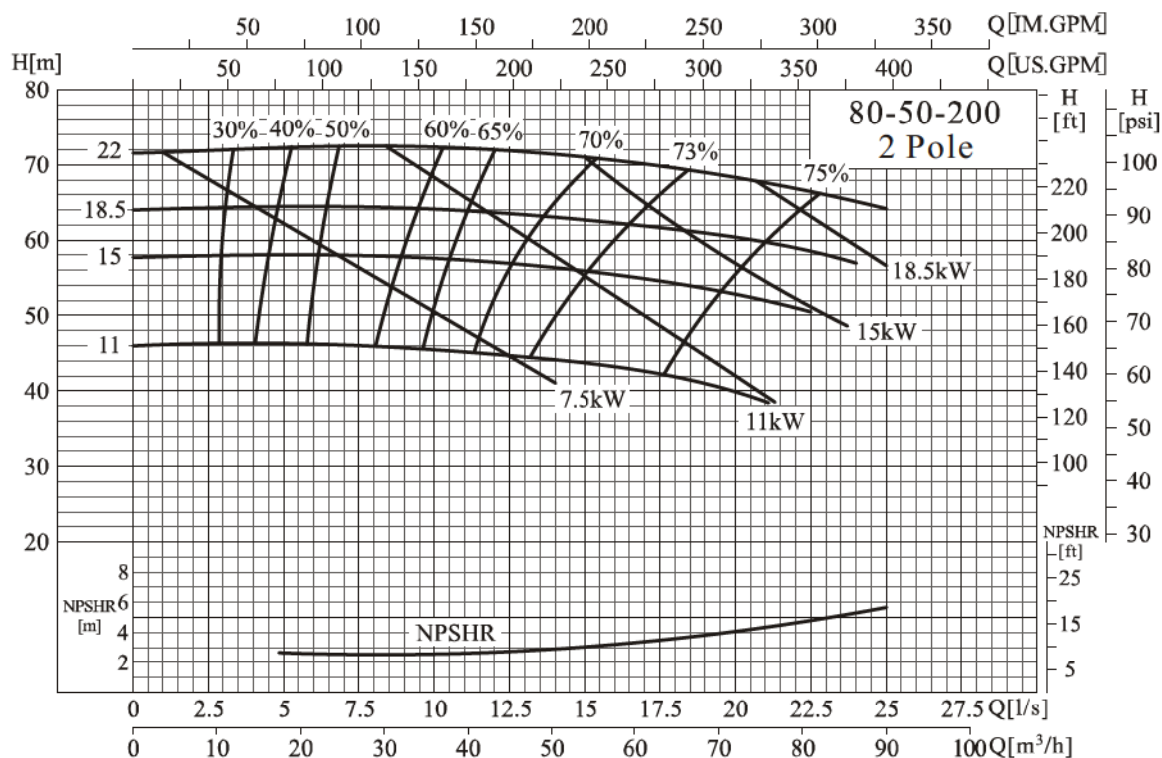


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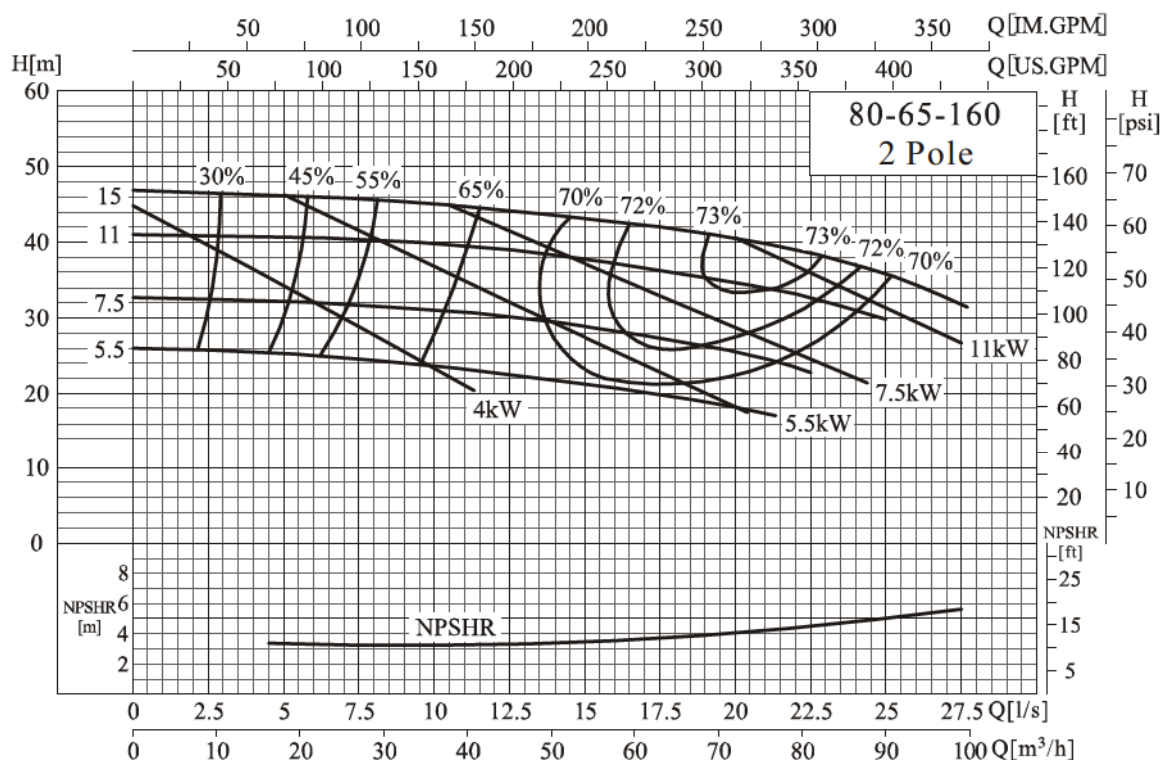
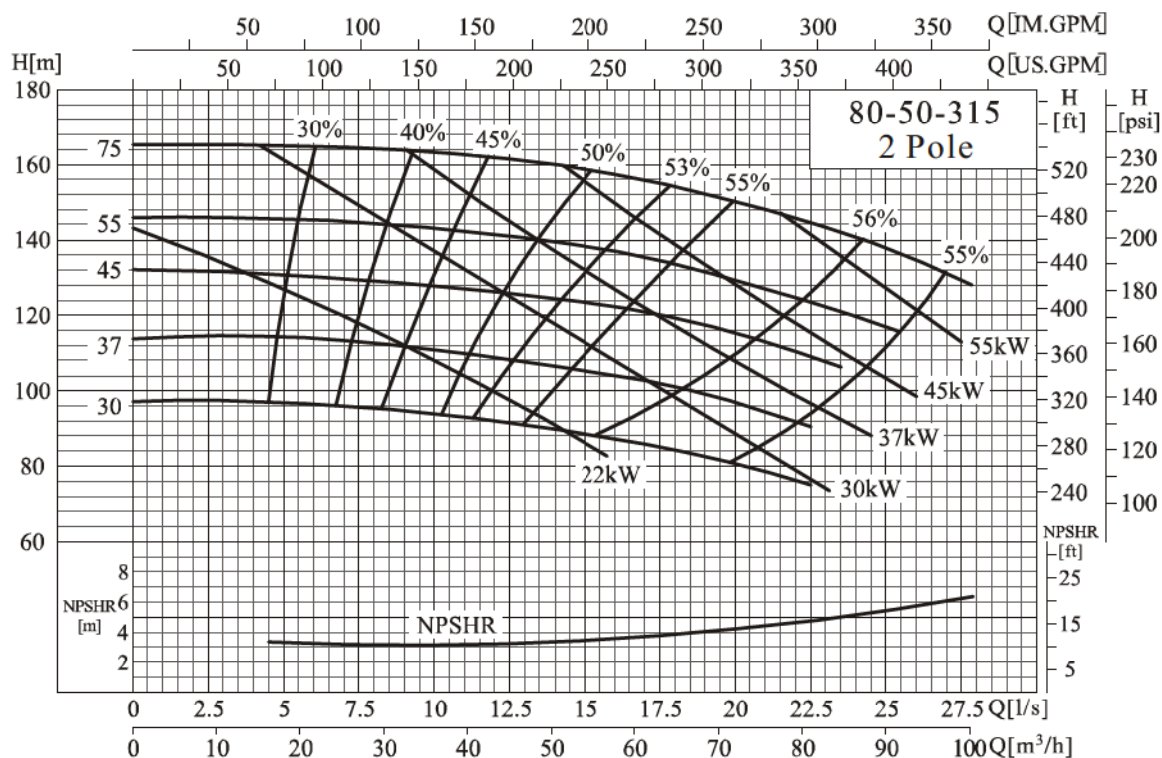


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● NISO80-50-200/NISO80-50-250

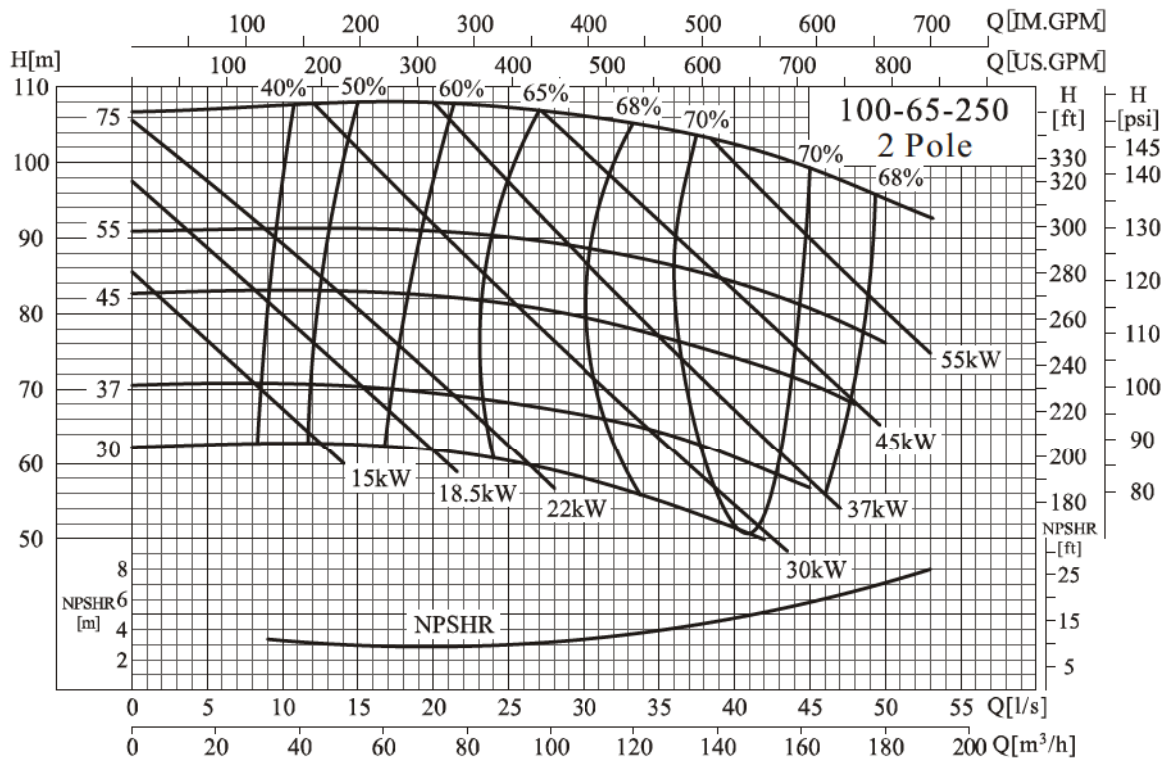
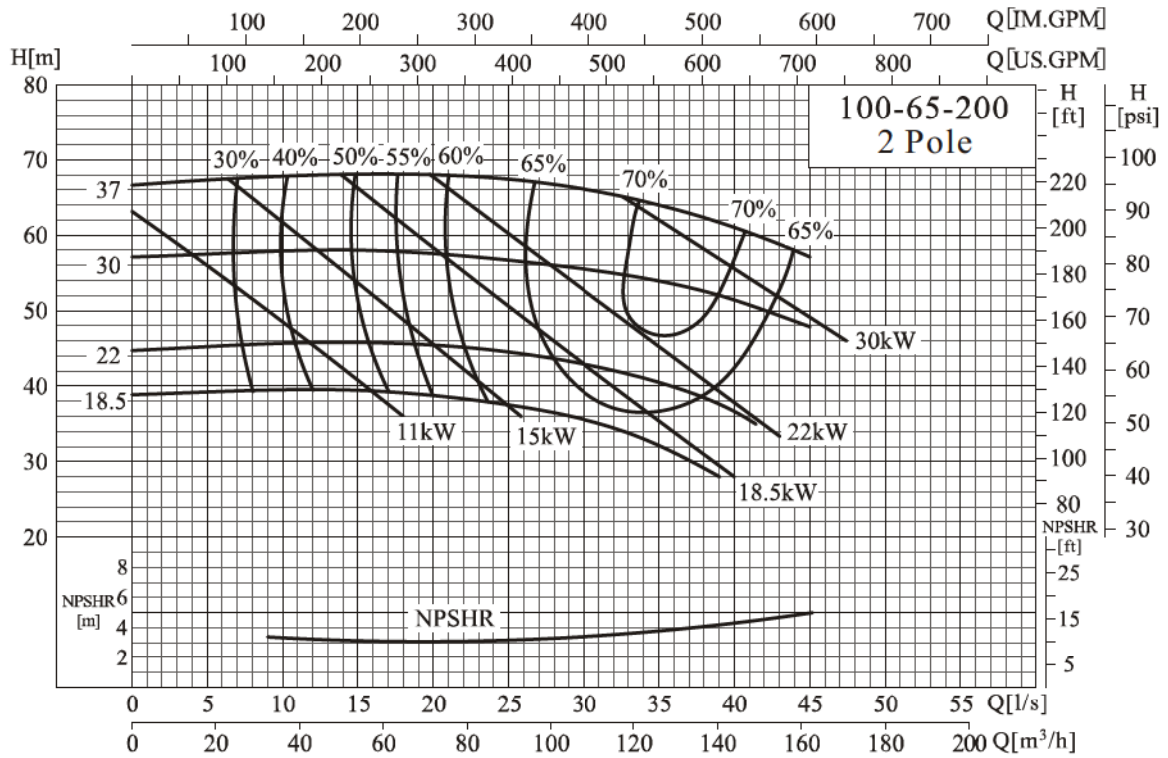


● NISO80-50-315/NISO80-65-160

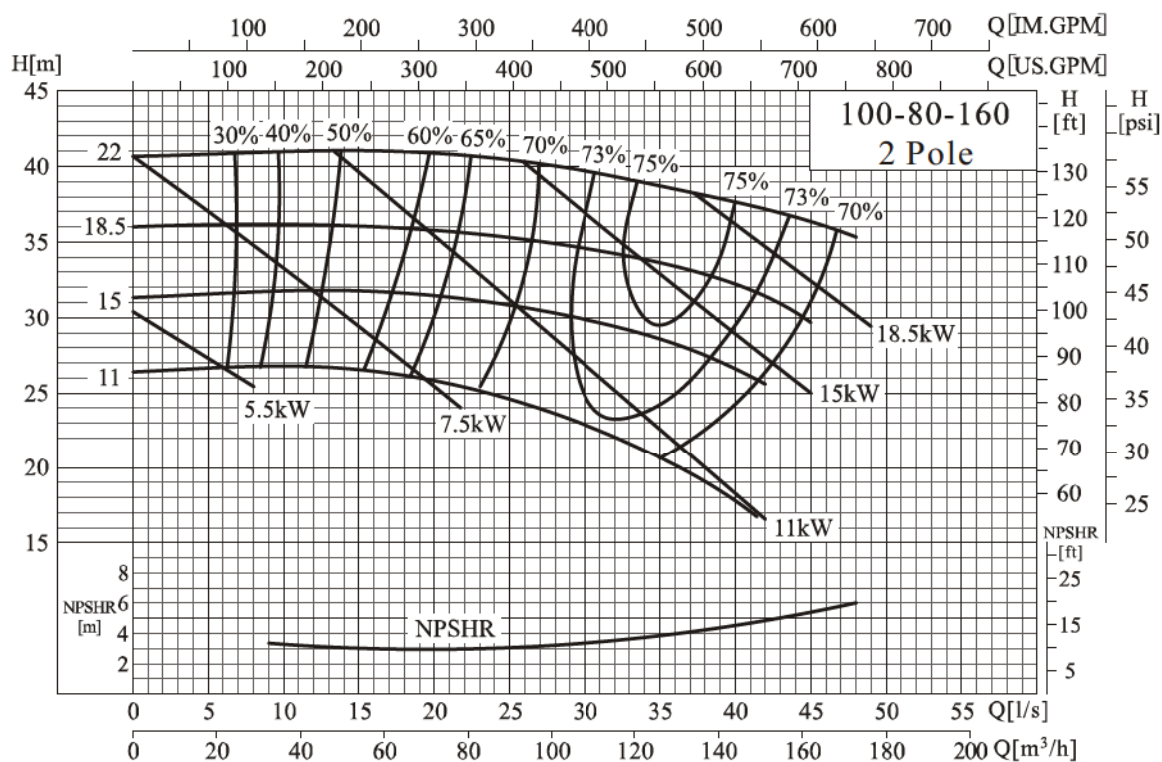
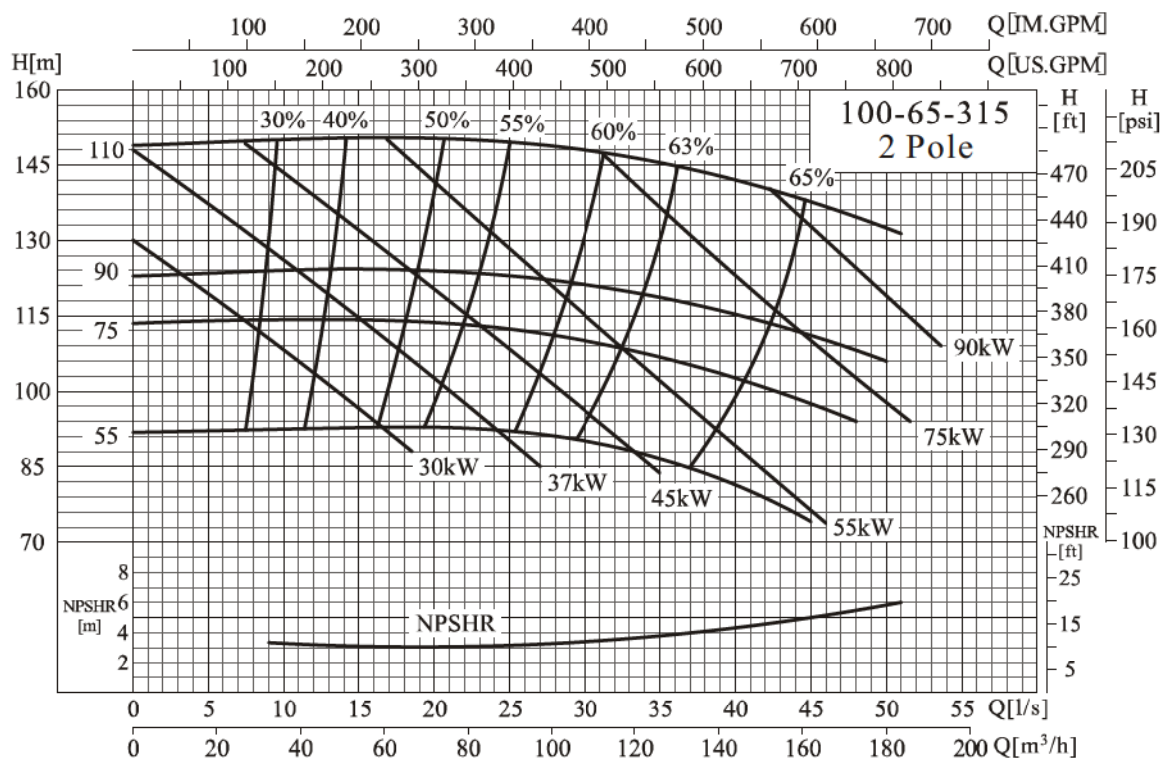


Technical Data

● **NISO100-65-200/NIS100-65-250**

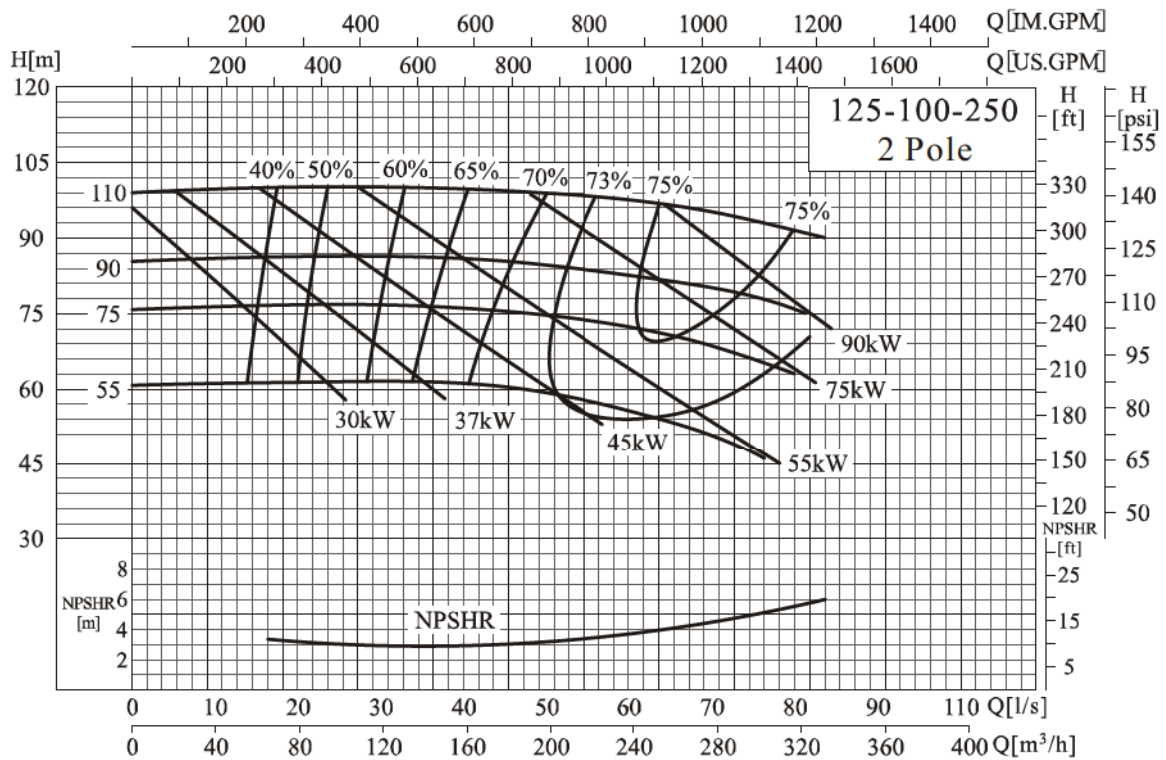
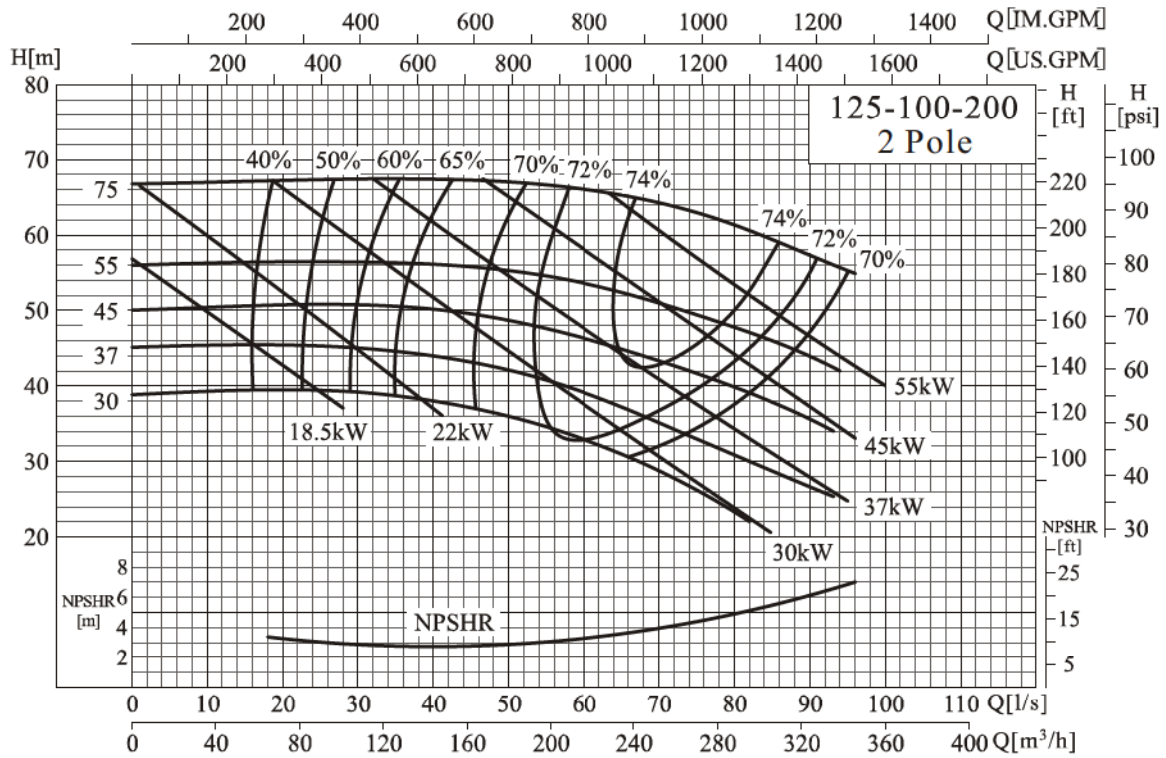


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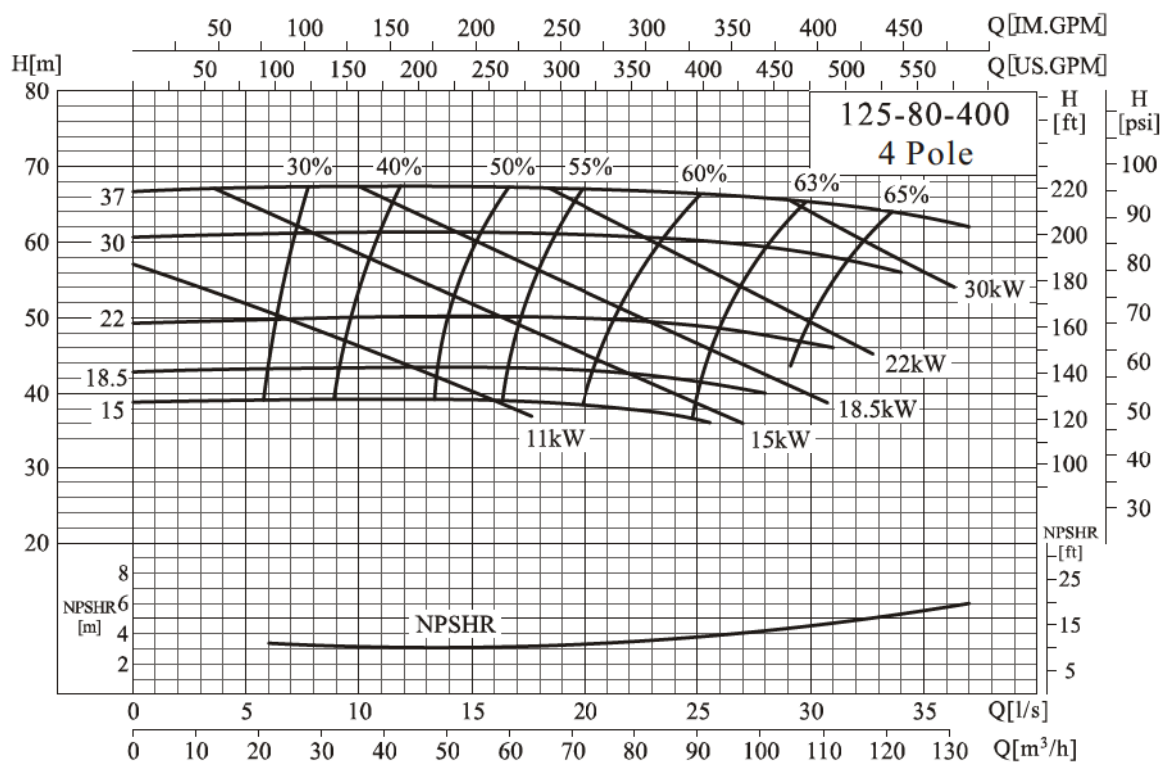
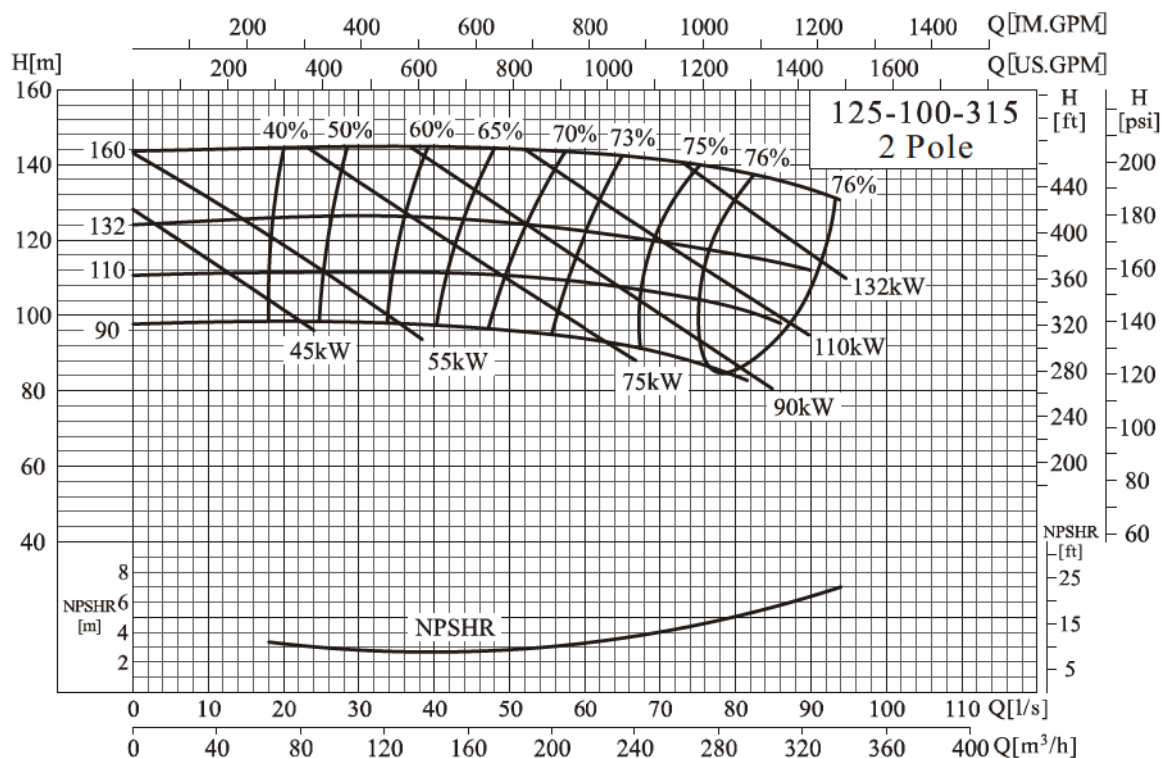


Technical Data

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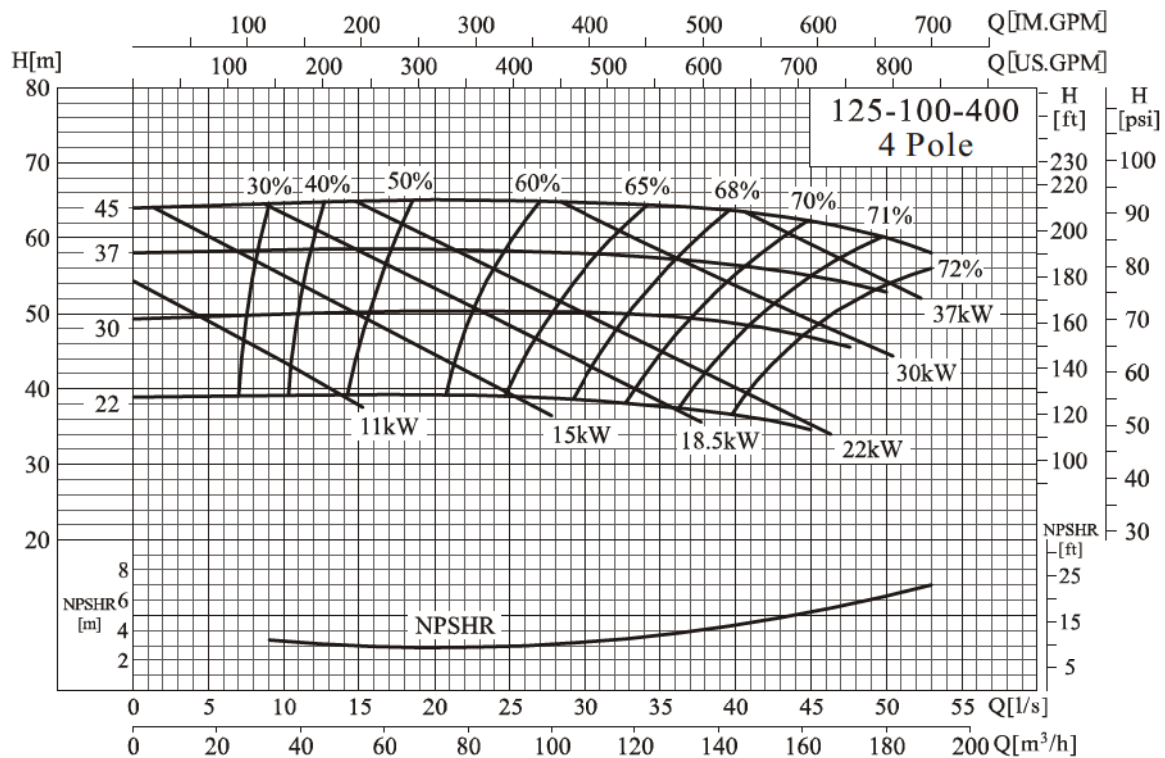


● NISO125-100-315/NISO125-80-400

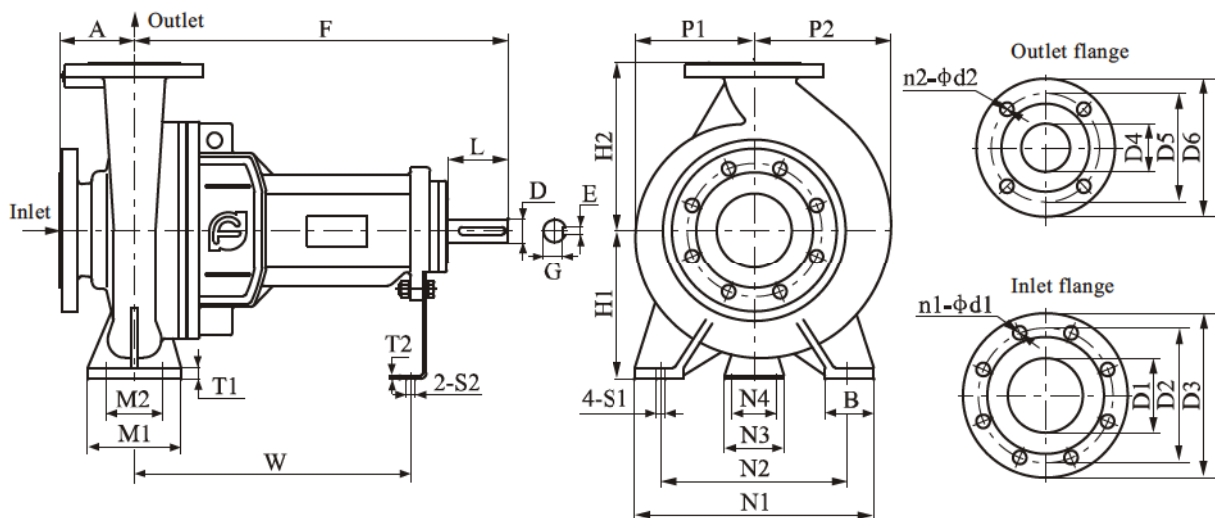


Technical Data

● NISO125-100-400



● Pump Dimensions



● Pump Dimension Table

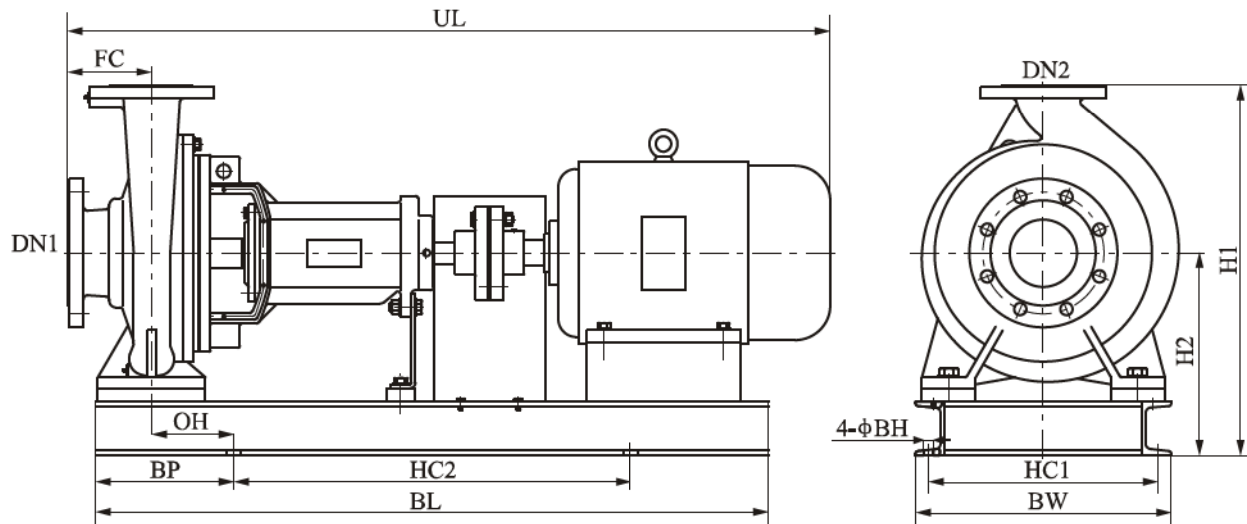
No.	Model	Pump size							Installation dimension										
		A	F	H1	H2	B	P1	P2	M1	M2	N1	N2	N3	N4	T1	T2	W	S1	S2
1	50-32-160	80	385	132	160	50	118	128	100	70	240	190	160	110	12	6	285	14	14
2	50-32-200	80	385	160	180	50	139	147	100	70	240	190	160	110	12	6	285	14	14
3	65-50-160	80	385	132	160	50	121	136	100	70	240	190	160	110	12	6	285	14	14
4	65-40-200	100	385	160	180	50	140	151	100	70	265	212	160	110	13	6	285	14	14
5	65-40-250	100	500	180	225	65	166	176	125	95	320	250	160	110	14	6	370	14	14
6	65-40-315	125	500	200	250	65	194	200	125	95	345	280	160	110	16	6	370	14	14
7	80-65-160	100	385	160	180	50	124	143	100	70	265	212	160	110	13	6	285	14	14
8	80-50-200	100	385	160	200	52	147	161	100	70	265	212	160	110	13	6	285	14	14
9	80-50-250	125	500	180	225	65	167	179	125	95	320	250	160	110	15	6	370	14	14
10	80-50-315	125	500	225	280	65	204	215	125	95	345	280	160	110	18	6	370	14	14
11	100-65-200	100	500	180	225	65	159	183	125	95	320	250	160	110	14	6	370	14	14
12	100-65-250	125	500	200	250	80	180	201	160	120	360	280	160	110	16	6	370	18	14
13	100-65-315	125	530	225	280	80	210	228	160	120	400	315	160	110	18	6	370	18	14
14	100-80-160	100	500	160	200	65	132	160	125	95	280	212	160	110	14	6	370	14	14
15	125-80-400	125	530	280	355	80	261	279	160	120	435	355	160	110	20	6	370	18	14
16	125-100-200	125	500	200	280	80	175	210	160	120	360	280	160	110	17	6	370	18	14
17	125-100-250	140	530	225	280	80	193	225	160	120	400	315	160	110	18	6	370	18	14
18	125-100-315	140	530	250	315	80	224	250	160	120	400	315	160	110	19	6	370	18	14
19	125-100-400	140	530	280	355	100	265	287	200	150	500	400	160	110	20	6	370	18	14

● To be continued

No.	Model	Inlet flange size					Outlet flange size					Size of pump shaft extension				Weight (kg)
		D1	D2	D3	n1	d1	D4	D5	D6	n2	d2	D	L	E	G	
1	50-32-160	50	125	165	4	18	32	100	140	4	18	24	50	8	20	40
2	50-32-200	50	125	165	4	18	32	100	140	4	18	24	50	8	20	48
3	65-50-160	65	145	185	4	18	50	125	165	4	18	24	50	8	20	42
4	65-40-200	65	145	185	4	18	40	110	150	4	18	24	50	8	20	50
5	65-40-250	65	145	185	4	18	40	110	150	4	18	32	80	10	27	72
6	65-40-315	65	145	185	4	18	40	110	150	4	18	32	80	10	27	82
7	80-65-160	80	160	200	8	18	65	145	185	4	18	24	50	8	20	48
8	80-50-200	80	160	200	8	18	50	125	165	4	18	24	50	8	20	54
9	80-50-250	80	160	200	8	18	50	125	165	4	18	32	80	10	27	75
10	80-50-315	80	160	200	8	18	50	125	165	4	18	32	80	10	27	90
11	100-65-200	100	180	220	8	18	65	145	185	4	18	32	80	10	27	73
12	100-65-250	100	180	220	8	18	65	145	185	4	18	32	80	10	27	82
13	100-65-315	100	180	220	8	18	65	145	185	4	18	42	110	12	37	120
14	100-80-160	100	180	220	8	18	80	160	200	8	18	32	80	10	27	70
15	125-80-400	125	210	250	8	18	80	160	200	8	18	42	110	12	37	168
16	125-100-200	125	210	250	8	18	100	180	220	8	18	32	80	10	27	88
17	125-100-250	125	210	250	8	18	100	180	220	8	18	42	110	12	37	130
18	125-100-315	125	210	250	8	18	100	180	220	8	18	42	110	12	37	138
19	125-100-400	125	210	250	8	18	100	180	220	8	18	42	110	12	37	178

Technical Data

Pump Set Dimension



Pump Set Dimension Table

2 Pole

Model	Power (kW)	H1	H2	HC1	HC2	BW	BL	BP	BH	OH	UL	FC	DN1	DN2	Total weight (kg)
50-32-160	3	375	215	260	450	295	750	150	14	95	843	80	50	32	95
	4	375	215	260	470	295	770	150	14	95	868	80	50	32	103
	5.5	375	215	280	520	315	820	150	14	95	933	80	50	32	126
50-32-200	5.5	423	243	280	520	315	820	150	14	95	933	80	50	32	135
	7.5	423	243	280	520	315	820	150	14	95	933	80	50	32	138
	11	440	260	320	590	358	940	175	18	120	1068	80	50	32	191
65-40-200	7.5	423	243	280	520	315	820	150	14	95	953	100	65	40	140
	11	440	260	320	590	358	940	175	18	120	1088	100	65	40	193
	15	440	260	320	590	358	940	175	18	120	1088	100	65	40	203
65-40-250	11	505	280	320	670	358	1070	200	18	130	1203	100	65	40	219
	15	505	280	320	670	358	1070	200	18	130	1203	100	65	40	229
	18.5	505	280	320	710	358	1110	200	18	130	1243	100	65	40	250
	22	525	300	360	730	402	1130	200	18	130	1293	100	65	40	294
	30	545	320	400	750	442	1200	225	18	155	1363	100	65	40	350
65-40-315	22	570	320	360	730	402	1130	200	18	130	1318	125	65	40	305
	30	570	320	400	750	442	1200	225	18	155	1388	125	65	40	360
	37	570	320	400	750	442	1200	225	18	155	1388	125	65	40	379
	45	615	365	440	790	487	1240	225	22	155	1433	125	65	40	453

● To be continued

2 Pole

Model	Power (kW)	H1	H2	HC1	HC2	BW	BL	BP	BH	OH	UL	FC	DN1	DN2	Total weight (kg)
65-50-160	4	375	215	260	470	295	770	150	14	95	868	80	65	50	105
	5.5	375	215	280	520	315	820	150	14	95	933	80	65	50	128
	7.5	375	215	280	520	315	820	150	14	95	933	80	65	50	131
80-50-200	11	460	260	320	590	358	940	175	18	120	1088	100	80	50	197
	15	460	260	320	590	358	940	175	18	120	1088	100	80	50	207
	18.5	460	260	320	630	358	980	175	18	120	1128	100	80	50	228
	22	480	280	360	650	398	1000	175	18	120	1178	100	80	50	266
80-50-250	18.5	505	280	320	710	358	1110	200	18	130	1268	125	80	50	252
	22	525	300	360	730	402	1130	200	18	130	1318	125	80	50	296
	30	545	320	400	750	442	1200	225	18	155	1388	125	80	50	352
	37	545	320	400	750	442	1200	225	18	155	1388	125	80	50	371
80-50-315	30	625	345	400	750	442	1200	225	18	155	1388	125	80	50	369
	37	625	345	400	750	442	1200	225	18	155	1388	125	80	50	388
	45	645	365	440	790	487	1240	225	22	155	1433	125	80	50	459
	55	675	395	500	840	547	1340	250	22	180	1538	125	80	50	556
	75	725	445	550	890	602	1390	250	22	180	1613	125	80	50	720
80-65-160	5.5	423	243	280	520	315	820	150	14	95	953	100	80	65	135
	7.5	423	243	280	520	315	820	150	14	95	953	100	80	65	138
	11	440	260	320	590	358	940	175	18	120	1088	100	80	65	191
	15	440	260	320	590	358	940	175	18	120	1088	100	80	65	201
100-65-200	18.5	505	280	320	710	358	1110	200	18	130	1243	100	100	65	250
	22	525	300	360	730	402	1130	200	18	130	1293	100	100	65	294
	30	545	320	400	750	442	1200	225	18	155	1363	100	100	65	350
	37	545	320	400	750	442	1200	225	18	155	1363	100	100	65	369
100-65-250	30	570	320	400	770	442	1220	225	18	135	1388	125	100	65	362
	37	570	320	400	770	442	1220	225	18	135	1388	125	100	65	381
	45	615	365	440	810	487	1260	225	22	135	1433	125	100	65	455
	55	645	395	500	860	547	1360	250	22	160	1538	125	100	65	552
	75	695	445	550	910	602	1410	250	22	160	1613	125	100	65	716
100-65-315	55	695	415	500	890	552	1390	250	22	160	1568	125	100	65	613
	75	725	445	550	940	602	1440	250	22	160	1643	125	100	65	755
	90	725	445	550	890	602	1490	300	22	210	1693	125	100	65	794
	110	760	480	600	960	655	1560	300	22	210	1848	125	100	65	1190

Technical Data

● To be continued

2 Pole

Model	Power (kW)	H1	H2	HC1	HC2	BW	BL	BP	BH	OH	UL	FC	DN1	DN2	Total weight (kg)
100-80-160	11	460	260	320	670	358	1070	200	18	130	1203	100	100	80	216
	15	460	260	320	670	358	1070	200	18	130	1203	100	100	80	226
	18.5	460	260	320	710	358	1110	200	18	130	1243	100	100	80	247
	22	480	280	360	730	398	1130	200	18	130	1293	100	100	80	285
125-100-200	30	600	320	400	770	442	1220	225	18	135	1388	125	125	100	367
	37	600	320	400	770	442	1220	225	18	135	1388	125	125	100	386
	45	645	365	440	810	487	1260	225	22	135	1433	125	125	100	460
	55	675	395	500	860	547	1360	250	22	160	1538	125	125	100	557
	75	725	445	550	910	602	1410	250	22	160	1613	125	125	100	721
125-100-250	55	695	415	500	890	552	1390	250	22	160	1583	140	125	100	621
	75	725	445	550	940	602	1440	250	22	160	1658	140	125	100	763
	90	725	445	550	890	602	1490	300	22	210	1708	140	125	100	802
	110	760	480	600	960	655	1560	300	22	210	1863	140	125	100	1198
125-100-315	90	760	445	550	890	602	1490	300	22	210	1708	140	125	100	810
	110	795	480	600	960	655	1560	300	22	210	1863	140	125	100	1207
	132	795	480	600	1050	655	1650	300	22	210	1973	140	125	100	1265
	160	795	480	600	1070	655	1670	300	22	210	1973	140	125	100	1385

● Pump Set Dimension Table

4 Pole

Model	Power (kW)	H1	H2	HC1	HC2	BW	BL	BP	BH	OH	UL	FC	DN1	DN2	Total weight (kg)
125-80-400	15	755	400	440	760	482	1160	200	18	110	1298	125	125	80	363
	18.5	755	400	440	780	482	1180	200	18	110	1348	125	125	80	398
	22	775	420	440	770	487	1220	225	22	135	1388	125	125	80	425
	30	775	420	440	800	487	1250	225	22	135	1418	125	125	80	483
	37	775	420	440	840	487	1290	225	22	135	1468	125	125	80	539
125-100-400	22	775	420	480	790	527	1240	225	22	115	1403	140	125	100	440
	30	775	420	480	820	527	1270	225	22	115	1433	140	125	100	498
	37	775	420	480	860	527	1310	225	22	115	1483	140	125	100	554
	45	795	440	500	840	552	1340	250	22	140	1508	140	125	100	614