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YIMAN艺迈®

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IL SERIES

SINGLE-STAGE INLINE CIRCULATION PUMP

SHANGHAI YIMAI INDUSTRIAL CO., LTD

YIMAN艺迈®

专注提高 专业服务
FOCUS ON IMPROVING PROFESSIONAL SERVICES

COMPANY PROFILE

Shanghai Yimai Industrial Co., Ltd. is a high-tech enterprise integrating research and development, production, sales and service. Factory located in Shanghai Bay High-tech Industrial Zone.

We are committed to the development and manufacturing of special motor industry, the main motors are YE3, YE4 series of high-efficiency three-phase asynchronous motors; YPT3 series variable frequency speed regulating three-phase asynchronous motor; YBX3, YBX4 series high efficiency explosive proof three-phase asynchronous motor, YBBPX3 series explosive proof variable frequency speed regulation three-phase asynchronous motor and other products, the company has passed the ISO9001 quality management system certification, explosion-proof electrical equipment has passed the CCC product certification, explosion-proof motor certificate and many other national departments issued the certification certificate. The company has introduced advanced equipment and technology at home and abroad, and has gained good reputation in the same industry with scientific design, precision processing and rigorous testing.

Adhering to the business philosophy of "focus on improvement, professional in service" and implementing the values of pragmatic work style and concept of integrity and responsibility, we provide high-quality products to establish win-win business relationship with all customers.

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Product introduction

IL series In line circulation pump is a new generation series of standard pump developed by Yimai Group, with the original platform design method, which has the following characteristics:

-Beautiful appearance, with unified family characteristics

-The spectrum distribution is in line with international first-line brands to ensure interchangeability

-CFD-based hydraulic design, the efficiency reaches the energy saving evaluation value specified in GB19762-2007

-The whole pump is designed in 3D and verified by FEA strength

-Motor lengthening shaft design, reduce the number of parts, increase reliability

-Standard YX3 motor, IE3 ultra-high energy efficiency level, energy saving and environmental protection, to ensure long-term economic operation

-High part versatility with CS/ES series, providing good maintenance convenience and economy

Product Explosive view ：

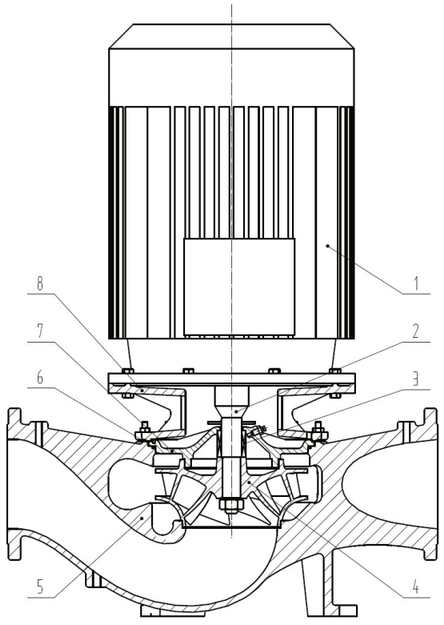
Application fields:

-HVAC system
-Cooling system
-Commercial building water supply
-Other industry process

Technical data:

	2 pole pump	4 pole pump
Flow rate	Max to 400m³/h	Max to 700m³/h
Head	Max to 150m	Max to 60m
Media temperature	-25~140°C(For details refer to mechanical seal selection sheet)	
Pressure rating	10bar for standard ,16bar、25bar available as customer required	
Connection flange	DN50~DN200,dimensions apply to EN 1092-2 and GB/T 17241.6	
Pumping media	Clean,low viscosity water-like liquid without particle or fibers inside	

Components Material:



S/N	Parts	Material	
		standard	option
1	Motor	YE3 high efficiency motor	others
2	Shaft	45#	2Cr13
3	Shaft seal	Standard graphite silicon carbide +EPDM	refer to selection sheet
4	Impeller	HT200	QT450、304
5	Casing	HT250	QT450、304
6	O-ring	Ethylene-propylene rubber	FKM/Viton
7	Cover	HT250	QT450、304
8	Motor bracket	HT250	QT450、304

Shaft selection:

Pumping media	Temperature	Rot. Ring mat.	Sta. Ring mat.	Secondary seal	Remark
Low temp.water	0~120℃	Carbon	SiC	EPDM	Standard
High temp.water	120~140℃	Carbon	WC	EPDM	Optional
Coolant	-25~90℃	SiC	SiC	EPDM	Optional
Oil	~90℃	SiC	SiC	FKM/Viton	Optional

Type Definition:

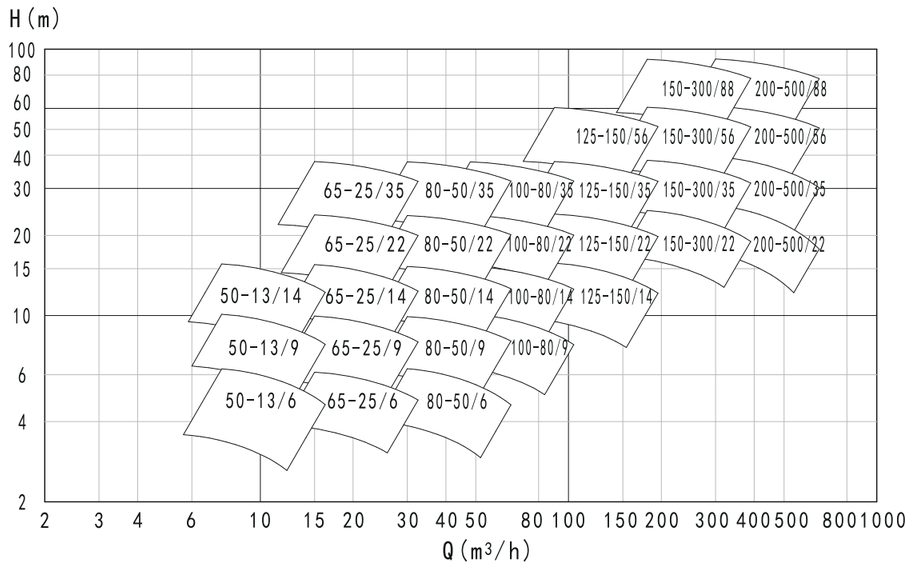
ILSingle stage Inline circulation pump

IL 150-300/34 - A (B)

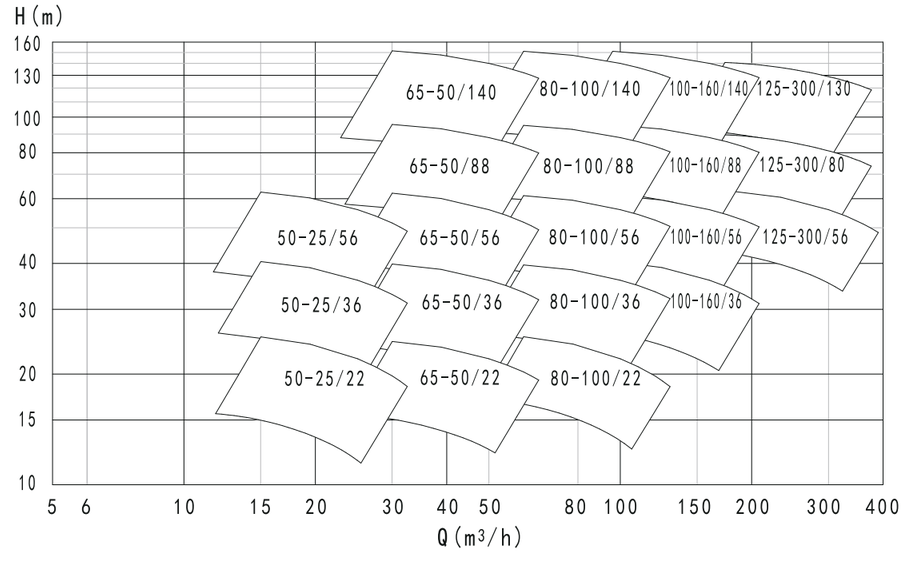
- Impeller cutting diameter code
  e.g. : A cutting、 B two cutting
- Rated power of the motor(kW)
  e.g. : 45=45kW
- Rated flow(m3/h)
  e.g. : 300=300m3/h
- Diameter of inlet/outlet (mm)
  e.g. : 150=DN150
- Type range — ILP series

Hydraulic layout

50Hz 4-pole motor



50Hz 2-pole motor



Curve condition

The following conditions are suitable for the performance curves shown:

1．Curve tolerance is conformity with ISO 9906,Annex A;

2．All curves are based on the measured value of magnet 3×380V, under the constant speed of 2900 rpm, 1450 rpm or 1480 rpm;

3．Measurements is done with 20℃, air-free water, without impurities, kinematic viscosity of 1mm2/s (1cSt) ;

4．If the thickness and density of the pumped liquid is different from water, the motor power should be adjusted.

5．The NPSHr curve of the candidate pump type corresponds the biggest impeller diameter, the NPSHr value should be added a minimum safety margin of 0.5 m.

Performance data sheet **50Hz 4-pole motor**

S/N	Model	Flow rate (m3/h)	Head (m)	Motor power (kw)	Rated spped (r/min)	NPSH (m)
1	50-12.5/14	8.8	15.1	1.1	1450	1.5
		12.5	14			
		16.3	12.1			
2	50-12.5/14（A）	8.2	13.7	0.75	1450	1.5
		11.7	12.5			
		15.2	10.7			
3	50-12.5/14（B）	7.6	12.5	0.75	1450	1.5
		10.8	11			
		14	9.5			
4	65-25/9	17.5	9.7	1.1	1450	1.5
		25	9			
		32.5	8			
5	65-25/9（A）	16.4	7.85	1.1	1450	1.8
		23.5	7			
		30.5	6			
6	65-25/9（B）	13	6.1	0.75	1450	1.8
		21.6	5.5			
		25.9	4.5			
7	65-25/14	17.5	15.4	2.2	1450	1.5
		25	14			
		32.5	12.4			
8	65-25/14(A)	16.4	13.2	1.5	1450	1.8
		23.5	12			
		30.5	10.5			
9	65-25/14(B)	13	11.1	1.1	1450	1.8
		21.6	10			
		25.9	8.6			
10	65-25/22	17.5	23.5	3.0	1450	1.6
		25	22			
		32.5	20			
11	65-25/22（A）	14	20.5	2.2	1450	1.8
		23.3	19			
		27.9	17.2			
12	65-25/22（B）	12.1	17.5	2.2	1450	1.8
		20.2	16			
		24.3	14.3			
13	65-25/36	17.5	37.5	5.5	1450	1.6
		25	36			
		32.5	32			

Performance data sheet **50Hz 4-pole motor**

S/N	Model	Flow rate (m3/h)	Head (m)	Motor power (kw)	Rated spped (r/min)	NPSH (m)
14	65-25/36（A）	16.4	31.5	5.5	1450	1.8
		23.5	30			
		30.5	26.8			
15	65-25/36（B）	13	25.8	4.0	1450	1.8
		21.6	24			
		25.9	21.5			
16	80-50/9	35	9.8	2.2	1450	2.0
		50	9			
		65	8			
17	80-50/9（A）	32.5	7.7	1.5	1450	2.2
		46.5	7			
		60.5	6.1			
18	80-50/9（B）	31	6	1.1	1450	2.2
		44.5	5.5			
		58	4.3			
19	80-50/14	35	15	3.0	1450	2.0
		50	14			
		65	12.6			
20	80-50/14（A）	32.5	13	3.0	1450	2.2
		46.5	12			
		60.5	10.6			
21	80-50/14（B）	31	11	2.2	1450	2.2
		44.5	10			
		58	8.6			
22	80-50/22	35	23.5	5.5	1450	2.0
		50	22			
		65	20.2			
23	80-50/22（A）	32.5	20.8	5.5	1450	2.2
		46.5	19			
		60.5	16.5			
24	80-50/22（B）	31	17.6	4.0	1450	2.2
		44.5	16			
		58	13.8			
25	80-50/35	35	37.2	11	1450	2.0
		50	35			
		65	32			
26	80-50/35（A）	32.5	31.5	7.5	1450	2.2
		46.5	29			
		60.5	26.2			

Performance data sheet **50Hz 4-pole motor**

S/N	Model	Flow rate (m3/h)	Head (m)	Motor power (kw)	Rated spped (r/min)	NPSH (m)
27	80-50/35（B）	31	25.2	5.5	1450	2.2
		44.5	23			
		58	20.4			
28	100-80/9	56	9.9	3.0	1450	2.3
		80	9			
		104	7.8			
29	100-80/9（A）	53.2	8.5	3.0	1450	2.5
		76	7.5			
		98.8	6.3			
30	100-80/9（B）	50.8	6.9	2.2	1450	2.5
		72.5	6			
		94.3	4.8			
31	100-80/14	56	15.2	5.5	1450	2.3
		80	14			
		104	12.2			
32	100-80/14（A）	53.2	13.2	4.0	1450	2.5
		76	12			
		98.8	10.1			
33	100-80/14（B）	50.8	11.2	3.0	1450	2.5
		72.5	10			
		94.3	7.8			
34	100-80/22	56	23.8	7.5	1450	2.3
		80	22			
		104	20.2			
35	100-80/22（A）	53.2	20.7	7.5	1450	2.5
		76	19			
		98.8	16.5			
36	100-80/22（B）	50.8	17.5	5.5	1450	2.5
		72.5	16			
		94.3	13.5			
37	100-80/35	56	37	15	1450	2.3
		80	35			
		104	32			
38	100-80/35（A）	53.2	31.5	11	1450	2.5
		76	29			
		98.8	24.5			
39	100-80/35（B）	50.8	25.5	7.5	1450	2.5
		72.5	23			
		94.3	18.5			

Performance data sheet **50Hz 4-pole motor**

S/N	Model	Flow rate (m3/h)	Head (m)	Motor power (kw)	Rated spped (r/min)	NPSH (m)
40	125-150/14	90	15.7	11	1450	2.5
		150	14			
		195	11.6			
41	125-150/14（A）	84	13.7	7.5	1450	2.8
		140	12			
		182	9.6			
42	125-150/14（B）	78	11.6	5.5	1450	2.8
		130	10			
		169	8			
43	125-150/22	90	24	15	1450	2.5
		150	22			
		195	19.8			
44	125-150/22（A）	84	20.5	15	1450	2.8
		140	19			
		182	15.5			
45	125-150/22（B）	78	17.5	11	1450	2.8
		130	16			
		169	12.8			
46	125-150/35	90	37.8	22	1450	2.5
		150	35			
		195	32			
47	125-150/35（A）	84	31.5	18.5	1450	2.8
		140	29			
		182	24.5			
48	125-150/35（B）	78	25.5	15	1450	2.8
		130	23			
		169	18.5			
49	125-100/35	70	38	18.5	1450	3.0
		100	35			
		130	27			
50	125-100/35（A）	60	32.5	15	1450	3.0
		90	30			
		120	23			
51	125-150/56	90	60.5	37	1450	2.5
		150	56			
		195	45.5			
52	125-150/56(A)	84	50.3	30	1450	2.8
		140	47			
		182	38.5			

Performance data sheet **50Hz 4-pole motor**

S/N	Model	Flow rate (m3/h)	Head (m)	Motor power (kw)	Rated spped (r/min)	NPSH (m)
53	125-150/56（B）	78	40	22	1450	2.8
		130	38			
		169	28.8			
54	125-100/56	70	60.5	30	1450	3.0
		100	56			
		130	48			
55	125-100/56（A）	66	54	22	1450	3.0
		95	50			
		123	46			
56	150-300/22	180	24.8	30	1450	3.2
		300	22			
		390	19			
57	150-300/22（A）	168	22.8	22	1450	3.5
		280	20			
		360	16.4			
58	150-300/22（B）	150	18.5	18.5	1450	3.5
		250	16			
		320	12.5			
59	150-300/35	180	38.2	45	1450	3.2
		300	35			
		390	31.5			
60	150-300/35（A）	168	31.5	37	1450	3.5
		280	29			
		360	24.5			
61	150-300/35（B）	150	25.5	30	1450	3.5
		250	23			
		320	18.5			
62	150-220/35	150	38	30	1450	3.5
		220	35			
		280	31			
63	150-220/35（A）	140	32	22	1450	3.5
		200	28			
		260	24			
64	150-300/56	180	60.6	75	1450	3.2
		300	56			
		390	51			
65	150-300/56（A）	168	50.2	55	1450	3.5
		280	47			
		360	38.2			

Performance data sheet **50Hz 4-pole motor**

S/N	Model	Flow rate (m3/h)	Head (m)	Motor power (kw)	Rated spped (r/min)	NPSH (m)
66	150-300/56（B）	150	40.5	45	1450	3.5
		250	38			
		320	28.6			
67	150-220/56	150	60.6	55	1450	3.8
		220	56			
		285	51			
68	150-220/56（A）	140	50.2	45	1450	3.8
		200	47			
		260	38.2			
69	200-500/20	300	22.5	37	1450	5.5
		500	20			
		600	16			
70	200-500/20（A）	270	18.5	30	1450	5.8
		450	16			
		550	12			
71	200-500/35	300	39.4	75	1450	5.5
		500	35			
		650	30.2			
72	200-500/35（A）	270	33.5	55	1450	5.8
		450	30			
		580	24.8			
73	200-500/35（B）	240	27.6	45	1450	5.8
		400	25			
		520	20.3			
74	200-400/35	280	39	55	1450	5.8
		400	35			
		520	30			
75	200-400/35（A）	260	33.5	45	1450	5.8
		375	30			
		485	31			
76	200-500/56	300	61	110	1450	5.5
		500	56			
		650	50.5			
77	200-500/56（A）	270	50.2	90	1450	5.8
		450	47			
		580	38.2			
78	200-500/56（B）	240	40.8	75	1450	5.8
		400	38			
		520	28.6			

Performance data sheet **50Hz 4-pole motor**

S/N	Model	Flow rate (m3/h)	Head (m)	Motor power (kw)	Rated spped (r/min)	NPSH (m)
79	200-400/56	240	60	90	1450	5.8
		400	56			
		520	50.5			
80	200-400/56（A）	260	50.5	75	1450	5.8
		375	47			
		485	38.5			
81	200-500/85	300	90	200	1450	5.3
		500	85			
		650	75			
82	200-500/85（A）	270	84	160	1450	5.3
		450	80			
		580	71			
83	200-500/85（B）	240	80	132	1450	5.3
		400	75			
		520	68			
84	250-720/20	540	22.5	55	1450	6.5
		720	20			
		900	17			
85	250-720/20（A）	450	19.5	45	1450	6.5
		600	17			
		720	14			
86	250-750/32	550	33	90	1450	6.5
		750	32			
		900	28			
87	250-750/32（A）	520	29	75	1450	7.0
		650	28			
		780	24			
88	250-750/32（B）	450	28	55	1450	7.0
		580	25			
		720	21			
89	250-750/55	550	59	160	1450	7.0
		750	55			
		900	50			
90	250-750/55（A）	520	54	132	1450	7.0
		650	50			
		780	45			
91	250-750/55（B）	420	50	110	1450	7.0
		600	45			
		720	40			

Performance data sheet **50Hz 2-pole motor**

S/N	Model	Flow rate (m3/h)	Head (m)	Motor power (kw)	Rated spped (r/min)	NPSH (m)
1	40-6.3/22	4.5	23	1.1	2900	2.0
		6.3	22			
		8.5	20			
2	40-6.3/22(A)	4.0	19	0.75	2900	2.0
		5.6	18			
		7.5	16			
3	40-6.3/32	4.5	23	2.2	2900	2.0
		6.3	22			
		8.5	30			
4	40-6.3/32(A)	4.2	29	1.5	2900	2.0
		5.8	28			
		7.5	26			
5	40-6.3/32(A)	3.8	25	1.1	2900	2.0
		5.5	24			
		7.2	22			
6	50-12.5/22	8.8	23	1.5	2900	2.2
		12.5	22			
		16.5	20			
7	50-12.5/22(A)	8.0	19	1.1	2900	2.2
		11	18			
		14.5	16			
8	50-12.5/32	8.8	33	3	2900	2.2
		12.5	32			
		16.5	30			
9	50-12.5/32(A)	8.2	29	2.2	2900	2.2
		11.7	28			
		15.5	26			
10	50-12.5/32(B)	7.5	23	2.2	2900	2.2
		10.5	22			
		13.5	20			
11	50-12.5/55	8.8	57	5.5	2900	2.2
		12.5	55			
		16.5	51			
12	50-12.5/55(A)	8.3	48	4	2900	2.2
		11.7	46			
		15.3	42			
13	50-12.5/55(B)	7.5	40	3	2900	2.2
		10.6	38			
		13.8	35			

Performance data sheet **50Hz 2-pole motor**

S/N	Model	Flow rate (m3/h)	Head (m)	Motor power (kw)	Rated spped (r/min)	NPSH (m)
14	50-25/56	17.5	61.2	7.5	2900	2.2
		25	56			
		32.5	49			
15	50-25/56（A）	16.4	55.1	7.5	2900	2.4
		23.4	50			
		30.4	40.5			
16	50-25/56（B）	15.2	48.5	5.5	2900	2.4
		21.8	44			
		28	35.2			
17	65-25/22	17.5	23	3	2900	3.0
		25	22			
		32.5	20			
18	65-25/22（A）	16.5	20	2.2	2900	3.0
		22.5	19			
		30.5	18			
19	65-50/36	30	39	11	2900	3.0
		50	36			
		65	32			
20	65-50/36（A）	26.5	34	7.5	2900	3.2
		44.5	30			
		53.5	24.5			
21	65-50/36（B）	25.5	26.5	5.5	2900	3.2
		42.5	24			
		51	19.8			
22	65-25/36	17.5	39	5.5	2900	3.0
		25	36			
		32.5	32			
23	65-25/36（A）	16.5	32	4	2900	3.0
		22.5	30			
		30.5	27			
24	65-50/56	30	62	15	2900	3.0
		50	56			
		65	49			
25	65-50/56（A）	26.5	51.5	11	2900	3.2
		44.5	47			
		53.5	37.6			
26	65-50/56（B）	25.5	41.8	11	2900	3.2
		42.5	38			
		51	30.6			

Performance data sheet **50Hz 2-pole motor**

S/N	Model	Flow rate (m3/h)	Head (m)	Motor power (kw)	Rated spped (r/min)	NPSH (m)
27	65-50/88	30	95.5	22	2900	3.0
		50	88			
		65	80			
28	65-50/88（A）	26.5	80.3	18.5	2900	3.2
		44.5	73			
		53.5	58.4			
29	65-50/88（B）	25.5	63.8	15	2900	3.2
		42.5	58			
		51	46.4			
30	65-50/140	30	151	45	2900	3.0
		50	140			
		65	128			
31	65-50/140（A）	26.5	132	37	2900	3.2
		44.5	125			
		53.5	114			
32	65-50/140（B）	24.3	99.5	30	2900	3.2
		40.5	90			
		48.6	72.6			
33	80-100/36	60	39.5	15	2900	4.2
		100	36			
		130	32			
34	80-100/36（A）	55.8	33.2	15	2900	4.5
		93	30			
		115	24.2			
35	80-100/36（B）	51	26.5	11	2900	4.5
		85	24			
		110	19.5			
36	80-100/56	60	61	30	2900	4.2
		100	56			
		130	50.5			
37	80-100/56（A）	55.8	51.8	22	2900	4.5
		93	47			
		115	38.5			
38	80-100/56（B）	51	43.8	18.5	2900	4.5
		85	40			
		110	32.5			
39	80-100/88	60	95	45	2900	4.2
		100	88			
		130	81			

Performance data sheet **50Hz 2-pole motor**

S/N	Model	Flow rate (m3/h)	Head (m)	Motor power (kw)	Rated spped (r/min)	NPSH (m)
40	80-100/88（A）	56.4	80.5	37	2900	4.5
		94	73			
		120	58.8			
41	80-100/88（B）	52.8	63.9	30	2900	4.5
		88	58			
		110	32.5			
42	80-100/140	60	151	75	2900	4.2
		100	140			
		130	128			
43	80-100/140（A）	56.4	126.8	55	2900	4.5
		94	115			
		120	92.7			
44	80-100/140（B）	54	99.6	45	2900	4.5
		90	92			
		112	72.8			
45	100-160/36	60	39.5	22	2900	4.5
		96	40.5			
		160	36			
46	100-160/36（A）	208	31	18.5	2900	4.8
		90	33.5			
		150	30			
47	100-160/36（B）	84	26.5	15	2900	4.8
		140	24			
		168	19.5			
48	100-160/56	96	61	37	2900	4.8
		160	56			
		208	50.5			
49	100-160/56（A）	90	51.8	30	2900	5.0
		150	47			
		180	38.2			
50	100-160/56（B）	55.8	51.8	22	2900	5.0
		93	47			
		115	38.5			
51	100-160/88	96	95	75	2900	4.8
		160	88			
		208	80			
52	100-160/88（A）	90	82.5	55	2900	5.0
		150	75			
		180	60.5			

Performance data sheet **50Hz 2-pole motor**

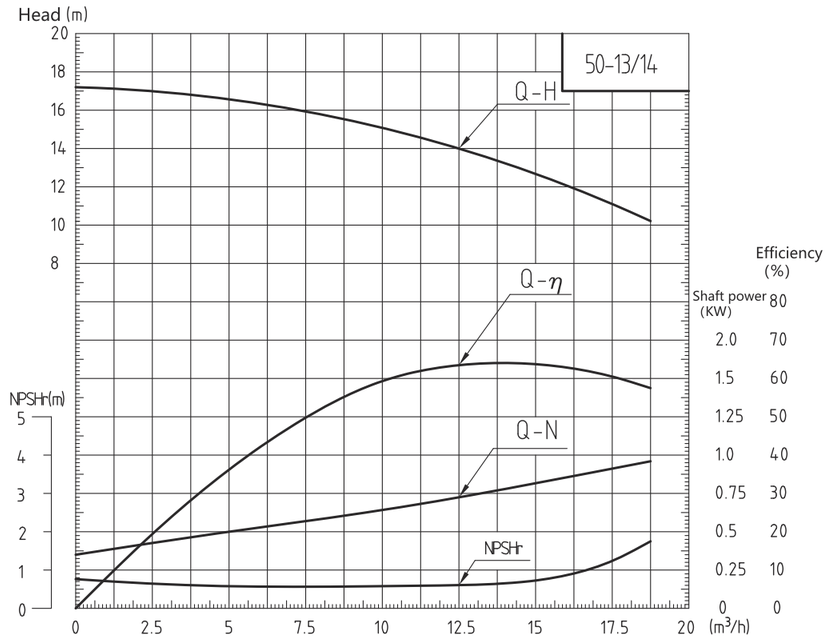
S/N	Mode	Flow rate (m3/h)	Head (m)	Motor power (kw)	Rated spped (r/min)	NPSH (m)
53	100-160/88（B）	84	68.9	45	2900	5.0
		140	62			
		168	49.9			
54	100-160/140	96	151	110	2900	4.8
		160	140			
		208	128			
55	100-160/140（A）	90	126.9	90	2900	5.0
		150	115			
		180	92.8			
56	100-160/140（B）	84	99.7	75	2900	5.0
		140	90			
		168	72.9			
57	125-300/56	180	63	75	2900	8.5
		300	56			
		390	49			
58	125-300/56（A）	156	51.9	55	2900	8.6
		260	47			
		315	38.2			
59	125-300/56（B）	132	44.5	45	2900	8.6
		220	40			
		265	32.6			
60	125-300/80	180	88	110	2900	8.5
		300	80			
		390	71			
61	125-300/80（A）	156	80.5	75	2900	8.6
		260	73			
		315	58.8			
62	125-300/80（B）	132	66.5	55	2900	8.6
		220	60			
		265	48.2			
63	125-300/130	180	142.5	160	2900	8.5
		300	130			
		390	108.5			
64	125-300/130（A）	156	126.7	132	2900	8.6
		260	115			
		315	92.7			
65	125-300/130（B）	132	110.6	110	2900	8.6
		220	100			
		265	81.2			

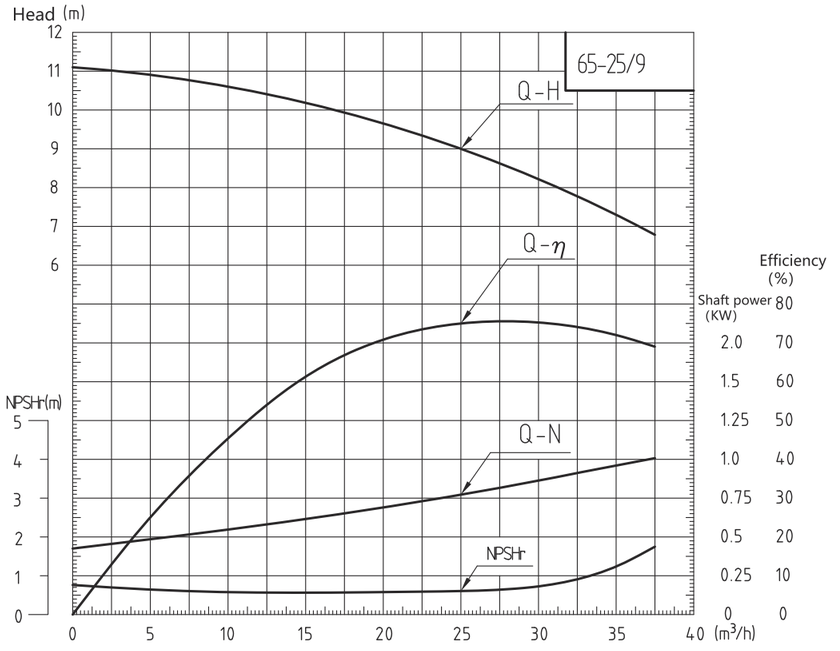
Performance data sheet **50Hz 2-pole motor**

S/N	Model	Flow rate (m3/h)	Head (m)	Motor power (kw)	Rated spped (r/min)	NPSH (m)
66	125-200/130	140	143	132	2900	7.0
		200	130			
		260	108			
67	125-200/130（A）	125	126	110	2900	7.0
		180	115			
		235	92			

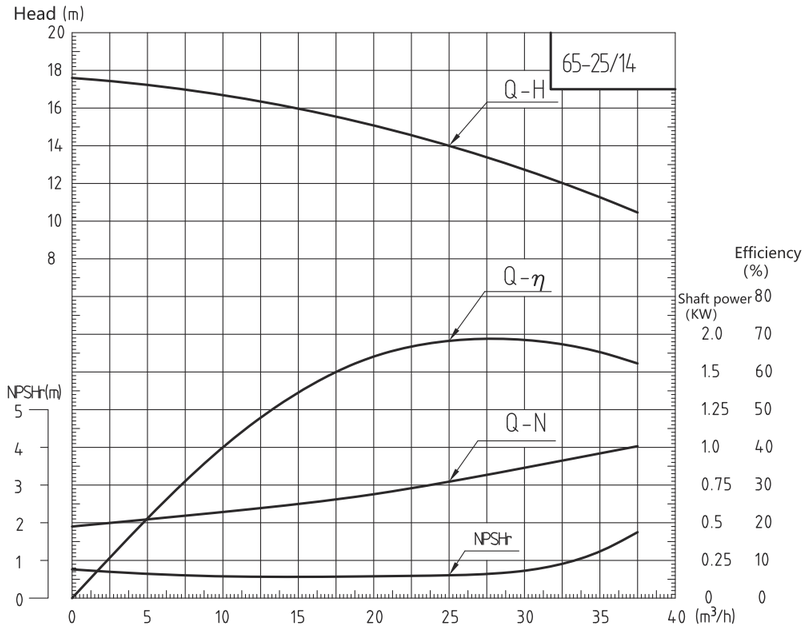
Performance curves

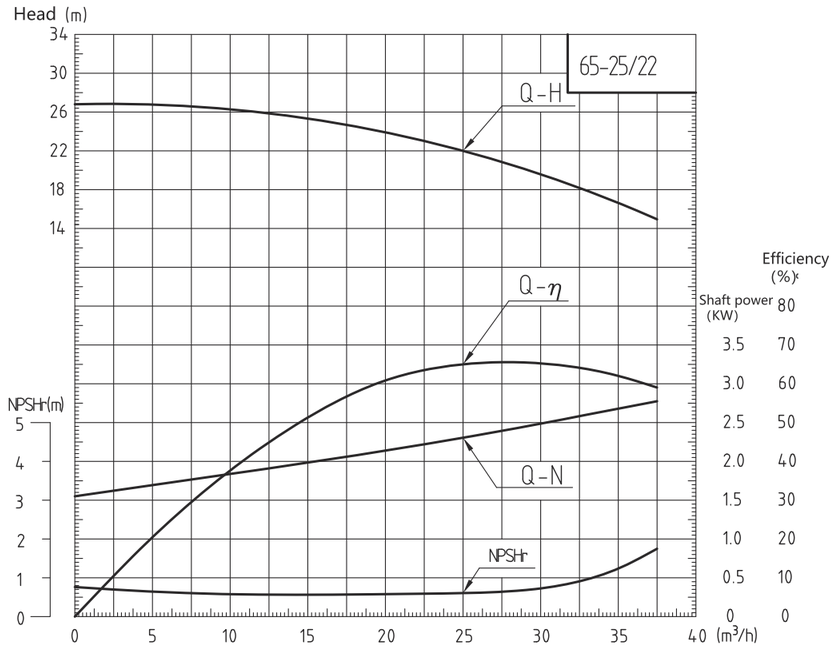
50Hz 4-pole motor



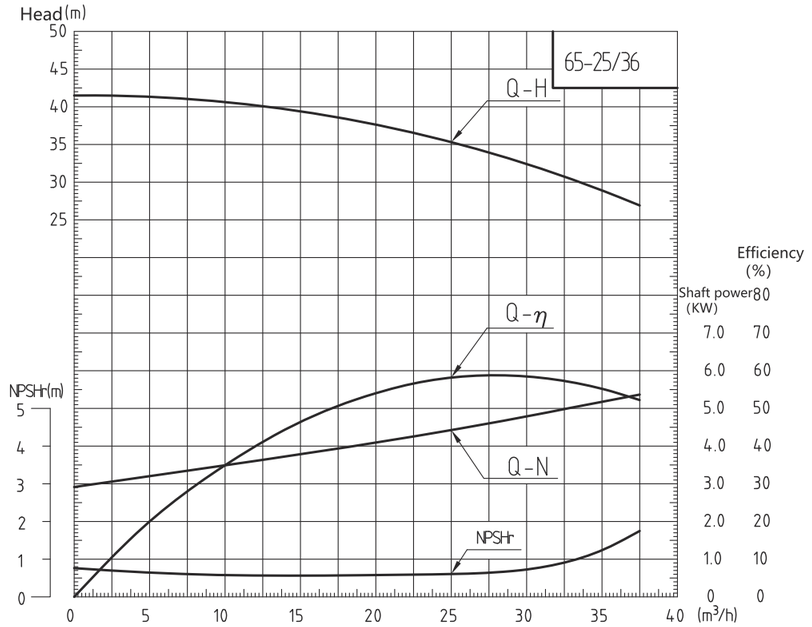


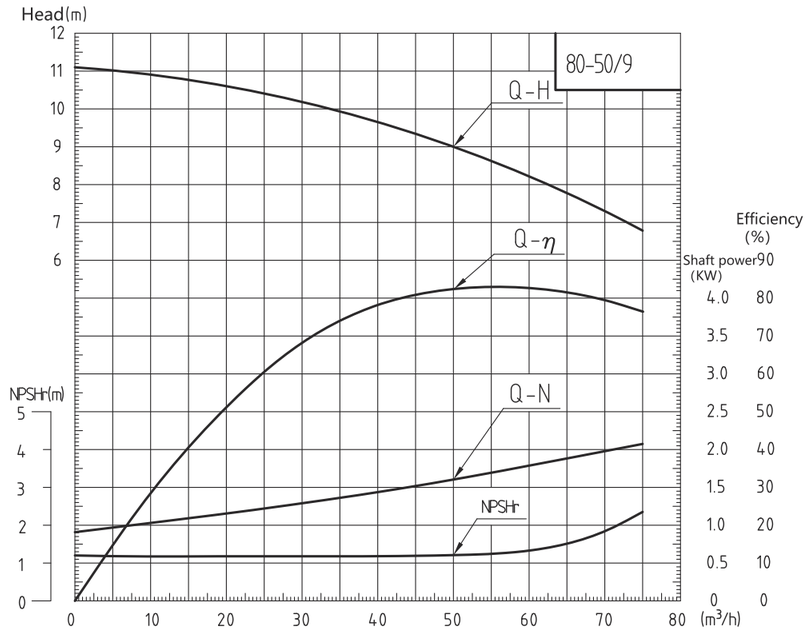
50Hz 4-pole motor



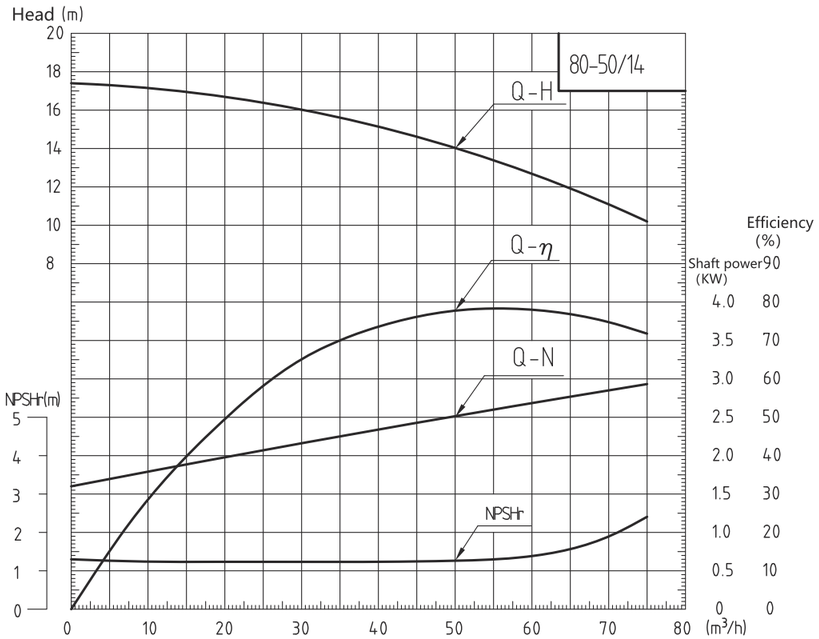


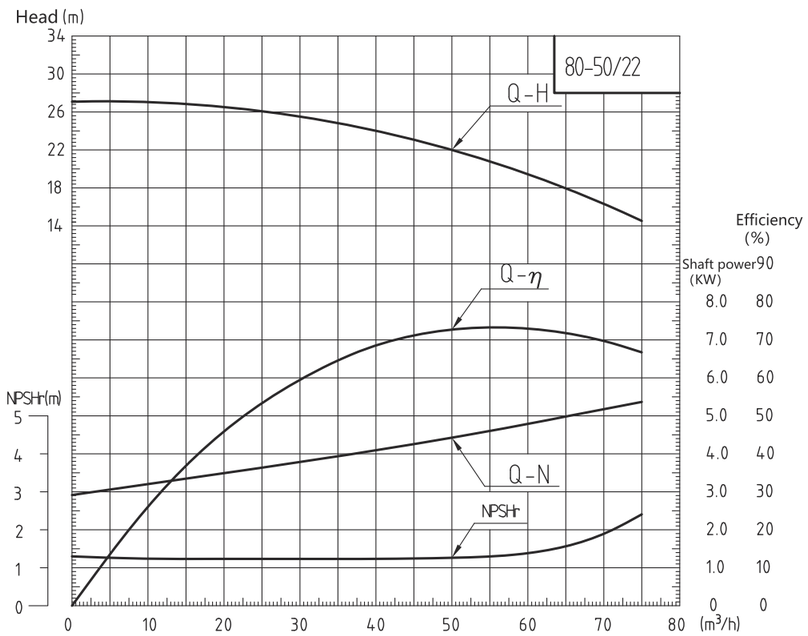
50Hz 4-pole motor





50Hz 4-pole motor





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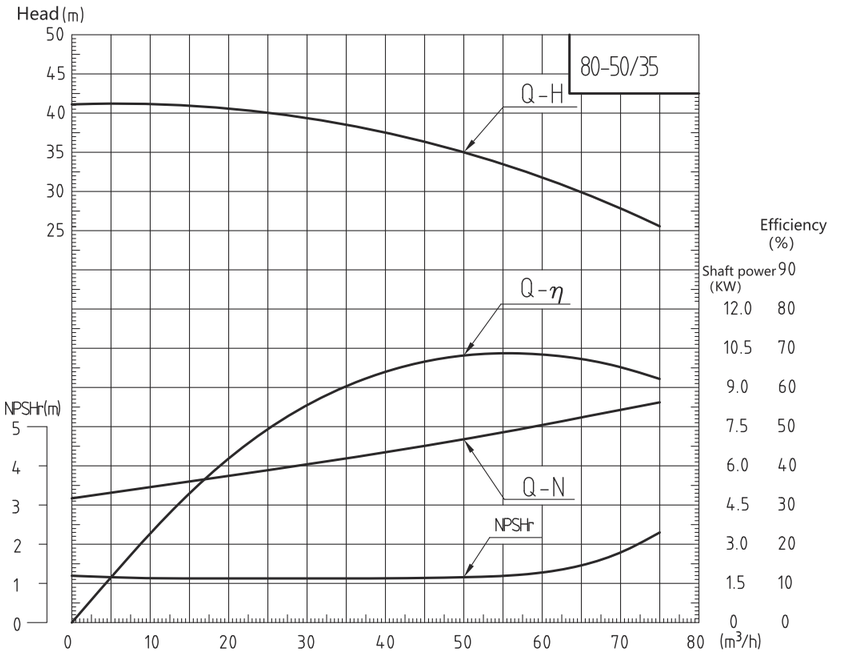

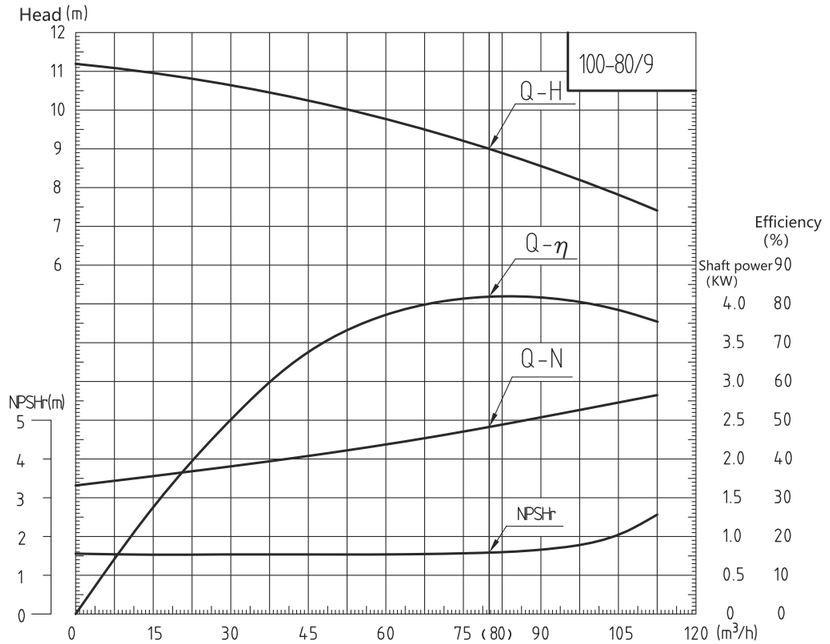

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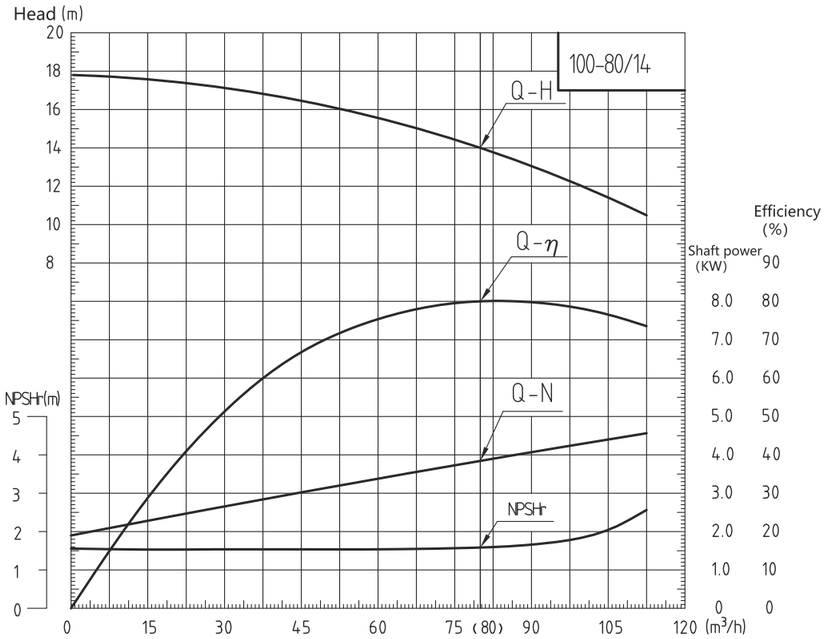

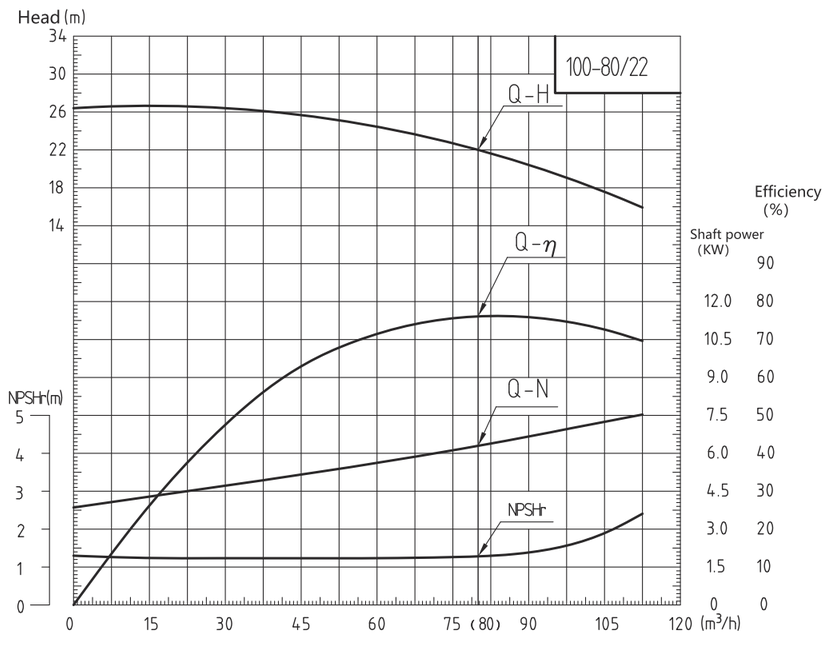

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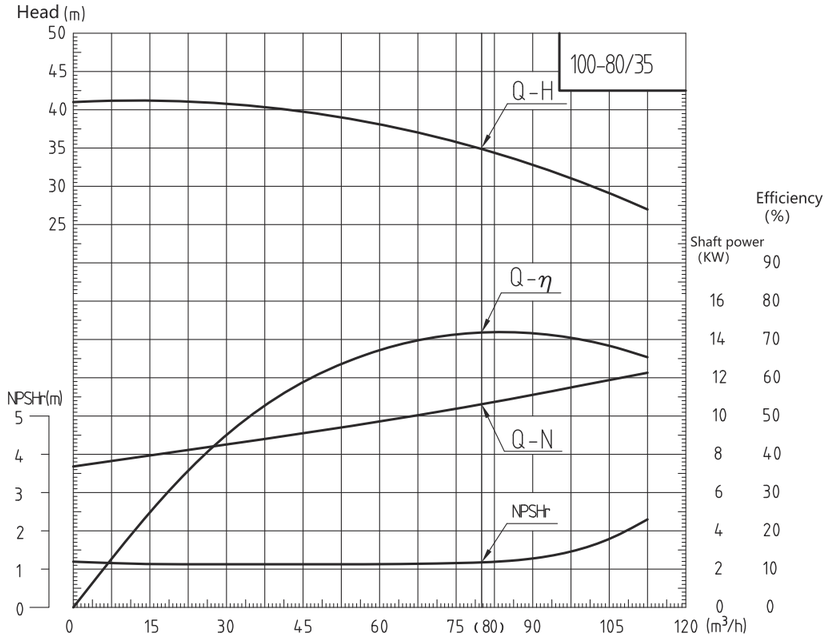

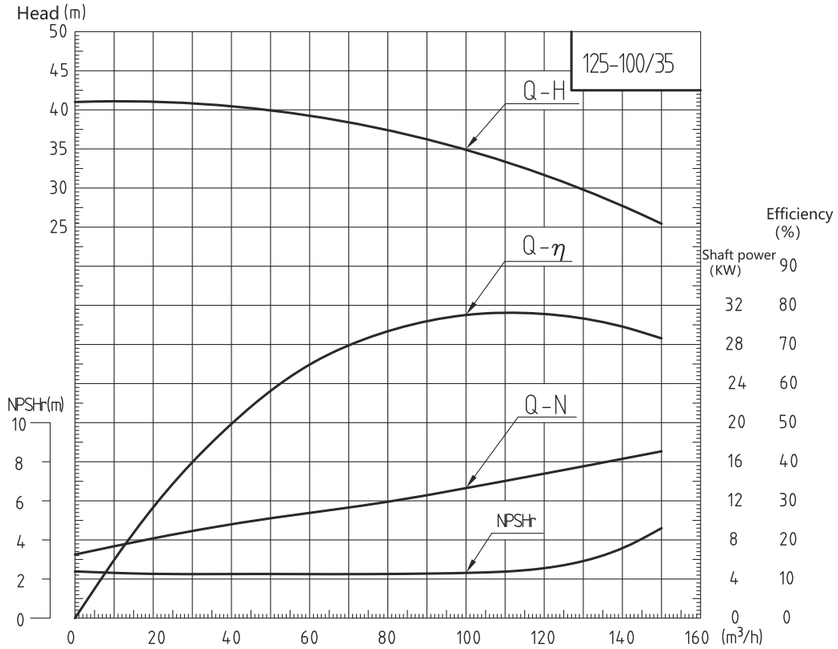

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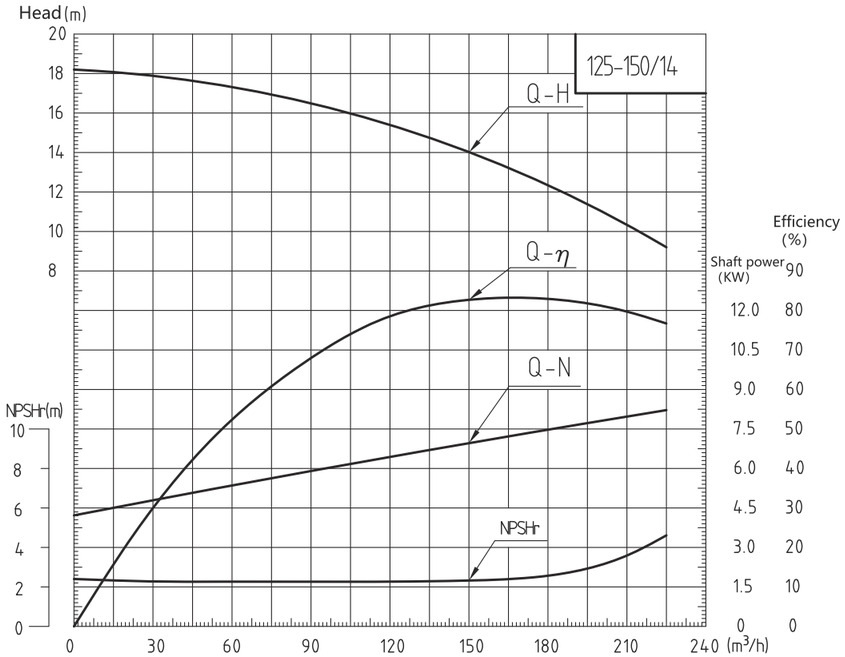

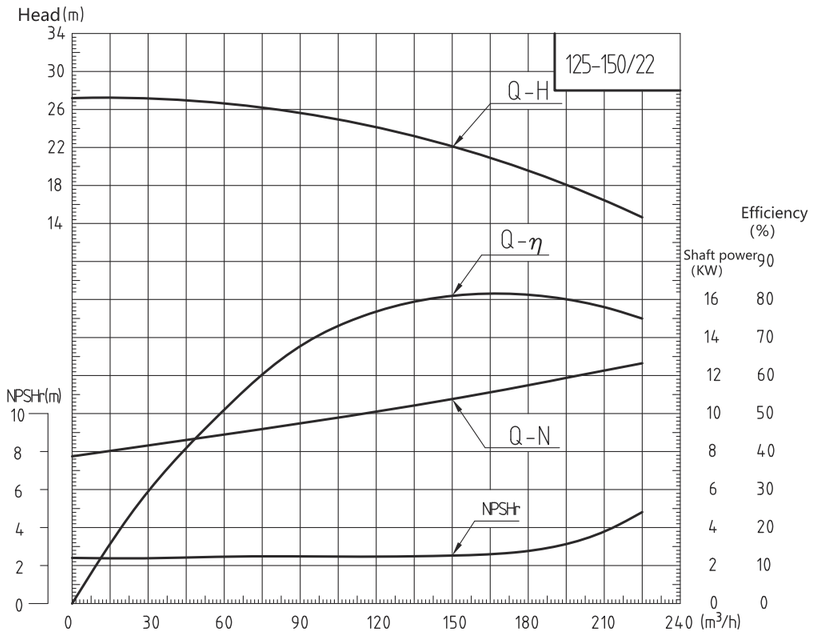

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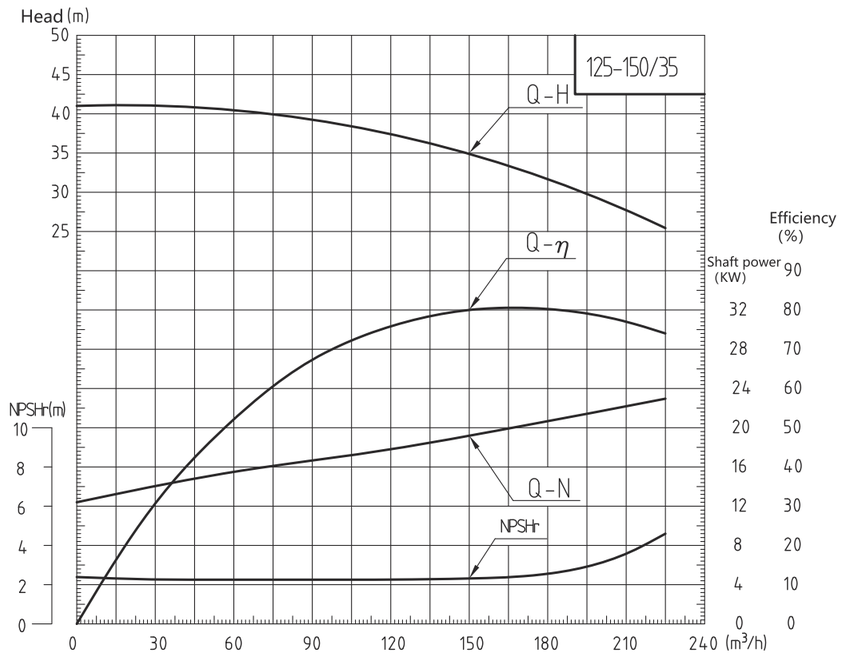

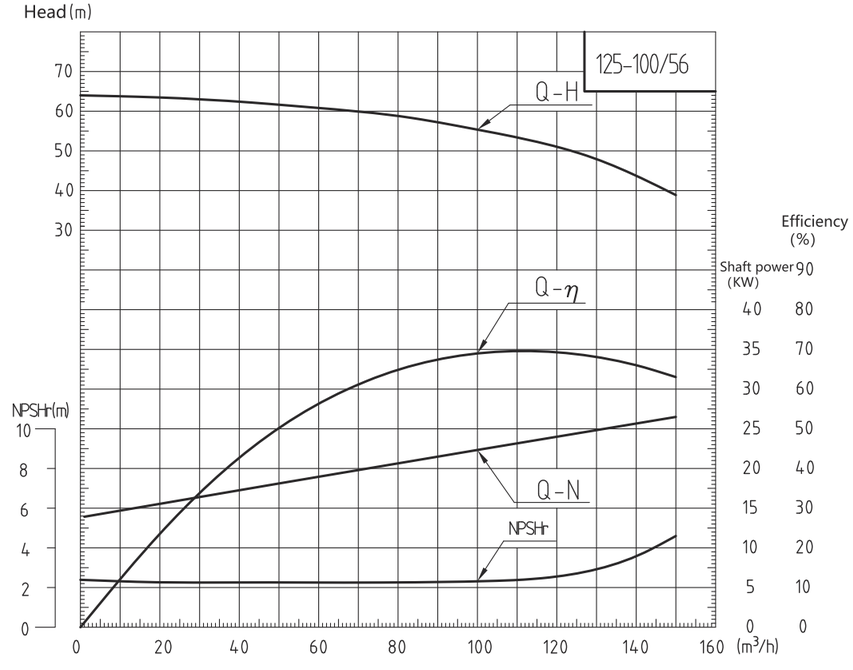

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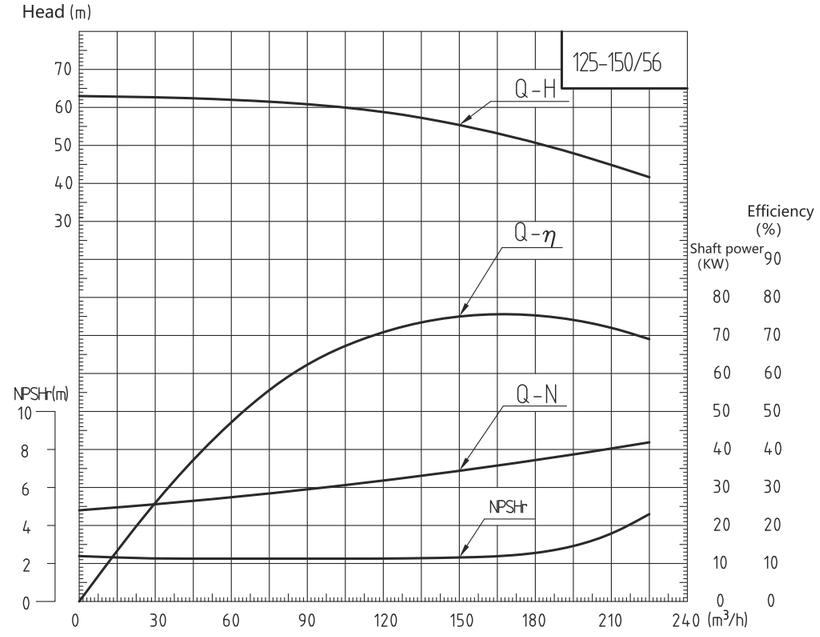

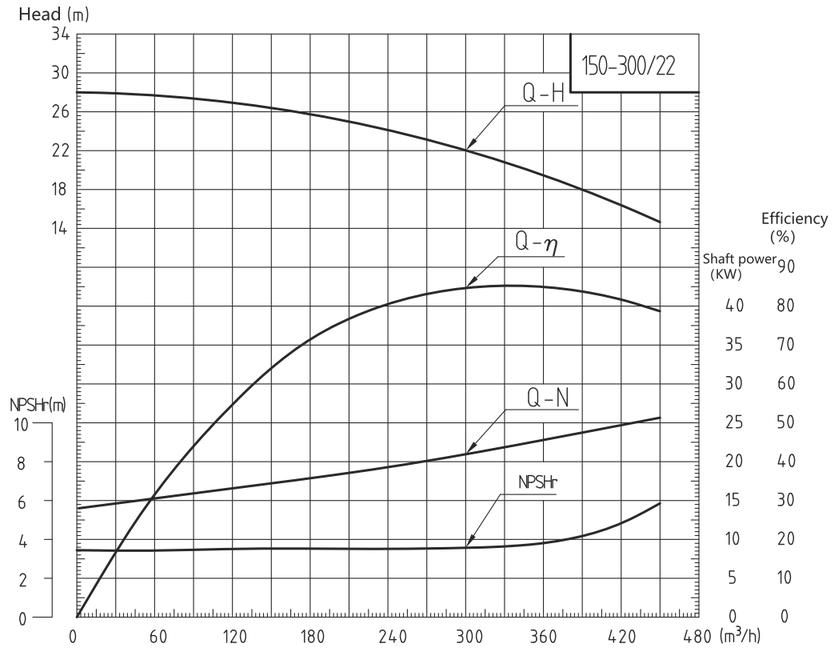

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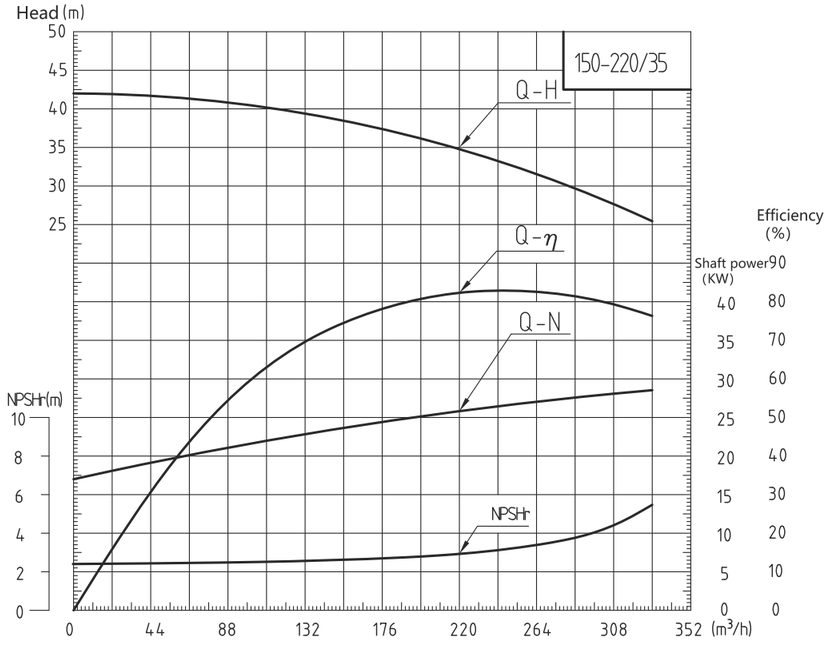

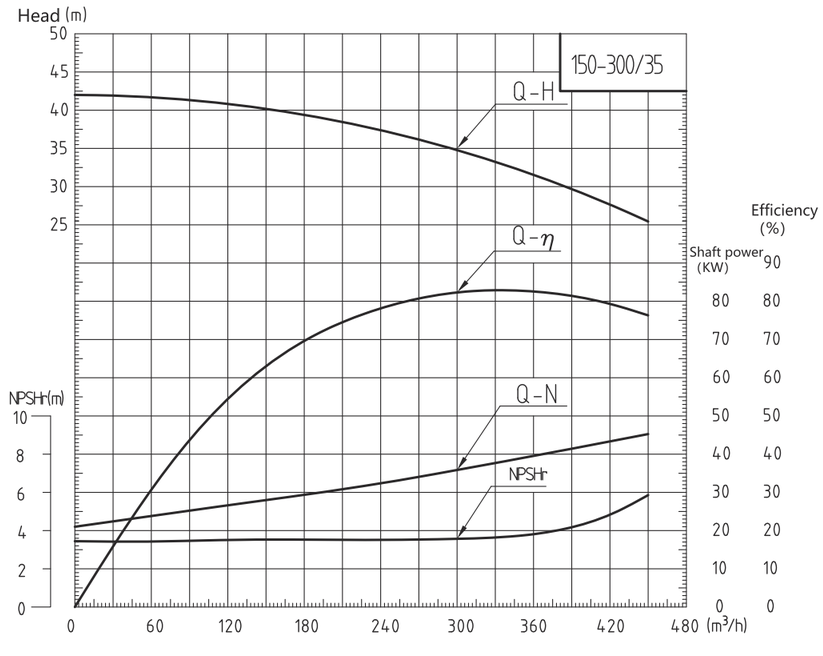

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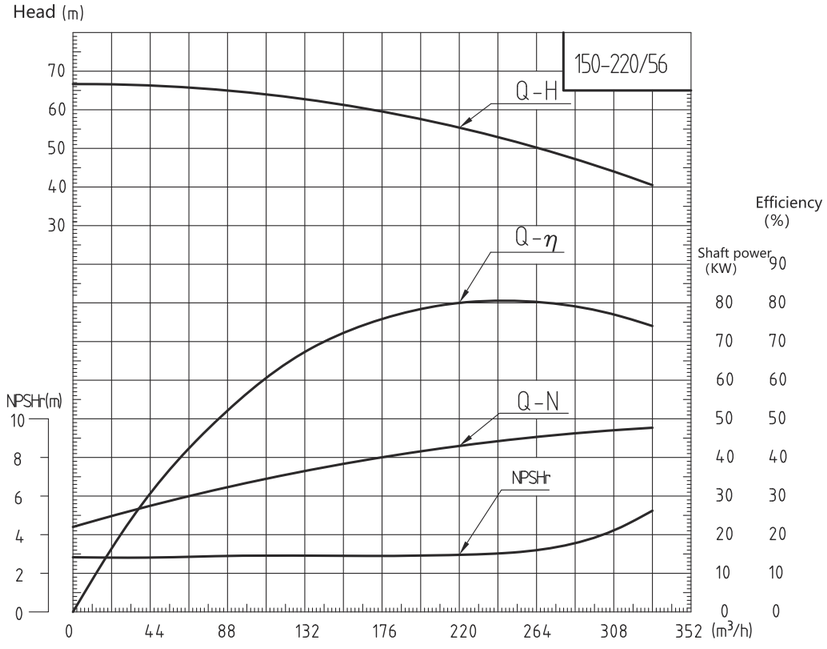

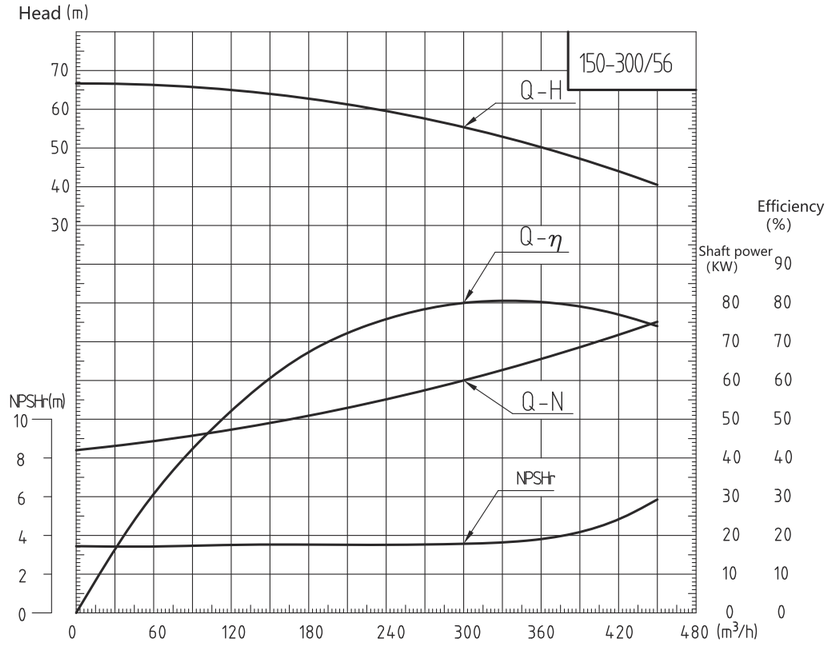

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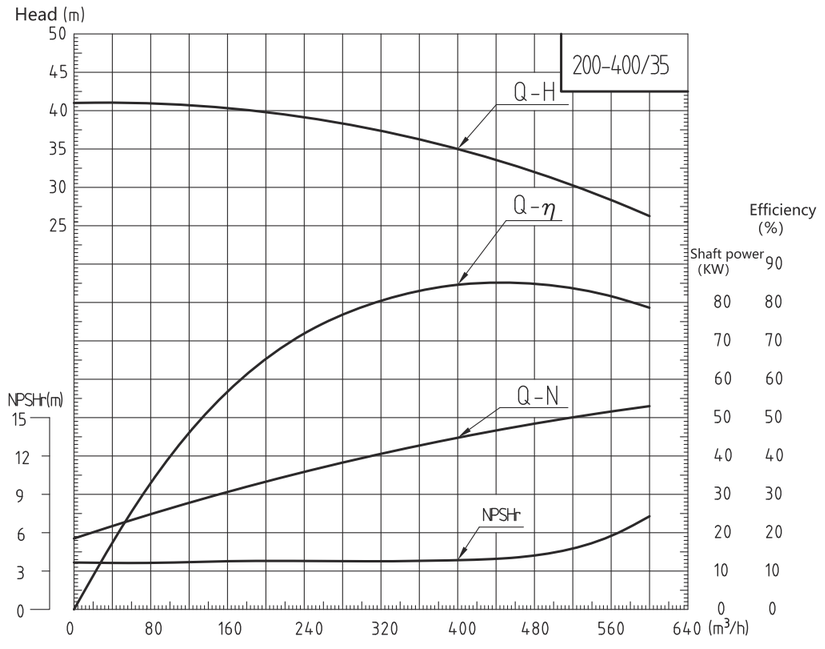

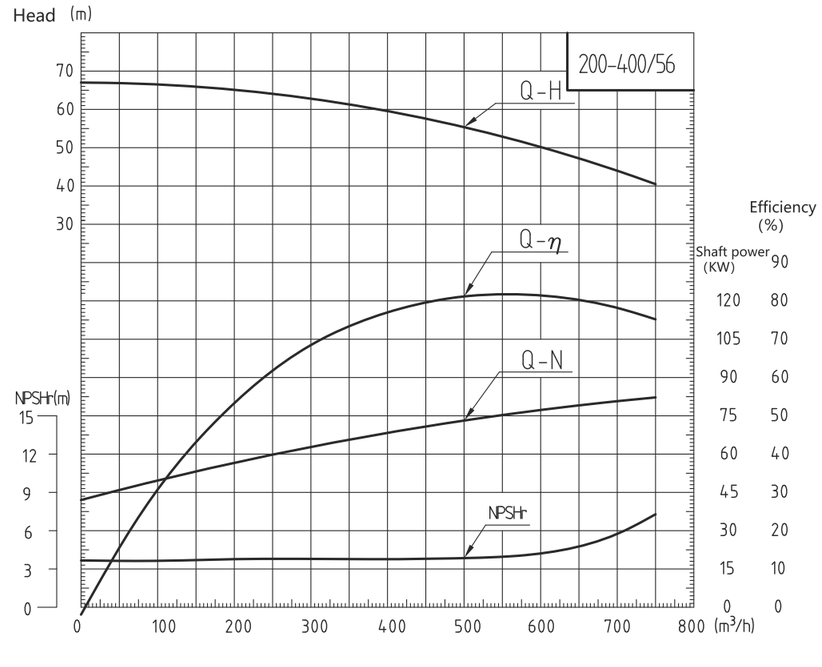

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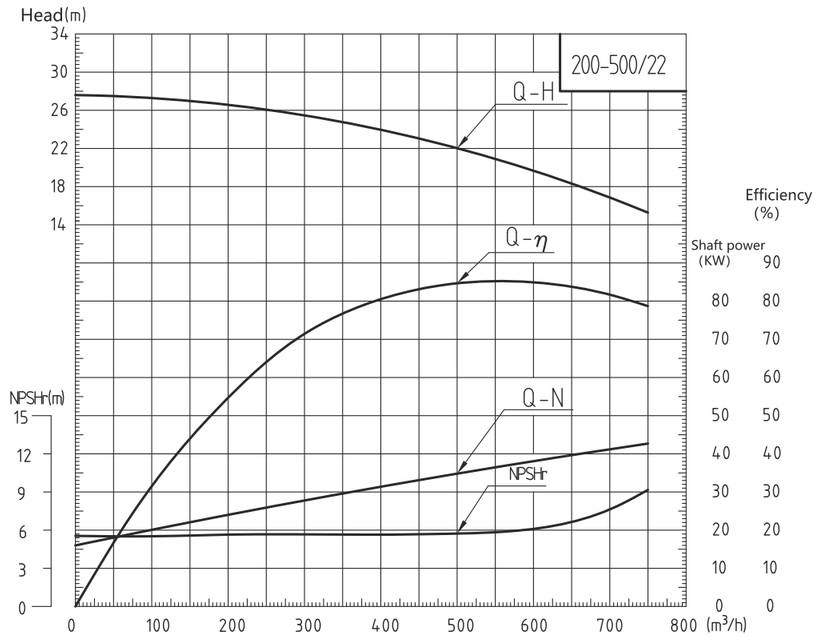
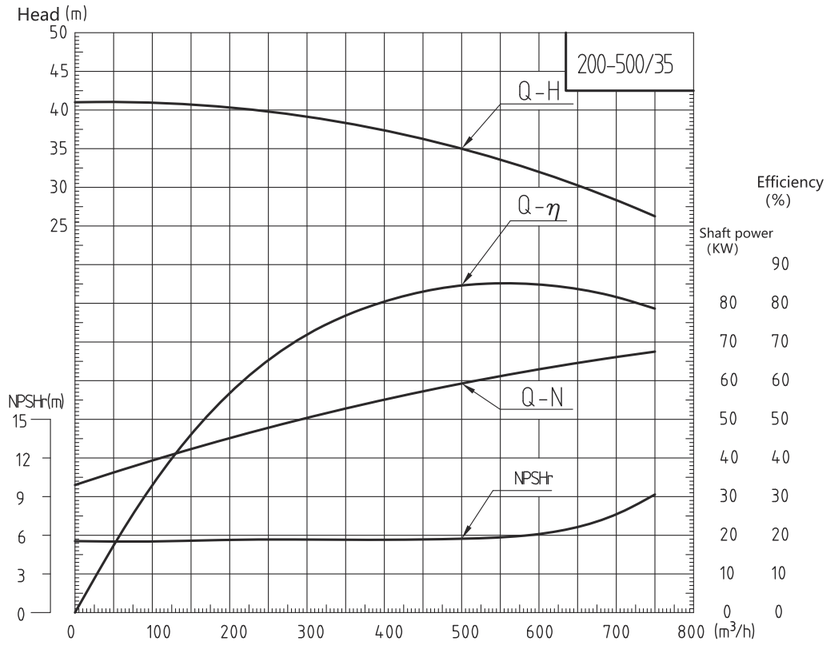
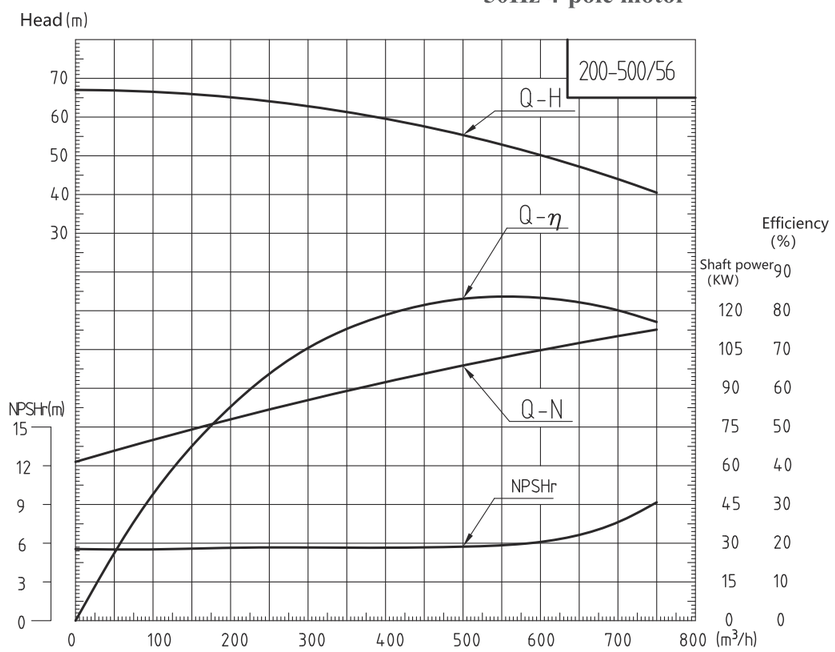
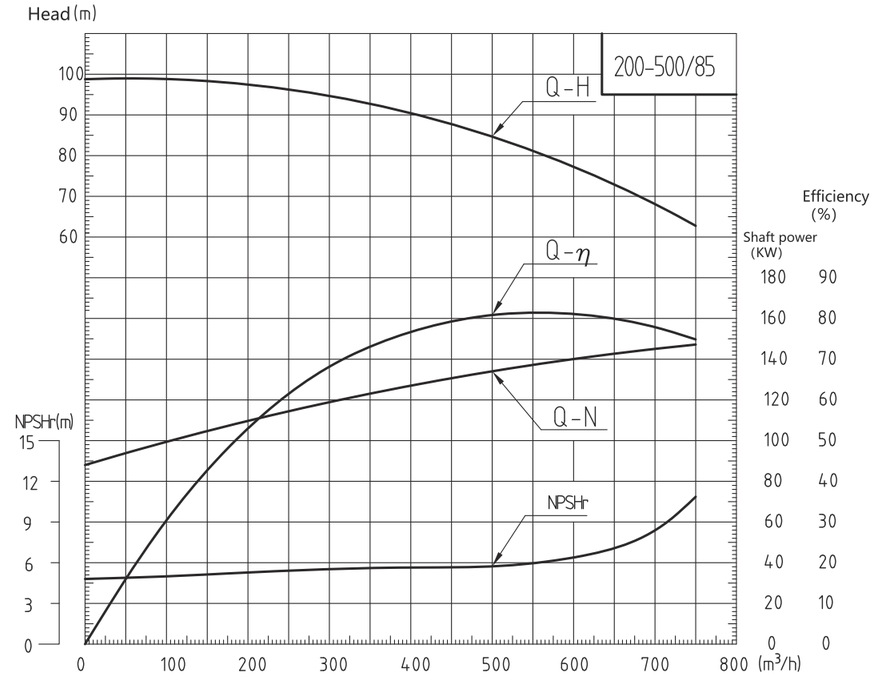




50Hz 4-pole motor





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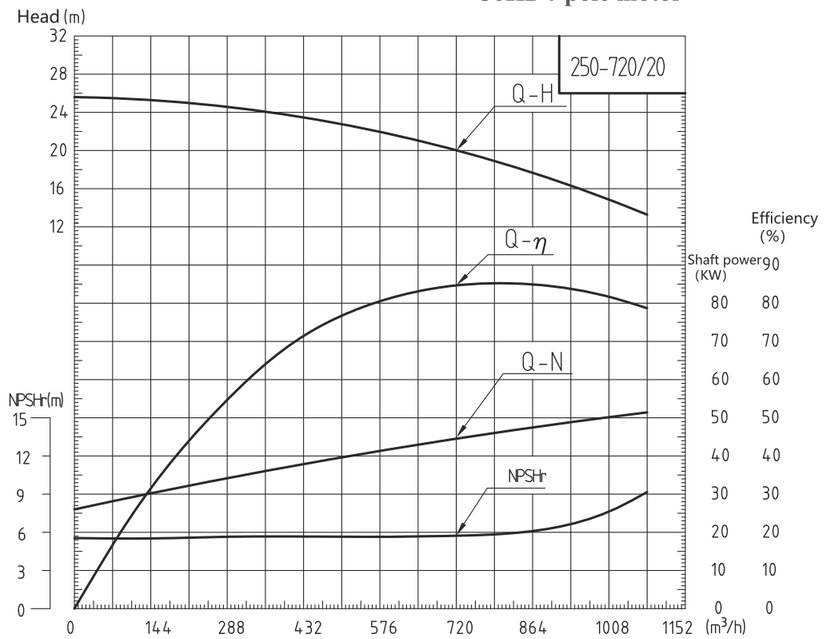
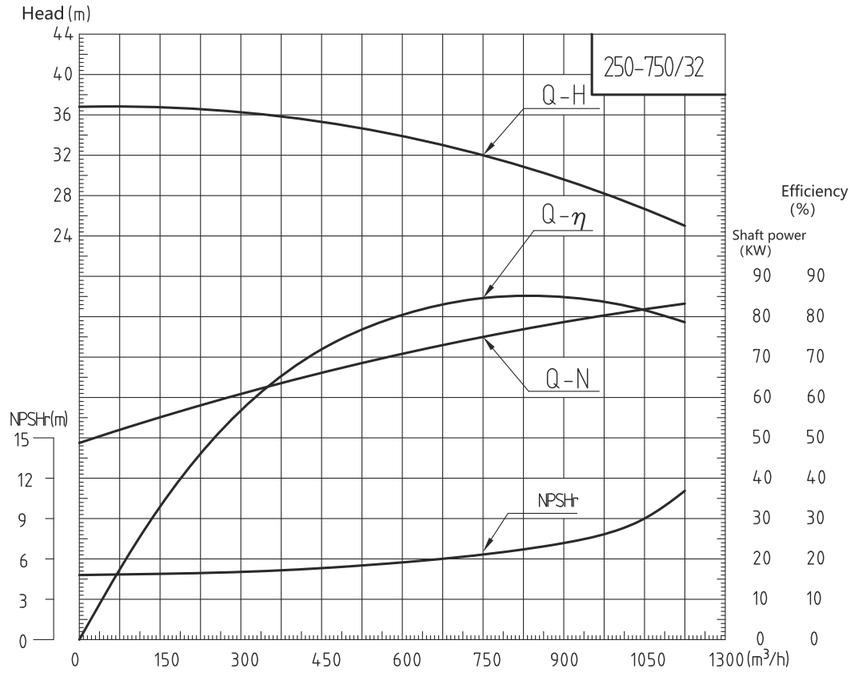
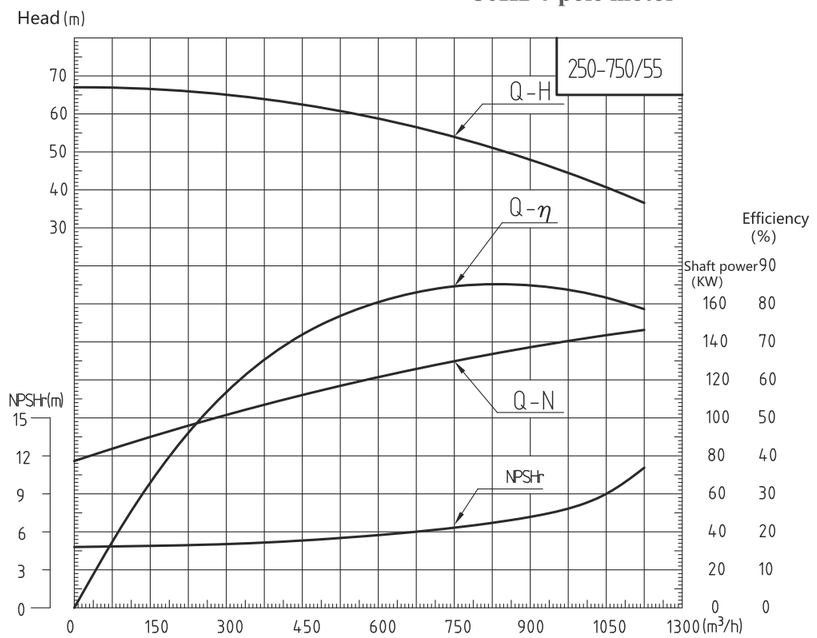
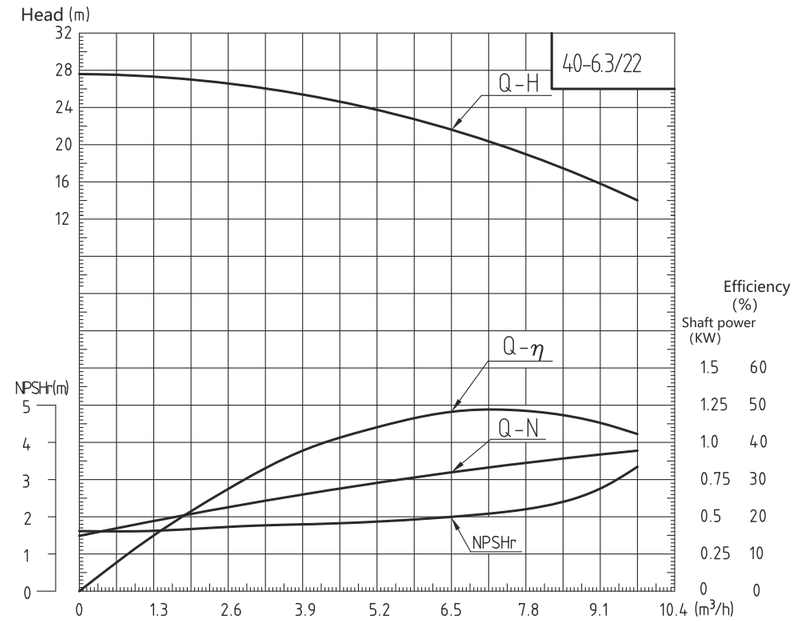


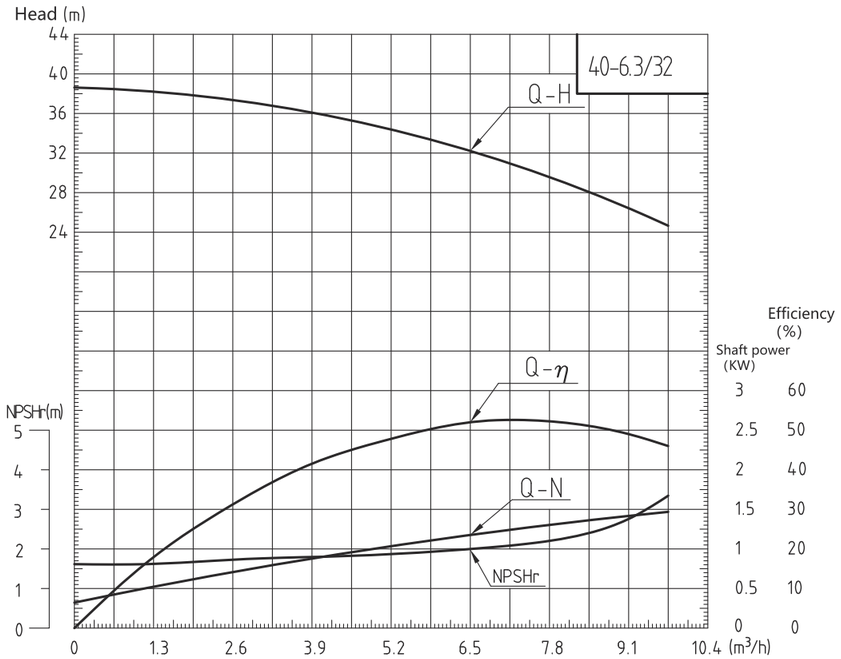


50Hz 4-pole motor

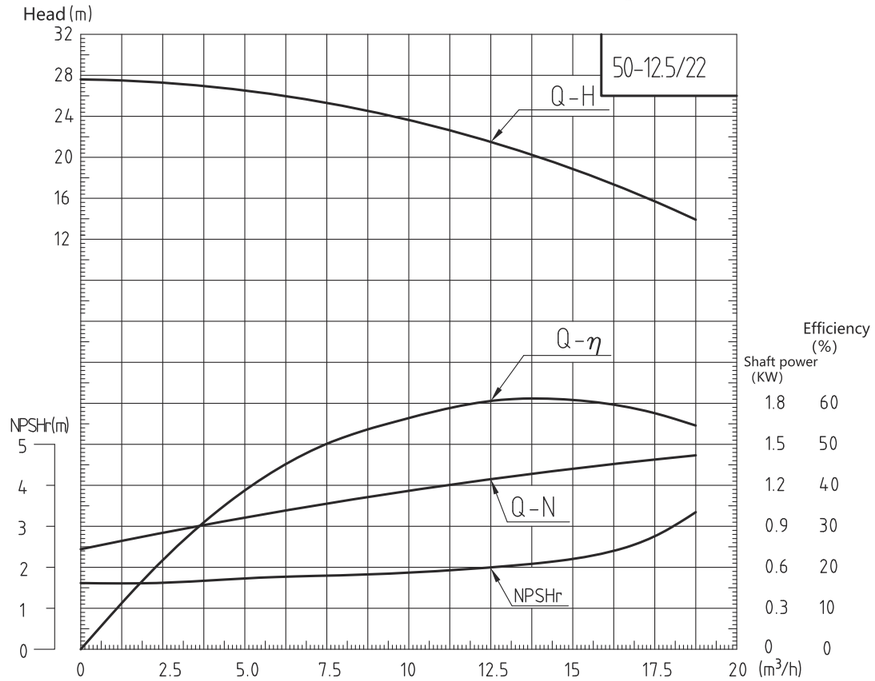


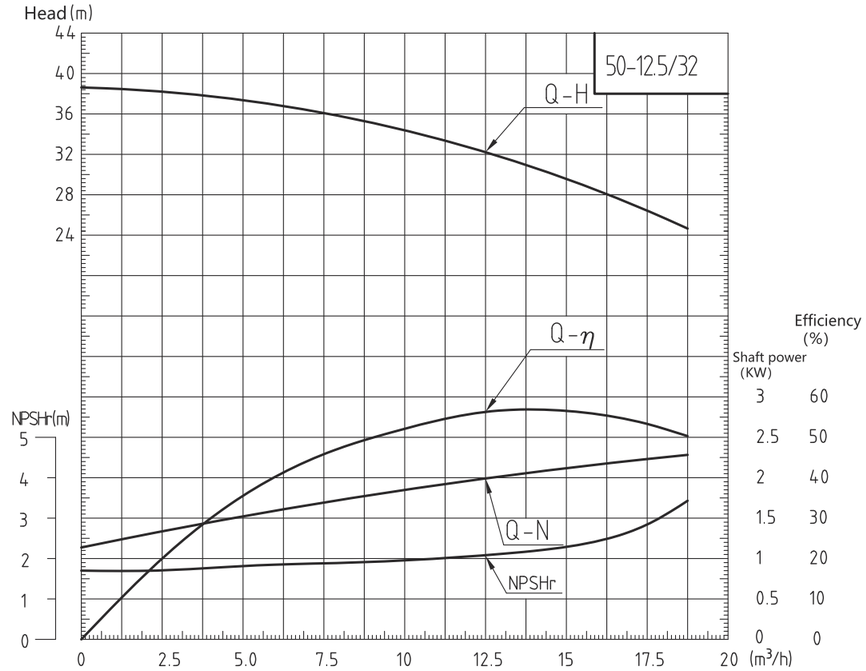
50Hz 2-pole motor



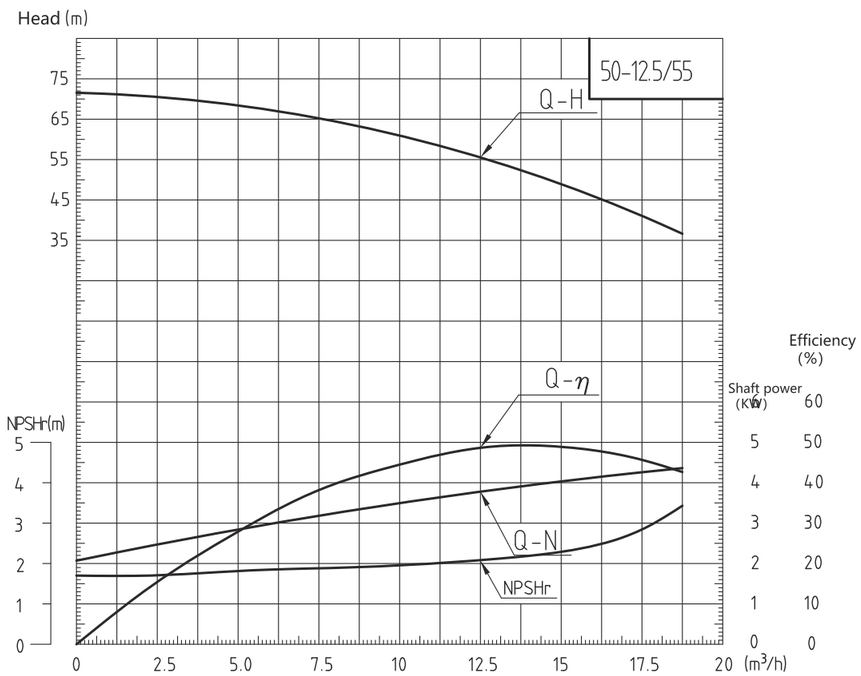


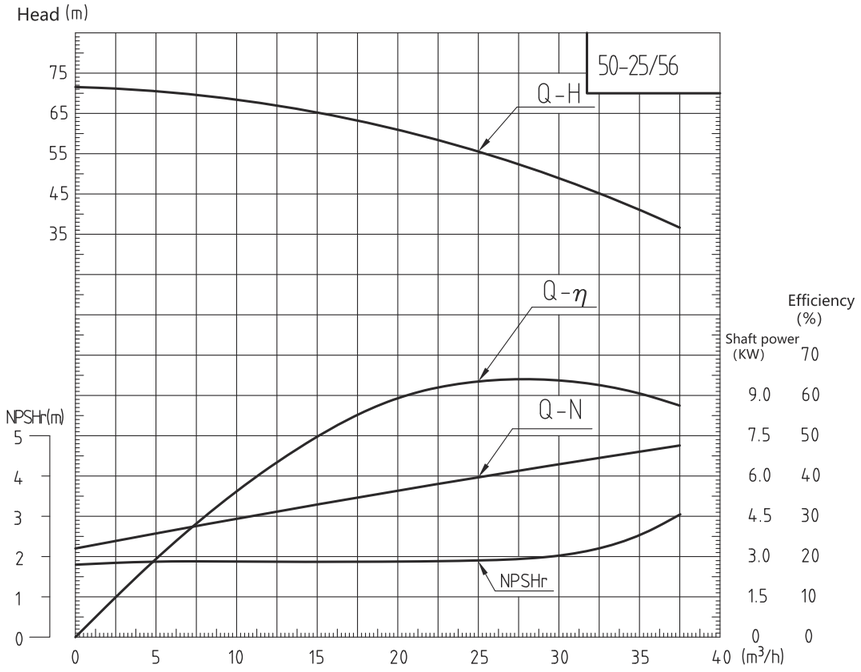
50Hz 2-pole motor



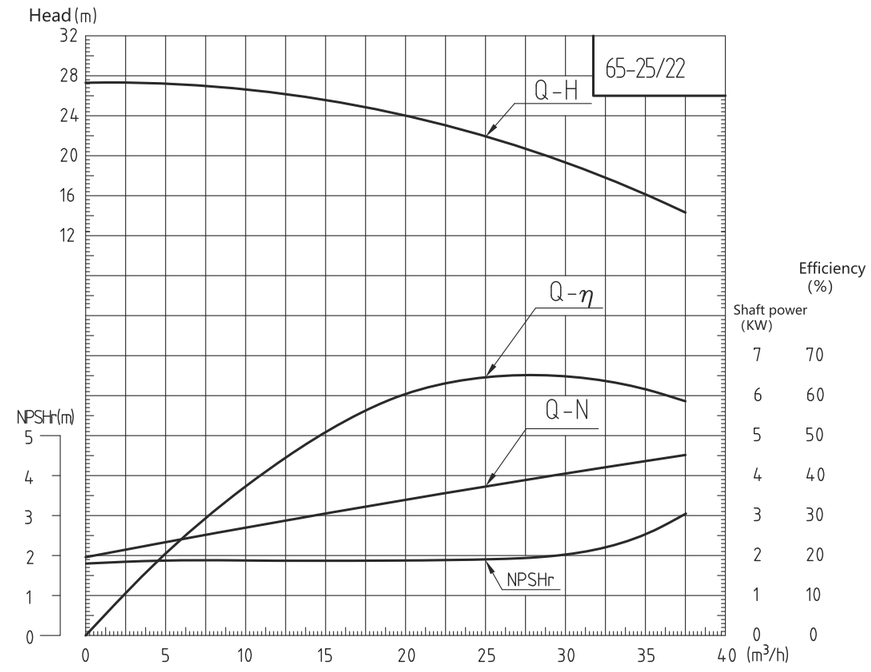


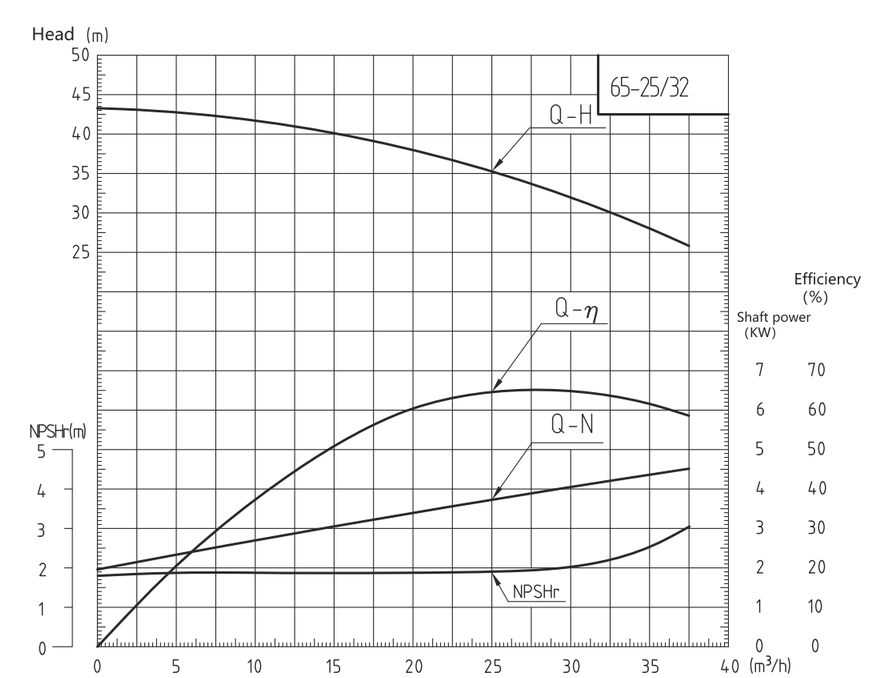
50Hz 2-pole motor



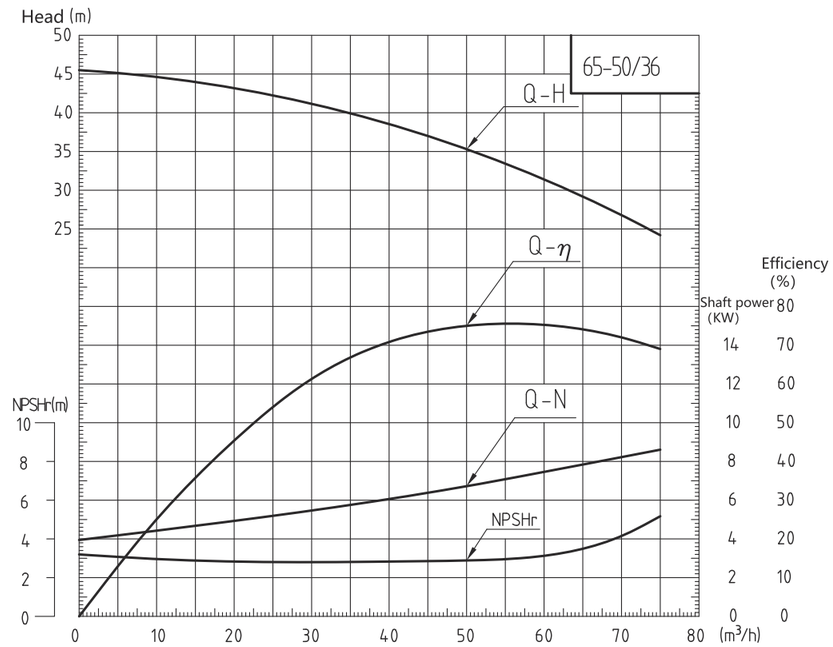


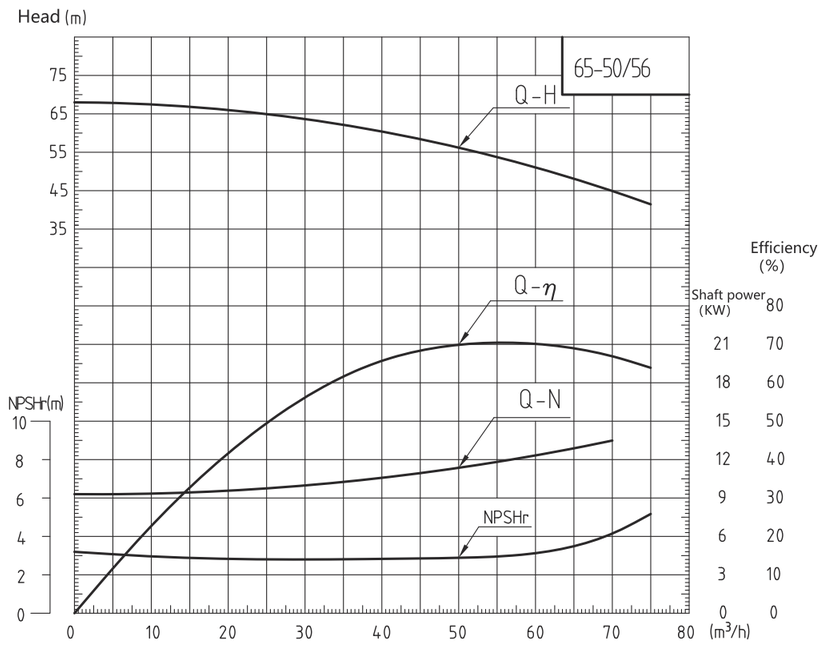
50Hz 2-pole motor



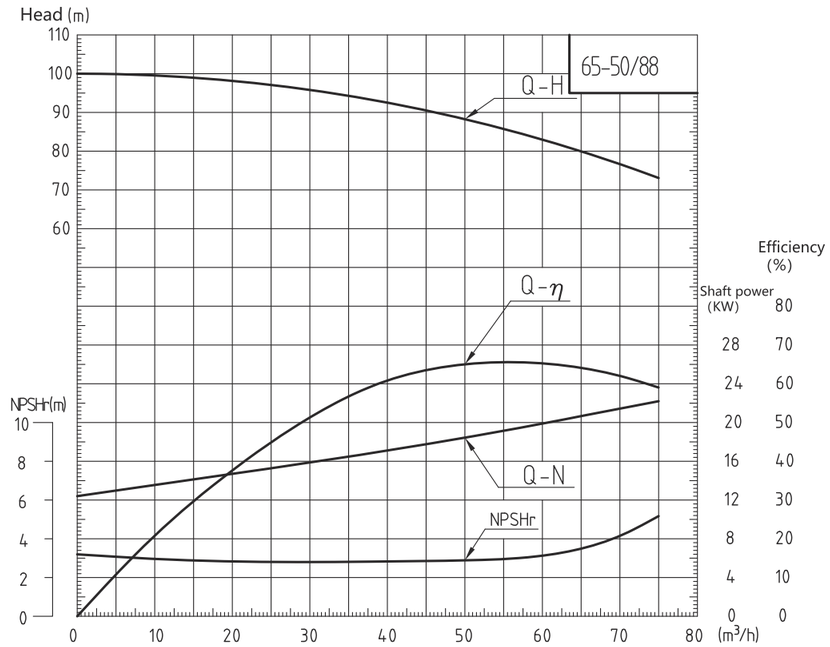


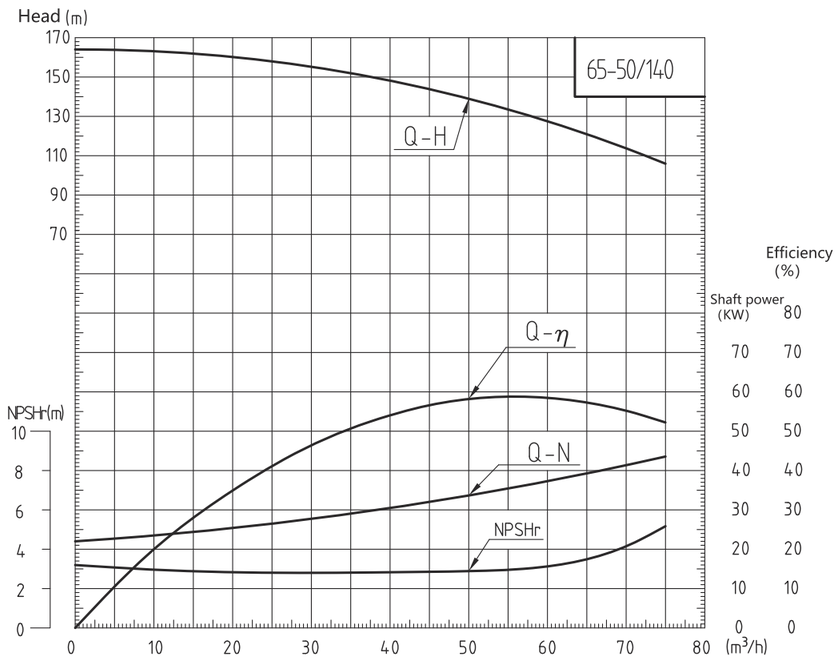
50Hz 2-pole motor



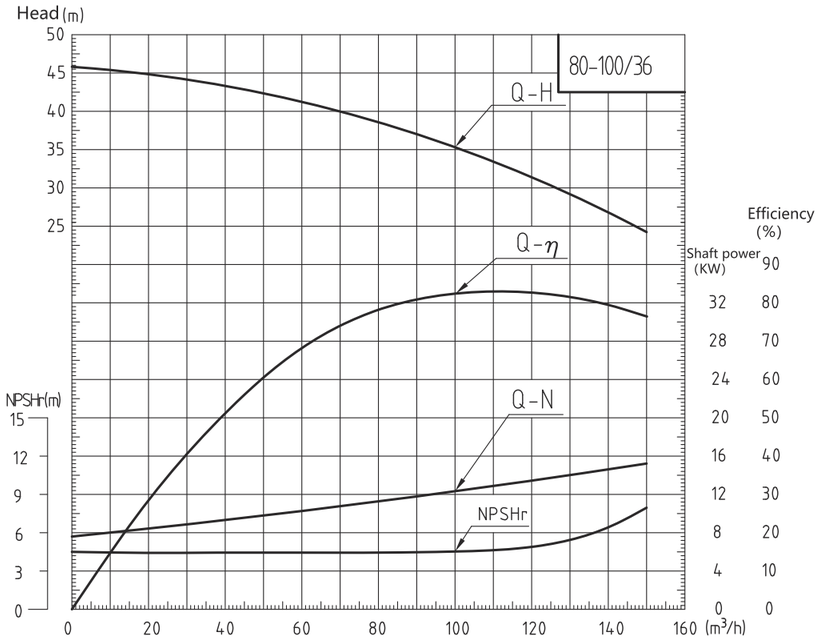


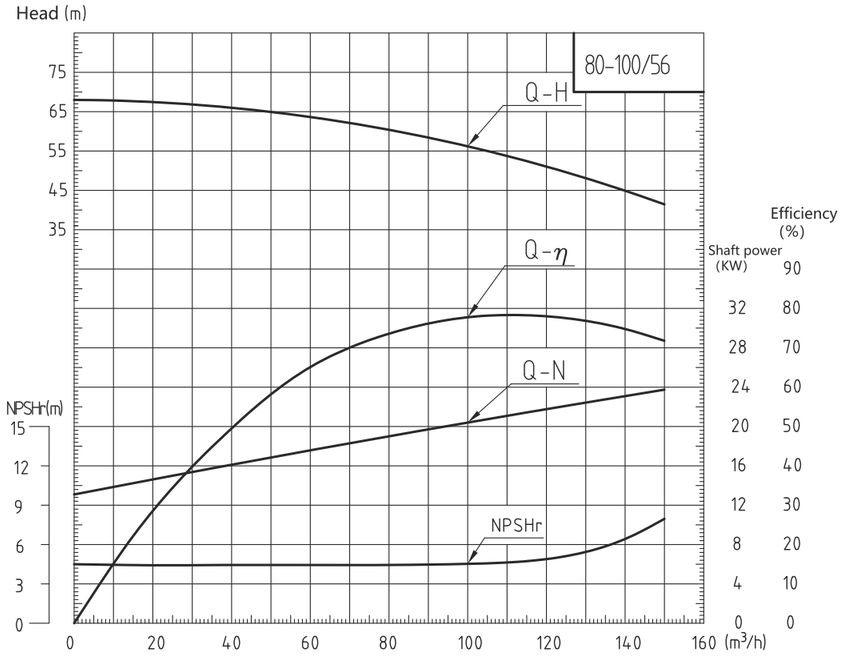
50Hz 2-pole motor



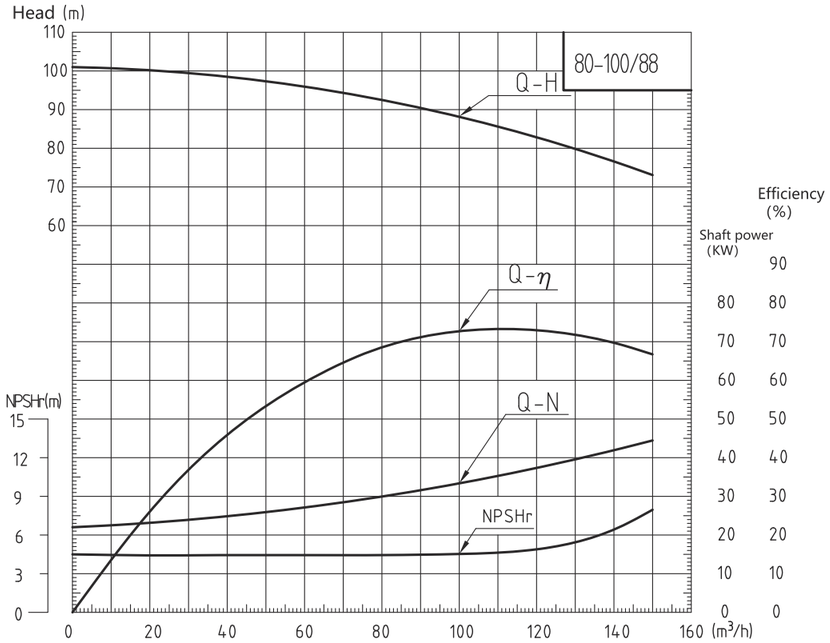


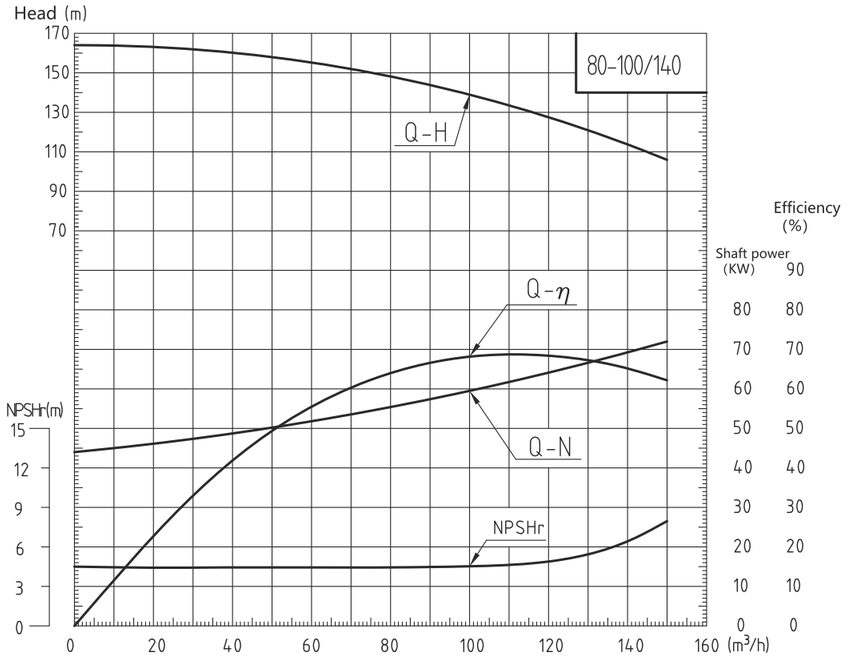
50Hz 2-pole motor



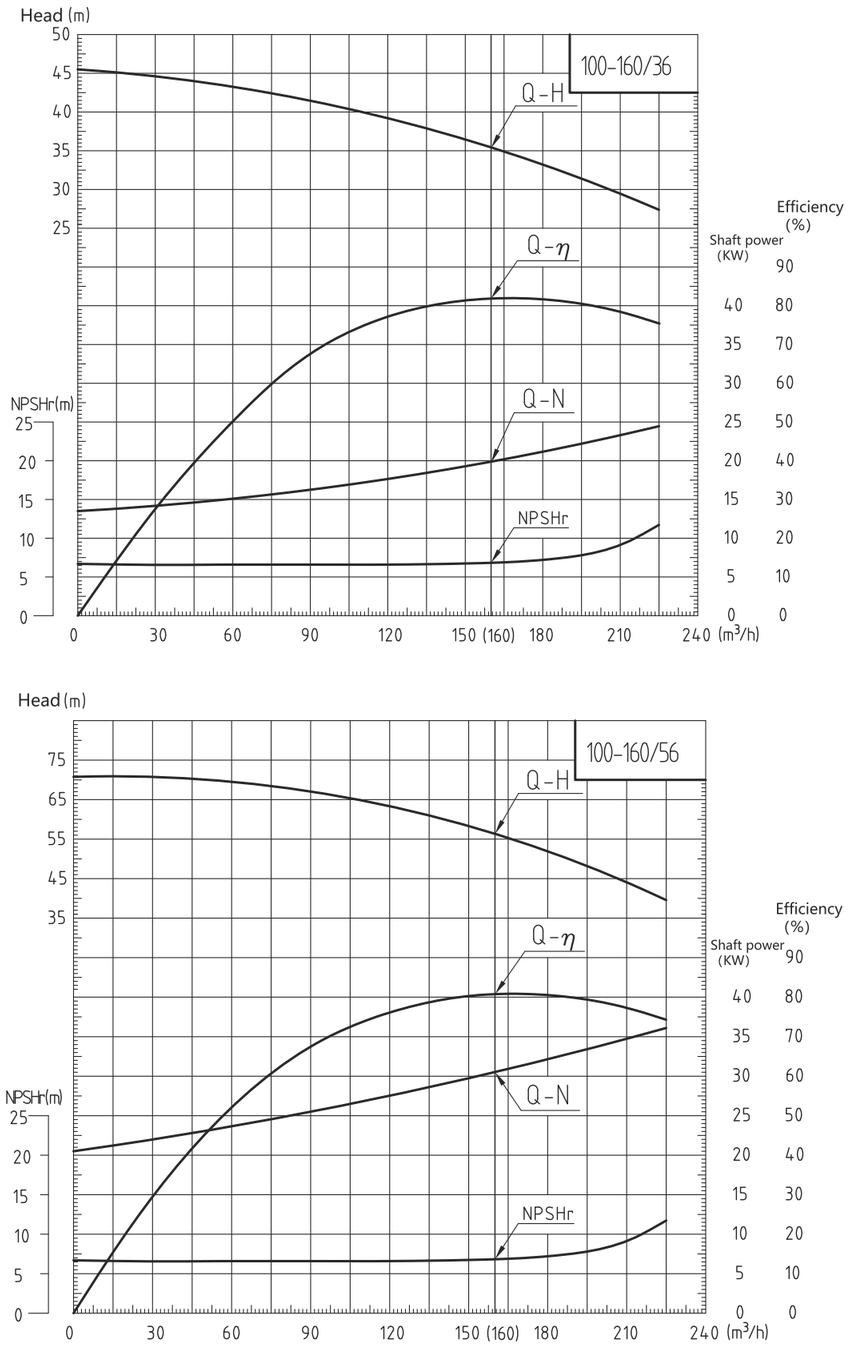


50Hz 2-pole motor

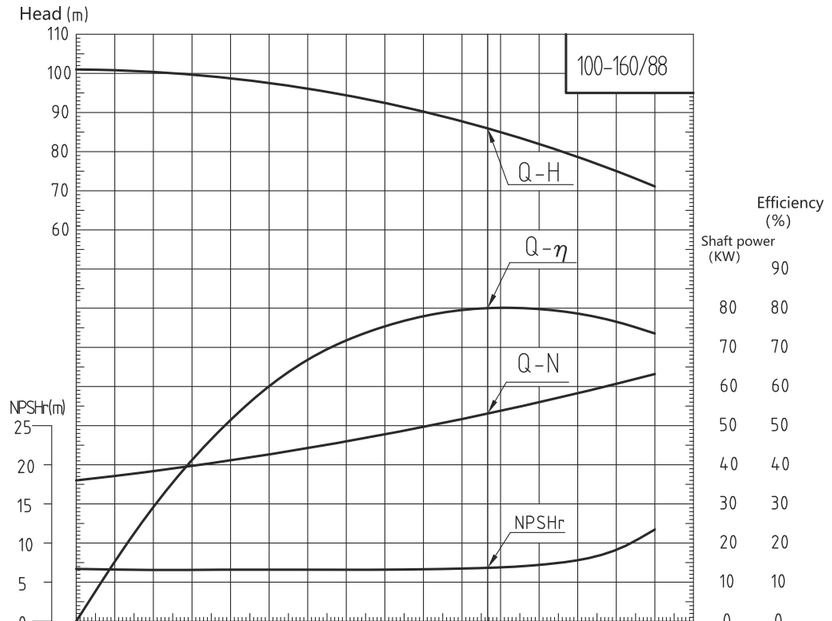


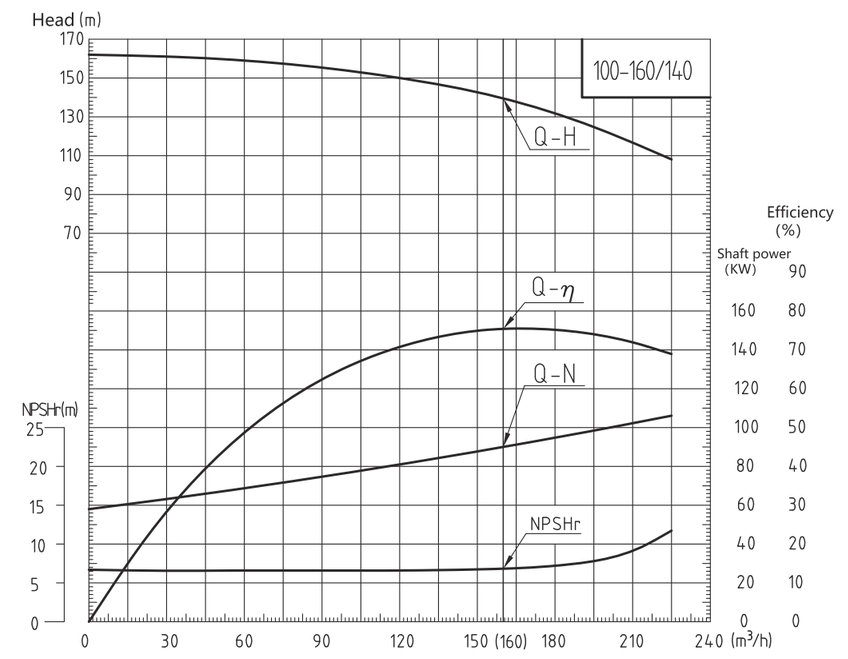


50Hz 2-pole motor

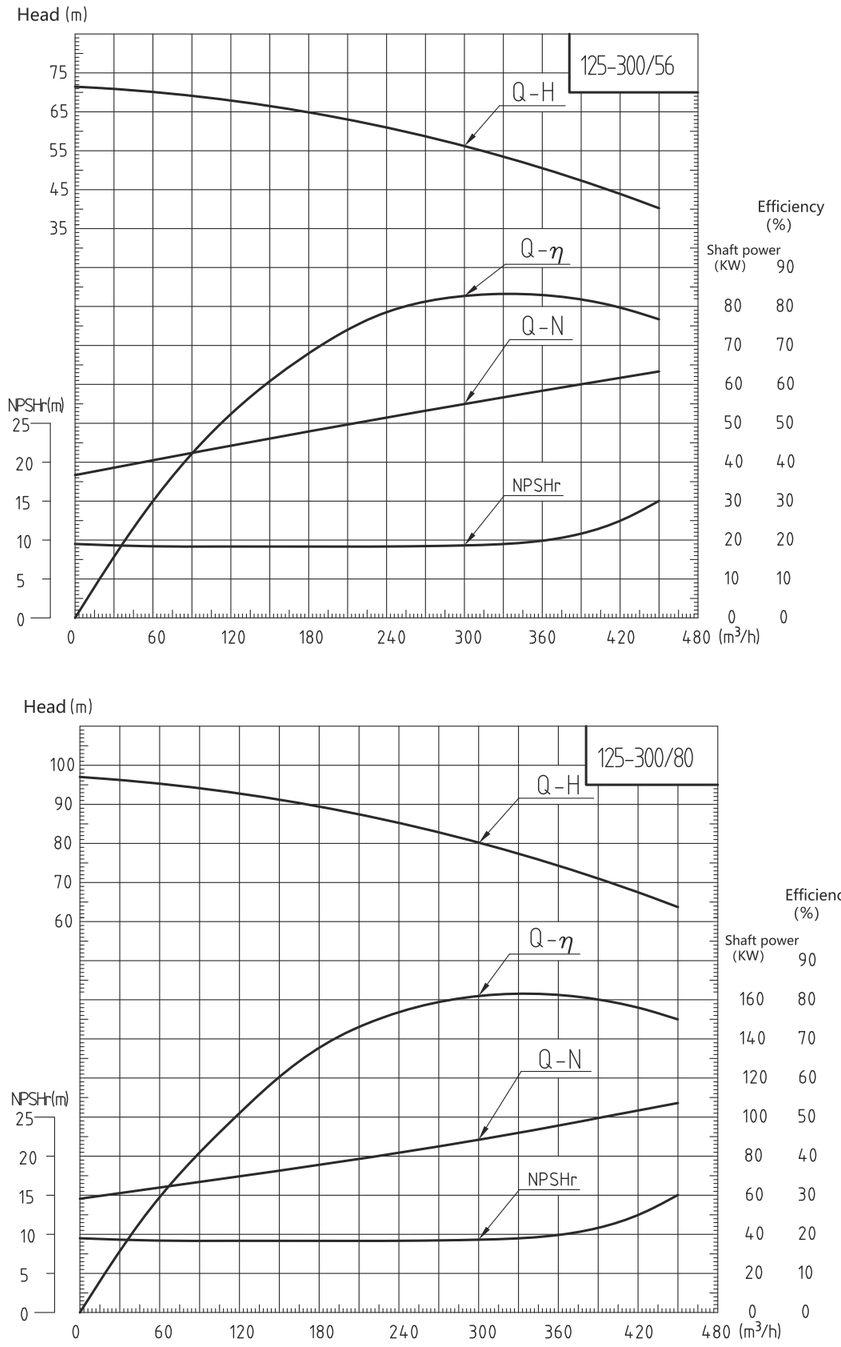


50Hz 2-pole motor

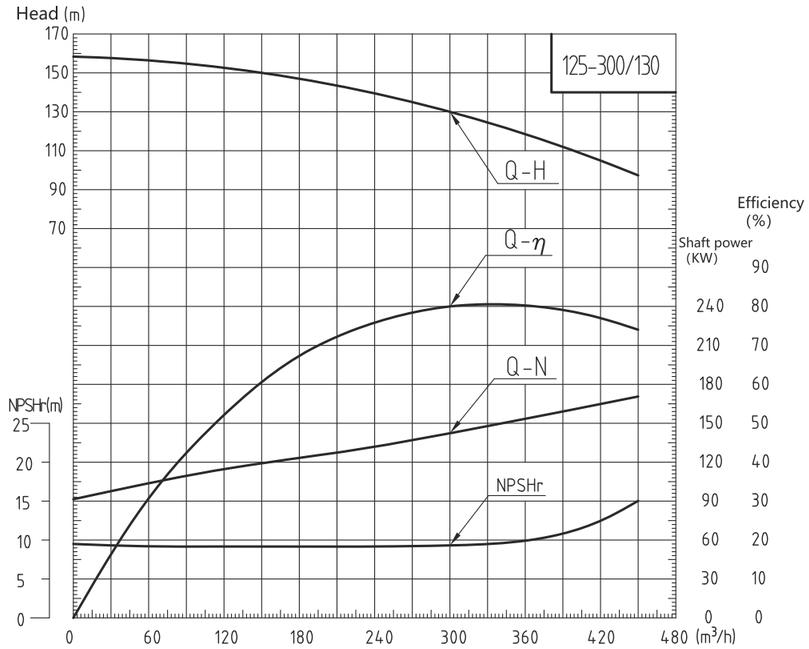




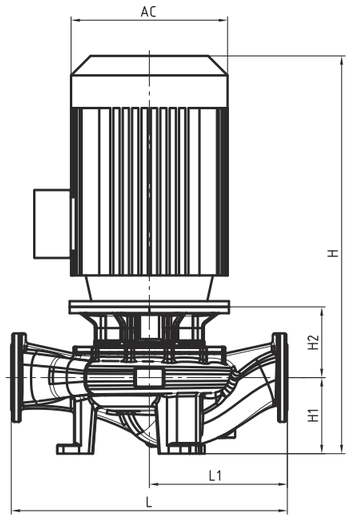
50Hz 2-pole motor

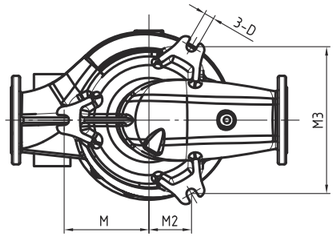


50Hz 2-pole motor



Dimensions

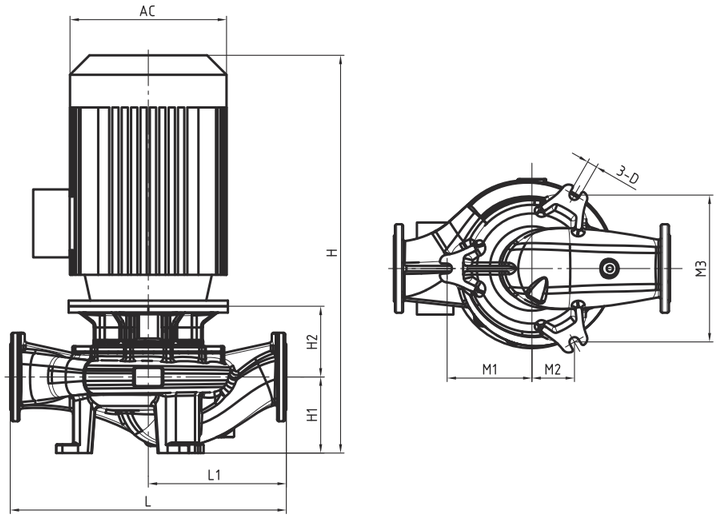




Model with 4-pole motor

Note: L1 blank means two end faces symmetry toward motor axis

Pump type	Motor	Pump Unit Overall Dimensions （mm）										Weight
	kW	L	L1	H1	H2	H	AC	M1	M2	M3	D	kg
50-13/14	0.75	420	---	105	160	565	195	98	49	170	M16	70
	1.1				160	615	195					73
65-25/9	0.75	430	---	105	160	565	175	98	49	170	M16	69
	1.1				160	615	195					72
65-25/14	1.1	480	---	120	160	660	195	98	49	170	M16	79
	1.5				160	660	195					82
	2.2				160	680	215					86
65-25/22	2.2	540	---	140	175	715	215	180	90	312	19	111
	3				175	735	215					111
65-25/36	4	600	---	140	180	760	275	200	100	346	20	132
	5.5				180	772	275					142
80-50/9	1.1	470	---	130	160	670	195	100	50	173	M16	87
	1.5				160	670	195					90
	2.2				160	690	215					90
80-50/14	2.2	520	---	140	160	690	215	170	85	294	19	93
	3				160	700	215					99
80-50/22	4	580	---	140	180	750	240	180	90	312	19	127
	5.5				180	772	275					132
100-80/9	2.2	550	---	150	160	710	215	100	50	173	M16	107
	3				160	730	215					111
100-80/14	3	590	---	160	180	765	215	180	90	312	19	118
	4				180	780	240					127
	5.5				180	792	275					132
100-80/22	5.5	640	---	170	180	800	275	195	98	337	20	145
	7.5				180	840	275					160
100-80/35	7.5	680	---	180	180	960	275	240	120	416	28	180
	11				185	960	330					180
	15				185	1003	330					205
125-150/14	5.5	680	---	190	180	840	275	195	98	338	20	185
	7.5				180	860	275					198
	11				185	963	330					220
125-150/22	11	740	---	200	195	980	330	223	111	385	23	280
	15				195	1023	330					306
125-150/35	15	780	---	215	195	1050	380	240	120	416	28	350
	18.5				195	1070	380					362
	22				195	1122	380					390
125-150/56	22	820	---	215	195	1160	380	280	140	485	28	390
	30				200	1190	410					455
	37				205	1210	460					550
150-300/22	18.5	800	---	250	195	1120	380	250	125	433	28	364
	22				195	1150	380					378
	30				200	1220	410					434
150-300/35	30	830	430	235	215	1270	410	255	150	468	28	423
	37				220	1300	460					518
	45				220	1345	460					553
150-300/56	45	940	---	260	220	1390	460	305	153	528	28	802
	55				225	1420	580					880
	75				225	1445	580					910
200-500/35	45	960	500	295	220	1360	460	255	158	476	28	772
	55				225	1450	510					850
	75				225	1480	580					893
200-500/56	75	1050	---	260	225	1450	580	305	153	528	28	1130
	90				225	1560	580					1230
	110				230	1595	645					1253



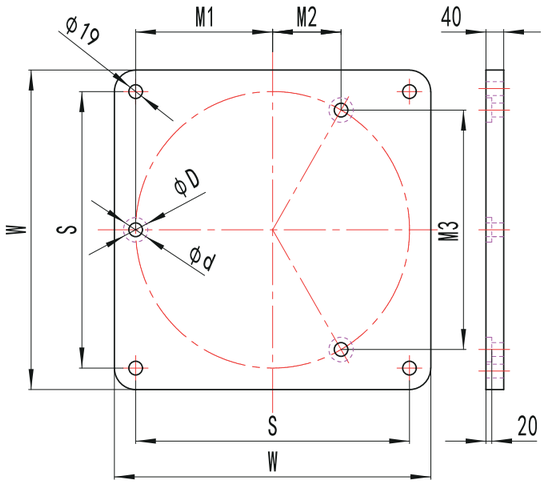
Model with 2-pole motor

Note: L1 blank means two end faces symmetry toward motor axis

Pump type	Motor	Pump Unit Overall Dimensions （mm）										Weight
	kW	L	L1	H1	H2	H	AC	M1	M2	M3	D	kg
50-25/56	5.5	420	---	105	165	725	275	98	49	170	M16	121
	7.5				165	760	275					121
65-50/36	5.5	430	---	105	165	725	275	98	49	170	M16	115
	7.5				165	760	275					128
	11				170	850	330					169
65-50/56	11	480	---	120	170	850	330	98	49	170	M16	176
	15				170	878	330					186
65-50/88	15	540	---	140	185	910	330	180	90	312	19	200
	18.5				185	940	330					221
	22				185	1037	380					256
65-50/140	30	600	---	140	190	1075	410	200	100	346	20	300
	37				190	1100	410					320
	45				195	1154	460					425
80-100/36	11	470	---	130	170	850	300	100	50	173	M16	170
	15				170	888	330					185
80-100/56	18.5	520	---	140	170	930	330	170	85	294	19	209
	22				170	1022	380					245
	30				190	1075	410					274
80-100/88	30	580	---	140	190	1075	410	180	90	312	19	305
	37				190	1100	410					325
	45				195	1154	460					430

Pump type	Motor	Pump Unit Overall Dimensions （mm）										Weight
	kW	L	L1	H1	H2	H	AC	M1	M2	M3	D	kg
80-50/140	45	640	---	150	195	1170	460	240	120	416	28	466
	55				200	1300	510					535
	75				200	1310	580					666
100-160/36	15	550	---	150	170	945	330	100	50	173	M16	198
	18.5				170	1000	330					221
	22				170	1032	380					257
100-160/56	22	590	---	160	170	1050	380	180	90	312	19	267
	30				190	1100	410					346
	37				190	1120	410					352
100-160/88	45	640	---	170	195	1200	460	195	98	337	20	427
	55				200	1327	510					531
	75				200	1330	580					600
100-160/140	75	680	---	180	215	1360	580	240	120	416	28	810
	90				215	1470	580					800
	110				220	1472	645					970
125-300/56	45	680	---	190	195	1210	410	195	98	338	20	470
	55				200	1347	510					600
	75				200	1350	580					669
125-300/80	75	740	---	200	210	1390	580	223	111	385	23	665
	90				210	1480	580					765
	110				220	1600	645					987
125-300/130	110	780	---	215	220	1615	645	240	120	416	28	1050
	132				220	1645	645					1106
	160				220	1645	645					1206

Baseplate(Optional) and Pump flange dimensions



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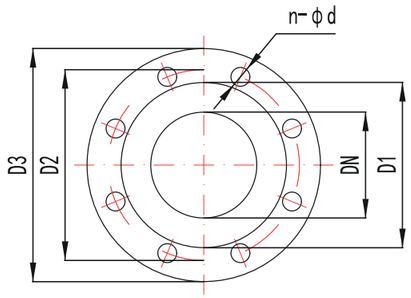
Base plate dimensions						
W	S	M1	M2	M3	d	D
250	190	80	40		14	40
300	230	98	49	170	19	50
300	230	100	50	173	19	50



Flange dimensions					
DN	D1	D2	D3	n	d
50	102	125	165	4	18
65	122	145	185	4	18
80	133	160	200	8	18
100	158	180	220	8	18
125	184	210	250	8	18
150	212	240	285	8	22
200	268	295	340	12	22
250	320	355	405	12	26
300	370	410	460	12	26

Installation & maintenance

Installation Requirements

1．Secondary grouting method should be adopted for building concrete foundation based on installation dimensions, anchor bolts embedded accordingly;

2．Before installation, go through following checklist：
-There should be no damage on all parts, no particle in the pump;
-Pump model need to be checked;
-Complete technical documents and quality certificates should be in place.

3．There should be expansion joint between piping system and pump flange, in order to compensate the misalignment and isolate pump from pipe vibration.

4．To prevent debris from entering the pump, filters should be set in front of the entrance of the suction pipeline. The filter area should be more than 3 ~ 4 times of the pipe sectional area.

5．For the pumps of high-head and parallel operation, check valves should be set on the discharge pipeline in order to prevent from water hammer harm in case of sudden halt.

6．Ensure that the mounting height of the pump accords with thepump NPSH, the loss of the suction pipeline and the temperature of the pumped liquid taken into account.

Start&run

1．Before starting the pump, fill with the pumped liquid (in the case of suction), close all the discharge valves, connect the power wires;

2．Turn on the power, correct the pump's rotation direction as indicated by the direction sign;

3．Trial run for 5 ~ 10 minutes. No exceptional cases mean that the pump has come into operation;

4．When stopping the pump, firstly shut down all the gate valves, then cut the power off;

5．Before detaching the pump, wash the flow channel until no debris flows out of the pump;

6．When replacing the pump accessories, it is strictly prohibited to hit them with spikes or hard objects. Alternatively, tap them lightly with soft cloth package of wood. All the parts detached should be placed gently, seal faces looking upwards.

7．Constantly inspect the pump and motor in actual operations. If abnormal noise or temperature rise happens, immediately stop the pump and motor to check.

Typical malfunction and remedies

Malfunctions	Possible Causes	Remedies
No water come from pump when starting	There is residual air in suction pipeline or pump housing.	Open the air evacuation valve, refill suction pipeline and pump housing.
	There is a serious leakage of air in suction pipeline.	Inspect and adjust suction pipelines, tighten seal faces, drain the residual air.
	Either suction or discharge valves are closed or pipelines are blocked.	Open suction and discharge valves or clean the pipelines.
	The motor rotates inversely or slowly, lacks some one phase.	Alternate the rotating direction of the pump; Tighten the motor wiring.
	The mounting height is too high. Suction pressure is so low that cavitation happens. Bottom valve leaks out.	Lower mounting height. Stop the pump to check and adjust the suction pressure. Repair or replace the bad bottom valve.
	The resistance of discharge pipeline is too large or geometric height is too high. Improper pump selection, excessively lower head than needed.	Bold discharge pipeline or reduce the corners number. Reselcect the pump.
The capacity of pump is insufficient.	Firstly check the causes of above malfunction 1.	Firstly rule out the causes according to the remedies of above malfunction 1.
	Impellers are worn-out.	Replace impellers.
	Rotating speed of pump or power volatge is far below the required value.	Check the motor and remain stable power voltage supply.
	Impeller flow channels, discharge pipelines or suction pipelines are blocked by the scale.	Clean impellers and pipeline.

Malfunctions	Possible Causes	Remedies
	The discharge valve opens less than reqired.	Turn up the discharge valve.
Motors overload	The flow rate exceeds allowable range.	Turn down the discharge valve to adjust the flow rate.
	There are mechanical frictions somewhere.	Check and locate frictions, prepare for maintenance.
Motors overload	The flow rate exceeds allowable range. The motor is overloaded.	Turn down the discharge valve.
	The rotar scratches.	Check and remove.
	Bearings are worn out.	Replace worn bearings.
	Power voltage is insufficient.	Remain stable power voltage supply.
Pumps make noise and vibrate violently.	Cavitation happens.	Turn down the discharge valve. Bring down height of installation. Lower the resistance of suction pipeline.
	The impeller single vane is congested.	Clean the impellers.
	Fastening parts or foundation becomes flexible.	Fasten anchor nuts and reinforce the foundation.
	There are mechanical frictions somewhere.	Check and locate frictions, prepare for maintenance.
The pump leaks out: shaft end leakage, pump shell leakage, the seal faces leakage	Shaft end seal clearance is too large.	Replace wear rings.
	Mechanical seal dynamic and static rings are worn out, spring pressure is too light.	Repair or replace the worn material, adjusting the spring.

Malfunctions	Possible Causes	Remedies
(including mechanical seal)		Turn up the discharge valve.
	Uneven seal faces fit poor (including echanical seal dynamic and static rings).	Repair the seal faces flat (including echanical seal dynamic and static rings).
	The pump shell has sand holes or cracks.	Weld repair the defects or replace a new shell.