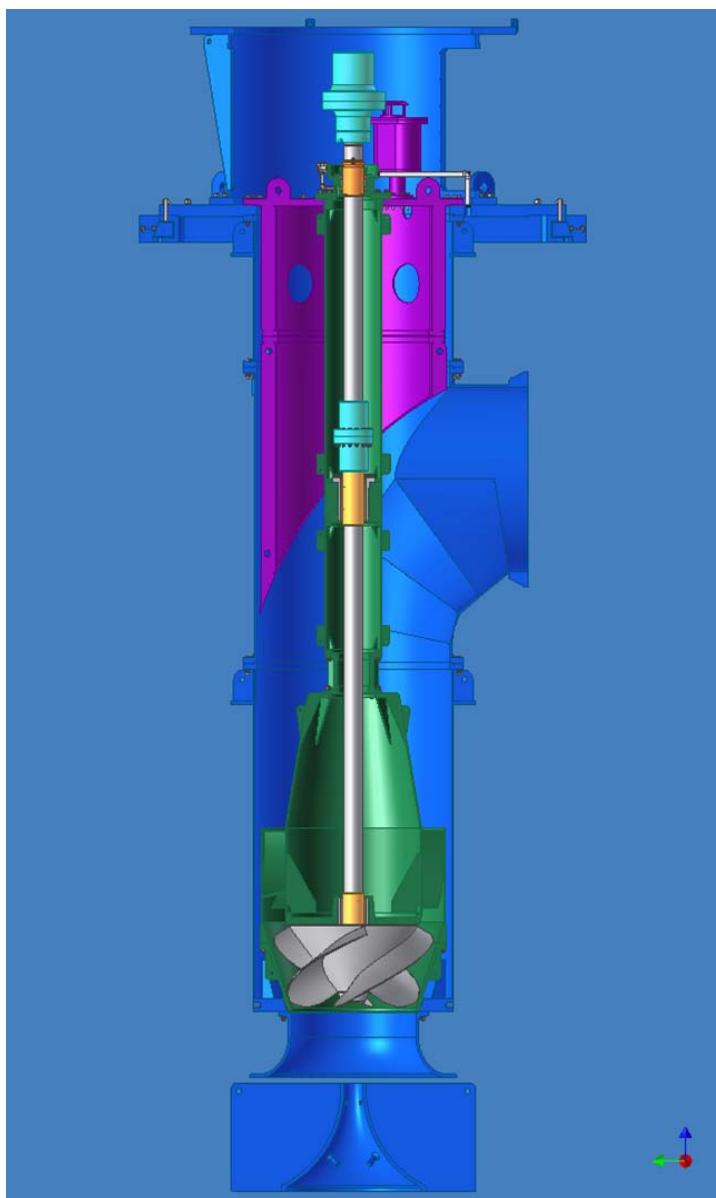




立式混流泵



上海水泵制造有限公司

Shanghai pump manufacture Co.,Ltd



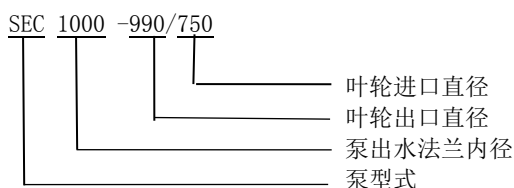
用途

用于电厂输送循环冷却水；用于农田水利排灌泵站；城市给排水；工矿、船码升降水位等。

运行数据

流量	Q	到	18 m ³ /s
扬程	H	到	33 m
温度	t	到	40 °C
转速	n	到	980 r/min

型号意义



设计特点

立式混流泵。进水部分为吸入喇叭或进水弯管，出水管路可任意选择在基础上方或下面。采用赛龙导轴承/新型合成材料等。可以任选泵的抽出型式，即泵转子为可抽出式或不可抽出式。

抽轴式设计

泵顶部泵盖拆开后，泵抽芯部分包括整个泵轴部件，水润滑轴承，叶轮，叶轮室，导叶和内接管都可以被抽出。而与出水管路相联的整个泵外筒体依然固定在泵基础上。

非抽芯式设计

泵转子及非转子部件组装成一体，检查泵内部零部件时，泵要被吊出并拆开。

泵的安装

“CD”安装形式，即出水弯管布置在基础楼板下方。泵由出水弯管上方的基础楼板支撑。驱动电机通过电机座与泵法兰式相连。

“EB”安装形式，出水弯管布置在基础楼板上，泵支撑在出水弯管下方的基础楼板之上。驱动电机通过电机座与泵法兰式相连。

Fields of Application

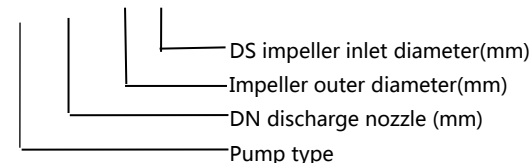
Used for conveying circulating cooling water of power plant; Used for drainage and irrigation pump station; Urban water supply and drainage; The rise and fall of the water level in mines, docks, etc.

Operating Data

Capacity	Q	up to	18 m ³ /s
Head	H	up to	33 m
Temperature of medium handle	t	up to	40 °C
Speed	n	up to	980 r/min

Designation

SEC1000 -990/750



Design

Vertical tubular casing pump with mixed flow impeller. Inlet via suction nozzle or intake elbow. Discharge branch above or below floor level (optional). Shaft bearings made of wear-resistant KSB RESIDUR® ceramic material or Thordon. Pull-out type or non-pull-out optional.

Pull-out Design

After opening the pump's casing cover arranged on top, the complete shaft unit, the water-lubricated shaft bearings, pump impeller, wear ring, diffuser and suspension pipe.

The complete pump casing, connected with the discharge pipe, remains bolted on the pump foundation.

Non-pull-out Design

The rotating and non-rotating components of the pump constitute an assembly unit. For inspection of internal pump components, the pump is lifted out and dismantled.

Pump Arrangement

The type of installation is “CD”, this means the discharge nozzle is arranged below floor. The pump is suspended above the discharge elbow and above floor. The drive is flange-mounted to the pump by means of a motor stool.

The type of installation is “EB”, this means the discharge nozzle is arranged above floor. The pump is suspended beneath the discharge elbow and above floor. The drive is flange mounted to the pump by means of a motor stool.



“EJ” 安装形式，即出水弯管布置在基础楼板下方。泵支撑在出水弯管下方的基础楼板之上。驱动电机安装在另一单独的基础楼板之上。

进水室

开式，特殊型：为保证良好的进水流态，规定了开式进水管的特殊土建尺寸。

开式，常规式：对于进水，选用常规的开式进水室。此型进水室无特殊土建尺寸。

闭式：为保证良好的进水状态，规定了闭式进水室的特殊土建。

进水弯管式：为保证进水均匀加速的流向水泵，进水弯管布置在泵的底部。进水弯管开始为正方形截面，此截面沿水流方向均匀减小直至过渡为管状截面。

进水锥

为保证泵稳定运行，要求泵进水流态均匀。因此，在泵进水喇叭下面布置一进水锥。

轴承/润滑

轴的径向支承可选耐磨陶瓷轴承，此时泵为介质自润滑。也可选用赛龙/橡胶轴承/新型合成材料，泵轴有护轴套保护，轴承由外接清洁的压力水润滑。若所输送液体为清水，赛龙/橡胶轴承/新型材料也可采用自润滑形式，不必设置护轴套管。承受轴向力的推力轴承，可选在泵内或电机内。

轴封

轴封为软填料（非石棉），轴封处轴套可更换。

联轴器

上轴和下轴由刚性联轴器联接。泵和电机用可调的刚性联轴器联接。按需要也可以用弹性联轴器。

出水方向

出水管水平布置在泵基础的上面或下面。

The type of installation is “EJ”, this means the discharge nozzle is arranged above floor. The pump is suspended beneath the discharge elbow and above floor. The drive is set in place on a separate floor.

Intake Chamber

Lined: For optimum inflow, special constructional measures in the open intake chamber have been specified.

Unlined: For inflow, an open intake chamber has been specified. This is a type without special constructional measures.

Covered: For optimum inflow, special constructional measure in the covered intake chamber have been specified.

Intake elbow type: For good inflow with uniform acceleration towards the pump, an intake elbow is arranged underneath the pump. Starting with a square cross-section, the cross-section reduces uniformly in the direction of flow until reaching the pipe cross-section.

Entry Cone

In order to ensure a smooth pump operation, a uniform inflow is an absolute requirement. Therefore, an entry cone will be arranged underneath the inlet nozzle of the pump.

Bearing/Lubrication

The shaft radially supported by wear-resistant KSB RESIDUR® ceramic bearings or rubber bearings. If the former is used, the pump is lubricated by the medium handled. The Thordon/rubber bearing can be lubricated with external clean water supply. The shaft is protected by enclosed tubes. The Thordon/rubber bearings can also be lubricated by the medium handled if it is clean. In this case the shaft shall not be protected by enclosed tubes. Thrust bearing provides axial support and is arranged either at the pump or in the motor (optional).

Shaft Seal

Asbestos-free soft packing. The shaft has removable sleeves in the vicinity of the seal.

Couplings

The shafts are connected with disc couplings. The connection, between the pump and motor is effected with a flexible or adjustable rigid of coupling.

Nozzle Orientation

The discharge nozzle is located horizontally above or below the pumps foundation.



法兰

按 GB 标准或 DIN (EN) 标准或 ANSI (AWWA) 标准。

驱动

一般泵直接由电机驱动。

Flanges

As per GB or DIN (EN) or ANSI (AWWA).

Drive

Normally the pump is direct driven by an electric motor.

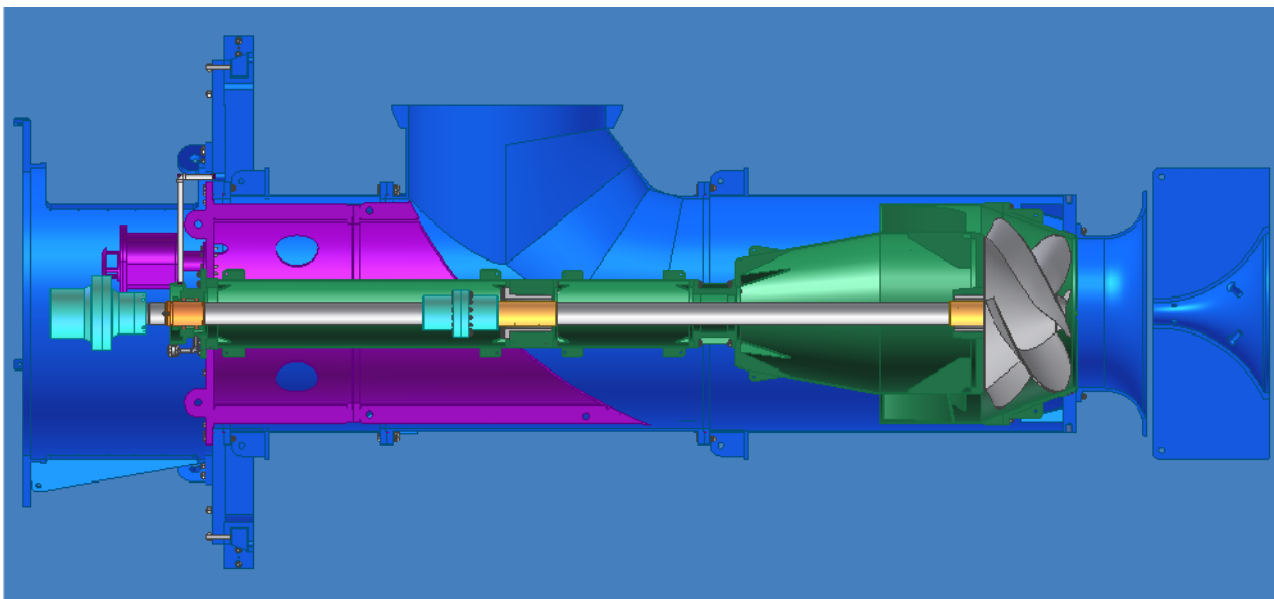
产品优点

本系列产品具体效率高、汽蚀性能好，结构以及安装形式多样化特点。

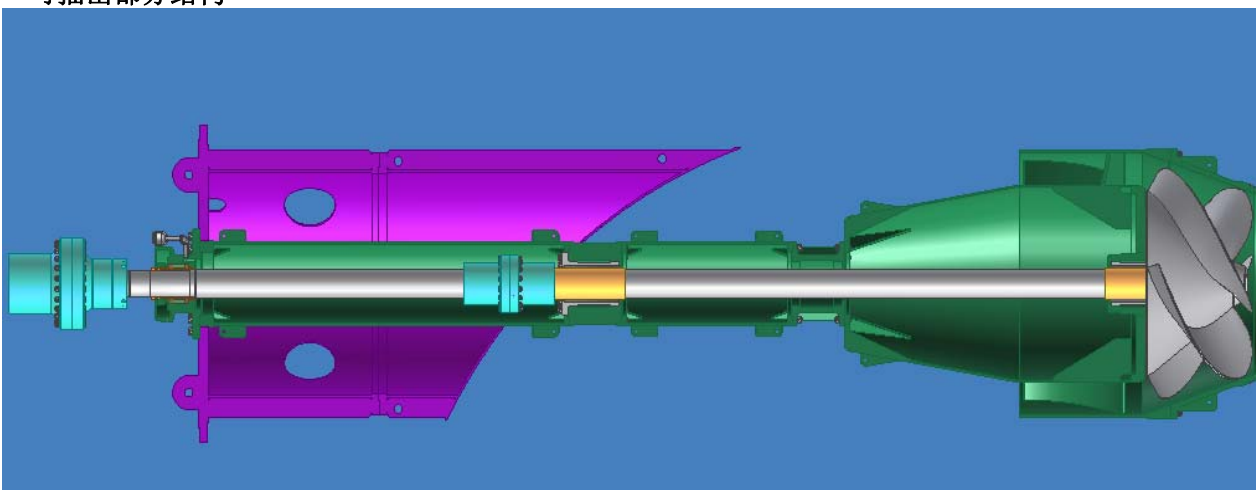
This series of products are characterized by high specific efficiency, good cavitation resistance, diverse structure and installation.

抽芯式结构图

整泵结构

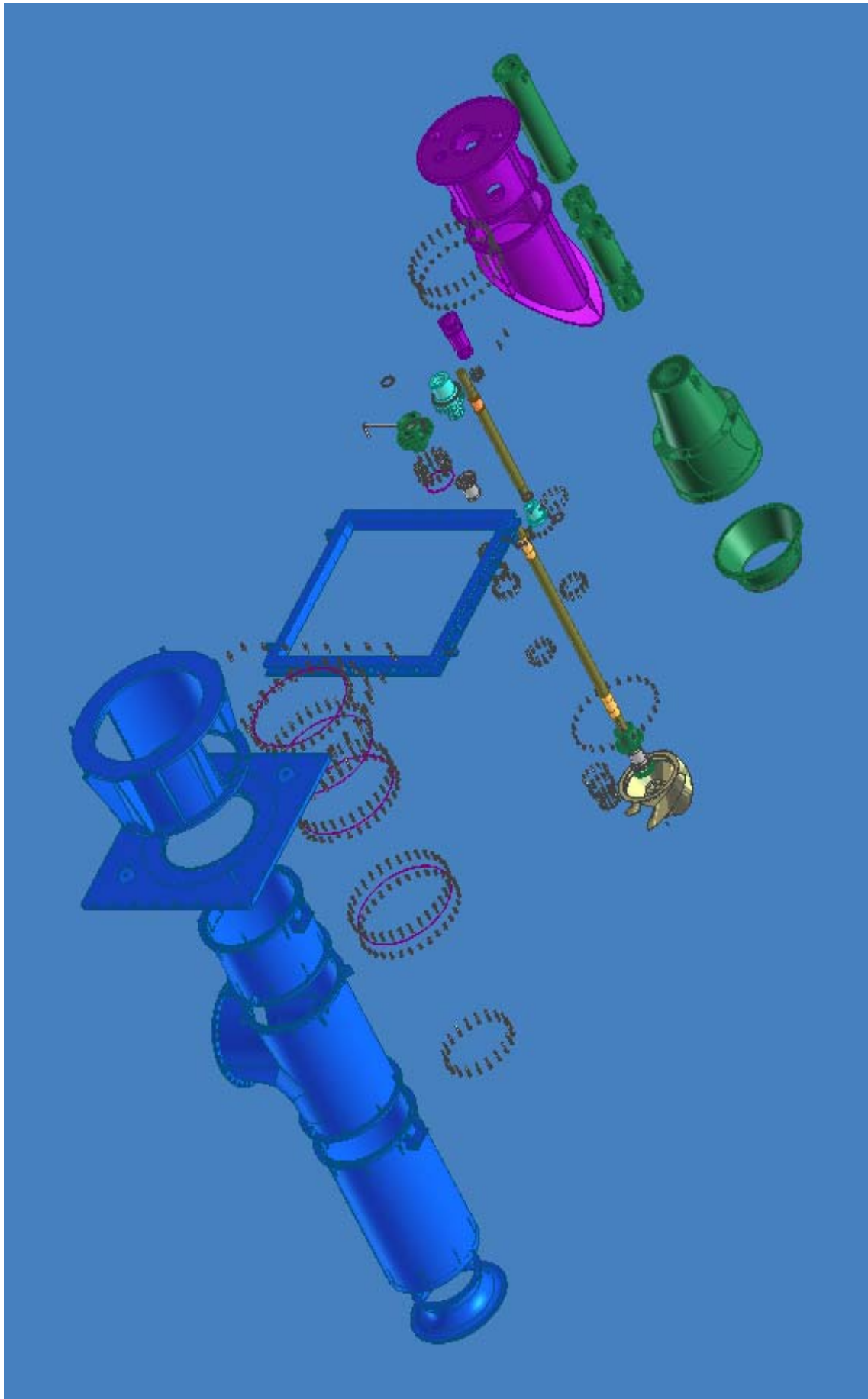


可抽出部分结构





组装过程示意图



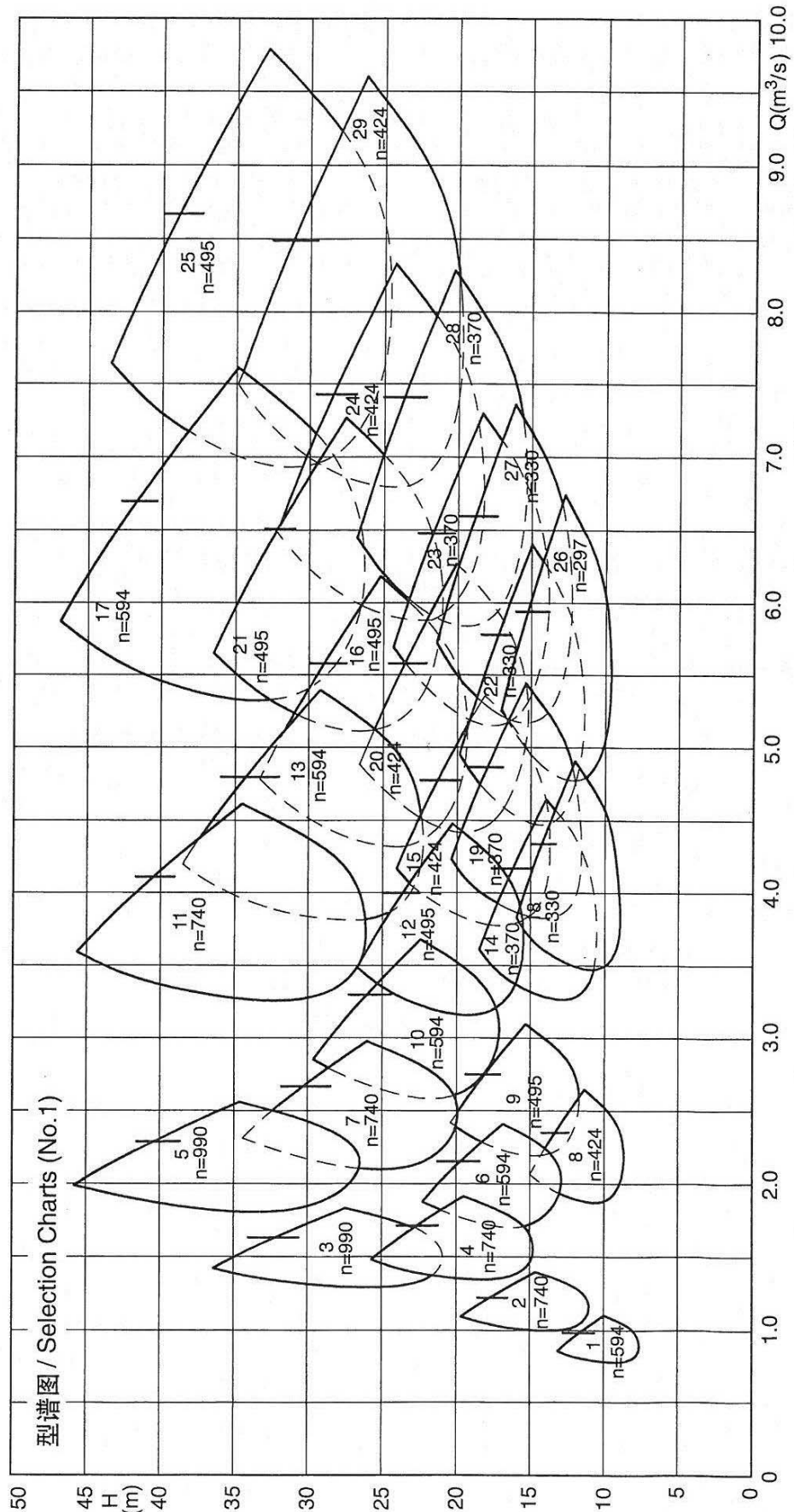


系列型谱图

NO.1	SEC	r/min	NO.1	SEC	r/min
23	1400 - 1450 / 1100	370	16	1300 - 1255 / 950	495
24	1500 - 1450 / 1100	424	17	1400 - 1255 / 950	594
25	1600 - 1450 / 1100	495	18	1100 - 1320 / 1000	330
26	1400 - 1520 / 1150	297	19	1200 - 1320 / 1000	370
27	1400 - 1520 / 1150	330	20	1300 - 1320 / 1000	424
28	1500 - 1520 / 1150	370	21	1400 - 1320 / 1000	495
29	1600 - 1520 / 1150	424	22	1400 - 1450 / 1100	330

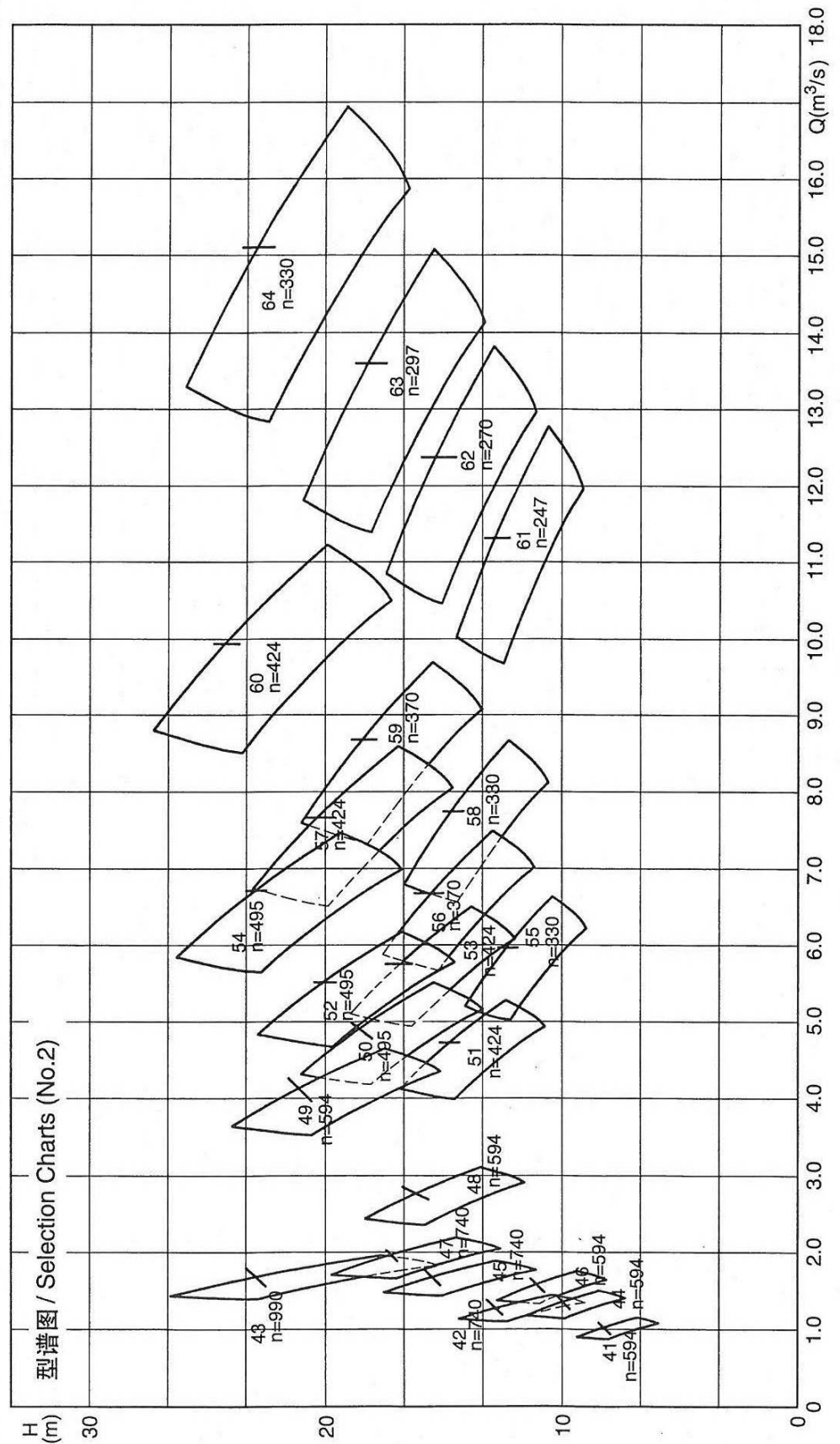
NO.1	SEC	r/min	NO.1	SEC	r/min
9	900 - 990 / 750	495	11	1100 - 990 / 750	740
10	1000 - 990 / 750	594	12	1100 - 1125 / 850	495
11	1100 - 990 / 750	740	13	1200 - 1125 / 850	594
12	1100 - 1125 / 850	495	14	1100 - 1255 / 950	370
13	1200 - 1125 / 850	594	15	1200 - 1255 / 950	424
14	1100 - 1255 / 950	370			
15	1200 - 1255 / 950	424			

NO.1	SEC	r/min	NO.1	SEC	r/min
1	600 - 660 / 500	594	5	900 - 990 / 750	495
2	600 - 660 / 500	740	6	1000 - 990 / 750	594
3	700 - 660 / 500	990	7	1100 - 990 / 750	740
4	700 - 740 / 560	740	8	1100 - 1125 / 850	495
5	800 - 740 / 560	990	9	1200 - 1125 / 850	594
6	800 - 860 / 650	594	10	1100 - 1255 / 950	370
7	900 - 860 / 650	740	11	1200 - 1255 / 950	424
8	800 - 990 / 750	424			



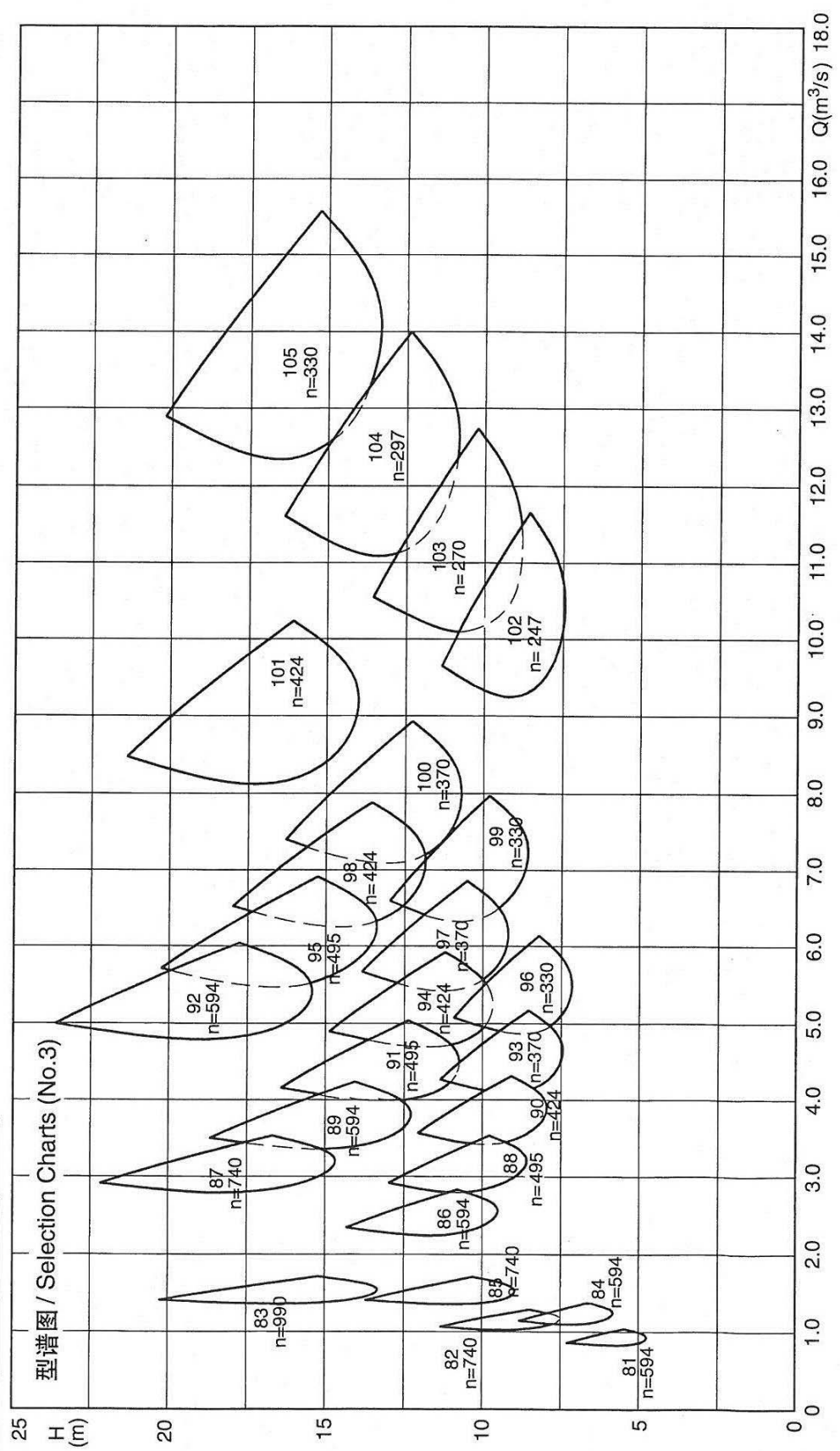


NO.2	SEC	r/min	NO.2	SEC	r/min	NO.2	SEC	r/min	NO.2	SEC	r/min
41	600 - 625 / 500	594	47	800 - 725 / 580	740	53	1400 - 1250 / 1000	424	59	1800 - 1500 / 1200	370
42	600 - 625 / 500	740	48	900 - 875 / 700	594	54	1500 - 1250 / 1000	495	60	1800 - 1500 / 1200	424
43	700 - 625 / 500	990	49	1100 - 1000 / 800	594	55	1400 - 1375 / 1100	330	61	2000 - 1875 / 1500	247
44	600 - 690 / 550	594	50	1200 - 1125 / 900	495	56	1500 - 1375 / 1100	370	62	2000 - 1875 / 1500	270
45	700 - 690 / 550	740	51	1200 - 1170 / 936	424	57	1600 - 1375 / 1100	424	63	2200 - 1875 / 1500	297
46	700 - 725 / 580	594	52	1400 - 1170 / 936	495	58	1600 - 1500 / 1200	330	64	2200 - 1875 / 1500	330



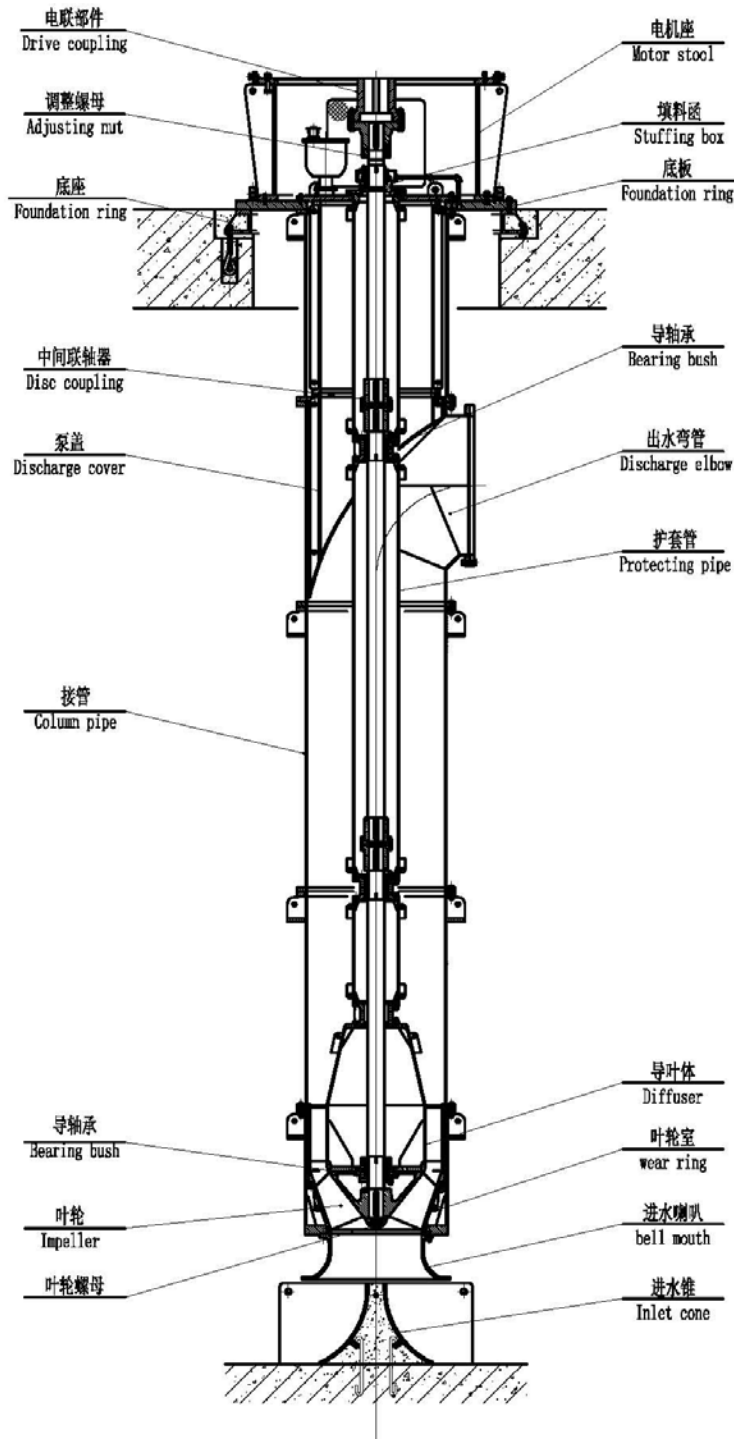


NO.3	SEC	r/min	NO.3	SEC	r/min	NO.3	SEC	r/min	NO.3	SEC	r/min
81	500 - 580 / 500	594	88	1000 - 930 / 800	495	94	1300 - 1160 / 1000	424	100	1600 - 1395 / 1200	370
82	600 - 580 / 500	740	89	1100 - 930 / 800	594	95	1400 - 1160 / 1000	495	101	1800 - 1395 / 1200	424
83	700 - 580 / 500	990	90	1100 - 1045 / 900	424	96	1300 - 1280 / 1100	330	102	1800 - 1740 / 1500	247
84	600 - 640 / 550	594	91	1200 - 1045 / 900	495	97	1400 - 1280 / 1100	370	103	2000 - 1740 / 1500	270
85	700 - 640 / 550	740	92	1300 - 1045 / 900	594	98	1500 - 1280 / 1100	424	104	2000 - 1740 / 1500	297
86	900 - 815 / 700	594	93	1200 - 1160 / 1000	370	99	1500 - 1395 / 1200	330	105	2200 - 1740 / 1500	330
87	1000 - 815 / 700	740									



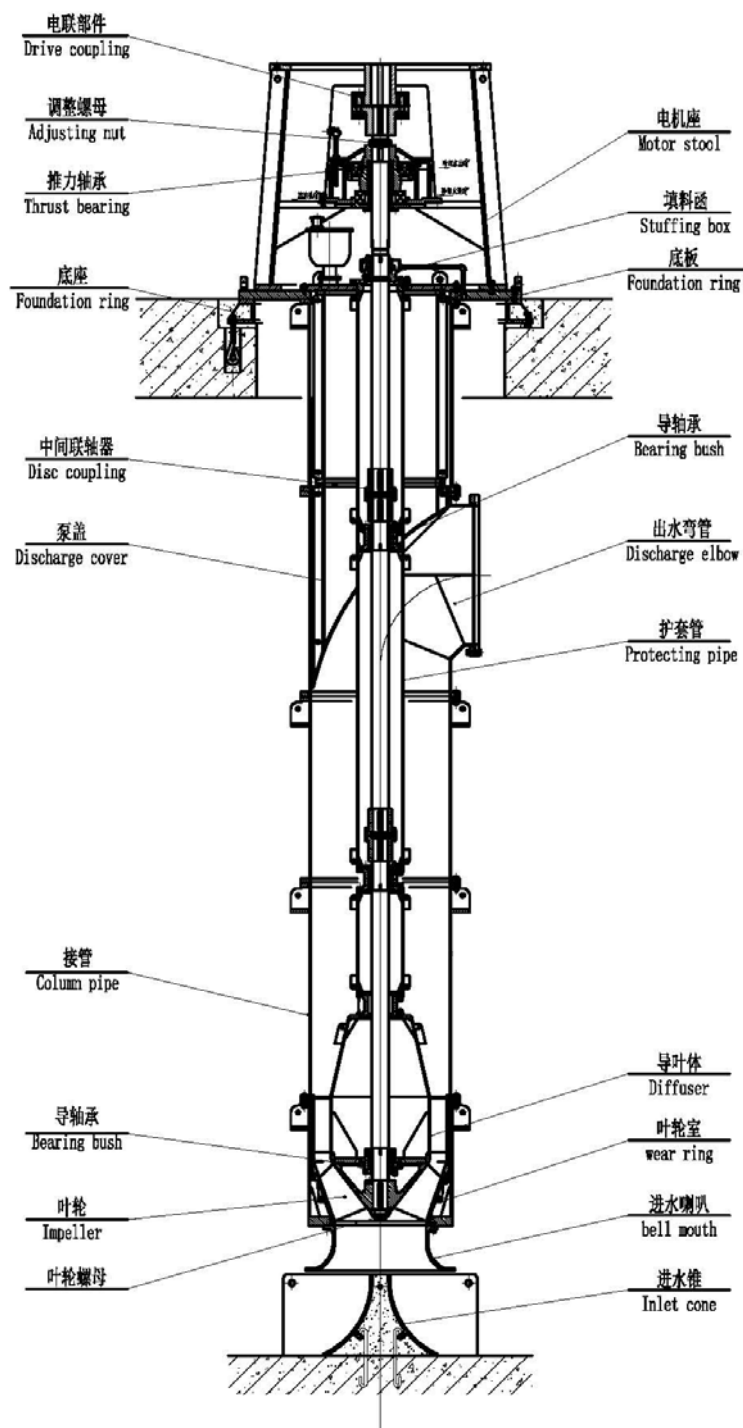
结构图

可抽芯, 不承受推力
Pull-out, without Thrust Bearing



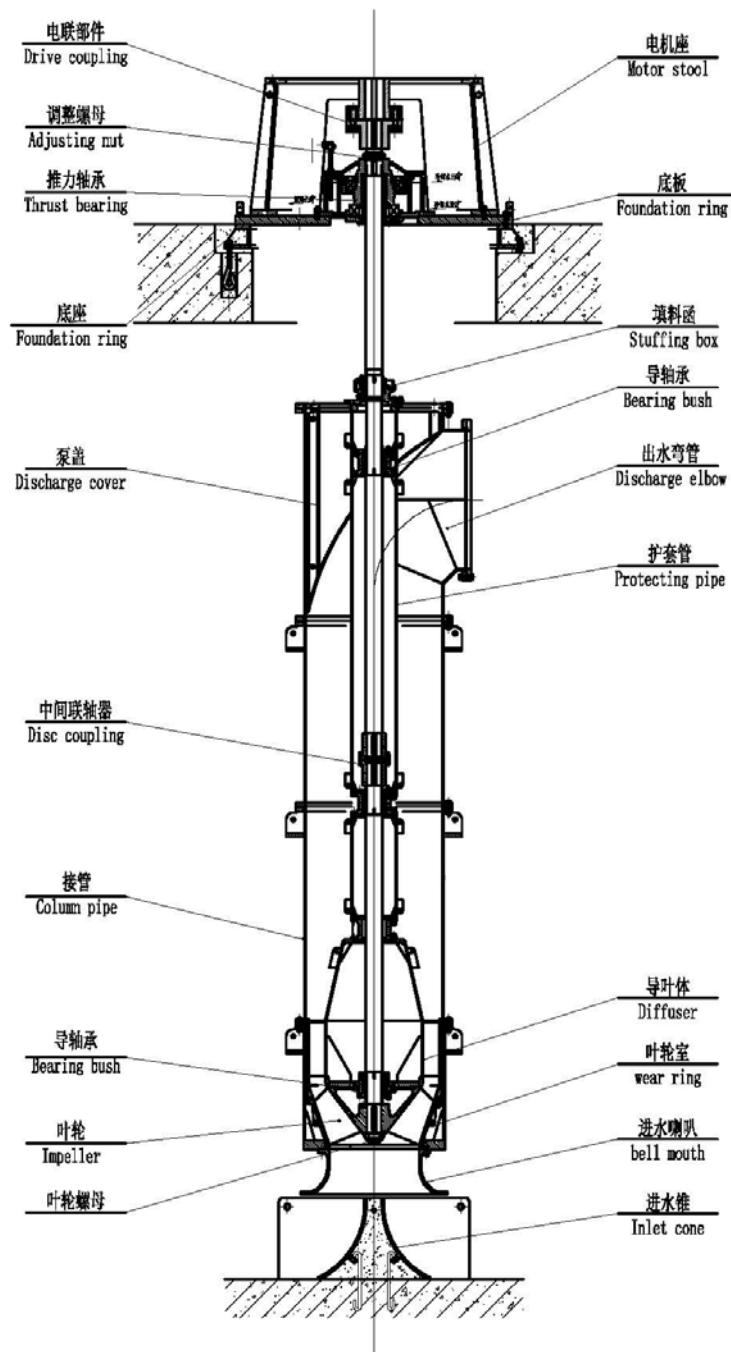
注: 可上出水。
Note: The pump outlet can be above of Foundation ring.

可抽芯, 承受推力
Pull-out, with Thrust Bearing

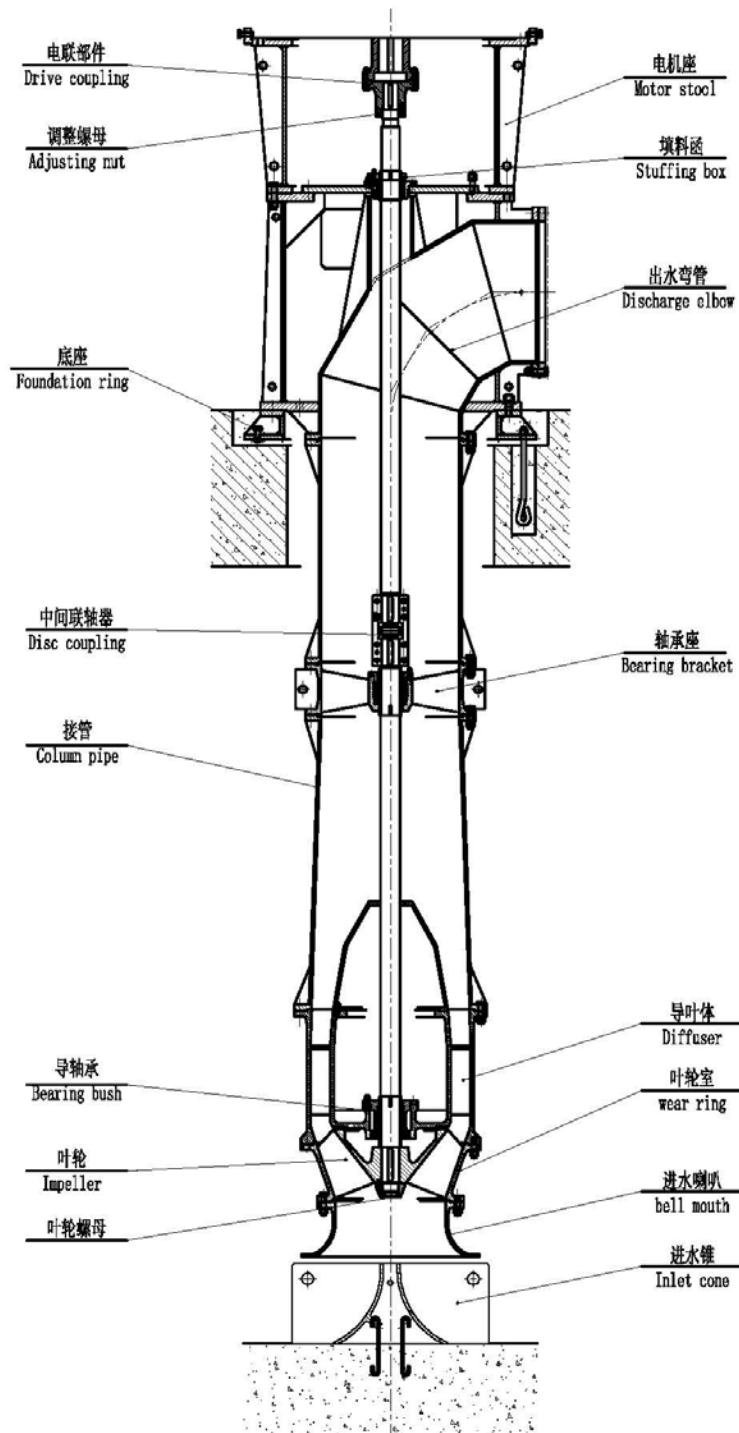


注: 可上出水。
Note: The pump outlet can be above of Foundation ring.

可抽芯, 承受推力
Pull-out, with Thrust Bearing

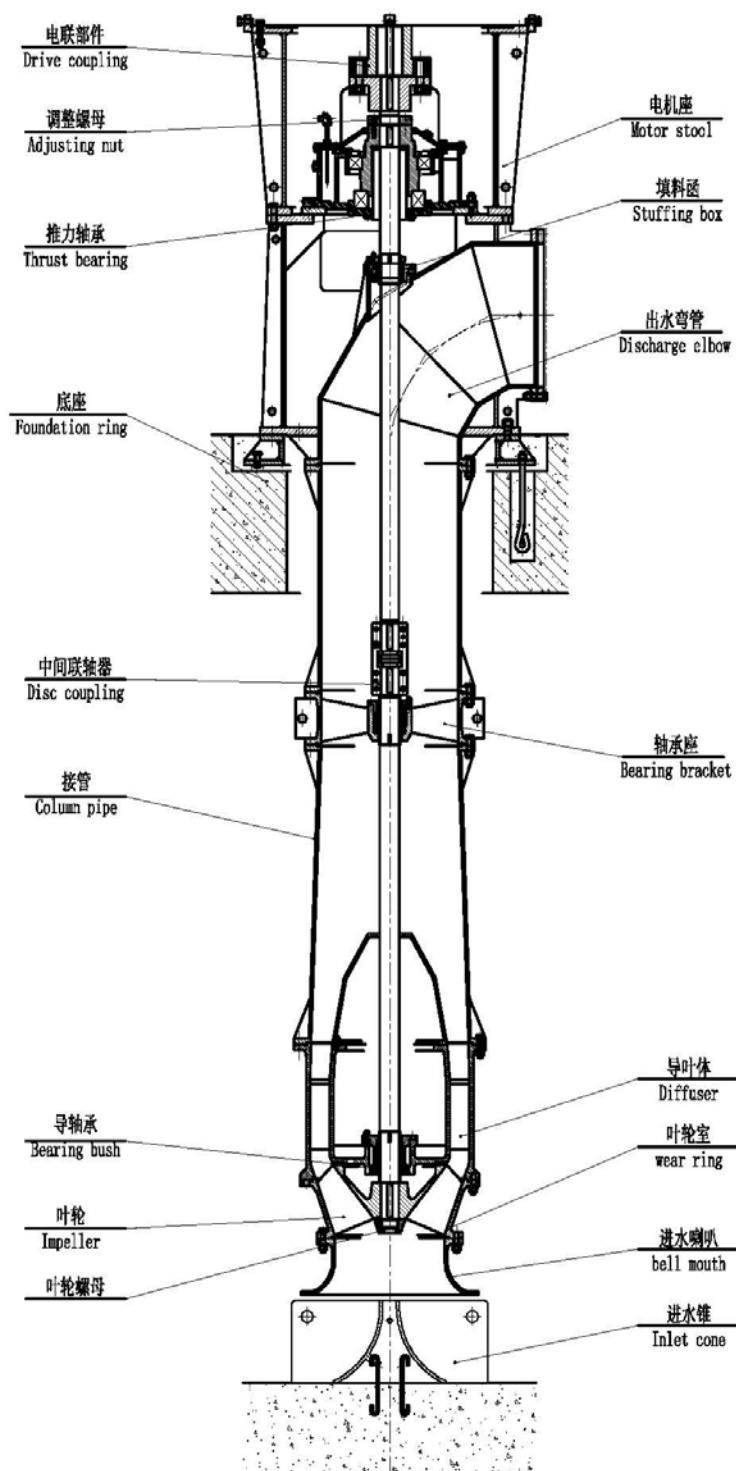


不可抽芯, 不承受推力
Non-Pull-out, without Thrust Bearing



注: 可下出水。
Note: The pump outlet can be below of Foundation ring.

不可抽芯, 承受推力
Non-Pull-out, with Thrust Bearing

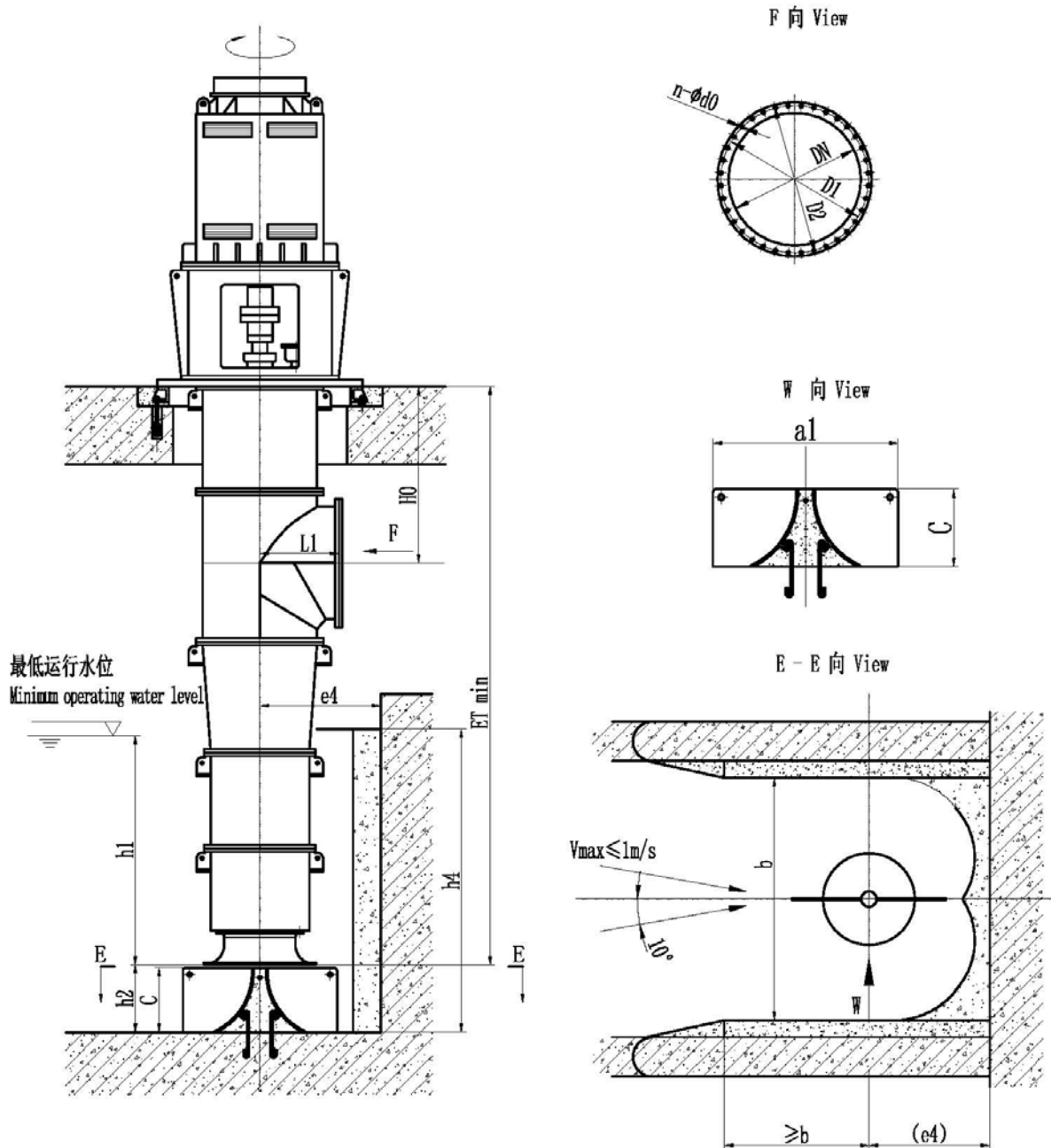


注: 可下出水。
Note: The pump outlet can be below of Foundation ring.

标准安装尺寸图

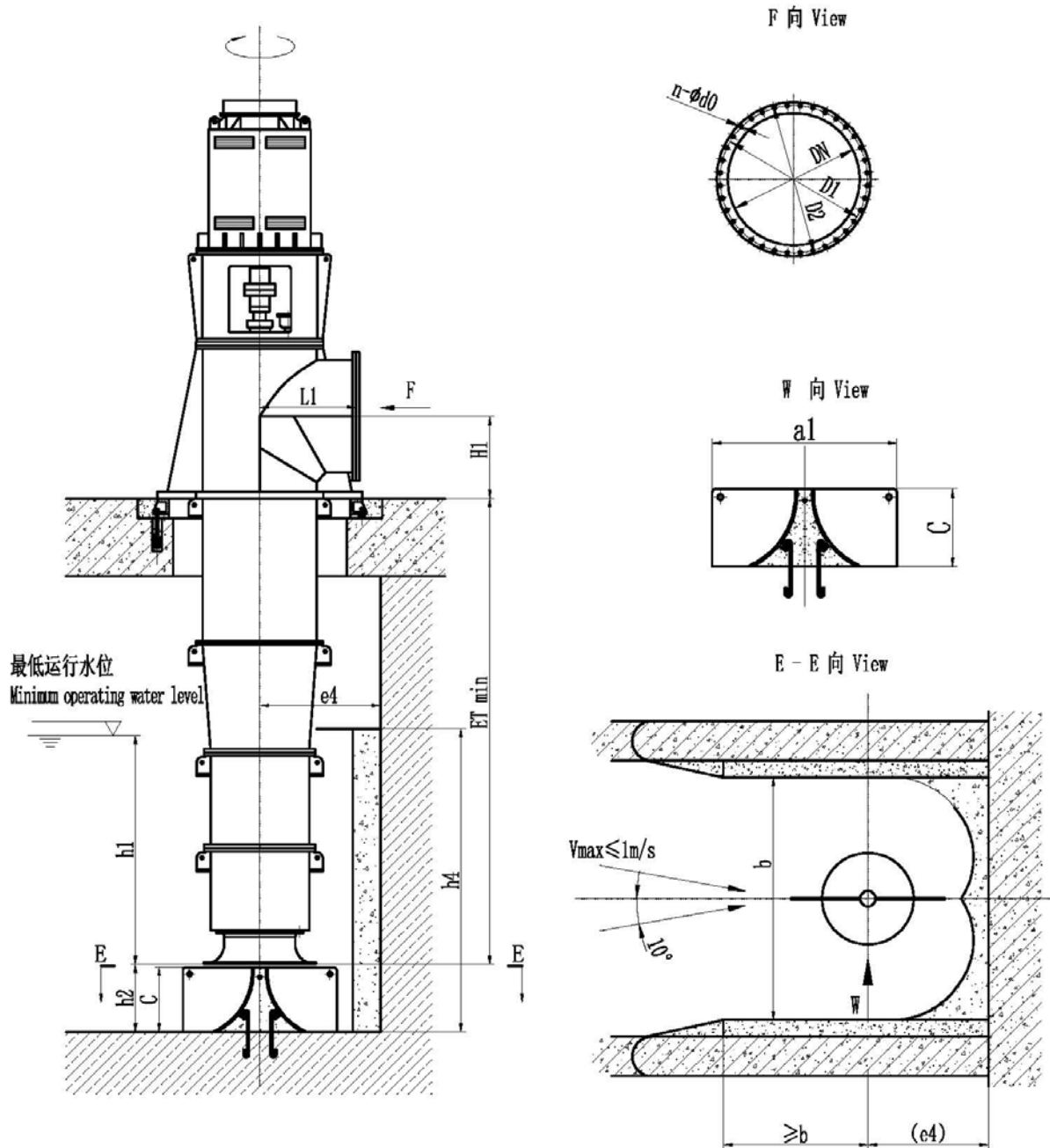
CD式安装外形示意图

Installation Plan for Type of Installation CD



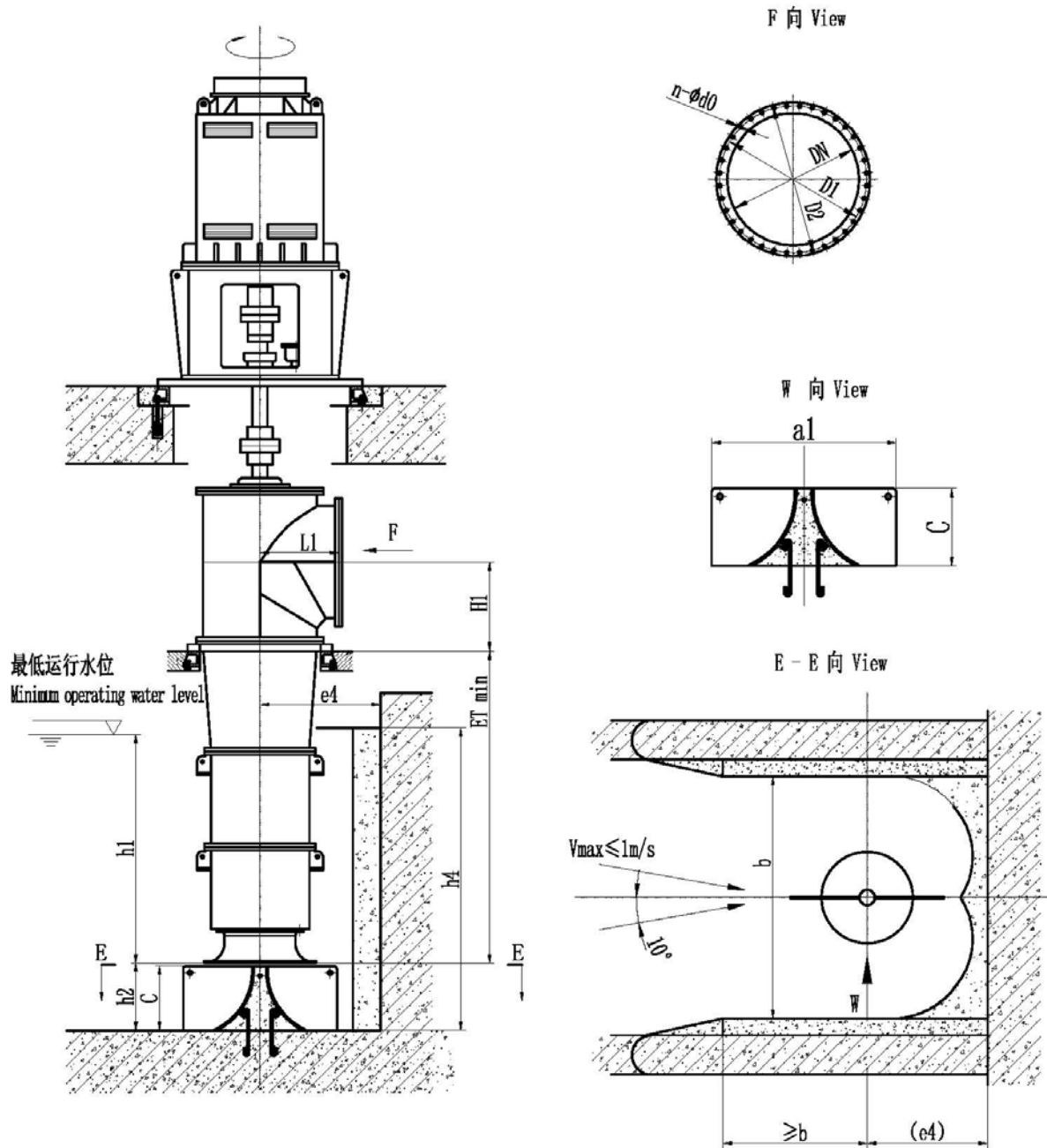
EB式安装外形示意图

Installation Plan for Type of Installation EB



EJ式安装外形示意图

Installation Plan for Type of Installation EJ





外型安装尺寸-The Overall & Installation Dimensions

序号 NO.1	泵型号 Type of pump	转速 (r/min)	外形尺寸/The Overall Dimensions														
			L1	H0 min	H1	h1	h2	h4	a1	c	e4	ET min CD	ET min	DN	D1	D2	n-φd0
1	600-660/500	594	600	1350	600	970	380	1490	850	350	655	3615	1665	600	705	755	20-φ 26
2	600-660/500	740	600	1350	600	1000	380	1520	850	350	655	3615	1665	600	705	755	20-φ 26
3	700-660/500	990	700	1400	700	1130	440	1730	1000	410	765	3765	1665	700	810	860	24-φ 26
4	700-740/560	740	700	1400	700	1150	440	1750	1000	410	765	3965	1865	700	810	860	24-φ 26
5	800-740/560	990	800	1450	800	1270	500	1950	1100	470	875	4115	1865	800	920	975	24-φ 30
6	800-860/650	594	800	1450	800	1250	500	1930	1100	470	875	4415	2165	800	920	975	24-φ 30
7	900-860/650	740	900	1500	900	1350	560	2100	1250	530	985	4565	2165	900	1020	1075	24-φ 30
8	800-990/750	424	800	1450	800	1290	500	1970	1100	470	875	4748	2498	800	920	975	24-φ 30
9	900-990/750	495	900	1500	900	1370	560	2120	1250	530	985	4898	2498	900	1020	1075	24-φ 30
10	1000-990/750	594	1000	1550	1000	1470	620	2090	1400	580	1095	5048	2498	1000	1120	1175	28-φ 30
11	1100-990/750	740	1100	1600	1100	1600	680	2510	1550	640	1205	5198	2498	1100	1220	1275	28-φ 30
12	1100-1125/850	495	1100	1600	1100	1590	680	2500	1550	640	1205	5531	2831	1100	1220	1275	28-φ 30
13	1200-1125/850	594	1200	1650	1200	1700	740	2680	1550	700	1315	5681	2831	1200	1340	1405	32-φ 33
14	1100-1255/950	370	1100	1600	1100	1610	680	2520	1550	640	1205	5864	3164	1100	1220	1275	28-φ 30
15	1200-1255/950	424	1200	1650	1200	1690	740	2670	1650	700	1315	6014	3164	1200	1340	1405	32-φ 33
16	1300-1255/950	495	1300	1700	1300	1810	800	2870	1800	760	1425	6164	3164	1300	1450	1520	32-φ 33
17	1400-1255/950	594	1400	1750	1400	1930	860	3070	1950	820	1530	6314	3164	1400	1560	1630	36-φ 36
18	1100-1320/1000	330	1100	1600	1100	1630	680	2540	1550	640	1205	6030	3330	1100	1220	1275	28-φ 30
19	1200-1320/1000	370	1200	1650	1200	1710	740	2690	1550	700	1315	6180	3330	1200	1340	1405	32-φ 33
20	1300-1320/1000	424	1300	1700	1300	1810	800	2870	1800	760	1425	6330	3330	1300	1450	1520	32-φ 33
21	1400-1320/1000	495	1400	1750	1400	1910	860	3050	1950	820	1530	6480	3330	1400	1560	1630	36-φ 36
22	1400-1450/1100	330	1400	1750	1400	1810	860	2940	1950	820	1530	6813	3663	1400	1560	1630	36-φ 36
23	1400-1450/1100	370	1400	1750	1400	1890	860	3030	1950	820	1530	6813	3663	1400	1560	1630	36-φ 36
24	1500-1450/1100	424	1500	1800	1500	2020	920	3240	2100	870	1640	6963	3663	1500	1660	1730	36-φ 36
25	1600-1450/1100	495	1600	1850	1600	2170	980	3470	2200	930	1750	7113	3663	1600	1760	1830	40-φ 36
26	1400-1520/1150	297	1400	1750	1400	1840	860	2970	1950	820	1530	6980	3830	1400	1560	1630	36-φ 36
27	1400-1520/1150	330	1400	1750	1400	1930	860	3070	1950	820	1530	6980	3830	1400	1560	1630	36-φ 36
28	1500-1520/1150	370	1500	1800	1500	2040	920	3260	2100	870	1640	7130	3830	1500	1660	1730	36-φ 36
29	1600-1520/1150	424	1600	1850	1600	2150	980	3450	2200	920	1750	7280	3830	1600	1760	1830	40-φ 36



外型安装尺寸-The Overall & Installation Dimensions

序号	泵型号 Type of pump	转速 (r/min)	外形尺寸/The Overall Dimensions														
			L1	H0 min	H1	h1	h2	h4	a1	c	e4	ET min CD	ET min	DN	D1	D2	n-Φd0
NO.2																	
41	600-625/500	594	600	1350	600	920	380	1430	850	350	655	3520	1570	600	705	755	20-Φ26
42	600-625/500	740	600	1350	600	1010	380	1530	850	350	655	3520	1570	600	705	755	20-Φ26
43	700-625/500	990	700	1400	700	1130	440	1730	1000	410	765	3670	1570	700	810	860	24-Φ26
44	600-690/550	594	600	1350	600	1040	380	1560	850	350	655	3520	1727	600	705	755	20-Φ26
45	700-690/550	740	700	1400	700	1130	440	1730	1000	410	765	3827	1721	700	810	860	24-Φ26
46	700-725/580	594	700	1400	700	1100	440	1700	1000	410	765	3922	1822	700	810	860	24-Φ26
47	800-725/580	740	800	1450	800	1200	500	1870	1100	470	875	4072	1822	800	920	975	24-Φ30
48	900-875/700	594	900	1500	900	1360	560	2110	1250	530	985	4598	2198	900	1020	1075	24-Φ30
49	1100-1000/800	594	1100	1600	1100	1610	680	2520	1550	640	1205	5212	2512	1100	1220	1275	28-Φ30
50	1200-1125/900	495	1200	1650	1200	1710	740	2700	1650	700	1315	5676	2826	1200	1340	1405	32-Φ33
51	1200-1170/936	424	1200	1650	1200	1680	740	2660	1650	700	1315	5790	2940	1200	1340	1405	32-Φ33
52	1400-1170/936	495	1400	1750	1400	1800	860	2930	1950	820	1530	6090	2940	1400	1560	1630	36-Φ36
53	1400-1250/1000	424	1400	1750	1400	1830	860	2960	1950	820	1530	6290	3140	1400	1560	1630	36-Φ36
54	1500-1250/1000	495	1500	1800	1500	1960	920	3170	2100	870	1640	6440	3140	1500	1660	1730	36-Φ36
55	1400-1375/1100	330	1400	1750	1400	1840	860	2970	1950	820	1530	6604	3454	1400	1560	1630	36-Φ36
56	1500-1375/1100	370	1500	1800	1500	1950	920	3160	2100	870	1640	6754	3454	1500	1660	1730	36-Φ36
57	1600-1375/1100	424	1600	1850	1600	2070	980	3360	2200	930	1750	6904	3454	1600	1760	1830	40-Φ36
58	1600-1500/1200	330	1600	1850	1600	2080	980	3370	2200	930	1750	7218	3768	1600	1760	1830	40-Φ36
59	1800-1500/1200	370	1800	1950	1800	2220	1100	3650	2500	960	1970	7518	3768	1800	1970	2045	44-Φ39
60	1800-1500/1200	424	1800	1950	1800	2310	1100	3750	2500	960	1970	7518	3768	1800	1970	2045	44-Φ39
61	2000-1875/1500	247	2000	2050	2000	2530	1220	4130	2750	1160	2190	8760	4710	2000	2180	2265	48-Φ42
62	2000-1875/1500	270	2000	2050	2000	2540	1220	4130	2750	1160	2190	8760	4710	2000	2180	2265	48-Φ42
63	2200-1875/1500	297	2200	2150	2200	2660	1340	4400	3000	1280	2405	9060	4710	2200	2380	2465	48-Φ42
64	2200-1875/1500	330	2200	2150	2200	2750	1340	4500	3000	1280	2405	9060	4710	2200	2380	2465	48-Φ42



外型安装尺寸-The Overall & Installation Dimensions

序号	泵型号 Type of pump	转速 (r/min)	外形尺寸/The Overall Dimensions														
			L1	H0 min	H1	h1	h2	h4	a1	c	e4	ET min CD	ET min	DN	D1	D2	n-φd0
NO.1																	
81	500-580/500	594	500	1300	500	915	320	1360	700	290	550	3370	1570	500	600	645	20-φ22
82	600-580/500	740	600	1350	600	980	380	1500	850	350	655	3520	1570	600	705	755	20-φ26
83	700-580/500	990	700	1400	700	1110	440	1700	1000	410	765	3670	1570	700	810	860	24-φ26
84	60-640/550	594	600	1350	600	1010	380	1530	850	350	655	3677	1727	600	705	755	20-φ26
85	700-640/550	740	700	1400	700	1100	440	1700	1000	410	765	3827	1727	700	810	860	24-φ26
86	900-815/700	594	900	1500	900	1330	560	2080	1250	530	985	4598	2198	900	1020	1075	24-φ30
87	1000-815/700	740	1000	1550	1000	1460	620	2290	1400	580	1095	4748	2198	1000	1120	1175	28-φ30
88	1000-930/800	495	1000	1550	1000	1460	620	2290	1400	580	1095	5062	2512	1000	1120	1175	28-φ30
89	1100-930/800	594	1100	1600	1100	1570	680	2480	1550	640	1205	5212	2512	1100	1220	1275	28-φ30
90	1100-1045/900	424	1100	1600	1100	1580	680	2480	1550	640	1205	5526	2826	1100	1220	1275	28-φ30
91	1200-1045/900	495	1200	1650	1200	1670	740	2650	1650	700	1315	5676	2826	1200	1340	1405	32-φ33
92	1300-1045/900	594	1300	1700	1300	1800	800	2860	1800	760	1425	5826	2826	1300	1450	1520	32-φ33
93	1200-1160/1000	370	1200	1650	1200	1680	740	2660	1650	700	1315	5990	3140	1200	1340	1405	32-φ33
94	1300-1160/1000	424	1300	1700	1300	1790	800	2850	1800	760	1425	6140	3140	1300	1450	1520	32-φ33
95	1400-1160/1000	424	1400	1750	1400	1900	860	3040	1950	820	1530	6260	3140	1400	1560	1630	36-φ36
96	1300-1280/1100	330	1300	1700	1300	1810	800	2870	1800	760	1425	6454	3454	1300	1450	1520	32-φ33
97	1400-1280/1100	370	1400	1750	1400	1900	860	3040	1950	820	1530	6604	3454	1400	1560	1630	36-φ36
98	1500-1280/1100	424	1500	1800	1500	2010	920	3220	2100	870	1640	6754	3454	1500	1660	1730	36-φ36
99	1500-1395/1200	330	1500	1800	1500	2010	920	3220	2100	870	1640	7068	3768	1500	1660	1730	36-φ36
100	1600-1395/1200	370	1600	1850	1600	2110	980	3400	2200	930	1750	7218	3768	1600	1760	1830	40-φ36
101	1800-1395/1200	424	1800	1950	1800	2320	1100	3760	2500	960	1970	7518	3768	1800	1970	2045	44-φ39
102	1800-1740/1500	247	1800	1950	1800	2370	1100	3820	2500	960	1970	8460	4710	1800	1970	2045	44-φ39
103	2000-1740/1500	270	2000	2050	2000	2490	1220	4080	2750	1160	2180	8760	4710	200	2180	2265	48-φ42
104	2000-1740/1500	297	2000	2050	2000	2570	1220	4170	2750	1160	2190	8760	4710	2000	2180	2265	48-φ42
105	2200-1740/1500	330	2200	2150	2200	2700	1340	4440	3000	1280	2405	9060	4710	2200	2380	2465	48-φ42