
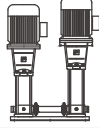
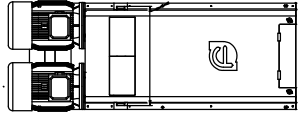
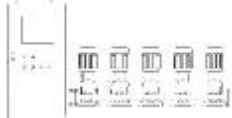
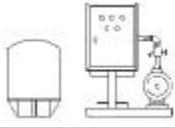
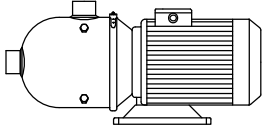
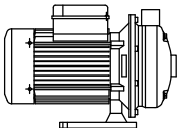


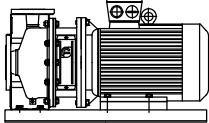
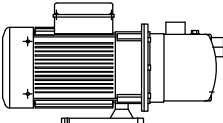
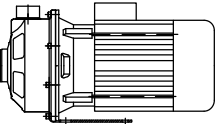
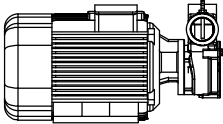
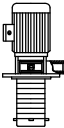

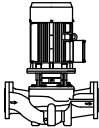

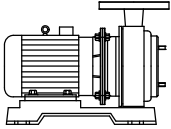


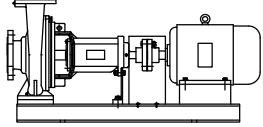
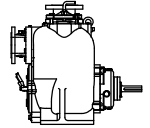
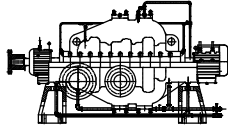
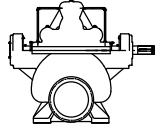

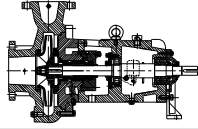
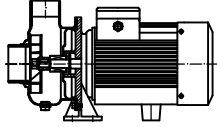
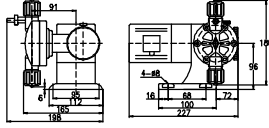
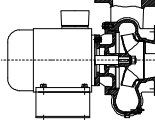
**A** **CNP** 50Hz  
PRODUCT MANUAL  
Pumping Water Pumping Honor

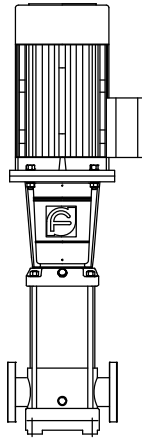


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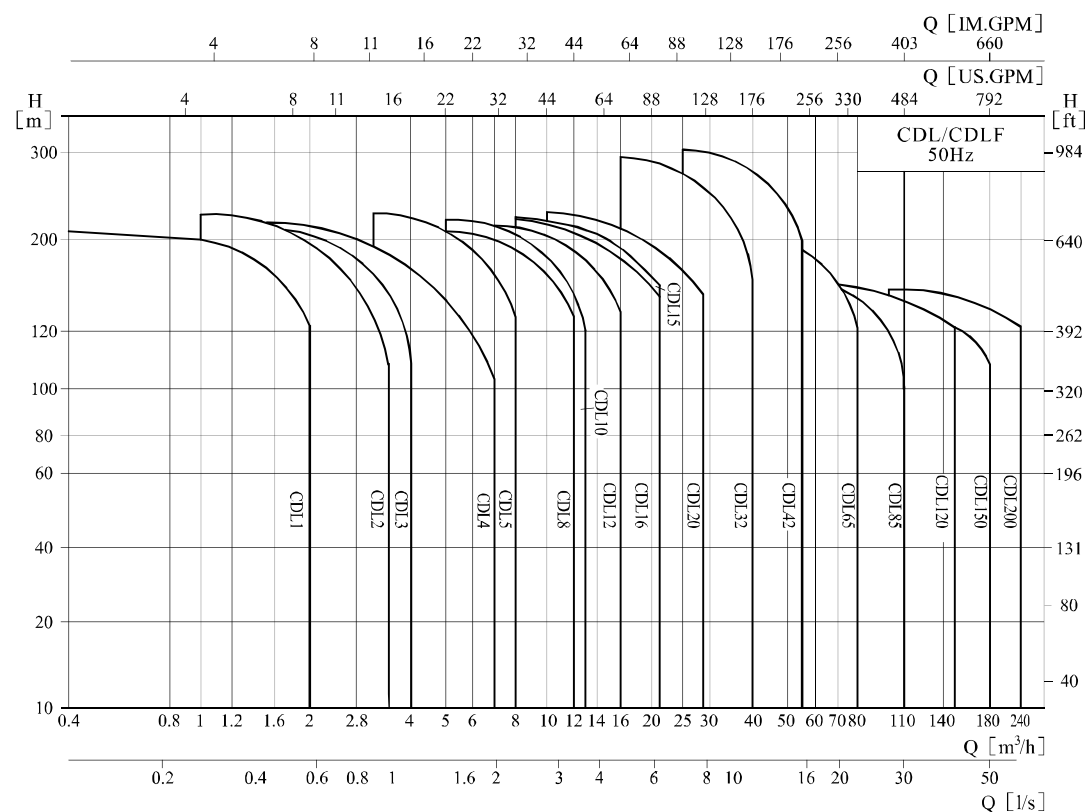
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CDLF Vertical multistage stainless steel centrifugal pump

Performance scope



Product range

Description	CDL1	CDL2	CDL3	CDL4	CDL5	CDL8	CDL10	CDL12	CDL15	CDL16	CDL20	CDL32	CDL42	CDL65	CDL85	CDL120	CDL150	CDL200
Rate flow[m³/h]	1	2	3	4	5	8	10	12	15	16	20	32	42	65	85	120	150	200
Rate flow[l/s]	0.28	0.56	0.83	1.1	1.39	2.2	2.78	3.3	4.17	4.4	5.6	8.9	11.7	18	24	33	41.6	55.6
Flow range[m³/h]	0.4-2	1-3.5	1.2-4	1.5-7	3-8	5-12	5-13	7-16	8-22	8-22	10-28	16-40	25-55	30-80	50-110	60-150	80-180	100-240
Flow range[l/s]	0.11-0.56	0.28-0.97	0.33-1.1	0.42-1.9	0.83-2.22	1.4-3.3	1.4-3.61	1.9-4.4	2.2-6.1	2.2-6.1	2.8-7.8	4.4-11.1	6.9-15.3	8.3-22.2	13.8-30.5	16.7-41.7	22-50	27.8-66.7
MAX.pressure[bar]	21	23	22	21	23	21	22	22	22	22	23	29	30	22	17	16	16	16
Motor power[kW]	0.37-2.2	0.37-3	0.37-3	0.37-4	0.37-5.5	0.75-7.5	0.75-7.5	1.5-11	1.1-15	2.2-15	1.1-18.5	1.5-30	3.0-45	4.0-45	5.5-45	11-75	11-75	18.5-110
Temp[°C]	-15~+120																	
MAX. efficiency[%]	44	46	54	57	64	62	68	63	70	66	69	73	75	76	77	74	73	79
Type																		
CDL	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
CDLF	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
CDL Pipelines																		
DIN Flangr	DN25	DN25	DN25	DN32	DN32	DN40	DN40	DN50	DN50	DN50	DN50	DN65	DN80	DN100	DN100	DN125	DN125	DN150
Oval Flange	G1	G1	G1	G1½	G1½	G1½	G1½											
CDLF Pipelines																		
DIN Flangr	DN25	DN25	DN25	DN32	DN32	DN40	DN40	DN50	DN50	DN50	DN50	DN65	DN80	DN100	DN100	DN125	DN125	DN150
Cutting ferrule joint	DN32	DN32	DN32	DN32	DN32	DN50	DN50	DN50	DN50	DN50	DN50							
Pipe thread	ZG1½	ZG1½	ZG1½	ZG1½	ZG1½	ZG2	ZG2	ZG2	ZG2	ZG2	ZG2							
Oval Flange	G1	G1	G1	G1½	G1½	G1½	G1½											

PUMP

CDL/CDLF is a kind of vertical non-self priming multistage centrifugal pump, which is driven by a standard electric motor. The motor output shaft directly connects with the pump shaft through a coupling. The pressure-resistant cylinder and flow passage components are fixed between pump head and inlet & outlet section with stay bolts. The inlet and outlet are located at the pump bottom at the same plane. This kind of pump can be equ-ipped with an intelligent protector to effectively prevent it from dry-running, out-of-phase and overload.

Motor

Full-enclosed air-blast two-pole standard motor  
 Protection class: IP55  
 Insulation class: F  
 Standard voltage: 50HZ: 1×220-230/240V  
 3×200-220/346-380V  
 3×220-240/380-415V  
 3×380-415V

Application

CDL/CDLF is a kind of multifunctional products. It can be used to convey various medium from tap water to industrial liquid at different temperature and with different flow rate and pressure. CDL type is applicable to conveying non-corrosive liquid, while CDLF is suitable for slightly corrosive liquid.

- Water supply: Water filter and transport in waterworks boosting of main pipeline, boosting in high-rise buildings.
- Industrial boosting: process flow water system, cleaning system, high-pressure washing system, fire fighting system.
- Industrial liquid conveying: Cooling and air-conditioning system, boiler water supply and condensing system, machine-associated purpose, acids and alkali.
- Water treatment: Ultra filtration system, reverse osmosis system distillation system, separator, swimming pool.
- Irrigation: Farmland irrigation, spray irrigation, dripping irrigation.

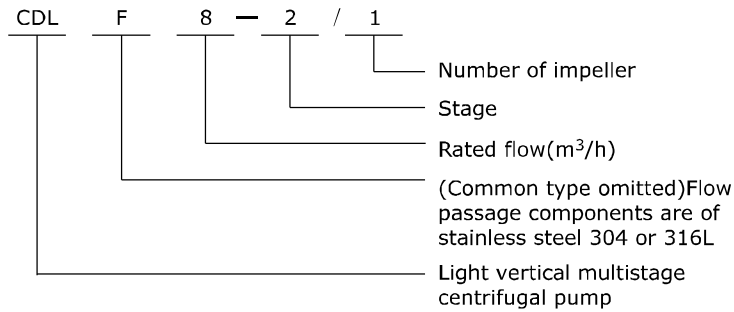
Operation conditions

- Thin, clean, non-flammable and non-explosive liquid containing no solid granules and fibers
- Liquid temperature:  
 Normal temperature type: -15°C ~ +70°C,  
 Hot water type: -15°C ~ +120°C
- Ambient temperature: up to +40°C
- Altitude: up to 1000m

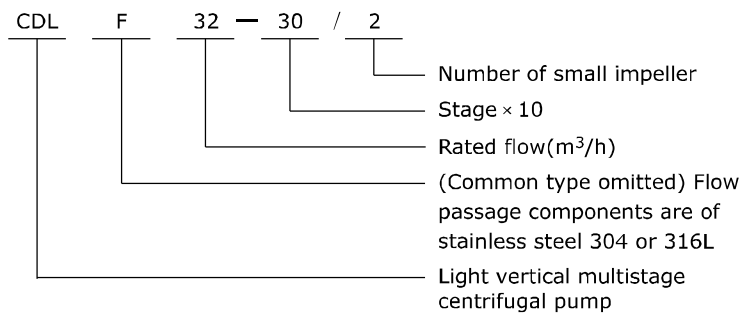
## CDL, CDLF

### Definition of model

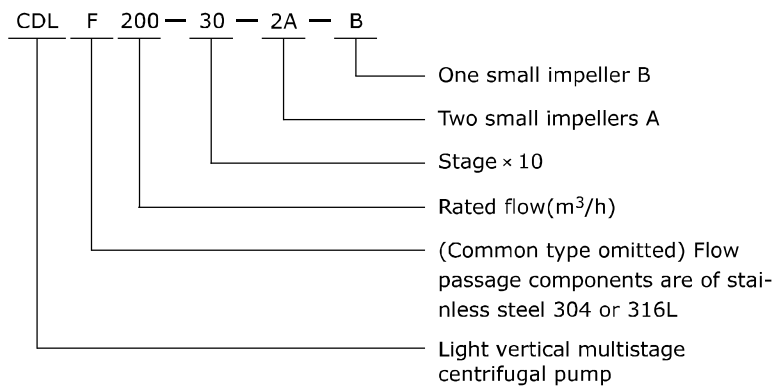
CDL/CDLF1,2,3,4,5,8,10,12,15,16 and 20



CDL/CDLF32,42,65,85,120 and 150



CDL/CDLF200

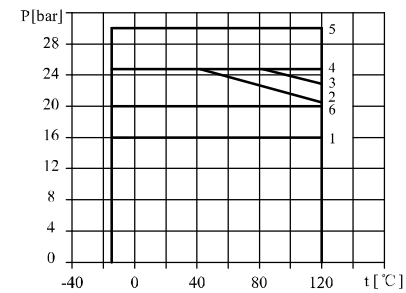


### Max. working pressure

Model	Curve number
CDL1,2,3,4,5Flange	2
CDL(F) 1,2,3,4,5Oval Flange	1
CDLF1,2,3,4,5 Flange,cutting ferrule joint, pipe thread	2
CDL8,10,12,15,16,20Flange	3
CDL(F)8 Oval Flange	1
CDLF8,10,12,15,16,20 Flange,cutting ferrule joint, pipe thread	3
CDL32	
32-10-1 ~ 32-80	1(*)
32-90-2 ~ 32-160	5
CDLF32	5
CDL42	
42-10-1 ~ 42-60-2	1(*)
42-60 ~ 42-90	4(*)
42-100-2 ~ 42-130-2	5
CDLF42	
42-10-1 ~ 42-90	4(*)
42-100-2 ~ 42-130-2	5
CDL65	
65-10-1 ~ 65-50-2	1(**)
65-50-1 ~ 65-80-1	4
CDL85	
85-10-1 ~ 85-40-2	1(**)
85-40 ~ 85-60	4
CDLF65,85	4
CDL,CDLF120,150,200	6

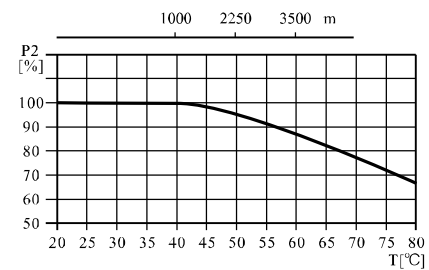
\*: For curve 5, need to specify especially; \*\*: For curve 4, need to specify especially.

The following figure shows the limitation of pressure and temperature, which shall be in the scope as shown in the figure.



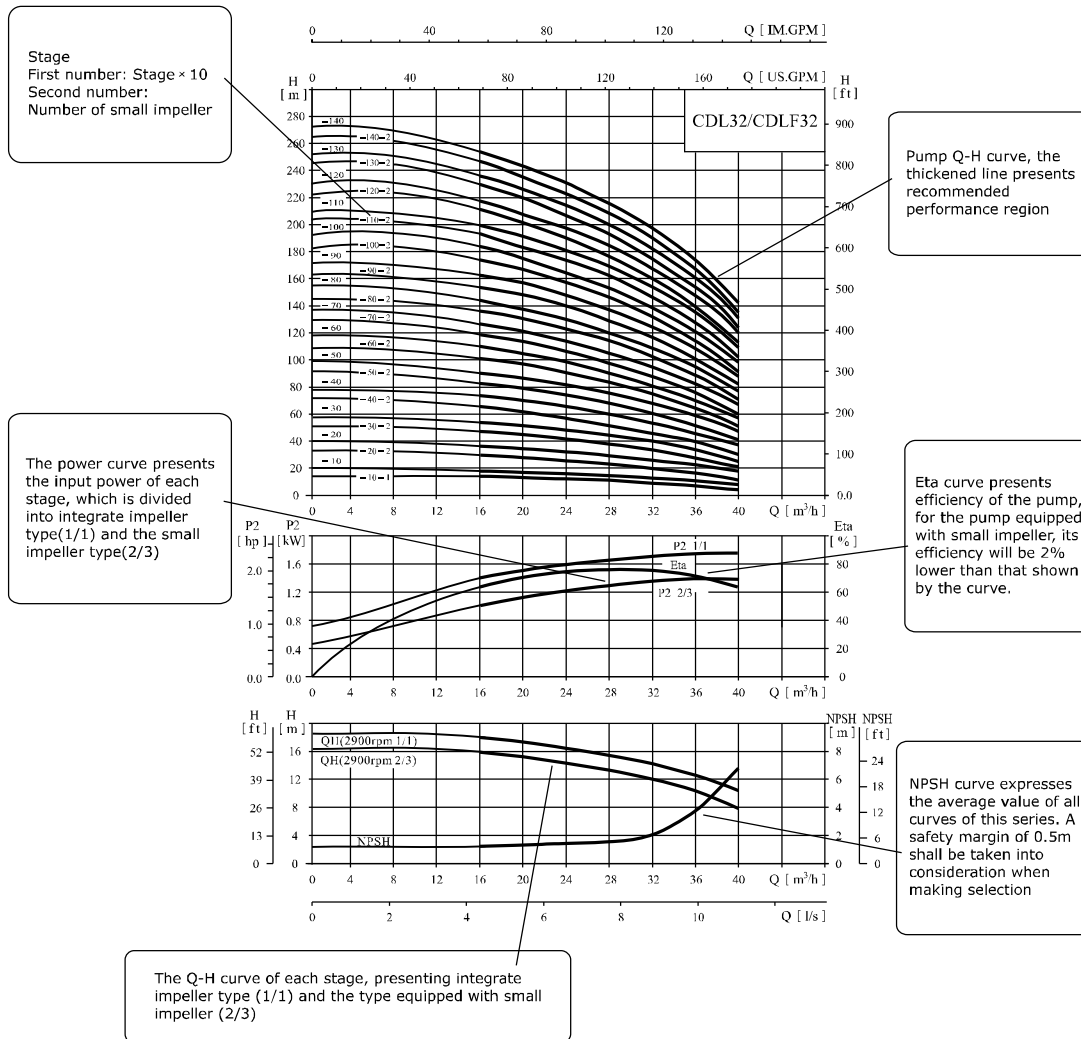
### Max. Ambient temperature

When the pump operates under ambient temperature higher than 40°C or under altitude higher than 1000m, because of low air density and poor cooling effects, the motor output power P2 will be decreased to certain extent. If the pump is operated under the above-said conditions, it should be equipped with motor of higher power.





**Curve illustration**



**Minimum inlet pressure NPSH**

In case that the pressure in pump is lower than the steam pressure used to convey liquid, the cavitations will occur. To avoid cavitations, a minimum pressure at the inlet side of the pump shall be guaranteed.

The maximum suction stroke can be calculated with following formula:  $H = P_b \times 10.2 - NPSH - H_f - H_v - H_s$

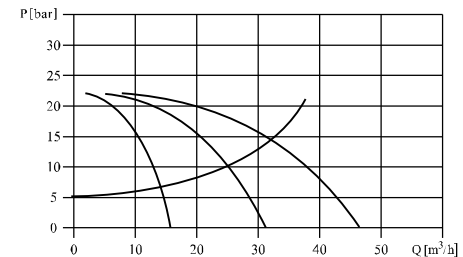
$P_b$  = atmosphere pressure [bar] (can be set as 1bar)  
 In a closed system,  $P_b$  means system pressure [bar]  
 $NPSH$  = Net positive suction head [m]  
 (It can be read out from the point of possible max. Flow rate shown on NPSH curve)  
 $H_f$  = Pipeline loss at the inlet [m]  
 $H_v$  = Steam pressure [m]  
 $H_s$  = Safety margin = Minimum 0.5m delivery head

If the calculated result H is positive, the pump may run under the max. Suction stroke H.  
 In case the calculated result H is negative, a delivery head of min. Inlet pressure is necessary.

Operation in parallel connecting several pumps in parallel running will benefit much more than running a single large pump.

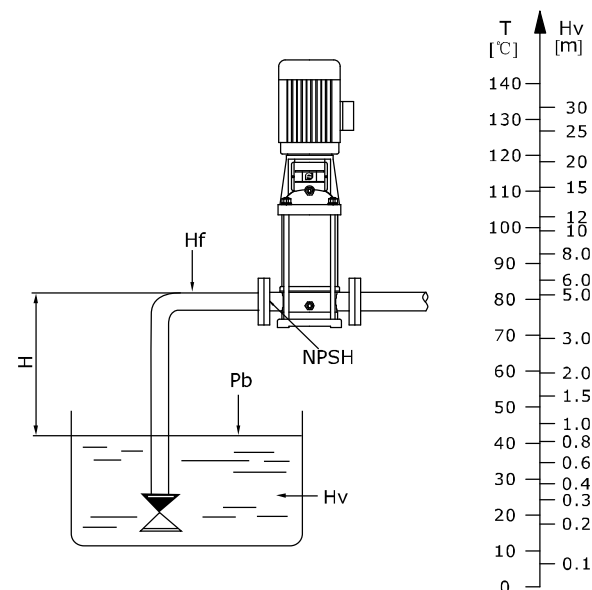
Applicable to different working states necessary in a variable flow system.

Increasing the possibility of water supply when the pump is in failure, because in case of pump failure, only part of the system flow is effected.



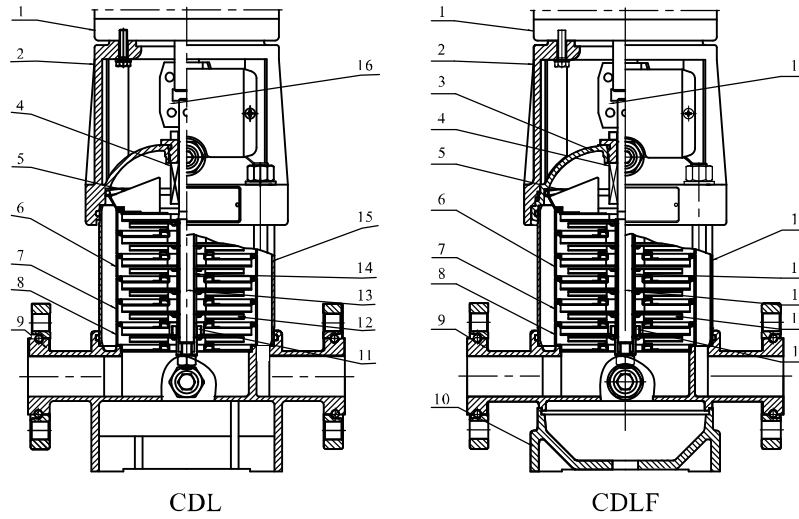
**Performance curve**

- Following conditions are suitable for the performance curves shown below:
1. All curves are based on the measured values of 50HZ: constant motor speed 2900rpm or 2950rpm.
  2. Curve tolerance in conformity with ISO9906 Annex A.
  3. Measurement is done with 20°C air-free water, kinematic viscosity of 1mm<sup>2</sup>/sec.
  4. The operation of pump shall refer to the performance region indicated by the thickened curve to prevent over-heating due to too small flow rate or overload of motor due to too large flow rate.



## CDL, CDLF

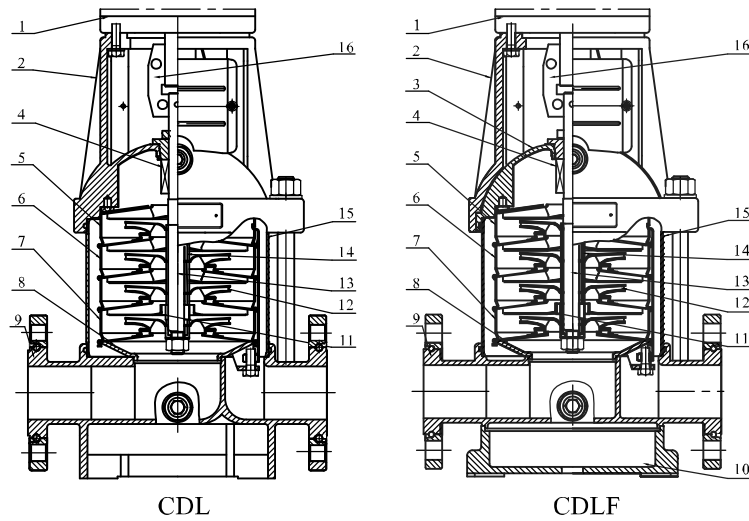
**Sectional drawing CDL/CDLF1,2,3,4,5**



**Material CDL/CDLF1,2,3,4,5**

NO.	Name	Material	AISI/ASTM
1	Motor		
2	Pump head	Cast iron	ASTM25B
4	Mechanical seal		
5	Top diffuser	Stainless steel	AISI304
6	Diffuser	Stainless steel	AISI304
7	Support diffuser	Stainless steel	AISI304
8	Inducer	Stainless steel	AISI304
11	Bearing	tungsten carbide	
12	Impeller	Stainless steel	AISI304
13	Shaft	Stainless steel	AISI304 AISI316L
14	Impeller sleeve	Stainless steel	AISI304
15	Cylinder	Stainless steel	AISI304
16	Coupling	Carbon steel	
CDLF			
3	Seal base	Stainless steel	AISI304
9	Inlet and outlet chamber	Stainless steel	AISI304
10	Base plate	Cast iron	ASTM25B
CDL			
9	Inlet and outlet chamber	Cast iron	ASTM25B

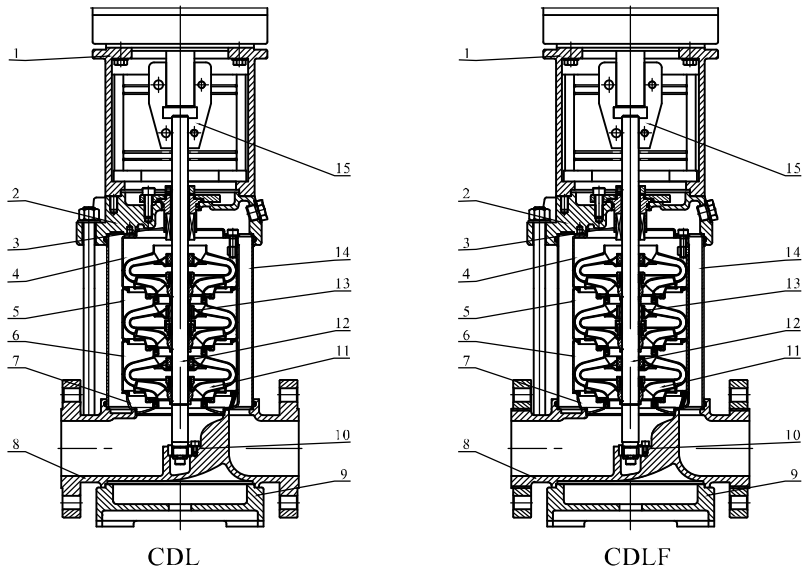
**Sectional drawing CDL/CDLF8,10,12,15,16,20**



**Material CDL/CDLF8,10,12,15,16,20**

NO.	Name	Material	AISI/ASTM
1	Motor		
2	Pump head	Cast iron	ASTM25B
4	Mechanical seal		
5	Top diffuser	Stainless steel	AISI304
6	Diffuser	Stainless steel	AISI304
7	Support diffuser	Stainless steel	AISI304
8	Inducer	Stainless steel	AISI304
11	Bearing	tungsten carbide	
12	Impeller	Stainless steel	AISI304
13	Shaft	Stainless steel	AISI304 AISI316L
14	Impeller sleeve	Stainless steel	AISI304
15	Cylinder	Stainless steel	AISI304
16	Coupling	Carbon steel	
CDLF			
3	Seal base	Stainless steel	AISI304
9	Inlet and outlet chamber	Stainless steel	AISI304
10	Base plate	Cast iron	ASTM25B
CDL			
9	Inlet and outlet chamber	Cast iron	ASTM25B

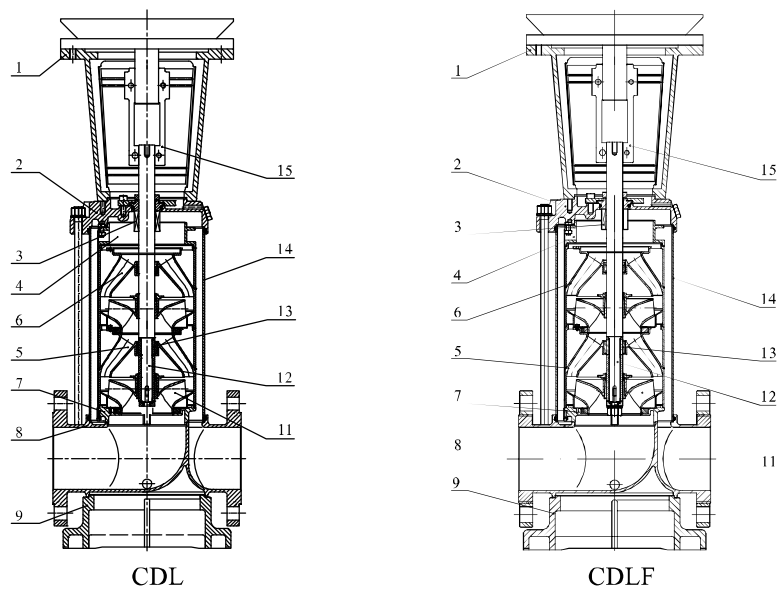
**Sectional drawing CDL/CDLF32,42,65,85**



**Material CDL/CDLF32,42,65,85**

NO.	Name	Material	AISI/ASTM
1	Bracket	Cast iron	ASTM25B
3	Mechanical seal		
4	Top diffuser	Stainless steel	AISI304
5	Support diffuser	Stainless steel	AISI304
6	Diffuser	Stainless steel	AISI304
7	Inducer	Stainless steel	AISI304
9	Base plate	Cast iron	ASTM25B
10	Bottom bearing	tungsten carbide	
11	Impeller	Stainless steel	AISI304
12	Shaft	Stainless steel	AISI316L AISI304 AISI431
13	Intermediate bearing	tungsten carbide	
14	Cylinder	Stainless steel	AISI304
15	Coupling	Carbon steel	
	Rubber parts	NBR	
CDL			
2	Pump head	Cast iron	ASTM25B
8	Inlet and outlet chamber	Cast iron	ASTM25B
CDLF			
2	Pump head	Stainless steel	AISI304
8	Inlet and outlet chamber	Stainless steel	AISI304

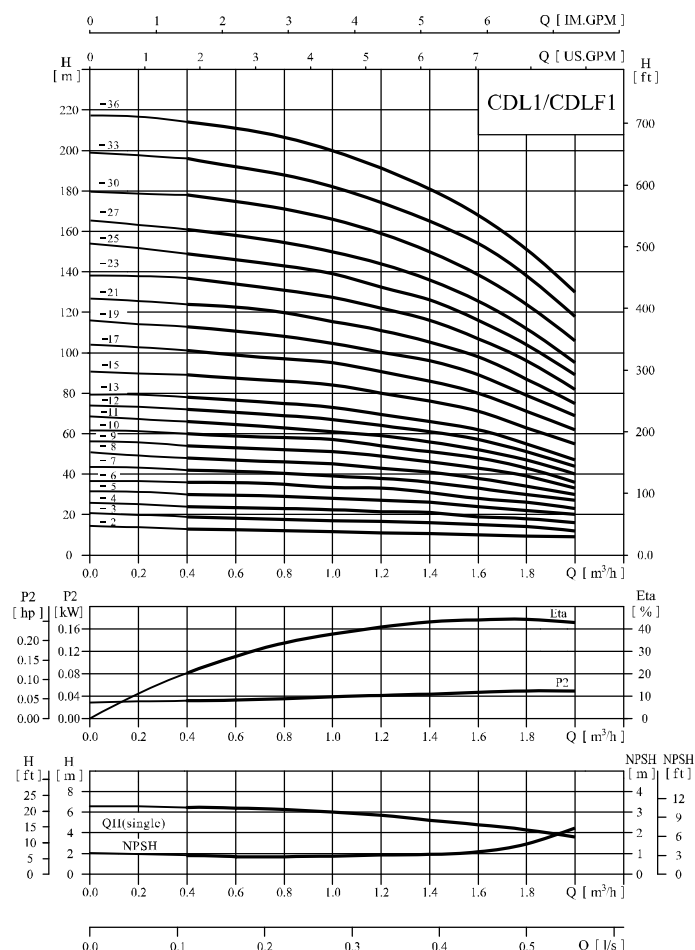
**Sectional drawing CDL/CDLF120,150,200**



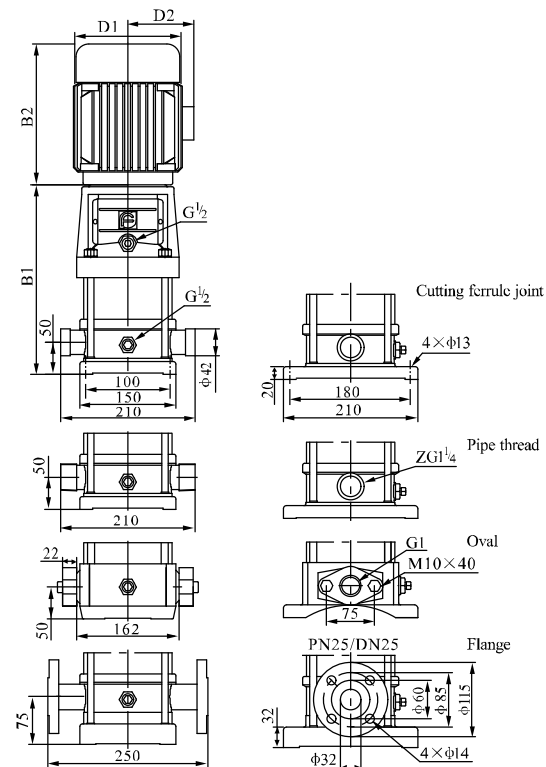
**Material CDL/CDLF120,150,200**

NO.	Name	Material	AISI/ASTM
1	Bracket	Cast iron	ASTM25B
3	Mechanical seal		
4	Discharge	Stainless steel	AISI304
5	Support diffuser	Stainless steel	AISI304
6	Diffuser	Stainless steel	AISI304
7	Inducer	Stainless steel	AISI304
9	Base plate	Cast iron	ASTM 80-55-06
11	Impeller	Stainless steel	AISI304
12	Shaft	Stainless steel	AISI304
13	Bearing	tungsten carbide	
14	Cylinder	Stainless steel	AISI304
15	Coupling	Carbon steel	
	Rubber parts	NBR	
CDL			
2	Pump head	Cast iron	ASTM 80-55-06
8	Inlet and outlet chamber	Cast iron	ASTM 80-55-06
CDLF			
2	Pump head	Stainless steel	AISI304
8	Inlet and outlet chamber	Stainless steel	AISI304

Performance curve ISO9906 Annex A 2900rpm



Installation sketch



CDL1-25~1-36 sub-connection of pipeline has no oval flange connection. The overall dimensions of the single-phase motor and explosion-proof motor are a little different. Pls contact us for details.

Performance table

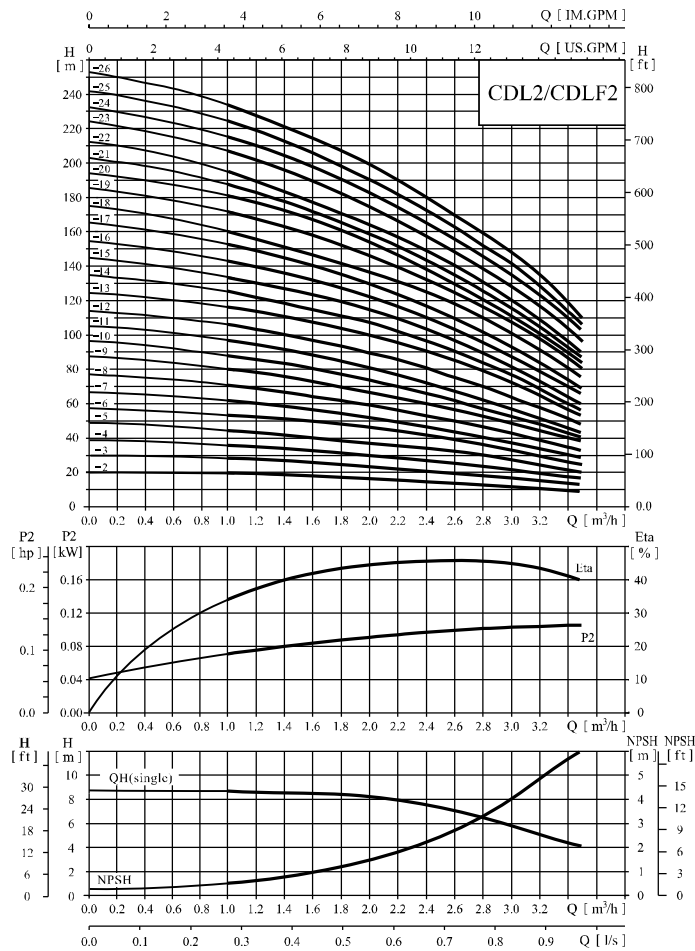
Model	Driving motor		Q (m³/h)	H (m)										
	(kW)	(hp)		0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0		
CDL1-2	0.37	0.5	13	12.5	12	11.5	11	10.5	10	9.5	9			
CDL1-3	0.37	0.5	19	18	17.5	17	16.5	16	15	14	12			
CDL1-4	0.37	0.5	24	23.5	23	22.5	21.5	21	19	18	16			
CDL1-5	0.37	0.5	30	29.6	29	28	27	26	24	22	20			
CDL1-6	0.37	0.5	36	35.5	35	33.5	33	31	28	26	23			
CDL1-7	0.37	0.5	42	41	40.5	39	38	36	33	30	27			
CDL1-8	0.55	0.75	48	47	46	45	43	41	38	34	30			
CDL1-9	0.55	0.75	54	53	52	51	49	46	43	39	33			
CDL1-10	0.55	0.75	60	59	58	57	54	51	48	43	36			
CDL1-11	0.55	0.75	66	65	63	61	59	56	52	47	40			
CDL1-12	0.75	1	72	71	69	67	64	61	57	51	44			
CDL1-13	0.75	1	78	77	75	73	69	66	62	55	47			
CDL1-15	0.75	1	89	88	86	84	79	76	71	63	55			
CDL1-17	1.1	1.5	101	99	97	95	89	86	80	71	62			
CDL1-19	1.1	1.5	113	110	108	106	99	96	89	79	69			
CDL1-21	1.1	1.5	124	122	120	117	110	106	98	87	75			
CDL1-23	1.1	1.5	137	133	131	128	121	116	107	96	82			
CDL1-25	1.5	2	149	145	143	139	131	126	116	104	89			
CDL1-27	1.5	2	161	157	155	150	141	136	125	112	95			
CDL1-30	1.5	2	178	175	171	166	157	150	139	124	106			
CDL1-33	2.2	3	196	192	188	183	173	165	154	137	118			
CDL1-36	2.2	3	214	210	205	200	190	181	169	151	130			

Size and weight

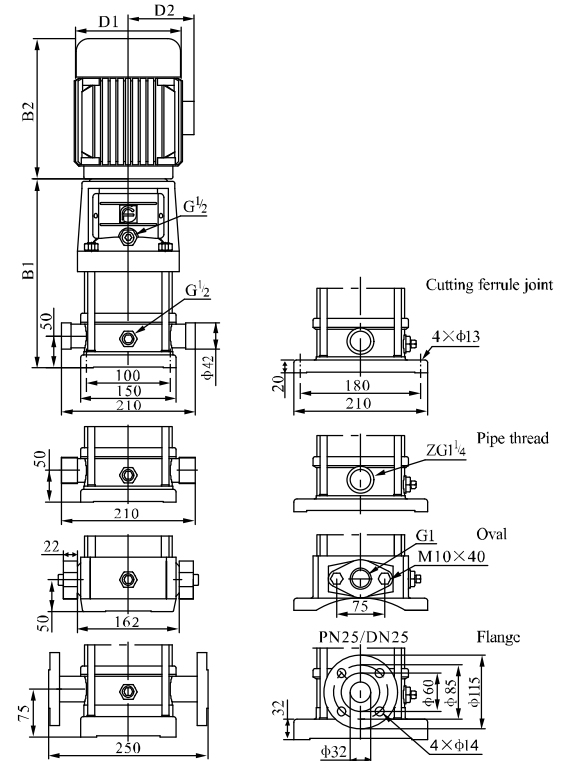
Model	Size(mm)					Weight (kg)
	B1	B2	B1+B2	D1	D2	
CDL1-2	258	225	483	148	117	20
CDL1-3	276	225	501	148	117	20
CDL1-4	294	225	519	148	117	21
CDL1-5	312	225	537	148	117	21
CDL1-6	330	225	555	148	117	22
CDL1-7	348	225	573	148	117	23
CDL1-8	366	225	591	148	117	24
CDL1-9	384	225	609	148	117	25
CDL1-10	402	225	627	148	117	26
CDL1-11	420	225	645	148	117	26
CDL1-12	448	245	693	170	142	29
CDL1-13	466	245	711	170	142	30
CDL1-15	502	245	747	170	142	31
CDL1-17	538	245	783	170	142	33
CDL1-19	574	245	819	170	142	34
CDL1-21	610	245	855	170	142	35
CDL1-23	646	245	891	170	142	36
CDL1-25	692	290	982	190	155	42
CDL1-27	728	290	1018	190	155	43
CDL1-30	782	290	1072	190	155	45
CDL1-33	836	290	1126	190	155	49
CDL1-36	890	290	1180	190	155	51

# CDL, CDLF2

## Performance curve ISO9906 Annex A 2900rpm



## Installation sketch



CDL2-18/~2-26 sub-connection of pipeline has no oval flange connection.  
The overall dimensions of the single-phase motor and explosion-proof motor are a little different.  
Pls contact us for details.

## Performance table

Model	Driving motor		Q (m³/h)	H (m)									
	(kW)	(hp)		1	1.2	1.6	2.0	2.4	2.8	3.2	3.5		
CDL2-2	0.37	0.5		18	17	16	15	13	12	10	8		
CDL2-3	0.37	0.5		27	26	24	22	20	18	15	12		
CDL2-4	0.55	0.75		36	35	33	30	26	24	20	16		
CDL2-5	0.55	0.75		45	43	40	37	33	30	24	20		
CDL2-6	0.75	1		53	52	50	45	40	36	30	24		
CDL2-7	0.75	1		63	61	57	52	47	41	35	28		
CDL2-9	1.1	1.5		80	78	73	67	61	54	45	37		
CDL2-11	1.1	1.5		98	95	89	82	73	64	54	44		
CDL2-13	1.5	2		116	114	106	98	89	78	65	52		
CDL2-15	1.5	2		134	130	123	112	100	90	73	60		
CDL2-18	2.2	3		161	157	148	136	121	108	91	76		
CDL2-22	2.2	3		197	192	180	165	148	130	110	90		
CDL2-26	3.0	4		232	228	214	198	179	158	130	110		

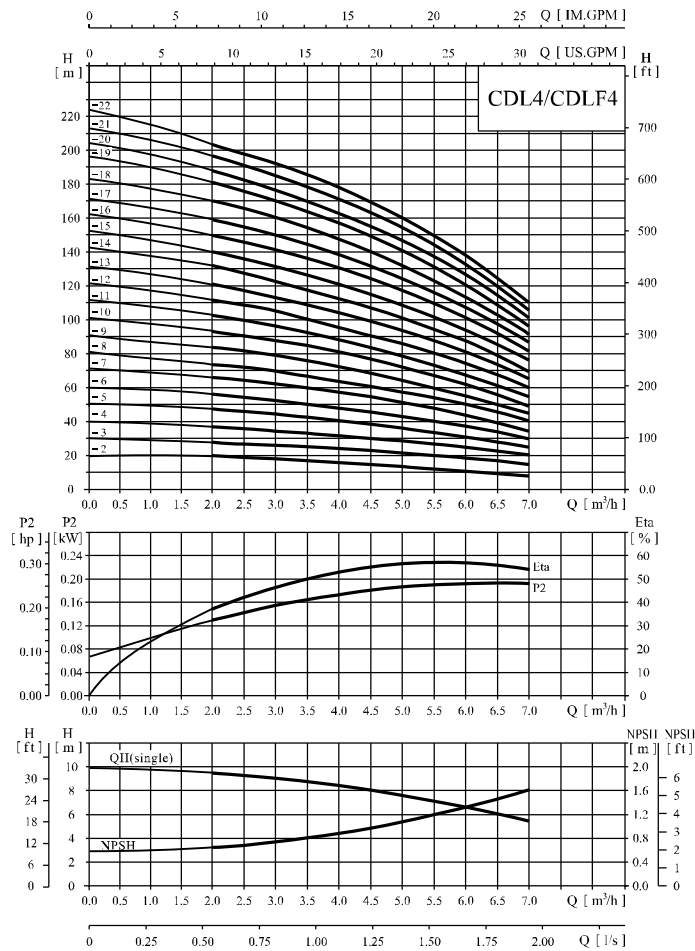
## Size and weight

Model	Size(mm)					Weight (kg)
	B1	B2	B1+B2	D1	D2	
CDL2-2	258	225	483	148	117	20
CDL2-3	276	225	501	148	117	20
CDL2-4	294	225	519	148	117	22
CDL2-5	312	225	537	148	117	23
CDL2-6	340	245	585	170	142	26
CDL2-7	358	245	603	170	142	26
CDL2-9	394	245	639	170	142	28
CDL2-11	430	245	675	170	142	29
CDL2-13	476	290	766	190	155	35
CDL2-15	512	290	802	190	155	36
CDL2-18	566	290	856	190	155	41
CDL2-22	638	290	928	190	155	42
CDL2-26	720	345	1065	197	165	52

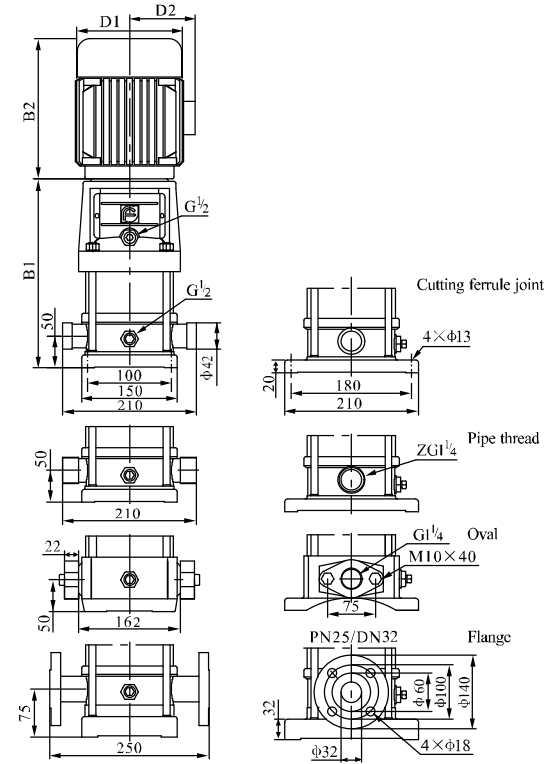


# CDL, CDLF4

## Performance curve ISO9906 Annex A 2900rpm



## Installation sketch



CDL4-19/~-4-22 sub-connection of pipeline has no oval flange connection.  
The overall dimensions of the single-phase motor and explosion-proof motor are a little different.  
Pls contact us for details.

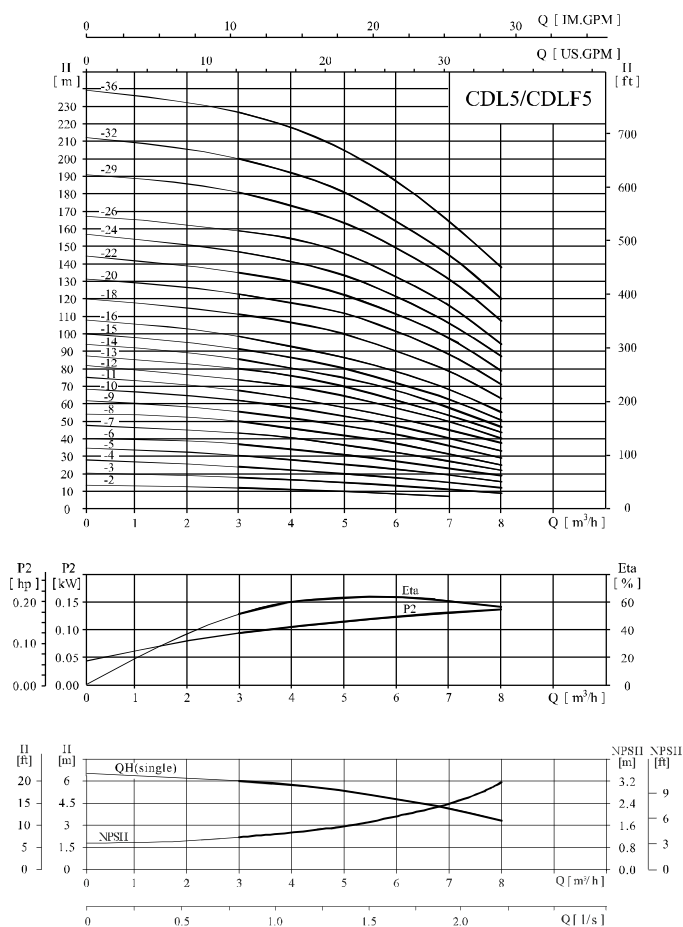
## Performance table

Model	Driving motor		Q (m³/h)	H (m)						
	(kW)	(hp)		1.5	2.0	3.0	4.0	5.0	6.0	7.0
CDL4-2	0.37	0.5	19	18	17	15	13	10	8	
CDL4-3	0.55	0.75	28	27	26	24	20	18	13	
CDL4-4	0.75	1	38	36	34	32	27	24	19	
CDL4-5	1.1	1.5	47	45	43	40	34	31	23	
CDL4-6	1.1	1.5	56	54	52	48	41	37	28	
CDL4-7	1.5	2	66	63	61	56	48	43	33	
CDL4-8	1.5	2	74	72	70	64	55	50	38	
CDL4-10	2.2	3	96	90	87	81	71	62	48	
CDL4-12	2.2	3	114	108	104	95	85	75	58	
CDL4-14	3.0	4	136	126	122	112	101	89	68	
CDL4-16	3.0	4	152	144	140	129	115	101	78	
CDL4-19	4.0	5.5	183	171	168	153	137	122	93	
CDL4-22	4.0	5.5	211	200	192	178	160	138	108	

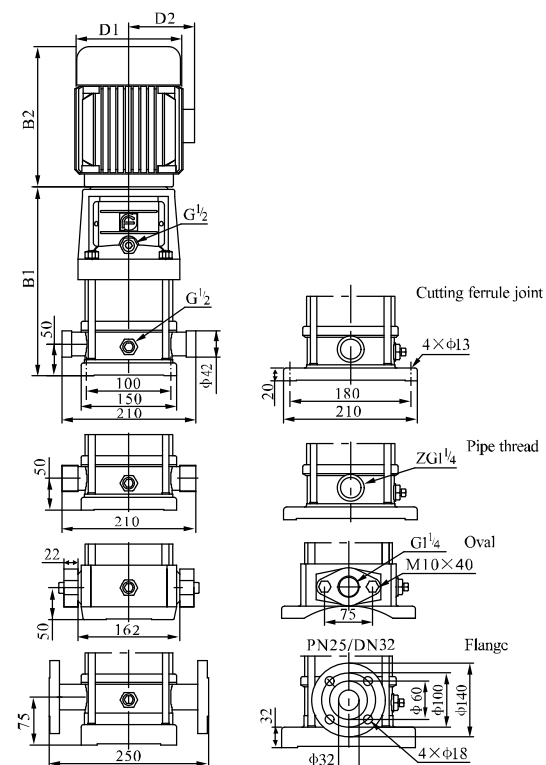
## Size and weight

Model	Size(mm)					Weight (kg)
	B1	B2	B1+B2	D1	D2	
CDL4-2	276	225	501	148	117	21
CDL4-3	303	225	528	148	117	22
CDL4-4	340	245	585	170	142	25
CDL4-5	367	245	612	170	142	27
CDL4-6	394	245	639	170	142	27
CDL4-7	431	290	721	190	155	33
CDL4-8	458	290	748	190	155	33
CDL4-10	512	290	802	190	155	37
CDL4-12	566	290	856	190	155	38
CDL4-14	630	345	975	197	165	46
CDL4-16	684	345	1029	197	165	48
CDL4-19	765	355	1120	230	188	57
CDL4-22	846	355	1201	230	188	59

Performance curve ISO9906 Annex A 2900rpm



Installation sketch



CDL5-26~5-36 sub-connection of pipeline has no oval flange connection. The overall dimensions of the single-phase motor and explosion-proof motor are a little different. Pls contact us for details.

Performance table

Model	Driving motor		Q (m³/h)	3	4	5	6	7	8
	(kW)	(hp)							
CDL5-2	0.37	0.5	H (m)	12	11	10	9	7	
CDL5-3	0.55	0.75		18	17	15	14	11	9
CDL5-4	0.55	0.75		24	22	20	18	15	12
CDL5-5	0.75	1		31	28	26	23	19	16
CDL5-6	1.1	1.5		37	35	32	27	23	19
CDL5-7	1.1	1.5		43	41	37	33	27	22
CDL5-8	1.1	1.5		50	47	43	38	32	25
CDL5-9	1.5	2		56	53	48	43	37	29
CDL5-10	1.5	2		62	59	54	48	41	34
CDL5-11	2.2	3		68	64	59	53	46	38
CDL5-12	2.2	3		74	70	65	58	50	41
CDL5-13	2.2	3		80	76	70	62	54	44
CDL5-14	2.2	3		86	81	75	68	58	47
CDL5-15	2.2	3		92	87	81	73	63	51
CDL5-16	2.2	3		99	93	87	79	69	55
CDL5-18	3.0	4		111	106	100	90	79	63
CDL5-20	3.0	4		123	118	112	102	89	71
CDL5-22	4.0	5.5		135	130	123	112	99	79
CDL5-24	4.0	5.5		147	142	134	122	107	87
CDL5-26	4.0	5.5		159	155	146	133	116	94
CDL5-29	4.0	5.5		181	174	164	149	131	107
CDL5-32	5.5	7.5		200	193	181	164	145	120
CDL5-36	5.5	7.5		227	219	205	188	165	138

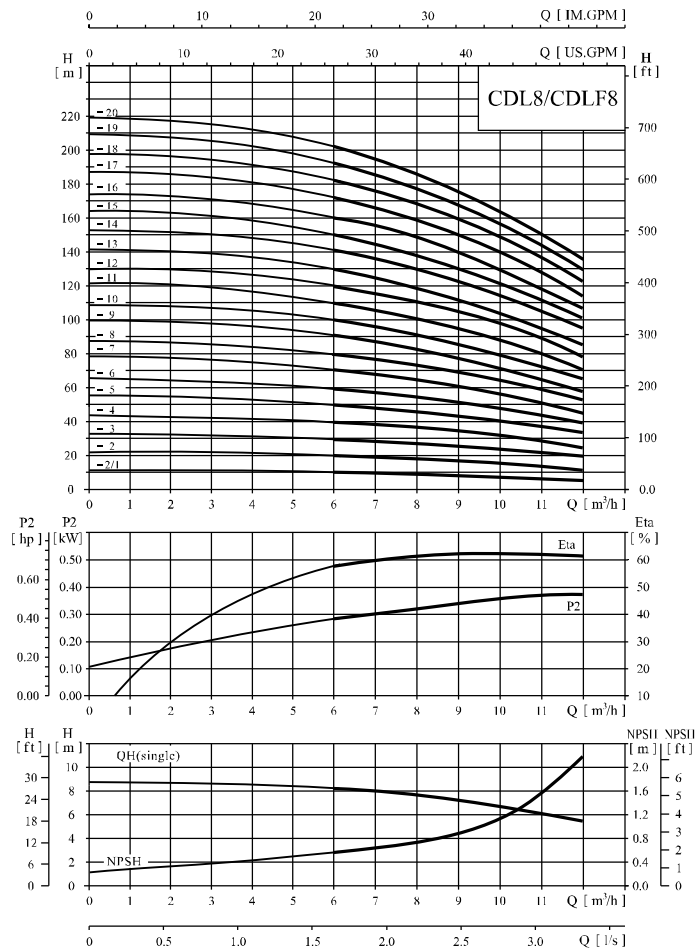
Size and weight

Model	Size(mm)					Weight (kg)
	B1	B2	B1+B2	D1	D2	
CDL5-2	276	225	501	148	117	26
CDL5-3	303	225	528	148	117	27
CDL5-4	330	225	555	148	117	27
CDL5-5	367	245	612	170	142	28
CDL5-6	394	245	639	170	142	29
CDL5-7	421	245	666	170	142	29
CDL5-8	448	245	693	170	142	30
CDL5-9	485	290	775	190	155	35
CDL5-10	512	290	802	190	155	36
CDL5-11	539	290	829	190	155	40
CDL5-12	566	290	856	190	155	41
CDL5-13	593	290	883	190	155	41
CDL5-14	620	290	910	190	155	42
CDL5-15	647	290	937	190	155	42
CDL5-16	684	290	974	190	155	43
CDL5-18	738	345	1083	197	165	50
CDL5-20	782	345	1127	197	165	51
CDL5-22	846	355	1201	230	188	59
CDL5-24	900	355	1255	230	188	60
CDL5-26	954	355	1309	230	188	61
CDL5-29	1035	355	1390	230	188	63
CDL5-32	1136	390	1526	260	208	85
CDL5-36	1244	390	1634	260	208	87

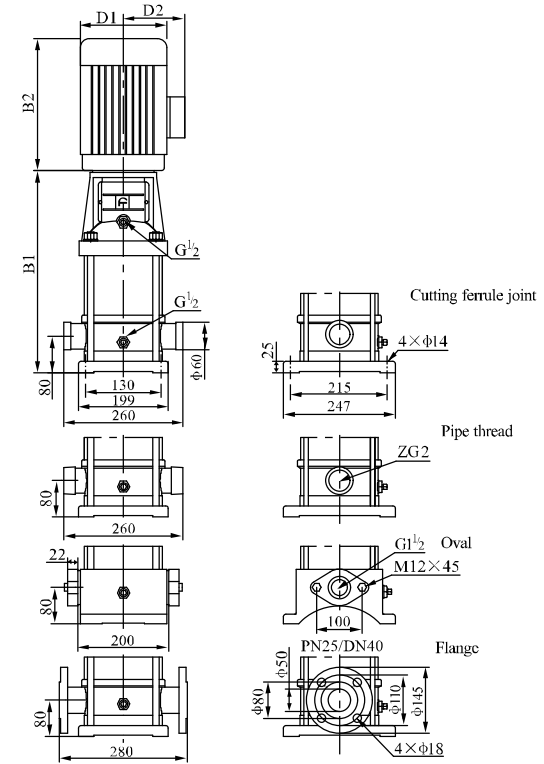


# CDL, CDLF8

## Performance curve ISO9906 Annex A 2900rpm



## Installation sketch



CDL8-14/~8-20 sub-connection of pipeline has no oval flange connection.  
The overall dimensions of the single-phase motor and explosion-proof motor are a little different.  
Pls contact us for details.

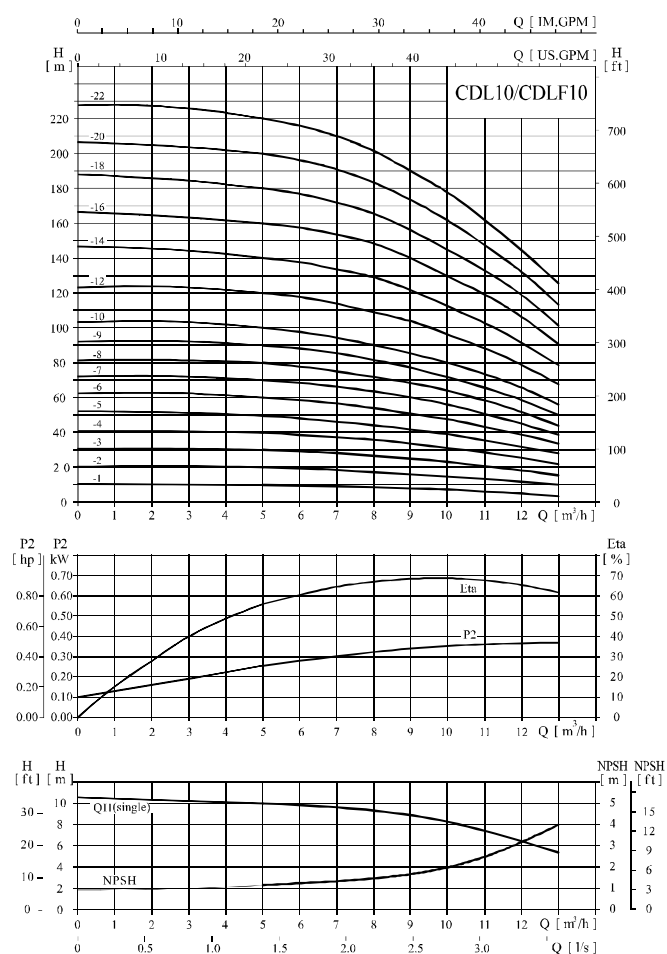
## Performance table

Model	Driving motor		Q (m³/h)	H (m)												
	(kW)	(hp)		5	6	7	8	9	10	11	12					
CDL8-2/1	0.75	1	10	9.5	9.3	9	8.5	8	7	6						
CDL8-2	0.75	1	20	19.5	19	18	17	16	14	13						
CDL8-3	1.1	1.5	30	29.5	28.5	27	25	24	21	19						
CDL8-4	1.5	2	41	39.5	38	36	34	32	28	26						
CDL8-5	2.2	3	52	50	48	45	42	40	36	32						
CDL8-6	2.2	3	62	60	57	54	51	48	43	39						
CDL8-8	3.0	4	83	80	77	73	69	65	58	52						
CDL8-10	4.0	5.5	104	100	97	92	87	81	73	65						
CDL8-12	4.0	5.5	124	120	116	111	104	92	87	78						
CDL8-14	5.5	7.5	145	141	136	130	122	113	102	92						
CDL8-16	5.5	7.5	166	161	156	148	139	130	118	106						
CDL8-18	7.5	10	187	182	175	167	157	146	134	120						
CDL8-20	7.5	10	208	202	195	186	175	163	150	135						

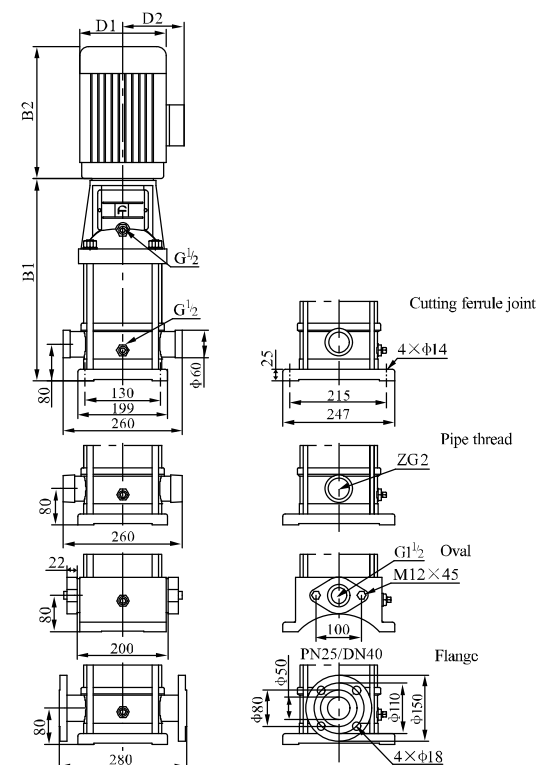
## Size and weight

Model	Size(mm)					Weight (kg)
	B1	B2	B1+B2	D1	D2	
CDL8-2/1	347	245	592	170	142	32
CDL8-2	347	245	592	170	142	32
CDL8-3	377	245	622	170	142	34
CDL8-4	417	290	707	190	155	40
CDL8-5	447	290	737	190	155	44
CDL8-6	477	290	767	190	155	45
CDL8-8	547	345	892	197	165	53
CDL8-10	607	355	962	230	188	64
CDL8-12	667	355	1022	230	188	66
CDL8-14	747	390	1137	260	208	81
CDL8-16	807	390	1197	260	208	84
CDL8-18	867	390	1257	260	208	93
CDL8-20	927	390	1317	260	208	94

Performance curve ISO9906 Annex A 2900rpm



Installation sketch



CDL10-16~10-22 sub-connection of pipeline has no oval flange connection. The overall dimensions of the single-phase motor and explosion-proof motor are a little different. Pls contact us for details.

Performance table

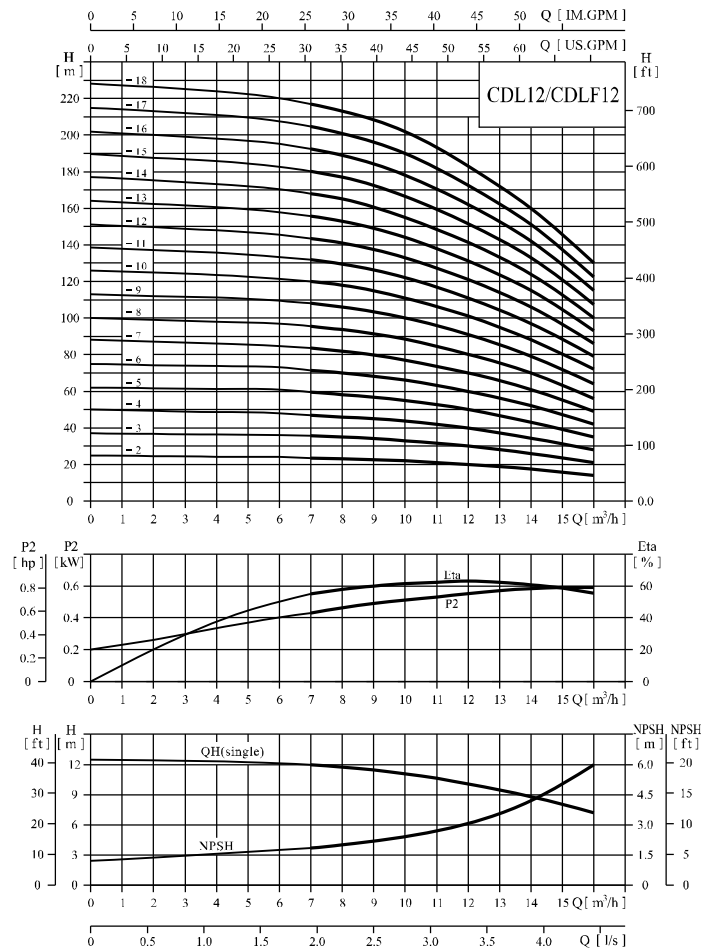
Model	Driving motor		Q (m³/h)	H (m)										
	(kW)	(hp)		5	6	7	8	9	10	11	12	13		
CDL10-1	0.75	1		9.7	9.3	8.9	8.3	7.7	7	6	5	4		
CDL10-2	0.75	1		19.5	19	18	17	16	15	13.5	11.5	10		
CDL10-3	1.1	1.5		29.5	29	28	27	25	23	21	18	16		
CDL10-4	1.5	2		39.5	38.5	37.5	36	34	31	28	25	22		
CDL10-5	2.2	3		49.5	48.5	47	44	42	39	35	32	28		
CDL10-6	2.2	3		60	58	56	54	51	48	43	39	34		
CDL10-7	3	4		70	68	66	63	60	56	51	45	39		
CDL10-8	3	4		80	78	75	73	69	64	58	52	44		
CDL10-9	3	4		90	87	85	81	77	72	66	58	50		
CDL10-10	4	5.5		100	97	95	90	85	80	74	66	56		
CDL10-12	4	5.5		120	117	114	109	104	96	89	79	68		
CDL10-14	5.5	7.5		140	137	134	129	122	113	103	92	79		
CDL10-16	5.5	7.5		160	158	153	148	140	129	119	106	91		
CDL10-18	7.5	10		180	177	172	166	156	145	133	119	102		
CDL10-20	7.5	10		200	196	191	184	173	162	147	132	114		
CDL10-22	7.5	10		220	216	210	202	190	178	162	145	126		

Size and weight

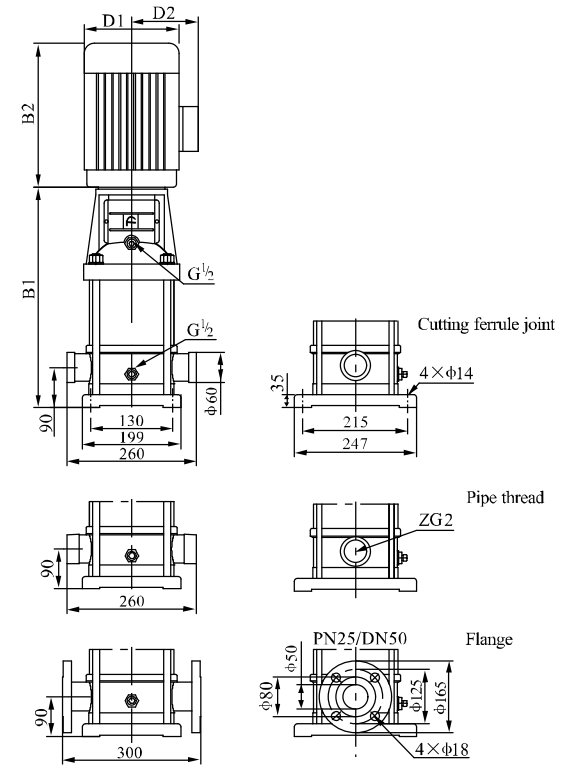
Model	Size(mm)					Weight (kg)
	B1	B2	B1+B2	D1	D2	
CDL10-1	347	225	572	170	142	40
CDL10-2	347	245	592	170	142	41
CDL10-3	377	245	622	170	142	43
CDL10-4	417	290	707	190	155	49
CDL10-5	447	290	737	190	155	53
CDL10-6	477	290	767	190	155	54
CDL10-7	517	345	862	197	165	64
CDL10-8	547	345	892	197	165	65
CDL10-9	577	345	922	197	165	66
CDL10-10	607	355	962	230	188	74
CDL10-12	607	355	1022	230	188	76
CDL10-14	747	390	1137	260	208	100
CDL10-16	807	390	1197	260	208	102
CDL10-18	867	390	1257	260	208	107
CDL10-20	927	390	1317	260	208	109
CDL10-22	987	390	1377	260	208	111

# CDL, CDLF12

## Performance curve ISO9906 Annex A 2900rpm



## Installation sketch



The overall dimensions of the single-phase motor and explosion-proof motor are a little different. Pls contact us for details.

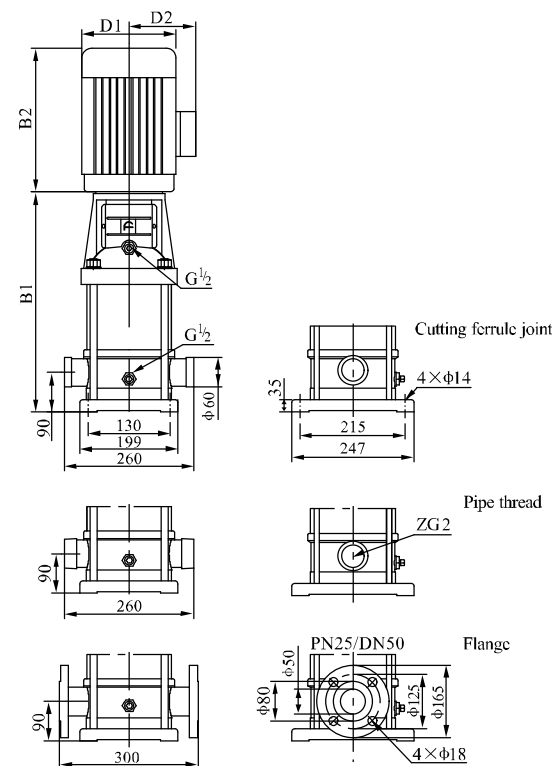
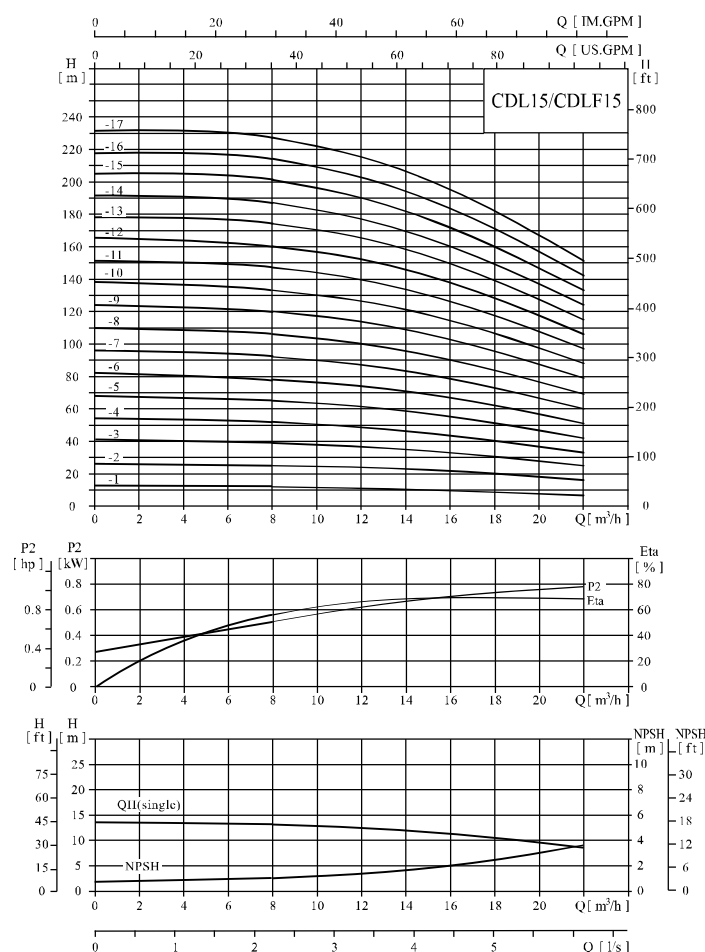
## Performance table

Model	Driving motor		Q (m³/h)	H (m)										
	(kW)	(hp)		7	8	9	10	11	12	13	14	15	16	
CDL12-2	1.5	2		23.5	23	22.5	22	21	20	18.5	17	15.5	14	
CDL12-3	2.2	3		35.5	35	34	33	31.5	30	28	26	23.5	21	
CDL12-4	3	4		47	46	45	44	42	40	37	34	31	28	
CDL12-5	3	4		59.5	58	56.5	55	52.5	50	46.5	43	39	35	
CDL12-6	4	5.5		71.5	70	68	66	63	60	56	52	47	42	
CDL12-7	5.5	7.5		83.5	82	79.5	77	73.5	70	65.5	61	55	49	
CDL12-8	5.5	7.5		95.5	94	91	88	84	80	75	70	63	56	
CDL12-9	5.5	7.5		108	106	103	100	95.5	91	85	79	71.5	64	
CDL12-10	7.5	10		120	118	114.5	111	106	101	94.5	88	80	72	
CDL12-12	7.5	10		143.5	141	137	133	127	121	113..5	106	96	86	
CDL12-14	11	15		168	165	160	155	148	141	132.5	124	112	100	
CDL12-16	11	15		192.5	189	183.5	178	170	162	152	142	128.5	115	
CDL12-18	11	15		217	213	207.5	202	192.5	183	171.5	160	145	130	

## Size and weight

Model	Size(mm)					Weight (kg)
	B1	B2	B1+B2	D1	D2	
CDL12-2	367	290	657	190	155	39
CDL12-3	397	290	687	190	155	43
CDL12-4	437	345	782	197	165	51
CDL12-5	467	345	812	197	165	53
CDL12-6	497	355	852	230	188	61
CDL12-7	547	390	937	260	208	73
CDL12-8	577	390	967	260	208	74
CDL12-9	607	390	997	260	208	76
CDL12-10	637	390	1027	260	208	83
CDL12-12	697	390	1087	260	208	87
CDL12-14	845	500	1345	330	255	157
CDL12-16	905	500	1405	330	255	161
CDL12-18	965	500	1465	330	255	164

Performance curve ISO9906 Annex A 2900rpm



The overall dimensions of the single-phase motor and explosion-proof motor are a little different. Pls contact us for details.

Performance table

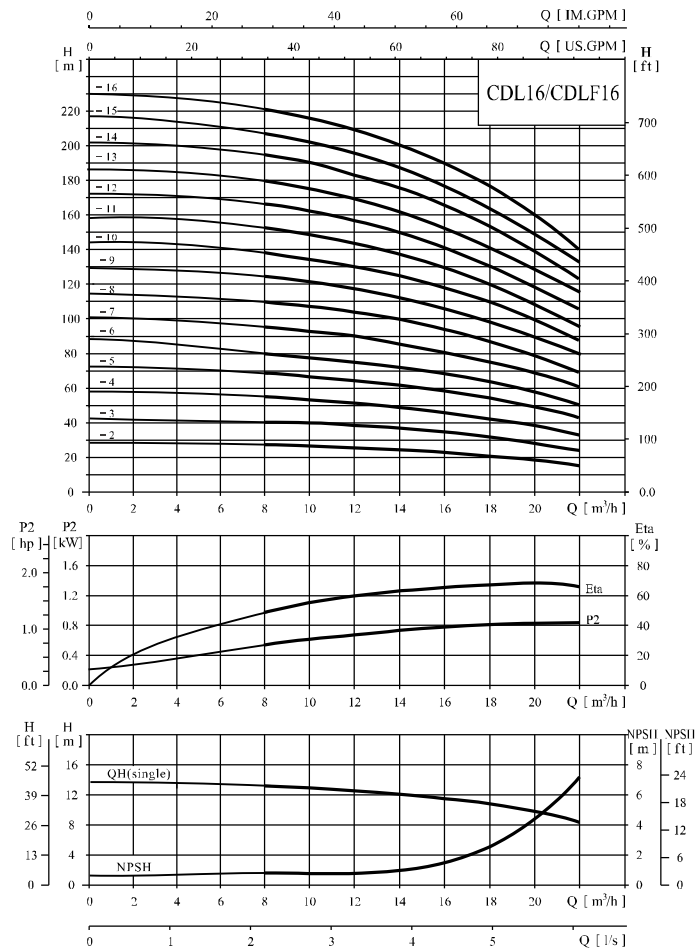
Model	Driving motor		Q (m³/h)	H (m)													
	(kW)	(hp)		8	10	12	14	15	16	18	20	22					
CDL15-1	1.1	1.5	H (m)	12	11.5	11	10.5	10	9.5	8.5	7.5	6.5					
CDL15-2	2.2	3		25	24.5	24	23	22.5	21.5	20	18	16					
CDL15-3	3	4		39	38	37	35	34	33	30	28	25					
CDL15-4	4	5.5		52	51	49	46	45	44	40	37	33					
CDL15-5	4	5.5		65	63	61	59	57	55	51	47	42					
CDL15-6	5.5	7.5		78	76	74	71	69	67	62	57	51					
CDL15-7	5.5	7.5		92	90	87	83	81	79	73	67	60					
CDL15-8	7.5	10		106	103	100	96	93	90	84	77	69					
CDL15-9	7.5	10		120	117	114	109	106	103	95	87	79					
CDL15-10	11	15		133	130	126	121	118	114	106	97	88					
CDL15-12	11	15		160	157	152	146	142	138	128	117	106					
CDL15-14	11	15		187	182	177	169	165	160	149	137	124					
CDL15-17	15	20		227	222	215	206	201	195	182	167	151					

Size and weight

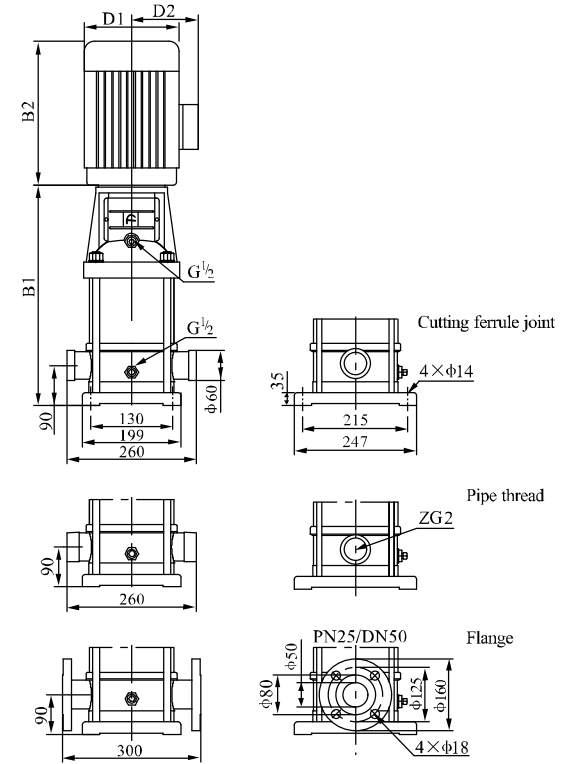
Model	Size(mm)					Weight (kg)
	B1	B2	B1+B2	D1	D2	
CDL15-1	387	245	632	170	142	33
CDL15-2	397	290	687	190	155	42
CDL15-3	452	345	797	197	165	51
CDL15-4	497	355	852	230	188	60
CDL15-5	542	355	897	230	188	62
CDL15-6	607	390	997	260	208	78
CDL15-7	652	390	1042	260	208	80
CDL15-8	697	390	1087	260	208	86
CDL15-9	742	390	1132	260	208	88
CDL15-10	875	500	1375	330	255	157
CDL15-12	965	500	1465	330	255	161
CDL15-14	1055	500	1555	330	255	165
CDL15-17	1190	500	1690	330	255	178

# CDL, CDLF16

## Performance curve ISO9906 Annex A 2900rpm



## Installation sketch



The overall dimensions of the single-phase motor and explosion-proof motor are a little different. Pls contact us for details.

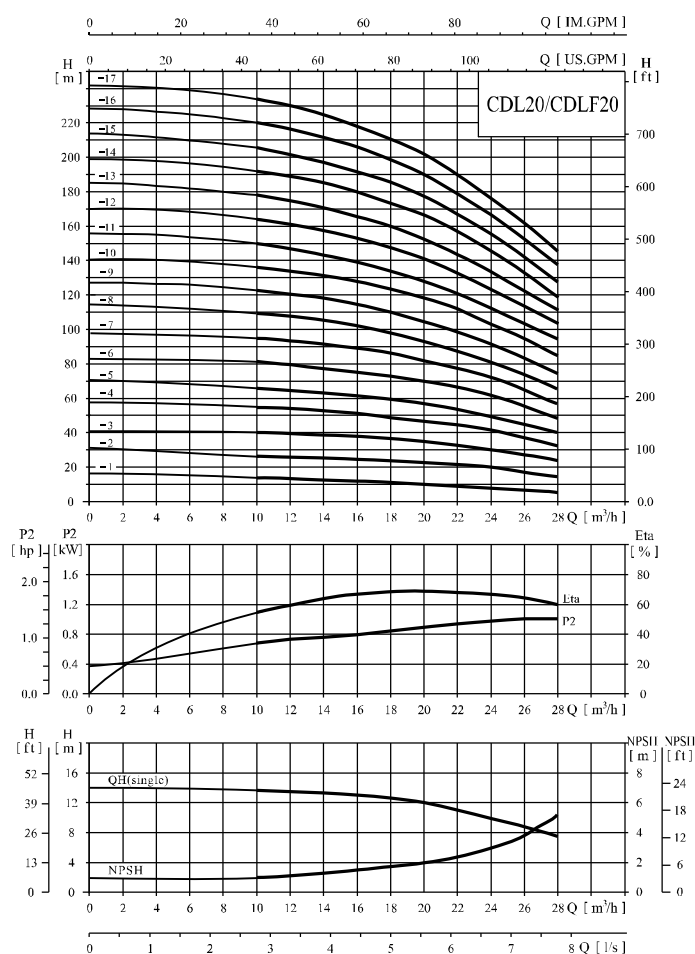
## Performance table

Model	Driving motor		Q (m³/h)	H (m)							
	(kW)	(hp)		8	10	12	14	16	18	20	22
CDL16-2	2.2	3		27	26	25	24	22	21	19	16
CDL16-3	3.0	4		41	40	38	37	34	32	29	25
CDL16-4	4.0	5.5		54	53	52	49	46	43	38	34
CDL16-5	5.5	7.5		68	67	65	62	58	54	48	43
CDL16-6	5.5	7.5		82	80	78	74	70	64	58	52
CDL16-7	7.5	10		96	95	91	87	82	76	68	61
CDL16-8	7.5	10		110	108	104	99	94	86	77	70
CDL16-10	11	15		138	136	131	125	118	109	97	87
CDL16-12	11	15		166	162	157	150	141	130	116	105
CDL16-14	15	20		194	190	184	175	166	152	136	122
CDL16-16	15	20		222	217	210	200	189	174	156	140

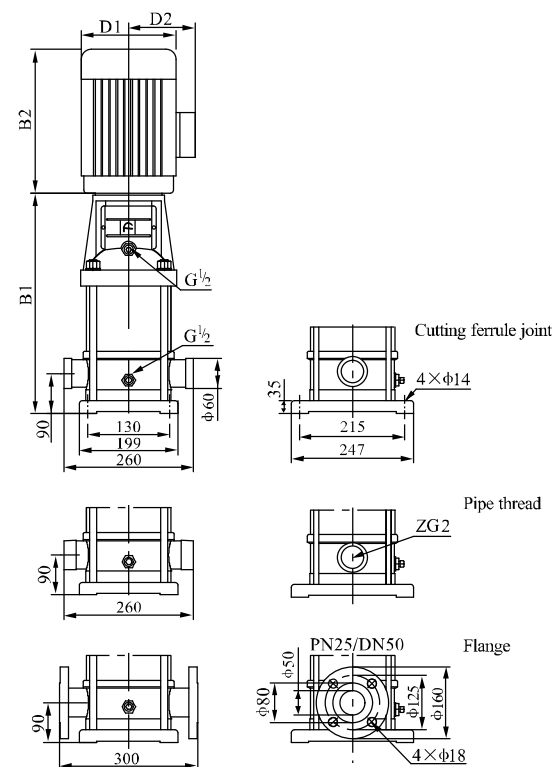
## Size and weight

Model	Size(mm)					Weight (kg)
	B1	B2	B1+B2	D1	D2	
CDL16-2	397	290	687	190	155	42
CDL16-3	452	345	797	197	165	50
CDL16-4	497	355	852	230	188	59
CDL16-5	562	390	952	260	208	76
CDL16-6	607	390	997	260	208	77
CDL16-7	652	390	1042	260	208	84
CDL16-8	697	390	1087	260	208	86
CDL16-10	875	500	1375	330	255	158
CDL16-12	965	500	1465	330	255	161
CDL16-14	1055	500	1555	330	255	174
CDL16-16	1145	550	1645	330	255	178

Performance curve ISO9906 Annex A 2900rpm



Installation sketch



The overall dimensions of the single-phase motor and explosion-proof motor are a little different. Pls contact us for details.

Performance table

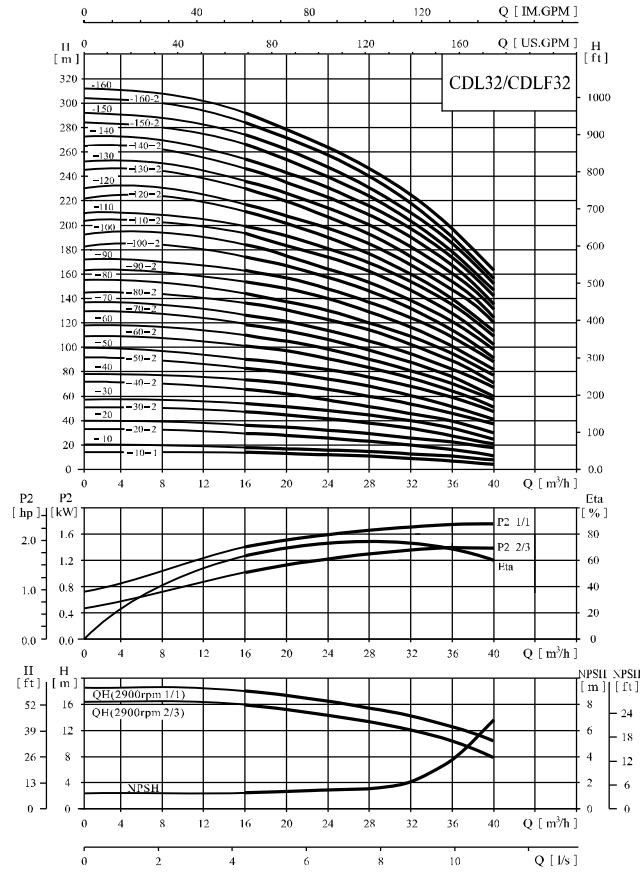
Model	Driving motor		Q (m³/h)	H (m)											
	(kW)	(hp)		10	12	14	16	18	20	22	24	26	28		
CDL20-1	1.1	1.5	13.5	13	12.5	12	11	10	9	8	7	6			
CDL20-2	2.2	3	27	26.5	26	25	24	23	22	20	18	15			
CDL20-3	4.0	5.5	40	39.5	39	38	37	35	33	30	27	24			
CDL20-4	5.5	7.5	54	53	52	51	49	47	44	41	37	33			
CDL20-5	5.5	7.5	67	66	64	62	60	58	55	50	45	40			
CDL20-6	7.5	10	81	79	77	75	73	70	66	61	55	49			
CDL20-7	7.5	10	95	93	91	89	86	82	77	71	65	58			
CDL20-8	11	15	109	107	105	102	99	94	89	82	75	67			
CDL20-10	11	15	136	134	131	128	124	118	111	103	95	85			
CDL20-12	15	20	164	162	158	154	149	142	133	124	114	102			
CDL20-14	15	20	192	189	185	180	174	166	156	145	133	119			
CDL20-17	18.5	25	234	230	225	219	212	202	190	177	162	145			

Size and weight

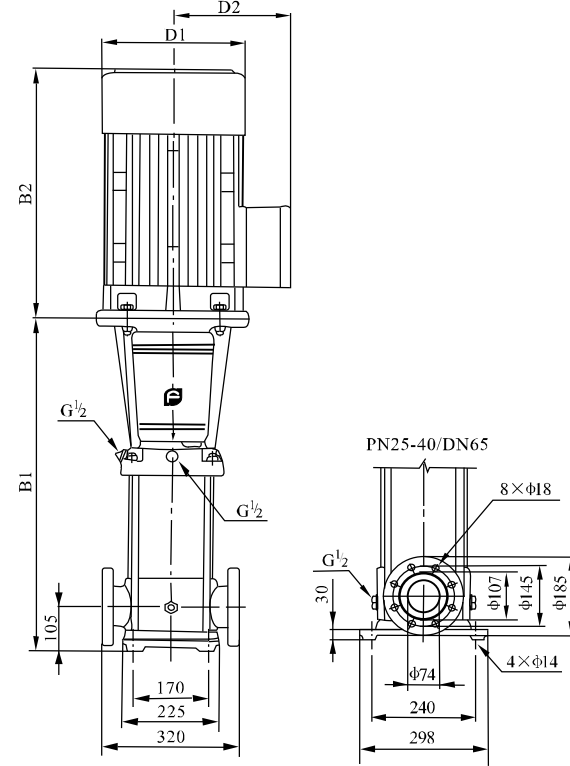
Model	Size(mm)					Weight (kg)
	B1	B2	B1+B2	D1	D2	
CDL20-1	387	245	632	170	142	33
CDL20-2	397	290	687	190	155	42
CDL20-3	452	355	807	230	188	58
CDL20-4	517	390	907	260	208	74
CDL20-5	562	390	952	260	208	76
CDL20-6	607	390	997	260	208	82
CDL20-7	652	390	1042	260	208	84
CDL20-8	785	500	1285	330	255	153
CDL20-10	875	500	1375	330	255	157
CDL20-12	965	500	1465	330	255	170
CDL20-14	1055	500	1555	330	255	172
CDL20-17	1190	550	1740	330	255	195

# CDL, CDLF32

## Performance curve ISO9906 Annex A 2900rpm



## Installation sketch



The overall dimensions of the single-phase motor and explosion-proof motor are a little different. Pls contact us for details.

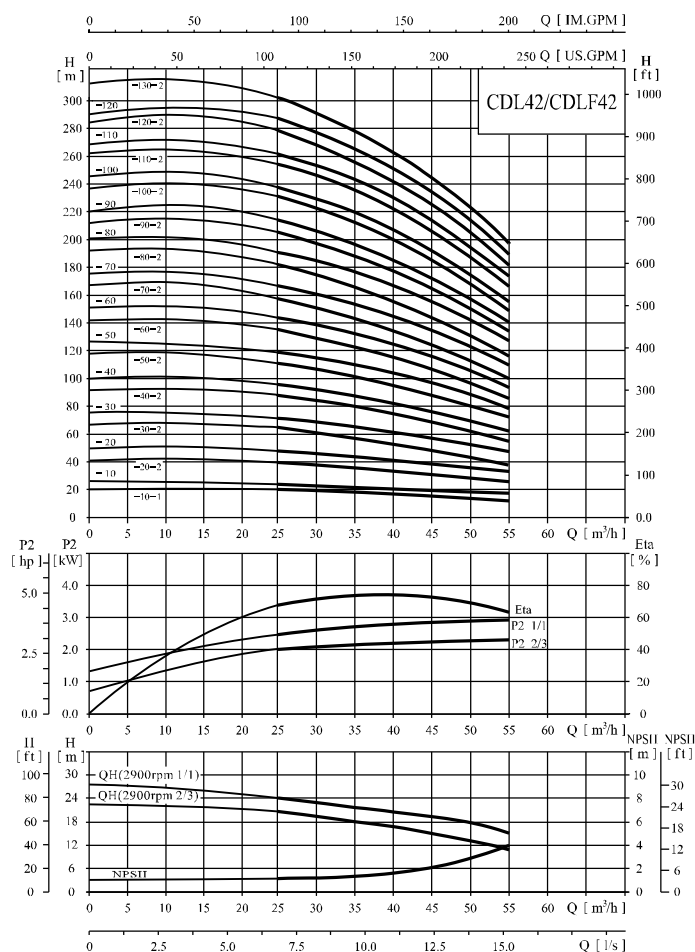
## Performance table

Model	Driving motor		Q (m³/h)	H (m)								
	(kW)	(hp)		16	20	24	28	32	36	40		
CDL32-10-1	1.5	2		14	13	12	11	9	7	4		
CDL32-10	2.2	3		18	17	15	14	13	11	8		
CDL32-20-2	3.0	4		29	28	26	23	20	16	11		
CDL32-20	4.0	5.5		36	34	32	29	27	23	18		
CDL32-30-2	5.5	7.5		47	44	41	38	33	28	21		
CDL32-30	5.5	7.5		54	51	48	44	40	35	27		
CDL32-40-2	7.5	10		65	62	58	53	46	40	30		
CDL32-40	7.5	10		72	69	65	59	53	47	37		
CDL32-50-2	11	15		83	79	74	68	60	52	41		
CDL32-50	11	15		90	86	81	74	67	59	47		
CDL32-60-2	11	15		101	97	90	83	74	65	51		
CDL32-60	11	15		108	104	97	90	81	72	57		
CDL32-70-2	15	20		119	114	107	98	88	78	60		
CDL32-70	15	20		126	121	113	105	95	85	67		
CDL32-80-2	15	20		136	131	123	114	102	90	71		
CDL32-80	15	20		144	138	130	120	109	97	77		
CDL32-90-2	18.5	25		154	148	140	129	117	102	82		
CDL32-90	18.5	25		162	156	147	136	124	109	88		
CDL32-100-2	18.5	25		175	166	157	146	131	115	91		
CDL32-100	18.5	25		182	173	164	152	138	122	98		
CDL32-110-2	22	30		193	184	173	164	146	128	102		
CDL32-110	22	30		200	191	180	168	153	135	109		
CDL32-120-2	22	30		211	201	189	178	160	140	113		
CDL32-120	22	30		218	208	196	184	167	147	120		
CDL32-130-2	30	40		230	218	206	193	174	153	124		
CDL32-130	30	40		237	225	213	200	181	160	131		
CDL32-140-2	30	40		247	235	222	210	189	165	135		
CDL32-140	30	40		255	242	229	216	196	172	142		
CDL32-150-2	30	40		266	253	239	224	203	178	145		
CDL32-150	30	40		274	260	246	231	210	185	152		
CDL32-160-2	30	40		284	270	255	240	218	190	156		
CDL32-160	30	40		292	277	262	246	225	197	163		

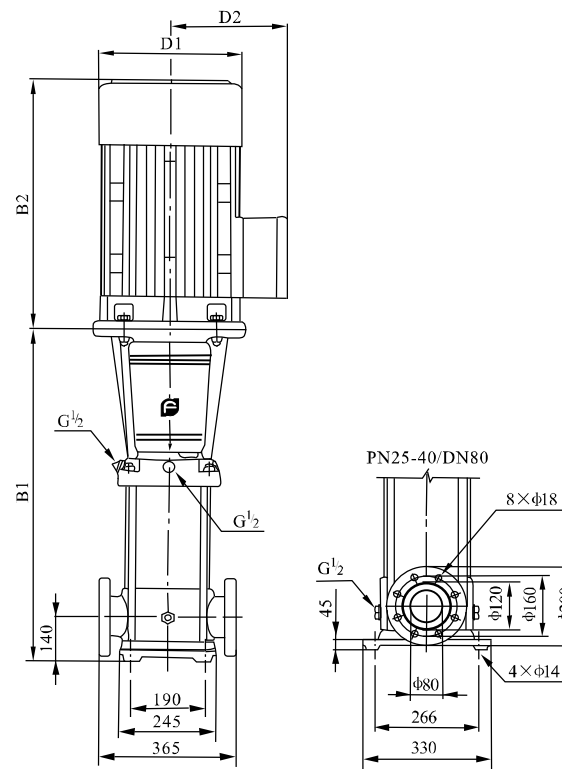
## Size and weight

Model	Size(mm)					Weight (kg)
	B1	B2	B1+B2	D1	D2	
CDL32-10-1 /CDL32-10	505	290	795	190	155	64/68
CDL32-20-2 /CDL32-20	575	345 /355	920 /930	197 /230	165 /180	77/85
CDL32-30-2 /CDL32-30	645	390	1035	260	208	100
CDL32-40-2 /CDL32-40	715	390	1105	260	208	109
CDL32-50-2 /CDL32-50	890	500	1390	330	255	181
CDL32-60-2 /CDL32-60	960	500	1460	330	255	185
CDL32-70-2 /CDL32-70	1030	500	1530	330	255	199
CDL32-80-2 /CDL32-80	1100	500	1600	330	255	203
CDL32-90-2 /CDL32-90	1170	550	1720	330	255	222
CDL32-100-2 /CDL32-100	1240	550	1790	330	255	227
CDL32-110-2 /CDL32-110	1310	575	1885	360	285	272
CDL32-120-2 /CDL32-120	1380	575	1955	360	285	276
CDL32-130-2 /CDL32-130	1450	650	2100	400	310	337
CDL32-140-2 /CDL32-140	1520	650	2170	400	310	341
CDL32-150-2 /CDL32-150	1590	650	2240	400	310	345
CDL32-160-2 /CDL32-160	1660	650	2310	400	310	350

Performance curve ISO9906 Annex A 2900rpm



Installation sketch



The overall dimensions of explosion-proof motor is a little different. Pls contact us for details.

Performance table

Model	Driving motor		Q (m³/h)	H																	
	(kW)	(hp)		25	30	35	40	42	45	50	55										
CDL42-10-1	3.0	4	20	19	18	17	16	15	13	11											
CDL42-10	4.0	5.5	24	23	22	21	20	19	18	16											
CDL42-20-2	5.5	7.5	40	38	36	33	32	30	27	23											
CDL42-20	7.5	10	48	46	44	42	41	39	35	31											
CDL42-30-2	11	15	63	61	58	54	52	50	44	38											
CDL42-30	11	15	71	69	66	63	61	58	53	47											
CDL42-40-2	15	20	87	84	80	75	73	69	62	54											
CDL42-40	15	20	95	92	88	84	81	78	71	62											
CDL42-50-2	18.5	25	111	107	102	96	93	88	80	69											
CDL42-50	18.5	25	119	115	110	105	101	97	88	78											
CDL42-60-2	22	30	135	130	124	117	113	108	97	85											
CDL42-60	22	30	143	138	132	125	122	116	106	93											
CDL42-70-2	30	40	158	152	146	138	134	127	115	100											
CDL42-70	30	40	166	161	154	146	142	135	124	109											
CDL42-80-2	30	40	182	175	168	159	154	146	133	116											
CDL42-80	30	40	190	184	176	167	162	154	141	124											
CDL42-90-2	30	40	205	198	190	180	174	166	150	132											
CDL42-90	37	50	214	207	198	188	183	174	159	140											
CDL42-100-2	37	50	230	221	212	200	194	185	168	147											
CDL42-100	37	50	238	230	220	209	203	193	177	155											
CDL42-110-2	45	60	255	246	236	223	217	206	188	165											
CDL42-110	45	60	263	255	244	232	225	214	196	173											
CDL42-120-2	45	60	280	270	259	245	238	226	206	181											
CDL42-120	45	60	289	280	268	255	247	236	216	190											
CDL42-130-2	45	60	305	294	282	267	259	247	225	198											

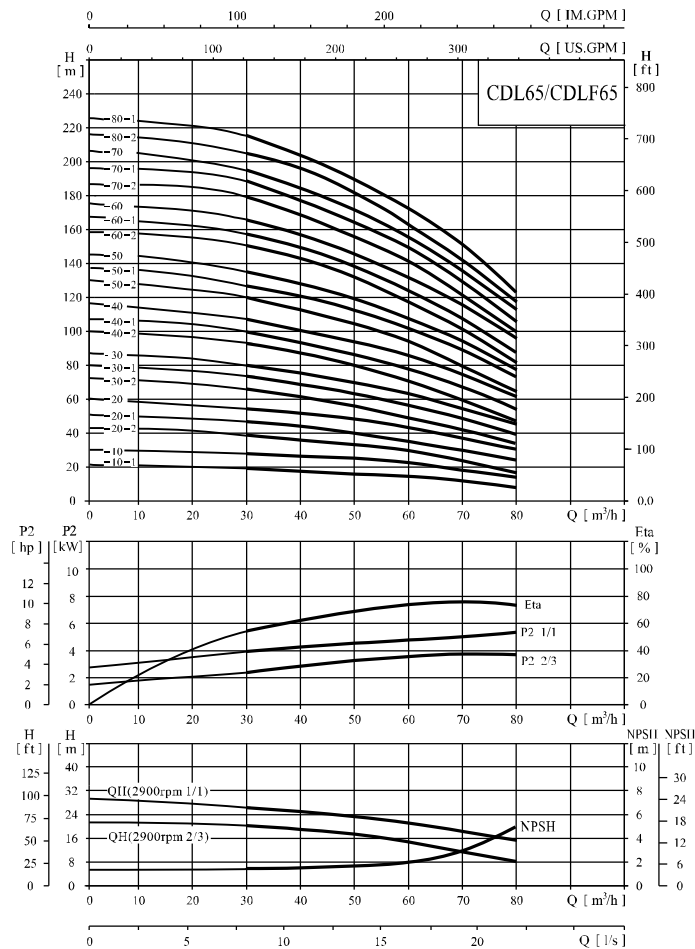
Size and weight

Model	Size(mm)					Weight (kg)
	B1	B2	B1+B2	D1	D2	
CDL42-10-1	561	345	906	197	165	83/90
CDL42-10		/355	/916	/230	/188	
CDL42-20-2	641	390	1031	260	208	105/110
CDL42-20						
CDL42-30-2	826	500	1326	330	255	183
CDL42-30						
CDL42-40-2	906	500	1406	330	255	197
CDL42-40						
CDL42-50-2	986	550	1536	330	255	221
CDL42-50						
CDL42-60-2	1066	575	1641	360	285	261
CDL42-60						
CDL42-70-2	1146	650	1796	400	310	320
CDL42-70						
CDL42-80-2	1226	650	1876	400	310	324
CDL42-80						
CDL42-90-2	1306	650	1956	400	310	328/352
CDL42-90						
CDL42-100-2	1386	650	2036	400	310	355
CDL42-100						
CDL42-110-2	1466	685	2151	450	345	426
CDL42-110						
CDL42-120-2	1546	685	2231	450	345	432
CDL42-120						
CDL42-130-2	1626	685	2311	450	345	438

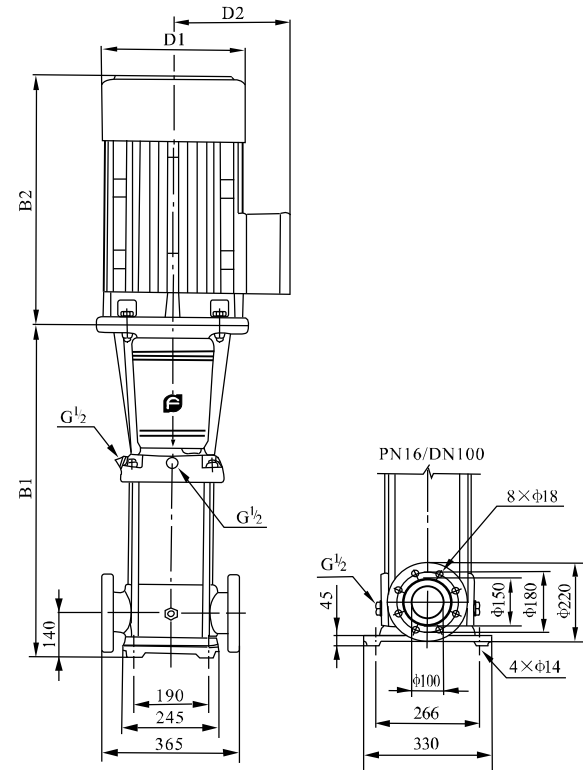


# CDL, CDLF65

## Performance curve ISO9906 Annex A 2900rpm



## Installation sketch



The overall dimensions of explosion-proof motor is a little different. Pls contact us for details.  
(For CDL65 series, PN25-40/DN100 standard flange is also available if required)

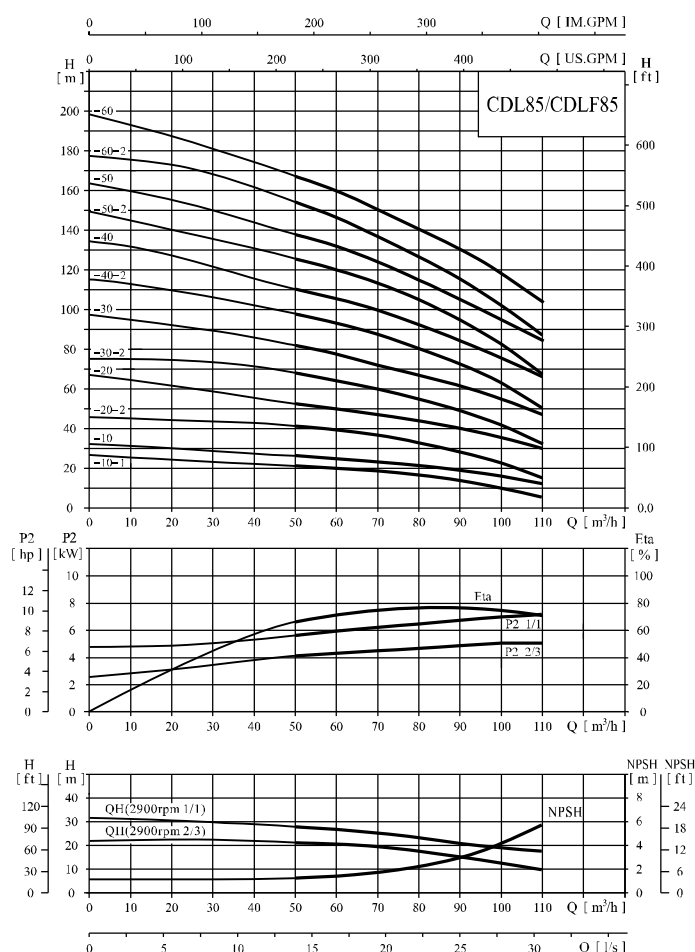
## Performance table

Model	Driving motor		Q (m³/h)	H (m)						
	(kW)	(hp)		30	40	50	60	65	70	80
CDL65-10-1	4.0	5.5	19	18	16	14	13	11	8	
CDL65-10	5.5	7.5	27	25	23	21	20	18	15	
CDL65-20-2	7.5	10	39	36	33	29	26	23	17	
CDL65-20-1	11	15	46	44	40	36	33	30	24	
CDL65-20	11	15	53	51	47	43	40	37	30	
CDL65-30-2	15	20	66	62	56	50	46	41	32	
CDL65-30-1	15	20	73	69	63	57	53	48	39	
CDL65-30	18.5	25	80	76	70	64	60	55	46	
CDL65-40-2	18.5	25	92	87	80	71	66	60	47	
CDL65-40-1	22	30	100	94	87	78	73	67	54	
CDL65-40	22	30	107	101	94	85	80	74	61	
CDL65-50-2	30	40	121	114	105	95	88	80	64	
CDL65-50-1	30	40	128	121	112	102	95	87	71	
CDL65-50	30	40	136	129	119	109	102	94	78	
CDL65-60-2	30	40	150	142	131	118	110	101	81	
CDL65-60-1	37	50	157	149	138	125	117	108	88	
CDL65-60	37	50	164	156	145	132	124	115	95	
CDL65-70-2	37	50	179	169	156	141	132	121	99	
CDL65-70-1	37	50	186	176	163	148	139	128	106	
CDL65-70	45	60	193	183	170	155	146	135	112	
CDL65-80-2	45	60	207	196	182	164	154	142	116	
CDL65-80-1	45	60	215	203	189	171	161	149	123	

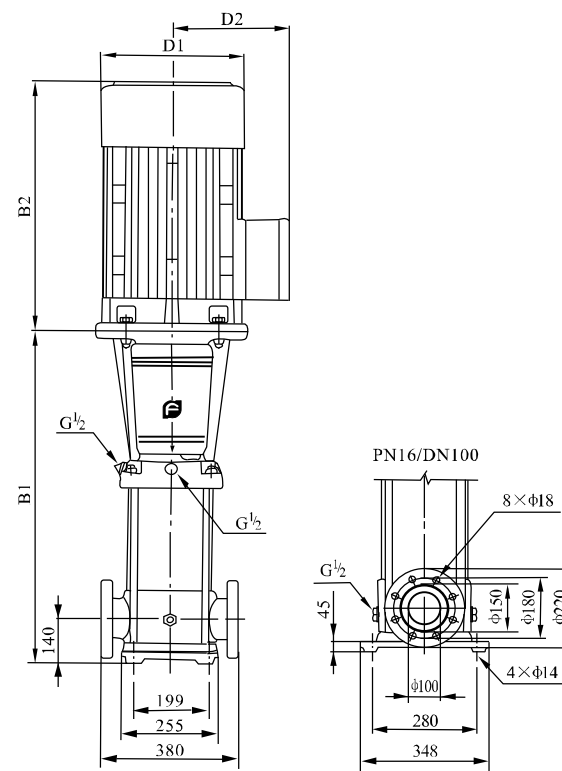
## Size and weight

Model	Size(mm)					Weight (kg)
	B1	B2	B1+B2	D1	D2	
CDL65-10-1	561	335	916	230	188	93
CDL65-10	561	390	951	260	208	105
CDL65-20-2	644	390	1034	260	208	110
CDL65-20-1	754	500	1254	330	255	182
CDL65-20	754	500	1254	330	255	182
CDL65-30-2	836	500	1336	330	255	196
CDL65-30-1	836	500	1336	330	255	197
CDL65-30	836	550	1386	330	255	221
CDL65-40-2	919	550	1469	330	255	225
CDL65-40-1	919	575	1494	360	285	258
CDL65-40	919	575	1494	360	285	258
CDL65-50-2	1001	650	1651	400	310	319
CDL65-50-1	1001	650	1651	400	310	319
CDL65-50	1001	650	1651	400	310	320
CDL65-60-2	1084	650	1734	400	310	325
CDL65-60-1	1084	650	1734	400	310	349
CDL65-60	1084	650	1734	400	310	349
CDL65-70-2	1166	650	1816	400	310	353
CDL65-70-1	1166	650	1816	400	310	353
CDL65-70	1166	685	1851	460	340	420
CDL65-80-2	1248	685	1933	460	340	424
CDL65-80-1	1248	685	1933	460	340	424

Performance curve ISO9906 Annex A 2900rpm



Installation sketch



The overall dimensions of explosion-proof motor is a little different. Pls contact us for details.  
(For CDL85 series, PN25-40/DN100 standard flange is also available if required)

Performance table

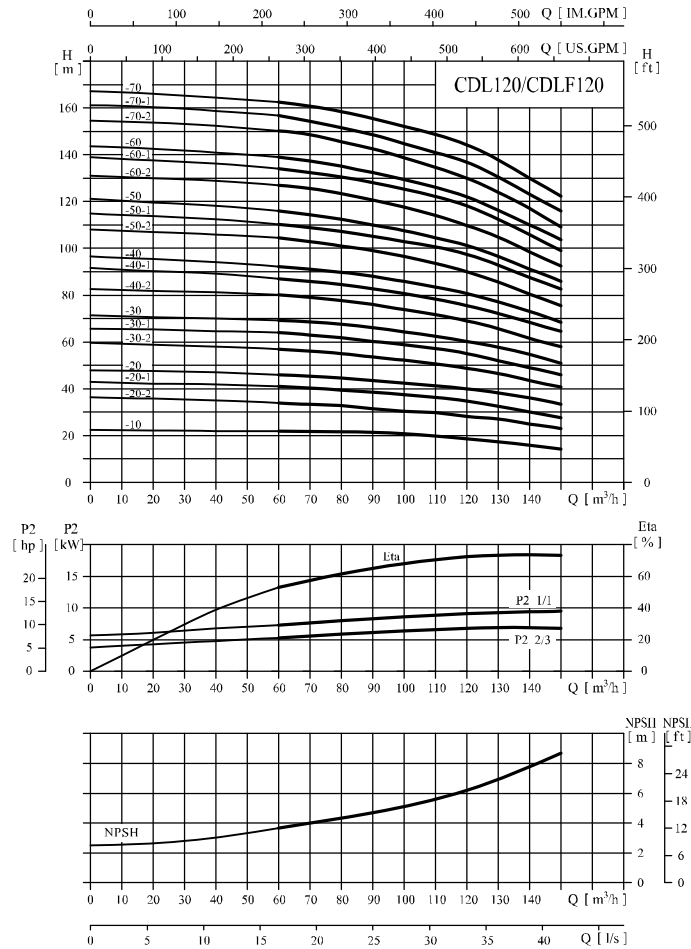
Model	Driving motor		Q (m³/h)	H (m)						
	(kW)	(hp)		50	60	70	80	85	90	100
CDL85-10-1	5.5	7.5	22	19	17	16	14	13	10	6
CDL85-10	7.5	10	25	24	22	21	20	19	16	12
CDL85-20-2	11	15	41	39	36	32	30	28	22	15
CDL85-20	15	20	53	50	47	44	41	40	36	30
CDL85-30-2	18.5	25	68	65	60	55	52	49	41	32
CDL85-30	22	30	81	77	72	67	64	62	55	48
CDL85-40-2	30	40	98	93	87	80	75	72	62	50
CDL85-40	30	40	110	105	100	92	86	84	76	66
CDL85-50-2	37	50	126	120	113	104	98	93	81	68
CDL85-50	37	50	139	131	124	115	110	106	94	83
CDL85-60-2	45	60	155	148	139	129	122	117	102	86
CDL85-60	45	60	168	160	150	141	134	130	117	103

Size and weight

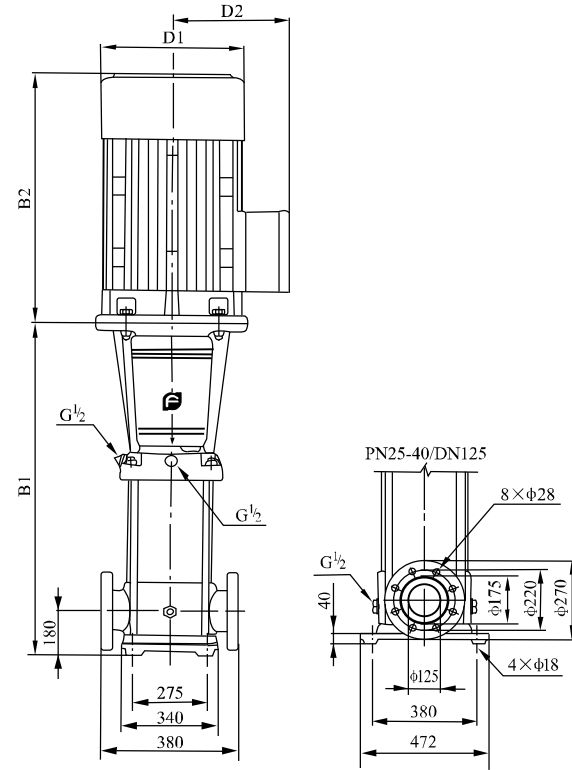
Model	Size(mm)					Weight (kg)
	B1	B2	B1+B2	D1	D2	
CDL85-10-1	571	390	961	260	208	105
CDL85-10	571	390	961	260	208	110
CDL85-20-2	773	500	1273	330	255	181
CDL85-20	773	500	1273	330	255	192
CDL85-30-2	865	550	1415	330	255	215
CDL85-30	865	575	1440	360	285	252
CDL85-40-2	957	650	1607	400	310	312
CDL85-40	957	650	1607	400	310	312
CDL85-50-2	1049	650	1699	400	310	336
CDL85-50	1049	650	1699	400	310	336
CDL85-60-2	1141	685	1826	460	340	407
CDL85-60	1141	685	1826	460	340	407

# CDL, CDLF120

## Performance curve ISO9906 Annex A 2950rpm



## Installation sketch



The overall dimensions of explosion-proof motor is a little different. Pls contact us for details.

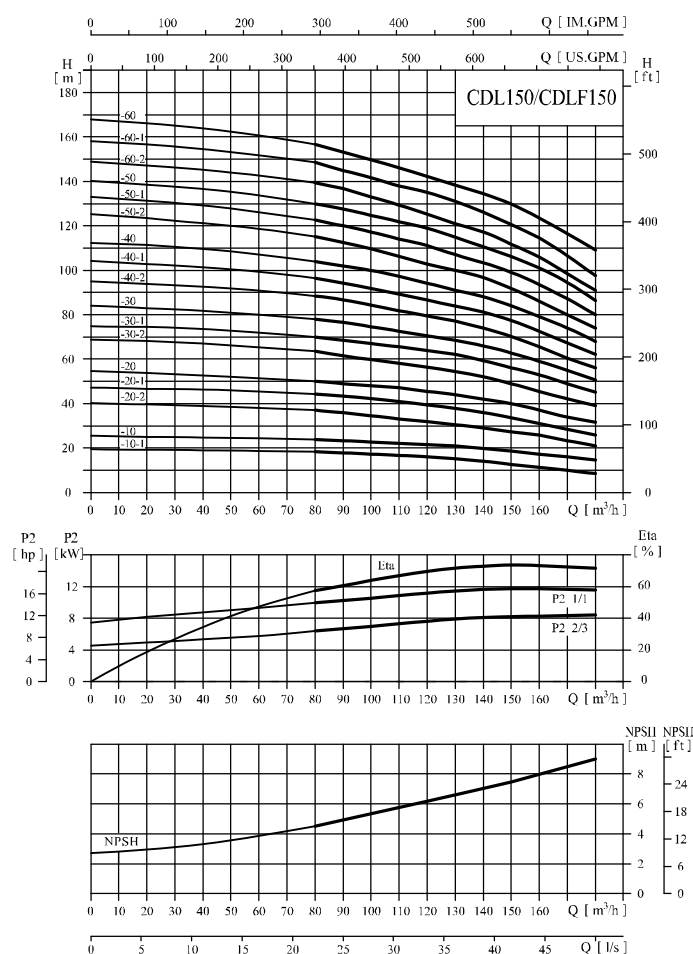
## Performance table

Model	Driving motor		Q (m³/h)	H (m)											
	(kW)	(hp)		60	70	80	90	100	110	120	130	140	150		
CDL120-10	11	15		22	21.8	21.6	21	20.5	19.5	18.5	17	16	15		
CDL120-20-2	15	20		34	33.6	33	31	30.2	30	28.5	27	25	24		
CDL120-20-1	18.5	25		41	40	39.5	38.5	37	36.5	34.5	32.5	30	27.5		
CDL120-20	22	30		46	45	44.5	43.5	42.4	41	40	38	36	33.5		
CDL120-30-2	30	40		57	56	55	53.5	52	51	49	46.5	43.5	41		
CDL120-30-1	30	40		64	63	62	60	58.5	57.5	55.5	52	49	46		
CDL120-30	30	40		69.5	68.5	67.5	66	64.4	62.5	61	57.5	54.5	51		
CDL120-40-2	37	50		80.5	79	78	76	73.5	72	69	66	61.5	58		
CDL120-40-1	37	50		87	86	84.5	82	80	78	76	72	68	64.5		
CDL120-40	45	60		92.5	91	90	88	85.5	83	81	77	73	68.5		
CDL120-50-2	45	60		104.5	103	101	99	96	93	90	85.5	80.5	75.5		
CDL120-50-1	45	60		110.5	109	107.5	105	102	100	97	92	86.5	83		
CDL120-50	55	75		115.5	114	113	110	107.5	104.5	101.5	96	91	86		
CDL120-60-2	55	75		128	125.5	123	121	117.3	113.5	110	104.5	98.5	92.5		
CDL120-60-1	55	75		134	132	130.5	127	124	121	118	111	105	100		
CDL120-60	75	100		139	137	135	132	128.8	126	123	116	110	104		
CDL120-70-2	75	100		151	148	145.5	143	138.6	134	130	123.5	116.5	109		
CDL120-70-1	75	100		156.5	154	152	148.5	144.5	141	137.5	130	123	116.5		
CDL120-70	75	100		162.5	160.5	158.5	155	151	148	145	137	129	123		

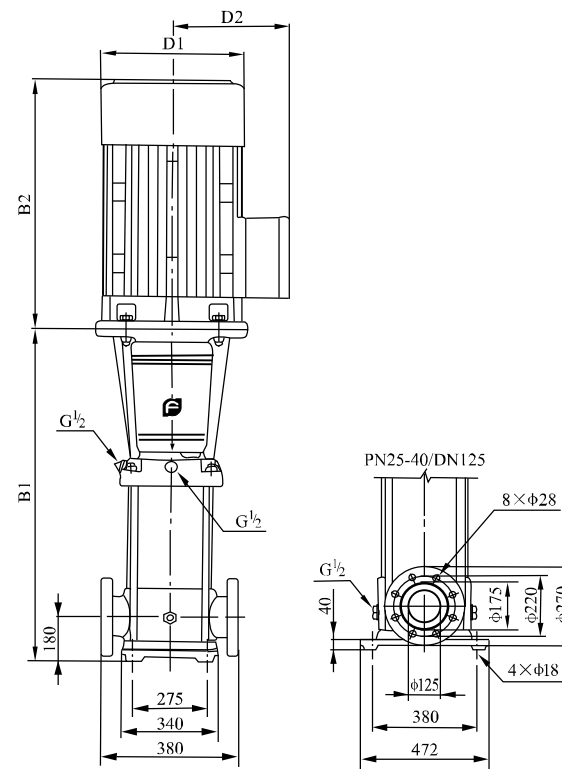
## Size and weight

Model	Size(mm)					Weight (kg)
	B1	B2	B1+B2	D1	D2	
CDL120-10	840	500	1340	330	255	230
CDL120-20-2	1000	500	1500	330	255	245
CDL120-20-1	1000	550	1550	330	255	250
CDL120-20	1000	575	1575	360	285	285
CDL120-30-2	1160	650	1810	400	310	360
CDL120-30-1	1160	650	1810	400	310	360
CDL120-30	1160	650	1810	400	310	360
CDL120-40-2	1320	650	1970	400	310	400
CDL120-40-1	1320	650	1970	400	310	400
CDL120-40	1320	685	2005	460	340	460
CDL120-50-2	1480	685	2165	460	340	470
CDL120-50-1	1480	685	2165	460	340	470
CDL120-50	1510	760	2270	540	370	575
CDL120-60-2	1670	760	2430	540	370	585
CDL120-60-1	1670	760	2430	540	370	585
CDL120-60	1670	845	2515	580	410	705
CDL120-70-2	1830	845	2675	580	410	715
CDL120-70-1	1830	845	2675	580	410	715
CDL120-70	1830	845	2675	580	410	715

Performance curve ISO9906 Annex A 2950rpm



Installation sketch



The overall dimensions of explosion-proof motor is a little different. Pls contact us for details.

Performance table

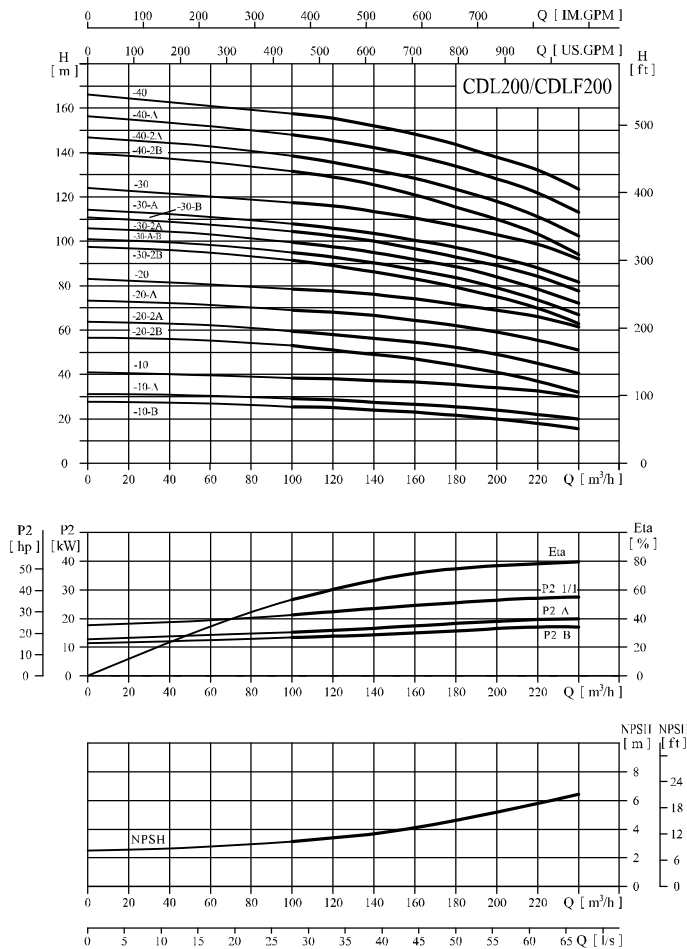
Model	Driving motor		Q (m³/h)	H (m)											
	(kW)	(hp)		80	90	100	110	120	130	140	150	160	170	180	
CDL150-10-1	11	15	18.3	17.8	17.3	17	16	15	14	12.5	11	10	8.5		
CDL150-10	15	20	24	23	22.5	22	21.5	20.5	20	18.5	17	16	15		
CDL150-20-2	18.5	25	37	35.5	34	33	32	31	29	27.5	26	23	21		
CDL150-20-1	22	30	44.3	43	42	40	39	38.5	37.5	35	33	30	27		
CDL150-20	30	40	50	49	48	47	45.5	44	42	40	37	34	32		
CDL150-30-2	30	40	63.5	61	59	57.5	56	54.5	53	49	45.5	42	39		
CDL150-30-1	37	50	70	68	67	65	63	62	60	56	53	49	45		
CDL150-30	37	50	78	76.5	75	73	70.5	68	66	63	59	55	50.5		
CDL150-40-2	45	60	89	87	84	81.5	79	77	74.5	70.5	65.5	60	56		
CDL150-40-1	45	60	96.5	94	91.5	89	86.5	84	81.5	77	72.5	67	62		
CDL150-40	55	75	104	102	100	97	95	91	88	84	79.5	74	68		
CDL150-50-2	55	75	115.5	112	109	106	102.5	100	97	92	86	79	73.5		
CDL150-50-1	75	100	122.5	119.5	117	113.5	111.5	107.5	104.5	99	93.5	87	80		
CDL150-50	75	100	130	127.5	125	121	119	115	111.5	106.5	101	94.5	86.5		
CDL150-60-2	75	100	140	137	133	130	126	121	118	112	106	98	91		
CDL150-60-1	75	100	148.5	145	141.7	137.5	135	131	127	120.5	114.5	106.5	97.5		
CDL150-60	75	100	157	153	149	145	142	139.5	137	130	123.5	116	109		

Size and weight

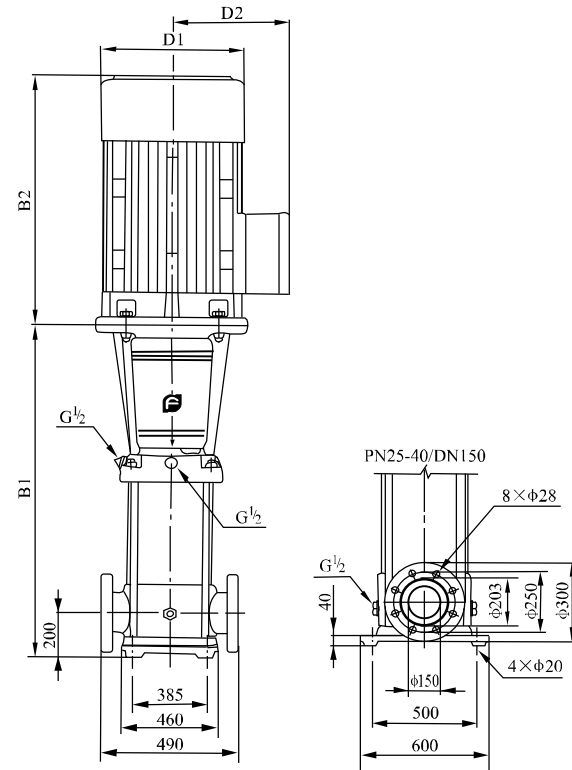
Model	Size(mm)					Weight (kg)
	B1	B2	B1+B2	D1	D2	
CDL150-10-1	840	500	1340	330	255	230
CDL150-10	840	500	1340	330	255	235
CDL150-20-2	1000	550	1550	330	255	250
CDL150-20-1	1000	575	1575	360	285	295
CDL150-20	1000	650	1650	400	310	350
CDL150-30-2	1160	650	1810	400	310	360
CDL150-30-1	1160	650	1810	400	310	360
CDL150-30	1160	650	1810	400	310	385
CDL150-40-2	1320	685	2005	460	340	460
CDL150-40-1	1320	685	2005	460	340	460
CDL150-40	1350	760	2110	540	370	560
CDL150-50-2	1510	760	2270	540	370	570
CDL150-50-1	1510	845	2355	580	410	690
CDL150-50	1510	845	2355	580	410	690
CDL150-60-2	1670	845	2515	580	410	700
CDL150-60-1	1670	845	2515	580	410	700
CDL150-60	1670	845	2515	580	410	700

# CDL, CDLF200

## Performance curve ISO9906 Annex A 2950rpm



## Installation sketch



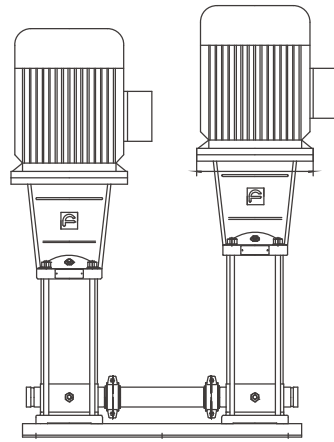
The overall dimensions of explosion-proof motor is a little different. Pls contact us for details.

## Performance table

Model	Driving motor		Q (m³/h)	H (m)												
	(kW)	(hp)		100	120	140	160	180	200	220	240					
CDL200-10-B	18.5	25	25.5	25	24	23	21.5	20	18	15.5						
CDL200-10-A	22	30	29	28.5	27.5	26.5	25.5	24	22	20						
CDL200-10	30	40	38.5	38	37.5	36.5	35	34	32.5	30						
CDL200-20-2B	37	50	53	51	49	47	44	41	37	32						
CDL200-20-2A	45	60	59.5	58	56	54	52.5	49	44.5	40.5						
CDL200-20-A	55	75	69	68	66	64	62	59	55.5	51						
CDL200-20	55	75	78.5	77.5	76	74	71.5	69	66	61.5						
CDL200-30-2B	75	100	91.5	89	86.5	83.5	79	75	70	63						
CDL200-30-A-B	75	100	95	93	90	87	83.5	79	73.5	67						
CDL200-30-2A	75	100	99.5	97.5	94.5	91.5	89	84	78.5	72						
CDL200-30-B	75	100	104.5	102.5	100	97	93	89	84.5	77.5						
CDL200-30-A	75	100	108	106	103.5	100.5	97.5	93	88	81.5						
CDL200-30	90	120	117.5	116	113.5	110.5	107	103	99	92						
CDL200-40-2B	90	120	131.5	129	125.5	121	115.5	110	103.5	94						
CDL200-40-2A	110	150	138.5	136	132	128	124	118	111	102.5						
CDL200-40-A	110	150	148	145.5	142.5	138	134	128	122	113						
CDL200-40	110	150	157.5	155.5	152.5	148	143.5	138	132.5	123.5						

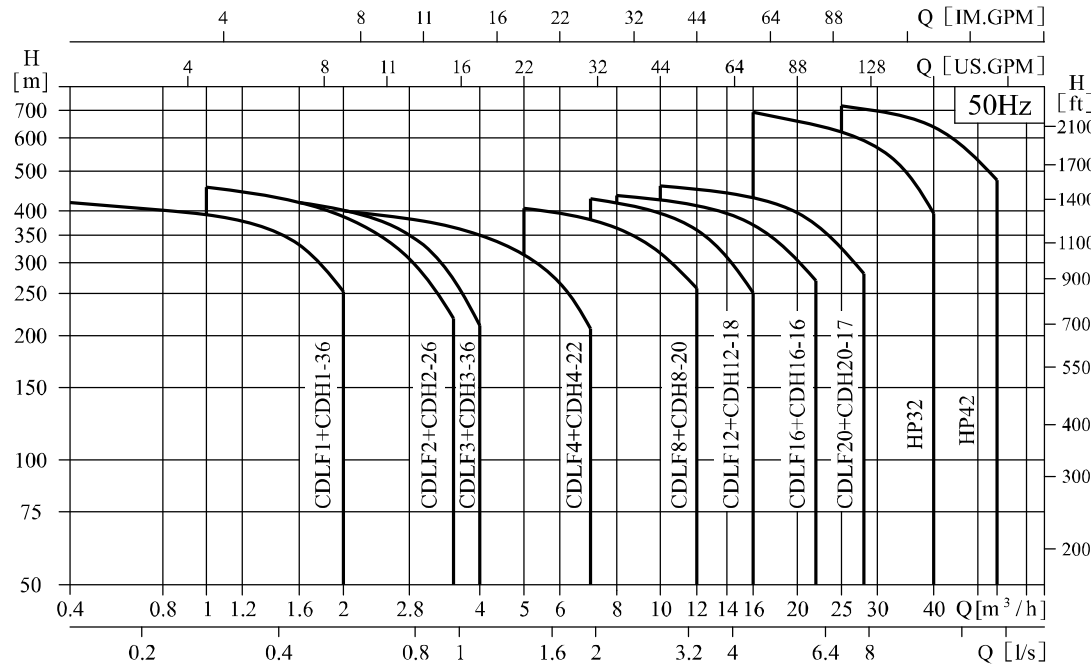
## Size and weight

Model	Size(mm)					Weight (kg)
	B1	B2	B1+B2	D1	D2	
CDL200-10-B	907	550	1457	330	255	311
CDL200-10-A	907	575	1482	360	285	347
CDL200-10	907	650	1557	400	310	403
CDL200-20-2B	1101	650	1751	400	310	447
CDL200-20-2A	1101	685	1786	460	340	504
CDL200-20-A	1131	760	1891	540	370	595
CDL200-20	1131	760	1891	540	370	595
CDL200-30-2B	1325	845	2170	580	410	748
CDL200-30-A-B	1325	845	2170	580	410	748
CDL200-30-2A	1325	845	2170	580	410	748
CDL200-30-B	1325	845	2170	580	410	748
CDL200-30-A	1325	845	2170	580	410	748
CDL200-30	1325	895	2220	580	410	817
CDL200-40-2B	1519	895	2414	580	410	830
CDL200-40-2A	1519	1140	2659	645	550	1180
CDL200-40-A	1519	1140	2659	645	550	1180
CDL200-40	1519	1140	2659	645	550	1180



CDLF+CDH,HP High pressure pump

**Performance scope**



**Product range**

Remark	CDLF1+ CDH1-36	CDLF2+ CDH2-26	CDLF3+ CDH3-36	CDLF4+ CDH4-22	CDLF8+ CDH8-20	CDLF12+ CDH12-18	CDLF16+ CDH16-16	CDLF20+ CDH20-17	HP32	HP42
Nominal flow[m³/h]	1	2	3	4	8	12	16	20	32	42
Nominal flow[l/s]	0.28	0.56	0.83	1.1	2.2	3.3	4.4	5.6	8.9	11.7
Flow range [m³/h]	0.4-2	1-3.5	1.2-4	1.5-7	5-12	7-16	8-22	10-28	16-40	25-55
Flow range [l/s]	0.11-0.56	0.28-0.97	0.33-1.1	0.42-1.9	1.4-3.3	1.9-4.4	2.2-6.1	2.8-7.8	4.4-11.1	6.9-15.3
Max. pressure[bar]	42	46	44	42	42	44	44	46	70	72
Power[kW]	2.57-4.4	3.37-6	3.37-6	4.37-8	8.25-15	12.5-22	17.2-30	19.6-37	37-74	55-110
Temp. [°C]	-15~+120									
Max. efficiency [%]	42	44	52	56	61	62	64	69	73	75
Type										
Vertical	●	●	●	●	●	●	●	●		
Horizontal									●	●
Pipelines										
PJE coupling	●	●	●	●	●	●	●	●	●	●
System										
Two pumps in serial	●	●	●	●	●	●	●	●		
Single pump or two pumps in serial									●	●

Remark: Motor power is the total of two pumps in serial.

**Working conditions**

- Thin, clean, non-flammable and non-explosive liquid containing no solid granules and fibers.
- Liquid temperature:  
Normal temperature type: -15°C~+70°C  
Hot water type: -15°C~+120°C
- Ambient temperature: up to +40°C
- Altitude: up to 1000m

**Applications**

- Water treatment: Ultra-filter system
- R/O system
- Booster system
- High pressure flushing system
- Water supply
- Sea water desalting R/O system (VMHP)

**Connection**

- Inlet & outlet: PJE connection

**Motor**

- TEFC motor
- Protection class: IP55
- Insulation class: F
- Voltage: 50Hz, 3 × 380-415V  
3 × 220-240/380-415V  
3 × 200-220/346-380V  
1 × 220-230/240V

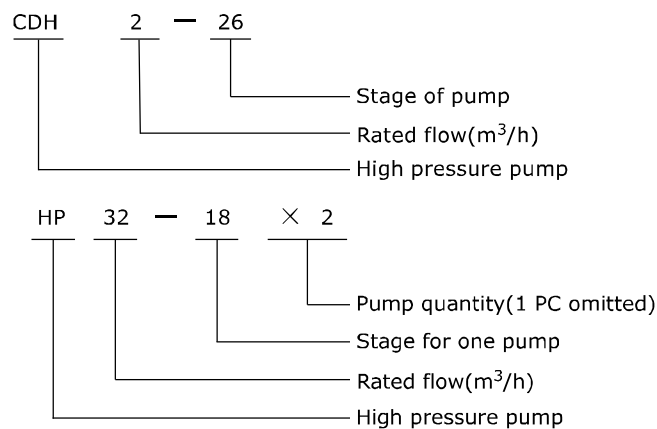
**Performance curve**

Following conditions are suitable for the performance curves shown below:

1. All curves are based on the measured values of 50Hz: constant motor speed 2900rpm or 2950rpm
2. Curve tolerance in conformity with ISO9906 Annex A.
3. Measurement is done with 20°C air-free water, kinematic viscosity of 1mm²/sec.
4. The operation of pump shall refer to the performance region indicated by the thickened curve to prevent overheating due to too small flow rate or overload of motor due to too large flow rate.

## CDLF+CDH,HP

### Definition of model



### Features

- High pressure
- Y2 series standard motor
- Simple structure, reliable, high efficient, light and aesthetic
- Cartridge mechanical seal, easy for service.

### Pump I. CDH

- Two pumps (CDLF & CDH) in serial produce 48 bar high pressure.
- CDLF pump supplies water, CDH is specially designed high pressure pump. The catalogue only gives technical information.
- CDH pump is non-priming vertical multistage centrifugal pump installed standard motor. Motor is coupled with pump shaft. Staybolts fix cylinder, wetting parts between pump head and inlet & outlet chamber. Inlet & outlet chamber and pump base are in the same line. Rotating direction is the reverse direction of water supply pump, chambers are reverse. The pumped liquid flowed reversely. The cylinder and mechanical seal only bear the outlet pressure of water supply pump, increased the reliability.

### Pump II HP,VMHP

- Two pumps assembled to pump sets in serial or only one pump, pump is coupled with standard motor by rigid coupling.
- Pump is installed horizontally.
- Impellers are installed back to back, so as to balance the big trust force of the pump.
- For the wet parts, for HP model, it is SS304 or SS316.

### Max. working pressure

- CDH1,2,3,4,8,12,16,20:50bar
- HP:75bar
- HP32-17~HP32-19、HP32-10×2: 40bar
- HP32-11×2~HP32-16×2: 63bar
- HP32-17×2~HP32-19×2
- HP42-14、HP42-15、HP42-8×2: 40bar
- HP42-9×2~HP42-12×2: 63bar
- HP42-13×2~HP42-15×2

### Minimum inlet pressure NPSH

- CDH:CDH1,2,3,4,8,12,16,20:0.5bar
- CDLF,HP:

In case that the pressure in pump is lower than the steam pressure used to convey liquid, the cavitations will occur. To avoid cavitations, a minimum pressure at the inlet side of the pump shall be guaranteed.

The maximum suction stroke can be calculated with following formula:

$$H = P_b \times 10.2 - NPSH - H_f - H_v - H_s$$

$P_b$  = atmosphere pressure [bar]

(can be set as 1 bar)

In a closed system,  $P_b$  means system pressure [bar]

NPSH = Net positive suction head [m]

(It can be read out from the point of possible max. Flow rate shown on NPSH curve)

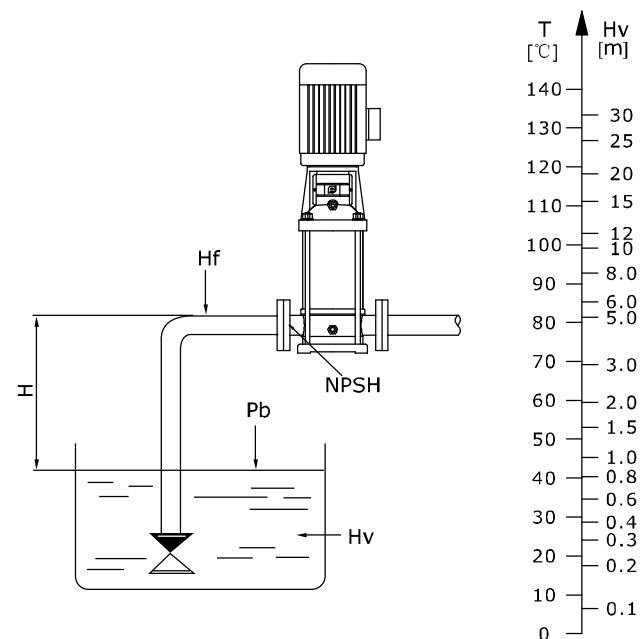
$H_f$  = Pipeline loss at the inlet [m]

$H_v$  = Steam pressure [m]

$H_s$  = Safety margin = Minimum 0.5m delivery head

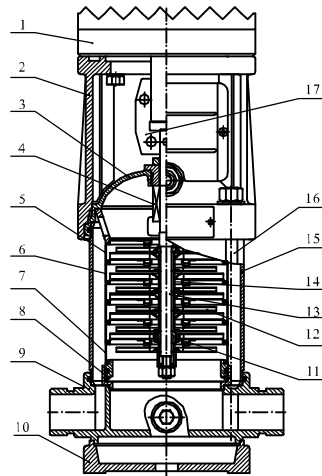
If the calculated result H is positive, the pump may run under the max. Suction stroke H.

In case the calculated result H is negative, a delivery head of min. Inlet pressure is necessary.





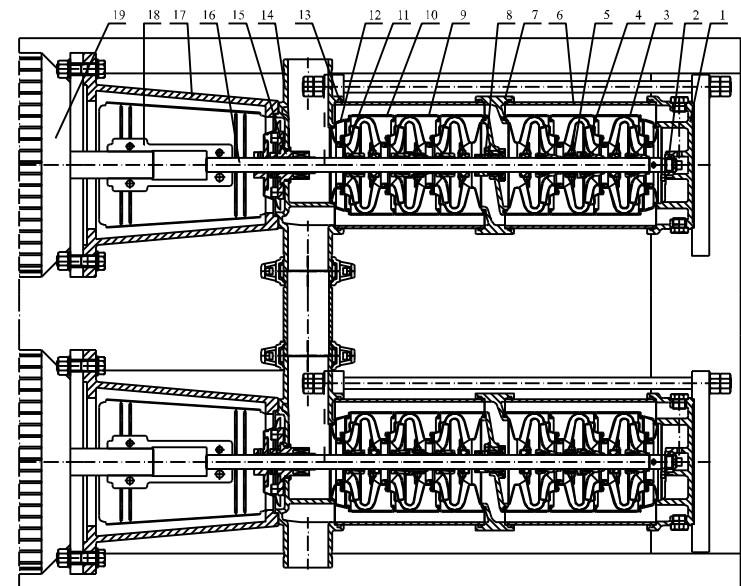
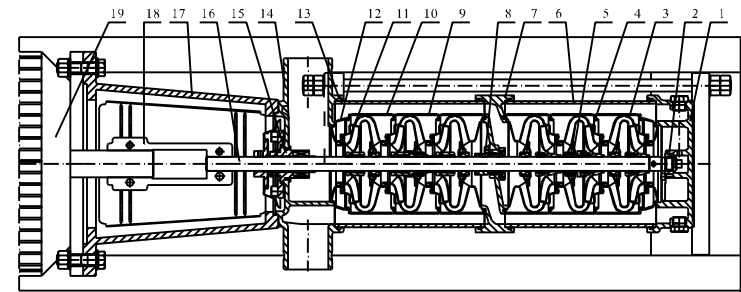
**Sectional drawing  
CDH1,2,3,4**



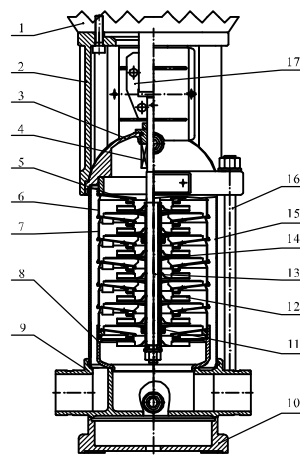
**Material CDH1,2,3,4**

NO.	Name	Material	AISI/ASTM
1	Motor		
2	Pump head	Cast iron	ASTM80-55-06
3	Lining		
4	Mechanical seal		
5	Top diffuser	Stainless steel	AISI304
6	Diffuser	Stainless steel	AISI304
7	Support diffuser	Stainless steel	AISI304
8	Inducer	Stainless steel	AISI304
9	Inlet and outlet chamber	Stainless steel	AISI304
10	Base plate	Cast iron	
11	Bearing	Tungsten carbide	
12	Impeller	Stainless steel	AISI304
13	Shaft	Stainless steel	AISI304 AISI316L
14	Impeller sleeve	Stainless steel	AISI304
15	Cylinder	Stainless steel	AISI304
16	Staybolt	Stainless steel	
17	Coupling	Carben steel	

**Sectional drawing**



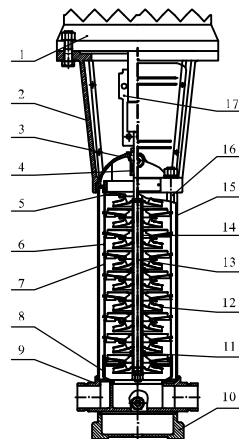
**Sectional drawing  
CDH8,12,16,20**



CDH8

**Material CDH8,12,16,20**

NO.	Name	Material	AISI/ASTM
1	Motor		
2	Pump head	Cast iron	ASTM80-55-06
3	Lining		
4	Mechanical seal		
5	Top diffuser	Stainless steel	AISI304
6	Diffuser	Stainless steel	AISI304
7	Support diffuser	Stainless steel	AISI304
8	Inducer	Stainless steel	AISI304
9	Inlet and outlet chamber	Stainless steel	AISI304
10	Base plate	Cast iron	
11	Bearing	Tungsten carbide	
12	Impeller	Stainless steel	AISI304
13	Shaft	Stainless steel	AISI304 AISI316L
14	Impeller sleeve	Stainless steel	AISI304
15	Cylinder	Stainless steel	AISI304
16	Staybolt	Stainless steel	
17	Coupling	Carben steel	

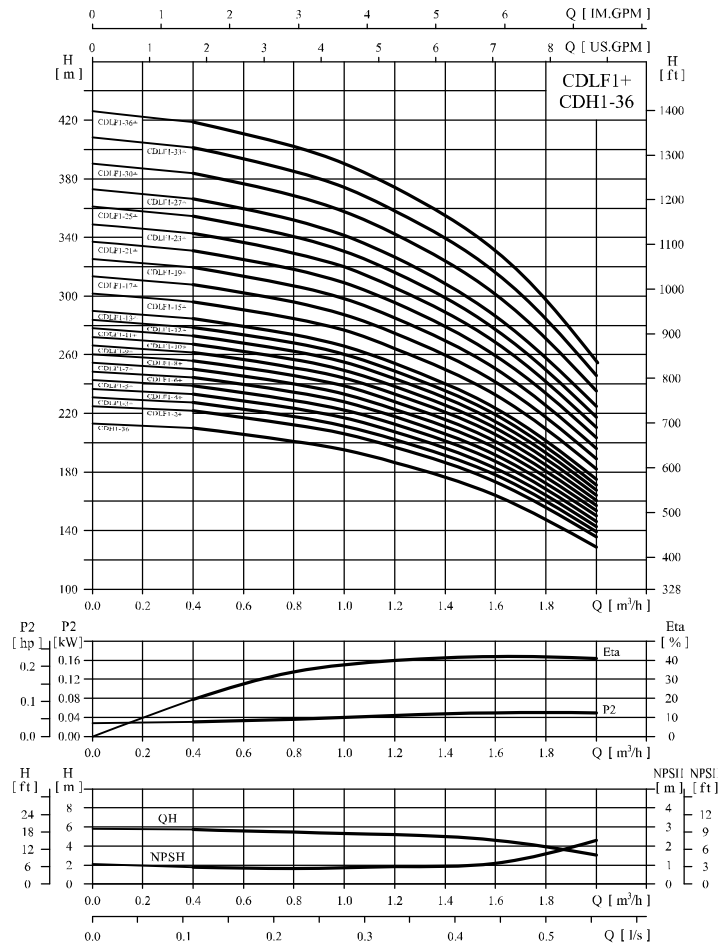


CDH12,16,20

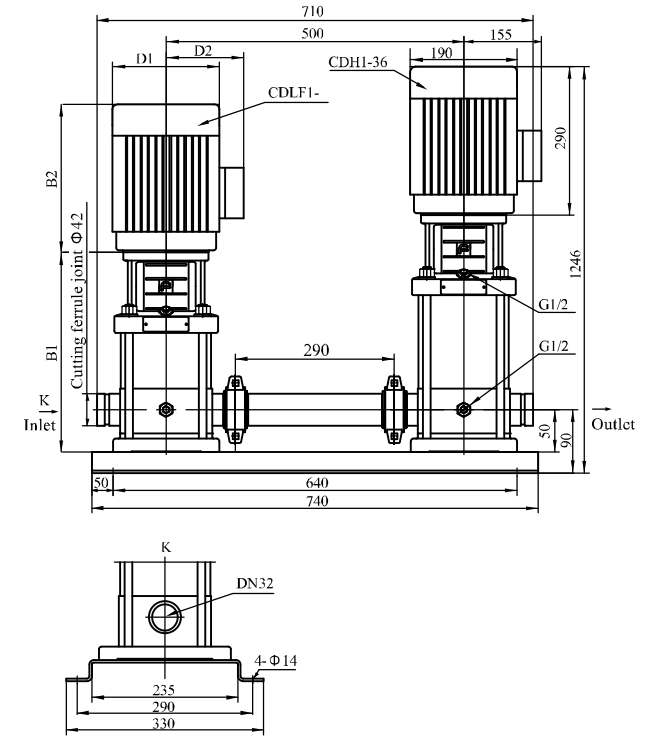
- 1.Base
- 2.Bottom bearing
- 3.Chamber
- 4.Impeller
- 5.Intermediate bearing
- 6.Outer sleeve
- 7.Exchange chamber
- 8.Exchange chamber bearing
- 9.Support reverse chamber
- 10.Reverse chamber
- 11.Reverse impeller
- 12.Inducer
- 13.O ring
- 14.Inlet and outlet chamber
- 15.Mechanical seal
- 16.Pump shaft
- 17.Bracket
- 18.Coupling
- 19.Motor

# CDLF1+CDH1-36

## Performance curve ISO9906 Annex A 2900rpm



## Installation sketch



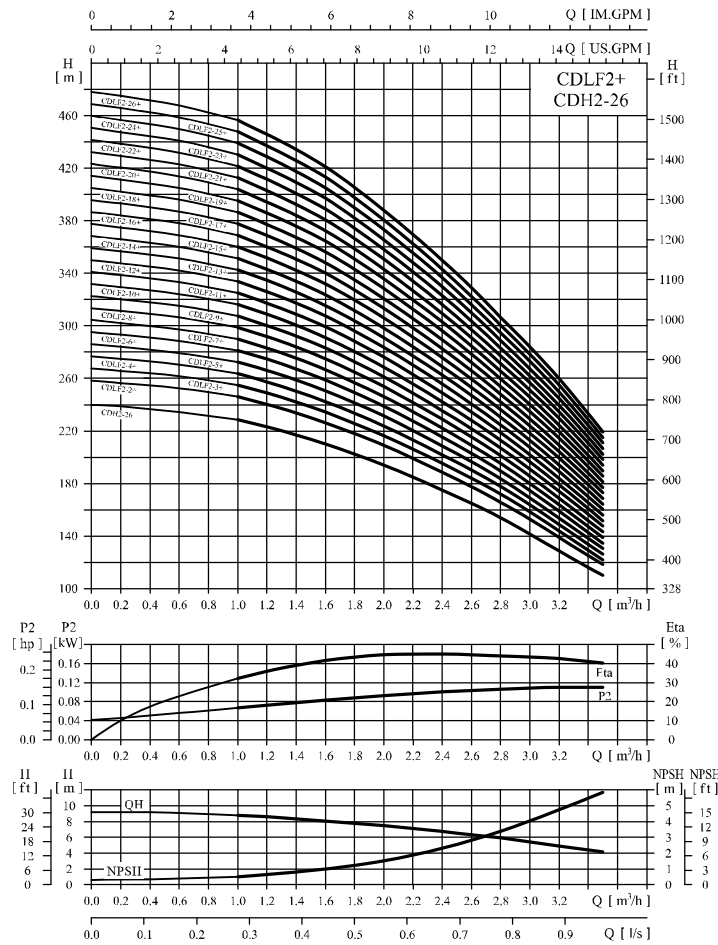
## Performance table

Model	Driving motor (kW)	Q (m³/h)	H (m)								
			0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0
CDLF1-2+CDH1-36	0.37+2.2		221	216.5	211	205.5	197	186.5	175	157.5	136
CDLF1-3+CDH1-36	0.37+2.2		227	222	216.5	211	202.5	192	180	162	139
CDLF1-4+CDH1-36	0.37+2.2		232	227.5	222	216.5	207.5	197	184	166	143
CDLF1-5+CDH1-36	0.37+2.2		238	233.6	228	222	213	202	189	170	147
CDLF1-6+CDH1-36	0.37+2.2		244	239.5	234	227.5	219	207	193	174	150
CDLF1-7+CDH1-36	0.37+2.2		250	245	239.5	233	224	212	198	178	154
CDLF1-8+CDH1-36	0.55+2.2		256	251	245	239	229	217	203	182	157
CDLF1-9+CDH1-36	0.55+2.2		262	257	251	245	235	222	208	187	160
CDLF1-10+CDH1-36	0.55+2.2		268	263	257	251	240	227	213	191	163
CDLF1-11+CDH1-36	0.55+2.2		274	269	262	255	245	232	217	195	167
CDLF1-12+CDH1-36	0.75+2.2		280	275	268	261	250	237	222	199	171
CDLF1-13+CDH1-36	0.75+2.2		286	281	274	267	255	242	227	203	174
CDLF1-15+CDH1-36	0.75+2.2		297	292	285	278	265	252	236	211	182
CDLF1-17+CDH1-36	1.1+2.2		309	303	296	289	275	262	245	219	189
CDLF1-19+CDH1-36	1.1+2.2		321	314	307	300	285	272	254	227	196
CDLF1-21+CDH1-36	1.1+2.2		332	326	319	311	296	282	263	235	202
CDLF1-23+CDH1-36	1.1+2.2		345	337	330	322	307	292	272	244	209
CDLF1-25+CDH1-36	1.5+2.2		357	349	342	333	317	302	281	252	216
CDLF1-27+CDH1-36	1.5+2.2		369	361	354	344	327	312	290	260	222
CDLF1-30+CDH1-36	1.5+2.2		386	379	370	360	343	326	304	272	233
CDLF1-33+CDH1-36	2.2+2.2		404	396	387	377	359	341	319	285	245
CDLF1-36+CDH1-36	2.2+2.2		422	414	404	394	376	357	334	299	257

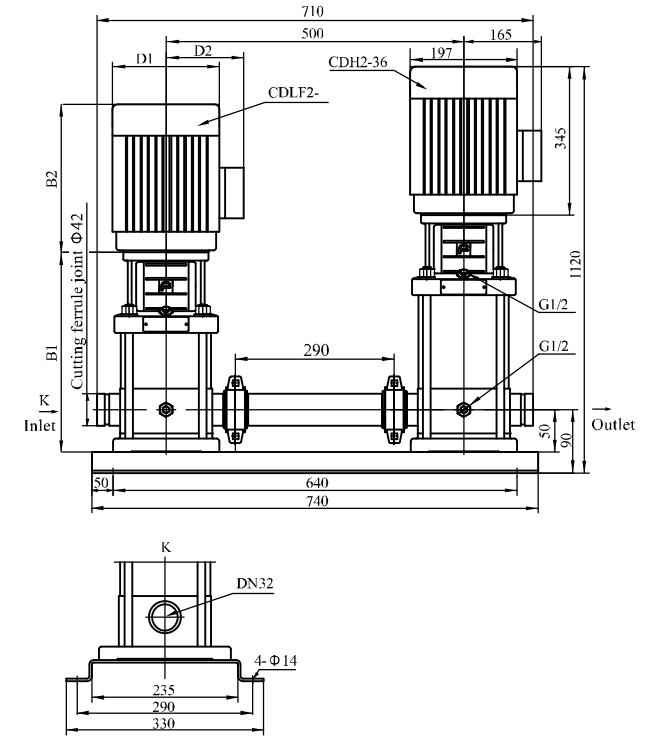
## Size and weight

Model	Size(mm)					Weight (kg)
	B1	B2	B1+B2	D1	D2	
CDLF1-2+CDH1-36	233	225	458	148	117	81
CDLF1-3+CDH1-36	251	225	476	148	117	81
CDLF1-4+CDH1-36	269	225	494	148	117	81
CDLF1-5+CDH1-36	287	225	512	148	117	81
CDLF1-6+CDH1-36	305	225	530	148	117	81
CDLF1-7+CDH1-36	323	225	548	148	117	81
CDLF1-8+CDH1-36	341	225	566	148	117	83
CDLF1-9+CDH1-36	359	225	584	148	117	83
CDLF1-10+CDH1-36	377	225	602	148	117	83
CDLF1-11+CDH1-36	395	225	620	148	117	83
CDLF1-12+CDH1-36	423	245	668	170	142	86
CDLF1-13+CDH1-36	441	245	686	170	142	86
CDLF1-15+CDH1-36	477	245	722	170	142	86
CDLF1-17+CDH1-36	513	245	758	170	142	89
CDLF1-19+CDH1-36	549	245	794	170	142	89
CDLF1-21+CDH1-36	585	245	830	170	142	91
CDLF1-23+CDH1-36	621	245	866	170	142	94
CDLF1-25+CDH1-36	667	290	957	190	155	101
CDLF1-27+CDH1-36	703	290	993	190	155	101
CDLF1-30+CDH1-36	757	290	1047	190	155	101
CDLF1-33+CDH1-36	811	290	1101	190	155	106
CDLF1-36+CDH1-36	865	290	1155	190	155	106

Performance curve ISO9906 Annex A 2900rpm



Installation sketch



Performance table

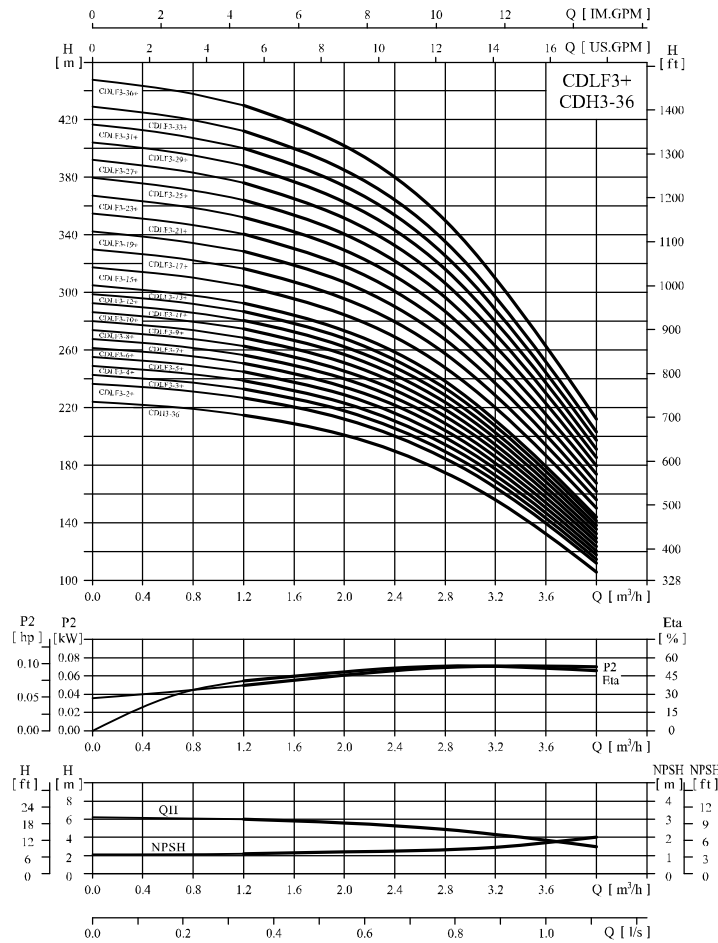
Model	Driving motor (kW)	Q (m³/h)	H (m)							
			1.0	1.2	1.6	2.0	2.4	2.8	3.2	3.5
CDLF2-2+CDH2-26	0.37+3.0		245	238	224	207	186	163	136	116
CDLF2-3+CDH2-26	0.37+3.0		254	247	232	214	193	169	141	120
CDLF2-4+CDH2-26	0.55+3.0		263	256	241	222	199	175	146	124
CDLF2-5+CDH2-26	0.55+3.0		272	264	248	229	206	181	150	128
CDLF2-6+CDH2-26	0.75+3.0		280	273	258	237	213	187	156	132
CDLF2-7+CDH2-26	0.75+3.0		290	282	265	244	220	192	161	136
CDLF2-9+CDH2-26	1.1+3.0		307	299	281	259	234	205	171	145
CDLF2-11+CDH2-26	1.1+3.0		325	316	297	274	246	215	180	152
CDLF2-13+CDH2-26	1.5+3.0		343	335	314	290	262	229	191	160
CDLF2-15+CDH2-26	1.5+3.0		361	351	331	304	273	241	199	168
CDLF2-18+CDH2-26	2.2+3.0		388	378	356	328	294	259	217	184
CDLF2-22+CDH2-26	2.2+3.0		424	413	388	357	321	281	236	198
CDLF2-26+CDH2-26	3.0+3.0		459	449	422	390	352	309	256	218

Size and weight

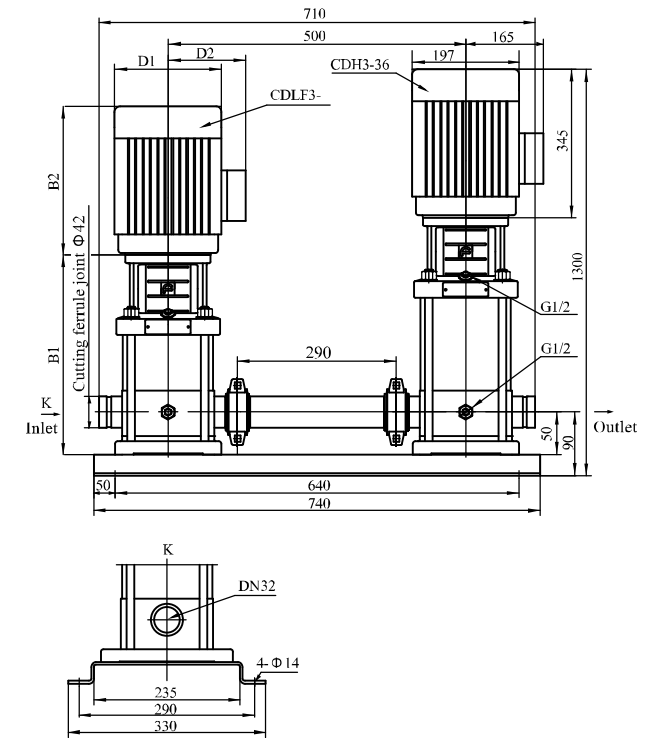
Model	Size(mm)					Weight (kg)
	B1	B2	B1+B2	D1	D2	
CDLF2-2+CDH2-26	233	225	458	148	117	86
CDLF2-3+CDH2-26	251	225	476	148	117	86
CDLF2-4+CDH2-26	269	225	494	148	117	86
CDLF2-5+CDH2-26	287	225	512	148	117	86
CDLF2-6+CDH2-26	315	245	560	170	142	91
CDLF2-7+CDH2-26	333	245	578	170	142	91
CDLF2-9+CDH2-26	369	245	614	170	142	96
CDLF2-11+CDH2-26	405	245	650	170	142	96
CDLF2-13+CDH2-26	451	290	741	190	155	101
CDLF2-15+CDH2-26	487	290	777	190	155	101
CDLF2-18+CDH2-26	541	290	831	190	155	106
CDLF2-22+CDH2-26	613	290	903	190	155	111
CDLF2-26+CDH2-26	695	345	1040	197	165	116

# CDLF3+CDH3-36

## Performance curve ISO9906 Annex A 2900rpm



## Installation sketch



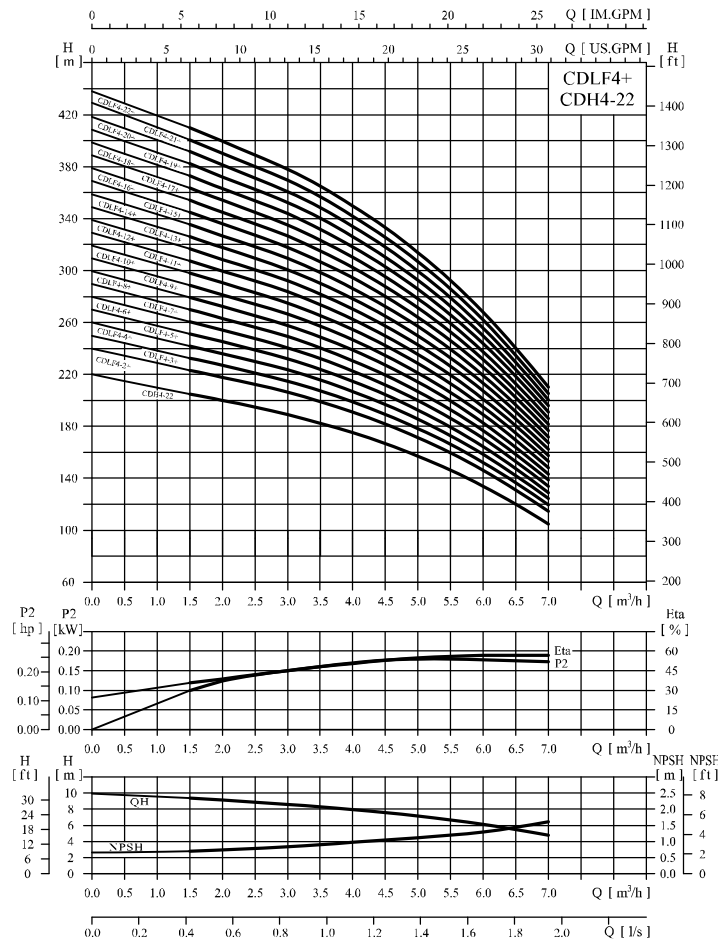
## Performance table

Model	Driving motor (kW)	Q (m³/h)	H (m)																		
			1.2	1.6	2.0	2.4	2.8	3.0	3.2	3.6	4.0										
CDLF3-2+CDH3-36	0.37+3.0		226.5	219.5	211	198.5	184	173	162	138	111										
CDLF3-3+CDH3-36	0.37+3.0		233	226.5	217.5	204.5	189	178	167	142	114										
CDLF3-4+CDH3-36	0.37+3.0		239	232	223	209.5	194	183	172	146	117										
CDLF3-5+CDH3-36	0.37+3.0		245	238	229	215	199	187	176	150	121										
CDLF3-6+CDH3-36	0.55+3.0		250	243	234	220	204	192	181	154	124										
CDLF3-7+CDH3-36	0.55+3.0		257	249	239	225	208	196	185	158	127										
CDLF3-8+CDH3-36	0.75+3.0		263	255	245	231	213	201	189	162	130										
CDLF3-9+CDH3-36	0.75+3.0		269	261	251	236	219	206	194	166	133										
CDLF3-10+CDH3-36	0.75+3.0		275	267	257	242	224	211	199	170	136										
CDLF3-11+CDH3-36	1.1+3.0		281	272	261	246	228	215	203	173	139										
CDLF3-12+CDH3-36	1.1+3.0		287	278	267	251	232	219	206	176	142										
CDLF3-13+CDH3-36	1.1+3.0		292	284	273	257	238	224	211	180	145										
CDLF3-15+CDH3-36	1.1+3.0		304	296	284	267	247	233	220	188	151										
CDLF3-17+CDH3-36	1.5+3.0		317	308	296	278	257	243	229	195	157										
CDLF3-19+CDH3-36	1.5+3.0		329	320	307	288	266	252	237	203	163										
CDLF3-21+CDH3-36	2.2+3.0		342	332	319	300	276	262	245	210	169										
CDLF3-23+CDH3-36	2.2+3.0		354	343	330	310	286	271	254	217	175										
CDLF3-25+CDH3-36	2.2+3.0		365	355	341	319	296	280	263	225	181										
CDLF3-27+CDH3-36	2.2+3.0		378	367	352	331	306	288	271	232	187										
CDLF3-29+CDH3-36	2.2+3.0		389	378	363	341	316	297	280	240	193										
CDLF3-31+CDH3-36	3.0+3.0		401	390	375	353	327	306	289	247	199										
CDLF3-33+CDH3-36	3.0+3.0		413	402	387	364	337	315	299	256	205										
CDLF3-36+CDH3-36	3.0+3.0		432	420	404	380	352	332	313	268	214										

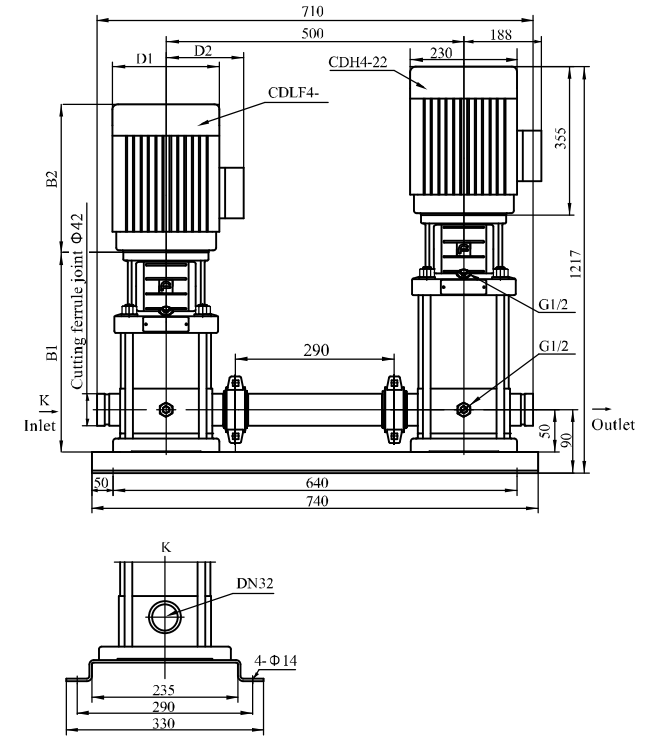
## Size and weight

Model	Size(mm)					Weight (kg)
	B1	B2	B1+B2	D1	D2	
CDLF3-2+CDH3-36	233	225	458	148	117	86
CDLF3-3+CDH3-36	251	225	476	148	117	86
CDLF3-4+CDH3-36	269	225	494	148	117	86
CDLF3-5+CDH3-36	287	225	512	148	117	86
CDLF3-6+CDH3-36	305	225	530	148	117	88
CDLF3-7+CDH3-36	323	225	548	148	117	88
CDLF3-8+CDH3-36	351	245	596	170	142	88
CDLF3-9+CDH3-36	369	245	614	170	142	88
CDLF3-10+CDH3-36	387	245	632	170	142	88
CDLF3-11+CDH3-36	405	245	650	170	142	91
CDLF3-12+CDH3-36	423	245	668	170	142	91
CDLF3-13+CDH3-36	441	245	686	170	142	91
CDLF3-15+CDH3-36	477	245	722	170	142	91
CDLF3-17+CDH3-36	523	290	813	190	155	96
CDLF3-19+CDH3-36	559	290	849	190	155	101
CDLF3-21+CDH3-36	595	290	885	190	155	101
CDLF3-23+CDH3-36	631	290	921	190	155	106
CDLF3-25+CDH3-36	667	290	957	190	155	106
CDLF3-27+CDH3-36	703	290	993	190	155	106
CDLF3-29+CDH3-36	739	290	1029	190	155	106
CDLF3-31+CDH3-36	785	345	1130	197	165	111
CDLF3-33+CDH3-36	821	345	1166	197	165	116
CDLF3-36+CDH3-36	875	345	1220	197	165	116

Performance curve ISO9906 Annex A 2900rpm



Installation sketch



Performance table

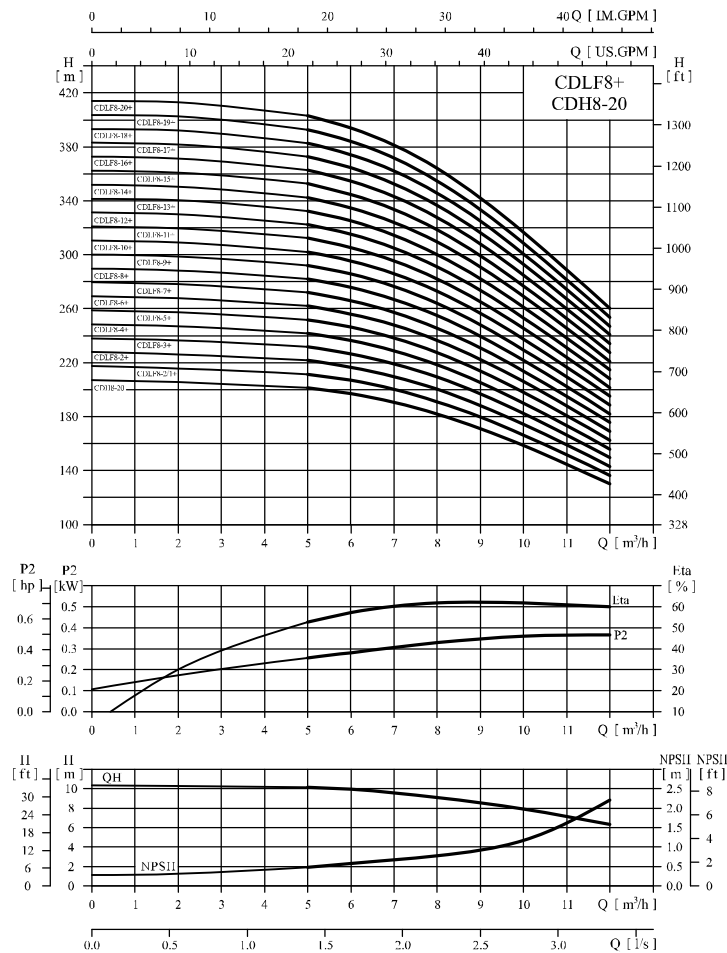
Model	Driving motor (kW)	Q (m³/h)	1.5	2.0	3.0	4.0	5.0	6.0	7.0
CDLF4-2+CDH4-22	0.37+4.0	H (m)	221	215	205	190	170	144	111
CDLF4-3+CDH4-22	0.55+4.0		230	224	214	199	177	152	116
CDLF4-4+CDH4-22	0.75+4.0		240	233	222	207	184	158	122
CDLF4-5+CDH4-22	1.1+4.0		249	242	231	215	191	165	126
CDLF4-6+CDH4-22	1.1+4.0		258	251	240	223	198	171	131
CDLF4-7+CDH4-22	1.5+4.0		268	260	249	231	205	177	136
CDLF4-8+CDH4-22	1.5+4.0		276	269	258	239	212	184	141
CDLF4-10+CDH4-22	2.2+4.0		298	287	275	256	228	196	151
CDLF4-12+CDH4-22	2.2+4.0		316	305	292	270	242	209	161
CDLF4-14+CDH4-22	3.0+4.0		338	323	310	287	258	223	171
CDLF4-16+CDH4-22	3.0+4.0		354	341	328	304	272	235	181
CDLF4-19+CDH4-22	4.0+4.0		385	368	356	328	294	256	196
CDLF4-22+CDH4-22	4.0+4.0		413	397	380	353	317	272	211

Size and weight

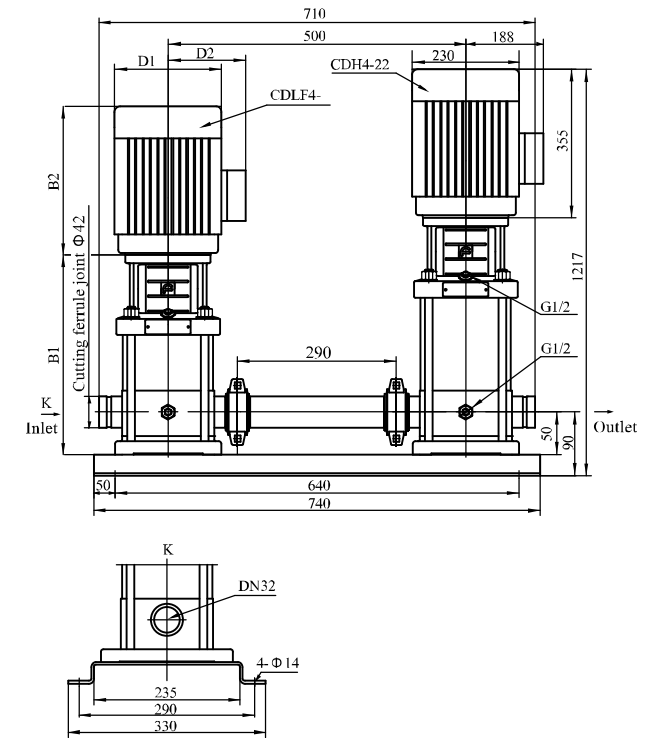
Model	Size(mm)					Weight (kg)
	B1	B2	B1+B2	D1	D2	
CDLF4-2+CDH4-22	251	225	476	148	117	86
CDLF4-3+CDH4-22	278	225	503	148	117	86
CDLF4-4+CDH4-22	315	245	560	170	142	86
CDLF4-5+CDH4-22	342	245	587	170	142	91
CDLF4-6+CDH4-22	369	245	614	170	142	91
CDLF4-7+CDH4-22	406	290	696	190	155	96
CDLF4-8+CDH4-22	433	290	723	190	155	96
CDLF4-10+CDH4-22	487	290	777	190	155	96
CDLF4-12+CDH4-22	541	290	831	190	155	101
CDLF4-14+CDH4-22	605	345	950	197	165	101
CDLF4-16+CDH4-22	659	345	1004	197	165	106
CDLF4-19+CDH4-22	740	345	1085	230	188	111
CDLF4-22+CDH4-22	821	355	1176	230	188	116

# CDLF8+CDH8-20

## Performance curve ISO9906 Annex A 2900rpm



## Installation sketch



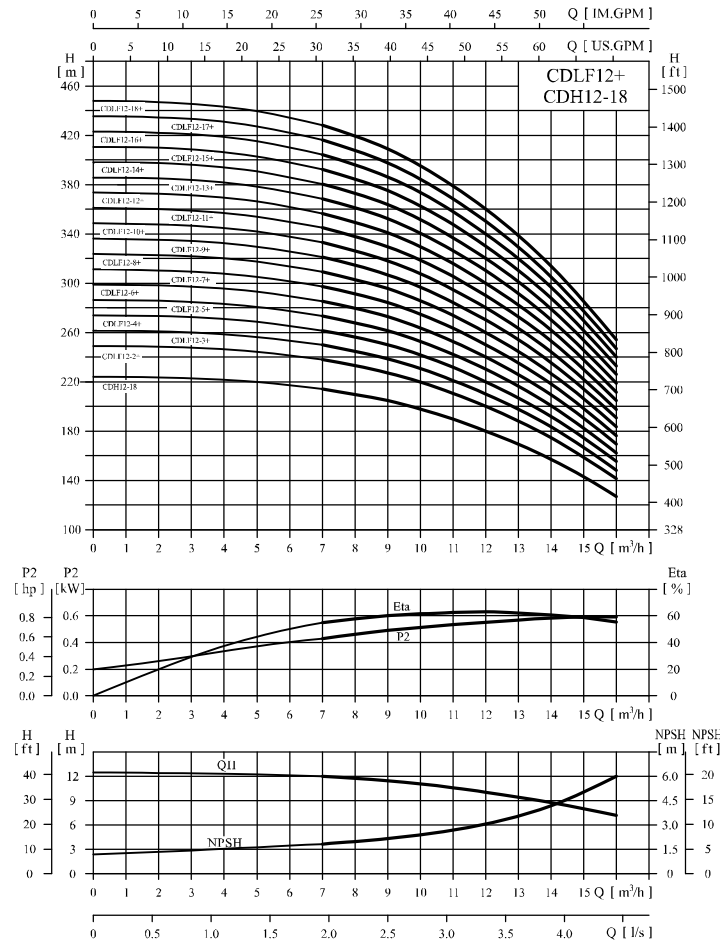
## Performance table

Model	Driving motor (kW)	Q (m³/h)	H (m)							
			5	6	7	8	9	10	11	12
CDLF8-2/1+CDH8-20	0.75+7.5		211	204.5	197.3	189	177.5	164	149	134
CDLF8-2+CDH8-20	0.75+7.5		221	214.5	207	198	186	172	156	141
CDLF8-3+CDH8-20	1.1+7.5		231	224.5	216.5	207	194	180	163	147
CDLF8-4+CDH8-20	1.5+7.5		242	234.5	226	216	203	188	170	154
CDLF8-5+CDH8-20	2.2+7.5		253	245	236	225	211	196	178	160
CDLF8-6+CDH8-20	2.2+7.5		263	255	245	234	220	204	185	167
CDLF8-8+CDH8-20	3.0+7.5		284	275	265	253	238	221	200	180
CDLF8-10+CDH8-20	4.0+7.5		305	295	285	272	256	237	215	193
CDLF8-12+CDH8-20	4.0+7.5		325	315	304	291	273	248	229	206
CDLF8-14+CDH8-20	5.5+7.5		346	336	324	310	291	269	244	220
CDLF8-16+CDH8-20	5.5+7.5		367	356	344	328	308	286	260	234
CDLF8-18+CDH8-20	7.5+7.5		388	377	363	347	326	302	276	248
CDLF8-20+CDH8-20	7.5+7.5		409	397	383	366	344	319	292	263

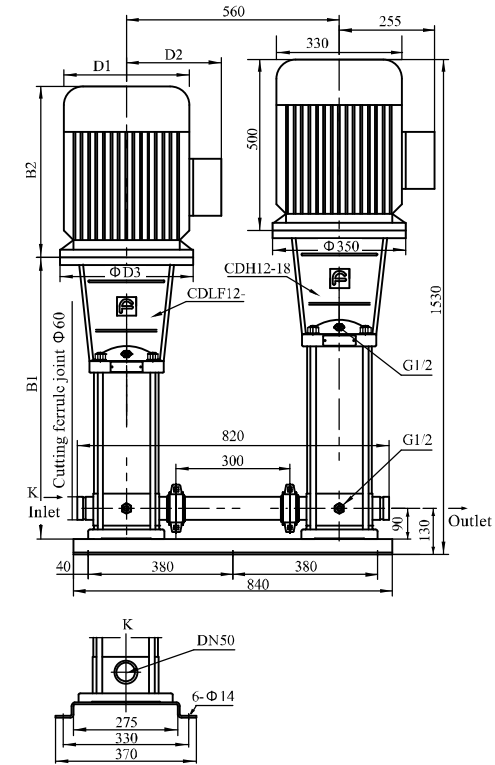
## Size and weight

Model	Size(mm)					Weight (kg)
	B1	B2	B1+B2	D1	D2	
CDLF8-2/1+CDH8-20	347	245	592	170	142	136
CDLF8-2+CDH8-20	347	245	592	170	142	136
CDLF8-3+CDH8-20	377	245	622	170	142	146
CDLF8-4+CDH8-20	417	290	707	190	155	146
CDLF8-5+CDH8-20	447	290	737	190	155	156
CDLF8-6+CDH8-20	477	290	767	190	155	156
CDLF8-8+CDH8-20	547	345	892	197	165	161
CDLF8-10+CDH8-20	607	355	962	230	188	171
CDLF8-12+CDH8-20	667	355	1022	230	188	171
CDLF8-14+CDH8-20	747	390	1137	260	208	196
CDLF8-16+CDH8-20	807	390	1197	260	208	196
CDLF8-18+CDH8-20	867	390	1257	260	208	206
CDLF8-20+CDH8-20	927	390	1317	260	208	206

Performance curve ISO9906 Annex A 2900rpm



Installation sketch



Performance table

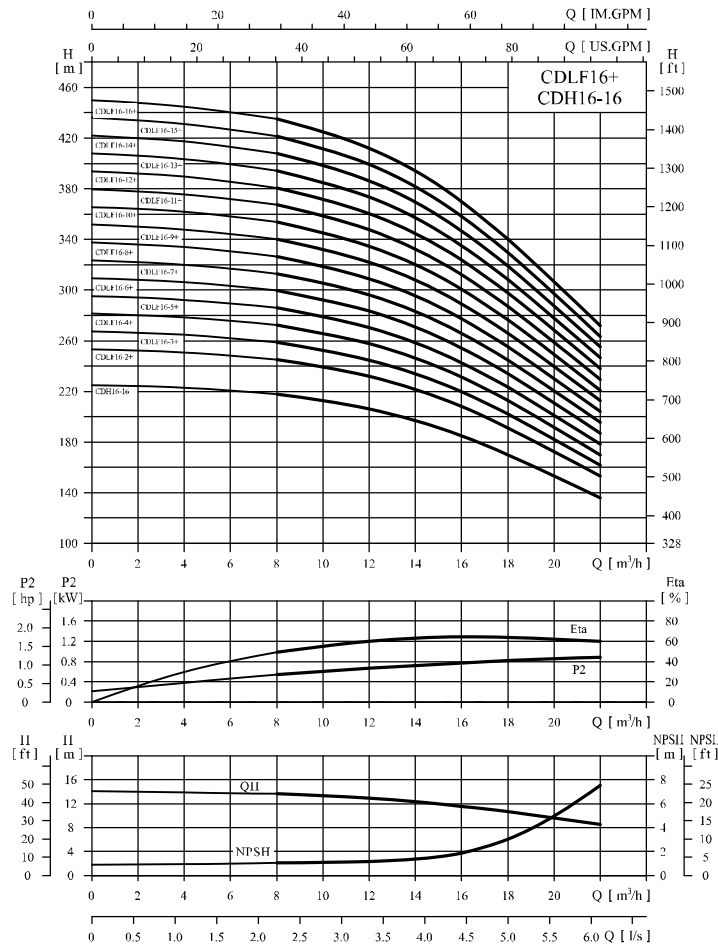
Model	Driving motor (kW)	Q (m³/h)	H (m)												
			7	8	9	10	11	12	13	14	15	16			
CDLF12-2+CDH12-18	1.5+11		237.5	232	225.5	218	210	200	187.5	174	157.5	141			
CDLF12-3+CDH12-18	2.2+11		249.5	244	237	229	220.5	210	197	183	165.5	148			
CDLF12-4+CDH12-18	3+11		261	255	248	240	231	220	206	191	173	155			
CDLF12-5+CDH12-18	3+11		273.5	267	259.5	251	241.5	230	215.5	200	181	162			
CDLF12-6+CDH12-18	4+11		285.5	279	271	262	252	240	225	209	189	169			
CDLF12-7+CDH12-18	5.5+11		297.5	291	282.5	273	262.5	250	234.5	218	197	176			
CDLF12-8+CDH12-18	5.5+11		309.5	303	294	284	273	260	244	227	205	183			
CDLF12-9+CDH12-18	5.5+11		322	315	306	296	284.5	271	254	236	213.5	191			
CDLF12-10+CDH12-18	7.5+11		334	327	317.5	307	295	281	263.5	245	222	199			
CDLF12-12+CDH12-18	7.5+11		357.5	350	340	329	316	301	282.5	263	238	213			
CDLF12-14+CDH12-18	11+11		382	374	363	351	337	321	301.5	281	254	227			
CDLF12-16+CDH12-18	11+11		406.5	398	386.5	374	359	342	321	299	270.5	242			
CDLF12-18+CDH12-18	11+11		431	422	410.5	398	381.5	363	340.5	317	287	257			

Size and weight

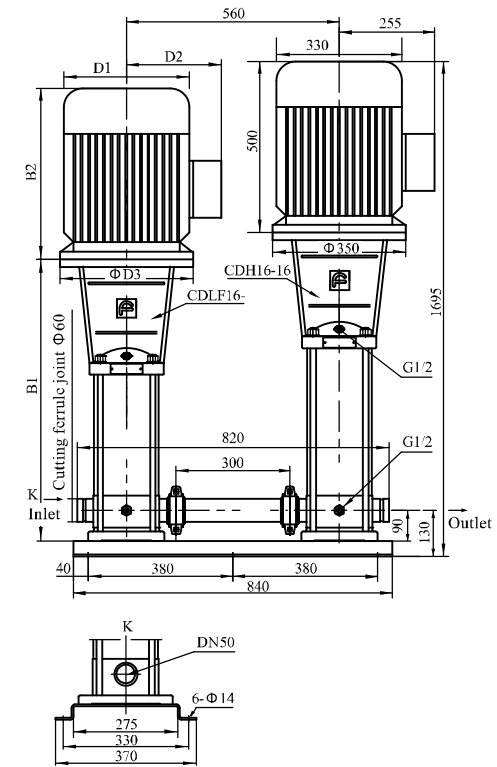
Model	Size(mm)						Weight (kg)
	B1	B2	B1+B2	D1	D2	D3	
CDLF12-2+CDH12-18	367	290	657	190	155	145	210
CDLF12-3+CDH12-18	397	290	687	190	155	145	213
CDLF12-4+CDH12-18	437	345	782	197	165	160	220
CDLF12-5+CDH12-18	467	345	812	197	165	160	221
CDLF12-6+CDH12-18	497	355	852	230	188	160	231
CDLF12-7+CDH12-18	547	390	937	260	208	200	249
CDLF12-8+CDH12-18	577	390	967	260	208	200	249
CDLF12-9+CDH12-18	607	390	997	260	208	200	251
CDLF12-10+CDH12-18	637	390	1027	260	208	200	251
CDLF12-12+CDH12-18	697	390	1087	260	208	200	253
CDLF12-14+CDH12-18	845	500	1345	330	255	350	324
CDLF12-16+CDH12-18	905	500	1405	330	255	350	324
CDLF12-18+CDH12-18	965	500	1465	330	255	350	326

# CDLF16+CDH16-16

## Performance curve ISO9906 Annex A 2900rpm



## Installation sketch



## Performance table

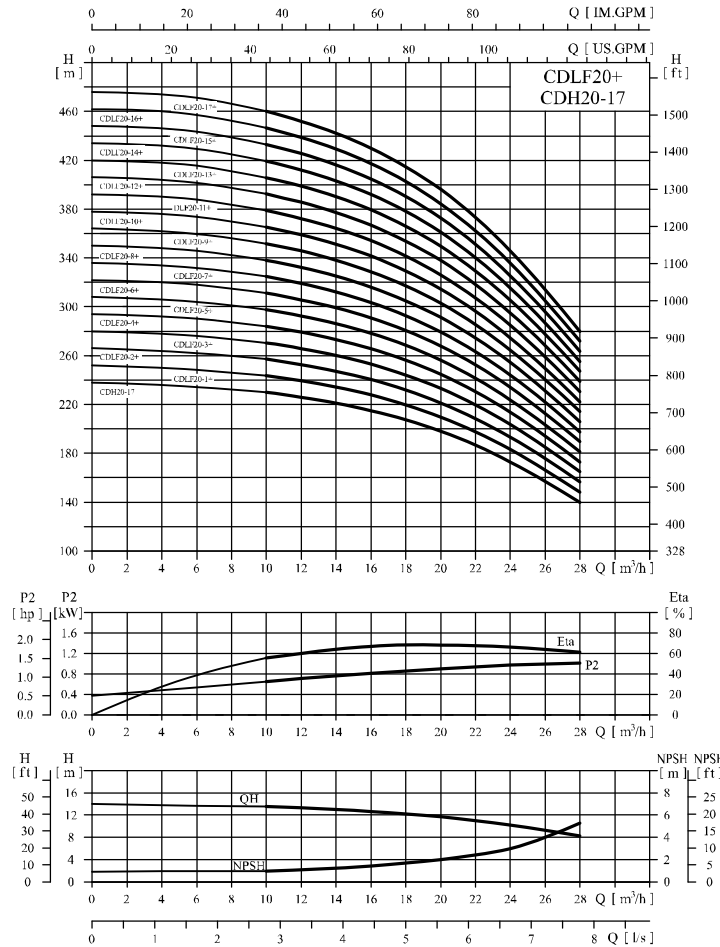
Model	Driving motor (kW)	Q (m³/h)	H (m)							
			8	10	12	14	16	18	20	22
CDLF16-2+CDH16-16	2.2+15		243	237	230	220	206	190	172	151
CDLF16-3+CDH16-16	3+15		257	251	243	233	218	201	182	160
CDLF16-4+CDH16-16	4+15		270	264	257	245	230	212	191	169
CDLF16-5+CDH16-16	5.5+15		284	278	270	258	242	223	201	178
CDLF16-6+CDH16-16	5.5+15		298	291	283	270	254	233	211	187
CDLF16-7+CDH16-16	7.5+15		312	306	296	283	266	245	221	196
CDLF16-8+CDH16-16	7.5+15		326	319	309	295	278	255	230	205
CDLF16-10+CDH16-16	11+15		354	347	336	321	302	278	250	222
CDLF16-12+CDH16-16	11+15		382	373	362	346	325	299	269	240
CDLF16-14+CDH16-16	15+15		410	401	389	371	350	321	289	257
CDLF16-16+CDH16-16	15+15		438	428	415	396	373	343	309	275

## Size and weight

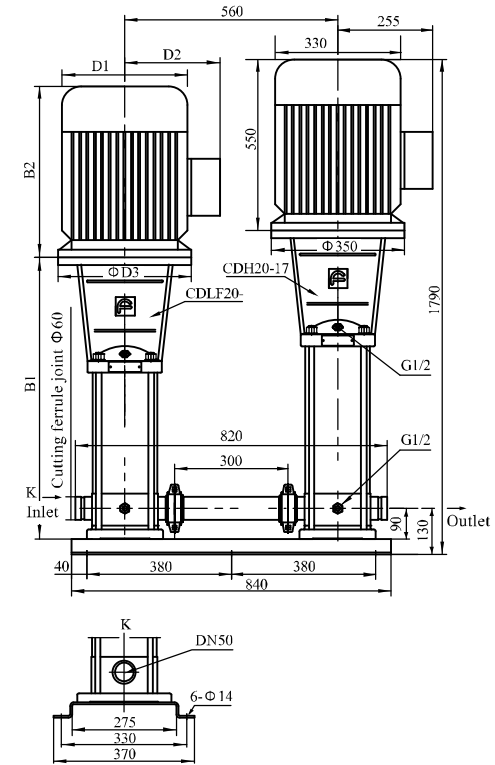
Model	Size(mm)						Weight (kg)
	B1	B2	B1+B2	D1	D2	D3	
CDLF16-2+CDH16-16	397	290	687	190	155	145	231
CDLF16-3+CDH16-16	452	345	797	197	165	160	241
CDLF16-4+CDH16-16	497	355	852	230	188	160	246
CDLF16-5+CDH16-16	562	390	952	260	208	200	261
CDLF16-6+CDH16-16	607	390	997	260	208	200	266
CDLF16-7+CDH16-16	652	390	1042	260	208	200	271
CDLF16-8+CDH16-16	697	390	1087	260	208	200	271
CDLF16-10+CDH16-16	875	500	1375	330	255	350	331
CDLF16-12+CDH16-16	965	500	1465	330	255	350	336
CDLF16-14+CDH16-16	1055	500	1555	330	255	350	351
CDLF16-16+CDH16-16	1145	500	1645	330	255	350	356



Performance curve ISO9906 Annex A 2900rpm



Installation sketch



Performance table

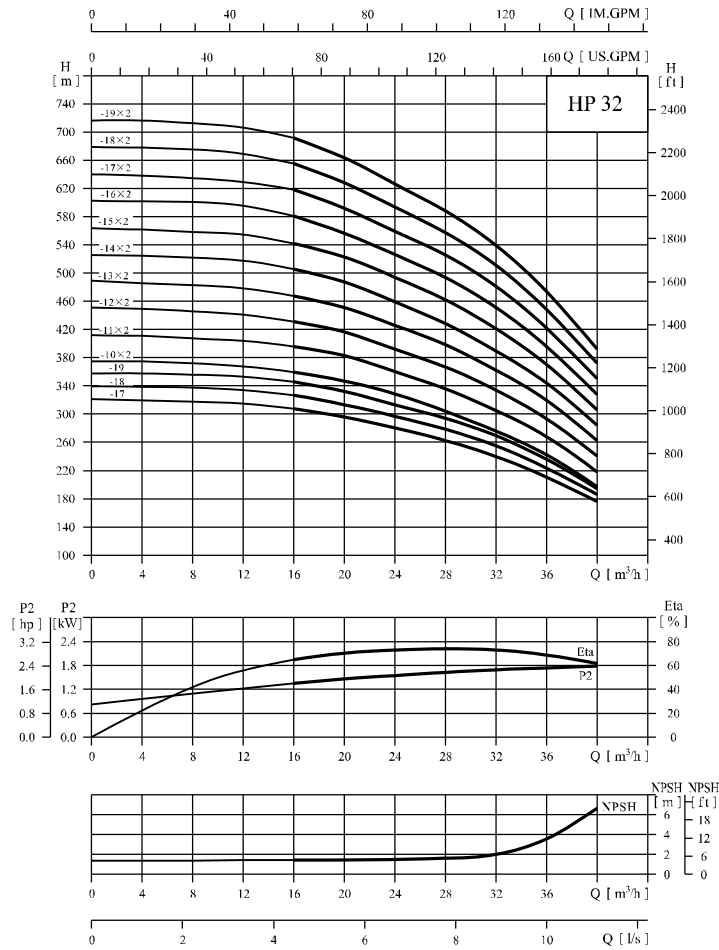
Model	Driving motor (kW)	Q (m³/h)	10	12	14	16	18	20	22	24	26	28
CDLF20-1+CDH20-17	1.1+18.5	H (m)	241.5	237	232.5	226	217	207	194	180	164	146
CDLF20-2+CDH20-17	2.2+18.5		255	250.5	246	239	230	220	207	192	175	155
CDLF20-3+CDH20-17	4+18.5		268	263.5	259	252	243	232	218	202	184	164
CDLF20-4+CDH20-17	5.5+18.5		282	277	272	265	255	244	229	213	194	173
CDLF20-5+CDH20-17	5.5+18.5		295	290	284	276	266	255	240	222	202	180
CDLF20-6+CDH20-17	7.5+18.5		309	303	297	289	279	267	251	233	212	189
CDLF20-7+CDH20-17	7.5+18.5		323	317	311	303	292	279	262	243	222	198
CDLF20-8+CDH20-17	11+18.5		337	331	325	316	305	291	274	254	232	207
CDLF20-10+CDH20-17	11+18.5		364	358	351	342	330	315	296	275	252	225
CDLF20-12+CDH20-17	15+18.5		392	386	378	368	355	339	318	296	271	242
CDLF20-14+CDH20-17	15+18.5		420	413	405	394	380	363	341	317	290	259
CDLF20-17+CDH20-17	18.5+18.5		462	454	445	433	418	399	375	349	319	285

Size and weight

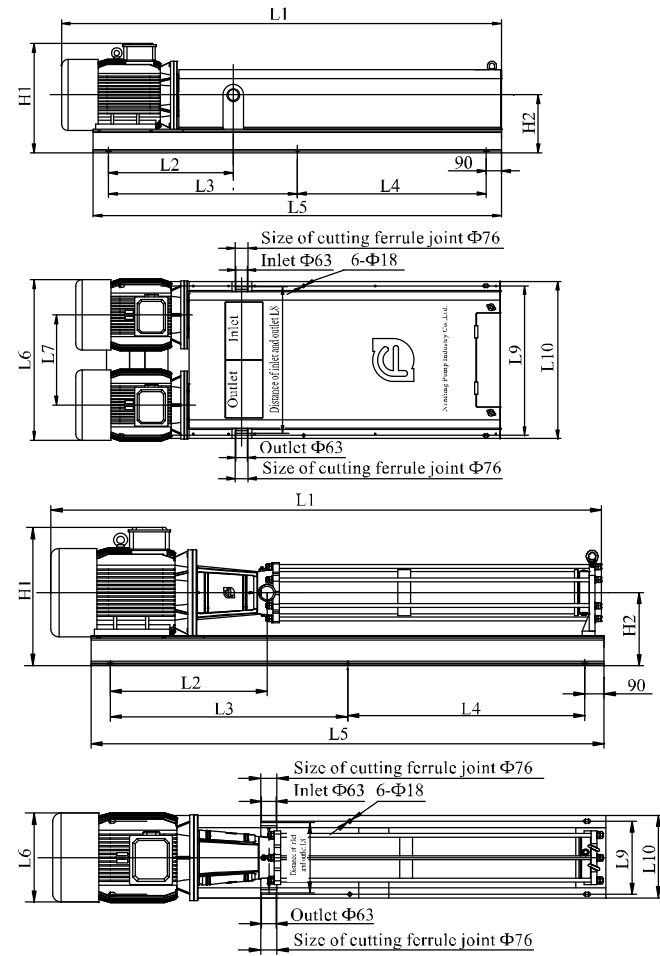
Model	Size(mm)						Weight (kg)
	B1	B2	B1+B2	D1	D2	D3	
CDLF20-1+CDH20-17	387	245	632	170	142	145	244
CDLF20-2+CDH20-17	397	290	687	190	155	145	255
CDLF20-3+CDH20-17	452	355	807	230	188	160	269
CDLF20-4+CDH20-17	517	390	907	260	208	200	284
CDLF20-5+CDH20-17	562	390	952	260	208	200	286
CDLF20-6+CDH20-17	607	390	997	260	208	200	294
CDLF20-7+CDH20-17	652	390	1042	260	208	200	296
CDLF20-8+CDH20-17	785	500	1285	330	255	350	352
CDLF20-10+CDH20-17	875	500	1375	330	255	350	357
CDLF20-12+CDH20-17	965	500	1465	330	255	350	372
CDLF20-14+CDH20-17	1055	500	1555	330	255	350	377
CDLF20-17+CDH20-17	1190	550	1740	330	255	350	402

# HP32

## Performance curve ISO9906 Annex A 2950rpm



## Installation sketch



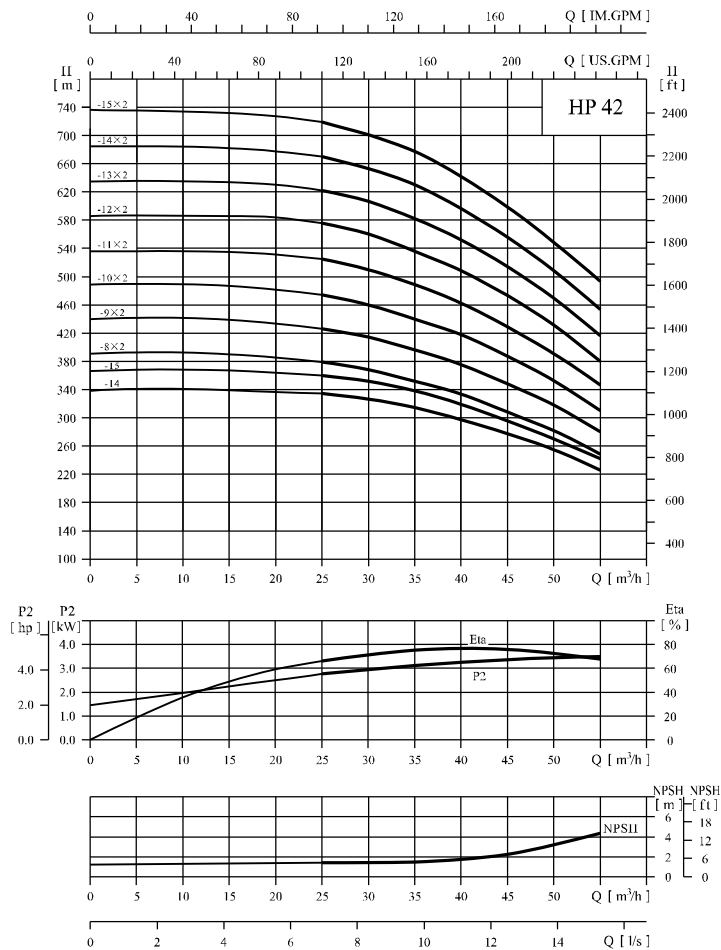
## Performance table

Model	Driving motor (kW)	Q (m³/h)	H (m)						
			16	20	24	28	32	36	40
HP32-17	37	H (m)	310	295	279	262	240	210	175
HP32-18	37		328	313	296	278	255	222	186
HP32-19	37		346	330	312	293	270	235	197
HP32-10x2	18.5x2		364	348	329	309	276	247	202
HP32-11x2	22x2		401	382	361	339	305	272	220
HP32-12x2	22x2		437	417	394	370	334	296	242
HP32-13x2	30x2		473	452	427	401	363	321	264
HP32-14x2	30x2		510	487	460	432	392	346	287
HP32-15x2	30x2		546	521	493	463	422	371	310
HP32-16x2	30x2		583	556	526	494	452	395	331
HP32-17x2	37x2		619	591	558	525	482	420	352
HP32-18x2	37x2		656	626	591	555	512	445	374
HP32-19x2	37x2		692	660	624	586	542	469	395

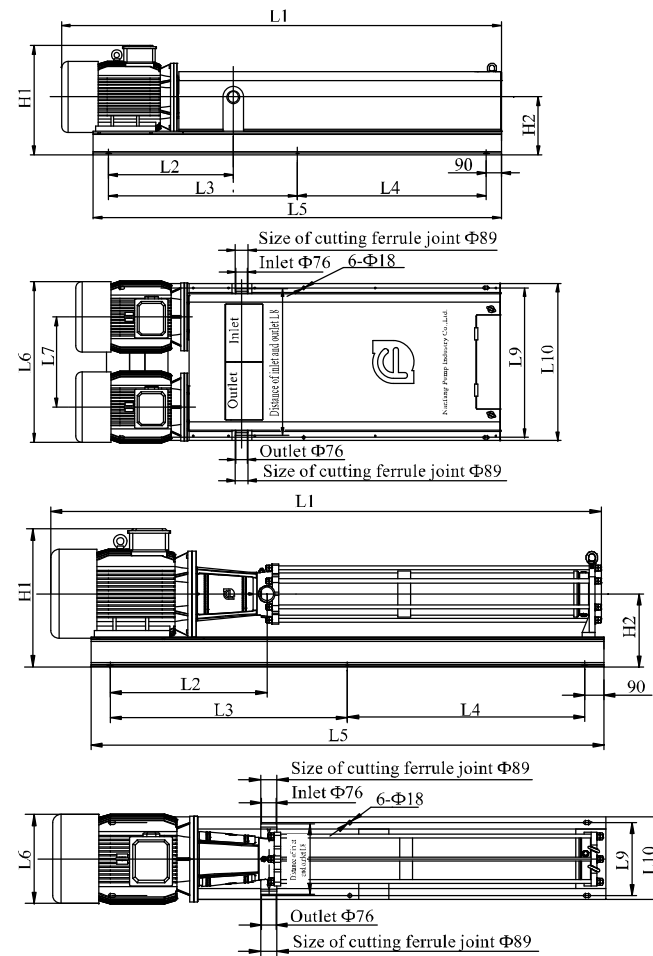
## Size and weight

Size(mm)												Weight (kg)
L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	H1	H2	
2446	734	1040	1040	2260	420		330	340	385	645	340	485
2516	734	1075	1075	2330	420		330	340	385	645	340	490
2586	734	1110	1110	2400	420		330	340	385	645	340	500
1856	653	755	755	1689	816	466	796	745	786	550	286	620
1956	658	792	792	1764	870	491	821	805	846	575	306	695
2026	658	827	827	1834	870	491	821	805	846	575	306	705
2166	734	900	900	1980	946	530	860	880	925	645	340	850
2236	734	935	935	2050	946	530	860	880	925	645	340	860
2306	734	970	970	2120	946	530	860	880	925	645	340	870
2376	734	1005	1005	2190	946	530	860	880	925	645	340	880
2446	734	1040	1040	2260	946	530	860	880	925	645	340	945
2516	734	1075	1075	2330	946	530	860	880	925	645	340	955
2586	734	1110	1110	2400	946	530	860	880	925	645	340	965

Performance curve ISO9906 Annex A 2950rpm



Installation sketch

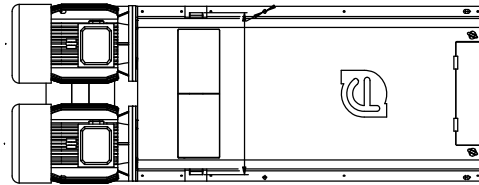


Performance table

Model	Driving motor (kW)	Q (m³/h)	H (m)								
			25	30	35	40	42	45	50	55	
HP42-14	55	H (m)	336	327	313	298	289	275	253	222	
HP42-15	55		360	350	337	319	310	295	271	241	
HP42-8x2	30x2		380	373	357	337	324	312	286	252	
HP42-9x2	37x2		428	416	400	377	366	350	320	282	
HP42-10x2	37x2		476	461	442	418	408	391	358	317	
HP42-11x2	45x2		526	513	490	462	450	430	397	348	
HP42-12x2	45x2		576	560	536	510	494	472	434	380	
HP42-13x2	55x2		624	607	581	553	536	513	470	412	
HP42-14x2	55x2		672	652	625	595	578	555	507	443	
HP42-15x2	55x2		718	697	670	638	620	597	548	475	

Size and weight

Size(mm)												Weight (kg)
L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	H1	H2	
2525	868	1078	1078	2333	510		350	432	477	755	390	660
2605	868	1118	1118	2413	510		350	432	477	755	390	665
1916	744	777	777	1729	946	530	880	880	925	645	340	815
1996	744	817	817	1809	946	530	880	880	925	645	340	895
2076	744	857	857	1889	946	530	880	880	925	645	340	905
2195	771	910	910	1996	1020	570	920	960	1005	700	365	1040
2275	771	950	950	2076	1020	570	920	960	1005	700	365	1055
2445	868	1038	1038	2253	1130	620	970	1050	1097	755	390	1270
2525	868	1078	1078	2333	1130	620	970	1050	1097	755	390	1285
2605	868	1118	1118	2413	1130	620	970	1050	1097	755	390	1295



VMHP High Pressure Pump for RO Seawater Desalination

### Working conditions

- Seawater
- Temperature: ambient temperature
- Ambient temperature: up to 40°C
- Altitude: up to 1000m
- Max. working pressure: 75 bar

### Applications

- R/O seawater desalting system

### Inlet & outlet connection

- VMHP20,40: PJE connection
- VMHP130,210,520: Flange connection

### Motor

- TEFC 2 pole three-phase asynchronous motor
- Protection level: IP55;
- Insulation level: F
- voltage:50Hz: 3 × 380V;  
3 × 660V;  
3 × 3000V;  
3 × 6000V;

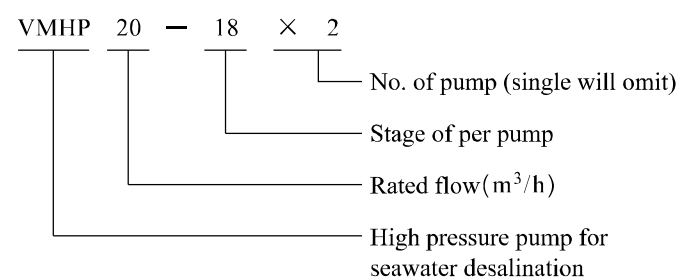
### Performance curve

- Curve tolerance in conformity with ISO9906, Annex A
- All curves are based on the measured value of 50Hz, constant motor speed 2950rpm.
- Measurement is done with 20°C air-free water, kinematic viscosity of 1mm<sup>2</sup>/s

### Features

- Impellers are installed back to back, so as to balance the big thrust force of the pump.
- For the wet parts, the material of precision molding part is duplex stainless steel, the material of profile part is super austenitic stainless steel.
- Mechanical seal rings adopt anti-seawater corrosion material, the pump can work under high pressure condition.
- High delivery head, large flow.
- Compact design, good reliability, high efficiency, elegant and small appearance.
- Adopting cartridge mechanical seal, easy to assemble and maintain.

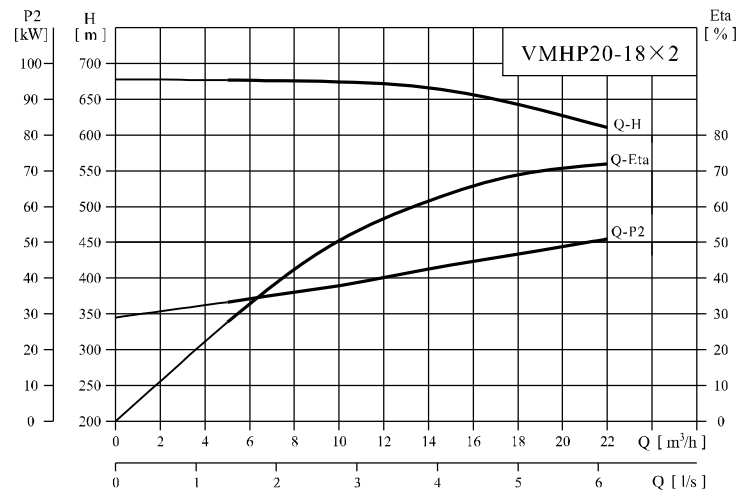
### Definition of model



# VMHP

VMHP20-18 × 2 (Supporting the system of daily output 500 tons fresh water)

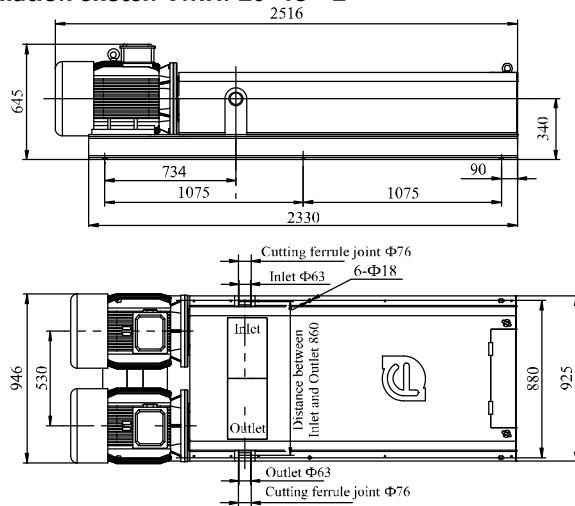
Performance curve VMHP20-18 × 2



Performance table VMHP20-18 × 2

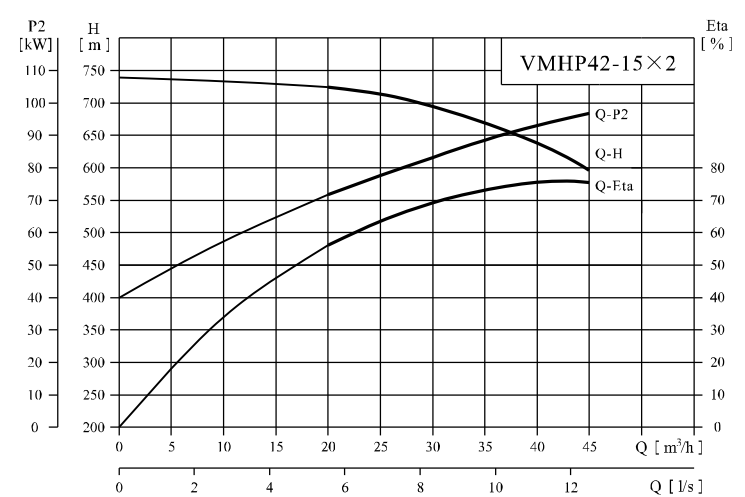
Model	Power (kW)	Q (m³/h)	5	10	15	20	22	Weight (kg)
VMHP20-18 × 2	30 × 2	H (m)	678	669	659	626	612	955

Installation sketch VMHP20-18 × 2



VMHP42-15 × 2 (Supporting the system of daily output 1000 tons fresh water)

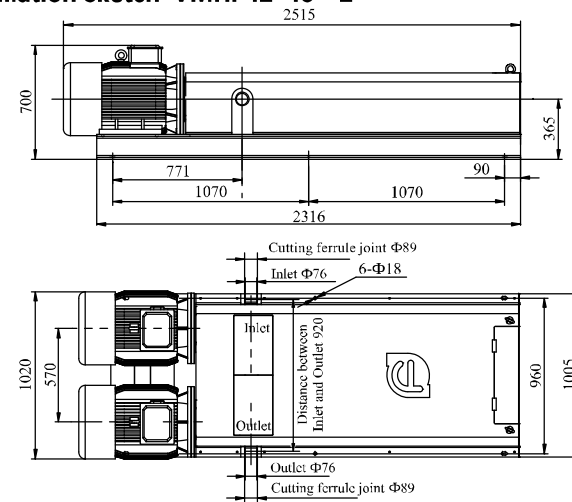
Performance curve VMHP42-15 × 2



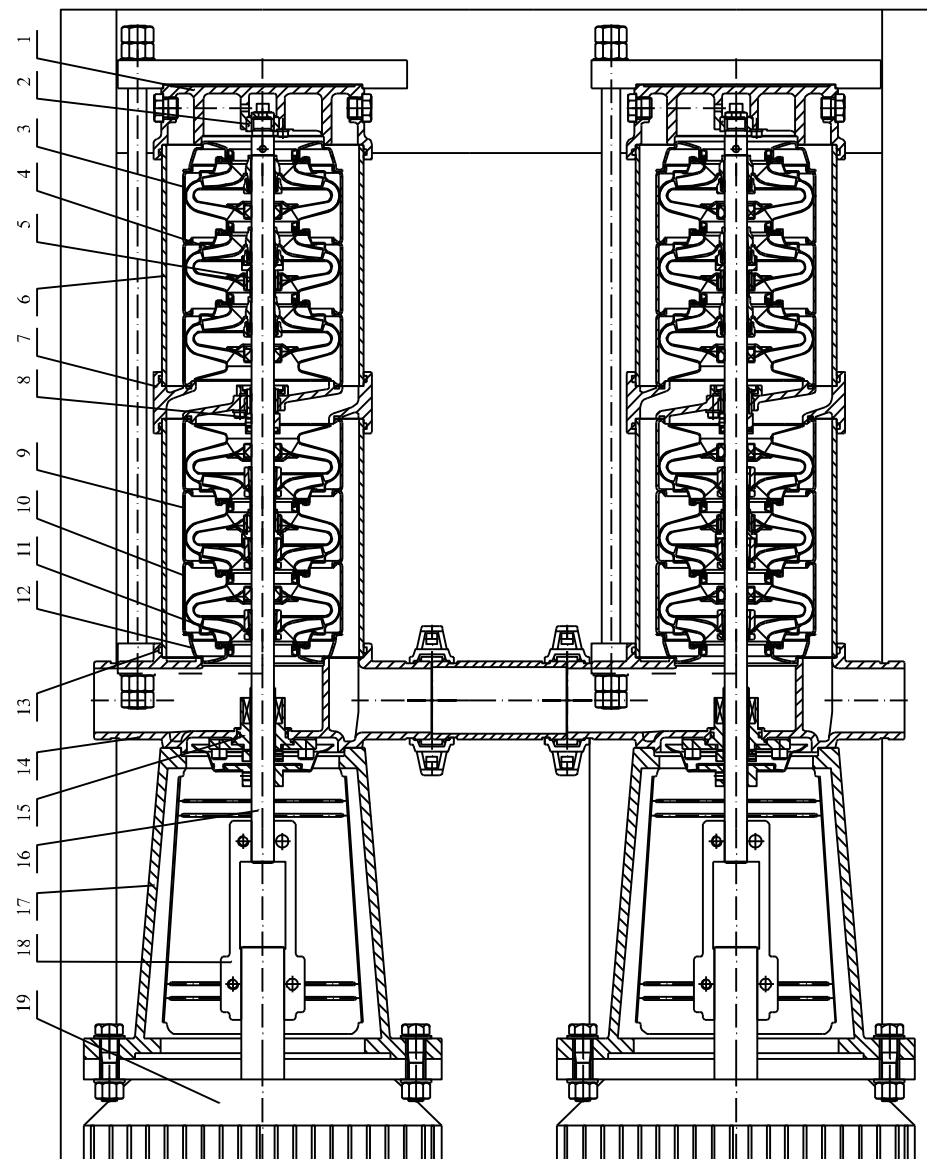
Performance table VMHP42-15 × 2

Model	Power (kW)	Q (m³/h)	20	25	30	35	40	42	45	Weight (kg)
VMHP42-15 × 2	52 × 2	H (m)	725	718	697	670	638	620	597	1095

Installation sketch VMHP42-15 × 2



Sectional drawing VMHP20-18 × 2, 42-15 × 2

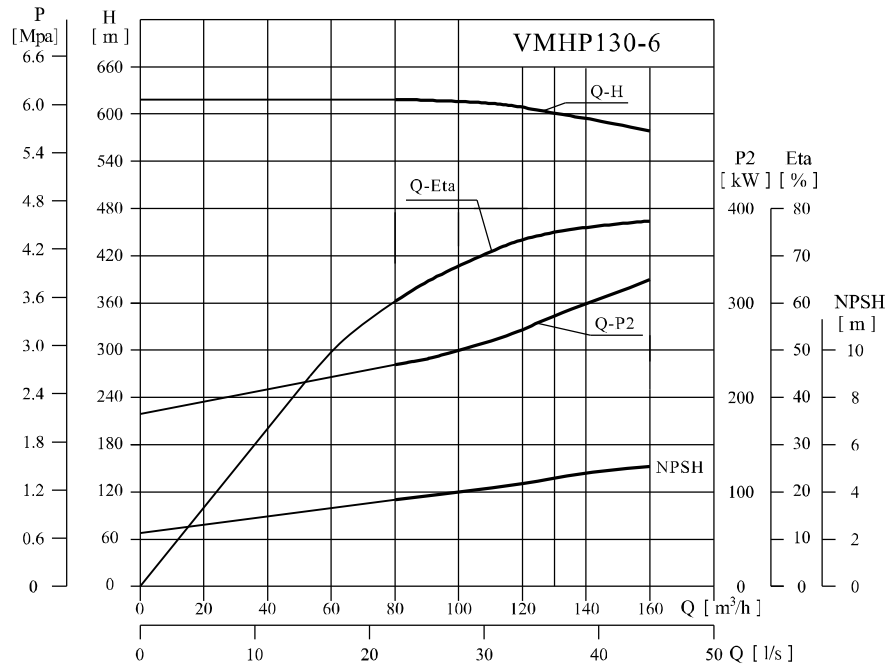


- 1.Base 2.Bottom bearing 3.Diffuser 4. Impeller 5.Sleeve 6.Cylinder 7.Exchange chamber  
 8.Exchange chamber bearing 9.Reverse support diffuser 10.Reverse diffuser 11.Revers Impeller  
 12.inducer 13.O ring 14.Inlet and outlet chamber 15.Mechanical seal 16.Shaft 17.Bracket  
 18.Coupling 19.Motor

# VMHP

**VMHP130-6(Supporting the system of daily output 3000 tons fresh water)**

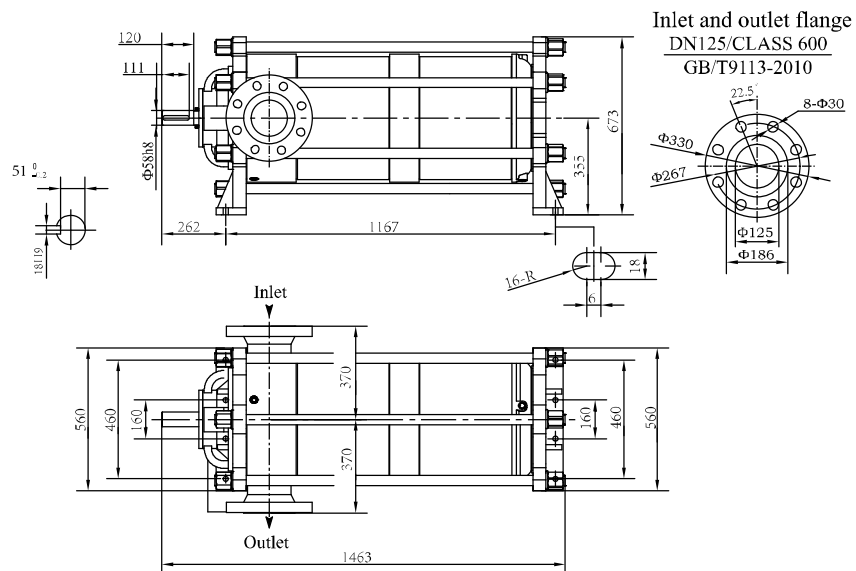
## Performance curve VMHP130-6



## Performance table VMHP130-6

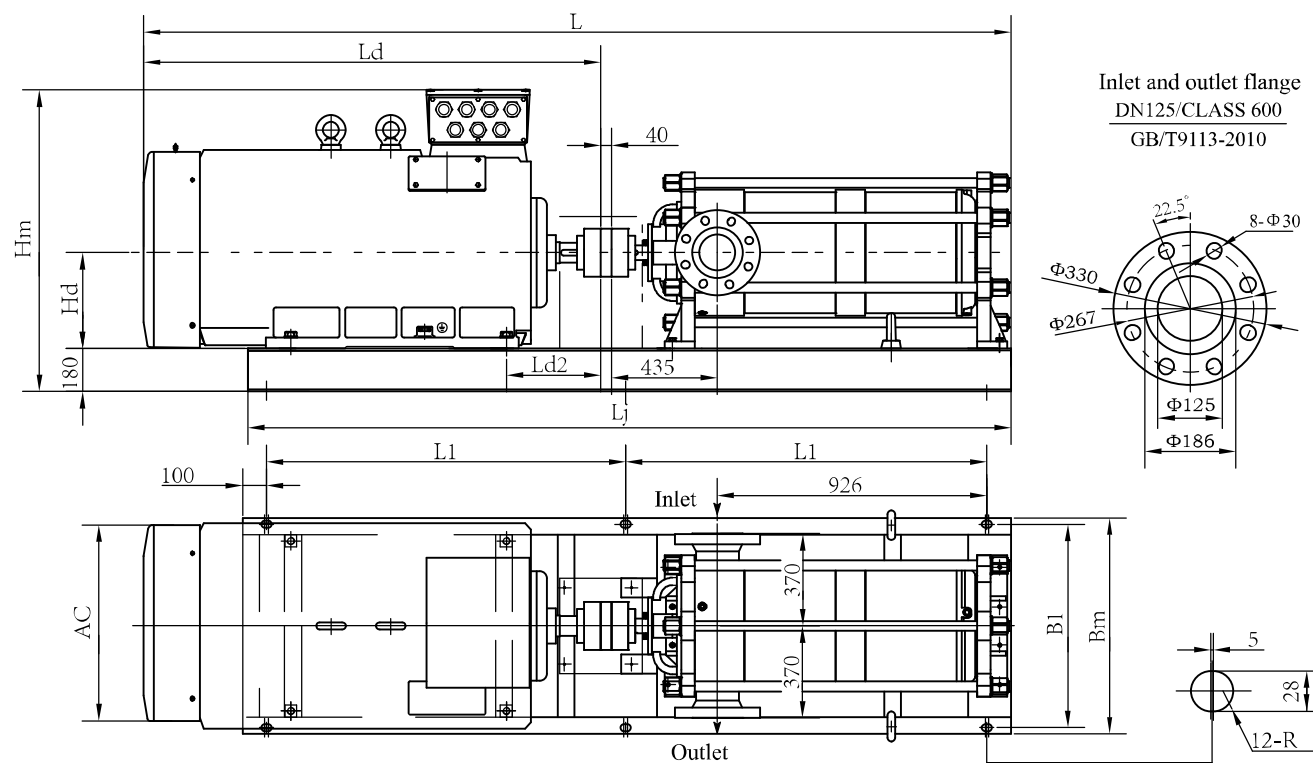
Model	Power (kW)	Q (m <sup>3</sup> /h)	80	100	120	130	140	160	Weight (kg)
VMHP130-6	355	H (m)	618	616	608	600	594	578	1400

## Installation sketch VMHP130-6





Installation sketch of pump set VMHP130-6

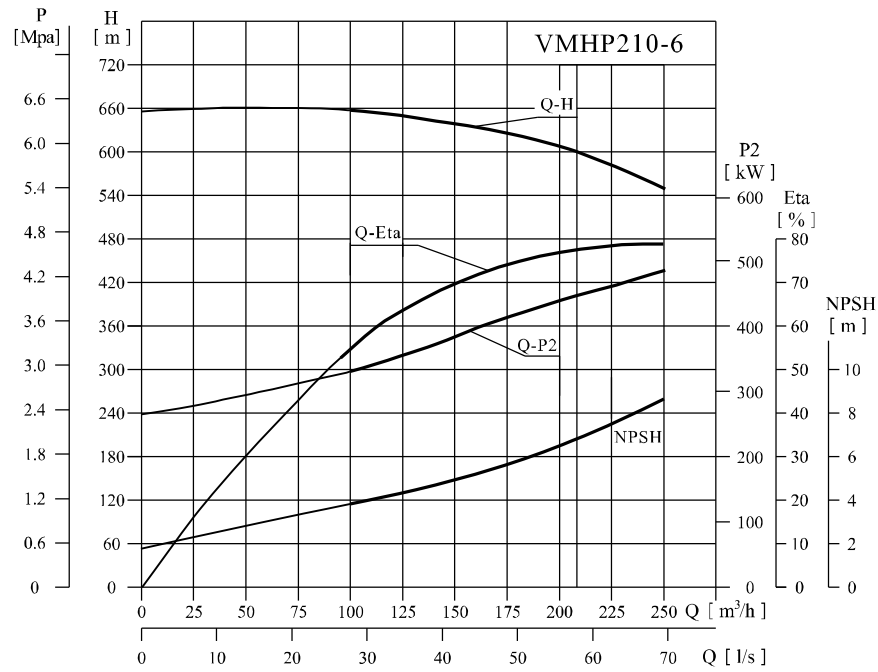


Model	Model of motor	Motor power Installation form	Dimension of pump set			Dimension of motor				Dimension of frame			Weight of pump set (kg)
			L	Hm	Bm	Ld	Hd	AC	Ld2	Lj	L1	B1	
VMHP130-6	Y3-3551-2	355kW/IM B3	3399	1310	820	1870	355	770	394	2860	1330	760	3900
	YKK-4002-2	355kW/IM B3	3929	1880	900	2400	400	1260	545	3220	1510	840	4700

Remark: Y3-3551-2; 50Hz; 380V/660V; JB/T 10868-2008  
Ykk-4002-2; 50Hz; 6000V/3000V; JB/T10315.2-2002

# VMHP

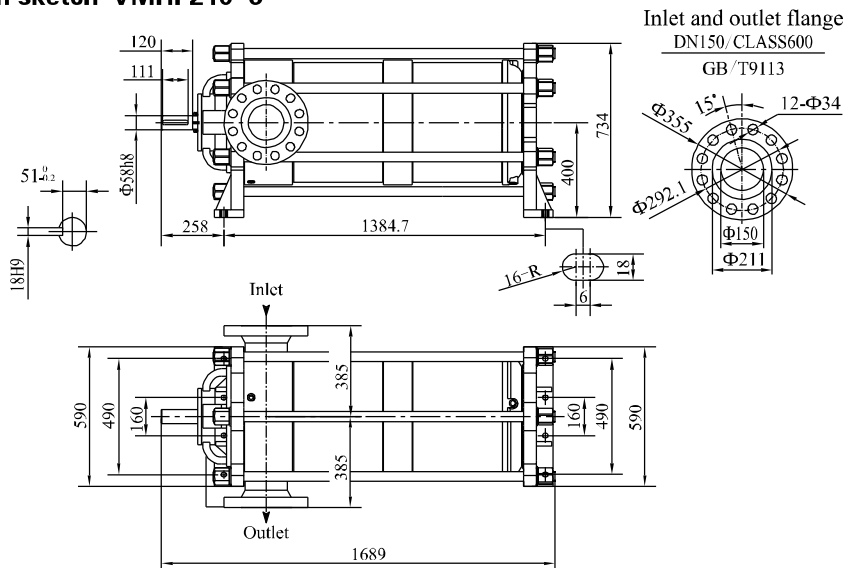
## VMHP210-6(Supporting the system of daily output 5000 tons fresh water) Performance curve VMHP210-6



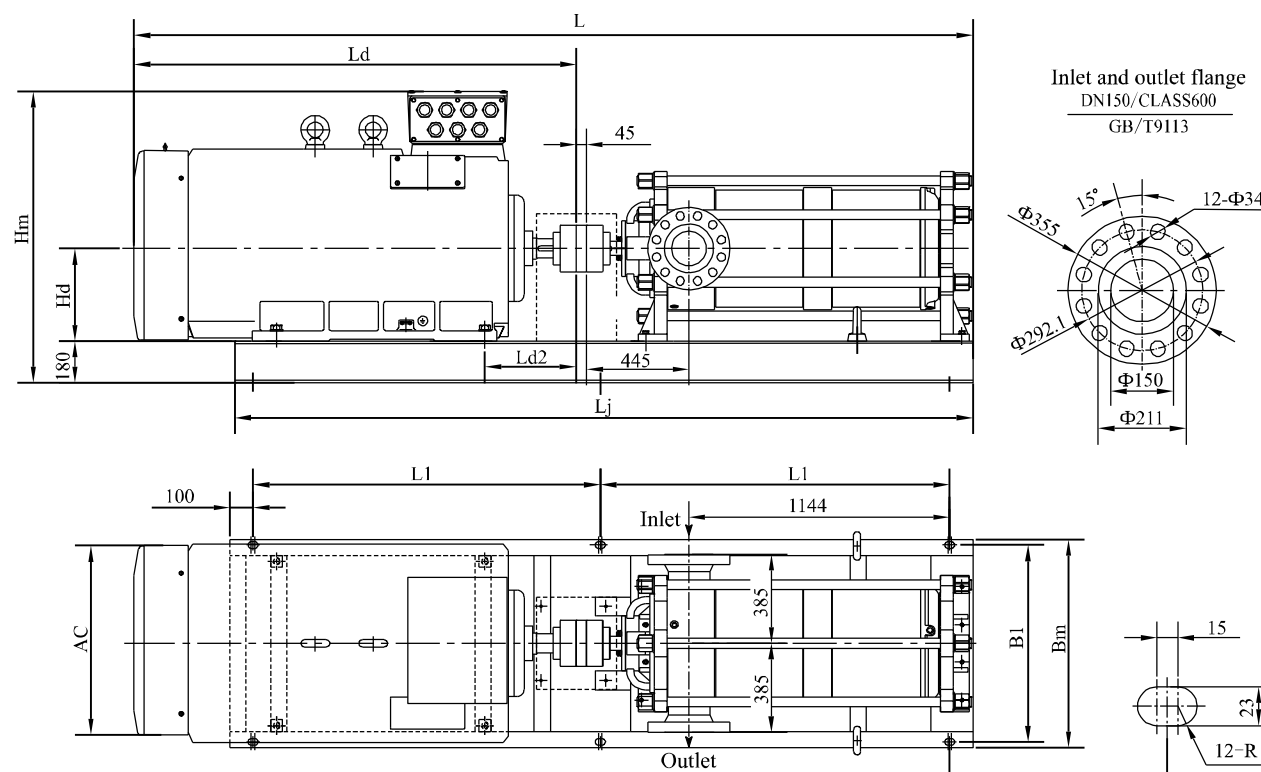
**Performance table VMHP210-6**

Model	Power (kW)	Q (m³/h)	100	125	150	175	210	225	250	Weight (kg)
VMHP210-6	560	H (m)	657	650	639	626	600	582	550	1458

**Installation sketch VMHP210-6**



### Installation sketch of pump set VMHP210-6

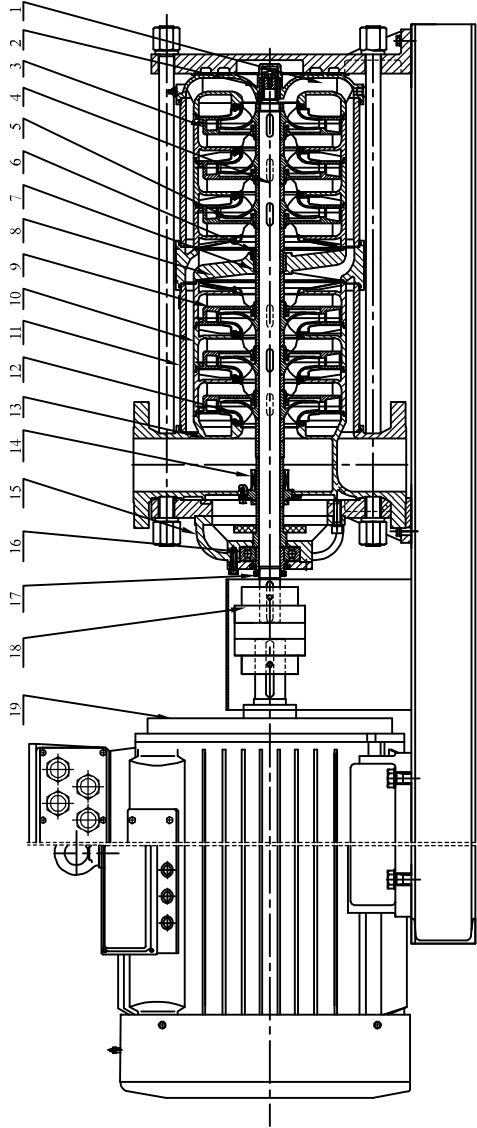


Model	Model of motor	Motor power Installation form	Dimension of pump set			Dimension of motor				Dimension of frame			Weight of pump set (kg)
			L	Hm	Bm	Ld	Hd	AC	Ld2	Lj	L1	B1	
VMHP210-6	Y3-4003-2	560kW/IM B3	3644	1440	900	1910	400	860	394	3209	1500	850	4968
	YKK-4502-2	560kW/IM B3	4334	1820	1000	2600	450	1200	610	3645	1722	948	5863

Remark: Y3-4003-2; 50Hz; 380V/660V; JB/T 10868-2008  
Ykk-4502-2; 50Hz; 6000V; JB/T10315.2-2002

# VMHP

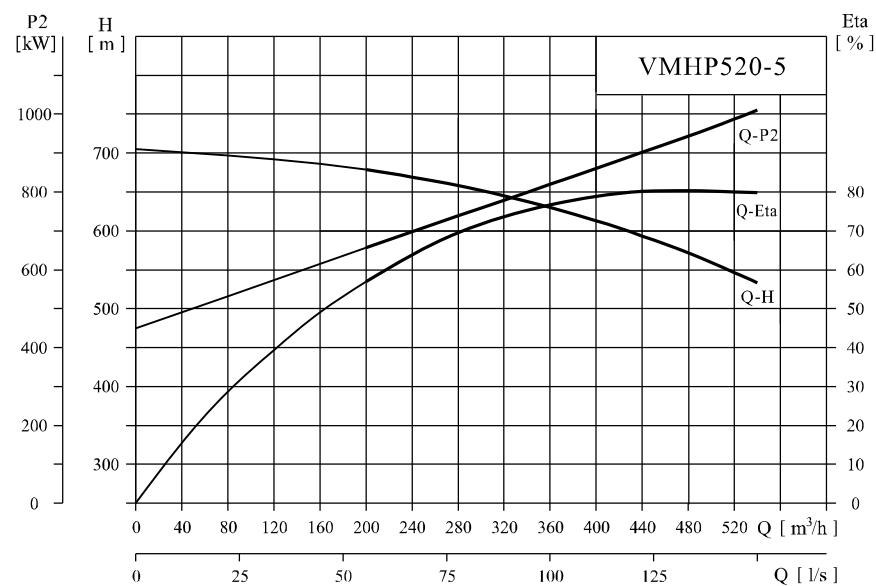
## Sectional drawing VMHP130-6, 210-6



- |                         |                              |                  |
|-------------------------|------------------------------|------------------|
| 1、 Base                 | 8、 Exchange chamber          | 15、 Bearing body |
| 2、 Bottom bearing       | 9、 Reverse diffuser assembly | 16、 Bearing      |
| 3、 Diffuser assembly    | 10、 Diffuser shell           | 17、 Round nut    |
| 4、 Shaft                | 11、 Cylinder                 | 18、 Coupling     |
| 5、 Impeller             | 12、 Reverse impeller         | 19、 Motor        |
| 6、 Sleeve               | 13、 Inlet and outlet chamber |                  |
| 7、 Intermediate bearing | 14、 Mechanical seal          |                  |

**VMHP520-5(Supporting the system of daily output 12500 tons fresh water)**

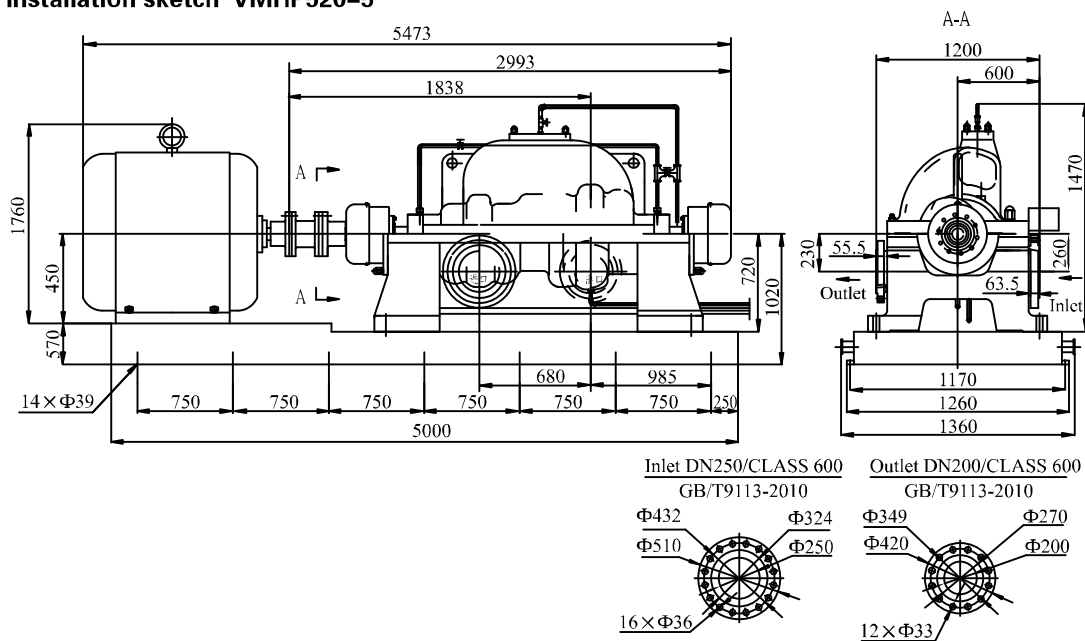
**Performance curve VMHP520-5**



**Performance table VMHP520-5**

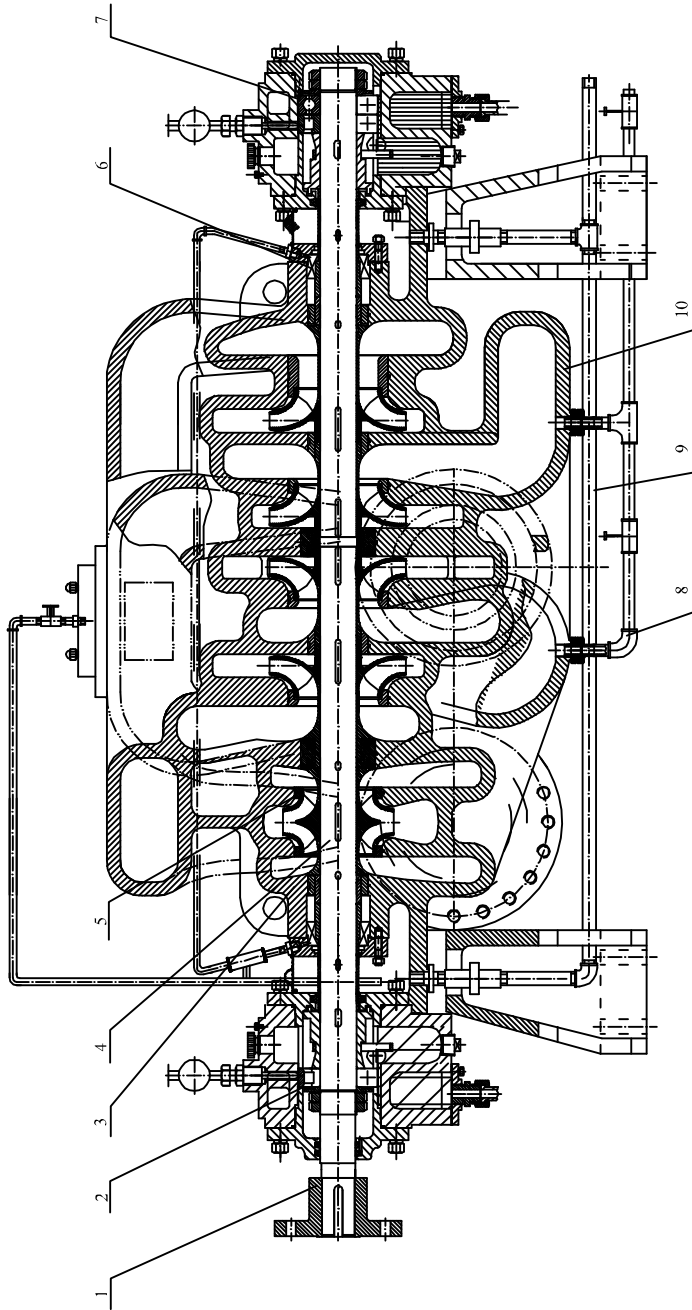
Model	Power (kW)	Q (m³/h)	200	240	280	320	360	400	440	480	520	540	Weight (kg)
VMHP520-5	1120	H (m)	678	670	658	645	630	613	594	572	547	533	12090

**Installation sketch VMHP520-5**



# VMHP

## Sectional drawing VMHP520-5



- 1.Coupling 2.Front bearing body subassembly 3.Pump cover 4.Rotor assembly 5.Impeller neck ring  
6. Mechanical seal 7.Back bearing body subassembly 8.Oil drain pipe 9.Blow-off pipe 10.Base

### Brief introduction

● CH horizontal seawater lift pump is specially designed for R/O seawater desalting system. The wet parts adopt duplex stainless steel and super austenitic stainless steel. Mechanical seal rings adopt anti-seawater corrosion material.

● It can apply to R/O seawater desalting system and boost seawater pressure of pressure exchange energy recovery system, then transfer it to R/O membrane.

### Working conditions

- Seawater
- Temperature: ambient temperature
- Ambient temperature: up to 40 °C
- Altitude: up to 1000m
- Max. working pressure: CH62.5-20-1:75 bar  
CH125-100-315/18.5, CH200-150-315/45, CH250-200-315/75: 63 bar

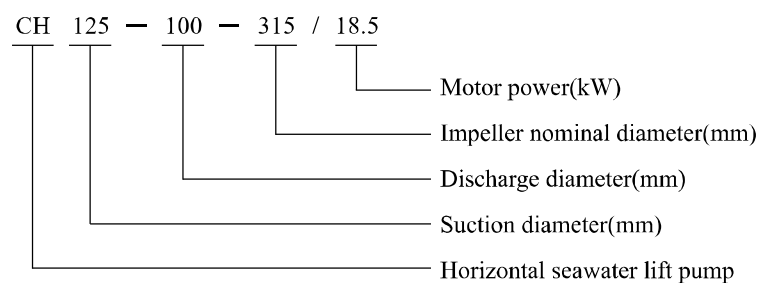
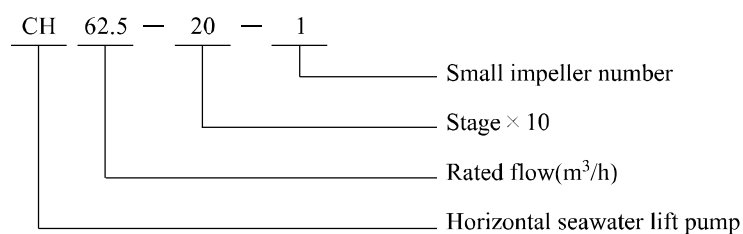
### Features

- TEFC motor; protection level IP55; insulation level: F; voltage 3x380V
- Compact design, good reliability,
- High efficiency, elegant and small appearance.

### Performance curve

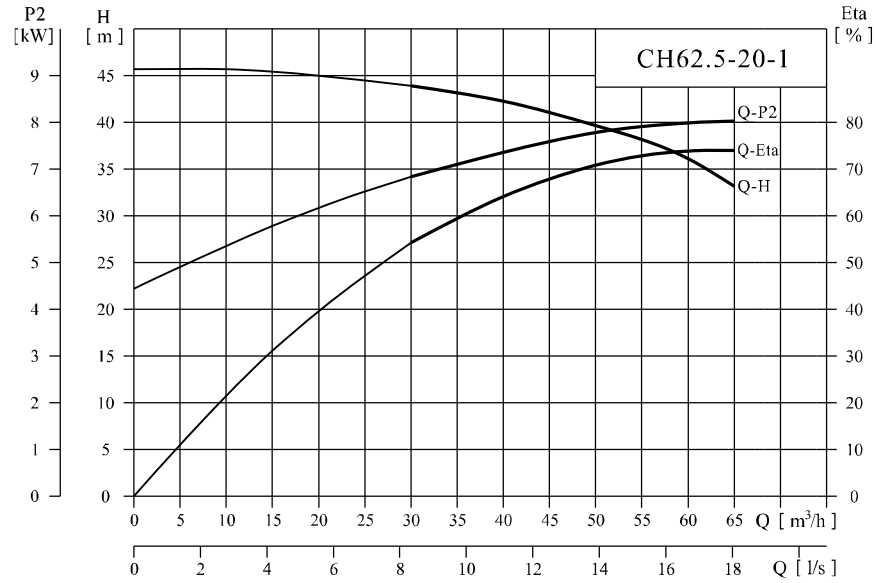
- Curve tolerance in conformity with ISO9906, Annex A.
- All curves are based on the measured value of 50Hz, constant motor speed 2950rpm.
- Measurement is done with 20°C air-free water, kinematic viscosity of 1mm<sup>2</sup>/s.

### Definition of model



**CH62.5-20-1(Supporting the system of daily output 1000 tons fresh water)**

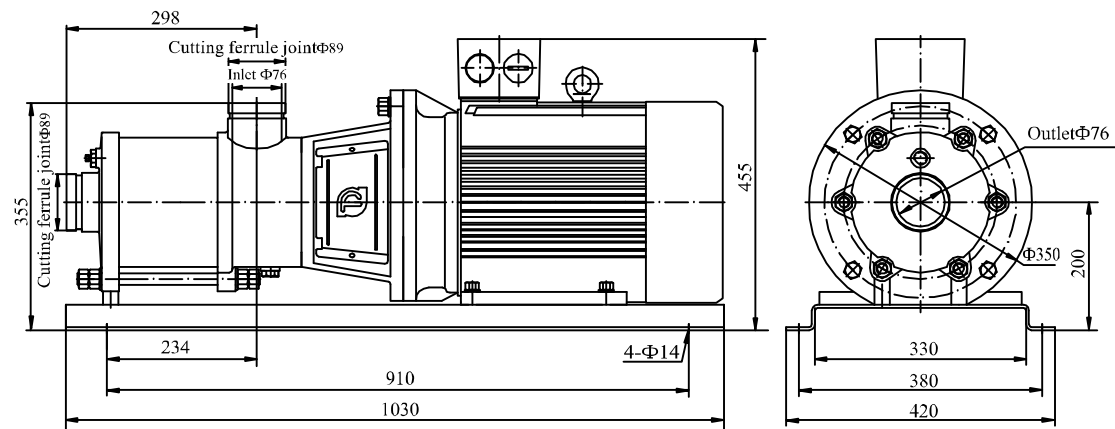
**Performance curve CH62.5-20-1**



**Performance table CH62.5-20-1**

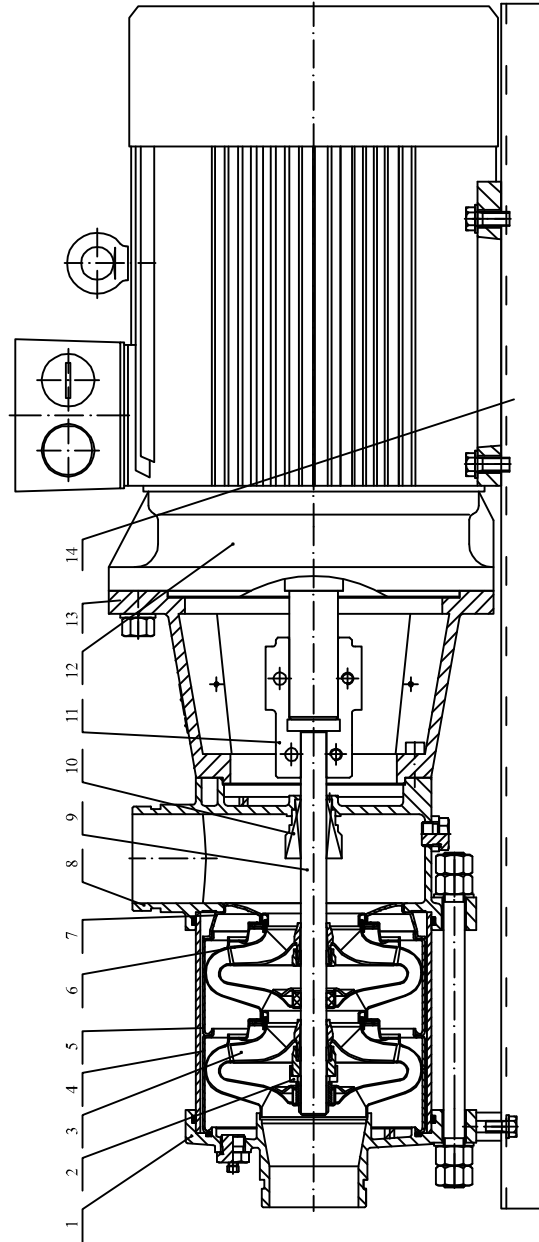
Model	Power (kW)	Q (m³/h)	30	35	40	45	50	55	60	62.5	65	Weight (kg)
CH62.5-20-1	11	H (m)	44	43	42	41	39.5	38	36	35	33	170

**Installation sketch CH62.5-20-1**





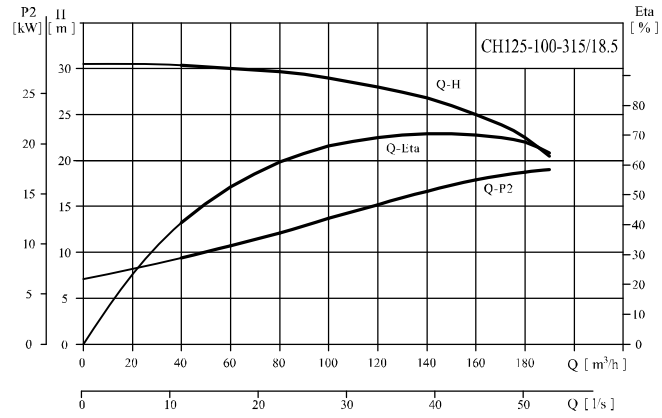
Sectional drawing CH62.5-20-1



- 1.Outlet chamber 2.Sleeve 3.Small impeller 4.Support diffuser 5.Diffuser 6.Big impeller 7.Inducer  
8.Inlet chamber 9.Shaft 10. Mechanical seal 11.Coupling 12.Motor 13.Bracket 14.Base

# CH

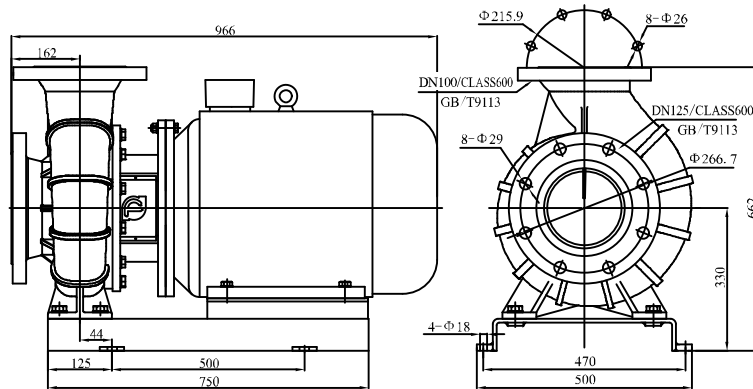
**CH125-100-315/18.5**(Supporting the system of daily output 2500 tons fresh water )  
**Performance curve CH125-100-315/18.5**



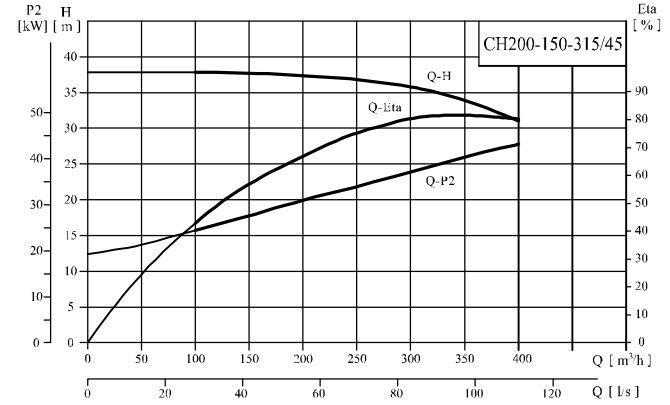
**Performance table CH125-100-315/18.5**

Model	Power (kW)	Q (m³/h)	40	60	80	100	120	140	160	180	190	Weight (kg)
CH125-100-315/18.5	18.5	H (m)	30.4	30	29.5	29	28	26.8	25	22.5	20.5	409

**Installation sketch CH125-100-315/18.5**



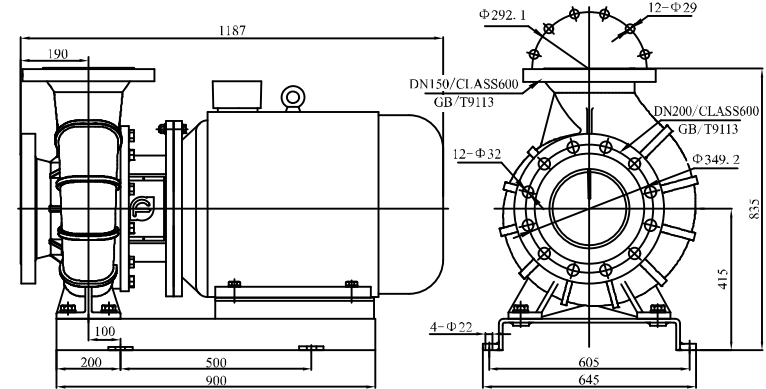
**CH200-150-315/45**  
**Performance curve CH200-150-315/45**



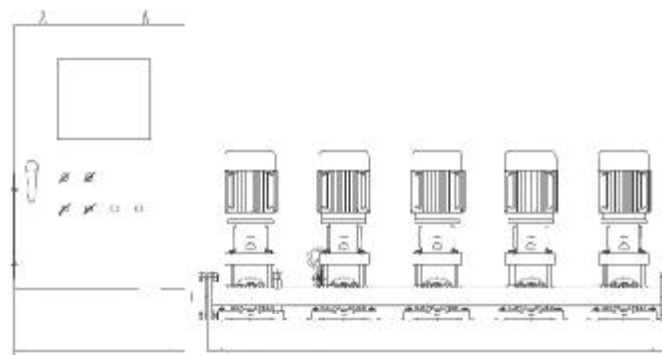
**Performance table CH200-150-315/45**

Model	Power (kW)	Q (m³/h)	100	150	200	250	300	350	400	Weight (kg)
CH200-150-315/45	45	H (m)	38.2	38	37.7	37.1	36	34.2	31.6	720

**Installation sketch CH200-150-315/45**



**FCNP**<sup>®</sup>



DRL Variable speed booster pump system

**General**

This variable speed PID controlled booster system is a sophisticated system, composed of latest technology PID variable speed control cabinet and more than two sets of parallel pumps. It can be automatically adjusted to fulfill the requirement of constant pressure, variable flow water supply. The pressure of the water supply pipe network keeps constant, and the whole water supply system always keeps the best state of high efficiency and energy saving. There are two types of water supply, one is by frequency conversion, the other is by pressure. Water supply by frequency conversion can automatically adjust the rotating speed of one pump or start/stop pumps, which is the best way to keep the pipelines constant pressure, easy to operate.

**Application**

Resident water for living: such as high-rise building, resident community, villa  
 Public places: such as hospital, school, gymnasium, golf court, airport  
 Commercial building: such as hotel, office building, department store, large-scale sauna  
 Irrigation: such as park, amusement park, orchard, farm  
 Manufacturing industry: such as production manufacturing, washing device, food industry, factory.

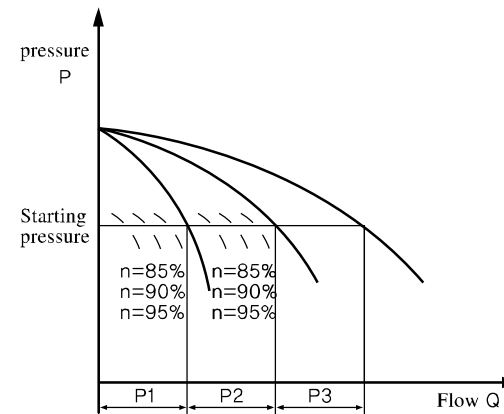
**Advantages**

- Solve the problem of low hydraulic pressure
- The booster system keeps the water pressure stable in the whole building. Avoid water pollution caused by roof tank
- Replace the traditional roof tank water supply way, eliminate the source of water pollution.
- Reduce the construction cost and enlarge the space
- Eliminate traditional roof tank, reduce the stress for the building, structure is simple, lower cost.
- Save power, less space
- Compared with common water supply equipment, it may save more than 30% electric energy. This equipment covers less floor area, its installation simpler and construction period shorter.

**Characteristics of Control Mode**

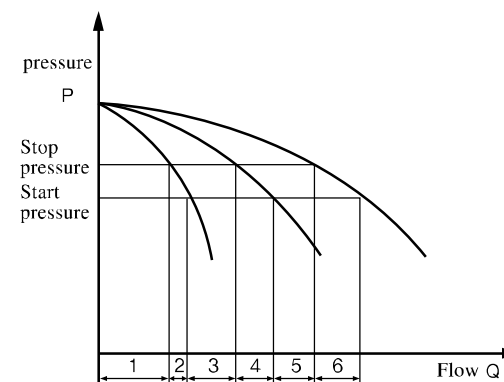
Controlled by frequency conversion	Controlled by air pressure
<ul style="list-style-type: none"> <li>● Operation mode</li> <li>-Keep the pressure of water supply constant through the change of the rotational speed of water pump</li> </ul>	<ul style="list-style-type: none"> <li>● Operation mode</li> <li>-Control the pressure by the pressure tank and pressure switch</li> </ul>
<ul style="list-style-type: none"> <li>● Characteristics</li> <li>-Higher cost than common equipment</li> <li>-Stable supply pressure</li> <li>-Electricity saving and low operation cost</li> <li>-Long life of water pump and motor</li> <li>Without the phenomenon of water hammer, stable operation</li> </ul>	<ul style="list-style-type: none"> <li>● Characteristics</li> <li>-Lower price</li> <li>-Larger deviation of water supply pressure</li> <li>-Simple control mode and convenient maintenance</li> <li>Short life of water pump and motor</li> </ul>

**Frequency conversion control**



Keep the pressure of pipe network constant by adjusting the rotational speed of the water pump. When the pressure inspected at the outlet pipe of the system is smaller than the start pressure value of the water pump, it is able to automatically adjust the rotational speed of the water pump to keep the outlet pressure constant. In case the pump is operated at the rotational speed of power frequency while the pressure can't reach setting pressure, the system will start P2, P3 pump in turn; With the reduction of water consumption, the outlet pressure increases, and the rotational speed of the water pump goes down gradually. If the rotational speed of the water pump reduces to the lowest speed set by the system, the system will stop the operation of the water pump in the turn of P3,P2,P1.

**Pressure control**



In case the pressure of the pipe network is larger than that of start setting value, the pressure tank connected with outlet pipeline supplies water. In case the pressure of the pipe network is equal to that of start setting value, start the pump. When the pressure of the pipe network reaches stop pressure during operation, stop the operation of water pump. After the pump starts, when the pressure of pipe network exceeds the start pressure, not reaching the stop pressure, the water pump continues operating; After the water pump is operated at full speed, when the pressure of pipe network has not reached the start pressure, the spare water pump start.

**Moving control Type Controller of Constant Pressure and Frequency Conversion(747D) was exclusively developed, first invention in the world.**

-World first invention: self-developed moving-control type water supply equipment of constant pressure and frequency conversion can save 3~7% electric energy, compared with former water supply of constant pressure and frequency conversion.

-This product is especially applicable to the sites of large power, large variation of flow and frequent start. The system has high operation efficiency and obvious electricity saving effect.

**1.Moving Mode of Frequency Converter Control**

One set of frequency converter plays the effect of many sets of frequency converter and saves electric power. And start pump softly. The start current spare pump is 200~300% of rating current.

Increase of water consumption	Pump 1	Pump 2	Pump 3
0%	Operation of frequency conversion		
33%	Operation of working frequency →	Operation of frequency conversion	
66%	Operation of working frequency →	Operation of working frequency →	Operation of frequency conversion

Reduction of water consumption	Pump 1	Pump 2	Pump 3
100%	Operation of working frequency →	Operation of working frequency →	Operation of frequency conversion
66%		Operation of working frequency →	Operation of frequency conversion
33%			Operation of frequency conversion

**2.Stationary Mode of Frequency Converter Control**

The frequency converter control is fixed on one pump. When the supplementary pump starts, the start current will be too large and the fluctuation of pressure is large. The start current of the supplementary pump is 500~600% of rated current.

Increase of water consumption	Pump 1	Pump 2	Pump 3
0%	Operation of frequency conversion		
33%	Operation of frequency conversion	→ Operation of working frequency	
66%	Operation of frequency conversion	→ Operation of working frequency	→ Operation of working frequency

Reduction of water consumption	Pump 1	Pump 2	Pump 3
100%	Operation of frequency conversion	← Operation of working frequency	← Operation of working frequency
66%	Operation of frequency conversion	← Operation of working frequency	
33%	Operation of frequency conversion		

**The difference between moving mode and alternate operation mode of frequency converter control**

Alternate operation is the fundamental function of water supply of constant pressure and frequency conversion. After stop, when all water pumps restart, the initial started pump is operated by frequency control, and it is major pump.

Alternatively starting the major pump every time or within any setting time shall prevent certain pump from starting frequently.

Alternate operation	Pump 1	Pump 2	Pump 3
At the time of initial start	1 operation of frequency conversion	2 operation of working frequency	3 operation of working frequency
At the time of restart	3 operation of working frequency	1 operation of frequency conversion	2 operation of working frequency
At the time of restart	2 operation of working frequency	3 operation of working frequency	1 operation of frequency conversion

**Operation Performance Test Curve of Control System of Frequency Converter**

Keep constant pressure by virtue of intelligent controller under the situation of extreme change of flow. It is observed that the water supply system of frequency conversion has the best performance to supply water.

● Performance Test: Variable Speed PID Controlled Booster Equipment

● Model No.: 3DRL8-60 Date: January 10, 2004

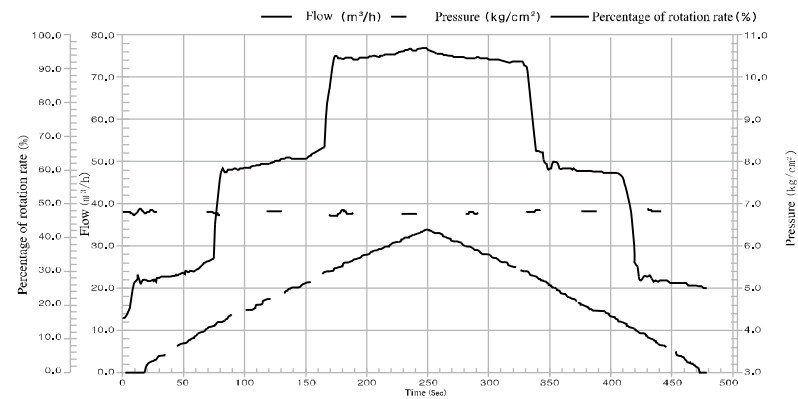
● Capacity: 200LPMX68X3 sets Capacity of Pressure Tank: 100L

Time: 09:56:04

● Control Mode: Frequency conversion and constant pressure

Start Mode: Direct Test Time: 8 minutes

● Test Curve for the variable speed PID controlled booster equipment



## Selection of Pressure Tank

The capacity of the pressure is selected according to the flow of pump, delivery head and start frequency.

The pressure level of the pressure tank is selected according to the system pressure.

### 1. Calculation of effective capacity (VESP)

$V_{ESP} = 16.5XQ/n$  Q: Flow of pump (LPM) n: Start frequency (Times/h)

Motor power(HP)	Below 5HP	7.5~10	15~30	40~75
Start frequency(Times/h)	Below 30	Below 20	Below 12	Below 8

2. Calculate the effective capacity coefficient (Z) based on the features of pump's start and stop

$$Z = \frac{P_i + 1.033}{P_f + 1.033}$$

Z (Effective flow coefficient) = the ratio of occupying coefficient of effective capacity for pressure tank under the condition of assigned start, stop pressure of pump

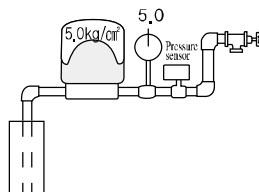
$P_i$ (Start Pressure of Pump) = Actual head + Pipe Loss + System Required Pressure

$P_f$ (Stop pressure of Pump) = General, ( $P_i + 1.0 \sim 2.0 \text{kg/cm}^2$ )

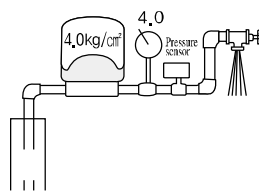
3. Calculate the capacity of pressure tank  $V_T$  from  $V_{ESP}$

$$V_T = V_{ESP}/Z$$

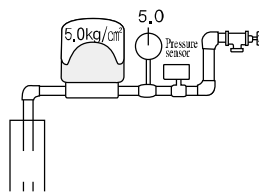
## Working Principle of Pressure Tank



- At the initial operation of the pump, fill water in the pressure tank. After it reaches setting pressure with the increasing of the pressure, the water pump stops.



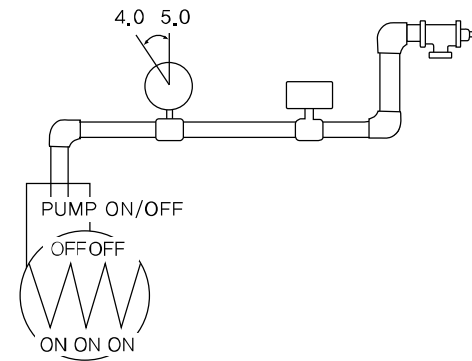
- For initial water consumption, the water is supplied by the pressure tank. With the gradual reduction of the internal pressure of the pressure tank, the water is supplied by the frequency conversion.



- When the supply volume is small or stopping water consumption, the water pump continues filling the water in the pressure tank. It will stop until it reached setting pressure.



## Operational situation of the system in case of without pressure tank



Water is non-compressible fluid so the pressure will change rapidly when little water flows into or out. For the pressurization water supply, without pressure tank or small capacity, the change of water consumption volume will start the water pump frequently and result in the great increase of fault rate for pressure controller, relay, contactor, etc. and large damage and loss for the pump and motor, lowering the reliability.

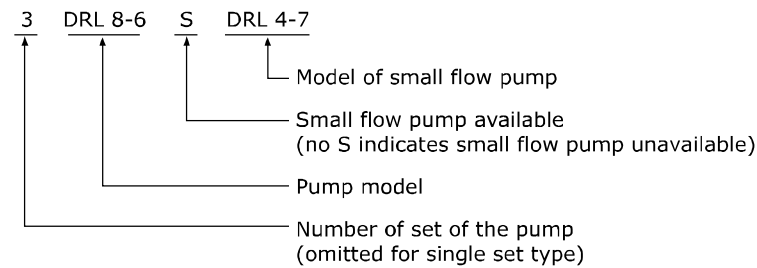
## DRL

### Main features

- High quality intelligent computer control  
Special purpose, self-developed, varied functions, precise control of sophisticated level, world leading standard.
- Energy-saving System  
The system is able to adjust the rotational speed and start/stop pumps in accordance with required water consumption volume, saving electric energy more than 30%.
- Keep Constant Pressure  
In case of rapid change of water consumption volume, the outlet pressure can keep stable to provide the consumer with comfortable water supply environment.
- Made of High Grade Material  
Water pump, main pipelines and accessories are made of stainless steel to provide clean water quality.
- Customer-centered Product Design  
Standardized design may guarantee timely delivery. LCD Menu of Chinese, English, Korean version facilitates consumer's use.

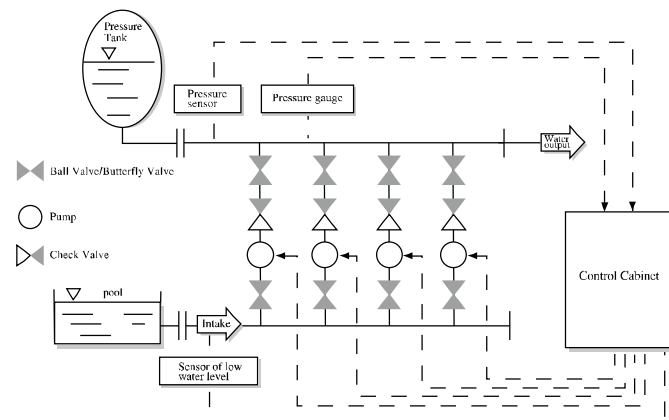
### Definition of Model

Example: 3 pumps including a small flow pump



\*Note: Standard pressure of the pressure tank is 10 bars. It shall be remarked for more than 10 when ordering.

### Sketch Map for Variable Speed PID Controlled Booster



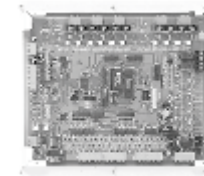
### Operation Environment

Control Mode	Frequency Conversion
Installation Site	Indoor
Temperature Environment	+5℃ ~ +40℃
Conveying Liquid	Clean Water
Liquid Temperature	0~70℃
Extreme Service Pressure(Suction Pressure + Head of Pump at Shut-off point)	20kg/cm <sup>2</sup>
Minimum Suction Pressure	0.2kg/cm <sup>2</sup>
Allowable Suction Pressure	Restricted by maximum use pressure
Pump	Vertical/Horizontal Multistage Centrifugal Pump
Combined Sets of Water Pump	2~6 Sets
Power Supply	3 phase, 220/380V, 50Hz
Suction Pipe/ Output Pipe	Stainless Steel Pipe

### Components Map for Variable Speed PID controlled Booster System



LCD(Chinese, English, 256\*128)



PID Controller Board



Diaphragm Type Pressure Tank



Pressure sensor



All stainless steel Multistage Pump



## Control Cabinet (Special for Variable Speed PID controlled Booster System)



## Main Features of Control Cabinet

Self-researched and developed sophisticated technical product (controller) by mature and abundant experience is applicable to moving mode of frequency converter control. Precisely control the constancy of water supply pressure in accordance with the change of water consumption. The menu of Chinese, English, Korean version is available. Easy to operate. The interface of remote control is available.

## Performance of Routine Product

Item	Type
Operation Mode	Automatic, manual
LCD Display	Chinese LCD
Frequency Converter	1HP~60HP (50Hz or 60Hz)
Pressure sensor	2 Lines, 4~20mA, 0~25 Bar
Remote Control	RS-232C/RS-485, Open of system options

\*Contact us for special requirements

## Major Control Function

Major Function	Content
Moving mode of frequency converter control	Select moving mode or stationary mode of frequency converter control in the menu
LCD screen	Display various information by wide screen LCD menu
LCD Display of Chinese, English, Korean version	Simple operation
Selection of operation interface	Menu options of Chinese, English, Korean
Latest PID control	Latest high performance control system
Running pump in turn	Run or stop pump in turn
Prevent from running without water	The pump stops operation and the system gives an alarm when the inlet pipe is short of water
Run though there is failed pump	When the pump breaks down, the system will automatically start the next normal pump to operate
Adhesion prevention	The system is capable of test run of the pump periodically to prevent the adhesion of the pump due to long-term stop
Overcurrent of motor prevention	Prevent the current of the motor from exceeding the setting value when starting
Overheat of motor prevention	Automatically stop the pump by the temperature switch on the motor
Abnormal high pressure prevention	Prevent abnormal rise of pressure by pressure sensor
Regular operation	Set operation time according to requirements and save energy
Self-diagnosed operation	Real-time monitoring function may diagnose various faults
High-pressure alarm	Automatically stop the pump and give an alarm when exceeding setting pressure and time
Low-pressure alarm	Give an alarm when the working frequency of all pumps operates and cannot reach setting value
Deviation adjustment display	Adjustable when the operation pressure of LCD differs from indicated pressure valve of pressure gauge
Record and storage of operation content	Record and store of various operation situations
Record and storage of alarm content	Display and store of various alarm contents
Emergency measure	Able to shift to manual control when the frequency conversion control fails
Alternate operation	After running some time, other pumps will replace main pump to run, which will make pump run evenly
Combined operation in parallel connection	Maximum 6 sets of pump connected in parallel

# DRL

## Frequency conversion control



### Main Components

NO.	Name	Quantity	Remark
1	Vertical multistage pump	2	SS304 /SS316
2	Control cabinet	1	SS400/SS304
3	Pressure sensor	1	4~20mA
4	Inlet and outlet pipe	One set	SS304
5	Valve	4	Ball valve
6	Check valve	2	SS304
7	Pressure tank	1	SS400
8	Basic frame	1	Q-235-A

### Performance table

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	2	2.4	3.2	4	4.8	5.6	6.4	7
2DRL2-3	0.37	50	60/10	H (m)	27	26	24	22	20	18	15	12
2DRL2-4	0.55	50	60/10		36	35	33	30	26	24	20	16
2DRL2-5	0.55	50	60/10		45	43	40	37	33	30	24	20
2DRL2-6	0.75	50	60/10		53	52	50	45	40	36	30	24
2DRL2-7	0.75	50	60/10		63	61	57	52	47	41	35	28
2DRL2-9	1.1	50	60/10		80	78	73	67	61	54	45	37
2DRL2-11	1.1	50	60/10		98	95	89	82	73	64	54	44
2DRL2-13	1.5	50	60/16		116	114	106	98	89	78	65	52
2DRL2-15	1.5	50	60/16		134	130	123	112	100	90	73	60
2DRL2-18	2.2	50	60/16		161	157	148	136	121	108	91	76
2DRL2-22	2.2	50	60/25		197	192	180	165	148	130	110	90
2DRL2-26	3.0	50	60/25		232	228	214	198	179	158	130	110

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	3	4	6	8	10	12	14	16
2DRL4-3	0.55	50	60/10	H (m)	28	27	26	24	20	18	13	10
2DRL4-4	0.75	50	60/10		38	36	34	32	27	24	19	13
2DRL4-5	1.1	50	60/10		47	45	43	40	34	31	23	17
2DRL4-6	1.1	50	60/10		56	54	52	48	41	37	28	20
2DRL4-7	1.5	50	60/10		66	63	61	56	48	43	33	24
2DRL4-8	1.5	50	60/10		74	72	70	64	55	50	38	27
2DRL4-10	2.2	50	60/10		96	90	87	81	71	62	48	34
2DRL4-12	2.2	50	60/10		114	108	104	95	85	75	58	41
2DRL4-14	3.0	50	60/16		136	126	122	112	101	89	68	48
2DRL4-16	3.0	50	60/16		152	144	140	129	115	101	78	55
2DRL4-19	4.0	50	60/25		183	171	168	153	137	122	93	67
2DRL4-22	4.0	50	60/25		211	200	192	178	160	138	108	79

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	10	12	14	16	18	20	22	24
2DRL8-3	1.1	65	60/10	H (m)	30	29.5	28.5	27	25	24	21	19
2DRL8-4	1.5	65	60/10		41	39.5	38	36	34	32	28	26
2DRL8-5	2.2	65	60/10		52	50	48	45	42	40	36	32
2DRL8-6	2.2	65	60/10		62	60	57	54	51	48	43	39
2DRL8-8	3.0	65	60/10		83	80	77	73	69	65	58	52
2DRL8-10	4.0	65	60/10		104	100	97	92	87	81	73	65
2DRL8-12	4.0	65	60/16		124	120	116	111	104	92	87	78
2DRL8-14	5.5	65	60/16		145	141	136	130	122	113	102	92
2DRL8-16	5.5	65	60/16		166	161	156	148	139	130	118	106
2DRL8-18	7.5	65	60/25		187	182	175	167	157	146	134	120
2DRL8-20	7.5	65	60/25		208	202	195	186	175	163	150	135

Performance table

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m³/h)	14	16	18	20	22	24	26	28	30	32	
2DRL12-3	2.2	80	80/10	H (m)	35.5	35	34	33	31.5	30	28	26	23.5	21	
2DRL12-4	3.0	80	80/10		47	46	45	44	42	40	37	34	31	28	
2DRL12-5	3.0	80	80/10		59.5	58	56.5	55	52.5	50	46.5	43	39	35	
2DRL12-6	4.0	80	80/10		71.5	70	68	66	63	60	56	52	47	42	
2DRL12-7	5.5	80	80/10		83.5	82	79.5	77	73.5	70	65.5	61	55	49	
2DRL12-8	5.5	80	80/10		95.5	94	91	88	84	80	75	70	63	56	
2DRL12-9	5.5	80	80/16		108	106	103	100	95.5	91	85	79	71.5	64	
2DRL12-10	7.5	80	80/16		120	118	114.5	111	106	101	94.5	88	80	72	
2DRL12-12	7.5	80	80/16		143.5	141	137	133	127	121	113.5	106	96	86	
2DRL12-14	11	80	80/16		168	165	160	155	148	141	132.5	124	112	100	
2DRL12-16	11	80	80/25		192.5	189	183.5	178	170	162	152	142	128.5	115	
2DRL12-18	11	80	80/25		217	213	207.5	202	192.5	183	171.5	160	145	130	
Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)		Flow (m³/h)	16	20	24	28	32	36	40	44		
2DRL16-2	2.2	80	80/10		H (m)	27	26	25	24	22	21	19	16		
2DRL16-3	3.0	80	80/10	41		40	38	37	34	32	26	25			
2DRL16-4	4.0	80	80/10	54		53	52	49	46	43	38	34			
2DRL16-5	5.5	80	80/10	68		67	65	62	58	54	48	43			
2DRL16-6	5.5	80	80/10	82		80	78	74	70	64	58	52			
2DRL16-7	7.5	80	80/10	96		95	91	87	82	76	68	61			
2DRL16-8	7.5	80	80/16	110		108	104	99	94	86	77	70			
2DRL16-10	11	80	80/16	138		136	131	125	118	109	97	87			
2DRL16-12	11	80	80/16	166		162	157	150	141	130	116	105			
2DRL16-14	15	80	80/25	194		190	184	175	166	152	136	122			
2DRL16-16	15	80	80/25	222		217	210	200	189	174	156	140			
Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m³/h)		20	24	28	32	36	40	44	48	52	56
2DRL20-2	2.2	80	80/10	H (m)		27	26.5	26	25	24	23	22	20	18	15
2DRL20-3	4.0	80	80/10			40	39.5	39	38	37	35	33	30	27	24
2DRL20-4	5.5	80	80/10		54	53	52	51	49	47	44	41	37	33	
2DRL20-5	5.5	80	80/10		67	66	64	62	60	58	55	50	45	40	
2DRL20-6	7.5	80	80/10		81	79	77	75	73	70	66	61	55	49	
2DRL20-7	7.5	80	80/10		95	93	91	89	86	82	77	71	65	58	
2DRL20-8	11	80	80/16		109	107	105	102	99	94	89	82	75	67	
2DRL20-10	11	80	80/16		136	134	131	128	124	118	111	103	95	85	
2DRL20-12	15	80	80/16		164	162	158	154	149	142	133	124	114	102	
2DRL20-14	15	80	80/25		192	189	185	180	174	166	156	145	133	119	
2DRL20-17	18.5	80	80/25		234	230	225	219	212	202	190	177	162	145	
Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)		Flow (m³/h)	32	40	48	56	64	72	80			
2DRL32-20-2	3.0	100	100/10		H (m)	29	28	26	23	20	16	11			
2DRL32-20	4.0	100	100/10			36	34	32	29	27	23	18			
2DRL32-30-2	5.5	100	100/10	47		44	41	38	33	28	21				
2DRL32-30	5.5	100	100/10	54		51	48	44	40	35	27				
2DRL32-40-2	7.5	100	100/10	65		62	58	53	46	40	30				
2DRL32-40	7.5	100	100/10	72		69	65	59	53	47	37				
2DRL32-50-2	11	100	100/10	83		79	74	68	60	52	41				
2DRL32-50	11	100	100/10	90		86	81	74	67	59	47				
2DRL32-60-2	11	100	100/10	101		97	90	83	74	65	51				
2DRL32-60	11	100	100/10	108		104	97	90	81	72	57				
2DRL32-70-2	15	100	100/10	119		114	107	98	88	78	60				
2DRL32-70	15	100	100/16	126		121	113	105	95	85	67				
2DRL32-80-2	15	100	100/16	136		131	123	114	102	90	71				
2DRL32-80	15	100	100/16	144		138	130	120	109	97	77				
2DRL32-90-2	18.5	100	100/16	154		148	140	129	117	102	82				
2DRL32-90	18.5	100	100/16	162		156	147	136	124	109	88				
2DRL32-100-2	18.5	100	100/16	175		166	157	146	131	115	91				
2DRL32-100	18.5	100	100/16	182		173	164	152	138	122	98				
2DRL32-110-2	22	100	100/16	193		184	173	164	146	128	102				
2DRL32-110	22	100	100/16	200		191	180	168	153	135	109				
2DRL32-120-2	22	100	100/25	211		201	189	178	160	140	113				
2DRL32-120	22	100	100/25	218		208	196	184	167	147	120				
2DRL32-130-2	30	100	100/25	230		218	206	193	174	153	124				
2DRL32-130	30	100	100/25	237		225	213	200	181	160	131				
2DRL32-140-2	30	100	100/25	247		235	222	210	189	165	135				
2DRL32-140	30	100	100/25	242		242	229	216	196	172	142				

# DRL

## Performance table

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m³/h)	50	60	70	80	84	90	100	110
2DRL42-10	4.0	125	100/10	H (m)	24	23	22	21	20	19	18	16
2DRL42-20-2	5.5	125	100/10		40	38	36	33	32	30	27	23
2DRL42-20	7.5	125	100/10		48	46	44	42	41	39	35	31
2DRL42-30-2	11	125	100/10		63	61	58	54	52	50	44	38
2DRL42-30	11	125	100/10		71	69	66	63	61	58	53	47
2DRL42-40-2	15	125	100/10		87	84	80	75	63	69	62	54
2DRL42-40	15	125	100/10		95	92	88	84	81	78	71	62
2DRL42-50-2	18.5	125	100/10		111	107	102	96	93	88	80	69
2DRL42-50	18.5	125	100/16		119	115	110	105	101	97	88	78
2DRL42-60-2	22	125	100/16		135	130	124	117	113	108	97	85
2DRL42-60	22	125	100/16		143	138	132	125	122	116	106	93
2DRL42-70-2	30	125	100/16		158	152	146	138	134	127	115	100
2DRL42-70	30	125	100/16		166	161	154	146	142	135	124	109
2DRL42-80-2	30	125	100/16		182	175	168	159	154	146	133	116
2DRL42-80	30	125	100/25		190	184	176	167	162	154	141	124
2DRL42-90-2	30	125	100/25		205	198	190	180	174	166	150	132
2DRL42-90	37	125	100/25		214	207	198	188	183	174	159	140
2DRL42-100-2	37	125	100/25		230	221	212	200	194	185	168	147
2DRL42-100	37	125	100/25		238	230	220	209	203	193	117	155
2DRL42-110-2	45	125	100/25		255	246	236	223	217	206	188	165
2DRL42-110	45	125	100/25		263	255	244	232	225	214	196	173
2DRL42-120-2	45	125	100/25		280	270	259	245	238	226	206	181
2DRL42-120	45	125	100/25		289	280	268	255	247	236	216	190

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m³/h)	60	80	100	120	130	140	160
2DRL65-10	5.5	150	100/10	H (m)	27	25	23	21	20	18	15
2DRL65-20-2	7.5	150	100/10		39	36	33	29	26	23	17
2DRL65-20-1	11	150	100/10		46	44	40	36	33	30	24
2DRL65-20	11	150	100/10		53	51	47	43	40	37	30
2DRL65-30-2	15	150	100/10		66	62	56	50	46	41	32
2DRL65-30-1	15	150	100/10		73	69	63	57	53	48	39
2DRL65-30	18.5	150	100/10		80	76	70	64	60	55	46
2DRL65-40-2	18.5	150	100/10		92	87	80	71	66	60	47
2DRL65-40-1	22	150	100/10		100	91	87	78	73	67	54
2DRL65-40	22	150	100/10		107	101	94	85	80	74	61
2DRL65-50-2	30	150	100/10		121	114	105	95	88	80	64
2DRL65-50-1	30	150	100/16		128	121	112	102	95	87	71
2DRL65-50	30	150	100/16		136	129	119	109	102	94	78
2DRL65-60-2	30	150	100/16		150	142	131	118	110	101	81
2DRL65-60-1	37	150	100/16		157	149	138	125	117	108	88
2DRL65-60	37	150	100/16		164	156	145	132	124	115	95
2DRL65-70-2	37	150	100/16		179	169	156	141	132	121	99
2DRL65-70-1	37	150	100/25		186	176	163	148	139	128	106
2DRL65-70	45	150	100/25		193	183	170	155	146	135	112
2DRL65-80-2	45	150	100/25		207	196	182	164	154	142	116
2DRL65-80-1	45	150	100/25		215	203	189	171	161	149	123

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m³/h)	100	120	140	160	170	180	200	220
2DRL85-10	7.5	150	100/10	H (m)	25	24	22	21	20	19	16	12
2DRL85-20-2	11	150	100/10		41	39	36	32	30	28	22	15
2DRL85-20	15	150	100/10		53	50	47	44	41	40	36	30
2DRL85-30-2	18.5	150	100/10		68	65	60	55	52	49	41	32
2DRL85-30	22	150	100/10		81	77	72	67	64	62	55	48
2DRL85-40-2	30	150	100/10		98	93	87	80	75	72	62	50
2DRL85-40	30	150	100/10		110	105	100	92	86	84	76	66
2DRL85-50-2	37	150	100/16		126	120	113	104	98	93	81	68
2DRL85-50	37	150	100/16		139	131	124	115	110	106	94	83
2DRL85-60-2	45	150	100/16		155	148	139	129	122	117	102	86
2DRL85-60	45	150	100/16		168	160	150	141	134	130	117	103

## Performance table

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	120	140	160	180	200	220	240	260	280	300
2DRL120-20-2	15	200	200/10	H (m)	34	33.6	33	31	30.2	30	28.5	27	25	24
2DRL120-20-1	18.5	200	200/10		41	40	39.5	38.5	37	36.5	34.5	32.5	30	27.5
2DRL120-20	22	200	200/10		46	45	44.5	43.5	42.4	41	40	38	36	33.5
2DRL120-30-2	30	200	200/10		57	56	55	53.5	52	51	49	46.5	43.5	41
2DRL120-30-1	30	200	200/10		64	63	62	60	58.5	57.5	55.5	52	49	46
2DRL120-30	30	200	200/10		69.5	68.5	67.5	66	64.4	62.5	61	57.5	54.5	51
2DRL120-40-2	37	200	200/10		80.5	79	78	76	73.5	72	69	66	61.5	58
2DRL120-40-1	37	200	200/10		87	86	84.5	82	80	78	76	72	68	64.5
2DRL120-40	45	200	200/10		92.5	91	90	88	85.5	83	81	77	73	68.5
2DRL120-50-2	45	200	200/16		104.5	103	101	99	96	93	90	85.5	80.5	75.5
2DRL120-50-1	45	200	200/16		110.5	109	107.5	105	102	100	97	92	86.5	83
2DRL120-50	55	200	200/16		115.5	114	113	110	107.5	104.5	101.5	96	91	86
2DRL120-60-2	55	200	200/16		128	125.5	123	121	117.3	113.5	110	104.5	98.5	92.5
2DRL120-60-1	55	200	200/16		134	132	130.5	127	124	121	118	111	105	100
2DRL120-60	75	200	200/16		139	137	135	132	128.8	126	123	116	110	104
2DRL120-70-2	75	200	200/16		151	148	145.5	143	138.6	134	130	123.5	116.5	109
2DRL120-70-1	75	200	200/25		156.5	154	152	148.5	144.5	141	137.5	130	123	116.5
2DRL120-70	75	200	200/25		162.5	160.5	158.5	155	151	148	145	137	129	123

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	160	180	200	220	240	260	280	300	320	340	360
2DRL150-20-2	18.5	200	200/10	H (m)	37	35.5	34	33	32	31	29	27.5	26	23	21
2DRL150-20-1	22	200	200/10		44.3	43	42	40	39	38.5	37.5	35	33	30	27
2DRL150-20	30	200	200/10		50	49	48	47	45.5	44	42	40	37	34	32
2DRL150-30-2	30	200	200/10		63.5	61	59	57.5	56	54.5	53	49	45.5	42	39
2DRL150-30-1	37	200	200/10		70	68	67	65	63	62	60	56	53	49	45
2DRL150-30	37	200	200/10		78	76.5	75	73	70.5	68	66	63	59	55	50.5
2DRL150-40-2	45	200	200/10		89	87	84	81.5	79	77	74.5	70.5	65.5	60	56
2DRL150-40-1	45	200	200/10		96.5	94	91.5	89	86.5	84	81.5	77	72.5	67	62
2DRL150-40	55	200	200/16		104	102	100	97	95	91	88	84	79.5	74	68
2DRL150-50-2	55	200	200/16		115.5	112	109	106	102.5	100	97	92	86	79	73.5
2DRL150-50-1	75	200	200/16		122.5	119.5	117	113.5	111.5	107.5	104.5	99	93.5	87	80
2DRL150-50	75	200	200/16		130	127.5	125	121	119	115	111.5	106.5	101	94.5	86.5
2DRL150-60-2	75	200	200/16		140	137	133	130	126	121	118	112	106	98	91
2DRL150-60-1	75	200	200/16		148.5	145	141.7	137.5	135	131	127	120.5	114.5	106.5	97.5
2DRL150-60	75	200	200/16		157	153	149	145	142	139.5	137	130	123.5	116	109

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	200	240	280	320	360	400	440	480
2DRL200-10-B	18.5	250	300/10	H (m)	25.5	25	24	23	21.5	20	18	15.5
2DRL200-10-A	22	250	300/10		29	28.5	27.5	26.5	25.5	24	22	20
2DRL200-10	30	250	300/10		38.5	38	37.5	36.5	35	34	32.5	30
2DRL200-20-2B	37	250	300/10		53	51	49	47	44	41	37	32
2DRL200-20-2A	45	250	300/10		59.5	58	56	54	52.5	49	44.5	40.5
2DRL200-20-A	55	250	300/10		69	68	66	64	62	59	55.5	51
2DRL200-20	75	250	300/10		78.5	77.5	76	74	71.5	69	66	61.5
2DRL200-30-2B	75	250	300/10		91.5	89	86.5	83.5	79	75	70	63
2DRL200-30-A-B	75	250	300/10		95	93	90	87	83.5	79	73.5	67
2DRL200-30-2A	75	250	300/10		99.5	97.5	94.5	91.5	89	84	78.5	72
2DRL200-30-B	75	250	300/16		104.5	102.5	100	97	93	89	84.5	77.5
2DRL200-30-A	75	250	300/16		108	106	103.5	100.5	97.5	93	88	81.5
2DRL200-30	90	250	300/16		117.5	116	113.5	110.5	107	103	99	92
2DRL200-40-2B	90	250	300/16		131.5	129	125.5	121	115.5	110	103.5	94
2DRL200-40-2A	110	250	300/16		138.5	136	132	128	124	118	111	102.5
2DRL200-40-A	110	250	300/16		148	145.5	142.5	138	134	128	122	113
2DRL200-40	110	250	300/16		157.5	155.5	152.5	148	143.5	138	132.2	123.5

# DRL

## Frequency conversion control



### Main Components

NO.	Name	Quantity	Remark
1	Vertical multistage pump	3	SS304 /SS316
2	Control cabinet	1	SS400/SS304
3	Pressure sensor	1	4~20mA
4	Inlet and outlet pipe	One set	SS304
5	Valve	6	Ball valve
6	Check valve	3	SS304
7	Pressure tank	1	SS400
8	Basic frame	1	Q-235-A

### Performance table

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	H (m)							
					3	3.6	4.8	6	7.2	8.4	9.6	10.5
3DRL2-3	0.37	50	60/10	H (m)	27	26	24	22	20	18	15	12
3DRL2-4	0.55	50	60/10		36	35	33	30	26	24	20	16
3DRL2-5	0.55	50	60/10		45	43	40	37	33	30	24	20
3DRL2-6	0.75	50	60/10		53	52	50	45	40	36	30	24
3DRL2-7	0.75	50	60/10		63	61	57	52	47	41	35	28
3DRL2-9	1.1	50	60/10		80	78	73	67	61	54	45	37
3DRL2-11	1.1	50	60/10		98	95	89	82	73	64	54	44
3DRL2-13	1.5	50	60/16		116	114	106	98	89	78	65	52
3DRL2-15	1.5	50	60/16		134	130	123	112	100	90	73	60
3DRL2-18	2.2	50	60/16		161	157	148	136	121	108	91	76
3DRL2-22	2.2	50	60/25		197	192	180	165	148	130	110	90
3DRL2-26	3.0	50	60/25		232	228	214	198	179	158	130	110

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	H (m)							
					4.5	6	9	12	15	18	21	24
3DRL4-3	0.55	65	60/10	H (m)	28	27	26	24	20	18	13	10
3DRL4-4	0.75	65	60/10		38	36	34	32	27	24	19	13
3DRL4-5	1.1	65	60/10		47	45	43	40	34	31	23	17
3DRL4-6	1.1	65	60/10		56	54	52	48	41	37	28	20
3DRL4-7	1.5	65	60/10		66	63	61	56	48	43	33	24
3DRL4-8	1.5	65	60/10		74	72	70	64	55	50	38	27
3DRL4-10	2.2	65	60/10		96	90	87	81	71	62	48	34
3DRL4-12	2.2	65	60/10		114	108	104	95	85	75	58	41
3DRL4-14	3.0	65	60/16		136	126	122	112	101	89	68	48
3DRL4-16	3.0	65	60/16		152	144	140	129	115	101	78	55
3DRL4-19	4.0	65	60/25		183	171	168	153	137	122	93	67
3DRL4-22	4.0	65	60/25		211	200	192	178	160	138	108	79

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	H (m)							
					15	18	21	24	27	30	33	36
3DRL8-3	1.1	80	80/10	H (m)	30	29.5	28.5	27	25	24	21	19
3DRL8-4	1.5	80	80/10		41	39.5	38	36	34	32	28	26
3DRL8-5	2.2	80	80/10		52	50	48	45	42	40	36	32
3DRL8-6	2.2	80	80/10		62	60	57	54	51	48	43	39
3DRL8-8	3.0	80	80/10		83	80	77	73	69	65	58	52
3DRL8-10	4.0	80	80/10		104	100	97	92	87	81	73	65
3DRL8-12	4.0	80	80/16		124	120	116	111	104	92	87	78
3DRL8-14	5.5	80	80/16		145	141	136	130	122	113	102	92
3DRL8-16	5.5	80	80/16		166	161	156	148	139	130	118	106
3DRL8-18	7.5	80	80/25		187	182	175	167	157	146	134	120
3DRL8-20	7.5	80	80/25		208	202	195	186	175	163	150	135

**Performance table**

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	21	24	27	30	33	36	39	42	45	48
3DRL12-3	2.2	100	100/10	H (m)	35.5	35	34	33	31.5	30	28	26	23.5	21
3DRL12-4	3.0	100	100/10		47	46	45	44	42	40	37	34	31	28
3DRL12-5	3.0	100	100/10		59.5	58	56.5	55	52.5	50	46.5	43	39	35
3DRL12-6	4.0	100	100/10		71.5	70	68	66	63	60	56	52	47	42
3DRL12-7	5.5	100	100/10		83.5	82	79.5	77	73.5	70	65.5	61	55	49
3DRL12-8	5.5	100	100/10		95.5	94	91	88	84	80	75	70	63	56
3DRL12-9	5.5	100	100/16		108	106	103	100	95.5	91	85	79	71.5	64
3DRL12-10	7.5	100	100/16		120	118	114.5	111	106	101	94.5	88	80	72
3DRL12-12	7.5	100	100/16		143.5	141	137	133	127	121	113.5	106	96	86
3DRL12-14	11	100	100/16		168	165	160	155	148	141	132.5	124	112	100
3DRL12-16	11	100	100/25		192.5	189	183.5	178	170	162	152	142	128.5	115
3DRL12-18	11	100	100/25		217	213	207.5	202	192.5	183	171.5	160	145	130

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	24	30	36	42	48	54	60	66
3DRL16-2	2.2	100	100/10	H (m)	27	26	25	24	22	21	19	16
3DRL16-3	3.0	100	100/10		41	40	38	37	34	32	26	25
3DRL16-4	4.0	100	100/10		54	53	52	49	46	43	38	34
3DRL16-5	5.5	100	100/10		68	67	65	62	58	54	48	43
3DRL16-6	5.5	100	100/10		82	80	78	74	70	64	58	52
3DRL16-7	7.5	100	100/10		96	95	91	87	82	76	68	61
3DRL16-8	7.5	100	100/16		110	108	104	99	94	86	77	70
3DRL16-10	11	100	100/16		138	136	131	125	118	109	97	87
3DRL16-12	11	100	100/16		166	162	157	150	141	130	116	105
3DRL16-14	15	100	100/25		194	190	184	175	166	152	136	122
3DRL16-16	15	100	100/25		222	217	210	200	189	174	156	140

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	30	36	42	48	54	60	66	72	78	84
3DRL20-2	2.2	100	100/10	H (m)	27	26.5	26	25	24	23	22	20	18	15
3DRL20-3	4.0	100	100/10		40	39.5	39	38	37	35	33	30	27	24
3DRL20-4	5.5	100	100/10		54	53	52	51	49	47	44	41	37	33
3DRL20-5	5.5	100	100/10		67	66	64	62	60	58	55	50	45	40
3DRL20-6	7.5	100	100/10		81	79	77	75	73	70	66	61	55	49
3DRL20-7	7.5	100	100/10		95	93	91	89	86	82	77	71	65	58
3DRL20-8	11	100	100/10		109	107	105	102	99	94	89	82	75	67
3DRL20-10	11	100	100/16		136	134	131	128	124	118	111	103	95	85
3DRL20-12	15	100	100/16		164	162	158	154	149	142	133	124	114	102
3DRL20-14	15	100	100/25		192	189	185	180	174	166	156	145	133	119
3DRL20-17	18.5	100	100/25		234	230	225	219	212	202	190	177	162	145

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	48	60	72	84	96	108	120
3DRL32-20-2	3.0	125	100/10	H (m)	29	28	26	23	20	16	11
3DRL32-20	4.0	125	100/10		36	34	32	29	27	23	18
3DRL32-30-2	5.5	125	100/10		47	44	41	38	33	28	21
3DRL32-30	5.5	125	100/10		54	51	48	44	40	35	27
3DRL32-40-2	7.5	125	100/10		65	62	58	53	46	40	30
3DRL32-40	7.5	125	100/10		72	69	65	59	53	47	37
3DRL32-50-2	11	125	100/10		83	79	74	68	60	52	41
3DRL32-50	11	125	100/10		90	86	81	74	67	59	47
3DRL32-60-2	11	125	100/10		101	97	90	83	74	65	51
3DRL32-60	11	125	100/10		108	104	97	90	81	72	57
3DRL32-70-2	15	125	100/10		119	114	107	98	88	78	60
3DRL32-70	15	125	100/16		126	121	113	105	95	85	67
3DRL32-80-2	15	125	100/16		136	131	123	114	102	90	71
3DRL32-80	15	125	100/16		144	138	130	120	109	97	77
3DRL32-90-2	18.5	125	100/16		154	148	140	129	117	102	82
3DRL32-90	18.5	125	100/16		162	156	147	136	124	109	88
3DRL32-100-2	18.5	125	100/16		175	166	157	146	131	115	91
3DRL32-100	18.5	125	100/16		182	173	164	152	138	122	98
3DRL32-110-2	22	125	100/16		193	184	173	164	146	128	102
3DRL32-110	22	125	100/16		200	191	180	168	153	135	109
3DRL32-120-2	22	125	100/25		211	201	189	178	160	140	113
3DRL32-120	22	125	100/25		218	208	196	184	167	147	120
3DRL32-130-2	30	125	100/25		230	218	206	193	174	153	124
3DRL32-130	30	125	100/25		237	225	213	200	181	160	131
3DRL32-140-2	30	125	100/25		247	235	222	210	189	165	135
3DRL32-140	30	125	100/25		242	242	229	216	196	172	142

# DRL

## Performance table

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	75	90	105	120	126	135	150	165
3DRL42-10	4.0	150	200/10	H (m)	24	23	22	21	20	19	18	16
3DRL42-20-2	5.5	150	200/10		40	38	36	33	32	30	27	23
3DRL42-20	7.5	150	200/10		48	46	44	42	41	39	35	31
3DRL42-30-2	11	150	200/10		63	61	58	54	52	50	44	38
3DRL42-30	11	150	200/10		71	69	66	63	61	58	53	47
3DRL42-40-2	15	150	200/10		87	84	80	75	63	69	62	54
3DRL42-40	15	150	200/10		95	92	88	84	81	78	71	62
3DRL42-50-2	18.5	150	200/10		111	107	102	96	93	88	80	69
3DRL42-50	18.5	150	200/16		119	115	110	105	101	97	88	78
3DRL42-60-2	22	150	200/16		135	130	124	117	113	108	97	85
3DRL42-60	22	150	200/16		143	138	132	125	122	116	106	93
3DRL42-70-2	30	150	200/16		158	152	146	138	134	127	115	100
3DRL42-70	30	150	200/16		166	161	154	146	142	135	124	109
3DRL42-80-2	30	150	200/16		182	175	168	159	154	146	133	116
3DRL42-80	30	150	200/25		190	184	176	167	162	154	141	124
3DRL42-90-2	30	150	200/25		205	198	190	180	174	166	150	132
3DRL42-90	37	150	200/25		214	207	198	188	183	174	159	140
3DRL42-100-2	37	150	200/25		230	221	212	200	194	185	168	147
3DRL42-100	37	150	200/25		238	230	220	209	203	193	117	155
3DRL42-110-2	45	150	200/25		255	246	236	223	217	206	188	165
3DRL42-110	45	150	200/25		263	255	244	232	225	214	196	173
3DRL42-120-2	45	150	200/25		280	270	259	245	238	226	206	181
3DRL42-120	45	150	200/25		289	280	268	255	247	236	216	190
3DRL42-130-2	45	150	200/30		305	294	282	267	259	247	225	198

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	90	120	150	180	195	210	240
3DRL65-10	5.5	200	200/10	H (m)	27	25	23	21	20	18	15
3DRL65-20-2	7.5	200	200/10		39	36	33	29	26	23	17
3DRL65-20-1	11	200	200/10		46	44	40	36	33	30	24
3DRL65-20	11	200	200/10		53	51	47	43	40	37	30
3DRL65-30-2	15	200	200/10		66	62	56	50	46	41	32
3DRL65-30-1	15	200	200/10		73	69	63	57	53	48	39
3DRL65-30	18.5	200	200/10		80	76	70	64	60	55	46
3DRL65-40-2	18.5	200	200/10		92	87	80	71	66	60	47
3DRL65-40-1	22	200	200/10		100	91	87	78	73	67	54
3DRL65-40	22	200	200/10		107	101	94	85	80	74	61
3DRL65-50-2	30	200	200/10		121	114	105	95	88	80	64
3DRL65-50-1	30	200	200/16		128	121	112	102	95	87	71
3DRL65-50	30	200	200/16		136	129	119	109	102	94	78
3DRL65-60-2	30	200	200/16		150	142	131	118	110	101	81
3DRL65-60-1	37	200	200/16		157	149	138	125	117	108	88
3DRL65-60	37	200	200/16		164	156	145	132	124	115	95
3DRL65-70-2	37	200	200/16		179	169	156	141	132	121	99
3DRL65-70-1	37	200	200/25		186	176	163	148	139	128	106
3DRL65-70	45	200	200/25		193	183	170	155	146	135	112
3DRL65-80-2	45	200	200/25		207	196	182	164	154	142	116
3DRL65-80-1	45	200	200/25	215	203	189	171	161	149	123	

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	150	180	210	240	255	270	300	330
3DRL85-10	7.5	200	200/10	H (m)	25	24	22	21	20	19	16	12
3DRL85-20-2	11	200	200/10		41	39	36	32	30	28	22	15
3DRL85-20	15	200	200/10		53	50	47	44	41	40	36	30
3DRL85-30-2	18.5	200	200/10		68	65	60	55	52	49	41	32
2DRL85-30	22	200	200/10		81	77	72	67	64	62	55	48
3DRL85-40-2	30	200	200/10		98	93	87	80	75	72	62	50
3DRL85-40	30	200	200/10		110	105	100	92	86	84	76	66
3DRL85-50-2	37	200	200/16		126	120	113	104	98	93	81	68
3DRL85-50	37	200	200/16		139	131	124	115	110	106	94	83
3DRL85-60-2	45	200	200/16		155	148	139	129	122	117	102	86
3DRL85-60	45	200	200/16		168	160	150	141	134	130	117	103



## Performance table

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	180	210	240	270	300	330	360	390	420	450
3DRL120-20-2	15	250	300/10	H (m)	34	33.6	33	31	30.2	30	28.5	27	25	24
3DRL120-20-1	18.5	250	300/10		41	40	39.5	38.5	37	36.5	34.5	32.5	30	27.5
3DRL120-20	22	250	300/10		46	45	44.5	43.5	42.4	41	40	38	36	33.5
3DRL120-30-2	30	250	300/10		57	56	55	53.5	52	51	49	46.5	43.5	41
3DRL120-30-1	30	250	300/10		64	63	62	60	58.5	57.5	55.5	52	49	46
3DRL120-30	30	250	300/10		69.5	68.5	67.5	66	64.4	62.5	61	57.5	54.5	51
3DRL120-40-2	37	250	300/10		80.5	79	78	76	73.5	72	69	66	61.5	58
3DRL120-40-1	37	250	300/10		87	86	84.5	82	80	78	76	72	68	64.5
3DRL120-40	45	250	300/10		92.5	91	90	88	85.5	83	81	77	73	68.5
3DRL120-50-2	45	250	300/16		104.5	103	101	99	96	93	90	85.5	80.5	75.5
3DRL120-50-1	45	250	300/16		110.5	109	107.5	105	102	100	97	92	86.5	83
3DRL120-50	55	250	300/16		115.5	114	113	110	107.5	104.5	101.5	96	91	86
3DRL120-60-2	55	250	300/16		128	125.5	123	121	117.3	113.5	110	104.5	98.5	92.5
3DRL120-60-1	55	250	300/16		134	132	130.5	127	124	121	118	111	105	100
3DRL120-60	75	250	300/16		139	137	135	132	128.8	126	123	116	110	104
3DRL120-70-2	75	250	300/16		151	148	145.5	143	138.6	134	130	123.5	116.5	109
3DRL120-70-1	75	250	300/25		156.5	154	152	148.5	144.5	141	137.5	130	123	116.5
3DRL120-70	75	250	300/25		162.5	160.5	158.5	155	151	148	145	137	129	123

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	240	270	300	330	360	390	420	450	480	510	540
3DRL150-20-2	18.5	250	300/10	H (m)	37	35.5	34	33	32	31	29	27.5	26	23	21
3DRL150-20-1	22	250	300/10		44.3	43	42	40	39	38.5	37.5	35	33	30	27
3DRL150-20	30	250	300/10		50	49	48	47	45.5	44	42	40	37	34	32
3DRL150-30-2	30	250	300/10		63.5	61	59	57.5	56	54.5	53	49	45.5	42	39
3DRL150-30-1	37	250	300/10		70	68	67	65	63	62	60	56	53	49	45
3DRL150-30	37	250	300/10		78	76.5	75	73	70.5	68	66	63	59	55	50.5
3DRL150-40-2	45	250	300/10		89	87	84	81.5	79	77	74.5	70.5	65.5	60	56
3DRL150-40-1	45	250	300/10		96.5	94	91.5	89	86.5	84	81.5	77	72.5	67	62
3DRL150-40	55	250	300/16		104	102	100	97	95	91	88	84	79.5	74	68
3DRL150-50-2	55	250	300/16		115.5	112	109	106	102.5	100	97	92	86	79	73.5
3DRL150-50-1	75	250	300/16		122.5	119.5	117	113.5	111.5	107.5	104.5	99	93.5	87	80
3DRL150-50	75	250	300/16		130	127.5	125	121	119	115	111.5	106.5	101	94.5	86.5
3DRL150-60-2	75	250	300/16		140	137	133	130	126	121	118	112	106	98	91
3DRL150-60-1	75	250	300/16		148.5	145	141.7	137.5	135	131	127	120.5	114.5	106.5	97.5
3DRL150-60	75	250	300/16		157	153	149	145	142	139.5	137	130	123.5	116	109

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	300	360	420	480	540	600	660	720
3DRL200-10-B	18.5	300	500/10	H (m)	25.5	25	24	23	21.5	20	18	15.5
3DRL200-10-A	22	300	500/10		29	28.5	27.5	26.5	25.5	24	22	20
3DRL200-10	30	300	500/10		38.5	38	37.5	36.5	35	34	32.5	30
3DRL200-20-2B	37	300	500/10		53	51	49	47	44	41	37	32
3DRL200-20-2A	45	300	500/10		59.5	58	56	54	52.5	49	44.5	40.5
3DRL200-20-A	55	300	500/10		69	68	66	64	62	59	55.5	51
3DRL200-20	75	300	500/10		78.5	77.5	76	74	71.5	69	66	61.5
3DRL200-30-2B	75	300	500/10		91.5	89	86.5	83.5	79	75	70	63
3DRL200-30-A-B	75	300	500/10		95	93	90	87	83.5	79	73.5	67
3DRL200-30-2A	75	300	500/10		99.5	97.5	94.5	91.5	89	84	78.5	72
3DRL200-30-B	75	300	500/16		104.5	102.5	100	97	93	89	84.5	77.5
3DRL200-30-A	75	300	500/16		108	106	103.5	100.5	97.5	93	88	81.5
3DRL200-30	90	300	500/16		117.5	116	113.5	110.5	107	103	99	92
3DRL200-40-2B	90	300	500/16		131.5	129	125.5	121	115.5	110	103.5	94
3DRL200-40-2A	110	300	500/16		138.5	136	132	128	124	118	111	102.5
3DRL200-40-A	110	300	500/16		148	145.5	142.5	138	134	128	122	113
3DRL200-40	110	300	500/16		157.5	155.5	152.5	148	143.5	138	132.2	123.5

# DRL

## Frequency conversion control



### Main Components

NO.	Name	Quantity	Remark
1	Vertical multistage pump	4	SS304 /SS316
2	Control cabinet	1	SS400/SS304
3	Pressure sensor	1	4~20mA
4	Inlet and outlet pipe	One set	SS304
5	Valve	8	Ball valve
6	Check valve	4	SS304
7	Pressure tank	1	SS400
8	Basic frame	1	Q-235-A

### Performance table

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	4	4.8	6.4	8	9.6	11.2	12.8	14
4DRL2-3	0.37	50	60/10	H (m)	27	26	24	22	20	18	15	12
4DRL2-4	0.55	50	60/10		36	35	33	30	26	24	20	16
4DRL2-5	0.55	50	60/10		45	43	40	37	33	30	24	20
4DRL2-6	0.75	50	60/10		53	52	50	45	40	36	30	24
4DRL2-7	0.75	50	60/10		63	61	57	52	47	41	35	28
4DRL2-9	1.1	50	60/10		80	78	73	67	61	54	45	37
4DRL2-11	1.1	50	60/10		98	95	89	82	73	64	54	44
4DRL2-13	1.5	50	60/16		116	114	106	98	89	78	65	52
4DRL2-15	1.5	50	60/16		134	130	123	112	100	90	73	60
4DRL2-18	2.2	50	60/16		161	157	148	136	121	108	91	76
4DRL2-22	2.2	50	60/25		197	192	180	165	148	130	110	90
4DRL2-26	3.0	50	60/25		232	228	214	198	179	158	130	110

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	6	8	12	16	20	24	28	32
4DRL4-3	0.55	80	60/10	H (m)	28	27	26	24	20	18	13	10
4DRL4-4	0.75	80	60/10		38	36	34	32	27	24	19	13
4DRL4-5	1.1	80	60/10		47	45	43	40	34	31	23	17
4DRL4-6	1.1	80	60/10		56	54	52	48	41	37	28	20
4DRL4-7	1.5	80	60/10		66	63	61	56	48	43	33	24
4DRL4-8	1.5	80	60/10		74	72	70	64	55	50	38	27
4DRL4-10	2.2	80	60/10		96	90	87	81	71	62	48	34
4DRL4-12	2.2	80	60/10		114	108	104	95	85	75	58	41
4DRL4-14	3.0	80	60/16		136	126	122	112	101	89	68	48
4DRL4-16	3.0	80	60/16		152	144	140	129	115	101	78	55
4DRL4-19	4.0	80	60/25		183	171	168	153	137	122	93	67
4DRL4-22	4.0	80	60/25		211	200	192	178	160	138	108	79

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	20	24	28	32	36	40	44	48
4DRL8-3	1.1	100	100/10	H (m)	30	29.5	28.5	27	25	24	21	19
4DRL8-4	1.5	100	100/10		41	39.5	38	36	34	32	28	26
4DRL8-5	2.2	100	100/10		52	50	48	45	42	40	36	32
4DRL8-6	2.2	100	100/10		62	60	57	54	51	48	43	39
4DRL8-8	3.0	100	100/10		83	80	77	73	69	65	58	52
4DRL8-10	4.0	100	100/10		104	100	97	92	87	81	73	65
4DRL8-12	4.0	100	100/16		124	120	116	111	104	92	87	78
4DRL8-14	5.5	100	100/16		145	141	136	130	122	113	102	92
4DRL8-16	5.5	100	100/16		166	161	156	148	139	130	118	106
4DRL8-18	7.5	100	100/25		187	182	175	167	157	146	134	120
4DRL8-20	7.5	100	100/25		208	202	195	186	175	163	150	135

## Performance table

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	28	32	36	40	44	48	52	56	60	64
					H (m)									
4DRL12-3	2.2	125	100/10	H (m)	35.5	35	34	33	31.5	30	28	26	23.5	21
4DRL12-4	3.0	125	100/10		47	46	45	44	42	40	37	34	31	28
4DRL12-5	3.0	125	100/10		59.5	58	56.5	55	52.5	50	46.5	43	39	35
4DRL12-6	4.0	125	100/10		71.5	70	68	66	63	60	56	52	47	42
4DRL12-7	5.5	125	100/10		83.5	82	79.5	77	73.5	70	65.5	61	55	49
4DRL12-8	5.5	125	100/10		95.5	94	91	88	84	80	75	70	63	56
4DRL12-9	5.5	125	100/16		108	106	103	100	95.5	91	85	79	71.5	64
4DRL12-10	7.5	125	100/16		120	118	114.5	111	106	101	94.5	88	80	72
4DRL12-12	7.5	125	100/16		143.5	141	137	133	127	121	113.5	106	96	86
4DRL12-14	11	125	100/16		168	165	160	155	148	141	132.5	124	112	100
4DRL12-16	11	125	100/25		192.5	189	183.5	178	170	162	152	142	128.5	115
4DRL12-18	11	125	100/25		217	213	207.5	202	192.5	183	171.5	160	145	130

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	32	40	48	56	64	72	80	88
					H (m)							
4DRL16-2	2.2	125	100/10	H (m)	27	26	25	24	22	21	19	16
4DRL16-3	3.0	125	100/10		41	40	38	37	34	32	26	25
4DRL16-4	4.0	125	100/10		54	53	52	49	46	43	38	34
4DRL16-5	5.5	125	100/10		68	67	65	62	58	54	48	43
4DRL16-6	5.5	125	100/10		82	80	78	74	70	64	58	52
4DRL16-7	7.5	125	100/10		96	95	91	87	82	76	68	61
4DRL16-8	7.5	125	100/16		110	108	104	99	94	86	77	70
4DRL16-10	11	125	100/16		138	136	131	125	118	109	97	87
4DRL16-12	11	125	100/16		166	162	157	150	141	130	116	105
4DRL16-14	15	125	100/25		194	190	184	175	166	152	136	122
4DRL16-16	15	125	100/25		222	217	210	200	189	174	156	140

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	40	48	56	64	72	80	88	96	104	84
					H (m)									
4DRL20-2	2.2	125	100/10	H (m)	27	26.5	26	25	24	23	22	20	18	15
4DRL20-3	4.0	125	100/10		40	39.5	39	38	37	35	33	30	27	24
4DRL20-4	5.5	125	100/10		54	53	52	51	49	47	44	41	37	33
4DRL20-5	5.5	125	100/10		67	66	64	62	60	58	55	50	45	40
4DRL20-6	7.5	125	100/10		81	79	77	75	73	70	66	61	55	49
4DRL20-7	7.5	125	100/10		95	93	91	89	86	82	77	71	65	58
4DRL20-8	11	125	100/16		109	107	105	102	99	94	89	82	75	67
4DRL20-10	11	125	100/16		136	134	131	128	124	118	111	103	95	85
4DRL20-12	15	125	100/16		164	162	158	154	149	142	133	124	114	102
4DRL20-14	15	125	100/25		192	189	185	180	174	166	156	145	133	119
4DRL20-17	18.5	125	100/25		234	230	225	219	212	202	190	177	162	145

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	64	80	96	112	128	144	160
					H (m)						
4DRL32-20-2	3.0	150	200/10	H (m)	29	28	26	23	20	16	11
4DRL32-20	4.0	150	200/10		36	34	32	29	27	23	18
4DRL32-30-2	5.5	150	200/10		47	44	41	38	33	28	21
4DRL32-30	5.5	150	200/10		54	51	48	44	40	35	27
4DRL32-40-2	7.5	150	200/10		65	62	58	53	46	40	30
4DRL32-40	7.5	150	200/10		72	69	65	59	53	47	37
4DRL32-50-2	11	150	200/10		83	79	74	68	60	52	41
4DRL32-50	11	150	200/10		90	86	81	74	67	59	47
4DRL32-60-2	11	150	200/10		101	97	90	83	74	65	51
4DRL32-60	11	150	200/10		108	104	97	90	81	72	57
4DRL32-70-2	15	150	200/10		119	114	107	98	88	78	60
4DRL32-70	15	150	200/16		126	121	113	105	95	85	67
4DRL32-80-2	15	150	200/16		136	131	123	114	102	90	71
4DRL32-80	15	150	200/16		144	138	130	120	109	97	77
4DRL32-90-2	18.5	150	200/16		154	148	140	129	117	102	82
4DRL32-90	18.5	150	200/16		162	156	147	136	124	109	88
4DRL32-100-2	18.5	150	200/16		175	166	157	146	131	115	91
4DRL32-100	18.5	150	200/16		182	173	164	152	138	122	98
4DRL32-110-2	22	150	200/16		193	184	173	164	146	128	102
4DRL32-110	22	150	200/16		200	191	180	168	153	135	109
4DRL32-120-2	22	150	200/25		211	201	189	178	160	140	113
4DRL32-120	22	150	200/25		218	208	196	184	167	147	120
4DRL32-130-2	30	150	200/25		230	218	206	193	174	153	124
4DRL32-130	30	150	200/25		237	225	213	200	181	160	131
4DRL32-140-2	30	150	200/25		247	235	222	210	189	165	135
4DRL32-140	30	150	200/25		242	242	229	216	196	172	142

# DRL

## Performance table

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	100	120	140	160	168	180	200	220
4DRL42-10	4.0	150	200/10	H (m)	24	23	22	21	20	19	18	16
4DRL42-20-2	5.5	150	200/10		40	38	36	33	32	30	27	23
4DRL42-20	7.5	150	200/10		48	46	44	42	41	39	35	31
4DRL42-30-2	11	150	200/10		63	61	58	54	52	50	44	38
4DRL42-30	11	150	200/10		71	69	66	63	61	58	53	47
4DRL42-40-2	15	150	200/10		87	84	80	75	63	69	62	54
4DRL42-40	15	150	200/10		95	92	88	84	81	78	71	62
4DRL42-50-2	18.5	150	200/10		111	107	102	96	93	88	80	69
4DRL42-50	18.5	150	200/16		119	115	110	105	101	97	88	78
4DRL42-60-2	22	150	200/16		135	130	124	117	113	108	97	85
4DRL42-60	22	150	200/16		143	138	132	125	122	116	106	93
4DRL42-70-2	30	150	200/16		158	152	146	138	134	127	115	100
4DRL42-70	30	150	200/16		166	161	154	146	142	135	124	109
4DRL42-80-2	30	150	200/16		182	175	168	159	154	146	133	116
4DRL42-80	30	150	200/25		190	184	176	167	162	154	141	124
4DRL42-90-2	30	150	200/25		205	198	190	180	174	166	150	132
4DRL42-90	37	150	200/25		214	207	198	188	183	174	159	140
4DRL42-100-2	37	150	200/25		230	221	212	200	194	185	168	147
4DRL42-100	37	150	200/25		238	230	220	209	203	193	117	155
4DRL42-110-2	45	150	200/25		255	246	236	223	217	206	188	165
4DRL42-110	45	150	200/25		263	255	244	232	225	214	196	173
4DRL42-120-2	45	150	200/25		280	270	259	245	238	226	206	181
4DRL42-120	45	150	200/25		289	280	268	255	247	236	216	190
4DRL42-130-2	45	150	200/30		305	294	282	267	259	247	225	198

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	120	160	200	240	260	280	320
4DRL65-10	5.5	200	200/10	H (m)	27	25	23	21	20	18	15
4DRL65-20-2	7.5	200	200/10		39	36	33	29	26	23	17
4DRL65-20-1	11	200	200/10		46	44	40	36	33	30	24
4DRL65-20	11	200	200/10		53	51	47	43	40	37	30
4DRL65-30-2	15	200	200/10		66	62	56	50	46	41	32
4DRL65-30-1	15	200	200/10		73	69	63	57	53	48	39
4DRL65-30	18.5	200	200/10		80	76	70	64	60	55	46
4DRL65-40-2	18.5	200	200/10		92	87	80	71	66	60	47
4DRL65-40-1	22	200	200/10		100	91	87	78	73	67	54
4DRL65-40	22	200	200/10		107	101	94	85	80	74	61
4DRL65-50-2	30	200	200/10		121	114	105	95	88	80	64
4DRL65-50-1	30	200	200/16		128	121	112	102	95	87	71
4DRL65-50	30	200	200/16		136	129	119	109	102	94	78
4DRL65-60-2	30	200	200/16		150	142	131	118	110	101	81
4DRL65-60-1	37	200	200/16		157	149	138	125	117	108	88
4DRL65-60	37	200	200/16		164	156	145	132	124	115	95
4DRL65-70-2	37	200	200/16		179	169	156	141	132	121	99
4DRL65-70-1	37	200	200/25		186	176	163	148	139	128	106
4DRL65-70	45	200	200/25		193	183	170	155	146	135	112
4DRL65-80-2	45	200	200/25		207	196	182	164	154	142	116
4DRL65-80-1	45	200	200/25	215	203	189	171	161	149	123	

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	200	240	280	320	340	360	400	440
4DRL85-10	7.5	200	200/10	H (m)	25	24	22	21	20	19	16	12
4DRL85-20-2	11	200	200/10		41	39	36	32	30	28	22	15
4DRL85-20	15	200	200/10		53	50	47	44	41	40	36	30
4DRL85-30-2	18.5	200	200/10		68	65	60	55	52	49	41	32
4DRL85-30	22	200	200/10		81	77	72	67	64	62	55	48
4DRL85-40-2	30	200	200/10		98	93	87	80	75	72	62	50
4DRL85-40	30	200	200/10		110	105	100	92	86	84	76	66
4DRL85-50-2	37	200	200/16		126	120	113	104	98	93	81	68
4DRL85-50	37	200	200/16		139	131	124	115	110	106	94	83
4DRL85-60-2	45	200	200/16		155	148	139	129	122	117	102	86
4DRL85-60	45	200	200/16		168	160	150	141	134	130	117	103

## Performance table

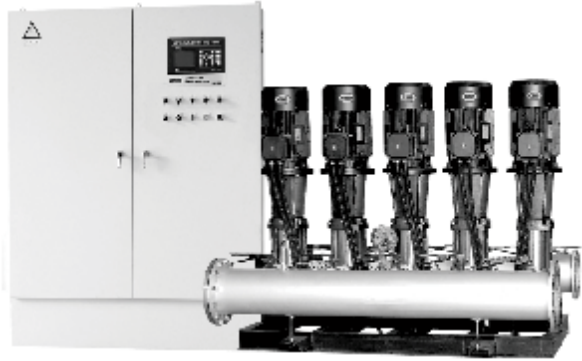
Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	240	280	320	360	400	440	480	520	560	600
4DRL120-20-2	15	250	300/10	H (m)	34	33.6	33	31	30.2	30	28.5	27	25	24
4DRL120-20-1	18.5	250	300/10		41	40	39.5	38.5	37	36.5	34.5	32.5	30	27.5
4DRL120-20	22	250	300/10		46	45	44.5	43.5	42.4	41	40	38	36	33.5
4DRL120-30-2	30	250	300/10		57	56	55	53.5	52	51	49	46.5	43.5	41
4DRL120-30-1	30	250	300/10		64	63	62	60	58.5	57.5	55.5	52	49	46
4DRL120-30	30	250	300/10		69.5	68.5	67.5	66	64.4	62.5	61	57.5	54.5	51
4DRL120-40-2	37	250	300/10		80.5	79	78	76	73.5	72	69	66	61.5	58
4DRL120-40-1	37	250	300/10		87	86	84.5	82	80	78	76	72	68	64.5
4DRL120-40	45	250	300/10		92.5	91	90	88	85.5	83	81	77	73	68.5
4DRL120-50-2	45	250	300/16		104.5	103	101	99	96	93	90	85.5	80.5	75.5
4DRL120-50-1	45	250	300/16		110.5	109	107.5	105	102	100	97	92	86.5	83
4DRL120-50	55	250	300/16		115.5	114	113	110	107.5	104.5	101.5	96	91	86
4DRL120-60-2	55	250	300/16		128	125.5	123	121	117.3	113.5	110	104.5	98.5	92.5
4DRL120-60-1	55	250	300/16		134	132	130.5	127	124	121	118	111	105	100
4DRL120-60	75	250	300/16		139	137	135	132	128.8	126	123	116	110	104
4DRL120-70-2	75	250	300/16		151	148	145.5	143	138.6	134	130	123.5	116.5	109
4DRL120-70-1	75	250	300/25		156.5	154	152	148.5	144.5	141	137.5	130	123	116.5
4DRL120-70	75	250	300/25		162.5	160.5	158.5	155	151	148	145	137	129	123

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	320	360	400	440	480	520	560	600	640	680	720
4DRL150-20-2	18.5	250	300/10	H (m)	37	35.5	34	33	32	31	29	27.5	26	23	21
4DRL150-20-1	22	250	300/10		44.3	43	42	40	39	38.5	37.5	35	33	30	27
4DRL150-20	30	250	300/10		50	49	48	47	45.5	44	42	40	37	34	32
4DRL150-30-2	30	250	300/10		63.5	61	59	57.5	56	54.5	53	49	45.5	42	39
4DRL150-30-1	37	250	300/10		70	68	67	65	63	62	60	56	53	49	45
4DRL150-30	37	250	300/10		78	76.5	75	73	70.5	68	66	63	59	55	50.5
4DRL150-40-2	45	250	300/10		89	87	84	81.5	79	77	74.5	70.5	65.5	60	56
4DRL150-40-1	45	250	300/10		96.5	94	91.5	89	86.5	84	81.5	77	72.5	67	62
4DRL150-40	55	250	300/16		104	102	100	97	95	91	88	84	79.5	74	68
4DRL150-50-2	55	250	300/16		115.5	112	109	106	102.5	100	97	92	86	79	73.5
4DRL150-50-1	75	250	300/16		122.5	119.5	117	113.5	111.5	107.5	104.5	99	93.5	87	80
4DRL150-50	75	250	300/16		130	127.5	125	121	119	115	111.5	106.5	101	94.5	86.5
4DRL150-60-2	75	250	300/16		140	137	133	130	126	121	118	112	106	98	91
4DRL150-60-1	75	250	300/16		148.5	145	141.7	137.5	135	131	127	120.5	114.5	106.5	97.5
4DRL150-60	75	250	300/16		157	153	149	145	142	139.5	137	130	123.5	116	109

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	400	480	560	640	720	800	880	960
4DRL200-10-B	18.5	300	500/10	H (m)	25.5	25	24	23	21.5	20	18	15.5
4DRL200-10-A	22	300	500/10		29	28.5	27.5	26.5	25.5	24	22	20
4DRL200-10	30	300	500/10		38.5	38	37.5	36.5	35	34	32.5	30
4DRL200-20-2B	37	300	500/10		53	51	49	47	44	41	37	32
4DRL200-20-2A	45	300	500/10		59.5	58	56	54	52.5	49	44.5	40.5
4DRL200-20-A	55	300	500/10		69	68	66	64	62	59	55.5	51
4DRL200-20	75	300	500/10		78.5	77.5	76	74	71.5	69	66	61.5
4DRL200-30-2B	75	300	500/10		91.5	89	86.5	83.5	79	75	70	63
4DRL200-30-A-B	75	300	500/10		95	93	90	87	83.5	79	73.5	67
4DRL200-30-2A	75	300	500/10		99.5	97.5	94.5	91.5	89	84	78.5	72
4DRL200-30-B	75	300	500/16		104.5	102.5	100	97	93	89	84.5	77.5
4DRL200-30-A	75	300	500/16		108	106	103.5	100.5	97.5	93	88	81.5
4DRL200-30	90	300	500/16		117.5	116	113.5	110.5	107	103	99	92
4DRL200-40-2B	90	300	500/16		131.5	129	125.5	121	115.5	110	103.5	94
4DRL200-40-2A	110	300	500/16		138.5	136	132	128	124	118	111	102.5
4DRL200-40-A	110	300	500/16		148	145.5	142.5	138	134	128	122	113
4DRL200-40	110	300	500/16		157.5	155.5	152.5	148	143.5	138	132.2	123.5

# DRL

## Frequency conversion control



### Main Components

NO.	Name	Quantity	Remark
1	Vertical multistage pump	5	SS304 /SS316
2	Control cabinet	1	SS400/SS304
3	Pressure sensor	1	4~20mA
4	Inlet and outlet pipe	One set	SS304
5	Valve	10	Ball valve
6	Check valve	5	SS304
7	Pressure tank	1	SS400
8	Basc frame	1	Q-235-A

### Performance table

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m³/h)	25	30	35	40	45	50	55	60
					H (m)							
5DRL8-3	1.1	100	100/10	30	29.5	28.5	27	25	24	21	19	
5DRL8-4	1.5	100	100/10	41	39.5	38	36	34	32	28	26	
5DRL8-5	2.2	100	100/10	52	50	48	45	42	40	36	32	
5DRL8-6	2.2	100	100/10	62	60	57	54	51	48	43	39	
5DRL8-8	3.0	100	100/10	83	80	77	73	69	65	58	52	
5DRL8-10	4.0	100	100/10	104	100	97	92	87	81	73	65	
5DRL8-12	4.0	100	100/16	124	120	116	111	104	92	87	78	
5DRL8-14	5.5	100	100/16	145	141	136	130	122	113	102	92	
5DRL8-16	5.5	100	100/16	166	161	156	148	139	130	118	106	
5DRL8-18	7.5	100	100/25	187	182	175	167	157	146	134	120	
5DRL8-20	7.5	100	100/25	208	202	195	186	175	163	150	135	

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m³/h)	35	40	45	50	55	60	65	70	75	80
					H (m)									
5DRL12-3	2.2	125	100/10	35.5	35	34	33	31.5	30	28	26	23.5	21	
5DRL12-4	3.0	125	100/10	47	46	45	44	42	40	37	34	31	28	
5DRL12-5	3.0	125	100/10	59.5	58	56.5	55	52.5	50	46.5	43	39	35	
5DRL12-6	4.0	125	100/10	71.5	70	68	66	63	60	56	52	47	42	
5DRL12-7	5.5	125	100/10	83.5	82	79.5	77	73.5	70	65.5	61	55	49	
5DRL12-8	5.5	125	100/10	95.5	94	91	88	84	80	75	70	63	56	
5DRL12-9	5.5	125	100/16	108	106	103	100	95.5	91	85	79	71.5	64	
5DRL12-10	7.5	125	100/16	120	118	114.5	111	106	101	94.5	88	80	72	
5DRL12-12	7.5	125	100/16	143.5	141	137	133	127	121	113.5	106	96	86	
5DRL12-14	11	125	100/16	168	165	160	155	148	141	132.5	124	112	100	
5DRL12-16	11	125	100/25	192.5	189	183.5	178	170	162	152	142	128.5	115	
5DRL12-18	11	125	100/25	217	213	207.5	202	192.5	183	171.5	160	145	130	

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m³/h)	40	50	60	70	80	90	100	110
					H (m)							
5DRL16-2	2.2	125	100/10	27	26	25	24	22	21	19	16	
5DRL16-3	3.0	125	100/10	41	40	38	37	34	32	26	25	
5DRL16-4	4.0	125	100/10	54	53	52	49	46	43	38	34	
5DRL16-5	5.5	125	100/10	68	67	65	62	58	54	48	43	
5DRL16-6	5.5	125	100/10	82	80	78	74	70	64	58	52	
5DRL16-7	7.5	125	100/10	96	95	91	87	82	76	68	61	
5DRL16-8	7.5	125	100/16	110	108	104	99	94	86	77	70	
5DRL16-10	11	125	100/16	138	136	131	125	118	109	97	87	
5DRL16-12	11	125	100/16	166	162	157	150	141	130	116	105	
5DRL16-14	15	125	100/25	194	190	184	175	166	152	136	122	
5DRL16-16	15	125	100/25	222	217	210	200	189	174	156	140	

**Performance table**

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m³/h)	50	60	70	80	90	100	110	120	130	140
5DRL20-2	2.2	125	100/10	H (m)	27	26.5	26	25	24	23	22	20	18	15
5DRL20-3	4.0	125	100/10		40	39.5	39	38	37	35	33	30	27	24
5DRL20-4	5.5	125	100/10		54	53	52	51	49	47	44	41	37	33
5DRL20-5	5.5	125	100/10		67	66	64	62	60	58	55	50	45	40
5DRL20-6	7.5	125	100/10		81	79	77	75	73	70	66	61	55	49
5DRL20-7	7.5	125	100/10		95	93	91	89	86	82	77	71	65	58
5DRL20-8	11	125	100/10		109	107	105	102	99	94	89	82	75	67
5DRL20-10	11	125	100/16		136	134	131	128	124	118	111	103	95	85
5DRL20-12	15	125	100/16		164	162	158	154	149	142	133	124	114	102
5DRL20-14	15	125	100/25		192	189	185	180	174	166	156	145	133	119
5DRL20-17	18.5	125	100/25		234	230	225	219	212	202	190	177	162	145

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m³/h)	80	100	120	140	160	180	200
5DRL32-20-2	3.0	200	200/10	H (m)	29	28	26	23	20	16	11
5DRL32-20	4.0	200	200/10		36	34	32	29	27	23	18
5DRL32-30-2	5.5	200	200/10		47	44	41	38	33	28	21
5DRL32-30	5.5	200	200/10		54	51	48	44	40	35	27
5DRL32-40-2	7.5	200	200/10		65	62	58	53	46	40	30
5DRL32-40	7.5	200	200/10		72	69	65	59	53	47	37
5DRL32-50-2	11	200	200/10		83	79	74	68	60	52	41
5DRL32-50	11	200	200/10		90	86	81	74	67	59	47
5DRL32-60-2	11	200	200/10		101	97	90	83	74	65	51
5DRL32-60	11	200	200/10		108	104	97	90	81	72	57
5DRL32-70-2	15	200	200/10		119	114	107	98	88	78	60
5DRL32-70	15	200	200/16		126	121	113	105	95	85	67
5DRL32-80-2	15	200	200/16		136	131	123	114	102	90	71
5DRL32-80	15	200	200/16		144	138	130	120	109	97	77
5DRL32-90-2	18.5	200	200/16		154	148	140	129	117	102	82
5DRL32-90	18.5	200	200/16		162	156	147	136	124	109	88
5DRL32-100-2	18.5	200	200/16		175	166	157	146	131	115	91
5DRL32-100	18.5	200	200/16		182	173	164	152	138	122	98
5DRL32-110-2	22	200	200/16		193	184	173	164	146	128	102
5DRL32-110	22	200	200/16		200	191	180	168	153	135	109
5DRL32-120-2	22	200	200/25		211	201	189	178	160	140	113
5DRL32-120	22	200	200/25		218	208	196	184	167	147	120
5DRL32-130-2	30	200	200/25		230	218	206	193	174	153	124
5DRL32-130	30	200	200/25		237	225	213	200	181	160	131
5DRL32-140-2	30	200	200/25		247	235	222	210	189	165	135
5DRL32-140	30	200	200/25		242	242	229	216	196	172	142

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m³/h)	125	150	175	200	210	225	250	275
5DRL42-10	4.0	200	200/10	H (m)	24	23	22	21	20	19	18	16
5DRL42-20-2	5.5	200	200/10		40	38	36	33	32	30	27	23
5DRL42-20	7.5	200	200/10		48	46	44	42	41	39	35	31
5DRL42-30-2	11	200	200/10		63	61	58	54	52	50	44	38
5DRL42-30	11	200	200/10		71	69	66	63	61	58	53	47
5DRL42-40-2	15	200	200/10		87	84	80	75	63	69	62	54
5DRL42-40	15	200	200/10		95	92	88	84	81	78	71	62
5DRL42-50-2	18.5	200	200/10		111	107	102	96	93	88	80	69
5DRL42-50	18.5	200	200/16		119	115	110	105	101	97	88	78
5DRL42-60-2	22	200	200/16		135	130	124	117	113	108	97	85
5DRL42-60	22	200	200/16		143	138	132	125	122	116	106	93
5DRL42-70-2	30	200	200/16		158	152	146	138	134	127	115	100
5DRL42-70	30	200	200/16		166	161	154	146	142	135	124	109
5DRL42-80-2	30	200	200/16		182	175	168	159	154	146	133	116
5DRL42-80	30	200	200/25		190	184	176	167	162	154	141	124
5DRL42-90-2	30	200	200/25		205	198	190	180	174	166	150	132
5DRL42-90	37	200	200/25		214	207	198	188	183	174	159	140
5DRL42-100-2	37	200	200/25		230	221	212	200	194	185	168	147
5DRL42-100	37	200	200/25		238	230	220	209	203	193	177	155
5DRL42-110-2	45	200	200/25		255	246	236	223	217	206	188	165
5DRL42-110	45	200	200/25		263	255	244	232	225	214	196	173
5DRL42-120-2	45	200	200/25		280	270	259	245	238	226	206	181
5DRL42-120	45	200	200/25		289	280	268	255	247	236	216	190

# DRL

## Performance table

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	150	200	250	300	325	350	400
5DRL65-10	5.5	250	200/10	H (m)	27	25	23	21	20	18	15
5DRL65-20-2	7.5	250	200/10		39	36	33	29	26	23	17
5DRL65-20-1	11	250	200/10		46	44	40	36	33	30	24
5DRL65-20	11	250	200/10		53	51	47	43	40	37	30
5DRL65-30-2	15	250	200/10		66	62	56	50	46	41	32
5DRL65-30-1	15	250	200/10		73	69	63	57	53	48	39
5DRL65-30	18.5	250	200/10		80	76	70	64	60	55	46
5DRL65-40-2	18.5	250	200/10		92	87	80	71	66	60	47
5DRL65-40-1	22	250	200/10		100	91	87	78	73	67	54
5DRL65-40	22	250	200/10		107	101	94	85	80	74	61
5DRL65-50-2	30	250	200/10		121	114	105	95	88	80	64
5DRL65-50-1	30	250	200/16		128	121	112	102	95	87	71
5DRL65-50	30	250	200/16		136	129	119	109	102	94	78
5DRL65-60-2	30	250	200/16		150	142	131	118	110	101	81
5DRL65-60-1	37	250	200/16		157	149	138	125	117	108	88
5DRL65-60	37	250	200/16		164	156	145	132	124	115	95
5DRL65-70-2	37	250	200/16		179	169	156	141	132	121	99
5DRL65-70-1	37	250	200/25		186	176	163	148	139	128	106
5DRL65-70	45	250	200/25		193	183	170	155	146	135	112
5DRL65-80-2	45	250	200/25		207	196	182	164	154	142	116
5DRL65-80-1	45	250	200/25	215	203	189	171	161	149	123	

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	250	300	350	400	425	450	500	550
5DRL85-10	7.5	250	300/10	H (m)	25	24	22	21	20	19	16	12
5DRL85-20-2	11	250	300/10		41	39	36	32	30	28	22	15
5DRL85-20	15	250	300/10		53	50	47	44	41	40	36	30
5DRL85-30-2	18.5	250	300/10		68	65	60	55	52	49	41	32
5DRL85-30	22	250	300/10		81	77	72	67	64	62	55	48
5DRL85-40-2	30	250	300/10		98	93	87	80	75	72	62	50
5DRL85-40	30	250	300/10		110	105	100	92	86	84	76	66
5DRL85-50-2	37	250	300/16		126	120	113	104	98	93	81	68
5DRL85-50	37	250	300/16		139	131	124	115	110	106	94	83
5DRL85-60-2	45	250	300/16		155	148	139	129	122	117	102	86
5DRL85-60	45	250	300/16		168	160	150	141	134	130	117	103

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	300	350	400	450	500	550	600	650	700	750
5DRL120-20-2	15	250	500/10	H (m)	34	33.6	33	31	30.2	30	28.5	27	25	24
5DRL120-20-1	18.5	250	500/10		41	40	39.5	38.5	37	36.5	34.5	32.5	30	27.5
5DRL120-20	22	250	500/10		46	45	44.5	43.5	42.4	41	40	38	36	33.5
5DRL120-30-2	30	250	500/10		57	56	55	53.5	52	51	49	46.5	43.5	41
5DRL120-30-1	30	250	500/10		64	63	62	60	58.5	57.5	55.5	52	49	46
5DRL120-30	30	250	500/10		69.5	68.5	67.5	66	64.4	62.5	61	57.5	54.5	51
5DRL120-40-2	37	250	500/10		80.5	79	78	76	73.5	72	69	66	61.5	58
5DRL120-40-1	37	250	500/10		87	86	84.5	82	80	78	76	72	68	64.5
5DRL120-40	45	250	500/10		92.5	91	90	88	85.5	83	81	77	73	68.5
5DRL120-50-2	45	250	500/16		104.5	103	101	99	96	93	90	85.5	80.5	75.5
5DRL120-50-1	45	250	500/16		110.5	109	107.5	105	102	100	97	92	86.5	83
5DRL120-50	55	250	500/16		115.5	114	113	110	107.5	104.5	101.5	96	91	86
5DRL120-60-2	55	250	500/16		128	125.5	123	121	117.3	113.5	110	104.5	98.5	92.5
5DRL120-60-1	55	250	500/16		134	132	130.5	127	124	121	118	111	105	100
5DRL120-60	75	250	500/16		139	137	135	132	128.8	126	123	116	110	104
5DRL120-70-2	75	250	500/16		151	148	145.5	143	138.6	134	130	123.5	116.5	109
5DRL120-70-1	75	250	500/25		156.5	154	152	148.5	144.5	141	137.5	130	123	116.5
5DRL120-70	75	250	500/25		162.5	160.5	158.5	155	151	148	145	137	129	123



## Performance table

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	400	450	500	550	600	650	700	750	800	850	900
SDRL150-20-2	18.5	300	500/10	H (m)	37	35.5	34	33	32	31	29	27.5	26	23	21
SDRL150-20-1	22	300	500/10		44.3	43	42	40	39	38.5	37.5	35	33	30	27
SDRL150-20	30	300	500/10		50	49	48	47	45.5	44	42	40	37	34	32
SDRL150-30-2	30	300	500/10		63.5	61	59	57.5	56	54.5	53	49	45.5	42	39
SDRL150-30-1	37	300	500/10		70	68	67	65	63	62	60	56	53	49	45
SDRL150-30	37	300	500/10		78	76.5	75	73	70.5	68	66	63	59	55	50.5
SDRL150-40-2	45	300	500/10		89	87	84	81.5	79	77	74.5	70.5	65.5	60	56
SDRL150-40-1	45	300	500/10		96.5	94	91.5	89	86.5	84	81.5	77	72.5	67	62
SDRL150-40	55	300	500/16		104	102	100	97	95	91	88	84	79.5	74	68
SDRL150-50-2	55	300	500/16		115.5	112	109	106	102.5	100	97	92	86	79	73.5
SDRL150-50-1	75	300	500/16		122.5	119.5	117	113.5	111.5	107.5	104.5	99	93.5	87	80
SDRL150-50	75	300	500/16		130	127.5	125	121	119	115	111.5	106.5	101	94.5	86.5
SDRL150-60-2	75	300	500/16		140	137	133	130	126	121	118	112	106	98	91
SDRL150-60-1	75	300	500/16		148.5	145	141.7	137.5	135	131	127	120.5	114.5	106.5	97.5
SDRL150-60	75	300	500/16		157	153	149	145	142	139.5	137	130	123.5	116	109

Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	500	600	700	800	900	1000	1100	1200
SDRL200-10-B	18.5	350	500/10	H (m)	25.5	25	24	23	21.5	20	18	15.5
SDRL200-10-A	22	350	500/10		29	28.5	27.5	26.5	25.5	24	22	20
SDRL200-10	30	350	500/10		38.5	38	37.5	36.5	35	34	32.5	30
SDRL200-20-2B	37	350	500/10		53	51	49	47	44	41	37	32
SDRL200-20-2A	45	350	500/10		59.5	58	56	54	52.5	49	44.5	40.5
SDRL200-20-A	55	350	500/10		69	68	66	64	62	59	55.5	51
SDRL200-20	75	350	500/10		78.5	77.5	76	74	71.5	69	66	61.5
SDRL200-30-2B	75	350	500/10		91.5	89	86.5	83.5	79	75	70	63
SDRL200-30-A-B	75	350	500/10		95	93	90	87	83.5	79	73.5	67
SDRL200-30-2A	75	350	500/10		99.5	97.5	94.5	91.5	89	84	78.5	72
SDRL200-30-B	75	350	500/16		104.5	102.5	100	97	93	89	84.5	77.5
SDRL200-30-A	75	350	500/16		108	106	103.5	100.5	97.5	93	88	81.5
SDRL200-30	90	350	500/16		117.5	116	113.5	110.5	107	103	99	92
SDRL200-40-2B	90	350	500/16		131.5	129	125.5	121	115.5	110	103.5	94
SDRL200-40-2A	110	350	500/16		138.5	136	132	128	124	118	111	102.5
SDRL200-40-A	110	350	500/16		148	145.5	142.5	138	134	128	122	113
SDRL200-40	110	350	500/16		157.5	155.5	152.5	148	143.5	138	132.2	123.5

## DRL

### 2 sets of Horizontal Variable Speed Booster Equipment



#### Main Components

NO.	Name	Quantity	Remark
1	Horizontal multi-stage Pump	2	SS304 /SS316
2	Control cabinet	1	SS400/SS304
3	Pressure sensor	1	4~20mA
4	Inlet and outlet pipe	One set	SS304
5	Valve	4	Ball valve
6	Check valve	2	SS304
7	Pressure tank	2	SS400
8	Basic frame	1	Q235-A

#### Performance Parameter table

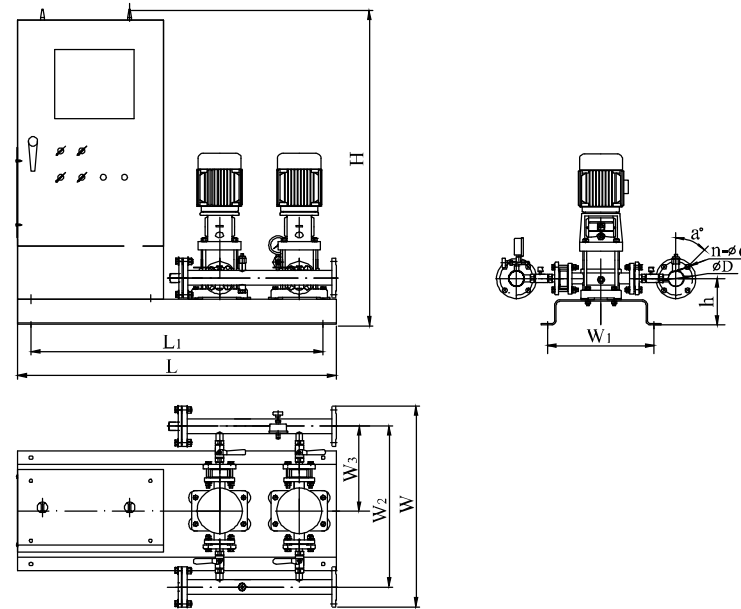
Category	Model	Power (kW)	Inlet/outlet pipe DN	Pressure tank(L)		Flow (m <sup>3</sup> /h)	1	2	3	4	5	6	7
				Pressure control	Frequency conversion control								
2DHF2	2DHF2-50	0.55	50	100	50	Head(m)	46	43	40	35	33	28	22

Category	Model	Power (kW)	Inlet/outlet pipe DN	Pressure tank(L)		Flow (m <sup>3</sup> /h)	2	4	6	8	10	12	14
				Pressure control	Frequency conversion control								
2DHF4	2DHF4-40	0.75	50	100	50	Head(m)	38	36	32	30	26	20	14

Category	Model	Power (kW)	Inlet/outlet pipe DN	Pressure tank(L)		Flow (m <sup>3</sup> /h)	10	12	14	16	18	20	22
				Pressure control	Frequency conversion control								
2DHF8	2DHF8-20	0.75	65	200	50	H (m)	19	18.5	18	17	15	13	11
	2DHF8-30	1.1	65	200	50		29	28	27	25.5	22.5	20	17.5
	2DHF8-50	2.2	65	200	50		49	47	45	42.5	38	33.5	28

Category	Model	Power (kW)	Inlet/outlet pipe DN	Pressure tank(L)		Flow (m <sup>3</sup> /h)	16	20	24	28	32	36	40	44
				Pressure control	Frequency conversion control									
2DHF16	2DHF16-20	2.2	80	200	100	H (m)	25.5	24	23	22	21	19	17	14.5
	2DHF16-30	3	80	200	100		38.5	37	36	34	32	30	27	23

2 DR(L) Series



Dimension of the booster system

	Model	h	L	W	H	L1	W1	W2	W3	a	n	d	D
2DRL	2DRL2-3	175	1200	780	1195	1100	400	620	340	45	4	18	125
	2DRL2-4	175	1200	780	1195	1100	400	620	340	45	4	18	125
	2DRL2-5	175	1200	780	1195	1100	400	620	340	45	4	18	125
	2DRL2-6	175	1200	780	1195	1100	400	620	340	45	4	18	125
	2DRL2-7	175	1200	780	1195	1100	400	620	340	45	4	18	125
	2DRL2-9	175	1200	780	1195	1100	400	620	340	45	4	18	125
	2DRL2-11	175	1200	780	1195	1100	400	620	340	45	4	18	125
	2DRL2-13	175	1200	780	1195	1100	400	620	340	45	4	18	125
	2DRL2-15	175	1200	780	1195	1100	400	620	340	45	4	18	125
	2DRL2-18	175	1200	780	1195	1100	400	620	340	45	4	18	125
	2DRL2-22	175	1200	780	1195	1100	400	620	340	45	4	18	125
	2DRL2-26	175	1200	780	1195	1100	400	620	340	45	4	18	125
	2DRL4-3	175	1200	785	1195	1100	400	640	355	45	4	18	125
	2DRL4-4	175	1200	785	1195	1100	400	640	355	45	4	18	125
	2DRL4-5	175	1200	785	1195	1100	400	640	355	45	4	18	125
	2DRL4-6	175	1200	785	1195	1100	400	640	355	45	4	18	125
	2DRL4-7	175	1200	785	1195	1100	400	640	355	45	4	18	125
	2DRL4-8	175	1200	785	1195	1100	400	640	355	45	4	18	125
	2DRL4-10	175	1200	785	1195	1100	400	640	355	45	4	18	125
	2DRL4-12	175	1200	785	1195	1100	400	640	355	45	4	18	125
	2DRL4-14	175	1200	785	1195	1100	400	640	355	45	4	18	125
	2DRL4-16	175	1200	785	1195	1100	400	640	355	45	4	18	125
	2DRL4-19	175	1200	785	1195	1100	400	640	355	45	4	18	125
	2DRL4-22	175	1200	785	1195	1100	400	640	355	45	4	18	125
	2DRL8-3	175	1300	896	1190	1200	400	710	405	45	4	18	145
	2DRL8-4	175	1300	896	1190	1200	400	710	405	45	4	18	145
2DRL8-5	175	1300	896	1190	1200	400	710	405	45	4	18	145	
2DRL8-6	175	1300	896	1190	1200	400	710	405	45	4	18	145	
2DRL8-8	175	1300	896	1190	1200	400	710	405	45	4	18	145	
2DRL8-10	175	1300	896	1190	1200	400	710	405	45	4	18	145	
2DRL8-12	175	1300	896	1190	1200	400	710	405	45	4	18	145	
2DRL8-14	175	1300	896	1190	1200	400	710	405	45	4	18	145	
2DRL8-16	175	1300	896	1190	1200	400	710	405	45	4	18	145	
2DRL8-18	175	1300	896	1190	1200	400	710	405	45	4	18	145	

# DRL

## Dimension of the booster system

	Model	h	L	W	H	L1	W1	W2	W3	a	n	d	D
2DRL	2DRL12-3	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL12-4	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL12-5	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL12-6	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL12-7	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL12-8	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL12-9	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL12-10	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL12-12	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL12-14	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL12-16	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL12-18	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL16-2	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL16-3	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL16-4	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL16-5	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL16-6	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL16-7	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL16-8	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL16-10	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL16-12	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL16-14	175	1550	989	1535	1450	400	789	415	22.5	8	18	160
	2DRL16-16	175	1550	989	1535	1450	400	789	415	22.5	8	18	160
	2DRL20-2	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL20-3	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL20-4	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL20-5	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL20-6	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL20-7	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL20-8	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL20-10	175	1550	989	1175	1450	400	789	415	22.5	8	18	160
	2DRL20-12	175	1550	989	1535	1450	400	789	415	22.5	8	18	160
	2DRL20-14	175	1550	989	1535	1450	400	789	415	22.5	8	18	160
	2DRL20-17	175	1550	989	1685	1450	400	789	415	22.5	8	18	160
	2DRL32-20-2	265	1344	1128	1095	600	760	908	434	22.5	8	18	180
	2DRL32-20	265	1410	1128	1095	600	760	908	434	22.5	8	18	180
	2DRL32-30-2	265	1470	1128	1095	600	760	908	434	22.5	8	18	180
	2DRL32-30	265	1470	1128	1095	600	760	908	434	22.5	8	18	180
	2DRL32-40-2	265	1470	1128	1095	600	760	908	434	22.5	8	18	180
	2DRL32-40	265	1470	1128	1095	600	760	908	434	22.5	8	18	180
	2DRL32-50-2	265	1610	1128	1095	600	760	908	434	22.5	8	18	180
	2DRL32-50	265	1610	1128	1095	600	760	908	434	22.5	8	18	180
2DRL32-60-2	265	1610	1128	1095	600	760	908	434	22.5	8	18	180	
2DRL32-60	265	1610	1128	1095	600	760	908	434	22.5	8	18	180	
2DRL32-70-2	265	1710	1128	1305	600	760	908	434	22.5	8	18	180	
2DRL32-70	265	1710	1128	1305	600	760	908	434	22.5	8	18	180	
2DRL32-80-2	265	1710	1128	1305	600	760	908	434	22.5	8	18	180	
2DRL32-80	265	1710	1128	1305	600	760	908	434	22.5	8	18	180	
2DRL32-90-2	265	1810	1128	1455	600	760	908	434	22.5	8	18	180	
2DRL32-90	265	1810	1128	1455	600	760	908	434	22.5	8	18	180	
2DRL32-100-2	265	1810	1128	1455	600	760	908	434	22.5	8	18	180	
2DRL32-100	265	1810	1128	1455	600	760	908	434	22.5	8	18	180	
2DRL32-110-2	265	1870	1128	1455	600	760	908	434	22.5	8	18	180	
2DRL32-110	265	1870	1128	1455	600	760	908	434	22.5	8	18	180	
2DRL32-120-2	265	1870	1128	1455	600	760	908	434	22.5	8	18	180	
2DRL32-120	265	1870	1128	1455	600	760	908	434	22.5	8	18	180	
2DRL32-130-2	265	1950	1128	1455	600	760	908	434	22.5	8	18	180	

## Dimension of the booster system

Model	h	L	W	H	L1	W1	W2	W3	a	n	d	D
2DRL32-130	265	1950	1128	1455	600	760	908	434	22.5	8	18	180
2DRL32-140-2	265	1950	1128	1455	600	760	908	434	22.5	8	18	180
2DRL32-140	265	1950	1128	1455	600	760	908	434	22.5	8	18	180
2DRL42-10	300	1410	1203	1095	710	760	953	529	22.5	8	18	210
2DRL42-20-2	300	1470	1203	1095	710	760	953	529	22.5	8	18	210
2DRL42-20	300	1470	1203	1095	710	760	953	529	22.5	8	18	210
2DRL42-30-2	300	1610	1203	1095	710	760	953	529	22.5	8	18	210
2DRL42-30	300	1610	1203	1095	710	760	953	529	22.5	8	18	210
2DRL42-40-2	300	1710	1203	1305	710	760	953	529	22.5	8	18	210
2DRL42-40	300	1710	1203	1305	710	760	953	529	22.5	8	18	210
2DRL42-50-2	300	1810	1203	1455	710	760	953	529	22.5	8	18	210
2DRL42-50	300	1810	1203	1455	710	760	953	529	22.5	8	18	210
2DRL42-60-2	300	1870	1203	1455	710	760	953	529	22.5	8	18	210
2DRL42-60	300	1870	1203	1455	710	760	953	529	22.5	8	18	210
2DRL42-70-2	300	1950	1203	1455	710	760	953	529	22.5	8	18	210
2DRL42-70	300	1950	1203	1455	710	760	953	529	22.5	8	18	210
2DRL42-80-2	300	1950	1203	1455	710	760	953	529	22.5	8	18	210
2DRL42-80	300	1950	1203	1455	710	760	953	529	22.5	8	18	210
2DRL42-90-2	300	1950	1203	1455	710	760	953	529	22.5	8	18	210
2DRL42-90	300	2000	1203	1605	710	760	953	529	22.5	8	18	210
2DRL42-100-2	300	2000	1203	1605	710	760	953	529	22.5	8	18	210
2DRL42-100	300	2000	1203	1605	710	760	953	529	22.5	8	18	210
2DRL42-110-2	300	2100	1203	1605	710	760	953	529	22.5	8	18	210
2DRL42-110	300	2100	1203	1605	710	760	953	529	22.5	8	18	210
2DRL42-120-2	300	2100	1203	1605	710	760	953	529	22.5	8	18	210
2DRL42-120	300	2100	1203	1605	710	760	953	529	22.5	8	18	210
2DRL42-130-2	300	2100	1203	1605	710	760	953	529	22.5	8	18	210
2DRL65-10	300	1470	1289	1095	710	760	1004	542	22.5	8	22	240
2DRL65-20-2	300	1470	1289	1095	710	760	1004	542	22.5	8	22	240
2DRL65-20-1	300	1610	1289	1095	710	760	1004	542	22.5	8	22	240
2DRL65-20	300	1610	1289	1095	710	760	1004	542	22.5	8	22	240
2DRL65-30-2	300	1710	1289	1305	710	760	1004	542	22.5	8	22	240
2DRL65-30-1	300	1710	1289	1305	710	760	1004	542	22.5	8	22	240
2DRL65-30	300	1810	1289	1455	710	760	1004	542	22.5	8	22	240
2DRL65-40-2	300	1810	1289	1455	710	760	1004	542	22.5	8	22	240
2DRL65-40-1	300	1870	1289	1455	710	760	1004	542	22.5	8	22	240
2DRL65-40	300	1870	1289	1455	710	760	1004	542	22.5	8	22	240
2DRL65-50-2	300	1950	1289	1455	710	760	1004	542	22.5	8	22	240
2DRL65-50-1	300	1950	1289	1455	710	760	1004	542	22.5	8	22	240
2DRL65-50	300	1950	1289	1455	710	760	1004	542	22.5	8	22	240
2DRL65-60-2	300	1950	1289	1455	710	760	1004	542	22.5	8	22	240
2DRL65-60-1	300	2000	1289	1605	710	760	1004	542	22.5	8	22	240
2DRL65-60	300	2000	1289	1605	710	760	1004	542	22.5	8	22	240
2DRL65-70-2	300	2000	1289	1605	710	760	1004	542	22.5	8	22	240
2DRL65-70-1	300	2000	1289	1605	710	760	1004	542	22.5	8	22	240
2DRL65-70	300	2120	1289	1605	710	760	1004	542	22.5	8	22	240
2DRL65-80-2	300	2120	1289	1605	710	760	1004	542	22.5	8	22	240
2DRL65-80-1	300	2120	1289	1605	710	760	1004	542	22.5	8	22	240
2DRL85-10	340	1470	1304	1095	720	760	1019	550	22.5	8	22	240
2DRL85-20-2	340	1610	1304	1095	720	760	1019	550	22.5	8	22	240
2DRL85-20	340	1710	1304	1305	720	760	1019	550	22.5	8	22	240
2DRL85-30	340	1810	1304	1455	720	760	1019	550	22.5	8	22	240
2DRL85-30-2	340	1870	1304	1455	720	760	1019	550	22.5	8	22	240
2DRL85-40-2	340	1950	1304	1455	720	760	1019	550	22.5	8	22	240
2DRL85-40	340	1950	1304	1455	720	760	1019	550	22.5	8	22	240
2DRL85-50-2	340	2000	1304	1605	720	760	1019	550	22.5	8	22	240
2DRL85-50	340	2000	1304	1605	720	760	1019	550	22.5	8	22	240

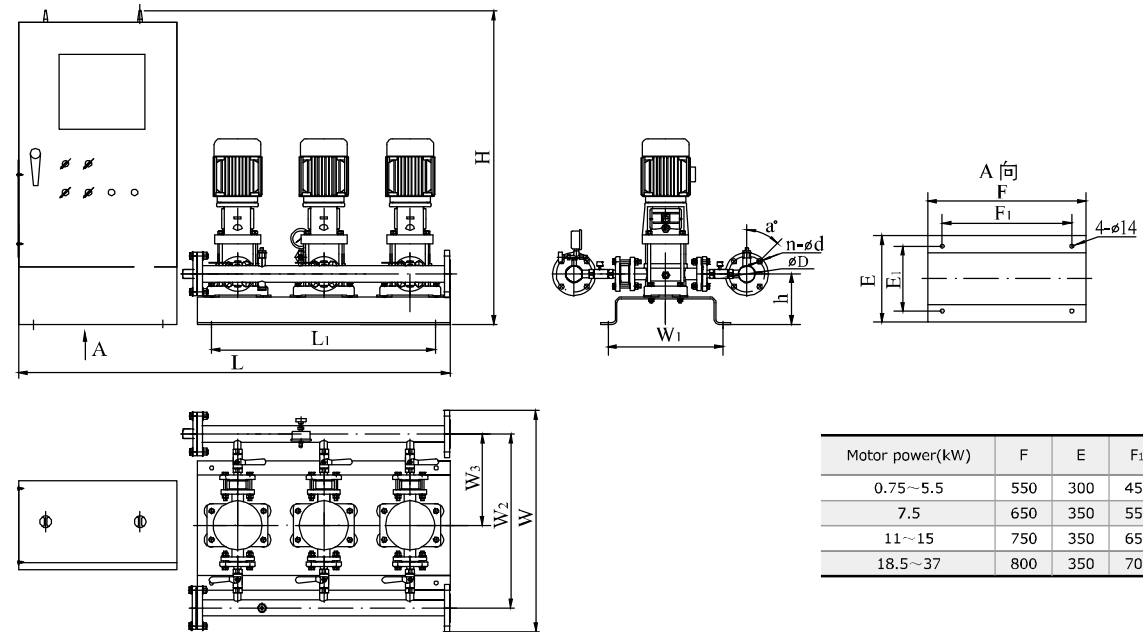
2DRL

# DRL

## Dimension of the booster system

	Model	h	L	W	H	L1	W1	W2	W3	a	n	d	D
2DRL	2DRL85-60-2	340	2120	1304	1605	720	760	1019	550	22.5	8	22	240
	2DRL85-60	340	2120	1304	1605	720	760	1019	550	22.5	8	22	240
	2DRL120-10	400	1930	1437	1095	660	760	1097	745	22.5	8	22	295
	2DRL120-20-2	400	1930	1437	1305	660	760	1097	745	22.5	8	22	295
	2DRL120-20-1	400	2030	1437	1455	660	760	1097	745	22.5	8	22	295
	2DRL120-20	400	2030	1437	1455	720	760	1097	745	22.5	8	22	295
	2DRL120-30-2	400	2030	1437	1455	800	760	1097	745	22.5	8	22	295
	2DRL120-30-1	400	2030	1437	1455	800	760	1097	745	22.5	8	22	295
	2DRL120-30	400	2030	1437	1455	800	760	1097	745	22.5	8	22	295
	2DRL120-40-2	400	2080	1437	1605	800	760	1097	745	22.5	8	22	295
	2DRL120-40-1	400	2080	1437	1605	800	760	1097	745	22.5	8	22	295
	2DRL120-40	400	2080	1437	1605	920	760	1097	745	22.5	8	22	295
	2DRL120-50-2	400	2080	1437	1605	920	760	1097	745	22.5	8	22	295
	2DRL120-50-1	400	2080	1437	1605	920	760	1097	745	22.5	8	22	295
	2DRL120-50	400	2080	1437	2200	1080	760	1097	745	22.5	8	22	295
	2DRL120-60-2	400	2080	1437	2200	1080	760	1097	745	22.5	8	22	295
	2DRL120-60-1	400	2080	1437	2200	1080	760	1097	745	22.5	8	22	295
	2DRL120-60	400	2080	1437	2200	1160	760	1097	745	22.5	8	22	295
	2DRL120-70-2	400	2080	1437	2200	1160	760	1097	745	22.5	8	22	295
	2DRL120-70-1	400	2080	1437	2200	1160	760	1097	745	22.5	8	22	295
	2DRL120-70	400	2080	1419	2200	1160	760	1079	745	22.5	8	22	295
	2DRL150-10-1	400	1930	1419	1095	660	760	1079	745	22.5	8	22	295
	2DRL150-10	400	1930	1419	1305	660	760	1079	745	22.5	8	22	295
	2DRL150-20-2	400	2030	1419	1455	660	760	1079	745	22.5	8	22	295
	2DRL150-20-1	400	2030	1419	1455	720	760	1079	745	22.5	8	22	295
	2DRL150-20	400	2030	1419	1455	800	760	1079	745	22.5	8	22	295
	2DRL150-30-2	400	2030	1419	1455	800	760	1079	745	22.5	8	22	295
	2DRL150-30-1	400	2080	1419	1605	800	760	1079	745	22.5	8	22	295
	2DRL150-30	400	2080	1419	1605	800	760	1079	745	22.5	8	22	295
	2DRL150-40-2	400	2080	1419	1605	920	760	1079	745	22.5	8	22	295
	2DRL150-40-1	400	2080	1419	1605	920	760	1079	745	22.5	8	22	295
	2DRL150-40	400	2080	1419	2200	1080	760	1079	745	22.5	8	22	295
	2DRL150-50-2	400	2080	1419	2200	1080	760	1079	745	22.5	8	22	295
	2DRL150-50-1	400	2080	1419	2200	1160	760	1079	745	22.5	8	22	295
	2DRL150-50	400	2080	1419	2200	1160	760	1079	745	22.5	8	22	295
	2DRL150-60-2	400	2080	1419	2200	1160	760	1079	745	22.5	8	22	295
	2DRL150-60-1	400	2080	1419	2200	1160	760	1079	745	22.5	8	22	295
	2DRL150-60	400	2080	1419	2200	1160	760	1079	745	22.5	8	22	295
	2DRL200-10-B	420	2095	1638	1455	660	760	1243	845	15	12	22	350
	2DRL200-10-A	420	2095	1638	1455	720	760	1243	845	15	12	22	350
	2DRL200-10	420	2095	1638	1455	800	760	1243	845	15	12	22	350
	2DRL200-20-2B	420	2145	1638	1605	800	760	1243	845	15	12	22	350
	2DRL200-20-2A	420	2145	1638	1605	920	760	1243	845	15	12	22	350
	2DRL200-20-A	420	2145	1638	2200	1080	760	1243	845	15	12	22	350
	2DRL200-20	420	2145	1638	2200	1080	760	1243	845	15	12	22	350
	2DRL200-30-2B	420	2145	1638	2200	1160	760	1243	845	15	12	22	350
2DRL200-30-A-B	420	2145	1638	2200	1160	760	1243	845	15	12	22	350	
2DRL200-30-2A	420	2145	1638	2200	1160	760	1243	845	15	12	22	350	
2DRL200-30-B	420	2145	1638	2200	1160	760	1243	845	15	12	22	350	
2DRL200-30-A	420	2145	1638	2200	1160	760	1243	845	15	12	22	350	
2DRL200-30	420	2145	1638	2200	1160	760	1243	845	15	12	22	350	
2DRL200-40-2B	420	2145	1638	2200	1160	760	1243	845	15	12	22	350	
2DRL200-40-2A	420	2145	1638	2200	1290	760	1243	845	15	12	22	350	
2DRL200-40-A	420	2145	1638	2200	1290	760	1243	845	15	12	22	350	
2DRL200-40	420	2145	1638	2200	1290	760	1243	845	15	12	22	350	

3 DR(L) Series



Dimension of the booster system

	Model	h	L	W	H	L1	W1	W2	W3	a	n	d	D
Control cabinet seperated 3DRL	3DRL2-3	175	1550	790	1100	780	400	620	340	45	4	18	125
	3DRL2-4	175	1550	790	1100	780	400	620	340	45	4	18	125
	3DRL2-5	175	1550	790	1100	780	400	620	340	45	4	18	125
	3DRL2-6	175	1550	790	1100	780	400	620	340	45	4	18	125
	3DRL2-7	175	1550	790	1100	780	400	620	340	45	4	18	125
	3DRL2-9	175	1550	790	1100	780	400	620	340	45	4	18	125
	3DRL2-11	175	1550	790	1100	780	400	620	340	45	4	18	125
	3DRL2-13	175	1550	790	1100	780	400	620	340	45	4	18	125
	3DRL2-15	175	1550	790	1100	780	400	620	340	45	4	18	125
	3DRL2-18	175	1550	790	1100	780	400	620	340	45	4	18	125
	3DRL2-22	175	1550	790	1100	780	400	620	340	45	4	18	125
	3DRL2-26	175	1550	790	1100	780	400	620	340	45	4	18	125
	3DRL4-3	175	1550	857	1100	780	400	680	375	45	4	18	145
	3DRL4-4	175	1550	857	1100	780	400	680	375	45	4	18	145
	3DRL4-5	175	1550	857	1100	780	400	680	375	45	4	18	145
	3DRL4-6	175	1550	857	1100	780	400	680	375	45	4	18	145
	3DRL4-7	175	1550	857	1100	780	400	680	375	45	4	18	145
	3DRL4-8	175	1550	857	1100	780	400	680	375	45	4	18	145
	3DRL4-10	175	1550	857	1100	780	400	680	375	45	4	18	145
	3DRL4-12	175	1550	857	1100	780	400	680	375	45	4	18	145
	3DRL4-14	175	1550	857	1100	780	400	680	375	45	4	18	145
	3DRL4-16	175	1550	857	1100	780	400	680	375	45	4	18	145
3DRL4-19	175	1550	857	1100	780	400	680	375	45	4	18	145	
3DRL4-22	175	1550	857	1100	780	400	680	375	45	4	18	145	
3DRL8-3	175	1790	930	1100	900	400	735	420	22.5	8	18	160	
3DRL8-4	175	1790	930	1100	900	400	735	420	22.5	8	18	160	
3DRL8-5	175	1790	930	1100	900	400	735	420	22.5	8	18	160	
3DRL8-6	175	1790	930	1100	900	400	735	420	22.5	8	18	160	
3DRL8-8	175	1790	930	1100	900	400	735	420	22.5	8	18	160	
3DRL8-10	175	1790	930	1100	900	400	735	420	22.5	8	18	160	
3DRL8-12	175	1790	930	1100	900	400	735	420	22.5	8	18	160	
3DRL8-14	175	1790	930	1100	900	400	735	420	22.5	8	18	160	
3DRL8-16	175	1790	930	1100	900	400	735	420	22.5	8	18	160	
3DRL8-18	175	1790	930	1100	900	400	735	420	22.5	8	18	160	
3DRL8-20	175	1790	930	1100	900	400	735	420	22.5	8	18	160	

# DRL

## Dimension of the booster system

Model	h	L	W	H	L1	W1	W2	W3	a	n	d	D
3DRL12-3	180	1620	989	1095	1000	400	789	415	22.5	8	18	180
3DRL12-4	180	1641	989	1095	1000	400	789	415	22.5	8	18	180
3DRL12-5	180	1641	989	1095	1000	400	789	415	22.5	8	18	180
3DRL12-6	180	1740	989	1095	1000	400	789	415	22.5	8	18	180
3DRL12-7	180	1830	989	1095	1000	400	789	415	22.5	8	18	180
3DRL12-8	180	1830	989	1095	1000	400	789	415	22.5	8	18	180
3DRL12-9	180	1830	989	1095	1000	400	789	415	22.5	8	18	180
3DRL12-10	180	1830	989	1095	1000	400	789	415	22.5	8	18	180
3DRL12-12	180	1830	989	1095	1000	400	789	415	22.5	8	18	180
3DRL12-14	180	2040	989	1095	1000	400	789	415	22.5	8	18	180
3DRL12-16	180	2040	989	1095	1000	400	789	415	22.5	8	18	180
3DRL12-18	180	2040	989	1095	1000	400	789	415	22.5	8	18	180
3DRL16-2	180	1620	989	1095	1000	400	789	415	22.5	8	18	180
3DRL16-3	180	1641	989	1095	1000	400	789	415	22.5	8	18	180
3DRL16-4	180	1740	989	1095	1000	400	789	415	22.5	8	18	180
3DRL16-5	180	1830	989	1095	1000	400	789	415	22.5	8	18	180
3DRL16-6	180	1830	989	1095	1000	400	789	415	22.5	8	18	180
3DRL16-7	180	1830	989	1095	1000	400	789	415	22.5	8	18	180
3DRL16-8	180	1830	989	1095	1000	400	789	415	22.5	8	18	180
3DRL16-10	180	2040	989	1095	1000	400	789	415	22.5	8	18	180
3DRL16-12	180	2040	989	1095	1000	400	789	415	22.5	8	18	180
3DRL16-14	180	2140	989	1305	1000	400	789	415	22.5	8	18	180
3DRL16-16	180	2140	989	1305	1000	400	789	415	22.5	8	18	180
3DRL20-2	180	1620	989	1095	1000	400	789	415	22.5	8	18	180
3DRL20-3	180	1740	989	1095	1000	400	789	415	22.5	8	18	180
3DRL20-4	180	1830	989	1095	1000	400	789	415	22.5	8	18	180
3DRL20-5	180	1830	989	1095	1000	400	789	415	22.5	8	18	180
3DRL20-6	180	1830	989	1095	1000	400	789	415	22.5	8	18	180
3DRL20-7	180	1830	989	1095	1000	400	789	415	22.5	8	18	180
3DRL20-8	180	2040	989	1095	1000	400	789	415	22.5	8	18	180
3DRL20-10	180	2040	989	1095	1000	400	789	415	22.5	8	18	180
3DRL20-12	180	2140	989	1305	1000	400	789	415	22.5	8	18	180
3DRL20-14	180	2140	989	1305	1000	400	789	415	22.5	8	18	180
3DRL20-17	180	2240	989	1455	1000	400	789	415	22.5	8	18	180
3DRL32-20-2	265	1641	1128	1095	1060	760	908	434	22.5	8	18	210
3DRL32-20	265	1740	1128	1095	1060	760	908	434	22.5	8	18	210
3DRL32-30-2	265	1830	1128	1095	1060	760	908	434	22.5	8	18	210
3DRL32-30	265	1830	1128	1095	1060	760	908	434	22.5	8	18	210
3DRL32-40-2	265	1830	1128	1095	1060	760	908	434	22.5	8	18	210
3DRL32-40	265	1830	1128	1095	1060	760	908	434	22.5	8	18	210
3DRL32-50-2	265	2040	1128	1095	1060	760	908	434	22.5	8	18	210
3DRL32-50	265	2040	1128	1095	1060	760	908	434	22.5	8	18	210
3DRL32-60-2	265	2040	1128	1095	1060	760	908	434	22.5	8	18	210
3DRL32-60	265	2040	1128	1095	1060	760	908	434	22.5	8	18	210
3DRL32-70-2	265	2140	1128	1305	1060	760	908	434	22.5	8	18	210
3DRL32-70	265	2140	1128	1305	1060	760	908	434	22.5	8	18	210
3DRL32-80-2	265	2140	1128	1305	1060	760	908	434	22.5	8	18	210
3DRL32-80	265	2140	1128	1305	1060	760	908	434	22.5	8	18	210
3DRL32-90-2	265	2240	1128	1455	1060	760	908	434	22.5	8	18	210
3DRL32-90	265	2240	1128	1455	1060	760	908	434	22.5	8	18	210
3DRL32-100-2	265	2240	1128	1455	1060	760	908	434	22.5	8	18	210
3DRL32-100	265	2240	1128	1455	1060	760	908	434	22.5	8	18	210
3DRL32-110-2	265	2330	1128	1455	1060	760	908	434	22.5	8	18	210
3DRL32-110	265	2330	1128	1455	1060	760	908	434	22.5	8	18	210
3DRL32-120-2	265	2330	1128	1455	1060	760	908	434	22.5	8	18	210
3DRL32-120	265	2330	1128	1455	1060	760	908	434	22.5	8	18	210
3DRL32-130-2	265	2450	1128	1455	1060	760	908	434	22.5	8	18	210

Control cabinet seperated 3DRL



## Dimension of the booster system

Model	h	L	W	H	L1	W1	W2	W3	a	n	d	D
3DRL32-130	265	2450	1128	1455	1060	760	908	434	22.5	8	18	210
3DRL32-140-2	265	2450	1128	1455	1060	760	908	434	22.5	8	18	210
3DRL32-140	265	2450	1128	1455	1060	760	908	434	22.5	8	18	210
3DRL42-10	320	1740	1203	1095	1250	760	953	529	22.5	8	22	240
3DRL42-20-2	320	1830	1203	1095	1250	760	953	529	22.5	8	22	240
3DRL42-20	320	1830	1203	1095	1250	760	953	529	22.5	8	22	240
3DRL42-30-2	320	2040	1203	1095	1250	760	953	529	22.5	8	22	240
3DRL42-30	320	2040	1203	1095	1250	760	953	529	22.5	8	22	240
3DRL42-40-2	320	2140	1203	1305	1250	760	953	529	22.5	8	22	240
3DRL42-40	320	2140	1203	1305	1250	760	953	529	22.5	8	22	240
3DRL42-50-2	320	2240	1203	1455	1250	760	953	529	22.5	8	22	240
3DRL42-50	320	2240	1203	1455	1250	760	953	529	22.5	8	22	240
3DRL42-60-2	320	2330	1203	1455	1250	760	953	529	22.5	8	22	240
3DRL42-60	320	2330	1203	1455	1250	760	953	529	22.5	8	22	240
3DRL42-70-2	320	2450	1203	1455	1250	760	953	529	22.5	8	22	240
3DRL42-70	320	2450	1203	1455	1250	760	953	529	22.5	8	22	240
3DRL42-80-2	320	2450	1203	1455	1250	760	953	529	22.5	8	22	240
3DRL42-80	320	2450	1203	1455	1250	760	953	529	22.5	8	22	240
3DRL42-90-2	320	2450	1203	1455	1250	760	953	529	22.5	8	22	240
3DRL42-90	320	2500	1203	1605	1250	760	953	529	22.5	8	22	240
3DRL42-100-2	320	2500	1203	1605	1250	760	953	529	22.5	8	22	240
3DRL42-100	320	2500	1203	1605	1250	760	953	529	22.5	8	22	240
3DRL42-110-2	320	2650	1203	1605	1250	760	953	529	22.5	8	22	240
3DRL42-110	320	2650	1203	1605	1250	760	953	529	22.5	8	22	240
3DRL42-120-2	320	2650	1203	1605	1250	760	953	529	22.5	8	22	240
3DRL42-120	320	2650	1203	1605	1250	760	953	529	22.5	8	22	240
3DRL42-130-2	320	2650	1203	1605	1250	760	953	529	22.5	8	22	240
3DRL65-10	320	1830	1289	1095	1250	760	1004	542	22.5	8	22	295
3DRL65-20-2	320	1830	1289	1095	1250	760	1004	542	22.5	8	22	295
3DRL65-20-1	320	2040	1289	1095	1250	760	1004	542	22.5	8	22	295
3DRL65-20	320	2040	1289	1095	1250	760	1004	542	22.5	8	22	295
3DRL65-30-2	320	2140	1289	1305	1250	760	1004	542	22.5	8	22	295
3DRL65-30-1	320	2140	1289	1305	1250	760	1004	542	22.5	8	22	295
3DRL65-30	320	2240	1289	1455	1250	760	1004	542	22.5	8	22	295
3DRL65-40-2	320	2240	1289	1455	1250	760	1004	542	22.5	8	22	295
3DRL65-40-1	320	2330	1289	1455	1250	760	1004	542	22.5	8	22	295
3DRL65-40	320	2330	1289	1455	1250	760	1004	542	22.5	8	22	295
3DRL65-50-2	320	2450	1289	1455	1250	760	1004	542	22.5	8	22	295
3DRL65-50-1	320	2450	1289	1455	1250	760	1004	542	22.5	8	22	295
3DRL65-50	320	2450	1289	1455	1250	760	1004	542	22.5	8	22	295
3DRL65-60-2	320	2450	1289	1455	1250	760	1004	542	22.5	8	22	295
3DRL65-60-1	320	2500	1289	1605	1250	760	1004	542	22.5	8	22	295
3DRL65-60	320	2500	1289	1605	1250	760	1004	542	22.5	8	22	295
3DRL65-70-2	320	2500	1289	1605	1250	760	1004	542	22.5	8	22	295
3DRL65-70-1	320	2500	1289	1605	1250	760	1004	542	22.5	8	22	295
3DRL65-70	320	2680	1289	1605	1250	760	1004	542	22.5	8	22	295
3DRL65-80-2	320	2680	1289	1605	1250	760	1004	542	22.5	8	22	295
3DRL65-80-1	320	2680	1289	1605	1250	760	1004	542	22.5	8	22	295
3DRL85-10	360	1830	1304	1095	1260	760	1019	550	22.5	8	22	295
3DRL85-20-2	360	2040	1304	1095	1260	760	1019	550	22.5	8	22	295
3DRL85-20	360	2140	1304	1305	1260	760	1019	550	22.5	8	22	295
3DRL85-30	360	2240	1304	1455	1260	760	1019	550	22.5	8	22	295
3DRL85-30-2	360	2330	1304	1455	1260	760	1019	550	22.5	8	22	295
3DRL85-40-2	360	2450	1304	1455	1260	760	1019	550	22.5	8	22	295
3DRL85-40	360	2450	1304	1455	1260	760	1019	550	22.5	8	22	295
3DRL85-50-2	360	2500	1304	1605	1260	760	1019	550	22.5	8	22	295
3DRL85-50	360	2500	1304	1605	1260	760	1019	550	22.5	8	22	295

Control cabinet seperated 3DRL

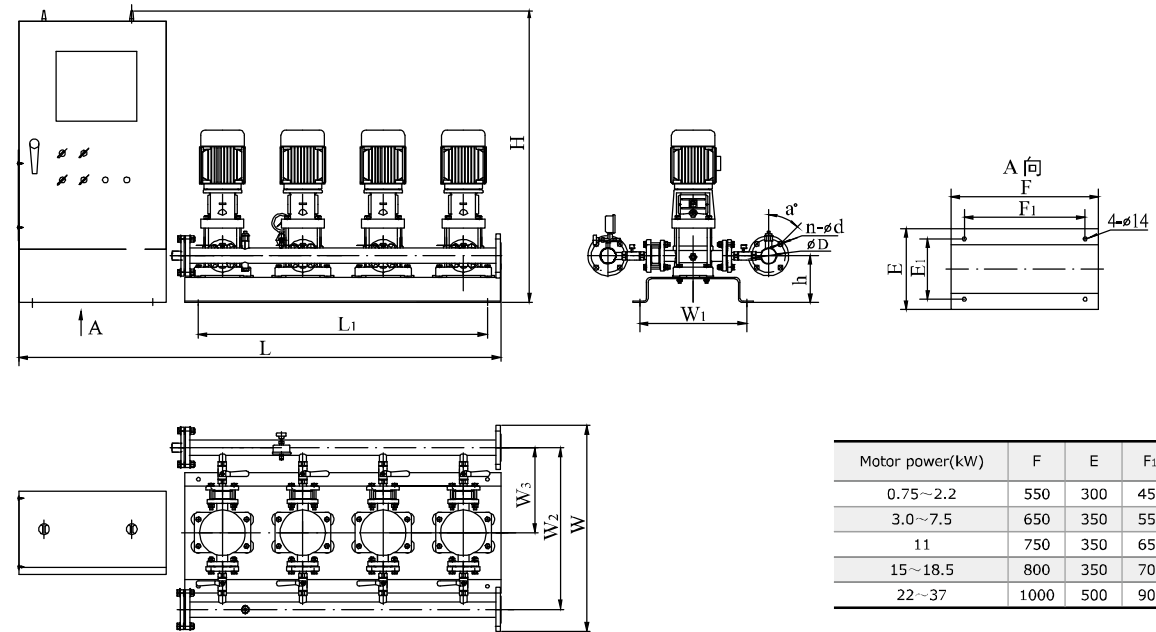
# DRL

## Dimension of the booster system

Model	h	L	W	H	L1	W1	W2	W3	a	n	d	D
3DRL85-60-2	360	2680	1304	1605	1260	760	1019	550	22.5	8	22	295
3DRL85-60	360	2680	1304	1605	1260	760	1019	550	22.5	8	22	295
3DRL120-10	405	2630	1710	1550	1690	980	1315	770	15	12	22	350
3DRL120-20-2	405	2630	1710	1710	1690	980	1315	770	15	12	22	350
3DRL120-20-1	405	2240	1710	1770	1690	980	1315	770	15	12	22	350
3DRL120-20	405	2730	1710	1810	1690	980	1315	770	15	12	22	350
3DRL120-30-2	405	2730	1710	2040	1690	980	1315	770	15	12	22	350
3DRL120-30-1	405	2730	1710	2040	1690	980	1315	770	15	12	22	350
3DRL120-30	405	2730	1710	2040	1690	980	1315	770	15	12	22	350
3DRL120-40-2	405	2730	1710	2200	1690	980	1315	770	15	12	22	350
3DRL120-40-1	405	2780	1710	2200	1690	980	1315	770	15	12	22	350
3DRL120-40	405	2780	1710	2240	1690	980	1315	770	15	12	22	350
3DRL120-50-2	405	2780	1710	2400	1690	980	1315	770	15	12	22	350
3DRL120-50-1	405	2780	1710	2400	1690	980	1315	770	15	12	22	350
3DRL120-50	405	2780	1710	2500	1690	980	1315	770	15	12	22	350
3DRL120-60-2	405	2780	1710	2660	1690	980	1315	770	15	12	22	350
3DRL120-60-1	405	2780	1710	2660	1690	980	1315	770	15	12	22	350
3DRL120-60	405	2780	1710	2735	1690	980	1315	770	15	12	22	350
3DRL120-70-2	405	2780	1710	2895	1690	980	1315	770	15	12	22	350
3DRL120-70-1	405	2780	1710	2895	1690	980	1315	770	15	12	22	350
3DRL120-70	405	2780	1710	2895	1690	980	1315	770	15	12	22	350
3DRL150-10-1	405	2630	1710	1550	1690	980	1315	770	15	12	22	350
3DRL150-10	405	2630	1710	1550	1690	980	1315	770	15	12	22	350
3DRL150-20-2	405	2730	1710	1770	1690	980	1315	770	15	12	22	350
3DRL150-20-1	405	2730	1710	1810	1690	980	1315	770	15	12	22	350
3DRL150-20	405	2730	1710	1880	1690	980	1315	770	15	12	22	350
3DRL150-30-2	405	2730	1710	2040	1690	980	1315	770	15	12	22	350
3DRL150-30-1	405	2780	1710	2040	1690	980	1315	770	15	12	22	350
3DRL150-30	405	2780	1710	2040	1690	980	1315	770	15	12	22	350
3DRL150-40-2	405	2780	1710	2240	1690	980	1315	770	15	12	22	350
3DRL150-40-1	405	2780	1710	2240	1690	980	1315	770	15	12	22	350
3DRL150-40	405	2780	1710	2340	1690	980	1315	770	15	12	22	350
3DRL150-50-2	405	2780	1710	2500	1690	980	1315	770	15	12	22	350
3DRL150-50-1	405	2780	1710	2575	1690	980	1315	770	15	12	22	350
3DRL150-50	405	2780	1710	2575	1690	980	1315	770	15	12	22	350
3DRL150-60-2	405	2780	1710	2735	1690	980	1315	770	15	12	22	350
3DRL150-60-1	405	2780	1710	2735	1690	980	1315	770	15	12	22	350
3DRL150-60	405	2780	1710	2735	1690	980	1315	770	15	12	22	350
3DRL200-10-B	425	2840	1935	1455	1940	1130	1490	870	15	12	22	400
3DRL200-10-A	425	2840	1935	1455	1940	1130	1490	870	15	12	22	400
3DRL200-10	425	2840	1935	1455	1940	1130	1490	870	15	12	22	400
3DRL200-20-2B	425	2890	1935	1605	1940	1130	1490	870	15	12	22	400
3DRL200-20-2A	425	2890	1935	1605	1940	1130	1490	870	15	12	22	400
3DRL200-20-A	425	2890	1935	2200	1940	1130	1490	870	15	12	22	400
3DRL200-20	425	2890	1935	2200	1940	1130	1490	870	15	12	22	400
3DRL200-30-2B	425	2890	1935	2200	1940	1130	1490	870	15	12	22	400
3DRL200-30-A-B	425	2890	1935	2200	1940	1130	1490	870	15	12	22	400
3DRL200-30-2A	425	2890	1935	2200	1940	1130	1490	870	15	12	22	400
3DRL200-30-B	425	2890	1935	2200	1940	1130	1490	870	15	12	22	400
3DRL200-30-A	425	2890	1935	2200	1940	1130	1490	870	15	12	22	400
3DRL200-30	425	2890	1935	2200	1940	1130	1490	870	15	12	22	400
3DRL200-40-2B	425	2890	1935	2200	1940	1130	1490	870	15	12	22	400
3DRL200-40-2A	425	2890	1935	2200	1940	1130	1490	870	15	12	22	400
3DRL200-40-A	425	2890	1935	2200	1940	1130	1490	870	15	12	22	400
3DRL200-40	425	2890	1935	2200	1940	1130	1490	870	15	12	22	400

Control cabinet separated 3DRL

4 DR(L) Series



Dimension of the booster system

Model	h	L	W	H	L1	W1	W2	W3	a	n	d	D
4DRL2-3	175	1850	790	1100	1080	400	620	340	45	4	18	125
4DRL2-4	175	1850	790	1100	1080	400	620	340	45	4	18	125
4DRL2-5	175	1850	790	1100	1080	400	620	340	45	4	18	125
4DRL2-6	175	1850	790	1100	1080	400	620	340	45	4	18	125
4DRL2-7	175	1850	790	1100	1080	400	620	340	45	4	18	125
4DRL2-9	175	1850	790	1100	1080	400	620	340	45	4	18	125
4DRL2-11	175	1850	790	1100	1080	400	620	340	45	4	18	125
4DRL2-13	175	1850	790	1100	1080	400	620	340	45	4	18	125
4DRL2-15	175	1850	790	1100	1080	400	620	340	45	4	18	125
4DRL2-18	175	1850	790	1100	1080	400	620	340	45	4	18	125
4DRL2-22	175	1850	790	1100	1080	400	620	340	45	4	18	125
4DRL2-26	175	1850	790	1100	1080	400	620	340	45	4	18	125
4DRL4-3	175	1850	900	1100	1080	400	705	385	22.5	8	18	160
4DRL4-4	175	1850	900	1100	1080	400	705	385	22.5	8	18	160
4DRL4-5	175	1850	900	1100	1080	400	705	385	22.5	8	18	160
4DRL4-6	175	1850	900	1100	1080	400	705	385	22.5	8	18	160
4DRL4-7	175	1850	900	1100	1080	400	705	385	22.5	8	18	160
4DRL4-8	175	1850	900	1100	1080	400	705	385	22.5	8	18	160
4DRL4-10	175	1850	900	1100	1080	400	705	385	22.5	8	18	160
4DRL4-12	175	1850	900	1100	1080	400	705	385	22.5	8	18	160
4DRL4-14	175	1850	900	1100	1080	400	705	385	22.5	8	18	160
4DRL4-16	175	1950	900	1300	1080	400	705	385	22.5	8	18	160
4DRL4-19	175	1950	900	1300	1080	400	705	385	22.5	8	18	160
4DRL4-22	175	1950	900	1300	1080	400	705	385	22.5	8	18	160
4DRL8-3	175	2130	975	1100	1235	400	755	440	22.5	8	18	180
4DRL8-4	175	2130	975	1100	1235	400	755	440	22.5	8	18	180
4DRL8-5	175	2130	975	1100	1235	400	755	440	22.5	8	18	180
4DRL8-6	175	2130	975	1100	1235	400	755	440	22.5	8	18	180
4DRL8-8	175	2230	975	1270	1235	400	755	440	22.5	8	18	180
4DRL8-10	175	2230	975	1270	1235	400	755	440	22.5	8	18	180
4DRL8-12	175	2230	975	1270	1235	400	755	440	22.5	8	18	180
4DRL8-14	175	2230	975	1270	1235	400	755	440	22.5	8	18	180
4DRL8-16	175	2230	975	1270	1235	400	755	440	22.5	8	18	180
4DRL8-18	175	2230	975	1270	1235	400	755	440	22.5	8	18	180
4DRL8-20	175	2230	975	1270	1235	400	755	440	22.5	8	18	180

Control cabinet seperated 4DRL

# DRL

## Dimension of the booster system

Model	h	L	W	H	L1	W1	W2	W3	a	n	d	D
4DRL12-3	175	1710	989	1095	1430	400	789	415	22.5	8	18	210
4DRL12-4	175	1738	989	1095	1430	400	789	415	22.5	8	18	210
4DRL12-5	175	1738	989	1095	1430	400	789	415	22.5	8	18	210
4DRL12-6	175	1870	989	1095	1430	400	789	415	22.5	8	18	210
4DRL12-7	175	1990	989	1095	1430	400	789	415	22.5	8	18	210
4DRL12-8	175	1990	989	1095	1430	400	789	415	22.5	8	18	210
4DRL12-9	175	1990	989	1095	1430	400	789	415	22.5	8	18	210
4DRL12-10	175	1990	989	1095	1430	400	789	415	22.5	8	18	210
4DRL12-12	175	1990	989	1095	1430	400	789	415	22.5	8	18	210
4DRL12-14	175	2270	989	1095	1430	400	789	415	22.5	8	18	210
4DRL12-16	175	2270	989	1095	1430	400	789	415	22.5	8	18	210
4DRL12-18	175	2270	989	1095	1430	400	789	415	22.5	8	18	210
4DRL16-2	175	1710	989	1095	1430	400	789	415	22.5	8	18	210
4DRL16-3	175	1738	989	1095	1430	400	789	415	22.5	8	18	210
4DRL16-4	175	1870	989	1095	1430	400	789	415	22.5	8	18	210
4DRL16-5	175	1990	989	1095	1430	400	789	415	22.5	8	18	210
4DRL16-6	175	1990	989	1095	1430	400	789	415	22.5	8	18	210
4DRL16-7	175	1990	989	1095	1430	400	789	415	22.5	8	18	210
4DRL16-8	175	1990	989	1095	1430	400	789	415	22.5	8	18	210
4DRL16-10	175	2270	989	1095	1430	400	789	415	22.5	8	18	210
4DRL16-12	175	2270	989	1095	1430	400	789	415	22.5	8	18	210
4DRL16-14	175	2370	989	1305	1430	400	789	415	22.5	8	18	210
4DRL16-16	175	2370	989	1305	1430	400	789	415	22.5	8	18	210
4DRL20-2	175	1710	989	1095	1430	400	789	415	22.5	8	18	210
4DRL20-3	175	1870	989	1095	1430	400	789	415	22.5	8	18	210
4DRL20-4	175	1990	989	1095	1430	400	789	415	22.5	8	18	210
4DRL20-5	175	1990	989	1095	1430	400	789	415	22.5	8	18	210
4DRL20-6	175	1990	989	1095	1430	400	789	415	22.5	8	18	210
4DRL20-7	175	1990	989	1095	1430	400	789	415	22.5	8	18	210
4DRL20-8	175	2270	989	1095	1430	400	789	415	22.5	8	18	210
4DRL20-10	175	2270	989	1095	1430	400	789	415	22.5	8	18	210
4DRL20-12	175	2370	989	1305	1430	400	789	415	22.5	8	18	210
4DRL20-14	175	2370	989	1305	1430	400	789	415	22.5	8	18	210
4DRL20-17	175	2470	989	1455	1430	400	789	415	22.5	8	18	210
4DRL32-20-2	305	1738	1128	1095	1520	760	908	434	22.5	8	22	240
4DRL32-20	305	1870	1128	1095	1520	760	908	434	22.5	8	22	240
4DRL32-30-2	305	1990	1128	1095	1520	760	908	434	22.5	8	22	240
4DRL32-30	305	1990	1128	1095	1520	760	908	434	22.5	8	22	240
4DRL32-40-2	305	1990	1128	1095	1520	760	908	434	22.5	8	22	240
4DRL32-40	305	1990	1128	1095	1520	760	908	434	22.5	8	22	240
4DRL32-50-2	305	2270	1128	1095	1520	760	908	434	22.5	8	22	240
4DRL32-50	305	2270	1128	1095	1520	760	908	434	22.5	8	22	240
4DRL32-60-2	305	2270	1128	1095	1520	760	908	434	22.5	8	22	240
4DRL32-60	305	2270	1128	1095	1520	760	908	434	22.5	8	22	240
4DRL32-70-2	305	2370	1128	1305	1520	760	908	434	22.5	8	22	240
4DRL32-70	305	2370	1128	1305	1520	760	908	434	22.5	8	22	240
4DRL32-80-2	305	2370	1128	1305	1520	760	908	434	22.5	8	22	240
4DRL32-80	305	2370	1128	1305	1520	760	908	434	22.5	8	22	240
4DRL32-90-2	305	2470	1128	1455	1520	760	908	434	22.5	8	22	240
4DRL32-90	305	2470	1128	1455	1520	760	908	434	22.5	8	22	240
4DRL32-100-2	305	2470	1128	1455	1520	760	908	434	22.5	8	22	240
4DRL32-100	305	2470	1128	1455	1520	760	908	434	22.5	8	22	240
4DRL32-110-2	305	2590	1128	1455	1520	760	908	434	22.5	8	22	240
4DRL32-110	305	2590	1128	1455	1520	760	908	434	22.5	8	22	240
4DRL32-120-2	305	2590	1128	1455	1520	760	908	434	22.5	8	22	240
4DRL32-120	305	2590	1128	1455	1520	760	908	434	22.5	8	22	240
4DRL32-130-2	305	2750	1128	1455	1520	760	908	434	22.5	8	22	240

Control cabinet seperated 4DRL

## Dimension of the booster system

Model	h	L	W	H	L1	W1	W2	W3	a	n	d	D
4DRL32-130	305	2750	1128	1455	1520	760	908	434	22.5	8	22	240
4DRL32-140-2	305	2750	1128	1455	1520	760	908	434	22.5	8	22	240
4DRL32-140	305	2750	1128	1455	1520	760	908	434	22.5	8	22	240
4DRL42-10	340	1870	1203	1095	1790	760	953	529	22.5	8	22	240
4DRL42-20-2	340	1990	1203	1095	1790	760	953	529	22.5	8	22	240
4DRL42-20	340	1990	1203	1095	1790	760	953	529	22.5	8	22	240
4DRL42-30-2	340	2270	1203	1095	1790	760	953	529	22.5	8	22	240
4DRL42-30	340	2270	1203	1095	1790	760	953	529	22.5	8	22	240
4DRL42-40-2	340	2370	1203	1305	1790	760	953	529	22.5	8	22	240
4DRL42-40	340	2370	1203	1305	1790	760	953	529	22.5	8	22	240
4DRL42-50-2	340	2470	1203	1455	1790	760	953	529	22.5	8	22	240
4DRL42-50	340	2470	1203	1455	1790	760	953	529	22.5	8	22	240
4DRL42-60-2	340	2590	1203	1455	1790	760	953	529	22.5	8	22	240
4DRL42-60	340	2590	1203	1455	1790	760	953	529	22.5	8	22	240
4DRL42-70-2	340	2750	1203	1455	1790	760	953	529	22.5	8	22	240
4DRL42-70	340	2750	1203	1455	1790	760	953	529	22.5	8	22	240
4DRL42-80-2	340	2750	1203	1455	1790	760	953	529	22.5	8	22	240
4DRL42-80	340	2750	1203	1455	1790	760	953	529	22.5	8	22	240
4DRL42-90-2	340	2750	1203	1455	1790	760	953	529	22.5	8	22	240
4DRL42-90	340	2800	1203	1605	1790	760	953	529	22.5	8	22	240
4DRL42-100-2	340	2800	1203	1605	1790	760	953	529	22.5	8	22	240
4DRL42-100	340	2800	1203	1605	1790	760	953	529	22.5	8	22	240
4DRL42-110-2	340	3000	1203	1605	1790	760	953	529	22.5	8	22	240
4DRL42-110	340	3000	1203	1605	1790	760	953	529	22.5	8	22	240
4DRL42-120-2	340	3000	1203	1605	1790	760	953	529	22.5	8	22	240
4DRL42-120	340	3000	1203	1605	1790	760	953	529	22.5	8	22	240
4DRL42-130-2	340	3000	1203	1605	1790	760	953	542	22.5	8	22	240
4DRL65-10	360	1990	1289	1095	1790	760	1004	542	22.5	8	22	295
4DRL65-20-2	360	1990	1289	1095	1790	760	1004	542	22.5	8	22	295
4DRL65-20-1	360	2270	1289	1095	1790	760	1004	542	22.5	8	22	295
4DRL65-20	360	2270	1289	1095	1790	760	1004	542	22.5	8	22	295
4DRL65-30-2	360	2370	1289	1305	1790	760	1004	542	22.5	8	22	295
4DRL65-30-1	360	2370	1289	1305	1790	760	1004	542	22.5	8	22	295
4DRL65-30	360	2470	1289	1455	1790	760	1004	542	22.5	8	22	295
4DRL65-40-2	360	2470	1289	1455	1790	760	1004	542	22.5	8	22	295
4DRL65-40-1	360	2590	1289	1455	1790	760	1004	542	22.5	8	22	295
4DRL65-40	360	2590	1289	1455	1790	760	1004	542	22.5	8	22	295
4DRL65-50-2	360	2750	1289	1455	1790	760	1004	542	22.5	8	22	295
4DRL65-50-1	360	2750	1289	1455	1790	760	1004	542	22.5	8	22	295
4DRL65-50	360	2750	1289	1455	1790	760	1004	542	22.5	8	22	295
4DRL65-60-2	360	2750	1289	1455	1790	760	1004	542	22.5	8	22	295
4DRL65-60-1	360	2800	1289	1605	1790	760	1004	542	22.5	8	22	295
4DRL65-60	360	2800	1289	1605	1790	760	1004	542	22.5	8	22	295
4DRL65-70-2	360	2800	1289	1605	1790	760	1004	542	22.5	8	22	295
4DRL65-70-1	360	2800	1289	1605	1790	760	1004	542	22.5	8	22	295
4DRL65-70	360	3040	1289	1605	1790	760	1004	542	22.5	8	22	295
4DRL65-80-2	360	3040	1289	1605	1790	760	1004	542	22.5	8	22	295
4DRL65-80-1	360	3040	1289	1605	1790	760	1004	542	22.5	8	22	295
4DRL85-10	360	1990	1304	1095	1800	760	1019	550	22.5	8	22	295
4DRL85-20-2	360	2270	1304	1095	1800	760	1019	550	22.5	8	22	295
4DRL85-20	360	2370	1304	1305	1800	760	1019	550	22.5	8	22	295
4DRL85-30	360	2470	1304	1455	1800	760	1019	550	22.5	8	22	295
4DRL85-30-2	360	2590	1304	1455	1800	760	1019	550	22.5	8	22	295
4DRL85-40-2	360	2750	1304	1455	1800	760	1019	550	22.5	8	22	295
4DRL85-40	360	2750	1304	1455	1800	760	1019	550	22.5	8	22	295
4DRL85-50-2	360	2800	1304	1605	1800	760	1019	550	22.5	8	22	295
4DRL85-50	360	2800	1304	1605	1800	760	1019	550	22.5	8	22	295

Control cabinet seperated 4DRL

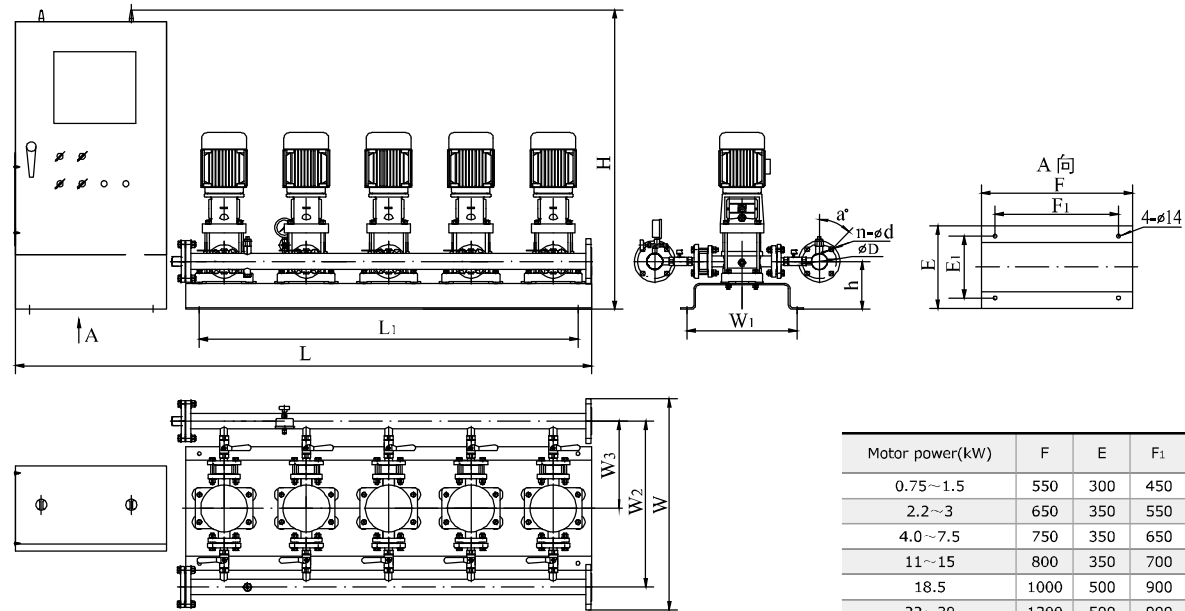
# DRL

## Dimension of the booster system

Model	h	L	W	H	L1	W1	W2	W3	a	n	d	D
4DRL85-60-2	360	3040	1304	1605	1800	760	1019	550	22.5	8	22	295
4DRL85-60	360	3040	1304	1605	1800	760	1019	550	22.5	8	22	295
4DRL120-10	405	3290	1710	1550	2370	980	1315	770	15	12	22	350
4DRL120-20-2	405	3290	1710	1710	2370	980	1315	770	15	12	22	350
4DRL120-20-1	405	3390	1710	1770	2370	980	1315	770	15	12	22	350
4DRL120-20	405	3390	1710	1810	2370	980	1315	770	15	12	22	350
4DRL120-30-2	405	3390	1710	2040	2370	980	1315	770	15	12	22	350
4DRL120-30-1	405	3390	1710	2040	2370	980	1315	770	15	12	22	350
4DRL120-30	405	3390	1710	2040	2370	980	1315	770	15	12	22	350
4DRL120-40-2	405	2800	1710	2200	2370	980	1315	770	15	12	22	350
4DRL120-40-1	405	3440	1710	2200	2370	980	1315	770	15	12	22	350
4DRL120-40	405	3440	1710	2240	2370	980	1315	770	15	12	22	350
4DRL120-50-2	405	3440	1710	2400	2370	980	1315	770	15	12	22	350
4DRL120-50-1	405	3440	1710	2400	2370	980	1315	770	15	12	22	350
4DRL120-50	405	3440	1710	2500	2370	980	1315	770	15	12	22	350
4DRL120-60-2	405	3440	1710	2660	2370	980	1315	770	15	12	22	350
4DRL120-60-1	405	3440	1710	2660	2370	980	1315	770	15	12	22	350
4DRL120-60	405	3440	1710	2735	2370	980	1315	770	15	12	22	350
4DRL120-70-2	405	3440	1710	2895	2370	980	1315	770	15	12	22	350
4DRL120-70-1	405	3440	1710	2895	2370	980	1315	770	15	12	22	350
4DRL120-70	405	3440	1710	2895	2370	980	1315	770	15	12	22	350
4DRL150-10-1	405	3290	1710	1550	2370	980	1315	770	15	12	22	350
4DRL150-10	405	3290	1710	1550	2370	980	1315	770	15	12	22	350
4DRL150-20-2	405	3390	1710	1770	2370	980	1315	770	15	12	22	350
4DRL150-20-1	405	3390	1710	1810	2370	980	1315	770	15	12	22	350
4DRL150-20	405	3390	1710	1880	2370	980	1315	770	15	12	22	350
4DRL150-30-2	405	3390	1710	2040	2370	980	1315	770	15	12	22	350
4DRL150-30-1	405	3440	1710	2040	2370	980	1315	770	15	12	22	350
4DRL150-30	405	3440	1710	2040	2370	980	1315	770	15	12	22	350
4DRL150-40-2	405	3440	1710	2240	2370	980	1315	770	15	12	22	350
4DRL150-40-1	405	3440	1710	2240	2370	980	1315	770	15	12	22	350
4DRL150-40	405	3440	1710	2340	2370	980	1315	770	15	12	22	350
4DRL150-50-2	405	3440	1710	2500	2370	980	1315	770	15	12	22	350
4DRL150-50-1	405	3440	1710	2575	2370	980	1315	770	15	12	22	350
4DRL150-50	405	3440	1710	2575	2370	980	1315	770	15	12	22	350
4DRL150-60-2	405	3440	1710	2735	2370	980	1315	770	15	12	22	350
4DRL150-60-1	405	3440	1710	2735	2370	980	1315	770	15	12	22	350
4DRL150-60	405	3440	1710	2735	2370	980	1315	770	15	12	22	350
4DRL200-10-B	425	3585	1935	1697	2685	1130	1490	870	11.25	16	22	460
4DRL200-10-A	425	3585	1935	1737	2685	1130	1490	870	11.25	16	22	460
4DRL200-10	425	3585	1935	1807	2685	1130	1490	870	11.25	16	22	460
4DRL200-20-2B	425	3635	1935	2001	2685	1130	1490	870	11.25	16	22	460
4DRL200-20-2A	425	3635	1935	2041	2685	1130	1490	870	11.25	16	22	460
4DRL200-20-A	425	3635	1935	2141	2685	1130	1490	870	11.25	16	22	460
4DRL200-20	425	3635	1935	2141	2685	1130	1490	870	11.25	16	22	460
4DRL200-30-2B	425	3635	1935	2410	2685	1130	1490	870	11.25	16	22	460
4DRL200-30-A-B	425	3635	1935	2410	2685	1130	1490	870	11.25	16	22	460
4DRL200-30-2A	425	3635	1935	2410	2685	1130	1490	870	11.25	16	22	460
4DRL200-30-B	425	3635	1935	2410	2685	1130	1490	870	11.25	16	22	460
4DRL200-30-A	425	3635	1935	2410	2685	1130	1490	870	11.25	16	22	460
4DRL200-30	425	3635	1935	2460	2685	1130	1490	870	11.25	16	22	460
4DRL200-40-2B	425	3635	1935	2654	2685	1130	1490	870	11.25	16	22	460
4DRL200-40-2A	425	3635	1935	2899	2685	1130	1490	870	11.25	16	22	460
4DRL200-40-A	425	3635	1935	2899	2685	1130	1490	870	11.25	16	22	460
4DRL200-40	425	3635	1935	2899	2685	1130	1490	870	11.25	16	22	460

Control cabinet seperated 4DRL

5 DR(L) Series



Dimension of the booster system

	Model	h	L	W	H	L1	W1	W2	W3	a	n	d	D
Control cabinet seperated 5DRL	5DRL8-3	175	2500	975	1100	1575	400	755	440	22.5	8	18	180
	5DRL8-4	175	2500	975	1100	1575	400	755	440	22.5	8	18	180
	5DRL8-5	175	2500	975	1100	1575	400	755	440	22.5	8	18	180
	5DRL8-6	175	2500	975	1100	1575	400	755	440	22.5	8	18	180
	5DRL8-8	175	2600	975	1270	1575	400	755	440	22.5	8	18	180
	5DRL8-10	175	2600	975	1270	1575	400	755	440	22.5	8	18	180
	5DRL8-12	175	2600	975	1270	1575	400	755	440	22.5	8	18	180
	5DRL8-14	175	2600	975	1270	1575	400	755	440	22.5	8	18	180
	5DRL8-16	175	2600	975	1270	1575	400	755	440	22.5	8	18	180
	5DRL8-18	175	2600	975	1270	1575	400	755	440	22.5	8	18	180
	5DRL8-20	175	2600	975	1270	1575	400	755	440	22.5	8	18	180
	5DRL12-3	175	2500	1120	1100	1835	400	875	485	22.5	8	18	210
	5DRL12-4	175	2500	1120	1100	1835	400	875	485	22.5	8	18	210
	5DRL12-5	175	2500	1120	1100	1835	400	875	485	22.5	8	18	210
	5DRL12-6	175	2500	1120	1100	1835	400	875	485	22.5	8	18	210
	5DRL12-7	175	2500	1120	1100	1835	400	875	485	22.5	8	18	210
	5DRL12-8	175	2500	1120	1100	1835	400	875	485	22.5	8	18	210
	5DRL12-9	175	2500	1120	1100	1835	400	875	485	22.5	8	18	210
	5DRL12-10	175	2500	1120	1100	1835	400	875	485	22.5	8	18	210
	5DRL12-12	175	2500	1120	1100	1835	400	875	485	22.5	8	18	210
	5DRL12-14	175	2500	1120	1100	1835	400	875	485	22.5	8	18	210
	5DRL12-16	175	2500	1120	1100	1835	400	875	485	22.5	8	18	210
	5DRL12-18	175	2500	1120	1100	1835	400	875	485	22.5	8	18	210
	5DRL16-2	175	2500	1120	1100	1835	400	875	485	22.5	8	18	210
5DRL16-3	175	2600	1120	1300	1835	400	875	485	22.5	8	18	210	
5DRL16-4	175	2600	1120	1300	1835	400	875	485	22.5	8	18	210	
5DRL16-5	175	2600	1120	1300	1835	400	875	485	22.5	8	18	210	
5DRL16-6	175	2600	1120	1300	1835	400	875	485	22.5	8	18	210	
5DRL16-7	175	2600	1120	1300	1835	400	875	485	22.5	8	18	210	
5DRL16-8	175	2600	1120	1300	1835	400	875	485	22.5	8	18	210	
5DRL16-10	175	2810	1120	1450	1835	400	875	485	22.5	8	18	210	
5DRL16-12	175	2810	1120	1450	1835	400	875	485	22.5	8	18	210	
5DRL16-14	175	2810	1120	1450	1835	400	875	485	22.5	8	18	210	
5DRL16-16	175	2810	1120	1450	1835	400	875	485	22.5	8	18	210	

# DRL

## Dimension of the booster system

Model	h	L	W	H	L1	W1	W2	W3	a	n	d	D
5DRL20-2	310	2000	989	1095	1250	760	789	415	22.5	8	18	210
5DRL20-3	310	2200	989	1095	1450	760	789	415	22.5	8	18	210
5DRL20-4	310	2350	989	1095	1600	760	789	415	22.5	8	18	210
5DRL20-5	310	2350	989	1095	1600	760	789	415	22.5	8	18	210
5DRL20-6	310	2350	989	1095	1600	760	789	415	22.5	8	18	210
5DRL20-7	310	2350	989	1095	1600	760	789	415	22.5	8	18	210
5DRL20-8	310	2700	989	1095	1950	760	789	415	22.5	8	18	210
5DRL20-10	310	2700	989	1095	1950	760	789	415	22.5	8	18	210
5DRL20-12	310	2800	989	1305	1950	760	789	415	22.5	8	18	210
5DRL20-14	310	2800	989	1305	1950	760	789	415	22.5	8	18	210
5DRL20-17	310	2900	989	1455	1950	760	789	415	22.5	8	18	210
5DRL32-20-2	325	2035	1128	1095	1980	760	908	434	22.5	8	22	295
5DRL32-20	325	2200	1128	1095	1980	760	908	434	22.5	8	22	295
5DRL32-30-2	325	2350	1128	1095	1980	760	908	434	22.5	8	22	295
5DRL32-30	325	2350	1128	1095	1980	760	908	434	22.5	8	22	295
5DRL32-40-2	325	2350	1128	1095	1980	760	908	434	22.5	8	22	295
5DRL32-40	325	2350	1128	1095	1980	760	908	434	22.5	8	22	295
5DRL32-50-2	325	2700	1128	1095	1980	760	908	434	22.5	8	22	295
5DRL32-50	325	2700	1128	1095	1980	760	908	434	22.5	8	22	295
5DRL32-60-2	325	2700	1128	1095	1980	760	908	434	22.5	8	22	295
5DRL32-60	325	2700	1128	1095	1980	760	908	434	22.5	8	22	295
5DRL32-70-2	325	2800	1128	1305	1980	760	908	434	22.5	8	22	295
5DRL32-70	325	2800	1128	1305	1980	760	908	434	22.5	8	22	295
5DRL32-80-2	325	2800	1128	1305	1980	760	908	434	22.5	8	22	295
5DRL32-80	325	2800	1128	1305	1980	760	908	434	22.5	8	22	295
5DRL32-90-2	325	2900	1128	1455	1980	760	908	434	22.5	8	22	295
5DRL32-90	325	2900	1128	1455	1980	760	908	434	22.5	8	22	295
5DRL32-100-2	325	2900	1128	1455	1980	760	908	434	22.5	8	22	295
5DRL32-100	325	2900	1128	1455	1980	760	908	434	22.5	8	22	295
5DRL32-110-2	325	3050	1128	1455	1980	760	908	434	22.5	8	22	295
5DRL32-110	325	3050	1128	1455	1980	760	908	434	22.5	8	22	295
5DRL32-120-2	325	3050	1128	1455	1980	760	908	434	22.5	8	22	295
5DRL32-120	325	3050	1128	1455	1980	760	908	434	22.5	8	22	295
5DRL32-130-2	325	3250	1128	1455	1980	760	908	434	22.5	8	22	295
5DRL32-130	325	3250	1128	1455	1980	760	908	434	22.5	8	22	295
5DRL32-140-2	325	3250	1128	1455	1980	760	908	434	22.5	8	22	295
5DRL32-140	325	3250	1128	1455	1980	760	908	434	22.5	8	22	295
5DRL42-10	360	2200	1203	1095	2330	760	953	529	22.5	8	22	295
5DRL42-20-2	360	2350	1203	1095	2330	760	953	529	22.5	8	22	295
5DRL42-20	360	2350	1203	1095	2330	760	953	529	22.5	8	22	295
5DRL42-30-2	360	2700	1203	1095	2330	760	953	529	22.5	8	22	295
5DRL42-30	360	2700	1203	1095	2330	760	953	529	22.5	8	22	295
5DRL42-40-2	360	2800	1203	1305	2330	760	953	529	22.5	8	22	295
5DRL42-40	360	2800	1203	1305	2330	760	953	529	22.5	8	22	295
5DRL42-50-2	360	2900	1203	1455	2330	760	953	529	22.5	8	22	295
5DRL42-50	360	2900	1203	1455	2330	760	953	529	22.5	8	22	295
5DRL42-60-2	360	3050	1203	1455	2330	760	953	529	22.5	8	22	295
5DRL42-60	360	3050	1203	1455	2330	760	953	529	22.5	8	22	295
5DRL42-70-2	360	3250	1203	1455	2330	760	953	529	22.5	8	22	295
5DRL42-70	360	3250	1203	1455	2330	760	953	529	22.5	8	22	295
5DRL42-80-2	360	3250	1203	1455	2330	760	953	529	22.5	8	22	295
5DRL42-80	360	3250	1203	1455	2330	760	953	529	22.5	8	22	295
5DRL42-90-2	360	3250	1203	1455	2330	760	953	529	22.5	8	22	295
5DRL42-90	360	3300	1203	1605	2330	760	953	529	22.5	8	22	295
5DRL42-100-2	360	3300	1203	1605	2330	760	953	529	22.5	8	22	295
5DRL42-100	360	3300	1203	1605	2330	760	953	529	22.5	8	22	295
5DRL42-110-2	360	3550	1203	1605	2330	760	953	529	22.5	8	22	295

Control cabinet seperated 5DRL



## Dimension of the booster system

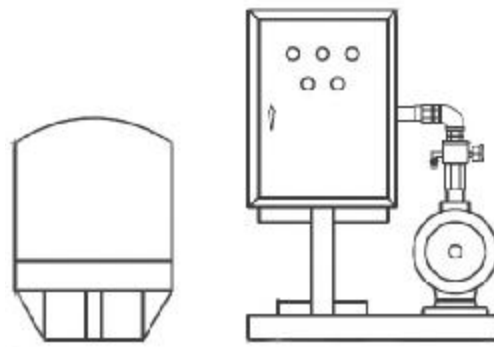
Model	h	L	W	H	L1	W1	W2	W3	a	n	d	D
5DRL42-110	360	3550	1203	1605	2330	760	953	529	22.5	8	22	295
5DRL42-120-2	360	3550	1203	1605	2330	760	953	529	22.5	8	22	295
5DRL42-120	360	3550	1203	1605	2330	760	953	529	22.5	8	22	295
5DRL42-130-2	360	3550	1203	1605	2330	760	953	529	22.5	8	22	295
5DRL65-10	360	2350	1289	1095	1600	760	1004	542	15	12	22	350
5DRL65-20-2	360	2350	1289	1095	1600	760	1004	542	15	12	22	350
5DRL65-20-1	360	2700	1289	1095	1950	760	1004	542	15	12	22	350
5DRL65-20	360	2700	1289	1095	1950	760	1004	542	15	12	22	350
5DRL65-30-2	360	2800	1289	1305	1950	760	1004	542	15	12	22	350
5DRL65-30-1	360	2800	1289	1305	1950	760	1004	542	15	12	22	350
5DRL65-30	360	2900	1289	1455	1950	760	1004	542	15	12	22	350
5DRL65-40-2	360	2900	1289	1455	1950	760	1004	542	15	12	22	350
5DRL65-40-1	360	3050	1289	1455	2100	760	1004	542	15	12	22	350
5DRL65-40	360	3050	1289	1455	2100	760	1004	542	15	12	22	350
5DRL65-50-2	360	3250	1289	1455	2300	760	1004	542	15	12	22	350
5DRL65-50-1	360	3250	1289	1455	2300	760	1004	542	15	12	22	350
5DRL65-50	360	3250	1289	1455	2300	760	1004	542	15	12	22	350
5DRL65-60-2	360	3250	1289	1455	2300	760	1004	542	15	12	22	350
5DRL65-60-1	360	3300	1289	1605	2300	760	1004	542	15	12	22	350
5DRL65-60	360	3300	1289	1605	2300	760	1004	542	15	12	22	350
5DRL65-70-2	360	3300	1289	1605	2300	760	1004	542	15	12	22	350
5DRL65-70-1	360	3300	1289	1605	2300	760	1004	542	15	12	22	350
5DRL65-70	360	3600	1289	1605	2600	760	1004	542	15	12	22	350
5DRL65-80-2	360	3600	1289	1605	2600	760	1004	542	15	12	22	350
5DRL65-80-1	360	3600	1289	1605	2600	760	1004	542	15	12	22	350
5DRL85-10	360	2350	1304	1095	1600	760	1019	550	15	12	22	350
5DRL85-20-2	360	2700	1304	1095	1950	760	1019	550	15	12	22	350
5DRL85-20	360	2800	1304	1305	1950	760	1019	550	15	12	22	350
5DRL85-30	360	2900	1304	1455	1950	760	1019	550	15	12	22	350
5DRL85-30-2	360	3050	1304	1455	2100	760	1019	550	15	12	22	350
5DRL85-40-2	360	3250	1304	1455	2300	760	1019	550	15	12	22	350
5DRL85-40	360	3250	1304	1455	2300	760	1019	550	15	12	22	350
5DRL85-50-2	360	3300	1304	1605	2300	760	1019	550	15	12	22	350
5DRL85-50	360	3300	1304	1605	2300	760	1019	550	15	12	22	350
5DRL85-60-2	360	3600	1304	1605	2600	760	1019	550	15	12	22	350
5DRL85-60	360	3600	1304	1605	2600	760	1019	550	15	12	22	350
5DRL120-10	405	4070	1810	1550	3050	980	1364	800	15	12	22	400
5DRL120-20-2	405	4070	1810	1710	3050	980	1364	800	15	12	22	400
5DRL120-20-1	405	4070	1810	1770	3050	980	1364	800	15	12	22	400
5DRL120-20	405	4070	1810	1810	3050	980	1364	800	15	12	22	400
5DRL120-30-2	405	4070	1810	2040	3050	980	1364	800	15	12	22	400
5DRL120-30-1	405	4070	1810	2040	3050	980	1364	800	15	12	22	400
5DRL120-30	405	4070	1810	2040	3050	980	1364	800	15	12	22	400
5DRL120-40-2	405	4120	1810	2200	3050	980	1364	800	15	12	22	400
5DRL120-40-1	405	4120	1810	2200	3050	980	1364	800	15	12	22	400
5DRL120-40	405	4120	1810	2240	3050	980	1364	800	15	12	22	400
5DRL120-50-2	405	4120	1810	2400	3050	980	1364	800	15	12	22	400
5DRL120-50-1	405	4120	1810	2400	3050	980	1364	800	15	12	22	400
5DRL120-50	405	4120	1810	2500	3050	980	1364	800	15	12	22	400
5DRL120-60-2	405	4120	1810	2660	3050	980	1364	800	15	12	22	400
5DRL120-60-1	405	4120	1810	2660	3050	980	1364	800	15	12	22	400
5DRL120-60	405	4120	1810	2735	3050	980	1364	800	15	12	22	400
5DRL120-70-2	405	4120	1810	2895	3050	980	1364	800	15	12	22	400
5DRL120-70-1	405	4120	1810	2895	3050	980	1364	800	15	12	22	400
5DRL120-70	405	4120	1810	2895	3050	980	1364	800	15	12	22	400
5DRL150-10-1	405	4070	1810	1550	3050	980	1364	800	15	12	22	400
5DRL150-10	405	4070	1810	1550	3050	980	1364	800	15	12	22	400

Control cabinet separated 5DRL

# DRL

## Dimension of the booster system

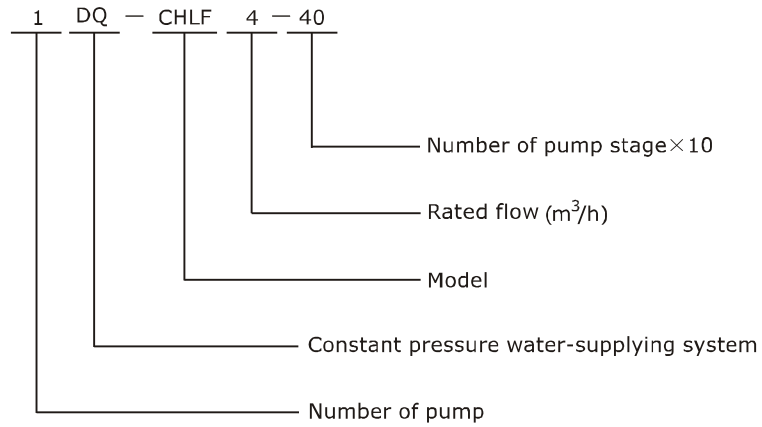
	Model	h	L	W	H	L1	W1	W2	W3	a	n	d	D
Control cabinet seperated 5DRL	5DRL150-20-2	405	4070	1810	1770	3050	980	1364	800	15	12	22	400
	5DRL150-20-1	405	4070	1810	1810	3050	980	1364	800	15	12	22	400
	5DRL150-20	405	4070	1810	1880	3050	980	1364	800	15	12	22	400
	5DRL150-30-2	405	4070	1810	2040	3050	980	1364	800	15	12	22	400
	5DRL150-30-1	405	4120	1810	2040	3050	980	1364	800	15	12	22	400
	5DRL150-30	405	4120	1810	2040	3050	980	1364	800	15	12	22	400
	5DRL150-40-2	405	4120	1810	2240	3050	980	1364	800	15	12	22	400
	5DRL150-40-1	405	4120	1810	2240	3050	980	1364	800	15	12	22	400
	5DRL150-40	405	4120	1810	2340	3050	980	1364	800	15	12	22	400
	5DRL150-50-2	405	4120	1810	2500	3050	980	1364	800	15	12	22	400
	5DRL150-50-1	405	4120	1810	2575	3050	980	1364	800	15	12	22	400
	5DRL150-50	405	4120	1810	2575	3050	980	1364	800	15	12	22	400
	5DRL150-60-2	405	4120	1810	2735	3050	980	1364	800	15	12	22	400
	5DRL150-60-1	405	4120	1810	2735	3050	980	1364	800	15	12	22	400
	5DRL150-60	405	4120	1810	2735	3050	980	1364	800	15	12	22	400
	5DRL200-10-B	425	4330	2050	1697	3430	1130	1545	895	11.25	16	22	460
	5DRL200-10-A	425	4330	2050	1737	3430	1130	1545	895	11.25	16	22	460
	5DRL200-10	425	4330	2050	1807	3430	1130	1545	895	11.25	16	22	460
	5DRL200-20-2B	425	4380	2050	2001	3430	1130	1545	895	11.25	16	22	460
	5DRL200-20-2A	425	4380	2050	2041	3430	1130	1545	895	11.25	16	22	460
	5DRL200-20-A	425	4380	2050	2141	3430	1130	1545	895	11.25	16	22	460
	5DRL200-20	425	4380	2050	2141	3430	1130	1545	895	11.25	16	22	460
	5DRL200-30-2B	425	4380	2050	2410	3430	1130	1545	895	11.25	16	22	460
	5DRL200-30-A-B	425	4380	2050	2410	3430	1130	1545	895	11.25	16	22	460
	5DRL200-30-2A	425	4380	2050	2410	3430	1130	1545	895	11.25	16	22	460
	5DRL200-30-B	425	4380	2050	2410	3430	1130	1545	895	11.25	16	22	460
	5DRL200-30-A	425	4380	2050	2410	3430	1130	1545	895	11.25	16	22	460
	5DRL200-30	425	4380	2050	2460	3430	1130	1545	895	11.25	16	22	460
	5DRL200-40-2B	425	4380	2050	2654	3430	1130	1545	895	11.25	16	22	460
	5DRL200-40-2A	425	4380	2050	2899	3430	1130	1545	895	11.25	16	22	460
	5DRL200-40-A	425	4380	2050	2899	3430	1130	1545	895	11.25	16	22	460
	5DRL200-40	425	4380	2050	2899	3430	1130	1545	895	11.25	16	22	460



DQ Constant pressure booster pump system

## DQ

### Definition of model



### Special function

- When operating, only set range of pressure
- Protection of low water level
- Alarm function. In case of arising of trouble, emergency measures may be taken

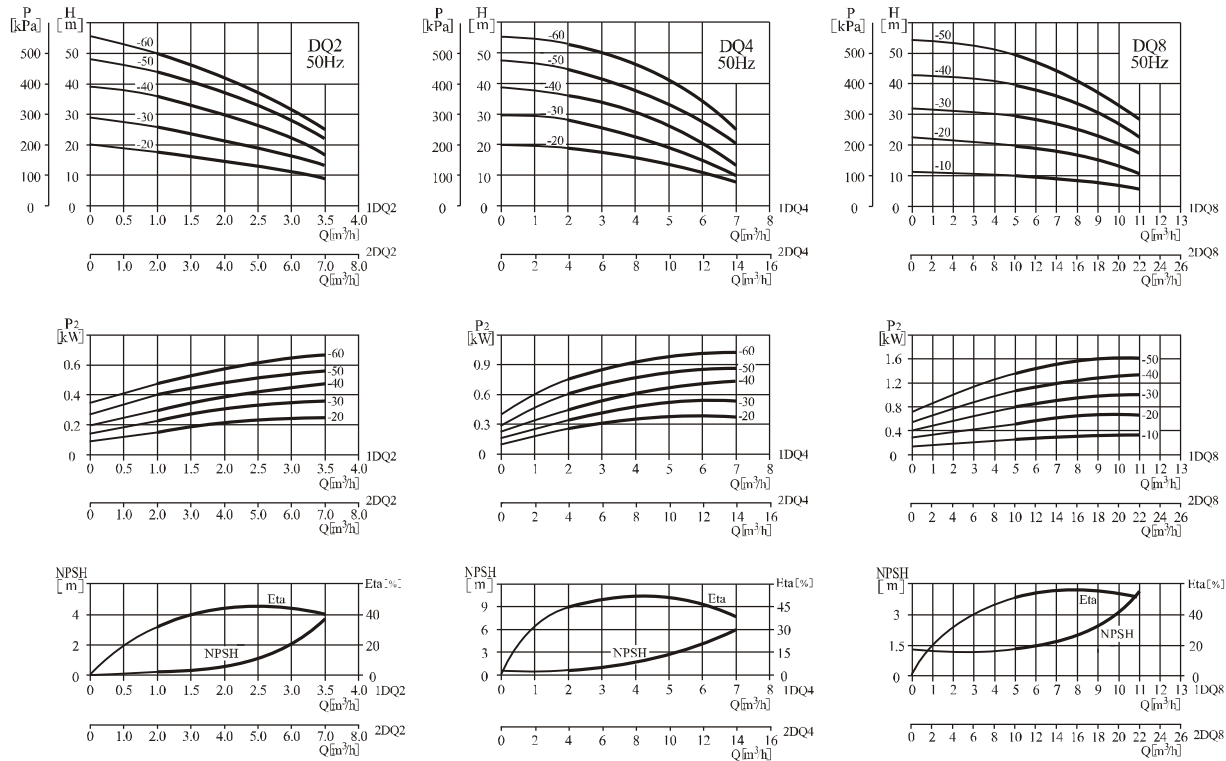
### Range of use

- Ordinary family, small high-rise, advanced villa, hotel requiring the water supply by constant pressure or other places requiring pressurization, water for machinetool and the industry.
- Pressurization for the second floor on the top of the house in the residential district and other places where the water pressure is not enough, requiring pressurization.

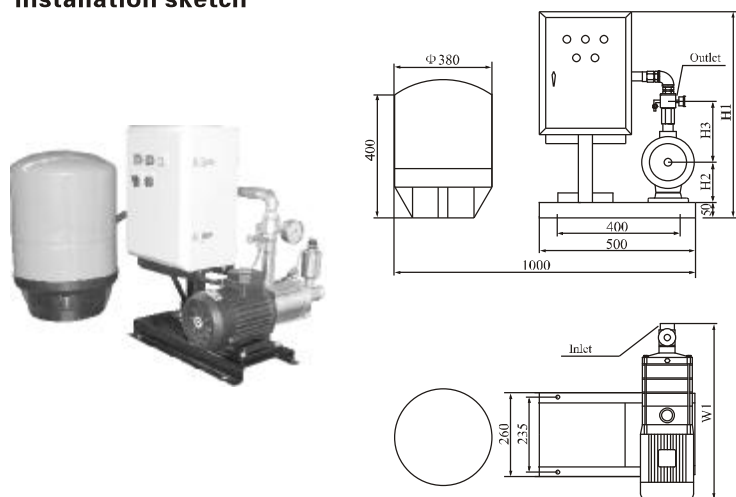
### Virtues

- Simple options for pump
- Easy operation
- Low noise and small vibration
- Energy saving
- Able to prevent the water pump from empty running
- Perfect waterproof hammer
- Maintain constant pressure
- Overcurrent protection
- Saving installation space
- Wet parts are in stainless steel
- Excellent internal structure and higher product reliability
- High quality design contributes to more beautiful appearance

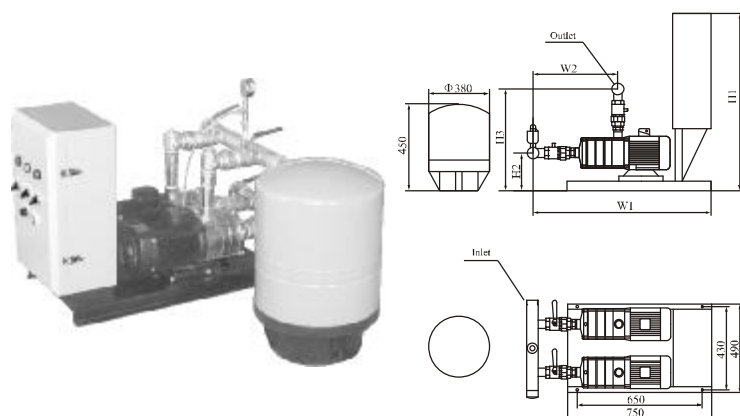
### Performance curve



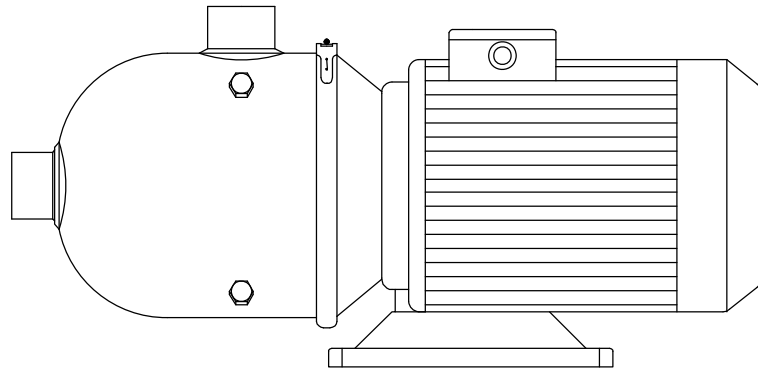
Installation sketch



Model	Power (kW)	Inlet&Outlet(mm)		Size(mm)				Weight (kg)
		Inlet	Outlet	W1	H1	H2	H3	
1DQ-CHLF2-20	0.37	G1"	G1"	305	660	110	220	30
1DQ-CHLF2-30	0.55	G1"	G1"	323	660	110	220	30
1DQ-CHLF2-40	0.55	G1"	G1"	341	660	110	220	30
1DQ-CHLF2-50	0.55	G1"	G1"	359	660	110	220	30
1DQ-CHLF2-60	0.75	G1"	G1"	422	660	110	220	34
1DQ-CHLF4-20	0.55	G1 1/4"	G1"	323	660	110	220	30
1DQ-CHLF4-30	0.55	G1 1/4"	G1"	395	660	110	220	34
1DQ-CHLF4-40	0.75	G1 1/4"	G1"	422	660	110	220	34
1DQ-CHLF4-50	1.1	G1 1/4"	G1"	469	660	110	220	40
1DQ-CHLF4-60	1.1	G1 1/4"	G1"	496	660	110	220	40
1DQ-CHLF8-10	0.75	G1 1/2"	G1 1/4"	395	700	118	230	40
1DQ-CHLF8-20	0.75	G1 1/2"	G1 1/4"	395	700	118	230	40
1DQ-CHLF8-30	1.1	G1 1/2"	G1 1/4"	425	700	118	230	50
1DQ-CHLF8-40	1.5	G1 1/2"	G1 1/4"	490	710	118	230	56
1DQ-CHLF8-50	2.2	G1 1/2"	G1 1/4"	520	710	118	230	60

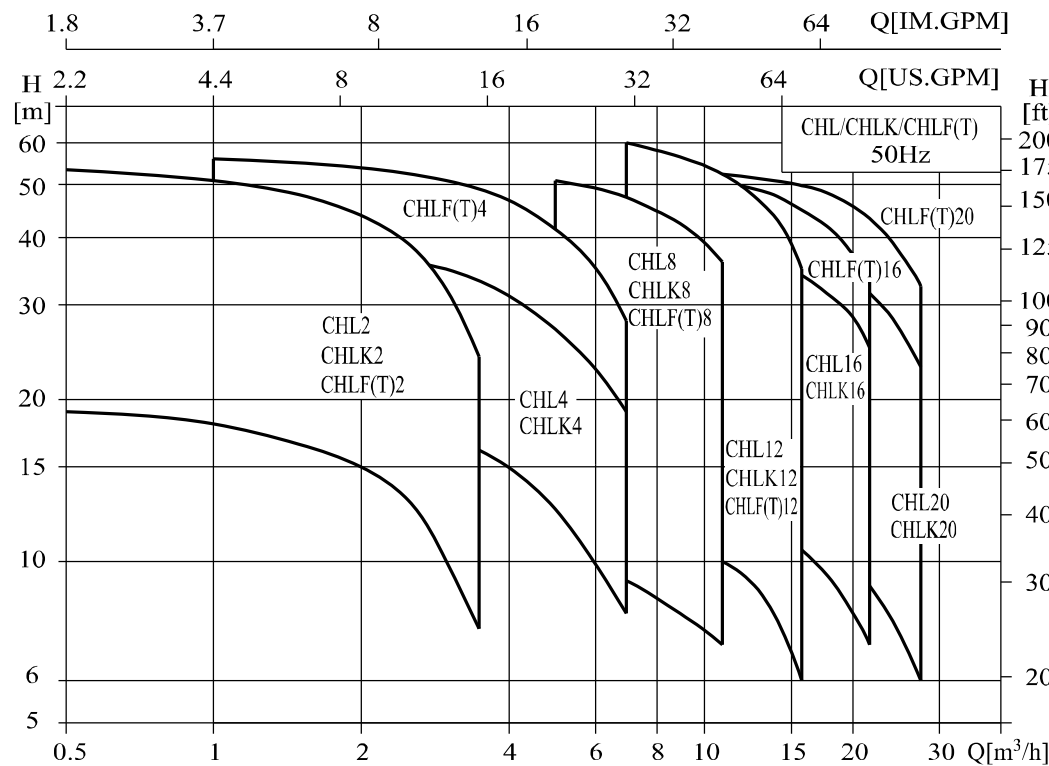


Model	Power (kW)	Inlet&Outlet(mm)		Size(mm)				Weight (kg)	
		Inlet	Outlet	W1	W2	H1	H2		H3
2DQ-CHLF2-20	0.37	G2"	G2"	835	385	800	110	310	60
2DQ-CHLF2-30	0.55	G2"	G2"	850	400	800	110	310	60
2DQ-CHLF2-40	0.55	G2"	G2"	870	420	800	110	310	60
2DQ-CHLF2-50	0.55	G2"	G2"	890	440	800	110	310	60
2DQ-CHLF2-60	0.75	G2"	G2"	950	500	800	110	310	68
2DQ-CHLF4-20	0.55	G2"	G2"	895	445	800	110	320	60
2DQ-CHLF4-30	0.55	G2"	G2"	930	480	800	110	320	68
2DQ-CHLF4-40	0.75	G2"	G2"	960	510	800	110	320	68
2DQ-CHLF4-50	1.1	G2"	G2"	990	540	800	110	320	80
2DQ-CHLF4-60	1.1	G2"	G2"	1020	570	800	110	320	80
2DQ-CHLF8-10	0.75	G2"	G2"	930	480	845	118	350	80
2DQ-CHLF8-20	0.75	G2"	G2"	930	480	845	118	350	80
2DQ-CHLF8-30	1.1	G2"	G2"	960	510	845	118	350	100
2DQ-CHLF8-40	1.5	G2"	G2"	990	540	845	118	350	112
2DQ-CHLF8-50	2.2	G2"	G2"	1020	570	845	118	350	120



CHL ,CHLF(T) Horizontal multistage stainless steel centrifugal pump

**Performance scope**



**Performance table**

Connection port	CHL/CHLK/CHLF(T)2	CHL/CHLK/CHLF(T)4	CHL/CHLK8, 12,16,20	CHLF(T)8	CHLF(T)12	CHLF(T)16,20
Inlet	G1	G1 1/4	G2	G1 1/2	G1 1/2	G2
Outlet	G1	G1	G2	G1 1/4	G1 1/2	G2

**Applicable medium**

- Thin and clean non-flammable and non-explosive liquid without solid granules and fibers.
- Mineral water, soft water, pure water, edible vegetable oil and other light chemical mediums.
- When the density or viscosity of to-be-conveyed liquid is larger than that of water, it is necessary to select a driving motor of high power.
- Whether a specific liquid is suitable for the pump depends on many factors, among which the most important ones are chlorine content, PH value, temperature, solvent and oil content.

**Application**

CHL,CHLK and CHLF(T) type pump are mainly used in industrial field:

- Air-conditioning system
- Cooling system
- Industrial cleaning
- Water treatment (Water purification)
- Aquiculture
- Fertilizing / meeting system
- Environmental application
- Other special applications

**Motor**

- TEFC motor 2-pole
- Protection class: IP55
- Insulation class: F
- Standard voltage, 50Hz: 1×220-240V  
3×220-240V/380-415V

**Curve conditions**

Following conditions are suitable for the performance curves shown above.

- All curves are based on the measured values of 50Hz, constant motor speed 2900r/min;
- Curve tolerance in conformity with ISO9906 Annex A.
- Measurement is done with 20°C air-free water, kinematic viscosity of 1mm<sup>2</sup>/sec.
- The operation of pump shall refer to the performance region described by the thickened curve to prevent overheating due to too small flow rate or overload of motor due to too large flow rate.

**Operation conditions**

- Liquid temperature:  
Normal temperature type: -15°C ~ +70°C  
Hot water type: -15°C ~ +110°C
- Ambient temperature: up to +40°C
- Max. operation pressure: 10 bar
- Max. inlet pressure is limited by max. Operation Pressure

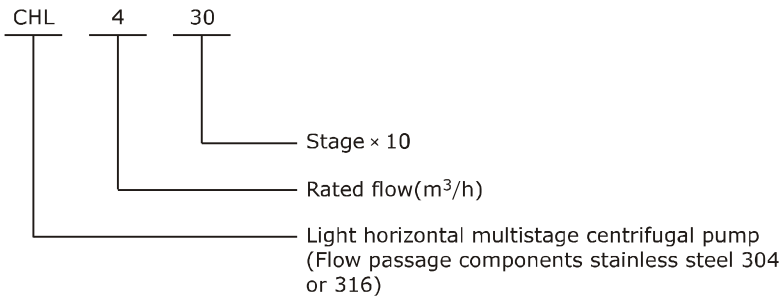
**Pump**

- Horizontal multistage non-self-priming centrifugal pump, attached with long shaft electric motor.
- Compact structure renders small size of pump; axial inlet and radial outlet.

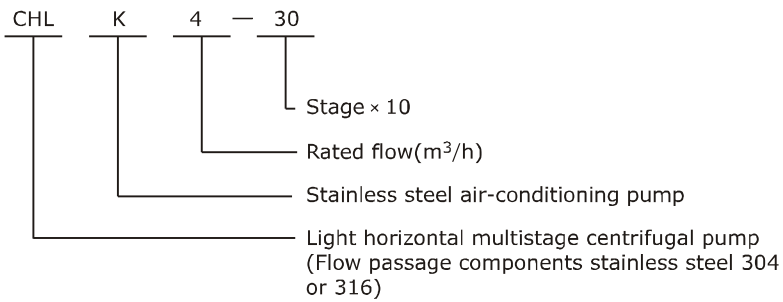
## CHL,CHLK,CHLF(T)

### Definition of model

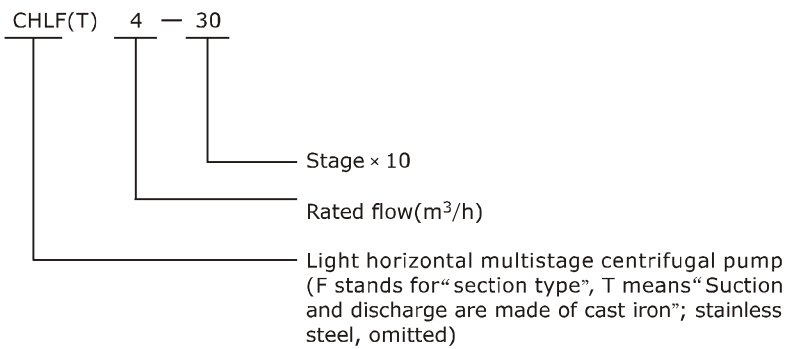
CHL Example



CHLK Example



CHLF(T) Example



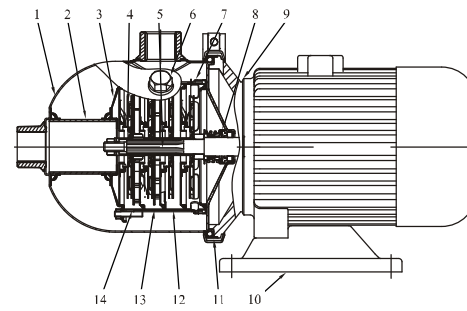
### Material CHL/CHLK

NO.	Name	Material	AISI/ASTM
1	Inlet and outlet chamber	Stainless steel	AISI304
2	Connection pipe	Stainless steel	AISI304
3	Clamp plate	Stainless steel	AISI304
4	Impeller	Stainless steel	AISI304
5	Shaft	Stainless steel	AISI304
6	Plug	Stainless steel	AISI304
7	Discharge diffuser	Stainless steel	AISI304
8	Mechanical seal		
9	Motor end cover	Aluminum alloy	
10	Base plate	Steel plate	AZSZ1015
11	Spannband	Stainless steel	AISI304
12	Diffuser	Stainless steel	AISI304
13	Support diffuser	Stainless steel	AISI304
14	Inducer	Stainless steel	AISI304

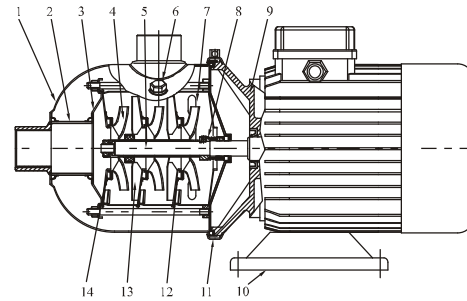
### Material CHLF/CHLF(T)

NO.	Name	Material	AISI/ASTM
2	Plug	Stainless steel	AISI304
3	Bearing	Tungsten carbide	
4	Impeller	Stainless steel	AISI304
5	Shaft	Stainless steel	AISI304
8	Mechanical seal		
9	Motor end cover	Aluminum alloy	
10	Base plate	Steel plate	AZSZ1015
11	Spannband	Stainless steel	AISI304
12	Diffuser	Stainless steel	AISI304
13	Support diffuser	Stainless steel	AISI304
14	Impeller sleeve	Stainless steel	AISI304
CHLF			
1	Suction	Stainless steel	AISI304
7	Discharge	Stainless steel	AISI304
CHLF(T)			
1	Suction	Cast iron	ASTM25B
7	Discharge	Cast iron	ASTM25B

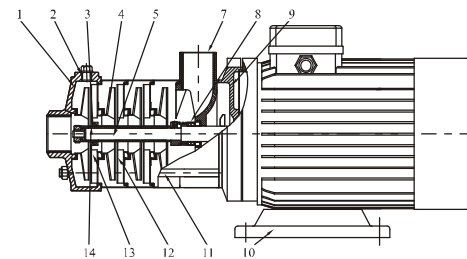
### Section drawing CHL,CHLK2,4



### Section drawing CHL,CHLK8,12,16,20

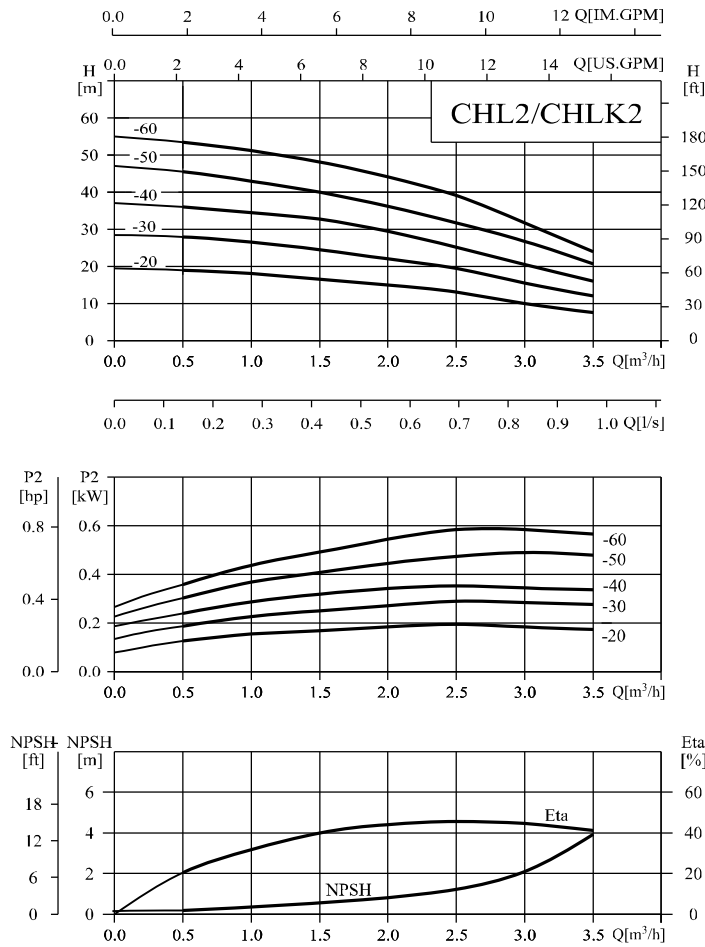


### Section drawing CHLF, CHLF(T)

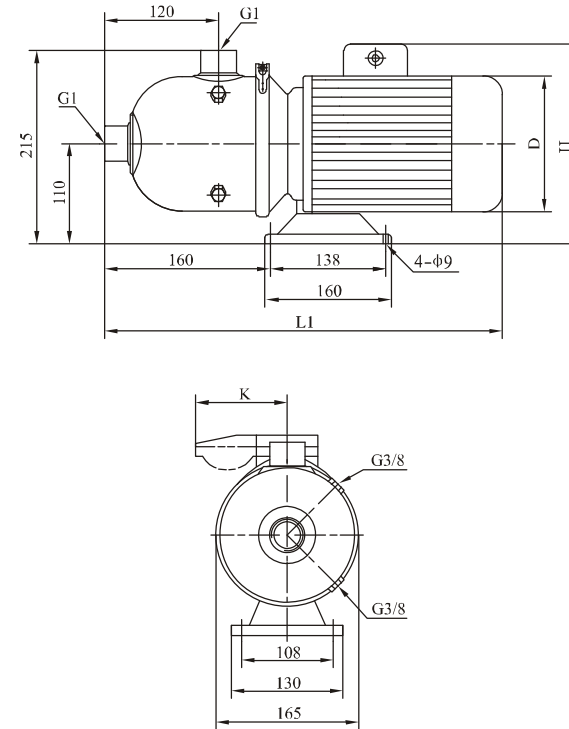




Performance curve ISO9906 Annex A



Installation sketch



Performance table

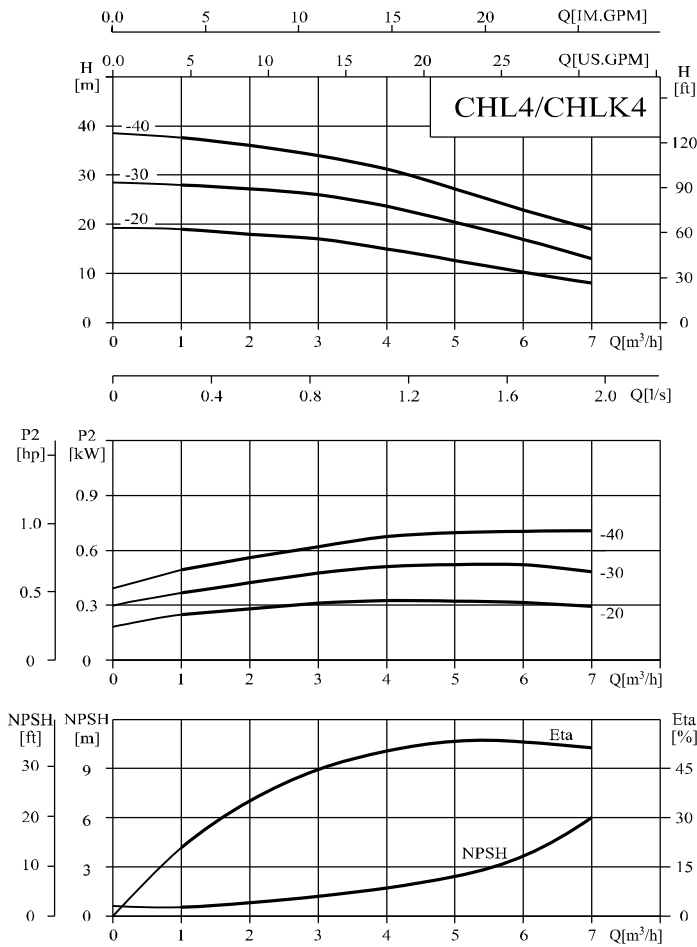
Model	Driving motor		Q (m³/h)	0.5	1	1.5	2	2.5	3	3.5
	(kW)	(hp)								
CHL2-20	0.37	0.5	H (m)	19	18	16.5	15	13	10	7.5
CHL2-30	0.55	0.75		28	26.5	24.5	22	19	15.5	12
CHL2-40	0.55	0.75		36	34.5	33	29	25	20.5	16
CHL2-50	0.55	0.75		45.5	43	40	36	31.5	26.5	20.5
CHL2-60	0.75	1		53.5	51	48	44	39	32	24

Size and weight

Motor	Model	Size(mm)				Weight (kg)
		L1	D	H	K	
Three-phase/ single-phase	CHL2-20	400	145	215/230	/96	13
	CHL2-30	400	145	215/230	/96	13
	CHL2-40	400	145	215/230	/96	13
	CHL2-50	400	145	215/230	/96	13
	CHL2-60	445	170	225/245	/100	15

# CHL,CHLK4

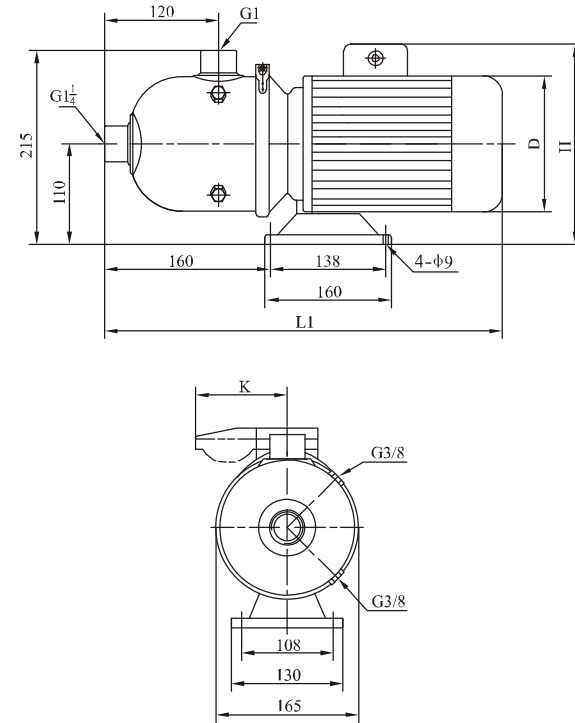
## Performance curve ISO9906 Annex A



**Performance table**

Model	Driving motor		Q (m³/h)	1	2	3	4	5	6	7
	(kW)	(hp)								
CHL4-20	0.55	0.75	H (m)	19	18	17	15	12.5	10	8
CHL4-30	0.75	1		28	27	26	23.5	20.5	17	13
CHL4-40	0.75	1		37.5	36	34	31	27	23	19

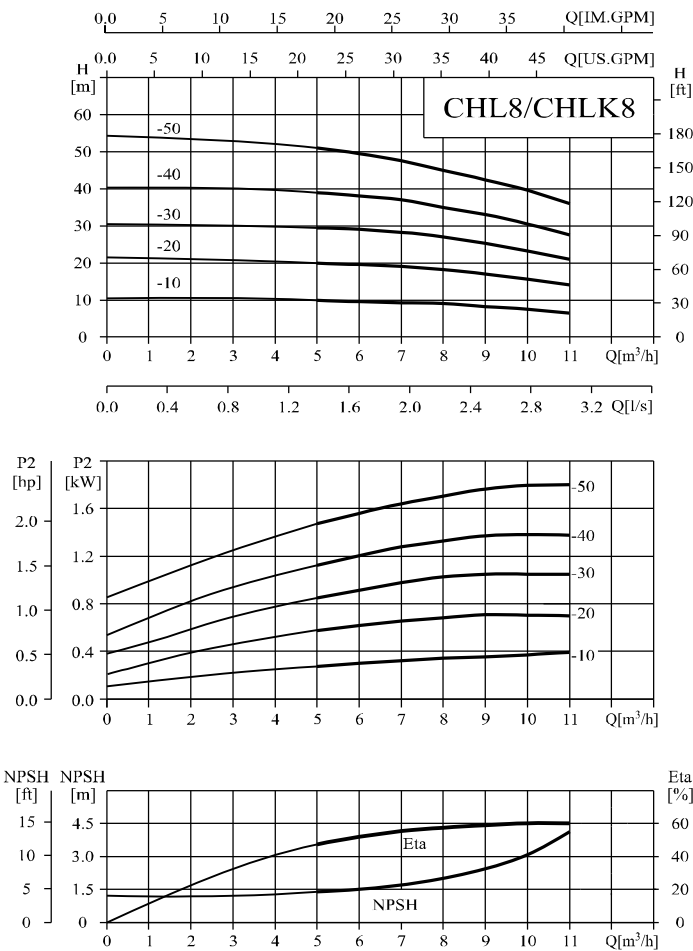
## Installation sketch



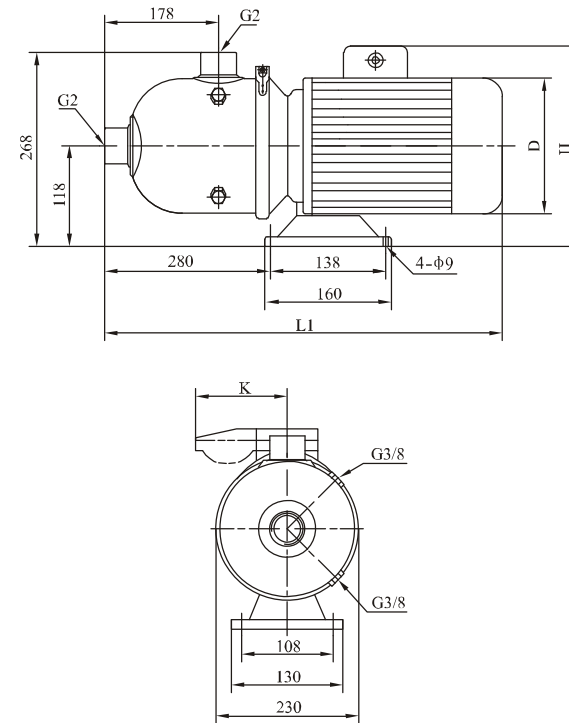
## Size and weight

Motor	Model	Size(mm)				Weight (kg)
		L1	D	H	K	
Three-phase/ single-phase	CHL4-20	400	145	215/230	/96	12
	CHL4-30	445	170	225/245	/100	15
	CHL4-40	445	170	225/245	/100	15

Performance curve ISO9906 Annex A



Installation sketch



Performance table

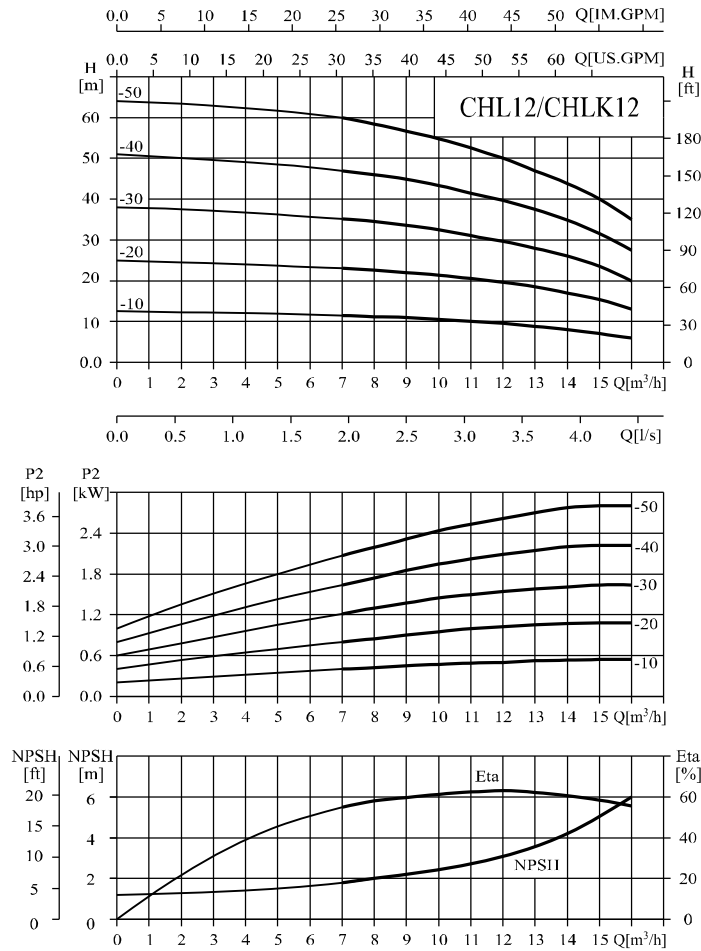
Model	Driving motor		Q (m³/h)	5	6	7	8	9	10	11
	(kW)	(hp)								
CHL8-10	0.75	1	H (m)	10	9.5	9.3	9	8	7.5	7
CHL8-20	0.75	1		20	19.5	19	18	17	15.5	14
CHL8-30	1.1	1.5		29.5	29	28	27	25	23	21
CHL8-40	1.5	2		39	38	37	35	33	30.5	27.5
CHL8-50	2.2	3		51	49.5	47.5	45	42.5	39.5	36

Size and weight

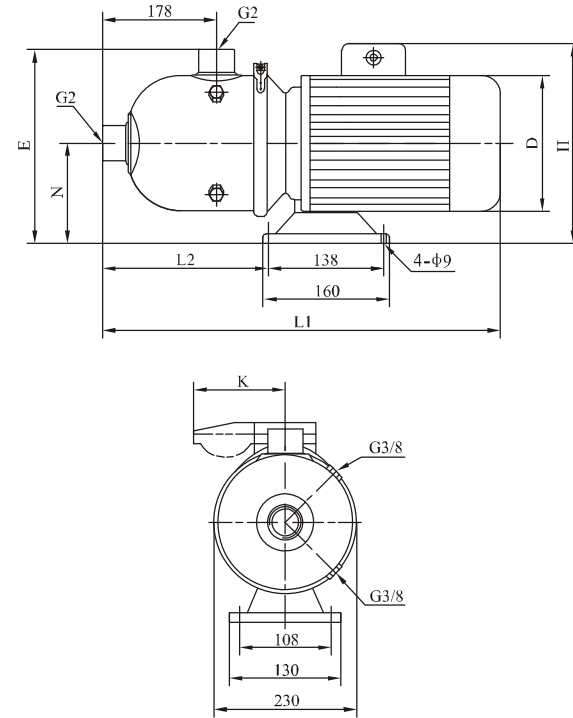
Motor	Model	Size(mm)				Weight (kg)
		L1	D	H	K	
Three-phase/ single-phase	CHL8-10	560	170	230/265	/100	20
	CHL8-20	560	170	230/265	/100	20
	CHL8-30	560	170	230/265	/100	25
	CHL8-40	580	180	240/270	/100	25
	CHL8-50	580	180	240/270	/100	30

# CHL,CHLK12

## Performance curve ISO9906 Annex A



## Installation sketch



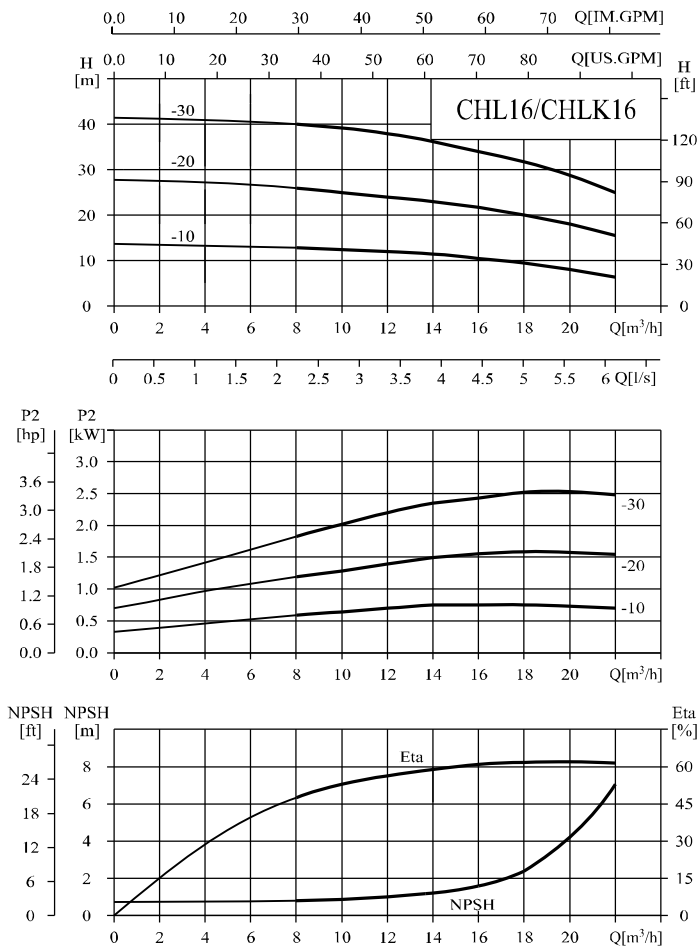
## Performance table

Model	Driving motor		Q (m³/h)	H											
	(kW)	(hp)		7	8	9	10	11	12	13	14	15	16		
CHL12-10	0.75	1	H (m)	11.5	11.2	11	10.5	10	9.5	9	8	7	6		
CHL12-20	1.2	1.6		23	22.5	22	21.5	20.5	19.5	18.5	17	15.5	13		
CHL12-30	1.8	2.4		35	34.5	33.5	32.5	31	29.5	28	26	23.5	20		
CHL12-40	2.4	3.3		47	46	45	43.5	41.5	39.5	37.5	35	31.5	27.5		
CHL12-50	3	4		60	58	56.5	55	52.5	50	47	44	40	35		

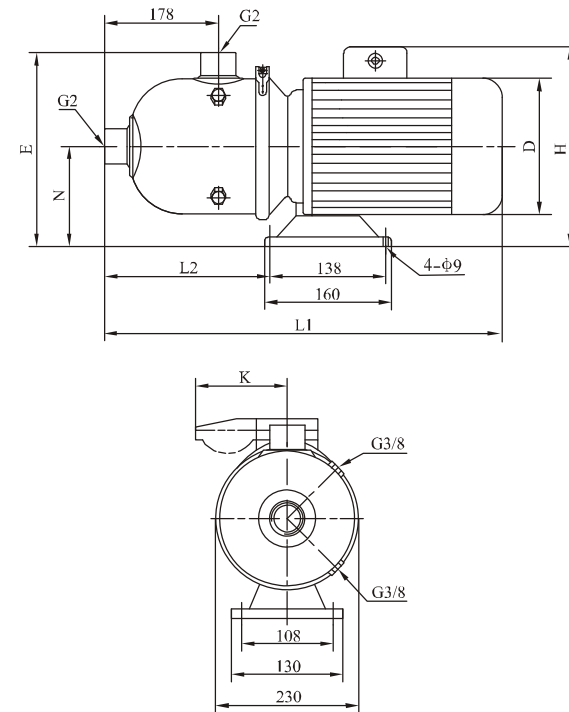
## Size and weight

Motor	Model	Size(mm)								Weight (kg)
		L1	L2	H	D	E	N	K		
Three-phase/ single-phase	CHL12-10	560	280	230/265	170	268	118	/100	20	
	CHL12-20	560	280	230/265	170	268	118	/100	21	
	CHL12-30	580	280	240/270	180	268	118	/100	25	
	CHL12-40	580	280	240/270	180	268	118	/100	29	
	CHL12-50	610	270	270/	195	276	126		34	

Performance curve ISO9906 Annex A



Installation sketch



Performance table

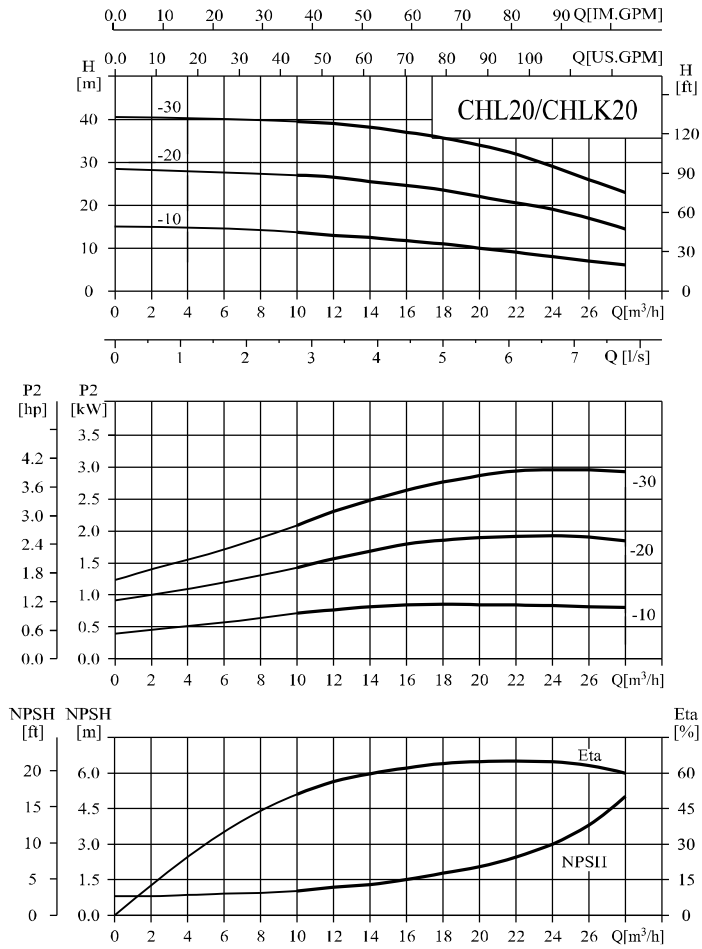
Model	Driving motor		Q (m³/h)	8	10	12	14	16	18	20	22
	(kW)	(hp)									
CHL16-10	1.1	1.5	H (m)	12.8	12.5	12	11.5	10.5	9.5	8	7
CHL16-20	2.2	3		26	25	24	23	21.7	20	18	15.5
CHL16-30	3	4		40	39	38	36	34	31.5	29	25

Size and weight

Motor	Model	Size(mm)							Weight (kg)
		L1	L2	E	N	D	H	K	
Three-phase/ single-phase	CHL16-10	560	280	268	118	170	230/265	/100	20
	CHL16-20	580	280	268	118	180	240/270	/100	27
	CHL16-30	610	270	276	126	195	270/		34

# CHL,CHLK20

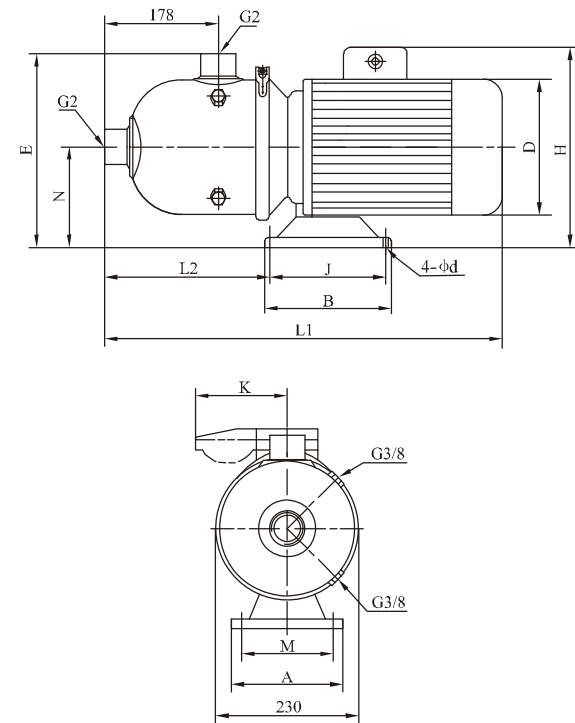
## Performance curve ISO9906 Annex A



Performance table

Model	Driving motor		Q (m³/h)	H (m)										
	(kW)	(hp)		10	12	14	16	18	20	22	24	26	28	
CHL20-10	1.1	1.5		13.5	13	12.5	12	11	10	9	8	7	6	
CHL20-20	2.2	3		27	26.5	25.5	25	23.5	22	20.5	18.5	17	14.5	
CHL20-30	4	5.5		39.5	39	38	37.5	35.5	34	31.5	29	26	23	

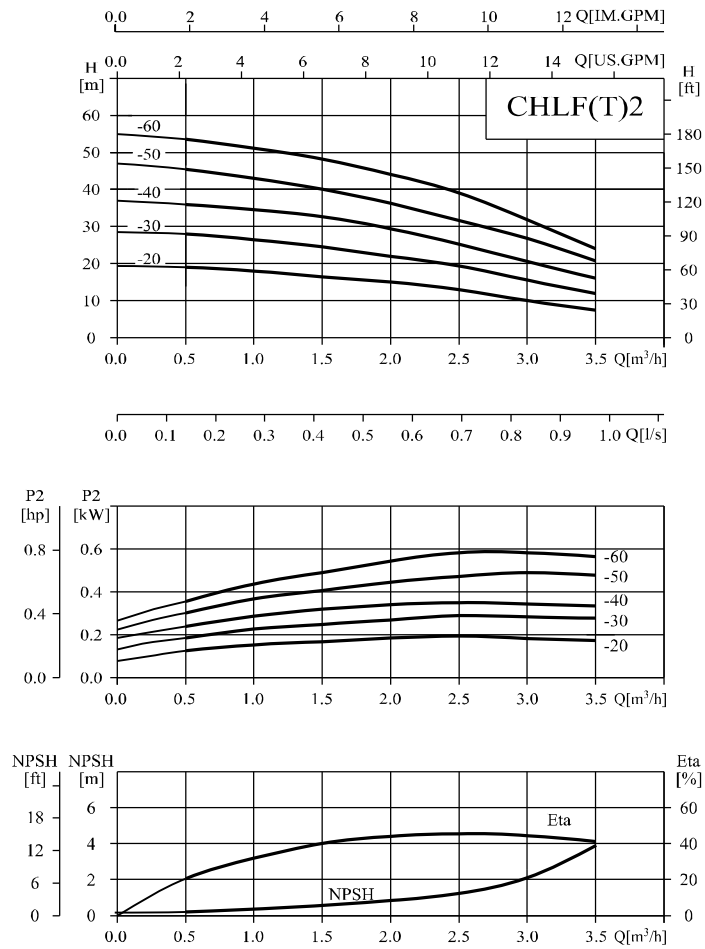
## Installation sketch



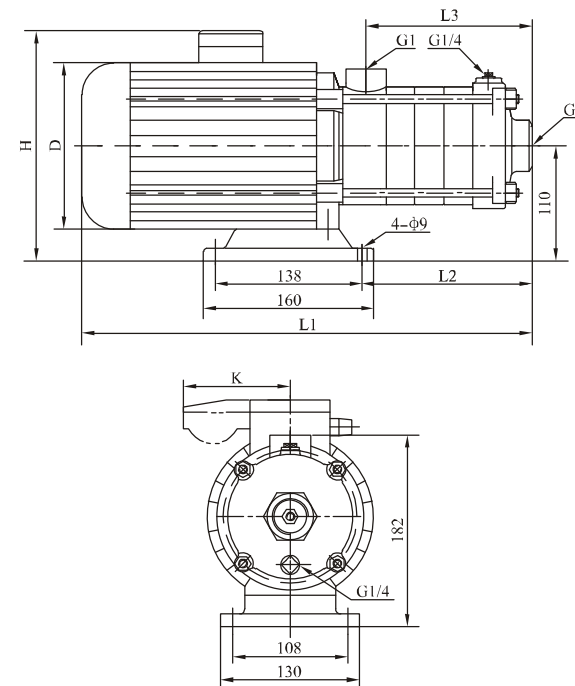
## Size and weight

Motor	Model	Size(mm)											Weight (kg)	
		L1	L2	H	D	E	N	A	M	B	J	d		K
Three-phase/ single-phase	CHL20-10	560	280	230/265	170	268	118	130	108	160	138	9	/100	21
	CHL20-20	580	280	240/270	180	268	118	130	108	160	138	9	/100	28
	CHL20-30	650	360	270/	220	270	120	230	190	170	140	12		42

Performance curve ISO9906 Annex A



Installation sketch



Performance table

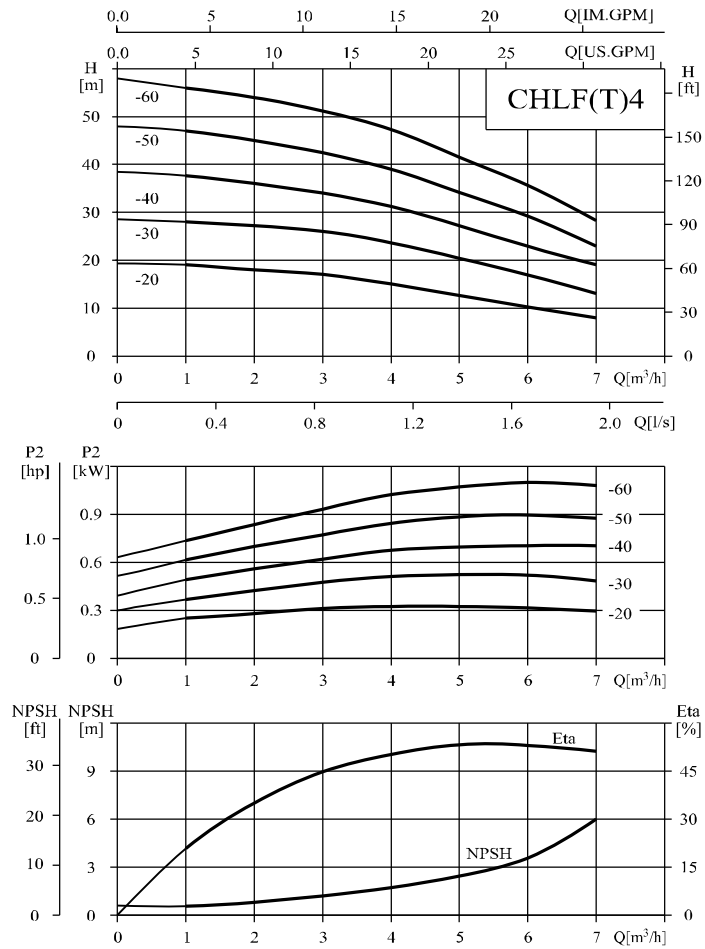
Model	Driving motor		Q (m³/h)	H (m)						
	(kW)	(hp)		0.5	1	1.5	2	2.5	3	3.5
CHLF(T)2-20	0.37	0.5		19	18	16.5	15	13	10	7.5
CHLF(T)2-30	0.55	0.75		28	26.5	24.5	22	19	15.5	12
CHLF(T)2-40	0.55	0.75		36	34.5	33	29	25	20.5	16
CHLF(T)2-50	0.55	0.75		45.5	43	40	36	31.5	26.5	20.5
CHLF(T)2-60	0.75	1		53.5	51	48	44	39	32	24

Size and weight

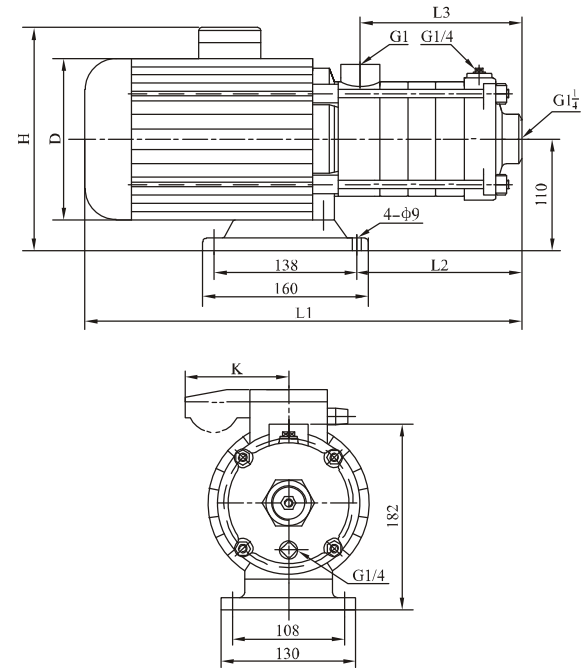
Motor	Model	Size(mm)						Weight (kg)
		L1	L2	L3	D	H	K	
Three-phase/ single-phase	CHLF(T)2-20	305	87	84	145	215/230	/96	15
	CHLF(T)2-30	323	105	102	145	215/230	/96	15
	CHLF(T)2-40	341	123	120	145	215/230	/96	15
	CHLF(T)2-50	359	141	138	145	215/230	/96	15
	CHLF(T)2-60	422	159	156	170	225/245	/100	17

# CHL,CHLK,CHLF(T)4

## Performance curve ISO9906 Annex A



## Installation sketch



## Performance table

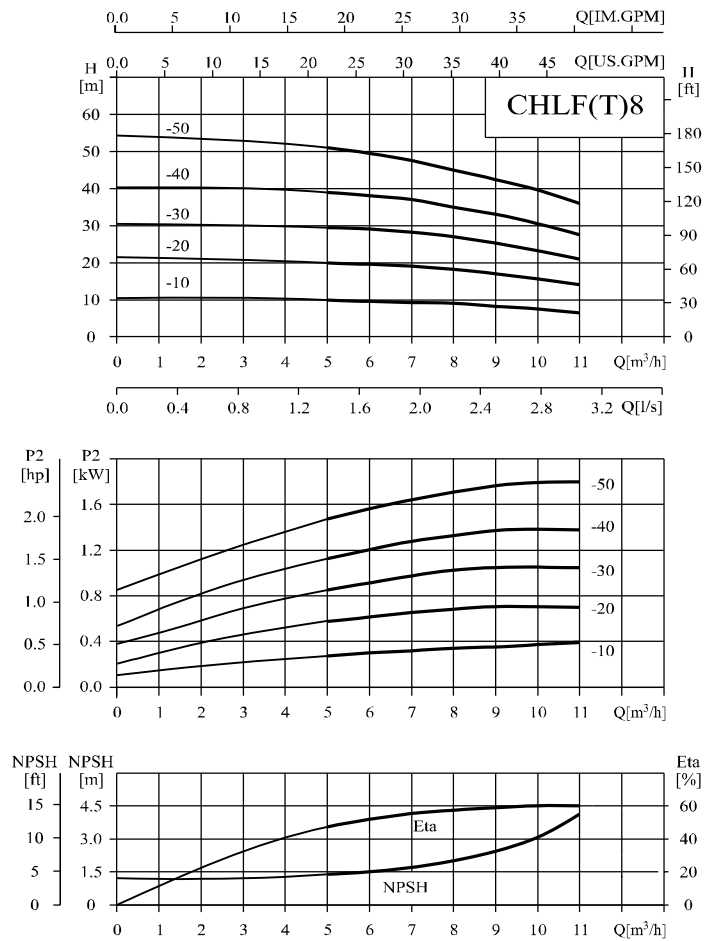
Model	Driving motor		Q (m³/h)	1	2	3	4	5	6	7
	(kW)	(hp)								
CHLF(T)4-20	0.55	0.75	H (m)	19	18	17	15	12.5	10	8
CHLF(T)4-30	0.55	0.75		28	27	26	23.5	20.5	17	13
CHLF(T)4-40	0.75	1		37.5	36	34	31	27	23	19
CHLF(T)4-50	1.1	1.5		47	45	42.5	39	34	29	23
CHLF(T)4-60	1.1	1.5		56	54	51	47	41.5	35.5	28

## Size and weight

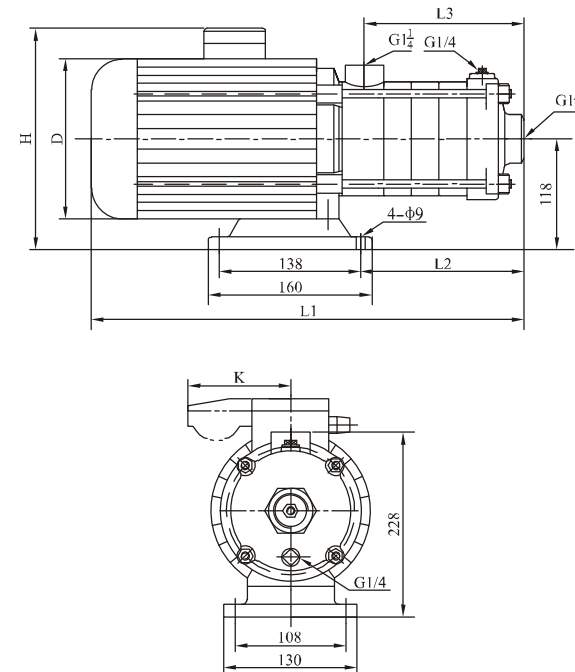
Motor	Model	Size(mm)						Weight (kg)
		L1	L2	L3	D	H	K	
Three-phase/ single-phase	CHLF(T)4-20	329	105	102	145	215/230	/96	15
	CHLF(T)4-30	356	132	129	145	215/230	/96	15
	CHLF(T)4-40	416	162	156	170	225/245	/100	17
	CHLF(T)4-50	455	188	183	170	225/245	/100	17
	CHLF(T)4-60	482	213	210	170	225/245	/100	17



Performance curve ISO9906 Annex A



Installation sketch



Performance table

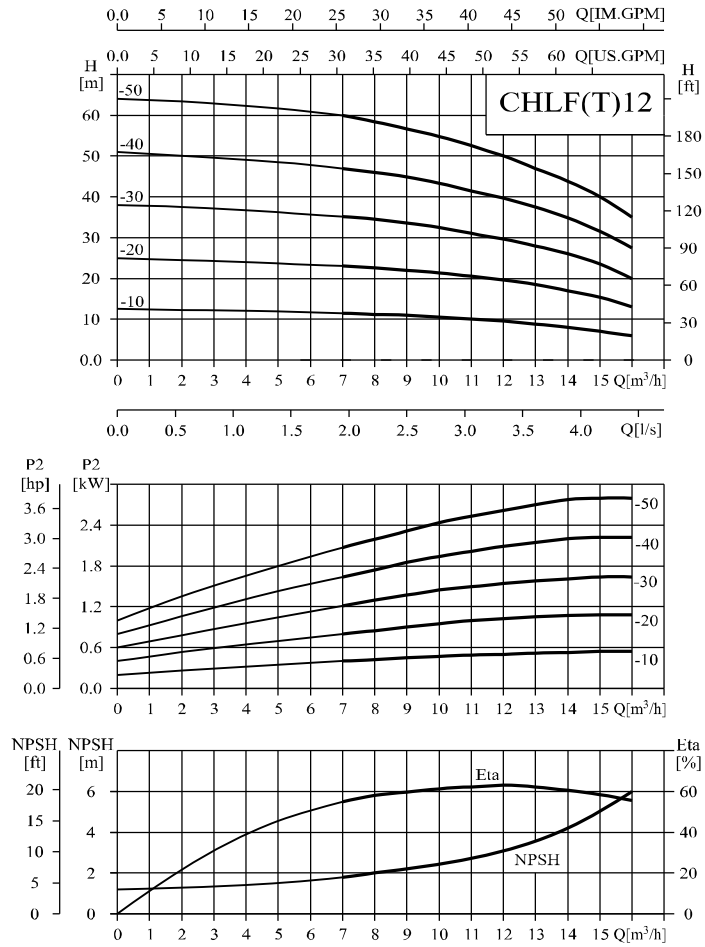
Model	Driving motor		Q (m³/h)	5	6	7	8	9	10	11
	(kW)	(hp)								
CHLF(T)8-10	0.75	1	H (m)	10	9.5	9.3	9	8	7.5	7
CHLF(T)8-20	0.75	1		20	19.5	19	18	17	15.5	14
CHLF(T)8-30	1.1	1.5		29.5	29	28	27	25	23	21
CHLF(T)8-40	1.5	2		39	38	37	35	33	30.5	27.5
CHLF(T)8-50	2.2	3		51	49.5	47.5	45	42.5	39.5	36

Size and weight

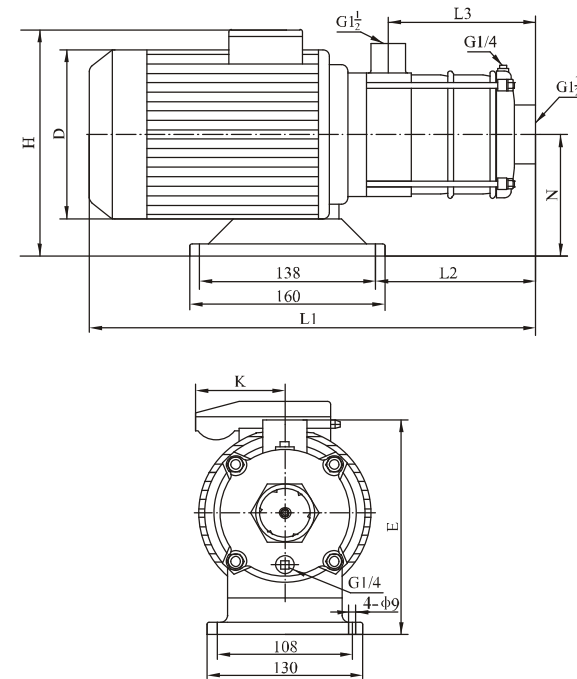
Motor	Model	Size(mm)						Weight (kg)
		L1	L2	L3	D	H	K	
Three-phase/ single-phase	CHLF(T)8-10	395	126	108	170	230/265	/100	20
	CHLF(T)8-20	395	126	108	170	230/265	/100	20
	CHLF(T)8-30	425	156	138	170	230/265	/100	25
	CHLF(T)8-40	490	186	168	180	240/270	/100	28
	CHLF(T)8-50	520	216	198	180	240/270	/100	30

# CHL,CHLK,CHLF(T)12

## Performance curve ISO9906 Annex A



## Installation sketch



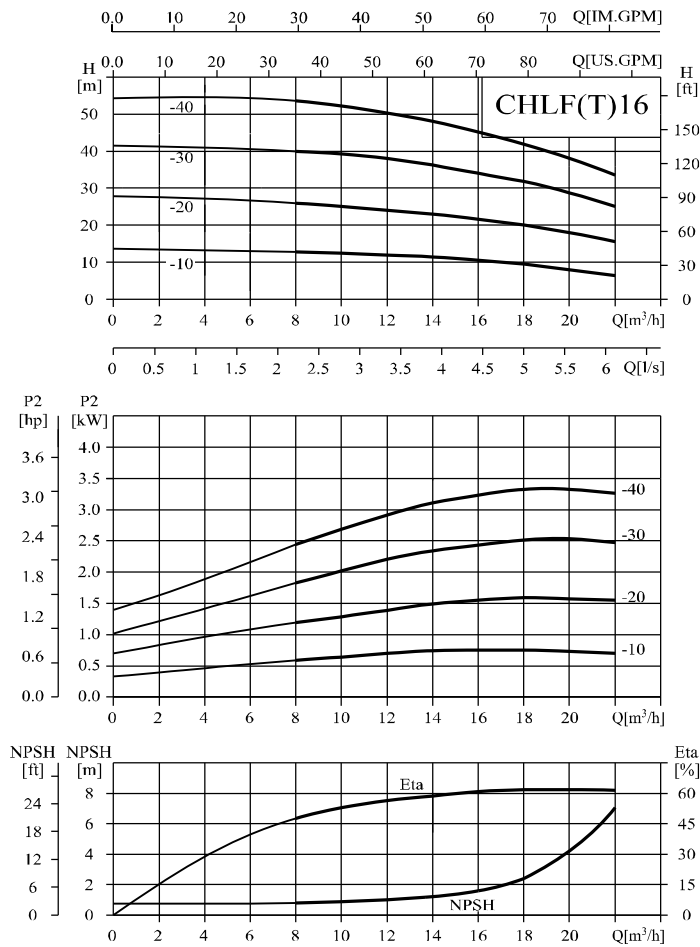
## Performance table

Model	Driving motor		Q (m³/h)	H (m)															
	(kW)	(hp)		7	8	9	10	11	12	13	14	15	16						
CHLF(T)12-10	0.75	1		11.5	11.2	11	10.5	10	9.5	9	8	7	6						
CHLF(T)12-20	1.2	1.6		23	22.5	22	21.5	20.5	19.5	18.5	17	15.5	13						
CHLF(T)12-30	1.8	2.4		35	34.5	33.5	32.5	31	29.5	28	26	23.5	20						
CHLF(T)12-40	2.4	3.3		47	46	45	43.5	41.5	39.5	37.5	35	31.5	27.5						
CHLF(T)12-50	3	4		60	58	56.5	55	52.5	50	47	44	40	35						

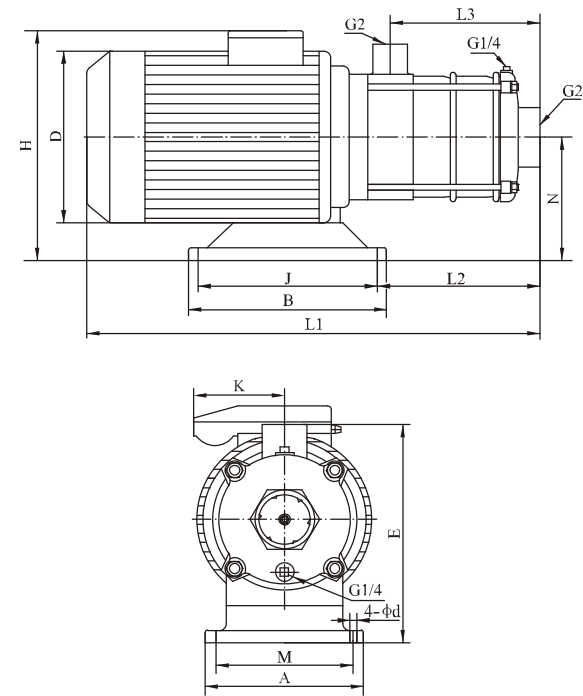
## Size and weight

Motor	Model	Size(mm)								Weight (kg)
		L1	L2	L3	H	D	E	N	K	
Three-phase/ single-phase	CHLF(T)12-10	395	126	108	230/265	170	228	118	/100	20
	CHLF(T)12-20	395	126	108	230/265	170	228	118	/100	21
	CHLF(T)12-30	460	156	138	240/270	180	228	118	/100	25
	CHLF(T)12-40	490	186	168	240/270	180	228	118	/100	29
	CHLF(T)12-50	555	216	198	270/	195	240	126		34

Performance curve ISO9906 Annex A



Installation sketch



Performance table

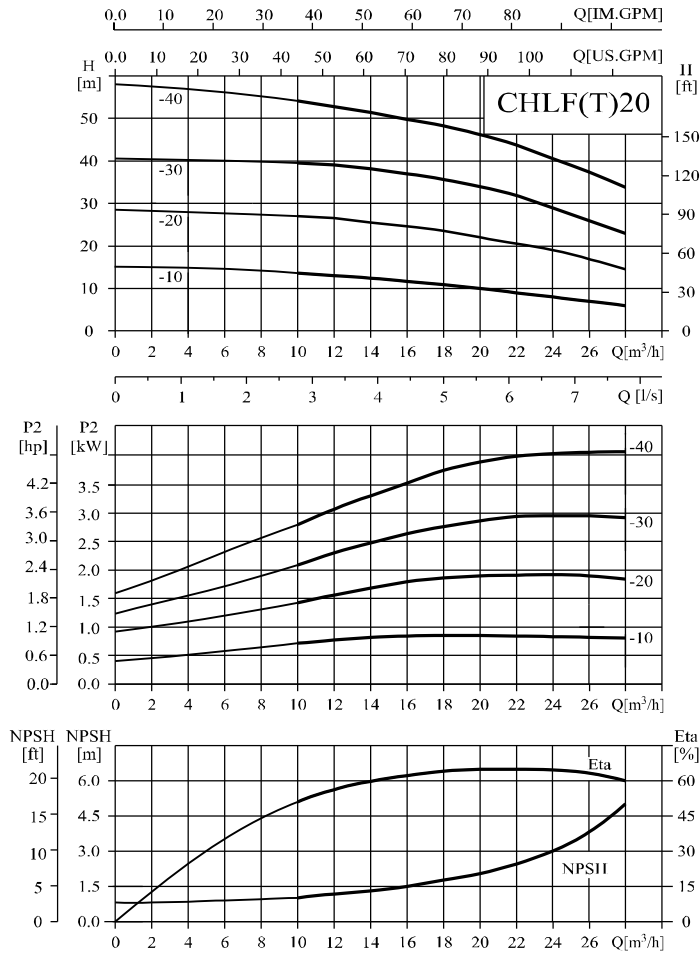
Model	Driving motor		Q (m³/h)	H (m)							
	(kW)	(hp)		8	10	12	14	16	18	20	22
CHLF(T)16-10	1.1	1.5	H (m)	12.8	12.5	12	11.5	10.5	9.5	8	7
CHLF(T)16-20	2.2	3		26	25	24	23	21.7	20	18	15.5
CHLF(T)16-30	3	4		40	39	38	36	34	31.5	29	25
CHLF(T)16-40	4	5.5		53.5	52	50	48	45	42	38	33.5

Size and weight

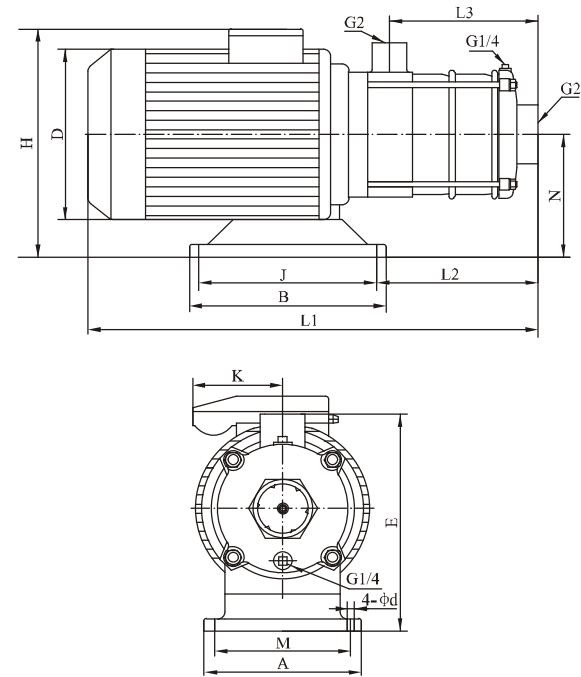
Motor	Model	Size(mm)													Weight (kg)
		L1	L2	L3	H	D	E	N	A	M	B	J	d	K	
Three-phase/ single-phase	CHLF(T)16-10	423	151	126	230/265	170	227	117	130	108	160	138	9	/100	17.5
	CHLF(T)16-20	455	151	126	240/270	180	228	118	130	108	160	138	9	/100	27
	CHLF(T)16-30	561	196	171	270/	195	240	130	130	108	160	138	9		33
	CHLF(T)16-40	621	340	216	270/	220	230	120	230	190	170	140	12		41

# CHL,CHLK,CHLF(T)20

## Performance curve ISO9906 Annex A



## Installation sketch

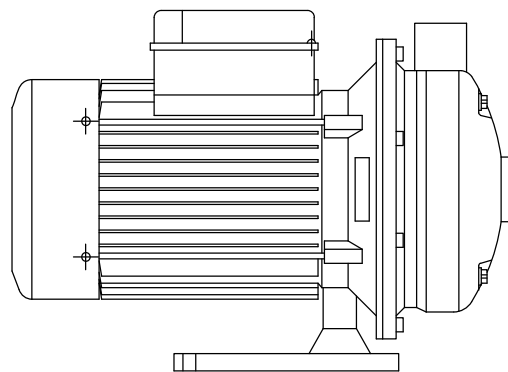


## Performance table

Model	Driving motor		Q (m³/h)	H											
	(kW)	(hp)		10	12	14	16	18	20	22	24	26	28		
CHLF(T)20-10	1.1	1.5	H (m)	13.5	13	12.5	12	11	10	9	8	7	6		
CHLF(T)20-20	2.2	3		27	26.5	25.5	25	23.5	22	20.5	18.5	17	14.5		
CHLF(T)20-30	4	5.5		39.5	39	38	37.5	35.5	34	31.5	29	26	23		
CHLF(T)20-40	4.4	6		53	52	51	50	48.5	46.5	43	40	36	32.5		

## Size and weight

Motor	Model	Size(mm)														Weight (kg)
		L1	L2	L3	H	D	E	N	A	M	B	J	d	K		
Three-phase/ single-phase	CHLF(T)20-10	423	151	126	230/265	170	227	117	130	108	160	138	9	/100	17.5	
	CHLF(T)20-20	455	151	126	240/270	180	228	118	130	108	160	138	9	/100	27	
	CHLF(T)20-30	576	294	171	270/	220	230	120	230	190	170	140	12		41	
	CHLF(T)20-40	621	340	216	270/	220	230	120	230	190	170	140	12		44	



SWB Stainless steel horizontal single-stage centrifugal pump

# SWB

## Definition of model



## Applications

Applied to pumping thin, clean, non-flammable and non-explosive liquid containing no solid granules and fibers. Such as:

- Domestic water supply
- Irrigation
- Water transfer
- Washing systems
- Boosting

## Features

- Made of high quality anti-corrosive materials, compact design, robustness
- TEFC motor, easy and safe to operate.
- Coaxial pump design, float neck ring structure, improved mechanical efficiency and volume efficiency.
- Screwed thread connection, easy and simple to install.
- Simple structure, less parts, easy to maintain and service.

## Technical data

	SWB6-25	SWB6-18
Max. suction head	7 m	
Liquid temperature	-15°C ~ +80°C	
Max. ambient temperature	+40°C	
Max. pump casing pressure	0.8 MPa	
Inlet size	G1.25	
Outlet size	G1	

## Material table

Parts	Casing	Impeller	Shaft	Rotating	Stationary	Neckring	O-Ring	Motor house
Materials	SS 304	SS 304	SS 304	Ceramic	Carbon	PTFE	NBR	Aluminum alloy

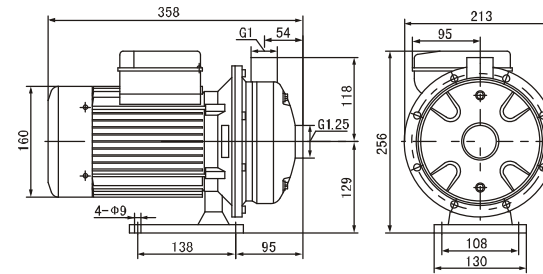
## Electrical data table

Model	Power	Voltage/Current			Frequency	Speed	Protection class
		Single-phase	Three-phase				
SWB6-25	1.1kW	220V/6.42A	220V/4.3A	380V/2.48A	50Hz	2900r/min	IP55
SWB6-18	0.75kW	220V/4.45A	220V/2.84A	380V/1.64A			

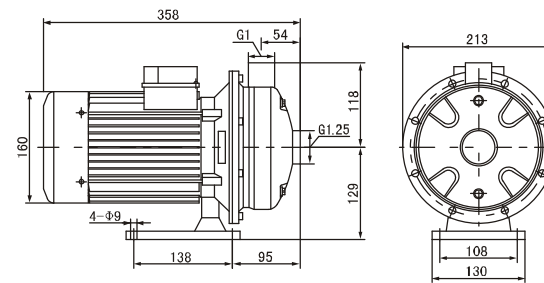
## Performance table

Model	Driving motor (kW)	Q(m <sup>3</sup> /h)	0	3	6	9	12
SWB6-25	1.1	H(m)	29	27.5	25	22	18
SWB6-18	0.75		21.5	20.5	18	16	

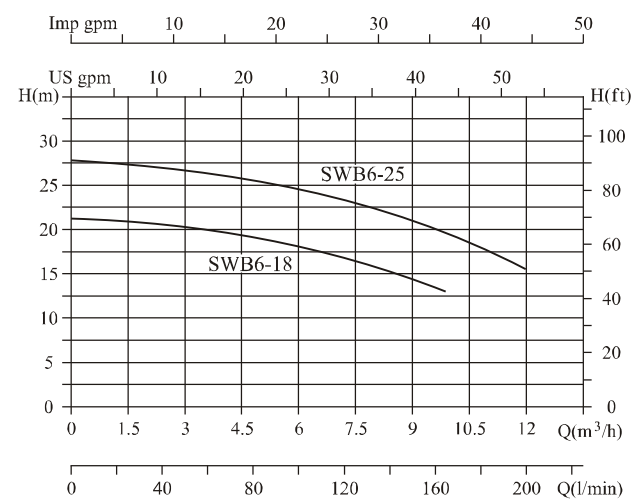
Outline and installation dimension (equipped with single-phase motor)

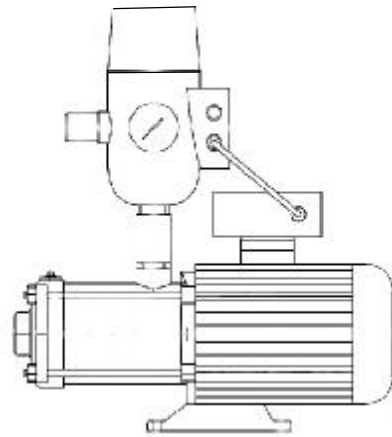


Outline and installation dimension (equipped with three-phase motor)



## Performance curve

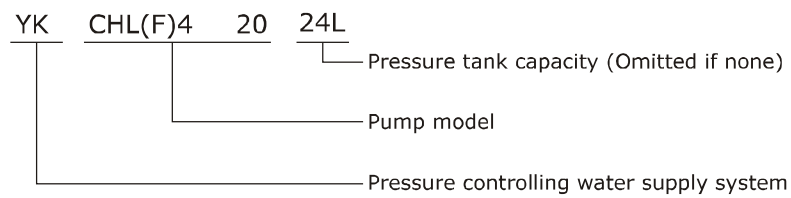




YK Series water supply system

# YK

## Definition of model



## Application

- Villa water supply
- Booster for residential
- Irrigation for orchard, farm, garden

## Working conditions

- Voltage: Single phase 220V/240V
- Max working current: 10A
- Frequency: 50/60Hz
- Enclosure class: IP65
- Max pumped liquid temperature: 60°C
- Start pressure: 1.5~3bar
- Max operation pressure: 10bar
- Max ambient temperature: 40°C
- pH: 4~9

## Introduction

The YK system has the following characteristics. Supplying water stably, simple structure, convenient to install, easy to use. It has the water-shortage protection and motor overload protection. It is good for homely usage. When turn on the tap, the system works, when tap is off, it stops. It saves much operation cost.

## Features

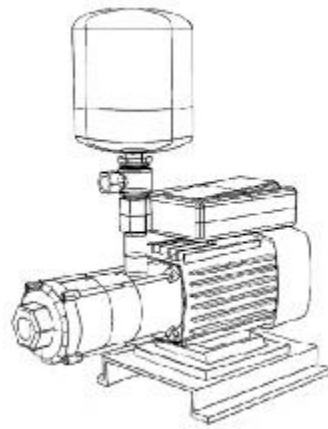
- Easy to operate, convenient to use, aesthetic appearance, very practical.
- It can display status of error, running, stop.

## Performance parameter

Model	Motor power(kW)	Pressure Tank (Optional)	Flow Q(m <sup>3</sup> /h)	0.5	1	1.5	2	2.5	3	3.5
YK-CHL(F)2-20	0.37	24	Head H (m)	19	18	16	14	13	11	9
YK-CHL(F)2-30	0.55	24		28	25	24	21	20	17	14
YK-CHL(F)2-40	0.55	24		36	34	32	28	26	23	17
YK-CHL(F)2-50	0.55	24		46	43	40	35	33	28	22
YK-CHL(F)2-60	0.75	24		54	50	48	42	38	33	25

Model	Motor power(kW)	Pressure Tank (Optional)	Flow Q(m <sup>3</sup> /h)	1	2	3	4	5	6	7
YK-CHL(F)4-20	0.55	50	Head H (m)	19	18	16	15	13	10	7
YK-CHL(F)4-30	0.75	50		28	27	24	22	19	15	10
YK-CHL(F)4-40	0.75	50		38	36	32	30	26	20	14





IQ Variable speed booster pump system

**Summary**

The smart VFD controlled pump booster system is composed of new PID controller and pump in parallel. It can auto adjust to fulfill variable water requirement of user. The pressure of water supply network will keep constant. The whole water supply system is in high efficient, energy saving status. VFD control can auto adjust each pump's rotating speed or start /stop pump, which can keep the pressure constant. It is the best way of water supply and it is easy for operation.

**Applications**

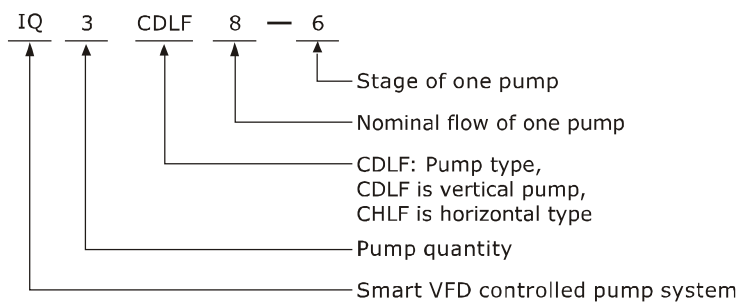
- Homes, small buildings, villas, hotels, etc.,
- Hospital, schools, stadium, golf course, air port
- Hotel, commercial buildings, department store, sauna
- Irrigation for park, play ground, orchard, farm, etc.
- Manufacturer, washing, food industry, factories.

**Features**

- 1.Auto control, constant water pressure
- 2.Set pressure in the device
- 3.There is built-in pressure and flow sensor, water level switch signal interface;
- 4.PID control, when no flow, it will monitor autoly and stop pump(go to sleep mode);
- 5.No need to use PLD, it can auto change pump;
- 6.When power supply stop to start or recover from low water level, it can run autoly;
- 7.The start and stop of the cooling fan is controlled by inner temperature, prolong fan service time;
- 8.When multi pump work together, it can change main pump autoly, make each pump work evenly, prevent pumps over working or can't work due to corrosive.
- 9.It is suitable for cold place, there is anti-frozen function.
- 10.There is running monitor and perfect motor protection, which make pump set easy to use, and it is small, save space.

**Model definition**

For example, 3 pump sets



※ Remark: Standard pressure of pressure tank is 10 bar, need to indicate if bigger than 10bar when order.

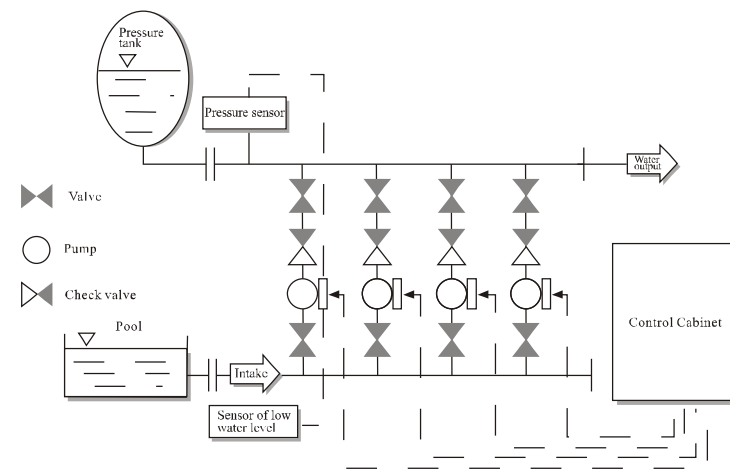
**Benefits**

- Solve low water pressure problem.  
The VFD pump system can keep the pressure constant for the whole building.
- Avoid second time water pollution of roof tank  
Eliminate traditional roof tank, lessen force of the building, simple structure, cost down.
- Save power supply, smaller space  
Save power 30% than normal equipment, small space, easy to install, shorten building time.
- Multi pump variable speed  
Each pump is equipped with VFD, multi pump in VFD.

**Working conditions**

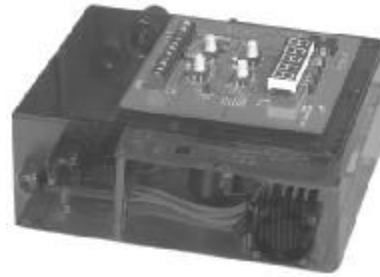
Control way	VFD control
Installed place	In the room
Ambient temperature	+5℃~+40℃
Pumped liquid	Clean water
Liquid temperature	0~70℃
Max working pressure(Suction pressure+valve closed head)	20kg/cm <sup>2</sup>
Min suction pressure	0.2kg/cm <sup>2</sup>
Allowed suction pressure	Restricted by max. Working pressure
Pump	Multistage centrifugal pump
quantity of assembling	2 to 6
Power supply	Three phase220/380V,50Hz
Suction and discharge pipe	Stainless steel

**Schematic diagram**





Pressure Transmitter



ND controller

Built-in VFD controlled constant pressure booster system  
High Performance Pump  
Variable Speed PID Controlled Booster System  
Inverter with PID Controlled Booster Pump

Variable Speed Drive  
Pressure Transmitter



VFD Special for Pump

Motor  
Ip54, F CLASS, AL FRAME

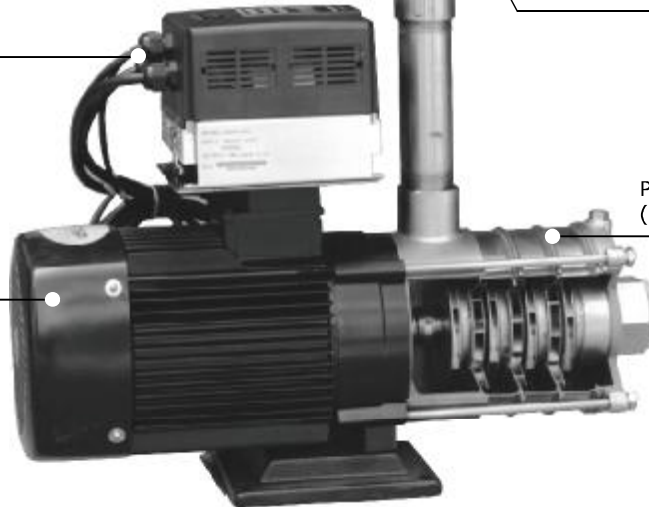


Tank

Check Valve



Pressure Gauge



Pump(SS304)  
(All stainless steel pump)

# IQ

## VFD controll



### Main Components

NO.	Name	Quantity	Remark
1	Horizontal Multi-stage Pump	1	SS304 /SS316
2	Control cabinet	1	SS400/SS304
3	Pressure sensor	1	4~20mA
4	Inlet and outlet pipe	One set	SS304
5	Valve	1	Ball valve
6	Check valve	1	SS304
7	Pressure tank	1	SS400
8	Basc frame	1	Q-235-A

### Performance table

Type	Model	Power (kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	0.5	1.0	1.5	2.0	2.5	3.0	3.5
IQ1	CHLF2-20	0.37	25	8/6	H (m)	19	18	16	14	13	11	9
	CHLF2-30	0.55	25	8/6		28	27	24	21	20	17	14
	CHLF2-40	0.55	25	8/6		36	34	32	28	26	23	17
	CHLF2-50	0.55	25	8/6		46	43	40	35	33	28	22
	CHLF2-60	0.75	25	8/6		54	50	48	42	38	33	25

Type	Model	Power (kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	1	2	3	4	5	6	7
IQ1	CHLF4-20	0.55	25/32	8/6	H (m)	19	18	16	15	13	10	7
	CHLF4-30	0.55	25/32	8/6		28	27	24	22	19	15	10
	CHLF4-40	0.75	25/32	8/6		38	36	32	30	26	20	14
	CHLF4-50	1.1	25/32	8/6		46	44	41	38	32	26	20
	CHLF4-60	1.1	25/32	8/6		55	53	50	45	37	31	26

Type	Model	Power (kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	5	6	7	8	9	10	11
IQ1	CHLF8-10	0.75	32/40	8/6	H (m)	9.5	9.3	9	8.5	7.5	6.5	5.5
	CHLF8-20	0.75	32/40	8/6		19	18.5	18	17	15	13	11
	CHLF8-30	1.1	32/40	8/6		29	28	27	25.5	22.5	20	17.5
	CHLF8-40	1.5	32/40	8/6		39	38	36	34	30	26.5	22.5
	CHLF8-50	2.2	32/40	8/6		49	47	45	42.5	38	33.5	28

Type	Model	Power (kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	7	8	9	10	11	12	13	14	15	16
IQ1	CHLF12-10	0.75	40	20/6	H (m)	11.5	11.2	11	10.5	10	9.5	9	8	7	6
	CHLF12-20	1.2	40	20/6		23	22.5	22	21.5	20.5	19.5	18.5	17	15.5	13
	CHLF12-30	1.8	40	20/6		35	34.5	33.5	32.5	31	29.5	28	26	23.5	20
	CHLF12-40	2.4	40	20/6		47	46	45	43.5	41.5	39.5	37.5	35	31.5	27.5
	CHLF12-50	3	40	20/6		60	58	56.5	55	52.5	50	47	44	40	35

Type	Model	Power (kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	8	10	12	14	16	18	20	22
IQ1	CHLF16-10	1.1	50	20/6	H (m)	12.5	12	11.5	10.5	10	9	7.5	6.5
	CHLF16-20	2.2	50	20/6		25.5	24	23	22	21	19	17	14.5
	CHLF16-30	3	50	20/6		38.5	37	36	34	32	30	27	23
	CHLF16-40	4	50	20/6		51.5	50.5	49	46	43	40.5	36	31.5

Type	Model	Power (kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	10	12	14	16	18	20	22	24	26	28
IQ1	CHLF20-10	1.1	50	20/6	H (m)	12.5	12	11.5	11	10.5	9.5	8.5	7.5	6.5	5.5
	CHLF20-20	2.2	50	20/6		25.5	24.5	24	23	22	21	20	18	16	13.5
	CHLF20-30	4	50	20/6		38	37.5	37	36	35	33	31	28	25	22
	CHLF20-40	4.4	50	20/6		51	50	49	48	47	44.5	41.5	37.5	33.5	30

## VFD controll



## Main Components

NO.	Name	Quantity	Remark
1	Horizontal Multi-stage Pump	2	SS304 /SS316
2	Control cabinet	1	SS400/SS304
3	Pressure sensor	1	4~20mA
4	Inlet and outlet pipe	One set	SS304
5	Valve	4	Ball valve/ butterfly valve
6	Check valve	2	SS304
7	Pressure tank	1	SS400
8	Basic frame	1	Q-235-A

## Performance table

Type	Model	Power (kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	1.0	2.0	3.0	4.0	5.0	6.0	7.0
IQ2	CHLF2-20	0.37	50	60/6	H (m)	19	18	16	14	13	11	9
	CHLF2-30	0.55	50	60/6		28	27	24	21	20	17	14
	CHLF2-40	0.55	50	60/6		36	34	32	28	26	23	17
	CHLF2-50	0.55	50	60/6		46	43	40	35	33	28	22
	CHLF2-60	0.75	50	60/6		54	50	48	42	38	33	25

Type	Model	Power (kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	2	4	6	8	10	12	14
IQ2	CHLF4-20	0.55	50	60/6	H (m)	19	18	16	15	13	10	7
	CHLF4-30	0.55	50	60/6		28	27	24	22	19	15	10
	CHLF4-40	0.75	50	60/6		38	36	32	30	26	20	14
	CHLF4-50	1.1	50	60/6		46	44	41	38	32	26	20
	CHLF4-60	1.1	50	60/6		55	53	50	45	37	31	26

Type	Model	Power (kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	10	12	14	16	18	20	22
IQ2	CHLF8-10	0.75	65	60/6	H (m)	9.5	9.3	9	8.5	7.5	6.5	5.5
	CHLF8-20	0.75	65	60/6		19	18.5	18	17	15	13	11
	CHLF8-30	1.1	65	60/6		29	28	27	25.5	22.5	20	17.5
	CHLF8-40	1.5	65	60/6		39	38	36	34	30	26.5	22.5
	CHLF8-50	2.2	65	60/6		49	47	45	42.5	38	33.5	28

Type	Model	Power (kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	14	16	18	20	22	24	26	28	30	32
IQ2	CHLF12-10	0.75	80	60/6	H (m)	11.5	11.2	11	10.5	10	9.5	9	8	7	6
	CHLF12-20	1.2	80	60/6		23	22.5	22	21.5	20.5	19.5	18.5	17	15.5	13
	CHLF12-30	1.8	80	60/6		35	34.5	33.5	32.5	31	29.5	28	26	23.5	20
	CHLF12-40	2.4	80	60/6		47	46	45	43.5	41.5	39.5	37.5	35	31.5	27.5
	CHLF12-50	3	80	60/6		60	58	56.5	55	52.5	50	47	44	40	35

Type	Model	Power (kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	16	20	24	28	32	36	40	44
IQ2	CHLF16-10	1.1	80	60/6	H (m)	12.5	12	11.5	10.5	10	9	7.5	6.5
	CHLF16-20	2.2	80	60/6		25.5	24	23	22	21	19	17	14.5
	CHLF16-30	3	80	60/6		38.5	37	36	34	32	30	27	23
	CHLF16-40	4	80	60/6		51.5	50.5	49	46	43	40.5	36	31.5

Type	Model	Power (kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	20	24	28	32	36	40	44	48	52	56
IQ2	CHLF20-10	1.1	80	60/6	H (m)	12.5	12	11.5	11	10.5	9.5	8.5	7.5	6.5	5.5
	CHLF20-20	2.2	80	60/6		25.5	24.5	24	23	22	21	20	18	16	13.5
	CHLF20-30	4	80	60/6		38	37.5	37	36	35	33	31	28	25	22
	CHLF20-40	4.4	80	60/6		51	50	49	48	47	44.5	41.5	37.5	33.5	30

# IQ

## VFD controll



### Main Components

NO.	Name	Quantity	Remark
1	Vertical multistage pump	1	SS304 /SS316
2	Control cabinet	1	SS400/SS304
3	Pressure sensor	1	4~20mA
4	Inlet and outlet pipe	One set	SS304
5	Valve	1	Ball valve/ butterfly valve
6	Check valve	1	SS304
7	Pressure tank	1	SS400
8	Basc frame	1	Q-235-A

### Performance table

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m³/h)	1	1.2	1.6	2	2.4	2.8	3.2	3.5
IQ1	CDLF2-3	0.37	25	20/6	H (m)	27	26	24	22	20	18	15	12
	CDLF2-4	0.55	25	20/6		36	35	33	30	26	24	20	16
	CDLF2-5	0.55	25	20/6		45	43	40	37	33	30	24	20
	CDLF2-6	0.75	25	20/6		53	52	50	45	40	36	30	24
	CDLF2-7	0.75	25	20/6		63	61	57	52	47	41	35	28
	CDLF2-9	1.1	25	60/10		80	78	73	67	61	54	45	37
	CDLF2-11	1.1	25	60/10		98	95	89	82	73	64	54	44
	CDLF2-13	1.5	25	60/16		116	114	106	98	89	78	65	52
	CDLF2-15	1.5	25	60/16		134	130	123	112	100	90	73	60
	CDLF2-18	2.2	25	60/16		161	157	148	136	121	108	91	76
	CDLF2-22	2.2	25	60/25		197	192	180	165	148	130	110	90
	CDLF2-26	3.0	25	60/25		232	228	214	198	179	158	130	110

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m³/h)	1.5	2	3	4	5	6	7	8
IQ1	CDLF4-3	0.55	32	20/6	H (m)	28	27	26	24	20	18	13	10
	CDLF4-4	0.75	32	20/6		38	36	34	32	27	24	19	13
	CDLF4-5	1.1	32	20/6		47	45	43	40	34	31	23	17
	CDLF4-6	1.1	32	20/6		56	54	52	48	41	37	28	20
	CDLF4-7	1.5	32	20/6		66	63	61	56	48	43	33	24
	CDLF4-8	1.5	32	60/10		74	72	70	64	55	50	38	27
	CDLF4-10	2.2	32	60/10		96	90	87	81	71	62	48	34
	CDLF4-12	2.2	32	60/10		114	108	104	95	85	75	58	41
	CDLF4-14	3.0	32	60/16		136	126	122	112	101	89	68	48
	CDLF4-16	3.0	32	60/16		152	144	140	129	115	101	78	55
	CDLF4-19	4.0	32	60/25		183	171	168	153	137	122	93	67
	CDLF4-22	4.0	32	60/25		211	200	192	178	160	138	108	79

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m³/h)	5	6	7	8	9	10	11	12
IQ1	CDLF8-3	1.1	40	20/6	H (m)	30	29.5	28.5	27	25	24	21	19
	CDLF8-4	1.5	40	20/6		41	39.5	38	36	34	32	28	26
	CDLF8-5	2.2	40	20/6		52	50	48	45	42	40	36	32
	CDLF8-6	2.2	40	20/6		62	60	57	54	51	48	43	39
	CDLF8-8	3.0	40	60/10		83	80	77	73	69	65	58	52
	CDLF8-10	4.0	40	60/10		104	100	97	92	87	81	73	65
	CDLF8-12	4.0	40	60/16		124	120	116	111	104	92	87	78
	CDLF8-14	5.5	40	60/16		145	141	136	130	122	113	102	92
	CDLF8-16	5.5	40	60/16		166	161	156	148	139	130	118	106
	CDLF8-18	7.5	40	60/25		187	182	175	167	157	146	134	120
	CDLF8-20	7.5	40	60/25		208	202	195	186	175	163	150	135

## Performance table

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	7	8	9	10	11	12	13	14	15	16
IQ1	CDLF12-3	2.2	50	60/6	H (m)	35.5	35	34	33	31.5	30	28	26	23.5	21
	CDLF12-4	3.0	50	60/6		47	46	45	44	42	40	37	34	31	28
	CDLF12-5	3.0	50	60/6		59.5	58	56.5	55	52.5	50	46.5	43	39	35
	CDLF12-6	4.0	50	60/10		71.5	70	68	66	63	60	56	52	47	42
	CDLF12-7	5.5	50	60/10		83.5	82	79.5	77	73.5	70	65.5	61	55	49
	CDLF12-8	5.5	50	60/10		95.5	94	91	88	84	80	75	70	63	56
	CDLF12-9	5.5	50	60/16		108	106	103	100	95.5	91	85	79	71.5	64
	CDLF12-10	7.5	50	60/16		120	118	114.5	111	106	101	94.5	88	80	72
	CDLF12-12	7.5	50	60/16		143.5	141	137	133	127	121	113.5	106	96	86

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	8	10	12	14	16	18	20	22
IQ1	CDLF16-2	2.2	50	60/6	H (m)	27	26	25	24	22	21	19	16
	CDLF16-3	3.0	50	60/6		41	40	38	37	34	32	26	25
	CDLF16-4	4.0	50	60/6		54	53	52	49	46	43	38	34
	CDLF16-5	5.5	50	60/6		68	67	65	62	58	54	48	43
	CDLF16-6	5.5	50	60/10		82	80	78	74	70	64	58	52
	CDLF16-7	7.5	50	60/10		96	95	91	87	82	76	68	61
	CDLF16-8	7.5	50	60/16		110	108	104	99	94	86	77	70

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	10	12	14	16	18	20	22	24	26	28
IQ1	CDLF20-2	2.2	50	60/6	H (m)	27	26.5	26	25	24	23	22	20	18	15
	CDLF20-3	4.0	50	60/6		40	39.5	39	38	37	35	33	30	27	24
	CDLF20-4	5.5	50	60/6		54	53	52	51	49	47	44	41	37	33
	CDLF20-5	5.5	50	60/6		67	66	64	62	60	58	55	50	45	40
	CDLF20-6	7.5	50	60/10		81	79	77	75	73	70	66	61	55	49
	CDLF20-7	7.5	50	60/10		95	93	91	89	86	82	77	71	65	58

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	16	20	24	28	27	36	40
IQ1	CDLF32-20-2	3.0	65	60/6	H (m)	29	28	26	23	20	16	11
	CDLF32-20	4.0	65	60/6		36	34	32	29	27	23	18
	CDLF32-30-2	5.5	65	60/6		47	44	41	38	33	28	21
	CDLF32-30	5.5	65	60/6		54	51	48	44	40	35	27
	CDLF32-40-2	7.5	65	60/6		65	62	58	53	46	40	30
	CDLF32-40	7.5	65	60/6		72	69	65	59	53	47	37

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	25	30	35	40	42	45	50	55
IQ1	CDLF42-10	4.0	80	60/6	H (m)	24	23	23	21	20	19	18	16
	CDLF42-10-2	5.5	80	60/6		40	38	36	33	32	30	27	23
	CDLF42-20	7.5	80	60/6		48	46	44	42	41	39	35	31

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	30	40	50	60	65	70	80
IQ1	CDLF65-10	5.5	100	60/6	H (m)	27	25	23	21	20	18	15
	CDLF65-20-2	7.5	100	60/6		39	36	33	29	26	23	17

# IQ

## VFD controll



### Main Components

NO.	Name	Quantity	Remark
1	Vertical multistage pump	2	SS304 /SS316
2	Control cabinet	1	SS400/SS304
3	Pressure sensor	1	4~20mA
4	Inlet and outlet pipe	One set	SS304
5	Valve	4	Ball valve/ butterfly valve
6	Check valve	2	SS304
7	Pressure tank	1	SS400
8	Basc frame	1	Q-235-A

### Performance table

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m³/h)	2	2.4	3.2	4	4.8	5.6	6.4	7
IQ2	CDLF2-3	0.37	50	60/6	H (m)	27	26	24	22	20	18	15	12
	CDLF2-4	0.55	50	60/6		36	35	33	30	26	24	20	16
	CDLF2-5	0.55	50	60/6		45	43	40	37	33	30	24	20
	CDLF2-6	0.75	50	60/6		53	52	50	45	40	36	30	24
	CDLF2-7	0.75	50	60/6		63	61	57	52	47	41	35	28
	CDLF2-9	1.1	50	60/10		80	78	73	67	61	54	45	37
	CDLF2-11	1.1	50	60/10		98	95	89	82	73	64	54	44
	CDLF2-13	1.5	50	60/16		116	114	106	98	89	78	65	52
	CDLF2-15	1.5	50	60/16		134	130	123	112	100	90	73	60
	CDLF2-18	2.2	50	60/16		161	157	148	136	121	108	91	76
	CDLF2-22	2.2	50	60/25		197	192	180	165	148	130	110	90
	CDLF2-26	3.0	50	60/25		232	228	214	198	179	158	130	110

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m³/h)	3	4	6	8	10	12	14	16
IQ2	CDLF4-3	0.55	50	60/6	H (m)	28	27	26	24	20	18	13	10
	CDLF4-4	0.75	50	60/6		38	36	34	32	27	24	19	13
	CDLF4-5	1.1	50	60/6		47	45	43	40	34	31	23	17
	CDLF4-6	1.1	50	60/6		56	54	52	48	41	37	28	20
	CDLF4-7	1.5	50	60/6		66	63	61	56	48	43	33	24
	CDLF4-8	1.5	50	60/10		74	72	70	64	55	50	38	27
	CDLF4-10	2.2	50	60/10		96	90	87	81	71	62	48	34
	CDLF4-12	2.2	50	60/10		114	108	104	95	85	75	58	41
	CDLF4-14	3.0	50	60/16		136	126	122	112	101	89	68	48
	CDLF4-16	3.0	50	60/16		152	144	140	129	115	101	78	55
	CDLF4-19	4.0	50	60/25		183	171	168	153	137	122	93	67
	CDLF4-22	4.0	50	60/25		211	200	192	178	160	138	108	79

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m³/h)	10	12	14	16	18	20	22	24
IQ2	CDLF8-3	1.1	65	60/6	H (m)	30	29.5	28.5	27	25	24	21	19
	CDLF8-4	1.5	65	60/6		41	39.5	38	36	34	32	28	26
	CDLF8-5	2.2	65	60/6		52	50	48	45	42	40	36	32
	CDLF8-6	2.2	65	60/6		62	60	57	54	51	48	43	39
	CDLF8-8	3.0	65	60/10		83	80	77	73	69	65	58	52
	CDLF8-10	4.0	65	60/10		104	100	97	92	87	81	73	65
	CDLF8-12	4.0	65	60/16		124	120	116	111	104	92	87	78
	CDLF8-14	5.5	65	60/16		145	141	136	130	122	113	102	92
	CDLF8-16	5.5	65	60/16		166	161	156	148	139	130	118	106
	CDLF8-18	7.5	65	60/25		187	182	175	167	157	146	134	120
	CDLF8-20	7.5	65	60/25		208	202	195	186	175	163	150	135



Performance table

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	14	16	18	20	22	24	26	28	30	32
IQ2	CDLF12-3	2.2	80	80/6	H (m)	35.5	35	34	33	31.5	30	28	26	23.5	21
	CDLF12-4	3.0	80	80/6		47	46	45	44	42	40	37	34	31	28
	CDLF12-5	3.0	80	80/6		59.5	58	56.5	55	52.5	50	46.5	43	39	35
	CDLF12-6	4.0	80	80/10		71.5	70	68	66	63	60	56	52	47	42
	CDLF12-7	5.5	80	80/10		83.5	82	79.5	77	73.5	70	65.5	61	55	49
	CDLF12-8	5.5	80	80/10		95.5	94	91	88	84	80	75	70	63	56
	CDLF12-9	5.5	80	80/16		108	106	103	100	95.5	91	85	79	71.5	64
	CDLF12-10	7.5	80	80/16		120	118	114.5	111	106	101	94.5	88	80	72
	CDLF12-12	7.5	80	80/16		143.5	141	137	133	127	121	113.5	106	96	86

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	16	20	24	28	32	36	40	44
IQ2	CDLF16-2	2.2	80	80/6	H (m)	27	26	25	24	22	21	19	16
	CDLF16-3	3.0	80	80/6		41	40	38	37	34	32	26	25
	CDLF16-4	4.0	80	80/6		54	53	52	49	46	43	38	34
	CDLF16-5	5.5	80	80/6		68	67	65	62	58	54	48	43
	CDLF16-6	5.5	80	80/10		82	80	78	74	70	64	58	52
	CDLF16-7	7.5	80	80/10		96	95	91	87	82	76	68	61
	CDLF16-8	7.5	80	80/16		110	108	104	99	94	86	77	70

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	20	24	28	32	36	40	44	48	52	56
IQ2	CDLF20-2	2.2	80	80/6	H (m)	27	26.5	26	25	24	23	22	20	18	15
	CDLF20-3	4.0	80	80/6		40	39.5	39	38	37	35	33	30	27	24
	CDLF20-4	5.5	80	80/6		54	53	52	51	49	47	44	41	37	33
	CDLF20-5	5.5	80	80/6		67	66	64	62	60	58	55	50	45	40
	CDLF20-6	7.5	80	80/10		81	79	77	75	73	70	66	61	55	49
	CDLF20-7	7.5	80	80/10		95	93	91	89	86	82	77	71	65	58

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	32	40	48	56	64	72	80
IQ2	CDLF32-20-2	3.0	100	100/6	H (m)	29	28	26	23	20	16	11
	CDLF32-20	4.0	100	100/6		36	34	32	29	27	23	18
	CDLF32-30-2	5.5	100	100/6		47	44	41	38	33	28	21
	CDLF32-30	5.5	100	100/6		54	51	48	44	40	35	27
	CDLF32-40-2	7.5	100	100/6		65	62	58	53	46	40	30
	CDLF32-40	7.5	100	100/6		72	69	65	59	53	47	37

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	50	60	70	80	84	90	100	110
IQ2	CDLF42-10	4.0	125	100/6	H (m)	24	23	23	21	20	19	18	16
	CDLF42-10-2	5.5	125	100/6		40	38	36	33	32	30	27	23
	CDLF42-20	7.5	125	100/6		48	46	44	42	41	39	35	31

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	60	80	100	120	130	140	160
IQ2	CDLF65-10	5.5	150	100/6	H (m)	27	25	23	21	20	18	15
	CDLF65-20-2	7.5	150	100/6		39	36	33	29	26	23	17

# IQ

## VFD controll



### Main Components

NO.	Name	Quantity	Remark
1	Vertical multistage pump	3	SS304 /SS316
2	Control cabinet	1	SS400/SS304
3	Pressure sensor	1	4~20mA
4	Inlet and outlet pipe	One set	SS304
5	Valve	6	Ball valve/ butterfly valve
6	Check valve	3	SS304
7	Pressure tank	1	SS400
8	Basc frame	1	Q-235-A

### Performance table

Type	Model	Power of one pump(kW)	DN of inlet &outlet	Pressure tank (L/bar)	Flow (m³/h)	3	3.6	4.8	6	7.2	8.4	9.6	10.5
IQ3	CDLF2-3	0.37	50	60/6	H (m)	27	26	24	22	20	18	15	12
	CDLF2-4	0.55	50	60/6		36	35	33	30	26	24	20	16
	CDLF2-5	0.55	50	60/6		45	43	40	37	33	30	24	20
	CDLF2-6	0.75	50	60/6		53	52	50	45	40	36	30	24
	CDLF2-7	0.75	50	60/6		63	61	57	52	47	41	35	28
	CDLF2-9	1.1	50	60/10		80	78	73	67	61	54	45	37
	CDLF2-11	1.1	50	60/10		98	95	89	82	73	64	54	44
	CDLF2-13	1.5	50	60/16		116	114	106	98	89	78	65	52
	CDLF2-15	1.5	50	60/16		134	130	123	112	100	90	73	60
	CDLF2-18	2.2	50	60/16		161	157	148	136	121	108	91	76
	CDLF2-22	2.2	50	60/25		197	192	180	165	148	130	110	90
	CDLF2-26	3.0	50	60/25		232	228	214	198	179	158	130	110

Type	Model	Power of one pump(kW)	DN of inlet &outlet	Pressure tank (L/bar)	Flow (m³/h)	4.5	6	9	12	15	18	21	24
IQ3	CDLF4-3	0.55	65	60/6	H (m)	28	27	26	24	20	18	13	10
	CDLF4-4	0.75	65	60/6		38	36	34	32	27	24	19	13
	CDLF4-5	1.1	65	60/6		47	45	43	40	34	31	23	17
	CDLF4-6	1.1	65	60/6		56	54	52	48	41	37	28	20
	CDLF4-7	1.5	65	60/6		66	63	61	56	48	43	33	24
	CDLF4-8	1.5	65	60/10		74	72	70	64	55	50	38	27
	CDLF4-10	2.2	65	60/10		96	90	87	81	71	62	48	34
	CDLF4-12	2.2	65	60/10		114	108	104	95	85	75	58	41
	CDLF4-14	3.0	65	60/16		136	126	122	112	101	89	68	48
	CDLF4-16	3.0	65	60/16		152	144	140	129	115	101	78	55
	CDLF4-19	4.0	65	60/25		183	171	168	153	137	122	93	67
	CDLF4-22	4.0	65	60/25		211	200	192	178	160	138	108	79

Type	Model	Power of one pump(kW)	DN of inlet &outlet	Pressure tank (L/bar)	Flow (m³/h)	15	18	21	24	27	30	33	36
IQ3	CDLF8-3	1.1	80	80/6	H (m)	30	29.5	28.5	27	25	24	21	19
	CDLF8-4	1.5	80	80/6		41	39.5	38	36	34	32	28	26
	CDLF8-5	2.2	80	80/6		52	50	48	45	42	40	36	32
	CDLF8-6	2.2	80	80/6		62	60	57	54	51	48	43	39
	CDLF8-8	3.0	80	80/10		83	80	77	73	69	65	58	52
	CDLF8-10	4.0	80	80/10		104	100	97	92	87	81	73	65
	CDLF8-12	4.0	80	80/16		124	120	116	111	104	92	87	78
	CDLF8-14	5.5	80	80/16		145	141	136	130	122	113	102	92
	CDLF8-16	5.5	80	80/16		166	161	156	148	139	130	118	106
	CDLF8-18	7.5	80	80/25		187	182	175	167	157	146	134	120
	CDLF8-20	7.5	80	80/25		208	202	195	186	175	163	150	135

## Performance table

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	21	24	27	30	33	36	39	42	45	48
IQ3	CDLF12-3	2.2	100	100/6	H (m)	35.5	35	34	33	31.5	30	28	26	23.5	21
	CDLF12-4	3.0	100	100/6		47	46	45	44	42	40	37	34	31	28
	CDLF12-5	3.0	100	100/6		59.5	58	56.5	55	52.5	50	46.5	43	39	35
	CDLF12-6	4.0	100	100/10		71.5	70	68	66	63	60	56	52	47	42
	CDLF12-7	5.5	100	100/10		83.5	82	79.5	77	73.5	70	65.5	61	55	49
	CDLF12-8	5.5	100	100/10		95.5	94	91	88	84	80	75	70	63	56
	CDLF12-9	5.5	100	100/16		108	106	103	100	95.5	91	85	79	71.5	64
	CDLF12-10	7.5	100	100/16		120	118	114.5	111	106	101	94.5	88	80	72
	CDLF12-12	7.5	100	100/16		143.5	141	137	133	127	121	113.5	106	96	86

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	24	30	36	42	48	54	60	66
IQ3	CDLF16-2	2.2	100	100/6	H (m)	27	26	25	24	22	21	19	16
	CDLF16-3	3.0	100	100/6		41	40	38	37	34	32	26	25
	CDLF16-4	4.0	100	100/6		54	53	52	49	46	43	38	34
	CDLF16-5	5.5	100	100/6		68	67	65	62	58	54	48	43
	CDLF16-6	5.5	100	100/10		82	80	78	74	70	64	58	52
	CDLF16-7	7.5	100	100/10		96	95	91	87	82	76	68	61
	CDLF16-8	7.5	100	100/16		110	108	104	99	94	86	77	70

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	30	36	42	48	54	60	66	72	78	84
IQ3	CDLF20-2	2.2	100	100/6	H (m)	27	26.5	26	25	24	23	22	20	18	15
	CDLF20-3	4.0	100	100/6		40	39.5	39	38	37	35	33	30	27	24
	CDLF20-4	5.5	100	100/6		54	53	52	51	49	47	44	41	37	33
	CDLF20-5	5.5	100	100/6		67	66	64	62	60	58	55	50	45	40
	CDLF20-6	7.5	100	100/10		81	79	77	75	73	70	66	61	55	49
	CDLF20-7	7.5	100	100/10		95	93	91	89	86	82	77	71	65	58

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	48	60	72	84	96	108	120
IQ3	CDLF32-20-2	3.0	125	100/6	H (m)	29	28	26	23	20	16	11
	CDLF32-20	4.0	125	100/6		36	34	32	29	27	23	18
	CDLF32-30-2	5.5	125	100/6		47	44	41	38	33	28	21
	CDLF32-30	5.5	125	100/6		54	51	48	44	40	35	27
	CDLF32-40-2	7.5	125	100/6		65	62	58	53	46	40	30
	CDLF32-40	7.5	125	100/6		72	69	65	59	53	47	37

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	75	90	105	120	126	135	150	165
IQ3	CDLF42-10	4.0	150	200/6	H (m)	24	23	23	21	20	19	18	16
	CDLF42-10-2	5.5	150	200/6		40	38	36	33	32	30	27	23
	CDLF42-20	7.5	150	200/6		48	46	44	42	41	39	35	31

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	90	120	150	180	195	210	240
IQ3	CDLF65-10	5.5	200	200/6	H (m)	27	25	23	21	20	18	15
	CDLF65-20-2	7.5	200	200/6		39	36	33	29	26	23	17

# IQ

## VFD control



### Main Components

NO.	Name	Quantity	Remark
1	Vertical multistage pump	4	SS304 /SS316
2	Control cabinet	1	SS400/SS304
3	Pressure sensor	1	4~20mA
4	Inlet and outlet pipe	One set	SS304
5	Valve	8	Ball valve/ butterfly valve
6	Check valve	4	SS304
7	Pressure tank	1	SS400
8	Basc frame	1	Q-235-A

### Performance table

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m³/h)	4	4.8	6.4	8	9.6	11.2	12.8	14
IQ4	CDLF2-3	0.37	50	60/6	H (m)	27	26	24	22	20	18	15	12
	CDLF2-4	0.55	50	60/6		36	35	33	30	26	24	20	16
	CDLF2-5	0.55	50	60/6		45	43	40	37	33	30	24	20
	CDLF2-6	0.75	50	60/6		53	52	50	45	40	36	30	24
	CDLF2-7	0.75	50	60/6		63	61	57	52	47	41	35	28
	CDLF2-9	1.1	50	60/10		80	78	73	67	61	54	45	37
	CDLF2-11	1.1	50	60/10		98	95	89	82	73	64	54	44
	CDLF2-13	1.5	50	60/16		116	114	106	98	89	78	65	52
	CDLF2-15	1.5	50	60/16		134	130	123	112	100	90	73	60
	CDLF2-18	2.2	50	60/16		161	157	148	136	121	108	91	76
	CDLF2-22	2.2	50	60/25		197	192	180	165	148	130	110	90
	CDLF2-26	3.0	50	60/25		232	228	214	198	179	158	130	110

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m³/h)	6	8	12	16	20	24	28	32
IQ4	CDLF4-3	0.55	80	60/6	H (m)	28	27	26	24	20	18	13	10
	CDLF4-4	0.75	80	60/6		38	36	34	32	27	24	19	13
	CDLF4-5	1.1	80	60/6		47	45	43	40	34	31	23	17
	CDLF4-6	1.1	80	60/6		56	54	52	48	41	37	28	20
	CDLF4-7	1.5	80	60/6		66	63	61	56	48	43	33	24
	CDLF4-8	1.5	80	60/10		74	72	70	64	55	50	38	27
	CDLF4-10	2.2	80	60/10		96	90	87	81	71	62	48	34
	CDLF4-12	2.2	80	60/10		114	108	104	95	85	75	58	41
	CDLF4-14	3.0	80	60/16		136	126	122	112	101	89	68	48
	CDLF4-16	3.0	80	60/16		152	144	140	129	115	101	78	55
	CDLF4-19	4.0	80	60/25		183	171	168	153	137	122	93	67
	CDLF4-22	4.0	80	60/25		211	200	192	178	160	138	108	79

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m³/h)	20	24	28	32	36	40	44	48
IQ4	CDLF8-3	1.1	100	100/6	H (m)	30	29.5	28.5	27	25	24	21	19
	CDLF8-4	1.5	100	100/6		41	39.5	38	36	34	32	28	26
	CDLF8-5	2.2	100	100/6		52	50	48	45	42	40	36	32
	CDLF8-6	2.2	100	100/6		62	60	57	54	51	48	43	39
	CDLF8-8	3.0	100	100/10		83	80	77	73	69	65	58	52
	CDLF8-10	4.0	100	100/10		104	100	97	92	87	81	73	65
	CDLF8-12	4.0	100	100/16		124	120	116	111	104	92	87	78
	CDLF8-14	5.5	100	100/16		145	141	136	130	122	113	102	92
	CDLF8-16	5.5	100	100/16		166	161	156	148	139	130	118	106
	CDLF8-18	7.5	100	100/25		187	182	175	167	157	146	134	120
	CDLF8-20	7.5	100	100/25		208	202	195	186	175	163	150	135

## Performance table

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	28	32	36	40	44	48	52	56	60	64
IQ4	CDLF12-3	2.2	125	100/6	H (m)	35.5	35	34	33	31.5	30	28	26	23.5	21
	CDLF12-4	3.0	125	100/6		47	46	45	44	42	40	37	34	31	28
	CDLF12-5	3.0	125	100/6		59.5	58	56.5	55	52.5	50	46.5	43	39	35
	CDLF12-6	4.0	125	100/10		71.5	70	68	66	63	60	56	52	47	42
	CDLF12-7	5.5	125	100/10		83.5	82	79.5	77	73.5	70	65.5	61	55	49
	CDLF12-8	5.5	125	100/10		95.5	94	91	88	84	80	75	70	63	56
	CDLF12-9	5.5	125	100/16		108	106	103	100	95.5	91	85	79	71.5	64
	CDLF12-10	7.5	125	100/16		120	118	114.5	111	106	101	94.5	88	80	72
	CDLF12-12	7.5	125	100/16		143.5	141	137	133	127	121	113.5	106	96	86

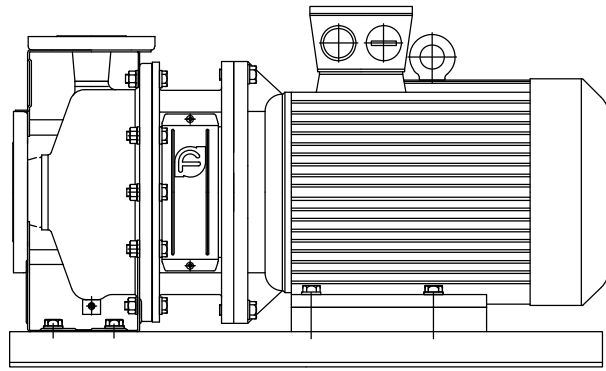
Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	32	40	48	56	64	72	80	88
IQ4	CDLF16-2	2.2	125	100/6	H (m)	27	26	25	24	22	21	19	16
	CDLF16-3	3.0	125	100/6		41	40	38	37	34	32	26	25
	CDLF16-4	4.0	125	100/6		54	53	52	49	46	43	38	34
	CDLF16-5	5.5	125	100/6		68	67	65	62	58	54	48	43
	CDLF16-6	5.5	125	100/10		82	80	78	74	70	64	58	52
	CDLF16-7	7.5	125	100/10		96	95	91	87	82	76	68	61
	CDLF16-8	7.5	125	100/16		110	108	104	99	94	86	77	70

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	40	48	56	64	72	80	88	96	104	84
IQ4	CDLF20-2	2.2	125	100/6	H (m)	27	26.5	26	25	24	23	22	20	18	15
	CDLF20-3	4.0	125	100/6		40	39.5	39	38	37	35	33	30	27	24
	CDLF20-4	5.5	125	100/6		54	53	52	51	49	47	44	41	37	33
	CDLF20-5	5.5	125	100/6		67	66	64	62	60	58	55	50	45	40
	CDLF20-6	7.5	125	100/10		81	79	77	75	73	70	66	61	55	49
	CDLF20-7	7.5	125	100/10		95	93	91	89	86	82	77	71	65	58

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	64	80	96	112	128	144	160
IQ4	CDLF32-20-2	3.0	150	200/6	H (m)	29	28	26	23	20	16	11
	CDLF32-20	4.0	150	200/6		36	34	32	29	27	23	18
	CDLF32-30-2	5.5	150	200/6		47	44	41	38	33	28	21
	CDLF32-30	5.5	150	200/6		54	51	48	44	40	35	27
	CDLF32-40-2	7.5	150	200/6		65	62	58	53	46	40	30
	CDLF32-40	7.5	150	200/6		72	69	65	59	53	47	37

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	100	120	140	160	168	180	200	220
IQ4	CDLF42-10	4.0	150	200/6	H (m)	24	23	23	21	20	19	18	16
	CDLF42-10-2	5.5	150	200/6		40	38	36	33	32	30	27	23
	CDLF42-20	7.5	150	200/6		48	46	44	42	41	39	35	31

Type	Model	Power of one pump(kW)	DN of inlet & outlet	Pressure tank (L/bar)	Flow (m <sup>3</sup> /h)	120	160	200	240	260	280	320
IQ4	CDLF65-10	5.5	200	200/6	H (m)	27	25	23	21	20	18	15
	CDLF65-20-2	7.5	200	200/6		39	36	33	29	26	23	17

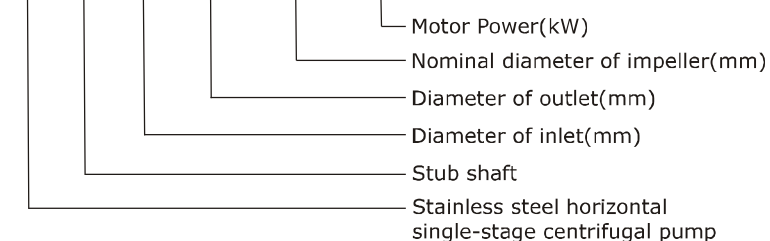


ZS Stainless steel horizontal single stage centrifugal pump

### Definition of model

ZS 65-50-200/6 11.0

Z S 65 50 - 200 / 11.0



### Introduction

ZS Stainless steel horizontal single-stage centrifugal pump is made by advanced techniques such as pressing bulging welding of corrosion resistant plate. It is a new generation centrifugal pump initiated in China and may replace traditional IS pump and common corrosion proof pump. It features beautiful appearance, light and handy structure, high efficiency and energy saving, durable, corrosion proof, low noise, etc.

### Application

ZS Stainless steel horizontal single-stage centrifugal pump is a sort of multifunction product with wide application. It may transmit various mediums including water or industrial liquid and is suitable for different temperature, flow rate and range of pressure. Its typical application mainly includes the following aspects:

- Water supply: filtration in water works, transportation and subarea water carriage, pressurization of main duct;
- Industrial pressurization: flow wetting system, cleaning system;
- Transportation of industrial liquid: water supply of boiler, condensed system, cooling and air conditioning system, machine tool support, light acid and alkali transportation;
- Water treatment: distilled water system or separator, swimming pool, etc.;
- Farmland irrigation, medicine and sanitation, etc.

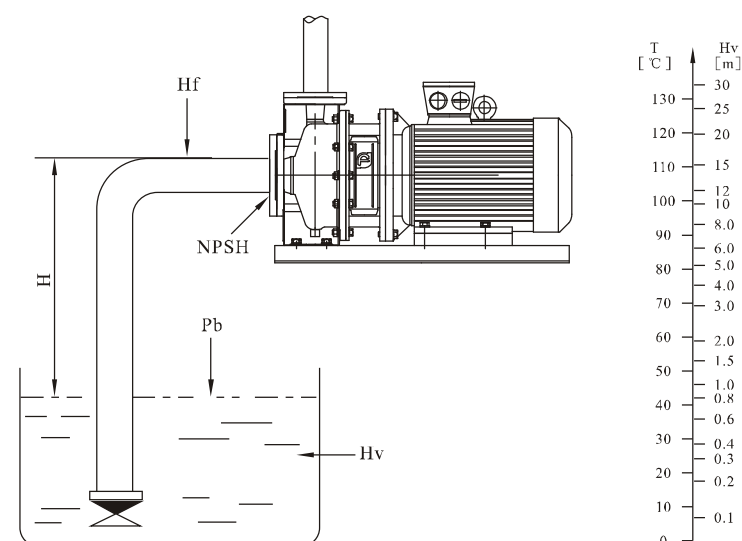
### Curves

Following conditions are suitable for the performance curves shown below:

1. Curve tolerance is in conformity with ISO9906 Annex A;
2. All curves are based on the measured value of motor 3 × 380V, 50Hz: under the constant speed of 2900rpm or 2950rpm;
3. The test medium is clear 20°C water without any solid impurity;
4. Pumps should not work if the flow is beyond the minimum or the maximum flow in the curves;
5. The motor power shall be adjusted if the viscosity or density of medium is different from water.

### Motor

- TEFC motor, 2-pole;
- Protection class: Ip55;
- Insulation class: F;
- Standard voltage: 1 × 220V 3 × 380V



### Minimum inlet pressure NPSH

In case that the pressure in pump is lower than the steam pressure used to convey liquid, the cavitations will occur. To avoid cavitations, a minimum pressure at the inlet side of the pump shall be guaranteed. The maximum suction stroke can be calculated with following formula:

$$H = P_b \times 10.2 - NPSH - H_f - H_v - H_s$$

P<sub>b</sub>-Atmosphere pressure (bar)

In a closed system, P<sub>b</sub> means system pressure (bar)

NPSH-Net positive suction head (m)

It can be read from the point of Max. flow rate shown on NPSH curve.

H<sub>f</sub>-Pipeline loss at the inlet (m)

It is in accordance with pipeline possible Max.Flow.

H<sub>v</sub>-Steam pressure (m)

It depends on liquid temperature and steam pressure value.

H<sub>s</sub>-Safety margin (m)

Minimum 0.5m delivery head.

If the calculated result H is negative, the pump may run under the Max. Suction head H. In case the calculated result H is negative, a delivery head of Min. Inlet pressure is necessary.

Note: Normally, the above calculation will not be done. H is calculated in the following conditions:

1. The liquid temperature is comparatively higher;
2. Liquid flow exceeds rated value;
3. Suction head is comparatively large or inlet pipeline long;
4. System pressure is too low;
5. Bad inlet condition.

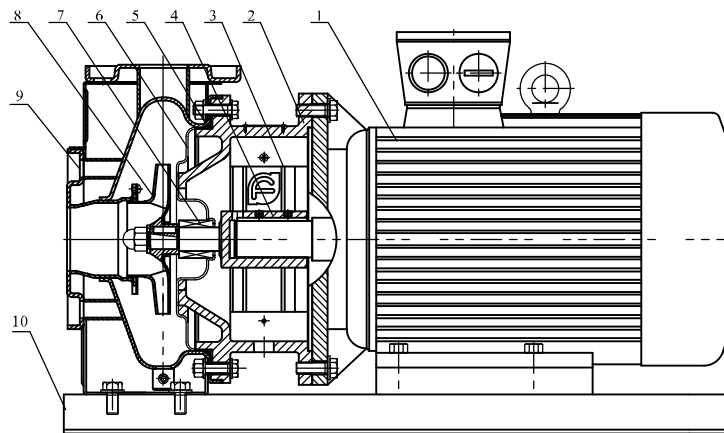
## ZS

### Installation requirements

The shaft connection type of ZS pump is direct connection. The pump is composed of pump, shaft and standard motor.

- The pump shall be installed on the ventilating and anti-freezing place;
- The installation of the pump shall ensure that the pump will not be forced by the tension of the pipeline;
- If the pump is installed outdoor, suitable outer cover must be used to prevent electric elements from water inflow or coagulating dew;
- To facilitate inspection and maintenance, enough space must be left around the machine group;
- Electric wiring device shall guarantee that the pump will not be damaged by lack of phase, unstable voltage, current leakage and overload;
- The pump shall be installed on the base horizontally. Horizontal direction is the inlet for the pump, and vertical direction is the outlet for the pump.
- The flange connectio dimension are in conformity with the related provisions PN 16 in GB/T 17241.6 or ISO7005-2/DIN 2501.

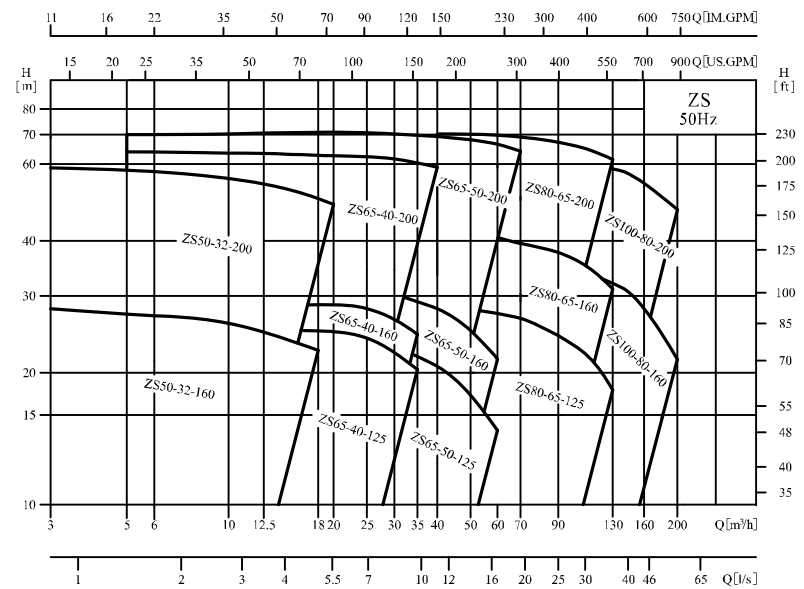
### Section drawing



### Operating condition

- Clean, thin, non-flammable and explosive, not containing the liquid with solid particle and fibre ;
- Liquid temperature:  $-20^{\circ}\text{C} \sim +100^{\circ}\text{C}$ ;
- Ambient temperature: up to  $+40^{\circ}\text{C}$ ;
- Altitude: up to 1000m;
- Max. pressure of the system is 10 bar.

### Scope of performance



### Material

NO.	Parts	Material	AISI/ASTM
1	Motor		
2	Pump head	HT200	ASTM25B
3	Guard plate	06Cr19Ni10	AISI304
4	Shaft	2Cr13/0Cr18Ni9	AISI420/AISI304
5	O ring	NBR	
6	Lining of pump head	06Cr19Ni10	AISI304
7	Mechanical seal	Carbon/Silicon Carbide	
8	Impeller	06Cr19Ni10	AISI304
9	Casing	06Cr19Ni10	AISI304
10	Base plate	Q235	ASTMA570

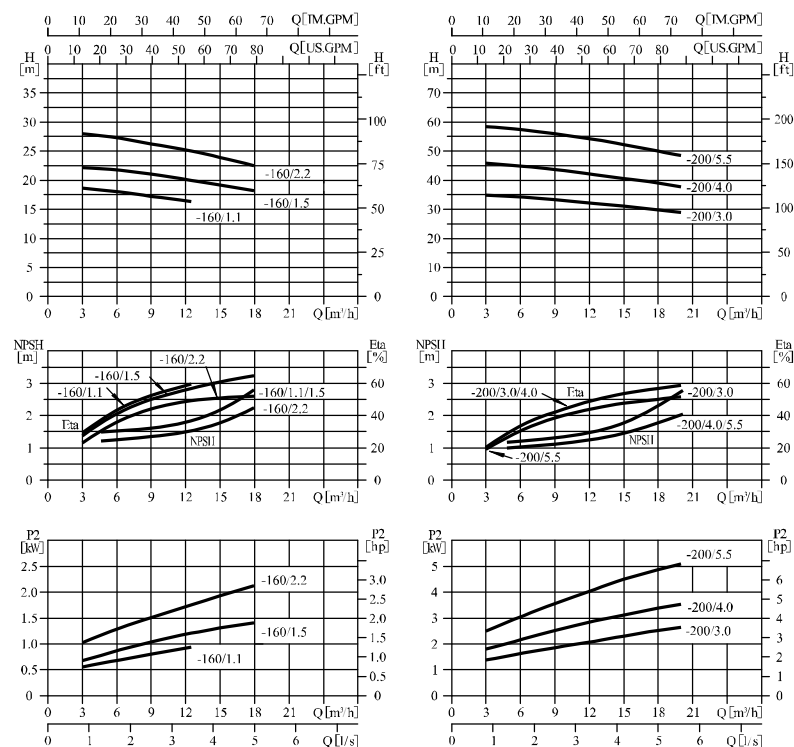


**Product range**

NO.	Model	Q (m³/h)	H (m)	n (r/min)	Standard Voltage (V)		
					1×220V	3×380V	
					P2(kW)	P3(KW)	
1	ZS50-32-160/1.1	6.3	18	2900	1.1	1.1	
2	ZS50-32-160/1.5	12.5	20		1.5	1.5	
3	ZS50-32-160/2.2	12.5	25		2.2	2.2	
4	ZS50-32-200/3.0	12.5	32			3	
5	ZS50-32-200/4.0	12.5	42			4	
6	ZS50-32-200/5.5	12.5	54			5.5	
7	ZS65-40-125/1.5	25	13		1.5	1.5	
8	ZS65-40-125/2.2	25	18		2.2	2.2	
9	ZS65-40-125/3.0	25	24			3	
10	ZS65-40-160/4.0	25	28			4	
11	ZS65-40-200/5.5	25	36			5.5	
12	ZS65-40-200/7.5	25	46			7.5	
13	ZS65-40-200/11.0	25	62	2950		11	
14	ZS65-50-125/3.0	50	13	2900		3	
15	ZS65-50-125/4.0	50	18			4	
16	ZS65-50-160/5.5	50	25			5.5	
17	ZS65-50-200/7.5	50	32			7.5	
18	ZS65-50-200/9.2	50	40			9.2	
19	ZS65-50-200/11.0	50	48		2950		11
20	ZS65-50-200/15.0	50	58			15	
21	ZS65-50-200/18.5	50	68			18.5	
22	ZS80-65-125/5.5	100	13	2900		5.5	
23	ZS80-65-125/7.5	100	18			7.5	
24	ZS80-65-125/9.2	100	23			9.2	
25	ZS80-65-160/11.0	100	27	2950		11	
26	ZS80-65-160/15.0	100	36			15	
27	ZS80-65-200/18.5	100	45			18.5	
28	ZS80-65-200/22.0	100	53			22	
29	ZS80-65-200/30.0	100	66			30	
30	ZS100-80-160/11.0	160	15		2950		11
31	ZS100-80-160/15.0	160	22				15
32	ZS100-80-160/18.5	160	28				18.5
33	ZS100-80-200/22.0	160	33				22
34	ZS100-80-200/30.0	160	45				30
35	ZS100-80-200/37.0	160	54				37

**ZS50-32-\*\*\*:**

**ISO9906 Annex A**

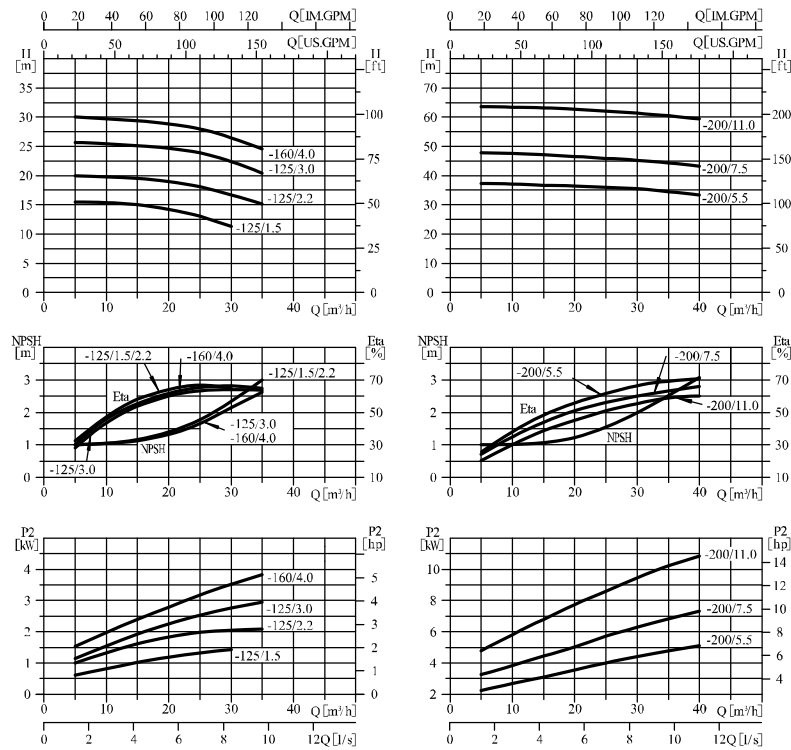


**Performance table**

Model	Driving motor		Q (m³/h)	H (m)							
	(kW)	(hp)		3	6.3	9	12.5	15	18	20	
ZS50-32-160/1.1	1.1	1.5	H (m)	18.7	18	17.2	16.4				
ZS50-32-160/1.5	1.5	2		22.5	22	21	20	19	18		
ZS50-32-160/2.2	2.2	3		28	27	26.3	25	24	22.5		
ZS50-32-200/3.0	3	4		34.9	34.1	33.3	32	31	29.8	28.9	
ZS50-32-200/4.0	4	5.5		45.7	44.8	43.7	42	40.7	39	37.7	
ZS50-32-200/5.5	5.5	7.5		58.5	57.2	56	54	52.5	50	48.5	

ZS65-40-\*\*\*:

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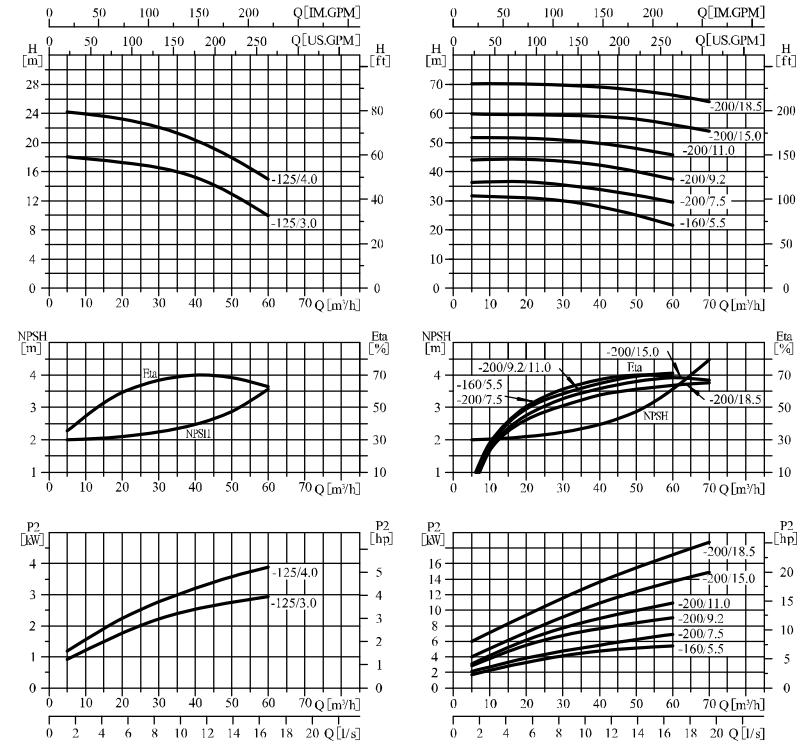


Performance table

Model	Driving motor		Q (m³/h)	H (m)							
	(kW)	(hp)		5	10	15	20	25	30	35	40
ZS65-40-125/1.5	1.5	2	15.5	15.4	15	14.4	13	11.3			
ZS65-40-125/2.2	2.2	3	20	19.7	19.5	19	18	16.7	15.2		
ZS65-40-125/3.0	3	4	25.7	25.3	25.1	24.8	24	22.3	20.3		
ZS65-40-160/4.0	4	5.5	30	29.7	29.3	28.9	28	26.5	24.5		
ZS65-40-200/5.5	5.5	7.5	37.4	37.2	36.7	36.4	36	35.5	34.6	33.3	
ZS65-40-200/7.5	7.5	10	48	47.5	47	46.6	46	45.2	44.5	43.3	
ZS65-40-200/11.0	11	15	64	63.5	63	62.5	62	61.5	60.5	59	

ZS65-50-\*\*\*:

ISO9906 Annex A

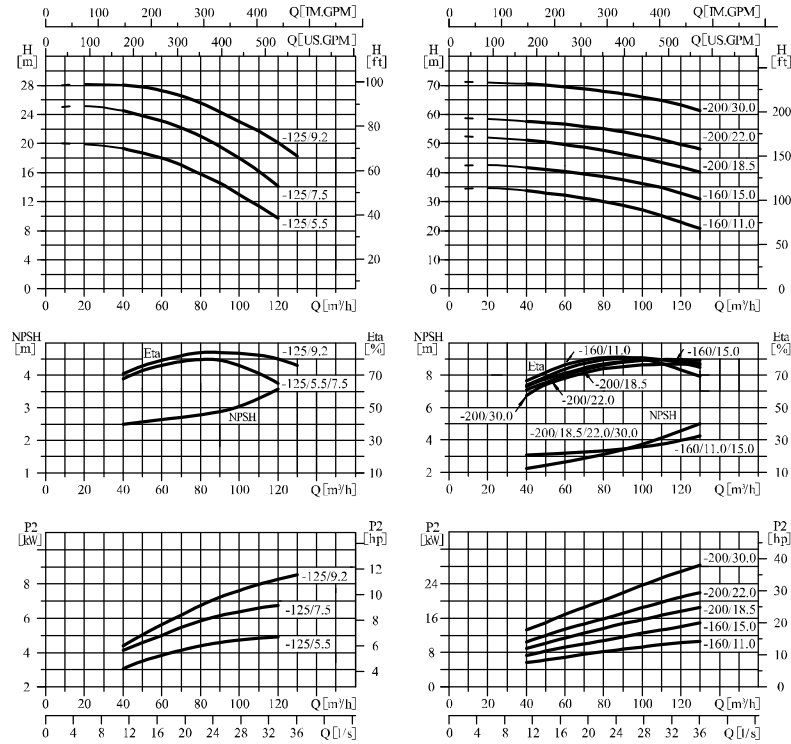


Performance table

Model	Driving motor		Q (m³/h)	H (m)							
	(kW)	(hp)		5	10	20	30	40	50	60	70
ZS65-50-125/3.0	3	4	18	17.8	17.2	16.4	15.1	13	10		
ZS65-50-125/4.0	4	5.5	24.2	24.2	23.6	22.6	20.7	18	14.8		
ZS65-50-160/5.5	5.5	7.5	31.6	31.5	31	30	28	25	21.5		
ZS65-50-200/7.5	7.5	10	36.3	36.6	36.4	35.6	34.1	32	29.6		
ZS65-50-200/9.2	9.2	12.5	43.5	43.5	43.5	43	42	40	37.5		
ZS65-50-200/11.0	11	15	51.5	51.5	51	50	49.3	48	45.6		
ZS65-50-200/15.0	15	20	59.7	59.7	59.6	59.5	59	58	56.2	53	
ZS65-50-200/18.5	18.5	25	70.2	70.2	70.1	70	69.1	68	66.4	64	

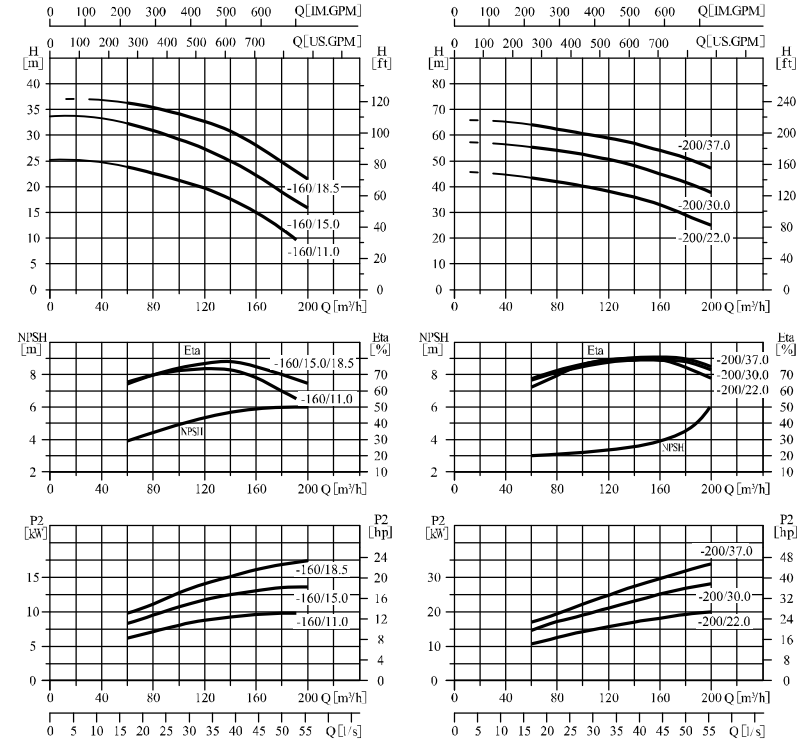
ZS80-65-\*\*\*:

ISO9906 Annex A



ZS100-80-\*\*\*:

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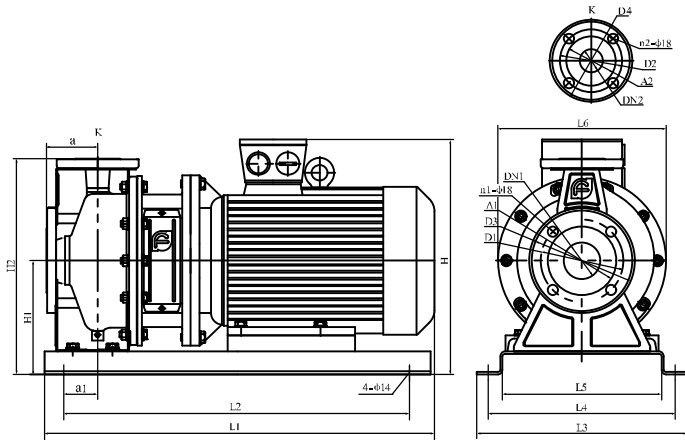
Performance table

Model	Driving motor		Q (m³/h)	H (m)												
	(kW)	(hp)		40	50	60	70	80	90	100	110	120	130			
ZS80-65-125/5.5	5.5	7.5	H (m)	19.3	18.7	18	17	15.8	14.8	13	11.4	9.7				
ZS80-65-125/7.5	7.5	10		24.5	23.8	23.1	22.2	21	19.6	18	16.2	14.1				
ZS80-65-125/9.2	9.2	12.5		28.1	27.8	27.3	26.6	25.7	24.3	23	21.8	20.1	18.3			
ZS80-65-160/11.0	11	15		33.9	33	32.2	31.3	29.9	28.8	27	25.1	22.9	20.7			
ZS80-65-160/15.0	15	20		41.8	41.1	40.4	39.5	38.6	37.6	36	34.8	33	31			
ZS80-65-200/18.5	18.5	25		51	50.5	49.6	48.7	47.6	46.3	45	43.5	42.2	40.2			
ZS80-65-200/22.0	22	30		57.7	57.2	56.8	55.9	55.1	54	53	51.6	49.7	48.2			
ZS80-65-200/30.0	30	40		70.2	70.2	69.6	68.9	68.2	67.1	66	64.6	63.3	61.4			

Performance table

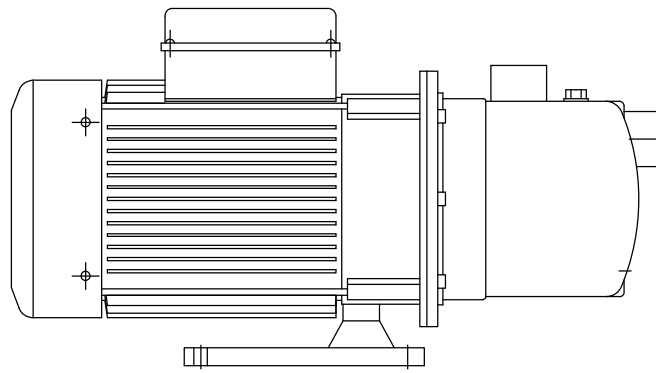
Model	Driving motor		Q (m³/h)	H (m)											
	(kW)	(hp)		60	80	100	120	140	160	180	192	200			
ZS100-80-160/11.0	11	15	H (m)	23.8	22.7	21.1	19.7	17.6	15	11.8	9.7				
ZS100-80-160/15.0	15	20		32.3	30.8	29.1	27.2	25.1	22	18.8			16.1		
ZS100-80-160/18.5	18.5	25		36.2	35.2	33.8	32.7	31	28	24.8			21.5		
ZS100-80-200/22.0	22	30		43.5	42	39.7	38.3	35.9	33	29			24.9		
ZS100-80-200/30.0	30	40		55.4	54.1	52.6	50.5	48.2	45	41.9			37.6		
ZS100-80-200/37.0	37	50		64.1	62.5	61	59	57.4	54	51.2			47.1		

Installation Sketch



Size and weight

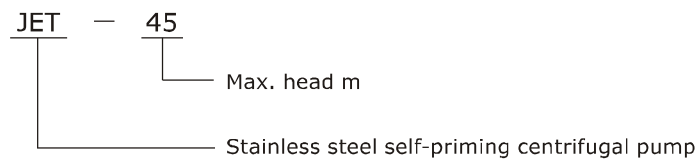
Model	Size(mm)																Weight (kg)					
	DN1	DN2	A1	A2	D1	D2	D3	D4	n1	n2	a	a1	H	H1	H2	L1		L2	L3	L4	L5	L6
ZS50-32-160/1.1	50	32	98	75	125	100	160	139	4	4	80	32	290	152	296	470	370	280	240	192	210	31
ZS50-32-160/1.5	50	32	98	75	125	100	160	139	4	4	80	46	307	152	296	500	430	280	240	192	210	37
ZS50-32-160/2.2	50	32	98	75	125	100	160	139	4	4	80	46	307	152	296	500	430	280	240	192	210	39
ZS50-32-200/3.0	50	32	98	75	125	100	160	139	4	4	84	42	370	200	386	550	460	330	290	242	300	53
ZS50-32-200/4.0	50	32	98	75	125	100	160	139	4	4	84	47	393	200	386	560	480	330	290	242	300	58
ZS50-32-200/5.5	50	32	98	75	125	100	160	139	4	4	84	50	413	200	386	660	580	370	330	280	300	77
ZS65-40-125/1.5	65	40	118	84	145	110	185	145	4	4	80	45	307	152	294	502	430	280	240	192	210	33
ZS65-40-125/2.2	65	40	118	84	145	110	185	145	4	4	80	45	307	152	294	502	430	280	240	192	210	35
ZS65-40-125/3.0	65	40	118	84	145	110	185	145	4	4	80	45	322	152	294	532	460	300	260	212	250	47
ZS65-40-160/4.0	65	40	118	84	145	110	185	145	4	4	80	45	345	152	294	557	480	330	290	242	250	52
ZS65-40-200/5.5	65	40	118	84	145	110	185	145	4	4	100	50	413	200	380	680	580	370	330	280	300	78
ZS65-40-200/7.5	65	40	118	84	145	110	185	145	4	4	100	50	413	200	380	680	580	370	330	280	300	82
ZS65-40-200/11.0	65	40	118	84	145	110	185	145	4	4	100	50	456	200	380	790	690	420	380	330	350	161
ZS65-50-125/3.0	65	50	118	98	145	125	185	160	4	4	86	45	342	172	338	548	468	330	290	242	250	49
ZS65-50-125/4.0	65	50	118	98	145	125	185	160	4	4	86	45	365	172	338	570	490	330	290	242	250	54
ZS65-50-160/5.5	65	50	118	98	145	125	185	160	4	4	100	50	413	200	380	680	580	370	330	280	300	78
ZS65-50-200/7.5	65	50	118	98	145	125	185	160	4	4	100	50	413	200	380	680	580	370	330	280	300	82
ZS65-50-200/9.2	65	50	118	98	145	125	185	160	4	4	100	50	413	200	380	680	580	370	330	280	300	85
ZS65-50-200/11.0	65	50	118	98	145	125	185	160	4	4	100	50	456	200	380	790	690	420	380	330	350	161
ZS65-50-200/15.0	65	50	118	98	145	125	185	160	4	4	100	50	456	200	380	790	690	420	380	330	350	171
ZS65-50-200/18.5	65	50	118	98	145	125	185	160	4	4	100	50	456	200	380	830	730	420	380	330	350	188
ZS80-65-125/5.5	80	65	130	118	160	145	200	185	8	4	100	50	413	200	380	690	590	370	330	280	300	79
ZS80-65-125/7.5	80	65	130	118	160	145	200	185	8	4	100	50	413	200	380	690	590	370	330	280	300	83
ZS80-65-125/9.2	80	65	130	118	160	145	200	185	8	4	100	50	413	200	380	690	590	370	330	280	300	87
ZS80-65-160/11.0	80	65	130	118	160	145	200	185	8	4	100	50	456	200	400	790	690	420	380	330	350	163
ZS80-65-160/15.0	80	65	130	118	160	145	200	185	8	4	100	50	456	200	400	790	690	420	380	330	350	173
ZS80-65-200/18.5	80	65	130	118	160	145	200	185	8	4	100	50	476	220	445	830	730	420	380	330	350	190
ZS80-65-200/22.0	80	65	130	118	160	145	200	185	8	4	100	50	500	220	445	880	780	455	415	365	350	220
ZS80-65-200/30.0	80	65	130	118	160	145	200	185	8	4	100	50	550	240	465	950	850	495	455	405	400	292
ZS100-80-160/11.0	100	80	150	130	180	160	220	200	8	8	125	75	476	220	445	830	730	420	380	330	350	163
ZS100-80-160/15.0	100	80	150	130	180	160	220	200	8	8	125	75	476	220	445	830	730	420	380	330	350	173
ZS100-80-160/18.5	100	80	150	130	180	160	220	200	8	8	125	75	476	220	445	870	770	420	380	330	350	185
ZS100-80-200/22.0	100	80	150	130	180	160	220	200	8	8	125	75	500	220	470	915	810	455	415	365	350	223
ZS100-80-200/30.0	100	80	150	130	180	160	220	200	8	8	125	75	550	240	490	985	880	495	455	405	400	295
ZS100-80-200/37.0	100	80	150	130	180	160	220	200	8	8	125	75	550	240	490	985	880	495	455	405	400	315



JET Stainless steel self-priming centrifugal pump

# JET

## Definition of model



## Applications

Applied to pumping thin, clean, non-flammable and non-explosive liquid containing no solid granules and fibers. Such as:

- Tank filling
- Domestic water supply
- Water transfer
- Boosting

## Features

- Self-priming jet centrifugal pumps provides higher pressure and good suction ability
- Pump body and impeller and so on are made of stainless steel, venturi is made of plastic with high intensity and abrasion proof.
- TEFC motor, built-in thermal overload protector easy and safe to operate.
- Screwed thread suction and discharge, easy and quick to install.
- Simple structure, less parts, easy to maintain and service.

## Technical data

	JET-45	JET-35
Max. suction head	7 m	
Liquid temperature	+45°C	
Max. ambient temperature	+40°C	
Max.pump casing pressure	0.6 MPa	
Inlet size	G1	
Outlet size	G1	

## Material table

Parts	Casing	Impeller	Shaft	Rotating	Stationary	Venturi	O-Ring	Motor house
Materials	SS 304	SS 304	SS 304	C/SiC	Carbon	PP+GF	NBR	Aluminum alloy

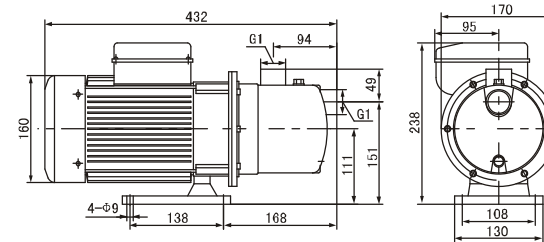
## Electrical data table

Model	Power	Voltage/Current		Frequency	Speed	Protection class
		Single-phase	Three-phase			
JET-45	0.55kW	220V/3.65A	220V/2.22A	50Hz	2900r/min	IP55
JET-35						

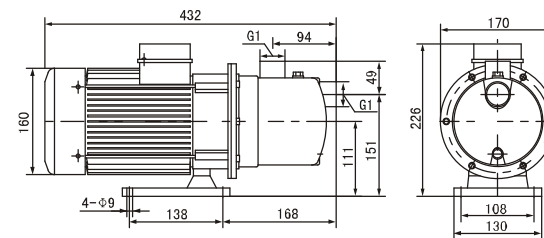
## Performance table

Model	Driving motor (kW)	Q(m <sup>3</sup> /h)	H(m)						
			0	0.6	1.2	1.5	1.8	2.4	3.0
JET-45	0.55	H(m)	43	34	27	24	23	18	15
JET-35	0.55		33	28	23	21	20	18	

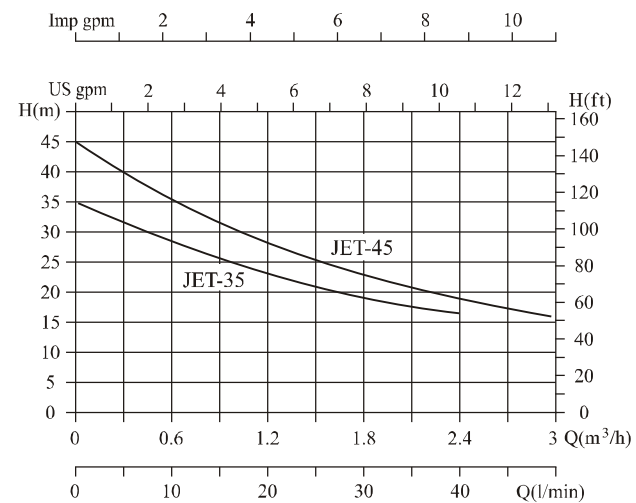
Outline and installation dimension (equipped with single-phase motor)

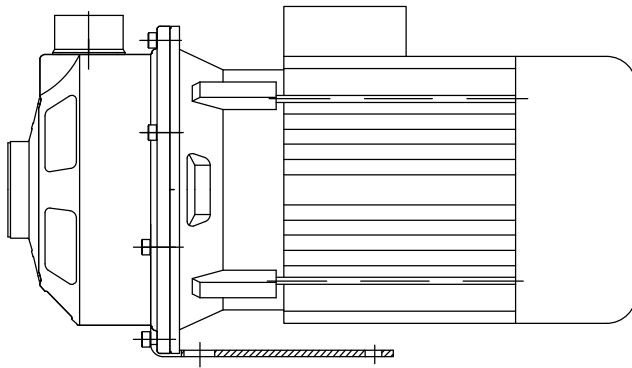


Outline and installation dimension (equipped with three-phase motor)



## Performance curve

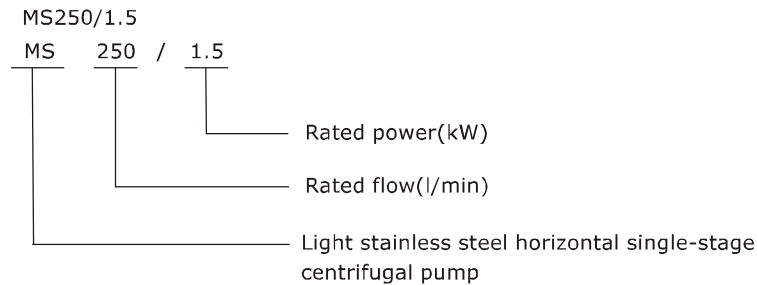




MS Horizontal single stage centrifugal pump

# MS

## Definition of model



## Structure features

- MS series of pump is single-stage centrifugal pump and features axial suction and radial discharge;
- Compact structure, the pump is directly connected with the motor, coaxial installation;
- Convenient installation, screw thread water inlet and outlet;
- Light weight, thin plate pressing structure for main parts and components;
- A little corrosion resistance, material of wet parts is AISI 304 or AISI 316 stainless steel.

## Application

- Pressurization and pumping of industrial and civilian clean water or other liquids;
- Water treatment;
- Water circulating system;
- Agricultural irrigation;
- Other fields.

## Pumping liquids

- Thin, clean, non-flammable and explosive, not containing the liquid with solid particle and fiber;
- Able to transmit light corrosive medium(Relate to the content of chloride ion in the medium, thickness of acid or alkali, whether generate corrosion on the rubber and mechanical seal materials);
- The density of transmitted medium is less than that of clean water, viscosity is close to water. Other wise the motor of large power is required.

## Operating condition

- Liquid temperature: -10℃ ~ +85℃
- Ambient temperature: up to +40℃
- Altitude: up to 1000m
- Max. Pressure of the system is 8 bar.

## Motor

- TEFC motor, 2-pole
- Protection class: IP 55
- Insulation class: F
- Standard voltage: 1 × 220V  
3 × 380V/3 × 220V

## Installation requirements

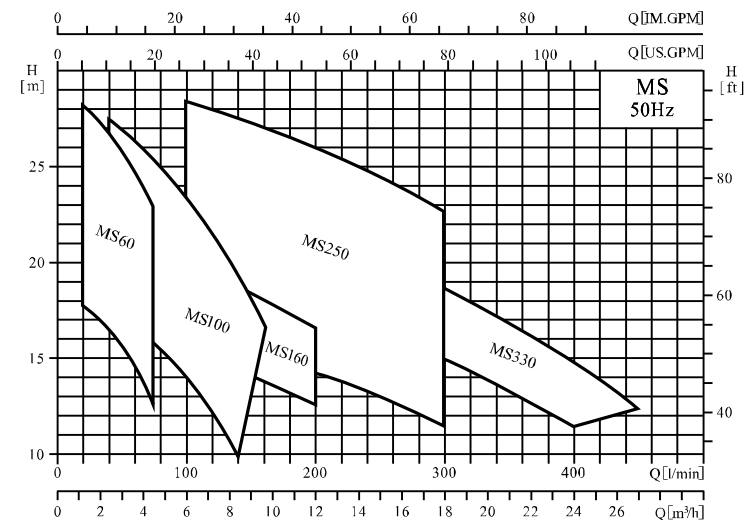
- The pump shall be fastened on the stable horizontal base;
- The installation of the pump shall ensure that the pump will not be influenced by the tension of the pipeline;
- The pump shall be installed on the ventilation and anti-freezing place to ensure normal operation of the motor;
- Electric wiring device shall guarantee that the pump will not be damaged by lack of phase, unstable voltage, current leakage and overload.

## Curves

Include performance curve in the technical data:

- All curves are based on the measured values of 50Hz: constant motor speed 2850r/min.
- Measurement is done with 20℃ air-free water, kinematic viscosity of 1mm<sup>2</sup>/sec;
- Curve tolerance in conformity with ISO9906 Annex A;
- The operation of pump shall refer to the performance region to prevent overload of motor due to too large flow rate.

## Scope of performance

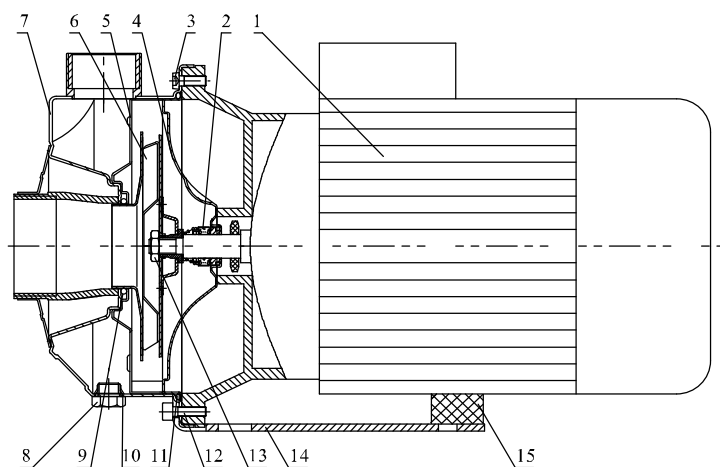


## Performance table

Model	Driving motor		Q (l/min)	Q (m³/h)																
	(kW)	(hp)		1.2	2.4	3.6	4.8	6.0	7.2	8.4	9.6	12	15	18	20	21	24	27		
MS60/0.37	0.37	0.5		17.7	16.4	14.6	11.4													
MS60/0.55	0.55	0.75		22.7	21.3	19.5	16.2													
MS60/0.75	0.75	1		28.2	26.8	25	22													
MS100/0.55	0.55	0.75		17.8	16.7	15.4	14	12.2	9.9											
MS100/1.1	1.1	1.5		27.4	26.3	25	23.4	21.5	19.5	16.7										
MS160/0.75	0.75	1			15.5	15.3	15	14.8	14.3	13.8	12.5									
MS160/1.1	1.1	1.5			19.7	19.5	19.3	19.1	18.7	18.2	16.5									
MS250/1.1	1.1	1.5					15.8	15.6	15.4	15	14.3	13	11.5							
MS250/1.5	1.5	2					23.2	23	22.7	22.2	21.4	19.8	17.7							
MS250/2.2	2.2	3					28.2	27.8	27.5	27	26.2	24.6	22.6							
MS330/1.5	1.5	2						18.8	18.7	18.5	17.8	16.7	15	14	13.5	11.6				
MS330/2.2	2.2	3						22.5	22.2	22	21.5	20.3	18.7	17.5	16.8	14.8	12.3			



## Section drawing

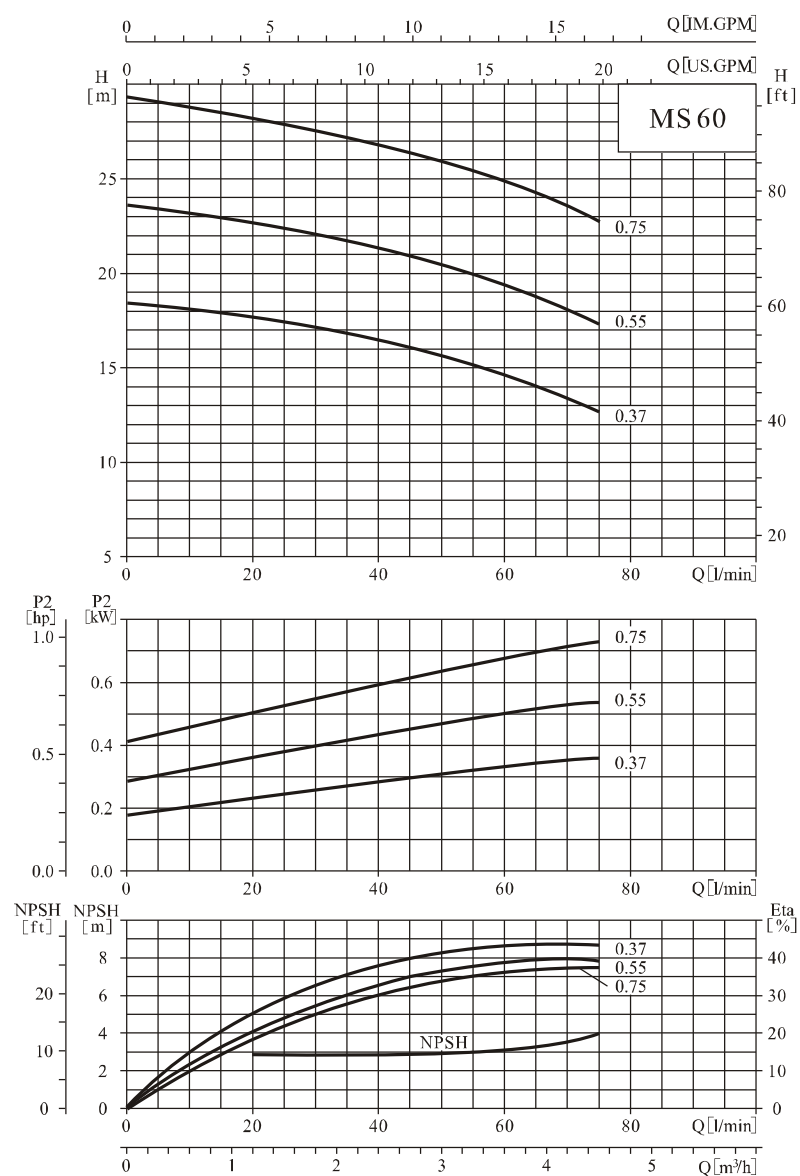


## Material

NO.	Parts	Material	AISI/ASTM
1	Motor		
2	Mechanical seal	Carbon/Silicon Carbide	
3	M6x15/Screw	06Cr19Ni10/SS304	AISI304
4	Seal base	06Cr19Ni10/SS304	AISI304
5	Diffuser	06Cr19Ni10/SS304	AISI304
6	Impeller	06Cr19Ni10/SS304	AISI304
7	Pump body	06Cr19Ni10/SS304	AISI304
8	Vent	06Cr19Ni10/SS304	AISI304
9	O-Ring	NBR	
10	O-Ring	NBR	
11	O-Ring	NBR	
12	M6X20/Screw	06Cr19Ni10/SS304	AISI304
13	Nut M10	06Cr19Ni10/SS304	AISI304
14	Base	Steel	A570
15	Support foot	NBR	

## Performance curve

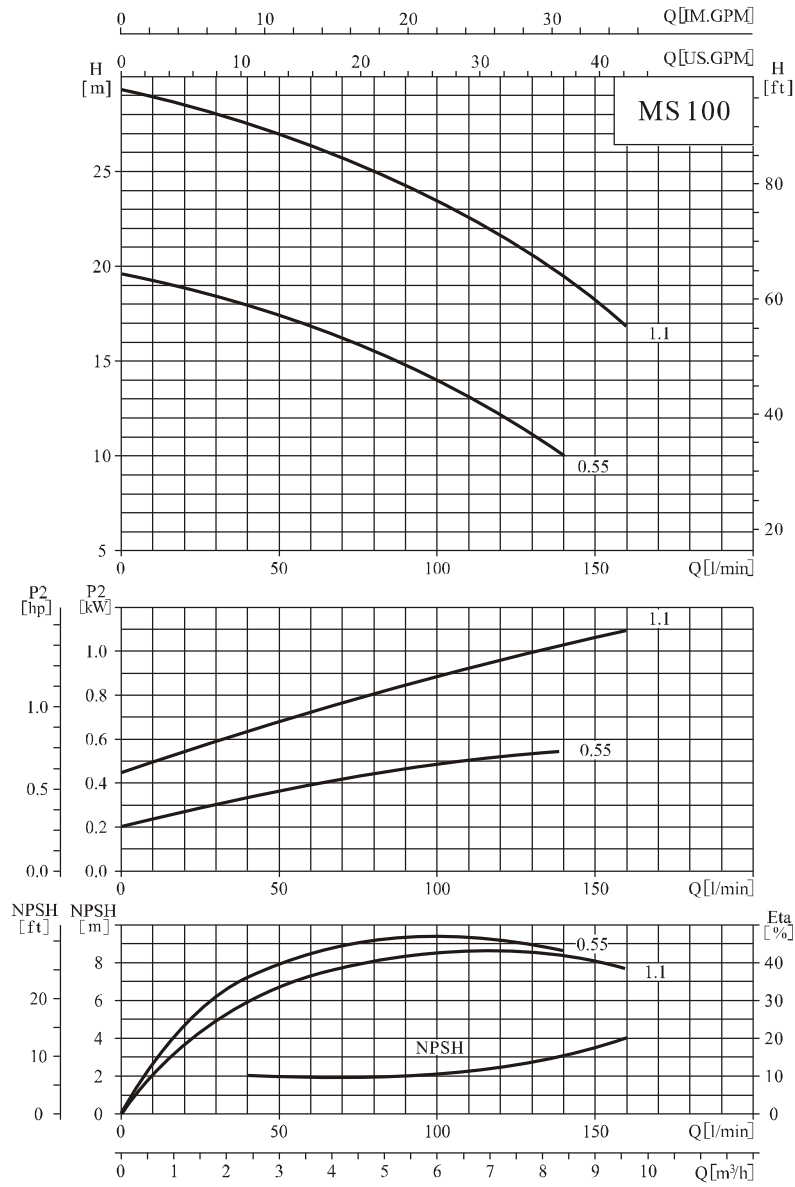
## ISO9906 Annex A



# MS

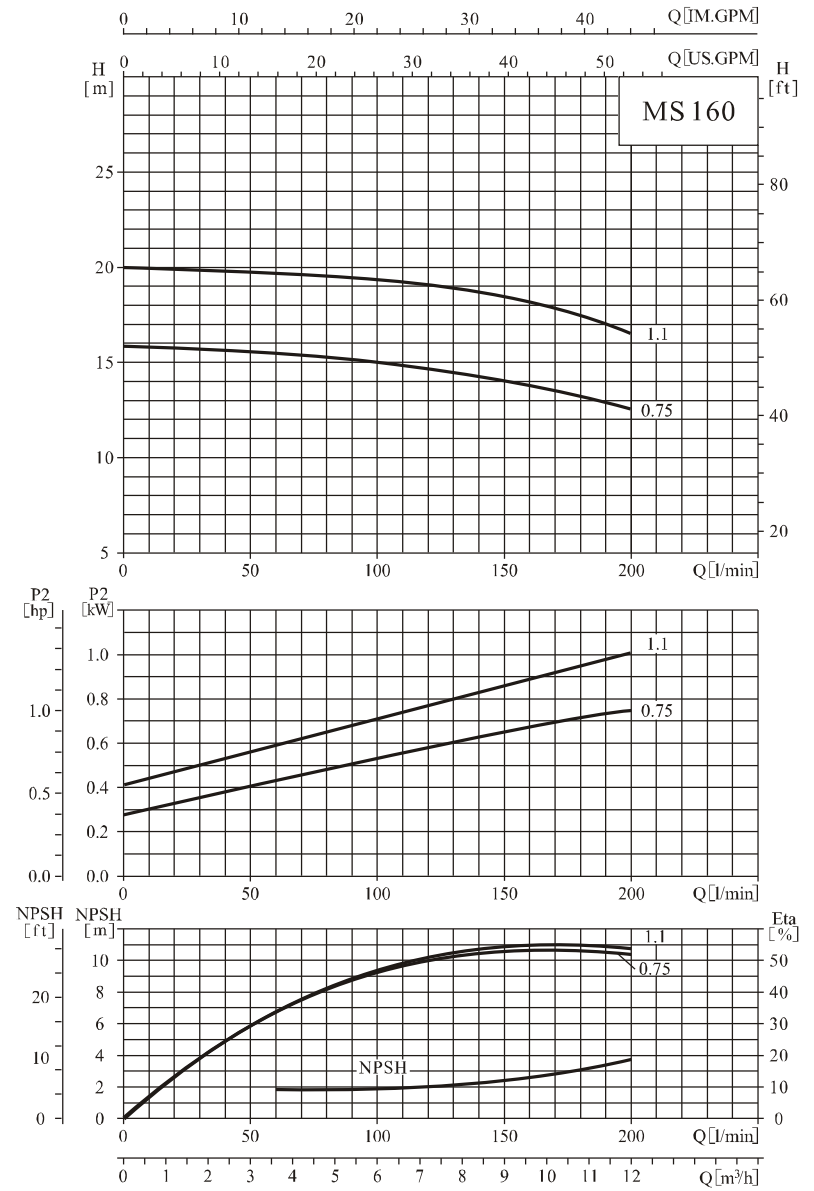
## Performance curve

### ISO9906 Annex A



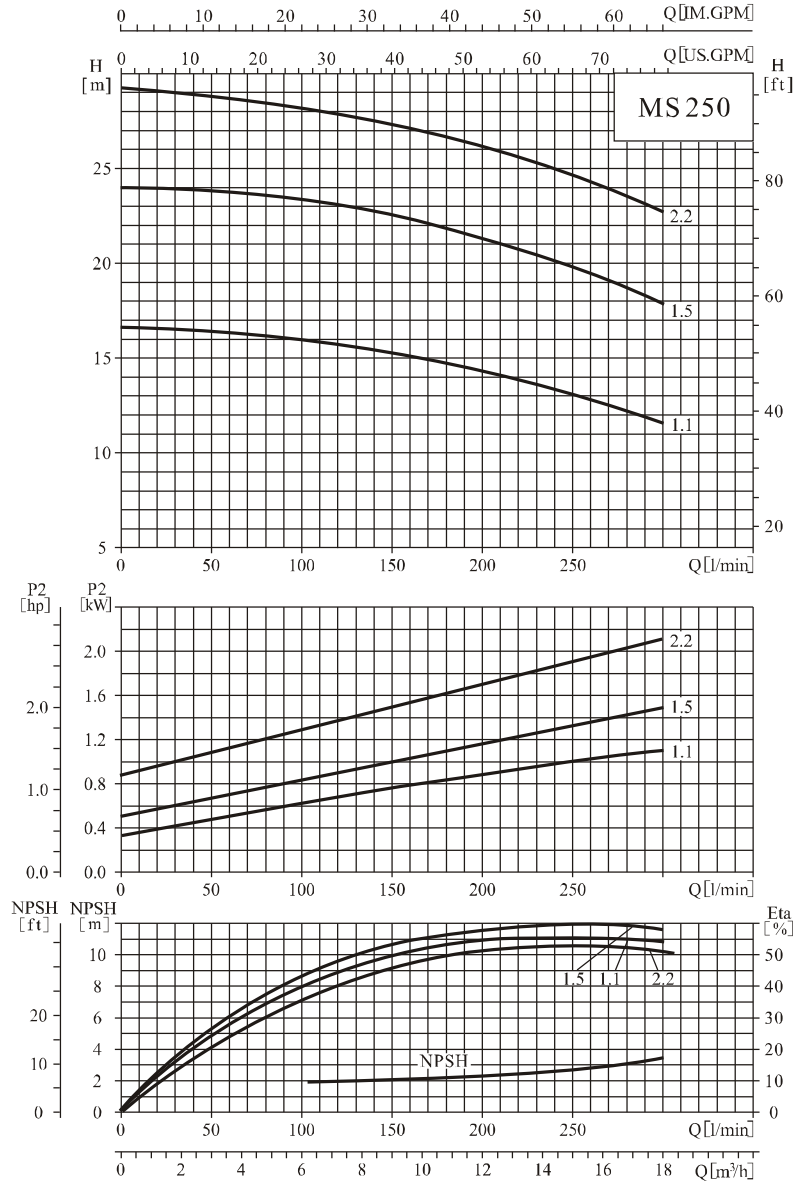
## Performance curve

### ISO9906 Annex A



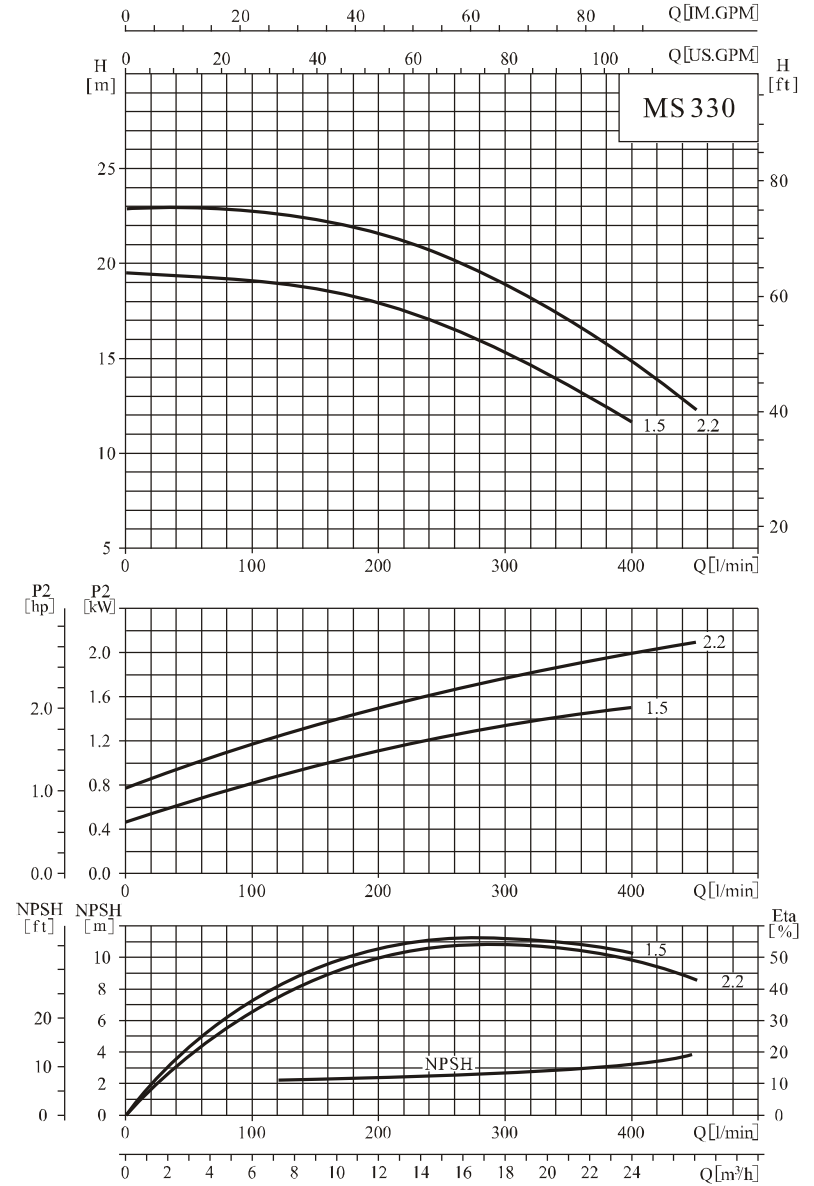
Performance curve

ISO9906 Annex A



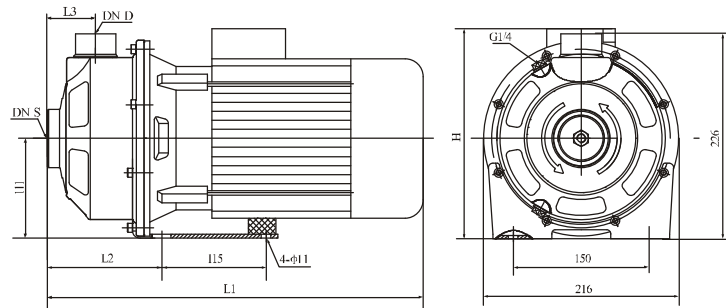
Performance curve

ISO9906 Annex A



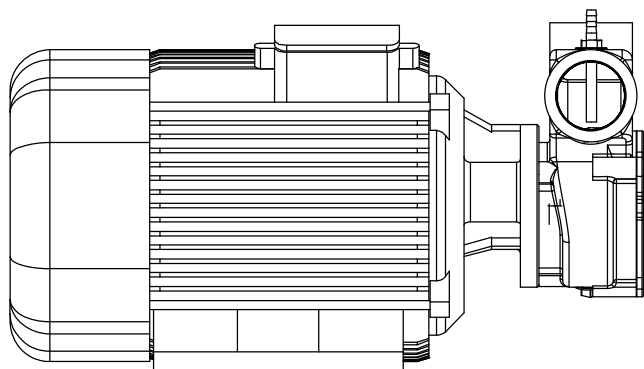
# MS

## Installation sketch



## Size and weight

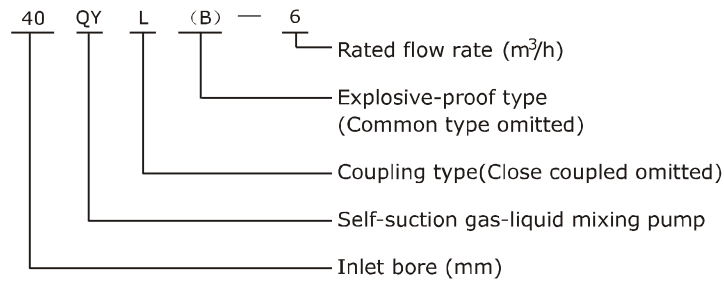
Model	motor		L1	L2	L3	H	DN S	DN D	Weight	
	Phase	(kW)								(hp)
MS60/0.37	3PH 1PH	0.37	0.5	328	113	51	216/230	G1 $\frac{1}{4}$	G1	10
MS60/0.55		0.55	0.75	328	113	51	216/230	G1 $\frac{1}{4}$	G1	12
MS60/0.75		0.75	1	361	113	51	223/245	G1 $\frac{1}{4}$	G1	14
MS100/0.55		0.55	0.75	328	113	51	216/230	G1 $\frac{1}{4}$	G1	12
MS100/1.1		1.1	1.5	361	113	51	223/245	G1 $\frac{1}{4}$	G1	16
MS160/0.75		0.75	1	375	127	54	223/245	G1 $\frac{1}{2}$	G1 $\frac{1}{4}$	14
MS160/1.1		1.1	1.5	375	127	54	223/245	G1 $\frac{1}{2}$	G1 $\frac{1}{4}$	16
MS250/1.1		1.1	1.5	375	127	54	223/245	G1 $\frac{1}{2}$	G1 $\frac{1}{4}$	16
MS250/1.5		1.5	2	415	127	54	232/253	G1 $\frac{1}{2}$	G1 $\frac{1}{4}$	20
MS250/2.2		2.2	3	415	127	54	232/253	G1 $\frac{1}{2}$	G1 $\frac{1}{4}$	23
MS330/1.5		1.5	2	415	127	54	232/253	G2	G1 $\frac{1}{4}$	20
MS330/2.2		2.2	3	415	127	54	232/253	G2	G1 $\frac{1}{4}$	23



QY Stainless steel self-priming gas-liquid pump

# QY

## Definition of model



## Working conditions

- QY and QYL designed for clear and low viscosity liquid, or liquid containing extra-fine foreign matters.
- QYB and QYLB designed for clear and low viscosity liquid, or explosive flammable liquid which containing very little solids.
- Liquid Temperature:-15℃~120℃
- Maximum ambient temperature: +40℃
- Gas-liquid ratio 1:9 (gas suction volume 8~10%)
- Inlet:horizontal, Outlet:Vertical

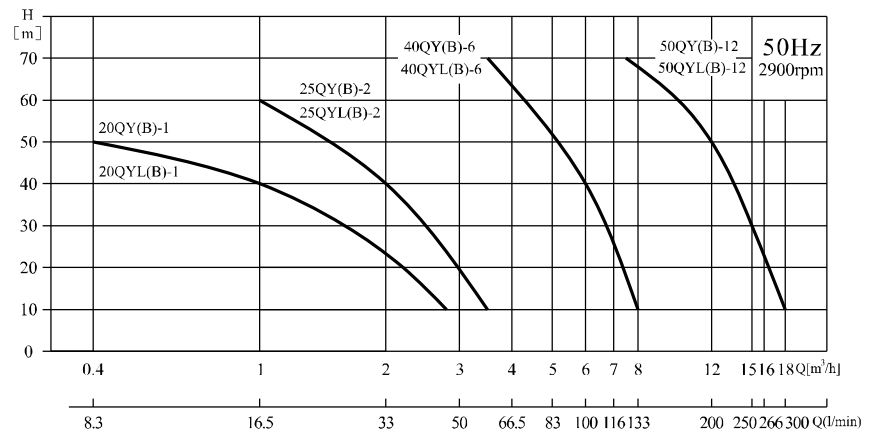
## Application

- Air suspension treating equipment, ozone water preparing equipment, and biological treating equipment.
- Feeding of heating or cooling medium for various temperature adjusting devices.
- Various filters: sucking or high pressure transferring low viscosity liquid from underground tank, such as gasoline and various solvent.
- Misting treatment of clear water, pure water, foods, chemical solution and waste solution.
- Strict applications (continuous running, abrupt variation in hydraulic pressure): such as small scale stream boiler.high building water supply, high pressure water injection to high pressure tank, and suction from vacuum tank.
- Sampling from river or tank, transfer foamable liquid, transfer liquid through long and horizontal pipeline, where air pockets likely occur.

## Features

- It can suck water while sucking gas and pressurize and mix them inside it. Ultra fine air bubble 20~30 μ. It renders a good gas liquid solving effect.
- It has stable performances, high efficiency and low noise level, and its gas liquid solving efficiency is as high as twice that of the traditional mode.
- When it is used in air suspension unit, air compressors, various mixers, high pressure air solving tanks and releasers may be saved and thus the weakness of instable air supply and boiling of large air bubble which likely occur in traditional working model will be eliminated.
- When it is used in ozone water preparing equipment, many mixers and large oxidation towers may be saved and thus the cost for equipment will be greatly reduced. In addition, its gas liquid solving ratio may exceed 95%.
- It is simple in structure and operation, easy in maintenance and durable and needs less components. It has a good self suction capacity and a wide application range.

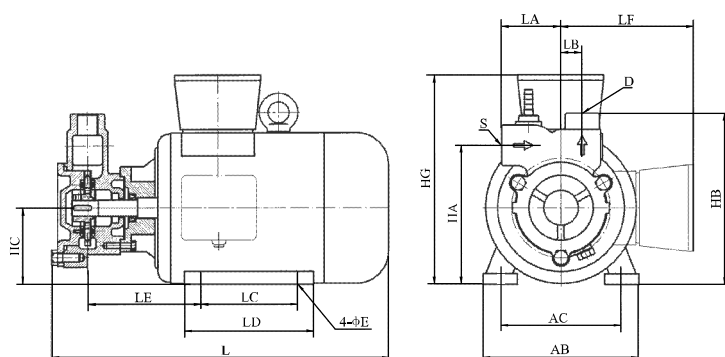
## Performance curve



## Performance table

Model	Driving motor			H (m)	10	20	30	40	50	60	70	
	(kW)	(hp)	PH									
20QY-1	0.55	0.75	1PH 3PH	Q [m <sup>3</sup> /h]	2.8	2.2	1.6	1	0.4			
20QYB-1			3PH									
25QY-2	1.1	1.5	1PH 3PH		3.5	3	2.5	2	1.5	1		
25QYB-2			3PH									
40QY-6	3	4	3PH		8	7.4	6.7	6	5.2	4.3	3.5	
40QYB-6												4
50QY-12	5.5	7.5	3PH		18	16.4	15	13.6	12	10	7.5	
50QYB-12												7.5
20QYL-1	0.55	0.75	1PH 3PH		Q [m <sup>3</sup> /h]	2.8	2.2	1.6	1	0.4		
20QYLB-1			3PH									
25QYL-2	1.1	1.5	1PH 3PH			3.5	3	2.5	2	1.5	1	
25QYLB-2			3PH									
40QYL-6	4	5.5	3PH	8		7.4	6.7	6	5.2	4.3	3.5	
40QYLB-6												4
50QYL-12	7.5	10	3PH	18		16.4	15	13.6	12	10	7.5	
50QYLB-12												7.5

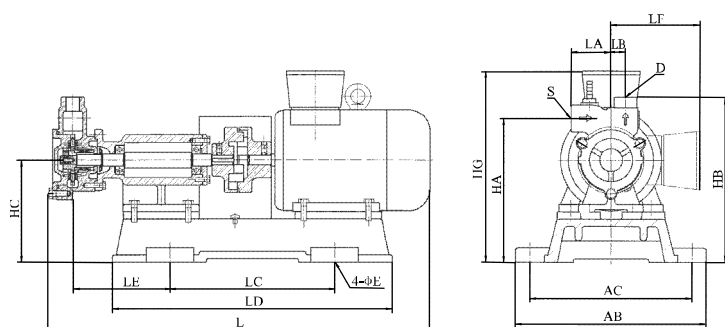
**QY(B) Installation sketch**



**QY(B) Installation dimensions**

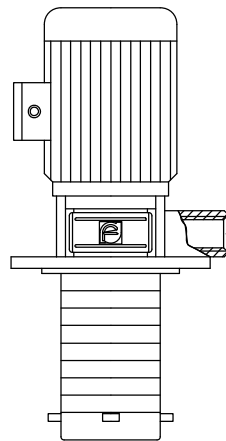
Model	HA	HB	HC	HG	AB	AC	L	LA	LB	LC	LD	LE	LF	S	D	E	Weight (kg)
20QY-1	128	158	71	195	150	110	320	55	20	90	120	100		G $\frac{3}{4}$	G $\frac{1}{2}$	7	10
20QYB-1	128	158	71	260	150	110	320	55	20	90	120	100		G $\frac{3}{4}$	G $\frac{1}{2}$	7	20
25QY-2	150	185	80	214	165	125	327	60	28	100	130	105	145	G1	G $\frac{3}{4}$	10	14
25QYB-2	150	185	80	340	165	125	327	60	28	100	130	105		G1	G $\frac{3}{4}$	10	27
40QY-6	185	230	100	270	200	160	444	70	40	140	180	135	180	G1 $\frac{1}{2}$	G1 $\frac{1}{4}$	12	36
40QYB-6	197	242	112	400	225	190	451	70	40	140	180	142		G1 $\frac{1}{2}$	G1 $\frac{1}{4}$	12	58
50QY-12	232	290	132	345	280	216	570	77	47	140	200	190	210	G2	G1 $\frac{1}{4}$	12	63
50QYB-12	232	290	132	470	280	216	570	77	47	140	200	190		G2	G1 $\frac{1}{4}$	12	91

**QYL(B) Installation sketch**



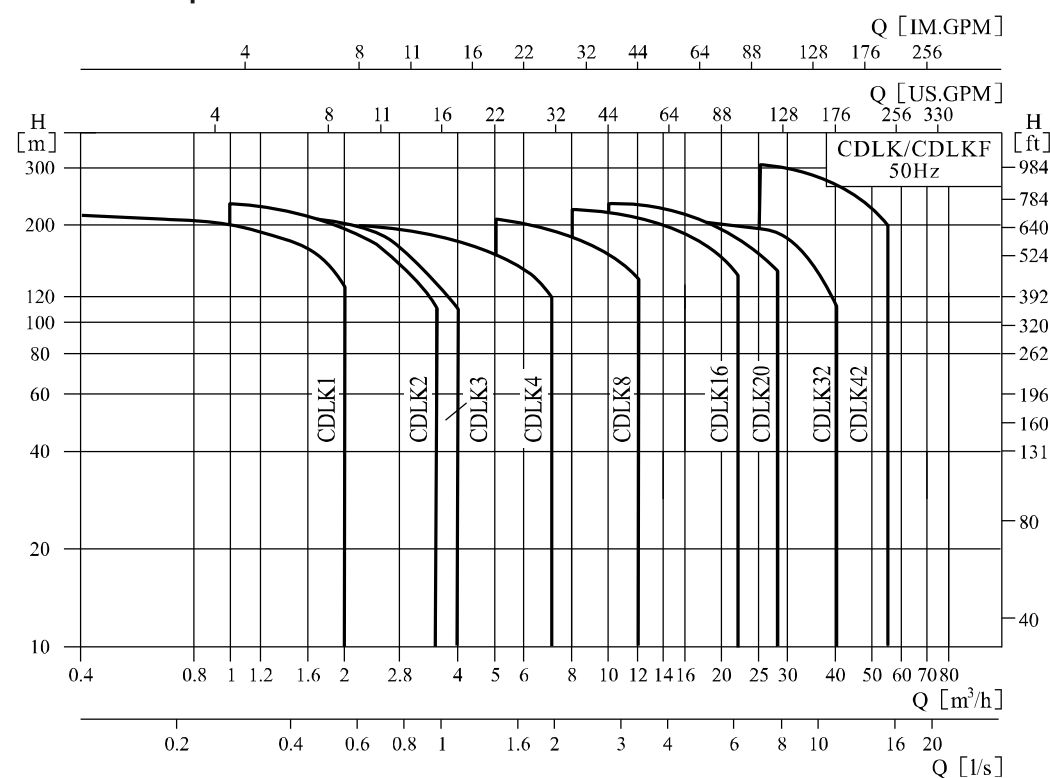
**QYL(B) Installation dimensions**

Model	HA	HB	HC	HG	AB	AC	L	LA	LB	LC	LD	LE	LF	S	D	E	Weight (kg)
20QYL-1	198	228	141	265	265	225	532	55	20	228	388	135		G $\frac{3}{4}$	G $\frac{1}{2}$	φ8.5	26
20QYLB-1	198	228	141	330	265	225	532	55	20	228	388	135		G $\frac{3}{4}$	G $\frac{1}{2}$	φ8.5	36
25QYL-2	220	255	150	284	275	235	610	60	28	293	453	85	145	G1	G $\frac{3}{4}$	φ11	36
25QYLB-2	220	255	150	410	275	235	610	60	28	293	453	85		G1	G $\frac{3}{4}$	φ11	48
40QYL-6	255	300	170	340	345	305	721	70	40	363	523	152	180	G1 $\frac{1}{2}$	G1 $\frac{1}{4}$	φ11	65
40QYLB-6	265	312	182	470	345	305	721	70	40	363	523	152		G1 $\frac{1}{2}$	G1 $\frac{1}{4}$	φ11	88
50QYL-12	302	360	203	415	390	350	816	77	47	450	610	158	210	G2	G1 $\frac{1}{4}$	φ11	99
50QYLB-12	302	360	203	540	390	350	816	77	47	450	610	158		G2	G1 $\frac{1}{4}$	φ11	128



CDLK(F) Immersion type multistage centrifugal pump



**Performance scope**

**Product range**

Description	CDLK1	CDLK2	CDLK3	CDLK4	CDLK8	CDLK16	CDLK20	CDLK32	CDLK42
Rate flow [m³/h]	1	2	3	4	8	16	20	32	42
Rate flow [l/s]	0.28	0.56	0.83	1.1	2.2	4.4	5.6	8.9	11.7
Flow range [m³/h]	0.4~2	1~3.5	1.2~4	1.5~7	5~12	8~22	10~28	16~40	25~55
Flow range [l/s]	0.11~0.56	0.28~0.97	0.33~1.1	0.42~1.9	1.4~3.3	2.2~6.1	2.8~7.8	4.4~11.1	6.9~15.3
Max. pressure [bar]	21	23	22	21	21	22	23	26	30
Motor power [kW]	0.37~2.2	0.37~3	0.37~3	0.37~4	0.75~7.5	2.2~15	2.2~18.5	1.5~30	3~45
Temp. [°C]	-15~+120								
Max. efficiency [%]	44	46	54	57	62	66	69	73	75

**Operation conditions**

- Thin, clean non-explosive liquid without solid grains and fibers; can be used for conveying of water, cooling water solution and cutting lubricating liquid.
- Liquid temperature:
  - Normal temperature type: -15°C~+70°C
  - Warm water type: -15°C~+120°C

**Application**

● CDLK/CDLKF is used for conveying cooling liquid, lubricating liquid and condensation water of machine tools, industrial cleaning equipment or other cases that application of immersed pump is suitable, and is applicable to various temperature, flow and pressure ranges. CDLKF is applicable to low-corrosive liquid.

● Concretely, it is applicable to electric spark, lathe, grinding machine, processing center, cooling devices, industrial cleaning equipment, filtering system etc.

**Performance curve**

1. All curves are based on measured values of 50Hz: constant motor speed 2900r/min.
2. The allowable tolerance of the curve complies with ISO9906 Annex A.
3. For measurement, air-free water with temperature 20°C and kinematical viscosity 1 mm²/s.
4. The pump application is in reference to performance scope of Heavy line to prevent overheating due to too low flow and motor overload due to too high flow rate etc.

**Motor**

- The motor is fully-sealed, air-cooling standard motor 2 poles
- Protection class: IP55
- Insulation class: F
- Standard voltage: 1X220-230/240V  
3X200/346V  
3X220-240/380-415V  
3X220-255/380-440V
- Motors for other voltages can be supplied according to the requirement.
- Single phase motors with 0.37~2.2kW are available.

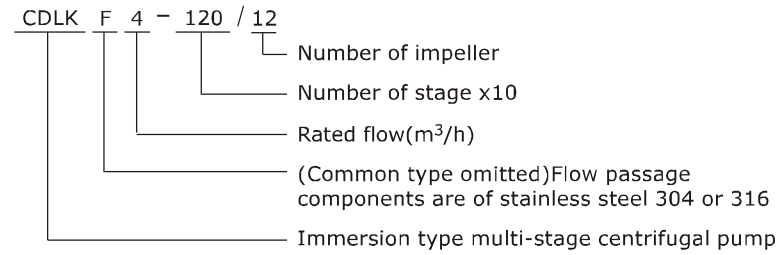
**Pump**

● CDLK/CDLKF is non-self priming multi-stage centrifugal pump installed with standard motor. The motor shaft is directly connected with the pump shaft through coupling. According to the requirement, the pump can be equipped with intelligent protector, which effectively protects pump from dry rotation, phase lack, overload etc. In order to meet the requirement of installation depth of the water tank or vessel, it is possible to install cavity body for changing length of the pump. Length for different number of stages is shown in the dimensions & weight table and the table of products supply scope.

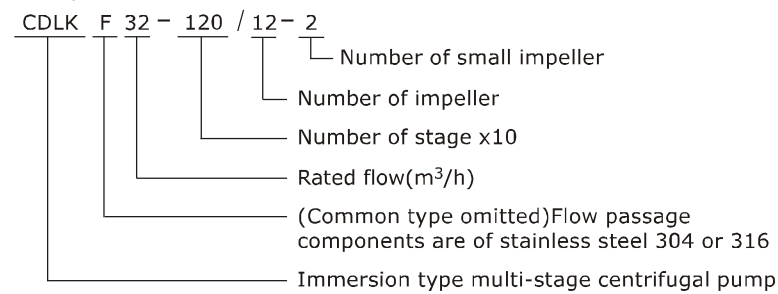
## CDLK,CDLKF

### Definition of model

CDLK,CDLKF1,2,3,4,8,16 and 20

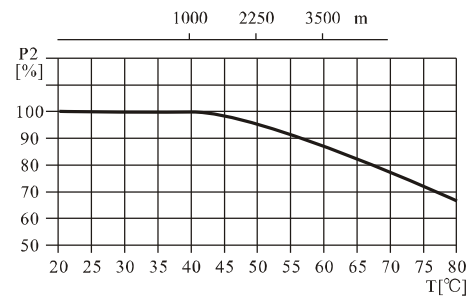


CDLK,CDLKF32 and 42



### Max. Ambient temperature

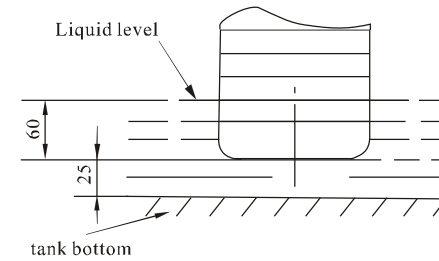
● When the pump operates under ambient temperature higher than 40°C or under altitude higher than 1000m, because of low air density and poor cooling effects, the motor output power P2 will be decreased to certain extent. If the pump is operated under the above-mentioned conditions, it should be equipped with motor of higher power.



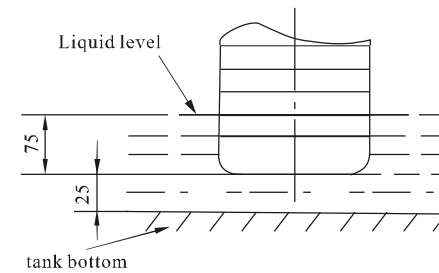
### Installation of pump

The dimensions shown in the below drawing are the minimum installation ones:

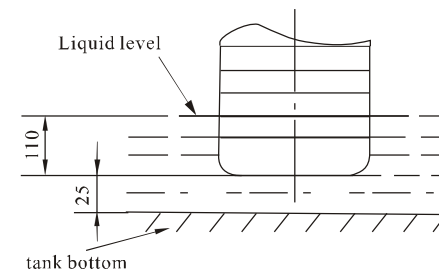
#### CDLK/CDLKF1,2,3,4



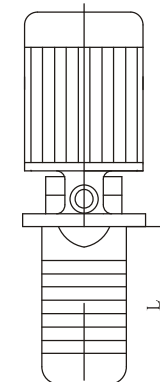
#### CDLK/CDLKF8,16,20



#### CDLK/CDLKF32,42



### Installation sketch





# CDLK,CDLKF

## Scope of available products

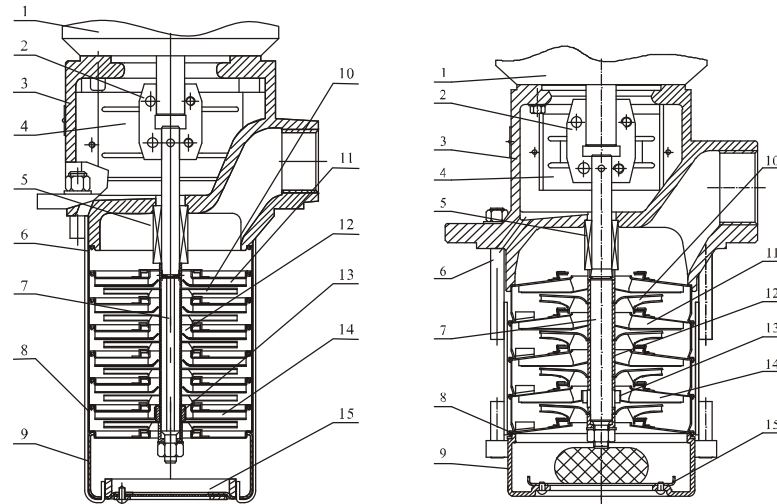
Diagram	Stages	Number of impellers											L (mm)		
		2	3	4	5	6	7	8	10	12	14	17			
CDLK20 50Hz	20	●													180
	30	○	●												225
	40	○	○	●											270
	50	○	○	○	●										315
	60	○	○	○	○	●									360
	70	○	○	○	○	○	●								405
	80	○	○	○	○	○	○	●							450
	100	○	○	○	○	○	○	○	●						540
	120	○	○	○	○	○	○	○	○	●					630
	140	○	○	○	○	○	○	○	○	○	●				720
170	○	○	○	○	○	○	○	○	○	○	●			855	
Motor ( kW )		2.2	4.0	5.5	7.5	11	15	18.5							

Diagram	Stages	Number of impellers														L (mm)
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	
CDLK32 50Hz	10	●														186
	20	○	●													256
	30	○	○	●												326
	40	○	○	○	●											396
	50	○	○	○	○	●										466
	60	○	○	○	○	○	●									536
	70	○	○	○	○	○	○	●								606
	80	○	○	○	○	○	○	○	●							676
	90	○	○	○	○	○	○	○	○	●						746
	100	○	○	○	○	○	○	○	○	○	●					816
	110	○	○	○	○	○	○	○	○	○	○	●				886
	120	○	○	○	○	○	○	○	○	○	○	○	●			956
	130	○	○	○	○	○	○	○	○	○	○	○	○	●		1026
	140	○	○	○	○	○	○	○	○	○	○	○	○	○	●	1096

Diagram	Stages	Number of impellers													L (mm)	
		1	2	3	4	5	6	7	8	9	10	11	12	13		
CDLK42 50Hz	10	●														198
	20	○	●													278
	30	○	○	●												358
	40	○	○	○	●											438
	50	○	○	○	○	●										518
	60	○	○	○	○	○	●									598
	70	○	○	○	○	○	○	●								678
	80	○	○	○	○	○	○	○	●							758
	90	○	○	○	○	○	○	○	○	●						838
	100	○	○	○	○	○	○	○	○	○	●					918
	110	○	○	○	○	○	○	○	○	○	○	●				998
	120	○	○	○	○	○	○	○	○	○	○	○	●			1078
	130	○	○	○	○	○	○	○	○	○	○	○	○	●		1158

● Basic Type    ○ Available on request

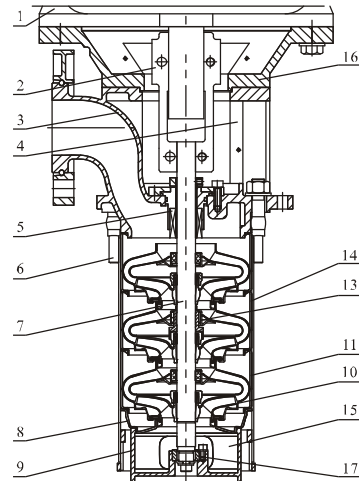
**Sectional drawing CDLK/CDLKF1,2,3,4,8,12,16,20**



**Material CDLK/CDLKF1,2,3,4,8,12,16,20**

NO.	Name	Material	AISI/ASTM
1	Motor		
2	Coupling	Carbon steel	
4	Coupling guard	Stainless steel	AISI304
5	Mechanical seal		
6	Straps	Stainless steel	AISI304
7	Shaft	Stainless steel	AISI316
8	Inducer	Stainless steel	AISI304
9	Suction head	Stainless steel	AISI304
10	Impeller	Stainless steel	AISI304
11	Diffuser	Stainless steel	AISI304
12	Impeller sleeve	Stainless steel	AISI304
13	Bearing	Tungsten carbide	
14	Support diffuser	Stainless steel	AISI304
15	strainer	Stainless steel	AISI304
CDLK			
3	Pump head	Cast iron	ASTM25B
CDLKF			
3	Pump head	Stainless steel	AISI304

**Sectional drawing CDLK/CDLKF32,42**

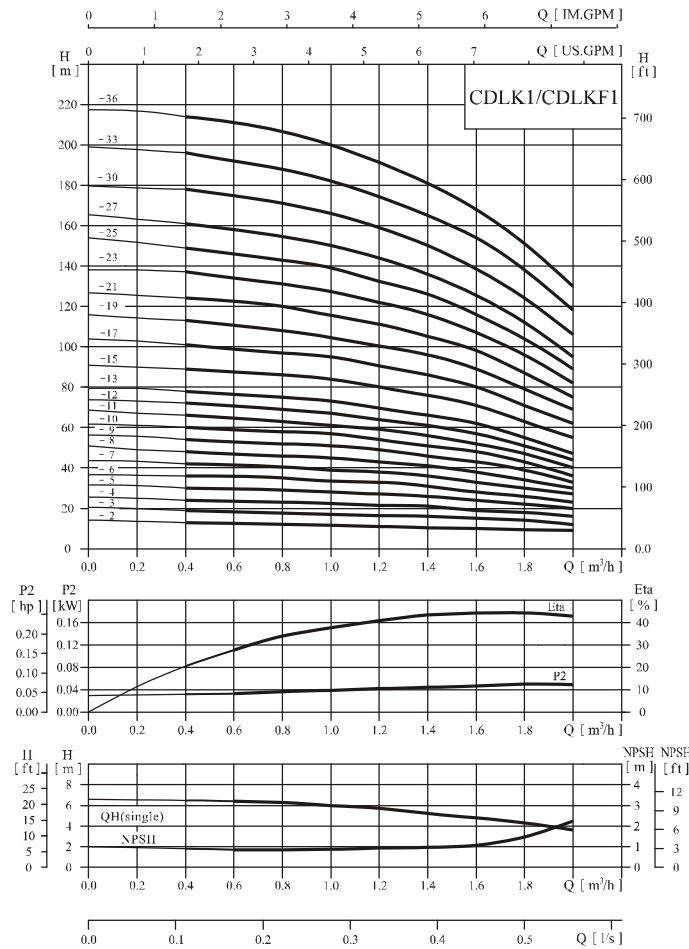


**Material CDLK/CDLKF32,42**

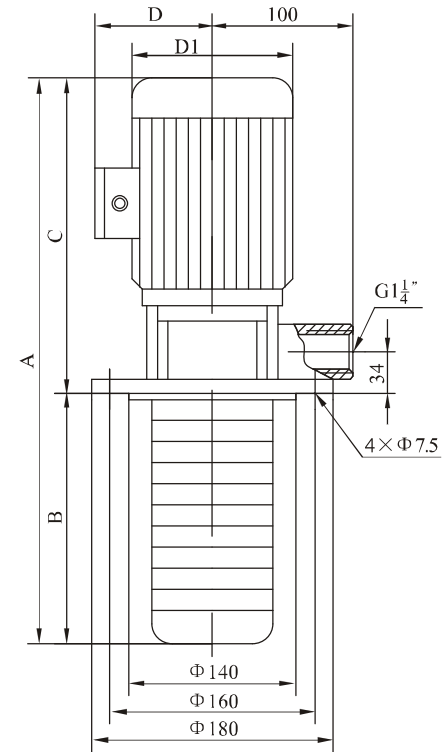
NO.	Name	Material	AISI/ASTM
1	Motor		
2	Coupling	Carbon steel	
4	Coupling guard	Stainless steel	AISI304
5	Mechanical seal		
6	Straps	Stainless steel	AISI304
7	Shaft	Stainless steel	AISI316 AISI304 AISI431
8	Inducer	Stainless steel	AISI304
9	Suction head	Stainless steel	AISI304
10	Impeller	Stainless steel	AISI304
11	Diffuser	Stainless steel	AISI304
13	Bearing	Tungsten carbide	
14	Support diffuser	Stainless steel	AISI304
15	strainer	Stainless steel	AISI304
16	Crossover flange	Cast iron	ASTM25B
17	Bottom bearing	Tungsten carbide	
CDLK			
3	Pump head	Cast iron	ASTM25B
CDLKF			
3	Pump head	Stainless steel	AISI304

# CDLK,CDLK1

## Performance curve ISO9906 Annex A



## Installation sketch



The overall dimensions of the single-phase motor and explosion-proof motor are a little changed. Pls contact us for details.

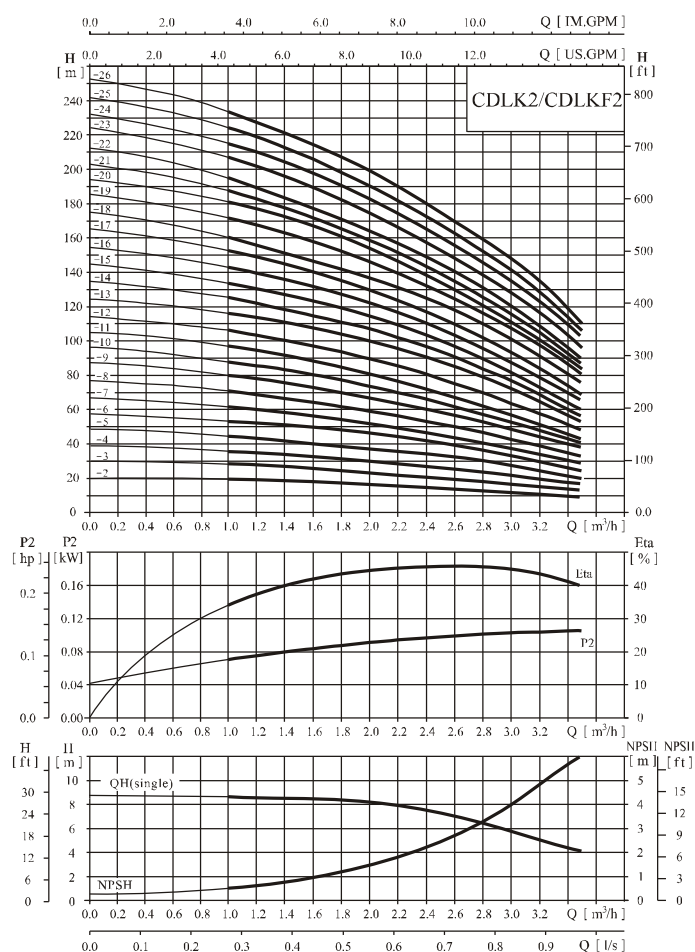
## Performance table

Model	Driving motor		Q (m³/h)	0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0
	(kW)	(hp)										
CDLK1-20/2	0.37	0.5	H (m)	13	12.5	12	11.5	11	10.5	10	9.5	9
CDLK1-30/3	0.37	0.5		19	18	17.5	17	16.5	16	15	14	12
CDLK1-40/4	0.37	0.5		24	23.5	23	22.5	21.5	21	19	18	16
CDLK1-50/5	0.37	0.5		30	29.6	29	28	27	26	24	22	20
CDLK1-60/6	0.37	0.5		36	35.5	35	33.5	33	31	28	26	23
CDLK1-70/7	0.37	0.5		42	41	40.5	39	38	36	33	30	27
CDLK1-80/8	0.55	0.75		48	47	46	45	43	41	38	34	30
CDLK1-90/9	0.55	0.75		54	53	52	51	49	46	43	39	33
CDLK1-100/10	0.55	0.75		60	59	58	57	54	51	48	43	36
CDLK1-110/11	0.55	0.75		66	65	63	61	59	56	52	47	40
CDLK1-120/12	0.75	1		72	71	69	67	64	61	57	51	44
CDLK1-130/13	0.75	1		78	77	75	73	69	66	62	55	47
CDLK1-150/15	0.75	1		89	88	86	84	79	76	71	63	55
CDLK1-170/17	1.1	1.5		101	99	97	95	89	86	80	71	62
CDLK1-190/19	1.1	1.5		113	110	108	106	99	96	89	79	69
CDLK1-210/21	1.1	1.5		124	122	120	117	110	106	98	87	75
CDLK1-230/23	1.1	1.5		137	133	131	128	121	116	107	96	82
CDLK1-250/25	1.5	2		149	145	143	139	131	126	116	104	89
CDLK1-270/27	1.5	2		161	157	155	150	141	136	125	112	95
CDLK1-300/30	1.5	2		178	175	171	166	157	150	139	124	106
CDLK1-330/33	2.2	3	196	192	188	183	173	165	154	137	118	
CDLK1-360/36	2.2	3	214	210	205	200	190	181	169	151	130	

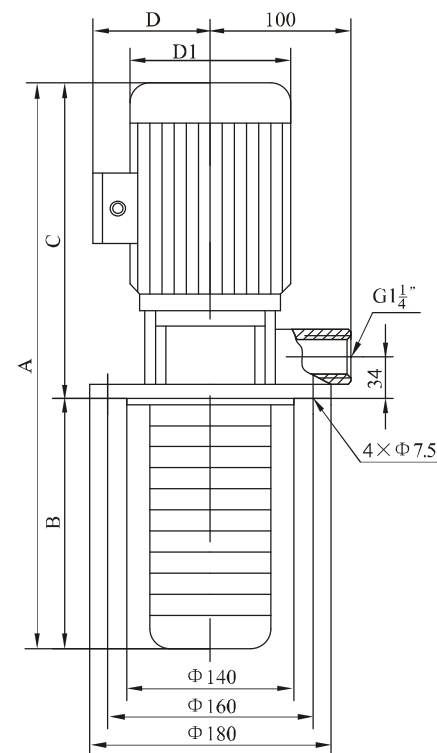
## Size and weight

Model	Size(mm)					Weight (kg)
	A	B	C	D	D1	
CDLK1-20/2	453	123	330	117	148	15
CDLK1-30/3	471	141	330	117	148	15
CDLK1-40/4	489	159	330	117	148	15
CDLK1-50/5	507	177	330	117	148	16
CDLK1-60/6	525	195	330	117	148	16
CDLK1-70/7	543	213	330	117	148	16
CDLK1-80/8	561	231	330	117	148	17
CDLK1-90/9	579	249	330	117	148	17
CDLK1-100/10	597	267	330	117	148	17
CDLK1-110/11	615	285	330	117	148	17
CDLK1-120/12	661	303	358	142	170	20
CDLK1-130/13	679	321	358	142	170	20
CDLK1-150/15	715	357	358	142	170	20
CDLK1-170/17	751	393	358	142	170	22
CDLK1-190/19	787	429	358	142	170	22
CDLK1-210/21	823	465	358	142	170	23
CDLK1-230/23	859	501	358	142	170	23
CDLK1-250/25	950	537	413	155	190	30
CDLK1-270/27	986	573	413	155	190	30
CDLK1-300/30	1040	627	413	155	190	31
CDLK1-330/33	1094	681	413	155	190	34
CDLK1-360/36	1148	735	413	155	190	35

Performance curve ISO9906 Annex A



Installation sketch



The overall dimensions of the single-phase motor and explosion-proof motor are a little changed. Pls contact us for details.

Performance table

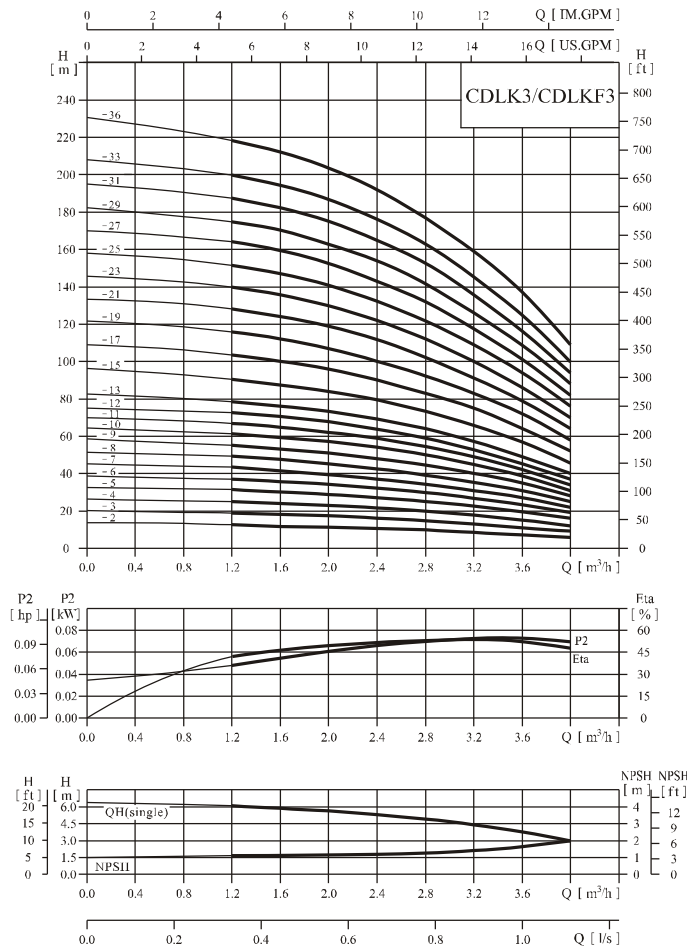
Model	Driving motor		Q (m³/h)	H (m)							
	(kW)	(hp)		1.0	1.2	1.6	2.0	2.4	2.8	3.2	3.5
CDLK2-20/2	0.37	0.5	18	17	16	15	13	12	10	8	
CDLK2-30/3	0.37	0.5	27	26	24	22	20	18	15	12	
CDLK2-40/4	0.55	0.75	36	35	33	30	26	24	20	16	
CDLK2-50/5	0.55	0.75	45	43	40	37	33	30	24	20	
CDLK2-60/6	0.75	1	53	52	50	45	40	36	30	24	
CDLK2-70/7	0.75	1	63	61	57	52	47	41	35	28	
CDLK2-90/9	1.1	1.5	80	78	73	67	61	54	45	37	
CDLK2-110/11	1.1	1.5	98	95	89	82	73	64	54	44	
CDLK2-130/13	1.5	2	116	114	106	98	89	78	65	52	
CDLK2-150/15	1.5	2	134	130	123	112	100	90	73	60	
CDLK2-180/18	2.2	3	161	157	148	136	121	108	91	76	
CDLK2-220/22	2.2	3	197	192	180	165	148	130	110	90	
CDLK2-260/26	3.0	4	232	228	214	198	179	158	130	110	

Size and weight

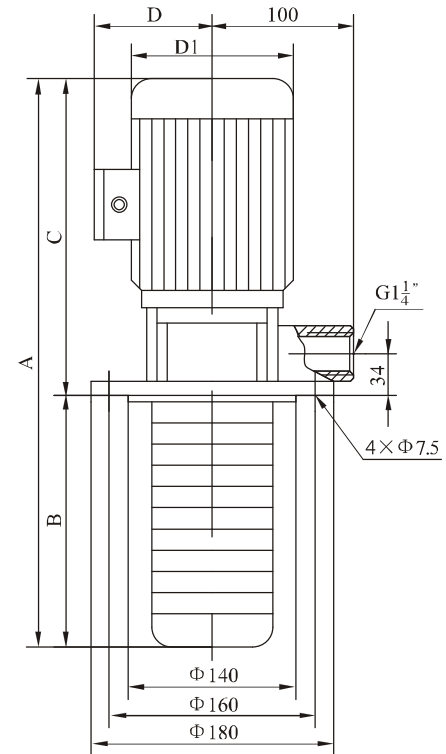
Model	Size(mm)					Weight (kg)
	A	B	C	D	D1	
CDLK2-20/2	453	123	330	117	148	15
CDLK2-30/3	471	141	330	117	148	15
CDLK2-40/4	489	159	330	117	148	17
CDLK2-50/5	507	177	330	117	148	17
CDLK2-60/6	553	195	358	142	170	20
CDLK2-70/7	571	213	358	142	170	20
CDLK2-90/9	607	249	358	142	170	22
CDLK2-110/11	643	285	358	142	170	22
CDLK2-130/13	734	321	413	155	190	29
CDLK2-150/15	770	357	413	155	190	29
CDLK2-180/18	824	411	413	155	190	33
CDLK2-220/22	896	483	413	155	190	33
CDLK2-260/26	1003	555	478	165	197	41

# CDLK,CDLKF3

## Performance curve ISO9906 Annex A



## Installation sketch



The overall dimensions of the single-phase motor and explosion-proof motor are a little changed. Pls contact us for details.

## Performance table

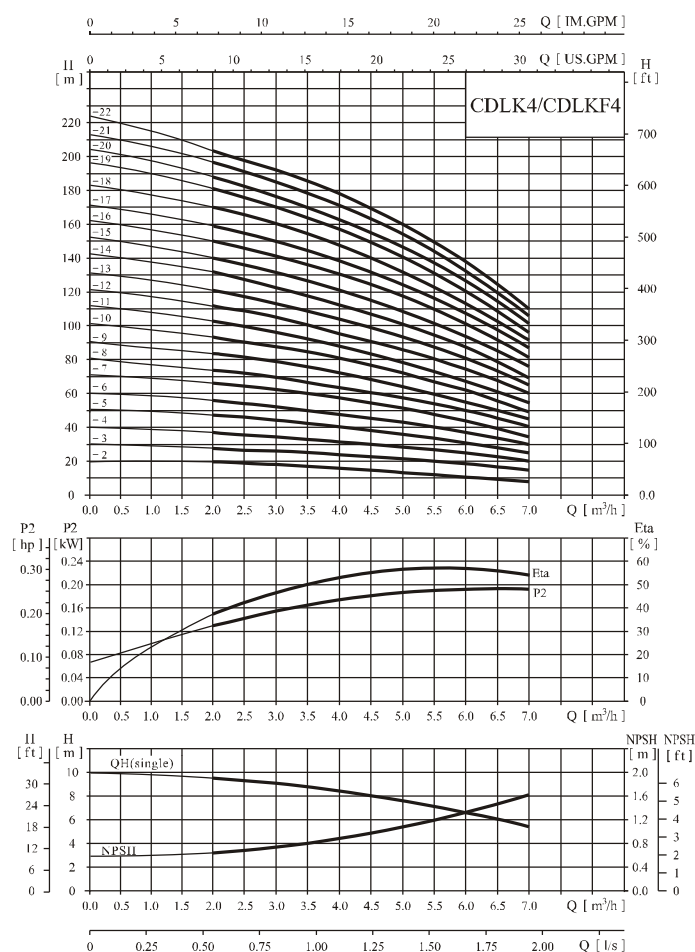
Model	Driving motor		Q (m³/h)	H (m)													
	(kW)	(hp)		1.2	1.6	2.0	2.4	2.8	3.0	3.2	3.6	4.0					
CDLK3-20/2	0.37	0.5	12.5	11.5	11	10.5	10	9	8	7	6						
CDLK3-30/3	0.37	0.5	19	18.5	17.5	16.5	15	14	13	11	9						
CDLK3-40/4	0.37	0.5	25	24	23	21.5	20	19	18	15	12						
CDLK3-50/5	0.37	0.5	31	30	29	27	25	23	22	19	16						
CDLK3-60/6	0.55	0.75	36	35	34	32	30	28	27	23	19						
CDLK3-70/7	0.55	0.75	43	41	39	37	34	32	31	27	22						
CDLK3-80/8	0.75	1	49	47	45	43	39	37	35	31	25						
CDLK3-90/9	0.75	1	55	53	51	48	45	42	40	35	28						
CDLK3-100/10	0.75	1	61	59	57	54	50	47	45	39	31						
CDLK3-110/11	1.1	1.5	67	64	61	58	54	51	49	42	34						
CDLK3-120/12	1.1	1.5	73	70	67	63	58	55	52	45	37						
CDLK3-130/13	1.1	1.5	78	76	73	69	64	60	57	49	40						
CDLK3-150/15	1.1	1.5	90	88	84	79	73	69	66	57	46						
CDLK3-170/17	1.5	2	103	100	96	90	83	79	75	64	52						
CDLK3-190/19	1.5	2	115	112	107	100	92	88	83	72	58						
CDLK3-210/21	2.2	3	128	124	119	112	102	98	91	79	64						
CDLK3-230/23	2.2	3	140	135	130	122	112	107	100	86	70						
CDLK3-250/25	2.2	3	151	147	141	131	122	116	109	94	76						
CDLK3-270/27	2.2	3	164	159	152	143	132	124	117	101	82						
CDLK3-290/29	2.2	3	175	170	163	153	142	133	126	109	88						
CDLK3-310/31	3.0	4	187	182	175	165	153	142	135	116	94						
CDLK3-330/33	3.0	4	199	194	187	176	163	151	145	125	100						
CDLK3-360/36	3.0	4	218	212	204	192	178	168	159	137	109						

## Size and weight

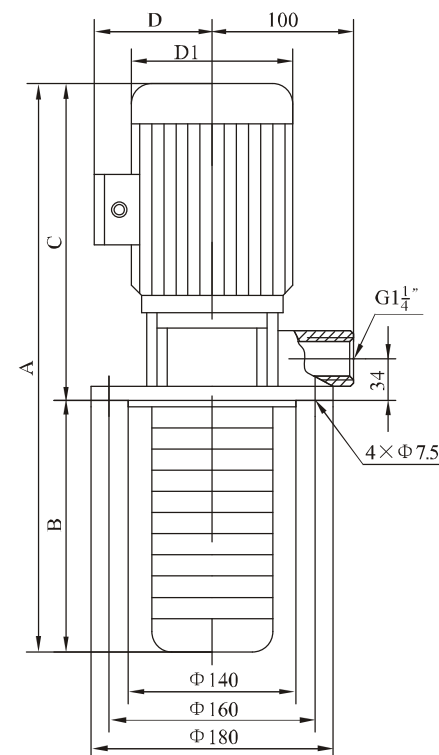
Model	Size(mm)					Weight (kg)
	A	B	C	D	D1	
CDLK3-20/2	453	123	330	117	148	15
CDLK3-30/3	471	141	330	117	148	15
CDLK3-40/4	489	159	330	117	148	15
CDLK3-50/5	507	177	330	117	148	16
CDLK3-60/6	525	195	330	117	148	17
CDLK3-70/7	543	213	330	117	148	17
CDLK3-80/8	589	231	358	142	170	19
CDLK3-90/9	607	249	358	142	170	20
CDLK3-100/10	625	267	358	142	170	20
CDLK3-110/11	643	285	358	142	170	21
CDLK3-120/12	661	303	358	142	170	21
CDLK3-130/13	679	321	358	142	170	22
CDLK3-150/15	715	357	358	142	170	22
CDLK3-170/17	806	393	413	155	190	28
CDLK3-190/19	842	429	413	155	190	29
CDLK3-210/21	878	465	413	155	190	32
CDLK3-230/23	914	501	413	155	190	32
CDLK3-250/25	950	537	413	155	190	33
CDLK3-270/27	986	573	413	155	190	33
CDLK3-290/29	1022	609	413	155	190	33
CDLK3-310/31	1123	645	478	165	197	40
CDLK3-330/33	1159	681	478	165	197	41
CDLK3-360/36	1213	735	478	165	197	41



Performance curve ISO9906 Annex A



Installation sketch



The overall dimensions of the single-phase motor and explosion-proof motor are a little changed. Pls contact us for details.

Performance table

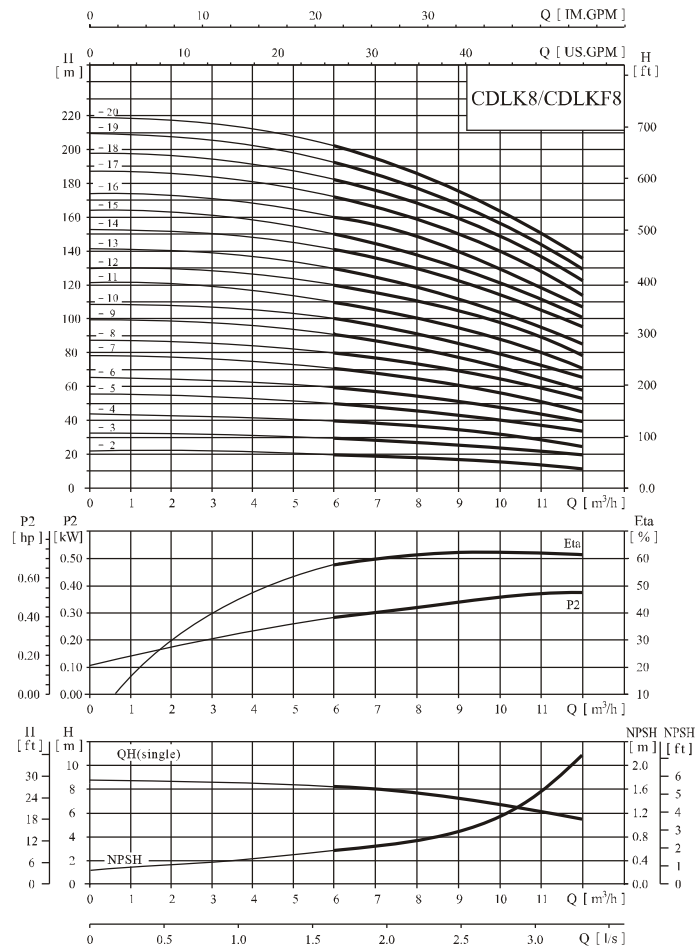
Model	Driving motor		Q (m³/h)	H (m)						
	(kW)	(hp)		1.5	2.0	3.0	4.0	5.0	6.0	7.0
CDLK4-20/2	0.37	0.5	19	18	17	15	13	12	8	
CDLK4-30/3	0.55	0.75	28	27	26	24	20	18	13	
CDLK4-40/4	0.75	1	38	36	34	32	27	24	19	
CDLK4-50/5	1.1	1.5	47	45	43	40	34	31	23	
CDLK4-60/6	1.1	1.5	56	54	52	48	41	37	28	
CDLK4-70/7	1.5	2	66	63	61	56	48	43	33	
CDLK4-80/8	1.5	2	74	72	70	64	55	50	38	
CDLK4-100/10	2.2	3	96	90	87	81	71	62	48	
CDLK4-120/12	2.2	3	114	108	104	95	85	75	58	
CDLK4-140/14	3.0	4	136	126	122	112	101	89	68	
CDLK4-160/16	3.0	4	152	144	140	129	115	101	78	
CDLK4-190/19	4.0	5.5	183	171	168	153	137	122	93	
CDLK4-220/22	4.0	5.5	211	200	192	178	160	138	108	

Size and weight

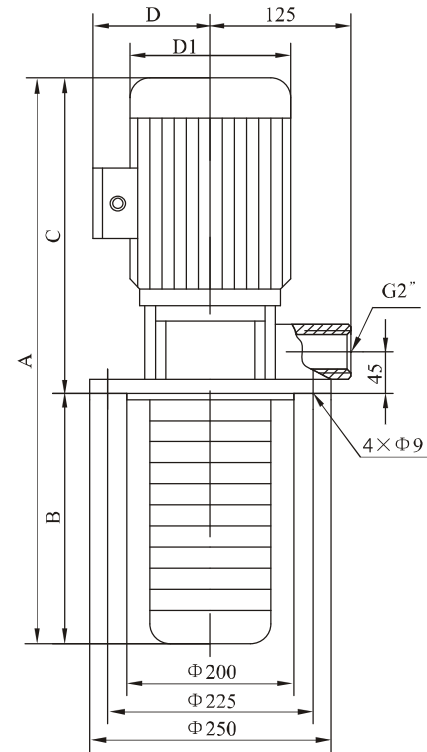
Model	Size(mm)					Weight (kg)
	A	B	C	D	D1	
CDLK4-20/2	478	148	330	117	148	15
CDLK4-30/3	505	175	330	117	148	15
CDLK4-40/4	560	202	358	142	170	18
CDLK4-50/5	587	229	358	142	170	20
CDLK4-60/6	614	256	358	142	170	21
CDLK4-70/7	696	283	413	155	190	27
CDLK4-80/8	723	310	413	155	190	28
CDLK4-100/10	777	364	413	155	190	30
CDLK4-120/12	831	418	413	155	190	30
CDLK4-140/14	950	472	478	165	197	35
CDLK4-160/16	1004	526	478	165	197	35
CDLK4-190/19	1095	607	488	185	230	40
CDLK4-220/22	1176	688	488	185	230	41

# CDLK,CDLKF8

## Performance curve ISO9906 Annex A



## Installation sketch



The overall dimensions of the single-phase motor and explosion-proof motor are a little changed. Pls contact us for details.

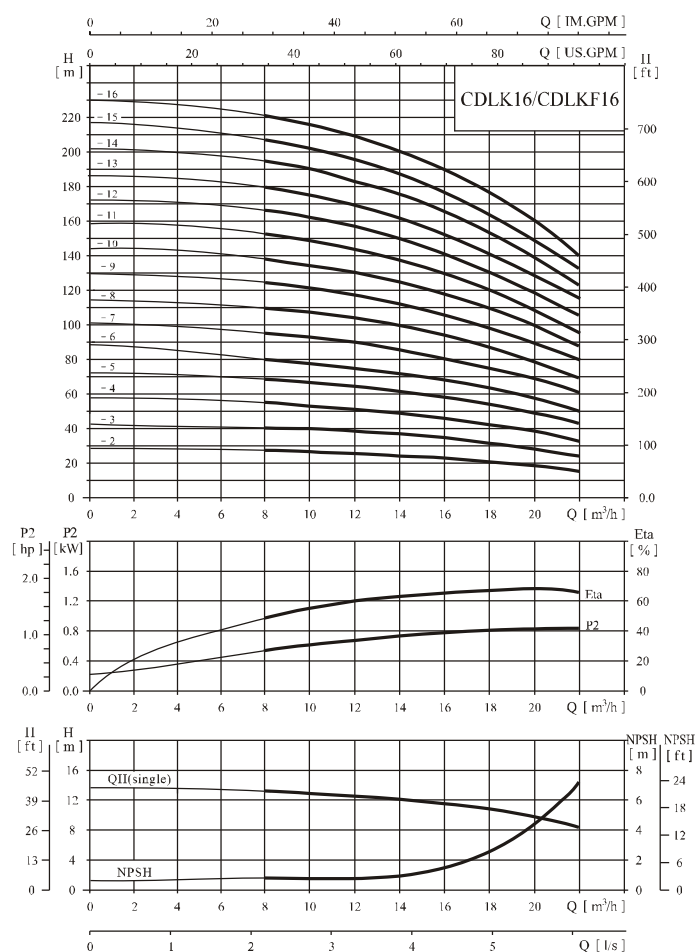
## Performance table

Model	Driving motor		Q (m³/h)	H (m)							
	(kW)	(hp)		5	6	7	8	9	10	11	12
CDLK8-20/2	0.75	1	20	19.5	19	18	17	16	14	13	
CDLK8-30/3	1.1	1.5	30	29.5	28.5	27	25	24	21	19	
CDLK8-40/4	1.5	2	41	39.5	38	36	34	32	28	26	
CDLK8-50/5	2.2	3	52	50	48	45	42	40	36	32	
CDLK8-60/6	2.2	3	62	60	57	54	51	48	43	39	
CDLK8-80/8	3.0	4	83	80	77	73	69	65	58	52	
CDLK8-100/10	4.0	5.5	104	100	97	92	87	81	73	65	
CDLK8-120/12	4.0	5.5	124	120	116	111	104	92	87	78	
CDLK8-140/14	5.5	7.5	145	141	136	130	122	113	102	92	
CDLK8-160/16	5.5	7.5	166	161	156	148	139	130	118	106	
CDLK8-180/18	7.5	10	187	182	175	167	157	146	134	120	
CDLK8-200/20	7.5	10	208	202	195	186	175	163	150	135	

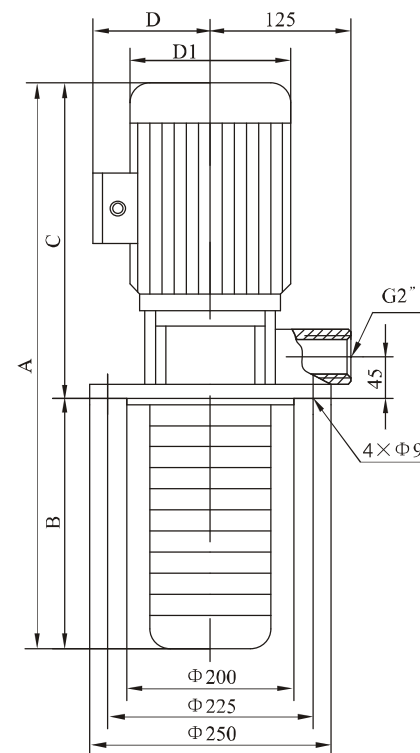
## Size and weight

Model	Size(mm)					Weight (kg)
	A	B	C	D	D1	
CDLK8-20/2	516	150	366	142	170	22
CDLK8-30/3	546	180	366	142	170	27
CDLK8-40/4	629	210	419	155	190	27
CDLK8-50/5	659	240	419	155	190	36
CDLK8-60/6	689	270	419	155	190	37
CDLK8-80/8	814	330	484	165	197	42
CDLK8-100/10	884	390	494	185	230	52
CDLK8-120/12	944	450	494	185	230	53
CDLK8-140/14	1059	510	549	210	260	75
CDLK8-160/16	1119	570	549	210	260	77
CDLK8-180/18	1179	630	549	210	260	85
CDLK8-200/20	1239	690	549	210	260	87

Performance curve ISO9906 Annex A



Installation sketch



The overall dimensions of the single-phase motor and explosion-proof motor are a little changed. Pls contact us for details.

Performance table

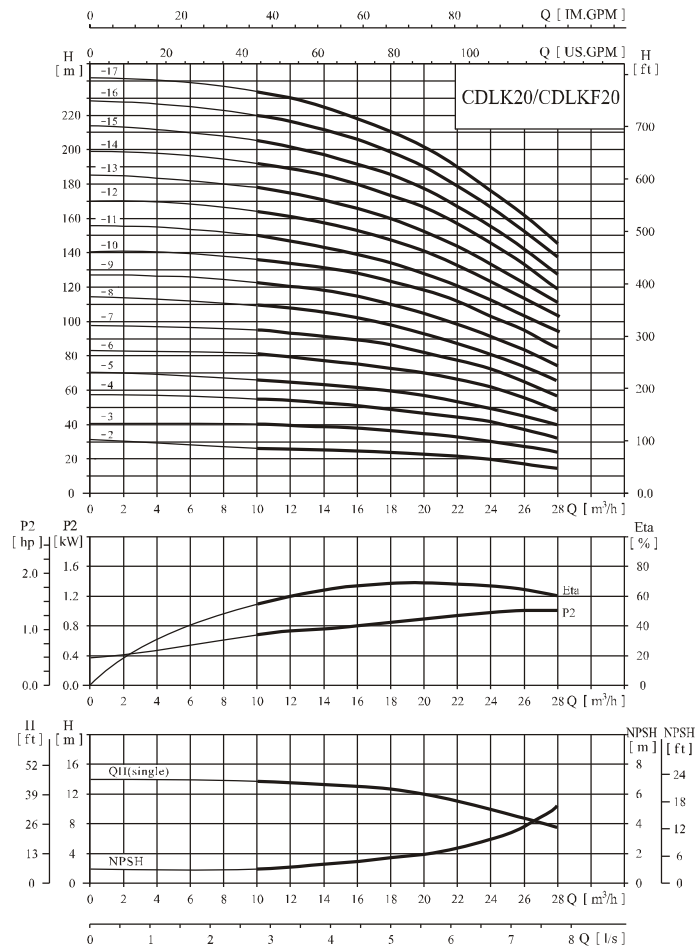
Model	Driving motor		Q (m³/h)	H (m)							
	(kW)	(hp)		8	10	12	14	16	18	20	22
CDLK16-20/2	2.2	3	20	27	26	25	24	22	21	19	16
CDLK16-30/3	3.0	4	30	41	40	38	37	34	32	29	25
CDLK16-40/4	4.0	5.5	40	54	53	52	49	46	43	38	34
CDLK16-50/5	5.5	7.5	50	68	67	65	62	58	54	48	43
CDLK16-60/6	5.5	7.5	60	82	80	78	74	70	64	58	52
CDLK16-70/7	7.5	10	70	96	95	91	87	82	76	68	61
CDLK16-80/8	7.5	10	80	110	108	104	99	94	86	77	70
CDLK16-100/10	11	15	100	138	136	131	125	118	109	97	87
CDLK16-120/12	11	15	120	166	162	157	150	141	130	116	105
CDLK16-140/14	15	20	140	194	190	184	175	166	152	136	122
CDLK16-160/16	15	20	160	222	217	210	200	189	174	156	140

Size and weight

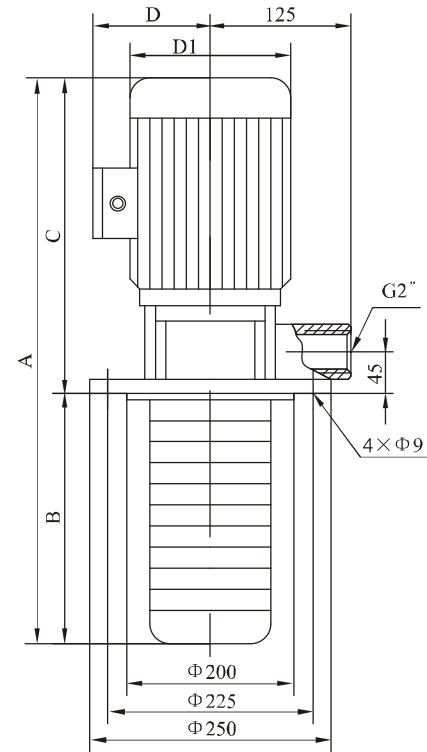
Model	Size(mm)					Weight (kg)
	A	B	C	D	D1	
CDLK16-20/2	599	180	419	155	190	37
CDLK16-30/3	709	225	484	165	197	47
CDLK16-40/4	764	270	494	185	230	52
CDLK16-50/5	864	315	549	210	260	67
CDLK16-60/6	909	360	549	210	260	72
CDLK16-70/7	954	405	549	210	260	77
CDLK16-80/8	999	450	549	210	260	78
CDLK16-100/10	1240	540	700	255	330	135
CDLK16-120/12	1330	630	700	255	330	140
CDLK16-140/14	1420	720	700	255	330	155
CDLK16-160/16	1510	810	700	255	330	162

# CDLK,CDLK20

## Performance curve ISO9906 Annex A



## Installation sketch



The overall dimensions of the single-phase motor and explosion-proof motor are a little changed. Pls contact us for details.

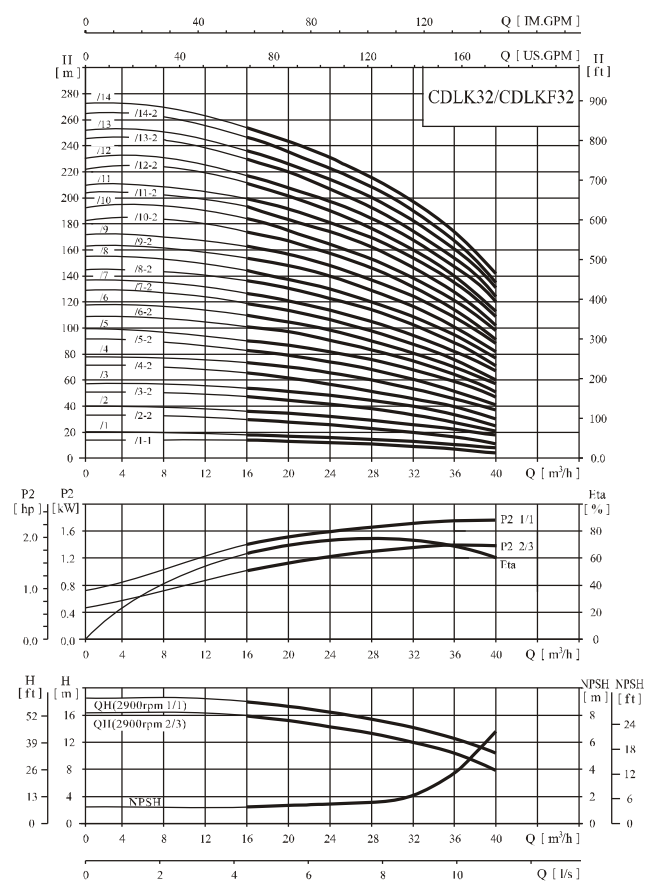
## Performance table

Model	Driving motor		Q (m³/h)	H (m)											
	(kW)	(hp)		10	12	14	16	18	20	22	24	26	28		
CDLK20-20/2	2.2	3	27	26.5	26	25	24	23	22	20	18	15			
CDLK20-30/3	4.0	5.5	40	39.5	39	38	37	35	33	30	27	24			
CDLK20-40/4	5.5	7.5	54	53	52	51	49	47	44	41	37	33			
CDLK20-50/5	5.5	7.5	67	66	64	62	60	58	55	50	45	40			
CDLK20-60/6	7.5	10	81	79	77	75	73	70	66	61	55	49			
CDLK20-70/7	7.5	10	95	93	91	89	86	82	77	71	65	58			
CDLK20-80/8	11	15	109	107	105	102	99	94	89	82	75	67			
CDLK20-100/10	11	15	136	134	131	128	124	118	111	103	95	85			
CDLK20-120/12	15	20	164	162	158	154	149	142	133	124	114	102			
CDLK20-140/14	15	20	192	189	185	180	174	166	156	145	133	119			
CDLK20-170/17	18.5	25	234	230	225	219	212	202	190	177	162	145			

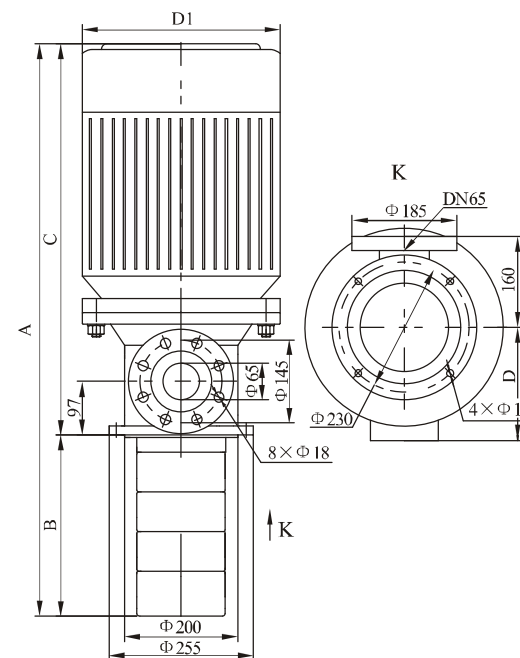
## Size and weight

Model	Size(mm)					Weight (kg)
	A	B	C	D	D1	
CDLK20-20/2	599	180	419	155	190	37
CDLK20-30/3	719	225	494	185	230	50
CDLK20-40/4	819	270	549	210	260	65
CDLK20-50/5	864	315	549	210	260	67
CDLK20-60/6	909	360	549	210	260	75
CDLK20-70/7	954	405	549	210	260	77
CDLK20-80/8	1150	450	700	255	330	131
CDLK20-100/10	1240	540	700	255	330	135
CDLK20-120/12	1330	630	700	255	330	151
CDLK20-140/14	1420	720	700	255	330	155
CDLK20-170/17	1605	855	750	255	330	181

Performance curve ISO9906 Annex A



Installation sketch



The overall dimensions of the single-phase motor and explosion-proof motor are a little changed. Pls contact us for details.

Performance table

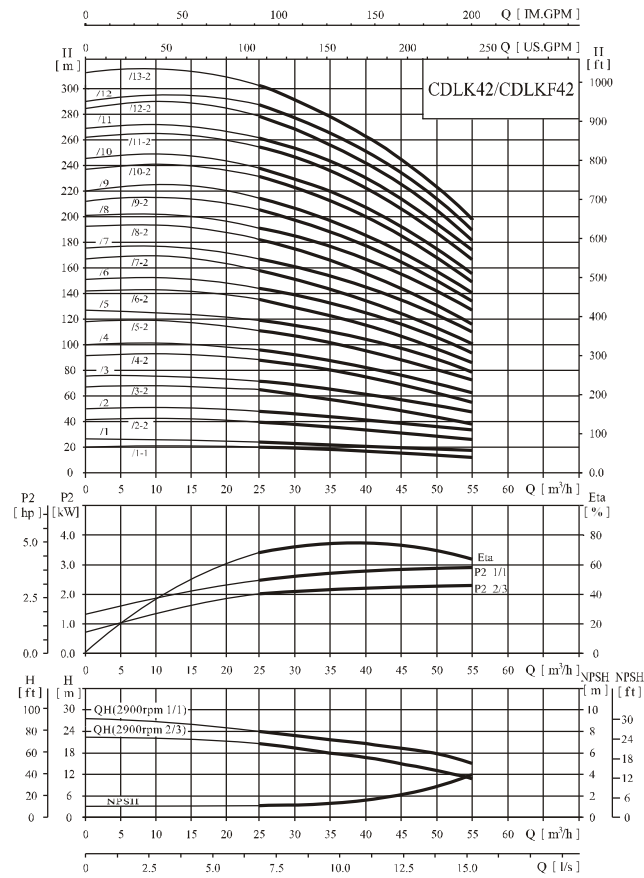
Model	Driving motor		Q (m³/h)	16	20	24	28	32	36	40	H (m)
	(kW)	(hp)									
CDLK32-10/1-1	1.5	2	14	13	12	11	9	7	4		
CDLK32-10/1	2.2	3	18	17	15	14	13	11	8		
CDLK32-20/2-2	3.0	4	29	28	26	23	20	16	11		
CDLK32-20/2	4.0	5.5	36	34	32	29	27	23	18		
CDLK32-30/3-2	5.5	7.5	47	44	41	38	33	28	21		
CDLK32-30/3	5.5	7.5	54	51	48	44	40	35	27		
CDLK32-40/4-2	7.5	10	65	62	58	53	46	40	30		
CDLK32-40/4	7.5	10	72	69	65	59	53	47	37		
CDLK32-50/5-2	11	15	83	79	74	68	60	52	41		
CDLK32-50/5	11	15	90	86	81	74	67	59	47		
CDLK32-60/6-2	11	15	101	97	90	83	74	65	51		
CDLK32-60/6	11	15	108	104	97	90	81	72	57		
CDLK32-70/7-2	15	20	119	114	107	98	88	78	60		
CDLK32-70/7	15	20	126	121	113	105	95	85	67		
CDLK32-80/8-2	15	20	136	131	123	114	102	90	71		
CDLK32-80/8	15	20	144	138	130	120	109	97	77		
CDLK32-90/9-2	18.5	25	154	148	140	129	117	102	82		
CDLK32-90/9	18.5	25	162	156	147	136	124	109	88		
CDLK32-100/10-2	18.5	25	175	166	157	146	131	115	91		
CDLK32-100/10	18.5	25	182	173	164	152	138	122	98		
CDLK32-110/11-2	22	30	193	184	173	164	146	128	102		
CDLK32-110/11	22	30	200	191	180	168	153	135	109		
CDLK32-120/12-2	22	30	211	201	189	178	160	140	113		
CDLK32-120/12	22	30	218	208	196	184	167	147	120		
CDLK32-130/13-2	30	40	230	218	206	193	174	153	124		
CDLK32-130/13	30	40	237	225	213	200	181	160	131		
CDLK32-140/14-2	30	40	247	235	222	210	189	165	135		
CDLK32-140/14	30	40	255	242	229	216	196	172	142		

Size and weight

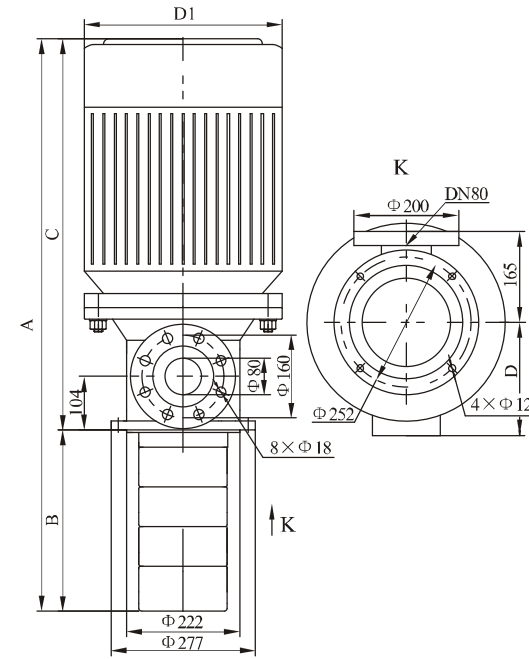
Model	Size(mm)					Weight (kg)
	A	B	C	D	D1	
CDLK32-10/1-1						
CDLK32-10/1	621	186	435	155	190	49/51
CDLK32-20/2-2	746/ 756	256	490/ 500	165/ 185	197/ 230	57/62
CDLK32-20/2						
CDLK32-30/3-2						
CDLK32-30/3	881	326	555	210	260	70
CDLK32-40/4-2						
CDLK32-40/4	951	396	555	210	260	77
CDLK32-50/5-2						
CDLK32-50/5	1184	466	718	255	330	148
CDLK32-60/6-2						
CDLK32-60/6	1254	536	718	255	330	150
CDLK32-70/7-2						
CDLK32-70/7	1324	606	718	255	330	162
CDLK32-80/8-2						
CDLK32-80/8	1394	676	718	255	330	165
CDLK32-90/9-2						
CDLK32-90/9	1514	746	768	255	330	191
CDLK32-100/10-2						
CDLK32-100/10	1584	816	768	255	330	194
CDLK32-110/11-2						
CDLK32-110/11	1679	886	793	285	360	230
CDLK32-120/12-2						
CDLK32-120/12	1749	956	793	285	360	234
CDLK32-130/13-2						
CDLK32-130/13	1894	1026	868	310	400	297
CDLK32-140/14-2						
CDLK32-140/14	1964	1096	868	310	400	300

# CDLK,CDLK42

## Performance curve ISO9906 Annex A



## Installation sketch



The overall dimensions of the single-phase motor and explosion-proof motor are a little changed. Pls contact us for details.

## Performance table

Model	Driving motor		Q (m³/h)	25	30	35	40	42	45	50	55
	(kW)	(hp)									
CDLK42-10/1-1	3.0	4	20	19	18	17	16	15	13	11	
CDLK42-10/1	4.0	5.5	24	23	22	21	20	19	18	16	
CDLK42-20/2-2	5.5	7.5	40	38	36	33	32	30	27	23	
CDLK42-20/2	7.5	10	48	46	44	42	41	39	35	31	
CDLK42-30/3-2	11	15	63	61	58	54	52	50	44	38	
CDLK42-30/3	11	15	71	69	66	63	61	58	53	47	
CDLK42-40/4-2	15	20	87	84	80	75	73	69	62	54	
CDLK42-40/4	15	20	95	92	88	84	81	78	71	62	
CDLK42-50/5-2	18.5	25	111	107	102	96	93	88	80	69	
CDLK42-50/5	18.5	25	119	115	110	105	101	97	88	78	
CDLK42-60/6-2	22	30	135	130	124	117	113	108	97	85	
CDLK42-60/6	22	30	143	138	132	125	122	116	106	93	
CDLK42-70/7-2	30	40	158	152	146	138	134	127	115	100	
CDLK42-70/7	30	40	166	161	154	146	142	135	124	109	
CDLK42-80/8-2	30	40	182	175	168	159	154	146	133	116	
CDLK42-80/8	30	40	190	184	176	167	162	154	141	124	
CDLK42-90/9-2	30	40	205	198	190	180	174	166	150	132	
CDLK42-90/9	37	50	214	207	198	188	183	174	159	140	
CDLK42-100/10-2	37	50	230	221	212	200	194	185	168	147	
CDLK42-100/10	37	50	238	230	220	209	203	193	177	155	
CDLK42-110/11-2	45	60	255	246	236	223	217	206	188	165	
CDLK42-110/11	45	60	263	255	244	232	225	214	196	173	
CDLK42-120/12-2	45	60	280	270	259	245	238	226	206	181	
CDLK42-120/12	45	60	289	280	268	255	247	236	216	190	
CDLK42-130/13-2	45	60	305	294	282	267	259	247	225	198	

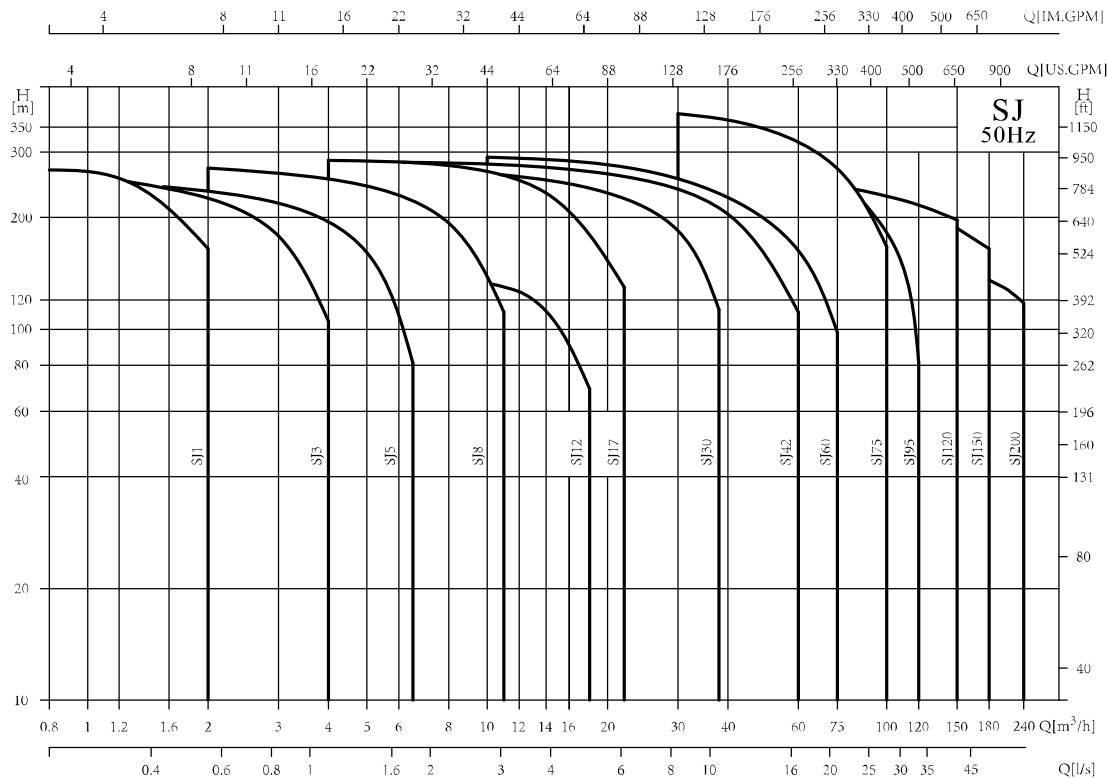
## Size and weight

Model	Size(mm)					Weight (kg)
	A	B	C	D	D1	
CDLK42-10/1-1	702/712	198	504/514	165/185	197/230	60/65
CDLK42-20/2-2	847	278	569	210	260	77/84
CDLK42-30/3-2	1090	358	732	255	330	150
CDLK42-40/4-2	1170	438	732	255	330	162
CDLK42-50/5-2	1300	518	782	255	330	182
CDLK42-60/6-2	1405	598	807	285	360	225
CDLK42-70/7-2	1560	678	882	310	400	288
CDLK42-80/8-2	1640	758	882	310	400	292
CDLK42-90/9-2	1720	838	882	310	400	296/315
CDLK42-100/10-2	1800	918	882	310	400	320
CDLK42-110/11-2	1915	998	917	345	450	385
CDLK42-120/12-2	1995	1078	917	345	450	390
CDLK42-130/13-2	2075	1158	917	345	450	394



SJ Stainless steel submersible borehole pump

**Performance scope**



**Product range**

Description	SJ1	SJ3	SJ5	SJ8	SJ12	SJ17	SJ30
Rate flow [m³/h]	1	3	5	8	12	17	30
Rate flow [l/s]	0.28	0.83	1.39	2.22	3.33	4.72	8.33
Flow range [m³/h]	0.2~2	0.8~4	1~6.5	2~11	3~18	4~22	5~38
Flow range [l/s]	0.06~0.56	0.22~1.1	0.28~1.8	0.56~3.1	0.83~5	1.11~6.1	1.39~10.6
Max. pressure [bar]	28	25	24	27	16	26	28
Motor power [kW]	0.37~2.2	0.37~3	0.37~4	0.75~7.5	1.5~7.5	0.55~15	1.1~22
Temp. [°C]	45	56	59	60	60	73	74
Pipe screw joint	Rp1 1/4	Rp1 1/4	Rp1 1/2	Rp2	Rp2	Rp2 1/2	Rp3

Description	SJ42	SJ60	SJ75	SJ95	SJ120	SJ150	SJ200
Rate flow [m³/h]	42	60	75	95	120	150	200
Rate flow [l/s]	11.7	16.7	20.8	26.4	33.3	41.6	55.6
Flow range [m³/h]	5~60	10~75	30~100	40~120	60~150	80~180	100~240
Flow range [l/s]	1.39~16.7	2.8~20.8	8.3~27.8	11.1~33.3	16.6~41.6	22.2~50	27.8~66.7
Max. pressure [bar]	28	29	38	34	25	23	16
Motor power [kW]	1.1~37	2.2~37	7.5~75	9.2~75	11~110	9.2~110	30~110
Temp. [°C]	75	79	79	80	77	77	79
Pipe screw joint	Rp3	Rp4	Rp5	Rp5	Rp6	Rp6	Rp6

**Typical applications**

- Circulation or boosting for clean water, demineralized water.
- Water supply, irrigating system.
- Lowering ground water level.
- Boosting.
- Other industrial applications.

**Operation conditions**

- Clean, thin, non-corrosive liquid without grain or fiber.
- Maximum liquid temperature: 25°C
- Maximum working pressure: 38bar
- pH: 6.5~8.5
- Maximum diving depth: ≤ 70m
- For the sake of pump running safely and reliably, user shall install the correct motor protector.

**Curve conditions**

- The curve tolerance complies with ISO9906 Annex A.
- All curves are based on the measured values of 50Hz: constant motor speed 2850r/min or 2900r/min,
- All measurements are carried out with gas-free water of temperature 20°C. The curve is applicable to kinematical viscosity 1mm²/s. In case density of the liquid conveyed by the pump is higher than that of water, it is necessary to use corresponding motor of higher output power.
- The bold part of the curve means the recommended performances scope.
- The performance curve includes loss caused by check valve etc.

**Performance curve**

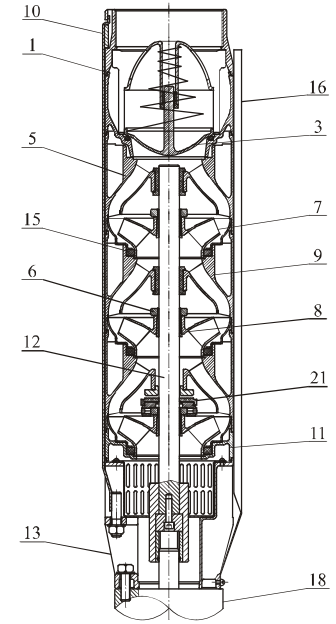
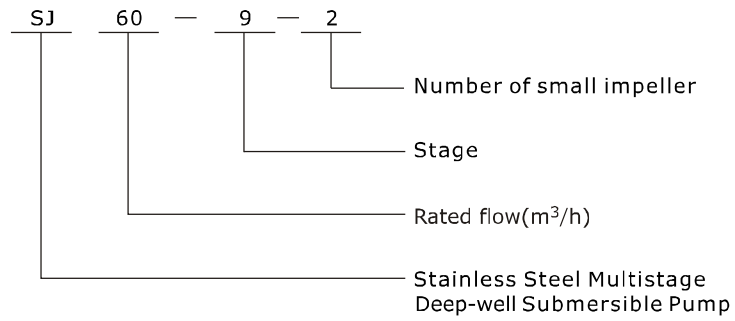
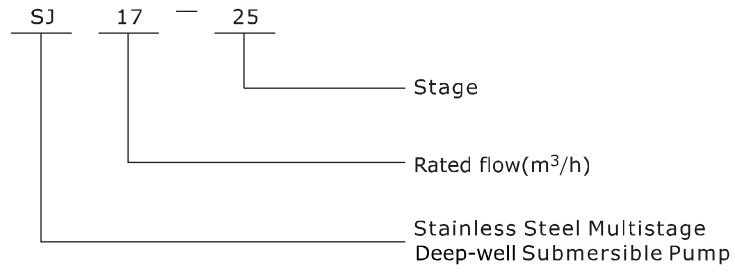
- Q/H curve means flow and head under the rated speed.
- Power curve: P2 means input power of each grade, curves are shown for complete (1/1) and for reduced diameter (2/3) impellers.
- Efficiency curve: Eta means the stage efficiency of the pump.

**NEMA Motor**

- 4" Motor Stainless steel (there is bronze flange or ss flange), oil-filled motor (transformer oil is standard configuration, but coolant oil which in accord with the standard of FDA is also available)  
Single phase: 0.37kW ~ 2.2kW  
Three phase: 0.37kW~7.5 kW
- 6" Motor Cast iron (Standard), Stainless steel (If required, need to specify) Three phase: 4kW~37 kW
- 8" Motor Cast iron (Standard), Stainless steel (If required, need to specify) Three phase: 5.5kW~110kW

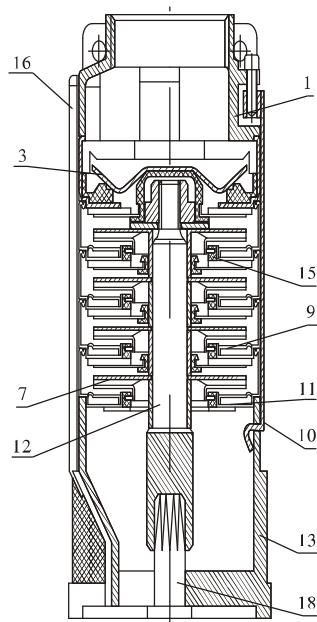


**Definition of Model**

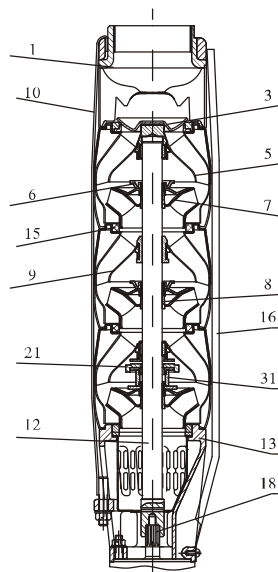


Ex.:SJ95

**Section drawing**



Ex.:SJ5



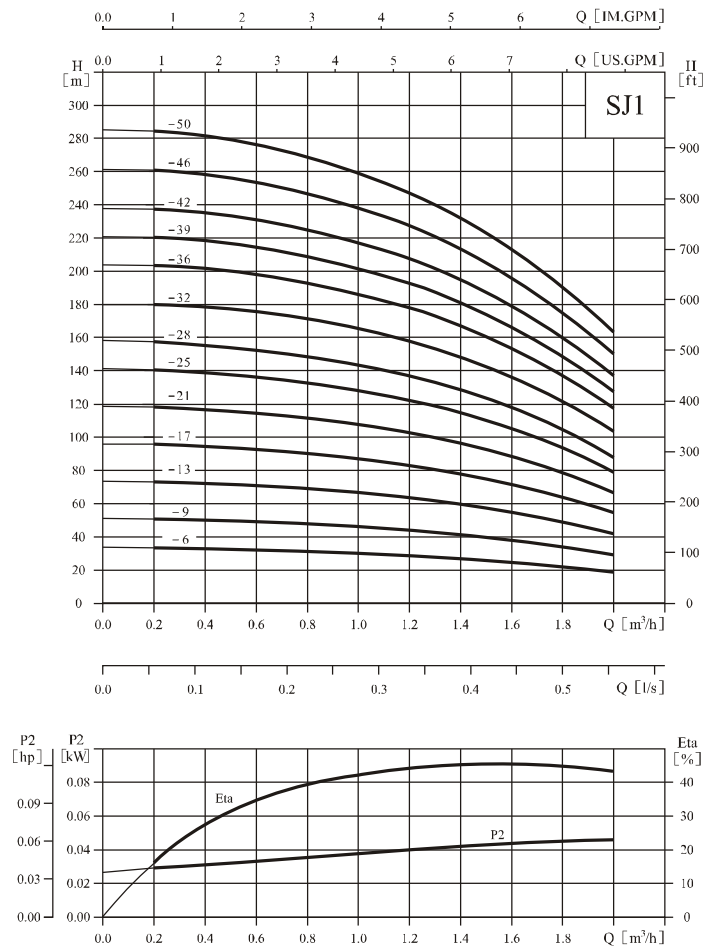
Ex.:SJ42

**Material**

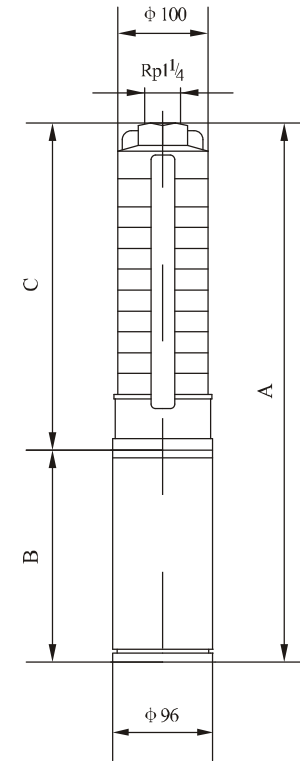
NO.	Name	Material	AISI
1	Discharge head	SS304	A ISI304
3	Valve cap	SS304	A ISI304
5	Discharge diffuser	SS304	A ISI304
6	Impeller nut	SS304	A ISI304
7	Impeller	SS304	A ISI304
8	Impeller cone	SS304	A ISI304
9	Diffuser	SS304	A ISI304
10	Straps	SS304	A ISI304
11	Inducer	SS304	A ISI304
12	Pump shaft	SS304/420/431	AISI304/420/431
13	Suction Interconnector	SS304	A ISI304
15	Neck ring	PBT/NBR	
16	Cable guard	SS304	A ISI304
18	Submersible motor		
21	Inlet spacer	Carbon	
31	Connecting sleeve	SS304	A ISI304

# SJ1

## Performance curve ISO9906 Annex A 2850rpm



## Installation sketch



Note: The size B is varied with the motors of different manufacturers.

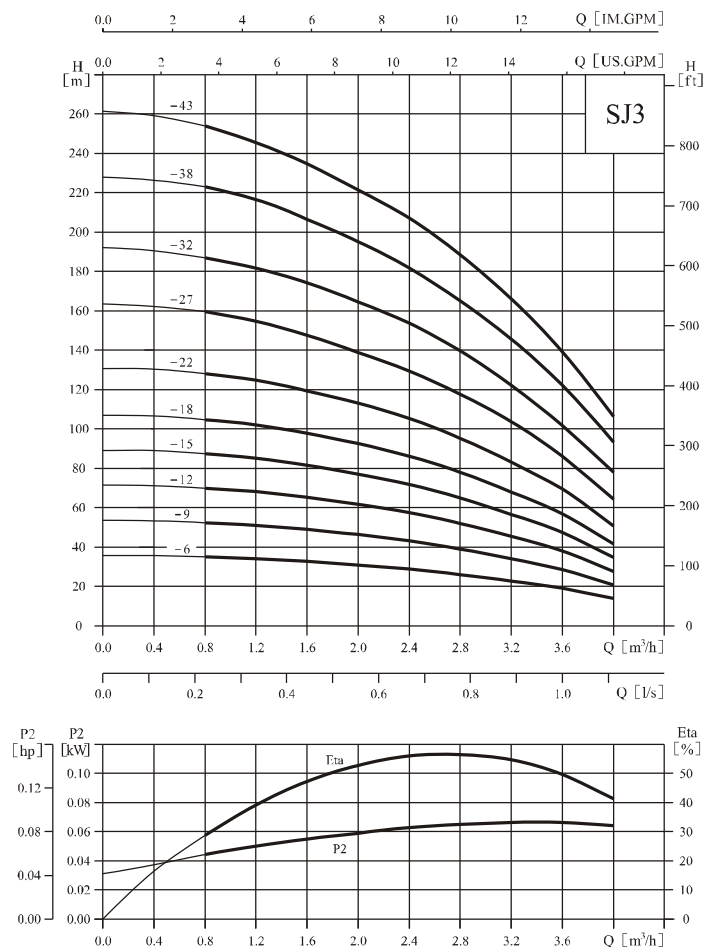
## Performance table

Model	Driving motor		Q (m³/h)	H (m)											
	(kW)	(hp)		0.2	0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0		
SJ1-6	0.37	0.5		33.5	33	32	31	30	29	27	25	22	19		
SJ1-9	0.37	0.5		51	50	49	48	46	44	41	38	34	29		
SJ1-13	0.55	0.75		73	72	71	69	67	64	60	55	49	42		
SJ1-17	0.75	1		96	95	92	90	87	84	78	71	64	55		
SJ1-21	1.1	1.5		119	118	115	112	108	103	97	89	80	69		
SJ1-25	1.1	1.5		141	140	137	134	129	123	116	106	95	82		
SJ1-28	1.5	2		158	157	153	150	145	138	130	119	107	92		
SJ1-32	1.5	2		180	179	175	171	165	158	148	136	122	105		
SJ1-36	1.5	2		203	202	197	192	186	178	167	153	137	118		
SJ1-39	2.2	3		221	219	214	209	202	193	181	166	149	128		
SJ1-42	2.2	3		238	236	230	225	217	208	195	179	160	137		
SJ1-46	2.2	3		260	258	252	246	238	227	213	196	176	151		
SJ1-50	2.2	3		284	282	276	269	260	248	233	214	192	165		

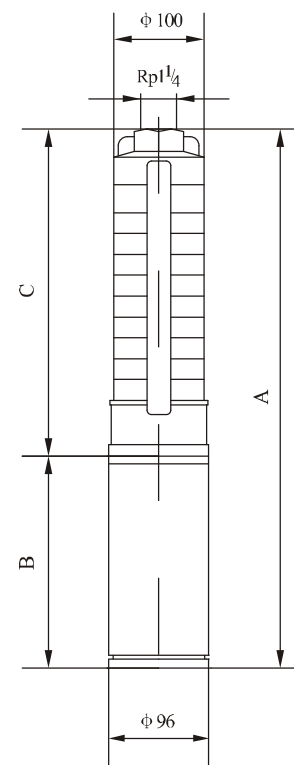
## Size and weight

Model	Size(mm)			Weight (kg)
	A	B	C	
SJ1-6	667	370	297	12
SJ1-9	730	370	360	13
SJ1-13	824	380	444	15
SJ1-17	928	400	528	17
SJ1-21	1052	440	612	19
SJ1-25	1136	440	696	20
SJ1-28	1229	470	759	23
SJ1-32	1313	470	843	24
SJ1-36	1397	470	927	25
SJ1-39	1500	510	990	29
SJ1-42	1563	510	1053	30
SJ1-46	1647	510	1137	31
SJ1-50	1731	510	1221	32

Performance curve ISO9906 Annex A 2850rpm



Installation sketch



Note: The size B is varied with the motors of different manufacturers.

Performance table

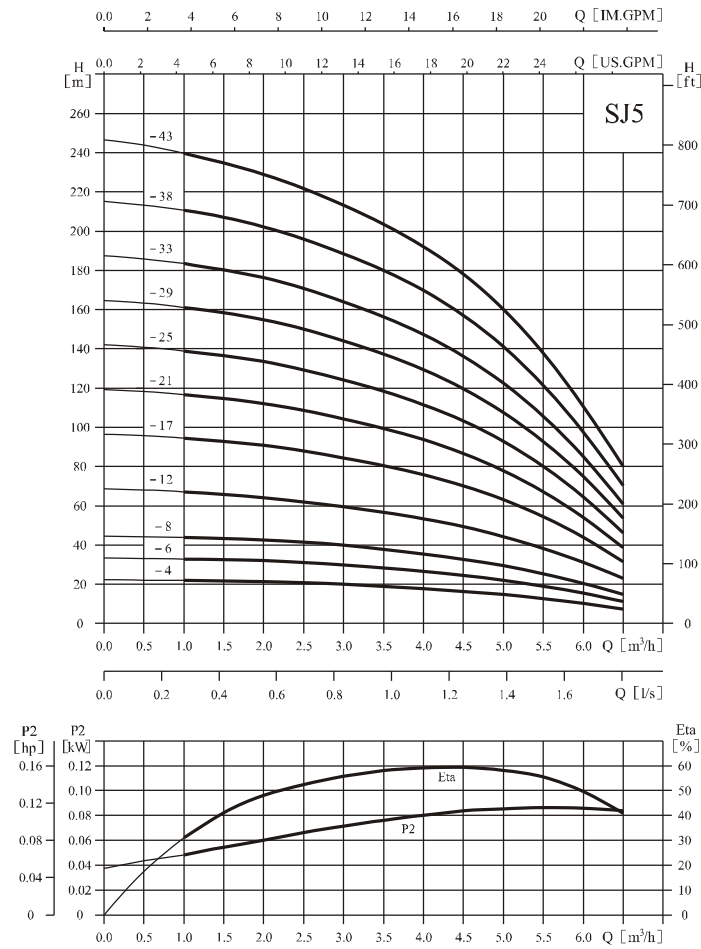
Model	Driving motor		Q (m³/h)	H (m)											
	(kW)	(hp)		0.8	1.2	1.6	2.0	2.4	2.8	3.0	3.2	3.6	4.0		
SJ3-6	0.37	0.5		36	34	32	30	28	26	24	23	18	13		
SJ3-9	0.55	0.75		53	51	48	45	42	38	36	33	27	20		
SJ3-12	0.75	1		70	68	64	61	57	52	49	44	37	27		
SJ3-15	1.1	1.5		87	85	81	77	72	65	61	56	47	34		
SJ3-18	1.1	1.5		105	103	97	92	87	78	74	68	57	42		
SJ3-22	1.5	2		130	126	120	113	106	96	91	84	70	53		
SJ3-27	2.2	3		159	154	146	138	130	118	111	104	87	66		
SJ3-32	2.2	3		189	183	173	163	154	140	131	122	102	79		
SJ3-38	3.0	4		224	217	205	194	183	168	157	146	122	94		
SJ3-43	3.0	4		254	246	233	220	207	190	178	166	139	107		

Size and weight

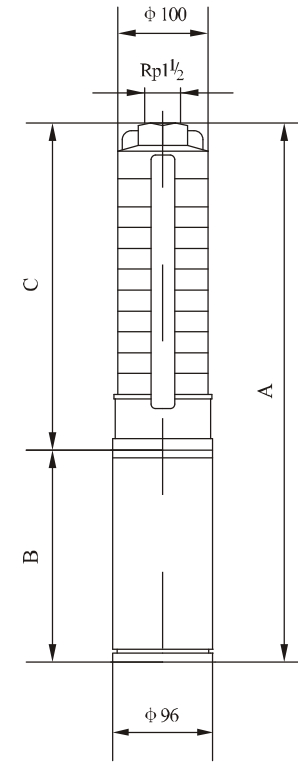
Model	Size(mm)			Weight (kg)
	A	B	C	
SJ3-6	667	370	297	12
SJ3-9	740	380	360	13
SJ3-12	823	400	423	16
SJ3-15	926	440	486	18
SJ3-18	999	440	549	19
SJ3-22	1103	470	633	22
SJ3-27	1248	510	738	27
SJ3-32	1353	510	843	28
SJ3-38	1589	620	969	31
SJ3-43	1694	620	1074	32

# SJ5

## Performance curve ISO9906 Annex A 2850rpm



## Installation sketch



Note: The size B is varied with the motors of different manufacturers.

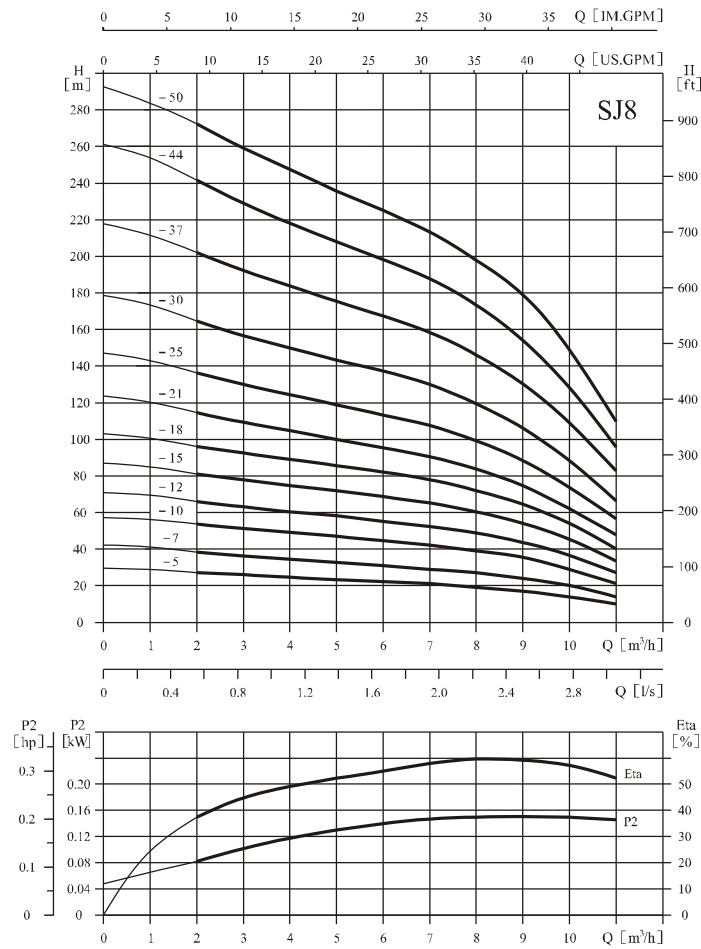
## Performance table

Model	Driving motor		Q (m³/h)	H (m)											
	(kW)	(hp)		1.0	2.0	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5		
SJ5-4	0.37	0.5		21	20.5	20	19	18	17	15	13	10	8		
SJ5-6	0.55	0.75		32	31	30	28	27	25	22	19	15	11		
SJ5-8	0.75	1		43	42	40	38	36	33	30	25	20	15		
SJ5-12	1.1	1.5		66	63	59	57	54	50	45	38	30	23		
SJ5-17	1.5	2		95	91	84	80	76	71	64	54	43	32		
SJ5-21	2.2	3		117	112	104	99	94	87	79	67	53	39		
SJ5-25	2.2	3		139	134	124	118	112	104	94	80	64	47		
SJ5-29	3.0	4		161	155	144	137	130	120	108	92	74	55		
SJ5-33	3.0	4		183	177	163	156	148	137	123	105	84	62		
SJ5-38	4.0	5.5		211	203	188	178	170	158	142	121	97	71		
SJ5-43	4.0	5.5		239	230	213	203	193	179	161	137	109	81		

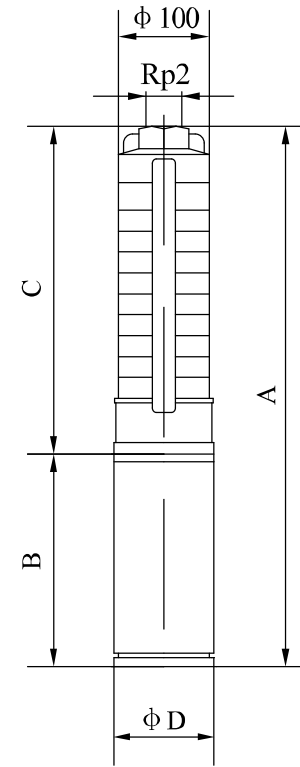
## Size and weight

Model	Size(mm)			Weight (kg)
	A	B	C	
SJ5-4	625	370	255	12
SJ5-6	677	380	297	13
SJ5-8	739	400	339	15
SJ5-12	863	440	423	17
SJ5-17	998	470	528	21
SJ5-21	1122	510	612	26
SJ5-25	1206	510	696	27
SJ5-29	1400	620	780	29
SJ5-33	1484	620	864	30
SJ5-38	1719	750	969	33
SJ5-43	1824	750	1074	35

Performance curve ISO9906 Annex A 2850rpm



Installation sketch



Note: The size B is varied with the motors of different manufacturers.

Performance table

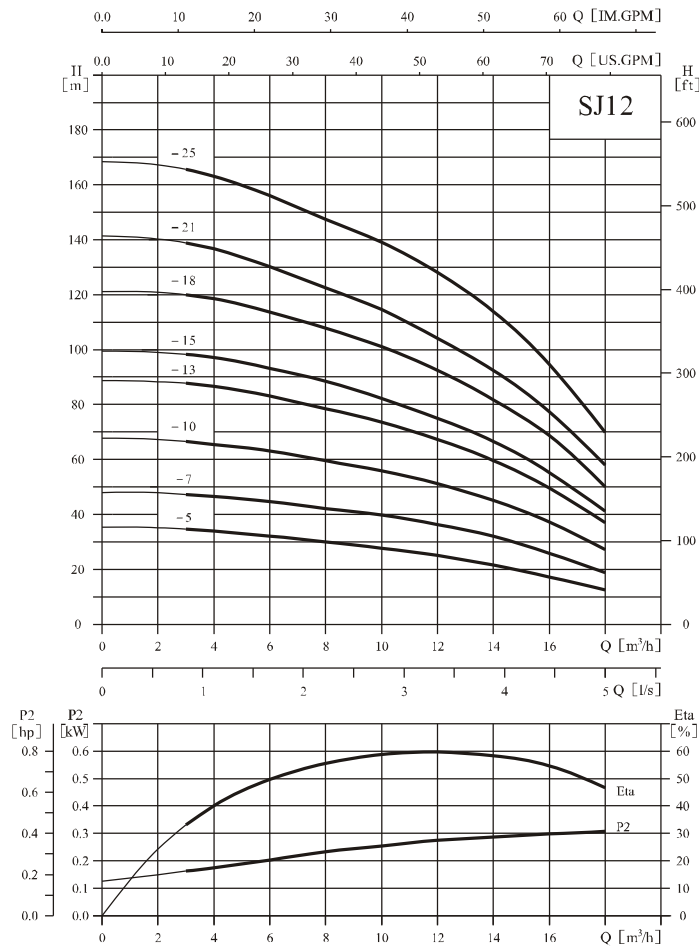
Model	Driving motor		Q (m³/h)	H (m)										
	(kW)	(hp)		2	3	4	5	6	7	8	9	10	11	
SJ8-5	0.75	1		27	26	24	23	22	21	19	17	14	10	
SJ8-7	1.1	1.5		38	36	34	33	31	29	27	24	20	14	
SJ8-10	1.5	2		54	52	50	47	45	42	39	35	29	21	
SJ8-12	2.2	3		65	62	60	57	54	51	47	42	35	26	
SJ8-15	2.2	3		81	77	74	71	68	64	59	53	44	33	
SJ8-18	3.0	4		95	93	89	86	81	77	71	63	53	40	
SJ8-21	4.0	5.5		112	108	104	100	95	90	83	74	62	47	
SJ8-25	4.0	5.5		135	129	124	119	113	108	99	89	74	56	
SJ8-30	5.5	7.5		162	155	149	143	136	130	119	106	88	67	
SJ8-37	5.5	7.5		201	191	184	176	167	159	147	131	109	82	
SJ8-44	7.5	10		242	227	218	209	199	190	174	156	129	98	
SJ8-50	7.5	10		272	258	248	238	226	216	198	177	147	111	

Size and weight

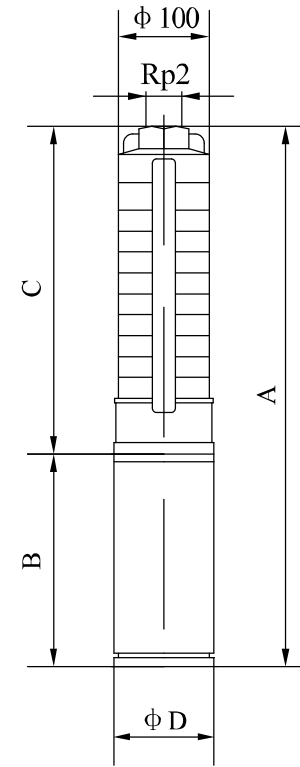
Model	Size(mm)(Coupled to 4"/6" motor)				Weight (kg)
	A	B	C	$\phi D$	
SJ8-5	853	400	453	96	16
SJ8-7	977	440	537	96	19
SJ8-10	1133	470	663	96	22
SJ8-12	1257	510	747	96	27
SJ8-15	1383	510	873	96	29
SJ8-18	1619	620	999	96	32
SJ8-21	1907	782	1125	96/143	35/41
SJ8-25	2075	782	1293	96/143	37/43
SJ8-30	2343	840	1503	96/143	43/51
SJ8-37	2637	840	1797	96/143	46/54
SJ8-44	3011	920	2091	96/143	55/66
SJ8-50	3263	920	2343	96/143	58/69

# SJ12

## Performance curve ISO9906 Annex A 2850rpm



## Installation sketch



Note: The size B is varied with the motors of different manufacturers.

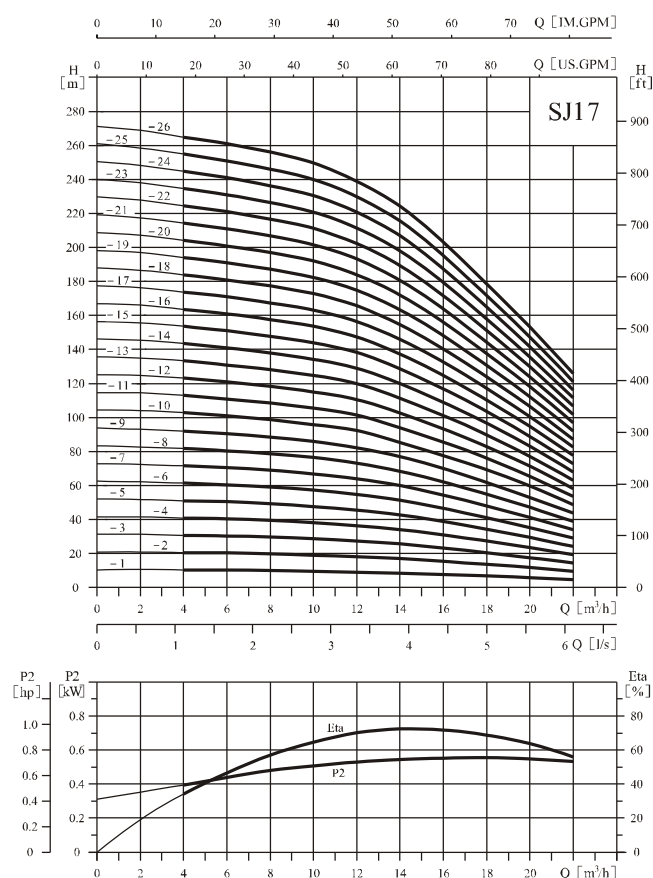
## Performance table

Model	Driving motor		Q (m³/h)	3	4	6	8	10	12	14	16	18
	(kW)	(hp)										
SJ12-5	1.5	2	H (m)	34	33	31	29	27	25	22	18	13
SJ12-7	2.2	3		48	46	43	40	38	35	31	25	19
SJ12-10	3.0	4		67	65	62	58	55	50	45	36	27
SJ12-13	4.0	5.5		88	86	81	76	71	66	59	48	36
SJ12-15	5.5	7.5		99	97	93	88	82	76	68	55	41
SJ12-18	5.5	7.5		120	118	112	105	99	91	81	66	50
SJ12-21	7.5	10		138	136	130	123	115	106	95	77	58
SJ12-25	7.5	10		166	163	155	146	137	126	113	92	69

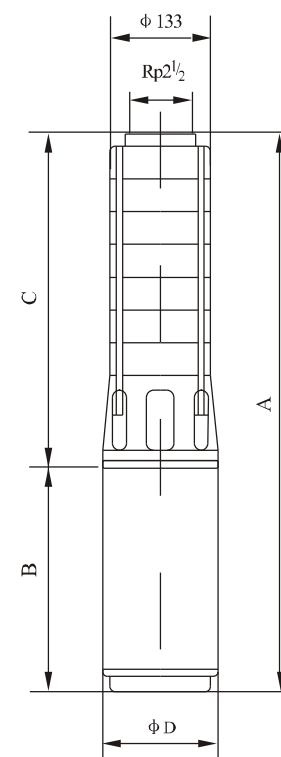
## Size and weight

Model	Size(mm)(Coupled to 4"/6" motor)				Weight (kg)
	A	B	C	φD	
SJ12-5	1005	470	535	96	21
SJ12-7	1175	510	665	96	26
SJ12-10	1480	620	860	96	30
SJ12-13	1837	782	1055	96/143	34/40
SJ12-15	2025	840	1185	96/143	38/46
SJ12-18	2220	840	1380	96/143	40/48
SJ12-21	2495	920	1575	96/143	47/58
SJ12-25	2755	920	1835	96/143	50/61

Performance curve ISO9906 Annex A 2850rpm



Installation sketch



Note: The size B is varied with the motors of different manufacturers.

Performance table

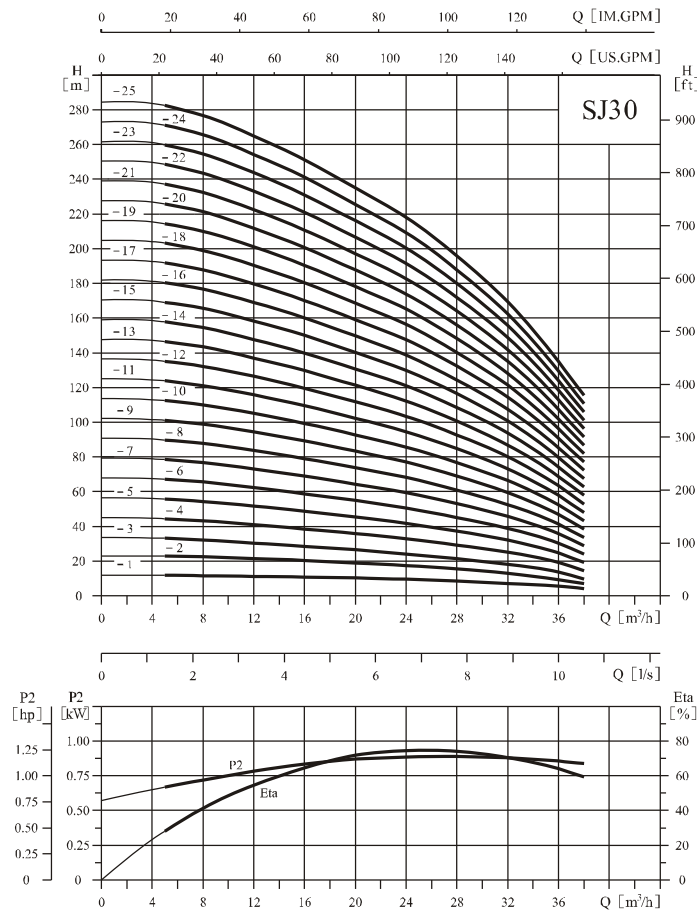
Model	Driving motor		Q (m³/h)	H (m)											
	(kW)	(hp)		4	6	8	10	12	14	17	20	22			
SJ17-1	0.55	0.75	10.5	10	9.5	9	8.5	8	6.5	5	4				
SJ17-2	1.1	1.5	20.5	20	19.5	19	18	16	13.5	10.5	8				
SJ17-3	2.2	3	31	30	29.5	28.5	27	24.5	20.5	16	13				
SJ17-4	2.2	3	41	40	39.5	38	36.5	33.5	28	22	18				
SJ17-5	3.0	4	52	51	50	48	45	42	35	28	23				
SJ17-6	4.0	5.5	62	61	60	58	55	51	42	34	27				
SJ17-7	4.0	5.5	73	71	70	67	64	59	49	40	31				
SJ17-8	5.5	7.5	83	81	80	77	73	67	57	45	36				
SJ17-9	5.5	7.5	93	91	90	87	82	76	64	52	40				
SJ17-10	5.5	7.5	103	101	100	97	91	85	72	58	45				
SJ17-11	7.5	10	113	111	109	106	100	94	79	64	50				
SJ17-12	7.5	10	123	121	119	115	109	102	87	70	55				
SJ17-13	7.5	10	133	131	129	125	118	111	95	75	60				
SJ17-14	9.2	12.5	143	141	139	134	128	119	102	81	65				
SJ17-15	9.2	12.5	153	151	148	144	137	128	109	87	70				
SJ17-16	9.2	12.5	163	161	158	154	146	136	116	92	75				
SJ17-17	9.2	12.5	173	171	167	163	155	145	123	98	79				
SJ17-18	11	15	184	181	177	173	164	154	130	104	84				
SJ17-19	11	15	194	191	187	182	174	162	138	110	89				
SJ17-20	11	15	204	201	197	192	184	171	145	116	94				
SJ17-21	13	17.5	214	211	207	202	193	180	152	121	99				
SJ17-22	13	17.5	224	221	217	211	202	188	160	127	104				
SJ17-23	13	17.5	235	231	227	221	211	197	167	133	109				
SJ17-24	13	17.5	245	241	236	230	220	205	174	139	113				
SJ17-25	15	20	255	251	246	240	229	213	181	145	118				
SJ17-26	15	20	265	261	256	250	238	222	189	150	122				

Size and weight

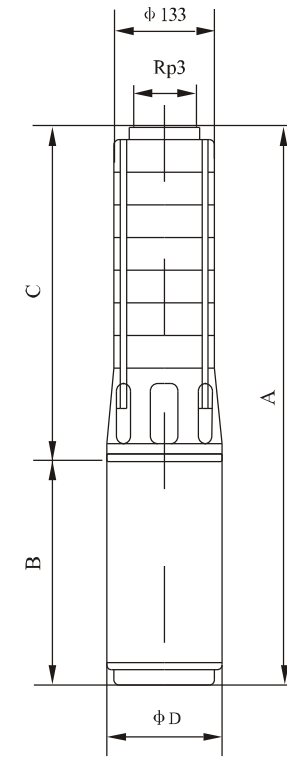
Model	Size(mm)(Coupled to 4 1/6" motor)				Weight (kg)
	A	B	C	$\phi D$	
SJ17-1	708	380	328	96	17
SJ17-2	828	440	388	96	21
SJ17-3	959	510	449	96	28
SJ17-4	1019	510	509	96	29
SJ17-5	1190	620	570	96	32
SJ17-6	1412	782	630	96/143	35/41
SJ17-7	1441	782	691	96/143	36/42
SJ17-8	1591	840	751	96/143	41/49
SJ17-9	1652	840	812	96/143	42/50
SJ17-10	1712	840	872	96/143	43/51
SJ17-11	1853	920	933	96/143	49/60
SJ17-12	1913	920	993	96/143	50/61
SJ17-13	1974	920	1054	96/143	51/62
SJ17-14	2027	897	1130	143	75
SJ17-15	2088	897	1191	143	76
SJ17-16	2148	897	1251	143	77
SJ17-17	2209	897	1312	143	78
SJ17-18	2314	942	1372	143	85
SJ17-19	2375	942	1433	143	86
SJ17-20	2435	942	1493	143	87
SJ17-21	2534	980	1554	143	95
SJ17-22	2594	980	1614	143	96
SJ17-23	2655	980	1675	143	98
SJ17-24	2715	980	1735	143	99
SJ17-25	2826	1030	1796	143	106
SJ17-26	2886	1030	1856	143	107

# SJ30

## Performance curve ISO9906 Annex A 2850rpm



## Installation sketch



Note: The size B is varied with the motors of different manufacturers.

## Performance table

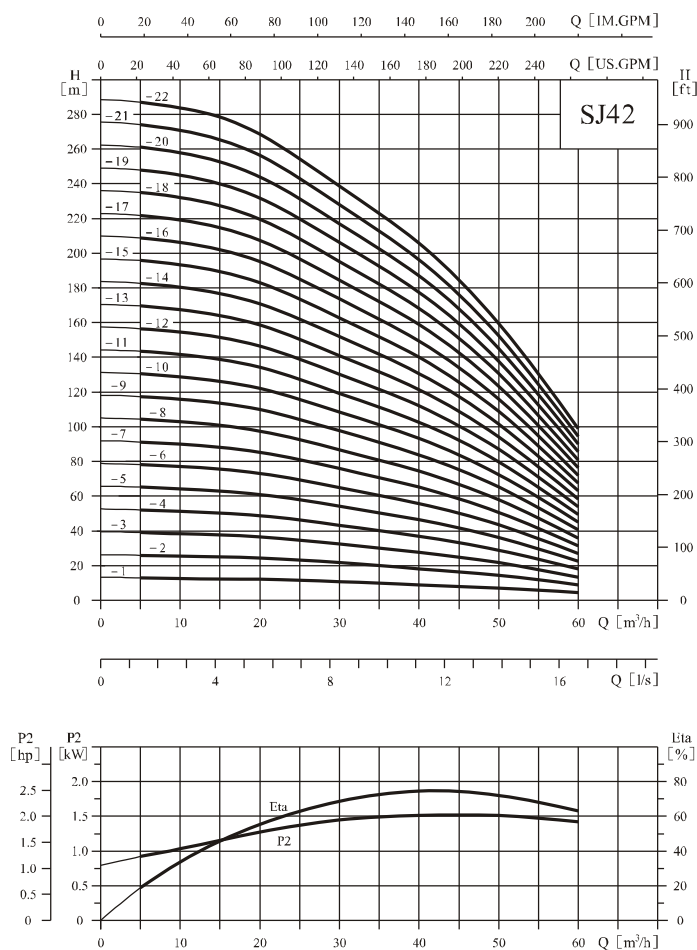
Model	Driving motor		Q (m³/h)	H (m)											
	(kW)	(hp)		5	8	12	16	20	24	28	30	32	36	38	
SJ30-1	1.1	1.5	11.5	11	10.5	10	9.5	9	8	7.5	7	5.5	4.5		
SJ30-2	2.2	3	22.5	22	21	20	19	17.5	16	15	14	10.5	9		
SJ30-3	3.0	4	33.5	33	32	30	28	26	24	22	20	16	14		
SJ30-4	4.0	5.5	44.5	44	42	40	37	35	32	29	27	21	18		
SJ30-5	5.5	7.5	55.5	55	53	50	47	44	40	37	34	27	23		
SJ30-6	5.5	7.5	67	66	63	60	56	52	48	44	41	32	27		
SJ30-7	7.5	10	77	76	74	70	65	61	55	52	48	37	32		
SJ30-8	7.5	10	89	87	84	80	75	70	63	59	54	43	36		
SJ30-9	9.2	12.5	101	98	95	90	84	78	71	66	61	48	41		
SJ30-10	9.2	12.5	112	109	105	100	93	87	79	74	68	53	45		
SJ30-11	9.2	12.5	123	120	116	110	103	96	87	81	75	59	50		
SJ30-12	11	15	134	131	126	120	112	105	95	88	82	64	54		
SJ30-13	11	15	145	142	137	129	121	113	103	96	88	69	59		
SJ30-14	13	17.5	157	153	147	139	130	122	111	103	95	74	63		
SJ30-15	13	17.5	168	164	158	149	140	131	119	110	102	80	68		
SJ30-16	15	20	180	175	168	159	149	140	127	118	109	85	72		
SJ30-17	15	20	190	186	179	169	158	148	135	125	116	90	77		
SJ30-18	18.5	25	201	197	189	179	168	157	143	132	122	96	81		
SJ30-19	18.5	25	212	207	200	189	177	166	150	140	129	101	86		
SJ30-20	18.5	25	223	218	210	199	186	174	158	147	136	106	90		
SJ30-21	18.5	25	235	229	221	209	196	183	166	155	143	112	95		
SJ30-22	22	30	246	240	231	219	205	192	174	162	150	117	99		
SJ30-23	22	30	258	251	242	229	214	201	182	169	156	122	104		
SJ30-24	22	30	269	262	252	239	224	209	190	177	163	128	108		
SJ30-25	22	30	281	273	263	249	233	218	198	184	170	133	113		

## Size and weight

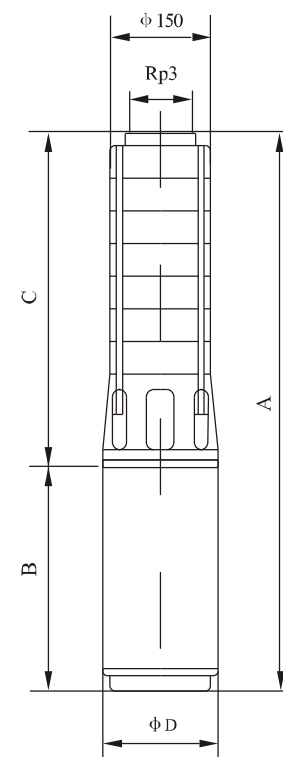
Model	Size(mm)(Coupled to 4"/6" motor)				Weight (kg)
	A	B	C	φD	
SJ30-1	802	440	362	96	20
SJ30-2	968	510	458	96	28
SJ30-3	1174	620	554	96	31
SJ30-4	1432	782	650	96/143	35/41
SJ30-5	1586	840	746	96/143	40/48
SJ30-6	1682	840	842	96/143	42/50
SJ30-7	1858	920	938	96/143	49/60
SJ30-8	1954	920	1034	96/143	51/61
SJ30-9	2043	897	1146	143	75
SJ30-10	2139	897	1242	143	77
SJ30-11	2235	897	1338	143	79
SJ30-12	2376	942	1434	143	85
SJ30-13	2472	942	1530	143	87
SJ30-14	2606	980	1626	143	96
SJ30-15	2702	980	1722	143	98
SJ30-16	2848	1030	1818	143	106
SJ30-17	2944	1030	1914	143	108
SJ30-18	3100	1090	2010	143	117
SJ30-19	3196	1090	2106	143	119
SJ30-20	3292	1090	2202	143	120
SJ30-21	3388	1090	2298	143	122
SJ30-22	3554	1160	2394	143	138
SJ30-23	3650	1160	2490	143	140
SJ30-24	3746	1160	2586	143	142
SJ30-25	3842	1160	2682	143	144



Performance curve ISO9906 Annex A 2850rpm



Installation sketch



Note: The size B is varied with the motors of different manufacturers.

Performance table

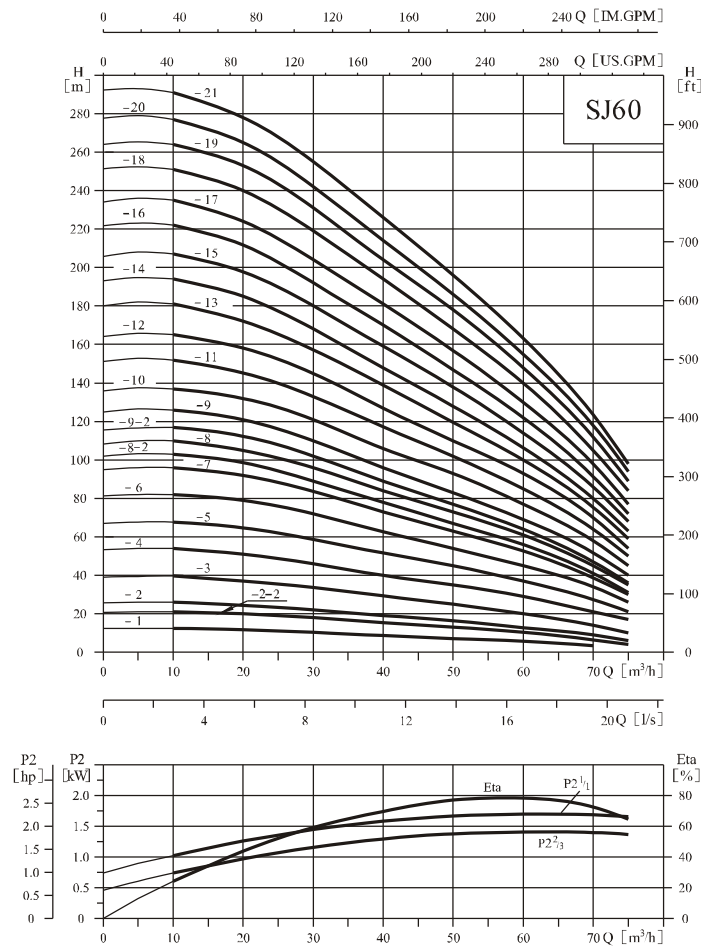
Model	Driving motor		Q (m³/h)	H (m)									
	(kW)	(hp)		5	10	20	30	40	42	50	60		
SJ42-1	2.2	3	13	12.5	12	10.5	9	8.5	7	4			
SJ42-2	3.0	4	26	25.5	24	21.5	18.5	17	14.5	8.5			
SJ42-3	5.5	7.5	40	38.5	36	32.5	28	26.5	22	13			
SJ42-4	7.5	10	53	52	49	43	37	36	29	18			
SJ42-5	7.5	10	66	65	61	54	47	45	38	23			
SJ42-6	9.2	12.5	79	78	74	66	57	54	45	28			
SJ42-7	11	15	92	91	86	77	66	63	52	32			
SJ42-8	13	17.5	105	104	98	87	75	72	58	36			
SJ42-9	15	20	118	117	110	97	84	80	65	40			
SJ42-10	15	20	132	130	122	108	93	89	72	45			
SJ42-11	18.5	25	144	142	134	119	103	98	79	49			
SJ42-12	18.5	25	157	155	146	130	112	107	87	54			
SJ42-13	22	30	170	168	158	141	122	116	94	58			
SJ42-14	22	30	183	181	170	152	131	125	102	63			
SJ42-15	22	30	196	194	182	163	140	134	109	67			
SJ42-16	25	34	209	207	194	174	150	143	116	72			
SJ42-17	25	34	222	220	206	184	159	152	123	77			
SJ42-18	30	40	235	233	218	195	168	161	131	81			
SJ42-19	30	40	248	246	231	206	178	170	138	86			
SJ42-20	30	40	261	259	243	217	187	179	145	90			
SJ42-21	37	50	274	271	255	228	196	188	152	95			
SJ42-22	37	50	287	283	267	238	205	197	160	99			

Size and weight

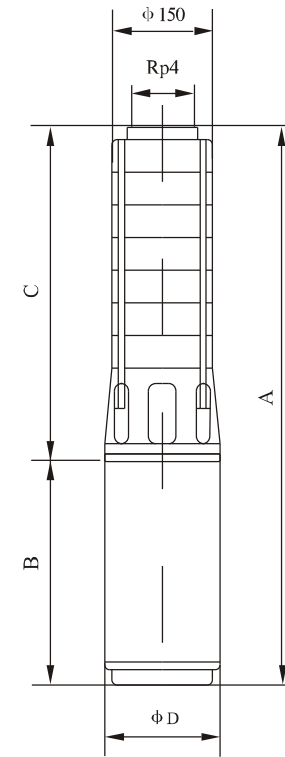
Model	Size(mm)(Coupled to 4"/6" motor)				Weight (kg)
	A	B	C	φD	
SJ42-1	888	510	378	96	29
SJ42-2	1111	620	491	96	33
SJ42-3	1444	840	604	96/143	40/48
SJ42-4	1637	920	717	96/143	47/58
SJ42-5	1750	920	830	96/143	49/60
SJ42-6	1856	897	959	143	73
SJ42-7	2014	942	1072	143	80
SJ42-8	2165	980	1185	143	89
SJ42-9	2328	1030	1298	143	97
SJ42-10	2441	1030	1411	143	100
SJ42-11	2614	1090	1524	143	109
SJ42-12	2727	1090	1637	143	111
SJ42-13	2910	1160	1750	143	127
SJ42-14	3023	1160	1863	143	129
SJ42-15	3136	1160	1976	143	131
SJ42-16	3331	1242	2089	143	145
SJ42-17	3444	1242	2202	143	147
SJ42-18	3697	1382	2315	143	162
SJ42-19	3810	1382	2428	143	164
SJ42-20	3923	1382	2541	143	167
SJ42-21	4224	1570	2654	143	192
SJ42-22	4337	1570	2767	143	194

# SJ60

## Performance curve ISO9906 Annex A 2850rpm



## Installation sketch



Note: The size B is varied with the motors of different manufacturers.

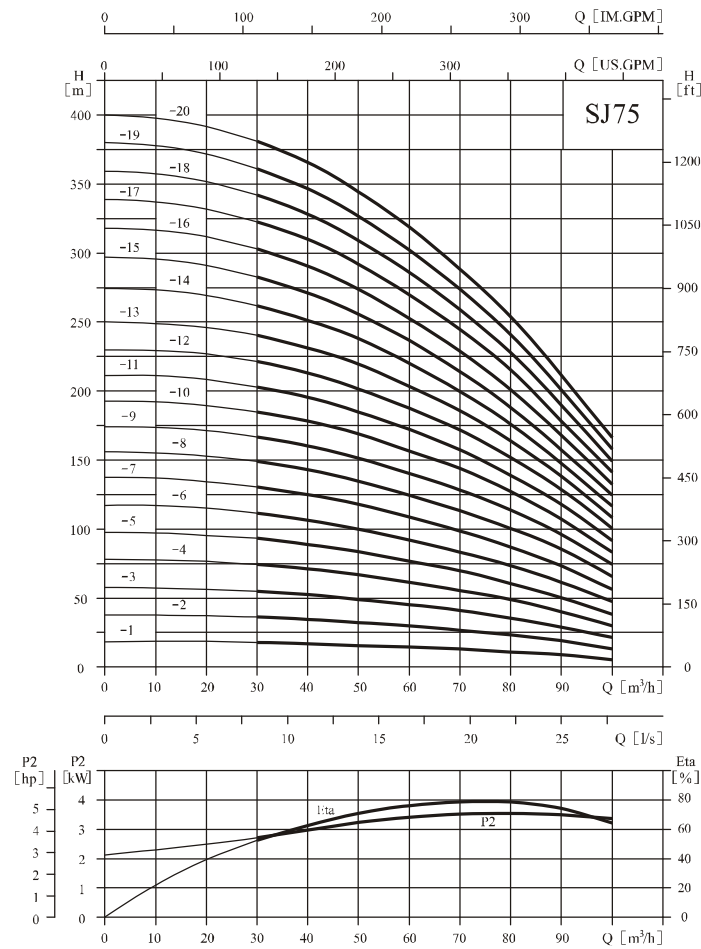
## Performance table

Model	Driving motor		Q (m³/h)	H (m)																	
	(kW)	(hp)		10	20	30	40	50	60	70	75										
SJ60-1	2.2	3	12.5	12	10.5	8.5	7	6	4	—											
SJ60-2-2	3.0	4	21	20	18	15.5	13	10.5	6.5	4											
SJ60-2	4.0	5.5	26	24.5	22	19	16.5	12.5	9	6											
SJ60-3	5.5	7.5	40	37	34	29	25	20	14	10											
SJ60-4	7.5	10	54	51	46	40	35	29	21	17											
SJ60-5	9.2	12.5	68	65	59	51	45	37	28	21											
SJ60-6	11	15	82	79	72	62	54	45	34	26											
SJ60-7	13	17.5	96	92	84	73	63	53	39	30											
SJ60-8-2	13	17.5	103	99	89	78	67	56	41	31											
SJ60-8	15	20	110	105	96	84	73	61	45	35											
SJ60-9-2	15	20	117	112	102	89	77	64	47	36											
SJ60-9	18.5	25	124	121	110	96	85	69	52	40											
SJ60-10	18.5	25	137	132	121	106	93	77	58	45											
SJ60-11	22	30	152	145	133	117	102	85	64	50											
SJ60-12	22	30	165	158	145	127	110	93	70	54											
SJ60-13	25	34	181	172	157	139	120	100	75	59											
SJ60-14	25	34	194	185	168	148	128	106	80	63											
SJ60-15	25	34	207	198	180	159	138	114	85	68											
SJ60-16	30	40	222	212	192	170	147	122	91	72											
SJ60-17	30	40	235	224	204	181	157	130	98	77											
SJ60-18	37	50	251	240	219	194	168	140	105	84											
SJ60-19	37	50	264	253	231	204	178	148	112	89											
SJ60-20	37	50	277	265	242	214	186	155	118	94											
SJ60-21	37	50	291	278	255	226	196	163	123	98											

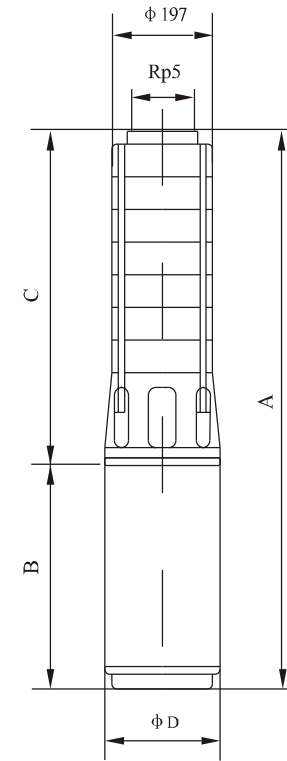
## Size and weight

Model	Size(mm)(Coupled to 4"/6" motor)				Weight (kg)
	A	B	C	φD	
SJ60-1	878	510	368	96	30
SJ60-2-2	1101	620	481	96	33
SJ60-2	1263	782	481	96/143	35/41
SJ60-3	1434	840	594	96/143	41/49
SJ60-4	1627	920	707	96/143	48/59
SJ60-5	1717	897	820	143	72
SJ60-6	1891	942	949	143	78
SJ60-7	2042	980	1062	143	87
SJ60-8-2	2155	980	1175	143	88
SJ60-8	2205	1030	1175	143	96
SJ60-9-2	2318	1030	1288	143	97
SJ60-9	2378	1090	1288	143	105
SJ60-10	2491	1090	1401	143	107
SJ60-11	2674	1160	1514	143	123
SJ60-12	2787	1160	1627	143	125
SJ60-13	2900	1160	1740	143	139
SJ60-14	3095	1242	1853	143	141
SJ60-15	3208	1242	1966	143	143
SJ60-16	3461	1382	2079	143	158
SJ60-17	3594	1382	2192	143	160
SJ60-18	3687	1382	2305	143	186
SJ60-19	3988	1570	2418	143	188
SJ60-20	4101	1570	2531	143	190
SJ60-21	4214	1570	2644	143	191

Performance curve ISO9906 Annex A 2900rpm



Installation sketch



Note: The size B is varied with the motors of different manufacturers.

Performance table

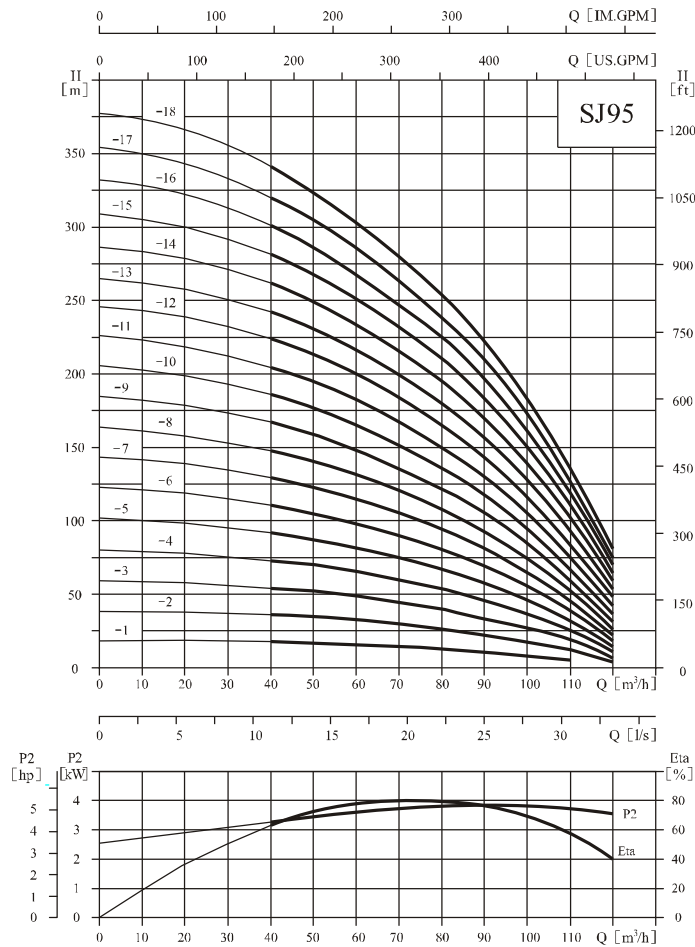
Model	Driving motor		Q (m³/h)	H (m)										
	(kW)	(hp)		30	40	50	60	70	75	80	90	100		
SJ75-1	4	5.5	18	17	15.5	14.5	13	12	11	9	5.5			
SJ75-2	7.5	10	36.5	34.5	32	30	27	25	23	19	12.5			
SJ75-3	11	15	54.5	52.5	49	45	41	38	35.5	29	21.5			
SJ75-4	15	20	73.5	71	66.5	61	55.5	52	48	40	30			
SJ75-5	18.5	25	92	89	83	76	70	65	60.5	51	38			
SJ75-6	22	30	111	107	100	91	84	79	73	62	47			
SJ75-7	30	40	130	125	118	107	98	93	87	73	56			
SJ75-8	30	40	148	143	135	124	113	107	101	85	65			
SJ75-9	37	50	167	161	152	140	128	121	114	96	74			
SJ75-10	37	50	185	178	169	157	143	135	127	107	83			
SJ75-11	45	60	203	196	185	172	158	148	139	118	92			
SJ75-12	45	60	222	214	202	188	172	162	152	129	100			
SJ75-13	55	75	241	232	220	204	186	175	164	139	108			
SJ75-14	55	75	262	251	238	220	200	188	176	149	116			
SJ75-15	55	75	283	271	256	236	214	201	188	159	124			
SJ75-16	63	85	303	291	274	253	229	215	202	169	133			
SJ75-17	63	85	323	310	292	270	245	229	215	179	142			
SJ75-18	75	100	342	329	309	286	259	243	228	190	150			
SJ75-19	75	100	361	347	327	302	274	257	241	201	158			
SJ75-20	75	100	381	366	345	318	288	271	254	212	167			

Size and weight

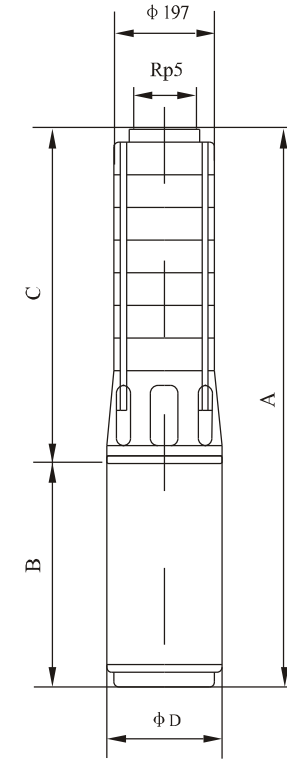
Model	Size(mm)(Coupled to 6"/8" motor)				Weight (kg)
	A	B	C	φD	
SJ75-1	1270	782	488	143	56
SJ75-2	1476/1421	862/790	614/631	143/184	78/97
SJ75-3	1682/1577	942/820	740/757	143/184	92/116
SJ75-4	1896/1743	1030/860	866/883	143/184	110/134
SJ75-5	2082/1899	1090/890	992/1009	143/184	122/152
SJ75-6	2278/2075	1160/940	1118/1135	143/184	141/178
SJ75-7	2626/2311	1330/1050	1244/1261	143/184	171/211
SJ75-8	2752/2437	1330/1050	1370/1387	143/184	176/216
SJ75-9	3066/2663	1570/1150	1496/1513	143/184	204/233
SJ75-10	3192/2789	1570/1150	1622/1639	143/184	209/238
SJ75-11	3005	1240	1765	184	256
SJ75-12	3131	1240	1891	184	261
SJ75-13	3387	1370	2017	184	279
SJ75-14	3513	1370	2143	184	285
SJ75-15	3639	1370	2269	184	290
SJ75-16	3885	1490	2395	192	309
SJ75-17	4011	1490	2521	192	315
SJ75-18	4187	1540	2647	192	341
SJ75-19	4313	1540	2773	192	346
SJ75-20	4439	1540	2899	192	351

# SJ95

## Performance curve ISO9906 Annex A 2900rpm



## Installation sketch



Note: The size B is varied with the motors of different manufacturers.

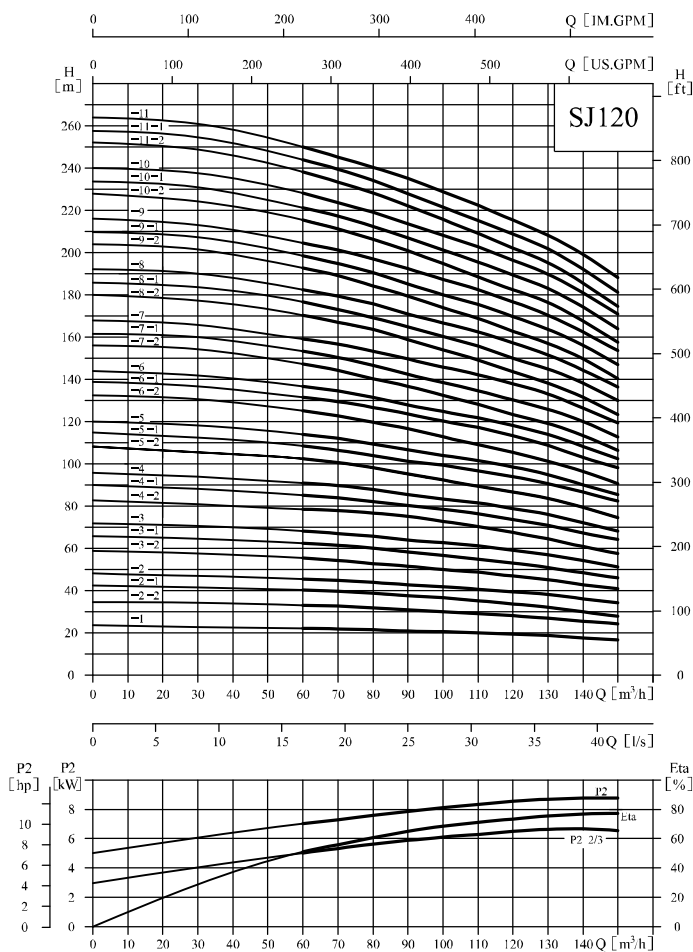
## Performance table

Model	Driving motor		Q (m³/h)	H (m)											
	(kW)	(hp)		40	50	60	70	80	90	95	100	110	120		
SJ95-1	4	5.5	17.5	16.5	15.5	14	12.5	10.5	9.5	8	5	—			
SJ95-2	9.2	12.5	36	34	32	28.5	26	21.5	20	17	12	3.5			
SJ95-3	13	17.5	54	52	48.5	44.5	40	33	30	26	19	6			
SJ95-4	18.5	25	72	70	65	60	54	45	41	36	25.5	10.5			
SJ95-5	22	30	91	87	81.5	75	68	57	51.5	46	32	14.5			
SJ95-6	25	34	110	104	98	90	81	69	62	55	38	18			
SJ95-7	30	40	129	122	115	105	94	81	73	65	45	22			
SJ95-8	37	50	148	141	131	120	108	93	84	75	52	26			
SJ95-9	37	50	167	159	148	135	122	105	95	85	59	31			
SJ95-10	45	60	186	177	165	151	136	117	106	95	67	36			
SJ95-11	45	60	205	195	182	167	150	130	117	105	75	42			
SJ95-12	55	75	224	213	199	183	165	143	129	116	84	48			
SJ95-13	55	75	243	231	216	199	180	156	141	127	93	53			
SJ95-14	55	75	262	249	233	215	195	169	153	138	102	59			
SJ95-15	63	85	281	268	250	231	210	183	166	149	111	64			
SJ95-16	63	85	301	286	267	247	225	197	178	160	119	70			
SJ95-17	75	100	321	304	284	263	240	210	190	171	127	75			
SJ95-18	75	100	342	323	302	279	255	222	202	182	135	81			

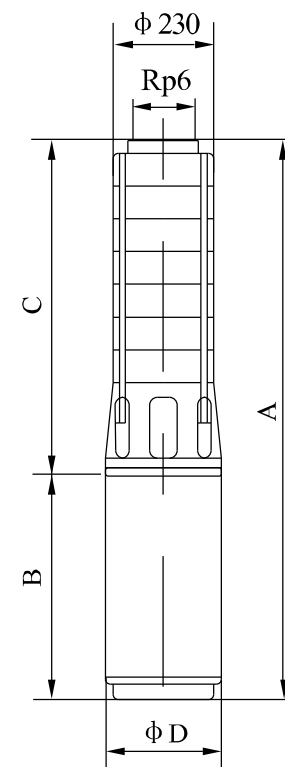
## Size and weight

Model	Size(mm)(Coupled to 6"/8" motor)				Weight (kg)
	A	B	C	φ D	
SJ95-1	1270	782	488	143	57
SJ95-2	1511/1431	897/800	614/631	143/184	83/105
SJ95-3	1720/1617	980/860	740/757	143/184	100/129
SJ95-4	1956/1773	1090/890	866/883	143/184	119/148
SJ95-5	2152/1949	1160/940	992/1009	143/184	138/175
SJ95-6	2360/2125	1242/990	1118/1135	143/184	155/188
SJ95-7	2626/2311	1382/1050	1244/1261	143/184	174/213
SJ95-8	2940/2537	1570/1150	1370/1387	143/184	202/231
SJ95-9	3066/2663	1570/1150	1496/1513	143/184	208/237
SJ95-10	2879	1240	1639	184	254
SJ95-11	3005	1240	1765	184	260
SJ95-12	3261	1370	1891	184	279
SJ95-13	3387	1370	2017	184	284
SJ95-14	3513	1370	2143	184	290
SJ95-15	3759	1490	2269	192	310
SJ95-16	3885	1490	2395	192	316
SJ95-17	4061	1540	2521	192	342
SJ95-18	4187	1540	2647	192	348

Performance curve ISO9906 Annex A 2900rpm



Installation sketch



Note: The size B is varied with the motors of different manufacturers.

Performance table

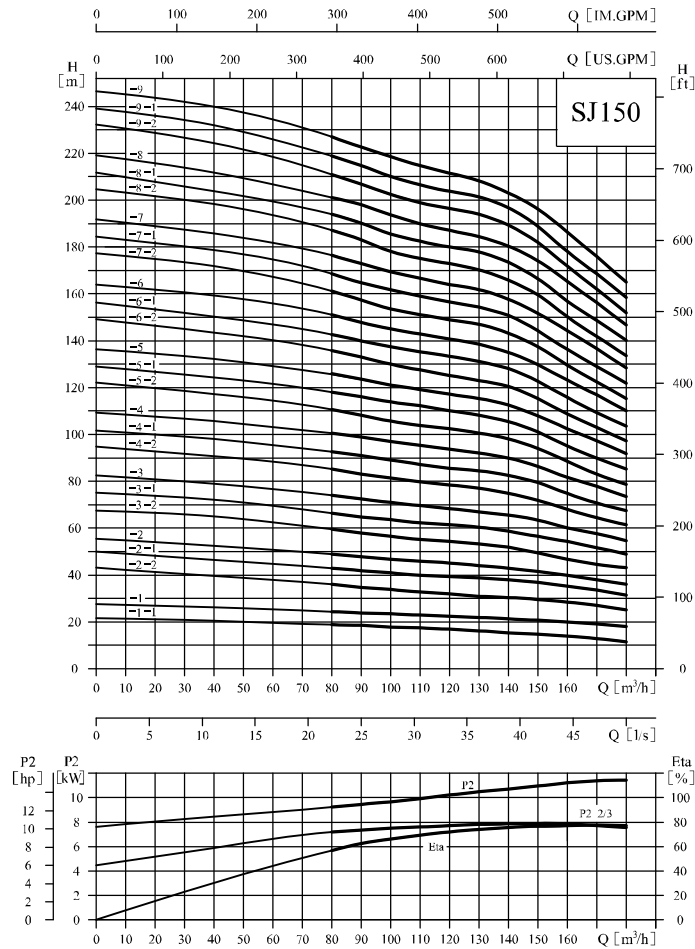
Model	Driving motor		Q (m³/h)	H (m)										
	(kW)	(hp)		60	70	80	90	100	110	120	130	140	150	
SJ120-1	11	15	22.5	22	21.5	21	20.5	20	19	18.5	17.5	16.5		
SJ120-2	15	20	33.5	33	32	30	29	28.5	27.5	26.5	24.5	24		
SJ120-2-1	18.5	25	40.5	40	38.5	37.5	36	35.5	33.5	32.5	29.5	28		
SJ120-2	22	30	45.5	44.5	43.5	42.5	41.5	40.5	39	38	36	34		
SJ120-3-2	25	34	55	54.5	52.5	51	49.5	48.5	46.5	45	42.5	40.5		
SJ120-3-1	30	40	62.5	61.5	60	58	56	54	53.5	51	48.5	46		
SJ120-3	30	40	68	67	65.5	64	62	61	59	57	54	51		
SJ120-4-2	37	50	78.5	77	75	72.5	70.5	69	66.5	65	60.5	57.5		
SJ120-4-1	37	50	85	84	82	79.5	77	76	73.5	71	67	64		
SJ120-4	37	50	90.5	89.5	87.5	85.5	83	81.5	78.5	76	72	68		
SJ120-5-2	45	60	102	100.5	97.5	95	91.5	90	86.5	84	79	74.5		
SJ120-5-1	45	60	108.5	106.5	103.5	101	98.5	96.5	94	91	86.5	82		
SJ120-5	55	75	113.5	112	109.5	106.5	103.5	101.5	98.5	95	90	85		
SJ120-6-2	55	75	125	122.5	119	116.5	112.5	109	104.5	101.5	96	90.5		
SJ120-6-1	55	75	131	129.5	126.5	123.5	120	117	113	109	103	98		
SJ120-6	63	85	136	134.5	131	127.5	124.5	121.5	118	114	108	102		
SJ120-7-2	63	85	147	144	140.5	136.5	132.5	128	123	119	113	106		
SJ120-7-1	63	85	153	150	146.5	142.5	138.5	135	130	125.5	120	112.5		
SJ120-7	75	100	159	156.5	153	149	145	142	138	133	126	119.5		
SJ120-8-2	75	100	170	167	164.5	158	153	148.5	143	138	131.5	123		
SJ120-8-1	75	100	175.5	173	168.5	163.5	159	155.5	150	145	138	129.5		
SJ120-8	75	100	181.5	179.5	175	170.5	166	163	157.5	152.5	144	136.5		
SJ120-9-2	90	120	192.5	189	184	179.5	174	168.5	162.5	157	149.5	140		
SJ120-9-1	90	120	198	195	190.5	185	180	175.5	169.5	164	156	147		
SJ120-9	90	120	204	201.5	198	191.5	186.5	182.5	177.5	171.5	162	153.5		
SJ120-10-2	90	120	215.5	211	206	200.5	194.5	188.5	182.5	176.5	167.5	157.5		
SJ120-10-1	90	120	221	217	212	206.5	200.5	195.5	189.5	183	174	164		
SJ120-10	110	150	227	223.5	219	213	207.5	202.5	197	190.5	180	170.5		
SJ120-11-2	110	150	238	233	228	222	215.5	208	202	195.5	185.5	174.5		
SJ120-11-1	110	150	243.5	239.5	234	227.5	221.5	215	209	202	192	181		
SJ120-11	110	150	250	245.5	241	234.5	228	222.5	216.5	209.5	198.5	187.5		

Size and weight

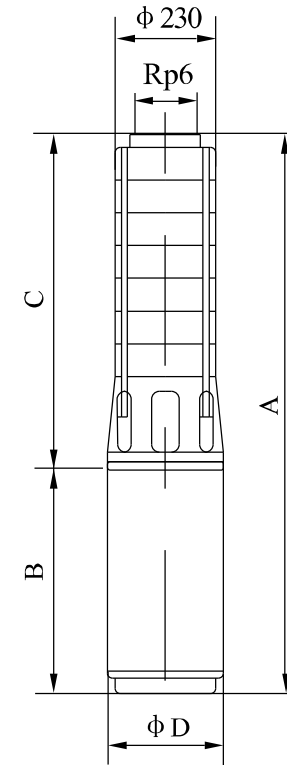
Model	Size(mm)(Coupled to 6"/8"/10" motor)				Weight (kg)
	A	B	C	φ D	
SJ120-1	1451/1380/--	920/820/--	531/560/--	144/184/--	96/121/--
SJ120-2	1721/1580/--	1030/860/--	691/720/--	144/184/--	111/135/--
SJ120-2-1	1781/1610/--	1090/890/--	691/720/--	144/184/--	118/140/--
SJ120-2	1921/1660/--	1230/940/--	691/720/--	144/184/--	127/155/--
SJ120-3-2	2093/1870/--	1242/990/--	851/880/--	144/184/--	142/173/--
SJ120-3-1	2233/1930/2002	1382/1050/1122	851/880/880	144/184/236	148/187/227
SJ120-3	2233/1930/2002	1382/1050/1122	851/880/880	144/184/236	148/187/227
SJ120-4-2	2581/2190/2202	1570/1150/1162	1011/1040/1040	144/184/236	166/210/252
SJ120-4-1	2581/2190/2202	1570/1150/1162	1011/1040/1040	144/184/236	166/210/252
SJ120-4	2581/2190/2202	1570/1150/1162	1011/1040/1040	144/184/236	166/210/252
SJ120-5-2	--/2440/2392	--/1240/1192	--/1200/1200	--/184/236	--/233/282
SJ120-5-1	--/2440/2392	--/1240/1192	--/1200/1200	--/184/236	--/233/282
SJ120-5	--/2570/2472	--/1370/1272	--/1200/1200	--/184/236	--/253/315
SJ120-6-2	--/2730/2632	--/1370/1272	--/1360/1360	--/184/236	--/261/323
SJ120-6-1	--/2730/2632	--/1370/1272	--/1360/1360	--/184/236	--/261/323
SJ120-6	--/2850/2692	--/1490/1332	--/1360/1360	--/192/236	--/288/341
SJ120-7-2	--/3010/2852	--/1490/1332	--/1520/1520	--/192/236	--/296/349
SJ120-7-1	--/3010/2852	--/1490/1332	--/1520/1520	--/192/236	--/296/349
SJ120-7	--/3060/2942	--/1540/1422	--/1520/1520	--/192/236	--/306/387
SJ120-8-2	--/3220/3102	--/1540/1422	--/1680/1680	--/192/236	--/314/395
SJ120-8-1	--/3220/3102	--/1540/1422	--/1680/1680	--/192/236	--/314/395
SJ120-8	--/3220/3102	--/1540/1422	--/1680/1680	--/192/236	--/314/395
SJ120-9-2	--/3484/3371	--/1644/1531	--/1840/1840	--/192/236	--/342/416
SJ120-9-1	--/3484/3371	--/1644/1531	--/1840/1840	--/192/236	--/342/416
SJ120-9	--/3484/3371	--/1644/1531	--/1840/1840	--/192/236	--/342/416
SJ120-10-2	--/3644/3531	--/1644/1531	--/2000/2000	--/192/236	--/350/424
SJ120-10-1	--/3644/3531	--/1644/1531	--/2000/2000	--/192/236	--/350/424
SJ120-10	--/3764/3641	--/1764/1641	--/2000/2000	--/192/236	--/376/461
SJ120-11-2	--/3924/3801	--/1764/1641	--/2160/2160	--/192/236	--/384/469
SJ120-11-1	--/3924/3801	--/1764/1641	--/2160/2160	--/192/236	--/384/469
SJ120-11	--/3924/3801	--/1764/1641	--/2160/2160	--/192/236	--/384/469

# SJ150

## Performance curve ISO9906 Annex A 2900rpm



## Installation sketch



Note: The size B is varied with the motors of different manufacturers.

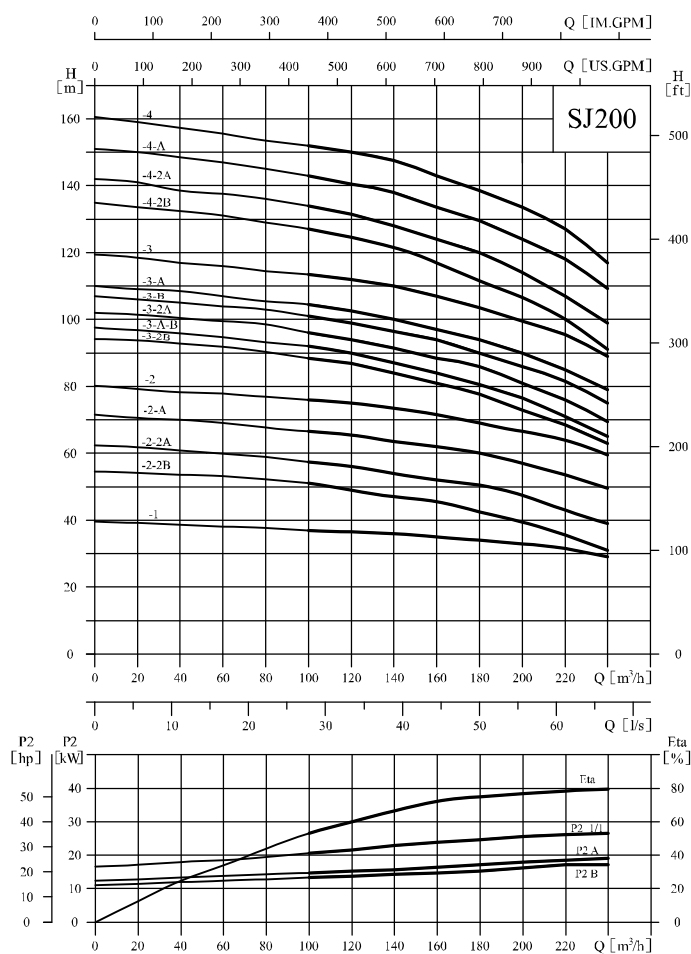
## Performance table

Model	Driving motor		Q (m³/h)	H (m)										
	(kW)	(hp)		80	90	100	110	120	130	140	150	160	170	180
SJ150-1-1	9.2	12.5	18.5	18	17.5	17	16.5	16	15	14.5	13.5	13	11.5	
SJ150-1	13	17.5	24	23.5	23	22.5	22	21.5	21	20	19.5	19	18	
SJ150-2-2	18.5	25	35.5	34	32	31.5	31	29.5	29	28.5	28	27	25	
SJ150-2-1	22	30	43	41.5	40	39	38.5	38	37.5	36	35.5	34	31	
SJ150-2	25	34	48.5	47.5	46	45	44.5	44	42.5	41	39.5	38	36	
SJ150-3-2	30	40	60	57	54.5	54	53.5	53	52.5	49.5	46.5	44.5	43	
SJ150-3-1	37	50	66.5	64	62.5	61.5	60.5	60	59.5	56.5	54	51.5	49	
SJ150-3	37	50	74.5	72.5	70.5	69.5	68	67.5	65.5	63.5	60	57.5	54.5	
SJ150-4-2	45	60	85.5	83	80	79	77.5	77	76	73	66.5	63.5	61	
SJ150-4-1	45	60	93	90	87.5	86.5	84.5	83.5	83	79.5	73.5	70.5	67	
SJ150-4	55	75	100.5	98	96	94.5	93	92.5	89.5	86.5	80.5	77.5	73	
SJ150-5-2	55	75	111.5	107	104	103	102	101	98	94	86.5	81.5	78.5	
SJ150-5-1	55	75	118.5	114.5	112	110.5	108.5	107	105.5	101	94	89.5	85	
SJ150-5	63	85	126	122.5	120	118	116	115	112.5	108.5	101.5	97	91.5	
SJ150-6-2	63	85	137	131.5	128	126.5	123	122	120.5	115.5	107	101	97	
SJ150-6-1	75	100	144	139	136	134	132	131.5	128	122.5	114.5	109	103.5	
SJ150-6	75	100	151.5	147	144	141.5	139.5	138	135	130	122	116.5	110	
SJ150-7-2	75	100	162.5	156	152.5	150.5	146	145	143	138	128	121	115	
SJ150-7-1	90	120	169.5	163.5	160.5	158	155	153	150.5	145	135.5	129	121.5	
SJ150-7	90	120	177	171.5	168.5	165.5	163.5	162.5	157.5	152.5	143	136.5	128	
SJ150-8-2	90	120	188	180.5	177	174.5	172	171	165.5	160.5	149	140.5	133.5	
SJ150-8-1	110	150	195	188	185	182	180	178.5	173	168.5	156.5	148.5	140	
SJ150-8	110	150	202.5	196	193	189.5	187	186	180	175	164	156	146.5	
SJ150-9-2	110	150	213.5	205	201.5	198	196	194	188.5	182.5	170.5	160	152	
SJ150-9-1	110	150	220.5	212.5	209.5	205.5	203	201.5	196	189.5	178	168	158.5	
SJ150-9	110	150	228	220.5	217.5	213	210	209	203	197	185.5	175.5	165	

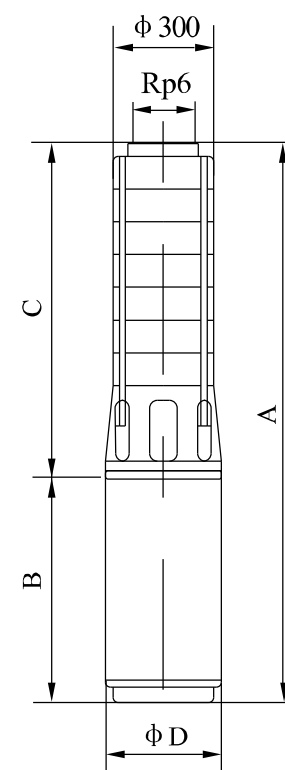
## Size and weight

Model	Size(mm)(Coupled to 6"/8"/10" motor)				Weight (kg)
	A	B	C	φ D	
SJ150-1-1	1428/1360/--	897/800/--	531/560/--	144/184/--	92/117/--
SJ150-1	1561/1420/--	1030/860/--	531/560/--	144/184/--	100/124/--
SJ150-2-2	1781/1610/--	1090/890/--	691/720/--	144/184/--	119/141/--
SJ150-2-1	1851/1660/--	1160/940/--	691/720/--	144/184/--	128/156/--
SJ150-2	1933/1710/--	1242/990/--	691/720/--	144/184/--	135/166/--
SJ150-3-2	2233/1930/2002	1382/1050/1122	851/880/880	144/184/--	149/188/228
SJ150-3-1	2421/2030/2042	1570/1150/1162	851/880/880	144/184/--	158/202/246
SJ150-3	2421/2030/2042	1570/1150/1162	851/880/880	144/184/--	158/202/246
SJ150-4-2	--/2280/2232	--/1240/1192	--/1040/1040	--/184/236	--/225/274
SJ150-4-1	--/2280/2232	--/1240/1192	--/1040/1040	--/184/236	--/225/274
SJ150-4	--/2410/2312	--/1370/1272	--/1040/1040	--/184/236	--/245/307
SJ150-5-2	--/2570/2472	--/1370/1272	--/1200/1200	--/184/236	--/253/315
SJ150-5-1	--/2570/2472	--/1370/1272	--/1200/1200	--/184/236	--/253/315
SJ150-5	--/2690/2532	--/1490/1332	--/1200/1200	--/192/236	--/280/333
SJ150-6-2	--/2850/2692	--/1490/1332	--/1360/1360	--/192/236	--/288/341
SJ150-6-1	--/2900/2782	--/1540/1422	--/1360/1360	--/192/236	--/298/379
SJ150-6	--/2900/2782	--/1540/1422	--/1360/1360	--/192/236	--/298/379
SJ150-7-2	--/3060/2942	--/1540/1422	--/1520/1520	--/192/236	--/306/387
SJ150-7-1	--/3164/3051	--/1644/1531	--/1520/1520	--/192/236	--/326/400
SJ150-7	--/3164/3051	--/1644/1531	--/1520/1520	--/192/236	--/326/400
SJ150-8-2	--/3324/3211	--/1644/1531	--/1680/1680	--/192/236	--/334/408
SJ150-8-1	--/3444/3321	--/1764/1641	--/1680/1680	--/192/236	--/360/426
SJ150-8	--/3444/3321	--/1764/1641	--/1680/1680	--/192/236	--/360/426
SJ150-9-2	--/3604/3481	--/1764/1641	--/1840/1840	--/192/236	--/369/435
SJ150-9-1	--/3604/3481	--/1764/1641	--/1840/1840	--/192/236	--/369/435
SJ150-9	--/3604/3481	--/1764/1641	--/1840/1840	--/192/236	--/369/435

Performance curve ISO9906 Annex A 2900rpm



Installation sketch



Note: The size B is varied with the motors of different manufacturers.

Performance table

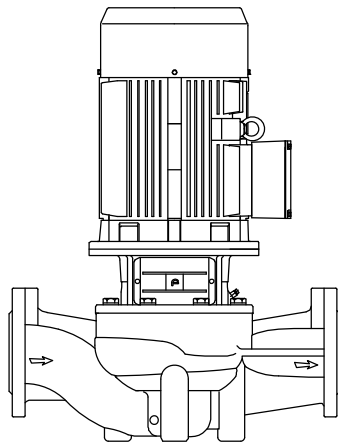
Model	Driving motor		Q (m³/h)	100	120	140	160	180	200	220	240
	(kW)	(hp)									
SJ200-1	30	40	H (m)	37	36.5	36	35	34	33	31.5	29
SJ200-2-2B	37	50		51	49	47	45.5	42.5	39.5	35.5	31
SJ200-2-2A	45	60		57.5	56	54	52	50.5	47.5	43	39
SJ200-2-A	55	75		66.5	65.5	63.5	62	60	57	53.5	49.5
SJ200-2	55	75		76	75	73.5	71.5	69	66.5	64	59.5
SJ200-3-2B	75	100		88.5	87	84	81	78	72.5	68.5	63
SJ200-3-A-B	75	100		92	90	87	84	80.5	76.5	71	65
SJ200-3-2A	75	100		96	94	91.5	88.5	86	81	76	69.5
SJ200-3-B	75	100		101	99	96.5	94	90	86	81.5	75
SJ200-3-A	75	100		104.5	102.5	100	97	94	90	85	79
SJ200-3	90	120		113.5	112	110	107	103.5	99.5	95.5	89
SJ200-4-2B	90	120		127	124.5	121.5	117	111.5	106.5	100	91
SJ200-4-2A	110	150		134	131.5	127.5	124	120	114	107	99
SJ200-4-A	110	150		143	140.5	138	133.5	129.5	124	118	109.5
SJ200-4	110	150		152	150	147.5	143	138.5	133.5	127	117

Size and weight

Model	Size(mm)(Coupled to 10" motor)				Weight (kg)
	A	B	C	φD	
SJ200-1	1721	1122	599	236	221
SJ200-2-2B	1955	1162	793	236	255
SJ200-2-2A	1985	1192	793	236	275
SJ200-2-A	2065	1272	793	236	308
SJ200-2	2065	1272	793	236	308
SJ200-3-2B	2409	1422	987	236	386
SJ200-3-A-B	2409	1422	987	236	386
SJ200-3-2A	2409	1422	987	236	386
SJ200-3-B	2409	1422	987	236	386
SJ200-3-A	2409	1422	987	236	386
SJ200-3	2519	1532	987	236	399
SJ200-4-2B	2713	1532	1181	236	416
SJ200-4-2A	2823	1642	1181	236	453
SJ200-4-A	2823	1642	1181	236	453
SJ200-4	2823	1642	1181	236	453

**FCNP**<sup>®</sup>

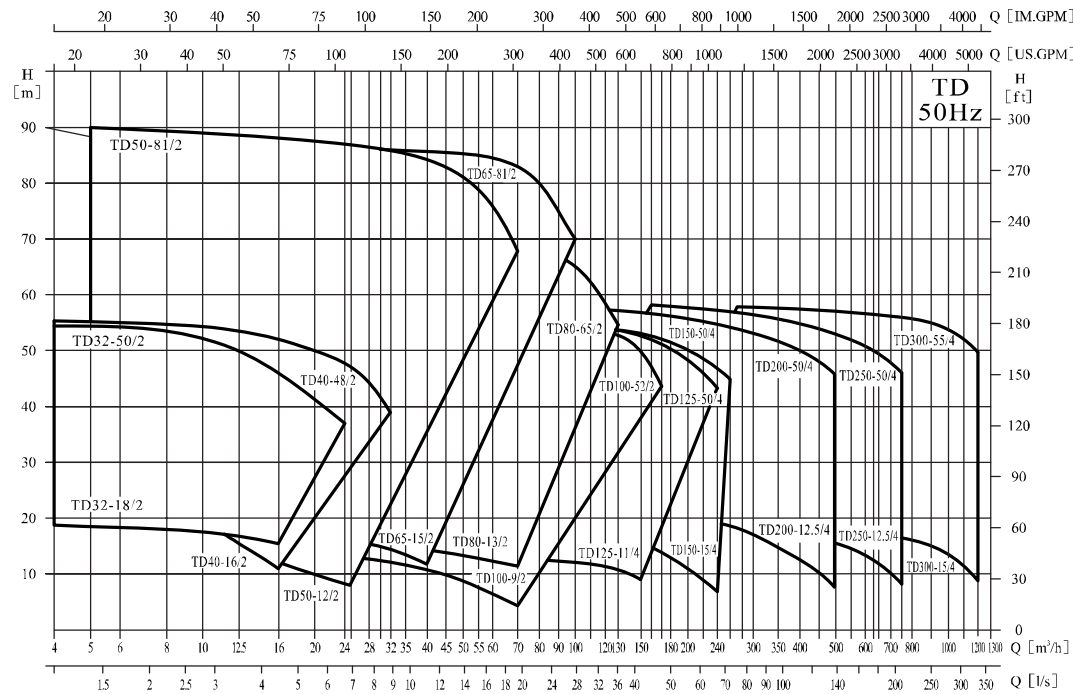




TD Vertical in-line circulation pump

# TD

## Performance scope



## Introduction

- The type TD pumps are single stage in-line centrifugal pumps, equipped with standard motor and mechanical seal. Comparing with other pumps in similar structure, the pumps are less accessible to the impurity in the liquid.
- The pump is designed to be pulled out from the top when disassemble. It can be repaired without affecting the pipelines.
- The mechanical seal for TD200 and above is cartridge mechanical seal. Motor needn't to be disassembled when replace mechanical seal.

## Curve conditions

Following conditions are suitable for the performance curves shown above.

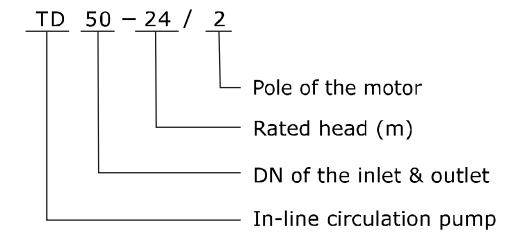
1. All curves are based on the measured value of motor 3×380V, 50Hz: under the constant speed of 2900rpm, 1450rpm or 1480 rpm;
2. Curve tolerance in conformity with ISO9906 Annex A
3. Measurement is done with 20°C air-free water, without impurities.
4. The operation of pump shall refer to the performance region indicated by the thickened curve to prevent overheating due to too small flow rate or overload of motor due to too large flow rate.
5. If the thickness and density of the pumped liquid is different from water, the motor power should be adjusted

## Applications

- The pumped liquid is clean, thin, non-corrosive, non-flammable, and non-explosive liquid which shall not contain any solid grain and fibre that might damage the pump mechanically or chemically.
- The detailed requirements on the liquid is in Table 2. If the liquid viscosity or density is beyond the required level, the performance curves will descend and energy consumption will be increased.
- Liquid temperature: -15°C~110°C
- Max. Working pressure: Normal type: PN 12 bar; special type: PN 16 bar.

## Definition of Model

TD50-24/2



## Product range

Table 1

NO.	Model	Q (m³/h)	H (m)	n (r/min)	Standard voltage(V)	
					1×220V P₂(kW)	3×380V P₂(kW)
1	TD32-18/2	8	18	2900	1.1	1.1
2	TD32-21/2	12.5	21		1.5	1.5
3	TD32-25/2	12.5	25		2.2	2.2
4	TD32-32/2	12.5	32			3
5	TD32-38/2	12.5	38			4
6	TD32-50/2	12.5	50			5.5
7	TD40-16/2	12.5	16		1.1	1.1
8	TD40-20/2	12.5	20		1.5	1.5
9	TD40-18/2	20	18		2.2	2.2
10	TD40-25/2	20	25			3
11	TD40-30/2	25	30			4
12	TD40-36/2	25	36			5.5
13	TD40-48/2	25	48			7.5
14	TD50-32/2	12.5	32			3
15	TD50-38/2	12.5	38			4
16	TD50-48/2	12.5	48			5.5
17	TD50-58/2	12.5	58			7.5
18	TD50-80/2	12.5	80			11
19	TD50-12/2	16	12		1.1	1.1
20	TD50-15/2	20	15		1.5	1.5
21	TD50-18/2	25	18		2.2	2.2
22	TD50-24/2	25	24			3
23	TD50-28/2	30	28			4
24	TD50-35/2	30	35			5.5
25	TD50-40/2	35	40			7.5
26	TD50-50/2	40	50		11	
27	TD50-60/2	50	60		15	
28	TD50-70/2	50	70		18.5	
29	TD50-81/2	50	81		22	
30	TD65-36/2	25	36		5.5	
31	TD65-48/2	25	48		7.5	
32	TD65-15/2	30	15	2.2	2.2	
33	TD65-19/2	30	19		3	
34	TD65-22/2	40	22		4	
35	TD65-30/2	40	30		5.5	
36	TD65-34/2	50	34		7.5	
37	TD65-40/2	50	40		11	
38	TD65-50/2	50	50		15	
39	TD65-61/2	50	61		18.5	
40	TD65-67/2	50	67		22	
41	TD65-83/2	50	83		30	
42	TD80-13/2	50	13		3	
43	TD80-18/2	50	18		4	
44	TD80-22/2	50	22		5.5	
45	TD80-28/2	50	28		7.5	

Table1(continued)

NO.	Model	Q (m <sup>3</sup> /h)	H (m)	n (r/min)	Standard voltage(V)	
					1×220V P <sub>2</sub> (kW)	3×380V P <sub>2</sub> (kW)
46	TD80-40/2	50	40	2900		11
47	TD80-48/2	50	48			15
48	TD80-30/2	80	30			11
49	TD80-38/2	80	38			15
50	TD80-47/2	80	47			18.5
51	TD80-54/2	80	54			22
52	TD80-67/2	80	67			30
53	TD100-9/2	50	9			2.2
54	TD100-15/2	60	15			4
55	TD100-17/2	80	17			5.5
56	TD100-22/2	80	22			7.5
57	TD100-27/2	100	27			11
58	TD100-33/2	100	33			15
59	TD100-40/2	100	40			18.5
60	TD100-48/2	100	48		22	
61	TD100-52/2	130	52		30	
62	TD125-11/4	120	11	1450		5.5
63	TD125-14/4	120	14			7.5
64	TD125-18/4*	160	18			11
65	TD125-22/4*	160	22			15
66	TD125-28/4*	160	28			18.5
67	TD125-32/4*	160	32			22
68	TD125-40/4*	160	40			30
69	TD125-48/4*	160	48			37
70	TD150-12.5/4*	200	12.5			11
71	TD150-17/4*	200	17			15
72	TD150-21/4*	200	21			18.5
73	TD150-25/4*	200	25			22
74	TD150-33/4*	200	33			30
75	TD150-40/4*	200	40			37
76	TD150-50/4*	200	50		45	
77	TD200-15/4	300	15	1480		18.5
78	TD200-18/4	300	18			22
79	TD200-24/4	300	24			30
80	TD200-30/4	300	30			37
81	TD200-35/4	300	35			45
82	TD200-44/4	300	44			55
83	TD200-53/4	300	53			75
84	TD200-12.5/4	400	12.5			22
85	TD200-20/4	400	20			30
86	TD200-23/4	400	23			37
87	TD200-27/4	400	27			45
88	TD200-32/4	400	32			55
89	TD200-43/4	400	43			75
90	TD200-50/4	400	50			90
91	TD250-15/4	500	15		30	
92	TD250-18/4	500	18		37	
93	TD250-21/4	500	21		45	
94	TD250-27/4	500	27		55	
95	TD250-36/4	500	36		75	
96	TD250-44/4	500	44		90	
97	TD250-53/4	500	53		110	
98	TD250-12.5/4	630	12.5		30	
99	TD250-14/4	630	14		37	
100	TD250-17/4	630	17		45	
101	TD250-20/4	630	20		55	
102	TD250-26/4	630	26		75	
103	TD250-32/4	630	32		90	
104	TD250-40/4	630	40		110	
105	TD250-50/4	630	50		132	

NO.	Model	Q (m <sup>3</sup> /h)	H (m)	n (r/min)	Standard voltage(V)	
					1×220V P <sub>2</sub> (kW)	3×380V P <sub>2</sub> (kW)
106	TD300-15/4	900	15	1480		55
107	TD300-20/4	900	20			75
108	TD300-25/4	900	25			90
109	TD300-30/4	900	30			110
110	TD300-35/4	900	35			132
111	TD300-44/4	900	44			160
112	TD300-55/4	900	55			200

Type with "\*" has two structures for selection, one is lengthening shaft type and the other is easy maintenance type.

### Minimum inlet pressure NPSH

In case that the pressure in pump is lower than the steam pressure used to convey liquid, the cavitations will occur. To avoid cavitations, a minimum pressure at the inlet side of the pump shall be guaranteed. The maximum suction can be calculated with following formula:

$$H = P_b \times 10.2 - NPSH - H_f - H_v - H_s$$

H-Maximum suction head (m)

P<sub>b</sub>-Atmosphere pressure (bar)

In a closed system, P<sub>b</sub> means system pressure (bar)

NPSH-Net positive suction head (m)

It can be read from the point of Max. Flow rate shown on NPSH curve.

H<sub>f</sub>-Pipeline loss at the inlet (m)

It is in accordance with pipeline possible Max.flow.

H<sub>v</sub>-Steam pressure (m)

It depends on liquid temperature and steam pressure value.

H<sub>s</sub>-Safety margin (m)

Minimum 0.5m delivery head.

If the calculated result H is negative the pump may run under the Max. Suction head H. in case the calculated result H is negative, a delivery head of Min. inlet pressure is necessary.

Note: Normally, the above calculation will not be done. H is calculated in the following conditions:

- 1.The liquid temperature is comparatively higher;
- 2.Liquid flow exceed rated value;
- 3.Suction head is comparatively large or inlet pipeline long;
- 4.System pressure is too low;
- 5.Bad inlet condition.

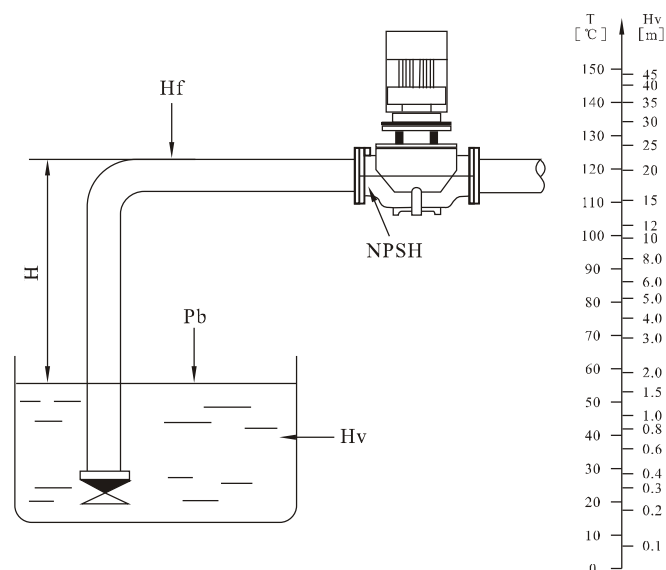


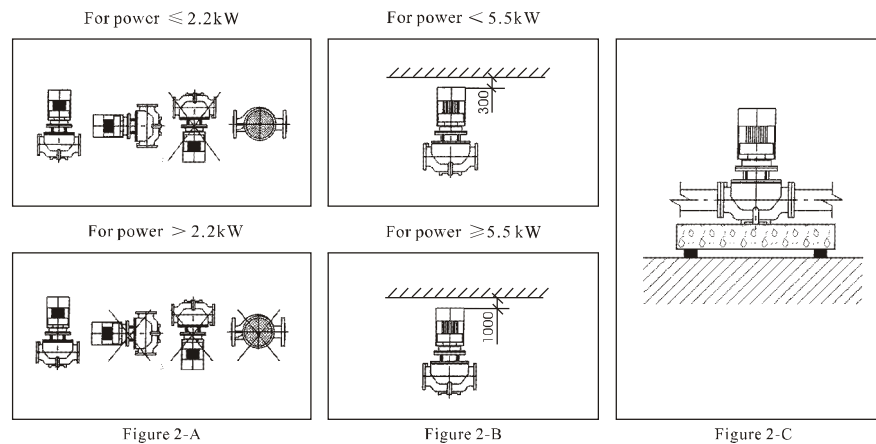
Table2

	Liquid	Max.temperature	Liquid requirement	Application
Water	Groundwater	<90℃		TD pumps are applicable for urban water supply, industrial water, cooling system, and cold & hot water for regional heat supply system: 1)main circulation pump 2)mixed circuit pump 3)boiler mixed-flow pump 4)gas-fired freezer pump 5)filter pump 6)constant pressure system pump 7)urban hot water circulation
	Boiler feed water	<110℃		
	District feed water	<110℃		
	Condensate	<90℃		
	Softened water	-15℃~110℃		
	Alkalescent water		Weak alkalescence	
Coolants	Hydrocarbon based antifreeze	<50℃	Little rime may damage the shaft seal	TD pumps can be used in chemical industry, pharmaceutical industry, food processing and so on. 1)liquid feeding 2)system pressure boosting 3)mixed circuit circulation pump
	Alcoholised compound	<50℃ 50%		
	30% brine(NaCl, CaCl <sub>2</sub> solution, etc)	<50℃	Little rime may damage the shaft seal	
Organic solvents	Isopropyl alcohol	≤60℃	Flammable liquid	
	Propyl alcohol	≤60℃		
Oxidants	Hydrogen peroxide	≤60℃ 20%		

**Installation requirements**

Some detailed requirement of installation is as below. The concrete request is as following:

- 1.If the system pipeline can support the pumps, pumps with 2.2kw motor power (including 2.2kw) can be hung in line; if the system pipeline cannot support the pumps or the pump motor power is higher than 2.2kw, the pumps must be installed in brackets or base.
- 2.Pumps with motor power lower than 2.2kw (including 2.2kw) can be installed horizontally or vertically to the pipeline. Pumps with motor power higher than 2.2kw, can only be installed vertically to the pipeline (see2-A)
- 3.The pump installation shall not allow the system pipeline tensile force to be transferred to the pump body.
- 4.The pump should be installed in the environment with sufficient cooling and the cooling air shall not be above 40℃.
- 5.If the pumps are installed outdoors, there should be covers to protect electric components from water.
- 6.For the convenience of maintenance, there should be enough space above and below the pumps. Minimum 300mm shall be kept for pumps with motor power lower than 5.5kw, and minimum 1000mm for pumps with motor power higher than 5.5kw(including 5.5kw).(See 2-B)
- 7.To prevent noises and vibration and ensure the best operation, anti-vibration base shall be used in installation. Generally, cement base with the weight equal or bigger than 1.5\*pump weight shall be adopted. (See2-C)
- 8.For TD32 to TD150, pumps with bases or without bases are both available for customers' requirements. (See appendix TD32-TD150 for base dimensions).

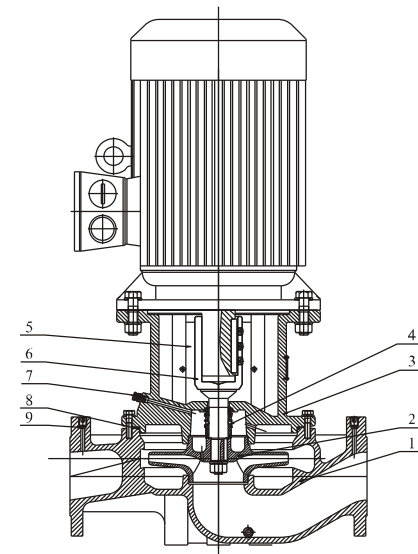


**Product structure and component material**

- The design of the pump is pump and motor. P-ump part can be pulled out. The TD series are e-quipped with standard motor and mechanical seal. Motor is TEFC standard motor. Its major dimensions are in conformity with JB/T8680 standard.
- The pump body is equal to a sestion of pipeline.While in maintenance, blind flange can be used to seal to pump cover which enable the normal operation of pumps.
- The flange connection dimensions are in conformity with the related provisions PN16 in GB/T 17241.6 or ISO7005-2/DIN2501.
- The inlet and outlet diameters are inconformity with related standard dimensions.
- The pump head is to connect motor and the pump.“O”ring is used to seal the pump head and the pump.

See Table 4 for component materials.

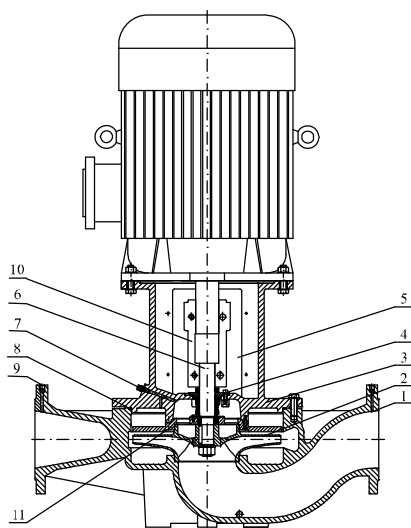
**Section drawing TD32~TD150**



**Material**

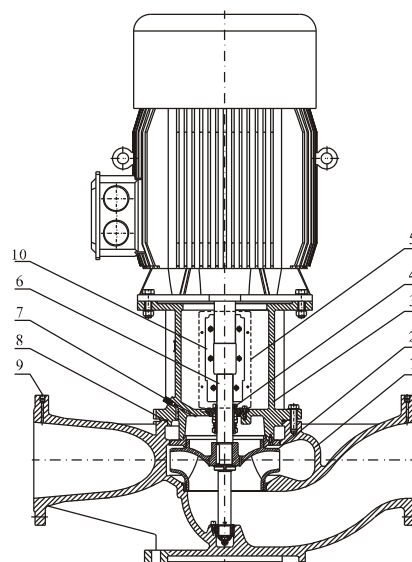
NO.	Parts	Material
1	Pump body	HT 200
2	Impeller	HT200/ZG07Cr19Ni9
3	Pump head	HT 200
4	Mechanical seal	Carbon /Silicon Carbide
5	Guard plate	06Cr19Ni10
6	Shaft	20Cr13
7	Air release bolt	06Cr19Ni10
8	O ring	NBR
9	Plug	06Cr19Ni10

Section drawing TD125 ~ TD150

**Material**

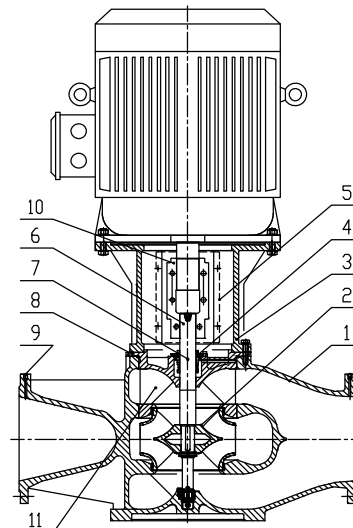
NO.	Parts	Material
1	Pump body	HT 200
2	Impeller	HT200/ZG07Cr19Ni9
3	Pump head	HT 200
4	Mechanical seal	Carbon /Silicon Carbide
5	Guard plate	06Cr19Ni10
6	Shaft	20Cr13
7	Air release bolt	06Cr19Ni10
8	O ring	NBR
9	Plug	06Cr19Ni10
10	Coupling	Cast Steel ZG270-500
11	Bearing ring	HT200

Section drawing TD200 ~ TD250

**Material**

NO.	Parts	Material
1	Pump body	HT200
2	Impeller	HT200/ZG07Cr19Ni9
3	Pump head	HT 200
4	Mechanical seal	Carbon /Silicon Carbide
5	Guard plate	06Cr19Ni10
6	Shaft	20Cr13
7	Air release bolt	06Cr19Ni10
8	O ring	NBR
9	Plug	06Cr19Ni10
10	Coupling	Cast Steel ZG270-500

Section drawing TD300

**Material**

NO.	Parts	Material
1	Pump body	QT 500-7
2	Impeller	HT 200
3	Pump head	HT 200
4	Mechanical seal	Carbon /Silicon Carbide
5	Guard plate	06Cr19Ni10
6	Shaft	20Cr13
7	Air release bolt	06Cr19Ni10
8	O ring	NBR
9	Plug	06Cr19Ni10
10	Coupling	ZG270-500
11	Pump cover	QT 500-7

Appendix-Base plate

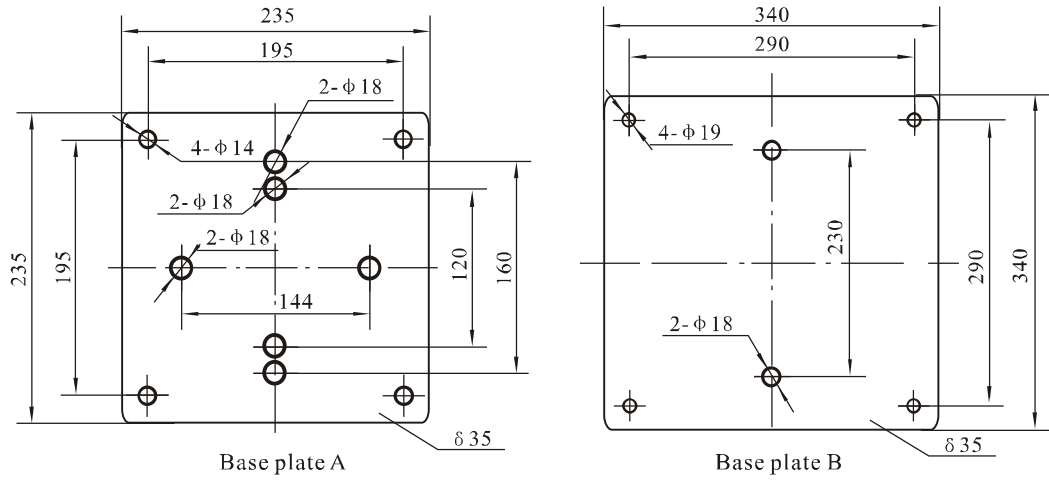
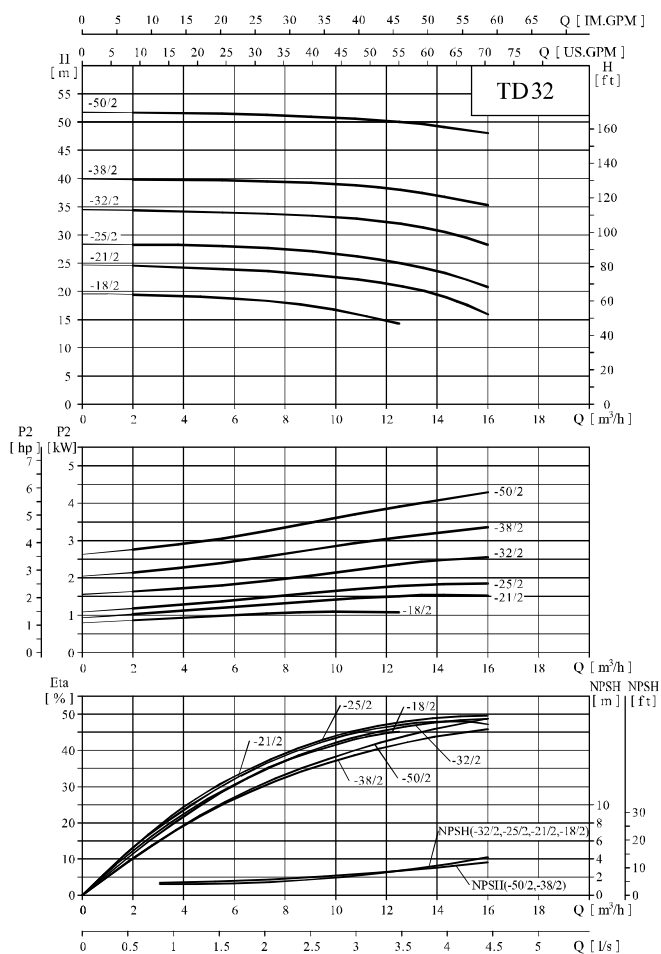


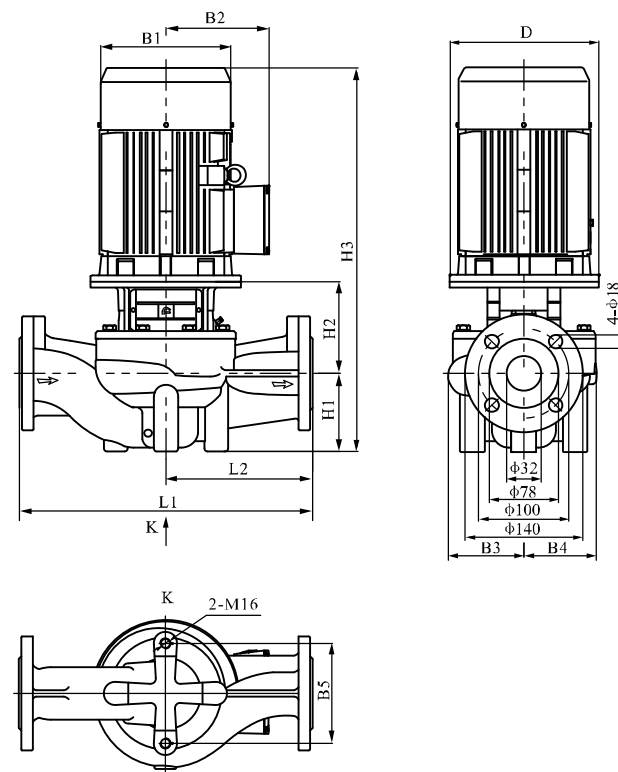
Table 3

NO.	Product model	Base plate type	NO.	Product model	Base plate type	NO.	Product model	Base plate type
1	TD32-18/2	A	27	TD50-60/2	A	53	TD100-9/2	A
2	TD32-21/2	A	28	TD50-70/2	A	54	TD100-15/2	A
3	TD32-25/2	A	29	TD50-81/2	A	55	TD100-17/2	A
4	TD32-32/2	A	30	TD65-36/2	A	56	TD100-22/2	A
5	TD32-38/2	A	31	TD65-48/2	A	57	TD100-27/2	A
6	TD32-50/2	A	32	TD65-15/2	A	58	TD100-33/2	A
7	TD40-16/2	A	33	TD65-19/2	A	59	TD100-40/2	B
8	TD40-20/2	A	34	TD65-22/2	A	60	TD100-48/2	B
9	TD40-18/2	A	35	TD65-30/2	A	61	TD100-52/2	B
10	TD40-25/2	A	36	TD65-34/2	A	62	TD125-11/4	B
11	TD40-30/2	A	37	TD65-40/2	A	63	TD125-14/4	B
12	TD40-36/2	A	38	TD65-50/2	A	64	TD125-18/4	B
13	TD40-48/2	A	39	TD65-61/2	A	65	TD125-22/4	B
14	TD50-32/2	A	40	TD65-67/2	A	66	TD125-28/4	B
15	TD50-38/2	A	41	TD65-83/2	A	67	TD125-32/4	B
16	TD50-48/2	A	42	TD80-13/2	A	68	TD125-40/4	B
17	TD50-58/2	A	43	TD80-18/2	A	69	TD125-48/4	B
18	TD50-80/2	A	44	TD80-22/2	A	70	TD150-12.5/4	B
19	TD50-12/2	A	45	TD80-28/2	A	71	TD150-17/4	B
20	TD50-15/2	A	46	TD80-40/2	A	72	TD150-21/4	B
21	TD50-18/2	A	47	TD80-48/2	A	73	TD150-25/4	B
22	TD50-24/2	A	48	TD80-30/2	A	74	TD150-33/4	B
23	TD50-28/2	A	49	TD80-38/2	A	75	TD150-40/4	B
24	TD50-35/2	A	50	TD80-47/2	A	76	TD150-50/4	B
25	TD50-40/2	A	51	TD80-54/2	A			
26	TD50-50/2	A	52	TD80-67/2	A			

Performance curve ISO9906 Annex A



Installation sketch



Performance table

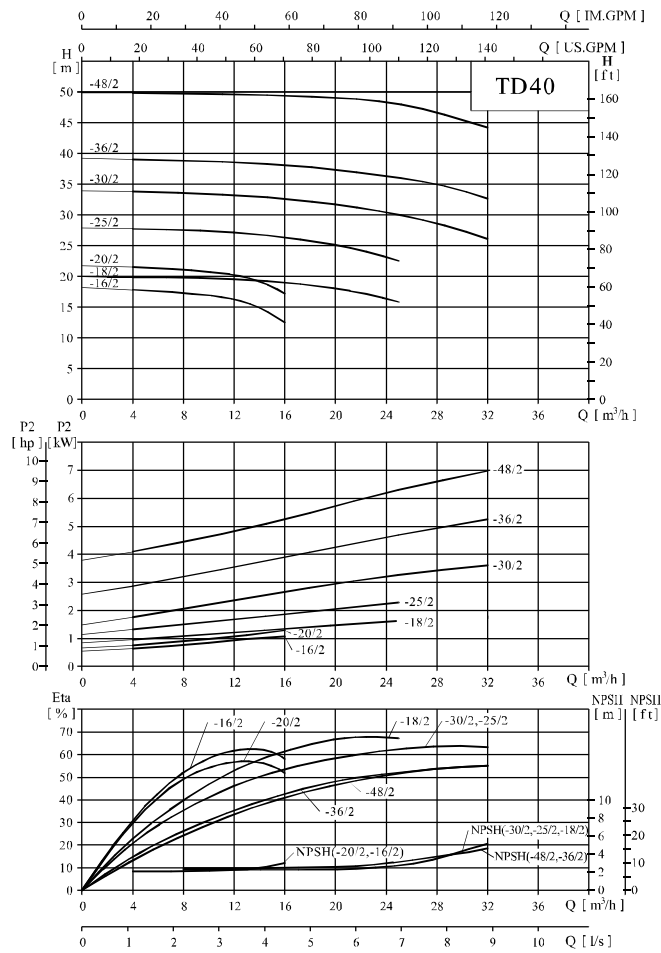
Model	Driving motor		Q (m³/h)	H (m)									
	(kW)	(hp)		2	4	6	8	10	12.5	14	16		
TD32-18/2	1.1	1.5		19.4	19.1	18.7	18	16.7	14.3				
TD32-21/2	1.5	2		24.5	24.2	23.9	23.3	22.5	21	19.4	15.9		
TD32-25/2	2.2	3		28.3	28.2	28	27.5	26.7	25	23.6	20.7		
TD32-32/2	3	4		34.3	34.2	33.9	33.6	33.1	32	30.8	28.2		
TD32-38/2	4	5.5		39.8	39.8	39.7	39.4	39	38	37	35.2		
TD32-50/2	5.5	7.5		51.7	51.6	51.4	51.1	50.7	50	49.3	48		

Size and weight

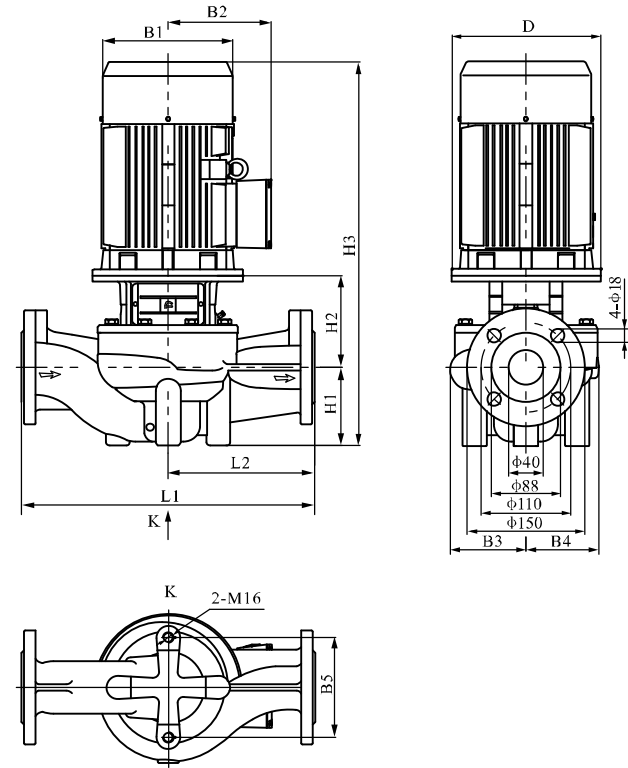
Model	Size(mm)											Weight (kg)
	D	B1	B2	B3	B4	B5	H1	H2	H3	L1	L2	
TD32-18/2	120	170	142	125	117	144	100	166	511	340	170	50
TD32-21/2	140	190	155	125	117	144	100	166	556	340	170	56
TD32-25/2	140	190	155	125	117	144	100	166	556	340	170	59
TD32-32/2	160	197	165	125	117	144	100	185	630	340	170	68
TD32-38/2	160	230	188	144	144	144	100	185	640	440	220	79
TD32-50/2	200	260	208	144	144	144	100	213	703	440	220	104

# TD40

## Performance curve ISO9906 Annex A



## Installation sketch



## Performance table

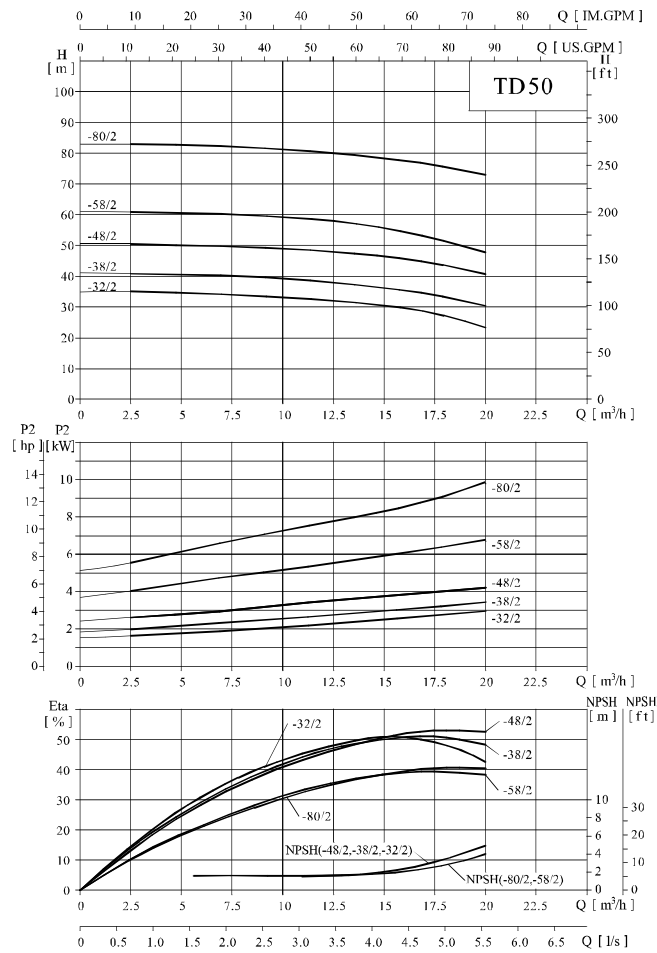
Model	Driving motor		Q (m³/h)	H (m)										
	(kW)	(hp)		4	8	12.5	16	20	25	28	32			
TD40-16/2	1.1	1.5		17.8	17.3	16	12.5							
TD40-20/2	1.5	2		21.5	21.1	20	17.2							
TD40-18/2	2.2	3		19.9	19.8	19.5	19	18	15.8					
TD40-25/2	3	4		27.7	27.5	27.1	26.4	25	22.5					
TD40-30/2	4	5.5		33.8	33.6	33.1	32.6	31.7	30	28.6	26.1			
TD40-36/2	5.5	7.5		39	38.8	38.5	38.1	37.3	36	35	32.6			
TD40-48/2	7.5	10		49.8	49.7	49.5	49.4	49	48	46.6	44.2			

## Size and weight

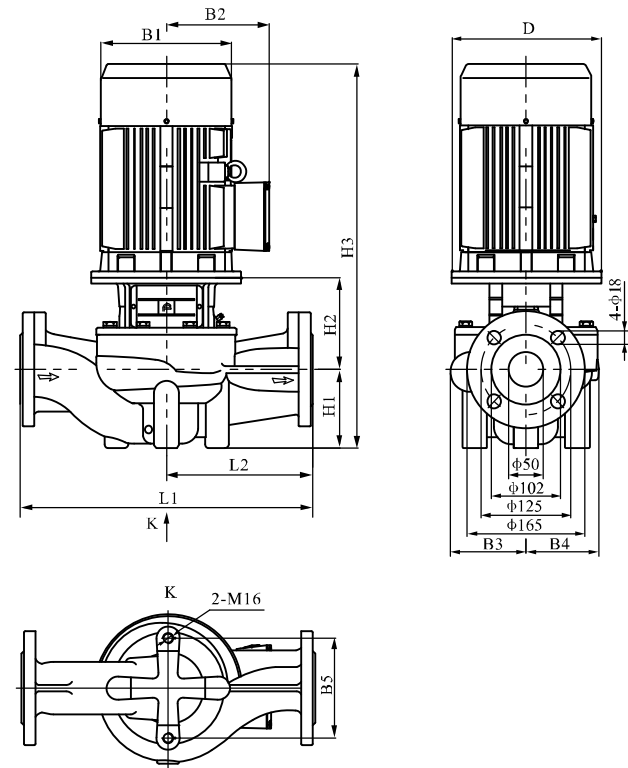
Model	Size(mm)											Weight (kg)
	D	B1	B2	B3	B4	B5	H1	H2	H3	L1	L2	
TD40-16/2	120	170	142	97	96	120	68	150	463	320	160	40
TD40-20/2	140	190	155	97	96	120	68	160	518	320	160	46
TD40-18/2	140	190	155	110	95	144	100	167	557	340	170	53
TD40-25/2	160	197	165	127	115	144	100	185	630	340	170	70
TD40-30/2	160	230	188	127	115	144	100	185	640	340	170	77
TD40-36/2	200	260	208	138	125	144	110	213	713	440	220	106
TD40-48/2	200	260	208	138	125	144	110	213	713	440	220	110



Performance curve ISO9906 Annex A



Installation sketch



Performance table

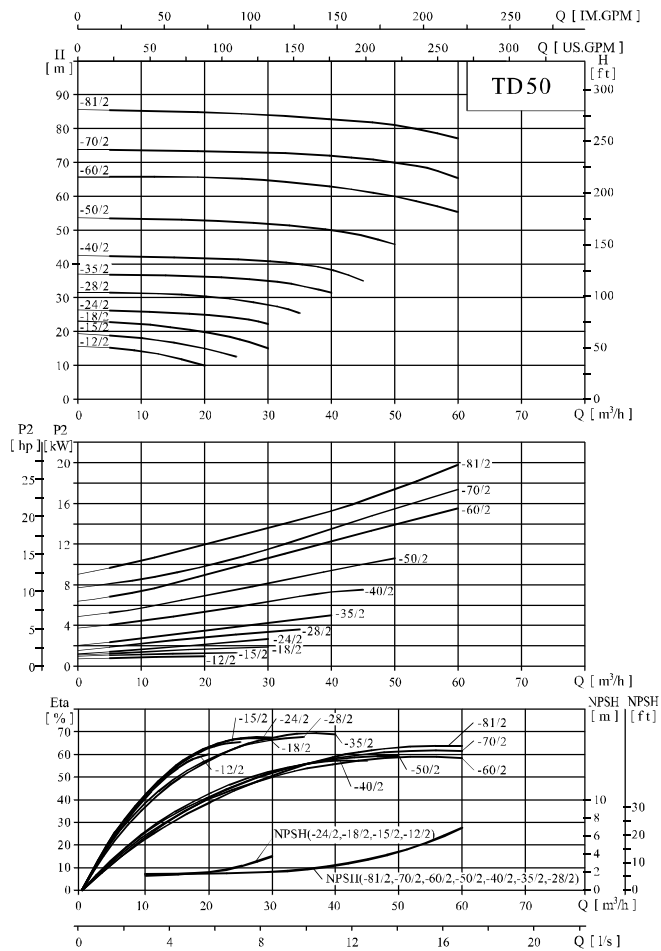
Model	Driving motor		Q (m³/h)	H (m)													
	(kW)	(hp)		2.5	5	7.5	10	12.5	15	17.5	20						
TD50-32/2	3	4		35	34.6	34	33.2	32	30.5	27.9	23.3						
TD50-38/2	4	5.5		40.8	40.6	40.2	39.2	38	36.2	33.9	30.4						
TD50-48/2	5.5	7.5		50.5	50	49.7	49	48	46.5	44.2	40.7						
TD50-58/2	7.5	10		61	60.6	60.1	59.2	58	55.7	52.2	47.8						
TD50-80/2	11	15		82.9	82.6	82.2	81.2	80	78.4	76.1	73						

Size and weight

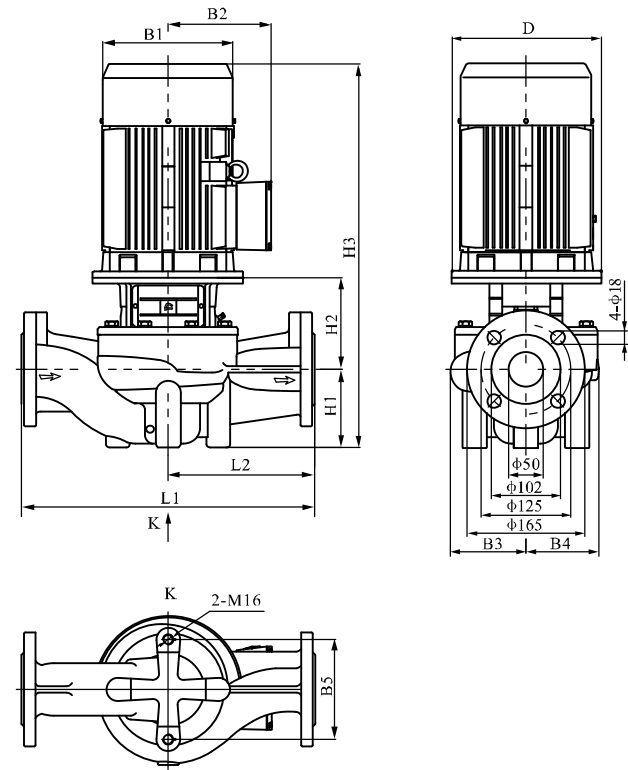
Model	Size(mm)												Weight (kg)
	D	B1	B2	B3	B4	B5	H1	H2	H3	L1	L2		
TD50-32/2	160	197	165	128	128	144	105	162	612	400	200	65	
TD50-38/2	160	230	188	128	128	144	105	162	622	400	200	71	
TD50-48/2	200	260	208	128	128	144	105	186	681	400	200	85	
TD50-58/2	200	260	208	163	163	144	105	196	692	440	220	110	
TD50-80/2	350	330	255	163	163	144	105	196	852	440	220	185	

# TD50

## Performance curve ISO9906 Annex A



## Installation sketch



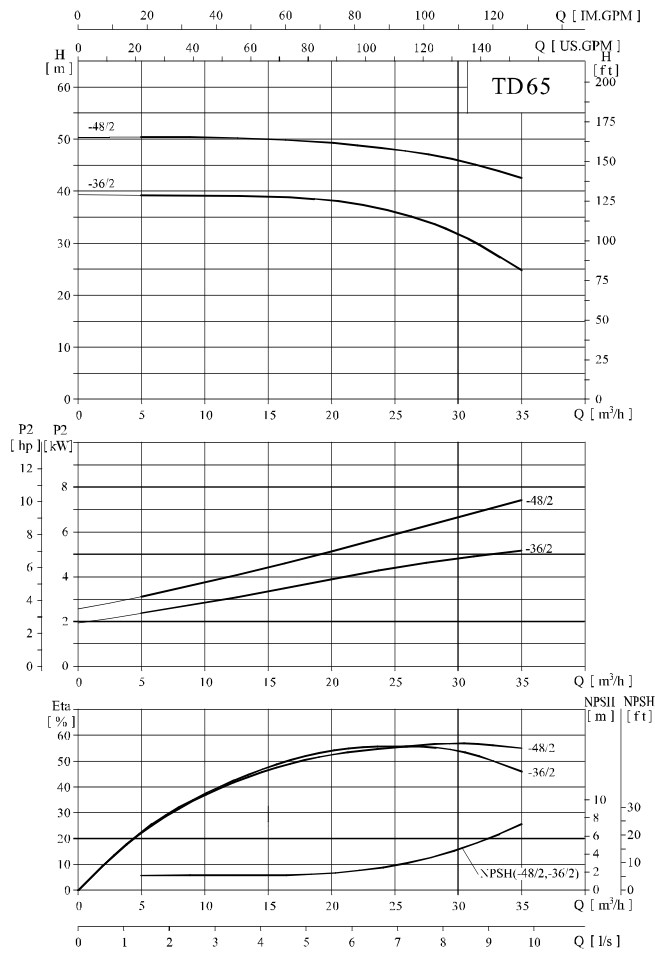
## Performance table

Model	Driving motor		Q (m³/h)	H (m)											
	(kW)	(hp)		5	10	16	20	25	30	35	40	45	50	60	
TD50-12/2	1.1	1.5	15.2	14.2	12	10									
TD50-15/2	1.5	2	18.9	18	16.5	15	12.6								
TD50-18/2	2.2	3	22.8	22.3	21	19.8	18	15							
TD50-24/2	3	4	26.2	26	25.5	25	24	22.3							
TD50-28/2	4	5.5	31.5	31.3	31	30.5	29.5	28	25.5						
TD50-35/2	5.5	7.5	36.9	36.7	36.5	36.2	35.8	35	33.7	31.5					
TD50-40/2	7.5	10	42.3	42.2	41.9	41.7	41.3	40.8	40	38.3	35				
TD50-50/2	11	15	53.5	53.4	53.1	52.9	52.5	51.9	51.1	50	48.4	45.8			
TD50-60/2	15	20	65.7	65.8	65.7	65.6	65.3	64.7	63.9	62.8	61.6	60	55.4		
TD50-70/2	18.5	25	73.7	73.6	73.4	73.3	73.1	72.9	72.5	72	71.2	70	65.4		
TD50-81/2	22	30	85.5	85.3	85	84.8	84.5	84	83.5	82.8	82.1	81	77.1		

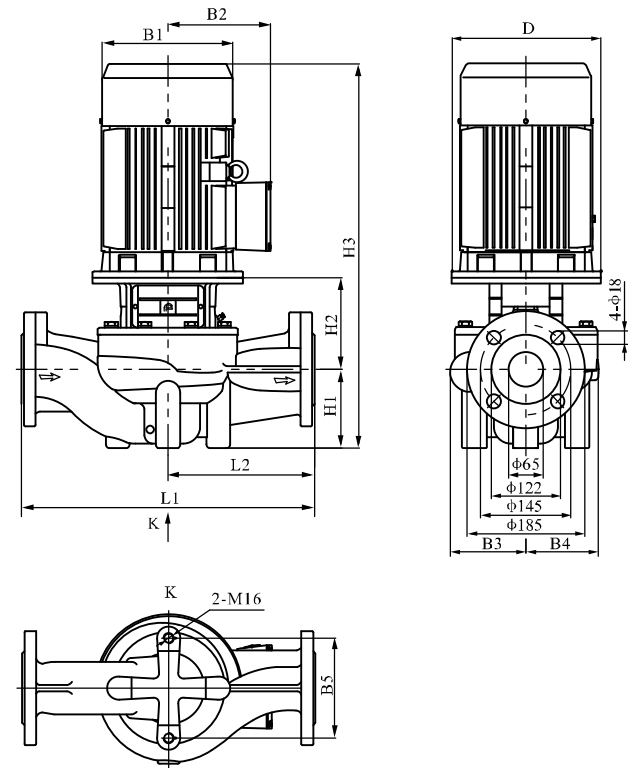
## Size and weight

Model	Size(mm)											Weight (kg)
	D	B1	B2	B3	B4	B5	H1	H2	H3	L1	L2	
TD50-12/2	120	170	142	117	115	144	115	153	513	340	170	56
TD50-15/2	140	190	155	117	115	144	115	153	558	340	170	62
TD50-18/2	140	190	155	117	115	144	115	153	558	340	170	65
TD50-24/2	160	197	165	117	115	144	115	172	632	340	170	74
TD50-28/2	160	230	188	129	115	144	115	175	645	340	170	79
TD50-35/2	200	260	208	129	115	144	115	197	702	340	170	103
TD50-40/2	200	260	208	171	158	144	115	187	692	440	220	118
TD50-50/2	350	330	255	171	158	144	115	250	865	440	220	181
TD50-60/2	350	330	255	171	158	144	115	250	865	440	220	191
TD50-70/2	350	330	255	171	158	144	115	250	915	440	220	209
TD50-81/2	350	360	285	171	158	144	115	250	940	440	220	245

Performance curve ISO9906 Annex A



Installation sketch



Performance table

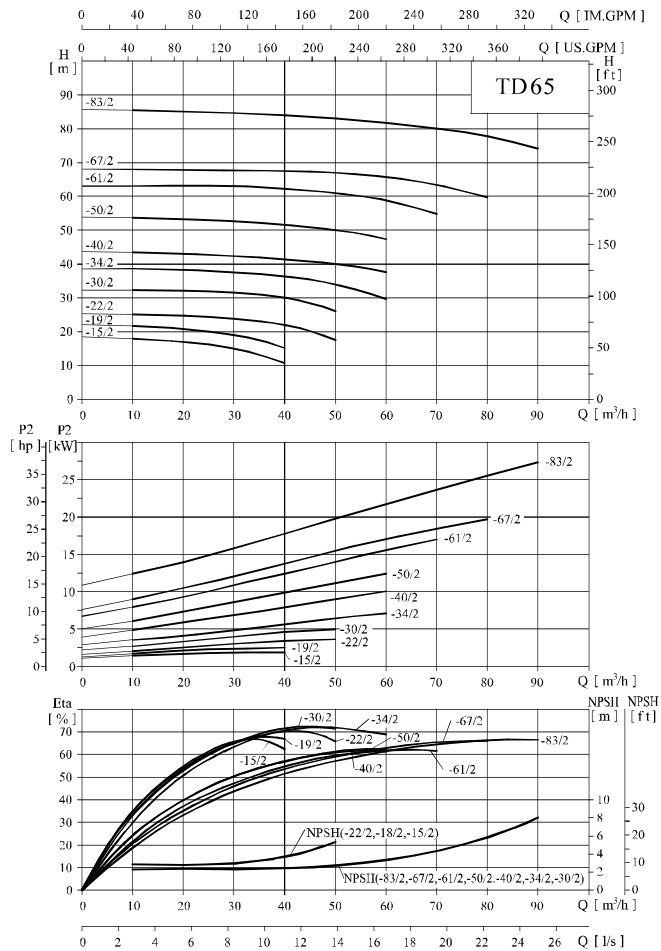
Model	Driving motor		Q (m³/h)	5	10	15	20	25	30	35
	(kW)	(hp)								
TD65-36/2	5.5	7.5	H	39.2	39.1	38.9	38.2	36	31.8	24.8
TD65-48/2	7.5	10	(m)	50.4	50.3	50	49.3	48	45.9	42.5

Size and weight

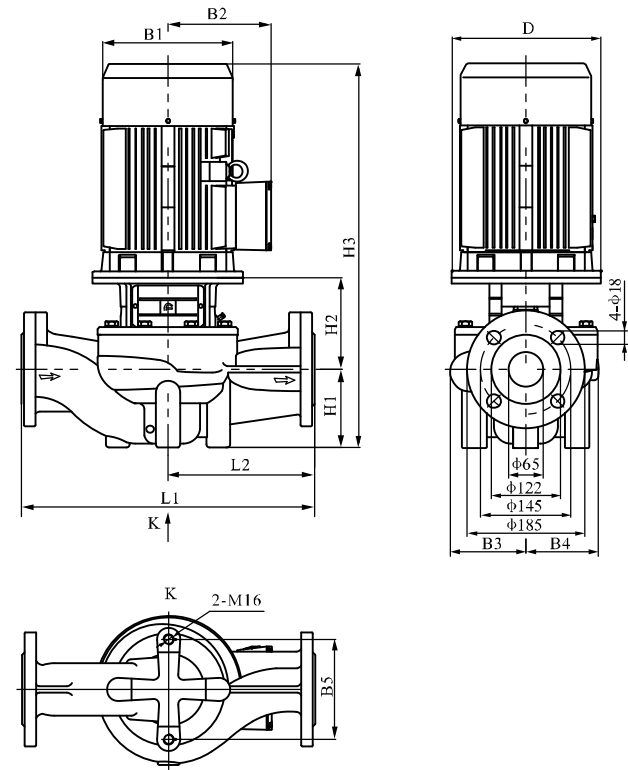
Model	Size(mm)											Weight (kg)
	D	B1	B2	B3	B4	B5	H1	H2	H3	L1	L2	
TD65-36/2	200	260	208	128	128	144	105	194	689	400	200	87
TD65-48/2	200	260	208	128	128	144	105	194	689	400	200	91

# TD65

## Performance curve ISO9906 Annex A



## Installation sketch



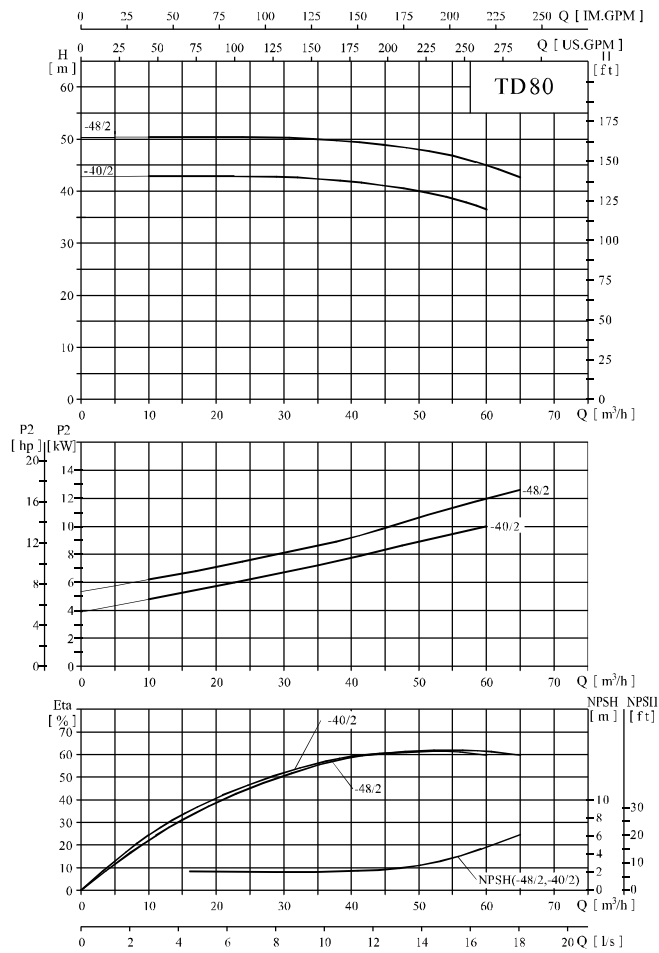
## Performance table

Model	Driving motor		Q (m³/h)	H												
	(kW)	(hp)		10	20	30	40	50	60	70	80	90				
TD65-15/2	2.2	3	H (m)	17.9	17	15	10.7									
TD65-19/2	3	4		21.7	20.8	19	15.2									
TD65-22/2	4	5.5		25.1	24.7	23.9	22	17.5								
TD65-30/2	5.5	7.5		32.4	32.1	31.5	30	26.1								
TD65-34/2	7.5	10		38.6	38.2	37.6	36.4	34	29.6							
TD65-40/2	11	15		43.4	42.9	42.3	41.4	40	37.6							
TD65-50/2	15	20		53.6	53.3	52.7	51.6	50	47.3							
TD65-61/2	18.5	25		63.1	63.2	63	62.3	61	58.8	54.8						
TD65-67/2	22	30		68	67.8	67.7	67.5	67	65.8	63.4	59.7					
TD65-83/2	30	40		85.4	85.1	84.6	83.9	83	81.7	80	77.8	74.2				

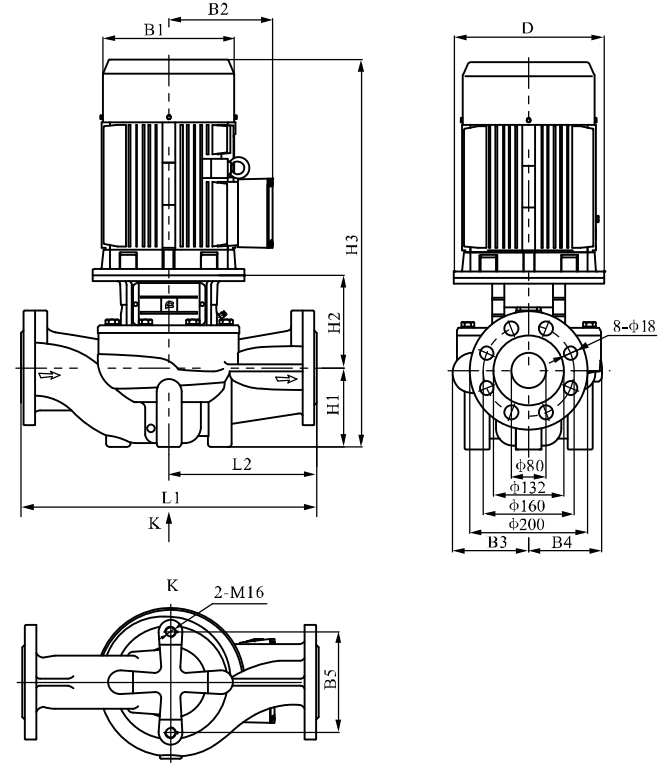
## Size and weight

Model	Size(mm)											Weight (kg)
	D	B1	B2	B3	B4	B5	H1	H2	H3	L1	L2	
TD65-15/2	140	190	155	142	124	144	105	172	567	360	180	65
TD65-19/2	160	197	165	142	124	144	105	191	641	360	180	74
TD65-22/2	160	230	188	142	124	144	105	191	651	360	180	81
TD65-30/2	200	260	208	142	124	144	105	213	708	360	180	105
TD65-34/2	200	260	208	142	124	144	105	213	708	360	180	108
TD65-40/2	350	330	255	179	167	144	125	262	887	475	238	183
TD65-50/2	350	330	255	179	167	144	125	262	887	475	238	193
TD65-61/2	350	330	255	179	167	144	125	262	937	475	238	210
TD65-67/2	350	330	255	179	167	144	125	262	962	475	238	248
TD65-83/2	400	400	310	179	167	144	125	262	1037	475	238	309

**Performance curve ISO9906 Annex A**



**Installation sketch**



**Performance table**

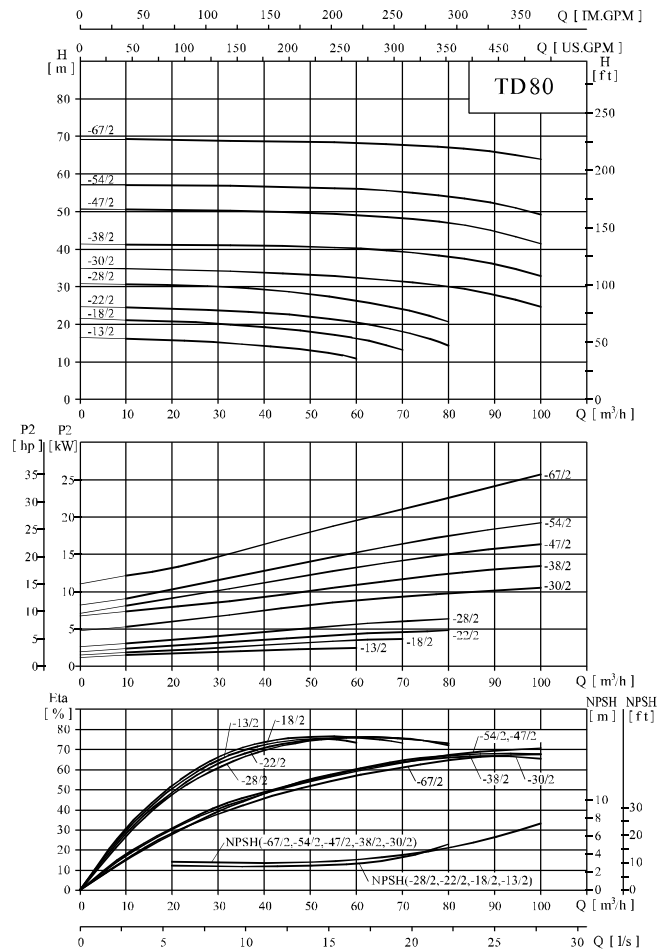
Model	Driving motor		Q (m³/h)	H						
	(kW)	(hp)		10	20	30	40	50	60	65
TD80-40/2	11	15	H	42.8	42.8	42.7	41.8	40	36.5	
TD80-48/2	15	20	(m)	50.4	50.4	50.2	49.5	48	45	42.6

**Size and weight**

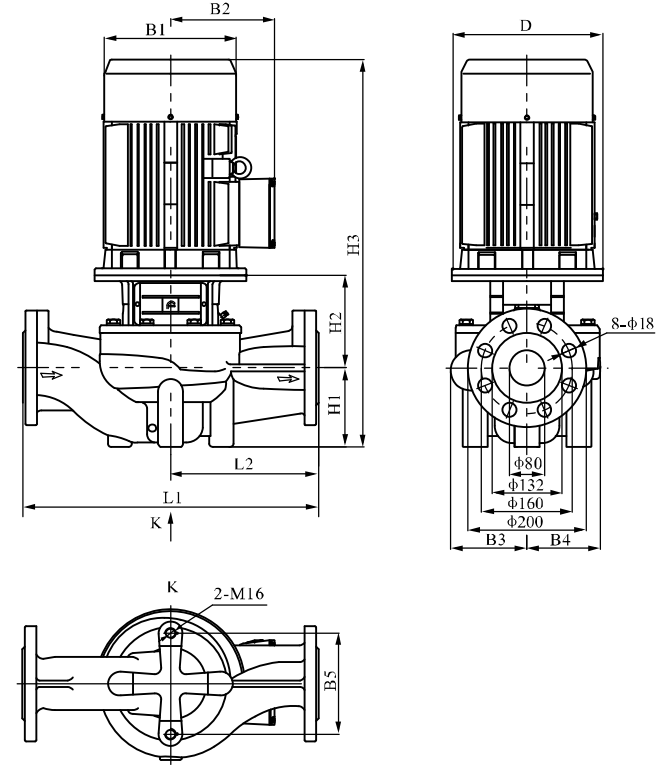
Model	Size(mm)											Weight (kg)
	D	B1	B2	B3	B4	B5	H1	H2	H3	L1	L2	
TD80-40/2	350	330	255	137	128	144	115	240	855	500	250	170
TD80-48/2	350	330	255	137	128	144	115	240	855	500	250	181

# TD80

## Performance curve ISO9906 Annex A



## Installation sketch



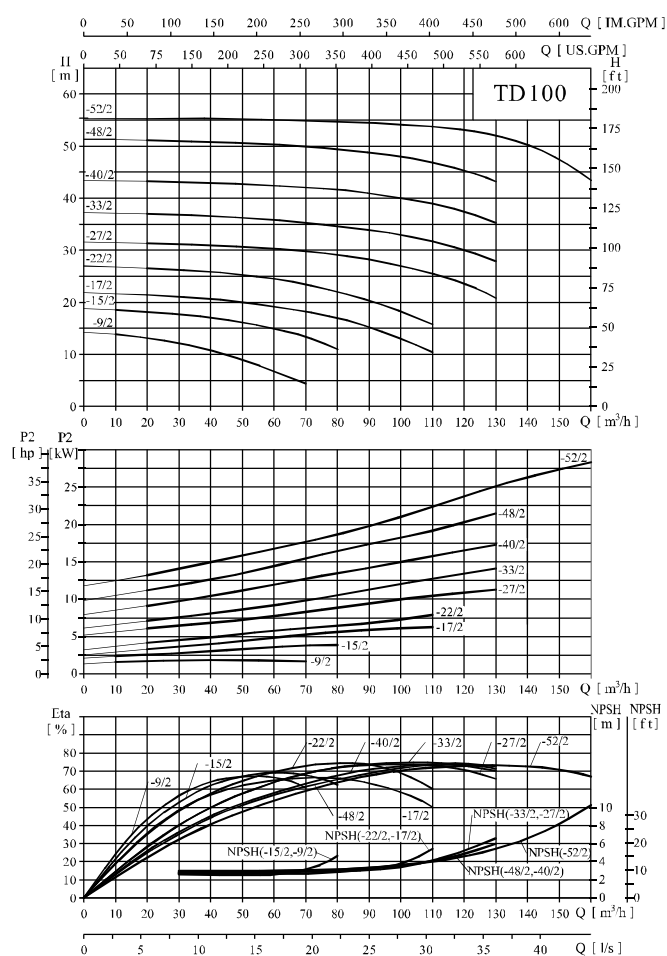
## Performance table

Model	Driving motor		Q (m³/h)	H (m)											
	(kW)	(hp)		10	20	30	40	50	60	70	80	90	100		
TD80-13/2	3	4		16.1	15.8	15.2	14.3	13	10.9						
TD80-18/2	4	5.5		21.1	20.8	20.2	19.2	18	16.2	13.2					
TD80-22/2	5.5	7.5		24.4	24.1	23.7	23	22	20.5	18	14.3				
TD80-28/2	7.5	10		30.6	30.4	30	29.3	28	26.3	24	20.6				
TD80-30/2	11	15		34.8	34.5	34.2	33.8	33.2	32.4	31.3	30	27.8	24.7		
TD80-38/2	15	20		41.2	41.2	41.1	40.9	40.6	40.1	39.3	38	36	32.9		
TD80-47/2	18.5	25		50.6	50.4	50	49.8	49.6	49.1	48.3	47	44.8	41.4		
TD80-54/2	22	30		57	57	56.8	56.6	56.3	56	55.3	54	52.2	49.2		
TD80-67/2	30	40		69.2	69	68.8	68.7	68.6	68.3	67.8	67	65.9	63.9		

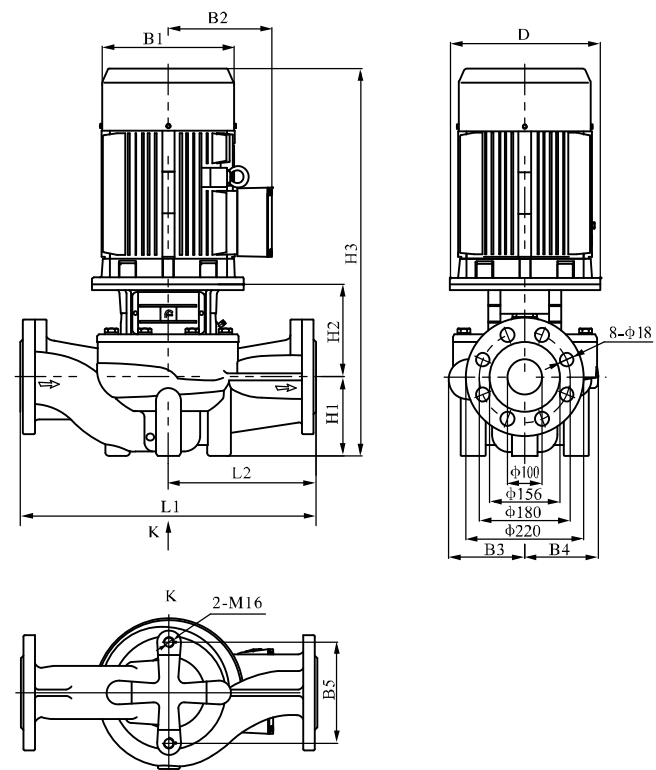
## Size and weight

Model	Size(mm)											Weight (kg)
	D	B1	B2	B3	B4	B5	H1	H2	H3	L1	L2	
TD80-13/2	160	197	165	142	124	160	97	219	661	450	225	84
TD80-18/2	160	230	188	142	124	160	97	219	671	450	225	91
TD80-22/2	200	260	208	142	124	160	97	241	728	450	225	114
TD80-28/2	200	260	208	142	124	160	97	241	728	450	225	117
TD80-30/2	350	330	255	182	163	144	115	279	894	500	250	194
TD80-38/2	350	330	255	182	163	144	115	279	894	500	250	204
TD80-47/2	350	330	255	182	163	144	115	279	944	500	250	222
TD80-54/2	350	330	255	182	163	144	115	279	969	500	250	258
TD80-67/2	400	400	310	182	163	144	115	279	1044	500	250	319

Performance curve ISO9906 Annex A



Installation sketch



Performance table

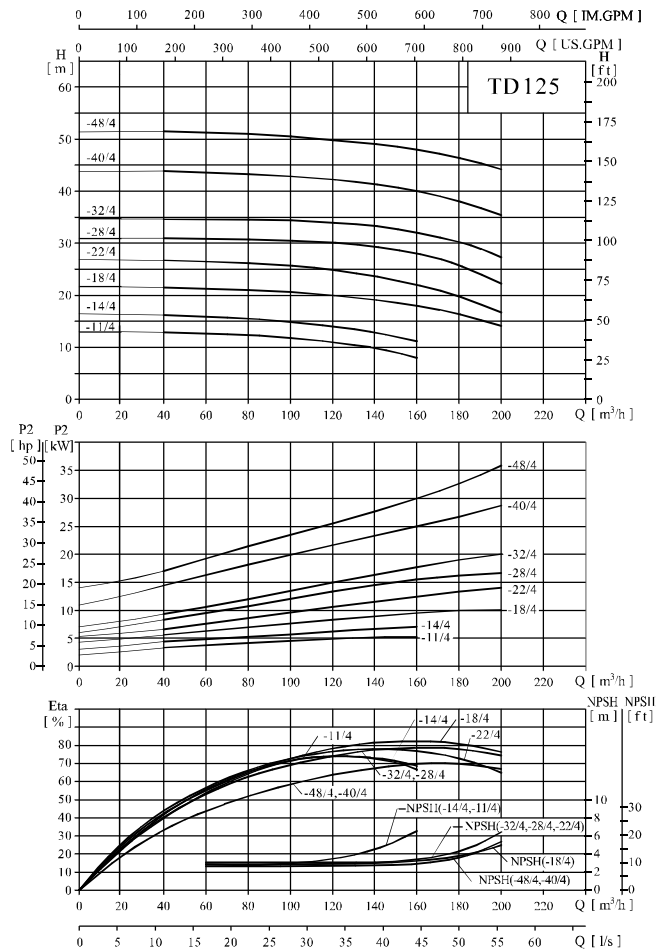
Model	Driving motor		Q (m³/h)	H (m)															
	(kW)	(hp)		10	20	30	40	50	60	70	80	90	100	110	120	130	145	160	
TD100-9/2	2.2	3	13.9	13.2	12.2	10.8	9	6.8	4.4										
TD100-15/2	4	5.5	18.6	18.2	17.7	17.1	16.2	15	13.4	11									
TD100-17/2	5.5	7.5	21.7	21.5	21.1	20.7	20	19.2	18.3	17	15.3	13	10.4						
TD100-22/2	7.5	10	26.8	26.6	26.3	25.9	25.3	24.5	23.4	22	20.3	18.2	15.8						
TD100-27/2	11	15	31.5	31.3	31.1	30.9	30.7	30.3	29.8	29.2	28.2	27	25.5	23.6	20.8				
TD100-33/2	15	20	37.1	37	36.8	36.6	36.2	35.8	35.3	34.7	33.9	33	31.7	30.1	27.9				
TD100-40/2	18.5	25	43.3	43.2	43.1	42.9	42.7	42.4	42.1	41.6	40.9	40	38.9	37.4	35.3				
TD100-48/2	22	30	51.2	51.1	51	50.8	50.6	50.3	49.9	49.4	48.8	48	46.9	45.3	43.2				
TD100-52/2	30	40	55.3	55.3	55.3	55.3	55.2	55.1	54.8	54.6	54.4	54.2	53.8	53.1	52	49	43.5		

Size and weight

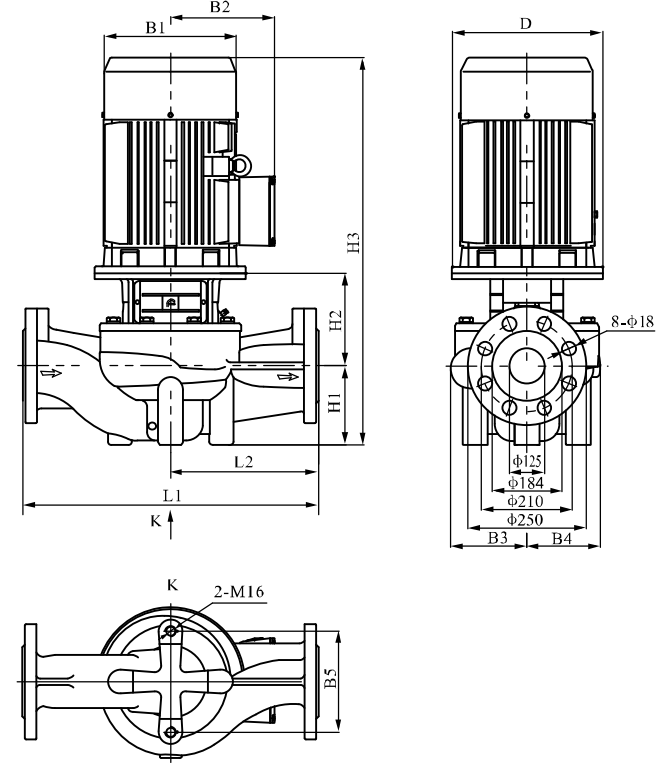
Model	Size(mm)												Weight (kg)
	D	B1	B2	B3	B4	B5	H1	H2	H3	L1	L2		
TD100-9/2	140	175	155	134	101	160	105	178	573	450	225	65	
TD100-15/2	160	215	190	134	101	160	105	190	650	450	225	83	
TD100-17/2	200	260	205	150	117	144	140	215	745	500	250	119	
TD100-22/2	200	260	205	150	117	144	140	215	745	500	250	122	
TD100-27/2	350	350	245	147	123	144	140	260	900	550	275	183	
TD100-33/2	350	350	265	147	123	144	140	260	900	550	275	194	
TD100-40/2	350	350	265	181	152	230	140	270	960	550	275	224	
TD100-48/2	350	350	280	181	152	230	140	270	985	550	275	260	
TD100-52/2	400	400	305	181	152	230	140	270	1060	550	275	318	

# TD125

## Performance curve ISO9906 Annex A



## Installation sketch



## Performance table

Model	Driving motor		Q (m³/h)	H											
	(kW)	(hp)		40	60	80	100	120	140	160	180	200			
TD125-11/4	5.5	7.5	H (m)	12.9	12.7	12.4	11.8	11	9.9	8					
TD125-14/4	7.5	10		16.2	15.9	15.5	14.9	14	12.8	11.2					
TD125-18/4	11	15		21.5	21.3	21	20.6	19.9	19.1	18	16.4	14.1			
TD125-22/4	15	20		26.7	26.5	26.2	25.7	24.9	23.7	22	19.8	16.7			
TD125-28/4	18.5	25		30.9	30.8	30.7	30.5	30.1	29.3	28	25.8	22.2			
TD125-32/4	22	30		34.6	34.6	34.5	34.4	34	33.3	32	30.2	27.3			
TD125-40/4	30	40		43.9	43.6	43.3	42.9	42.2	41.3	40	38	35.4			
TD125-48/4	37	50		51.5	51.3	51	50.5	49.9	49.1	48	46.4	44.2			

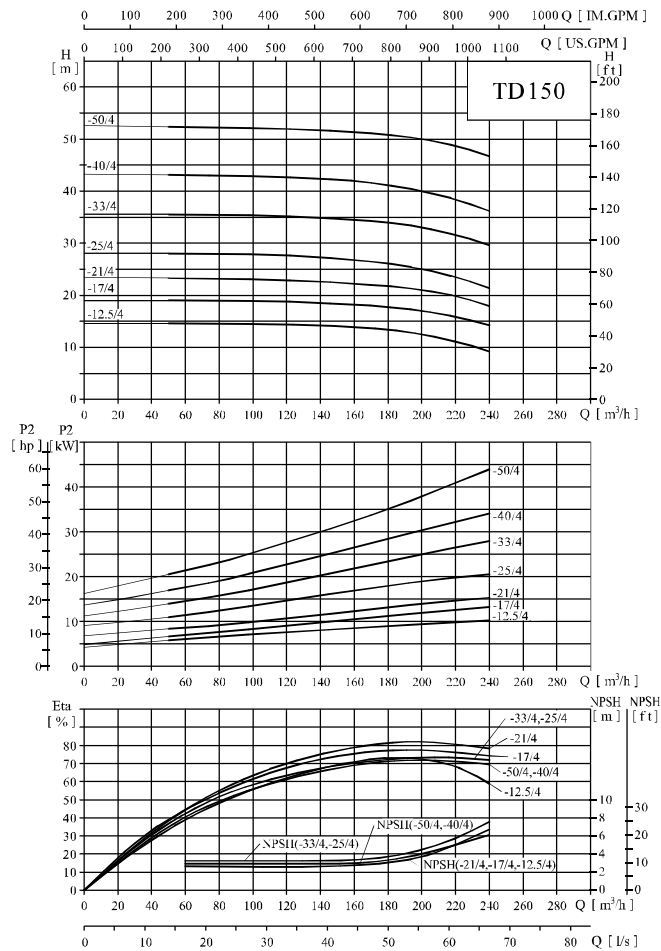
## Size and weight

Model	Size(mm)												Weight (kg)	
	D	B1	B2	B3	B4	B5	H1	H2	H2*	H3	H3*	L1		L2
TD125-11/4	200	260	208	216	176	230	215	228	-	873	-	620	310	166 (-)
TD125-14/4	200	260	208	216	176	230	215	228	-	873	-	620	310	169 (-)
TD125-18/4	350	330	255	211	177	230	215	276	376	989	1089	800	400	257 (265)
TD125-22/4	350	330	255	236	208	230	215	292	395	1047	1150	800	400	302 (314)
TD125-28/4	350	330	255	236	208	230	215	292	395	1084	1187	800	400	321 (348)
TD125-32/4	350	330	255	236	208	230	215	292	395	1122	1225	800	400	356 (362)
TD125-40/4	400	400	310	272	248	230	215	314	411	1178	1179	800	400	442 (460)
TD125-48/4	450	450	325	272	248	230	215	314	442	1203	1204	800	400	498 (528)

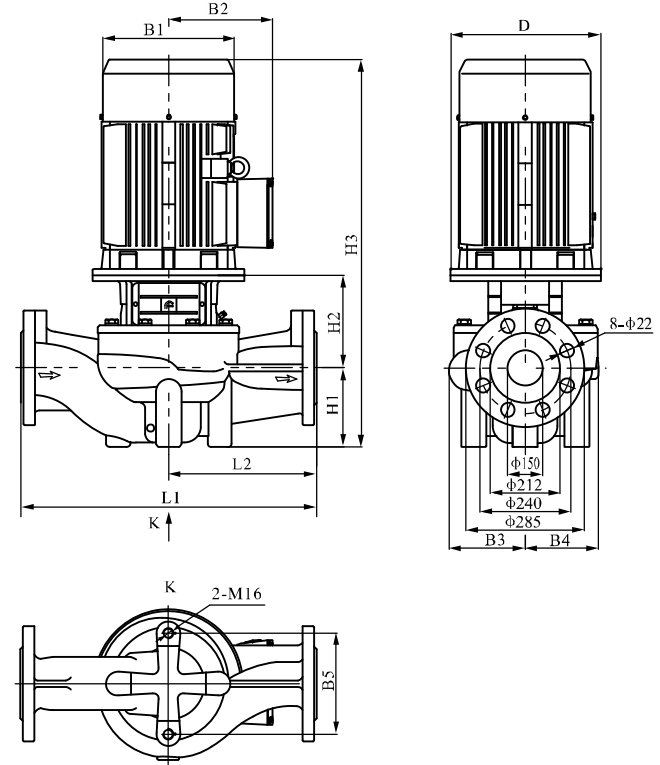
Attention: The size with "\*" in the data is Easy-disassembled inline-pump size. The weight in the braces is the weight of Easy-disassembled in-line pump.



Performance curve ISO9906 Annex A



Installation sketch



Performance table

Model	Driving motor		Q (m³/h)	H (m)							
	(kW)	(hp)		50	80	110	140	170	200	220	240
TD150-12.5/4	11	15	H (m)	14.6	14.5	14.4	14.2	13.7	12.5	11.1	9.2
TD150-17/4	15	20		18.8	18.8	18.7	18.5	18	17	16.1	15
TD150-21/4	18.5	25		23.3	23.1	22.9	22.6	22	21	19.8	17.9
TD150-25/4	22	30		28	28	27.8	27.3	26.5	25	23.5	21.3
TD150-33/4	30	40		35.5	35.4	35.2	34.8	34.2	33	31.5	29.6
TD150-40/4	37	50		43.1	43	42.8	42.4	41.6	40	38.4	36.2
TD150-50/4	45	60		52.4	52.4	52	51.7	51.1	50	48.7	46.7

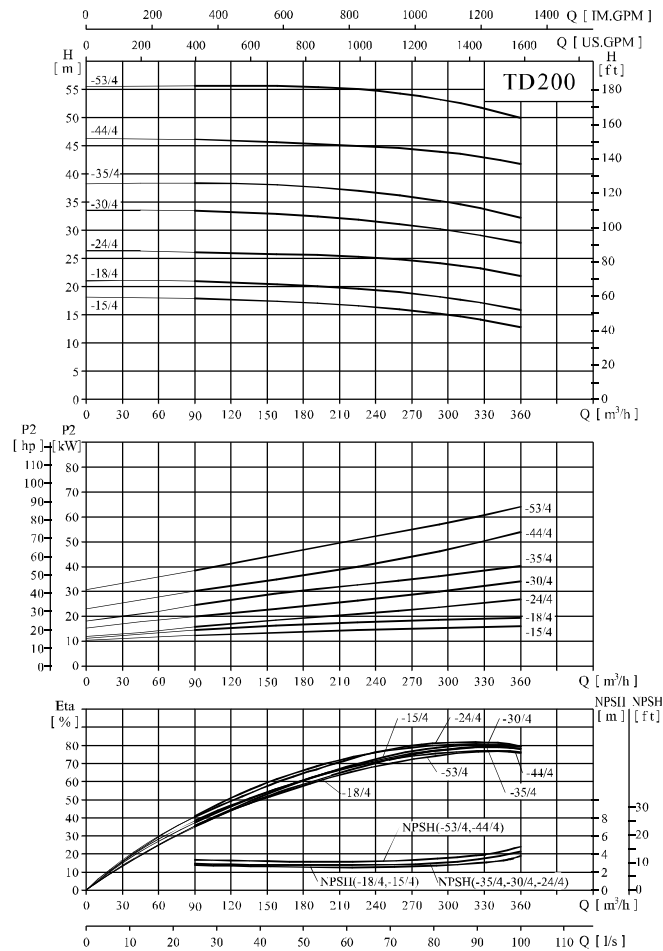
Attention: The size with "\*" in the data is Easy-disassembled inline-pump size;  
The weight in the braces is the weight of Easy-disassembled in-line pump.

Size and weight

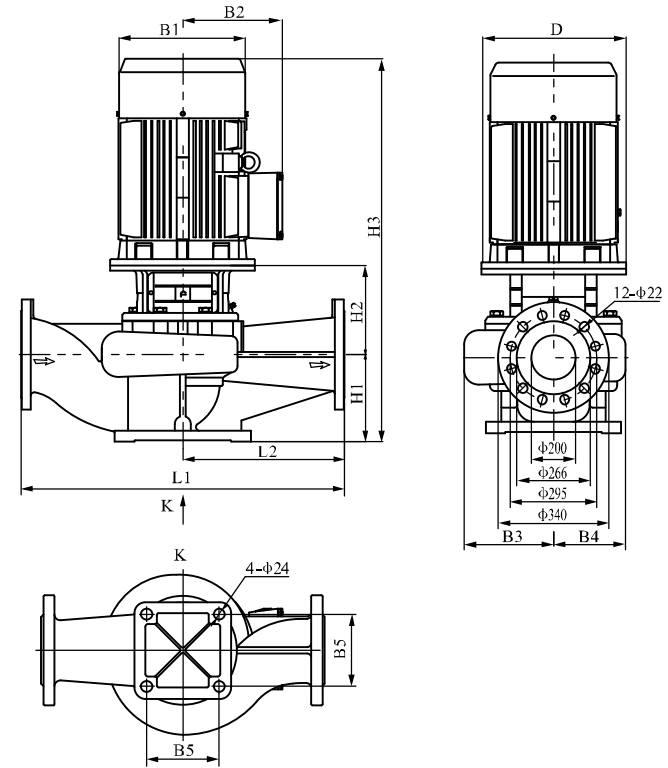
Model	Size(mm)												Weight (kg)	
	D	B1	B2	B3	B4	B5	H1	H2	H2*	H3	H3*	L1		L2
TD150-12.5/4	350	315	250	217	180	230	215	272	372	985	1085	800	400	257(271)
TD150-17/4	350	315	250	217	180	230	215	272	372	1027	1127	800	400	278(291)
TD150-21/4	350	360	275	217	180	230	215	272	372	1064	1164	800	400	313(325)
TD150-25/4	350	360	275	238	208	230	215	269	372	1099	1202	800	400	354(373)
TD150-33/4	400	400	305	238	208	230	215	269	385	1133	1249	800	400	406(425)
TD150-40/4	450	450	325	267	248	230	230	288	416	1188	1316	900	450	511(537)
TD150-50/4	450	450	325	267	248	230	230	288	416	1215	1343	900	450	548(573)

# TD200

## Performance curve ISO9906 Annex A



## Installation sketch



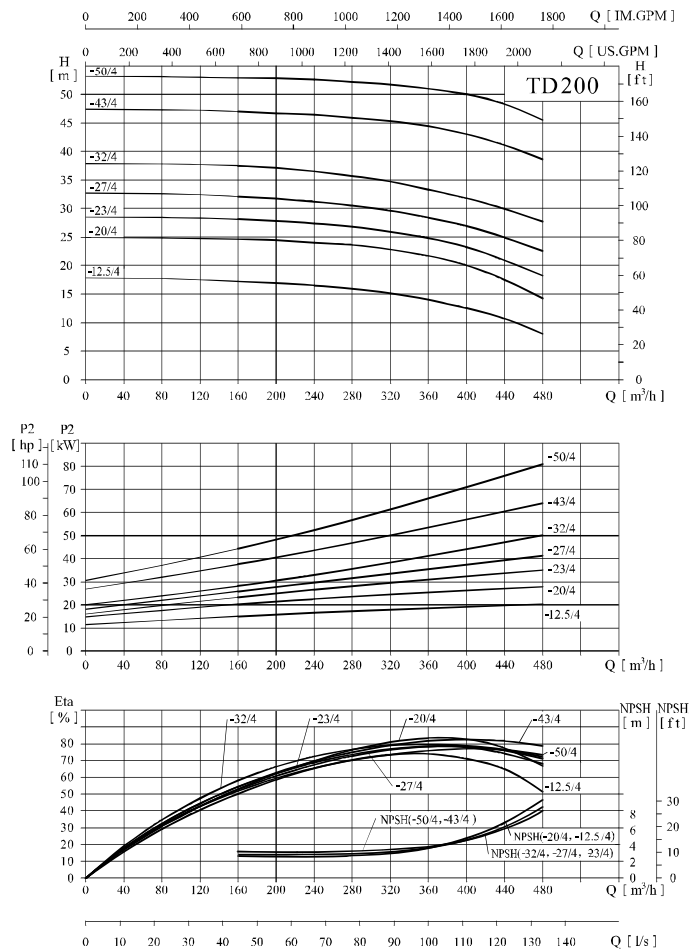
## Performance table

Model	Driving motor		Q (m³/h)	H (m)										
	(kW)	(hp)		90	120	150	180	210	240	270	300	330	360	
TD200-15/4	18.5	25		18	17.7	17.5	17.2	16.8	16.4	15.8	15	14.1	12.9	
TD200-18/4	22	30		21	20.7	20.5	20.2	19.8	19.4	18.8	18	17.1	15.8	
TD200-24/4	30	40		26.1	26	25.8	25.7	25.4	25.1	24.6	24	23.1	21.9	
TD200-30/4	37	50		33.4	33.2	33	32.6	32.2	31.6	30.9	30	29	27.7	
TD200-35/4	45	60		38.3	38.3	38.1	37.8	37.3	36.7	35.9	35	33.8	32.2	
TD200-44/4	55	75		46.3	46.1	45.9	45.6	45.4	45	44.6	44	43.1	41.9	
TD200-53/4	75	100		55.7	55.7	55.7	55.5	55.3	54.8	54	53	51.6	50	

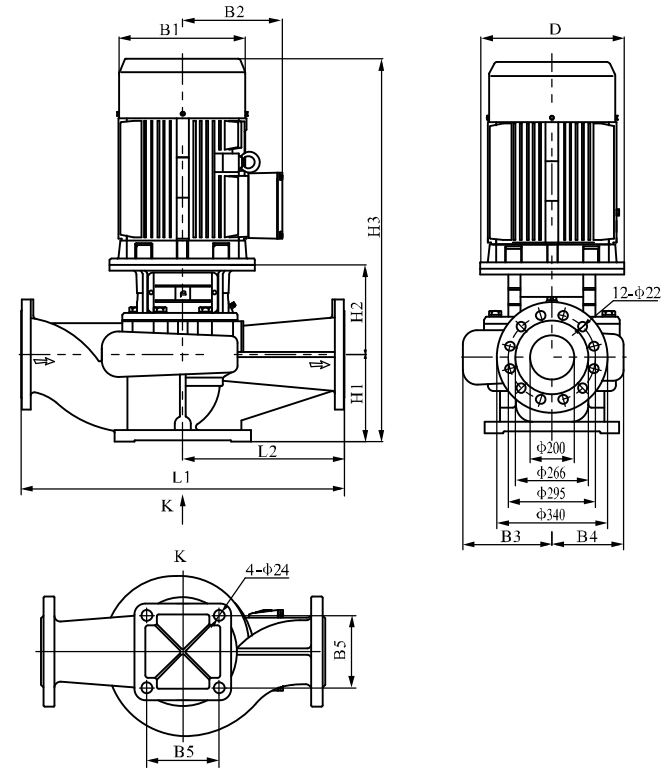
## Size and weight

Model	Size(mm)											Weight (kg)
	D	B1	B2	B3	B4	B5	H1	H2	H3	L1	L2	
TD200-15/4	350	360	280	278	219	360	270	415	1262	1000	500	418
TD200-18/4	350	360	280	278	219	360	270	415	1300	1000	500	435
TD200-24/4	400	400	305	303	252	360	270	415	1334	1100	550	537
TD200-30/4	450	450	335	303	252	360	270	445	1389	1100	550	603
TD200-35/4	450	450	335	303	252	360	270	445	1412	1100	550	649
TD200-44/4	550	490	365	315	269	360	270	457	1500	1100	550	751
TD200-53/4	550	550	400	315	269	360	270	457	1556	1100	550	884

**Performance curve ISO9906 Annex A**



**Installation sketch**



**Performance table**

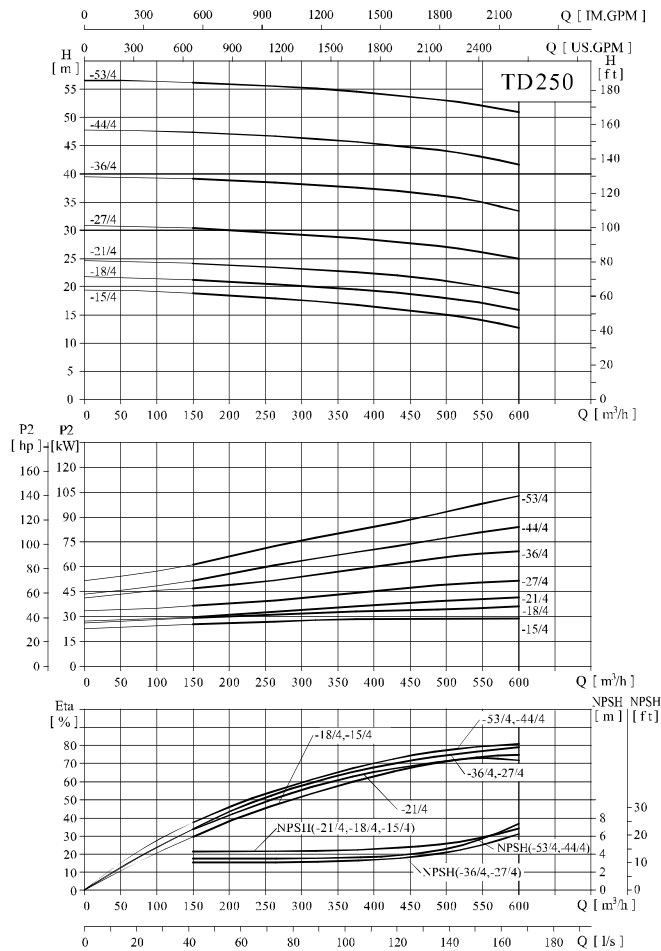
Model	Driving motor		Q (m³/h)	H (m)										
	(kW)	(hp)		160	200	240	280	320	360	400	440	480		
TD200-12.5/4	22	30		17.2	16.9	16.5	15.9	15.1	14	12.5	10.7	8		
TD200-20/4	30	40		24.6	24.4	24	23.6	22.8	21.7	20	17.5	14.2		
TD200-23/4	37	50		28.1	27.8	27.4	26.8	25.9	24.8	23	20.9	18.2		
TD200-27/4	45	60		32.1	31.7	31.2	30.5	29.6	28.4	27	24.9	22.5		
TD200-32/4	55	75		37.5	37.1	36.5	35.7	34.7	33.3	32	29.9	27.7		
TD200-43/4	75	100		47	46.7	46.4	45.9	45.3	44.4	43	41.1	38.6		
TD200-50/4	90	120		52.9	52.8	52.6	52.2	51.7	51	50	48.3	45.5		

**Size and weight**

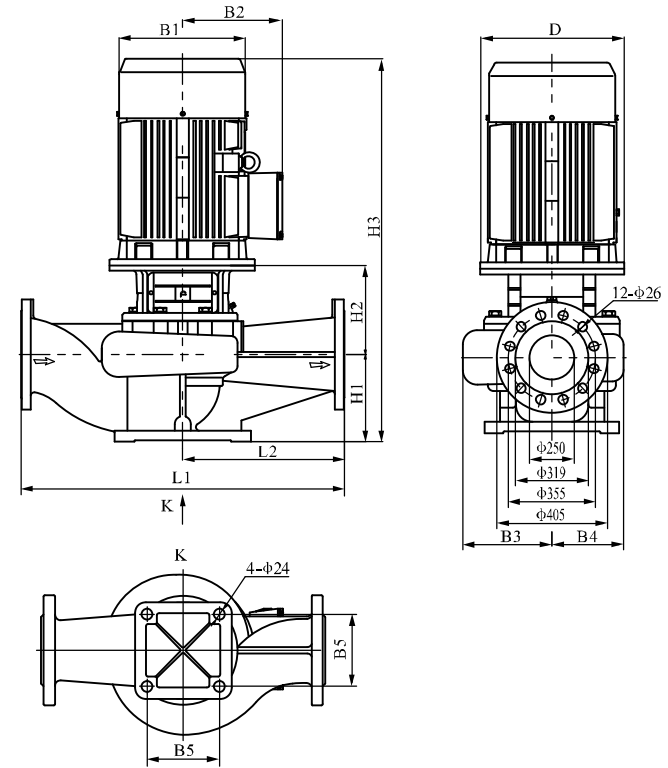
Model	Size(mm)											Weight (kg)
	D	B1	B2	B3	B4	B5	H1	H2	H3	L1	L2	
TD200-12.5/4	350	360	280	278	219	360	270	415	1300	1000	500	432
TD200-20/4	400	400	305	278	219	360	270	415	1334	1000	500	492
TD200-23/4	450	450	335	303	252	360	270	445	1389	1100	550	602
TD200-27/4	450	450	335	303	252	360	270	445	1412	1100	550	638
TD200-32/4	550	490	365	303	252	360	270	445	1488	1100	550	710
TD200-43/4	550	550	400	315	269	360	270	457	1556	1100	550	883
TD200-50/4	550	550	400	315	269	360	270	457	1607	1100	550	975

# TD250

## Performance curve ISO9906 Annex A



## Installation sketch



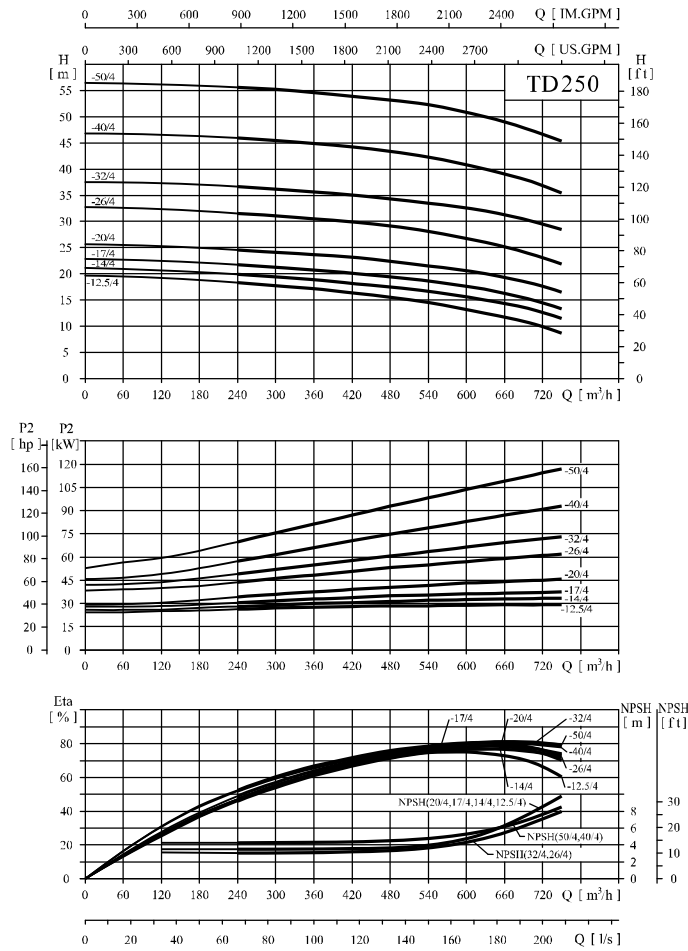
## Performance table

Model	Driving motor		Q (m³/h)	H (m)											
	(kW)	(hp)		150	200	250	300	350	400	450	500	550	600		
TD250-15/4	30	40		18.8	18.4	18	17.6	17.1	16.4	15.8	15	14.1	12.7		
TD250-18/4	37	50		21.2	20.9	20.5	20.1	19.7	19.2	18.7	18	17.1	15.9		
TD250-21/4	45	60		24.1	23.8	23.5	23.1	22.8	22.3	21.8	21	20	18.8		
TD250-27/4	55	75		30.3	30	29.6	29.2	28.8	28.3	27.7	27	26.1	24.9		
TD250-36/4	75	100		39.1	38.8	38.5	38.2	37.8	37.3	36.8	36	35	33.4		
TD250-44/4	90	120		47.4	47.1	46.8	46.4	45.9	45.4	44.8	44	43	41.6		
TD250-53/4	110	150		56.2	55.9	55.6	55.3	54.8	54.3	53.7	53	52.1	50.9		

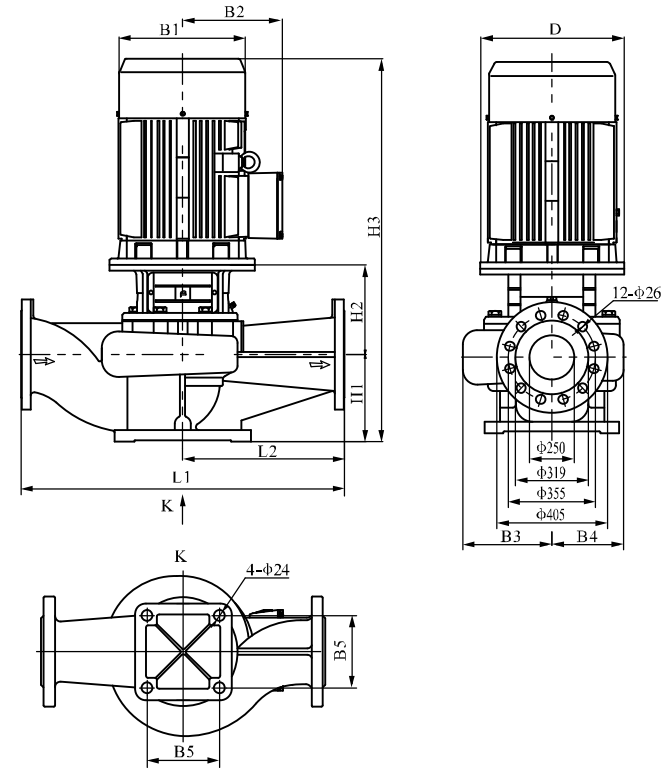
## Size and weight

Model	Size(mm)												Weight (kg)
	D	B1	B2	B3	B4	B5	H1	H2	H3	L1	L2		
TD250-15/4	400	400	305	316	243	390	300	465	1414	1100	550	553	
TD250-18/4	450	450	335	316	243	390	300	495	1469	1100	550	614	
TD250-21/4	450	450	335	316	243	390	300	495	1492	1100	550	650	
TD250-27/4	550	490	365	329	264	440	300	507	1580	1100	550	780	
TD250-36/4	550	550	400	329	264	440	300	507	1636	1100	550	909	
TD250-44/4	550	550	400	347	292	440	305	485	1670	1200	600	1032	
TD250-53/4	660	625	555	347	292	440	305	525	1840	1200	600	1391	

**Performance curve ISO9906 Annex A**



**Installation sketch**



**Performance table**

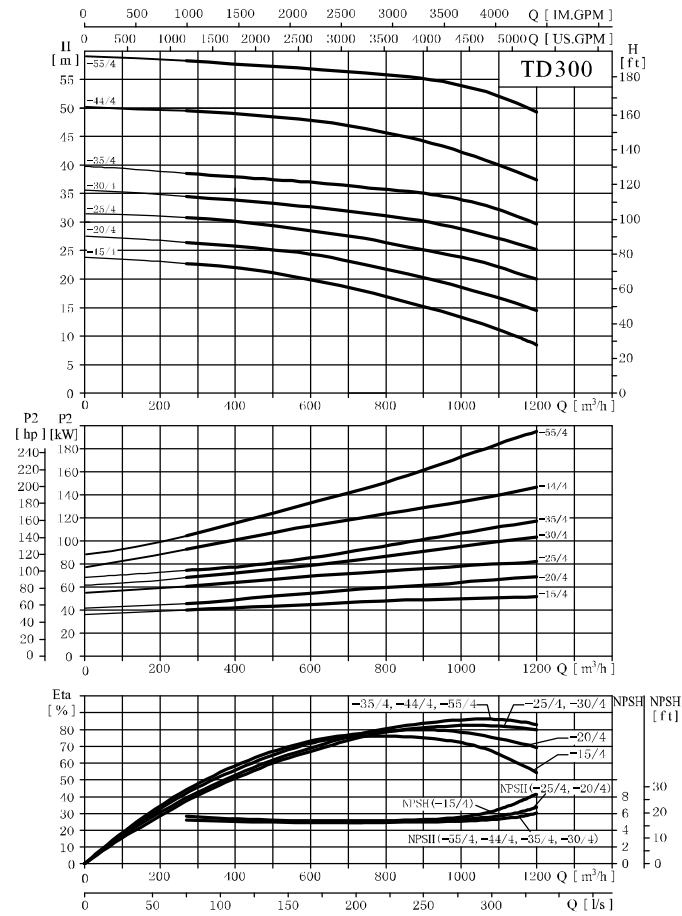
Model	Driving motor		Q (m³/h)	H (m)											
	(kW)	(hp)		240	300	360	420	480	540	600	630	660	720	750	
TD250-12.5/4	30	40		18.4	17.9	17.2	16.4	15.5	14.5	13.2	12.5	11.8	9.9	8.7	
TD250-14/4	37	50		20	19.5	18.9	18.2	17.5	16.6	15.6	14	13.4	12.6	11.6	
TD250-17/4	45	60		21.8	21.3	20.8	20.1	19.4	18.6	17.6	17	16.3	14.4	13.4	
TD250-20/4	55	75		24.5	24.1	23.7	23.1	22.4	21.5	20.5	20	19.3	17.6	16.5	
TD250-26/4	75	100		31.7	31.1	30.6	29.9	29.1	28.2	26.8	26	25.2	23.1	21.9	
TD250-32/4	90	120		36.7	36.3	35.7	35.1	34.3	33.5	32.6	32	31.3	29.5	28.4	
TD250-40/4	110	150		46	45.5	44.9	44.2	43.4	42.3	40.8	40	39.1	36.8	35.5	
TD250-50/4	132	180		55.6	55.2	54.6	53.9	53.2	52.3	50.9	50	49	46.7	45.4	

**Size and weight**

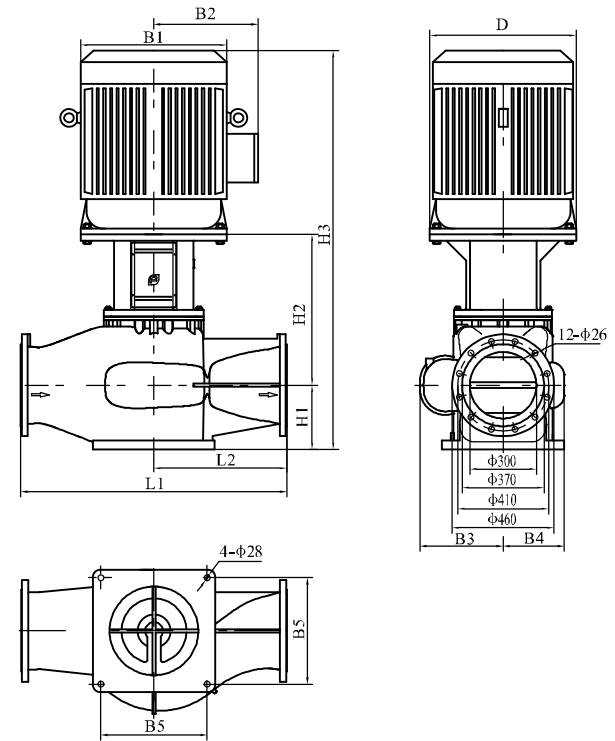
Model	Size(mm)												Weight (kg)
	D	B1	B2	B3	B4	B5	H1	H2	H3	L1	L2		
TD250-12.5/4	400	400	305	316	243	390	300	465	1414	1100	550	552	
TD250-14/4	450	450	335	316	243	390	300	495	1469	1100	550	613	
TD250-17/4	450	450	335	316	243	390	300	495	1492	1100	550	649	
TD250-20/4	550	490	365	316	243	390	300	495	1568	1100	550	722	
TD250-26/4	550	550	400	329	264	440	300	507	1636	1100	550	909	
TD250-32/4	550	550	400	329	264	440	300	507	1687	1100	550	999	
TD250-40/4	660	625	555	347	292	440	305	525	1840	1200	600	1389	
TD250-50/4	660	625	555	347	292	440	305	525	1990	1200	600	1473	

# TD300

## Performance curve ISO9906 Annex A



## Installation sketch



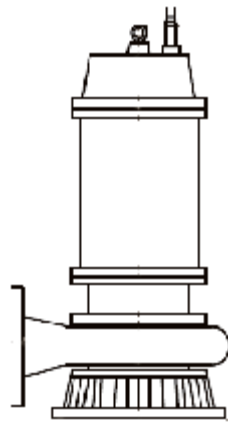
## Performance table

Model	Driving motor		Q (m³/h)	H (m)							
	(kW)	(hp)		270	360	450	630	750	900	1080	1200
TD300-15/4	55	75		22.7	22.3	21.6	19.5	17.8	15	11.6	8.5
TD300-20/4	75	100		26.4	26	25.5	24.1	22.4	20	17.1	14.5
TD300-25/4	90	120		30.8	30.4	29.8	28.2	27.1	25	22.5	20
TD300-30/4	110	150		34.5	34	33.5	32.4	31.6	30	27.5	25
TD300-35/4	132	180		38.6	38.1	37.8	36.9	36	35	32.6	29.6
TD300-44/4	160	215		49.5	49.2	48.8	47.6	46.3	44	40.5	37.5
TD300-55/4	200	270		58.2	57.9	57.6	56.7	56.1	55	52.5	49.2

## Size and weight

Model	Size(mm)											Weight (kg)
	D	B1	B2	B3	B4	B5	H1	H2	H3	L1	L2	
TD300-15/4	550	490	365	345	250	440	290	649	1720	1200	600	907
TD300-20/4	550	550	400	345	250	440	290	649	1770	1200	600	1075
TD300-25/4	550	550	400	380	280	480	290	659	1850	1200	600	1230
TD300-30/4	660	625	550	380	280	480	290	699	2000	1200	600	1570
TD300-35/4	660	625	550	380	280	480	290	699	2150	1200	600	1650
TD300-44/4	660	625	550	380	295	480	290	702	2150	1200	600	1790
TD300-55/4	660	625	550	380	295	480	290	702	2150	1200	600	1905

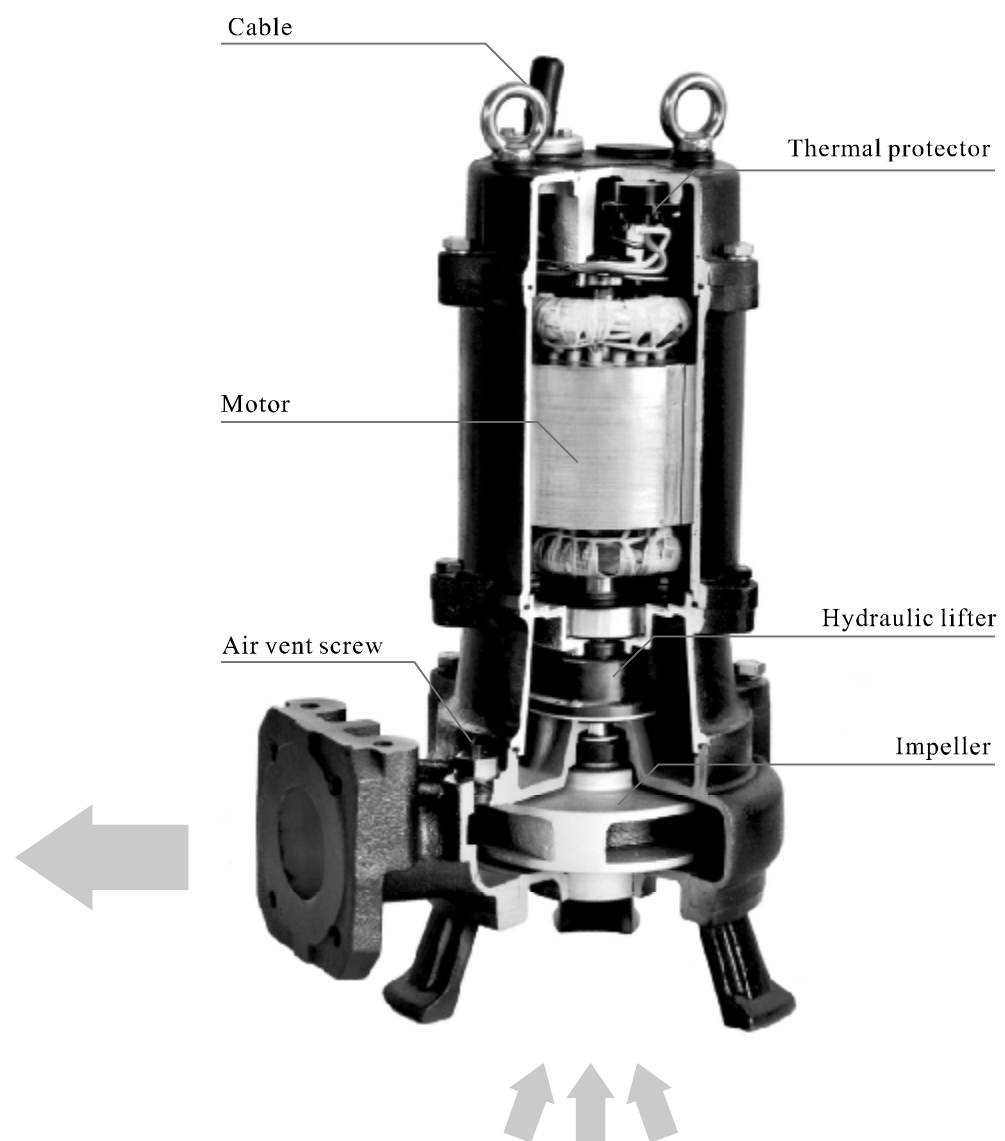
**FCNP**<sup>®</sup>



WQ Submersible sewage pump



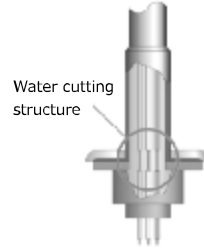
## New generation submersible sewage pump



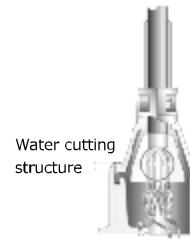
**SUMMARY**

WQ(I) series new generation submersible sewage pump has the following features:

**1** The special cable production process can prevent water leak to motor cabinet when cable cover is broken or the front of cable is submersed.



Under 4kW



Above 5.5kW

**2** Specially designed submersible motor with the protection level of IPX8, insulation class F. The allowed temperature rise is high, submerged cooling effect is good, the actual temperature rise is low, motor insulation life is long, it ensures that the motor can automatically cut off the power supply in abnormal condition.

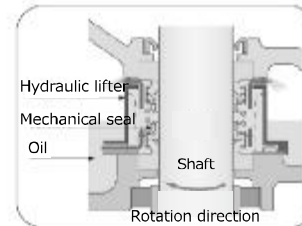
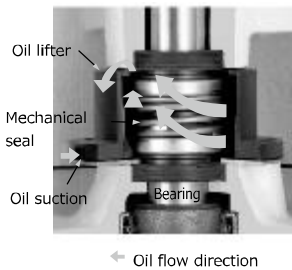


Under 7.5kW



Above 11kW

**3** The product is fitted with outside frameworks oil seal and double-mechanical seal. The hydraulic lifter which is installed inside oil chamber ensures the lubrication of mechanical seal when the oil level is low. Prolong the service life of the seal, the sealing performance is more reliable, effectively ensuring the continuous safe operation of product. (This kind of technology is a patent of Tsurumi Pump)



**4** The design of automatic vent valve enables the pump to exhaust air automatically when pumping water. (This kind of technology is a patent of Tsurumi Pump)



**5** The impeller adopts semi-closed and open shape of double-channel design. Because of symmetric channel, it is well balanced, stable running, small vibration, long service life and energy saving.



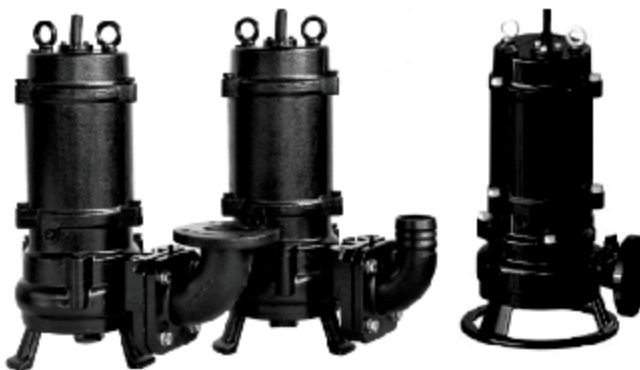
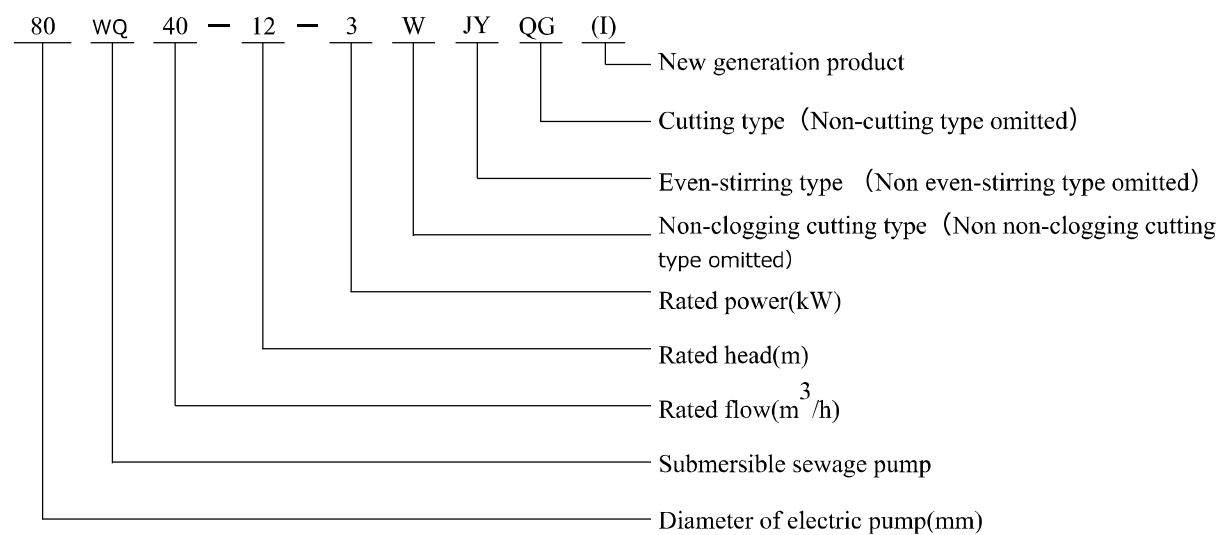
## Application

- Sewage water treatment system for construction, industrial enterprises, municipal projects, etc.
- Drainage, waste water treatment for city environmental protection system.
- Prospection, mines, etc.
- Irrigation, fen, aquaculture, fountain, etc.

## Working conditions

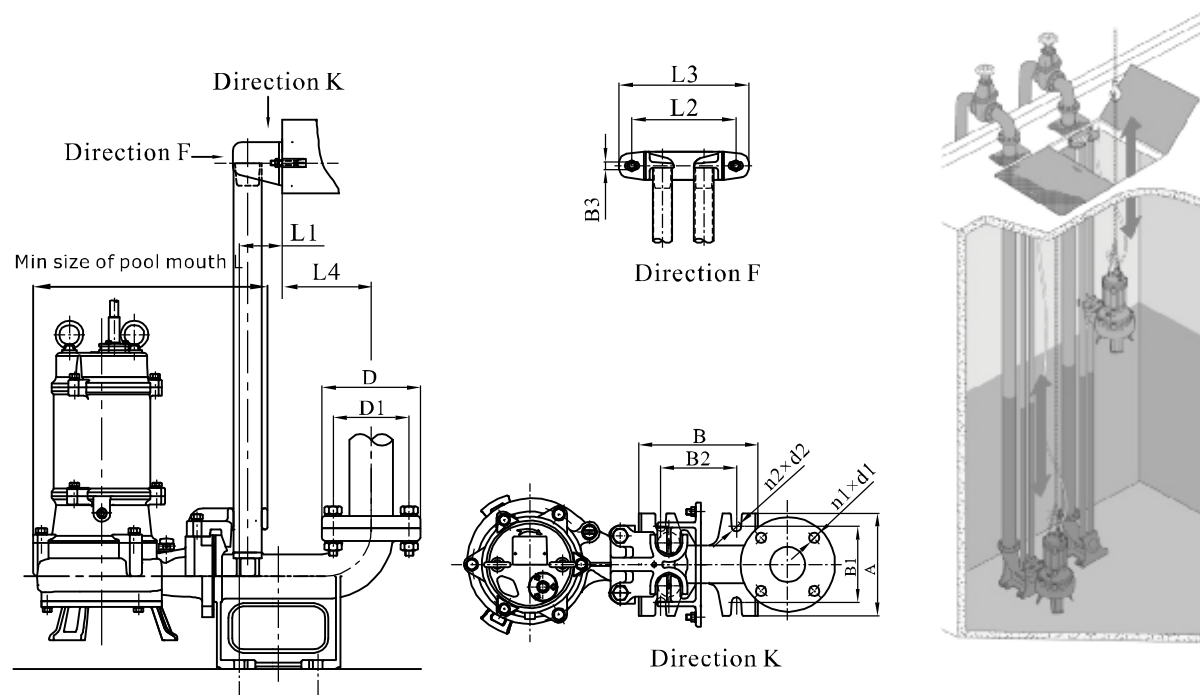
- Power Supply: 50Hz, 3×380V;
- Medium temperature shall less than 40℃, PH value is between 4 to 10. Medium density shall less than 1200kg/m<sup>3</sup>, solid and liquid ratio shall less than 2%.
- The lowest liquid level shall in conform to the lowest liquid in the size dimension.
- The pump is not suitable for strong corrosive fluids or strong corrosive solid.
- The solid diameter in the medium shall not exceed the maximum allowed solid diameter.

## Definition of model

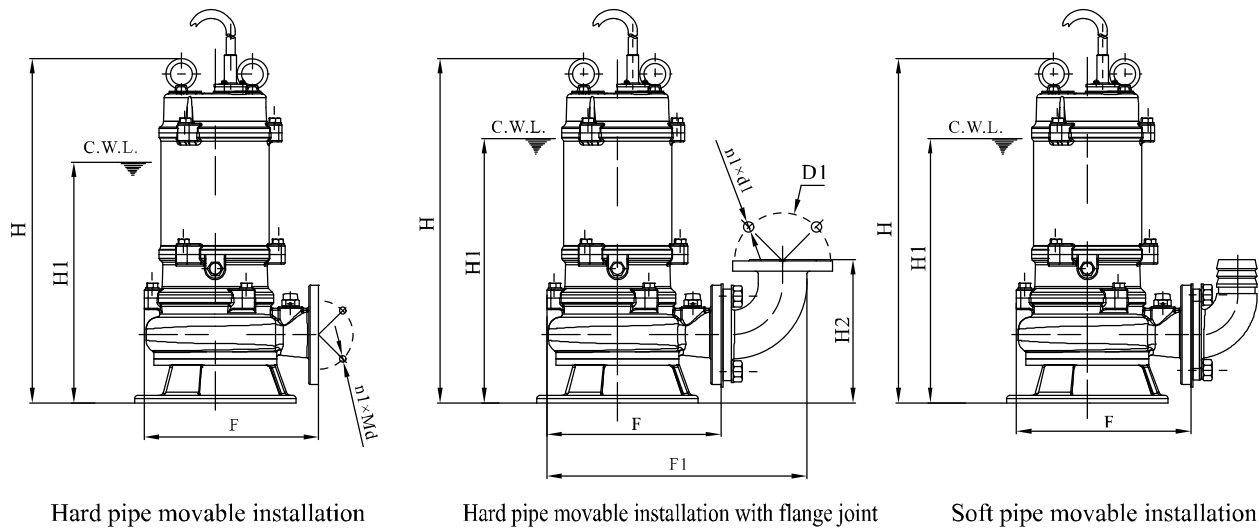


### Installation type

#### Fixed auto coupling device installation



#### Movable installation



\*C.W.L.: The lowest water level when continuous operating

### Coupling device dimension

Measure:mm

No.	Diameter	Flange connection size PN6				Coupling base dimension(mm)						L	L1	L2	L3	L4
		D	D1	n1×d1	n1×Md	A	B	B1	B2	B3	n2×d2					
1	DN40	130	100	4-Φ14	4-M12	140	149	100	95	2-Φ14	4-Φ18	400	73	185	230	57
2	DN50	140	110	4-Φ14	4-M12	160	200	120	120	2-Φ14	4-Φ18	400	60	185	230	175
3	DN65	160	130	4-Φ14	4-M12	190	220	140	140	2-Φ14	4-Φ18	415	75	195	230	130
4	DN80	190	150	4-Φ18	4-M16	220	250	170	170	2-Φ14	4-Φ18	415	75	195	230	165
5	DN100	210	170	4-Φ18	4-M16	250	290	200	200	2-Φ15	4-Φ18	480	114	245	300	176
6	DN150	265	225	8-Φ18	8-M16	400	410	300	300	3-Φ15	4-Φ24	925	190	260	380	190
7	DN200	320	280	8-Φ19	8-M16	400	450	300	350	3-Φ15	4-Φ24	1048	200	260	380	229
8	DN250	375	335	12-Φ19	12-M16	460	560	360	430	3-Φ15	4-Φ24	1205	200	280	380	300
9	DN300	440	395	12-Φ23	12-M20	600	630	500	470	3-Φ18	4-Φ28	1078	270	400	700	300

In the following two situations , foot bracket is not included :  
 1. auto coupling installed cutting type pump with 2 pole motor;  
 2. auto coupling installed cutting type pump with 5.5kW 4 pole motor.

### Relevant dimensions

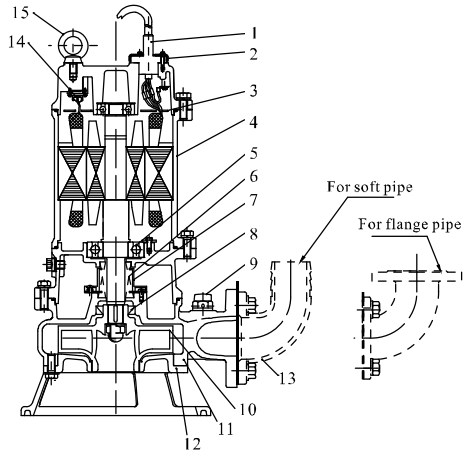
Measure:mm(Except inch)

Diameter Item	DN40	DN50	DN65	DN80	DN100	DN150	DN200	DN250	DN300
Guide rod tap pipe /Seamless steel pipe	1"/33×3.0		1-1/4"/42×3.0		2"/60×3.25	1-1/2"/48×3.25			2-1/2"/75×4
Guide rod length	Pool depth -245	Pool depth -285	Pool depth -300	Pool depth -320	Pool depth -365	Pool depth -100			Pool depth -150
Quantity of expansion bolt and specification	2-M10×120				2-M12×125				2-M16×150
Quantity of bolt and specification	4-M16×250					4-M20×300			4-M24×350
Footer bolt hole size	80×80×300					100×100×350			120×120×400
Dia. of soft pipe	1-1/2"/40	2"/50	2-1/2"/65	3"/80	4"/100	6"/150	8"/200	10"/250	12"/300

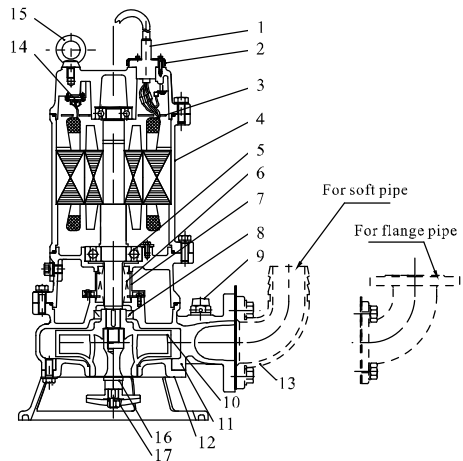
**WQ(I), WQ-JY(I) type submersible sewage pump**

Sectional drawing of sewage pump with 2 pole motor

WQ(I) type



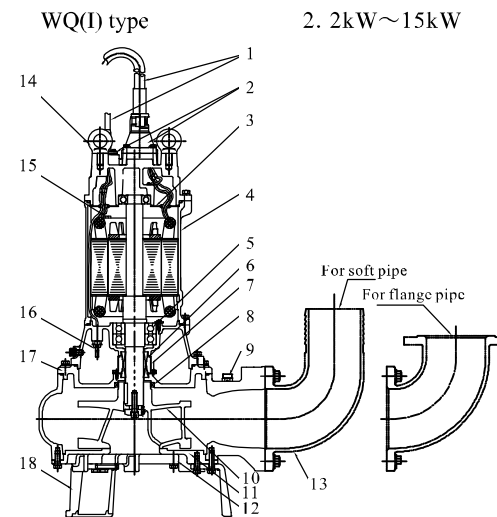
WQ-JY(I) type



No.	Name	Material
1	Cable	YZW
2	Cable gland	
3	Threading board	
4	Electric motor	
5	Bearing	
6	Mechanical seal	Graphite/Ceramic /Silicon carbide
7	Oil lifter	
8	Oil seal	NBR1-2
9	Air vent screw	Resin/others
10	Impeller	Cast iron
11	Casing	Cast iron
12	Suction cover	Cast iron
13	Discharge bend (optional)	Cast iron
14	Thermal protector	
15	Eye-bolt	
16	Agitating shaft (for JY)	20Cr13
17	Stir impeller (for JY)	Cast iron

### WQ(I), WQ-JY(I) type submersible sewage pump

#### Sectional drawing of sewage pump with 4 pole motor



No.	Name	Material
1	Cable	YZW
2	Cable gland	
3	Threading board	
4	Electric motor	
5	Bearing	
6	Mechanical seal	
7	Oil lifter	
8	Oil seal	NBR1-2
9	Air vent screw	Resin/others
10	Impeller	
11	Casing	Cast iron
12	Suction cover	Cast iron
13	Discharge bend (optional)	Cast iron
14	Thermal protector	
15	Eye-bolt	
16	Leak sensor electrode bar (above 11kW)	Cast iron
17	Agitating shaft (for JY)	
18	Stir impeller (for JY)	

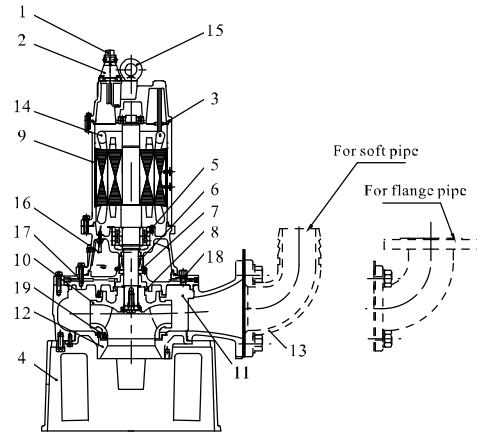
## WQ

### WQ(I), WQ-JY(I) type submersible sewage pump

#### Sectional drawing of sewage pump with 4 pole motor

WQ(I) type

18. 5kW~75kW



No.	Name	Material
1	Cable	YCW
2	Cable gland	Cast iron
3	Threading board	Q235
4	Filter bracket	Ductile iron
5	Bearing	
6	Mechanical seal	Graphite/Ceramic/ Silicon carbide
7	Oil lifter	
8	Oil seal	NBR 1-2
9	Base	Cast iron
10	Impeller	Cast iron
11	Casing	Cast iron
12	Suction cover	Cast iron
13	Discharge bend (optional)	Cast iron
14	Thermal protector	
15	Eye-bolt	45#Galvanized
16	Leak sensor electrode bar	
17	Casing upper cover	Cast iron
18	Air vent screw	06Cr19Ni10
19	Neck ring	Cast iron



### Technical data and dimensions

Model	Diameter	Q	H	Speed	Power	Rated voltage	Rated current	Max. dia. of passing solid	Weight	Dimensions(mm)				
	(mm)	(m <sup>3</sup> /h)	(m)	(rpm)	(kW)	(V)	(A)	(mm)	(kg)	H	H1	H2	F	F1
40WQ12-10-0.75(JY)(I)	40	12	10	2850	0.75	380	1.8	15	21.5	415	285	203	222	333
40WQ8-15-1.1(JY)(I)	40	8	15	2850	1.1	380	2.6	15	21.5	415	285	203	222	333
40WQ15-8-1.1(JY)(I)	40	15	8	2850	1.1	380	2.6	20	25.5	440	300	214	244	337
40WQ15-13-1.1(JY)(I)	40	15	13	2850	1.1	380	2.6	15	23.5	440	305	214	245	337
40WQ12-18-1.5(JY)(I)	40	12	18	2880	1.5	380	3.3	20	33	470	330	215	271	382
50WQ10-7-0.55(JY)(I)	50	10	7	2850	0.55	380	1.3	15	21.5	415	285	203	222	333
50WQ12-10-0.75(JY)(I)	50	12	10	2850	0.75	380	1.8	15	21.5	415	285	203	222	333
50WQ8-15-1.1(JY)(I)	50	8	15	2850	1.1	380	2.6	20	25.5	440	300	214	244	337
50WQ10-13-1.1(JY)(I)	50	10	13	2850	1.1	380	2.6	20	25.5	440	300	214	244	337
50WQ15-8-1.1(JY)(I)	50	15	8	2850	1.1	380	2.6	20	25.5	440	300	214	244	337
50WQ15-13-1.1(JY)(I)	50	15	13	2850	1.1	380	2.6	15	23.5	440	305	214	245	363
50WQ10-15-1.5(JY)(I)	50	10	15	2880	1.5	380	3.3	20	33	475	310	216	270	363
50WQ10-18-1.5(JY)(I)	50	10	18	2880	1.5	380	3.3	20	33	475	310	216	270	363
50WQ12-12-1.5(JY)(I)	50	12	12	2880	1.5	380	3.3	20	33	475	310	216	270	363
50WQ15-10-1.5(JY)(I)	50	15	10	2880	1.5	380	3.3	20	33	475	310	216	270	363
50WQ15-15-1.5(JY)(I)	50	15	15	2880	1.5	380	3.3	20	33	475	310	216	270	363
50WQ9-22-2.2(JY)(I)	50	9	22	2880	2.2	380	4.6	22	33	475	310	216	270	363
50WQ15-18-2.2(JY)(I)	50	15	18	2880	2.2	380	4.6	22	37.5	510	320	216	279	373
50WQ15-20-2.2(JY)(I)	50	15	20	2880	2.2	380	4.6	22	37.5	510	320	216	279	373
50WQ20-15-2.2(JY)(I)	50	20	15	2880	2.2	380	4.6	22	37.5	510	320	216	279	373
50WQ25-10-2.2(JY)(I)	50	25	10	2880	2.2	380	4.6	22	37.5	510	320	216	279	373
50WQ15-25-3(JY)(I)	50	15	25	2840	3	380	6.1	25.5	44	540	335	218	279	372
50WQ15-27-3(JY)(I)	50	15	27	2840	3	380	6.1	25.5	44	540	335	218	279	372
50WQ25-20-3(JY)(I)	50	25	20	2840	3	380	6.1	25.5	44	540	335	218	279	372
50WQ15-32-4(JY)(I)	50	15	32	2840	4	380	7.7	25.5	49.5	557	351	221	321	414
50WQ15-40-5.5(JY)(I)	50	15	40	2940	5.5	380	10.8	19.5	84	790	450	221	321	414
50WQ20-30-5.5(JY)(I)	50	20	30	2940	5.5	380	10.8	19.5	84	790	450	221	321	414
50WQ25-25-5.5(JY)(I)	50	25	25	2940	5.5	380	10.8	19.5	84	790	450	221	321	414
50WQ20-40-7.5(JY)(I)	50	20	40	2940	7.5	380	14.3	19.5	92	787	500	221	321	414
50WQ25-35-7.5(JY)(I)	50	25	35	2940	7.5	380	14.3	19.5	92	787	500	221	321	414
65WQ15-10-1.1(JY)(I)	65	15	10	2850	1.1	380	2.6	23	27	440	300	214	246	363
65WQ25-10-1.5(JY)(I)	65	25	10	2850	1.5	380	3.3	28	30	480	340	160	283	418
65WQ25-14-2.2(JY)(I)	65	25	14	2880	2.2	380	4.6	24	40.5	526	340	235	287	404
65WQ35-7-2.2(JY)(I)	65	35	7	2880	2.2	380	4.6	24	40.5	526	340	235	287	404
65WQ25-15-3(JY)(I)	65	25	15	2840	3	380	6.1	25.5	46	542	336	229	275	392
65WQ25-18-3(JY)(I)	65	25	18	2840	3	380	6.1	25.5	46	542	336	229	275	392
65WQ37-13-3(JY)(I)	65	37	13	2840	3	380	6.1	25.5	46	542	336	229	275	392
65WQ40-10-3(JY)(I)	65	40	10	2840	3	380	6.1	25.5	46	542	336	229	275	392
65WQ20-25-4(JY)(I)	65	20	25	2840	4	380	7.7	26	52	563	357	235	320	437
65WQ20-27-4(JY)(I)	65	20	27	2840	4	380	7.7	26	52	563	357	235	320	437
65WQ25-31-5.5(JY)(I)	65	25	31	2940	5.5	380	10.8	17.5	86	793	450	236	314	431
65WQ30-25-5.5(JY)(I)	65	30	25	2940	5.5	380	10.8	17.5	86	793	450	236	314	431

## Technical data and dimensions

Model	Diameter	Q	H	Speed	Power	Rated voltage	Rated current	Max. dia. of passing solid	Weight	Dimensions(mm)				
	(mm)	(m <sup>3</sup> /h)	(m)	(rpm)	(kW)	(V)	(A)	(mm)	(kg)	H	H1	H2	F	F1
65WQ20-60-11(JY)(I)	65	20	60	2930	11	380	21.7	22	95	877	600	284	362	520
65WQ40-50-11(JY)(I)	65	40	50	2930	11	380	21.7	22	95	877	600	284	362	520
80WQ40-8-2.2(JY)(I)	80	40	8	2880	2.2	380	4.6	26.5	42.5	545	370	256	296	431
80WQ40-10-2.2(JY)(I)	80	40	10	2880	2.2	380	4.6	26.5	42.5	545	370	256	296	431
80WQ45-9-2.2(JY)(I)	80	45	9	2880	2.2	380	4.6	26.5	42.5	545	370	256	296	431
80WQ35-13-3(JY)(I)	80	35	13	2840	3	380	6.1	34.5	47	565	360	256	300	436
80WQ40-15-4(JY)(I)	80	40	15	2840	4	380	7.7	26	51	563	357	250	318	454
80WQ40-22-5.5(JY)(I)	80	40	22	2940	5.5	380	10.8	17.5	85.5	793	450	251	310	447
80WQ40-30-7.5(JY)(I)	80	40	30	2940	7.5	380	14.3	17.5	92	790	500	251	310	447
80WQ50-25-7.5(JY)(I)	80	50	25	2940	7.5	380	14.3	17.5	92	790	500	251	310	447
80WQ48-38-11(JY)(I)	80	48	38	2930	11	380	21.7	22	134.5	924	610	317	410	557
100WQ50-7-2.2(JY)(I)	100	50	7	2880	2.2	380	4.6	45	48	522	400	170	323	472
100WQ60-9-3(JY)(I)	100	60	9	2840	3	380	6.1	40	50	564	420	190	311	460
100WQ50-12-4(JY)(I)	100	50	12	2840	4	380	7.7	34.5	53.5	607	400	292	337	492
100WQ65-15-5.5(JY)(I)	100	65	15	2940	5.5	380	10.8	35.5	89	835	500	292	337	492
100WQ65-18-5.5(JY)(I)	100	65	18	2940	5.5	380	10.8	35.5	89	835	500	292	337	492
100WQ70-14-5.5(JY)(I)	100	70	14	2940	5.5	380	10.8	35.5	89	835	500	292	337	492
100WQ45-22-7.5(JY)(I)	100	45	22	2940	7.5	380	14.3	32.5	98	835	500	297	365	519
100WQ65-20-7.5(JY)(I)	100	65	20	2940	7.5	380	14.3	32.5	98	835	500	297	365	519
100WQ80-15-7.5(JY)(I)	100	80	15	2940	7.5	380	14.3	32.5	98	835	500	297	365	519
100WQ100-15-7.5(JY)(I)	100	100	15	2940	7.5	380	14.3	32.5	98	835	500	297	365	519
100WQ80-25-11(JY)(I)	100	80	25	2930	11	380	21.7	25	128	906	620	344	388	577
100WQ100-30-15(JY)(I)	100	100	30	2930	15	380	29.1	27.5	136	906	620	344	388	577
150WQ100-7-5.5(JY)(I)	150	100	7	2940	5.5	380	10.8	31	102	850	510	365	398	650
150WQ100-10-5.5(JY)(I)	150	100	10	2940	5.5	380	10.8	31	102	850	510	365	398	650
150WQ100-17-7.5(JY)(I)	150	100	17	2940	7.5	380	14.3	31	109	850	510	365	398	650
150WQ120-25-15(JY)(I)	150	120	25	2930	15	380	29.1	40	145	955	680	425	398	660
150WQ150-10-7.5(JY)(I)	150	150	10	2940	7.5	380	14.3	30	105	909	670	425	398	660

Please contact the salesman for overall dimension drawing.

### Technical data and dimensions

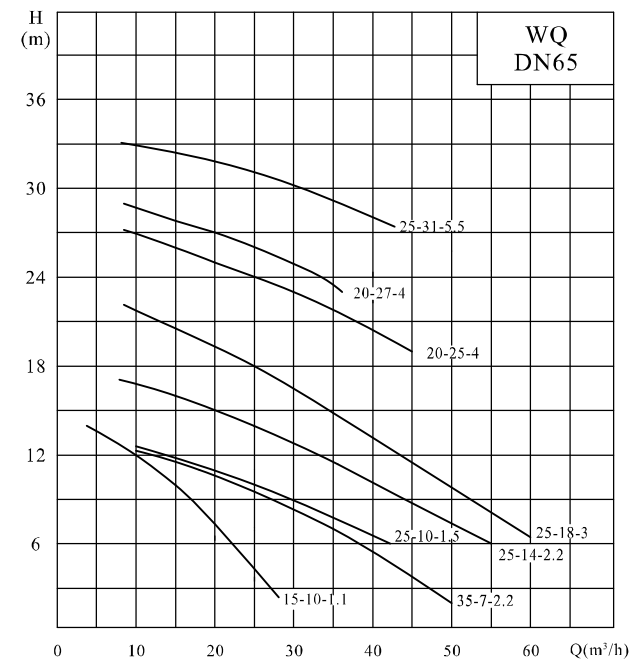
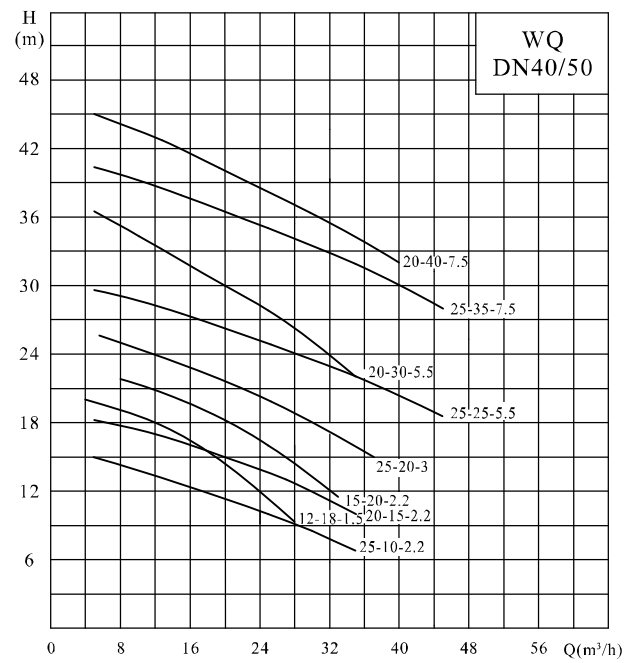
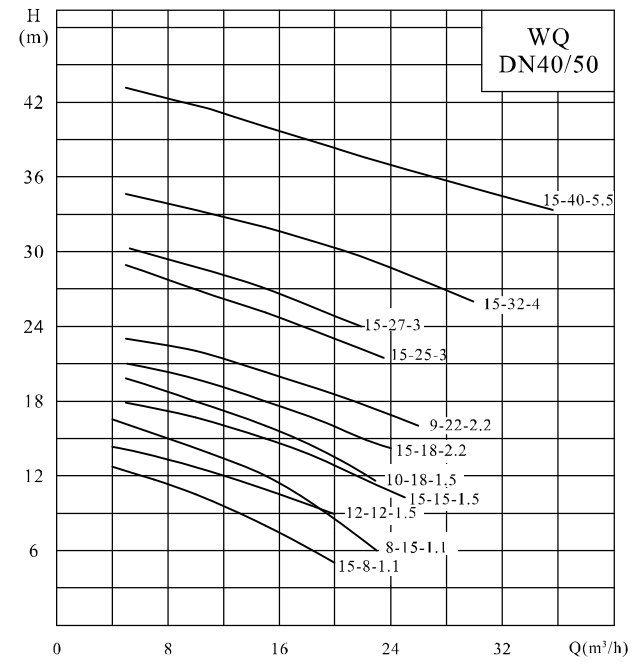
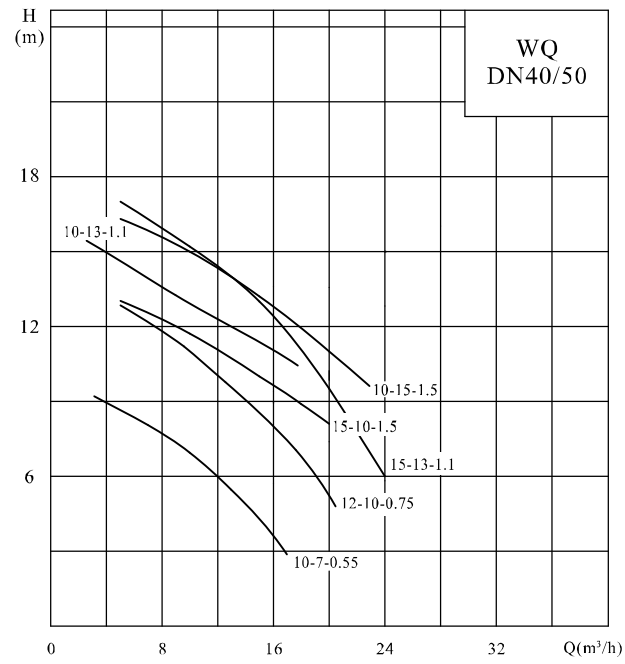
Model	Diameter	Q	H	Speed	Power	Rated voltage	Rated current	Max. dia. of passing solid	Weight	Dimensions(mm)				
	(mm)	(m <sup>3</sup> /h)	(m)	(rpm)	(kW)	(V)	(A)	(mm)	(kg)	H	H1	H2	F	F1
80WQ36-10-2.2(JY)(I)	80	36	10	1413	2.2	380	5.5	50	56	643	460	301	363	510
80WQ36-12-2.2(JY)(I)	80	36	12	1413	2.2	380	5.5	50	56	643	460	301	363	510
80WQ36-16-4(JY)(I)	80	36	16	1413	4	380	8.4	35	65	692	555	301	375	580
80WQ60-11-4(JY)(I)	80	60	11	1413	4	380	8.4	55	51	716	357	250	370	454
100WQ60-17-5.5(JY)(I)	100	60	17	1437	5.5	380	11.5	40	90	908	670	432	453	714
100WQ60-20-7.5(JY)(I)	100	60	20	1450	7.5	380	16.6	40	110	929	690	369	454	687
100WQ80-35-18.5(JY)(I)	100	80	35	1460	18.5	380	36.9	27.5	136	906	620	344	388	577
100WQ100-35-22(JY)(I)	100	100	35	1460	18.5	380	36.9	35	285	990	950	439	550	710
150WQ240-7-7.5(JY)(I)	150	240	7	1450	7.5	380	16.6	70	126	1085	845	510	548	841
150WQ150-16-11(JY)(I)	150	150	16	1440	11	380	22.9	52	216	1097	750	535	575	825
150WQ150-20-15(JY)(I)	150	150	20	1440	15	380	30.6	57	237	1167	800	535	572	822
150WQ150-24-18.5(JY)(I)	150	150	24	1460	18.5	380	36.9	45	290	1080	1030	530	620	820
150WQ180-20-18.5(JY)(I)	150	180	20	1460	18.5	380	36.9	45	290	1080	1030	530	620	820
150WQ200-15-18.5(JY)(I)	150	200	15	1460	18.5	380	36.9	45	285	1080	1030	530	620	820
150WQ150-27-22(JY)(I)	150	150	27	1460	22	380	43.1	60	330	1281	880	530	575	900
150WQ180-25-22(JY)(I)	150	180	25	1460	22	380	43.1	60	330	1281	880	530	575	900
150WQ200-20-22(JY)(I)	150	200	20	1460	22	380	43.1	60	330	1281	880	530	575	900
150WQ270-16-22(JY)(I)	150	270	16	1460	22	380	43.1	65	330	1273	860	530	575	900
150WQ200-25-30(I)	150	200	25	1450	30	380	60.0	50	450	1513	1200	673	620	900
150WQ150-35-37(I)	150	150	35	1470	37	380	71.9	50	690	1567	1200	671	765	1025
150WQ200-30-37(I)	150	200	30	1470	37	380	71.9	50	690	1567	1200	671	765	1025
150WQ270-40-55(I)	150	270	40	1480	55	380	106.0	35	845	1663	1300	596	811	1138
200WQ270-10-11(JY)(I)	200	270	10	1440	11	380	22.9	63	255	1113	760	530	568	890
200WQ270-14-15(JY)(I)	200	270	14	1440	15	380	30.6	64	230	1184	810	535	546	868
200WQ250-15-18.5(JY)(I)	200	250	15	1460	18.5	380	36.9	60	330	1281	880	530	575	900
200WQ300-9-18.5(JY)(I)	200	300	9	1460	18.5	380	36.9	60	330	1281	880	530	575	900
200WQ300-15-22(JY)(I)	200	300	15	1450	22	380	45.0	60	330	1281	880	530	575	900
200WQ400-10-22(JY)(I)	200	400	10	1450	22	380	45.0	60	330	1281	880	530	575	900
200WQ250-22-30(I)	200	250	22	1450	30	380	60.0	50	450	1513	1200	673	620	900
200WQ360-15-30(I)	200	360	15	1450	30	380	60.0	50	450	1513	1200	673	620	900
200WQ400-13-30(I)	200	400	13	1450	30	380	60.0	50	450	1513	1200	673	620	900
200WQ270-28-37(I)	200	270	28	1470	37	380	71.9	40	710	1590	1200	673	813	1140
200WQ300-20-37(I)	200	300	20	1470	37	380	71.9	40	710	1590	1200	673	813	1140
200WQ350-25-37(I)	200	350	25	1470	37	380	71.9	40	710	1590	1200	673	813	1140
200WQ400-18-37(I)	200	400	18	1470	37	380	71.9	40	710	1590	1200	673	813	1140
200WQ250-40-55(I)	200	250	40	1480	55	380	106.0	40	850	1663	1300	650	811	1236
200WQ400-30-55(I)	200	400	30	1480	55	380	106.0	40	850	1663	1300	650	811	1236
200WQ420-30-55(I)	200	420	30	1480	55	380	106.0	40	850	1663	1300	650	811	1236
200WQ350-40-75(I)	200	350	40	1480	75	380	142.0	40	940	1663	1300	650	811	1236
200WQ420-40-75(I)	200	420	40	1480	75	380	142.0	40	940	1663	1300	650	811	1236
250WQ420-16-30(I)	250	420	16	1460	30	380	57.4	45	680	1517	1250	750	815	1235
250WQ600-9-30(I)	250	600	9	1460	30	380	57.4	45	680	1517	1250	750	815	1235

## Technical data and dimensions

Model	Diameter	Q	H	Speed	Power	Rated voltage	Rated current	Max. dia. of passing solid	Weight	Dimensions(mm)				
	(mm)	(m <sup>3</sup> /h)	(m)	(rpm)	(kW)	(V)	(A)	(mm)	(kg)	H	H1	H2	F	F1
250WQ420-22-37(I)	250	420	22	1470	37	380	71.9	62	700	1594	1200	750	820	1240
250WQ600-12-37(I)	250	600	12	1470	37	380	71.9	62	700	1594	1200	750	820	1240
250WQ360-28-45(I)	250	360	28	1470	45	380	87.0	45	685	1556	1200	695	829	1256
250WQ800-12-45(I)	250	800	12	1470	45	380	87.0	60	850	1350	1100	695	829	980
250WQ600-25-75(I)	250	600	25	1480	75	380	142.0	60	930	1663	1300	740	895	1380
300WQ800-8-37(I)	300	800	8	1450	37	380	75.0	60	650	1400	1150	779	800	1200
300WQ500-15-37(I)	300	500	15	1450	37	380	75.0	60	650	1400	1150	779	800	1200
300WQ600-15-45(I)	300	600	15	1470	45	380	87.0	60	690	1605	1250	825	881	1306
300WQ800-12-45(I)	300	800	12	1470	45	380	87.0	60	690	1605	1250	825	881	1306
300WQ600-20-55(I)	300	600	20	1450	55	380	106.0	55	1000	1680	1120	775	870	1270
300WQ800-20-75(I)	300	800	20	1450	75	380	142.0	60	1200	1680	1120	775	870	1270

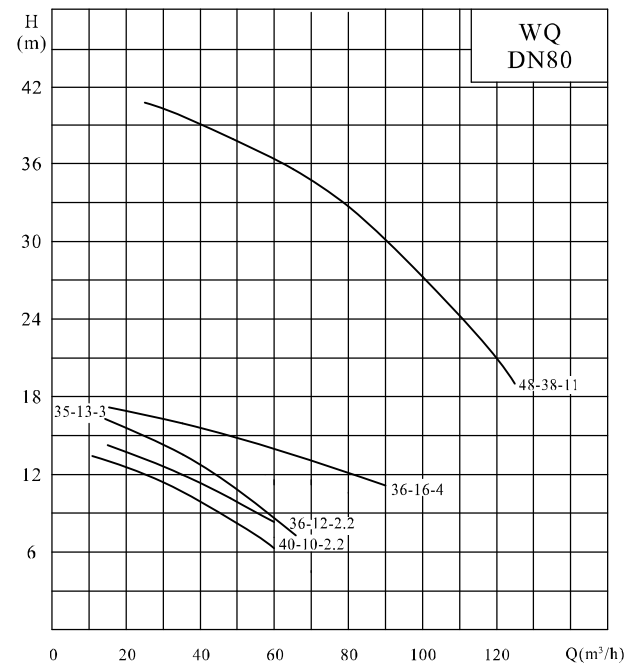
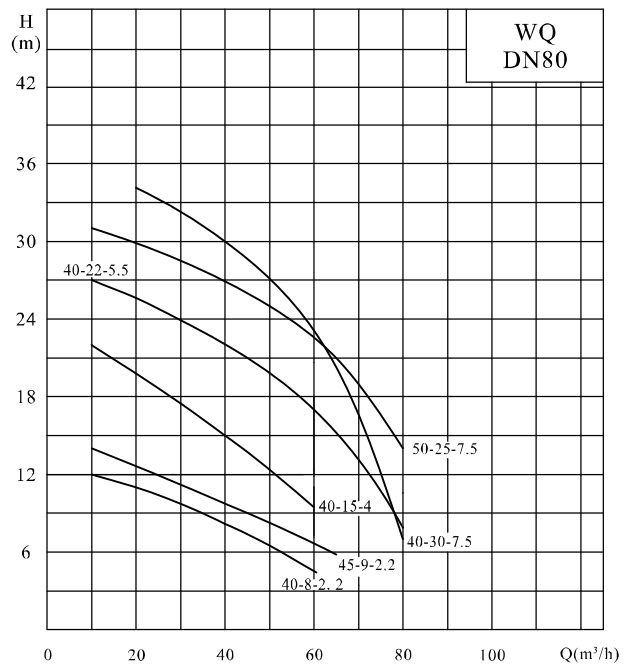
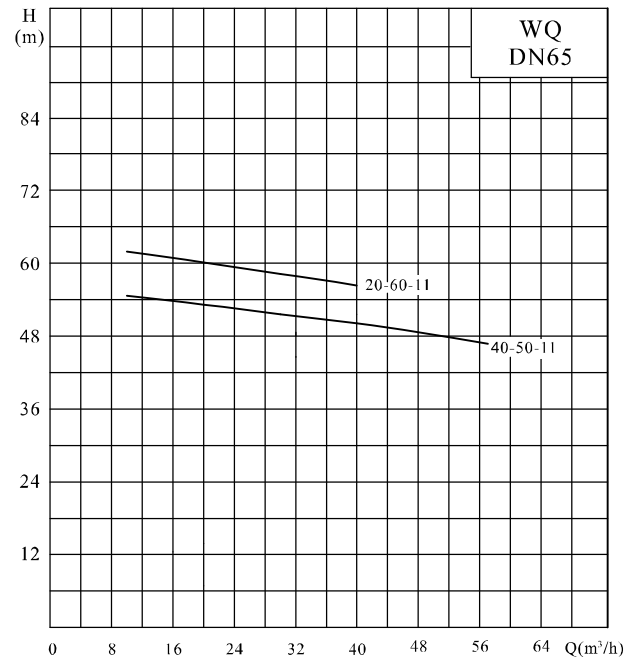
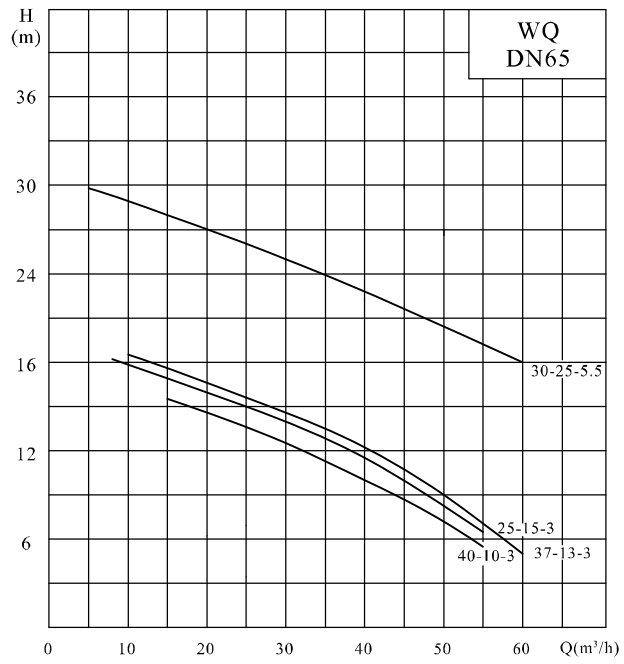
Please contact the salesman for overall dimension drawing.

Performance curve

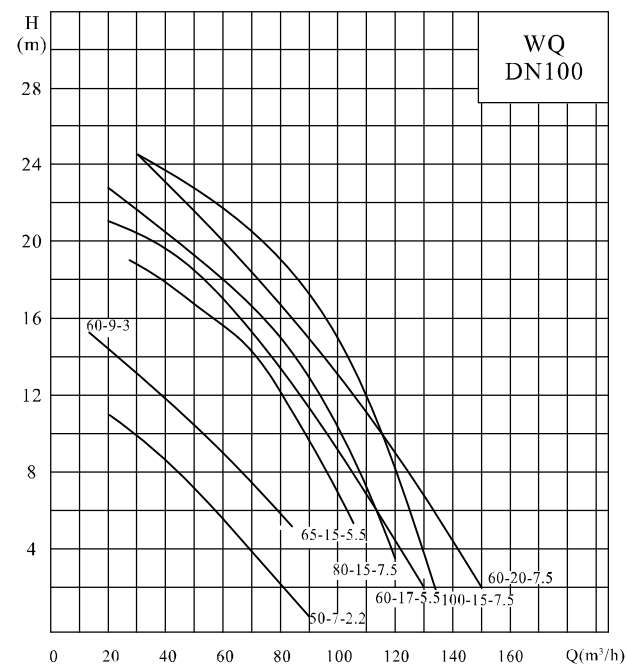
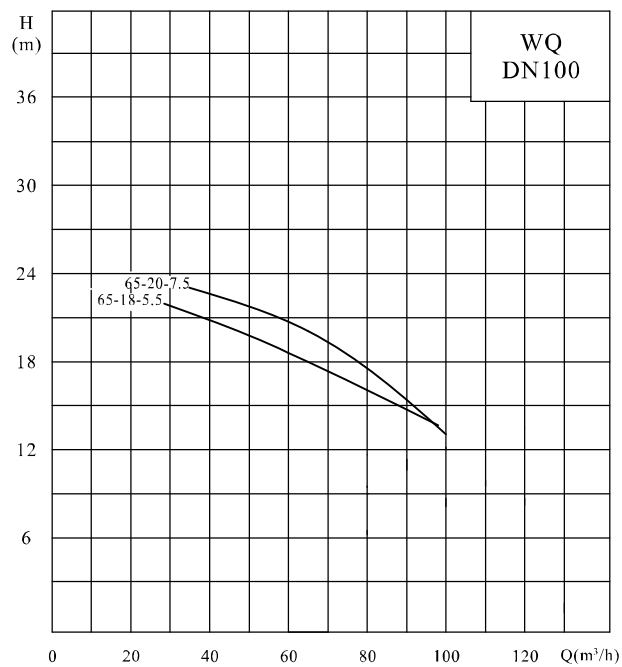
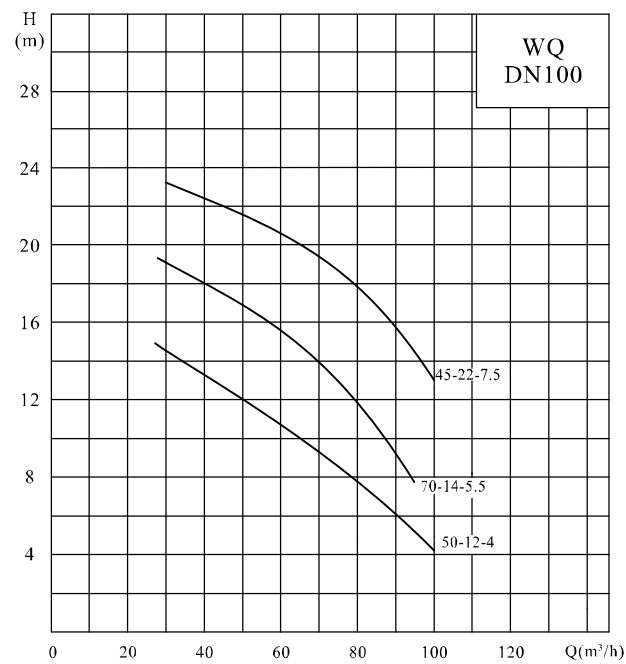
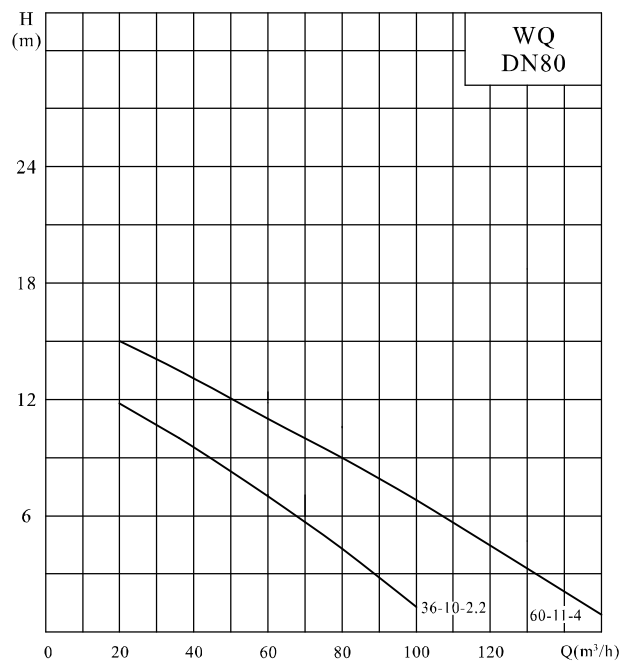


# WQ

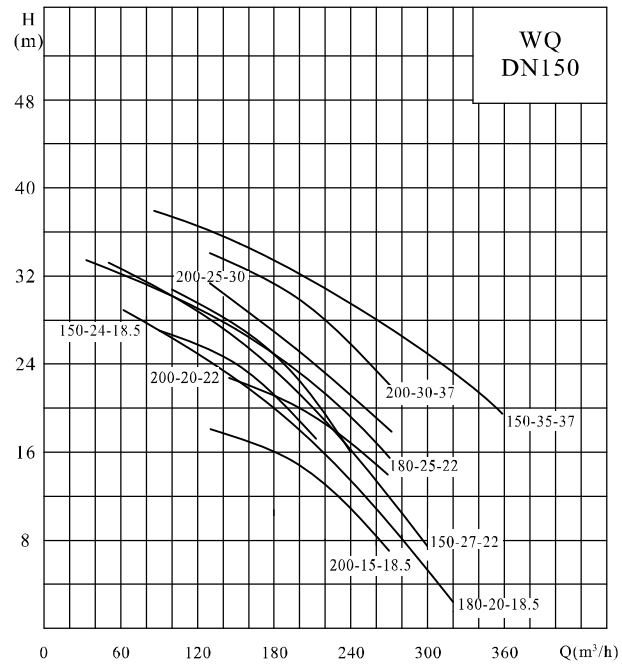
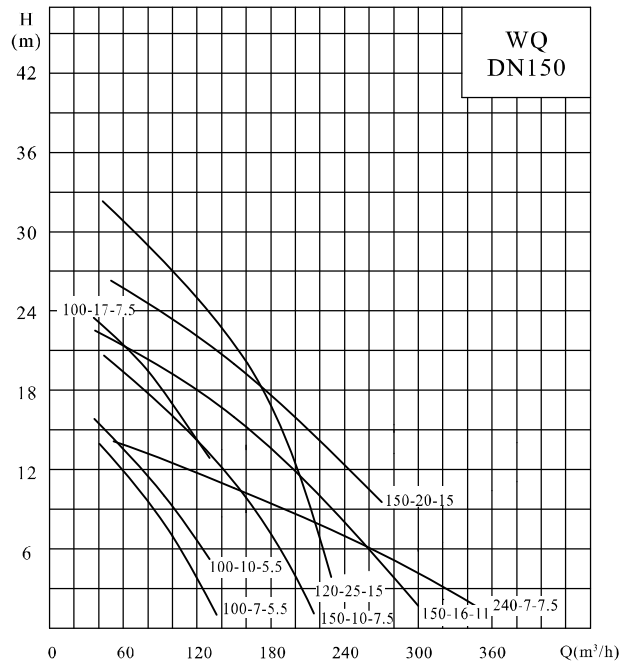
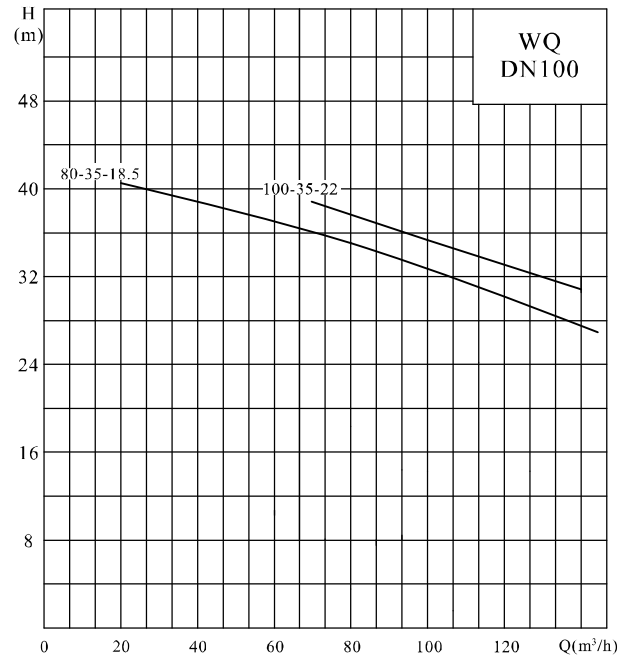
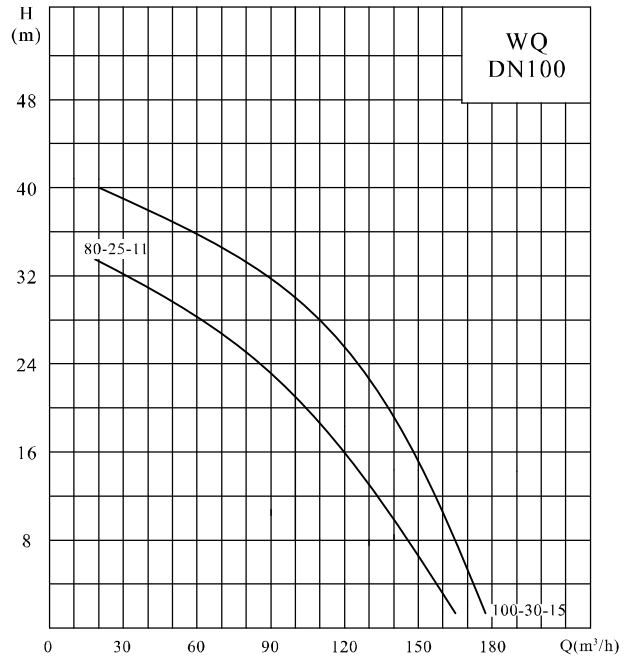
## Performance curve



## Performance curve

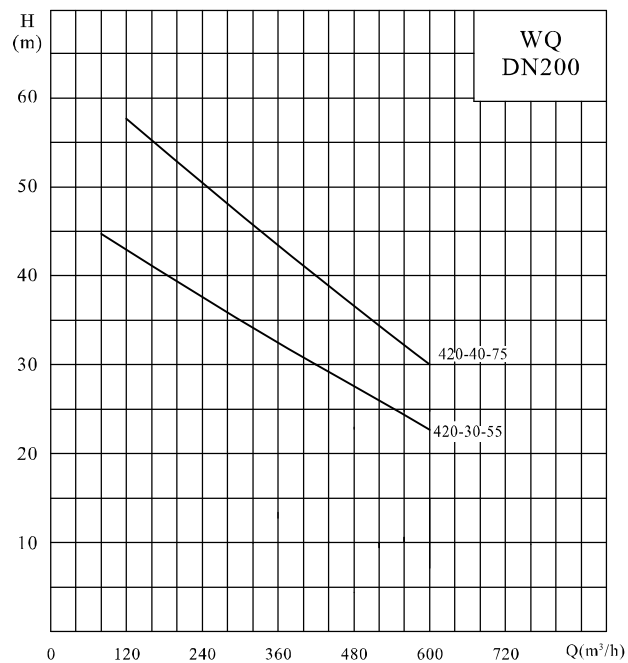
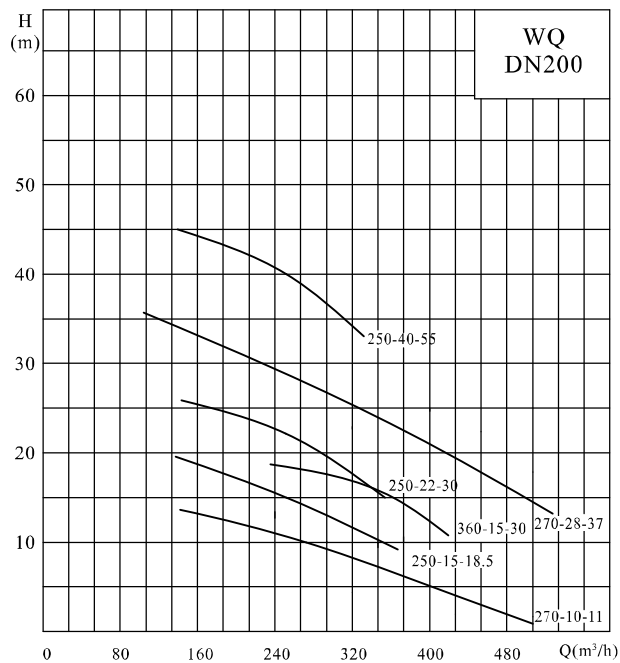
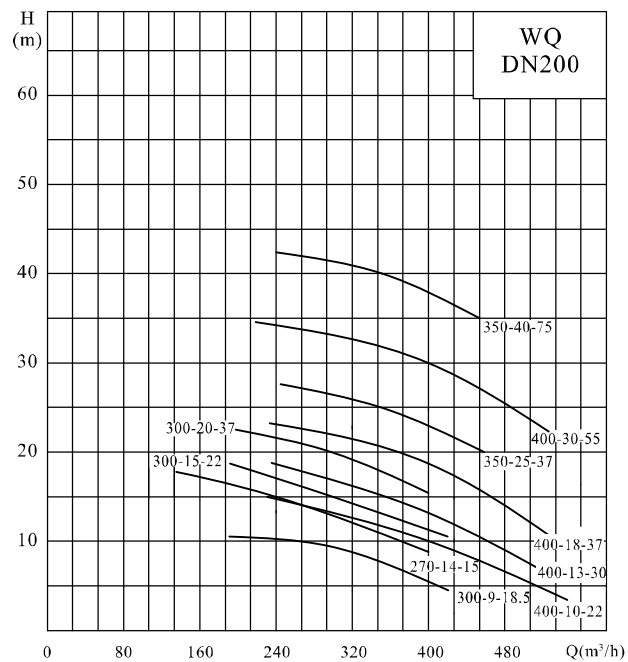
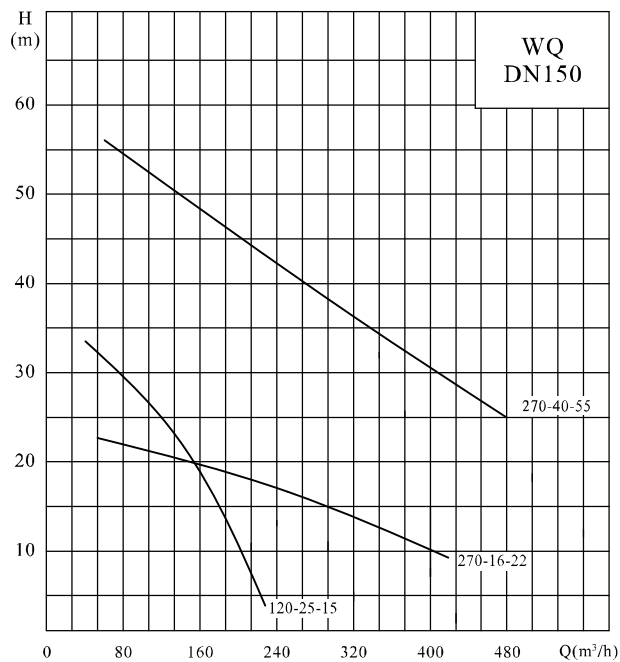


Performance curve

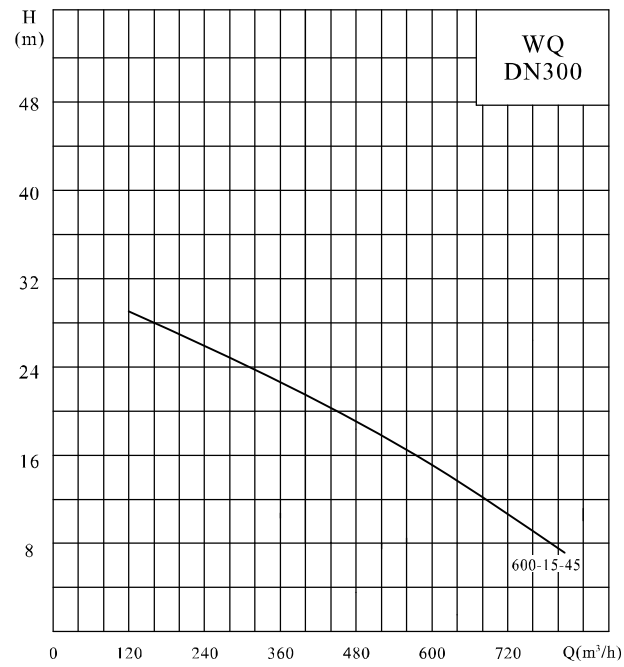
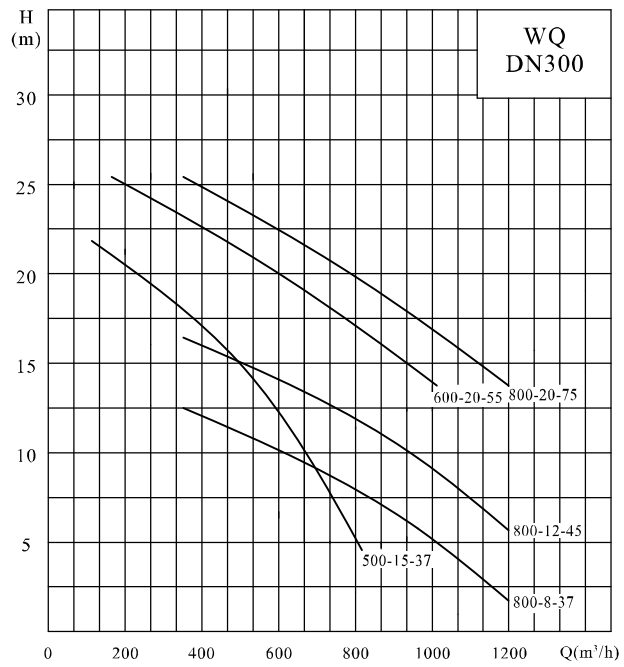
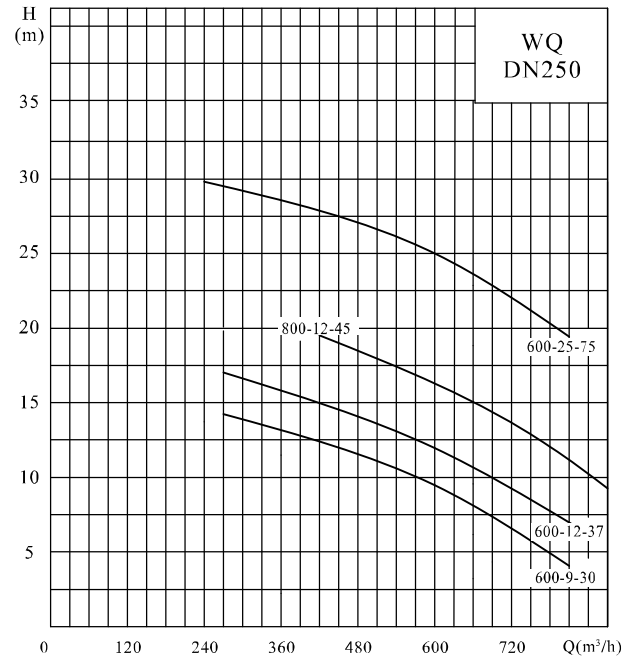
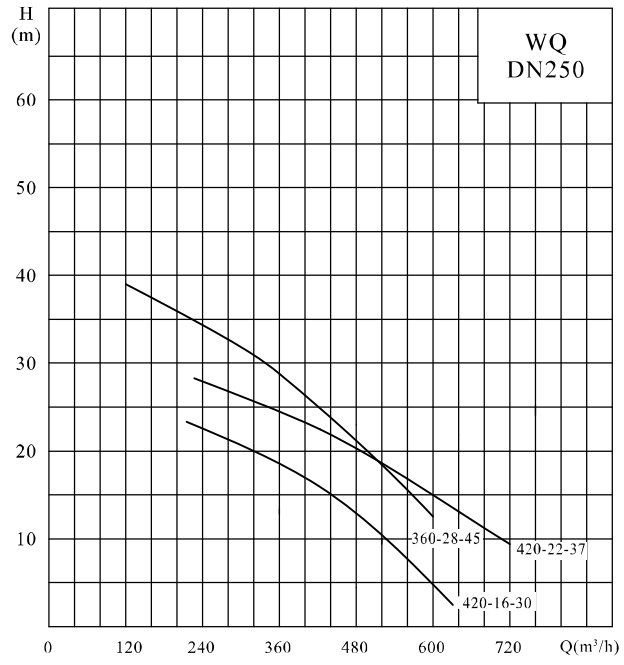




Performance curve

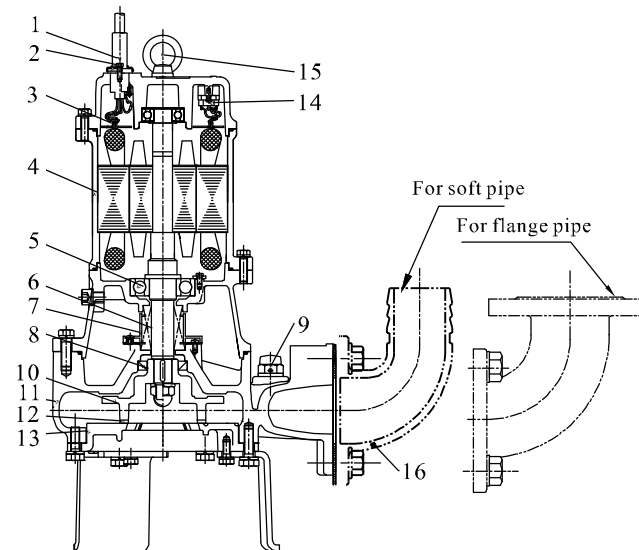


Performance curve



## WQ-QG(I) cutting type submersible sewage pump

### Cutting type pump(2 pole motor)



With the reasonable structure of cutting type, the pump is able to prevent clogging at the extreme. It consists of rotating impeller which with cutting blade and suction cover which with zigzag fixed gear. Two cemented carbide blades are welded into impeller. The edge of blade and zigzag cover will move in the opposite direction when impeller rotates. It ensures the excellent cutting performance of the pump. Impeller and suction cover are produced by casting process which can improve the head of cutting type pump.

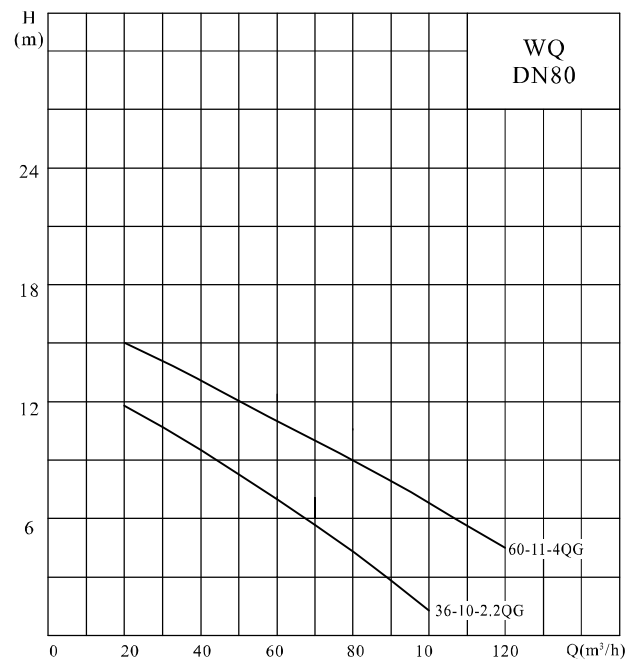
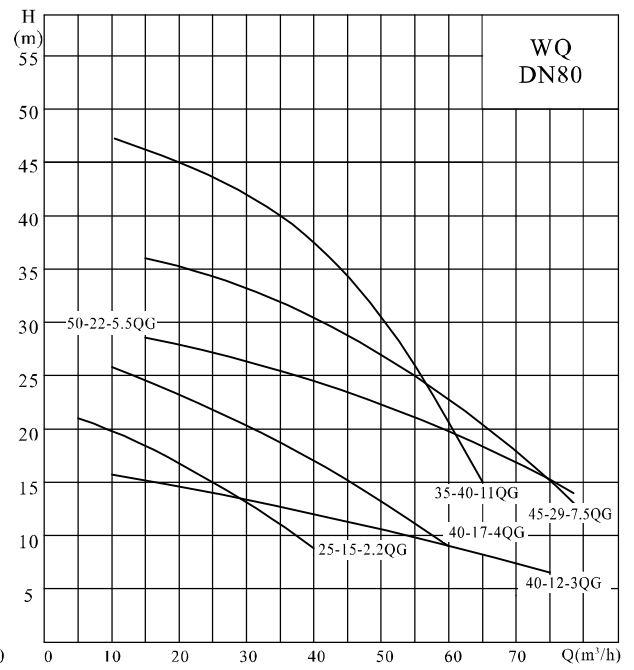
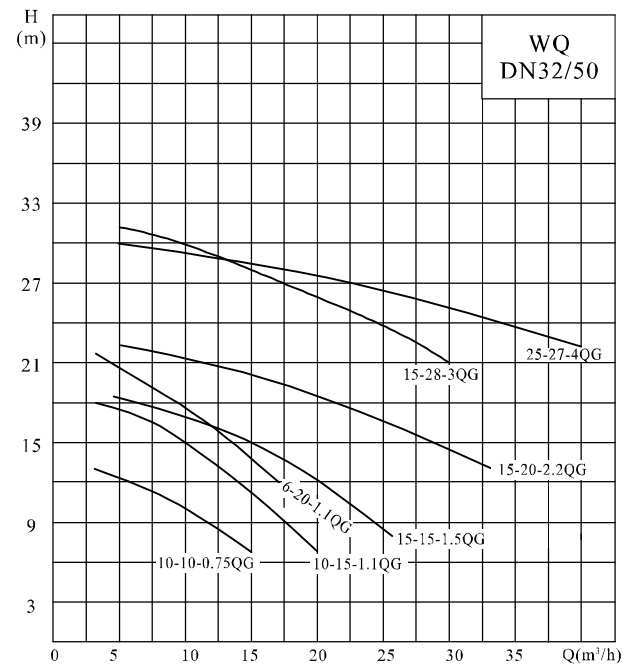
No.	Name	Material
1	Cable	YZW
2	Cable gland	
3	Threading board	
4	Electric motor	
5	Bearing	
6	Mechanical seal	Graphite/Ceramic/ Silicon carbide
7	Oil lifter	
8	Oil seal	NBR1-2
9	Air vent screw	Resin/others
10	Impeller	Cast iron
11	Casing	Cast iron
12	Cutting blade	Cemented carbide
13	Suction cover	Ductile iron
14	Circle thermal protector	
15	Eye-bolt	
16	Discharge bend (optional)	Cast iron

## Technical data and dimensions

Model	Diameter	Q	H	Speed	Power	Rated voltage	Rated current	Max. dia. of passing solid	Weight	Dimensions(mm)				
	(mm)	(m <sup>3</sup> /h)	(m)	(rpm)	(kW)	(V)	(A)	(mm)	(kg)	H	H1	H2	F	F1
32WQ6-20-1.1QG(I)	32	6	20	2850	1.1	380	2.6	12	18	398	270	157	237	317
50WQ10-10-0.75QG(I)	50	10	10	2850	0.75	380	1.8	11	21.5	415	285	203	222	333
50WQ10-15-1.1QG(I)	50	10	15	2850	1.1	380	2.6	13	22	415	280	201	238	349
50WQ15-15-1.5 QG(I)	50	15	15	2880	1.5	380	3.3	23	33	464	320	197	271	382
50WQ15-20-2.2QG(I)	50	15	20	2880	2.2	380	4.6	12	37.5	510	320	216	279	373
50WQ15-28-3QG(I)	50	15	28	2840	3	380	6.1	20	45	540	370	119	294	405
50WQ25-27-4QG(I)	50	25	27	2840	4	380	7.7	22	50	556	420	221	337	448
80WQ25-15-2.2QG(I)	80	25	15	2880	2.2	380	4.6	22	45	576	440	291	313	450
80WQ36-10-2.2QG(I)	80	36	10	1413	2.2	380	5.5	47	65	643	500	308	363	510
80WQ40-12-3QG(I)	80	40	12	2840	3	380	6.1	22	45	586	450	276	300	447
80WQ40-17-4QG(I)	80	40	17	2840	4	380	7.7	22	48	609	465	292	313	450
80WQ60-11-4QG(I)	80	60	11	1413	4	380	8.4	65	80	717	570	315	369	515
80WQ50-22-5.5QG(I)	80	50	22	2940	5.5	380	10.8	23	99	879	570	320	410	546
80WQ45-29-7.5QG(I)	80	45	29	2940	7.5	380	14.3	25	99	879	600	320	410	546
80WQ35-40-11QG(I)	80	35	40	2930	11	380	21.7	25	130	927	660	320	410	559

Please contact the salesman for overall dimension drawing. The dimensions of above table please refer to page 7.

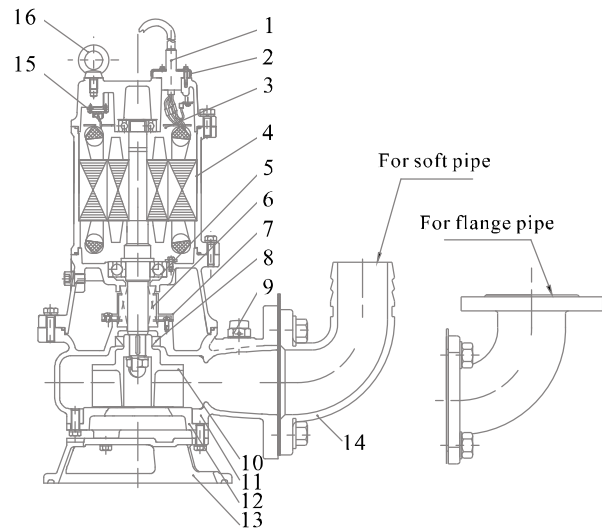
Performance curve



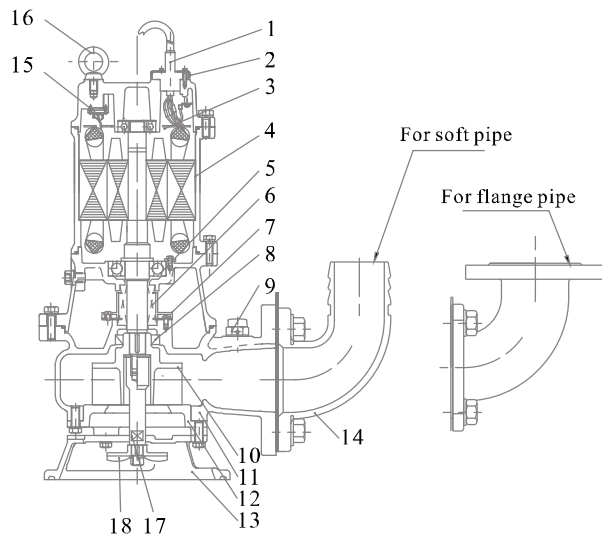
## WQ

### WQ-W(I) non-clogging cutting type submersible sewage pump

WQ-W(I) type



WQ-W(I) type



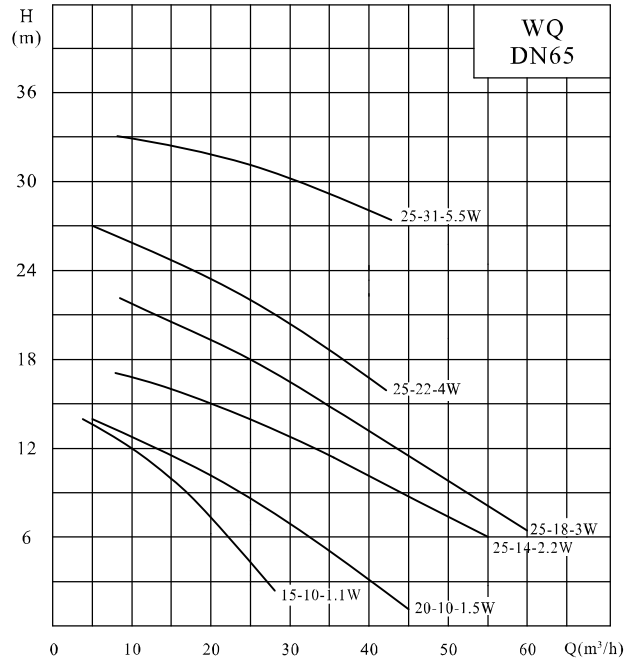
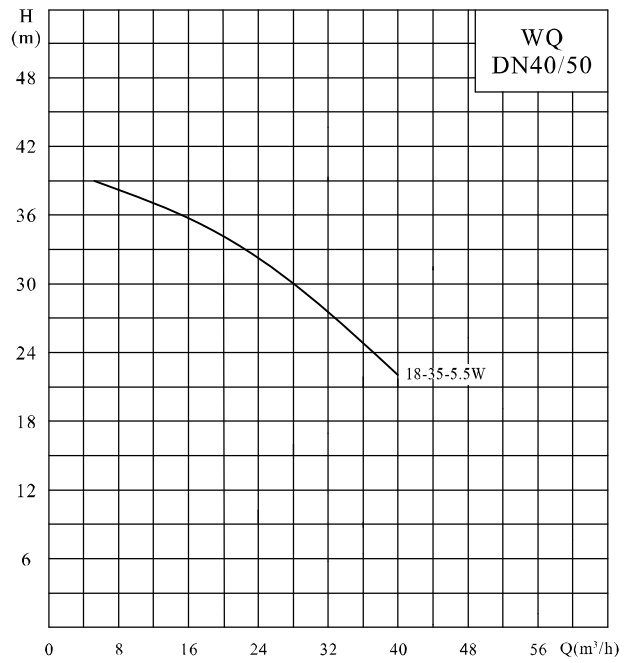
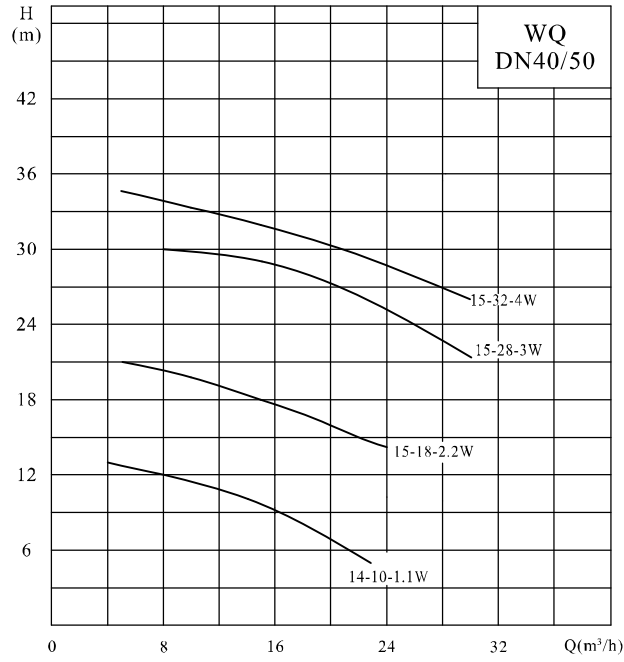
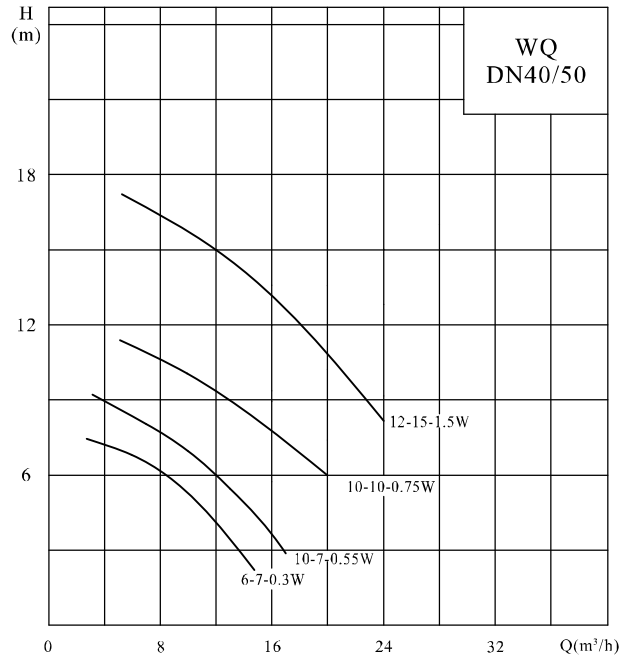
No.	Name	Material
1	Cable	YZW
2	Cable gland (below 4kW)	06Cr19Ni10
	Cable gland (above 5.5kW)	Cast iron
3	Threading board (below 4kW)	PPS
	Threading board (below 5.5kW)	Q235
4	Electric motor	
5	Bearing	
6	Mechanical seal	Graphite/Ceramic/ Silicon carbide
7	Oil lifter	
8	Oil seal	NBR1-2
9	Air vent screw	Resin/others
10	Impeller	Ductile iron
11	Casing	Cast iron
12	Non-clogging suction cover	Ductile iron
13	Non-clogging foot bracket	Ductile iron
14	Discharge bend (optional)	Cast iron
15	Thermal protector	
16	Eye-bolt	
17	Agitating shaft (for JY)	
18	Stir impeller (for JY)	Cast iron

### Technical data and dimensions

Model	Diameter	Q	H	Speed	Power	Rated current	Max. dia. of passing solid	Weight	Dimensions(mm)				
	(mm)	(m <sup>3</sup> /h)	(m)	(rpm)	(kW)	(A)	(mm)	(kg)	H	H1	H2	F	F1
40WQ6-7-0.37W(JY)(I)	40	6	7	2800	0.37	1.0	15	20	374	260	169	184	284
40WQ10-7-0.55W(JY)(I)	40	10	7	2850	0.55	1.2	15	23	420	285	189	222	322
40WQ10-10-0.75W(JY)(I)	40	10	10	2850	0.75	1.8	15	23	420	285	189	222	333
40WQ12-15-1.5W(JY)(I)	40	12	15	2880	1.5	3.3	18	35	478	340	202	269	368
50WQ14-10-1.1W(JY)(I)	50	14	10	2850	1.1	2.6	18	27	443	330	217	241	353
50WQ10-7-0.55W(JY)(I)	50	10	7	2850	0.55	1.2	15	23	420	285	209	222	333
50WQ10-10-0.75W(JY)(I)	50	10	10	2850	0.75	1.8	15	23	420	285	209	222	322
50WQ12-15-1.5W(JY)(I)	50	12	15	2880	1.5	3.3	18	35	478	340	222	269	381
50WQ15-18-2.2W(JY)(I)	50	15	18	2880	2.2	4.6	18	39	517	370	224	283	395
50WQ15-28-3W(JY)(I)	50	15	28	2840	3	6.1	20	47	547	400	225	283	395
50WQ15-32-4W(JY)(I)	50	15	32	2840	4	7.7	18	52	593	450	257	298	410
50WQ18-35-5.5W(JY)(I)	50	18	35	2940	5.5	10.8	18	86	814	540	244	324	436
65WQ15-10-1.1W(JY)(I)	65	15	10	2850	1.1	2.6	18	29	443	330	227	241	378
65WQ20-10-1.5W(JY)(I)	65	20	10	2880	1.5	3.3	18	38	485	350	230	279	416
65WQ25-14-2.2W(JY)(I)	65	25	14	2880	2.2	4.6	18	42	531	390	241	298	435
65WQ25-18-3W(JY)(I)	65	25	18	2840	3	6.1	19	48	550	390	236	278	415
65WQ25-22-4W(JY)(I)	65	25	22	2840	4	7.7	18	67	598	470	270	298	435
65WQ25-31-5.5W(JY)(I)	65	25	31	2940	5.5	10.8	20	87	824	590	270	324	461
80WQ35-13-3W(JY)(I)	80	35	13	2840	3	6.1	19	49	575	430	265	283	433
80WQ40-22-5.5W(JY)(I)	80	40	22	2940	5.5	10.8	20	87	825	590	285	324	474
80WQ40-8-2.2W(JY)(I)	80	40	8	2880	2.2	4.6	22	55	548	400	259	296	433
80WQ50-12-4W(JY)(I)	80	50	12	2840	4	7.7	15	43	598	450	285	303	453
100WQ60-9-3W(JY)(I)	100	60	9	2840	3	6.1	19	50	575	430	281	311	500
100WQ65-15-5.5W(JY)(I)	100	65	15	2940	5.5	10.8	24	92	857	560	315	334	523
100WQ65-20-7.5W(JY)(I)	100	65	20	2940	7.5	14.3	33	100	855	590	316	351	540
100WQ75-8-4W(JY)(I)	100	75	8	2840	4	7.7	18	55	630	500	315	303	492
150WQ150-10-7.5W(JY)(I)	150	150	10	2940	7.5	14.3	35	120	890	620	383	390	652

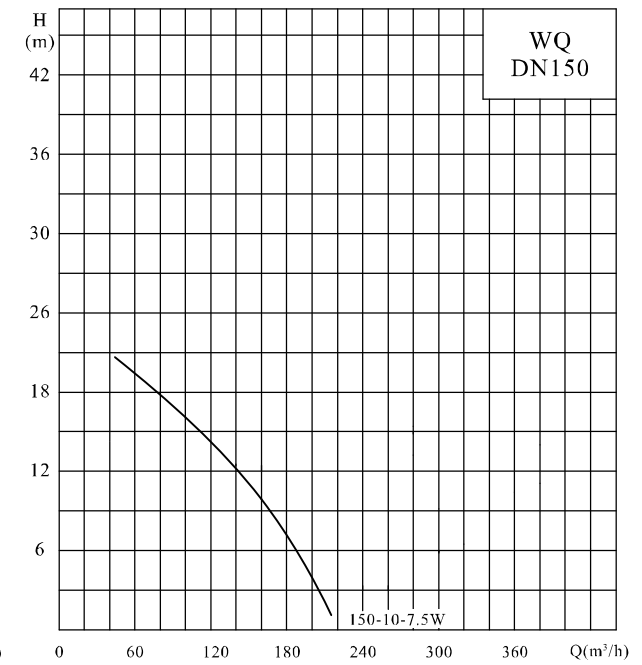
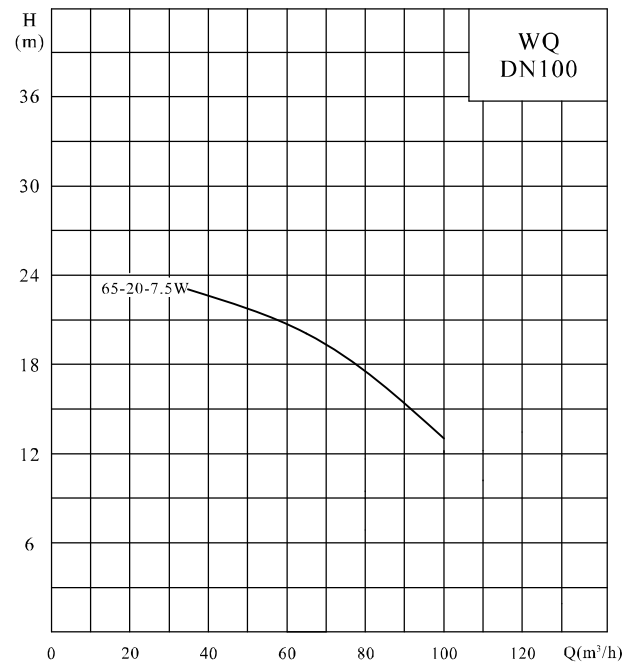
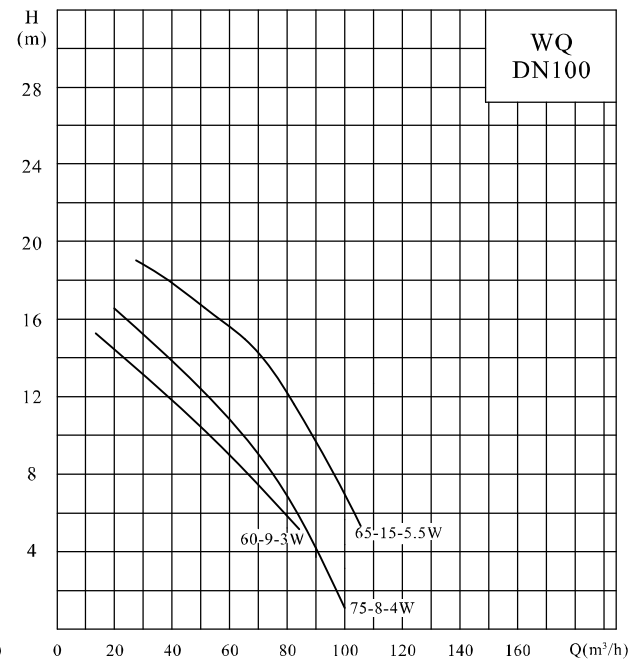
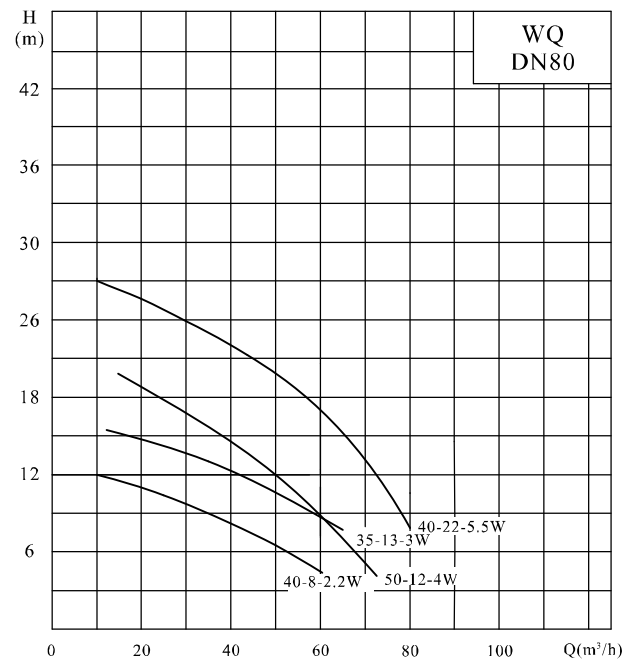
# WQ

## Performance curve





Performance curve



## Traditional submersible sewage pump

### WQ,WQ-JY submersible sewage pump

#### Summery

●WQ, WQ-JY improve the same type pumps of the local and overseas. It optimizes the hydraulic, seal technology, structure, protection. And it innovates, makes it more reliable and safe. Easy to use, long service life, good drainage capacity. The whole series is easy for selection. If fit with electronic control cabinet, which will protect pump.

●Optimize performance, two channel impeller, two to three mechanical seal, make mechanical seal lubricate, and cool better, run stable without clogging, easy to pass for pumped liquid.

●Mechanical seal is tandem type, the shaft seal is more reliable, long service life.

●The improvement the structure is benefit for seal, running reliable, less vibration, optimized structure, pump is easy for usage.

●IPX8 motor, good cooling performance, temperature rise is lower than normal motor, endurable, Class F insulation to ensure the long service life of motor.

●There are many protections in the motor, easy for selection.

#### Application

●Building, hospital, residential area, municipal projects, roads, factory sewage, small sewage treatment, etc. The pumped liquid can be rain water, waste water with solid, long fabrics

#### Working conditions

●Power supply: 50Hz, 3PH, 380V

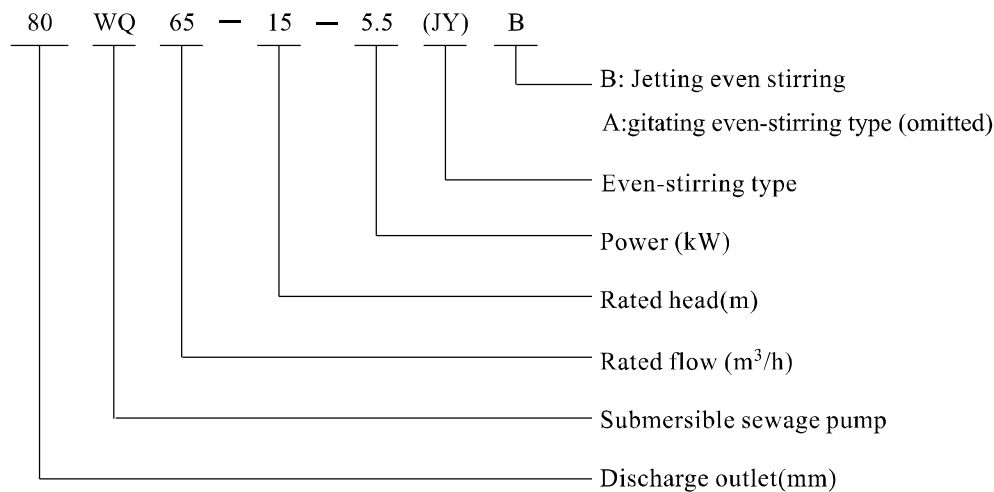
●Medium temperature < 40°C ,PH value is 4-10, medium density < 1200kg/m<sup>3</sup>, solid and liquid ratio < 2%.

●The lowest liquid level shall in conform to the lowest liquid in the installation drawing.

●The pump is not suitable for strongly corrosion liquid or strongly corrosion solid.

●The solid shall not exceed the max. allowed solid diameter.

#### Definition of model



## Structure

- Carefully selection and matching of the pump body and impeller, the flow through with good performance, high efficiency, flat power curve, not easy to overload. Impeller is balance and precise with less vibration and stable rotation.

- Motor: Specially designed submersible motor, the protection level is IPX8, Insulation class: F, cooling performance is good, long insulation service life.

- Hydrocooling: The motor is cooled by the medium or outside liquid. The minimum immersion depth should be at least immerse 2/3 of the stator shell to make sure the pump runs safely.

- Shaft seal: Two or three sets of mechanical seal work in series. One seal separate medium from the oil chamber. Other two seals separate oil from the motor.

- Oil chamber: There is suitable oil in the oil chamber, there are two mechanical seal, oil chamber is separate medium from the motor. If the first mechanical seal is leaked, there is oil in oil chamber to prevent liquid from going to the motor. And the two separate mechanical seals can be lubricated and cooled, it make mechanical seal work stably. and, it will take away some heat caused by bottom bearing and motor.

- Bearing: The bottom bearing sets forms the stably support for shaft. According to the radial force, axial force and the load, the bottom bearing can be formed with two or three kinds of different bearings, to ensure pump work stable and service long life.

- Cable and mechanical seal:

1. The cable is soft rubber cable which can resist sewage. It is designed according to ambient temperature 40 degree centigrade and motor full load working conditions. When pump is working, keep motor working at not full load or ambient temperature below 40 degree, pumps can work longer.

2. There is seal between cable rubber cover and motor, it can prevent medium leak to motor cabinet.

3. Cable slot and cables are rubber vulcanization, if rubber cover is broken, it can prevent medium leak to motor cabinet also.

- Motor shell: Base, bearing seat, motor cover composed the motor shell. There are seals at the part joint. Every pump is water pressure tested to ensure the seal.

- Safe protection in pump( Earthed professional power supply controlled cabinet):

1. Oil water detector, it is installed in the oil chamber, check the leakage of the first mechanical seal(in the medium), when the medium leaked to oil chamber to some amount, it will alarm.

2. Leaking protector: It is installed in the motor cabinet, detect the second mechanical seal leak, when oil or oil water mixture go into the motor, water in detector will alarm and stop pump.

3. Thermal sensor: It is installed in the windings of motor stator, if motor overload for long time, the temperature of windings will increase(or other reason cause temperature rise) to some amount, it will alarm and stop pump.

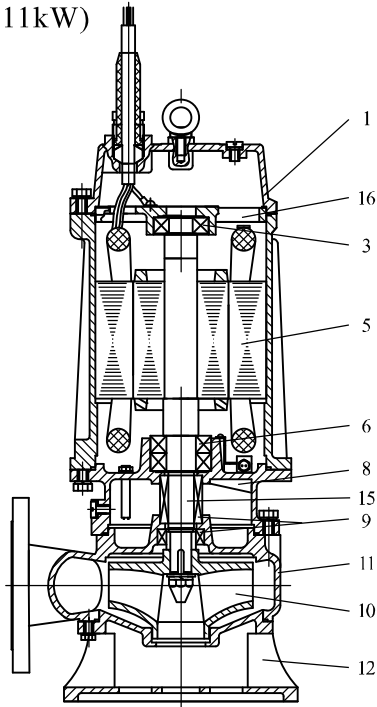
- Outer control system: The user shall use the professional control cabinet to control and protect pump. When users use their own control cabinet, please contact us to instruct them to install protection controller.

- Special hand lift for easy movement. It is prohibited to pump/move pump by the cable, it will loose the seal between cable and motor cover which will cause leakage. Fix cable on the hand lift also prohibited to move pump with cable.

- Performance curve and main technical data: The performance curve show the recommended pump running scope. When the medium changed, please ensure the shaft power should be within the rated motor power range. When overload, motor will burn.

**Sectional drawing**

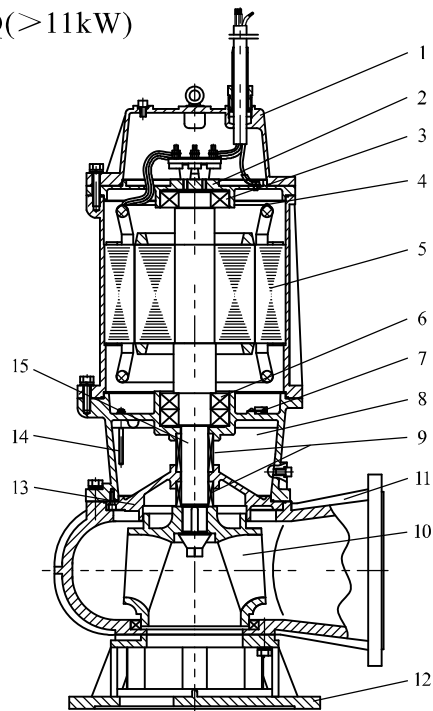
WQ( $\leq 11\text{kW}$ )



**Material**

No.	Name	Material
1	Casing cover	Cast iron
3	Bearing	
5	Motor	
6	Bearing	
8	Oil chamber	Cast iron
9	Mechanical seal	SiC/Tungsten carbide
10	Impeller	Cast iron
11	Casing	Cast iron
12	Base	Cast iron
15	Shaft	20Cr13
16	Thermal protector	

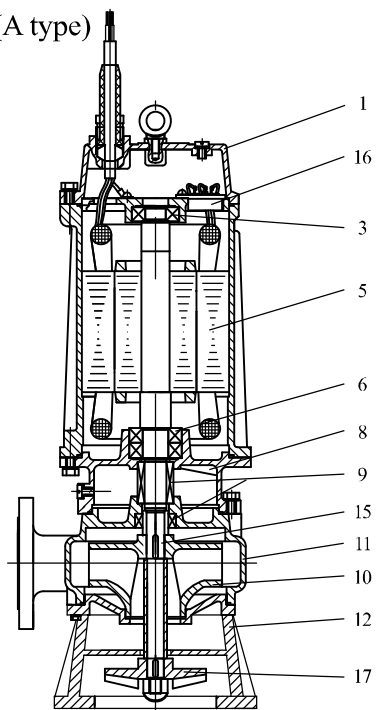
WQ( $> 11\text{kW}$ )



No.	Name	Material
1	Casing cover	Cast iron
2	Upper bearing seat	Cast iron
3	Bearing	
4	Heat control switch	
5	Motor	
6	Bearing	
7	Water in detector	
8	Oil chamber	Cast iron
9	Mechanical seal	SiC/Tungsten carbide
10	Impeller	Cast iron
11	Casing	
12	Base	Cast iron
13	Oil chamber cover	
14	Oil water detector	
15	Shaft	20Cr13

## Sectional drawing

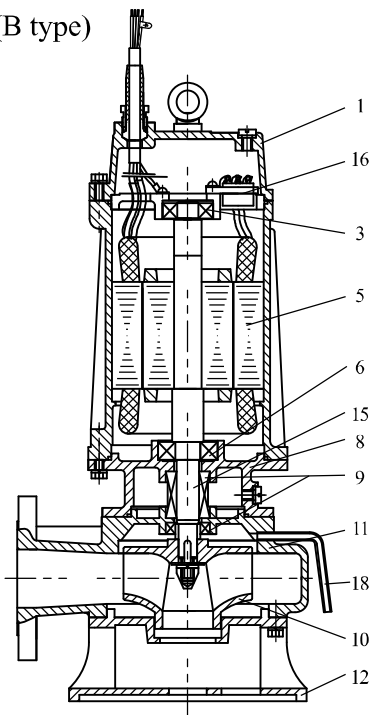
WQ-JY(A type)



## Material

No.	Name	Material
1	Casing cover	Cast iron
3	Bearing	
5	Motor	
6	Bearing	
8	Oil chamber	Cast iron
9	Mechanical seal	SiC/Tungsten carbide
10	Impeller	Cast iron
11	Casing	Cast iron
12	Base	Cast iron
15	Shaft	20Cr13
16	Thermal protector	
17	Stir impeller	Cast iron

WQ-JY(B type)

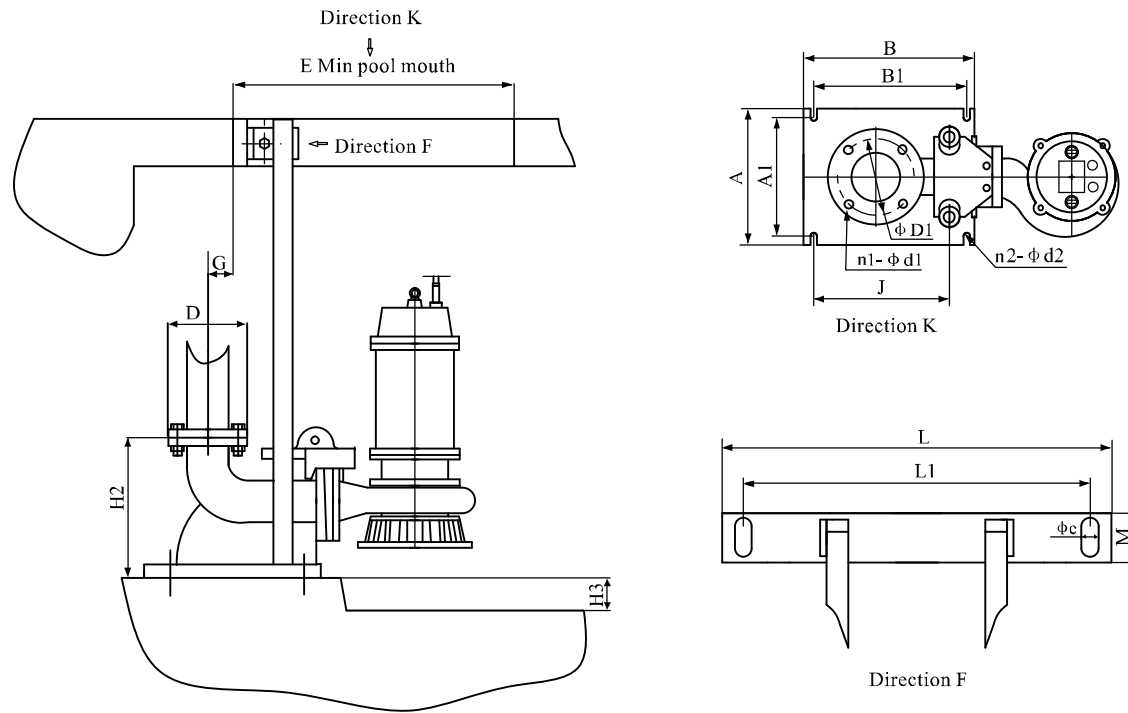


No.	Name	Material
1	Casing cover	Cast iron
3	Bearing	
5	Motor	
6	Bearing	
8	Oil chamber	Cast iron
9	Mechanical seal	SiC/Tungsten carbide
10	Impeller	Cast iron
11	Casing	Cast iron
12	Base	Cast iron
15	Shaft	20Cr13
16	Thermal protector	
18	Ejecting pipe	

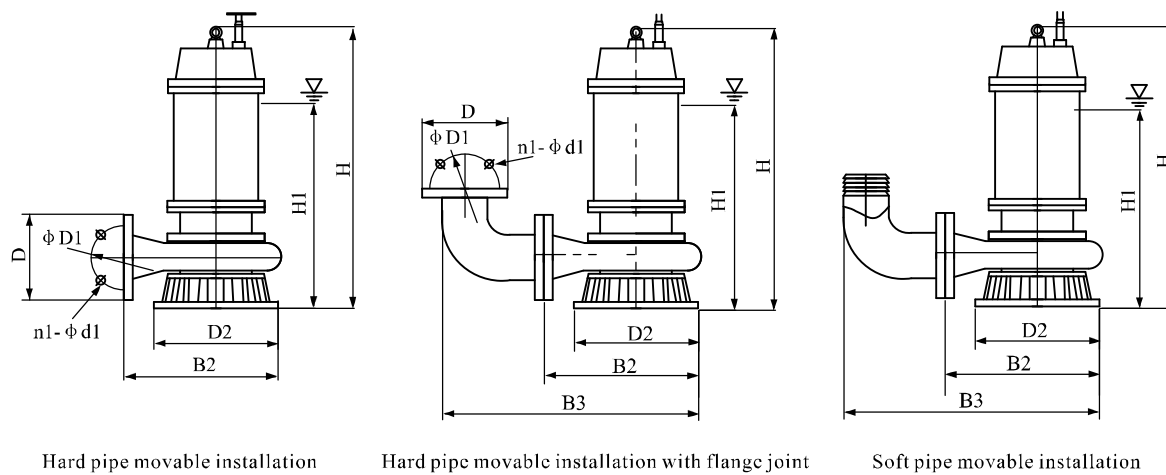
### Installation type

For WQ, JYWQ pumps, there is auto coupling device installation (Z), hard pipe movable installation(Y), soft pipe movable installation(R)

Fixed auto coupling device installation



Movable installation



Hard pipe movable installation

Hard pipe movable installation with flange joint

Soft pipe movable installation

## Coupling device dimensions (same for WQ-QG)

Measure:mm

No.	Model	Flange connection size PN6			Coupling base dimensions					G	H <sub>2</sub>	H <sub>3</sub>	L	L <sub>1</sub>	m	Φe	E
		D	D1	n1-Φd1	A	A1	B	B1	n2-Φd2								
1	50WQ(JY)	140	110	4-Φ14	197	168	208	130	4-Φ16	90	250	160	265	220	50	13	550×550
2	65WQ(JY)	160	130	4-Φ14	225	190	235	155	4-Φ16	130	265	165	280	235	50	13	650×600
3	80WQ(JY)	190	150	4-Φ18	255	220	225	153	4-Φ18	165	285	165	315	260	50	13	650×600
4	100WQ(JY)	210	170	4-Φ18	293	265	258	175	4-Φ18	175	305	185	410	315	60	15	750×650
5	150WQ(JY)	265	225	8-Φ18	400	300	410	300	4-Φ18	190	480	200	410	260	60	15	1000×800
6	200WQ(JY)	320	280	8-Φ18	400	300	450	350	4-Φ18	230	550	200	410	260	60	15	1300×900
7	250WQ(JY)	375	335	12-Φ18	460	370	560	430	4-Φ24	230	630	200	410	260	60	15	1600×1300
8	300WQ(JY)	440	395	12-Φ22	420	340	510	390	4-Φ24	375	650	250	700	615	150	20	1600×1300
9	350WQ(JY)	490	445	12-Φ22	500	420	520	420	4-Φ24	390	700	250	700	615	150	24	1600×1300

## Relevant dimensions

Measure:mm(Except inch)

Item	Diameter										
	DN50	DN65	DN80	DN100	DN150	DN200	DN250	DN300	DN350		
Guide rod tap pipe/ Seamless steel pipe	1 " /32×3.5			1.5 " /48×3.5					2 " /60×5		
Guide rod length	Pool depth-30				Pool depth -390	Pool depth -440	Pool depth -450	Pool depth -480			
Quantity and specification of expansion bolt	2-M12×150			3-M12×150				3-M16×150			
Quantity and specification of foundation bolt	4-M16×250					4-M20×300					
footer bolt hole size	80×80×300					100×100×350					
Dia. of rubber pipe	2 "/50	2.5"/65	3"/80	4"/100	6"/150	8"/200	10"/250	12"/300	14"/350		

## WQ

### Technical data and dimensions

Model	Q	H	Speed	Power	Rated current	Max. dia. of passing solid	Dimensions(mm)											Weight
	(m <sup>3</sup> /h)	(m)	(rpm)	(kW)	(A)	(mm)	H	H*	H1	H1*	B3	B2	D2	d	D	D1	n1-φ d1	(kg)
40WQ10-10-0.75(JY)	10	10	2860	0.75	2.0	20	350	400	300	350	320	230	190	40	130	100	4-φ 14	20
40WQ8-15-1.1(JY)	8	15	2860	1.1	2.8	20	350	400	300	350	320	230	190	40	130	100	4-φ 14	20
40WQ12-15-1.5(JY)	12	15	2860	1.5	4.0	20	540	590	490	540	330	240	190	40	130	100	4-φ 14	28
50WQ10-10-0.75(JY)	10	10	2860	0.75	2.0	20	500	550	450	500	320	230	190	50	140	110	4-φ 14	20
50WQ15-8-1.1(JY)	15	8	2860	1.1	2.8	20	500	550	450	500	320	230	190	50	140	110	4-φ 14	20
50WQ8-15-1.1(JY)	8	15	2860	1.1	2.8	20	500	550	450	500	320	230	190	50	140	110	4-φ 14	20
50WQ15-10-1.5(JY)	15	10	2860	1.5	4.0	20	500	550	450	500	330	240	200	50	140	110	4-φ 14	28
50WQ10-15-1.5(JY)	10	15	2860	1.5	4.0	20	500	550	450	500	330	240	200	50	140	110	4-φ 14	28
50WQ15-15-2.2(JY)	15	15	2860	2.2	6.0	20	540	590	490	540	340	250	200	50	140	110	4-φ 14	35
50WQ25-10-2.2(JY)	25	10	2860	2.2	6.0	25	540	590	490	540	340	250	200	50	140	110	4-φ 14	35
50WQ9-22-2.2(JY)	9	22	2860	2.2	6.0	20	540	590	490	540	340	250	200	50	140	110	4-φ 14	35
50WQ20-18-2.2(JY)	20	18	2860	2.2	6.0	25	540	590	490	540	340	250	200	50	140	110	4-φ 14	35
50WQ15-20-2.2(JY)	15	20	2860	2.2	6.0	20	540	590	490	540	340	250	200	50	140	110	4-φ 14	35
50WQ20-25-3(JY)	20	25	2860	3	6.5	25	580	640	530	590	350	260	210	50	140	110	4-φ 14	40
50WQ15-30-3(JY)	15	30	2860	3	6.5	20	580	640	530	590	350	260	210	50	140	110	4-φ 14	40
50WQ15-35-4(JY)	15	35	2860	4	8.4	20	650	710	600	660	360	270	250	50	140	110	4-φ 14	45
50WQ15-40-5.5(JY)	15	40	2860	5.5	12.0	20	680	740	630	690	390	300	250	50	140	110	4-φ 14	60
50WQ20-30-5.5(JY)	20	30	2860	5.5	12.0	25	680	740	630	690	390	300	250	50	140	110	4-φ 14	60
50WQ20-40-7.5(JY)	20	40	2860	7.5	16.8	25	680	740	630	690	370	280	250	50	140	110	4-φ 14	95
50WQ25-35-7.5(JY)	25	35	2860	7.5	16.8	25	680	740	630	690	370	280	250	50	140	110	4-φ 14	95
65WQ25-7-1.5(JY)	25	7	2860	1.5	4.0	25	550	600	450	500	330	230	200	65	160	130	4-φ 14	28
65WQ35-7-2.2(JY)	35	7	2860	2.2	6.0	25	550	600	500	550	350	250	230	65	160	130	4-φ 14	45
65WQ25-10-2.2(JY)	25	10	2860	2.2	6.0	25	550	600	500	550	350	250	200	65	160	130	4-φ 14	35
65WQ25-15-3(JY)	25	15	2860	3	6.5	25	620	670	570	620	350	250	200	65	160	130	4-φ 14	40
65WQ37-13-3(JY)	37	13	2860	3	6.5	25	620	670	570	620	350	250	200	65	160	130	4-φ 14	40
65WQ40-10-3(JY)	40	10	2860	3	6.5	25	620	670	570	620	350	250	200	65	160	130	4-φ 14	40
65WQ20-25-4(JY)	20	25	2860	4	8.4	25	650	700	600	650	370	270	240	65	160	130	4-φ 14	50
65WQ30-30-5.5(JY)	30	30	2860	5.5	12.0	25	710	770	660	720	370	270	250	65	160	130	4-φ 14	65
65WQ20-40-7.5(JY)	20	40	2860	7.5	16.8	25	800	860	760	820	450	350	250	65	160	130	4-φ 14	95
80WQ45-9-2.2(JY)	45	9	2860	2.2	6.0	30	550	600	500	550	380	270	230	76	190	150	4-φ 18	45
80WQ40-12-3(JY)	40	12	2860	3	6.5	30	620	680	570	630	380	270	230	76	190	150	4-φ 18	50
80WQ40-15-4(JY)	40	15	2860	4	8.4	30	680	740	630	690	450	340	230	76	190	150	4-φ 18	60
80WQ50-10-4(JY)	50	10	2860	4	8.4	30	680	740	630	690	450	340	230	76	190	150	4-φ 18	60
80WQ65-15-5.5(JY)	65	15	2860	5.5	12.0	30	730	790	680	740	440	330	250	76	190	150	4-φ 18	65
80WQ40-22-5.5(JY)	40	22	2860	5.5	12.0	30	820	880	770	830	460	350	250	76	190	150	4-φ 18	65
80WQ40-30-7.5(JY)	40	30	2860	7.5	16.8	30	820	880	770	830	460	350	360	76	190	150	4-φ 18	95
80WQ40-45-11(JY)	40	45	2860	11	23.6	30	850	910	780	840	500	390	360	76	190	150	4-φ 18	135

Remark: H\*, H1\* refer to the dimension of agitating even-stirring type pump



### Technical data and dimensions

Model	Q	H	Speed	Power	Rated current	Max. dia. of passing solid	Dimensions(mm)											Weight (kg)
	(m <sup>3</sup> /h)	(m)	(rpm)	(kW)	(A)	(mm)	H	H*	H1	H1*	B3	B2	D2	d	D	D1	n1-φd1	
100WQ40-8-2.2(JY)	40	8	2860	2.2	6.0	30	550	600	500	550	430	270	230	100	210	170	4-φ18	45
100WQ50-7-2.2(JY)	50	7	2860	2.2	6.0	30	550	600	500	550	430	270	230	100	210	170	4-φ18	45
100WQ60-9-3(JY)	60	9	2860	3	6.5	30	600	660	550	610	430	270	230	100	210	170	4-φ18	50
100WQ65-10-4(JY)	65	10	2860	4	8.4	30	680	740	630	690	480	320	230	100	210	170	4-φ18	60
100WQ65-15-5.5(JY)	65	15	2860	5.5	12.0	30	730	790	680	740	480	320	250	100	210	170	4-φ18	65
100WQ65-20-7.5(JY)	65	20	2860	7.5	16.8	30	850	910	800	860	480	320	360	100	210	170	4-φ18	95
100WQ45-22-7.5(JY)	45	22	2860	7.5	16.8	30	800	860	750	810	480	320	360	100	210	170	4-φ18	95
100WQ100-6-4(JY)	100	6	2860	4	8.4	35	680	740	630	690	470	310	230	100	210	170	4-φ18	60
100WQ100-10-5.5(JY)	100	10	2860	5.5	12.0	35	730	790	680	740	480	320	250	100	210	170	4-φ18	65
100WQ100-15-7.5(JY)	100	15	2860	7.5	16.8	35	800	860	750	810	480	320	360	100	210	170	4-φ18	95
100WQ80-15-7.5(JY)	80	15	2860	7.5	16.8	35	800	860	750	810	480	320	360	100	210	170	4-φ18	95
150WQ100-7-5.5(JY)	100	7	2860	5.5	12.0	35	800	860	750	810	550	350	250	150	265	225	8-φ18	65
150WQ100-10-7.5(JY)	100	10	2860	7.5	16.8	35	800	860	750	810	550	350	360	150	265	225	8-φ18	95
100WQ80-25-11(JY)	80	25	1450	11	23.6	35	1000		950		710	550	420	100	210	170	4-φ18	210
100WQ80-30-15(JY)	80	30	1450	15	32.0	35	1020		920		710	550	420	100	210	170	4-φ18	200
100WQ80-35-18.5(JY)	80	35	1450	18.5	37.0	35	1060		950		710	550	420	100	210	170	4-φ18	285
150WQ145-9-7.5(JY)	145	9	1450	7.5	16.8	45	800	860	750	810	550	350	360	150	265	225	8-φ18	95
150WQ150-12-11(JY)	150	12	1450	11	23.6	45	1050		1000		820	620	420	150	265	225	8-φ18	210
150WQ180-15-15(JY)	180	15	1450	15	32.0	45	1050		1000		820	620	420	150	265	225	8-φ18	200
150WQ180-20-18.5(JY)	180	20	1450	18.5	37.0	45	1080		1030		820	620	420	150	265	225	8-φ18	290
150WQ150-24-18.5(JY)	150	24	1450	18.5	37.0	45	1080		1030		820	620	420	150	265	225	8-φ18	290
150WQ180-25-22(JY)	180	25	1450	22	45.0	45	1080		1030		820	620	420	150	265	225	8-φ18	315
150WQ200-10-15(JY)	200	10	1450	15	32.0	45	1050		1000		820	620	420	150	265	225	8-φ18	200
150WQ200-15-18.5(JY)	200	15	1450	18.5	37.0	45	1080		1030		820	620	420	150	265	225	8-φ18	285
150WQ200-20-22(JY)	200	20	1450	22	45.0	45	1080		1030		820	620	420	150	265	225	8-φ18	315
150WQ200-25-30	200	25	1450	30	60.0	45	1240		980		850	650	470	150	265	225	8-φ18	450
150WQ200-30-37	200	30	1450	37	75.0	45	1240		980		850	650	470	150	265	225	8-φ18	650
150WQ150-35-37	150	35	1450	37	75.0	40	1240		980		850	650	470	150	265	225	8-φ18	650
150WQ180-40-45	180	40	1450	45	90.0	40	1290		1030		850	650	470	150	265	225	8-φ18	850
200WQ300-7-11(JY)	300	7	1450	11	23.6	50	1120		1070		890	610	420	200	320	280	8-φ18	216
200WQ300-8-15(JY)	300	8	1450	15	32.0	50	1060		900		890	610	420	200	320	280	8-φ18	248
200WQ250-11-15(JY)	250	11	1450	15	32.0	50	1120		1070		890	610	420	200	320	280	8-φ18	248
200WQ250-15-18.5(JY)	250	15	1450	18.5	37.0	50	1020		800		890	610	420	200	320	280	8-φ18	285
200WQ300-9-18.5(JY)	300	9	1450	18.5	37.0	50	1020		800		890	610	420	200	320	280	8-φ18	285
200WQ400-10-22(JY)	400	10	1450	22	45.0	50	1070		850		890	610	420	200	320	280	8-φ18	315
200WQ300-15-22(JY)	300	15	1450	22	45.0	50	1070		850		890	610	420	200	320	280	8-φ18	315
200WQ250-22-30	250	22	1450	30	60.0	50	1240		980		900	620	470	200	320	280	8-φ18	450

Remark: H\*, H1\* refer to the dimension of agitating even-stirring type pump

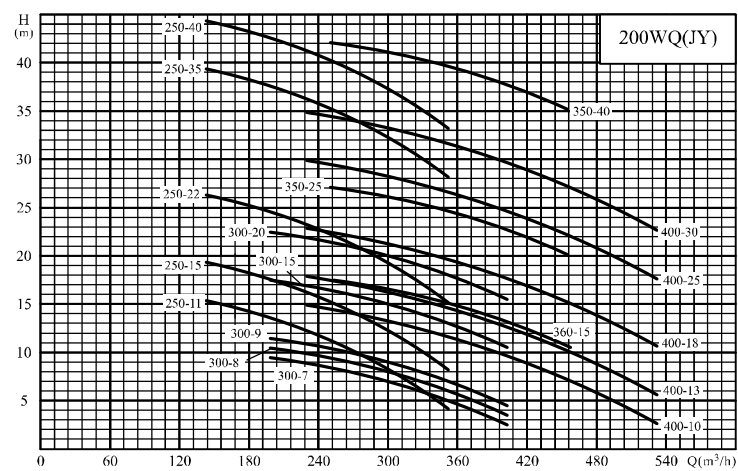
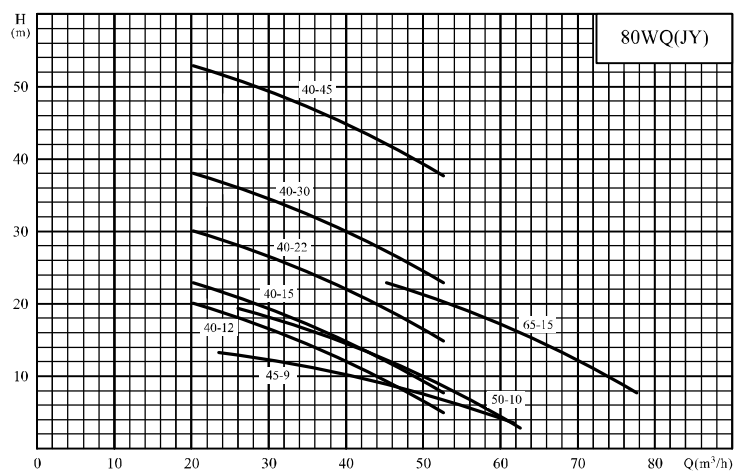
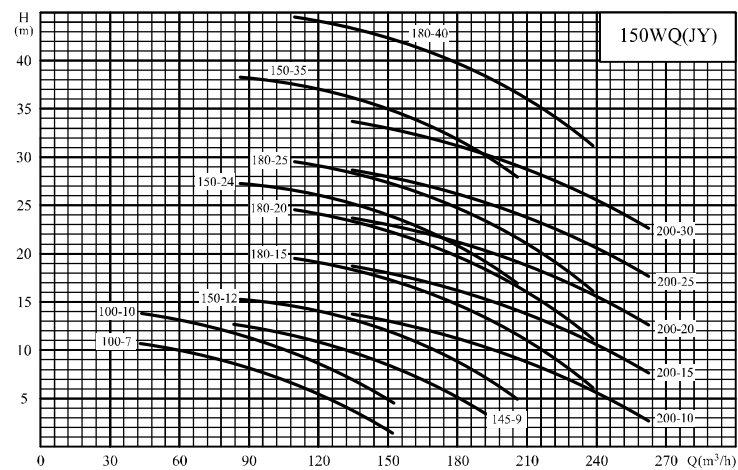
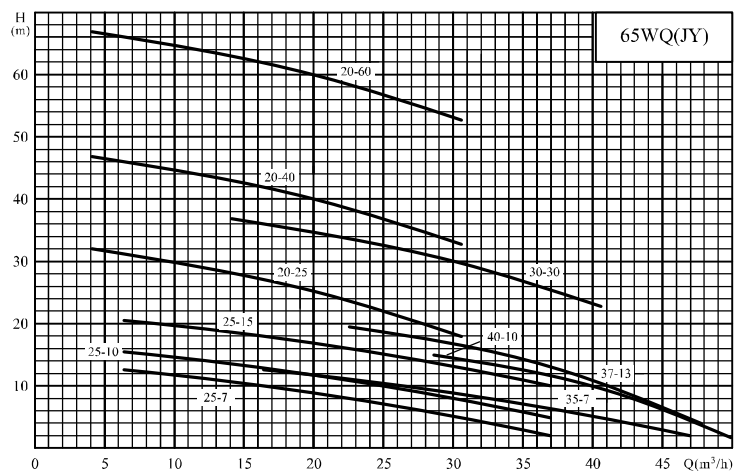
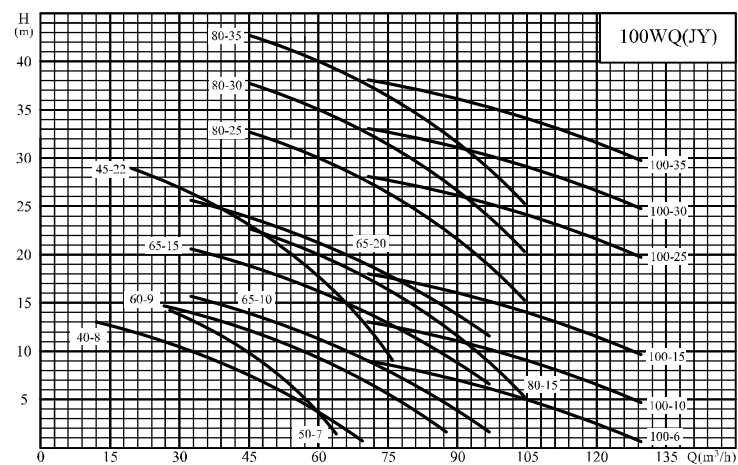
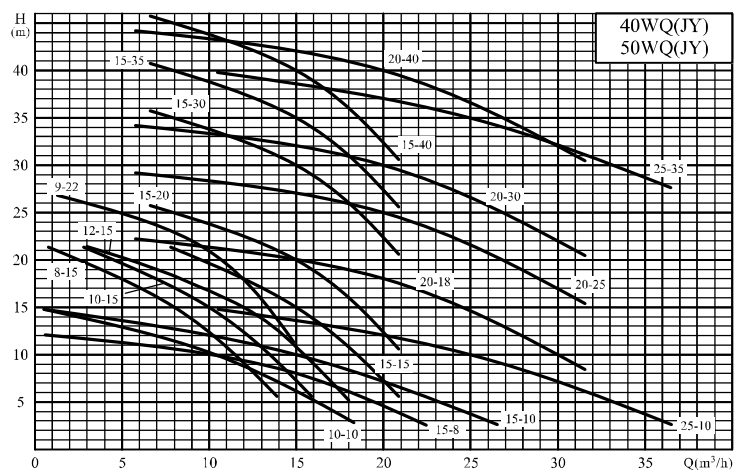
## WQ

### Technical data and dimensions

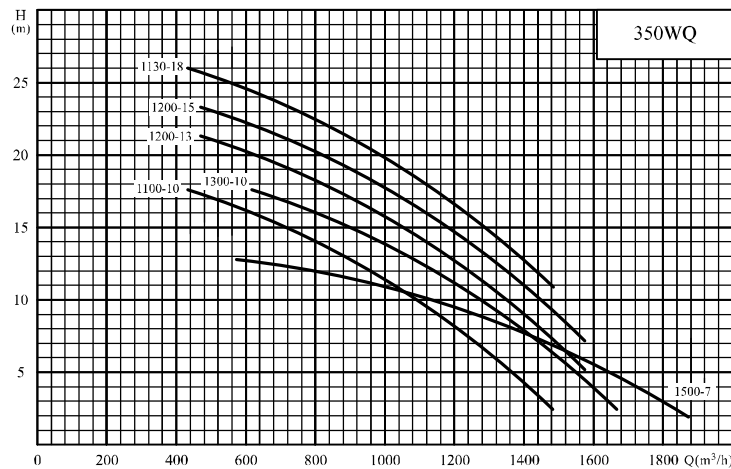
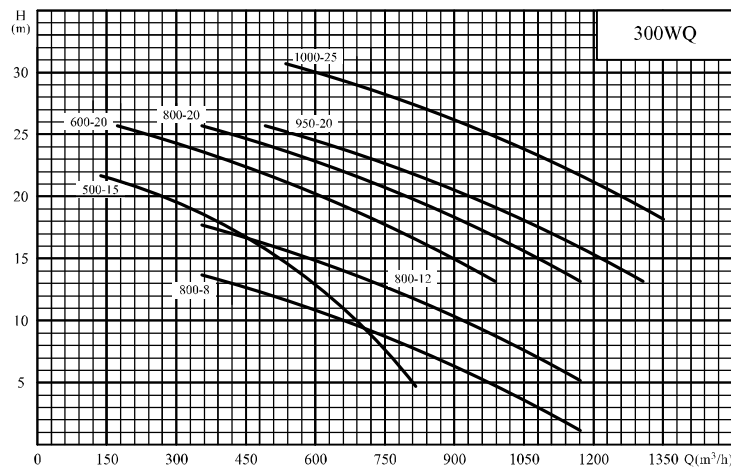
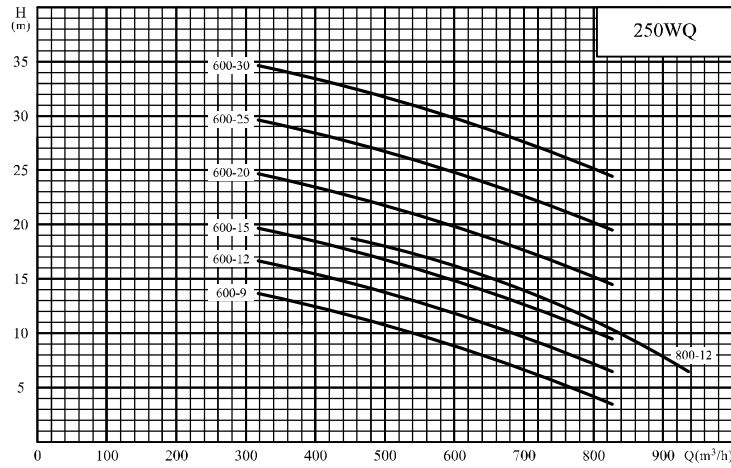
Model	Q	H	Speed	Power	Rated current	Max. dia. of passing solid	Dimensions(mm)											Weight
	(m <sup>3</sup> /h)	(m)	(rpm)	(kW)	(A)	(mm)	H	H*	H1	H1*	B3	B2	D2	d	D	D1	n1-φ d1	(kg)
200WQ360-15-30	360	15	1450	30	60.0	50	1240		980		900	620	470	200	320	280	8-φ 18	450
200WQ400-13-30	400	13	1450	30	60.0	50	1240		980		900	620	470	200	320	280	8-φ 18	450
200WQ300-20-37	300	20	1450	37	75.0	50	1240		980		900	620	470	200	320	280	8-φ 18	650
200WQ350-25-37	350	25	1450	37	75.0	50	1240		980		900	620	470	200	320	280	8-φ 18	650
200WQ400-18-37	400	18	1450	37	75.0	50	1240		980		900	620	470	200	320	280	8-φ 18	650
200WQ250-35-45	250	35	1450	45	90.0	45	1290		1030		900	620	470	200	320	280	8-φ 18	850
200WQ400-25-45	400	25	1450	45	90.0	50	1290		1030		900	620	470	200	320	280	8-φ 18	850
200WQ250-40-55	250	40	1450	55	110.0	45	1450		1050		1050	770	560	200	320	280	8-φ 18	1000
200WQ400-30-55	400	30	1450	55	110.0	45	1450		1050		1050	770	560	200	320	280	8-φ 18	1000
200WQ350-40-75	350	40	1450	75	150.0	45	1520		1120		1050	770	560	200	320	280	8-φ 18	1200
250WQ600-9-30	600	9	1450	30	60.0	55	1300		1050		980	640	470	250	375	335	12-φ 18	450
250WQ600-12-37	600	12	1450	37	75.0	55	1300		1050		980	640	470	250	375	335	12-φ 18	650
250WQ800-12-45	800	12	1450	45	90.0	60	1350		1100		980	640	470	250	375	335	12-φ 18	850
250WQ600-15-45	600	15	1450	45	90.0	55	1350		1100		980	640	470	250	375	335	12-φ 18	850
250WQ600-20-55	600	20	1450	55	110.0	55	1450		1050		1210	870	560	250	375	335	12-φ 18	1000
250WQ600-25-75	600	25	1450	75	150.0	55	1520		1120		1210	870	560	250	375	335	12-φ 18	1200
250WQ600-30-90	600	30	1450	90	180.0	55	1570		1170		1210	870	560	250	375	335	12-φ 18	1300
300WQ800-8-37	800	8	1450	37	75.0	60	1400		1150		1200	800	470	300	440	395	12-φ 22	650
300WQ500-15-45	500	15	1450	45	90.0	55	1450		1200		1200	800	470	300	440	395	12-φ 22	850
300WQ800-12-45	800	12	1450	45	90.0	60	1450		1200		1200	800	470	300	440	395	12-φ 22	850
300WQ600-20-55	600	20	1450	55	110.0	55	1480		1080		1270	870	560	300	440	395	12-φ 22	1000
300WQ800-20-75	800	20	1450	75	150.0	60	1520		1120		1270	870	560	300	440	395	12-φ 22	1200
300WQ950-20-90	950	20	1450	90	150.0	65	1570		1170		1270	870	560	300	440	395	12-φ 22	1300
300WQ1000-25-110	1000	25	1450	110	220.0	70	2200		2100		1900	1500	600	300	440	395	12-φ 22	1400
350WQ1500-7-45	1500	7	1450	45	90.0	80	2100		2100		1880	1380	500	350	490	445	12-φ 22	860
350WQ1100-10-55	1100	10	1450	55	110.0	75	2150		2100		1880	1380	560	350	490	445	12-φ 22	1000
350WQ1200-13-75	1200	13	1450	75	150.0	75	2150		2100		1900	1400	560	350	490	445	12-φ 22	1200
350WQ1300-10-75	1300	10	1450	75	150.0	75	2150		2100		1900	1400	560	350	490	445	12-φ 22	1200
350WQ1200-15-90	1200	15	1450	90	180.0	75	2190		2150		1950	1450	560	350	490	445	12-φ 22	1350
350WQ1130-18-90	1130	18	1450	90	180.0	75	2190		2150		1950	1450	560	350	490	445	12-φ 22	1350

Remark: H\*, H1\* refer to the dimension of agitating even-stirring type pump

## Performance curve



**Performance curve**



**WQ-F Summery**

- WQ-F full stainless steel sewage submersible pump improve the same type pumps of the local and overseas. It is specially for miners, buildings, municipal projects, sewage treatment applications.
- Wet parts of pump are made of casting stainless steel. It is self non polluted and anti corrosive, it expands the drainage applications area.
- High efficient, good structure, non-clogging, anti-twisting, small space, light weight, running safe and reliable, long service time.
- The on request two guides auto coupling device system, it is convenient for pump installation.
- Two faces mechanical seal, use tungsten carbide, it can works more than 10000 hours.
- There is auto coupling device installation (Z), hard pipe movable installation(Y), soft pipe movable installation(R).

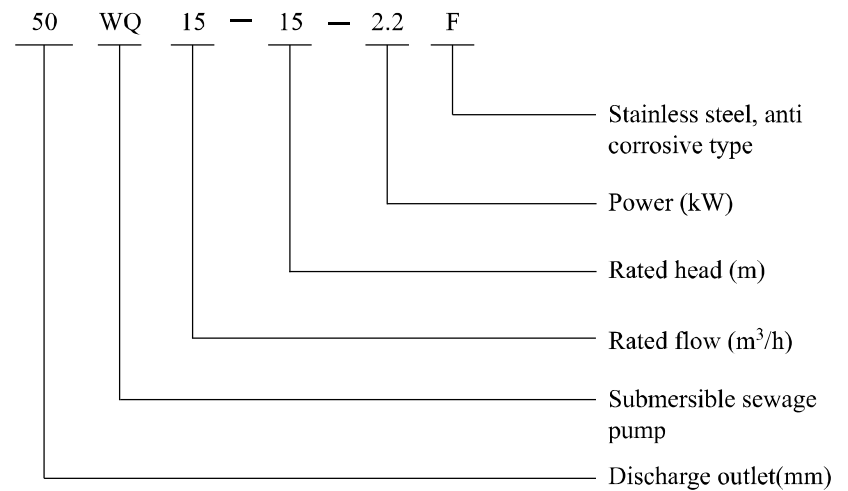
**Application**

- Projects, industrial enterprises, municipal projects, etc. sewage water treatment system.
- Sewage transportation in the municipal sewage system.
- Prospection, mines, etc.
- Sewage water drainage for food, hospital, sea water, ship.
- Irrigation, fen, aquaculture, sprinkle, etc.

**Working conditions**

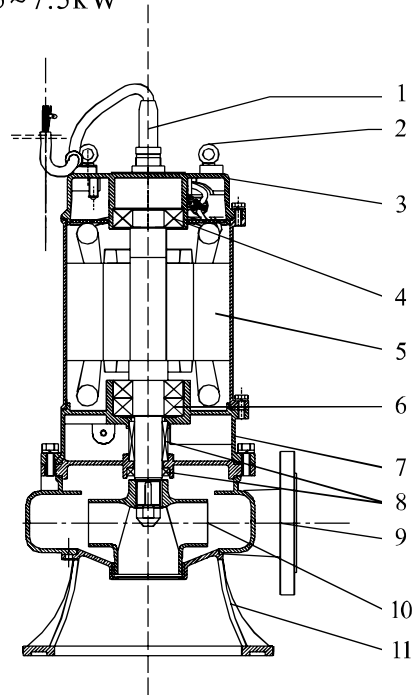
- Power supply: 50Hz, 3 × 380V
- Medium temperature < 60°C , PH value is 2-12, medium density < 1200 kg/m<sup>3</sup>, solid and liquid ratio < 2%.
- When working, motor on liquid level shall more than 1/2 of the whole motor.

**Definition of model**



## Sectional drawing

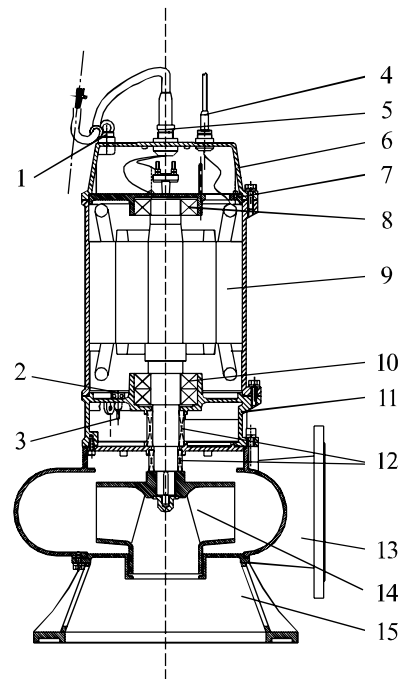
0.55~7.5kW



## Material

No.	Name	Material
1	Cable and seal	
2	Eye-bolt	
3	Casing cover	06Cr19Ni10
4	Bearing	20Cr13
5	Motor	
6	Bearing	20Cr13
7	Oil chamber	06Cr19Ni10
8	Mechanical seal	SiC/Tungsten carbide
9	Casing	06Cr19Ni10
10	Impeller	06Cr19Ni10
11	Base	06Cr19Ni10

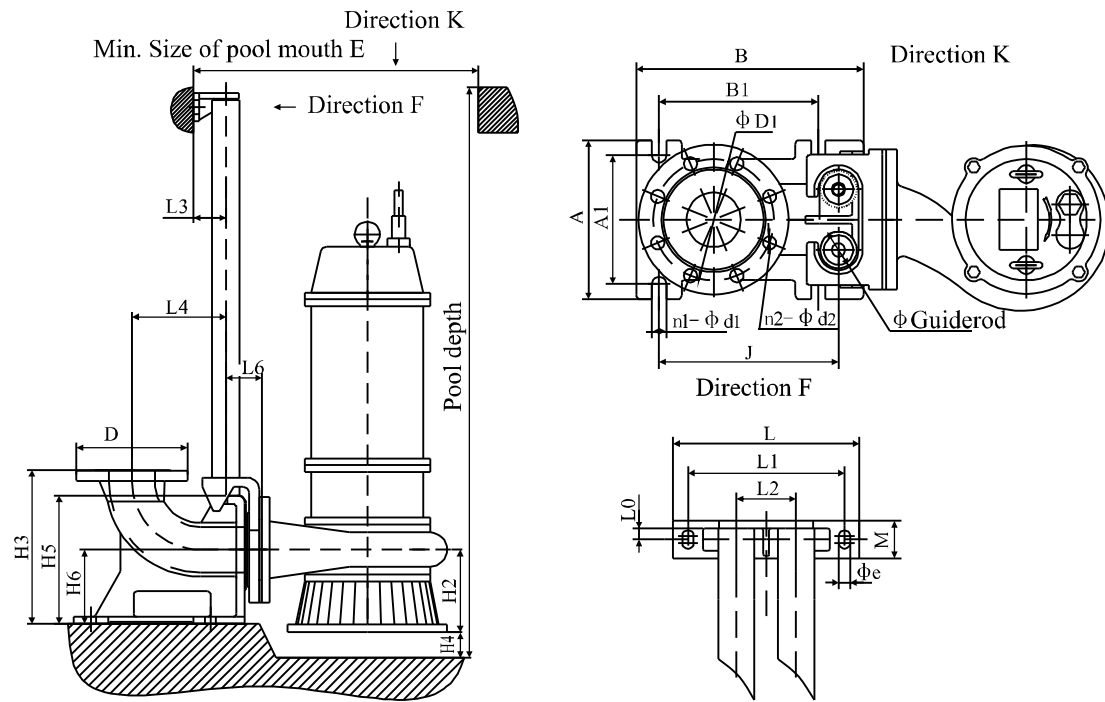
11~45kW



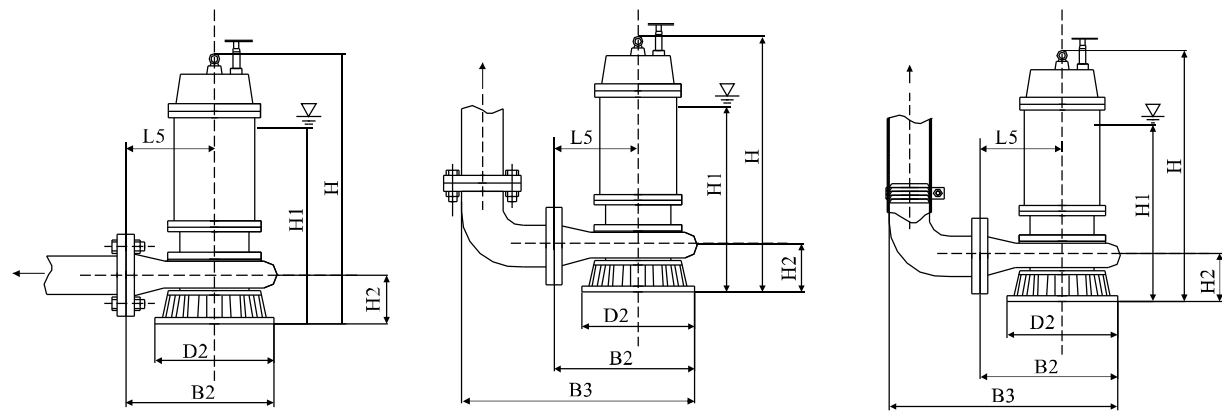
No.	Name	Material
1	Eye-bolt	
2	Water leak detector	
3	Oil water detector	
4	Control cable and seal	
5	Power cable and seal	
6	Casing cover	06Cr19Ni10
7	Upper bearing bracket	
8	Bearing	20Cr13
9	Motor	
10	Bearing	20Cr13
11	Oil chamber	06Cr19Ni10
12	Mechanical seal	SiC/Tungsten carbide
13	Casing	06Cr19Ni10
14	Impeller	06Cr19Ni10
15	Base	06Cr19Ni10

### Installation type

#### Fixed auto coupling device installation



#### Movable installation



Hard pipe movable installation

Hard pipe movable installation with flange joint

Soft pipe movable installation

## Coupling device dimensions

Measure:mm

No.	Model	Flange connection size PN6			Coupling base dimensions							H3	H4	H5	H6	L	L0	L1	L2	M	φe	L3	L4	L6	E
		D	D1	n1- φ d1	A	A1	B	B1	J	n2- φ d2															
		1	50WQ-F	165	125	4- φ 18	180	140	270	190	214														
2	65WQ-F	180	145	4- φ 18	190	150	280	190	221	4- φ 19	240	100	200	120	220	11	180	60	44	12	50	149	55	650×600	
3	80WQ-F	195	160	8- φ 18	210	170	300	210	237	4- φ 19	270	150	225	130	250	15	210	80	50	15	57	165	63	650×600	
4	100WQ-F	215	180	8- φ 18	230	190	300	210	237	4- φ 19	300	150	260	140	250	15	210	80	50	15	57	185	63	650×600	
5	150WQ-F	280	240	8- φ 23	300	250	460	330	367	4- φ 28	380	150	320	180	330	18	280	120	60	19	62	305	76	1300×900	
6	200WQ-F	335	295	8- φ 23	420	324	400	372	248	4- φ 18	508	200	370	277	350	18	300	192	56	19	78	200	156	1400×900	
7	250WQ-F	395	350	12- φ 23	410	360	650	540	560	4- φ 28	500	200	450	240	440	22	380	200	65	23	100	420	95	1300×900	
8	300WQ-F	440	400	12- φ 23	450	400	700	580	600	4- φ 28	560	200	500	300	480	22	420	240	65	23	100	450	95	1400×900	

## Relevant dimensions

Measure:mm(Except inch)

Item	Diameter	DN50	DN65	DN80	DN100	DN150	DN200	DN250	DN300
	Guide rod tap pipe/ Seamless steel pipe		1 " /32×3.5			1.5 " /48×3.5			
Guide rod length		Pool depth-H2-H4-H5-M/2-15+L0+H6							
Quantity and specification of expansion bolt		2-M12×150				2-M12×150			
Quantity and specification of foundation bolt		4-M16×250				4-M20×300			
footer bolt hole size		80×80×300				100×100×350			
Dia. of rubber pipe		2"/50	2.5"/65	3"/76	4"/100	6"/150	8"/200	10"/250	12"/300

### Technical data and dimensions

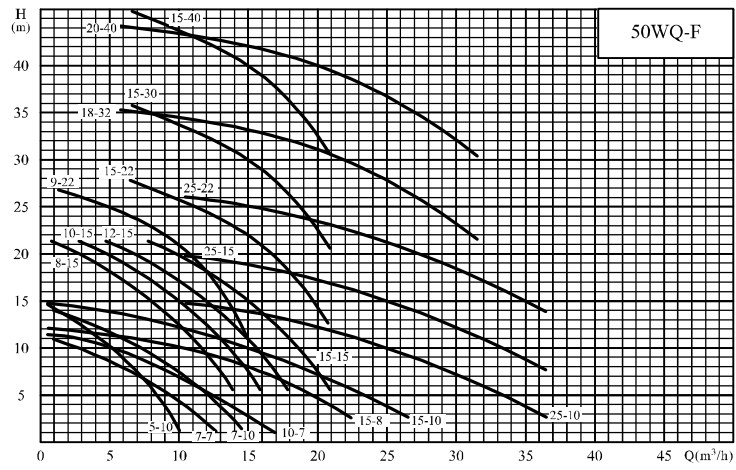
Model	Q	H	Speed	Power	Voltage	Dimensions(mm)							
	(m <sup>3</sup> /h)	(m)	(kW)	(rpm)	(v)	H	H1	H2	D2	B2	B3	L5	d
50WQ7-7-0.55F	7	7	0.55	3000	220/380	416	328	98	188	230	324	135	50
50WQ5-10-0.55F	5	10	0.55	3000	220/380	416	328	98	188	230	324	135	50
50WQ10-7-0.75F	10	7	0.75	3000	220/380	416	328	98	188	230	324	135	50
50WQ7-10-0.75F	7	10	0.75	3000	220/380	416	328	98	188	230	324	135	50
50WQ15-8-1.1F	15	8	1.1	3000	380	416	328	98	188	230	324	135	50
50WQ8-15-1.1F	8	15	1.1	3000	380	416	328	98	188	230	324	135	50
50WQ15-10-1.5F	15	10	1.5	3000	380	485	330	98	200	250	344	145	50
50WQ10-15-1.5F	10	15	1.5	3000	380	485	330	98	200	250	344	145	50
50WQ25-10-2.2F	25	10	2.2	3000	380	485	330	98	200	250	344	145	50
50WQ15-15-2.2F	15	15	2.2	3000	380	485	330	98	200	250	344	145	50
50WQ9-22-2.2F	9	22	2.2	3000	380	485	330	98	200	250	344	145	50
50WQ15-35-4F	15	35	4	3000	380	526	400	98	200	275	369	168	50
50WQ25-22-4F	25	22	4	3000	380	600	440	130	240	290	385	168	50
50WQ15-22-3F	15	22	3	3000	380	510	400	98	200	270	364	150	50
50WQ15-30-3F	15	30	3	3000	380	510	400	98	200	270	364	150	50
50WQ25-15-3F	25	15	3	3000	380	510	400	98	200	270	364	150	50
50WQ18-32-5.5F	18	32	5.5	3000	380	640	500	136	320	346	440	168	50
50WQ15-40-5.5F	15	40	5.5	3000	380	640	500	136	320	346	440	168	50
50WQ20-40-7.5F	20	40	7.5	3000	380	640	500	136	320	346	440	182	50
65WQ35-8-2.2F	35	8	2.2	3000	380	485	340	108	225	255	360	158	65
65WQ25-15-3F	25	15	3	3000	380	510	400	98	200	270	364	158	50
65WQ35-10-3F	35	10	3	3000	380	520	420	98	225	270	375	158	65
65WQ40-15-4F	40	15	4	3000	380	630	470	146	240	290	395	160	65
65WQ30-22-5.5F	30	22	5.5	3000	380	630	470	146	240	290	395	160	65
80WQ50-8-3F	50	8	3	3000	380	540	440	113	240	270	390	165	80
80WQ50-10-4F	50	10	4	3000	380	630	470	152	240	295	415	165	80
80WQ30-32-7.5F	30	32	7.5	3000	380	662	510	172	320	350	470	190	80
80WQ50-15-5.5F	50	15	5.5	3000	380	630	470	152	240	295	415	165	80
80WQ65-15-5.5F	65	15	5.5	3000	380	630	470	152	240	295	415	165	80
80WQ45-22-7.5F	45	22	7.5	3000	380	662	510	172	320	350	470	190	80
80WQ30-40-11F	30	40	11	3000	380	940	650	180	440	470	590	250	80
80WQ45-32-11F	45	32	11	3000	380	940	650	180	440	470	590	250	80
80WQ45-40-15F	45	40	15	3000	380	940	650	180	440	470	590	250	80
80WQ50-45-18.5F	50	45	18.5	3000	380	940	650	180	440	470	620	250	80
80WQ70-10-5.5F	70	10	5.5	3000	380	630	470	152	240	295	415	165	80
80WQ70-15-7.5F	70	15	7.5	3000	380	662	510	172	320	350	470	190	80
80WQ70-20-11F	70	20	11	3000	380	940	650	180	440	470	620	250	80
80WQ70-25-15F	70	25	15	3000	380	940	650	180	440	470	620	250	80
80WQ70-30-18.5F	70	30	18.5	3000	380	940	650	180	440	470	620	250	80



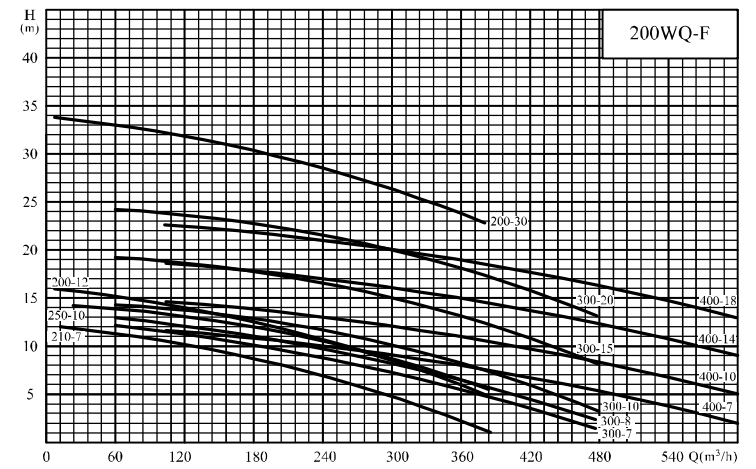
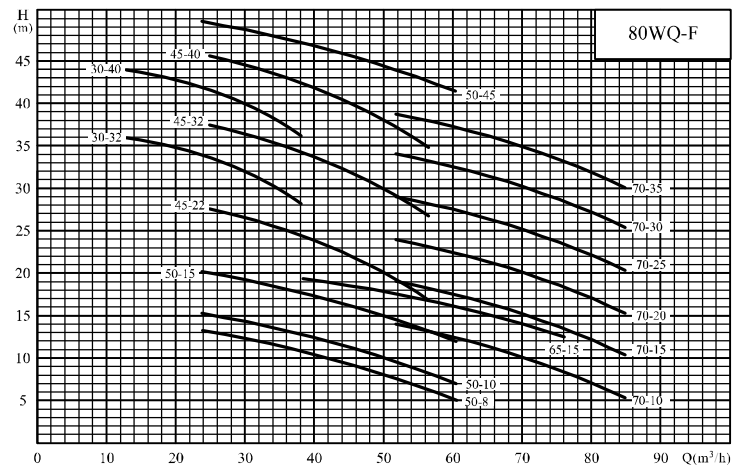
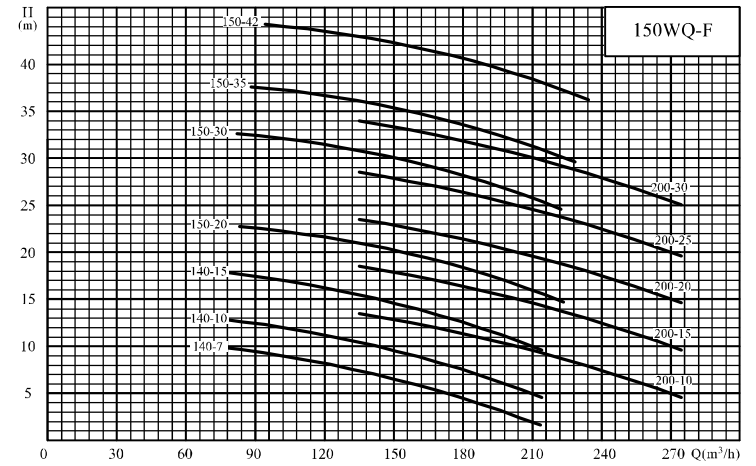
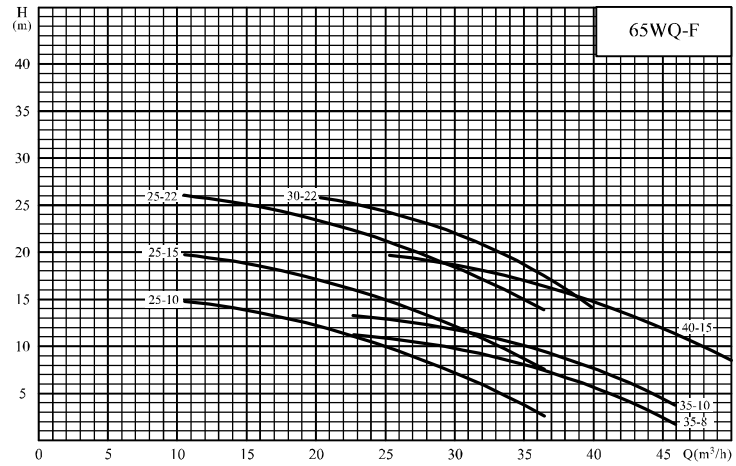
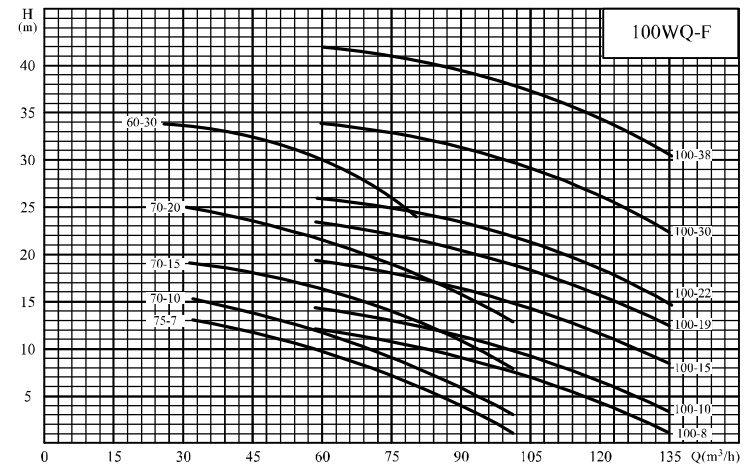
### Technical data and dimensions

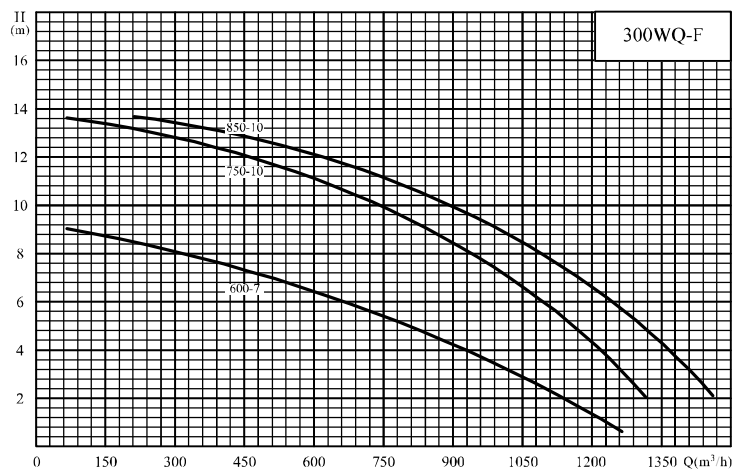
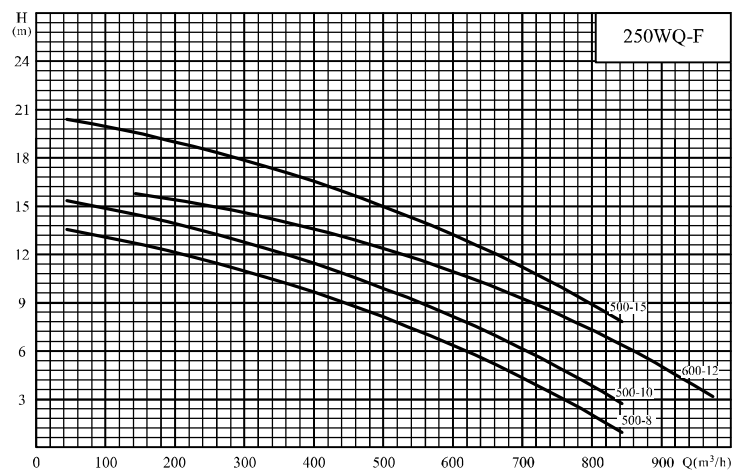
Model	Q	H	Speed	Power	Voltage	Dimensions(mm)							
	(m <sup>3</sup> /h)	(m)	(kW)	(rpm)	(v)	H	H1	H2	D2	B2	B3	L5	d
100WQ75-7-4.0F	75	7	4.0	3000	380	640	480	156	240	305	445	165	100
100WQ100-8-5.5F	100	8	5.5	3000	380	640	480	156	240	305	445	165	100
100WQ70-10-5.5F	70	10	5.5	3000	380	640	480	156	240	305	445	165	100
100WQ70-15-7.5F	70	15	7.5	3000	380	676	520	176	320	350	490	190	100
100WQ100-10-7.5F	100	10	7.5	3000	380	676	520	176	320	350	490	190	100
100WQ100-15-11F	100	15	11	1500	380	970	690	228	500	530	670	280	100
100WQ70-20-11F	70	20	11	1500	380	970	690	228	500	530	670	280	100
100WQ100-19-15F	100	19	15	1500	380	970	690	228	500	530	670	280	100
100WQ60-30-15F	60	30	15	1500	380	970	690	228	500	530	670	280	100
100WQ100-22-18.5F	100	22	18.5	1500	380	1060	725	228	500	580	690	280	150
100WQ100-30-22F	100	30	22	1500	380	1050	750	228	550	640	690	280	100
100WQ100-38-30F	100	38	30	3000	380	1095	795	228	550	640	690	280	100
150WQ140-7-7.5F	140	7	7.5	3000	380	695	540	196	320	395	/	200	150
150WQ140-10-11F	140	10	11	1500	380	1010	725	250	500	580	/	280	150
150WQ200-10-15F	200	10	15	1500	380	1010	725	250	500	580	/	280	150
150WQ140-15-18.5F	140	15	18.5	1500	380	1060	725	250	500	580	/	280	150
150WQ200-15-22F	200	15	22	1500	380	1080	800	250	580	640	/	280	150
150WQ150-20-22F	150	20	22	1500	380	1080	800	250	580	640	/	280	150
150WQ150-30-30F	150	30	30	1500	380	1125	845	250	580	640	/	280	150
150WQ200-20-30F	200	20	30	1500	380	1125	845	250	580	640	/	280	150
150WQ200-25-37F	200	25	37	1500	380	1320	990	350	650	730	/	380	150
150WQ150-35-37F	150	35	37	1500	380	1320	990	350	650	730	/	380	150
150WQ150-42-45F	150	42	45	1500	380	1480	1050	380	720	780	/	410	150
200WQ210-7-11F	210	7	11	1500	380	1010	725	250	500	580	/	320	200
200WQ300-7-15F	300	7	15	1500	380	1010	725	250	500	580	/	320	200
200WQ250-10-18.5F	250	10	18.5	1500	380	1010	725	250	500	580	/	320	200
200WQ200-12-18.5F	200	12	18.5	1500	380	1080	800	250	580	640	/	320	200
200WQ300-8-18.5F	300	8	18.5	1500	380	1080	800	250	580	640	/	320	200
200WQ300-10-22F	300	10	22	1500	380	1080	800	250	580	640	/	320	200
200WQ400-7-22F	400	7	22	1500	380	1080	800	250	580	640	/	320	200
200WQ400-10-30F	400	10	30	1500	380	1125	845	250	580	640	/	320	200
200WQ300-15-37F	300	15	37	1500	380	1320	990	350	650	730	/	380	200
200WQ400-18-45F	400	18	45	1500	380	1480	1050	380	720	780	/	410	200
200WQ300-20-45F	300	20	45	1500	380	1480	1050	380	720	780	/	410	200
200WQ200-30-45F	200	30	45	1500	380	1480	1050	380	720	780	/	410	200
250WQ500-8-30F	500	8	30	1500	380	1170	885	275	580	670	/	340	250
250WQ500-10-37F	500	10	37	1500	380	1320	990	350	650	730	/	380	250
250WQ600-15-45F	600	15	45	1500	380	1480	1050	380	720	780	/	410	250
300WQ600-7-30F	600	7	30	1500	380	1190	910	310	580	690	/	360	300
300WQ750-10-37F	750	10	37	1500	380	1320	990	350	650	730	/	380	300
300WQ850-10-45F	850	10	45	1500	380	1480	1050	380	720	780	/	410	300

Performance curve



Performance curve



**Performance curve**

## WQ-QG submersible sewage pump

### Summary

- With the design of special chopper plate, WQ cutting type submersible sewage pump can crush foreign matters.
- There are three ways of installation: auto device installation, hard pipe movable installation, soft pipe movable installation. (same as WQ series)

### Application

- Sewage with foreign matter, domestic sewage and industrial sewage drainage.

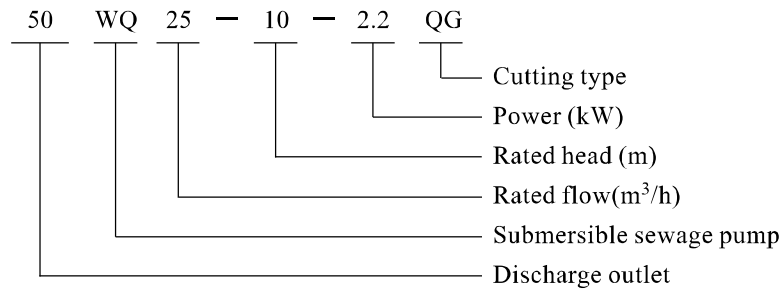
### Working conditions

- Power: 50Hz, 3X380V
- Medium temperature is less than 40°C; PH value is between 4 and 10; Density shall less than 1200kg/m<sup>3</sup>; Solid and liquid ratio shall less than 2%.
- When working, motor on liquid level shall not more than 1/2 of the whole motor.

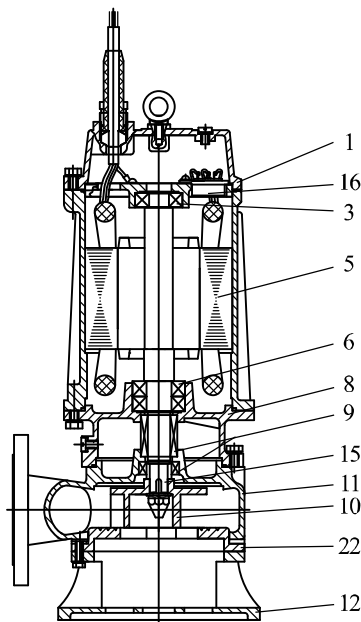
### Structure

The impeller is single channel non-block cutting impeller, the chopper plate placed between base and casing can regulate the axial clearance between cutting impeller. The shear effect of cutting wheel and chopper plate can chop and discharge any inhaled long fiber solids.

### Definition of model



### Sectional drawing

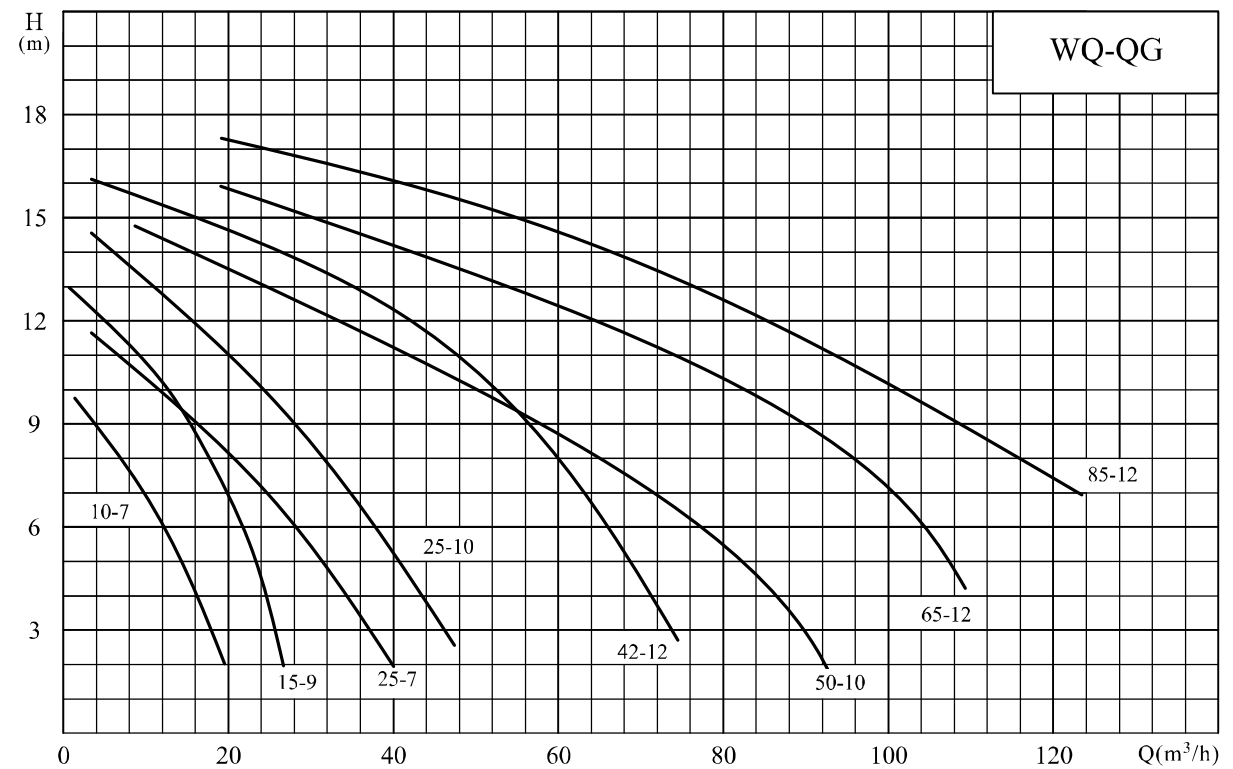


### Material

No.	Name	Material
1	Casing cover	Cast iron
3	Bearing	
5	Motor	
6	Bearing	
8	Oil chamber	Cast iron
9	Mechanical seal	SiC/Tungsten carbide
10	Impeller	Cast iron
11	Casing	Cast iron
12	Base	Cast iron
15	Shaft	20Cr13
16	Thermal protector	
22	Chopper plate	Steel

**Technical data and dimensions (Installation diagram please refer to page 33)**

Model	Q	H	Speed	Power	Current	Dimensions(mm)									Weight (kg)
	(m <sup>3</sup> /h)	(m)	(rpm)	(kW)	(A)	H	H1	B3	B2	D2	d	D	D1	n1- φ d1	
50WQ10-7-0.75QG	10	7	2860	0.75	2.0	450	340	300	210	190	50	140	110	4- φ 14	20
50WQ15-9-1.1QG	15	9	2860	1.1	2.8	480	370	300	210	190	50	140	110	4- φ 14	23
50WQ25-7-1.5QG	25	7	2860	1.5	4.0	520	410	360	270	200	50	140	110	4- φ 14	28
50WQ25-10-2.2QG	25	10	2860	2.2	6.0	550	440	360	270	200	50	140	110	4- φ 14	30
80WQ42-12-3QG	42	12	2860	3	6.5	600	490	420	300	250	76	190	150	4- φ 18	57
80WQ50-10-4QG	50	10	2860	4	8.4	630	520	420	300	250	76	190	150	4- φ 18	60
100WQ65-12-5.5QG	65	12	2860	5.5	12.0	700	560	500	340	260	100	210	170	4- φ 18	85
100WQ85-12-7.5QG	85	12	2860	7.5	16.8	740	600	500	340	260	100	210	170	4- φ 18	94

**Performance curve**


## NFK electric control cabinet

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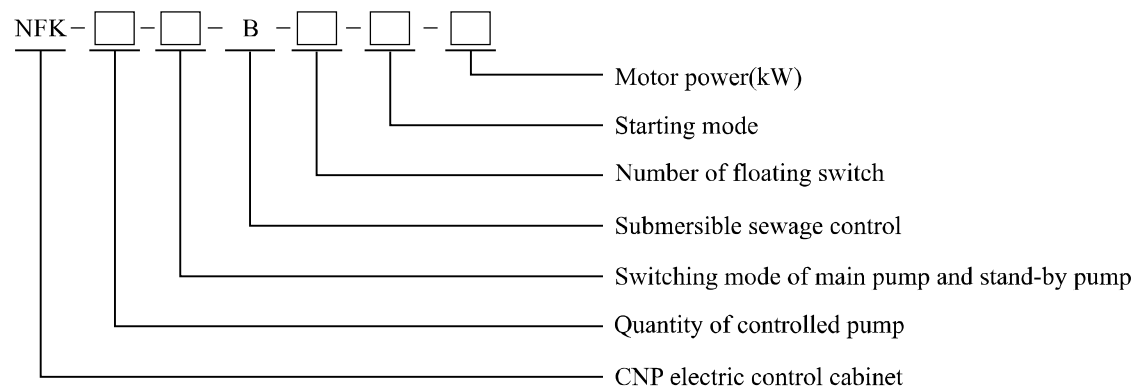
### Summery

NFK series electric control cabinets have the protection function of overload, short circuit and over-current. With the working mode of single pump and multiple pump control, switching mode of main pump and stand-by pump, and various starting mode, they can apply to automatic control of water supply and drainage of agricultural production and buildings, fire control and spray network pressure boost. With fine appearance, convenient installation and good quality, NFK series electric control cabinets are reliable partner of all kinds of pumps.

### Product features

- Can be used in all kinds of situation, e.g. domestic sewage disposal.
- Equipped with domestic and international famous brand and excellent cabinet body, well-designed, good in quality.
- Combination by arbitrary selection, the product has various starting mode, control mode and switching mode.
- Good service. Provide pre-sales consulting and after-sales service timely.

### Definition of model



### Quantity of controlled pump

“1”stands for one control one; “2”stands for one control two; “3”stands for one control three. The above modes all have manual function. Each pump can work under manual function.

### Switching mode of main pump and stand-by pump

“H”stands for ordinary type. User can select main pump and stand-by pump manually before starting the machine. When the main pump breakdown, the stand-by pump will start automatically. It is commonly used.

“AS” stands for timing automatic/manual switch. It can be used for timing alternation of main pump and stand-by pump. Regular switching time: 8-12 hours. User can switch from timing automatic switch to manual switch to manual to select main pump and stand-by pump. This type has the automatic switching function of stand-by pump.

“AC” stands for automatic/manual switch. Main pump and stand-by pump will alternate each time the machine starts.

User can switch from automatic switch to manual switch to select main pump and stand-by pump. This type has the automatic switching function of stand-by pump.

### Control mode

“B” stands for submersible sewage pump only. It controls components by floater. Except overload protection, short circuit protection and over-current protection, it has the function of casing leakage protection, motor overheating protection and residual current protection.

## Starting mode

If not indicate, it refers to direct starting;“JY:Y-Δ”stands for reduced voltage start;“JY(Z)”stands for autotransformer low-voltage start;“JY(R)”stands for soft starting.

## Operation condition and installation condition

- altitude shall not above 2000m,ambient temperature shall not above 45℃ and less than -5℃, air relative humidity shall not more than 90% (if the temperature is 25℃).
- Situation with no water drop,steam,afloat dust,metal particle, direct sunlight, high temperature,dust fall,corrosive gas, flammable gas or liquid.
- Situation with no significant shake,shock and vibration.
- Sweep condensation on product’s surface which caused by temperature variation.
- Vertical installation.

## Power requirement

- Power inlet : three-phase-five-wire system
- Power: 50HZ, three phase 380V

## Supply range

Installation type	With the accessory	Optional part		Spares
Soft pipe movable installation	Pump, rubber joint	Hose	Control cabinet, end cabinet, butterfly valve non return valve, chains (for sinking pump)	Impeller, seal ring, bearing, mechanical seal
Hard pipe movable installation	Pump, flange	Dual flange joint		
Auto coupling device installation	Pump, auto coupling device	Guide rod, footer bolt, expanding bolt		

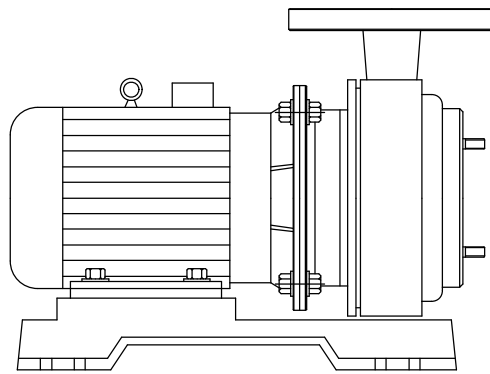
## Ordering Instructions

1.Please note product model, name, performance data(flow,head),installation way, optional part, spare part etc. Please take into consideration the impact of medium density on power and the requirements of overcurrent sealing elements ( corrosivity of medium, wear resistance ) .

2.If there is special requirement for the protection in the pump ( oil detector,water detector, thermal element), please note when ordering. The control mode and automation requirement should be noted when ordering electric control cabinet.

3.The standard cable length for the submersible sewage pump is 9 m. If needs prolong, please specify.

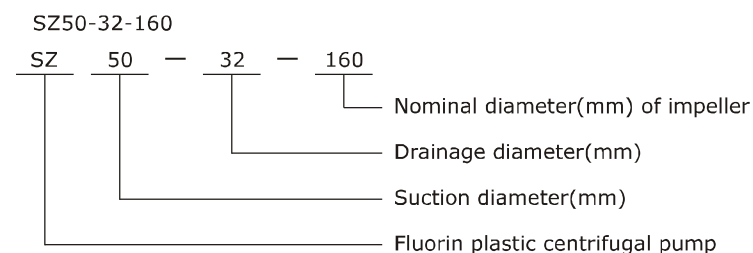
4.Please specify whether need the dual cable(normally for motor power bigger than 7.5kW).



SZ Fluorine plastic single-stage centrifugal pump



### Definition of model



### Structure feature

- SZ pump has one impeller, axial suction and radical discharge.
- Simple structure, shaft is directly connected with impeller.
- Easy for pipe works, inlet and outlet are connected by standard flanges.
- Wet parts are made of F26.F46, accessories are made of cast iron(HT200).

### Typical application

- Any concentration of acid alkali, salty solution, strong oxidants, organic solvent etc. Strongly corrosive medium.
- Petrol, chemical, pesticide, acid cleaning, dying, paper making, galvanization, etc.

### Operation conditions

- Thin medium not containing grain or fiber.
- Medium temperature:  $-20^{\circ}\text{C} \sim 120^{\circ}\text{C}$
- Medium density: Max  $1.35 \times 10^3 \text{kg/m}^3$
- Ambient temperature: Max  $+40^{\circ}\text{C}$
- Altitude: Max 1000m
- Pressure: Max 10bar

### Motor

- TEFC motor, 2 pole
- Protection class: IP 55
- Insulation level: CLASS F
- Standard voltage:  $3 \times 380\text{V}$

### Curve conditions

- Curves tolerance is according to ISO9906, Annex A;
- All curves are based on the measured value of constant motor speed 2900 rpm,  $3 \times 380\text{V}$ .
- The measurements were made with airless water at temperature of  $20^{\circ}\text{C}$ . The curves apply to a kinematic viscosity of  $1 \text{mm}^2/\text{s}$  (1 cst)
- It is suggested to operate the pump in the scope of the bold curve, to prevent motor from overload.
- When pumping liquids with a density higher than that of the operation conditions, use motors with correspondingly higher outputs.

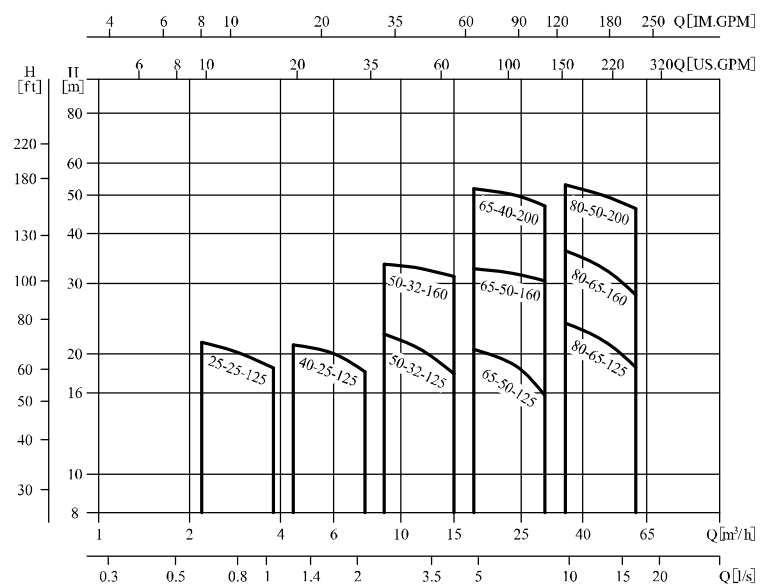
### Performance curve

- Q/H: means the curve of the flow and head at the nominal rotating speed.
- Power curve: P2 means the pump input power, if the medium density is  $1 \times 10^3 \text{kg/m}^3$ .
- Efficient curve: Eta means the pump efficient.

### Installation conditions

- When installation, please make sure the pump would not be effected by the pipeline force when pump operation.
- The pump should be strongly fixed on the horizontal base.
- In order to make motor work well, pump should be installed on the frozen free and ventilate place.
- The electric protection devices should protect pump from being damaged by phase lack, unstable voltage, electric leakage, overload.

### Performance scope 2900rpm

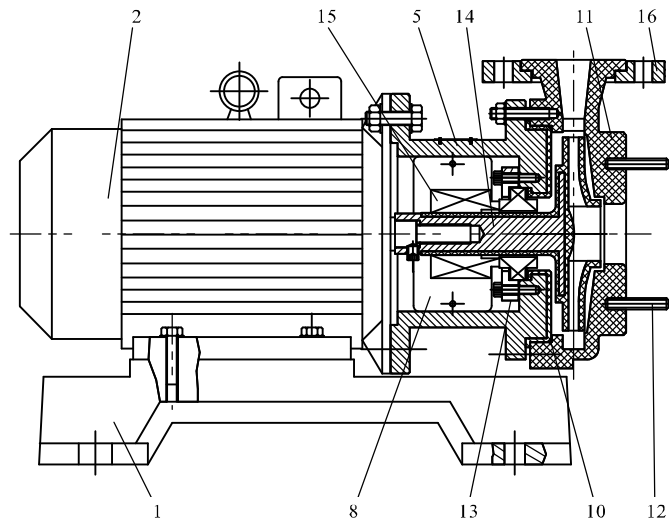


### Performance table

Model	Nominal flow (m <sup>3</sup> /h)	Nominal head (m)	Flow range (m <sup>3</sup> /h)	Max bar (bar)	Power (kW)	Max efficiency (%)
SZ25-25-125	3.2	20	2.2~3.8	2.1	1.1	28
SZ40-25-125	6.3	20	4.4~7.6	2.1	1.5	41
SZ50-32-125	12.5	20	8.8~15	2.3	3	44
SZ50-32-160	12.5	32	8.8~15	3.3	4	51
SZ65-50-125	25	20	17.5~30	2	4	55
SZ65-50-160	25	32	17.5~30	3.3	5.5	60
SZ65-40-200	25	50	17.5~30	5.1	11	55
SZ80-65-125	50	20	35~60	2.6	7.5	62
SZ80-65-160	50	32	35~60	3.6	11	62
SZ80-50-200	50	50	35~60	5.4	18.5	63

# SZ

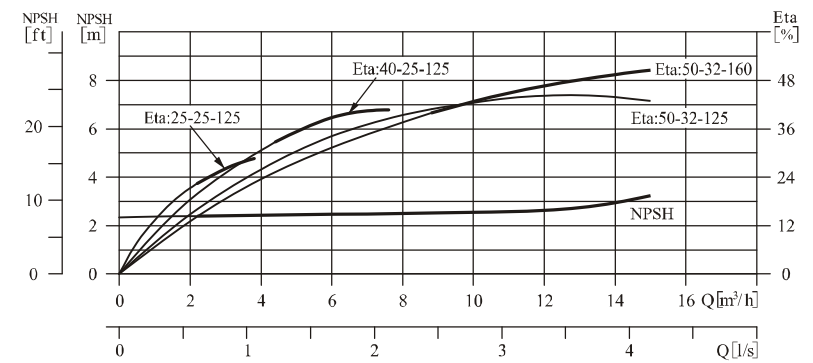
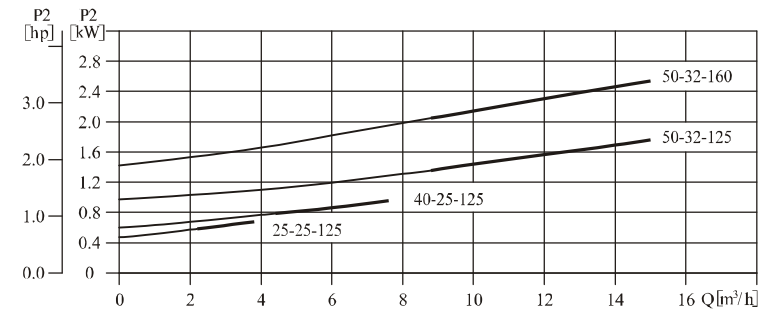
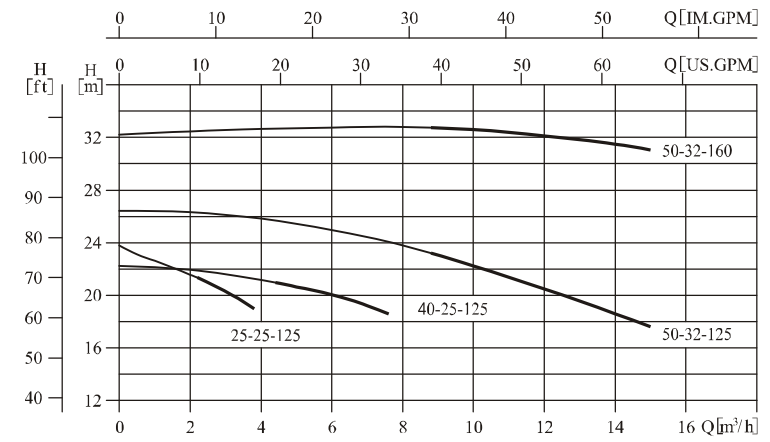
## Section drawing



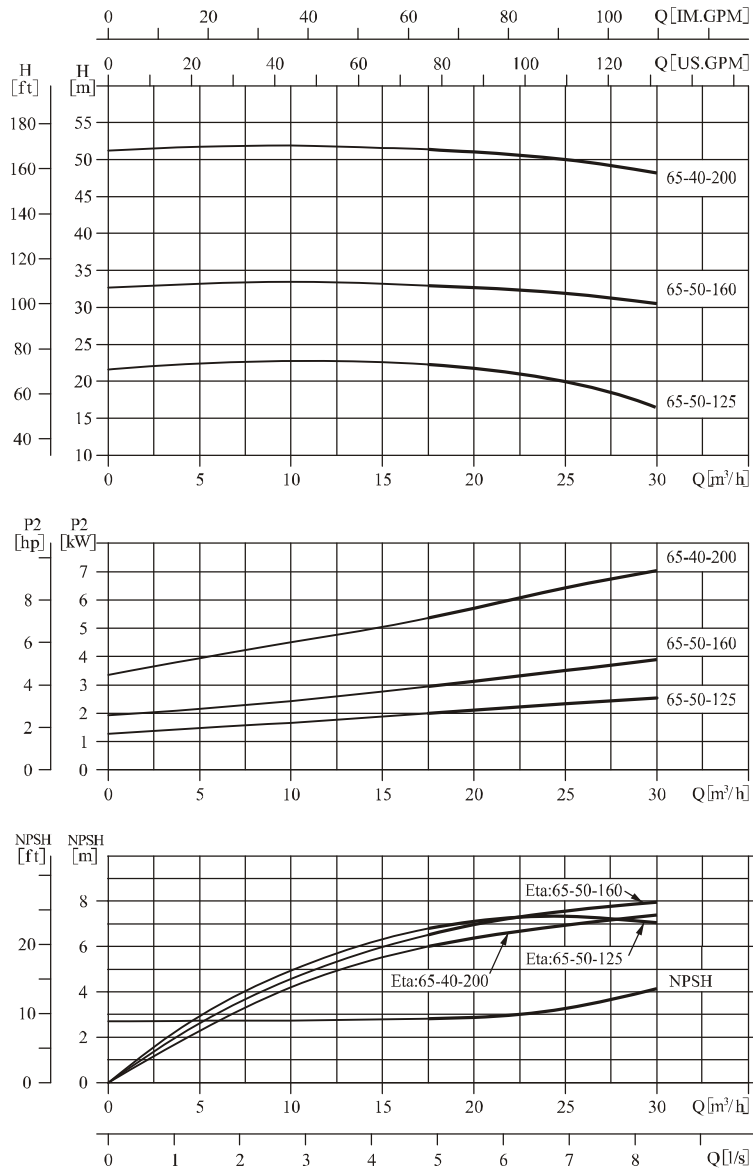
## Part list

NO.	Name	Material	Code/AISI/ASTM
1	Base	HT200	ASTM25B
2	Motor		
5	Injection moulding pump head	HT200+F26(F46)	ASTM25B+F26(F46)
8	Guard	Stainless Steel OCr18Ni9	AISI304
10	O ring	FPM	
11	Casing	F26(F46)	
12	Double end studs	Stainless Steel OCr18Ni9	AISI304
13	Seal cover	HT200	ASTM25B
14	Impeller	Steel+F26(F46)	ASTMA570+F26(F46)
15	Mechanical seal	Silicon Carbide/Silicon Carbide	
16	Outlet flange	HT200	ASTM25B

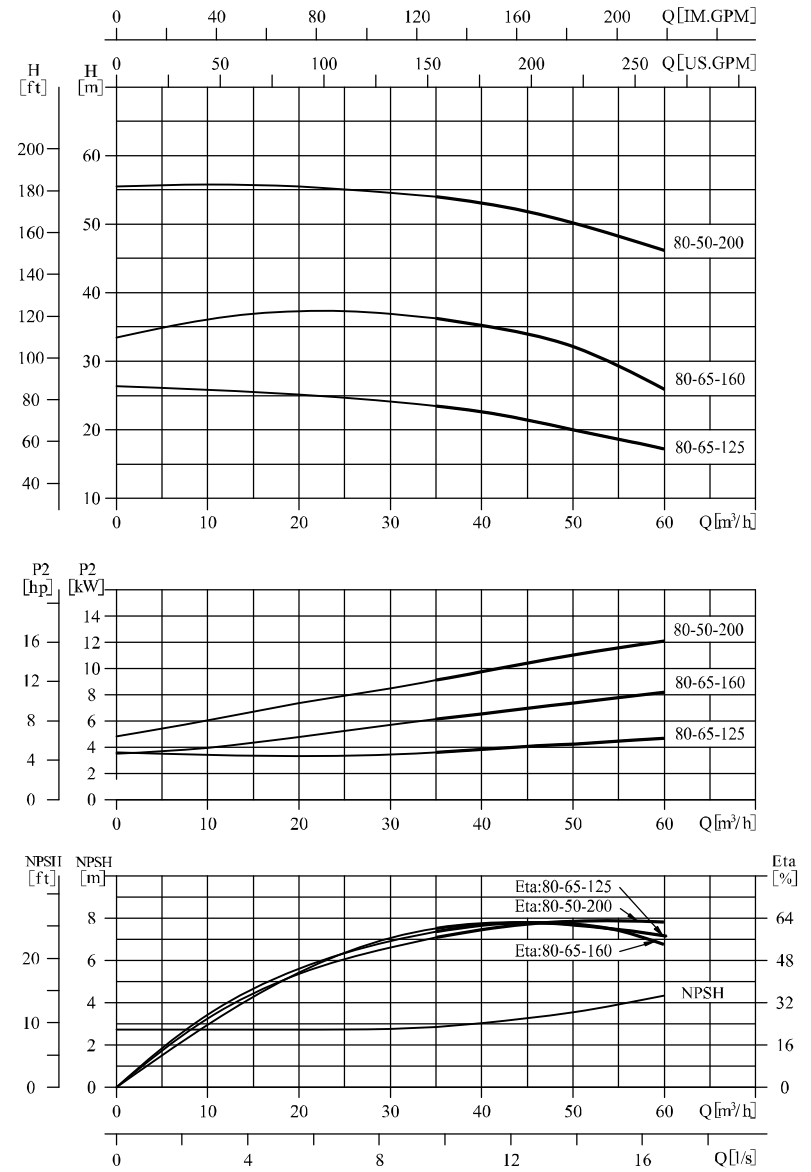
## Performance curve SZ 25 SZ 40 SZ 50 2900rpm



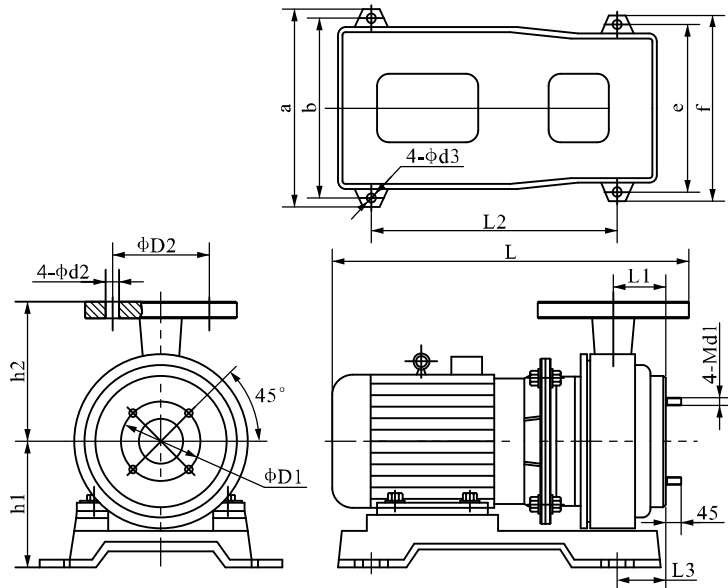
Performance curve SZ 65 2900rpm



Performance curve SZ 80 2900rpm



Pump dimensions



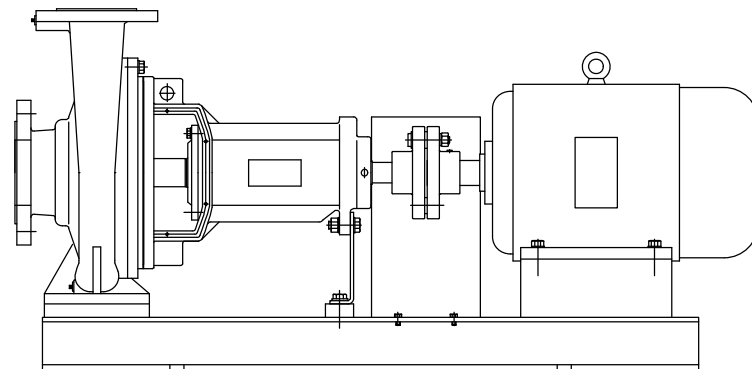
Size and weight

Model	Size (mm)												Weight (kg)					
	L	L1	L2	L3	D1	Inlet flange	d1	h1	h2	D2	outlet flange	d2		a	b	d3	e	f
SZ25-25-125	457	37	300	64	75	DN25/PN6	10	164	120	100	DN32/PN10	14	265	230	15	230	265	45
SZ40-25-125	461	37	300	72	100	DN40/PN6	10	165	120	100		14	265	230	15	230	265	48
SZ50-32-125	531	43	370	79	125	DN50/PN10	14	175	140	100	DN50/PN10	14	275	235	17	235	275	74
SZ50-32-160	553	53	370	103	125		14	191	159	100		14	315	270	17	270	315	78
SZ65-50-125	563	50	370	95	145	DN65/PN10	14	175	147	125	DN50/PN10	18	315	270	17	270	315	79
SZ65-50-160	618	51	400	88	145		14	219	165	125		18	370	330	17	290	335	113
SZ65-40-200	727	55	440	96	145	DN80/PN10	14	255	180	110	DN40/PN10	18	425	380	19	320	365	181
SZ80-65-125	631	52	400	88	160		14	219	165	145	DN65/PN10	18	370	330	17	290	335	123
SZ80-65-160	750	57	440	97	160	14	255	186	145	18		425	380	19	320	365	183	
SZ80-50-200	797	57	440	110	160	14	255	195	125	DN50/PN10	18	425	380	19	320	365	205	

F46,F26 Corrosion resistance table

Medium	F46	F26	Medium	F46	F26	Medium	F46	F26
Acetic acid; Benzene acid	✓	✓	Sulfuric Acid +20% Smoke sulfate	✓/80°C	—	Titanium tetrachloride; zinc chloride	✓	✓
Arsenate; Boric acid	✓	✓	Smoke sulfate	✓	×	Ferric Trichloride, carbon tetrachloride	✓	✓
Carbonate	✓	✓/20°C	sulfurous acid	✓	✓	Salt solution; seawater	✓	✓
Fluoride acid	✓	—	Ammonium hydroxide, potassium hydroxide	✓	✓	Alum (slurry); black liquor (slurry)	×	—
Hypochlorite; Wet chlorine	✓	✓	Sodium hydroxide <20%	✓	✓	Blue alum; NaHSO3	✓	✓
Chromic Acid	✓	✓/50°C	Sodium hydroxide <80%	✓	×	Sodium bicarbonate; soda	✓	✓
citric acid	✓	✓/120°C	Calcium hydroxide	✓	✓	Sodium hypochlorite	✓	✓/20%
Toluene-acid	✓	✓/65°C	Acetic acid salt solution	✓	✓	Sodium chlorate; calcium chloride	✓	✓
Formic acid	✓	✓	Ammonium nitrate; barium nitrate	✓	✓	Chromium sodium	✓	—
Glycolic acid	—	✓/20°C	Sodium nitrate; copper nitrate	✓	✓	Al acetic	✓	✓
hydrochloric acid	✓/65°C	✓/37%	Iron nitrate	✓	✓	Bromine	✓	✓/20°C
hydrofluoric acid; Fluorosilicic acid	✓	✓	Nitrate lead; silver nitrate	✓	—	Glycerol	✓	✓
Hydrogen Peroxide; lactic acid	✓	✓/20°C	Aluminum sulfate, ammonium sulfate	✓	✓	Pyridine	✓	×
Maleic acid; malic acid	✓	✓	ammonium sulfate + Sulfuric Acid	✓	✓	acetic (acid) anhydride	✓	✓/20°C
Mixed acid	✓	—	Barium sulfate; sodium sulfate	✓	✓	Aniline dye; hydrochloride aniline	✓	—
Oleic acid	✓	✓	Copper sulfate	✓	✓	Methane, ethane, propane	✓	✓
Oxalate acid	✓	✓/50°C	Copper sulfate +10% Sulfuric Acid	✓	—	Nitrobenzene	✓	✓/20°C
Picric acid, stearic acid	✓	✓/20°C	Ferrum sulfate +10% Sulfuric Acid	✓	—	Tar and ammonia	✓	—
Tartrate; Tannin	✓	✓	Magnesium sulfate; zinc sulfate	✓	✓	Toluene; SO3	✓	✓
Nitrate 5% to 10%	✓	✓/50°C	Ammonium; sodium	✓	✓	Glycol; ethylene oxide	✓	✓
Nitric Acid <50%	✓	✓	Chloride; barium chloride	✓	✓	Two-acetone; dichloro-ethanol	✓	✓/20°C
Concentrated nitric acid	✓	×	Calcium chloride	✓	✓	Ethylene dichloride, vinyl Trichloride	✓	✓
Nitric Acid +3.5% hydrofluoric acid	✓	—	Aluminum Trichloride	✓	✓/20%	Formaldehyde	✓	✓/50°C
Phosphoric Acid	✓	✓	Potassium chloride	✓	✓/65°C	Freon	×	—
Phosphoric Acid +2% Sulfuric acid +1% hydrofluoric acid	✓	—	Sodium chloride; tin chloride	✓	✓	CS2	✓	✓/20°C
sulfuric acid <10%	✓	✓	Silver chloride, magnesium chloride	✓	✓	Molten sulfur	✓	✓
Sulfuric acid 10% to 75%	✓	✓/65°C	Nickel Chloride	✓	✓			
Sulfuric acid 75% to 98%	✓/80°C	✓/50°C	Sulphur dichloride	✓	✓/20°C			

Note: 1. ✓/20°C means the material can be used in the medium that temperature is below 20°C. ✓ means workable, × means doesn't work, — means not known. 2. ✓/20% means the material can be used in the 20% medium.

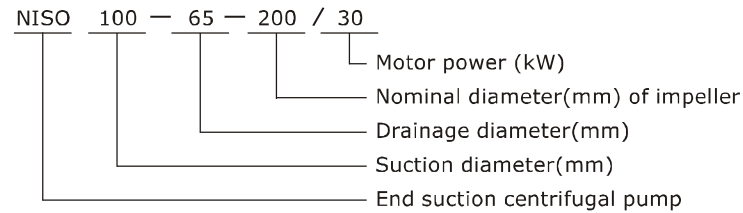


NISO Single stage end suction centrifugal pump

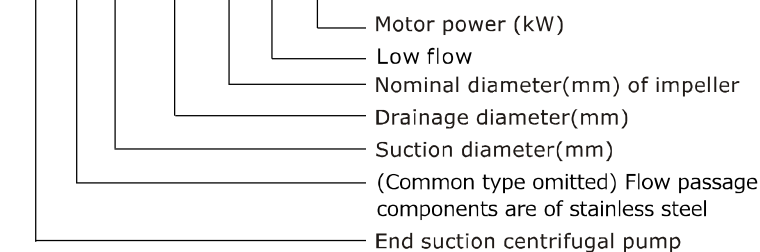
# NISO

## Definition of model

NISO100-65-200/30



NIS F 300 - 250 - 315 (Q) / 75



## Min inlet pressure

● Min inlet pressure depends on NPSH +0.5m safety margin+gasified pressure. It should be recalculated the inlet pressure of one of the following happens.

- The liquid is more warm.
- The flow speed exceeds the nominate value.
- Suction distance is very long or inlet pipe is very long.
- system pressure is too little.
- Inlet pressure is low,working 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.
- NISO Pump use bearing cradle, which can orientate bearing, prevent from radical vibration, improve the rigidity of rotary part.
- NISO Pump use compacted shaft, use deep groove grease lubricated roller bearing.
- NISO Pump use connect pump and motor with semi-flexible coupling.
- Use standard wearable mechanical seal.
- TEFC motor, size complies to IEC standard.
- NISO Pump dimensions is conform to ISO 2858.
- NIS,NISF series pumps are coupled with extension shaft structure.

## Specification

- Flow: Max 1200m<sup>3</sup>/h
- Head: Max 160m
- Working pressure: Max 16 bar

- Inlet pressure: Max 6 bar
- Power: Max 200kW
- Liquid temperature: -15℃ ~ 110℃
- Inlet and Outlet diameter: Inlet diameter: DN50~DN300  
Outlet diameter: DN32~DN250

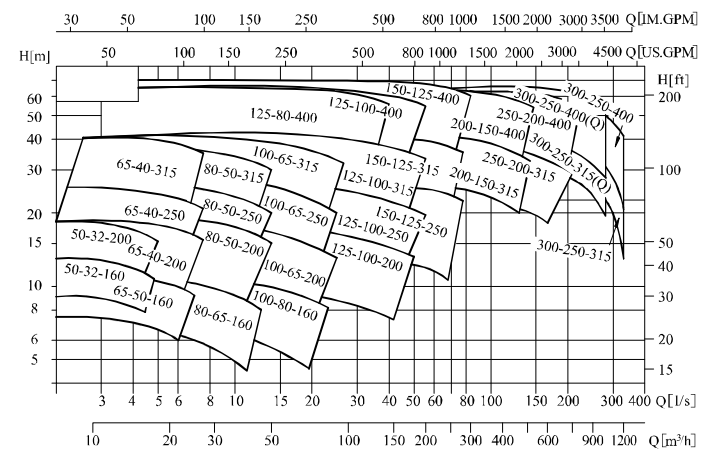
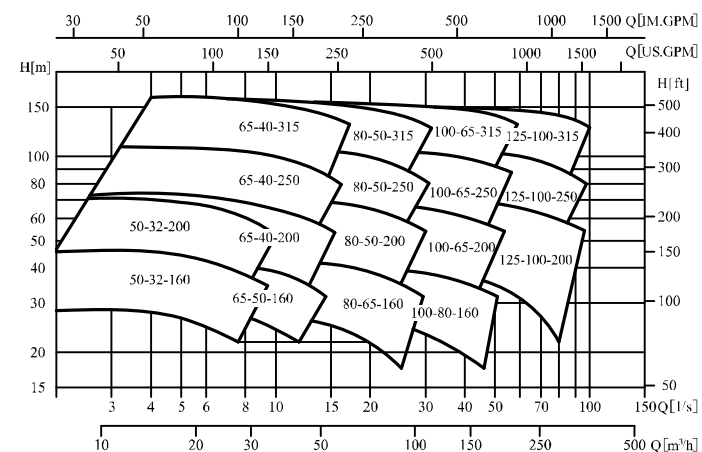
## Curve conditions

- Curves tolerance is according to ISO9906, Annex A;
- All curves are based on the measured value of constant motor speed 2900 rpm, 2950rpm, 1450rpm or 1480rpm.
- The measurements were made with airless water at temperature of 20℃. The curves apply to a kinematic viscosity of 1mm<sup>2</sup>/s(1 cst)

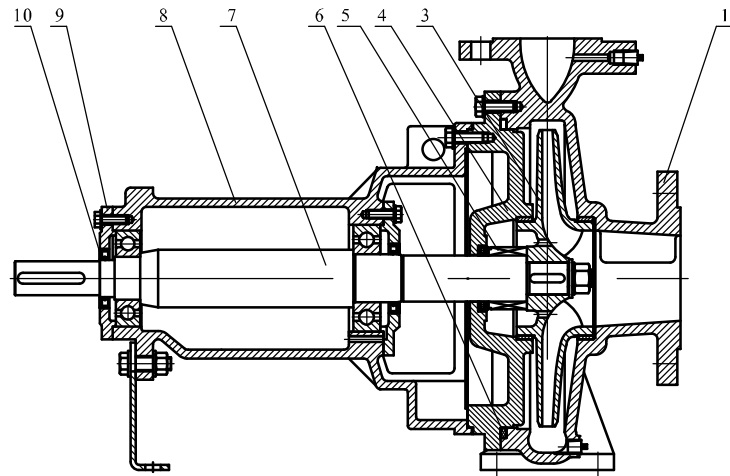
## Features

- Back-pull-out design, without having to disturb pump body and pipelines when servicing.
- All the NISO Pump models only use 4 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.
- NIS,NISF Pump are small,compact,easy to install.

## Model performance drawing



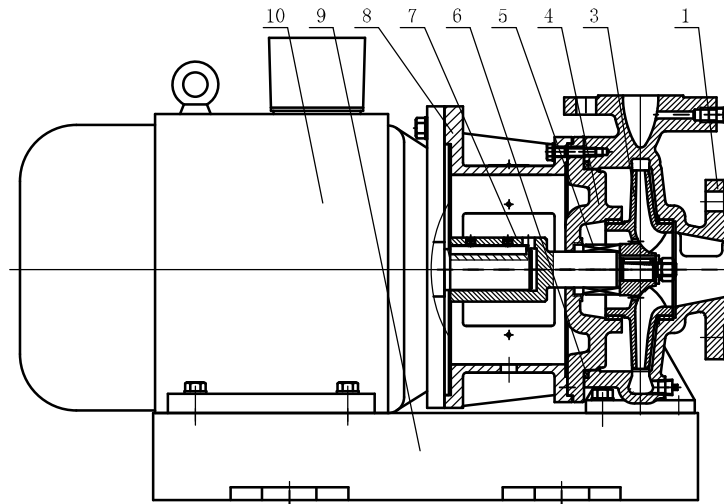
NISO Section drawing



Material

NO.	Parts	Material	AISI/ASTM
1	Casing	Cast Iron /ZG07Cr19Ni9	ASTM25B/AIS1304
3	Impeller	Cast Iron/ZG07Cr19Ni9	ASTM25B/AIS1304
4	Casing cover	Cast Iron/ZG07Cr19Ni9	ASTM25B/AIS1304
5	Mechanical seal	Silicon Carbide	
6	O ring	NBR	
7	Shaft	20Cr13/06Cr19Ni10	AISI420/AIS1304
8	Bearing housing	Cast Iron	ASTM25B
9	Bearing cover	Cast Iron	ASTM25B
10	Oil seal	NBR	

NIS,NISF Sectional drawing



Material

NO.	Parts	Material	AISI/ASTM
1	Casing	Cast Iron/ZG07Cr19Ni9	ASTM25B/AIS1304
3	Impeller	Cast Iron/ZG07Cr19Ni9	ASTM25B/AIS1304
4	Casing cover	Cast Iron/ZG07Cr19Ni9	ASTM25B/AIS1304
5	Mechanical seal	Carbon/Silicon Carbide	
6	O ring	NBR	
7	Shaft	SS 20Cr13/06Cr19Ni10	AISI420/AIS1304
8	Head	Cast Iron	ASTM25B
9	Baseplate	Q235-4	AISIA570
10	Motor		

**Models 2 Pole**

NO.	Model	Q[m³/h]	H[m]	Motor[kW]	n[r/min]
1	50-32-160/3	12.5	28	3	2900
2	50-32-160/4		36	4	
3	50-32-160/5.5		44	5.5	
4	50-32-200/7.5		55	7.5	
5	50-32-200/11		74	11	
6	65-40-200/7.5	25	48	7.5	2900
7	65-40-200/11		62	11	2950
8	65-40-200/15		72	15	
9	65-40-250/18.5		84	18.5	
10	65-40-250/22		95	22	
11	65-40-250/30		105	30	
12	65-40-315/22		105	22	
13	65-40-315/30		120	30	
14	65-40-315/37		145	37	
15	65-40-315/45		165	45	
16	65-50-160/4	50	28	4	
17	65-50-160/7.5		36	5.5	
18	65-50-160/5.5		42	7.5	
19	80-50-200/11		44	11	
20	80-50-200/15		57	15	
21	80-50-200/18.5		64	18.5	
22	80-50-200/22		71	22	
23	80-50-250/30		84	30	2950
24	80-50-250/37		100	37	
25	80-50-315/37		105	37	
26	80-50-315/45	125	45		
27	80-50-315/55	140	55		
28	80-50-315/75	152	75		
29	80-65-160/5.5	100	22	5.5	2900
30	80-65-160/7.5		29	7.5	
31	80-65-160/11		38	11	
32	80-65-160/15		44	15	
33	100-65-200/18.5		36	18.5	
34	100-65-200/22		43	22	
35	100-65-200/30		56	30	
36	100-65-200/37		67	37	
37	100-65-250/45		80	45	
38	100-65-250/55		88	55	
39	100-65-250/75	108	75		
40	100-65-315/90	128	90		
41	100-65-315/110	148	110		
42	100-80-160/11	200	23	11	2950
43	100-80-160/15		30	15	
44	100-80-160/18.5		35	18.5	
45	100-80-160/22		40	22	
46	125-100-200/30		34	30	
47	125-100-200/37		41	37	
48	125-100-200/45		48	45	
49	125-100-200/55		55	55	
50	125-100-200/75		66	75	
51	125-100-250/75		75	75	
52	125-100-250/90	86	90		
53	125-100-250/110	100	110		
54	125-100-315/90	93	90		
55	125-100-315/110	108	110		
56	125-100-315/132	124	132		
57	125-100-315/160	144	160		

**Models 4 Pole**

NO.	Model	Q[m³/h]	Motor[kW]	n[r/min]
1	50-32-160/0.55	6.3	8.5	0.55
2	50-32-160/0.75		11	0.75
3	50-32-200/1.1		14	1.1
4	65-40-200/1.1		18	1.5
5	50-32-200/1.5	12.5	12	1.1
6	65-40-200/1.5		15	1.5
7	65-40-200/2.2		17.5	2.2
8	65-40-250/3		25	3
9	65-40-315/4		34	4
10	65-40-315/5.5		40	5.5
11	65-50-160/0.55		7	0.55
12	65-50-160/0.75		9	0.75
13	65-50-160/1.1		10.5	1.1
14	80-50-200/1.5		25	11
15	80-50-200/2.2	15		2.2
16	80-50-200/3	17.5		3
17	80-50-250/4	21		4
18	80-50-250/5.5	25		5.5
19	80-50-315/5.5	30		5.5
20	80-50-315/7.5	37		7.5
21	80-65-160/0.75	6		0.75
22	80-65-160/1.1	8		1.1
23	80-65-160/1.5	10.5		1.5
24	100-65-200/3	50	11.5	3
25	100-65-200/4		14	4
26	100-65-200/5.5		16	5.5
27	100-65-250/5.5		20	5.5
28	100-65-250/7.5		25	7.5
29	100-65-315/11		32	11
30	100-65-315/15		40	15
31	100-80-160/1.5		6.5	1.5
32	100-80-160/2.2		9	2.2
33	100-80-160/3		10.5	3
34	125-80-400/15	50	39	15
35	125-80-400/18.5		45	18.5
36	125-80-400/22		50	22
37	125-80-400/30		60	30
38	125-80-400/37		67	37
39	125-100-200/4		9	4
40	125-100-200/5.5		11.5	5.5
41	125-100-200/7.5		14	7.5
42	125-100-200/11		16.5	11
43	125-100-250/15		25	15
44	125-100-315/11	23	11	
45	125-100-315/18.5	32	18.5	
46	125-100-315/22	36	22	
47	125-100-315/30	40	30	
48	125-100-400/30	50	30	
49	125-100-400/37	58	37	
50	125-100-400/45	65	45	
51	150-125-250/11	200	16	11
52	150-125-250/15		20	15
53	150-125-250/18.5		24	18.5
54	150-125-250/22		32	22
55	150-125-315/30		39	30
56	150-125-315/37		50	37
57	150-125-400/45		57	45
58	150-125-400/55		12.5	55
59	150-125-400/75		68	75
60	200-150-315/37		23	37
61	200-150-315/45	27	45	
62	200-150-315/55	32	55	
63	200-150-315/75	38	75	
64	200-150-400/75	43	75	
65	200-150-400/90	50	90	
66	200-150-400/110	62	110	
67	250-200-315/37	500	20	37
68	250-200-315/45		23	45
69	250-200-315/55		24	55
70	250-200-315/75		32	75
71	250-200-400/90		37	90
72	250-200-400/110		44	110
73	250-200-400/132		53	132
74	250-200-400/160		60	160



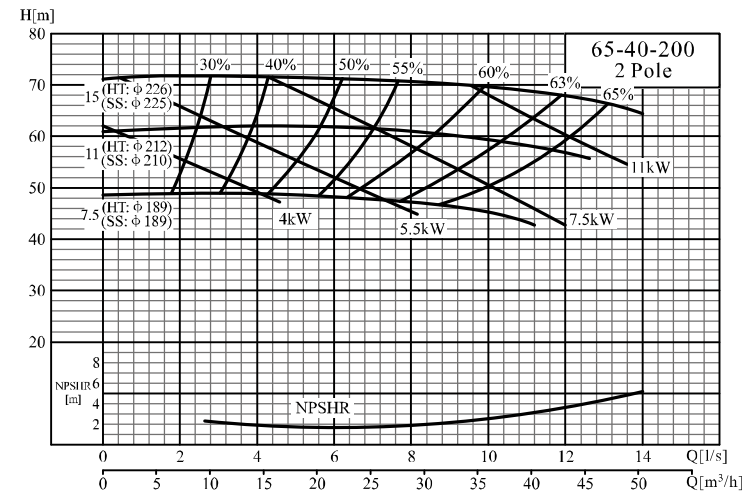
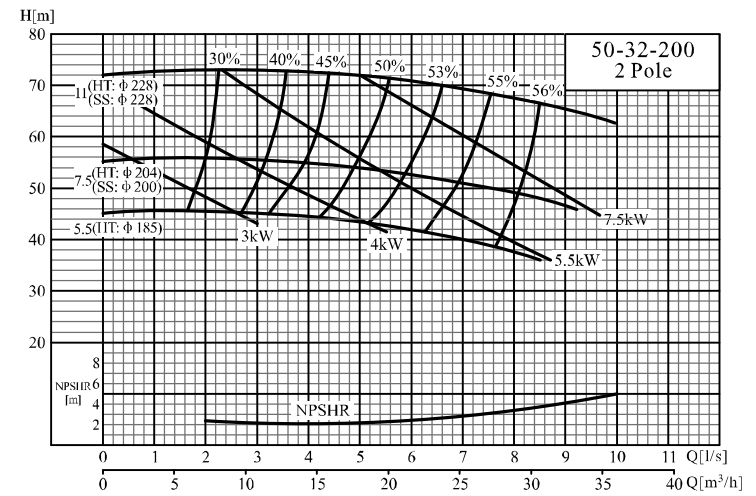
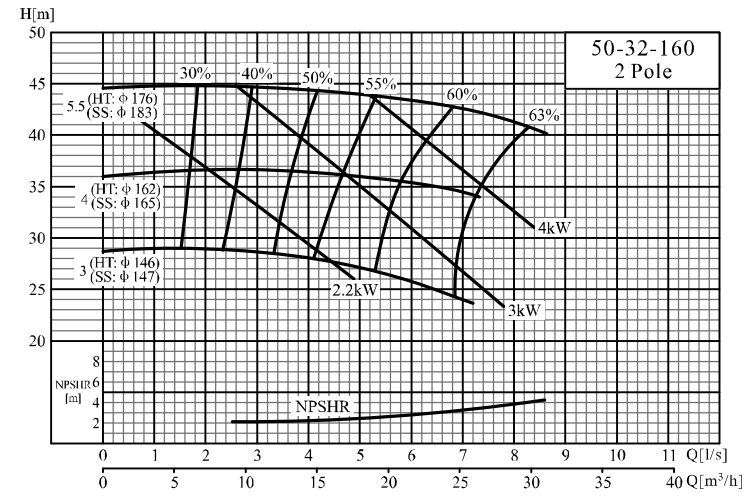
Models

4 Pole

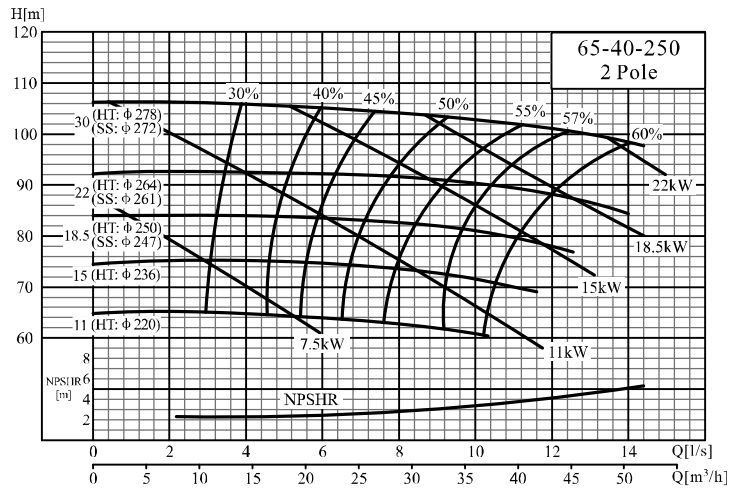
NO.	Model	Q[m <sup>3</sup> /h]	H [m]	Motor[kW]	n[r/min]		
75*	300-250-315(Q)/75	800	26	75	1480		
	300-250-315(Q)/90		90				
77*	300-250-315(Q)/110		35	110			
	300-250-400(Q)/110		110				
79*	300-250-400(Q)/132		45	132			
	300-250-400(Q)/160		160				
81*	300-250-400(Q)/200		62	200			
	300-250-315/75		1000	75			
83*	300-250-315/90			27			90
	300-250-315/110			110			
85*	300-250-400/132	37		132			
	300-250-400/160	160					
87*	300-250-400/200	50		200			

\* stands for this kind of products only have NIS structure.

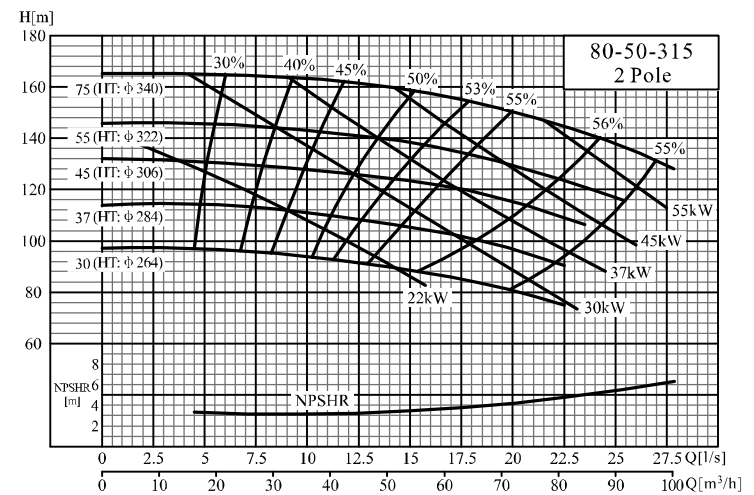
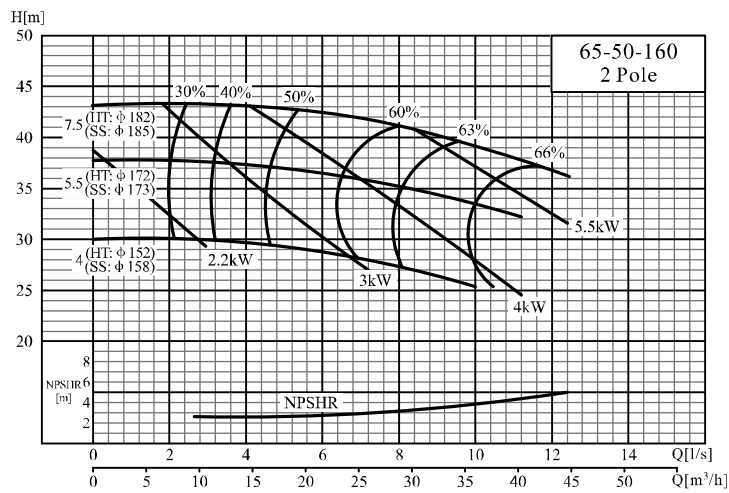
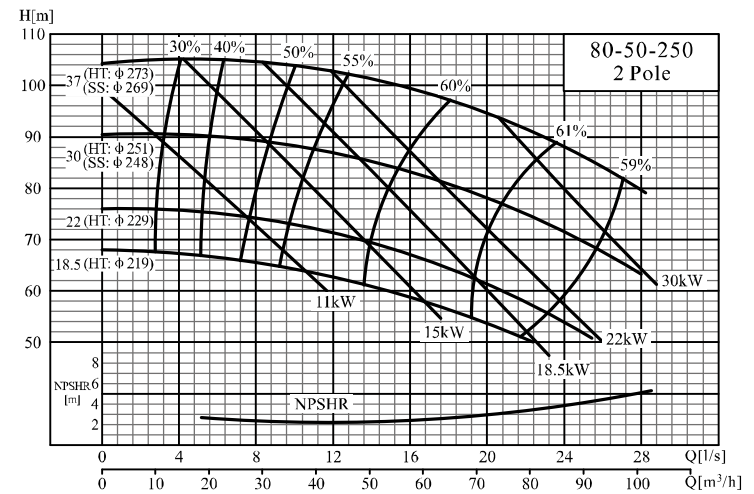
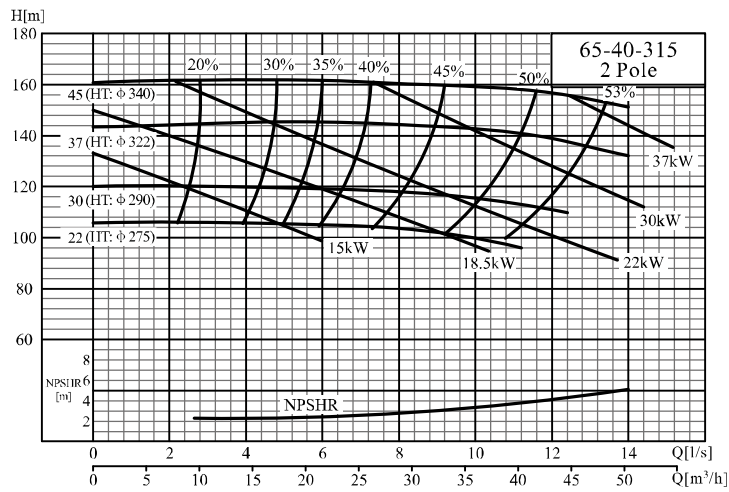
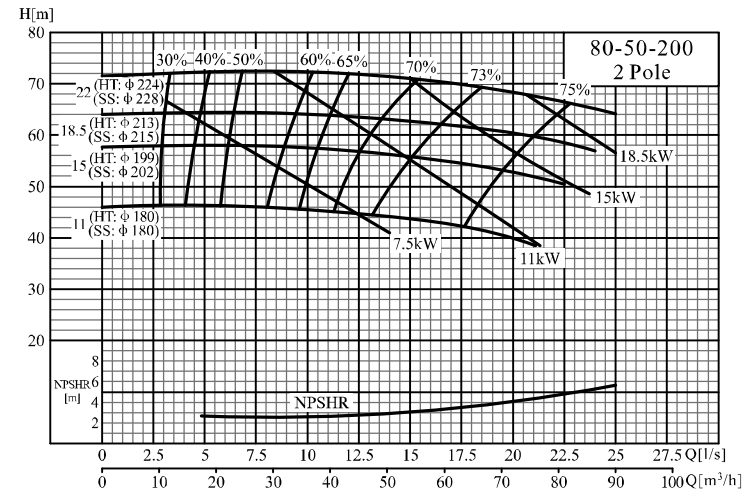
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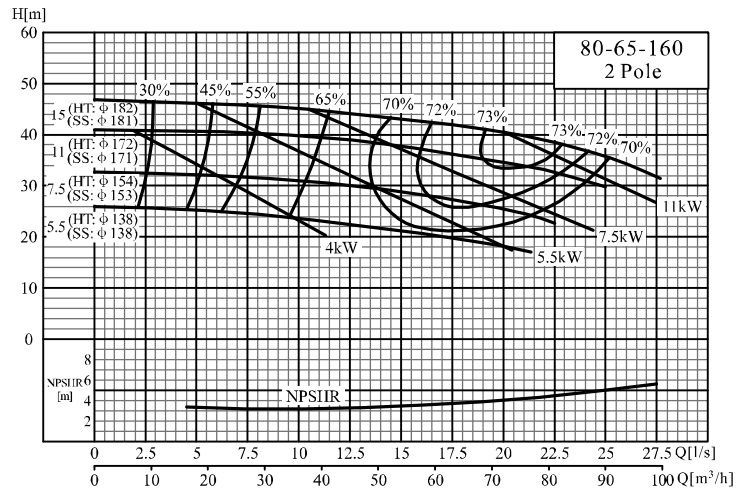
NISO65-40-250/NISO65-40-315/NISO65-50-160



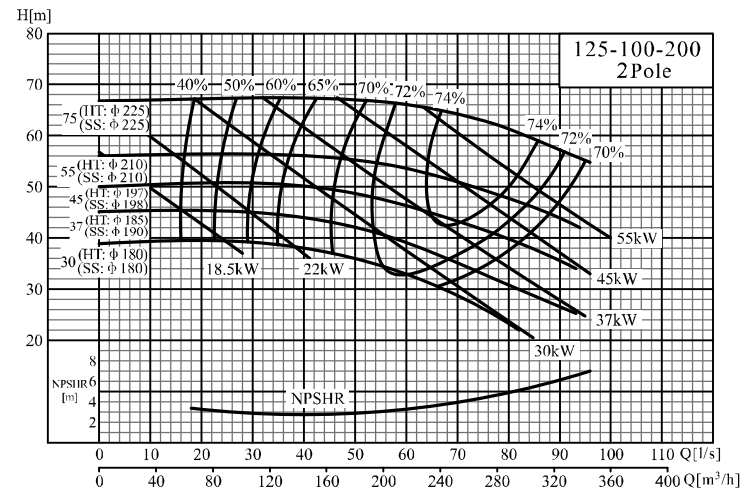
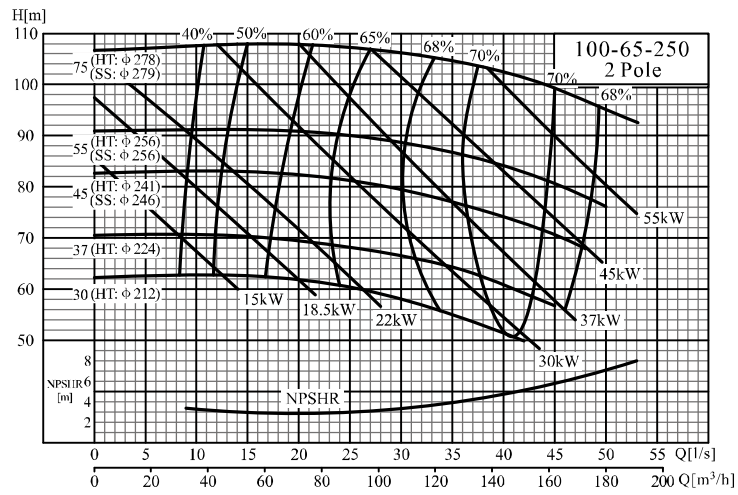
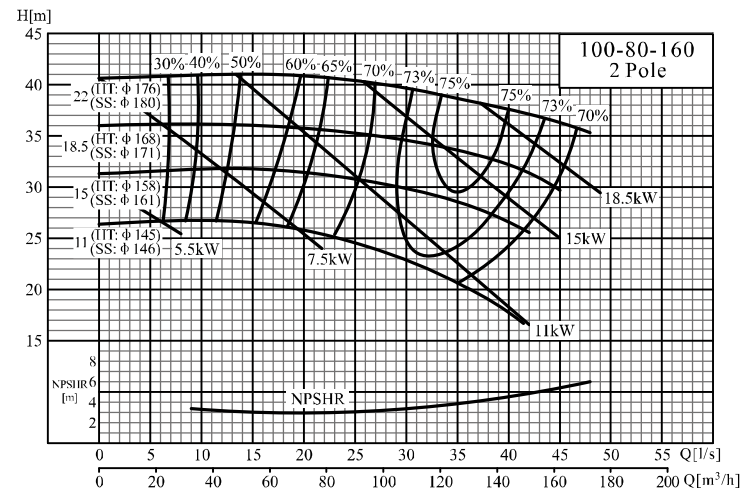
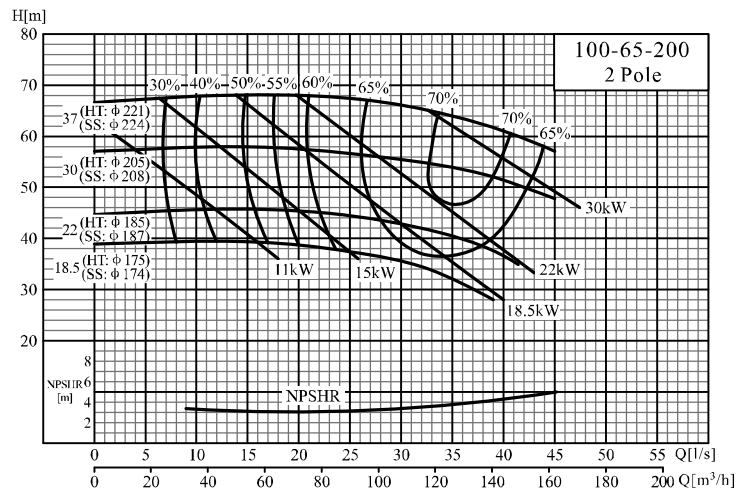
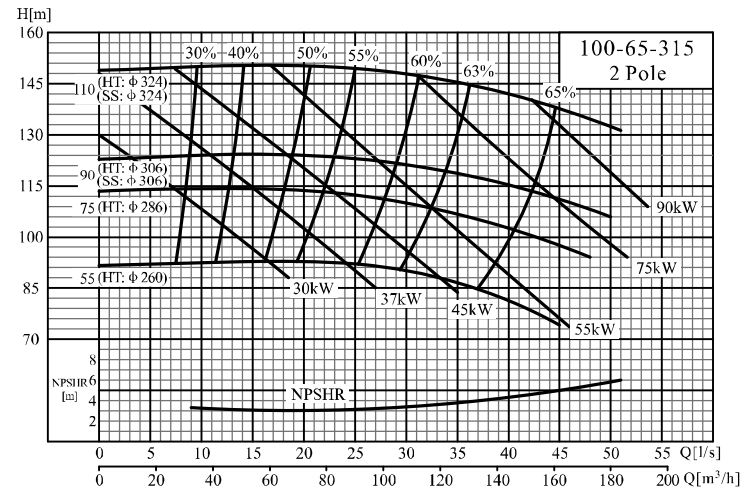
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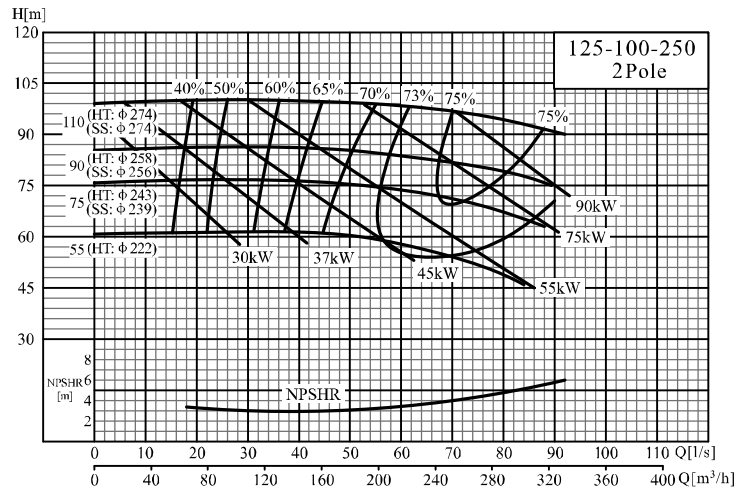
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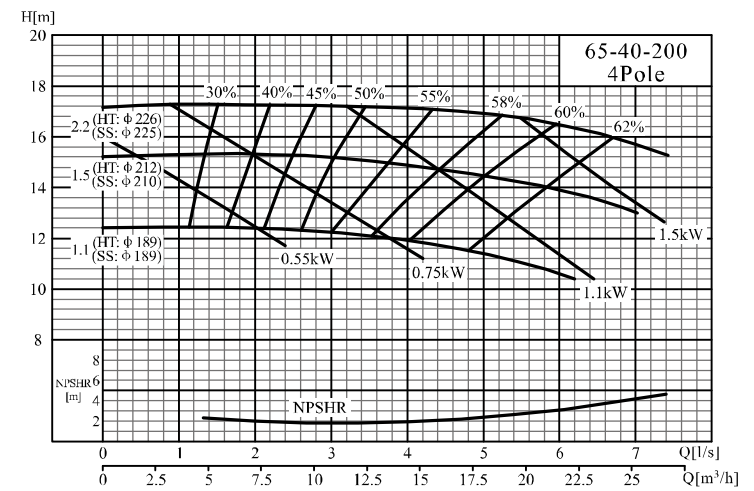
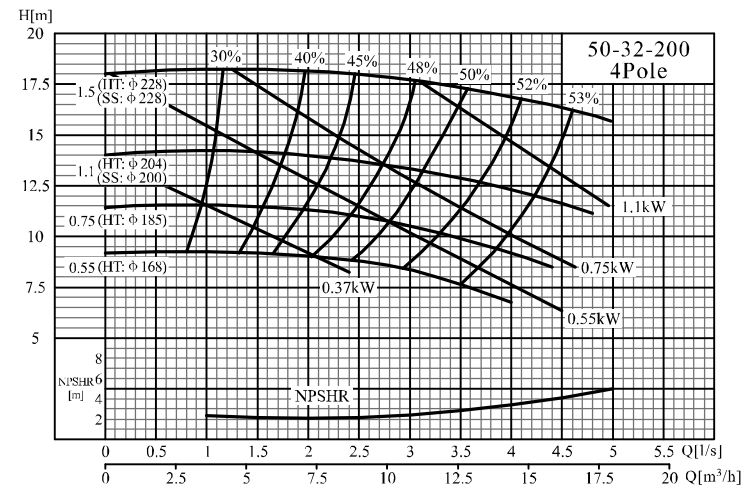
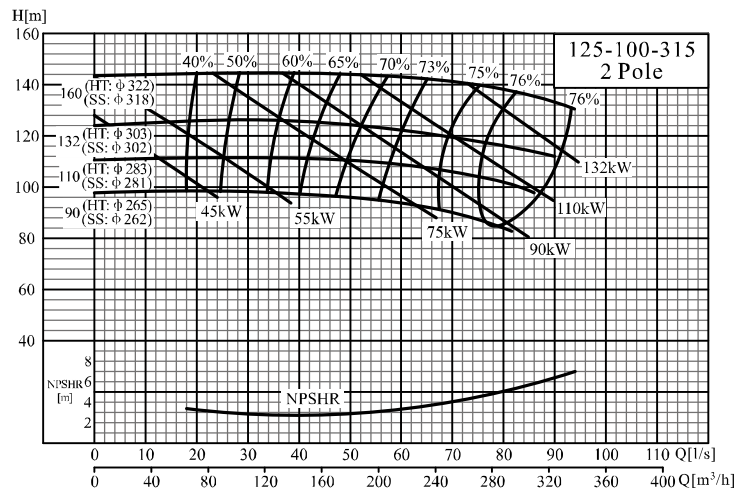
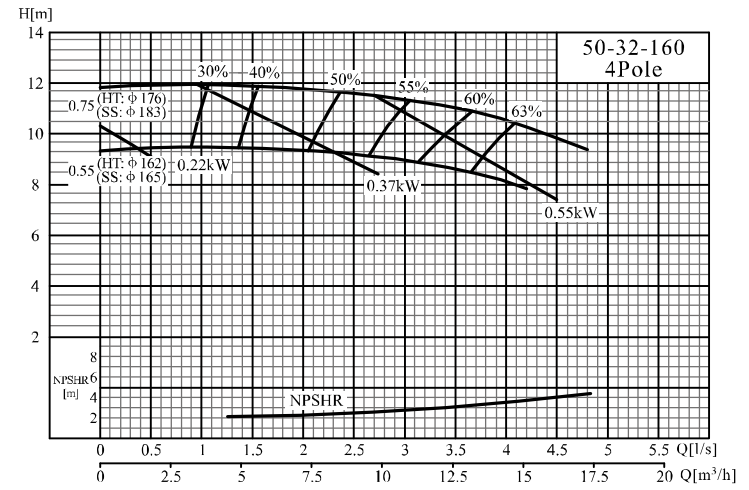
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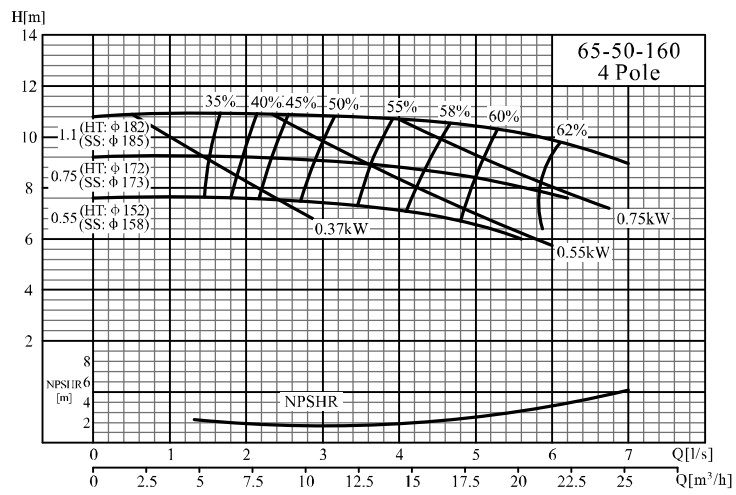
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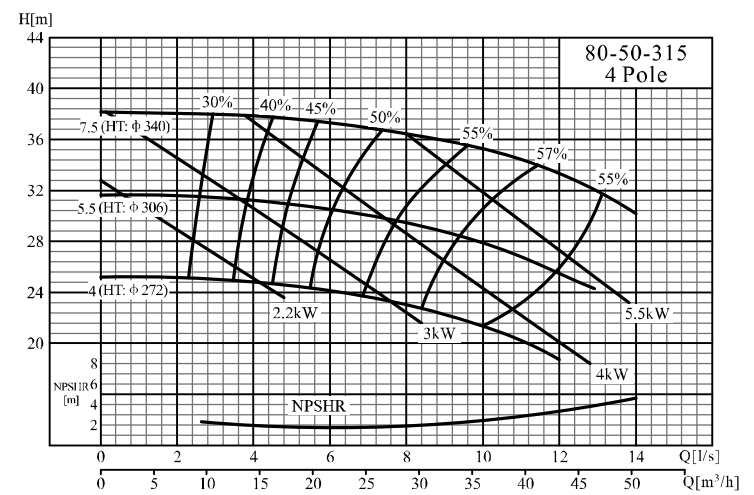
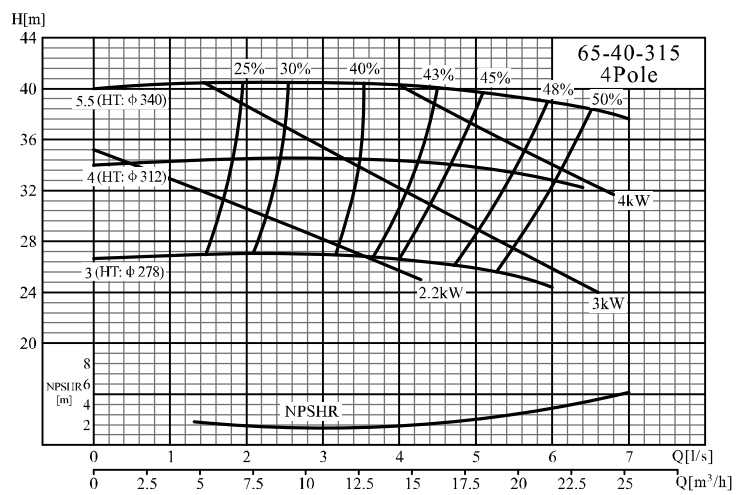
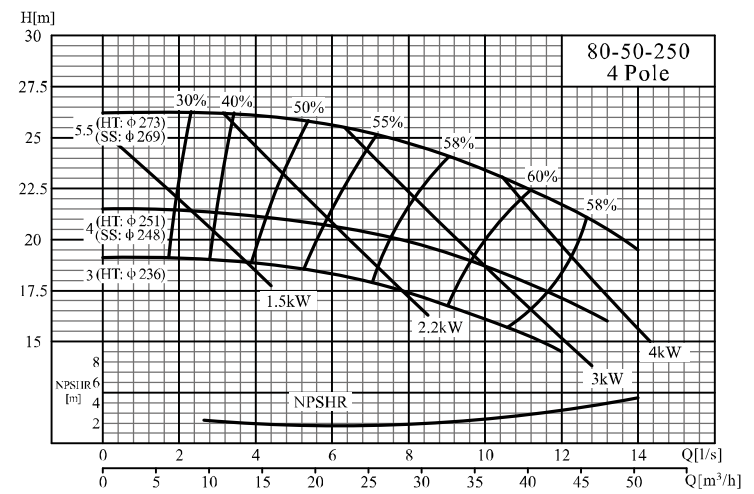
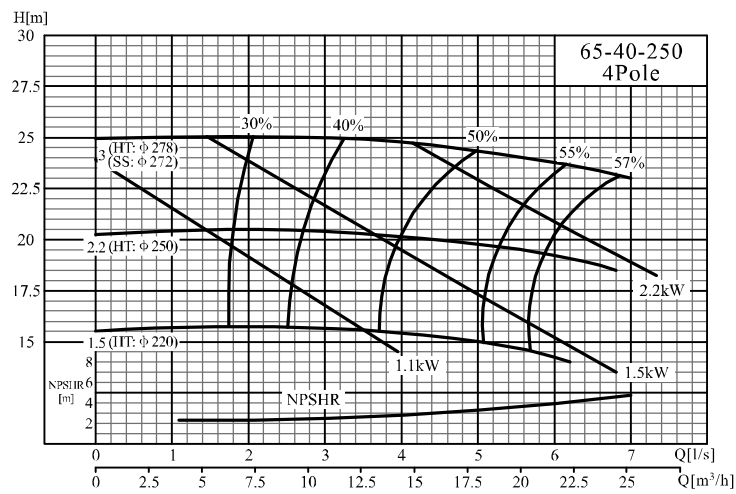
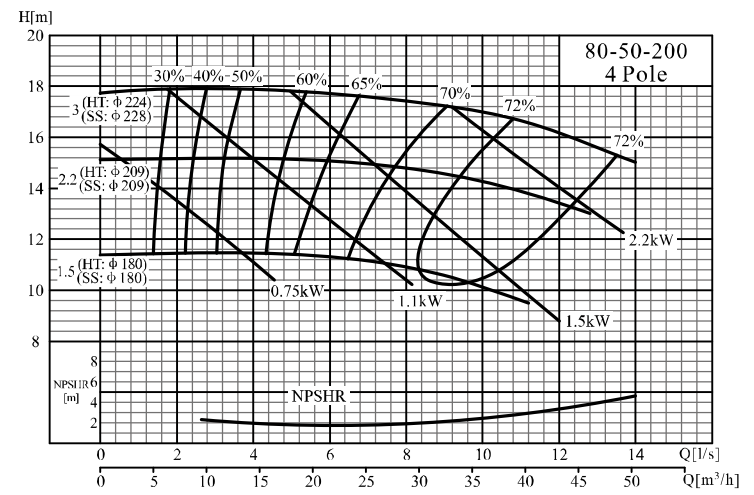
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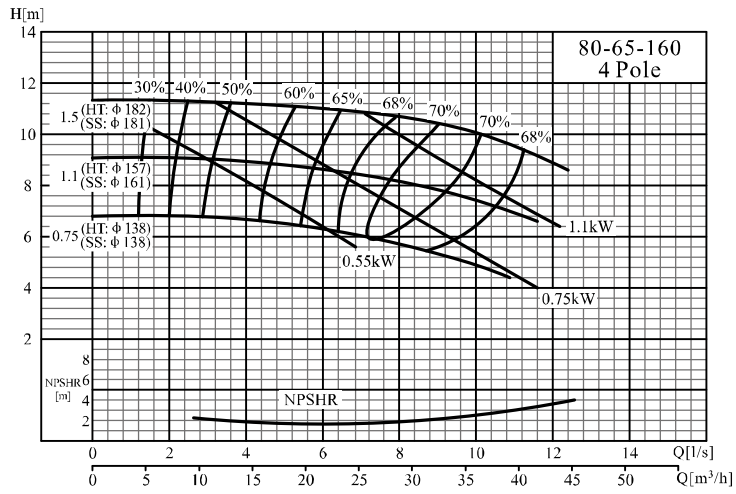
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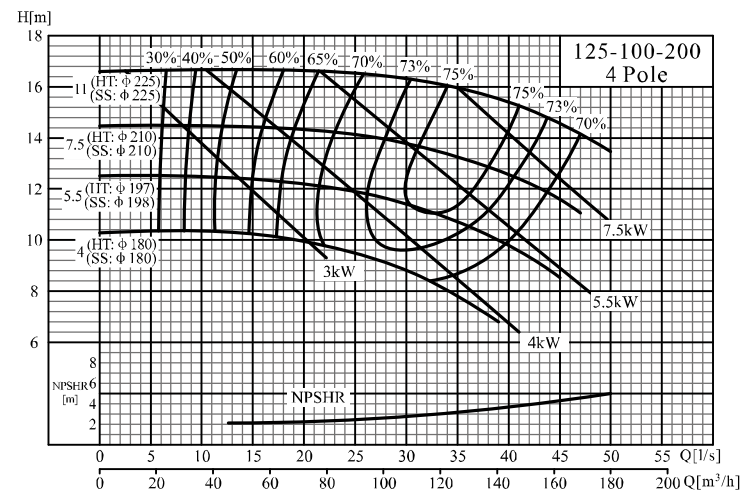
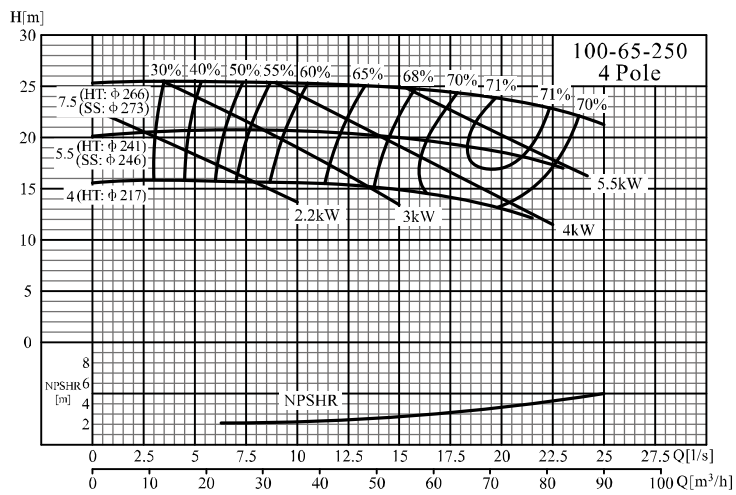
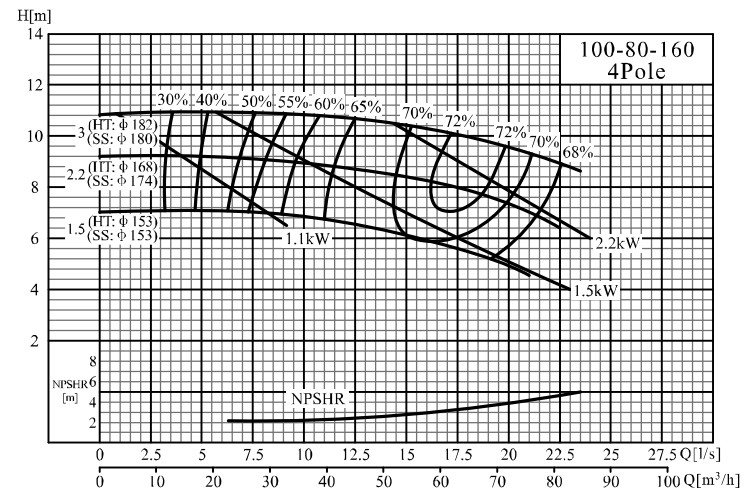
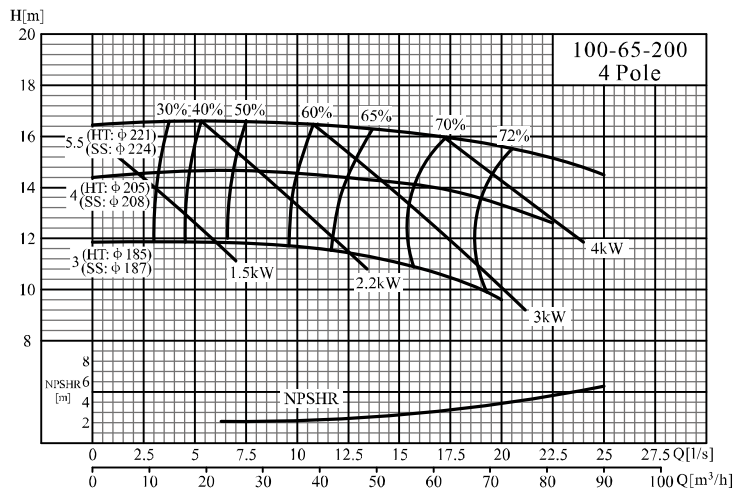
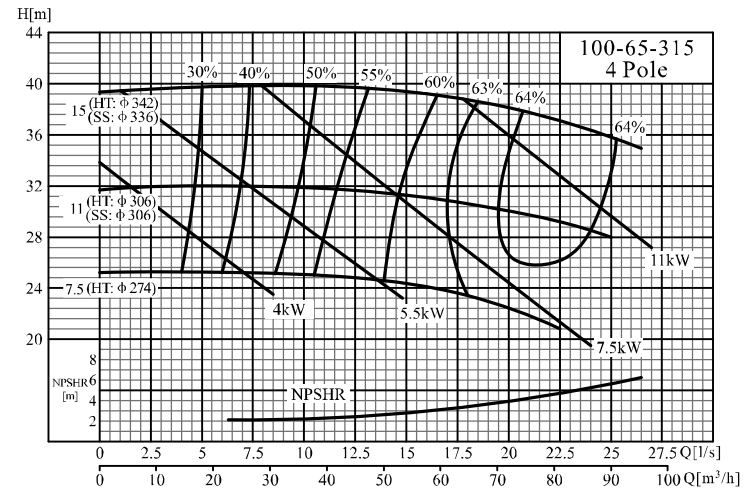
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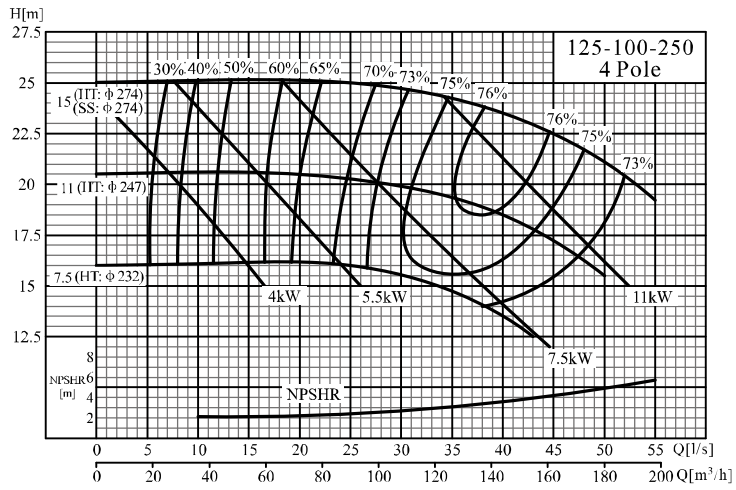
**NISO80-65-160/NISO100-65-200/NISO100-65-250**



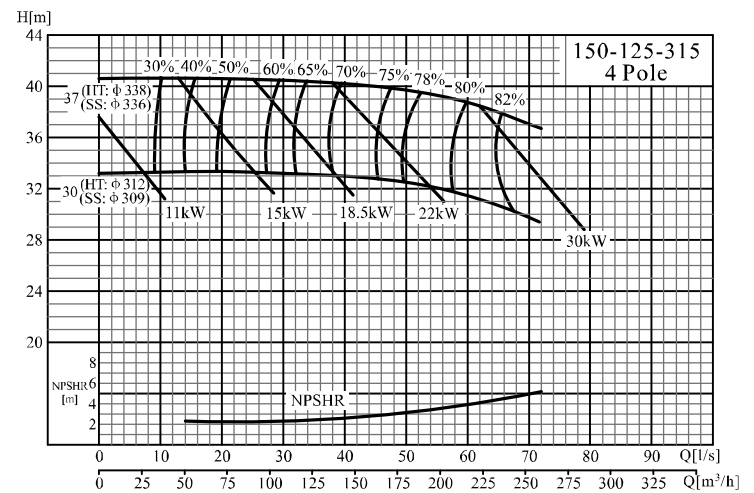
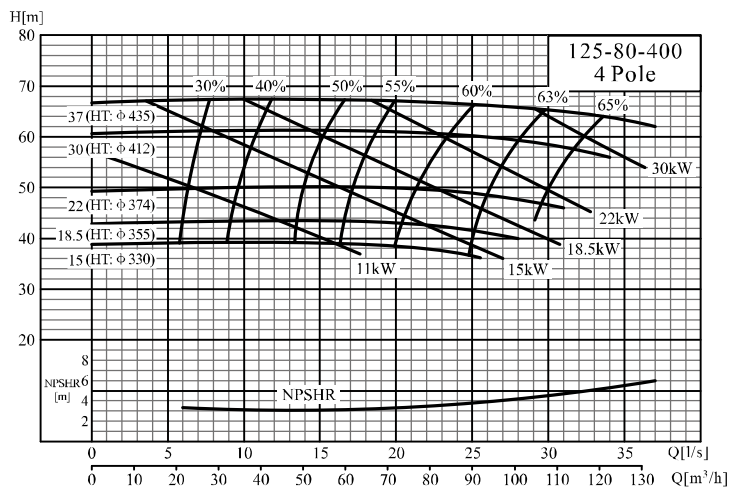
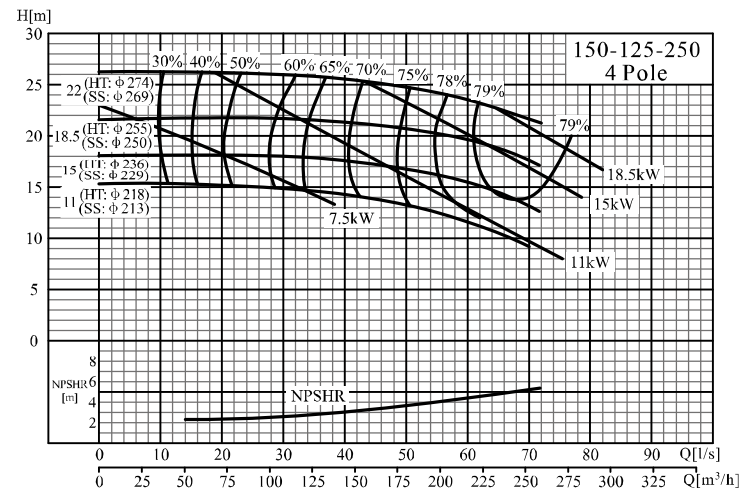
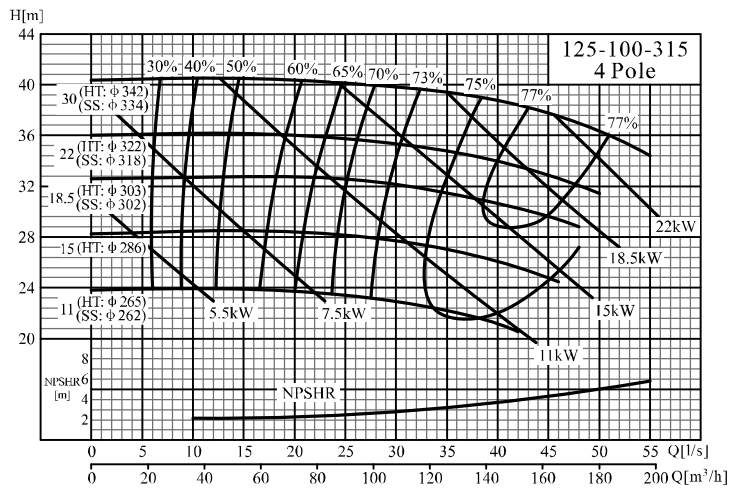
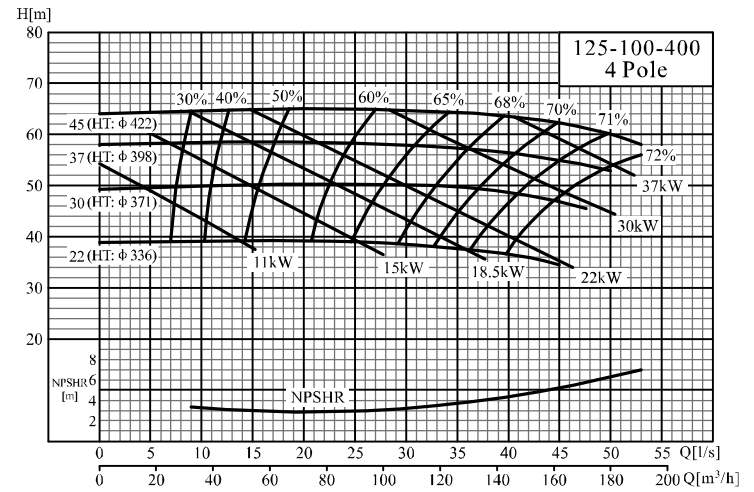
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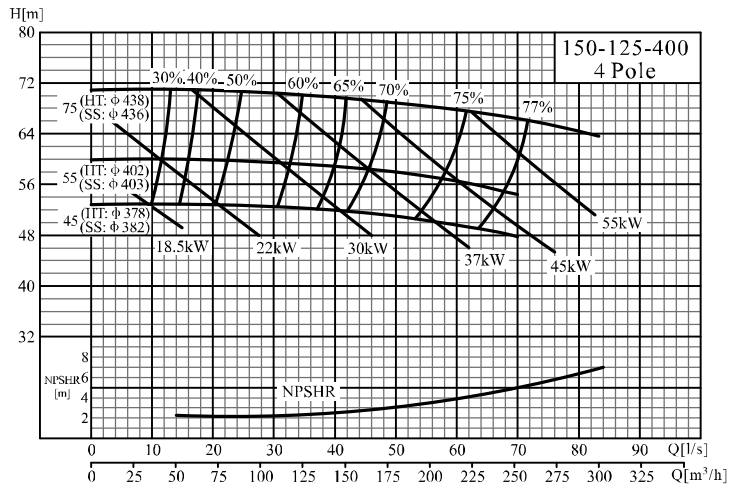
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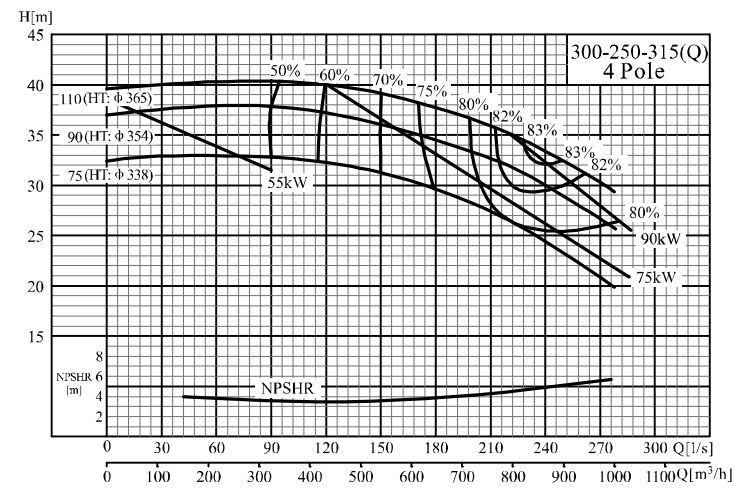
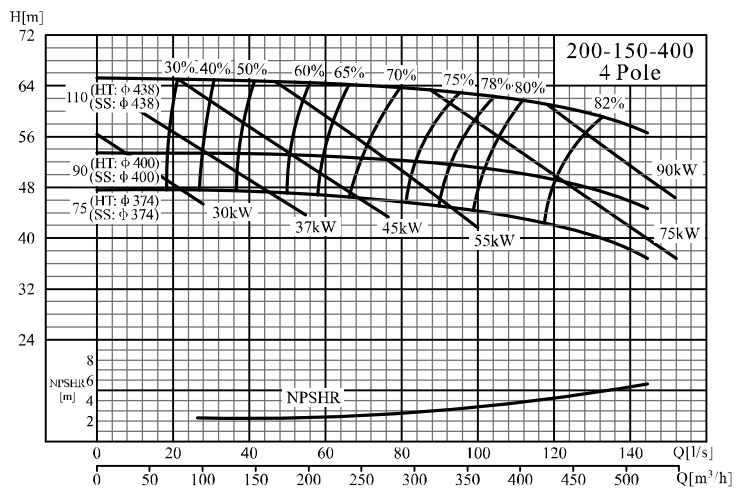
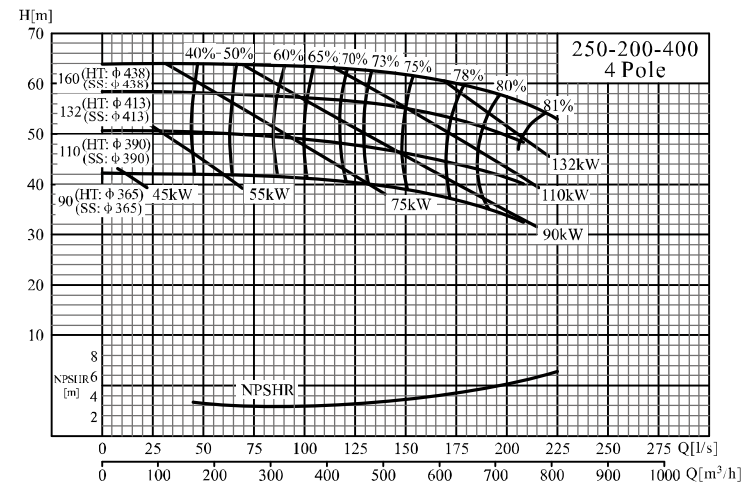
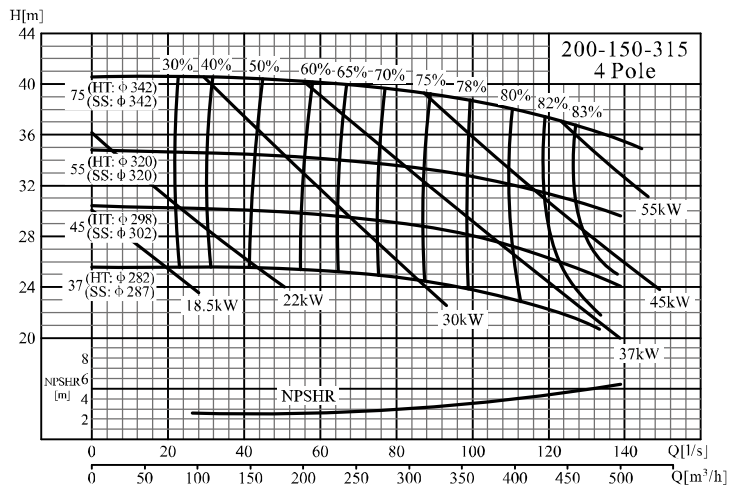
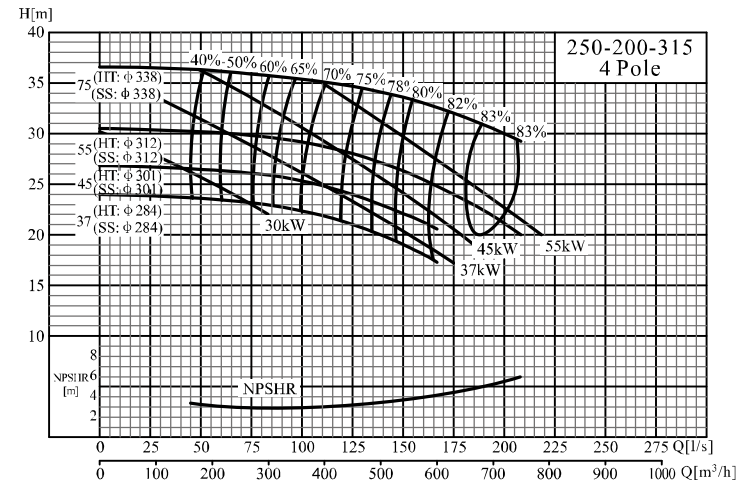
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NISO150-125-400/NISO200-150-315/NISO200-150-400

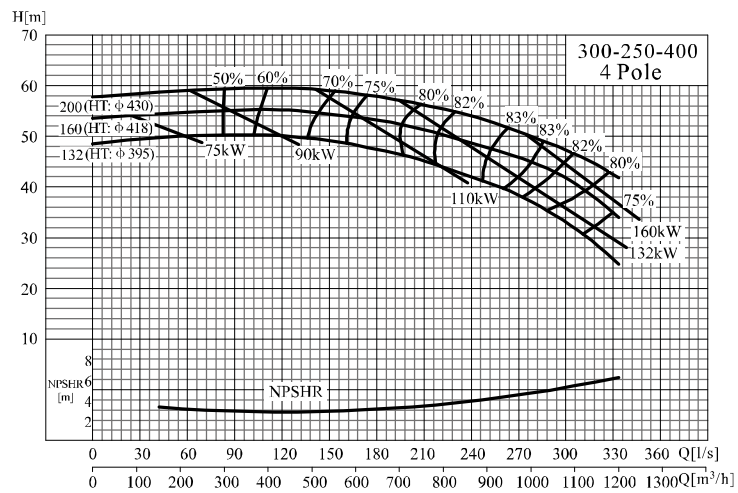
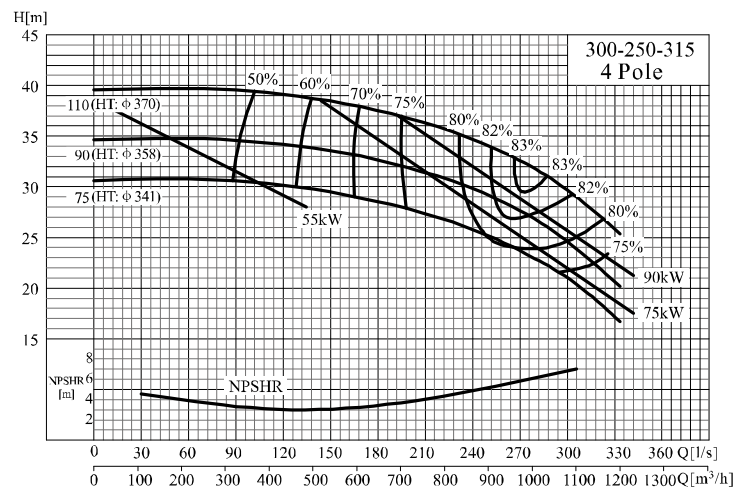
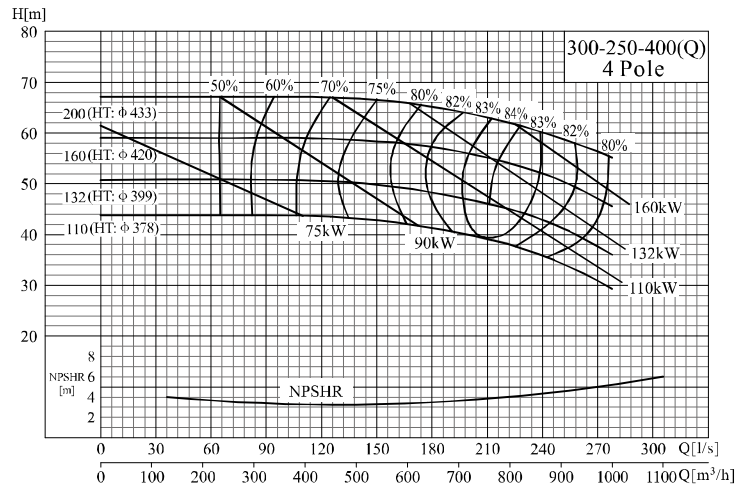


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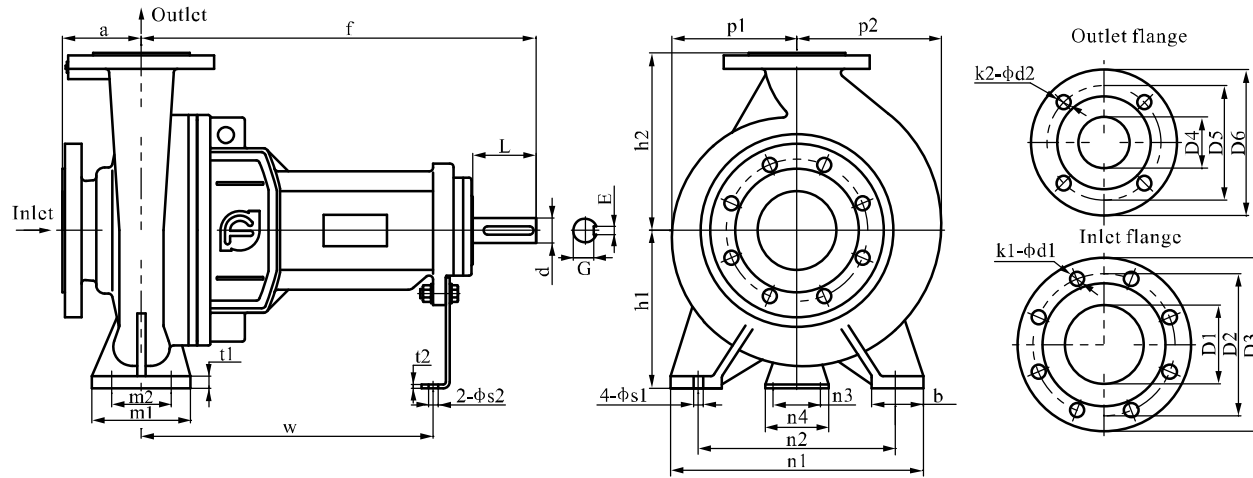




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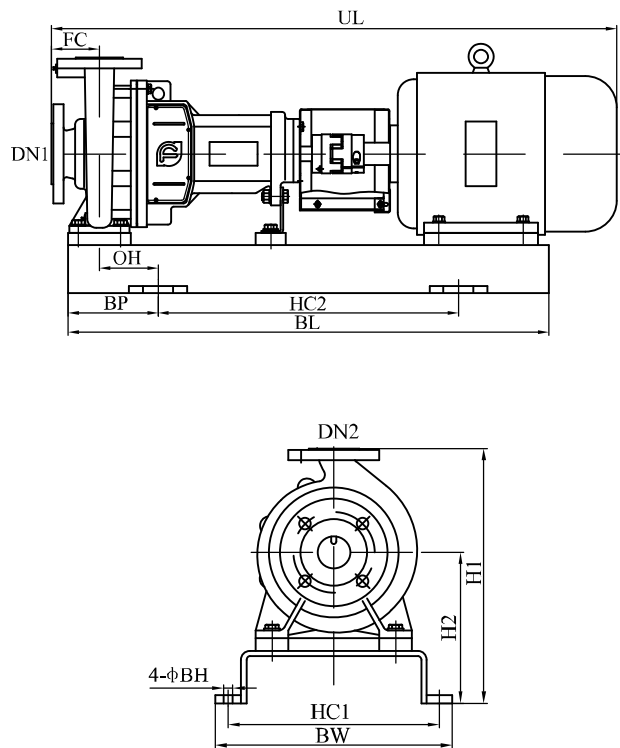
Pump dimensions



Pump dimension table

No.	Model	pump size						Installation dimension										Inlet flange size			Outlet flange size				size of pump shaft extension				Weight (kg)					
		a	f	h1	h2	b	p1	p2	m1	m2	n1	n2	n3	n4	t1	t2	w	s1	s2	D1	D2	D3	k1	d1	D4	D5	D6	k2		d2	D	L	E	G
1	50-32-160	80	385	132	160	50	118	128	100	70	240	190	110	160	12	6	285	14	14	50	125	165	4	18	32	100	140	4	18	24	50	8	20	38
2	50-32-200	80	385	160	180	50	139	147	100	70	240	190	110	160	12	6	285	14	14	50	125	165	4	18	32	100	140	4	18	24	50	8	20	43
3	65-50-160	80	385	132	160	50	121	136	100	70	240	190	110	160	12	6	285	14	14	65	145	185	4	18	50	125	165	4	18	24	50	8	20	41
4	65-40-200	100	385	160	180	50	140	151	100	70	265	212	110	160	13	6	285	14	14	65	145	185	4	18	40	110	150	4	18	24	50	8	20	45
5	65-40-250	100	500	180	225	65	166	176	125	95	320	250	110	160	14	6	370	14	14	65	145	185	4	18	40	110	150	4	18	32	80	10	27	68
6	65-40-315	125	500	200	250	65	194	200	125	95	345	280	110	160	16	6	370	14	14	65	145	185	4	18	40	110	150	4	18	32	80	10	27	84
7	80-65-160	100	385	160	180	50	124	143	100	70	265	212	110	160	13	6	285	14	14	80	160	200	8	18	65	145	185	4	18	24	50	8	20	44
8	80-50-200	100	385	160	200	52	147	161	100	70	265	212	110	160	13	6	285	14	14	80	160	200	8	18	50	125	165	4	18	24	50	8	20	48
9	80-50-250	125	500	180	225	65	167	179	125	95	320	250	110	160	15	6	370	14	14	80	160	200	8	18	50	125	165	4	18	32	80	10	27	71
10	80-50-315	125	500	225	280	65	204	215	125	95	345	280	110	160	18	6	370	14	14	80	160	200	8	18	50	125	165	4	18	32	80	10	27	90
11	100-65-200	100	500	180	225	65	159	183	125	95	320	250	110	160	14	6	370	14	14	100	180	220	8	18	65	145	185	4	18	32	80	10	27	67
12	100-65-250	125	500	200	250	80	180	201	160	120	360	280	110	160	16	6	370	18	14	100	180	220	8	18	65	145	185	4	18	32	80	10	27	82
13	100-65-315	125	530	225	280	80	210	228	160	120	400	315	110	160	18	6	370	18	14	100	180	220	8	18	65	145	185	4	18	42	110	12	37	120
14	100-80-160	100	500	160	200	65	132	160	125	95	280	212	110	160	14	6	370	14	14	100	180	220	8	18	80	160	200	8	18	32	80	10	27	70
15	125-80-400	125	530	280	355	80	261	279	160	120	435	355	110	160	20	6	370	18	14	125	210	250	8	18	80	160	200	8	18	42	110	12	37	158
16	125-100-200	125	500	200	280	80	175	210	160	120	360	280	110	160	17	6	370	18	14	125	210	250	8	18	100	180	220	8	18	32	80	10	27	88
17	125-100-250	140	530	225	280	80	193	225	160	120	400	315	110	160	18	6	370	18	14	125	210	250	8	18	100	180	220	8	18	42	110	12	37	122
18	125-100-315	140	530	250	315	80	224	250	160	120	400	315	110	160	19	6	370	18	14	125	210	250	8	18	100	180	220	8	18	42	110	12	37	137
19	125-100-400	140	530	280	355	100	265	287	200	150	500	400	110	160	20	6	370	18	14	125	210	250	8	18	100	180	220	8	18	42	110	12	37	163
20	150-125-250	140	530	250	355	80	204	244	160	120	400	315	110	160	19	6	370	18	14	150	240	285	8	22	125	210	250	8	18	42	106	12	37	129
21	150-125-315	140	530	280	355	100	236	271	200	150	500	400	110	160	20	6	370	22	14	150	240	285	8	22	125	210	250	8	18	42	106	12	37	157
22	150-125-400	140	530	315	400	100	273	301	200	150	500	400	110	160	21	6	370	22	14	150	240	285	8	22	125	210	250	8	18	42	106	12	37	181
23	200-150-315	160	670	315	400	82	255	304	200	150	515	450	140	180	25	10	500	22	18	200	295	340	12	22	150	240	285	8	22	60	110	18	53	222
24	200-150-400	160	670	315	450	82	291	330	200	150	515	450	140	180	25	10	500	22	18	200	295	340	12	22	150	240	285	8	22	60	110	18	53	293
25	250-200-315	180	670	315	450	82	278	344	200	150	515	450	140	180	25	10	500	22	18	250	355	405	12	26	200	295	340	12	22	60	110	18	53	258
26	250-200-400	180	670	380	450	82	314	367	200	150	515	450	140	180	25	10	500	22	18	250	355	405	12	26	200	295	340	12	22	60	110	18	53	328

NISO 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	392	232	296	500	336	750	125	14	72.5	857	80	50	32	95
	4	392	232	296	500	336	750	125	14	72.5	875	80	50	32	109
	5.5	392	232	325	500	365	800	150	14	97.5	941	80	50	32	133
50-32-200	7.5	440	243	340	600	380	860	130	14	77.5	941	80	50	32	146
	11	440	260	380	600	420	950	175	18	121	1077	80	50	32	190
65-40-200	7.5	440	260	325	500	365	800	150	14	97.5	961	100	65	40	145
	11	440	260	380	600	420	950	175	18	121	1097	100	65	40	192
65-40-250	15	440	260	380	600	420	950	175	18	121	1097	100	65	40	208
	18.5	505	280	380	800	420	1080	140	18	73.5	1282	100	65	40	255
65-40-315	22	505	280	420	800	480	1100	150	18	81.5	1319	100	65	40	291
	30	525	300	460	800	500	1180	190	18	121.5	1379	100	65	40	363
	22	550	300	420	800	460	1100	150	18	81.5	1344	125	65	40	307
65-40-315	30	570	320	455	800	495	1200	200	18	131.5	1412	125	65	40	392
	37	570	320	455	800	495	1200	200	18	131.5	1412	125	65	40	403
	45	590	340	510	800	560	1250	225	22	155	1466	125	65	40	453
65-50-160	4	392	232	296	500	336	750	125	14	72.5	875	80	65	50	112
	5.5	392	232	325	500	365	800	150	14	97.5	941	80	65	50	135
	7.5	392	232	325	500	365	800	150	14	97.5	941	80	65	50	141

To be continued

Model	Power (kW)	H1	H2	HC1	HC2	BW	BL	BP	BH	OH	UL	FC	DN1	DN2	Total weight (kg)
80-50-200	11	460	260	380	600	420	950	175	18	121	1097	100	80	50	194
	15	460	260	380	600	420	950	175	18	121	1097	100	80	50	210
	18.5	460	260	380	600	420	950	175	18	121	1137	100	80	50	222
	22	480	280	420	700	460	1000	150	18	96	1194	100	80	50	268
80-50-250	30	525	300	460	800	500	1180	190	18	121.5	1404	125	80	50	367
	37	525	300	460	800	495	1180	190	18	121.5	1404	125	80	50	377
80-50-315	37	625	345	455	800	495	1200	200	18	131.5	1402	125	80	50	410
	45	625	345	510	800	560	1250	225	22	155	1466	125	80	50	451
	55	650	370	575	900	625	1300	200	22	130	1547	125	80	50	573
80-65-160	75	680	400	620	800	670	1400	300	22	230	1620	125	80	50	703
	5.5	440	260	325	500	365	800	150	14	97.5	961	100	80	65	139
	7.5	440	260	325	500	365	800	150	14	97.5	961	100	80	65	144
	11	440	260	380	600	420	950	175	18	121	1097	100	80	65	191
100-65-200	15	440	260	380	600	420	950	175	18	121	1097	100	80	65	206
	18.5	505	280	380	800	420	1080	140	18	73.5	1282	100	100	65	254
	22	505	280	420	800	460	1100	150	18	81.5	1319	100	100	65	290
100-65-250	30	525	300	460	800	500	1180	190	18	121.5	1379	100	100	65	362
	37	525	300	460	800	500	1180	190	18	121.5	1379	100	100	65	372
	45	590	340	510	800	550	1250	225	22	141.5	1466	125	100	65	444
100-65-315	55	620	370	575	900	625	1350	225	22	141.5	1547	125	100	65	576
	75	650	400	620	800	670	1400	300	22	214	1620	125	100	65	695
100-80-160	90	680	400	620	900	670	1450	275	22	189	1700	125	100	65	771
	110	720	440	710	1000	760	1500	250	22	164	1909	125	100	65	1278
125-100-200	11	460	260	380	800	420	1080	140	18	73.5	1212	100	100	80	221
	15	460	260	380	800	420	1080	140	18	73.5	1212	100	100	80	237
	18.5	460	260	380	800	420	1080	140	18	73.5	1282	100	100	80	253
	22	480	280	420	800	460	1100	150	18	83.5	1319	100	100	80	293
125-100-250	30	600	320	455	800	495	1200	200	18	119	1412	125	125	100	390
	37	600	320	455	800	495	1200	200	18	119	1412	125	125	100	400
	45	620	340	510	800	560	1250	225	22	141.5	1466	125	125	100	449
125-100-315	55	650	370	575	900	625	1350	225	22	141.5	1547	125	125	100	580
	75	680	400	620	800	670	1400	300	22	214	1620	125	125	100	699
	75	680	400	620	800	670	1400	300	22	214	1665	140	125	100	734
125-100-250	90	680	400	620	900	670	1450	275	22	189	1715	140	125	100	774
	110	720	440	710	1000	760	1500	250	22	164	1924	140	125	100	1278
125-100-315	90	715	400	620	900	670	1450	275	22	189	1715	140	125	100	784
	110	755	440	710	1000	760	1500	250	22	164	1909	140	125	100	1238
	132	755	440	710	1000	760	1560	280	22	194	2034	140	125	100	1344
160	755	440	710	1000	760	1560	280	22	194	2034	140	125	100	1441	

# NISO

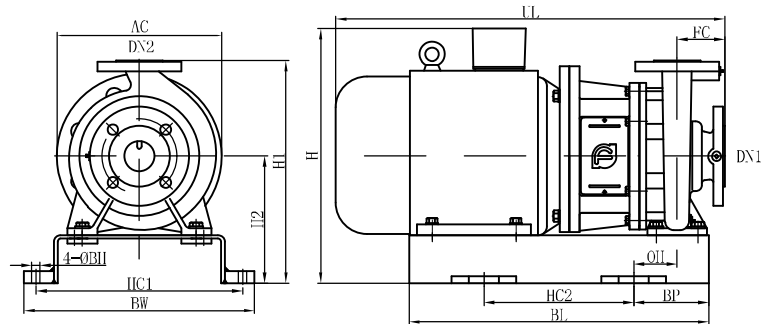
## Pump set dimension table 4 Pole

Model	Power (kW)	H1	H2	HC1	HC2	BW	BL	BP	BH	OH	UL	FC	DN1	DN2	Total weight (kg)
50-32-160	0.55	392	232	296	500	336	700	100	14	47.5	755	80	50	32	78
	0.75	392	232	296	500	336	700	100	14	47.5	755	80	50	32	79
50-32-200	1.1	440	260	296	500	336	750	125	14	72.5	794	80	50	32	89
	1.5	440	260	296	500	336	750	125	14	72.5	819	80	50	32	91
65-40-200	1.1	440	260	325	500	365	750	125	14	72.5	824	100	65	40	92
	1.5	440	260	325	500	365	750	125	14	72.5	849	100	65	40	94
65-40-250	2.2	440	260	325	500	365	750	125	14	72.5	887	100	65	40	107
	3	505	280	376	600	416	920	160	14	95	992	100	65	40	141
65-40-315	4	550	300	405	600	445	900	150	14	85	1045	125	65	40	171
	5.5	550	300	405	600	445	950	175	14	110	1101	125	65	40	192
65-50-160	0.55	392	232	296	500	336	700	100	14	47.5	755	80	65	50	81
	0.75	392	232	296	500	336	700	100	14	47.5	755	80	65	50	81
80-50-200	1.1	392	232	296	500	336	700	100	14	47.5	794	80	65	50	85
	1.5	460	260	325	500	365	750	125	14	72.5	849	100	80	50	96
80-50-250	2.2	460	260	325	500	365	750	125	14	72.5	877	100	80	50	109
	3	460	260	325	500	365	750	125	14	72.5	877	100	80	50	113
80-50-315	4	505	280	376	600	416	920	160	14	95	1042	125	80	50	155
	5.5	505	280	376	600	416	920	160	14	95	1107	125	80	50	173
80-50-315	5.5	605	325	405	600	445	950	175	18	108.5	1101	125	80	50	199
	7.5	605	325	405	600	445	950	175	18	108.5	1141	125	80	50	211
80-65-160	0.75	440	260	325	500	365	700	100	14	47.5	775	100	80	65	84
	1.1	440	260	325	500	365	750	125	14	72.5	824	100	80	65	91
100-65-200	1.5	440	260	325	500	365	750	125	14	72.5	849	100	80	65	93
	3	505	280	376	600	416	920	160	14	95	992	100	100	65	140
100-65-250	4	505	280	376	600	416	920	160	14	95	1017	100	100	65	150
	5.5	505	280	376	600	416	920	160	14	95	1082	100	100	65	169
100-65-315	5.5	550	300	420	600	460	980	190	14	110	1111	125	100	65	190
	7.5	550	300	420	600	460	980	190	18	110	1151	125	100	65	203
100-65-315	11	605	325	460	800	500	1120	160	18	80	1267	125	100	65	298
	15	605	325	460	800	500	1120	160	18	80	1307	125	100	65	312
100-80-160	1.5	460	260	340	600	380	860	130	14	65	954	100	100	80	124
	2.2	460	260	340	600	380	860	130	14	65	982	100	100	80	135
125-80-400	3	460	260	340	600	380	860	130	14	65	982	100	100	80	139
	15	735	380	500	800	540	1150	175	18	94	1317	125	125	80	362
125-80-400	18.5	735	380	500	800	540	1150	175	18	94	1374	125	125	80	381
	22	735	380	510	800	560	1220	210	22	126.5	1404	125	125	80	418
125-80-400	30	735	380	510	800	560	1220	210	22	126.5	1442	125	125	80	474
	37	755	400	510	800	560	1250	225	22	141.5	1481	125	125	80	548
125-100-200	4	580	300	420	600	460	900	150	14	70	1045	125	125	100	171
	5.5	580	300	420	600	460	980	190	18	110	1111	125	125	100	195
125-100-250	7.5	580	300	420	600	460	980	190	18	110	1151	125	125	100	207
	11	580	300	420	800	460	1100	150	18	70	1237	125	125	100	263
125-100-315	15	605	325	460	800	500	1120	160	18	80	1322	140	125	100	312
	11	665	350	460	800	500	1120	160	18	79	1282	140	125	100	314
125-100-315	18.5	665	350	460	800	500	1180	190	18	109	1379	140	125	100	354
	22	665	350	460	800	500	1180	190	18	109	1409	140	125	100	380
125-100-400	30	665	350	510	800	560	1220	210	22	126.5	1457	140	125	100	452
	37	735	380	570	800	620	1220	210	22	110	1447	140	125	100	478
150-125-250	37	755	400	575	900	625	1300	200	22	100	1496	140	125	100	552
	45	755	400	575	900	625	1300	200	22	100	1531	140	125	100	581
150-125-250	11	705	350	460	800	500	1120	160	18	79	1282	140	150	125	309
	15	705	350	460	800	500	1120	160	18	79	1322	140	150	125	324
150-125-250	18.5	705	350	460	800	500	1180	190	18	109	1379	140	150	125	349
	22	705	350	460	800	500	1180	190	18	109	1409	140	150	125	375

## To be continued

Model	Power (kW)	H1	H2	HC1	HC2	BW	BL	BP	BH	OH	UL	FC	DN1	DN2	Total weight (kg)
150-125-315	30	735	380	570	800	620	1220	210	22	110	1447	140	150	125	483
	37	755	400	575	900	625	1300	200	22	100	1496	140	150	125	559
150-125-400	45	835	435	575	900	625	1300	200	22	100	1531	140	150	125	607
	55	835	435	575	900	625	1350	225	22	125	1592	140	150	125	709
200-150-315	75	835	435	620	800	670	1400	300	22	200	1665	140	150	125	844
	37	835	435	620	800	670	1400	300	22	200	1656	160	200	150	628
200-150-315	45	835	435	595	900	645	1500	300	22	200	1691	160	200	150	659
	55	835	435	595	900	645	1500	300	22	200	1752	160	200	150	762
200-150-400	75	835	435	625	1000	675	1600	300	22	200	1835	160	200	150	903
	75	885	435	625	1000	675	1600	300	22	200	1835	160	200	150	973
200-150-400	90	885	435	625	1000	675	1600	300	22	200	1885	160	200	150	1024
	110	885	435	710	1200	760	1700	250	22	150	2124	160	200	150	1467
250-200-315	37	885	435	620	800	670	1400	300	22	200	1676	180	250	200	663
	45	885	435	595	900	645	1500	300	22	200	1711	180	250	200	694
250-200-315	55	885	435	595	900	645	1500	300	22	200	1772	180	250	200	798
	75	885	435	625	1000	675	1600	300	22	200	1855	180	250	200	943
250-200-400	90	950	500	625	1000	675	1600	300	22	200	1905	180	250	200	1075
	110	950	500	710	1200	760	1700	250	22	150	2144	180	250	200	1524
250-200-400	132	950	500	710	1200	760	1750	275	22	175	2244	180	250	200	1606
	160	950	500	710	1200	760	1750	275	22	175	2244	180	250	200	1710

NIS,NIF Pump set dimension



Pump set dimension table 2 Pole

Model	Power (kW)	H	H1	H2	HC1	HC2	BW	BL	BP	BH	OH	UL	FC	DN1	DN2	Total weight (kg)
50-32-160	3	382	372	212	306	250	336	450	100	14	47.5	563	80	50	32	75
	4	400	372	212	306	250	336	450	100	14	47.5	578	80	50	32	81
	5.5	425	372	212	335	300	365	500	100	14	47.5	650	80	50	32	105
50-32-200	7.5	453	420	240	350	300	380	500	100	14	46	650	80	50	32	120
	11	500	420	240	390	350	420	600	125	18	71	787	80	50	32	175
65-40-200	7.5	453	420	240	335	300	365	500	100	14	47.5	670	100	65	40	120
	11	500	420	240	390	350	420	600	125	18	71	807	100	65	40	177
	15	500	420	240	390	350	420	600	125	18	71	807	100	65	40	187
65-40-250	18.5	520	485	260	390	400	420	660	130	18	63.5	865	100	65	40	222
	22	535	485	260	430	400	460	700	150	18	81.5	895	100	65	40	257
	30	585	505	280	470	450	500	750	150	18	81.5	967	100	65	40	318
65-40-315	22	555	530	280	430	400	460	700	150	18	81.5	920	125	65	40	270
	30	585	530	280	465	500	495	800	150	18	81.5	992	125	65	40	340
	37	585	530	280	465	500	495	800	150	18	81.5	992	125	65	40	359
	45	640	555	305	520	500	560	820	160	22	90	1042	125	65	40	428
	55	715	600	350	585	550	625	950	200	22	116.5	1156	125	65	40	529
65-50-160	4	400	372	212	306	250	336	450	100	14	47.5	578	80	50	32	83
	5.5	425	372	212	335	300	365	500	100	14	47.5	650	80	50	32	107
	7.5	425	372	212	335	300	365	500	100	14	47.5	650	80	50	32	110

To be continued

2 Pole

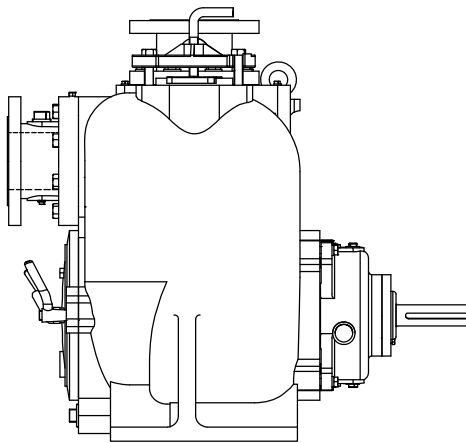
Model	Power (kW)	H	H1	H2	HC1	HC2	BW	BL	BP	BH	OH	UL	FC	DN1	DN2	Total weight (kg)
80-50-200	11	500	440	240	390	350	420	600	125	18	71	807	100	80	50	181
	15	500	440	240	390	350	420	600	125	18	71	807	100	80	50	191
	18.5	500	440	240	390	400	420	660	130	18	76	862	100	80	50	211
	22	535	460	260	430	400	460	700	150	18	96	892	100	80	50	254
80-50-250	30	585	505	280	470	450	500	750	150	18	81.5	992	125	80	50	320
	37	585	505	280	470	450	500	750	150	18	81.5	992	125	80	50	339
80-50-315	37	610	585	305	465	500	495	800	150	18	81.5	992	125	80	50	370
	45	640	585	305	520	500	560	820	160	22	90	1042	125	80	50	434
	55	715	630	350	585	550	625	950	200	22	130	1156	125	80	50	534
80-65-160	7.5	453	420	240	335	300	365	500	100	14	47.5	670	100	80	65	115
	11	500	420	240	390	350	420	600	125	18	71	807	100	80	65	175
	15	500	420	240	390	350	420	600	125	18	71	807	100	80	65	185
	18.5	520	485	260	390	400	420	660	130	18	63.5	865	100	65	40	222
	22	535	485	260	430	400	460	700	150	18	81.5	895	100	65	40	257
100-65-200	30	585	505	280	470	450	500	750	150	18	81.5	967	100	100	65	318
	37	585	505	280	470	450	500	750	150	18	81.5	967	100	100	65	337
100-65-250	45	640	555	305	520	500	560	820	160	22	90	1042	125	100	65	426
	55	715	600	350	585	550	625	950	200	22	116.5	1156	125	100	65	529
	75	780	630	380	630	600	670	1000	200	22	114	1231	125	100	65	673
100-65-315	90	780	660	380	630	600	670	1100	250	22	164	1295	125	100	65	730
	110	945	695	415	720	600	760	1100	250	22	164	1530	125	100	65	1161
	132	945	730	415	720	700	760	1220	260	22	174	1655	140	125	100	1230
100-80-160	11	500	440	240	390	400	420	660	130	18	63.5	810	100	100	80	177
	15	500	440	240	390	400	420	660	130	18	63.5	810	100	100	80	187
	18.5	500	440	240	390	400	420	660	130	18	63.5	865	100	100	80	207
	22	535	460	260	430	400	460	700	150	18	83.5	895	100	100	80	248
125-100-200	30	585	560	280	465	500	495	800	150	18	69	992	125	125	100	349
	37	585	560	280	465	500	495	800	150	18	69	992	125	125	100	368
	45	640	585	305	520	500	560	820	160	22	76.5	1042	125	125	100	431
	55	715	630	350	585	550	625	950	200	22	116.5	1156	125	125	100	534
	75	780	660	380	630	600	670	1000	200	22	114	1231	125	125	100	678
125-100-250	75	780	660	380	630	600	670	1000	200	22	114	1265	140	125	100	701
	90	780	660	380	630	600	670	1100	250	22	164	1315	140	125	100	738
	110	945	695	415	720	600	760	1100	250	22	164	1523	140	125	100	1169
125-100-315	90	780	695	380	630	600	670	1100	250	22	164	1310	140	125	100	744
	110	945	730	415	720	600	760	1100	250	22	164	1545	140	125	100	1170
	132	945	730	415	720	700	760	1220	260	22	174	1655	140	125	100	1230
	160	945	730	415	720	700	760	1220	260	22	174	1655	140	125	100	1350

Pump set dimension table 4 Pole

Model	Power (kW)	H	H1	H2	HC1	HC2	BW	BL	BP	BH	OH	UL	FC	DN1	DN2	Total weight (kg)
50-32-160	0.55	352	372	212	306	250	336	400	75	14	22.5	483	80	50	32	44
	0.75	352	372	212	306	250	336	400	75	14	22.5	483	80	50	32	45
50-32-200	1.1	400	420	240	306	250	336	400	75	14	22.5	498	80	50	32	71
	1.5	400	420	240	306	250	336	400	75	14	22.5	523	80	50	32	78
65-40-200	1.1	400	420	240	335	250	365	400	75	14	22.5	518	100	65	40	73
	1.5	400	420	240	335	250	365	400	75	14	22.5	543	100	65	40	80
65-40-250	2.2	410	420	240	335	250	365	450	100	14	47.5	583	100	65	40	91
	3	430	485	260	386	300	416	500	100	14	35	591	100	65	40	109
65-40-315	4	468	530	280	415	300	445	500	100	14	35	631	125	65	40	128
	5.5	493	530	280	415	300	445	500	100	14	35	687	125	65	40	151
65-50-160	0.55	352	372	212	306	250	336	400	75	14	22.5	483	80	65	50	47
	0.75	352	372	212	306	250	336	400	75	14	22.5	483	80	65	50	47
80-50-200	1.1	372	372	212	306	250	336	400	75	14	22.5	498	80	65	50	63
	1.5	400	440	240	335	250	365	400	75	14	22.5	543	100	80	50	84
80-50-250	2.2	410	440	240	335	250	365	450	100	14	47.5	583	100	80	50	95
	3	410	440	240	335	250	365	450	100	14	47.5	583	100	80	50	100
80-50-315	4	448	485	260	386	300	416	500	100	14	35	631	125	80	50	116
	5.5	473	485	260	386	300	416	500	100	14	35	687	125	80	50	137
80-50-315	5.5	518	585	305	415	350	445	550	100	18	33.5	687	125	80	50	155
	7.5	518	585	305	415	350	445	550	100	18	33.5	727	125	80	50	169
80-65-160	0.75	380	420	240	335	250	365	400	75	14	22.5	503	100	80	65	67
	1.1	400	420	240	335	250	365	400	75	14	22.5	518	100	80	65	71
100-65-200	1.5	400	420	240	335	250	365	400	75	14	22.5	543	100	80	65	78
	3	430	485	260	386	300	416	500	100	14	35	591	100	100	65	109
100-65-250	4	448	485	260	386	300	416	500	100	14	35	631	125	100	65	114
	5.5	473	485	260	386	300	416	500	100	14	35	662	100	100	65	135
100-65-315	5.5	493	530	280	430	350	460	550	100	14	20	687	125	100	65	147
	7.5	493	530	280	430	350	460	550	100	18	20	727	125	100	65	166
100-80-160	11	565	585	305	470	400	500	700	150	18	70	854	125	100	65	249
	15	565	585	305	470	400	500	700	150	18	70	909	125	100	65	270
125-80-400	1.5	400	440	240	350	200	380	410	105	14	40	536	100	100	80	91
	2.2	410	440	240	350	300	380	500	100	14	35	591	100	100	80	87
125-100-200	3	410	440	240	350	300	380	500	100	14	35	591	100	100	80	92
	15	620	715	360	510	450	540	750	150	18	68	911	125	125	80	334
125-100-250	18.5	635	715	360	510	450	540	750	150	18	68	941	125	125	80	369
	22	635	715	360	520	450	560	750	150	22	66.5	981	125	125	80	391
125-100-315	30	665	715	360	520	500	560	820	160	22	76.5	1015	125	125	80	440
	37	695	715	360	520	500	560	820	160	22	76.5	1058	125	125	80	498
125-100-400	4	468	560	280	430	300	460	500	100	14	20	631	125	125	100	136
	5.5	493	560	280	430	350	460	550	100	18	20	687	125	125	100	152
125-100-250	7.5	493	560	280	430	350	460	550	100	18	20	727	125	125	100	171
	11	540	560	280	430	400	460	650	125	18	45	835	125	125	100	222
125-100-315	15	565	585	305	470	400	500	700	150	18	70	924	140	125	100	278
	11	590	645	330	470	400	500	700	150	18	69	869	140	125	100	261
125-100-400	18.5	605	645	330	470	450	500	750	150	18	69	954	140	125	100	317
	22	605	645	330	470	450	500	750	150	18	69	994	140	125	100	335
125-100-400	30	635	645	330	520	500	560	820	160	22	76.5	1028	140	125	100	394
	30	665	715	360	580	500	620	800	150	22	50	1028	140	125	100	444
125-100-400	37	715	735	380	585	550	625	950	200	22	100	1071	140	125	100	523
	45	715	735	380	585	550	625	950	200	22	100	1101	140	125	100	552

To be continued

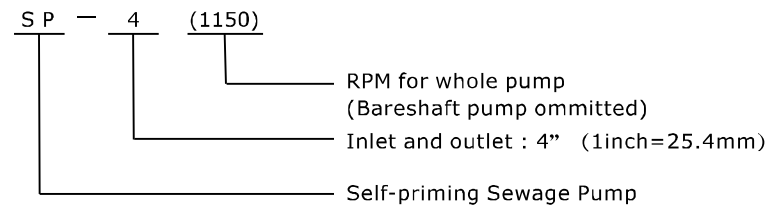
Model	Power (kW)	H	H1	H2	HC1	HC2	BW	BL	BP	BH	OH	UL	FC	DN1	DN2	Total weight (kg)
150-125-250	11	590	685	330	470	400	500	700	150	18	69	869	140	150	125	257
	15	590	685	330	470	400	500	700	150	18	69	924	140	150	125	284
	18.5	605	685	330	470	450	500	750	150	18	69	954	140	150	125	315
	22	605	685	330	470	450	500	750	150	18	69	994	140	150	125	333
150-125-315	30	665	715	360	580	500	620	800	150	22	50	1028	140	150	125	430
	37	715	735	380	585	550	625	950	200	22	100	1071	140	150	125	507
150-125-400	45	750	815	415	585	550	625	950	200	22	100	1103	140	150	125	561
	55	780	815	415	585	550	625	950	200	22	100	1187	140	150	125	620
	75	815	815	415	630	600	670	1000	200	22	100	1262	140	150	125	776
200-150-315	37	750	815	415	605	500	670	900	200	22	100	1116	160	200	150	541
	45	750	815	415	605	500	645	900	200	22	100	1146	160	200	150	579
	55	780	815	415	605	600	645	1000	200	22	100	1254	160	200	150	650
200-150-400	75	815	815	415	630	600	675	1100	250	22	150	1329	160	200	150	806
	75	815	865	415	630	600	675	1100	250	22	150	1329	160	200	150	859
250-200-315	90	815	865	415	630	600	675	1100	250	22	150	1379	160	200	150	956
	110	945	865	415	720	700	760	1220	260	22	160	1614	160	200	150	1325
250-200-400	37	750	865	415	605	500	670	900	200	22	100	1136	180	250	200	592
	45	750	865	415	605	500	645	900	200	22	100	1166	180	250	200	630
	55	780	865	415	605	600	645	1100	250	22	150	1274	180	250	200	695
	75	815	865	415	630	600	675	1100	250	22	150	1349	180	250	200	840
300-250-315(Q)	90	845	930	480	630	600	675	1100	250	22	150	1399	180	250	200	1015
	110	1010	930	480	720	750	760	1250	250	22	150	1634	180	250	200	1400
	132	1010	930	480	720	700	760	1220	260	22	160	1744	180	250	200	1495
	160	1010	930	480	720	700	760	1220	260	22	160	1744	180	250	200	1564
300-250-400(Q)	75	930	930	475	810	750	850	1250	250	22	90	1356	225	300	250	1120
	90	930	930	475	810	750	850	1250	250	22	90	1406	225	300	250	1182
	110	1005	930	475	810	750	850	1250	250	22	90	1743	225	300	250	1518
300-250-315	110	1055	1025	525	810	750	850	1250	250	22	90	1611	225	300	250	1582
	132	1055	1025	525	810	900	850	1400	250	22	90	1721	225	300	250	1676
	160	1055	1025	525	810	900	850	1400	250	22	90	1721	225	300	250	1777
	200	1055	1025	525	810	900	850	1400	250	22	90	1721	225	300	250	1853
300-250-400	75	930	930	475	810	750	850	1250	250	22	90	1356	225	300	250	1120
	90	930	930	475	810	750	850	1250	250	22	90	1406	225	300	250	1182
300-250-400	110	1005	930	475	810	750	850	1250	250	22	90	1743	225	300	250	1518
	132	1055	1025	525	810	900	850	1400	250	22	90	1721	225	300	250	1676
	160	1055	1025	525	810	900	850	1400								



SP Non-clogging self-priming sewage pump

## SP

### Definition of model



### Features

SP Non-clogging self-priming sewage pump is our latest developed product, and is suitable for the treatment project of municipal sewage and industrial sewage as well as stage treatment and concentrated treatment system of various sewages. It's known as "King of Self-priming Sewage Pump", and it is the most ideal new-generation sewage product.

- Stable performance, reliable operation.
- Rapid self-priming, high suction head.
- Back-pull-out construction: Convenient for maintenance and troubleshooting. Daily maintenance can be performed rapidly by common tools, saving time and labor.
- Semi-open impeller structure and non-clogging design: Strong passing capacity. Diameter of maximum passing grain for SP-6 is 76mm.
- Convenient usage: The pump can be mounted near cesspit, with only the suction pipe down in the liquid. (The pump shall be filled with water for first start).

### Application

- Non-flammable and non-explosive liquid.
- Rain water and common sewage.
- Municipal drainage project, construction site, drainage station of people's air defense system.
- Industrial sewage of light industry, paper mill, textile, food processing plant, chemical industry, electric utility, mines, etc.
- Sewage discharge in the residential area.
- Sewage and deposit of water purifying system.
- Tanning industry, sewage of slaughter house, fish breeding in the river and pond.
- Wine and sugar industry.
- Discharge not strongly corrosive but seriously polluted sewage.

### Operating limits

- Liquid temperature: 0 °C ~ 40 °C, medium density  $\leq 1.2 \times 10^3 \text{ kg/m}^3$ , pH 5 ~ 9.
- Volume ratio of solids in the medium  $\leq 2\%$ .
- Diameter of maximum grain: SP-2 38mm, SP-3 63mm, SP-4/SP-6/SP-8/SP-10 76mm.
- Ambient temperature:  $\leq 40$  °C.
- Altitude: Max. 1,000m.
- Flow range:  $10 \text{ m}^3/\text{h} \sim 750 \text{ m}^3/\text{h}$ .
- Head range: 3m ~ 38m.
- Power: 1.1kW ~ 90kW.
- Max. Working pressure: See Performance Curve.
- Max. Suction head: See Performance Table.

### Installation conditions

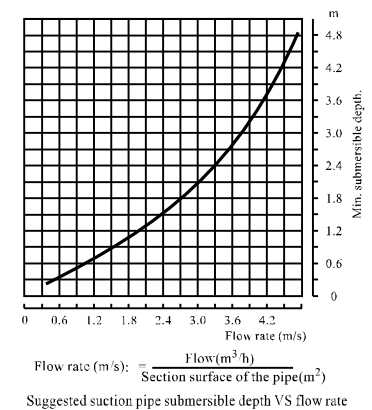
- Suction pipe can be soft pipe or hard pipe, the material of pipes shall be suitable for the pumped liquid. Soft pipe shall be hard enough to prevent from flat when suction.
- Suction pipe shall be short and straight, use less joints and accessories as less as possible. For joints, the radius shall be bigger.
- The distance between the submersible suction pipe in the sump and the wall of the sump shall be 1.5 times than the radius of the pipe. Suction pipe shall not installed in the sump near the whirlpool. If there is, there shall be one baffle between suction pipe and water. The distance shall be 1.5 times than the radius of the pipe.
- If there are two suction in the sump, the pipe distance shall be three times than the radius of the pipe.
- Submersible depth of the submersible suction pipe:

The submersible depth of the suction pipe relates to the flow rate in the pipe. See drawing one

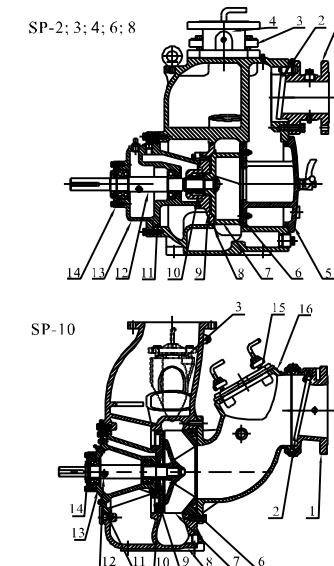
To reduce the submersible depth, we can enlarge the pipe radius or reduce the flow rate of the water. We can use increasing joint to enlarge the radius pipe. The suggested times is 1.3 times to 1.5 times.

- In flooded status, there is inlet pressure. It shall not exceed 50% of the max. working pressure.

- If use the strainer, the face area of the strainer shall be 4 to 6 times than the radius of the pipe. And ensure the max. dia. of the strainer hole to pass granules shall be less than the granule pump allowed.



### Section drawing

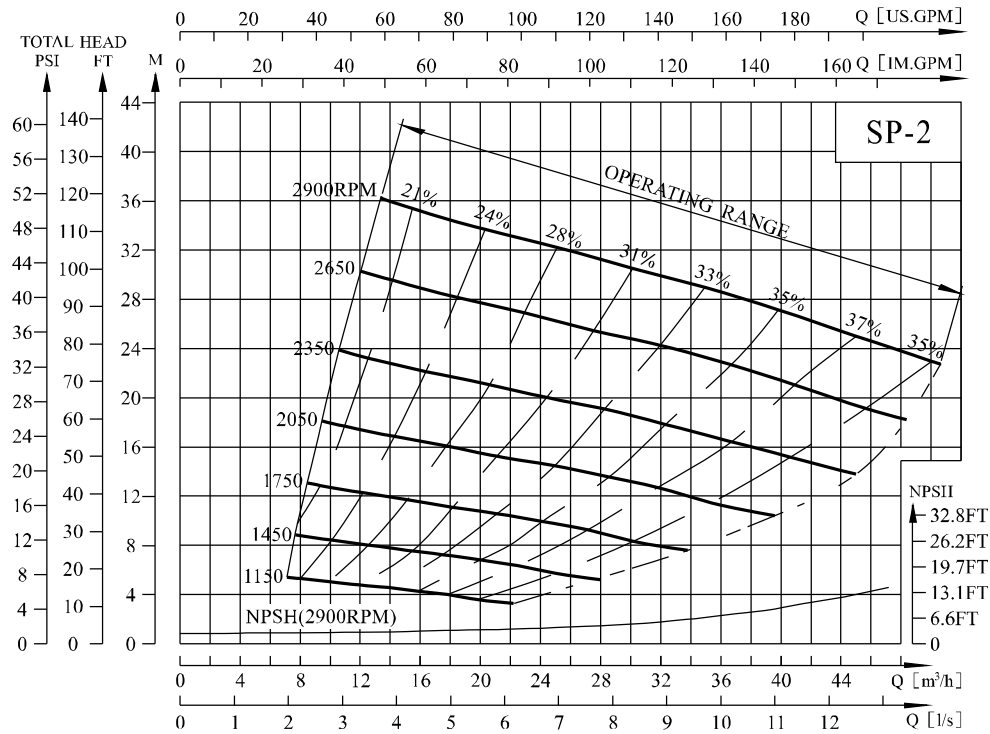


### Material

NO.	Parts	Material
1	Suction Inlet	Cast iron
2	Flap Valve	NBR+ Carbon steel
3	Infusion Cover	Cast iron
4	Discharge Outlet	Cast iron
5	End Cover	Cast iron
6	Wear Plate	Carbon steel
7	Impeller	DCI Cast steel
8	Volute	Cast iron
9	Impeller Cover	Cast iron
10	Mechanical Seal	WC/ WC
11	O-Ring	NBR/FPM
12	Shaft	Stainless steel
13	Bearing Body	Cast iron
14	Bearing Cover	Cast iron
15	Inlet cover	Cast iron
16	Inlet	Cast iron



**Performance curve**



**SP-2 Performance Table**

Model	RPM	Q		H (m)	Motor		Inlet & Outlet (2")	Max. Solids (mm)	Max. Suction Head (m)
		(m³/h)	(l/s)		(kW)	(hp)			
SP-2	1150	15	4.2	4.0	1.1	1.5	50	38	5.0
	1450*	20	5.6	6.5	1.5	2			6.5
	1750	25	6.9	9.5	3	4			6.5
	2050	28	7.8	13.5	4	5.5			6.5
	2350	32	8.9	18.0	7.5	10			6.5
	2650	35	9.7	23.0	7.5	10			6.5
	2900*	40	11.1	27.0	9.2	12.5			6.5

**SP-2 Operating Table**

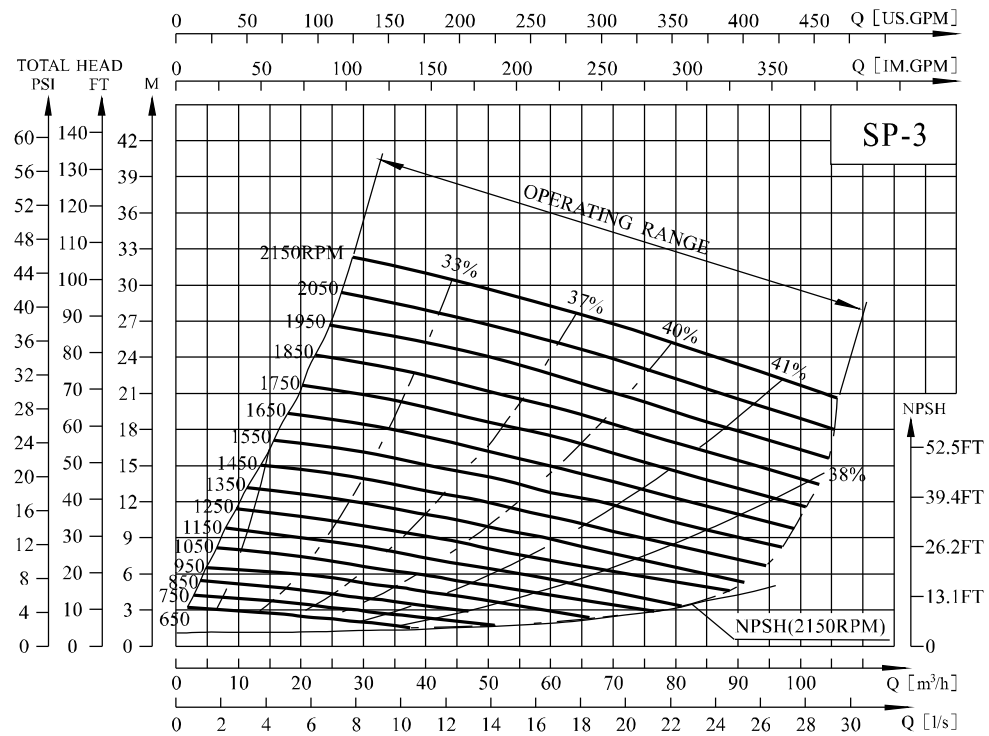
Model	RPM	Q (m³/h)	H (m)											
			10	12.5	15	17.5	20	25	30	35	40	45		
SP-2	1150	H (m)	5.1	4.7	4.0	3.8	3.5							
	1450*		8.4	8.1	7.6	7.3	6.5	5.8						
	1750		12.6	12.2	11.8	11.3	10.8	9.5	8.5					
	2050		17.9	17.2	16.7	16.1	15.5	14.5	13.2	11.6				
	2350			23.2	22.5	21.8	21.2	19.9	18.6	17.2	15.3			
	2650				30.1	29.2	28.4	27.6	26.2	24.8	23.0	21.6	19.4	
	2900*						35.6	34.5	33.7	32.1	30.4	29	27.0	25.3

**Note: ( Suit for SP-1, 3, 4, 6, 8, 10 )**

- 1) The performance is based on pumping clean water under normal temperature and min suction head is measured on sea level. For different installation way of pump, pump performance vary from flow rate, specific gravity, altitude, temperature. If the specific gravity of pumped medium is bigger than 1.2kg/dm<sup>3</sup>, please contact us.
- 2) For the rpm with '\*' in the table, pump can be coupled with Y2 B3 series standard motor.
- 3) For other rpm, pump can be driven by triangle belt sheave.

# SP

## Performance curve



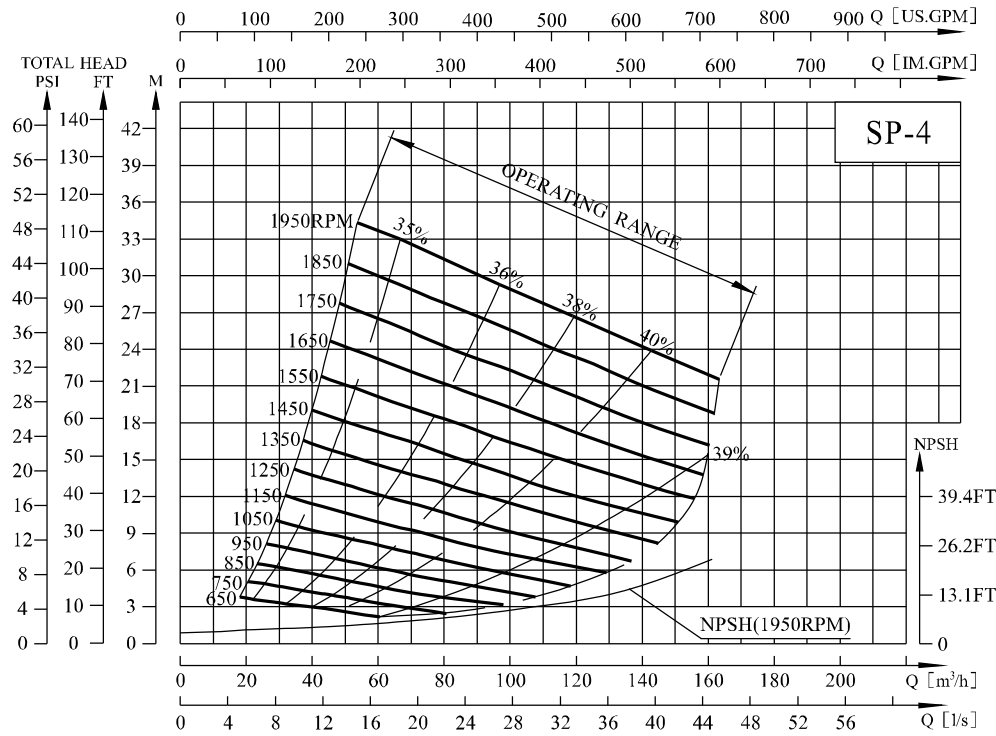
**SP-3 Performance Table**

Model	RPM	Q		H (m)	Motor		Inlet & Outlet	Max. Solids (mm)	Max. Suction Head (m)
		(m³/h)	(l/s)		(kW)	(hp)			
SP-3	650	25	6.9	2	0.75	1	80 (3')	63	1.5
	750*	30	8.3	3	1.5	2			1.8
	850	32.5	9.0	4	1.5	2			2.4
	950*	40	11.1	4.5	1.5	2			3.0
	1050	42.5	11.8	5.5	3	4			4.0
	1150	45	12.5	7	4	5.5			4.9
	1250	50	13.9	8	4	5.5			5.5
	1350	52.5	14.6	10	5.5	7.5			5.8
	1450*	55	15.3	11.5	5.5	7.5			6.4
	1550	60	16.7	12.5	7.5	10			6.4
	1650	65	18.1	14.5	11	15			6.7
	1750	70	19.4	16	11	15			6.7
	1850	72.5	20.1	18	15	20			7.6
	1950	75	20.8	20	15	20			7.6
2050	80	22.2	22.5	18.5	25	7.6			
2150	85	23.6	24.5	18.5	25	7.6			

**SP-3 Operating Table**

Model	RPM	Q (m³/h)	H (m)												
			10	20	30	40	50	60	70	80	90	100			
SP-3	650		2.9	2.5	2.0										
	750*		3.9	3.5	3.0	2.3									
	850		5.2	4.7	3.9	3.4									
	950*		6.4	6.0	5.2	4.5	3.8								
	1050		7.9	7.4	6.7	5.9	5.0	4.3							
	1150		9.7	9.0	8.3	7.4	6.5	5.6							
	1250		11.3	10.7	10.0	9.1	8.0	7.1	6.2						
	1350			12.6	11.9	11.0	10.0	9.0	7.7						
	1450*			14.7	14.0	12.9	12.0	10.8	9.6	8.3					
	1550			16.8	16.1	15.1	14.0	12.5	11.7	10.4	9.1				
	1650			19.3	18.5	17.4	16.2	15.0	13.6	12.3	11.1				
	1750				20.9	19.7	18.7	17.5	16.0	14.5	13.2	11.8			
	1850					23.5	22.5	21.2	20.0	18.4	16.9	15.3	14.0		
	1950						26.2	25.3	24.1	22.7	21.0	19.6	17.9	16.4	
2050							29.0	28.0	26.8	25.3	24.0	22.5	20.5	18.9	
2150								32.1	31.0	29.7	28.2	26.8	25.1	23.4	21.7

**Performance curve**



**SP-4 Performance Table**

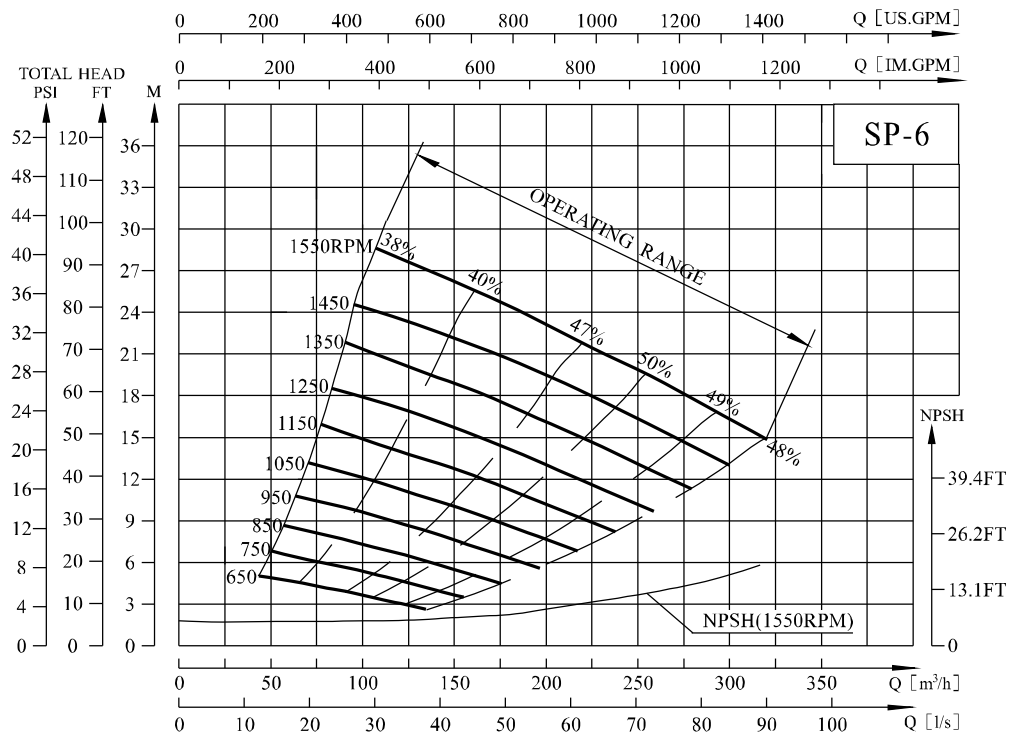
Model	RPM	Q		H (m)	Motor		Inlet & Outlet	Max. Solids (mm)	Max. Suction Head(m)
		(m³/h)	(l/s)		(kW)	(hp)			
SP-4	650	40	11.1	3	1.5	2	100 (4')	76	1.5
	750*	45	12.5	4	1.5	2			2.4
	850	53	14.7	5	2.2	3			4.9
	950*	60	16.7	6	3	4			5.8
	1050	65	18.1	7.5	5.5	7.5			6.7
	1150	72	20.0	9	5.5	7.5			7.3
	1250	80	22.2	10.5	7.5	10			7.6
	1350	85	23.6	12.5	11	15			7.6
	1450*	100	27.8	13.5	11	15			7.6
	1550	110	30.6	15.5	15	20			7.6
	1650	115	31.9	18	18.5	25			7.6
	1750	120	33.3	20	22	30			7.6
	1850	130	36.1	22.5	30	40			7.6
	1950	135	37.5	25	30	40			7.6

**SP-4 Operating Table**

Model	RPM	Q (m³/h)	H (m)													
			20	32	48	64	80	96	112	128	144	160				
SP-4	650	H (m)	3.8	3.3	2.6											
	750*		4.5	3.7	3.0											
	850		6.0	5.3	4.5	3.5										
	950*		7.5	6.5	5.7	5.0										
	1050		9.7	8.7	7.8	6.8	5.9									
	1150		11.9	10.8	9.9	8.8	7.6									
	1250		14.2	13.2	12.0	10.8	9.5	8.4								
	1350		16.7	15.7	14.3	13.1	11.8	10.5								
	1450*				18.0	16.5	15.5	14.0	12.5	11.5						
	1550					20.9	19.8	18.3	16.9	15.4	13.8	12.6				
	1650						24.3	22.9	21.1	19.8	18.1	16.3	15.0			
	1750							27.6	26.2	24.4	22.9	21.3	19.3	17.5	16.2	
	1850								31.0	29.8	27.7	26.1	24.4	22.5	20.5	18.7
	1950									34.5	33.4	31.5	29.4	27.7	25.7	23.5

# SP

## Performance curve



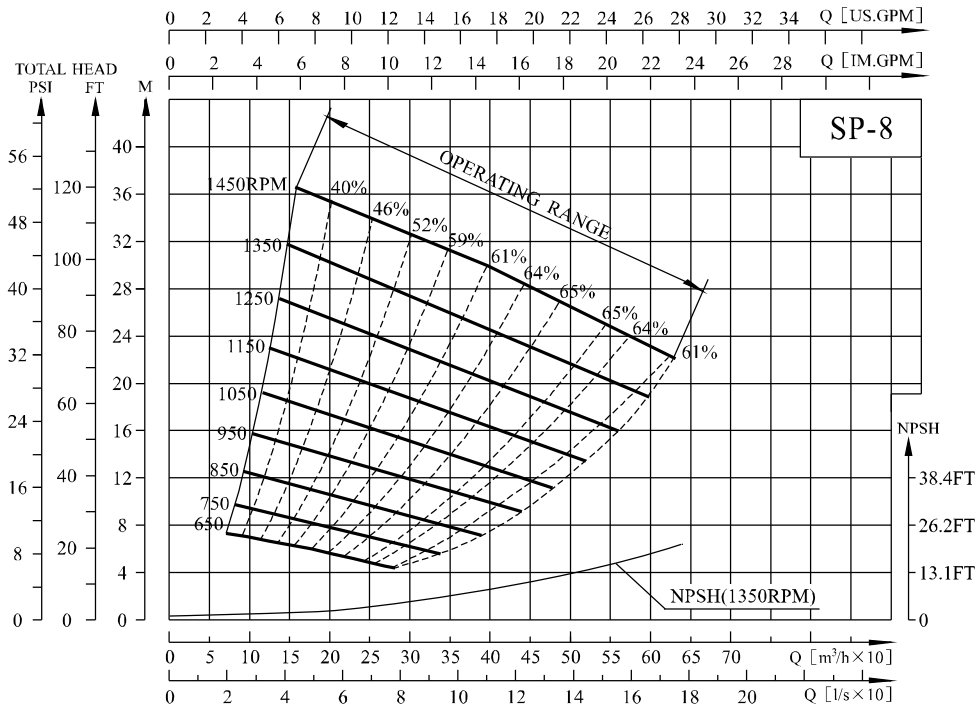
**SP-6 Performance Table**

Model	RPM	Q		H		Motor		Inlet& Outlet	Max.Solids (mm)	Max.Suction Head(m)
		(m³/h)	(l/s)	(m)	(ft)	(kW)	(hp)			
SP-6	650	100	27.8	3.5	3	4	150 (6")	76		2.4
	750*	125	34.7	4.5	4	5.5				2.7
	850	150	41.7	5.5	7.5	10				3.6
	950*	160	44.4	7.5	7.5	10				4.2
	1050	180	50.0	9.0	11	15				5.5
	1150	200	55.6	10.0	15	20				6.4
	1250	220	61.1	12.5	22	30				6.4
	1350	230	63.9	15.0	30	40				6.7
	1450*	250	69.4	17.0	30	40				7.0
	1550	280	77.8	18.0	37	50				7.6

**SP-6 Operating Table**

Model	RPM	Q (m³/h)	H (m)												
			50	80	120	150	180	210	240	270	300				
SP-6	650	H (m)	5.0	4.2	3.1										
	750*		6.0	4.7	3.6										
	850		8.0	7.0	5.5										
	950*		11.0	9.5	7.5	6.8									
	1050		13.0	11.0	10.0	9.0	7.5								
	1150		16.0	14.0	12.8	11.2	10.0	8.0							
	1250			17.0	15.5	14.0	12.7	10.5							
	1350				20.5	19.0	17.5	15.5	14.0	12.0					
	1450*				24.0	22.0	21.0	19.0	17.0	15.0	13.0				
	1550					28.0	26.0	24.5	22.7	20.5	18.5	16.5			

Performance curve



SP-8 Performance Table

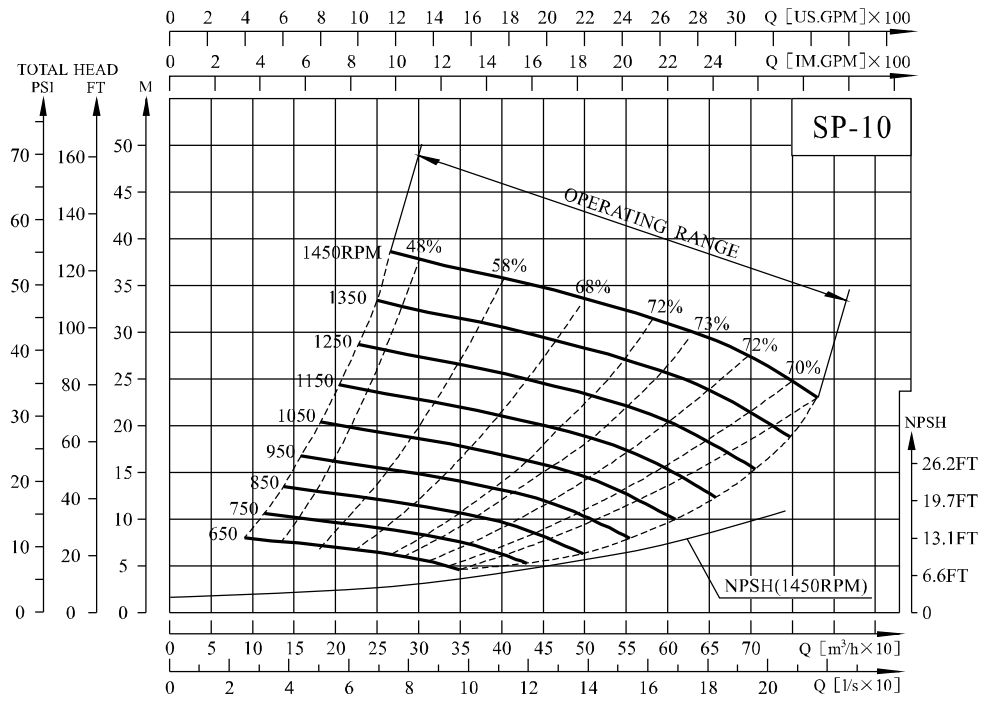
Model	RPM	Q		H (m)	Motor		Inlet & Outlet	Max. Solids (mm)	Max. Suction Head (m)
		(m³/h)	(l/s)		(kW)	(hp)			
SP-8	650	200	55.6	6	7.5	10	200 (8')	76	2.7
	750*	230	63.9	8	11	15			3.7
	850	260	72.2	10	15	20			4.6
	950*	300	83.3	12	22	30			5.2
	1050	320	88.9	15	30	41			6.1
	1150	350	97.2	18	37	50			6.4
	1250	400	111.1	20	55	75			6.7
	1350	450	125.0	23	75	102			7
	1450*	500	138.9	26	75	102			7

SP-8 Operating Table

Model	RPM	Q (m³/h)	H (m)											
			100	150	200	250	300	350	400	450	500	580		
SP-8	650	H (m)	7.0	6.5	6.0	5.0								
	750*		8.8	8.5	7.5	6.5								
	850		11.5	11.0	10.0	9.0	8.0							
	950*		15.0	14.0	13	12.0	11.0							
	1050		18.5	17.5	16.5	15.5	14.0	13.0						
	1150			21.5	20.3	19.0	18.0	16.5	15.5					
	1250				25.5	24.5	23.0	22.0	20.0	19.0	18.0			
	1350					30.5	29.0	27.8	26.0	25.0	23.0	22.0		
	1450*						35.5	34.0	32.0	31.0	30.0	28.0	26.0	23.0

# SP

## Performance curve



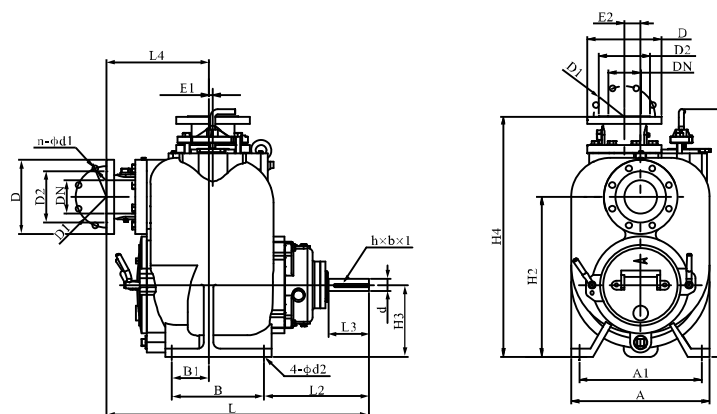
**SP-10 Performance Table**

Model	RPM	Q		H		Motor		Inlet & Outlet	Max. Solids (mm)	Max. Suction Head (m)
		(m³/h)	(l/s)	(m)	(m)	(kW)	(hp)			
SP-10	650	250	69	6.5	11	15	250 (10')	76		2.1
	750*	300	83	8.5	15	20				3.4
	850	350	97	11	22	30				4.3
	950*	400	111	13	30	41				5.2
	1050	450	125	16	45	61				5.5
	1150	500	139	19	55	75				5.5
	1250	525	146	23	75	102				5.8
	1350	550	153	27	90	122				6.7
	1450*	600	167	31	90	122				6.7

**SP-10 Operating Table**

Model	RPM	Q (m³/h)	H (m)												
			200	300	400	450	500	550	600	650	700	750			
SP-10	650	H (m)	7.0	6.5											
	750*		10.0	8.5	6.0										
	850		13.0	11.5	10.0	8.0									
	950*		16.0	15.0	13.0	12.0	10.0								
	1050		20.0	19.0	17.0	16.0	14.5	12.5							
	1150			23.0	21.0	20.0	19.0	17.5	15.0						
	1250			27.5	25.5	24.5	23.5	22.0	20.5	18.0					
	1350			32.5	30.5	29.5	28.0	27.0	25.5	23.5	21.5				
	1450*			38.0	36.0	35.0	33.5	32.0	31.0	29.5	27.5	24.5			

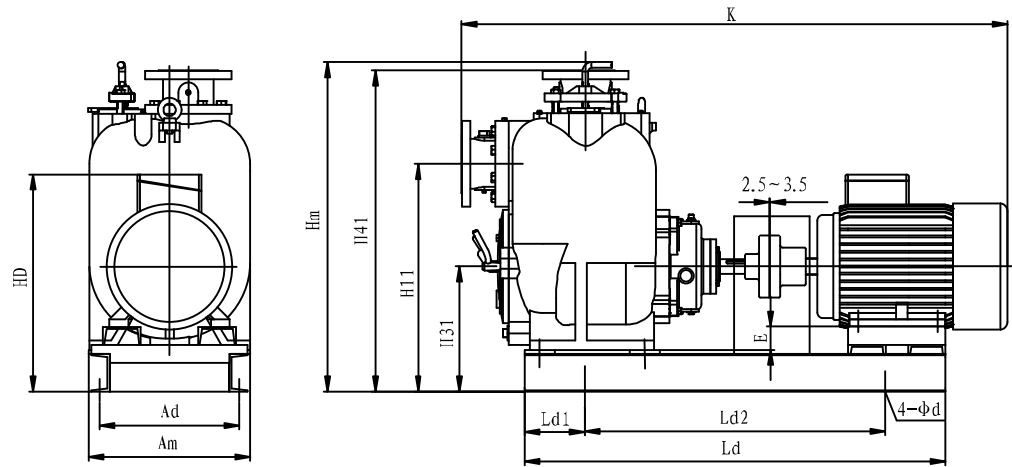
Pump profile & installation dimension



Item	SP-2	SP-3	SP-4	SP-6	SP-8	SP-10	
Dimension of Inlet & Outlet Flange DIN(mm)/ANSI(in)	PN	PN0.6MPa / Class 150 lb		PN1.0MPa / Class 150 lb		PN1.6MPa / Class 150 lb	
	DN	50/2'	80/3'	100/4'	150/6'	200/8'	250/10'
	D	140/6'	190/7.5'	228.6/9'	285/11'	340/13.5'	405/16'
	D1	110/4.75'	150/6'	180/7.5'	240/9.5'	295/11.75'	355/14.25'
	D2	90/3.6'	127/5'	158/6.19'	212/8.3'	266/10.62'	320/12.75'
	n-d1	4-14/0.75'	4-19/0.75'	8-19/0.75'	8-23/0.88'	8-23/0.88'	12-26/1'
h×b×l	10×5×95	10×5×80	10×5×90	10×5×95	14×3.5×127	14×3.5×120	
	0.38'×0.19'×3.74'	0.38'×0.19'×3'	0.38'×0.19'×3.5'		0.38'×0.19'×5'		
Installation Dimension DIN(mm)/ANSI(in)	H2	318/12.51'	431.8/17'	495.3/19.5'	574.3/22.61'	723.8/28.5'	639.8/25.19'
	A	308/12.13'	377/14.84'	428/16.85'	580/22.83'	716/28.19'	705/27.75'
	A1	281/11.06'	328/12.91'	373/14.69'	527/20.75'	635/25'	635/25'
	B	163.2/6.42'	228.6/9'	279.4/11'	279.4/11'	304.8/12'	304.8/12'
	B1	54/2.12'	76.2/3'	110/4.33'	77.8/3.06'	101.6/4'	101.6/4'
	L2	274.8/10.82'	285/11.22'	326/12.83'	294/11.57'	407.1/16.03'	320.6/12.63'
	d2	14/0.55'	18/0.71'	18/0.71'	18/0.71'	24/0.88'	24/0.88'
	H3	151.5/5.96'	190.5/7.5'	222.2/8.75'	257.2/10.13'	330.2/13'	355.6/14'
	L3	104/4.09'	102/4.02'	127/5'	127/5'	170/6.69'	123/4.84'
	d	38/1.50'	38/1.5'	38/1.5'	38/1.5'	48/1.75'	48/1.75'
	H	552/21.73'	697.5/27.46'	760/29.92'	875/34.45'	989/38.94'	1017/40.04'
	Am	321/12.64'	389/15.31'	429/16.89'	580/22.83'	716/28.19'	786/30.94'
Profile Dimension DIN(mm)/ANSI(in)	H4	502/19.16'	652/25.67'	735/28.94'	887.7/34.95'	1069.3/42.06'	1047.8/41.25'
	L	615/24.21'	712.2/28.04'	813.5/32.03'	906.6/35.69'	1023/40.28'	1244.7/49'
	L4	233/9.17'	277/10.91'	318/12.52'	411/16.18'	412.8/16.25'	720.9/28.38'
	E1	27.5/1.08'	15/0.59'	13/0.51'	0	0	0
Wt. (kg/ lbs)	E2	70/2.76'	50/2'	50/2'	50/2'	0	0
		99/218	190/419	275/606	438/966	655/1445	705/1555

# SP

## Profile & installation dimension of coupled pump set



Model	Motor		Dimensions							Dimensions					
	Power (kW)	Model	$A_d$	$L_{d1}$	$L_{d2}$	$d$	$H_{11}$	$H_{31}$	$H_{41}$	$K$	$A_m$	$H_m$	$H_D$	$E$	$L_d$
SP-2(1450)	1.5	YE2-90L-4	300	77.5	617	20	428	261.5	612	986	341	662	416.5	61.5	772
SP-2(2900)	9.2	YE2-132S-2	300	77.5	695	20	428	261.5	612	1110	341	662	471.5	19.5	850
SP-3(750)	1.5	YE2-112M-8	330	120	621	20	541.8	300.5	762.2	1134	370	800	490.5	78.5	861
SP-3(950)	1.5	YE2-100L-6	330	120	614	20	541.8	300.5	762.2	1119	370	800	480.5	90.5	854
SP-3(1450)	5.5	YE2-132S1-4	330	120	660	20	541.8	300.5	762.2	1204	370	800	510.5	58.5	900
SP-4(750)	1.5	YE2-112M-8	370	150	663	20	605.3	332.2	843.6	1236	430	887.3	522.2	110.2	963
SP-4(950)	3	YE2-132S-6	370	150	702	20	605.3	332.2	843.6	1306	430	887.3	542.2	90.2	1002
SP-4(1450)	11	YE2-160M-4	370	150	821	20	605.3	332.2	843.6	1451	430	887.3	587.2	62.2	1121
SP-6(750)	4	YE2-160M1-8	510	150	784	20	710.3	393.2	1023.7	1544	590	1024	648.2	97.2	1084
SP-6(950)	7.5	YE2-160M-6	510	150	784	20	710.3	393.2	1023.7	1544	590	1024	648.2	97.2	1084
SP-6(1450)	30	YE2-200L-4	510	150	905	20	710.3	393.2	1023.7	1705	590	1024	698.2	57.2	1205
SP-8(750)	11	YE2-180L-8	640	150	1050	24	904	510.2	1250	1767	716	1250	790	150.2	1350
SP-8(950)	22	YE2-200L2-6	640	150	1085	24	904	510.2	1250	1769	716	1250	815	130.2	1385
SP-8(1450)	75	YE2-280S-4	640	150	1264	24	904	510.2	1250	2012	716	1250	1020	50.2	1564
SP-10(750)	15	YE2-200L-8	640	150	1050	24	820	535.6	1227.8	2020	786	1228	880.6	155.6	1350
SP-10(950)	30	YE2-225M-6	640	150	1050	24	820	535.6	1227.8	2095	786	1228	865.6	130.6	1350
SP-10(1450)	90	YE2-280M-4	640	150	1240	24	820	535.6	1227.8	2285	786	1228	935.6	75.6	1540

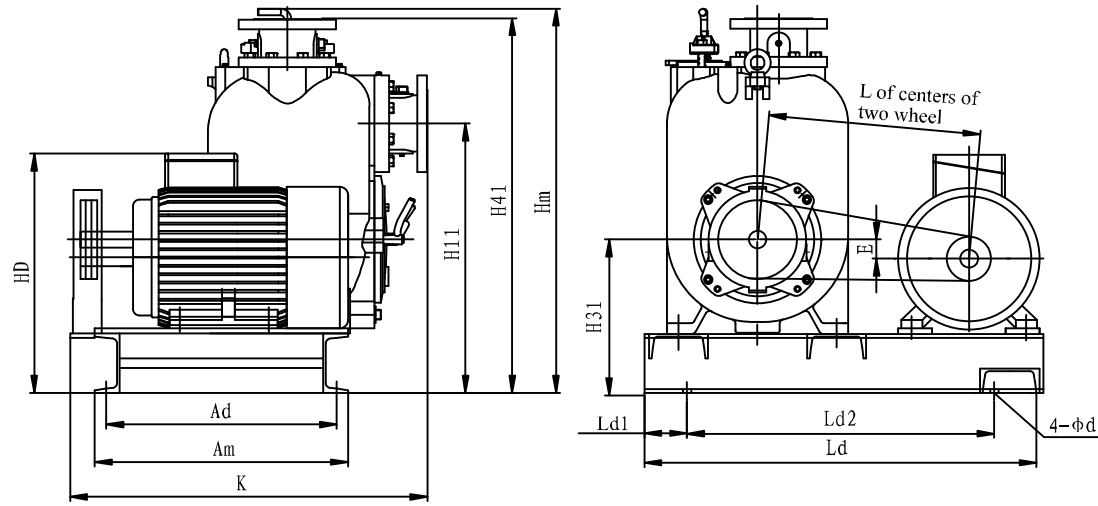


## SP pump belt sheave data

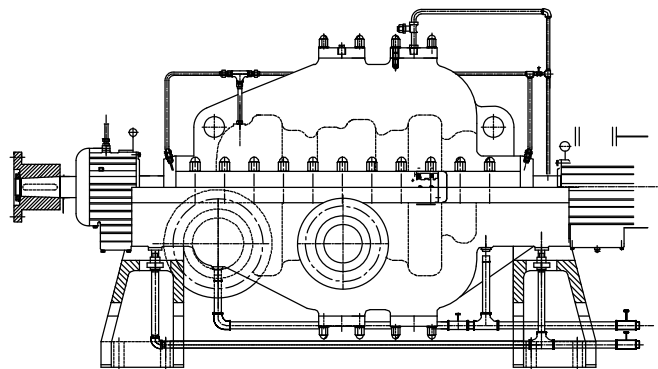
Model	Motor		Belt sheave at motor end		Belt sheave at pump end		Triangle belt		
	Power (kW)	Model	Model	OD of belt sheave (mm)	Model	OD of belt sheave (mm)	Model	Fiducial length	Nos.
SP-2(1150)	1.1	YE2-90S-4	VA2-85	90.5	VA2-100	105.5	Belt A	990	2
SP-2(1750)	3	YE2-100L-2	VA4-85	90.5	VA4-132	137.5	Belt A	1100	4
SP-2(2050)	4	YE2-112M-2	VA3-100	105.5	VA3-132	137.5	Belt A	1100	3
SP-2(2350)	7.5	YE2-132S2-2	VA4-100	105.5	VA4-120	125.5	Belt A	1250	4
SP-2(2650)	7.5	YE2-132S2-2	VA3-118	123.5	VA3-125	130.5	Belt A	1250	3
SP-3(650)	0.75	YE2-80M2-4	VA2-80	85.5	VA2-160	165.5	Belt A	1250	2
SP-3(850)	1.5	YE2-90L-4	VA2-80	85.5	VA2-125	130.5	Belt A	1250	2
SP-3(1050)	3	YE2-100L-6	VA3-90	95.5	VA3-120	125.5	Belt A	1250	3
SP-3(1150)	4	YE2-112M-4	VA3-100	105.5	VA3-120	125.5	Belt A	1430	3
SP-3(1250)	4	YE2-112M-4	VA3-100	105.5	VA3-112	117.5	Belt A	1430	3
SP-3(1350)	5.5	YE2-132S1-4	VA4-125	130.5	VA4-130	135.5	Belt A	1430	4
SP-3(1550)	7.5	YE2-132S2-2	VA3-125	130.5	VA3-224	229.5	Belt A	1430	3
SP-3(1650)	11	YE2-160M1-2	VA4-125	130.5	VA4-212	217.5	Belt A	1560	4
SP-3(1750)	11	YE2-160M1-2	VA4-125	130.5	VA4-200	205.5	Belt A	1560	4
SP-3(1850)	15	YE2-160M2-2	VB4-132	139	VB4-200	207	Belt B	1560	4
SP-3(1950)	15	YE2-160M2-2	VB4-125	132	VB4-180	187	Belt B	1560	4
SP-3(2050)	18.5	YE2-160L-2	VB4-160	167	VB4-224	231	Belt B	1560	4
SP-3(2150)	18.5	YE2-160L-2	VB4-160	167	VB4-212	219	Belt B	1560	4
SP-4(650)	1.5	YE2-90L-4	VA2-85	90.5	VA2-180	185.5	Belt A	1560	2
SP-4(850)	2.2	YE2-100L1-4	VA3-90	95.5	VA2-150	155.5	Belt A	1430	2
SP-4(1050)	5.5	YE2-132S-4	VA3-125	130.5	VA3-160	165.5	Belt A	1430	3
SP-4(1150)	5.5	YE2-132S-4	VA3-125	130.5	VA3-150	155.5	Belt A	1550	3
SP-4(1250)	7.5	YE2-132M-4	VA4-125	130.5	VA4-140	145.5	Belt A	1550	4
SP-4(1350)	11	YE2-160M-4	VB4-160	167	VB4-170	177	Belt B	1550	4
SP-4(1550)	15	YE2-160M2-2	VB3-180	187	VB3-315	322	Belt B	1950	3
SP-4(1650)	18.5	YE2-160L-2	VB4-150	157	VB4-250	257	Belt B	1950	4
SP-4(1750)	22	YE2-180M-2	VB4-180	187	VB4-280	287	Belt B	1950	4
SP-4(1850)	30	YE2-200L1-2	VC4-212	209.6	VC4-315	324.6	Belt C	1950	4
SP-4(1950)	30	YE2-200L1-2	VC4-250	239.6	VC4-355	364.6	Belt C	1950	4
SP-6(650)	3	YE2-200L1-2	VA2-85	91	VA2-180	186	Belt A	1550	2
SP-6(850)	7.5	YE2-132M-4	VB4-125	132	VB4-200	207	Belt B	1760	4
SP-6(1050)	11	YE2-160M-4	VB3-170	177	VB3-224	231	Belt B	1950	3
SP-6(1150)	15	YE2-160L-4	VB4-170	177	VB4-200	207	Belt B	1950	4
SP-6(1250)	22	YE2-180L-4	VC4-224	234	VC4-250	260	Belt C	1950	4
SP-6(1350)	30	YE2-200L-4	VC4-250	260	VC4-265	275	Belt C	2195	5
SP-6(1550)	37	YE2-225S-4	VC4-300	310	VC4-280	290	Belt C	2195	4
SP-8(650)	7.5	YE2-160M-6	VB3-125	132	VB3-180	187	Belt B	1950	3
SP-8(850)	15	YE2-180L-6	VB4-200	207	VB4-224	231	Belt B	1950	4
SP-8(1050)	30	YE2-200L-4	VC4-224	233.6	VC4-315	324.6	Belt C	2420	4
SP-8(1150)	37	YE2-225S-4	VC4-280	289.6	VC4-355	364.6	Belt C	2420	4
SP-8(1250)	55	YE2-250M-4	VC4-280	289.6	VC4-315	324.6	Belt C	2420	4
SP-8(1350)	75	YE2-280S-4	VD4-355	371.2	VD4-375	391.2	Belt D	2740	4
SP-10(650)	11	YE2-160L-6	VB4-140	147	VB4-200	207	Belt B	1950	4
SP-10(850)	22	YE2-200L2-6	VC4-224	233.6	VC4-250	259.6	Belt C	2195	4
SP-10(1050)	45	YE2-225M-4	VC4-250	259.6	VC4-355	364.6	Belt C	2420	4
SP-10(1150)	55	YE2-250M-4	VC4-315	324.6	VC4-400	409.6	Belt C	2715	4
SP-10(1250)	75	YE2-280S-4	VD4-355	371.2	VD4-425	441.2	Belt D	2740	4
SP-10(1350)	90	YE2-280M-4	VD4-355	371.2	VD4-375	391.2	Belt D	2740	4

Note for table: Belt sheave complies with GB/T10412 rule; belt complies with GB/T 11544 rule.

Profile & installation dimension of  $\Delta$ -belt drives pump set



Model	Motor		Dimensions								Dimensions					
	Power (kW)	Model	Ad	Ld1	Ld2	d	H11	H31	H41	L	Ld	K	Hm	Am	HD	E
SP-2(1150)	1.1	YE2-90S-4	375	100	515	20	438	271.5	622	350	715	655	672	423	375	72
SP-2(1750)	3	YE2-100L-2	359	100	550	20	438	271.5	622	375	750	655	672	407	410	62
SP-2(2050)	4	YE2-112M-2	352	100	560	20	438	271.5	622	363	760	655	672	400	432	50
SP-2(2350)	7.5	YE2-132S2-2	313	100	670	20	438	271.5	622	451	870	655	672	361	472	30
SP-2(2650)	7.5	YE2-132S2-2	313	100	650	20	438	271.5	622	433	850	655	672	361	472	30
SP-3(650)	0.75	YE2-80M2-4	467	100	609	20	552	310.5	772	428	808	752	818	514	355	121
SP-3(850)	1.5	YE2-90L-4	451	100	651	20	552	310.5	772	460	854	752	818	498	375	111
SP-3(1050)	3	YE2-100L2-4	435	100	662	20	552	310.5	772	459	866	752	818	482	410	101
SP-3(1150)	4	YE2-112M-4	428	100	767	20	552	310.5	772	540	967	752	818	475	432	89
SP-3(1250)	4	YE2-112M-4	428	100	774	20	552	310.5	772	548	974	752	818	475	432	89
SP-3(1350)	5.5	YE2-132S1-4	389	100	756	20	552	310.5	772	514	956	752	818	436	472	69
SP-3(1550)	7.5	YE2-132S2-2	389	100	675	20	552	310.5	772	434	875	752	818	436	472	69
SP-3(1650)	11	YE2-160M1-2	341	100	776	20	552	310.5	772	509	975	752	818	389	545	41
SP-3(1750)	11	YE2-160M1-2	341	100	786	20	552	310.5	772	519	986	752	818	389	545	41
SP-3(1850)	15	YE2-160M2-2	341	100	781	20	552	310.5	772	514	981	752	818	389	545	41
SP-3(1950)	15	YE2-160M2-2	341	100	803	20	552	310.5	772	536	1003	752	818	389	545	41
SP-3(2050)	18.5	YE2-160L-2	341	100	744	20	552	310.5	772	477	944	752	818	389	545	41
SP-3(2150)	18.5	YE2-160L-2	341	100	753	20	552	310.5	772	486	953	752	818	389	545	41
SP-4(650)	1.5	YE2-90L-4	545	100	722	20	635.3	362.2	875	499	922	855	900	600	395	142.2
SP-4(850)	2.2	YE2-100L1-4	529	100	761	20	635.3	362.2	875	525	961	855	900	584	430	132.2
SP-4(1050)	5.5	YE2-132S-4	483	100	818	20	635.3	362.2	875	543	1018	855	900	538	492	100.2
SP-4(1150)	5.5	YE2-132S-4	483	100	830	20	635.3	362.2	875	555	1030	855	900	538	492	100.2
SP-4(1250)	7.5	YE2-132M-4	483	100	840	20	635.3	362.2	875	565	1040	855	900	538	492	100.2
SP-4(1350)	11	YE2-160M-4	436	100	818	20	635.3	362.2	875	521	1018	855	900	491	565	72.2
SP-4(1550)	15	YE2-160M2-2	436	100	876	20	635.3	362.2	875	567	1076	855	900	491	565	72.2
SP-4(1650)	18.5	YE2-160L-2	436	100	959	20	635.3	362.2	875	649	1159	855	900	491	565	72.2
SP-4(1750)	22	YE2-180M-2	423	100	922	20	635.3	362.2	875	599	1122	855	900	478	610	52.2
SP-4(1850)	30	YE2-200L1-2	413	100	900	20	635.3	362.2	875	547	1100	855	900	468	655	32.2
SP-4(1950)	30	YE2-200L1-2	413	100	870	20	635.3	362.2	875	526	1070	855	900	468	655	32.2
SP-6(650)	3	YE2-100L2-4	497	100	886	20	714.3	397.2	1027.7	562	1096	947	1030	552	462	135.2
SP-6(850)	7.5	YE2-132M-4	451	100	970	20	714.3	397.2	1027.7	618	1180	947	1030	506	492	135.2
SP-6(1050)	11	YE2-160M-4	404	100	1045	20	714.3	397.2	1027.7	659	1255	947	1030	459	565	107.2
SP-6(1150)	15	YE2-160L-4	404	100	1061	20	714.3	397.2	1027.7	675	1271	947	1030	459	565	107.2
SP-6(1250)	22	YE2-180L-4	391	100	1013	20	714.3	397.2	1027.7	596	1223	947	1030	446	610	87.2
SP-6(1350)	30	YE2-200L-4	381	100	1130	20	714.3	397.2	1027.7	692	1340	947	1030	436	655	67.2
SP-6(1550)	37	YE2-225S-4	335	100	1127	20	714.3	397.2	1027.7	662	1337	947	1030	390	710	42.2
SP-8(650)	7.5	YE2-160M-6	614	150	1060	24	924	530.2	1269.3	733	1375	1043	1270	675	615	170.2
SP-8(850)	15	YE2-180L-6	599	150	1000	24	924	530.2	1269.3	642	1315	1043	1270	660	660	150.2
SP-8(1050)	30	YE2-200L-4	599	150	1200	24	924	530.2	1269.3	792	1515	1054	1270	660	705	130.2
SP-8(1150)	37	YE2-225S-4	549	150	1130	24	924	530.2	1269.3	712	1445	1054	1270	610	760	105.2
SP-8(1250)	55	YE2-250M-4	549	150	1150	24	924	530.2	1269.3	735	1465	1054	1270	610	820	80.2
SP-8(1350)	75	YE2-280S-4	514	150	1260	24	924	530.2	1269.3	792	1575	1095	1270	575	890	50.2
SP-10(650)	11	YE2-160L-6	529	150	1040	24	839.8	555.6	1247.8	704	1375	1270	1248	590	615	195.6
SP-10(850)	22	YE2-200L2-6	509	150	1100	24	839.8	555.6	1247.8	725	1435	1280	1248	570	705	155.6
SP-10(1050)	45	YE2-225M-4	459	150	1180	24	839.8	555.6	1247.8	743	1515	1280	1248	520	760	130.6
SP-10(1150)	55	YE2-250M-4	489	150	1280	24	839.8	555.6	1247.8	798	1615	1280	1248	550	820	105.6
SP-10(1250)	75	YE2-280S-4	539	150	1280	24	839.8	555.6	1247.8	738	1615	1320	1248	600	890	75.6
SP-10(1350)	90	YE2-280M-4	554	150	1280	24	839.8	555.6	1247.8	792	1615	1320	1248	615	890	75.6



NDS Multistage heavy duty axially split casing centrifugal pump

## NDS

### Application

- Crude oil both in and offshore
- Remote pipelines
- Process plants
- Refineries
- Sewage water with oil and solid
- Boiler feed
- General water supply
- Mine dewatering
- Sea water pumping
- Water injection

### Operating Data

- Capacity to 2400m<sup>3</sup>/h
- Head to 1200m
- Temperatures to 200°C
- Working pressure to 170bar

### Model Code

KY is a two stages pump with two single suction impellers.

KSY is a two stages pump with two double suction impellers.

KDY is a multistage pump with three or more impellers.

### Instrumentation

Pump can be furnished with instrumentation options to measure vibration, temperature and seal leakage.

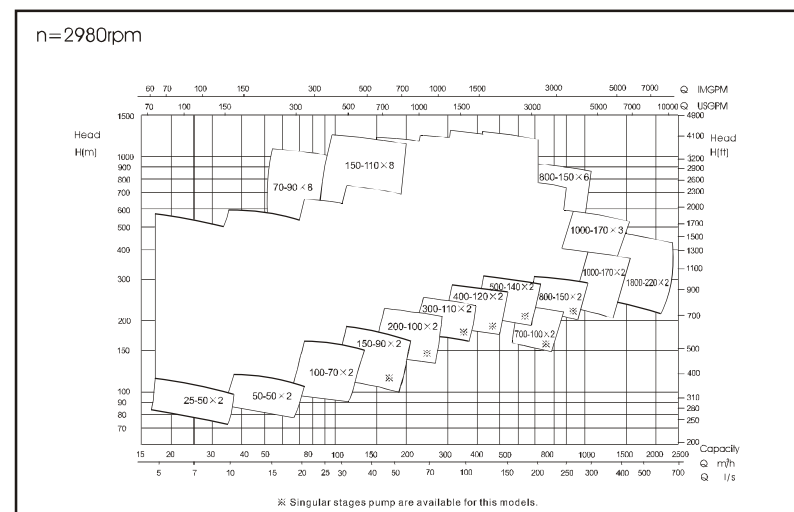
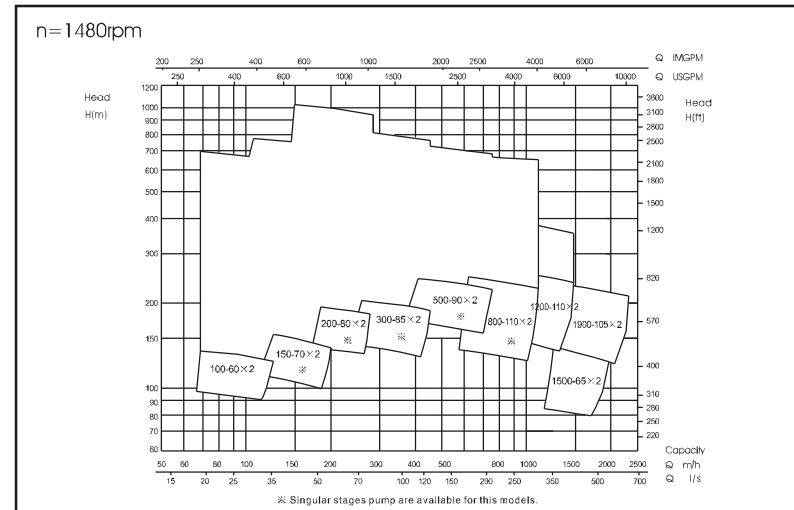
### Pump and baseplate design compliance API610 latest edition

### Material

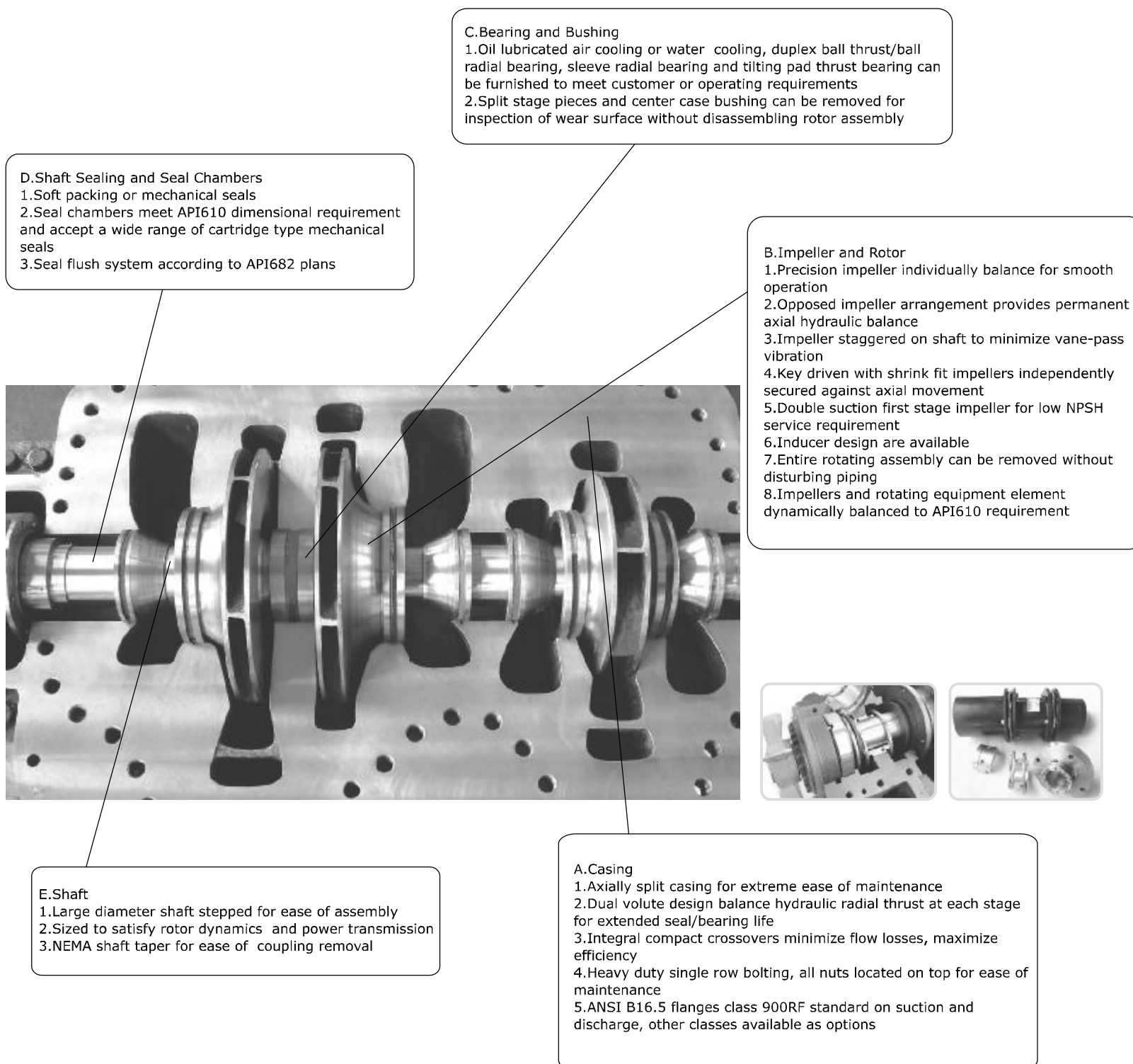
Pump's material according to API610  
( I-1, I-2, S-1,S-3,S-4,S-5, S-6 ,S-8, C-6, A-8 and D-1)



### Hydraulic Coverage ( 50Hz )



## Design Features and advantages



### C. Bearing and Bushing

1. Oil lubricated air cooling or water cooling, duplex ball thrust/ball radial bearing, sleeve radial bearing and tilting pad thrust bearing can be furnished to meet customer or operating requirements
2. Split stage pieces and center case bushing can be removed for inspection of wear surface without disassembling rotor assembly

### D. Shaft Sealing and Seal Chambers

1. Soft packing or mechanical seals
2. Seal chambers meet API610 dimensional requirement and accept a wide range of cartridge type mechanical seals
3. Seal flush system according to API682 plans

### B. Impeller and Rotor

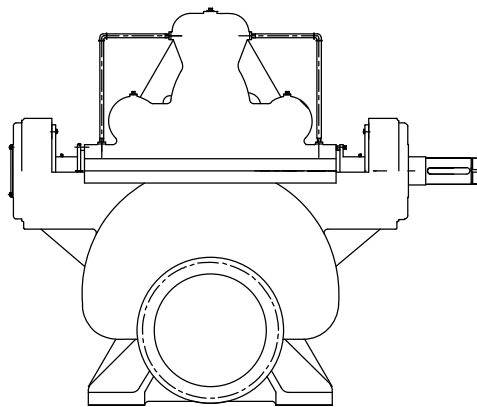
1. Precision impeller individually balance for smooth operation
2. Opposed impeller arrangement provides permanent axial hydraulic balance
3. Impeller staggered on shaft to minimize vane-pass vibration
4. Key driven with shrink fit impellers independently secured against axial movement
5. Double suction first stage impeller for low NPSH service requirement
6. Inducer design are available
7. Entire rotating assembly can be removed without disturbing piping
8. Impellers and rotating equipment element dynamically balanced to API610 requirement

### E. Shaft

1. Large diameter shaft stepped for ease of assembly
2. Sized to satisfy rotor dynamics and power transmission
3. NEMA shaft taper for ease of coupling removal

### A. Casing

1. Axially split casing for extreme ease of maintenance
2. Dual volute design balance hydraulic radial thrust at each stage for extended seal/bearing life
3. Integral compact crossovers minimize flow losses, maximize efficiency
4. Heavy duty single row bolting, all nuts located on top for ease of maintenance
5. ANSI B16.5 flanges class 900RF standard on suction and discharge, other classes available as options



NSC Single stage Double Suction Split Casing Centrifugal Pumps

## Brief Introduction

### Applications

- Clean water or medium similar to water in Physical and chemical properties
 

Water supply	Drainage	Irrigation	Power station
Hydropower station	Fire-fighting	Air-conditioning	Building Industry
Marine applications	All kinds of water for industrial processes		
- Abrasive medium
 

Sand water	Oxide scale water	Others
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- Corrosive medium
 

Desalination	Bittern	Sea water	Others
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- High temperature medium
 

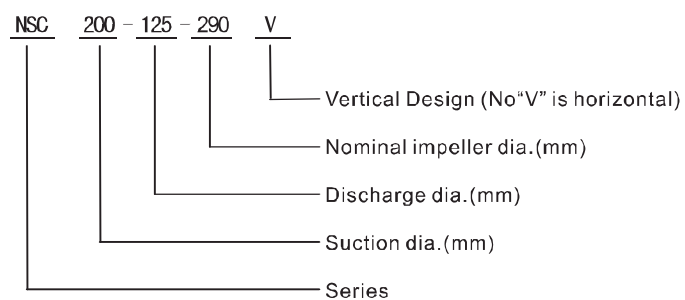
Heating network circulating water	All kinds of chemical liquid
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- Petroleum and chemical liquids (according to API610 BB1 )
 

Crude oil and refined oil	Oil loading and unloading of oil terminal	All kinds of chemical liquid
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### Specification

Capacity	Q :50~20000m <sup>3</sup> /h
Head	H : 10~230m
Suction Dia	DN: 100~1400mm
Discharge Dia	DN: 80~1200mm
Operating Pressure	P : ≤5MPa
Operating Temperature	t : -15℃~+ 200℃(above 80℃,pls contact CNP)
Abrasive medium concentration: ≤4%	

### Designation



### Structure Design

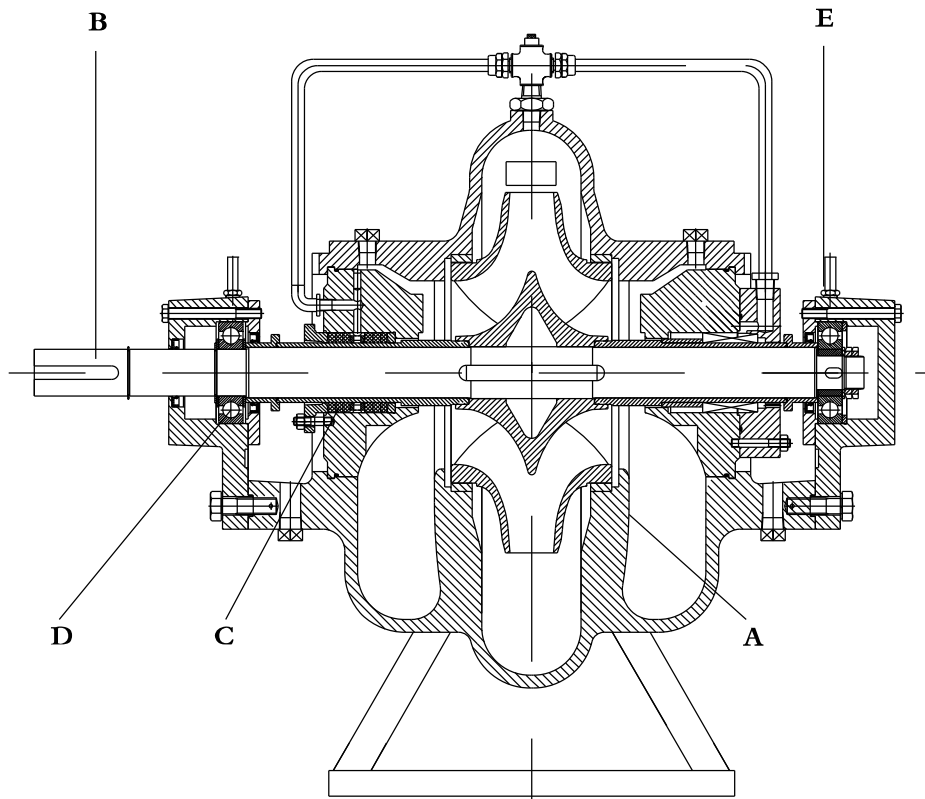
NSC is Single stage, axially split volute casing pump with double suction impeller, for horizontal and vertical installation. Drive shaft end of the horizontal pump optionally on the left or right side. Flanges drilled to GB, ISO, DIN, BS or ANSI.

### Bearing

Horizontal: Grease lubricated ball bearings on both side, oil lubrication is optional. For the big size pump, sliding bearing is available.

Vertical: Grease lubricated ball bearings

Configuration Features



**A. Casing**

- a. In-line axially split design which permits removal of the complete rotor without moving the pipe and motor
- b. Short distance between bearings
- c. Leak-tight due to compact joint flange with long, prestressed bolts
- d. Counter-rotation possible with similar parts
- e. Double volute casing reduces radial forces on the impeller and consequently the bearing loads
- f. Easy mounting self-aligning upper casing
- g. Flange drilled to ISO, DIN, BS or ANSI
- h. Smooth surface inside and epoxy coating as required
- i. Replaceable wear rings protect the casing at the impeller running clearances
- j. Excellent efficiencies and outstanding NPSH improved by CFD
- k. Heavy duty casing design for high working pressure

**B. Rotor parts**

- a. Computer-optimized double entry impellers
- b. Minimal axial thrust due to double-entry impeller
- c. Impeller is statically and dynamically balanced according to ISO1940
- d. Optional impeller wear rings
- e. New vane passage with excellent hydraulic characteristics high-performance improved by CFD

**C. Seal**

- a. Asbestos-free, potable water quality softpacked stuffing boxes
- b. Unbalanced mechanical seal, according to DIN 24960 Balance mechanical seal for operating pressure >16 bar on required
- c. Cartridge-type mechanical seal on required

**D. Bearing**

- a. SKF covered, sealed for life grease lubricated antifriction bearings for long service life
- b. Open gland, enough space for service activities
- c. Optional: oil lubrication with constant level oiler

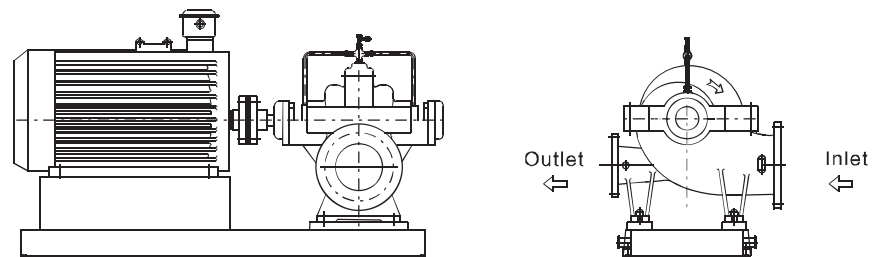
**E. Controlling & protection**

- a. Heavy duty shaft completely sealed and dry for zero corrosion
- b. Short and rigid with negligible vibrations
- c. Replaceable shaft protecting sleeves
- d. No threads exposed to pumped medium, long operating life and no corrosion
- e. Adjustment-free assembly
- f. Quick and easy assembly/dismantling of the rotor components due to elastically pre-stressed mountings
- g. Maximum interchangeability shafts design entire series for 2900rpm and 1450rpm model just six shafts and six bearings assemblies

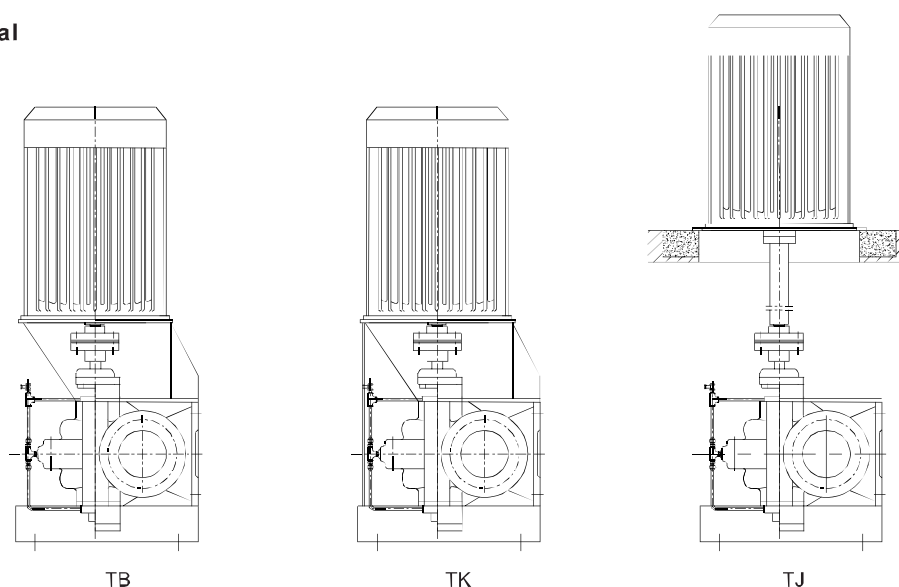


### Pump and Motor Arrangement

#### Horizontal



#### Vertical



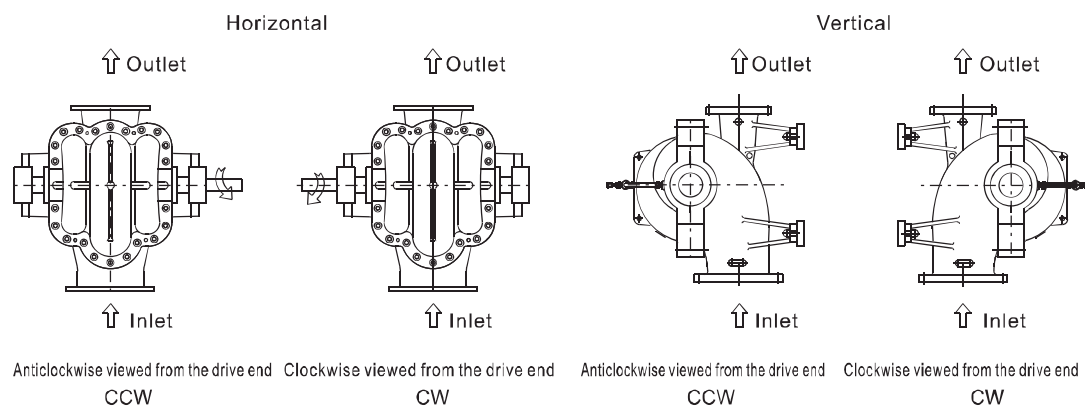
TB

TK

TJ

Note: CNP chooses the TB or TK according to the motor size.

### Direction of Rotation and Flow Direction



Anticlockwise viewed from the drive end  
CCW

Clockwise viewed from the drive end  
CW

Anticlockwise viewed from the drive end  
CCW

Clockwise viewed from the drive end  
CW

# NSC

## Standard Materials

Medium Name	Clear water	Water with mud and sand/ Side scale water /Sewage/Saline water	Sea water	Hot water	Petrochemical liquids
Casing	Cast Iron	Nickel chromium cast iron /Wear resistant cast iron (Cast steel + Wear-resistant coating)	Duplex stainless steel	Ductile CI / Cast steel / Stainless steel	According to API610 I-1, I-2, S-5, S-8, C-6, A-7, A-8, D-1, D-2
Impeller	CI/Bronze/ Stainless steel	Ductile CI /SS420/ Stainless steel	Duplex stainless steel	SS420/ Stainless steel	
Bearing housing	Cast Iron	Cast Iron	Cast Iron	Cast Iron	
Shaft	SS420	SS420	Duplex stainless steel	SS420/ Stainless steel	
Wear ring	Cast Iron	Ductile CI/SS420	Bronze / Duplex stainless steel with hardening treatment	Ductile CI /Cast steel	
Shaft sleeve	SS420	SS420	Duplex stainless steel	SS420	
Shaft seal	Packing/ Mechanical seal	Packing/ Mechanical seal	Mechanical seal	Mechanical seal	
Flushing Pipeline	Q235-A	Q235-A	316L	Q235-A/stainless steel	

Note: The materials of pump parts are chosen according to the pressure rating, application, medium, operating temperature and customer requirements etc.

## Technical Data

### Shaft Diameter, Shaft Seal and Bearing

Unit: mm, Unless other wise stated

Model	Shaft dia.	Nominal dia. Packing/Mechanical seal	Sealed chamber D	Sealed chamber L	Bearing	Mechanical seal	Pump structure
NSC125-80-210 NSC125-80-270 NSC125-80-350 NSC150-100-250 NSC150-100-320 NSC150-100-400	35	50	75	72	6307 SKF	M74N/50-G92-Q2BVGG (Mechanical Seal Type B)	Horizontal installation Type C
NSC150-100-400G	40	55	75	72	NU308 SKF	H75N/55-G92-Q2BVGG (Mechanical Seal Type B)	Horizontal installation Type C
NSC200-125-240 NSC200-125-300 NSC200-125-360 NSC200-125-460 NSC200-150-290 NSC200-150-360 NSC200-150-460 NSC200-150-570 NSC250-200-340 NSC250-200-430 NSC300-250-270 NSC300-250-260 NSC350-300-310 NSC350-300-330 NSC350-300-400 NSC350-250-400 NSC350-250-610 NSC400-300-450 NSC400-350-360 NSC400-350-360 NSC450-400-350 NSC500-400-400 NSC500-400-420	45	60	85	82	6309 SKF	M74N/60-G92-Q2BVGG (Mechanical Seal Type B)	Horizontal installation Type C
NSC250-200-460 NSC300-250-390 NSC350-300-310 NSC350-300-330 NSC350-300-400 NSC350-250-400 NSC350-250-610 NSC400-300-450 NSC400-350-360 NSC400-350-360 NSC450-400-350 NSC500-400-400 NSC500-400-420	55	70	95	85	6311 SKF	M74N/70-G92-Q2BVGG (Mechanical Seal Type B)	Horizontal installation Type C
NSC250-200-460 NSC300-250-390 NSC350-300-310 NSC350-300-330 NSC350-300-400 NSC350-250-400 NSC350-250-610 NSC400-300-450 NSC400-350-360 NSC400-350-360 NSC450-400-350 NSC500-400-400 NSC500-400-420	65	80	110	93	6313 FAG	M74N/80-G92-Q2BVGG (Mechanical Seal Type B)	Horizontal installation Type C
NSC250-200-460 NSC300-250-390 NSC350-300-310 NSC350-300-330 NSC350-300-400 NSC350-250-400 NSC350-250-610 NSC400-300-450 NSC400-350-360 NSC400-350-360 NSC450-400-350 NSC500-400-400 NSC500-400-420	75	90	120	92	6315 SKF	M74N/90-G92-Q2BVGG (Mechanical Seal Type A)	Horizontal installation Type C

Remark: 1. The max test pressure in above table is 1.6Mpa and pump casing material within this range apply to HT250; if the pressure is over 1.6 Mpa, should use ductile cast iron or the better materials. 2. The max test pressure in above table pump is 2.5Mpa and above, if the max test pressure is within 2.0Mpa, casing material can be HT250, if the max test pressure is more than 2.0Mpa, casing material should be ductile cast iron or the other better materials.

Model	Shaft dia.	Nominal dia. Packing/Mechanical seal	Sealed chamber D	Sealed chamber L	Bearing	Mechanical seal Model	Pump structure
NSC600-500-550 NSC600-600-680	80	115	150	170	6320 SKF	M74N/115-G92-Q2BVGG (Mechanical Seal Type A)	Horizontal installation Type A
NSC300-250-760 NSC400-300-570 NSC400-300-700 NSC400-350-520 NSC500-400-500 NSC500-400-590 NSC500-400-675 NSC700-700-500	65	110	150	130	NU316/6316 SKF	H75N/110-G92-Q2BVGG (Mechanical Seal Type A)	Horizontal installation Type B
NSC600-500-470 NSC600-500-520 NSC500-400-540 NSC600-400-660 NSC500-300-790 NSC600-400-740 NSC600-450-640 NSC700-500-670 NSC700-600-800 NSC700-600-880	85	110	150	130	6317 FAG	M74N/110-G92-Q2BVGG (Mechanical Seal Type A)	Horizontal installation Type B
NSC600-500-470 NSC600-500-520 NSC500-400-540 NSC600-400-660 NSC500-300-790 NSC600-400-740 NSC600-450-640 NSC700-500-670 NSC700-600-800 NSC700-600-880	95	115	150	170	6320 FAG	M74N/120-G92-Q2BVGG (Mechanical Seal Type A)	Horizontal installation Type A
NSC600-300-760 NSC600-300-920 NSC600-400-850 NSC700-600-740	100	135	150	150	NU321/6321 SKF	M74N/135-G92-Q2BVGG (Mechanical Seal Type A)	Horizontal installation Type B
NSC800-700-750 NSC700-500-840 NSC800-700-910 NSC1000-800-940	120	160	205	170	NU326/6326 SKF	M74N/150-G92-Q2BVGG (Mechanical Seal Type A)	Horizontal installation Type B
NSC800-700-910 NSC1000-800-940	130	170	215	176	2NU326/6326 NU326/6326	M74N/170-G92-Q2BVGG (Mechanical Seal Type A)	Horizontal installation Type A

Note: Above values are valid for the pumps under normal pressure and temperature, if the medium temp. is more than 80°C, and the pressure exceeds the pressure limit in the below table, pls to select CHS.

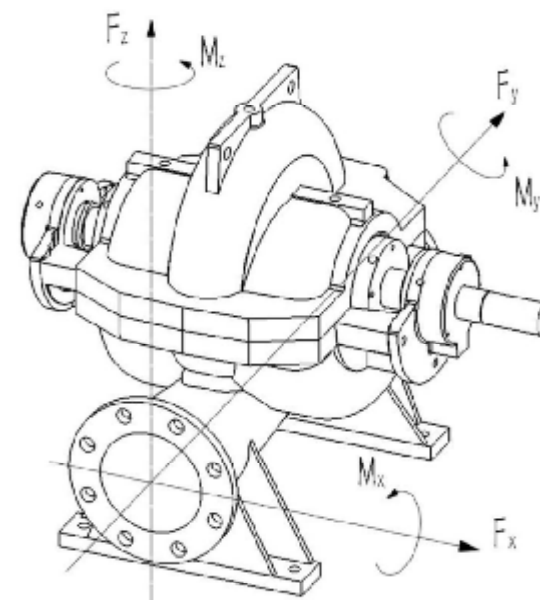
## Pressure Limits

Model	Permissible operating pressure(MPa)	Model	Permissible operating pressure(MPa)
NSC125-80-210	1.6	NSC400-300-700	2.5
NSC125-80-270	1.6	NSC400-360-360	1.6
NSC125-80-350	1.6	NSC400-360-380	1.6
NSC150-100-250	1.6	NSC400-360-620	1.6
NSC150-100-320	1.6	NSC400-400-300	1.0
NSC150-100-400	1.6	NSC500-300-760	3.0
NSC200-125-240	1.6	NSC500-300-520	2.5
NSC200-125-300	1.6	NSC500-400-400	1.6
NSC200-125-360	1.6	NSC500-400-420	1.6
NSC200-125-460	1.6	NSC500-400-500	1.6
NSC200-150-290	1.6	NSC500-400-540	1.6
NSC200-150-360	1.6	NSC500-400-590	1.0
NSC200-150-460	1.6	NSC500-400-690	2.5
NSC200-150-570	1.6	NSC500-400-675	1.0
NSC250-200-340	1.6	NSC600-400-740	1.6
NSC250-200-430	1.6	NSC600-400-850	1.6
NSC300-250-270	2.5	NSC600-450-640	1.6
NSC300-250-260	1.6	NSC600-500-470	1.0
NSC350-300-310	1.6	NSC600-600-620	1.0
NSC350-300-330	1.6	NSC600-500-550	1.0
NSC350-300-400	2.5	NSC600-500-550	1.0
NSC350-250-400	1.4	NSC700-500-670	1.6
NSC350-250-610	1.6	NSC700-500-540	2.5
NSC400-300-450	1.6	NSC700-600-600	1.0
NSC400-350-360	1.6	NSC700-600-680	1.0
NSC400-350-360	3.0	NSC700-600-740	1.6
NSC450-400-350	1.6	NSC700-700-500	1.0
NSC500-400-400	1.6	NSC800-700-750	1.0
NSC500-400-420	1.6	NSC800-700-910	1.6
	1.6	NSC1000-800-940	1.0

## Impeller, Nozzle Forces and Nozzle Moments

Model	Impeller Dimensions(mm)		Permissible Nozzle forces Fx, Fy, Fz N	Permissible Nozzle moments Mx, My, Mz Nm
	Free passage +/- 10%	Max. Diameter		
NSC125-80-210	30	216	800	500
NSC125-80-270	25	270		
NSC125-80-350	22	345		
NSC150-100-250	30	254	1000	700
NSC150-100-320	24	325		
NSC150-100-400	21	423		
NSC150-100-400G	21	423		
NSC200-125-240	48	250	1500	1000
NSC200-125-300	37	301		
NSC200-125-380	35	395		
NSC200-125-480	29	491	2000	1500
NSC200-150-290	52	290		
NSC200-150-360	44	370	2500	2000
NSC200-150-460	35	460		
NSC200-150-570	32	585	3000	
NSC250-200-340	57	338	4000	2750
NSC250-200-430	52	426		
NSC250-200-530	40	530		
NSC250-200-660	38	665		
NSC300-250-270	119	302		
NSC300-250-280	96	321		
NSC300-250-390	70	395		
NSC300-250-490	60	490		
NSC300-250-610	45	610		
NSC300-250-780	42	770		
NSC350-300-310	132	310	5000	3000
NSC350-300-330	101	350		
NSC350-300-400	81.6	425		
NSC400-300-450	81	450		
NSC400-300-570	67	580		
NSC400-300-700	65	700		
NSC400-350-360	149	360		
NSC400-350-380	122	415		
NSC400-350-520	90	558		
NSC450-450-350	161	350		
NSC500-300-780	81	780	5600	3200
NSC500-300-920	85.4	920		
NSC500-400-400	180.6	412		
NSC500-400-420	180	425		
NSC500-400-500	166.1	498		
NSC500-400-540	105	545		
NSC500-400-590	105	545		
NSC500-400-660	84.9	666		
NSC500-400-675	84.9	666		
NSC600-400-740	99	740	6900	3800
NSC600-400-850	102	860		
NSC600-450-640	128	650		
NSC600-500-470	175	520	8800	4900
NSC600-500-520				
NSC600-500-550	243	580		
NSC600-500-580				
NSC700-500-670	130	672	10700	6300
NSC700-500-940	128.5	940		
NSC700-600-600	103.5	610		
NSC700-600-680	240	702		
NSC700-600-740	146	780		
NSC700-700-500	246	522	12600	7100
NSC800-700-750	315.9	750		
NSC800-700-910	196	920		
NSC1000-800-940	291	940		

Note: Values are valid for casing materials cast iron, for casing material ductile cast iron use 1.4-fold value and for cast steel use 1.7-fold value. If require for the dimension of pump which is not shown in the above table, pls contact CNP.



## NSC

### Speeds

The Performance Range Chart shows the pump operating range, for higher speeds, pls consult CNP.

### Vibrations

- 1.The normal operating range of pump is 0.4~1.25 times of rated capacity.
- 2.The vibration values of pump are according to ISO 2372-1974.

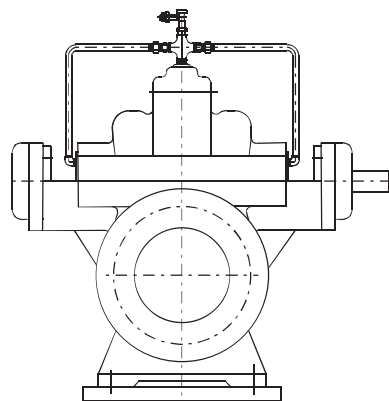
### Paint Specifications

	Inside	Outside
Pre-treatment	Blasting (2 times)	
Primer coating	Epoxy zinc-rich primer	
Finish coating	Wet parts use the Interzone 954 or Epoxy zinc-rich primer	Acrylic Enamel Normal NSC: RAL5015(Blue) Fire-Fighting Pump: RAL3000(Red)

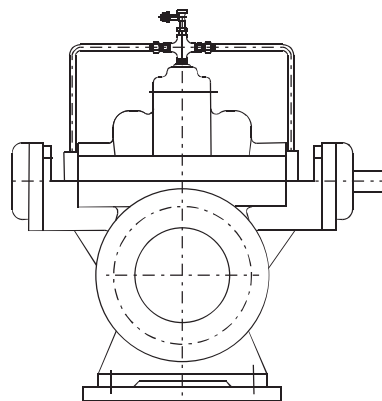
Note: Super light energy saving coating, wear-resistant coating, anti-corrosion coating and others are available according to the different medium, application, customer requirements and the coating is extra-charged.

### Arrangement

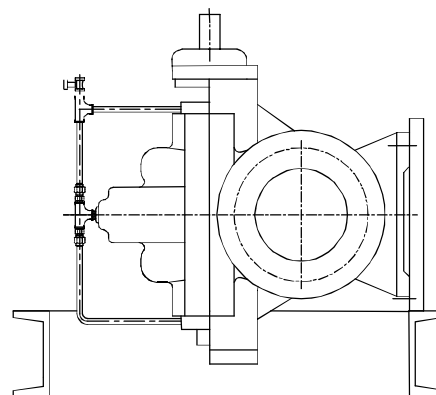
Sealing Water Pipes



▲01 Flushing water piping stuffing box

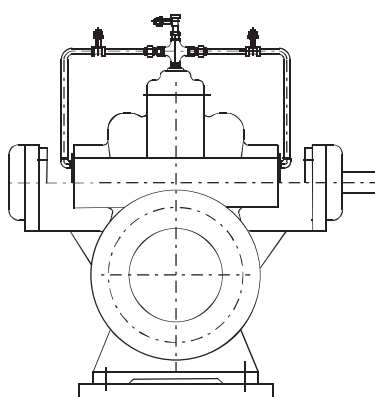


▲ 02 Flushing water piping mechanical seal

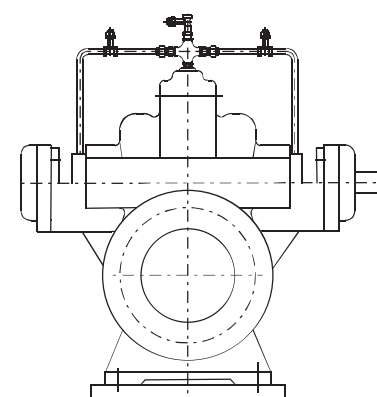


▲ 03 Mechanical seal and flushing water piping for lineshaft bearing

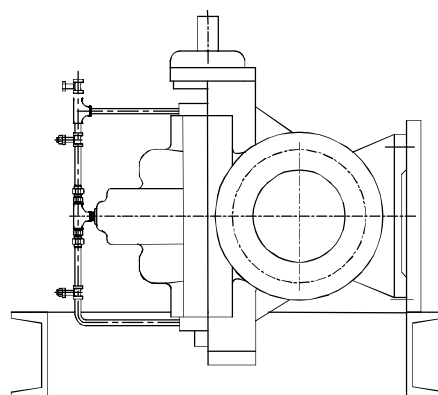
### Venting Connections and Bearing Temperature Sensor (Vent valves are available as accessories)



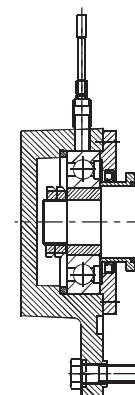
▲ 04 Flushing water piping stuffing box with vent valve



▲ 05 Flushing water piping mechanical seal with vent valve



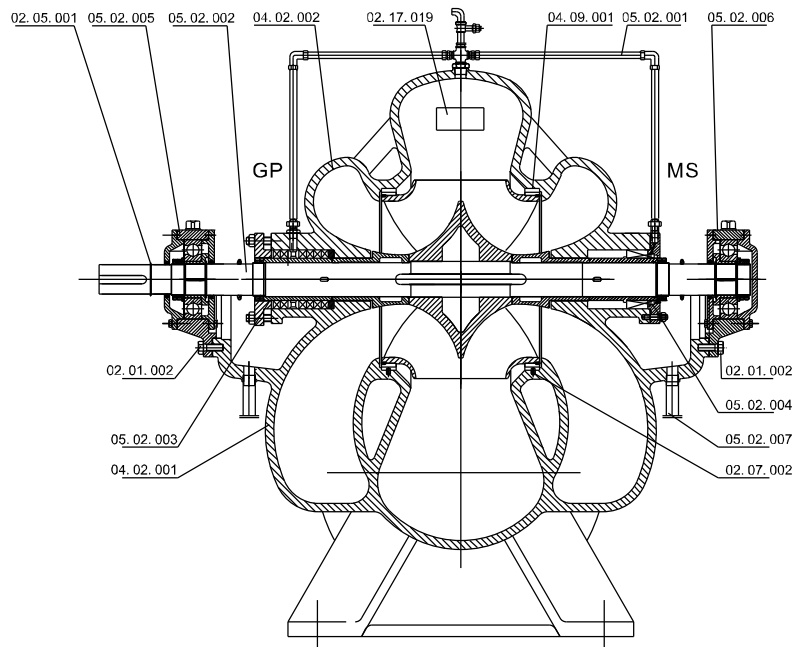
▲ 06 Flushing water piping and vent valve (Vertical installation)



▲ 07 Bearing temperature sensor (PT100)

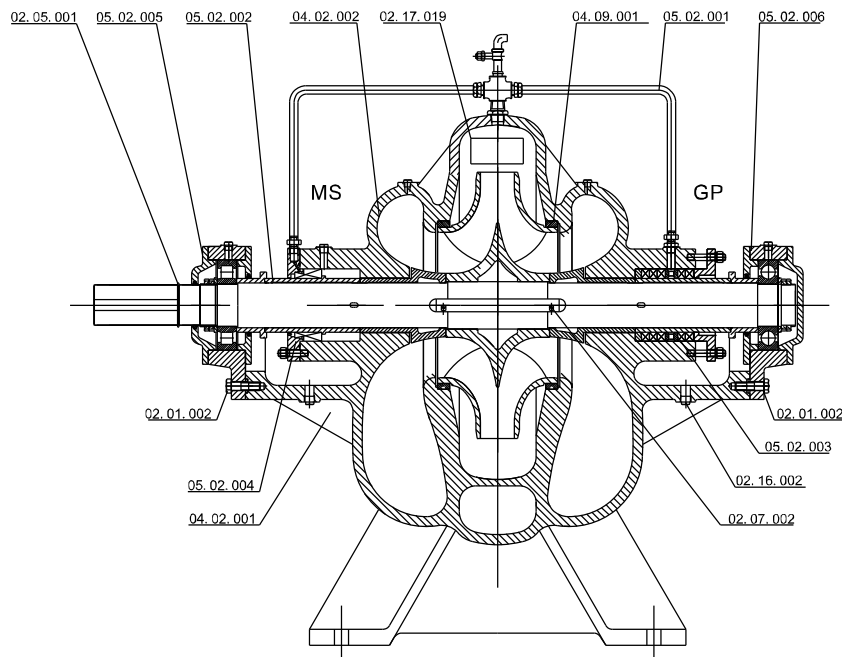
## Sectional View—NSC

### Horizontal Installation



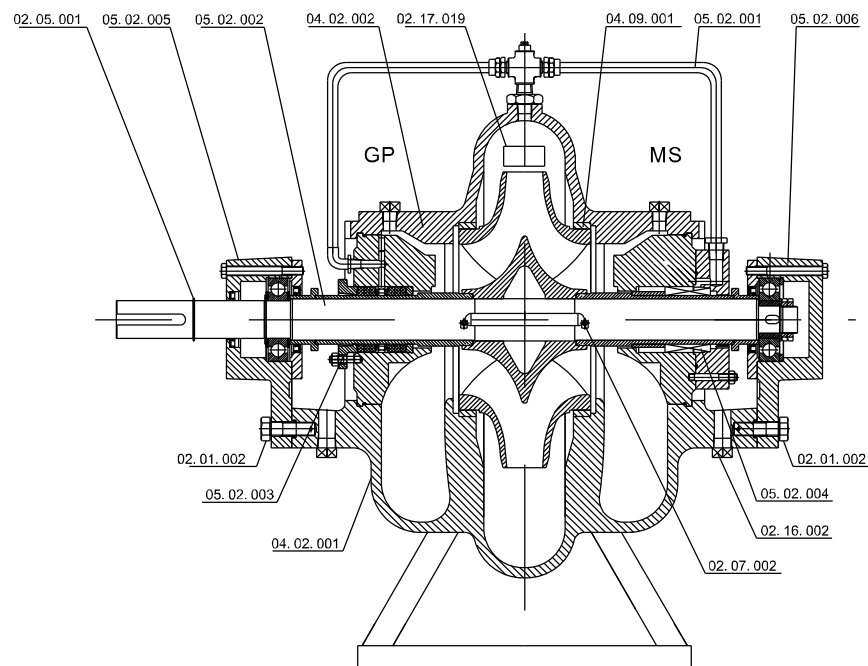
▲ Type A

Part No.	Part Name
02.05.001	Shaft Circlip
05.02.005	Bearing assembly (DE)
05.02.002	Rotor assembly
04.02.002	Upper casing
02.17.019	Nameplate
04.09.001	Casing wear ring
05.02.001	Flushing water piping
05.02.006	Bearing assembly (NDE)
02.01.002	Bolt
05.02.003	Packing seal assembly
04.02.001	Lower casing
05.02.004	Mechanical seal assembly
05.02.007	Drainage pipe
02.07.002	Wear ring dowel pin



▲ Type B

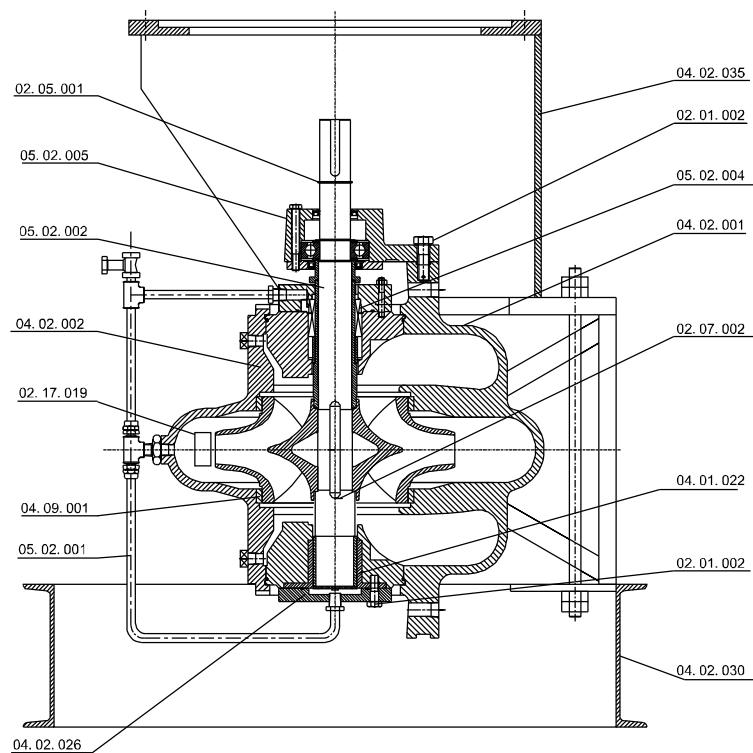
Part No.	Part Name
02.05.001	Shaft Circlip
05.02.005	Bearing assembly (DE)
05.02.002	Rotor assembly
04.02.002	Upper casing
02.17.019	Nameplate
04.09.001	Casing wear ring
05.02.001	Flushing water piping
05.02.006	Bearing assembly (NDE)
02.01.002	Bolt
05.02.004	Mechanical seal assembly
04.02.001	Lower casing
05.02.003	Packing seal assembly
02.16.002	Plug
02.07.002	Wear ring dowel pin



▲ Type C

Part No.	Part Name
02.05.001	Shaft Circlip
05.02.005	Bearing assembly (DE)
05.02.002	Rotor assembly
04.02.002	Upper casing
02.17.019	Nameplate
04.09.001	Casing wear ring
05.02.001	Flushing water piping
05.02.006	Bearing assembly (NDE)
02.01.002	Bolt
05.02.003	Packing seal assembly
04.02.001	Lower casing
05.02.004	Mechanical seal assembly
02.16.002	Plug
02.07.002	Wear ring dowel pin

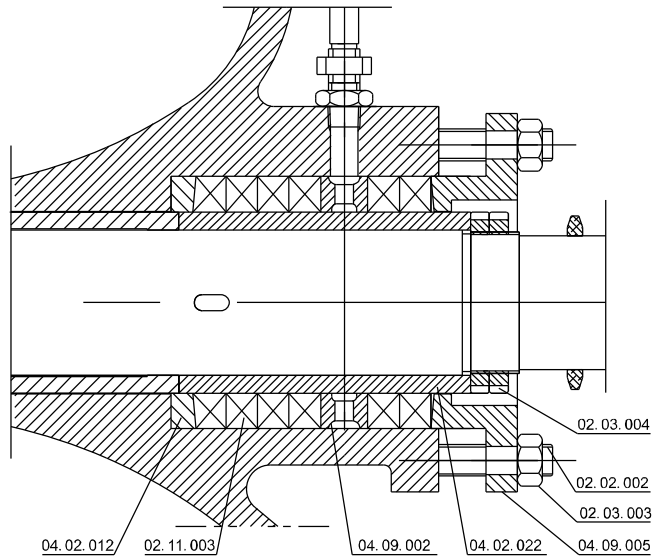
**Vertical Installation**



Part No.	Part Name
02.05.001	Shaft Circlip
05.02.005	Bearing assembly (DE)
05.02.002	Rotor assembly
04.02.002	Upper casing
02.17.019	Nameplate
04.09.001	Casing wear ring
05.02.001	Flushing water piping
04.02.026	Cap
04.02.035	Motor riser
02.01.002	Bolt
05.02.004	Mechanical seal assembly
04.02.001	Lower casing
02.07.002	Wear ring dowel pin
04.01.022	Bearing bush
04.02.030	Foot

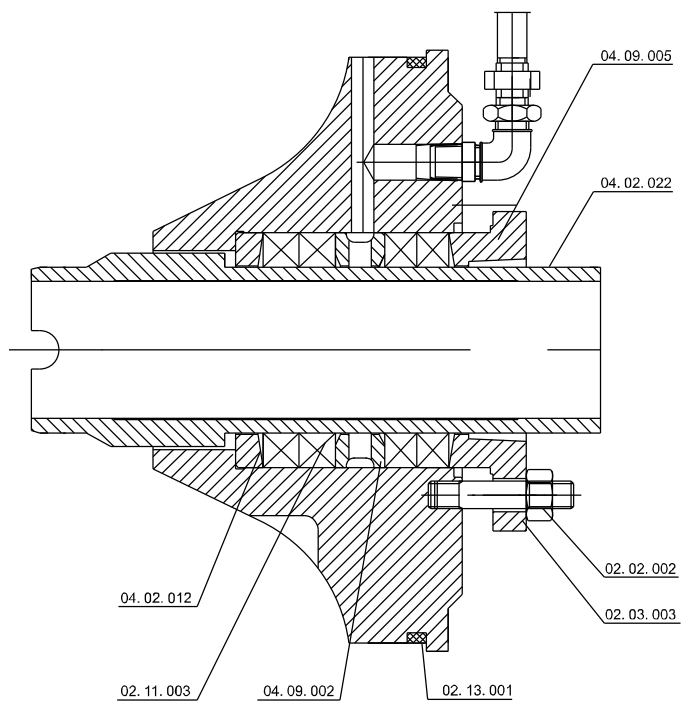
**Sectional View—Shaft Seal**

**1. Soft Packed Stuffing Box**



Part No.	Part Name
04.02.012	Set neck ring
02.11.003	Gland packing
04.09.002	Lantern ring
04.02.022	Shaft protecting sleeve
04.09.005	Gland
02.03.003	Nut
02.02.002	Bolt
02.03.004	Round nut

▲ Type A—Apply to horizontal installation type A and B

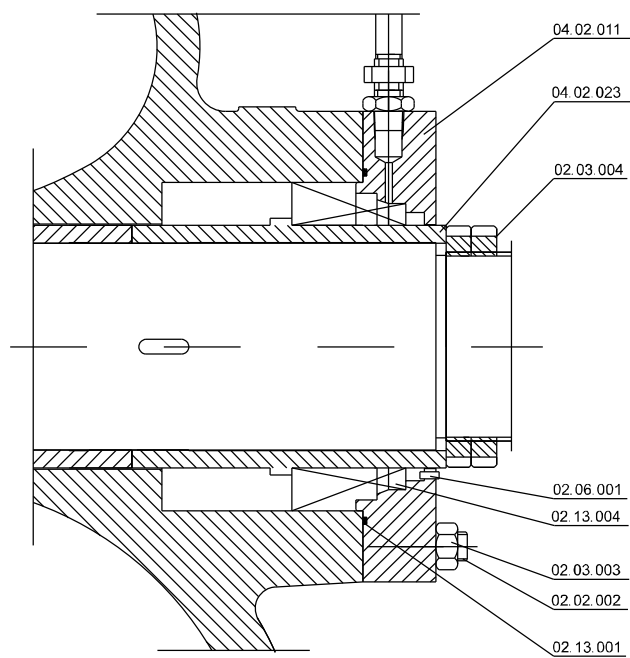


Part No.	Part Name
04.09.005	Gland
04.02.022	Shaft protecting sleeve
04.02.012	Set neck ring
02.11.003	Gland packing
04.09.002	Lantern ring
02.13.001	O-Ring
02.02.002	Bolt
02.03.003	Nut

▲ Type B—Apply to horizontal installation type C

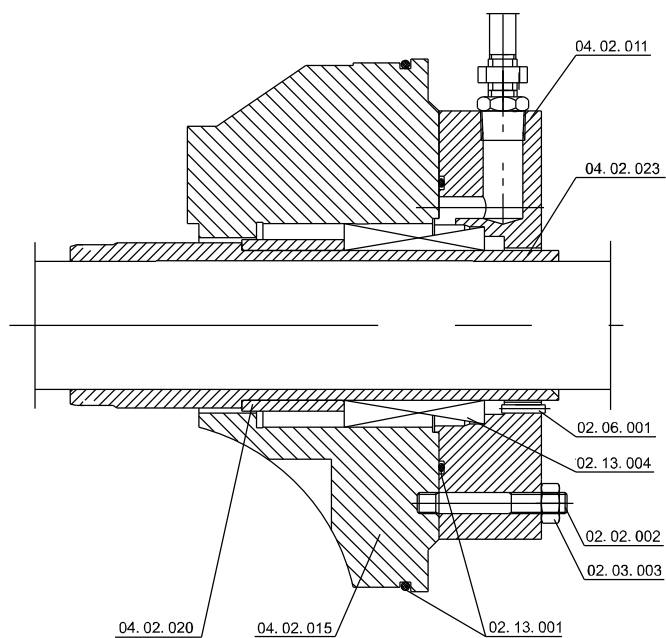


## 2.Mechanical Seal



▲ Type A—Apply to horizontal installation type A and B

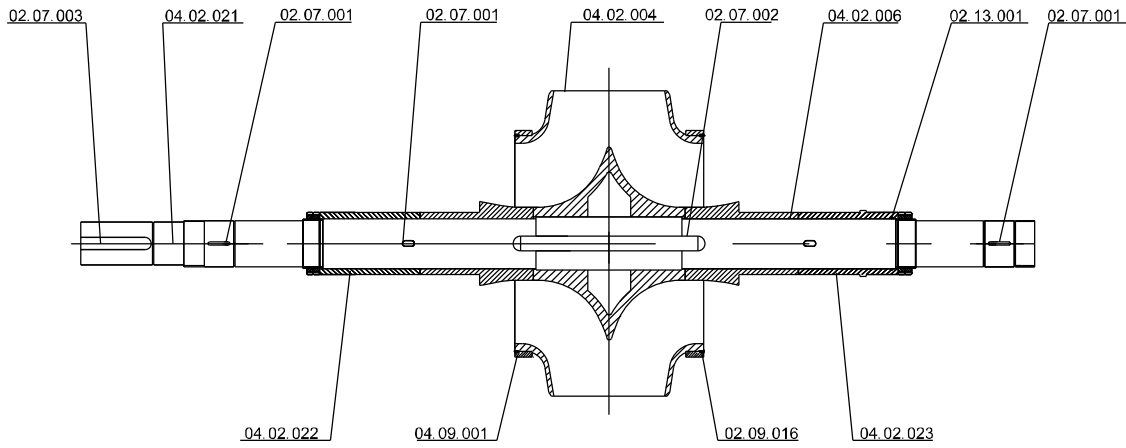
Part No.	Part Name
04.02.011	Seal cover
04.02.023	Shaft protecting sleeve
02.03.004	Round nut
02.06.001	Round pin
02.13.004	Shaft seal unit
02.03.003	Nut
02.02.002	bolt
02.13.001	O-Ring



▲ Type B—Apply to horizontal installation type C

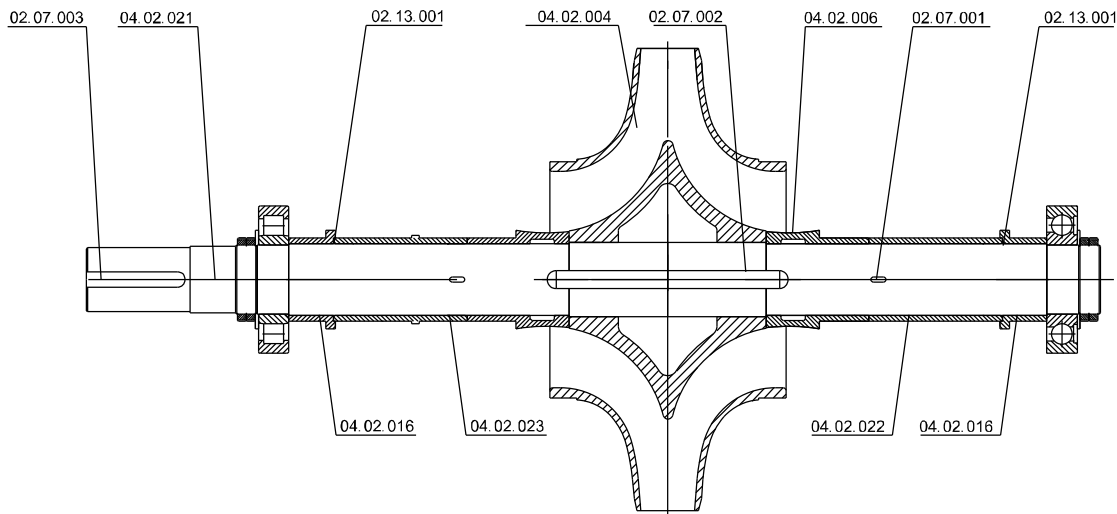
Part No.	Part Name
04.02.011	Seal cover
04.02.023	Shaft protecting sleeve
02.06.001	Round pin
02.13.004	Shaft seal unit
02.02.002	Bolt
02.03.003	Nut
02.13.001	O-Ring
04.02.015	Shaft seal housing
04.02.020	Spacer sleeve

Sectional View—Rotor



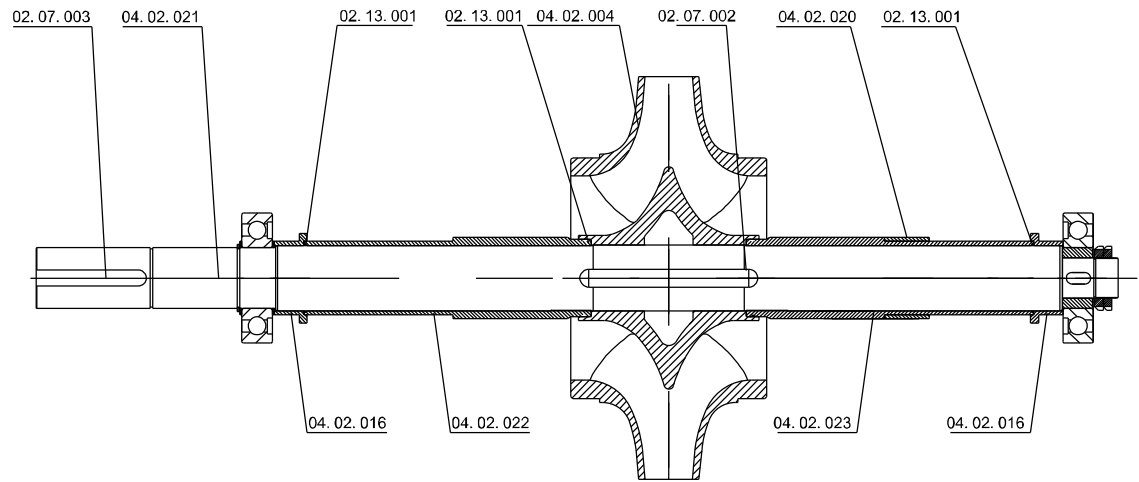
▲ Type A—Apply to horizontal installation type A

Part No.	Part Name	Part No.	Part Name	Part No.	Part Name
02.07.003	Key C	04.02.021	Shaft	02.07.001	Key A
04.02.004	Impeller	02.07.002	Key B	04.02.006	Shaft protecting sleeve
02.13.001	O-Ring	04.02.022	Shaft protecting sleeve(GP)	04.09.001	Impeller seal ring
02.09.016	Impeller locating screw	04.02.023	Shaft protecting sleeve(MS)		



▲ Type B—Apply to horizontal installation type B

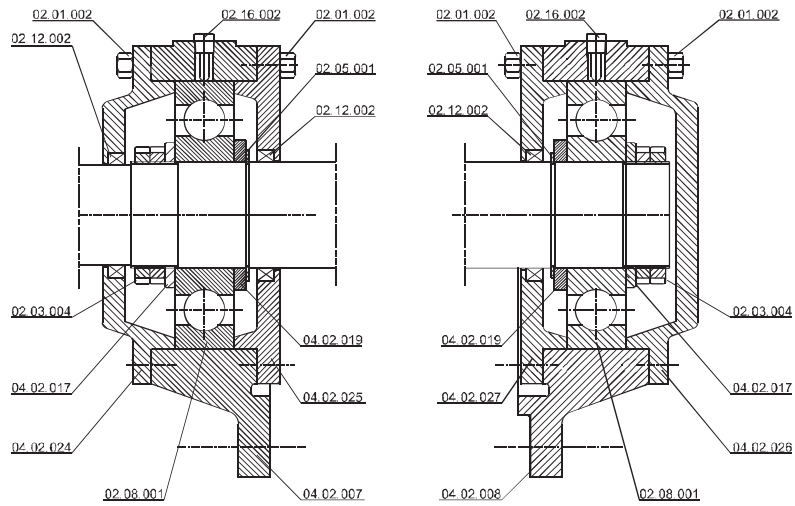
Part No.	Part Name	Part No.	Part Name	Part No.	Part Name
02.07.003	Key C	04.02.021	Shaft	02.13.001	O-Ring
04.02.004	Impeller	02.07.002	Key B	04.02.006	Shaft protecting sleeve
02.07.001	Key A	04.02.016	Water baffle sleeve	04.02.023	Shaft protecting sleeve(MS)
04.02.022	Shaft protecting sleeve(GP)				



▲ Type C—Apply to horizontal installation type C

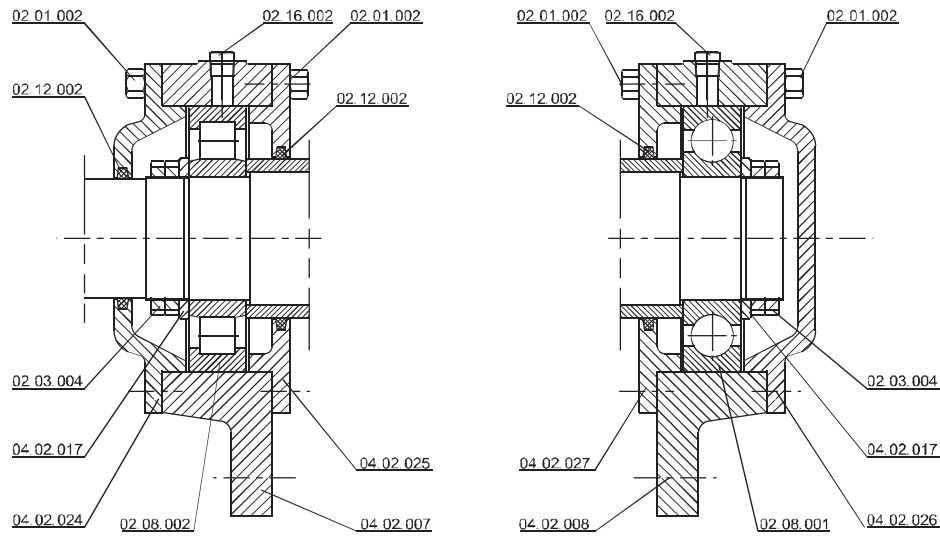
Part No.	Part Name	Part No.	Part Name	Part No.	Part Name
02.07.003	Key C	04.02.021	Shaft	02.13.001	O-Ring
04.02.004	Impeller	02.07.002	Key B	04.02.020	Spacer sleeve(MS)
04.02.023	Shaft protecting sleeve(MS)	04.02.016	Water baffle sleeve	04.02.022	Shaft protecting sleeve(GP)

**Sectional View—Bearing**



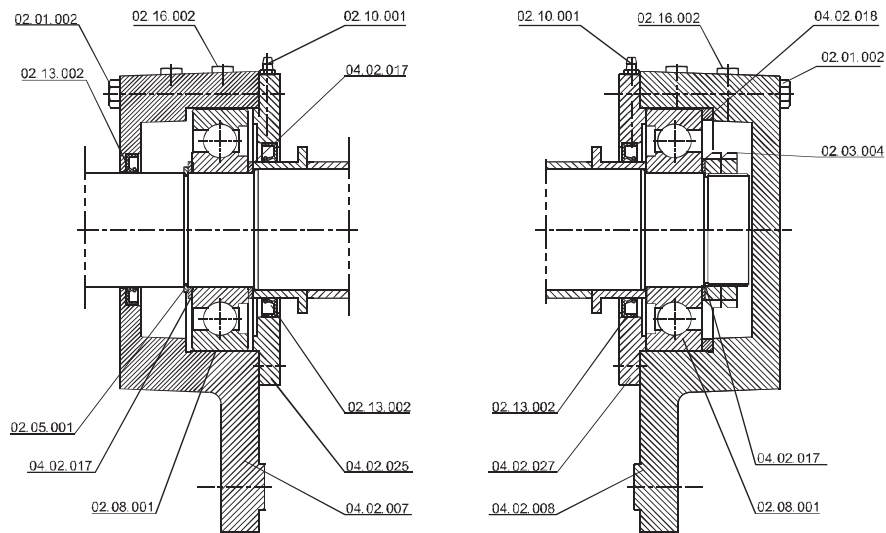
▲ Type A---Apply to horizontal installation type A

Part No.	Part Name	Part No.	Part Name	Part No.	Part Name	Part No.	Part Name
02.01.002	Hex bolts	02.12.002	Bearing retainer ring	02.03.004	Round nut	04.02.017	Bearing circlip
04.02.024	Bearing outer cover(DE)	02.08.001	Deep groove ball bearing	02.16.002	Plug	02.05.001	Shaft Circlip
04.02.019	Lip seal ring	04.02.025	Bearing inner cover (DE)	04.02.007	Bearing housing (DE)	04.02.027	Bearing inner cover (NDE)
04.02.008	Bearing housing (NDE)	04.02.026	Bearing outer cover (NDE)				



▲ Type B—Apply to horizontal installation type B

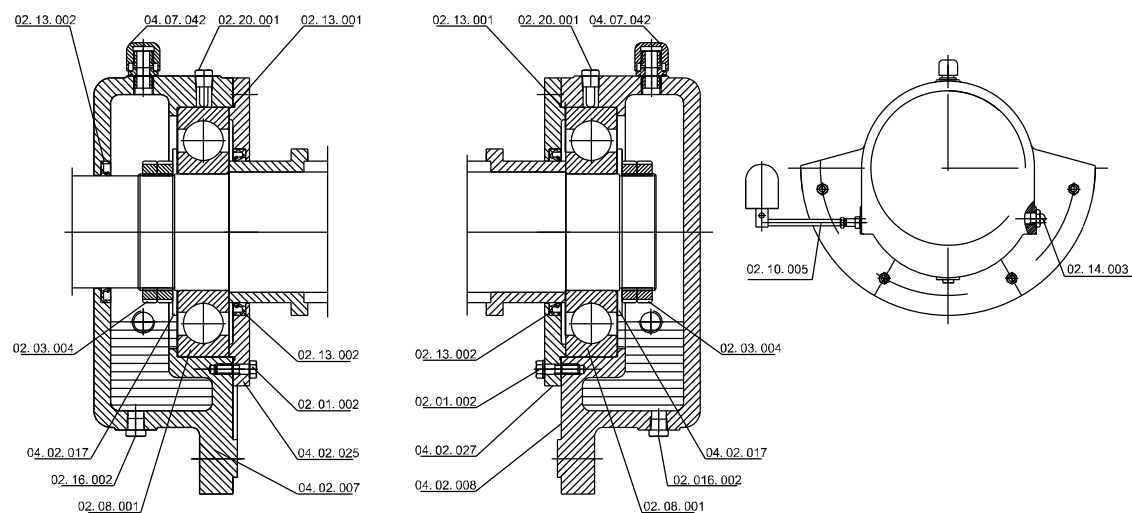
Part No.	Part Name	Part No.	Part Name	Part No.	Part Name	Part No.	Part Name
02.01.002	Hex bolts	02.12.002	Felt ring	02.03.004	Round nut	04.02.017	Bearing circlip
04.02.024	Bearing outer cover (DE)	02.08.002	Roller bearing	02.16.002	Plug	04.02.025	Bearing inner cover (DE)
04.02.007	Bearing housing (DE)	04.02.027	Bearing inner cover (NDE)	04.02.008	Bearing housing (NDE)	02.08.001	Deep groove ball bearing
04.02.026	Bearing outer cover (NDE)						



▲ Type C—Apply to horizontal installation type C

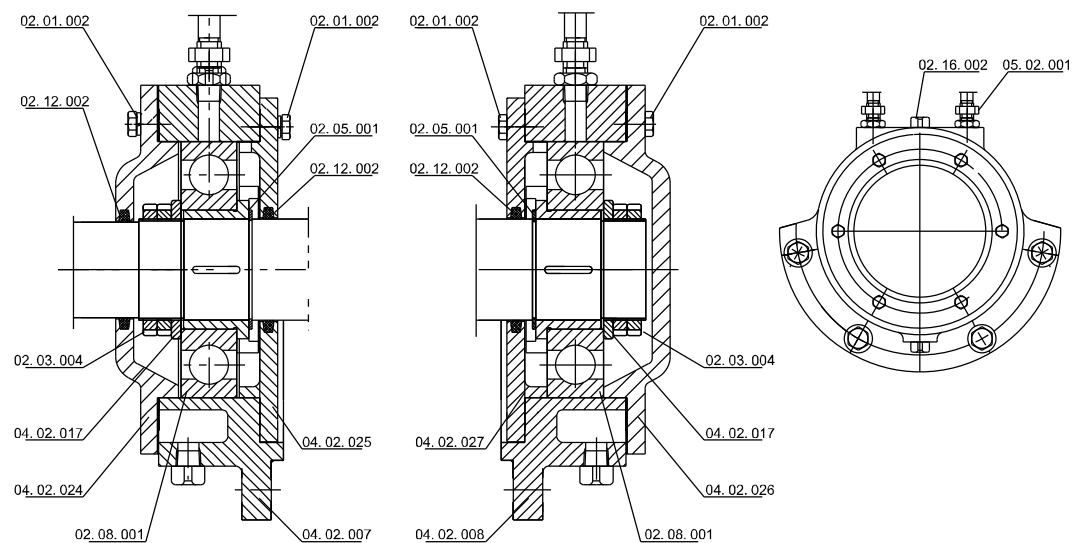
Part No.	Part Name	Part No.	Part Name	Part No.	Part Name	Part No.	Part Name
02.01.002	Hex bolts	02.13.002	Lip-type seal ring	02.05.001	Shaft Circlip	04.02.017	Bearing circlip
02.08.001	Deep groove ball bearing	02.16.002	Plug	02.10.001	Straight-through type oil cup	04.02.025	Bearing inner cover (DE)
04.02.007	Bearing housing (DE)	04.02.027	Bearing inner cover (NDE)	04.02.008	Bearing housing (NDE)	04.02.018	Bearing locating ring
02.03.004	Round nut						

### Bearing with oil lubrication



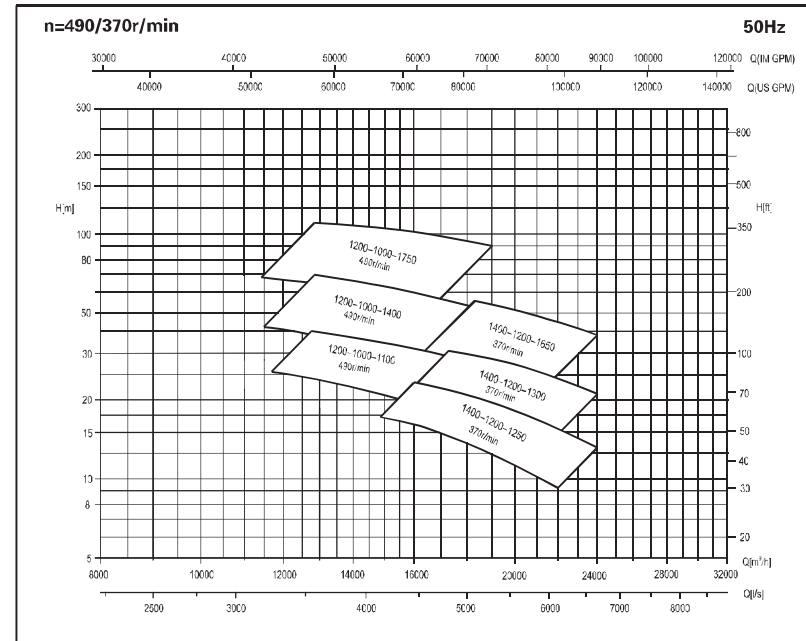
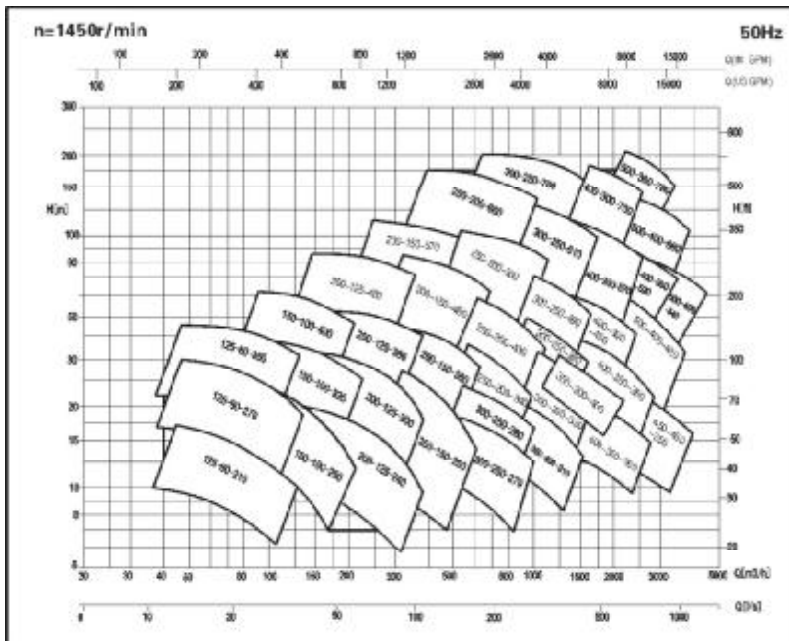
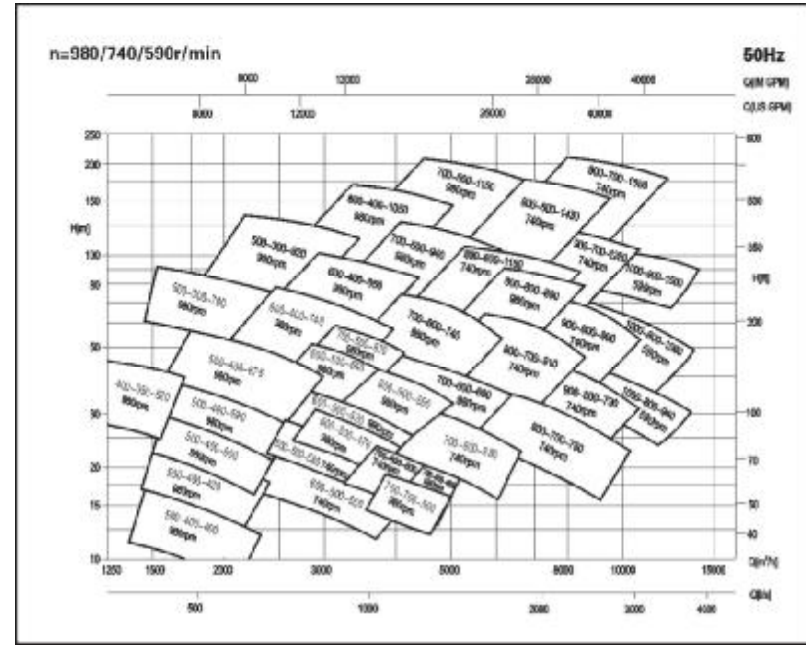
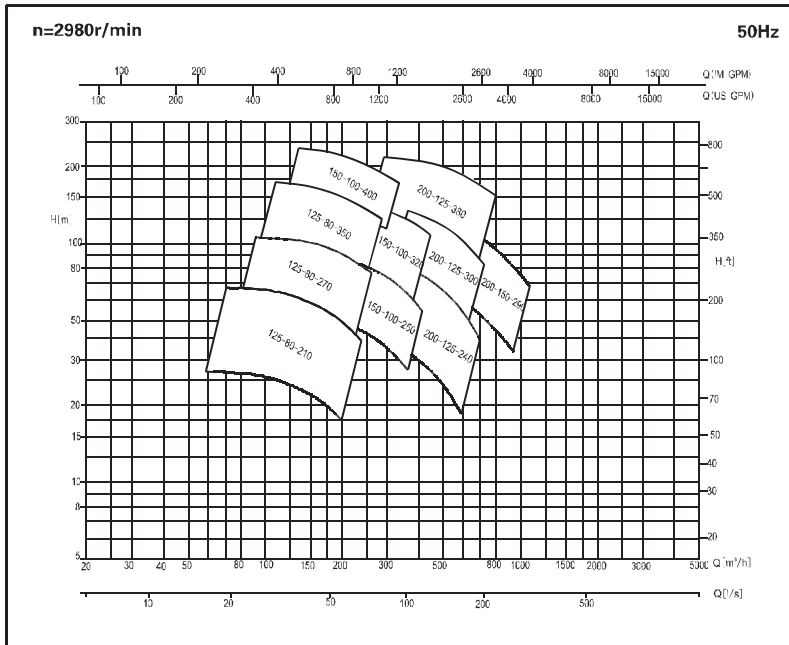
Part No.	Part Name	Part No.	Part Name	Part No.	Part Name	Part No.	Part Name
02.13.002	Lip-type seal ring	02.03.004	Round nut	04.02.017	Bearing circlip	02.16.002	Plug
02.08.001	Deep groove ball bearing	04.07.042	Breather cap	02.20.001	Temperature measuring device	02.13.001	O-Ring
02.01.002	Hex bolts	04.02.025	Bearing inner cover (DE)	04.02.007	Bearing housing (DE)	04.02.027	Bearing inner cover (NDE)
04.02.008	Bearing housing (NDE)	02.14.003	Oil sight gauge	02.10.005	Constant lever oiler		

### Bearing with water cooling(Pumping higher temp. liquid)

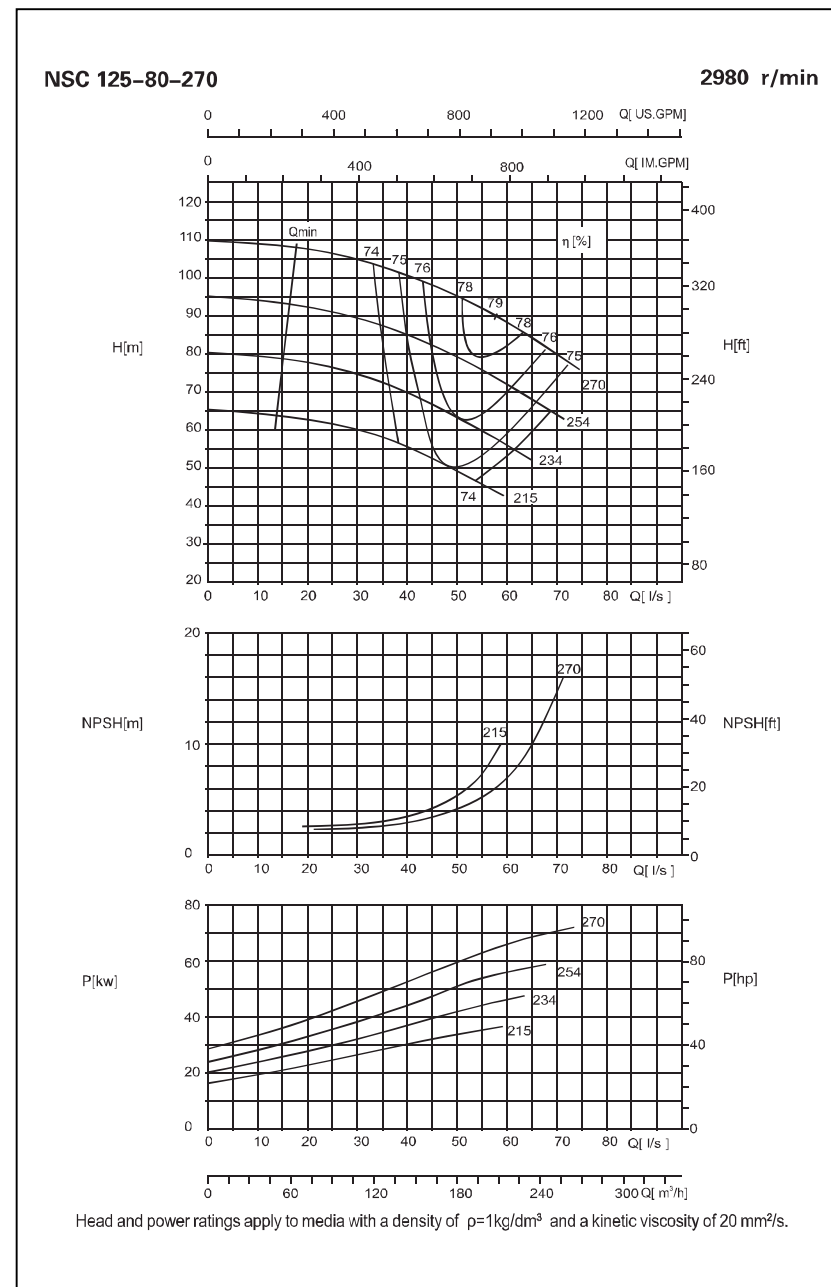
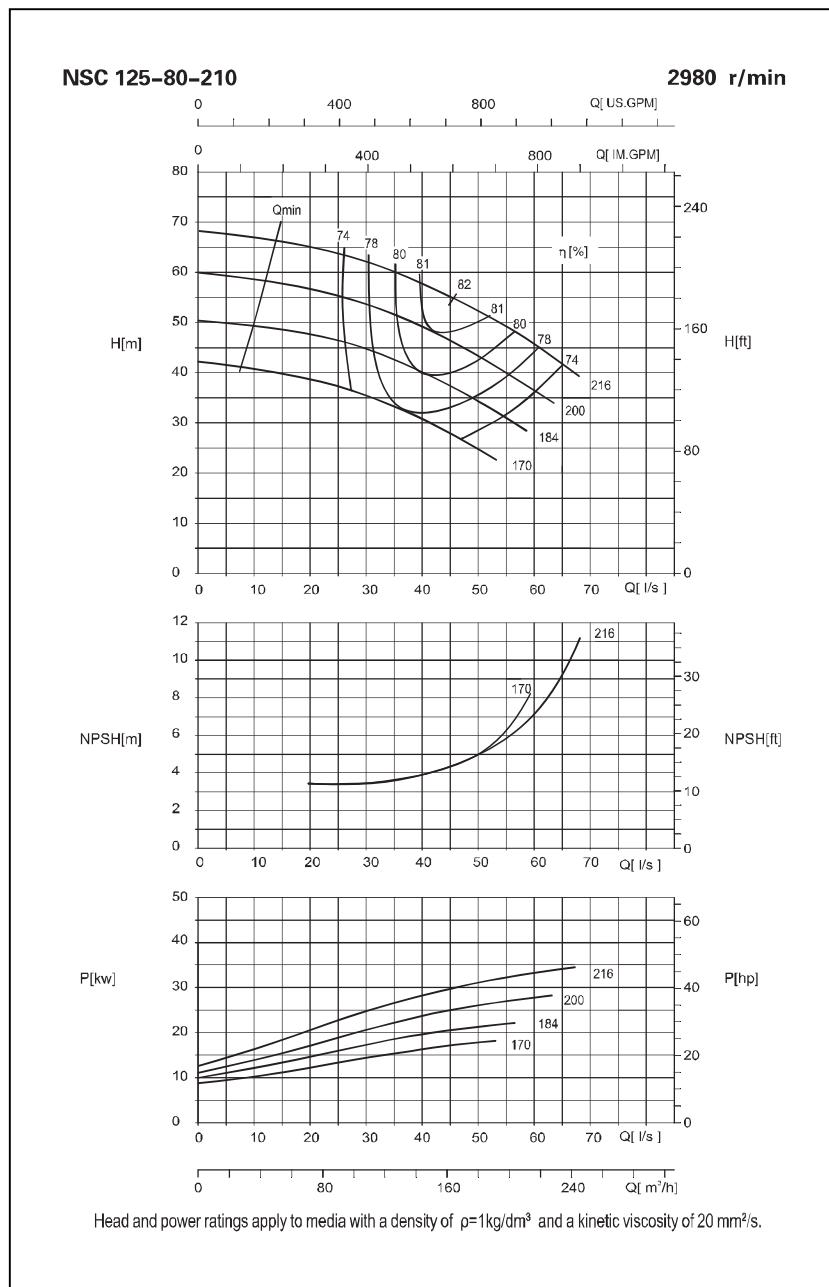


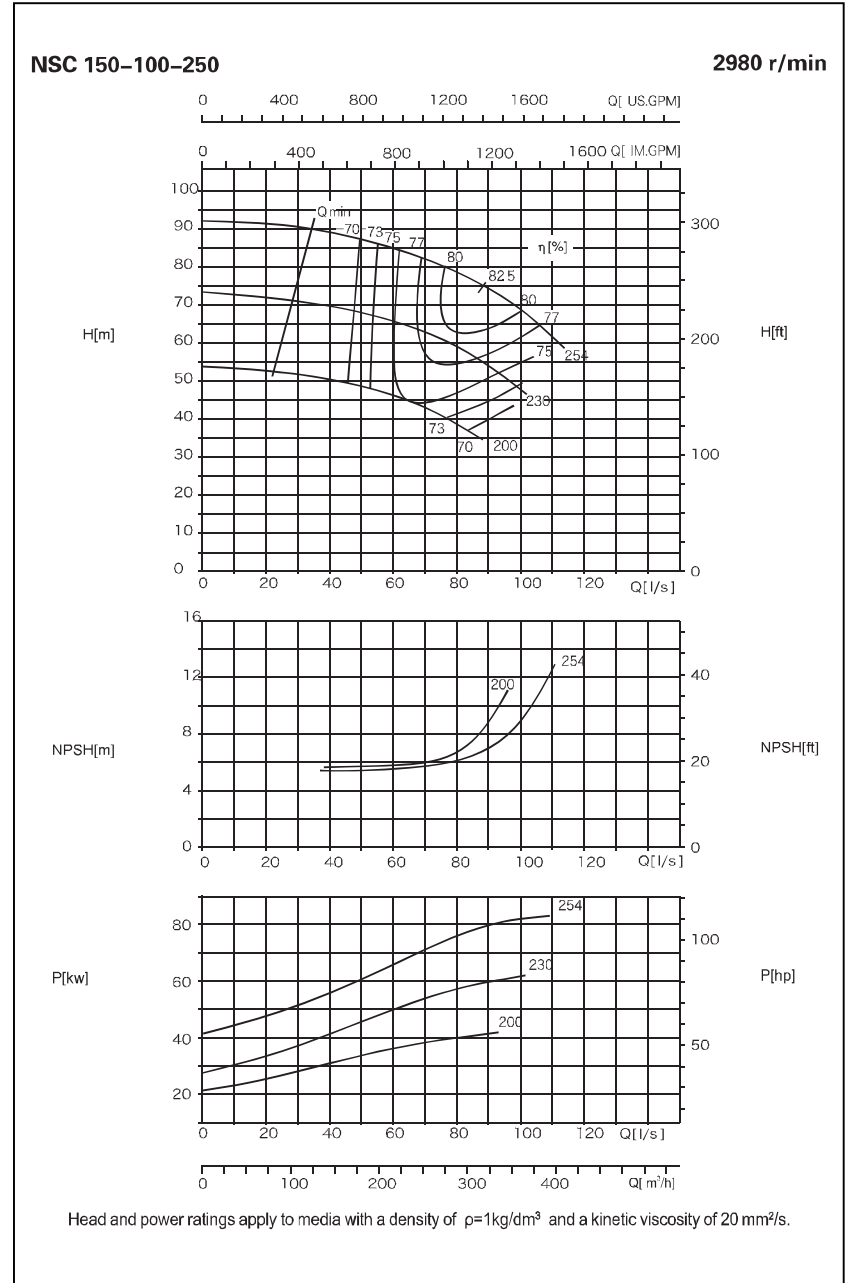
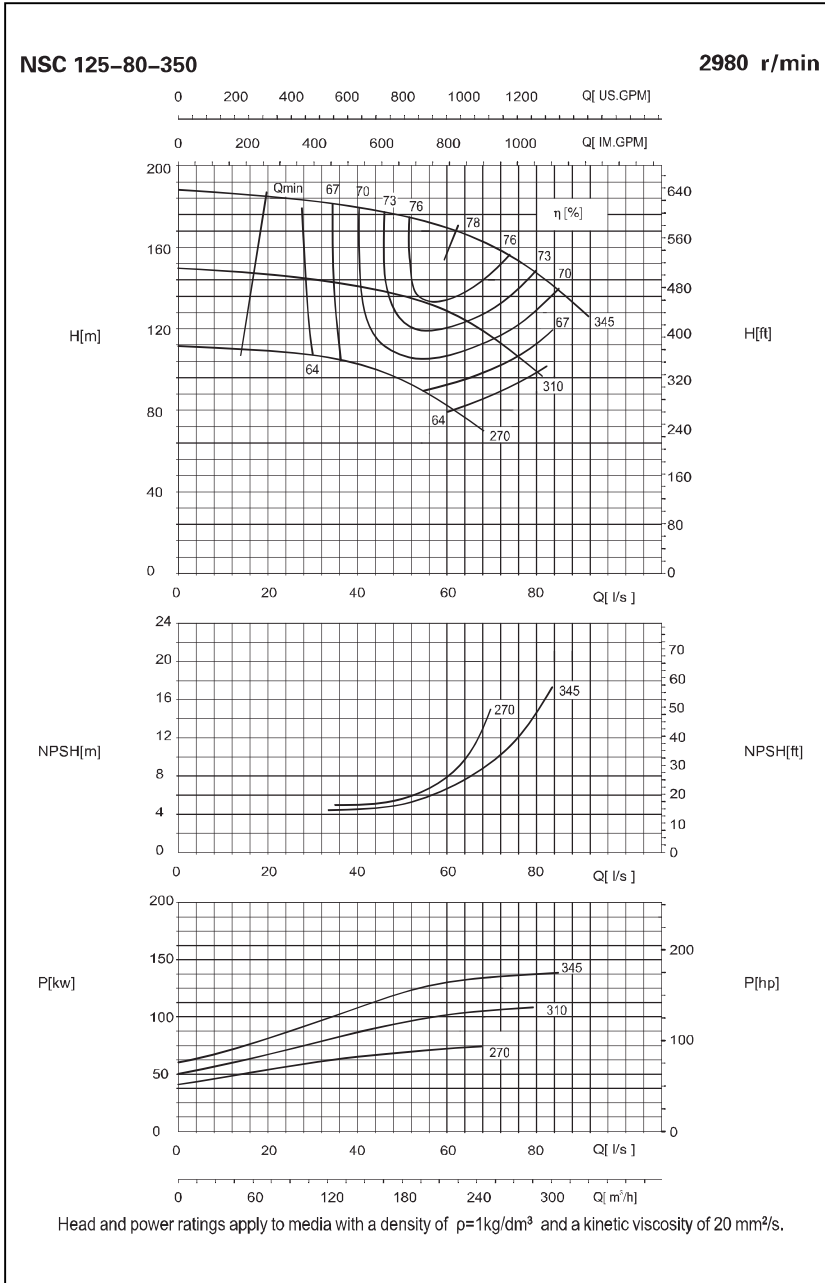
Part No.	Part Name	Part No.	Part Name	Part No.	Part Name	Part No.	Part Name
02.01.002	Hex bolts	02.12.002	Felt ring	02.03.004	Round nut	04.02.017	Bearing circlip
04.02.024	Bearing outer cover(DE)	02.08.001	Deep groove ball bearing	02.05.001	Shaft Circlip	04.02.008	Bearing housing (NDE)
04.02.025	Bearing inner cover (DE)	04.02.007	Bearing housing (DE)	04.02.027	Bearing inner cover (NDE)		
04.02.026	Bearing outer cover (NDE)	02.16.002	Plug	05.02.001	Cooling Piping		

Performance Range



## Performance Curve

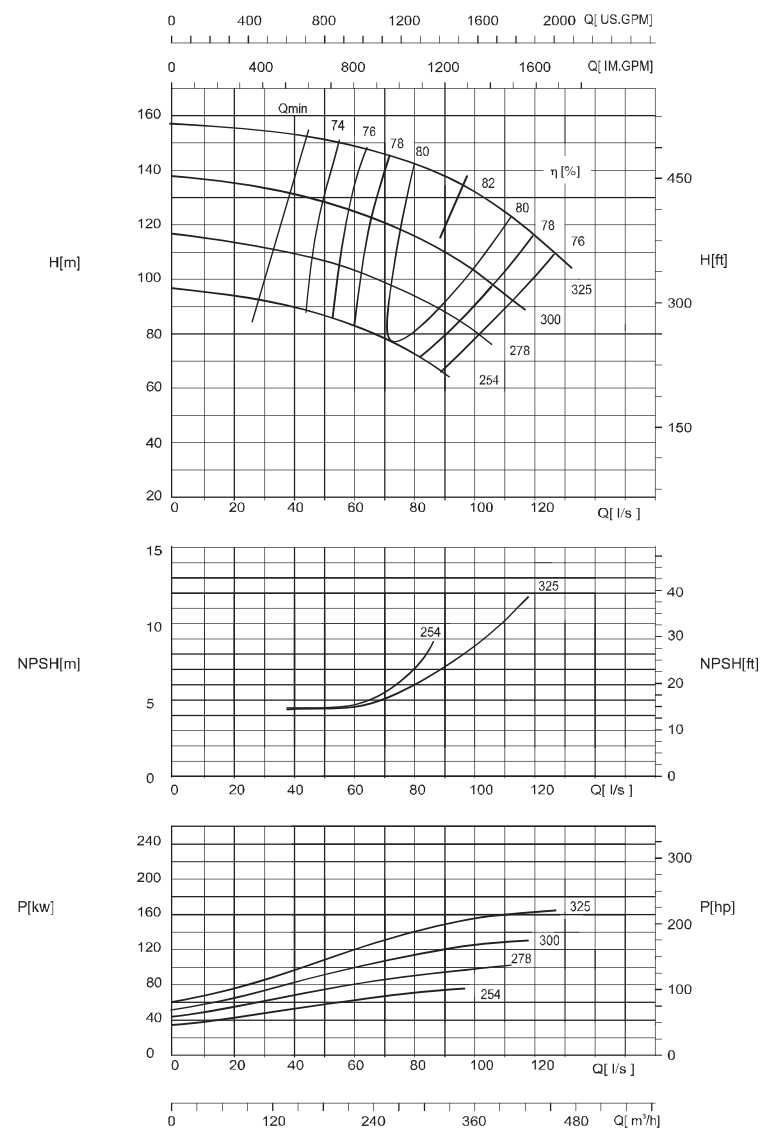






NSC 150-100-320

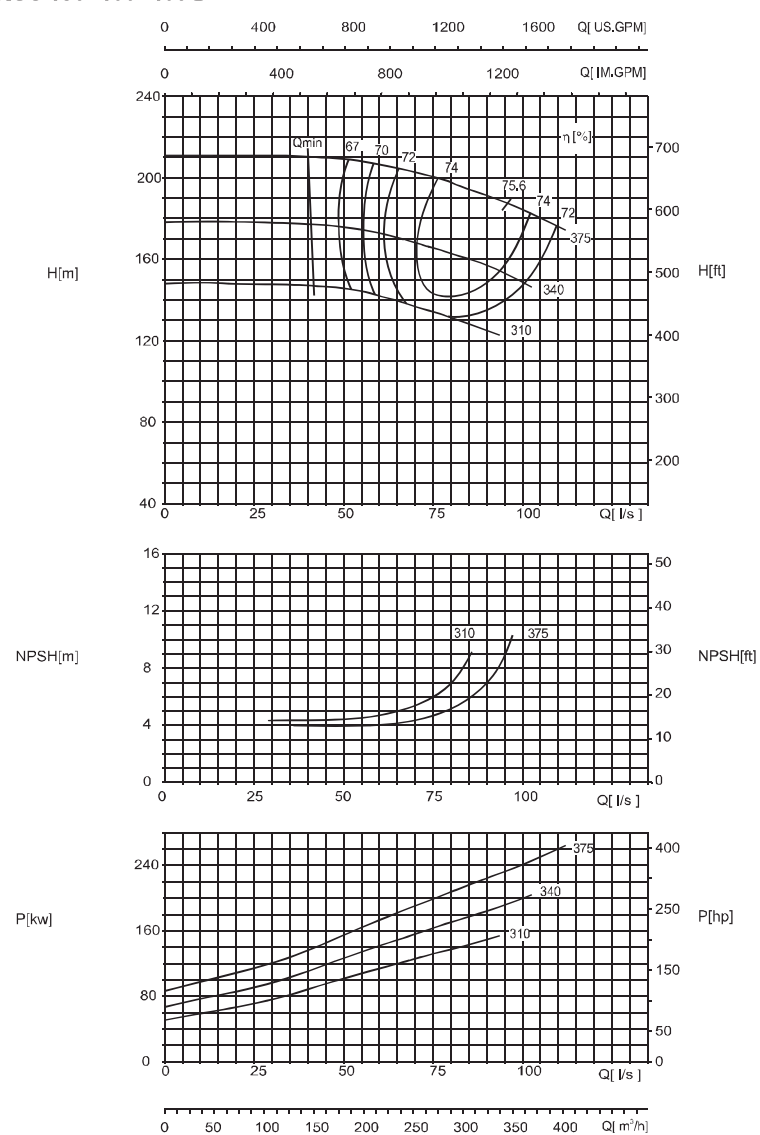
2980 r/min



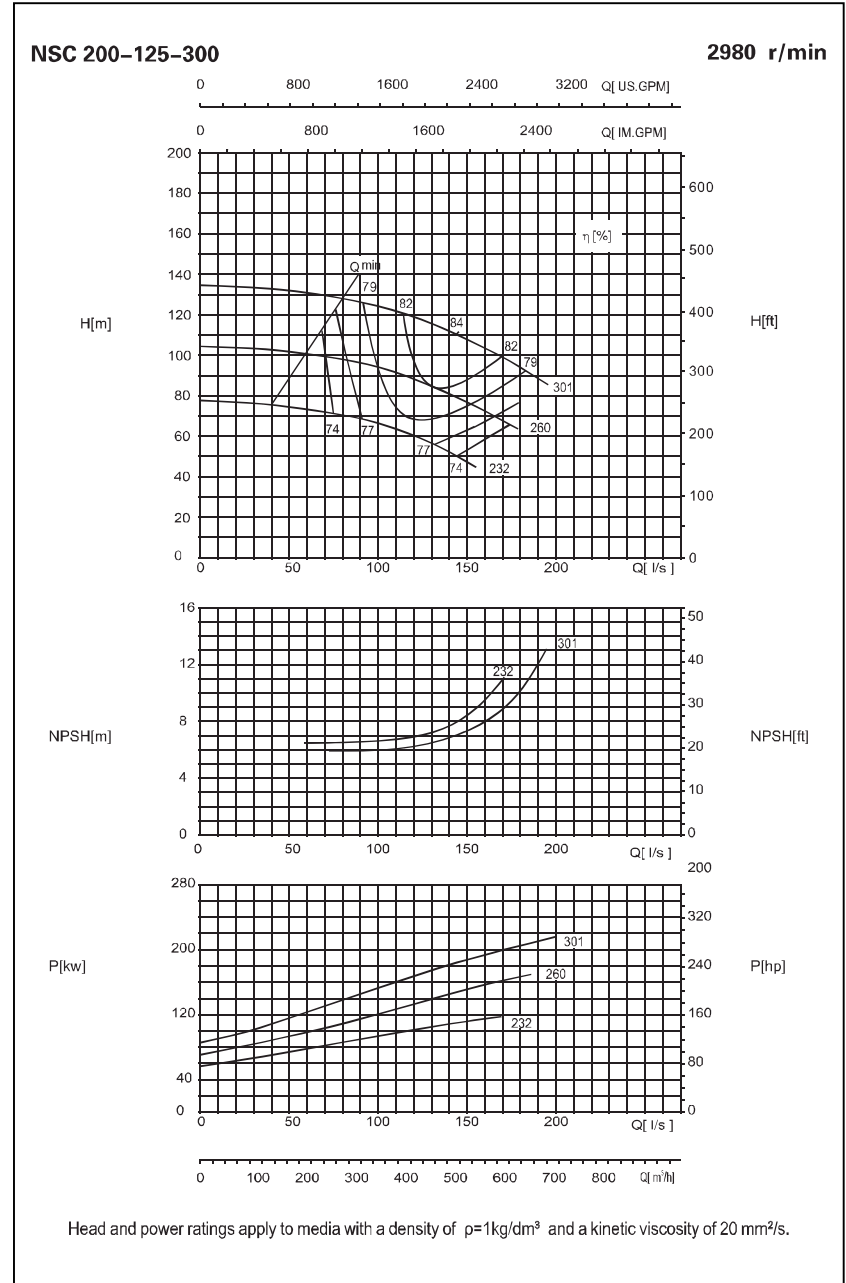
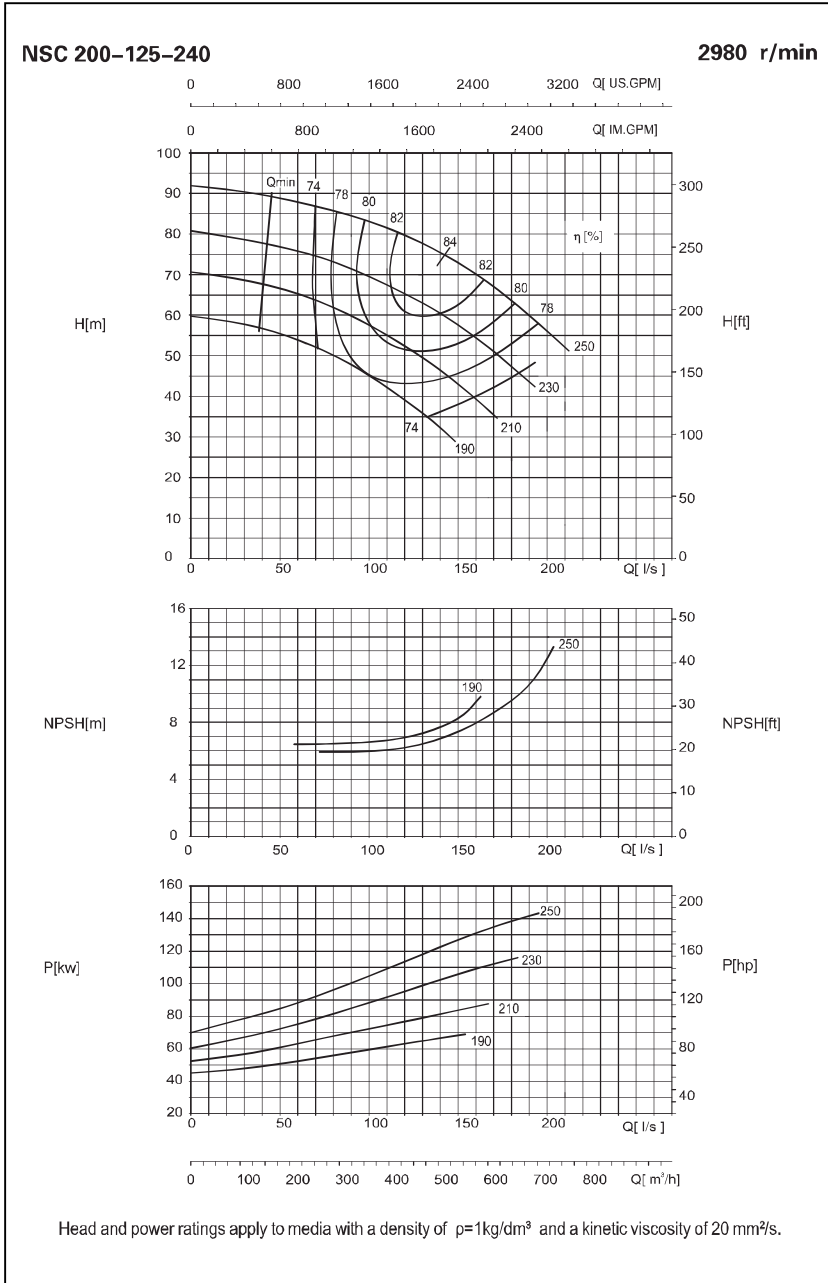
Head and power ratings apply to media with a density of  $\rho=1\text{kg/dm}^3$  and a kinetic viscosity of  $20\text{mm}^2/\text{s}$ .

NSC 150-100-400G

2980 r/min

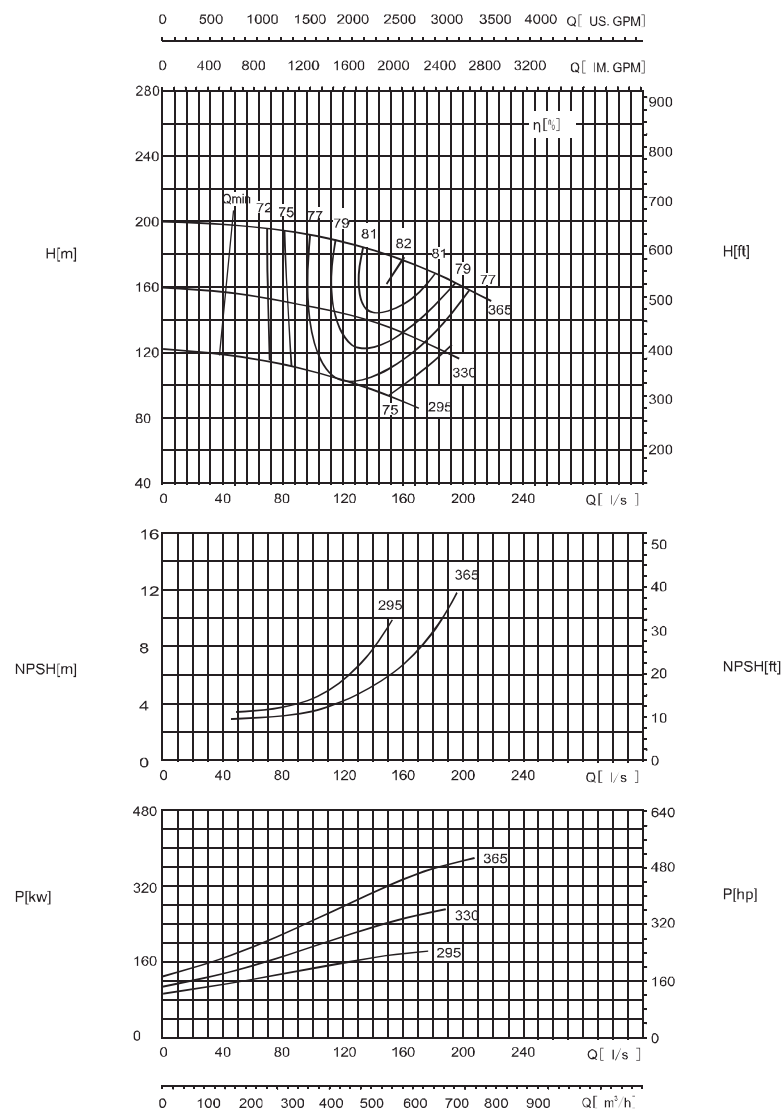


Head and power ratings apply to media with a density of  $\rho=1\text{kg/dm}^3$  and a kinetic viscosity of  $20\text{mm}^2/\text{s}$ .



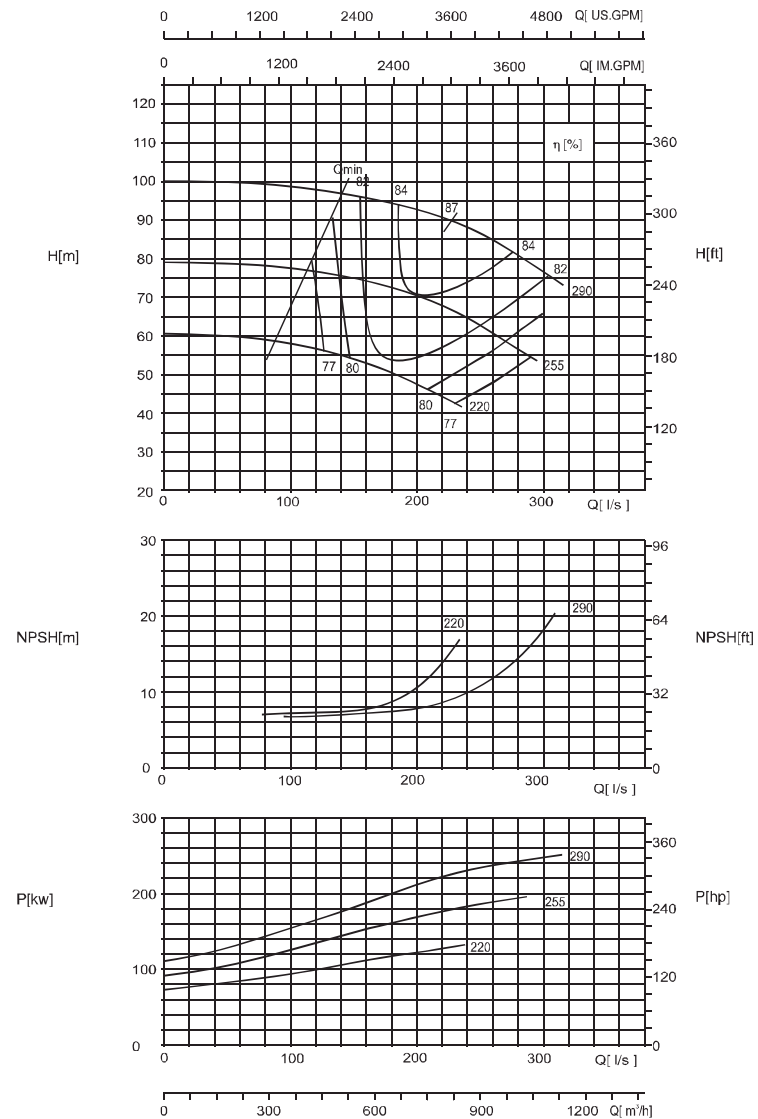
NSC 200-125-380

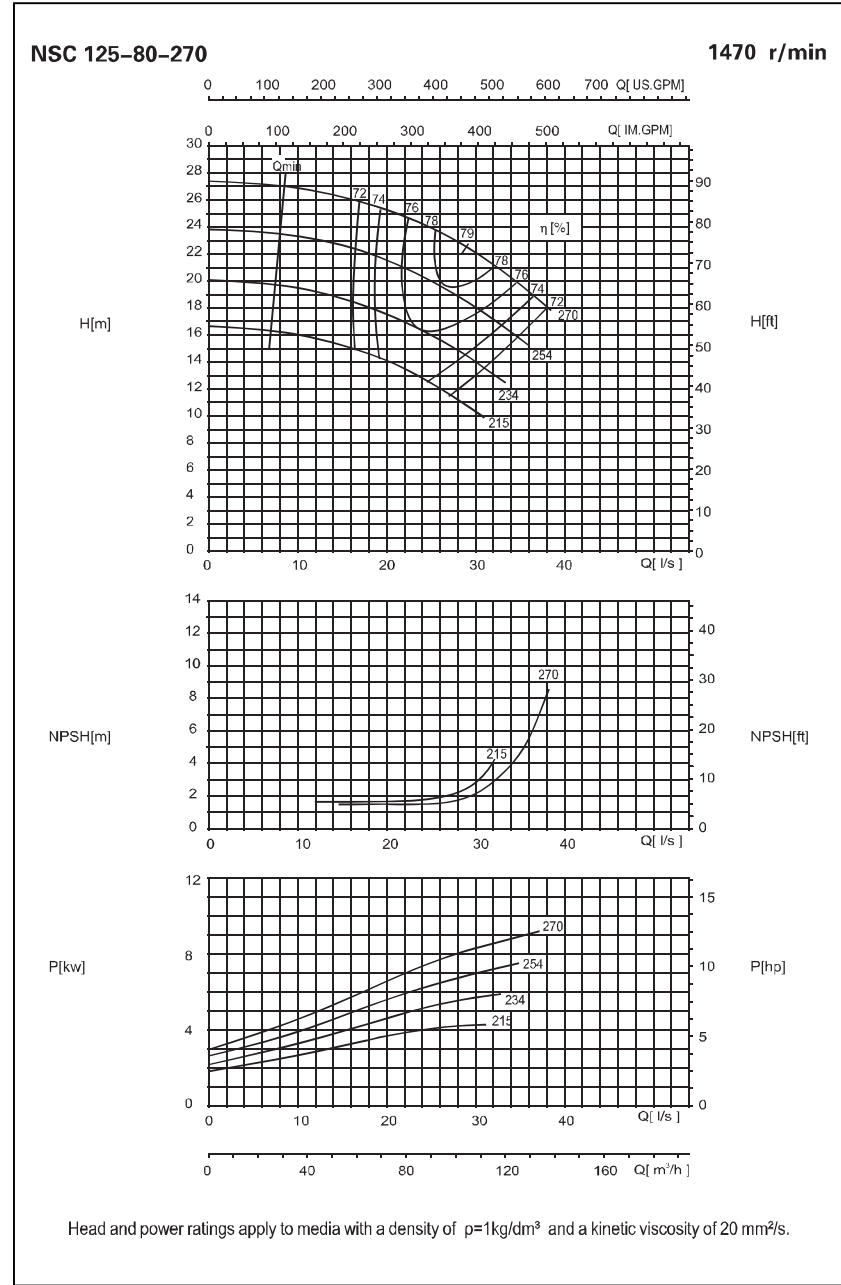
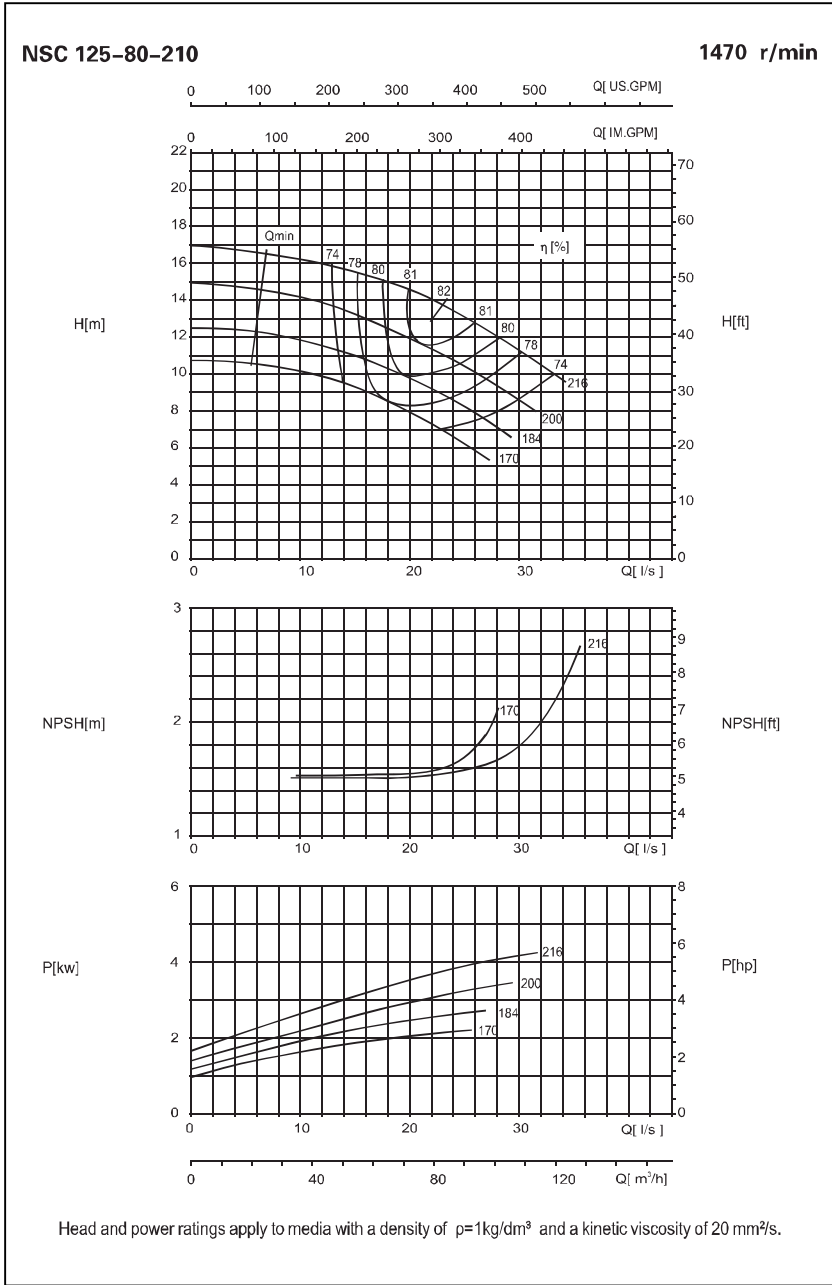
2980 r/min



NSC 200-150-290

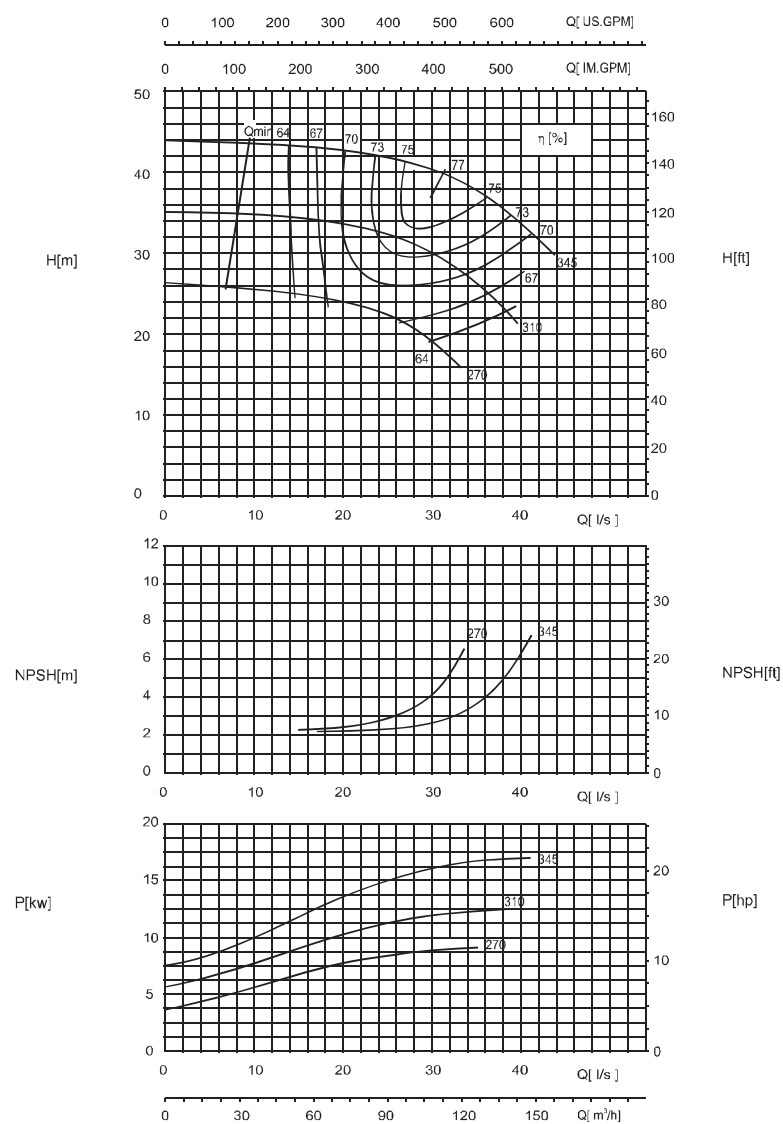
2980 r/min





NSC 125-80-350

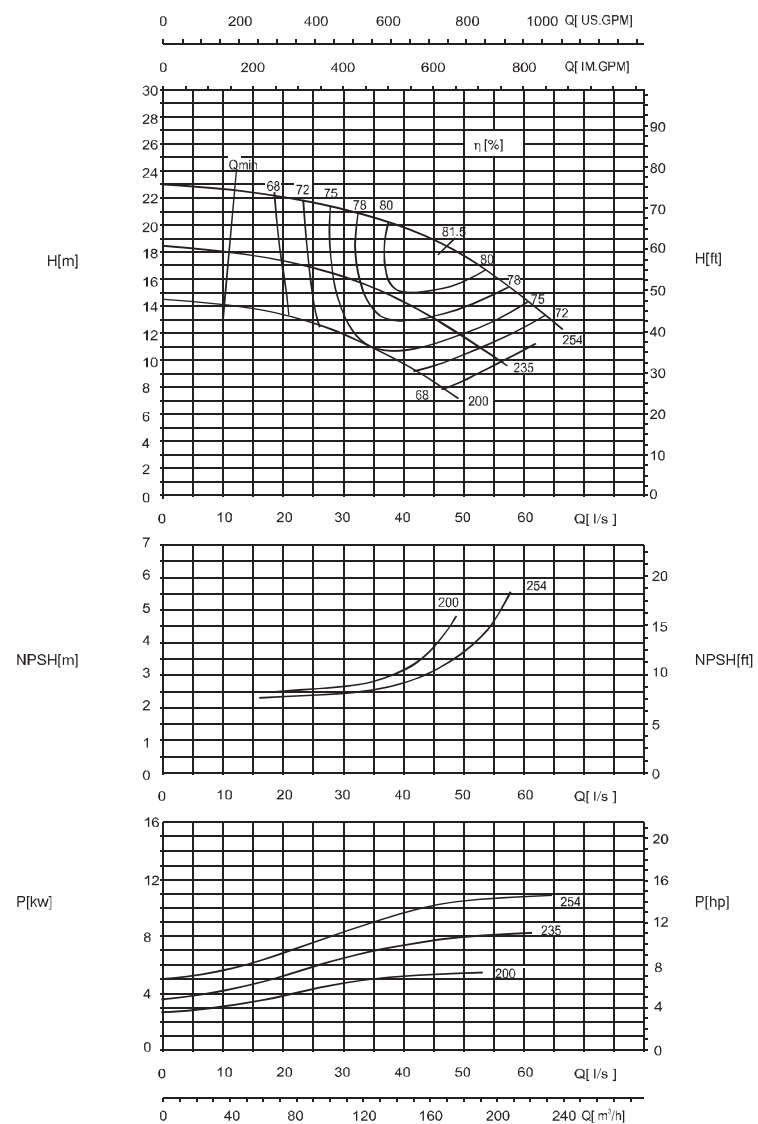
1470 r/min



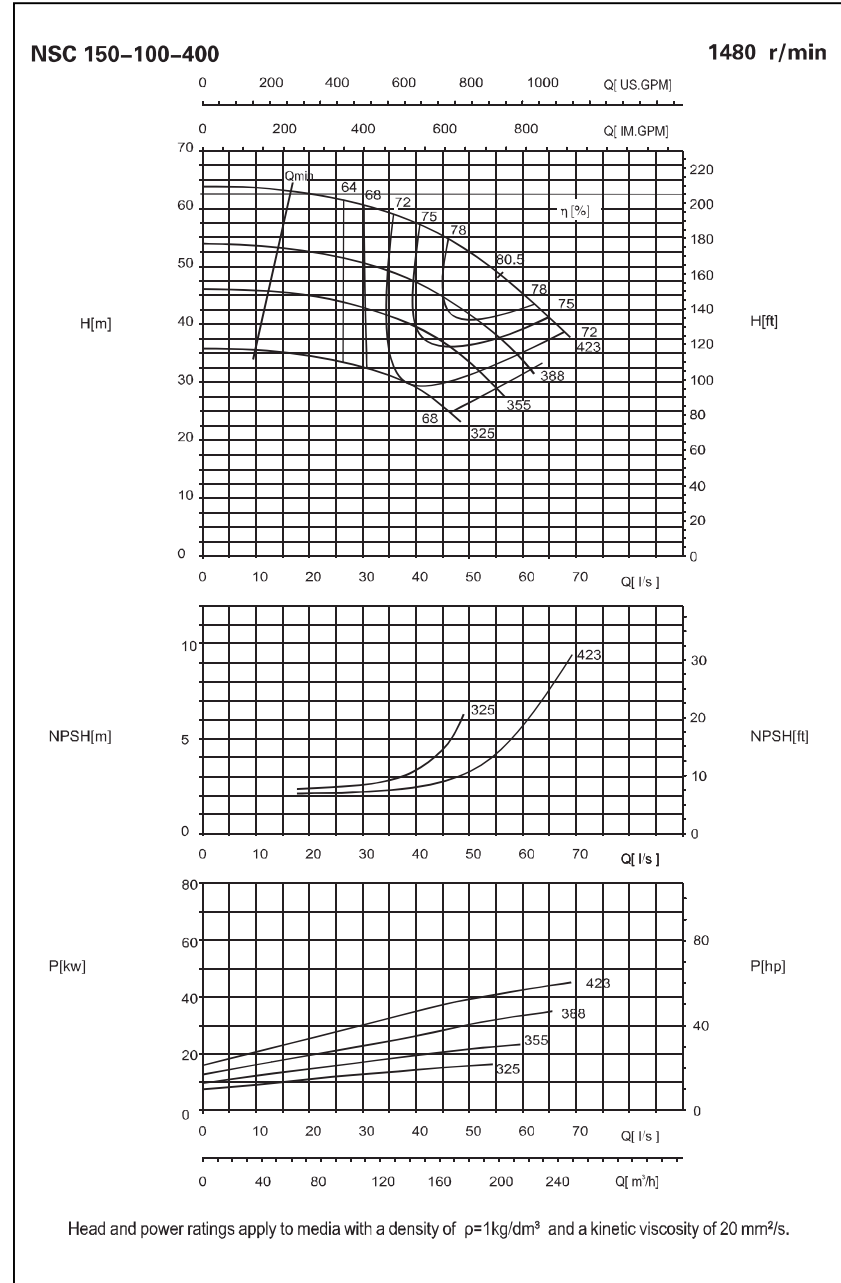
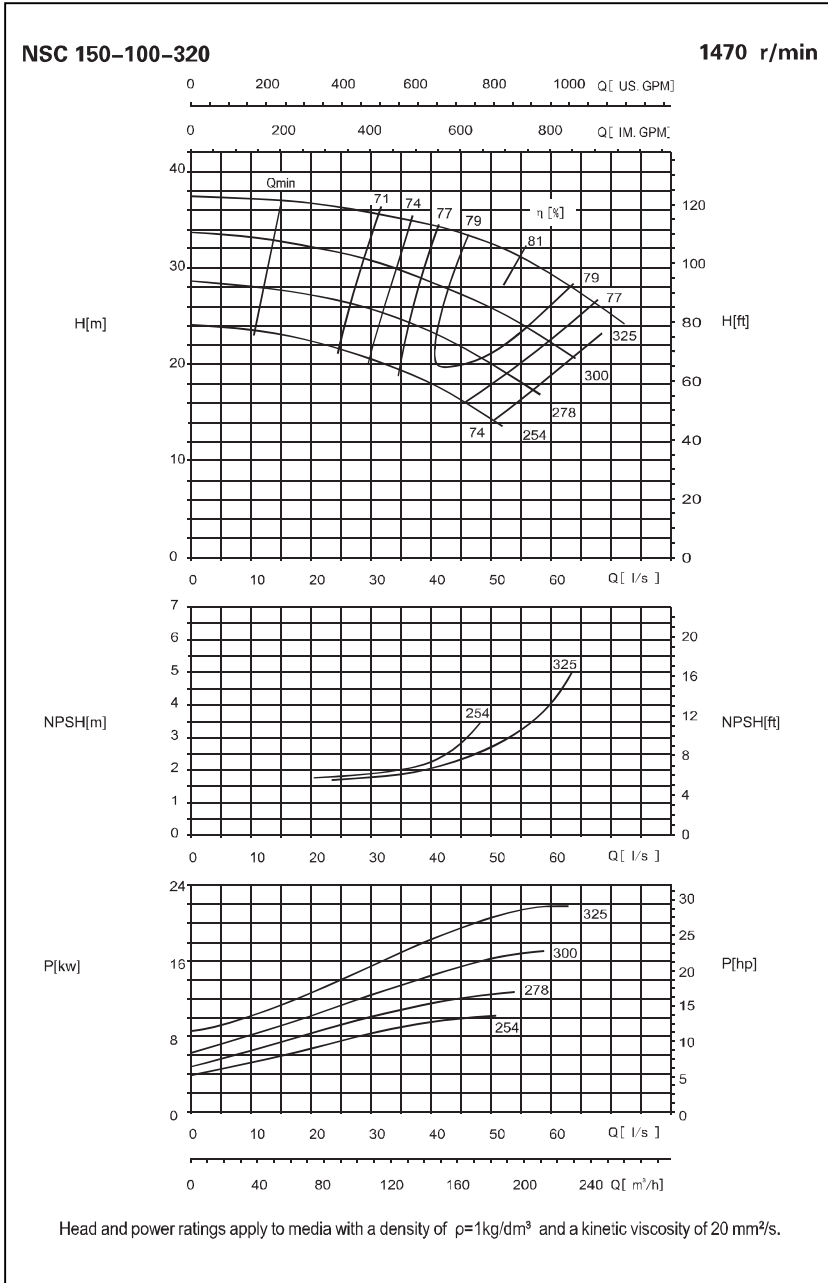
Head and power ratings apply to media with a density of  $\rho=1\text{kg/dm}^3$  and a kinetic viscosity of  $20\text{mm}^2/\text{s}$ .

NSC 150-100-250

1470 r/min

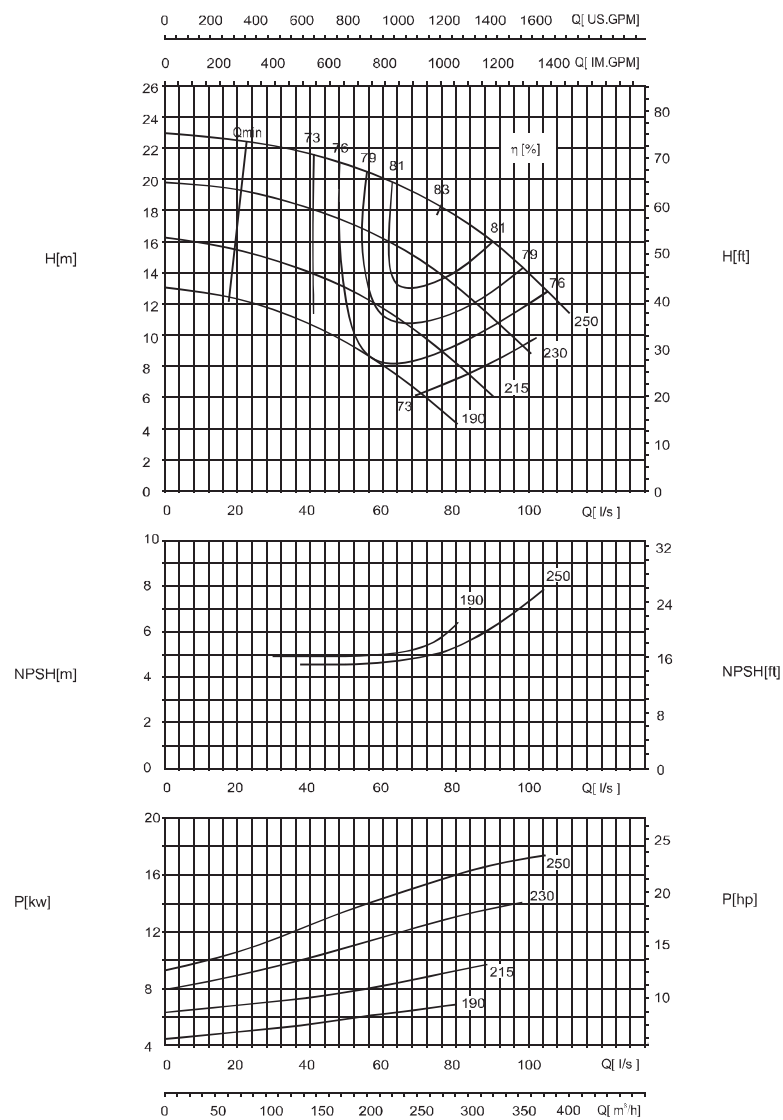


Head and power ratings apply to media with a density of  $\rho=1\text{kg/dm}^3$  and a kinetic viscosity of  $20\text{mm}^2/\text{s}$ .



NSC 200-125-240

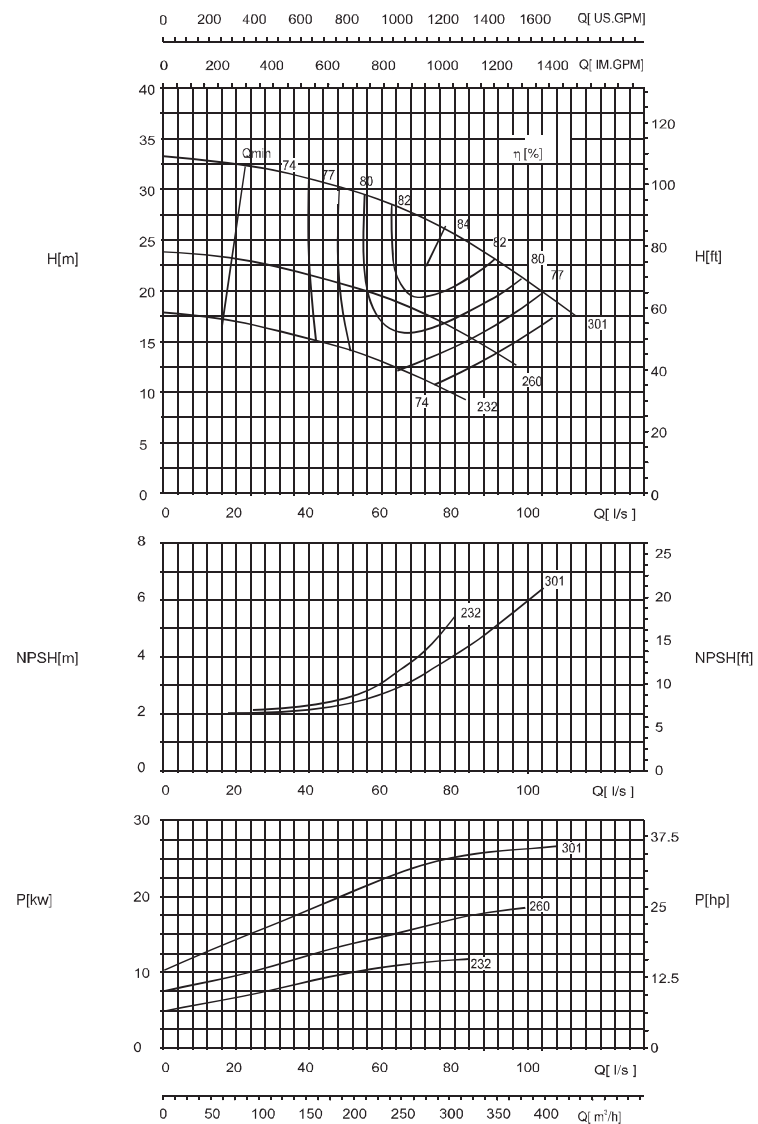
1470 r/min



Head and power ratings apply to media with a density of  $\rho=1\text{kg/dm}^3$  and a kinetic viscosity of  $20\text{mm}^2/\text{s}$ .

NSC 200-125-300

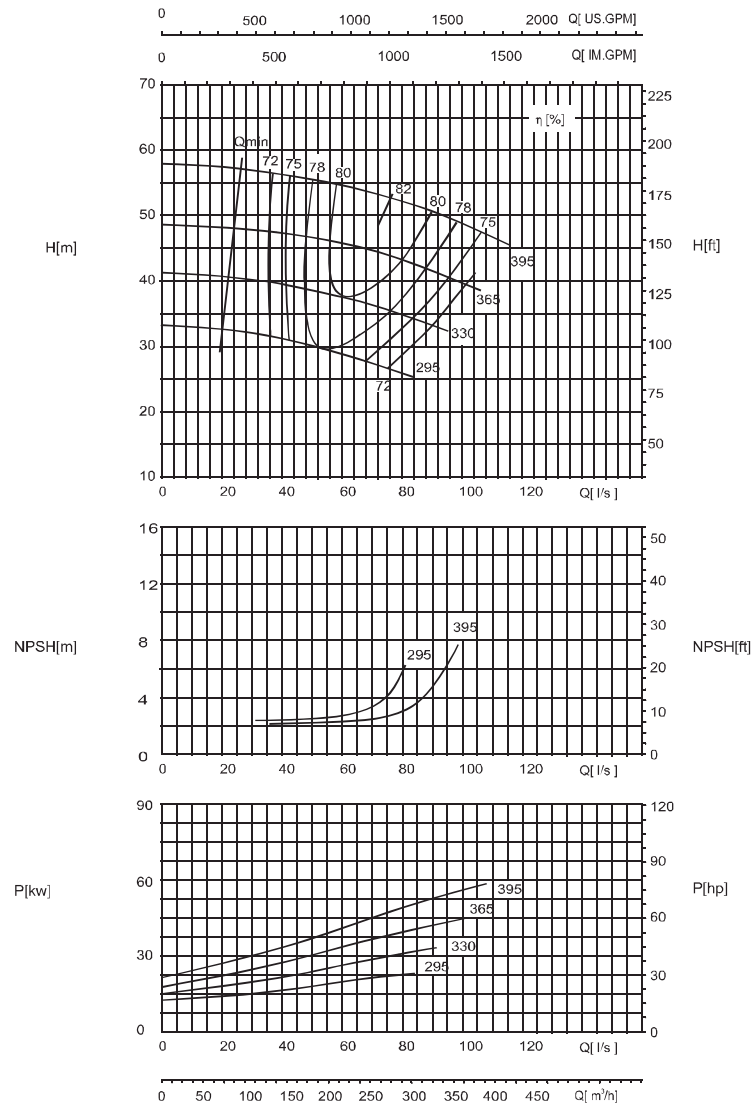
1470 r/min



Head and power ratings apply to media with a density of  $\rho=1\text{kg/dm}^3$  and a kinetic viscosity of  $20\text{mm}^2/\text{s}$ .

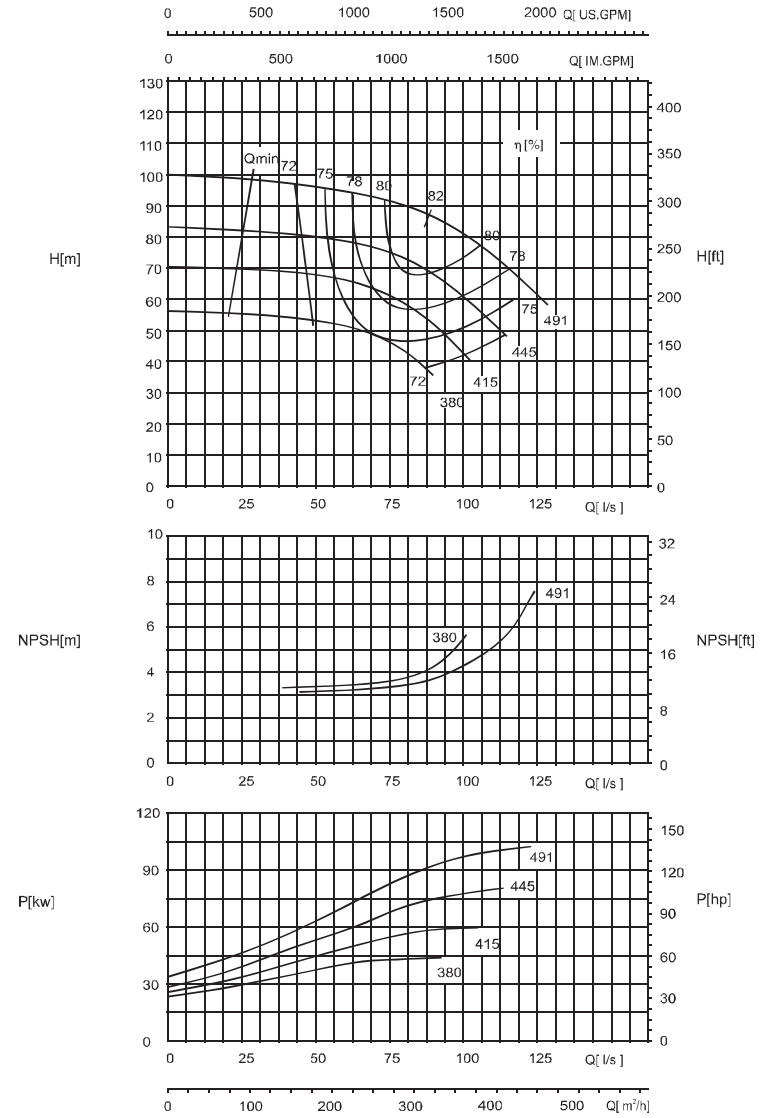
NSC 200-125-380

1480 r/min



NSC 200-125-480

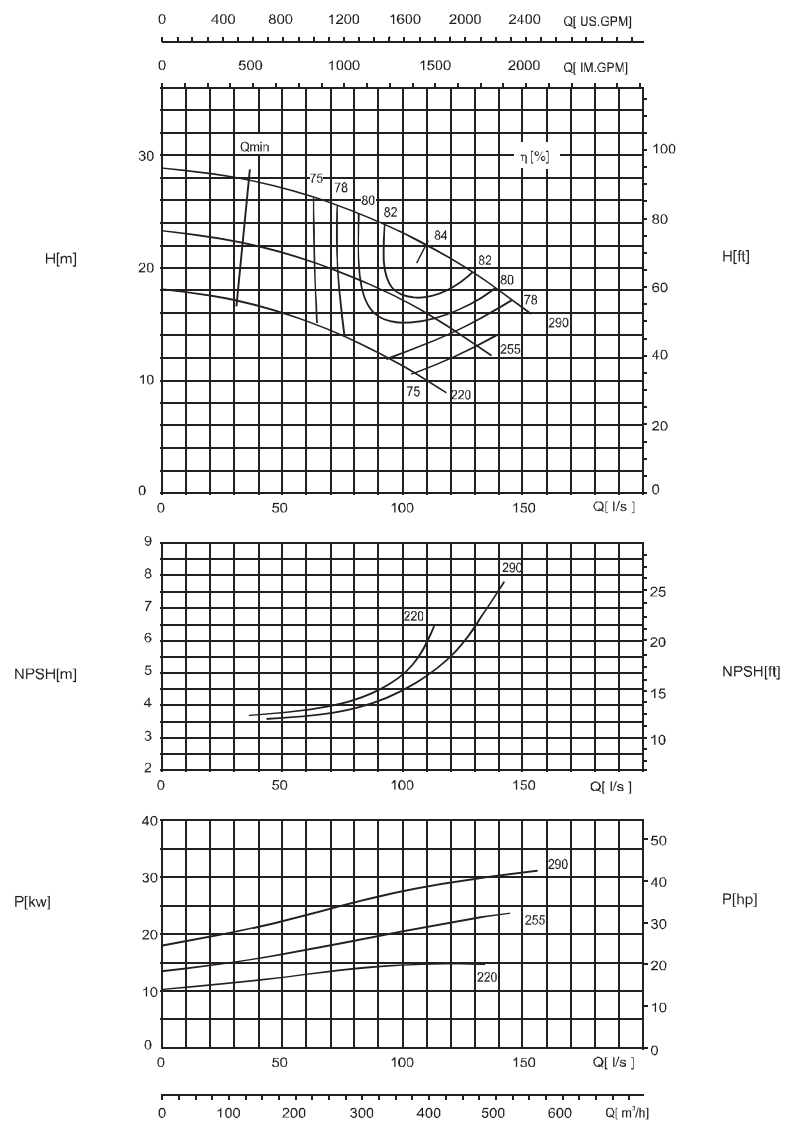
1480 r/min





NSC 200-150-290

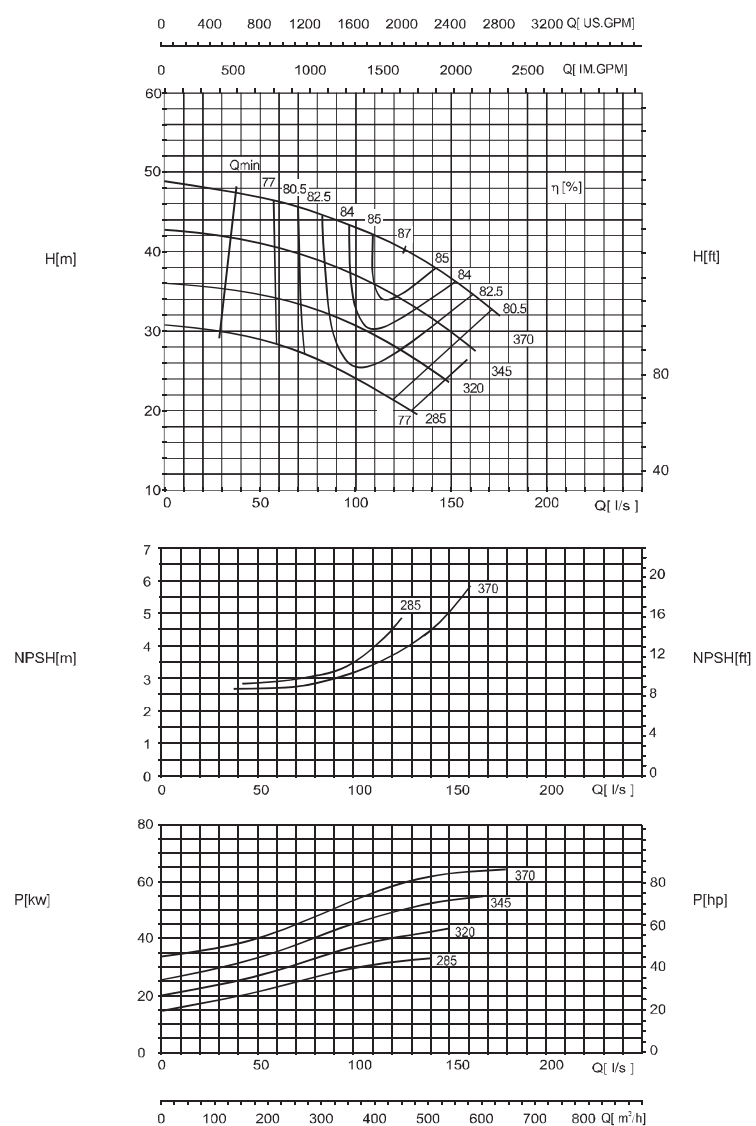
1470 r/min



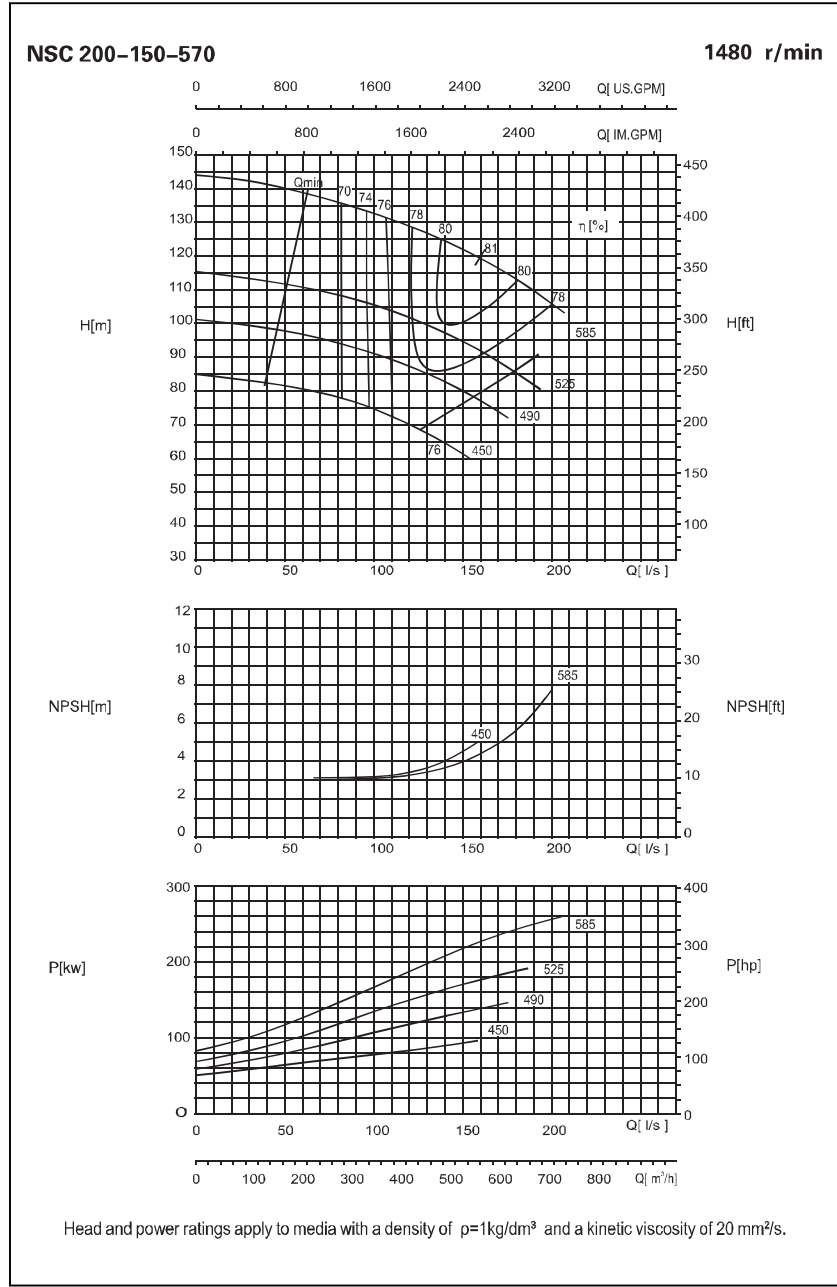
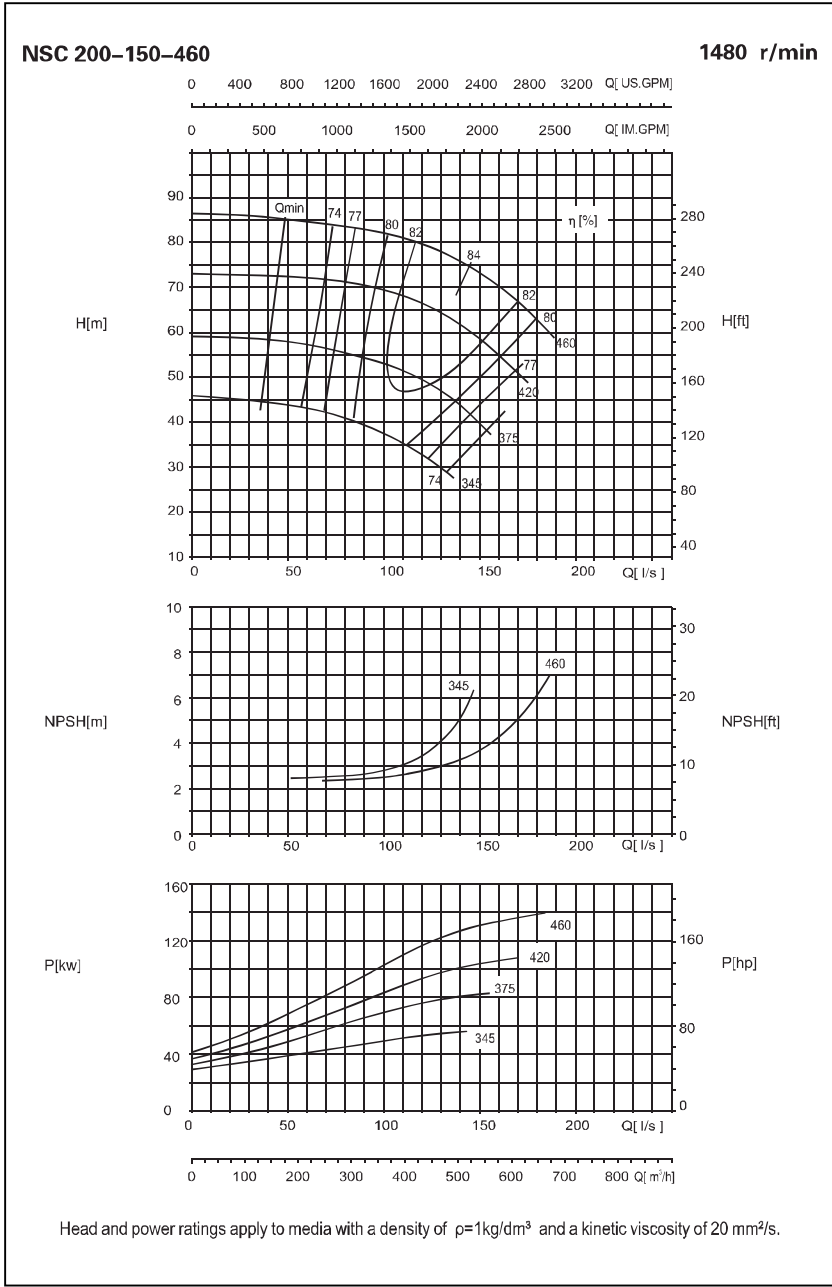
Head and power ratings apply to media with a density of  $\rho=1\text{kg/dm}^3$  and a kinetic viscosity of  $20\text{ mm}^2/\text{s}$ .

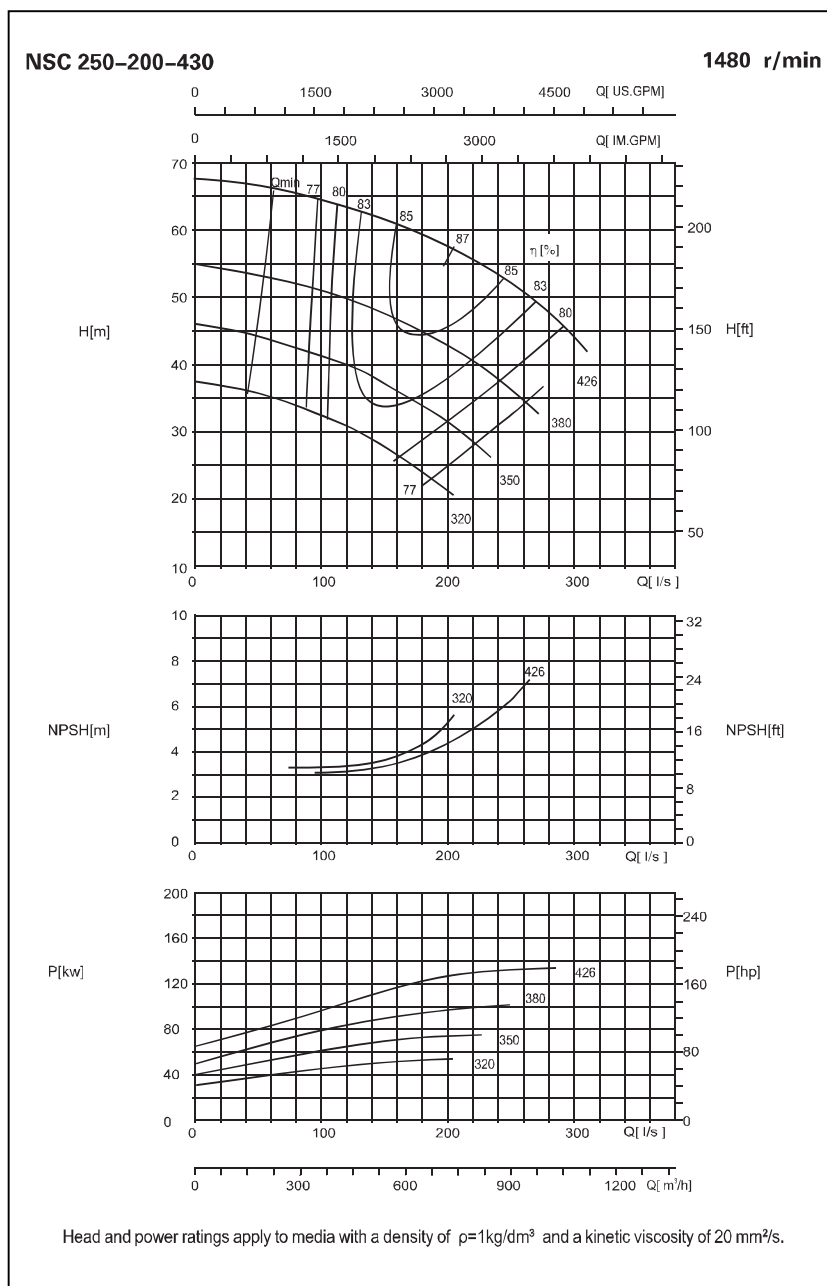
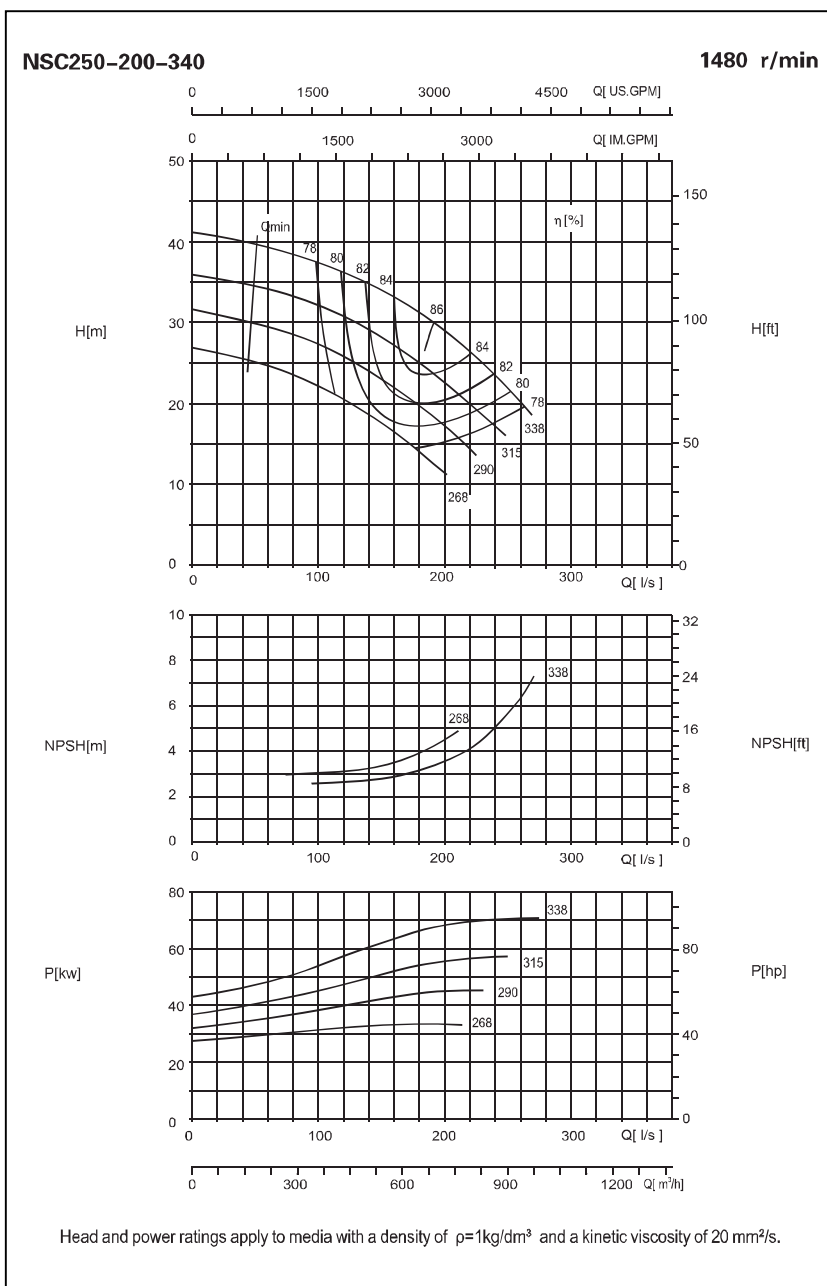
NSC 200-150-360

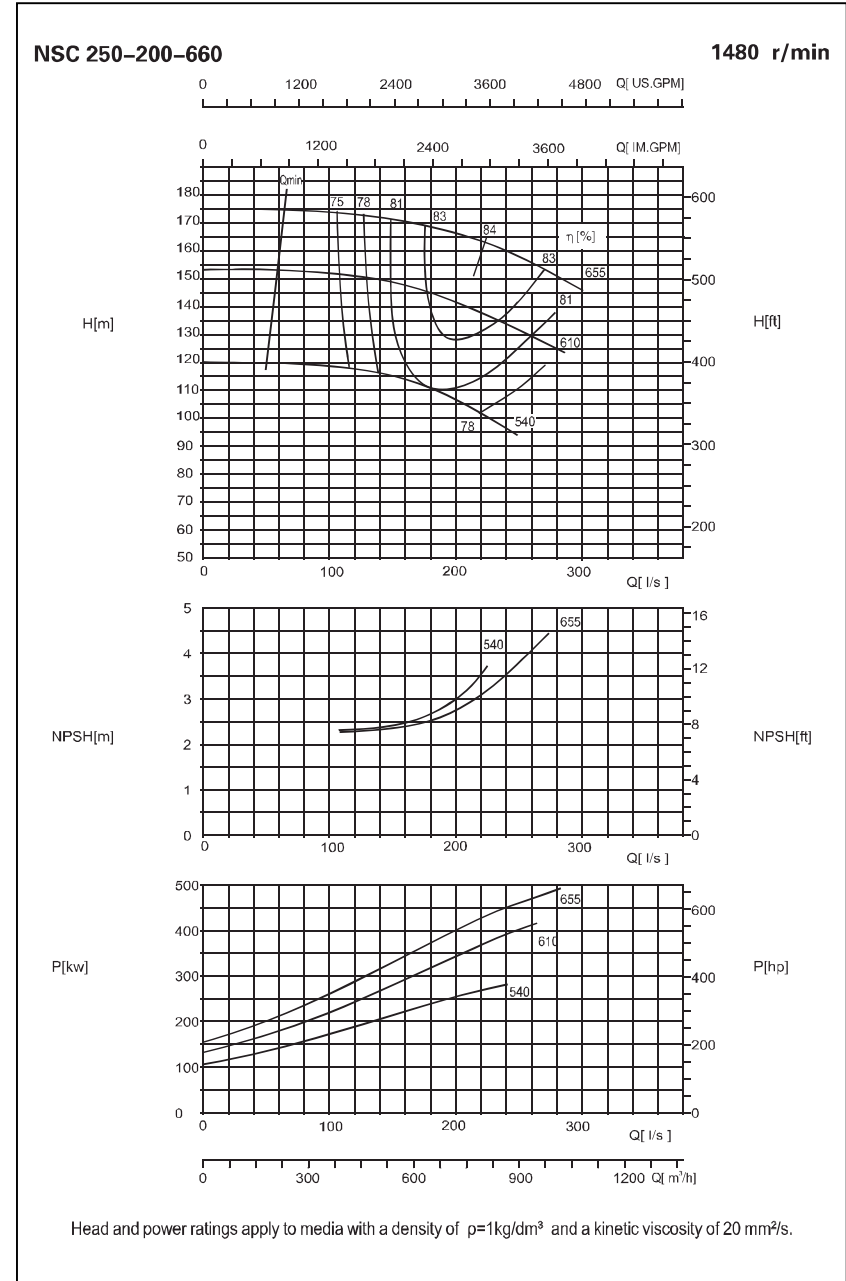
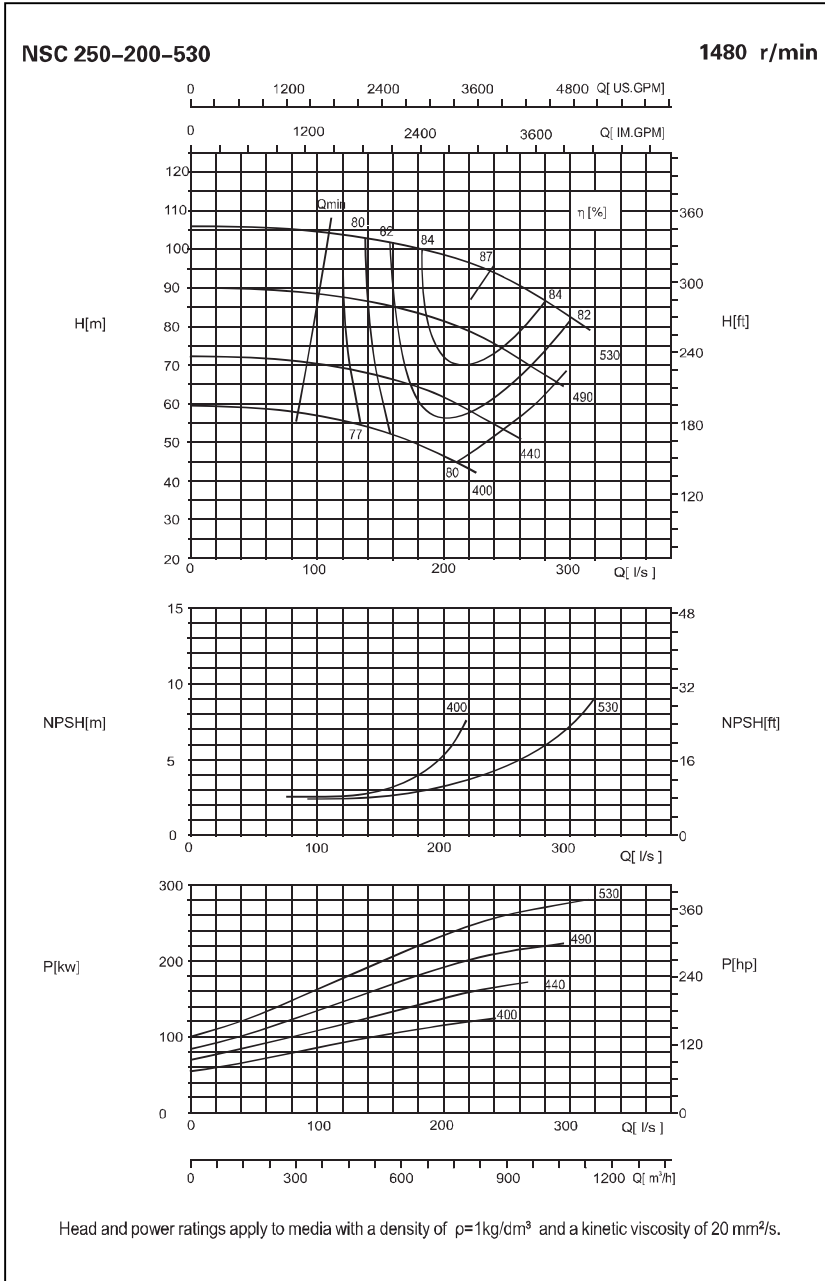
1480 r/min



Head and power ratings apply to media with a density of  $\rho=1\text{kg/dm}^3$  and a kinetic viscosity of  $20\text{ mm}^2/\text{s}$ .

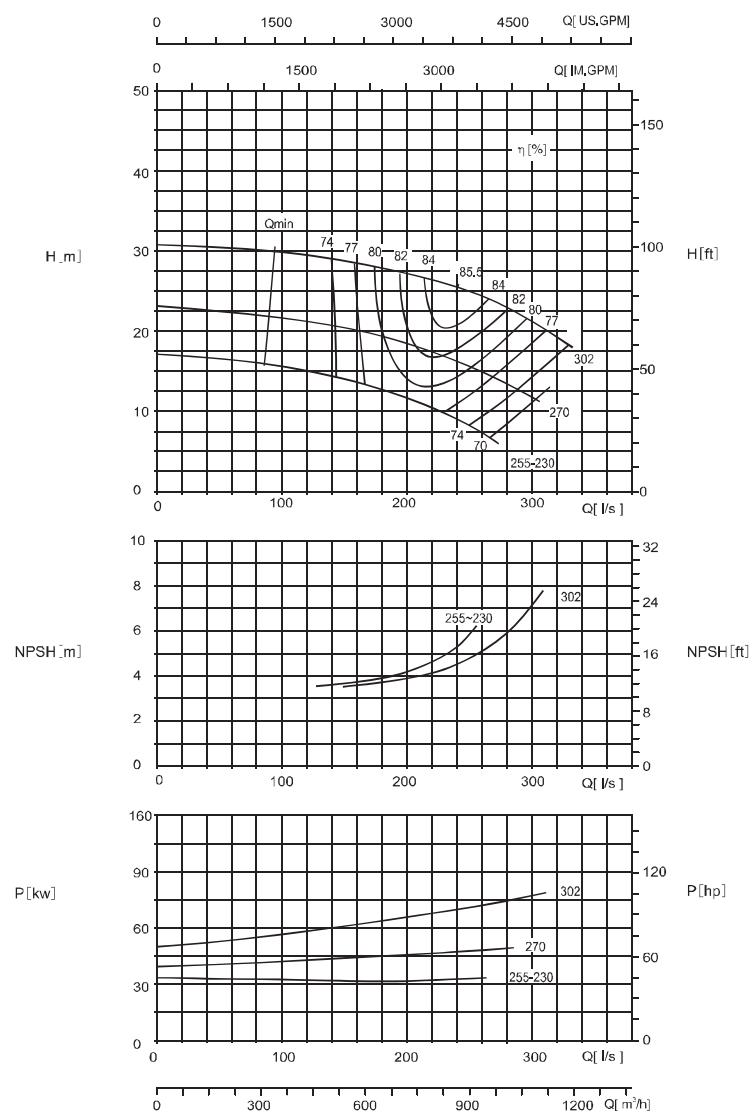






NSC 300-250-270

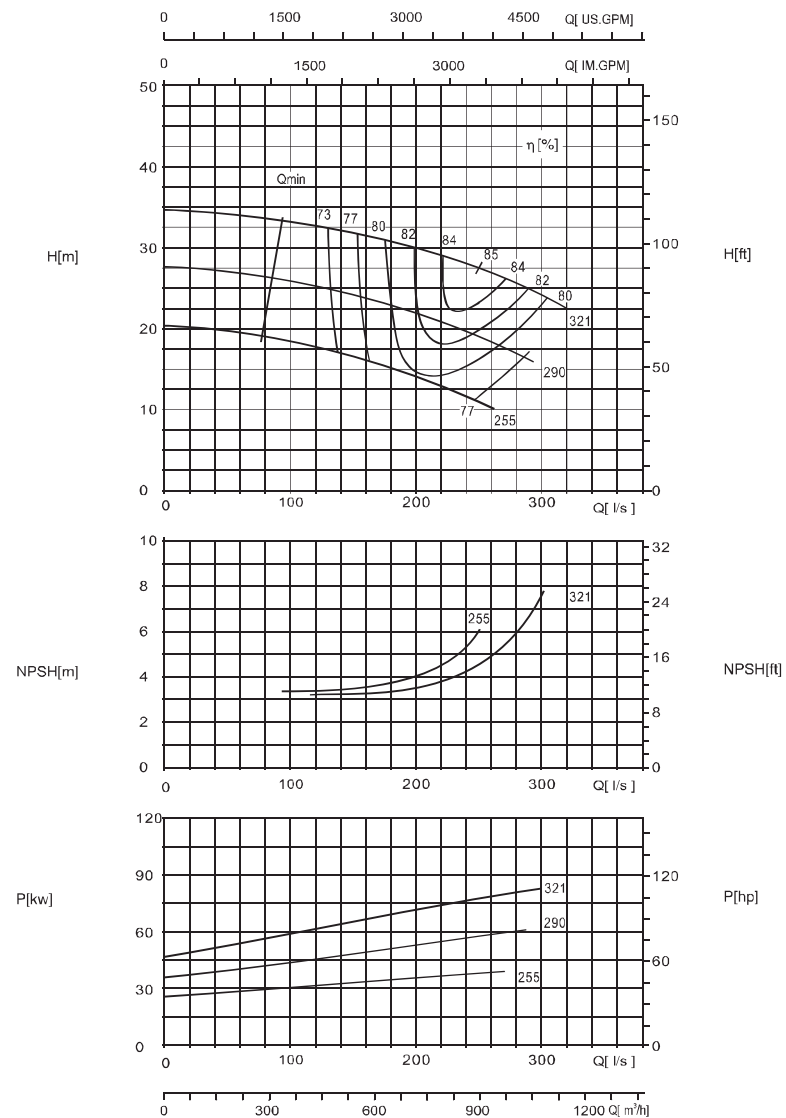
1480 r/min



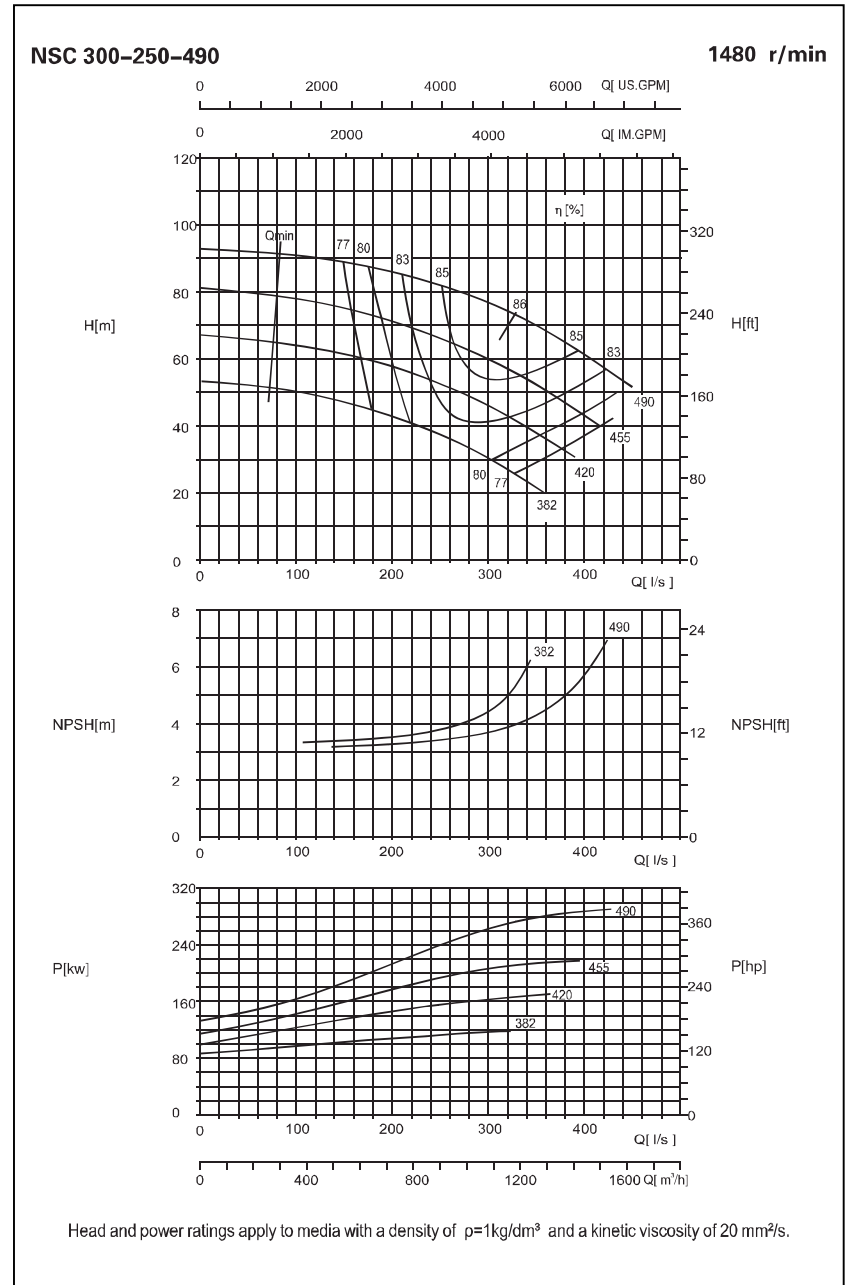
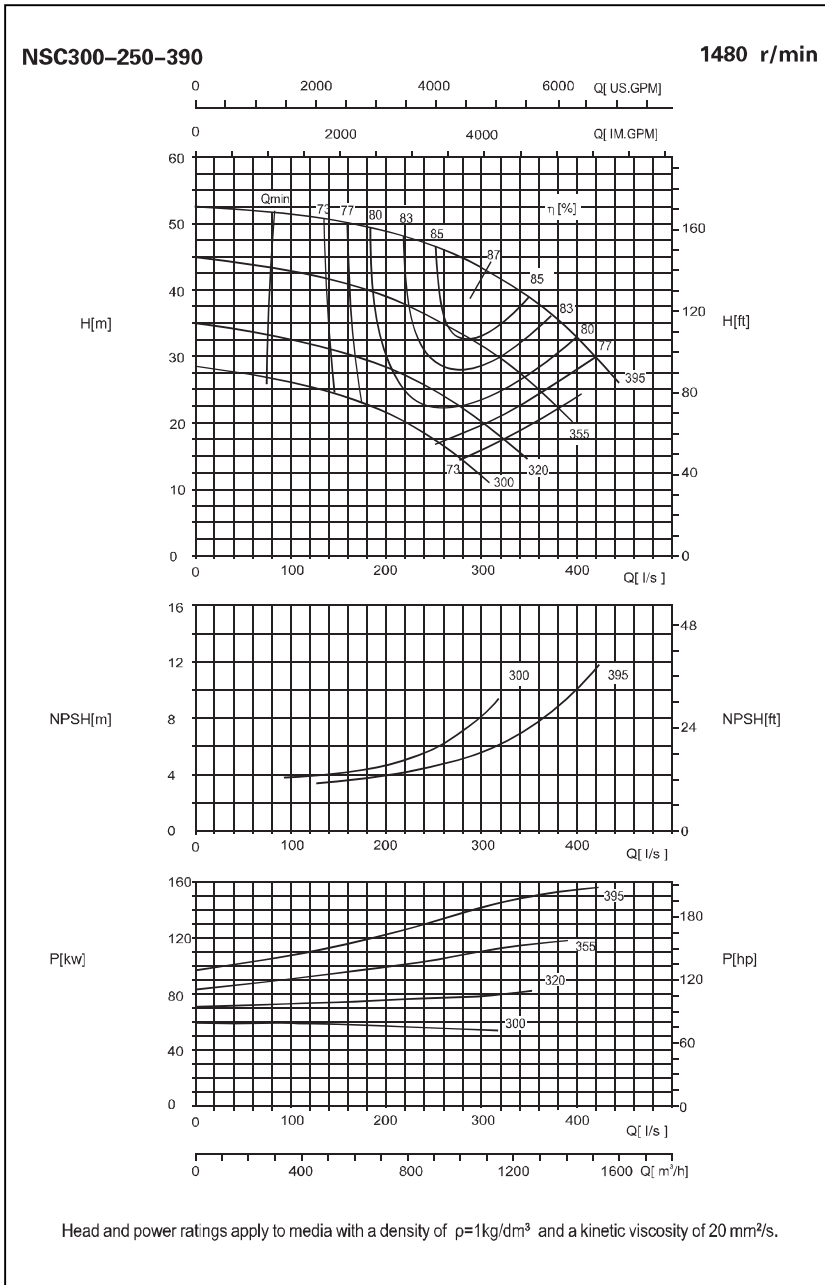
Head and power ratings apply to media with a density of  $\rho=1\text{kg/dm}^3$  and a kinetic viscosity of  $20\text{mm}^2/\text{s}$ .

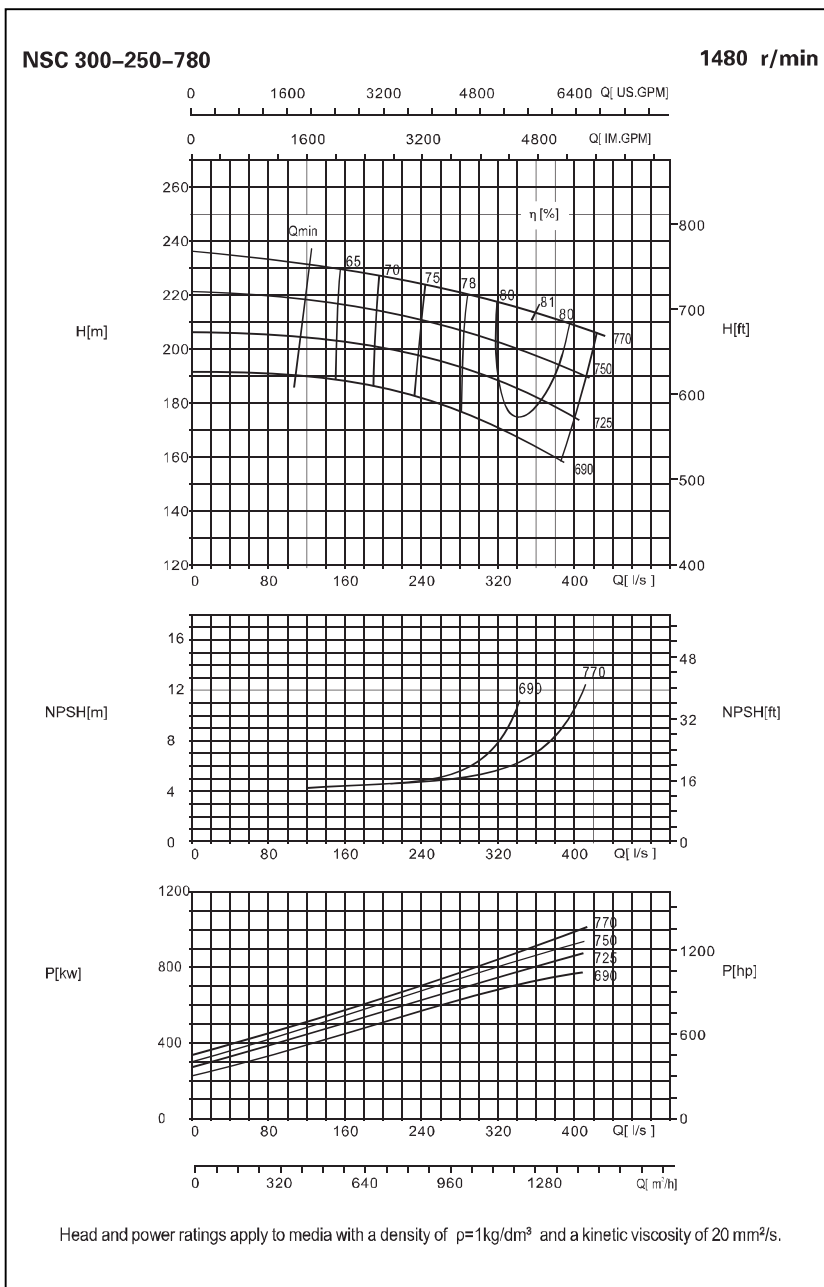
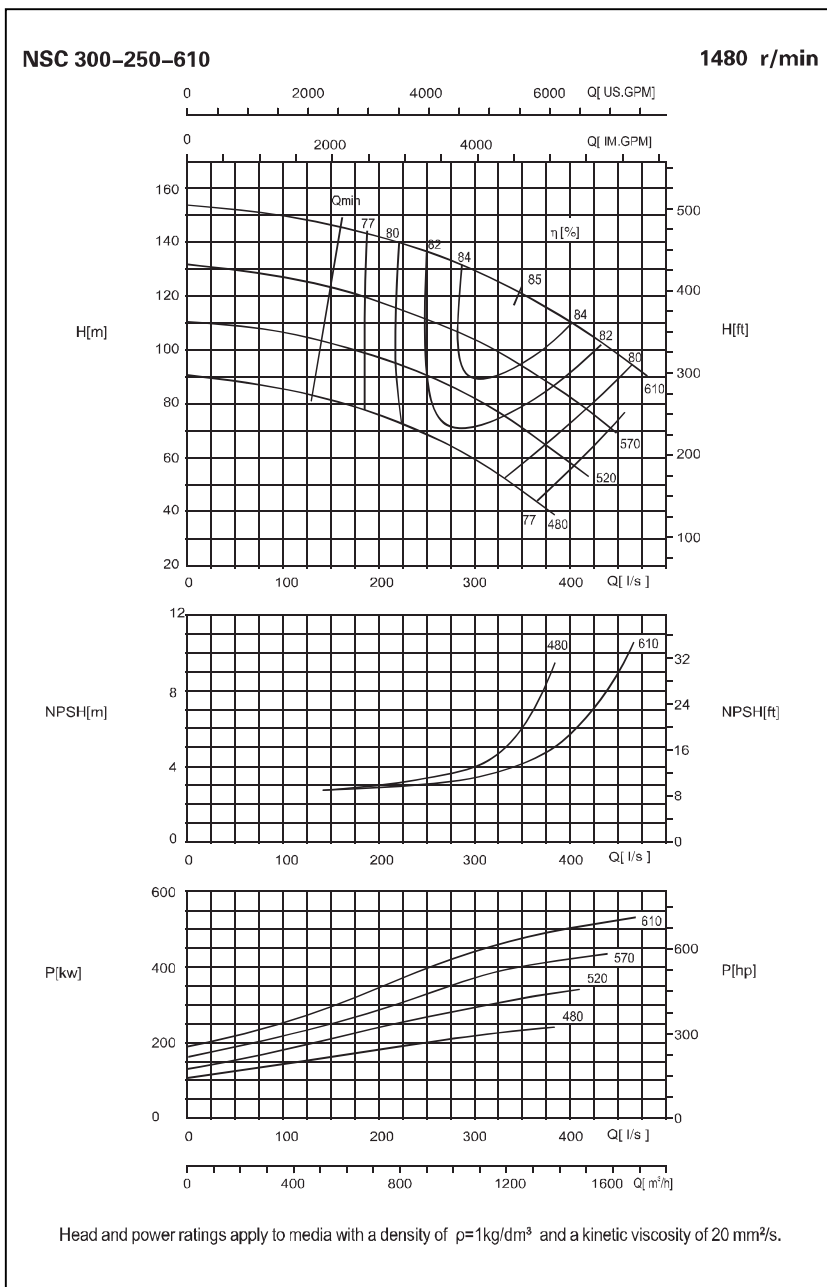
NSC 300-250-280

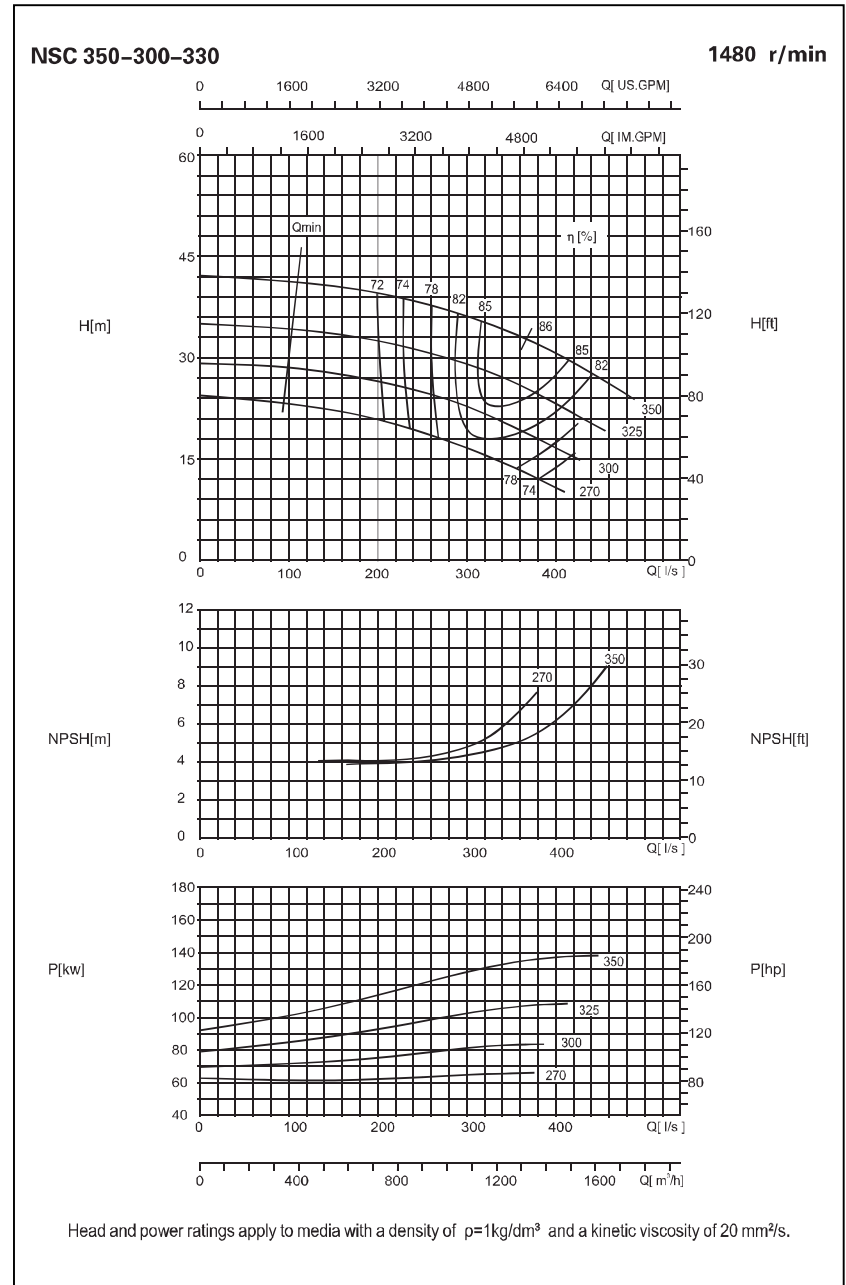
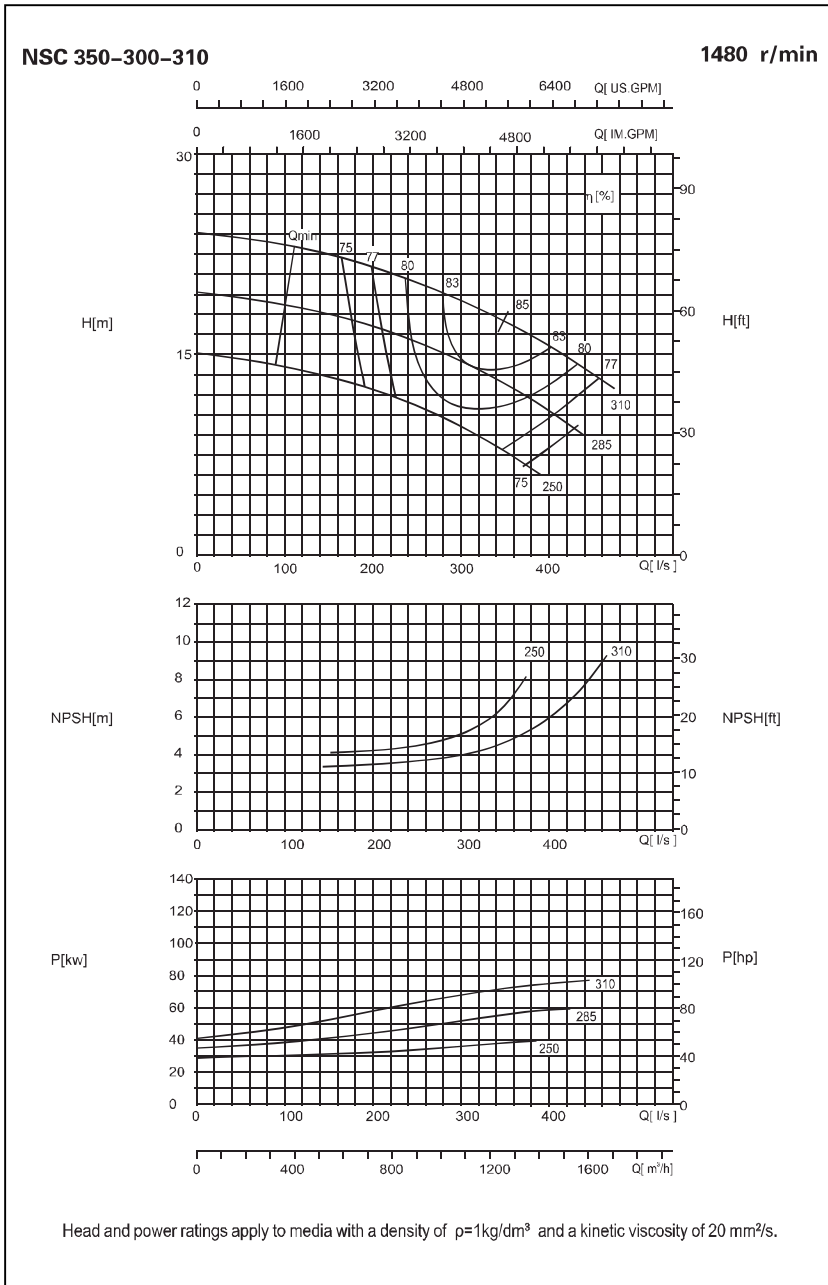
1480 r/min



Head and power ratings apply to media with a density of  $\rho=1\text{kg/dm}^3$  and a kinetic viscosity of  $20\text{mm}^2/\text{s}$ .



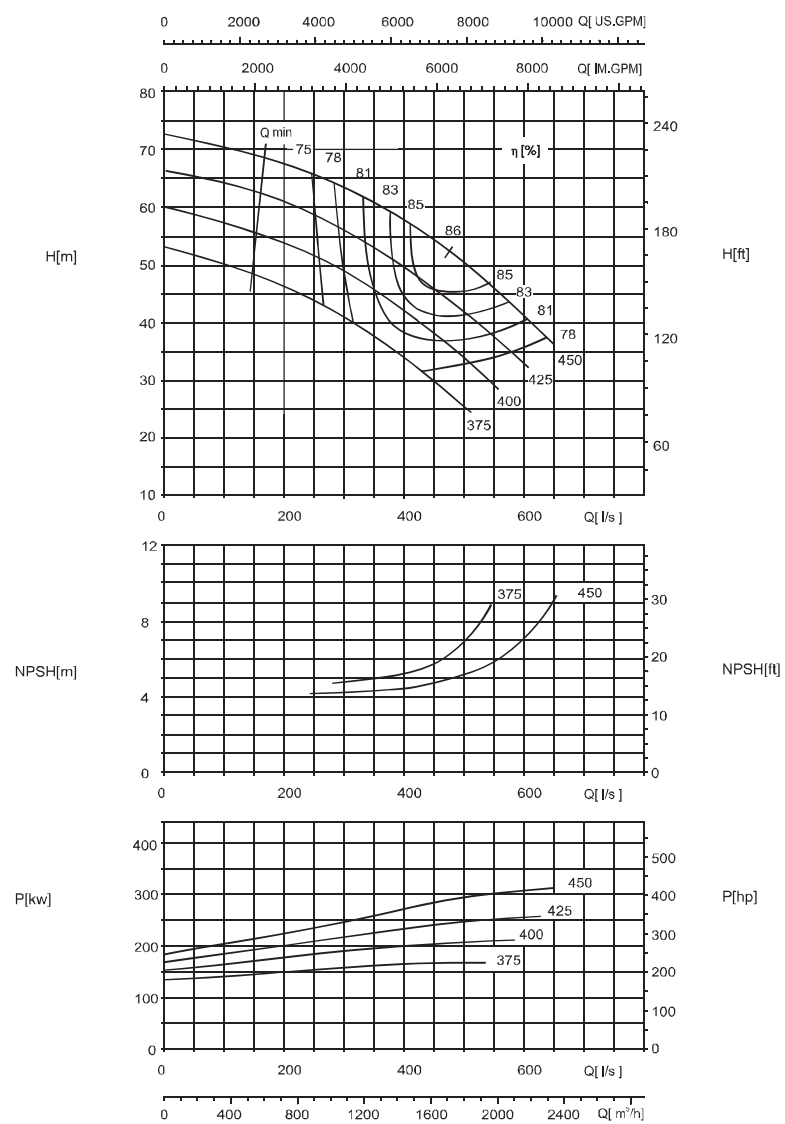






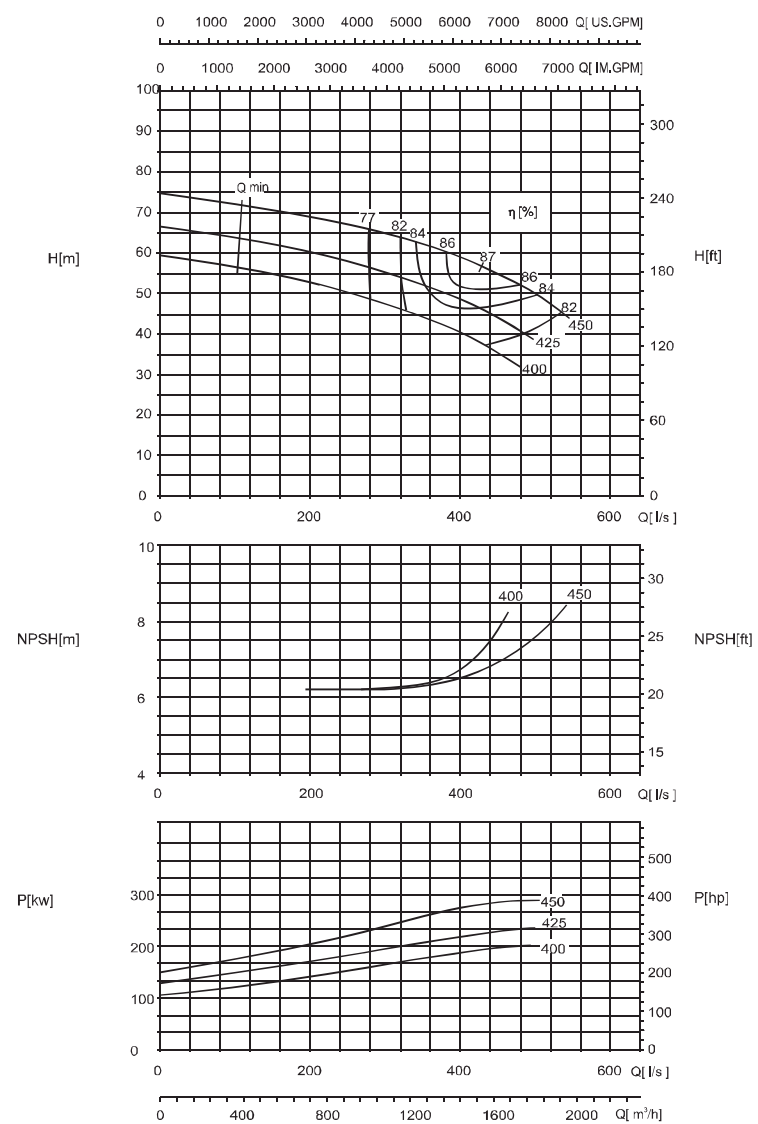
NSC 400-300-450L ( Low Cavitation Impeller )

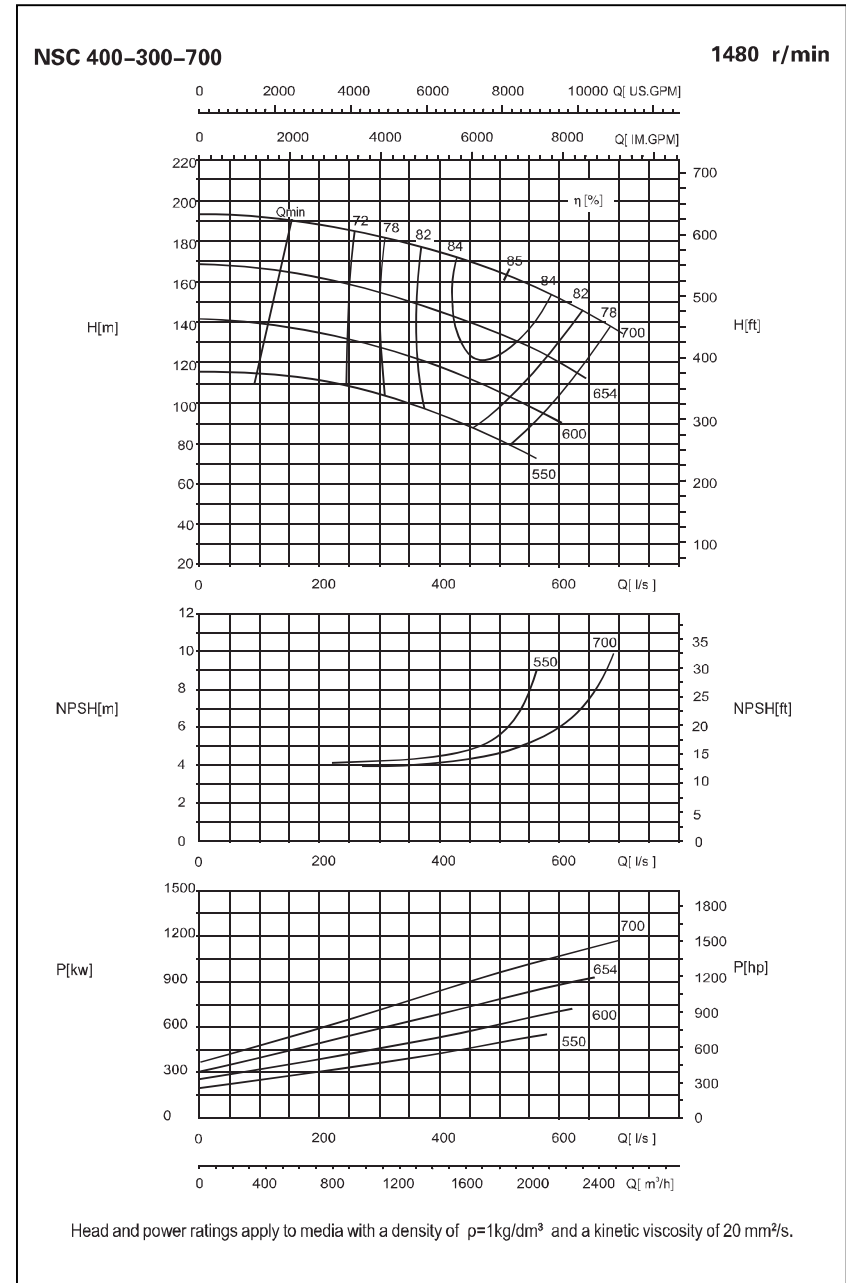
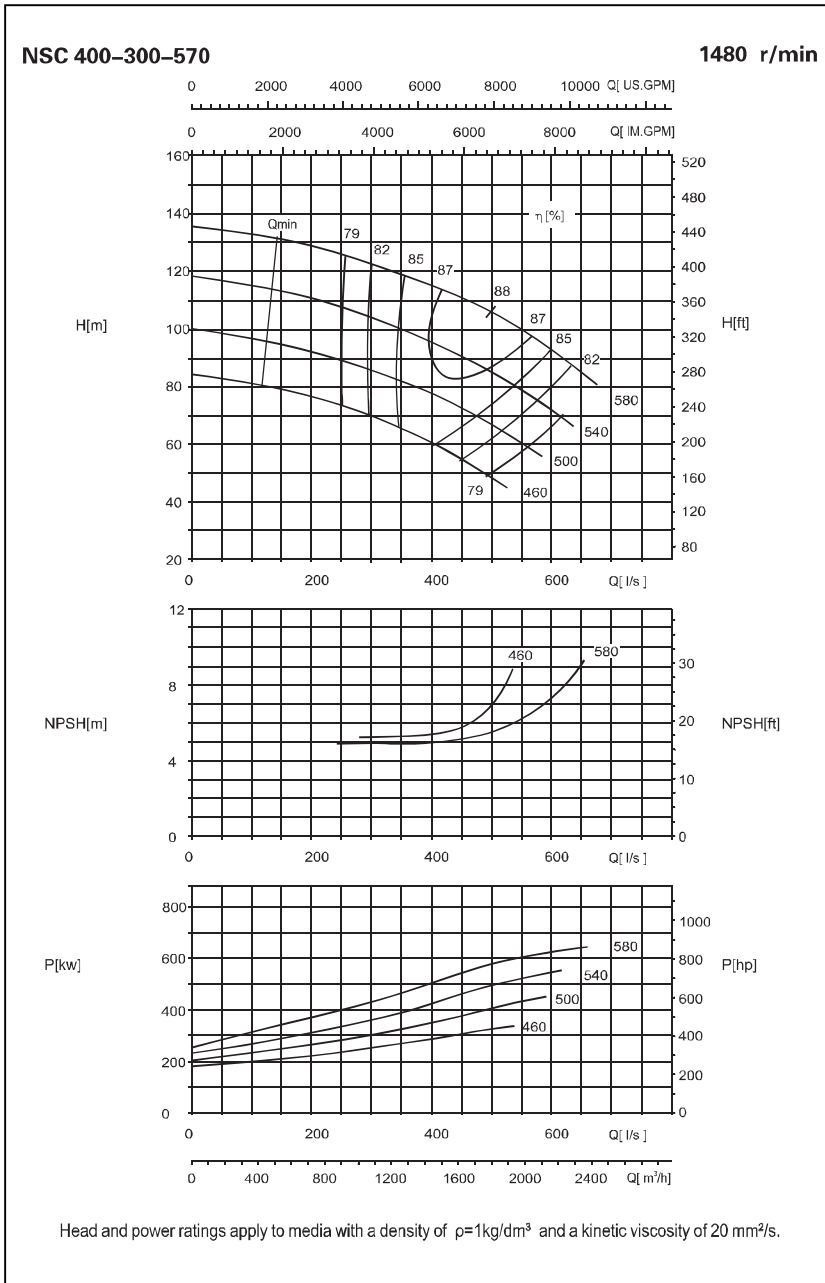
1480 r/min

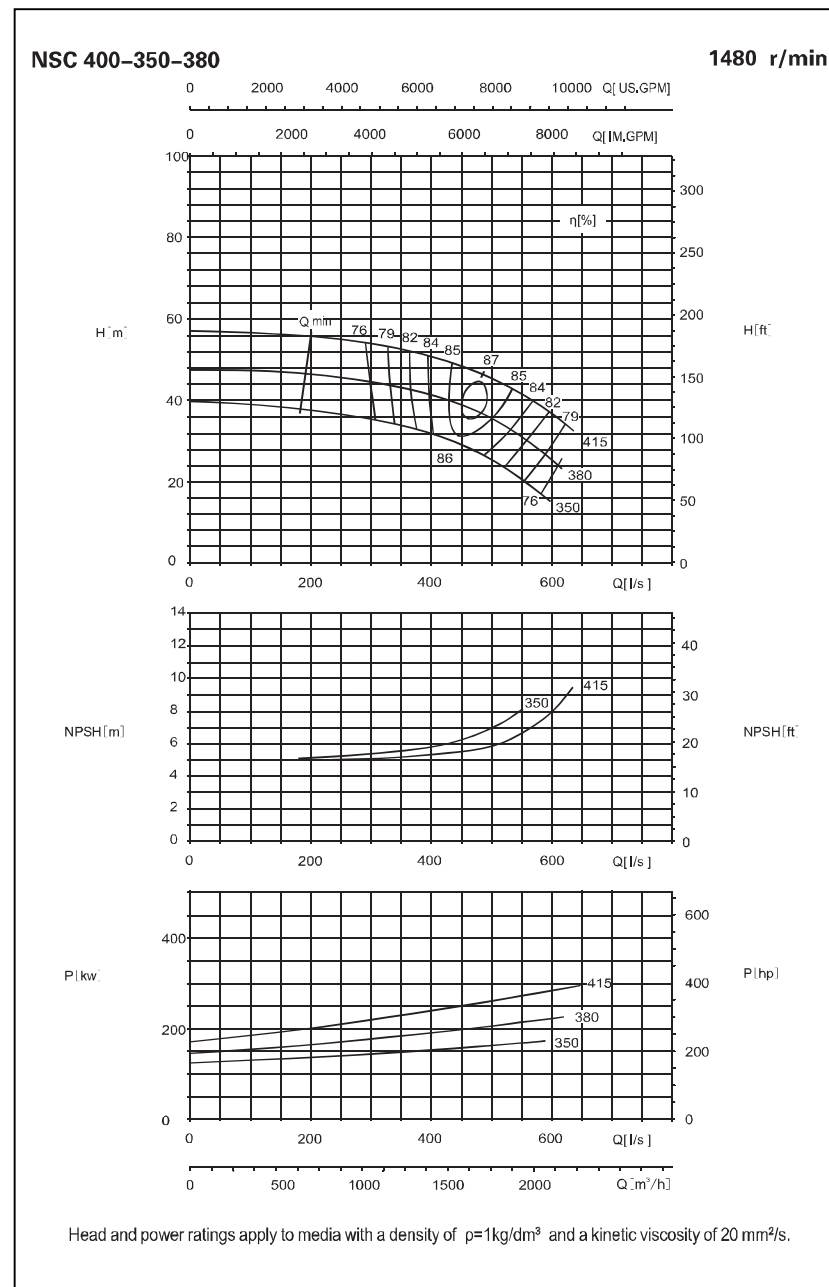
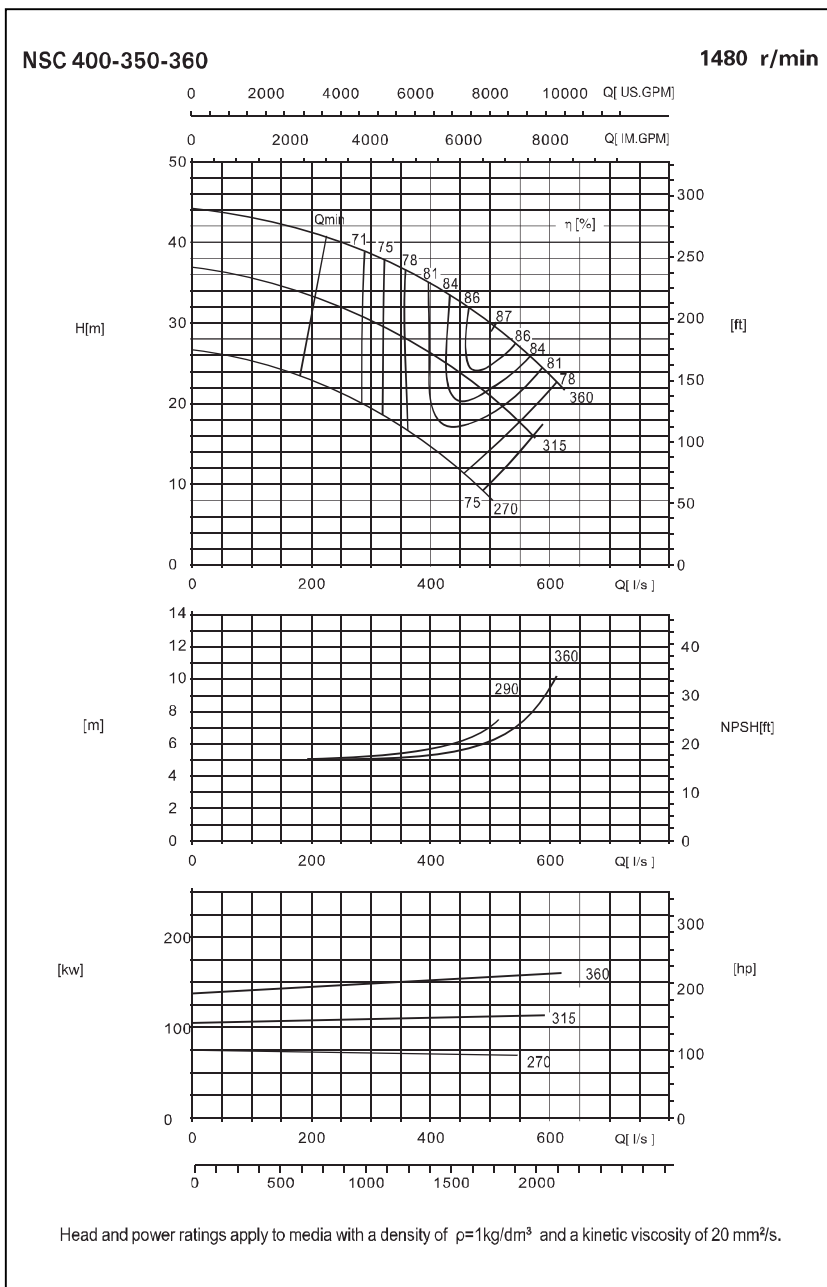


NSC 400-300-450H ( High Efficiency Impeller )

1480 r/min

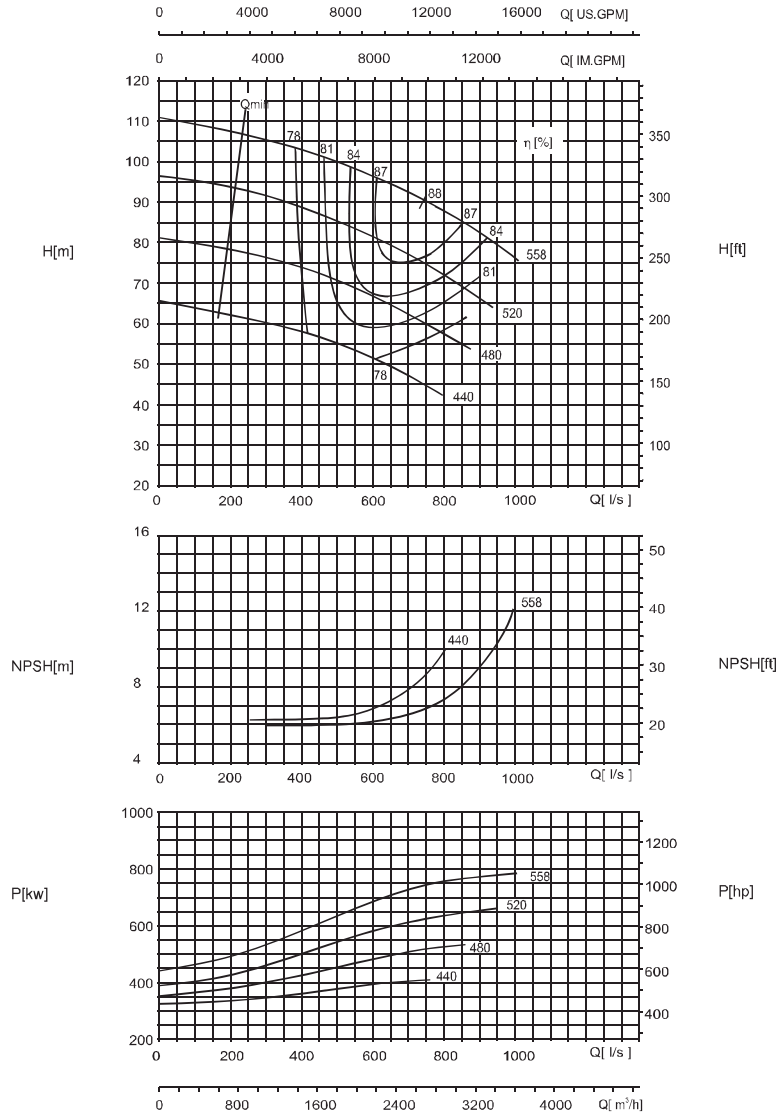






NSC400-350-520

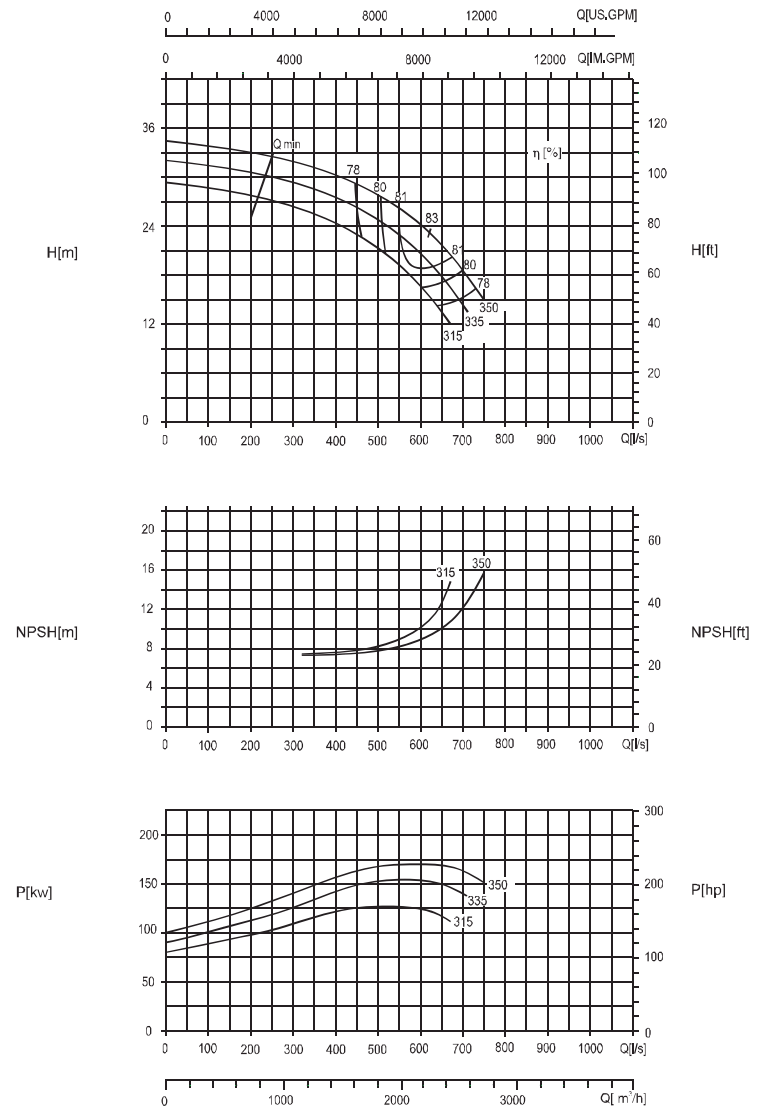
1480 r/min



Head and power ratings apply to media with a density of  $\rho=1\text{kg/dm}^3$  and a kinetic viscosity of  $20\text{ mm}^2/\text{s}$ .

NSC 450-450-350

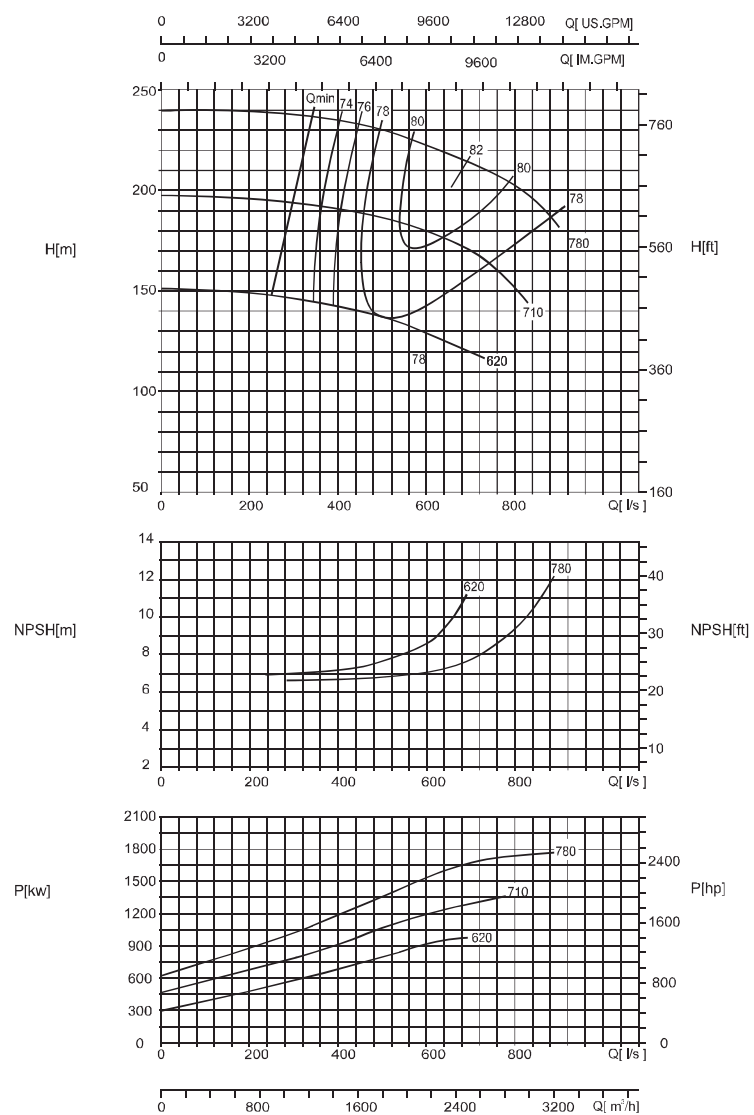
1480 r/min



Head and power ratings apply to media with a density of  $\rho=1\text{kg/dm}^3$  and a kinetic viscosity of  $20\text{ mm}^2/\text{s}$ .

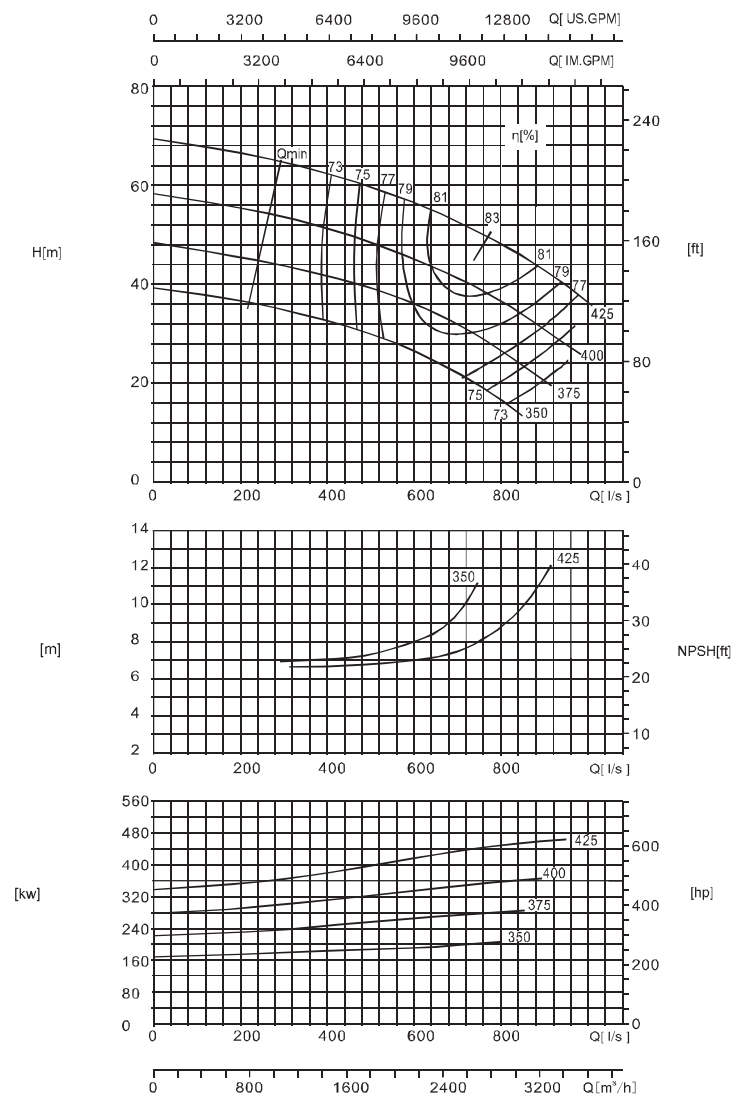
**NSC 500-300-780**

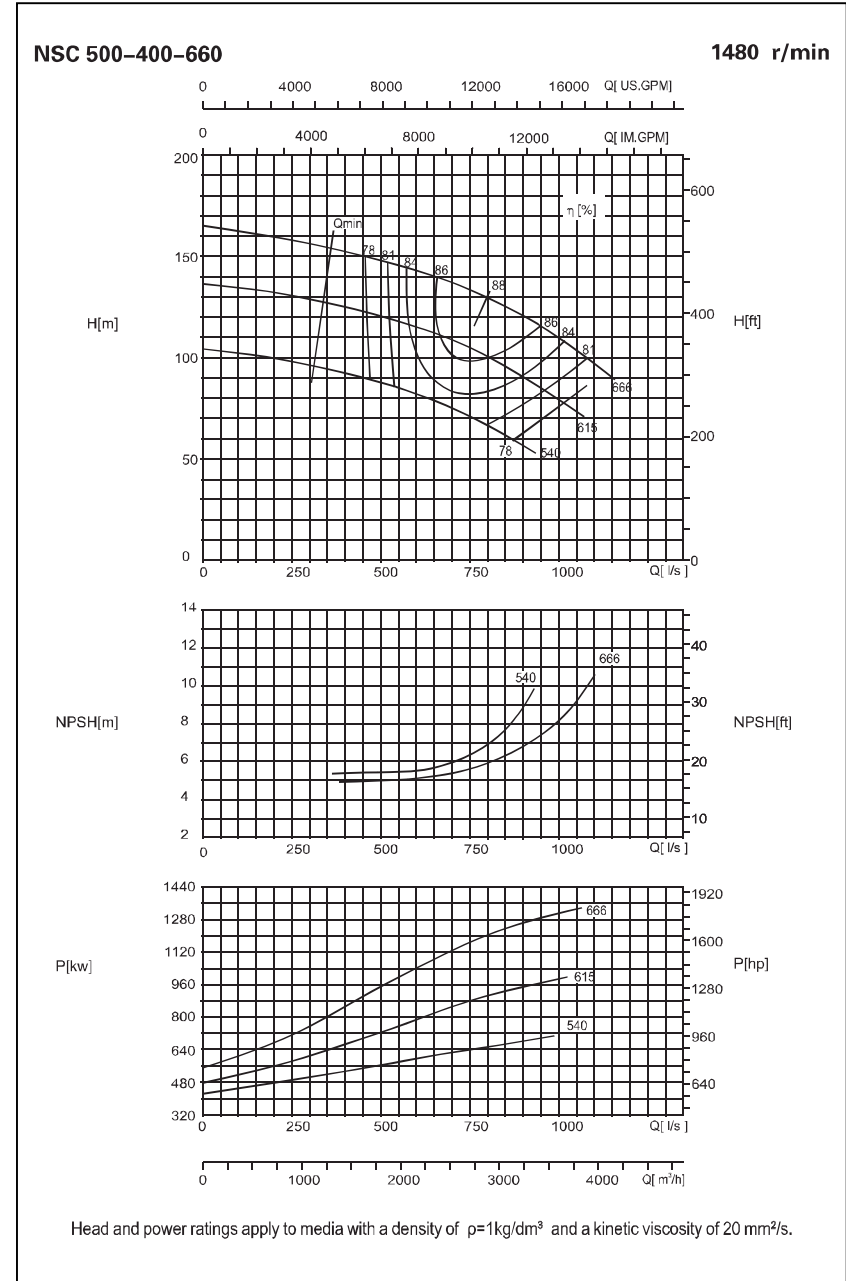
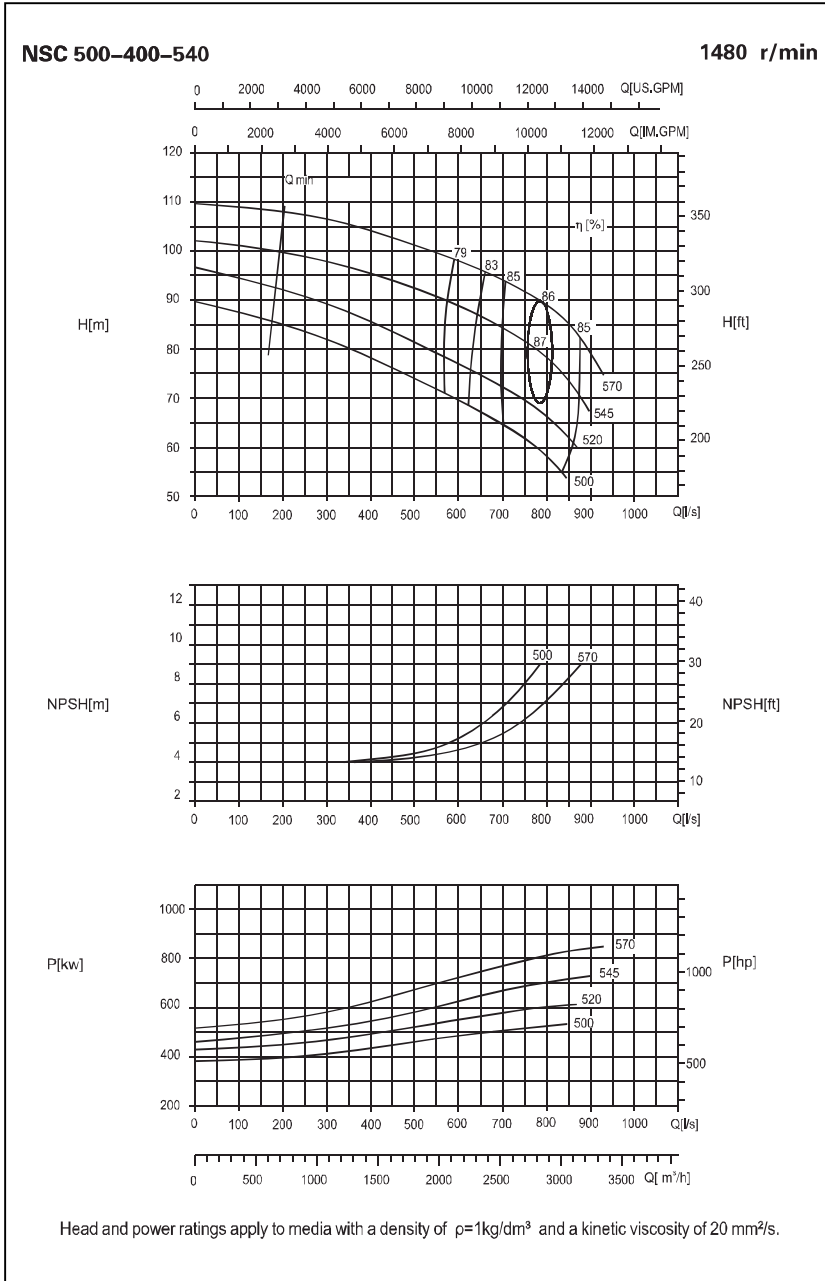
**1480 r/min**



**NSC 500-400-420**

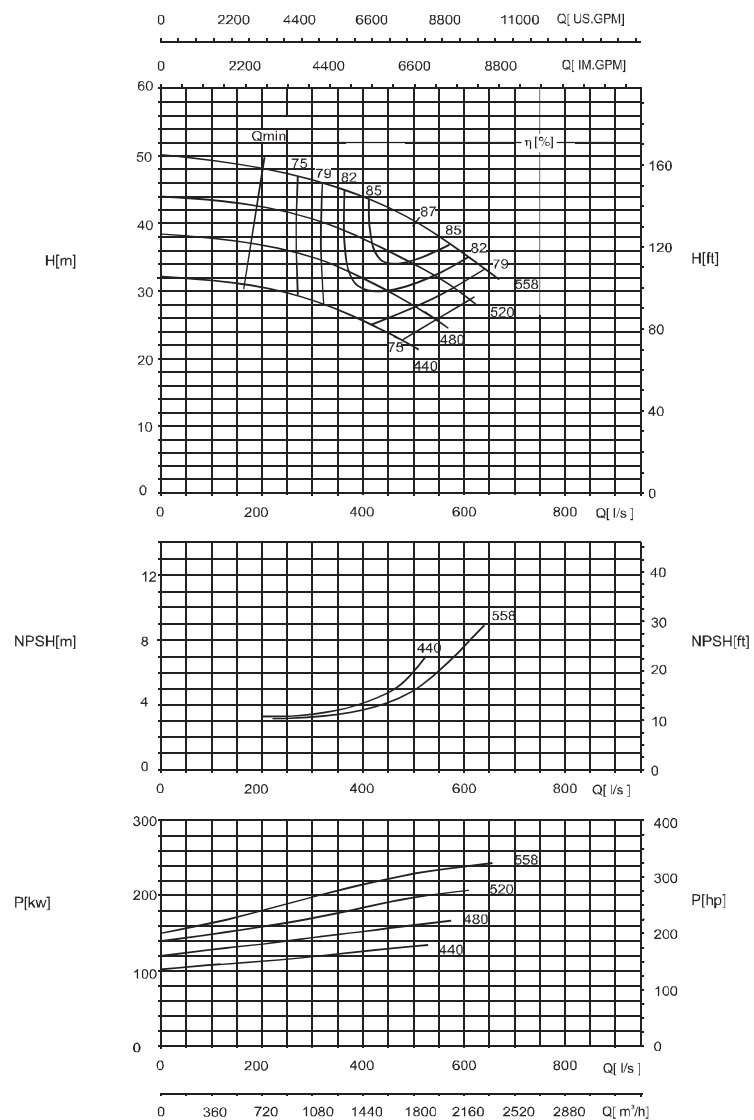
**1480 r/min**





**NSC 400-350-520**

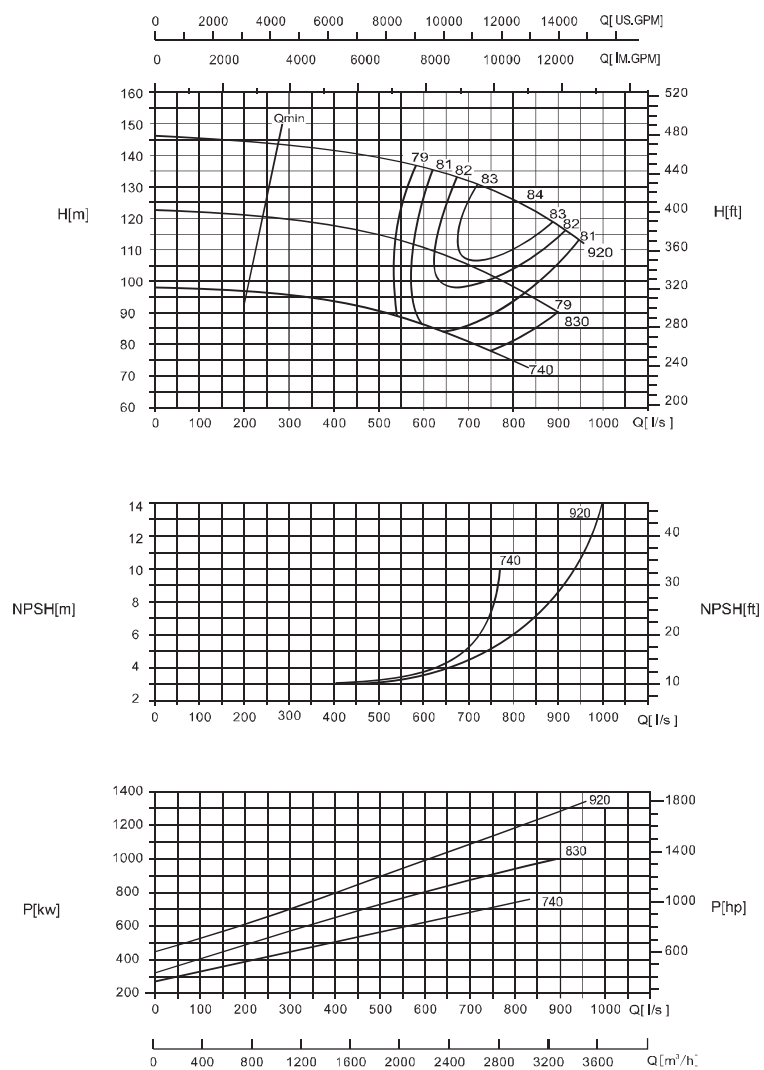
980 r/min



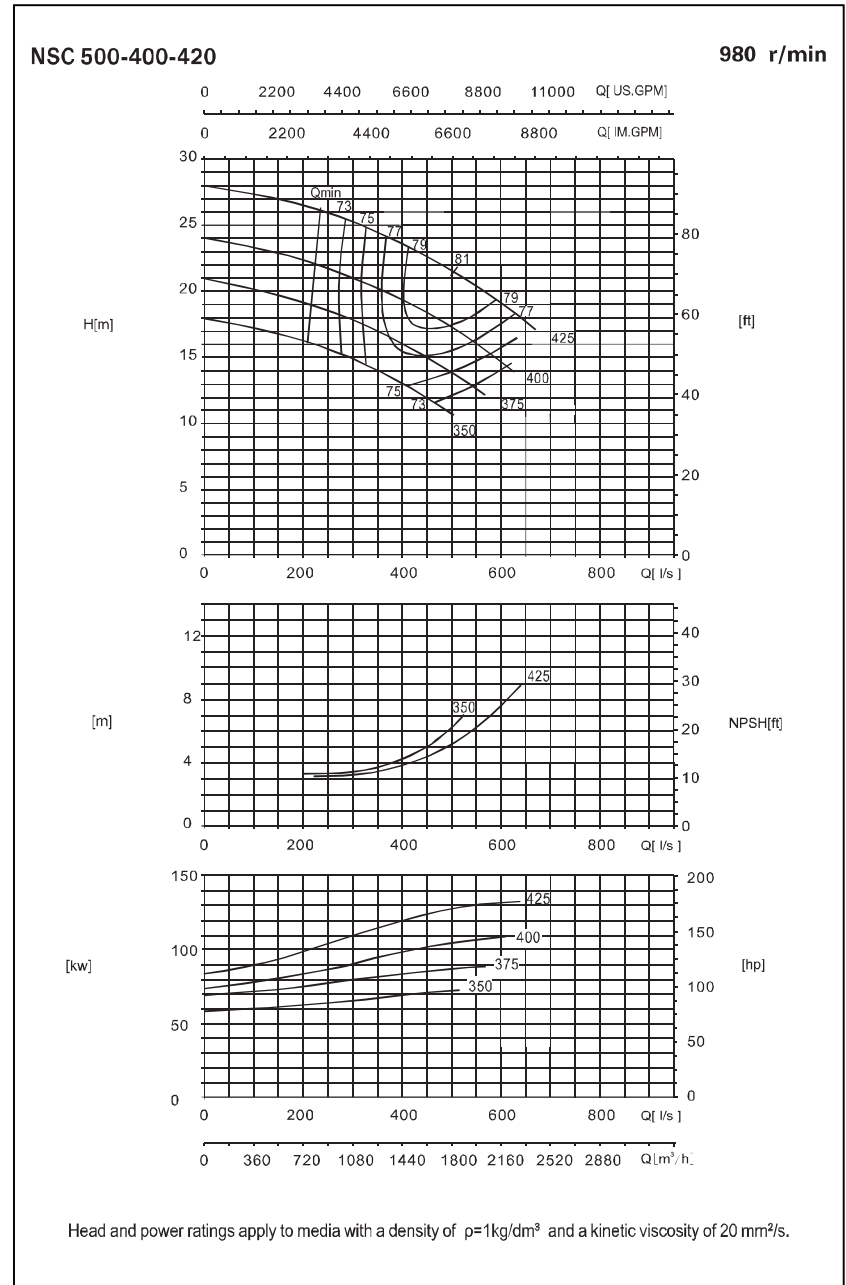
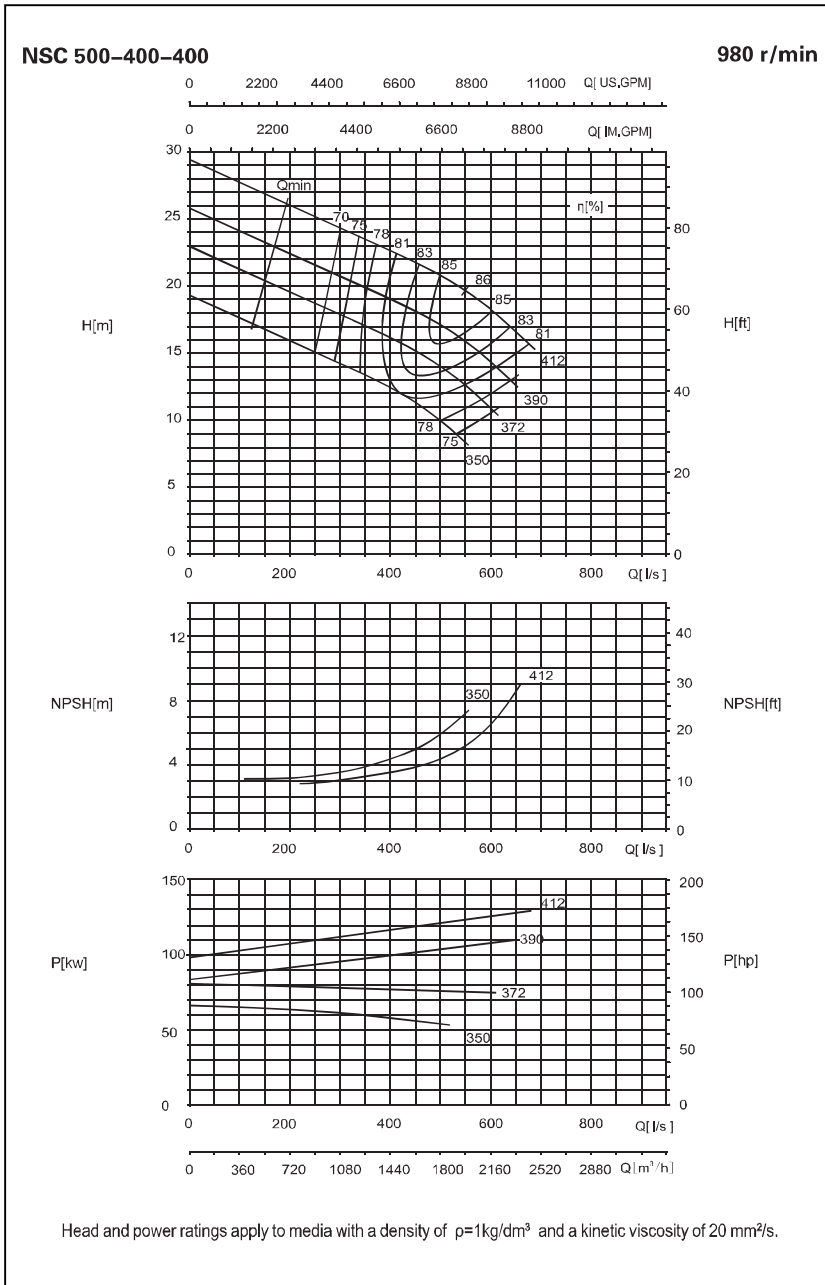
Head and power ratings apply to media with a density of  $\rho=1\text{kg/dm}^3$  and a kinetic viscosity of  $20\text{ mm}^2/\text{s}$ .

**NSC 500-300-920**

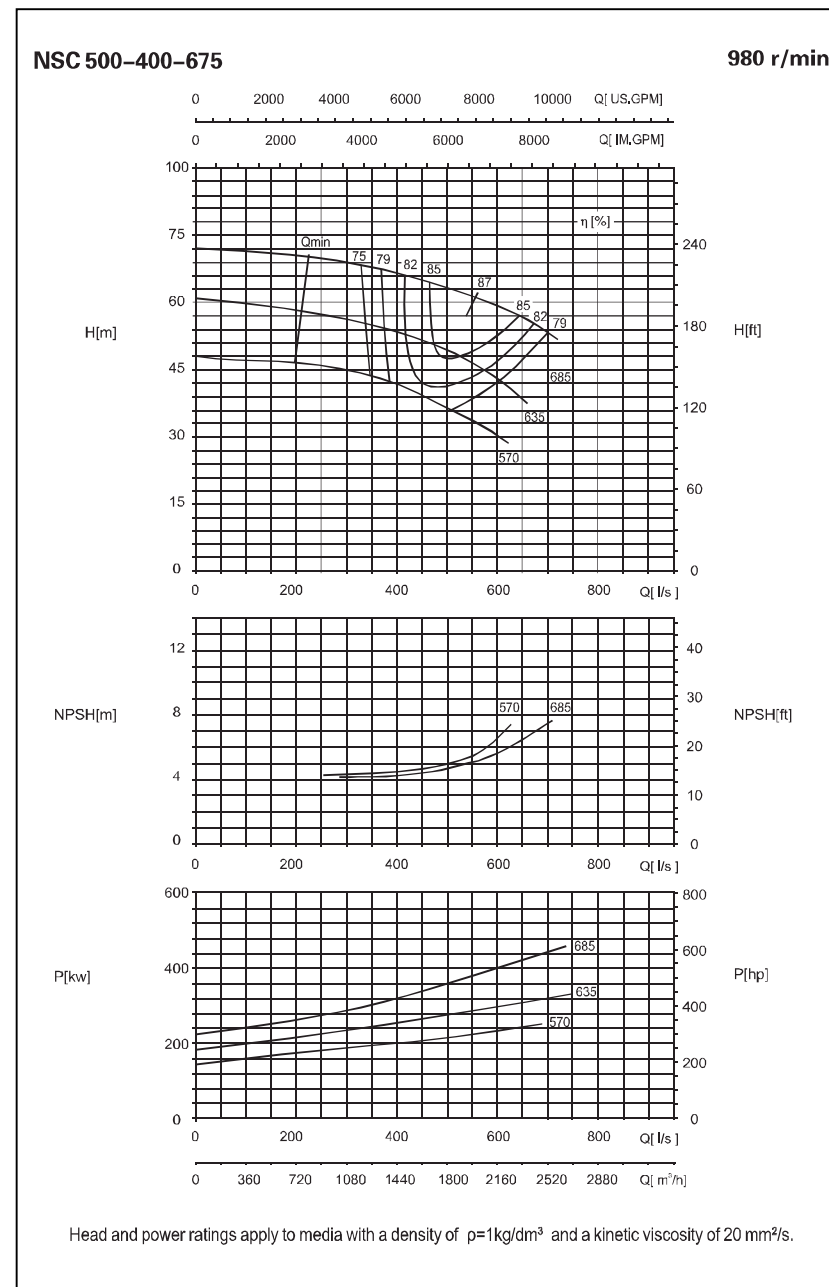
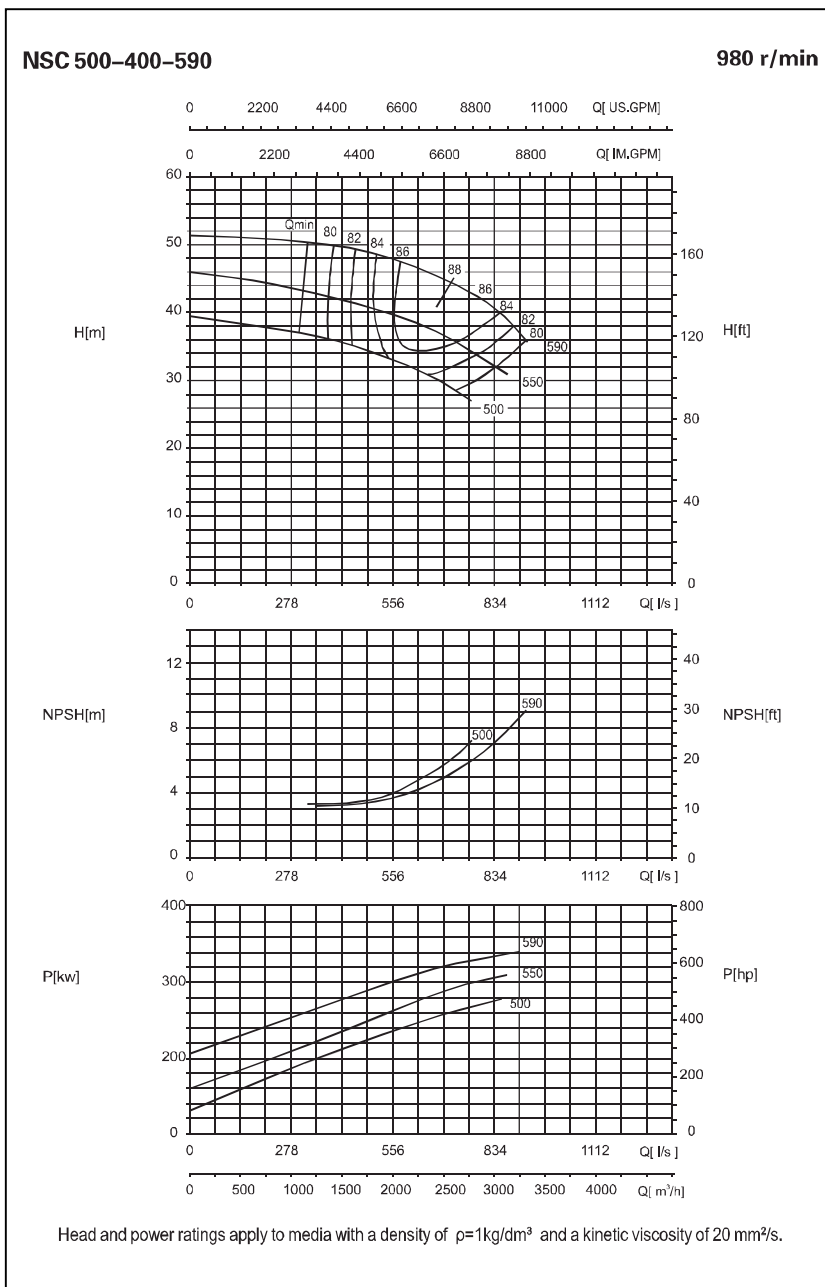
980 r/min

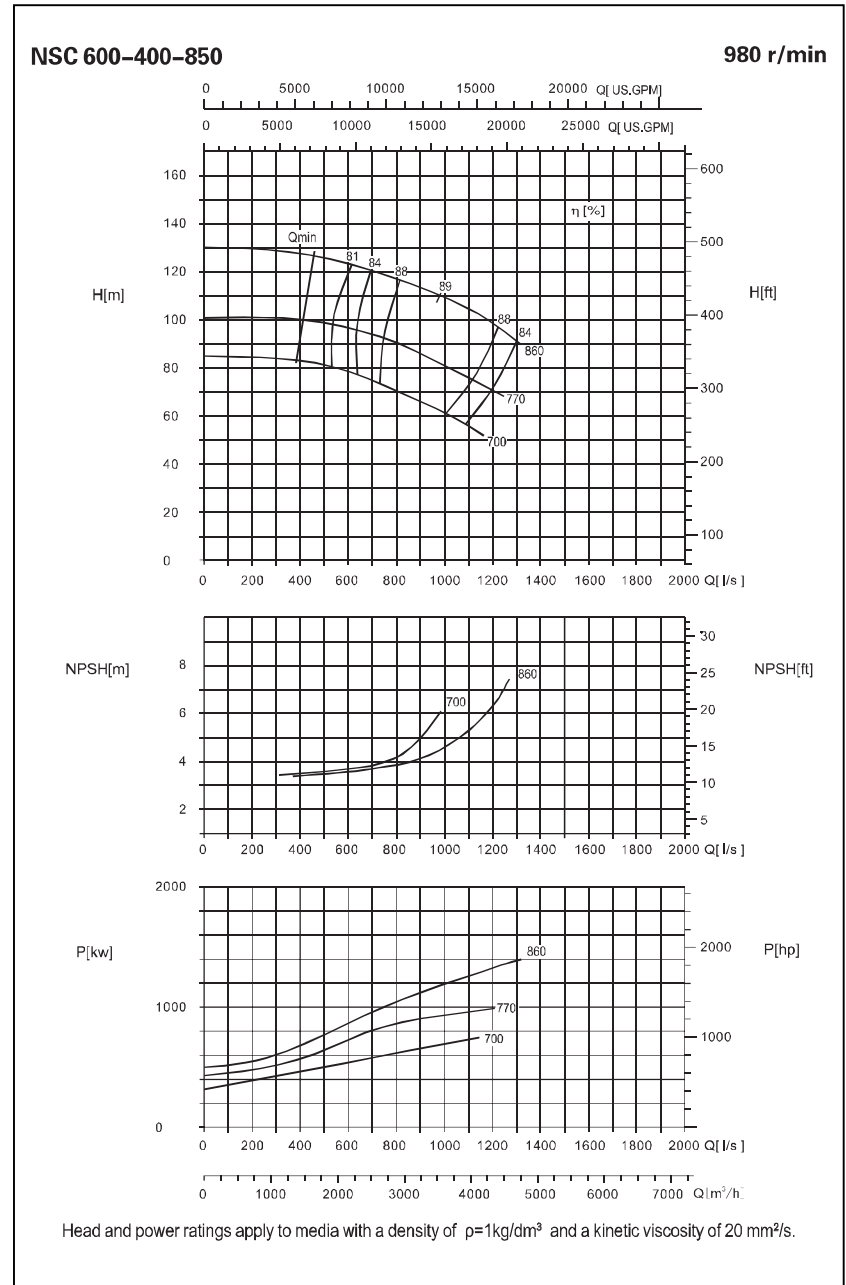
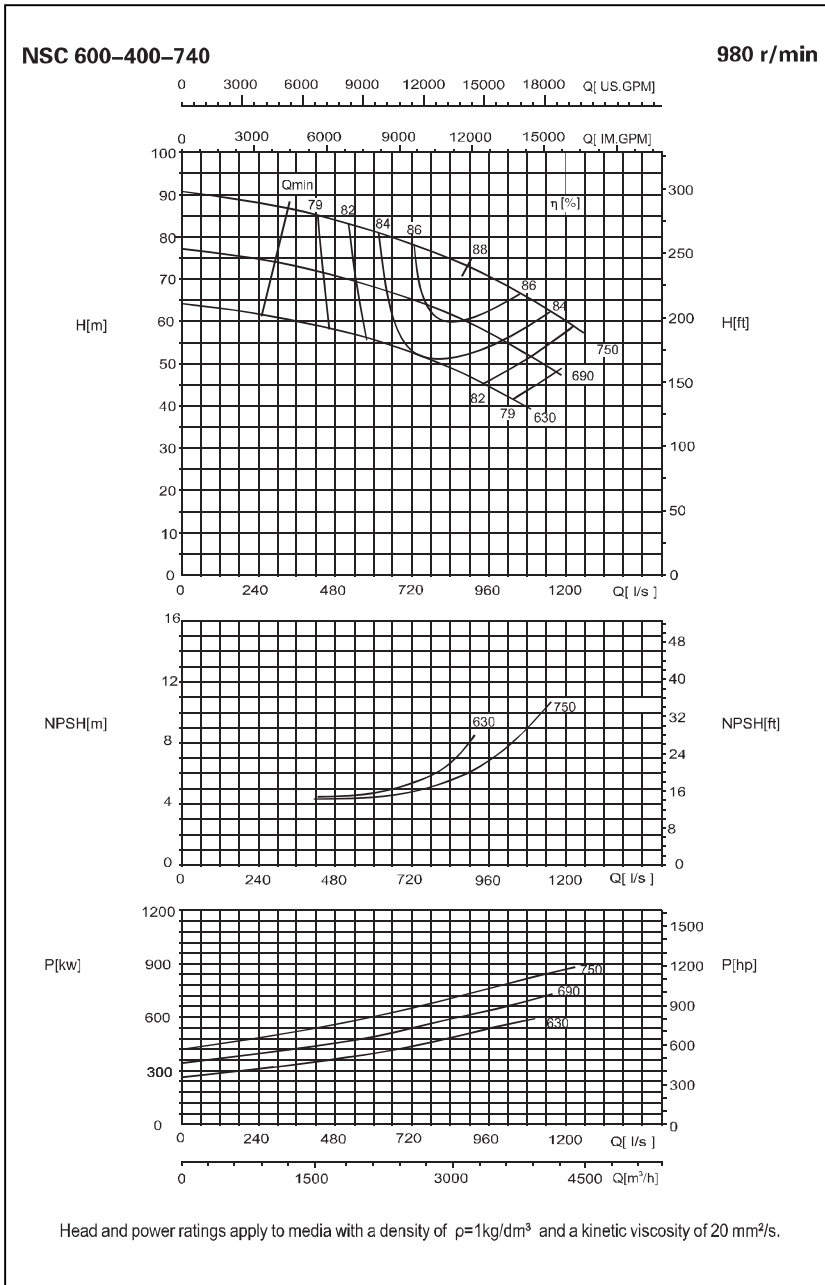


Head and power ratings apply to media with a density of  $\rho=1\text{kg/dm}^3$  and a kinetic viscosity of  $20\text{ mm}^2/\text{s}$ .



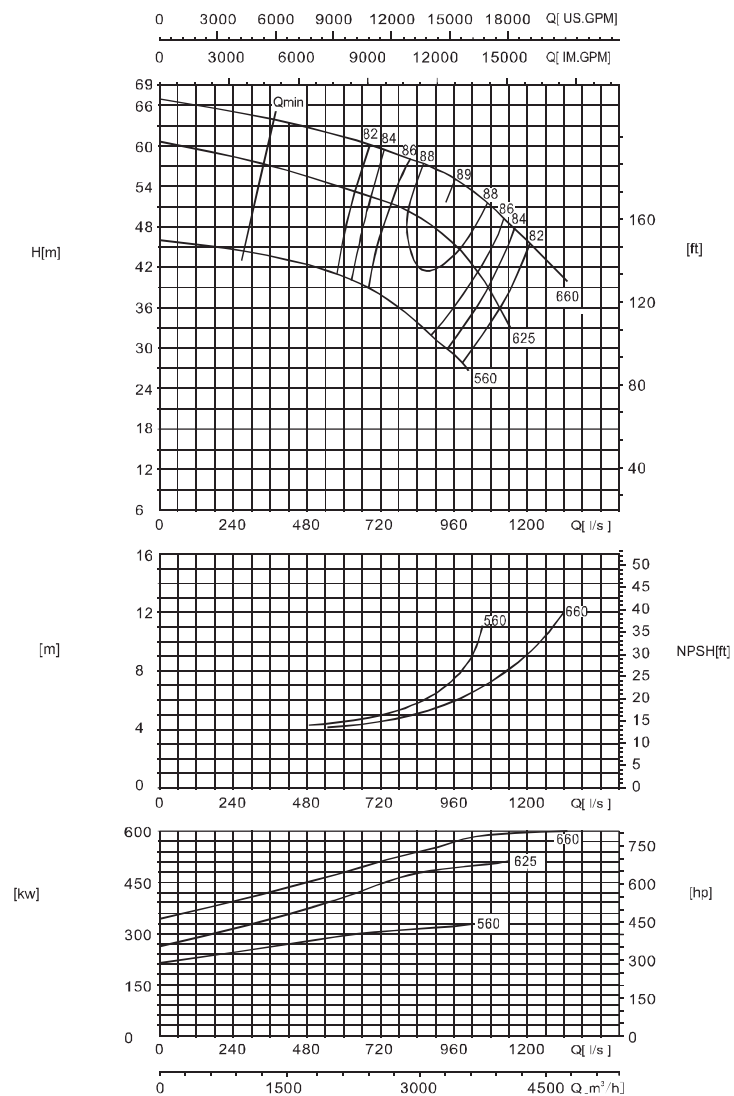






NSC 600-450-640

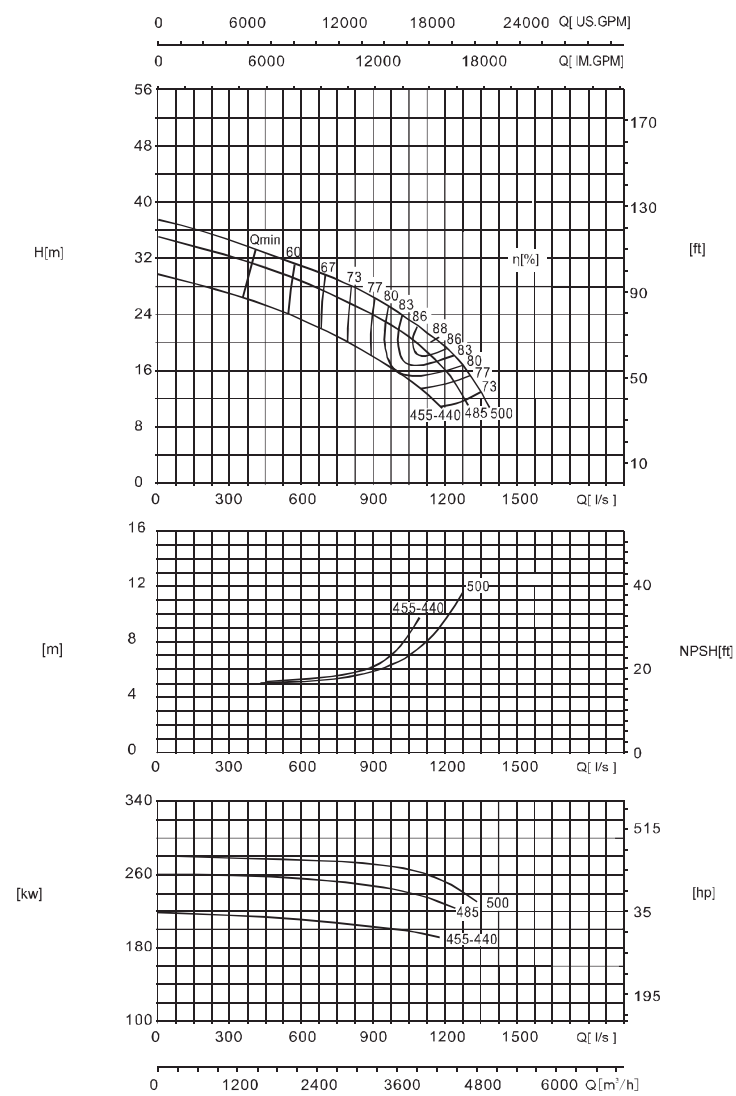
980 r/min



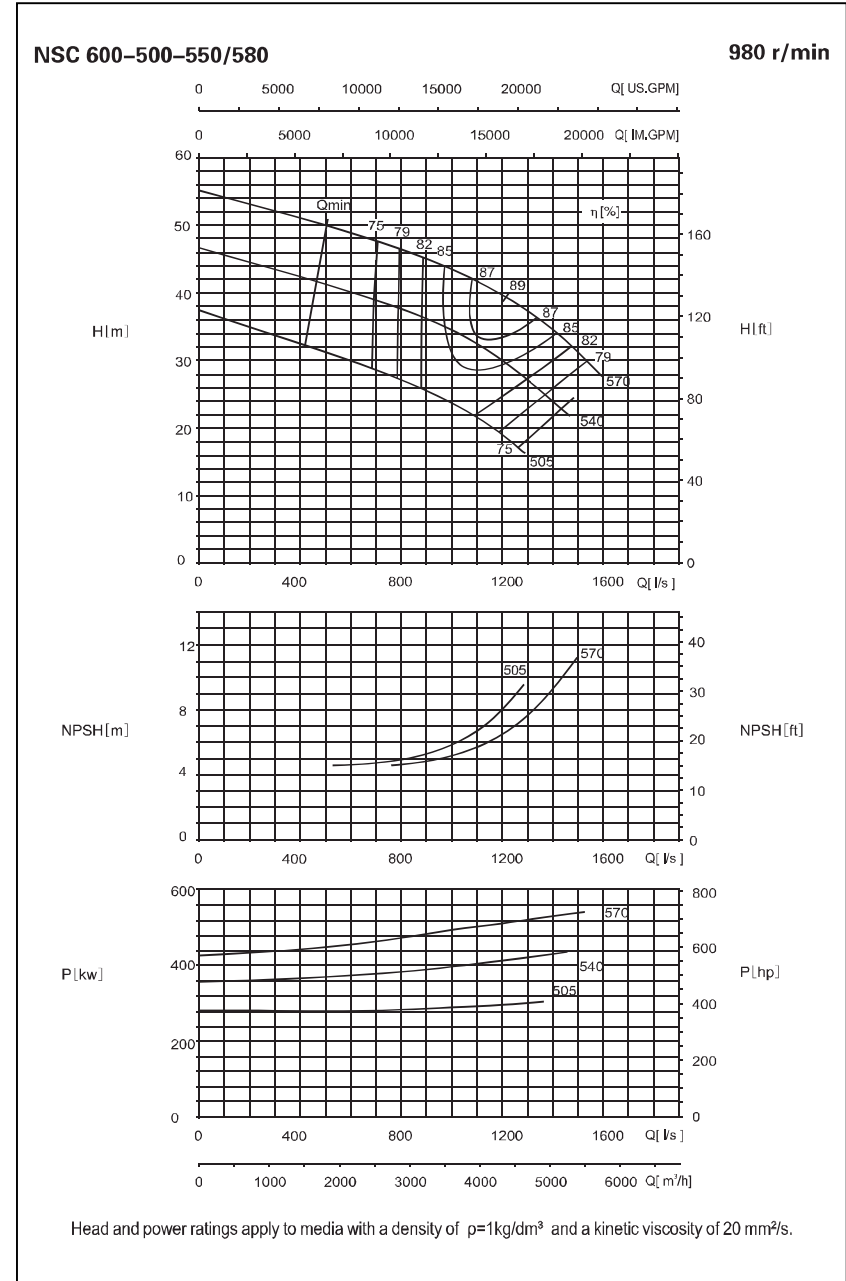
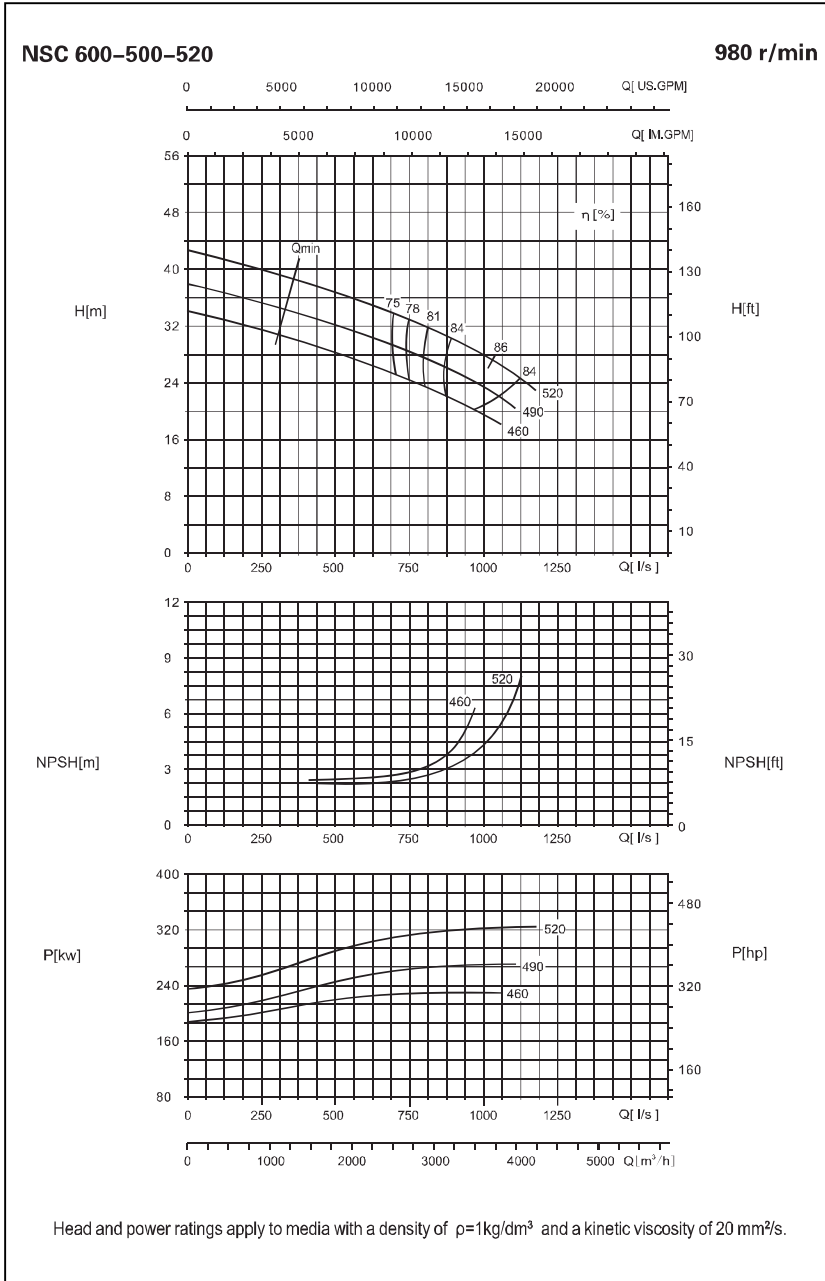
Head and power ratings apply to media with a density of  $\rho=1\text{kg/dm}^3$  and a kinetic viscosity of  $20\text{ mm}^2/\text{s}$ .

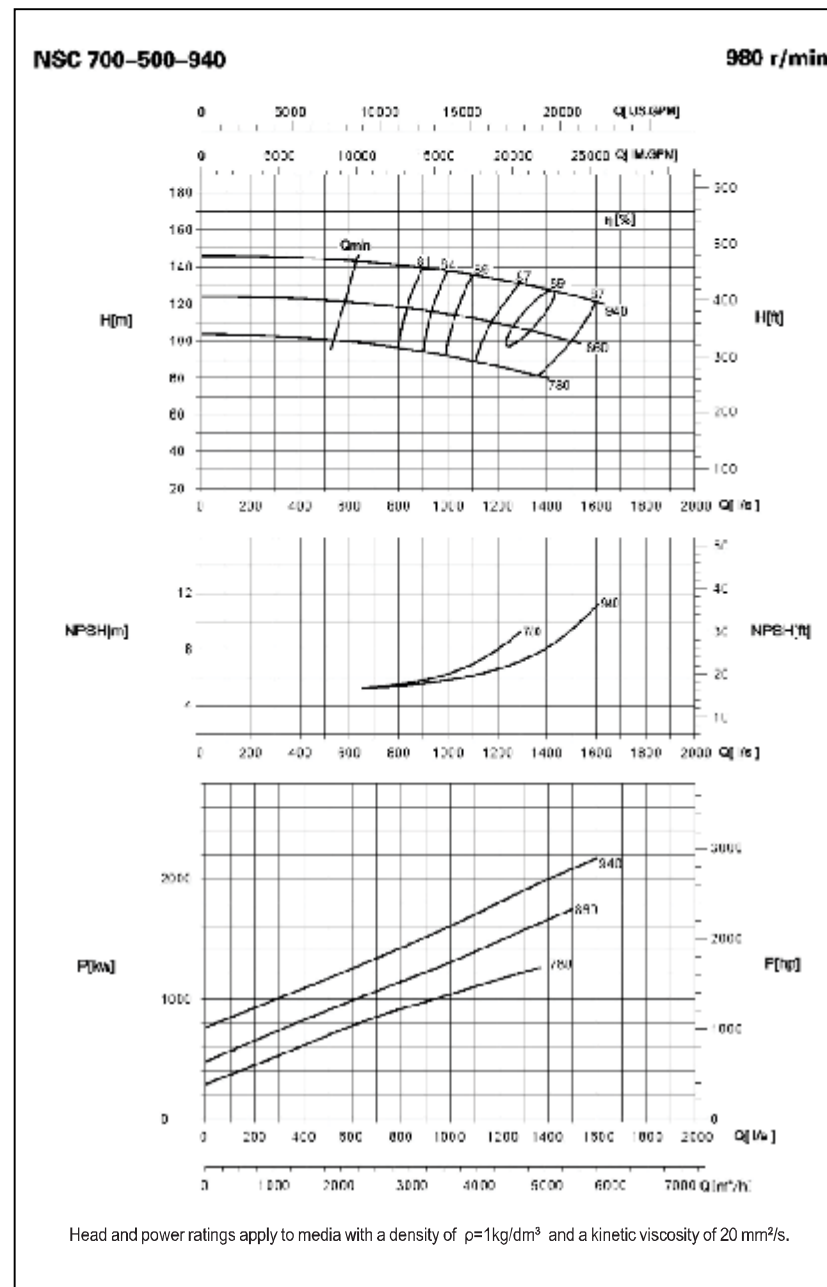
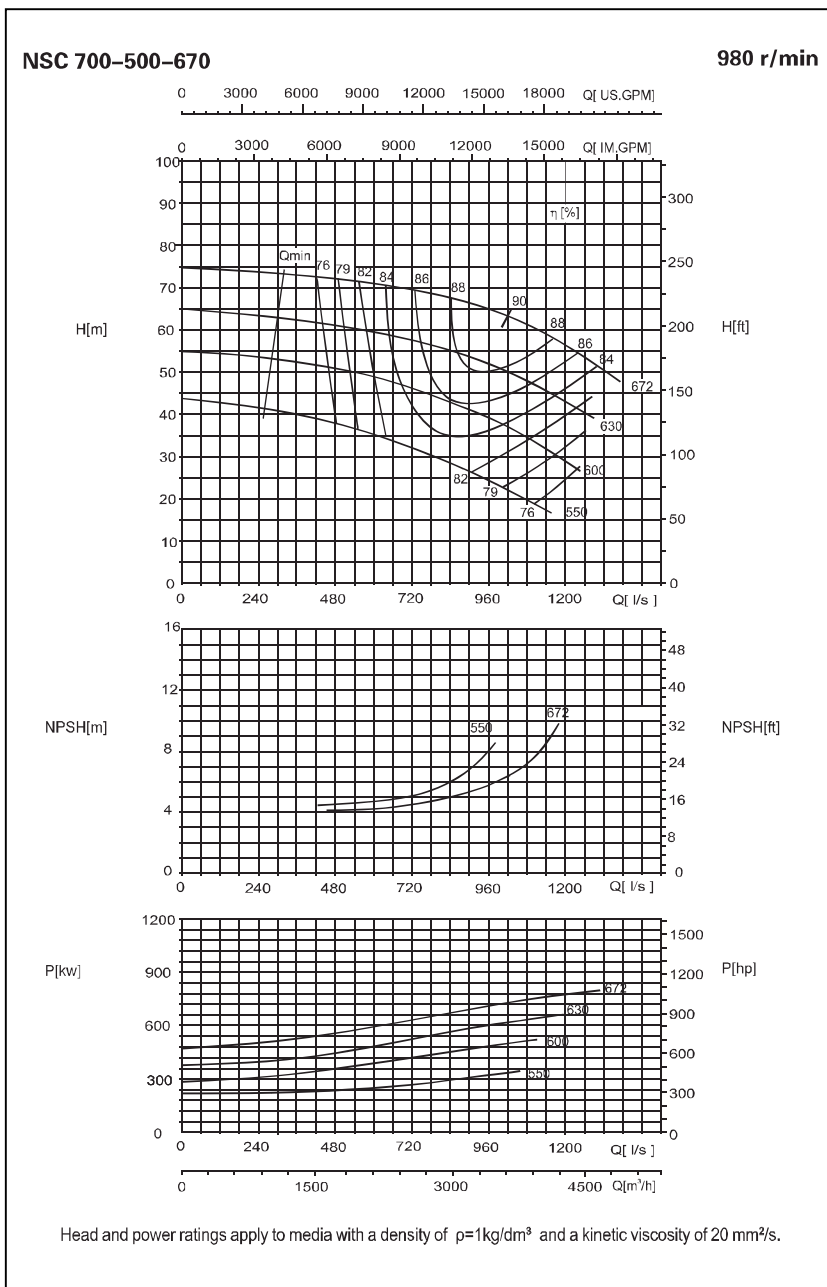
NSC 600-500-470

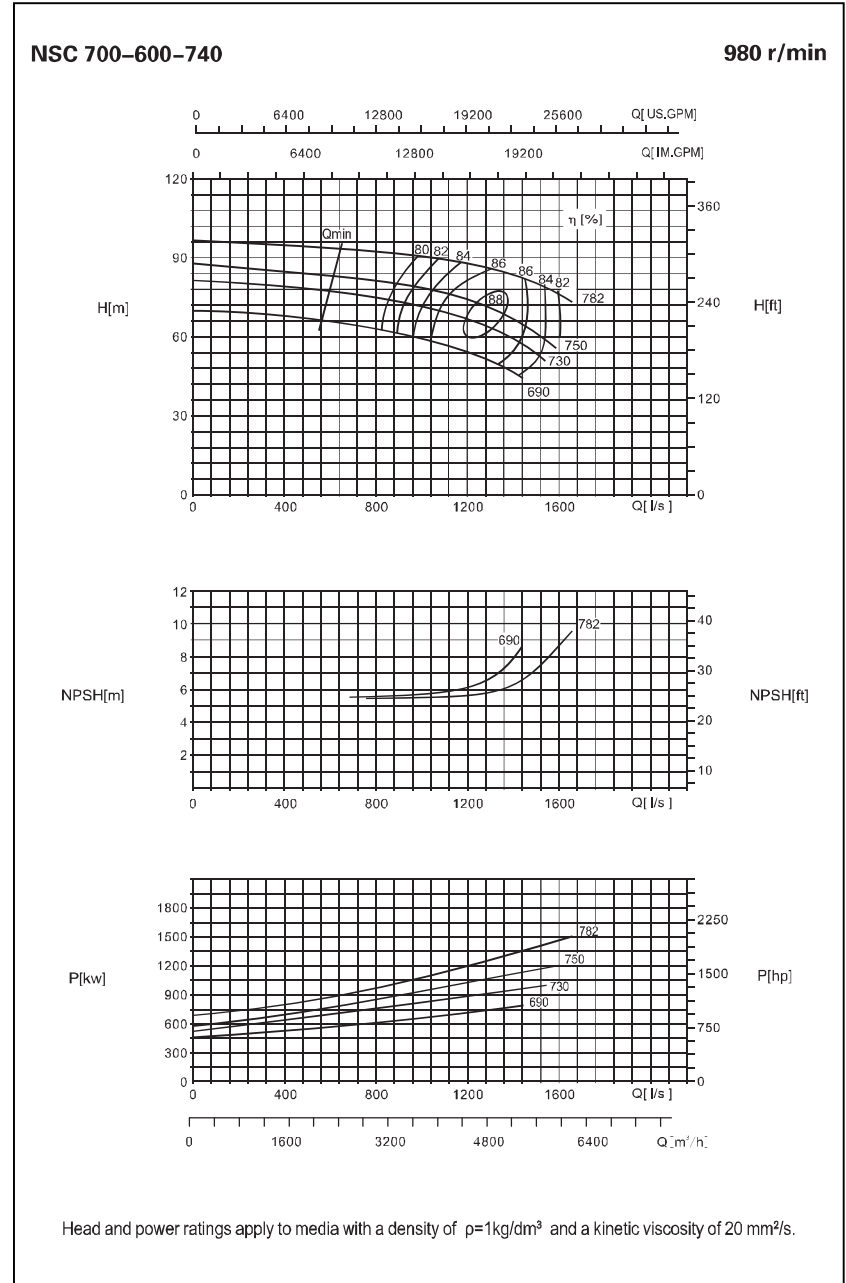
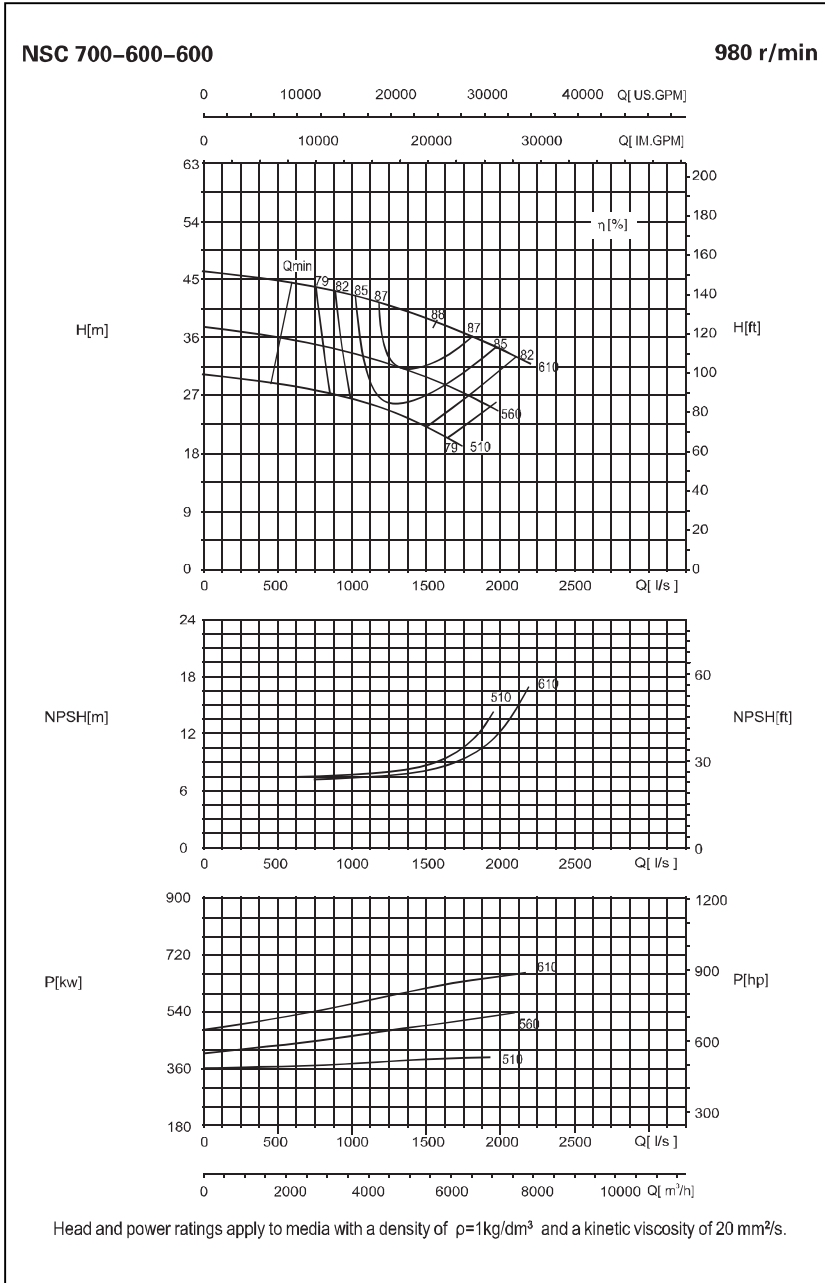
980 r/min



Head and power ratings apply to media with a density of  $\rho=1\text{kg/dm}^3$  and a kinetic viscosity of  $20\text{ mm}^2/\text{s}$ .

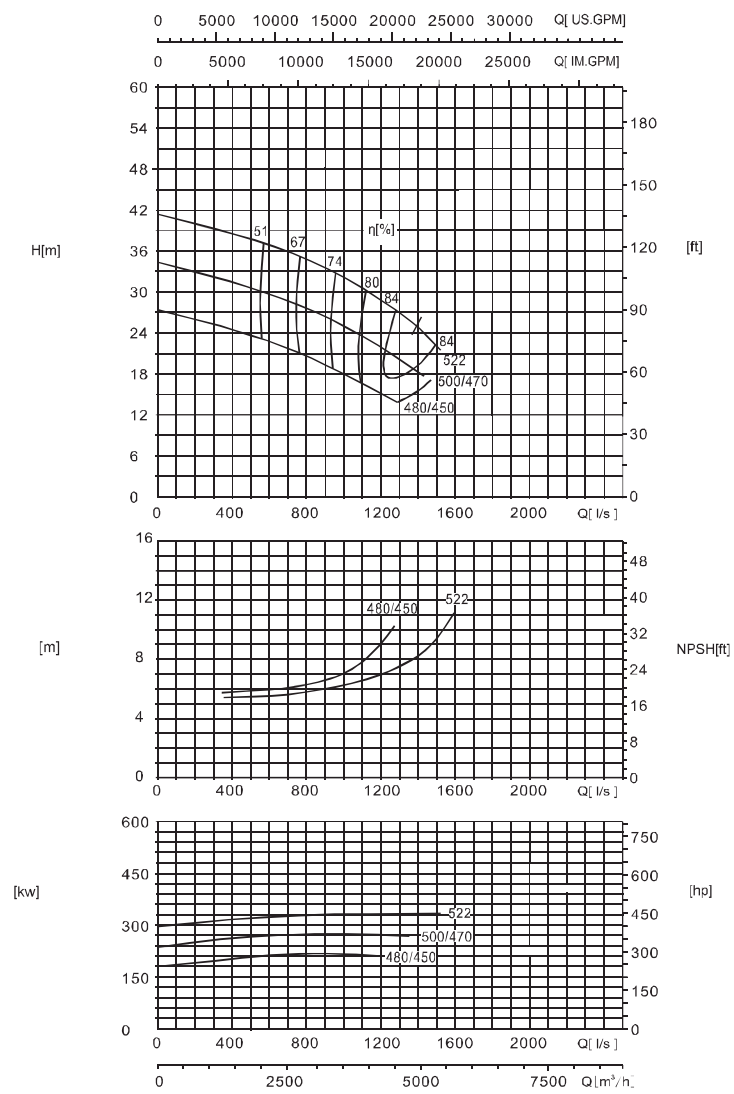






NSC 700-700-500

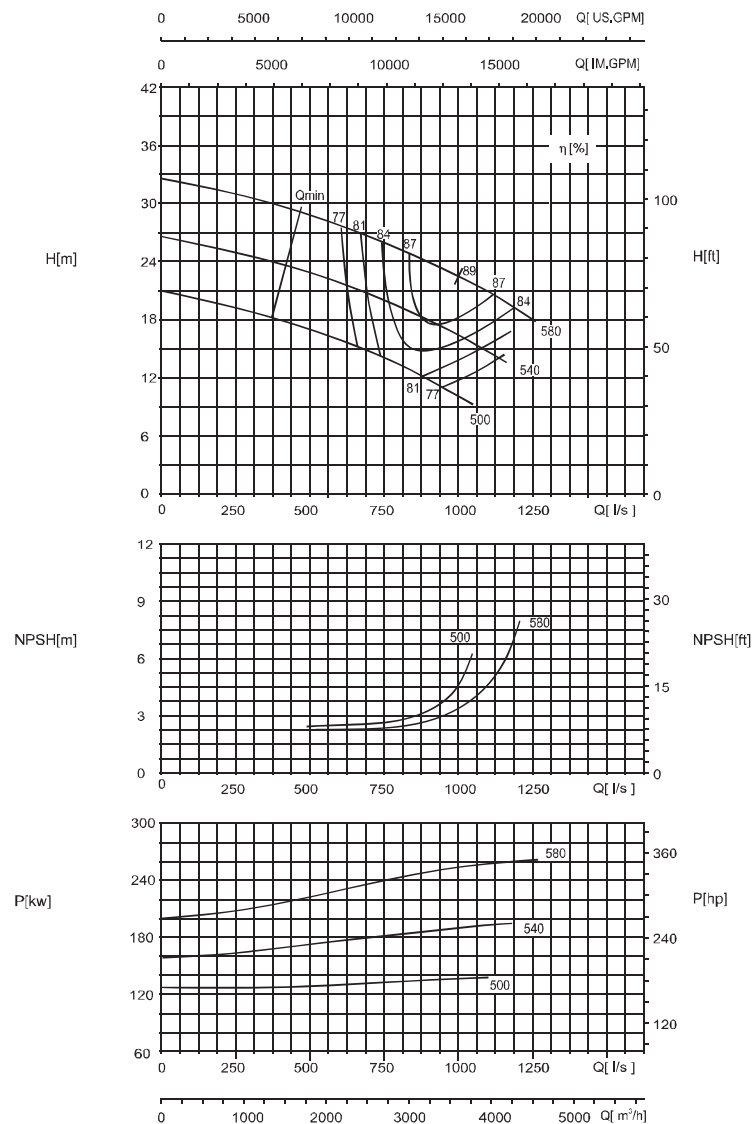
980 r/min



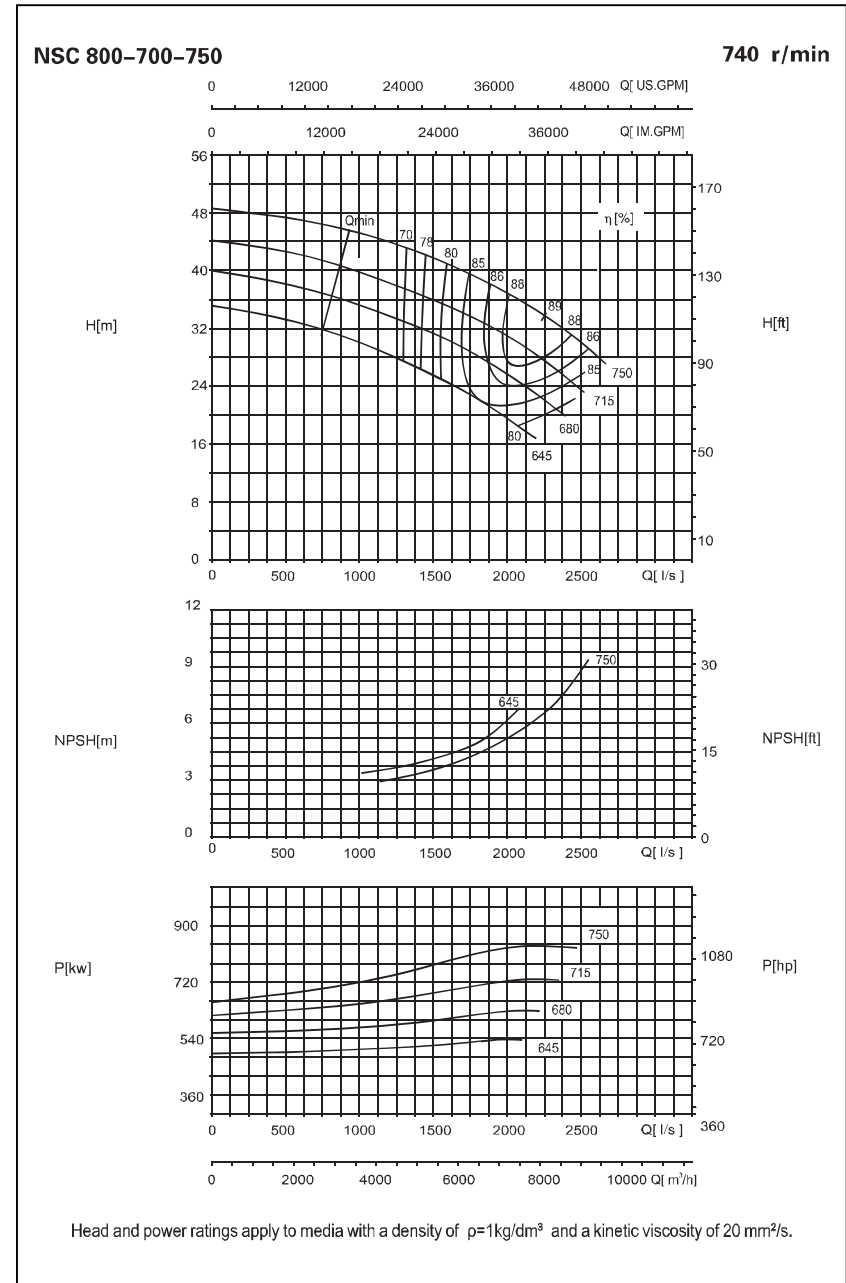
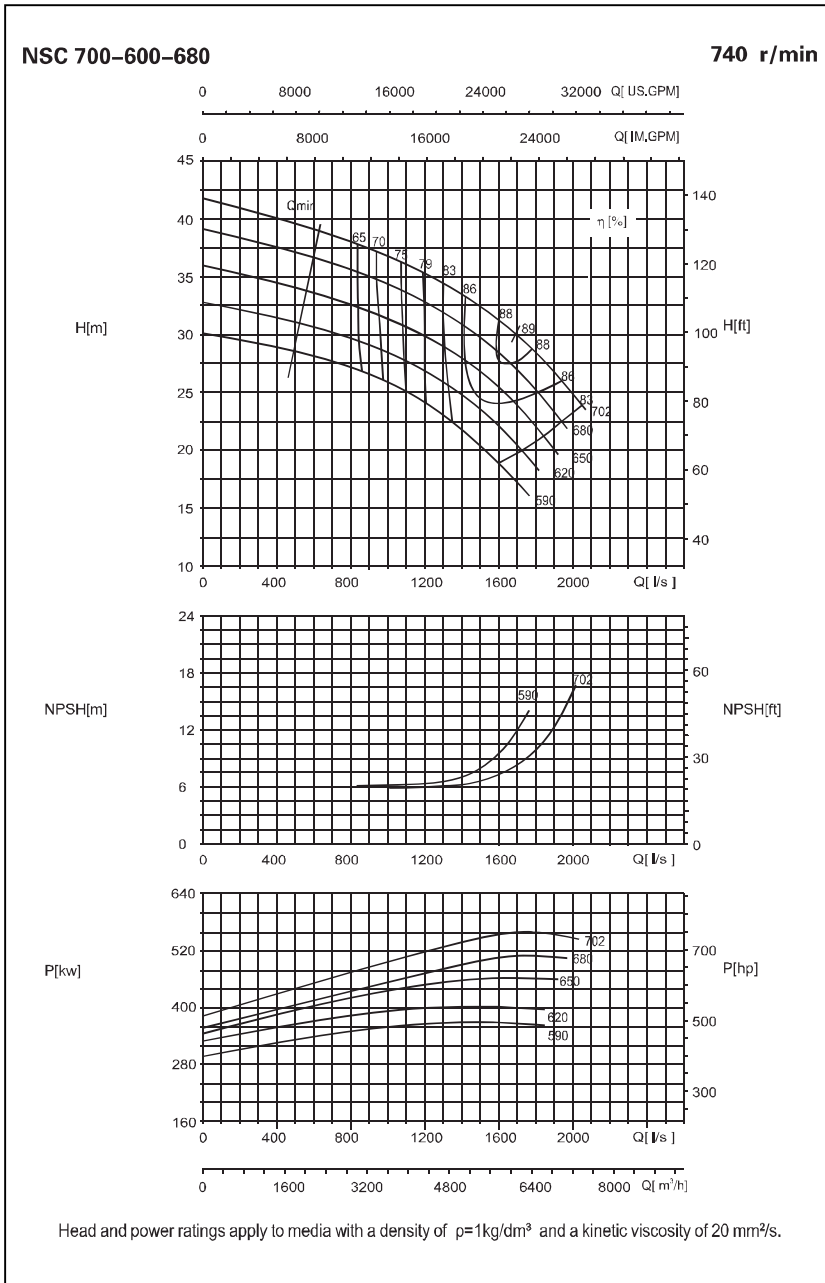
Head and power ratings apply to media with a density of  $\rho=1\text{kg/dm}^3$  and a kinetic viscosity of  $20\text{ mm}^2/\text{s}$ .

NSC 600-500-550/580

740 r/min



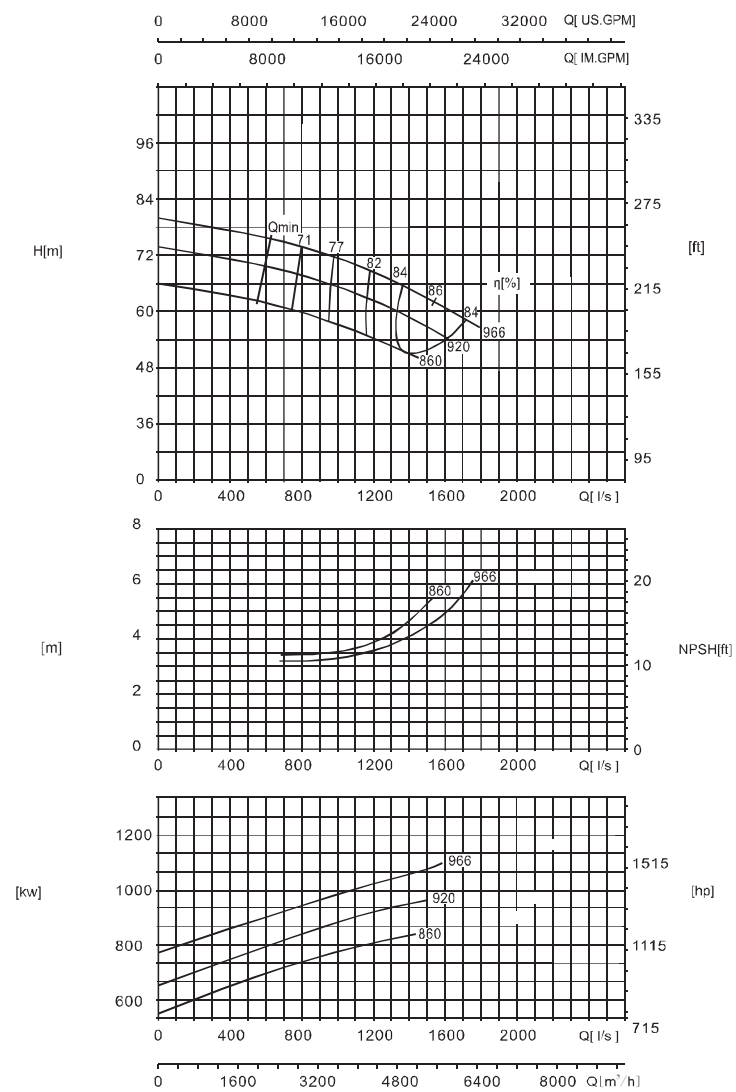
Head and power ratings apply to media with a density of  $\rho=1\text{kg/dm}^3$  and a kinetic viscosity of  $20\text{ mm}^2/\text{s}$ .





NSC 800-700-910L ( Low Cavitation Impeller )

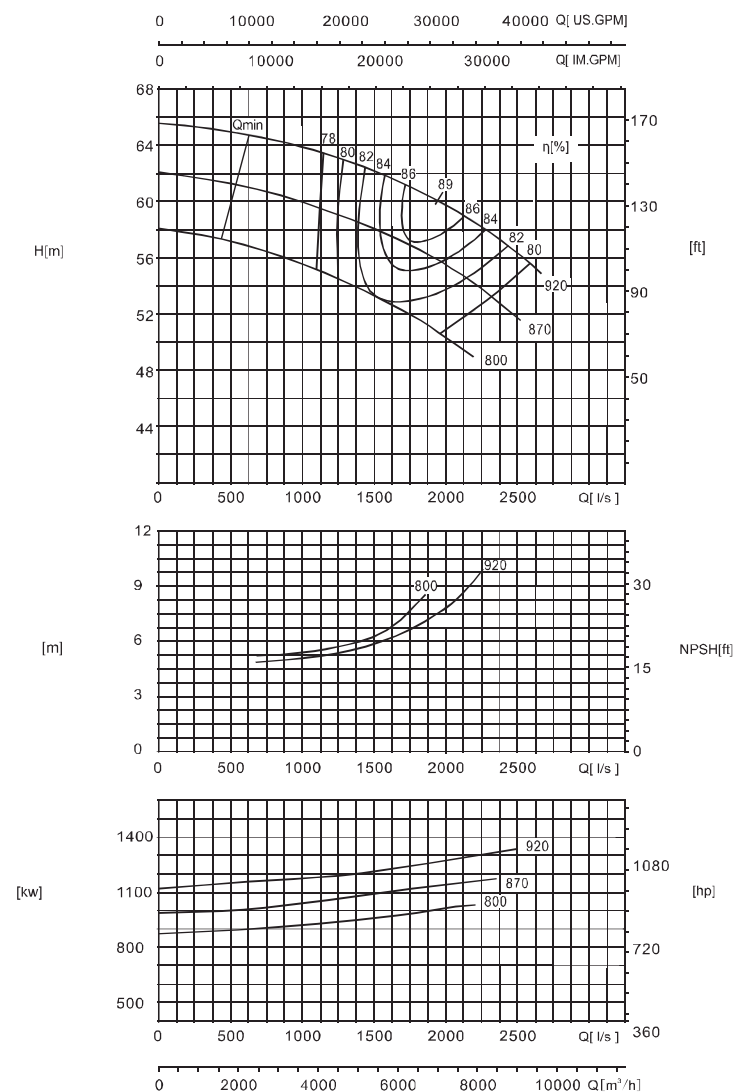
740 r/min



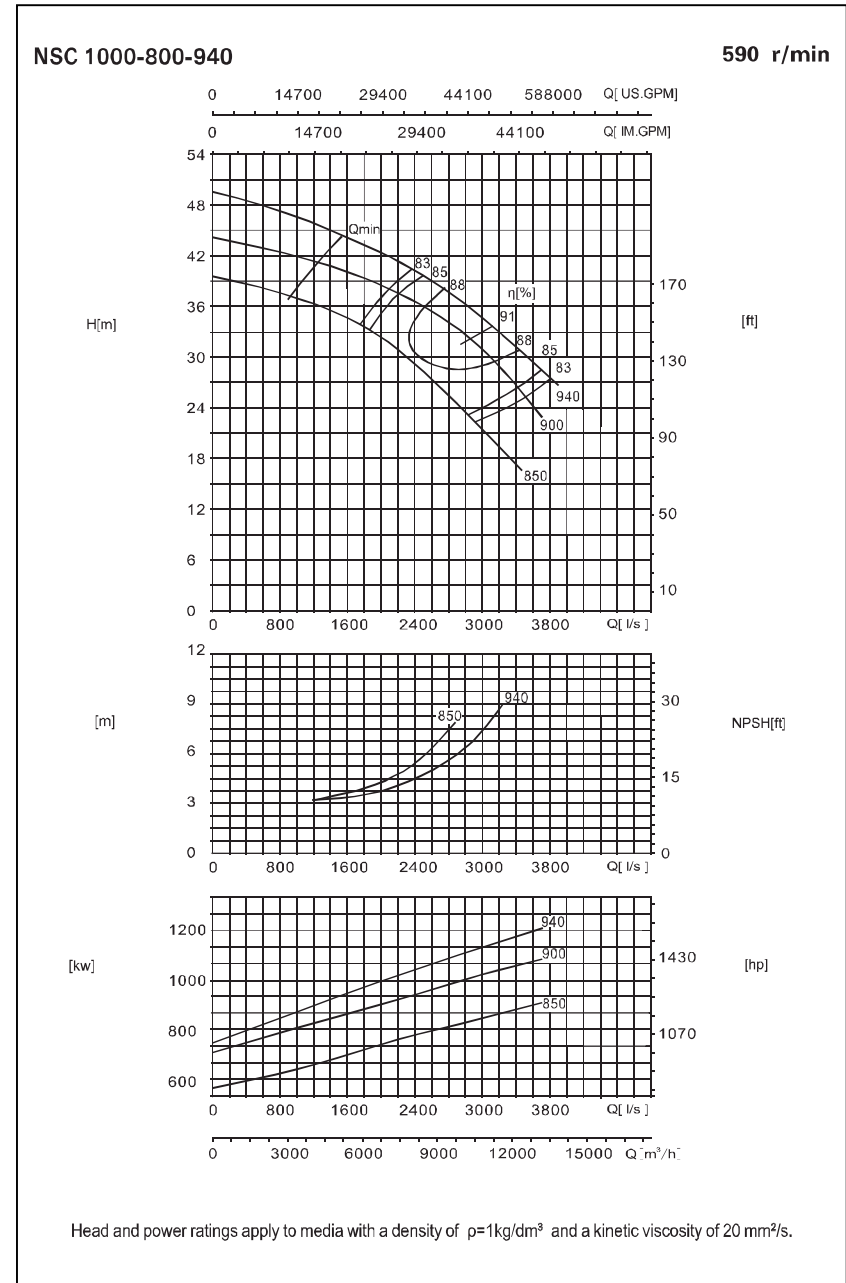
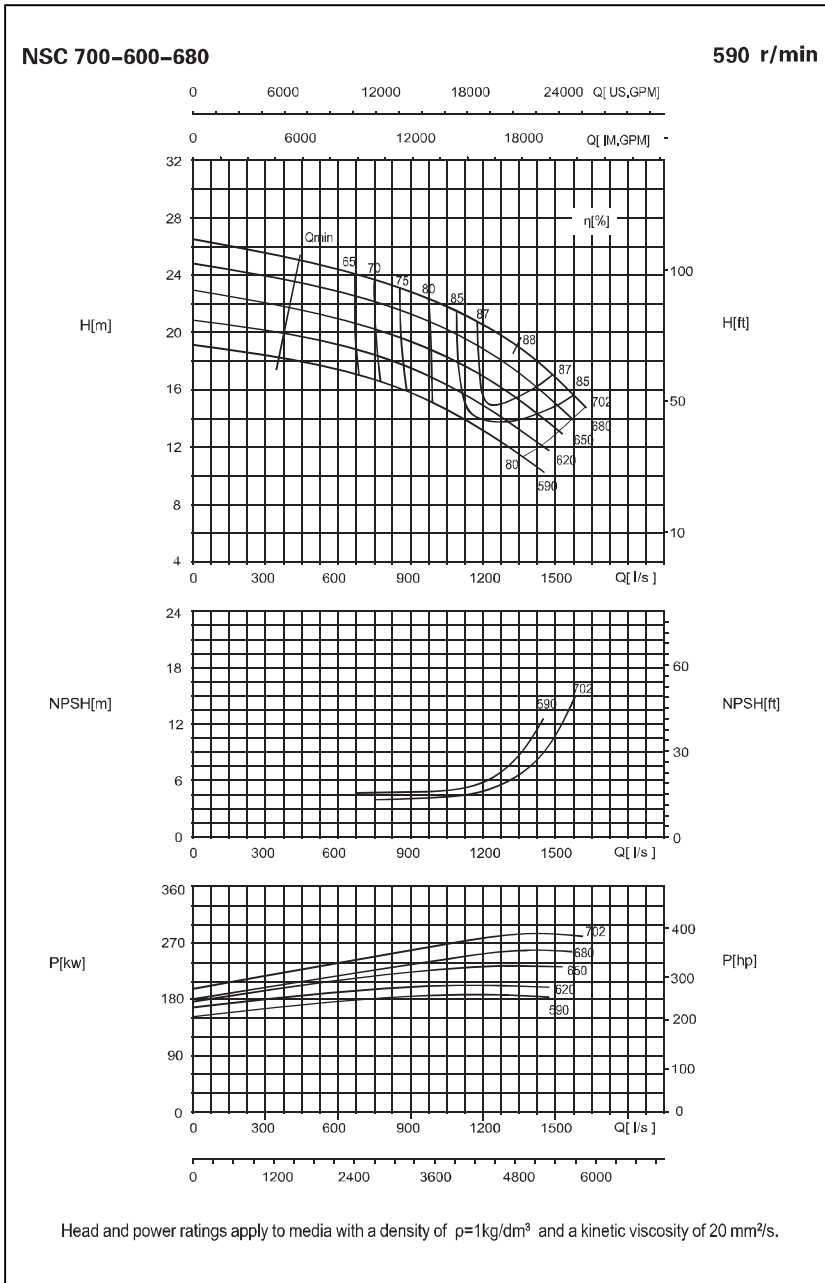
Head and power ratings apply to media with a density of  $\rho=1\text{kg/dm}^3$  and a kinetic viscosity of  $20\text{mm}^2/\text{s}$ .

NSC 800-700-910H ( High Efficiency Impeller )

740 r/min

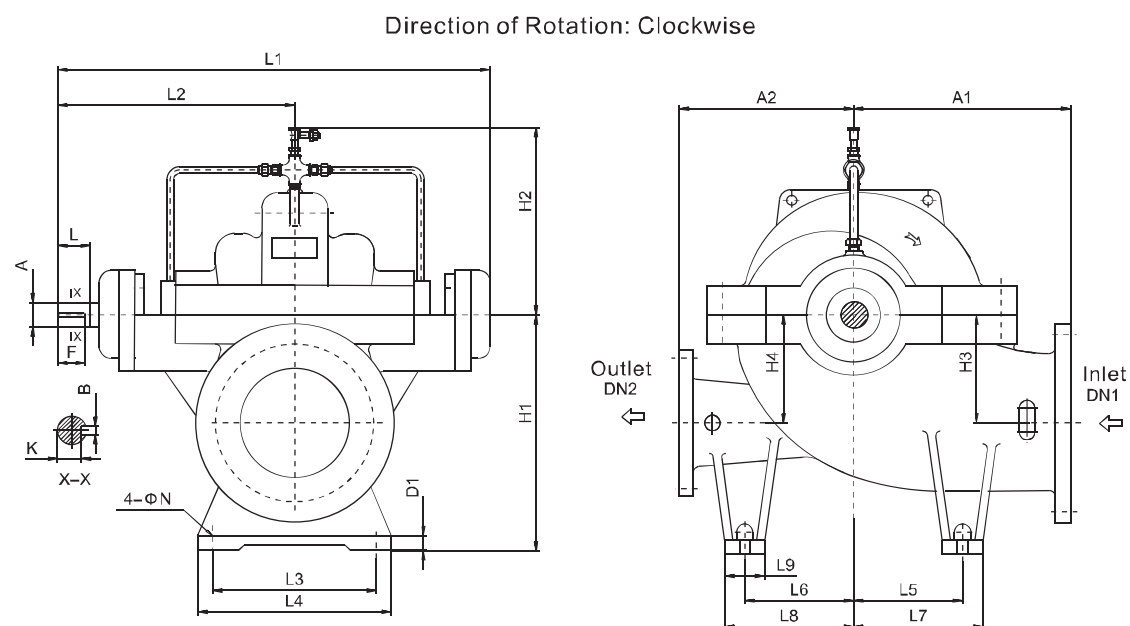


Head and power ratings apply to media with a density of  $\rho=1\text{kg/dm}^3$  and a kinetic viscosity of  $20\text{mm}^2/\text{s}$ .



## Dimensions

### Bare Shaft Pump Dimensions



Dimensions—Bare Shaft Pump (1/2)

Unit: mm, unless otherwise stated

Model	A1	A2	H1	H2	H3	H4	L1	L2	L3	L4	L5	L6	L7	L8	L9	D1	N	A	L	B	K	F
NSC125-80-210	300	300	315	270	150	150	788.9	440.5	270	320	170	170	205	205	70	30	18	35	81.5	10	30	75
NSC125-80-270	300	300	315	269	150	150	788.9	440.5	270	320	170	170	205	205	70	30	18	35	81.5	10	30	75
NSC125-80-350	330	330	315	333	140	140	788.9	440.5	270	320	170	170	210	210	80	30	18	35	81.5	10	30	75
NSC150-100-250	330	330	355	328	170	170	788.9	440.5	270	320	200	200	240	240	80	30	18	35	81.5	10	30	75
NSC150-100-320	330	330	355	342	170	170	788.9	440.5	270	320	200	200	240	240	80	30	18	35	81.5	10	30	75
NSC150-100-400	370	370	355	260	170	170	788.9	440.5	270	320	200	200	245	245	90	30	18	35	81.5	10	30	75
NSC150-100-400G	370	370	355	260	170	170	788.9	440.5	270	320	200	200	245	245	90	30	18	40	105	12	35	100
NSC200-125-240	370	370	400	300	200	200	871	500	380	430	200	200	240	240	80	22	25	45	111.5	14	39.5	105
NSC200-125-300	370	370	400	325	200	200	871	500	380	430	225	225	265	265	80	22	25	45	111.5	14	39.5	105
NSC200-125-380	395	370	400	350	200	200	871	500	340	390	225	225	265	265	80	30	25	45	111.5	14	39.5	105
NSC200-125-480	450	450	400	389	200	200	871	500	340	390	280	280	320	320	80	30	25	45	111.5	14	39.5	105
NSC200-150-290	400	400	400	340	200	200	871	500	380	430	225	225	265	265	80	30	25	45	111.5	14	39.5	105
NSC200-150-360	400	400	400	380	200	200	871	500	380	430	225	225	265	265	80	30	25	45	111.5	14	39.5	105
NSC200-150-460	450	450	400	390	200	200	1006.1	569.3	430	480	280	280	320	320	80	30	25	55	112.7	16	49	100
NSC200-150-570	600	500	500	460	300	300	1006.1	569.3	430	480	350	350	400	400	100	30	25	55	112.7	16	49	100
NSC250-200-340	450	450	500	368	240	240	1006.1	569.3	430	480	280	280	320	320	80	25	25	55	112.7	16	49	100
NSC250-200-430	500	500	500	400	240	240	1006.1	569.3	430	480	280	280	325	325	80	30	25	55	112.7	16	49	100
NSC250-200-530	600	600	560	470	300	300	1110.8	637.3	430	480	350	350	400	400	100	30	25	65	143.2	18	58	135
NSC250-200-660	650	550	600	525	350	350	1110.8	637.3	440	520	350	350	400	400	100	30	25	65	143.2	18	58	135
NSC300-250-270	500	450	600	404	300	300	1006.1	569.3	430	480	300	270	340	310	80	30	25	55	112.7	16	49	100
NSC300-250-280	500	450	600	404	300	300	1006.1	569.3	430	480	300	270	340	310	80	30	25	55	112.7	16	49	100
NSC300-250-390	500	500	600	417	300	300	1110.8	637.3	430	480	350	350	400	400	100	42	25	65	143.2	18	58	135
NSC300-250-490	550	550	600	583	300	300	1316.5	737.5	520	600	350	350	400	400	100	35	25	75	143.5	20	67.5	135

Dimensions—Bare Shaft Pump (2/2)

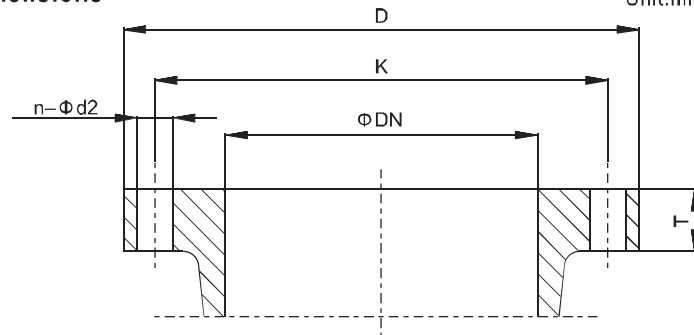
Unit: mm, unless otherwise stated

Model	A1	A2	H1	H2	H3	H4	L1	L2	L3	L4	L5	L6	L7	L8	L9	D1	N	A	L	B	K	F
NSC300-250-810	650	550	630	640	350	350	1316.5	737.5	520	600	350	350	400	400	100	42	25	75	143.5	20	67.5	135
NSC300-250-780	700	600	750	600	400	400	1533	870	600	700	350	350	425	425	150	42	25	85	172.5	22	76	165
NSC350-300-310	600	520	630	465	300	300	1110.8	637.3	490	560	350	300	415	365	130	35	25	65	143.2	18	58	135
NSC350-300-330	600	520	630	465	300	300	1110.8	637.3	490	560	350	300	415	365	130	35	25	65	143.2	18	58	135
NSC350-300-400	630	560	630	450	320	320	1243	696	490	560	350	350	415	415	130	35	25	65	143.2	18	58	135
NSC400-300-450	650	550	700	590	350	350	1316.5	737.5	520	600	350	350	400	400	100	40	25	75	143.5	20	67.5	135
NSC400-300-570	750	650	710	530	350	350	1527	870	520	600	475	475	525	525	100	40	25	85	172.5	22	76	165
NSC400-300-700	700	650	750	530	400	400	1527	870	600	700	425	425	485	485	120	40	25	85	172.5	22	76	165
NSC400-350-360	670	570	670	513	350	350	1316.5	737.5	630	710	330	330	380	380	100	35	25	75	143.5	20	67.5	135
NSC400-350-380	670	570	670	513	350	350	1316.5	737.5	630	710	330	330	380	380	100	35	25	75	143.5	20	67.5	135
NSC400-350-520	700	650	750	535	400	400	1527	870	520	600	475	475	525	525	100	35	25	85	172.5	22	76	165
NSC450-450-350	700	550	700	520	370	370	1308.5	737.5	700	800	330	330	380	380	100	35	25	75	143.5	20	67.5	135
NSC500-300-820	900	900	850	615	400	400	1909	1088	780	940	500	500	620	620	240	40	42	115	210	32	104	180
NSC500-300-780	800	750	800	535	400	400	1900	1055	580	740	450	450	570	570	240	45	35	115	210	30	104	180
NSC500-400-400	765	600	785	537	420	400	1438.5	821.5	580	640	400	400	460	460	120	35	30	75	143.5	20	67.5	135
NSC500-400-420	765	600	785	537	420	400	1438.5	821.5	580	640	400	400	460	460	120	35	30	75	143.5	20	67.5	135
NSC500-400-540	700	700	820	600	420	420	1773	1009	780	940	400	400	520	520	240	40	35	100	210	28	90	180
NSC500-400-580	900	750	850	700	470	470	1527	870	780	940	400	400	520	520	240	40	35	85	172.5	22	76	165
NSC500-400-860	850	750	850	641	450	450	1773	1000	780	940	500	400	620	520	240	40	35	100	210	28	90	180
NSC500-400-875	850	750	850	641	450	450	1527	870	780	940	500	400	620	520	240	40	35	85	172.5	22	76	165
NSC600-400-740	990	800	1000	697	530	530	1773	1009	780	940	560	480	680	580	240	40	35	100	210	28	90	180
NSC600-400-850	1030	880	1000	600	500	500	2009	1138	880	1060	600	600	730	730	260	50	42	115	210	32	104	180
NSC600-450-840	1000	800	970	690	510	510	1773	1009	780	940	525	525	650	650	250	50	42	100	210	28	90	180
NSC600-500-470	1020	740	970	737	550	525	1790	984	780	940	360	360	480	480	240	40	35	95	170	25	71	130
NSC600-500-520	1020	740	970	737	550	525	1790	984	780	940	360	360	480	480	240	40	35	95	170	25	71	130
NSC600-500-550	1020	740	970	737	550	525	1790	984	780	940	360	360	480	480	240	40	35	80	142	22	71	130
NSC600-500-580	1020	740	970	737	550	525	1790	984	780	940	360	360	480	480	240	40	35	80	142	22	71	130
NSC700-500-670	1050	950	1035	725	550	550	1773	1009	780	940	625	525	750	650	280	50	42	100	210	28	90	180
NSC700-500-940	1050	950	1150	695	650	650	2308	1225	980	1100	700	800	810	710	220	50	42	130	250	32	119	245
NSC700-600-800	1050	850	1100	800	610	610	1935	1090	780	940	725	575	850	700	250	50	42	100	210	28	90	180
NSC700-600-880	1150	850	1100	800	610	610	1935	1090	780	940	725	575	850	700	250	50	42	100	210	28	90	180
NSC700-600-740	1160	1100	1070	725	570	570	1909	1088	880	1060	630	630	760	760	260	50	42	115	210	32	104	180
NSC700-700-500	1000	800	1000	640	530	530	1730	980	940	1100	625	425	750	550	2500	50	42	85	170	22	76	165
NSC800-700-750	1315	1250	1250	870	710	680	2310	1278	1000	1250	725	725	875	675	300	60	42	120	210	32	109	200
NSC800-700-910	1150	1150	1250	890	700	700	2318	1278	1000	1200	725	725	875	675	300	50	42	130	250	32	119	245
NSC1000-800-940	1450	1200	1500	1060	810	810	2700	1460	1250	1400	850	850	1000	1000	300	60	50	130	250	32	119	245

Note: If require for the dimension of pump which is not shown in the above table, pls contact with CNP.

Standard Flange Dimensions

Unit:mm,unless other wise stated



Note:Other flange designs are available on request

## Dimensions—Flange

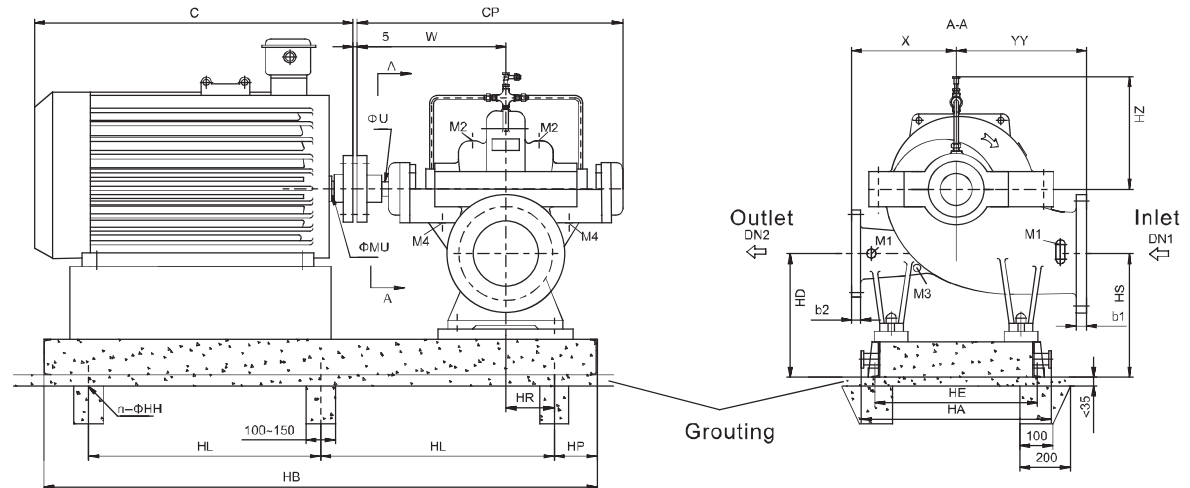
Model	ISO 7025/2 DIN2501	Suction flange						Discharge flange					
		DN	D(mm)	T(mm)	K(mm)	d2(mm)	n	DN	D(mm)	T(mm)	K(mm)	d2(mm)	n
NSC125-80-210 NSC125-80-270 NSC125-80-350	PN16	125	250	26	210	19	8	80	200	22	160	19	8
NSC150-100-250 NSC150-100-320 NSC150-100-400	PN16	150	285	26	240	23	8	100	220	24	180	19	8
NSC150-100-400G	PN40	150	300	26	250	28	8	100	235	19	190	23	8
NSC200-125-240 NSC200-125-300 NSC200-125-380 NSC200-125-480	PN16	200	340	30	295	23	12	125	250	26	210	19	8
NSC200-150-290 NSC200-150-360 NSC200-150-460	PN16	200	340	30	295	23	12	150	285	26	240	23	8
NSC200-150-570	PN25	200	360	34	310	28	12	150	300	34	250	28	8
NSC250-200-340 NSC250-200-430 NSC250-200-530	PN16	250	405	32	355	28	12	200	340	30	295	23	12
NSC250-200-660	PN25	250	425	36	370	31	12	200	360	34	310	28	12
NSC300-250-270 NSC300-250-280 NSC300-250-390 NSC300-250-490 NSC300-250-610	PN16	300	460	32	410	28	12	250	405	32	355	28	12
NSC300-250-780	PN40	300	515	50	450	34	16	250	450	46	385	34	12
NSC350-300-310 NSC350-300-330 NSC350-300-400	PN16	350	520	36	470	28	16	300	460	32	410	28	12
NSC400-300-450 NSC400-300-570	PN16	400	580	38	525	31	16	300	460	32	410	28	12
NSC400-300-700	PN25	400	620	48	550	37	16	300	485	40	430	31	16
NSC400-350-360 NSC400-350-380 NSC400-350-520	PN16	400	580	38	525	31	16	350	520	36	470	28	16
NSC450-450-350	PN10	450	615	35	565	28	20	450	615	35	565	28	20
NSC500-400-400 NSC500-400-420	PN10	500	670	34	620	28	20	400	565	32	515	28	16
NSC500-300-780	PN40	500	755	64	670	42	20	300	515	50	450	33	16
NSC500-300-920	PN25	500	730	56	660	36	20	300	485	38	430	30	16
NSC500-400-590 NSC500-400-675	PN10	500	670	34	620	28	20	400	565	32	515	28	16
NSC500-400-500 NSC500-400-540	PN16	500	715	42	650	34	20	400	580	38	525	31	16
NSC500-400-660 NSC600-500-470 NSC600-500-520 NSC600-500-550 NSC600-500-580	PN25	500	730	52	660	37	20	400	620	48	550	37	16
NSC600-400-740	PN10	600	780	36	725	31	20	500	670	34	620	28	20
NSC700-500-670	PN16	600	840	48	770	37	20	400	580	38	525	31	16
NSC700-500-940	PN10	700	895	40	840	31	24	500	670	34	620	28	20
NSC700-600-800 NSC700-600-890	PN25	700	960	60	875	43	24	500	730	52	660	37	20
NSC700-600-900 NSC700-600-990	PN10	700	895	40	840	31	24	600	780	36	725	31	20
NSC700-800-740	PN16	700	910	54	840	36	24	600	840	48	770	37	20
NSC700-700-500	PN10	700	895	40	840	31	24	700	895	40	840	31	24
NSC800-700-750	PN10	800	1015	44	950	34	24	700	895	40	840	31	24
NSC800-700-910	PN16	800	1015	44	950	34	24	700	910	54	840	36	24
NSC1000-800-940	PN10	1000	1230	50	1160	36	28	800	1015	44	950	34	24

Note: If require flange which is in accordance with BS4504, ANSI B16.1 or other standards, pls specify.  
If require for the dimension of pump which is not shown in the above table, pls contact with CNP.

### Horizontal NSC Pump with Motor Dimensions (Standard)

Unit: mm, unless other wise stated

Direction of Rotation:Clockwise



After alignment fill baseplate with non-shrinking concrete Position of the terminal box is in accordance with the motor standard

Connect pipes without stress

Connections

M1:Pressure gauge G1/2 M2:Vent G1/2 M3:Drainage G1/2 M4:Leakage liquid drain G3/4

#### Dimensions—Horizontal Arrangement (1/5)

Unit: mm, unless other wise stated

Model	Speed (r/min)	Power (KW)	Motor Size	Pump					Motor		Baseplate								Weight (Kg)						
				CP	U	W	YY	X	HZ	C	MU	HB	HP	HL	HD/HS	HA	HE	n	HH	HR	Pump	Motor	Baseplate	Total	
NSC125-80-210	1480	1.5	90L	788.9	35	440.5	300	300	270	340	24	930	120	340	305	570	470	6	20	80	180	27	105	312	
		3	100L							380	28	960	120	360	305	570	470	6	20	80	180	33	105	318	
		4	112M							400	28	970	120	360	305	570	470	6	20	80	180	45	110	335	
		5.5	132S							475	38	1020	120	390	305	570	470	6	20	80	180	61	110	351	
	2980	15	160M							605	42	1140	120	450	305	570	470	6	20	80	180	106	120	406	
		18.5	160L							605	42	1180	120	470	305	570	470	6	20	80	180	125	125	430	
		22	180M							670	48	1190	120	470	305	570	470	6	20	80	180	152	120	452	
		37	200L							775	55	1270	120	510	305	570	470	6	20	80	180	245	125	550	
		225M	815							55	1290	120	520	305	570	470	6	20	80	180	307	125	612		
			45							225M	815	55	1290	120	520	305	570	470	6	20	80	180	307	125	612
NSC125-80-270	1480	3	100L	788.9	35	440.5	300	300	269	380	28	960	120	360	305	570	470	6	20	80	185	33	100	317	
		4	112M							400	28	970	120	360	305	570	470	6	20	80	185	45	102	331	
		5.5	132S							475	38	1020	120	390	305	570	470	6	20	80	185	61	104	349	
		7.5	132M							515	38	1060	120	410	305	570	470	6	20	80	185	73	108	365	
	2980	11	160M							605	42	1140	120	450	305	570	470	6	20	80	185	103	111	398	
		15	160L							650	42	1180	120	470	305	570	470	6	20	80	185	130	116	430	
		22	180M							670	48	1190	120	470	305	570	470	6	20	80	185	152	113	449	
		37	200L							775	55	1270	120	510	305	570	470	6	20	80	185	245	117	546	
		225M	815							55	1290	120	520	305	570	470	6	20	80	185	307	115	606		
			45							225M	815	55	1290	120	520	305	570	470	6	20	80	185	307	115	606
		250M	930							60	1390	120	570	305	600	500	6	20	80	185	378	120	682		
			75							280S	1000	65	1460	120	610	305	670	540	6	20	80	185	550	129	863
			280M							1050	65	1510	120	630	305	670	540	6	20	80	185	570	133	887	
										90	280M	1050	65	1510	120	630	305	670	540	6	20	80	185	570	133

Note: Dimensions and weight deviations subject to selected motor manufacturer are to be considered.

Horizontal Arrangement Dimensions (2/5)

Unit: mm, unless other wise stated

Model	Speed (r/min)	Power (KW)	Motor Size	Pump					Motor											Weight (Kg)												
				CP	U	W	YY	X	HZ	C	MU	HB	HP	HL	HD/HS	HA	HE	n	HH	HR	Pump	Motor	Baseplate	Total								
NSC125-80-350	1450	5.5	132S	788.9	35	440.5	330	330	333	475	38	1020	120	390	315	570	470	6	20	80	205	61	106	373								
		7.5	132M							515	38	1060	120	410	315	570	470	6	20	80	205	73	109	388								
		11	160M							605	42	1140	120	450	315	570	470	6	20	80	205	103	112	421								
		15	160L							650	42	1180	120	470	315	570	470	6	20	80	205	130	117	453								
		18.5	180M							670	48	1190	120	470	315	570	470	6	20	80	205	165	114	485								
		22	180L							710	48	1240	120	500	315	570	470	6	20	80	205	180	117	503								
NSC150-100-250	1450	3	100L	788.9	35	440.5	330	330	328	380	28	960	120	360	325	600	500	6	20	80	220	33	106	357								
		4	112M							400	28	970	120	360	325	600	500	6	20	80	220	45	108	371								
		5.5	132S							475	38	1020	120	390	325	600	500	6	20	80	220	61	111	390								
		7.5	132M							515	38	1060	120	410	325	600	500	6	20	80	220	73	115	406								
		11	160M							605	42	1140	120	450	325	600	500	6	20	80	220	103	120	441								
		15	160L							650	42	1180	120	470	325	600	500	6	20	80	220	130	125	473								
	2950	22	180M							670	48	1190	120	470	325	600	500	6	20	80	220	152	122	492								
		37	200L							775	55	1270	120	510	325	600	500	6	20	80	220	245	127	590								
		45	225M							815	55	1290	120	520	325	600	500	6	20	80	220	307	126	651								
		55	250M							930	60	1390	120	570	325	600	500	6	20	80	220	378	132	728								
		75	280S							1000	65	1460	120	610	325	670	540	6	20	80	220	550	131	899								
		90	280M							1050	65	1510	120	630	325	670	540	6	20	80	220	570	136	924								
NSC150-100-320	1450	7.5	132M	788.9	35	440.5	330	330	342	515	38	1060	120	410	325	600	500	6	20	80	235	73	115	418								
		11	160M							605	42	1140	120	450	325	600	500	6	20	80	235	103	120	453								
		15	160L							650	42	1180	120	470	325	600	500	6	20	80	235	130	125	485								
		18.5	180M							670	48	1190	120	470	325	600	500	6	20	80	235	165	122	517								
		22	180L							710	48	1270	120	510	325	600	500	6	20	80	235	180	126	536								
		30	200L							775	55	1290	120	520	325	600	500	6	20	80	235	238	127	595								
	2950	55	250M							930	60	1390	120	570	325	600	500	6	20	80	235	378	132	740								
		75	280S							1000	65	1460	120	610	325	670	540	6	20	80	235	550	131	911								
		90	280M							1050	65	1510	120	630	325	670	540	6	20	80	235	570	136	936								
		110	315S							1240	65	1550	120	650	325	790	690	6	20	80	235	740	155	1125								
		132	315M							1310	65	1630	120	690	325	790	690	6	20	80	235	855	166	1251								
		200	315L							1310	65	1650	120	700	325	790	690	6	20	80	235	970	166	1366								
NSC150-100-400	1450	11	160M	788.9	35	440.5	370	370	260	605	42	1140	120	450	325	600	500	6	20	80	245	103	121	462								
		15	160L							650	42	1180	120	470	325	600	500	6	20	80	245	130	126	494								
		18.5	180M							670	48	1190	120	470	325	600	500	6	20	80	245	165	123	526								
		195	180L							710	48	1240	120	500	325	600	500	6	20	80	245	180	127	545								
		30	200L							775	55	1270	120	510	325	600	500	6	20	80	245	238	128	604								
		37	225S							820	60	1300	120	530	325	600	500	6	20	80	245	298	125	661								
	2950	45	225M							847	60	1320	120	520	325	600	500	6	20	80	245	322	127	687								
		55	250M							930	65	1390	120	570	325	600	500	6	20	80	245	410	133	781								
		NSC200-125-240	1450							5.5	132S	871	45	500	370	370	300	475	38	1140	150	420	350	600	500	6	20	110	295	61	128	483
										7.5	132M							515	38	1180	150	440	350	600	500	6	20	110	295	73	132	499
										11	160M							605	42	1260	150	480	350	600	500	6	20	110	295	103	138	535
										15	160L							650	42	1300	150	500	350	600	500	6	20	110	295	130	144	568
18.5	180M			670	48	1310	150	500	350	600	500							6	20	110	295	165	141	600								
22	180L			710	48	1360	150	530	350	600	500							6	20	110	295	180	146	620								
2950	45		225M	815	55	1410	150	550	350	600	500							6	20	110	295	307	149	750								
	55		250M	930	60	1510	150	600	350	600	500							6	20	110	295	378	156	828								
	75		280S	1000	65	1580	150	640	350	670	540							6	20	110	295	550	163	1007								
	90		280M	1050	65	1630	150	660	350	670	540							6	20	110	295	570	169	1033								
	110		315S	1240	65	1660	150	680	350	790	690							6	20	110	295	740	185	1219								
	132		315M	1310	65	1750	150	720	350	790	690							6	20	110	295	855	197	1346								
NSC200-125-300	1450	7.5	132M	871	45	500	370	370	325	515	38	1180	150	440	350	680	580	6	20	110	310	73	135	520								
		11	160M							605	42	1260	150	480	350	680	580	6	20	110	310	103	142	557								
		15	160L							650	42	1300	150	500	350	680	580	6	20	110	310	130	147	589								
		18.5	180M							670	48	1310	150	500	350	680	580	6	20	110	310	165	145	622								
		22	180L							710	48	1360	150	530	350	680	580	6	20	110	310	180	150	642								
		30	200L							775	55	1390	150	540	350	680	580	6	20	110	310	238	150	700								
	2950	37	225S							820	60	1420	150	560	350	680	580	6	20	110	310	298	147	757								
		55	250M							930	60	1510	150	600	350	680	580	6	20	110	310	378	163	853								
		75	280S							1000	65	1580	150	640	350	680	580	6	20	110	310	550	163	1025								
		90	280M							1050	65	1630	150	660	350	680	580	6	20	110	310	570	169	1051								
		110	315S							1240	65	1660	150	680	350	790	690	6	20	110	310	740	185	1237								
		132	315M							1310	65	1750	150	720	350	790	690	6	20	110	310	855	197	1364								
200	315L	1310	65	1770	150	730	350	790	690	6	20	110	310	1080	197	1589																

Note: Dimensions and weight deviations subject to selected motor manufacturer are to be considered.

Horizontal Arrangement Dimensions (3/5)

Unit: mm, unless other wise stated

Model	Speed (r/min)	Power (KW)	Motor Size	Pump					Motor					Baseplate					Weight (Kg)					
				CP	U	W	YY	X	HZ	C	MU	HB	HP	HL	HD/HS	HA	HE	n	HH	HR	Pump	Motor	Baseplate	Total
NSC200-125-380	1480	15	160L	871	45	500	395	370	350	650	42	1290	150	490	360	670	540	6	20	95	350	130	152	632
		18.5	180M							670	48	1290	150	490	360	670	540	6	20	95	350	165	149	684
		22	180L							710	48	1340	150	520	360	670	540	6	20	95	350	180	154	684
		30	200L							775	55	1370	150	530	360	670	540	6	20	95	350	238	155	743
		37	225S							820	60	1400	150	550	360	670	540	6	20	95	350	298	152	800
		45	225M							845	60	1430	150	560	360	670	540	6	20	95	350	322	154	826
		55	250M							930	65	1500	150	600	360	670	540	6	20	95	350	410	162	922
		75	280S							1000	75	1560	150	630	360	670	540	6	20	95	350	555	169	1074
NSC200-125-480	1480	30	200L	871	45	500	450	450	389	775	55	1370	150	530	360	790	690	6	20	95	390	238	161	789
		37	225S							820	60	1400	150	550	360	790	690	6	20	95	390	298	158	846
		45	225M							845	60	1430	150	560	360	790	690	6	20	95	390	322	160	872
		55	250M							930	65	1500	150	600	360	790	690	6	20	95	390	410	168	958
		75	280S							1000	75	1560	150	630	360	790	690	6	20	95	390	555	176	1121
		90	280M							1050	75	1620	150	660	360	790	690	6	20	95	390	610	182	1182
		110	315S							1270	80	1680	150	690	360	790	690	6	20	95	390	750	192	1332
		132	315M							1340	80	1730	150	710	360	790	690	6	20	95	390	875	204	1469
NSC200-150-290	1480	11	160M	871	45	500	400	400	340	605	42	1260	150	480	360	680	580	6	20	110	330	103	150	583
		15	160L							650	42	1300	150	500	360	680	580	6	20	110	330	130	150	610
		18.5	180M							670	48	1310	150	500	360	680	580	6	20	110	330	165	160	655
		22	180L							710	48	1360	150	530	360	680	580	6	20	110	330	180	160	670
		30	200L							775	55	1390	150	540	360	680	580	6	20	110	330	238	170	738
		37	225S							820	60	1420	150	560	360	680	580	6	20	110	330	298	170	798
		45	225M							930	60	1440	150	570	360	680	580	6	20	110	330	322	170	822
		55	250M							1000	75	1580	150	640	360	680	580	6	20	110	330	555	185	1090
NSC200-150-360	1480	18.5	180M	871	45	500	400	400	380	670	48	1310	150	500	360	670	540	6	20	110	365	165	160	675
		22	180L							710	48	1360	150	530	360	670	540	6	20	110	365	160	160	690
		30	200L							775	55	1390	150	540	360	670	540	6	20	110	365	238	170	758
		37	225S							820	60	1420	150	560	360	670	540	6	20	110	365	298	170	818
		45	225M							930	60	1440	150	570	360	670	540	6	20	110	365	322	170	842
		55	250M							930	65	1510	150	600	360	670	540	6	20	110	365	410	175	935
		75	280S							1000	75	1580	150	640	360	670	540	6	20	110	365	555	185	1090
		1000	75							1580	150	640	360	670	540	6	20	110	365	555	185	1090		
NSC200-150-460	1480	30	200L	1006.1	55	569.3	450	450	390	775	55	1490	150	590	360	770	650	6	25	140	460	238	220	918
		37	225S							820	60	1520	150	610	360	770	650	6	25	140	460	298	230	988
		45	225M							930	60	1540	150	620	360	770	650	6	25	140	460	322	230	1012
		55	250M							930	65	1610	150	650	360	770	650	6	25	140	460	410	235	1105
		75	280S							1000	75	1680	150	690	360	770	650	6	25	140	460	555	250	1265
		90	280M							1050	75	1730	150	710	360	770	650	6	25	140	460	610	255	1325
		110	315S							1270	80	1790	150	740	360	770	650	6	25	140	460	750	280	1490
		132	315M							1340	80	1850	150	770	360	770	650	6	25	140	460	875	280	1615
		200	315L							1340	80	1900	150	800	360	820	700	6	25	140	460	960	280	1700
		200	315L							1340	80	1900	150	800	360	820	700	6	25	140	460	960	280	1700
NSC200-150-570	1480	55	250M	1006.1	55	569.3	600	500	460	930	65	1610	150	650	360	960	840	6	25	140	670	410	260	1338
		75	280S							1000	75	1680	150	690	360	960	840	6	25	140	670	555	285	1508
		90	280M							1050	75	1730	150	710	360	960	840	6	25	140	670	610	285	1563
		110	315S							1270	80	1790	150	740	360	960	840	6	25	140	670	750	300	1718
		132	315M							1340	80	1850	150	770	360	960	840	6	25	140	670	875	320	1863
		200	315L							1340	80	1900	150	800	360	960	840	6	25	140	670	960	340	1968
		280	335(6KV)							1690	100	2590	150	760	380	960	840	8	25	140	670	1730	480	2878
		280	335(6KV)							1690	100	2590	150	760	380	960	840	8	25	140	670	1730	480	2878
NSC250-200-340	1480	30	200L	1006.1	55	569.3	450	450	368	775	55	1490	150	590	420	680	650	6	25	140	478	238	260	976
		37	225S							820	60	1520	150	610	420	680	650	6	25	140	478	298	260	1036
		45	225M							845	60	1540	150	620	420	680	650	6	25	140	478	322	260	1060
		55	250M							930	65	1610	150	650	420	680	650	6	25	140	478	410	280	1168
		75	280S							1000	75	1680	150	690	420	680	650	6	25	140	478	555	280	1313
		90	280M							1050	75	1730	150	710	420	680	650	6	25	140	478	610	280	1368
		37	225S							820	60	1530	150	610	420	820	700	6	25	150	568	298	260	1118
		45	225M							845	60	1550	150	620	420	820	700	6	25	150	568	322	260	1142
NSC250-200-430	1480	55	250M	1006.1	55	569.3	500	500	400	930	65	1620	150	660	420	820	700	6	25	150	568	410	280	1250
		75	280S							1000	75	1690	150	690	420	820	700	6	25	150	568	555	280	1395
		90	280M							1050	75	1740	150	720	420	820	700	6	25	150	568	610	280	1450
		110	315S							1340	80	1800	150	750	420	820	700	6	25	150	568	750	310	1620
		132	315M							1340	80	1850	150	770	420	820	700	6	25	150	568	875	310	1745
		200	315L							1340	80	1900	150	800	420	820	700	6	25	150	568	960	310	1830
		200	315L							1340	80	1900	150	800	420	820	700	6	25	150	568	960	310	1830
		200	315L							1340	80	1900	150	800	420	820	700	6	25	150	568	960	310	1830

Note: Dimensions and weight deviations subject to selected motor manufacturer are to be considered.



Horizontal Arrangement Dimensions (4/5)

Unit: mm, unless other wise stated

Model	Speed (r/min)	Power (KW)	Motor Size	Pump					Motor		Baseplate							Weight (Kg)						
				CP	U	W	YY	X	HZ	C	MU	HB	HP	HL	HD/HS	HA	HE	n	HH	HR	Pump	Motor	Baseplate	Total
NSC250-200-530	1480	75	280S	1110.8	65	637.3	600	500	470	1000	75	1760	150	730	440	960	840	6	25	150	710	555	280	1545
		90	280M							1050	75	1810	150	750	440	960	840	6	25	150	710	610	280	1600
		110	315S							1340	80	1870	150	780	440	960	840	6	25	150	710	750	350	1810
		132	315M							1340	80	1920	150	810	440	960	840	6	25	150	710	875	350	1935
		200	315L							1340	80	1970	150	830	440	960	840	6	25	150	710	960	350	2020
		315	335(6KV)							1690	100	2670	150	790	460	960	840	8	25	150	710	1730	540	2980
		355	400(6KV)							1860	110	2780	150	820	460	1070	950	8	25	150	710	2050	610	3370
NSC250-200-660	1480	110	315S	1110.8	65	637.3	650	550	525	1340	80	1880	150	790	450	960	840	6	25	160	1020	750	360	2104
		132	315M							1340	80	1930	150	810	450	960	840	6	25	160	1020	875	360	2229
		200	315L							1340	80	1980	150	840	450	960	840	6	25	160	1020	960	360	2314
		315	355(6KV)							1690	100	2680	150	790	450	960	840	8	25	160	1020	1730	560	3284
		355	400(6KV)							1860	110	2790	150	830	450	1070	950	8	25	160	1020	2050	610	3654
NSC300-250-280	1480	30	200L	1006.1	55	569.3	500	450	404	775	55	1490	150	590	460	820	700	6	25	140	650	238	270	1158
		37	225S							820	60	1520	150	610	460	820	700	6	25	140	650	298	280	1228
		45	225M							845	60	1540	150	620	460	820	700	6	25	140	65	322	280	1252
		55	250M							930	65	1610	150	650	460	820	700	6	25	140	650	410	280	1340
		75	280S							1000	75	1680	150	690	460	820	700	6	25	140	650	555	280	1485
NSC300-250-390	1480	75	280S	1110.8	65	637.3	500	500	417	1000	75	1760	150	730	480	960	840	6	25	150	668	555	340	1563
		90	280M							1050	75	1810	150	750	480	960	840	6	25	150	668	610	340	1618
		110	315S							1340	80	1870	150	780	480	960	840	6	25	150	668	750	360	1778
		132	315M							1340	80	1920	150	810	480	960	840	6	25	150	668	875	360	1903
		200	315L							1340	80	1970	150	830	480	960	840	6	25	150	668	960	360	1988
NSC300-250-490	1480	90	280M	1316.5	75	736.5	550	550	583	1050	75	1950	150	820	500	960	840	6	25	200	950	610	420	1980
		110	315S							1340	80	2020	150	860	500	960	840	6	25	200	950	750	420	2120
		132	315M							1340	80	2070	150	590	500	960	840	8	25	200	950	875	450	2275
		200	315L							1340	80	2120	150	600	500	960	840	8	25	200	950	960	450	2360
		315	355(6KV)							1690	100	28010	150	830	520	960	840	8	25	200	950	1730	620	3300
		355	400(6KV)							1860	110	2920	150	870	520	1070	950	8	25	200	950	2050	720	3720
NSC300-250-510	1480	132	315M	1316.5	75	736.5	650	550	610	1340	80	2070	150	590	500	1070	950	8	25	200	1125	875	440	2441
		315	355(6KV)							1340	80	2120	150	600	500	1070	950	8	25	200	1125	960	440	2526
		560	400(6KV)							1690	100	2850	150	850	520	1070	950	8	25	210	1125	1730	640	3496
		630	450(6KV)							1860	110	2930	150	870	520	1070	950	8	25	210	1125	2430	740	426
		900	500(6KV)							1900	120	3200	150	960	520	1170	1050	8	25	210	1125	3030	740	4896
NSC300-250-720	1480	560	400(6KV)	1527	85	870	700	600	680	1860	110	3110	200	900	590	1070	950	8	30	200	1350	2430	920	4700
		710	450(6KV)							1900	120	3370	200	990	590	1170	1050	8	30	200	1350	2170	950	4470
		800	450(6KV)							1900	120	3370	200	990	590	1170	1050	8	30	200	1350	2280	1050	4680
		1000	500(6KV)							1900	120	3630	200	800	590	1320	1200	8	30	200	1350	3960	1150	6460
NSC300-250-270	1480	30	200L	1006.1	55	569.3	500	500	300	775	55	1490	150	590	460	820	700	6	25	140	650	238	270	1158
		45	225M							845	60	1510	150	620	460	820	700	6	25	140	650	322	280	1252
		55	250M							930	65	1610	150	650	460	820	700	6	25	140	650	410	280	1340
NSC350-300-330	1480	55	250M	1110.8	85	637.3	600	520	465	930	65	1710	150	700	510	920	800	6	25	175	800	410	350	1560
		75	280S							1000	75	1780	150	740	510	920	800	6	25	175	800	555	350	1705
		90	280M							1050	75	1830	150	760	510	920	800	6	25	175	800	610	350	1780
		110	315S							1340	80	1900	150	800	510	920	800	6	25	175	800	750	370	1920
		132	315M							1340	80	1950	150	820	510	920	800	6	25	175	800	875	370	2045
NSC350-350-310	1480	55	250M	1110.8	85	637.3	600	520	465	930	65	1950	150	820	510	960	840	6	25	175	800	410	350	1560
		75	280S							1000	75	1950	150	820	510	960	840	6	25	175	800	555	350	1705
		90	280M							1050	75	1950	150	820	510	960	840	6	25	175	800	610	350	1780
		110	315S							1340	80	1950	150	820	510	960	840	6	25	175	800	750	370	1920
		132	315M							1340	80	1950	150	820	510	960	840	6	25	175	800	875	370	2045
NSC400-300-450	1480	90	280M	1316.5	75	736.5	650	550	590	1050	75	1960	150	830	530	960	840	6	25	200	1000	610	450	2060
		110	315S							1340	80	2020	150	860	530	960	840	6	25	200	1000	750	450	2200
		132	315M							1340	80	2070	150	590	530	960	840	8	25	200	1000	875	510	2385
		200	351L							1340	80	2120	150	600	530	960	840	8	25	200	1000	960	510	2470
		315	355(6KV)							1690	100	2860	150	850	570	960	840	8	25	210	1000	1730	690	3420
		500	400(6KV)							1860	110	2940	150	880	570	1070	950	8	25	210	1000	2340	780	4120

Note: Dimensions and weight deviations subject to selected motor manufacturer are to be considered.

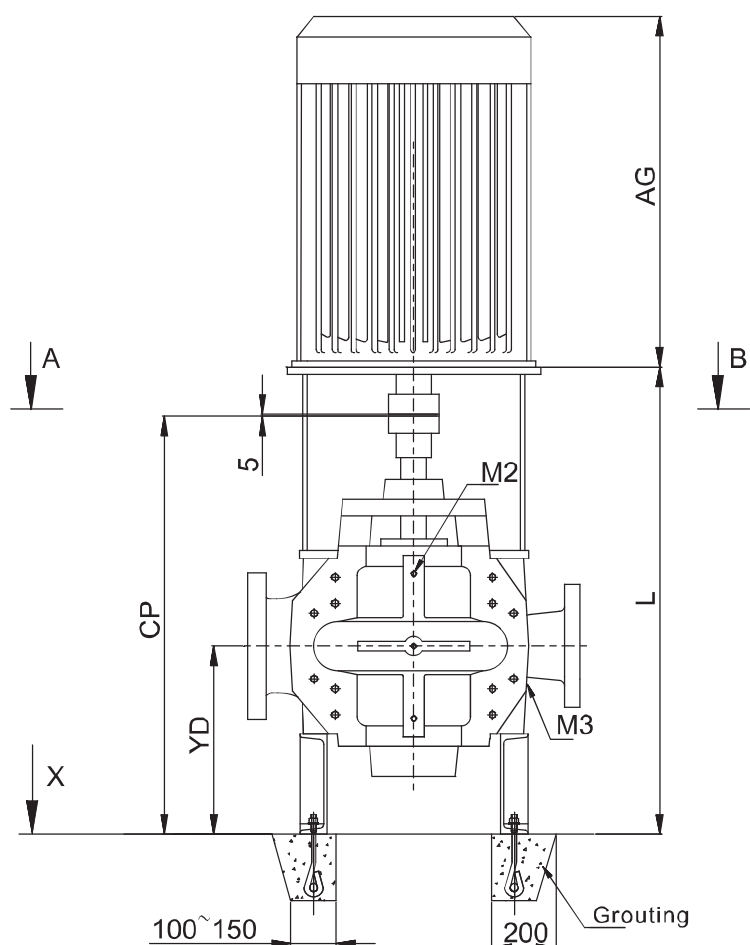
Horizontal Arrangement Dimensions (5/5)

Unit: mm, unless other wise stated

Model	Speed (r/min)	Power (KW)	Motor Size	Pump						Motor		Baseplate										Weight (Kg)			
				CP	U	W	YY	X	HZ	C	MU	HB	HP	HL	HD/HS	HA	HE	n	HH	HR	Pump	Motor	Baseplate	Total	
NSC400-300-570	1480	200	315L	1527	85	870	700	650	530	1340	80	2270	150	650	600	1270	1090	8	30	210	1505	960	500	2940	
		315	355(6KV)							1690	100	2990	150	890	600	1270	1090	8	30	210	1505	1730	790	4000	
		560	400(6KV)							1860	110	3070	150	920	600	1270	1090	8	30	210	1505	2430	880	4790	
		630	450(6KV)							1900	120	3330	150	1010	600	1270	1090	8	30	210	1505	3030	880	5390	
NSC400-300-700	1480	315	355(6KV)	1527	85	870	700	650	530	1690	100	3030	200	870	620	1170	1050	8	30	200	1650	1730	810	4190	
		560	400(6KV)							1860	110	3110	200	900	620	1170	1050	8	30	200	1650	2430	920	5000	
		900	450(6KV)							1900	120	3370	200	990	620	1170	1050	8	30	200	1650	3460	950	6060	
		1000	500(6KV)							2220	130	3630	200	1070	620	1170	1050	8	30	200	1650	3960	1050	6660	
NSC100-350-363	1480	160	315L	1316.5	75	736.5	670	570	513	1340	80	2170	200	590	520	920	790	8	25	200	880	960	690	2530	
		160	315L							1340	80	2170	200	590	520	920	790	8	25	200	880	960	690	2530	
		110	315S							1340	80	2070	200	830	520	920	790	6	25	200	880	750	430	2060	
NSC400-350-380	1480	90	280M	1316.5	75	736.5	670	570	513	1050	75	2010	200	800	520	920	790	6	25	200	880	610	350	1840	
		110	315S							1340	80	2070	200	830	520	920	790	6	25	200	880	750	430	2060	
		132	315M							1340	80	2120	200	570	520	920	790	8	25	200	880	875	460	2215	
		200	315L							1340	80	2170	200	590	520	920	790	8	25	200	880	1080	690	2650	
		315	355(6KV)							1690	100	2900	200	830	520	920	790	8	25	200	880	1730	660	3270	
NSC400-350-520	1480	315	355(6KV)	1527	85	870	700	650	535	1690	100	2990	150	890	590	1260	1100	8	30	210	1350	1730	800	3880	
		560	400(6KV)							1860	110	3070	150	920	590	1260	1100	8	30	210	1350	2430	900	4680	
		800	450(6KV)							1900	120	3330	150	750	590	1260	1100	10	30	210	1350	3230	900	5480	
NSC400-350-520	980	315	Y4005-6	1527	85	870	700	650	535	1860	110	3070	150	920	570	1260	1100	8	30	210	1350	2130	900	4380	
		250	Y355L-6							1690	100	2420	150	700	570	1260	1100	8	30	210	1350	1800	900	4050	
		200	Y355M-6							1690	100	2390	150	690	570	1260	1100	8	30	210	1350	1700	900	3950	
		160	Y355M-6							1690	100	2390	150	690	570	1260	1100	8	30	210	1350	1600	900	3850	
NSC500-400-400	980	110	Y315L-6	1438.5	75	821.5	765	600	537	1340	80	2230	200	610	590/570	1080	960	8	25	170	1200	1150	600	2950	
		90	Y315M-6							1340	80	2180	200	590	590/570	1080	960	8	25	170	1200	1080	600	2880	
		75	Y280S-6							1050	75	2010	200	800	590/570	1080	960	6	25	170	1200	990	600	2790	
NSC500-400-420	980	160	Y355M-6	1438.5	75	821.5	765	600	537	1690	100	2350	200	650	610/590	1080	960	8	30	170	1200	1600	900	3700	
		132	Y315L-6							1340	80	2230	200	610	590/570	1080	960	8	25	170	1200	1300	900	3400	
		110	Y315L-6							1340	80	2230	200	610	590/570	1080	960	8	25	170	1200	1150	900	3250	
		90	Y315M-6							1340	80	2180	200	590	590/570	1080	960	8	25	170	1200	1080	900	3180	
NSC500-400-540	1480	1000	Y5006-4	1773	100	1009	700	700	600	2220	130	3850	300	800	620/620	1260	1150	10	30	210	1870	3690	1200	7160	
		800	Y4506-4							1900	120	3600	300	1000	620/620	1180	1050	8	30	210	1870	3230	1200	6430	
		500	Y4005-4							1860	110	3400	300	950	620/620	1180	1050	8	30	210	1870	2340	1100	5440	
NSC500-400-570	980	315	Y4006-4	1468	100	821	700	700	600	1860	110	3200	300	900	620/620	1180	1050	8	30	210	1683	2130	1100	5230	
		250	Y3555-6							1690	110	3000	300	850	620/620	1180	1050	8	30	210	1683	1880	1000	4880	
		185	Y355L-6							1570	95	2500	300	650	620/620	1180	1050	8	30	210	1683	1400	700	4100	
NSC500-400-660	1480	1400	Y50010-4	1773	100	1009	850	750	641	2220	130	3880	200	870	680	1360	1240	10	30	310	2400	4580	1300	8280	
		1120	Y5007-4							2220	130	3880	200	870	680	1360	1240	10	30	310	2400	4110	1300	7810	
		800	Y4507-4							1900	120	3620	200	800	680	1360	1240	10	30	310	2400	3230	1200	6830	
NSC600-400-675	980	450	Y4505-6	1527	100	870	850	750	641	1940	130	3450	200	760	650	1360	1240	10	30	310	2160	2830	1200	6430	
		355	Y4006-6							1860	110	3260	200	720	650	1360	1240	10	30	310	2160	2190	1200	5790	
		250	Y355L-6							1690	100	2610	200	550	650	1360	1240	10	30	310	2160	1800	1200	5400	

Note: Dimensions and weight deviations subject to selected motor manufacturer are to be considered. If require for the dimension of pump which is not shown in the above table, pls contact with CNP.

**Vertical NSC Pump with Motor (Standard) Dimensions**



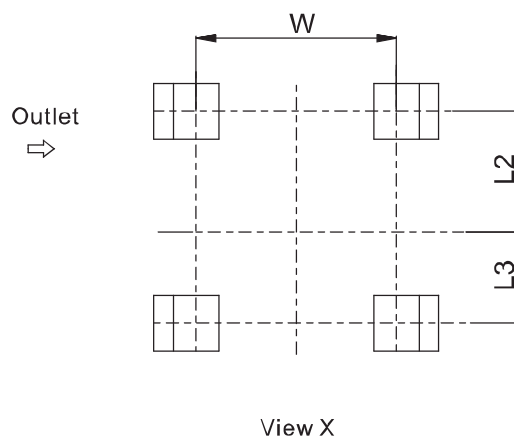
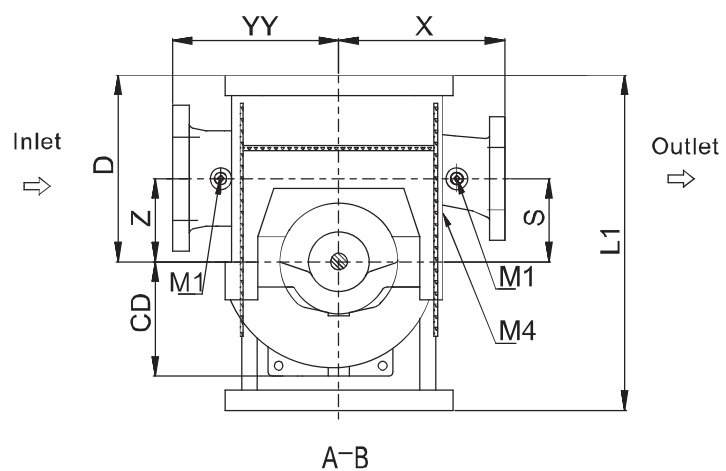
Unit: mm, unless otherwise stated

Direction of Rotation: Clockwise

After alignment fill baseplate with non-shrinking concrete  
Position of the terminal box is in accordance with the motor standard.  
Connect pipes without stress

Connections

- M1 Pressure gauge G1/2
- M2 Vent G1/2
- M3 Drainage G1/2
- M4 Leakage liquid drain G3/4



Dimensions—Vertical Arrangement

Unit: mm, unless other wise stated

Model	Motor Size	Power (KW)	Dimensions												Installation	
			CP	YY	X	S/Z	D	YD	CD	L	W	L1	L2	L3		AG
NSC125-80-210	min. 100L	3	840	300	300	150	315	400	270	870	580/520	710	370	120	320	TB
	max. 200L	37													930	
NSC125-80-270	min. 132S	5.5	840	300	300	150	315	400	269	880	580/520	710	370	120	395	TB
	max. 280M	90													960	
NSC125-80-350	min. 160M	11	840	330	330	140	315	400	333	880	580/520	710	370	120	495	TB/TK
	max. 315L	160													990	
NSC150-100-250	min. 132M	7.5	840	330	330	170	355	385	328	920	580/520	695	315	115	435	TB
	max. 280M	90													980	
NSC150-100-320	min. 160L	15	840	330	330	170	355	385	342	950	580/520	695	315	115	540	TB/TK
	max. 315L	200													1010	
NSC150-100-400	min. 180L	22	840	370	370	170	355	385	260	950	580/520	695	315	115	600	TB
	max. 225M	55													980	
NSC200-125-240	min. 160M	11	875	370	370	200	400	400	300	990	560	855	360	210	495	TB/TK
	max. 315L	160													1070	
NSC200-125-300	min. 180M	18.5	875	370	370	200	400	400	325	990	560	855	360	210	580	TB/TK
	max. 355M	250													1070	
NSC200-125-380	min. 200L	30	875	395	370	200	400	400	350	990	560	855	360	210	665	TB/TK
	max. 355L	280													1070	
NSC200-125-480	min. 225M	45	875	450	450	200	400	400	389	990	560	855	360	210	705	TB
	max. 315S	110													1050	
NSC200-150-290	min. 180M	18.5	875	400	400	200	435	375	340	990	600	900	435	315	560	TB/TK
	max. 355L	280													1020	
NSC200-150-360	min. 180M	18.5	875	400	400	200	435	375	380	990	600	900	435	315	580	TB
	max. 280S	75													1020	
NSC200-150-460	min. 280S	75	982	450	450	200	400	465	390	1125	600	900	435	315	860	TB/TK
	max. 315L	160													1155	
NSC200-150-570	min. 315M	132	1002	600	500	300	500	465	460	1175	700	1060	460	315	1170	TK
	max. 355L	280													1175	
NSC250-200-340	min. 225M	45	982	450	450	240	500	465	368	1125	700	1060	460	315	705	TB
	max. 280M	90													1125	
NSC250-200-430	min. 280S	75	982	500	500	240	500	465	400	1125	700	1060	460	315	770	TB/TK
	max. 315L	160													1155	
NSC250-200-530	min. 280S	132	1134	600	500	300	560	505	470	1050	700	1120	520	315	860	TK
	max. 355L	315													1340	
NSC250-200-660	min. 355L	315	1134	560	550	350	600	505	525	1340	700	1180	560	315	1400	TK/TJ
	max. 400(6KV)	500													/	
NSC300-250-270	min. 200L	30	982	500	450	300	600	465	404	1095	700	855	360	210	665	TB
	max. 250M	55													1125	
NSC300-250-280	min. 200L	30	982	500	450	300	600	465	404	1095	700	855	360	210	665	TB
	max. 315S	110													1155	
NSC300-250-390	min. 280M	90	1094	500	500	300	630	450	417	1235	850	1200	635	350	910	TB/TK
	max. 315L	200													1265	
NSC300-250-490	min. 315L	160	1260	550	550	300	600	605	583	1430	840	1180	560	315	1030	TK/TJ
	max. 355(6KV)	315													/	
NSC300-250-610	min. 355(6KV)	280	1280	650	550	350	630	605	640	/	860	1210	590	315	2200	TJ
	max. 400(6KV)	560													/	
NSC350-300-310	min. 250M	55	1134	600	520	300	670	490	465	1275	865	1300	670	430	790	TB
	max. 315S	110													1305	
NSC350-300-330	min. 250M	55	1134	600	520	300	670	490	465	1275	865	1300	670	430	790	TB/TK
	max. 315L	160													1305	
NSC400-300-450	min. 315M	200	1260	650	550	350	700	605	590	1340	1250	630	315	315	1170	TK/TJ
	max. 400(6KV)	355													/	
NSC400-350-360	min. 315S	110	1323	670	570	350	725	600	513	1500	834	1350	725	350	1100	TK
	max. 315L	160													1500	
NSC400-350-380	min. 315S	110	1323	670	570	350	725	600	513	1500	834	1350	725	350	1100	TK
	max. 355M	250													1500	

Note: Dimensions and weight deviations subject to selected motor manufacturer are to be considered. If require for the dimension of pump which is not shown in the above table, pls contact with CNP.

## Recommended Spare Parts

### 1. Recommended spare parts for commissioning

#### Soft Packed Stuffing Box

Part No.	Part Name (Set)	Qty. of Pumps including Standby Pumps				
		1	2	3	4	5
		Qty. of Spare Parts				
02.11.003 02.13.001 02.13.002	Gland packing O-Ring Lip-type seal ring	1	2	3	4	5

#### Mechanical Seal

Part No.	Part Name (Set)	Qty. of Pumps including Standby Pumps				
		1	2	3	4	5
		Qty. of Spare Parts				
02.08.001 04.02.017	Deep groove ball bearings Bearing circlip	1	2	3	4	5
02.13.001 02.13.002	O-Ring Lip-type seal ring	1	2	3	4	5
02.13.004	Mechanical seal	1	2	3	4	5

### 2. Recommended spare parts (per set) for 2 years operation (8000 hours per year)

#### Soft Packed Stuffing Box

Part No.	Part Name	Qty. of Pumps including Standby Pumps				
		1	2	3	4	5
		Qty. of Spare Parts				
04.02.021	Shaft					
04.02.019	Bearing sleeve				1	1
02.03.004	Round nut	-	-	-	1	1
02.05.001	Circlip					
04.02.004	Impeller	1	2	2	2	2
02.08.001	Deep groove ball bearing	1	1	1	2	2
04.02.017	Bearing circlip					
04.09.005	Gland	-	-	-	1	1
02.13.001	O-Ring	1	2	3	4	5
02.13.002	Lip-type seal ring					
02.11.003	Gland packing	4	8	12	16	20
04.02.012	Set neck ring	-	-	-	1	1
04.09.002	Lantern ring	-	-	-	1	1
04.09.001	Wear ring	1	1	1	2	2
02.12.004	Gasket	1	1	1	2	2
04.02.022	Shaft sleeve	1	1	1	2	2

## Mechanical Seal

Part No.	Part Name(Set)	Qty. of Pumps including Standby Pumps				
		1	2	3	4	5
		Qty. of Spare Parts				
04.02.021	Shaft					
04.02.019	Bearing sleeve					
02.03.004	Round nut	-	-	-	1	1
02.05.001	Circlip					
04.02.004	Impeller	1	2	2	2	2
02.08.001	Deep groove ball bearing					
04.02.017	Bearing circlip	1	1	1	2	2
02.13.001	O-Ring					
02.13.002	Lip-type seal ring	1	2	3	4	5
02.13.004	Mechanical seal	1	1	1	2	2
04.09.001	Wear ring	1	1	1	2	2
02.12.004	Gasket	1	1	1	2	2
04.02.023	Shaft sleeve	1	1	1	2	2

## Scope of Supply

- Pump with bare shaft end: horizontal over vertical design, with finish coating, primer coating, and soft packed stuffing box or mechanical seal.
- Extra charges for: —Oil lubricated bearing—Potable water quality coating/finish coating—Horizontal baseplate for pump and motor—Motor stool for vertical arrangements—Motor mounting—Special coating treatment—Witness test
- Extra charges for available accessories: —Coupling and coupling guard—Set pressure gauges—Set seal pipe—Venting valve—Temperature sensor for bearing (PT100)

## Guarantee, Testing and Quality Control

- Every pump undergoes a functional test and the operating data is guaranteed without acceptance test, Witness test is surcharged.
- Acceptance tests can be performed in accordance with ISO9906, GB3216C or other comparable international testing standards.
- The quality of the CNP products is ensured by the DIN ISO9001 quality assurance system.

## Order Data

## —Pump

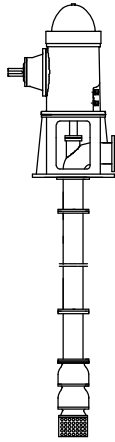
1.Description of the pump according to "Designation"	6.Shaft seal as soft packed stuffing box or mechanical seal
2.Capacity Q	7.Liquid handled and liquid temperature
3.Total head H	8.Direction of rotation /arrangement of the motor
4.Material combination	9.Accessories required
5.Flange standard	10.Number and language of operating manual

## —Motor ( Provided by CNP )

1.Protection	4.Accessories required
2.Voltage, frequency, method of starting	5.Insulation class
3.Ambient temperature	6.Others

Note: If the motor is provided by the client, please bind the motor drawings and technical files.

**FCNP**<sup>®</sup>



VTP Vertical Turbine Pumps



## Vertical Turbine Pumps

The 4 different model vertical turbine pumps have one thing in common the hydraulic design of the pump bowl assembly. Using a new techniques in turbine hydraulic conditions to meet virtually every pumping service with optimum efficiency. pump design. It covers a wide range of CNP flexibility of design allows the use of a wide range of material and design features to meet the custom requirements of user. No matter what the requirements, whether low first cost, ease of maintenance, optimum efficiency. Tough service conditions, CNP can make the pump to best satisfy the requirements.

- VTC Centrifugal or mixed-flow pump for high pressure
- VTM Mixed-flow pump for high flow and middle pressure
- VTA Axial-flow pump for high flow low pressure
- VTG Pump for fire and marine gear box engine driven

### Model VTC

Vertical Industrial Turbine Pumps

VTC series is a single or multistage pump with centrifugal or mixed-flow enclosed type impeller, designed for high pressure services.



### Model VTM

High Capacity Vertical Turbine Pumps

VTM series is a single stage pump with mixed-flow semi-open or enclosed type impeller, designed for high capacity, medium to high head services.

### Model VTA

Low Head Vertical Turbine Pumps

VTA series is a single stage pump with axial-flow impeller, designed for high capacity, low head services.



### Model VTG

Right Angle Gear Box Driven Vertical Turbine Pumps

VTG series is vertical turbine pump designed for engine driven through a right angle gear box, for the place where electric power is not available services.

## VTP

---

The bowl assembly is the heart of the VTP. The impeller and diffuser type casing are designed to deliver the head and capacity that your system requires in the most efficient way possible. The fact that the VTP can be multi-staged allows maximum flexibility both in the initial pump selection and in the event that future system modifications require a change in the pump rating. Submerged impellers allow pump to be started without priming.

A variety material options allows the selection of a pump best suited for even the most severe services. The many bowl assembly options available assure that the VTP satisfies the user's need for safe, efficient, reliable and maintenance-free operation.

**1. Strainers**

316SS Basket strainers to provide protection from large solids.

**2. Suction bell**

Allows smooth entry of liquid into impeller eye, minimizes vortex formation.  
Scotchkote custom fusion bonded epoxy coating inside.

**3. Suction bell bearing**

Provided for shaft stability.

**4. Sand collar**

Prevents solids from entering suction bearing.

**5. Impeller**

Hydraulic balancing to reduce axial down thrust and achieve long thrust bearing life.  
Dynamic balancing of impellers are available.

**6. Pump shaft**

Heavy duty, 416SS standard, other alloys for strength and corrosion resistance.  
Hollow pump shaft with flushing hole special for bearing flushing on corrosive/abrasive services.

**7. Diffuser bowl**

Available in variety of cast material. Scotchkote custom fusion bonded epoxy coating inside to improved the efficiency and longer life. Registered fits assure positive alignment, ease of maintenance.

**8. Sleeve type bearing**

Provided at each stage to assure stable operation away from critical speed.

**9. Wear rings**

Dual wear rings for enclosed impellers and bowls, permits re-establishing initial running clearances and efficiency at lower cost. Hard facing of wear surface available for longer life.  
Wear ring can be flushed when solids are present in the pumping liquid.

**10. Keyed impeller**

Keyed impeller for all the pumps, suitable for pumping liquid in high temperatures. Keyed impellers provide ease of maintenance and positive locking under fluctuating load and temperature conditions.

**11. Flanged column**

Heavy duty seamless column pipe sections are provided with flanged ends incorporating registered fits for ease of alignment during assembly.

**12. Lineshaft and coupling**

a. Open lineshaft

Flanges column/product lubricated lineshaft is recommended for ease of maintenance or whenever a special bearing material is required. Precision keyed lineshaft coupling available in all sizes for ease of maintenance. Various bearing material available. Renewable shaft sleeve or hard facing of shaft available for longer life.

b. Enclosed lineshaft

The lineshaft is protected by water flushing tube, flushing water for bearing and wear ring on corrosive/abrasive services.

**13. Bearing retainer and lineshaft bearing**

Ductile cast iron bearing retainer for size smaller than 24". Various bearing material available.

**14. Discharge head and motor riser**

Discharge head and motor riser designed for all modes of drivers including hollow shaft or solid shaft motors, right angle gears, vertical steam turbines, etc. Fabricated elbow discharge head engineered to minimize losses. Large access holes provide easy access to coupling and stuffing box. Above ground and below ground discharge head for requirement.

**15. Thrust bearing**

Oil lubricated thrust bearing assembly set with water cooling system make the pumps running safely in longer life

**16. Packing box**

Whenever packing lubrication leakage can be tolerated and the discharge pressure does not exceed 300psi, a packed box may be used. Optional headshaft sleeve available to protect shaft.

**17. Coupling for pump and motor**

Flexible coupling for pump and motor when pump with thrust bearing. Impeller adjustment by the nut on the top shaft.

## VTC, VTG Industrial Turbine Pumps

### Specification range

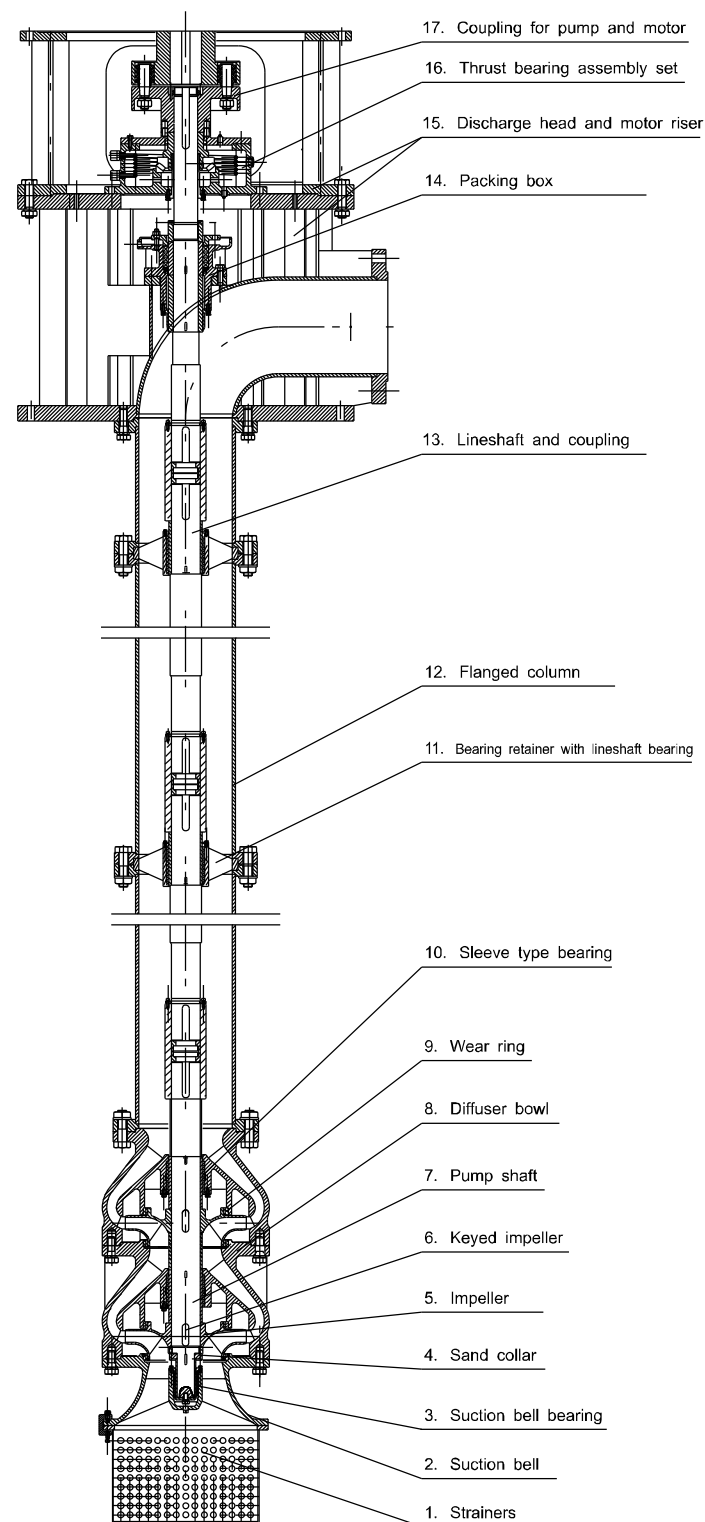
- Capacities to 5500m<sup>3</sup>/h (24,000GPM)
- Heads to 300m (980ft)
- Temperatures to 80°C(176°F)

### Design Advantages

1. Fabricated discharge head for 10" or larger sizes. Suitable for temperature liquid pumping.
  2. Seamless flanged ends column pipe and flanges bowl construction incorporating registered fits for ease of assembly during assembly.
  3. Alloy construction with external tube flush of critical wear areas available for abrasive services.
  4. Build-in alignment and simple piping for less costly installation and ease of maintenance reduced downtime.
  5. 416SS shafting. Keyed lineshaft coupling available in all size for ease of maintenance. The lineshaft can be protected by water flushing the enclosing tube bearing on corrosive/abrasive services.
  6. Various bearing material available.
  7. Renewable shaft sleeve or hard facing of shaft available for long life.
  8. Dual wear rings for impellers and bowls.
- Hard facing wear surfaces available for longer life. Wear rings can be flushed when solids are present in pumpage.

### Services

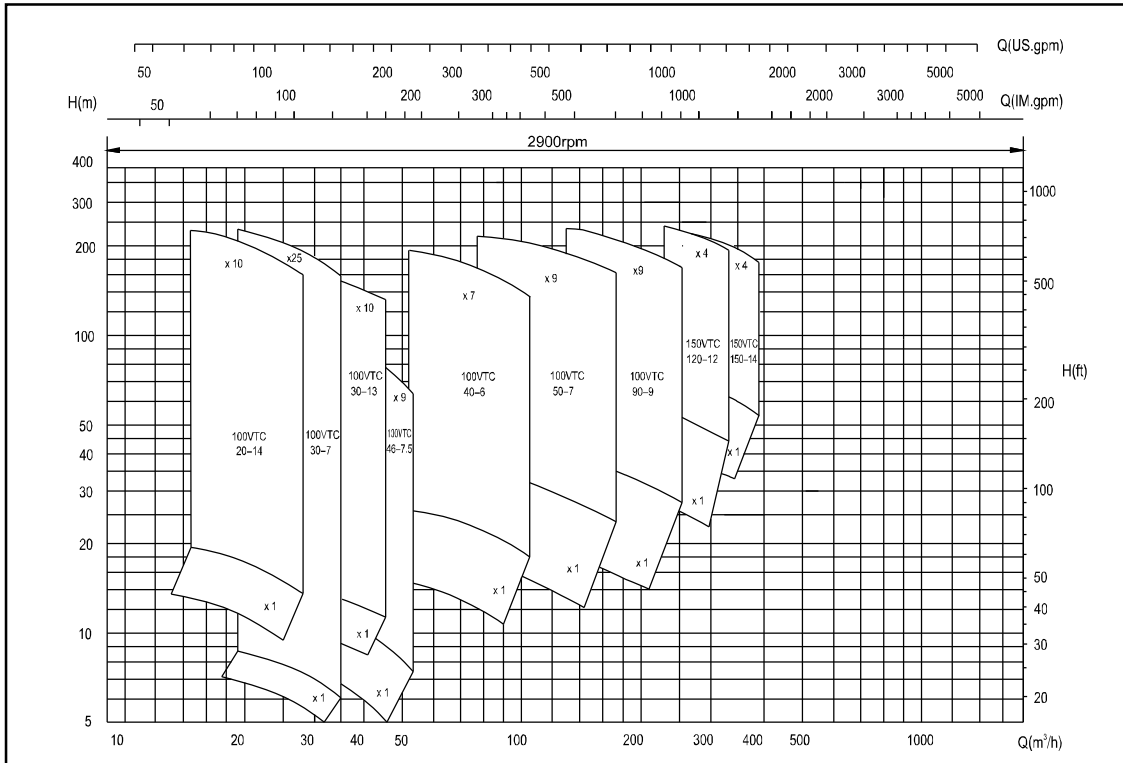
Cooling Water  
 Seawater and Raw Water Intake  
 Industrial Process Pumps  
 Utility Circulating Water  
 Condenser Circulating Water Pumps  
 Ash Sluice  
 Fire-fighting



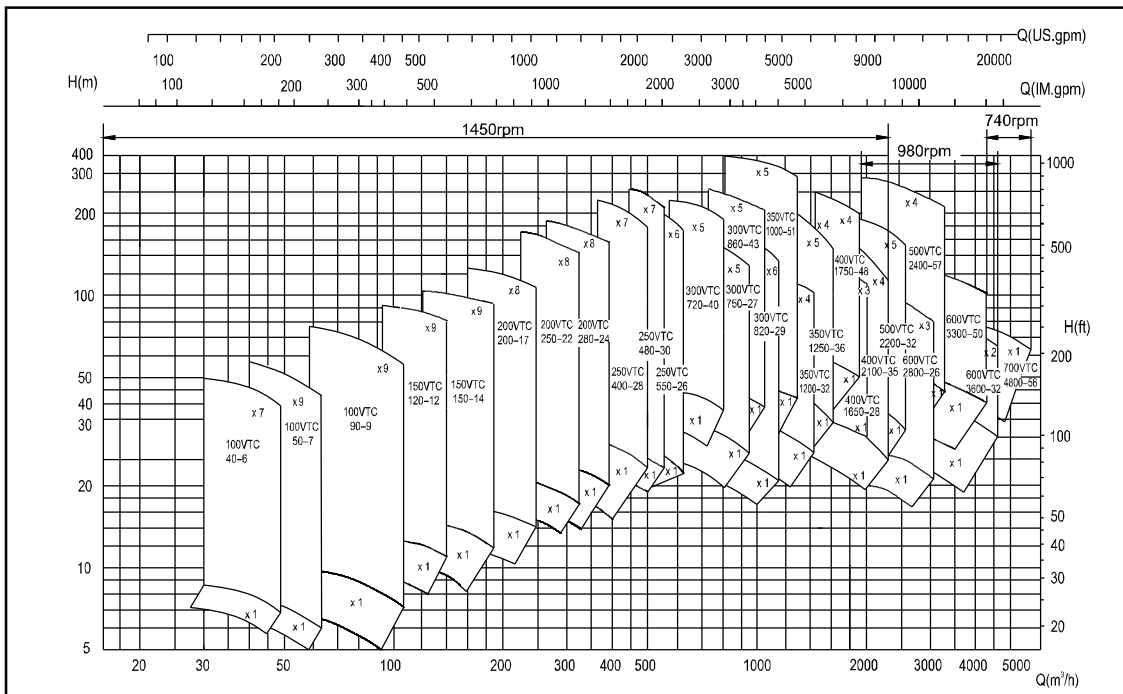
# VTP

## VTC Selection Charts

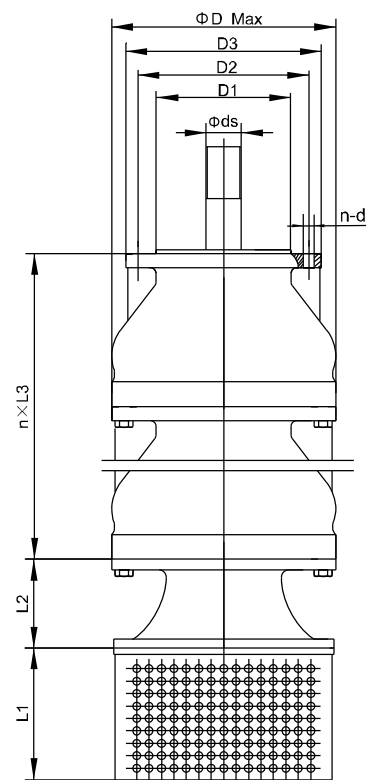
2900r/min



1450/980/740r/min



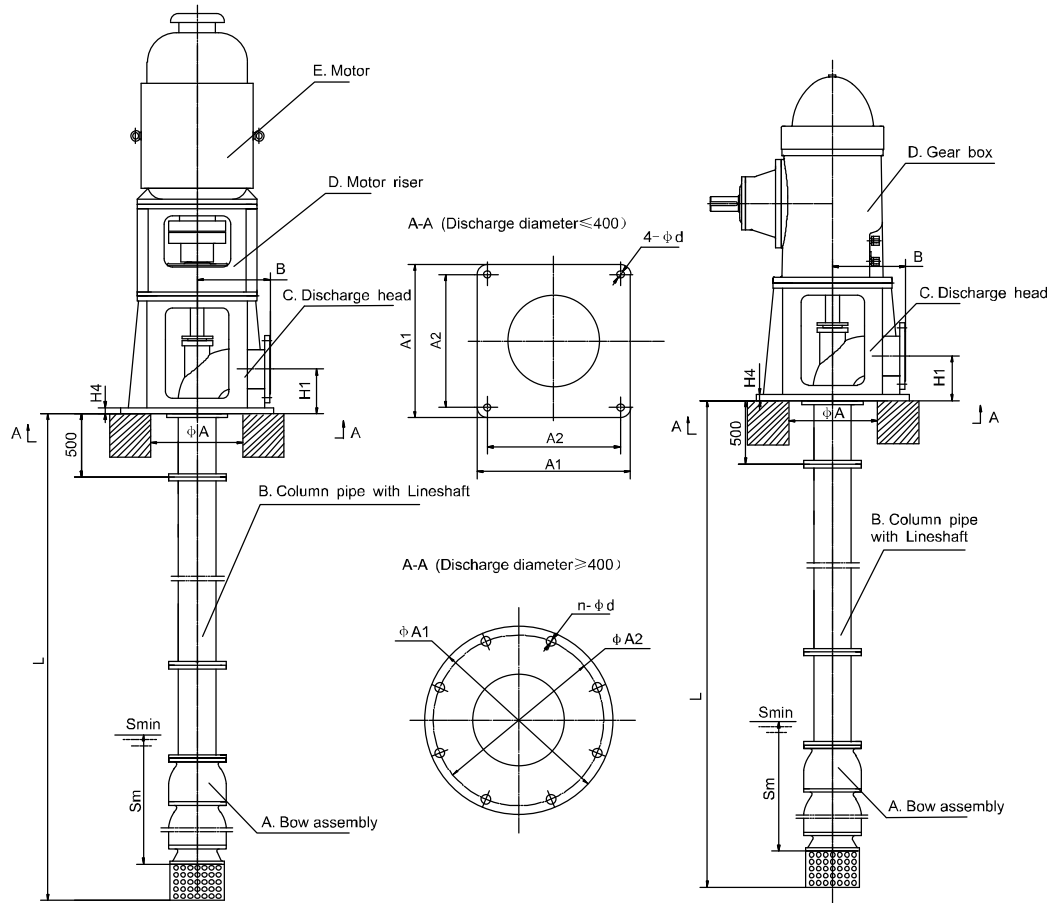
## VTC Pump Bowl Assembly Dimensions



Model	D Max	L1	L2	L3	Max n	D1	D2	D3	Φds	n - Φd
100VTC20-14	195	150	95	110	10	125h6	165	195	28	8-M12
100VTC30-7	133	200	80	90	25	132h6	160	200	22	8-Φ14
100VTC30-13	180	150	95	135	10	125h6	156	180	28	8-M12
100VTC40-6	245	225	90	180	10	130h6	210	220	30/35	8-M16
100VTC50-7	245	240	90	180	10	130h6	174	200	40	8-Φ13.5
100VTC90-9	245	240	90	225	6	130h6	174	200	40	8-Φ13.5
150VTC120-12	323	295	140	230	4	160h6	210	240	40	8-M16
150VTC150-14	323	292	140	230	4	160h6	210	240	40	8-M16
200VTC200-17	358	320	140	250	3	230h6	280	320	30/40	8-Φ23
200VTC250-22	420	320	165	300	5	230h6	280	320	50	8-Φ22
200VTC280-24	420	320	165	300	4	230h6	280	320	50	8-Φ22
250VTC400-28	477	340	185	330	8	280h6	330	370	60	12-Φ22
250VTC480-30	477	340	185	330	8	280h6	330	370	60	12-Φ22
250VTC550-26	430	320	170	365	7	280h6	330	370	60	12-Φ22
300VTC720-40	570	600	220	390	7	340h6	385	425	60/70/80	12-M20
300VTC820-29	480	320	170	475	7	340h6	385	425	60/70/90	12-Φ22
300VTC860-43	570	600	220	390	7	340h6	385	425	60/70/80	12-M20
300VTC900-25	435	600	170	513	5	340h6	385	425	50	12-Φ23
350VTC1000-51	630	370	250	430	7	395h6	440	480	70/90	16-M20
350VTC1200-32	550	320	250	600	4	395h6	440	480	60	16-M20
350VTC1250-36	550	320	250	550	5	395h6	440	480	70/80/90	16-Φ23
400VTC1650-28	670	400	280	720	3	440h6	500	550	70/80	16-M24
400VTC1750-48	620	400	280	615	4	440h6	500	550	80/90	16-M24
400VTC2100-35	550	320	250	600	4	440h6	500	550	70	16-M20
500VTC2200-32	755	550	250	750	5	550h6	600	650	90	16-Φ26
500VTC2400-57	965	480	390	675	4	550h6	600	650	90/100/120	16-Φ30
600VTC2800-26	718	550	450	550	3	660h6	725	780	80/100/110	20-Φ30
600VTC3300-50	880	320	280	760	2	650h6	700	745	90/100/110	16-Φ27
600VTC3600-32	810	550	330	870	2	650h6	700	745	90/100	16-M24
700VTC4800-56	1330	440	405	890	1	750h6	840	900	120/140	24-Φ30

# VTP

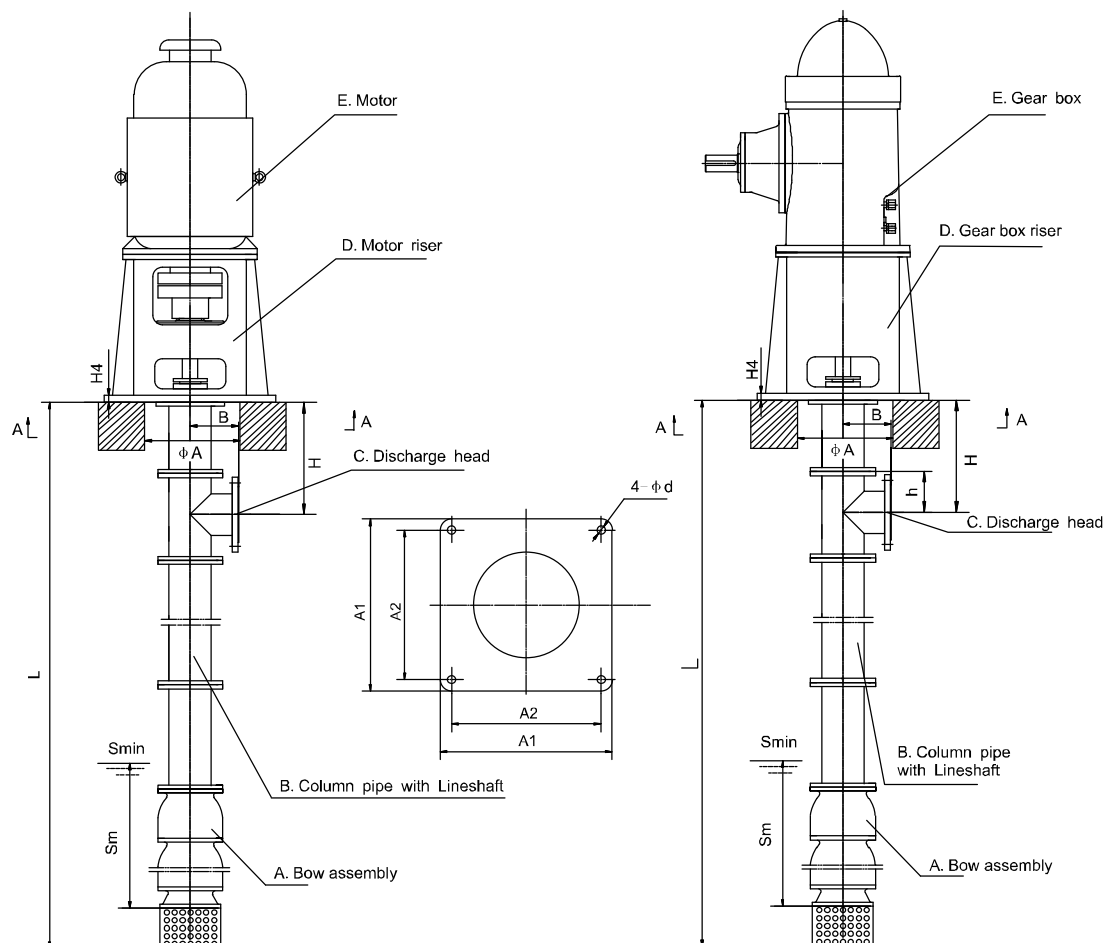
## VTC, VTG Pump Dimensions ( Above Ground Discharge )



Model	A1	A2	n- $\phi d$	H1	H4	B	S <sub>m</sub>	$\phi A$
100VTC	470	420	4-25	145	20	300	400	300
150VTC	550	500	4-25	165	25	350	450	380
200VTC	700	640	4-30	215	25	400	480	480
250VTC	780	720	4-30	265	30	450	700	550
300VTC	880	820	4-30	320	35	500	900	650
350VTC	930	870	4-30	370	35	550	1400	700
400VTC	1030	960	4-30	420	40	600	1800	700
500VTC	$\phi 1500$	$\phi 1400$	8-40	520	40	700	1800	1000
600VTC	$\phi 1600$	$\phi 1500$	12-40	620	45	850	2000	1100
700VTC	$\phi 1900$	$\phi 1800$	12-40	700	50	950	2200	1400

1. Discharge Flanges drilled to ISO.DIN.BS or ANSI.
2. 400 outlet diameter and below can directly use the table size, over 400 outlet diameter will be subject to overall dimension of CNP.
3. The final installation size will be subject the final overall dimension of CNP.

### VTC, VTG Pump Dimensions ( Below Ground Discharge )

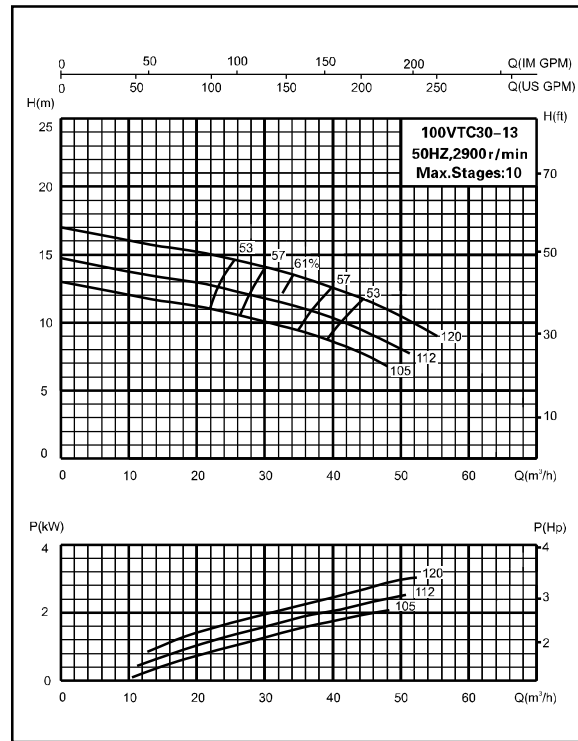
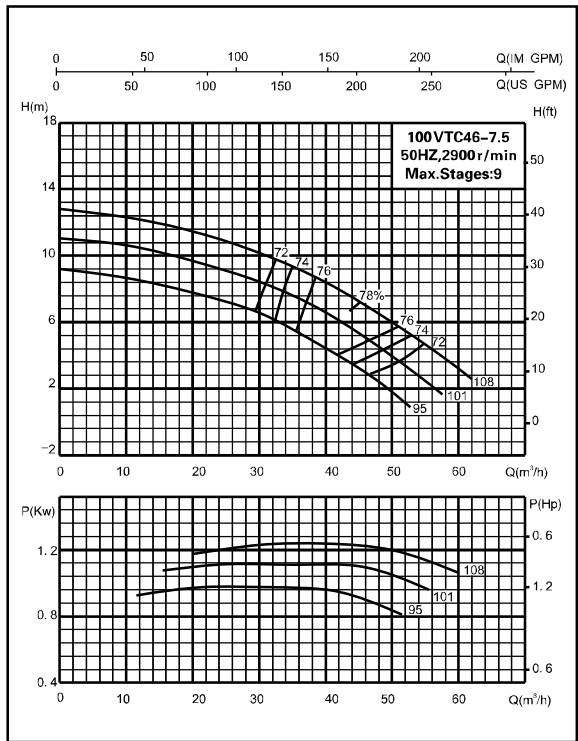
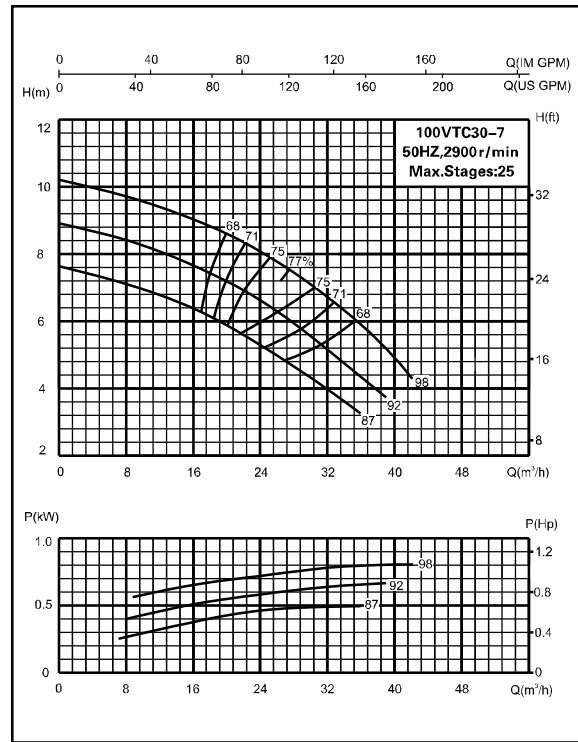
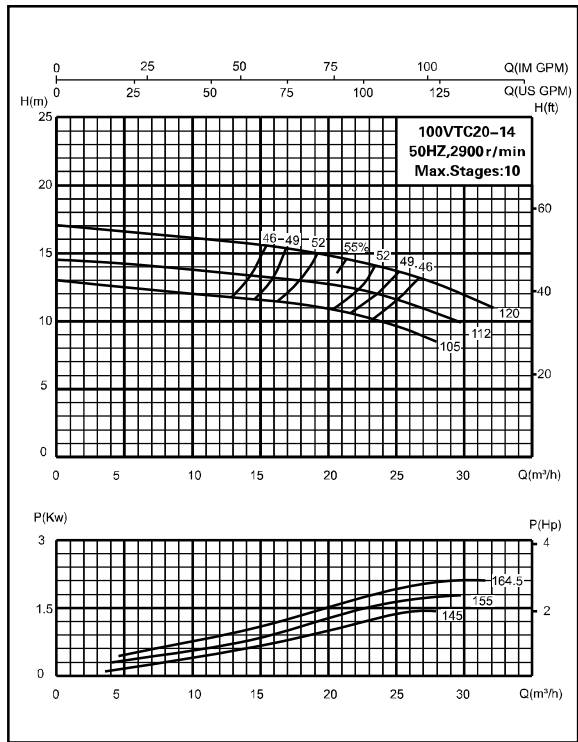


Model	A1	A2	$\phi d$	h	B	Sm	$\phi A$
100VTC	470	420	25	200	140	400	350
150VTC	550	500	25	200	180	450	420
200VTC	700	640	30	200	220	480	520
250VTC	780	720	30	240	280	700	600
300VTC	880	820	30	260	330	900	700
350VTC	930	870	30	300	380	1400	770
400VTC	1030	960	30	320	430	1800	850

1. Discharge Flanges drilled to ISO.DIN.BS or ANSI.
2. The final installation size will be subject to the final overall dimension of CNP.
3. The VTC series below ground discharge in principle is not recommended
4. Over 500 outlet diameter will be subject to overall dimension of CNP.

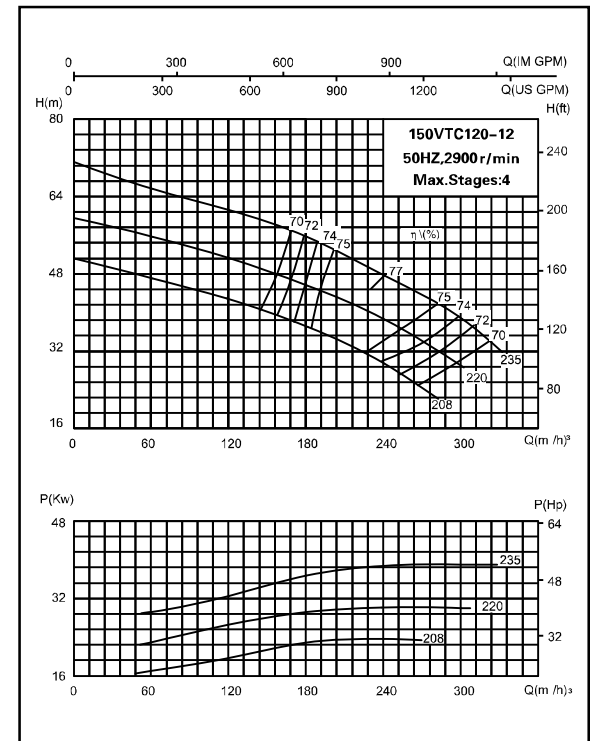
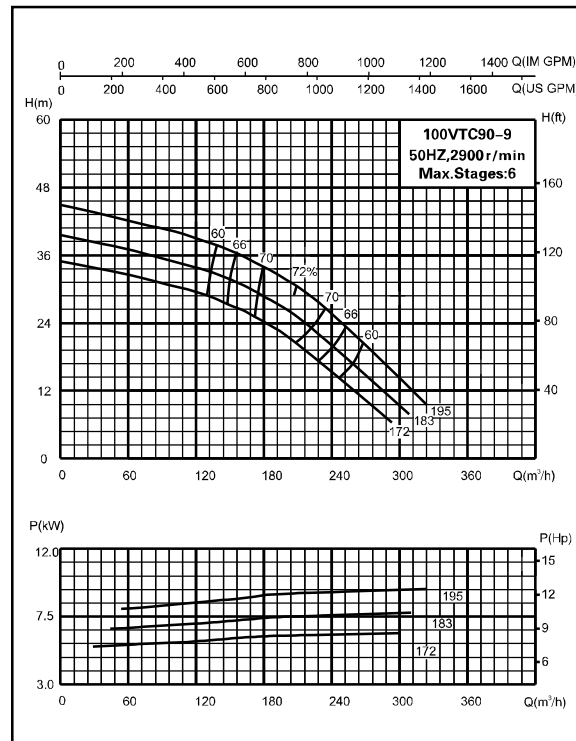
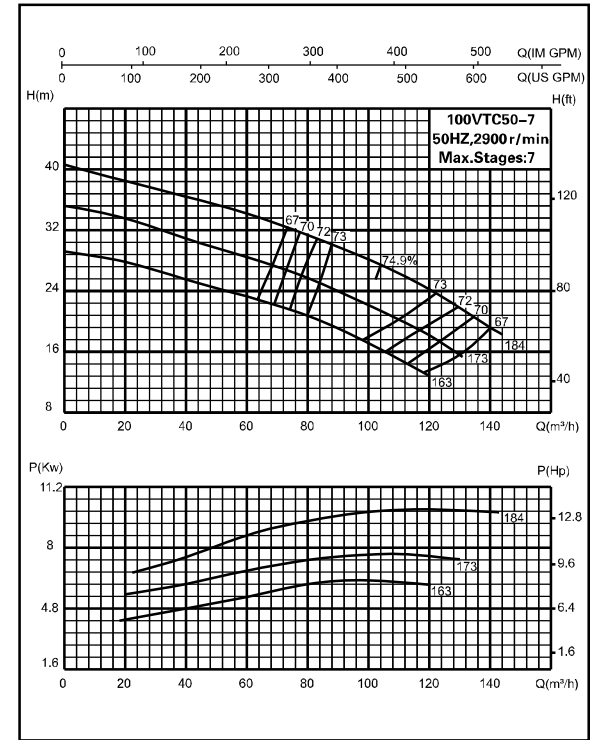
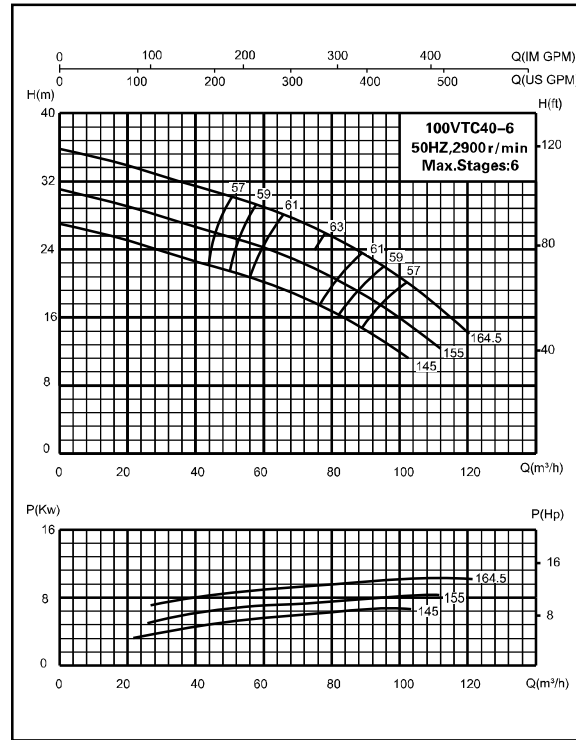
# VTP

## VTC, VTG Pump Curves ( Single stage )



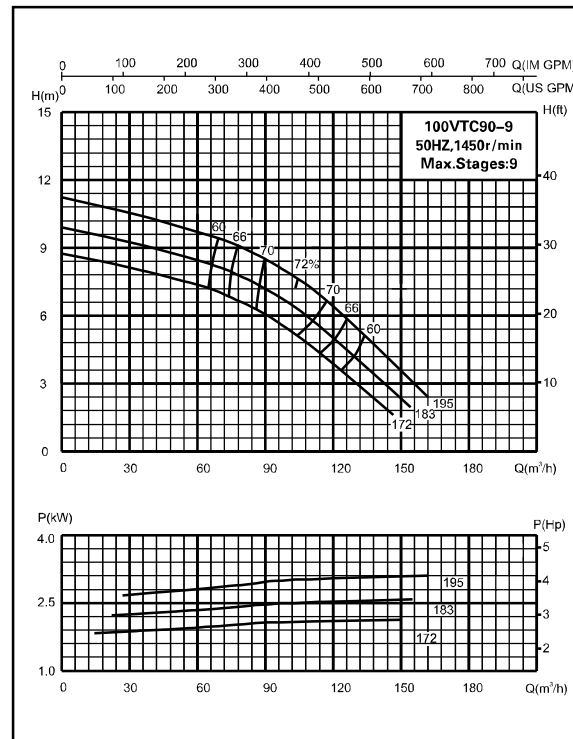
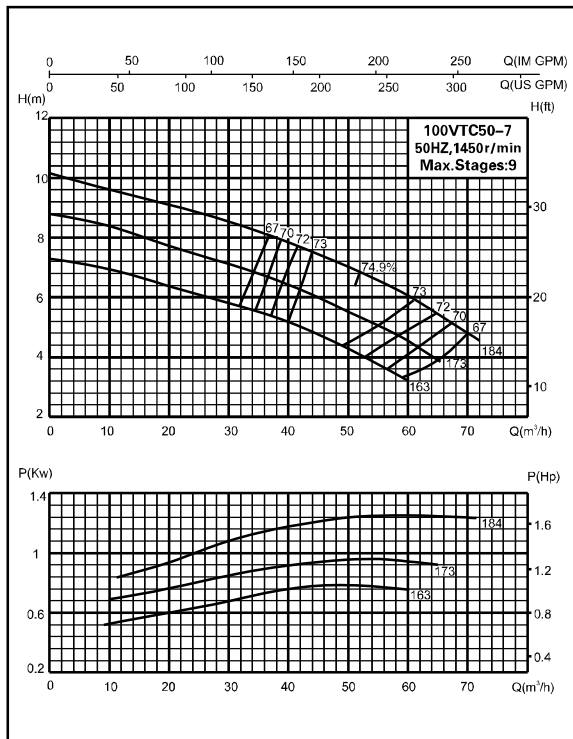
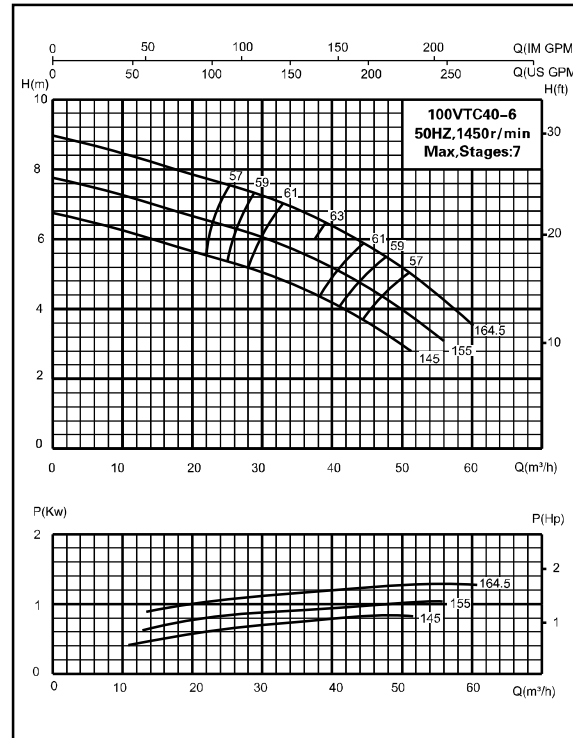
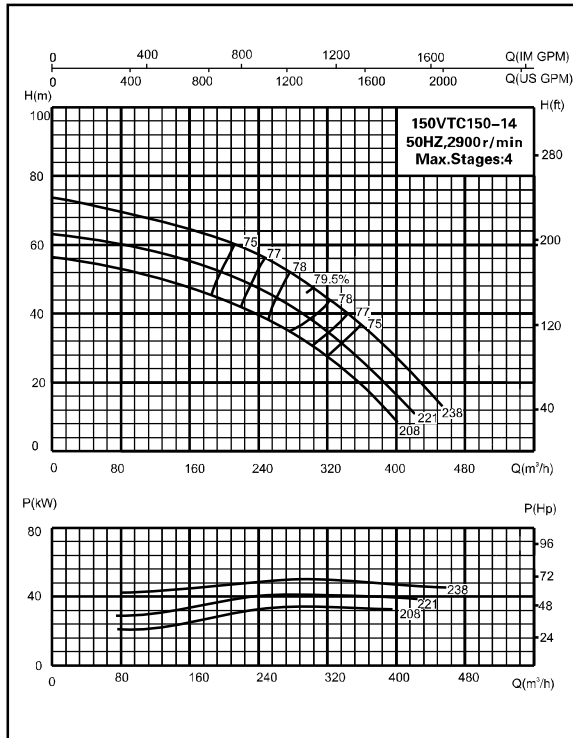


VTC, VTG Pump Curves ( Single stage )

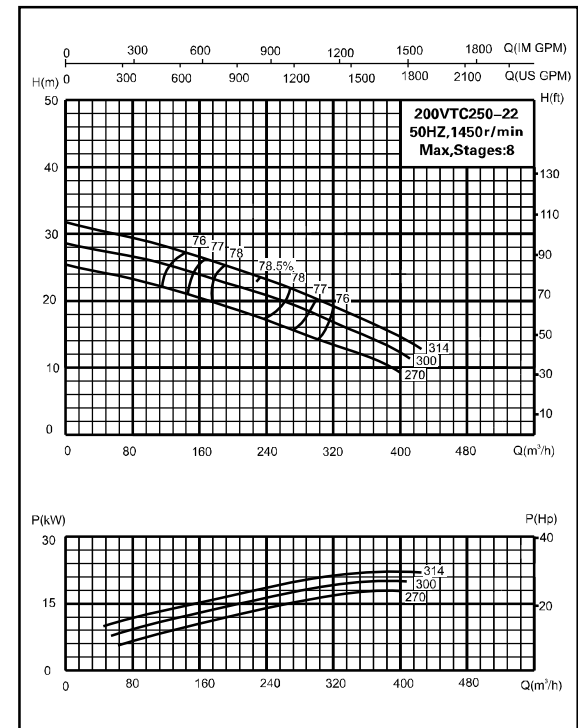
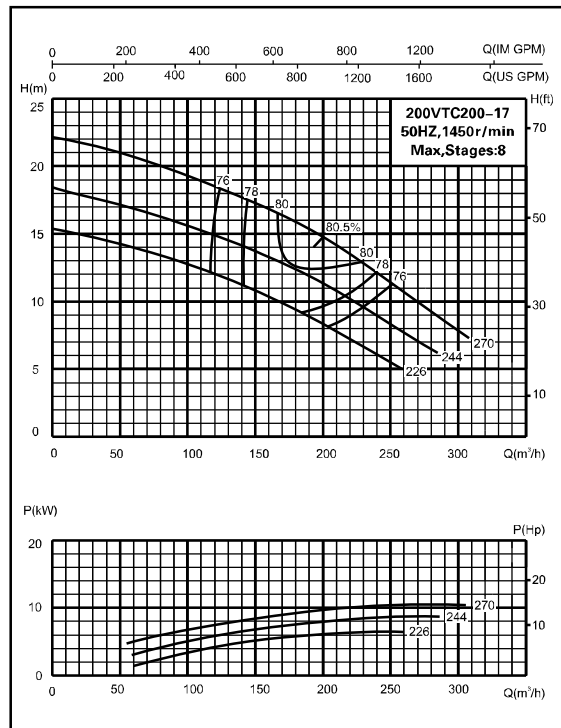
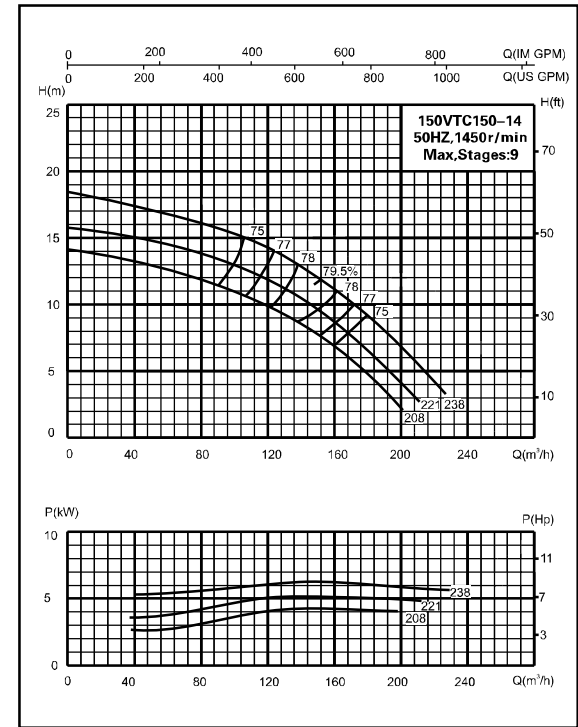
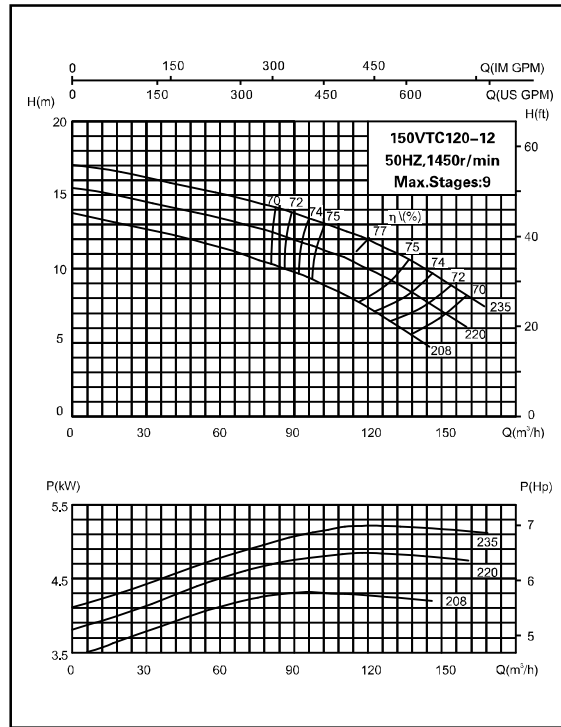


# VTP

## VTC, VTG Pump Curves ( Single stage )

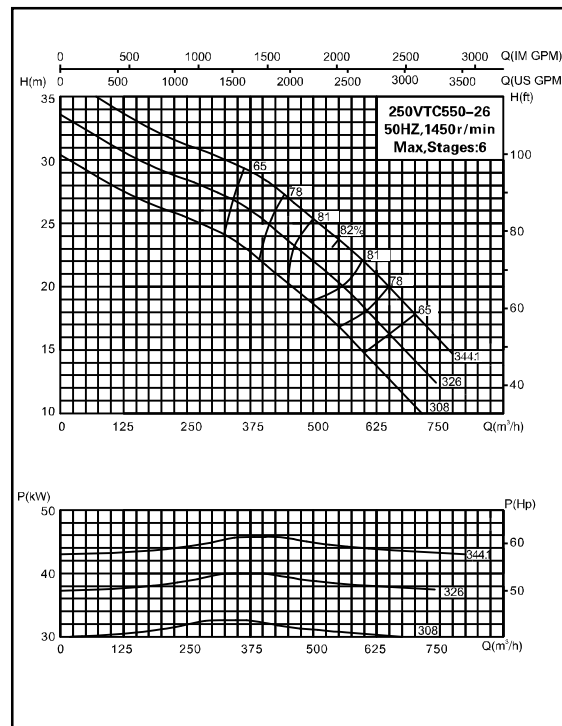
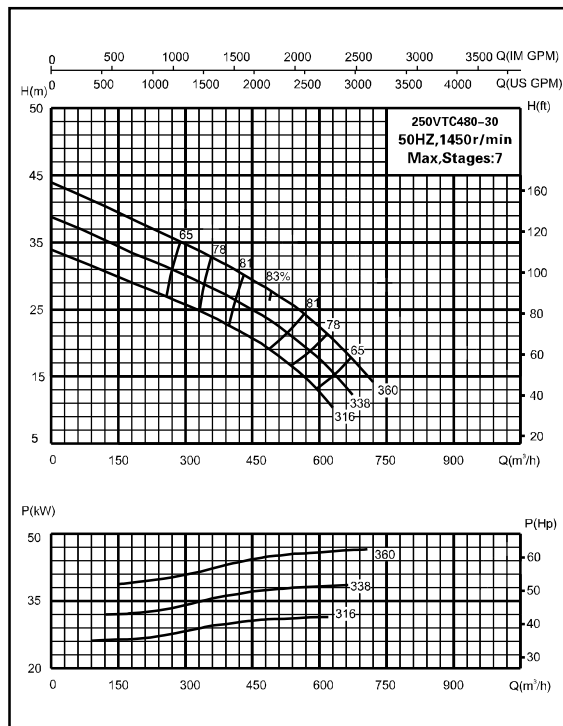
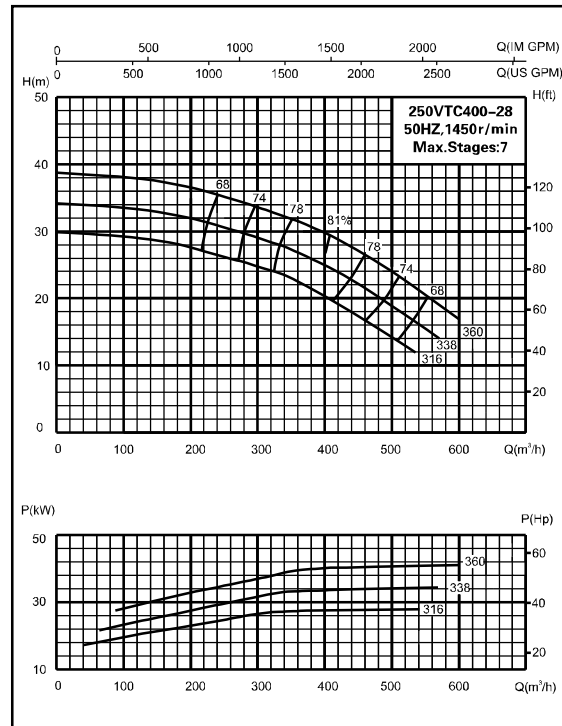
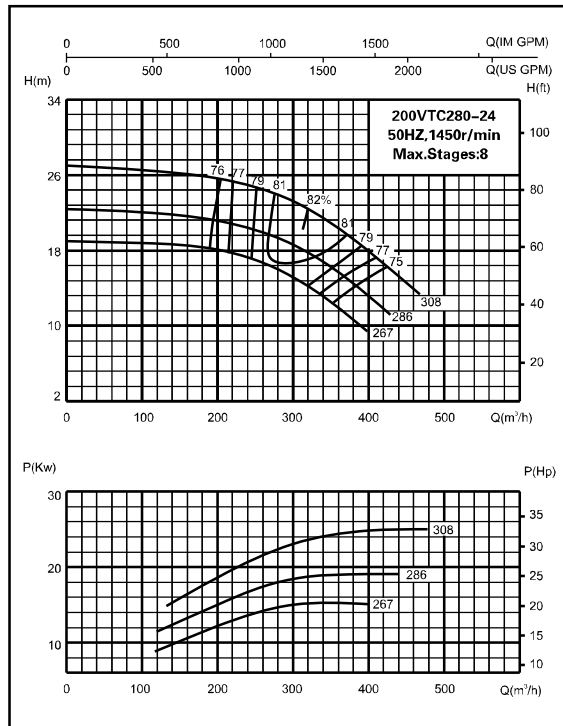


VTC, VTG Pump Curves ( Single stage )

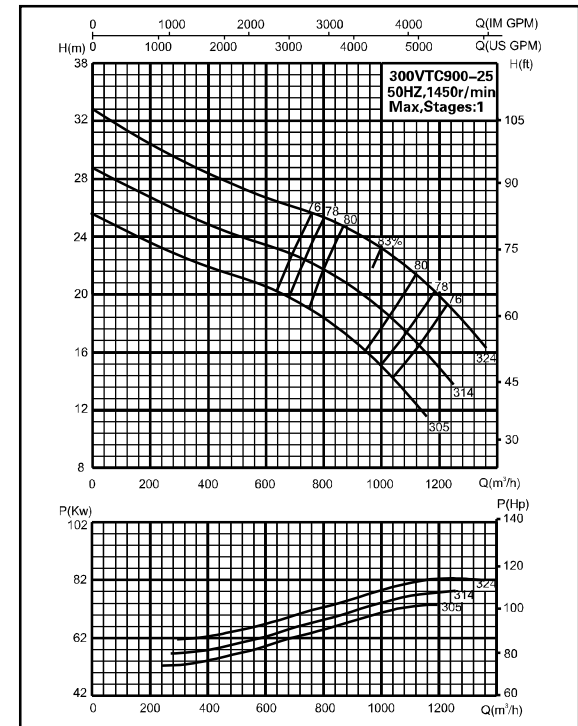
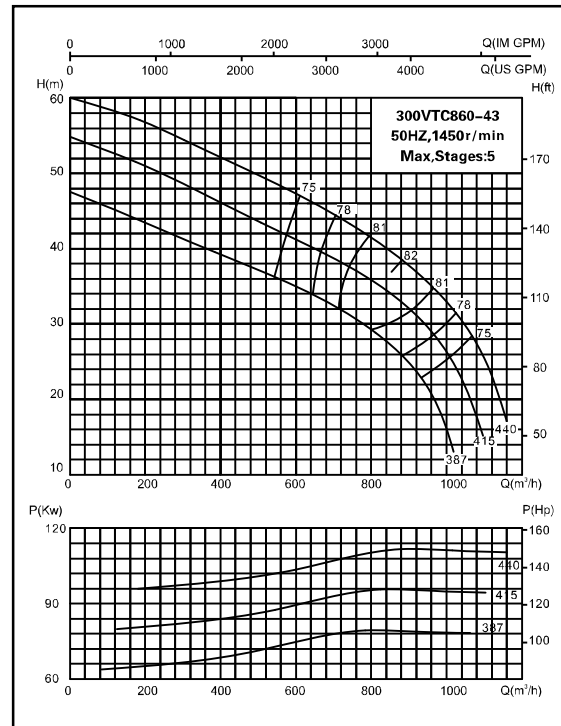
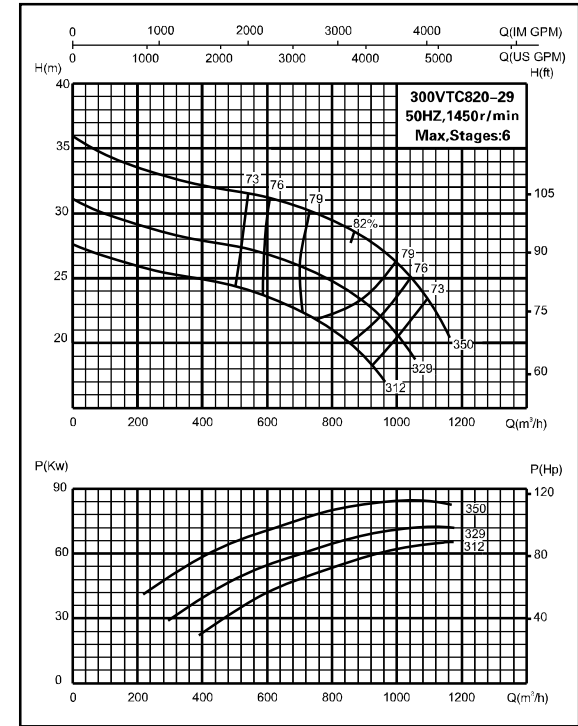
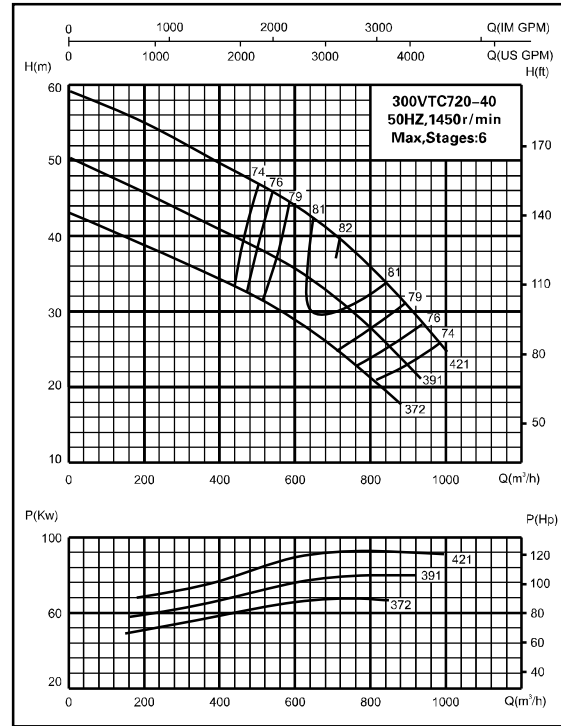


# VTP

## VTC, VTG Pump Curves ( Single stage )

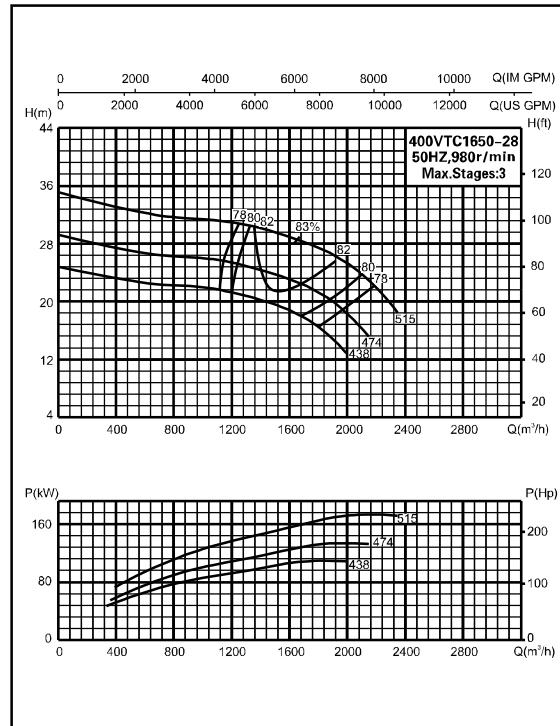
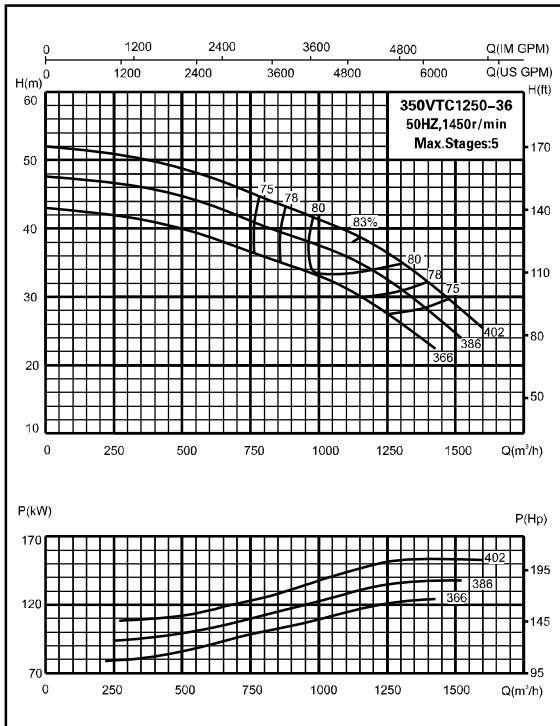
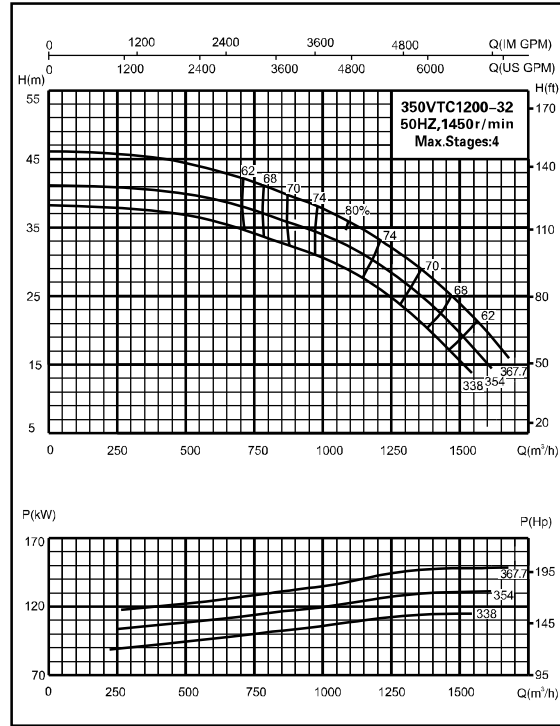
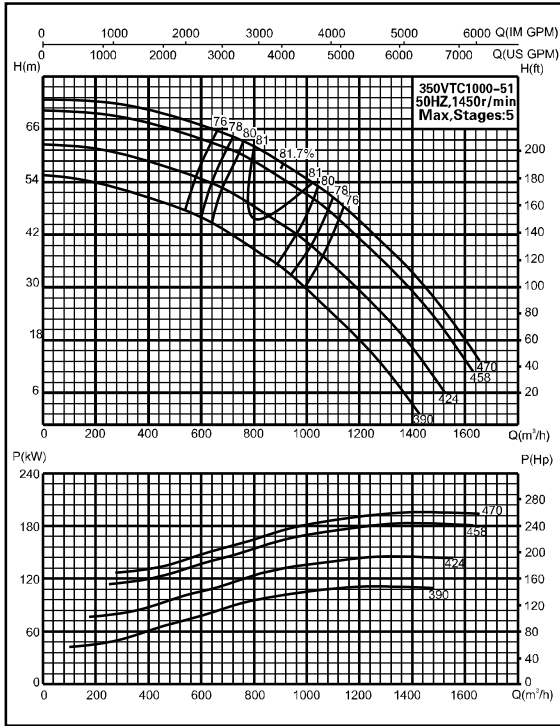


VTC, VTG Pump Curves ( Single stage )

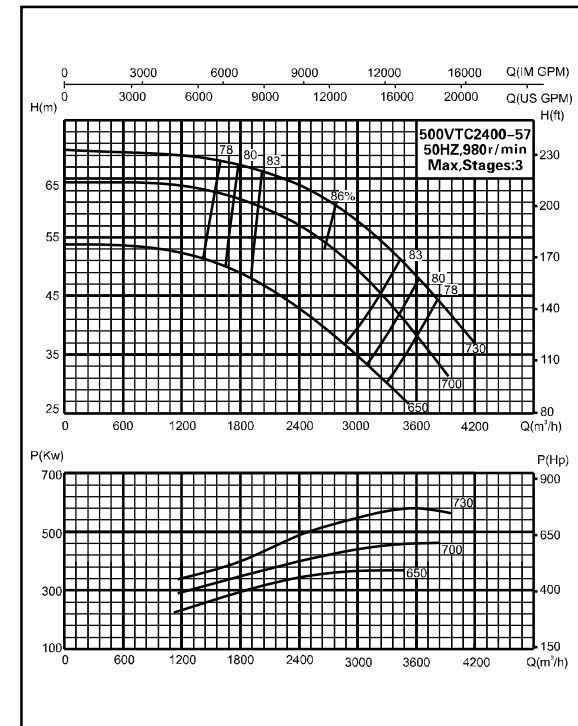
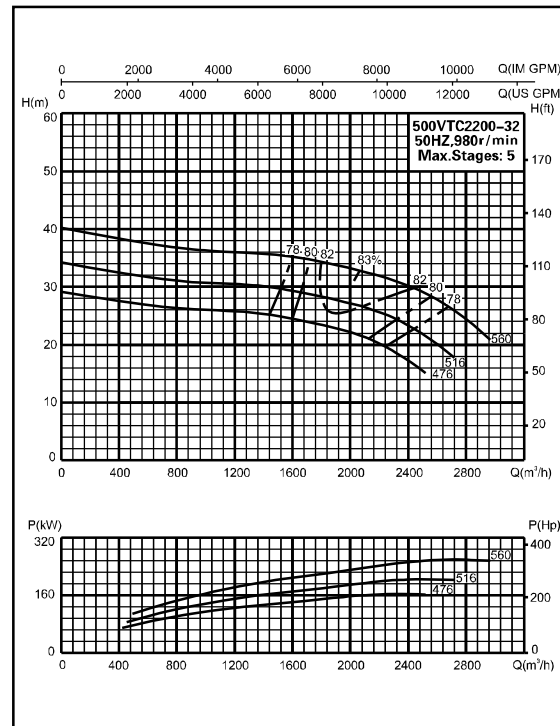
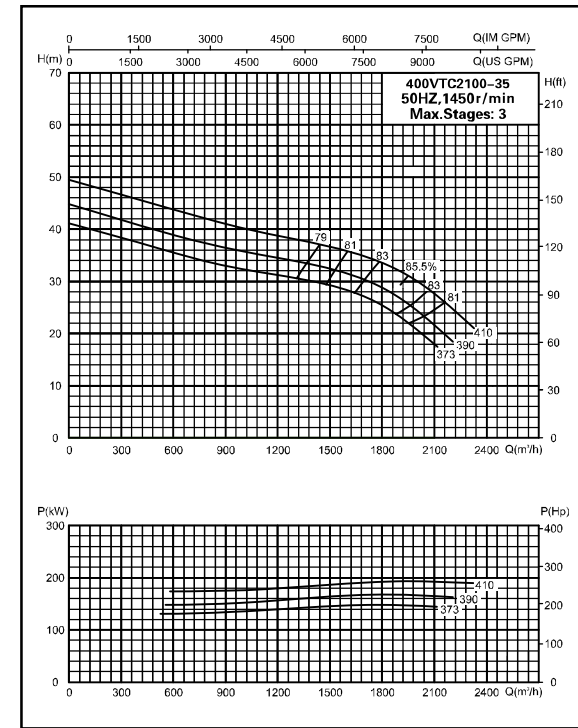
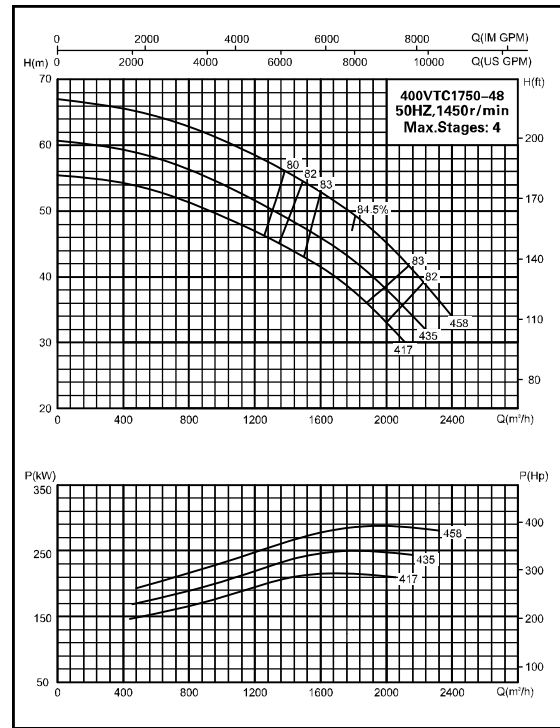


# VTP

## VTC, VTG Pump Curves ( Single stage )

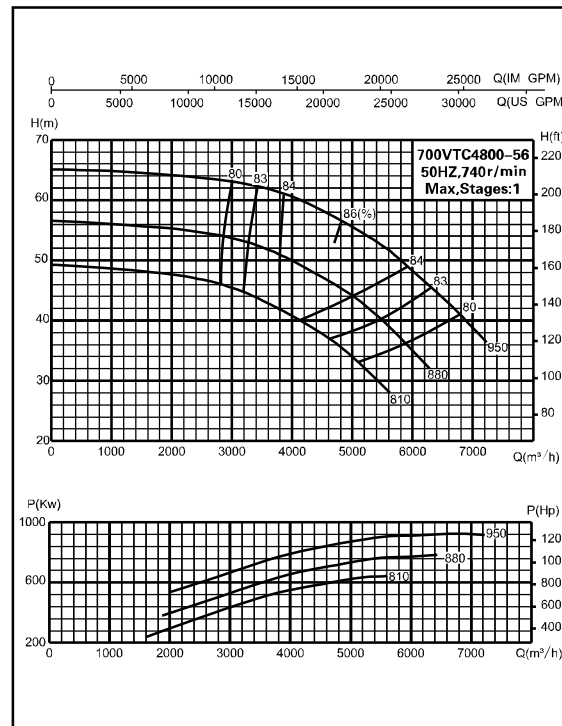
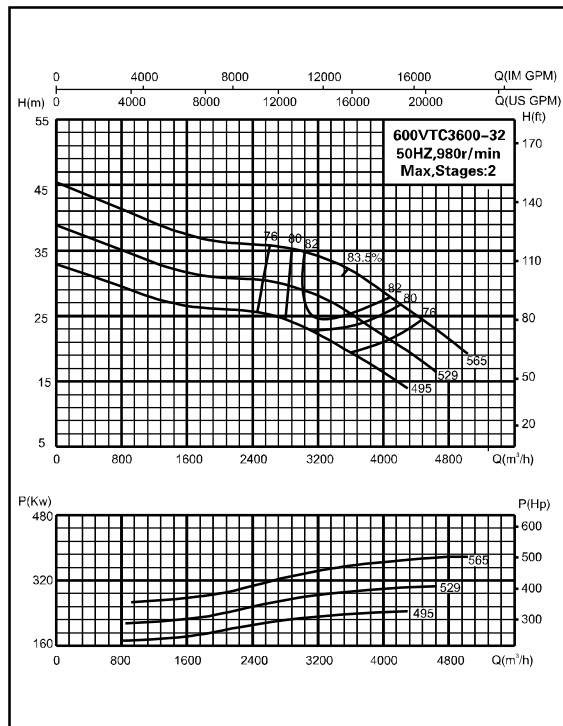
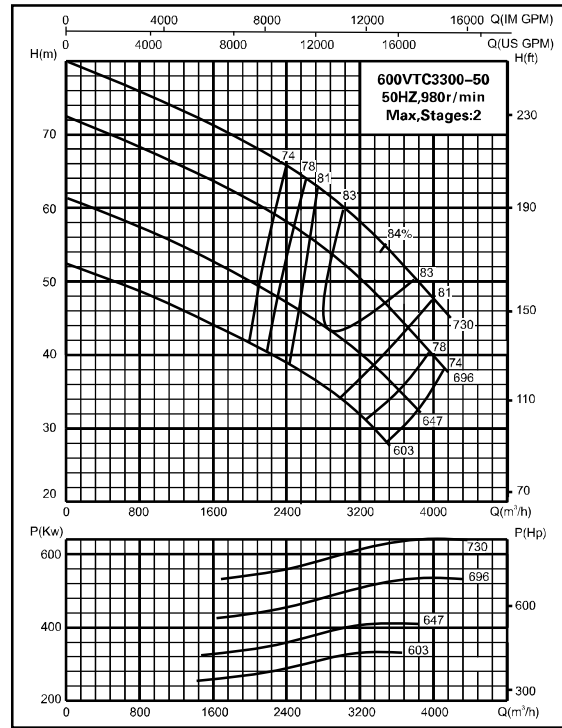
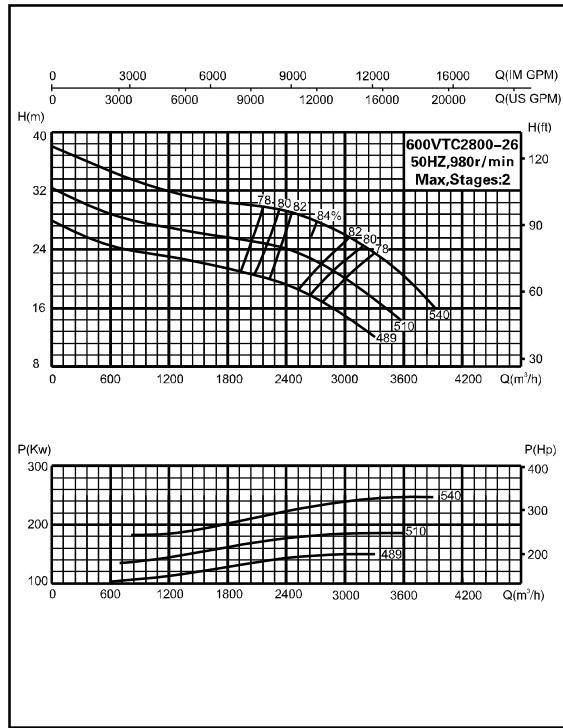


VTC, VTG Pump Curves ( Single stage )



# VTP

## VTC, VTG Pump Curves ( Single stage )





## VTM, VTG Vertical Turbine Pumps

### Specification range

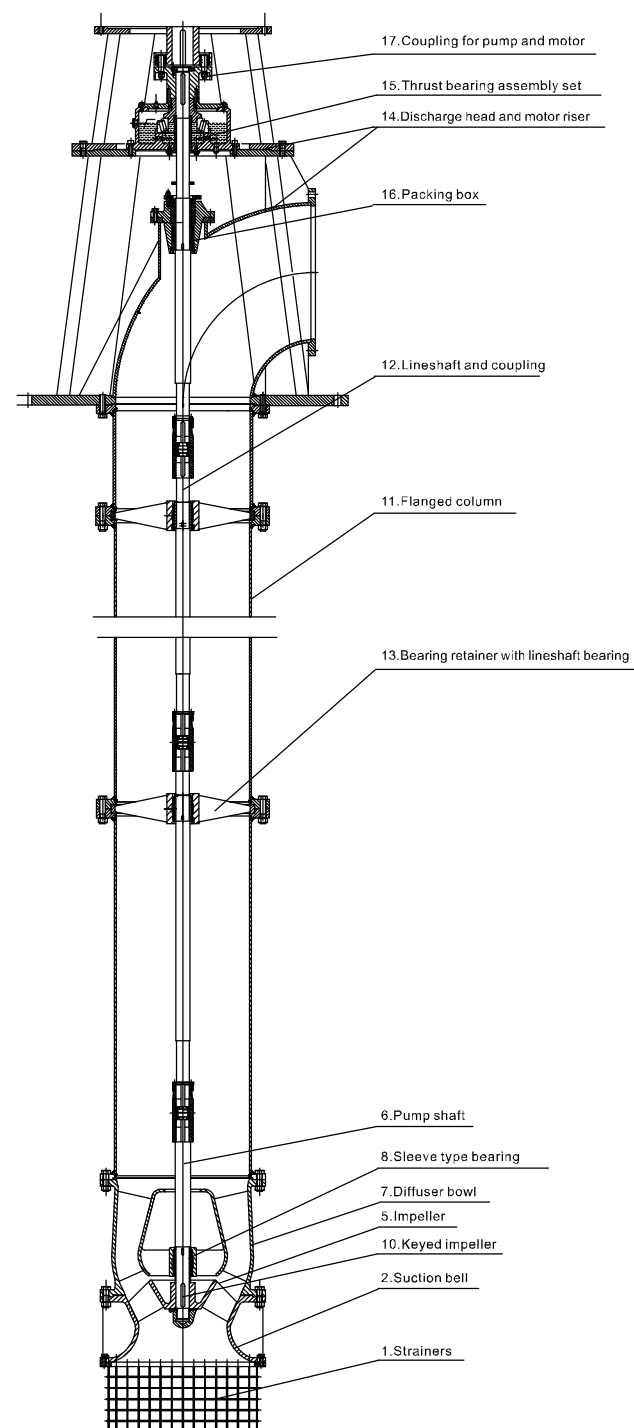
- Capacities to 40000m<sup>3</sup>/h (180,000GPM)
- Heads to 60m (200ft)

### Design Advantages

1. Fabricated discharge head for all sizes.
2. Seamless flanged ends column pipe and flanges bowl construction incorporating registered fits for ease of assembly during assembly.
3. Alloy construction with external tube flush of critical wear areas available for abrasive services.
4. Available with semi-open or enclosed impeller, with or without wear rings, optimum diffuser and impeller match for maximum efficiency.
5. 416SS shafting. Keyed lineshaft coupling available in all size for ease of maintenance. The lineshaft can be protected by water flushing the enclosing tube bearing on corrosive/abrasive services.
6. Various bearing material available.
7. Wide range of corrosion and erosion resistant materials.
8. Hollow shaft for bowl bearing flushing.
9. Flexible design to accommodate fixed or existing dimensions above and below ground discharge.

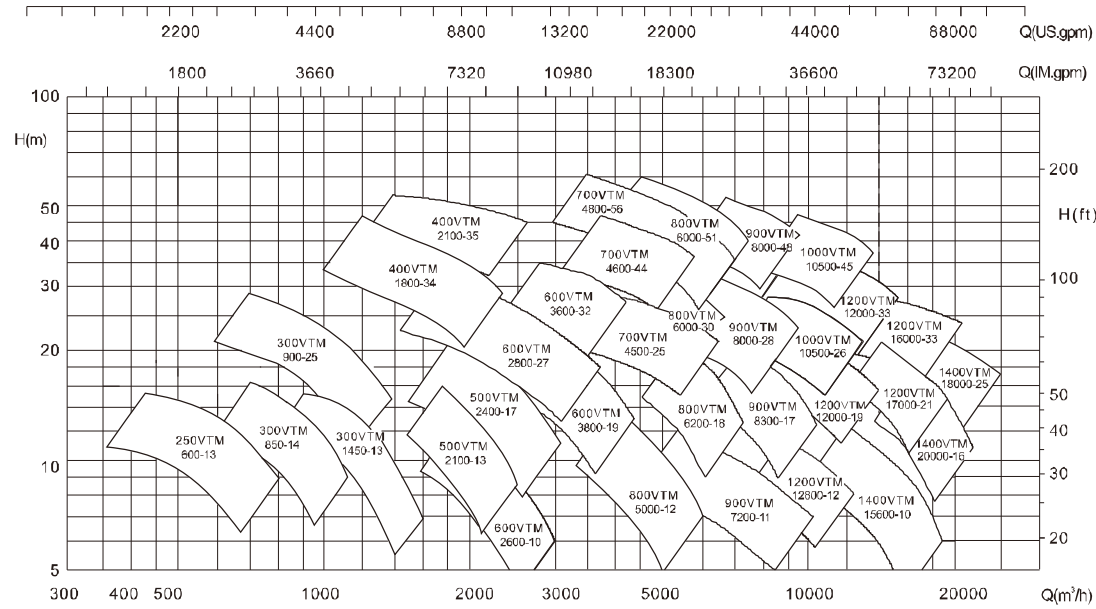
### Services

Cooling Water  
 Seawater and Raw water intake  
 Industrial Process Pumps  
 Utility Circulating Water  
 Condenser Circulating Water Pumps  
 Irrigation and Drainage  
 Storm and Flood water  
 River Water Intake  
 Municipal Water Supply

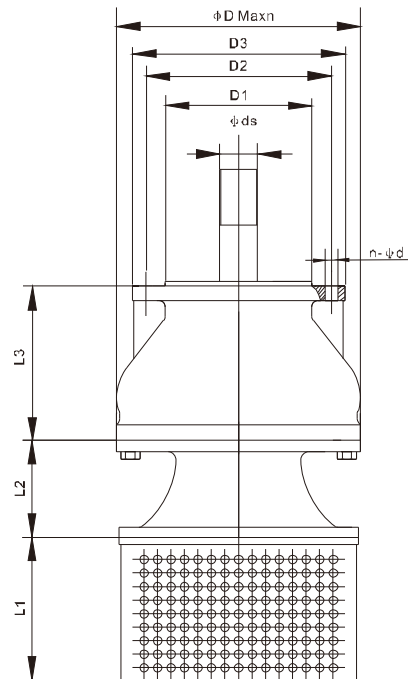


# VTP

## VTM Selection Charts



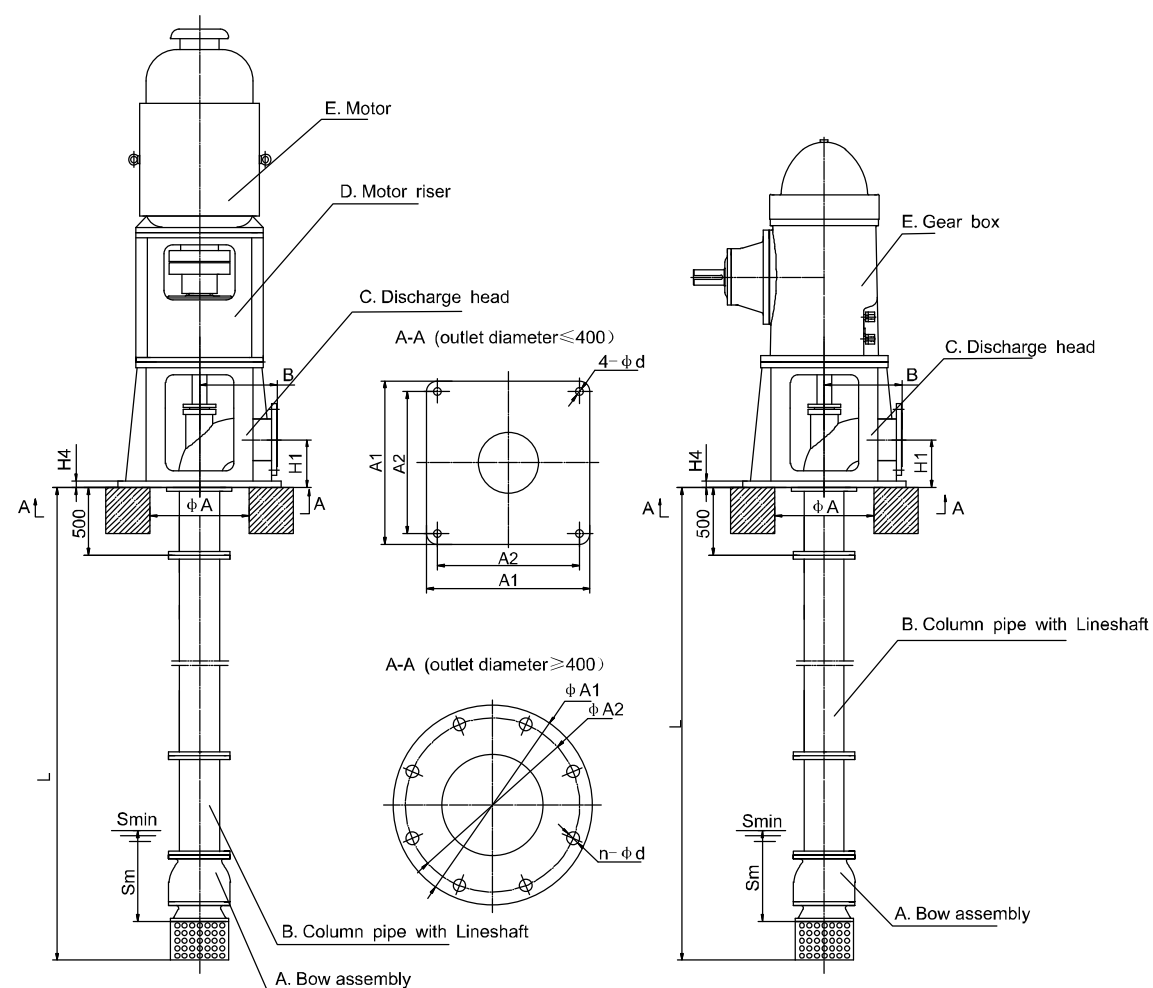
## VTM Pump Bowl Assembly Dimensions



Model	Dmax	L1	L2	L3	φ ds	D1	D2	D3	n-φ d
250VTM600-13	393	320	110	385	40	305h6	350	393	12-φ 23
300VTM850-14	427	320	120	415	40	330h6	385	427	12-φ 23
300VTM900-25	435	320	180	513	50	320h6	360	400	12-φ 23
350VTM1450-13	480	320	240	410	40	395h6	440	480	16-φ 23
400VTM1800-34	550	320	230	600	70	440h6	500	550	16-φ 25
400VTM2100-35	550	320	230	600	70	440h6	500	550	16-φ 25
★ 500VTM2100-13	670	320	350	450	50	520h6	620	670	20-φ 25
500VTM2400-17	750	320	400	475	60	550h6	600	650	20-φ 25
★ 600VTM2600-10	745	320	295	530	60	630h6	695	745	20-φ 30
600VTM3600-32	740	320	480	620	80	630h6	725	780	20-φ 30
600VTM2800-27	710	320	300	735	70	630h6	725	780	20-φ 30
★ 600VTM3800-19	760	320	330	640	70	630h6	725	780	20-φ 30
700VTM4500-25	875	320	570	730	90	730h6	840	895	24-φ 30
700VTM4600-44	1075	320	350	925	110	730h6	840	895	24-φ 30
700VTM4800-56	1295	320	405	890	120	730h6	840	895	24-φ 30
800VTM5000-12	980	320	410	735	80	830h6	950	1010	24-φ 34
800VTM6000-51	1165	320	380	1000	120	830h6	950	1010	24-φ 34
800VTM6000-30	965	320	625	810	100	830h6	950	1010	24-φ 34
800VTM6200-18	990	320	430	835	90	830h6	950	1010	24-φ 34
900VTM7200-11	1160	320	490	890	90	930h6	1050	1110	28-φ 34
900VTM8000-28	1135	320	960	740	120	930h6	1050	1110	28-φ 34
900VTM8300-17	1165	320	515	990	100	930h6	1050	1110	28-φ 34
900VTM8000-48	1385	320	450	1190	140	930h6	1050	1110	28-φ 34
1000VTM10500-26	1325	320	865	1110	130	1030h6	1160	1220	28-φ 34
1000VTM10500-45	1610	320	525	1390	160	1030h6	1160	1220	28-φ 34
1000VTM12000-19	1500	320	985	1265	130	1230h6	1380	1450	32-φ 41
1000VTM12000-33	1830	320	600	1590	160	1230h6	1380	1450	32-φ 41
1200VTM12800-12	1560	320	700	1330	120	1230h6	1380	1450	32-φ 41
1200VTM16000-33	1500	320	985	1265	160	1230h6	1380	1450	32-φ 41
1200VTM17000-21	1560	320	700	1330	140	1230h6	1380	1450	32-φ 41
1400VTM20000-16	1800	320	805	1545	160	1430h6	1590	1675	36-φ 48
1400VTM18000-25	1720	320	1130	1450	170	1430h6	1590	1675	36-φ 48
1400VTM15600-10	1700	320	750	1340	120	1430h6	1590	1675	36-φ 48

★ marks the pump using semi-open impeller.

## VTM, VTG Pump Dimensions (Above Ground Discharge)

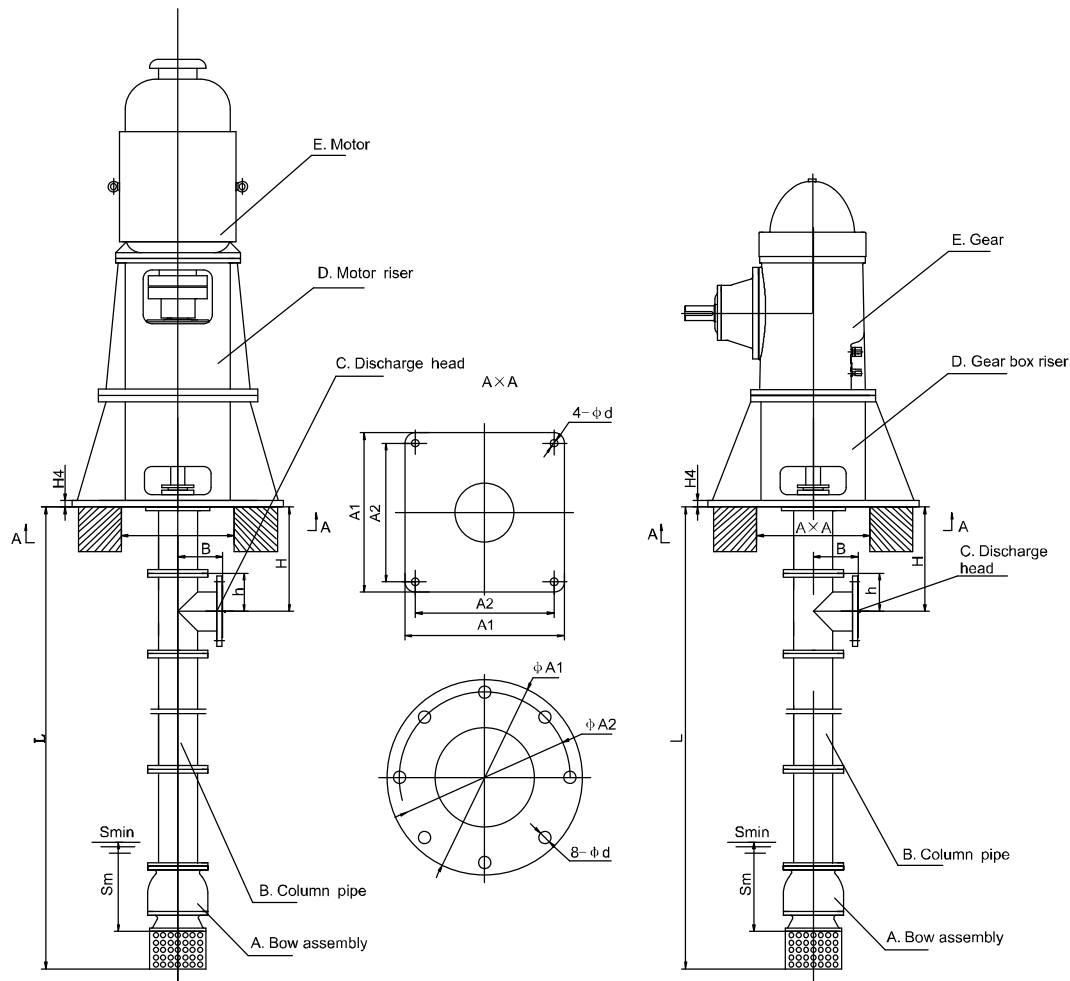


Model	$\phi A1$	$\phi A2$	A1	A2	n- $\phi d$	H1	H4	B	Sm	$\phi A$
250VTM	/	/	780	720	4- $\phi 30$	265	30	450	700	500
300VTM	/	/	880	820	4- $\phi 30$	320	35	500	900	600
300VTM	/	/	930	870	4- $\phi 30$	370	35	550	1400	650
400VTM	/	/	1030	960	4- $\phi 30$	420	40	600	1800	800
500VTM	1400	1300	/	/	8- $\phi 40$	520	40	700	1800	900
600VTM	1500	1400	/	/	8- $\phi 40$	620	45	850	2000	1000
700VTM	1600	1500	/	/	12- $\phi 40$	700	50	950	2200	1100
800VTM	1700	1600	/	/	16- $\phi 40$	800	50	1000	2400	1200
900VTM	1800	1700	/	/	16- $\phi 40$	900	60	1050	2400	1300
1000VTM	1900	1800	/	/	16- $\phi 45$	1000	60	1100	2600	1400
1200VTM	2000	1900	/	/	16- $\phi 50$	1200	65	1150	2800	1500
1400VTM	2300	2200	/	/	16- $\phi 50$	1400	70	1450	3000	1700

1. Discharge Flanges drilled to ISO.DIN.BS or ANSI.
2. The final installation size will be subject to the final overall dimension of CNP.
3. 500 outlet diameter and below can directly use the table size, over 600 will be cancelled the strainer.
4. We recommend below ground discharge when the outlet diameter is more than 1200

# VTP

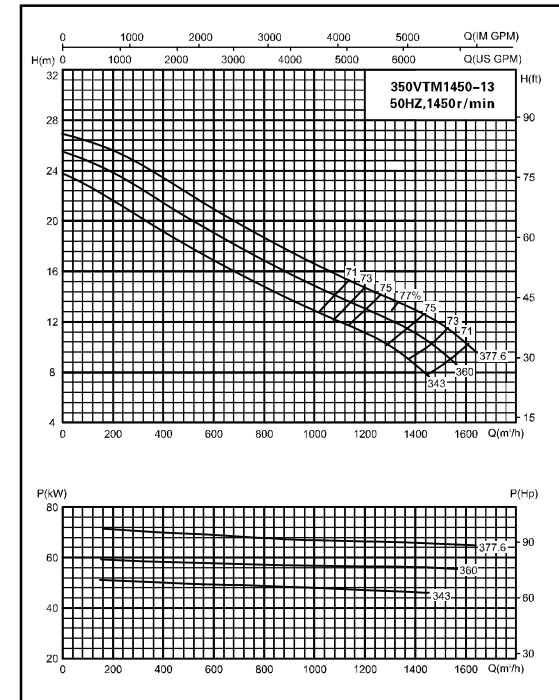
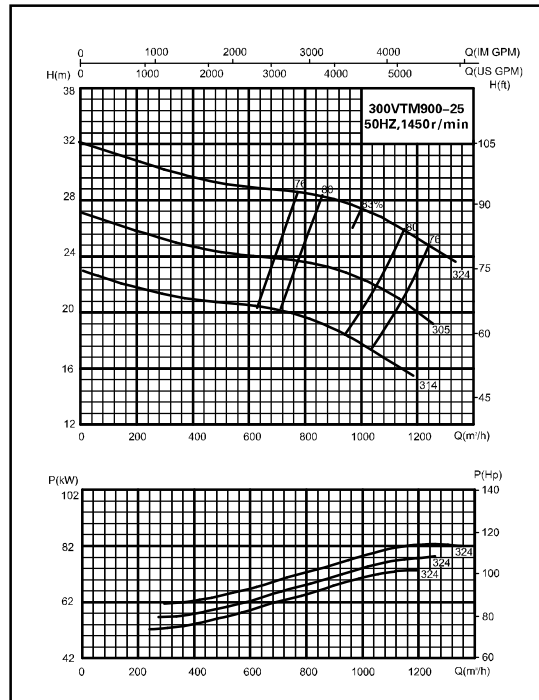
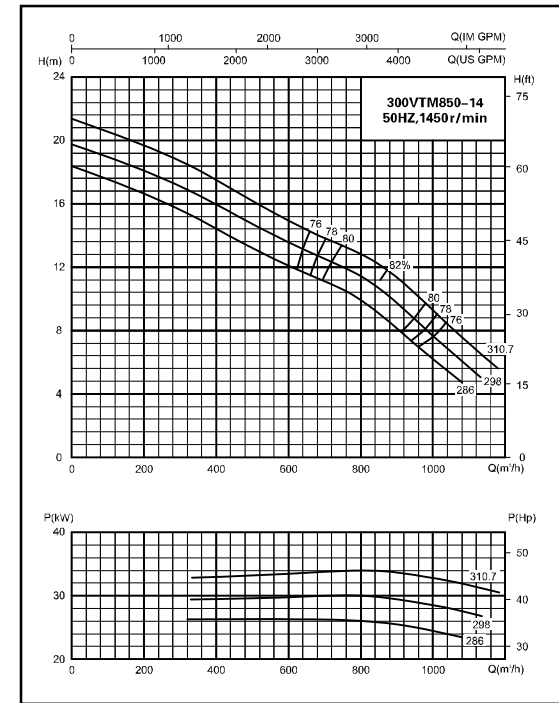
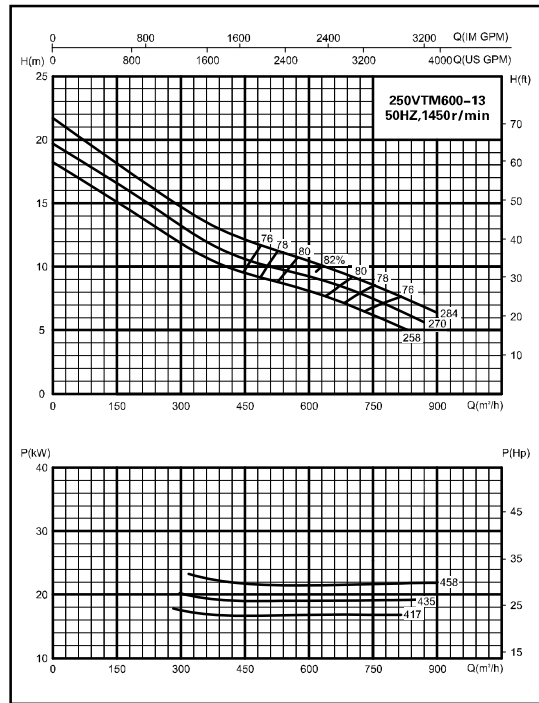
## VTM, VTG Pump Dimensions ( Below Ground Discharge )



Model	$\phi A1$	$\phi A2$	A1	A2	$\phi d$	H	B	Sm	A x A
250VTM	///	///	780	720	30	200	280	450	550 x 550
300VTM	///	///	880	820	30	230	330	500	650 x 650
350VTM	///	///	930	870	30	260	380	600	700 x 700
400VTM	///	///	1030	960	30	290	430	700	750 x 750
500VTM	///	///	1230	1160	33	350	540	900	1000 x 1000
600VTM	///	///	1380	1310	33	420	640	1000	1000 x 1000
700VTM	1500	1400	///	///	36	700	800	1200	1800 x 1800
800VTM	1650	1550	///	///	36	800	900	1400	2000 x 2000
900VTM	1800	1700	///	///	36	900	1000	1600	2200 x 2200
1000VTM	1950	1850	///	///	42	1000	1100	1800	2400 x 2400
1200VTM	2250	2150	///	///	42	1200	1200	2200	2600 x 2600
1400VTM	2550	2450	///	///	42	1400	1400	2600	3000 x 3000

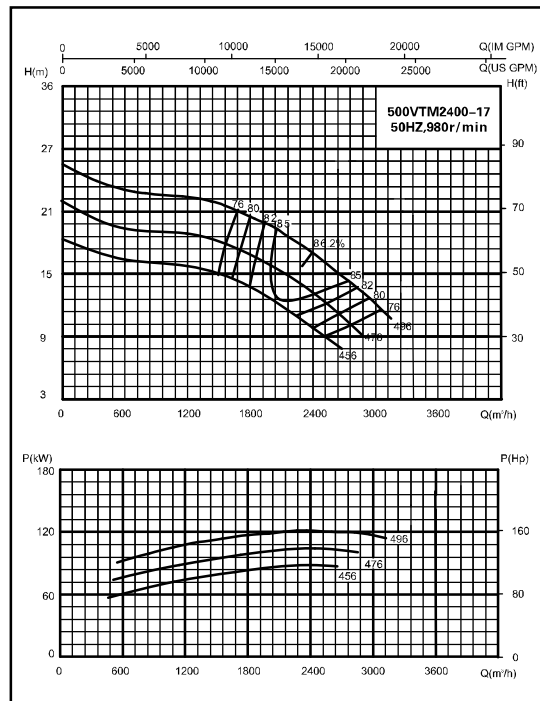
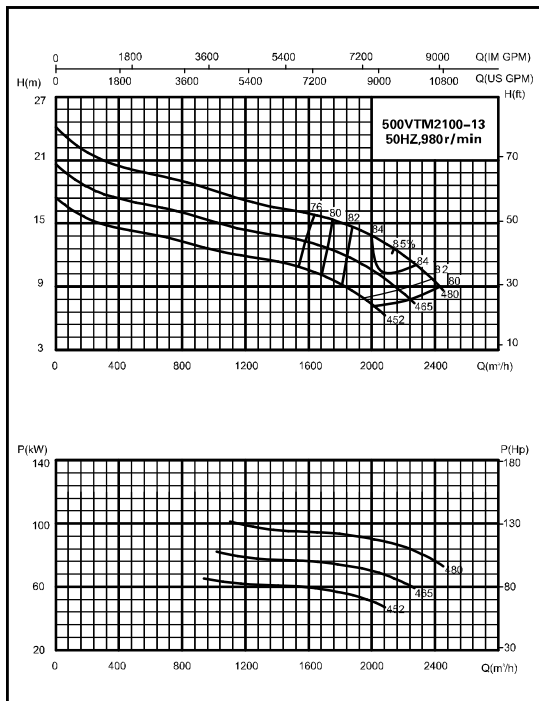
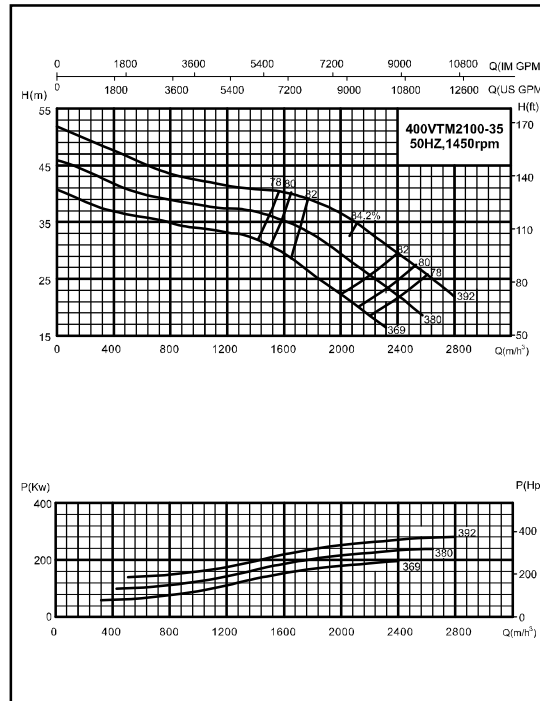
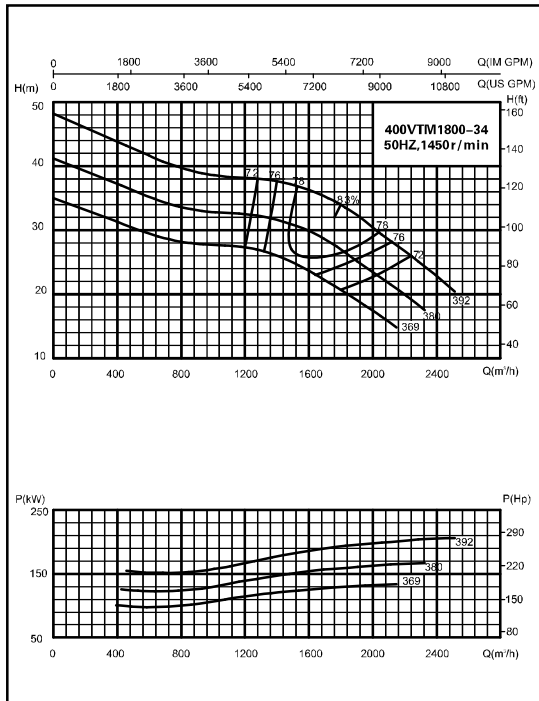
According to customer requirement: Discharge flanges drilled to ISODIN, BS or ANSI stand.

**VTM, VTG Pump Curves**

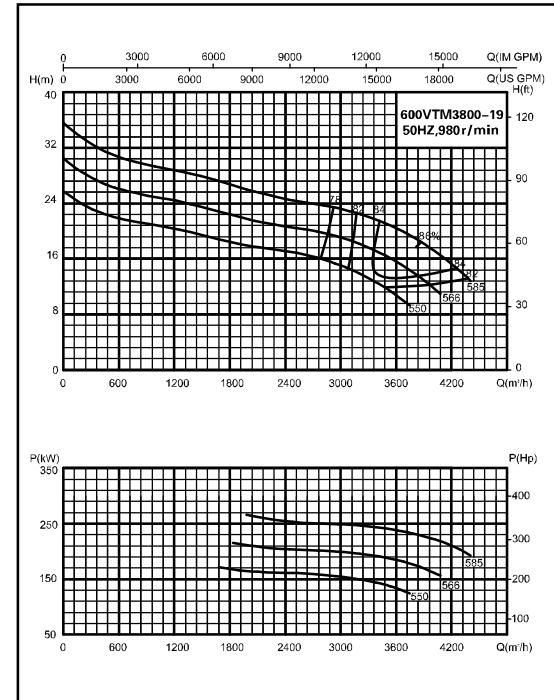
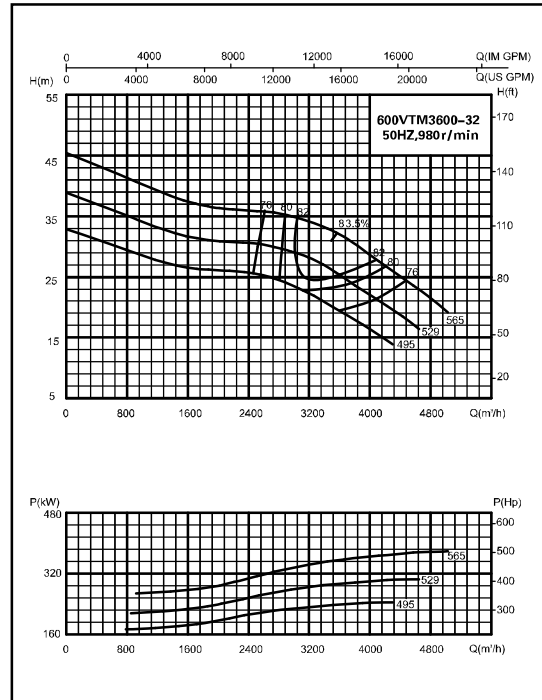
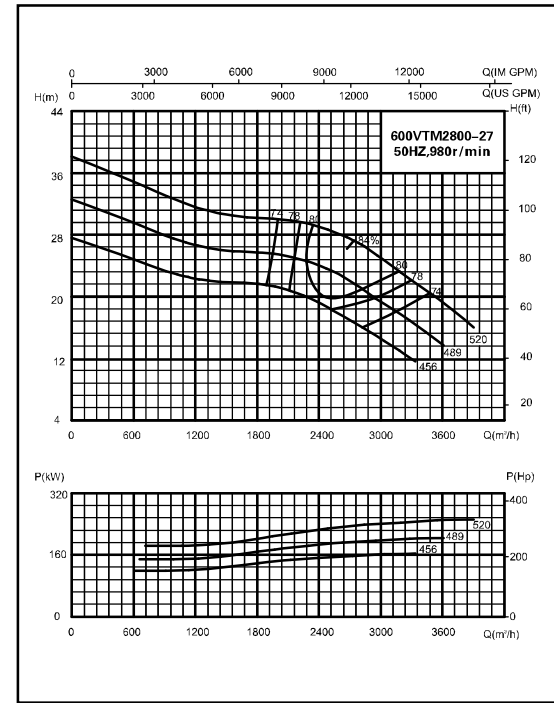
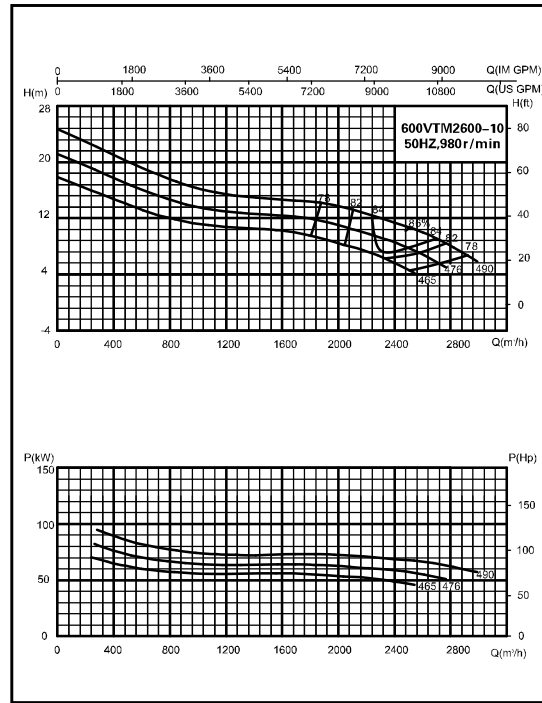


# VTP

## VTM, VTG Pump Curves

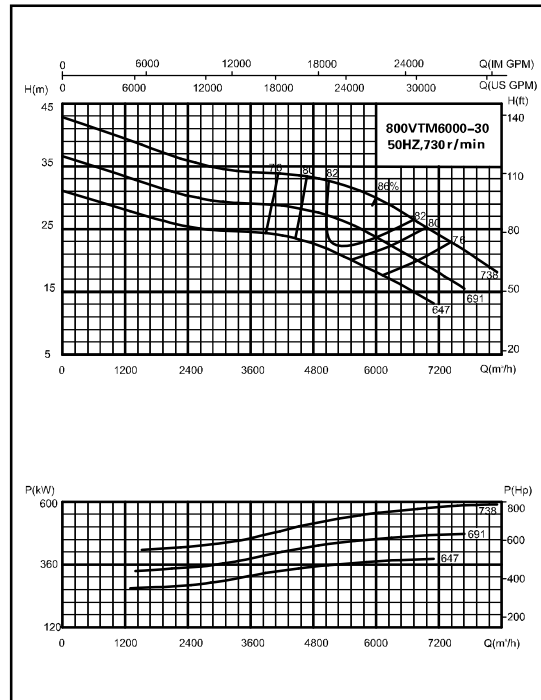
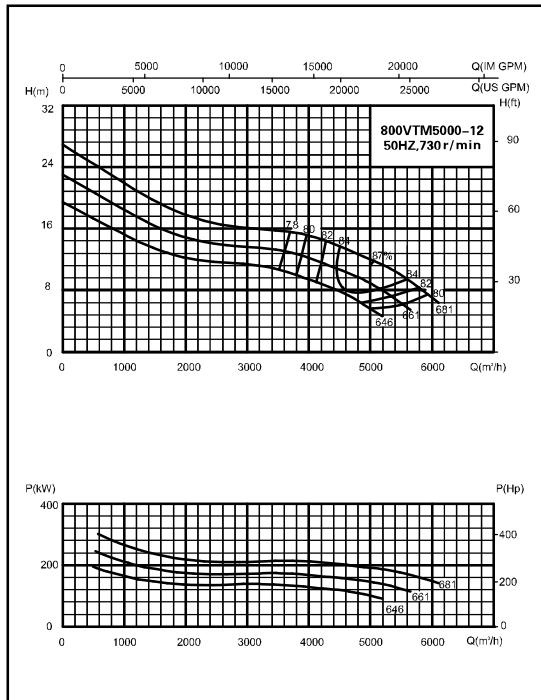
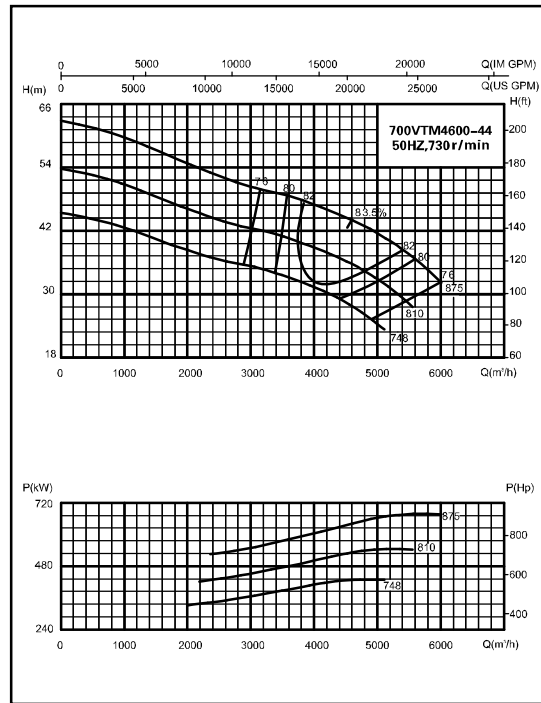
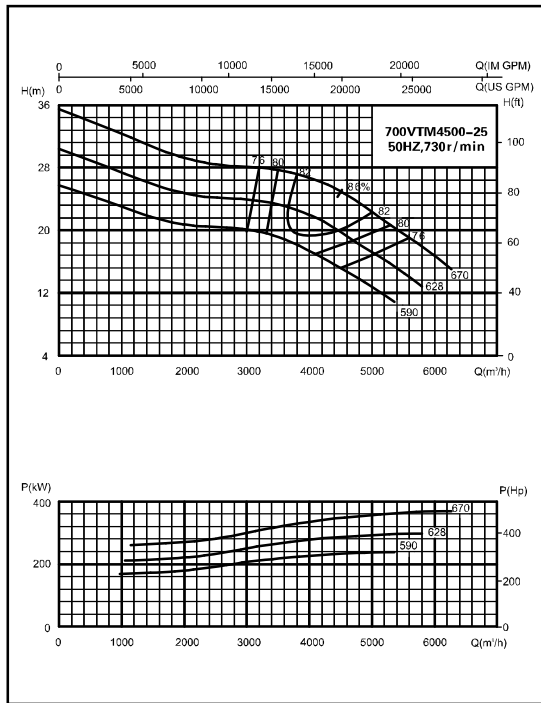


VTM, VTG Pump Curves



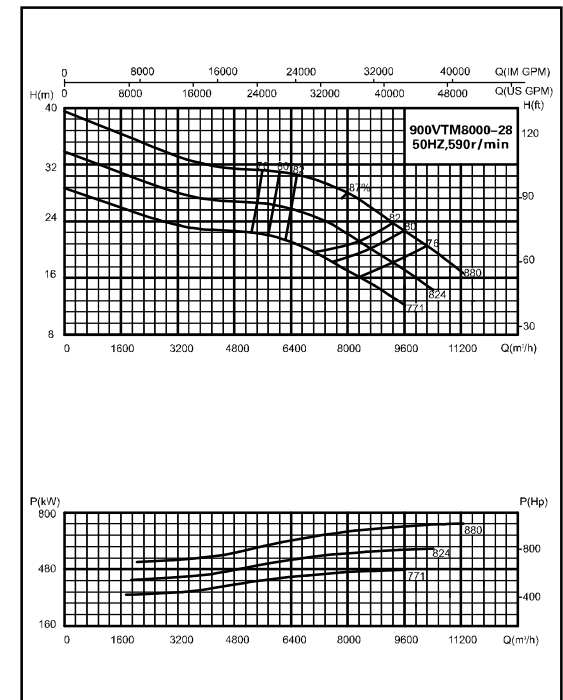
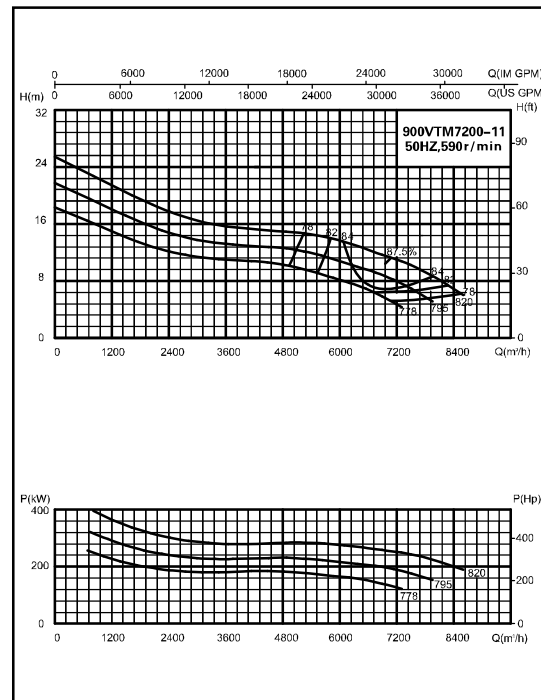
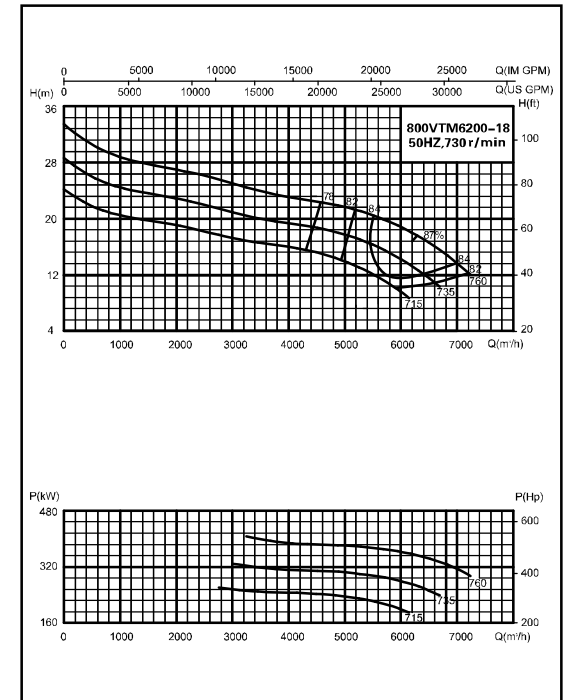
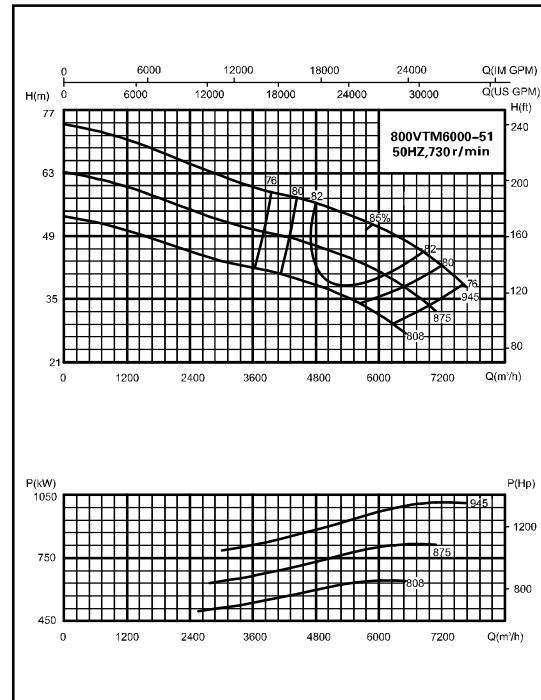
# VTP

## VTM, VTG Pump Curves



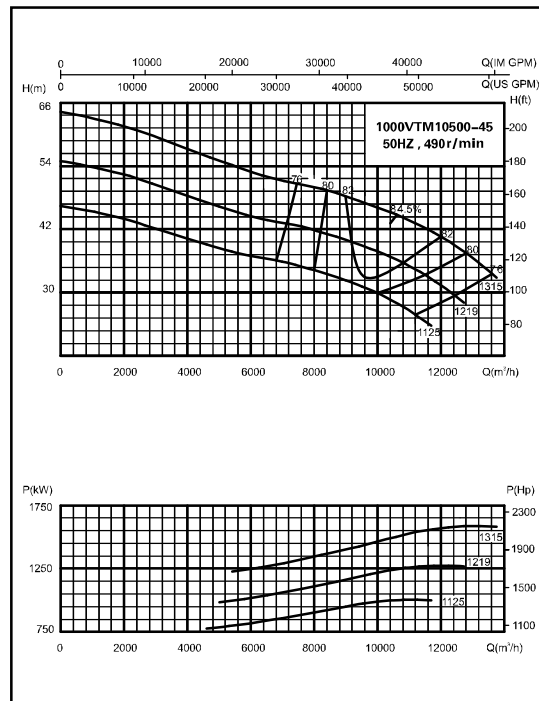
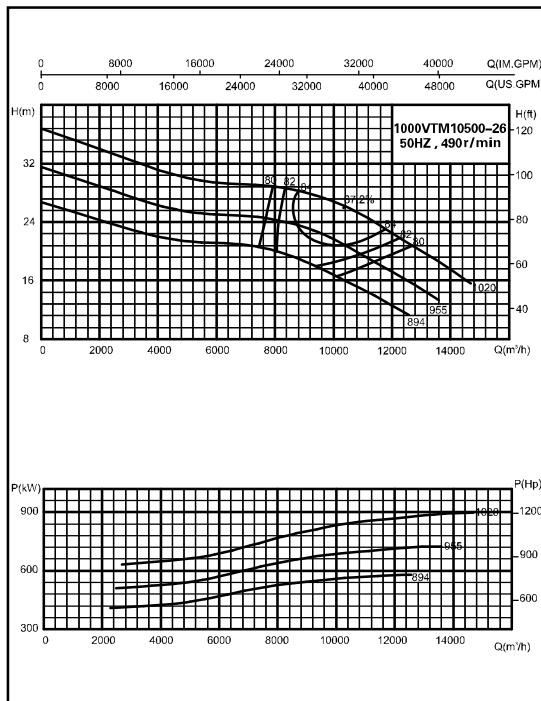
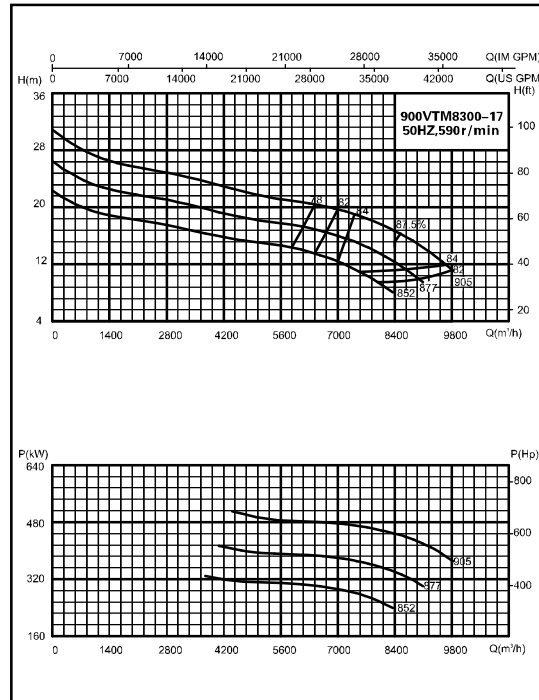
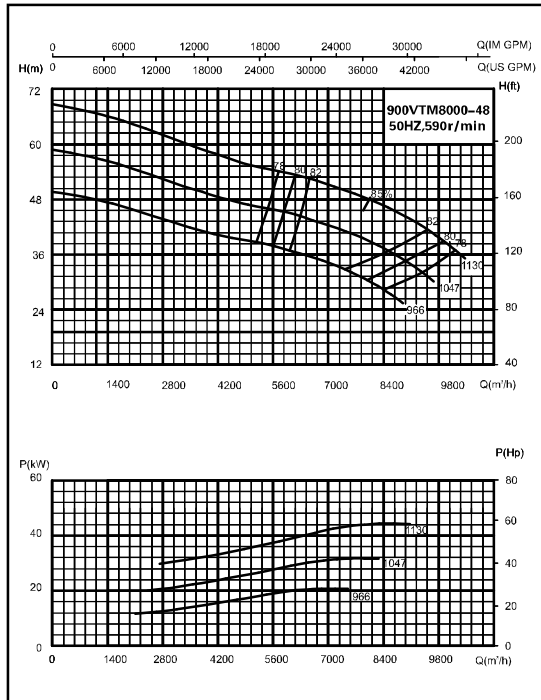


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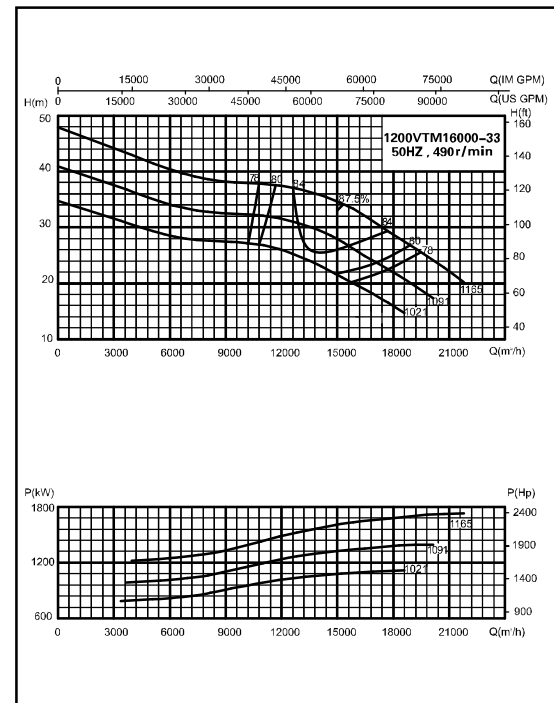
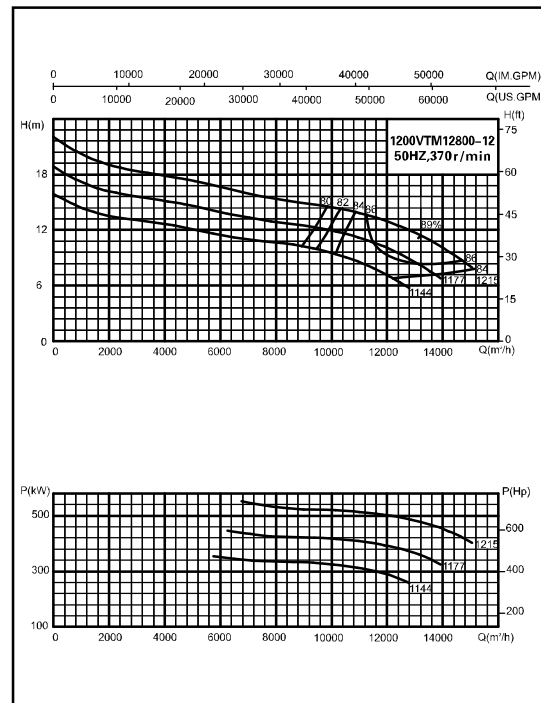
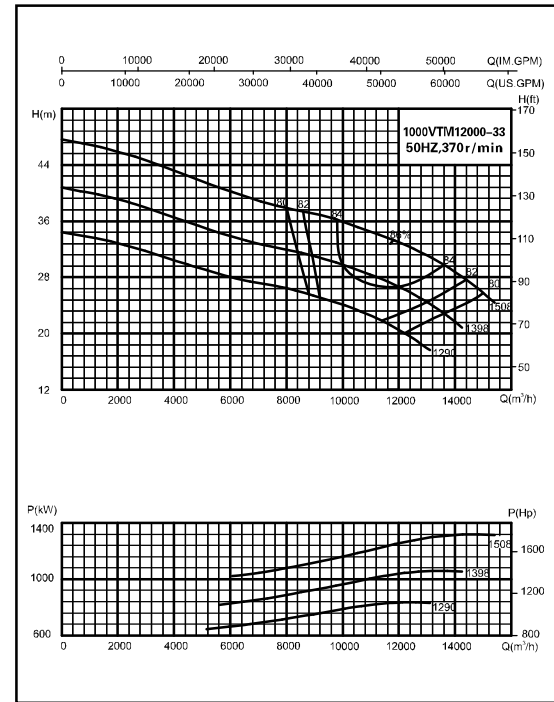
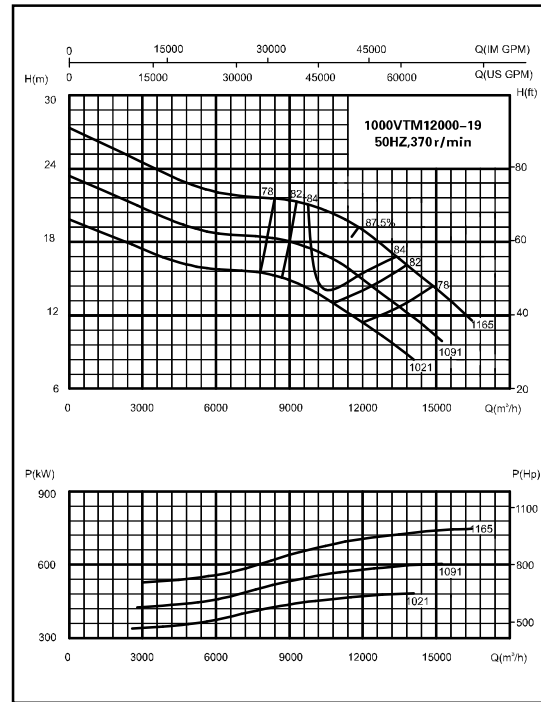


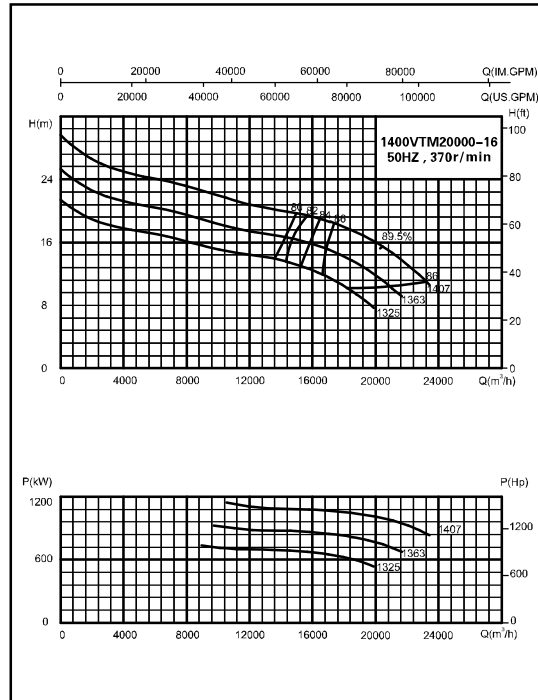
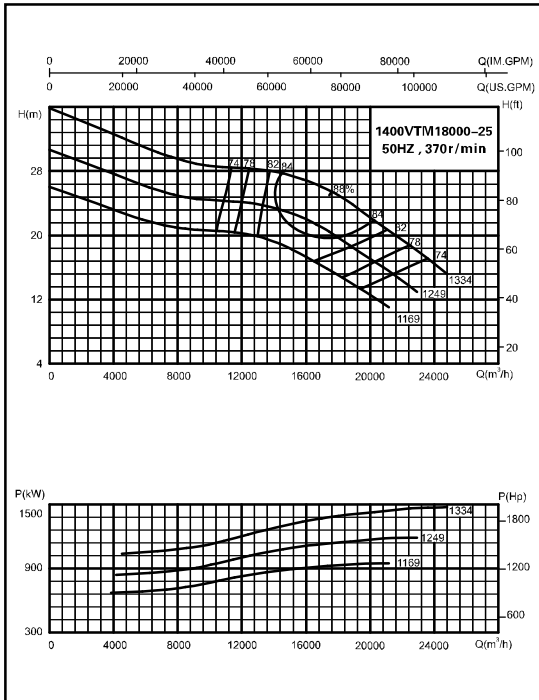
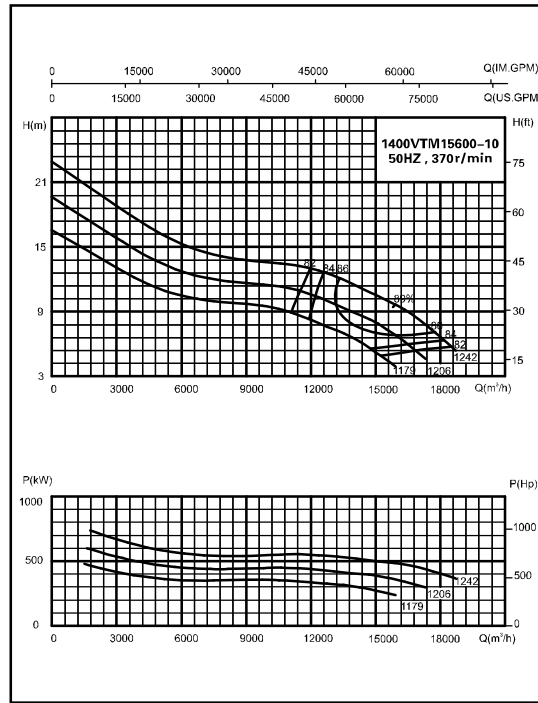
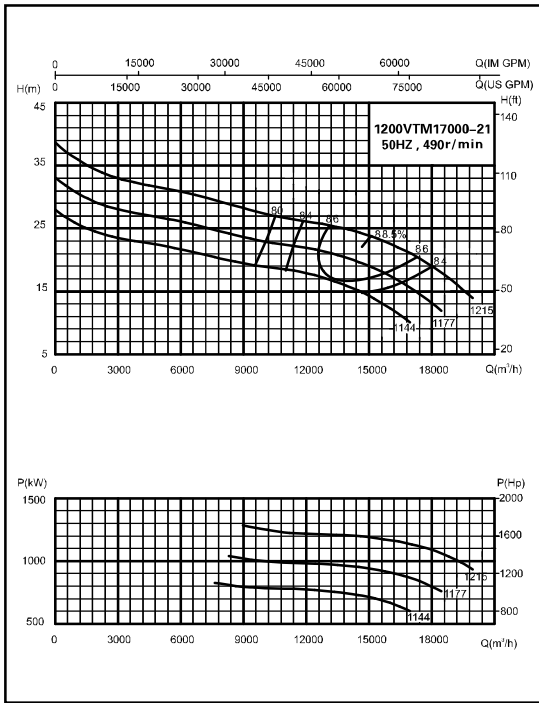
# VTP

## VTM, VTG Pump Curves



VTM, VTG Pump Curves





## VTA, VTG Vertical Turbine Pumps

### Specification range

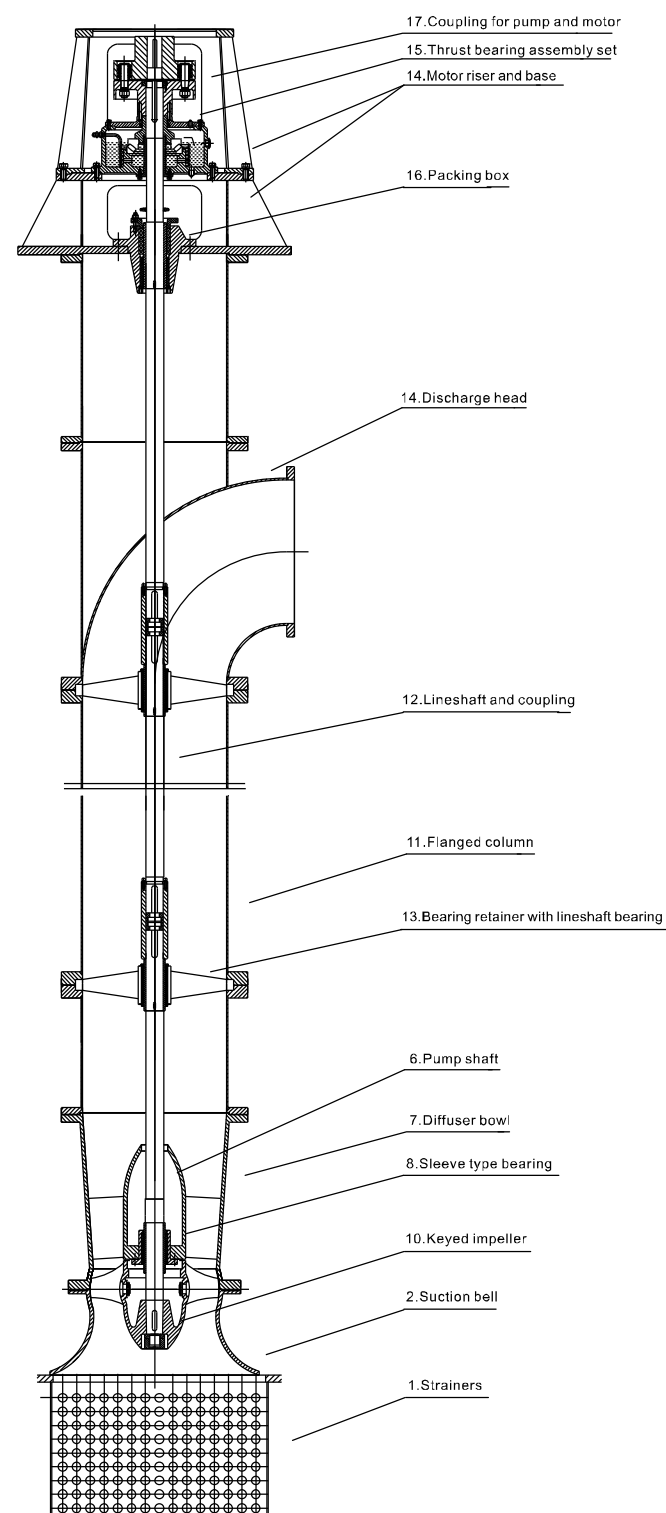
- Capacities to 50000 m<sup>3</sup>/h  
(220000GPM)
- Heads to 15 m (50ft)

### Design Advantages

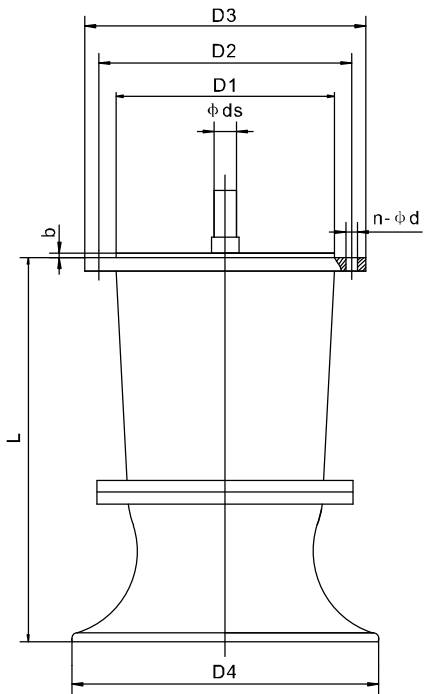
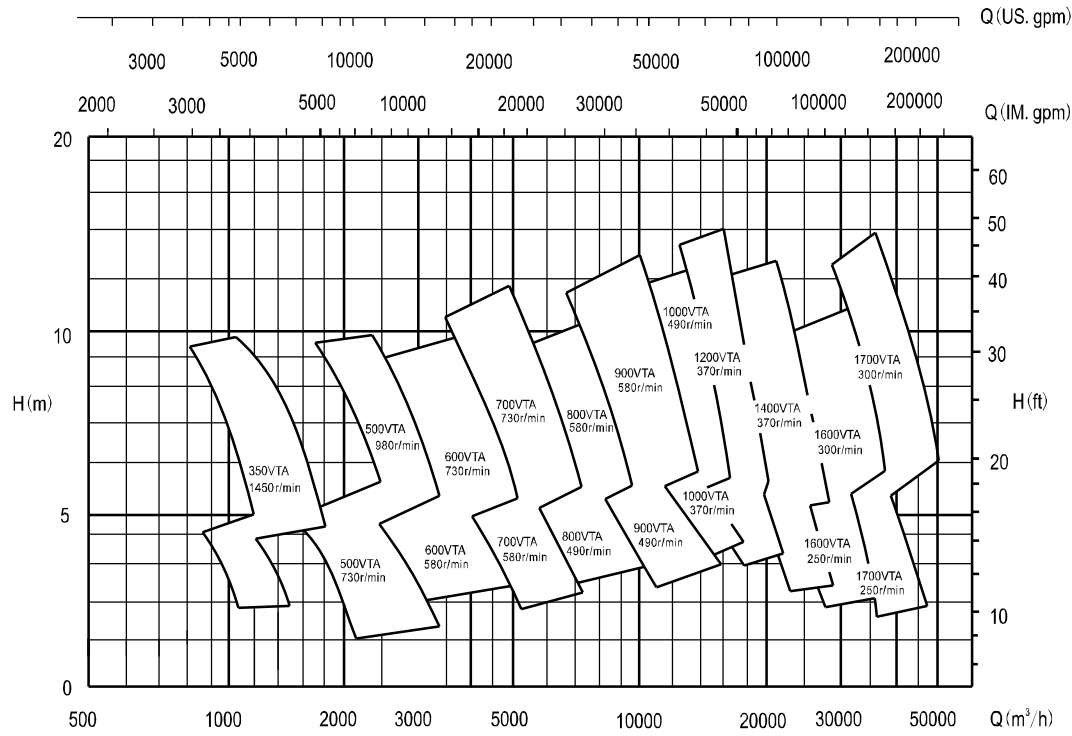
1. Fabricated discharge head for all sizes.
2. Seamless flanged ends column pipe and flanges bowl construction incorporating registered fits for ease of assembly during assembly.
3. Alloy construction with external tube flush of critical wear areas available for abrasive services.
4. High efficiency design. Broad hydraulic coverage provides best selection to meet specific operating conditions.
5. 416SS shafting. Keyed lineshaft coupling available in all size for ease of maintenance. The lineshaft can be protected by water flushing the enclosing tube bearing on corrosive/abrasive services.
6. Various bearing material available.
7. Wide range of corrosion and erosion resistant materials.
8. Flexible design to accommodate fixed or existing dimensions.

### Services

Pollution Control  
 Medium and Low Head Circulation  
 Effluent Disposal  
 Flood Control  
 Dewatering  
 River Water Intake  
 Cooling Water  
 Irrigation and Drainage  
 Dry Docks



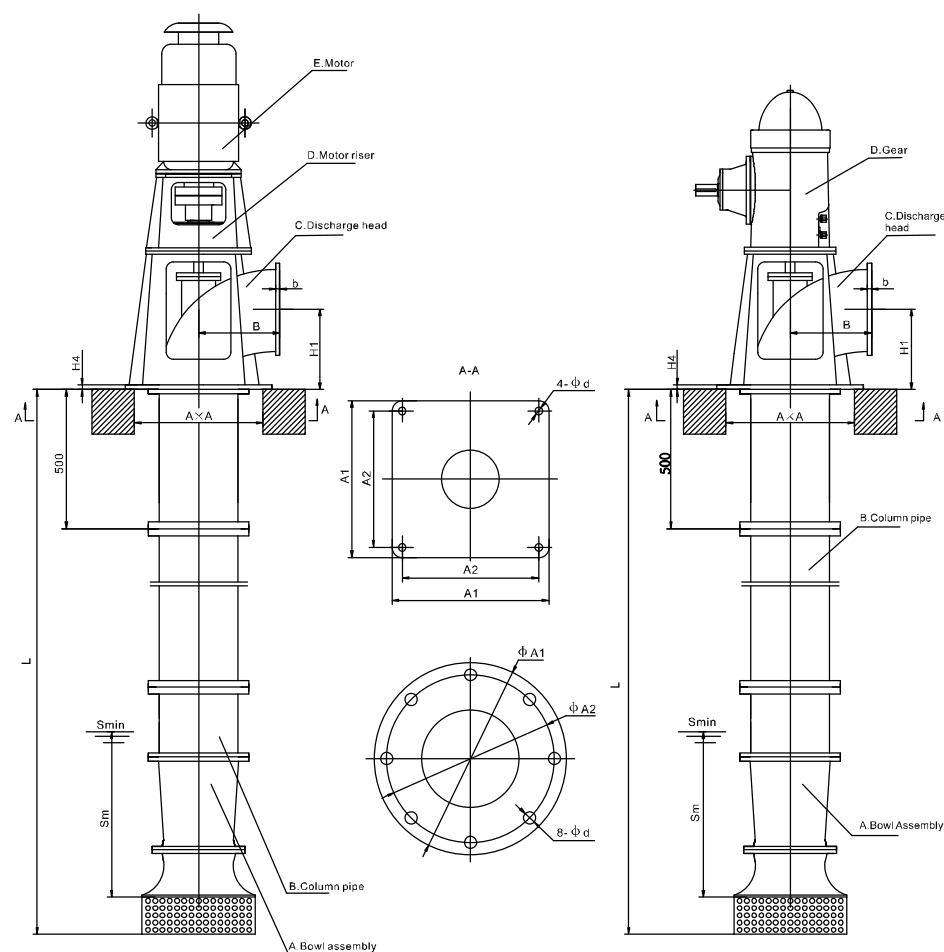
Selection Charts of VTA pumps



VTA Pump Bowl Assembly Dimensions

Model	Impeller Dia	D1	D2	D3	D4	L	$\phi ds$	b	n- $\phi d$
350VTA	300	370h6-h7	415	450	516	590	40	5	8- $\phi 18$
500VTA	450	520h6-h7	600	650	700	900	60	5	12- $\phi 23$
600VTA	550	620h6-h7	700	760	850	950	75	6	16- $\phi 23$
700VTA	650	720h6-h7	810	865	1000	1000	90	7	20- $\phi 25$
800VTA	750	820h6-h7	910	970	1120	1100	100	8	24- $\phi 25$
900VTA	850	920h6-h7	1020	1080	1280	1150	110	8	24- $\phi 30$
1000VTA	950	1020h6-h7	1120	1180	1400	1200	120	10	28- $\phi 30$
1200VTA	1100	1270h6-h7	1380	1450	1600	1300	140	10	32- $\phi 30$
1400VTA	1300	1420h6-h7	1530	1600	1750	1400	160	10	36- $\phi 30$
1600VTA	1500	1620h6-h7	1630	1700	1900	1500	180	10	40- $\phi 30$
1700VTA	1600	1720h6-h7	1830	1900	2150	1600	190	10	40- $\phi 30$

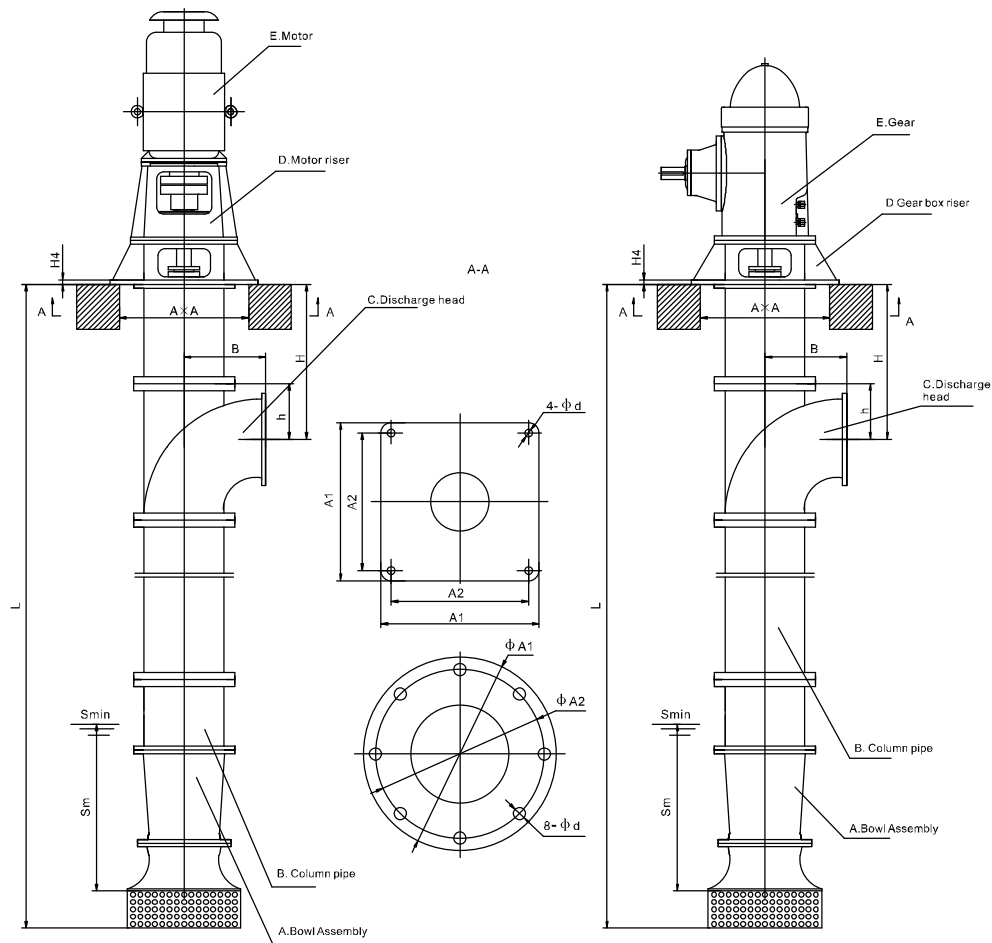
### VTA, VTG Pump Dimensions(Above Ground Discharge)



Model	$\phi A1$	$\phi A2$	A1	A2	$\phi d$	H1	H4	B	S <sub>m</sub>	$\phi A$
350VTA	/	/	930	870	30	370	35	550	600	550
500VTA	/	/	1230	1160	33	520	40	700	900	750
600VTA	1800	1700	/	/	36	600	45	750	1000	850
700VTA	1500	1400	/	/	36	700	50	850	1200	950
800VTA	1800	1700	/	/	36	800	55	1050	1400	1100
900VTA	1800	1700	/	/	36	900	60	1050	1600	1200
1000VTA	1950	1850	/	/	42	1000	60	1150	1800	1300
1200VTA	2250	2150	/	/	42	1200	60	1250	2200	1600
1400VTA	2550	2450	/	/	42	1400	60	1450	2600	1800
1600VTA	3150	3050	/	/	46	1600	60	1750	2800	2000
1700VTA	3200	3100	/	/	46	1700	60	1750	3000	2200

According to customer requirement: Discharge flanges drilled to ISODIN. BS or ANSI standrd.

VTA, VTG Pump Dimensions ( Below Ground Discharge )

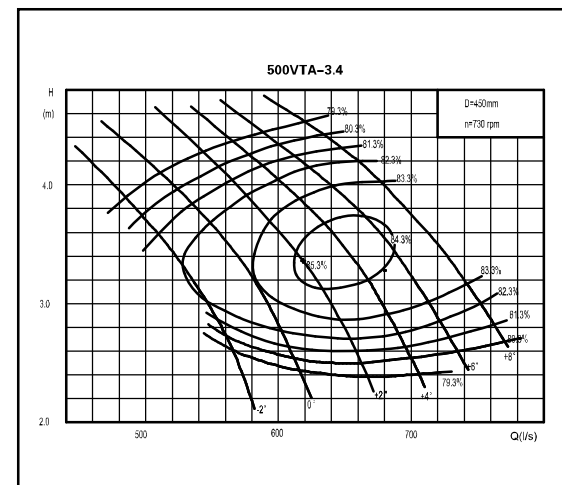
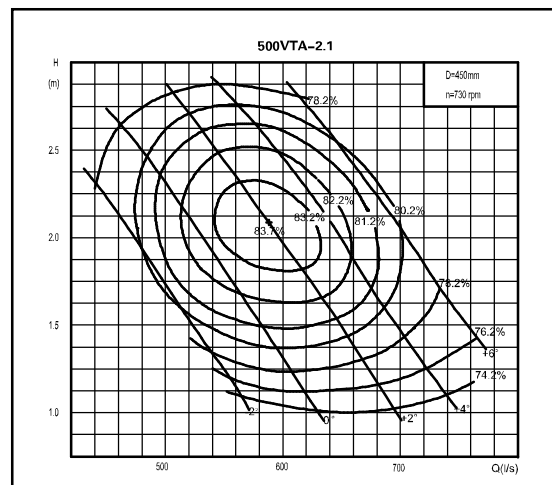
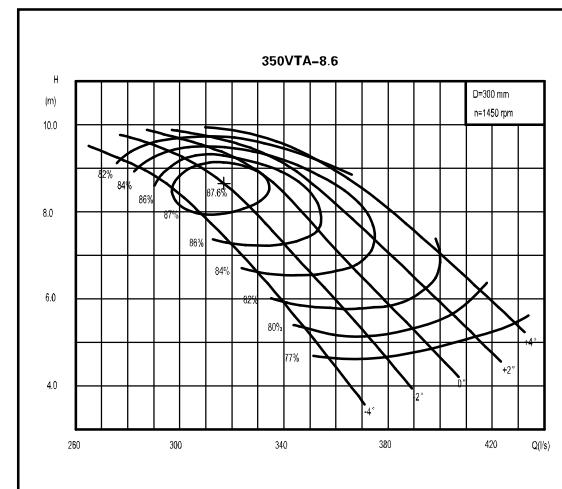
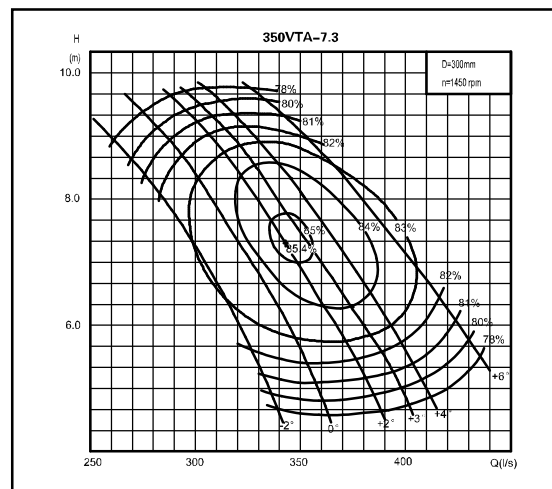
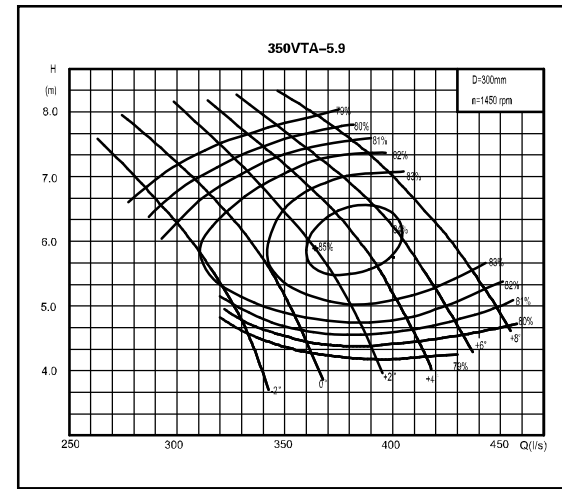
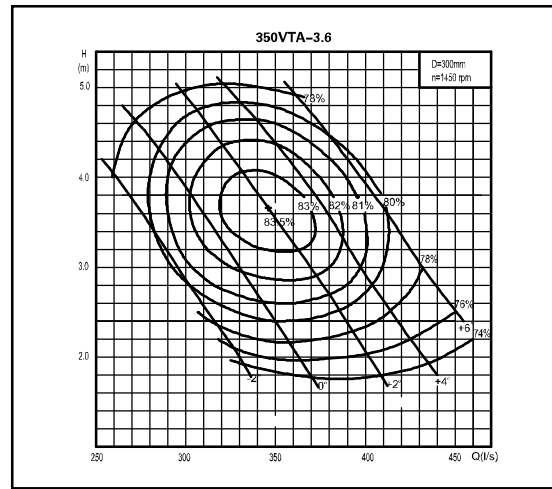


Model	$\phi A1$	$\phi A2$	A1	A2	$\phi d$	H	B	S <sub>min</sub>	A×A
350VTA	—	—	930	870	30	370	550	600	700×700
500VTA	—	—	1230	1160	33	520	700	900	1000×1000
600VTA	1800	1700	—	—	36	600	750	1000	1300×1300
700VTA	1500	1400	—	—	36	700	850	1200	1800×1800
800VTA	1800	1700	—	—	36	800	1050	1400	2000×2000
900VTA	1800	1700	—	—	36	900	1050	1600	2200×2200
1000VTA	1950	1850	—	—	42	1000	1150	1800	2400×2400
1200VTA	2250	2150	—	—	42	1200	1250	2200	2600×2600
1400VTA	2550	2450	—	—	42	1400	1450	2600	3000×3000
1600VTA	3150	3050	—	—	46	1600	1750	2800	3200×3200
1700VTA	3200	3100	—	—	46	1700	1750	3000	3500×3500

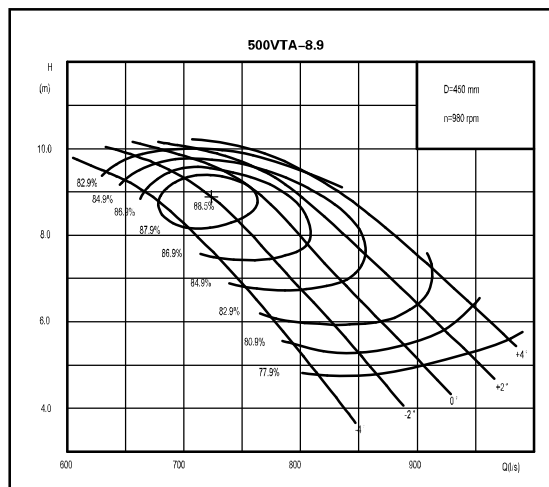
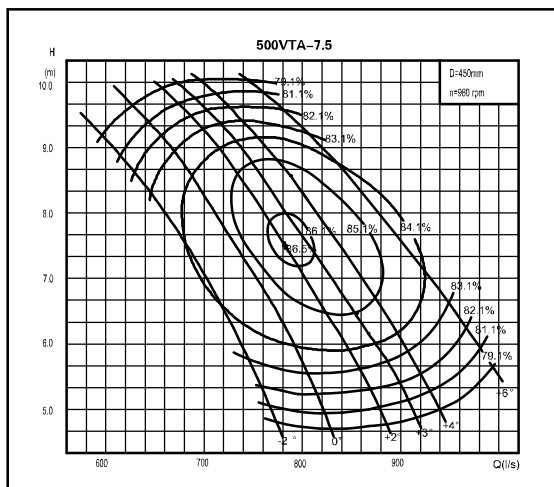
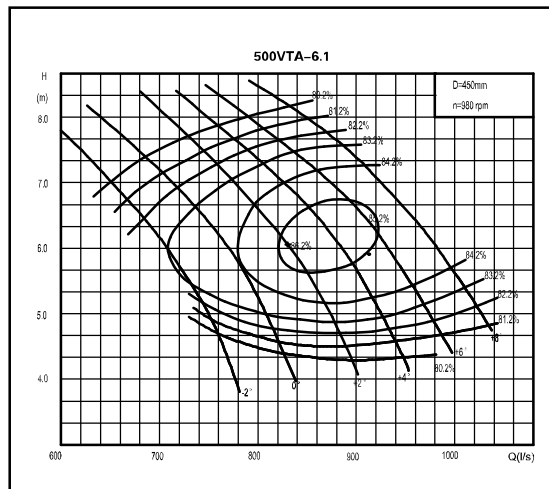
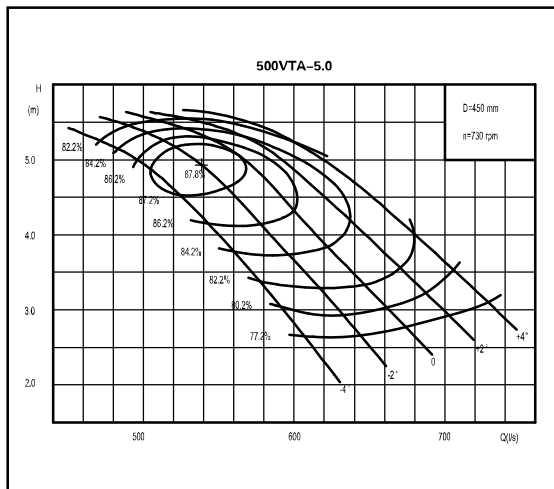
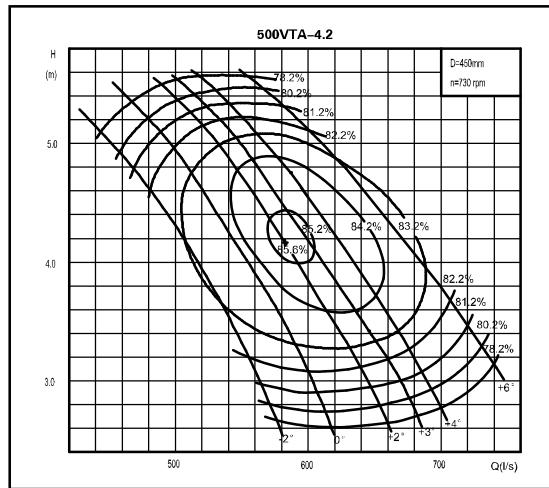
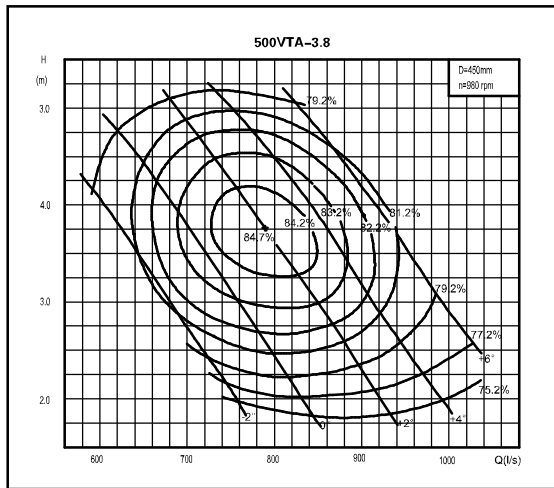
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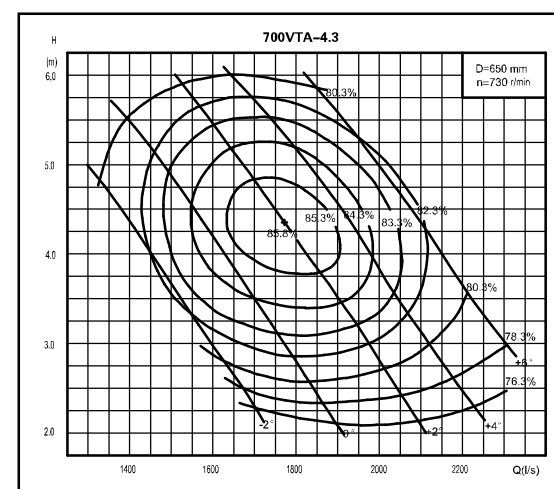
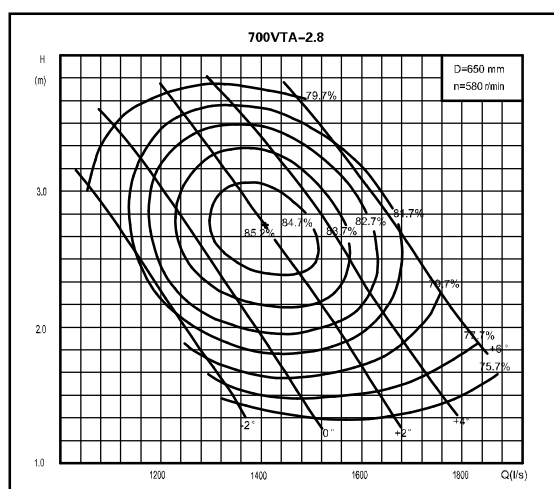
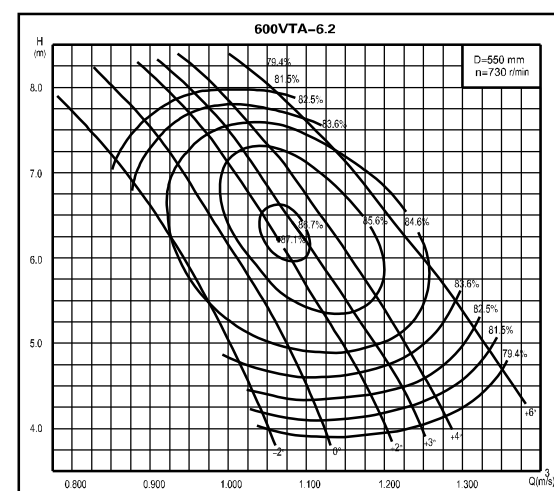
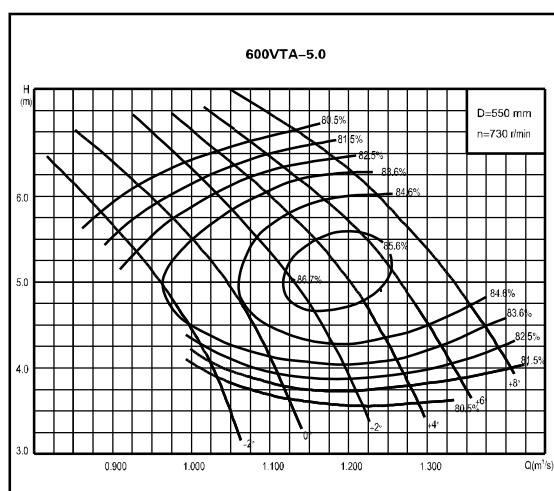
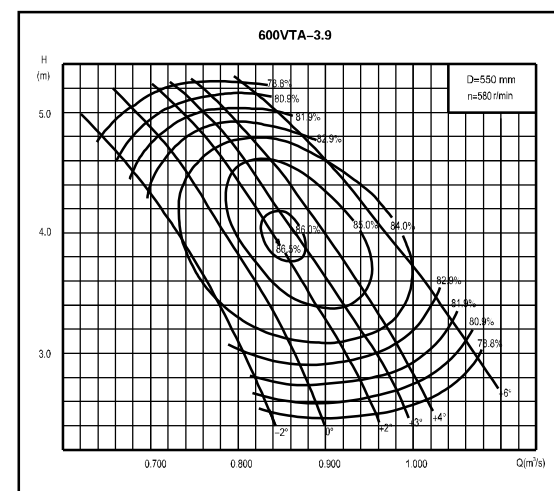
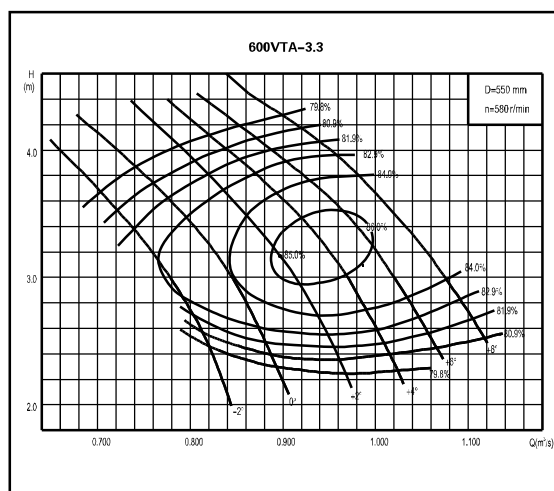
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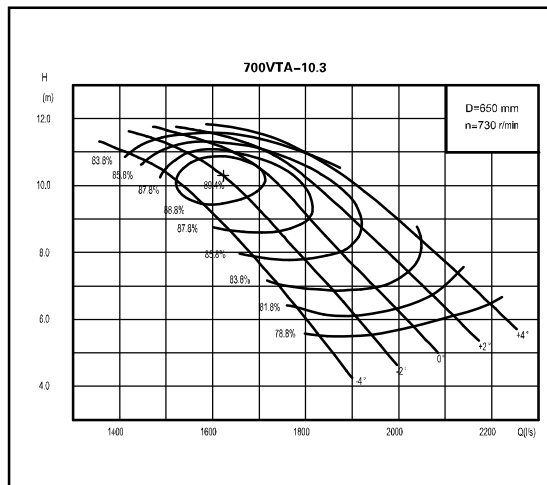
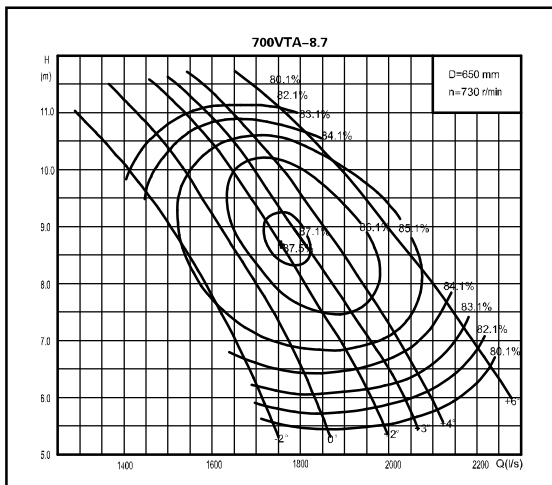
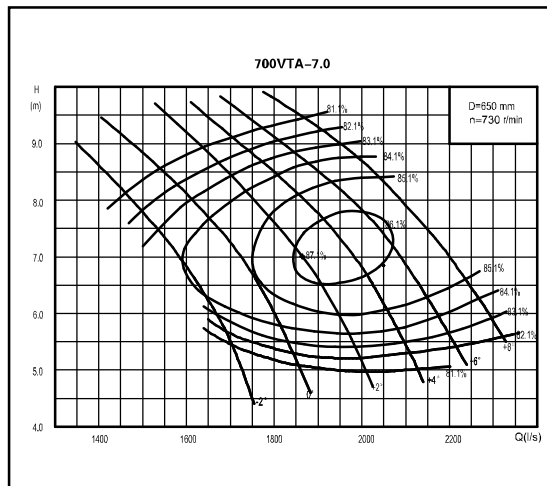
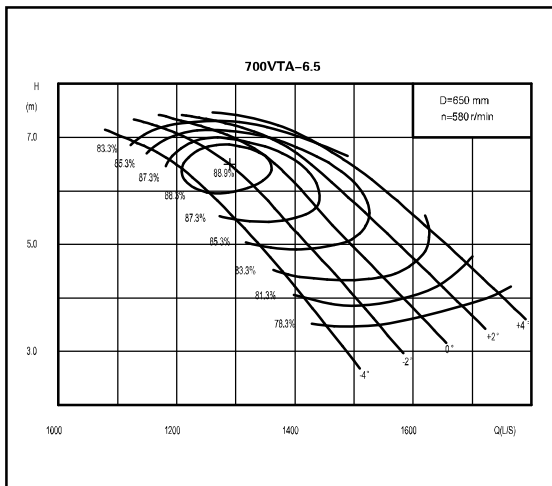
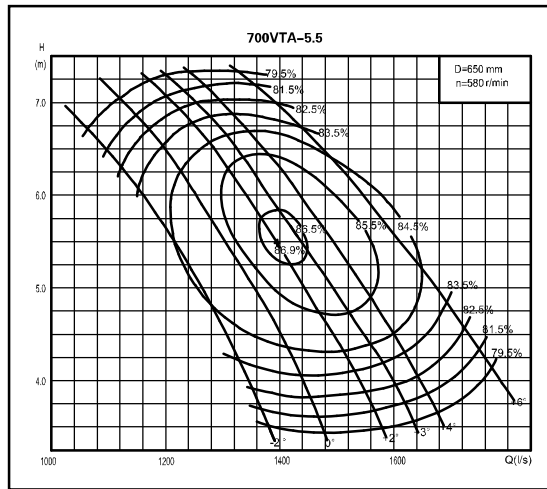
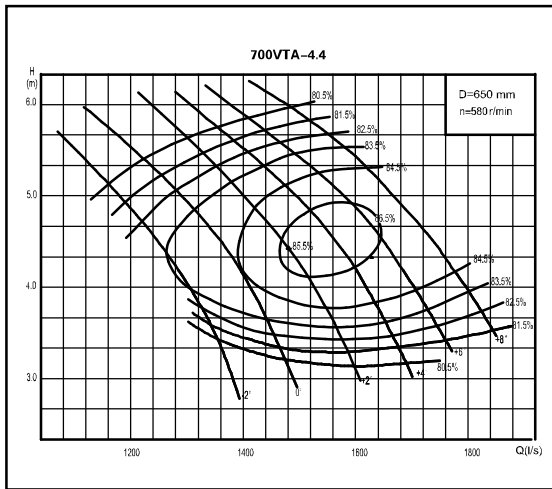
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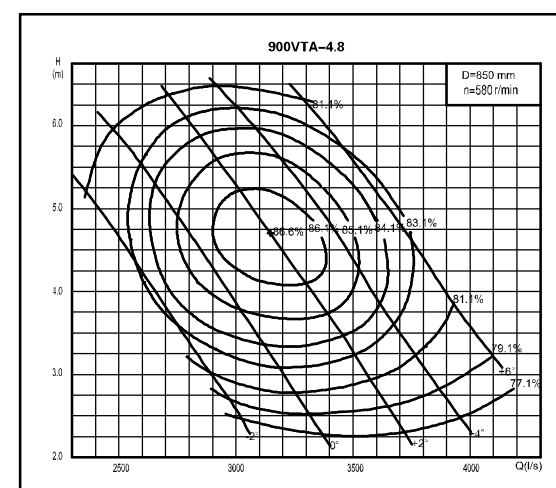
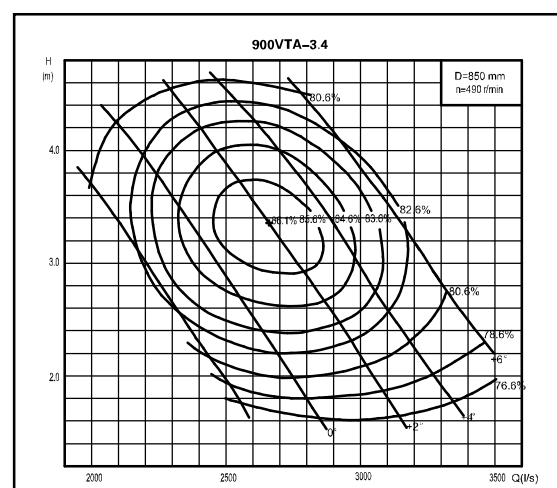
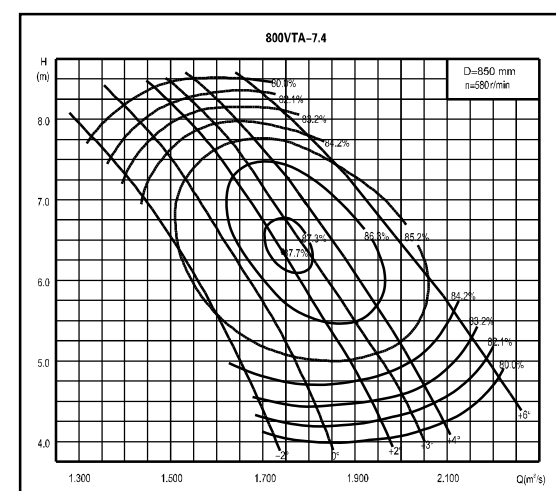
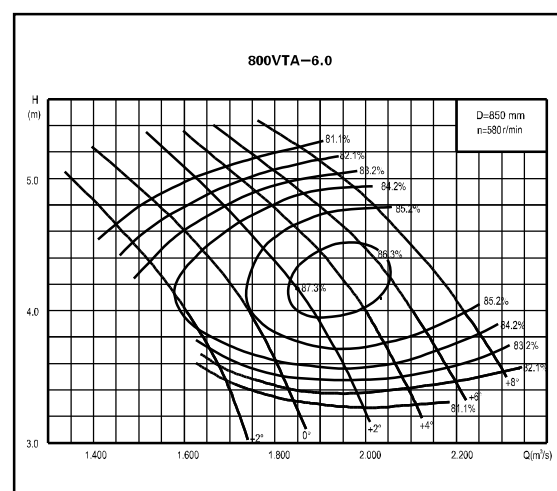
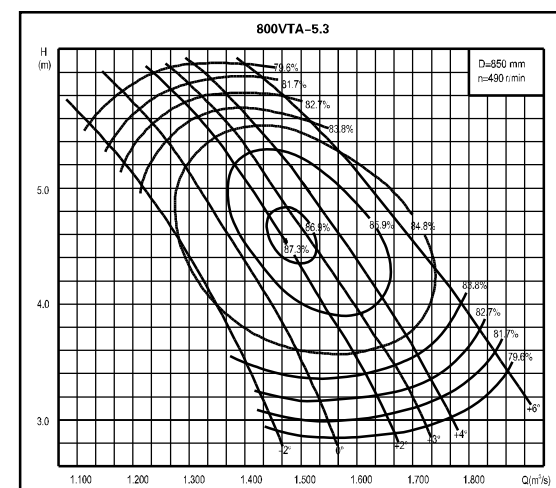
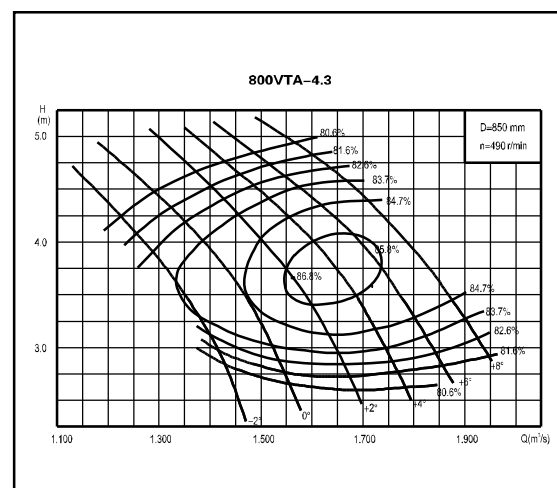
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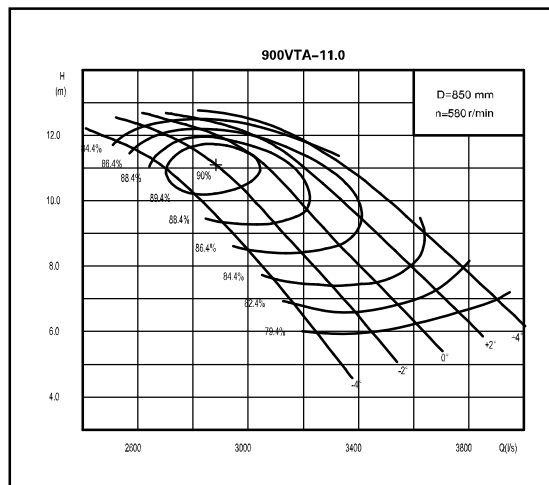
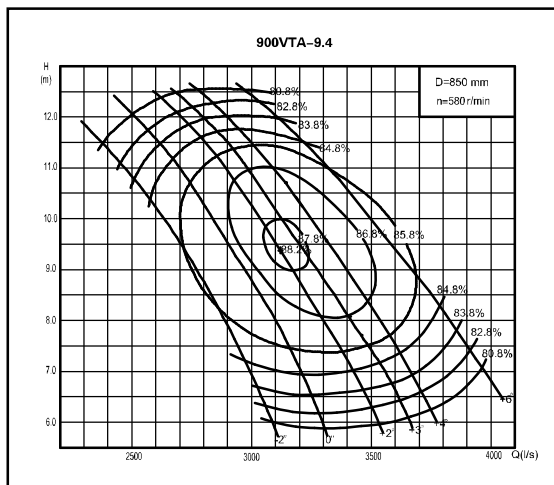
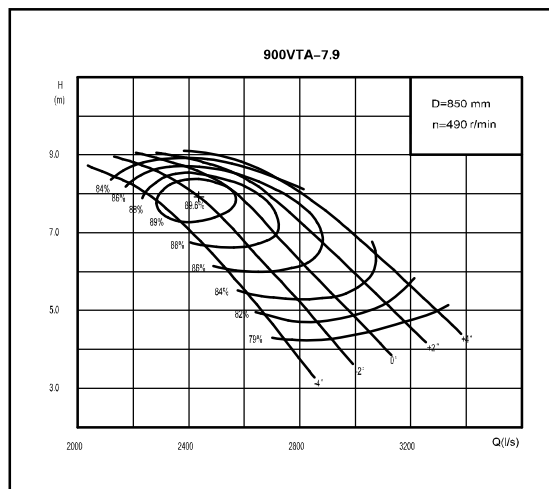
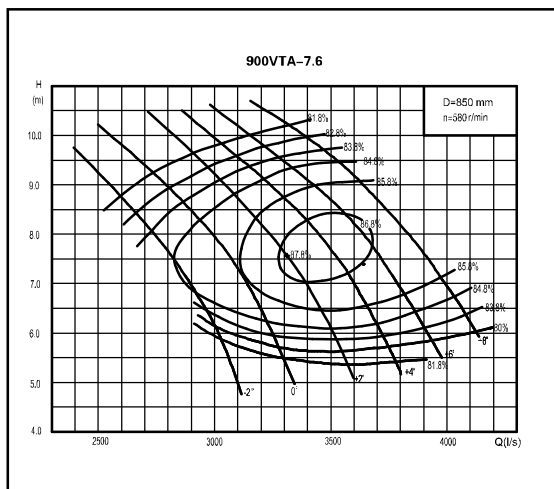
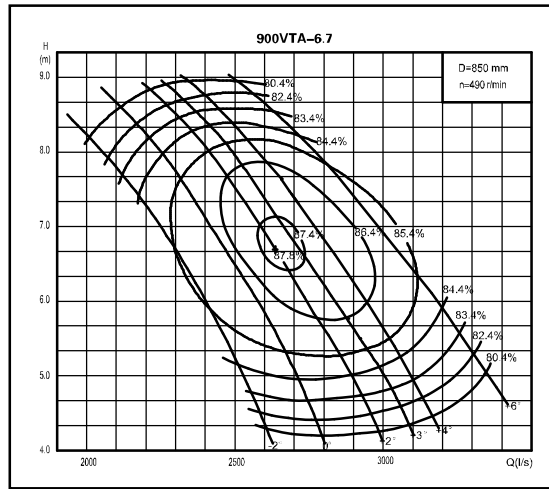
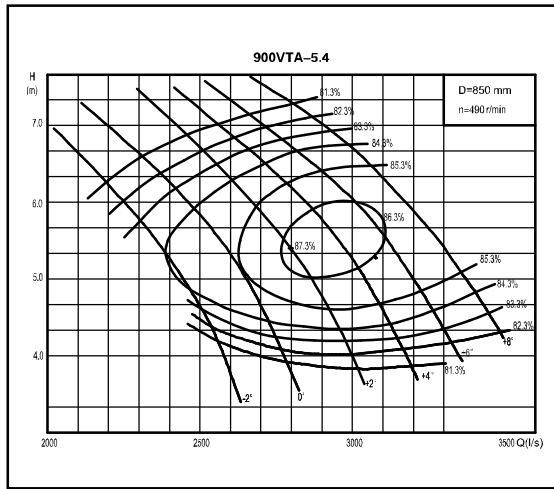
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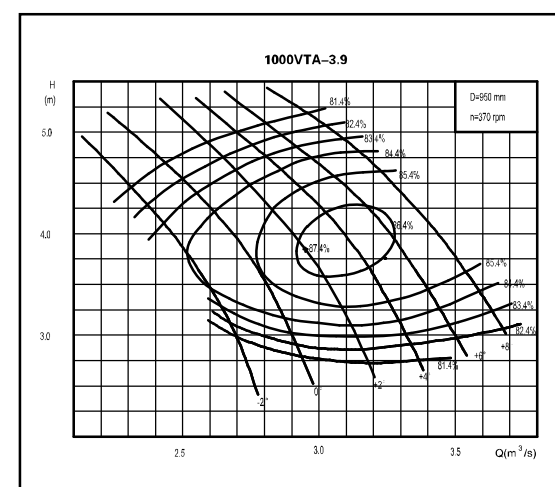
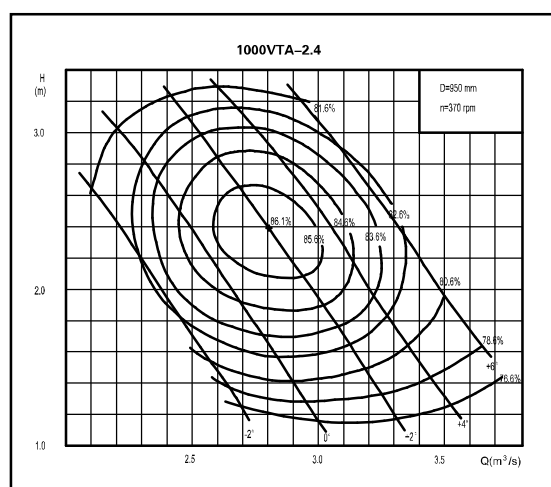
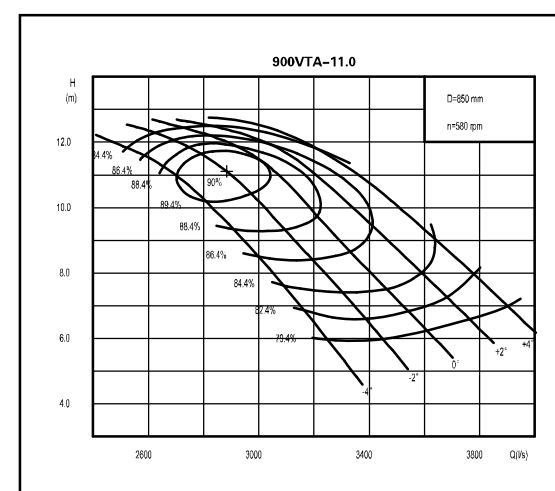
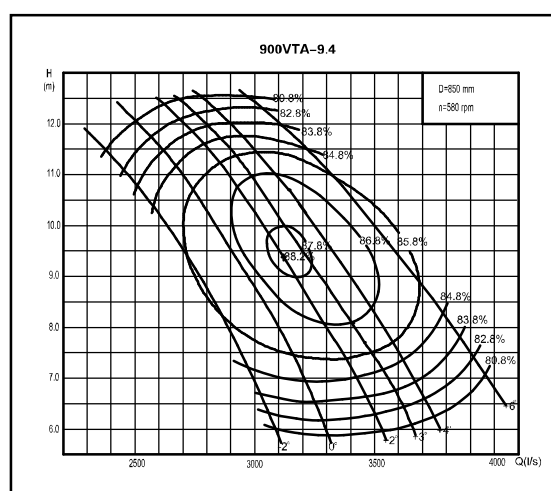
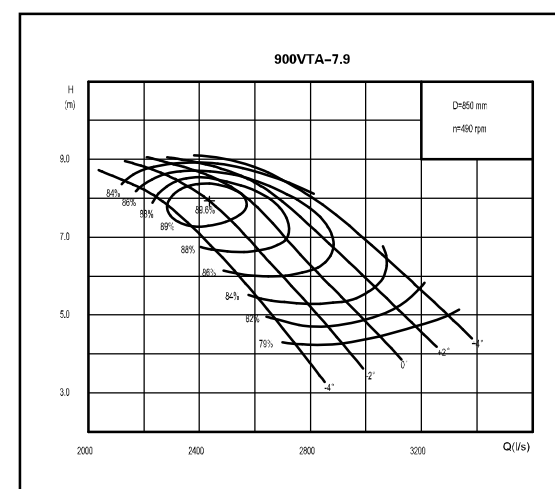
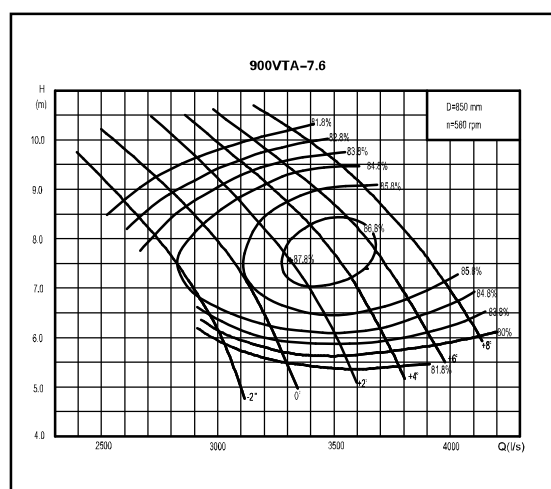
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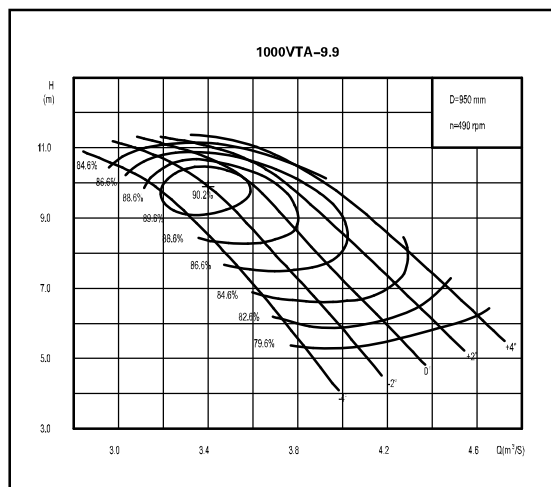
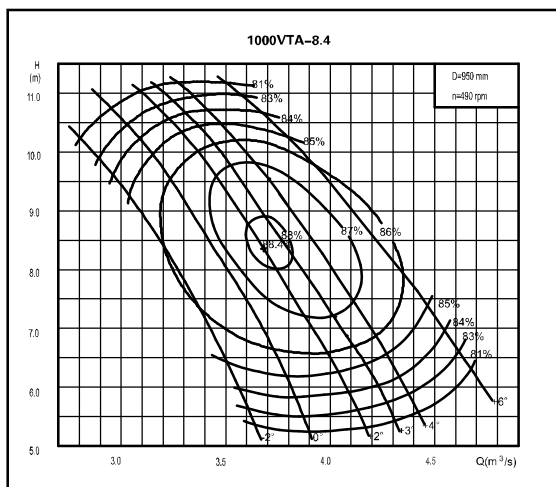
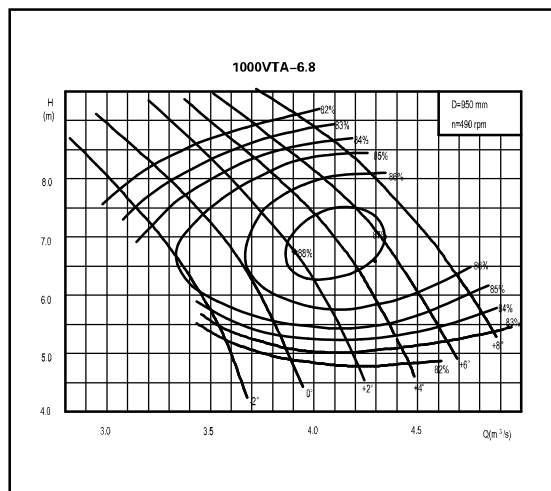
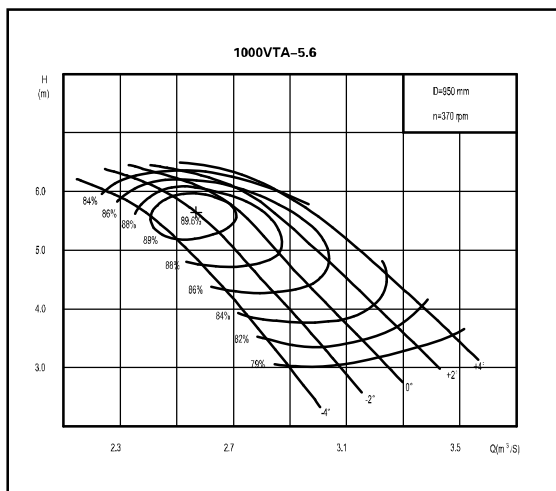
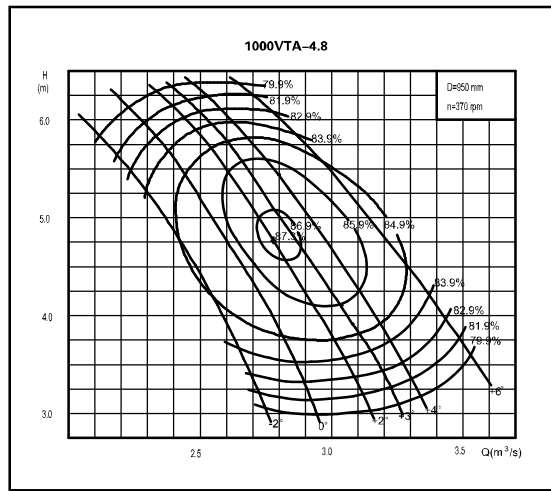
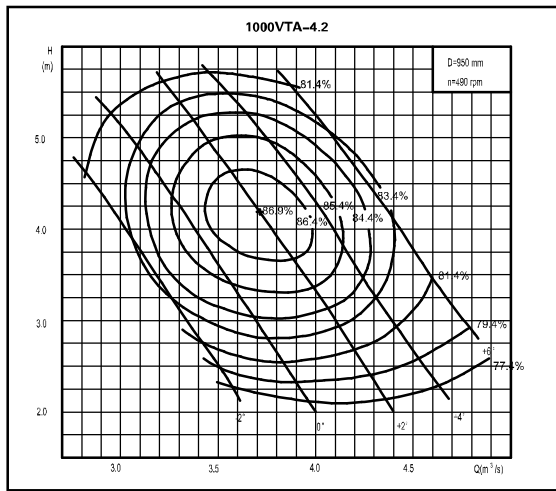
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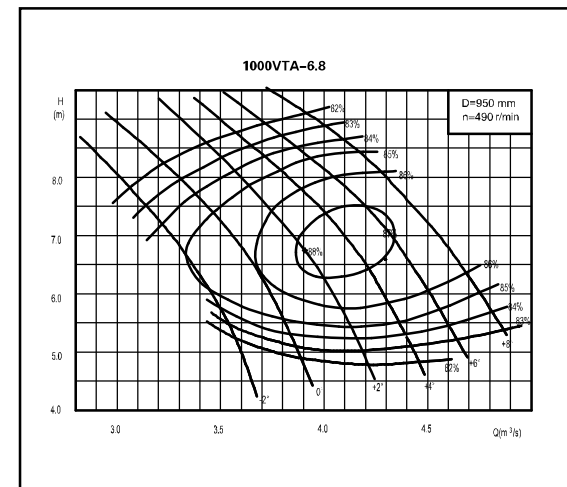
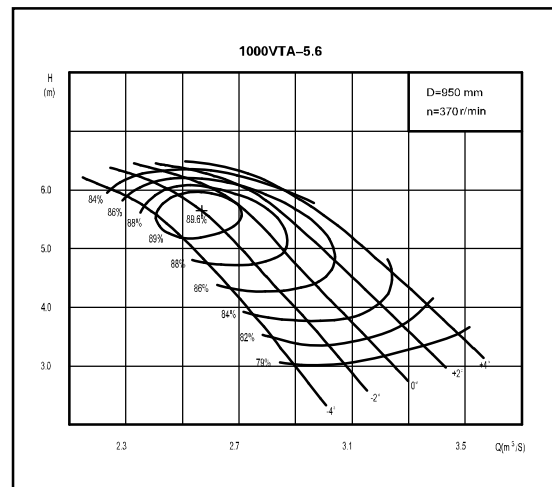
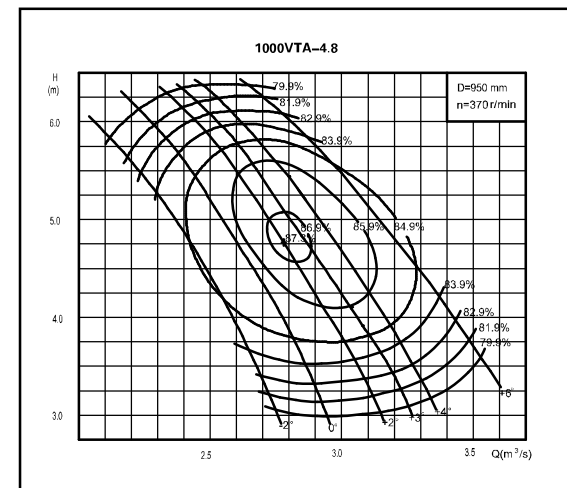
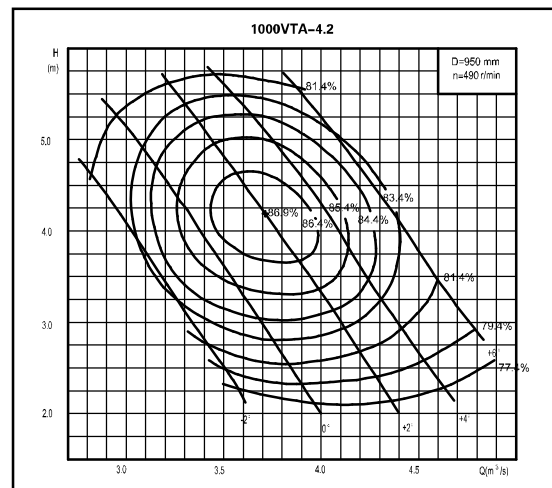
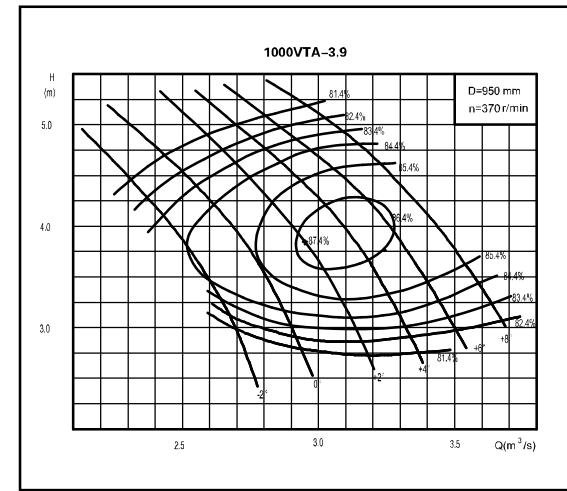
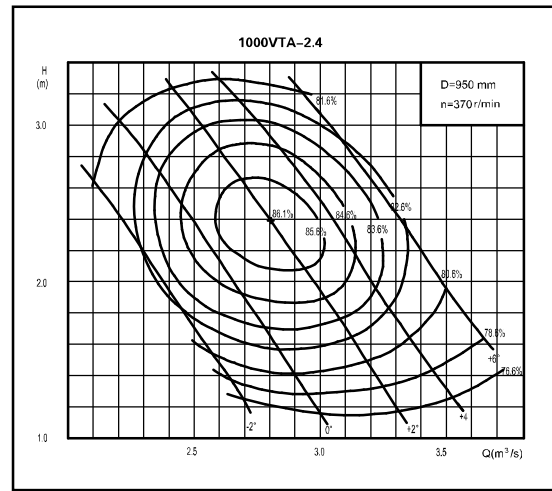


VTA,VTG Pump Curves

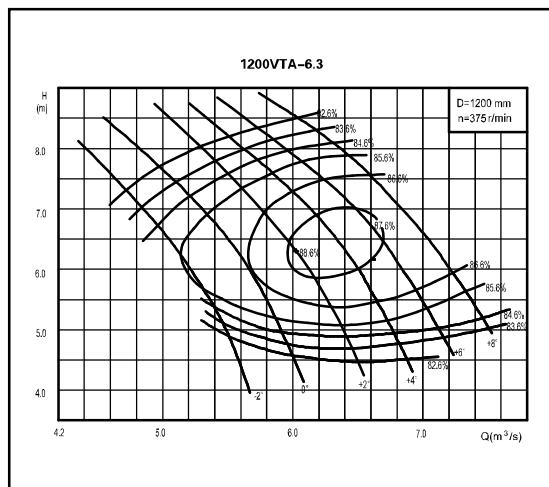
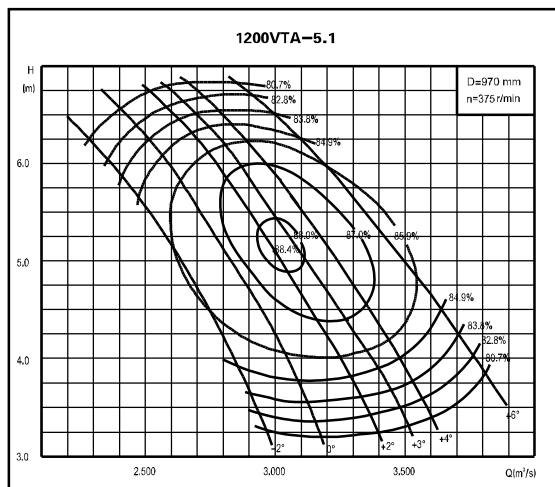
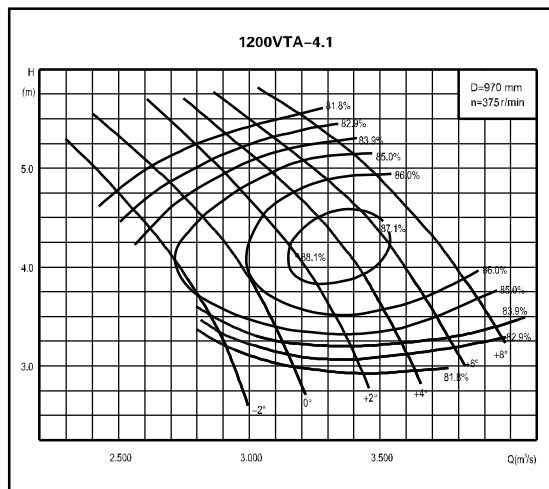
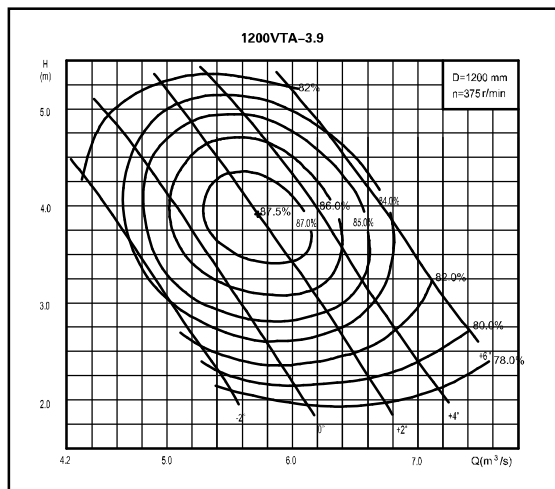
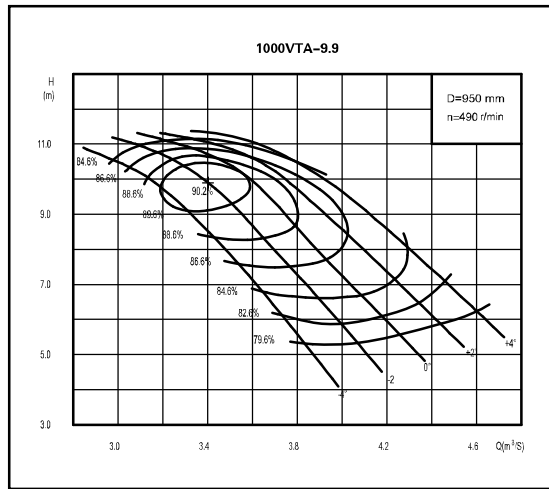
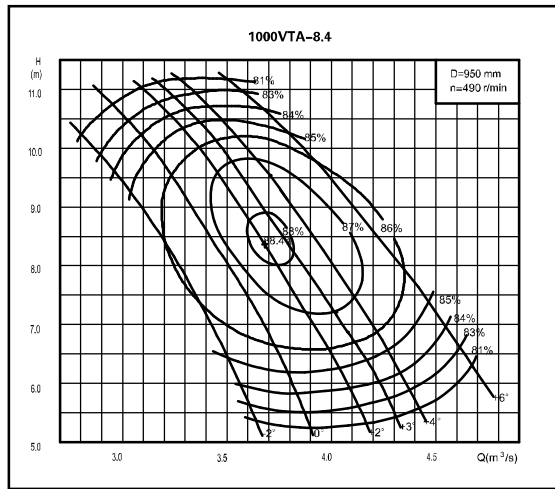




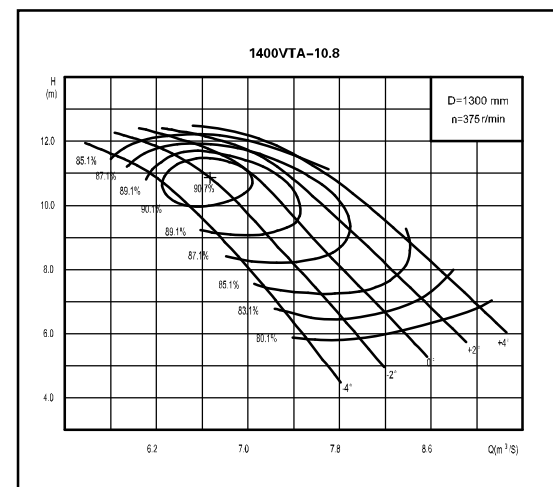
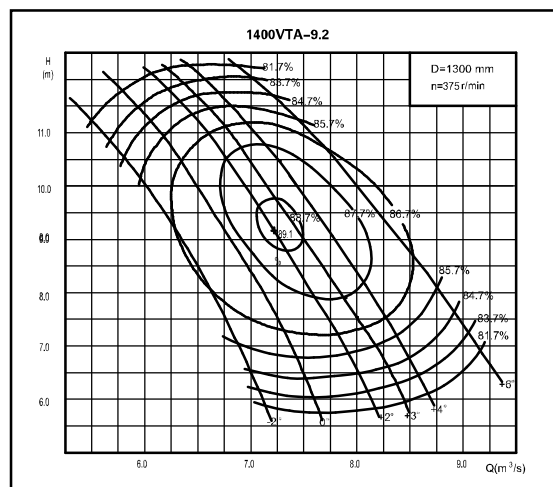
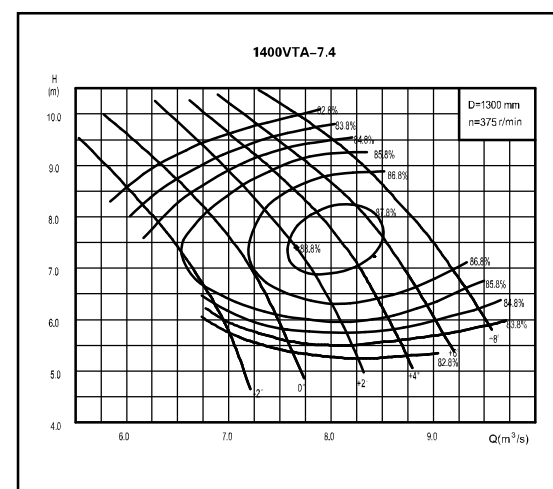
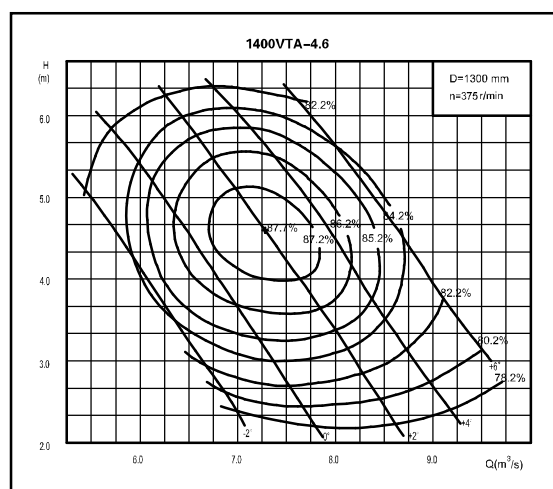
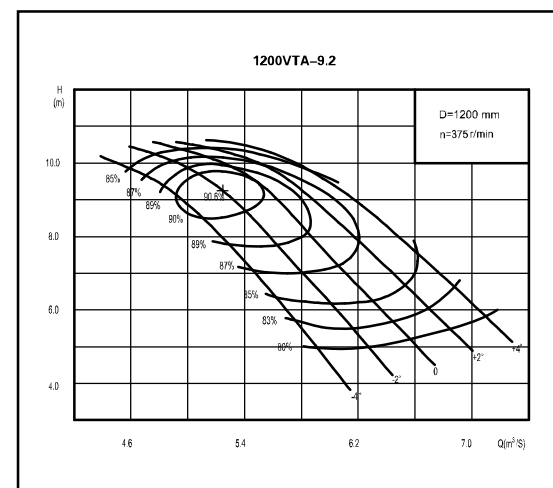
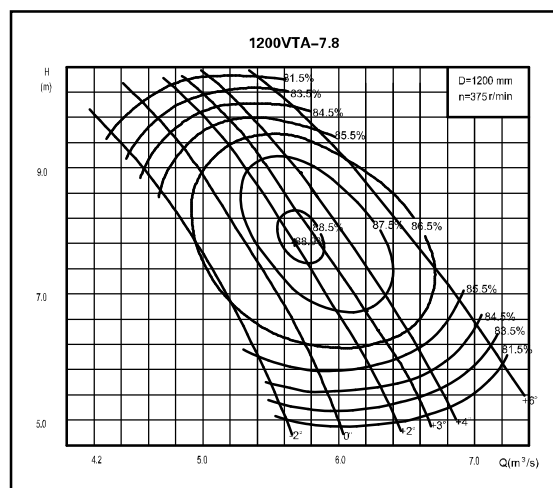
VTA,VTG Pump Curves



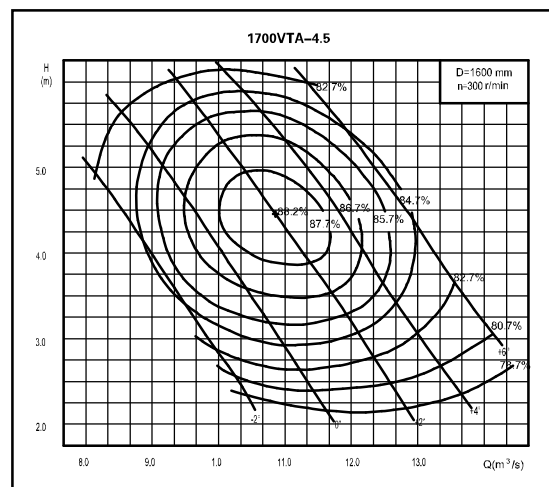
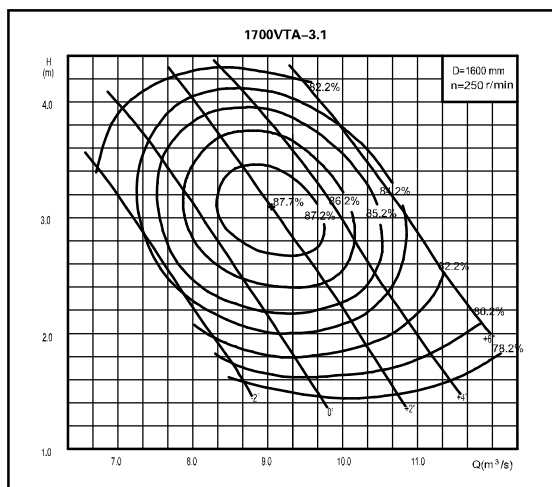
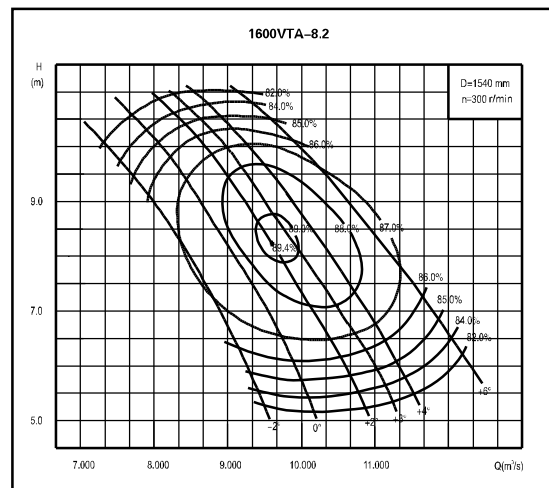
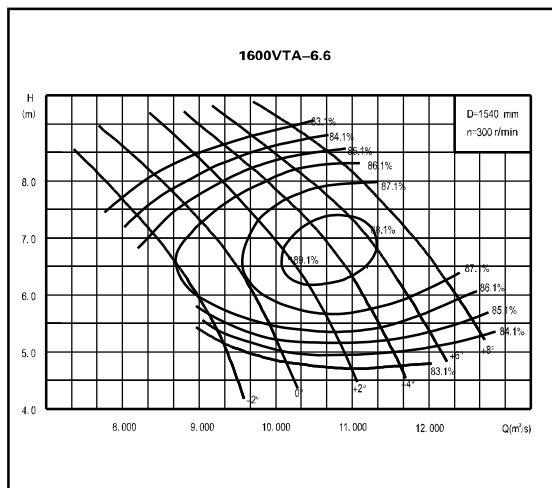
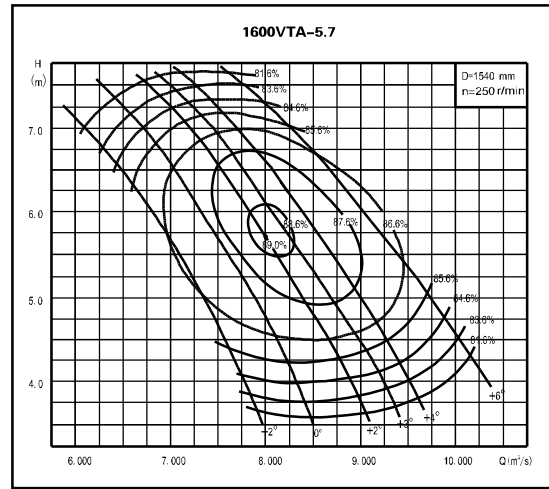
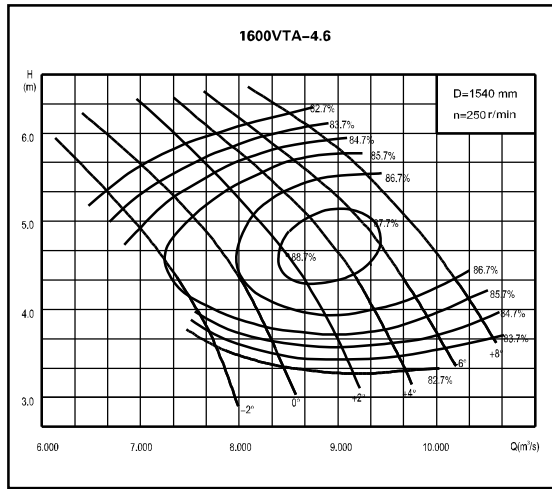
VTA,VTG Pump Curves



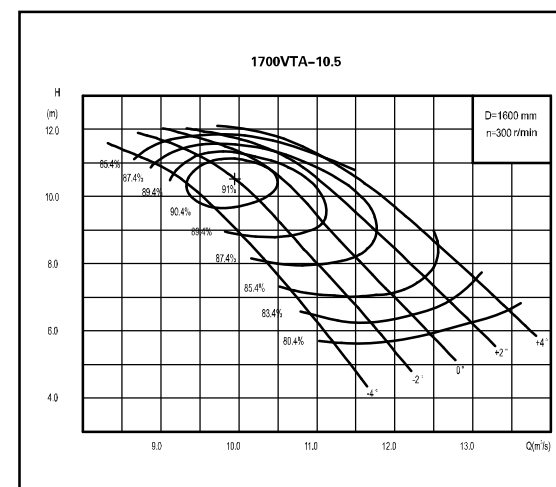
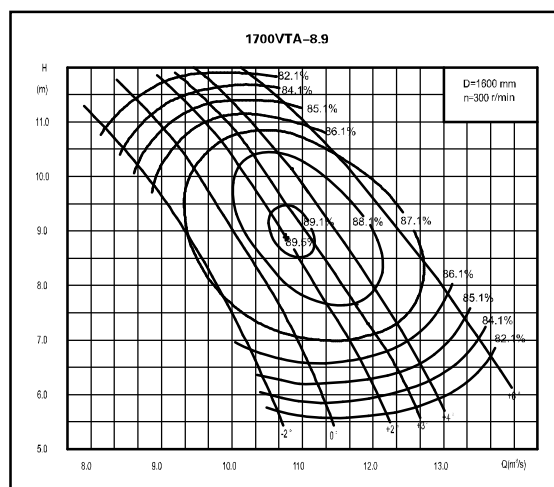
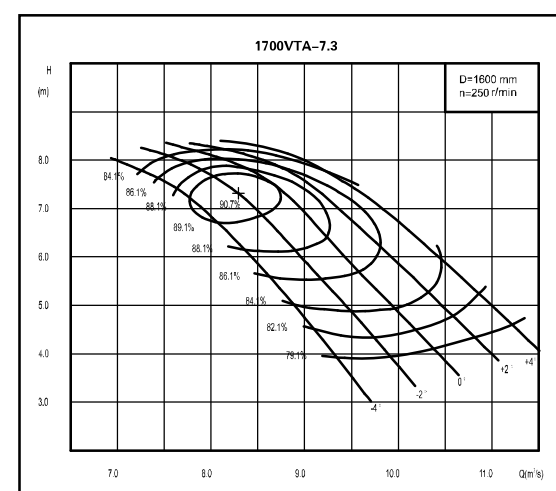
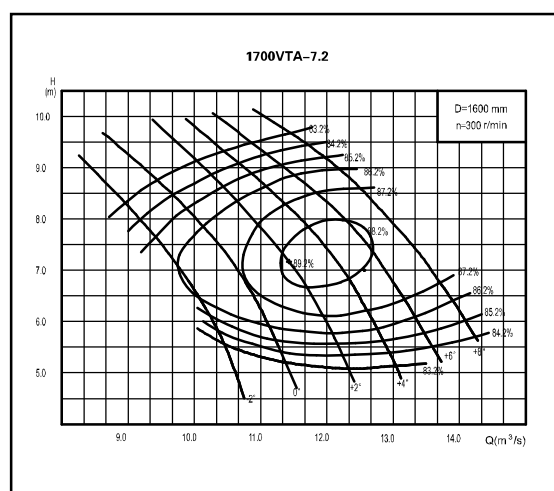
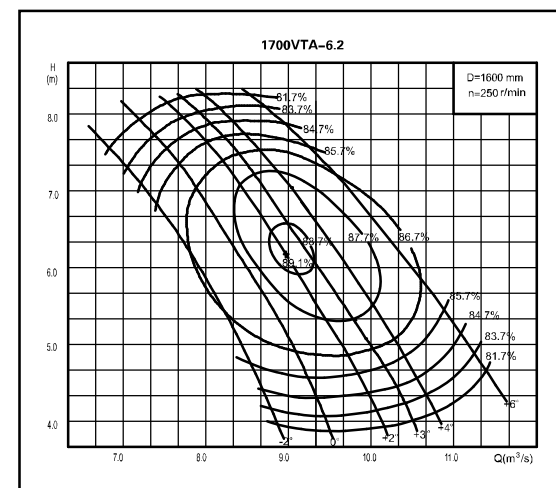
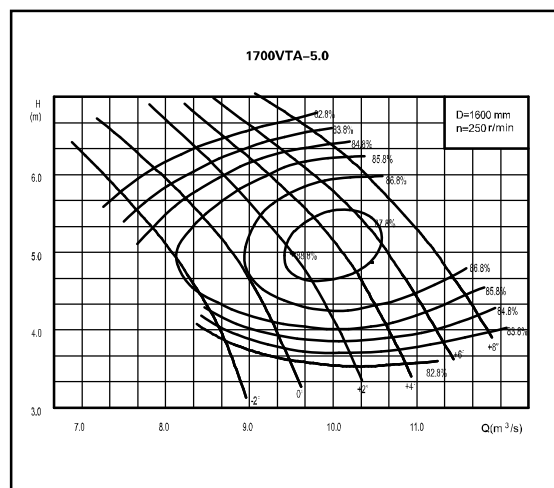
## VTA,VTG Pump Curves



VTA,VTG Pump Curves



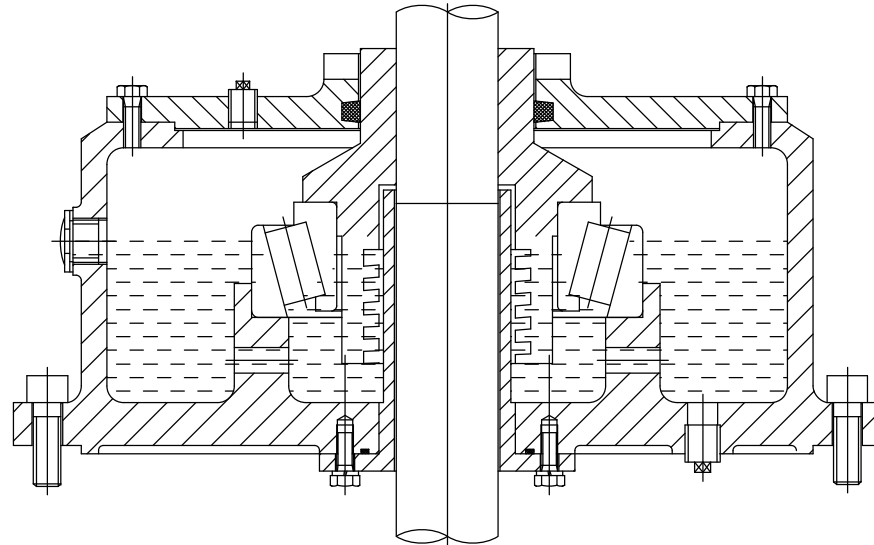
## VTA,VTG Pump Curves



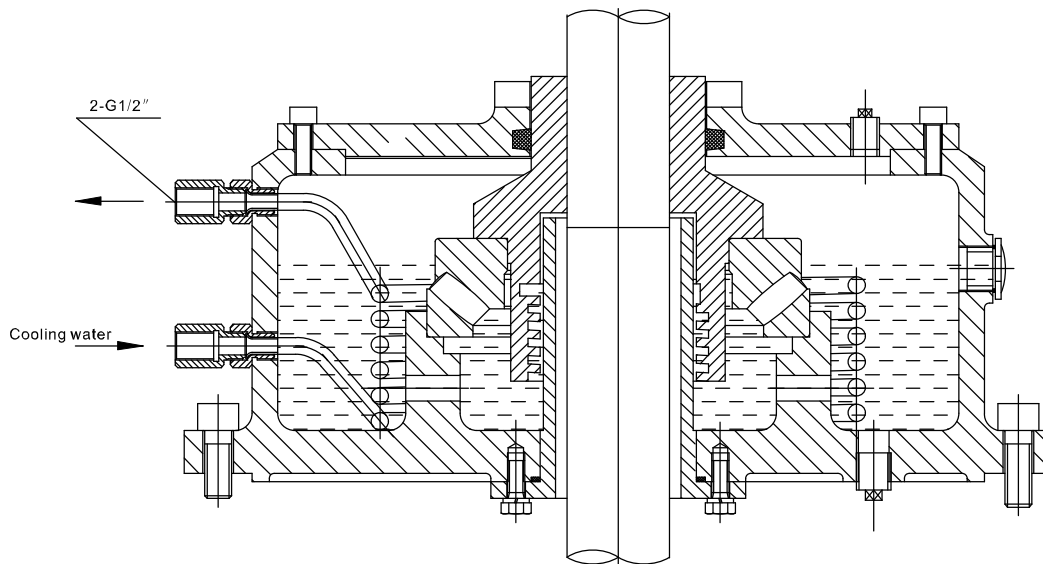
**Oil Lubricated Thrust Bearing Assembling Sets**

When the VTP designed driven by VSS motor, the pump's thrust will be loaded by the thrust bearing on the top of the pump or loaded by the top thrust bearing of the VSS motor.

CNP can supply two kinds of different thrust bearing assembly sets as following, design for the pumps with lower and higher thrust.

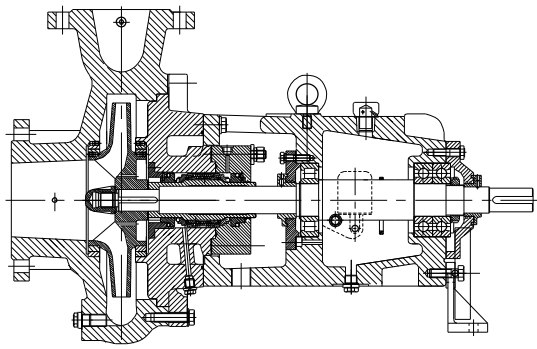


**Standard thrust bearing assembly set**



**Water cooling heavy duty thrust bearing assembly set**

**FCNP**<sup>®</sup>



CE Heavy Duty Petrochemical Process Pumps



**Application**

Refineries	Petrochemical industry
Coal processing	Lower temperature engineer
Chemical industry	Fibre industry
Paper and pulp industry	Sugar industry
Sea water	Water industry
Air condition	Nuclear power station
Offshore industry	

**Performance Range**

Size	25 up to 400mm
Capacity	up to 2600m <sup>3</sup> /h
Head	up to 250m
Working pressure	up to 16Mpa
Operating temperature	-80°C up to +450°C

**Standard Material**

According to API 610 standard

**Description**

Single stage, horizontal volute casing pump with feet below and single entry impeller, end suction type. Depending on operating conditions hydraulic balance provided by front or wear rings and balance holes.

Full compliance with the latest edition of API 610, heavy duty fan cooled bearing housing, heavy duty and non-grout baseplates for PAU and offshore application.

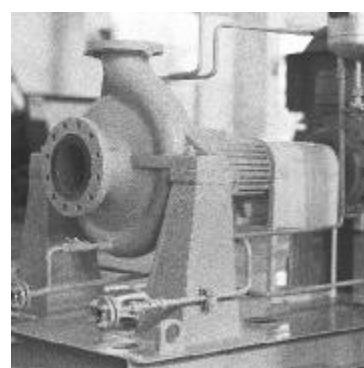
Casing cover with cooling or heating connections, shaft sealing by packing or mechanical seals of any design (single or double working), connections for cooling, flushing or sealing liquid.

Standard pipework according to API 682 Plans. Cooling system for high temperature pumping. Flanges according to DIN or ANSI.

CA working pressure up to 2.5Mpa, can be supplied with open impeller. (OH1)

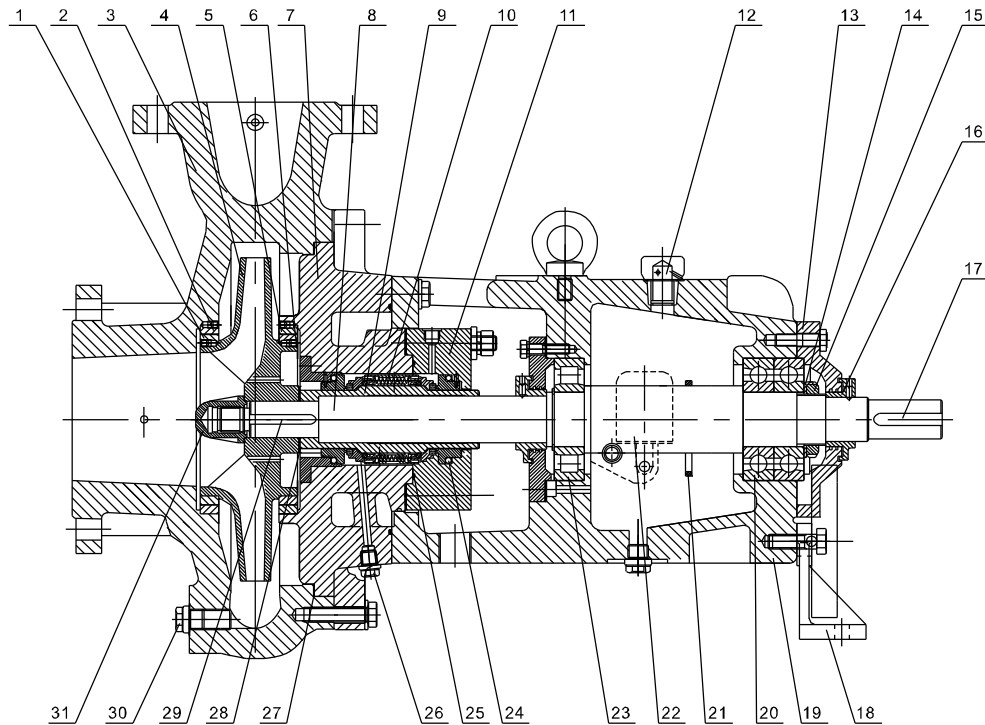
CE working pressure up to 5.0Mpa, can be supplied with open impeller. (OH2)

CF working pressure up to 7.5Mpa. (Oh2)



## Sectional Drawing

- |                       |                          |
|-----------------------|--------------------------|
| 1. Volute casing      | 17. Supporting foot      |
| 2. Impeller wear ring | 18. Bearing              |
| 3. Casing wear ring   | 19. Bearing bracket      |
| 4. Impeller           | 20. constant level oiler |
| 5. Impeller wear ring | 21. Lubricating ring     |
| 6. Casing wear ring   | 22. Antifriction bearing |
| 7. Casing cover       | 23. O ring               |
| 8. Mechanical seal    | 24. Shaft                |
| 9. Sealing cover      | 25. O ring               |
| 10. Vent filter       | 26. 1/4" screwed plug    |
| 11. Protective cover  | 27. Flat gasket          |
| 12. Collar            | 28. Casing foot          |
| 13. Deflector         | 29. 1/2" pipe plug       |
| 14. Keyway            | 30. Keyway               |
| 15. Bearing nut       | 31. Impeller nut         |
| 16. Bearing cover     |                          |



## Design Features and Advantages

### 6. Impeller designs

Closed impeller ( standard )

Open impeller depending on size ( CA and CE ).

Inducer possible.

Optimum compliance with various operating conditions, closed impeller with high efficiencies, low NPSHr values.

Open impeller for very gaseous liquids, high solids concentrations, extremely low NPSHr values, small suction head required.

### 7. Interchangeable wear parts

Impeller and casing wear rings.

Shaft sleeve in the area of the shaft seal.

Flushing of casing wear ring possible.

When casing and impeller wear ring and shaft seal are subject to wear, casing, impeller and shaft can be reused.

Small wear of casing and impeller wear ring due to absence of solids.

### 8. Double volute casing ( above 80mm branch size )

Large branches.

Increased corrosion allowance.

Enclosed casing gasket.

Small radial thrust, small shaft deflection ( < 0.05mm ) in the area of the shaft seal.

Low branch velocity, low noise level due to additional primary measures at impeller, long rated lift of casings, casing joint cannot break.

### 5. Flush system according to API 682 plans.

### 4. Well dimensioned stuffing box chamber

Possibility of replacing packing or mechanical seals of any design.

### 3. one-piece heavy duty bearing bracket

Oil-lubricated antifriction bearing, with automatic lubrication and oil level control.

$T \leq 250^{\circ}\text{C}$ , no cooling.

$T > 250^{\circ}\text{C}$ , air cooling ( fan or water cooling possible ).

With labyrinth sealing( standard ), radial sealing ring possible.

Stable, aligning shaft position, robust shaft with small shaft deflection.

Few bearing checks required no cooling water pipework.No cooling water consumption.

### 2. Interchangeable modular elements

for various sizes Only 8 bearing frames for 46 sizes.Same hydraulics ( impellers ) and bearing frames as for light or medium duty series.

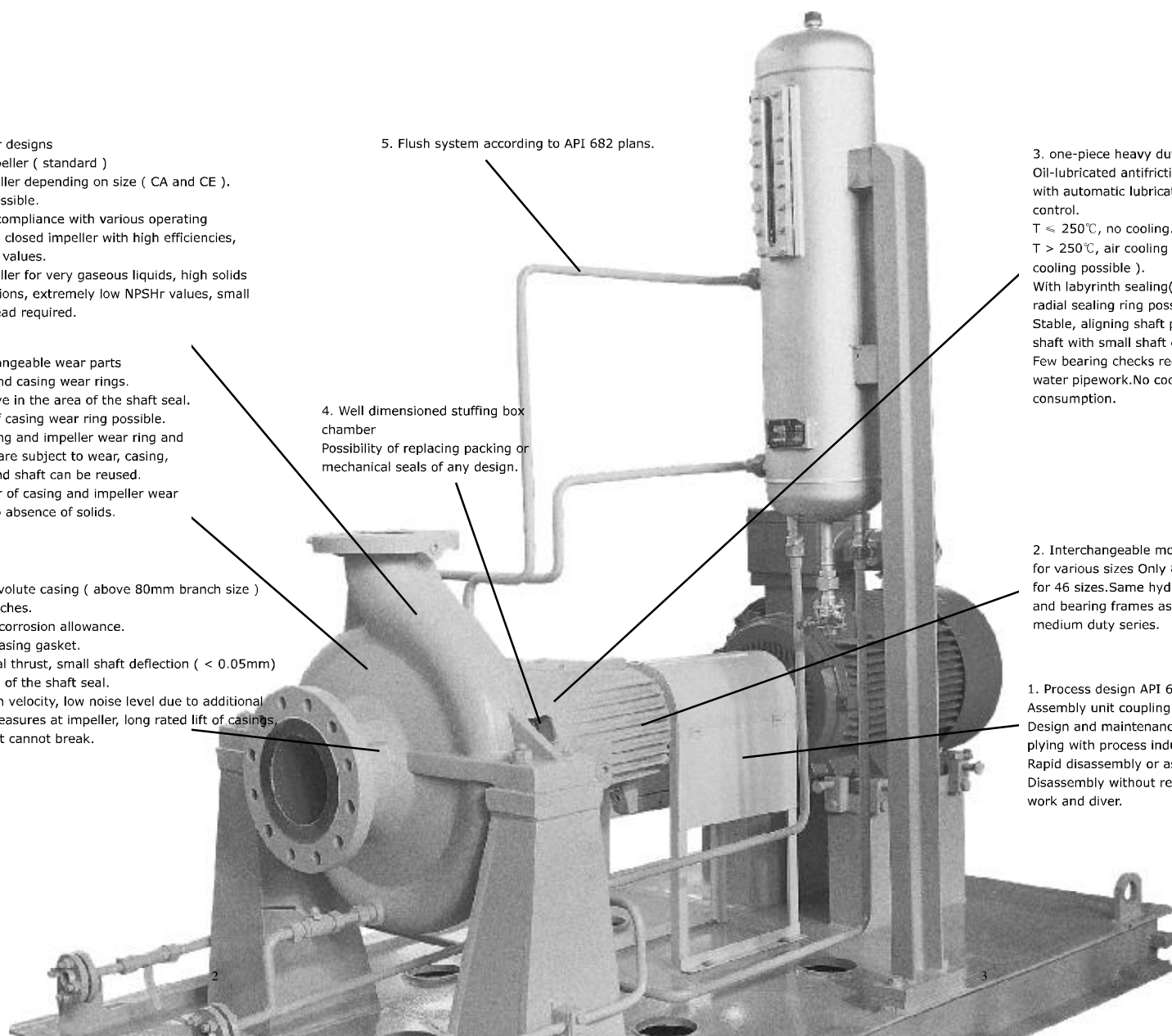
### 1. Process design API 610 ( Code OH1 & OH2 )

Assembly unit coupling with spacer.

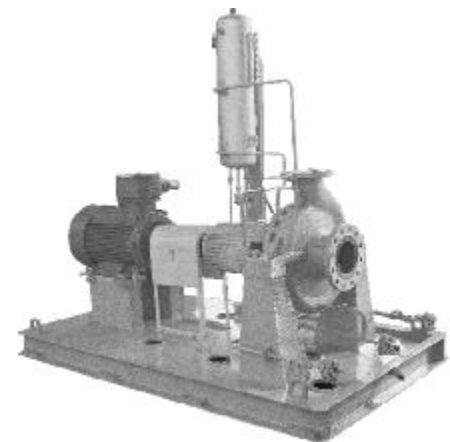
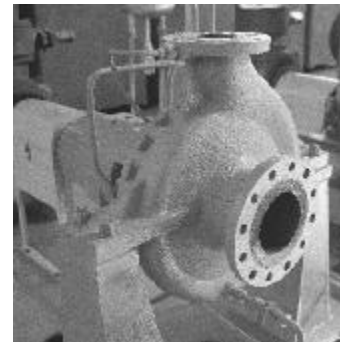
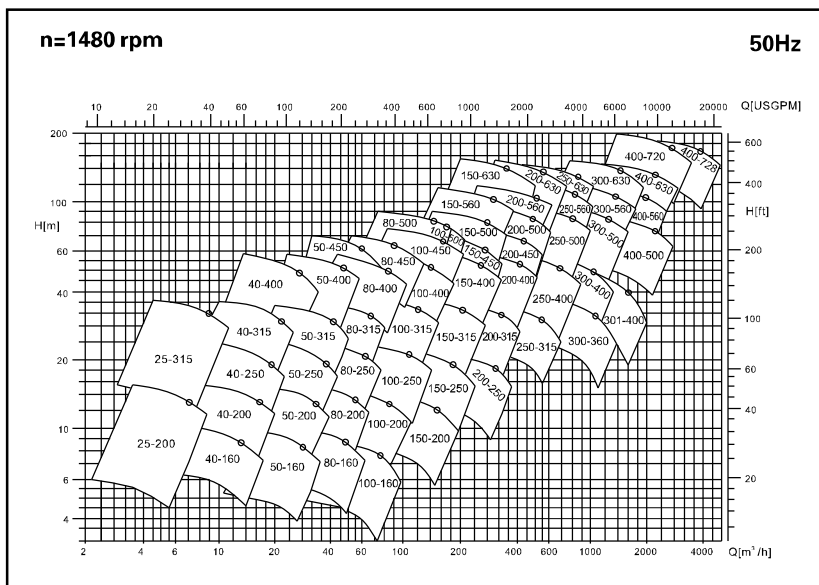
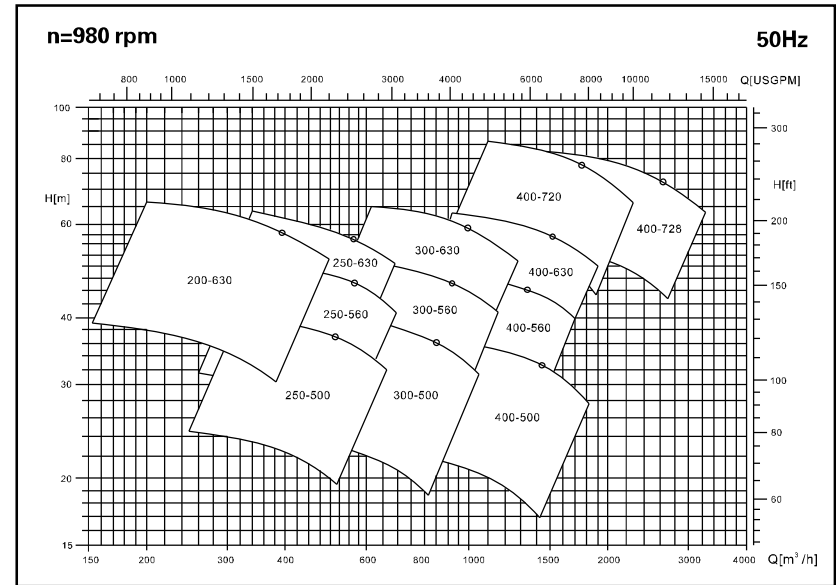
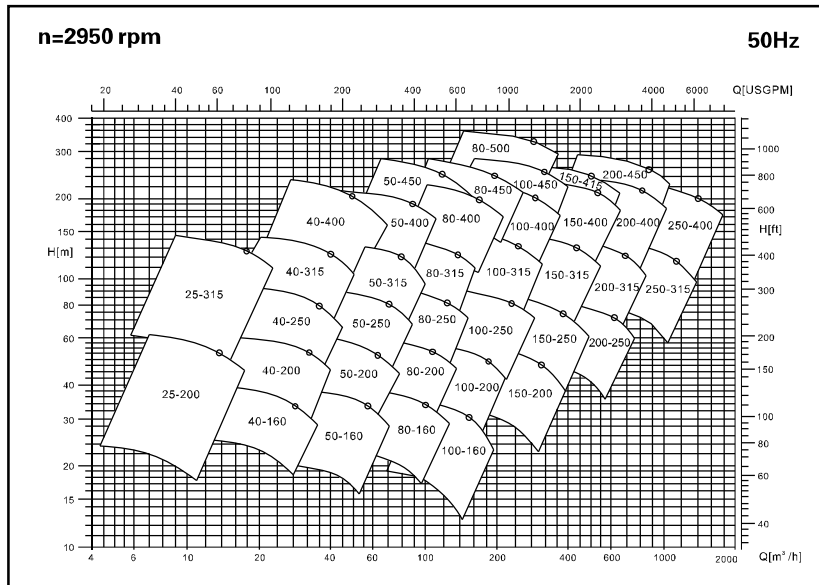
Design and maintenance standard complying with process industry is ensured.

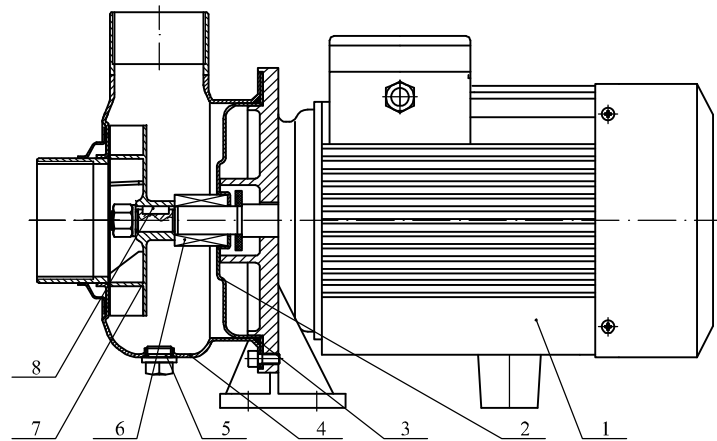
Rapid disassembly or assembly.

Disassembly without removal of pipe work and diver.



Hydraulic Coverage



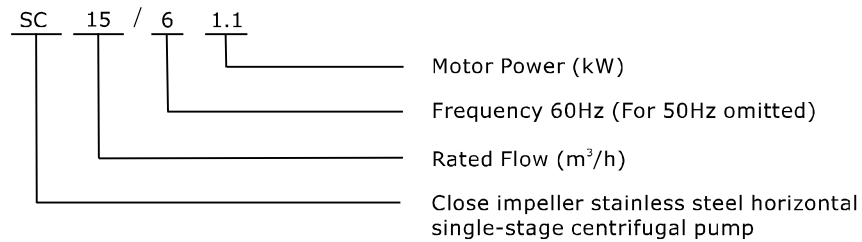
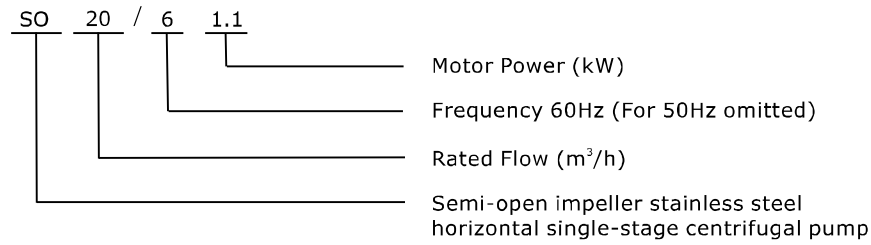


Stainless steel Horizontal Single-stage Centrifugal Pump

## SOSC

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### Definition of model



### Structure features

- SO is semi-open impeller stainless steel horizontal single-stage centrifugal pump. SC is close impeller stainless steel horizontal single-stage centrifugal pump. They are axial suction and radial discharge.
- Compact structure, the pump is connected with motor directly and fit with same shaft.
- Easy for connection. They are thread and cutting ferrule connection for inlet and outlet.
- Light weight, casing is welded by punching thin plate. SO impeller is investment casting part. SC impeller is welded by punching thin plate.
- A little corrosion proof. Wet parts are in AISI304 or AISI316 stainless steel.

### Applications

SO

- Domestic water;
- Water supply for industrial washing machine;
- Water supply and drainage;
- Washing and surface cleaning for households;

SC

- Cooling, air condition and heating system;
- Cooling device;
- Washing device;
- Pressurization and transportation of water for domestic and industry;

**Operating condition**

- Liquid temperature:  $-10^{\circ}\text{C} \sim +90^{\circ}\text{C}$ ;
- Ambient temperature: up to  $+40^{\circ}\text{C}$ ;
- Altitude: up to 1000m;
- Max. pressure of the system is 8 bar.

**Motor**

- TEFC motor, 2 poles;
- Protection class: Ip55;
- Insulation class: F;
- Standard voltage:  $1 \times 220\text{V}$   
 $3 \times 220\text{V}/380\text{V}$
- Max. power of 1ph motor: 2.2kW.

**Installation requirement**

- The pump shall be installed on the base horizontally, When installing, please ensure the pump will not be forced by tension of the pipeline.
- The pump shall be installed on the ventilating and anti-freezing place. The pump shall not be damaged by lack of phase, unstable voltage, current leakage and overload when electrical connection.

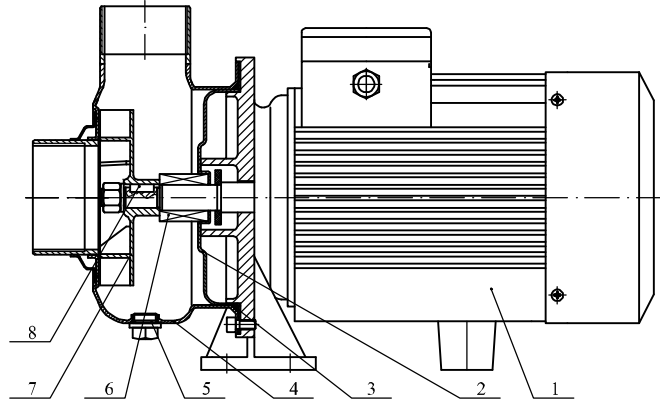
**Curve conditions**

The guidelines below apply to the curves shown on the next pages;

- All curves are based on the measured value of motor  $3 \times 380\text{V}$ , 50Hz: under the constant speed of 2900 rpm, 60Hz: under the constant speed of 3450rpm.
- Tolerances to ISO 9906, Annex A, if indicated;
- Measurements were made with airless water at a temperature of  $20^{\circ}\text{C}$ ;
- The curves apply to a kinematic viscosity of  $\mu = 1\text{mm}^2/\text{s}$  (1 cSt).
- The bold curves indicate the recommended performance range. Do not operate pump exceeding the performance scope to prevent from motor overload.

# SOSC

## Section Drawing of SO

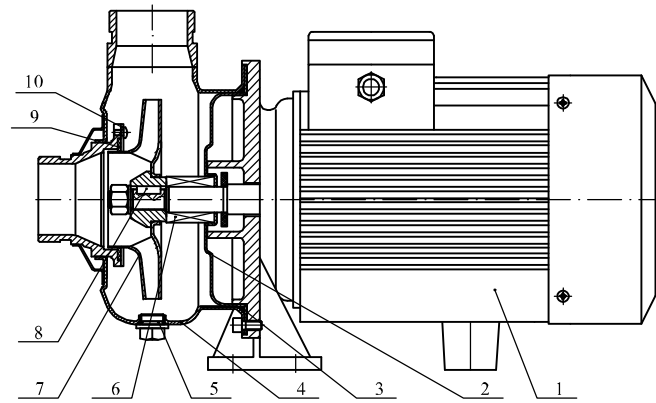


### Material of SO

NO.	Parts	Material	AISI
1	Motor		
2	Seal base plate	Stainless steel	AISI304
3	O ring	NBR	
4	Casing	Stainless steel	AISI304
5	Plug	Stainless steel	AISI304
6	Mechanical seal	Carbon / Silicon Fluoride	
7	Impeller	Stainless steel	AISI304
8	Key	Stainless steel	AISI304

The material for mechanical seal can be Sic/Sic or Tc/Tc on request.

## Section drawing of SC

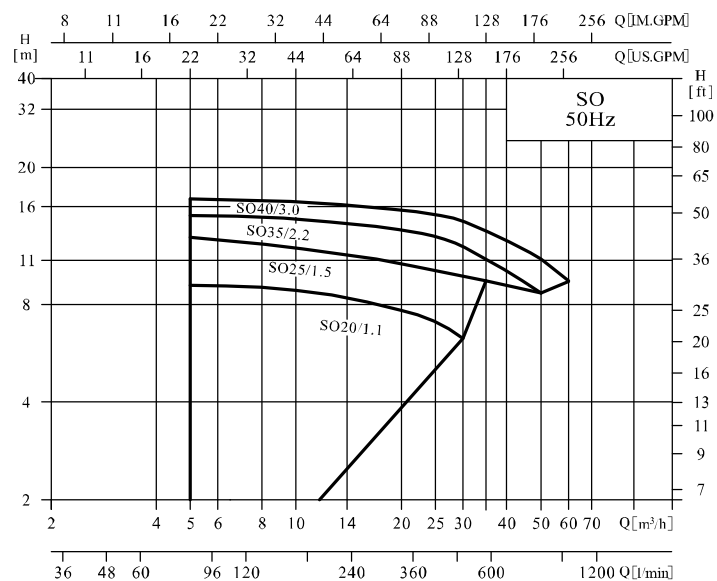


### Material of SC

NO.	Parts	Material	AISI
1	Motor		
2	Seal base plate	Stainless steel	AISI304
3	O ring	NBR	
4	Casing	Stainless steel	AISI304
5	Plug	Stainless steel	AISI304
6	Mechanical seal	Carbon / Silicon Fluoride	
7	Impeller	Stainless steel	AISI304
8	Key	Stainless steel	AISI304
9	Neck ring	F4	
10	Neck ring cover	Stainless steel	AISI304



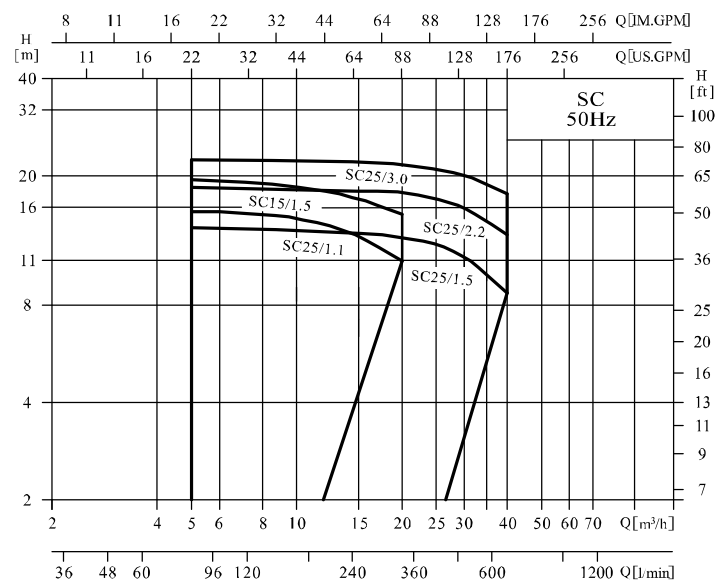
● Scope of performance SO 50Hz



● Performance table SO 50Hz

Model	Motor (kW)	Q (m³/h)	5	10	20	25	30	35	40	50	60
SO20/1.1	1.1	H (m)	9.2	8.9	7.5	7.1	6.3				
SO25/1.5	1.5		12.5	11.9	11	10	9.5	9			
SO35/2.2	2.2		15.1	14.7	13.6	13	12.2	11	10.2	8.7	
SO40/3.0	3.0		17	16.6	15.7	15.2	14.5	13.5	12.5	11.3	9.5

● Scope of performance SC 50Hz

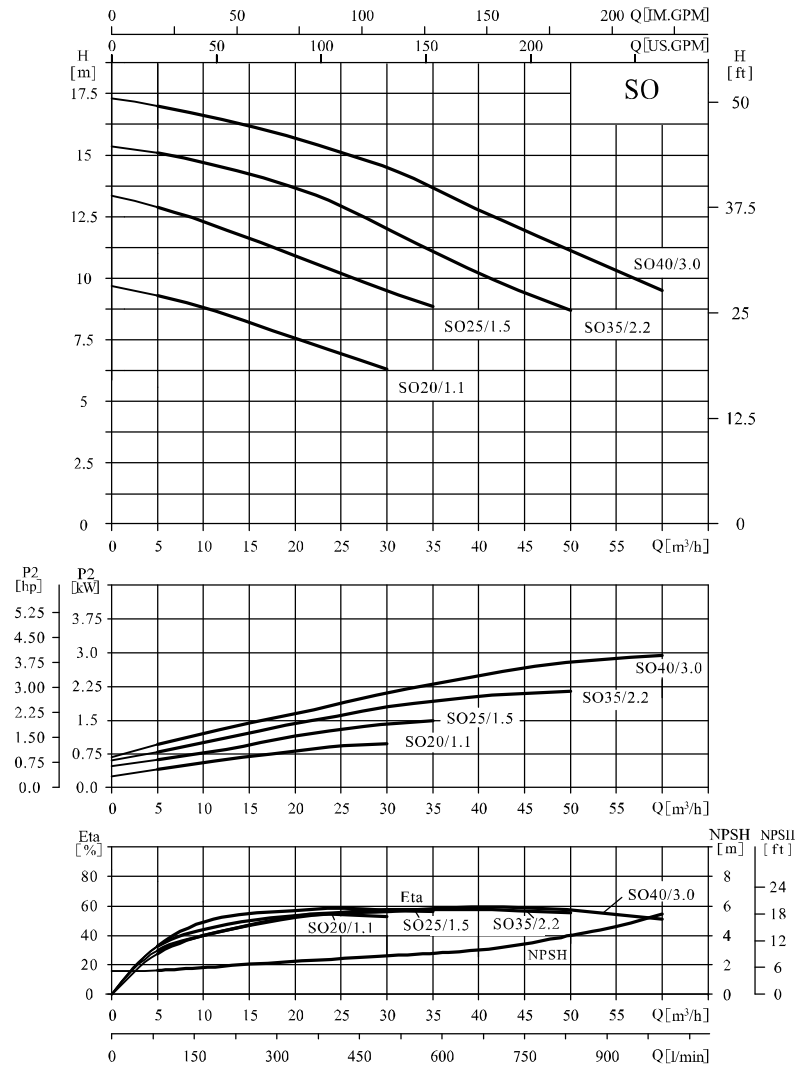


● Performance table SC 50Hz

Model	Motor (kW)	Q (m³/h)	5	10	15	20	25	30	35	40
SC15/1.1	1.1	H (m)	15.5	14.8	13	10.9				
SC15/1.5	1.5		19.5	18.5	17	15.2				
SC25/1.5	1.5		13.8	13.6	13.3	12.9	12	11.3	9.9	8.7
SC25/2.2	2.2		18.4	18.1	18	17.8	17	15.9	14.5	13.1
SC25/3.0	3.0		22.4	22.3	22.1	21.7	21	20.1	18.8	17.6

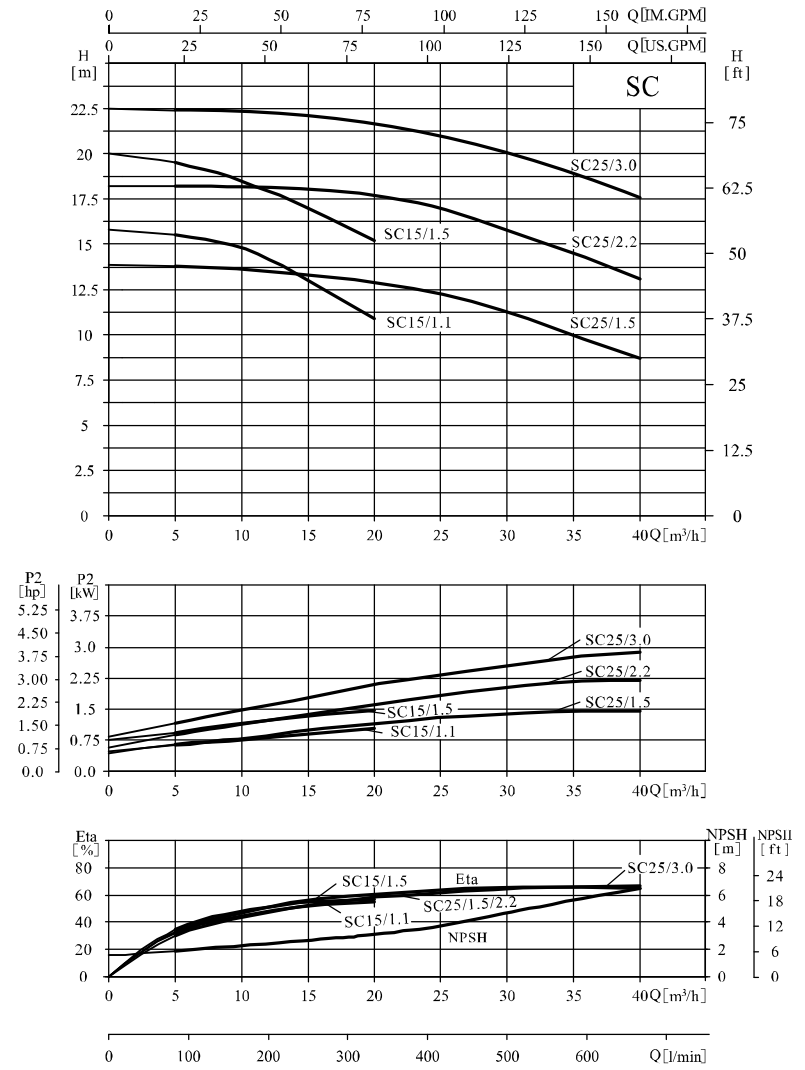
● Performance curve

50Hz ISO9906 Annex A

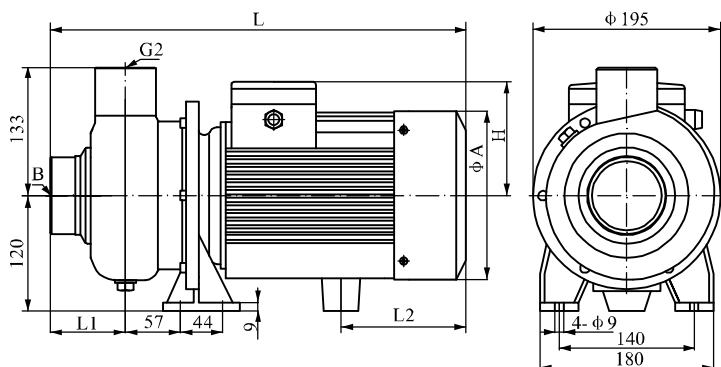


● Performance curve

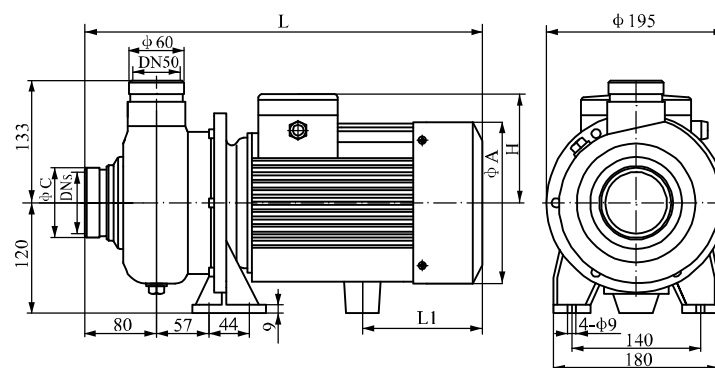
50Hz ISO9906 Annex A



● installation drawing (thread connection)



● installation drawing (cutting ferrule connection)



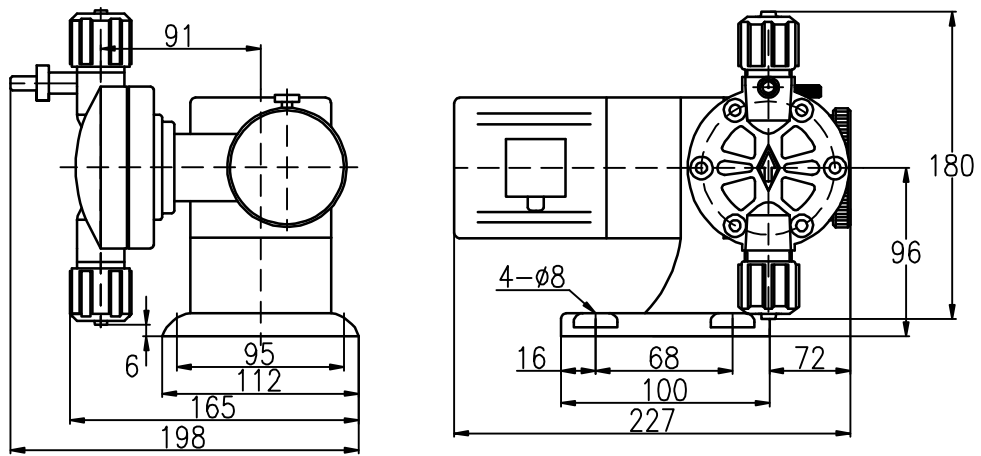
● size and weight (thread connection)

Model	L	L1	L2	φ A	B	H		Weight (kg)
						1th	3th	
SO20/1.1 SO20/6 1.1	410	74	115	160	G2	147	113	18
SO25/1.5 SO25/6 1.5	420					78	123	175
SO35/2.2 SO35/6 2.2		420	78	123	175			
SO40/3.0 SO40/6 3.0	420					78	123	175
SC15/1.1 SC15/6 1.1		410	80	115	160			
SC15/1.5 SC15/6 1.5	420	80				123	175	G2
SC25/1.5 SC15/6 1.5			420	80	123			
SC15/6 2.2 SC25/2.2 SC25/6 2.2	420	80				123	175	G2
SC25/3.0 SC25/6 3.0			420	80	123			

● size and weight (cutting ferrule connection)

Model	L	L1	φ A	DNs	φ C	H		Weight (kg)
						1th	3th	
SO20/1.1 SO20/6 1.1	410	115	160	50	60	147	113	18
SO25/1.5 SO25/6 1.5	420	123	175			65	76	157
SO35/2.2 SO35/6 2.2				420	123			175
SO40/3.0 SO40/6 3.0	420	123	175			65	76	
SC15/1.1 SC15/6 1.1				410	115			160
SC15/1.5 SC15/6 1.5	420	123	175	50	60	157	121	22
SC25/1.5 SC25/6 1.5						420	123	175
SC15/6 2.2 SC25/2.2 SC25/6 2.2	420	123	175	50	60			
SC25/3.0 SC25/6 3.0						420	123	175

**FCNP**<sup>®</sup>



Metering Pump

## GW

### GW Series Mechanical Diaphragm metering Pump

#### Technical Data:

Flow Rate:5L/h-53L/h  
Maximum discharge pressure:10bar  
Regulating ratio:10:1, Steady precision:±2%  
Suction lift:0.5M  
Maximum temperature:40°C  
Maximum suction pressure:1bar

#### Main Features:

##### Hydraulic End

- Diaphragm is mechanically driven, no diaphragm protecting plate at the material side ,easy to let material getting through.
- Many kind of pump head material like PVC,PVDF,316SS, fit for all kinds of materials.
- Self-cleaning one-way valve structure.

##### Driving End

- Variable eccentric institutions regulation , insure flow pulsation gently vary.
- Enchanted structure design , suitable for tough operation environment.

##### Control Mode

- Power supply:380V/220V -50Hz/60Hz/single phase/three phase.
- motor controller,control motor with mode “run/stop”, adjust output flow.



#### Major Applications

Reverse osmosis, industrial water and waste water, swimming pool etc, all kinds of water treatment process.

#### Main components material of hydraulic end

##### ○ GW005—GW055

Hydraulic end material	Pump head material	Valve body	Valve seat	Valve ball	Diaphragm	Seal ring	Connection
PVC	PVC	PVDF	PVDF	Ceramic	PTFE	Fluorous rubber	PVC
PVDF	PVDF	PVDF	PVDF	Ceramic	PTFE	PTFE	PVDF
316SS	316SS	316SS	316SS	316SS	PTFE	Fluorous rubber	316SS

#### Accessory

- Provide system required accessories as : Filter, Adjusting pillar, Buffer, Safety Valve and Back Pressure valve etc.
- GW 005-GW055 range and pump with PVC pump head , along with the dosing pump to provide injection valve, foot valve, counter weight and 6 meters tube ,except the high viscosity pump head and PVDF pump head.

#### Standard configuration motor performance parameters

- Power supply:380V220V -50Hz/60Hz/single phase/three phase
- Protection grade: IP 54
- Insulation class: F
- All the motors accord with international electrical association IEC standard or US electrical committee NEC standards.

### GW series mechanical diaphragm metering pump product code and flow pressure gauge

<b>Code</b>	<b>Series</b>	<b>Flow Rate</b>	<b>Hydraulic end</b>	<b>Port</b>	<b>Motor</b>
	GW				

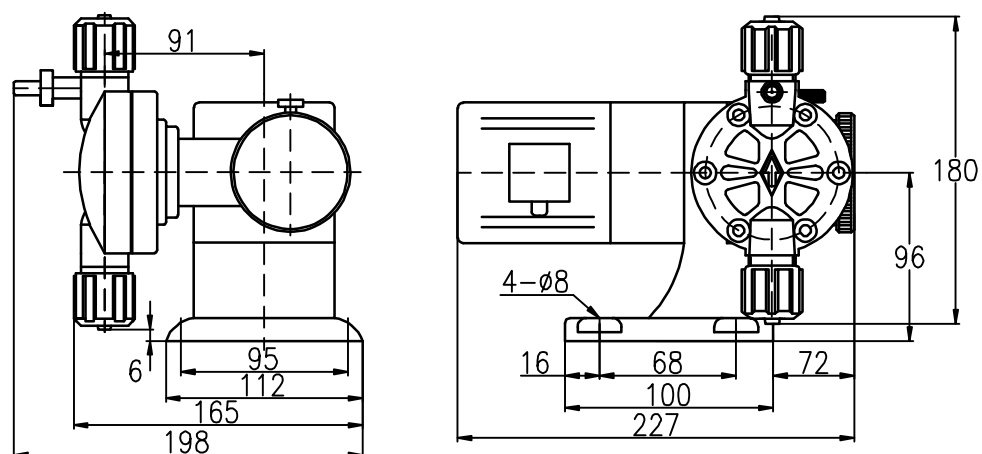
<b>Series</b>	<b>Code</b>	<b>Description</b>
	GW	GW series mechanical diaphragm metering pump

<b>Flow rate</b>	<b>Code</b>	<b>LPH@Pmax</b>	<b>SPM(mm)</b>	<b>Pmax(bar)</b>	<b>stroke (mm)</b>	<b>diagram (mm)</b>	<b>Motor power (W)</b>	<b>Weight (kg)</b>
	GW005	6	30	10	4	60	25	3.5
	GW010	13	50					
	GW025	24	83	7				
	GW030	30	100					
	GW035	36	120	5				
	GW045	46	150	4				
	GW055	53	166	2				

<b>Hydraulic end</b>	<b>Code</b>	<b>Description</b>	<b>Port</b>	<b>Code</b>	<b>Description</b>	<b>GW005-055</b>			
	P	PVC hydraulic end					<b>PVC</b>	<b>PVDF</b>	<b>316</b>
	S	316 hydraulic end					1/2" F	----	1/2" F
	T	PVDF hydraulic end					1/2" F	----	1/2" F
				P	NPT threaded port	1/2" F	----	1/2" F	
				Q	The inner pipe mouth hard tube intubation port DN 15	DN15	----	1/2" F	
				R	Intubation 8x12 Tube	8x12	8x12 <sup>(*)</sup>	----	
				X	Special port	Consult CNP, indicate when ordering.			

<b>Motor</b>	<b>Code</b>	<b>Description</b>
	1	25W.1440rpm.3-50-380V.IP55/F/TEFC
	2	25W.1440rpm.1-50-220V.IP55/F/TEFC

### Dimension figure



## GD Series Mechanical Diaphragm metering Pump

### Technical Data:

Maximum Flow Rate:130L/H  
Maximum discharge pressure:10bar  
Regulating ratio:10:1  
Steady precision: ±2%  
Suction lift:2M  
Maximum suction pressure:2bar  
Maximum temperature:40°C



### Main Features:

#### Hydraulic End

- ◎Diaphragm is mechanically driven, it adopt multi-layer structure with PTFE and elastic rubber, no leaks, durable
- ◎No diaphragm protecting plate at the material side ,easy to let material getting through.
- ◎Many kind of pump head material like PVC,PVDF,316SS, fit for all kinds of materials.
- ◎Self-cleaning one-way valve structure.

#### Driving End

- ◎Double cam structure, suitable for tough operation environment, low noise, easy to disassemble and repair .
- ◎Oil bath lubrication,driving components have long working life.
- ◎Flow regulation in downtime or running state.
- ◎The highly accurate worm and gear enables it run smoothly.

### Major Applications

Deliver chemicals in many areas, e.g. Environmental protection, municipal engineering, pharmacy, food, waste water treatment etc.



**Main components material of hydraulic end****GD030-GD050**

Hydraulic end material	Valve body	Valve seat	Valve ball	Diaphragm	Seal ring	Connection
PVC	PVC	PVDF	Zirconia	PTFE	Fluorous rubber	PVC
PVDF	PVDF	PVDF	Zirconia	PTFE	Fluorous rubber	PVDF
316SS	316SS	316SS	316SS	PTFE	Fluorous rubber	316SS

**GD055-GD130**

Hydraulic end material	Valve body	Valve seat	Valve ball	Diaphragm	Seal ring	Connection
PVC	PVC	PVDF	Zirconia	PTFE	Fluorous rubber	PVC
PVDF	PVDF	PVDF	Zirconia	PTFE	Fluorous rubber	PVDF
316SS	316SS	316SS	316SS	PTFE	Fluorous rubber	316SS

**Control Mode**

◎Motor controller, control motor with mode “run/stop”, adjust output flow through adjusting handle.

◎Power supply:220V -50Hz-single phase/380V-50Hz-three phase .

◎Variable frequency controller,accept external control signal,adjust stroke speed.

Power supply:200V -50Hz-single phase/380V-50Hz-three phase .

Input signal:4-20mA analog signal.

**Accessory**

Provide system required accessories as:Filter, Adjusting pillar,Buffer,Safety valve and Back pressure valve etc.

Safety valve is mandatory. (GD030,GD050 and pump with connection code

R PVC/PVDF pump head, along with the dosing pump to

provide injection valve ,foot valve, counter weight and 6 meters tube.



## GD

### GD series mechanical diaphragm metering pump product code and flow pressure gauge

	Series	Flow Rate	Hydraulic end	Port	Motor
Code	GD				

Series	Code	Description
	GD	GD series mechanical diaphragm metering pump

Flow rate	Code	LPH@Pmax	Stroke(mm)	SPM	Pmax(bar)	Motor power
	030	34	4	80	10	0.2kW
	050	44	4	116	10	
	055	59	4	96	10	
	070	71	4	116	10	
	085	91	6	80	10	
	100	101	6	96	8	
	130	135	6	116	8	

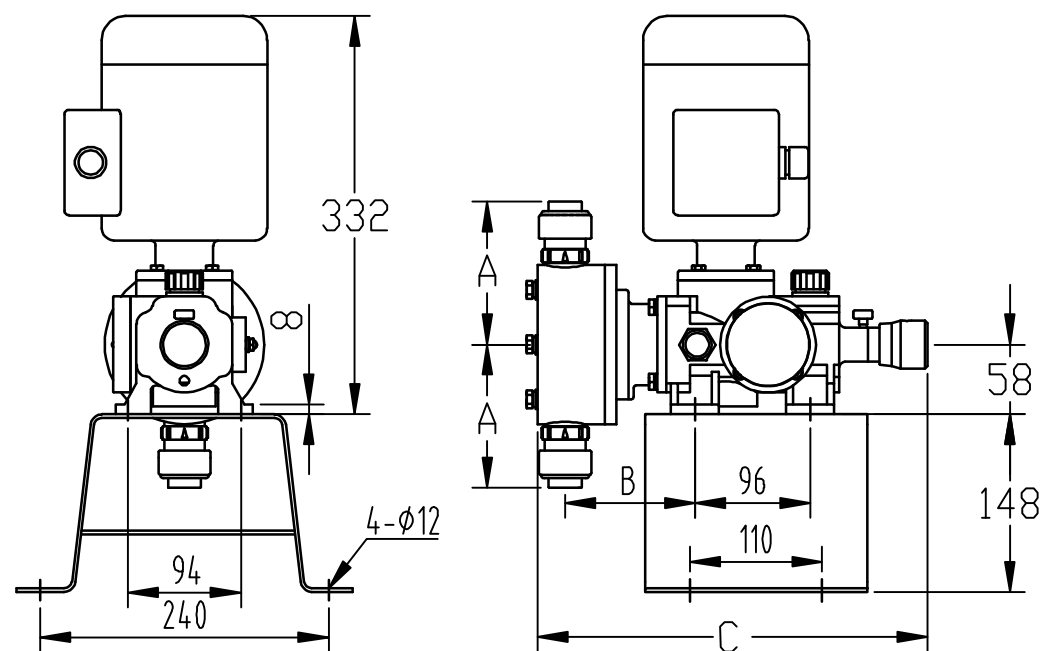
Hydraulic end	Code	Description
	P	PVC hydraulic end
	S	316 hydraulic end
	T	PVDF hydraulic end
	Z	Special material hydraulic end.Consult CNP,indicate when ordering.

Port	Code	Description	GD030-050			GD055-130		
			PVC	PVDF	316	PVC	PVDF	316
	P	NPT threaded port	----	----	1/2" F	1/2" F	1/2" F	1/2" F
	Q	The inner pipe mouth hard tube intubation port	DN15	DN15	----	DN15	DN15	----
	R	Intubation 6x12 Tube	6x12	6x12	----	----	----	----
	X	Special port	Consult CNP,indicate when ordering.					

Motor	Code	Description
	1	200W.1440rpm.3-50-380V. IP55/F/TEFC
	2	200W.Capacitor start. 1440rpm.1-50-220V. IP55/F/TEFC
	3	Others.Consult CNP,indicate when ordering.

Baseplate	Code	Description
	N	No baseplate
	Y	Baseplate

Dimension figure



Pump head material	GD030-050				GD055-130			
	Port code	A	B	C	Port code	A	B	C
PVC	P	101	91	301	P	119	108	327
	Q	101			Q	119		
	R	108			R	/		
PVDF	P	101	91	301	P	119	108	327
	Q	101			Q	119		
	R	108			R	/		
316	P	95	91	301	P	123	108	327
	Q	/			Q	/		
	R	/			R	/		

### GMGB Series Mechanical Diaphragm Metering Pump



#### Main Function Parameter

- Single-head maximum flow: 1800L/H
- Maximum discharge pressure: 12bar
- Regulating ratio 10:1, Steady precision  $\pm 2\%$
- Suction lift: 3m
- Maximum suction pressure: 2bar
- Maximum temperature: 40°C

#### Main features

##### Hydraulic end

- Diaphragm is mechanically driven, no diaphragm protecting plate at the material side, ripe for material getting through
- Many kind of pump head material like PVC, PVDF, 316SS, high viscosity, sizing agent, fit for all kinds of materials
- Self-cleaning one-way valve structure

##### Driving end

- Variable eccentric institutions regulation, insure flow pulsation gently vary
- Enhanced structure design, suitable for tough operation environment
- Wear-resisting ball bearings, running is more stable
- Oil bath lubrication, driving components have long working life
- Flow regulation in downtime or running state, adjustment mode can be selected manually, motor-driven or frequency conversion

##### Control mode

- ◆ Electric stroke controller, accept external control signal, adjust stroke length
- Power supply: 220V-50Hz-single phase
- Input signal: 4-20mA analog signal
- Output signal: 4-20mA/1-5V analog signal, for records shown and control system usage
- ◆ Variable frequency controller, accept external control signal, adjust stroke speed
- Power supply: 220V-50Hz-single phase/380-50Hz-three phase
- Input signal: 4-20mA analog signal
- ◆ Motor controller, control three phase motor with mode "run/stop", adjust output flow
- Power supply: 200-240V-50/60Hz-single phase
- Control mode: can accept 4-20mA analog signal, external pulse signal or manual adjustment

#### Major Applications

- Municipal, industrial water and waste water, swimming pool etc, all kinds of water treatment process

## Options

- ⊙ Two diaphragm pump heads
- Two diaphragm pump heads, broken pressure gauge detection and pressure switch detection
- ⊙ Stroke count sensor
- PNP output/NPN output/Relay output



## The material of the main components of hydraulic end

### ⊙ GM0002 ~ GM0050

Hydraulic end material	Hydraulic end cover	Valve body	Valve seat	Valve ball	Diaphragm	Seal ring	Connection
PVC	PVC	PVDF	PVDF	Ceramic	PTFE	Fluorous rubber	PVC
PVDF	PVDF	PVDF	PVDF	Ceramic	PTFE	PTFE	PVDF
316 SS	316 SS	316 SS	316 SS	316 SS	PTFE	Fluorous rubber	316 SS

### ⊙ GM0090 ~ GM0500

Hydraulic end material	Hydraulic end cover	Valve body	Valve seat	Valve ball	Diaphragm	Seal ring	Connection
PVC	PVC	PVC	PVC	Glass	PTFE	Fluorous rubber	PVC
PVDF	PVDF	PVDF	PVDF	Ceramic	PTFE	PTFE	PVDF
316 SS	316 SS	316 SS	316 SS	316 SS	PTFE	Fluorous rubber	316 SS

### ⊙ GB0080 ~ GB1200

Hydraulic end material	Hydraulic end cover	Valve body	Valve seat	Valve ball	Diaphragm	Seal ring	Connection
PVC	PVC	PVC	PVC	Ceramic	PTFE	Fluorous rubber	PVC
PVDF	PVDF	PVDF	PVDF	Ceramic	PTFE	PTFE	PVDF
316 SS	316 SS	316 SS	316 SS	316 SS	PTFE	Fluorous rubber/PTFE	316 SS

### ⊙ GM1500~GM1800

Hydraulic end material	Hydraulic end cover	Valve body /Bush	Valve plate /Lift limit plate	Spring	Diaphragm	Seal ring	Connection
PVC	PVC	PVC/PVC	PVC/PVC	Hastelloy c	PTFE	Fluorous rubber	PVC
PVDF	PVDF	PVDF/PVDF	PVDF/PVDF	Hastelloy c	PTFE	PTFE	PVDF
316 SS	316 SS	316 SS /316 SS	316 SS /316 SS	Hastelloy c	PTFE	Fluorous rubber	316 SS

## Accessory

Provide system required accessories as: Filter, Adjusting pillar, Buffer, Safety valve and Back pressure valve etc., Safety valve is mandatory.  
(GM0002~GM0050 range and pump with PVC/PVDF pump head, along with the dosing pump to provide injection valve, foot valve, counter weight and 6 meters tube, except the high viscosity pump head)

## Standard configuration motor performance parameters

Power supply: 380V~50Hz~three phase/220V~50Hz~single phase

Protection grade: IP55

Insulation class: F

Explosion-proof motor, 60Hz motor can be chosen, All the motors accord with international electrical association IEC standard or US electrical committee NEC standards

GM&GB series mechanical diaphragm metering pump product code and flow pressure table

Code    Series    Flow    Hydraulic end    Port    Motor    Adjustment    Baseplate    Option  
                       

Series	Code	Description	Code	Description
	GM	GM series mechanical diaphragm dosing pump	GB	GB series mechanical diaphragm dosing pump

Flow	Code	LPH@Pmax	SPM	Pmax(bar)	Motor rate	Code	LPH@Pmax	SPM	Pmax(bar)	Motor rate
		GM0002	2.25	36	12	0.25kW <sup>1)</sup>	GB0080	82	36	10
	GM0005	4.5	72	GB0180			167	72		
	GM0010	9	144	GB0250			237	102		
	GM0025	25	72	GB0350			334	144		
	GM0050	50	144	10	0.25kW <sup>1)</sup>	GB0450	416	180	7	0.75kW
	GM0090	85	72	7	0.37kW <sup>2)</sup>	GB0500	464	144	3.5	
	GM0120	115	72	7	0.25kW <sup>1)</sup>	GB0600	583	180	3	
	GM0170	170	144	7	0.37kW <sup>2)</sup>	GB0700	656	102	3	
	GM0240	235	144	5	0.37kW <sup>1)</sup>	GB1000	946	144		
	GM0330	315	144			GB1200	1200	180		
	GM0400	400	144			GB1500	1500	180		
	GM0500	500	180			GB1800	1800	206		

1)This power is available for constant speed or frequency conversion,5-50Hz conversion need to use inverter motor;  
 2)This power is available for single phase and inverter motor.

Hydraulic end	Code	Description	Code	Description
		P	PVC hydraulic end	V
	S	316 hydraulic end	K	Sizing agent application,GM0025-0500;316hydraulic end;GB:PVC hydraulic end
	T	PVDF hydraulic end	M	Mixture application,GM:PVDF hydraulic end
	F	NaClO application:PVC hydraulic end*	Z	Special materials hydraulic end,consult CNP,indicate when ordering

(\*),GM0002-0050:EPDM O ring;GM0090-0500,GB:PTFE covering O ring

Port	Code	Description	GM0002-0050			GM0090-0500			GB0080-0450			GB0500-1200			GB1500			GB1800		
			PVC	PVDF	316	PVC	PVDF	316	PVC	PVDF	316	PVC	PVDF	316	PVC	PVDF	316	PVC	PVDF	316
	P	NPT threaded port	---	---	1/2"F	1/2"F	1/2"F	1/2"F	1/2"F	1/2"F	1"	1"	1"	1"	1"	1"	1-1/2"M	1-1/2"F	1-1/2"M	
	Q	The inner pipe mouth hard tube intubation port	DN15	---	---	---	---	DN15	---	---	---	---	DN25	---	---	DN40	---	---	---	
	R	Intubation 6 x 12 Tube	6 x 12	6 x 12"	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	H	GM tube High viscosity application dedication	15 x 23 9 x 12	---	---	DN15	---	---	---	---	---	---	---	---	---	---	---	---	---	
	X	Special port	Consult CNP,indicate when ordering																	

Dash area is standard configuration,firstly:high viscosity pump head V,sizing agent K,mixture pump head M,if no special optional,choose port according hydraulic end (\*),the default features configured tube is PVC material,if need PVDF ture (6m),order additionally,and enquiry to factory.

Motor	Code	Description ( GM )	Description ( GB )
		1	250W,IEC71,1440rpm,3-50-220/380V,IP55/F/TEFC
	2	1/3hp,NEMA 56C,1440rpm,3-50-220/380V,NEMA 3/TEFC	1hp,NEMA 56C,1440rpm,3-50-220/380V,NEMA 3/TEFC
	3	370W,IEC71,1440rpm,3-50-220/380V,IP55/F/TEFC/Ex-dIIIBT4	550W,IEC71,1440rpm,3-50-220/380V,IP55/F/TEFC/Ex-dIIIBT4
	4	370W,IEC71,1440rpm,3-50-220/380V,IP55/F/TEFC	750W,IEC80,1440rpm,3-50-220/380V,IP55/F/TEFC
	5	250W,Capacitor start type,IEC71,1440rpm,1-50-220V,IP55/F/TEFC	750W,IEC80,1440rpm,3-50-220/380V,IP55/F/TEFC/Ex-dIIIBT4
	6	250W,IEC71,1440rpm,3-50-200/400V,3-60-230/460V,IP55/F/TEFC	550W,Capacitor start type,IEC80,1440rpm,1-50-220V,IP55/F/TEFC
	7	370W,IEC71,1440rpm,3-50-200/380V,3-60-230/460V,IP55/F/TEFC	750W,Capacitor start type,IEC80,1440rpm,1-50-220V,IP55/F/TEFC
	8	---	550W,IEC80,1440rpm,3-50-220/380V,IP55/F/TEFC
	9(5)	Pump default: without motor,retain IEC71 port	Pump default: without motor,retain IEC71 port
	9(6)	370W,Capacitor start type,IEC71,1440rpm,1-50-220V,IP55/F/TEFC	---
	9(8)	---	Pump default: without motor,retain IEC80 port
	9	Other,pls consult: CNP company	Other,pls consult: CNP company

Single phase motor can not be used with the motor switch at the same time.

Adjustment	Code	Description ( GM )	Description ( GB )	Remarks
		M	Manual stroke adjusting	Manual stroke adjusting
	N	Electric stroke adjusting,4-20mA,220VAC-1Ph	Electric stroke adjusting,4-20mA,220VAC-1Ph	-----
	E	---	Electric stroke adjusting,4-20mA,220VAC-1Ph,Ex,Proof	-----
	F	Frequency conversion control	Frequency conversion control	-----
	T	Motor switch controller and electric stroke adjusting	---	Apply to GM series
	P	Motor switch controller ( 1Ph-50Hz-220VAC)	---	Apply to GM series

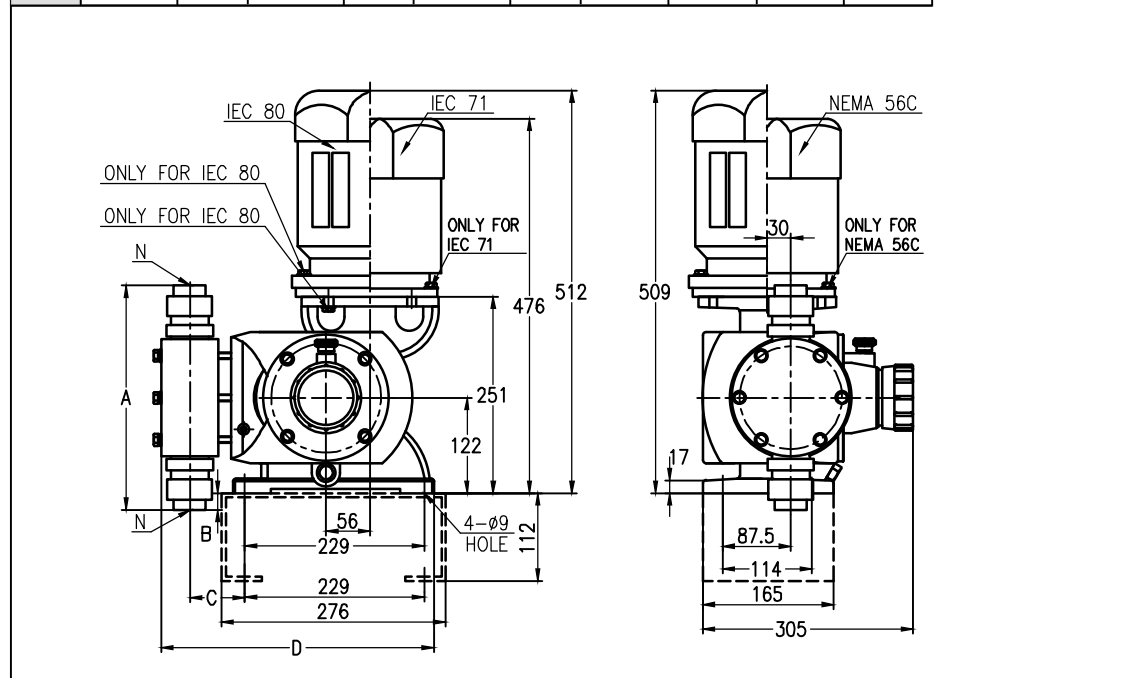
Baseplate	Code	Description ( GM )	Description ( GB )	Remarks
		N	No baseplate	No baseplate
	Y	Baseplate(2)	Baseplate	-----

Options	Code	Description ( GM )	Description ( GB )	Remarks
		N	No option	No option
	A	Stroke count sensor	Stroke count sensor	-----
	B	The diaphragm rupture test and pressure gauge	The diaphragm rupture test and pressure gauge	Pressure gauge
	C	The diaphragm rupture test and pressure gauge switch(2)	The diaphragm rupture test and pressure gauge switch	Normal pressure switch,including baseplate
	D	The diaphragm rupture test and pressure gauge, explosion-proof pressure switch(2)	The diaphragm rupture test and pressure gauge, explosion-proof pressure switch	Normal pressure switch and pressuregauge, including baseplate
	X	Other,pls consult CNP company	Other,pls consult CNP company	Special configuration indicated in the contract

Remarks: This code is used for G series dosing pump made by CNP,this code apply to the usage in marketing.  
 (2),GM series two diaphragm with pressure switch,default with baseplate,and should choose "N" in the options of baseplate

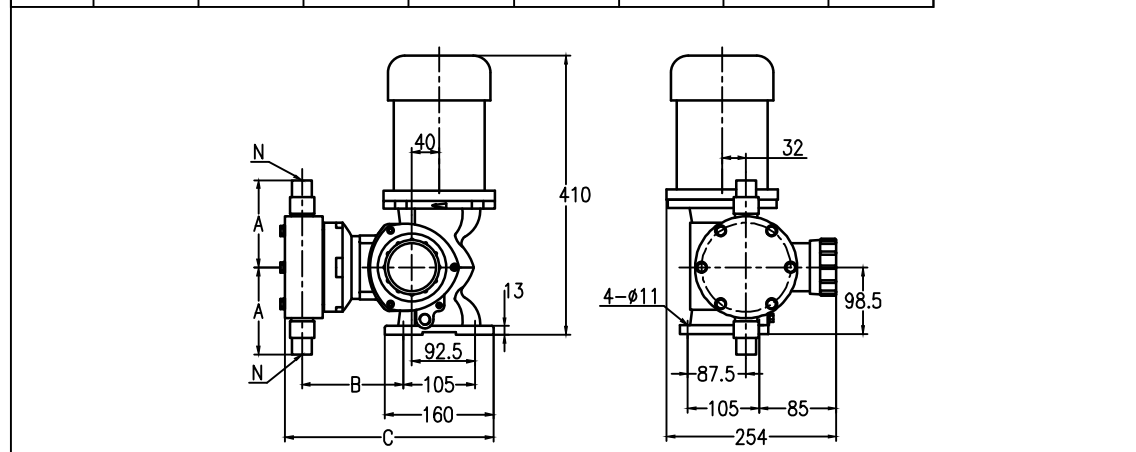
**GB pump**

Model Size	GB40(80-450)		GB60(500-600)		GB80(700-1200)		GB80(1500)		GB80(1800)	
	Plastics	Metal	Plastics	Metal	Plastics	Metal	Plastics	Metal	Plastics	Metal
A	237	260	286	338	362	414	374	446	420	458
B	5	4	19	46	59	85	64	100	87	102
C	60,3	60,3	71,4	76,2	96,4	100	96,4	100	96,4	100
D	333	333	351,2	348	373,1	373,1	373,1	373,1	373,1	373,1
N	1/2" F NPT	1/2" F NPT	1" F NPT	1" M NPT	1" F NPT	1" M NPT	1" F NPT	1 1/2" M NPT	1 1/2" F NPT	1 1/2" M NPT
	DN15 (PVC pump head only)	—	DN25 (PVC pump head only)	—	DN25 (PVC pump head only)	—	—	—	—	—



**GM pump**

Pump head Material	GM0002 - GM0050				GM0090 - GM0500			
	Port code	A	B	C	Port code	A	B	C
PVC	P	108	116	250	Q	127	159	322
PVDF	P	108			N	131		
316	N	102			N	131		



### GX Series Mechanical Diaphragm Metering Pump

#### Technical Data:

Single-end maximum Flow Rate:2100L/h

Maximum discharge pressure:9bar

Regulating ratio:10:1

Steady precision:  $\pm 2\%$

Suction lift:2.5M

Maximum temperature:40°C

#### Main features

◎Diaphragm is mechanically driven, no diaphragm protecting plate at the material side, easy to let material getting through.

◎Many kind of pump head material like PVC,PVDF,316SS, high viscosity, sizing agent,fit for all kinds of materials.

Self-cleaning one-way valve structure.

◎variable eccentric institution regulation , insure flow pulsation gently vary. Suitable for tough operation environment.

◎Oil bath lubrication, driving components have long working life.

◎Flow regulation in downtime or running state.

#### Major Applications

◎municipal , industrial water and waste water, swimming pool etc.

◎Petrochemical industry,chemical industry, Electricity,Metallurgy,Pharmacy,Food industry,etc.





### Main components material of hydraulic end

Hydraulic end material	Pump head	Pump body	Valve seat	Valve ball	Diaphragm	Oring	Connection
PVC	PVDF	PVC	PVDF	Ceramic/PVDF	PTFE	Fluorous rubber	PVC
PVDF	PVDF	PVDF	PVDF	Ceramic/PVDF	PTFE	Fluorous rubber	PVDF
316SS	316SS	316SS	Hastelloy C	316SS	PTFE	Fluorous rubber	316SS

### Control mode

©Power supply:380V/220V -50Hz/60Hz/single phase/three phase.

©Variable frequency controller,accept external control signal,adjust stroke speed.Input signal:4-20mA analog signal.

©Motor controller,control three phase motor with mode “run/stop”, adjust output flow.



# GX

## GX series mechanical diaphragm metering pump product code and flow pressure gauge

<b>Code</b>	<b>Series</b>	<b>Flow Rate</b>	<b>Hydraulic end</b>	<b>Port</b>	<b>Motor</b>
	GX				

<b>Series</b>	<b>Code</b>	<b>Description</b>
	GX	GX series mechanical diaphragm metering pump

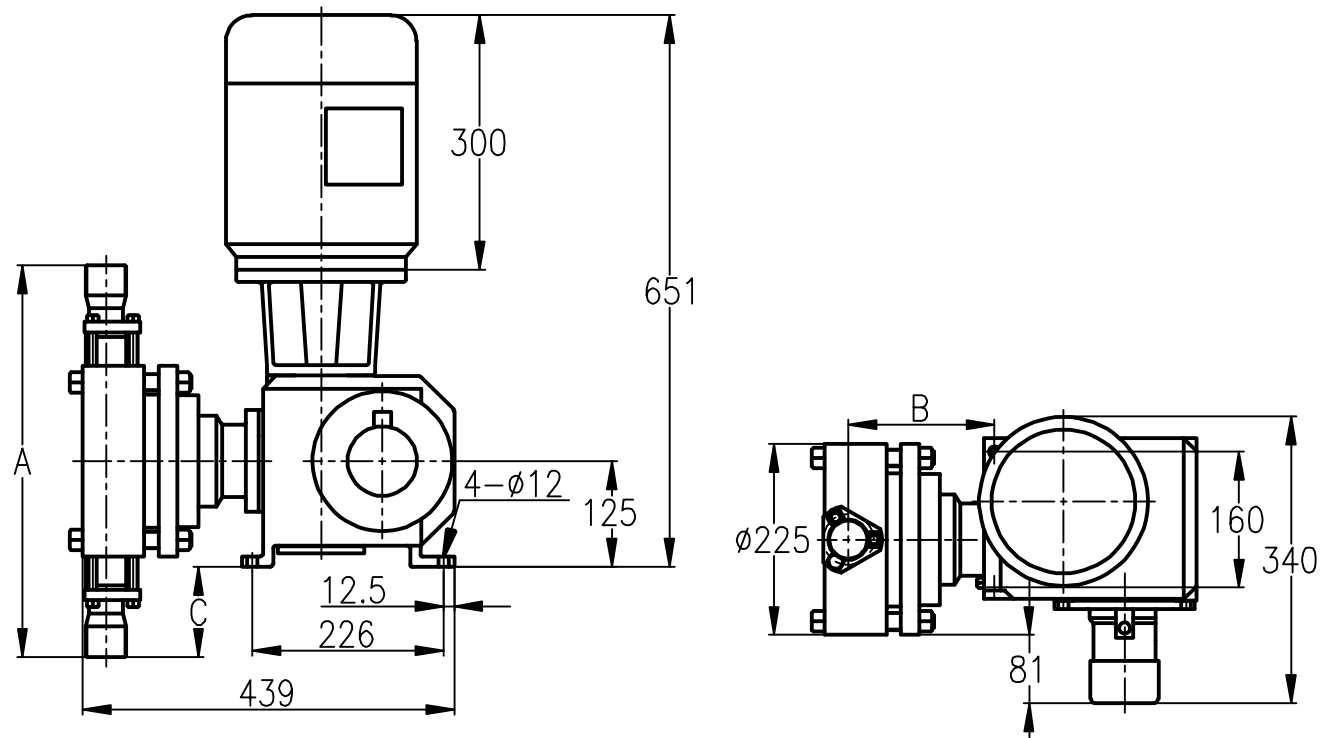
<b>Flow rate</b>	<b>Code</b>	<b>LPH@Pmax</b>	<b>Pmax(Mpa)</b>	<b>SPM (min-1)</b>	<b>Stroke(mm)</b>	<b>Motor power(kw)</b>	<b>Weight(kg)</b>
	GX900	910	0.6(PVC/PVDF)	89	20	1.5	75±10
		910	0.8(316SS)	89			
	GX1350	1350	0.6(PVC/PVDF)	130			
		1350	0.8(316SS)	130			
	Gx1800	1820	0.6	178			
	GX2100	2100	0.6	203			

<b>Hydraulic end</b>	<b>Code</b>	<b>Description</b>
	P	PVC hydraulic end
	T	PVDF hydraulic end
	S	316SS hydraulic end

<b>Port</b>	<b>Code</b>	<b>Description</b>	<b>GX 900</b>			<b>GX1350/1800/2100</b>		
			<b>PVC</b>	<b>PVDF</b>	<b>316</b>	<b>PVC</b>	<b>PVDF</b>	<b>316</b>
	P	NPT threaded port	1" F	1" F	1" M	1/2" F	1-1/2" F	1-1/2" F
	Q	The inner pipe mouth hard tube intubation port	DN25	DN25	----	----	----	----
	X	Special port	Consult CNP, indicate when ordering.					

<b>Motor</b>	<b>Code</b>	<b>Description</b>
	1	Three-phase 200V/380V..1440rpm. IP55/F
	2	220V.50Hz. 1440rpm.1-50-220V. IP55/F
	3	Three-phase explosion-proof 220/380V.50Hz.1440rpm.IP55/F,DIIBT4
	4	Three-phase frequency conversion 220/380V.50Hz.1440rpm.IP55/F
	5	Pump default without motor, retain IEC90 port.
	6	Other motors. Consult CNP, indicate when ordering.

Dimension figure



Pump head material	GX900				GX1350/1800/2100			
	Port code	A	B	C	Port code	A	B	C
PVC	P	362	165.5	56	P	420	165.5	85
	Q	362	165.5	56	Q	420	165.5	85
PVDF	P	362	165.5	56	P	420	165.5	85
	Q	362	165.5	56	Q	420	165.5	85
316SS	P	433	172.5	91.5	P	462	172.5	106

## GH Series Hydraulic Diaphragm Metering Pump

### Technical Data:

Maximum Flow Rate: 500L/h  
Maximum discharge pressure:40bar  
Regulating ratio: 10:1  
Steady precision: ±2%  
Suction lift:3M

### Main features

#### Driving end

- ◎Eccentric institutions drive, compact structure, less space required;
- ◎Unique worm / gear structure ensure the steady working of the mechanical parts.
- ◎The tampered roller bearings at the end of gear ensure stable operation under heavy load for a long time.
- ◎Oil bath lubrication, change oil regularly, no need special maintenance for lubrication system.
- ◎All the working components are oil bath, they have long working life.
- ◎Flow regulation in downtime or running state. Adjustment mode can be selected manually, motor-driven, pneumatic-driven or frequency conversion.

#### Control mode

#### Hydraulic end

- ◎Diaphragm is hydraulic -driven, long service life.
- ◎The high precision design of one way check valve ensure the accuracy of the pump.
- ◎The built-in structure of pressure relief valve will protect pump head and diaphragm automatically.
- ◎Many kind of pump head material like PVC, PVDF, 316SS, Alloy 20, Hastelloy Alloy, suit for variable materials.
- ◎Option: pressure double diaphragm leak detection (local/long-distance) alarm.

### Major Applications

- ◎Petrochemical industry, chemical industry, refinery process
- ◎Power plant boiler water treatment



## GH series hydraulic diaphragm metering pump product code

Code	Series	Flow Rate	Pressure	Material	Motor	Port	Adjustment	Detection	Baseplate
	GH								

Series	Code	Description
	GH	GH Series hydraulic diaphragm metering pump

Flow rate	Description
	e. g. 025 stand for the flow rate is 25l/h

Pressure	Code	G	A	B	C	D	E	F
Implication		40 bar	30 bar	25 bar	20 bar	15 bar	12 bar	10 bar

Hydraulic end	Code	P	S	T	A	B
Material		PVC	316SS	PVDF	Alloy20	Alloy22

Motor	Code	Description
	1	550W.IEC71, 1440rpm. 3-50-220/380V. IP55/F/TEFC
	2	550W.IEC80, 1440rpm.1-50-220V. IP55/F/TEFC
	3	550W.IEC71, 1440rpm. 3-50-220/380V. IP55/F/TEFC/Ex-dIIBT4
	4	750W.IEC80, 1440rpm.3-50-220/380V. IP55/F/TEFC
	5	750W.IEC80, 1440rpm.1-50-220V. IP55/F/TEFC
	6	750W.IEC80, 1440rpm.3-50-220/380V. IP55/F/TEFC/Ex-dIIBT4
	7	Pump default without motor, retain IEC71 port.
	8	Pump default without motor, retain IEC80 port.

Adjustment	Code	Description
	M	Manual stroke adjusting
	N	Manual stroke adjusting,4-20mA,220VAC-1Ph
	E	Electric stroke adjusting 4-20mA,220VAC-1Ph,Ex,Proof
	F	Frequency conversion control, (0.55kw increase to 0.75kw, no 0.75KW)

Port	Code	Description	
	P	NPT threaded port	1/2" F
	Q	The inner pipe mouth hard tube intubation port	DN15(PVC hydraulic end only)
	X	Special port	Consult CNP,indicate when ordering.

Detection	Code	Description	Note
	N	No detection	Single hydraulic diaphragm
	B	Diaphragm break detection and pressure gauge	Double hydraulic diaphragm
	C	Diaphragm break detection, pressure gauge and explosion-proof pressure switch	

Baseplate	Code	Description
	N	No baseplate
	Y	Baseplate

Remarks: (1)This code is used for GH series dosing pump made by CNP, this code apply to the usage in marketing;

(2)Beyond (less or more than) the flow or pressure range in the catalogue, or beyond the content, please consult CNP.

## GH

### GH series hydraulic diaphragm metering pump flow pressure gauge

Series	plunger diameter	Stroke (mm)	Code	Speed Ratio	SPM	LPH@Pmax	Pmax(bar)	Motor power(KW)
GH	Φ30mm	16mm	GH015G	40:1	36	15	40	0.55
			GH030G	20:1	72	30	40	
			GH040G	14:1	102	40	40	
			GH060G	10:1	144	60	40	
			GH080G	8:1	180	80	40	
	Φ35mm		GH090G	7:1	206	90	40	0.75
			GH025A	40:1	36	25	30	
			GH050A	20:1	72	50	30	
			GH075A	14:1	102	75	30	
			GH105A	10:1	144	105	30	
	GH130A		8:1	180	130	30	0.75	
	Φ40mm		GH145A	7:1	206	145		30
			GH032B	40:1	36	32	25	0.55
			GH065B	20:1	72	65	25	
			GH100B	14:1	102	100	25	
			GH125B	10:1	144	125	25	
	GH150B		8:1	180	150	25	0.75	
	Φ45mm		GH200B	7:1	206	200		25
			GH045C	40:1	36	45	20	0.55
			GH090C	20:1	72	90	20	
			GH130C	14:1	102	130	20	
			GH190C	10:1	144	190	20	
	GH220C		8:1	180	220	20	0.75	
	Φ50mm		GH270C	7:1	206	270		20
			GH060D	40:1	36	60	15	0.55
			GH120D	20:1	72	120	15	
			GH160D	14:1	102	160	15	
			GH230D	10:1	144	230	15	
	GH300D		8:1	180	300	15	0.75	
	Φ55mm		GH340D	7:1	206	340		15
GH070E		40:1	36	70	12	0.55		
GH140E		20:1	72	140	12			
GH200E		14:1	102	200	12			
GH280E		10:1	144	280	12			
GH360E	8:1	180	360	12	0.75			
Φ60mm	GH400E	7:1	206	400		12		
	GH085F	40:1	36	85	10	0.55		
	GH170F	20:1	72	170	10			
	GH240F	14:1	102	240	10			
	GH350F	10:1	144	350	10			
GH450F	8:1	180	450	10	0.75			
GH500F	7:1	206	500	10				

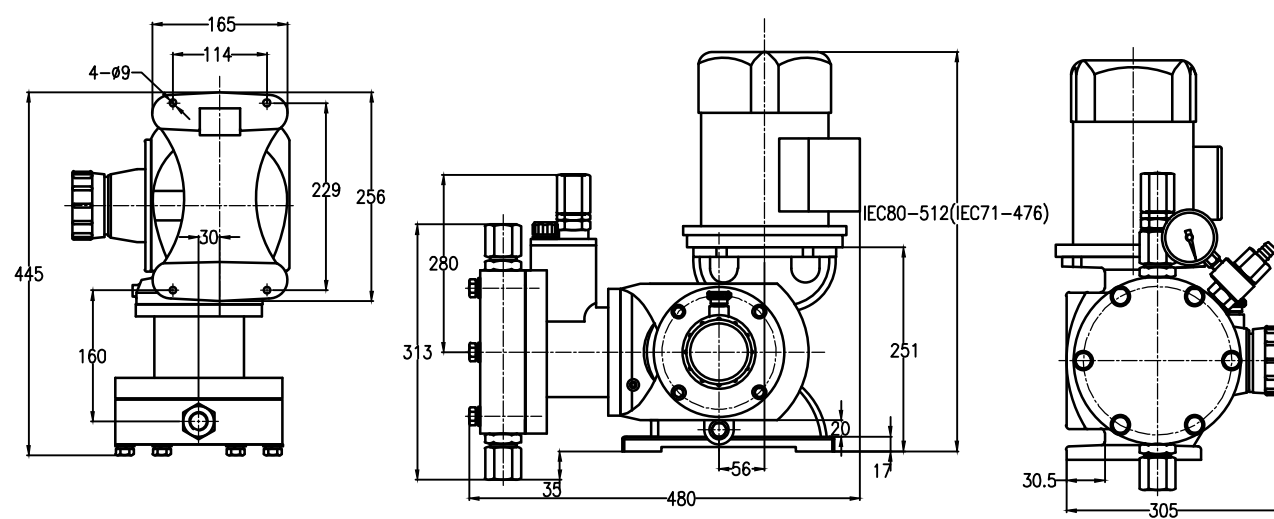
Remarks :The Speed Ratio in the gauge refers to nominal Speed Ratio

The Pmax of plastic hydraulic end is less than 10 bar.

#### Accessory

Provide system required accessories as:Filter,Buffer,Safety valve and Back pressure valve etc.

Dimension figure



### FROY Series Hydraulic Diaphragm Metering Pump

#### Technical Data:

Maximum Flow Rate: 659L/H  
Maximum discharge pressure: 211bar  
Regulating ratio: 10:1  
Steady precision :  $\pm 1\%$   
Suction lift:3m

#### Main features

##### Hydraulic end:

- ◎Eccentric institutions drive,compact structure,compact , less space required;
- ◎Unique worm and gear structure ensure the steady working of the mechanical parts.
- ◎The tapered roller bearings at the end of gear ensure stable operation under heavy load for a long time.
- ◎Oil bath lubrication, change oil regularly, no need special maintenance for lubrication system. All the working components have long working life.
- ◎Flow regulation in downtime or running state.
- ◎Adjustment mode can be selected manually,motor-driven,pneumatic-driven or frequency conversion.

##### Hydraulic end

- ◎Diaphragm is pneumatic-driven,long service life.
- ◎The design of one way check valve promotes the accuracy of the pump.
- ◎The built-in structure of pressure relief valve will protect pump head and diaphragm automatically.
- ◎Many kind of pump head material like PVC,PVDF,316SS,Alloy 20 ,Hadtelloy Alloy
- ◎Option: Double-end parallel, each end's flow rate can be adjusted individually.
- ◎Option: Pressure double diaphragm leak detection(local/long-distance) alarm

#### Major Applications:

- ◎Petrochemical /Chemicals/Petroleum Refining Industry
- ◎Water treatment of utility boiler





FROY series hydraulic diaphragm metering pump product code and flow pressure gauge

Series Code  Flow Rate  Material  Pressure  Motor  Port  Adjustment  Detection  Baseplate

Series	Code	Implication	Remark	Code	Implication	Remark
A	FRoyA	1-1/16" 7/16" 5/8" Plunger, low pressure, flow rate up to 116L/h, pressure up to 24bar		D	FRoyD	1-7/16" Plunger, dual-head pump, flow rate up to 659L/h, pressure up to 24bar
H	FRoyH	7/16" Plunger, high pressure, flow rate up to 17L/h, pressure up to 124bar		T	FRoyT	11/32" Plunger, flow rate up to 7.1L/h, pressure up to 211bar
P	FRoyP	7/16" 5/8" 1-1/16" Plunger suitable for medium with high viscosity, flow rate up to 88L/h, pressure up to 24bar		W	FRoyW	1/2" Plunger, flow rate up to 30L/h, pressure up to 211bar
B	FRoyB	19/32" 7/8" 1-7/16" Plunger, flow rate up to 329L/h, pressure up to 103bar				

Flow rate	Code	001	002	003	004	005	006	007	008	009	010	011	012	014	015	020	025	030	035	040	050	060	070	090	120	170	180	260	270	330	360	530	660					
P	Q <sup>(1)</sup>	1.6 <sup>(2)</sup>	2.3 <sup>(2)</sup>		5.0		7.9		11		18	22		35	55	68																						
A	P <sub>max</sub>	24bar																																				
A	Q <sup>(1)</sup>	2.3		5.0		7.9		19		39	61		94	116	metallic material: 24bar, non-metallic material: 10bar												metallic material: 14bar, non-metallic material: 10bar											
B	P <sub>max</sub>	non-metallic material: 10bar, metallic material: bar																																				
B	Q <sup>(1)</sup>							22	30	42	55		96	125	179	267	329																					
D	P <sub>max</sub>	non-metallic material: 10bar, metallic material: bar																																				
D	Q <sup>(1)</sup>							8.8 <sup>(3)</sup>		14 <sup>(3)</sup>	17 <sup>(3)</sup>		170	264		358	534	659																				
H	P <sub>max</sub>	124bar																																				
H	Q <sup>(1)</sup>	1.8	2.5	5.3 <sup>(3)</sup>		8.8 <sup>(3)</sup>		14 <sup>(3)</sup>	17 <sup>(3)</sup>																													
T	P <sub>max</sub>	211bar																																				
T	Q <sup>(1)</sup>	1.2	2.3	3.8	6.0	7.1																																
W	P <sub>max</sub>	211bar																																				
W	Q <sup>(1)</sup>					7.8		12	16	25	30																											

(1) Rated flow: l/h@7bar; others: @Pmax (2) If viscosity <1460cp, please choose RH pump. (3) The flow rate of double diaphragm pump will decrease 10%

Material	Code	Implication	FRoyA	FRoyP	FRoyH	FRoyB/D	FRoyT	FRoyW	
S	316SS		Y	Y	Y	Y	Y	Y	
A	Alloy20		Y	Y	Y	Y	Y	Y	
B	Alloy22		Y	Y	Y	Y	Y	Y	
P	PVC		Y <sup>(1)</sup>	Y	Y	Y	Y	Y	(1) N/A for Q >= 57l/h, (2) N/A for Q <= 55l/h
T	PVDF		Y <sup>(1)</sup>	Y	Y	Y	Y	Y	(1) N/A for Q >= 57l/h, (2) N/A for Q <= 125l/h

Pressure	Code	010	014	017	024	028	067	103	124	211
Implication		10bar	14bar	17bar	24bar	28bar	67bar	103bar	124bar	211bar

Motor	Code	Implication	Code	Implication	A	H	P	B	D	T	W	Remark
normal motor	A	direct connection, IEC71, 0.25KW	G	direct connection, IEC71, 0.25KW, ExdII BT4	Y	Y	Y	Y	Y	Y	Y	1425rpm, 3-50-380v, Ip55, F, TEFC, B5
	P	direct connection, IEC71, 0.37KW	S	direct connection, IEC71, 0.37KW, ExdII BT4	Y	Y	Y	Y	Y	Y	Y	
	B	API flange, IEC71, 0.25KW	H	API flange, IEC71, 0.25KW, ExdII BT4	Y	Y	Y	Y	Y	Y	Y	
	Q	API flange, IEC71, 0.37KW	T	API flange, IEC71, 0.37KW, ExdII BT4	Y	Y	Y	Y	Y	Y	Y	
	C	API flange, IEC80, 0.55KW	J	API flange, IEC80, 0.55KW, ExdII BT4	Y	Y	Y	Y	Y	Y	Y	
	D	API flange, IEC80, 0.75KW	K	API flange, IEC80, 0.75KW, ExdII BT4	Y	Y	Y	Y	Y	Y	Y	
EX motor	E	API flange, IEC90, 1.1KW	L	API flange, IEC90, 1.1KW, ExdII BT4	Y	Y	Y	Y	Y	Y	Y	Special motor
	F	API flange, IEC90, 1.5KW	M	API flange, IEC90, 1.5KW, ExdII BT4	Y	Y	Y	Y	Y	Y	Y	
X	Others, please consult CNP, indicate when ordering											

Port	Code	Implication	A	H	P	B	D	T	W	Remark	
1	Inlet: NPT internal thread 1/2", Outlet: NPT internal thread 1/4", 3/8" used for specifications above RB070 (include RB070)	Y	Y	Y	Y	Y	Y	Y	Y	Metal pump head	
2	Inlet: ANSI 150# RF1/2" socket welding flange, Outlet: ANSI 150# RF1/2" socket welding flange	Y	Y	Y	Y	Y	Y	Y	Y		
3	Inlet: ANSI 150# RF1/2" socket welding flange, Outlet: ANSI 300# RF1/2" socket welding flange	Y	Y	Y	Y	Y	Y	Y	Y		
4	Inlet: ANSI 150# RF1/2" socket welding flange, Outlet: ANSI 600# RF1/2" socket welding flange	Y	Y	Y	Y	Y	Y	Y	Y		
5	Inlet: ANSI 150# RF1/2" socket welding flange, Outlet: ANSI 900# RF1/2" socket welding flange	Y	Y	Y	Y	Y	Y	Y	Y		
6	Inlet: ANSI 150# RF1/2" socket welding flange, Outlet: ANSI 1500# RF1/2" socket welding flange	Y	Y	Y	Y	Y	Y	Y	Y		
7	Inlet: NPT1/2" external thread; Outlet: NPT1/2" external thread	Y	Y	Y	Y	Y	Y	Y	Y	Plastic pump head	
8	Inlet: NPT1/2" internal thread; Outlet: NPT3/8" internal thread	Y	Y	Y	Y	Y	Y	Y	Y		
9	ANSI 150# RF1/2" threaded flange	Y	Y	Y	Y	Y	Y	Y	Y		
9	Others, please consult CNP, indicate when ordering										

Adjustment	Code	Implication	A	H	P	B	D	T	W	Remark
M	Manual stroke adjusting-PVC/Al	Y	Y	Y	Y	Y	Y	Y	Y	
S	Manual stroke adjusting-316SS	Y	Y	Y	Y	Y	Y	Y	Y	
E	Electric stroke adjusting, NEMA4-20mA, 220V	Y	Y	Y	Y	Y	Y	Y	Y	
F	Electric stroke adjusting, explosion-proof, 4.4-20mA, 220V	Y	Y	Y	Y	Y	Y	Y	Y	
P	Pneumatic stroke adjusting, 0.2-1bar, direct adjustment	Y	Y	Y	Y	Y	Y	Y	Y	
V	Electric stroke adjusting 4-20mA, 220V/Manual	Y	Y	Y	Y	Y	Y	Y	Y	

Detection	Code	Implication	A	H	P	B	D	T	W	Remark
N	No detection	Y	Y	Y	Y	Y	Y	Y	Y	nonmetallic pump head, no detection option.
B	The diaphragm rupture test and pressure gauge (include baseplate)	Y	*	Y	Y	Y	Y	Y	Y	
C	The diaphragm rupture test and pressure gauge, NEMA4 pressure switch (include baseplate)	Y	*	Y	Y	Y	Y	Y	Y	
D	The diaphragm rupture test and pressure gauge, explosion-proof pressure switch (include baseplate)	Y	*	Y	Y	Y	Y	Y	Y	

The 005,009 and 015 series of RH pumps can choose double diaphragm, but the flow rate will decrease 10%.

Baseplate	Code	Implication	A	H	P	B	D	T	W	Remark
N	No baseplate	Y	Y	Y	Y	Y	Y	Y	Y	
Y	Baseplate	Y	Y	Y	Y	Y	Y	Y	Y	

Remarks: 1. This code is used for FROY series dosing pump made by CNP, this code apply to the usage in marketing.  
2. The red "Y" refer to standard configuration, any circumstance out of range of the gauge above, please consult CNP.  
3. If you choose the option of diaphragm rupture test, the option of baseplate should be "Y".

# FROY

## Main components material of Pump head

Hydraulic end material	Pump head	Valve body	Valve seat	Valve ball	Diagram	Seal ring	Spring
PVC	PVC	PVC	PVDF	Ceramic	PTFE	Fluorous rubber	-
PVDF	PVDF	PVDF	PVDF	Ceramic	PTFE	Fluorous rubber	-
316SS	316SS	316SS	316SS	316SS	PTFE	Fluorous rubber	316SS
Alloy20	Alloy20	Alloy20	Alloy20	Alloy20	PTFE	Fluorous rubber	HastelloyC276
HastelloyC22	HastelloyC22	HastelloyC22	HastelloyC22	HastelloyC22	PTFE	Fluorous rubber	HastelloyC276

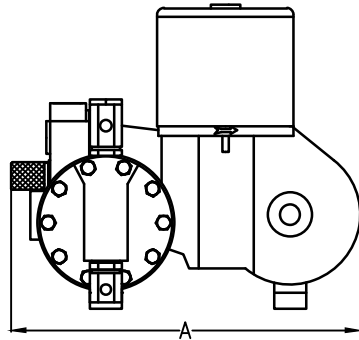
## Accessory

Provide system required accessories as: Filter, Buffer, Safety valve and Back pressure valve etc.

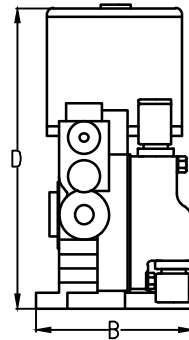
## The outline drawing of FROY series hydraulic diaphragm metering pump

### Product Dimensions

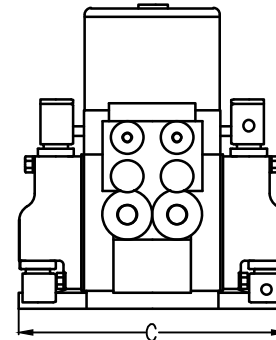
Series	A(mm)	B(mm)	C(mm)	D(max)(mm)
RA, RH, RP	302	152	267	609
RB	476	192	343	650
RT	384	165	N/A	497
RW	567	204	N/A </tr	



Side view of single-head pump & double-head pump



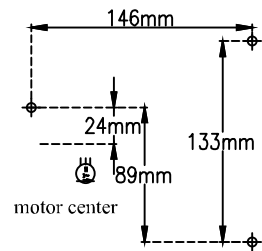
Front view of single-head pump



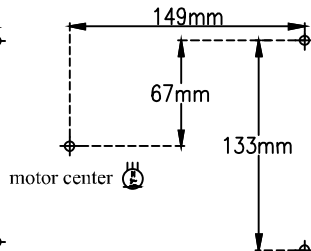
Front view of double-head pump

## Footing size

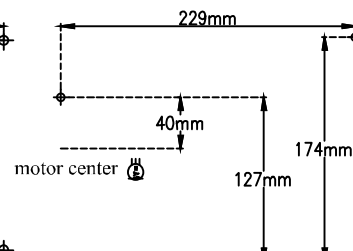
RA, RH, RP, RT  
single-head pump



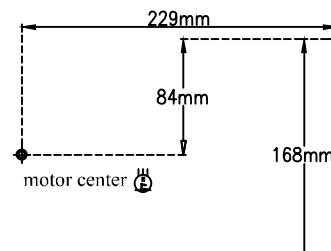
RA, RH, RP, RT  
double-head pump



RB, RW  
single-head pump



RB, RW  
double-head pump



FROY series hydraulic diaphragm metering pump flow rate and pressure gauge

Series	Plunger diameter	Stroke (mm)	Model	Speed Ratio	SPM(ref) 1425rpm	Maximum Consistency CP	Metal pump head(l/h)-1425rpm				Plastic pump head		motor
							7bar	14bar	20bar	24bar	7bar	10bar	
A	7/16" (Φ 11.1mm)	20.8 mm	RA002	48:1	30	1760	<b>2.3</b>	2.2	2.1	2.0			0.25kw
			RA008	15:1	96	310	<b>7.9</b>	7.7	7.3	7.2			
			RA005	48:1	30	1760	<b>5.0</b>	4.7	4.5	4.4			
	RA020		48:1	30	150	<b>19</b>	19	18	17	<b>18</b>	18		
	RA040		24:1	60	75	<b>39</b>	38	36	36	<b>36</b>	35		
	RA060		15:1	96	40	<b>61</b>	60	58	57	<b>57</b>	57		
	RA090		9.5:1	152	35	<b>94</b>	91	-----	-----	-----	-----		
	RA120		8:1	178	30	<b>116</b>	112	-----	-----	-----	-----		
	5/8" (Φ 15.9mm)												
	1-1/16" (Φ 27.0mm)												

Series	Plunger diameter	Stroke (mm)	Model	Speed Ratio	SPM(ref) 1425rpm	Maximum Consistency CP	Metal pump head(l/h)-1425rpm					Plastic pump head		motor	
							7bar	17bar	24bar	28bar	67bar	103bar	7bar		10bar
B	19/32" <sup>(3)</sup> (Φ 15.1mm)	40.6 mm	RB020	25:1	60	102	<b>22</b>	22	21	21	19	18	-----	-----	Standard Configuration is 0.75kw  1.1kw is optional when regulating speed.
			RB030	19:1	80	74	<b>30</b>	29	28	28	22	22	-----	-----	
			RB040	12:1	120	44	<b>42</b>	40	40	40	38	36	-----	-----	
			RB050	9.5:1	152	38	<b>55</b>	54	53	53	49	47	-----	-----	
			RB070	19:1	80	169	<b>66</b>	64	62	61	50	-----	<b>66</b>	66	
	RB090		12:1	120	114	<b>96</b>	94	92	91	80	-----	<b>96</b>	95		
	RB120		9.5:1	152	88	<b>125</b>	122	120	119	105	-----	<b>125</b>	124		
	RB180		19:1	80	58	<b>179</b>	171	166	160	-----	-----	<b>179</b>	176		
	RB270		12:1	120	34	<b>267</b>	259	254	248	-----	-----	<b>267</b>	264		
	RB330		9.5:1	152	26	<b>329</b>	318	310	303	-----	-----	<b>329</b>	326		
D	1-7/16" (double-head B) (Φ 36.5mm)	RD170	38:1	40	100	<b>170</b>	152 <sup>(1)</sup>	142 <sup>(1)</sup>	-----	-----	-----	<b>170</b>	163		
		RD260	25:1	60	80	<b>264</b>	246 <sup>(1)</sup>	236 <sup>(1)</sup>	-----	-----	-----	<b>264</b>	258		
		RD360	19:1	80	58	<b>358</b>	340 <sup>(3)</sup>	-----	-----	-----	-----	<b>358</b>	352		
		RD530	12:1	120	34	<b>534</b>	516 <sup>(2)</sup>	-----	-----	-----	-----	<b>534</b>	528		
		RD660	9.5:1	152	26	<b>659</b>	639 <sup>(2)</sup>	-----	-----	-----	-----	<b>659</b>	651		

(1) The maximum pressure is 24bar. (2) The maximum pressure is 17bar. (3) Metal pump head only.

Series	Plunger diameter	Stroke (mm)	Model	Speed Ratio	SPM(ref) 1425rpm	Maximum Consistency CP	Metal pump head(l/h)-1425rpm					motor	
							7bar	28bar	55bar	83bar	103bar		124bar
H	7/16" (Φ 11.1mm)	20.8 mm	RH002	77:1	19	2660	<b>1.8</b>	1.7	1.6	1.4	1.4	1.2	0.25kw
			RH003	48:1	30	1760	<b>2.5</b>	2.2	1.9	1.9	1.9	1.9	
			RH005	24:1	60	720	<b>5.3</b>	5.0	4.7	4.4	4.1	3.8	
			RH009	15:1	96	310	<b>8.8</b>	8.2	7.9	7.2	6.6	6.3	
			RH014	9.5:1	152	210	<b>14.0</b>	12.9	12.6	11.4	10.4	9.7	
			RH015	8:1	178	180	<b>17.0</b>	15.8	15.4	13.9	12.7	12.0	

Series	Plunger diameter	Stroke (mm)	Model	Speed Ratio	SPM(ref) 1425rpm	Maximum Consistency CP	Metal pump head(l/h)-1425rpm				motor
							7bar	14bar	20bar	24bar	
P High viscosity application	7/16" (Φ 11.1mm)	20.8 mm	RP001	77:1	19	12200	<b>1.6</b>	1.6	1.5	1.5	0.25kw
			RP002	48:1	30	7500	<b>2.3</b>	2.2	2.1	2.0	
			RP008	15:1	96	2000	<b>7.9</b>	7.7	7.3	7.2	
			RP005	48:1	30	5000	<b>5.0</b>	4.7	4.5	4.4	
	5/8" (Φ 15.9mm)		RP011	24:1	60	2500	<b>11.0</b>	10.7	10.3	10.0	
			RP015	15:1	96	1250	<b>17.6</b>	17.0	16.7	16.0	
			RP020	12:1	120	600	<b>21.9</b>	21.1	20.7	19.9	
			RP035	24:1	60	1000	<b>34.6</b>	33.9	32.1	31.1	
1-1/16" (Φ 27.0mm)	RP050	15:1	96	500	<b>55.0</b>	54.4	52.2	50.9			
	RP070	12:1	120	300	<b>68.4</b>	67.6	64.9	63.3			

Series	Plunger diameter	Stroke (mm)	Model	Speed Ratio	SPM(ref) 1425rpm	Maximum Consistency CP	Metal pump head(l/h)-1425rpm			motor
							140bar	175bar	211bar	
T	11/32" (Φ 8.7mm)	20.8 mm	RT001	48:1	30	1760	1.4	1.3	<b>1.2</b>	0.55kw
			RT002	24:1	60	700	2.8	2.5	<b>2.3</b>	
			RT004	15:1	96	337	4.3	4.0	<b>3.8</b>	
			RT006	9.5:1	152	143	6.8	6.4	<b>6.0</b>	
			RT007	8:1	180	95	8.1	7.6	<b>7.1</b>	
W	1/2" (Φ 12.7mm)	40.6 mm	RW008	38:1	40	650	8.8	8.4	<b>7.8</b>	1.1kw
			RW012	25:1	60	285	13.5	12.6	<b>11.9</b>	
			RW015	19:1	80	160	18.3	17.0	<b>15.8</b>	
			RW025	12:1	120	43	29.0	27.1	<b>25.2</b>	
			RW030	9.5:1	152	41	34.1	31.9	<b>29.7</b>	1.5kw

Remarks : 1. The Speed Ratio above is nominal.  
2. The parts which font is bold and italic ,the flow rate is rated.

## JX Series Plunger Metering Pump

### Technical Data:

Single-end Maximum Flow Rate:940L/h

Maximum discharge pressure:50MPa

Regulating ratio:10:1

Steady precision :  $\pm 1\%$

Suction lift: : 2.5m

Medium temperature:-10°C-100°C

Maximum ambient temperature:40°C

Maximum Altitude:1000m



### Main features

- ◎Solid and compact structure,pump head size is small, optimizable connection.
- ◎High volumetric efficiency
- ◎High measure precision and steady precision can reach  $\pm 1\%$ .
- ◎Fit for high pressure environment, it can convey media with high viscosity. Corrosive medium and dangerous chemicals are not recommended.
- ◎Variable eccentric institution regulation, insure flow pulsation gently vary.
- ◎The application of imported hydraulic composite seal enables the good performance of leak-proof and long service life.

### Control Mode:

- ◎Power supply:380V/220V -50Hz/60Hz/single phase/three phase
- ◎Variable frequency controller,accept external control signal,adjust stroke speed; input signal:4-20mA analog signal.
- ◎Motor controller,control three phase motor with mode“run/stop”, adjust output flow..

### Major Applications:

- ◎Petrochemical /Electricity/Metallurgy/Pharmaceuticals Industry /Food Industry, Especially outstanding in the area of high precision, high pressure, high temperature.



# JX

## Flow rate /Pressure

Code	LPH@Pmax (L/h)	Pmax(Mpa)	Plunger diameter (mm)	SPM (min-1)	Stroke (mm)	Motor (kw)	Weight (kg)
JX100/8.5	100	8.5	30	130	20	1.5	82
JX100/6.2		6.2				1.1	
JX100/4.2		4.2				0.75	
JX70/12.0	70	12	25			1.5	
JX70/8.8		8.8				1.1	
JX70/6.0		6				0.75	
JX55/15.8	55	15.8	22			1.5	78
JX55/11.7		11.7				1.1	
JX55/8.0		8				0.75	
JX45/19	45	19	20			1.5	
JX45/13.9		13.9				1.1	
JX45/9.5		9.5				0.75	
JX35/23.5	35	23.5	18			1.5	
JX35/17.0		17				1.1	
JX35/12.0		12				0.75	
JX25/34.0	25	34	15			1.5	
JX25/25.0		25				1.1	
JX25/17.0		17				0.75	
JX15/50.0	15	50	12			1.5	
JX15/36.0		36				1.1	
JX15/25.0		25				0.75	
JX10/50.0	10	50	10			1.5	
JX10/36.0		36				1.1	
JX10/25.0		25				0.75	

### Hydraulic end

Code	Description
S	304SS
L	316SS

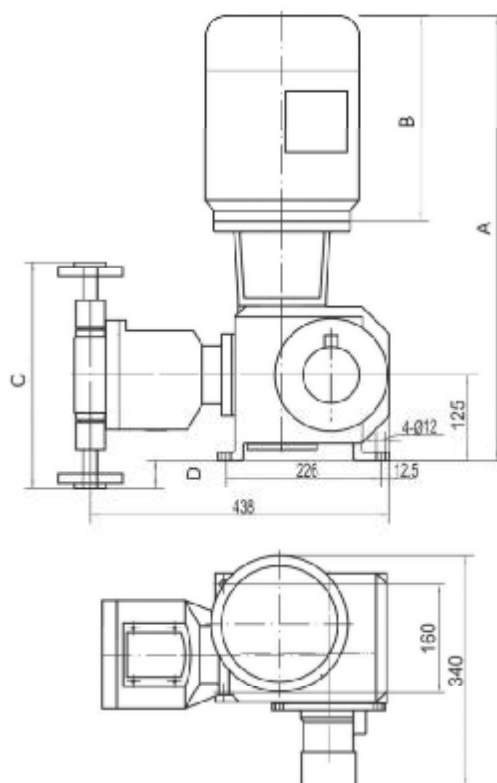
### Port

Code	Description	JX10-55	JX70-410	JX490-940
P	NPT threaded port	1/2" M	1/2" F	1" F
F	Flange port	DN15	DN20	DN25
K	Cutting sleeve	DN10	DN15	None
X	Special port	Consult CNP, indicate when ordering		

### Motor

Code	Description
1	Three-phase 200V/380V..1440rpm. IP55/F
2	200V.50Hz. 1440rpm.1-50-220V. IP55/F
3	Three-phase explosion-proof 220/380V.50Hz.1440rpm.IP55/Ex-dllBT4
4	Three-phase frequency conversion 220/380V.50Hz.1440rpm.IP55/F
5	Pump default without motor, retain IEC90 port.
6	Other motors. Consult CNP, indicate when ordering.

Dimension figure



Installation dimension of JX series plunger metering pump

Model	A	B	C	D	Power (kw)	Weight (kg)
JX940/0.9	655	300	360	55	1.5	88
JX940/0.7	635	280	360	55	1.1	
JX940/0.5	615	260	360	55	0.75	
JX840/1.1	655	300	360	55	1.5	
JX840/0.8	635	280	360	55	1.1	
JX840/0.5	615	260	360	55	0.75	
JX740/1.2	655	300	360	55	1.5	
JX740/0.9	635	280	360	55	1.1	
JX740/0.6	615	260	360	55	0.75	
JX650/1.4	655	300	360	55	1.5	
JX650/1.0	635	280	360	55	1.1	
JX650/0.7	615	260	360	55	0.75	
JX570/1.6	655	300	360	55	1.5	
JX570/1.0	635	280	360	55	1.1	
JX570/0.8	615	260	360	55	0.75	
JX490/1.8	655	300	360	55	1.5	
JX490/1.3	635	280	360	55	1.1	
JX490/0.9	615	260	360	55	0.75	

Installation dimension of JX series plunger metering pump

Model	A	B	C	D	Power (kw)	Weight (kg)
JX410/2.1	655	300	225	-13	1.5	83
JX410/1.6	635	280	225	-13	1.1	
JX410/1.1	615	260	225	-13	0.75	
JX360/2.4	655	300	220	-15	1.5	
JX360/1.8	635	280	220	-15	1.1	
JX360/1.2	615	260	220	-15	0.75	
JX280/3.1	655	300	215	-18	1.5	
JX280/2.2	635	280	215	-18	1.1	
JX280/1.5	615	260	215	-18	0.75	
JX230/3.8	655	300	210	-20	1.5	
JX230/2.8	635	280	210	-20	1.1	
JX230/1.9	615	260	210	-20	0.75	
JX180/4.8	655	300	205	-23	1.5	
JX180/3.5	635	280	205	-23	1.1	
JX180/2.4	615	260	205	-23	0.75	
JX140/6.2	655	300	200	-25	1.5	
JX140/4.6	635	280	200	-25	1.1	
JX140/3.1	615	260	200	-25	0.75	
JX100/8.5	655	300	195	-28	1.5	
JX100/6.2	635	280	195	-28	1.1	
JX100/4.2	615	260	195	-28	0.75	
JX70/12.0	655	300	190	-30	1.5	
JX70/8.8	635	280	190	-30	1.1	
JX70/6.0	615	260	190	-30	0.75	
JX55/15.8	655	300	265	8	1.5	77
JX55/11.7	635	280	265	8	1.1	
JX55/8.0	615	260	265	8	0.75	
JX45/19.0	655	300	260	5	1.5	
JX45/13.9	635	280	260	5	1.1	
JX45/9.5	615	260	260	5	0.75	
JX35/23.5	655	300	260	5	1.5	
JX35/17.0	635	280	260	5	1.1	
JX35/12.0	615	260	260	5	0.75	
JX25/34.0	655	300	260	5	1.5	
JX25/25.0	635	280	260	5	1.1	
JX25/17.0	615	260	260	5	0.75	
JX15/50.0	655	300	260	5	1.5	
JX15/36.0	635	280	260	5	1.1	
JX15/25.0	615	260	260	5	0.75	
JX10/50.0	655	300	260	5	1.5	
JX10/36.0	635	280	260	5	1.1	
JX10/25.0	615	260	260	5	0.75	

### JMX Series Hydraulic Diaphragm Metering Pump



#### Technical Data:

Flow rate: 45L/h ~ 1100L/h  
Maximum discharge pressure: 19MPa  
Regulating ratio 10:1  
Steady precision:  $\pm 1\%$   
Maximum suction lift: 2m  
Medium temperature:  $-10^{\circ}\text{C} \sim 100^{\circ}\text{C}$   
Maximum ambient temperature:  $+40^{\circ}\text{C}$   
Maximum altitude: 1000m

#### Main features

- ◎ Solid, compact design; fixed seal, no leakage, the seal performance is better than plunger pump
- ◎ Variable eccentric institutions regulation, ensure flow pulsation gently vary
- ◎ High metering precision, steady precision can be  $\pm 1\%$
- ◎ Built-in limited fill oil valve to ensure liquid oil capacity, built-in safety valve to ensure diaphragm to avoid liquid
- ◎ When deliver corrosive slurry and flammable and explosive chemicals, you can choose double diaphragm, which is equip with diaphragm break alarm.

#### Control Mode:

- ◎ Supply power: 380V/220V-50Hz/60Hz/Three phase/Single phase
- ◎ Variable frequency controller, accept external control signal, adjust stroke speed, input signal: 4-20mA analog signal
- ◎ Motor controller, control three phase motor with run/stop, adjust output flow

#### Major Applications:

◎ Environmental protection, petrochemical industry, chemical industry, electricity, metallurgy, Pharmacy, Food Etc., excellent performance especially in the condition of high precision, high pressure, high temperature





# JMX

Flow rate / Pressure	Code	LPH@Pmax (L/h)	Pmax(Mpa)	Plunger diameter (mm)	SPM (min-1)	Stroke (mm)	Motor (KW)
	JMX280/3.1	280	3.1	50	130	20	1.5
	JMX280/2.2		2.2				1.1
	JMX280/1.5		1.5				0.75
	JMX230/3.8	230	3.8	45			1.5
	JMX230/2.8		2.8				1.1
	JMX230/1.9		1.9				0.75
	JMX180/4.8	180	4.8	40			1.5
	JMX180/3.5		3.5				1.1
	JMX180/2.4		2.4				0.75
	JMX140/6.2	140	6.2	35			1.5
	JMX140/4.6		4.6				1.1
	JMX140/3.1		3.1				0.75
	JMX100/8.5	100	8.5	30			1.5
	JMX100/6.2		6.2				1.1
	JMX100/4.2		4.2				0.75
	JMX70/12.0	70	12	25			1.5
	JMX70/8.8		8.8				1.1
	JMX70/6.0		6				0.75
	JMX55/15.8	55	15.8	22			1.5
	JMX55/11.7		11.7				1.1
	JMX55/8.0		8		0.75		
	JMX45/19	45	19	20	1.5		
	JMX45/13.9		13.9		1.1		
	JMX45/9.5		9.5		0.75		

Hydraulic end	Code	Material	Remark	Code	Material	Remark
	S	304SS	-----	P	PVC	PVC&PVDF hydraulic end only suit for flow rate 570L/h to 1100L/h. The maximum bearing pressure of plastic hydraulic end is 10bar.
	L	316SS	-----			
	Z	Special material hydraulic end. Consult CNP, indicate when ordering.	-----			

Port	Code	Description	JMX45-55	JMX70-490	JMX570-1100	
					Metal hydraulic end	Plastic hydraulic end
	P	NPT threaded port	1/2" M	1/2" F	1" M	1" F
	F	Flange port	DN15	DN20	DN25	
	K	Cutting sleeve	DN10	DN15	NO	
	X	Special port	Consult CNP, indicate when ordering			

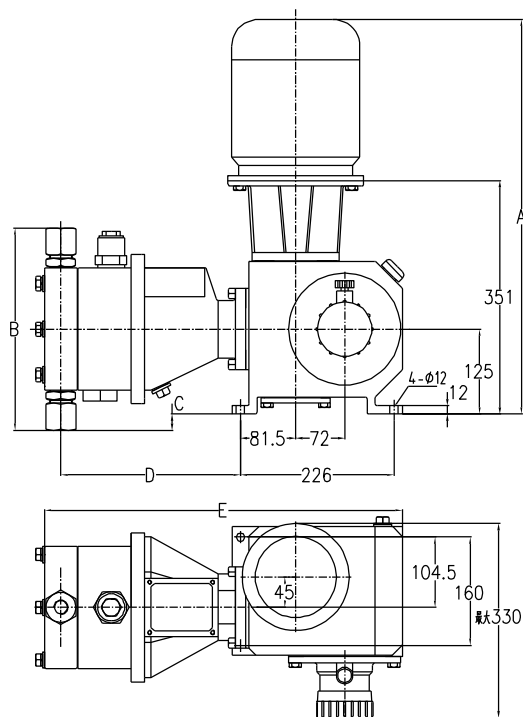
Dash area is standard configuration.

Motor	Code	Description	Code	Description
	1	Three-phase 220V/380V,50Hz,1440rpm,IP55/F dIIBT4	4 <sup>(1)</sup>	Three-phase variable frequency 220V/380V,50Hz,1440rpm,IP55/F
	2	Single-phase 220V,50Hz,1440rpm,IP55/F	5 <sup>(1)</sup>	Pump default without motor, retain IEC90 port.
	3	Three-phase explosion-proof 380V,50Hz,1440rpm,IP55/F dIIBT4	6 <sup>(1)</sup>	Other motors. Consult CNP, indicate when ordering.

Option	Code	Description	Remark
	N	No option	-----
	B <sup>(2)</sup>	The diaphragm rupture test and pressure gauge	With pressure gauge
	C <sup>(2)</sup>	The diaphragm rupture test and pressure gauge, pressure switch	With normal pressure switch and pressure gauge
	D <sup>(2)</sup>	The diaphragm rupture test and pressure gauge, explosion-proof pressure switch	With explosion-proof pressure switch and pressure gauge

1. When you choose variable frequency motor, the power lever should be one grade more than normal.
2. If you choose double diaphragm rupture test, the flow rate will decrease 5%

Dimension figure



JMX installation dimension

Model	Motor Power (kW)	A (mm)	B(mm)		C(mm)		D(mm)		E(mm)	
			Metal pump head	Plastic pump head	Metal pump head	Plastic pump head	Metal pump head	Plastic pump head	Metal pump head	Plastic pump head
JMX490/0.9	0.75	591	298	24	264.5	527	332	41		
JMX490/1.3	1.1	620								
JMX490/1.8	1.5	666								
JMX410/1.1	0.75	591								
JMX410/1.6	1.1	620								
JMX410/2.1	1.5	666								
JMX360/1.2	0.75	591								
JMX360/1.8	1.1	620								
JMX360/2.4	1.5	666								
JMX280/1.5	0.75	591								
JMX280/2.2	1.1	620								
JMX280/3.1	1.5	666								
JMX230/1.9	0.75	591								
JMX230/2.8	1.1	620								
JMX230/3.8	1.5	666								
JMX180/2.4	0.75	591								
JMX180/3.5	1.1	620								
JMX180/4.8	1.5	666								
JMX140/3.1	0.75	591								
JMX140/4.6	1.1	620								
JMX140/6.2	1.5	666								
JMX100/4.2	0.75	591								
JMX100/6.2	1.1	620								
JMX100/8.5	1.5	666								
JMX70/6.0	0.75	591								
JMX70/8.8	1.1	620								
JMX70/12.0	1.5	666								
JMX55/8.0	0.75	591								
JMX55/11.7	1.1	620								
JMX55/15.8	1.5	666								
JMX45/9.5	0.75	591								
JMX45/13.9	1.1	620								
JMX45/19.0	1.5	666								

JMX installation dimension

Model	Motor Power (kW)	A (mm)	B(mm)		C(mm)		D(mm)		E(mm)	
			Metal pump head	Plastic pump head	Metal pump head	Plastic pump head	Metal pump head	Plastic pump head	Metal pump head	Plastic pump head
JMX1100/0.2	0.75	591	356	53	278.5	552				
JMX1100/0.3	1.1	620	356	53	278.5	552				
JMX1100/0.5	1.5	666	356	53	278.5	552				
JMX1000/0.3	0.75	591	356	53	278.5	552				
JMX1000/0.5	1.1	620	356	53	278.5	552				
JMX1000/0.7	1.5	666	356	53	278.5	552				
JMX940/0.5	0.75	591	356	53	278.5	552				
JMX940/0.7	1.1	620	356	53	278.5	552				
JMX940/0.9	1.5	666	356	53	278.5	552				
JMX840/0.5	0.75	591	356	53	278.5	552				
JMX840/0.7	1.1	620	418	84	266.5	550				
JMX840/1.1	1.5	666								
JMX740/0.6	0.75	591	356	53	278.5	552				
JMX740/0.9	1.1	620	356	53	278.5	552				
JMX740/1.2	1.5	666								
JMX650/0.7	0.75	591	356	53	278.5	552				
JMX650/1.0	1.1	620	356	53	278.5	552				
JMX650/1.4	1.5	666								
JMX570/0.8	0.75	591	356	53	278.5	552				
JMX570/1.1	1.1	620								
JMX570/1.6	1.5	666								

## J(M)XS

### J(M)XS Metering Pump



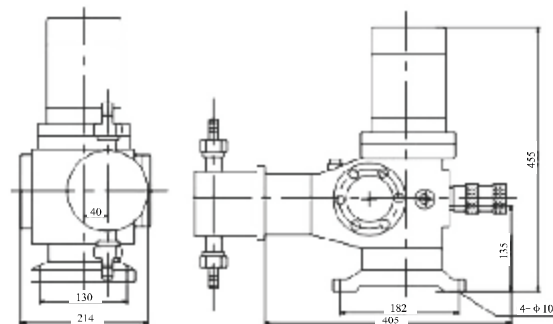
#### Performance description

- ◎ Pump head can be hydraulic diaphragm type, plunger type and piston type.
- ◎ Hydraulic balance diaphragm pump with built-in function of emptying, pressure-relieving and oil adding, superior performance, zero leakage and high safety.
- ◎ All-in-one structure of variable worm gearing, low noise, efficient.
- ◎ U-cam regulating structure, compact and reliable, able to adjust stroke from 0-100%.
- ◎ The check valve fitted with high lever anti-corrosion ball valve and linear seal, the measure is smooth and accurate.
- ◎ High-performance plunger and imported filler, diaphragm and seal assembly, long service life, good seal ability
- ◎ Oil bath lubrication, driving components have long working life.
- ◎ Adjustable range: 0-100%; measurement precision:  $\pm 0.5\%$ .
- ◎ Adjustment mode can be selected manually, motor-driven, frequency conversion driven, automatically driven..
- ◎ Many kind of pump head material like 45 steel, 304SS, 316SS and high polymer materials.

#### Technical Data:

Model	Flow rate (L/h)	motor power			Plunger diameter (mm)
		0.25kw	0.37kw	0.55kw	
		Outlet pressure(Mpa)			
J(M)XS0.8/40/50/60	0.8	40	50	60	3
J(M)XS3.3/20/28/36	3.3	20	28	36	6
J(M)XS7.3/11/14/20	7.3	11	14	20	9
J(M)XS15/5.5/8/11	15	5.5	8.0	11	13
J(M)XS30/2.5/3.2/5	30	2.5	3.2	5.0	18
J(M)XS48/1.5/2/3	48	1.5	2.0	3.0	23
J(M)XS70/1/1.5/2	70	1.0	1.5	2.0	28
J(M)XS100/0.8/1.2/1.5	100	0.8	1.2	1.5	33
J(M)XS130/0.7/0.9/1.2	130	0.7	0.9	1.2	38
J(M)XS165/0.5/0.6/1.0	165	0.5	0.6	1.0	43
J(M)XS210/0.4/0.5/0.8	210	0.4	0.5	0.8	48
J(M)XS255/0.3/0.4/0.6	255	0.3	0.4	0.6	53
J(M)XS305/0.2/0.3/0.5	305	0.2	0.3	0.5	58

#### Dimension figure



## J(M)XL Metering Pump

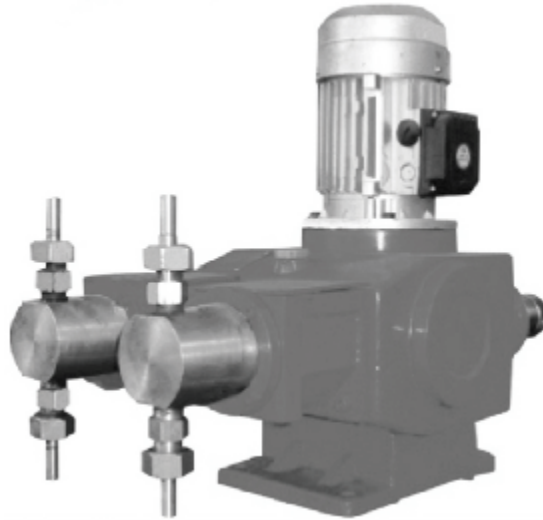
**Performance description**

- ◎ Pump head can be hydraulic diaphragm type, plunger type and piston type.
- ◎ Hydraulic balance diaphragm pump with built-in function of emptying, pressure-relieving and oil adding, superior performance, zero leakage and high safety.
- ◎ All-in-one structure of variable worm gearing, low noise, efficient.
- ◎ U-cam regulating structure, compact and reliable, able to adjust stroke from 0–100%.
- ◎ The check valve fitted with high lever anti-corrosion ball valve and linear seal, the measure is smooth and accurate.
- ◎ High-performance plunger and imported filler, diaphragm and seal assembly, long service life, good seal ability
- ◎ Oil bath lubrication, driving components have long working life.
- ◎ Adjustable range: 0-100%. measurement precision :  $\pm 0.5\%$ .
- ◎ Adjustment mode can be selected manually, motor-driven, frequency conversion driven, automatically driven..
- ◎ Many kind of pump head material like 45 steel, 304SS, 316SS and high polymer materials.

**Technical Data:**

Model	Flow rate (L/h)	motor power			Plunger diameter (mm)	Dimension figure
		0.25kw	0.37kw	0.55kw		
J(M)XL0.8/40/50/55	0.8	40	50	55	3	
J(M)XL3/30/32/40	3.0	30	32	40	6	
J(M)XL7/20/22/30	7.0	20	22	30	8	
J(M)XL14/12/15/19	14	12	15	19	13	
J(M)XL27/6/8/13	27	6.0	8.0	13	18	
J(M)XL45/3.3/6/8.2	45	3.3	6.0	8.2	23	
J(M)XL65/2/3/4.2	65	2.0	3.0	4.2	28	
J(M)XL90/1.5/2/3.5	90	1.5	2.0	3.5	33	
J(M)XL120/1.2/1.7/2.5	120	1.2	1.7	2.5	38	
J(M)XL150/1/1.5/2.2	150	1.0	1.5	2.2	43	
J(M)XL195/0.8/1.3/2.1	195	0.8	1.3	2.1	48	
J(M)XL235/0.7/1/1.9	235	0.7	1.0	1.9	53	
J(M)XL285/0.5/0.8/1.5	285	0.5	0.8	1.5	58	
J(M)XL330/0.4/0.7/1.3	330	0.4	0.7	1.3	63	
J(M)XL390/0.3/0.4/0.8	390	0.3	0.4	0.8	68	
J(M)XL450/0.2/0.3/0.6	450	0.2	0.3	0.6	73	

## J(M)X Metering Pump



### Performance description

- ◎ Pump head can be hydraulic diaphragm type, plunger type and piston type.
- ◎ Hydraulic balance diaphragm pump with Built-in function of emptying, pressure-relieving and oil adding, superior performance, zero leakage and high safety.
- ◎ All-in-one structure of variable worm gearing, low noise, efficient .
- ◎ U-cam regulating structure, compact and reliable, able to adjust stroke from 0-100%.
- ◎ The check valve fitted with high lever anti-corrosion ball valve and linear seal, the measure is smooth and accurate.
- ◎ High-performance plunger and imported filler, diaphragm and seal assembly, long service life ,good seal ability
- ◎ Oil bath lubrication, driving components have long working life.
- ◎ Adjustable range: 0-100%.; measurement precision :  $\pm 0.5\%$ .
- ◎ Adjustment mode can be selected manually, motor-driven, frequency conversion driven, automatically driven..
- ◎ Many kind of pump head material like 45 steel, 304SS, 316SS and high polymer materials.

### Technical Data:

Model	Flow rate (L/h)	motor power		Plunger diameter (mm)	Dimension figure
		0.37kw	0.55kw		
		Outlet pressure(Mpa)			
2J(M)X2/70/100	2.0	70	100	5	
2J(M)X6/25/46	6.0	25	46	8	
2J(M)X10/15/29	10	15	29	10	
2J(M)X16/12/22	16	12	22	12	
2J(M)X26/7.5/13	26	7.5	13	15	
2J(M)X50/4.2/8	50	4.2	8.0	20	
2J(M)X76/2.6/4.8	76	2.6	4.8	25	
2J(M)X110/1.8/3.2	110	1.8	3.2	30	
2J(M)X150/1.3/2.4	150	1.3	2.4	35	
2J(M)X200/1/1.8	200	1.0	1.8	40	
2J(M)X250/0.8/1.5	250	0.8	1.5	45	
2J(M)X310/0.65/1.2	310	0.65	1.2	50	
2J(M)X390/0.5/1	390	0.5	1.0	55	
2J(M)X340/1/1.8	340	1.0	1.8	40	
2J(M)X420/0.8/1.5	420	0.8	1.5	45	
2J(M)X520/0.65/1.2	520	0.65	1.2	50	
2J(M)X640/0.5/1	640	0.5	1.0	55	

J(M)ZS Metering Pump



Performance description

- ◎ Pump head can be hydraulic diaphragm type, plunger type and piston type.
- ◎ Hydraulic balance diaphragm pump with Built-in function of emptying, pressure-relieving and oil adding, superior performance, zero leakage and high safety.
- ◎ All-in-one structure of variable worm gearing, low noise, efficient .
- ◎ With high quality N-crankshaft regulating structure, able to adjust linear stroke with power on or off
- ◎ The check valve fitted with high lever anti-corrosion ball valve and linear seal, the measure is smooth and accurate.
- ◎ High-performance plunger and imported filler, diaphragm and seal assembly, long service life, good seal ability.
- ◎ Adjustable range: 0-100%.; measurement precision :  $\pm 0.5\%$ .
- ◎ Adjustment mode can be selected manually, motor-driven, frequency conversion driven, automatically driven.
- ◎ Many kind of pump head material like 45 steel, 304SS, 316SS and high polymer materials.

Technical Data:

Model	Flow rate (L/h)	motor power		Plunger diameter (mm)	Dimension figure
		0.75kw	1.5kw		
		Outlet pressure(Mpa)			
J(M)ZS16/16/40	16	16	40	8	
J(M)ZS30/12/30	30	12	30	13	
J(M)ZS60/7/15	60	7.0	15	18	
J(M)ZS100/4.5/10	100	4.5	10	23	
J(M)ZS150/2.5/7	150	2.5	7.0	28	
J(M)ZS210/2.1/5	210	2.1	5.0	33	
J(M)ZS280/1.5/4	280	1.5	4.0	38	
J(M)ZS360/1.2/3	360	1.2	3.0	43	
J(M)ZS450/1/2.5	450	1.0	2.5	48	
J(M)ZS550/0.8/2	550	0.8	2.0	53	
J(M)ZS660/0.6/1.5	660	0.6	1.5	58	
J(M)ZS780/0.5/1.2	780	0.5	1.2	63	
J(M)ZS900/0.45/1	900	0.45	1.0	68	
J(M)ZS1000/0.4/0.8	1000	0.4	0.8	73	
J(M)ZS1200/0.32/0.6	1200	0.32	0.6	78	
J(M)ZS1360/0.3/0.5	1360	0.3	0.5	83	
J(M)ZS1500/0.25/0.4	1500	0.25	0.4	88	

## J(M)ZS

### J(M)Z Metering Pump



#### Performance description

- ◎ Pump head can be hydraulic diaphragm type, plunger type and piston type.
- ◎ Hydraulic balance diaphragm pump with Built-in function of emptying, pressure-relieving and oil adding, superior performance, zero leakage and high safety.
- ◎ With high quality N-crankshaft regulating structure, able to adjust linear stroke with power on or off
- ◎ Mechanical diaphragm pump no need plunger to seal, it use high performance diaphragm, failure free period is longer than normal pump. No pump head leakage in diaphragm warranty period.
- ◎ Simple structure, convenient operation and maintenance.
- ◎ The check valve fitted with high precision anti-corrosion and abrasive resistance check emery ceramic ball, linear seal to ensure the measurement smooth and accurate.
- ◎ Adjustable range: 0-100%; measurement precision :  $\pm 0.5\%$ .
- ◎ Adjustment mode can be selected manually, motor-driven, frequency conversion driven, automatically driven.
- ◎ Many kind of pump head material like 45 steel, 304SS, 316SS and high polymer materials.

#### Technical Data:

Model	Flow rate	Pressure	motor power	Dimension figure
J(M)Z320/1.0	320	1.0	0.55	
J(M)Z400/0.8	400	0.8	0.55	
J(M)Z550/0.6	550	0.6	0.55	
J(M)Z670/0.6	670	0.6	0.55	
J(M)Z800/0.7	800	0.7	0.75	
J(M)Z1000/0.6	1000	0.6	0.75	
J(M)Z1200/0.5	1200	0.5	0.75	
J(M)Z1500/0.5	1500	0.5	0.75	
J(M)Z1800/0.4	1800	0.4	0.75	



## J(M)ZL Metering Pump

**Performance description**

- Pump head can be hydraulic diaphragm type, plunger type and piston type.
- Hydraulic balance diaphragm pump with Built-in function of emptying, pressure-relieving and oil adding, superior performance, zero leakage and high safety.
- With high quality N-crankshaft regulating structure, able to adjust linear stroke with power on or off
- The check valve fitted with high lever anti-corrosion ball valve and linear seal, the measure is smooth and accurate.
- High-performance plunger and imported filler, diaphragm and seal assembly, long service life, good seal ability.
- Adjustable range: 0-100%; measurement precision:  $\pm 0.5\%$ .
- Adjustment mode can be selected manually, motor-driven, frequency conversion driven, automatically driven.
- Many kind of pump head material like 45 steel, 304SS, 316SS and high polymer materials.

**Technical Data:**

Model	Flow rate (L/h)	motor power		Plunger diameter (mm)	Dimension figure
		0.75kw	1.5kw		
J(M)ZL16/16/50	16	16	50	8	
J(M)ZL36/12/35	30	12	35	13	
J(M)ZL60/7/20	60	7.0	20	18	
J(M)ZL100/4.5/13	100	4.5	13	23	
J(M)ZL150/2.5/8	150	2.5	8.0	28	
J(M)ZL210/2.1/6	210	2.1	6.0	33	
J(M)ZL280/1.5/5	280	1.5	5.0	38	
J(M)ZL360/1.2/3.5	360	1.2	3.5	43	
J(M)ZL450/1/3	450	1.0	3.0	48	
J(M)ZL550/0.8/2.5	550	0.8	2.5	53	
J(M)ZL660/0.6/2	660	0.6	2.0	58	
J(M)ZL780/0.5/1.6	780	0.5	1.6	63	
J(M)ZL900/0.45/1.4	900	0.45	1.4	68	
J(M)ZL1000/0.4/1.2	1000	0.4	1.2	73	
J(M)ZL1200/0.32/1	1200	0.32	1.0	78	
J(M)ZL1360/0.3/0.8	1360	0.3	0.8	83	
J(M)ZL1500/0.23/0.7	1500	0.23	0.7	88	
J(M)ZL1700/0.2/0.6	1700	0.2	0.6	93	
J(M)ZL1900/0.15/0.5	1900	0.15	0.5	98	
J(M)ZL2300/0.13/0.4	2300	0.13	0.4	108	
J(M)ZL2750/0.1/0.3	2750	0.1	0.3	118	
J(M)ZL3200/0.1/0.3	3200	0.1	0.3	128	

## J(M)Z

### J(M)Z Metering Pump



#### Performance description

- Pump head can be hydraulic diaphragm type, plunger type and piston type.
- Hydraulic balance diaphragm pump with Built-in function of emptying, pressure-relieving and oil adding, superior performance, zero leakage and high safety.
- With high quality N-crankshaft regulating structure, able to adjust linear stroke with power on or off
- The check valve fitted with high lever anti-corrosion ball valve and linear seal, the measure is smooth and accurate.
- High-performance plunger and imported filler, diaphragm and seal assembly, long service life, good seal ability.
- Adjustable range: 0-100%; measurement precision :  $\pm 0.5\%$ .
- Adjustment mode can be selected manually, motor-driven, frequency conversion driven, automatically driven.
- Many kind of pump head material like 45 steel, 304SS, 316SS and high polymer materials.
- Can connect in parallel (from 2 to 12 sets) as proportioning pump, pulse smooth .

#### Technical Data:

Model	Flow rate (L/h)	motor power		Plunger diameter (mm)	Dimension figure
		0.75kw	1.5kw		
		Outlet pressure(Mpa)			
2J(M)Z20/40/64	20	40	64	10	
2J(M)Z34/23/56	34	23	56	12	
2J(M)Z56/15/34	56	15	34	15	
2J(M)Z96/8/19	96	8.0	19	20	
2J(M)Z160/5.2/12	160	5.2	12	25	
2J(M)Z230/4.4/8.8	230	4.4	8.8	30	
2J(M)Z310/3.2/6.5	310	3.2	6.5	35	
2J(M)Z400/2.4/4.8	400	2.4	4.8	40	
2J(M)Z520/2/3.7	520	2.0	3.7	45	
2J(M)Z640/1.6/3	640	1.6	3.0	50	
2J(M)Z780/1.3/2.4	780	1.3	2.4	55	
2J(M)Z920/1/2	920	1.0	2.0	60	
2J(M)Z1090/0.8/1.7	1090	0.8	1.7	65	
2J(M)Z1260/0.65/1.5	1260	0.65	1.5	70	
2J(M)Z1450/0.56/1.3	1450	0.56	1.3	75	
2J(M)Z1650/0.45/1.2	1650	0.45	1.2	80	
2J(M)Z1860/0.4/1	1860	0.4	1.0	85	
2J(M)Z2090/0.36/0.9	2090	0.36	0.9	90	
2J(M)Z2320/0.32/0.8	2320	0.32	0.8	95	
2J(M)Z2580/0.25/0.7	2580	0.25	0.7	100	
2J(M)Z2840/0.2/0.65	2840	0.2	0.65	85	
2J(M)Z3130/0.18/0.6	3130	0.18	0.6	90	
2J(M)Z3490/0.56/0.5	3490	0.56	0.5	95	
2J(M)Z3860/0.5/0.4	3860	0.5	0.4	100	

## J(M)DL Metering Pump



### Performance description

- Pump head can be hydraulic diaphragm type, plunger type and piston type.
- Hydraulic balance diaphragm pump with Built-in function of emptying, pressure-relieving and oil adding, superior performance, zero leakage and high safety.
- With high quality N-crankshaft regulating structure, able to adjust linear stroke with power on or off
- The check valve fitted with high lever anti-corrosion ball valve and linear seal, the measure is smooth and accurate.
- High-performance plunger and imported filler, diaphragm and seal assembly, long service life, good seal ability.
- Adjustable range: 0-100%; measurement precision:  $\pm 0.5\%$ .
- Adjustment mode can be selected manually, motor-driven, frequency conversion driven, automatically driven.
- Many kind of pump head material like 45 steel, 304SS, 316SS and high polymer materials.

### Technical Data:

Model	Flow rate (L/h)	motor power			Plunger diameter (mm)	Dimension figure
		4kw	5.5kw	7.5kw		
J(M)DL42/85/90/95	42	85	90	95	15	
J(M)DL75/50/73/90	75	50	73	90	20	
J(M)DL125/34.5/50/70	125	34.5	50	70	25	
J(M)DL182/23/34/48	182	23	34	48	30	
J(M)DL247/16/25/35	247	16	25	35	35	
J(M)DL320/12.5/19/26	320	12.5	19	26	40	
J(M)DL405/9.5/14/20	405	9.5	14	20	45	
J(M)DL505/7.5/11.5/16	505	7.5	11.5	16	50	
J(M)DL612/6.2/9.2/13.2	612	6.2	9.2	13.2	55	
J(M)DL725/5.3/7.8/11	725	5.3	7.8	11	60	
J(M)DL855/4.3/6.4/9	855	4.3	6.4	9.0	65	
J(M)DL900/3.7/5.5/7.8	900	3.7	5.5	7.8	70	
J(M)DL1135/3.3/5/7	1135	3.3	5.0	7.0	75	
J(M)DL1295/2.8/4.2/6	1295	2.8	4.2	6.0	80	
J(M)DL1480/2.5/3.7/5	1480	2.5	3.7	5.0	85	
J(M)DL1660/2.2/3.2/4.6	1660	2.2	3.2	4.6	90	
J(M)DL1850/2/3/4.2	1850	2.0	3.0	4.2	95	
J(M)DL2050/1.8/2.6/3.7	2050	1.8	2.6	3.7	100	
J(M)DL2500/1.5/2.1/3	2500	1.5	2.1	3.0	110	
J(M)DL2960/1.2/1.8/2.6	2960	1.2	1.8	2.6	120	
J(M)DL3500/1.1/1.6/2.2	3500	1.1	1.6	2.2	130	
J(M)DL4050/0.9/1.3/1.7	4050	0.9	1.3	1.7	140	
J(M)DL4680/0.8/1.2/1.7	4680	0.8	1.2	1.7	150	
J(M)DL5320/0.7/1/1.5	5320	0.7	1.0	1.5	160	
J(M)DL5980/0.6/0.9/1.3	5980	0.6	0.9	1.3	170	

## J(M)TS

### J(M)TS Metering Pump



#### Performance description

- Pump head can be hydraulic diaphragm type, plunger type and piston type.
- Hydraulic balance diaphragm pump with Built-in function of emptying, pressure-relieving and oil adding, superior performance, zero leakage and high safety.
- With high quality N-crankshaft regulating structure, able to adjust linear stroke with power on or off
- The check valve fitted with high lever anti-corrosion ball valve and linear seal, the measure is smooth and accurate.
- High-performance plunger and imported filler, diaphragm and seal assembly, long service life, good seal ability.
- Adjustable range: 0-100%; measurement precision:  $\pm 0.5\%$ .
- Adjustment mode can be selected manually, motor-driven, frequency conversion driven, automatically driven.
- Many kind of pump head material like 45 steel, 304SS, 316SS and high polymer materials.

#### Technical Data:

Model	Flow rate (L/h)	motor power			Plunger diameter (mm)	Dimension figure
		7.5kw	11kw	15kw		
J(M)TS175/60/80/100	175	60	80	100	25	
J(M)TS255/45/60/80	255	45	60	80	30	
J(M)TS350/28/37/54	350	28	37	54	35	
J(M)TS455/19/26/38	455	19	26	38	40	
J(M)TS715/13/17/26	715	13	17	26	50	
J(M)TS865/10/13.6/20	865	10	13.6	20	55	
J(M)TS1030/8/10.8/15.8	1030	8.0	10.8	15.8	60	
J(M)TS1200/6.4/8.8/12.8	1200	6.4	8.8	12.8	65	
J(M)TS1610/5.2/7.2/10.4	1610	5.2	7.2	10.4	75	
J(M)TS1830/4.5/6/8.9	1830	4.5	6.0	8.9	80	
J(M)TS2070/3.8/5.3/7.8	2070	3.8	5.3	7.8	85	
J(M)TS2320/3.3/4.5/6.6	2320	3.3	4.5	6.6	90	
J(M)TS2585/2.9/4/5.8	2585	2.9	4.0	5.8	95	
J(M)TS3150/2.5/3.5/5	3150	2.5	3.5	5.0	105	
J(M)TS3465/2.2/3/4.4	3465	2.2	3.0	4.4	110	
J(M)TS3800/2/2.7/3.9	3800	2.0	2.7	3.9	115	
J(M)TS4350/1.8/2.4/3.5	4350	1.8	2.4	3.5	100	
J(M)TS4800/1.6/2.2/3.2	4800	1.6	2.2	3.2	105	
J(M)TS5800/1.3/1.8/2.6	5800	1.3	1.8	2.6	115	
J(M)TS7000/1.1/1.5/2.2	7000	1.1	1.5	2.2	120	
J(M)TS8500/0.9/1.2/1.8	8500	0.9	1.2	1.8	140	
J(M)TS9300/0.8/1.1/1.6	9300	0.8	1.1	1.6	145	
J(M)TS9800/0.7/1/1.5	9800	0.7	1.0	1.5	150	
J(M)TS11200/0.6/0.8/1.3	11200	0.6	0.8	1.3	160	

## J(M)TF Metering Pump



## Performance description

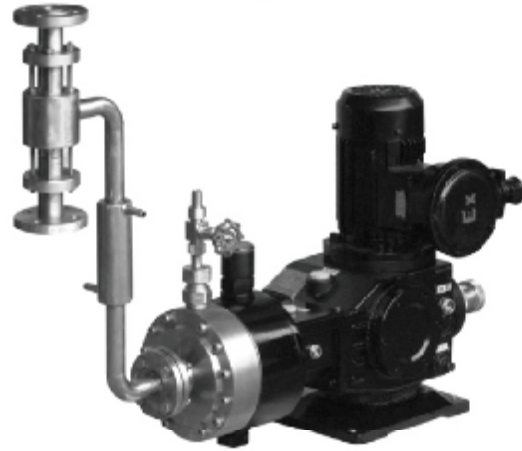
- ◎ Pump head can be hydraulic diaphragm type, plunger type and piston type.
- ◎ Hydraulic balance diaphragm pump with Built-in function of emptying, pressure-relieving and oil adding, superior performance, zero leakage and high safety.
- ◎ With high quality N-crankshaft regulating structure, able to adjust linear stroke with power on or off
- ◎ The check valve fitted with high lever anti-corrosion ball valve and linear seal, the measure is smooth and accurate.
- ◎ High-performance plunger and imported filler, diaphragm and seal assembly, long service life, good seal ability.
- ◎ Adjustable range: 0-100%, measurement precision:  $\pm 0.5\%$ .
- ◎ Adjustment mode can be selected manually, motor-driven, frequency conversion driven, automatically driven.
- ◎ Many kind of pump head material like 45 steel, 304SS, 316SS and high polymer materials.
- ◎ Can connect in parallel (from 2 to 12 sets) as proportioning pump, pulse smooth.

## Technical Data:

Model	Flow rate (L/h)	motor power			Plunger diameter (mm)	Dimension figure
		15kw	22kw	37kw		
J(M)TF235/64/92/120	235	64	92	120	25	
J(M)TF365/41/60/82	365	41	60	82	30	
J(M)TF510/29/43/58	510	29	43	58	35	
J(M)TF680/22/32/44	680	22	32	44	40	
J(M)TF860/17.5/25.5/34.5	860	17.5	25.5	34.5	45	
J(M)TF1050/14.3/21/27	1050	14.3	21	27	50	
J(M)TF1280/12/17/23	1280	12	17	23	55	
J(M)TF1510/10/14.5/19.7	1510	10	14.5	19.7	60	
J(M)TF1780/8.5/12/16.2	1780	8.5	12	16.2	65	
J(M)TF2080/7.2/11/15.4	2080	7.2	11	15.4	70	
J(M)TF2430/6/10/14	2430	6	10	14	75	
J(M)TF2750/5.5/9/12.6	2750	5.5	9.0	12.6	80	
J(M)TF3120/4.8/8/11.6	3120	4.8	8.0	11.6	85	
J(M)TF3520/4.2/7/10.5	3520	4.2	7.0	10.5	90	
J(M)TF3920/3.8/6.3/9.4	3920	3.8	6.3	9.4	95	
J(M)TF4350/3.5/5.7/8.5	4350	3.5	5.7	8.5	100	
J(M)TF5280/2.8/4.7/7.3	5280	2.8	4.7	7.3	110	
J(M)TF6350/2.4/4/6.2	6350	2.4	4.0	6.2	120	
J(M)TF7480/2/2.3/5.2	7480	2.0	2.3	5.2	130	
J(M)TF8620/1.7/2.9/4.6	8620	1.7	2.9	4.6	140	
J(M)TF9960/1.5/2.5/4.0	9960	1.5	2.5	4.0	150	
J(M)TF11380/1.3/2.2/3.5	11380	1.3	2.2	3.5	160	
J(M)TF12860/1.1/1.9/3.0	12860	1.1	1.9	3.0	170	
J(M)TF14410/1/1.7/2.7	14410	1.0	1.7	2.7	180	
J(M)TF16000/0.9/1.55/2.4	16000	0.9	1.55	2.4	190	
J(M)TF17800/0.8/1.4/2.1	17800	0.8	1.4	2.1	200	
J(M)TF19500/0.7/1.25/1.8	19500	0.7	1.25	1.8	210	
J(M)TF21600/0.6/1.1/1.5	21600	0.6	1.1	1.5	220	

## J(M)G

### J(M)G Metering Pump



### J(M)G Metering Pump

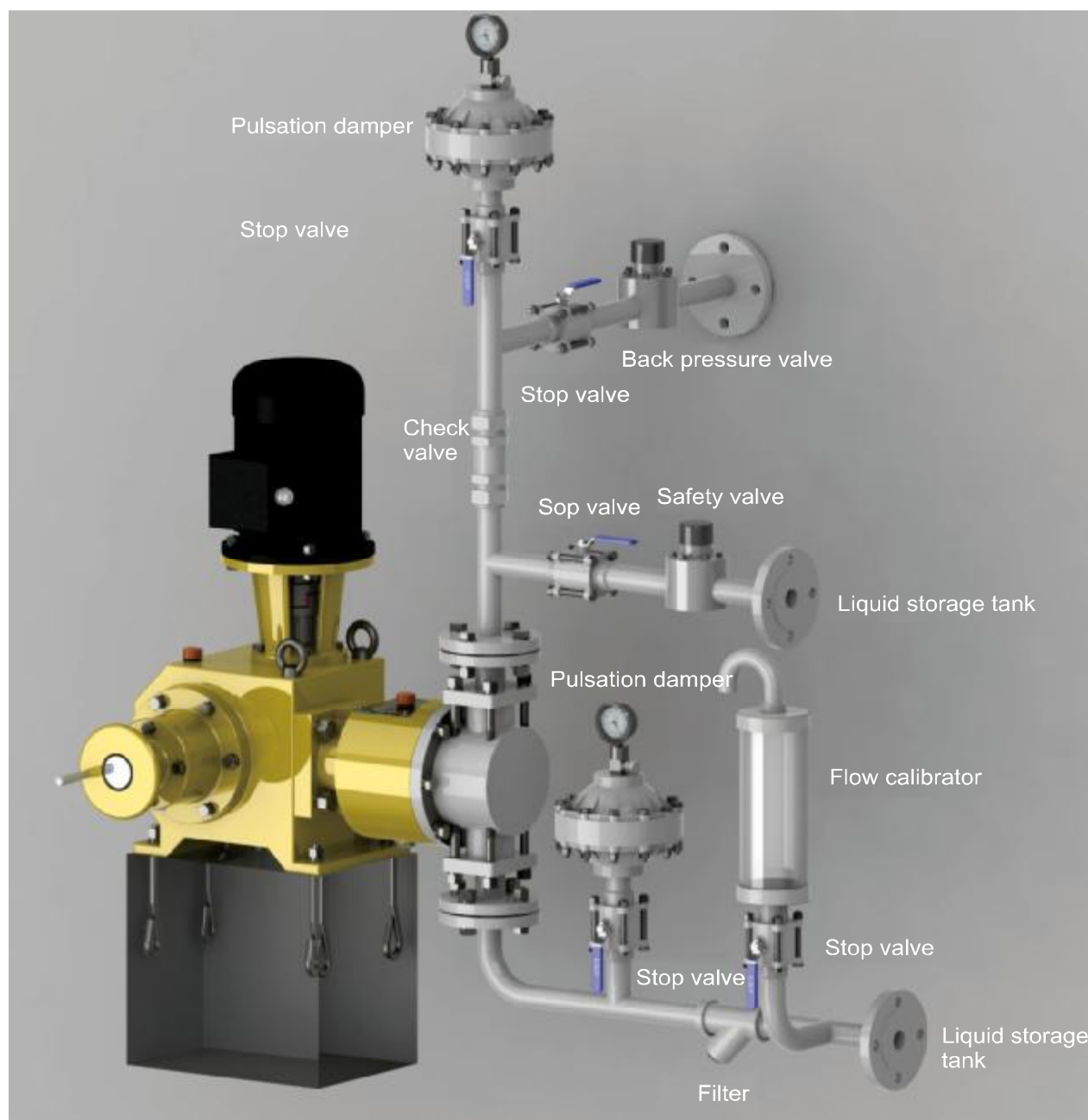
#### Performance description

- ◎The pump head is equipped with remote handling device, because poly-tetrafluoroethylene has the feature of thermal expansion.
- ◎The design of remote pump head shorten the distance between suction valve and discharge valve.It makes the pump able to convey dangerous liquid.
- ◎Electric heating appliance attached to remote handling device, so the pump can convey liquid which is 280 °C.
- ◎Hydraulic end applies double diaphragm with diaphragm state monitor, the pump can work even when one diaphragm is broken. The material of ball valve is emery grains.
- ◎The hydraulic system applying German technologies. It consists of safety valve and limit valve. Built-in function of emptying,pressure-reliefing and oil adding,superior performance,zero leakage and high safety.

#### Technical Data:

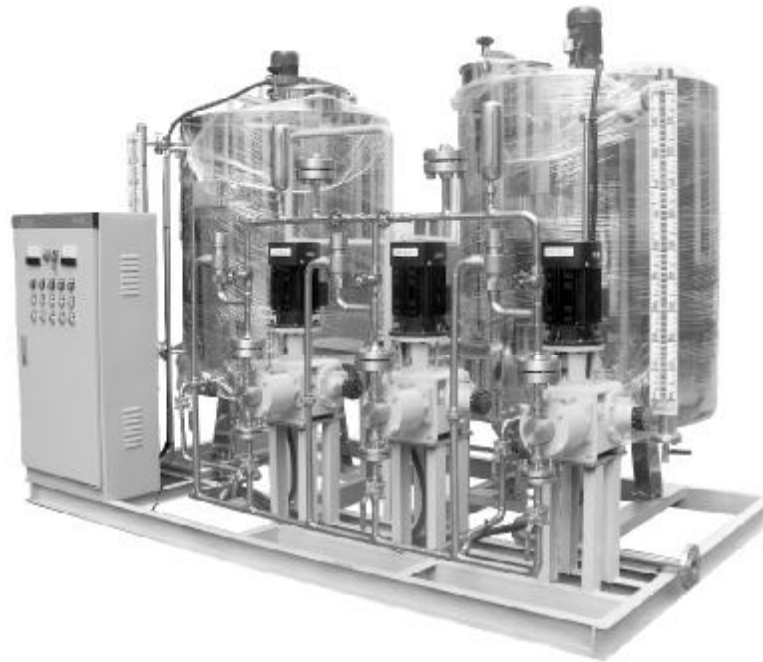
Model	Flow rate (L/h)	motor power		Plunger diameter (mm)	Dimension figure
		2.2kw	4kw		
		Outlet pressure(Mpa)			
J(M)G 40/45/67.5	40	45	67.5	15	
J(M)G 77/25/37.5	77	25	37.5	20	
J(M)G 120/17/25.5	120	17	25.5	25	
J(M)G 175/11/16.5	175	11	16.5	30	
J(M)G 238/8.5/13.6	238	8.5	13.6	35	
J(M)G 310/6.9/11	310	6.9	11	40	
J(M)G 395/5/8	395	5.0	8.0	45	
J(M)G 486/4.2/7.1	486	4.2	7.1	50	
J(M)G 588/3.4/5.7	588	3.4	5.7	55	
J(M)G 700/2.8/4.8	700	2.8	4.8	60	
J(M)G 820/2.4/4.2	820	2.4	4.2	65	
J(M)G 950/2/3.8	950	2.0	3.8	70	
J(M)G 1100/1.8/3.2	1100	1.8	3.2	75	
J(M)G 1250/1.6/2.8	1250	1.6	2.8	80	
J(M)G 1400/1.4/2.5	1400	1.4	2.5	85	
J(M)G 1580/1.2/2.1	1580	1.2	2.1	90	
J(M)G 1750/1.1/1.9	1750	1.1	1.9	95	
J(M)G 1960/1/1.8	1960	1.0	1.8	100	
J(M)G 2380/0.8/1.4	2380	0.8	1.4	110	
J(M)G 2800/0.7/1.3	2800	0.7	1.3	120	
J(M)G 3300/0.6/1.1	3300	0.6	1.1	130	

Installation drawing



## JY series Chemical Dosing System

To meet the market demand and facilitate customers, CNP introduced advanced technology from USA, Germany and Japan, combining the actual conditions in our country, developed JY series chemical dosing system. The JY series chemical dosing system can be widely used in power plant dosing, wastewater treatment, water treatment, steel mill etc. There are many advantages: can equip as a complete set, advanced technics, high degree of automation, easy operation, easy installation, easy maintenance, it can suit for variable working condition.



There are a variety of specifications for JY Series chemical dosing pump. It contains one tank one pump, one tank two pumps, two tanks two pumps, two tanks three pumps, three tanks three pumps and many tanks many pumps. The system is chosen by dosing pump quantity and discharge. You can choose the system according to the catalogue. And also, we can design and produce special products according your special requirement, for example, put the whole system meter and liquid-level signal into DCS control system, to control the whole system with run/stop, running control and alarm.

### Structure and work principle

#### 1. Structure

JY series chemical dosing system consists of dosing pump, solution tank, liquid indicator, impact damper, filter, valves, blender, baseplate, stair railing, control circuit, full set of pipeline and accessories.

#### 2. Work principle

According to the demanded concentration of the liquor, operators make up the liquor by blender in the agitator tank, then put it in solution tank and convey it through dosing pump to the specified place.

#### 3. Advantages:

Beautiful appearance, reliable performance, compact structure, facilitate maintenance.



## The function of the valves of JY series chemical dosing system

### 1.Safety valve

When the pipeline is blocked or closed by mis-operation, the safe valve will automatically open and discharge the liquor to reduce pressure, so the safety of the dosing pump and the pipeline system can be ensured.

### 2.Pulse damper

Pulse damper can smooth the effect of pulse.,as a result, the liquor can be evenly conveyed.

### 3.filter

The application of Y type filter prevents foreign particles from entering the pump head, easy cleaning

Mesh material:PTEF

### 4.Check valve

The check valve installed at the suction pipe, can avoid positive pressure flow. The check valve equipped at the discharge pipe can avoid negative pressure and siphon.

### 5.Flow calibrator

Can estimate the flow rate through the flow calibrator. Generally installed at the pump inlet end.

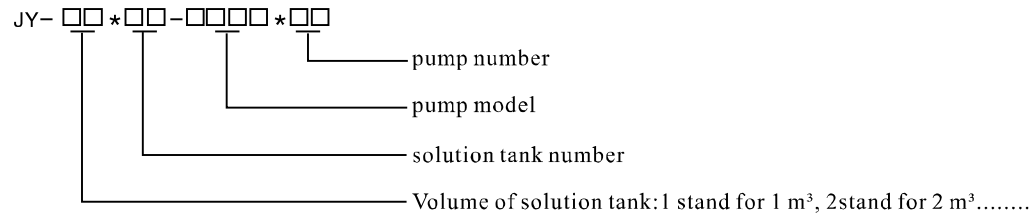
### 6.Back pressure valve

Back pressure valve installed at pressure pipe , bring constant back pressure , it can remain measurement accurately. Avoid liquor flow by gravity or siphoning.



# JY

## JY series Chemical Dosing System product code



## JY series Chemical Dosing System Technical Parameters

System	Type	Dissolving drug tank size (M)	Dosing pump			Dosing method		
			Type	Flow(L/h)	Pressure(Mpa)			
Hydrazine chemical dosing system	two tanks two pumps	1.0	Plunger type Mechanical diaphragm type Hydraulic diaphragm type	30	1.6	Manual  Automatic		
	two tanks three pumps			40	2.4			
PH adjustment ammonification dosing system	two tanks two pumps			50	4.0			
	two tanks three pumps			60	6.3			
Phosphates dosing system	two tanks two pumps			2.0	80		16	
	two tanks three pumps			100	20			
		200	24					
Coagulants feeding equipment	two tanks two pumps	1.0	Plunger type Mechanical diaphragm type Hydraulic diaphragm type	40	0.6	Manual  Automatic		
	two tanks three pumps			60				
Inhibitor feeding equipment	two tanks two pumps			90			1.0	
	two tanks three pumps			160			1.4	
PH adjustment Alkali feeding equipment	two tanks two pumps			2.0			330	
	two tanks three pumps			3.0				
Ferrous sulfate coating dosing system	one tank one pump		Centrifugal	2-4m <sup>3</sup> /h	0.4	Manual		
	two tanks two pumps							

## JY series Chemical Dosing System Parameter Selection Table

<b>User's name</b>	
Application	Quantity set
Operation parameter	
Medium	Medium temperature °C
Concentration %	Liquor density kg/m <sup>3</sup>
Dosing point	Flow rate of Dosing point l/h
Back Pressure of Dosing point Mpa	Dosing distance m
Status	<input type="checkbox"/> discontinuous <input type="checkbox"/> continuous
Structural parameters	
Dissolving drug tank size m <sup>3</sup>	
Material	<input type="checkbox"/> stainless steel <input type="checkbox"/> carbon steel <input type="checkbox"/> carbon steel foil <input type="checkbox"/> non-metallic <input type="checkbox"/> others
Type	<input type="checkbox"/> Mechanical diaphragm <input type="checkbox"/> hydraulic diaphragm <input type="checkbox"/> plunger pump quantity set
Flow rate l/h	pressure Mpa
Control mode	<input type="checkbox"/> Manual adjustment <input type="checkbox"/> automatic adjustment
Pipeline material	<input type="checkbox"/> stainless steel <input type="checkbox"/> carbon steel <input type="checkbox"/> UPVC <input type="checkbox"/> others
Other requirement	

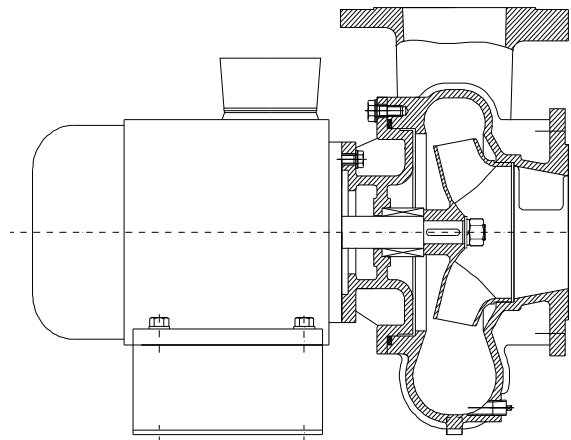
Remarks: 1. Buyers fill the form in detail when purchasing.

2. If users have any other specific requirement, please note at the "other requirement" line or contract CNP for more information.

**Corrosivity parallel table**

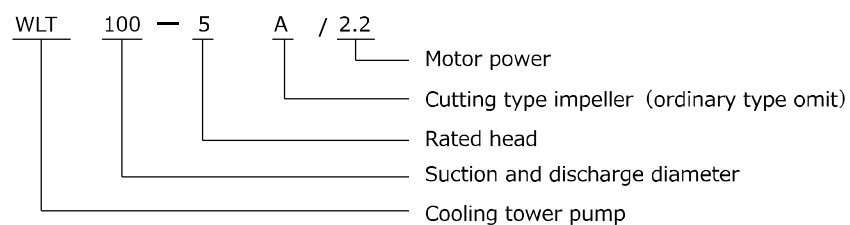
Corrosive medium	concentration	stainless steel			FRPP			PVDF			Phenolic glass fiber reinforced plastics		
		25℃	50℃	100℃	25℃	50℃	100℃	25℃	50℃	100℃	25℃	50℃	100℃
Sulfuric acid	0-50	×	×	×	✓	✓	○	✓	✓	✓	✓	✓	✓
Sulfuric acid	50-98	×	×	×	✓	○	×	✓	✓	✓	✓	✓	○
Nitric Acid	10-70	✓	✓	✓	✓	✓	○	✓	✓	✓	×	×	×
Nitric Acid	70-100	✓	✓	✓	×	×	×	✓	✓	✓	×	×	×
Hydrochloric acid	arbitrarily	×	×	×	○	○	○	✓	✓	✓	✓	✓	✓
Phosphoric acid	0-90	×	×	×	✓	✓	○	✓	✓	✓	✓	✓	✓
Hydrofluoric Acid	0-50	×	×	×	✓	✓	✓	✓	✓	✓	×	×	×
Hydrobromic acid	arbitrarily	×	×	×	✓	✓	○	✓	✓	✓	✓	✓	✓
Hydrocyanic acid	arbitrarily	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓
Lactic acid	0-50	×	×	×	✓	✓	×	✓	✓	✓	×	×	×
Hypofluorous acid	arbitrarily	×	×	×	✓	✓	×	✓	✓	✓	✓	○	×
Hexafluorosilicic acid	arbitrarily	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓
Aqua regia		×	×	×	×	×	×	✓	✓	✓	×	×	×
Formic acid	arbitrarily	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓
Acetic acid	arbitrarily	○	○	○	✓	✓	○	✓	✓	✓	✓	✓	○
Butyric acid	arbitrarily	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Lactic acid	arbitrarily	✓	✓	×	✓	✓	×	✓	✓	✓	✓	✓	○
Oxalic acid	arbitrarily	○	○	×	✓	○	×	✓	✓	✓	✓	✓	✓
Fatty Acid	arbitrarily	✓	✓	✓	✓	○	×	✓	✓	✓	✓	✓	✓
Benzoic acid	arbitrarily	✓	✓	✓	✓	✓	×	✓	✓	✓	✓	✓	✓
Citric acid	arbitrarily	✓	✓	✓	✓	○	×	✓	✓	✓	✓	✓	✓
Benzene sulfonic acid	arbitrarily	✓	✓	✓	○	○	×	✓	✓	✓	✓	✓	✓
Chloroacetic acid	arbitrarily	×	×	×	✓	✓	×	✓	✓	✓	○	○	○
Potassium hydroxide	arbitrarily	✓	✓	×	✓	✓	✓	✓	✓	✓	×	×	×
Sodium hydroxide	arbitrarily	✓	✓	✓	✓	✓	✓	✓	✓	✓	×	×	×
Ammonium sulfate	arbitrarily	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ammonium carbonate	arbitrarily	✓	✓	×	✓	✓	○	✓	✓	✓	✓	✓	✓
Ammonium chloride	arbitrarily	×	×	✓	✓	✓	○	✓	✓	✓	✓	✓	✓
Sodium fluosulfate	arbitrarily	○	○	×	✓	✓	✓	✓	✓	✓	×	×	×
Ammonium fluoride	arbitrarily	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sodium hypochlorite	0-25	×	×	×	✓	○	×	✓	✓	✓	×	×	×
Aluminium Sulfate	arbitrarily	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Lead Acetate	arbitrarily	✓	✓	✓	✓	✓	○	✓	✓	✓	✓	✓	✓
Calcium hypochlorite	0-25	×	×	×	✓	○	○	✓	✓	✓	○	○	×
Methanol	arbitrarily	✓	✓	✓	✓	○	○	✓	✓	✓	○	×	×
Ethanol	arbitrarily	✓	✓	✓	✓	○	○	✓	✓	✓	○	○	×
Toluene	arbitrarily	✓	✓	✓	×	×	×	✓	✓	✓	○	○	○
Dichloroethane	arbitrarily	✓	✓	✓	×	×	×	✓	✓	✓	✓	○	○
Chloric acid	arbitrarily	×	×	×	✓	✓	×	✓	✓	✓	✓	○	○
Potassium chlorate	arbitrarily	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Boric acid	arbitrarily	✓	✓	○	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sodium phosphate	arbitrarily	✓	✓	✓	✓	○	×	✓	✓	✓	✓	✓	✓
Borax	arbitrarily	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Potassium permanganate	arbitrarily	✓	✓	✓	✓	✓	×	✓	✓	✓	○	○	○
Sulfurous acid	arbitrarily	✓	✓	○	✓	✓	✓	✓	✓	✓	✓	✓	✓
Silicic acid	arbitrarily	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓
Hypochlorous acid	arbitrarily	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	○
Nickel sulfate	arbitrarily	✓	✓	×	✓	✓	✓	✓	✓	✓	✓	✓	✓
Aluminium chloride	arbitrarily	○	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓

Remarks : ✓ stands for work well, ○ stands for able to use, × stands for forbidden.  
Medium data beyond the above table, please consult CNP.



Cooling Tower Pump

### Definition of model



### Structure features

- Non-self-priming, single stage, single suction, horizontal; axial suction and radical discharge.
- Motor is fixed by base , easy to install.
- The back pull pattern structure makes it easy to repair.
- Pump shaft is coaxial extended motor shaft, less occupied area, light weight.
- Impeller and casing adopt excellent hydraulic model, they can be designed according to market demand with high efficiency.
- Key components such as impeller and shaft are made of stainless steel.
- Casted by resin sand, the castings feature smooth and bright surface, nice shape, good quality, dense structure.

### Applications

- Water circulation of closed cooling tower and condenser; cooling of various unit equipment ; circumstances in which need pump with large flow and low head.
- Clean, thin, non-corrosive, non-flammable or non-explosive liquid without solid grain or fiber which won't attack the pump chemically or mechanically. Liquid with high viscosity or big density will result the decrease of performance curve and the increase of energy consumption.
- Liquid temperature
- Working pressure: Max 6 bar

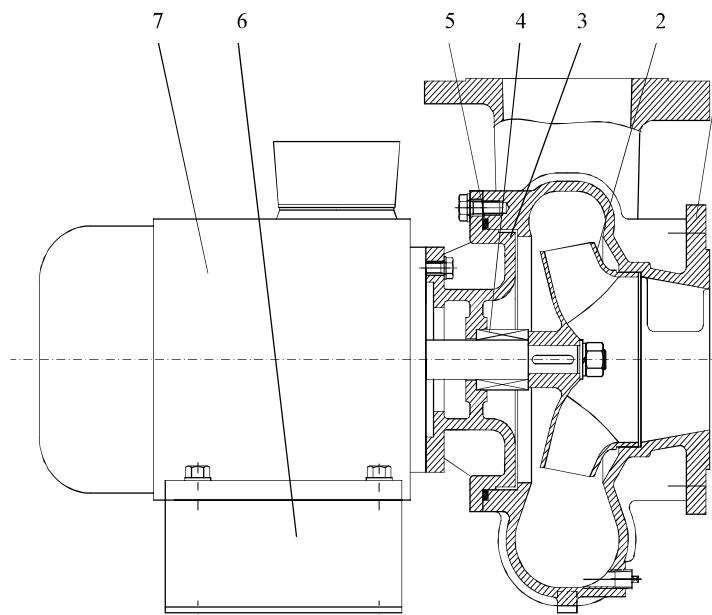
### Motor

- Totally closed fan cooled motor
- Protection level
- Insulation level
- Standard voltage

### Curve conditions

- Following conditions are suitable for performance curve
- Curve tolerance in conformity with ISO9906, annex A.
- All curves are based on the measured values of 50Hz (3X380V) : constant motor speed 2900rpm or 1450rpm.
- Test medium is clean water with temperature of 20 °C without any solid impurity and air.
- The operation of pump should refer to the performance range of curve shown in boldface to prevent overheating due to too small flow rate or overloading due to too large flow rate.

## Section drawing



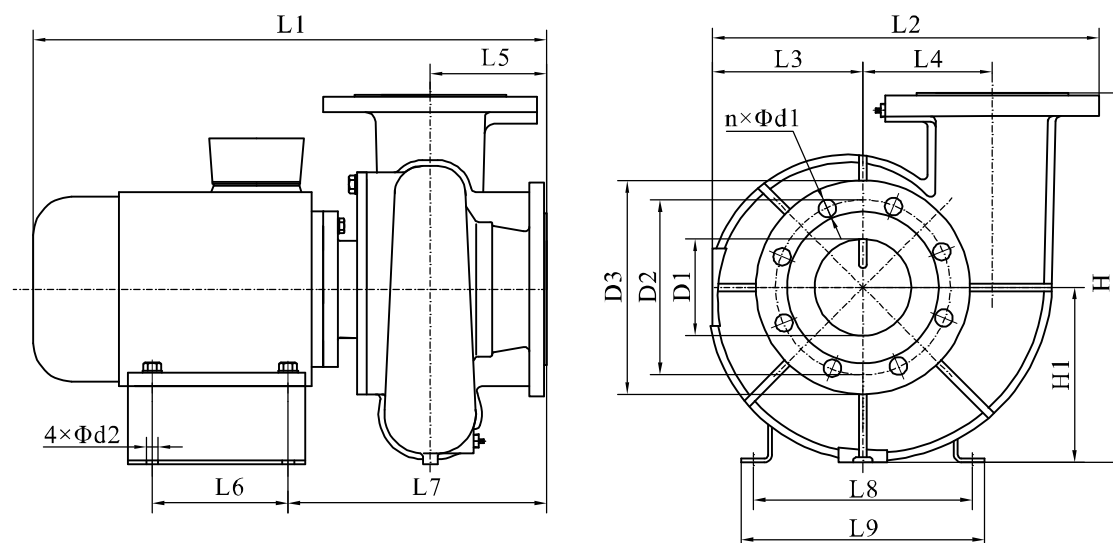
## Material

NO.	Name	Material	AISI/ASTM
1	Casing	Cast iron	ASTM25B
2	Impeller	ZG07Cr19Ni9	AISI304
3	pump head	Cast iron	ASTM25B
4	Mechanical seal	Graphite /Silicon carbide	
5	O ring	NBR	
6	Base	Q235-A	AISIA570
7	Motor		

## Performance table

NO.	Model	Q [m <sup>3</sup> /h]	H [m]	Motor [kW]	n [r/min]
1	WLT65-5/1.1	45	5	1.1	2900
2	WLT80-5/1.5	65	5	1.5	2900
3	WLT100-5/2.2	120	5	2.2	1450
4	WLT125-5A/3	150	5	3	1450
5	WLT125-5/4	180	5	4	1450
6	WLT150-6/5.5	230	6	5.5	1450

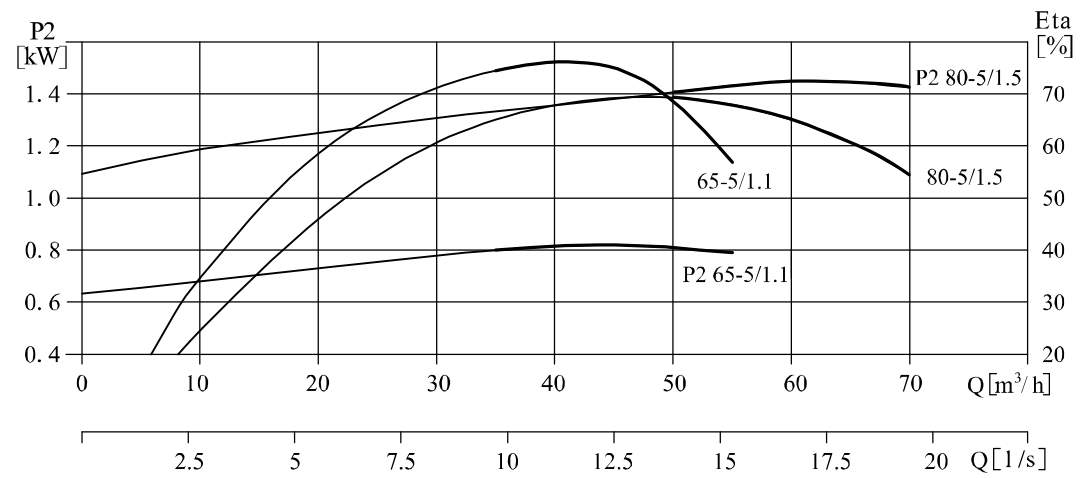
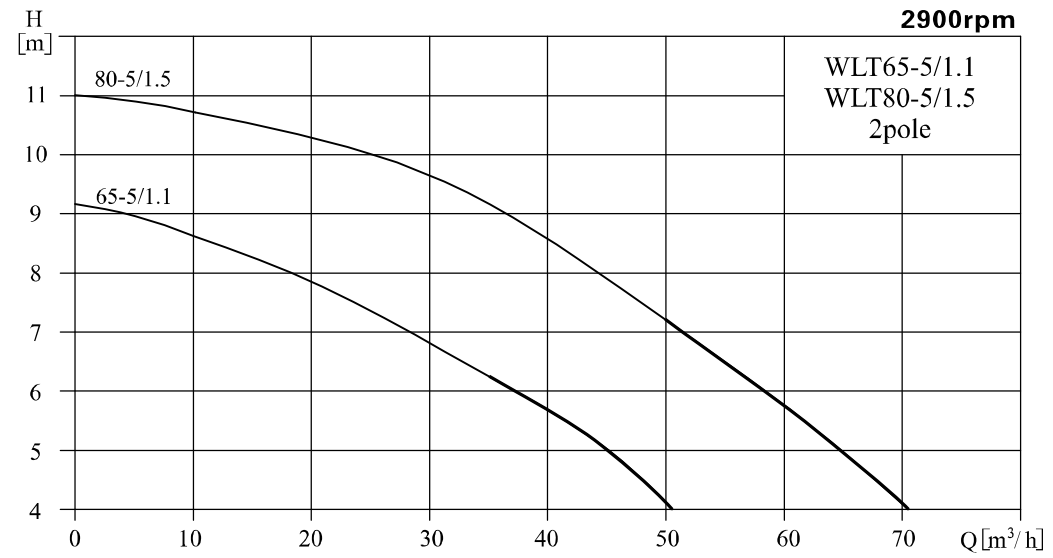
## Installation sketch



## Size and weight

Model	External dimension			Installation dimension								Inlet and outlet flange dimension					Weight (kg)	
	L1	H	H1	L2	L3	L7	L9	L5	L4	L8	L6	d2	D1	D2	D3	n		d1
WLT65-5/1.1	439	240	120	285	107	245	215	100	85	185	100	10	65	145	185	4	18	29
WLT80-5/1.5	488	270	130	305	115	261	230	110	90	200	125	10	80	160	200	8	18	35
WLT100-5/2.2	562	380	180	400	155	293	250	120	135	225	140	12	100	180	220	8	18	50
WLT125-5A/3	577	432	212	450	175	308	250	135	150	225	140	12	125	210	250	8	18	60
WLT125-5/4	582	432	212	450	175	315	280	135	150	255	140	12	125	210	250	8	18	76
WLT150-6/5.5	653	462	232	510	195	359	350	150	170	310	140	12	150	240	285	8	22	102

**Performance curve**

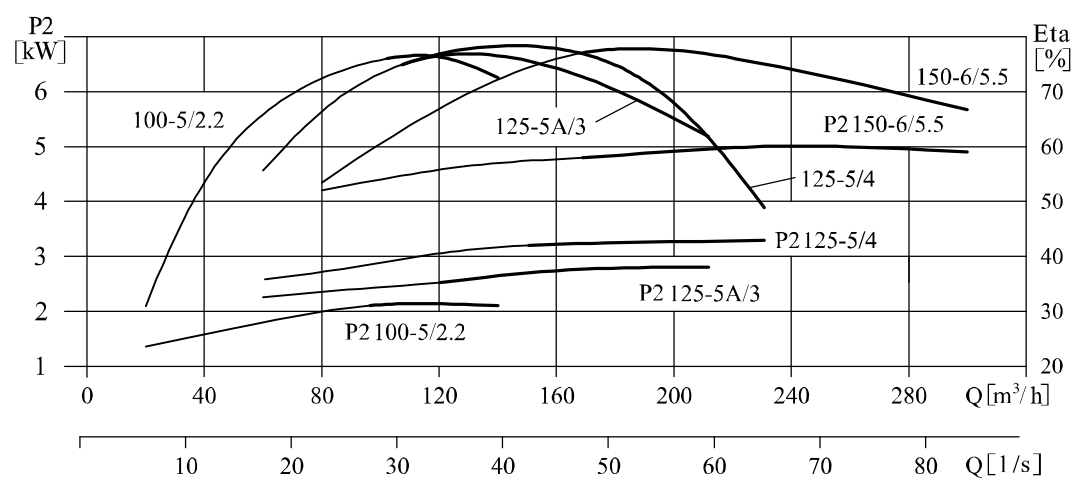
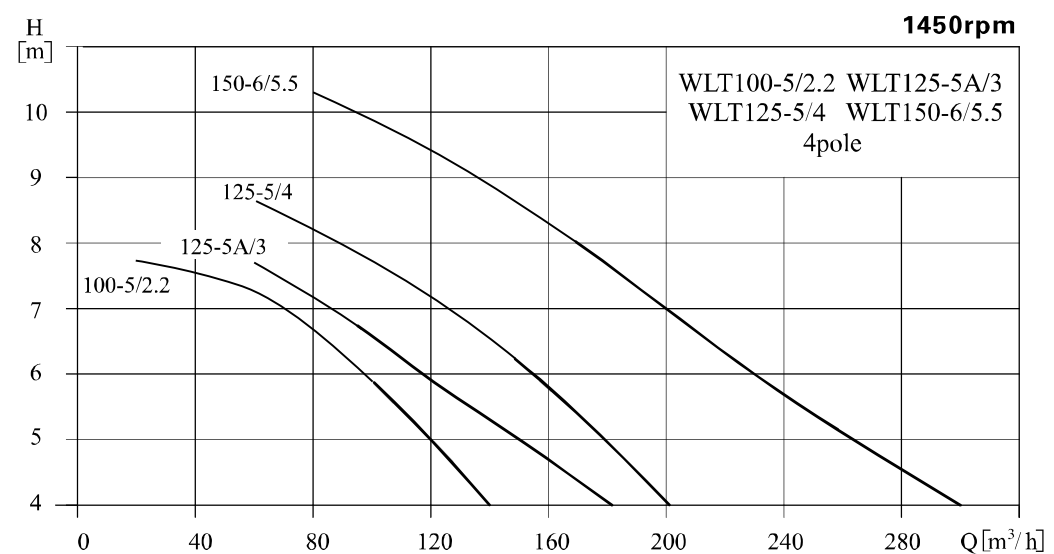


**Performance table**

Model	Motor (kW)	Q (m³/h)	35	40	45	50	55	60	65	70
WLT65-5/1.1	1.1	H (m)	6.2	5.7	5	4.1				
WLT80-5/1.5	1.5					7.2	6.4	5.8	5	4



**Performance curve**



**Performance table**

Model	Motor (kW)	Q (m³/h)	100	110	120	130	140	150	160	170	180	190	200	210	230	250	270	300
WLT100-5/2.2	2.2	H (m)	5.9	5.4	5	4.5	4											
WLT125-5A/3	3		6.6	6.2	5.9	5.6	5.3	5	4.7	4.4	4							
WLT125-5/4	4							6.2	5.8	5.4	5	4.5	4					
WLT150-6/5.5	5.5									8	7.6	7.3	7	6.7	6	5.4	4.8	4

## TOOLS

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### Pressure:

1MPa =10 bar

1psi=0.069bar

1kgf/cm<sup>2</sup>=0.98bar

### Flow rate:

1 m<sup>3</sup>/h=0.28 L/s = 16.67 L/min = 3.67 gpm UK = 4.4 gpm USA

1 L/s = 3.6 m<sup>3</sup>/h

1 L/min=0.06 m<sup>3</sup>/h

1 gpm USA = 0.2273 m<sup>3</sup>/h

### Power

1 hp = 0.746 kW

### Length

1 in=0.0254 m

1 ft= 0.3048m