

LP(T) Type Vertical Turbine Pump



Flow: 8 m³/hr ~ 60,000 m³/hr
Head: 5m ~ 90m
Power: 1.5kW ~ 4,800kW
Medium Temperature: 0° ~ 60° C



DRAKOS - POLEMIS INC
PUMP MANUFACTURERS

General Data

Outline And Purpose Of The Product

Model LP vertical sludge pump is use to pump up the non-corrosive sludge or wastewater or a temperature below 60°C and the content of suspension (containing no fiber, non-ground grains) less than 150 mg/L.

With model LPT vertical sludge pump a protective shaft sleeve is set, inside of the sludge or waste water of temperature below 60°C and containing some solid grains (as iron dregs, thin sand, coal power etc.).

Both pumps cab be used for municipal works, metallurgy, iron and steel, min, chemical industry, papermaking, tap water, power plant and farmland hydraulic project.

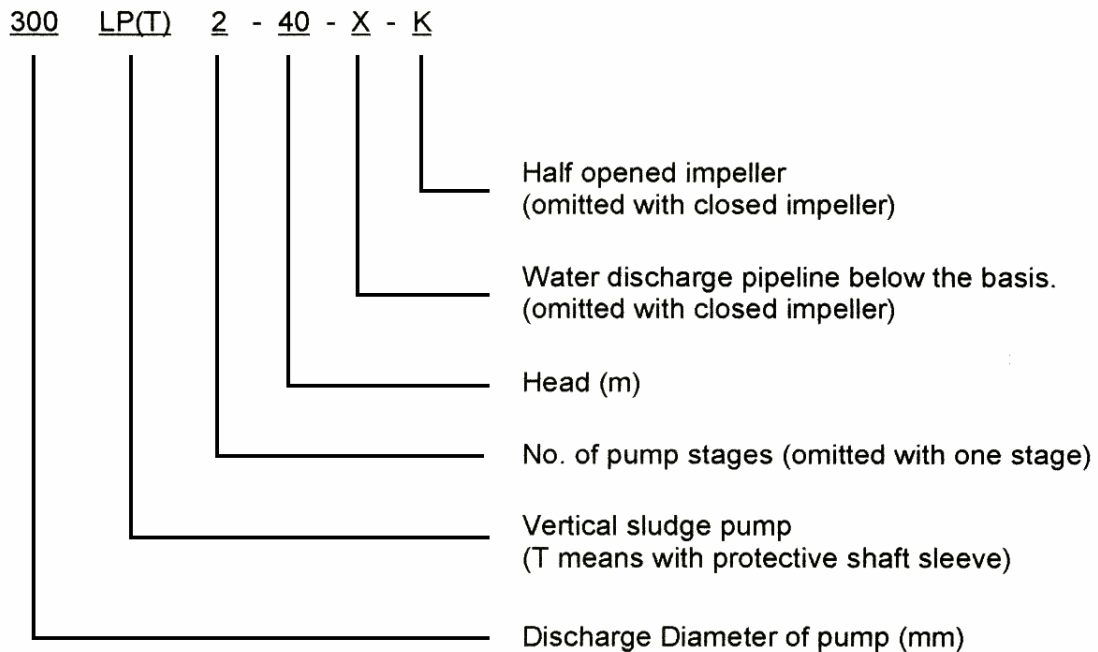
Range Of Performance

Flow: 15 m³/hr ~3000 m³/hr

Head: 6m ~ 60m

Power: 1.5kW ~ 315kW

Definition Of Model



General Data

Conditions Of Use

1. The Medium temperature should not be more than 60°C.
2. Neutral medium, with the PH value within 6.5 ~ 8.5. Please make it clear when order of pumps in case the medium not in line with the requirements.
3. For model LP pump, the medium contained suspensions' content must be smaller than 150 mg/L, for model LPT pump, the medium contained solid grains' content must be smaller than 2 g/L and the maximum diameter of the grain must be smaller than 2mm.
4. Model LPT pump has to externally connected with pure or soap water so as to lubricate the rubber bearing and for a two stages pump. The lubricating water's pressure should not be lower than the pump's working pressure by ½.
5. For the power supply, the rated voltage 400V and the rated frequency 50Hz. The motor cannot work properly unless the deviation both voltage and frequency not bigger than ± 5%.
6. The first stage impeller of the pump is submerged by over 0.5m at the lowest water level, 2 ~ 3m are proper generally.
7. The well barrel is required upright.
8. For special conditions of use, the contract or technical agreement is regarded to prevail.

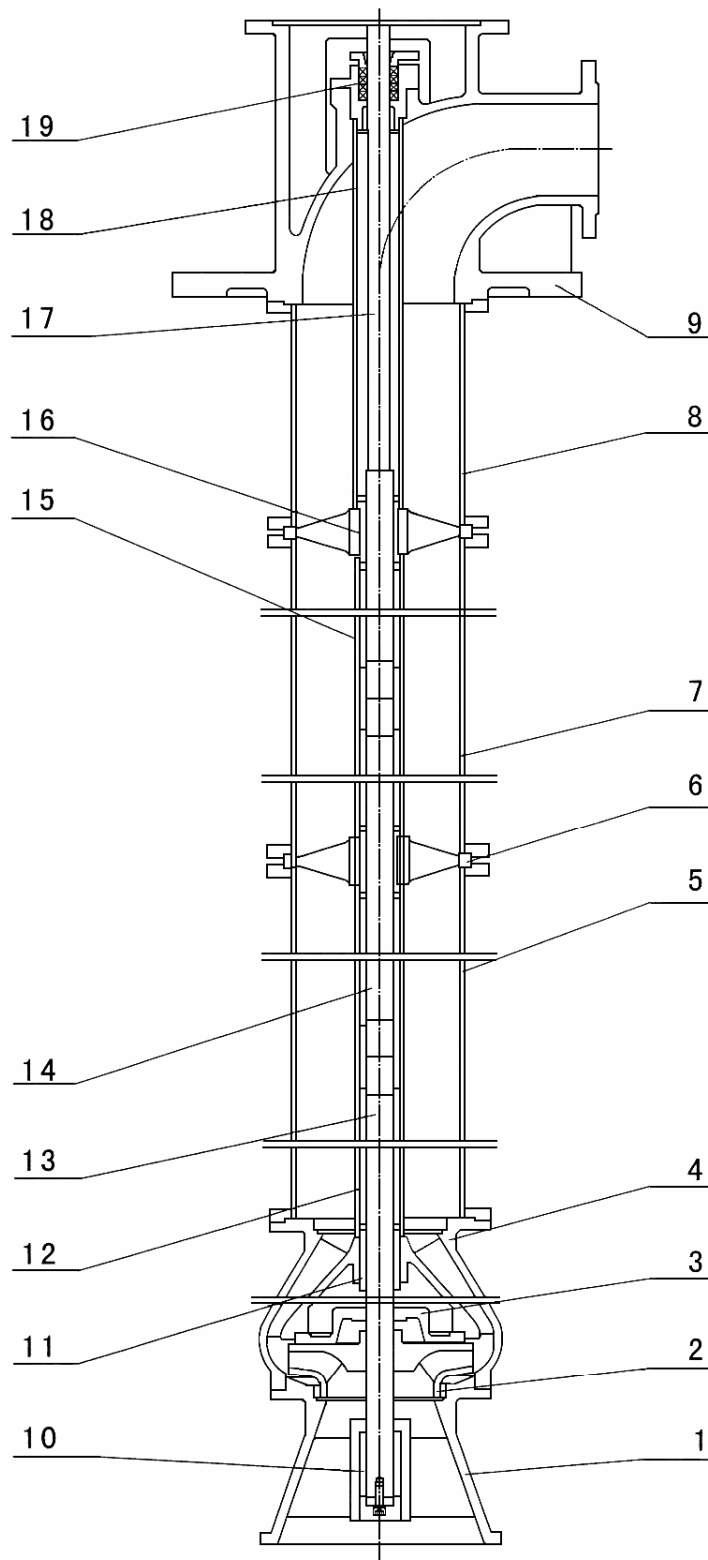
Rotating Direction

The impeller rotates clockwise viewing from the suction inlet of the pump.

Description Of Structure

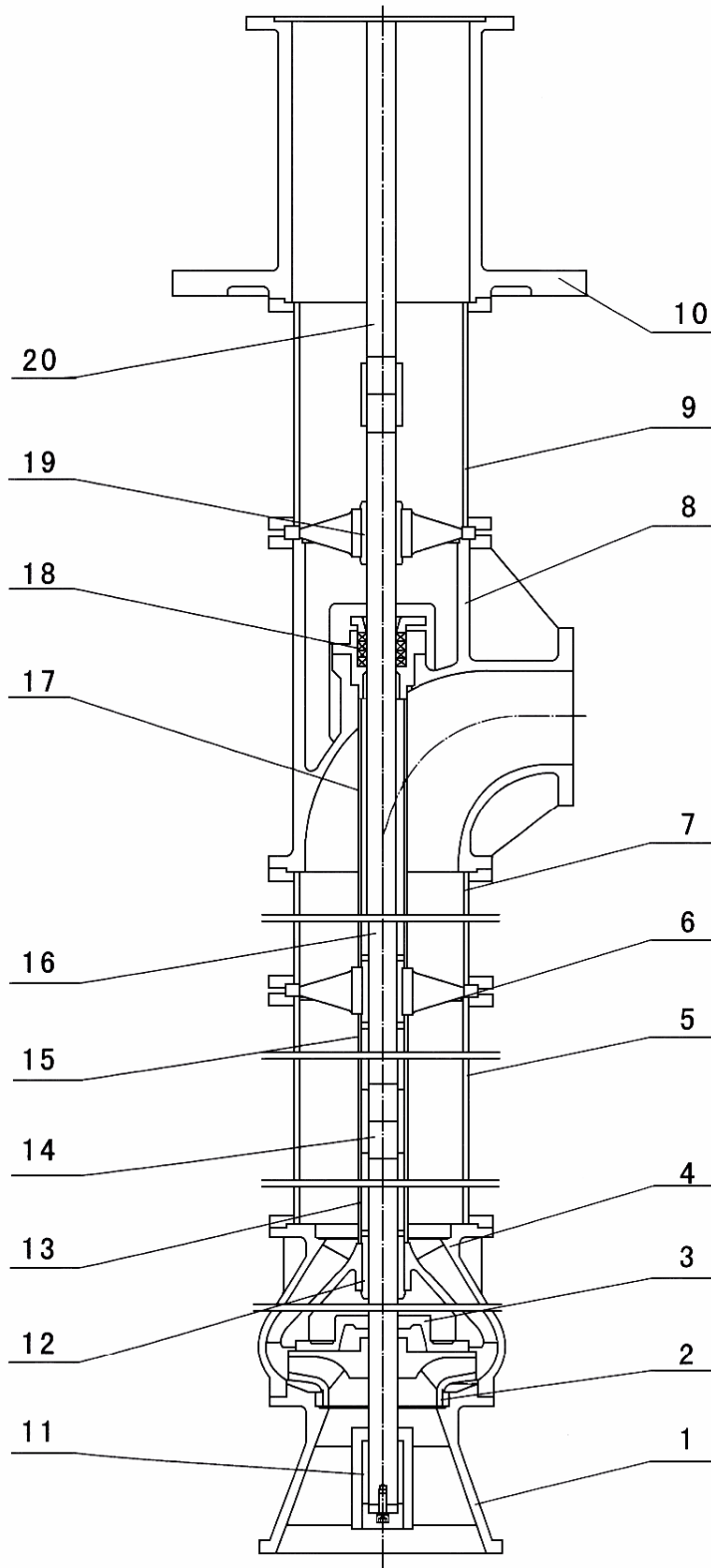
1. The inlet of both pumps is vertically downward and the outlet is horizontal. The pump's discharge exit can be on or under the basis.
2. Closed and semi-opened two types with the impeller and the impeller is completely submerged in the liquid being pumped up, no need to pour water when being started.
3. Compared with model LP, a protective shaft sleeve is added in with model LPT and its impeller is made of a wearable material to expanding the range of use.
4. Use a clutch nut to link the impeller shaft, actuating shaft and motor's shaft.
5. Water lubricating rubber bearing and packing seal are used.
6. The motor is YLS-type specially used three phase asynchronous motor and standard Y type one, an inverse proof device is set with the pump to effectively prevent it from inverse rotating.
7. The motor is in F class insulating. YLB type motor is of a protective class IP23 and Y type is IP44.

The Configuration Of LP(T) Type Pump (The Pump's Discharge Exit Is On The Basis)



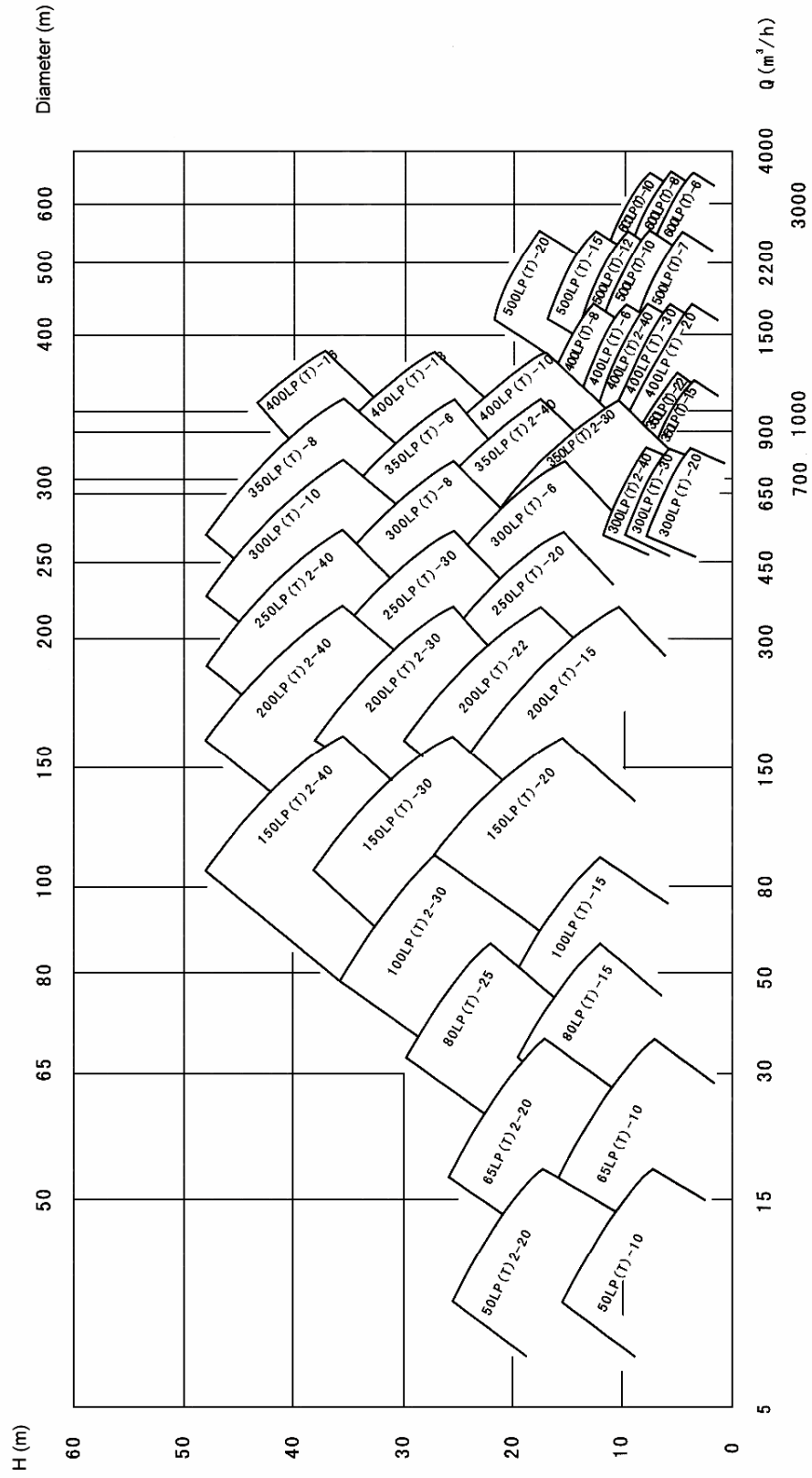
No.	Part
1	Water Inlet Seat
2	Impeller
3	Water Seal Seat
4	Flow guider
5	Lower Water Pump-up Pipe
6	Stand
7	Middle Water Pump-up Pipe
8	Upper Water Pump-up Pipe
9	Water Outlet Seat
10	Lower Bearing
11	Middle Bearing
12	Lower Sleeve
13	Impeller Shaft
14	Actuating Shaft
15	Middle Sleeve
16	Stand Bearing
17	Motor Shaft
18	Upper Sleeve
19	Sealing Device

The Configuration Of LP(T) Type Pump (The Pump's Discharge Exit Is Below The Basis)



No.	Part
1	Water Inlet Seat
2	Impeller
3	Water Seal Seat
4	Flow Guider
5	Low Water Pump-up Pipe
6	Stand
7	Middel Water Pump-up Pipe
8	Water Outlet Seat
9	Upper Water Pump-up Pipe
10	Motor Stand
11	Lower Bearing
12	Middel Bearing
13	Lower Sleeve
14	Impeller Shaft
15	Middel Sleeve
16	Actuating Shaft
17	Upper Sleeve
18	Sealing Device
19	Stand Bearing
20	20 Motor Shaft

LP(T) Atlas Of Style



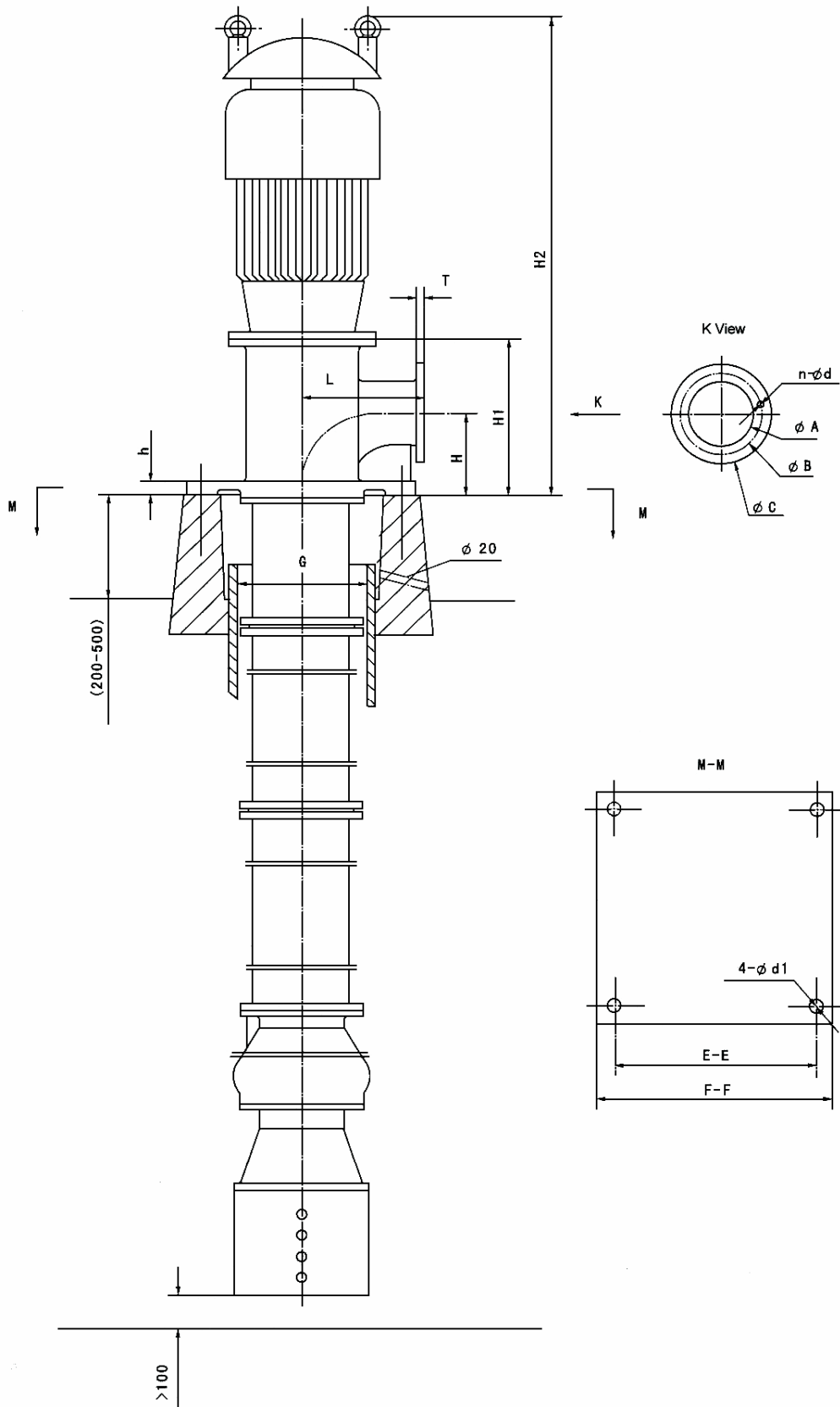
Performance Data Table Of LP(T) Type Pump

No.	Pump Type	Outlet Diameter	Capacity	Head	Speed	Efficiency	Motor Power	Motor Type
		mm	m ³ /hr	m	rpm	%	kW	
1	50LP(T)-10	50	15	10	2840	50	15	Y90S-2
2	50LP(T)2-20	50	15	20	2870	50	3	Y100L-2
3	65LP(T)-10	65	30	10	2840	55	2.2	Y90L-2
4	65LP(T)2-20	65	30	20	2890	55	4	Y112M-2
5	80LP(T)-15	80	50	15	2900	60	5.5	Y132S1-2
6	80LP(T)-25	80	50	25	2900	60	7.5	Y132S2-2
7	100LP(T)-15	100	80	15	2900	65	7.5	Y112M-2
8	100LP(T)2-30	100	80	30	2930	65	15	YLB132-2-2
9	150LP(T)-20	150	150	20	1460	73	15	YLB160-2-4
10	150LP(T)-30	150	150	30	1470	72	22	YLB180-2-4
11	150LP(T)2-40	150	150	40	1470	73	30	YLB200-1-4
12	200LP(T)-15	200	300	15	1470	77	22	YLB180-2-4
13	200LP(T)-22	200	300	22	1470	75	30	YLB200-1-4
14	200LP(T)2-30	200	300	30	1480	77	45	YLB200-3-4
15	200LP(T)2-40	200	300	40	1480	75	55	YLB250-1-4
16	250LP(T)-20	250	450	20	1480	77	45	YLB200-3-4
17	250LP(T)-30	250	450	30	1480	73	75	YLB250-2-4
18	250LP(T)2-40	250	450	40	1480	77	90	YLB250-3-4
19	300LP(T)-20	300	650	20	1480	78	55	YLB250-1-4
20	300LP(T)-30	300	650	30	1490	78	90	YLB250-3-4
21	300LP(T)2-40	300	650	40	1490	78	110	YLB280-1-4
22	300LP(T)-6	300	700	6	970	65	22	Y200L2-6
23	300LP(T)-8	300	700	8	980	65	30	Y225M-6

Performance Data Table Of LP(T) Type Pump

No.	Pump Type	Outlet Diameter	Capacity	Head	Speed	Efficiency	Motor Power	Motor Type
		mm	m ³ /hr	m	rpm	%	kW	
24	300LP(T)-10	300	700	10	980	65	37	Y250M-6
25	350LP(T)-15	350	900	15	1480	75	75	YLB250-2-4
26	350LP(T)-22	350	900	22	1490	75	90	YLB250-3-4
27	350LP(T)2-30	350	900	30	1490	75	132	YLB280-2-4
28	350LP(T)2-40	350	900	40	1490	75	180	YLB280-4-4
29	350LP(T)-6	350	1000	6	740	72	30	Y250M-8
30	350LP(T)-8	350	1000	8	740	75	37	Y280S-8
31	400LP(T)-20	400	1250	20	1490	80	110	YLB280-1-4
32	400LP(T)-30	400	1250	30	1490	80	150	YLB280-3-4
33	400LP(T)2-40	400	1250	40	1490	80	220	YLB280-6-4
34	400LP(T)-6	400	1500	6	740	72	45	Y280M-8
35	400LP(T)-8	400	1500	8	740	80	55	Y315S-8
36	400LP(T)-10	400	1500	10	740	80	75	Y315M-8
37	400LP(T)-13	400	1500	13	740	78	90	Y315L1-8
38	400LP(T)-16	400	1500	16	740	78	110	Y315L2-8
39	500LP(T)-7	500	2200	7	990	65	90	Y315M-6
40	500LP(T)-10	500	2200	10	990	70	110	Y315L1-6
41	500LP(T)-12	500	2200	12	990	72	132	Y315L2-6
42	500LP(T)-15	500	2200	15	990	75	160	Y355M1-6
43	500LP(T)-20	500	2200	20	990	80	200	Y355M2-6
44	600LP(T)-6	600	3000	6	590	62	110	Y315M1-10
45	600LP(T)-8	600	3000	8	590	68	132	Y355M2-10
46	600LP(T)-10	600	3000	10	590	75	160	Y355L-10

LP(T) Type Pump Installation Dimension Drawing (The Pump's Discharge Exit Is On The Basis)



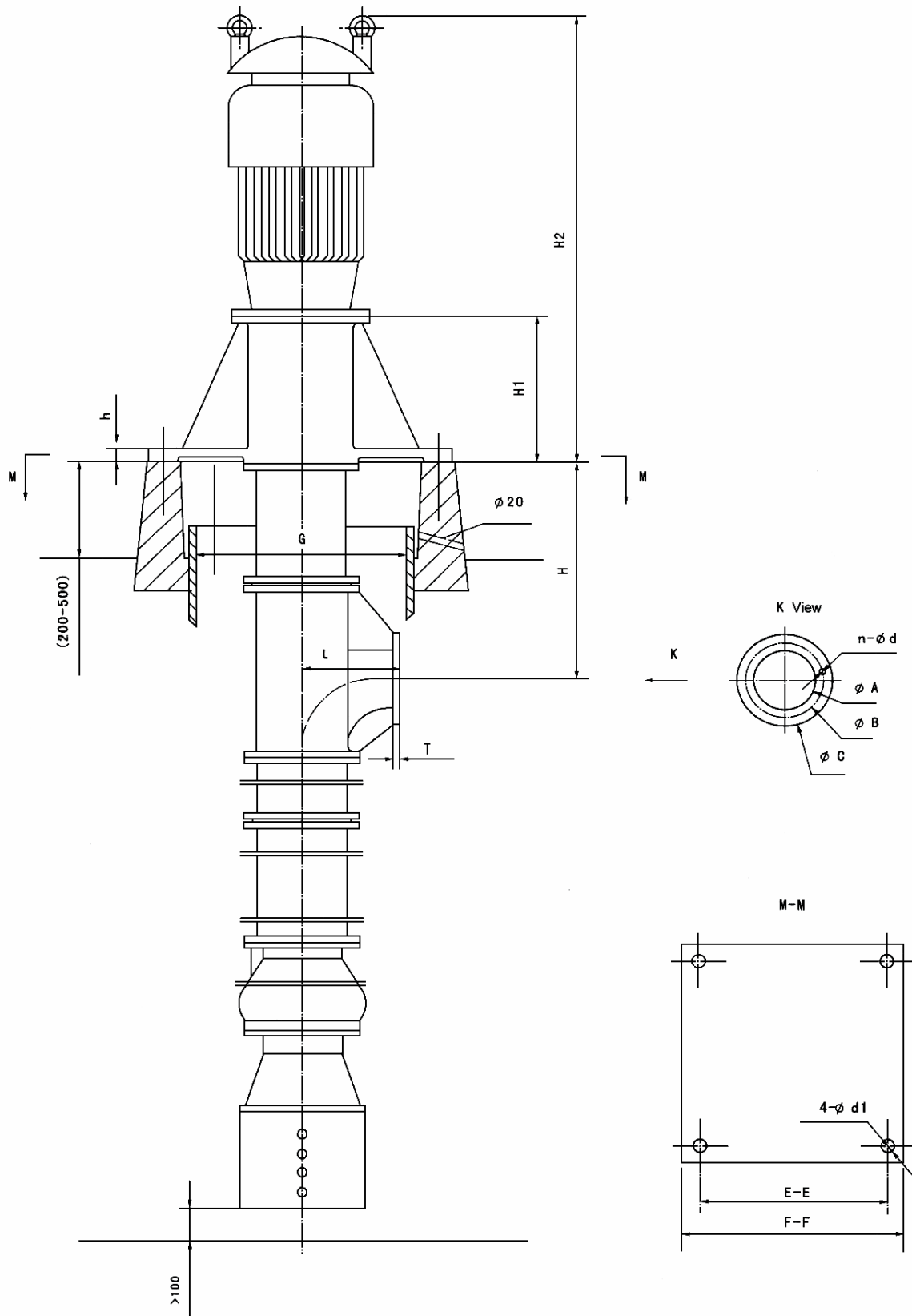
LP(T) Type Pump Installation Dimension Table (The Pump's Discharge Exit Is On The Basis)

No.	Pump Type	Dimension													
		H	H1	H2	L	T	h	A	B	C	n-φd	E	F	n-φdo	G
1	50LP(T)-10	120	475	760	150	20	20	50	125	165	4-φ19	400	500	4-φ20	350
2	50LP(T)-20	120	475	800	150	20	20	50	125	165	4-φ19	400	500	4-φ20	350
3	65LP(T)-10	150	530	850	200	20	20	65	145	185	4-φ19	450	550	4-φ25	400
4	65LP(T)-20	150	590	870	200	20	20	65	145	185	4-φ19	450	550	4-φ25	400
5	80LP(T)-15	150	600	940	200	22	25	80	160	200	8-φ19	500	600	4-φ25	450
6	80LP(T)-25	150	600	1030	200	22	25	80	160	200	8-φ19	500	600	4-φ25	450
7	100LP(T)-15	200	350	1200	250	24	25	100	180	220	8-φ19	500	600	4-φ25	450
8	100LP(T)-30	200	350	1235	250	24	25	100	180	220	8-φ19	500	600	4-φ25	450
9	150LP(T)-20	200	400	1250	350	26	25	150	240	285	8-φ23	550	650	4-φ30	500
10	150LP(T)-30	200	400	1285	350	26	25	150	240	285	8-φ23	550	650	4-φ30	500
11	150LP(T)-40	200	400	1395	350	26	40	150	240	285	8-φ23	550	650	4-φ30	500
12	200LP(T)-15	250	450	1335	350	26	40	200	295	340	8-φ23	600	700	4-φ30	550
13	200LP(T)-22	250	450	1445	350	26	40	200	295	340	8-φ23	600	700	4-φ30	550
14	200LP(T)-30	250	450	1445	350	26	40	200	295	340	8-φ23	600	700	4-φ30	550
15	200LP(T)-40	250	450	1625	350	26	40	200	295	340	8-φ23	600	700	4-φ30	550
16	250LP(T)-20	300	550	1725	400	28	40	250	350	395	12-φ23	650	750	4-φ30	600
17	250LP(T)-30	300	550	1775	400	28	40	250	350	395	12-φ23	650	750	4-φ30	600
18	250LP(T)-40	300	550	1960	400	28	40	250	350	395	12-φ23	650	750	4-φ30	600
19	300LP(T)-20	350	650	1825	450	28	50	300	400	445	12-φ23	700	850	4-φ40	650
20	300LP(T)-30	350	650	1825	450	28	50	300	400	445	12-φ23	700	850	4-φ40	650
21	300LP(T)-40	350	650	1875	450	28	50	300	400	445	12-φ23	700	850	4-φ40	650
22	300LP(T)-6	350	1100	1765	450	28	50	300	400	445	12-φ23	800	960	4-φ40	750
23	300LP(T)-8	350	1100	1805	450	28	50	300	400	445	12-φ23	800	960	4-φ40	750

LP(T) Type Pump Installation Dimension Table (The Pump's Discharge Exit Is On The Basis)

No.	Pump Type	Dimension													
		H	H1	H2	L	T	h	A	B	C	n-φd	E	F	n-φdb	G
24	300LP(T)-10	350	1100	1890	450	28	50	300	400	4445	12-φ23	800	950	4-φ40	750
25	350LP(T)-15	400	750	1925	500	30	50	350	460	505	16-φ23	800	950	4-φ40	700
26	350LP(T)-22	400	750	1925	500	30	50	350	460	505	16-φ23	800	950	4-φ40	700
27	350LP(T)-30	400	750	1975	500	30	50	350	460	505	16-φ23	800	950	4-φ40	700
28	350LP(T)-40	400	750	2150	500	30	50	350	460	505	16-φ23	800	950	4-φ40	700
29	350LP(T)-6	400	1200	1990	500	30	50	350	460	505	16-φ23	900	1100	4-φ40	800
30	350LP(T)-8	400	1200	2060	500	30	50	350	46	505	16-φ23	900	1100	4-φ40	800
31	400LP(T)-20	450	800	2025	550	32	50	400	515	565	16-φ28	900	1100	4-φ40	800
32	400LP(T)-30	450	800	2200	550	32	50	400	515	565	16-φ28	900	1100	4-φ40	800
33	400LP(T)-40	450	800	2200	550	32	50	400	515	565	16-φ28	900	1100	4-φ40	800
34	400LP(T)-6	450	1300	2210	550	32	50	400	515	565	16-φ28	1150	1350	4-φ40	1050
35	400LP(T)-8	450	1300	2450	550	32	50	400	515	565	16-φ28	1150	1350	4-φ40	1050
36	400LP(T)-10	450	1300	2550	550	32	50	400	515	565	16-φ28	1150	1350	4-φ40	1050
37	400LP(T)-13	450	1300	2550	550	32	50	400	515	565	16-φ28	1300	1500	4-φ40	1200
38	400LP(T)-16	450	1300	2550	550	32	50	400	515	565	16-φ28	1300	1500	4-φ40	1200
39	500LP(T)-7	550	1600	2850	700	34	60	500	620	670	20-φ28	1200	1450	4-φ50	1100
40	500LP(T)-10	550	1600	2850	700	34	60	500	620	670	20-φ28	1200	1450	4-φ50	1100
41	500LP(T)-12	550	1600	2850	700	34	60	500	620	670	20-φ28	1300	1500	4-φ50	1200
42	500LP(T)-15	550	1600	3100	700	34	60	500	620	670	20-φ28	1300	1500	4-φ50	1200
43	500LP(T)-20	550	1600	3100	700	34	60	500	620	670	20-φ28	1400	1600	4-φ50	1300
44	600LP(T)-6	650	1900	3050	800	36	60	600	725	750	20-φ31	1400	1600	4-φ50	1300
45	600LP(T)-8	650	1900	3300	800	36	60	600	725	750	20-φ31	1400	1600	4-φ50	1300
46	600LP(T)-10	650	1900	3300	800	36	60	600	725	750	20-φ31	1400	1600	4-φ50	1300

LP(T) Type Pump Installation Dimension Drawing (The Pump's Discharge Exit Is Below The Basis)



LP(T) Type Pump Installation Dimension Table (The Pump's Discharge Exit Is Below The Basis)

No.	Pump Type	Dimension													
		H	H1	H2	L	T	h	A	B	C	n-φd	E	F	n-φdo	G
1	50LP(T)-10	500	250	535	120	20	20	50	125	165	4-φ19	400	500	4-φ20	360
2	50LP(T)2-20	500	250	535	120	20	20	50	125	165	4-φ19	400	500	4-φ20	360
3	65LP(T)-10	550	300	620	150	20	20	65	145	185	4-φ19	450	550	4-φ25	400
4	65LP(T)2-20	550	300	650	150	20	20	65	145	185	4-φ19	450	550	4-φ25	400
5	80LP(T)-15	600	350	690	150	22	25	80	160	200	8-φ19	500	600	4-φ25	450
6	80LP(T)-25	600	350	780	160	22	25	80	160	200	8-φ19	500	600	4-φ25	450
7	100LP(T)-15	700	350	1175	200	24	25	100	180	220	8-φ19	500	600	4-φ25	450
8	100LP(T)2-30	700	350	1235	200	24	25	100	180	220	8-φ19	500	600	4-φ25	450
9	150LP(T)-20	800	400	1250	250	26	25	150	240	285	8-φ23	600	700	4-φ30	550
10	150LP(T)-30	800	400	1285	250	26	25	150	240	285	8-φ23	600	700	4-φ30	550
11	150LP(T)2-40	800	400	1395	250	26	40	150	240	285	8-φ23	600	700	4-φ30	550
12	200LP(T)-15	900	450	1335	250	26	40	200	295	340	8-φ23	600	700	4-φ30	550
13	200LP(T)-22	900	450	1445	250	26	40	200	295	340	8-φ23	600	700	4-φ30	550
14	200LP(T)2-30	900	450	1445	250	26	40	200	295	340	8-φ23	600	700	4-φ30	550
15	200LP(T)2-40	900	450	1625	250	26	40	200	295	340	8-φ23	600	700	4-φ30	550
16	250LP(T)-20	1000	500	1495	300	28	40	250	350	395	12-φ23	700	800	4-φ30	650
17	250LP(T)-30	1000	500	1675	300	28	40	250	350	395	12-φ23	700	800	4-φ30	650
18	250LP(T)2-40	1000	500	1675	300	28	40	250	350	395	12-φ23	700	800	4-φ30	650
19	300LP(T)-20	1100	550	1675	300	28	50	300	400	445	12-φ23	700	850	4-φ40	650
20	300LP(T)-30	1100	550	1675	300	28	50	300	400	445	12-φ23	700	850	4-φ40	650
21	300LP(T)-40	1100	550	1725	300	28	50	300	400	445	12-φ23	700	850	4-φ40	650
22	300LP(T)-6	1100	550	1615	350	28	50	300	400	445	12-φ23	800	950	4-φ40	750
23	300LP(T)-8	1100	550	1655	350	28	50	300	400	445	12-φ23	800	950	4-φ40	750

LP(T) Type Pump Installation Dimension Table (The Pump's Discharge Exit Is Below The Basis)

No.	Pump Type	Dimension													
		H	H1	H2	L	T	h	A	B	C	n-φd	E	F	n-φdb	G
24	300LP(T)-10	1100	550	1740	350	28	50	300	400	445	12-φ23	800	950	4-φ40	750
25	350LP(T)-15	1200	600	1725	350	30	50	350	460	505	16-φ23	800	950	4-φ40	750
26	350LP(T)-22	1200	600	1725	350	30	50	350	460	505	16-φ23	800	950	4-φ40	750
27	350LP(T)-30	1200	600	1775	350	30	50	350	460	505	16-φ23	800	950	4-φ40	750
28	350LP(T)-40	1200	600	1950	350	30	50	350	460	505	16-φ23	800	950	4-φ40	750
29	350LP(T)-6	1200	600	1440	400	30	50	350	460	505	16-φ23	900	1100	4-φ40	850
30	350LP(T)-8	1200	600	1625	400	30	50	350	460	505	16-φ23	900	1100	4-φ40	850
31	400LP(T)-20	1300	700	1925	400	32	50	400	515	565	16-φ28	900	1100	4-φ40	850
32	400LP(T)-30	1300	700	2100	400	32	50	400	515	565	16-φ28	900	1100	4-φ40	850
33	400LP(T)-40	1300	700	2100	400	32	50	400	515	565	16-φ28	900	1100	4-φ40	850
34	400LP(T)-6	1300	700	1675	450	32	50	400	515	565	16-φ28	1150	1350	4-φ40	1050
35	400LP(T)-8	1300	700	1845	450	32	50	400	515	565	16-φ28	1150	1350	4-φ40	1050
36	400LP(T)-10	1300	700	1955	450	32	50	400	515	565	16-φ28	1150	1350	4-φ40	1050
37	400LP(T)-13	1300	700	1955	450	32	50	400	515	565	16-φ28	1300	1500	4-φ40	1200
38	400LP(T)-16	1300	700	1955	450	32	50	400	515	565	16-φ28	1300	1500	4-φ40	1200
39	500LP(T)-7	1500	800	2050	500	34	60	500	620	670	20-φ28	1200	1450	4-φ50	1100
40	500LP(T)-10	1500	800	2050	500	34	60	500	620	670	20-φ28	1200	1450	4-φ50	1100
41	500LP(T)-12	1500	800	2050	500	34	60	500	620	670	20-φ28	1300	1500	4-φ50	1200
42	500LP(T)-15	1500	800	2300	500	34	60	500	620	670	20-φ28	1300	1500	4-φ50	1200
43	500LP(T)-20	1500	800	2300	500	34	60	500	620	670	20-φ28	1400	1600	4-φ50	1300
44	600LP(T)-6	1800	1000	2500	600	36	60	600	725	780	20-φ31	1400	1600	4-φ50	1300
45	600LP(T)-8	1800	1000	2500	600	36	60	600	725	780	20-φ31	1400	1600	4-φ50	1300
46	600LP(T)-10	1800	1000	2500	600	36	60	600	725	780	20-φ31	1400	1600	4-φ50	1300