

FY型液下泵

FY CHEMICAL CENTRIFUGAL SUBMERGED PUMP

安装使用说明书

INSTALLATION AND OPERATION MANUAL



浙江扬子江泵业有限公司
ZHEJIANG YANGTZE RIVER PUMP CO.,LTD.

■ 产品简介

FY型系列化工离心液下泵，叶轮型式分闭式、半开式全开式供用户任选，当液下深度超过2米时可采用接轴结构，多点支承，液下深度可达6米。

■ 性能范围

流量: $Q=3\sim 600\text{ m}^3/\text{h}$
扬程: $H=5\sim 125\text{m}$
工作温度: $-20^\circ\text{C}\sim +500^\circ\text{C}$

■ 用途

化工、石油化工、造纸厂、水泥厂、炼钢厂、制药厂、电厂、采矿场、污水处理厂等。

■ 输送介质

1. 各种温度和浓度的硫酸、硝酸、盐酸和磷酸等有机酸和无机酸。
2. 各种温度和浓度的碱溶液、盐溶液。
3. 各种液态石油化工产品、有机化合物以及其它腐蚀性的化工原料和产品。
4. 我厂的耐腐蚀材料，能满足上述各种介质要求，订货时，请用户提供输送介质的详细情况，以便正确选用。

■ 特点

1. 接轴结构安全可靠。
2. 转子部分两点支承，无轴向串动。
3. 中间导轴承可采用自润滑或外润滑。
4. 泵启动时，叶轮已浸没在介质中，启动容易，不存在排气。抽空问题。
5. 泵用于深井时，可加装一根吸入管。

■ 连接形式

1. 出口为法兰连接或管螺纹连接。
2. 底座为长方形，也可根据用户要求设计方形或圆形。

■ 泵型号意义说明 Pump Model's Meaning & Description:



■ Product Introduction

FY series chemical centrifugal submerged pump, which can equip with closed, semi-open or fully open impeller type for choice. When the submerged depth is greater than 2m, we will use connecting shaft structure. Under such multi-point support structure, the depth can be up to 6 meters.

■ The Performance Range

Capacity: $Q=3\sim 600\text{ m}^3/\text{h}$
Head: $H=5\sim 125\text{m}$

■ Usage

Chemical, petrochemical, paper mills, Cement plant, steel mill, Pharmaceutical factory, Power plant, Mining site, sewage treatment plant, etc.

■ Conveying medium

1. Various acid at various temperatures and concentrations.
2. Alkaline solution and salt solution at various temperatures and concentrations.
3. Various petrochemical liquid products, organic compounds and other corrosive chemical raw materials and products.
4. When ordering, please provide the details of the conveying medium to choose the most suitable pump models for you.

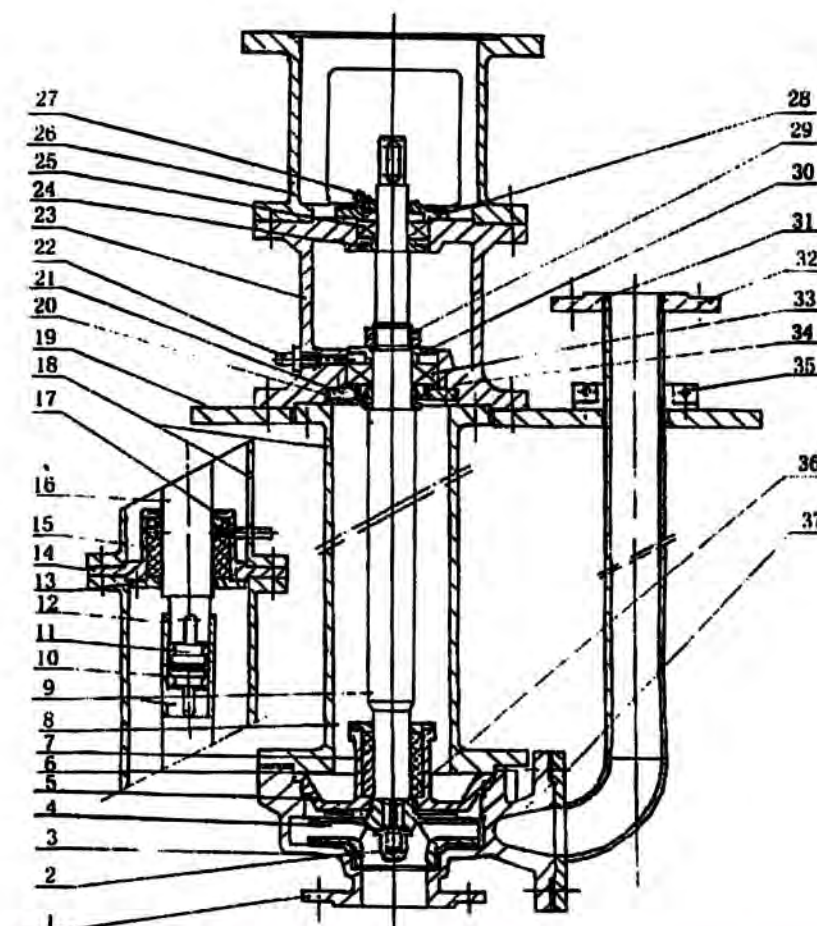
■ Characteristics

1. The structure of connecting shaft is safe and reliable.
2. The rotor is supported by two points and has no axial motion.
3. Intermediate guide bearings can be self-lubricated.
4. It is easy to start and there is no exhaust.

■ The form of connection

1. The outlet is flange connection or thread connection.
2. The base is rectangular, and it can also be designed square or round according to user's requirements.

■ 结构图 Structure

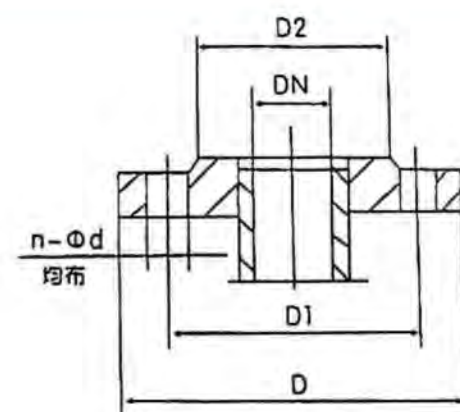
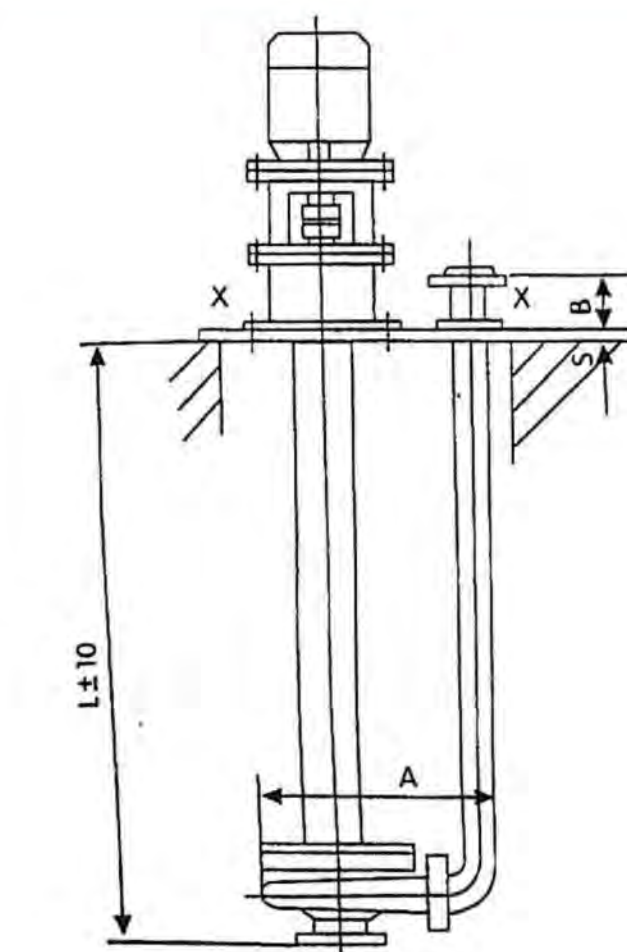


Item	Description	Item	Description	Item	Description	Item	Description
1	泵体 Pump Case	11	联接套 Connecting Sleeve	21	下轴承压盖 Bottom Bearing Gland	31	出液管 Outlet Pipeline
2	叶轮螺母 Impeller Nut	12	键 Key	22	黄油杯 Grease Cup	32	出液口法兰 Outlet Flange
3	叶轮 Impeller	13	中间导轴承压盖 Middle guide bearing gland	23	轴承座 Bearing Seat	33	轴承 Bearing
4	垫片 Gasket	14	中间导轴承座 Middle Guide bearing seat	24	上轴承挡圈 Top bearing baffle	34	油封 Oil Seal
5	泵盖 Pump Cover	15	中间导轴承 Middle guide bearing	25	轴承 Bearing	35	对半法兰 Half Flange
6	立柱管 Vertical Pipe	16	泵轴 Shaft	26	电机座 Motor Seat	36	键 Key
7	下导轴承 Bottom guide Bearing	17	润滑液管路 Lubricating line	27	黄油杯 Butter Cup	37	垫片 Gasket
8	导轴承压盖 Guide bearing Gland	18	立柱管 Vertical Pipe	28	上轴承压盖 Top Bearing Gland		
9	泵轴 Shaft	19	支承座 Support Base	29	锁紧螺母 Tighten Thread		
10	传动套 Transmission sleeve	20	甩液套 Drainage Sleeve	30	下轴承挡圈 Bottom Bearing baffle		

性能参数表 Performance Data Sheet

型 号	泵额定转速n=2900r/min					泵额定转速 n=1450r/min				
	流量 Q (m³/h)	扬程 H (m)	轴功率 N (kw)	液体比重r=1.00		流量 Q (m³/h)	扬程 H (m)	轴功率 N (kw)	液体比重r=1.00	
				功率 (kw)	配用电机型号				功率 (kw)	配用电机型号
25-20-130	3.6	25	0.91	2.2	Y90L-2					
25-20-130A	3.6	16	0.42	1.5	Y90S-2					
25-25-180	3.6	40	2.24	3	Y100L-2					
40-32-120	7.2	20	0.91	3	Y100L-2					
40-32-120A	7.2	16	0.61	2.2	Y90L-2					
40-25-145	7.2	25	1.14	3	Y100L-2					
40-32-180	7.2	40	2.24	4	Y112M-2					
50-32-125	12.5	20	1.33	2.2	Y90L-2	6.3	5	0.19	0.55	Y80L-4
50-32-125A	11.3	16.4	0.99	1.5	Y90S-2	5.7	4.1	1.149	0.55	Y80L-4
50-32-160	12.5	32	2.37	3	Y100L-2	6.3	8	0.34	0.55	Y80L-4
50-32-160A	11.3	26.4	1.85	3	Y100L-2	5.7	6.6	0.28	0.55	Y80L-4
50-32-200	12.5	50	4.36	5.5	Y132S1-2	6.3	12.5	0.65	1.1	Y90S-4
50-32-200A	11.3	41	3.24	5.5	Y132S1-2	5.7	10.3	0.52	1.1	Y90S-4
50-32-250	12.5	80	8.25	11	Y160M1-2	6.3	20	1.27	2.2	Y100L1-4
50-32-250A	11.7	70	6.97	11	Y160M1-2	5.8	17.5	1.125	1.5	Y90L-4
50-32-250B	11	62	6.19	7.5	Y132S2-2	5.5	15.58	0.77	1.1	Y90S-4
65-50-125	25	20	2.2	3	Y100L-2	12.5	5	0.31	0.55	Y80L-4
65-50-125A	22.7	16.5	1.67	2.2	Y90L-2	11.4	4.1	0.21	0.55	Y80L-4
65-50-160	25	32	3.82	5.5	Y132S1-2	12.5	8	0.53	1.1	Y90S-4
65-50-160A	22.7	26.5	2.93	4	Y112M-2	11.3	6.6	0.41	0.75	Y80L-4
65-40-200	25	50	6.55	11	Y160M1-2	12.5	12.5	0.93	1.5	Y90L-4
65-40-200A	22.7	41	5.07	7.5	Y132S2-2	11.3	10.3	0.72	1.1	Y90S-4
65-40-250	25	80	11.84	15	Y160M2-2	12.5	20.0	1.75	3	Y100L2-4
65-40-250A	23.4	74.8	10.06	15	Y160M2-2	11.7	17.5	1.47	2.2	Y100L1-4
65-40-250B	22	61.8	8.42	11	Y160M1-2					
65-40-315	25	125	21.8	30	Y200L1-2	12.5	32	3.3	5.5	Y132S-4
65-40-315A	23.4	109.5	18.36	30	Y200L1-2	11.7	28	2.88	4	Y112M-4
80-65-125	50	20	3.95	5.5	Y132S1-2	25	5.0	0.53	0.75	Y80L-4
80-65-125A	45.3	16.5	3.04	4	Y112M-2	22.6	4.1	0.41	1.1	Y90S-4
80-65-160	50	26.4	6.5	11	Y160M1-2	25	8	0.88	1.5	Y90L-4
80-65-160A	45.4	50	5.02	7.5	Y132S2-2	22.7	6.6	0.68	1.1	Y90S-4
80-50-200	50	41	10.8	15	Y160M2-2	25	12.5	1.49	2.2	Y100L1-4
80-50-200A	45.3	80	8.29	11	Y160M1-2	22.7	10.3	1.135	1.5	Y90L-4
80-50-250	50	70.2	20.6	30	Y200L1-2	25	20	2.43	4	Y112M-4
80-50-250A	45.9	30.2	17.6	22	Y180M-2	23.4	17.6	2.25	4	Y112M-4
80-50-250B	44	125	13.8	18.5	Y160L-2					
80-50-315	50	110	32.8	45	Y225M-2	25	32	4.74	7.5	Y132M-4
80-50-315A	46.9		28.1	37	Y200L2-2	23.5	28.3	4.22	5.5	Y132S-4

型 号	泵额定转速n=2900r/min					泵额定转速 n=1450r/min				
	流量 Q (m³/h)	扬程 H (m)	轴功率 N (kw)	液体比重r=1.00		流量 Q (m³/h)	扬程 H (m)	轴功率 N (kw)	液体比重r=1.00	
				功率 (kw)	配用电机型号				功率 (kw)	配用电机型号
100-80-125	100	20	7.47	1	Y160M1-2	50	5	1.0	1.5	Y90L-4
100-80-125A	91.8	16.8	5.92	7.5	Y132S2-2	45.8	4.2	0.79	1.1	Y90S-4
100-80-160	100	32	11.9	15	Y160M2-2	50	8	1.58	2.2	Y100L1-4
100-80-160A	91	26.5	9.25	15	Y160M2-2	45.5	6.6	1.22	2.2	Y100L1-4
100-65-200	100	50	18.9	22	Y180M-2	50	12.5	2.5	3	Y100L2-4
100-65-200A	91	41.5	14.7	18.5	Y160L-2	45.5	10.3	1.93	3	Y100L2-4
100-65-250	100	80	32	45	Y225M-2	50	20	4.3	5.5	Y132S-4
100-65-200A	93.5	70	27.4	37	Y200L2-2	46.7	17.4	3.53	5.5	Y132S-4
100-65-200B	87.8	61.7	23.1	30	Y200L1-2					
100-65-315						50	32	7.5	11	Y160M-4
100-65-315A						46.5	28	6.33	11	Y160M-4
100-65-315B						44	22.2	4.85	7.5	Y132M-4
125-100-200	200	50	35.4	45	Y225M-2	400	12.5	4.66	7.5	Y132M-4
125-100-200A	182	41.4	27.4	37	Y200L1-2	91	10.3	3.6	5.5	Y132S-4
125-100-250						100	20	7.56	11	Y160M-4
125-100-250A						93	17.4	6.29	11	Y160M-4
125-100-315						100	32	14.1	18.5	Y180M-4
125-100-315A						94	28.3	12.1	15	Y160L-4
125-100-400						100	50	24.8	30	Y200L-4
125-100-400A						91	41	19	30	Y200L-4
150-125-250						200	20	14.1	18.5	Y180M-4
150-125-250A						182	16.5	10.9	15	Y160L-4
150-125-315						200	32	23.2	30	Y200L-4
150-125-315A						182	26.4	17.94	22	Y180L-4
150-125-400						20	50	38.9	55	Y250M-4
150-125-400A						182	741	29.9	37	Y225S-4
200-125-250						400	20	27.3	37	Y225S-4
200-125-250A						363	16.6	21.1	30	Y200L-4
200-150-315						400	32	44.4	55	Y250M-4
200-150-315A						363	26.4	33.9	45	Y225M-4
200-150-400						400	50	69.8	90	Y280M-4
200-150-400A						363	41	53.5	75	Y280S-4
250-200-315						624	22	55.8	75	Y280S-4
250-200-315A						600	20	47.8	55	Y250M-4
250-200-315B						550	16	34	37	Y225S-4

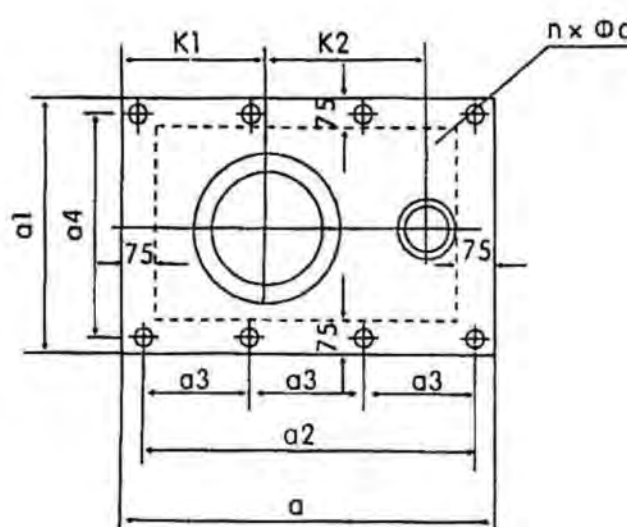


出口法兰尺寸

GB2555-81 PN16				
DN	D	D ₁	D ₂	n- ϕd
20	105	75	56	4-14
25	115	85	65	4-14
32	140	100	76	4-18
40	150	110	84	4-18
50	165	125	99	4-18
65	185	145	118	8-18
80	200	160	132	8-18
100	220	180	156	8-22
125	250	210	184	8-22
150	285	240	211	8-22
200	340	295	266	12-22

出口弯头连接

DN	20	25	32	40	50
in	G3/4"	G1"	G1 1/4"	G1 1/2"	G2"



型 号	a	a1	a2	a3	a4	n× ϕd	k1	k2	A	S	B
25-20-130	540	420	480		360	4×15	220	173	278	14	100
25-25-180	540	420	480		360	4×15	220	217	354	14	100
40-32-120	540	420	480		360	4×15	220	194	302	14	100
40-25-145	540	420	480		360	4×15	220	206	326	14	100
40-32-180	540	420	480		360	4×15	220	226	345	14	100
50-32-125	540	420	480		360	4×15	220	196	320	14	100
50-32-160	540	420	480		360	4×15	220	216	361	14	100
50-32-200	540	420	480		360	4×15	210	236	398	14	100
50-32-250	640	540	580		480	6×15	250	279	462	20	100
65-50-125	540	420	480	290	360	4×15	220	223	330	14	100
65-50-160	540	420	480		360	4×15	200	245	365	14	100
65-40-200	640	540	580	290	480	6×15	250	248	415	20	100
65-40-250	640	540	580	290	480	6×15	250	293	483	20	100
65-40-315	800	640	740	740	580	6×18	320	318	540	20	100
80-65-125	640	540	580	290	480	6×15	250	268	425	16	100
80-65-160	640	540	580	290	480	6×15	230	288	458	16	100
80-50-200	640	540	580	290	480	6×15	230	283	455	16	100
80-50-250	800	640	740	370	580	6×18	320	308	530	20	100
80-50-315	800	640	740	370	580	6×18	320	363	595	20	100
100-80-125	720	540	660	330	480	6×18	250	310	480	16	120
100-80-160	720	540	660	330	480	6×18	250	330	25	16	120
100-65-200	720	540	660	330	480	6×18	250	334	530	20	100
100-65-250	800	640	740	370	580	6×18	320	358	580	20	100
100-65-315	860	640	800	400	580	6×18	320	388	645	22	100
125-100-200	860	640	800	400	580	6×18	320	442	680	22	150
125-100-250	860	640	800	400	580	6×18	320	442	700	22	150
125-100-315	960	640	900	300	580	8×18	320	477	765	25	150
125-100-400	1050	760	990	330	700	8×18	350	518	840	25	150
150-125-250	1050	760	990	330	700	8×18	320	556	885	25	150
150-125-315	1200	760	990	330	700	8×18	350	556	905	30	150
150-125-400	1200	760	1400	380	700	8×18	350	600	950	30	150
200-150-250	1200	760	1400	380	700	8×18	350	613	960	25	175
200-150-315	1380	760	1320	380	700	8×18	400	638	1120	30	175
250-200-315	1380	760	1320	440	700	8×18	400	764	1165	30	175

■ 安装与使用

- 1、安装基础应用水平仪检查，以保证泵的垂直度。
- 2、泵吸入口最下端与槽底不得小于300mm。
- 3、盘动泵轴应用手感均匀，无阻滞现象。
- 4、泵的出口管路设计支承架，其重量不得加在泵上。
- 5、启动前应检查电机转向是否与转向标牌所示一致，切勿反转。
- 6、定期加轴承润滑油脂。
- 7、中间导轴承外润滑时不得脱液。

■ 订货须知

- 1、根据使用条件决定泵的规格，材料;提供所需流量扬程，使用温度，输送介质名称，以便正确选用制泵材料。
- 2、提供介质比重，选配恰当的电机功率，配用特殊电动机时，要指出防爆等级，功率等。
- 3、订货时应提出液下深度L，如配带吸入管应指出其长度。
- 4、本样本内所列性能参数，用户可在其范围内任选，当其不能满足您的要求时，请与我们联系，提供特殊规格产品。
- 5、指定叶轮型式。

■ Installation and usage

1. The installation foundation shall be checked by a level gauge to ensure the verticality of the pump.
2. The lowest end of the pump inlet and the bottom of the tank shall not less than 300mm.
3. Before operation, rotate the pump shaft, it shall be smoothly and no block.
4. The outlet pipeline from the pump shall be designed with support, and its weight shall not add to the pump.
5. Before starting, check whether the rotation of the motor is in accordance with the rotation sign, and do not reverse it.
6. Add bearing grease regularly.
7. The middle guide bearing shall not be dehydrated during external lubrication.

■ Instructions for ordering

1. Confirm the specifications and materials of the pump according to the conditions of usage; provide the required flow head, temperature, and the name of the conveying medium in order to choose correct pump materials.
2. Provide the specific gravity of the medium, select the appropriate motor power, and point out the explosion-proof grade and power when using a special motor.
3. The submerged depth L should be point forward when ordering, and its length should be indicated when equipped with suction pipe.
4. Users can choose any of the performance parameters listed in this data sheet. If they can not meet your requirements, please contact us directly to provide special specifications of products.
5. Specifies the impeller type.