



概述

WB 型不锈钢旋涡泵是单级单吸悬臂式离心泵，供吸输送粘度在 5°E 以下不含固体颗粒的腐蚀性液体，液体温度不得超过 105℃。广泛用于化工医药、科研等国民经济各部门抽送小流量，高扬程，不含固体颗粒的腐蚀性液体。

General

WB stainless eddy pump belonging to single entry cantilever centrifugal pump can convey corrosion liquid non-containing solid particle with viscosity below 5°E and temperature not more than 105℃ It is widely used in the fields of chemical industry, pharmacology and scientific research to convey corrosion liquid non-containing solid particle with low flow capacity and high head of delivery.

WB 型泵性能参数表 WB Type Pump Table of Performance

泵型号 Model	流量 Capacity Q m ³ /h	扬程 Head H m	转速 Speed n r/min	功率 Power N kw	效率 Efficiency η %	允许吸上 真空高度 Vacuum high HS m	叶轮直径 Impeller diameter D m
20WB - 20	0.36	28	2900	0.75	14	7	65
	0.72	20			22	6.5	
	0.9	15			21	6	
25WB - 25	0.792	40	2900	0.75	17	6.5	75
	1.44	25			26	6	
	1.8	18			25	5.5	
32WB - 30	1.73	52	2900	1.5	23	6.5	85
	2.88	30			32	6	
	3.6	20			31	5.5	
40WB - 40	3.6	60	2900	4	25	6	95
	5.4	40			34	5	
	6.28	26			34	4	
50WB - 50	6.12	66	2900	5.5	26	5	105
	9	45			36	4	
	10.8	28			35	3	
65WB - 50	10.1	84	2900	11	29	4.5	110
	14.4	50			39	3.5	
	16.9	30			37	2.5	
20WB - 65	0.36	80	2900	2.2	7	6.5	105
	0.75	65			15	6	
	0.9	50			15	5.5	
25WB - 70	0.762	110	2900	3	13	6	115
	1.44	70			22	5.5	
	1.8	52			22	5	
32WB - 75	1.73	115	2900	4	23	5.5	115
	2.88	75			30	5	
	3.6	53			30	4.5	
40WB - 90	3.6	132	2900	7.5	23	4.5	125
	5.4	90			33	3.5	
	6.48	63			33	2.5	



IN Series Carbamide Pump
IN型尿素泵

概述

IN型尿素泵是单级单吸悬臂式离心泵。适用于化肥厂输送熔尿素液用，也可用于输送不含悬浮颗粒物的其他腐蚀性液体。介质的温度允许-20~180℃，泵是水平轴向吸入，径向顶端吐出，泵前侧有保温夹套，可允0.59MPa,170℃的蒸汽保温。用户可根据被输送介质的腐蚀输送性能程度选用不同材料。

General

IN series carbamide pump is single – stage single – suction overhung centrifugal pump. It is used in transporting carbamide liquids and other corrosive liquids which have not suspend grains. Temperature of medium is from – 20℃ to 180℃. Pump is level axial suction, discharges radial from top, there is temperature – preserved nip cover on front which can allow steam preservation of 0.59 MPa, 170℃. Materials can be selected according to the corrosive of medium.

IN 型泵性能参数表 IN Type Pump Table of Performance

泵型号 Model	流量 CapacityQ		扬程 H (m) Head	转速 n (r/min) Speed	功率 Power N(KW)		效率 η (%) Efficiency	必需汽蚀 余量(m) (NPSH)r
	(m ³ /h)	(L/S)			轴功率 Shaft power	配带功率 Motor power		
IN50 – 32 – 250	7.5	2.08	82	2900	7.28	11	23	2.0
	12.5	3.47	80		8.25		33	
	15.0	4.17	78.5		8.79		36.5	
IN65 – 40 – 250	15	4.17	81.2	2900	6.76	15	34	2.0
	25	6.94	80		11.84		46	
	30	8.33	78.4		12.8		50	
IN80 – 50 – 250	30	8.33	84	2900	14.61	30	47	2.6
	50	13.9	80		18.80		58	
	60	16.7	75		20.78		59	
IN100 – 65 – 315	60	16.7	132	2900	44.9	75	48	2.8
	100	27.8	125		54.9		62	
	120	33.3	119		60.8		64	



工厂系列无泄漏化工流程泵
Model LHB non-leakage-type chemical process pump

概述

LHB 型系列无泄漏化工流程泵系我厂 98 年初，在引进国外离心泵最新技术的基础上，结合我厂多年生产经验，经过不断的完善改进而成。

机械密封采用负压装置，在压力不断增加而流量逐渐减少的情况下长期输送液体，机械密封不承受工作压力，确保机械密封永不泄漏，是建设文明工厂的理想设备。

LHB 系列耐腐蚀泵为单级单吸悬臂式离心泵。其标记，额定性能点和尺寸等均符合 GB5662-1985 标准，等效于 ISO2858-1975。它与国家推广的 IH 型同属一类型。

轴封：采用机械密封、动力密封及填料密封，用户可以根据任意选定。

Summary

Model LHB non-leakage-type chemical process pump series was developed by our factory in the early 1998 after continuous consumption and reformation on the basis of importation of newest foreign technologies of centrifugal pump and combination of the many years of production experience of our factory.

The mechanical sealing adopts negative pressure devices, which can be used for conveying of liquid for very long time under the continuously-increasing pressure and gradually-decreasing flow. THE MECHANICAL SEALING IS NOT SUBJECT TO WORKING PRESSURE, it is guaranteed that the mechanical sealing will never leak, so it is an ideal device for construction of civilized factory.

The Model LHB anti-corrosion pump series is a single-stage-single-suction cantilever-type centrifugal pump. Its mark, rated performance and size are conformed to the standards of GB5662-1985, which is corresponding to ISO2858-1975. It is the same type as IH type promoted by the state.

Shaft seal: it can use mechanical seal, dynamic seal and packing seal, at the option of users.

泵阀系列产品

PUMP AND VALVE SERIES PRODUCTS



LHB 型泵性能参数表 LHB Type Pump Table of Performance

型号 Model	转速 r/min Speed	流量 m ³ /h Capacity	扬程 m Head	额定流量 m ³ /h Speed	额定扬程 m Head	效率 % Efficiency	功率 kw Power	配套电机 Motor power	汽蚀余量 NPSH m
LHB50-32-160	1450	5~9	6.5~9.6	6.3	8	40	0.34		2.0
	2900	10~15	25.6~33	12.5	32	46	2.37		2.0
LHB50-32-250	1450	5~9	16~24	6.3	20	27	1.27		2.0
	2900	10~15	64~86	12.5	80	33	8.25		2.0
LHB65-50-160	1450	10~15	6.5~9.6	12.5	8	51	0.53		2.0
	2900	20~30	25.6~33	25	32	57	3.82		2.0
LHB65-50-160A	2900	18~27	20.8~31.2	22.5	26	55	2.9		2.0
LHB65-40-200	1450	10~15	10~15	12.5	12.5	46	0.93		2.0
	2900	20~30	40~60	25	50	52	6.5		2.0
LHB65-40-250	1450	10~15	16~21	12.5	20	39	1.75		2.0
	2900	20~30	64~85	25	80	46	11.84		2.0
LHB65-40-250A	2900	18~27	55~80	23.3	69	46	9.52		2.5
LHB65-40-315	1450	10~15	25.6~33	12.5	32	33	3.3		2.0
	2900	20~30	100~127	25	125	39	21.8		2.0
LHB80-65-160	1450	20~30	6.4~10	25	8	62	0.88		2.3
	2900	40~60	29~35	50	32	67	6.5		2.3
LHB80-65-160A	2900	37~56	24~33	46	28	62	5.64		2.3
LHB80-50-200	1450	20~35	10~14	25	12.5	57	1.49		2.0
	2900	40~60	46~54	50	50	63	10.8		2.5
LHB80-50-200A	2900	37~56	34.5~46	46.5	48	61	8.9	按实际比重选用	2.5
LHB80-50-250	1450	20~30	16~21	25	20	52	2.62		2.5
	2900	40~60	72~87	50	80	57	19.11		2.5
LHB80-50-315	1450	20~30	29~35	25	32	56	3.9		2.0
	2900	40~60	100~127	50	125	51	33.36		2.0
LHB100-80-160	1450	40~60	6.4~9	50	8	69	1.58		3.4
	2900	70~120	26~35	100	32	73	11.9		2.5
LHB100-80-160A	2900	65~110	25~32	93	28	69	10.3		2.5
LHB100-65-200	1450	40~60	10~15	50	12.5	68	2.5		3.9
	2900	80~120	45~53	100	50	72	18.9		3.9
LHB100-65-200A	2900	64~120	35~46	93	43	71	15.3	Select gravity of fact	3.9
LHB100-65-250	1450	40~60	16~22	50	20	63	4.3		3.6
	2900	70~130	70~84	100	80	65	33.5		3.6
LHB100-65-250A	2900	65~120	60~74	93	69	65	26.8		3.6
LHB100-65-250B	2900	70~105	49~72	87	60.5	65	22.1		3.6
LHB100-65-315	1450	35~65	30~33	50	32	60	7.26		2.0
LHB125-100-250	1450	80~120	16~32	100	20	72	7.56		2.3
	2900	160~240	70~15	200	80	75	58		4.5
LHB125-100-250A	2900	160~200	52~54	180	65	72	44.3		4.5
LHB125-100-315	1450	80~120	28~50	100	32	67	13		2.0
	2900	160~240	96~15	200	125	70	97.2		5.2
LHB125-100-315A	2900	160~200	81~53	180	101	69	71.9		5.0
LHB125-100-400	1450	70~140	42~46	100	50	62	22		2.3
LHB150-125-250	1450	150~300	13~84	200	20	76.8	14		2.8
LHB150-125-315	1450	160~250	28~72	200	32	77	22.63		2.8
LHB150-125-315A	1450	150~240	21~33	180	26	72	17.7		3.5
LHB200-150-250	1450	250~520	12~114	400	20	80	27.2		3.5
LHB200-150-315	1450	250~520	28~15	400	32	79	44.1		3.5
LHB200-150-400	1450	300~550	40~46	400	50	78	69.8		3.5
LHB200-150-400A	1450	300~500	38~24	360	43	73	57.7		3.5
LHB300-250-400V	1450	650~1000	24~85	800	32	79	88.2		3.5
LHB300-250-400IV	1450	500~700	28~80	600	38	70	88.6		3.5



WFB Series no-seal-self-control-self-suction Pump
WFB系列无密封自控自吸泵

概述

WFB 系列无密封自控自吸泵采用“连环式”多面离心密封装置,无“跑、冒、滴、漏”之忧。由于运行过程无密封装置磨擦,无磨损,因此,使用寿命较同类产品延长数倍。

该泵具有耐温、耐压、耐磨“一次引流,终身自吸”等多种功能,自吸性能可靠,特别是采用“电动空气控制阀”具有运行可靠,拆卸方便,易于安装等特点。

该泵分别采用不锈钢、增强聚丙烯、铸钢等多种材质制造,可分别适用于各种场合,同时根据用户需要,还设计了多种形式,长方型、圆锥型,可为您提供不同安装形式的选择余地。防爆型、户外型,可适用于易燃易爆、雨雾、潮湿场合。推车移动型列可将水泵方便地送到您所需要的任何工作岗位上。

General

Model WFB no – seal – self – control – self – suction pump adopts an “interlink – type” multiple – faced from the worry of “running, emitting, dropping, leaking”. Because there is no abrasion of sealing devices, its life is several times longer than that of similar products.

The pump is featured with resistance to heat, resistance to pressure, resistance to abrasion, “forever self – suction upon once flow induction”, etc. It has reliable self – suction performance. Especially because of using “electric air control valve”, it is featured with reliable operation, convenient disassembling, easy installation, etc.

The pump is made of many kinds of materials such stainless steel, enforced polypropylene, cast steel, respectively. It can be used in different fields. At the same time, our company can design many styles as per user’s need, indifferent square type and cone type, offering different forms of installation. An explosive proof and outdoor type is suitable for inflammable and explosive, rain and fog accessible, wet places. A handcart movable type can be moved to any place you require.

泵阀系列产品

PUMP AND VALVE SERIES PRODUCTS



WFB 型泵性能参数表 WFB Type Pump Table of Performance

规格型号specification model			转速n speed r/min	流量Q capacity m ³ /h	总扬程 H total lift m	配套 功率 match- ing power KW	允许吸深 ≤m permissible suction depth	吸液口径 mm diameter of inlet	出液口径 mm diameter of outlet	整机 重量kg weight of the whole machine
类别 代码 type code	材质代号 material	型号 model								
1-5	T.G.PP.BXG	16WFB-A	2900	0.75	8	0.75	2.5	16	10	75
				1.1	6.5					
				1.5	5.5					
1-5	T.G.PP.BXG	25WFB-A	2900	3.6	25	3	3.5	25	20	110
1-5	T.G.PP.BXG	32WFB-A	2900	4.5	13	1.5	3	32	25	99
				6.5	10.5					
				9	8					
1-5	T.G.PP.BXG	40WFB-A	2900	6.5	25	4	4	40	32	140
				8.5	23					
				10	21					
1-5	T.G.PP.BXG	40WFB-A ₁	2900	8	18	3	4	40	32	140
1-5	T.G.PP.BXG	40WFB-A ₂	2900	5	15	2.2	4	40	32	125
				8	13					
				10	11					
1-5	T.G.PP.BXG	40WFB-A ₃	2900	14	8	2.2	4	40	32	125
				7.5	28					
				12.5	26					
1-5	T.G.PP.BXG	50WFB-A	2900	15	24.5	5.5	5	50	40	205
				10.5	20.5					
				5	11					
1-5	T.G.PP.BXG	50WFB-A ₁	2900	6.3	10	1.5	4	50	40	149
1-5	T.G.PP.BXG	50WFB-AD	1450	7.5	9	1.5	4	50	40	149
				10	6					
				10	40					
1-4	T.T.G.BXG	50WFB-B	2900	11	38	11	5	50	40	215
				15	35					
				7	33					
1-4	T.G.PP.BXG	50WFB-B ₁	2900	12	31	7.5	5	50	40	205
				15	29					
				5	15					
1-5	T.G.PP.BXG	50WFB-B ₂	2900	10	26.5	4	5	50	40	185
1-5	T.G.PP.BXG	50WFB-B ₃	2900	5	15	2.2	4	50	40	150
				6.4	14					
				7.5	12.5					
1-4	T.G.BXG	50WFB-C	2900	8.5	58	15	5	50	40	240
				12	56					
				15	54					
1-4	T.G.BXG	50WFB-C ₁	2900	10	46	11	5	50	40	215
				12	40					
				5	19					
1-5	T.G.PP.BXG	50WFB-CD	1450	6	18	3	4	50	40	170
				8	17					
				7.5	82					
1-4	T.G.BXG	50WFB-E	2900	12	80	22	5	50	40	260
				15	75					
				10	68					
1-4	T.G.BXG	50WFB-E ₁	2900	12	62	18.5	5	50	40	250
				15	55					
				3.5	26					
1-5	T.G.PP.BXG	50WFB-E ₂	2900	6.3	25	4	4	50	40	170
				7.5	24					
				15	27					
1-5	T.G.PP.BXG	65WFB-A	2900	20	26	7.5	4	65	50	260
				25	24					
				21	20					
1-5	T.G.PP.BXG	65WFB-A ₁	2900	7	12	3	4	65	50	200
				12	11					
				15	9					
1-4	T.G.BXG	65WFB-B	2900	15	41	11	5	65	50	270
				25	38					
				30	34					
1-5	T.G.PP.BXG	65WFB-B ₁	2900	20	26	7.5	5	65	50	250
1-5	T.G.PP.BXG	65WFB-BD	1450	10	16	4	5	65	50	230
				12	14					
				15	13					

规格型号specification model			转速n speed r/min	流量Q capacity m ³ /h	总扬程 H total lift m	配套 功率 match- ing power KW	允许吸深 ≤m permissible suction depth	吸液口径 mm diameter of inlet	出液口径 mm diameter of outlet	整机 重量kg weight of the whole machine
类别 代码 type code	材质代号 material	型号 model								
1-4	T.G.BXG	65WFB-C	2900	15	58	18.5	5	65	50	280
				25	56					
				30	52					
1-4	T.G.BXG	65WFB-C ₁	2900	22	45	15	5	65	50	265
1-5	T.G.PP.BXG	65WFB-C ₂	2900	7.5	19	4	5	65	50	240
				12.5	18					
				15	17					
1-4	T.G.BXG	65WFB-E	2900	15	82	30	5	65	50	450
				25	80					
				30	78					
1-4	T.G.BXG	65WFB-E ₁	2900	21	64	18.5	5	65	50	340
				20	56					
				7.5	27.5					
1-5	T.G.PP.BXG	65WFB-E ₂	2900	12.5	26	7.5	5	65	50	280
				15	24.5					
				15	105					
1-4	T.G.BXG	65WFB-F	2900	25	95	45	5	65	50	485
				30	85					
				18	108					
1-4	T.G.BXG	65WFB-F ₁	2900	21.5	95	45	5	65	50	485
				23.5	85					
				7.5	38					
1-4	T.G.BXG	65WFB-F ₂	2900	12.5	37	7.5	5	65	50	270
				15	36					
				7	34					
1-4	T.G.BXG	65WFB-F ₃	2900	8	30	5.5	5	65	50	260
				12	26					
				30	28					
2-4	T.G.PP.BXG	80WFB-A	2900	50	26	11	6	80	65	380
				60	24					
				70	20					
2-4	T.G.PP.BXG	80WFB-AD	1450	15	11.5	4	4	80	65	305
				20	11					
				25	10					
2-4	T.G.BXG	80WFB-B	2900	40	35	15	5	80	65	395
				50	32					
				60	30					
2-4	T.G.PP.BXG	80WFB-BD	1450	15	15	5.5	5	80	65	340
				25	14					
				30	13					
2-4	T.G.BXG	80WFB-C	2900	30	59	22	5	80	65	460
				50	55					
				60	52					
2-4	T.G.BXG	80WFB-C ₁	2900	45	38	15	5	80	65	400
				40	46					
				15	19					
2-4	T.G.PP.BXG	80WFB-C ₂	2900	25	18	7.5	5	80	65	320
				30	17					
				21	14					
2-4	T.G.PP.BXG	80WFB-CD	1450	25	12	5.5	5	80	65	340
				30	84					
				50	80					
2-4	T.G.BXG	80WFB-E	2900	60	76	37	5	80	65	480
				30	60					
				40	50					
2-4	T.G.PP.BXG	80WFB-E ₁	2900	15	27	11	5	80	65	380
				25	26					
				30	24					
2-4	T.G.PP.BXG	80WFB-E ₂	2900	15	22	5.5	5	80	65	300
				20	18					
				30	128					
2-4	T.G.BXG	80WFB-F	2900	50	120	55	5	80	65	580
				60	110					

WFB 型泵续表 1 WFB Type Pump Table 1 (continued)

规格型号 specification model			转速 n speed r/min	流量 Q capacity m ³ /h	总扬程 H total lift m	配套 功率 match- ing power KW	允许吸深 ≤ m permissible suction depth	吸液口径 mm diameter of inlet	出液口径 mm diameter of outlet	整机 重量 kg weight of the whole machine
类别 代码 type code	材质代号 material	型号 model								
2-4	T.G.BXG	80WFB-F ₁	2900	26	103	45	5	80	65	530
				30	95					
				40	80					
2-4	T.G.BXG	80WFB-F ₂	2900	15	36	11	5	80	65	380
				25	32					
				30	30					
2-4	T.G.BXG	80WFB-F ₃	2900	21	34	11	5	80	65	380
				23	30					
				26	26					
2-4	T.G.PP.BXG	100WFB-A	2900	60	30	18.5	5	100	80	560
				100	26					
				110	22					
				120	20					
2-4	T.G.PP.BXG	100WFB-AD	1450	30	12	7.5	5	100	80	450
				40	11					
				50	10					
				60	9					
2-4	T.G.BXG	100WFB-B	2900	60	40	22	5	100	80	580
				80	36					
				100	32					
				120	28					
2-4	T.G.PP.BXG	100WFB-BD	1450	30	15	11	5	100	80	520
				40	14					
				50	13					
				68	11					
2-4	T.G.BXG	100WFB-C	2900	45	55	37	5	100	80	630
				80	48					
				100	45					
2-4	T.G.BXG	100WFB-C ₁	2900	75	40	30	5	100	80	605
				85	35					
				40	20					
2-4	T.G.BXG	100WFB-C ₂	2900	50	19	11	5	100	80	520
				40	20					
				60	18					
2-4	T.G.PP.BXG	100WFB-C ₃	2900	40	16	7.5	5	100	80	500
				45	15					
				60	8					
2-4	T.G.BXG	100WFB-E	2900	80	80	55	5	100	80	720
				100	75					
				40	60					
2-4	T.G.BXG	100WFB-E ₁	2900	100	51	45	5	100	80	680
				30	26					
				50	25					
2-4	T.G.PP.BXG	100WFB-E ₂	2900	55	24	11	5	100	80	530
				58	22					
				62	18					
2-4	T.G.BXG	100WFB-F	2900	60	133	90	5	100	80	965
				80	125					
				100	120					
2-4	T.G.BXG	100WFB-F ₁	2900	80	108	75	5	100	80	820
				90	90					
				100	80					
2-4	T.G.BXG	100WFB-F ₂	2900	30	40	15	5	100	80	550
				50	38					
				60	36					
2-4	T.G.PP.BXG	100WFB-F ₃	2900	40	33	11	5	100	80	530
				43	29					
				46	26					
2-4	T.G.BXG	125WFB-A	2900	150	50	55	5	125	100	900
				180	45					
				170	40					
2-4	T.G.BXG	125WFB-A ₁	2900	185	30	45	5	125	100	860
				170	30					

规格型号 specification model			转速 n speed r/min	流量 Q capacity m ³ /h	总扬程 H total lift m	配套 功率 match- ing power KW	允许吸深 ≤ m permissible suction depth	吸液口径 mm diameter of inlet	出液口径 mm diameter of outlet	整机 重量 kg weight of the whole machine
类别 代码 type code	材质代号 material	型号 model								
2-4	T.G.PP.BXG	125WFB-A ₂	2900	70	20	15	5	125	100	720
				80	19					
				100	17					
2-4	T.G.PP.BXG	125WFB-AD	1450	105	16	15	5	125	100	740
				110	15					
				120	86					
2-4	T.G.BXG	125WFB-B	2900	180	80	110	5	125	100	1150
				220	72					
				150	65					
2-4	T.G.BXG	125WFB-B ₁	2900	170	60	75	5	125	100	1005
				80	26					
				100	25					
2-4	T.G.PP.BXG	125WFB-B ₂	2900	100	25	22	5	125	100	760
				120	24					
				85	22					
2-4	T.G.PP.BXG	125WFB-B ₃	2900	90	20	18.5	5	125	100	730
				160	132					
				180	125					
2-4	T.G.BXG	125WFB-C	2900	200	120	160	5	125	100	1580
				180	108					
				190	93					
2-4	T.G.BXG	125WFB-C ₁	2900	206	80	110	5	125	100	1270
				80	40					
				100	38					
2-4	T.G.BXG	125WFB-C ₂	2900	120	36.5	30	5	125	100	790
				92	23					
				85	26					
2-4	T.G.PP.BXG	125WFB-C ₃	2900	80	29	18.5	5	125	100	750
				70	52					
				90	50					
2-4	T.G.BXG	125WFB-E	1450	110	48	37	5	125	100	820
				90	45					
				95	40					
2-4	T.G.BXG	125WFB-E ₁	2900	85	36	22	5	125	100	770
				120	28					
				185	26					
2-4	T.G.BXG	150WFB-A	2900	200	23.5	30	5	150	125	990
				240	22.5					
				160	20					
2-4	T.G.BXG	150WFB-AD	1450	156	40	22	5	150	125	960
				180	36					
				225	30					
2-4	T.G.BXG	150WFB-B	1450	220	29	45	5	150	125	1080
				260	25					
				160	34					
2-4	T.G.BXG	150WFB-B ₁	1450	180	29	37	5	150	125	1020
				195	26					
				120	55					
2-4	T.G.BXG	150WFB-BD ₁	1450	200	50	75	5	150	125	1205
				240	45					
				180	45					
2-4	T.G.BXG	150WFB-C	1450	190	38	55	5	150	125	1100
				165	36					
				250	26.5					
2-4	T.G.BXG	200WFB-AD	1450	330	25	55	5	200	150	1415
				360	23.5					
				300	22					
2-4	T.G.BXG	200WFB-AD ₁	1450	330	19	45	5	200	150	1375
				370	19					
				240	42					
2-4	T.G.BXG	200WFB-BD	1450	300	37	75	5	200	150	1520
				350	33.5					
				250	28.5					
2-4	T.G.BXG	200WFB-BD ₁	1450	310	25	55	5	200	150	1415
				380	18					
				450	13					
2-4	T.G.BXG	200WFB-BD ₂	1450	520	10	45	5	200	150	1375
				450	10					

泵阀系列产品

PUMP AND VALVE SERIES PRODUCTS



WFB 型泵续表 2 WFB Type Pump Table 2 (continued)

类别 代码 type code	规格型号specification model		转速n speed r/min	流量Q capacity m ³ /h	总扬程 H total lift m	配套 功率 match- ing power KW	允许吸深 ≤m permissible suction depth	吸液口径 mm diameter of inlet	出液口径 mm diameter of outlet	整机 重量kg weight of the whole machine
	材质代号 material	型 号 model								
2-4	T.G.BXG	200WFB-CD	1450	350	55	110	5	200	150	1790
				380	50					
				420	45					
2-4	T.G.BXG	200WFB-CD ₁	1450	360	45	90	5	200	150	1660
				300	40					
2-4	T.G.BXG	200WFB-CD ₂	1450	330	36	75	5	200	150	1520
				290	26.5					
2-4	T.G.BXG	250WFB-AD	1450	330	25	55	5	250	200	1556
				360	23.5					
				400	13					
2-4	T.G.BXG	250WFB-AD ₁	1450	430	8	45	5	250	200	1450
				340	35					
2-4	T.G.BXG	250WFB-AD ₂	1450	360	33	75	5	250	200	1660
				400	31					
				500	28.5					
2-4	T.G.BXG	250WFB-AD ₃	1450	600	22.5	75	5	250	200	1660
				720	18					
				350	45					
2-4	T.G.BXG	250WFB-BD	1450	380	40	90	5	250	200	1800
				400	37					
				300	50					
2-4	T.G.BXG	250WFB-BD ₁	1450	350	47	90	5	250	200	1800
				380	45					
				200	57.5					
2-4	T.G.BXG	250WFB-BD ₂	1450	260	55	90	5	250	200	1800
				290	52.5					
				400	30					
2-4	T.G.BXG	250WFB-BD ₃	1450	628	24.5	90	5	250	200	1800
				700	20					
				500	26.5					
2-4	T.G.BXG	300WFB-AD	1450	550	25	90	5	300	250	1880
				600	23.5					
				370	42					
2-4	T.G.BXG	300WFB-AD ₁	1450	390	35	90	5	300	250	1988
				400	33					
				430	31					
				600	30					
2-4	T.G.BXG	300WFB-AD ₂	1450	650	25	132	5	300	250	2058
				1000	18					
				350	50					
2-4	T.G.BXG	300WFB-AD ₃	1450	400	47.5	110	5	300	250	2280
				450	45					
				300	57.5					
2-4	T.G.BXG	300WFB-BD	1450	320	55	110	5	300	250	2280
				345	52.5					
				378	55					
2-4	T.G.BXG	300WFB-BD ₁	1450	780	47.5	200	5	300	250	2480
				900	30					
				740	40					
2-4	T.G.BXG	300WFB-BD ₂	1450	590	50	160	5	300	250	2388
				600	57					
				750	45					
2-4	T.G.BXG	300WFB-BD ₃	1450	850	40	185	5	300	250	2400
				978	35					
				700	57.5					
2-4	T.G.BXG	300WFB-CD	1450	780	52	220	5	300	250	2508
				890	45					
				550	26.5					
2-4	T.G.BXG	350WFB-AD	1450	600	25	90	5	350	300	2500
				790	23.5					
				580	35					
2-4	T.G.BXG	350WFB-AD ₁	1450	690	33	145	5	350	300	2780
				820	31					

类别 代码 type code	规格型号specification model		转速n speed r/min	流量Q capacity m ³ /h	总扬程 H total lift m	配套 功率 match- ing power KW	允许吸深 ≤m permissible suction depth	吸液口径 mm diameter of inlet	出液口径 mm diameter of outlet	整机 重量kg weight of the whole machine
	材质代号 material	型 号 model								
2-4	T.G.BXG	350WFB-AD ₂	1450	450	42.5	110	5	350	300	2630
				500	40					
				550	37.5					
2-4	T.G.BXG	350WFB-AD ₃	1450	500	50	145	5	350	300	2785
				535	47.5					
				590	45					
2-4	T.G.BXG	350WFB-BD	1450	306	57.5	110	5	350	300	2630
				356	55					
				400	52					
2-4	T.G.BXG	350WFB-BD ₁	1450	840	55	250	5	350	300	2785
				950	48					
				1200	40					
2-4	T.G.BXG	350WFB-BD ₂	1450	866	57.5	280	5	350	300	3088
				980	52.5					
				1186	45					
				860	42					
2-4	T.G.BXG	350WFB-BD ₃	1450	1050	35	200	5	350	300	2508
				1180	32					
				1200	35					
2-4	T.G.BXG	350WFB-CD	1450	1320	32	220	5	350	300	2688
				1156	40					
2-4	T.G.BXG	350WFB-CD ₁	1450	1280	35	250	5	350	300	2886
				1128	45					
2-4	T.G.BXG	350WFB-CD ₂	1450	1050	50	280	5	350	300	3080
				1000	57.5					
				1200	50					
2-4	T.G.BXG	350WFB-CD ₃	1450	900	30	315	5	350	300	3285
				1096	25					
				1140	30					
2-4	T.G.BXG	400WFB-ED ₁	1450	1370	25	200	5	350	300	2600
				1850	15					
				1520	18					
2-4	T.G.BXG	400WFB-AD	1450	1450	20	160	5	400	350	2860
				1680	10					
2-4	T.G.BXG	400WFB-AD ₁	1450	1600	75	75	5	400	350	1800
				2050	55					
2-4	T.G.BXG	400WFB-AD ₂	1450	2050	55	55	5	400	350	1750
				1700	20					
2-4	T.G.BXG	400WFB-BD	1450	2085	15	185	5	400	350	2500
				1600	22.5					
2-4	T.G.BXG	400WFB-BD ₁	1450	2000	18	200	5	400	350	2650
				2226	20					
2-4	T.G.BXG	400WFB-BD ₂	1450	1880	25	250	5	400	350	2880
				1700	30					
2-4	T.G.BXG	400WFB-BD ₃	1450	2506	20	280	5	400	350	2980
				2308	8					
2-4	T.G.BXG	400WFB-CD	1450	1880	12	132	5	400	350	2750
				2280	12					
2-4	T.G.BXG	400WFB-CD ₂	1450	1905	18	200	5	400	350	2850
				1650	35					
2-4	T.G.BXG	450WFB-AD	1450	2880	20	315	5	450	400	3250
				2890	5					
2-4	T.G.BXG	450WFB-AD ₁	1450	2825	8	132	5	450	400	2880
				2825	12					
2-4	T.G.BXG	450WFB-BD	1450	3400	8	160	5	600	500	3080
				4280	8					
2-4	T.G.BXG	600WFB-AD	1450	4020	5	110	5	600	500	2850
				4520	5					
2-4	T.G.BXG	800WFB-AD	1450	5480	5	160	5	800	600	3385
				6850	5					



概述

AFSM 型耐腐蚀泵是我公司采用专有技术 ZSM 系列耐磨耐蚀材料生产的一种新型化工离心泵,其性能范围包括了 IH 系列和 F 系列化工泵所有性能,可广泛适用于工矿、冶金化工等耐磨耐蚀场合。

可输送常温、高温或具有强腐蚀性并含有固体颗粒的液体,适用于:

- 1、湿法炼锌、炼镍等冶金化工。液体输送及板框压滤机专用。
- 2、石油化学工业
- 3、炼油厂
- 4、造纸厂和纸浆厂
- 5、制糖业、制药
- 6、合成纤维
- 7、油脂化工

General

AFSM corrosive resistance pump is adopting special ZSM serial corrosive resistance material, this novel centrifugal pump can be widely used in the fields of industrial mines, metallurgy and chemical industry, whose properties covers all that of IH and F serials chemical pumps.

It can deliver strong corrosive liquid with solid particles contained, at normal or high temperature, which is applicable in the fields as follows.

1. Metallurgy and chemical industry, such as zinc and nickel wet melting. Exclusive use for special liquid delivery and plate frame filter – press.
2. Petrochemical industry
3. Oil refinery factory
4. Paper making and paper pulp factory
5. Sugar and pharmacy making
6. Synthetic fiber
7. Grease industry

AFSM 型泵性能参数表 AFSM Type Pump Table of Performance

规格 Specification	流量 Flow Capacity		扬程 Delivery lift	效率 Efficiency	吸程 Suction lift	轴功率 Axle power	配用电机及功率 Matching electric machinery and power		
	M ³ /h	L/s					m	%	m
			γ = 1	γ = 1.4	γ = 1.8				
50AFSM - 25	14.4	4	25	58	6	1.85	3 - 2P	4 - 2P	5.5 - 2P
50AFSM - 40			40	46	6	3.41	5.5 - 2P	7.5 - 2P	7.5 - 2P
65AFSM - 40	28.8	8	40	62	6	5.63	7.5 - 2P	11 - 2P	15 - 2P
65AFSM - 64			64	54	5	9.47	15 - 2P	18.5 - 2P	22 - 2P
80AFSM - 24	54	15	24	68	5.5	5.9	7.5 - 2P	11 - 2P	15 - 2P
80AFSM - 38			38	68	6	8.34	11 - 2P	15 - 2P	18.5 - 2P
80AFSM - 60			60	63	5.5	14.01	18.5 - 2P	22 - 2P	30 - 2P
100AFSM - 37	100.8	28	37	78	4	13.54	18.5 - 2P	22 - 2P	30 - 2P
100AFSM - 57			57	72	4	22.68	30 - 2P	37 - 2P	45 - 2P
125AFSM - 20	100	27.7	20	72	3	7.56	11 - 4P	15 - 4P	18.5 - 4P
125AFSM - 32			32	68	2.8	12.82	18.5 - 4P	22 - 4P	30 - 4P
125AFSM - 50			50	60	2.8	22.69	30 - 4P	37 - 4P	45 - 4P
150AFSM - 20	200	55.55	20	77	2.8	14.1	18.5 - 4P	22 - 4P	30 - 4P
150AFSM - 32			32	75	2.8	23.2	30 - 4P	37 - 4P	45 - 4P
150AFSM - 50			50	70	3.5	38.9	55 - 4P	75 - 4P	90 - 4P
200AFSM - 20	400	111.1	20	81	3.5	26.9	37 - 4P	45 - 4P	55 - 4P
200AFSM - 32			32	79	3.5	44.1	55 - 4P	75 - 4P	90 - 4P
200AFSM - 50			50	78	3.5	69.8	90 - 4P	110 - 4P	132 - 4P

注：表中配套电机为 Y 型普通型，用户可根据需要选用变频调速，防爆等电机，应根据工况及使用
方法对配套功率作适当调整。

Note:

The matching electric machinery in table is common 'Y' type, besides, according to the requirements, users can purchase frequency and speed conversion or flame - proof electric machinery, whose power should be adjusted in accordance with the working condition and operation methods.

AY型单、双级离心油泵 Model AY Single and Double Stage Centrifugal Oil Pump



概述

AY 型油泵系列，是在老 Y 型油泵系列的基础上进行改造并重新设计的。它是为满足现代化建设的需要，尽快地适应以节能为中心的设备更新换代而发展的新产品，具有下列特点。

- 1、轴承体部件将原 35, 50, 60 轴承体分别为 45, 55, 70 轴承体，提高了可靠性。
- 2、水力过流部件采用了高效节能泵的水力模型，平均比老 Y 型油泵的效率提高 5~8%。
- 3、为保持继承性，AY 型油泵的结构型式、安装尺寸、性能参数范围保持与 Y 型油泵相同，便于老装置更新改造。
- 4、零部件通用化程度高，通标件为几个系列产品共用。
- 5、选材精炼，主体以 II、III 类材料为主，轴承体等零件增加为铸钢、铸铁两种，为寒冷地区、露天使用，船用提供了有利条件。
- 6、轴承有空气冷、风扇冷、水冷三种，根据泵的不同使用温度选用。其中风扇冷尤为适用于缺水或水质差的地区。

General

AY series oil pump is rebuilt and redesigned on original Y oil pump. It is a new product satisfied the requirements of modernization construction, suits for power saving. It has following characteristics:

1. Bearing bodies use 45, 55, 70 separately replace 35, 50, 60 increase reliable.
2. Water passed parts adopt high - efficiency can be averagely increased 5 ~ 8% than original Y oil pump.
3. In order to succeed and old equipment replacement, the structure, installing dimension and performance parameter of AY series oil pump is the same of original Y oil pump.
4. Spare parts are high universal, standard spare parts can be used b several series products.
5. Select materials proficiency, main bodies use II and III kind materials, spare parts such as bearing add casting steel and casting iron, which provides favorableness conditions for cold areas, the open air and ship service.
6. Bearing has three cooling methods such as air cooling, fan cooling and water cooling which is selected according to the temperature. Fan cooling is especially used in water - shorten and water poor quality areas.

AY 型泵性能参数表 AY Type Pump Table of Performance

性能参数 property parameters 型号码 Type	流量 Capacity Q m ³ /h	扬程 Head H m	转速 Speed n r/min	效率 Efficiency η %	汽蚀 余量 NPSH m	轴功率 Shaft power Pa kw	配带电机 Motor		泵重 Weight kg	附注 Remarks
							型号 Type	功率 Power kw		
40AY 40×2	6.25	80	2950	31	2.7	4.4	YB 132S ₂ -2	7.5	163	
40AY 40×2A	5.85	70	2950	31	2.7	3.6	YB 132S ₁ -2	5.5		
40AY 40×2B	5.4	60	2950	31	2.5	2.85	YB 112M-2	4		
40AY 40×2C	4.9	50	2950	31	2.5	2.17	YB 100L-2	3		
50AY 60	12.5	70	2950	42	2.9	5.67	YB 132S ₂ -2	7.5	130	
50AY 60A	11.2	53	2950	39	2.9	4.1	YB 132S ₁ -2	5.5		
50AY 60B	9.9	39	2950	37	2.8	2.8	YB 112M-2	4		
50AY 60×2	12.5	120	2950	37	2	11	YB 160M ₂ -2	15	210	
50AY 60×2A	12	105	2950	36	2	9.5	YB 160M ₂ -2	15		
50AY 60×2B	11	90	2950	35	1.9	7.7	YB 160M ₁ -2	15		
50AY 60×2C	10	76	2950	35	1.7	6	YB 160M ₁ -2	11	170	
65AY 60	25	60	2950	56	3.1	7.3	YB 160M ₁ -2	11		
65AY 60A	22.5	49	2950	54	2.8	5.6	YB 132S ₂ -2	7.5		
65AY 60B	20	37.5	2950	52	2.5	3.9	YB 132S ₁ -2	5.5		
65AY 100	25	110	2950	47	3	15.9	YB 180M-2	22	190	
65AY 100A	23	92	2950	46	2.9	12.5	YB 160L-2	18.5		
65AY 100B	21	73	2950	44	3	9.5	YB 160M ₂ -2	15		
65AY 100×2	25	205	2950	48	2.8	29.1	YB 225M-2	45	310	
65AY 100×2A	23	178	2950	47	2.7	23.7	YB 200L ₂ -2	37		
65AY 100×2B	22	154	2950	46	2.7	20.1	YB 200L ₁ -2	30		
65AY 100×2C	20	130	2950	45	2.6	15.7	YB 180M-2	22		
80AY 60	50	60	2950	62	3.2	13.2	YB 160L-2	18.5	200	
80AY 60A	45	49	2950	61	3	9.9	YB 160M ₂ -2	15		
80AY 60B	40	38	2950	60	3	6.9	YB 160M ₁ -2	11		
80AY 100	50	104	2950	59	3.1	24	YB 200L ₂ -2	37	220	
80AY 100A	45	85	2950	56	3	18.6	YB 200L ₁ -2	30		
80AY 100B	40	76	2950	54	2.9	15.3	YB 180M-2	22		
80AY 100×2	50	200	2950	57	3.6	47.8	YB 280S-2	75	380	
80AY 100×2A	47	175	2950	55	3.5	40.7	YB 250M-2	55		
80AY 100×2B	43	153	2950	53	3.3	33.8	YB 225M-2	45		
80AY 100×2C	40	125	2950	51	3.3	26.7	YB 200L ₂ -2	37		
100AY 60	100	63	2950	72	4	23.8	YB 200L ₂ -2	37	220	
100AY 60A	90	49	2950	71	3.8	16.9	YB 200L ₁ -2	30		
100AY 60B	79	38	2950	67	3.5	12.2	YB 160L-2	18.5		
100AY 120	100	123	2950	66	4.3	50.6	YB 280S-2	75	320	
100AY 120A	93	108	2950	62	4	44.1	YB 280S-2	75		
100AY 120B	85	94	2950	62	3.8	35.5	YB 250M-2	55		
100AY 120C	79	75	2950	59	3.6	27.5	YB 200L ₂ -2	37		

AY 型泵续表 1 AY Type Pump Table 1 (continued)

性能参数 property parameters 型号码 Type	流量 Capacity Q m ³ /h	扬程 Head H m	转速 Speed n r/min	效率 Efficien- cy η %	汽蚀 余量 NPSH m	轴功率 Shaft power Pa kw	配带电机 Motor		泵重 Weight kg	附注 Remarks
							型 号 Type	功率 Power kw		
100AY 120×2	100	240	2950	61	4.5	107.2	YB 315M ₂ -2	160	500	
100AY 120×2A	93	205	2950	60	4.3	86.6	YB 315M ₁ -2	132	500	
100AY 120×2B	86	178	2950	59	4.2	70.7	YB 315S-2	110	500	
100AY 120×2C	79	150	2950	58	4.1	55.7	YB 280S-2	75	500	
150AY 75	180	80	2950	75	3.9	52.3	YB 280S-2	75	290	
150AY 75A	160	66	2950	74	3.8	38.9	YB 250M-2	55	290	
150AY 75B	145	46	2950	73	3.6	24.9	YB 200L ₂ -2	37	290	
150AY 150	180	157	2950	69	3.6	111.6	YB 315M ₂ -2	160	600	
150AY 150A	168	137	2950	68	3.3	92.2	YB 315M ₁ -2	132	600	
150AY 150B	155	116	2950	67	3.2	73.1	YB 215S-2	110	600	
150AY 150C	140	94	2950	65	3.1	55.5	YB 280S-2	75	550	
150AY 150×2	180	300	2950	67	3.6	219.5	YB 355L-2	315	1500	高压电机也可
150AY 150×2A	167	258	2950	65	3.2	180.5	YB 355S ₄ -2	250	1500	
150AY 150×2B	155	222	2950	62	3	151.1	YB 355S ₃ -2	220	1500	
150AY 150×2C	140	181	2950	60	2.9	115	YB 315M ₂ -2	160	1500	
200AY 75	300	75	2950	79	5.5	77.6	YB 315S-2	110	275	
200AY 75A	260	60	2950	78	5.5	54.5	YB 280S-2	75	275	
200AY 75B	225	45	2950	77	5.5	35.8	YB 250M-2	55	275	
200AY 150	300	150	2950	76	4.5	161	YB 355S ₃ -2	220	620	高压电机也可
200AY 150A	270	137	2950	75	4.2	132	YB 355S ₁ -2	185	620	
200AY 150B	243	127	2950	73	3.8	115.1	YB 315M ₂ -2	160	620	
200AY 150C	219	112	2950	72	3.5	92.8	YB315M ₁ -2	132	620	
200AY 150×2	300	300	2950	74	5.5	331.2	YB 450M ₁ -2	450	1400	6000V
200AY 150×2A	287	270	2950	73	5.4	289	YB 450S ₃ -2	400	1400	6000V
200AY 150×2B	270	239	2950	72	5.2	244	YB 450S ₂ -2	355	1400	6000V
200AY 150×2C	247	195	2950	70	5.0	187.4	YB 355S ₄ -2	250	1400	高压电机也可
250AY S 80	500	80	2950	82	6.5	132.8	YB 355S ₁ -2	185	450	
250AY S 80A	440	62	2950	81	6.5	91.7	YB 315M ₁ -2	132	450	
250AY S 80B	370	44	2950	80	6.5	55.4	YB 280M-2	90	450	
250AY S 150	500	153	2950	79	4.8	264	YB 450S ₁ -2	315	1500	6000V
250AY S 150A	472	136	2950	78	4.6	224	YB 355M-2	280	1500	高压电机也可
250AY S 150B	444	119	2950	77	4.2	187	YB 355S ₄ -2	250	1500	高压电机也可
250AY S 150C	400	96	2950	76	4	138	YB 355S ₁ -2	185	1500	高压电机也可
250AY S 150×2	500	303	2950	79	4.8	522	JBO 710M ₂ -2	630	2500	6000V
250AY S 150×2A	472	272	2950	79	4.5	443	JBO 710S ₂ -2	560	2500	6000V
250AY S 150×2B	444	230	2950	78	4.3	357	YB 450S ₃ -2	400	2500	6000V
250AY S 150×2C	400	190	2950	77	4	269	YB 450S ₁ -2	315	2500	6000V

泵阀系列产品

PUMP AND VALVE SERIES PRODUCTS



TL Desulphurization Pump

TL型脱硫泵



概述

TL型脱硫泵是在ZM系列渣浆泵成功设计制造的经验基础上,针对我国烟气脱硫用泵的特点,吸收国内外同类产品的先进技术、精心研制的新一代高效系列脱硫泵。泵的最大流量范围可达12000m³/h,泵的扬程一般在100m以下,涵盖了所有脱硫系统用泵工况,可用作吸收塔大型浆液循环泵及石灰石浆液输送泵,石膏浆液排出泵、回收泵、地坑泵等。

结构形式

TL型采用卧式、单泵壳、单级单吸、托架式(或悬架式)结构。

采用挠性联轴器。

适用工况

浆液PH值:	2.5~13
氯离子浓度:	≤6000ppm
重量浓度:	≤60%
介质温度:	≤120℃

性能与材料特点

水力设计采用计算机CAD辅助设计及二相流理论设计。

泵效率高、使用寿命长、运行可靠。

过流部件采用全金属耐磨蚀铬镍合金材料,耐磨损与耐腐蚀兼顾,表面晶间间隙小,具有优良的耐氯化物应力腐蚀裂纹能力及更高的机械强度。

运行可靠性高,全金属泵克服了非金属泵内衬容易出现脱落、撕裂、变形等缺点。

水力摩擦损失小,比同参数的非金属泵效率高3%以上。

全金属泵同何尺寸易控制保证,零件表面光洁度高,部件配合间隙小,容积效率高,综合效率比非金属泵高5%以上。

过流部件使用寿命长,金属护板承受剪切滑动磨损能力比一般非金属材料强,能经受长期的剪切磨损。

动态抗磨性为0.008~0.08mm/年,抗拉强度高,在长期磨蚀工况下能保持恒定的性能。

轴封型式

轴封全部采用机械密封,我公司配带机械密封分为有轴封水型和无轴封水型两种方式。

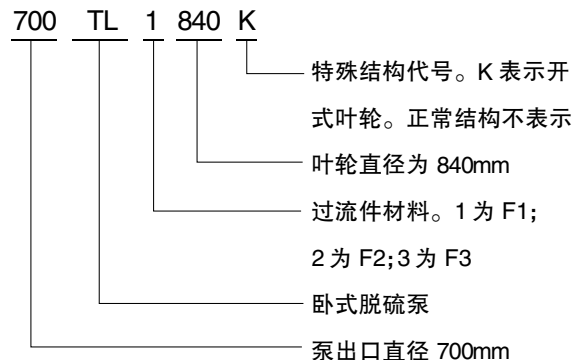
有轴封水型

双端面机械密封,轴封水流量为泵流量的0.1~1%,但最小不低于1m³/h;轴封水压力等于泵出口压力的1/2。

无轴封水型

无水介质自冲洗型机械密封,结构独特,节水效果好。

型号意义



TL 型泵性能参数表 TL Type Pump Table of Performance

型号 Type	允许配带 最大功率 Allowable max. power of ass. motor (KW)	清水性能 Clear water performance					间断通过 最大粒度 Particle max. size handled occasionally (mm)	泵重 Pump weight (kg)
		流量Q Capacity (m ³ /h)	扬程H Head (m)	转速n Speed (r/min)	最高效率 Max. eff. (%)	汽蚀余量 (NPSH)r (m)		
25TL - 150	5.5	4.4 - 19.3	6.2 - 34.4	1390 - 2900	41.8	1.3	8	89
40TL - 200	15	7.9 - 37.1	10.7 - 57.7	1400 - 2930	53.0	0.9	7	160
40TL - 250	45	16.8 - 74.7	13.7 - 88.6	1400 - 2950	42.5	2.6	9	185
50TL - 300	18.5	16 - 78	6.1 - 36.3	700 - 1460	48.5	0.8	16	210
50TL - 400	30	16 - 76	9.5 - 51.7	700 - 1470	45.1	1.2	10	320
65TL - 300	22	21 - 99	7.0 - 35.6	700 - 1470	54.6	2.2	19	260
65TL - 400	55	34 - 159	12.2 - 63.2	700 - 1480	62.1	2.1	16	490
80TL - 360	37	41 - 167	8.9 - 47.1	700 - 1480	62.4	1.5	16	480
100TL - 350	75	77 - 323	8.8 - 45.9	700 - 1480	73.2	1.9	42	550
100TL - 400	75	61 - 268	12.0 - 61.0	700 - 1480	70.4	1.7	29	620
100TL - 450	90	41 - 219	12.1 - 76.4	700 - 1480	51.8	2.4	24	800
150TL - 400	132	122 - 503	11.2 - 61.2	700 - 1490	73.1	2.6	40	830
150TL - 500	90	62 - 279	9.3 - 44.6	490 - 980	65.7	2.1	30	1470
150TL - 550	132	139 - 630	11.3 - 53.7	490 - 990	78.1	2.3	56	1540
200TL - 450	90	138 - 645	5.7 - 31.0	490 - 990	80.8	2.0	51	1750
300TL - 600	400	580 - 2403	8.9 - 53.1	490 - 989	81.1	4.3	96	2790
350TL - 780	500	720 - 2865	11.6 - 51.1	400 - 740	78.0	3.5	104	3700
500TL - 850	400	1036 - 4080	5.7 - 26.8	300 - 591	84.7	3.1	135	4500
600TL - 820	500	1664 - 5600	5.2 - 27.8	300 - 595	88.3	2.2	152	4900
700TL - 840	630	2157 - 7360	5.2 - 24.5	300 - 591	88.8	2.0	168	5420
800TL - 900	900	3142 - 9700	6.0 - 28.7	300 - 592	89.3	2.0	181	5900

注:1. (NPSH)r 系指本样本中第二档转速时规定点之值。
2. 正常通过粒度为允许间断通过的最大粒度的 56%。

泵阀系列产品

PUMP AND VALVE SERIES PRODUCTS



ISW型卧式离心泵 Model ISW Horizontal Centrifugal Pump



概述

ISW、ISWR、ISWD 卧式离心泵，系根据 IS 型、IR 型离心泵之性能参数，参照 ISO2858 标准，采用国内优秀水力模型进行优化设计而成。是理想的新一代卧式泵产品。

特点

- 1、该系列泵为卧式结构，机泵一体，外形美观。与普通卧式泵相比，占地面积减少 30%，如采用 IP54 户外电机则无需泵房可置于户外使用。
- 2、叶轮直径装配在电机加长轴上，使泵运行更加平稳，振动小，噪音低。
- 3、轴封采用优质机械密封，动、静环由新型硬质合金制成，耐磨损、无泄漏，使用寿命长。
- 4、叶轮、泵体采用优秀水力模型设计制造，能耗低、效率高。
- 5、该系列卧式泵为后开门式结构，无需拆卸管路，即可进行检修。
- 6、泵的出水口，能以水平向左、垂直向上、水平向右三种方式任意安装。

用途

- 1、ISW 型泵适用于工业和城市给排水、高层建筑增压送水、园林喷灌、消防增压、远距离输水、暖通制冷循环、浴室暖水循环增压，以及各种给水设备、锅炉的配套。供输送清水或物理、化学性质类似清水的其它液体之用，使用温度不高于 85℃。
- 2、ISWR 型泵适用于冶金、化工、纺织、木材加工、造纸以及饭店、浴室、宾馆、锅炉热水增压循环和城市住房采暖循环等场合，使用温度不高于 120℃。
- 3、ISWD 型泵适应要求环境噪声很低的场合，使用温度不高于 100℃。

General

Adopting domestic excellent hydraulic mold, ISW、ISWR、ISWD horizontal centrifugal pumps are designed on the basis of the performance parameters of IS and IR series pumps, as required by ISO2858 standard, which are the ideal product of new generation.

Features

1. This series of horizontal pump integrates motor and body as a whole, contributing to its appearance. Compared to other plain horizontal pumps, whose occupied area declines 30%.
2. Impeller is mounted on the lengthening axis, which contributes to its stable operation, small vibration and noise.
3. Mechanical sealing is adopted for shaft, dynamic and static rings are made from carbide alloy of new type, with corrosion resistance, non-leakage and longevity.
4. Impeller and pump body with little power consumed and high efficiency, adopt excellent hydraulic mold.
5. This series pump belongs to the rear-door-open structure, no need to disassemble the duct when maintaining.
6. The vent of the pump can be mounted rightward, leftward or upright at option.

Usage

1. ISW series of pump is applicable in the fields of industrial and urban water supply, pressurized water supply for high building, garden irrigation, remote water delivery for firefight, pressurized warm water circulation for bathroom, as well as diverse water supply equipments and boiler to deliver clean water and other liquid with homogeneous physical and chemical character as clean water, with temperature no more than 85℃.
2. ISWR series of pump is applied for metallurgy, chemical industry, textile, timber processing, paper making, hotel, bathroom and other occasions for pressurized water and heating supply with temperature on more than 120℃.
3. ISWD series of pump is applied under the circumstance of small noise with temperature no more than 100℃.



ISW 型泵性能参数表 ISW Type Pump Table of Performance

型号 Type	流量 Q Capacity		扬程 Head m	效率 Eff. %	转速 Speed r/min	电机 功率 Power KW	必需汽 蚀余量 NPSHr m	重量 Gravity kg	型号 Type	流量 Q Capacity		扬程 Head m	效率 Eff. %	转速 Speed r/min	电机 功率 Power KW	必需汽 蚀余量 NPSHr m	重量 Gravity kg
	m³/h	l/s								m³/h	l/s						
40-100	4.4	1.22	13.2	48	2900	0.55	2.3	34	50-125	8.8	2.44	21.5	49	2900	1.5	2.3	44
	6.3	1.75	12.5	54						12.5	3.47	20	58				
	8.3	2.31	11.3	53						16.3	4.53	17.8	57				
40-100A	3.9	1.08	10.6	52	2900	0.37	2.3	32	50-125A	8.0	2.22	17	57	2900	1.1	2.3	39
	5.6	1.56	10							11.0	3.05	16					
	7.4	2.06	9							14.5	4.03	14					
40-125	4.4	1.22	21	41	2900	1.1	2.3	35	50-160	8.8	2.44	33	45	2900	3.0	2.3	60
	6.3	1.75	20	46						12.5	3.47	32	52				
	8.3	2.31	18	43						16.3	4.53	30	51				
40-125A	3.9	1.08	17.6	40	2900	0.75	2.3	31	50-160A	8.2	2.28	29	44	2900	2.2	2.3	52
	5.6	1.56	16	45						11.7	3.25	28	51				
	7.4	2.06	14.4	41						15.2	4.22	26	50				
40-160	4.4	1.22	33	35	2900	2.2	2.3	50	50-160B	7.3	2.38	23	50	2900	1.5	2.3	48
	6.3	1.75	32	40						10.4	2.89	22					
	8.3	2.31	30	40						13.5	3.75	20.5					
40-160A	4.1	1.14	29	34	2900	1.5	2.3	45	50-200	8.8	2.44	52	38	2900	5.5	2.3	104
	5.9	1.64	28	39						12.5	3.47	50	46				
	7.8	2.17	26.3	39						16.3	4.53	48	46				
40-160B	3.8	1.06	25.5	34	2900	1.1	2.3	40	50-200A	8.3	2.31	45.8	37	2900	4.0	2.3	82
	5.5	1.53	24	38						11.7	3.25	44	45				
	7.2	2.0	22.5	37						15.3	4.25	42	45				
40-200	4.4	1.22	51	26	2900	4.0	2.3	76	50-200B	7.5	2.08	37	44	2900	3	2.3	69
	6.3	1.75	50	33						10.6	2.94	36					
	8.3	2.31	48	32						13.8	3.83	34					
40-200A	4.1	1.14	45	26	2900	3.0	2.3	64	50-250	8.8	2.44	82	29	2900	11	2.3	163
	5.9	1.64	44	31						12.5	3.47	80	38				
	7.0	2.17	42	30						16.3	4.53	77.5	40				
40-200B	3.7	1.03	38	29	2900	2.2	2.3	54	50-250A	8.2	2.28	71.5	38	2900	7.5	2.3	116
	5.3	1.47	36	29						11.6	3.22	70					
	7.0	1.94	34.5	29						15.2	4.22	68					
40-250	4.4	1.22	82	24	2900	7.5	2.3	108	50-250B	7.6	2.11	61.4	37	2900	7.5	2.3	114
	6.3	1.75	80	28						10.8	3.00	60	37				
	8.3	2.31	74	28						14.0	3.89	58					
40-250A	4.1	1.14	72	24	2900	5.5	2.3	100	50-250C	7.1	1.97	53.2	36	2900	5.5	2.3	108
	5.9	1.64	70	28						10.0	2.78	52					
	7.8	2.17	65	27						13.1	3.64	50.4					
40-250B	3.8	1.06	61.5	23	2900	4.0	2.3	80	50-100(I)	17.5	4.86	13.7	67	2900	1.5	2.3	43
	5.5	1.53	60	27						25.0	6.94	12.5	69				
	7.0	1.94	56	26						32.5	9.03	10.5	69				
40-100(I)	8.8	2.44	13.2	55	2900	1.1	2.3	36	50-100(I)A	15.6	4.30	11	65	2900	1.1	2.3	38
	12.5	3.47	12.5	62						22.3	6.19	10	67				
	16.3	4.53	11.3	60						29.0	8.10	8.4	68				
40-100(I)A	8.0	2.22	10.6	60	2900	0.75	2.3	34	50-125(I)	17.5	4.86	21.5	60	2900	3.0	2.3	58
	11.0	3.05	10	60						25.0	6.94	21	68				
	14.5	4.03	9	57						32.5	9.03	18	67				
40-125(I)	8.8	2.44	21.2	49	2900	1.5	2.3	40	50-125(I)A	15.6	4.33	17	58	2900	2.2	2.5	50
	12.5	3.47	20	58						22.3	6.19	16	66				
	16.3	4.53	17.8	57						29.2	8.10	13.6	65				
40-125(I)A	8.0	2.22	17	57	2900	1.1	2.3	35	50-160(I)	17.5	4.86	34.4	54	2900	4.0	2.5	74
	11.0	3.05	16	54						25.0	6.94	32	66				
	14.5	4.03	14	51						32.5	9.03	27.5	60				
40-160(I)	8.8	2.44	33	45	2900	3.0	2.3	58	50-160(I)A	16.4	4.56	30	54	2900	4.0	2.5	72
	12.5	3.47	32	52						23.4	6.50	28	62				
	16.3	4.53	30	51						30.4	8.44	24	59				
40-160(I)A	8.2	2.28	29	44	2900	2.2	2.3	49	50-160(I)B	15.0	4.17	26	58	2900	3.0	2.5	61
	11.7	3.25	28	51						21.6	6.00	24	58				
	15.2	4.22	26	50						28.0	7.78	20.6					
40-160(I)B	7.3	2.38	23	50	2900	1.5	2.3	44	50-200(I)	17.5	4.86	52.7	49	2900	7.5	2.5	113
	10.4	2.89	22	49						25.0	6.94	50	58				
	13.5	3.75	20.5	47						32.5	9.03	45.5	59				
40-200(I)	8.8	2.44	51.2	36	2900	5.5	2.3	87	50-200(I)A	16.4	4.56	46.4	48	2900	7.5	2.5	111
	12.5	3.47	50	46						23.5	6.53	44	57				
	16.3	4.53	48	46						30.5	8.47	40	58				
40-200(I)A	8.3	2.31	45	37	2900	4.0	2.3	76	50-200(I)B	15.2	4.22	40	55	2900	5.5	2.5	104
	11.7	3.25	44	45						21.8	6.06	38	55				
	15.3	4.25	42	45						28.3	7.86	34.5					
40-200(I)B	7.5	2.08	37	44	2900	3	2.3	65	50-250(I)	17.5	4.86	82	39	2900	15.0	2.5	180
	10.6	2.94	36	44						25.0	6.94	80	50				
	13.8	3.83	34	44						32.5	9.03	76.5	52				
40-250(I)	8.8	2.44	81.2	29	2900	11	2.3	148	50-250(I)A	16.4	4.56	71.5	39	2900	11.0	2.5	170
	12.5	3.47	80	38						23.4	6.50	70	50				
	16.3	4.53	77.5	40						30.5	8.47	67	52				
40-250(I)A	8.2	2.28	71	38	2900	7.5	2.3	98	50-250(I)B	15	4.17	61	38	2900	11.0	2.5	170
	11.6	3.22	70	38						21.6	6.0	60	49				
	15.2	4.22	68	38						28	7.78	57.4	54				
40-250(I)B	7.6	2.11	61.4	47	2900	7.5	2.3	97	50-315(I)	17.5	4.86	128	30	2900	30.0	2.5	313
	10.8	3.0	60	44						25	6.94	125	40				
	14.0	3.89	58	44						32.5	9.03	122	44				
40-250(I)C	7.1	1.97	53.2	36	2900	5.5	2.3	88	50-315(I)A	16.6	4.61	115	30	2900	22.0	2.5	247
	10.0	2.78	52	36						23.7	6.58	113	40				
	13.1	3.64	50.4	36						31	8.6	110	44				
50-100	8.8	2.44	13.6	55	2900	1.1	2.3	38	50-315(I)B	15.7	4.36	103	39	2900	18.5	2.5	217
	12.5	3.47	12.5	62						22.5	6.25	101	98				
	16.3	4.53	11.3	60						29.2	8.0	98					
50-100A	8.0	2.22	11	55	2900	0.75	2.3	37	50-315(I)C	14.4	4.0	86	38	2900	15.0	2.5	196
	11.0	3.05	10	60						20.6	5.72	85	38				
	14.5	4.03	9	57						26.8	7.44	83					

泵阀系列产品

PUMP AND VALVE SERIES PRODUCTS



ISW 型泵续表 1 ISW Type Pump Table 1 (continued)

型号 Type	流量 Q Capacity		扬程 Head m	效率 Eff. %	转速 Speed r/min	电机 功率 Power KW	必需汽 蚀余量 NPSHr m	重量 Gravity kg
	m ³ /h	l/s						
65-100	17.5	4.86	13.7	67	2900	1.5	2.5	48
	25	6.94	12.5	69				
	32.5	9.03	10.5	69				
65-100A	15.6	4.3	11	65	2900	1.1	2.5	42
	22.3	6.19	10	67				
	29	8.1	8.4	68				
65-125	17.5	4.86	21.5	60	2900	3.0	2.5	60
	25	6.94	20	68				
	32.5	9.03	18	67				
65-125A	15.6	4.33	17	58	2900	2.2	2.5	51
	22.3	6.19	16	66				
	29	8.1	14.4	65				
65-160	17.5	4.86	34.4	54	2900	4.0	2.5	77
	25	6.94	32	63				
	32.5	9.03	27.5	60				
65-160A	16.4	4.56	30	54	2900	4.0	2.5	77
	23.4	6.5	28	62				
	30.4	8.44	24	59				
65-160B	15.0	4.17	26	54	2900	3.0	2.5	64
	21.6	6.0	24	58				
	28	7.78	20.6	55				
65-200	17.5	4.86	52.7	49	2900	7.5	2.5	110
	25	6.94	50	58				
	32.5	9.03	45.5	59				
65-200A	16.4	4.56	46.4	48	2900	7.5	2.5	109
	23.5	6.53	44	57				
	30.5	8.47	40	58				
65-200B	15.2	4.22	40	55	2900	5.5	2.5	101
	21.8	6.06	38	55				
	28.3	7.86	34.5	55				
65-250	17.5	4.86	82	39	2900	15.0	2.5	185
	25	6.94	80	50				
	32.5	9.03	76.5	52				
65-250A	16.4	4.56	71.5	39	2900	11.0	2.5	173
	23.4	6.5	70	50				
	30.5	8.47	67	52				
65-250B	15	4.17	61	38	2900	11.0	2.5	173
	21.6	6.0	60	49				
	28	7.78	57.4	54				
65-315	17.5	4.86	127	32	2900	30.0	2.5	325
	25	6.94	125	40				
	32.5	9.03	122	44				
65-315A	16.6	4.61	115	32	2900	22.0	2.5	258
	23.7	6.58	113	40				
	31	8.6	110	44				
65-315B	15.7	4.36	103	39	2900	18.5	2.5	229
	22.5	6.25	101	39				
	29.2	8.0	98	38				
65-315C	14.4	4.0	86	38	2900	15.0	2.5	207
	20.6	5.72	85	38				
	26.8	7.44	83	38				
65-100(I)	35	9.72	13.8	67	2900	3.0	3.0	65
	50	13.9	12.5	73				
	65	18.1	10	70				
65-100(I)A	31.3	8.7	11	66	2900	2.2	3.0	54
	44.7	12.4	10	72				
	58	16.1	8	69				
65-125(I)	35	9.72	22	67	2900	5.5	3.0	100
	50	13.9	20	72.5				
	65	18.1	17	70				
65-125(I)A	31.3	8.7	17.5	66	2900	4.0	3.0	79
	45	12.5	16	71				
	58	16.1	13.6	69				
65-160(I)	35	9.72	35	63	2900	7.5	3.0	105
	50	13.9	32	71				
	65	18.1	28	70				
65-160(I)A	32.7	9.1	30.6	62	2900	7.5	3.0	105
	46.7	13.0	28	70				
	61	16.9	24	69				
65-160(I)B	30.3	8.4	26	69	2900	5.5	3.0	98
	43.3	12.0	24	69				
	56.3	15.6	21	69				
65-200(I)	35	9.72	53.5	55	2900	15.0	3.0	179
	50	13.9	50	67				
	65	18.1	46	68				
65-200(I)A	32.8	9.1	47	54	2900	11.0	3.0	168
	47	13.1	44	66				
	61	16.9	40	67				
65-200(I)B	30.5	8.5	40.6	65	2900	7.5	3.0	115
	43.5	12.1	38	65				
	56.6	15.7	33.4	65				
65-250(I)	35	9.72	83	52	2900	22.0	3.0	238
	50	13.9	80	59				
	65	18.1	72	60				
65-250(I)A	32.5	9.0	73	52	2900	18.5	3.0	207
	46.7	13.0	70	59				
	61	16.9	63	60				
65-250(I)B	32.5	9.0	73	52	2900	18.5	3.0	207
	46.7	13.0	70	59				
	61	16.9	63	60				
65-250(I)C	29	8.1	87	51	2900	22.0	3.0	273
	41	11.4	85	51				
	53.6	14.9	83	51				
80-100	35	9.72	13.8	67	2900	3.0	3.0	65
	50	13.9	12.5	73				
	65	18.1	10	70				
80-100A	31.3	8.7	11	66	2900	2.2	3.0	55
	44.7	12.4	10	72				
	58	16.1	8	69				
80-125	35	9.72	22	67	2900	5.5	3.0	100
	50	13.9	20	72.5				
	65	18.1	17	70				
80-125A	31.3	8.7	17.5	66	2900	4.0	3.0	80
	45	12.5	16	71				
	58	16.1	13.6	69				
80-160	35	9.72	35	63	2900	7.5	3.0	107
	50	13.9	32	71				
	65	18.1	28	70				
80-160A	32.7	9.1	30.6	62	2900	7.5	3.0	107
	46.7	13.0	28	70				
	61	16.9	24	69				
80-160B	30.3	8.4	26	69	2900	5.5	3.0	99
	43.3	12.0	24	69				
	56.3	15.6	21	69				
80-200	35	9.72	53.5	55	2900	15.0	3.0	177
	50	13.9	50	67				
	65	18.1	46	68				
80-200A	32.8	9.1	47	54	2900	11.0	3.0	166
	47	13.1	44	66				
	61	16.9	40	67				
80-200B	30.5	8.5	40.6	65	2900	7.5	3.0	116
	43.5	12.1	38	65				
	56.6	15.7	33.4	65				
80-250	35	9.72	83	52	2900	22.0	3.0	245
	50	13.9	80	59				
	65	18.1	72	60				
80-250A	32.5	9.0	73	52	2900	18.5	3.0	215
	46.7	13.0	70	59				
	61	16.9	63	60				
80-250B	30	8.3	62	58	2900	15.0	3.0	187
	43.3	12.0	60	58				
	56	15.6	54	54				
80-315	35	9.72	128	43	2900	37.0	3.0	360
	50	13.9	125	54				
	65	18.1	122	57				
80-315A	32.5	9.0	112.5	43	2900	30.0	3.0	342
	46.5	12.9	110	54				
	60.5	16.8	107.4	57				
80-315B	31	8.6	102.5	53	2900	30.0	3.0	342
	44.5	12.4	100	53				
	58	16.1	98	53				
80-315C	29	8.1	98	51	2900	22.0	3.0	277
	41	11.4	85	51				
	53.6	14.9	83	51				
80-100(I)	70	19.4	13.6	66	2900	5.5	4.5	110
	100	27.8	12.5	76				
	130	36.1	11	75				
80-100(I)A	62.6	17.4	11	64	2900	4.0	4.5	88
	89	24.7	10	74				
	116	32.2	8.8	74				
80-125(I)	70	19.4	23.5	70	2900	11.0	4.5	164
	100	27.8	20	76				
	130	36.1	14	72				
80-125(I)A	62.6	17.4	19	68	2900	7.5	4.5	114
	89	24.7	16	74				
	116	32.2	11	65				
80-160(I)	70	19.4	36.5	70	2900	15.0	4.5	187
	100	27.8	32	76				
	130	36.1	24	65				
80-160(I)A	65.4	18.2	32	68	2900	11.0	4.5	175
	93.5	26.0	28	74				
	121.6	33.8	21	67				
80-160(I)B	60.6	16.8	27	66	2900	11.0	4.5	175
	86.6	24.1	24	72				
	112.5	31.3	18	66				



ISW 型泵续表 2 ISW Type Pump Table 2 (continued)

型号 Type	流量 Q Capacity		扬程 Head m	效率 Eff. %	转速 Speed r/min	电机 功率 Power KW	必需汽 蚀余量 NPSHr m	重量 Gravity kg
	m ³ /h	l/s						
80-200(I)	70	19.4	54	65	2900	22.0	4.0	253
	100	27.8	50	74				
	130	36.1	42	73				
80-200(I)A	65.4	18.2	47.5	64	2900	18.5	4.0	221
	93.5	26.0	44	73				
	121.6	33.8	37	72				
80-200(I)B	61	16.9	41	71	2900	15.0	4.0	200
	87	24.2	38	62				
	113	31.4	32	67				
80-250(I)	70	19.4	87	62	2900	37.0	4.0	333
	100	27.8	80	69				
	130	36.1	68	67				
80-250(I)A	65.4	18.2	76	61	2900	30.0	4.0	317
	93.5	26.0	70	68				
	121.6	33.8	59.5	67				
80-250(I)B	61	16.9	65	66	2900	30.0	4.0	317
	87	24.2	60	67				
	113	31.4	51	67				
80-315(I)	70	19.4	132	55	2900	75.0	4.0	680
	100	27.8	125	66				
	130	36.1	114	67				
80-315(I)A	66.5	18.5	119	55	2900	55.0	4.0	537
	95	26.4	113	66				
	123.6	34.3	103	67				
80-315(I)B	63	17.5	106.6	65	2900	45.0	4.0	425
	90	25	101	65				
	117	32.5	92	65				
80-315(I)C	58	16.1	90	63	2900	37.0	4.0	370
	82	22.8	85	63				
	107	29.7	76	63				
100-100	70	19.4	13.6	66	2900	5.5	4.5	115
	100	27.8	12.5	76				
	130	36.1	11	75				
100-100A	62.6	17.4	11	64	2900	4.0	4.5	92
	89	24.7	10	74				
	116	32.2	8.8	74				
100-125	70	19.4	23.5	70	2900	11.0	4.5	173
	100	27.8	20	76				
	130	36.1	14	65				
100-125A	62.6	17.4	19	68	2900	7.5	4.5	120
	89	24.7	16	74				
	116	32.2	11	63				
100-160	70	19.4	36.5	70	2900	15.0	4.5	195
	100	27.8	32	76				
	130	36.1	24	65				
100-160A	65.4	18.2	32	68	2900	11.0	4.5	182
	93.5	26.0	28	74				
	121.6	33.8	21	67				
100-160B	60.6	16.8	27	72	2900	11.0	4.5	182
	86.6	24.1	24	72				
	112.5	31.3	18	68				
100-200	70	19.4	54	65	2900	22.0	4.0	248
	100	27.8	50	74				
	130	36.1	42	73				
100-200A	65.4	18.2	47.5	64	2900	18.5	4.0	216
	93.5	26.0	44	73				
	121.6	33.8	37	72				
100-200B	61	16.9	41	71	2900	15.0	4.0	195
	87	24.2	38	62				
	113	31.4	32	67				
100-250	70	19.4	87	62	2900	37.0	4.0	348
	100	27.8	80	69				
	130	36.1	68	68				
100-250A	65.4	18.2	76	61	2900	30.0	4.0	332
	93.5	26.0	70	68				
	121.6	33.8	59.5	67				
100-250B	61	16.9	65	66	2900	30.0	4.0	332
	87	24.2	60	66				
	113	31.4	51	66				
100-315	70	19.4	132	55	2900	75.0	4.0	695
	100	27.8	125	66				
	130	36.1	114	67				
100-315A	66.5	18.5	119	55	2900	55.0	4.0	552
	95	26.4	113	66				
	123.6	34.3	103	67				
100-315B	63	17.5	106.6	65	2900	45.0	4.0	442
	90	25.0	101	65				
	117	32.5	92	65				
100-315C	58	16.1	90	63	2900	37.0	4.0	387
	82	22.8	85	63				
	107	29.7	76	63				
125-100	96	26.7	13	82	2900	11.0	4.0	185
	160	44.4	12.5	82				
	192	53.3	12	82				
125-100A	86	23.9	10.4	77	2900	7.5	4.0	130
	143	39.7	10	77				
	172	47.8	9.6	77				
125-125	96	26.7	22.6	80	2900	15.0	4.0	227
	160	44.4	20	80				
	192	53.3	17	80				
125-125A	86	23.9	18	77	2900	11.0	4.0	215
	143	39.7	16	77				
	172	47.8	13.6	77				
125-160	96	26.7	36	78	2900	22.0	4.0	272
	160	44.4	32	78				
	192	53.3	28	78				
125-160A	90	25	31.5	76	2900	18.5	4.0	215
	150	41.7	28	76				
	180	50	24.5	76				
125-160B	83	21.7	27	73	2900	15.0	4.0	220
	138	38.3	24	73				
	166	46.1	21	73				
125-200	96	26.7	55	77	2900	37.0	5.5	403
	160	44.4	50	77				
	192	53.3	46	77				
125-200A	90	25	48.4	76	2900	30.0	5.5	385
	150	41.7	44	76				
	180	50	40.5	76				
125-200B	83	21.7	41.3	75	2900	22.0	5.5	328
	138	38.3	37.5	75				
	166	46.1	34.5	75				
125-250	96	26.7	87	75	2900	55.0	5.0	585
	160	44.4	80	75				
	192	53.3	73	75				
125-250A	90	25	76	74	2900	45.0	5.0	495
	150	41.7	70	74				
	180	50	64	74				
125-250B	83	21.7	65	73	2900	37.0	5.0	424
	138	38.3	60	73				
	166	46.1	55	73				
125-315	96	26.7	133	70	2900	90.0	5.0	799
	160	44.7	125	70				
	192	53.3	119	70				
125-315A	90	25	117	70	2900	75.0	5.0	715
	150	41.7	110	70				
	180	50	104.6	70				
125-315B	86	24	106.4	69	2900	75.0	5.0	712
	143	40	100	69				
	172	48	95.2	69				
125-315C	80.5	22.4	96	67	2900	55.0	5.0	590
	134	37.2	88	67				
	161	44.7	86	67				
150-200	140	38.9	13.8	68	1450	15.0	5.0	270
	200	55.6	12.5	78				
	260	72.2	10.6	78				
150-200A	125	34.7	11	66	1450	11.0	3.0	248
	179	49.7	10	76				
	232.5	64.6	8.5	76				
150-250	140	38.9	21.8	73	1450	18.5	3.0	307
	200	55.6	20	79				
	260	72.2	17	77				
150-250A	129	35.8	18.5	72	1450	15.0	3.0	268
	184.4	51.2	17	78				
	240	66.7	14.4	76				
150-250B	117	32.5	15.2	76	1450	11.0	3.0	245
	167	46.4	14	76				
	217.5	60.4	12	76				
150-315	140	38.9	33.8	70	1450	30.0	3.5	415
	200	55.6	32	78				
	260	72.2	28	73				
150-315A	131	36.4	29.5	69	1450	22.0	3.5	340
	187	51.9	28	77				
	243	67.5	24.5	77				
150-315B	121	33.6	25	76	1450	18.5	3.5	320
	173	48.1	24	76				
	225	62.5	21	76				
150-400	140	38.9	53	68	1450	45.0	3.5	495
	200	55.6	50	75				
	260	72.2	44	71				
150-400A	131	36.4	46.5	67	1450	37.0	3.5	460
	187	51.9	44	74				
	243	67.5	38.3	70				
150-400B	122	33.9	40	73	1450	30.0	3.5	440
	174	48.3	38	73				
	226.5	62.9	33	73				
150-400C	112	31.1	34	71	1450	22.0	3.5	370
	160	44.4	32	71				
	208	57.8	28	71				
150-250(I)	120	33.3	87	65	2900	75.0	4.5	705
	200	55.6	80	76				
	240	66.7	72	74				
150-250(I)A	112	31.1	76	64	2900	55.0	4.5	565
	187	51.9	70	75				
	224	62.2	63	73				

ISW 型泵续表 3 ISW Type Pump Table 3 (continued)

型号 Type	流量 Q Capacity		扬程 Head m	效率 Eff. %	转速 Speed r/min	电机 功率 Power KW	必需汽 蚀余量 NPSHr m	重量 Gravity kg	型号 Type	流量 Q Capacity		扬程 Head m	效率 Eff. %	转速 Speed r/min	电机 功率 Power KW	必需汽 蚀余量 NPSHr m	重量 Gravity kg
	m ³ /h	l/s								m ³ /h	l/s						
150-250(I)B	104 173 208	28.9 48.1 57.8	65 60 54	63 74 72	2900	45.0	4.5	463	200-250(I)B	226 322 419	62.8 89.4 116.4	14.4 13 7.3	70 75 67	1450	18.5	4.0	395
150-315(I)	120 200 240	33.3 55.6 66.7	133 125 120	58 73 75	2900	110.0	4.5	985	200-315(I)	280 400 520	77.8 111.4 144	36 32 26	73 80 75	1450	55.0	4.0	685
150-315(I)A	112 187 224	31.3 51.9 62.2	116 110 105	57 72 74	2900	90.0	4.5	805	200-315(I)A	262 374 486	72.8 103.9 135	31.5 28 23	72 79 74	1450	45.0	4.0	568
150-315(I)B	104 173 208	28.9 48.1 57.8	100 95 91	55 70 72	29020	75.0	4.5	730	200-315(I)B	242 346 450	67.2 96.1 125	27 24 19.5	78	1450	37.0	4.0	545
200-200	140 200 260	38.9 55.6 72.2	13.8 12.5 10.6	68 78 78	1450	15.0	3.0	272	200-400(I)	280 400 520	77.8 111.4 144	54.5 50 39	75 81 77	1450	75.0	4.0	840
200-200A	125 179 232.5	34.7 49.7 64.6	11 10 8.5	66 76 76	1450	11.0	3.0	250	200-400(I)A	262 374 486	72.8 103.9 135	48 44 34	80	1450	75.0	4.0	840
200-250	140 200 260	38.9 55.6 72.2	21.8 20 17	73 79 77	1450	18.5	3.0	312	200-400(I)B	242 346 450	67.2 96.1 125	41.4 38 29.6	78	1450	55.0	4.0	693
200-250A	129 184.4 240	35.8 51.2 66.7	18.5 17 14.4	72 78 76	1450	15.0	3.0	272	200-400(I)C	224 320 416	62.2 88.9 115.6	34.9 32 25	76	1450	45.0	4.0	590
200-250B	117 167 217.5	32.5 46.4 60.4	15.2 14 12	76	1450	11.0	3.0	250	300-235	480 720 900	133.3 200 250	20 18 15.5	77 81 74	970	55.0	5.0	1135
200-315	140 200 260	38.9 55.6 72.2	33.8 32 28	70 78 78	1450	30.0	3.5	425	300-235A	438 607 821	121.7 182.5 228.1	16.5 15 13	75 79 72	970	45.0	5.0	1040
200-315A	131 187 243	36.4 51.9 67.5	29.5 28 24.5	69 77 77	1450	22.0	3.5	348	300-235B	400 600 750	111.1 167.0 208.3	14 12.5 11	73 77 70	970	37.0	5.0	900
200-315B	121 173 225	33.6 48.1 62.5	25 24 21	76	1450	18.5	3.5	328	300-300	480 720 900	133.3 200 250	31 28 25	77 81 77	970	75.0	5.0	1370
200-400	140 200 260	38.9 55.6 72.2	53 50 44	68 75 71	1450	45.0	3.5	505	300-300A	444 666 833	123.3 185 231.4	26.5 24 21.5	76 80 76	970	75.0	5.0	1370
200-400A	131 187 243	36.4 51.9 67.5	46.6 44 38.3	67 74 70	1450	37.0	3.5	468	300-300B	415 623 779	115.3 173.1 216.4	23 21 18.5	79	970	55.0	5.0	1190
200-400B	122 174 226.5	33.9 48.3 62.9	40 38 33	73	1450	30.0	3.5	450	300-380	480 720 900	133.3 200 250	48 44 34	84	970	132.0	5.0	1930
200-400C	112 160 208	31.3 44.4 57.8	34 32 28	71	1450	22.0	3.5	380	300-380A	444 666 833	123.3 185 231.4	41.4 38 30	80	970	110.0	5.0	1725
200-200(I)	280 400 520	77.8 111.1 144	13.4 12.5 10.5	70 80 79	1450	22.0	4.0	390	300-380B	409 614 767	113.6 170.6 213.1	35 32 25	78	970	90.0	5.0	1550
200-200(I)A	250 358 465	69.4 99.4 129.2	10.7 10 8.5	68 78 77	1450	15.0	4.0	370	300-235(I)	718 1080 1345	199.4 300 373.6	44.6 40 34.6	82	970	160.0	5.5	1800
200-250(I)	280 400 520	77.8 111.4 144	22.2 20 14	75 80 72	1450	30.0	4.0	483	300-235(I)A	642 965 1203	178.3 268.1 334.2	35.7 32 27.7	80	970	132.0	5.5	1470
200-250(I)A	250 358 465	69.4 99.4 129.2	18 16 11.2	73 78 70	1450	22.0	4.0	411									

ZM、ZML系列渣浆泵 ZM、ZML(stag) Series Slurry Pump



概述

ZM 型渣浆泵是一种单级单吸悬臂卧式离心泵，在结构上吸收了国内外同类产品的优点而设计的，该泵便于安装、拆卸检修方便。

泵头部分：ZM 渣浆泵为双泵壳结构，即前、后泵壳、前护板、后护板、护套、轴套组成。过流部分采用 JM3 制造，前、后泵壳由灰铸铁或球墨铸铁制造。泵的吐出口位置可根据需要，按 45° 间隔，旋转八个不同的角度安装使用，并可根据用户要求的角度安装，叶轮前后盖板有背叶片以减少泄漏，提高泵的寿命及效率。

轴封部分：轴封有两种型式，副叶轮轴封及填料轴封。副叶轮轴封具有不稀释矿浆、密封使用寿命长、密封效果好等优点。填料密封结构简单，维修方便。

传动部分：ZM 型渣浆泵可采用直接驱动，轴承座合轴承体组件结构强度高，泵轴直径大，刚性好，悬臂短，在恶劣的工况下不会弯曲和振动。轴承选用重型单列圆锥滚子轴承，能够承受泵的轴向和径向载荷。轴承采用油脂润滑。轴承体两端有轴承压盖，内有密封圈，能有效防止矿浆进入和润滑脂的外泄，保证轴承安全运行。可根据用户要求，轴承传动部位采用对开式，用稀油润滑，降低轴温。

General

As a single-stage-single-suction horizontal cantilever one, model ZM(slag) slurry pump is designed through absorbing advantages of similar products from home and abroad. It is convenient to install and easy to disassemble and repair.

The pump head part: model ZM(slag) slurry pump has double pump casings in structure. That is to say, it is made up of front pump casing, back pump casing, front guard plate, back guard plate, sheathing, shaft casing. The flow contact parts are made of JM3 materials, while the front and back pump casings are made of gray cast-iron or nodular cast iron. The outlets of the pump can be installed at the interval of 45°, at eight angles, according to user's requirements. At the front and back cover plates there are back blades to lower leakage, so as extend the life and increase efficiency of the pump.

The shaft seal part: the shaft seal has two forms: shaft seal of auxiliary blade wheel and filling seal. The shaft seal of auxiliary blade wheel is featured with not thinning ore slurry, long life of seal and good effect of seal, etc. The filling seal has simple structure and is convenient to repair.

Drive part: Model ZM(slag) slurry pump can be directly driven. The bearing support, in combination with bearing body, has high strength in structure, big diameter of pump shaft, good flexibility, and short cantilever. Even if in bad working conditions, no bending and vibration can arise. Because of using heavy single-line cone roller bearing, it can stand axial and radial loads of the pump. The shaft is lubricated with oil. At both ends of the bearing body there are bearing covers, inside of which there is seal ring. The ring can effectively protect ore slurry from penetration and the lubricating oil from leaking. This can make sure that the bearing can run safely. In accordance with users' requirements, the drive part of the bearing can be in double-open type, and lubricated with thin oil. This can lower the temperature of the shaft.

ZM、ZML 型泵性能参数表 ZM、ZML Type Pump Table of Performance

型号 Model	扬程 m Head	流量 Q Capacity		转速 Speed (r.p.m/ h)	配用功率 Motor power (KW)	允许吸上高度 Permissible suctioned hight (m)	效率 Efficiency %
		m ³ / h	L/ S				
100ZM - 25	20 - 30	150 - 200	41.6 - 55.5	1450	45	5.5	65 - 67
100ZM - 25A	25 - 35	200 - 250	55.5 - 69.4	1450	45	5.5	65 - 67
100ZM - 40	35 - 45	180 - 200	50 - 55.5	1450	55	5.5	43 - 48
100ZM - 40A	40 - 50	200 - 250	55.5 - 69.4	1450	75	5.5	70 - 75
100ZM - 45	40 - 50	150 - 180	41.6 - 50	1450	55	5	50 - 60
100ZM - 70	65 - 75	200 - 250	55.5 - 69.4	1450	110	5.5	55 - 60
100ZM - 90	80 - 90	120 - 180	33.3 - 50	1450	110	5.5	50 - 55
150ZM - 32	32 - 36	300 - 320	83.3 - 89	980	75	5.5	70 - 73
150ZM - 32A	32 - 36	420 - 450	116.6 - 125	980	90	5	70 - 73
150ZM - 50	50 - 60	250 - 320	69.4 - 89	980	90	5	67 - 70
150ZM - 50A	50 - 60	400 - 450	111.1 - 125	980	132	5	67 - 70
150ZM - 80	90 - 75	250 - 300	69.4 - 85	980	132	5	60 - 62
150ZM - 100	90 - 105	400 - 450	116.6 - 125	980	250	5	60 - 62
200ZM - 45	40 - 50	480 - 550	133.3 - 152.7	980	132	5.5	70 - 75
200ZM - 45A	40 - 50	680 - 750	188.9 - 208.3	980	185	5.5	75 - 78
200ZM - 75	70 - 80	450 - 550	125 - 153.7	980	250	5.5	70 - 75
200ZM - 75A	70 - 80	650 - 750	180.5 - 208.3	980	300	5.5	70 - 75
200ZM - 95	100 - 90	480 - 580	133.3 - 161.1	980	320	5.5	55 - 58
250ZM - 50	50 - 60	650 - 700	180.5 - 194	980	185	5.5	76 - 80
250ZM - 50A	50 - 60	950 - 1000	263.9 - 277.7	980	260	5.5	75 - 80
250ZM - 85	50 - 60	630 - 700	175 - 194.4	980	320	5.5	70 - 72
250ZM - 85A	80 - 90	930 - 1000	258.3 - 277.7	980	450	5.5	70 - 73
250ZM - 100	90 - 100	1000 - 1200	277.7 - 333.3	980	560	5.5	60 - 65
300ZM - 40	40 - 45	1100 - 1200	305.5 - 333.3	730	270	4	75 - 80
300ZM - 60	60 - 67	1500 - 1600	416.7 - 444.4	730	480	4.5	75 - 80

D、DG型多级离心泵

D、DG Type Multi-stages Centrifugal Pump



概述

D、DG型多级离心泵是卧式单吸多级节段式离心泵。根据泵用材料的不同可以输送清水(含杂质质量小于1%)及物理性质类似清水的其它腐蚀性液体。普通材料D、DG型泵输送的介质温度不大80℃,适用于矿山和工厂、城市供水;特殊材料D、DG型泵适用于石油、化工、电力、冶金、制药、环保等行业输送中性或有腐蚀性、清洁或含少量固体颗粒的液体。

General

Type D、DG multi-grade pump is a horizontal single-absorbing multi-section centrifuge one which to transfer clean water (impurity less than 1%) and the other corrosive liquid whose physic features is similar to clean water according to different raw materials. D、DG type pump made by common materials is only to transfer the medias whose temp. no more than 80℃, and one by special materials, the neutral or little corrosive liquid, or clean or little particle's one in the line of chemical, pharmaceutical, petrol, metallurgy, and environment, etc.

D、DG 型泵性能参数表 D、DG Type Pump Table of Performance

型号 Type	转速 Speed (r/min)	流量 Capacity		扬程 Head (m)	效率 Efficiency η(%)	功率 Power (kw)		必需汽 蚀余量 (NPSH) _r (m)	型号 Type	转速 Speed (r/min)	流量 Capacity		扬程 Head (m)	效率 Efficiency η(%)	功率 Power (kw)		必需汽 蚀余量 (NPSH) _r (m)
		m ³ /h	l/s			轴功率 shaft power	电机功率 motor power				m ³ /h	l/s			轴功率 shaft power	电机功率 motor power	
D、DG6-25×3	2950	6.3	1.75	75	45	2.86	5.5	2.0	D、DG12-25×12	2950	12.5	3.47	225	54	14.18	18.5	2.0
D、DG6-25×4	2950	6.3	1.75	100	45	3.81	7.5	2.0	D、DG12-25×10	2950	12.5	3.47	250	54	15.76	22	2.0
D、DG6-25×5	2950	6.3	1.75	125	45	4.77	7.5	2.0	D、DG12-25×11	2950	12.5	3.47	275	54	17.34	22	2.0
D、DG6-25×6	2950	6.3	1.75	150	45	5.72	11	2.0	D、DG12-25×12	2950	12.5	3.47	300	54	18.9	30	2.0
D、DG6-25×7	2950	6.3	1.75	175	45	6.67	11	2.0	D、DG25-30×3	2950	25	6.94	90	62	9.88	15	2.2
D、DG6-25×8	2950	6.3	1.75	200	45	7.63	15	2.0	D、DG25-30×4	2950	25	6.94	120	62	13.1	18.5	2.2
D、DG6-25×9	2950	6.3	1.75	225	45	8.52	15	2.0	D、DG25-30×5	2950	25	6.94	150	62	16.47	22	2.2
D、DG6-25×10	2950	6.3	1.75	250	45	9.53	18.5	2.0	D、DG25-30×6	2950	25	6.94	180	62	19.77	30	2.2
D、DG6-25×11	2950	6.3	1.75	275	45	10.5	18.5	2.0	D、DG25-30×7	2950	25	6.94	210	62	23.1	30	2.2
D、DG6-25×12	2950	6.3	1.75	300	45	11.44	18.5	2.0	D、DG25-30×8	2950	25	6.94	240	62	26.4	37	2.2
D、DG12-25×3	2950	12.5	3.47	75	54	47.73	7.5	2.0	D、DG25-30×9	2950	25	6.94	270	62	29.65	37	2.2
D、DG12-25×4	2950	12.5	3.47	100	54	6.30	11	2.0	D、DG25-30×10	2950	25	6.94	300	62	32.9	45	2.2
D、DG12-25×5	2950	12.5	3.47	125	54	7.88	11	2.0	D、DG46-30×3	2950	46	12.8	90	71	16.11	22	3.0
D、DG12-25×6	2950	12.5	3.47	150	54	9.46	15	2.0	D、DG46-30×4	2950	46	12.8	120	70	21.48	30	3.0
D、DG12-25×7	2950	12.5	3.47	175	54	11.0	15	2.0	D、DG46-30×5	2950	46	12.8	150	70	26.85	37	3.0
D、DG12-25×8	2950	12.5	3.47	200	54	12.51	18.5	2.0	D、DG46-30×6	2950	46	12.8	180	70	32.21	37	3.0

D、DG 型泵续表 1 D、DG Type Pump Table 1 (continued)

型号 Type	转速 Speed (r/min)	流量 Capacity		扬程 Head (m)	效率 Efficiency η(%)	功率 Power (kw)		必需汽 蚀余量 (NPSH) _r (m)	型号 Type	转速 Speed (r/min)	流量 Capacity		扬程 Head (m)	效率 Efficiency η(%)	功率 Power (kw)		必需汽 蚀余量 (NPSH) _r (m)
		m ³ /h	l/s			轴功率 shaft power	电机功率 motor power				m ³ /h	l/s			轴功率 shaft power	电机功率 motor power	
D、DG46-30×7	2950	46	12.8	210	70	37.58	45	3.0	D、DG155-30×9	2950	155	43	270	77	147.78	180	3.2
D、DG46-30×8	2950	46	12.8	240	70	42.95	55	3.0	D、DG155-30×10	2950	155	43	300	77	164.20	225	3.2
D、DG46-30×9	2950	46	12.8	270	70	48.32	55	3.0	D、DG155-67×3	2950	155	43	201	74	114.7	132	5.0
D、DG46-30×10	2950	46	12.8	300	70	53.69	75	3.0	D、DG155-67×4	2950	155	43	268	74	152.9	185	5.0
D、DG46-50×3	2950	46	12.8	150	63	29.83	37	2.8	D、DG155-67×5	2950	155	43	335	74	191.1	220	5.0
D、DG46-50×4	2950	46	12.8	200	63	39.77	45	2.8	D、DG155-67×6	2950	155	43	402	74	229.3	280	5.0
D、DG46-50×5	2950	46	12.8	250	63	49.71	55	2.8	D、DG155-67×7	2950	155	43	469	74	267.5	350	5.0
D、DG46-50×6	2950	46	12.8	300	63	59.65	75	2.8	D、DG155-67×8	2950	155	43	536	74	305.7	350	5.0
D、DG46-50×7	2950	46	12.8	350	63	69.6	90	2.8	D、DG155-67×9	2950	155	43	603	74	344	440	5.0
D、DG46-50×8	2950	46	12.8	400	63	79.54	90	2.8	D、DG280-43×2	1480	280	77.8	86	77	85.17	110	4.0
D、DG46-50×9	2950	46	12.8	450	63	69.48	110	2.8	D、DG280-43×3	1480	280	77.8	129	77	127.7	150	4.0
D、DG46-50×10	2950	46	12.8	500	63	99.42	110	2.8	D、DG280-43×4	1480	280	77.8	172	77	170.3	230	4.0
D、DG46-50×11	2950	46	12.8	550	63	109.36	132	2.8	D、DG280-43×5	1480	280	77.8	215	77	212.9	300	4.0
D、DG46-50×12	2950	46	12.8	600	63	119.3	132	2.8	D、DG280-43×6	1480	280	77.8	258	77	255.5	300	4.0
D、DG85-45×2	2950	85	23.6	90	72	28.94	37	4.2	D、DG280-43×7	1480	280	77.8	301	77	298.1	350	4.0
D、DG85-45×3	2950	85	23.6	135	72	43.4	55	4.2	D、DG280-43×8	1480	280	77.8	344	77	304.7	410	4.0
D、DG85-45×4	2950	85	23.6	180	72	57.87	75	4.2	D、DG280-43×9	1480	280	77.8	387	77	383.2	430	4.0
D、DG85-45×5	2950	85	23.6	225	72	72.34	90	4.2	D、DG280-65×6	1480	280	77.8	390	73	407.4	500	3.0
D、DG85-45×6	2950	85	23.6	270	72	86.81	110	4.2	D、DG280-65×7	1480	280	77.8	455	73	475.3	680	3.0
D、DG85-45×7	2950	85	23.6	315	72	101.3	132	4.2	D、DG280-65×8	1480	280	77.8	520	73	543.2	680	3.0
D、DG85-45×8	2950	85	23.6	360	72	115.7	132	4.2	D、DG280-65×9	1480	280	77.8	585	73	611.1	850	3.0
D、DG85-45×9	2950	85	23.6	405	72	130.2	160	4.2	D、DG280-65×10	1480	280	77.8	650	73	579	850	3.0
D、DG155-30×2	2950	155	43	60	77	32.84	55	3.2	D、DG450-60×3	1480	450	125	180	79	229.2	360	4.2
D、DG155-30×3	2950	155	43	90	77	49.26	75	3.2	D、DG450-60×4	1480	450	125	240	79	372.3	500	4.2
D、DG155-30×4	2950	155	43	120	77	65.68	90	3.2	D、DG450-60×5	1480	450	125	300	79	465.4	680	4.2
D、DG155-30×5	2950	155	43	150	77	82.10	110	3.2	D、DG450-60×6	1480	450	125	360	79	558.5	680	4.2
D、DG155-30×6	2950	155	43	180	77	98.52	132	3.2	D、DG450-60×7	1480	450	125	420	79	651.5	850	4.2
D、DG155-30×7	2950	155	43	210	77	114.97	160	3.2	D、DG450-60×8	1480	450	125	480	79	744.6	850	4.2
D、DG155-30×8	2950	155	43	240	77	131.36	180	3.2	D、DG450-60×9	1480	450	125	540	79	837.7	1050	4.2
									D、DG450-60×10	1480	450	125	600	79	930.8	1050	4.2



FSB、FSB-L系列氟塑料泵
FSB、FSB-L Series Fluorin Plastic Enhanced Alloy Submersible Pump

概述

FSB 泵采用特种泵工艺加工制造。适合于在 $-85^{\circ}\text{C} \sim 200^{\circ}\text{C}$ 条件下, 长期输送任意浓度的任意介质酸、氧化剂及腐蚀性介质。广泛应用于化工、石油、制药、农药、染料、油漆、冶炼、造纸、电镀、电力、食品等行业。

过流部分全部采用氟合金 (聚四氟乙烯和聚全氟乙丙烯等多种氟材料经过合理配方) 模压、加工而成, 具有较强的耐腐蚀性、机械强度高、不老化、无毒素分解等优点。

FSB 系列产品的生产、制造及验收规范, 严格执行了有关标准规定, 并台检测, 备案待查。其机械密封由英国格兰公司与国内联合制造, 性能十分可靠, 维修方便, 节约能源, 是杜绝跑、冒、滴、漏建设文明工厂的理想防腐输送设备。

General

FSB pump is made according to special pump arts and crafts. It transports lengthly random density acid, oxidation and corrosive medium. It is widely used in chemical, petro - chemical, medicine, pesticide, dyeing, painting, metallurgy, paper making, plating, power station, food industry.

The parts which liquids passed use fluorin alloy, which have the advantages of high corrosive, strong mechanism, no aged, no poison decomposed.

The production, making and inspection of FSB series products strictly carry out relate standard, test every pump and remarked. Mechanical seal is made by Gelan company, performance reliable, repair convenience, power saving. It is perfect corrosive transporting equipment because of no emitting, dropping, leakage.

FSB、FSB - L 型泵工作性能表 FSB、FSB - L Type Pump Table of Performance

规格型号 Model	流量 m ³ /h Capacity	扬程 m Head	口径 caliber		配用电机 KW Motor power	转速 r/min Speed	吸上高度 m Vacuum high	效率 % Efficiency
			吸入 mm Suck	吐出 mm Spit out				
25FSB - 10L	1.5	10	25	20	1.5	2900	6	29
25FSB - 18L	3.6	18	25	20	2.2 - 3	2900	6	27
40FSB - 15L	5	15	40	32	3	2900	6	40
40FSB - 20L	10	20	40	32	3	2900	6	42
40FSB - 30L	10	30	40	32	3 - 4	2900	6	38
40FSB - 40L	10	40	40	32	4 - 5.5	2900	5.5	35
40FSB - 50L	10	50	40	32	5.5 - 7.5	2900	5	33
50FSB - 20L	15	20	50	40	3 - 4	2900	6	51
50FSB - 25L	15	25	50	40	4	2900	6	49
50FSB - 30L	15	30	50	40	4	2900	6	44.5
50FSB - 40L	15	40	50	32	4.5 - 5.5	2900	5.5	35
50FSB - 50L	15	50	50	32	5.5 - 7.5	2900	5.5	33
50FSB - 63L	15	63	50	32	11	2900	5.5	30
65FSB - 32L	29	32	65	50	5.5	2900	6	57
65FSB - 40L	29	40	65	40	11	2900	5.5	53
65FSB - 50L	29	50	65	40	15	2900	5.5	46
65FSB - 64L	29	64	65	50	15 - 18.5	2900	5.5	44
80FSB - 20L	50	20	80	65	5.5	2900	6	69
80FSB - 30L	50	30	80	65	7.5	2900	5.5	64
80FSB - 34L	50	34	80	65	11	2900	5.5	64
80FSB - 40L	50	40	80	50	11 - 15	2900	5.5	60
80FSB - 50L	50	50	80	50	15 - 18.5	2900	6	53
80FSB - 55L	50	55	80	50	15 - 18.5	2900	5.5	47
80FSB - 80L	50	80	80	50	30 - 37	2900	5.5	36
100FSB - 32L	100	32	100	80	18.5 - 22	2900	5.5	70
100FSB - 40L	100	40	100	80	18.5 - 22	2900	5.5	70
100FSB - 50L	100	50	100	65	22 - 30	2900	5.5	62
125FSB - 32L	125	32	125	80	22	2900	5.5	72
125FSB - 40L	125	40	125	80	30	2900	5.5	70.9
125FSB - 50L	125	50	125	100	37	2900	5.5	64
150FSB - 22L	190	22	150	100	18.5	1450	6	77
150FSB - 35L	190	35	150	100	30	1450	5	75
150FSB - 42L	190	42	150	100	55	1450	4.5	70
200FSB - 20L	200	20	200	150	37	1450	3	81
200FSB - 32L	200	32	200	150	55	1450	3	79

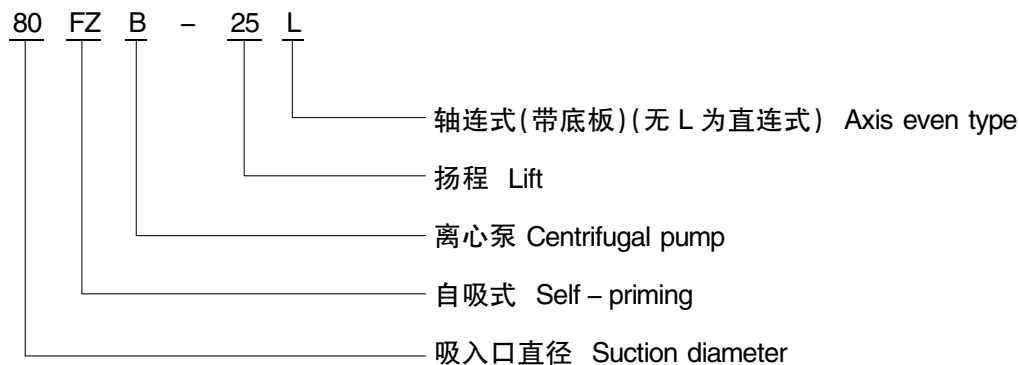


概述

FZB□-□-□、FZB□-□-□(L)型氟塑料合金自吸泵式耐腐蚀离心泵，是我公司研制开发的一种集多种特优点高新技术的产品，改变了原传统式用止回阀受到输送介质的限制和止回阀易损坏的缺点，提高了自吸时间及自吸高度，外型美观、结构简单、安装拆卸方便、维修率低，使用寿命长，输送介质范围广。

泵的过流部位采用 F50-1、F50-2 两种氟塑料合金制造，具有特强的耐腐蚀性和抗氧化性，对目前已知的化学介质都能使用。使用温度可在 -40℃ + 120℃ 范围内使用。

型号意义



General

FZB□-□-□ and FZB□-□-□(L) type fluoroplastic alloy self-priming corrosion resistance centrifugal pump are high and new-technology products researched and developed by our company, which avoid the deflections that the traditional check valve confined by the conveying meditional and easy damage of flapper, it reduces the self-priming time and improves the self-priming height, with attractive appearance, simple structure, easy for installation and dismounting, low maintenance cost, and long service life.

The parts of pump where liquid is flowing by are fabricated with F50-1 or F50-2 fluoroplastic alloy, with special strong corrosion resistance and inoxidizability, suit for existing chemical mediator, and the working temperature scope is 40℃ + 120℃.

性能参数表 Table of Property Parameters

规格型号 Type	流量 Capacity (m ³ /h)	扬程 Head (m)	口径 Caliber		配用电机 Matched motor (KW)	转速 Speed (r/min)	效率 Efficiency %
			吸入 Suck mm	吐出 Spit out mm			
25FZB-18L	1.5	10	25	20	2.2	2900	29
40FZB-25L	8	25	40	32	2.2	2900	52
40FZB-30L	8	30	40	32	3	2900	49
50FZB-25L	12	25	50	40	3	2900	50
50FZB-30L	12	30	50	40	4	2900	49
65FZB-25L	25	25	65	50	5.5	2900	58
65FZB-30L	25	30	65	50	7.5	2900	56.8
80FZB-25L	50	25	80	65	7.5	2900	60
80FZB-30L	50	03	80	65	7.5	2900	59.9
100FZB-30L	100	30	100	80	15	2900	58
100FZB-40L	100	40	100	80	18.5	2900	59



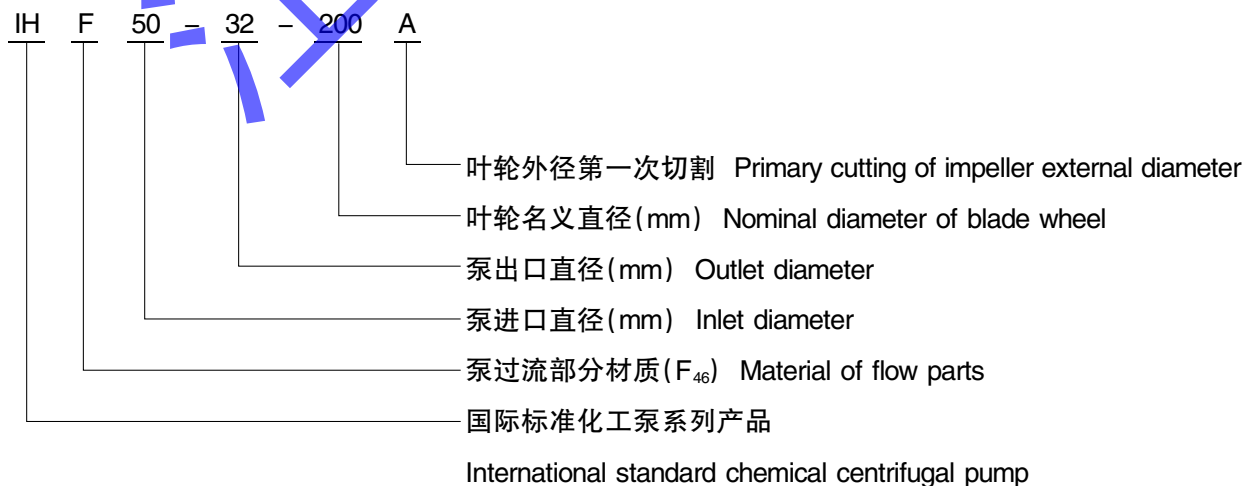
IHF Series Fluorin Plastic Chemical Centrifugal Pump

概述

IHF 型衬氟化工离心泵为单级单吸式离心泵，参照国际标准 ISO2858 标准设计。介质过流部分的材料采用 FEP、PVDF 等材料。

具有耐高温强腐蚀性能，广泛适用于化工、制药、石油、冶金、冶炼、电力、电镀、印染、农药、造纸、食品、化纤等行业在 $-85^{\circ}\text{C} \sim 200^{\circ}\text{C}$ 温度条件下长期输送任意浓度的各种酸、液碱、强氧化剂等多种腐蚀性介质。

型号意义



General

IHF fluorin plastic chemical centrifugal pump is single-stage single-suction pump, it is designed according to standard of ISO2858. The parts where liquids passed use FEP、PVDF material. It endures high temperature and corrosive, and widely used in chemical, medicine, petrochemical, metallurgy, power station, plating, printing and dyeing, pesticide, paper making, food industry, synthetic fibre industry. It transports random density acid, alkali and strong oxidant corrosive mediums whose temperature is from $-85^{\circ}\text{C} \sim 200^{\circ}\text{C}$.

IHF 型泵工作性能表 IHF Type Pump Table of Performance

型号 Model	流量 Q Capacity (m ³ /h)	扬程 Head (m)	轴功率 Shaft power (kw)	效率 Efficiency (%)	转速 Speed (r.p.m)	必需汽蚀余量 NPSHr (m)	配带功率* Motor power (kw)
IHF32-25-140	6	20	1.36	24	2900	2.0	2.2
	3	5	0.17	24	1450	2.0	0.75
IHF32-25-160	6	33	2.4	22.45	2900	2.0	3.0
	3	8	0.296	22	1450	2.0	0.75
IHF50-32-125	12.5	20	1.89	36	2900	2.0	3
	6.3	5	0.23	37	1450	2.0	0.75
IHF50-32-160	12.5	32	2.83	38	2900	2.0	4
	6.3	8	0.35	39	1450	2.0	0.75
IHF50-32-200	6	60	2.5	39	2900	3	7.5
	12.5	50	4.25	40	2900	3	11
IHF65-50-125	25	20	3.24	42	2900	2.0	4
	12.5	5	1.06	40	1450	2.0	1.5
IHF65-50-160	25	32	4.27	51	2900	2.0	5.5
	12.5	8	0.533	51	1450	2.0	1.5
IHF65-50-200	25	50	7.08	48	2900	2.0	7.5
	12.5	12.5	0.96	44	1450	2.0	1.5
IHF65-50-250	25	80	11.8	46	2900	2.0	15
	12.5	20	1.74	39	1450	2.0	2.2
IHF80-65-125	50	20	5.2	52	2900	2.3	7.5
	25	5	0.68	50	1450	2.3	1.5
IHF80-65-160	50	32	8.64	51	2900	2.3	11
	25	8	1.08	50	1450	2.3	3
IHF80-65-200	50	50	10.8	63	2900	2.5	11
	25	12.5	1.49	57	1450	2.0	2.2
IHF80-65-250	50	80	21.77	50	2900	2.5	22
	25	20	2.83	48	1450	2.5	4
IHF100-80-160	100	32	14.32	61	2900	4.3	15
	50	8	1.85	59	1450	3.4	3
IHF100-80-200	100	50	18.9	72	2900	3.9	22
	50	12.5	2.5	68	1450	2.5	4
IHF125-100-200	200	50	38.9	70	2900	5	45
	100	12.5	5.0	68	1450	3.0	7.5
IHF125-100-315	120	32	18	58	1450	3.0	22
IHF150-125-250	200	20	15.6	70	1450	3.0	18.5
IHF150-125-315	200	32	25.6	68	1450	3.0	30
IHF200-150-250	400	20	36.3	60	1450	5	37
IHF200-150-315	350	100	198.5	48	2900	5	200

配套功率按介质比重为 1kg/dm³ 计算 The matched power is calculated on the basis of medium with specific weight 1kg/dm³.



CQF(B)系列磁力驱动泵
CQF(B) Magnetic Drive Pump

概述

CQB 型小型磁力驱动泵是依靠磁力耦合器来传递动力的节能新产品。它取消了传统的轴封和联轴器,使复杂的动密封变成了可靠的静密封,消灭了轴填充的跑、冒、滴、漏现象,广泛应用于石油化工、食品、制药、染料、造纸、环保、冶金、电力、化工等行业。

根据用户输送介质不同的要求,我公司生产的磁力驱动泵有三种形式。

(1) CQF 系列采用全氟塑料增强合金制造(功率 2.2KW 以下)。

(2) CQB 系列接触液体的过流部件均用不锈钢制造。(功率在 37KW 以下)。

(3) CIF 泵体采用氟塑料增强合金衬里,叶轮、泵盖等采用氟塑料增强合金压制(功率在 37KW 以下)。

这三种形式的泵由于采用了不同的材料,从而扩大了泵的使用。具有良好的耐硫酸磷酸、氢氟酸、盐酸和硝酸等溶液。该系列泵是按国际标准 ISO2858 设计,各另部件都有足够的安全系数,故其能满足高压和大流量的要求,最大流量 $50\text{m}^3/\text{h}$,最高扬程 80m。

General

CQB magnetic drive pump is new power – saving product which is depended on magnetic coupling to transport power. It canceled traditional shaft seal and coupling, which makes complex dynamic seal to reliable static seal, avoids emitting, dropping and leakage. It is widely used in petro – chemical, food industry, medicine, dyeing, paper making, environment, metallurgy, power, chemical industry.

Our magnetic drive pump has three types according to the mediums.

(1) CQF series pump is made up of fluorin plastic enhanced alloy (power is below 2.2kw).

(2) The parts contacted with liquids of CQB series pump is made up of stainless steel (power is below 37kw).

(3) CIF Pump casing is made up of lined fluorin plastic enhanced alloy, impeller and pump cover are made up of pressed fluorin plastic enhanced alloy. (power is below 37kw).

The usage of pump is widen because of different materials. It can well resist vitriol, phosphate, hydrofluoric acid, muriatic acid, hitric acid. This series pump is designed according to international standard of ISO2858, every spare parts have enough safe coefficient, so it can satisfy high pressure and high capacity, max. capacity is $50\text{m}^3/\text{h}$, max. head is 80m.

CQB 型泵性能参数表 CQB Type Pump Table of Performance

规格型号	流量 m ³ /h	扬程 m	汽蚀余量 (NPSH)r (m)	转速N r/min	效率 η %	电机功率 kw
CQF32-20-125	3.2	20	5.0	2900	35	1.1
CQF32-20-160	3.2	32	3.5	2900	35	1.5
CQF40-25-105	6.3	12.5	6.0	2900	45	1.1
CQF40-25-125	6.3	20	5.0	2900	42	2.2
CQF40-25-160	6.3	32		2900	35	3
CQF40-25-200	6.3	50		2900	28	5.5
CQF50-40-85	12.5	8		2900	56	1.1
CQF50-32-105	12.5	12.5		2900	54	2.2
CQF50-32-125	12.5	20	3.5	2900	50	3
CQF50-32-160	12.5	32		2900	46	4
CQF50-32-200	12.5	50		2900	39	7.5
CQF50-32-250	12.5	80		2900	30	15
CQF65-50-125	25	20		2900	58	5.5
CQF65-50-160	25	32		2900	56	7.5
CQF65-40-200	25	50		2900	49	15
CQF65-40-250	25	80		2900	46	22
CQF80-65-125	50	20		2900	66	7.5
CQF80-65-160	50	32		2900	64	15
CQF80-50-200	50	50	4.0	2900	60	18.5
CQF80-50-250	50	80		2900	55	30
CQF100-80-125	100	32		2900	72	11
CQF100-80-160	100	20		2900	70	18.5
CQF100-65-200	100	50		2900	68	30
CQF100-65-200	100	80		2900	64	37



102、103塑料耐腐蚀离心泵、自吸泵
102、103 Wearable Plastic Centrifugal Pump, Self-priming Pump

概述

S 系列工程塑料耐磨离心泵、自吸泵，材质有聚丙烯和 ABS 泵轴采用注塑工艺，介质不与金属接触，无毒无污染、重量轻、体积小、耗能少，使用方便等优点，适合输送不含固体颗粒的腐蚀性液体或非腐蚀性液体，在长期使用实践中，深受各界用户欢迎。

General

S Series wearable plastic centrifugal pump, self-priming pump, pump shaft materials are polypropylene and ABS using injection molding process, the media is not in contact with the metal, toxic pollution, light weight, small size, low energy consumption, ease of use for transporting corrosive liquids without solid particles or non-corrosive liquid, long-term use in practice, by all users.

主要性能参数表 Operating property table

型号 Model	流量 Capacity m ³ /h	扬程 Head m	配套电机 Matched motor KW	转速 Speed r/min	进出口径 Inlet outlet diameter mm	吸程 Suction
103离心centrifugal 32FS-11	4	11	0.75	2900	32×25	3
102离心centrifugal 40FS-20	8.5	20	1.5	2900	40×32	5
101离心centrifugal 50FS-25	20	25	3	2900	50×40	5
103自吸self-priming 32FSZ-11	4	11	0.75	2900	32×25	3
102自吸self-priming 40FSZ-22A	8.5	20	1.5	2900	40×32	5

泵阀系列产品

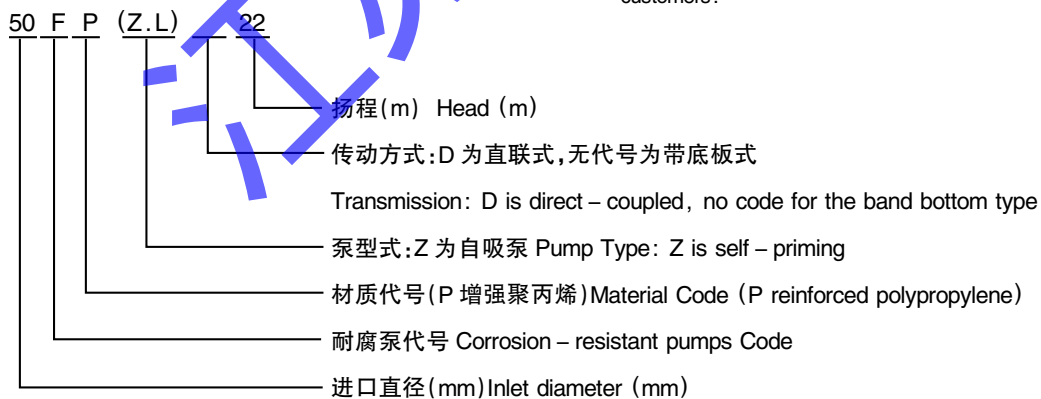
PUMP AND VALVE SERIES PRODUCTS



概述

耐腐离心泵、自吸泵、管道泵是本公司自行研制的高效节能耐腐泵。介质过流部分采用玻纤增强聚丙烯(RPP)注塑成形,结构紧凑,机械强度高,耐腐性能优异,尺寸稳定等特点。RPP材质:非极性、无污毒、耐一般酸碱盐类,工作温度在 -14°C - 70°C 。泵的性能可靠,高效低耗,运转平稳,安装及维修保养方便,总体技术水平处于国内领先,故深受广大客户信赖。

型号说明



General

Corrosion-resistant centrifugal pumps, self-priming pump, pipeline pump is the company's self-developed energy-efficient corrosion-resistant pumps. Medium flow part of glass fiber reinforced polypropylene (RPP) injection molding, compact structure, high mechanical strength, excellent corrosion resistance, dimensional stability and other characteristics. RPP Material: non-polar, non-toxic pollution, anti-acid and alkali salts in general, the working temperature -14°C - 70°C . Pump performance, reliable, efficient and low consumption, stable operation, easy installation and maintenance, the overall level of the leading domestic technology, it is trusted by our customers.

主要性能参数表 Operating property table

A、离心泵性能参数表

型号规格 Model	流量 Capacity m ³ /h	扬程 Head m	配套电机 Matched motor kw	转速 Speed r/min	效率 Efficiency %	进出口径 Inlet outlet diameter mm	吸程 Suction m
25FP - 10(L)	3.5	10	0.55	2900	46	25 × 25	5
32FP - 11(L)	4	11	0.75	2900	46	32 × 25	5
40FP - 18(L)	12	18	1.5	2900	54.43	40 × 32	6
40FP - 25(L)	18	25	3	2900	55.63	40 × 32	6
40FP - 32(L)	10	32	3	2900	54.43	40 × 32	6
50FP - 22(L)	18	22	2.2	2900	51.74	50 × 40	6
50FP - 25(L)	25	25	3	2900	52.3	50 × 40	6
50FP - 28(L)	25	28	4	2900	51.74	50 × 40	6
50FP - 32(L)	13	32	4	2900	53.63	50 × 40	6
65FP - 26(L)	25	26	4	2900	64.6	65 × 50	4
65FP - 30(L)	29	30	5.5	2900	68.2	65 × 50	4
80FP - 30(L)	45	30	5.5	2900	68.8	80 × 65	4
80FP - 32(L)	50	32	7.5	2900	69.9	80 × 65	4
80FP - 36(L)	40	36	7.5	2900	69.9	80 × 65	4
100FP - 20(L)	100	20	11	2900	75	100 × 80	4
100FP - 32(L)	100	32	15	2900	76	100 × 80	4
100FP - 40(L)	100	40	18.5	2900	76.2	100 × 80	4

B、管道泵性能参数表

型号规格 Model	流量 Capacity m ³ /h	扬程 Head m	转速 Speed r/min	效率 Efficiency %	吸程 Suction m	进出口径 Inlet outlet diameter mm	配套电机 Matched motor kw
25FPL - 11	4	11	2900	46	6	25 × 25	0.55
40FPL - 18	12	18	2900	54.43	6	40 × 40	1.5
50FPL - 22	18	22	2900	51.74	6	50 × 50	2.2

C、自吸泵性能参数表

型号规格 Model	流量 Capacity m ³ /h	扬程 Head m	自吸高度 Suction height m	转速 Speed r/min	自吸时间 Suction time s/m	进出口径 Inlet outlet diameter mm		功率 Power kw
						进Inlet	出Outlet	
25FPZ - 10(L)	3	10	3	2900	70	25	25	0.55
32FPZ - 11(L)	3.5	11	3	2900	70	32	25	0.75
40FPZ - 18(L)	10	18	3	2900	70	40	32	1.5
40FPZ - 25(L)	18	25	4	2900	55	40	32	3
50FPZ - 22(L)	16	22	3	2900	65	50	40	2.2
50FPZ - 25(L)	20	25	4	2900	52	50	40	3
50FPZ - 28(L)	20	28	4	2900	50	50	40	4
65FPZ - 26(L)	29	26	4	2900	53	65	50	4
65ZPZ - 30(L)	29	30	4	2900	55	65	50	5.5
80FPZ - 30(L)	40	30	4	2900	55	80	65	5.5
80FPZ - 32(L)	45	32	4	2900	50	80	65	7.5



概述

SG 型管道式离心泵又称 SG 型单级单吸离心立式泵,其额定性能点符合 ISO2858 国际标准,采用最新国家行业标准 JB/T6878.1-93,管道式离心泵型式与基本参数 JB/T6878.2-93 管道式离心泵技术条件,其效率平均上升 3~5%,是取代原 SG 型管道泵的节能型新产品,最高工作压力不大于 1.0MPa,吸入口压力不大于 0.2MPa。

除上表所列材质外,允许用户选用其它所需适合本系列泵生产的材质,材料及其代号原则上应符合 GB2100-80 标准的规定。对国家没有规定代号的材质可采用国际通用的材料代号或国内公认的标准代号(如行业或本企业的规定)。

General

SG series inline centrifugal pump is also called SG series single-stage and single-suction vertical centrifugal pump, whose performance accords with International Standard of ISO2825, and is designed according to latest National Industry Standard of JB/T6878.1-93. Its efficiency is average higher 3-5% compared with the parameter of JB/T6878.2-93. It is the power saving new product replacing former SG series inline pump. Its max. operating pressure is no higher than 1.0MPa. Suction pressure is no higher than 0.2MPa.

Except above materials, other applied materials and code selected by customers must accord to Standard GB2100-80. Material code that is not specified by National Standard may use international general material code or nation widely regarded material code (such as industry or our company specification).

SG、ISG 型泵性能参数表 SG、ISG Type Pump Table of Performance

型号 model	流量 Capacity		扬程 head m	效率 efficiency η%	转速 speed r/min	电机功率 motor power KW	允许气蚀余量 NPSH m	重量 weight kg	型号 model	流量 Capacity		扬程 head m	效率 efficiency η%	转速 speed r/min	电机功率 motor power KW	允许气蚀余量 NPSH m	重量 weight kg
	m ³ /h	L/s								m ³ /h	L/s						
32SG-20	3.2	1.39	20	38	2900	0.75	2.5	29	50SG-50	12.5	3.47	50	46	2900	5.5	2.5	91
32SG-20A	2.9	1.25	16	37	2900	0.75	2.5	29	50SG-50A	11	3.05	44	43	2900	4.0	2.5	66
40SG-20	6.3	1.75	20	46	2900	1.1	2.5	33	50SG-50B	10	2.78	88	44	2900	3.0	2.5	57
40SG-20A	5.5	1.53	16	44	2900	0.75	2.5	33	50SG-80	12.5	3.47	80	36	2900	11	2.5	137
40SG-32	6.3	1.75	32	40	2900	2.2	2.5	44	50SG-80A	11	3.05	70	34	2900	7.5	2.5	92
40SG-32A	5.5	1.53	28	38	2900	1.5	2.5	40	50SG-80B	10	2.78	60	34	2900	5.5	2.5	85
40SG-50	6.3	1.75	50	33	2900	4.0	2.5	71	50SG-12.5(I)	25	6.94	12.5	69	2900	1.5	3.0	40
40SG-50A	5.5	1.53	44	31	2900	3.0	2.5	62	50SG-12.5(A)	22	6.11	10	68	2900	1.1	3.0	36
40SG-50B	5	1.39	38	29	2900	2.2	2.5	53	50SG-20(I)	25	6.94	20	67	2900	3.0	3.0	56
40SG-80	6.3	1.75	80	27.5	2900	7.5	2.5	98	50SG-20(I)A	22	6.11	16	63	2900	2.2	3.0	47
40SG-80A	5.5	1.53	70	26	2900	5.5	2.5	91	50SG-32(I)	25	6.94	32	63	2900	4.0	3.0	70
40SG-80B	5	1.39	60	25	2900	4.0	2.5	65	50SG-32(I)A	22	6.11	28	59	2900	3.0	3.0	61
40SG-12.5(I)	12.5	3.47	12.5	62	2900	1.1	2.5	36	50SG-32(I)B	20	5.56	24	61	2900	2.2	3.0	52
40SG-12.5(I)A	11	3.05	10	60	2900	0.75	2.5	31	50SG-50(I)	25	6.94	50	57	2900	7.5	3.0	95
40SG-20(I)	12.5	3.47	20	58	2900	1.5	2.5	32	50SG-50(I)A	22	6.11	44.2	55	2900	5.5	3.0	88
40SG-20(I)A	11	3.05	16	56	2900	1.1	2.5	32	50SG-50(I)B	20	5.56	38	55	2900	4.0	3.0	63
40SG-32(I)	12.5	3.47	32	52	2900	3.0	2.5	55	50SG-80(I)	25	6.94	80	50	2900	15	3.0	165
40SG-32(I)A	11	3.05	28	48	2900	2.2	2.5	46	50SG-80(I)A	22	6.11	70	47	2900	11	3.0	155
40SG-32(I)B	10	2.78	24	50	2900	1.5	2.5	42	50SG-80(I)B	20	5.56	60	50	2900	7.5	3.0	110
40SG-50(I)	12.5	3.47	50	46	2900	5.5	2.5	90	65SG-12.5	25	6.94	12.5	69	2900	1.5	3.0	41
40SG-50(I)A	11	3.05	44	43	2900	4.0	2.5	65	65SG-12.5A	22	6.11	10	68	2900	1.1	3.0	37
40SG-50(I)B	10	2.78	38	44	2900	3.0	2.5	56	65SG-20	25	6.94	20	67	2900	3.0	3.0	56
40SG-80(I)	12.5	3.47	80	36	2900	11	2.5	135	65SG-20A	22	6.11	16	63	2900	2.2	3.0	47
40SG-80(I)A	11	3.05	70	34	2900	7.5	2.5	90	65SG-32	25	6.94	32	63	2900	4.5	3.0	71
40SG-80(I)B	10	2.78	60	34	2900	5.5	2.5	83	65SG-32A	22	6.11	28	59	2900	3.0	3.0	62
50SG-12.5	12.5	3.47	12.5	62	2900	1.1	2.5	35	65SG-32B	20	5.56	24	61	2900	2.2	3.0	53
50SG-20	12.5	3.47	20	58	2900	1.2	2.5	38	65SG-50	25	6.94	50	57	2900	7.5	3.0	97
50SG-20A	11	3.05	16	53	2900	1.1	2.5	34	65SG-50A	22	6.11	44.2	55	2900	5.5	3.0	90
50SG-32	12.5	3.47	32	52	2900	3.0	2.5	57	65SG-50B	20	5.56	38	55	2900	4.0	3.0	65
50SG-32A	11	3.05	28	48	2900	2.2	2.5	48	65SG-80	25	6.94	80	50	2900	15	3.0	166
50SG-32B	10	2.78	24	50	2900	1.5	2.5	44	65SG-80A	22	6.11	70	47	2900	11	3.0	156