



## Centrifugal Fan No.9-19、 9-26



9-19、9-26 • • • • •



• • • • • 1990 • • • • • ISO9000 • • • • • 2001 • • • • • ISO9001:2000, ISO14001:1996 • • • • •

## 9-19、9-26 型离心式通风机

### 9-19、9-26 CENTRIFUGE STYLE VENTILATING FAN

#### 概述

9-19、9-26 型高压离心式通风机是由浙江上风实业股份有限公司、上海交通大学联合运用 CAD 技术优化设计,具有效率高、比 A 声级小、高效区宽、结构紧凑、运行可靠等特点。

该两大类风机适用于一般锻冶、物料输送及其它高压强制通风的场合。输送介质为空气或无腐蚀性、不自燃、不含有粘性物质的气体,介质温度一般不超过 80°C(如有易燃、易爆、高温气体,用户必须作说明,本公司可以特别处理)。介质中所含尘土及硬质细颗粒不大于 150mg/m<sup>3</sup>。

该两大类风机为单吸入进气式,机号有№4、4.5、5、5.6、6.3、7.1、8、9、10、11.2、12.5、14、16 等共十三种品种规格。

根据用户安装管道的需要,风机可制成右旋转式或左旋转式两种形式。从电机一端正视,如叶轮按顺时针方向旋转的,称为右旋转风机,以“右”表示;叶轮按逆时针旋转的,称为左旋转式风机,以“左”表示。同时,该风机还可制成“左”“右”0、45、90、135、180、270 等共六种角度。

该两大类风机均采用电机直接驱动,有二种传动方式:№4~6.3 为 A 式,№7.1~16 为 D 式。

两种风机系列主要由叶轮、机壳、进风口和传动组等部件组成。

叶轮:9-19 型各机号的叶轮由 12 个叶片组成;9-26 型各机号的叶轮由 16 个叶片组成,材质均采用 16Mn 锰钢制作,叶片采用激光切割机下料,叶片与前后盘连接采用机器人焊接工艺,叶型均为前口弯曲式。叶轮成形后均经过静、动平衡校正,以保证运转平衡、运行可靠。

机壳:用普通钢板焊接成蜗形壳整体。

进风口:为锥弧流线形的整体结构,并用螺栓与前盖板组固定。

传动组:由主轴、轴承箱、联轴器等组成。主轴用优质碳钢数控车床加工成形,轴承档经数控磨床加工;轴承箱为铸铁整体式,轴承用 NSK 品牌,滚动轴承润滑油润滑,以保证风机运行的寿命。

风机性能参数选用:该两大类系列风机的性能系分别按 9-19、9-26 型无因次性能曲线图设计,9-19、9-26 型无因次工况点性能表换算公式如下:

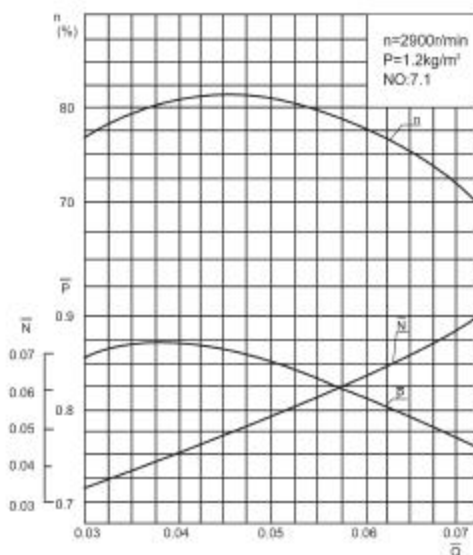
$$\text{全压 } P = \bar{P} \rho \mu_2^2 \quad (\text{Pa})$$

$$\text{流量 } Q = \bar{Q} \frac{\pi D_2^2 U_2}{4} \times 3600 \quad (\text{m}^3/\text{h})$$

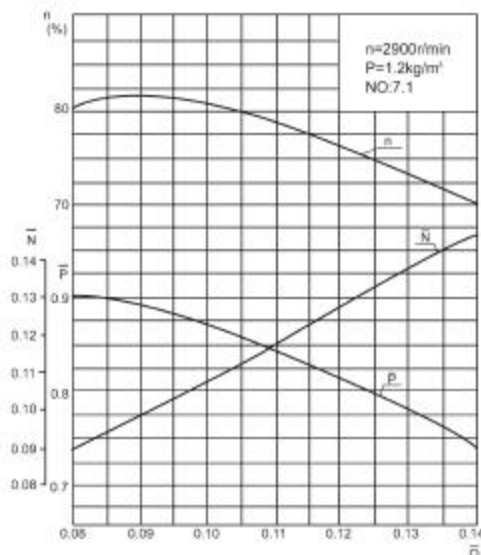
式中  $D_2$ —叶轮外径 (m)

$\mu_2$ —叶轮外弦线速度 (m/s)

$\rho$ —气体密度 ( $\text{kg}/\text{m}^3$ )



9-19 型离心式通风机无因次特性曲线图



9-26 型离心式通风机无因次特性曲线图

通风机的流量  $Q$ 、全压  $P$ 、功率  $N$  与转速  $n$  有如下关系：
$$\frac{n_1}{n_2} = \frac{Q_1}{Q_2} = \sqrt{\frac{P_1}{P_2}} = \sqrt[3]{\frac{N_1}{N_2}}$$

从式中知，当电机容量不改变而转速提高时，电机出现过负荷的状况。

对于 D 式风机，当风机配用 Y 型电机时，采用 ST0103 型联轴器，风机配用 JS、JSO、JK 型等电机，则采用 ST0102 型联轴器。

## General

9-19、9-26 high pressure centrifugal fan is jointly designed by Zhejiang Shangfeng Industrial Holdings Co.LTD and Shanghai Jiaotong University through the Auto-CAD technology, and has the characteristics as high efficiency, lower A-weighted sound level, wide high efficiency area, compact structure, reliable operation and more.

The two types are generally applicable for trades as forging, material conveying and other high pressure forcing ventilation conditions. The medium conveyed is the air or the gas without containing corrosive, non-normal or no sticky stuff, and the temperature is generally not more than 80 deg C. (if the gas is easy sparkle, explosion or high temperature, the customer must make the notes at first and we'll do the special process.). The dust and hard particles contained is not more.

The two types are both single inlet and the models are No4,4.5,5,5.6,6.3,7.1,8,9,10,11.2, 12.5,14,16 totally thirteen specifications.

As per the customers requirements in installing the duct,the fan can be made into two forms right rotating and left rotating.See from the motor side,if impeller is rotating clockwise direction,we name right rotatory fan and indicate with "D",otherwise,if the impellers are in Anti-clockwise direction,we name left rotatory fan and indicate with "D".each rotatory direction can be made into 0,45,90,135,180,270 six angles respectively.

This two type fans both direct-driven by motor and have two forms of drive style:NO4-6.3 is A form and NO7.1-16 is D form.

The two type fans both mainly comprise impeller,casing,Inlet and drive components and etc.

Impeller:9-19 model is composed of 12 blades and 9-26 model is composed of 16 blades.The material is selected 16M manganese steel and the blade laying off is made by laser cutting machine.The blades connecting with front and back basin are made with robot welding craft and both blade form are forward curved.The impellers are going through the static and dynamic balancing checking after forming to ensure the balance and reliable operation.

Casing: the complete roll casing is welded and formed by general steel plate.

Inlet: the cone-arlike complete structure and fixed with the front cover in bolts.

Driving Units: comprise main shaft,bearing box and coupling. Main shaft is forming by the quality carbon steel and machined by NC lathe, and the bearing guard is manufactured by NC grinding machine the bearing box is complete cast iron. The bearing selects NSK brand and is lubricated with rolling bearing lubricating oil to guarantee the lifetime of the fan.

The parameters selection of the fan performance: the two series fan performance is designed respectively as per 9-19 and 9-26 zero dimension character graph.The scale formula of the zero dimension condition performance table as follows:

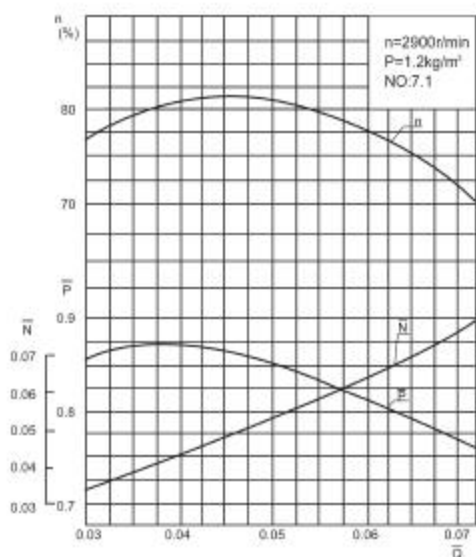
$$\text{Total Pressure } P = \bar{P} \rho \mu_2^2 (\text{pa})$$

$$\text{AirFlow } Q = \bar{Q} \frac{\pi D_2^2 U_2}{4} \times 3600 (\text{m}^3 / \text{h})$$

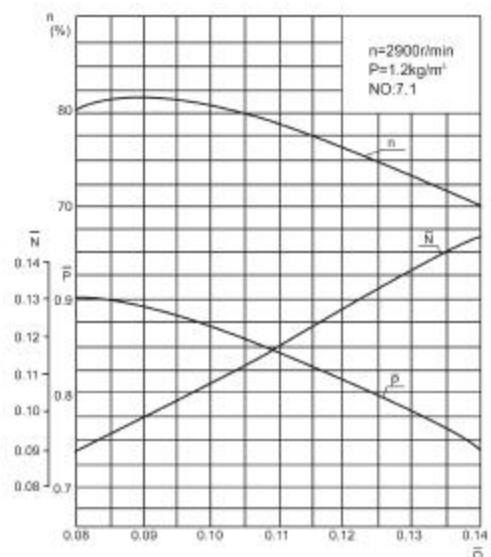
Luthe formula:  $D_2$  -Outer dia of impelier(m)

$\mu_2$  -Outer Chordline Velocing (m/s)

P-Air densiog ( $\text{kg}/\text{m}^3$ )



9-19Centrifugal fan zero dimension character graph



9-26Centrifugal fan zero dimension character graph

The air flow  $Q$ , total Pressure  $P$ , Power  $N$  and Speed  $n$  have the equation:

$$\frac{n_1}{n_2} = \frac{Q_1}{Q_2} = \sqrt{\frac{P_1}{P_2}} = \sqrt[3]{\frac{N_1}{N_2}}$$

We can see from the equation that when the motor capacity is fixed and increasing the speed, motor occurs the condition of over-loading.

For D form fan, when the fan is completed with Y model motor, select ST0103 coupling, and otherwise completed with JS, JSO or JK model motor, select ST0102 coupling.

9-19 离心通风机性能表

机号 No	传动方式 Driving way	转速 Rev r/min	序号 Sequence No	流量 Flow m <sup>3</sup> /h	全压 Total pressure Pa	内效率 Internal efficiency %	内功率 Internal Power kW	所需功率 Power needed kW	电动机 Motor	
									型号 Model	功率 Power kW
4	A	2900	1	824	3584	70	1.16	1.5	Y90L-2	2.2
			2	970	3665	73.5	1.33	1.7		
			3	1116	3647	73.5	1.48	1.9		
			4	1264	3597	76	1.64	2.1		
			5	1410	3507	75.5	1.80	2.3	Y100L-2	3
			6	1558	3384	73.5	1.97	2.6		
			7	1704	3253	70	2.17	2.6		
4.5	A	2900	1	1174	4603	71.2	2.07	2.5	Y112M-2	4
			2	1397	4684	75	2.38	2.9		
			3	1616	4672	77	2.68	3.2		
			4	1839	4580	77.3	2.98	3.6		
			5	2062	4447	76.2	3.29	3.9		
			6	2281	4297	73.8	3.63	4.4	Y132S <sub>1</sub> -2	5.5
			7	2504	4112	70	4.03	4.8		
5	A	2900	1	1610	5697	72.7	3.43	4.1	Y132S <sub>2</sub> -2	7.5
			2	1932	5768	76.2	3.98	4.8		
			3	2254	5740	78.2	4.50	5.4		
			4	2576	5639	78.5	5.04	5.8		
			5	2844	5517	77.2	5.54	6.4		
			6	3166	5323	74.5	6.17	7.1		
			7	3488	5080	70.5	6.86	7.9	Y160M <sub>1</sub> -2	11
5.6	A	2900	1	2262	7182	72.7	6.05	7.0	Y160M <sub>1</sub> -2	11
			2	2714	7273	76.2	7.02	8.1		
			3	3167	7236	78.2	7.93	9.1		
			4	3619	7109	78.5	8.88	10.2		
			5	3996	6954	77.2	9.76	11.2	Y160L-2	18.5
			6	4448	6709	74.5	10.88	12.5		
			7	4901	6400	70.5	12.09	13.9		
6.3	A	2900	1	3220	9149	72.7	10.91	12.5	Y160L-2	18.5
			2	3865	9265	76.2	12.65	14.5		
			3	4509	9219	78.2	14.30	16.4		
			4	5153	9055	78.5	16.00	18.4		
			5	5690	8857	77.2	17.59	20.2	Y200L <sub>1</sub> -2	30
			6	6334	8543	74.5	19.60	22.5		
			7	6978	8148	70.5	21.79	25.1		

9-19 离心通风机性能表

机号 No	传动方式 Driving way	转速 Rev r/min	序号 Sequence No	流量 Flow m <sup>3</sup> /h	全压 Total pressure Pa	内效率 Internal efficiency %	内功率 Internal Power kW	所需功率 Power needed kW	电动机 Motor		联轴器 1 套 Coupling(1 set) GB4323-84 (ST0103)
									型号 Model	功率 kW Power	
7.1	D	2900	1	4610	11717	72.7	19.83	23.3	Y200L <sub>2</sub> -2	37	TL8 $\frac{55 \times 112}{65 \times 142}$ (200-65×55)
			2	5532	11868	76.2	22.99	27.0			
			3	6454	11807	78.2	25.99	30.5			
			4	7376	11596	78.5	29.09	34.1	Y250M-2	55	
			5	8144	11340	77.2	31.98	37.5			
			6	9066	10935	74.5	35.63	41.8			
			7	9988	10426	70.5	39.62	46.5			
8	D	2900	1	6594	15034	72.7	369.02	42.3	Y280S-2	75	TL8 $\frac{65 \times 142}{65 \times 142}$ (200-65×65)
			2	7918	15229	76.2	41.75	49.0			
			3	9232	15151	78.2	47.21	55.4			
			4	10550	14877	78.5	52.83	62.0	Y315S-2	110	
			5	11649	14546	77.2	58.08	68.2			
			6	12968	14021	74.5	64.71	75.9			
			7	14287	13362	70.5	71.95	84.4			
		1450	1	3297	3620	72.7	4.5	5.5	Y132M-4	7.5	TL8 $\frac{38 \times 62}{65 \times 142}$ (200-65×38)
			2	3957	3665	76.2	5.22	6.1			
			3	4616	3647	78.2	5.90	6.9			
			4	5275	3584	78.5	6.60	7.7	Y160L-4	15	
			5	5825	3507	77.2	7.26	8.5			
			6	6484	3384	74.5	8.09	9.5			
			7	7144	3231	70.5	8.99	10.6			
9	D	1450	1	4695	4597	72.7	8.11	9.5	Y160L-4	15	TL8 $\frac{42 \times 112}{65 \times 142}$ (200-65×42)
			2	5633	4655	76.2	9.41	11.0			
			3	6572	4632	78.2	10.63	12.5			
			4	7511	4551	78.5	11.90	14.0	Y180L-4	22	
			5	8294	4453	77.2	13.08	15.4			
			6	9233	4297	74.5	14.58	17.1			
			7	10171	4101	70.5	16.21	19.0			

**9-19 离心通风机性能表**

机号 No	传动方式 Driving way	转速 Rev r/min	序号 Sequence No	流量 Flow m <sup>3</sup> /h	全压 Total pressure Pa	内效率 Internal efficiency %	内功率 Internal Power kW	所需功率 Power needed kW	电动机 Motor		联轴器 1 套 Coupling(1 set) GB4323-84 (ST0103)
									型号 Model	功率 kW Power	
10	D	1450	1	6440	5840	76.5	13.38	15.7	Y200L-4	30	TL8 $\frac{55 \times 112}{65 \times 142}$ (200-65 × 65)
			2	7942	5941	80	16.03	18.8			
			3	9445	5891	81.5	18.59	21.8			
			4	10947	5740	81	21.12	24.0			
			5	12450	5495	78.2	23.84	28.0			
			6	13952	5244	74.5	26.79	31.4	Y225S-4	37	
			7	15455	4958	70	29.88	35.1			
11.2	D	1450	1	9047	7364	76.5	23.58	27.7	Y225M-4	45	TL9 $\frac{60 \times 112}{85 \times 175}$ (290-85 × 60)
			2	11158	7491	80	28.25	33.2			
			3	13269	7428	81.5	32.76	38.4			
			4	15380	7236	81	37.22	43.7			
			5	17491	6927	78.2	42.02	49.3			
			6	19602	6609	74.5	47.21	55.4	Y280S-4	75	
			7	21713	6246	70	52.66	61.8			
11.2	D	960	1	5990	3182	76.5	6.84	8.0	Y180L-6	15	TL9 $\frac{48 \times 112}{85 \times 175}$ (240-85 × 48)
			2	7388	3237	80	8.20	9.6			
			3	8785	3210	81.5	9.51	11.2			
			4	10182	3128	81	10.80	12.7			
			5	11580	2996	78.2	12.19	14.3			
			6	12978	2860	74.5	13.70	16.1	Y200L <sub>F</sub> -6	22	
			7	14375	2705	70	15.28	17.9			
12.5	D	1450	1	12577	9229	76.5	40.84	47.9	Y280S-4	75	TL9 $\frac{75 \times 142}{85 \times 175}$ (290-85 × 75)
			2	15512	9390	80	48.92	57.4			
			3	18447	9310	81.5	56.72	66.6			
			4	21381	9068	81	64.46	75.6	Y315S-4	110	
			5	24316	8678	78.2	72.76	85.4			
			6	27251	8278	74.5	81.75	95.9			
			7	30186	7822	70	91.18	107.0			



9-26 离心通风机性能表

机号 No	传动方式 Driving way	转速 Rev r/min	序号 Sequence No	流量 Flow m <sup>3</sup> /h	全压 Total pressure Pa	内效率 Internal efficiency %	内功率 Internal Power kW	所需功率 Power needed kW	电动机 Motor		联轴器1套 Coupling(1 set) GB4323-84 (ST0103)							
									型号 Model	功率kW Power								
12.5	D	960	1	8327	3975	76.5	11.85	13.9	Y200L-6	22	TL9 $\frac{55 \times 112}{85 \times 175}$ (240-85 × 55)							
			2	10270	4043	80	14.20	16.7										
			3	12213	4009	81.5	16.46	19.3										
			4	14156	3907	81	18.71	21.9										
			5	16099	3741	78.2	21.11	24.8	Y225M-6	37								
			6	18042	3571	74.5	23.72	27.8										
			7	19985	3377	70	26.46	31.1										
14	D	1450	1	17670	11668	76.5	71.97	84.5	Y315M-4	132	TL10 $\frac{80 \times 175}{95 \times 175}$ (350-95 × 80)							
			2	21793	11874	80	86.22	101.2										
			3	25916	11771	81.5	99.96	117.3										
			4	30040	11464	81	113.59	133.3	Y355M-4	220								
			5	34163	10967	78.2	128.22	150.5										
			6	38286	10457	74.5	144.06	169.1										
			7	42409	9878	70	160.69	188.6										
		960	11669	5004	76.5	20.89	24.5	Y250M-6	37	TL10 $\frac{65 \times 142}{95 \times 175}$ (290-95 × 65)								
											2	14428	5090	80	25.02	29.4		
											3	17158	5047	81.5	29.01	34.0		
											4	19888	4917	81	32.97	38.7	Y315S-6	75
											5	24618	4709	78.2	37.21	43.7		
											6	25348	4494	74.5	41.81	49.1		
											7	28078	4249	70	46.63	54.7		
16	D	1450	1	26377	15425	76.5	140.31	164.6	Y355M <sub>3</sub> -4	315	TL11 $\frac{100 \times 215}{95 \times 175}$ (350-95 × 100)							
			2	32531	15700	80	168.09	197.2										
			3	38686	15563	81.5	194.89	228.7										
			4	44841	15151	81	221.46	259.9	JS138-4	410								
			5	50995	14488	78.2	249.98	293.3										
			6	57150	13808	74.5	280.88	329.6										
			7	63305	13035	70	313.29	367.6										
		960	17463	6570	76.5	40.72	47.8	Y315S-6	75	TL10 $\frac{80 \times 175}{95 \times 175}$ (350-95 × 80)								
											2	21538	6683	80	48.78	57.2		
											3	25613	6627	81.5	56.56	66.4		
								4	29687		6456	81	64.27	75.4	Y315L <sub>1</sub> -6	110		
								5	33762		6180	78.2	72.55	85.1				
								6	37837		5898	74.5	81.52	95.7				
								7	41912		5575	70	90.92	106.7				

**9-26 离心通风机性能表**

机号 No	传动方式 Driving way	转速 Rev r/min	序号 Sequence No	流量 Flow m <sup>3</sup> /h	全压 Total pressure Pa	内效率 Internal efficiency %	内功率 Internal Power kW	所需功率 Power needed kW	电动机 Motor				
									型号 Model	功率kW Power			
4	A	2900	1	2198	3852	74.70	3.11	3.7	Y132S <sub>1</sub> -2	5.5			
			2	2368	3820	75.5	3.28	3.9					
			3	2536	3765	75.7	3.46	4.1					
			4	2706	3684	75	3.65	4.4					
			5	2877	3607	73.8	3.86	4.6					
			6	3044	3502	72.1	4.06	4.9					
			7	3215	3407	70	4.29	5.2					
4.5	A	2900	1	3130	4910	76.1	5.51	6.3	Y132S <sub>2</sub> -2	7.5			
			2	3407	4863	77.1	5.87	6.8					
			3	3685	4776	77.1	6.24	7.2					
			5	A	2900	4	3963	4661	76	6.64	7.6	Y160M <sub>1</sub> -2	11
						5	4237	4545	74.5	7.06	8.1		
						6	4515	4412	72.3	7.54	8.7		
						7	4792	4256	70	7.98	9.2		
5	A	2900	1	4293	6035	77.2	9.12	10.5	Y160M <sub>2</sub> -2	15			
			2	4706	5984	78.2	9.80	11.3					
			3	5114	5869	78	10.48	12.0					
			4	5527	5725	76.7	11.23	12.9					
			5	5941	5553	74.9	12.00	13.8					
			6	6349	5381	72.7	12.81	14.7					
			7	6762	5180	70	13.65	15.7	Y160L-2	18.5			
5.6	A	2900	1	6032	7610	77.2	16.09	18.5	Y180M-2	22			
			2	6612	7546	78.2	17.27	19.9					
			3	7185	7400	78	18.47	21.2					
			6	A	2900	4	7766	7218	76.7	19.79	22.8	Y200L <sub>1</sub> -2	30
						5	8346	7000	74.9	21.15	24.3		
						6	8919	6781	72.7	22.57	26.0		
						7	9500	6527	70	24.06	27.7		

9-26 离心通风机性能表

机号 No	传动方式 Driving way	转速 Rev r/min	序号 Sequence No	流量 Flow m <sup>3</sup> /h	全压 Total pressure Pa	内效率 Internal efficiency %	内功率 Internal Power kW	所需功率 Power needed kW	电动机 Motor	
									型号 Model	功率kW Power
6.3	A	2900	1	8588	9698	77.2	28.99	33.3	Y225M-2	45
			2	9639	9616	78.2	31.12	35.3		
			3	10230	9429	78	33.28	38.3		
			4	11056	9195	76.7	35.66	41.0		
			5	11883	8915	74.9	38.12	43.8		
			6	12699	8636	72.7	40.67	46.8	Y250M-2	55
			7	13525	8310	70	43.35	49.9		

机号 No	传动方式 Driving way	转速 Rev r/min	序号 Sequence No	流量 Flow m <sup>3</sup> /h	全压 Total pressure Pa	内效率 Internal efficiency %	内功率 Internal Power kW	所需功率 Power needed kW	电动机 Motor		联轴器1套 Coupling(1 set) GB4323-84 (ST0103)
									型号 Model	功率kW Power	
7.1	D	2900	1	12292	12427	77.2	52.70	61.8	Y280S-2	75	TL8 $\frac{65 \times 142}{65 \times 142}$ (200-65 × 65)
			2	13475	12321	78.2	56.57	66.1			
			3	14643	12078	78	60.49	71.0			
			4	15826	11776	76.7	64.84	76.1	Y315S-2	110	TL8 $\frac{65 \times 142}{65 \times 142}$ (200-65 × 65)
			5	17009	11415	74.9	69.30	81.3			
			6	18177	11055	72.7	73.94	86.8			
			7	19360	10635	70	78.82	92.5			

9-26 离心通风机性能表

机号 No	传动方式 Driving way	转速 Rev r/min	序号 Sequence No	流量 Flow m <sup>3</sup> /h	全压 Total pressure Pa	内效率 Internal efficiency %	内功率 Internal Power kW	所需功率 Power needed kW	电动机 Motor		联轴器 1 套 Coupling(1 set) GB4323-84 (STO 103)
									型号 Model	功率 kW Power	
8	D	2900	1	17584	15955	77.2	95.72	112.3	Y315M-2	132	TLB <sub>65×142</sub> 65×142 (200-65×65)
			2	19277	15818	78.2	102.73	120.5			
			3	20947	15504	78	109.86	128.9			
			4	22640	15112	76.7	117.75	138.2	Y315L <sub>2</sub> -2	200	
			5	24332	14644	74.9	125.85	147.7			
			6	26005	14177	72.7	134.28	157.6			
			7	27696	13634	70	143.14	168.0			
		1450	1	8792	3834	77.2	11.96	14.0	Y180M-4	18.5	TLB <sub>48×112</sub> 65×142 (200-65×48)
			2	9639	3802	78.2	12.84	15.1			
			3	10473	3729	78	13.73	16.1			
			4	11320	3638	76.7	14.72	17.3			
			5	12166	3529	74.9	15.73	18.5			
			6	13001	3421	72.7	16.79	19.7	Y200L-4	30	
			7	13848	3294	70	17.89	21.0			
9	D	1450	1	12518	4869	77.2	21.56	25.3	Y200L-4	30	TLB <sub>55×112</sub> 65×142 (200-65×55)
			2	13723	4828	78.2	23.14	27.2			
			3	14913	4736	78	24.75	29.0			
			4	16118	4620	76.7	26.53	31.1	Y225M-4	45	
			5	17322	4481	74.9	28.35	33.3			
			6	18512	4343	72.7	30.25	35.5			
			7	19717	4181	70	32.24	37.8			
10	D	1450	1	17172	6143	80.4	35.69	41.9	Y250M-4	55	TLB <sub>65×142</sub> 65×142 (200-65×65)
			2	19319	6056	81.2	39.19	46.0			
			3	21465	5920	80.4	43.02	50.5			
			4	23612	5761	78.6	47.10	55.3	Y280S-4	75	
			5	25758	5560	76	51.35	60.3			
			6	27905	5309	73	55.35	65.0			
			7	30052	5065	70	59.34	69.6			

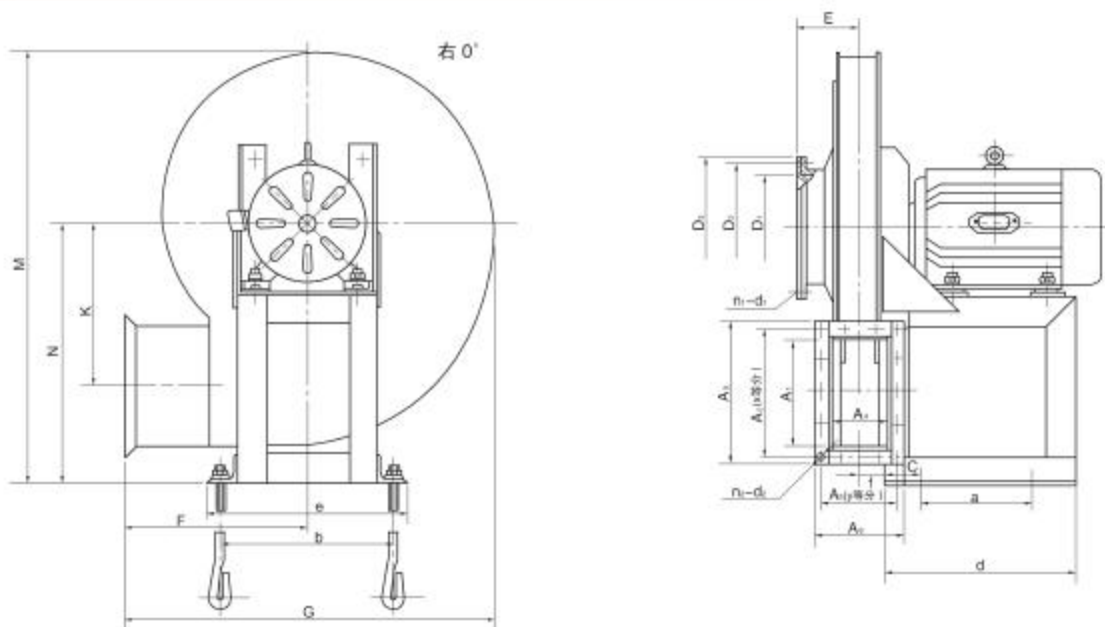
9-26 离心通风机性能表

机号 No	传动方式 Driving way	转速 Rev r/min	序号 Sequence No	流量 Flow m <sup>3</sup> /h	全压 Total pressure Pa	内效率 Internal efficiency %	内功率 Internal Power kW	所需功率 Power needed kW	电动机 Motor		联轴器1套 Coupling (1 set) GB4323-84 (ST0103)
									型号 Model	功率kW Power	
11.2	D	1450	1	24126	7747	76.5	62.90	73.8	Y315S-4	110	TL9 $\frac{80 \times 175}{85 \times 175}$ (240-85 × 80)
			2	27142	7637	80	69.07	81.0			
			3	30157	7464	81.5	75.82	89.0			
			4	33173	7264	81	83.01	97.4			
			5	36189	7009	78.2	90.50	106.2			
			6	39205	6691	47.5	97.54	114.5			
			7	42221	6382	70	104.86	112.7			
		960	1	15973	3346	80.4	18.25	21.4	Y225M-6	30	TL9 $\frac{60 \times 142}{85 \times 175}$ (240-85 × 60)
			2	17969	3299	81.2	20.04	23.5			
			3	19966	3225	80.4	22.00	25.8			
			4	21963	3140	78.6	24.09	28.3			
			5	23959	3031	76	26.26	30.8			
			6	25956	2895	73	28.31	33.2			
			7	27953	2763	70	30.35	35.6			
12.5	D	1450	1	33540	9713	80.4	108.91	127.8	Y315L <sub>1</sub> -4	160	TL9 $\frac{80 \times 175}{85 \times 175}$ (290-85 × 80)
			2	37732	9575	81.2	119.60	140.3			
			3	41925	9356	80.4	131.30	154.1			
			4	46117	9103	78.6	143.75	168.7			
			5	50310	8782	76	156.70	183.9			
			6	54503	8381	73	168.90	198.2			
			7	58695	7993	70	181.10	212.5			
12.5	D	960	1	22206	4179	80.4	31.61	37.1	Y280S-6	45	TL9 $\frac{75 \times 142}{85 \times 175}$ (240-85 × 75)
			2	24981	4121	81.2	34.71	40.7			
			3	27757	4028	80.4	38.10	44.7			
			4	30533	3921	78.6	41.72	49.0			
			5	33309	3785	76	45.48	53.4			
			6	36084	3615	73	49.02	57.5			
			7	38860	3450	70	52.56	61.7			
											TL9 $\frac{80 \times 1175}{85 \times 175}$ (240-85 × 80)

9-26 离心通风机性能表

机号 No	传动方式 Driving way	转速 Rev r/min	序号 Sequence No	流量 Flow m <sup>3</sup> /h	全压 Total pressure Pa	内效率 Internal efficiency %	内功率 Internal Power kW	所需功率 Power needed kW	电动机 Motor		联轴器1套 Coupling(1 set) GB4323-84 (ST0103)
									型号 Model	功率kW Power	
14	D	1450	1	47121	12285	80.4	191.94	225.2	Y355M <sub>2</sub> -4	250	TL9 $\frac{100 \times 215}{95 \times 175}$ (290-95 × 100)
			2	53011	12109	81.2	210.78	247.3			
			3	58902	11830	80.4	231.39	271.5	JS-138-4	410	TL11 $\frac{85 \times 175}{95 \times 175}$ (350-95 × 85)
			4	64762	11508	78.6	253.33	297.3			
			5	70682	11099	76	276.16	324.1			
			6	76573	10699	73	297.60	386.9			
			7	82468	10095	70	319.16	374.5			
		960	1	31197	5262	80.4	55.70	65.4	Y315S-6	75	TL10 $\frac{80 \times 175}{95 \times 175}$ (240-95 × 80)
			2	35097	5188	81.2	61.17	71.8			
			3	38997	5071	80.4	67.15	78.8	Y315L <sub>1</sub> -6	110	TL10 $\frac{80 \times 175}{95 \times 175}$ (240-95 × 80)
			4	42897	4936	78.6	73.52	86.3			
			5	46796	4764	76	80.15	94.0			
			6	50696	4549	73	86.39	101.4			
			7	54596	4341	70	92.63	108.7			
16	D	1450	1	70339	16250	80.4	374.22	439.1	JSQ-147-4 (3000V)	500	TL11 $\frac{110 \times 215}{95 \times 175}$ (350-95 × 110)
			2	79181	16014	81.2	410.95	482.2			
			3	87923	15640	80.4	451.14	529.4	JSQ-158-4 (3000V)	850	TL12 $\frac{120 \times 215}{95 \times 175}$ (410-95 × 120)
			4	96716	15210	78.6	493.92	579.6			
			5	105500	14663	76	538.43	631.8			
			6	114300	13933	73	580.35	681.0			
			7	123090	13324	70	622.26	730.2			
		960	1	46569	6911	80.4	108.60	127.4	Y355M <sub>1</sub> -6	185	TL11 $\frac{100 \times 215}{95 \times 175}$ (350-95 × 90)
			2	52390	6813	81.2	119.26	139.9			
			3	58211	6659	80.4	130.92	153.6			
			4	64032	6481	78.6	143.34	168.2			
			5	69854	6254	76	156.25	183.3			
			6	75675	5971	73	168.42	197.6	Y355M <sub>3</sub> -6	200	
			7	81496	5696	70	180.58	211.9			

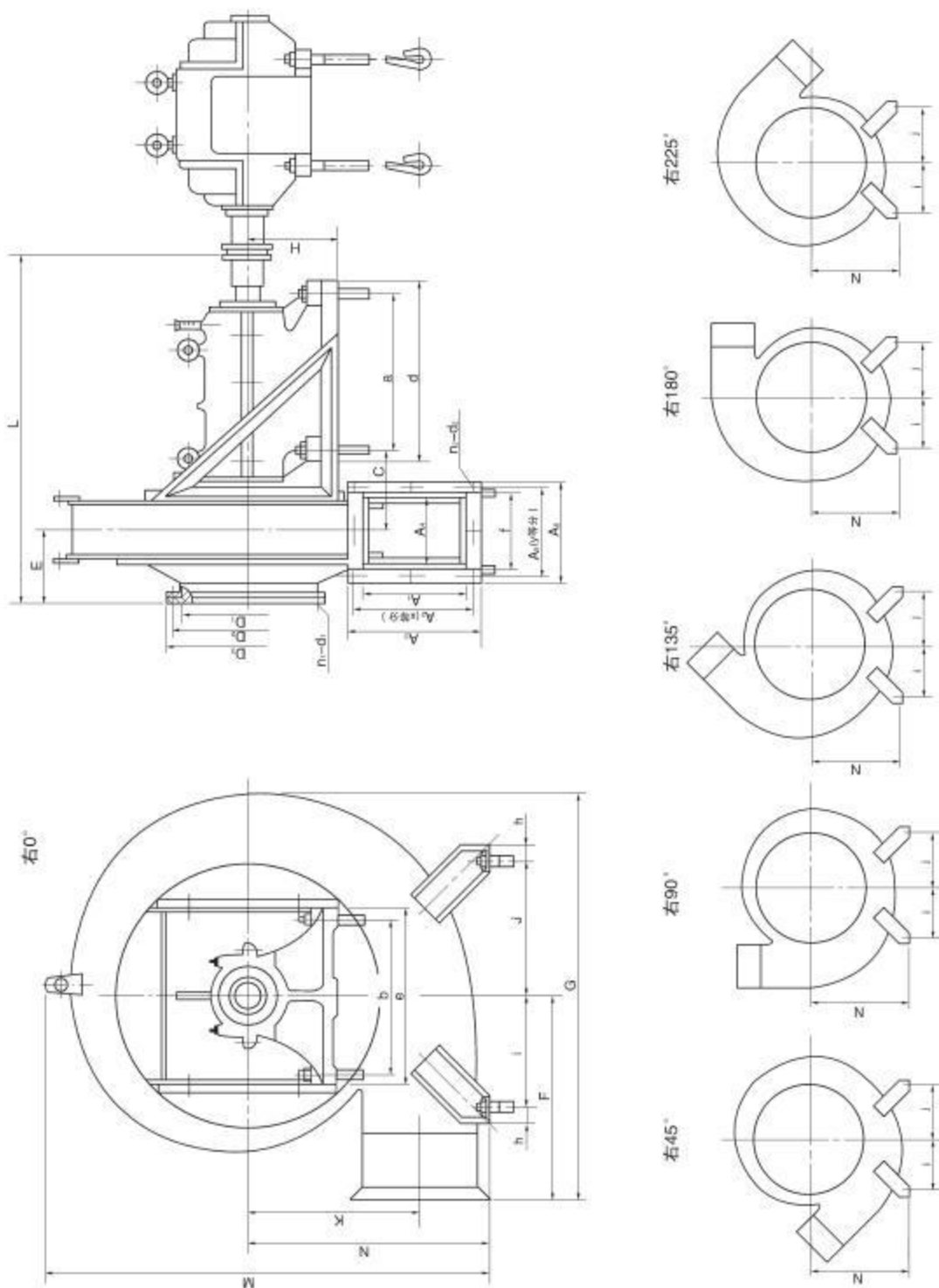
## 9-19、9-26 型 No4~6.3 离心通风机外形及安装尺寸



系列 Series	机号 No	进口尺寸 air inlet					出口尺寸 air outlet							
		$D_1$	$D_2$	$D_3$	$n-d_1$	$A_1$	$A_2$	$A_3$	$A_4$	$A_5$	$A_6$	x	y	$n-d_2$
9-19	4	180	205	230	8-Φ7	128	160	182	92	126	148	4	3	14-Φ7
	4.5	200	225	250	8-Φ7	144	176	198	104	135	160	4	3	14-Φ7
	5	224	254	282	8-Φ7	160	192	214	115	150	171	4	3	14-Φ7
	5.6	250	280	308	8-Φ10	179	212	233	129	162	185	4	3	14-Φ7
	6.3	280	320	359	8-Φ10	202	236	258	145	180	204	4	3	14-Φ7
9-26	4	224	254	284	8-Φ7	196	228	250	128	165	184	4	3	14-Φ7
	4.5	250	280	310	8-Φ10	221	252	275	144	177	200	4	3	14-Φ7
	5	280	320	360	8-Φ10	245	284	299	160	192	216	4	3	14-Φ7
	5.6	315	355	395	8-Φ10	274	305	328	179	212	235	5	4	18-Φ7
	6.3	355	395	435	8-Φ10	309	340	365	202	236	261	5	4	18-Φ7

系列 Series	机号 No	外形尺寸 contour dimensions					基础尺寸 foundation dimensions						地脚螺栓 (4套) footing screws	
		E	F	G	K	M	N	a	b	c	d	e		f
9-19	4	100	262	587	286	715	420	200	350	50	300	385	35	M12×300
	4.5	110	295	661	322	782	450	240	390	50	340	430	39	M12×300
	5	126	328	734	358	868	500	340	450	50	440	495	43	M12×300
	5.6	140	367	821	401	962	550	350	485	50	450	534	48	M12×300
	6.3	157	413	925	451	1085	620	450	570	60	570	626	55	M16×400
9-26	4	132	360	711	287	761	450	240	390	50	340	430	49	M12×300
	4.5	147	405	799	322	849	500	340	450	50	440	495	55	M12×300
	5	165	450	887	359	937	550	350	485	50	450	534	61	M12×300
	5.6	185	504	993	402	1053	620	450	570	60	570	626	68	M16×400
	6.3	209	567	1117	451	1167	680	550	720	70	690	790	77	M20×500

## 9-19、9-26 型 No7.1~16 离心通风机外形及安装尺寸表





系列 Series	机号 №	进口尺寸 air inlet				出口尺寸 air outlet								
		D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	n <sub>1</sub> -d <sub>1</sub>	A <sub>1</sub>	A <sub>2</sub>	A <sub>3</sub>	A <sub>4</sub>	A <sub>5</sub>	A <sub>6</sub>	x	y	n <sub>2</sub> -d <sub>2</sub>
9-19	7.1	315	355	395	8-Φ10	227	270	293	163	204	232	4	3	14-Φ10
	8	355	395	435	8-Φ10	256	296	322	184	228	253	4	3	14-Φ10
	9	400	450	498	8-Φ12	288	330	354	207	252	276	5	4	18-Φ10
	10	450	500	548	8-Φ12	320	360	386	230	276	299	5	4	18-Φ10
	11.2	500	560	620	12-Φ1 2	359	415	448	258	316	350	5	4	18-Φ12
	12.5	560	620	680	12-Φ1 2	400	456	489	288	344	380	6	4	20-Φ12
	14	630	690	750	16-Φ1 2	448	516	557	332	405	448	6	5	22-Φ12
	16	710	770	830	16-Φ1 2	512	574	621	368	440	484	7	5	24-Φ12
9-26	7.1	400	450	500	8-Φ12	348	390	414	227	272	296	6	4	20-Φ10
	8	450	500	550	8-Φ12	392	432	458	256	300	325	6	4	20-Φ10
	9	500	560	620	12-Φ1 2	441	483	507	288	330	357	6	4	20-Φ10
	10	560	620	680	12-Φ1 2	490	528	556	320	356	389	6	4	20-Φ10
	11.2	630	690	750	12-Φ1 2	549	600	638	358	410	450	8	5	26-Φ12
	12.5	710	770	830	16-Φ1 2	613	664	702	400	456	492	8	6	28-Φ12
	14	800	870	920	16-Φ1 2	686	747	795	448	516	564	9	6	30-Φ12
	16	900	970	1040	16-Φ1 5	784	840	893	512	588	628	10	7	34-Φ12

系列 Series	外形尺寸 contour dimensions							基础尺寸 foundation dimensions						
	E	F	G	K	L	M	H	a	b	c	d	e	f	h
9-19	177	466	1043	507	1230	1303	280	520	440	300	590	510	193	61
	200	525	1173	572	1256	1463	280	520	440	303	590	510	207	61
	226	590	1318	644	1289	1611	280	520	440	310	590	510	223	61
	250	656	1464	715	1317	1773	280	520	440	314	590	510	239	61
	280	735	1641	801	1565	1975	375	700	620	366	780	700	261	61
	313	820	1830	895	1603	2181	375	700	620	372	780	700	282	61
	350	920	2040	1001	2031	2425	500	900	900	478	1000	1000	336	112
	400	1050	2340	1144	2091	2760	500	900	900	488	1000	1000	372	112
9-26	237	639	1259	509	1317	1379	280	900	440	327	590	510	242	61
	262	720	1418	574	1349	1538	280	520	440	334	590	510	263	61
	294	810	1594	646	1392	1609	280	520	440	346	590	510	286	61
	327	900	1770	717	1433	1880	280	520	440	353	590	510	309	61
	367	1008	1983	803	1694	2098	375	700	620	409	780	700	340	61
	418	1125	2212	896	1755	2323	375	700	620	419	780	700	370	61
	469	1260	2481	1003	2199	2572	500	900	900	527	1000	1000	438	112
	524	1440	2830	1148	2271	2955	500	900	900	544	1000	1000	484	112

系列 Series	机号 No	各出口方向机壳中心高及基础尺寸 A piece outlet direction center height and foundation dimensions						轴承座 地脚螺栓 (4套) footing screws of bearing box (4 sets)	机壳地 脚螺栓 (4套) footing screws of fan case (4 sets)	滚动轴承 rolling bearing
		右 R 0°			右 R 45°					
		N	i	j	N	i	j			
9-19	7.1	690	220	380	630	450	350	M24×630	M20×500	1616
	8	775	250	460	700	480	480	M24×630	M20×500	1616
	9	860	285	520	780	600	500	M24×630	M20×500	1616
	10	950	325	580	870	600	600	M24×630	M20×500	1616
	11.2	1060	380	750	980	800	680	M30×800	M20×500	3620
	12.5	1175	410	770	1085	900	700	M30×800	M20×500	3620
	14	1310	450	800	1210	950	750	M36×1000	M30×800	3624
9-26	16	1500	500	900	1380	1000	960	M36×1000	M30×800	3624
	7.1	755	320	420	690	520	420	M24×630	M20×500	1616
	8	845	350	500	790	600	500	M24×630	M20×500	1616
	9	940	400	550	865	650	600	M24×630	M20×500	1616
	10	1035	470	600	950	700	650	M24×630	M20×500	1616
	11.2	1160	550	700	1070	850	700	M30×800	M20×500	3620
	12.5	1285	600	800	1190	940	740	M30×800	M20×500	3620
	14	1420	650	800	1330	950	800	M36×1000	M30×800	3624
16	1650	700	950	1500	1200	1000	M36×1000	M30×800	3624	

系列 Series	各出口方向机壳中心高及基础尺寸 A piece outlet direction center height and foundation dimensions											
	右 R90°			右 R135°			右 R180°			右 R225°		
	N	i	j	N	i	j	N	i	j	N	i	j
9-19	610	450	400	580	450	400	560	450	400	530	450	450
	670	520	440	640	520	450	610	520	460	580	520	480
	760	600	500	720	600	500	700	600	500	650	600	580
	835	650	550	800	650	500	760	650	550	720	650	600
	940	800	600	900	800	700	860	800	700	810	750	750
	1035	900	700	990	900	780	945	850	780	900	820	820
	1160	950	800	1110	950	850	1060	900	850	1000	900	900
	1320	1040	880	1260	1040	880	1190	1040	900	1140	1040	960
9-26	655	520	420	620	500	420	585	500	480	550	480	480
	730	600	500	700	600	500	650	600	500	610	550	550
	820	650	550	775	650	550	730	650	550	685	600	580
	900	700	600	850	700	600	800	700	600	750	650	600
	1020	850	700	960	850	700	900	800	700	850	750	750
	1125	940	740	1160	940	740	1000	900	740	940	820	800
	1250	950	800	1200	950	850	1120	900	850	1080	900	900
	1420	1100	900	1350	1100	950	1250	1100	1000	1200	1000	900