



2015 YFT/YFB/YFH皮带传动系列

双吸离心式通风机 Double Inlet Centrifugal Fan



上海谷科通风设备有限公司
Shanghai Aeolus Ventilation Equipment Co., Ltd.



公司简介

上海谷科通风设备有限公司是一家以设计开发、生产、销售通风机类产品为主的股份制企业。公司自2007年开业以来，业务发展迅猛。业务涉及中央空调、列车空调、机站机房空调、新风换气机、空压机散热、洗车设备、粮食机械、PET输送系统、热风炉、食品机械、能源、石油化工、电力、造船、汽车等行业的通风除尘。

公司引进消化国外同类产品的先进技术，以“不求最大、只求最精”为宗旨，为客户提供优良的服务；以完善的检测和质量保证体系为基础，不断提高技术和工艺水平，确保产品的竞争优势；专业开发的ERP系统，覆盖销售、技术、采购、生产、财务等各部门；同时公司拥有自主进出口权，使“谷科”品牌走向世界。

作为国际空气运动与控制协会（AMCA）的会员单位，公司的主要产品系列YFB、YFH、YFT等进行了AMCA性能和噪声测试认证。公司的性能测试装置通过国内权威机构—合肥通用机电产品检测院的GMPI认证，同时也通过了中国能效标识能源效率检测实验室认证。公司拥有完善的ISO9001管理体系，并取得全国工业生产许可证认证。

Shanghai Aeolus ventilation equipment Co., Ltd. is a production, design and development of sales fan products of the joint-stock enterprises. The company has since opening in 2007, the rapid business development. Business involves the central air-conditioning, air-conditioning train, station computer room air conditioning, fresh air ventilator, air compressor cooling, washing equipment, food machinery, the PET transport system, hot-blast stove, food machinery, energy, petrochemical, electric power, shipbuilding, automobile and other industries of the ventilation and dust removal.

Companies to introduce advanced technology digestion similar foreign products, "not to do the most, just the most essence of life" for the purpose, to provide excellent customer service; to detect and perfect quality guarantee system as the basis, and constantly improve the technology and craft level, to ensure that the product competitive advantage; ERP system of professional development, covering sales, technology, purchasing, production, finance and other departments; at the same time, the company has independent import and export rights, make "guke" brand to the world.

As the Air Movement and Control Association (AMCA) International member, the company's main products of YFB, YFH, YFT are AMCA licensed to bear the AMCA seal for the air and sound performance. The company's testing device already through GMPI certification by the domestic authority - Hefei General electromechanical product testing institute, and through the China energy efficiency labeling of energy efficiency testing laboratory accreditation. The company has perfect ISO9001 management system, and obtains the national industrial production license certification.





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上海谷科通风设备有限公司特此证明，此处所示系列风机 YFT (7-7 ~ 20-20) , YFB (250 ~ 800) , YFH (250 ~ 1000) 获得了加盖 AMCA 印章的授权。

所示额定值系根据 AMCA 出版物 211 和 AMCA 出版物 311 所进行测试和程序确定，并符合 AMCA 认证额定值计算的要求。

Shanghai Aeolus Ventilation Equipment Co., Ltd. certifies that the YFT(7-7 ~ 20-20), YFB(250 ~ 800), YFH(250 ~ 1000) series shown herein is licensed to bear the AMCA seal.

The ratings shown are based on tests and procedures performed in accordance with AMCA publication 211 and AMCA publication 311 and comply with the requirements of the AMCA Certified Ratings Program.



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风机结构概述

Configurations

1.结构型式

YFT、YFB、YFH系列风机设计成以下几种结构型式，从轻型结构到加强结构依次排列为：L；R；K；G

1. Configuration

From light to strengthened structure, there are 4 types for YFT/YFB/YFH including L/R/K/G

L 型式		L2型式	
R 型式		R2型式	
K、G型式		K2、G2型式	

2.风机转向（皮带侧看）

2.Rotation (From view of belt)

	0°	90° (A)	90° (B)	180°
顺时针/右向 Clockwise/Right				
逆时针/左向 Counter-clockwise/left				

风机用途

Applications

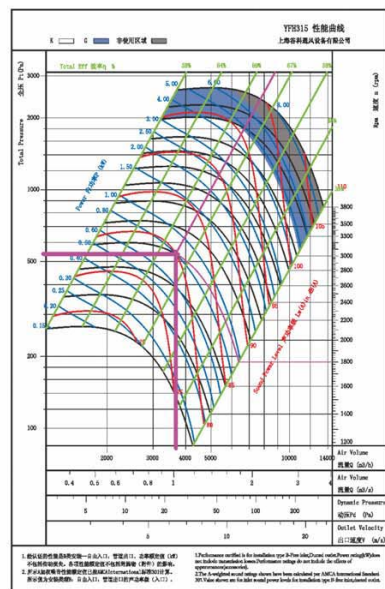
1. 风机用于输送不易燃烧、无腐蚀性气体，含尘量和其它固体含量不大于 100g/m³，环境温度 -20℃~40℃。
2. 对于 YFB、YFH 系列，根据客户要求，可提供输送 280℃ 气体的风机；也可加工用铝或玻璃钢制作进风口的防暴型风机。

1. The fan is applied for nonflammable, non-corrosive air with dust & solid particles <100g/m³, the environmental temperature should be within -20℃~+40℃.
2. The fan that is applied for high temperature (280℃) can be provided for YFB/YFH series, and also for explosion-proof fan of aluminum and fiber glass.



风机性能概述

1. 选型说明



2. 双风机性能换算

样本中的双风机性能曲线按单风机性能用以下公式计算得出：

$$\begin{aligned} \text{流量} \quad Q_n &= Q \times 2 \\ \text{风压} \quad P_n &= P \times 1 \\ \text{转速} \quad n_n &= n \times 1.05 \\ \text{功率} \quad P_n &= P \times 2.15 \\ \text{噪声} \quad L_{Pn} &= L_P + 3 \end{aligned}$$

双风机的性能未获得 AMCA International 授权。

3. 大气标准状态

样本中的风机性能均为在标准状态下的性能，即：

$$\begin{aligned} \text{大气压力} \quad P_a &= 101.325 \text{ kPa} \\ \text{大气温度} \quad t &= 20^\circ \text{C} \\ \text{大气密度} \quad \rho &= 1.2 \text{ kg/m}^3 \end{aligned}$$

Performance

1. Fan selection (Illustration)

$$\begin{aligned} \text{流量} \quad Q &= 3800 \text{ m}^3/\text{h} \\ \text{Air Volume} \quad P_t &= 540 \text{ Pa} \\ \text{全压} \quad P_s &= 25 \text{ Pa} \\ \text{Total Pressure} \quad P_a &= 515 \text{ Pa} \\ \text{动压} \quad P_s &= 515 \text{ Pa} \\ \text{Dynamic Pressure} \quad n &= 1800 \text{ r/min} \\ \text{静压} \quad P_s &= 515 \text{ Pa} \\ \text{Static Pressure} \quad n &= 1800 \text{ r/min} \\ \text{转速} \quad v &= 6.2 \text{ m/s} \\ \text{Rpm} \quad L_w &= 80 \text{ dB(A)} \\ \text{出口速度} \quad P &= 0.8 \text{ kW} \\ \text{Outlet Velocity} \quad \eta &= 68\% \\ \text{声功率级} \quad P_m &= P_a \times k = 1.1 \text{ kW} \\ \text{Noise Level} \quad P_m &= P_a \times k = 1.1 \text{ kW} \\ \text{内功率} \quad P_m &= P_a \times k = 1.1 \text{ kW} \\ \text{Power} \quad P_m &= P_a \times k = 1.1 \text{ kW} \\ \text{效率} \quad P_m &= P_a \times k = 1.1 \text{ kW} \\ \text{Total Efficiency} \quad P_m &= P_a \times k = 1.1 \text{ kW} \\ \text{电机功率} \quad P_m &= P_a \times k = 1.1 \text{ kW} \\ \text{Motor Power} \quad P_m &= P_a \times k = 1.1 \text{ kW} \end{aligned}$$

上式中K为电机安全系数

Where, K stands for safety coefficient of motor

$$P_m \leq 2.2 \text{ kW}, k = 1.2$$

$$P_m \leq 11 \text{ kW}, k = 1.15$$

$$P_m > 11 \text{ kW}, k = 1.1$$

2. Performance of Twin Fan

Performance of Twin Fan can be calculated according to the following formula based on that of Single Fan

$$\begin{aligned} \text{Air Volume} \quad Q_n &= Q \times 2 \\ \text{Pressure} \quad P_n &= P \times 1 \\ \text{Rpm} \quad n_n &= n \times 1.05 \\ \text{Power} \quad P_n &= P \times 2.15 \\ \text{Noise Level} \quad L_{Pn} &= L_P + 3 \end{aligned}$$

Performance of twin fans are not licensed by AMCA International.

3. Standard Air Parameters

The performance shown in this brochure are based on standard air parameters, namely

$$\begin{aligned} \text{Air pressure} \quad P_a &= 101.325 \text{ kPa} \\ \text{Air temperature} \quad t &= 20^\circ \text{C} \\ \text{Air density} \quad \rho &= 1.2 \text{ kg/m}^3 \end{aligned}$$



4. 相似换算

同一台风机，若实际使用的气体大气状态或风机转速不一致时，按以下关系式换算：

$$\begin{aligned} \text{流量} \quad Q_2 &= Q_1 \times \left(\frac{n_2}{n_1}\right) \\ \text{风压} \quad P_2 &= P_1 \times \left(\frac{n_2}{n_1}\right)^2 \times \left(\frac{\rho_2}{\rho_1}\right) \\ \text{功率} \quad P_{a2} &= P_{a1} \times \left(\frac{n_2}{n_1}\right)^3 \times \left(\frac{\rho_2}{\rho_1}\right) \\ \text{噪声} \quad L_{P2} &= L_{P1} + 55 \lg\left(\frac{n_2}{n_1}\right) \end{aligned}$$

上式中流量 Q_1 (m³/h)、压力 P_1 (Pa)、轴功率 P_{a1} (kW)、转速 n_1 (r/min)、声压级 L_{P1} [dB(A)] 可从性能曲线中查得，右下角注“2”的为实际大气状态下的性能参数。

5. 声压级与声功率级

样本中A声功率级，由8个频带声功率级计算得到，其计算公式为：

$$L_w A = 10 \lg \left[10 (L_{w1} + \Delta A_1) / 10 + 10 (L_{w2} + \Delta A_2) / 10 + \dots + 10 (L_{w8} + \Delta A_8) / 10 \right]$$

式中：

L_w —A声功率级；

L_{w1} —倍频程声功率级，单位为dB；

$\Delta A_1, \Delta A_2, \dots, \Delta A_8$ —不同频率的计权衰减值，见下表。

中心频率 Center Frequency	63	125	250	500	1000	2000	4000	8000
计权衰减 A-weighting correction	-25.5	-15.5	-8.5	-3	0	+1.0	+1.0	-1.0

2) 声功率级与声压级的转换

自由声场： $L_w = L_p + 20 (\lg d) + 11$

室内： $L_w = L_p + 20 (\lg d) + 7$

式中：

L_w —声功率级

d —与风机距离 (m)

使用指南

1. 传动系统的选型和安装维护

传动系统合理的选型和正确的安装维护是保证风机正常工作的基础，传动系统主要控制以下几点：

1) 工作情况系数 K_g 的确定：配置皮带的传递功率要大于电机的功率，其数学关系是 $P_1 = K_g P_m$ ， P_m 是电机功率，我公司规定的系数是：电机功率 ≤ 7.5 kW时， $K_g \geq 1.5$ ；电机功率 > 7.5 kW时， $K_g \geq 1.6$ 。如为增速式传动，上述系数分别为1.7和1.85。

2) 中心距的确定：由于空间的限制，我们通常只规定最小中心距，带传动的最小中心距的极限值约为 $A > 0.55(D_1 + D_2) + h$ ， D_1 、 D_2 为风、电轮节径， h 为带高，我公司推荐的最小中心距的极限值为 $A > 0.75(D_1 + D_2)$ 。

4. Similarity Calculation

The expressions to fan performance of practical conditions

$$\begin{aligned} \text{Air Volume} \quad Q_2 &= Q_1 \times \left(\frac{n_2}{n_1}\right) \\ \text{Pressure} \quad P_2 &= P_1 \times \left(\frac{n_2}{n_1}\right)^2 \times \left(\frac{\rho_2}{\rho_1}\right) \\ \text{Power} \quad P_{a2} &= P_{a1} \times \left(\frac{n_2}{n_1}\right)^3 \times \left(\frac{\rho_2}{\rho_1}\right) \\ \text{Noise} \quad L_{P2} &= L_{P1} + 55 \lg\left(\frac{n_2}{n_1}\right) \end{aligned}$$

Where, Air Volume Q_1 , Air Pressure P_1 , Shaft Power P_{a1} , RPM n_1 and Noise Level L_{P1} can be got from performance chart, and performance with footnote "2" is for practical conditions.

5. Sound Pressure Level & Sound Power Level

The A-weighted power level can be calculated from the 8 octave bands of the sound power level.

$$L_w A = 10 \lg \left[10 (L_{w1} + \Delta A_1) / 10 + 10 (L_{w2} + \Delta A_2) / 10 + \dots + 10 (L_{w8} + \Delta A_8) / 10 \right]$$

Where:

$L_w A$ —A-weighted power level;

L_{w1} —octave band sound power level, in dB;

$\Delta A_1, \Delta A_2, \dots, \Delta A_8$ —A-weighting correction, shown in below sheet.

2) Conversion Between Sound Pressure & Sound Power

Free field: $L_w = L_p + 20 (\lg d) + 11$

Room conditions: $L_w = L_p + 20 (\lg d) + 7$

Where:

L_w —Sound power level

d —The distance from fan in meters

User's Guidance

1. Selection, installation & maintenance for drive system

It is critical to assure normal operating if we have correct drive system selection, installation and maintenance,

1) K_g coefficient, the power transmission of belt should be greater than motor power, thus $P_1 = K_g P_m$, where P_m stands for motor power. What Aeolus specified is that K_g should be ≥ 1.5 when $P_m \leq 7.5$ kW, while $K_g \geq 1.6$ if $P_m > 7.5$ kW. If step-up drive, above K_g should be 1.7 and 1.85 respectively.

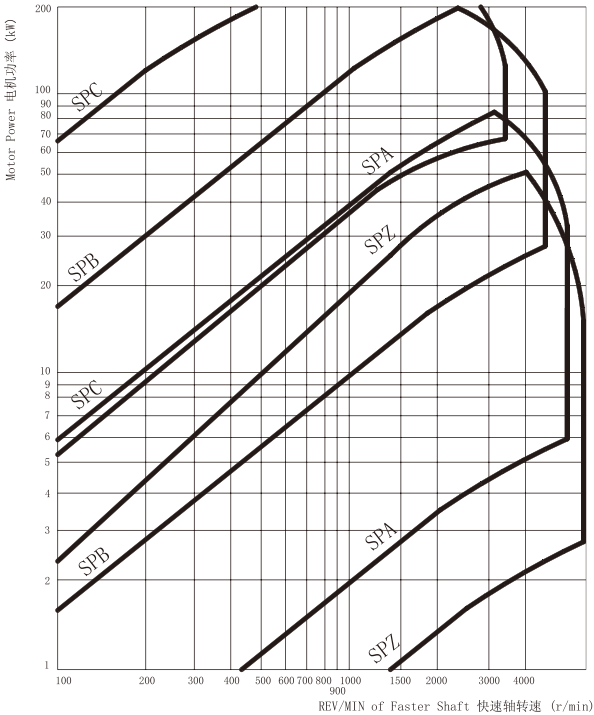
2) Center Distance A, here we just specify minimum center distance, normally, $A > 0.55(D_1 + D_2) + h$, where D_1 , D_2 are pitch diameter of the pulley, h is height differentiation of the pulley position. What Aeolus specified here is $A > 0.75(D_1 + D_2)$.



3) 皮带轮的选择 (见下表) :

快速轴转速 (转/分) Fast Shaft Rpm	最小皮带轮直径(mm) Min Pulley Diameter (mm)														
	电机功率(kW) Motor Power (kW)														
	≤1	3	4	5.5	7.5	11	15	18.5	22	30	37	45	55	75	
2880	56	60	67	67	80	80	85	90	100	112	125	132	160	170	
1800	56	63	71	75	80	85	95	106	112	125	150	155	170	190	
1400	56	63	75	80	85	85	100	112	125	140	160	165	190	212	
1200	56	71	80	80	95	95	106	118	132	150	160	175	200	236	
960	56	75	80	85	95	100	112	132	150	180	180	190	224	250	
720	56	80	85	100	100	106	132	150	160	190	200	224	250		

4) 带型的确定: 合理的选用带型有利于提高传动系统和风机轴承的寿命, 推荐按下表选用带型。



5) 皮带轮和皮带的安装规范:

只有当皮带轮 确实安装在轴上后, 才可以套上皮带。装皮带前须将中心距稍微缩短, 使皮带可以不费力地装好。在任何情况下, 绝不允许将皮带撬入皮带轮槽内。皮带轮和皮带的安装理论上要求二轴互相平行, 皮带的纵向截面和轴的轴心垂直。这很难做到, 准确的安装要求按下图所示。通常中心距在≤350mm, 皮带的实际偏移量≤1.2mm; 中心距在350~550mm之间的, 皮带的实际偏移量≤1.5mm; 550~1000之间的, 皮带的实际偏移量≤2.5mm。

3) Pulley selection (See below sheet)

(4) Belt type: it will be helpful to improve life length of the driving system if using the right belt, selections should be proceeded according to below chart

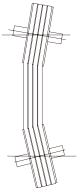
5) Pulley and belt assembly

Belt should be assembled only if the pulley is correctly fixed. To assure smooth assembly, the center distance must be slightly shortened, it is prohibited to pry the belt into the pulley groove at any time. Theoretically, two shaft should be parallel and the lengthwise intersection of the belt should be vertical with the shaft axis. It is difficult and the following pictures shows wrong and right examples. So practically, slight deviation is allowed as follows: allowed deviation ≤1.2mm if center distance ≤350mm; ≤1.5mm if center distance between 350mm and 550mm; ≤2.5mm if center distance between 550mm and 1000mm.



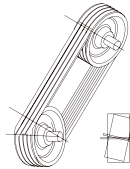
a. 转轴不平行

Not parallel shaft



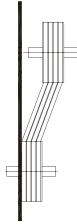
b. 转轴没有正确校正(纵使看来平行)

Not parallel shaft (view from another direction)



c. 转轴方向正确, 皮带轮位置有偏差

The belt are not vertical with the shaft axis



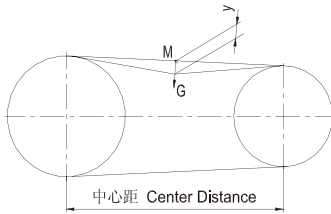
d. 正确安装, 转轴和皮带轮轴线都平行, 用直尺测量偏移量符合要求

Corrent, shaft be parallel and belt be vertical with the shaft axis.



6) 皮带张紧力:

皮带传动的工作面是皮带的二个侧面, 合适的张紧力是皮带寿命的保证。在带传动中, 张紧力是通过在带与两轮的切点跨距的中点M, 加上一个垂直于两轮的外公切线的适当载荷G, 使带沿跨距每长100mm所产生的挠度y为来控制。依据不同的带速和中心距, y可分为二档, 下表是推荐使用的张紧力。主动轮直径小时取低值, 直径大时取高值, 新三角带G值可增加约1.5倍。



6) Belt Tension

Belt tension is critical to belt life. We usually use value of flexibility (y) to control the tension. When we apply force to belt at middle of external common tangent of two pulleys, and along with perpendicular of the tangent, there will be displacement, and (y) is displacement per 100mm tangent. Per different line speed and center distance, we can find value of force applied to belt in below sheet, with which there will be specific (y) value, bottom number if action pulley diameter is smaller and top number if larger, for new belt, the force applied can be 1.5 times more.

带型 Belt Type	小带轮 直径 D (mm) Small Pulley Diameter (mm)	皮带中心距 >1000 mm			皮带中心距 <1000 mm		
		Center distance >1000 mm			Center distance <1000 mm		
		皮带速度 m/s	皮带速度 m/s	皮带速度 m/s	皮带速度 m/s	皮带速度 m/s	皮带速度 m/s
		Line speed m/s	Line speed m/s	Line speed m/s	Line speed m/s	Line speed m/s	Line speed m/s
		0~10	10~20	20~30	0~10	10~20	20~30
		使皮带每米跨距挠曲10mm所需力 f (N)			使皮带每米跨距挠曲15mm所需力 f (N)		
		Force to belt with 10mm flexibility f (N)			Force to belt with 10mm flexibility f (N)		
SPZ	63~95	9~13	8~11	7~10	12~17	10~14	9~13
	>95	13~18	11~17	10~15	17~24	17~24	13~20
SPA	90~140	15~21	13~18	11~15	20~28	20~28	14~20
	>140	21~32	18~27	15~23	28~42	28~42	20~30
SPB	140~265	26~37	21~32	19~28	34~49	34~49	25~38
	>265	37~47	33~42	28~38	49~62	49~62	38~50
SPC	224~355	47~67	39~59	33~53	62~89	62~89	45~70
	>355	67~86	59~77	53~71	90~115	90~115	70~95

2.轴承

1) 轴承寿命:

通常讲的球轴承寿命, 按照ISO281-1990的规定, 是指球轴承可靠性为90%的疲劳寿命, 这里不再对轴承寿命的计算进行讨论。在确保设计寿命的条件下, 影响轴承使用寿命的因素还包括皮带轮的选配、环境温度、润滑周期、皮带张力、环境湿度、风机安装精度等。

2. Bearing

1) Bearing Life

According to ISO281-1990, ball bearing life means endurance life with 90% reliability. Besides the design life, items there will be impacts on bearing life include pulley selection, belt tension, lubricating interval, ambient temperature/humidity and fan assembly quality.



2) 轴承推荐的再润滑周期:

通常轴承工作温度（外圈表面）在 60℃以下时润滑脂有 常的寿命，下表是推荐的轴承再润滑周期，建议使用 3#锂基脂或请咨询轴承厂家。

Type 类型	V alue d _n d _n 值	Environmental Conditions 使用环境	Operating Temperature 运行温度℃	Lubrication interval 润滑周期	
				Operating hous 运行小时	Time interval 时间间隔
Standard type 普通类型	40000 or lower	Normal 常情况	-15~80	1500~3000	6~12 months
Standard type 普通类型	70000 or lower	Normal 常情况	-15~80	1000~2000	3~6 months
Standard type 普通类型	70000 or lower	Normal 常情况	80~100	500~700	1 months
Heat resistant type 抗高温类型	70000 or lower	Normal 常情况	100~170	300~700	1 months
Heat resistant type 抗高温类型	70000 or lower	Normal 常情况	170~200	100	1 week
Heat resistant type 抗高温类型	70000 or lower	Normal 常情况	-60~80	1000~2000	3~6 months
Standard type 普通类型	70000 or lower	Dust 有灰尘的环境	-15~100	100~500	1 week~1 months
Standard type 普通类型	70000 or lower	Humid 充满潮湿的环境	-15~100	30~100	1 day~1 week

备注:

a. d_n 值为轴承内径d和轴承工作转速 n 的乘积。
b. 以上再润滑周期仅是一个推荐值，当d_n 值远小于规定值、风机在轻载状态或运行环境温度低于 60℃以下时，再润滑周期将成线性延长，甚至可以长期运行不作再润滑。

3) 轴承推荐的再润滑注脂量:

轴承再润滑时应小心避免加入过量的油脂。过量的油脂将导致轴承过热或密封件脱落。油脂必须以较小的压力少量多次加入。如可能，加脂时应同时缓慢的转动轴承来保证油脂在滚道内的均匀分布。不建议使用气动注脂工具，除非可以保证低压力下表中提供了一个加脂量大致的参考。绝大多数时候，最佳的加脂办法是少量多次，低压力，只到密封圈唇边区域出现薄薄的一层新鲜油脂为止。不建议再润滑的间隔周期太长，不建议一次加入过多油脂

系列	加脂克数
201~205	2 克
206~208	3 克
209~212	5 克
213~218	8 克

3.风机的常见故障及产生的原因和解决方法

风机在运转过程中可能发生某 故障，对发生的故障必须 速查明原因，及时解决，防止事故发生，常见故障及产生原因和解决方法见下表:

2) Lubricating Interval

Here is the suggestion of lubricating interval, please use lithium grease 3# or contact bearing manufacturer for details.

Notes:

a. d_n stands for arithmetic product of bearing inner diameter (d) and working speed(n)
b. The lubricating interval could be prolonged, or even be cancelled when value d_n is much lower than the specified, or the bearing is light loaded, or ambient temperature is below 60℃

3) Lubricant weight

Excessive lubricant must be avoided, which will lead to bearing overheated and seal components loosen. The lubricant must be put in by several times gradually, slowly rotating the bearing will be better. Please don't use the air-powered tools.
Below is the suggestion of lubricant weight for different bearing.

Series	Lubricant Weight
201~205	2g
206~208	3g
209~212	5g
213~218	8g

3. Troubleshooting

If failure happened, please at the first time find the root cause and solutions to avoid further issues. Below sheet is the common issues and solutions:



故障名称	产生原因	处理方法
叶轮擦壳	1. 运输、装卸过程中风机受到轴向力的作用，使叶轮偏离一边与进风口相擦；	1. 松开叶轮与轴端固定螺钉，调整叶轮与进风口两侧间隙并力求均等，拧紧紧固螺钉；
风机振动	1. 叶轮与进风口相擦； 2. 基础或支架刚度不够引起共振； 3. 机壳与支架、轴承座与支架连接螺栓松动； 4. 叶轮轴盘与轴配合松动； 5. 叶轮不平衡； 6. 减震器失效；	1. 调整叶轮与进风口两侧间隙； 2. 对基础和支架进行加固，使其有足够的刚度和强度； 3. 拧紧机壳与支架、轴承座与支架联结螺栓； 4. 以一方为基础，重新配置； 5. 叶轮重新进行动平衡； 6. 检查更换减震器；
轴承温升过高	1. 润滑脂质量不良，变质或填充过多和含有灰尘粘砂、污垢等杂质； 2. 滚动轴承损坏；	1. 更换高质量的润滑脂并保持清洁； 2. 更换轴承；
电机超电流	1. 开机时进气管道内阀门或节流阀未关严； 2. 流量超过额定值或风管漏气； 3. 电动机输入电压过低或电源单相断电，输入电压三相不平衡； 4. 电机接线错误； 5. 同一台机组内风机有反转现象； 6. 受同一空间并联风机工作情况恶化或发生故障影响；	1. 检查并关闭进气管阀门或节流阀； 2. 关闭阀门使流量不超过额定值，检查风管不应有漏气现象； 3. 测定三相电压，必须确保基本平衡； 4. 按 确方法接线； 5. 检查同一台机组，确定没有反转现象； 6. 同一台机组内所有风机必须同时运行；
控制柜开关跳闸	1. 风机转子部分被卡住； 2. 长期不运转，轴承严重生锈，电机不转； 3. 电机进水； 4. 控制柜接触器有质量问题；	1. 排除故障使转子运转灵活； 2. 定期对轴承进行保养，确保风机、电机运转灵活； 3. 清除电机内积水，并对电机进行烘烤，绝缘处理； 4. 更换接触器；
风机噪声异常	1. 运输、装卸中风机变形； 2. 叶轮紧固螺钉松动； 3. 轴承座紧固螺钉松动，主轴移位； 4. 滚动轴承损坏； 5. 风机叶轮剧烈震动；	1. 对风机各部件变形部位，予以修复； 2. 拧紧叶轮紧固螺钉； 3. 将主轴恢复到原来位置拧紧紧固螺钉； 4. 更换滚动轴承； 5. 叶轮重新进行动平衡；
风机运转后风小或无风	1. 调节阀关闭； 2. 没有回风； 3. 风机反转；	1. 风机运转后慢慢打开调节阀至额定工况； 2. 清除回风口过滤网确保常回风； 3. 重新接线，使风机旋转方向 确；
皮带滑下	1. 两皮带轮位置不在一中心线上，使皮带从小皮带轮上滑下；	1、重新调 两皮带轮位置，确保在同一中心线上；

Items	Root Cause	Solutions
Fan wheel collision w/ fan housing	Wheel deflected to touch air inlet cause axial force during shipment & loading or unloading	Loosen fastener fixed wheel & shaft, adjust gaps between wheel and air inlet, then re-tighten
Vibration	1. Fan wheel collision w/ air inlet 2. Resonance vibration cause not enough frame rigidity 3. Screw loosen between housing and frame, bearing block and frame 4. Loosen between shaft and shaft frame 5. Wheel unbalanced 6. Isolator failure	1. Adjust gaps between wheel and air inlet 2. Strengthen fan frame 3. Re-tighten 4. Exchange parts (shaft or shaft frame) 5. Re-balance 7. Exchange
Bearing – High temp. rising	1. Lubricant quality issue / overweighted, or contains dust etc. 2. Bearing damaged	1. Use qualified lubricant and keep working environment clean 2. Exchange
Motor – Super-current	1. Valve in air inlet duct not 100% closed when startup 2. Excessive air volume or leakage on duct 3. Low voltage / 3 phase unbalanced power 4. Wrong wire connection 5. normal and reverse rotation in same unit 6. Different running status for parallel fans in same unit	1. Check & Close 2. Valve adjustment / check and fix duct leakage 3. Check voltage, assure balanced power 4. Re-wiring 5. Check and assure no reverse rotation 6. Assure same running status for parallel fans
Control box – Switch tripped	1. Fan wheel seized 2. Bearing rust cause leaving unused for long time 3. Motor wetted 4. Contactor quality issue	1. Check 2. Periodical maintenance for fan bearing 3. Drying motors 4. Exchange
Abnormal noise	1. Fan deformation during shipment, loading & unloading 2. Fastener loosen, which fixes fan wheel 3. Fastener for bearing frame loosen, shaft deflected 4. Bearing damaged 5. Fan wheel vibration	1. Retrofit 2. Re-tighten 3. Adjust shaft position & re-tighten 4. Exchange 5. Re-balance fan wheel
Low or zero air volume	1. Valve closed 2. No return air 3. Reverse rotation	1. Valve should be gradually opened to nominal condition when startup 2. Clean filter to assure return air volume 3. Re-wiring
Belt loosen	1. Pulley and belt is not correctly assembled	1. Adjustment



4.注意事项

1. 用户订货时须注明风机的型号、风量、全压、安装方向、电机型号等，如需配套法兰、传动系统、底盘等的请在订单上注明；
2. 在安装前应对风机各部件进行检查，各转动件是否有干涉现象，叶轮、轴、轴承等主要部件是否正常，若有必须调整后方可安装；
3. 风机安装时，禁止将输气管道的重量加在风壳上，同时必须保证风机轴处于水平位置；
4. 风机式运行前，需确认电机的转向与风机的转向标志一致；
5. 风机是根据选定的工况来匹配电机的，远小于不施加阻力全敞开运行时的功率。为防止电机超功率运行，禁止风机在出风口或进风口未加足够阻力的情况下超载运行，以免烧毁电机。建议在风机的出口或进口管路中配置调节风阀，启动电机时关闭风阀，运行后再将风阀开启至规定位置；
6. 在风机长时间运行过程中，电机的运行电流不得超过电机的额定电流；
7. 风机必须进行定期的维护保养，如张紧皮带、更换轴承油脂、检查各连接件是否可靠等，如发现异常情况必须调整后才允许继续工作。

1. Fan model, air volume, total pressure, installation direction & motor model must be specified on Purchasing Order, and any accessories like flange, driving system & base frame should be marked if required.
2. The fan assembly must be on site inspected before installation to assure there is no any interference between moving parts, especially for fan wheel and motor. Professional adjustment is necessary if any.
- 3.It's prohibited to put any additional weight on fan scroll, such as air duct. And fan shaft must be in horizontal position.
4. Before commissioning, please confirm the compliance of rotation direction and direction label on the fan scroll
- 5.It is prohibited to startup when the outlet head loss is out of specifications.
- 6.Please sure the operation current within nominal value at any time.
- 7.Routine maintenance is a must including belt tension, bearing grease, fasteners etc., adjustment is required immediately if something abnormal.



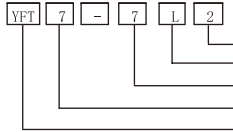
YFT 系列离心式通风机
Centrifugal Fan



特点

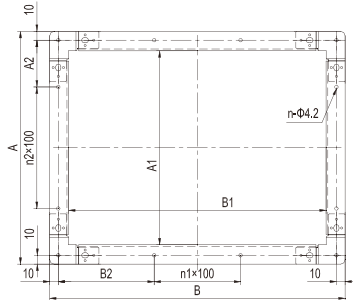
- 1.超轻结构。整机质量低于同性能的其他型号风机，使风机更适合于吊顶式空调系统。
- 2.低振动。轴承座采用目前国内唯一的特殊加强结构，使风机特别是并联双风机的振动大大降低。
- 3.低噪音，高效率，可替代外转子风机。独特的风壳蜗线及叶片角度设计，使风机效率更高，噪音更低。配上特殊设计的风机底座及电机固定系统，可替代外转子风机，大大节约风机成本。
- 4.可靠的运行寿命。低噪音精密球轴承的基本理论寿命不低于20,000小时，在遵守皮带轮及皮带的安装和使用规则情况下，在限定的工况下可保证轴承的长期运行质量。

命名方式



单、双风机
结构形式 (L/G)
叶轮名义宽度 (inch)
叶轮名义直径 (inch)
YFT系列

出口法兰



序号	物料名称 Flange P/N	A	A1	A2	B	B1	B2	n	n1	n2
1	YFT7-7	272	228	76	301.5	257.5	90.75	12	1	1
2	YFT9-9	306	262	93	340.5	296.5	60.25	14	2	1
3	YFT10-10	333	289	56.5	373.5	329.5	76.75	16	2	2
4	YFT12-12	387	343	83.5	437	393	58.5	18	3	2
5	YFT15-15	448	404	64	513	469	96.5	20	3	3
6	YFT18-18	522	478	101	599	555	89.5	22	4	3
7	YFT20-20	634	590	107	682	638	81	26	5	4

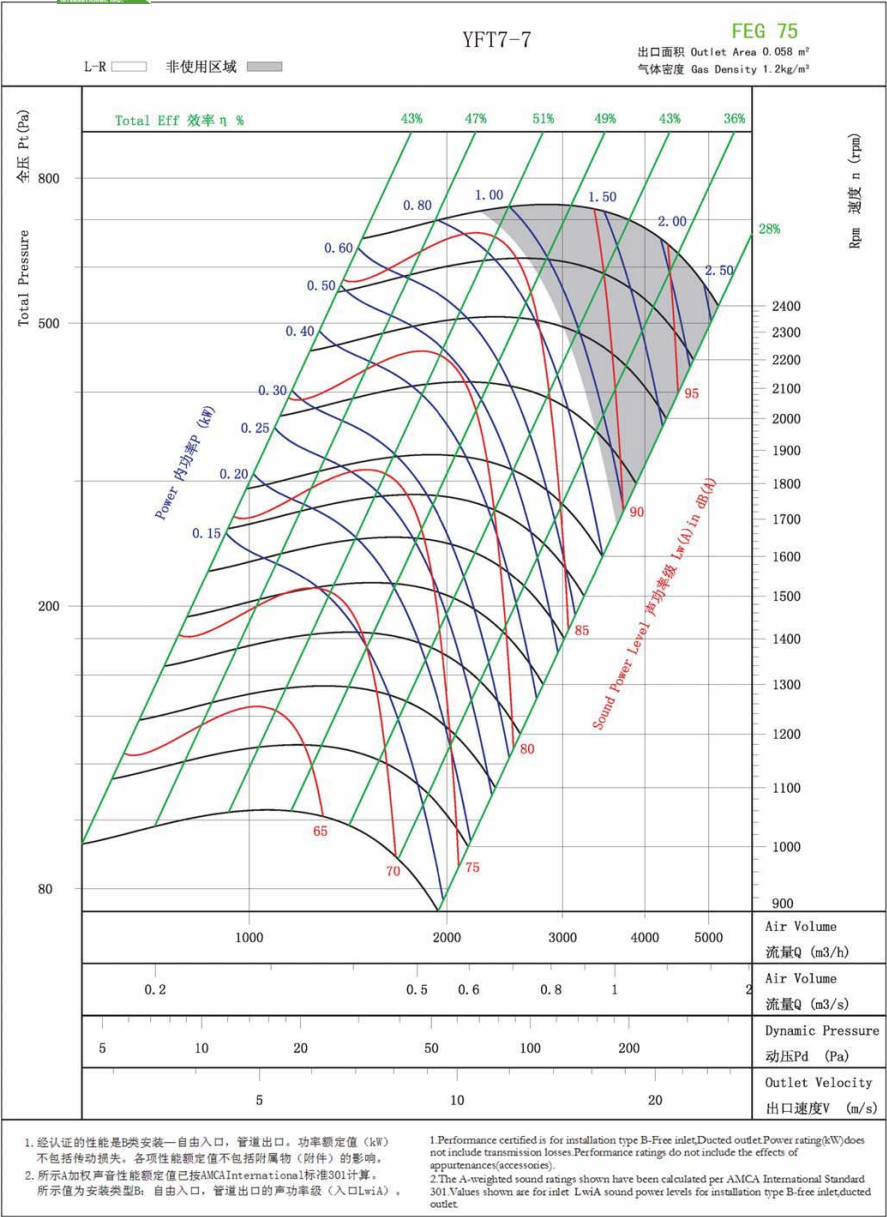
Features

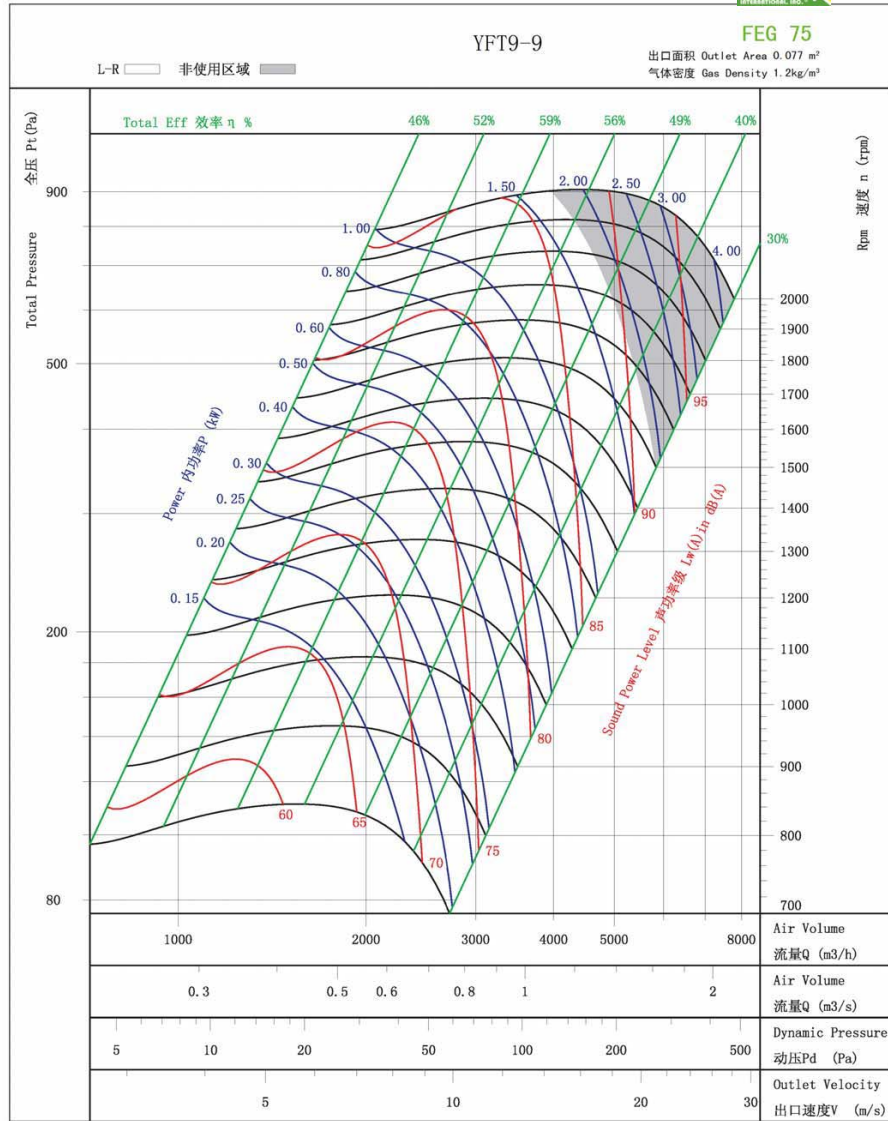
- 1.Super Light Construction. Especially suitable for underceiling packaged unit.
- 2.Low Vibration.Unique reinforced design of bearing block greatly reduce the fan vibration, especially for those twin fans.
- 3.Low Noise Level & High Efficiency.Can replace high cost outer-rotor fan. Optimized scroll profiles and blade outlet angle assure the fan with high efficiency & low noise, and it will be further improved if adopt specially design the based frame and motor bracket.
- 4.High Reliability.Theoretical life span of ball bearing is no less than 20,000 hours if followed installation and operation instruction shown in this catalogue.

Nomenclature

Single/Twin fan
Construction (L/G)
Nominal width of the fan wheel (inch)
Nominal diameter of the fan wheel (inch)
YFT series

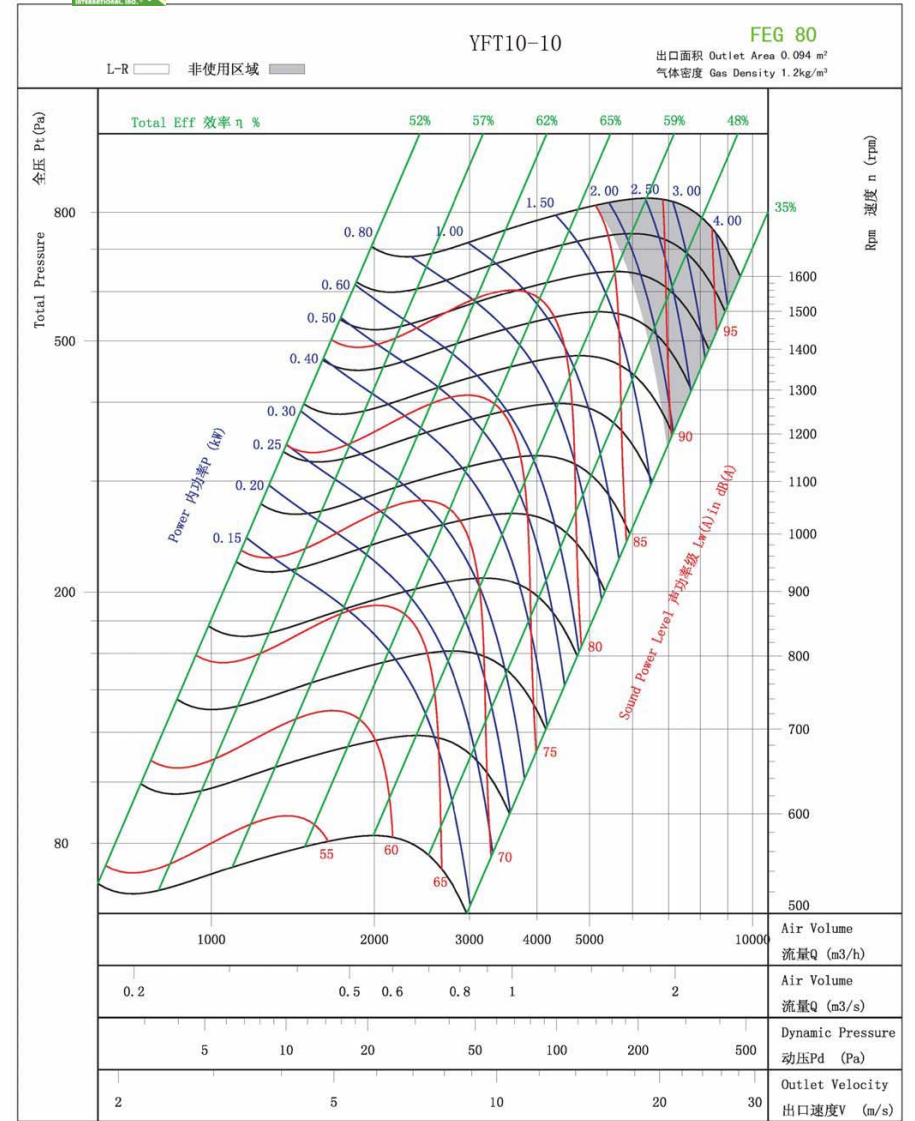
Outlet Flange





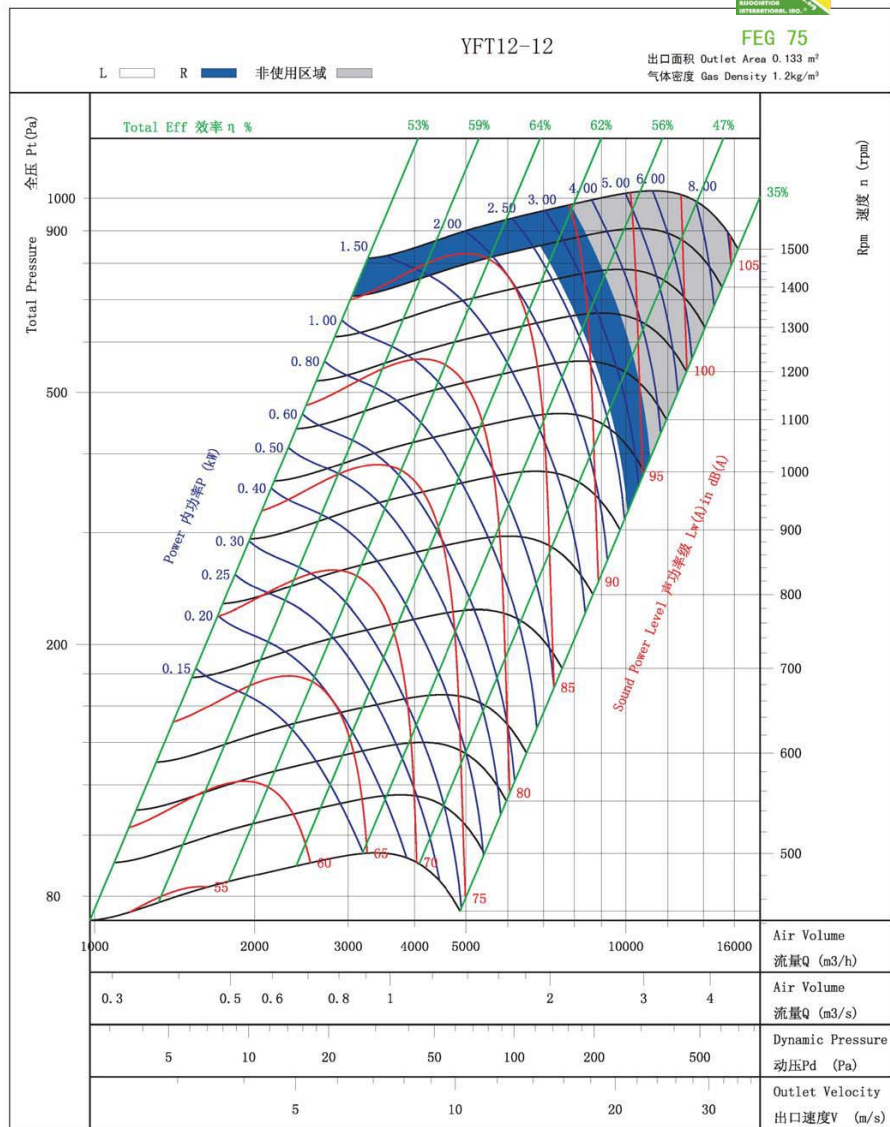
1. 经认证的性能是B类安装—自由入口，管道出口。功率额定值 (kW) 不包括传动损失。各项性能额定值不包括附属物 (附件) 的影响。
2. 所示A加权声音性能额定值已按AMCA International标准301计算。所示值为安装类型B：自由入口，管道出口的声功率级 (入口LwA)。

1. Performance certified is for installation type B-Free inlet, Ducted outlet. Power rating (kW) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).
2. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet LwA sound power levels for installation type B-free inlet, ducted outlet.



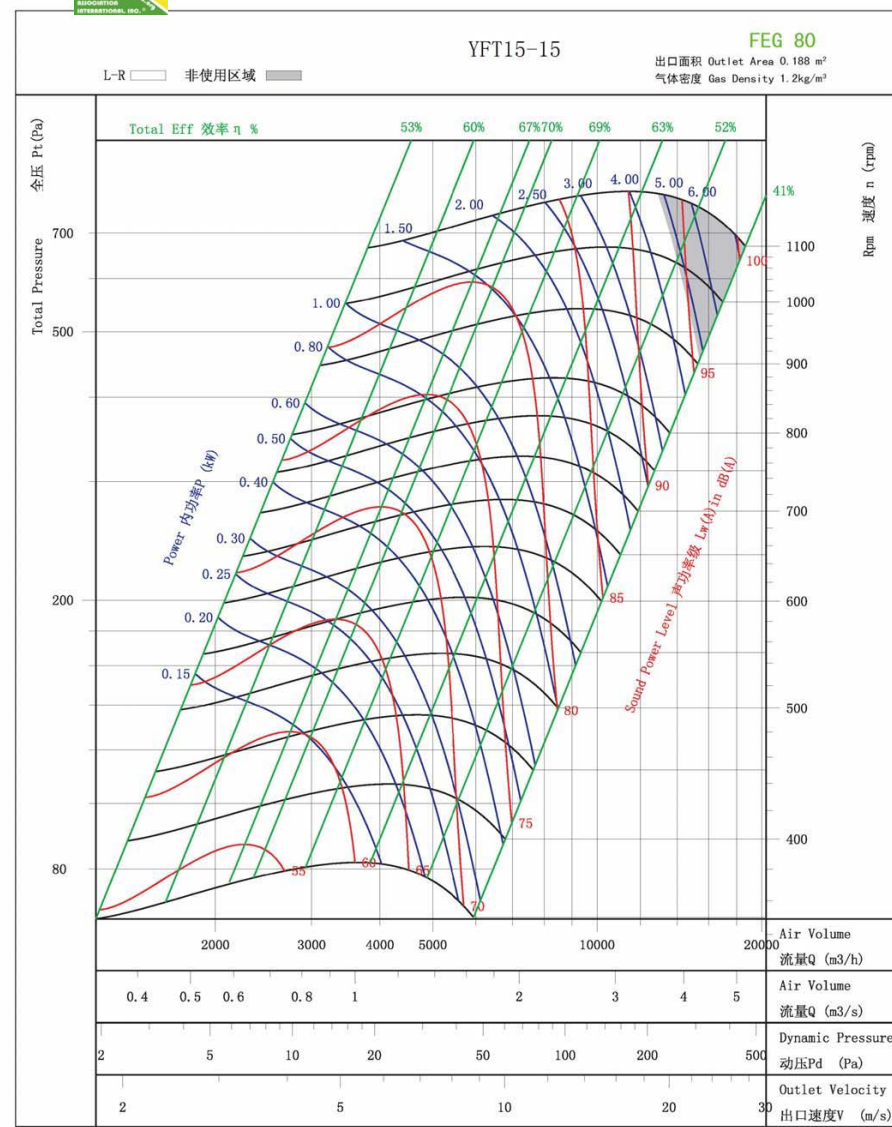
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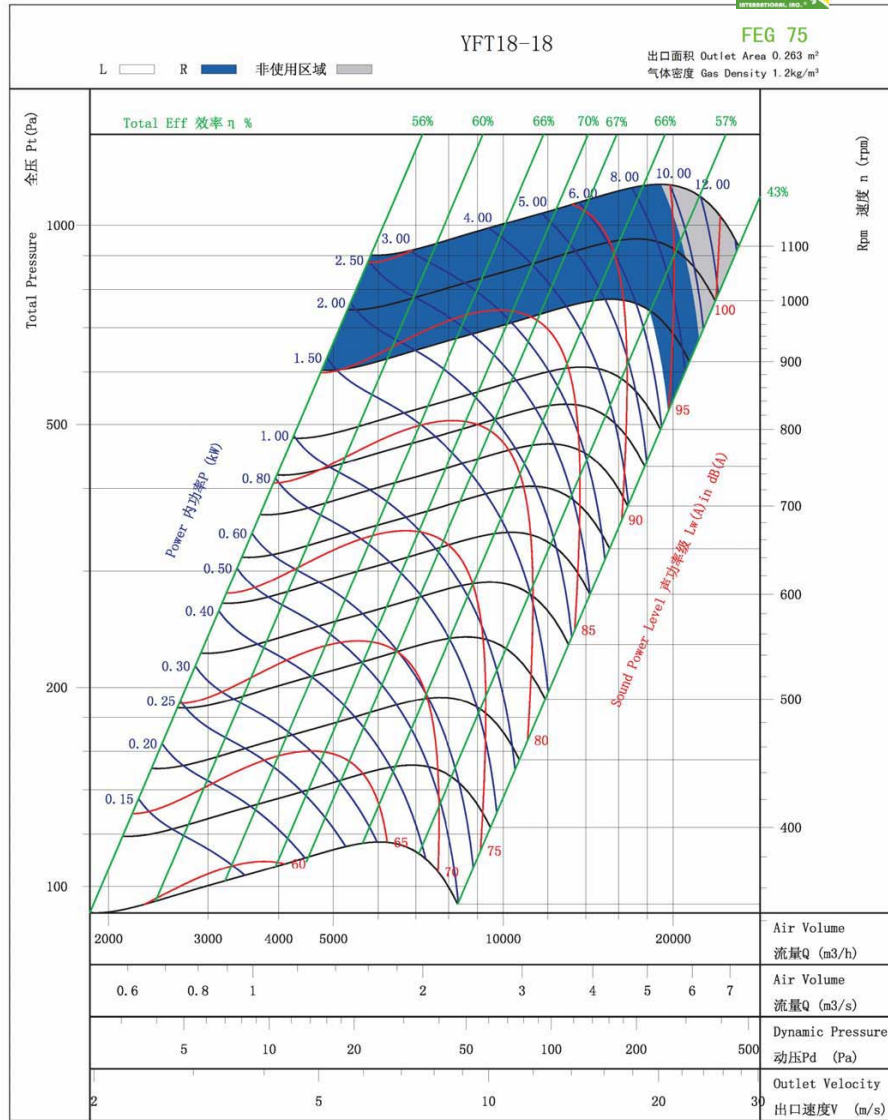
1. 经认证的性能是B类安装—自由入口，管道出口。功率额定值 (kW) 不包括传动损失。各项性能额定值不包括附属物（附件）的影响。
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- 2.The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.Values shown are for inlet L_{wi}A sound power levels for installation type B-free inlet,ducted outlet.

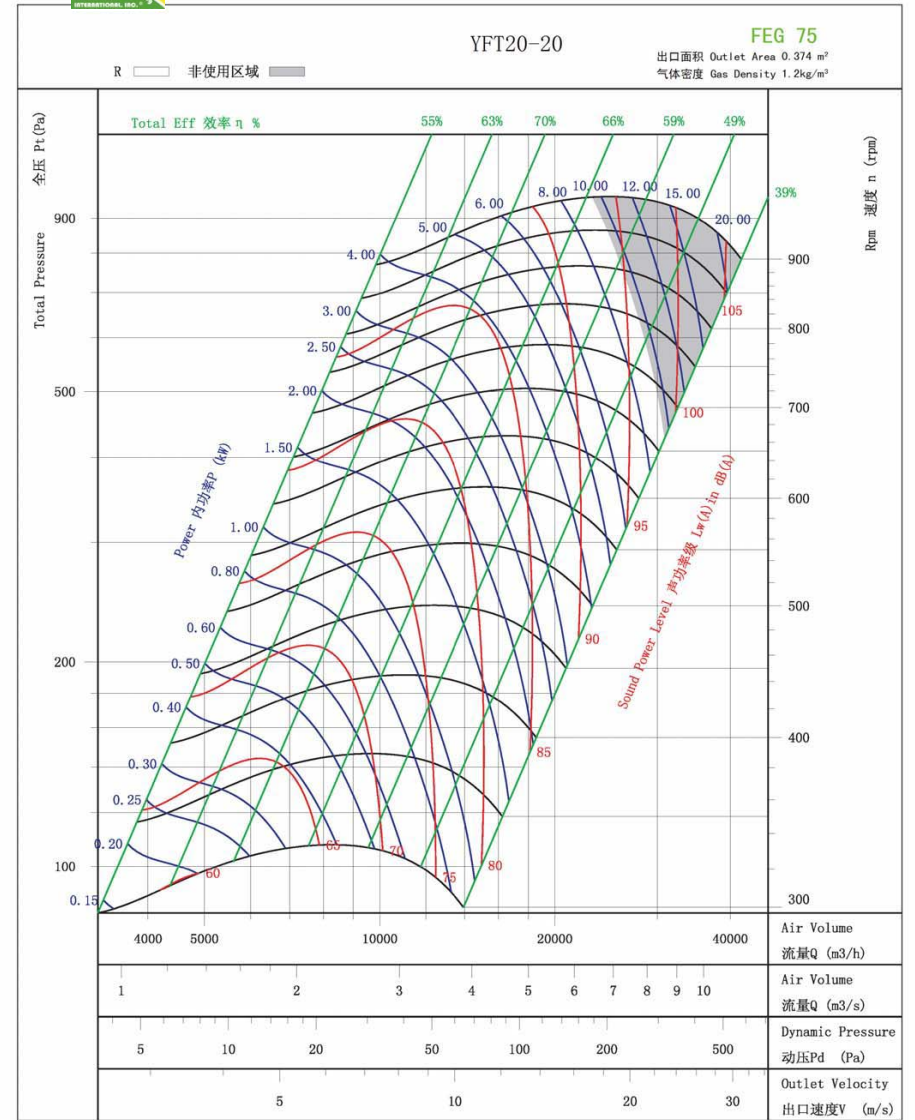


1. 经认证的性能是B类安装—自由入口，管道出口。功率额定值 (kW) 不包括传动损失。各项性能额定值不包括附属物（附件）的影响。
2. 所示A加权声性能额定值已按AMCA International标准301计算。所示值为安装类型B：自由入口，管道出口的声功率级（入口L_{wi}A）。

1. Performance certified for installation type B-Free inlet,Ducted outlet.Power rating(kW) does not include transmission losses.Performance ratings do not include the effects of appurtenances(accessories).
- 2.The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.Values shown are for inlet L_{wi}A sound power levels for installation type B-free inlet,ducted outlet.



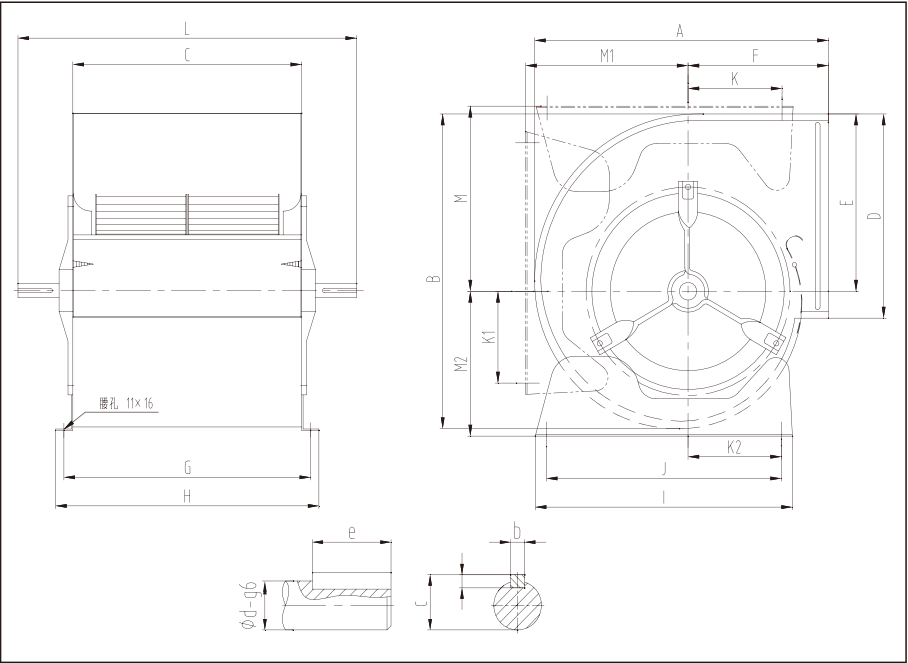
1. Performance certified for installation type B-Free inlet,Ducted outlet.Power rating(kW) does not include transmission losses.Performance ratings do not include the effects of appurtenances(accessories).
2.The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.Values shown are for inlet LwIA sound power levels for installation type B-free inlet,ducted outlet.



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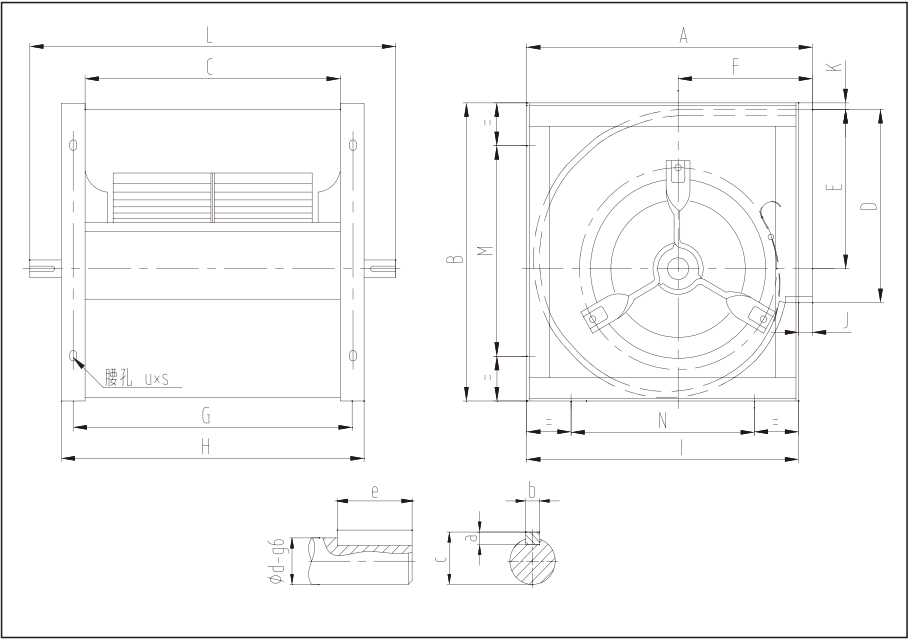
YFT-L



风机规格 Fan Model	A	B	C	D	E	F	G	H	I	J	L	K	K1	K2	M	M1	M2	a	b	c	d	e
YFT7-7L	319	328	259	228	188	155	285	309	240	200	370	110	90	90	220	167	143	6	6	22.5	20	30
YFT9-9L	380	388	298	262	217	185	324	348	332	300	447	119	122	123	255	199	176	6	6	22.5	20	40
YFT10-10L	425	444	331	289	251	203	357	381	372	340	490	136	130	135	289	227	197	6	6	22.5	20	55
YFT12-12L	492	524	395	343	296	230	421	445	440	408	564	161	151	161	334	266	229	7	8	28	25	50
YFT15-15L	569	610	471	404	341	264	497	521	527	495	635	197	210	201	379	309	271	7	8	28	25	50
YFT18-18L	685	740	557	478	413	314	583	607	638	606	740	262	285	278	455	376	341	7	8	33	30	55



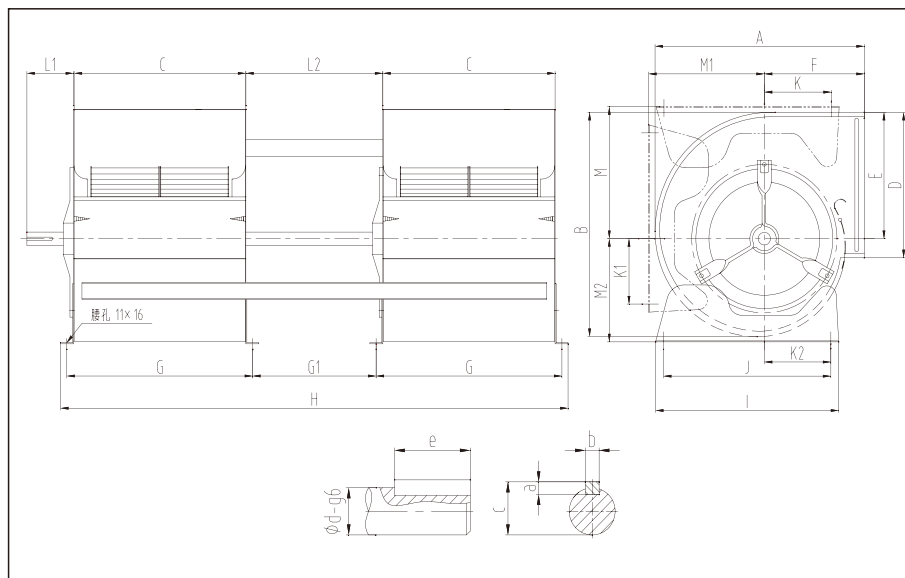
YFT-R



风机规格 Fan Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	a	b	c	d	e	U*S
YFT7-7R	323	336	259	228	188	155	281	299	294	30	4	430	180	180	6	6	22.5	20	30	9*12
YFT9-9R	384	396	298	262	217	185	320	338	350	34	4	465	324	274	6	6	22.5	20	30	9*12
YFT10-10R	429	452	331	288	251	203	353	371	399	30	4	490	383	330	6	6	22.5	20	55	9*12
YFT12-12R	497	534	395	343	296	230	425	455	467	30	5	600	443	371	7	8	28	25	50	11*16
YFT15-15R	574	620	471	404	341	264	501	531	539	35	5	685	530	449	7	8	28	25	60	11*16
YFT18-18R	690	751	557	478	413	314	597	637	655	35	5	800	641	545	7	8	33	30	75	11*16
YFT20-20R	796	868	640	590	488	361	680	720	750	46	5	880	750	628	9	10	38	35	75	11*16



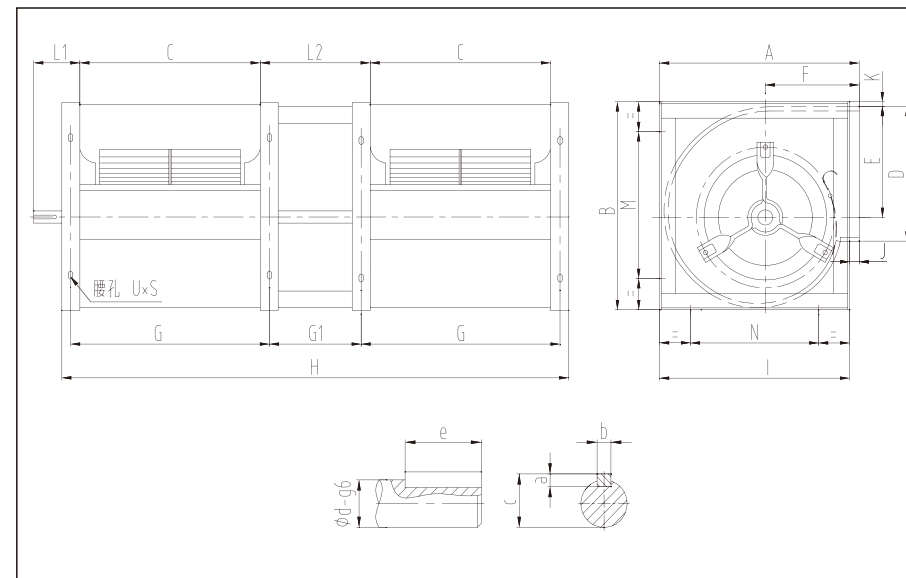
YFT-L2



风机规格 Fan Model	A	B	C	D	E	F	G	G1	H	I	J	L1	L2	K	K1	K2	M	M1	M2	a	b	c	d	e
YFT7-7L2	319	328	259	228	188	155	285	158	752	240	200	80	184	110	90	90	220	167	143	6	6	22.5	20	60
YFT9-9L2	380	388	298	262	217	185	324	218	890	332	300	90	244	119	122	123	255	199	176	6	6	22.5	20	60
YFT10-10L2	425	444	331	289	251	203	357	238	976	372	340	90	264	136	130	135	289	227	197	7	8	28	25	60
YFT12-12L2	492	524	395	343	296	230	421	298	1164	440	408	110	324	161	151	161	334	266	229	7	8	28	25	70
YFT15-15L2	569	610	471	404	341	264	497	358	1376	527	495	130	384	197	210	201	379	309	271	7	8	33	30	90
YFT18-18L2	685	740	557	478	413	314	583	432	1622	638	606	130	458	262	285	278	455	376	341	8	10	38	35	90



YFT-R2



风机规格 Fan Model	A	B	C	D	E	F	G	G1	H	I	J	K	L1	L2	M	N	a	b	c	d	e	U*S
YFT7-7R2	323	336	259	228	188	155	281	162	742	294	30	4	80	184	180	180	6	6	22.5	20	60	9*12
YFT9-9R2	384	396	298	262	217	185	320	222	880	350	34	4	80	244	324	274	6	6	22.5	20	60	9*12
YFT10-10R2	429	452	331	288	251	203	353	242	966	399	30	4	90	264	383	330	7	8	28	25	60	9*12
YFT12-12R2	497	534	395	343	296	230	425	294	1174	467	30	5	110	324	443	371	7	8	28	25	70	11*16
YFT15-15R2	574	620	471	404	341	264	501	354	1386	539	35	5	130	384	530	449	7	8	33	30	90	11*16
YFT18-18R2	690	751	557	478	413	314	597	418	1652	655	35	5	130	458	641	545	8	10	38	35	90	11*16
YFT20-20R2	796	868	640	590	488	361	680	470	1870	750	46	5	150	510	750	628	8	12	43	40	90	11*16



		7-7	9-9	10-10	12-12	15-15	18-18	20-20
最大选配功率 Max.installed power (kW)	L	1-1	2-2	2.2	3	5-5	7-5	—
	R	1-1	2-2	2.2	4	5-5	11	11
	L2	1-5	3	3	5-5	7-5	11	—
	R2	1-5	3	4	7-5	11	15	18-5
最高工作转速 Max.speed (r/min)	L	2400	2000	1600	1400	1100	900	—
	R	2400	2000	1600	1500	1100	1100	900
	L2	2200	1800	1500	1300	1100	900	—
	R2	2200	1800	1600	1400	1200	1000	900
风机重量 Fan weight (kg)	L	6-5	9	11	17	24	42	—
	R	8-5	10.5	12	20	30	47	62
	L2	15	19	25	37	52	88	—
	R2	20	27	30	48	66	103	145
空气温度 (最低-20°C) Air temperature (min-20°C)	L	85	85	85	85	85	85	—
	R	85	85	85	85	85	85	85
	L2	85	85	85	85	85	85	—
	R2	85	85	85	85	85	85	85
轴承额定动载荷 Dynamic Load (N)	L	12800	12800	12800	14000	14000	19500	—
	R	12800	12800	12800	14000	14000	19500	25700
	L2	12800	14000	19500	19500	25700	29100	—
	R2	12800	14000	19500	19500	25700	29100	32500
轴承型号 Bearing number	L	FH204	FH204	FH204	FH205	FH205	FH206	—
	R	FH204	FH204	FH204	FH205	FH205	FH206	FH207
	L2	FH204	UK205	UK206	UK206	UK207	UK208	—
	R2	FH204	UK205	UK206	UK206	UK207	UK208	UK209



YFB 系列离心式通风机
Centrifugal Fan



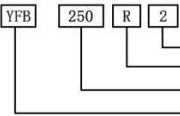
特点

- 1.YFB 系列风机为双进风、前倾式离心通风机。
- 2.全系列叶轮尺寸共11种, 从250mm到800mm。

Features

- 1.Double inlet fans,with forward curved impellers.
- 12 sizes from 250 up to 800 mm wheel diameter.

命名方式



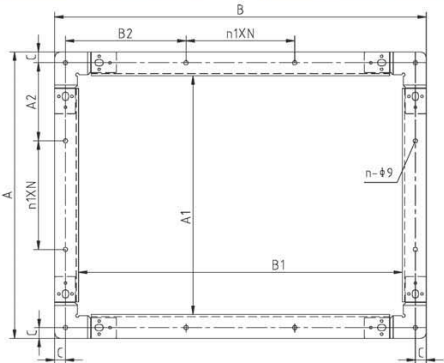
单、双风机
结构形式 (L/R/K/G)
叶轮名义直径 (mm)
YFB系列

Nomenclature

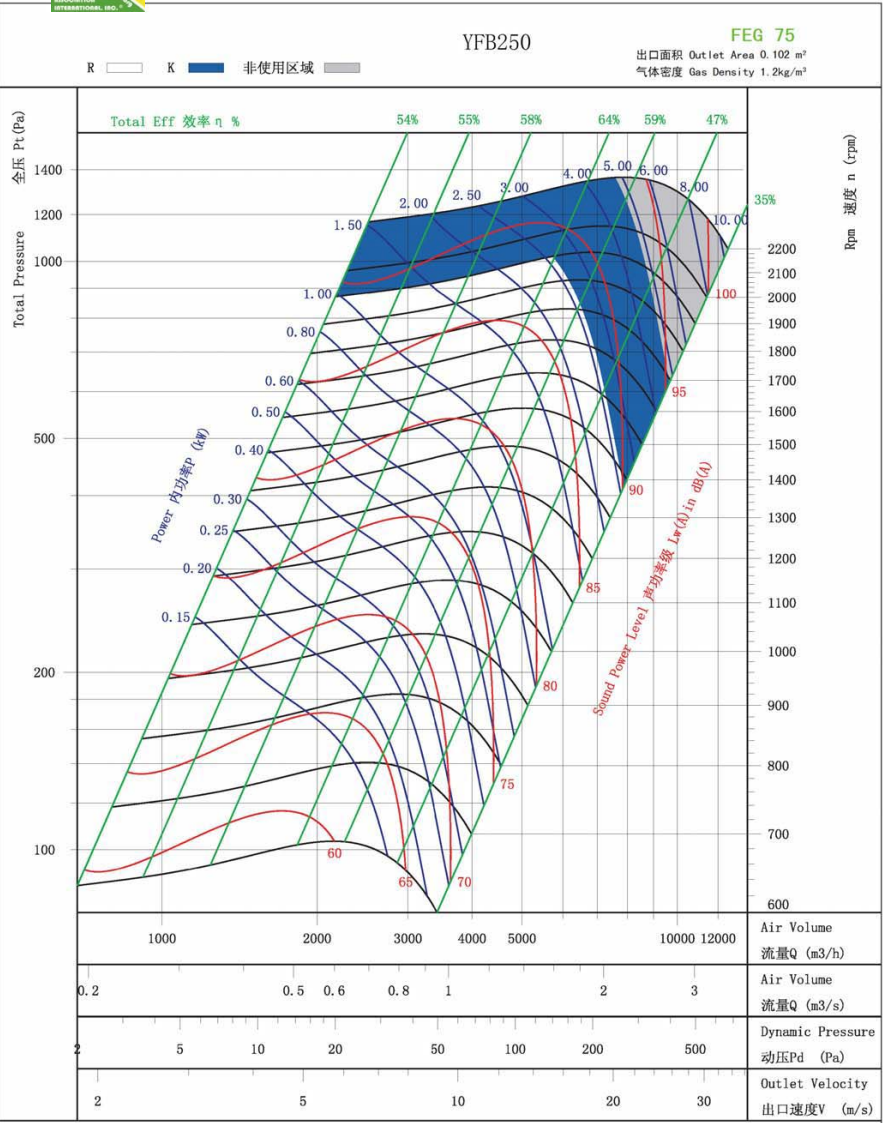
Single/Twin fan
Construction (L/R/K/G)
Nominal diameter of te fan weel(mm)
YFB series

出口法兰

Outlet Flange

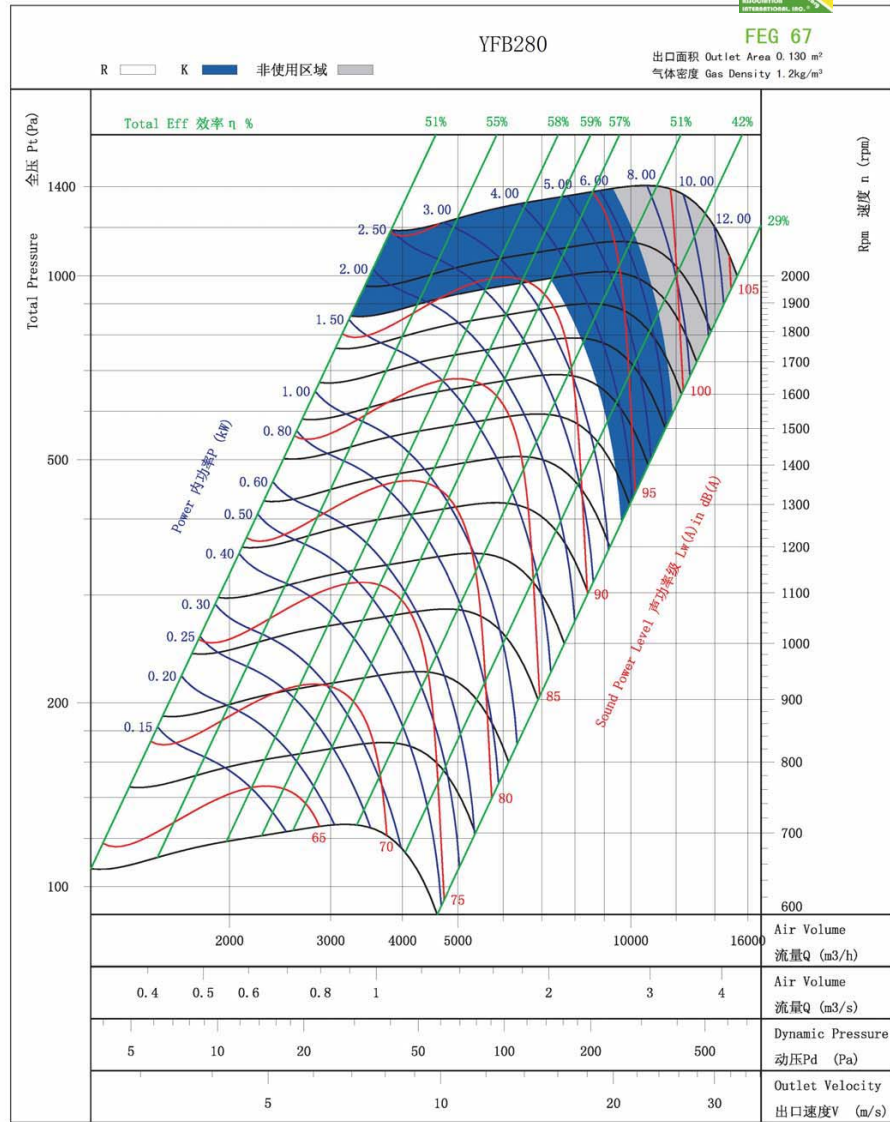


序号	物料名称 Flange P/N	A	A1	A2	B	B1	B2	C	N	n	n1
1	YFB250	366	322	98	365	321	97.5	10	150	12	1
2	YFB280	405	361	117.5	404	360	117	10	150	12	1
3	YFB315	448	404	144	447	403	143.5	10	150	12	1
4	YFB355	497	453	93.5	496	452	93	10	150	16	2
5	YFB400	551	507	170.5	550	506	170	10	200	12	1
6	YFB450	613	569	201.5	612	568	201	10	200	12	1
7	YFB500	698	638	136	697	637	135.5	13	200	16	2
8	YFB560	775	715	174.5	773	713	173.5	13	200	16	2
9	YFB630	861	801	167.5	859	799	166.5	13	250	16	2
10	YFB710	958	898	216	956	896	215	13	250	16	2
11	YFB800	1067	1007	145.5	1065	1005	144.5	13	250	20	3

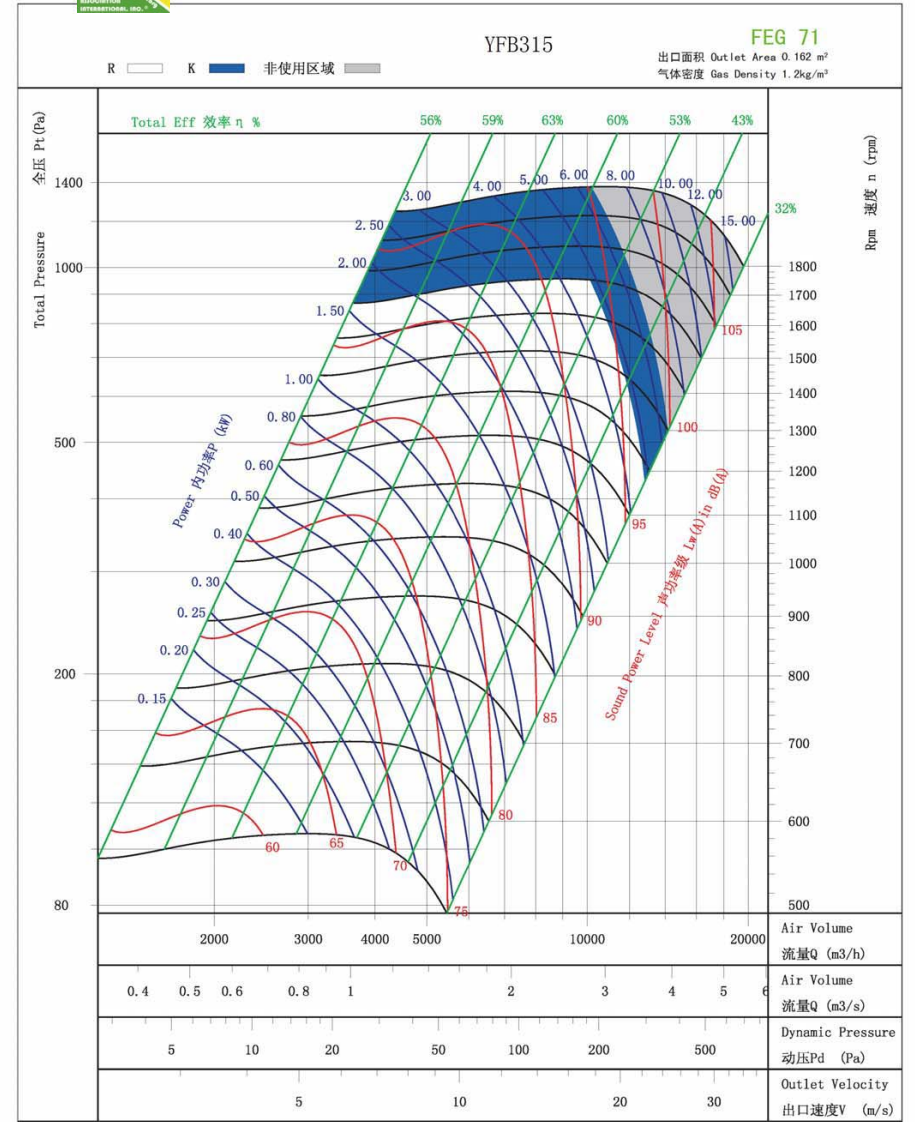


1. 经认证的性能是B类安装—自由入口, 管道出口, 功率额定值 (kW) 不包括传动损失, 各项性能额定值不包括附属物 (附件) 的影响。
2. 所示A加权声音性能额定值已按AMCA International标准301计算。
所示值为安装类型B: 自由入口, 管道出口的声功率级 (入口LwA)。

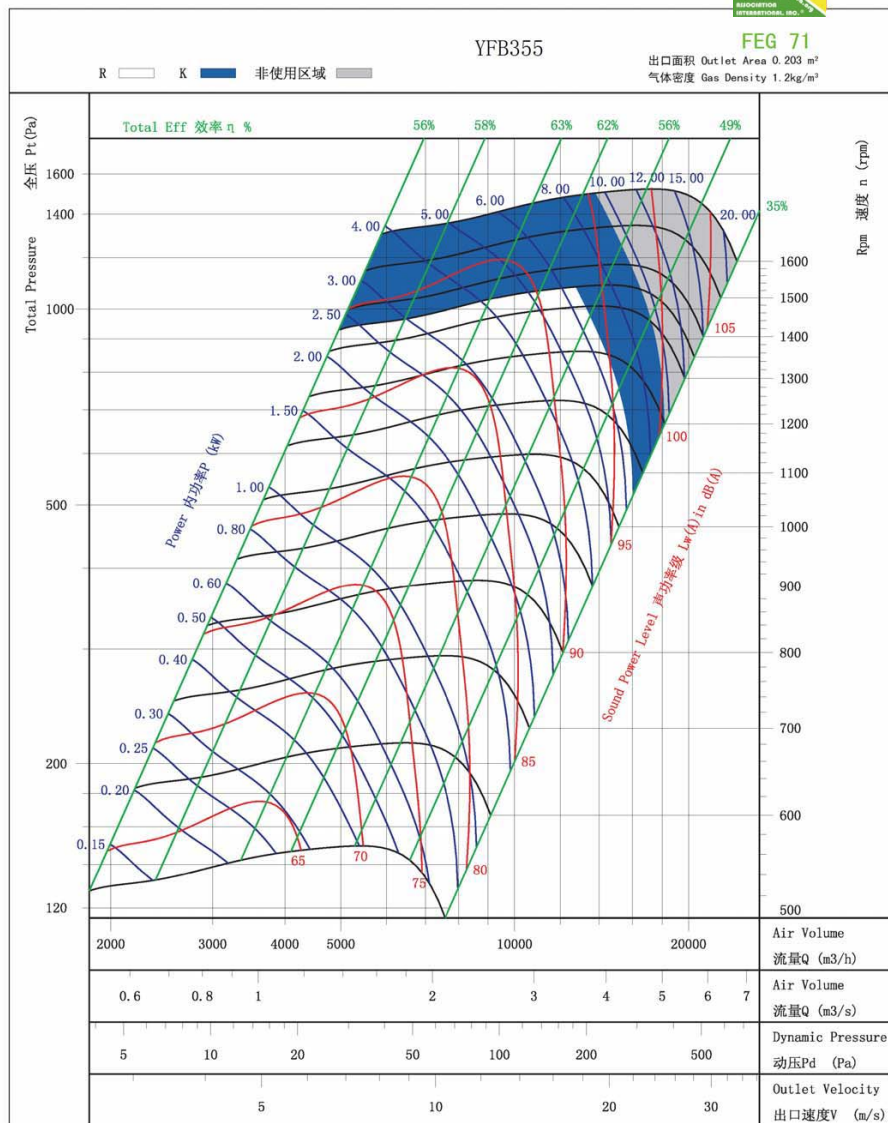
1. Performance certified for installation type B-Free inlet,Ducted outlet.Power rating(kW) does not include transmission losses Performance ratings do not include the effects of appurtenances/accessories.
2.The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.Values shown are for inlet LwA sound power levels for installation type B-free inlet,ducted outlet



1. Performance certified is for installation type B-Free inlet,Ducted outlet.Power rating(kW) does not include transmission losses. Performance ratings do not include the effects of appurtenances/accessories.
2. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_{WA} sound power levels for installation type B-free inlet, ducted outlet.

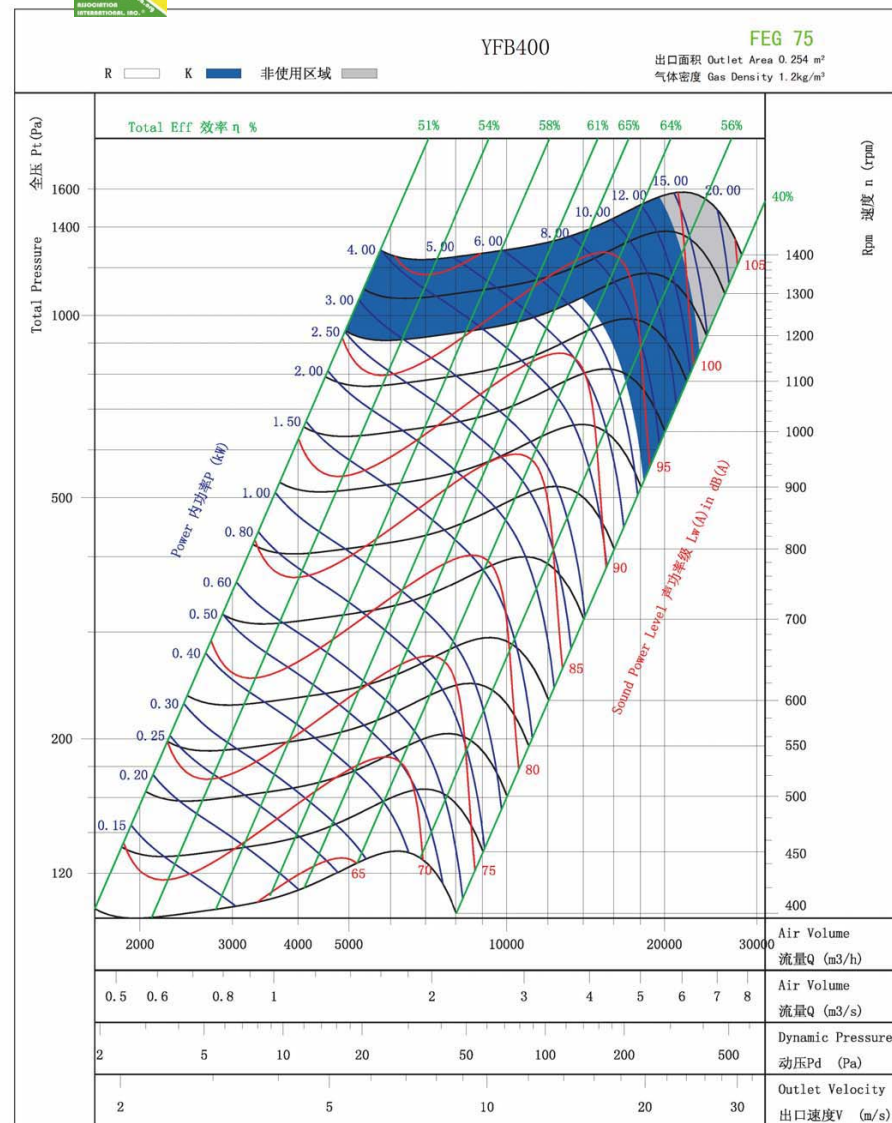


1. Performance certified is for installation type B-Free inlet,Ducted outlet.Power rating(kW) does not include transmission losses. Performance ratings do not include the effects of appurtenances/accessories.
2. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_{WA} sound power levels for installation type B-free inlet, ducted outlet.



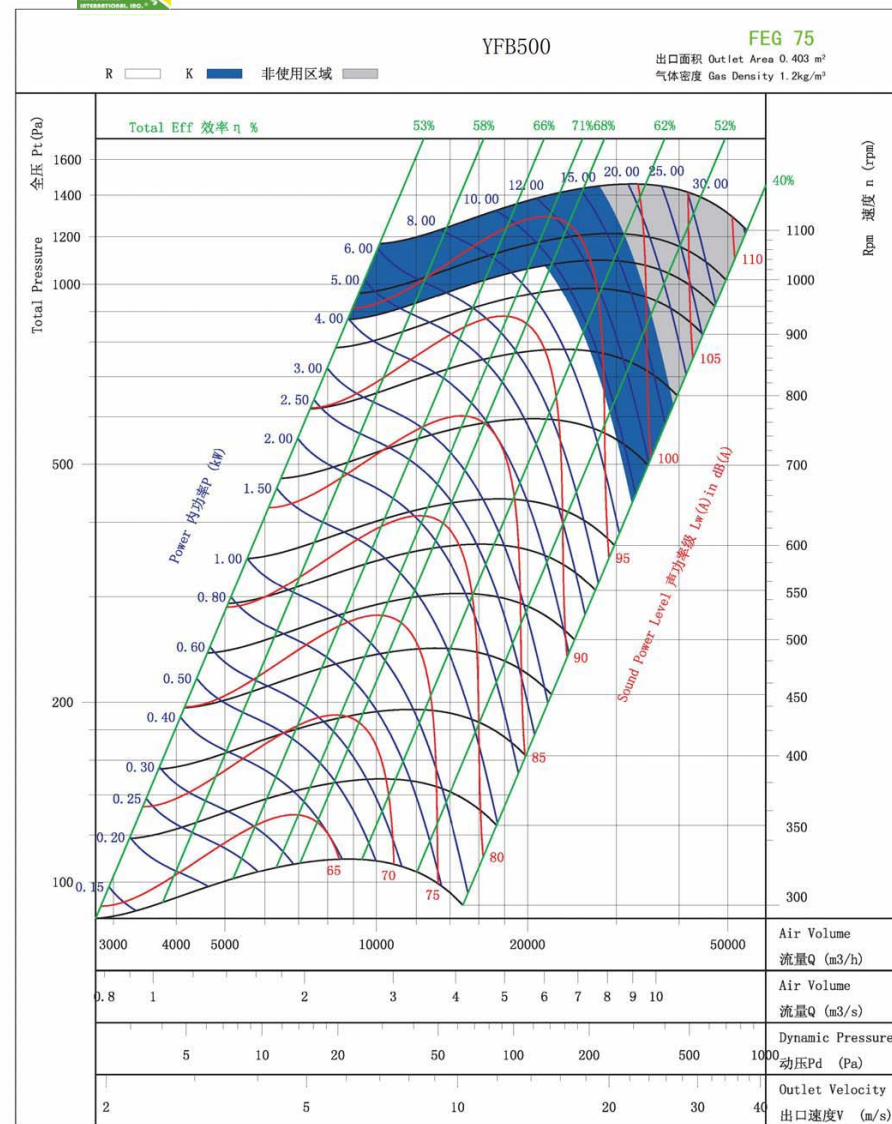
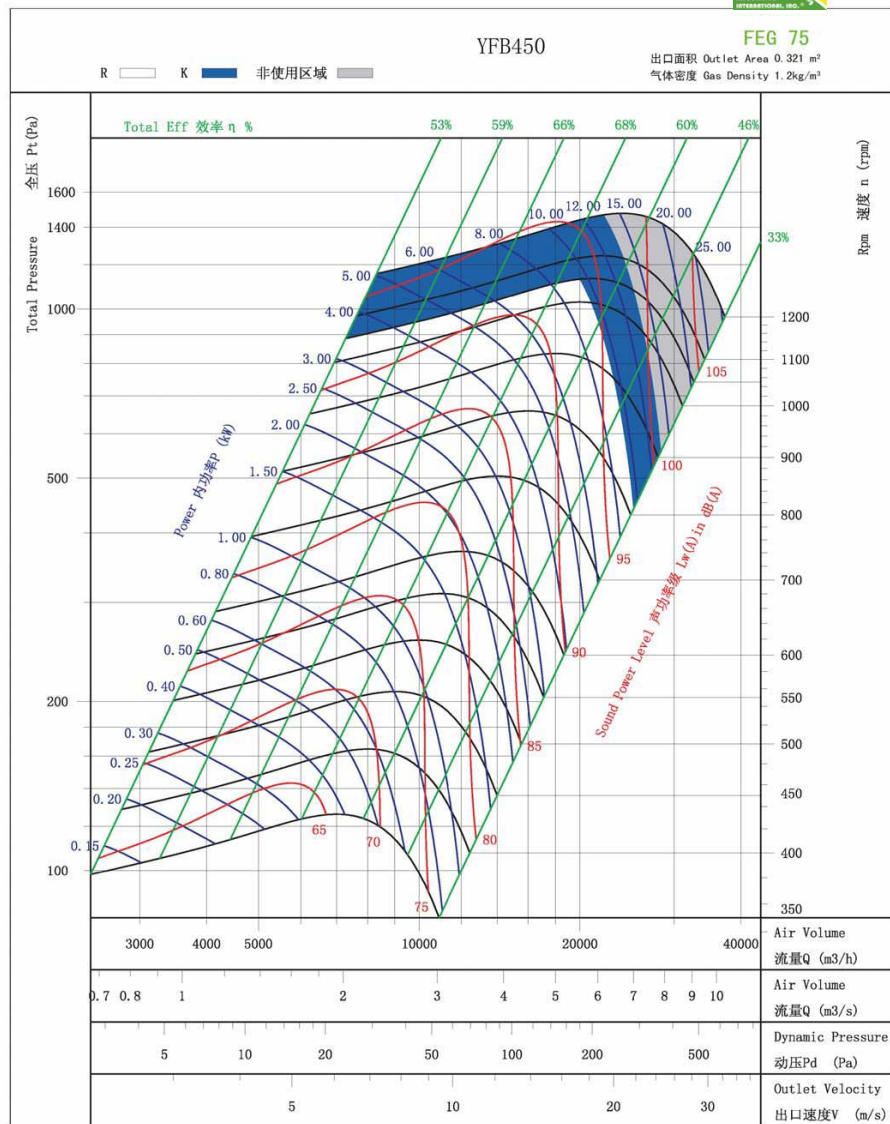
1. 经认证的性能是B类安装—自由入口，管道出口。功率额定值 (kW) 不包括传动损失。各项性能额定值不包括附属物 (附件) 的影响。
2. 所示A加权声性能额定值已按AMCA International标准301计算。
所示值为安装类型B: 自由入口，管道出口的声功率级 (入口LwIA)。

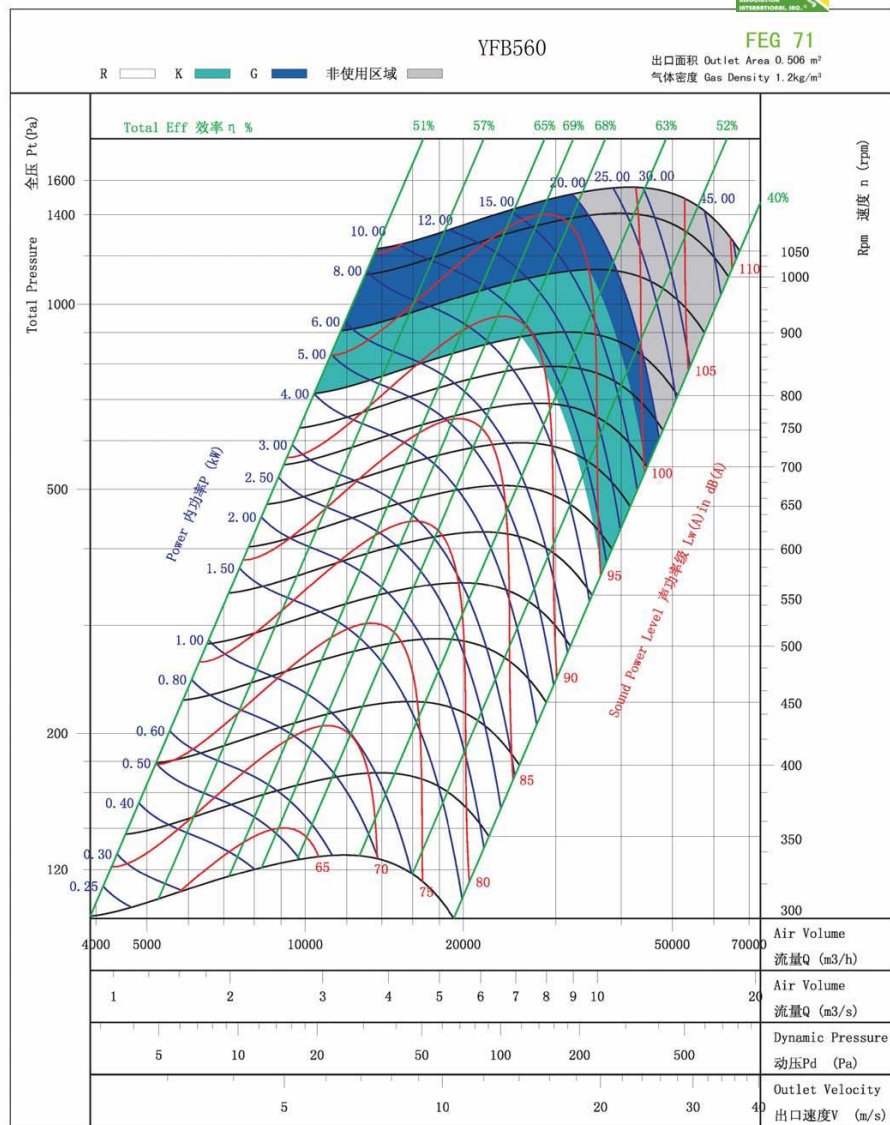
1 Performance certified is for installation type B-Free inlet,Ducted outlet.Power rating(kW) does not include transmission losses. Performance ratings do not include the effects of appurtenances(accessories).
2 The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.Values shown are for inlet LwIA sound power levels for installation type B-free inlet,ducted outlet.



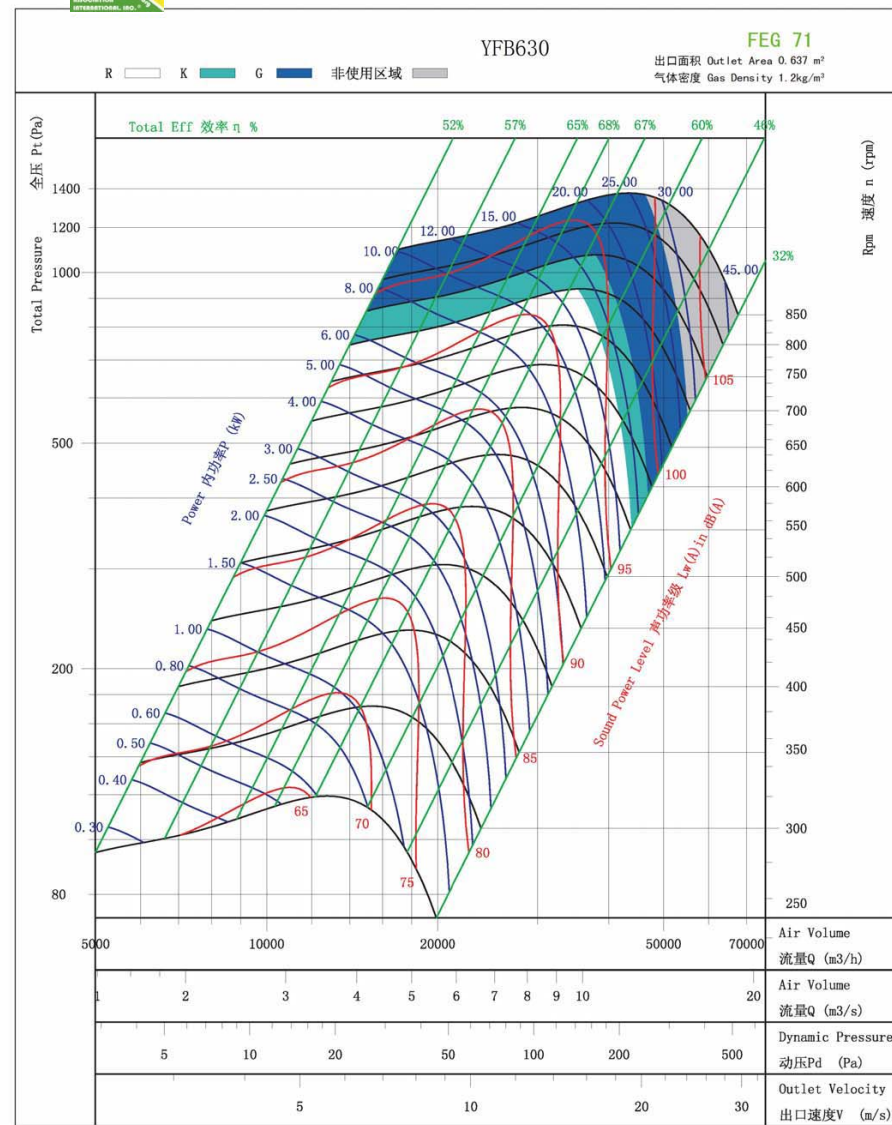
1. 经认证的性能是B类安装—自由入口，管道出口。功率额定值 (kW) 不包括传动损失。各项性能额定值不包括附属物 (附件) 的影响。
2. 所示A加权声性能额定值已按AMCA International标准301计算。
所示值为安装类型B: 自由入口，管道出口的声功率级 (入口LwIA)。

1 Performance certified is for installation type B-Free inlet,Ducted outlet.Power rating(kW) does not include transmission losses. Performance ratings do not include the effects of appurtenances(accessories).
2 The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.Values shown are for inlet LwIA sound power levels for installation type B-free inlet,ducted outlet.

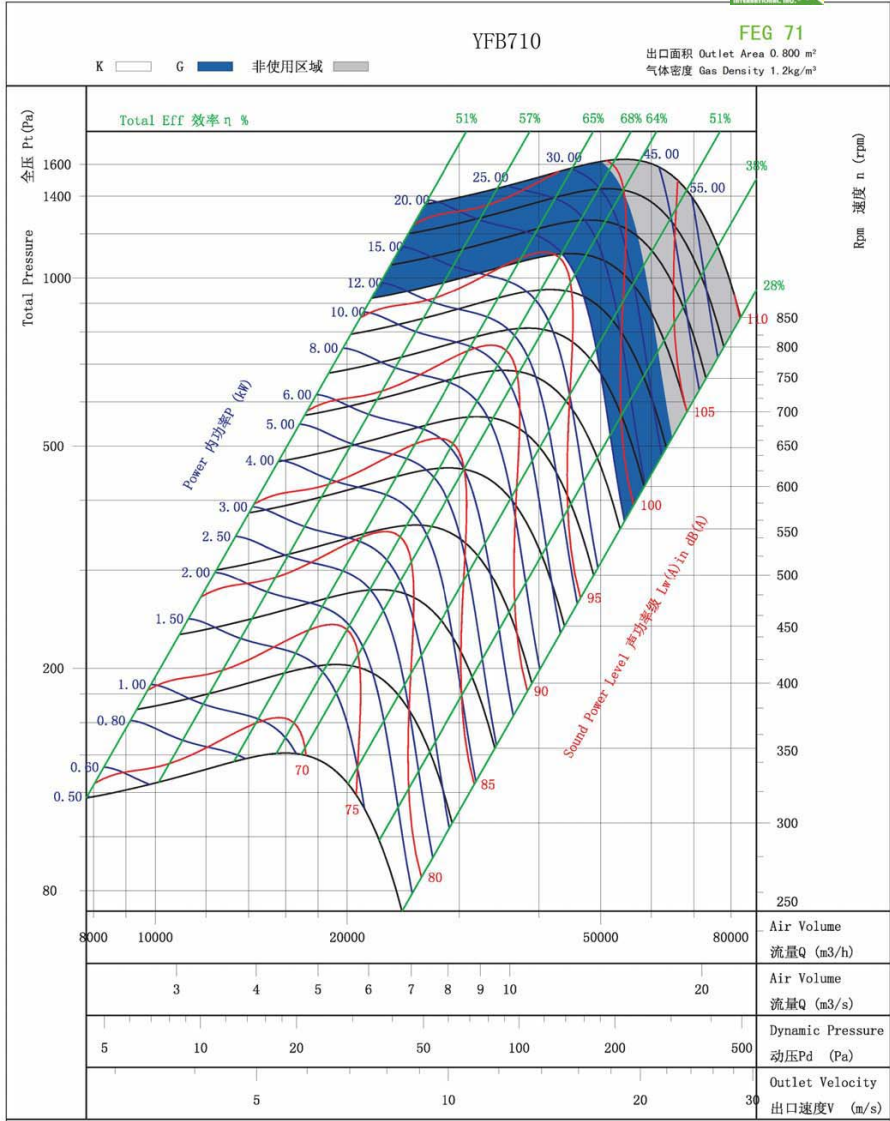




1. Performance certified is for installation type B-Free inlet, Ducted outlet. Power rating (kW) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).
2. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet LwIA sound power levels for installation type B-free inlet, ducted outlet.

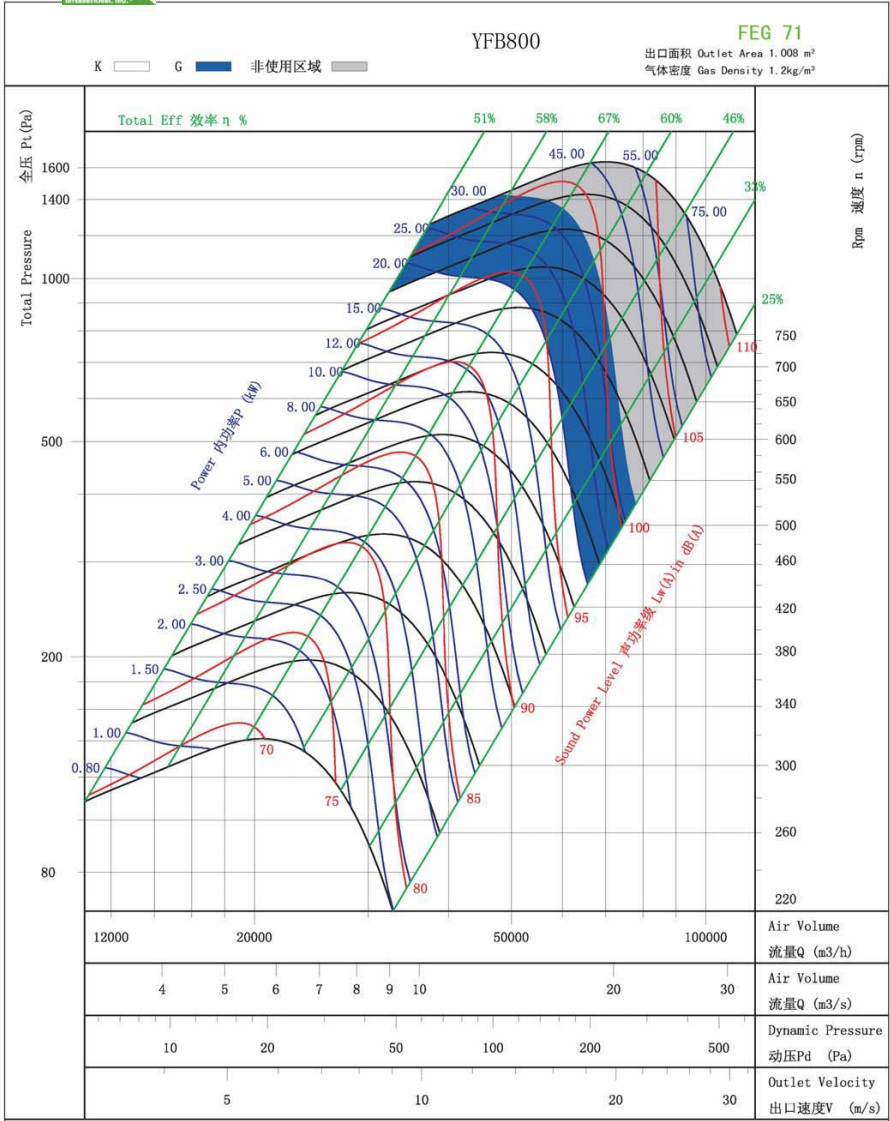


1. Performance certified is for installation type B-Free inlet, Ducted outlet. Power rating (kW) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).
2. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet LwIA sound power levels for installation type B-free inlet, ducted outlet.



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所示值为安装类型B: 自由入口，管道出口的声功率级 (入口LwIA)。

1. Performance certified for installation type B-Free inlet,Ducted outlet.Power rating(kW) does not include transmission losses. Performance ratings do not include the effects of appurtenances(accessories).
2. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet LwIA sound power levels for installation type B-free inlet,ducted outlet.

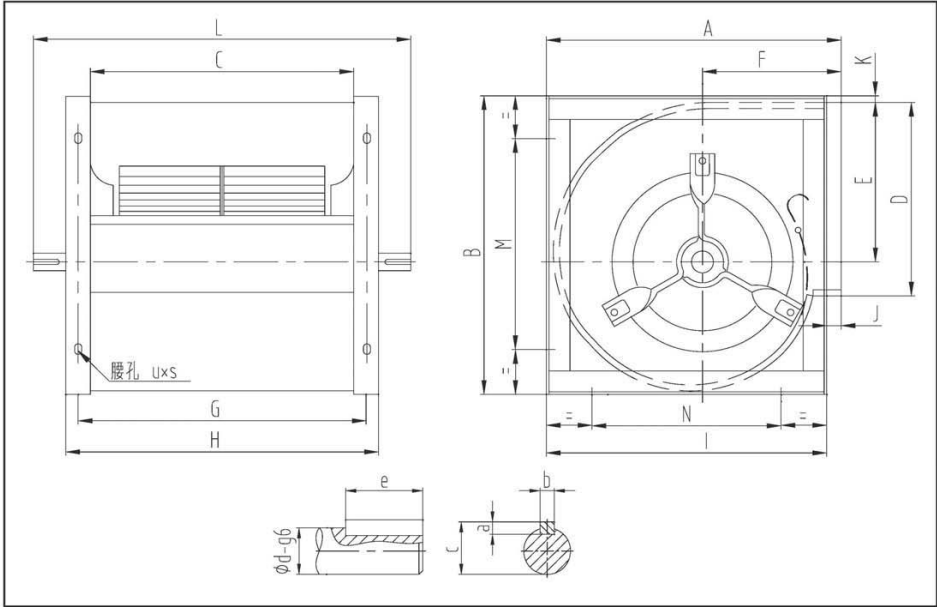


1. 经认证的性能是B类安装—自由入口，管道出口，功率额定值 (kW) 不包括传动损失。各项性能额定值不包括附属物 (附件) 的影响。
2. 所示A加权声性能额定值已按AMCA International标准301计算。
所示值为安装类型B: 自由入口，管道出口的声功率级 (入口LwIA)。

1. Performance certified for installation type B-Free inlet,Ducted outlet.Power rating(kW) does not include transmission losses. Performance ratings do not include the effects of appurtenances(accessories).
2. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet LwIA sound power levels for installation type B-free inlet,ducted outlet.



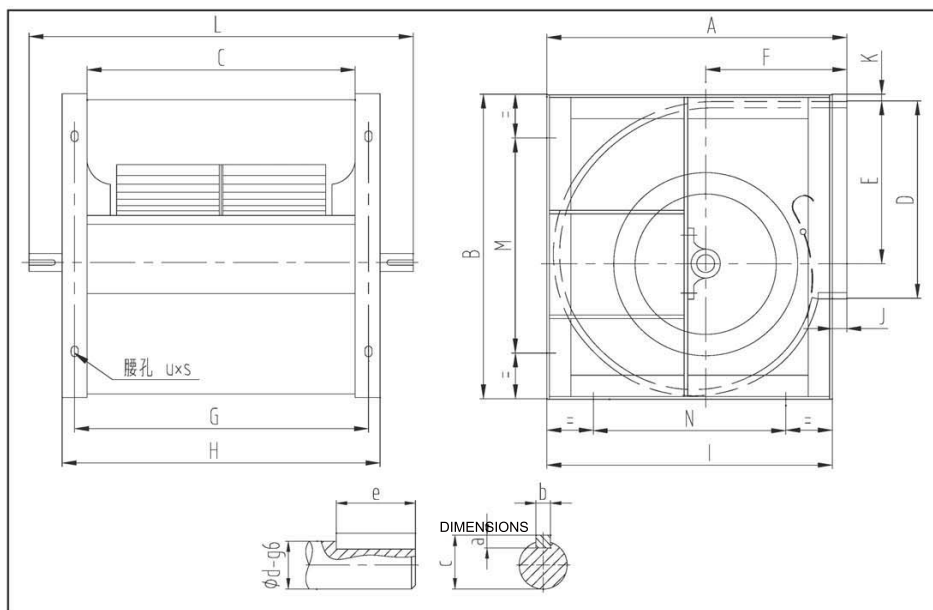
YFB-R



风机规格 Fan Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	a	b	c	d	e	U*S
YFB250R	427.5	475	322	322	264	193	350	372	391.5	36	10.5	520	224	224	6	6	22.5	20	45	11*16
YFB280R	476.5	530	361	361	296	213	391	421	440.5	36	11.5	560	280	280	7	8	28	25	50	11*16
YFB315R	530	595	404	404	336	234	434	464	492	38	11.5	605	280	280	7	8	28	25	50	11*16
YFB355R	587.5	663	453	453	375.5	260	489	513	550.5	37	12	680	355	355	7	8	33	30	65	11*16
YFB400R	656	742	507	507	421.5	292	547	587	620	36	12	730	355	355	7	8	33	30	65	11*16
YFB450R	739	841	569	569	482	325	609	649	699	40	12	815	530	530	8	10	38	35	75	11*16
YFB500R	810	929	638	638	530	352	678	718	762	48	12	885	530	530	8	10	38	35	75	13*18
YFB560R	890	1022	715	715	599	390	765	805	841	49	5	1000	530	530	8	12	43	40	75	13*18
YFB630R	998	1156	801	801	670	438	851	901	946	52	8	1090	530	530	8	12	43	40	90	13*18

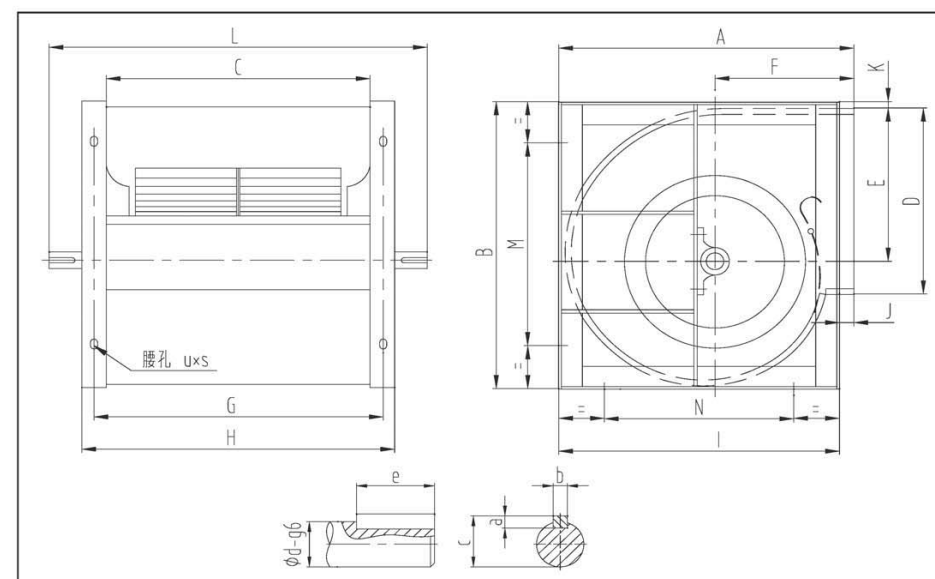


YFB-K



风机规格 Fan Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	a	b	c	d	e	U*S
YFB250K	427.5	475	322	322	264	193	350	372	391.5	36	10.5	520	224	224	7	8	28	25	45	11*16
YFB280K	476.5	530	361	361	296	213	391	421	440.5	36	11.5	580	281	281	7	8	33	30	50	11*16
YFB315K	530	595	404	404	336	234	434	464	492	38	11.5	625	280	280	7	8	33	30	50	11*16
YFB355K	587.5	663	453	453	376	260	489	513	550.5	37	12	680	355	355	8	10	38	35	65	11*16
YFB400K	656	742	507	507	421.5	292	547	587	620	36	12	760	355	355	8	10	38	35	65	11*16
YFB450K	739	841	569	569	482	325	609	649	699	40	12	845	530	530	8	12	43	40	75	11*16
YFB500K	810	929	638	638	530	352	678	718	762	48	12	920	530	530	8	12	43	40	75	13*18
YFB560K	890	1022	715	715	599	390	765	805	841	49	5	1060	530	530	8	12	43	40	90	13*18
YFB630K	998	1156	801	801	670	438	851	901	946	52	8	1160	530	530	8	12	43	40	90	13*18
YFB710K	1122	1298	898	898	761.5	482	948	998	1062	60	6.5	1300	630	630	9	14	53.8	50	110	17*22
YFB800K	1254	1466	1007	1007	855.5	538	1057	1107	1188	66	6.5	1450	710	710	9	14	53.8	50	110	17*22

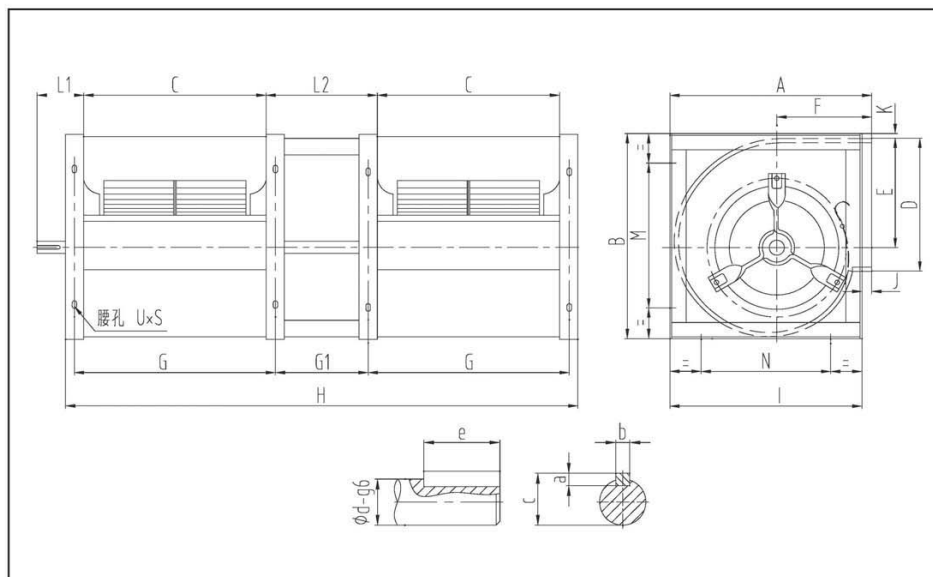
YFB-G



风机规格 Fan Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	a	b	c	d	e	U*S
YFB560G	890	1022	715	715	599	390	765	805	841	49	5	1060	530	530	9	14	53.8	50	90	13*18
YFB630G	998	1156	801	801	670	438	851	901	946	52	8	1160	530	530	9	14	53.8	50	90	13*18
YFB710G	1122	1298	898	898	761.5	482	948	998	1062	60	6.5	1300	630	630	11	18	64.4	60	110	17*22
YFB800G	1254	1466	1007	1007	855.5	538	1057	1107	1188	66	6.5	1450	710	710	11	18	64.4	60	110	17*22



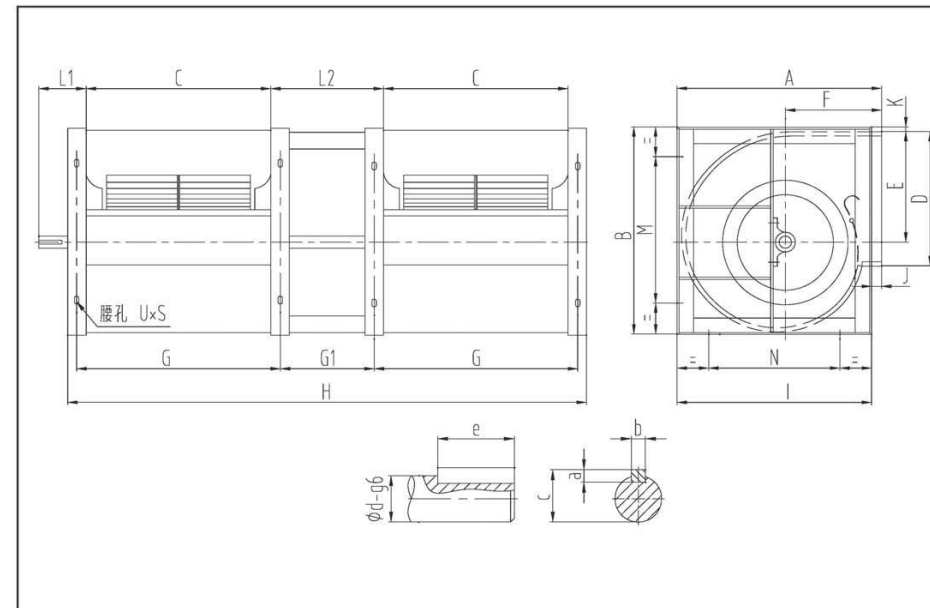
YFB-R2



风机规格 Fan Model	A	B	C	D	E	F	G	G1	H	I	J	K	L1	L2	M	N	a	b	c	d	e	U*S
YFB250R2	427.5	475	322	322	264	193	350	220	942	391.5	36	10.5	110	248	224	224	7	8	28	25	75	11*16
YFB280R2	476.5	530	361	361	296	213	391	248	1060	440.5	36	11.5	120	278	280	280	7	8	28	25	75	11*16
YFB315R2	530	595	404	404	336	234	434	283	1181	492	38	11.5	130	313	280	280	7	8	28	25	75	11*16
YFB355R2	587.5	663	453	453	376	260	489	317	1319	550.5	37	12	130	353	355	355	7	8	33	30	75	11*16
YFB400R2	656	742	507	507	421.5	292	547	358	1492	620	36	12	140	398	355	355	7	8	33	30	75	11*16
YFB450R2	739	841	569	569	482	325	609	408	1666	699	40	12	145	448	530	530	8	10	38	35	90	11*16
YFB500R2	810	929	638	638	530	352	678	458	1854	762	48	12	150	498	530	530	8	12	43	40	90	13*18



YFB-K2



风机规格 Fan Model	A	B	C	D	E	F	G	G1	H	I	J	K	L1	L2	M	N	a	b	c	d	e	U*S
YFB250K2	427.5	475	322	322	264	193	350	220	942	391.5	36	10.5	110	248	224	224	7	8	33	30	75	11*16
YFB280K2	476.5	530	361	361	296	213	391	248	1060	440.5	36	11.5	120	278	280	280	7	8	33	30	75	11*16
YFB315K2	530	595	404	404	336	234	434	283	1181	492	38	11.5	130	313	280	280	7	8	33	30	75	11*16
YFB355K2	587.5	663	453	453	376	260	489	317	1319	550.5	37	12	130	353	355	355	8	10	38	35	75	11*16
YFB400K2	656	742	507	507	421.5	292	547	358	1492	620	36	12	140	398	355	355	8	12	43	40	75	11*16
YFB450K2	739	841	569	569	482	325	609	408	1666	699	40	12	145	448	530	530	8	12	43	40	90	11*16
YFB500K2	810	929	638	638	530	352	678	458	1854	762	48	12	150	498	530	530	8	12	43	40	90	13*18



最大选配功率 Max.installed power (kW)	L-R K G L2-R2 K2	250	280	315	355	400	450	500	560	630	710	800
		3 4 5.5 — 4 7.5	4 7.5 — 5.5 7.5	5.5 7.5 — 7.5 11	7.5 11 — 11 15	7.5 15 — 11 15	11 15 — 15 22	11 18.5 — 15 22	11 18.5 — 22 —	15 18.5 — — —	— 22 37 — —	— 22 37 — —
最高工作转速 Max.speed (r/min)	L-R K G L2-R2 K2	1900 2200 — 1500 2000	1700 2000 — 1400 1600	1500 1800 — 1250 1400	1350 1600 — 1250 1400	1200 1400 — 1050 1200	1050 1200 — 950 1050	950 1100 — 800 900	800 900 — — —	700 750 — — —	— 700 850 — —	— 650 750 — —
风机重量 Fan weight (kg)	L-R K G L2-R2 K2	13 15 — 26 30	18.5 21.5 — 37 43	25 30 — 50 60	34 39 — 68 78	43 52 — 86 104	57.5 70 — 115 140	70.5 85 — 141 170	127 152 — — —	160 186 — — —	— 230 238 — —	— 290 299 — —
空气温度 (最低-20°C) Air temperature (min- 20°C)	L-R K G L2-R2 K2	85 85 — 85 85	85 85 — 85 85	85 85 — 85 85	85 85 — 85 85	85 85 — 85 85	85 85 — 85 85	85 85 — 85 85	85 85 — 85 85	85 85 — 85 85	85 85 — 85 85	85 85 — 85 85
轴承额定动载荷 Bearing Dynamic Load (N)	L-R K G L2-R2 K2	12800 14000 — 19500 19500	14000 14000 — 19500 19500	14000 14000 — 19500 19500	19500 19500 — 25700 25700	19500 19500 — 25700 25700	25700 25700 — 29100 29100	25700 25700 — 29100 29100	29100 29100 — 32500 32500	29100 29100 — 32500 32500	32500 32500 — 32500 32500	35000 35000 — 35000 35000
轴承型号 Bearing number	L-R K G L2-R2 K2	FH204 UCP205 — UK206 UCP206	FH205 UCP206 — UK206 UCP206	FH205 UCP206 — UK206 UCP206	FH206 UCP207 — UK207 UCP207	FH206 UCP207 — UK207 UCP208	FH207 UCP208 — UK208 UCP208	FH207 UCP208 — UK209 UCP209	FH208 UCP208 — — —	UK209 UCP208 — — —	— UCP210 — — —	— UCP210 U UCP212 U — —



YFH 系列离心式通风机
Centrifugal Fan

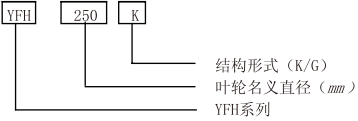


风机说明 DESCRIPTION

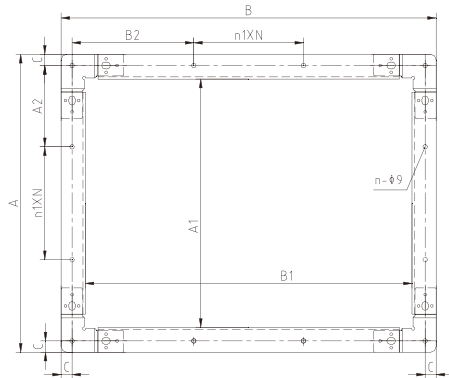
特点

- 1.YFH系列风机为双进风、后倾式离心通风机。
- 2.风量由1000m³/h到120000m³/h，全压最高可达到3000Pa。
- 3.全系列叶轮尺寸共13种，从250mm到1000mm。

命名方式



出口法兰



序号	物料名称 Flange P/N	A	A1	A2	B	B1	B2	C	N	n	
1	YFH250	366	322	98	365	321	97.5	10	150	12	1
2	YFH280	405	361	117.5	404	360	117	10	150	12	1
3	YFH315	448	404	144	447	403	143.5	10	150	12	1
4	YFH355	497	453	93.5	496	452	93	10	150	16	2
5	YFH400	551	507	170.5	550	506	170	10	200	12	1
6	YFH450	613	569	201.5	612	568	201	10	200	12	1
7	YFH500	698	638	136	697	637	135.5	13	200	16	2
8	YFH560	775	715	174.5	773	713	173.5	13	200	16	2
9	YFH630	861	801	167.5	859	799	166.5	13	250	16	2
10	YFH710	958	898	216	956	896	215	13	250	16	2
11	YFH800	1067	1007	145.5	1065	1005	144.5	13	250	20	3
12	YFH900	1190	1130	207	1188	1128	206	13	250	20	3
13	YFH1000	1327	1267	150.5	1325	1265	149.5	13	250	24	4

Features

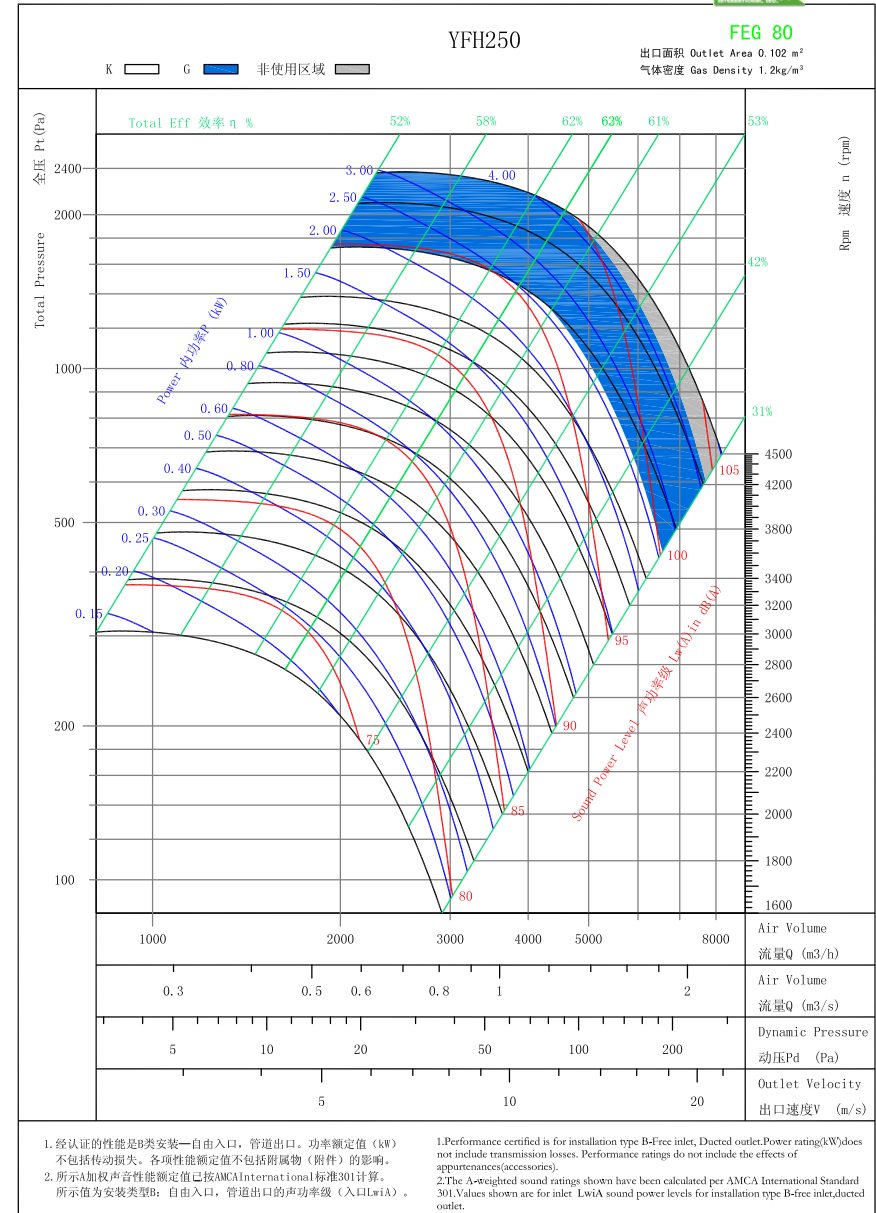
- 1.Double inlet fans,with backward curved impellers.
- 2.Volume between 1000m³/h and 120000m³/h,with total pressure up to 3000Pa.
- 3.13 sizes from 250 up to 1000mm wheel diameter.

Nomenclature

Construction(K/G)
Nominal diameter of the fan wheel(mm)
YFH series

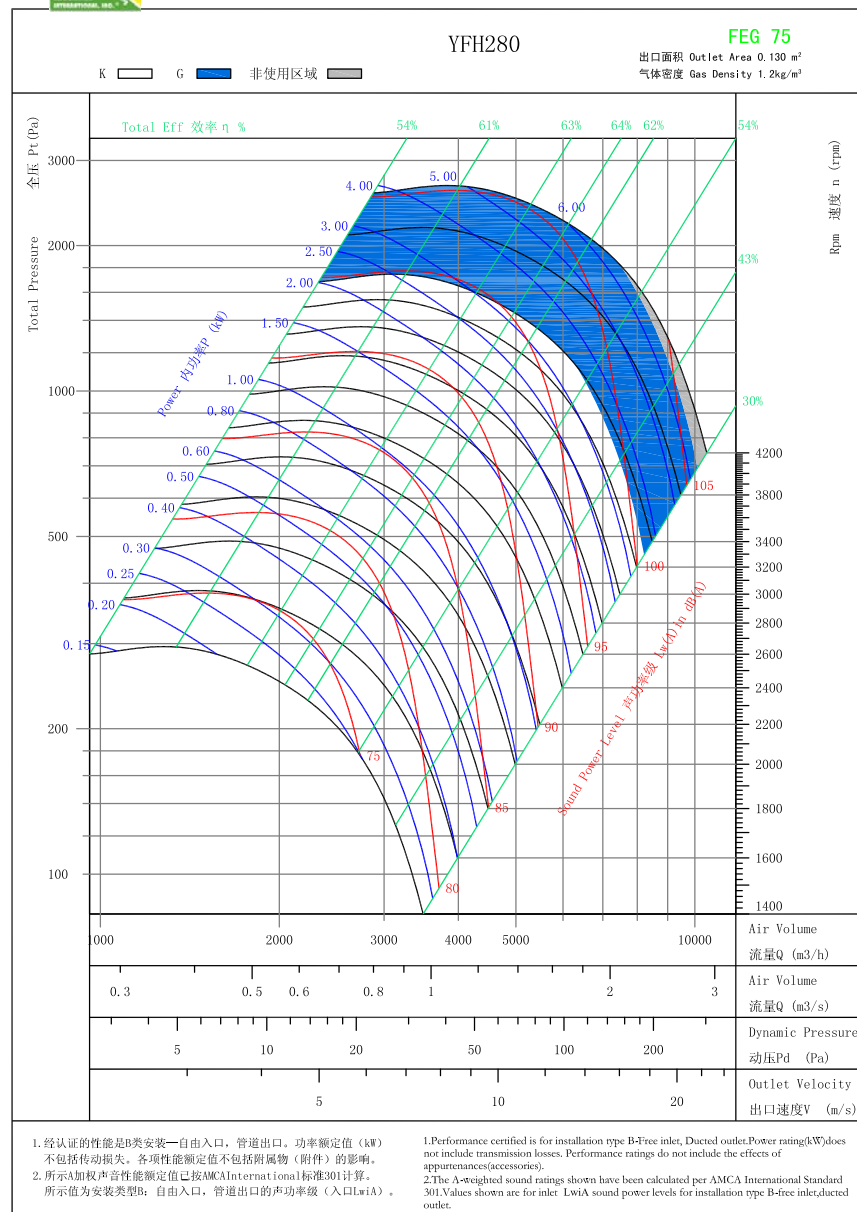
Outlet Flange

性能曲线 PERFORMANCE

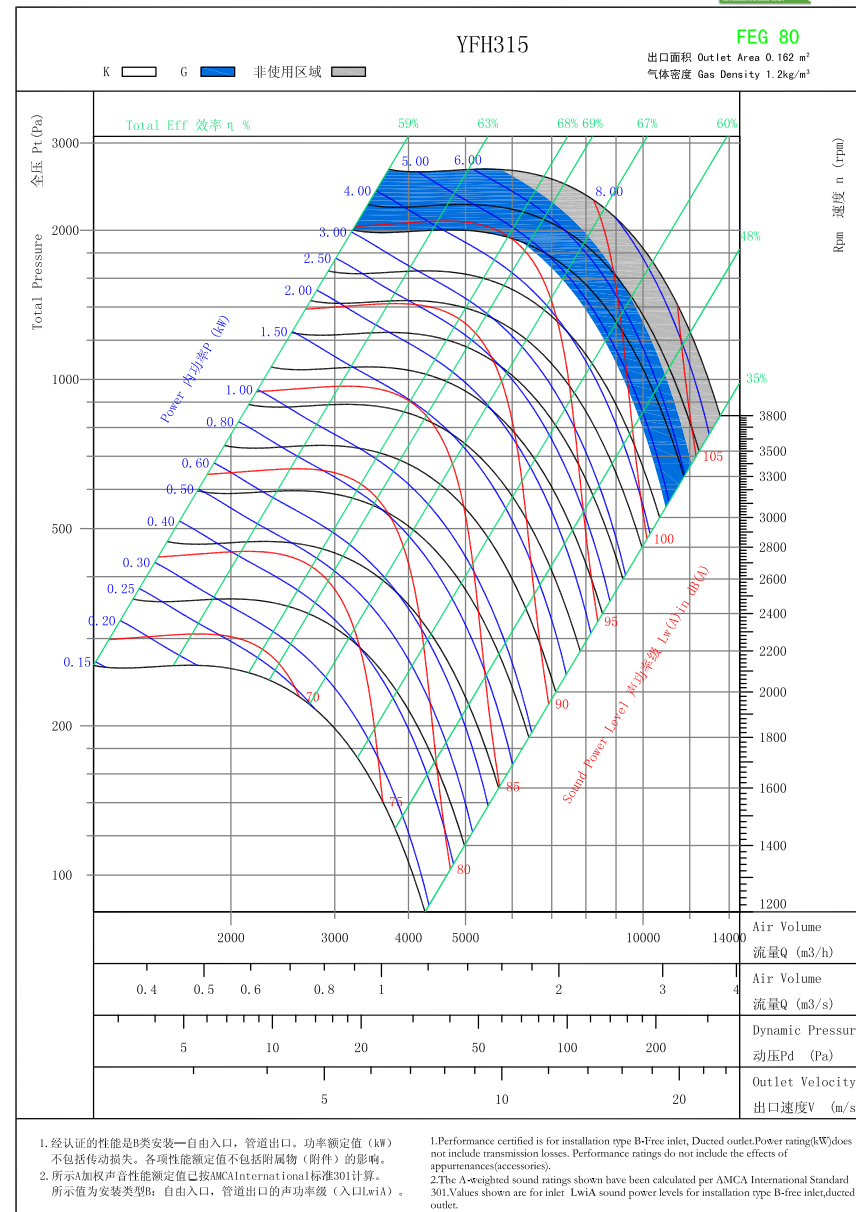




性能曲线
PERFORMANCE



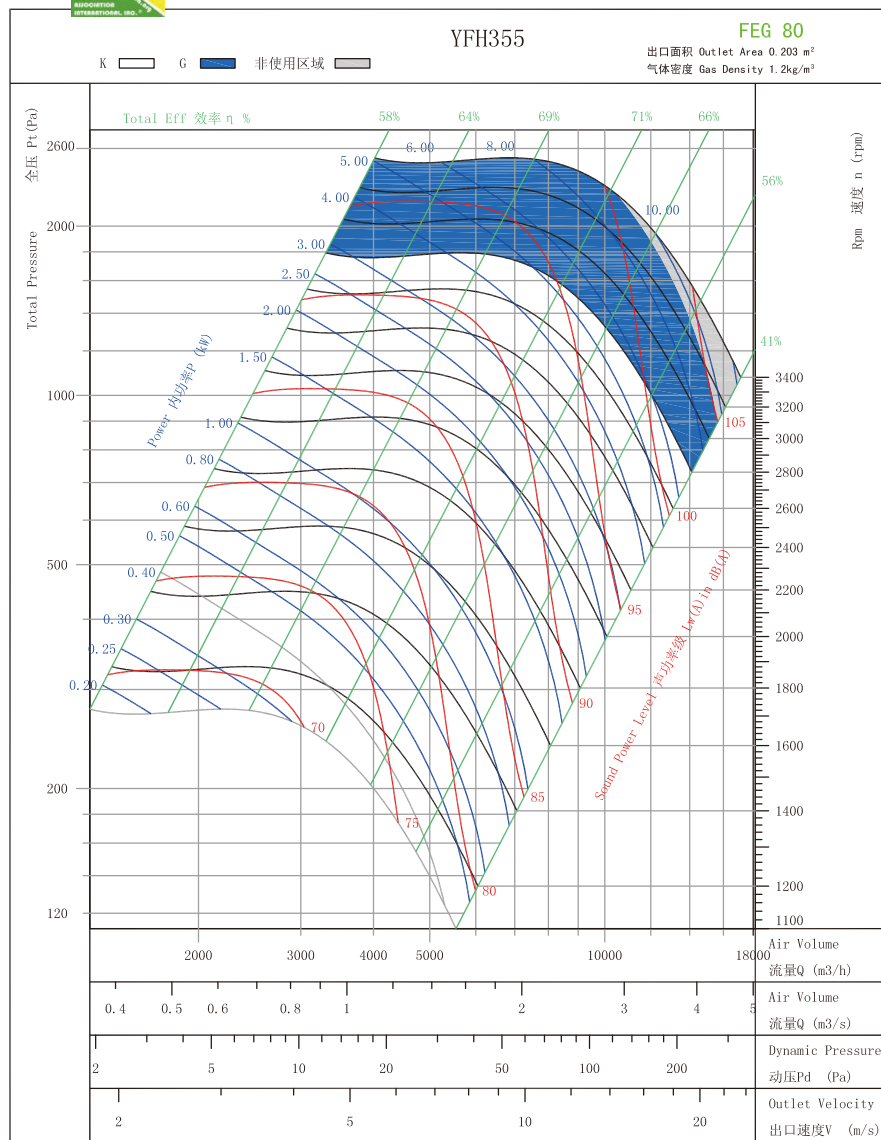
性能曲线
PERFORMANCE





性能曲线

PERFORMANCE



1. 经认证的性能是B类安装—自由入口，管道出口，功率额定值 (kW) 不包括传动损失。各项性能额定值不包括附属物（附件）的影响。
2. 所示A加权声音性能额定值已按AMCA International标准301计算。

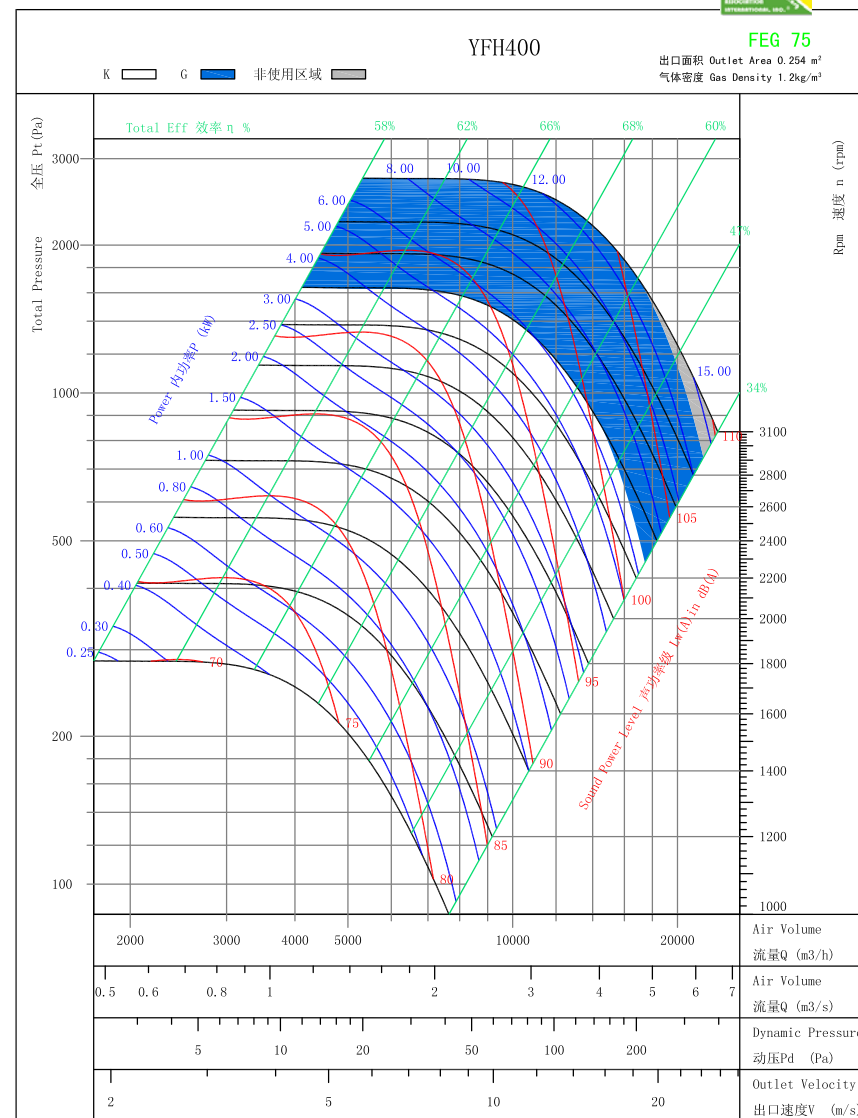
1. Performance certified is for installation type B-Free inlet, Ducted outlet. Power rating (kW) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).
2. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_{wA} sound power levels for installation type B-free inlet, ducted outlet.

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性能曲线

PERFORMANCE



1. 经认证的性能是B类安装—自由入口，管道出口，功率额定值 (kW) 不包括传动损失。各项性能额定值不包括附属物（附件）的影响。
2. 所示A加权声音性能额定值已按AMCA International标准301计算。

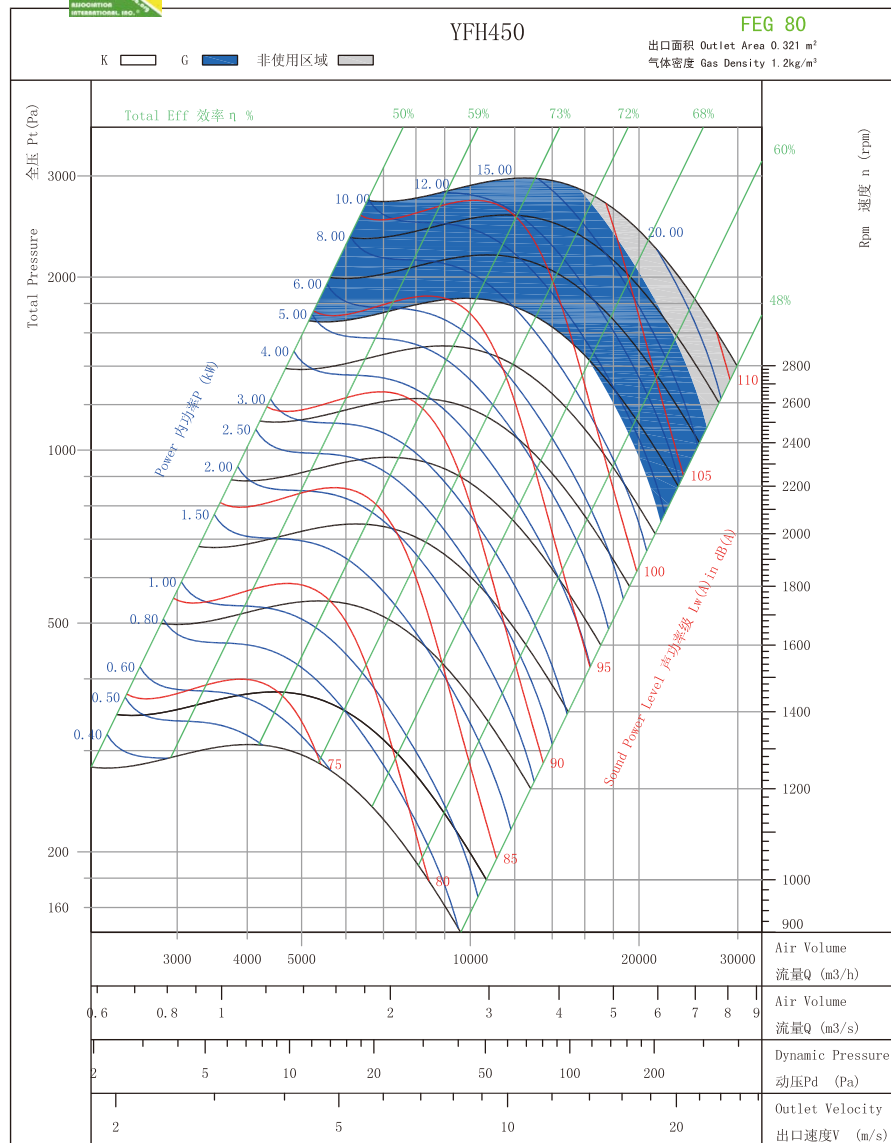
所示值为安装类型B：自由入口，管道出口的声功率级（入口 L_{wA} ）。

1. Performance certified is for installation type B-Free inlet, Ducted outlet. Power rating (kW) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).
2. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_{wA} sound power levels for installation type B-free inlet, ducted outlet.

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性能曲线
PERFORMANCE



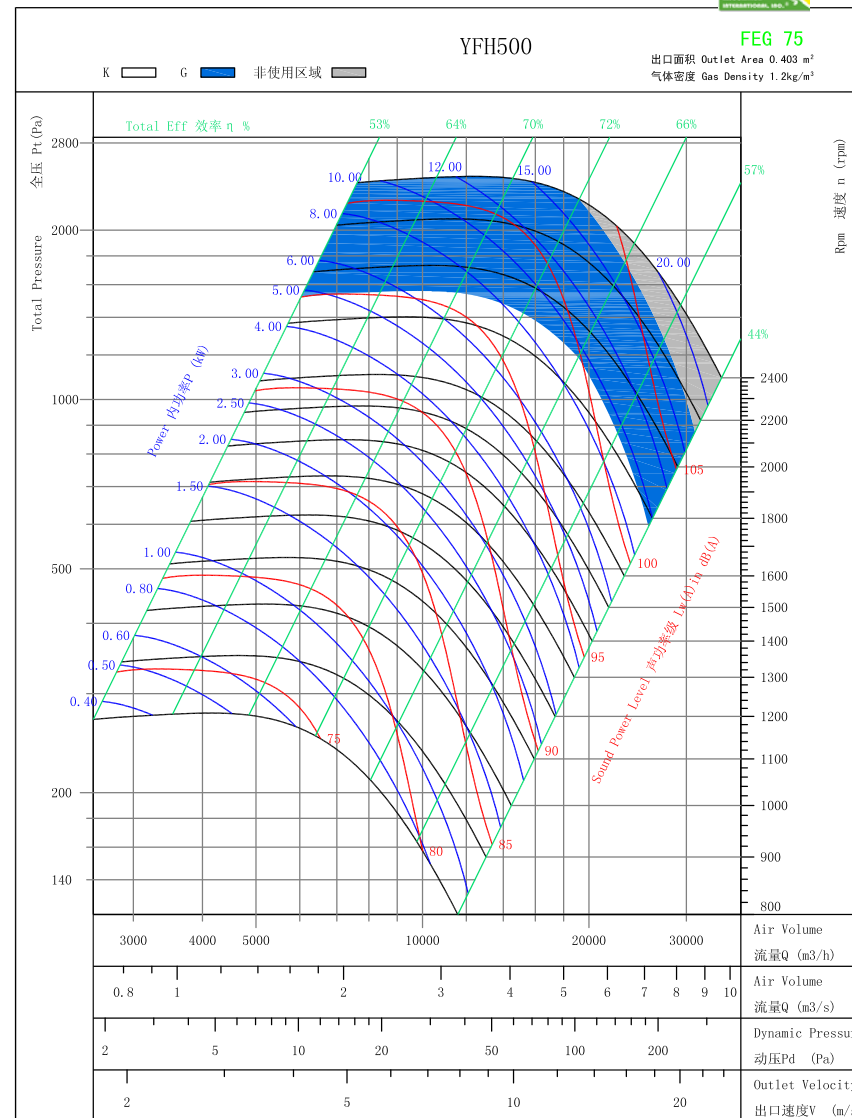
1. 经认证的性能是B类安装—自由入口，管道出口。功率额定值 (kW) 不包括传动损失。各项性能额定值不包括附属物 (附件) 的影响。
2. 所示A加权声音性能额定值已按AMCA International 标准301计算。
所示值为安装类型B：自由入口，管道出口的声功率级 (入口L_{WA})。

1. Performance certified is for installation type B-Free inlet, Ducted outlet. Power rating (kW) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).

2. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_{WA} sound power levels for installation type B-free inlet, ducted outlet.



性能曲线
PERFORMANCE



1. 经认证的性能是B类安装—自由入口，管道出口。功率额定值 (kW) 不包括传动损失。各项性能额定值不包括附属物 (附件) 的影响。
2. 所示A加权声音性能额定值已按AMCA International 标准301计算。
所示值为安装类型B：自由入口，管道出口的声功率级 (入口L_{WA})。

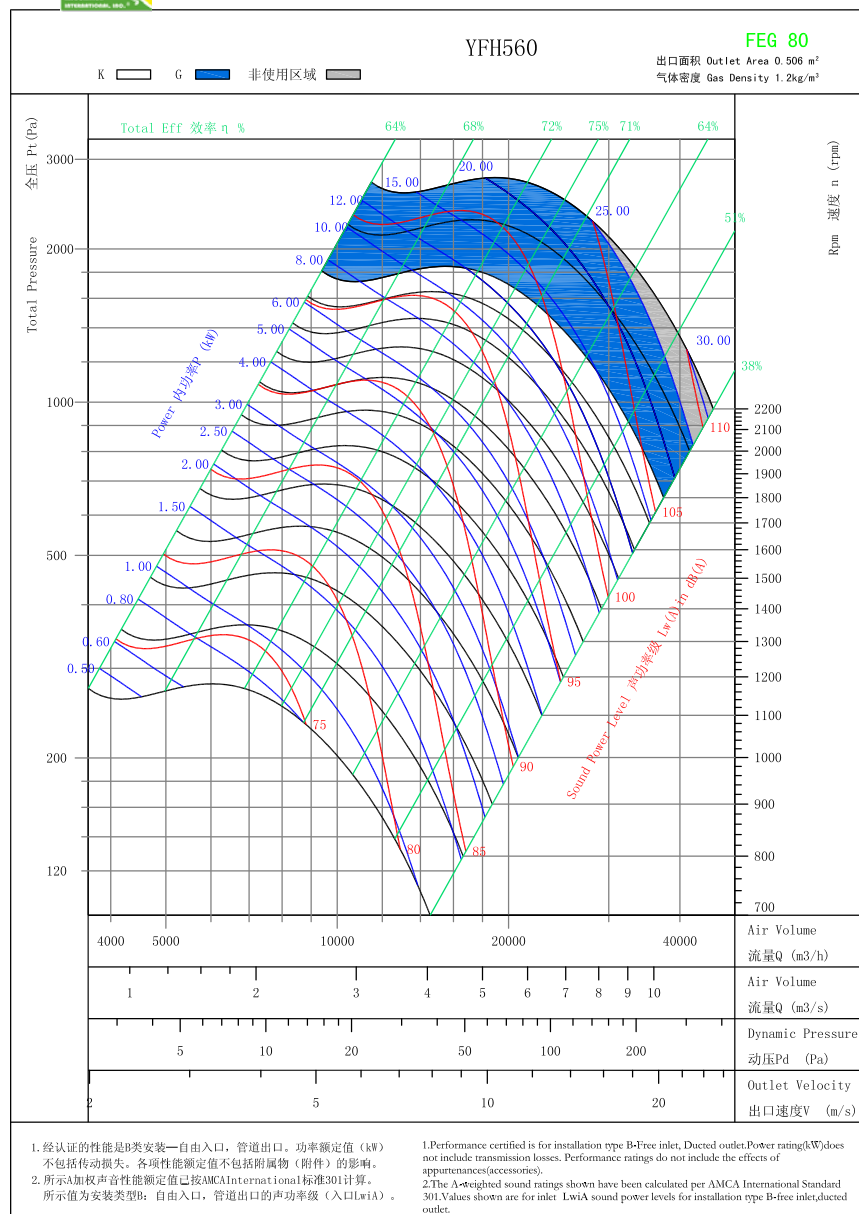
1. Performance certified is for installation type B-Free inlet, Ducted outlet. Power rating (kW) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).

2. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_{WA} sound power levels for installation type B-free inlet, ducted outlet.



性能曲线

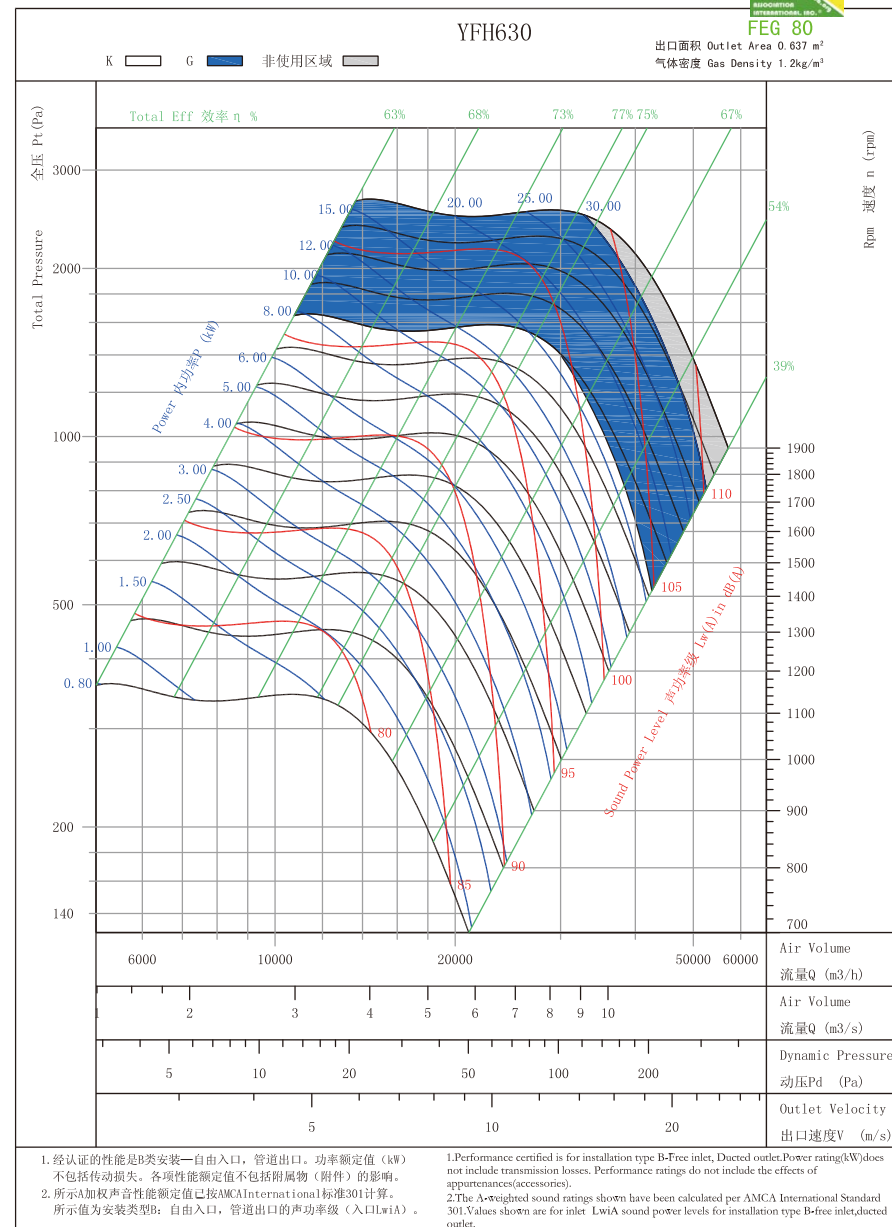
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性能曲线

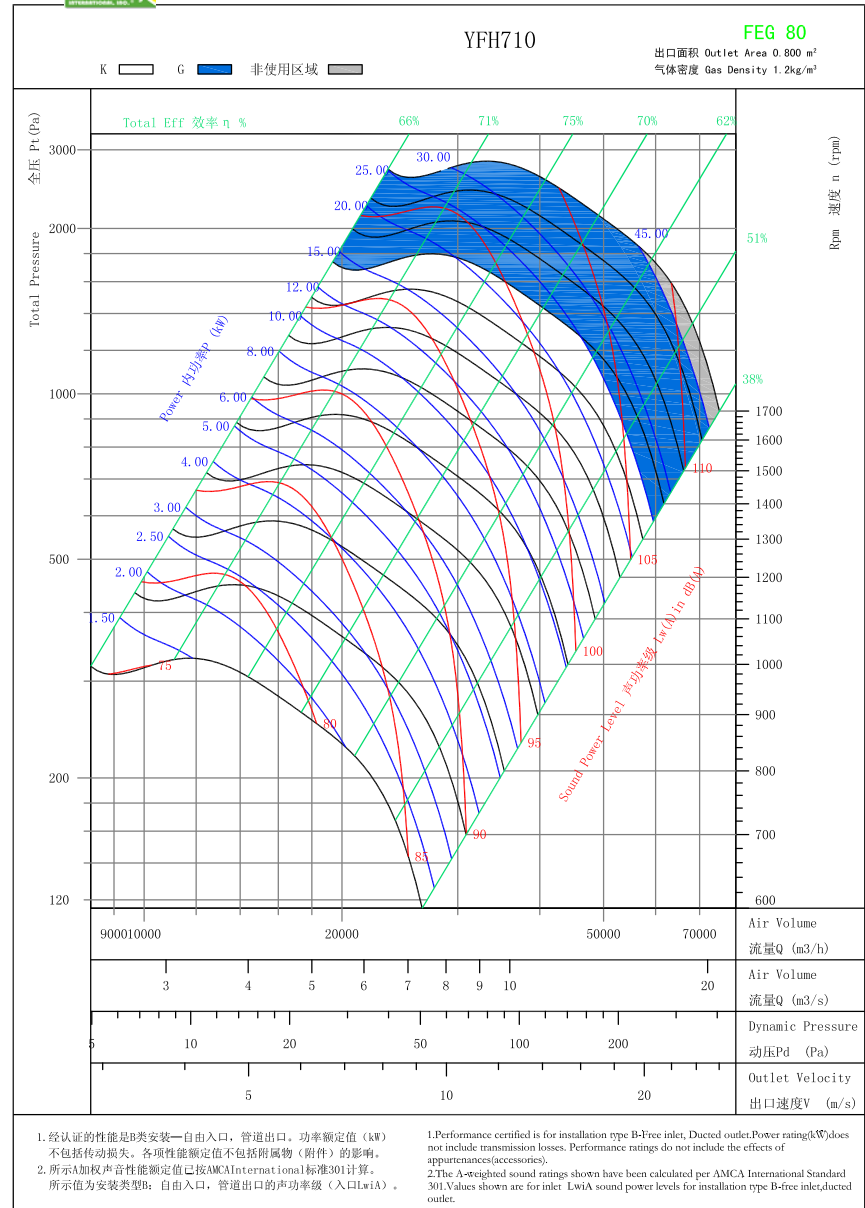
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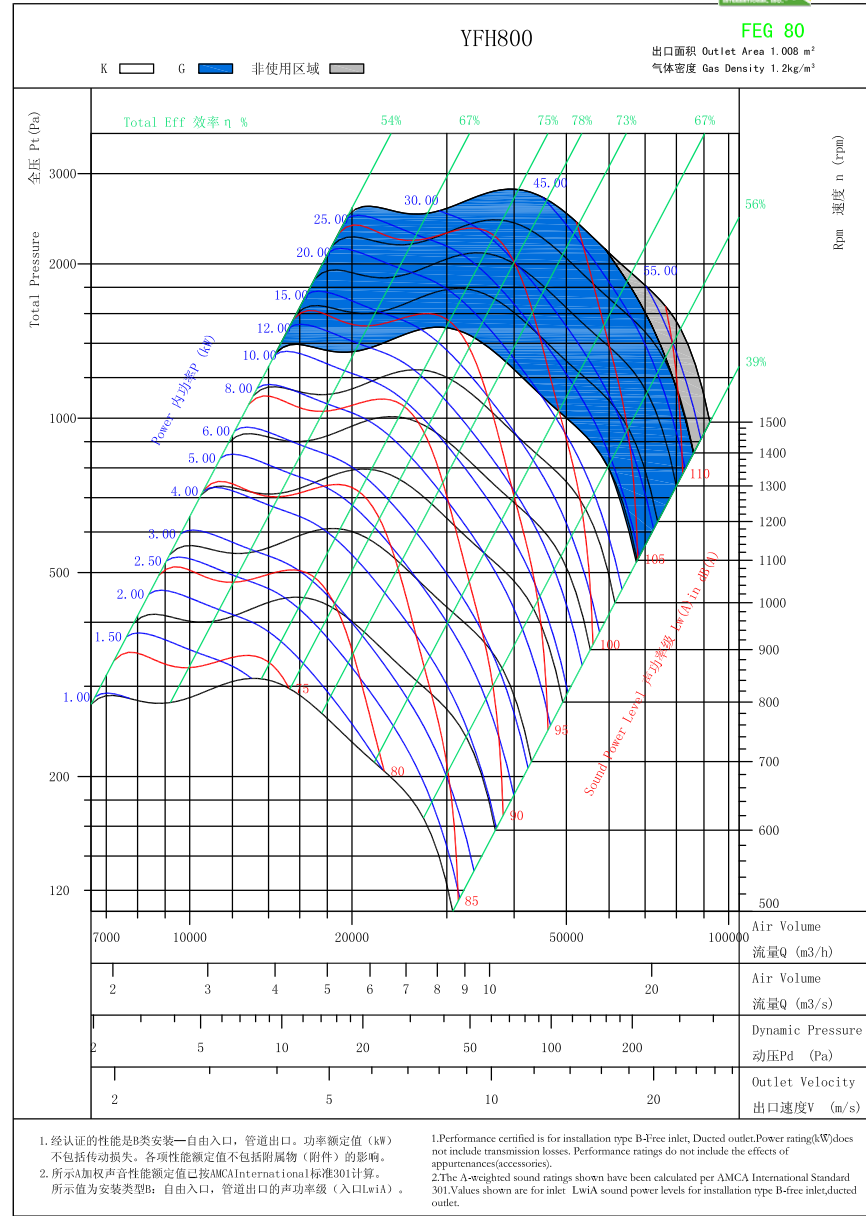
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性能曲线
PERFORMANCE

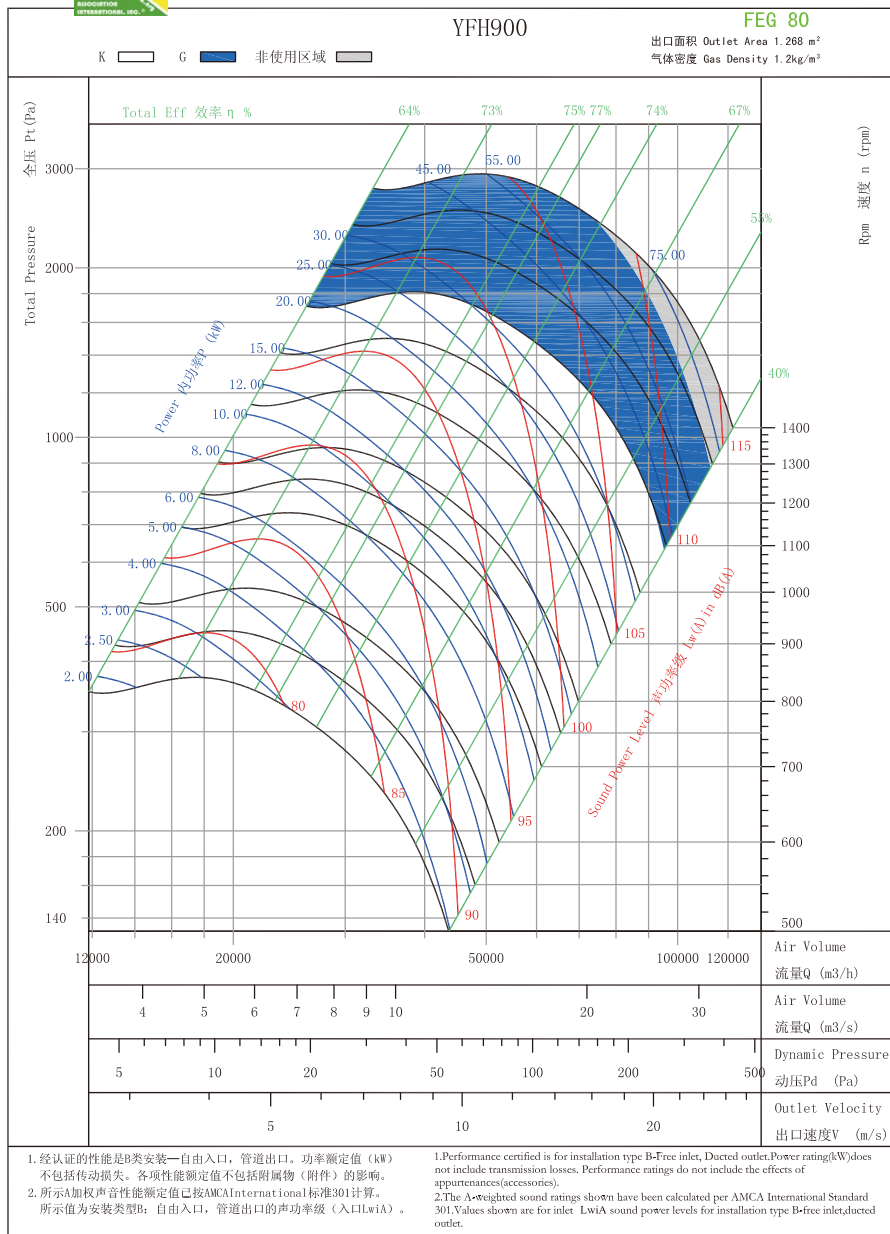


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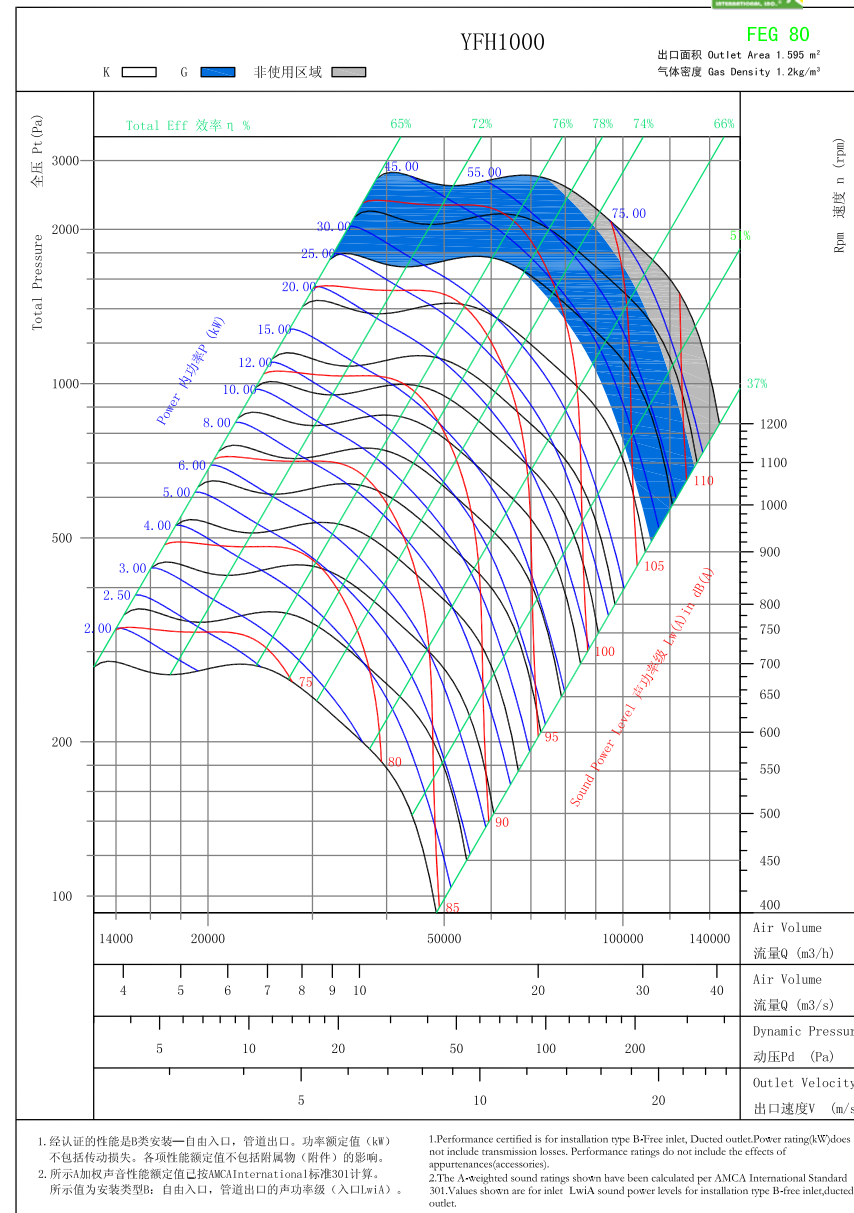




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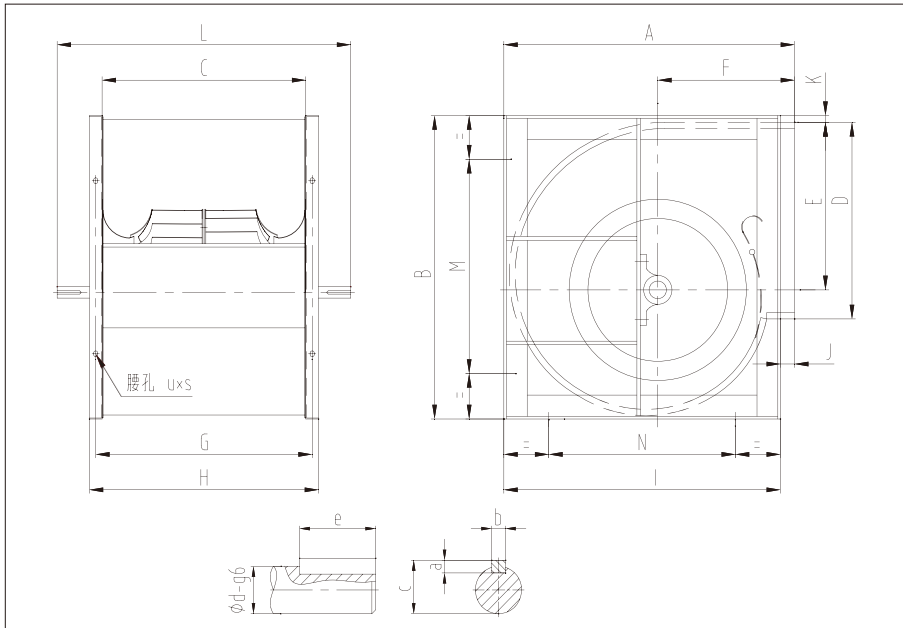


性能曲线
PERFORMANCE





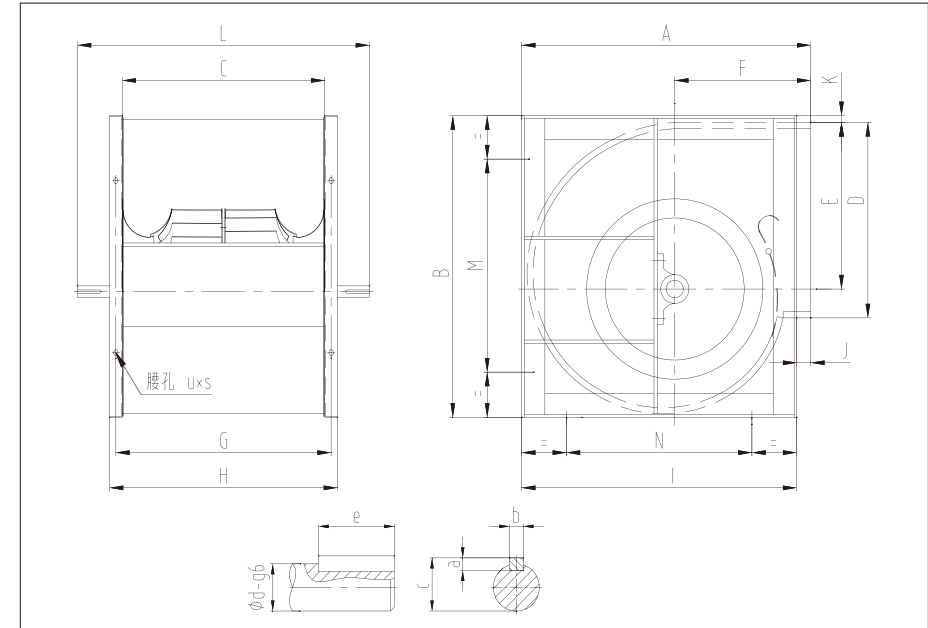
YFH-K



风机规格 Fan Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	a	b	c	d	e	U×S
YFH250K	427.5	475	322	322	264	193	350	372	391.5	36	10.5	520	224	224	6	6	22.5	20	45	11×16
YFH280K	476.5	530	361	361	296	213	391	421	440.5	36	11.5	580	280	280	7	8	28	25	50	11×16
YFH315K	530	595	404	404	336	234	434	464	492	38	11.5	625	280	280	7	8	28	25	50	11×16
YFH355K	587.5	663	453	453	376	260	489	513	550.5	37	12	680	355	355	7	8	33	30	65	11×16
YFH400K	656	742	507	507	421.5	292	547	587	620	36	12	760	355	355	7	8	33	30	65	11×16
YFH450K	739	841	569	569	482	325	609	649	699	40	12	845	530	530	8	10	38	35	75	11×16
YFH500K	810	929	638	638	530	352	678	718	762	48	12	920	530	530	8	10	38	35	75	13×18
YFH560K	890	1022	715	715	599	390	765	805	841	49	5	1060	530	530	8	12	43	40	75	13×18
YFH630K	998	1156	801	801	670	438	851	901	946	52	8	1160	530	530	8	12	43	40	90	13×18
YFH710K	1122	1298	898	898	761.5	482	948	998	1062	60	6.5	1300	630	630	9	14	53.8	50	110	17×22
YFH800K	1254	1466	1007	1007	855.5	538	1057	1107	1188	66	6.5	1450	710	710	9	14	53.8	50	110	17×22
YFH900K	1406	1641	1130	1130	962.5	600	1180	1230	1328	78	6.5	1580	800	800	11	18	64.4	60	110	17×22
YFH1000K	1538	1798	1267	1267	1052	655	1317	1367	1454	84	8	1700	900	900	11	18	64.4	60	110	17×22



YFH-H



风机规格 Fan Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	a	b	c	d	e	U×S
YFH250G	427.5	475	322	322	264	193	350	372	391.5	36	10.5	520	224	224	7	8	28	25	45	11×16
YFH280G	476.5	530	361	361	296	213	391	421	440.5	36	11.5	580	280	280	7	8	33	30	50	11×16
YFH315G	530	595	404	404	336	234	434	464	492	38	11.5	625	280	280	7	8	33	30	50	11×16
YFH355G	587.5	663	453	453	376	260	489	513	550.5	37	12	680	355	355	8	10	38	35	65	11×16
YFH400G	656	742	507	507	421.5	292	547	587	620	36	12	760	355	355	8	10	38	35	65	11×16
YFH450G	739	841	569	569	482	325	609	649	699	40	12	845	530	530	8	12	43	40	75	11×16
YFH500G	810	929	638	638	530	352	678	718	762	48	12	920	530	530	8	12	43	40	75	13×18
YFH560G	890	1022	715	715	599	390	765	805	841	49	5	1060	530	530	9	14	53.8	50	90	13×18
YFH630G	998	1156	801	801	670	438	851	901	946	52	8	1160	530	530	9	14	53.8	50	90	13×18
YFH710G	1122	1298	898	898	761.5	482	948	998	1062	60	6.5	1300	630	630	11	18	64.4	60	110	17×22
YFH800G	1254	1466	1007	1007	855.5	538	1057	1107	1188	66	6.5	1450	710	710	11	18	64.4	60	110	17×22
YFH900G	1406	1641	1130	1130	962.5	600	1180	1230	1328	78	6.5	1580	800	800	12	20	69.5	65	110	17×22
YFH1000G	1538	1798	1267	1267	1052	655	1317	1367	1454	84	8	1700	900	900	12	20	69.5	65	110	17×22



	250	280	315	355	400	450	500	560	630	710	800	900	1000
最大选配功率 Max.installed power (kW)	K	3	4	5.5	7.5	7.5	11	18.5	22	30	30	45	45
	G	5.5	7.5	11	15	18.5	22	30	37	55	55	75	75
最高工作转速 Max.speed (r/min)	K	3800	3400	3300	2800	2400	1900	1800	1500	1400	1100	1100	1000
	G	4500	4200	3800	3400	3100	2800	2200	1900	1700	1500	1400	1200
风机重量 Fan weight (kg)	K	16	22	30	40	55	74	89	162	260	325	410	530
	G	16.5	22.5	31	42	57	76	92	204	268	334	420	540
空气温度 (最低-20℃) Air temperature (min-20℃)	K	85	85	85	85	85	85	85	85	85	85	85	85
	G	85	85	85	85	85	85	85	85	85	85	85	85
轴承额定动载荷 Bearing Dynamic Load (N)	K	12800	14000	14000	19500	19500	25700	29100	32500	43500	43500	57500	57500
	G	14000	19500	19500	25700	25700	29100	32500	43500	57500	57500	66000	66000
轴承型号 Bearing number	K	UCP204	UCP205	UCP205	UCP206	UCP206	UCP207	UCP208	UKP209	UKP211	UKP211	UKP213	UKP213
	G	UCP205	UCP206	UCP206	UCP207	UCP207	UCP207	UCP208	UKP211	UKP213	UKP213	UKP215	UKP215

公司方位示意图

局部放大图

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