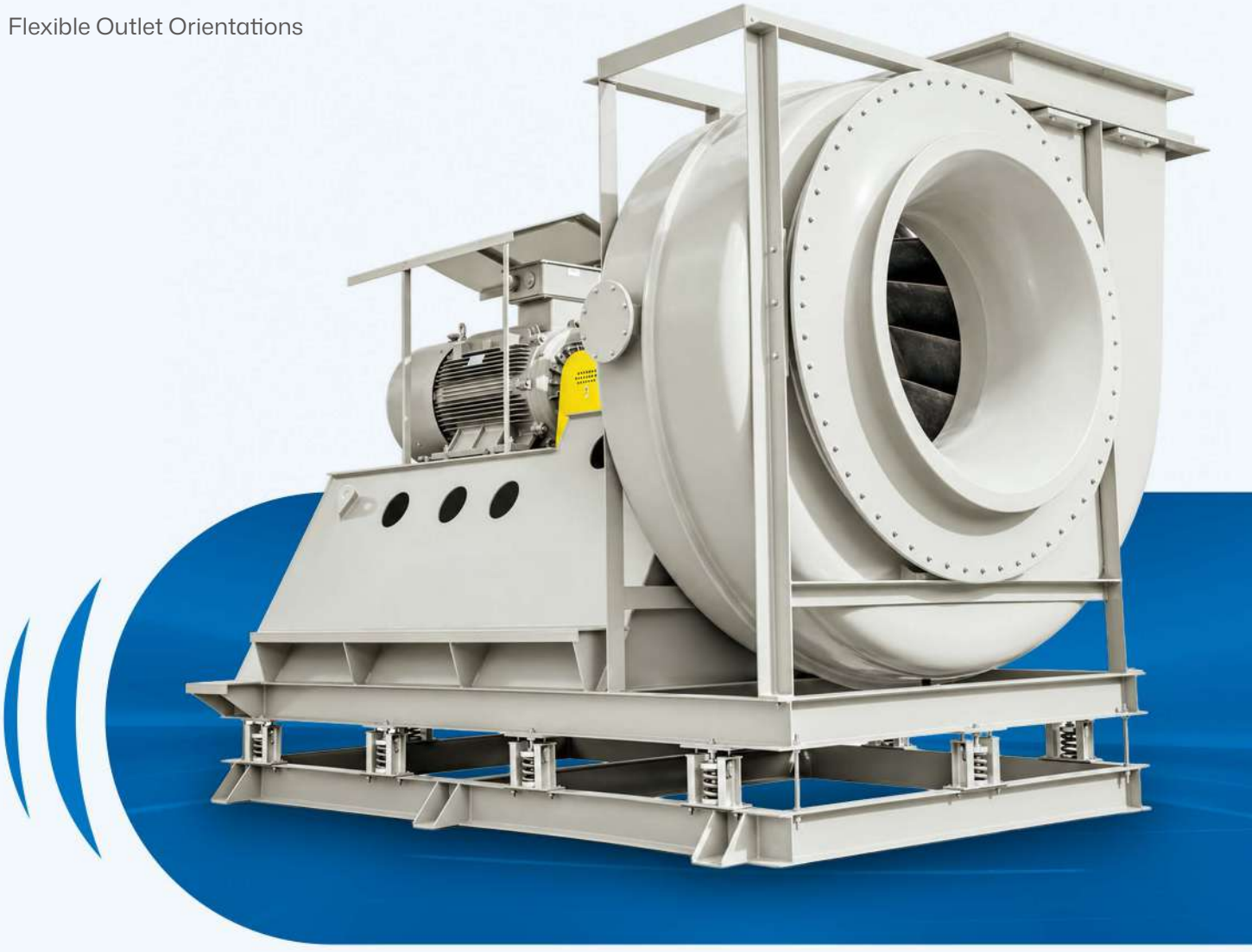
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Industrial Centrifugal Fans

- Wide Airflow & Pressure Range
- Corrosion-Resistant Options
- Multiple Drive Configurations
- Flexible Outlet Orientations



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Industrial Centrifugal Fans

An industrial centrifugal fan is a device that conveys air or process gases using a rotating Impeller, primarily for industrial ventilation, process exhaust, and waste gas treatment systems. The fan provides the required airflow and pressure to overcome resistance from ductwork, filters, and gas-cleaning equipment, enabling gas collection, conveyance, and discharge. Its Impeller type, material, and drive arrangement can be selected according to gas properties and operating conditions.



Key Features

Wide flow range

Different airflow rates can be provided to meet different requirements, making it suitable for ventilation systems of various sizes.

High pressure

Generates high pressure to overcome duct resistance and convey gas over long distances.

Compact structure

Features a compact design with a small footprint for easy installation and layout.

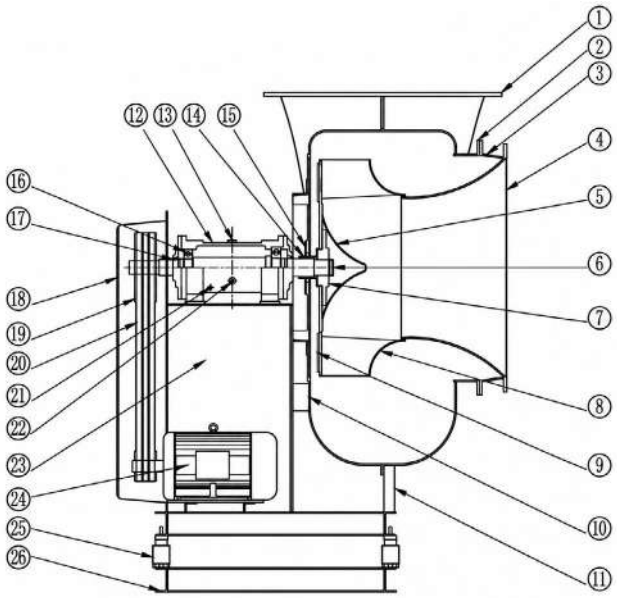
Stable operation

The Impeller is dynamically balanced to ensure smooth operation with low vibration and low noise.

High adaptability

Suitable for various gas media, including clean air, dust-laden gases, and corrosive gases.

Fan Components and Spare Parts

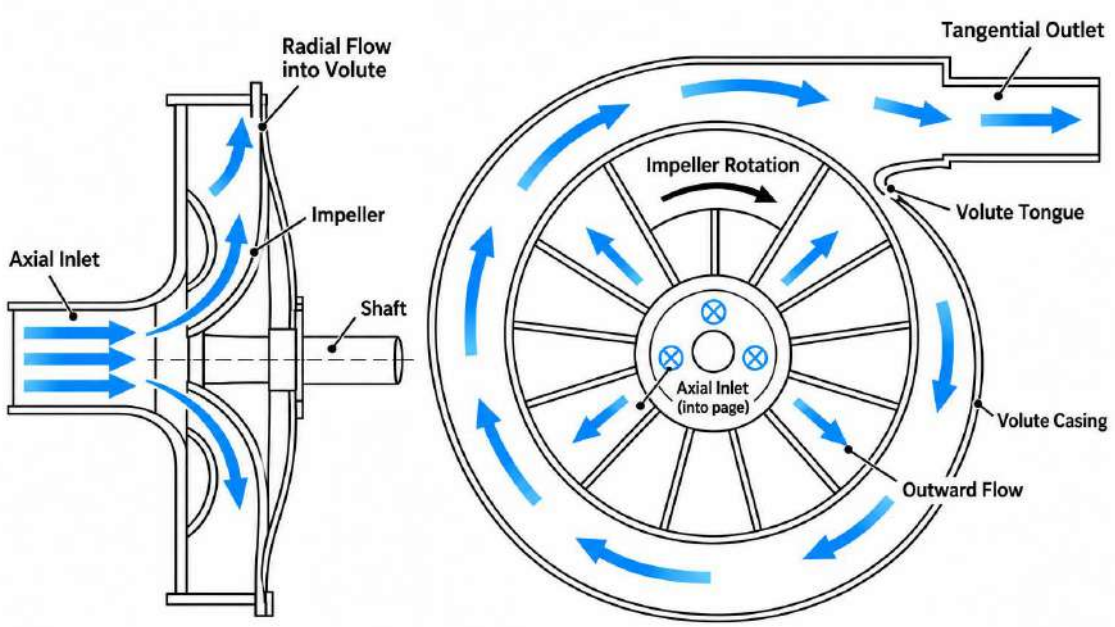


No.	Name	Material		Remarks	No.	Name	Material		Remarks
		FRP	Metal				FRP	Metal	
1	Volute casing	FRP	M		15	Shaft seal	PTFE	PTFE	▲
2	Inlet connector	FRP	M		16	Bearing	GCr15	GCr15	
3	Inlet flange	FRP	M		17	Oil seal	NBR		
4	Inlet cone	FRP	M		18	Protective cover	FRP	SS41	
5	Flow guide cone	FRP	/		19	Pulley	HT200		
6	Drive shaft	S45C	M	▲	20	Belt	NBR		
7	Shaft disc	HT250	M		21	Oil drain port	Cu		
8	Impeller	FRP	M		22	Oil sight glass	PC		
9	Small blade	FRP	M		23	Main Iron frame	SS41		▲
10	Vibration isolation pad	PP			24	Motor	Teco		▲
11	Support plate	SS41			25	Vibration isolator	65Mn		
12	Bearing housing	HT250			26	Base	SS41		
13	Oil Fill Port	SUS304			27	Coupling*	SKF		▲
14	Shaft Guard	FRP	M		28				

- M denotes the selected metal fan material, including SS41, SUS304, SUS316L, 310S, AL, TA2 and other special materials
- ▲ Available as an option according to customer requirements
- Grid couplings or diaphragm couplings are recommended

Principle

As the impeller rotates, centrifugal force drives the gas between the impeller blades from the center of the impeller toward its periphery, imparting kinetic energy and pressure energy to the gas, which is then guided out of the fan by the casing. At the same time, negative pressure forms at the center of the impeller, continuously drawing external gas into the fan under the pressure differential and thus ensuring continuous gas conveyance.



Impeller Flow Section

Front Cutaway View (from inlet side)

Airflow in Three Steps

01

Axial Intake

Gas enters the center of the impeller in a direction parallel to the shaft.

02

Radial Flow

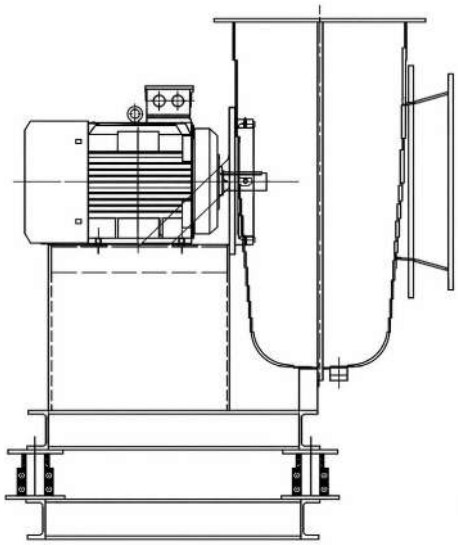
The rotating blades transfer energy to the gas and drive it outward toward the impeller rim.

03

Tangential Discharge

The volute collects the gas from the impeller and directs it to the tangential outlet.

Drive Type Selection



Direct Drive

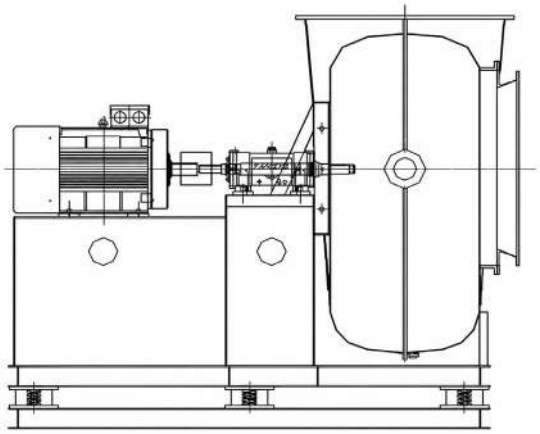
The fan impeller is mounted directly on the motor shaft, providing high mechanical efficiency and making it suitable for applications with low airflow and fixed rotational speed.

Advantages

- **Compact components and small size.** Mounting the impeller on the motor shaft reduces the fan's overall footprint and volume, facilitating installation in space-constrained locations, while its relatively low weight facilitates transportation and handling.
- **No drive component wear.** There are no components between the impeller and motor, eliminating the component wear and consumption associated with other arrangements.

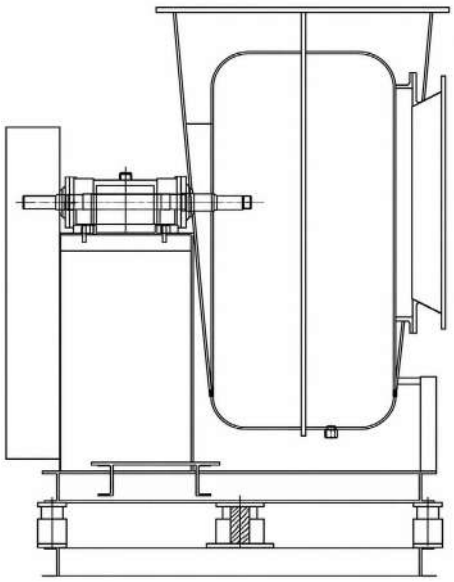
Coupling Drive

Driven through a serpentine spring (grid coupling) or double-disc coupling and a bearing housing, with high mechanical efficiency, suitable for speed adjustment using a variable frequency drive.



Advantages

- **Superior overall strength.** The impeller shaft and motor shaft are connected by a coupling and rotate synchronously during operation. The supporting iron frame underneath is a one-piece structure, increasing strength, reducing vibration, and accommodating greater power output.
- **Low ongoing costs.** The coupling has few individual components subject to wear and does not suffer from the wear and loss of elasticity associated with belts and pulleys. Connecting components have a long service life and require infrequent replacement, reducing maintenance frequency and component costs.



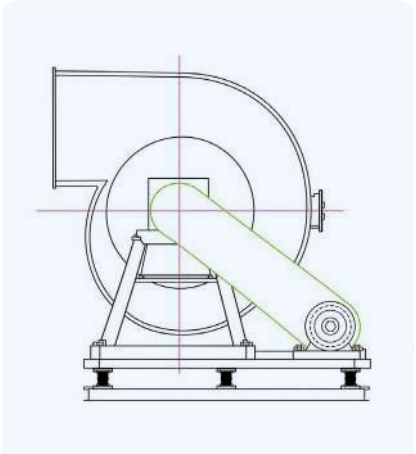
Belt Drive

Driven through a pulley and bearing housing, with speed varied using pulleys and belts, offering good economy and a wide range of applications.

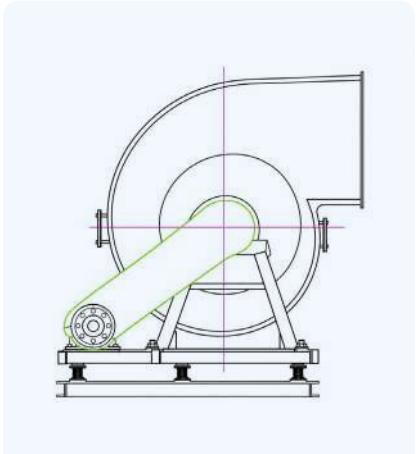
Advantages

- **Easy speed adjustment.** By selecting pulley diameter ratios, the same fan model can operate at various speeds without changing the motor speed, providing performance suited to requirements. When changes in site requirements necessitate adjusting the speed of the same fan, this can be achieved by replacing the pulley set on site.
- **Easy maintenance and servicing.** When servicing the bearings or impeller, simply removing the belt and pulleys provides sufficient working space. After servicing, adjust the pulley set. Adjustment screws in the motor area allow convenient adjustment of the motor position.

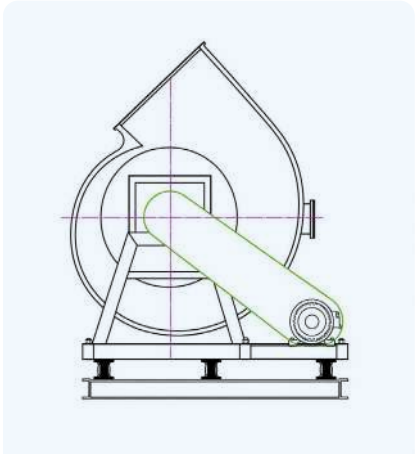
Fan Orientation Diagram



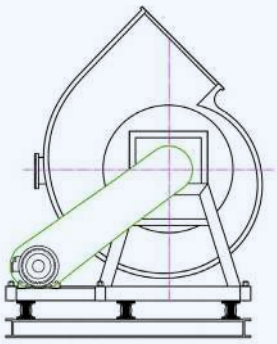
Direction A
Counterclockwise 180°



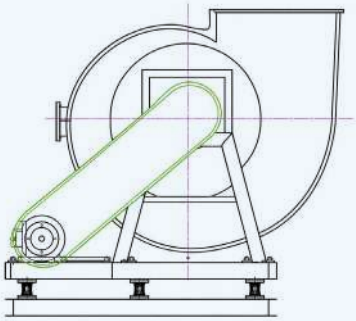
Direction B
Clockwise 180°



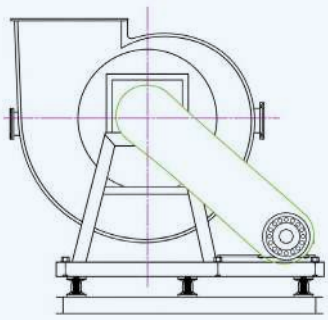
Direction M
Counterclockwise 135°



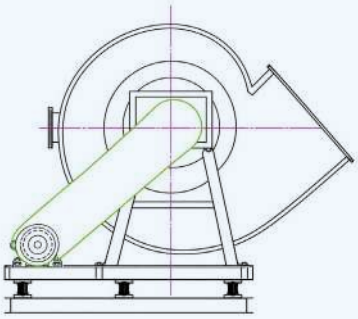
Direction N
Clockwise 135°



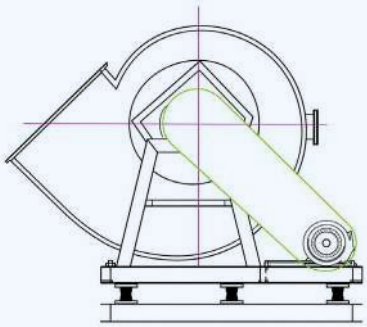
Direction F
Counterclockwise 90°



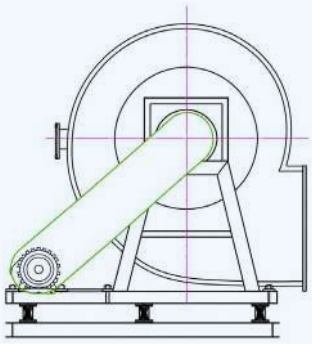
Direction E
Clockwise 90°



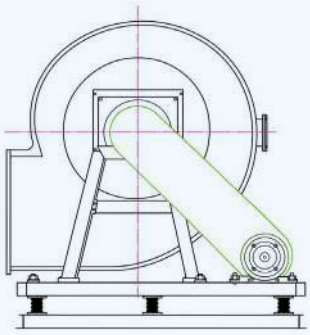
Direction L
Counterclockwise 45°



Direction K
Clockwise 45°



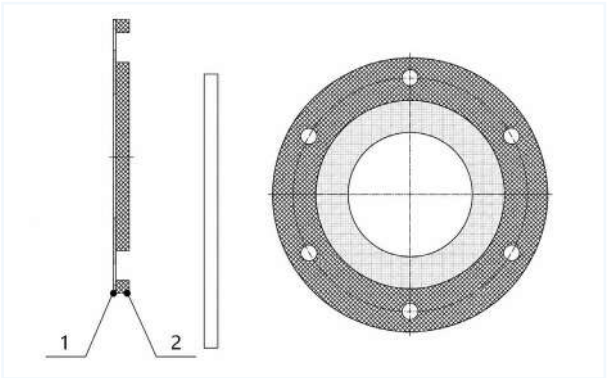
Direction D
Counterclockwise 0°



Direction C
Clockwise 0°

Shaft Seal Types

Standard Shaft Seal

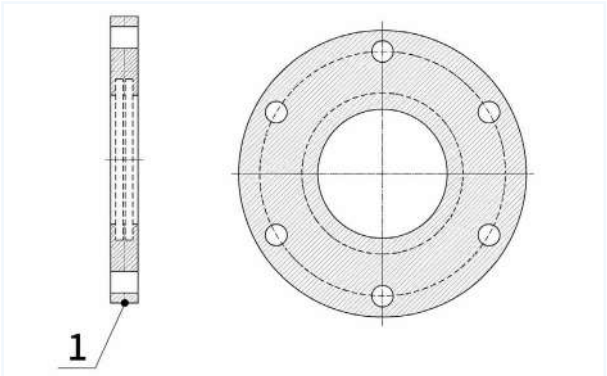


1. PTFE Inner Plate
2. PP Shaft Seal Clamping Plate



1. PTFE Inner Plate
2. PP Shaft Seal Clamping Plate

Labyrinth Shaft Seal

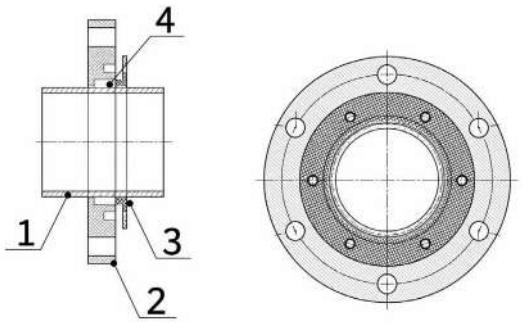


1. PTFE Labyrinth Shaft Seal



1. PTFE Labyrinth Shaft Seal

Packing Shaft Seal

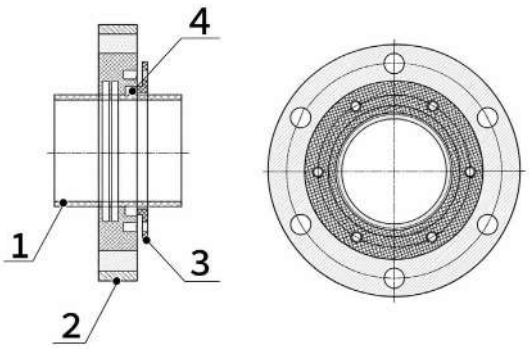


1. Shaft Sleeve
2. PTFE Packing Shaft Seal
3. Metal Packing Gland Plate
4.Seal Packing



1. PTFE Packing Shaft Seal
2. Metal Packing Gland Plate
3. Shaft Sleeve

Packing-Labyrinth Shaft Seal



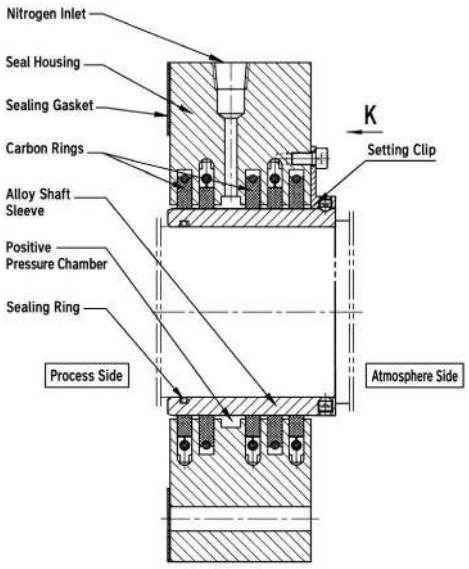
1. Shaft Sleeve
2. PTFE Packing-Labyrinth Shaft Seal
3. Metal Gland Plate(Packing-Labyrinth Seal)
4. Seal Packing



1. PTFE Packing Shaft Seal
2. Metal Gland Plate(Packing-Labyrinth Seal)
3. Shaft Sleeve

Carbon Ring Mechanical Shaft Seal Construction and Operating Principle





The carbon-ring shaft seal is a high-precision mechanical shaft seal primarily composed of a seal chamber, carbon ring, alloy shaft sleeve,nitrogen-filled chamber sand other components; it generally has a split design for easy assembly and disassembly, and the carbon ring has a floating design (supported by a rotating gas film between the carbon ring and the shaft), forming a toothed labyrinth structure with the outer chamber. Suitable for applications involving toxic, hazardous, flammable, or explosive process gases where stringent shaft-end leakage control is required.

- The seal chamber of the carbon-ring shaft seal contains four or five carbon rings, which mate with a specially manufactured precision alloy shaft sleeve, typically with a fit tolerance of 0.02-0.05 mm, providing the equivalent of multiple stages of tight packing shaft seals.
- The carbon rings are spaced apart to form a comb-type labyrinth shaft seal structure, combining five packing stages with four labyrinth stages to provide a high level of sealing even without the introduction of high-pressure gas.
- A positive-pressure chamber between the shaft seal carbon rings is supplied with high-pressure nitrogen to form a gas seal, enabling near-zero leakage.

Depending on the corrosiveness of the process medium, the carbon-ring shaft seal can be made from various alloys, including SUS304, SUS316L, TA2 titanium alloy, and Monel alloy. The process medium temperature must not exceed 250°, and the medium must be free of dust particles; slight water vapor is permissible. Harsh operating conditions involving high temperatures, dust, or similar factors require additional special treatment.

Model Nomenclature

FTY-100MTC-01 XX

Blade number: FTY-100MTC-01XX

Impeller number: 01 standard design, 02~05 modified impellers

Drive arrangement: A direct motor drive, C belt drive, D coupling drive

Impeller material: F fiberglass-reinforced plastic, MT carbon steel, MS stainless steel, MH alloy

Fan model: classified by impeller diameter, diameter 100 × 15 = 1500

Fan series: FT / FTY for low-to-medium pressure, BT / BTN for medium-to-high pressure, BTH / BTR / BTS for high pressure

F: FRP; M: Metal; T: Carbon steel; S: Stainless steel; H: Alloy (aluminum, titanium, Hastelloy C, etc.)

Airflow and Pressure Conversion Calculations

Correction Values for Changes in Temperature and Altitude											
Air Gas Temperature (°C)	Altitude in Meters above Sea Level with Corresponding Barometric Pressure in Millimeters Hg										
	0 760	250 738	500 717	750 697	1000 677	1250 657	1500 639	1750 620	2000 603	2500 569	3000 536
0	0.93	0.95	0.98	1.01	1.04	1.08	1.1	1.14	1.16	1.23	1.32
21	1	1.03	1.05	1.09	1.12	1.15	1.19	1.22	1.27	1.33	1.41
50	1.1	1.12	1.16	1.19	1.23	1.27	1.3	1.33	1.39	1.47	1.56
75	1.18	1.22	1.25	1.28	1.33	1.37	1.41	1.45	1.49	1.59	1.67
100	1.27	1.3	1.33	1.39	1.43	1.47	1.52	1.54	1.59	1.69	1.79
125	1.35	1.39	1.43	1.47	1.52	1.56	1.61	1.67	1.69	1.82	1.92
150	1.43	1.47	1.52	1.56	1.61	1.67	1.69	1.75	1.82	1.92	2.04
175	1.52	1.56	1.61	1.67	1.69	1.75	1.82	1.85	1.92	2.04	2.17
200	1.61	1.64	1.69	1.75	1.79	1.85	1.92	1.96	2.04	2.13	2.27
225	1.69	1.72	1.79	1.85	1.89	1.96	2	2.08	2.13	2.27	2.38
250	1.79	1.82	1.89	1.92	2	2.04	2.13	2.17	2.22	2.38	2.5
275	1.85	1.92	1.96	2.04	2.08	2.13	2.22	2.27	2.33	2.5	2.63
300	1.96	2	2.04	2.13	2.17	2.22	2.38	2.38	2.44	2.63	2.78
325	2.04	2.08	2.13	2.22	2.27	2.33	2.44	2.5	2.56	2.7	2.86
350	2.13	2.17	2.22	2.33	2.38	2.44	2.5	2.56	2.63	2.86	3.03
375	2.17	2.27	2.33	2.38	2.44	2.56	2.63	2.7	2.78	2.94	3.13
400	2.27	2.38	2.44	2.5	2.56	2.63	2.7	2.78	2.86	3.03	3.23
425	2.38	2.44	2.5	2.56	2.63	2.7	2.86	2.94	3.03	3.13	3.33
450	2.44	2.5	2.63	2.7	2.78	2.86	2.94	3.03	3.13	3.23	3.45
475	2.56	2.63	2.7	2.78	2.86	2.94	3.03	3.13	3.23	3.45	3.57

Example: Airflow 400 CMM, static pressure 200 mmAq, operating temperature 175 °C, altitude 250 meters.

1. Find the correction factor “1.56” in the table above for a temperature of 175 °C and an altitude of 250 meters
2. Airflow remains unchanged at 400 CMM
3. Corrected static pressure is 200 mmAq × 1.56 = 312 mmAq
4. Based on the performance requirements of 400 CMM and 312 mmAq, select the suitable model BTN060, Shaft power 37 KW
5. Corrected shaft power is 37 KW / 1.56 = 23.7 KW

Fan Selection Process

01 Determine the corrosiveness of the medium and select the fan material

02 Determine the operating conditions and convert airflow and pressure based on medium density, temperature, and altitude

03 Specify the fan drive arrangement and direction

04 Refer to the selection curves to determine the fan model, power, and rotational speed

FRP Fan

The FRP fan volute casing has a UV-resistant gelcoat surface layer to further enhance weather resistance, while the structural layer is made of acid- and alkali-resistant vinyl ester resin. To meet different requirements, we offer a range of resin materials and fabrication processes, including high-temperature-resistant, organic-solvent-resistant, flame-retardant, or antistatic resins, as well as organic-felt protection specifically designed to resist hydrofluoric acid corrosion, enhancing product stability and service life under special operating conditions.

Direct Drive



Belt Drive



Coupling Drive



Acoustic Enclosure



Features

Good corrosion resistance.

The FRP material offers good resistance to various acids, alkalis, and corrosive moist gases.

Relatively lightweight.

The FRP structure is lightweight, facilitating equipment installation and support design.

Stable structure.

The fiberglass-reinforced structure provides a certain level of mechanical strength and can meet industrial ventilation and exhaust gas conveying requirements.

Suitable for continuous industrial exhaust ventilation.

Suitable for continuous extraction and discharge in industrial production lines and waste-gas treatment systems.

Corrosion Resistance Table

Chemical	Formula	Conc. (Wt%)	Usable Temperature (°C) 20	40	60	80
● Inorganic acids						
Hydrochloric acid	HCl	20				
Perchloric acid	$HClO_4$	10				
Chromic acid	H_2CrO_4	20				
Fluorosilicic acid	H_2SiF_6	10				
Hydrocyanic acid	HCN	all				
Hydrogen bromide	HBr	25				
Nitric acid	HNO_3	20				
Fuming sulfuric acid	H_2SO_4		Not suitable			
Hydrofluoric acid	HF	5				
Boric acid	H_3BO_3	all				
Hydrogen fluoride	HF		Not suitable			
Anhydrous sulfuric acid	SO_3		Not suitable			
Sulfuric acid	H_2SO_4	50				
Phosphoric acid	H_3PO_4	80				
Sulfur dioxide	SO_2	25				
Carbon monoxide	CO	-				
Chlorine	Cl_2	10				
Ozone	O_3	10 ppm				
Bromine	Br_3		Not suitable			
Nitrogen oxides	NOx	5				
Carbon dioxide	CO_2	-				
Hydrogen sulfide	H_2S	all				

Standard Acid- and Alkali-Resistant Type
Special Solvent- and High-Temperature-Resistant Type
Special Chromic Acid-Resistant Type

Chemical	Formula	Conc. (Wt%)	Usable Temperature (°C) 20 40 60 80
● Organic acids			
Acrylic acid	CH_2=CHCOOH	10	
Adipic acid	$(CH_2)_4(COOH)_2$	23	
Benzoic acid	C_6H_6COOH	all	
Octadecenoic acid	C17H33COOH	all	
Formic acid	HCOOH	10	
Citric acid	$C_3H_4(OH)(COOH)_3$	all	
Glycolic acid	$CH_2OHCOOH$	50	
Acetic acid	CH_3COOH	25	
Acetic anhydride	$(CH_3CO)_2O$		Not suitable
Oxalic acid	$(COOH)_2$	all	
2,4-Dihydroxybutanedioic acid	$(CHOHCOOH)_2$	all	
Octadecanoic acid	C17H35COOH	all	
Aminobenzenesulfonic acid	$C_6H_4(NH_2)(SO_3H)$	all	
Thioglycolic acid	$HSCH_2COOH$		Not suitable
Lactic acid	$CH_3CH(OH)COOH$	all	
2,4,6-Trinitrophenol	$C_6H_2(NO_2)_3OH$	10	
Benzenesulfonic acid	$C_6H_5SO_3H$	50	
Succinic acid	$(CHCOOH)_2$	all	
Monochloroacetic acid	$CH_2ClCOOH$	25	
Butyric acid	$CH_3COCH_2CH_2COO$	50	
● Alkalis			
Ammonia	NH_3	all	
Ammonium hydroxide	NH_4OH	20	
Calcium hydroxide	$Ca(OH)_2$	25	
Potassium hydroxide	KOH	10	
Caustic soda	NaOH	25	
Barium hydroxide	$Ba(OH)_2$	10	
● Bleaching agents			
Hydrogen peroxide	H_2O_2	30	
Hypochlorous acid	HClO	10	
Calcium chlorite	$Ca(ClO)_2$	all	
Sodium hypochlorite	NaClO	15	
Chlorine dioxide	ClO_2	15	
● Salts			
Sodium nitrite	$NaNO_2$	all	
Sodium sulfite	Na_2SO_3	all	
Aluminum chloride	$AlCl_3$	all	
Ammonium chloride	NH_4Cl	all	
Calcium chloride	$CaCl_2$	all	
Copper(II) chloride	$CuCl_2$	all	
Iron(III) chloride	$FeCl_3$	all	
Nickel(II) chloride	$NiCl_2$	all	
Barium chloride	$BaCl_2$	all	

Standard Acid- and Alkali-Resistant Type
Special Solvent- and High-Temperature-Resistant Type
Special Chromic Acid-Resistant Type

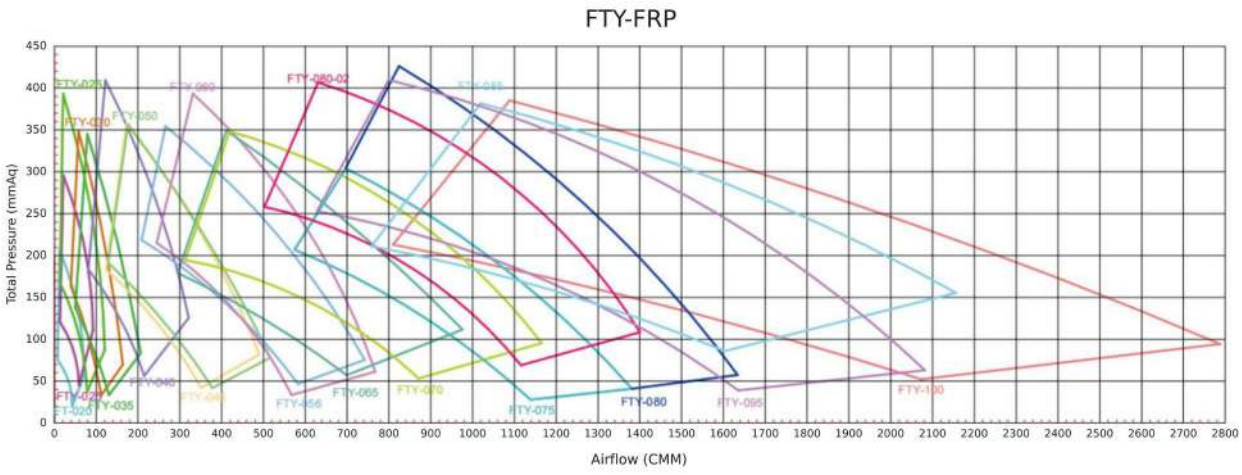
Chemical	Formula	Conc. (Wt%)	Usable Temperature (°C) 20 40 60 80
Potassium permanganate	$KMnO_4$	20	
Potassium dichromate	$K_2Cr_2O_7$	all	
Potassium bicarbonate	$KHCO_3$	50	
Ammonium nitrate	NH_4NO_3	all	
Silver nitrate	$AgNO_3$	all	
Sodium carbonate	Na_2CO_3	35	
Magnesium carbonate	$MgCO_3$	all	
Sodium sulfide	Na_2S	all	
Zinc sulfate	$ZnSO_4$	all	
Ammonium sulfate	$(NH_4)_2SO_4$	20	
Potassium sulfate	K_2SO_4	all	
Iron(III) sulfate	$Fe(SO_4)_3$	all	
Copper(II) sulfate	$CuSO_4$	all	
Magnesium sulfate	$MgSO_4$	all	
● Solvents and organic compounds			
Acrylonitrile	$CH_2=CHCN$		Not suitable
Acetaldehyde	CH_2CHO		Not suitable
Cyanomethane	CH_3CN		Not suitable
Phenetole	$C_6H_2OCH_3$		Not suitable
Acetone	CH_3COCH_3		Not suitable
Aniline	$C_6H_5NH_2$		Not suitable
Ethylmethylamine	$(CH_3)_2CHNH_3$	all	
Propanol	$(CH_3)_2CHOH$	all	
Ethanol	C_2H_5OH	50	
Diethyl ether	$C_2H_5OC_2H_5$		Not suitable
Dimethyl ether	CH_2CH_2O		Not suitable
Ethylene glycol	$HOCH_2CH_2OH$	all	
2-Chloroethanol	$ClCH_2CH_2OH$	all	
1,2-Dichloroethane	$ClCH_2CH_2Cl$		Not suitable
Dichloromethane	CH_2Cl_2		Not suitable
Xylene	$C_6H_4(CH_3)_2$	all	
Glycerol	$C_3H_5(OH)_3$	all	
Cresol	$CH_3C_6H_4OH$		Not suitable
Methyl formate	$CH_3COOC_2H_5$		Not suitable
Methyl acetate	CH_3COOCH_3		Not suitable
Ethyl acetate	$C_2H_5OC_2H_5$		Not suitable
Carbon tetrachloride	CCl_4	all	
Diallyl ether	C_6H10O	all	
Dimethylamine	$(CH_3)_2NH$		Not suitable
Bromoethane	C_2H_5Br		Not suitable
1,2-Dichloroethylene	$Cl_2=CCl_2$	all	
Triethanolamine	$N(C_2H_3OH)_3$	all	
Trichlorobenzene	$C_6H_3Cl_3$		Not suitable
Styrene	$C_6H_5CH_3$	all	

Standard Acid- and Alkali-Resistant Type
Special Solvent- and High-Temperature-Resistant Type
Special Chromic Acid-Resistant Type

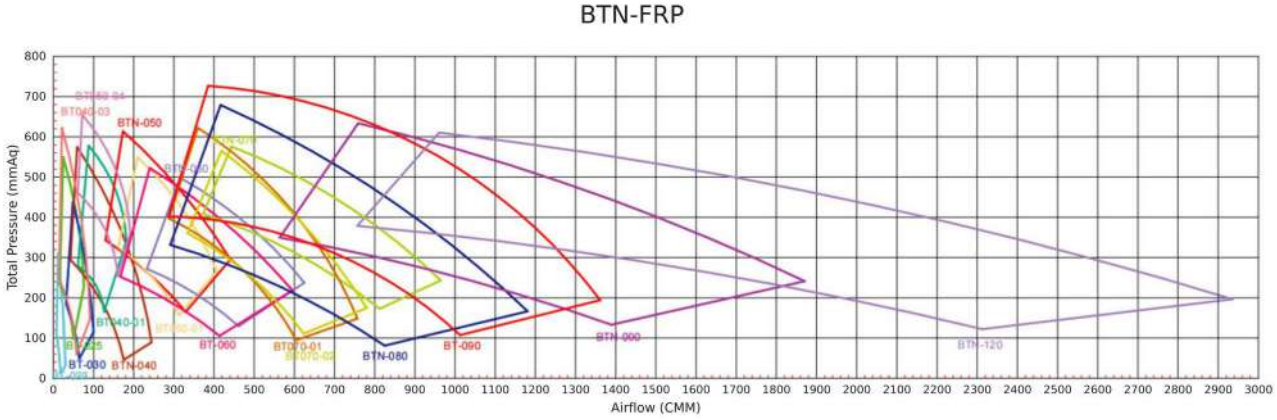
Chemical	Formula	Conc. (Wt%)	Usable Temperature (°C) 20 40 60 80
Sulfur dichloride	SCl_2		Not suitable
Nitrosobenzene	$C_6H_5NO_2$	all	
Carbon disulfide	CS_2	10	
Diphenyl ether	C12H10O	all	
Phenol	C_6H_5OH	5	
2-Hydroxybenzenesulfonic acid	$C_6H_4(OH)(SO_3H)$		Not suitable
Heptane	$CH_3(CH_2)_5CH_3$	all	
Benzaldehyde	C_6H_5CHO		Not suitable
Formaldehyde	HCHO	37	
Methanol	CH_3OH	50	

Standard Acid- and Alkali-Resistant Type
Special Solvent- and High-Temperature-Resistant Type
Special Chromic Acid-Resistant Type

FTY Full Performance Curve Range Table



BTN Full Performance Curve Range Table

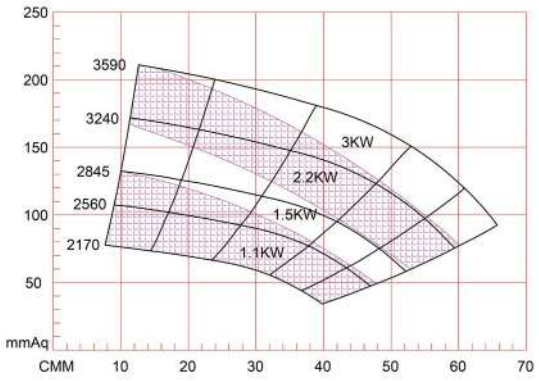


Standard FRP Fan

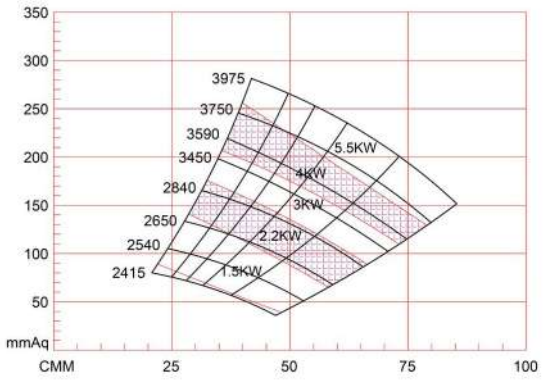
Standard FRP fan made of fiberglass-reinforced plastic (FRP), offering excellent acid and alkali resistance and corrosion resistance, suitable for general industrial exhaust-gas treatment. Mainly used in industries such as electronics and semiconductors, chemical exhaust-gas treatment, and wastewater treatment.

FTY Performance Curves

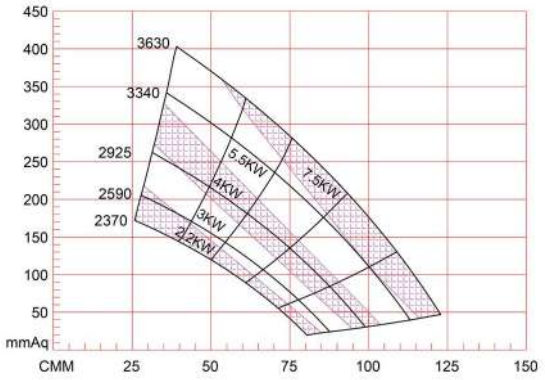
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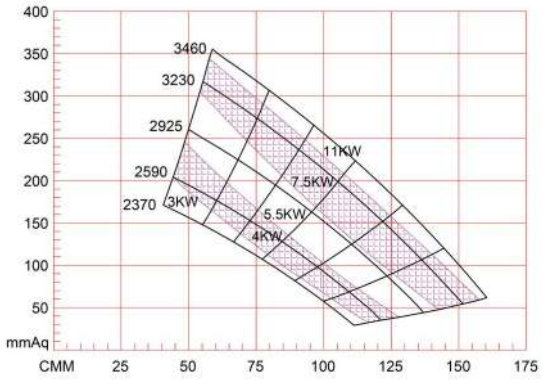
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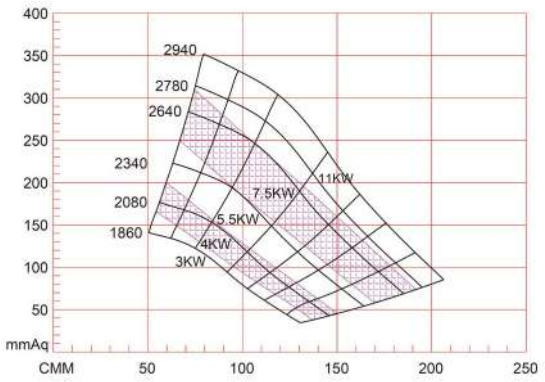
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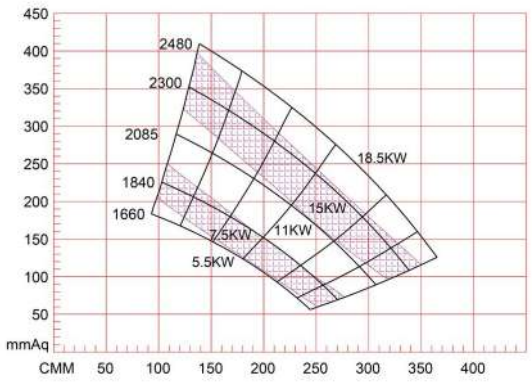
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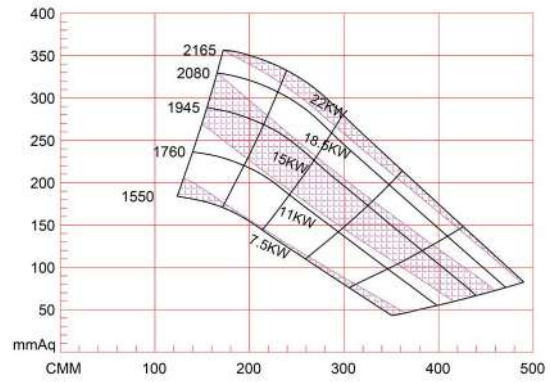
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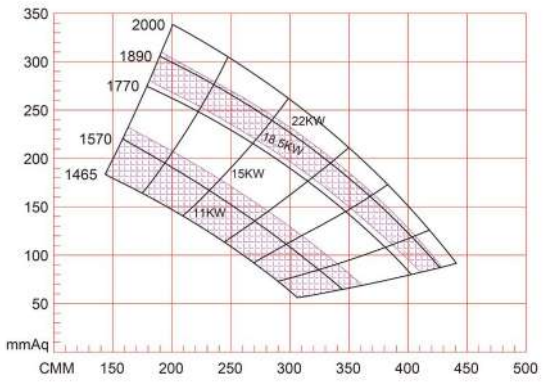
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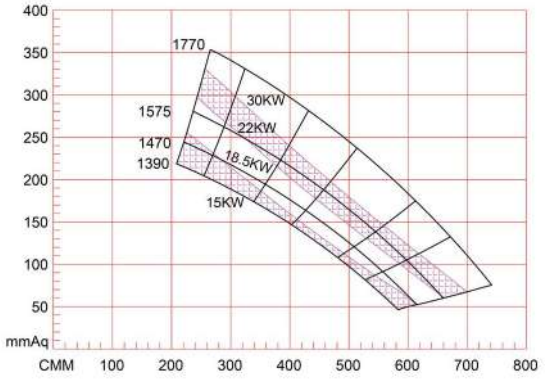
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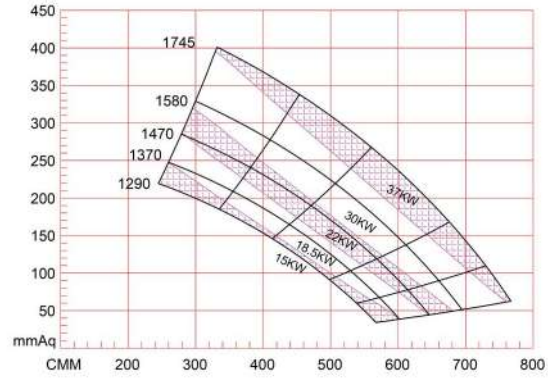
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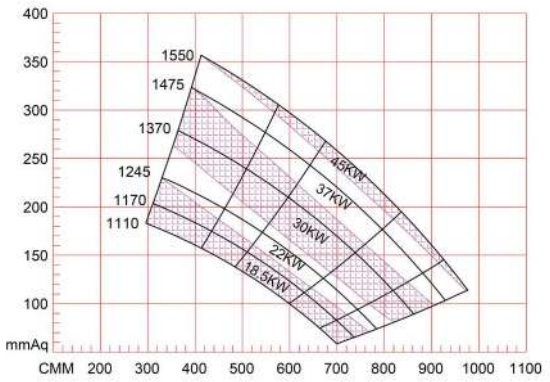
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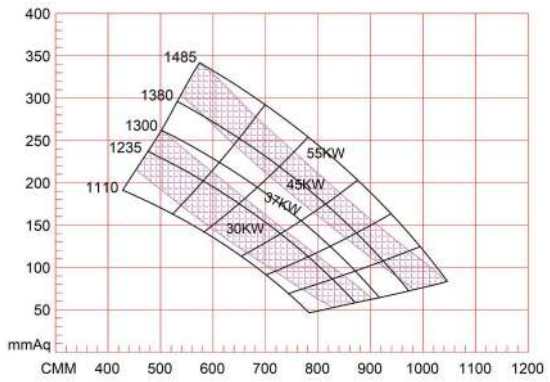
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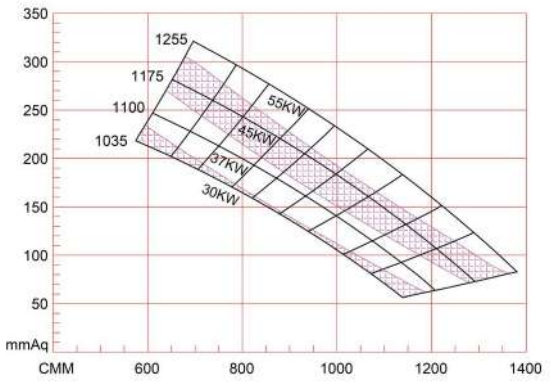
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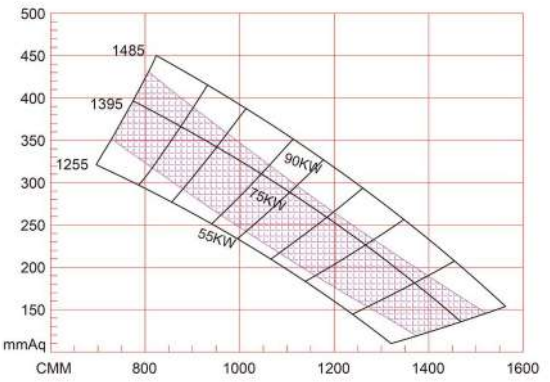
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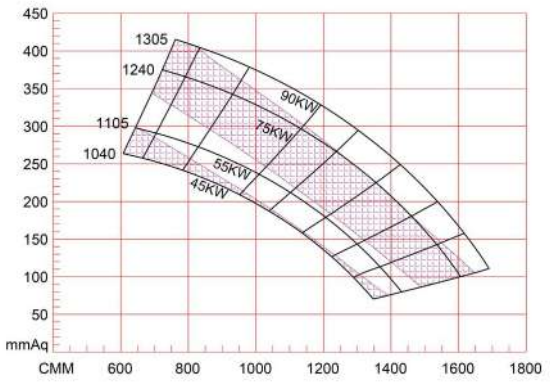
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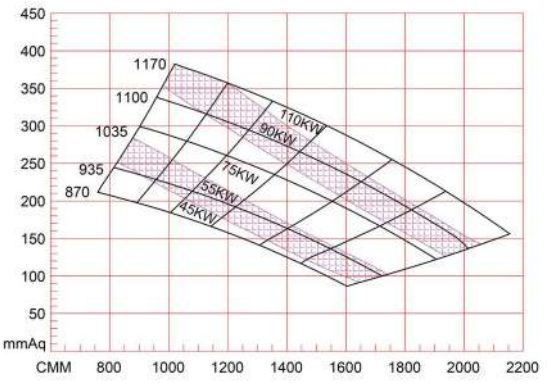
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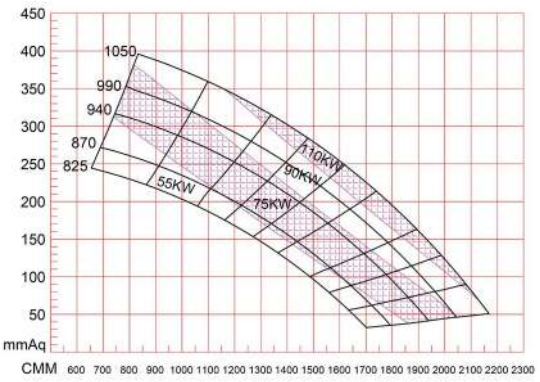
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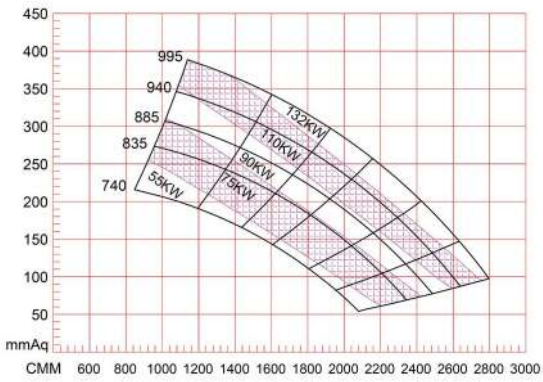
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FTY-095F-01



FTY-100F-01

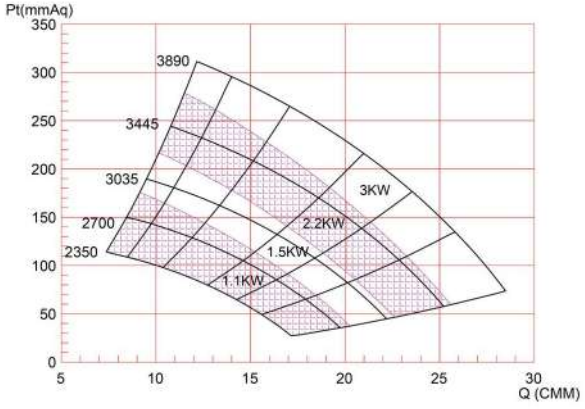


FRP High-Pressure Fan

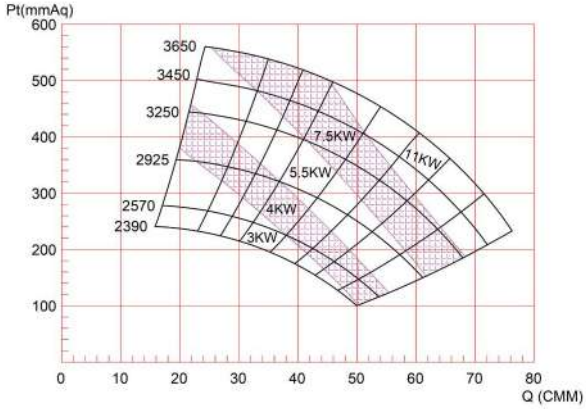
FRP high-pressure fans are designed for high-pressure requirements, with a maximum pressure of up to 10,000 Pa. They offer excellent corrosion resistance and high-pressure output performance and are suitable for industries such as pharmaceutical and chemical processing, anaerobic paper production, petrochemicals and petroleum, and semiconductor manufacturing processes.

BT, BTN, and BTY Performance Curves

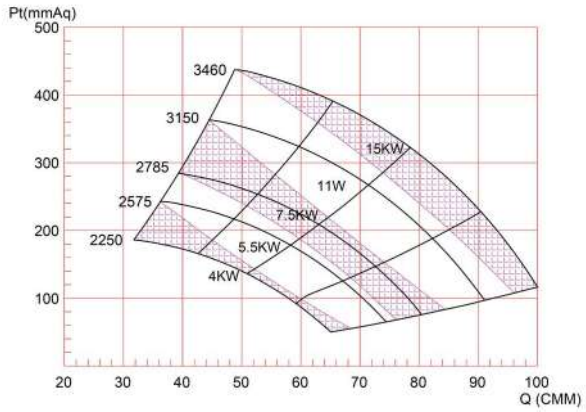
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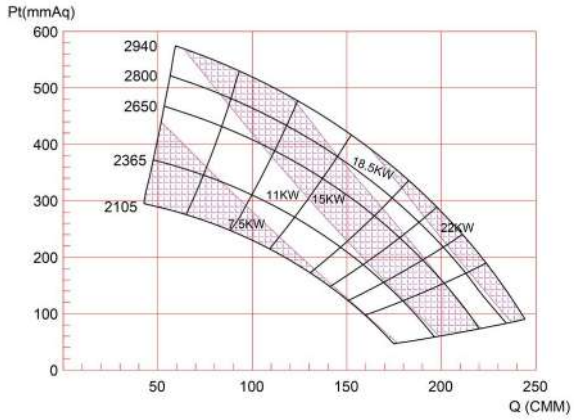
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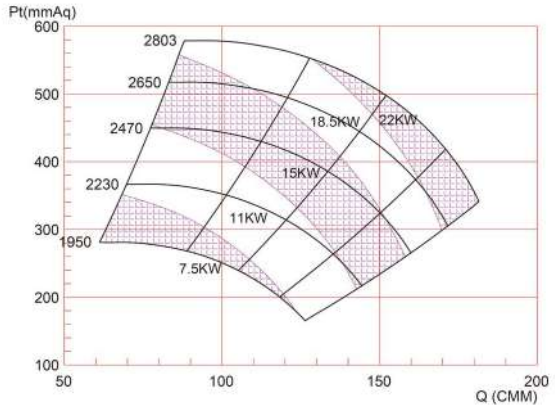
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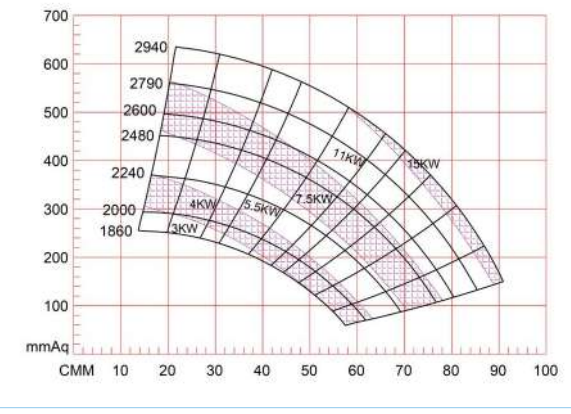
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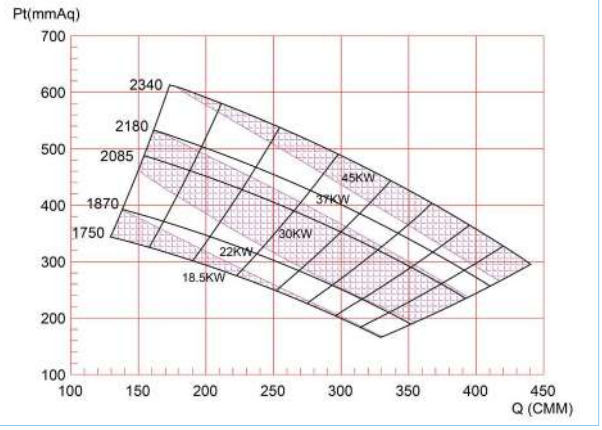
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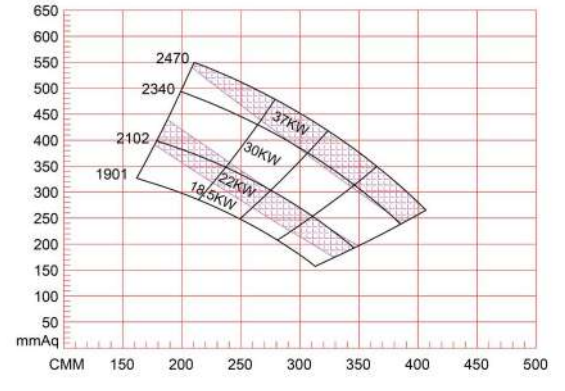
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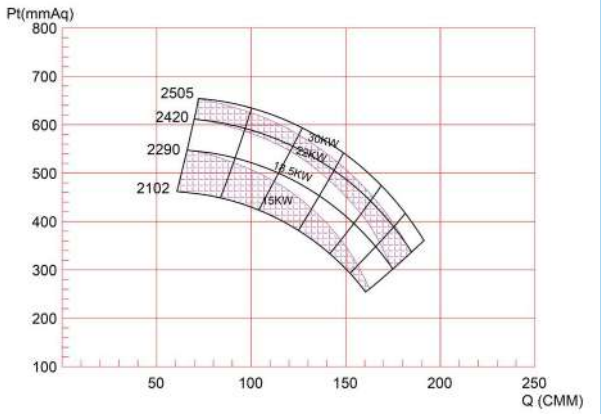
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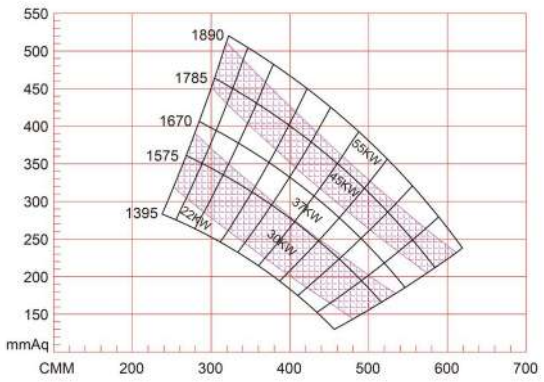
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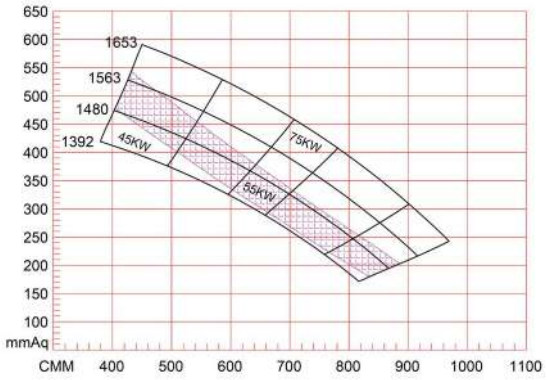
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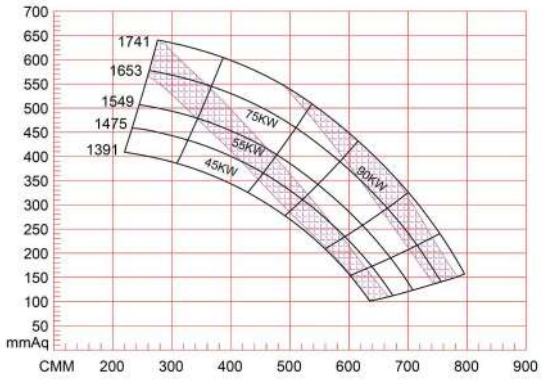
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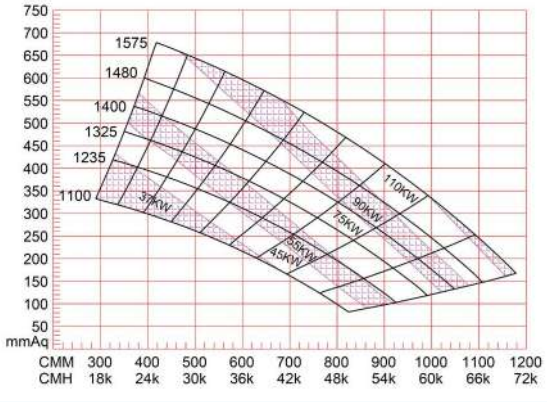
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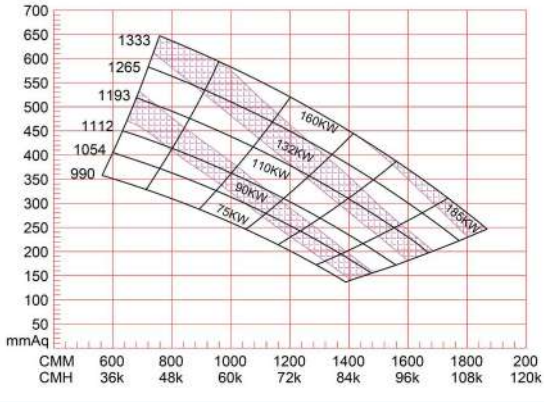
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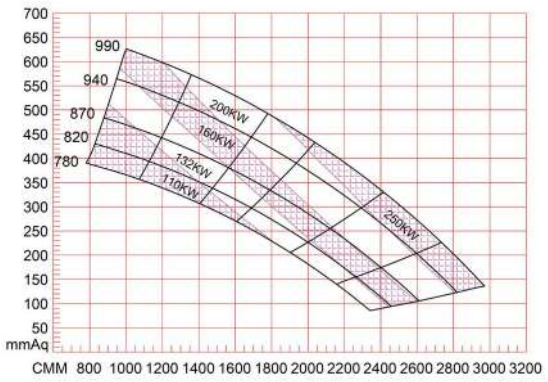
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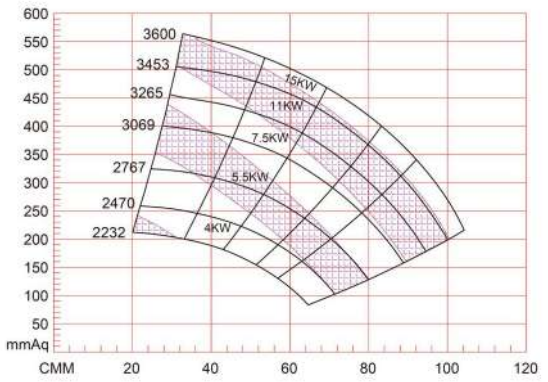
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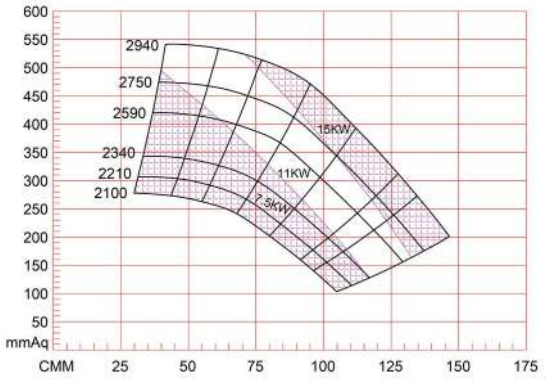
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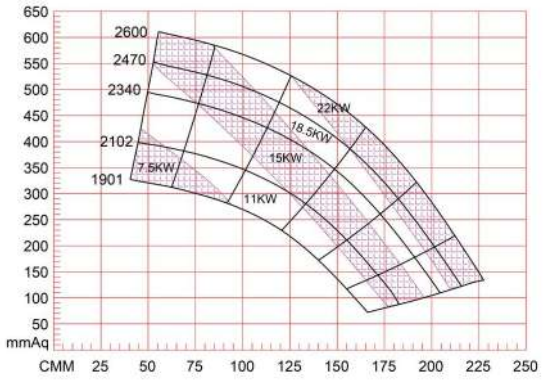
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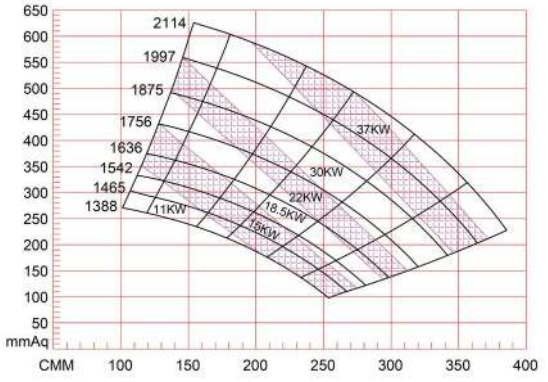
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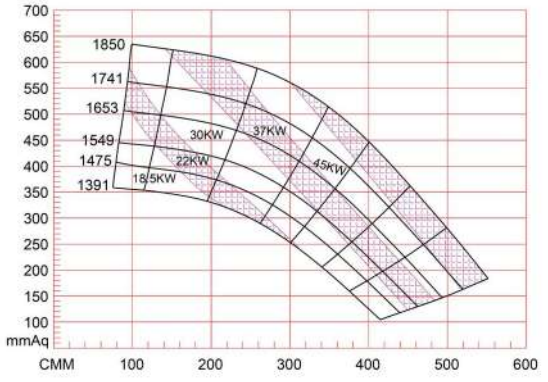
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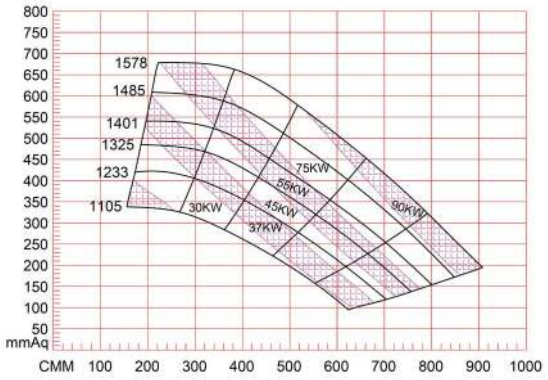
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BTY-065F-01



BTY-080F-01


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250
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100
50
mmAq
1578
1485
1401
1325
1233
1105
30KW
37KW
45KW
55KW
75KW
90KW
CMM 100 200 300 400 500 600 700 800 900 1000



Metal Fan

We select materials such as carbon steel, stainless steel, and special alloy steel according to operating conditions and the media handled, and thoroughly shot-blast metal components to remove rust before applying a high-temperature-cured powder coating for enhanced corrosion, wear, and scratch resistance. We place particular emphasis on the Iron frame material and coating process, using a baked coating process to enhance coating adhesion and product surface gloss.

Direct Drive



Belt Drive



Coupling Drive



Acoustic Enclosure



Features

High mechanical strength.

The metal housing and impeller provide excellent rigidity, making them suitable for continuous industrial operation and higher-load conditions.

Good temperature resistance.

Metal fans can handle gas streams at higher temperatures.

Suitable for systems with higher static pressure.

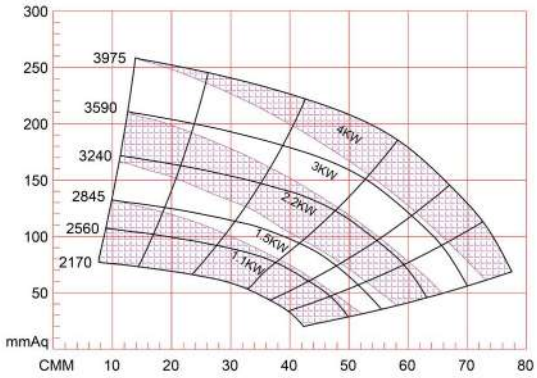
The metal structure is stable and suitable for exhaust gas treatment systems with longer duct runs and higher equipment resistance.

Suitable for a variety of industrial exhaust gas systems.

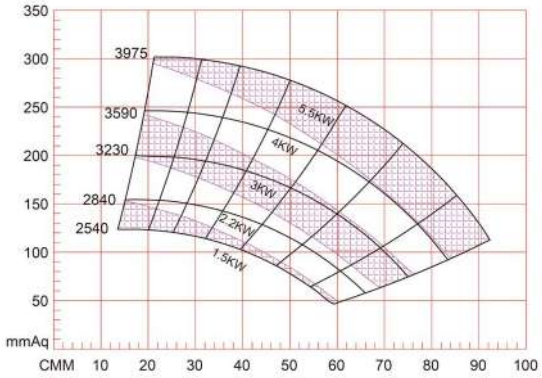
Can be used in systems for dust collection, exhaust gas purification, combustion exhaust, process exhaust, and production-line ventilation.

FTY Performance Curves

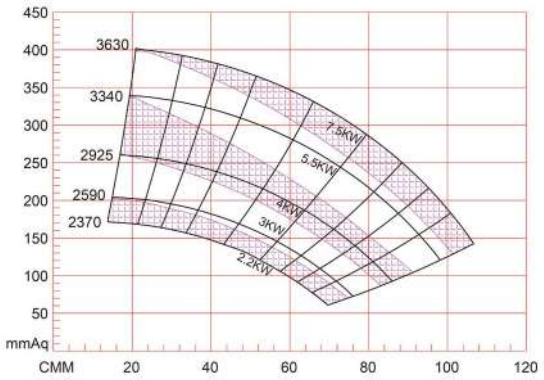
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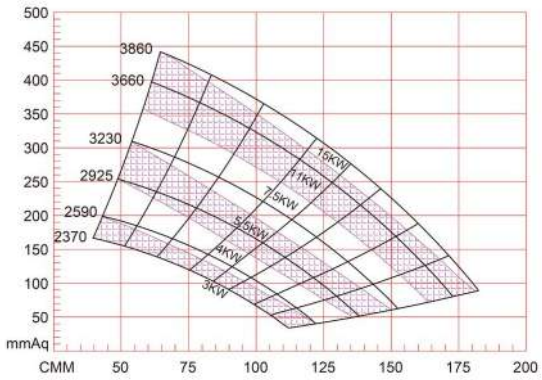
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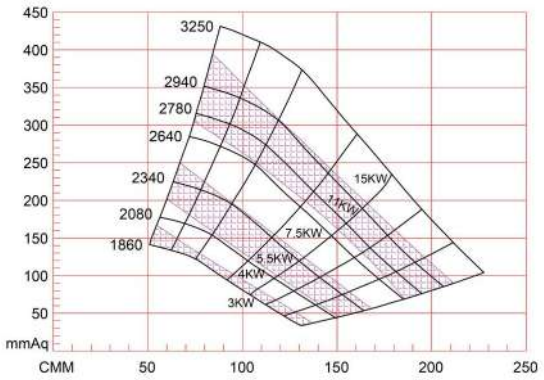
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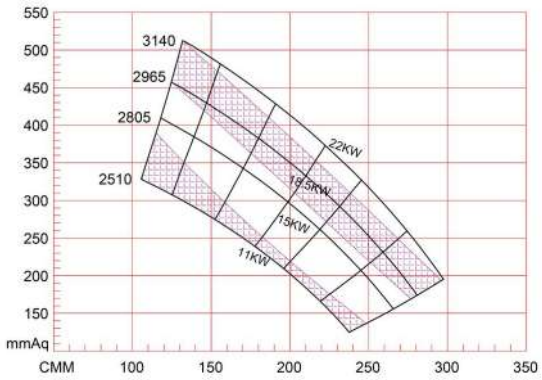
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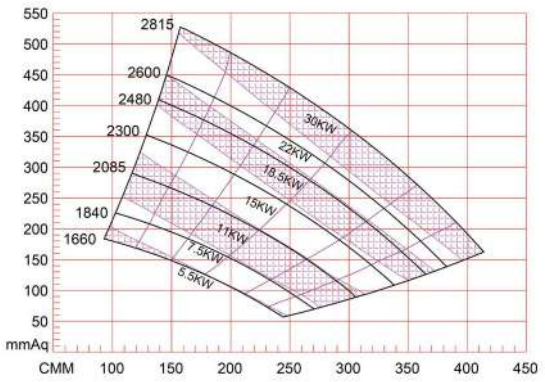
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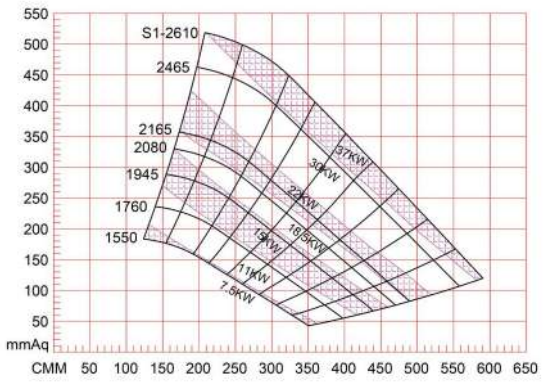
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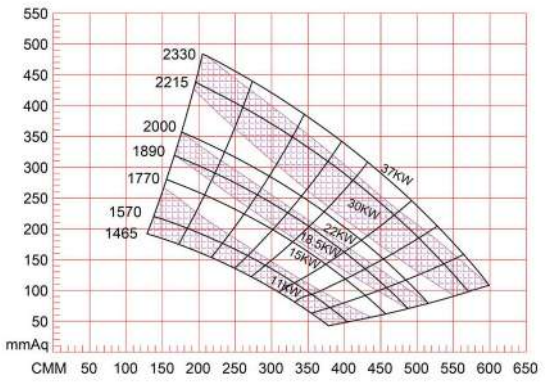
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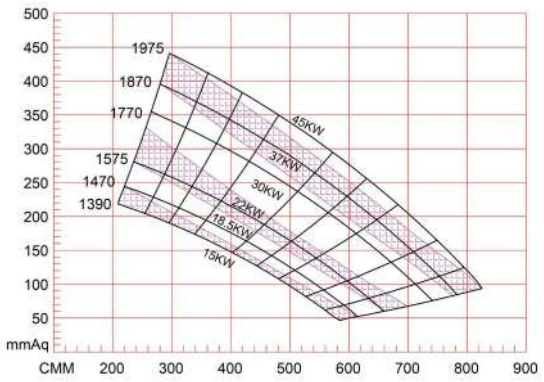
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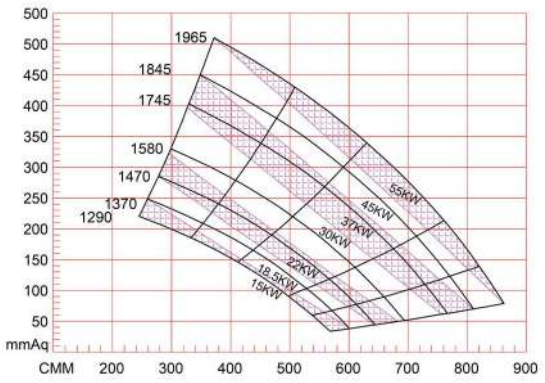
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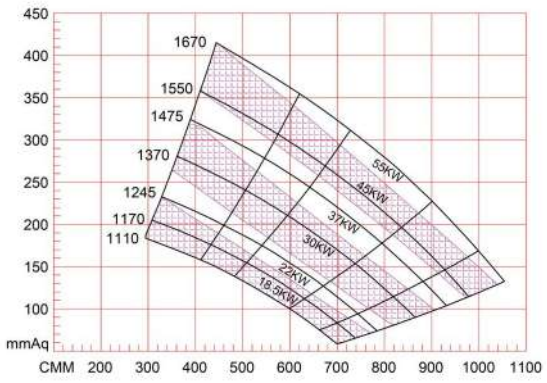
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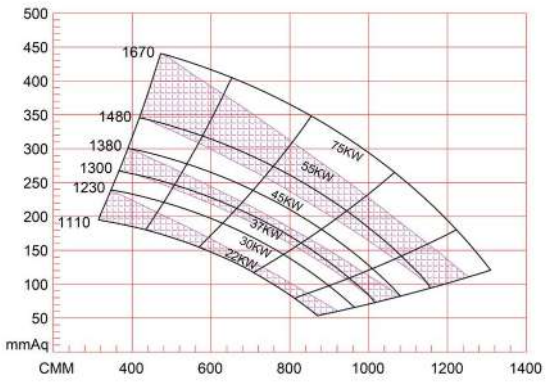
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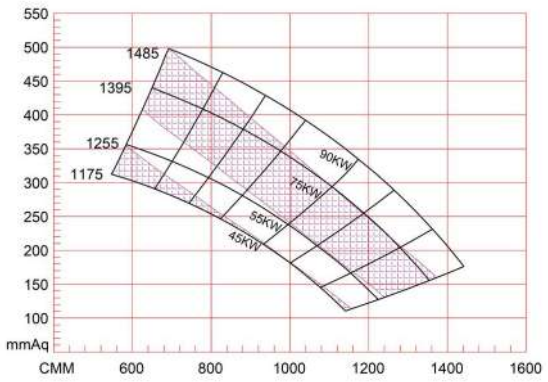
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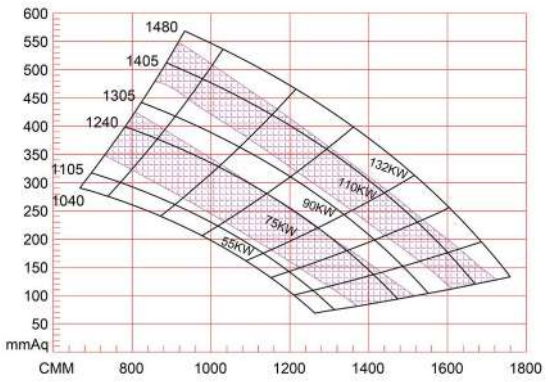
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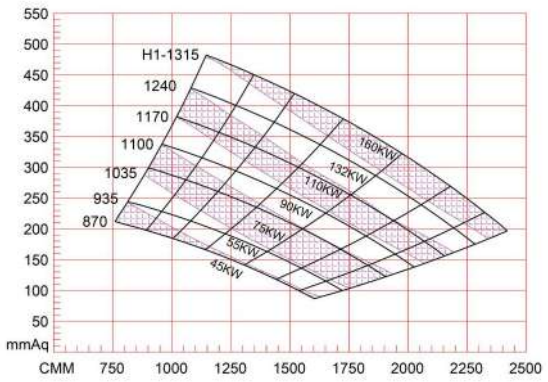
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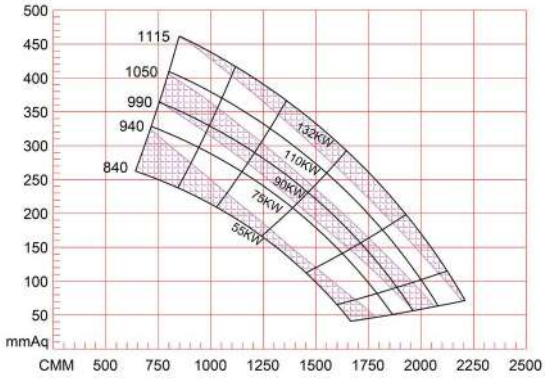
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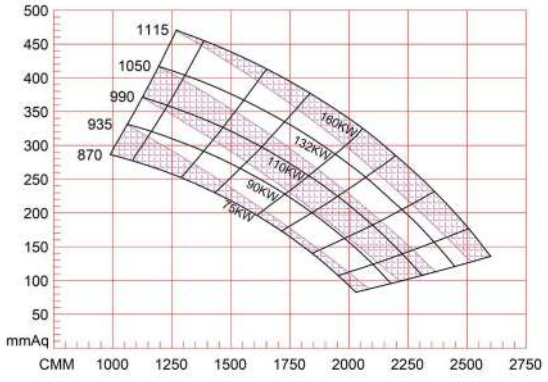
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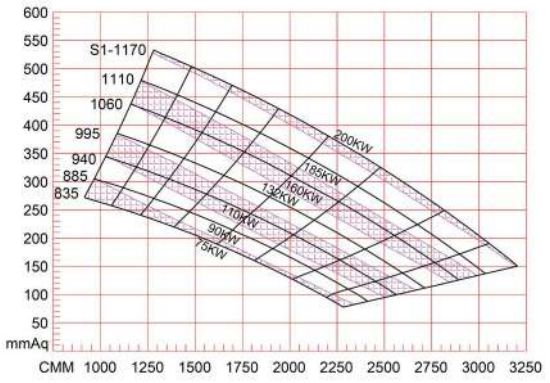
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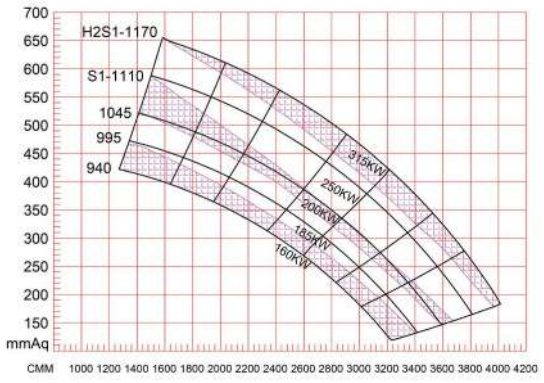
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FTY-100M-01

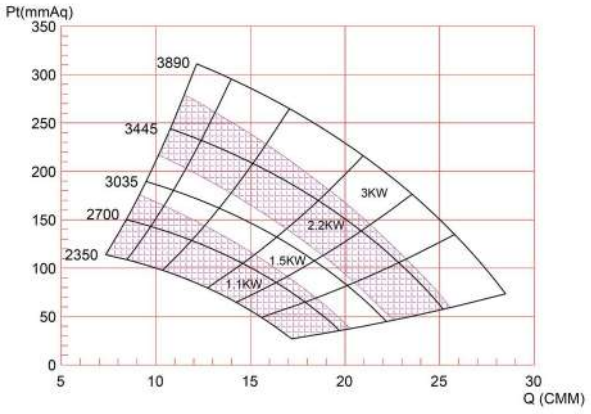


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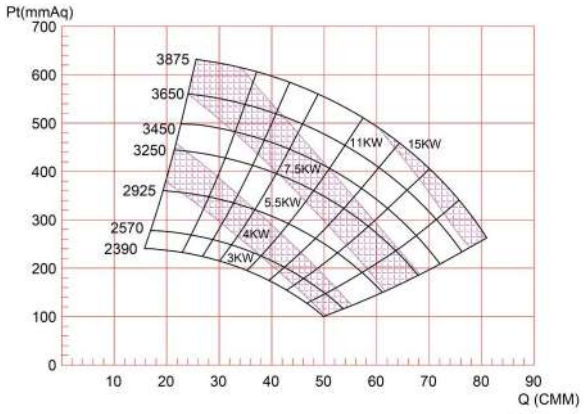


BT, BTN Performance Curves

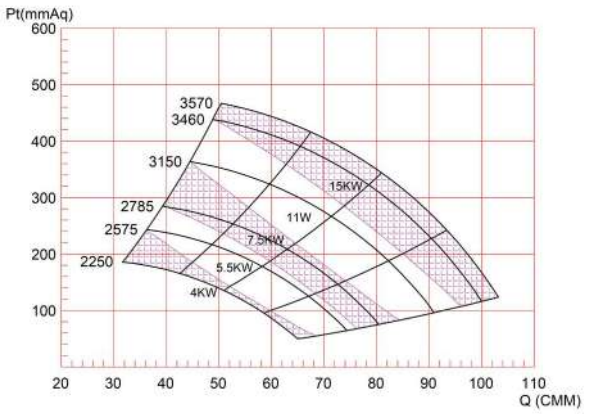
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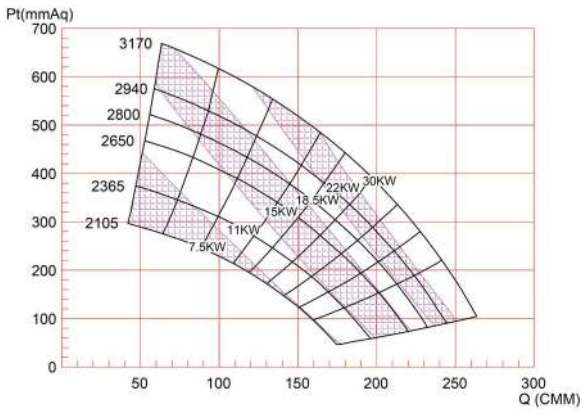
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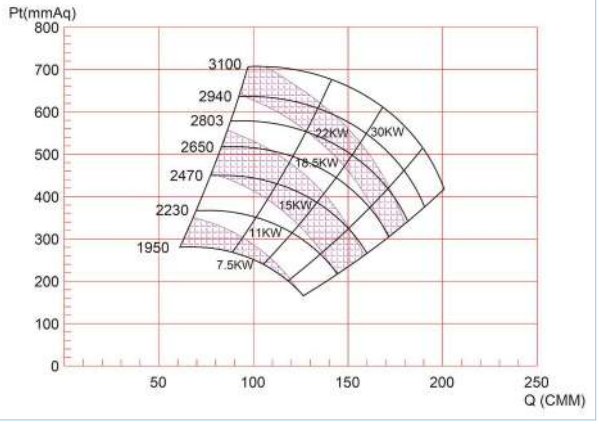
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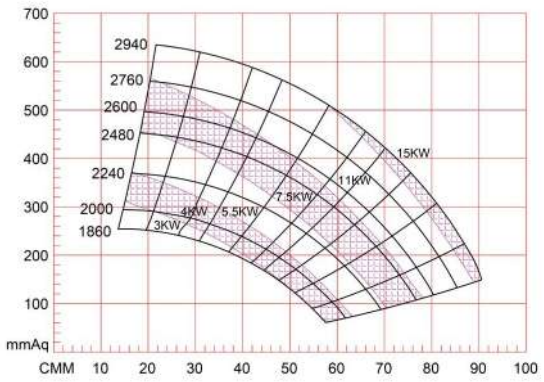
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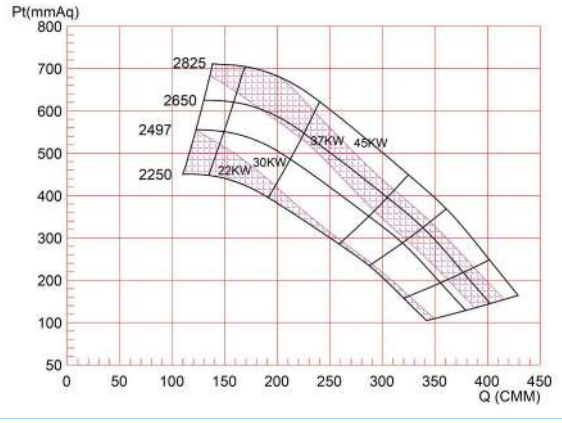
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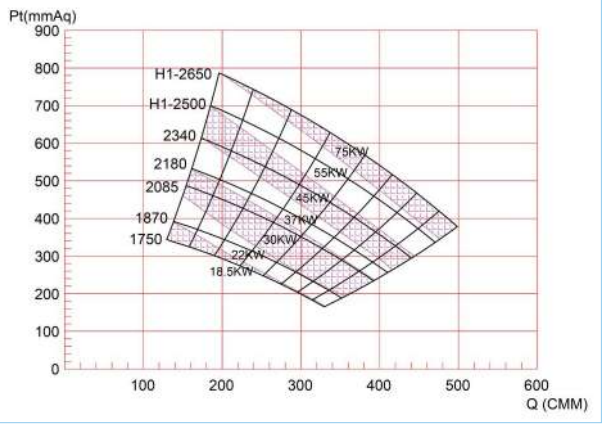
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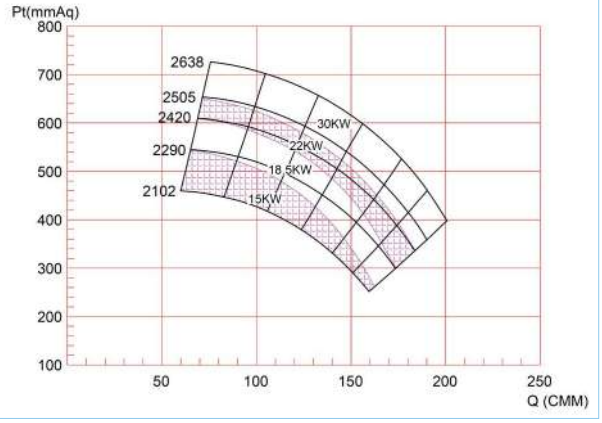
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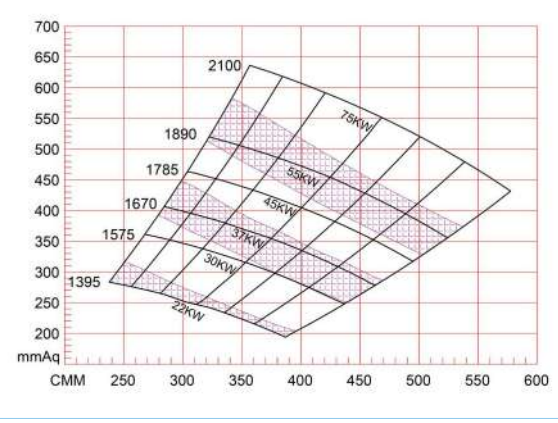
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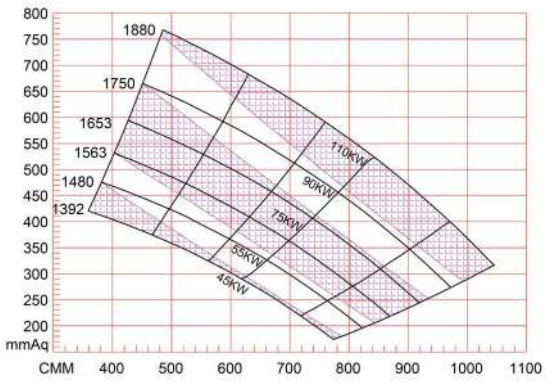
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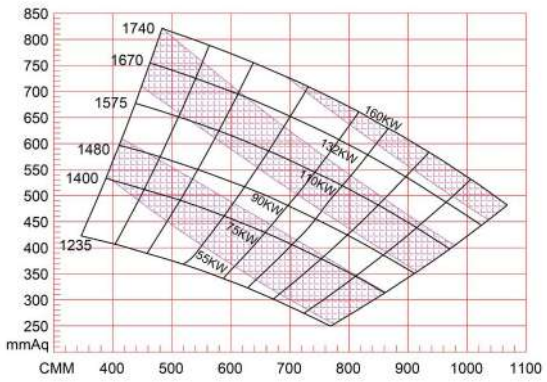
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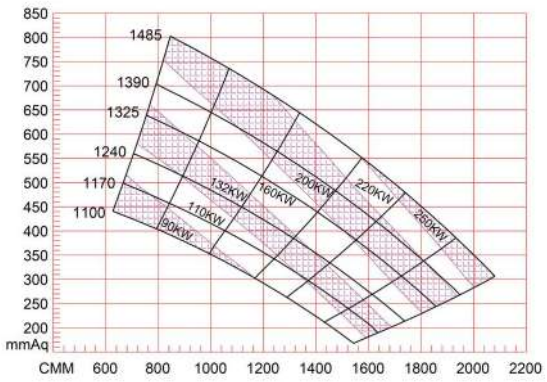
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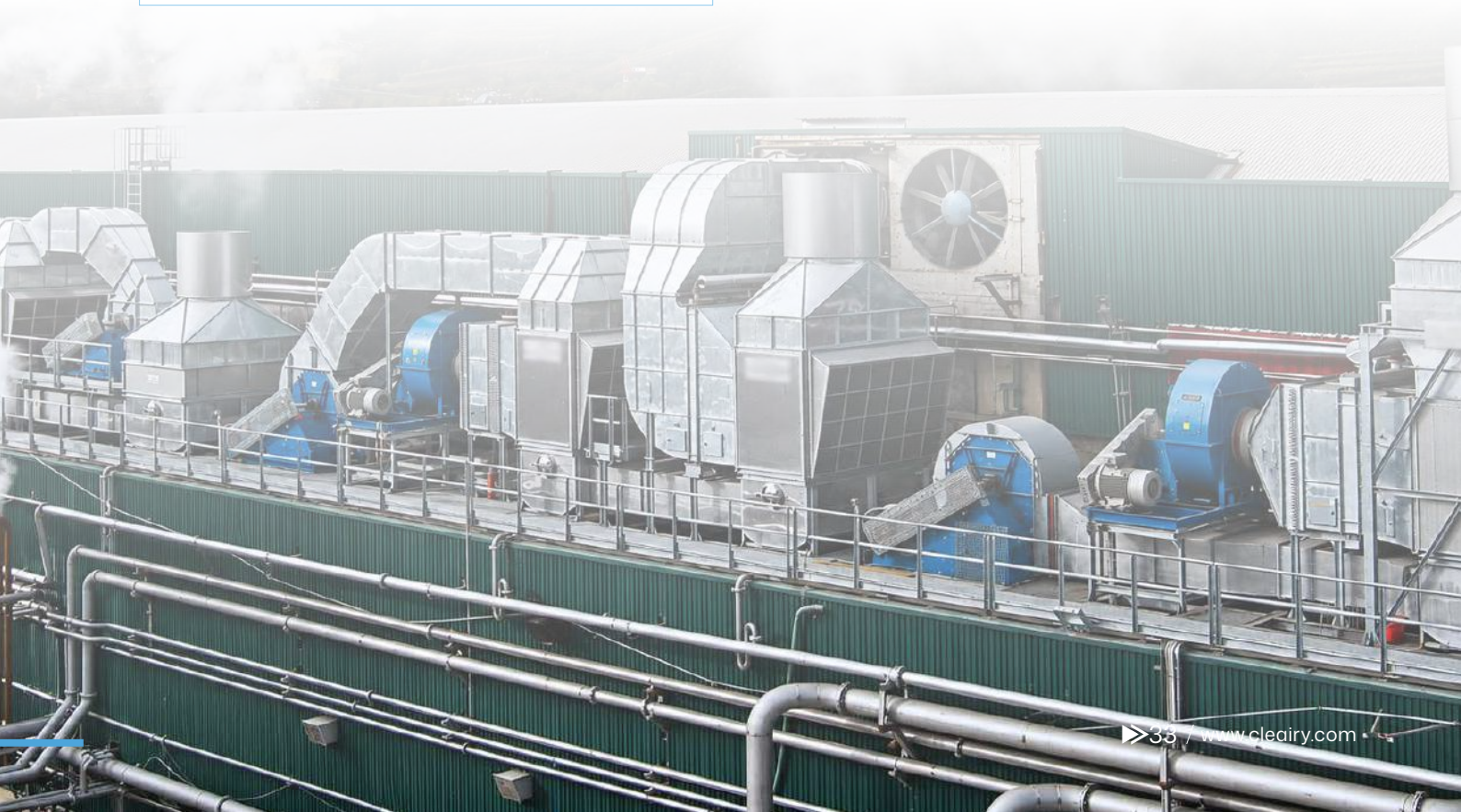


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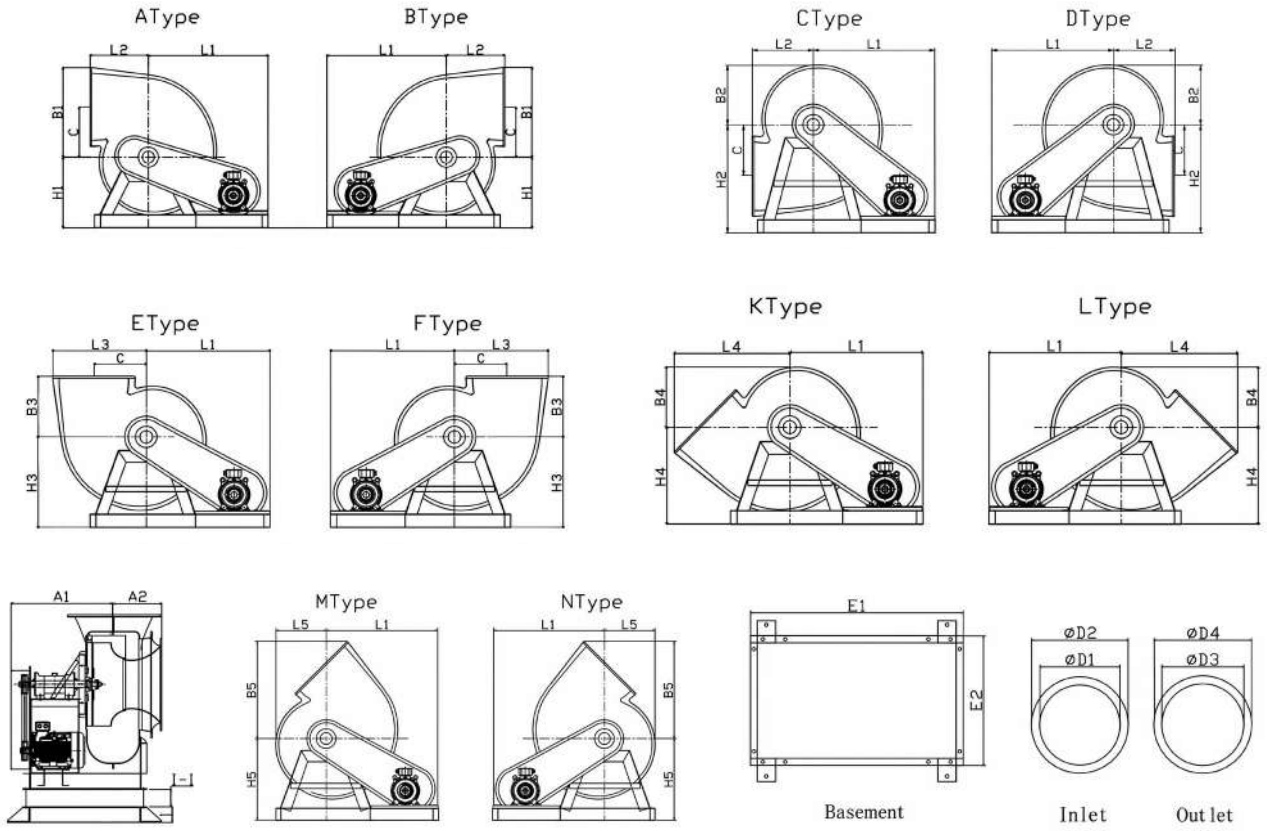


BTN-090M-01





Fan Overall Dimensions



Medium- and Low-Pressure FRP Fan Overall Dimensions

Specifications / Model	A1	A2	B1	B2	B3	B4	B5	C	L1	L2	L3	L4	L5	H1	H2	H3	H4	H5	I	Weight (excluding motor) Kg
FTY-020FC	680	209	450	283	236	253	491	250	602	245	450	491	253	500	603	500	500	500	230	140
FTY-025FC	676	232	459	305	296	281	534	239	698	296	459	534	282	388	568	488	488	488	230	189
FTY-026FC	640	219	534	339	311	313	597	309	718	311	534	597	313	570	680	570	570	570	230	184
FTY-030FC	704	273	532	350	338	326	615	282	812	338	532	615	358	440	672	560	560	560	250	241
FTY-035FC	721	321	598	411	412	382	715	333	924	413	598	715	382	490	732	640	640	490	250	268
FTY-040FC	803	360	806	521	522	479	939	451	1073	522	806	939	479	633	949	780	783	780	250	368
FTY-046FC	853	377	963	571	513	518	1044	588	1153	513	963	1044	518	760	1100	860	960	860	250	378
FTY-050FC	984	409	891	580	586	534	1045	486	1222	586	891	1044	534	720	1056	870	870	870	270	510
FTY-056FC	1020	427	1139	672	603	608	1231	689	1277	603	1139	1231	608	850	1290	980	1070	970	270	534
FTY-060FC	1029	512	1111	720	721	664	1296	621	1385	721	1111	1295	664	890	1271	978	1078	1078	270	700
FTY-065FC	1133	545	1176	775	766	714	1373	666	1453	766	1176	1373	714	914	1335	1021	1101	1101	310	780
FTY-070FC	1209	566	1273	823	823	755	1482	718	1555	823	1273	1482	755	943	1437	1092	1232	1043	310	930

Specifications / Model	A1	A2	B1	B2	B3	B4	B5	C	L1	L2	L3	L4	L5	H1	H2	H3	H4	H5	I	Weight (excluding motor) Kg
FTY-080FC	1315	592	1416	914	905	839	1641	796	1705	905	1416	1641	839	1054	1579	1192	1342	1342	310	960
FTY-080FC-02	1335	599	1481	976	960	883	1726	856	1705	960	1481	1726	1282	1140	1640	1340	1420	1420	310	1098
FTY-085FC	1391	641	1574	1033	1043	951	1850	889	1683	1043	1574	1850	949	1339	1737	1339	1489	1489	310	1220
FTY-095FC	1542	699	1775	1172	1145	1077	2065	999	1815	1145	1775	2065	1521	1465	1955	1510	1610	1610	330	1692
FTY-096FC	1542	699	1775	1172	1145	1077	2065	999	1815	1145	1775	2065	1521	1465	1955	1510	1610	1610	330	1710
FTY-100FC	1670	740	2005	1254	1247	1336	2252	1113	2005	1247	1939	2252	1336	1413	2115	1610	1810	1538	330	2320
FTY-110FC	1670	740	2005	1254	1247	1336	2252	1113	2005	1247	1939	2252	1336	1413	2115	1610	1810	1538	330	2500

Specifications / Model	Relative to Base		Inlet and Outlet Flanges			
			Inlet flange		Outlet Flange	
	E1	E2	D1	D2	D3	D4
FTY-020FC	840	579	300	380	300	400
FTY-025FC	980	727	350	440	335	425
FTY-026FC	1000	573	350	450	350	450
FTY-030FC	1170	793	400	500	400	500
FTY-035FC	ABMN: 1300 EFKLCD: 1200	830	450	550	440	530
FTY-040FC	ABMN: 1550 EFKLCD: 1450	954	580	700	600	710
FTY-046FC	ABMN: 1660 EFKLCD: 1560	745	650	750	650	750
FTY-050FC	ABEFKLMN: 1730 CD: 1850	1137	680	780	690	810
FTY-056FC	1860	890	800	900	800	900
FTY-060FC	1990	1265	900	1020	830	980
FTY-065FC	2120	1410	900	1020	900	1020
FTY-070FC	ABEFKLCD: 2280 MN: 2340	1497	1000	1120	960	1110
FTY-080FC	ABCD: 2430 EFKLMN: 2330	1606	1110	1240	1070	1240
FTY-080FC-02	AB: 2430 CDEFKLMN: 2330	1650	1180	1300	1130	1250
FTY-085FC	2460	1756	1260	1420	1242	1376
FTY-095FC	2700	1948	1400	1550	1400	1550
FTY-096FC	2700	1948	1400	1550	1400	1550
FTY-100FC	AB: 2950 CD: 2880 EFKL: 2790 MN: 3010	ABCDEF: 2145 KLMN: 2235	1490	1610	1090 × 1470	1270 × 1670
FTY-110FC	AB: 2950 CD: 2880 EFKL: 2790 MN: 3010	ABCDEF: 2145 KLMN: 2235	1600	1750	1090 × 1470	1270 × 1670

High-Pressure Fan Overall Dimensions

Specifications / Model	A1	A2	B1	B2	B3	B4	B5	C	L1	L2	L3	L4	L5	H1	H2	H3	H4	H5	I	Weight (excluding motor) Kg
BT-020FC	660	125	335	260	260	250	421	210	642	260	335	421	250	374	485	374	374	374	230	146
BT-025FC	608	215	424	309	325	282	530	285	737	325	425	530	282	430	575	430	430	430	230	193
BT-030FC	675	235	525	374	352	338	621	350	824	352	525	621	339	520	698	570	570	520	250	234
BT-040FC	738	260	660	496	472	460	800	460	1050	471	660	800	460	623	838	693	693	623	250	326
BT-040FC-03	665	200	585	422	430	396	720	420	958	430	585	720	396	572	757	617	617	572	250	480
BT-050FC	930	355	910	632	620	584	1082	600	1256	620	910	1082	584	802	1100	895	895	802	270	483
BT-050FC-04	825	261	685	520	552	491	875	485	1218	552	685	875	491	720	875	720	720	720	270	506
BT-060FC	1071	408	1050	750	732	690	1260	690	1470	732	1050	1260	690	865	1245	1035	1035	935	270	737
BT-070FC	1126	466	1234	894	849	834	1473	819	1649	849	1234	1473	818	995	1395	1155	1235	1095	310	953
BT-090FC	1331	552	1495	1088	1020	1011	1778	980	1753	1020	1495	1778	1011	1380	1710	1380	1440	1440	330	1423
BT-105FC	1481	610	1495	1088	1020	1011	1778	980	1873	1020	1495	1778	1011	1195	1710	1360	1440	1380	330	1894
BTN-040FC	716	228	660	496	472	451	800	460	1050	471	660	800	451	623	838	693	693	623	250	482
BTN-050FC	923	320	885	629	615	584	1061	575	1256	615	885	1061	584	802	1100	895	895	802	270	562
BTN-060FC	1071	363	1050	747	729	686	1258	690	1470	729	1050	1258	686	865	1245	1035	1035	935	270	756
BTN-070FC	1126	466	1234	894	849	818	1473	819	1649	849	1234	1473	818	995	1395	1155	1235	1095	310	1068
BTN-080FC	1153	399	1252	850	875	795	1504	802	1649	875	1252	1504	795	970	1410	1130	1130	1130	310	1074
BTN-090FC	1331	552	1495	1088	1020	1011	1778	980	1753	1020	1495	1778	1011	1380	1710	1380	1440	1440	330	1586
BTN-120FC	1823	713	1870	1296	1340	1206	2270	1145	2170	1340	1870	2270	1206	1425	2070	1630	1810	1605	350	3933
BTH-035FC	633	175	494	366	408	349	638	319	924	408	494	638	349	530	633	530	530	530	250	260
BTH-040FC	694	200	588	440	465	419	745	388	1025	465	588	745	419	600	730	600	600	600	250	307
BTH-045FC	726	225	678	514	542	490	863	453	1069	542	678	863	490	600	820	700	700	700	250	581
BTH-055FC	994	275	847	640	667	610	1070	572	1343	667	847	1070	610	825	990	825	825	825	270	652
BTH-065FC	1024	325	974	724	765	688	1230	649	1413	765	974	1230	688	830	1120	950	950	870	310	834
BTH-080FC	1097	395	1170	878	922	831	1480	796	1590	922	1170	1480	831	1098	1330	1098	1098	1098	310	1004

Specifications / Model	Relative to Base		Inlet and Outlet Flanges			
			Inlet flange		Outlet Flange	
	E1	E2	D1	D2	D3	D4
BT-020FC	930	683	150	250	150	250
BT-025FC	1060	689	200	300	200	280
BT-030FC	1180	716	250	350	250	350
BT-040FC	1530	788	300	400	300	400
BT-040FC-03	1330	686	220	330	200	330
BT-050FC	1820	1086 (EF: 1106)	500	620	500	620
BT-050FC-04	1720	900	300	400	300	400

Specifications / Model	Relative to Base		Inlet and Outlet Flanges			
			Inlet flange		Outlet Flange	
	E1	E2	D1	D2	D3	D4
BT-060FC	2160	1265	600	720	600	720
BT-070FC	2310	1290	700	800	550 × 680	700 × 830
BT-090FC	2610	1550	850	970	830 × 630	1030 × 810
BT-105FC	2730	1770	1000	1120	830 × 720	1020 × 890
BTN-040FC	1530	788	400	500	300	400
BTN-050FC	1820	1086 (EF: 1106)	500	620	500	620
BTN-060FC	2160	1265	600	720	600	720
BTN-070FC	2310	1290	700	820	550 × 680	700 × 830
BTN-080FC	2390	1287	850	980	510 × 750	660 × 900
BTN-090FC	2610 (MN: 2670)	1550	1000	1120	830 × 630	1030 × 810
BTN-120FC	3300	2123	1400	1550	825 × 1280	1010 × 1450
BTH-035FC	1300	667	300	400	250	350
BTH-040FC	1460	733	300	430	300	400
BTH-045FC	1550	787	400	520	350	450
BTH-055FC	1970	1053	500	620	450	550
BTH-065FC	2040	1115	600	700	500	650
BTH-080FC	2300	1186	750	870	650	750

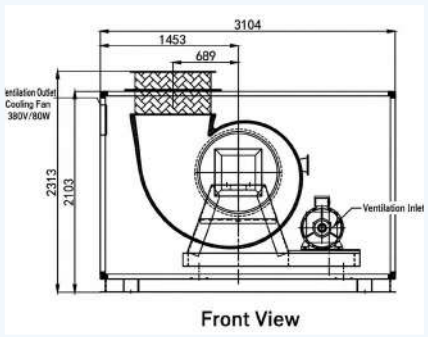
Medium- and Low-Pressure Metal Fan Overall Dimensions

Specifications / Model	A1	A2	B1	B2	B3	B4	B5	C	L1	L2	L3	L4	L5	H1	H2	H3	H4	H5	I	Weight (excluding motor) Kg
FTY-020MTC	680	209	450	283	245	253	491	250	664	245	450	491	253	500	600	500	500	500	230	225
FTY-025MTC	698	214	441	277	265	251	500	226	778	265	442	500	251	377	567	426	456	401	230	236
FTY-026MTC	709	220	453	331	319	309	546	248	784	319	453	546	309	411	550	455	477	433	210	246
FTY-030MTC	756	231	494	324	305	292	565	269	821	305	494	565	292	445	634	506	532	478	250	311
FTY-035MTC	766	255	580	377	389	346	685	319	904	389	580	685	346	497	700	561	598	529	250	362
FTY-040MTC	956	355	755	471	501	429	888	417	1023	501	755	888	429	591	866	685	741	638	250	540
FTY-046MTC	969	362	817	511	544	465	963	455	1132	544	817	963	465	631	895	734	794	682	250	565
FTY-050MTC	975	328	847	539	560	495	995	475	1202	560	847	995	495	679	948	781	843	730	270	681
FTY-056MTC	1000	406	970	667	648	612	1144	545	1292	648	970	1144	612	807	1072	921	979	864	270	816

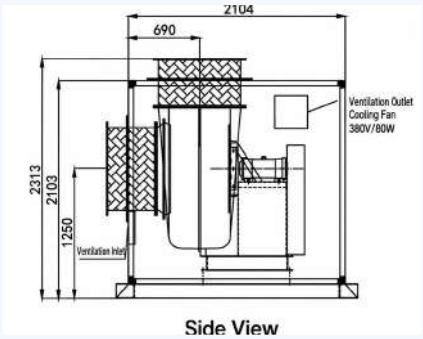
Specifications / Model	A1	A2	B1	B2	B3	B4	B5	C	L1	L2	L3	L4	L5	H1	H2	H3	H4	H5	I	Weight (excluding motor) Kg
FTY-060MTC	1131	422	1074	676	717	614	1267	602	1384	717	1074	1267	614	816	1160	949	1026	882	270	964
FTY-065MTC	1168	431	1111	702	736	639	1307	626	1422	736	1111	1307	639	842	1194	980	1062	910	310	1000
FTY-070MTC	1245	479	1202	757	757	694	1385	678	1560	757	1202	1385	694	897	1291	1047	1142	973	310	1303
FTY-075MTC	1287	525	1325	835	830	765	1525	751	1610	834	1325	1525	765	975	1408	1148	1247	1060	310	1442
FTY-080MTC	1287	525	1325	835	830	765	1525	751	1610	834	1325	1525	765	975	1408	1148	1247	1060	310	
FTY-080MTC-02	1444	592	1446	919	867	834	1635	833	1757	867	1446	1635	834	1370	1640	1245	1355	1151	310	1488
FTY-085MTC	1481	588	1577	1011	1033	907	1844	889	1793	1033	1577	1844	907	1151	1650	1349	1466	1250	310	1836
FTY-095MTC	1616	631	1744	1104	1123	992	2028	1005	1895	1123	1744	2028	992	1265	1838	1489	1625	1376	330	
FTY-100MTC	1892	676	1791	1134	1140	1037	2065	1030	2087	1130	1791	2065	1037	1294	1890	1526	1666	1410	330	3078

Specifications / Model	Relative to Base		Inlet and Outlet Flanges			
			Inlet flange		Outlet Flange	
	E1	E2	D1	D2	D3	D4
FTY-020MTC	1000	698	340	440	280 × 200	380 × 300
FTY-025MTC	1060	760	325	425	330 × 240	430 × 340
FTY-026MTC	1059	770	350	450	310 × 260	410 × 360
FTY-030MTC	1100	832	375	475	350 × 265	450 × 365
FTY-035MTC	1260	870	500	600	420 × 320	520 × 420
FTY-040MTC	1460	1100	600	700	575 × 400	675 × 500
FTY-046MTC	1620	1135	650	750	625 × 435	725 × 535
FTY-050MTC	1710	1137	700	800	645 × 455	745 × 555
FTY-056MTC	1860	1216	800	900	750 × 550	850 × 650
FTY-060MTC	1990	1340	850	950	825 × 565	925 × 665
FTY-065MTC	2020	1406	900	1020	850 × 650	970 × 770
FTY-070MTC	2220	1467	1000	1120	930 × 700	1050 × 820
FTY-075MTC	2250	1550	1100	1220	1030 × 785	1150 × 905
FTY-080MTC	2350	1550	1100	1220	1030 × 785	1150 × 905
FTY-080MTC-02	2360	1770	1100	1220	1105 × 850	1225 × 970
FTY-085MTC	2620	1817	1250	1370	1255 × 925	1375 × 1045
FTY-095MTC	2850	2000	1400	1520	1360 × 1010	1480 × 1130
FTY-100MTC	3030	2308	1450	1570	1400 × 1075	1520 × 1195

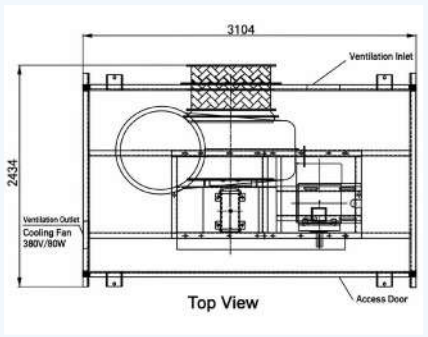
Low-Noise Fan Acoustic Enclosure



Front View



Side View



Top View

Features

- Built-in heat dissipation system, well-designed structure, and attractive appearance.
- Advanced enclosure panel materials, free from radioactive contamination, safe and environmentally friendly.
- High strength, high impact resistance, resistance to deformation, and high safety performance.
- Lightweight materials, strong bonding capability, easy installation, and convenient transportation.

Fan Accessories



PVC Flexible Connector



Expansion Joint



Air Damper



Various Silencers



High-temperature Teflon Flexible Connector



Air Supply Control Panel



Temperature and Vibration Sensor



Special Surface Treatment for Metal Impeller

Powering Industrial Ventilation and Gas Treatment



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