

Tube Axial Fan

Fiberglass Ventilation



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Fiberglass Tube Axial Fan Table of Contents

Fiberglass Tube Axial Fan Table of Contents.....	1
Fiberglass Tube Axial Fan Submittal.....	2
Fiberglass Tube Axial Fan Submittal Data	3
Fiberglass Tube Axial Fan Dimensional Data	4
Fiberglass Tube Axial Fan Performance Data.....	5
Fiberglass Tube Axial Fan Guide Specification	6

Fiberglass Tube Axial Fan Submittal

STANDARD FEATURES

- Size/Diameter
 - Belt Drive: 12" – 72"
 - Direct Drive: 12" – 60"
- CFM Range:
 - Belt Drive: 2,150 – 95,000
 - Direct Drive: 1,570 – 75,000
- Fan Housing: Fiberglass, with flanged ends.
- Fan Propeller: Highly efficient, air foil shaped fiberglass reinforced blades attached to a fiberglass encapsulated hub. Bushing protected by a removable cap for easy maintenance.
- Air foil propellers can be custom designed to meet air flow requirements.
- Drive Tube: Fiberglass, including bearing mounts. Sealed with a neoprene shaft seal.
- Bearings: Heavy duty, cast iron, pillow block type with regreaseable fittings.
- Shaft: 304 stainless steel.
- Motor: NEMA design B, heavy duty, industrial continuous duty, totally enclosed with sealed ball bearings.
- Severe duty motors are standard on direct drive units with motor in the airstream.
- Motor Mount: Fiberglass construction, adjustable for belt tensioning.
- Lube Lines: Polypropylene, extended from the bearings to the exterior of the unit.
- Motor Cover: Fiberglass construction.

BENEFITS

- Synthetic veil on fan housing provides smooth interior for efficient air flow and creates an impenetrable surface to most airstream corrosives.
- Motor cover protects motor while allowing fresh intake air to enter drive tube.

PRODUCT DESCRIPTION

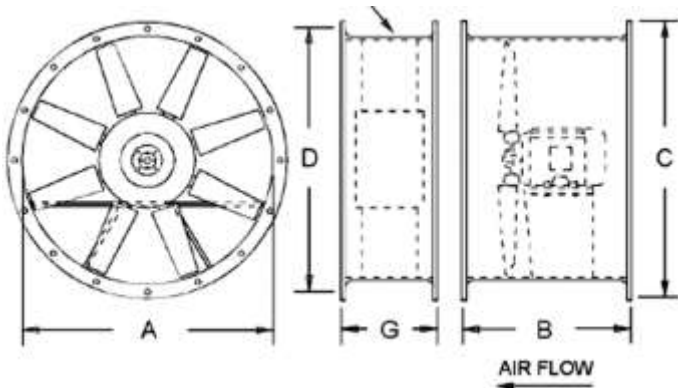
The Moffitt Series TA Tube Axial Fan is designed for high air flow capacity is required and low static pressures. Fiberglass construction makes these units an excellent choice where hostile atmospheres exist offering excellent chemical resistance and serviceability.

OPTIONAL FEATURES

- Vane Section: Fiberglass construction, mounted to the discharge side of the fan. Allows the unit to operate more efficiently at higher static pressures.
- Isolated Design: Motor is direct connected to the fan wheel but is completely sealed from the airstream in a ventilated housing.
- Special Resins: A variety of special resins are available to suit a specific corrosion application.
- Carbon impregnation is also available for explosive applications.
- Hardware/Shaft
 - 316 stainless steel
 - Monel
- Mounting Supports: Horizontal and vertical fiberglass mounting feet and hangers. Available with vibration isolators.
- Clamshell Design: Allows fan wheel to completely swing out on hinged supports for frequent maintenance and inspection. Disconnect Switch: Non-fused, mounted to the exterior of the unit in NEMA 3R enclosure. Can be factory pre-wired to motor.
- Roof Mount: Curb caps, stack caps and intake/exhaust hoods in all fiberglass construction can be provided.

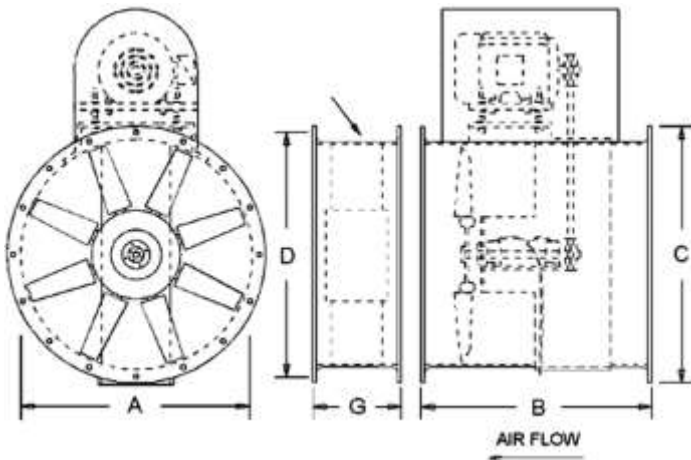
Fiberglass Tube Axial Fan Submittal Data

Model TA10- Direct Drive



A PROP DIA.	B*	C	D	G	HOUSING THICKNESS
12	20	17	15 1/2	8	3/16
16	24	21	19 1/2		
18		23	21 1/2		
20		25	23 1/2		
24	28	29	27 1/2	10	1/4
30	32	35	33 1/2	14	
36	36	41 3/4	40 1/2		16
42	42	47 3/4	46 1/2		
48	48	54	52 1/2	20	
54		60	58 1/2		
60		66 1/2	65		

Model TA20- Belt Drive



A PROP DIA.	B*	C	D	G	HOUSING THICKNESS
12	20	17	15 1/2	8	3/16
16	24	21	19 1/2		
18		23	21 1/2		
20		25	23 1/2		
24	28	29	27 1/2	10	1/4
30	32	35	33 1/2	14	
36	36	41 3/4	40 1/2		16
42	42	47 3/4	46 1/2		
48	48	54	52 1/2	20	
54		60	58 1/2		
60		66 1/2	65		
72		78 1/2	77		3/8

*Dimensions may vary with horsepower

Fiberglass Tube Axial Fan Dimensional Data

TA10 – Direct Drive

Fan Diameter	Unit Length	Flange Size	Bolt Circle	Number Holes	Size Holes	Vane Section	Housing Thickness	Approx. Wt. W/o Vane	Approx. Wt. W/ Vane
12"	20	16	14 ½	8	7/16	8	¼	105	120
16"	24	20	18 ½	8	7/16	8	¼	115	130
18"	24	22	20 ½	8	7/16	8	¼	120	140
20"	24	25	23	8	7/16	10	¼	140	160
24"	28	29	27	12	7/16	10	¼	165	190
30"	32	35	33	12	7/16	14	¼	195	220
36"	36	41	39	16	9/16	14	5/16	330	360
42"	42	47	45	16	9/16	14	5/16	410	440
48"	48	53	51	16	9/16	16	¾	560	595
54"	48	60	58	16	9/16	20	¾	755	795
60"	48	66	64	16	9/16	20	¾	900	940

*Dimensions may vary with horsepower

TA20 – Belt Drive

Fan Diameter	Unit Length	Flange Size	Bolt Circle	Number Holes	Size Holes	Vane Section	Housing Thickness	Approx. Wt. W/o Vane	Approx. Wt. W/ Vane
12"	20	16	14 ½	8	7/16	8	¼	120	130
16"	24	20	18 ½	8	7/16	8	¼	130	150
18"	24	22	20 ½	8	7/16	8	¼	140	160
20"	24	25	23	8	7/16	10	¼	170	190
24"	28	29	27	12	7/16	10	¼	190	210
30"	32	35	33	12	7/16	14	¼	230	255
36"	36	41	39	16	9/16	14	5/16	375	405
42"	42	47	45	16	9/16	14	5/16	470	500
48"	48	53	51	16	9/16	16	¾	640	675
54"	48	60	58	16	9/16	20	¾	845	885
60"	48	66	64	16	9/16	20	¾	1000	1040
72"	48	83	77 ½	18	9/16	20	¾	1300	1360

Fiberglass Tube Axial Fan Performance Data

MODEL	CFM / BHP								RPM
	.25"	.5"	.75"	1.0"	1.25"	1.5"	2.0"	2.5"	
TA10/20	2726/0.65	2212/0.58	1698/0.51						2778
	3100/0.88	2633/0.8	2165/0.72	1698/0.65					3058
12	3674/1.34	3266/1.26	2858/1.17	2450/1.08	2042/0.99	1633/0.9			3500
	4124/1.81	3753/1.72	3382/1.62	3011/1.52	2640/1.43	2270/1.33			3853
	4820/2.75	4496/2.64	4172/2.53	3848/2.42	3524/2.31	3200/2.2	2552/1.98		4410
	3901/0.41	2276/0.35							1915
	4606/0.57	331/0.49	1655/0.409						2108
15	5673/0.88	4384/0.79	3094/0.702	1827/0.62					2413
	6492/1.19	5321/1.1	4149/0.995	2978/0.9	1858/0.82				2656
	7664/1.78	6632/1.67	5600/1.55	4567/1.44	3535/1.33	2503/1.22			3014
	9529/3.09	8665/2.95	7801/2.818	6938/2.69	6074/2.56	5211/2.42	3483/2.15		3602
	3828/0.56	2605/0.49							1370
18	4712/0.86	3644/0.78	2576/0.7						1568
	5392/1.17	4422/1.08	3451/0.99						1726
	6436/1.78	5589/1.68	4741/1.58	3894/1.47					1976
	7247/2.4	6477/2.29	5707/2.18	4937/2.06	4167/1.95				2175
	8506/3.64	7833/3.51	7161/3.38	6488/3.25	5815/3.13	5143/3.0			2490
20	9136/4.41	8504/4.27	7872/4.13	7240/4.0	6608/3.86	5976/3.72	4712/3.44		2650
	3071/0.3								984
	4112/0.48								1126
	4896/0.67	3138/0.56							1239
	6085/1.04	4551/0.92							1419
26	6987/1.41	5592/1.28	4198/1.14						1561
	8377/2.16	7158/2.01	5940/1.86	4722/1.71					1787
	10350/3.67	9323/3.49	8295/3.32	7268/3.14	6241/2.96	5213/2.78			2119
	13108/1.38								645
	16573/2.14	11602/1.93							730
36	21344/3.66	17151/3.42	12958/3.17						876
	25577/5.59	21915/5.3	18253/5.02	14591/4.74					1003
	28857/7.52	25530/7.2	22202/6.89	18875/6.58	15548/6.27				1104
	33911/11.4	31002/11.0	28094/10.65	25186/10.3	22277/9.93	19369/9.58			1263
	37879/15.2	35236/14.8	32594/14.4	26651/14.1	27308/13.7	24666/13.3	19381/12.5		1390
42	412189/19.1	38766/18.7	36314/18.28	33862/17.9	31409/17.4	28957/17.0	24053/16.2		1498
	16403/1.45								526
	22287/2.37	11200/1.76							603
	30155/4.23	20791/3.5							714
	37101/6.62	28928/5.78	20755/4.95						818
48	42384/9.00	34956/8.09	20791/3.5	20099/6.26					900
	50517/13.8	44026/12.8	37536/11.73	31045/10.7	24554/9.64				1030
	56869/18.7	50973/17.5	45077/16.38	39182/15.2	33286/14.1	27391/12.9			1134
	62164/23.6	56693/22.3	51222/21.1	45751/19.9	40280/18.6	34809/17.4	23867/14.9		1222
	66690/28.4	61540/27.1	56389/25.8	51239/24.5	46088/23.2	40937/21.8	30636/19.2		1298
	74413/38.2	69735/36.8	65056/35.4	60378/33.9	55699/32.4	51021/31.0	41664/28.1	32307/25.19	1429

Fiberglass Tube Axial Fan Guide Specification

1.1. DESCRIPTION

Furnish and Install Tube Axial Fans and accessories as indicated on drawings.

1.2. QUALITY ASSURANCE

MOFFITT (Jacksonville, FL, 1 800-474-3267) FRP Products establish the standard of quality required. Manufacturer and erector shall demonstrate a minimum of five (5) years of related industry experience.

1.3. SUBSTITUTIONS

No substitutions will be considered unless written request for approval has been submitted by the bidder and has been received by the designer at least ten (10) days prior to bid date. Any proposed substitutions should meet the standards set by the specification.

1.4. SUBMITTALS

Furnish approval drawings prior to fabrication and erection drawings prior to shipment showing all erection procedures and accessories required for the specified product.

2.1. CONSTRUCTION

2.1.1. Unit shall be constructed of a premium grade polyester. All resin is fire retardant with a class 1 flame spread of 25 or less per ASTM E-84. UV inhibitor on exterior and C-glass surface veil on airstream surfaces. Reference to a Corrosion Chart is recommended for highly acidic or caustic environments.

2.1.2. The fan housing shall be of rugged construction with integrally molded flanged ends. Flanged inlet and outlet.

2.1.3. Fan propeller is to be directly mounted to the motor shaft on direct coupled units and rotate inside the venturi. On belted units, the propeller shall rotate inside a venturi on a shaft supported by heavy duty pillow blocks. Highly efficient airfoil blade propeller constructed of vinyl ester resin

2.1.4. Motor mount shall be of solid fiberglass construction.

2.1.5. The fan shall have a capacity of _____ CFM at _____ inch(es) static pressure standard air and equipped with a _____ HP, _____ RPM, motor mounted out of the airstream. It shall be rated for severe duty service and suitable for _____ volt, _____ phase, _____ cycle operation. Electrical connection motor leads are to be extended through conduit to the exterior of the unit to a junction box mounted to the fan housing. A motor with regreasable fittings shall have lubrication lines extended to the exterior of the unit and mounted next to the junction box.

2.1.6. All hardware shall be Stainless Steel.

2.2. OPTIONS/ACCESSORIES

Available accessories include: stainless steel mesh guard and the option for explosion proof motor design vane section, carbon impregnation with static grounding, horizontal and vertical mounting feet and hangers, swing out access, disconnect switch mounted and wired, polyethylene mesh outlet guard and fiberglass roof curb, stack cap and intake/exhaust hood.