

SPECIFICATIONS

Size	Shaft diameter [inches]		Bearings		Weight [lbs.]					Wheel WR ² [lb.-ft. ²]
	Arr. 1,8	Arr. 10	Arr. 1,8	Arr. 10	Bare fan			Wheel and shaft assembly		
					Arr. 1	Arr. 8	Arr. 10	Arr. 1,8	Arr. 10	
RFE-160	NA	1 ⁷ / ₁₆	NA	A	NA	NA	125	NA	13	.09
RFE-200	NA	1 ⁷ / ₁₆	NA	A	NA	NA	150	NA	15	.30
RFE-315	NA	1 ¹¹ / ₁₆	NA	A	NA	NA	213	NA	26	1.4
RFE-400	NA	1 ¹⁵ / ₁₆	NA	A	NA	NA	342	NA	44	4.5
RFE-500	NA	1 ¹⁵ / ₁₆	NA	A	NA	NA	375	NA	54	12.4
FPB-18	1 ⁷ / ₁₆	1 ⁷ / ₁₆	A	A	290	540	182	28	32	4.3
FPB-22	1 ⁷ / ₁₆	1 ¹¹ / ₁₆	D	A	370	680	320	50	60	9.2
FPB-28	1 ¹¹ / ₁₆	1 ¹¹ / ₁₆	D	A	610	740	410	65	67	27.5

A—Link Belt P3-U200 ball bearings. D—Linkbelt P-U300 ball bearings. NA—not available. **nyb** reserves the right to substitute bearings of equal quality.



CORROSION-RESISTANT ALTERNATIVES

New York Blower metal fans can be constructed of various alloys including 304 and 316 stainless steel and aluminum. A wide range of corrosion-resistant coatings are also available.

CORROSION-RESISTANCE GUIDE

FRP fans are used to exhaust highly corrosive gases or fumes from various processes. Following is a list of corrosive substances, including acids, alkalies, salts, and solvents, commonly encountered in these applications. Refer to **nyb** Engineering Letter 18 for a more comprehensive listing.

Corrosive agent	Std. FRP const.	All vinyl ester
Acetic Acid	R	R
Acrylic Acid	R	R
Ammonia	R	R
Ammonium Carbonate	R	R
Ammonium Hydroxide	V	V
Ammonium Sulfite	R	R
Arsenious Acid	R	R
Barium Carbonate	R	R
Benzoic Acid	R	R
Boric Acid	R	R
Bromine, Dry Gas	R	R
Bromine, Moist Gas	R	R
Butyl Acetate	R	R
Butylene Glycol	R	R
Butyric Acid	R	R
Calcium Sulfate	R	R
Carbon Dioxide	R	R
Carbon Disulfide Vapor	R	R
Carbon Tetrachloride	R	R
Chlorine Gas, Dry	V	V
Chlorine Gas, Wet	V	V
Chlorofluorocarbon	R	R
Chrome-Plating Bath	R	R
Chromic Acid	R	R
Citric Acid	R	R
Copper Cyanide	R	R
Copper Nitrate	R	R
Copper Sulfate	R	R
Cyclohexane	R	R
Diethyl Glycol	R	R
Dimethyl Sulfoxide	R	R
Dimethylamine	R	R
Dipropylene Glycol	R	R
Ether	R	R
Ethyl Alcohol	R	R
Ethyl Chloride	R	R
Ethylene Glycol	R	R
Fatty Acids	R	R
Ferric Nitrate	R	R
Ferrous Chloride	R	R

Corrosive agent	Std. FRP const.	All vinyl ester
Fluoboric Acid	V	V
Fluosilicic Acid	V	V
Formaldehyde	R	R
Formic Acid	R	R
Glycerine	R	R
Glycolic Acid	R	R
Heptane	R	R
Hexane	R	R
Hydrochloric Acid Fumes	D	D
Hydrocyanic Acid	R	R
Hydrofluoric Acid	D	D*
Hydrogen Bromide	R	R
Hydrogen Chloride	R	R
Hydrogen Fluoride	V	V*
Hydrogen Peroxide	R	R
Hydrogen Sulfide	R	R
Hydroxyacetic Acid	R	R
Hypochlorous Acid	R	R
Iodine	R	R
Kerosene	R	R
Lactic Acid	R	R
Lithium Chloride	R	R
Magnesium Carbonate	R	R
Magnesium Chloride	R	R
Malathion	R	R
Maleic Acid	R	R
Mercuric Chloride	R	R
Mercury	R	R
Methacrylic Acid	R	R
Methyl Alcohol	R	R
Methyl Bromide	R	R
Methyl Chloride	R*	R
Naphtha	R	R
Naphthalene	R	R
Nickel Nitrate	R	R
Nitric Acid	R	R
Nitrous Acid	R*	R
Oleic Acid	R	R
Oxalic Acid	R	R
Ozone	T	R

Corrosive agent	Std. FRP const.	All vinyl ester
Palmitic Acid	R	R
Perchloroethylene	R	R
Perchloric Acid	R*	R
Petroleum Ether	R	R
Phosphoric Acid	R	R
Phosphorous Acid	R	R
Phthalic Acid	R	R
Phthalic Anhydride	R	R
Polyvinyl Alcohol	R	R
Polyvinylidene Chloride	R	R
Potassium Bicarbonate	V	V
Potassium Ferrocyanide	R	R
Potassium Permanganate	R	R
Propionic Acid	R*	R
Propylene Glycol	R	R
Silver Nitrate	R	R
Sodium Acetate	R	R
Sodium Benzoate	R	R
Sodium Chloride	R	R
Sodium Dichromate	R	R
Sodium Hydroxide	V*	V
Sodium Nitrate	R	R
Stannic Chloride	R	R
Stearic Acid	R	R
Styrene	R	R
Sulfamic Acid	R	R
Sulfur Dichloride	R	R
Sulfur Dioxide	R	R
Sulfuric Acid	R	R
Sulfurous Acid	R	R
Tannic Acid	R	R
Tartaric Acid	R	R
Tetrachloroethane	T	R
Toluene	R	R
Trichloroacetic Acid	R	R
Turpentine	N	R
Vinegar	R	R
Water, Sea	R	R
Water, Steam Condensate	R	R
Xylene	N	R

R—Recommended. V—Synthetic surface veil required. D—Double layer synthetic surface veil required. N—Not recommended. T—Test data not available. * = 120°F. maximum.

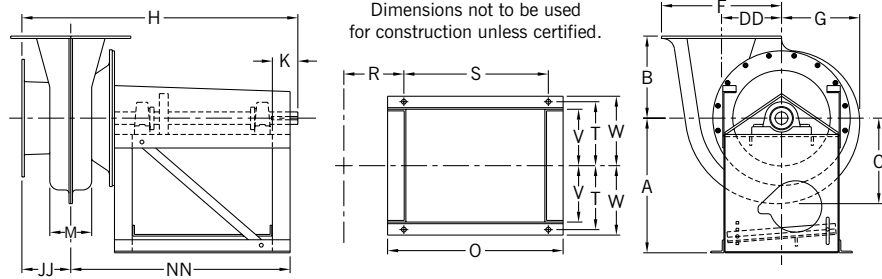
FRP RADIAL FUME EXHAUSTERS

ARRANGEMENT

10

DIMENSIONS

[inches/millimeters]



Dimensions not to be used for construction unless certified.

Size	A		B		C		DD		F		G		H		JJ		K		M		NN		O		R	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
160	15½	394	8¾	206	8½	206	5½	140	11	280	7¼	185	30⅞	784	5¼	134	2½	64	4¼	108	24¾	629	19⅞	505	6¾	171
200	15½	394	9½	241	9⅞	251	6¾	172	13⅝	346	8⅞	225	32¼	819	5¼	146	2½	64	5¼	133	24⅞	632	19⅞	505	6¾	171
315	21¼	540	13¾	337	13⅝	340	9½	242	19⅞	486	11⅞	300	39⅝	1006	6¾	171	3½	89	7¼	184	28½	724	21⅞	556	8⅞	226
400	25½	648	17	432	16⅞	422	11⅞	302	23⅝	600	14¾	375	47	1193	8⅞	219	4	102	9¼	234	33⅝	854	25⅞	657	10½	267
500	28	711	20¾	528	20	508	13¾	350	27⅞	702	17¾	450	49¾	1264	9½	241	4¼	108	11⅞	282	34⅞	866	25⅞	657	11¼	285

Size	S		T		V		W		a		b		c		d		Base holes	Square key	Maximum motor frame size		Maximum motor case length [C-NW]	Minimum motor HP**
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm			Open	TEFC		
160	16⅜	416	7⅞	187	6½	165	8	203	7⅞	194	13⅝	340	8⅞	213	6⅞	175	⅞	9.5	215T	184T	14½	⅓
200	16⅜	416	7⅞	187	6½	165	8	203	9⅞	238	16¼	413	10⅞	264	8¼	210	⅞	9.5	215T	184T	14½	⅓
315	17⅞	441	9⅞	238	8¼	210	10¼	260	13	330	22½	572	14⅞	359	11	279	⅞	9.5	215T	215T	16⅞	⅓
400	20⅞	518	10⅞	276	9¾	248	11¾	298	15¾	400	29¼	743	17⅞	441	13⅝	346	⅞	12.7	256T	254T	18⅞	½
500	19⅞	505	12¼	311	11	279	13	330	18⅞	473	35¼	895	21⅞	537	16¼	413	¾	19	256T	254T	18⅞	½

** This represents the minimum HP required for fan start-up with 3-phase motor.

Tolerance: ± ⅛" or ± 3 mm.

FLANGED INLET AND OUTLET DIMENSIONS

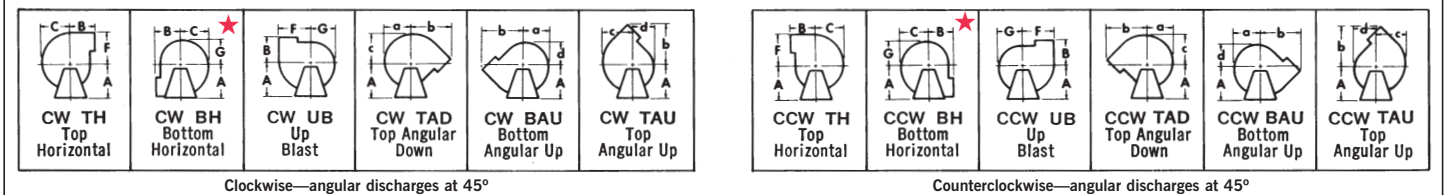
for FRP Radial Fume Exhausters and FRP Pressure Blowers [inches/millimeters]

Size	Inlet and outlet flanges*														
	I. D.		B. C. [bolt circle]				O. D.		Number of holes	Diameter of holes		Flange thickness			
	in.	mm	PS 15-69		ANSI Class 150		in.	mm		PS 15-69	ANSI Class 150				
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm			
RFE-160	6¼	160	9	229	9½	241	11	279	8	⅞	11	⅞	22	⅝	8
RFE-200	7⅞	200	11	279	11¾	298	13½	343	8	⅞	11	⅞	22	⅝	8
RFE-315	12½	315	15	381	17	432	19	483	12	⅞	11	1	25	⅞	11
RFE-400	15¾	400	19	483	21¼	540	23⅝	600	16	⅞	11	1⅞	29	½	13
RFE-500	19¾	500	23	584	25	635	27½	699	20	⅞	11	1¼	32	½	13
FPB-18	8	203	11	279	11¾	298	13½	343	8	⅞	11	⅞	22	½	13
FPB-22	10	254	13	330	14¼	362	16	406	12	⅞	11	1	25	½	13
FPB-28	12	305	15	381	17	432	19	483	12	⅞	11	1	25	½	13

* Flanges are furnished standard without holes. Choice of either PS 15-69 or ANSI Class 150 drilling patterns available. Holes straddle centerline except on inlet flange of the following fans in angular discharge positions: RFE-315, RFE-500, FPB-22, and FPB-28.

Tolerance: ± ⅛" or ± 3 mm.

FAN DISCHARGES – VIEWED FROM DRIVE SIDE



Clockwise—angular discharges at 45°

Counterclockwise—angular discharges at 45°

★ Bottom Horizontal fans, Size FPB-28 only, are equipped with a 3-inch channel sub-base...add 3" to the fan centerline height.

The New York Blower Company has a policy of continuous product development and reserves the right to change designs and specifications without notice.

FRP PRESSURE BLOWERS

ARRANGEMENT 1 AND 8 DIMENSIONS
[inches/millimeters]

Dimensions not to be used for construction unless certified.

Dotted structure represents Arrangement 8 construction.

Size	A		B		C		DD		F		G		H		JJ		K		M		NN	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
18	18½	470	17	432	14	356	10½	267	17¼	438	13¼	337	27¼	692	6⅝	168	3	76	7	178	17⅝	448
22	24½	622	22	559	18⅝	460	14⅞	378	22⅞	581	17⅞	435	28⅜	721	6¾	171	4	102	7⅞	181	17¾	451
28	27	686	28	711	22⅝	575	18⅞	479	28⅜	721	21⅜	543	31¾	806	8⅞	206	5	127	9	229	18⅝	473

Size	R		S		T		W		a		b		c		d		Base holes		Square key	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
18	4⅝	117	12	305	10¼	260	11⅞	283	13⅝	346	24¼	616	14⅜	365	12⅞	327	⅞	14	⅜	9.5
22	4¾	121	12	305	10⅞	276	11¾	298	17⅞	448	31¾	806	18⅞	473	16⅝	422	⅞	14	⅜	9.5
28	5⅝	143	12	305	10⅞	276	11¾	298	22	559	39⅞	1013	23¼	591	20¾	527	⅞	14	⅜	9.5

Tolerance: ± ⅛" or ± 3 mm.

ARRANGEMENT 8 FRP PRESSURE BLOWER DIMENSIONS [in./mm]

Motor frame	Size 18						Size 22						Size 28						
	HH*		SS		XX		HH*		SS		XX		HH*		SS		XX		
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	
143T-145T	41⅝	1045	14	356	31⅞	810	42¼	1073	15¼	387	33¼	845	—	—	—	—	—	—	—
182T-184T	45½	1156	15½	394	33⅜	848	46⅝	1184	16¾	425	34¾	883	50	1270	17¾	451	36⅝	930	
213T-215T	47⅞	1216	18¾	476	36⅝	930	49	1245	19¾	502	37¾	959	52⅜	1330	20¾	527	39⅝	1006	
254T-256T	—	—	—	—	—	—	54⅝	1387	25	635	43	1092	58	1473	26	660	44⅞	1140	
284TS-286TS	—	—	—	—	—	—	—	—	—	—	—	—	59½	1511	26¾	679	45⅝	1159	
324TS-326TS	—	—	—	—	—	—	—	—	—	—	—	—	62	1575	29¼	743	48⅞	1222	

* HH dimension is for reference only and is based on the maximum motor lengths for standard TEFC, 1800 RPM motors.

Tolerance: ± ⅛" or ± 3 mm.

ARRANGEMENT 10 DIMENSIONS
[inches/millimeters]

Dimensions not to be used for construction unless certified.

Size	A		B		C		DD		F		G		H		JJ		K		M		NN		O		R	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
18	17½	445	17	432	14	356	10½	267	17¼	438	13¼	337	33⅜	841	6⅝	168	3	76	7	178	25½	648	21⅞	556	5⅝	137
22	25⅝	645	22	559	18⅝	460	14⅞	378	22⅞	581	17⅞	435	37⅞	962	6¾	171	4	102	7⅞	181	29⅝	752	25⅞	657	6½	165
28	27⅞	708	28	711	22⅝	575	18⅞	479	28⅜	721	21⅜	543	40	1016	8⅞	206	4	102	9	229	30½	775	25⅞	657	7⅞	194

Size	S		T		V		W		a		b		c		d		Base holes		Square key		Maximum motor frame size		Maximum motor case length [C-NW]	Minimum motor HP**
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	Open	TEFC		
18	18⅜	467	8⅞	225	8	203	9½	241	13⅝	346	24¼	616	14⅜	365	12⅞	327	⅞	14	⅜	9.5	215T	215T	16⅝	½
22	20⅜	518	10⅞	276	9¼	248	11¾	298	17⅞	448	31¾	806	18⅞	473	16⅝	422	⅞	14	⅜	9.5	256T	254T	18⅞	½
28	19⅞	505	12¼	311	11	279	13	330	22	559	39⅞	1013	23¼	591	20¾	527	¾	19	⅜	9.5	256T	254T	18⅞	½

** This represents the minimum HP required for fan start-up with 3-phase motor.

Tolerance: ± ⅛" or ± 3 mm.