

SIZE 731

Wheel diameter: 73"
Wheel circumference: 19.1'

Fan outlet area: 55.2 sq. ft.
Maximum BHP = 860 $\left(\frac{\text{RPM}}{1000}\right)^3$

Class 1 = 555 RPM
Class 2 = 725 RPM
Class 3 = 915 RPM

CFM	OV	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		8"SP		10"SP		12"SP		14"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
80000	1449	273	16.8	342	31.4	408	48.5	467	68.0	524	90.5	574	114	661	164	743	221	812	278	874	337
93000	1685	296	21.0	356	36.7	414	54.7	471	75.2	524	97.5	574	122	664	177	741	234	812	296	877	361
106000	1920	324	26.4	374	43.2	427	62.6	478	83.5	526	106	574	131	660	186	741	248	811	313	875	379
119000	2156	354	33.1	395	50.6	443	71.2	490	93.5	534	117	579	143	664	200	742	263	811	330	876	401
132000	2391	384	41.2	420	59.5	462	81.0	505	105	546	129	586	155	667	214	740	276	809	344	874	419
145000	2627	414	50.3	447	70.3	483	92.6	523	118	561	143	598	170	671	228	745	295	810	363	873	437
158000	2862	444	60.6	476	82.6	507	105	542	131	579	159	613	187	683	249	750	314	813	383	877	461
171000	3098	471	71.2	506	96.7	533	120	564	147	598	175	630	205	694	267	759	337	821	410	881	487
184000	3333	486	78.3	537	113	562	138	588	165	619	194	650	225	711	292	770	361	829	436	885	512
197000	3569	516	91.9	567	131	591	157	615	185	642	215	671	248	728	316	782	386	838	463	894	545
210000	3804	547	108	597	150	622	179	643	207	666	238	692	271	747	342	801	418	852	496	903	577
223000	4040	579	127	626	170	652	202	673	233	693	264	716	297	767	371	817	447	868	530	915	611
236000	4275	612	148	654	192	682	229	702	260	722	293	742	326	788	401	836	479	883	562		
249000	4511	645	171	677	211	712	256	733	291	751	324	769	359	811	435	857	517	901	600		
262000	4746	677	197	692	225	742	287	764	324	781	360	798	395	835	471	877	553				
275000	4982	710	225	721	252	771	318	794	359	811	396	828	433	862	510	901	596				

Performance certified is for installation Type B: Free inlet, Ducted outlet. Power rating [BHP] does not include transmission losses. Performance ratings do not include the effects of appurtenances [accessories].

MATERIAL SPECIFICATIONS

Dimensions in inches. Weights in pounds. WR² in lb.-ft.².

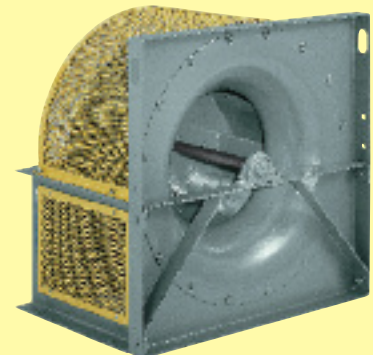
Size	Shaft diameter						Bearings			Drive key [square]			Wheel WR ² [lb.-ft. ²]			Bare fan weight [lbs.]		
	Class 1		Class 2		Class 3		Class	Class	Class	Class	Class	Class	Class	Class	Class	Class	Class	
	Wheel	Bearing	Wheel	Bearing	Wheel	Bearing	1	2	3	1	2	3	1	2	3	1	2	3
101	—	—	1	1	—	—	—	A	—	—	1/4	—	—	0.8	—	—	65	—
121	—	—	1 3/16	1 3/16	—	—	—	A	—	—	1/4	—	—	1.8	—	—	90	—
131	—	—	1 7/16	1 7/16	—	—	—	A	—	—	3/8	—	—	2.8	—	—	114	—
151	—	—	1 7/16	1 7/16	—	—	—	A	—	—	3/8	—	—	3.8	—	—	144	—
161	—	—	1 11/16	1 11/16	—	—	—	A	—	—	3/8	—	—	12	—	—	197	—
181	1 11/16	1 11/16	1 15/16	1 15/16	2 3/16	2 3/16	H	H	E	3/8	1/2	1/2	19	19	22	265	275	440
201	1 11/16	1 11/16	1 15/16	1 15/16	2 7/16	2 7/16	H	H	E	3/8	1/2	5/8	28	28	35	292	306	510
221	1 15/16	1 15/16	2 3/16	2 3/16	2 7/16	2 7/16	H	H	E	1/2	1/2	5/8	40	40	48	360	375	590
241	2 3/16	2 3/16	2 7/16	2 7/16	2 15/16	2 3/16	H	H	F	1/2	5/8	1/2	64	64	81	460	475	845
271	2 3/16	2 3/16	2 7/16	2 7/16	2 15/16	2 3/16	A	C	F	1/2	5/8	1/2	93	93	115	530	575	880
301	2 7/16	2 7/16	2 11/16	1 15/16	3 7/16	2 7/16	A	F	F	5/8	1/2	5/8	149	149	179	790	835	1065
331	2 7/16	2 7/16	2 15/16	2 3/16	3 7/16	2 7/16	A	F	F	5/8	1/2	5/8	219	220	251	925	1000	1325
361	2 11/16	2 11/16	2 15/16	2 3/16	3 15/16	2 11/16	A	F	F	5/8	1/2	5/8	363	363	417	1180	1225	2200
401	2 15/16	2 15/16	3 7/16	2 7/16	3 15/16	2 11/16	A	F	F	3/4	5/8	5/8	534	535	605	1345	1445	2350
441	3 7/16	2 7/16	3 15/16	2 11/16	4 7/16	2 15/16	F	F	F	5/8	5/8	3/4	872	874	1102	1730	1840	2750
491	3 7/16	2 11/16	4 7/16	2 15/16	4 15/16	3 7/16	F	F	F	5/8	3/4	7/8	1356	1406	2032	2205	2380	3350
541	3 15/16	2 15/16	4 7/16	3 7/16	5 7/16	3 15/16	F	F	F	3/4	7/8	1	2019	2096	3230	2820	2955	4300
601	3 15/16	2 15/16	4 15/16	3 7/16	5 7/16	4 7/16	F	F	F*	3/4	7/8	1	3068	3189	4756	3550	3855	4540
661	4 7/16	3 7/16	5 7/16	3 15/16	6	4 7/16	F	F	F*	7/8	1	1	5821	6008	7985	4585	4980	6960
731	4 15/16	3 15/16	6	3 15/16	6 1/2	4 15/16	F	F	F*	1	1	1 1/4	9374	9627	12918	7155	7465	10000

Shafting: AISI 1040 turned, ground, polished and straightened. Bearing types: A—Link-Belt P3-U200. C—Sealmaster SPM. E—Link-Belt P-U300. F—Link-Belt P-B22400. F*—Link-Belt P-B22500. H—Dodge GTAH Grip-Tight. **nyb** reserves the right to substitute bearings of equal ratings.



PLENUM FANS

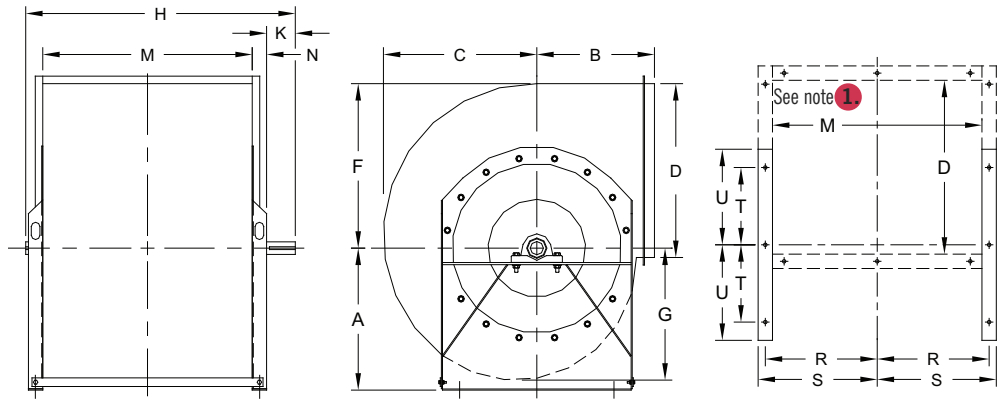
Unhoused, single-width, Plenum Fans are available for airflows to 150,000 CFM and pressures to 12" WG. Nineteen sizes are offered from 12" to 73" wheel diameters. Designs include belt and direct-drive arrangements.



DIMENSIONS

ROTATABLE FANS

Dimensions should not be used for construction unless certified.



DIMENSIONS [INCHES]

Size	A			B*		C	D	F	G	H			K		M
	Class 1, 2		Class 3	▲	TAD					Class 1	Class 2	Class 3	Class 1, 2	Class 3	
	TH, TAD, DB	BH, UB, TAU, BAU													
101	9½	11¼	—	8½	8½	10½	11½	10⅝	8½	—	21¼	—	3	—	13⅝
121	11	13¾	—	10	10	12¾	13⅝	13	10¾	—	24¼	—	3	—	16⅝
131	12	15	—	11	11	13⅝	15½	14¼	11¾	—	26½	—	3	—	18¾
151	14	16¾	—	12	12	15½	16¾	15⅞	12⅝	—	28½	—	3½	—	20¼
161	14¾	18½	—	13	13	16⅝	18½	17½	14	—	30½	—	3½	—	22¼
181	16¼	20¼	21¼	14	14	18½	20½	19¾	15½	34¼	34¼	37	3½	4	24¾
201	17¾	22¼	23¼	15½	15½	20¾	22½	21¾	17	37	37	40	4	4½	27
221	19¾	24½	25½	17	17	22½	24⅞	23⅝	18⅞	40⅞	40⅞	43	4	4½	30⅞
241	21½	26¾	28	19	19	24¾	27¾	26	20¾	44¾	44¾	47	4½	5	33¼
271	23¾	29½	30½	20½	20½	27¼	30¼	28⅝	22⅞	48½	48½	50½	5	5½	36½
301	—	—	33¾	22½†	33	30¾	33½	31⅞	25¾	—	—	55½	—	6	40½
331	—	—	37	24½†	36	33¾	36⅞	35	28	—	—	60	—	6½	44⅝
361	—	—	—	29†	40½	36⅞	40¾	38¾	30⅞	—	—	—	—	—	49¼

* For DB Discharge on Class 1 and 2 fans sizes 101-271, use A dimension for B. + For DB Discharge on Class 1 and 2 fans sizes 301-361, use B dimension for A.

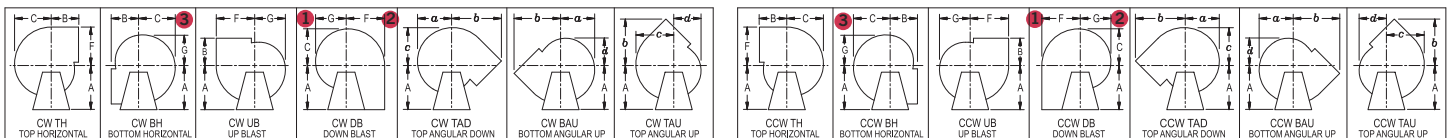
† Use TAD dimension for Class 1 and 2 TAU and BAU discharge fans. ▲ TH, BH, UB, DB, BAU, TAU discharges. D and M are outside dimensions.

Size	N		R		S		T	U		a	b◇	c	d	Base holes
	Class 1, 2	Class 3	Class 1, 2	Class 3	Class 1, 2	Class 3		Class 1, 2	Class 3					
101	2¼	—	7⅞	—	8¾	—	4⅝	6⅝	—	9½	13⅝	10½	7⅝	⅑/16
121	2¼	—	9¾	—	10¼	—	5⅞	8	—	11⅝	16¼	12⅞	9¼	⅑/16
131	2¼	—	10¾	—	11⅝	—	6⅝	8¾	—	12¾	17⅞	14	10¼	⅑/16
151	2¼	—	11½	—	12¾	—	7½	9⅝	—	14⅞	19¾	15¾	11¾	⅑/16
161	2¼	—	12½	—	13¾	—	8½	10½	—	15½	21⅝	17¼	12½	⅑/16
181	2¾	4⅞	14	14⅞	15½	15⅝	9⅞	11⅝	10⅞	17¼	23⅝	19⅞	13⅞	⅑/16
201	2¾	4⅞	15½	15¼	16¼	16¾	10⅞	12⅞	11¾	19	26½	21⅞	15¼	⅑/16
221	2¾	4⅞	16¾	16⅞	17⅞	18¾	10⅞	13⅞	12⅝	21	28¾	23¼	16¾	⅑/16
241	3¼	4⅞	18¼	18⅞	19¾	20⅞	12¼	15½	14¾	23⅞	31⅞	25⅝	18½	¾
271	3¼	4⅞	20¼	20½	21½	22½	13⅝	16⅞	15½	25⅞	34¾	28¼	20⅞	¾
301	—	4¼	—	22½	—	24½	14⅞	—	16⅞	28¼	38¾	31¾	22⅞	¾
331	—	4¼	—	24⅝	—	26⅝	16	—	18¼	31⅞	42⅞	34⅝	25¼	¾
361	—	—	—	—	—	—	17½	—	—	34⅞	45⅞	38¼	27½	⅞

◇ For Size 30 and 33, Class 3 fans, dimensions for BAU or TAU discharge are 38½" and 42½", respectively.

Tolerance: ± 1/8"

FAN DISCHARGES – VIEWED FROM DRIVE SIDE



Clockwise—angular discharges at 45°

Counterclockwise—angular discharges at 45°

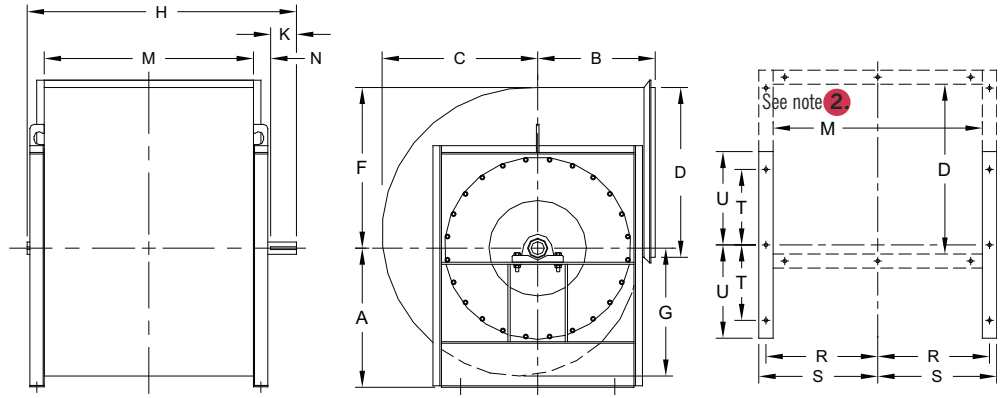
1. Discharge is framed at floorline on Class 1 and 2 Down Blast fans.
2. Discharge is framed at floorline on Class 3, Sizes 36-73 Down Blast fans. Class 3, Sizes 18-33 Down Blast fans are furnished standard with slip connection above floorline.
3. On Class 1 and 2 fans with Bottom Horizontal discharge and optional flanged outlet, the flange extends below the base bars of the fan.

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

DIMENSIONS

Non-ROTATABLE FANS

Dimensions should not be used for construction unless certified.



DIMENSIONS [INCHES]

Size	A†					B		C	D	F	G	H		K	
	Class 1, 2		Class 3			▲	TAD					Class 1, 2	Class 3	Class 1, 2	Class 3
	TH, TAD	BH, UB, TAU, BAU	TH, TAD	BH, BAU	UB, TAU										
301	26¼	33	—	—	—	22½	33	30¾	33½	31⅞	25¾	53	—	5 ½	—
331	28¾	36	—	—	—	24½	36	33¾	36⅞	35	28	57½	—	6	—
361	31¾	40	33	42	39	29	40½	36⅞	40¾	38¾	30⅞	62¾	67¼	6½	7
401	35	44	36	46	43	31	45¼	40¾	44⅞	42¾	34⅞	68¼	73	7	7½
441	38½	48¼	40	50	47	33½	49½	45	49⅝	47⅞	37¾	74½	79	7½	8
491	42½	53½	43½	55	51½	36	54	49½	54⅝	52	41½	83	86	8	8½
541	47	59	48	60½	57	40	60	54⅞	60¾	57½	45⅞	90½	94½	8½	9
601	52	65¼	53	66½	62½	43	66	60¾	66⅞	63¾	50⅞	98½	103¼	9	9½
661	57	71½	58	73	69	47	70¼	66¾	73½	70	56	107¼	111¾	9½	10
731	63	79	64	80½	76	51½	76½	73⅞	81¼	77½	61⅞	117	123¼	10	10½

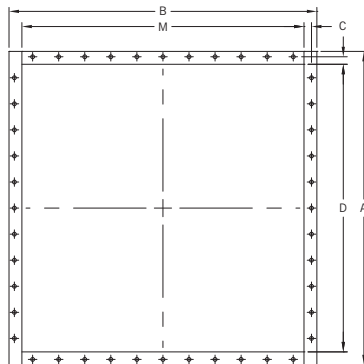
† On DB discharge, use B for A. ▲ TH, BH, UB, DB, BAU, TAU discharges. D and M are outside housing dimensions.

Size	M	N		R		S		T	U		a	b		c	d	Base holes
		Class 1, 2	Class 3	Class 1, 2	Class 3	Class 1, 2	Class 3		Class 1, 2	Class 3		BAU, TAU	TAD			
		301	40½	3¼	—	22⅞	—		23½	—		14⅞	19			
331	44⅝	3¼	—	24¼	—	25⅝	—	16	20⅝	—	31⅞	42⅞	50¼	34⅝	25¼	¾
361	49¼	3¼	5⅝	26½	26⅞	27⅞	27⅞	17½	22⅞	24½	34¾	47⅞	56	38¼	27½	⅞
401	54⅝	3¼	5⅝	28¾	28¾	30¼	30¼	19	27½	26¼	38	52⅞	62¼	42⅞	30	⅞
441	60	3¼	5⅝	31½	31½	33	33	21	30	28¾	42	57	68¾	46½	33⅝	⅞
491	66⅞	4⅞	5½	34⅝	34⅝	36⅞	36⅞	23	32½	31¼	46⅞	62¼	75	51¼	36½	⅞
541	73⅞	4⅞	5⅞	38⅞	38⅞	40⅞	40⅞	25	36¼	35	51⅞	69	83⅞	56¾	41	1
601	80¾	4⅞	6¼	42¾	42¾	44¾	44¾	26½	39¾	38½	56⅝	75½	91⅝	61⅞	45¾	1
661	88⅞	4⅞	6¼	46½	46½	47	48½	29	43	42¼	62¼	82¾	99⅞	69⅞	49⅞	1
731	98¼	4⅞	7	51⅞	51⅞	53⅞	54⅞	33½	47	46¼	68⅞	91¼	108⅞	76¾	55⅞	1

Tolerance: ± 1/8"

FLANGED OUTLET OPTION

1. Mounted flush with outside edge of housing discharge.
2. Holes furnished on 4" centers from centerlines.
3. M and D dimensions are inside flange, outside housing.
4. Down Blast fans with optional flanged outlet are only offered in Class 3.
5. Tolerance: ± 1/8".



DIMENSIONS [INCHES]

Size	A	B	C	D	M	Hole dia.
101	13⅞	15⅝	5/8	11⅞	13⅝	5/16
121	15⅝	18⅝	5/8	13⅝	16⅝	5/16
131	17⅞	20¾	5/8	15⅞	18¾	5/16
151	18¾	22¼	5/8	16¾	20¼	5/16
161	21	24¾	3/4	18½	22¼	7/16
181	23	27¼	3/4	20½	24¾	7/16
201	25	29½	3/4	22½	27	7/16
221	27¾	32⅝	3/4	24⅞	30⅞	7/16
241	30¾	36¼	7/8	27¾	33¼	7/16
271	33¼	39½	7/8	30¼	36½	7/16
301	36½	43½	7/8	33½	40½	7/16
331	39⅞	47⅝	7/8	36⅞	44⅝	7/16
361	44¾	53¼	1⅞	40¾	49¼	9/16
401	48⅞	58¾	1⅞	44⅞	54¾	9/16
441	53⅝	64	1⅞	49⅝	60	9/16
491	58⅝	70⅞	1⅞	54⅝	66⅞	9/16
541	64¾	77⅞	1⅞	60¾	73⅞	9/16
601	70⅞	84¾	1⅞	66⅞	80¾	9/16
661	77½	92⅞	1⅞	73½	88⅞	9/16
731	85¼	102¼	1⅞	81¼	98¼	9/16